

| Band | Modulation | Bandwidth | RB Size | RB Offset | Channel | Frequency | Power |
|------|------------|-----------|---------|-----------|---------|-----------|-------|
| 48   | 16QAM      | 10 MHz    | 50      | 0         | 55290   | 3555.0    | 22.2  |
|      |            |           |         |           | 55990   | 3526.0    | 22.1  |
|      |            |           |         |           | 56690   | 3695.0    | 22.3  |
|      |            |           | 25      | 12        | 55290   | 3555.0    | 22.3  |
|      |            |           |         |           | 55990   | 3526.0    | 22.2  |
|      |            |           |         |           | 56690   | 3695.0    | 22.4  |
|      |            |           | 1       | 0         | 55290   | 3555.0    | 23.3  |
|      |            |           |         |           | 55990   | 3526.0    | 23.2  |
|      |            |           |         |           | 56690   | 3695.0    | 23.2  |
|      |            |           | 1       | 24        | 55290   | 3555.0    | 23.3  |
|      |            |           |         |           | 55990   | 3526.0    | 23.1  |
|      |            |           |         |           | 56690   | 3695.0    | 23.2  |
|      |            | 15 MHz    | 75      | 0         | 55315   | 3557.5    | 22.1  |
|      |            |           |         |           | 55990   | 3626.0    | 22.0  |
|      |            |           |         |           | 56665   | 3692.5    | 22.1  |
|      |            |           | 36      | 19        | 55315   | 3557.5    | 22.3  |
|      |            |           |         |           | 55990   | 3626.0    | 22.3  |
|      |            |           |         |           | 56665   | 3692.5    | 22.2  |
|      |            |           | 1       | 0         | 55315   | 3557.5    | 23.2  |
|      |            |           |         |           | 55990   | 3626.0    | 23.3  |
|      |            |           |         |           | 56665   | 3692.5    | 23.3  |
|      |            |           | 1       | 74        | 55315   | 3557.5    | 23.1  |
|      |            |           |         |           | 55990   | 3626.0    | 23.0  |
|      |            |           |         |           | 56665   | 3692.5    | 23.2  |
|      |            | 20 MHz    | 100     | 0         | 55340   | 3560.0    | 22.2  |
|      |            |           |         |           | 55990   | 3526.0    | 22.1  |
|      |            |           |         |           | 56640   | 3690.0    | 22.3  |
|      |            |           | 50      | 25        | 55340   | 3560.0    | 22.1  |
|      |            |           |         |           | 55990   | 3526.0    | 22.0  |
|      |            |           |         |           | 56640   | 3690.0    | 22.2  |
|      |            |           | 1       | 0         | 55340   | 3560.0    | 23.3  |
|      |            |           |         |           | 55990   | 3526.0    | 23.4  |
|      |            |           |         |           | 56640   | 3690.0    | 23.2  |
|      |            |           | 1       | 99        | 55340   | 3560.0    | 23.1  |
|      |            |           |         |           | 55990   | 3526.0    | 23.2  |
|      |            |           |         |           | 56640   | 3690.0    | 23.2  |

**Table 10.5.2 Test Reduction Table – LTE**

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 2<br>1850-1910 MHz  | A    | 18700                                                        | 20 MHz    | QPSK       | 50               | 0            | Tested               |
|                          |      | 18900                                                        |           |            |                  |              | Tested               |
|                          |      | 19100                                                        |           |            |                  |              | Tested               |
|                          |      | 18700                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 19100                                                        |           |            |                  |              | Tested               |
|                          |      | 18700                                                        |           |            | 1                | 49           | Tested               |
|                          |      | 18900                                                        |           |            |                  |              | Tested               |
|                          |      | 19100                                                        |           |            |                  |              | Tested               |
|                          |      | 18700                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 18700                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 18700                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 18700                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 18700                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              | Reduced <sup>5</sup> |
|                          | B    | 18700                                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Tested               |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 18700                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 18700                                                        |           |            | 1                | 49           | Reduced <sup>2</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Tested               |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 18700                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 18700                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 18700                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 18700                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 18700                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |  |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|--|
| Band 2<br>1850-1910 MHz  | C    | 18700                                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Tested               |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>6</sup> |  |
|                          |      | 18700                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 18700                                                        |           |            | 1                | 49           | Tested               |  |
|                          |      | 18900                                                        |           |            |                  |              | Tested               |  |
|                          |      | 19100                                                        |           |            |                  |              | Tested               |  |
|                          |      | 18700                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 18700                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 18700                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 18700                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 18700                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              |                      |  |
|                          | D    | 18700                                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Tested               |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>6</sup> |  |
|                          |      | 18700                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 18700                                                        |           |            | 1                | 49           | Reduced <sup>6</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Tested               |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>6</sup> |  |
|                          |      | 18700                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 18700                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 18700                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 18700                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 18700                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              |                      |  |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |  |  |  |  |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|--|--|--|--|
| Band 2<br>1850-1910 MHz  | E    | 18700                                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |  |  |  |  |
|                          |      | 18900                                                        |           |            |                  |              | Tested               |  |  |  |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>6</sup> |  |  |  |  |
|                          |      | 18700                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |  |  |  |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>1</sup> |  |  |  |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>1</sup> |  |  |  |  |
|                          |      | 18700                                                        |           |            | 1                | 49           | Reduced <sup>6</sup> |  |  |  |  |
|                          |      | 18900                                                        |           |            |                  |              | Tested               |  |  |  |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>6</sup> |  |  |  |  |
|                          |      | 18700                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |  |  |  |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>2</sup> |  |  |  |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>2</sup> |  |  |  |  |
|                          |      | 18700                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |  |  |  |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>3</sup> |  |  |  |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>3</sup> |  |  |  |  |
|                          |      | 18700                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |  |  |  |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>1</sup> |  |  |  |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>1</sup> |  |  |  |  |
|                          |      | 18700                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |  |  |  |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>4</sup> |  |  |  |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>4</sup> |  |  |  |  |
|                          |      | 18700                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |  |  |  |  |
|                          |      | 18900                                                        |           |            |                  |              | Reduced <sup>4</sup> |  |  |  |  |
|                          |      | 19100                                                        |           |            |                  |              | Reduced <sup>4</sup> |  |  |  |  |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              |                      |  |  |  |  |
|                          |      |                                                              |           |            |                  |              | Reduced <sup>5</sup> |  |  |  |  |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

### Side F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 251.2 mW

Closest Distance to Side F: 97 mm

$\{[(3.0)/(\sqrt{1.91}) * 50 \text{ mm}]\} + \{[97 - 50 \text{ mm}] * 10\} = 578 \text{ mW}$  which is greater than 251.2 mW

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 25<br>1850-1915 MHz | A    | 26140                                                        | 20 MHz    | QPSK       | 50               | 0            | Tested               |
|                          |      | 26365                                                        |           |            |                  |              | Tested               |
|                          |      | 26590                                                        |           |            |                  |              | Tested               |
|                          |      | 26140                                                        |           |            | 100              | 0            | Tested               |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26140                                                        |           |            | 1                | 49           | Tested               |
|                          |      | 26365                                                        |           |            |                  |              | Tested               |
|                          |      | 26590                                                        |           |            |                  |              | Tested               |
|                          |      | 26140                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 26140                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 26140                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26140                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 26140                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              |                      |
|                          | B    | 26140                                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Tested               |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 26140                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26140                                                        |           |            | 1                | 49           | Reduced <sup>2</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Tested               |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 26140                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 26140                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 26140                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26140                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 26140                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 25<br>1850-1915 MHz | C    | 26140                                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Tested               |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 26140                                                        |           |            | 100              | 0            | Tested               |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26140                                                        |           |            | 1                | 49           | Tested               |
|                          |      | 26365                                                        |           |            |                  |              | Tested               |
|                          |      | 26590                                                        |           |            |                  |              | Tested               |
|                          |      | 26140                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 26140                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 26140                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26140                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 26140                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              | Reduced <sup>5</sup> |
|                          | D    | 26140                                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Tested               |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 26140                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26140                                                        |           |            | 1                | 49           | Reduced <sup>6</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Tested               |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 26140                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 26140                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 26140                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 26140                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 26140                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 26365                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 26590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz)                                     | Side | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset         | Tested/<br>Reduced   |
|--------------------------------------------------------------|------|--------------------------|-----------|------------|------------------|----------------------|----------------------|
| Band 25<br>1850-1915 MHz                                     | E    | 26140                    | 20 MHz    | QPSK       | 50               | 25                   | Reduced <sup>6</sup> |
|                                                              |      | 26365                    |           |            |                  |                      | Tested               |
|                                                              |      | 26590                    |           |            |                  |                      | Reduced <sup>6</sup> |
|                                                              |      | 26140                    |           |            | 100              | 0                    | Reduced <sup>1</sup> |
|                                                              |      | 26365                    |           |            |                  |                      | Reduced <sup>1</sup> |
|                                                              |      | 26590                    |           |            |                  |                      | Reduced <sup>1</sup> |
|                                                              |      | 26140                    |           |            | 1                | 49                   | Reduced <sup>6</sup> |
|                                                              |      | 26365                    |           |            |                  |                      | Tested               |
|                                                              |      | 26590                    |           |            |                  |                      | Reduced <sup>6</sup> |
|                                                              |      | 26140                    |           |            |                  | 99                   | Reduced <sup>2</sup> |
|                                                              |      | 26365                    |           |            |                  |                      | Reduced <sup>2</sup> |
|                                                              |      | 26590                    |           |            |                  |                      | Reduced <sup>2</sup> |
|                                                              |      | 26140                    |           | 16QAM      | 50               | 25                   | Reduced <sup>3</sup> |
|                                                              |      | 26365                    |           |            |                  |                      | Reduced <sup>3</sup> |
|                                                              |      | 26590                    |           |            |                  |                      | Reduced <sup>3</sup> |
|                                                              |      | 26140                    |           |            | 100              | 0                    | Reduced <sup>1</sup> |
|                                                              |      | 26365                    |           |            |                  |                      | Reduced <sup>1</sup> |
|                                                              |      | 26590                    |           |            |                  |                      | Reduced <sup>1</sup> |
|                                                              |      | 26140                    |           |            | 1                | 49                   | Reduced <sup>4</sup> |
|                                                              |      | 26365                    |           |            |                  |                      | Reduced <sup>4</sup> |
|                                                              |      | 26590                    |           |            |                  |                      | Reduced <sup>4</sup> |
|                                                              |      | 26140                    |           |            |                  | 99                   | Reduced <sup>4</sup> |
|                                                              |      | 26365                    |           |            |                  |                      | Reduced <sup>4</sup> |
|                                                              |      | 26590                    |           |            |                  |                      | Reduced <sup>4</sup> |
|                                                              |      | 26590                    |           |            |                  |                      | Reduced <sup>4</sup> |
| All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |      |                          |           |            |                  | Reduced <sup>5</sup> |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

### Side F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 251.2 mW

Closest Distance to Side F: 97 mm

$\{[(3.0)/(\sqrt{1.915})]*50 \text{ mm}\} + \{[97-50 \text{ mm}]*10\} = 578 \text{ mW}$  which is greater than 251.2 mW

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 66<br>1710-1780 MHz | A    | 132072                                                       | 20 MHz    | QPSK       | 50               | 25           | Tested               |
|                          |      | 132322                                                       |           |            |                  |              | Tested               |
|                          |      | 132572                                                       |           |            |                  |              | Tested               |
|                          |      | 132072                                                       |           |            | 100              | 0            | Tested               |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 132072                                                       |           |            | 1                | 49           | Tested               |
|                          |      | 132322                                                       |           |            |                  |              | Tested               |
|                          |      | 132572                                                       |           |            |                  |              | Tested               |
|                          |      | 132072                                                       |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 132072                                                       |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 132072                                                       |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 132072                                                       |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 132072                                                       |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              | Reduced <sup>5</sup> |
|                          | B    | 132072                                                       | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Tested               |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 132072                                                       |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 132072                                                       |           |            | 1                | 49           | Reduced <sup>6</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Tested               |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 132072                                                       |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 132072                                                       |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 132072                                                       |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 132072                                                       |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 132072                                                       |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz)                                     | Side                                                         | Required<br>Test Channel | Bandwidth | Modulation           | RB<br>Allocation | RB<br>Offset         | Tested/<br>Reduced   |
|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------|-----------|----------------------|------------------|----------------------|----------------------|
| Band 66<br>1710-1780 MHz                                     | C                                                            | 132072                   | 20 MHz    | QPSK                 | 50               | 25                   | Reduced <sup>6</sup> |
|                                                              |                                                              | 132322                   |           |                      |                  |                      | Tested               |
|                                                              |                                                              | 132572                   |           |                      | 100              | 0                    | Reduced <sup>6</sup> |
|                                                              |                                                              | 132072                   |           |                      |                  |                      | Reduced <sup>1</sup> |
|                                                              |                                                              | 132322                   |           |                      |                  |                      | Reduced <sup>1</sup> |
|                                                              |                                                              | 132572                   |           |                      | 1                | 49                   | Reduced <sup>1</sup> |
|                                                              |                                                              | 132072                   |           |                      |                  |                      | Reduced <sup>6</sup> |
|                                                              |                                                              | 132322                   |           |                      |                  | 99                   | Tested               |
|                                                              |                                                              | 132572                   |           |                      |                  |                      | Reduced <sup>6</sup> |
|                                                              |                                                              | 132072                   |           |                      |                  |                      | Reduced <sup>2</sup> |
|                                                              |                                                              | 132322                   |           |                      |                  |                      | Reduced <sup>2</sup> |
|                                                              |                                                              | 132572                   |           |                      |                  |                      | Reduced <sup>2</sup> |
|                                                              |                                                              | 132072                   |           | 16QAM                | 50               | 25                   | Reduced <sup>3</sup> |
|                                                              |                                                              | 132322                   |           |                      |                  |                      | Reduced <sup>3</sup> |
|                                                              |                                                              | 132572                   |           |                      | 100              | 0                    | Reduced <sup>3</sup> |
|                                                              |                                                              | 132072                   |           |                      |                  |                      | Reduced <sup>1</sup> |
|                                                              |                                                              | 132322                   |           |                      |                  |                      | Reduced <sup>1</sup> |
|                                                              |                                                              | 132572                   |           |                      | 1                | 49                   | Reduced <sup>1</sup> |
|                                                              |                                                              | 132072                   |           |                      |                  |                      | Reduced <sup>4</sup> |
|                                                              |                                                              | 132322                   |           |                      |                  | 99                   | Reduced <sup>4</sup> |
|                                                              |                                                              | 132572                   |           |                      |                  |                      | Reduced <sup>4</sup> |
|                                                              |                                                              | 132072                   |           |                      |                  |                      | Reduced <sup>4</sup> |
|                                                              |                                                              | 132322                   |           |                      |                  |                      | Reduced <sup>4</sup> |
|                                                              |                                                              | 132572                   |           |                      |                  |                      | Reduced <sup>4</sup> |
|                                                              |                                                              | 132072                   |           |                      |                  |                      | Reduced <sup>4</sup> |
|                                                              | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |                          |           |                      |                  |                      | Reduced <sup>5</sup> |
|                                                              | D                                                            | 132072                   | 20 MHz    | QPSK                 | 50               | 25                   | Reduced <sup>6</sup> |
|                                                              |                                                              | 132322                   |           |                      |                  |                      | Tested               |
|                                                              |                                                              | 132572                   |           |                      | 100              | 0                    | Reduced <sup>6</sup> |
|                                                              |                                                              | 132072                   |           |                      |                  |                      | Reduced <sup>1</sup> |
|                                                              |                                                              | 132322                   |           |                      |                  |                      | Reduced <sup>1</sup> |
|                                                              |                                                              | 132572                   |           |                      | 1                | 49                   | Reduced <sup>1</sup> |
|                                                              |                                                              | 132072                   |           |                      |                  |                      | Reduced <sup>6</sup> |
|                                                              |                                                              | 132322                   |           |                      |                  | 99                   | Tested               |
|                                                              |                                                              | 132572                   |           |                      |                  |                      | Reduced <sup>6</sup> |
|                                                              |                                                              | 132072                   |           |                      |                  |                      | Reduced <sup>2</sup> |
|                                                              |                                                              | 132322                   |           |                      |                  |                      | Reduced <sup>2</sup> |
|                                                              |                                                              | 132572                   |           |                      | 16QAM            | 50                   | 25                   |
|                                                              |                                                              | 132072                   |           | Reduced <sup>3</sup> |                  |                      |                      |
|                                                              |                                                              | 132322                   |           | 100                  |                  | 0                    | Reduced <sup>3</sup> |
|                                                              |                                                              | 132572                   |           |                      |                  |                      | Reduced <sup>1</sup> |
|                                                              |                                                              | 132072                   |           |                      |                  |                      | Reduced <sup>1</sup> |
|                                                              |                                                              | 132322                   |           | 1                    |                  | 49                   | Reduced <sup>1</sup> |
|                                                              |                                                              | 132572                   |           |                      |                  |                      | Reduced <sup>4</sup> |
|                                                              |                                                              | 132072                   |           |                      |                  | 99                   | Reduced <sup>4</sup> |
|                                                              |                                                              | 132322                   |           |                      |                  |                      | Reduced <sup>4</sup> |
|                                                              |                                                              | 132572                   |           |                      |                  |                      | Reduced <sup>4</sup> |
|                                                              |                                                              | 132072                   |           |                      |                  |                      | Reduced <sup>4</sup> |
| All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |                                                              |                          |           |                      |                  | Reduced <sup>4</sup> |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> – If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup> – If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup> – If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup> – If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 66<br>1710-1780 MHz | E    | 132072                                                       | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Tested               |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 132072                                                       |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 132072                                                       |           |            | 1                | 49           | Tested               |
|                          |      | 132322                                                       |           |            |                  |              | Tested               |
|                          |      | 132572                                                       |           |            |                  |              | Tested               |
|                          |      | 132072                                                       |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 132072                                                       |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 132072                                                       |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 132072                                                       |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 132072                                                       |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 132322                                                       |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 132572                                                       |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)  
A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)  
B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)  
A) I) page 4.

Reduced<sup>4</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)  
B) I) page 5.

Reduced<sup>5</sup> - If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup> - If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

#### Side F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 251.2 mW

Closest Distance to Side F: 97 mm

$[(3.0/(\sqrt{1.755})) * 50 \text{ mm}] + [(97 - 50 \text{ mm}) * 10] = 583 \text{ mW}$  which is greater than 251.2 mW

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 5<br>824-849 MHz    | A    | 20450                        | 10 MHz    | QPSK       | 25               | 12           | Reduced <sup>6</sup> |
|                          |      | 20525                        |           |            |                  |              | Tested               |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 20450                        |           |            | 50               | 0            | Tested               |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20450                        |           |            | 1                | 24           | Tested               |
|                          |      | 20525                        |           |            |                  |              | Tested               |
|                          |      | 20600                        |           |            |                  |              | Tested               |
|                          |      | 20450                        |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 20450                        |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 20450                        |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20450                        |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 20450                        |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |              | Reduced <sup>5</sup> |
|                          | B    | 20450                        | 10 MHz    | QPSK       | 25               | 12           | Reduced <sup>6</sup> |
|                          |      | 20525                        |           |            |                  |              | Tested               |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 20450                        |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20450                        |           |            | 1                | 24           | Reduced <sup>6</sup> |
|                          |      | 20525                        |           |            |                  |              | Tested               |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 20450                        |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 20450                        |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 20450                        |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20450                        |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 20450                        |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 5<br>824-849 MHz    | C    | 20450                        | 10 MHz    | QPSK       | 25               | 12           | Reduced <sup>6</sup> |
|                          |      | 20525                        |           |            |                  |              | Tested               |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 20450                        |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20450                        |           |            | 1                | 24           | Reduced <sup>6</sup> |
|                          |      | 20525                        |           |            |                  |              | Tested               |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 20450                        |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 20450                        |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 20450                        |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20450                        |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 20450                        |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |              | Reduced <sup>5</sup> |
|                          | D    | 20450                        | 10 MHz    | QPSK       | 25               | 12           | Reduced <sup>6</sup> |
|                          |      | 20525                        |           |            |                  |              | Tested               |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 20450                        |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20450                        |           |            | 1                | 12           | Reduced <sup>6</sup> |
|                          |      | 20525                        |           |            |                  |              | Tested               |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 20450                        |           |            |                  | 24           | Reduced <sup>2</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 20450                        |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 20450                        |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 20450                        |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 20450                        |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          |      | 20525                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 20600                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz)     | Side                 | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|------------------------------|----------------------|--------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 5<br>824-849 MHz        | E                    | 20450                    | 10 MHz    | QPSK       | 25               | 12           | Reduced <sup>6</sup> |
|                              |                      | 20525                    |           |            |                  |              | Tested               |
|                              |                      | 20600                    |           |            |                  |              | Reduced <sup>6</sup> |
|                              |                      | 20450                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                              |                      | 20525                    |           |            |                  |              | Reduced <sup>1</sup> |
|                              |                      | 20600                    |           |            |                  |              | Reduced <sup>1</sup> |
|                              |                      | 20450                    |           |            | 1                | 12           | Reduced <sup>6</sup> |
|                              |                      | 20525                    |           |            |                  |              | Tested               |
|                              |                      | 20600                    |           |            |                  | 24           | Reduced <sup>6</sup> |
|                              |                      | 20450                    |           |            |                  |              | Reduced <sup>2</sup> |
|                              |                      | 20525                    |           |            |                  |              | Reduced <sup>2</sup> |
|                              |                      | 20600                    |           |            |                  |              | Reduced <sup>2</sup> |
|                              |                      | 20450                    |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                              |                      | 20525                    |           |            |                  |              | Reduced <sup>3</sup> |
|                              |                      | 20600                    |           |            |                  |              | Reduced <sup>3</sup> |
|                              |                      | 20450                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                              |                      | 20525                    |           |            |                  |              | Reduced <sup>1</sup> |
|                              |                      | 20600                    |           |            |                  |              | Reduced <sup>1</sup> |
|                              |                      | 20450                    |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                              |                      | 20525                    |           |            |                  |              | Reduced <sup>4</sup> |
|                              |                      | 20600                    |           |            |                  | 49           | Reduced <sup>4</sup> |
|                              |                      | 20450                    |           |            |                  |              | Reduced <sup>4</sup> |
|                              |                      | 20525                    |           |            |                  |              | Reduced <sup>4</sup> |
|                              |                      | 20600                    |           |            |                  |              | Reduced <sup>4</sup> |
| 20450                        | Reduced <sup>4</sup> |                          |           |            |                  |              |                      |
| All lower bandwidths (5 MHz) |                      |                          |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)  
A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)  
B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)  
A) I) page 4.

Reduced<sup>4</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)  
B) I) page 5.

Reduced<sup>5</sup> - If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup> - If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

#### Side F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 251.2 mW

Closest Distance to Side F: 97 mm

$[(3.0/(\sqrt{0.849})) * 50 \text{ mm}] + [(97 - 50 \text{ mm}) * 10] = 632 \text{ mW}$  which is greater than 251.2 mW

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |  |
|--------------------------|------|------------------------------|-----------|------------|------------------|--------------|----------------------|--|
| Band 26<br>814-849 MHz   | A    | 26740                        | 15 MHz    | QPSK       | 36               | 19           | Reduced <sup>6</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Tested               |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>6</sup> |  |
|                          |      | 26740                        |           |            | 75               | 0            | Reduced <sup>1</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 26740                        |           |            | 1                | 37           | Reduced <sup>6</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Tested               |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>6</sup> |  |
|                          |      | 26740                        |           |            |                  | 74           | Reduced <sup>2</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 26740                        |           | 16QAM      | 36               | 19           | Reduced <sup>3</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 26740                        |           |            | 75               | 0            | Reduced <sup>1</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 26740                        |           |            | 1                | 37           | Reduced <sup>4</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 26740                        |           |            |                  | 74           | Reduced <sup>4</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |              |                      |  |
|                          | B    | 26740                        | 15 MHz    | QPSK       | 36               | 19           | Reduced <sup>6</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Tested               |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>6</sup> |  |
|                          |      | 26740                        |           |            | 75               | 0            | Reduced <sup>1</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 26740                        |           |            | 1                | 37           | Reduced <sup>6</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Tested               |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>6</sup> |  |
|                          |      | 26740                        |           |            |                  | 74           | Reduced <sup>2</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 26740                        |           | 16QAM      | 36               | 19           | Reduced <sup>3</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 26740                        |           |            | 75               | 0            | Reduced <sup>1</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 26740                        |           |            | 1                | 37           | Reduced <sup>4</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 26740                        |           |            |                  | 74           | Reduced <sup>4</sup> |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |              |                      |  |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side                         | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation     | RB<br>Offset         | Tested/<br>Reduced   |                      |                      |
|--------------------------|------------------------------|--------------------------|-----------|------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Band 26<br>814-849 MHz   | C                            | 26740                    | 15 MHz    | QPSK       | 36                   | 19                   | Reduced <sup>6</sup> |                      |                      |
|                          |                              | 26865                    |           |            |                      |                      | Tested               |                      |                      |
|                          |                              | 26990                    |           |            | 75                   | 0                    | Reduced <sup>6</sup> |                      |                      |
|                          |                              | 26740                    |           |            |                      |                      | Reduced <sup>1</sup> |                      |                      |
|                          |                              | 26865                    |           |            |                      |                      | Reduced <sup>1</sup> |                      |                      |
|                          |                              | 26990                    |           |            |                      |                      | Reduced <sup>1</sup> |                      |                      |
|                          |                              | 26740                    |           |            |                      |                      | 1                    | 37                   | Reduced <sup>6</sup> |
|                          |                              | 26865                    |           |            |                      |                      |                      |                      | Tested               |
|                          |                              | 26990                    |           |            | 74                   | Reduced <sup>6</sup> |                      |                      |                      |
|                          |                              | 26740                    |           |            |                      | Reduced <sup>2</sup> |                      |                      |                      |
|                          |                              | 26865                    |           |            | Reduced <sup>2</sup> |                      |                      |                      |                      |
|                          |                              | 26990                    |           |            | Reduced <sup>2</sup> |                      |                      |                      |                      |
|                          |                              | 26740                    |           | 16QAM      | 36                   | 19                   | Reduced <sup>3</sup> |                      |                      |
|                          |                              | 26865                    |           |            |                      |                      | Reduced <sup>3</sup> |                      |                      |
|                          |                              | 26990                    |           |            | 75                   | 0                    | Reduced <sup>3</sup> |                      |                      |
|                          |                              | 26740                    |           |            |                      |                      | Reduced <sup>1</sup> |                      |                      |
|                          |                              | 26865                    |           |            |                      |                      | Reduced <sup>1</sup> |                      |                      |
|                          |                              | 26990                    |           |            |                      |                      | Reduced <sup>1</sup> |                      |                      |
|                          |                              | 26740                    |           |            |                      |                      | 1                    | 37                   | Reduced <sup>4</sup> |
|                          |                              | 26865                    |           |            |                      |                      |                      |                      | Reduced <sup>4</sup> |
|                          |                              | 26990                    |           |            | 74                   | Reduced <sup>4</sup> |                      |                      |                      |
|                          |                              | 26740                    |           |            |                      | Reduced <sup>4</sup> |                      |                      |                      |
|                          |                              | 26865                    |           |            | Reduced <sup>4</sup> |                      |                      |                      |                      |
|                          |                              | 26990                    |           |            | Reduced <sup>4</sup> |                      |                      |                      |                      |
|                          | All lower bandwidths (5 MHz) |                          |           |            |                      |                      |                      | Reduced <sup>5</sup> |                      |
|                          | D                            | 26740                    | 15 MHz    | QPSK       | 36                   | 19                   | Reduced <sup>6</sup> |                      |                      |
|                          |                              | 26865                    |           |            |                      |                      | Tested               |                      |                      |
|                          |                              | 26990                    |           |            | 75                   | 0                    | Reduced <sup>6</sup> |                      |                      |
|                          |                              | 26740                    |           |            |                      |                      | Reduced <sup>1</sup> |                      |                      |
|                          |                              | 26865                    |           |            |                      |                      | Reduced <sup>1</sup> |                      |                      |
|                          |                              | 26990                    |           |            |                      |                      | Reduced <sup>1</sup> |                      |                      |
|                          |                              | 26740                    |           |            |                      |                      | 1                    | 37                   | Reduced <sup>6</sup> |
|                          |                              | 26865                    |           |            |                      |                      |                      |                      | Tested               |
|                          |                              | 26990                    |           |            | 74                   | Reduced <sup>6</sup> |                      |                      |                      |
|                          |                              | 26740                    |           |            |                      | Reduced <sup>2</sup> |                      |                      |                      |
|                          |                              | 26865                    |           |            | Reduced <sup>2</sup> |                      |                      |                      |                      |
|                          |                              | 26990                    |           |            | Reduced <sup>2</sup> |                      |                      |                      |                      |
|                          |                              | 26740                    |           | 16QAM      | 36                   | 19                   | Reduced <sup>3</sup> |                      |                      |
|                          |                              | 26865                    |           |            |                      |                      | Reduced <sup>3</sup> |                      |                      |
|                          |                              | 26990                    |           |            | 75                   | 0                    | Reduced <sup>3</sup> |                      |                      |
|                          |                              | 26740                    |           |            |                      |                      | Reduced <sup>1</sup> |                      |                      |
|                          |                              | 26865                    |           |            |                      |                      | Reduced <sup>1</sup> |                      |                      |
|                          |                              | 26990                    |           |            |                      |                      | Reduced <sup>1</sup> |                      |                      |
|                          |                              | 26740                    |           |            |                      |                      | 1                    | 37                   | Reduced <sup>4</sup> |
|                          |                              | 26865                    |           |            |                      |                      |                      |                      | Reduced <sup>4</sup> |
|                          |                              | 26990                    |           |            | 74                   | Reduced <sup>4</sup> |                      |                      |                      |
|                          |                              | 26740                    |           |            |                      | Reduced <sup>4</sup> |                      |                      |                      |
|                          |                              | 26865                    |           |            | Reduced <sup>4</sup> |                      |                      |                      |                      |
|                          |                              | 26990                    |           |            | Reduced <sup>4</sup> |                      |                      |                      |                      |
|                          | All lower bandwidths (5 MHz) |                          |           |            |                      |                      |                      | Reduced <sup>5</sup> |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |  |  |  |  |
|--------------------------|------|------------------------------|-----------|------------|------------------|--------------|----------------------|--|--|--|--|
| Band 26<br>814-849 MHz   | E    | 26740                        | 15 MHz    | QPSK       | 36               | 19           | Reduced <sup>6</sup> |  |  |  |  |
|                          |      | 26865                        |           |            |                  |              | Tested               |  |  |  |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>6</sup> |  |  |  |  |
|                          |      | 26740                        |           |            | 75               | 0            | Reduced <sup>1</sup> |  |  |  |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>1</sup> |  |  |  |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>1</sup> |  |  |  |  |
|                          |      | 26740                        |           |            | 1                | 37           | Reduced <sup>6</sup> |  |  |  |  |
|                          |      | 26865                        |           |            |                  |              | Tested               |  |  |  |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>6</sup> |  |  |  |  |
|                          |      | 26740                        |           |            |                  | 74           | Reduced <sup>2</sup> |  |  |  |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>2</sup> |  |  |  |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>2</sup> |  |  |  |  |
|                          |      | 26740                        |           | 16QAM      | 36               | 19           | Reduced <sup>3</sup> |  |  |  |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>3</sup> |  |  |  |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>3</sup> |  |  |  |  |
|                          |      | 26740                        |           |            | 75               | 0            | Reduced <sup>1</sup> |  |  |  |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>1</sup> |  |  |  |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>1</sup> |  |  |  |  |
|                          |      | 26740                        |           |            | 1                | 37           | Reduced <sup>4</sup> |  |  |  |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>4</sup> |  |  |  |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>4</sup> |  |  |  |  |
|                          |      | 26740                        |           |            |                  | 74           | Reduced <sup>4</sup> |  |  |  |  |
|                          |      | 26865                        |           |            |                  |              | Reduced <sup>4</sup> |  |  |  |  |
|                          |      | 26990                        |           |            |                  |              | Reduced <sup>4</sup> |  |  |  |  |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |              |                      |  |  |  |  |
|                          |      |                              |           |            |                  |              | Reduced <sup>5</sup> |  |  |  |  |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)  
A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)  
B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)  
A) I) page 4.

Reduced<sup>4</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)  
B) I) page 5.

Reduced<sup>5</sup> - If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup> - If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

#### Side F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 251.2 mW

Closest Distance to Side F: 97 mm

$[(3.0/(\sqrt{0.849})) * 50 \text{ mm}] + [(97 - 50 \text{ mm}) * 10] = 632 \text{ mW}$  which is greater than 251.2 mW

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |  |
|--------------------------|------|----------------------------------------------|-----------|------------|------------------|--------------|----------------------|--|
| Band 7<br>2500-2570 MHz  | A    | 20850                                        | 20 MHz    | QPSK       | 50               | 25           | Tested               |  |
|                          |      | 21100                                        |           |            |                  |              | Tested               |  |
|                          |      | 21350                                        |           |            |                  |              | Tested               |  |
|                          |      | 20850                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Tested               |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 20850                                        |           |            | 1                | 49           | Tested               |  |
|                          |      | 21100                                        |           |            |                  |              | Tested               |  |
|                          |      | 21350                                        |           |            |                  |              | Tested               |  |
|                          |      | 20850                                        |           |            |                  | 99           | Reduced <sup>1</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 20850                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 20850                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 20850                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 20850                                        |           |            |                  | 99           | Reduced <sup>4</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz) |           |            |                  |              |                      |  |
|                          | C    | 20850                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Tested               |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>6</sup> |  |
|                          |      | 20850                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 20850                                        |           |            | 1                | 49           | Reduced <sup>2</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 20850                                        |           |            |                  | 99           | Reduced <sup>6</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Tested               |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>6</sup> |  |
|                          |      | 20850                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 20850                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 20850                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 20850                                        |           |            |                  | 99           | Reduced <sup>4</sup> |  |
|                          |      | 21100                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 21350                                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz) |           |            |                  |              |                      |  |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz)                     | Side | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|----------------------------------------------|------|--------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 7<br>2500-2570 MHz                      | D    | 20850                    | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                                              |      | 21100                    |           |            |                  |              | Tested               |
|                                              |      | 21350                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                              |      | 20850                    |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                                              |      | 21100                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                              |      | 21350                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                              |      | 20850                    |           |            | 1                | 49           | Reduced <sup>2</sup> |
|                                              |      | 21100                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                              |      | 21350                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                              |      | 20850                    |           |            |                  | 99           | Tested               |
|                                              |      | 21100                    |           |            |                  |              | Tested               |
|                                              |      | 21350                    |           |            |                  |              | Tested               |
|                                              |      | 20850                    |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                                              |      | 21100                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                              |      | 21350                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                              |      | 20850                    |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                                              |      | 21100                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                              |      | 21350                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                              |      | 20850                    |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                                              |      | 21100                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                              |      | 21350                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                              |      | 20850                    |           |            |                  | 99           | Reduced <sup>4</sup> |
|                                              |      | 21100                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                              |      | 21350                    |           |            |                  |              | Reduced <sup>4</sup> |
| All lower bandwidths (15 MHz, 10 MHz, 5 MHz) |      |                          |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)  
A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)  
B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)  
A) I) page 4.

Reduced<sup>4</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)  
B) I) page 5.

Reduced<sup>5</sup> - If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup> - If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

### Sides B & F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 199.5 mW  
Closest Distance to Side B: 75 mm  
Closest Distance to Side F: 71 mm

Side F is the closest; therefore, if Side F is excluded side B would also be excluded.

$[(3.0/(\sqrt{2.70}) * 50 \text{ mm})] + [(71 - 50 \text{ mm}) * 10] = 301 \text{ mW}$  which is greater than 223.9 mW

| Band/<br>Frequency (MHz) | Side                         | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------------------------------|--------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 30<br>2305-2315 MHz | A                            | 27710                    | 10 MHz    | QPSK       | 25               | 12           | Tested               |
|                          |                              | 27710                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 27710                    |           |            | 1                | 24           | Tested               |
|                          |                              | 27710                    |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |                              | 27710                    |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |                              | 27710                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 27710                    |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |                              | 27710                    |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          | All lower bandwidths (5 MHz) |                          |           |            |                  |              | Reduced <sup>5</sup> |
|                          | C                            | 27710                    | 10 MHz    | QPSK       | 25               | 12           | Tested               |
|                          |                              | 27710                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 27710                    |           |            | 1                | 24           | Tested               |
|                          |                              | 27710                    |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |                              | 27710                    |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |                              | 27710                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 27710                    |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |                              | 27710                    |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          | All lower bandwidths (5 MHz) |                          |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset         | Tested/<br>Reduced   |
|--------------------------|------|------------------------------|-----------|------------|------------------|----------------------|----------------------|
| Band 30<br>2305-2315 MHz | D    | 27710                        | 10 MHz    | QPSK       | 25               | 12                   | Tested               |
|                          |      | 27710                        |           |            | 50               | 0                    | Reduced <sup>1</sup> |
|                          |      | 27710                        |           |            | 1                | 24                   | Tested               |
|                          |      | 27710                        |           | 16QAM      |                  | 49                   | Reduced <sup>2</sup> |
|                          |      | 27710                        |           |            | 25               | 12                   | Reduced <sup>3</sup> |
|                          |      | 27710                        |           |            | 50               | 0                    | Reduced <sup>1</sup> |
|                          |      | 27710                        |           |            | 1                | 24                   | Reduced <sup>4</sup> |
|                          |      | 27710                        |           |            | 49               | Reduced <sup>4</sup> |                      |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |                      |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

#### Side F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 251.2 mW

Closest Distance to Side F: 97 mm

$[(\{(3.0)/(\sqrt{2.315})\} * 50 \text{ mm})] + \{[97 - 50 \text{ mm}] * 10\} = 578 \text{ mW}$  which is greater than 251.2 mW

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                     | Bandwidth | Modulation           | RB<br>Allocation     | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|----------------------------------------------|-----------|----------------------|----------------------|--------------|----------------------|
| Band 40<br>2300-2400 MHz | A    | 38750                                        | 20 MHz    | QPSK                 | 50                   | 25           | Reduced <sup>6</sup> |
|                          |      | 39150                                        |           |                      |                      |              | Tested               |
|                          |      | 39550                                        |           |                      |                      |              | Reduced <sup>6</sup> |
|                          |      | 38750                                        |           |                      | 100                  | 0            | Reduced <sup>1</sup> |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>1</sup> |
|                          |      | 39550                                        |           |                      |                      |              | Tested               |
|                          |      | 38750                                        |           |                      | 1                    | 49           | Tested               |
|                          |      | 39150                                        |           |                      |                      |              | Tested               |
|                          |      | 39550                                        |           |                      |                      |              | Tested               |
|                          |      | 38750                                        |           |                      |                      | 99           | Reduced <sup>1</sup> |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>1</sup> |
|                          |      | 39550                                        |           |                      |                      |              | Reduced <sup>1</sup> |
|                          |      | 38750                                        |           | 16QAM                | 50                   | 25           | Reduced <sup>3</sup> |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>3</sup> |
|                          |      | 39550                                        |           |                      |                      |              | Reduced <sup>3</sup> |
|                          |      | 38750                                        |           |                      | 100                  | 0            | Reduced <sup>1</sup> |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>1</sup> |
|                          |      | 39550                                        |           |                      |                      |              | Reduced <sup>1</sup> |
|                          |      | 38750                                        |           |                      | 1                    | 49           | Reduced <sup>4</sup> |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>4</sup> |
|                          |      | 39550                                        |           |                      |                      |              | Reduced <sup>4</sup> |
|                          |      | 38750                                        |           |                      |                      | 99           | Reduced <sup>4</sup> |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>4</sup> |
|                          |      | 39550                                        |           |                      |                      |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz) |           |                      |                      |              | Reduced <sup>5</sup> |
|                          | C    | 20850                                        | 20 MHz    | QPSK                 | 50                   | 25           | Reduced <sup>6</sup> |
|                          |      | 38750                                        |           |                      |                      |              | Tested               |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>6</sup> |
|                          |      | 39550                                        |           |                      | 100                  | 0            | Reduced <sup>1</sup> |
|                          |      | 38750                                        |           |                      |                      |              | Reduced <sup>1</sup> |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>1</sup> |
|                          |      | 39550                                        |           |                      | 1                    | 49           | Reduced <sup>6</sup> |
|                          |      | 38750                                        |           |                      |                      |              | Tested               |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>6</sup> |
|                          |      | 39550                                        |           |                      |                      | 99           | Reduced <sup>2</sup> |
|                          |      | 38750                                        |           |                      |                      |              | Reduced <sup>2</sup> |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>2</sup> |
|                          |      | 39550                                        |           | 16QAM                | 50                   | 25           | Reduced <sup>3</sup> |
|                          |      | 38750                                        |           |                      |                      |              | Reduced <sup>3</sup> |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>3</sup> |
|                          |      | 39550                                        |           |                      | 100                  | 0            | Reduced <sup>1</sup> |
|                          |      | 38750                                        |           |                      |                      |              | Reduced <sup>1</sup> |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>1</sup> |
|                          |      | 39550                                        |           |                      | 1                    | 49           | Reduced <sup>4</sup> |
|                          |      | 38750                                        |           |                      |                      |              | Reduced <sup>4</sup> |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>4</sup> |
|                          |      | 39550                                        |           |                      |                      | 99           | Reduced <sup>4</sup> |
|                          |      | 38750                                        |           |                      |                      |              | Reduced <sup>4</sup> |
|                          |      | 39150                                        |           |                      |                      |              | Reduced <sup>4</sup> |
|                          |      | 39550                                        |           | Reduced <sup>4</sup> |                      |              |                      |
| 39550                    |      |                                              |           |                      | Reduced <sup>5</sup> |              |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz)                     | Side | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|----------------------------------------------|------|--------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 40<br>2300-2400 MHz                     | D    | 38750                    | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                                              |      | 39150                    |           |            |                  |              | Tested               |
|                                              |      | 39550                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                              |      | 38750                    |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                                              |      | 39150                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                              |      | 39550                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                              |      | 38750                    |           |            | 1                | 49           | Reduced <sup>6</sup> |
|                                              |      | 39150                    |           |            |                  |              | Tested               |
|                                              |      | 39550                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                              |      | 38750                    |           |            |                  | 99           | Reduced <sup>2</sup> |
|                                              |      | 39150                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                              |      | 39550                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                              |      | 38750                    |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                                              |      | 39150                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                              |      | 39550                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                              |      | 38750                    |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                                              |      | 39150                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                              |      | 39550                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                              |      | 38750                    |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                                              |      | 39150                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                              |      | 39550                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                              |      | 38750                    |           |            |                  | 99           | Reduced <sup>4</sup> |
|                                              |      | 39150                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                              |      | 39550                    |           |            |                  |              | Reduced <sup>4</sup> |
| All lower bandwidths (15 MHz, 10 MHz, 5 MHz) |      |                          |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3) A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3) B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) A) I) page 4.

Reduced<sup>4</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) B) I) page 5.

Reduced<sup>5</sup> - If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup> - If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

### Sides B & F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 199.5 mW  
Closest Distance to Side B: 75 mm  
Closest Distance to Side F: 71 mm

Side F is the closest; therefore, if Side F is excluded side B would also be excluded.

$(((3.0)/(\sqrt{2.40})) * 50 \text{ mm}) + [(71 - 50 \text{ mm}) * 10] = 306 \text{ mW}$  which is greater than 223.9 mW

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |  |
|--------------------------|------|------------------------------|-----------|------------|------------------|--------------|----------------------|--|
| Band 12<br>699-716 MHz   | A    | 23060                        | 10 MHz    | QPSK       | 25               | 12           | Reduced <sup>6</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Tested               |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>6</sup> |  |
|                          |      | 23060                        |           |            | 50               | 0            | Reduced <sup>1</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 23060                        |           |            | 1                | 24           | Reduced <sup>6</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Tested               |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>6</sup> |  |
|                          |      | 23060                        |           |            |                  | 49           | Reduced <sup>2</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 23060                        |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 23060                        |           |            | 50               | 0            | Reduced <sup>1</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 23060                        |           |            | 1                | 24           | Reduced <sup>4</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 23060                        |           |            |                  | 49           | Reduced <sup>4</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |              |                      |  |
|                          | B    | 23060                        | 10 MHz    | QPSK       | 25               | 12           | Reduced <sup>6</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Tested               |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>6</sup> |  |
|                          |      | 23060                        |           |            | 50               | 0            | Reduced <sup>1</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 23060                        |           |            | 1                | 24           | Reduced <sup>6</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Tested               |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>6</sup> |  |
|                          |      | 23060                        |           |            |                  | 49           | Reduced <sup>2</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>2</sup> |  |
|                          |      | 23060                        |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>3</sup> |  |
|                          |      | 23060                        |           |            | 50               | 0            | Reduced <sup>1</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>1</sup> |  |
|                          |      | 23060                        |           |            | 1                | 24           | Reduced <sup>4</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 23060                        |           |            |                  | 49           | Reduced <sup>4</sup> |  |
|                          |      | 23095                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | 23129                        |           |            |                  |              | Reduced <sup>4</sup> |  |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |              |                      |  |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset         | Tested/<br>Reduced   |  |
|--------------------------|------|------------------------------|-----------|------------|------------------|----------------------|----------------------|--|
| Band 12<br>699-716 MHz   | C    | 23060                        | 10 MHz    | QPSK       | 25               | 12                   | Reduced <sup>6</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Tested               |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>6</sup> |  |
|                          |      | 23060                        |           |            | 50               | 0                    | Reduced <sup>1</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Reduced <sup>1</sup> |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>1</sup> |  |
|                          |      | 23060                        |           |            | 1                | 24                   | Reduced <sup>6</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Tested               |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>6</sup> |  |
|                          |      | 23060                        |           | 49         |                  | Reduced <sup>2</sup> |                      |  |
|                          |      | 23095                        |           |            |                  | Reduced <sup>2</sup> |                      |  |
|                          |      | 23129                        |           |            |                  | Reduced <sup>2</sup> |                      |  |
|                          |      | 23060                        |           | 16QAM      | 25               | 12                   | Reduced <sup>3</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Reduced <sup>3</sup> |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>3</sup> |  |
|                          |      | 23060                        |           |            | 50               | 0                    | Reduced <sup>1</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Reduced <sup>1</sup> |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>1</sup> |  |
|                          |      | 23060                        |           |            | 1                | 24                   | Reduced <sup>4</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Reduced <sup>4</sup> |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>4</sup> |  |
|                          |      | 23060                        |           |            |                  | 49                   | Reduced <sup>4</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Reduced <sup>4</sup> |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>4</sup> |  |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |                      |                      |  |
|                          | D    | 23060                        | 10 MHz    | QPSK       | 25               | 12                   | Reduced <sup>6</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Tested               |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>6</sup> |  |
|                          |      | 23060                        |           |            | 50               | 0                    | Reduced <sup>1</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Reduced <sup>1</sup> |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>1</sup> |  |
|                          |      | 23060                        |           |            | 1                | 12                   | Reduced <sup>6</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Tested               |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>6</sup> |  |
|                          |      | 23060                        |           | 24         |                  | Reduced <sup>2</sup> |                      |  |
|                          |      | 23095                        |           |            |                  | Reduced <sup>2</sup> |                      |  |
|                          |      | 23129                        |           |            |                  | Reduced <sup>2</sup> |                      |  |
|                          |      | 23060                        |           | 16QAM      | 25               | 12                   | Reduced <sup>3</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Reduced <sup>3</sup> |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>3</sup> |  |
|                          |      | 23060                        |           |            | 50               | 0                    | Reduced <sup>1</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Reduced <sup>1</sup> |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>1</sup> |  |
|                          |      | 23060                        |           |            | 1                | 24                   | Reduced <sup>4</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Reduced <sup>4</sup> |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>4</sup> |  |
|                          |      | 23060                        |           |            |                  | 49                   | Reduced <sup>4</sup> |  |
|                          |      | 23095                        |           |            |                  |                      | Reduced <sup>4</sup> |  |
|                          |      | 23129                        |           |            |                  |                      | Reduced <sup>4</sup> |  |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |                      |                      |  |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz)     | Side                 | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|------------------------------|----------------------|--------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 12<br>699-716 MHz       | E                    | 23060                    | 10 MHz    | QPSK       | 25               | 12           | Reduced <sup>6</sup> |
|                              |                      | 23095                    |           |            |                  |              | Tested               |
|                              |                      | 23129                    |           |            |                  |              | Reduced <sup>6</sup> |
|                              |                      | 23060                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                              |                      | 23095                    |           |            |                  |              | Reduced <sup>1</sup> |
|                              |                      | 23129                    |           |            |                  |              | Reduced <sup>1</sup> |
|                              |                      | 23060                    |           |            | 1                | 12           | Reduced <sup>6</sup> |
|                              |                      | 23095                    |           |            |                  |              | Tested               |
|                              |                      | 23129                    |           |            |                  | 24           | Reduced <sup>6</sup> |
|                              |                      | 23060                    |           |            |                  |              | Reduced <sup>2</sup> |
|                              |                      | 23095                    |           |            |                  |              | Reduced <sup>2</sup> |
|                              |                      | 23129                    |           |            |                  |              | Reduced <sup>2</sup> |
|                              |                      | 23060                    |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                              |                      | 23095                    |           |            |                  |              | Reduced <sup>3</sup> |
|                              |                      | 23129                    |           |            | 50               | 0            | Reduced <sup>3</sup> |
|                              |                      | 23060                    |           |            |                  |              | Reduced <sup>1</sup> |
|                              |                      | 23095                    |           |            |                  |              | Reduced <sup>1</sup> |
|                              |                      | 23129                    |           |            |                  |              | Reduced <sup>1</sup> |
|                              |                      | 23060                    |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                              |                      | 23095                    |           |            |                  |              | Reduced <sup>4</sup> |
|                              |                      | 23129                    |           |            |                  | 49           | Reduced <sup>4</sup> |
|                              |                      | 23060                    |           |            |                  |              | Reduced <sup>4</sup> |
|                              |                      | 23095                    |           |            |                  |              | Reduced <sup>4</sup> |
|                              |                      | 23129                    |           |            |                  |              | Reduced <sup>4</sup> |
| 23129                        | Reduced <sup>4</sup> |                          |           |            |                  |              |                      |
| All lower bandwidths (5 MHz) |                      |                          |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3) A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3) B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) A) I) page 4.

Reduced<sup>4</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) B) I) page 5.

Reduced<sup>5</sup> - If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup> - If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

#### Side F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 251.2 mW

Closest Distance to Side F: 97 mm

$[(3.0/(\sqrt{0.716})) * 50 \text{ mm}] + [(97 - 50 \text{ mm}) * 10] = 632 \text{ mW}$  which is greater than 251.2 mW

| Band/<br>Frequency (MHz) | Side                         | Required<br>Test Channel     | Bandwidth            | Modulation | RB<br>Allocation | RB<br>Offset         | Tested/<br>Reduced   |                      |        |
|--------------------------|------------------------------|------------------------------|----------------------|------------|------------------|----------------------|----------------------|----------------------|--------|
| Band 17<br>704-716 MHz   | A                            | 23780                        | 10 MHz               | QPSK       | 25               | 12                   | Reduced <sup>6</sup> |                      |        |
|                          |                              | 23790                        |                      |            |                  |                      | Tested               |                      |        |
|                          |                              | 23800                        |                      |            |                  |                      | Reduced <sup>6</sup> |                      |        |
|                          |                              | 23780                        |                      |            | 50               | 0                    | Reduced <sup>1</sup> |                      |        |
|                          |                              | 23790                        |                      |            |                  |                      | Reduced <sup>1</sup> |                      |        |
|                          |                              | 23800                        |                      |            |                  |                      | Reduced <sup>1</sup> |                      |        |
|                          |                              | 23780                        |                      |            | 1                | 24                   | Reduced <sup>6</sup> |                      |        |
|                          |                              | 23790                        |                      |            |                  |                      | Tested               |                      |        |
|                          |                              | 23800                        |                      |            |                  |                      | Reduced <sup>6</sup> |                      |        |
|                          |                              | 23780                        |                      |            |                  | 49                   | Reduced <sup>2</sup> |                      |        |
|                          |                              | 23790                        |                      |            |                  |                      | Reduced <sup>2</sup> |                      |        |
|                          |                              | 23800                        |                      |            |                  |                      | Reduced <sup>2</sup> |                      |        |
|                          |                              | 23780                        |                      | 16QAM      | 25               | 12                   | Reduced <sup>3</sup> |                      |        |
|                          |                              | 23790                        |                      |            |                  |                      | Reduced <sup>3</sup> |                      |        |
|                          |                              | 23800                        |                      |            |                  |                      | Reduced <sup>3</sup> |                      |        |
|                          |                              | 23780                        |                      |            | 50               | 0                    | Reduced <sup>1</sup> |                      |        |
|                          |                              | 23790                        |                      |            |                  |                      | Reduced <sup>1</sup> |                      |        |
|                          |                              | 23800                        |                      |            |                  |                      | Reduced <sup>1</sup> |                      |        |
|                          |                              | 23780                        |                      |            | 1                | 24                   | Reduced <sup>4</sup> |                      |        |
|                          |                              | 23790                        |                      |            |                  |                      | Reduced <sup>4</sup> |                      |        |
|                          |                              | 23800                        |                      |            |                  |                      | Reduced <sup>4</sup> |                      |        |
|                          |                              | 23780                        |                      |            |                  | 49                   | Reduced <sup>4</sup> |                      |        |
|                          |                              | 23790                        |                      |            |                  |                      | Reduced <sup>4</sup> |                      |        |
|                          |                              | 23800                        |                      |            |                  |                      | Reduced <sup>4</sup> |                      |        |
|                          |                              | All lower bandwidths (5 MHz) |                      |            |                  |                      |                      | Reduced <sup>5</sup> |        |
|                          |                              | B                            |                      | 10 MHz     | QPSK             | 25                   | 12                   | Reduced <sup>6</sup> |        |
|                          |                              |                              |                      |            |                  |                      |                      | 23790                | Tested |
|                          | 23800                        |                              | Reduced <sup>6</sup> |            |                  |                      |                      |                      |        |
|                          | 23780                        |                              | 50                   |            |                  | 0                    | Reduced <sup>1</sup> |                      |        |
|                          | 23790                        |                              |                      |            |                  |                      | Reduced <sup>1</sup> |                      |        |
|                          | 23800                        |                              |                      |            |                  |                      | Reduced <sup>1</sup> |                      |        |
|                          | 23780                        |                              | 1                    |            |                  | 24                   | Reduced <sup>6</sup> |                      |        |
|                          | 23790                        |                              |                      |            |                  |                      | Tested               |                      |        |
|                          | 23800                        |                              |                      |            |                  |                      | Reduced <sup>6</sup> |                      |        |
|                          | 23780                        |                              |                      |            |                  | 49                   | Reduced <sup>2</sup> |                      |        |
|                          | 23790                        |                              |                      |            |                  |                      | Reduced <sup>2</sup> |                      |        |
|                          | 23800                        |                              |                      |            |                  |                      | Reduced <sup>2</sup> |                      |        |
|                          | 16QAM                        |                              | 25                   |            | 12               | Reduced <sup>3</sup> |                      |                      |        |
|                          |                              |                              |                      |            |                  | 23790                | Reduced <sup>3</sup> |                      |        |
|                          |                              |                              |                      |            |                  | 23800                | Reduced <sup>3</sup> |                      |        |
|                          |                              |                              | 23780                |            | 50               | 0                    | Reduced <sup>1</sup> |                      |        |
|                          |                              |                              | 23790                |            |                  |                      | Reduced <sup>1</sup> |                      |        |
|                          |                              |                              | 23800                |            |                  |                      | Reduced <sup>1</sup> |                      |        |
|                          |                              |                              | 23780                |            | 1                | 24                   | Reduced <sup>4</sup> |                      |        |
|                          |                              |                              | 23790                |            |                  |                      | Reduced <sup>4</sup> |                      |        |
|                          |                              |                              | 23800                |            |                  |                      | Reduced <sup>4</sup> |                      |        |
|                          |                              |                              | 23780                |            |                  | 49                   | Reduced <sup>4</sup> |                      |        |
|                          |                              |                              | 23790                |            |                  |                      | Reduced <sup>4</sup> |                      |        |
|                          | 23800                        | Reduced <sup>4</sup>         |                      |            |                  |                      |                      |                      |        |
|                          | All lower bandwidths (5 MHz) |                              |                      |            |                  |                      | Reduced <sup>5</sup> |                      |        |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side                         | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------------------------------|--------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 17<br>704-716 MHz   | C                            | 23780                    | 10 MHz    | QPSK       | 25               | 12           | Reduced <sup>6</sup> |
|                          |                              | 23790                    |           |            |                  |              | Tested               |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>6</sup> |
|                          |                              | 23780                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23790                    |           |            |                  |              | Reduced <sup>1</sup> |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>1</sup> |
|                          |                              | 23780                    |           |            | 1                | 24           | Reduced <sup>6</sup> |
|                          |                              | 23790                    |           |            |                  |              | Tested               |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>6</sup> |
|                          |                              | 23780                    |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |                              | 23790                    |           |            |                  |              | Reduced <sup>2</sup> |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>2</sup> |
|                          |                              | 23780                    |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |                              | 23790                    |           |            |                  |              | Reduced <sup>3</sup> |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>3</sup> |
|                          |                              | 23780                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23790                    |           |            |                  |              | Reduced <sup>1</sup> |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>1</sup> |
|                          |                              | 23780                    |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |                              | 23790                    |           |            |                  |              | Reduced <sup>4</sup> |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>4</sup> |
|                          |                              | 23780                    |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          |                              | 23790                    |           |            |                  |              | Reduced <sup>4</sup> |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>4</sup> |
|                          |                              | 23780                    |           |            |                  |              | Reduced <sup>4</sup> |
|                          | All lower bandwidths (5 MHz) |                          |           |            |                  |              | Reduced <sup>5</sup> |
|                          | D                            | 23780                    | 10 MHz    | QPSK       | 25               | 12           | Reduced <sup>6</sup> |
|                          |                              | 23790                    |           |            |                  |              | Tested               |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>6</sup> |
|                          |                              | 23780                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23790                    |           |            |                  |              | Reduced <sup>1</sup> |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>1</sup> |
|                          |                              | 23780                    |           |            | 1                | 12           | Reduced <sup>6</sup> |
|                          |                              | 23790                    |           |            |                  |              | Tested               |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>6</sup> |
|                          |                              | 23780                    |           |            |                  | 24           | Reduced <sup>2</sup> |
|                          |                              | 23790                    |           |            |                  |              | Reduced <sup>2</sup> |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>2</sup> |
|                          |                              | 23780                    |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |                              | 23790                    |           |            |                  |              | Reduced <sup>3</sup> |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>3</sup> |
|                          |                              | 23780                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23790                    |           |            |                  |              | Reduced <sup>1</sup> |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>1</sup> |
|                          |                              | 23780                    |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |                              | 23790                    |           |            |                  |              | Reduced <sup>4</sup> |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>4</sup> |
|                          |                              | 23780                    |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          |                              | 23790                    |           |            |                  |              | Reduced <sup>4</sup> |
|                          |                              | 23800                    |           |            |                  |              | Reduced <sup>4</sup> |
|                          |                              | 23780                    |           |            |                  |              | Reduced <sup>4</sup> |
| 23790                    |                              | Reduced <sup>4</sup>     |           |            |                  |              |                      |
| 23800                    | All lower bandwidths (5 MHz) |                          |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 17<br>704-716 MHz   | E    | 23780                        | 10 MHz    | QPSK       | 25               | 12           | Reduced <sup>6</sup> |
|                          |      | 23790                        |           |            |                  |              | Tested               |
|                          |      | 23800                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 23780                        |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |      | 23790                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 23800                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 23780                        |           |            | 1                | 12           | Reduced <sup>6</sup> |
|                          |      | 23790                        |           |            |                  |              | Tested               |
|                          |      | 23800                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 23780                        |           |            |                  | 24           | Reduced <sup>2</sup> |
|                          |      | 23790                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 23800                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 23780                        |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |      | 23790                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 23800                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 23780                        |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |      | 23790                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 23800                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 23780                        |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |      | 23790                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 23800                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 23780                        |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          |      | 23790                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 23800                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)  
A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)  
B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)  
A) I) page 4.

Reduced<sup>4</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)  
B) I) page 5.

Reduced<sup>5</sup> - If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup> - If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

#### Side F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 251.2 mW

Closest Distance to Side F: 97 mm

$[(3.0/(\sqrt{0.716})) * 50 \text{ mm}] + [(97 - 50 \text{ mm}) * 10] = 632 \text{ mW}$  which is greater than 251.2 mW

| Band/<br>Frequency (MHz) | Side                         | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------------------------------|--------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 13<br>777-787 MHz   | A                            | 23230                    | 10 MHz    | QPSK       | 25               | 12           | Tested               |
|                          |                              | 23230                    |           |            | 50               | 0            | Tested               |
|                          |                              | 23230                    |           |            | 1                | 24           | Tested               |
|                          |                              | 23230                    |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |                              | 23230                    |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |                              | 23230                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23230                    |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |                              | 23230                    |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          | All lower bandwidths (5 MHz) |                          |           |            |                  |              | Reduced <sup>5</sup> |
|                          | B                            | 23230                    | 10 MHz    | QPSK       | 25               | 12           | Tested               |
|                          |                              | 23230                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23230                    |           |            | 1                | 24           | Tested               |
|                          |                              | 23230                    |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |                              | 23230                    |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |                              | 23230                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23230                    |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |                              | 23230                    |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          | All lower bandwidths (5 MHz) |                          |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side                         | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------------------------------|--------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 13<br>777-787 MHz   | C                            | 23230                    | 10 MHz    | QPSK       | 25               | 12           | Tested               |
|                          |                              | 23230                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23230                    |           |            | 1                | 24           | Tested               |
|                          |                              | 23230                    |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |                              | 23230                    |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |                              | 23230                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23230                    |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |                              | 23230                    |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          | All lower bandwidths (5 MHz) |                          |           |            |                  |              | Reduced <sup>5</sup> |
|                          | D                            | 23230                    | 10 MHz    | QPSK       | 25               | 12           | Tested               |
|                          |                              | 23230                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23230                    |           |            | 1                | 24           | Tested               |
|                          |                              | 23230                    |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |                              | 23230                    |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |                              | 23230                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23230                    |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |                              | 23230                    |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          | All lower bandwidths (5 MHz) |                          |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset         | Tested/<br>Reduced   |
|--------------------------|------|------------------------------|-----------|------------|------------------|----------------------|----------------------|
| Band 13<br>777-787 MHz   | E    | 23230                        | 10 MHz    | QPSK       | 25               | 12                   | Tested               |
|                          |      | 23230                        |           |            | 50               | 0                    | Reduced <sup>1</sup> |
|                          |      | 23230                        |           |            | 1                | 24                   | Tested               |
|                          |      | 23230                        |           | 16QAM      | 49               | Reduced <sup>2</sup> |                      |
|                          |      | 23230                        |           |            | 25               | 12                   | Reduced <sup>3</sup> |
|                          |      | 23230                        |           |            | 50               | 0                    | Reduced <sup>1</sup> |
|                          |      | 23230                        |           |            | 1                | 24                   | Reduced <sup>4</sup> |
|                          |      | 23230                        |           |            | 49               | Reduced <sup>4</sup> |                      |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |                      |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>4</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup> - If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup> - If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

#### Side F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 251.2 mW

Closest Distance to Side F: 97 mm

$[(3.0/(\sqrt{0.782})) * 50 \text{ mm}] + [(97 - 50 \text{ mm}) * 10] = 639 \text{ mW}$  which is greater than 251.2 mW

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 14<br>788-798 MHz   | A    | 23330                        | 10 MHz    | QPSK       | 25               | 12           | Tested               |
|                          |      | 23330                        |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |      | 23330                        |           |            | 1                | 24           | Tested               |
|                          |      | 23330                        |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |      | 23330                        |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |      | 23330                        |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |      | 23330                        |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |      | 23330                        |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |              |                      |
|                          | B    | 23330                        | 10 MHz    | QPSK       | 25               | 12           | Tested               |
|                          |      | 23330                        |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |      | 23330                        |           |            | 1                | 24           | Tested               |
|                          |      | 23330                        |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |      | 23330                        |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |      | 23330                        |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |      | 23330                        |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |      | 23330                        |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |              |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side                         | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------------------------------|--------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 14<br>788-798 MHz   | C                            | 23330                    | 10 MHz    | QPSK       | 25               | 12           | Tested               |
|                          |                              | 23330                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23330                    |           |            | 1                | 24           | Tested               |
|                          |                              | 23330                    |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |                              | 23330                    |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |                              | 23330                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23330                    |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |                              | 23330                    |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          | All lower bandwidths (5 MHz) |                          |           |            |                  |              | Reduced <sup>5</sup> |
|                          | D                            | 23330                    | 10 MHz    | QPSK       | 25               | 12           | Tested               |
|                          |                              | 23330                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23330                    |           |            | 1                | 24           | Tested               |
|                          |                              | 23330                    |           |            |                  | 49           | Reduced <sup>2</sup> |
|                          |                              | 23330                    |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |
|                          |                              | 23330                    |           |            | 50               | 0            | Reduced <sup>1</sup> |
|                          |                              | 23330                    |           |            | 1                | 24           | Reduced <sup>4</sup> |
|                          |                              | 23330                    |           |            |                  | 49           | Reduced <sup>4</sup> |
|                          | All lower bandwidths (5 MHz) |                          |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |  |  |
|--------------------------|------|------------------------------|-----------|------------|------------------|--------------|----------------------|--|--|
| Band 14<br>788-798 MHz   | E    | 23330                        | 10 MHz    | QPSK       | 25               | 12           | Tested               |  |  |
|                          |      | 23330                        |           |            | 50               | 0            | Reduced <sup>1</sup> |  |  |
|                          |      | 23330                        |           |            | 1                | 24           | Tested               |  |  |
|                          |      | 23330                        |           | 16QAM      | 25               | 12           | Reduced <sup>3</sup> |  |  |
|                          |      | 23330                        |           |            | 50               | 0            | Reduced <sup>1</sup> |  |  |
|                          |      | 23330                        |           |            | 1                | 24           | Reduced <sup>4</sup> |  |  |
|                          |      | 23330                        |           |            | 1                | 49           | Reduced <sup>4</sup> |  |  |
|                          |      | All lower bandwidths (5 MHz) |           |            |                  |              | Reduced <sup>5</sup> |  |  |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

#### Side F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 251.2 mW

Closest Distance to Side F: 97 mm

$[(3.0)/(\sqrt{0.787}) * 50 \text{ mm}] + [(97 - 50 \text{ mm}) * 10] = 639 \text{ mW}$  which is greater than 251.2 mW

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 41<br>2496-2690 MHz | A    | 39750                                                        | 20 MHz    | QPSK       | 50               | 25           | Tested               |
|                          |      | 40135                                                        |           |            |                  |              | Tested               |
|                          |      | 40620                                                        |           |            |                  |              | Tested               |
|                          |      | 41105                                                        |           |            |                  |              | Tested               |
|                          |      | 41490                                                        |           |            |                  |              | Tested               |
|                          |      | 39750                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 40135                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 40620                                                        |           |            |                  |              | Tested               |
|                          |      | 41105                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 41490                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 39750                                                        |           |            | 1                | 49           | Tested               |
|                          |      | 40135                                                        |           |            |                  |              | Tested               |
|                          |      | 40620                                                        |           |            |                  |              | Tested               |
|                          |      | 41105                                                        |           |            |                  |              | Tested               |
|                          |      | 41490                                                        |           |            |                  |              | Tested               |
|                          |      | 39750                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 40135                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 40620                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 41105                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 41490                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 39750                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 40135                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 40620                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 41105                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 41490                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 39750                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 40135                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 40620                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 41105                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 41490                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 39750                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 40135                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 40620                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 41105                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 41490                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 39750                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 40135                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 40620                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 41105                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 41490                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3) A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3) B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz)                                     | Side | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------------------------------------------|------|--------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 41<br>2496-2690 MHz                                     | C    | 39750                    | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Tested               |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                                              |      | 39750                    |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 39750                    |           |            | 1                | 49           | Reduced <sup>6</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Tested               |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                                              |      | 39750                    |           |            |                  | 99           | Reduced <sup>2</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                                              |      | 39750                    |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                                              |      | 39750                    |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 39750                    |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 39750                    |           |            |                  | 99           | Reduced <sup>4</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>4</sup> |
| All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |      |                          |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3) A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3) B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz)                                     | Side | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------------------------------------------|------|--------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 41<br>2496-2690 MHz                                     | D    | 39750                    | 20 MHz    | QPSK       | 50               | 25           | Tested               |
|                                                              |      | 40135                    |           |            |                  |              | Tested               |
|                                                              |      | 40620                    |           |            |                  |              | Tested               |
|                                                              |      | 41105                    |           |            |                  |              | Tested               |
|                                                              |      | 41490                    |           |            |                  |              | Tested               |
|                                                              |      | 39750                    |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Tested               |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 39750                    |           |            | 1                | 49           | Tested               |
|                                                              |      | 40135                    |           |            |                  |              | Tested               |
|                                                              |      | 40620                    |           |            |                  |              | Tested               |
|                                                              |      | 41105                    |           |            |                  |              | Tested               |
|                                                              |      | 41490                    |           |            |                  |              | Tested               |
|                                                              |      | 39750                    |           |            |                  | 99           | Reduced <sup>2</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                                              |      | 39750                    |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                                              |      | 39750                    |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 39750                    |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 39750                    |           |            |                  | 99           | Reduced <sup>4</sup> |
|                                                              |      | 40135                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 40620                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 41105                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 41490                    |           |            |                  |              | Reduced <sup>4</sup> |
| All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |      |                          |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

### Sides B & F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 251.2 mW

Closest Distance to Side B: 78 mm

Closest Distance to Side F: 97 mm

Side B is the closest; therefore, if Side B is excluded side F would also be excluded.

$(((3.0)/(\sqrt{2.69})) * 50 \text{ mm})) + ((78 - 50 \text{ mm}) * 10) = 301 \text{ mW}$  which is greater than 251.2 mW

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 42<br>3400-3600 MHz | A    | 41690                                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Tested               |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 41690                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 41690                                                        |           |            | 1                | 49           | Reduced <sup>6</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Tested               |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 41690                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 41690                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 41690                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 41690                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 41690                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3) A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3) B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 42<br>3400-3600 MHz | C    | 41690                                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Tested               |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 41690                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 41690                                                        |           |            | 1                | 49           | Reduced <sup>6</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Tested               |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 41690                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 41690                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 41690                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 41690                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 41690                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)  
A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)  
B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05  
4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)  
B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per  
KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the  
remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 42<br>3400-3600 MHz | D    | 41690                                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Tested               |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 41690                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 41690                                                        |           |            | 1                | 49           | Reduced <sup>6</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Tested               |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 41690                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 41690                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 41690                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 41690                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 41690                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3) A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3) B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 42<br>3400-3600 MHz | E    | 41690                                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Tested               |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 41690                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 41690                                                        |           |            | 1                | 49           | Reduced <sup>6</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Tested               |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 41690                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 41690                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 41690                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 41690                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 41690                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 42140                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 42590                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43040                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 43490                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)  
A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)  
B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)  
A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)  
B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

### Sides B & F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 251.2 mW  
Closest Distance to Side B: 78 mm  
Closest Distance to Side F: 97 mm

Side B is the closest; therefore, if Side B is excluded side F would also be excluded.

$(((3.0)/(\sqrt{3.60})) * 50 \text{ mm})) + ((78 - 50 \text{ mm}) * 10) = 359 \text{ mW}$  which is greater than 251.2 mW

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation     | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|----------------------|--------------|----------------------|
| Band 48<br>3550-3700 MHz | A    | 55340                                                        | 20 MHz    | QPSK       | 50                   | 25           | Reduced <sup>6</sup> |
|                          |      | 55665                                                        |           |            |                      |              | Reduced <sup>6</sup> |
|                          |      | 55990                                                        |           |            |                      |              | Tested               |
|                          |      | 56315                                                        |           |            |                      |              | Reduced <sup>6</sup> |
|                          |      | 56640                                                        |           |            |                      |              | Reduced <sup>6</sup> |
|                          |      | 55340                                                        |           |            | 100                  | 0            | Reduced <sup>1</sup> |
|                          |      | 55665                                                        |           |            |                      |              | Reduced <sup>1</sup> |
|                          |      | 55990                                                        |           |            |                      |              | Reduced <sup>1</sup> |
|                          |      | 56315                                                        |           |            |                      |              | Reduced <sup>1</sup> |
|                          |      | 56640                                                        |           |            |                      |              | Reduced <sup>1</sup> |
|                          |      | 55340                                                        |           |            | 1                    | 49           | Reduced <sup>6</sup> |
|                          |      | 55665                                                        |           |            |                      |              | Reduced <sup>6</sup> |
|                          |      | 55990                                                        |           |            |                      |              | Tested               |
|                          |      | 56315                                                        |           |            |                      |              | Reduced <sup>6</sup> |
|                          |      | 56640                                                        |           |            |                      |              | Reduced <sup>6</sup> |
|                          |      | 55340                                                        |           |            |                      | 99           | Reduced <sup>2</sup> |
|                          |      | 55665                                                        |           |            |                      |              | Reduced <sup>2</sup> |
|                          |      | 55990                                                        |           |            |                      |              | Reduced <sup>2</sup> |
|                          |      | 56315                                                        |           |            |                      |              | Reduced <sup>2</sup> |
|                          |      | 56640                                                        |           |            | Reduced <sup>2</sup> |              |                      |
|                          |      | 55340                                                        |           | 16QAM      | 50                   | 25           | Reduced <sup>3</sup> |
|                          |      | 55665                                                        |           |            |                      |              | Reduced <sup>3</sup> |
|                          |      | 55990                                                        |           |            |                      |              | Reduced <sup>3</sup> |
|                          |      | 56315                                                        |           |            |                      |              | Reduced <sup>3</sup> |
|                          |      | 56640                                                        |           |            |                      |              | Reduced <sup>3</sup> |
|                          |      | 55340                                                        |           |            | 100                  | 0            | Reduced <sup>1</sup> |
|                          |      | 55665                                                        |           |            |                      |              | Reduced <sup>1</sup> |
|                          |      | 55990                                                        |           |            |                      |              | Reduced <sup>1</sup> |
|                          |      | 56315                                                        |           |            |                      |              | Reduced <sup>1</sup> |
|                          |      | 56640                                                        |           |            |                      |              | Reduced <sup>1</sup> |
|                          |      | 55340                                                        |           |            | 1                    | 49           | Reduced <sup>4</sup> |
|                          |      | 55665                                                        |           |            |                      |              | Reduced <sup>4</sup> |
|                          |      | 55990                                                        |           |            |                      |              | Reduced <sup>4</sup> |
|                          |      | 56315                                                        |           |            |                      |              | Reduced <sup>4</sup> |
|                          |      | 56640                                                        |           |            |                      |              | Reduced <sup>4</sup> |
|                          |      | 55340                                                        |           |            |                      | 99           | Reduced <sup>4</sup> |
|                          |      | 55665                                                        |           |            |                      |              | Reduced <sup>4</sup> |
|                          |      | 55990                                                        |           |            |                      |              | Reduced <sup>4</sup> |
|                          |      | 56315                                                        |           |            |                      |              | Reduced <sup>4</sup> |
|                          |      | 56640                                                        |           |            | Reduced <sup>4</sup> |              |                      |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                      |              |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3) A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3) B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz)                                     | Side | Required<br>Test Channel | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------------------------------------------|------|--------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 48<br>3550-3700 MHz                                     | C    | 55340                    | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                                                              |      | 55665                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                                              |      | 55990                    |           |            |                  |              | Tested               |
|                                                              |      | 56315                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                                              |      | 56640                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                                              |      | 55340                    |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                                                              |      | 55665                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 55990                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 56315                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 56640                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 55340                    |           |            | 1                | 49           | Reduced <sup>6</sup> |
|                                                              |      | 55665                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                                              |      | 55990                    |           |            |                  |              | Tested               |
|                                                              |      | 56315                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                                              |      | 56640                    |           |            |                  |              | Reduced <sup>6</sup> |
|                                                              |      | 55340                    |           |            |                  | 99           | Reduced <sup>2</sup> |
|                                                              |      | 55665                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                                              |      | 55990                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                                              |      | 56315                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                                              |      | 56640                    |           |            |                  |              | Reduced <sup>2</sup> |
|                                                              |      | 55340                    |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                                                              |      | 55665                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                                              |      | 55990                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                                              |      | 56315                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                                              |      | 56640                    |           |            |                  |              | Reduced <sup>3</sup> |
|                                                              |      | 55340                    |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                                                              |      | 55665                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 55990                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 56315                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 56640                    |           |            |                  |              | Reduced <sup>1</sup> |
|                                                              |      | 55340                    |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                                                              |      | 55665                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 55990                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 56315                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 56640                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 55340                    |           |            |                  | 99           | Reduced <sup>4</sup> |
|                                                              |      | 55665                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 55990                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 56315                    |           |            |                  |              | Reduced <sup>4</sup> |
|                                                              |      | 56640                    |           |            |                  |              | Reduced <sup>4</sup> |
| All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |      |                          |           |            |                  |              | Reduced <sup>5</sup> |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3) A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3) B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 48<br>3550-3700 MHz | D    | 55340                                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Tested               |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 55340                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 55340                                                        |           |            | 1                | 49           | Reduced <sup>6</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Tested               |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 55340                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 55340                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 55340                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 55340                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 55340                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3) A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3) B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4) B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within  $\pm 0.5$  dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within  $\pm 0.5$  dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

| Band/<br>Frequency (MHz) | Side | Required<br>Test Channel                                     | Bandwidth | Modulation | RB<br>Allocation | RB<br>Offset | Tested/<br>Reduced   |
|--------------------------|------|--------------------------------------------------------------|-----------|------------|------------------|--------------|----------------------|
| Band 48<br>3550-3700 MHz | E    | 55340                                                        | 20 MHz    | QPSK       | 50               | 25           | Reduced <sup>6</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Tested               |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 55340                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 55340                                                        |           |            | 1                | 49           | Reduced <sup>6</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Tested               |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>6</sup> |
|                          |      | 55340                                                        |           |            |                  | 99           | Reduced <sup>2</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>2</sup> |
|                          |      | 55340                                                        |           | 16QAM      | 50               | 25           | Reduced <sup>3</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>3</sup> |
|                          |      | 55340                                                        |           |            | 100              | 0            | Reduced <sup>1</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>1</sup> |
|                          |      | 55340                                                        |           |            | 1                | 49           | Reduced <sup>4</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 55340                                                        |           |            |                  | 99           | Reduced <sup>4</sup> |
|                          |      | 55665                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 55990                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 56315                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | 56640                                                        |           |            |                  |              | Reduced <sup>4</sup> |
|                          |      | All lower bandwidths (15 MHz, 10 MHz, 5 MHz, 3 MHz, 1.4 MHz) |           |            |                  |              |                      |

Reduced<sup>1</sup> – If the SAR value in the 50% RB testing is less than 1.45 W/kg, the 100% RB testing is reduced per KDB941225 D05 3)

A) I) page 4.

Reduced<sup>2</sup> - If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 3)

B) I) page 4.

Reduced<sup>3</sup> - If the SAR value in the 50% RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05

4) A) I) page 4.

Reduced<sup>4</sup>- If the SAR value in the 1 RB testing is less than 1.45 W/kg, the remaining channels are reduced per KDB941225 D05 4)

B) I) page 5.

Reduced<sup>5</sup>- If the conducted power is within ±0.5 dB, all testing where the SAR value is less than 1.45 W/kg is reduced per KDB941225 D05 5) B) I) page 5.

Reduced<sup>6</sup>- If the SAR value measured on the middle channel is less than 0.8 W/kg and the conducted power is within ±0.5 dB, the remaining channels are reduced per KDB941225 D05 page 4 footnote 2.

### Sides B & F Reduced based on distance in KDB 447498 D01 v06 (See below calculations).

Maximum power: 251.2 mW

Closest Distance to Side B: 78 mm

Closest Distance to Side F: 97 mm

Side B is the closest; therefore, if Side B is excluded side F would also be excluded.

$(((3.0)/(\sqrt{3.70})) * 50 \text{ mm})) + ((78 - 50 \text{ mm}) * 10) = 357 \text{ mW}$  which is greater than 251.2 mW

## SAR Data Summary – 750 MHz Body – LTE Band 12

| MEASUREMENT RESULTS |       |          |           |       |                   |            |                                                 |               |              |                        |                        |
|---------------------|-------|----------|-----------|-------|-------------------|------------|-------------------------------------------------|---------------|--------------|------------------------|------------------------|
| Gap                 | Plot  | Position | Frequency |       | BW/<br>Modulation | RB<br>Size | RB<br>Offset                                    | MPR<br>Target | End<br>Power | Measured<br>SAR (W/kg) | Reported<br>SAR (W/kg) |
|                     |       |          | MHz       | Ch.   |                   |            |                                                 |               | (dBm)        |                        |                        |
| 10<br>mm            | 1     | Side A   | 707.5     | 23095 | 10 MHz/QPSK       | 1          | 24                                              | 0             | 23.00        | 0.620                  | 0.78                   |
|                     | ----- |          | 707.5     | 23095 | 10 MHz/QPSK       | 25         | 12                                              | 1             | 22.23        | 0.507                  | 0.61                   |
|                     | ----- | Side B   | 707.5     | 23095 | 10 MHz/QPSK       | 1          | 24                                              | 0             | 23.00        | 0.271                  | 0.34                   |
|                     | ----- |          | 707.5     | 23095 | 10 MHz/QPSK       | 25         | 12                                              | 1             | 22.23        | 0.219                  | 0.26                   |
|                     | ----- | Side C   | 707.5     | 23095 | 10 MHz/QPSK       | 1          | 24                                              | 0             | 23.00        | 0.607                  | 0.76                   |
|                     | ----- |          | 707.5     | 23095 | 10 MHz/QPSK       | 25         | 12                                              | 1             | 22.23        | 0.490                  | 0.59                   |
|                     | ----- | Side D   | 707.5     | 23095 | 10 MHz/QPSK       | 1          | 24                                              | 0             | 23.00        | 0.131                  | 0.17                   |
|                     | ----- |          | 707.5     | 23095 | 10 MHz/QPSK       | 25         | 12                                              | 1             | 22.23        | 0.108                  | 0.13                   |
|                     | ----- | Side E   | 707.5     | 23095 | 10 MHz/QPSK       | 1          | 24                                              | 0             | 23.00        | 0.0768                 | 0.10                   |
|                     | ----- |          | 707.5     | 23095 | 10 MHz/QPSK       | 25         | 12                                              | 1             | 22.23        | 0.0623                 | 0.07                   |
|                     |       |          |           |       |                   |            | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |               |              |                        |                        |

1. Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

2. SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

3. Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

4. Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

5. Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

## SAR Data Summary – 750 MHz Body – LTE Band 17

| MEASUREMENT RESULTS |       |          |           |       |                   |            |                                                 |               |              |                        |                        |
|---------------------|-------|----------|-----------|-------|-------------------|------------|-------------------------------------------------|---------------|--------------|------------------------|------------------------|
| Gap                 | Plot  | Position | Frequency |       | BW/<br>Modulation | RB<br>Size | RB<br>Offset                                    | MPR<br>Target | End<br>Power | Measured<br>SAR (W/kg) | Reported<br>SAR (W/kg) |
|                     |       |          | MHz       | Ch.   |                   |            |                                                 |               | (dBm)        |                        |                        |
| 10<br>mm            | 2     | Side A   | 710.0     | 23780 | 10 MHz/QPSK       | 1          | 24                                              | 0             | 23.09        | 0.645                  | 0.80                   |
|                     | ----- |          | 710.0     | 23780 | 10 MHz/QPSK       | 25         | 12                                              | 1             | 22.13        | 0.548                  | 0.67                   |
|                     | ----- | Side B   | 710.0     | 23780 | 10 MHz/QPSK       | 1          | 24                                              | 0             | 23.09        | 0.306                  | 0.38                   |
|                     | ----- |          | 710.0     | 23780 | 10 MHz/QPSK       | 25         | 12                                              | 1             | 22.13        | 0.247                  | 0.30                   |
|                     | ----- | Side C   | 710.0     | 23780 | 10 MHz/QPSK       | 1          | 24                                              | 0             | 23.09        | 0.540                  | 0.67                   |
|                     | ----- |          | 710.0     | 23780 | 10 MHz/QPSK       | 25         | 12                                              | 1             | 22.13        | 0.442                  | 0.54                   |
|                     | ----- | Side D   | 710.0     | 23780 | 10 MHz/QPSK       | 1          | 24                                              | 0             | 23.09        | 0.151                  | 0.19                   |
|                     | ----- |          | 710.0     | 23780 | 10 MHz/QPSK       | 25         | 12                                              | 1             | 22.13        | 0.118                  | 0.14                   |
|                     | ----- | Side E   | 710.0     | 23780 | 10 MHz/QPSK       | 1          | 24                                              | 0             | 23.09        | 0.0799                 | 0.10                   |
|                     | ----- |          | 710.0     | 23780 | 10 MHz/QPSK       | 25         | 12                                              | 1             | 22.13        | 0.0667                 | 0.08                   |
|                     |       |          |           |       |                   |            | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |               |              |                        |                        |

1. Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

2. SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

3. Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

4. Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

5. Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

## SAR Data Summary – 750 MHz Body – LTE Band 13

| MEASUREMENT RESULTS                                                                     |       |          |           |       |                   |            |              |               |                       |                        |                        |
|-----------------------------------------------------------------------------------------|-------|----------|-----------|-------|-------------------|------------|--------------|---------------|-----------------------|------------------------|------------------------|
| Gap                                                                                     | Plot  | Position | Frequency |       | BW/<br>Modulation | RB<br>Size | RB<br>Offset | MPR<br>Target | End<br>Power<br>(dBm) | Measured<br>SAR (W/kg) | Reported<br>SAR (W/kg) |
|                                                                                         |       |          | MHz       | Ch.   |                   |            |              |               |                       |                        |                        |
| 10<br>mm                                                                                | 3     | Side A   | 782.0     | 23230 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.48                 | 1.00                   | 1.13                   |
|                                                                                         | ----- |          | 782.0     | 23230 | 10 MHz/QPSK       | 25         | 12           | 1             | 23.51                 | 0.824                  | 0.92                   |
|                                                                                         | ----- |          | 782.0     | 23230 | 10 MHz/QPSK       | 50         | 0            | 1             | 23.26                 | 0.721                  | 0.86                   |
|                                                                                         | ----- | Side B   | 782.0     | 23230 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.48                 | 0.602                  | 0.68                   |
|                                                                                         | ----- |          | 782.0     | 23230 | 10 MHz/QPSK       | 25         | 12           | 1             | 23.51                 | 0.492                  | 0.55                   |
|                                                                                         | ----- |          | 782.0     | 23230 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.48                 | 0.775                  | 0.87                   |
|                                                                                         | ----- | Side C   | 782.0     | 23230 | 10 MHz/QPSK       | 25         | 12           | 1             | 23.51                 | 0.606                  | 0.68                   |
|                                                                                         | ----- |          | 782.0     | 23230 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.48                 | 0.284                  | 0.32                   |
|                                                                                         | ----- |          | 782.0     | 23230 | 10 MHz/QPSK       | 25         | 12           | 1             | 23.51                 | 0.231                  | 0.26                   |
|                                                                                         | ----- | Side D   | 782.0     | 23230 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.48                 | 0.0911                 | 0.10                   |
|                                                                                         | ----- |          | 782.0     | 23230 | 10 MHz/QPSK       | 25         | 12           | 1             | 23.51                 | 0.0731                 | 0.08                   |
|                                                                                         | ----- |          | 782.0     | 23230 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.48                 | 0.987                  | 1.11                   |
|                                                                                         | ----- | Repeat   | 782.0     | 23230 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.48                 | 0.987                  | 1.11                   |
| <div> <div>Body</div> <div>1.6 W/kg (mW/g)</div> <div>averaged over 1 gram</div> </div> |       |          |           |       |                   |            |              |               |                       |                        |                        |

1. Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

2. SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

3. Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

4. Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

5. Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

## SAR Data Summary – 750 MHz Body – LTE Band 14

| MEASUREMENT RESULTS |       |          |           |       |                   |            |              |               |                       |                                                               |                        |
|---------------------|-------|----------|-----------|-------|-------------------|------------|--------------|---------------|-----------------------|---------------------------------------------------------------|------------------------|
| Gap                 | Plot  | Position | Frequency |       | BW/<br>Modulation | RB<br>Size | RB<br>Offset | MPR<br>Target | End<br>Power<br>(dBm) | Measured<br>SAR (W/kg)                                        | Reported<br>SAR (W/kg) |
|                     |       |          | MHz       | Ch.   |                   |            |              |               |                       |                                                               |                        |
| 10<br>mm            | 4     | Side A   | 793       | 23330 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.45                 | 0.757                                                         | 0.86                   |
|                     | ----- |          | 793       | 23330 | 10 MHz/QPSK       | 25         | 12           | 1             | 23.54                 | 0.513                                                         | 0.57                   |
|                     | ----- |          | 793       | 23330 | 10 MHz/QPSK       | 50         | 0            | 1             | 23.37                 | 0.436                                                         | 0.50                   |
|                     | ----- | Side B   | 793       | 23330 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.45                 | 0.366                                                         | 0.42                   |
|                     | ----- |          | 793       | 23330 | 10 MHz/QPSK       | 25         | 12           | 1             | 23.54                 | 0.329                                                         | 0.37                   |
|                     | ----- | Side C   | 793       | 23330 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.45                 | 0.464                                                         | 0.53                   |
|                     | ----- |          | 793       | 23330 | 10 MHz/QPSK       | 25         | 12           | 1             | 23.54                 | 0.435                                                         | 0.48                   |
|                     | ----- | Side D   | 793       | 23330 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.45                 | 0.133                                                         | 0.15                   |
|                     | ----- |          | 793       | 23330 | 10 MHz/QPSK       | 25         | 12           | 1             | 23.54                 | 0.134                                                         | 0.15                   |
|                     | ----- | Side E   | 793       | 23330 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.45                 | 0.102                                                         | 0.12                   |
|                     | ----- |          | 793       | 23330 | 10 MHz/QPSK       | 25         | 12           | 1             | 23.54                 | 0.0786                                                        | 0.19                   |
|                     | ----- | Repeat   | 793       | 23330 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.45                 | 0.734                                                         | 0.83                   |
|                     |       |          |           |       |                   |            |              |               |                       | <b>Body</b><br><b>1.6 W/kg (mW/g)</b><br>averaged over 1 gram |                        |

1. Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

2. SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

3. Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

4. Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

5. Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

## SAR Data Summary – 835 MHz Body - WCDMA

### MEASUREMENT RESULTS

| Gap   | Plot | Frequency |      | Modulation | Position | End Power | RMC       | Test Set Up | Measured SAR (W/kg) | Reported SAR (W/kg) |
|-------|------|-----------|------|------------|----------|-----------|-----------|-------------|---------------------|---------------------|
|       |      | MHz       | Ch.  |            |          | (dBm)     |           |             |                     |                     |
| 10 mm | ---- | 836.6     | 4183 | WCDMA      | Side A   | 23.13     | 12.2 kbps | Test Loop 1 | 0.552               | 0.67                |
|       | ---- | 836.6     | 4183 | WCDMA      | Side B   | 23.13     | 12.2 kbps | Test Loop 1 | 0.163               | 0.20                |
|       | 5    | 836.6     | 4183 | WCDMA      | Side C   | 23.13     | 12.2 kbps | Test Loop 1 | 0.589               | 0.72                |
|       | ---- | 836.6     | 4183 | WCDMA      | Side D   | 23.13     | 12.2 kbps | Test Loop 1 | 0.117               | 0.14                |
|       | ---- | 836.6     | 4183 | WCDMA      | Side E   | 23.13     | 12.2 kbps | Test Loop 1 | 0.130               | 0.16                |

**Body**  
**1.6 W/kg (mW/g)**  
averaged over 1 gram

- Battery is fully charged for all tests.  
Power Measured ☒ Conducted ☐ ERP ☐ EIRP
- SAR Measurement  
Phantom Configuration ☐ Left Head ☒ Eli4 ☐ Right Head  
SAR Configuration ☐ Head ☒ Body
- Test Signal Call Mode ☒ Test Code ☐ Base Station Simulator
- Test Configuration ☐ With Belt Clip ☐ Without Belt Clip ☒ N/A
- Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

## SAR Data Summary – 835 MHz Body – LTE Band 5

| MEASUREMENT RESULTS                                           |       |          |           |       |                   |            |              |               |                    |                           |                           |
|---------------------------------------------------------------|-------|----------|-----------|-------|-------------------|------------|--------------|---------------|--------------------|---------------------------|---------------------------|
| Gap                                                           | Plot  | Position | Frequency |       | BW/<br>Modulation | RB<br>Size | RB<br>Offset | MPR<br>Target | End Power<br>(dBm) | Measured<br>SAR<br>(W/kg) | Reported<br>SAR<br>(W/kg) |
|                                                               |       |          | MHz       | Ch.   |                   |            |              |               |                    |                           |                           |
| 10<br>mm                                                      | 6     | Side A   | 829.0     | 20450 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.9               | 0.975                     | 1.00                      |
|                                                               | ----- |          | 836.5     | 20525 | 10 MHz/QPSK       | 1          | 24           | 0             | 24.0               | 0.954                     | 0.95                      |
|                                                               | ----- |          | 844.0     | 20599 | 10 MHz/QPSK       | 1          | 24           | 0             | 24.0               | 0.937                     | 0.94                      |
|                                                               | ----- |          | 836.5     | 20525 | 10 MHz/QPSK       | 25         | 12           | 1             | 22.9               | 0.782                     | 0.80                      |
|                                                               | ----- |          | 836.5     | 20525 | 10 MHz/QPSK       | 50         | 0            | 1             | 22.9               | 0.698                     | 0.71                      |
|                                                               | ----- | Side B   | 836.5     | 20525 | 10 MHz/QPSK       | 1          | 24           | 0             | 24.0               | 0.400                     | 0.40                      |
|                                                               | ----- |          | 836.5     | 20525 | 10 MHz/QPSK       | 25         | 12           | 1             | 22.9               | 0.326                     | 0.33                      |
|                                                               | ----- | Side C   | 836.5     | 20525 | 10 MHz/QPSK       | 1          | 24           | 0             | 24.0               | 0.790                     | 0.79                      |
|                                                               | ----- |          | 836.5     | 20525 | 10 MHz/QPSK       | 25         | 12           | 1             | 22.9               | 0.647                     | 0.66                      |
|                                                               | ----- | Side D   | 836.5     | 20525 | 10 MHz/QPSK       | 1          | 24           | 0             | 24.0               | 0.233                     | 0.23                      |
|                                                               | ----- |          | 836.5     | 20525 | 10 MHz/QPSK       | 25         | 12           | 1             | 22.9               | 0.191                     | 0.20                      |
|                                                               | ----- | Side E   | 836.5     | 20525 | 10 MHz/QPSK       | 1          | 24           | 0             | 24.0               | 0.0973                    | 0.10                      |
|                                                               | ----- |          | 836.5     | 20525 | 10 MHz/QPSK       | 25         | 12           | 1             | 22.9               | 0.0769                    | 0.08                      |
|                                                               | ----- | Repeat   | 836.5     | 20525 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.9               | 0.956                     | 0.98                      |
| <b>Body</b><br><b>1.6 W/kg (mW/g)</b><br>averaged over 1 gram |       |          |           |       |                   |            |              |               |                    |                           |                           |

1. Battery is fully charged for all tests.

Power Measured ☒ Conducted ☐ ERP ☐ EIRP

2. SAR Measurement

Phantom Configuration ☐ Left Head ☒ Eli4 ☐ Right Head

SAR Configuration ☐ Head ☒ Body

3. Test Signal Call Mode ☒ Test Code ☐ Base Station Simulator

4. Test Configuration ☐ With Belt Clip ☐ Without Belt Clip ☒ N/A

5. Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

## SAR Data Summary – 835 MHz Body – LTE Band 26

| MEASUREMENT RESULTS |       |          |           |       |                   |            |                                                 |               |              |                        |                        |
|---------------------|-------|----------|-----------|-------|-------------------|------------|-------------------------------------------------|---------------|--------------|------------------------|------------------------|
| Gap                 | Plot  | Position | Frequency |       | BW/<br>Modulation | RB<br>Size | RB<br>Offset                                    | MPR<br>Target | End<br>Power | Measured<br>SAR (W/kg) | Reported<br>SAR (W/kg) |
|                     |       |          | MHz       | Ch.   |                   |            |                                                 |               | (dBm)        |                        |                        |
| 10<br>mm            | ----- | Side A   | 831.5     | 26865 | 15 MHz/QPSK       | 1          | 37                                              | 0             | 23.43        | 0.535                  | 0.61                   |
|                     | ----- |          | 831.5     | 26865 | 15 MHz/QPSK       | 36         | 19                                              | 1             | 22.20        | 0.512                  | 0.62                   |
|                     | ----- | Side B   | 831.5     | 26865 | 15 MHz/QPSK       | 1          | 37                                              | 0             | 23.43        | 0.337                  | 0.38                   |
|                     | ----- |          | 831.5     | 26865 | 15 MHz/QPSK       | 36         | 19                                              | 1             | 22.20        | 0.274                  | 0.33                   |
|                     | 7     | Side C   | 831.5     | 26865 | 15 MHz/QPSK       | 1          | 37                                              | 0             | 23.43        | 0.689                  | 0.79                   |
|                     | ----- |          | 831.5     | 26865 | 15 MHz/QPSK       | 36         | 19                                              | 1             | 22.20        | 0.560                  | 0.67                   |
|                     | ----- | Side D   | 831.5     | 26865 | 15 MHz/QPSK       | 1          | 37                                              | 0             | 23.43        | 0.195                  | 0.22                   |
|                     | ----- |          | 831.5     | 26865 | 15 MHz/QPSK       | 36         | 19                                              | 1             | 22.20        | 0.155                  | 0.19                   |
|                     | ----- | Side E   | 831.5     | 26865 | 15 MHz/QPSK       | 1          | 37                                              | 0             | 23.43        | 0.0949                 | 0.11                   |
|                     | ----- |          | 831.5     | 26865 | 15 MHz/QPSK       | 36         | 19                                              | 1             | 22.20        | 0.0751                 | 0.09                   |
|                     |       |          |           |       |                   |            | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |               |              |                        |                        |

1. Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

2. SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

3. Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

4. Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

5. Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

# SAR Data Summary – 1750 MHz Body - WCDMA

## MEASUREMENT RESULTS

| Gap      | Plot | Frequency |      | Rev Level/<br>Modulation | Position | End<br>Power | RMC       | Test Set Up | Measured<br>SAR<br>(W/kg) | Reported<br>SAR<br>(W/kg) |
|----------|------|-----------|------|--------------------------|----------|--------------|-----------|-------------|---------------------------|---------------------------|
|          |      | MHz       | Ch.  |                          |          | (dBm)        |           |             |                           |                           |
| 10<br>mm | 8    | 1712.4    | 1312 | WCDMA                    | Side A   | 22.56        | 12.2 kbps | Test Loop 1 | 0.945                     | 1.32                      |
|          | ---- | 1732.6    | 1413 | WCDMA                    |          | 22.77        | 12.2 kbps | Test Loop 1 | 0.902                     | 1.20                      |
|          | ---- | 1752.6    | 1513 | WCDMA                    |          | 23.32        | 12.2 kbps | Test Loop 1 | 0.961                     | 1.12                      |
|          | ---- | 1732.6    | 1413 | WCDMA                    | Side B   | 22.77        | 12.2 kbps | Test Loop 1 | 0.595                     | 0.79                      |
|          | ---- | 1712.4    | 1312 | WCDMA                    | Side C   | 22.56        | 12.2 kbps | Test Loop 1 | 0.586                     | 0.82                      |
|          | ---- | 1732.6    | 1413 | WCDMA                    |          | 22.77        | 12.2 kbps | Test Loop 1 | 0.644                     | 0.86                      |
|          | ---- | 1752.6    | 1513 | WCDMA                    |          | 23.32        | 12.2 kbps | Test Loop 1 | 0.604                     | 0.71                      |
|          | ---- | 1732.6    | 1413 | WCDMA                    | Side D   | 22.77        | 12.2 kbps | Test Loop 1 | 0.139                     | 0.19                      |
|          | ---- | 1732.6    | 1413 | WCDMA                    | Side E   | 22.77        | 12.2 kbps | Test Loop 1 | 0.540                     | 0.72                      |
|          | ---- | 1712.4    | 1312 | WCDMA                    | Repeat   | 22.56        | 12.2 kbps | Test Loop 1 | 0.973                     | 1.36                      |

**Body**  
**1.6 W/kg (mW/g)**  
averaged over 1 gram

- Battery is fully charged for all tests.  
Power Measured ☒ Conducted ☐ ERP ☐ EIRP
- SAR Measurement  
Phantom Configuration ☐ Left Head ☒ Eli4 ☐ Right Head  
SAR Configuration ☐ Head ☒ Body
- Test Signal Call Mode ☒ Test Code ☐ Base Station Simulator
- Test Configuration ☐ With Belt Clip ☐ Without Belt Clip ☒ N/A
- Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

## SAR Data Summary – 1750 MHz Body – LTE Band 66

| MEASUREMENT RESULTS |       |          |           |        |                   |            |              |               |                       |                        |                        |
|---------------------|-------|----------|-----------|--------|-------------------|------------|--------------|---------------|-----------------------|------------------------|------------------------|
| Gap                 | Plot  | Position | Frequency |        | BW/<br>Modulation | RB<br>Size | RB<br>Offset | MPR<br>Target | End<br>Power<br>(dBm) | Measured<br>SAR (W/kg) | Reported SAR<br>(W/kg) |
|                     |       |          | MHz       | Ch.    |                   |            |              |               |                       |                        |                        |
| 10<br>mm            | 9     | Side A   | 1720.0    | 132072 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.9                  | 1.28                   | 1.31                   |
|                     | ----- |          | 1745.0    | 132322 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0                  | 1.10                   | 1.10                   |
|                     | ----- |          | 1780.0    | 132572 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0                  | 0.96                   | 0.96                   |
|                     | ----- |          | 1720.0    | 132072 | 20 MHz/QPSK       | 50         | 24           | 1             | 22.9                  | 1.23                   | 1.26                   |
|                     | ----- |          | 1745.0    | 132322 | 20 MHz/QPSK       | 50         | 24           | 1             | 23.0                  | 0.893                  | 0.89                   |
|                     | ----- |          | 1780.0    | 132572 | 20 MHz/QPSK       | 50         | 24           | 1             | 23.0                  | 0.786                  | 0.79                   |
|                     | ----- | Side B   | 1720.0    | 132072 | 20 MHz/QPSK       | 100        | 0            | 1             | 23.0                  | 0.721                  | 0.72                   |
|                     | ----- |          | 1745.0    | 132322 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0                  | 0.408                  | 0.41                   |
|                     | ----- | Side C   | 1745.0    | 132322 | 20 MHz/QPSK       | 50         | 24           | 1             | 23.0                  | 0.341                  | 0.34                   |
|                     | ----- |          | 1745.0    | 132322 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0                  | 0.773                  | 0.77                   |
|                     | ----- | Side D   | 1745.0    | 132322 | 20 MHz/QPSK       | 50         | 24           | 1             | 23.0                  | 0.640                  | 0.64                   |
|                     | ----- |          | 1745.0    | 132322 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0                  | 0.196                  | 0.20                   |
|                     | ----- | Side E   | 1745.0    | 132322 | 20 MHz/QPSK       | 50         | 24           | 1             | 23.0                  | 0.165                  | 0.17                   |
|                     | ----- |          | 1720.0    | 132072 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.9                  | 1.21                   | 1.24                   |
|                     | ----- |          | 1745.0    | 132322 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0                  | 0.916                  | 0.92                   |
|                     | ----- |          | 1780.0    | 132572 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0                  | 0.509                  | 0.51                   |
|                     | ----- | Repeat   | 1745.0    | 132322 | 20 MHz/QPSK       | 50         | 24           | 1             | 23.0                  | 0.666                  | 0.67                   |
|                     | ----- |          | 1720.0    | 132072 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.9                  | 1.26                   | 1.29                   |

**Body**  
**1.6 W/kg (mW/g)**  
 averaged over 1 gram

1. Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

2. SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

3. Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

4. Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

5. Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

## SAR Data Summary – 1900 MHz Body - WCDMA

### MEASUREMENT RESULTS

| Gap      | Plot | Frequency |      | Rev Level/<br>Modulation | Position | End<br>Power | RMC       | Test Set Up | Measured<br>SAR<br>(W/kg) | Reported<br>SAR<br>(W/kg) |
|----------|------|-----------|------|--------------------------|----------|--------------|-----------|-------------|---------------------------|---------------------------|
|          |      | MHz       | Ch.  |                          |          | (dBm)        |           |             |                           |                           |
| 10<br>mm | 10   | 1852.4    | 9262 | WCDMA                    | Side A   | 23.67        | 12.2 kbps | Test Loop 1 | 1.11                      | 1.20                      |
|          | ---- | 1880.0    | 9400 | WCDMA                    |          | 23.89        | 12.2 kbps | Test Loop 1 | 1.08                      | 1.11                      |
|          | ---- | 1907.6    | 9538 | WCDMA                    |          | 23.71        | 12.2 kbps | Test Loop 1 | 0.968                     | 1.04                      |
|          | ---- | 1852.4    | 9262 | WCDMA                    | Side B   | 23.89        | 12.2 kbps | Test Loop 1 | 0.220                     | 0.23                      |
|          | ---- | 1852.4    | 9262 | WCDMA                    | Side C   | 23.67        | 12.2 kbps | Test Loop 1 | 0.851                     | 0.92                      |
|          | ---- | 1880.0    | 9400 | WCDMA                    |          | 23.89        | 12.2 kbps | Test Loop 1 | 0.821                     | 0.84                      |
|          | ---- | 1907.6    | 9538 | WCDMA                    |          | 23.71        | 12.2 kbps | Test Loop 1 | 0.732                     | 0.78                      |
|          | ---- | 1852.4    | 9262 | WCDMA                    | Side D   | 23.89        | 12.2 kbps | Test Loop 1 | 0.237                     | 0.24                      |
|          | ---- | 1852.4    | 9262 | WCDMA                    | Side E   | 23.89        | 12.2 kbps | Test Loop 1 | 0.229                     | 0.23                      |
|          | ---- | 1907.6    | 9538 | WCDMA                    | Repeat   | 23.67        | 12.2 kbps | Test Loop 1 | 1.09                      | 1.18                      |

**Body**  
**1.6 W/kg (mW/g)**  
averaged over 1 gram

- Battery is fully charged for all tests.  
Power Measured ☒ Conducted ☐ ERP ☐ EIRP
- SAR Measurement  
Phantom Configuration ☐ Left Head ☒ Eli4 ☐ Right Head  
SAR Configuration ☐ Head ☒ Body
- Test Signal Call Mode ☒ Test Code ☐ Base Station Simulator
- Test Configuration ☐ With Belt Clip ☐ Without Belt Clip ☒ N/A
- Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

## SAR Data Summary – 1900 MHz Body – LTE Band 2

| MEASUREMENT RESULTS |       |          |           |       |                   |            |              |               |                    |                           |                           |
|---------------------|-------|----------|-----------|-------|-------------------|------------|--------------|---------------|--------------------|---------------------------|---------------------------|
| Gap                 | Plot  | Position | Frequency |       | BW/<br>Modulation | RB<br>Size | RB<br>Offset | MPR<br>Target | End Power<br>(dBm) | Measured<br>SAR<br>(W/kg) | Reported<br>SAR<br>(W/kg) |
|                     |       |          | MHz       | Ch.   |                   |            |              |               |                    |                           |                           |
| 10<br>mm            | ----- | Side A   | 1860.0    | 18700 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0               | 0.838                     | 0.84                      |
|                     | ----- |          | 1880.0    | 18900 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0               | 0.940                     | 0.94                      |
|                     | 11    |          | 1900.0    | 19100 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0               | 0.948                     | 0.95                      |
|                     | ----- |          | 1860.0    | 18700 | 20 MHz/QPSK       | 50         | 24           | 1             | 23.0               | 0.796                     | 0.80                      |
|                     | ----- |          | 1880.0    | 18900 | 20 MHz/QPSK       | 50         | 24           | 1             | 23.0               | 0.878                     | 0.88                      |
|                     | ----- |          | 1900.0    | 19100 | 20 MHz/QPSK       | 50         | 24           | 1             | 23.0               | 0.846                     | 0.85                      |
|                     | ----- | Side B   | 1900.0    | 19100 | 20 MHz/QPSK       | 100        | 0            | 1             | 23.0               | 0.732                     | 0.73                      |
|                     | ----- |          | 1880.0    | 18900 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0               | 0.244                     | 0.24                      |
|                     | ----- | Side C   | 1880.0    | 18900 | 20 MHz/QPSK       | 50         | 24           | 1             | 23.0               | 0.202                     | 0.20                      |
|                     | ----- |          | 1860.0    | 18700 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0               | 0.831                     | 0.83                      |
|                     | ----- | Side D   | 1880.0    | 18900 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0               | 0.797                     | 0.80                      |
|                     | ----- |          | 1900.0    | 19100 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0               | 0.799                     | 0.80                      |
|                     | ----- | Side E   | 1880.0    | 18900 | 20 MHz/QPSK       | 50         | 24           | 1             | 23.0               | 0.622                     | 0.62                      |
|                     | ----- |          | 1880.0    | 18900 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0               | 0.183                     | 0.18                      |
|                     | ----- | Repeat   | 1880.0    | 18900 | 20 MHz/QPSK       | 50         | 24           | 1             | 23.0               | 0.156                     | 0.16                      |
|                     | ----- |          | 1880.0    | 18900 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0               | 0.186                     | 0.19                      |
|                     | ----- |          | 1880.0    | 18900 | 20 MHz/QPSK       | 50         | 24           | 1             | 23.0               | 0.153                     | 0.15                      |
|                     | ----- |          | 1860.0    | 18700 | 20 MHz/QPSK       | 1          | 49           | 0             | 24.0               | 0.922                     | 0.92                      |

**Body**  
**1.6 W/kg (mW/g)**  
 averaged over 1 gram

1. Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

2. SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

3. Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

4. Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

5. Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

## SAR Data Summary – 1900 MHz Body – LTE Band 25

| MEASUREMENT RESULTS                                                                     |       |          |           |       |                   |            |              |               |                    |                           |                           |
|-----------------------------------------------------------------------------------------|-------|----------|-----------|-------|-------------------|------------|--------------|---------------|--------------------|---------------------------|---------------------------|
| Gap                                                                                     | Plot  | Position | Frequency |       | BW/<br>Modulation | RB<br>Size | RB<br>Offset | MPR<br>Target | End Power<br>(dBm) | Measured<br>SAR<br>(W/kg) | Reported<br>SAR<br>(W/kg) |
|                                                                                         |       |          | MHz       | Ch.   |                   |            |              |               |                    |                           |                           |
| 10<br>mm                                                                                | 12    | Side A   | 1860.0    | 26140 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.46              | 1.18                      | 1.34                      |
|                                                                                         | ----- |          | 1882.5    | 26365 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.70              | 0.992                     | 1.34                      |
|                                                                                         | ----- |          | 1905.0    | 26590 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.20              | 1.02                      | 1.23                      |
|                                                                                         | ----- |          | 1860.0    | 26140 | 20 MHz/QPSK       | 50         | 24           | 1             | 22.60              | 0.956                     | 1.05                      |
|                                                                                         | ----- |          | 1882.5    | 26365 | 20 MHz/QPSK       | 50         | 24           | 1             | 21.95              | 0.831                     | 1.06                      |
|                                                                                         | ----- |          | 1905.0    | 26590 | 20 MHz/QPSK       | 50         | 24           | 1             | 22.29              | 0.914                     | 1.08                      |
|                                                                                         | ----- | Side B   | 1860.0    | 26140 | 20 MHz/QPSK       | 100        | 0            | 1             | 22.66              | 0.972                     | 1.05                      |
|                                                                                         | ----- |          | 1882.5    | 26365 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.70              | 0.369                     | 0.50                      |
|                                                                                         | ----- | Side C   | 1882.5    | 26365 | 20 MHz/QPSK       | 50         | 24           | 1             | 21.95              | 0.320                     | 0.41                      |
|                                                                                         | ----- |          | 1860.0    | 26140 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.46              | 0.955                     | 1.08                      |
|                                                                                         | ----- | Side C   | 1882.5    | 26365 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.70              | 0.827                     | 1.12                      |
|                                                                                         | ----- |          | 1905.0    | 26590 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.20              | 0.834                     | 1.00                      |
|                                                                                         | ----- |          | 1882.5    | 26365 | 20 MHz/QPSK       | 50         | 24           | 1             | 21.95              | 0.676                     | 0.86                      |
|                                                                                         | ----- | Side D   | 1882.5    | 26365 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.70              | 0.139                     | 0.19                      |
|                                                                                         | ----- |          | 1882.5    | 26365 | 20 MHz/QPSK       | 50         | 24           | 1             | 21.95              | 0.111                     | 0.14                      |
|                                                                                         | ----- | Side E   | 1882.5    | 26365 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.70              | 0.245                     | 0.33                      |
|                                                                                         | ----- |          | 1882.5    | 26365 | 20 MHz/QPSK       | 50         | 24           | 1             | 21.95              | 0.199                     | 0.25                      |
|                                                                                         | ----- | Repeat   | 1860.0    | 26140 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.46              | 1.23                      | 1.39                      |
| <p align="center"><b>Body</b><br/> <b>1.6 W/kg (mW/g)</b><br/> averaged over 1 gram</p> |       |          |           |       |                   |            |              |               |                    |                           |                           |

1. Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

2. SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

3. Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

4. Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

5. Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

## SAR Data Summary – 2300 MHz Body – LTE Band 30

| MEASUREMENT RESULTS                                                                     |       |          |           |       |                   |            |              |               |                       |                        |                        |
|-----------------------------------------------------------------------------------------|-------|----------|-----------|-------|-------------------|------------|--------------|---------------|-----------------------|------------------------|------------------------|
| Gap                                                                                     | Plot  | Position | Frequency |       | BW/<br>Modulation | RB<br>Size | RB<br>Offset | MPR<br>Target | End<br>Power<br>(dBm) | Measured<br>SAR (W/kg) | Reported<br>SAR (W/kg) |
|                                                                                         |       |          | MHz       | Ch.   |                   |            |              |               |                       |                        |                        |
| 10<br>mm                                                                                | 13    | Side A   | 2310.0    | 27710 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.46                 | 0.742                  | 0.84                   |
|                                                                                         | ----- |          | 2310.0    | 27710 | 10 MHz/QPSK       | 25         | 12           | 1             | 22.42                 | 0.660                  | 0.75                   |
|                                                                                         | ----- |          | 2310.0    | 27710 | 10 MHz/QPSK       | 50         | 0            | 1             | 22.75                 | 0.562                  | 0.60                   |
|                                                                                         | ----- | Side C   | 2310.0    | 27710 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.46                 | 0.369                  | 0.42                   |
|                                                                                         | ----- |          | 2310.0    | 27710 | 10 MHz/QPSK       | 25         | 12           | 1             | 22.42                 | 0.242                  | 0.28                   |
|                                                                                         | ----- | Side D   | 2310.0    | 27710 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.46                 | 0.664                  | 0.75                   |
|                                                                                         | ----- |          | 2310.0    | 27710 | 10 MHz/QPSK       | 25         | 12           | 1             | 22.42                 | 0.543                  | 0.62                   |
|                                                                                         | ----- | Repeat   | 2310.0    | 27710 | 10 MHz/QPSK       | 1          | 24           | 0             | 23.46                 | 0.721                  | 0.82                   |
| <div> <div>Body</div> <div>1.6 W/kg (mW/g)</div> <div>averaged over 1 gram</div> </div> |       |          |           |       |                   |            |              |               |                       |                        |                        |

- Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

- SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

- Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

- Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

- Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

## SAR Data Summary – 2300 MHz Body – LTE Band 40

| MEASUREMENT RESULTS                                                        |       |          |           |       |                   |            |              |               |                       |                        |                        |
|----------------------------------------------------------------------------|-------|----------|-----------|-------|-------------------|------------|--------------|---------------|-----------------------|------------------------|------------------------|
| Gap                                                                        | Plot  | Position | Frequency |       | BW/<br>Modulation | RB<br>Size | RB<br>Offset | MPR<br>Target | End<br>Power<br>(dBm) | Measured<br>SAR (W/kg) | Reported<br>SAR (W/kg) |
|                                                                            |       |          | MHz       | Ch.   |                   |            |              |               |                       |                        |                        |
| 10<br>mm                                                                   | ----- | Side A   | 2310.0    | 38750 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.42                 | 0.923                  | 1.06                   |
|                                                                            | ----- |          | 2350.0    | 39150 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.44                 | 0.836                  | 0.95                   |
|                                                                            | 14    |          | 2390.0    | 39550 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.61                 | 1.07                   | 1.17                   |
|                                                                            | ----- |          | 2350.0    | 39150 | 20 MHz/QPSK       | 50         | 24           | 1             | 22.75                 | 0.758                  | 0.80                   |
|                                                                            | ----- |          | 2390.0    | 39550 | 20 MHz/QPSK       | 100        | 0            | 1             | 22.72                 | 0.658                  | 0.70                   |
|                                                                            | ----- | Side C   | 2350.0    | 39150 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.44                 | 0.359                  | 0.41                   |
|                                                                            | ----- |          | 2350.0    | 39150 | 20 MHz/QPSK       | 50         | 24           | 1             | 22.75                 | 0.282                  | 0.30                   |
|                                                                            | ----- | Side D   | 2350.0    | 39150 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.44                 | 0.569                  | 0.65                   |
|                                                                            | ----- |          | 2350.0    | 39150 | 20 MHz/QPSK       | 50         | 24           | 1             | 22.75                 | 0.470                  | 0.50                   |
|                                                                            | ----- | Repeat   | 2390.0    | 39550 | 20 MHz/QPSK       | 1          | 49           | 0             | 23.61                 | 1.05                   | 1.15                   |
| <div>Body</div> <div>1.6 W/kg (mW/g)</div> <div>averaged over 1 gram</div> |       |          |           |       |                   |            |              |               |                       |                        |                        |

- Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

- SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

- Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

- Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

- Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

LTE TDD testing is performed using the SAR test guidance provided in FCC KDB 941225 D05 v02r05 clause 5.4. TDD is tested at the highest duty factor using UL-DL configuration 1 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05 v02r05. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211 Section 4. A duty cycle of 1:1.58 is the highest duty cycle achievable which was used for testing Band 40.

## SAR Data Summary – 2550 MHz Body – LTE Band 7

| MEASUREMENT RESULTS |       |          |           |       |                   |            |              |               |                       |                        |                        |
|---------------------|-------|----------|-----------|-------|-------------------|------------|--------------|---------------|-----------------------|------------------------|------------------------|
| Gap                 | Plot  | Position | Frequency |       | BW/<br>Modulation | RB<br>Size | RB<br>Offset | MPR<br>Target | End<br>Power<br>(dBm) | Measured<br>SAR (W/kg) | Reported<br>SAR (W/kg) |
|                     |       |          | MHz       | Ch.   |                   |            |              |               |                       |                        |                        |
| 10<br>mm            | ----- | Side A   | 2507.5    | 20850 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.4                  | 1.10                   | 1.26                   |
|                     | 15    |          | 2535.0    | 21100 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.6                  | 1.31                   | 1.44                   |
|                     | ----- |          | 2562.5    | 21350 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.2                  | 1.18                   | 1.42                   |
|                     | ----- |          | 2507.5    | 20850 | 20 MHz/QPSK       | 50         | 24           | 1             | 21.1                  | 0.973                  | 1.20                   |
|                     | ----- |          | 2535.0    | 21100 | 20 MHz/QPSK       | 50         | 24           | 1             | 21.1                  | 1.03                   | 1.27                   |
|                     | ----- |          | 2562.5    | 21350 | 20 MHz/QPSK       | 50         | 24           | 1             | 21.3                  | 1.02                   | 1.20                   |
|                     | ----- | Side B   | 2535.0    | 21100 | 20 MHz/QPSK       | 100        | 0            | 1             | 21.2                  | 1.01                   | 1.21                   |
|                     | ----- |          | 2535.0    | 21100 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.6                  | 0.152                  | 0.17                   |
|                     | ----- | Side C   | 2535.0    | 21100 | 20 MHz/QPSK       | 50         | 24           | 1             | 21.1                  | 0.106                  | 0.13                   |
|                     | ----- |          | 2535.0    | 21100 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.6                  | 0.681                  | 0.75                   |
|                     | ----- | Side D   | 2535.0    | 21100 | 20 MHz/QPSK       | 50         | 24           | 1             | 21.1                  | 0.692                  | 0.85                   |
|                     | ----- |          | 2507.5    | 20850 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.4                  | 0.801                  | 0.92                   |
|                     | ----- |          | 2535.0    | 21100 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.6                  | 0.921                  | 1.01                   |
|                     | ----- |          | 2562.5    | 21350 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.2                  | 0.832                  | 1.00                   |
|                     | ----- | Side E   | 2535.0    | 21100 | 20 MHz/QPSK       | 50         | 24           | 1             | 21.1                  | 0.760                  | 0.94                   |
|                     | ----- |          | 2535.0    | 21100 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.6                  | 0.129                  | 0.14                   |
|                     | ----- | Repeat   | 2535.0    | 21100 | 20 MHz/QPSK       | 50         | 24           | 1             | 21.1                  | 0.0987                 | 0.12                   |
|                     | ----- |          | 2535.0    | 21100 | 20 MHz/QPSK       | 1          | 49           | 0             | 22.6                  | 1.29                   | 1.41                   |

**Body**  
**1.6 W/kg (mW/g)**  
 averaged over 1 gram

- Battery is fully charged for all tests.  
 Power Measured ☒ Conducted ☐ ERP ☐ EIRP
- SAR Measurement  
 Phantom Configuration ☐ Left Head ☒ Eli4 ☐ Right Head  
 SAR Configuration ☐ Head ☒ Body
- Test Signal Call Mode ☒ Test Code ☐ Base Station Simulator
- Test Configuration ☐ With Belt Clip ☐ Without Belt Clip ☒ N/A
- Tissue Depth is at least 15.0 cm



Jay M. Moulton  
 Vice President

## SAR Data Summary – 2500 MHz Body – LTE Band 41

| MEASUREMENT RESULTS |       |          |           |             |                   |             |                                                 |               |              |                        |                        |
|---------------------|-------|----------|-----------|-------------|-------------------|-------------|-------------------------------------------------|---------------|--------------|------------------------|------------------------|
| Gap                 | Plot  | Position | Frequency |             | BW/<br>Modulation | RB<br>Size  | RB<br>Offset                                    | MPR<br>Target | End<br>Power | Measured<br>SAR (W/kg) | Reported<br>SAR (W/kg) |
|                     |       |          | MHz       | Ch.         |                   |             |                                                 |               | (dBm)        |                        |                        |
| 10<br>mm            | ----- | Side A   | 2506.0    | 39750       | 20 MHz/QPSK       | 1           | 49                                              | 0             | 24.58        | 1.03                   | 1.14                   |
|                     | ----- |          | 2544.5    | 40135       | 20 MHz/QPSK       | 1           | 49                                              | 0             | 24.37        | 1.04                   | 1.20                   |
|                     | 16    |          | 2593.0    | 40620       | 20 MHz/QPSK       | 1           | 49                                              | 0             | 24.42        | 1.20                   | 1.37                   |
|                     | ----- |          | 2641.5    | 41105       | 20 MHz/QPSK       | 1           | 49                                              | 0             | 24.01        | 1.07                   | 1.34                   |
|                     | ----- |          | 2680.0    | 41490       | 20 MHz/QPSK       | 1           | 49                                              | 0             | 23.40        | 0.929                  | 1.34                   |
|                     | ----- |          | 2506.0    | 39750       | 20 MHz/QPSK       | 50          | 24                                              | 1             | 23.80        | 0.859                  | 0.90                   |
|                     | ----- |          | 2544.5    | 40135       | 20 MHz/QPSK       | 50          | 24                                              | 1             | 23.86        | 0.970                  | 1.00                   |
|                     | ----- |          | 2593.0    | 40620       | 20 MHz/QPSK       | 50          | 24                                              | 1             | 23.59        | 0.982                  | 1.08                   |
|                     | ----- |          | 2641.5    | 41105       | 20 MHz/QPSK       | 50          | 24                                              | 1             | 23.33        | 0.965                  | 1.13                   |
|                     | ----- |          | 2680.0    | 41490       | 20 MHz/QPSK       | 50          | 24                                              | 1             | 23.77        | 1.01                   | 1.07                   |
|                     | ----- | 2593.0   | 40620     | 20 MHz/QPSK | 100               | 0           | 1                                               | 23.73         | 0.785        | 0.84                   |                        |
|                     | ----- | Side C   | 2593.0    | 40620       | 20 MHz/QPSK       | 1           | 49                                              | 0             | 24.42        | 0.641                  | 0.73                   |
|                     | ----- |          | 2593.0    | 40620       | 20 MHz/QPSK       | 50          | 24                                              | 1             | 23.59        | 0.541                  | 0.59                   |
|                     | ----- |          | Side D    | 2506.0      | 39750             | 20 MHz/QPSK | 1                                               | 49            | 0            | 24.58                  | 0.757                  |
|                     | ----- | 2544.5   |           | 40135       | 20 MHz/QPSK       | 1           | 49                                              | 0             | 24.37        | 0.773                  | 0.89                   |
|                     | ----- | 2593.0   |           | 40620       | 20 MHz/QPSK       | 1           | 49                                              | 0             | 24.42        | 0.753                  | 0.86                   |
|                     | ----- | 2641.5   |           | 41105       | 20 MHz/QPSK       | 1           | 49                                              | 0             | 24.01        | 0.697                  | 0.88                   |
|                     | ----- | 2680.0   |           | 41490       | 20 MHz/QPSK       | 1           | 49                                              | 0             | 23.40        | 0.638                  | 0.92                   |
|                     | ----- | 2506.0   |           | 39750       | 20 MHz/QPSK       | 50          | 24                                              | 1             | 23.80        | 0.823                  | 0.86                   |
|                     | ----- | 2544.5   |           | 40135       | 20 MHz/QPSK       | 50          | 24                                              | 1             | 23.86        | 0.854                  | 0.88                   |
|                     | ----- | 2593.0   |           | 40620       | 20 MHz/QPSK       | 50          | 24                                              | 1             | 23.59        | 0.814                  | 0.89                   |
|                     | ----- | 2641.5   |           | 41105       | 20 MHz/QPSK       | 50          | 24                                              | 1             | 23.33        | 0.766                  | 0.89                   |
|                     | ----- | 2680.0   |           | 41490       | 20 MHz/QPSK       | 50          | 24                                              | 1             | 23.77        | 0.755                  | 0.80                   |
|                     | ----- | Repeat   | 2593.0    | 40620       | 20 MHz/QPSK       | 1           | 49                                              | 0             | 24.42        | 1.25                   | 1.43                   |
|                     |       |          |           |             |                   |             | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |               |              |                        |                        |

- Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

- SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

- Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

- Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

- Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

LTE TDD testing is performed using the SAR test guidance provided in FCC KDB 941225 D05 v02r05 clause 5.4. TDD is tested at the highest duty factor using UL-DL configuration 1 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05 v02r05. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211 Section 4. A duty cycle of 1:1.58 is the highest duty cycle achievable which was used for testing Band 41.

## SAR Data Summary – 3500 MHz Body – LTE Band 42

| MEASUREMENT RESULTS |       |          |           |       |                   |                                                 |              |               |           |                           |                           |
|---------------------|-------|----------|-----------|-------|-------------------|-------------------------------------------------|--------------|---------------|-----------|---------------------------|---------------------------|
| Gap                 | Plot  | Position | Frequency |       | BW/<br>Modulation | RB<br>Size                                      | RB<br>Offset | MPR<br>Target | End Power | Measured<br>SAR<br>(W/kg) | Reported<br>SAR<br>(W/kg) |
|                     |       |          | MHz       | Ch.   |                   |                                                 |              |               | (dBm)     |                           |                           |
| 10<br>mm            | 17    | Side A   | 3500.0    | 42590 | 20 MHz/QPSK       | 1                                               | 49           | 0             | 22.96     | 0.331                     | 0.42                      |
|                     | ----- |          | 3500.0    | 42590 | 20 MHz/QPSK       | 50                                              | 24           | 1             | 22.42     | 0.270                     | 0.31                      |
|                     | ----- | Side C   | 3500.0    | 42590 | 20 MHz/QPSK       | 1                                               | 49           | 0             | 22.96     | 0.264                     | 0.34                      |
|                     | ----- |          | 3500.0    | 42590 | 20 MHz/QPSK       | 50                                              | 24           | 1             | 22.42     | 0.218                     | 0.25                      |
|                     | ----- | Side D   | 3500.0    | 42590 | 20 MHz/QPSK       | 1                                               | 49           | 0             | 22.96     | 0.0894                    | 0.11                      |
|                     | ----- |          | 3500.0    | 42590 | 20 MHz/QPSK       | 50                                              | 24           | 1             | 22.42     | 0.0784                    | 0.09                      |
|                     | ----- | Side E   | 3500.0    | 42590 | 20 MHz/QPSK       | 1                                               | 49           | 0             | 22.96     | 0.0723                    | 0.09                      |
|                     | ----- |          | 3500.0    | 42590 | 20 MHz/QPSK       | 50                                              | 24           | 1             | 22.42     | 0.0590                    | 0.07                      |
|                     |       |          |           |       |                   | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |              |               |           |                           |                           |

- Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

- SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

- Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

- Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

- Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

LTE TDD testing is performed using the SAR test guidance provided in FCC KDB 941225 D05 v02r05 clause 5.4. TDD is tested at the highest duty factor using UL-DL configuration 1 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05 v02r05. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211 Section 4. A duty cycle of 1:1.58 is the highest duty cycle achievable which was used for testing Band 42.

## SAR Data Summary – 3600 MHz Body – LTE Band 48

| MEASUREMENT RESULTS |       |          |           |       |                   |                                                 |              |               |           |                           |                           |
|---------------------|-------|----------|-----------|-------|-------------------|-------------------------------------------------|--------------|---------------|-----------|---------------------------|---------------------------|
| Gap                 | Plot  | Position | Frequency |       | BW/<br>Modulation | RB<br>Size                                      | RB<br>Offset | MPR<br>Target | End Power | Measured<br>SAR<br>(W/kg) | Reported<br>SAR<br>(W/kg) |
|                     |       |          | MHz       | Ch.   |                   |                                                 |              |               | (dBm)     |                           |                           |
| 10<br>mm            | 18    | Side A   | 3625      | 55990 | 20 MHz/QPSK       | 1                                               | 49           | 0             | 23.6      | 0.319                     | 0.35                      |
|                     | ----- |          | 3625      | 55990 | 20 MHz/QPSK       | 50                                              | 24           | 1             | 23.1      | 0.285                     | 0.35                      |
|                     | ----- | Side C   | 3625      | 55990 | 20 MHz/QPSK       | 1                                               | 49           | 0             | 23.6      | 0.269                     | 0.30                      |
|                     | ----- |          | 3625      | 55990 | 20 MHz/QPSK       | 50                                              | 24           | 1             | 23.1      | 0.224                     | 0.28                      |
|                     | ----- | Side D   | 3625      | 55990 | 20 MHz/QPSK       | 1                                               | 49           | 0             | 23.6      | 0.112                     | 0.12                      |
|                     | ----- |          | 3625      | 55990 | 20 MHz/QPSK       | 50                                              | 24           | 1             | 23.1      | 0.0897                    | 0.11                      |
|                     | ----- | Side E   | 3625      | 55990 | 20 MHz/QPSK       | 1                                               | 49           | 0             | 23.6      | 0.104                     | 0.11                      |
|                     | ----- |          | 3625      | 55990 | 20 MHz/QPSK       | 50                                              | 24           | 1             | 23.1      | 0.0856                    | 0.11                      |
|                     |       |          |           |       |                   | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |              |               |           |                           |                           |

6. Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

7. SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

8. Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

9. Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

10. Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

LTE TDD testing is performed using the SAR test guidance provided in FCC KDB 941225 D05 v02r05 clause 5.4. TDD is tested at the highest duty factor using UL-DL configuration 1 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05 v02r05. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211 Section 4. A duty cycle of 1:1.58 is the highest duty cycle achievable which was used for testing Band 48.

## SAR Data Summary – 2450 MHz Body 802.11b

### MEASUREMENT RESULTS

| Gap   | Plot  | Position | Frequency |     | Modulation | Antenna                                         | End Power | Measured SAR<br>(W/kg) | Reported SAR<br>(W/kg) |
|-------|-------|----------|-----------|-----|------------|-------------------------------------------------|-----------|------------------------|------------------------|
|       |       |          | MHz       | Ch. |            |                                                 | (dBm)     |                        |                        |
| 10 mm | ----- | Side A   | 2437      | 6   | DSSS       | Tx0                                             | 17.7      | 0.148                  | 0.16                   |
|       | ----- | Side B   | 2437      | 6   | DSSS       |                                                 | 17.7      | 0.148                  | 0.16                   |
|       | ----- | Side C   | 2437      | 6   | DSSS       |                                                 | 17.7      | 0.126                  | 0.14                   |
|       | ----- | Side F   | 2437      | 6   | DSSS       |                                                 | 17.7      | 0.0471                 | 0.05                   |
|       | 19    | Side A   | 2437      | 6   | DSSS       | Tx1                                             | 17.1      | 0.257                  | 0.32                   |
|       | ----- | Side C   | 2437      | 6   | DSSS       |                                                 | 17.1      | 0.168                  | 0.21                   |
|       | ----- | Side D   | 2437      | 6   | DSSS       |                                                 | 17.1      | 0.169                  | 0.21                   |
|       | ----- | Side F   | 2437      | 6   | DSSS       |                                                 | 17.1      | 0.0555                 | 0.07                   |
|       |       |          |           |     |            | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |           |                        |                        |

1. Battery is fully charged for all tests.

Power Measured

☒ Conducted

☐ ERP

☐ EIRP

2. SAR Measurement

Phantom Configuration

☐ Left Head

☒ Eli4

☐ Right Head

SAR Configuration

☐ Head

☒ Body

3. Test Signal Call Mode

☒ Test Code

☐ Base Station Simulator

4. Test Configuration

☐ With Belt Clip

☐ Without Belt Clip ☒ N/A

5. Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

# SAR Data Summary – 5200 MHz Body 802.11a

## MEASUREMENT RESULTS

| Gap   | Plot  | Position | Frequency |     | Modulation | Antenna | End Power | Measured SAR (W/kg) | Reported SAR (W/kg) |
|-------|-------|----------|-----------|-----|------------|---------|-----------|---------------------|---------------------|
|       |       |          | MHz       | Ch. |            |         | (dBm)     |                     |                     |
| 10 mm | ----- | Side A   | 5220      | 44  | OFDM       | Tx0     | 11.0      | 0.150               | 0.19                |
|       | 20    | Side B   | 5200      | 40  | OFDM       |         | 11.1      | 0.547               | 0.67                |
|       | ----- |          | 5220      | 44  | OFDM       |         | 11.0      | 0.479               | 0.60                |
|       | ----- | Side C   | 5220      | 44  | OFDM       |         | 11.0      | 0.092               | 0.12                |
|       | ----- | Side F   | 5220      | 44  | OFDM       |         | 11.0      | 0.00933             | 0.01                |
|       | ----- | Side A   | 5220      | 44  | OFDM       | Tx1     | 11.0      | 0.0716              | 0.09                |
|       | ----- | Side C   | 5220      | 44  | OFDM       |         | 11.0      | 0.0489              | 0.06                |
|       | ----- | Side D   | 5220      | 44  | OFDM       |         | 11.0      | 0.236               | 0.30                |
|       | ----- | Side F   | 5220      | 44  | OFDM       |         | 11.0      | 0.00575             | 0.01                |
|       | ----- |          |           |     |            |         |           |                     |                     |

**Body**  
**1.6 W/kg (mW/g)**  
averaged over 1 gram

- Battery is fully charged for all tests.  
Power Measured ☒ Conducted ☐ ERP ☐ EIRP
- SAR Measurement  
Phantom Configuration ☐ Left Head ☒ Eli4 ☐ Right Head  
SAR Configuration ☐ Head ☒ Body
- Test Signal Call Mode ☒ Test Code ☐ Base Station Simulator
- Test Configuration ☐ With Belt Clip ☐ Without Belt Clip ☒ N/A
- Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

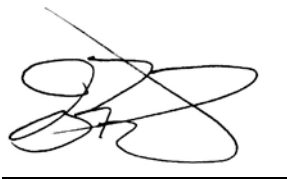
# SAR Data Summary – 5800 MHz Body 802.11a

## MEASUREMENT RESULTS

| Gap   | Plot  | Position | Frequency |     | Modulation | Antenna | End Power | Measured SAR (W/kg) | Reported SAR (W/kg) |
|-------|-------|----------|-----------|-----|------------|---------|-----------|---------------------|---------------------|
|       |       |          | MHz       | Ch. |            |         | (dBm)     |                     |                     |
| 10 mm | ----- | Side A   | 5785      | 157 | OFDM       | Tx0     | 19.8      | 0.926               | 0.97                |
|       | ----- |          | 5825      | 165 | OFDM       |         | 19.9      | 0.838               | 0.86                |
|       | ----- | Side B   | 5745      | 149 | OFDM       |         | 19.9      | 1.15                | 1.18                |
|       | 21    |          | 5785      | 157 | OFDM       |         | 19.8      | 1.36                | 1.42                |
|       | ----- | Side C   | 5825      | 165 | OFDM       |         | 19.9      | 1.25                | 1.28                |
|       | ----- |          | 5785      | 157 | OFDM       |         | 19.8      | 0.546               | 0.57                |
|       | ----- | Side D   | 5825      | 165 | OFDM       |         | 19.9      | 0.519               | 0.53                |
|       | ----- |          | 5785      | 157 | OFDM       |         | 19.8      | 0.137               | 0.14                |
|       | ----- | Side E   | 5785      | 157 | OFDM       |         | 19.8      | 0.116               | 0.12                |
|       | ----- | Side F   | 5785      | 157 | OFDM       |         | 19.8      | 0.147               | 0.15                |
|       | ----- | Side A   | 5785      | 157 | OFDM       | Tx1     | 17.6      | 0.695               | 0.76                |
|       | ----- |          | 5825      | 165 | OFDM       |         | 17.8      | 0.635               | 0.66                |
|       | ----- | Side B   | 5785      | 157 | OFDM       |         | 17.6      | 0.102               | 0.11                |
|       | ----- | Side C   | 5785      | 157 | OFDM       |         | 17.6      | 0.300               | 0.33                |
|       | ----- | Side D   | 5745      | 149 | OFDM       |         | 17.7      | 1.12                | 1.20                |
|       | ----- |          | 5785      | 157 | OFDM       |         | 17.6      | 1.29                | 1.41                |
|       | ----- | Side E   | 5825      | 165 | OFDM       |         | 17.8      | 1.26                | 1.32                |
|       | ----- |          | 5785      | 157 | OFDM       |         | 17.6      | 0.0687              | 0.08                |
|       | ----- | Side F   | 5785      | 157 | OFDM       |         | 17.6      | 0.0559              | 0.06                |
|       | ----- | Repeat   | 5785      | 157 | OFDM       | Tx0     | 19.8      | 1.34                | 1.40                |

**Body**  
**1.6 W/kg (mW/g)**  
averaged over 1 gram

- Battery is fully charged for all tests.  
Power Measured ☒ Conducted ☐ ERP ☐ EIRP
- SAR Measurement  
Phantom Configuration ☐ Left Head ☒ Eli4 ☐ Right Head  
SAR Configuration ☐ Head ☒ Body
- Test Signal Call Mode ☒ Test Code ☐ Base Station Simulator
- Test Configuration ☐ With Belt Clip ☐ Without Belt Clip ☒ N/A
- Tissue Depth is at least 15.0 cm



Jay M. Moulton  
Vice President

### SAR Data Summary – Simultaneous Transmit (Worst Case) Ant 0 – WiFi

| MEASUREMENT RESULTS |                  |     |                  |        |                                                 |                 |                 |                  |
|---------------------|------------------|-----|------------------|--------|-------------------------------------------------|-----------------|-----------------|------------------|
| Side                | Frequency (WLAN) |     | Frequency (WWAN) |        | WWAN Technology                                 | SAR (W/kg) WLAN | SAR (W/kg) WWAN | Total SAR (W/kg) |
|                     | MHz              | Ch. | MHz              | Ch.    |                                                 |                 |                 |                  |
| A                   | 5785             | 157 | 1882.5           | 26365  | LTE Band 25                                     | 0.97            | 1.34            | 2.31             |
| B                   | 5785             | 157 | 1732.6           | 1413   | WCDMA Band 4                                    | 1.41            | 0.79            | 2.20             |
| C                   | 5785             | 157 | 1882.5           | 26365  | LTE Band 25                                     | 0.57            | 1.12            | 1.69             |
| D                   | 5785             | 157 | 782.0            | 23230  | LTE Band 13                                     | 1.41            | 0.32            | 1.73             |
| E                   | 5785             | 157 | 1720.0           | 132072 | LTE Band 66                                     | 0.12            | 1.24            | 1.36             |
| F                   | 5785             | 157 | Estimated        |        |                                                 | 0.15            | 0.48            | 0.63             |
|                     |                  |     |                  |        | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |                 |                 |                  |

The worst case condition is Side A. The WWAN and WLAN antennas are a minimum of 80 mm apart. Using the highest reported SAR to calculate the simultaneous Tx using peak separation ratio, the highest ratio would be 0.04 which meets the requirements of KDB 447498 section 4.3.2 3) on page 13. The calculation is shown below.

#### Simultaneous Separation Ratio Calculation

$$(SAR_1 + SAR_2)^{1.5}/R_i \leq 0.04 \text{ rounded to two digits}$$

$$(0.97 + 1.34)^{1.5}/80 = 0.04$$

### SAR Data Summary – Simultaneous Transmit (Worst Case) Ant 2 – WiFi

| MEASUREMENT RESULTS |                  |     |                  |       |                                                 |                 |                 |                  |
|---------------------|------------------|-----|------------------|-------|-------------------------------------------------|-----------------|-----------------|------------------|
| Side                | Frequency (WLAN) |     | Frequency (WWAN) |       | WWAN Technology                                 | SAR (W/kg) WLAN | SAR (W/kg) WWAN | Total SAR (W/kg) |
|                     | MHz              | Ch. | MHz              | Ch.   |                                                 |                 |                 |                  |
| A                   | 5785             | 157 | 2535.0           | 21100 | LTE Band 7                                      | 0.97            | 1.44            | 2.41             |
| B                   | 5785             | 157 | 2535.0           | 21100 | LTE Band 7                                      | 1.41            | 0.17            | 1.58             |
| C                   | 5785             | 157 | 2535.0           | 21100 | LTE Band 7                                      | 0.57            | 0.85            | 1.42             |
| D                   | 5785             | 157 | 2535.0           | 21100 | LTE Band 7                                      | 1.41            | 1.01            | 2.42             |
| E                   | 5785             | 157 | 2535.0           | 21100 | LTE Band 7                                      | 0.12            | 0.14            | 0.26             |
| F                   | 5785             | 157 | Estimated        |       |                                                 | 0.15            | 0.40            | 0.55             |
|                     |                  |     |                  |       | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |                 |                 |                  |

The worst case condition is Side A. The WWAN and WLAN antennas are a minimum of 85 mm apart. Using the highest reported SAR to calculate the simultaneous Tx using peak separation ratio, the highest ratio would be 0.04 which meets the requirements of KDB 447498 section 4.3.2 3) on page 13. The calculation is shown below.

#### Simultaneous Separation Ratio Calculation

$$(SAR_1 + SAR_2)^{1.5}/R_i \leq 0.04 \text{ rounded to two digits}$$

$$(0.97 + 1.44)^{1.5}/85 = 0.04$$

### SAR Data Summary – Simultaneous Transmit (Worst Case) Ant 4 – WiFi

| MEASUREMENT RESULTS |                  |     |                  |       |                                                 |                 |                 |                  |
|---------------------|------------------|-----|------------------|-------|-------------------------------------------------|-----------------|-----------------|------------------|
| Side                | Frequency (WLAN) |     | Frequency (WWAN) |       | WWAN Technology                                 | SAR (W/kg) WLAN | SAR (W/kg) WWAN | Total SAR (W/kg) |
|                     | MHz              | Ch. | MHz              | Ch.   |                                                 |                 |                 |                  |
| A                   | 5785             | 157 | 3500.0           | 42590 | LTE Band 42                                     | 0.97            | 0.42            | 1.39             |
| B                   | 5785             | 157 | Estimated        |       |                                                 | 1.41            | 0.40            | 1.81             |
| C                   | 5785             | 157 | 3500.0           | 42590 | LTE Band 42                                     | 0.57            | 0.34            | 0.91             |
| D                   | 5785             | 157 | 3625.0           | 55990 | LTE Band 48                                     | 1.41            | 0.12            | 1.53             |
| E                   | 5785             | 157 | 3625.0           | 55990 | LTE Band 48                                     | 0.12            | 0.11            | 0.23             |
| F                   | 5785             | 157 | Estimated        |       |                                                 | 0.15            | 0.40            | 0.55             |
|                     |                  |     |                  |       | Body<br>1.6 W/kg (mW/g)<br>averaged over 1 gram |                 |                 |                  |

The worst case condition is Side B. The WWAN and WLAN antennas are a minimum of 76 mm apart. Using the highest reported SAR to calculate the simultaneous Tx using peak separation ratio, the highest ratio would be 0.03 which meets the requirements of KDB 447498 section 4.3.2.3 on page 13. The calculation is shown below.

#### Simultaneous Separation Ratio Calculation

$$(SAR_1 + SAR_2)^{1.5}/R_i \leq 0.04 \text{ rounded to two digits}$$

$$(1.41 + 0.40)^{1.5}/76 = 0.03$$

## SAR Data Summary – Simultaneous Transmit (Uplink CA)

The volume scan was conducted for the two highest channels for all the uplink configurations on Side A of the device. The worst case SAR combined value for the Uplink CA is 1.46 W/kg. See plots 13 and 14 in Appendix B for the data sheets.

| 1 <sup>st</sup> Band | 2 <sup>nd</sup> Band | 1 <sup>st</sup> Band Conducted Power | 2 <sup>nd</sup> Band Conducted Power | 1 <sup>st</sup> Band Channel | 2 <sup>nd</sup> Band Channel | SAR Volume Scan Sum | Scaled SAR |
|----------------------|----------------------|--------------------------------------|--------------------------------------|------------------------------|------------------------------|---------------------|------------|
| B2                   | B13                  | 23.1 dBm                             | 23.6 dBm                             | 19100                        | 23230                        | 1.18                | 1.45       |
| B66                  | B13                  | 22.9 dBm                             | 23.6 dBm                             | 132072                       | 23230                        | 1.13                | 1.46       |

## 11. Test Equipment List

**Table 11.1 Equipment Specifications**

| Type                                          | Calibration Due Date | Calibration Done Date | Serial Number   |
|-----------------------------------------------|----------------------|-----------------------|-----------------|
| Staubli Robot TX60L                           | N/A                  | N/A                   | F07/55M6A1/A/01 |
| Measurement Controller CS8c                   | N/A                  | N/A                   | 1012            |
| ELI5 Flat Phantom                             | N/A                  | N/A                   | 2037            |
| Device Holder                                 | N/A                  | N/A                   | N/A             |
| Data Acquisition Electronics 4                | 01/10/2019           | 01/10/2018            | 1321            |
| Data Acquisition Electronics 4                | 01/10/2020           | 01/10/2019            | 1321            |
| SPEAG E-Field Probe EX3DV4                    | 08/18/2018           | 08/18/2017            | 3693            |
| SPEAG E-Field Probe EX3DV4                    | 04/20/2019           | 04/20/2018            | 3662            |
| Speag Validation Dipole D750V2                | 08/10/2018           | 08/10/2015            | 1053            |
| Speag Validation Dipole D750V2                | 07/13/2019           | 07/13/2018            | 1016            |
| Speag Validation Dipole D835V2                | 08/10/2018           | 08/10/2015            | 4d131           |
| Speag Validation Dipole D835V2                | 07/13/2019           | 07/13/2018            | 4d089           |
| Speag Validation Dipole D1750V2               | 08/13/2018           | 08/13/2015            | 1061            |
| Speag Validation Dipole D1750V2               | 07/20/2019           | 07/20/2018            | 1018            |
| Speag Validation Dipole D1900V2               | 08/13/2019           | 08/13/2015            | 5d147           |
| Speag Validation Dipole D1900V2               | 07/13/2018           | 07/13/2018            | 5d116           |
| Speag Validation Dipole D2300V2               | 08/20/2019           | 08/20/2018            | 1060            |
| Speag Validation Dipole D2450V2               | 08/10/2016           | 08/10/2015            | 881             |
| Speag Validation Dipole D2550V2               | 08/10/2018           | 08/10/2015            | 1003            |
| Speag Validation Dipole D2550V2               | 07/12/2019           | 07/12/2018            | 1003            |
| Speag Validation Dipole D3500V2               | 04/13/2019           | 04/13/2018            | 1061            |
| Speag Validation Dipole D3700V2               | 04/13/2019           | 04/13/2018            | 1024            |
| Speag Validation Dipole D5GHzV2               | 08/11/2018           | 08/11/2015            | 1119            |
| Agilent N1911A Power Meter                    | 05/20/2019           | 03/20/2017            | GB45100254      |
| Agilent N1922A Power Sensor                   | 06/21/2019           | 06/21/2017            | MY45240464      |
| Advantest R3261A Spectrum Analyzer            | 03/26/2019           | 03/20/2017            | 31720068        |
| Agilent (HP) 8350B Signal Generator           | 03/26/2019           | 03/20/2017            | 2749A10226      |
| Agilent (HP) 83525A RF Plug-In                | 03/26/2019           | 03/20/2017            | 2647A01172      |
| Agilent (HP) 8753C Vector Network Analyzer    | 03/26/2019           | 03/20/2017            | 3135A01724      |
| Agilent (HP) 85047A S-Parameter Test Set      | 03/26/2019           | 03/20/2017            | 2904A00595      |
| Agilent (HP) 8960 Base Station Sim.           | 03/30/2019           | 03/30/2017            | MY48360364      |
| Anritsu MT8820C                               | 07/27/2019           | 07/27/2017            | 6201176199      |
| Agilent 778D Dual Directional Coupler         | N/A                  | N/A                   | MY48220184      |
| MiniCircuits BW-N20W5+ Fixed 20 dB Attenuator | N/A                  | N/A                   | N/A             |
| MiniCircuits SPL-10.7+ Low Pass Filter        | N/A                  | N/A                   | R8979513746     |
| Apriel Dielectric Probe Assembly              | N/A                  | N/A                   | 0011            |
| Body Equivalent Matter (750 MHz)              | N/A                  | N/A                   | N/A             |
| Body Equivalent Matter (835 MHz)              | N/A                  | N/A                   | N/A             |
| Body Equivalent Matter (1750 MHz)             | N/A                  | N/A                   | N/A             |
| Body Equivalent Matter (1900 MHz)             | N/A                  | N/A                   | N/A             |
| Body Equivalent Matter (2450 MHz)             | N/A                  | N/A                   | N/A             |
| Body Equivalent Matter (2550 MHz)             | N/A                  | N/A                   | N/A             |
| Body Equivalent Matter (3-5 GHz)              | N/A                  | N/A                   | N/A             |

## 12. Conclusion

The SAR measurement indicates that the EUT complies with the RF radiation exposure limits of the FCC/IC. These measurements are taken to simulate the RF effects exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The tested device complies with the requirements in respect to all parameters subject to the test. The test results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body is a very complex phenomena that depends on the mass, shape, and size of the body; the orientation of the body with respect to the field vectors; and, the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because innumerable factors may interact to determine the specific biological outcome of an exposure to electromagnetic fields, any protection guide shall consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables.

## 13. References

- [1] Federal Communications Commission, ET Docket 93-62, Guidelines for Evaluating the Environmental Effects of Radio Frequency Radiation, August 1996
- [2] ANSI/IEEE C95.1 – 1992, American National Standard Safety Levels with respect to Human Exposure to Radio Frequency Electromagnetic Fields, 300kHz to 100GHz, New York: IEEE, 1992.
- [3] ANSI/IEEE C95.3 – 2002, IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave, New York: IEEE, 2002.
- [4] International Electrotechnical Commission, IEC 62209-2 (Edition 1.0), Human Exposure to radio frequency fields from hand-held and body mounted wireless communication devices – Human models, instrumentation, and procedures – Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz), March 2010.
- [5] IEEE Standard 1528 – 2013, IEEE Recommended Practice for Determining the Peak-Spatial Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communication Devices: Measurement Techniques, June 2013.
- [6] Industry Canada, RSS – 102 Issue 5, Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands), March 2015.
- [7] Health Canada, Safety Code 6, Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3kHz to 300 GHz, 2009.

## Appendix A – System Validation Plots and Data

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Test Result for UIM Dielectric Parameter

Wed 06/Jun/2018

Freq Frequency(GHz)

FCC\_eH Limits for Head Epsilon

FCC\_sH Limits for Head Sigma

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 0.7000 | 55.73  | 0.96   | 55.72  | 0.97   |
| 0.7100 | 55.69  | 0.96   | 55.69  | 0.98   |
| 0.7200 | 55.65  | 0.96   | 55.66  | 0.98   |
| 0.7300 | 55.61  | 0.96   | 55.63  | 0.98   |
| 0.7400 | 55.57  | 0.96   | 55.60  | 0.99   |
| 0.7500 | 55.53  | 0.96   | 55.57  | 0.99   |
| 0.7600 | 55.49  | 0.96   | 55.54  | 0.99   |
| 0.7700 | 55.45  | 0.96   | 55.50  | 1.00   |
| 0.7800 | 55.41  | 0.97   | 55.46  | 1.00   |
| 0.7820 | 55.404 | 0.97   | 55.452 | 1.00*  |
| 0.7900 | 55.38  | 0.97   | 55.42  | 1.00   |
| 0.7930 | 55.368 | 0.97   | 55.408 | 1.003* |
| 0.8000 | 55.34  | 0.97   | 55.38  | 1.01   |

\* value interpolated

\*\*\*\*\*

Test Result for UIM Dielectric Parameter

Thu 26/Jul/2018

Freq Frequency(GHz)

FCC\_eH Limits for Head Epsilon

FCC\_sH Limits for Head Sigma

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 0.7000 | 55.73  | 0.96   | 55.59  | 0.95   |
| 0.7100 | 55.69  | 0.96   | 55.55  | 0.96   |
| 0.7200 | 55.65  | 0.96   | 55.51  | 0.96   |
| 0.7300 | 55.61  | 0.96   | 55.46  | 0.97   |
| 0.7400 | 55.57  | 0.96   | 55.42  | 0.97   |
| 0.7500 | 55.53  | 0.96   | 55.38  | 0.98   |
| 0.7600 | 55.49  | 0.96   | 55.33  | 0.98   |
| 0.7700 | 55.45  | 0.96   | 55.29  | 0.99   |
| 0.7800 | 55.41  | 0.97   | 55.25  | 0.99   |
| 0.7820 | 55.404 | 0.97   | 55.24  | 0.992* |
| 0.7900 | 55.38  | 0.97   | 55.20  | 1.00   |
| 0.8000 | 55.34  | 0.97   | 55.16  | 1.00   |

\* value interpolated

\*\*\*\*\*

# Test Result for UIM Dielectric Parameter

Tue 19/Feb/2019

Freq Frequency(GHz)

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 0.7000 | 55.73  | 0.96   | 55.53  | 0.97   |
| 0.7040 | 55.714 | 0.96   | 55.518 | 0.974* |
| 0.7075 | 55.70  | 0.96   | 55.508 | 0.978* |
| 0.7100 | 55.69  | 0.96   | 55.50  | 0.98   |
| 0.7110 | 55.686 | 0.96   | 55.497 | 0.98*  |
| 0.7200 | 55.65  | 0.96   | 55.47  | 0.98   |
| 0.7300 | 55.61  | 0.96   | 55.44  | 0.98   |
| 0.7400 | 55.57  | 0.96   | 55.41  | 0.99   |
| 0.7500 | 55.53  | 0.96   | 55.38  | 0.99   |
| 0.7600 | 55.49  | 0.96   | 55.35  | 0.99   |
| 0.7700 | 55.45  | 0.96   | 55.31  | 1.00   |
| 0.7800 | 55.41  | 0.97   | 55.37  | 1.00   |
| 0.7900 | 55.38  | 0.97   | 55.33  | 1.00   |
| 0.8000 | 55.34  | 0.97   | 55.29  | 1.01   |

\* value interpolated

\*\*\*\*\*

# Test Result for UIM Dielectric Parameter

Fri 01/Jun/2018

Freq Frequency(GHz)

FCC\_eH Limits for Head Epsilon

FCC\_sH Limits for Head Sigma

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 0.8050 | 55.32  | 0.97   | 56.05  | 0.96   |
| 0.8150 | 55.28  | 0.97   | 56.00  | 0.98   |
| 0.8250 | 55.24  | 0.97   | 55.95  | 0.98   |
| 0.8264 | 55.234 | 0.97   | 55.944 | 0.981* |
| 0.8290 | 55.24  | 0.97   | 55.934 | 0.984* |
| 0.8350 | 55.20  | 0.97   | 55.91  | 0.99   |
| 0.8355 | 55.199 | 0.971  | 55.908 | 0.99*  |
| 0.8366 | 55.195 | 0.972  | 55.902 | 0.99*  |
| 0.8440 | 55.173 | 0.979  | 55.865 | 0.99*  |
| 0.8450 | 55.17  | 0.98   | 55.86  | 0.99   |
| 0.8466 | 55.165 | 0.982  | 55.857 | 0.992* |
| 0.8550 | 55.14  | 0.99   | 55.84  | 1.00   |
| 0.8650 | 55.11  | 1.01   | 55.80  | 1.01   |
| 0.8750 | 55.08  | 1.02   | 55.78  | 1.03   |
| 0.8850 | 55.05  | 1.03   | 55.73  | 1.03   |
| 0.8950 | 55.02  | 1.04   | 55.70  | 1.04   |

\* value interpolated

\*\*\*\*\*

# Test Result for UIM Dielectric Parameter

Mon 18/Feb/2019

Freq Frequency(GHz)

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 0.8050 | 55.32  | 0.97   | 54.87  | 0.98   |
| 0.8150 | 55.28  | 0.97   | 54.82  | 0.98   |
| 0.8215 | 55.254 | 0.97   | 54.788 | 0.987* |
| 0.8250 | 55.24  | 0.97   | 54.77  | 0.99   |
| 0.8315 | 55.214 | 0.97   | 54.744 | 0.99*  |
| 0.8350 | 55.20  | 0.97   | 54.73  | 0.99   |
| 0.8415 | 55.181 | 0.977  | 54.707 | 0.993* |
| 0.8550 | 55.14  | 0.99   | 54.66  | 1.00   |
| 0.8650 | 55.11  | 1.01   | 54.62  | 1.01   |
| 0.8750 | 55.08  | 1.02   | 54.60  | 1.02   |
| 0.8850 | 55.05  | 1.03   | 54.55  | 1.03   |
| 0.8950 | 55.02  | 1.04   | 54.52  | 1.05   |

\* value interpolated

\*\*\*\*\*

# Test Result for UIM Dielectric Parameter

Tue 05/Jun/2018

Freq Frequency(GHz)

FCC\_eH Limits for Head Epsilon

FCC\_sH Limits for Head Sigma

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 1.7100 | 53.53  | 1.47   | 53.55  | 1.48   |
| 1.7200 | 53.51  | 1.47   | 53.52  | 1.49   |
| 1.7300 | 53.48  | 1.48   | 53.38  | 1.50   |
| 1.7400 | 53.46  | 1.48   | 53.36  | 1.51   |
| 1.7450 | 53.445 | 1.485  | 53.34  | 1.515* |
| 1.7500 | 53.43  | 1.49   | 53.32  | 1.52   |
| 1.7600 | 53.41  | 1.49   | 53.30  | 1.53   |
| 1.7700 | 53.38  | 1.50   | 53.27  | 1.55   |
| 1.7800 | 53.35  | 1.51   | 53.23  | 1.55   |

\* value interpolated

\*\*\*\*\*

# Test Result for UIM Dielectric Parameter

Thu 26/Jul/2018

Freq Frequency(GHz)

FCC\_eH Limits for Head Epsilon

FCC\_sH Limits for Head Sigma

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 1.7100 | 53.53  | 1.47   | 53.39  | 1.47   |
| 1.7200 | 53.51  | 1.47   | 53.36  | 1.48   |
| 1.7300 | 53.48  | 1.48   | 53.32  | 1.49   |
| 1.7400 | 53.46  | 1.48   | 53.29  | 1.50   |
| 1.7450 | 53.445 | 1.485  | 53.28  | 1.505* |
| 1.7500 | 53.43  | 1.49   | 53.27  | 1.51   |
| 1.7600 | 53.41  | 1.49   | 53.25  | 1.52   |
| 1.7700 | 53.38  | 1.50   | 53.22  | 1.53   |
| 1.7800 | 53.35  | 1.51   | 53.20  | 1.54   |

\* value interpolated

\*\*\*\*\*

# Test Result for UIM Dielectric Parameter

Thu 21/Feb/2019

Freq Frequency(GHz)

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 1.7100 | 53.53  | 1.47   | 52.81  | 1.49   |
| 1.7124 | 53.525 | 1.47   | 52.803 | 1.492* |
| 1.7200 | 53.51  | 1.47   | 52.78  | 1.50   |
| 1.7300 | 53.48  | 1.48   | 52.74  | 1.51   |
| 1.7326 | 53.475 | 1.48   | 52.735 | 1.513* |
| 1.7400 | 53.46  | 1.48   | 52.72  | 1.52   |
| 1.7500 | 53.43  | 1.49   | 52.68  | 1.53   |
| 1.7526 | 53.425 | 1.49   | 52.675 | 1.533* |
| 1.7600 | 53.41  | 1.49   | 52.66  | 1.54   |
| 1.7700 | 53.38  | 1.50   | 52.63  | 1.55   |
| 1.7800 | 53.35  | 1.51   | 52.59  | 1.56   |

\* value interpolated

\*\*\*\*\*

Test Result for UIM Dielectric Parameter

Thu 31/May/2018

Freq Frequency(GHz)

FCC\_eH Limits for Head Epsilon

FCC\_sH Limits for Head Sigma

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 1.8400 | 53.30  | 1.52   | 52.04  | 1.43   |
| 1.8500 | 53.30  | 1.52   | 52.03  | 1.44   |
| 1.8524 | 53.30  | 1.52   | 52.03  | 1.44*  |
| 1.8600 | 53.30  | 1.52   | 52.03  | 1.44   |
| 1.8700 | 53.30  | 1.52   | 52.14  | 1.45   |
| 1.8800 | 53.30  | 1.52   | 52.10  | 1.45   |
| 1.8900 | 53.30  | 1.52   | 52.17  | 1.46   |
| 1.9000 | 53.30  | 1.52   | 52.07  | 1.47   |
| 1.9076 | 53.30  | 1.52   | 52.108 | 1.493* |
| 1.9100 | 53.30  | 1.52   | 52.12  | 1.50   |
| 1.9200 | 53.30  | 1.52   | 52.00  | 1.50   |

\* value interpolated

\*\*\*\*\*

Test Result for UIM Dielectric Parameter

Thu 26/Jul/2018

Freq Frequency(GHz)

FCC\_eH Limits for Head Epsilon

FCC\_sH Limits for Head Sigma

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 1.8500 | 53.30  | 1.52   | 53.27  | 1.49   |
| 1.8600 | 53.30  | 1.52   | 53.25  | 1.50   |
| 1.8700 | 53.30  | 1.52   | 53.23  | 1.51   |
| 1.8800 | 53.30  | 1.52   | 53.21  | 1.52   |
| 1.8900 | 53.30  | 1.52   | 53.19  | 1.53   |
| 1.9000 | 53.30  | 1.52   | 53.17  | 1.54   |
| 1.9100 | 53.30  | 1.52   | 53.15  | 1.55   |
| 1.9200 | 53.30  | 1.52   | 53.14  | 1.57   |
| 1.9300 | 53.30  | 1.52   | 53.12  | 1.58   |

\* value interpolated

\*\*\*\*\*

Test Result for UIM Dielectric Parameter

Wed 27/Feb/2019

Freq Frequency(GHz)

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 1.8400 | 53.30  | 1.52   | 52.42  | 1.53   |
| 1.8500 | 53.30  | 1.52   | 52.41  | 1.54   |
| 1.8600 | 53.30  | 1.52   | 52.40  | 1.54   |
| 1.8700 | 53.30  | 1.52   | 52.38  | 1.55   |
| 1.8800 | 53.30  | 1.52   | 52.36  | 1.55   |
| 1.8825 | 53.30  | 1.52   | 52.355 | 1.553* |
| 1.8900 | 53.30  | 1.52   | 52.34  | 1.56   |
| 1.9000 | 53.30  | 1.52   | 52.31  | 1.56   |
| 1.9050 | 53.30  | 1.52   | 52.30  | 1.565* |
| 1.9100 | 53.30  | 1.52   | 52.29  | 1.57   |
| 1.9200 | 53.30  | 1.52   | 52.27  | 1.57   |

\* value interpolated

\*\*\*\*\*

Test Result for UIM Dielectric Parameter

Thu 14/Feb/2019

Freq Frequency(GHz)

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 2.2900 | 52.91  | 1.80   | 52.65  | 1.83   |
| 2.3000 | 52.90  | 1.81   | 52.63  | 1.84   |
| 2.3100 | 52.89  | 1.82   | 52.61  | 1.85   |
| 2.3200 | 52.87  | 1.83   | 52.59  | 1.86   |
| 2.3300 | 52.86  | 1.84   | 52.58  | 1.87   |
| 2.3400 | 52.85  | 1.84   | 52.56  | 1.88   |
| 2.3500 | 52.83  | 1.85   | 52.54  | 1.89   |
| 2.3600 | 52.82  | 1.86   | 52.52  | 1.89   |
| 2.3700 | 52.81  | 1.87   | 52.50  | 1.90   |
| 2.3800 | 52.79  | 1.88   | 52.48  | 1.91   |
| 2.3900 | 52.78  | 1.88   | 52.47  | 1.92   |
| 2.4000 | 52.77  | 1.89   | 52.45  | 1.93   |

\*\*\*\*\*

# Test Result for UIM Dielectric Parameter

Mon 02/Jul/2018

Freq Frequency(GHz)

FCC\_eH Limits for Head Epsilon

FCC\_sH Limits for Head Sigma

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 2.4100 | 52.75  | 1.91   | 52.85  | 1.88   |
| 2.4120 | 52.748 | 1.912  | 52.846 | 1.882* |
| 2.4200 | 52.74  | 1.92   | 52.83  | 1.89   |
| 2.4300 | 52.73  | 1.93   | 52.81  | 1.90   |
| 2.4370 | 52.716 | 1.937  | 52.796 | 1.907* |
| 2.4400 | 52.71  | 1.94   | 52.79  | 1.91   |
| 2.4500 | 52.70  | 1.95   | 52.77  | 1.92   |
| 2.4600 | 52.69  | 1.96   | 52.75  | 1.93   |
| 2.4620 | 52.686 | 1.964  | 52.746 | 1.932* |
| 2.4700 | 52.67  | 1.98   | 52.73  | 1.94   |
| 2.4800 | 52.66  | 1.99   | 52.71  | 1.95   |

\* value interpolated

\*\*\*\*\*

# Test Result for UIM Dielectric Parameter

Mon 09/Jul/2018

Freq Frequency(GHz)

FCC\_eH Limits for Head Epsilon

FCC\_sH Limits for Head Sigma

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 2.4900 | 52.65  | 2.01   | 52.60  | 2.02   |
| 2.5000 | 52.64  | 2.02   | 52.58  | 2.03   |
| 2.5100 | 52.62  | 2.04   | 52.55  | 2.05   |
| 2.5200 | 52.61  | 2.05   | 52.52  | 2.07   |
| 2.5300 | 52.60  | 2.06   | 52.50  | 2.09   |
| 2.5350 | 52.595 | 2.07   | 52.495 | 2.10*  |
| 2.5400 | 52.59  | 2.08   | 52.49  | 2.11   |
| 2.5500 | 52.57  | 2.09   | 52.47  | 2.12   |
| 2.5600 | 52.56  | 2.11   | 52.45  | 2.14   |
| 2.5700 | 52.55  | 2.12   | 52.43  | 2.16   |
| 2.5800 | 52.53  | 2.13   | 52.42  | 2.17   |
| 2.5900 | 52.52  | 2.15   | 52.39  | 2.19   |
| 2.6000 | 52.51  | 2.16   | 52.38  | 2.21   |

\* value interpolated

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# Test Result for UIM Dielectric Parameter

Mon 25/Feb/2019

Freq Frequency(GHz)

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 2.4900 | 52.65  | 2.01   | 52.31  | 2.01   |
| 2.5000 | 52.64  | 2.02   | 52.29  | 2.02   |
| 2.5060 | 52.628 | 2.032  | 52.272 | 2.032* |
| 2.5100 | 52.62  | 2.04   | 52.26  | 2.04   |
| 2.5200 | 52.61  | 2.05   | 52.23  | 2.06   |
| 2.5300 | 52.60  | 2.06   | 52.21  | 2.08   |
| 2.5400 | 52.59  | 2.08   | 52.20  | 2.10   |
| 2.5445 | 52.581 | 2.085  | 52.191 | 2.105* |
| 2.5500 | 52.57  | 2.09   | 52.18  | 2.11   |
| 2.5600 | 52.56  | 2.11   | 52.16  | 2.13   |
| 2.5700 | 52.55  | 2.12   | 52.14  | 2.15   |
| 2.5800 | 52.53  | 2.13   | 52.13  | 2.16   |
| 2.5900 | 52.52  | 2.15   | 52.10  | 2.18   |
| 2.5930 | 52.517 | 2.153  | 52.097 | 2.186* |
| 2.6000 | 52.51  | 2.16   | 52.09  | 2.20   |
| 2.6100 | 52.50  | 2.18   | 52.06  | 2.21   |
| 2.6200 | 52.48  | 2.19   | 52.04  | 2.22   |
| 2.6300 | 52.47  | 2.21   | 52.03  | 2.24   |
| 2.6400 | 52.46  | 2.22   | 52.01  | 2.25   |
| 2.6415 | 52.459 | 2.222  | 52.009 | 2.252* |
| 2.6500 | 52.45  | 2.23   | 52.00  | 2.26   |
| 2.6600 | 52.43  | 2.25   | 51.98  | 2.27   |
| 2.6700 | 52.42  | 2.26   | 51.96  | 2.28   |
| 2.6800 | 52.41  | 2.28   | 51.94  | 2.30   |
| 2.6900 | 52.39  | 2.29   | 51.91  | 2.31   |
| 2.7000 | 52.38  | 2.30   | 51.90  | 2.32   |
| 2.8000 | 52.37  | 2.31   | 51.88  | 2.33   |

\* value interpolated

\*\*\*\*\*

# Test Result for UIM Dielectric Parameter

Mon 11/Jun/2018

Freq Frequency(GHz)

FCC\_eH Limits for Head Epsilon

FCC\_sH Limits for Head Sigma

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

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| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 3.4900 | 51.33  | 3.31   | 51.24  | 3.34   |
| 3.5000 | 51.32  | 3.32   | 51.23  | 3.35   |
| 3.5100 | 51.31  | 3.33   | 51.23  | 3.36   |
| 3.5200 | 51.29  | 3.34   | 51.22  | 3.37   |
| 3.5300 | 51.28  | 3.35   | 51.20  | 3.38   |
| 3.5400 | 51.27  | 3.36   | 51.19  | 3.39   |
| 3.5500 | 51.25  | 3.37   | 51.17  | 3.40   |
| 3.5600 | 51.24  | 3.38   | 51.15  | 3.41   |
| 3.5700 | 51.23  | 3.40   | 51.14  | 3.42   |
| 3.5800 | 51.21  | 3.41   | 51.12  | 3.43   |
| 3.5900 | 51.20  | 3.42   | 51.10  | 3.44   |
| 3.5925 | 51.198 | 3.423  | 51.098 | 3.445* |
| 3.6000 | 51.19  | 3.43   | 51.09  | 3.46   |
| 3.6100 | 51.17  | 3.44   | 51.07  | 3.47   |
| 3.6200 | 51.16  | 3.45   | 51.05  | 3.48   |
| 3.6250 | 51.155 | 3.46   | 51.045 | 3.485* |
| 3.6300 | 51.15  | 3.47   | 51.04  | 3.49   |
| 3.6400 | 51.13  | 3.48   | 51.02  | 3.50   |
| 3.6500 | 51.12  | 3.49   | 51.00  | 3.52   |
| 3.6575 | 51.105 | 3.498  | 50.993 | 3.528* |
| 3.6600 | 51.10  | 3.50   | 50.99  | 3.53   |
| 3.6700 | 51.09  | 3.51   | 50.97  | 3.54   |
| 3.6800 | 51.08  | 3.52   | 50.96  | 3.55   |
| 3.6900 | 51.06  | 3.54   | 50.94  | 3.56   |
| 3.7000 | 51.05  | 3.55   | 50.92  | 3.57   |
| 3.7100 | 51.04  | 3.56   | 50.91  | 3.58   |

\* value interpolated

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Test Result for UIM Dielectric Parameter

Mon 25/Feb/2019

Freq Frequency(GHz)

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 3.3900 | 51.47  | 3.20   | 51.25  | 3.23   |
| 3.4000 | 51.45  | 3.21   | 51.23  | 3.24   |
| 3.4100 | 51.44  | 3.23   | 51.22  | 3.25   |
| 3.4200 | 51.43  | 3.24   | 51.21  | 3.26   |
| 3.4300 | 51.41  | 3.25   | 51.19  | 3.27   |
| 3.4400 | 51.40  | 3.26   | 51.18  | 3.28   |
| 3.4550 | 51.385 | 3.275  | 51.165 | 3.295* |
| 3.4500 | 51.39  | 3.27   | 51.17  | 3.29   |
| 3.4600 | 51.37  | 3.28   | 51.16  | 3.30   |
| 3.4700 | 51.36  | 3.29   | 51.15  | 3.31   |
| 3.4800 | 51.35  | 3.30   | 51.13  | 3.32   |
| 3.4900 | 51.33  | 3.31   | 51.12  | 3.33   |
| 3.5000 | 51.32  | 3.32   | 51.11  | 3.34   |
| 3.5100 | 51.31  | 3.33   | 51.11  | 3.35   |
| 3.5200 | 51.29  | 3.34   | 51.10  | 3.36   |
| 3.5300 | 51.28  | 3.35   | 51.08  | 3.37   |
| 3.5400 | 51.27  | 3.36   | 51.07  | 3.38   |
| 3.5450 | 51.26  | 3.365  | 51.06  | 3.385* |
| 3.5500 | 51.25  | 3.37   | 51.05  | 3.39   |
| 3.5600 | 51.24  | 3.38   | 51.03  | 3.40   |
| 3.5700 | 51.23  | 3.40   | 51.02  | 3.41   |
| 3.5800 | 51.21  | 3.41   | 51.00  | 3.42   |
| 3.5900 | 51.20  | 3.42   | 50.98  | 3.43   |
| 3.6000 | 51.19  | 3.43   | 50.97  | 3.44   |
| 3.6100 | 51.17  | 3.44   | 50.95  | 3.45   |

\* value interpolated

\*\*\*\*\*

# Test Result for UIM Dielectric Parameter

Thu 28/Jun/2018

Freq Frequency(GHz)

FCC\_eH Limits for Head Epsilon

FCC\_sH Limits for Head Sigma

FCC\_eB Limits for Body Epsilon

FCC\_sB Limits for Body Sigma

Test\_e Epsilon of UIM

Test\_s Sigma of UIM

\*\*\*\*\*

| Freq   | FCC_eB | FCC_sB | Test_e | Test_s |
|--------|--------|--------|--------|--------|
| 5.1000 | 49.15  | 5.18   | 49.22  | 5.10   |
| 5.1200 | 49.12  | 5.21   | 49.19  | 5.12   |
| 5.1400 | 49.10  | 5.23   | 49.16  | 5.14   |
| 5.1600 | 49.07  | 5.25   | 49.13  | 5.16   |
| 5.1800 | 49.04  | 5.28   | 49.10  | 5.19   |
| 5.2000 | 49.01  | 5.30   | 49.07  | 5.21   |
| 5.2100 | 49.00  | 5.31   | 49.055 | 5.22*  |
| 5.2200 | 48.99  | 5.32   | 49.04  | 5.23   |
| 5.2400 | 48.96  | 5.35   | 49.01  | 5.25   |
| 5.2600 | 48.93  | 5.37   | 48.98  | 5.28   |
| 5.2800 | 48.91  | 5.39   | 48.95  | 5.31   |
| 5.2900 | 48.895 | 5.405  | 48.935 | 5.32*  |
| 5.3000 | 48.88  | 5.42   | 48.92  | 5.33   |
| 5.3200 | 48.85  | 5.44   | 48.89  | 5.36   |
| 5.3400 | 48.82  | 5.46   | 48.86  | 5.38   |
| 5.3600 | 48.80  | 5.49   | 48.83  | 5.40   |
| 5.3800 | 48.77  | 5.51   | 48.80  | 5.43   |
| 5.4000 | 48.74  | 5.53   | 48.77  | 5.46   |
| 5.4200 | 48.72  | 5.56   | 48.74  | 5.49   |
| 5.4400 | 48.69  | 5.58   | 48.71  | 5.51   |
| 5.4600 | 48.66  | 5.60   | 48.68  | 5.53   |
| 5.4800 | 48.63  | 5.63   | 48.65  | 5.55   |
| 5.5000 | 48.61  | 5.65   | 48.62  | 5.58   |
| 5.5200 | 48.58  | 5.67   | 48.59  | 5.61   |
| 5.5400 | 48.55  | 5.70   | 48.56  | 5.64   |
| 5.5600 | 48.53  | 5.72   | 48.53  | 5.67   |
| 5.5800 | 48.50  | 5.74   | 48.50  | 5.70   |
| 5.6000 | 48.47  | 5.77   | 48.47  | 5.73   |
| 5.6200 | 48.44  | 5.79   | 48.44  | 5.75   |
| 5.6400 | 48.42  | 5.81   | 48.41  | 5.78   |
| 5.6600 | 48.39  | 5.84   | 48.38  | 5.81   |
| 5.6800 | 48.36  | 5.86   | 48.35  | 5.84   |
| 5.7000 | 48.34  | 5.88   | 48.32  | 5.86   |
| 5.7200 | 48.31  | 5.91   | 48.29  | 5.89   |
| 5.7400 | 48.28  | 5.93   | 48.26  | 5.91   |
| 5.7450 | 48.273 | 5.935  | 48.253 | 5.918* |
| 5.7600 | 48.25  | 5.95   | 48.23  | 5.94   |
| 5.7750 | 48.235 | 5.973  | 48.208 | 5.963* |
| 5.7800 | 48.23  | 5.98   | 48.20  | 5.97   |
| 5.7850 | 48.223 | 5.985  | 48.193 | 5.975* |
| 5.8000 | 48.20  | 6.00   | 48.17  | 5.99   |
| 5.8200 | 48.17  | 6.02   | 48.14  | 6.02   |
| 5.8250 | 48.165 | 6.028  | 48.133 | 6.025* |
| 5.8400 | 48.15  | 6.05   | 48.11  | 6.04   |

\* value interpolated

# RF Exposure Lab

## Plot 1

**DUT: Dipole 750 MHz D750V3; Type: D750V3; Serial: D750V3 - SN:1053**

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: MSL750; Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.99 \text{ S/m}$ ;  $\epsilon_r = 55.57$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Test Date: Date: 6/6/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(9.62, 9.62, 9.62); Calibrated: 4/20/2018;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1321; Calibrated: 1/10/2018

Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037

Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**750 MHz/Verification/Area Scan (5x11x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.08 W/kg

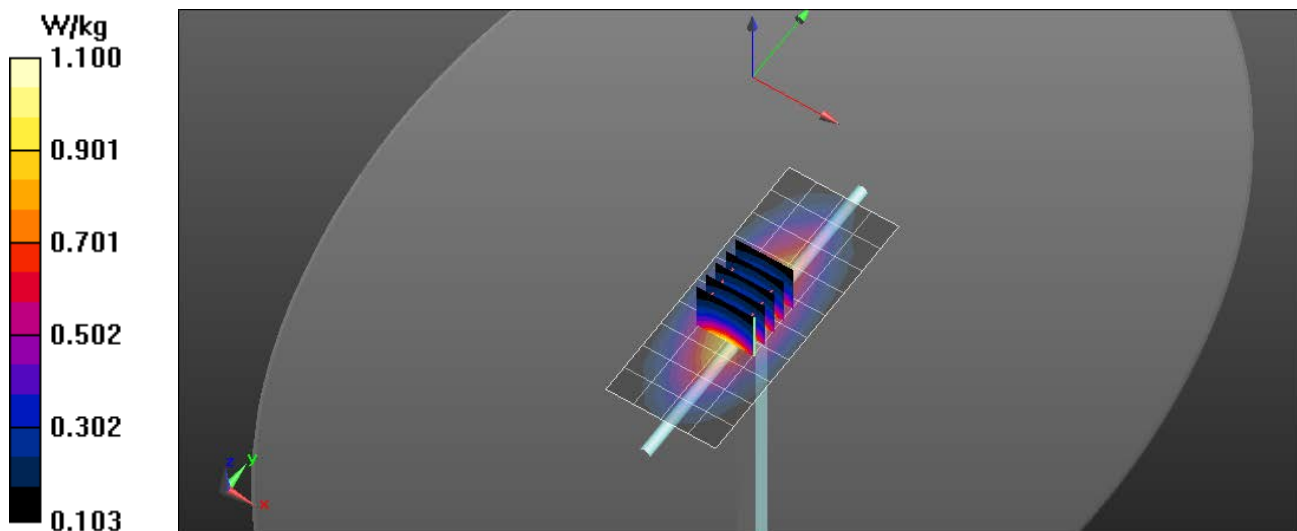
**750 MHz/Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

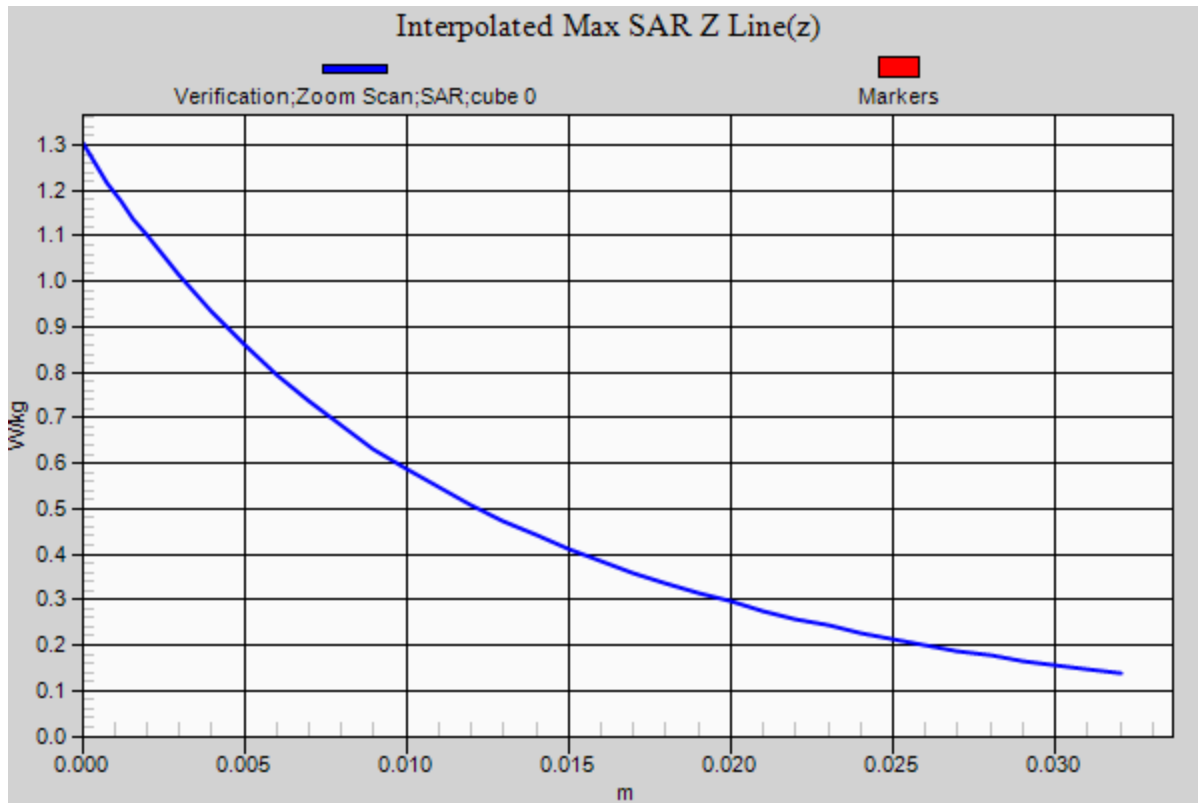
Reference Value = 31.227 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.30 W/kg

**SAR(1 g) = 0.865 W/kg; SAR(10 g) = 0.569 W/kg**

Maximum value of SAR (measured) = 1.10 W/kg





# RF Exposure Lab

## Plot 2

**DUT: Dipole 750 MHz D750V3; Type: D750V3; Serial: D750V3 - SN:1053**

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1  
Medium: MSL750; Medium parameters used:  $f = 750 \text{ MHz}$ ;  $\sigma = 0.98 \text{ S/m}$ ;  $\epsilon_r = 55.38$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

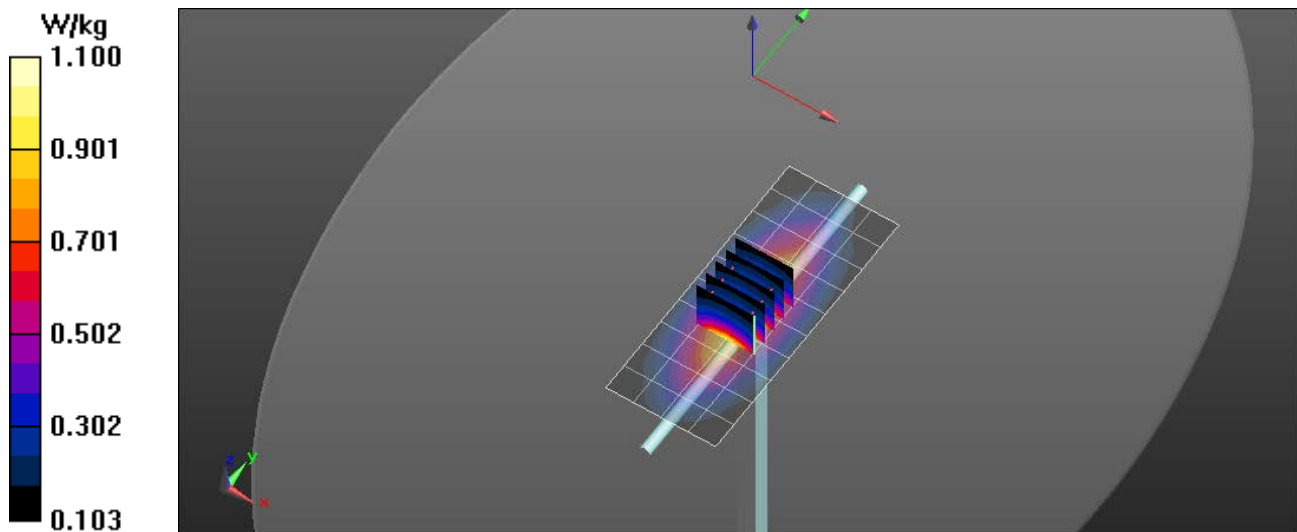
Test Date: Date: 7/26/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

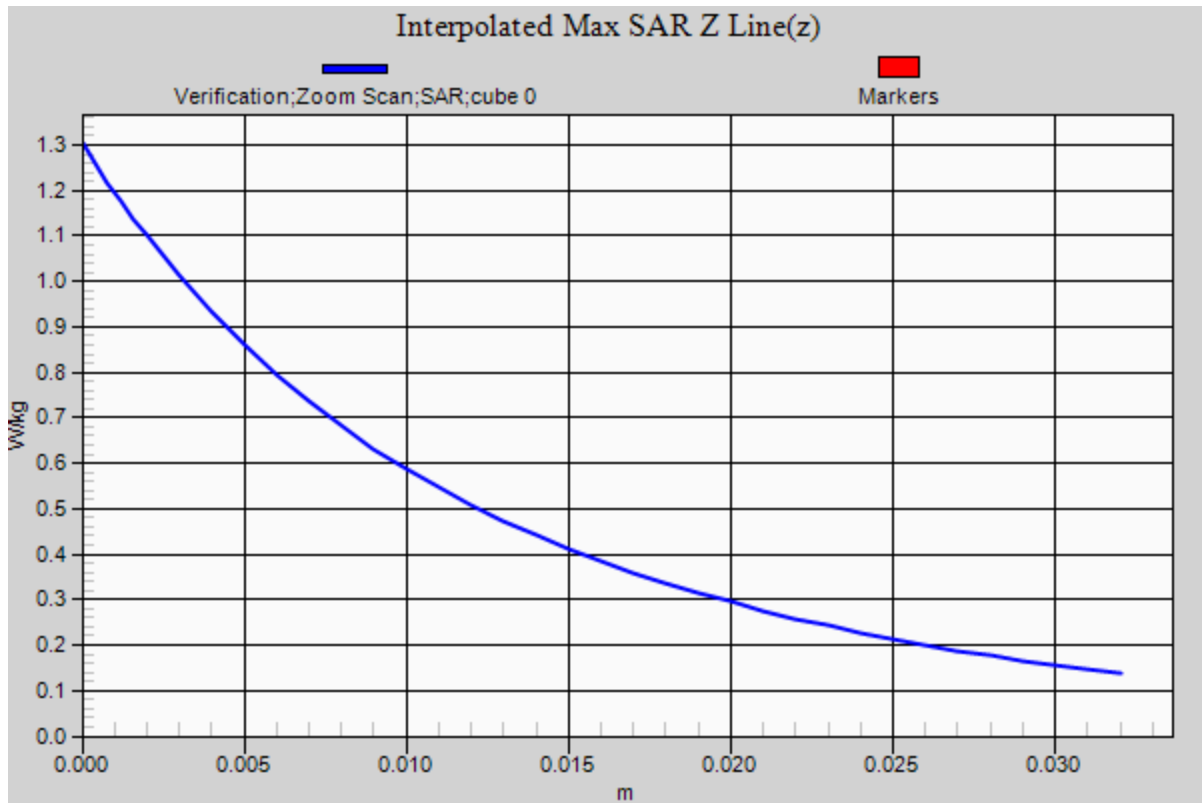
Probe: EX3DV4 - SN3693; ConvF(9.35, 9.35, 9.35); Calibrated: 8/18/2017;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn759; Calibrated: 8/21/2017  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 1251  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**750 MHz/Verification/Area Scan (5x11x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (measured) = 1.09 W/kg

**750 MHz/Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 31.143 V/m; Power Drift = 0.01 dB  
Peak SAR (extrapolated) = 1.31 W/kg  
 $P_{in} = 100 \text{ mW}$   
**SAR(1 g) = 0.852 W/kg; SAR(10 g) = 0.551 W/kg**  
Maximum value of SAR (measured) = 1.10 W/kg





# RF Exposure Lab

## Plot 3

**DUT: Dipole 750 MHz D750V3; Type: D750V3; Serial: D750V3 - SN:1016**

Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1  
Medium: MSL750; Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.99$  S/m;  $\epsilon_r = 55.38$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

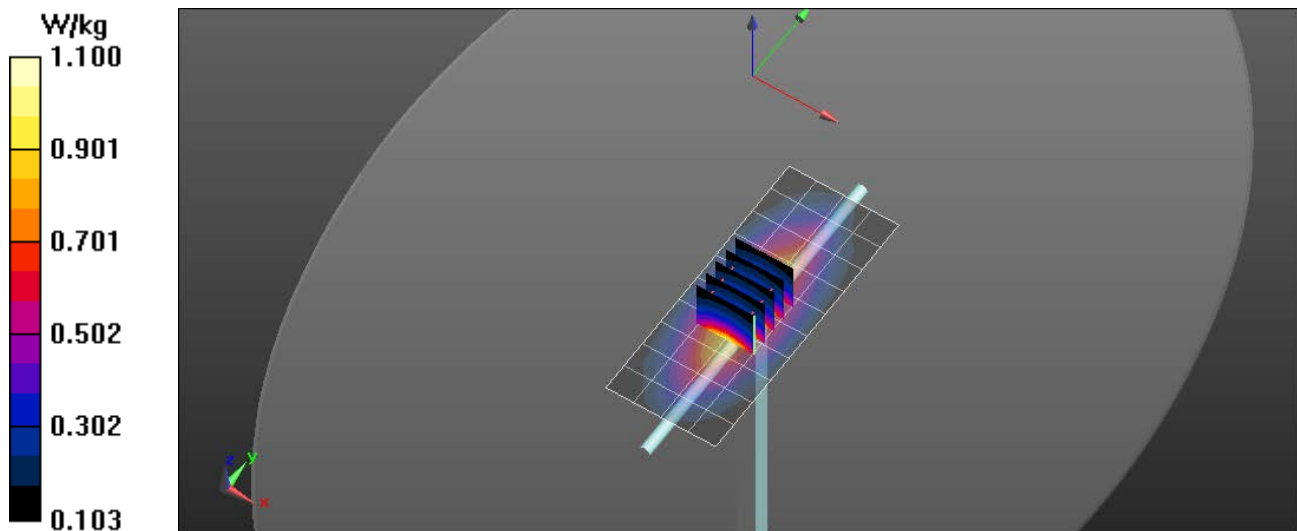
Test Date: Date: 2/19/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C

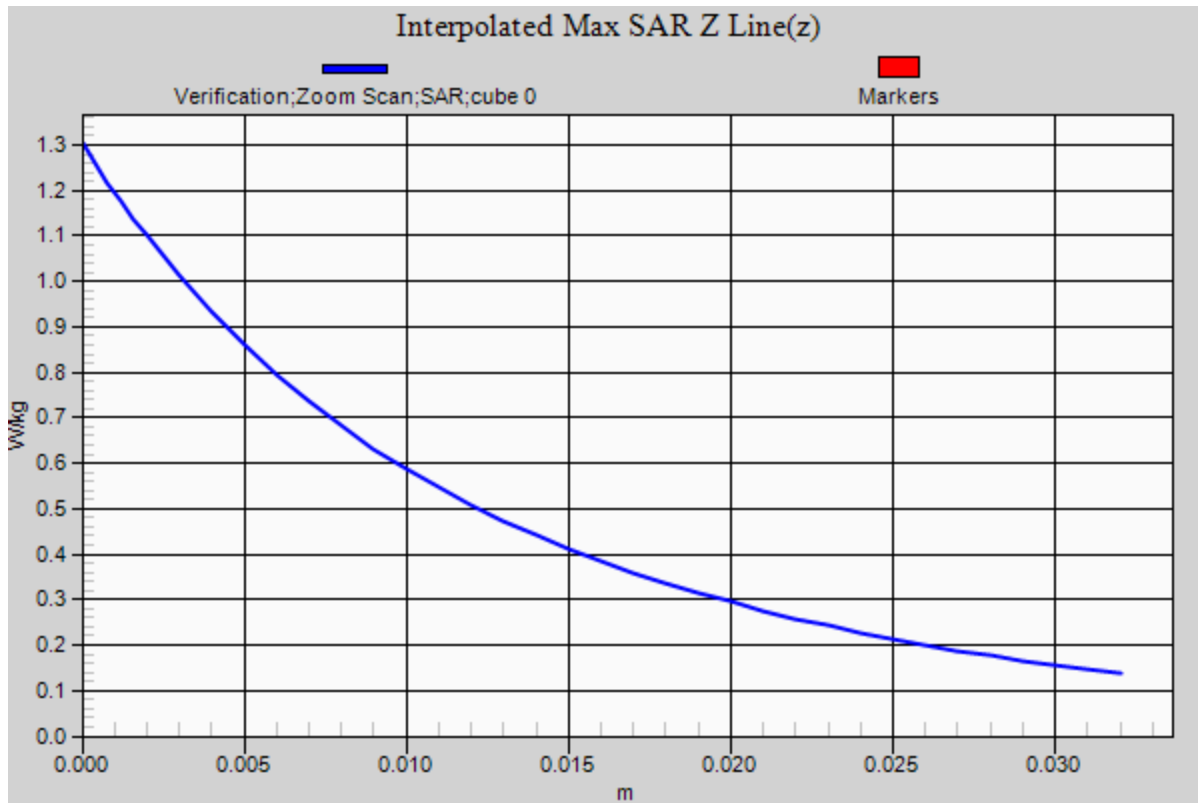
Probe: EX3DV4 - SN3662; ConvF(9.62, 9.62, 9.62); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2019  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**750 MHz/Verification/Area Scan (5x11x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.05 W/kg

**750 MHz/Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 31.897 V/m; Power Drift = 0.03 dB  
Peak SAR (extrapolated) = 1.28 W/kg  
**SAR(1 g) = 0.859 W/kg; SAR(10 g) = 0.564 W/kg**  
Maximum value of SAR (measured) = 1.09 W/kg





# RF Exposure Lab

## Plot 4

**DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN:4d131**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: MSL835; Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.99 \text{ S/m}$ ;  $\epsilon_r = 55.91$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Test Date: Date: 6/1/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(9.21, 9.21, 9.21); Calibrated: 4/20/2018;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1321; Calibrated: 1/10/2018

Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037

Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**835 MHz Body/Verification/Area Scan (81x161x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 1.29 W/kg

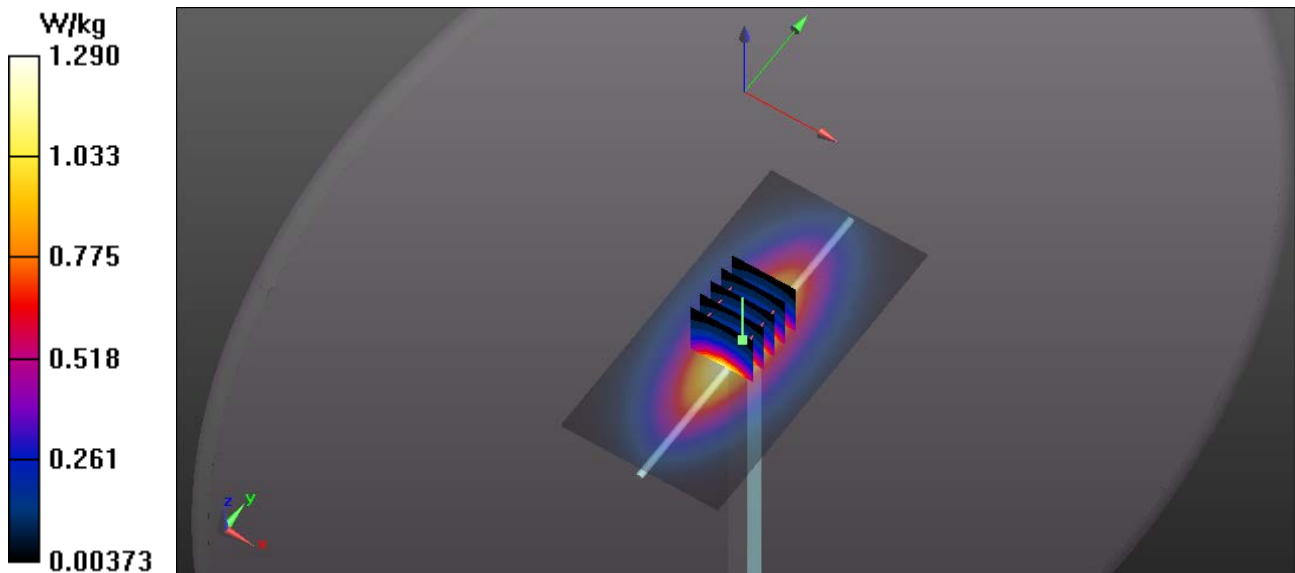
**835 MHz Body/Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

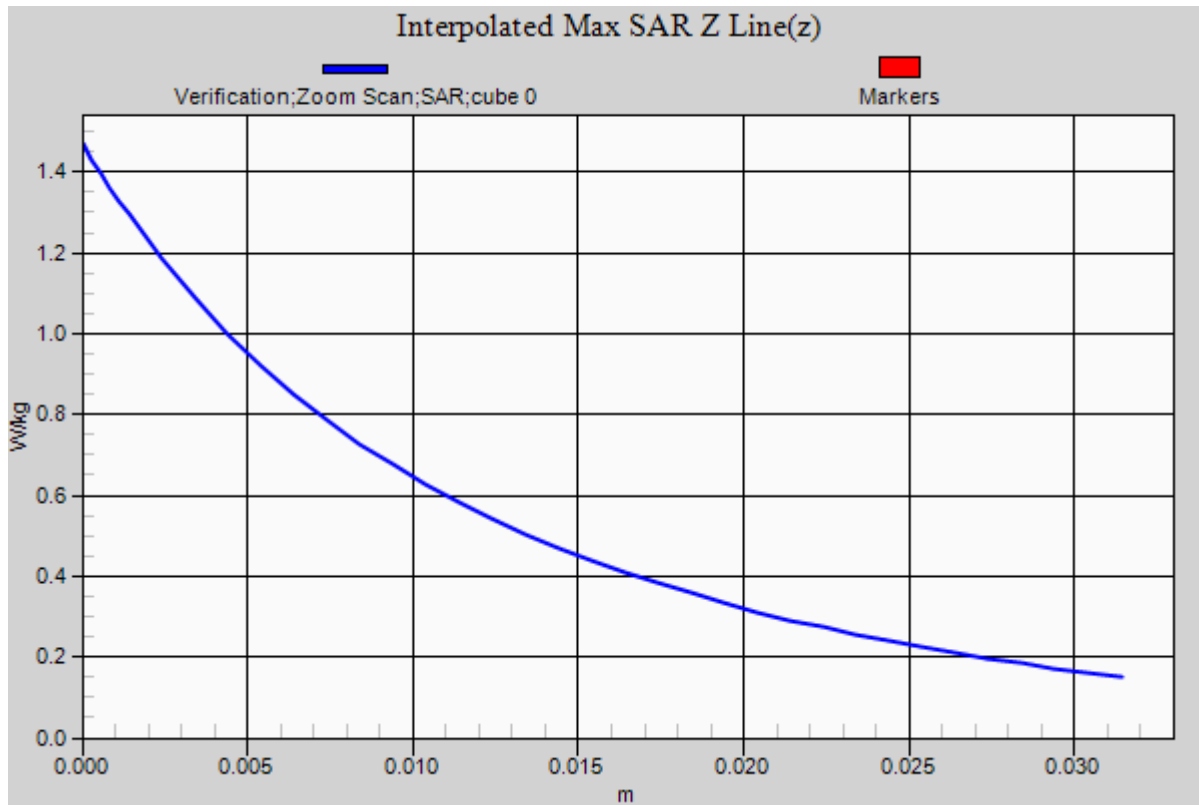
Reference Value = 52.612 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.47 W/kg

**SAR(1 g) = 0.953 W/kg; SAR(10 g) = 0.632 W/kg**

Maximum value of SAR (measured) = 1.29 W/kg





# RF Exposure Lab

## Plot 5

**DUT: Dipole 835 MHz D835V2; Type: D835V2; Serial: D835V2 - SN:4d089**

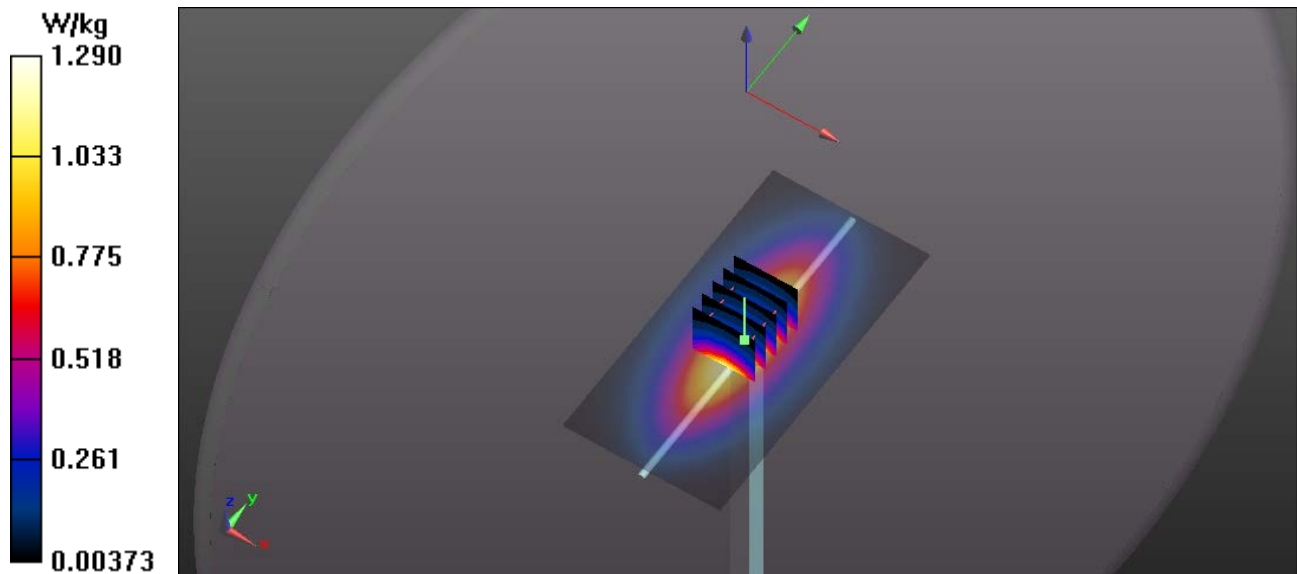
Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium: MSL835; Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.99 \text{ S/m}$ ;  $\epsilon_r = 54.73$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

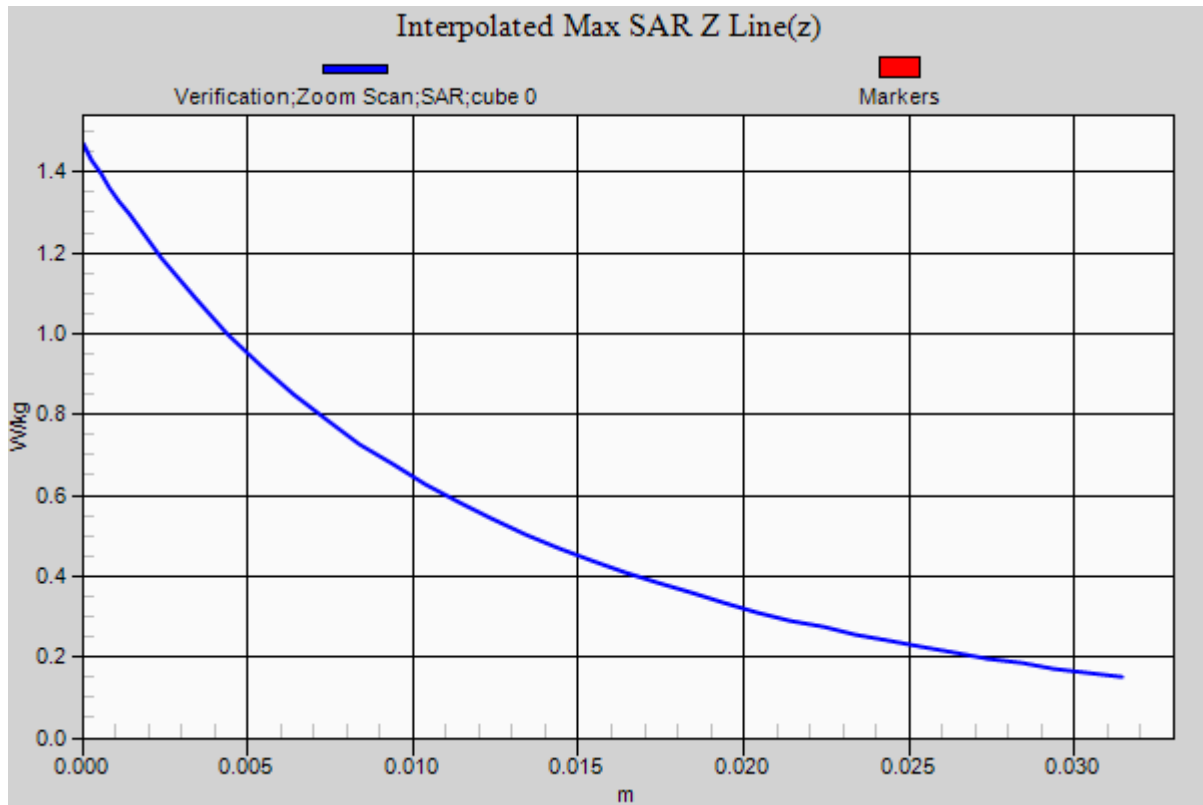
Test Date: Date: 2/18/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C  
Probe: EX3DV4 - SN3662; ConvF(9.21, 9.21, 9.21); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2019  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**835 MHz Body/Verification/Area Scan (81x161x1):** Interpolated grid:  $dx=1.000 \text{ mm}$ ,  $dy=1.000 \text{ mm}$   
Maximum value of SAR (interpolated) = 1.34 W/kg

**835 MHz Body/Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 53.568 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 1.49 W/kg  
**SAR(1 g) = 0.963 W/kg; SAR(10 g) = 0.637 W/kg**  
Maximum value of SAR (measured) = 1.30 W/kg





# RF Exposure Lab

## Plot 6

**DUT: Dipole 1750 MHz D1750V2; Type: D1750V2; Serial: D1750V2 - SN:1061**

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1  
Medium: MSL1750; Medium parameters used:  $f = 1750 \text{ MHz}$ ;  $\sigma = 1.52 \text{ S/m}$ ;  $\epsilon_r = 53.32$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

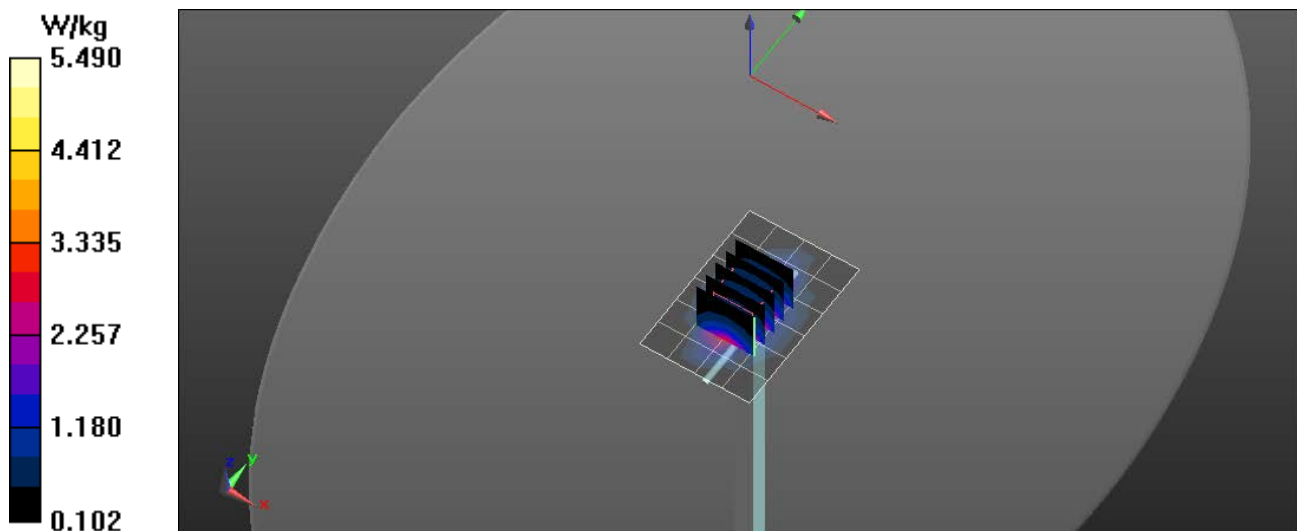
Test Date: Date: 6/5/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

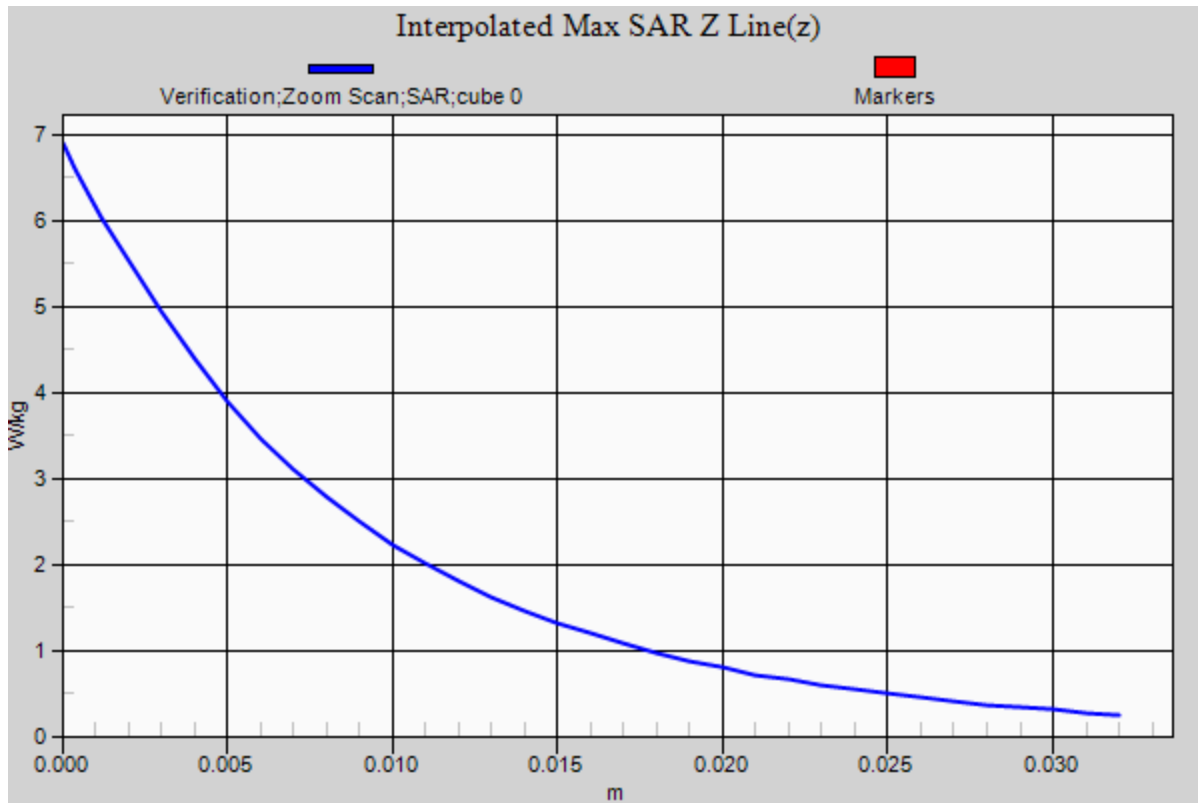
Probe: EX3DV4 - SN3662; ConvF(7.96, 7.96, 7.96); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**1750 MHz/Verification/Area Scan (5x7x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (measured) = 5.33 W/kg

**1750 MHz/Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 31.227 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 6.89 W/kg  
**SAR(1 g) = 3.85 W/kg; SAR(10 g) = 2.03 W/kg**  
Maximum value of SAR (measured) = 5.49 W/kg





# RF Exposure Lab

## Plot 7

**DUT: Dipole 1750 MHz D1750V2; Type: D1750V2; Serial: D1750V2 - SN:1061**

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: MSL1750; Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.51$  S/m;  $\epsilon_r = 53.27$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Test Date: Date: 7/26/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3693; ConvF(7.77, 7.77, 7.77); Calibrated: 8/18/2017;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn759; Calibrated: 8/21/2017

Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 1251

Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**1750 MHz/Verification/Area Scan (5x7x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 5.31 W/kg

**1750 MHz/Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

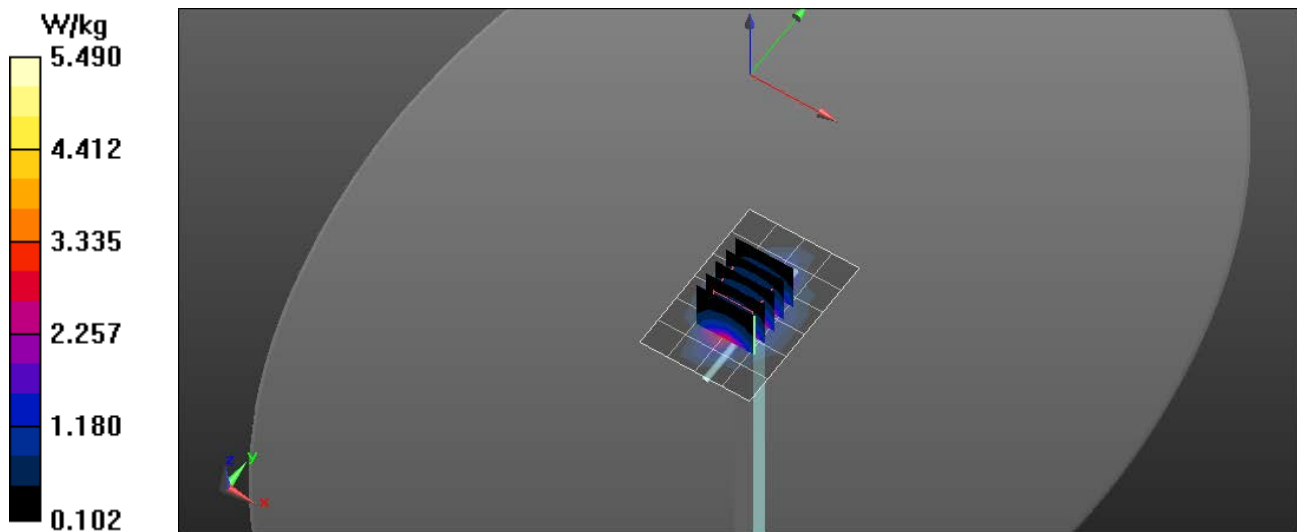
Reference Value = 31.489 V/m; Power Drift = -0.02 dB

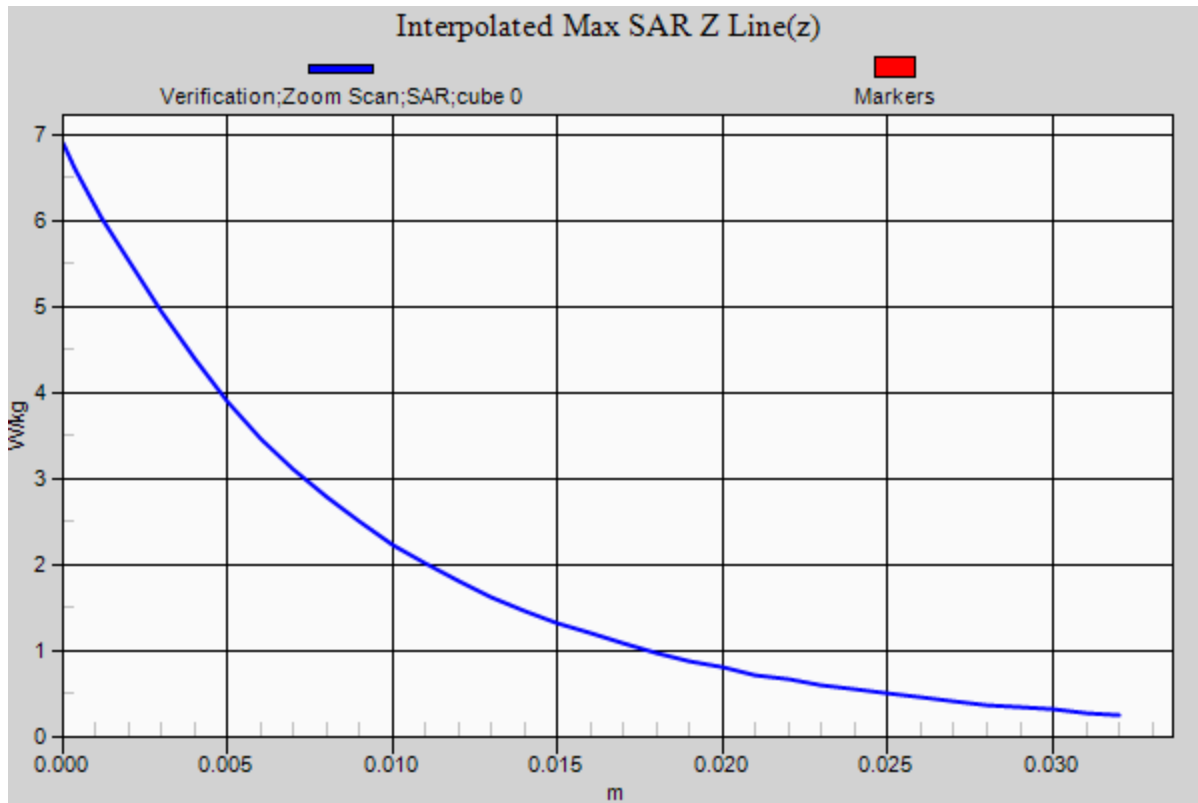
Peak SAR (extrapolated) = 6.92 W/kg

$P_{in} = 100$  mW

**SAR(1 g) = 3.81 W/kg; SAR(10 g) = 2 W/kg**

Maximum value of SAR (measured) = 5.47 W/kg





# RF Exposure Lab

## Plot 8

**DUT: Dipole 1750 MHz D1750V2; Type: D1750V2; Serial: D1750V2 - SN:1018**

Communication System: CW; Frequency: 1750 MHz; Duty Cycle: 1:1  
Medium: MSL1750; Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.53$  S/m;  $\epsilon_r = 52.68$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

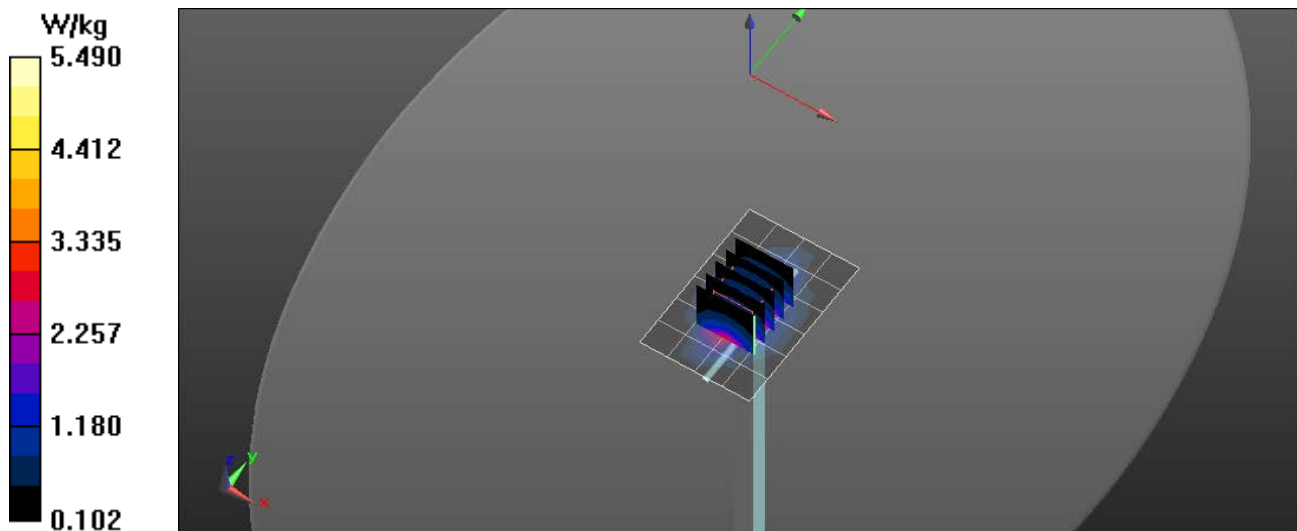
Test Date: Date: 2/6/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C

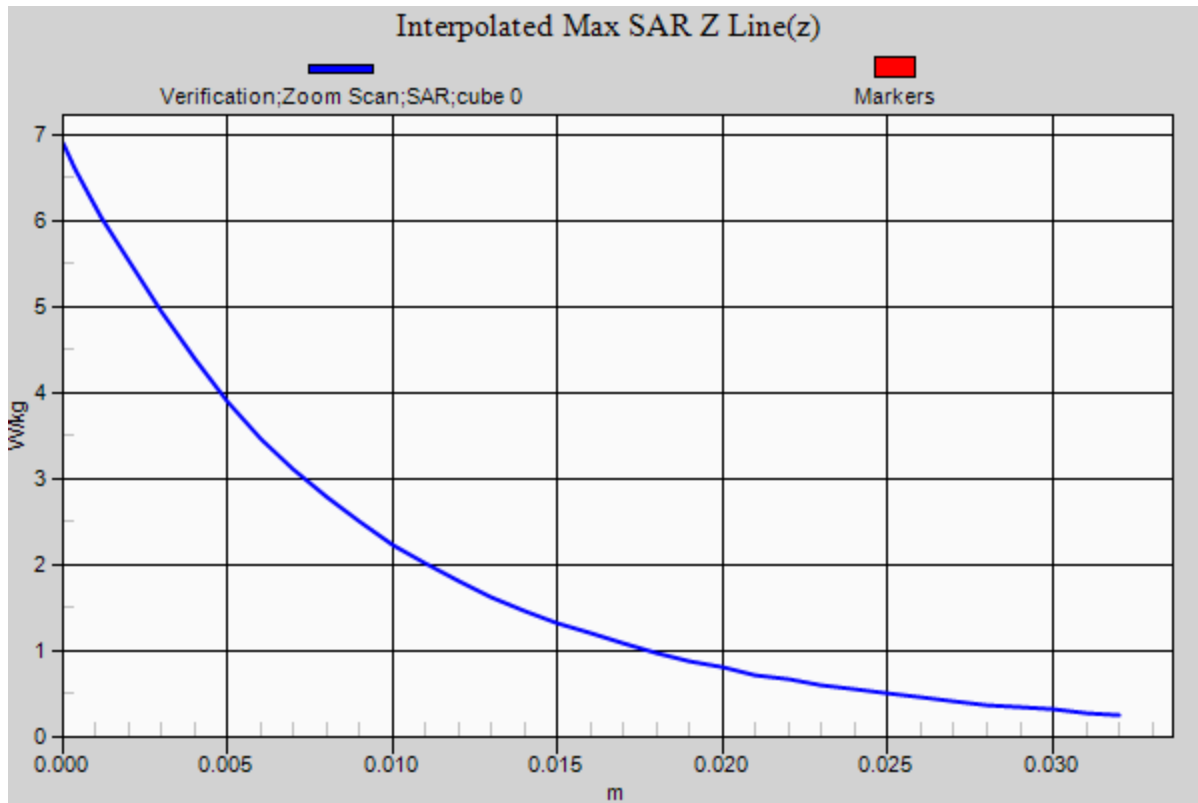
Probe: EX3DV4 - SN3662; ConvF(7.96, 7.96, 7.96); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2019  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**1750 MHz/Verification/Area Scan (5x7x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 5.25 W/kg

**1750 MHz/Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 30.236 V/m; Power Drift = -0.03 dB  
Peak SAR (extrapolated) = 6.86 W/kg  
**SAR(1 g) = 3.69 W/kg; SAR(10 g) = 1.95 W/kg**  
Maximum value of SAR (measured) = 5.47 W/kg





# RF Exposure Lab

## Plot 9

**DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d147**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: MSL1900; Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.47$  S/m;  $\epsilon_r = 52.07$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Test Date: Date: 5/31/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3693; ConvF(7.54, 7.54, 7.54); Calibrated: 8/18/2017;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1321; Calibrated: 1/10/2018

Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037

Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**1900 MHz Body/Verification/Area Scan (61x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 5.63 W/kg

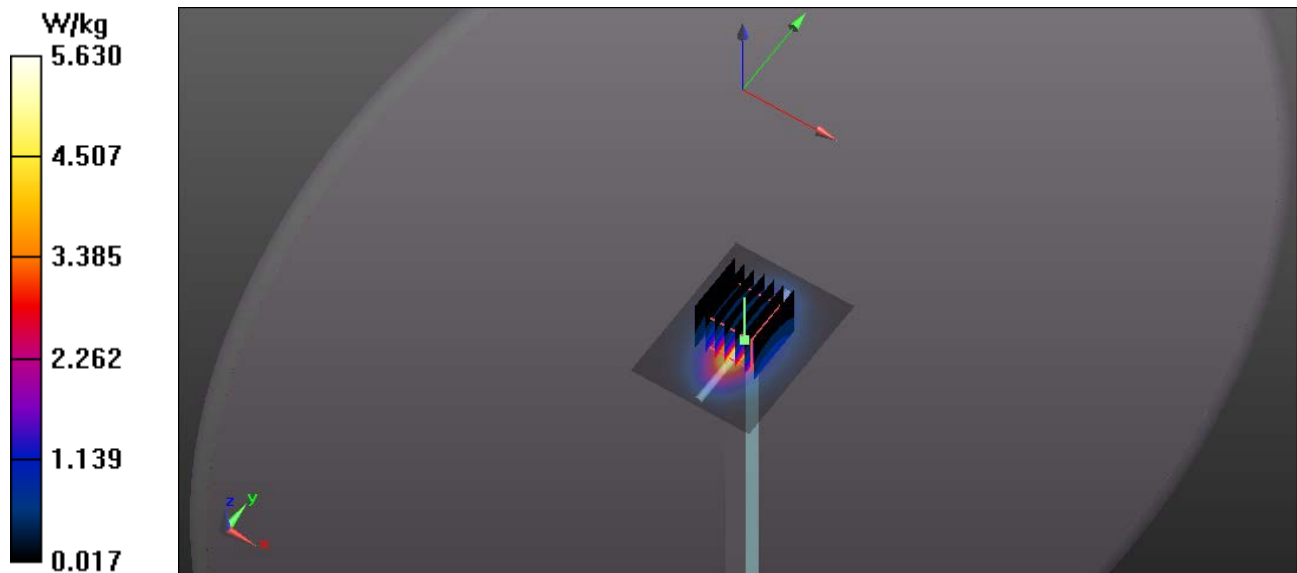
**1900 MHz Body/Verification/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

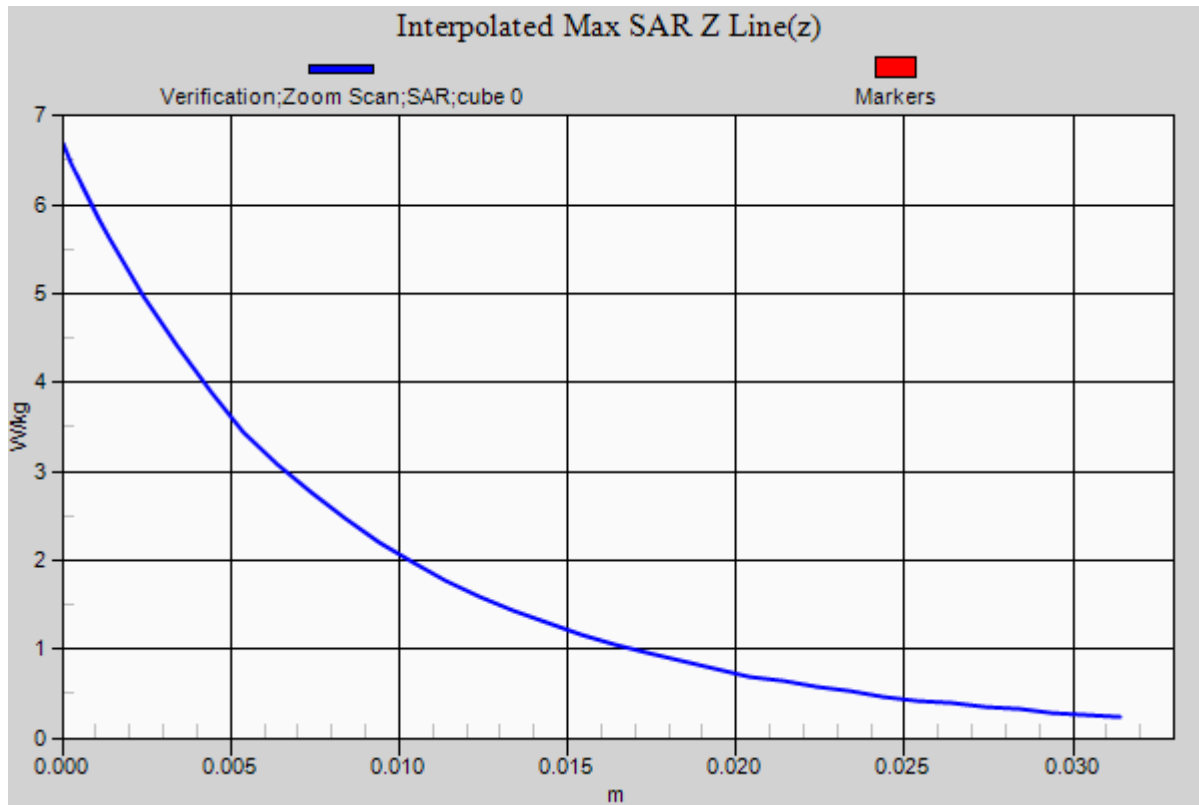
Reference Value = 52.612 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 6.68 W/kg

**SAR(1 g) = 3.98 W/kg; SAR(10 g) = 1.92 W/kg**

Maximum value of SAR (measured) = 5.63 W/kg





# RF Exposure Lab

## Plot 10

**DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d147**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: MSL1900; Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.54$  S/m;  $\epsilon_r = 53.17$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Test Date: Date: 7/26/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3693; ConvF(7.54, 7.54, 7.54); Calibrated: 8/18/2017;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn759; Calibrated: 8/21/2017

Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 1251

Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**1900 MHz/Verification/Area Scan (5x7x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 5.44 W/kg

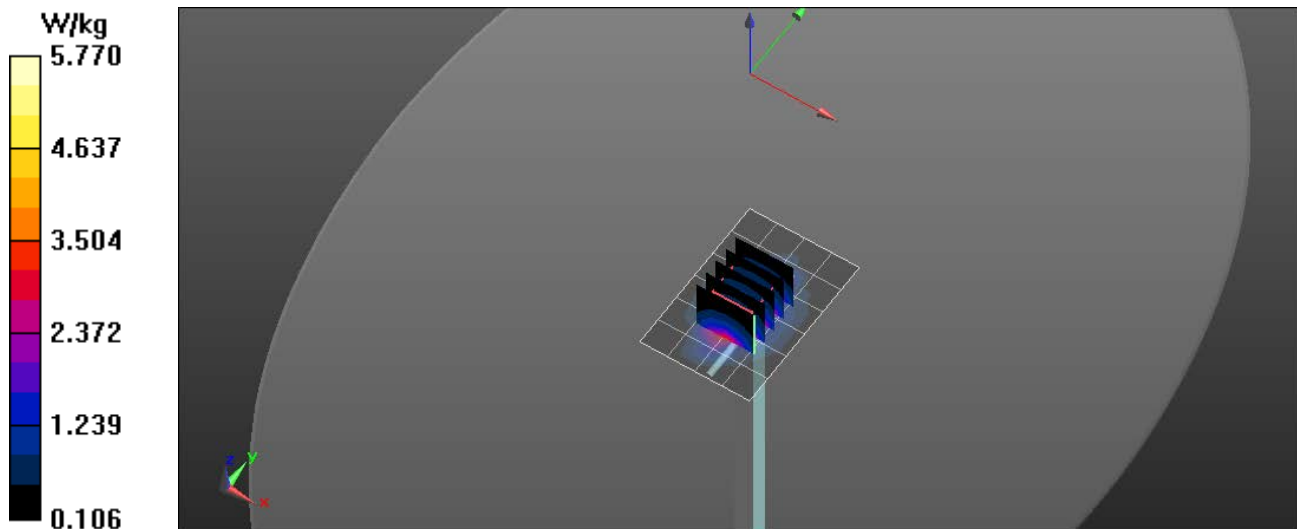
**1900 MHz/Verification/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

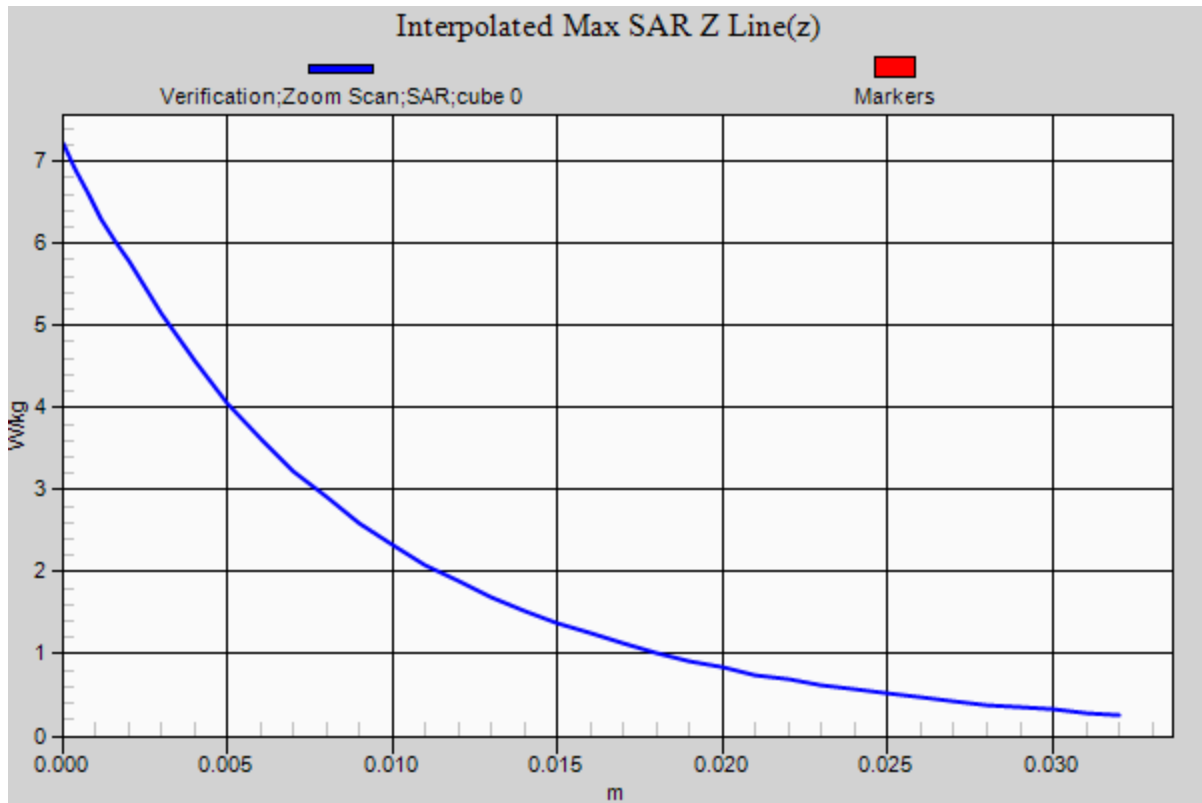
Reference Value = 31.227 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 7.22 W/kg

**SAR(1 g) = 4.02 W/kg; SAR(10 g) = 2.1 W/kg**

Maximum value of SAR (measured) = 5.77 W/kg





# RF Exposure Lab

## Plot 11

**DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d116**

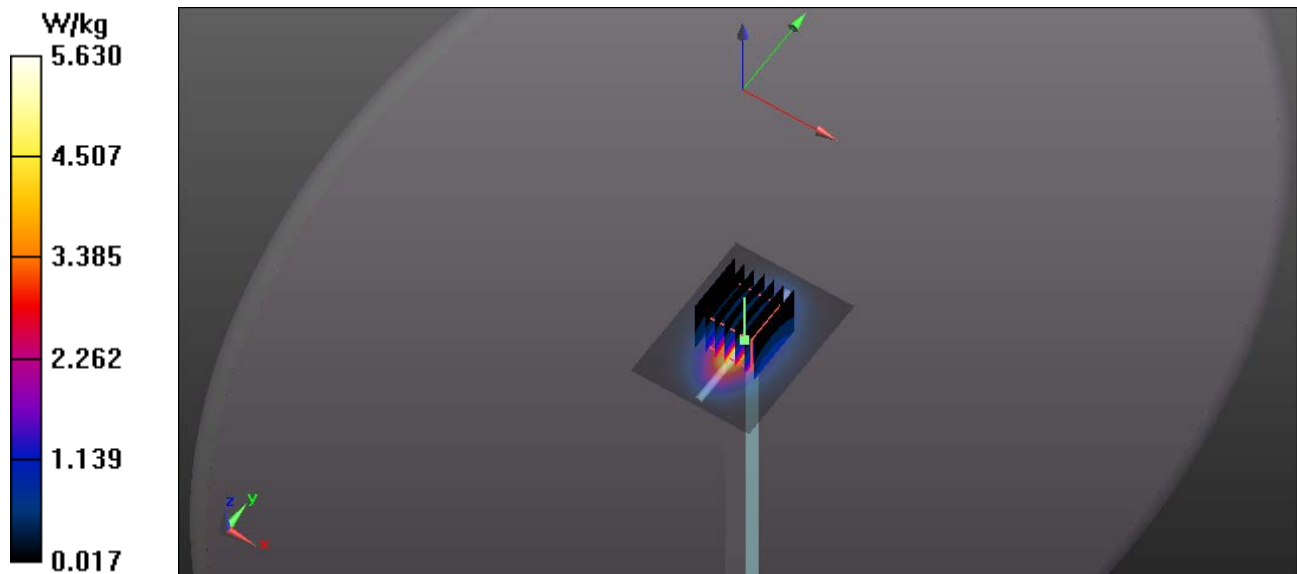
Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium: MSL1900; Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.56$  S/m;  $\epsilon_r = 52.31$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

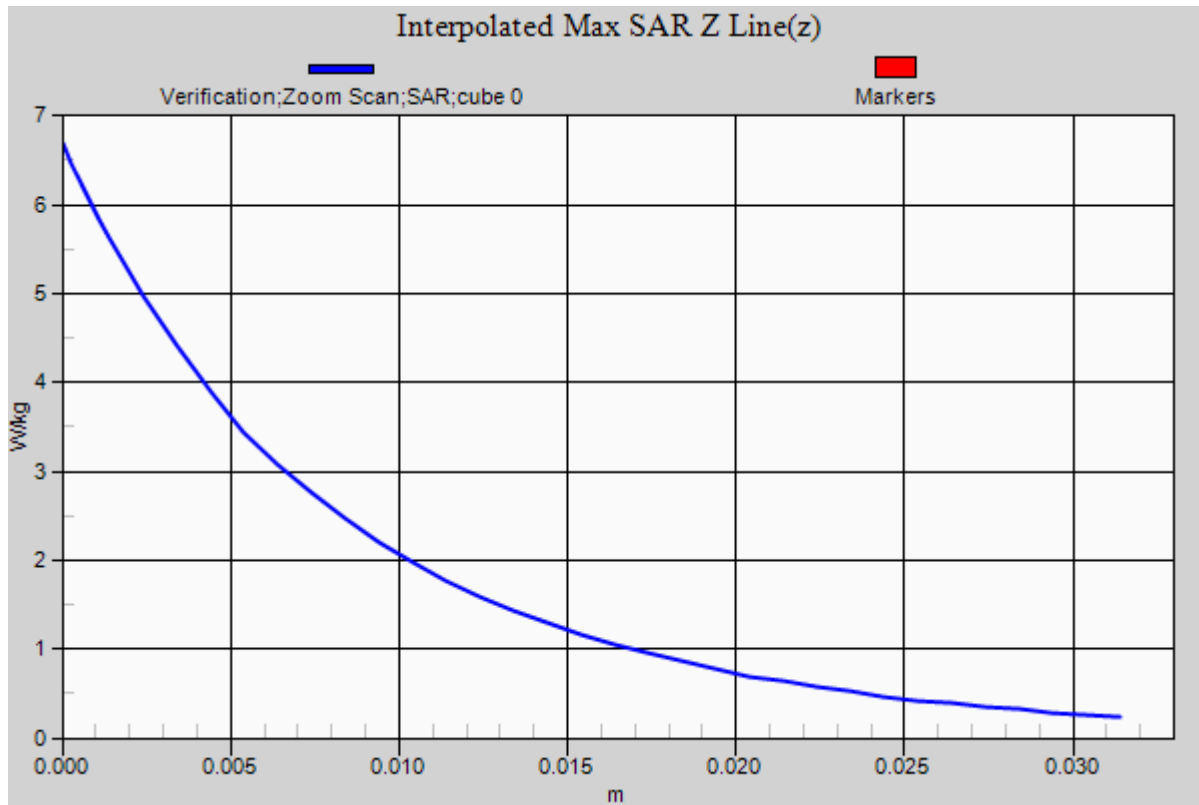
Test Date: Date: 2/27/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C  
Probe: EX3DV4 - SN3662; ConvF(7.61, 7.61, 7.61); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2019  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**1900 MHz Body/Verification/Area Scan (61x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 5.69 W/kg

**1900 MHz Body/Verification/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 52.975 V/m; Power Drift = -0.03 dB  
Peak SAR (extrapolated) = 6.65 W/kg  
**SAR(1 g) = 4.06 W/kg; SAR(10 g) = 1.97 W/kg**  
Maximum value of SAR (measured) = 5.62 W/kg





# RF Exposure Lab

## Plot 12

**DUT: Dipole 2300 MHz D2300V2; Type: D2300V2; Serial: D2300V2 - SN:1060**

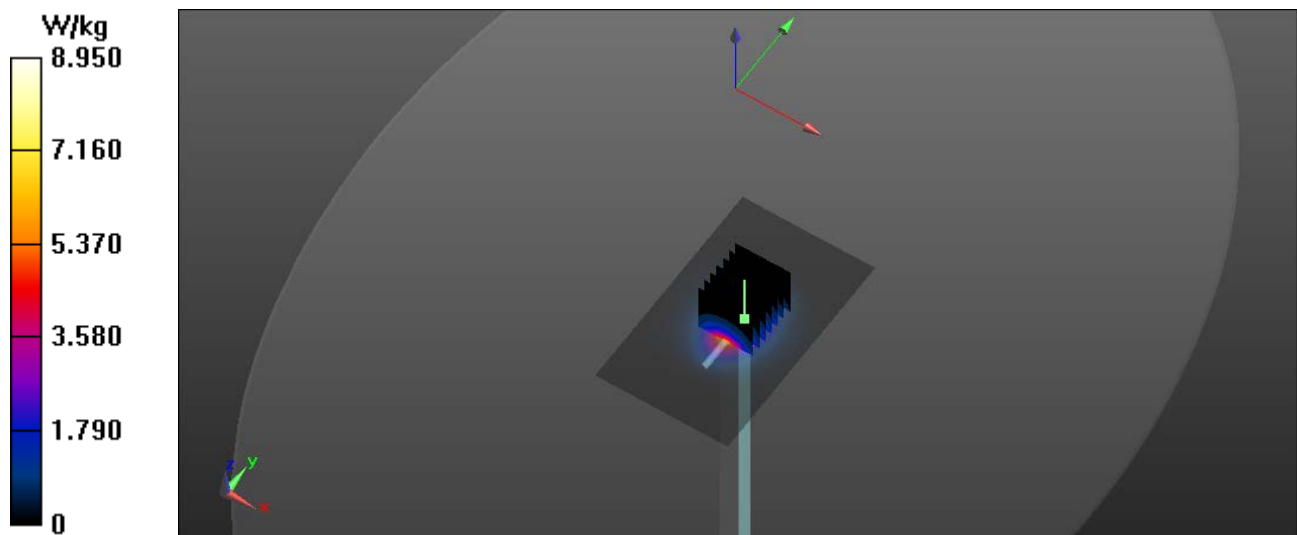
Communication System: CW; Frequency: 2300 MHz; Duty Cycle: 1:1  
Medium: MSL2300; Medium parameters used:  $f = 2300$  MHz;  $\sigma = 1.84$  S/m;  $\epsilon_r = 52.63$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

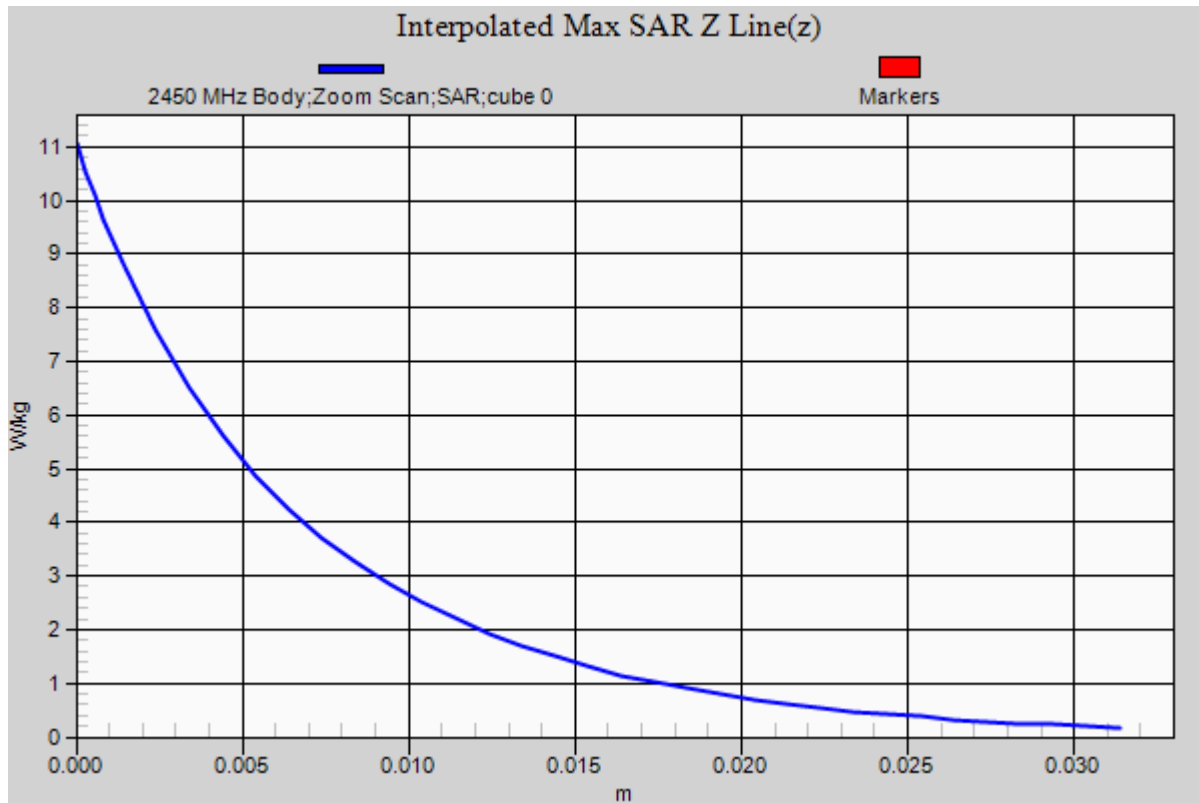
Test Date: Date: 2/14/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C  
Probe: EX3DV4 - SN3662; ConvF(7.33, 7.33, 7.33); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2019  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Body Verification/2300 MHz/Area Scan (61x101x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm  
Maximum value of SAR (interpolated) = 8.95 W/kg

**Body Verification/2300 MHz/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 53.597 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 11.18 W/kg  
 $P_{in} = 100$  mW  
**SAR(1 g) = 4.82 W/kg; SAR(10 g) = 2.2 W/kg**  
Maximum value of SAR (measured) = 8.71 W/kg





# RF Exposure Lab

## Plot 13

**DUT: Dipole 2550 MHz D2550V2; Type: D2550V2; Serial: D2550V2 - SN:1003**

Communication System: CW; Frequency: 2550 MHz; Duty Cycle: 1:1

Medium: MSL2600; Medium parameters used:  $f = 2550$  MHz;  $\sigma = 2.12$  S/m;  $\epsilon_r = 52.47$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Test Date: Date: 7/9/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(7.15, 7.15, 7.15); Calibrated: 4/20/2018;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1321; Calibrated: 1/10/2018

Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037

Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**2550 MHz Body/Verification/Area Scan (61x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 9.18 W/kg

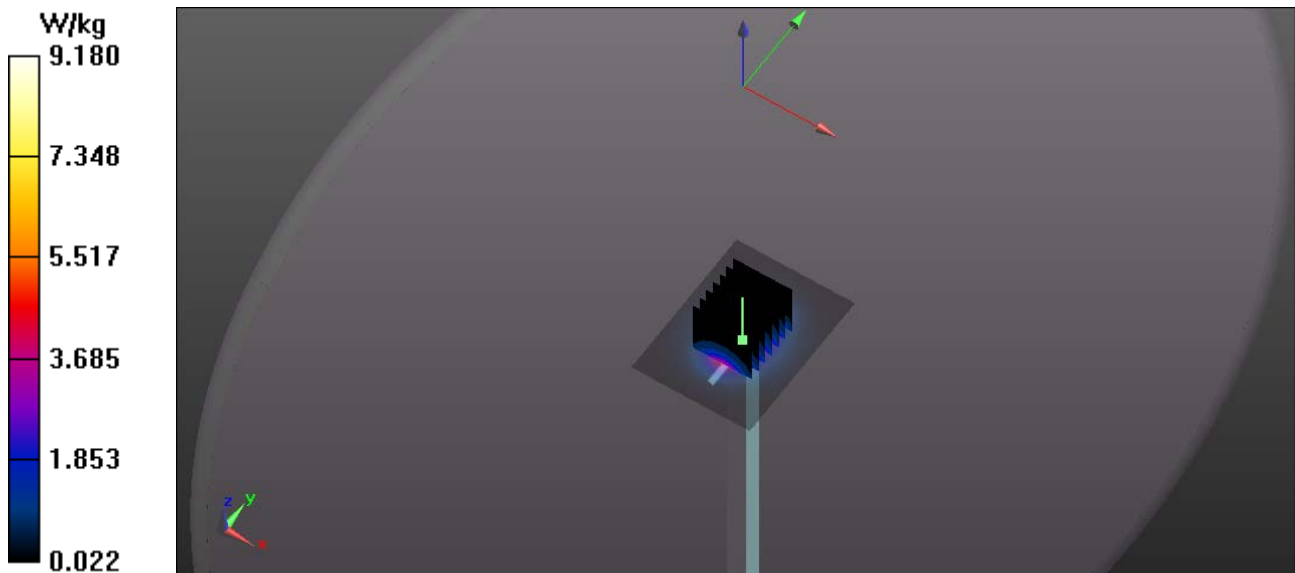
**2550 MHz Body/Verification/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

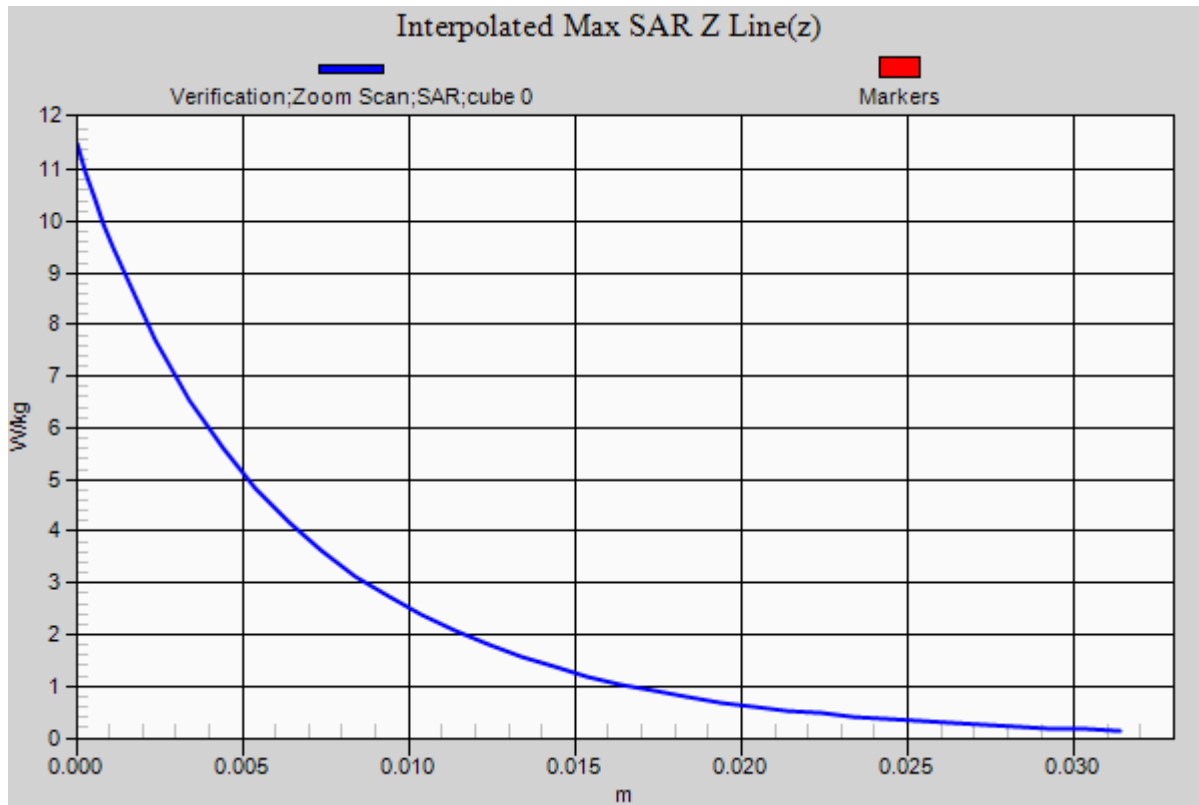
Reference Value = 54.541 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 11.5 W/kg

**SAR(1 g) = 5.41 W/kg; SAR(10 g) = 2.42 W/kg**

Maximum value of SAR (measured) = 8.98 W/kg





# RF Exposure Lab

## Plot 14

**DUT: Dipole 2550 MHz D2550V2; Type: D2550V2; Serial: D2550V2 - SN:1003**

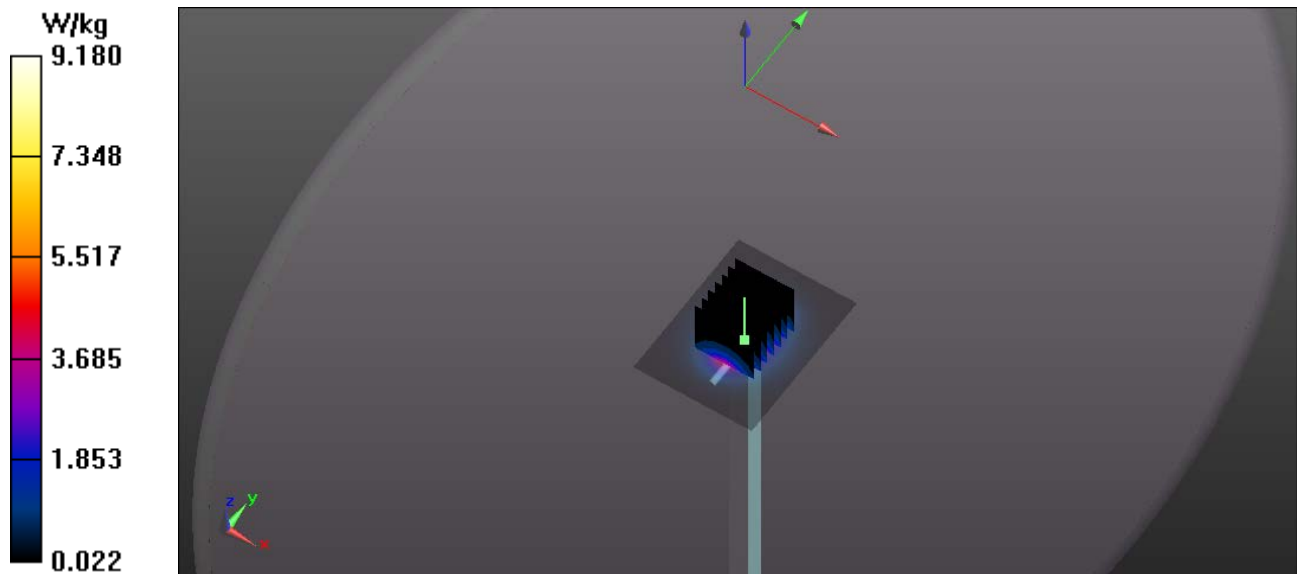
Communication System: CW; Frequency: 2550 MHz; Duty Cycle: 1:1  
Medium: MSL2600; Medium parameters used:  $f = 2550$  MHz;  $\sigma = 2.11$  S/m;  $\epsilon_r = 52.18$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

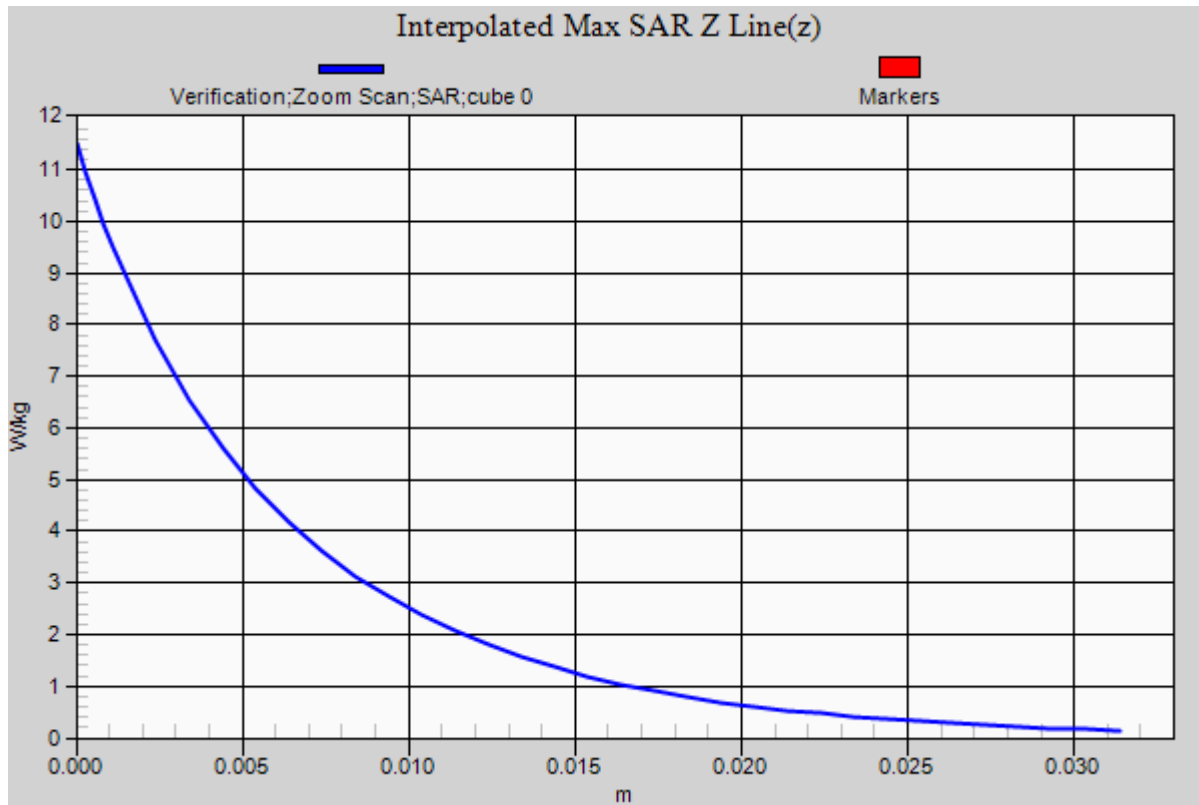
Test Date: Date: 2/25/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C  
Probe: EX3DV4 - SN3662; ConvF(7.15, 7.15, 7.15); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2019  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**2550 MHz Body/Verification/Area Scan (61x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 8.91 W/kg

**2550 MHz Body/Verification/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 54.867 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 11.6 W/kg  
**SAR(1 g) = 5.33 W/kg; SAR(10 g) = 2.43 W/kg**  
Maximum value of SAR (measured) = 9.18 W/kg





# RF Exposure Lab

## Plot 15

**DUT: Dipole D3500V2; Type: D3500V2; Serial: D3500V2 - SN:1061**

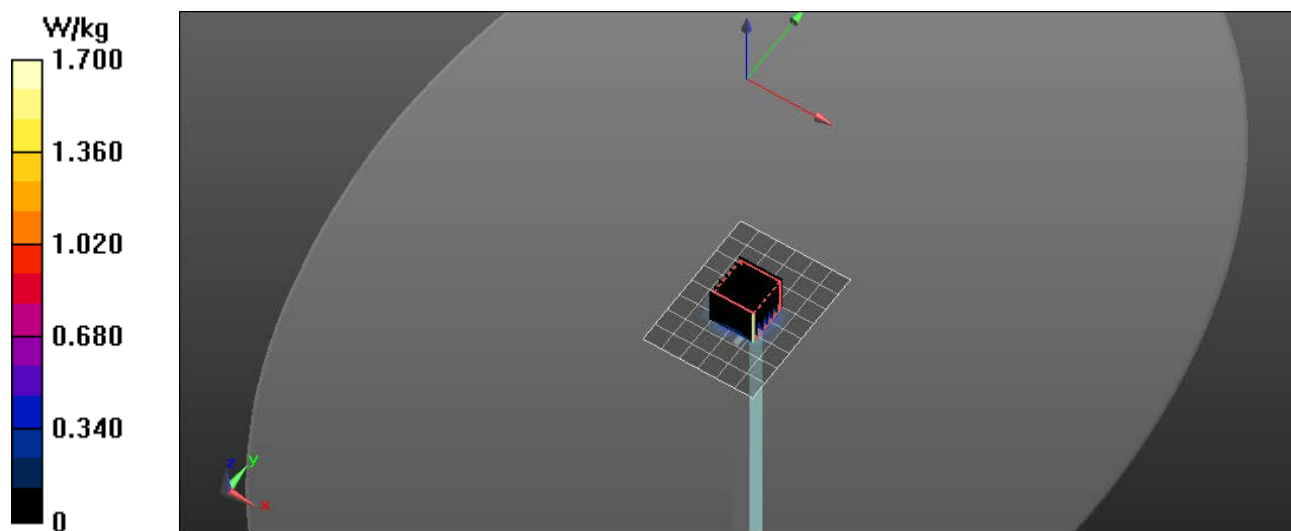
Communication System: CW; Frequency: 3500 MHz; Duty Cycle: 1:1  
Medium: MSL 3-6 GHz; Medium parameters used:  $f = 3500$  MHz;  $\sigma = 3.35$  S/m;  $\epsilon_r = 51.23$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

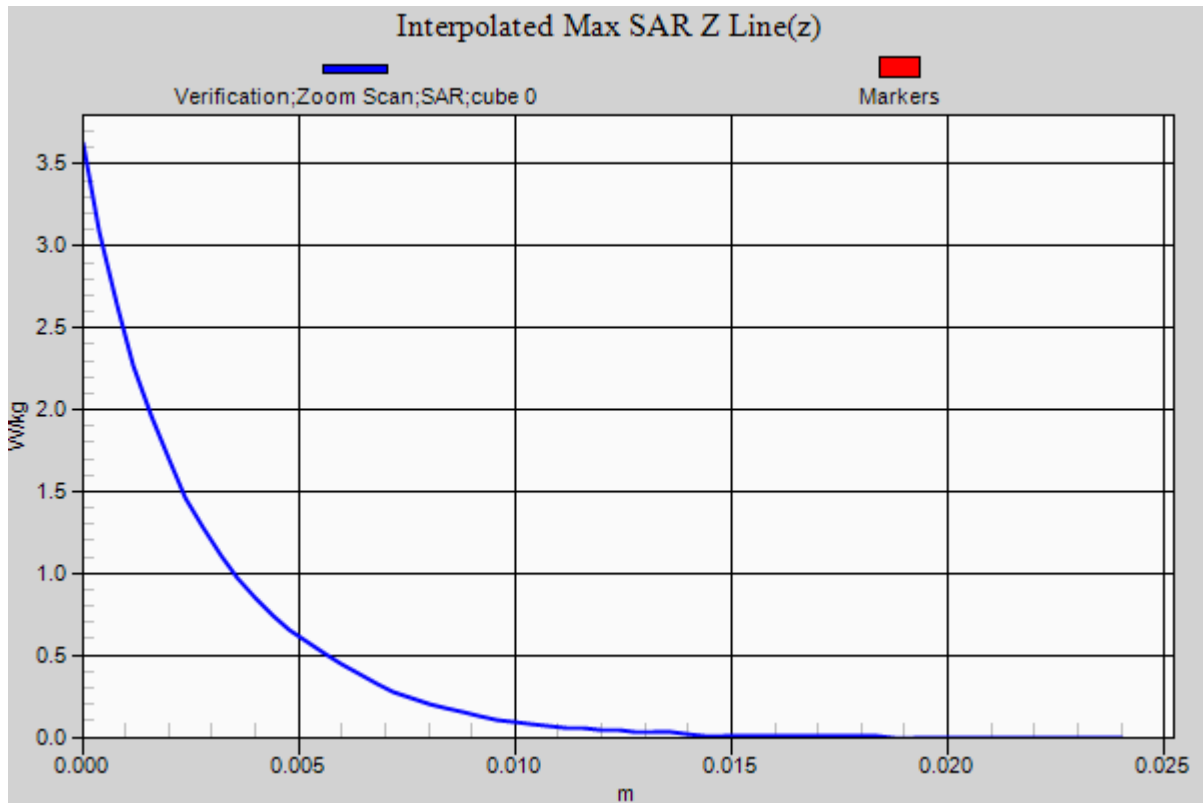
Test Date: Date: 6/11/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C  
Probe: EX3DV4 - SN3662; ConvF(7, 7, 7); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**3500 MHz Body/Verification/Area Scan (7x9x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 1.64 W/kg

**3500 MHz Body/Verification/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=4mm  
Reference Value = 11.892 V/m; Power Drift = 0.01 dB  
Peak SAR (extrapolated) = 3.63 W/kg  
**SAR(1 g) = 0.655 W/kg; SAR(10 g) = 0.245 W/kg**  
Maximum value of SAR (measured) = 1.70 W/kg





# RF Exposure Lab

## Plot 16

**DUT: Dipole D3500V2; Type: D3500V2; Serial: D3500V2 - SN:1061**

Communication System: CW; Frequency: 3500 MHz; Duty Cycle: 1:1

Medium: MSL 3-6 GHz; Medium parameters used:  $f = 3500$  MHz;  $\sigma = 3.34$  S/m;  $\epsilon_r = 51.11$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Test Date: Date: 2/25/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(7, 7, 7); Calibrated: 4/20/2018;

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1321; Calibrated: 1/10/2019

Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037

Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**3500 MHz Body/Verification/Area Scan (7x9x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.61 W/kg

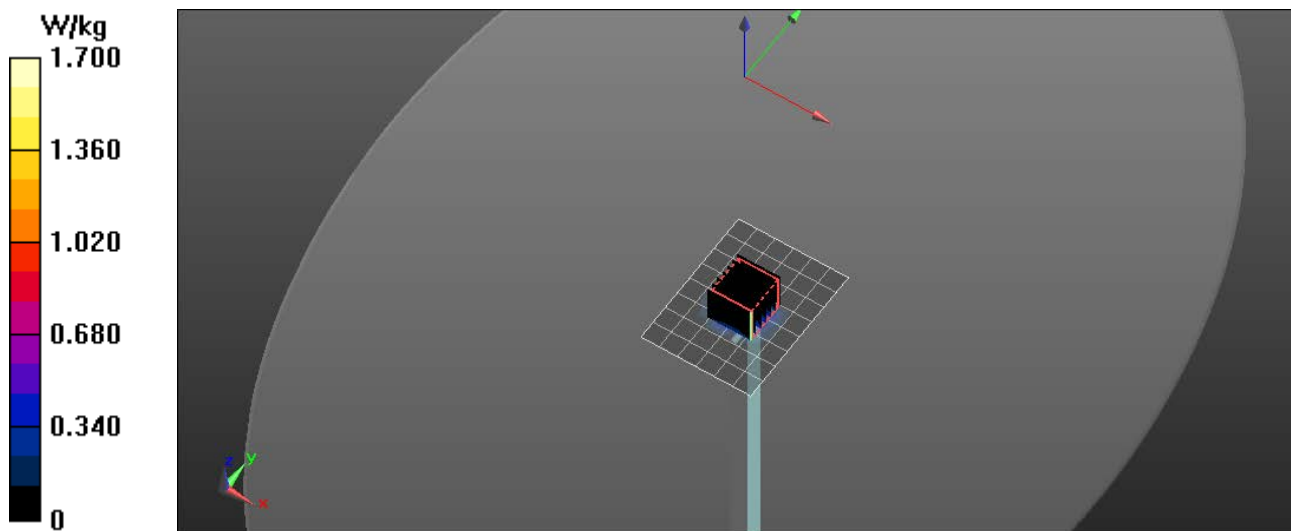
**3500 MHz Body/Verification/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=4mm

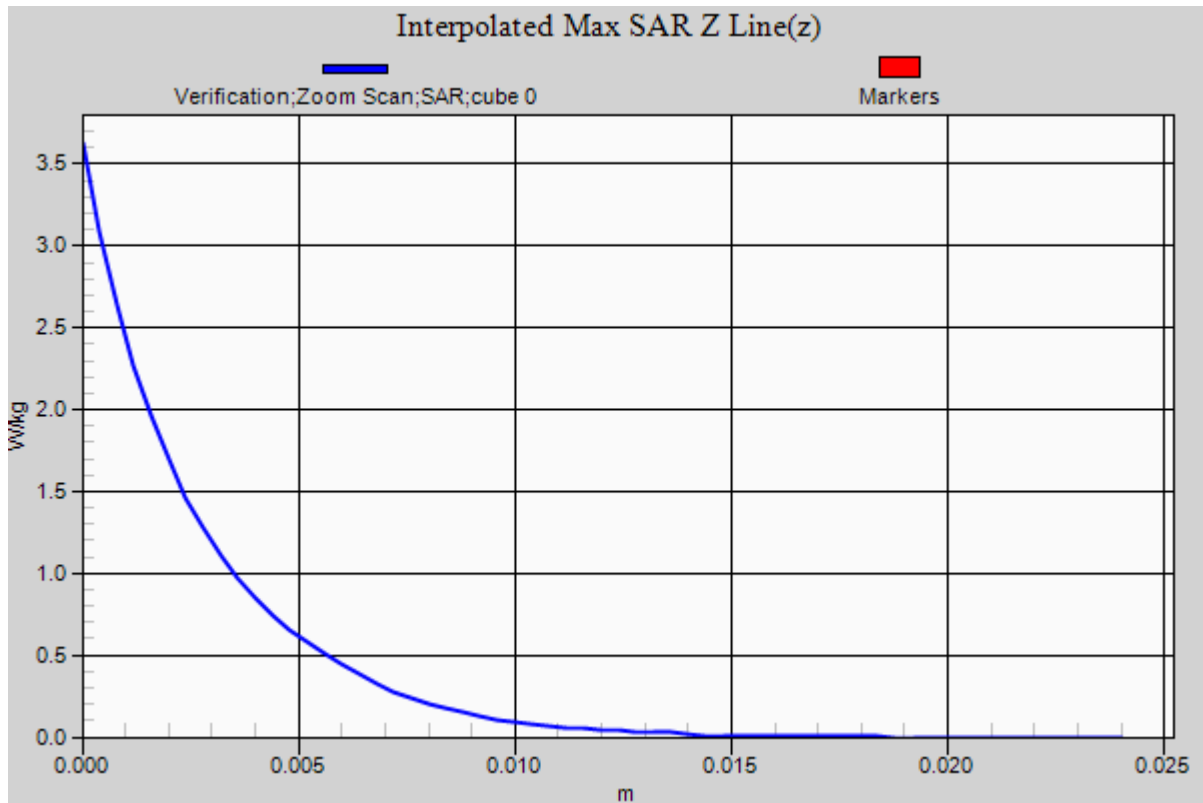
Reference Value = 12.358 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.65 W/kg

**SAR(1 g) = 0.657 W/kg; SAR(10 g) = 0.246 W/kg**

Maximum value of SAR (measured) = 1.68 W/kg





# RF Exposure Lab

## Plot 17

**DUT: Dipole D3700V2; Type: D3700V2; Serial: D3700V2 - SN:1024**

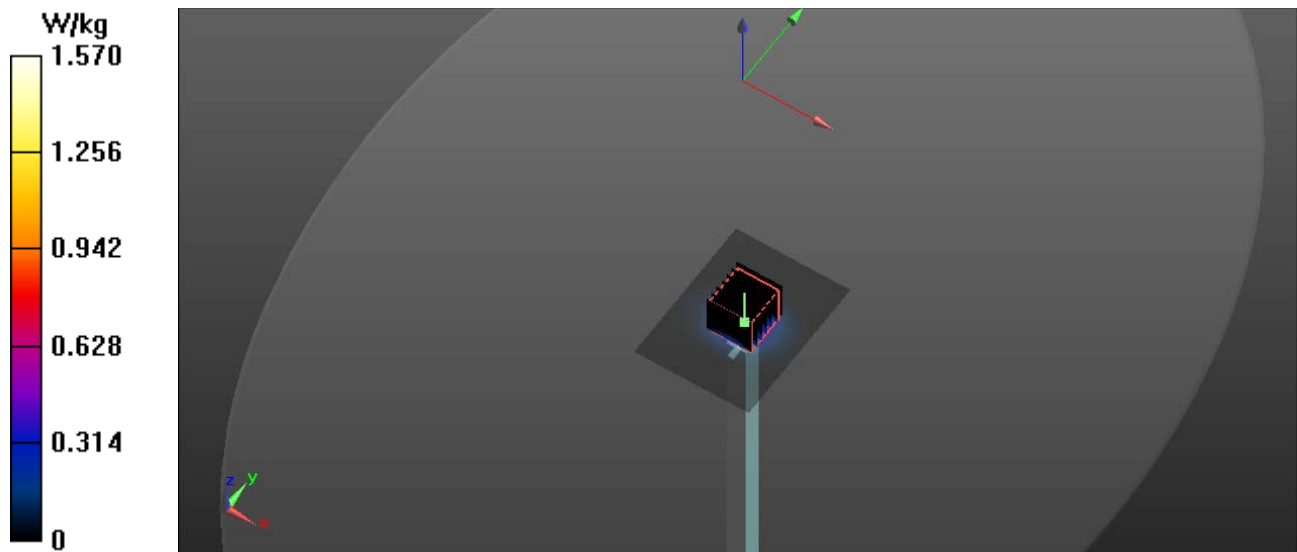
Communication System: CW; Frequency: 3700 MHz; Duty Cycle: 1:1  
Medium: MSL 3-6 GHz; Medium parameters used:  $f = 3700$  MHz;  $\sigma = 3.57$  S/m;  $\epsilon_r = 50.92$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

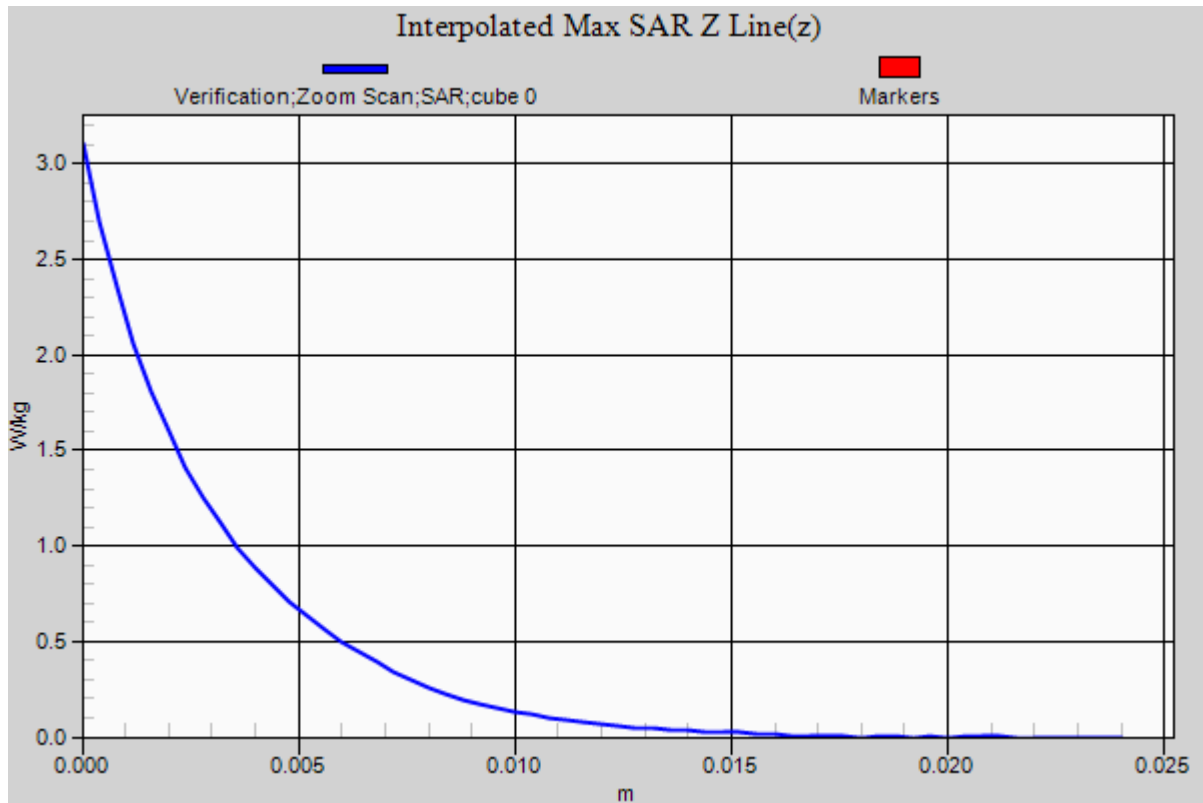
Test Date: Date: 6/11/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C  
Probe: EX3DV4 - SN3662; ConvF(6.71, 6.71, 6.71); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**3700 MHz Body/Verification/Area Scan (61x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
Maximum value of SAR (interpolated) = 1.55 W/kg

**3700 MHz Body/Verification/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=4mm  
Reference Value = 55.759 V/m; Power Drift = -0.04 dB  
Peak SAR (extrapolated) = 3.09 W/kg  
**SAR(1 g) = 0.659 W/kg; SAR(10 g) = 0.238 W/kg**  
Maximum value of SAR (measured) = 1.58 W/kg





# RF Exposure Lab

## Plot 18

**DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN: 881**

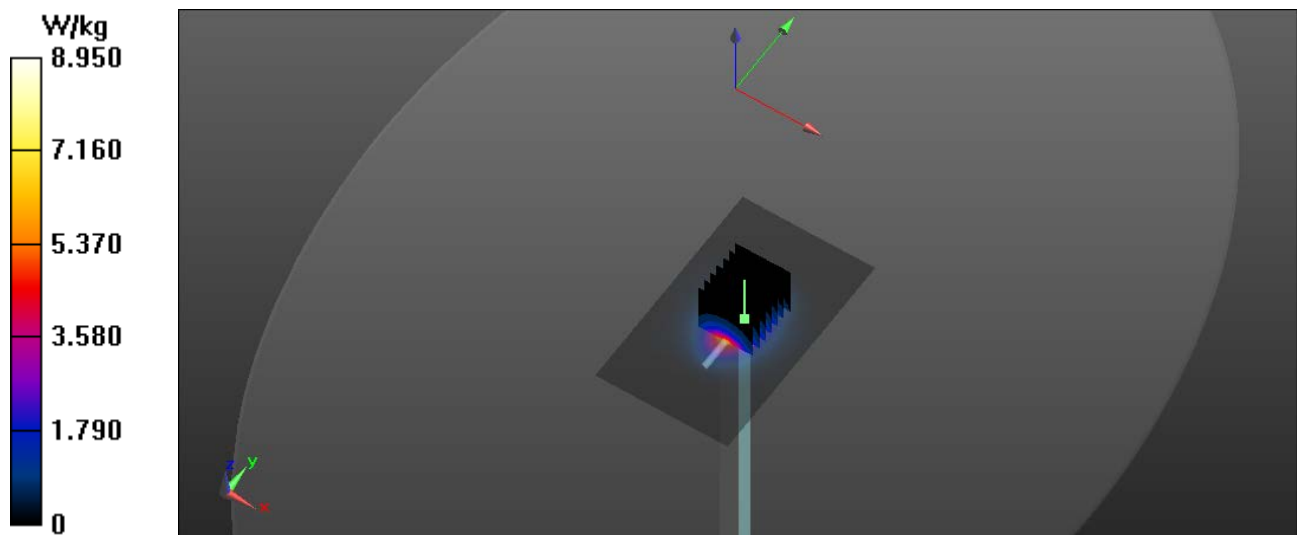
Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium: MSL2450; Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.92$  S/m;  $\epsilon_r = 52.77$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

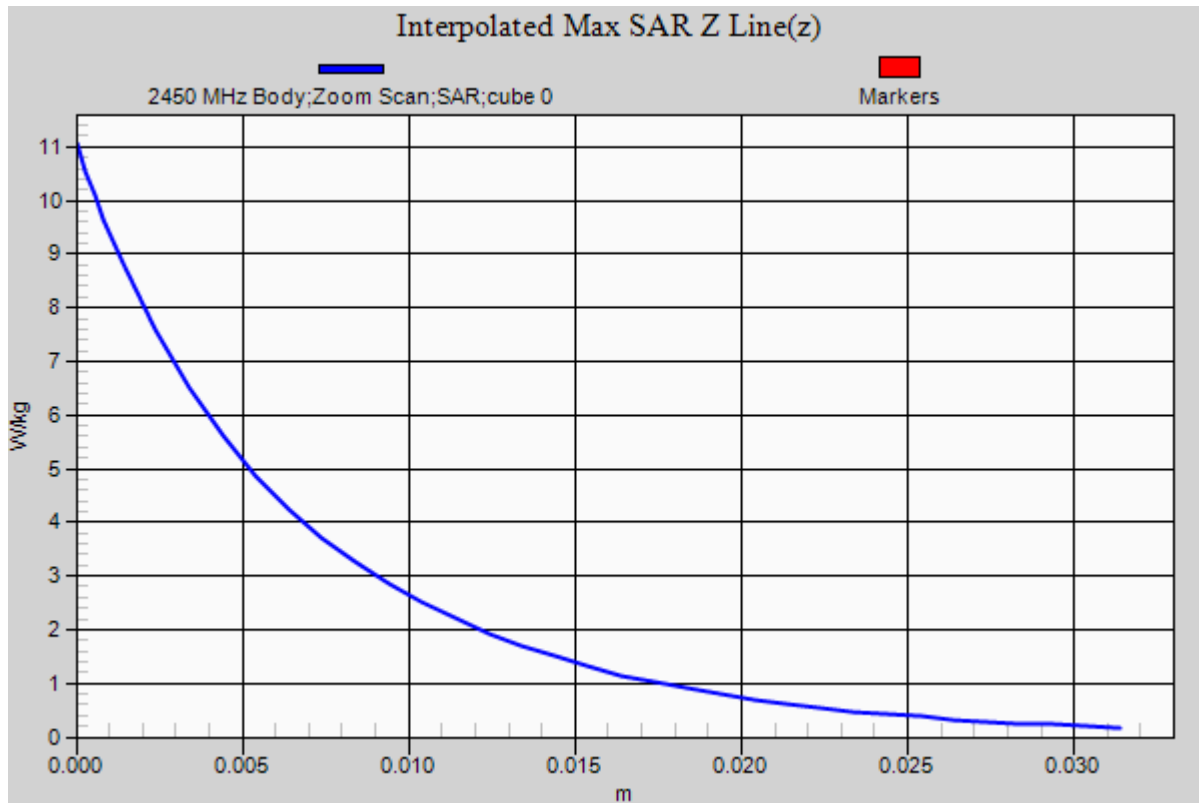
Test Date: Date: 7/2/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C  
Probe: EX3DV4 - SN3662; ConvF(7.29, 7.29, 7.29); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Body Verification/2450 MHz/Area Scan (61x101x1):** Interpolated grid:  $dx=1.200$  mm,  $dy=1.200$  mm  
Maximum value of SAR (interpolated) = 8.92 W/kg

**Body Verification/2450 MHz/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm  
Reference Value = 53.359 V/m; Power Drift = -0.02 dB  
Peak SAR (extrapolated) = 11.04 W/kg  
**SAR(1 g) = 5.22 W/kg; SAR(10 g) = 2.47 W/kg**  
Maximum value of SAR (measured) = 8.79 W/kg





# RF Exposure Lab

## Plot 19

**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1119**

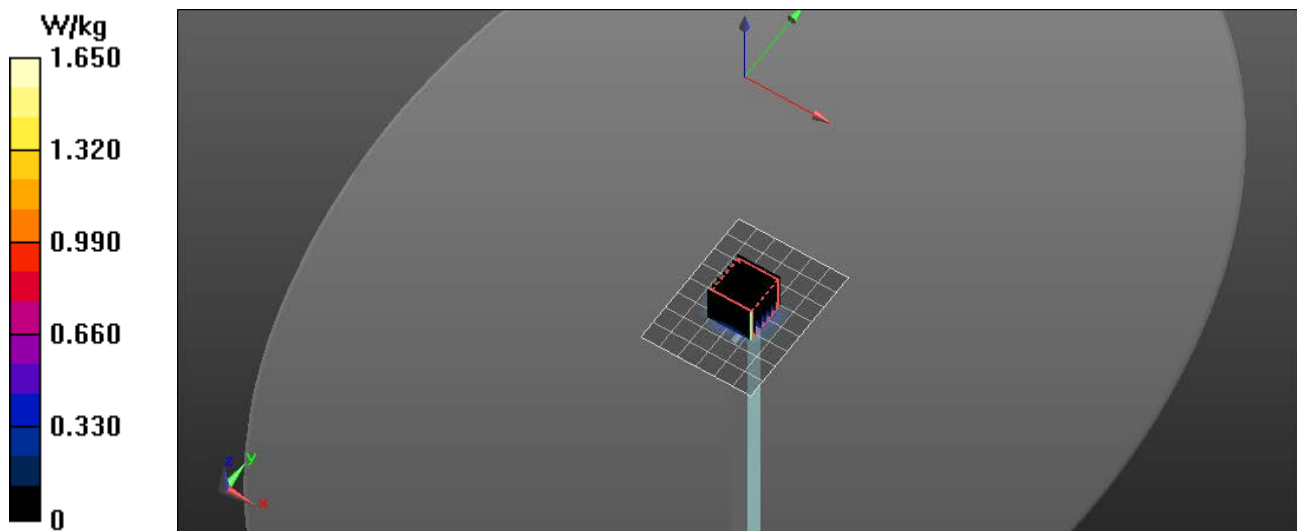
Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1  
Medium: MSL 3-6 GHz; Medium parameters used:  $f = 5200$  MHz;  $\sigma = 5.21$  S/m;  $\epsilon_r = 49.07$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

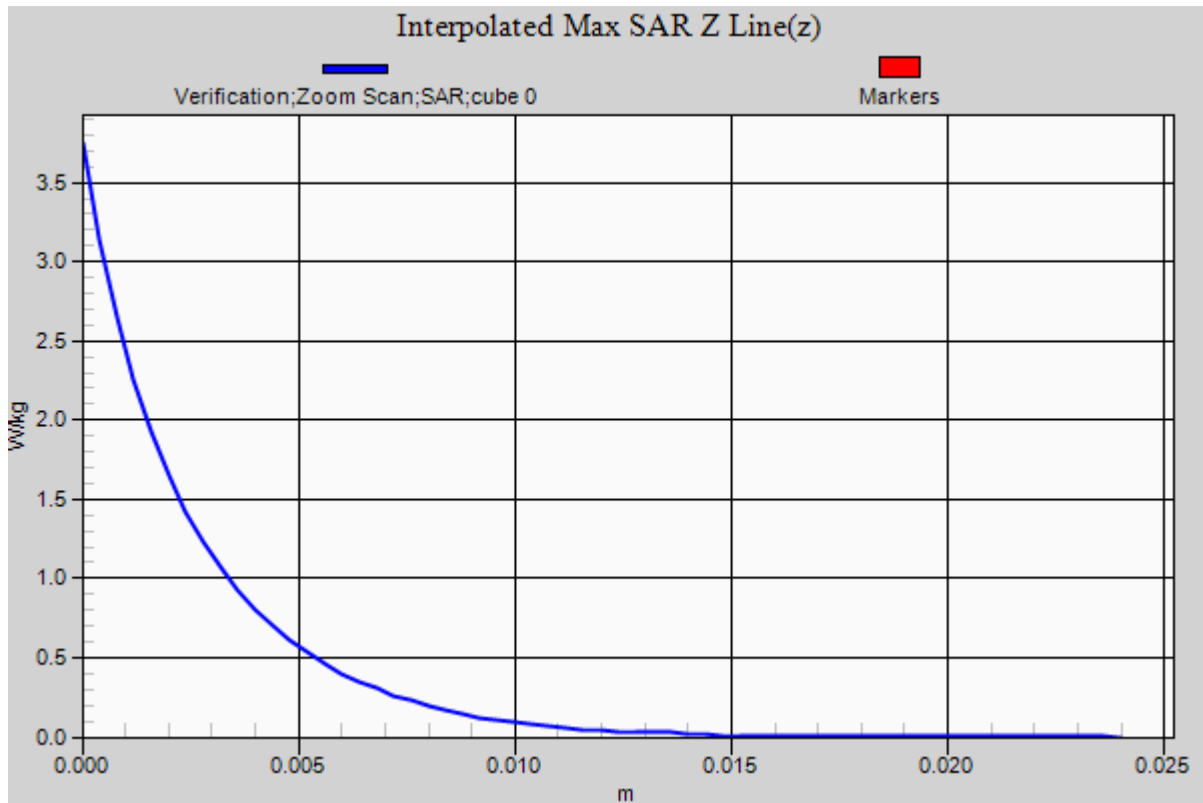
Test Date: Date: 6/28/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C  
Probe: EX3DV4 - SN3662; ConvF(4.46, 4.46, 4.46); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**5200 MHz Body/Verification/Area Scan (7x9x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 1.58 W/kg

**5200 MHz Body/Verification/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
Reference Value = 11.705 V/m; Power Drift = 0.01 dB  
Peak SAR (extrapolated) = 3.75 W/kg  
**SAR(1 g) = 0.813 W/kg; SAR(10 g) = 0.231 W/kg**  
Maximum value of SAR (measured) = 1.65 W/kg





# RF Exposure Lab

## Plot 20

**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1119**

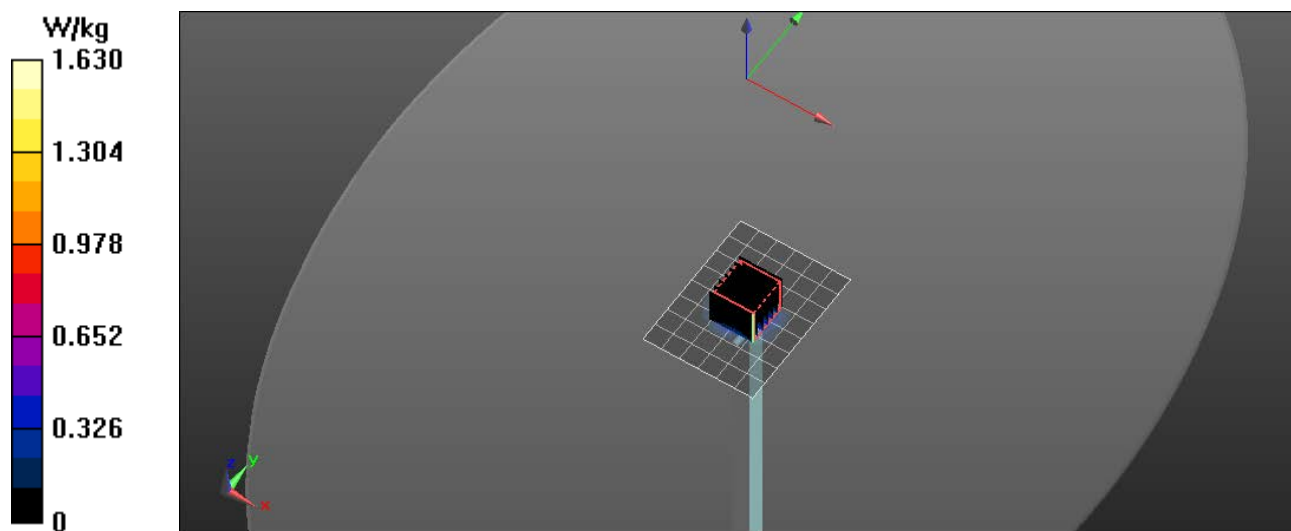
Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1  
Medium: MSL 3-6 GHz; Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.99$  S/m;  $\epsilon_r = 48.17$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

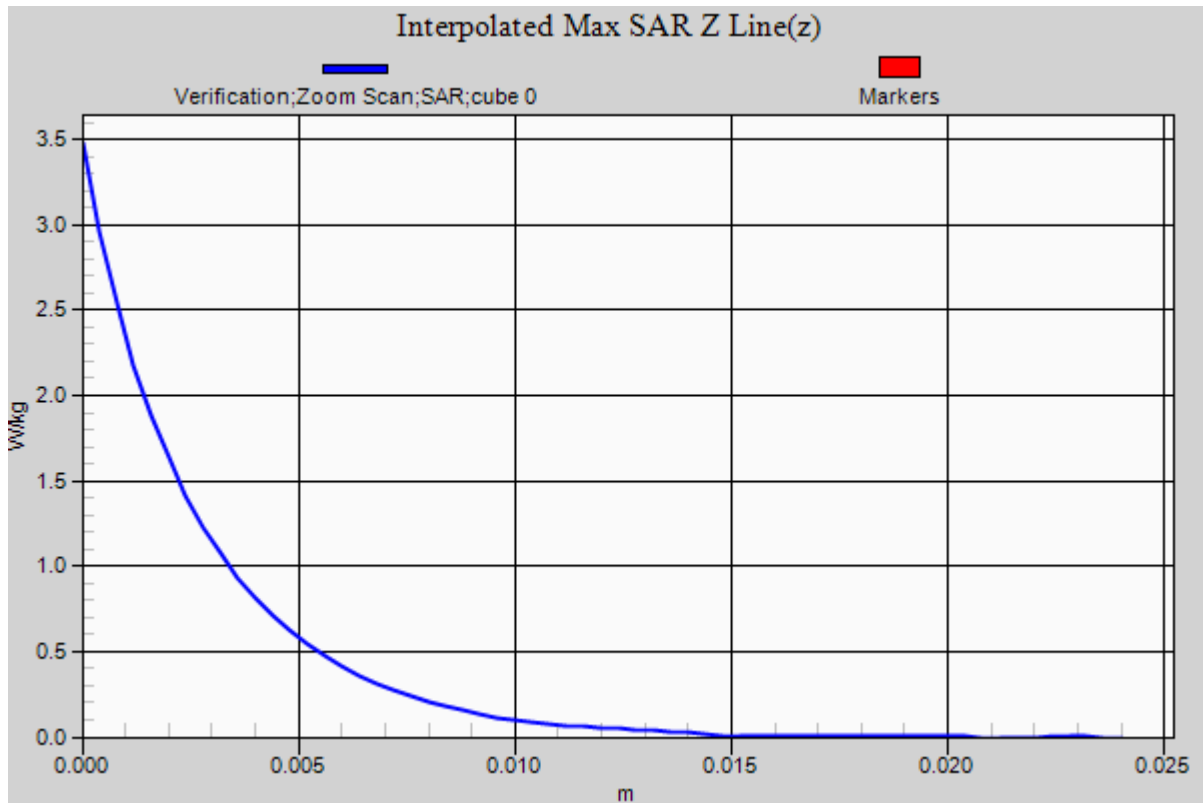
Test Date: Date: 6/28/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C  
Probe: EX3DV4 - SN3662; ConvF(4.08, 4.08, 4.08); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**5800 MHz Body/Verification/Area Scan (7x9x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 1.56 W/kg

**5800 MHz Body/Verification/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
Reference Value = 11.621 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 3.47 W/kg  
**SAR(1 g) = 0.799 W/kg; SAR(10 g) = 0.228 W/kg**  
Maximum value of SAR (measured) = 1.63 W/kg





## Appendix B – SAR Test Data Plots

# RF Exposure Lab

## Plot 1

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 10 MHz, QPSK); Frequency: 707.5 MHz; Duty Cycle: 1:1  
Medium: MSL750; Medium parameters used (interpolated):  $f = 707.5$  MHz;  $\sigma = 0.978$  S/m;  $\epsilon_r = 55.508$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 2/19/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(9.8, 9.8, 9.8); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 12 LTE/Side A 1 RB 24 Offset Ant 0 Mid/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.716 W/kg

**Band 12 LTE/Side A 1 RB 24 Offset Ant 0 Mid/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

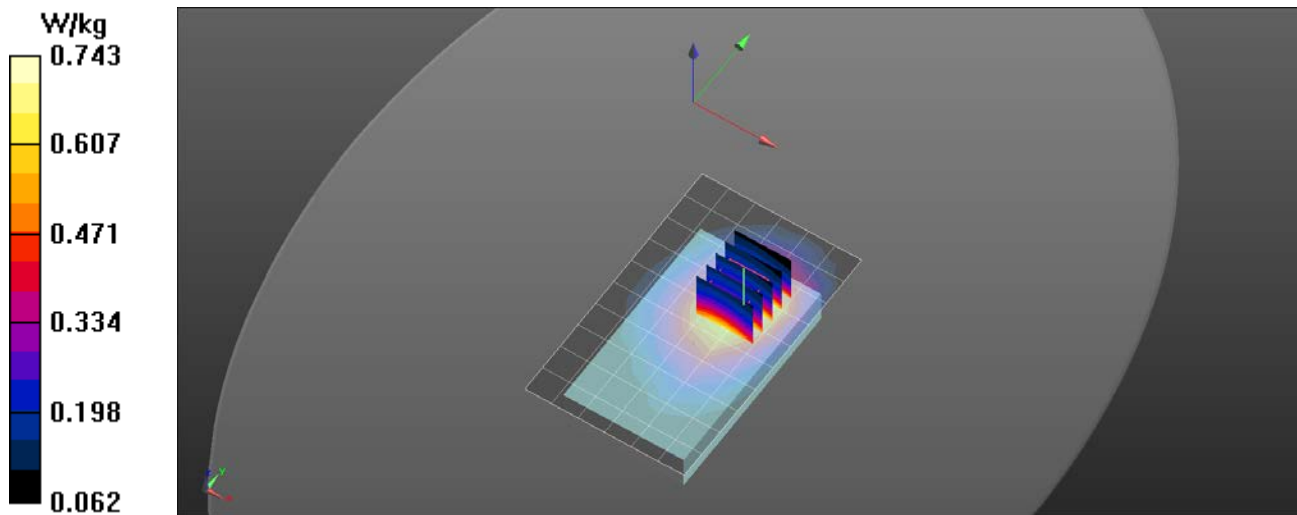
Reference Value = 23.23 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.850 W/kg

**SAR(1 g) = 0.620 W/kg; SAR(10 g) = 0.441 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.743 W/kg



# RF Exposure Lab

## Plot 2

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 10 MHz, QPSK); Frequency: 710 MHz; Duty Cycle: 1:1  
Medium: MSL750; Medium parameters used:  $f = 710 \text{ MHz}$ ;  $\sigma = 0.98 \text{ S/m}$ ;  $\epsilon_r = 55.5$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

Test Date: Date: 2/19/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(9.8, 9.8, 9.8); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 17 LTE/Side A 1 RB 24 Offset Ant 0 Mid/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 0.746 W/kg

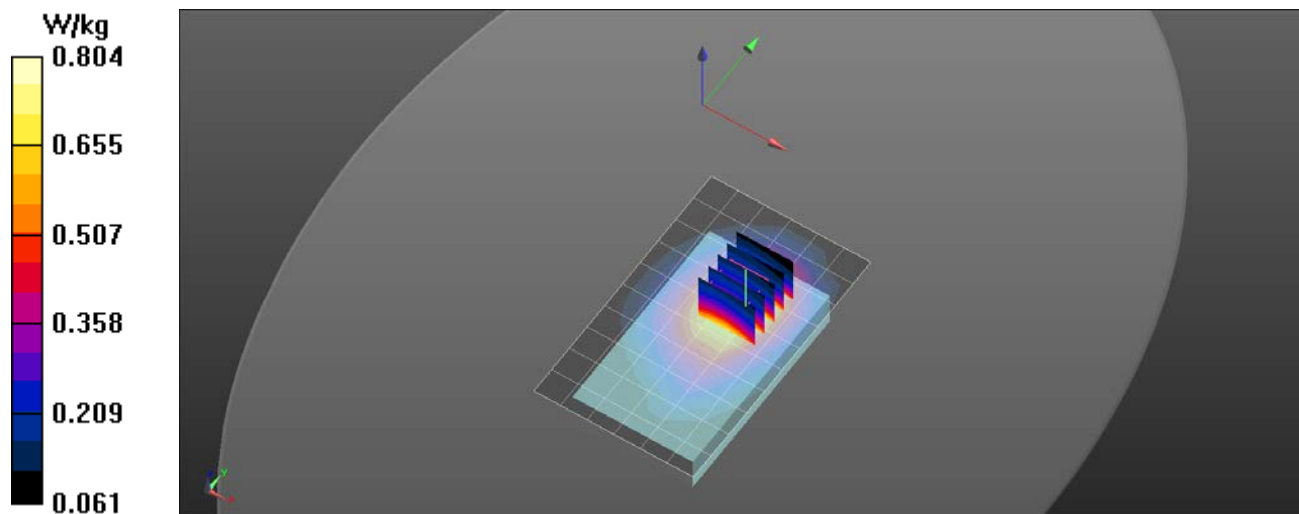
**Band 17 LTE/Side A 1 RB 24 Offset Ant 0 Mid/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.13 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.914 W/kg

**SAR(1 g) = 0.645 W/kg; SAR(10 g) = 0.460 W/kg**

Maximum value of SAR (measured) = 0.804 W/kg



# RF Exposure Lab

## Plot 3

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 10 MHz, QPSK); Frequency: 782 MHz; Duty Cycle: 1:1  
Medium: MSL750; Medium parameters used (interpolated):  $f = 782 \text{ MHz}$ ;  $\sigma = 1 \text{ S/m}$ ;  $\epsilon_r = 55.452$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

Test Date: Date: 6/6/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(9.8, 9.8, 9.8); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 13 LTE/Side A 1 RB 24 Offset Ant 0 Mid/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.18 W/kg

**Band 13 LTE/Side A 1 RB 24 Offset Ant 0 Mid/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 32.32 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.33 W/kg

**SAR(1 g) = 1 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.19 W/kg

**Band 13 LTE/Side A 1 RB 24 Offset Ant 0 Mid/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

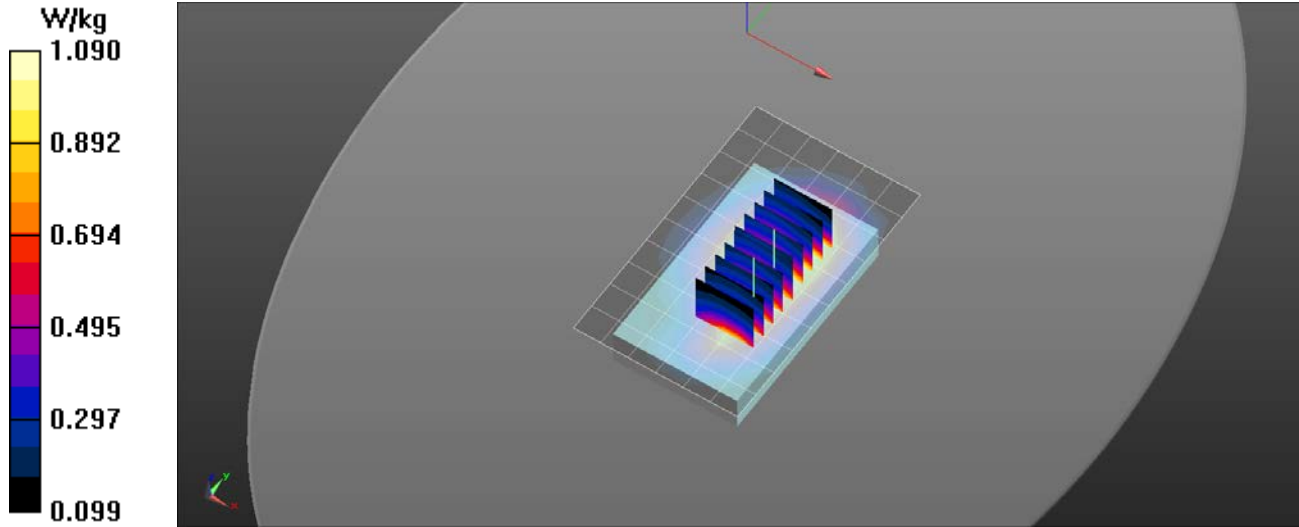
Reference Value = 32.32 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.21 W/kg

**SAR(1 g) = 0.905 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.09 W/kg



# RF Exposure Lab

## Plot 4

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 10 MHz, QPSK); Frequency: 793 MHz; Duty Cycle: 1:1  
Medium: MSL750; Medium parameters used (interpolated):  $f = 793 \text{ MHz}$ ;  $\sigma = 1.003 \text{ S/m}$ ;  $\epsilon_r = 55.408$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

Test Date: Date: 6/6/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(9.8, 9.8, 9.8); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 14 LTE/Side A 1 RB 24 Offset Ant 0 Mid/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.921 W/kg

**Band 14 LTE/Side A 1 RB 24 Offset Ant 0 Mid/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.73 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.06 W/kg

**SAR(1 g) = 0.757 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

**Band 14 LTE/Side A 1 RB 24 Offset Ant 0 Mid/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

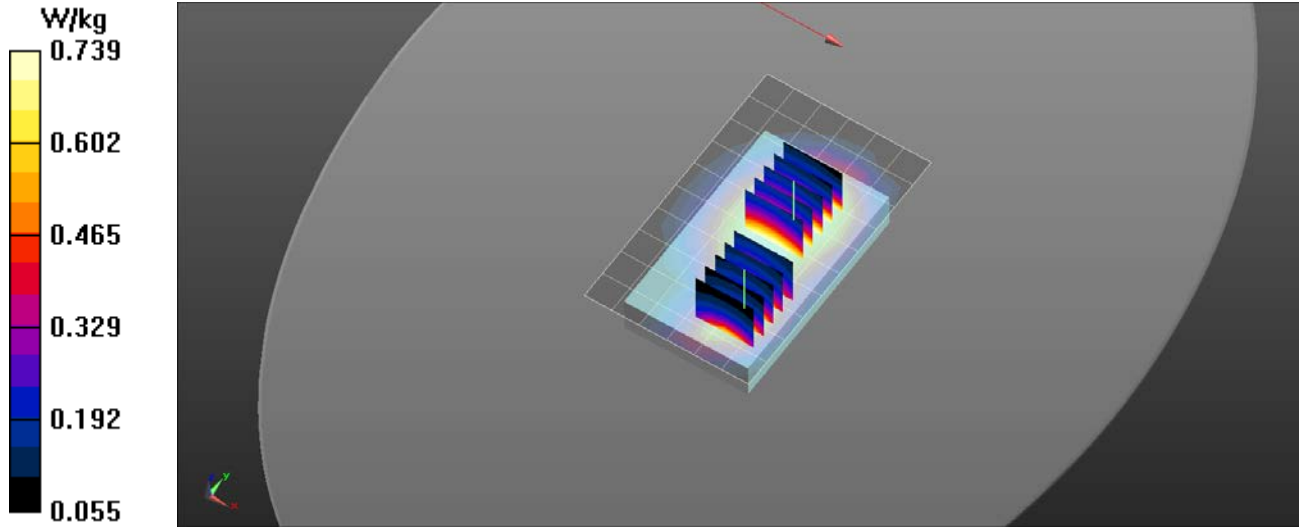
Reference Value = 27.73 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.861 W/kg

**SAR(1 g) = 0.597 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.739 W/kg



# RF Exposure Lab

## Plot 5

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: UMTS (WCDMA); Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium: MSL835; Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.99$  S/m;  $\epsilon_r = 55.902$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 6/1/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(9.21, 9.21, 9.21); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 5 UMTS/Side C Ant 0 Mid/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.709 W/kg

**Band 5 UMTS/Side C Ant 0 Mid/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

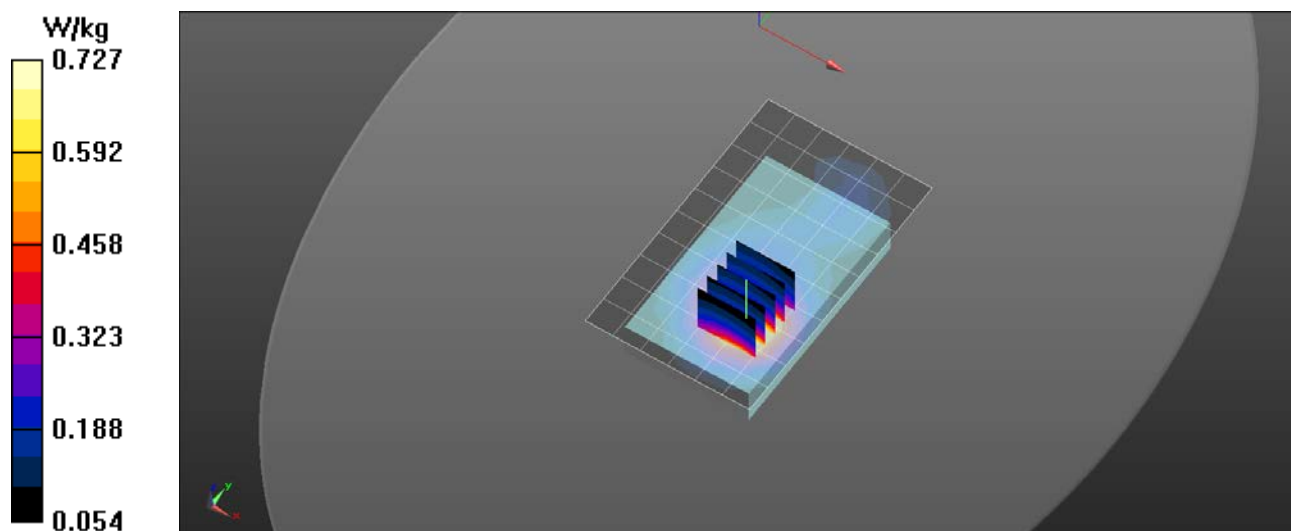
Reference Value = 15.23 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.843 W/kg

**SAR(1 g) = 0.589 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.727 W/kg



# RF Exposure Lab

## Plot 6

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 10 MHz, QPSK); Frequency: 829 MHz; Duty Cycle: 1:1  
Medium: MSL835; Medium parameters used (interpolated):  $f = 829 \text{ MHz}$ ;  $\sigma = 0.984 \text{ S/m}$ ;  $\epsilon_r = 55.934$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

Test Date: Date: 6/1/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(9.21, 9.21, 9.21); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 5 LTE/Side A 1 RB 24 Offset Ant 0 Low/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.14 W/kg

**Band 5 LTE/Side A 1 RB 24 Offset Ant 0 Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

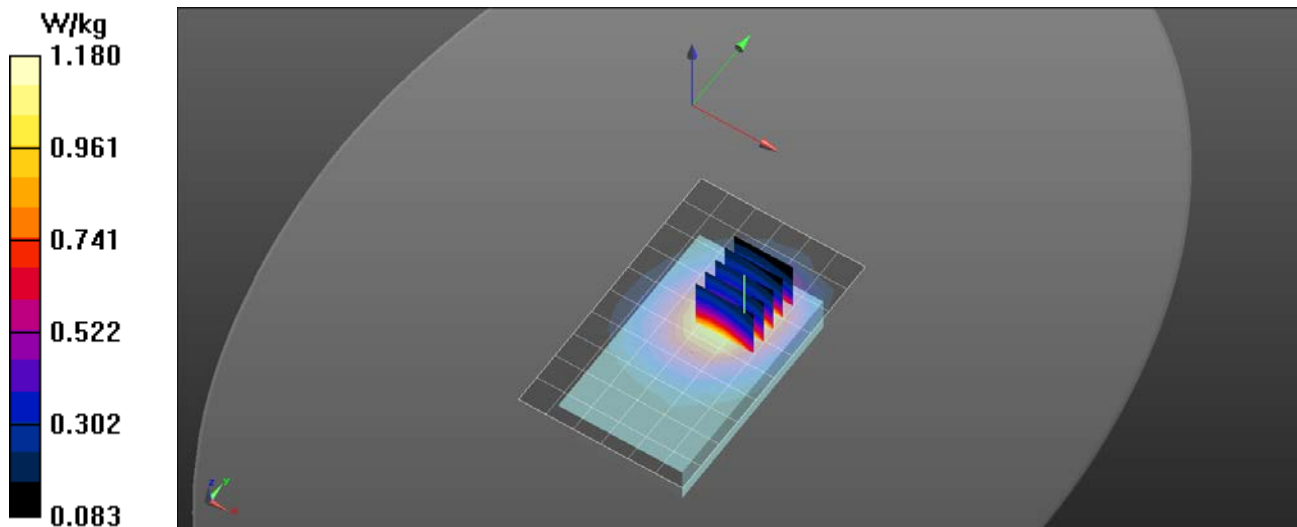
Reference Value = 27.59 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 1.36 W/kg

**SAR(1 g) = 0.975 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.18 W/kg



# RF Exposure Lab

## Plot 7

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 10 MHz, QPSK); Frequency: 831.5 MHz; Duty Cycle: 1:1  
Medium: MSL835; Medium parameters used (interpolated):  $f = 831.5$  MHz;  $\sigma = 0.99$  S/m;  $\epsilon_r = 54.744$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 2/19/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(9.21, 9.21, 9.21); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 26 LTE/Side C 1 RB 24 Offset Ant 0 Mid/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.800 W/kg

**Band 26 LTE/Side C 1 RB 24 Offset Ant 0 Mid/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

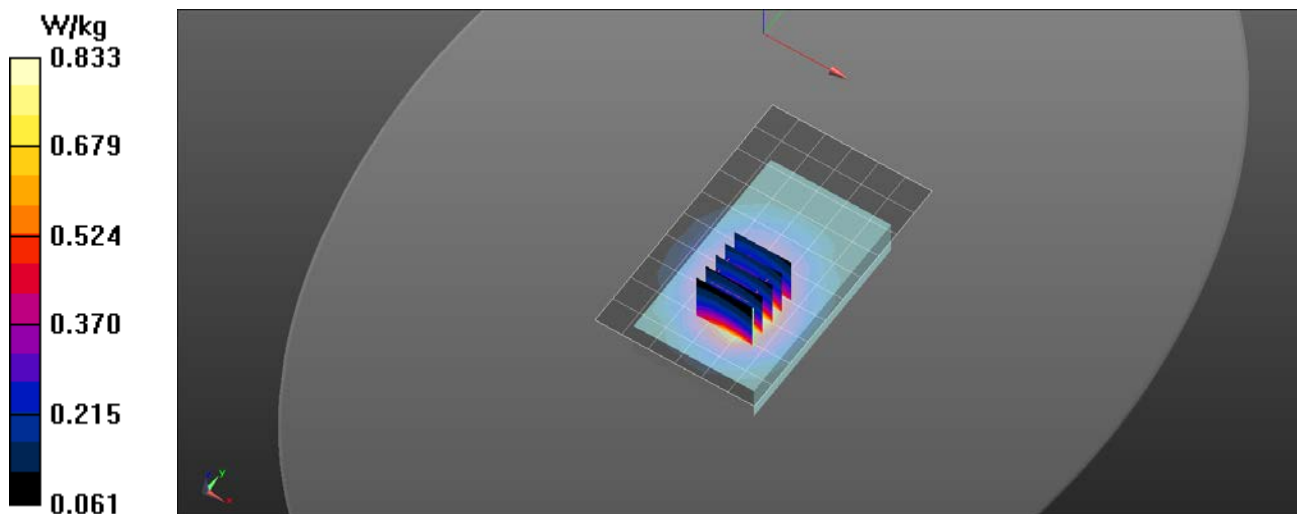
Reference Value = 20.82 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.951 W/kg

**SAR(1 g) = 0.689 W/kg; SAR(10 g) = 0.481 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.833 W/kg



# RF Exposure Lab

## Plot 8

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: UMTS (WCDMA); Frequency: 1712.4 MHz; Duty Cycle: 1:1  
Medium: MSL1750; Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.492$  S/m;  $\epsilon_r = 52.803$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 2/22/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(7.96, 7.96, 7.96); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 4 UMTS/Side A Ant 0 Low/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.53 W/kg

**Band 4 UMTS/Side A Ant 0 Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

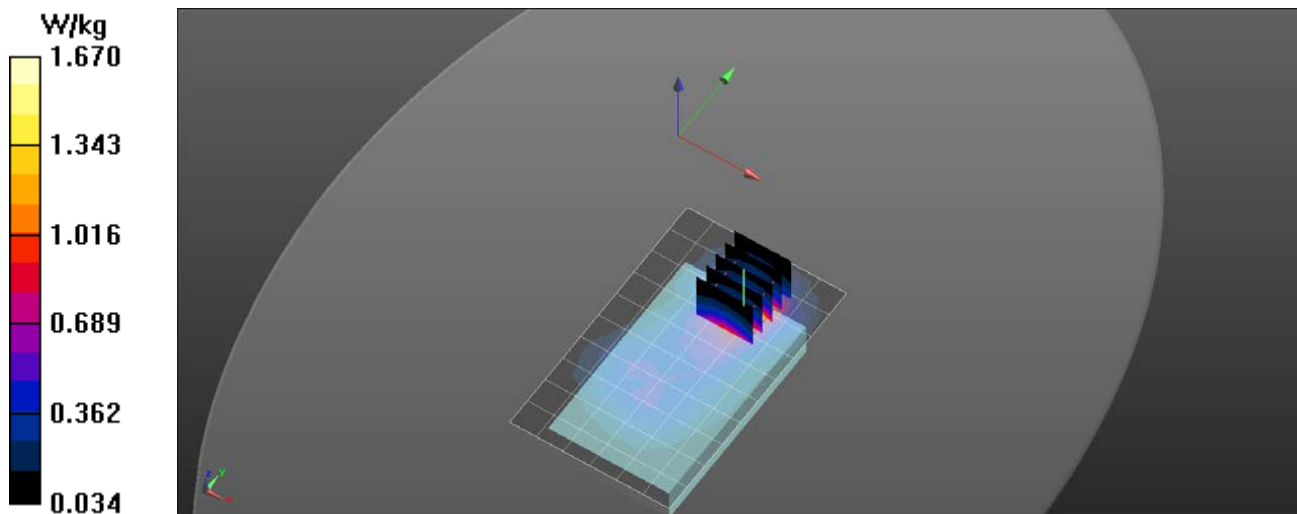
Reference Value = 15.41 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 2.09 W/kg

**SAR(1 g) = 0.945 W/kg; SAR(10 g) = 0.482 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.67 W/kg



# RF Exposure Lab

## Plot 9

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium: MSL1750; Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.49$  S/m;  $\epsilon_r = 53.52$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

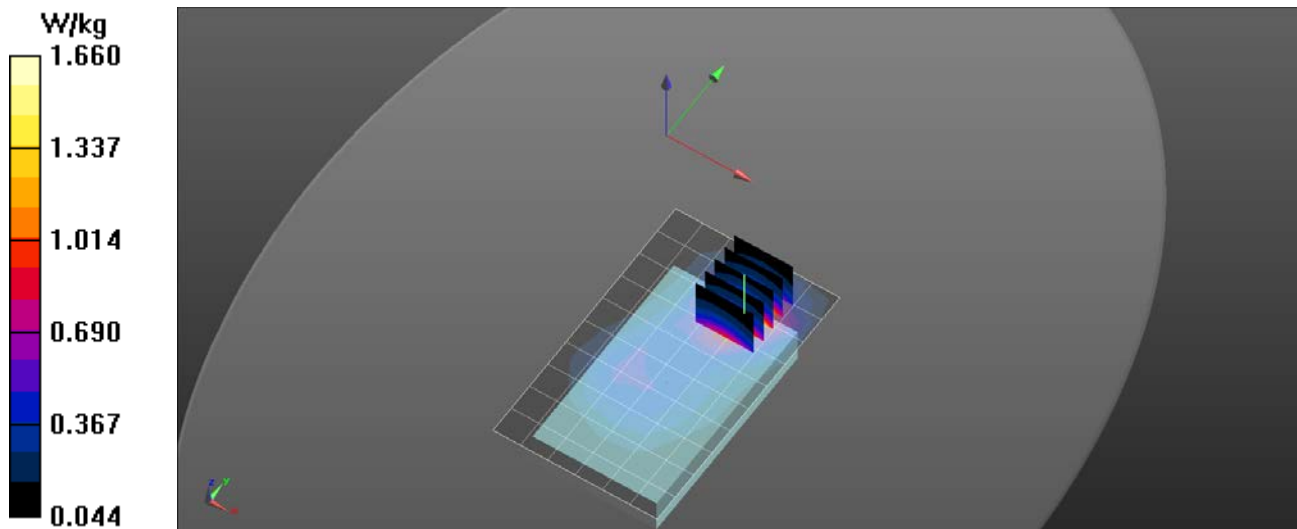
Test Date: Date: 6/8/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(7.96, 7.96, 7.96); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

## Procedure Notes:

**Band 66 LTE Retest/Side A 1 RB 49 Offset Ant 0 Low2/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.73 W/kg

**Band 66 LTE Retest/Side A 1 RB 49 Offset Ant 0 Low2/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 15.62 V/m; Power Drift = 0.04 dB  
Peak SAR (extrapolated) = 2.07 W/kg  
**SAR(1 g) = 1.28 W/kg**  
Maximum value of SAR (measured) = 1.66 W/kg



# RF Exposure Lab

## Plot 10

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: UMTS (WCDMA); Frequency: 1852.4 MHz; Duty Cycle: 1:1  
Medium: MSL1900; Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.44$  S/m;  $\epsilon_r = 52.03$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 6/1/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3693; ConvF(7.54, 7.54, 7.54); Calibrated: 8/18/2017;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 2 UMTS/Side A Ant 0 Low/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.38 W/kg

**Band 2 UMTS/Side A Ant 0 Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

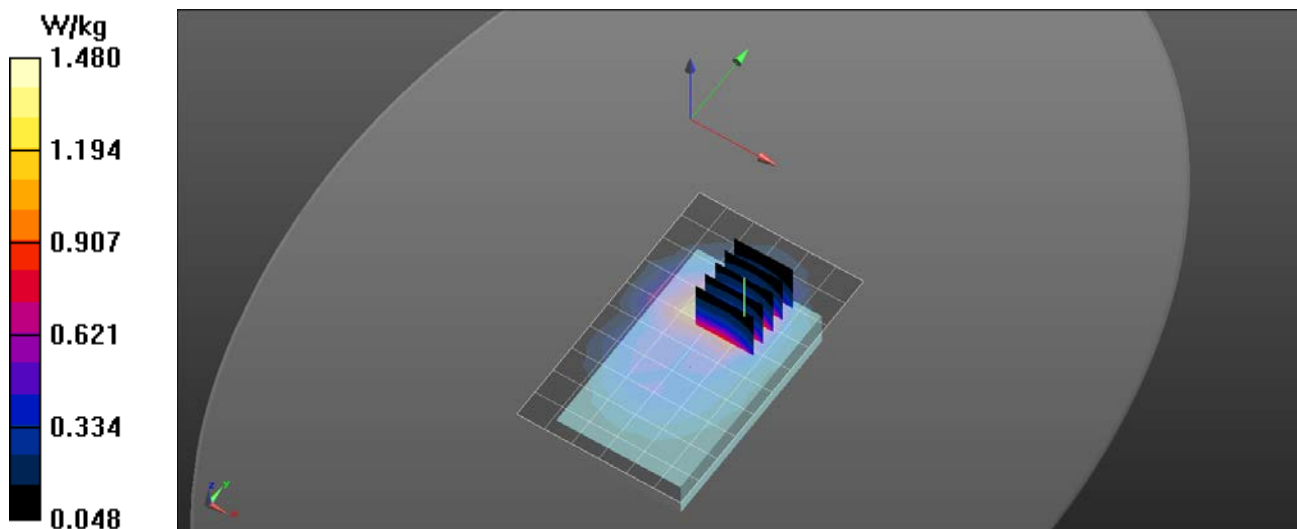
Reference Value = 15.81 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.83 W/kg

**SAR(1 g) = 1.11 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.48 W/kg



# RF Exposure Lab

## Plot 11

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium: MSL1900; Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.47$  S/m;  $\epsilon_r = 52.07$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 5/31/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3693; ConvF(7.54, 7.54, 7.54); Calibrated: 8/18/2017;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 2 LTE/Side A 1 RB 49 Offset Ant 0 High/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.04 W/kg

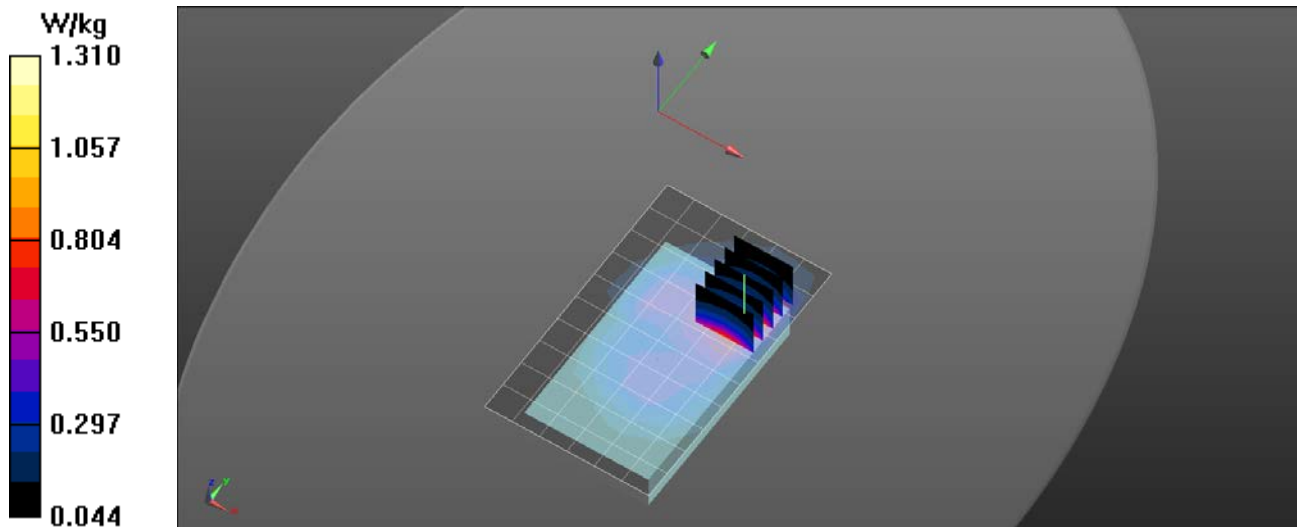
**Band 2 LTE/Side A 1 RB 49 Offset Ant 0 High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.79 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.63 W/kg

**SAR(1 g) = 0.948 W/kg**

Maximum value of SAR (measured) = 1.31 W/kg



# RF Exposure Lab

## Plot 12

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 1860 MHz; Duty Cycle: 1:1  
Medium: MSL1900; Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.54$  S/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 2/27/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(7.61, 7.61, 7.61); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 25 LTE/Side A 1 RB 49 Offset Ant 0 Low/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.99 W/kg

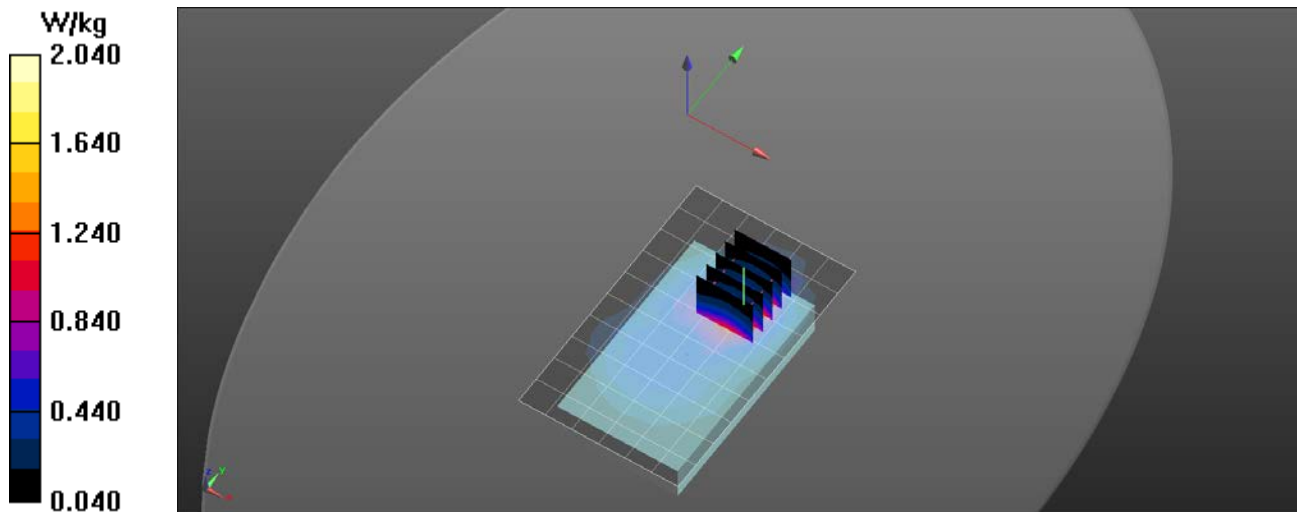
**Band 25 LTE/Side A 1 RB 49 Offset Ant 0 Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.67 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 2.58 W/kg

**SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.615 W/kg**

Maximum value of SAR (measured) = 2.04 W/kg



# RF Exposure Lab

## Plot 13

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 10 MHz, QPSK); Frequency: 2310 MHz; Duty Cycle: 1:1  
Medium: MSL2300; Medium parameters used:  $f = 2310$  MHz;  $\sigma = 1.85$  S/m;  $\epsilon_r = 52.61$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 2/14/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(7.33, 7.33, 7.33); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 30 LTE/Side A 1 RB 24 Offset Ant 2 Mid/Area Scan (10x16x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 1.05 W/kg

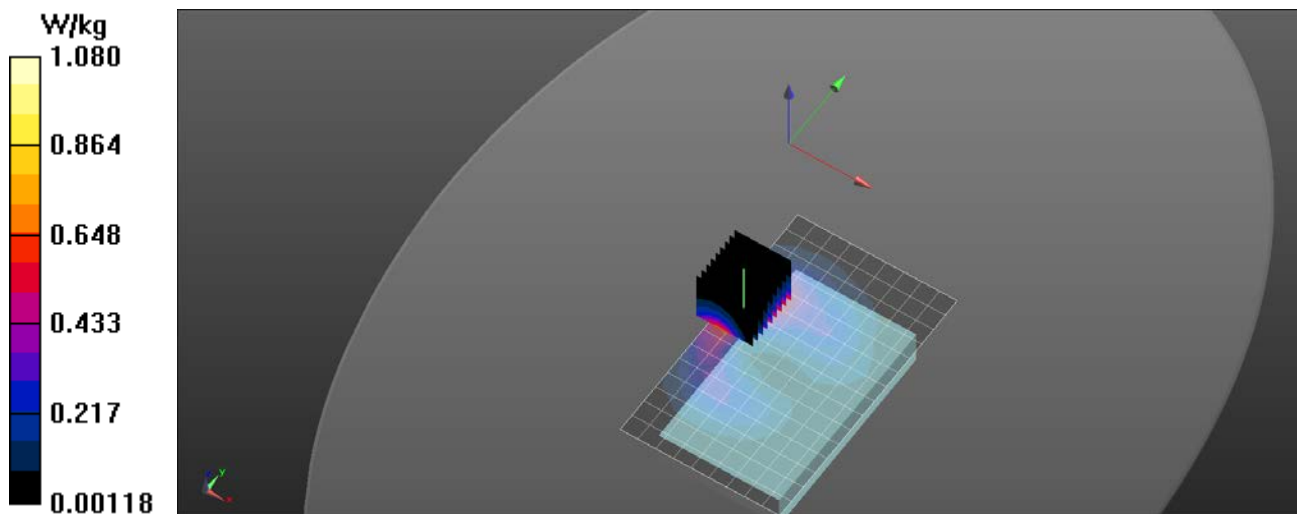
**Band 30 LTE/Side A 1 RB 24 Offset Ant 2 Mid/Zoom Scan (9x9x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=4mm

Reference Value = 4.858 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.41 W/kg

**SAR(1 g) = 0.742 W/kg; SAR(10 g) = 0.374 W/kg**

Maximum value of SAR (measured) = 1.08 W/kg



# RF Exposure Lab

## Plot 14

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2390 MHz; Duty Cycle: 1:8.33681  
Medium: MSL2300; Medium parameters used (extrapolated):  $f = 2390$  MHz;  $\sigma = 1.92$  S/m;  $\epsilon_r = 52.47$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 2/14/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(7.33, 7.33, 7.33); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 40 LTE/Side A 1 RB 49 Offset Ant 2 High/Area Scan (10x16x1):** Measurement grid: dx=10mm, dy=10mm

[Info: Extrapolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.48 W/kg

**Band 40 LTE/Side A 1 RB 49 Offset Ant 2 High/Zoom Scan (9x9x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=4mm

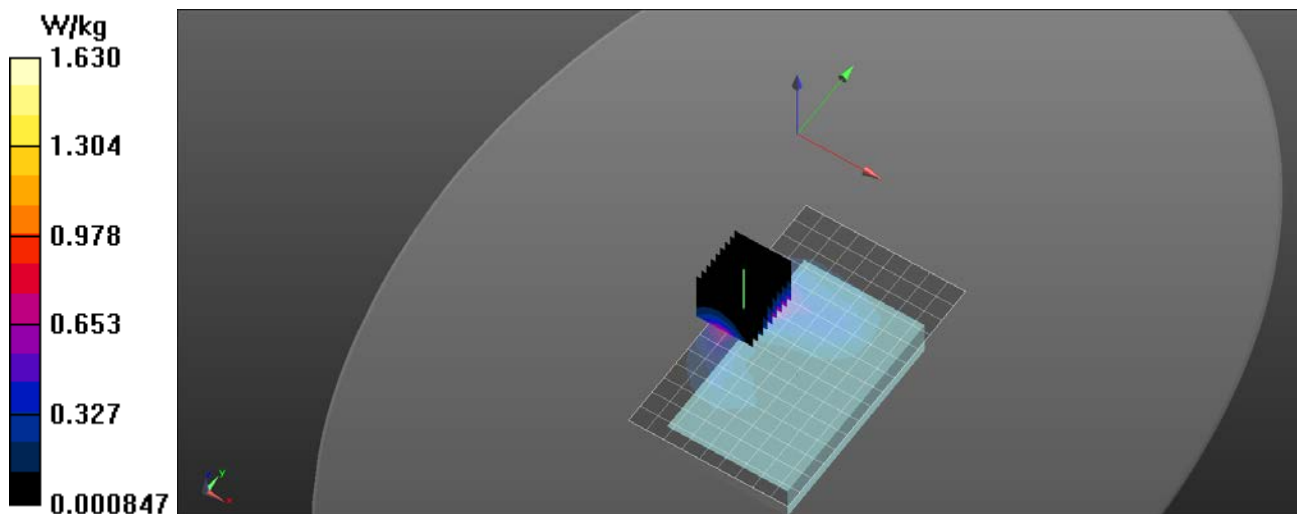
Reference Value = 6.025 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.20 W/kg

**SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.482 W/kg**

[Info: Extrapolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.63 W/kg



# RF Exposure Lab

## Plot 15

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2535 MHz; Duty Cycle: 1:1  
Medium: MSL2550; Medium parameters used (interpolated):  $f = 2535$  MHz;  $\sigma = 2.1$  S/m;  $\epsilon_r = 52.495$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 7/9/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(7.15, 7.15, 7.15); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 7 LTE Final/Side A 50 RB 24 Offset Ant 2 Mid/Area Scan (10x16x1):** Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.92 W/kg

**Band 7 LTE Final/Side A 50 RB 24 Offset Ant 2 Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

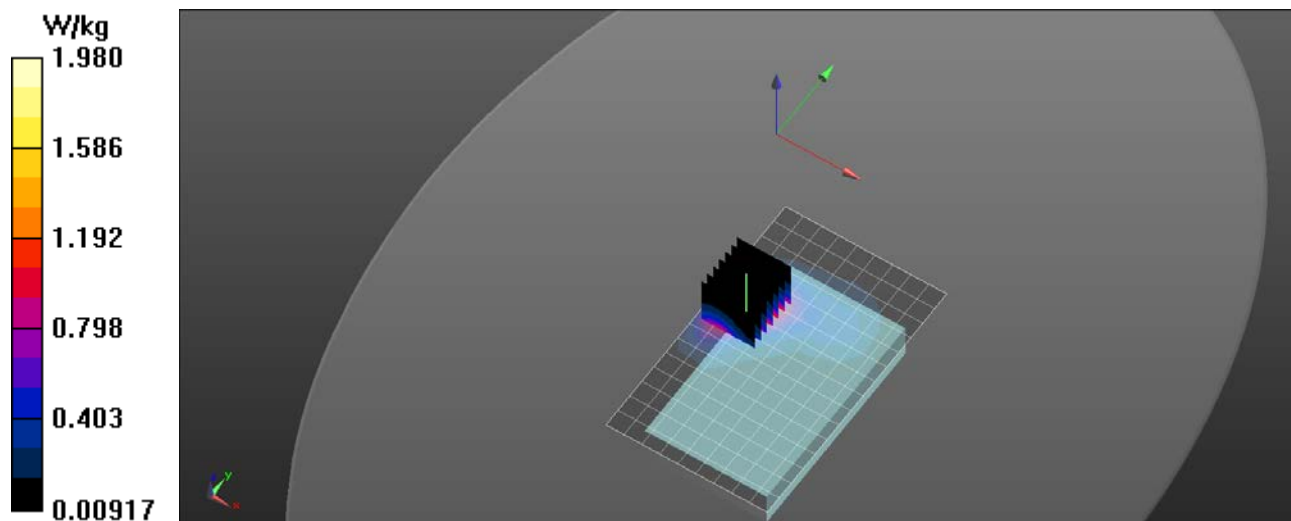
Reference Value = 6.825 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.62 W/kg

**SAR(1 g) = 1.31 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.98 W/kg



# RF Exposure Lab

## Plot 16

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2593 MHz; Duty Cycle: 1:8.33681  
Medium: MSL2550; Medium parameters used (interpolated):  $f = 2593$  MHz;  $\sigma = 2.186$  S/m;  $\epsilon_r = 52.097$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 2/25/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(7.15, 7.15, 7.15); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 41 LTE/Side A 1 RB 49 Offset Ant 2 Mid/Area Scan (10x16x1):** Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.05 W/kg

**Band 41 LTE/Side A 1 RB 49 Offset Ant 2 Mid/Zoom Scan (9x9x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=4mm

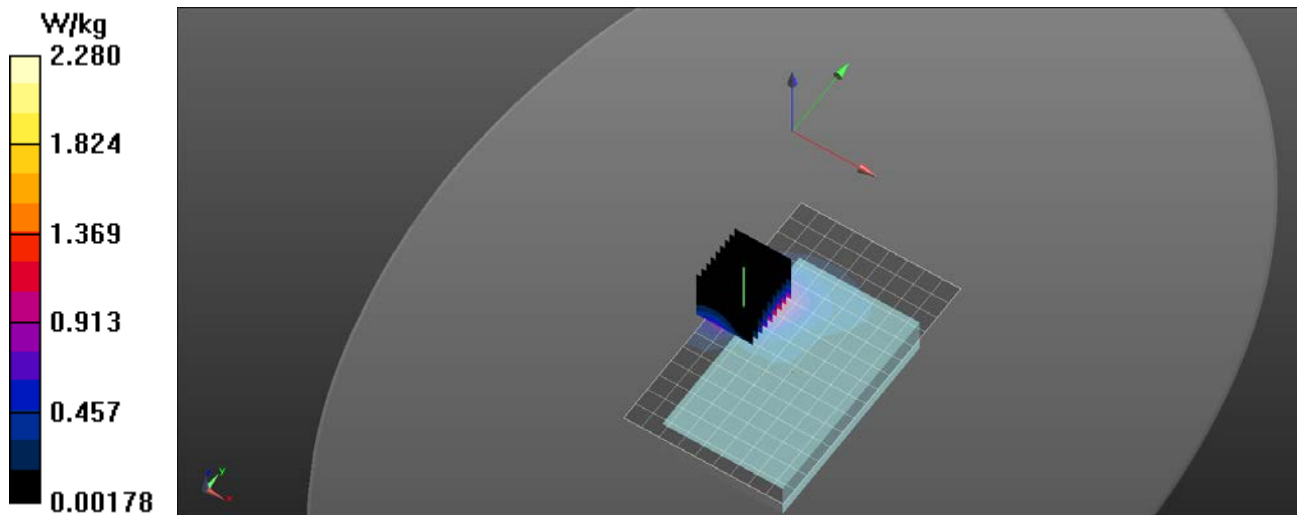
Reference Value = 8.500 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.24 W/kg

**SAR(1 g) = 1.20 W/kg; SAR(10 g) = 0.575 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.28 W/kg



# RF Exposure Lab

## Plot 17

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 3500 MHz; Duty Cycle: 1:8.33681  
Medium: MSL 3-6 GHz; Medium parameters used:  $f = 3500$  MHz;  $\sigma = 3.34$  S/m;  $\epsilon_r = 51.11$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 2/25/2019; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(7, 7, 7); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 42 LTE/Side A 1 RB 49 Offset Ant 2 Mid/Area Scan (10x16x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 0.590 W/kg

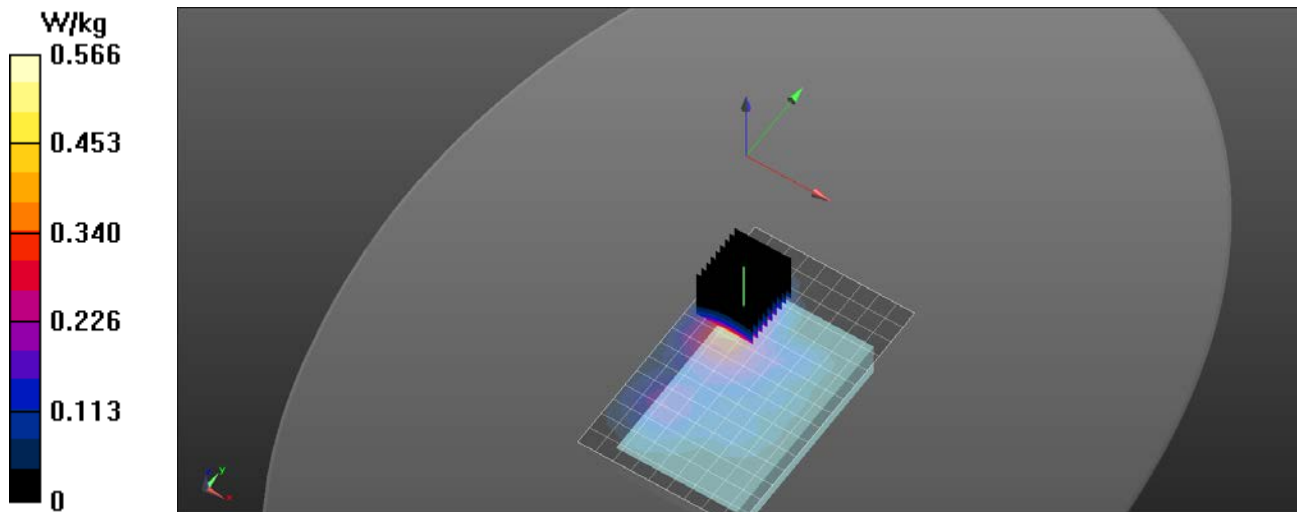
**Band 42 LTE/Side A 1 RB 49 Offset Ant 2 Mid/Zoom Scan (9x9x9)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=4mm

Reference Value = 6.230 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.895 W/kg

**SAR(1 g) = 0.331 W/kg; SAR(10 g) = 0.137 W/kg**

Maximum value of SAR (measured) = 0.566 W/kg



# RF Exposure Lab

## Plot 18

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 3625 MHz; Duty Cycle: 1:1  
Medium: MSL 3-6 GHz; Medium parameters used (interpolated):  $f = 3625$  MHz;  $\sigma = 3.485$  S/m;  $\epsilon_r = 51.045$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 6/11/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(6.71, 6.71, 6.71); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**Band 48 LTE/Side A 1 RB 49 Offset Ant 4 Mid2/Area Scan (10x16x1):** Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.516 W/kg

**Band 48 LTE/Side A 1 RB 49 Offset Ant 4 Mid2/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=4mm

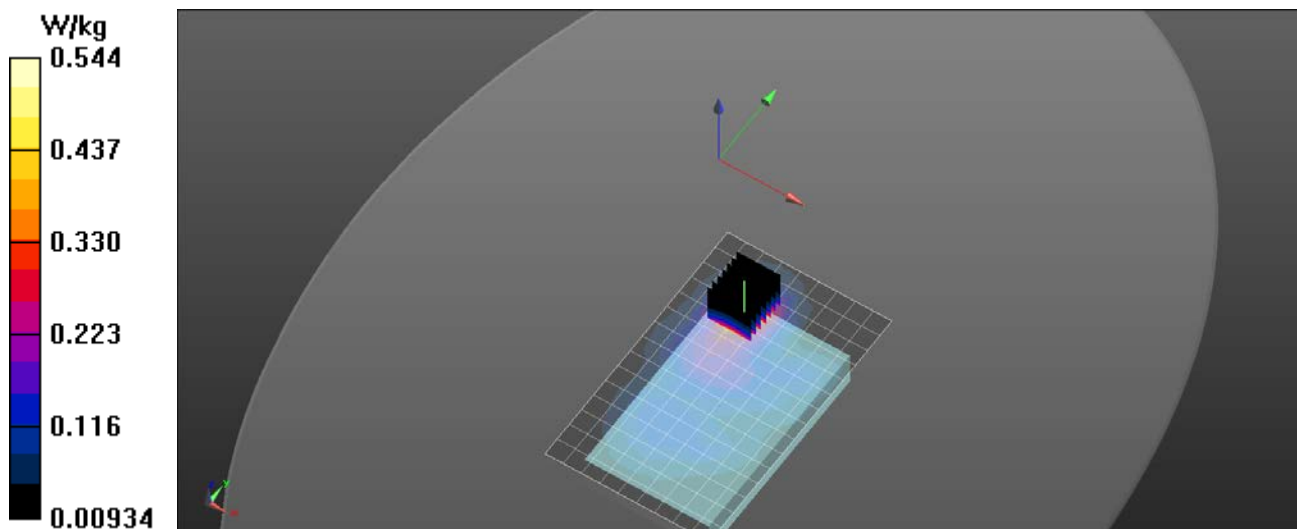
Reference Value = 5.811 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.836 W/kg

**SAR(1 g) = 0.319 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.544 W/kg



# RF Exposure Lab

## Plot 19

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: WiFi 802.11b (DSSS, 11 Mbps); Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: MSL2450; Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.907$  S/m;  $\epsilon_r = 52.796$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 7/2/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(7.29, 7.29, 7.29); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**2450 MHz/Side A Ant 1Mid/Area Scan (10x16x1):** Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.343 W/kg

**2450 MHz/Side A Ant 1Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

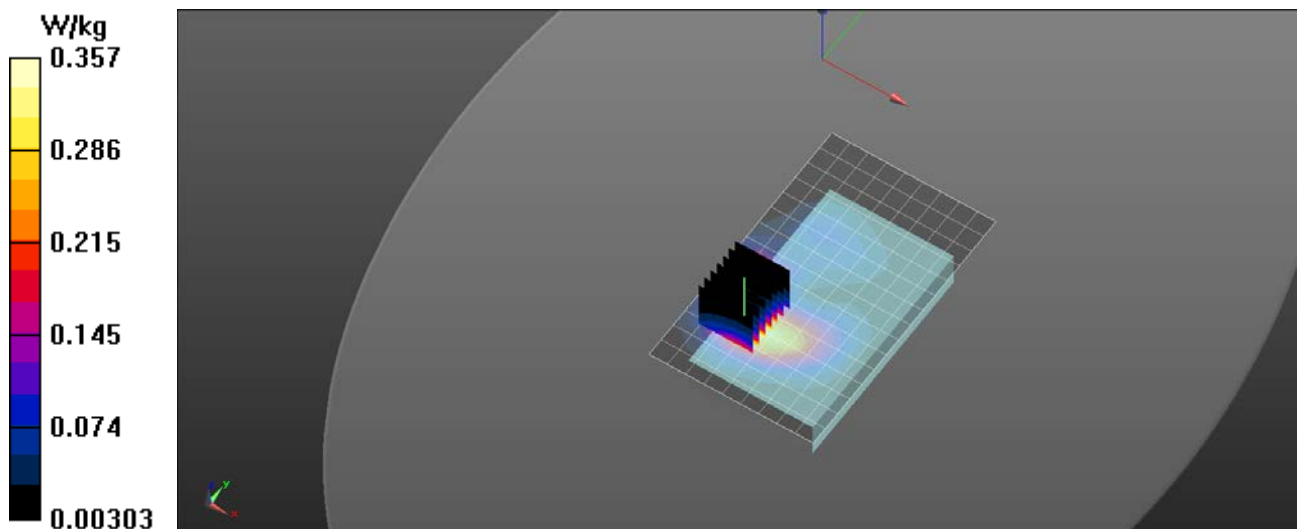
Reference Value = 3.066 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.471 W/kg

**SAR(1 g) = 0.257 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.357 W/kg



# RF Exposure Lab

## Plot 20

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: WiFi 802.11a (OFDM, 6 Mbps); Frequency: 5200 MHz; Duty Cycle: 1:1  
Medium: MSL 3-6 GHz; Medium parameters used:  $f = 5200 \text{ MHz}$ ;  $\sigma = 5.27 \text{ S/m}$ ;  $\epsilon_r = 49.11$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

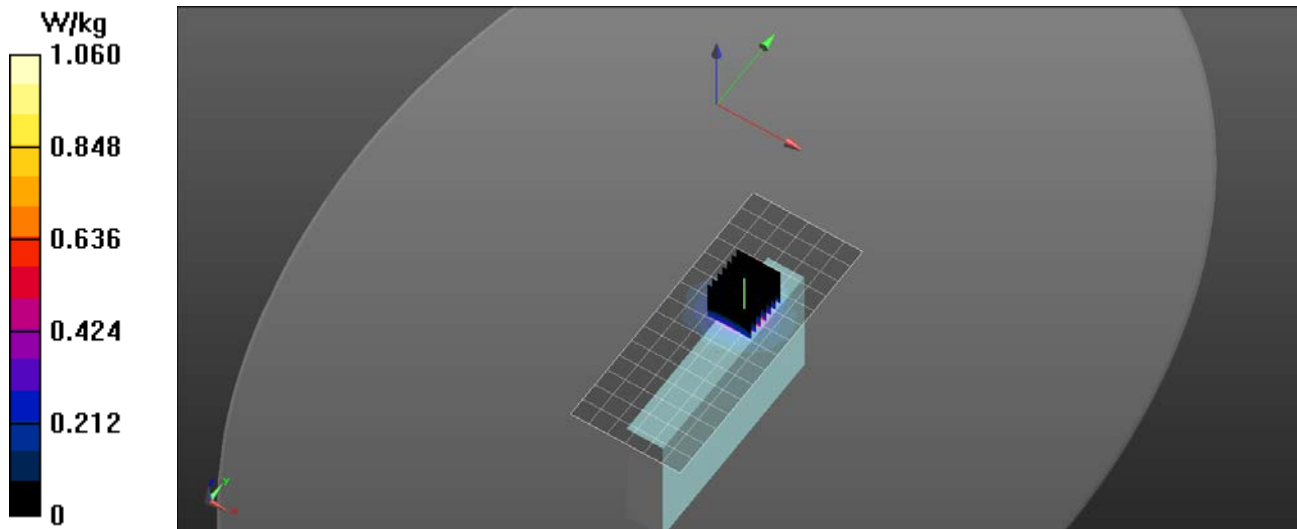
Test Date: Date: 6/28/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(4.46, 4.46, 4.46); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**5200 MHz/Side B Ant 0 40/Area Scan (7x16x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$   
Maximum value of SAR (measured) = 0.942 W/kg

**5200 MHz/Side B Ant 0 40/Zoom Scan (7x7x12)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=2\text{mm}$   
Reference Value = 4.305 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 2.10 W/kg  
**SAR(1 g) = 0.547 W/kg**  
Maximum value of SAR (measured) = 1.06 W/kg



# RF Exposure Lab

## Plot 21

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: WiFi 802.11a (OFDM, 6 Mbps); Frequency: 5785 MHz; Duty Cycle: 1:1  
Medium: MSL 3-6 GHz; Medium parameters used (interpolated):  $f = 5785$  MHz;  $\sigma = 5.975$  S/m;  $\epsilon_r = 48.193$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 6/28/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3662; ConvF(4.08, 4.08, 4.08); Calibrated: 4/20/2018;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1321; Calibrated: 1/10/2018  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 2037  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

**5800 MHz/Side B Ant 0 157/Area Scan (7x16x1):** Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.35 W/kg

**5800 MHz/Side B Ant 0 157/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

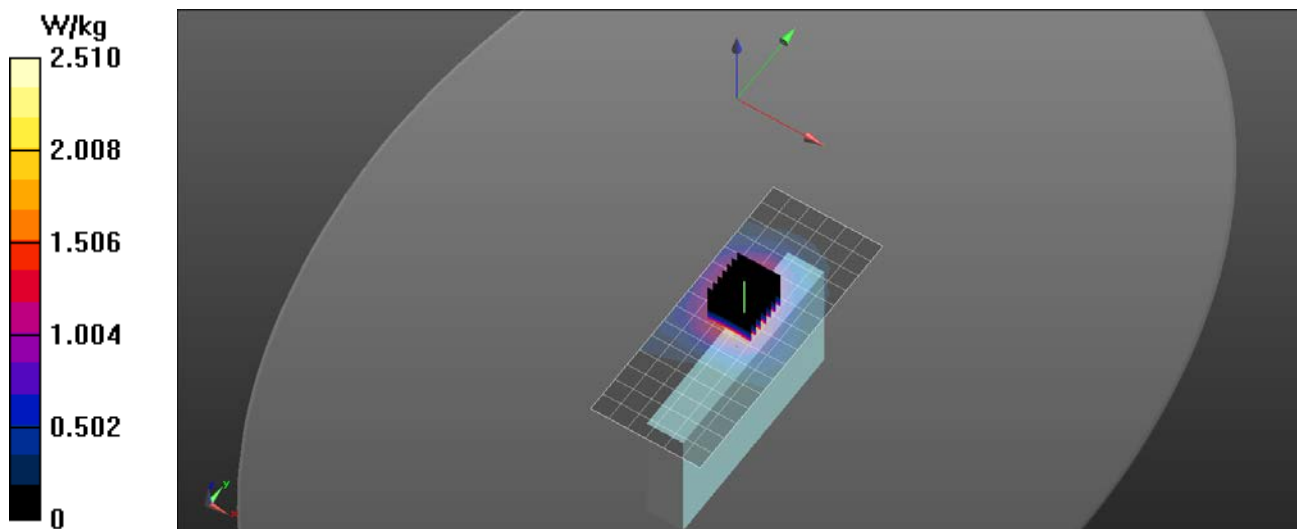
Reference Value = 13.25 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 5.62 W/kg

**SAR(1 g) = 1.36 W/kg**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 2.51 W/kg



# RF Exposure Lab

## Plot 22

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium: MSL1900; Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.57$  S/m;  $\epsilon_r = 51.05$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Communication System: LTE (SC-FDMA, 1 RB, 10 MHz, QPSK); Frequency: 782 MHz; Duty Cycle: 1:1  
Medium: MSL750; Medium parameters used (interpolated):  $f = 782$  MHz;  $\sigma = 0.926$  S/m;  $\epsilon_r = 41.412$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Test Date: Date: 7/26/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

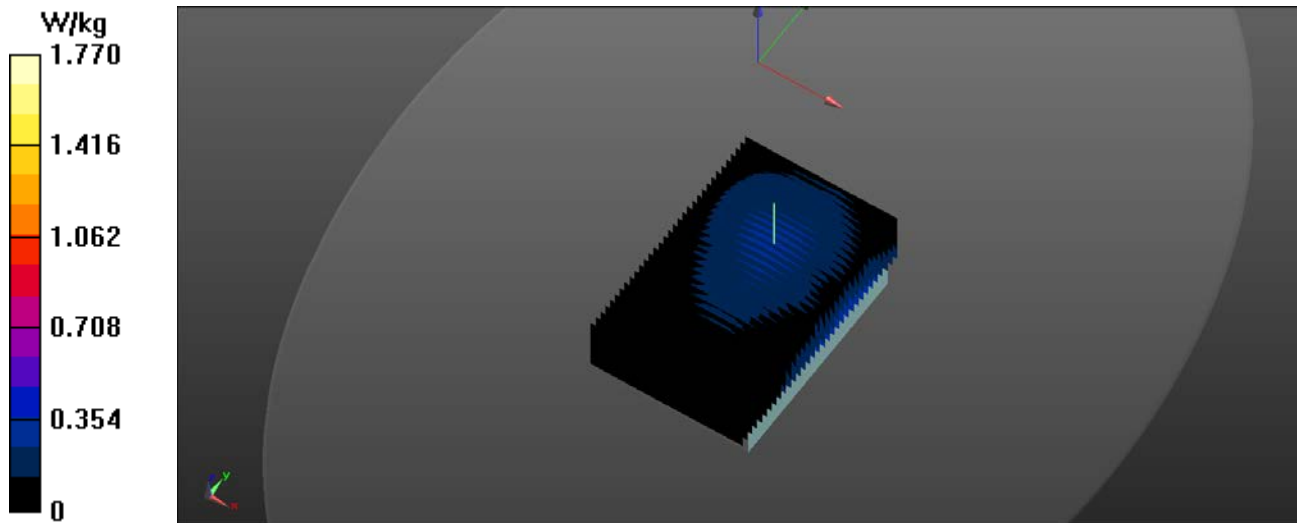
Probe: EX3DV4 - SN3693; ConvF(9.55, 9.55, 9.55); Calibrated: 8/18/2017;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn759; Calibrated: 8/21/2017  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 1251  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

#### Multi Band Result:

**SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.788 W/kg**

Maximum value of SAR (interpolated) = 1.77 W/kg



# RF Exposure Lab

## Plot 23

**DUT: MIFI8000; Type: Hotspot; Serial: 67**

Communication System: LTE (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 1720 MHz; Duty Cycle: 1:1  
Medium: MSL1750; Medium parameters used (interpolated):  $f = 1720$  MHz;  $\sigma = 1.444$  S/m;  $\epsilon_r = 53.316$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

Communication System: LTE (SC-FDMA, 1 RB, 10 MHz, QPSK); Frequency: 782 MHz; Duty Cycle: 1:1  
Medium: MSL750; Medium parameters used (interpolated):  $f = 782$  MHz;  $\sigma = 0.926$  S/m;  $\epsilon_r = 41.412$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

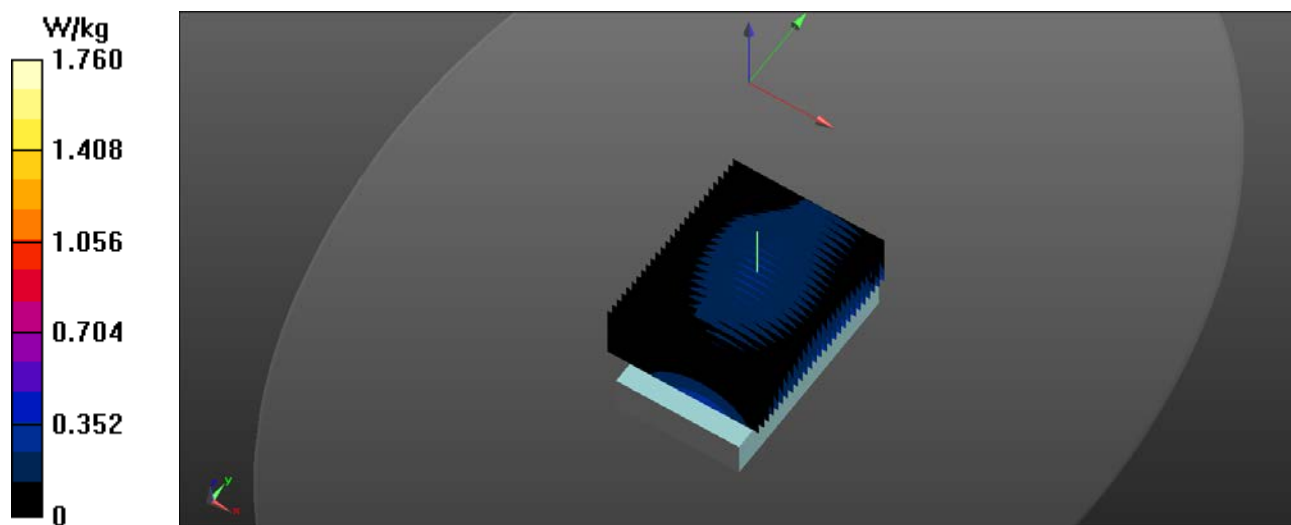
Test Date: Date: 7/26/2018; Ambient Temp: 23 °C; Tissue Temp: 21 °C

Probe: EX3DV4 - SN3693; ConvF(9.55, 9.55, 9.55); Calibrated: 8/18/2017;  
Sensor-Surface: 2mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn759; Calibrated: 8/21/2017  
Phantom: ELI v5.0; Type: QDOVA002AA; Serial: 1251  
Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

### Procedure Notes:

#### Multi Band Result:

**SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.702 W/kg**  
Maximum value of SAR (interpolated) = 1.76 W/kg



## **Appendix C – SAR Test Setup Photos**

















## **Appendix D – Probe Calibration Data Sheets**

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**Calibration Laboratory of**  
**Schmid & Partner**  
**Engineering AG**  
 Zeughausstrasse 43, 8004 Zurich, Switzerland



**S** Schweizerischer Kalibrierdienst  
**C** Service suisse d'étalonnage  
**S** Servizio svizzero di taratura  
 Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 0108**

The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

Client **RF Exposure Lab**

Certificate No: **EX3-3662\_Apr18**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:3662**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6**  
**Calibration procedure for dosimetric E-field probes**

Calibration date: **April 20, 2018**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature ( $22 \pm 3$ )°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|----------------------------|------------------|-----------------------------------|------------------------|
| Power meter NRP            | SN: 104778       | 04-Apr-18 (No. 217-02672/02673)   | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103244       | 04-Apr-18 (No. 217-02672)         | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103245       | 04-Apr-18 (No. 217-02673)         | Apr-19                 |
| Reference 20 dB Attenuator | SN: S5277 (20x)  | 04-Apr-18 (No. 217-02682)         | Apr-19                 |
| Reference Probe ES3DV2     | SN: 3013         | 30-Dec-17 (No. ES3-3013_Dec17)    | Dec-18                 |
| DAE4                       | SN: 660          | 21-Dec-17 (No. DAE4-660_Dec17)    | Dec-18                 |
| Secondary Standards        | ID               | Check Date (in house)             | Scheduled Check        |
| Power meter E4419B         | SN: GB41293874   | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| Power sensor E4412A        | SN: MY41498087   | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| Power sensor E4412A        | SN: 000110210    | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| RF generator HP 8648C      | SN: US3642U01700 | 04-Aug-99 (in house check Jun-16) | In house check: Jun-18 |
| Network Analyzer HP 8753E  | SN: US37390585   | 18-Oct-01 (in house check Oct-17) | In house check: Oct-18 |

|                                                                                                                 |                              |                                          |                        |
|-----------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------------|------------------------|
| Calibrated by:                                                                                                  | Name<br><b>Leif Klysner</b>  | Function<br><b>Laboratory Technician</b> | Signature<br>          |
| Approved by:                                                                                                    | Name<br><b>Katja Pokovic</b> | Function<br><b>Technical Manager</b>     | Signature<br>          |
|                                                                                                                 |                              |                                          | Issued: April 20, 2018 |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. |                              |                                          |                        |



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Accreditation No.: **SCS 0108**

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Multilateral Agreement for the recognition of calibration certificates

### Glossary:

|                          |                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| TSL                      | tissue simulating liquid                                                                                                                                |
| NORM <sub>x,y,z</sub>    | sensitivity in free space                                                                                                                               |
| ConvF                    | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                              |
| DCP                      | diode compression point                                                                                                                                 |
| CF                       | crest factor (1/duty_cycle) of the RF signal                                                                                                            |
| A, B, C, D               | modulation dependent linearization parameters                                                                                                           |
| Polarization $\phi$      | $\phi$ rotation around probe axis                                                                                                                       |
| Polarization $\vartheta$ | $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center),<br>i.e., $\vartheta = 0$ is normal to probe axis |
| Connector Angle          | information used in DASY system to align probe sensor X to the robot coordinate system                                                                  |

### Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Methods Applied and Interpretation of Parameters:

- NORM<sub>x,y,z</sub>**: Assessed for E-field polarization  $\vartheta = 0$  ( $f \leq 900$  MHz in TEM-cell;  $f > 1800$  MHz: R22 waveguide). NORM<sub>x,y,z</sub> are only intermediate values, i.e., the uncertainties of NORM<sub>x,y,z</sub> does not affect the E<sup>2</sup>-field uncertainty inside TSL (see below *ConvF*).
- NORM(f)<sub>x,y,z</sub>** = NORM<sub>x,y,z</sub> \* *frequency\_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- DCP<sub>x,y,z</sub>**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>**: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for  $f \leq 800$  MHz) and inside waveguide using analytical field distributions based on power measurements for  $f > 800$  MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM<sub>x,y,z</sub> \* *ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from  $\pm 50$  MHz to  $\pm 100$  MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle**: The angle is assessed using the information gained by determining the NORM<sub>x</sub> (no uncertainty required).

# Probe EX3DV4

## SN:3662

Manufactured: October 20, 2008  
Calibrated: April 20, 2018

Calibrated for DASY/EASY Systems  
(Note: non-compatible with DASY2 system!)

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3662

### Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2) |
|-----------------------------------------------------------|----------|----------|----------|-----------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.44     | 0.45     | 0.48     | ± 10.1 %  |
| DCP (mV) <sup>B</sup>                                     | 102.6    | 97.6     | 96.4     |           |

### Modulation Calibration Parameters

| UID | Communication System Name |   | A<br>dB | B<br>dB/ $\mu\text{V}$ | C   | D<br>dB | VR<br>mV | Unc <sup>E</sup><br>(k=2) |
|-----|---------------------------|---|---------|------------------------|-----|---------|----------|---------------------------|
| 0   | CW                        | X | 0.0     | 0.0                    | 1.0 | 0.00    | 136.8    | ±3.3 %                    |
|     |                           | Y | 0.0     | 0.0                    | 1.0 |         | 132.2    |                           |
|     |                           | Z | 0.0     | 0.0                    | 1.0 |         | 148.8    |                           |

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3662

### Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 41.9                               | 0.89                            | 9.80    | 9.80    | 9.80    | 0.43               | 0.90                    | ± 12.0 %  |
| 900                  | 41.5                               | 0.97                            | 9.29    | 9.29    | 9.29    | 0.40               | 0.91                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 8.29    | 8.29    | 8.29    | 0.29               | 0.84                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 8.01    | 8.01    | 8.01    | 0.37               | 0.80                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 7.71    | 7.71    | 7.71    | 0.35               | 0.80                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 7.39    | 7.39    | 7.39    | 0.28               | 0.91                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 7.14    | 7.14    | 7.14    | 0.36               | 0.85                    | ± 12.0 %  |
| 3500                 | 37.9                               | 2.91                            | 7.08    | 7.08    | 7.08    | 0.25               | 1.20                    | ± 13.1 %  |
| 3700                 | 37.7                               | 3.12                            | 6.99    | 6.99    | 6.99    | 0.25               | 1.20                    | ± 13.1 %  |
| 5250                 | 35.9                               | 4.71                            | 5.04    | 5.04    | 5.04    | 0.35               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 4.81    | 4.81    | 4.81    | 0.40               | 1.80                    | ± 13.1 %  |
| 5750                 | 35.4                               | 5.22                            | 4.89    | 4.89    | 4.89    | 0.40               | 1.80                    | ± 13.1 %  |

<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3662

### Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 55.5                               | 0.96                            | 9.62    | 9.62    | 9.62    | 0.37               | 0.98                    | ± 12.0 %  |
| 900                  | 55.0                               | 1.05                            | 9.21    | 9.21    | 9.21    | 0.44               | 0.84                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 7.96    | 7.96    | 7.96    | 0.45               | 0.80                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 7.61    | 7.61    | 7.61    | 0.44               | 0.80                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 7.33    | 7.33    | 7.33    | 0.41               | 0.80                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.29    | 7.29    | 7.29    | 0.36               | 0.87                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.15    | 7.15    | 7.15    | 0.26               | 0.99                    | ± 12.0 %  |
| 3500                 | 51.3                               | 3.31                            | 7.00    | 7.00    | 7.00    | 0.25               | 1.20                    | ± 13.1 %  |
| 3700                 | 51.0                               | 3.55                            | 6.71    | 6.71    | 6.71    | 0.23               | 1.20                    | ± 13.1 %  |
| 5250                 | 48.9                               | 5.36                            | 4.46    | 4.46    | 4.46    | 0.45               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 3.91    | 3.91    | 3.91    | 0.50               | 1.90                    | ± 13.1 %  |
| 5750                 | 48.3                               | 5.94                            | 4.08    | 4.08    | 4.08    | 0.50               | 1.90                    | ± 13.1 %  |

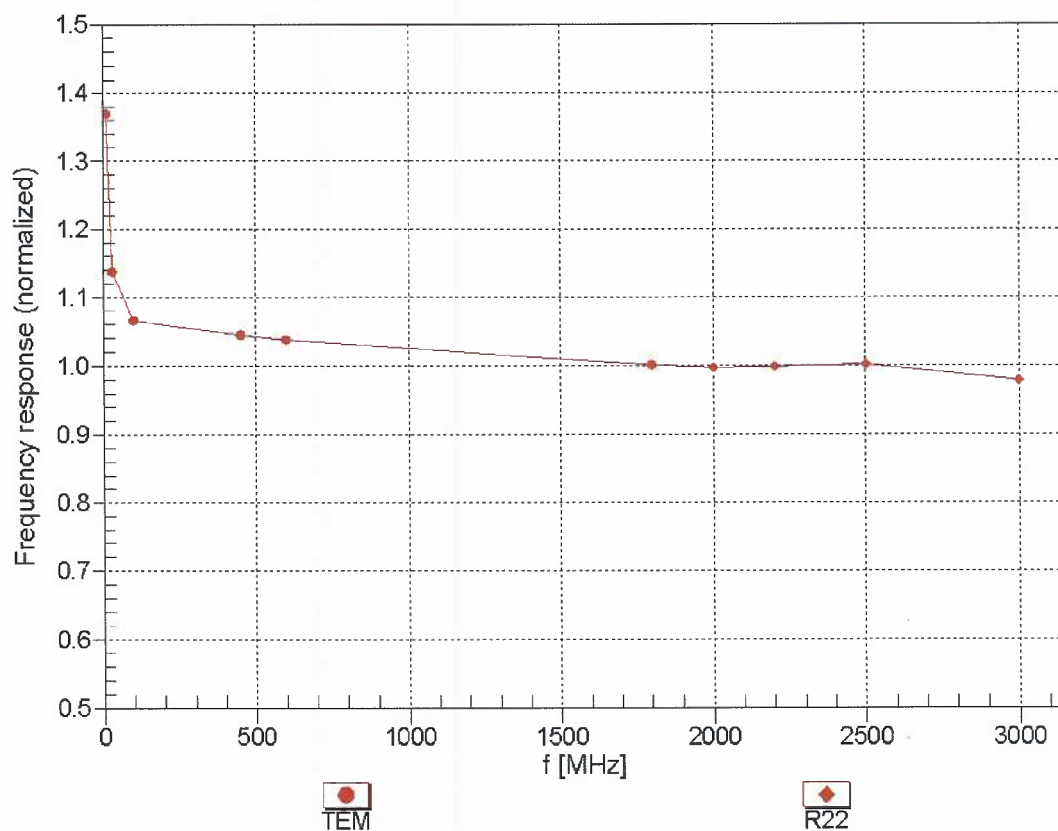
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## Frequency Response of E-Field

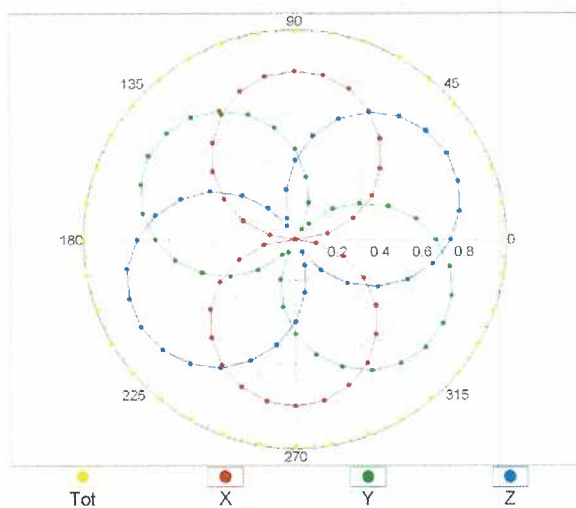
(TEM-Cell:ifi110 EXX, Waveguide: R22)



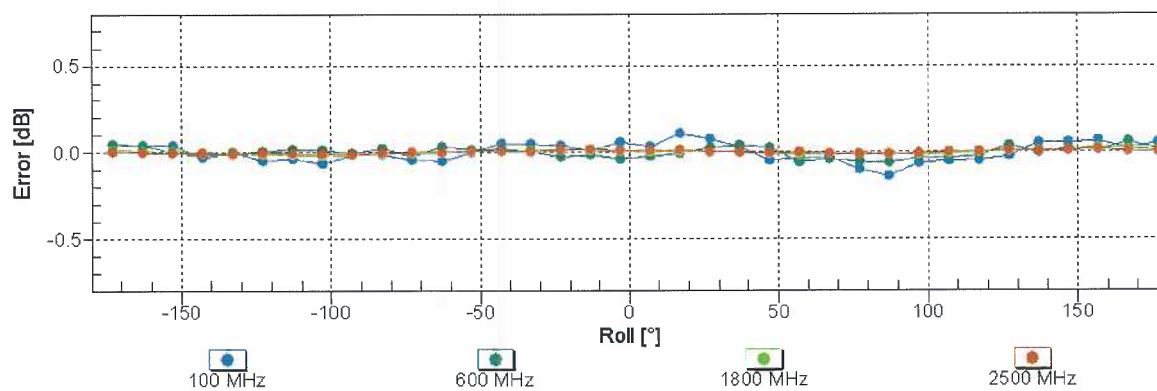
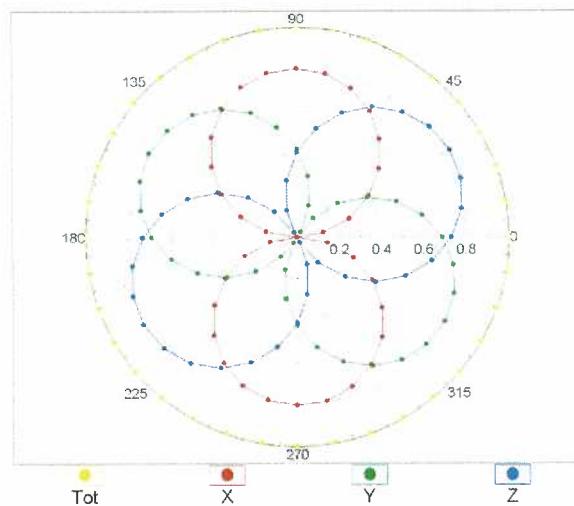
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

## Receiving Pattern ( $\phi$ ), $\theta = 0^\circ$

f=600 MHz,TEM

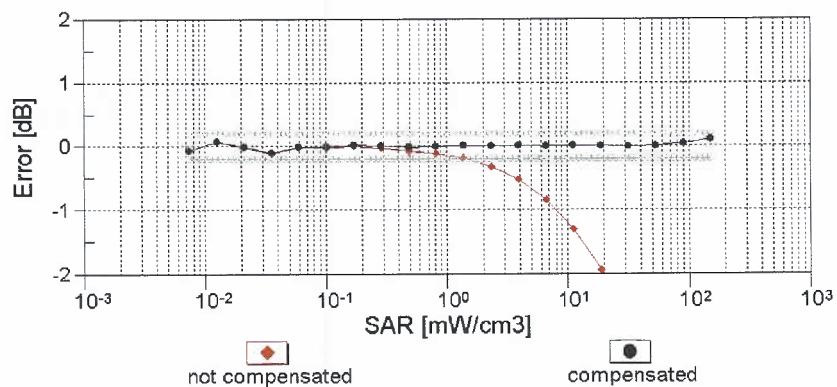
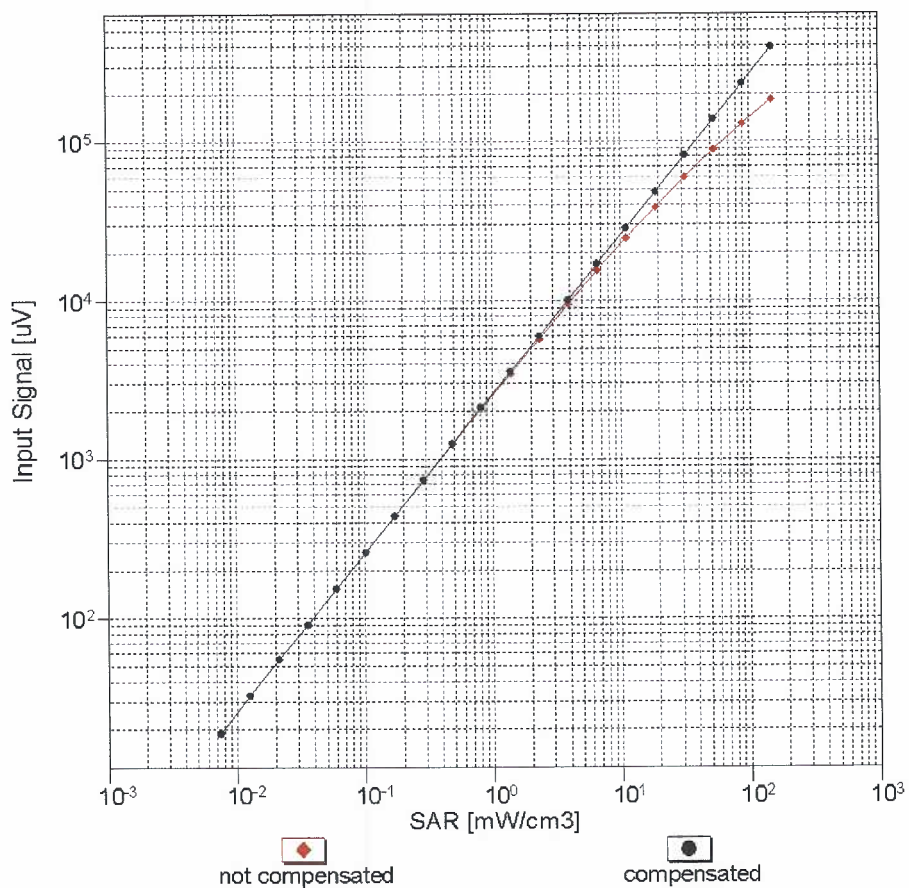


f=1800 MHz,R22



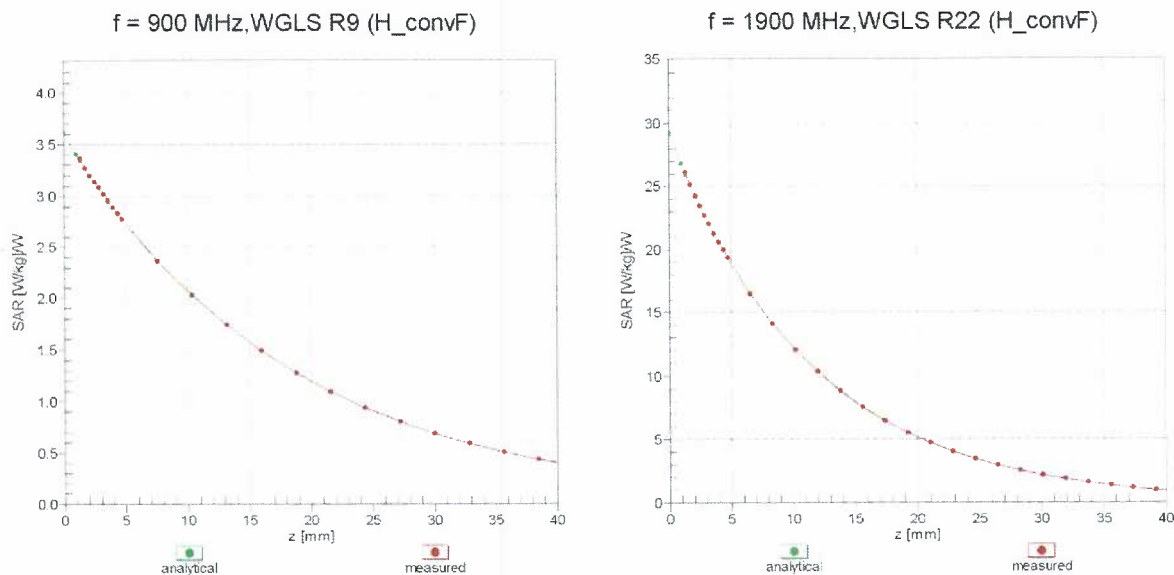
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

# Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell , $f_{\text{eval}} = 1900 \text{ MHz}$ )



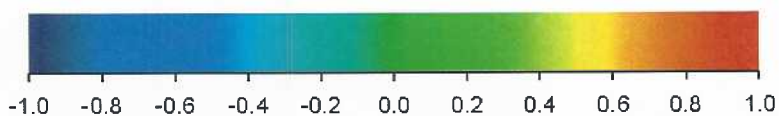
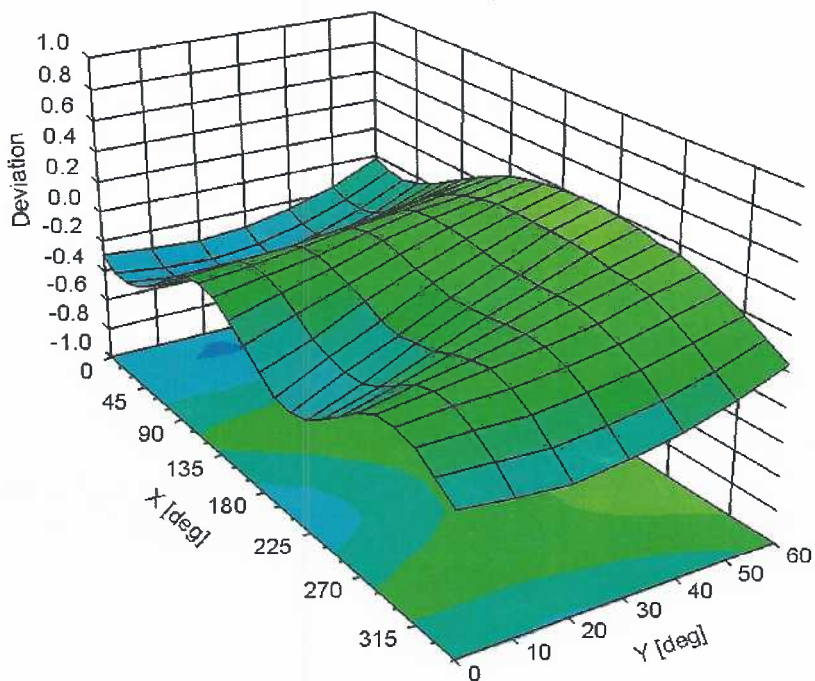
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

Error ( $\phi, \vartheta$ ),  $f = 900 \text{ MHz}$



Uncertainty of Spherical Isotropy Assessment:  $\pm 2.6\%$  ( $k=2$ )

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3662

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | -22.9      |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 9 mm       |
| Tip Diameter                                  | 2.5 mm     |
| Probe Tip to Sensor X Calibration Point       | 1 mm       |
| Probe Tip to Sensor Y Calibration Point       | 1 mm       |
| Probe Tip to Sensor Z Calibration Point       | 1 mm       |
| Recommended Measurement Distance from Surface | 1.4 mm     |

*gm*

**Calibration Laboratory of**  
**Schmid & Partner**  
**Engineering AG**  
 Zeughausstrasse 43, 8004 Zurich, Switzerland



**S** Schweizerischer Kalibrierdienst  
**C** Service suisse d'étalonnage  
**S** Servizio svizzero di taratura  
**S** Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)  
 The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **RF Exposure Lab**

Certificate No: **EX3-3693\_Aug17**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:3693**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-12.v9, QA CAL-14.v4, QA CAL-23.v5,  
 QA CAL-25.v6  
 Calibration procedure for dosimetric E-field probes**

Calibration date: **August 18, 2017**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature ( $22 \pm 3$ )°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|----------------------------|------------------|-----------------------------------|------------------------|
| Power meter NRP            | SN: 104778       | 04-Apr-17 (No. 217-02521/02522)   | Apr-18                 |
| Power sensor NRP-Z91       | SN: 103244       | 04-Apr-17 (No. 217-02521)         | Apr-18                 |
| Power sensor NRP-Z91       | SN: 103245       | 04-Apr-17 (No. 217-02525)         | Apr-18                 |
| Reference 20 dB Attenuator | SN: S5277 (20x)  | 07-Apr-17 (No. 217-02528)         | Apr-18                 |
| Reference Probe ES3DV2     | SN: 3013         | 31-Dec-16 (No. ES3-3013_Dec16)    | Dec-17                 |
| DAE4                       | SN: 660          | 7-Dec-16 (No. DAE4-660_Dec16)     | Dec-17                 |
| Secondary Standards        | ID               | Check Date (in house)             | Scheduled Check        |
| Power meter E4419B         | SN: GB41293874   | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| Power sensor E4412A        | SN: MY41498087   | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| Power sensor E4412A        | SN: 000110210    | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| RF generator HP 8648C      | SN: US3642U01700 | 04-Aug-99 (in house check Jun-16) | In house check: Jun-18 |
| Network Analyzer HP 8753E  | SN: US37390585   | 18-Oct-01 (in house check Oct-16) | In house check: Oct-17 |

|                                                                                                                 |                               |                                          |                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------|
| Calibrated by:                                                                                                  | Name<br><b>Jeton Kastrati</b> | Function<br><b>Laboratory Technician</b> | Signature<br> |
| Approved by:                                                                                                    | Name<br><b>Katja Pokovic</b>  | Function<br><b>Technical Manager</b>     | Signature<br> |
|                                                                                                                 |                               |                                          | Issued: August 22, 2017                                                                            |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. |                               |                                          |                                                                                                    |



Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 0108**

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## Glossary:

|                          |                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
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| NORM <sub>x,y,z</sub>    | sensitivity in free space                                                                                                                               |
| ConvF                    | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                              |
| DCP                      | diode compression point                                                                                                                                 |
| CF                       | crest factor (1/duty_cycle) of the RF signal                                                                                                            |
| A, B, C, D               | modulation dependent linearization parameters                                                                                                           |
| Polarization $\phi$      | $\phi$ rotation around probe axis                                                                                                                       |
| Polarization $\vartheta$ | $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center),<br>i.e., $\vartheta = 0$ is normal to probe axis |
| Connector Angle          | information used in DASY system to align probe sensor X to the robot coordinate system                                                                  |

## Calibration is Performed According to the Following Standards:

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## Methods Applied and Interpretation of Parameters:

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- NORM(f)<sub>x,y,z</sub>** = NORM<sub>x,y,z</sub> \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP<sub>x,y,z</sub>**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>**: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for  $f \leq 800$  MHz) and inside waveguide using analytical field distributions based on power measurements for  $f > 800$  MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM<sub>x,y,z</sub> \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from  $\pm 50$  MHz to  $\pm 100$  MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle**: The angle is assessed using the information gained by determining the NORM<sub>x</sub> (no uncertainty required).

# Probe EX3DV4

## SN:3693

Manufactured: April 22, 2009  
Calibrated: August 18, 2017

Calibrated for DASY/EASY Systems  
(Note: non-compatible with DASY2 system!)

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3693

### Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2) |
|-----------------------------------------------------------|----------|----------|----------|-----------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.39     | 0.32     | 0.35     | ± 10.1 %  |
| DCP (mV) <sup>B</sup>                                     | 95.1     | 97.9     | 107.8    |           |

### Modulation Calibration Parameters

| UID | Communication System Name |   | A<br>dB | B<br>dB/ $\mu\text{V}$ | C   | D<br>dB | VR<br>mV | Unc <sup>E</sup><br>(k=2) |
|-----|---------------------------|---|---------|------------------------|-----|---------|----------|---------------------------|
| 0   | CW                        | X | 0.0     | 0.0                    | 1.0 | 0.00    | 153.2    | ±3.5 %                    |
|     |                           | Y | 0.0     | 0.0                    | 1.0 |         | 144.5    |                           |
|     |                           | Z | 0.0     | 0.0                    | 1.0 |         | 151.4    |                           |

Note: For details on UID parameters see Appendix.

### Sensor Model Parameters

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$\text{V}^{-1}$ | T1<br>$\text{ms} \cdot \text{V}^{-2}$ | T2<br>$\text{ms} \cdot \text{V}^{-1}$ | T3<br>ms | T4<br>$\text{V}^{-2}$ | T5<br>$\text{V}^{-1}$ | T6    |
|---|----------|----------|-----------------------------|---------------------------------------|---------------------------------------|----------|-----------------------|-----------------------|-------|
| X | 33.42    | 257.2    | 37.63                       | 9.549                                 | 1.014                                 | 5.071    | 0                     | 0.481                 | 1.008 |
| Y | 36.13    | 269.4    | 35.53                       | 11.22                                 | 0.702                                 | 5.041    | 0.308                 | 0.41                  | 1.005 |
| Z | 28.36    | 204.6    | 33.61                       | 4.581                                 | 0.465                                 | 5.032    | 0.705                 | 0.298                 | 1.004 |

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k=2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the  $E^2$ -field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3693

### Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 150                  | 52.3                               | 0.76                            | 11.31   | 11.31   | 11.31   | 0.00               | 1.00                    | ± 13.3 %  |
| 220                  | 49.0                               | 0.81                            | 10.54   | 10.54   | 10.54   | 0.00               | 1.00                    | ± 13.3 %  |
| 450                  | 43.5                               | 0.87                            | 9.78    | 9.78    | 9.78    | 0.13               | 1.60                    | ± 13.3 %  |
| 750                  | 41.9                               | 0.89                            | 9.55    | 9.55    | 9.55    | 0.36               | 1.03                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 8.15    | 8.15    | 8.15    | 0.28               | 0.85                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 7.85    | 7.85    | 7.85    | 0.30               | 0.85                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 7.44    | 7.44    | 7.44    | 0.38               | 0.85                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 7.05    | 7.05    | 7.05    | 0.31               | 0.84                    | ± 12.0 %  |
| 5200                 | 36.0                               | 4.66                            | 5.09    | 5.09    | 5.09    | 0.35               | 1.80                    | ± 13.1 %  |
| 5300                 | 35.9                               | 4.76                            | 4.83    | 4.83    | 4.83    | 0.35               | 1.80                    | ± 13.1 %  |
| 5500                 | 35.6                               | 4.96                            | 4.85    | 4.85    | 4.85    | 0.40               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 4.70    | 4.70    | 4.70    | 0.40               | 1.80                    | ± 13.1 %  |
| 5800                 | 35.3                               | 5.27                            | 4.65    | 4.65    | 4.65    | 0.40               | 1.80                    | ± 13.1 %  |

<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3693

### Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 150                  | 61.9                               | 0.80                            | 10.76   | 10.76   | 10.76   | 0.00               | 1.00                    | ± 13.3 %  |
| 220                  | 60.2                               | 0.86                            | 10.08   | 10.08   | 10.08   | 0.00               | 1.00                    | ± 13.3 %  |
| 450                  | 56.7                               | 0.94                            | 10.19   | 10.19   | 10.19   | 0.10               | 1.30                    | ± 13.3 %  |
| 750                  | 55.5                               | 0.96                            | 9.35    | 9.35    | 9.35    | 0.50               | 0.85                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 7.77    | 7.77    | 7.77    | 0.37               | 0.85                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 7.54    | 7.54    | 7.54    | 0.30               | 0.96                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 7.41    | 7.41    | 7.41    | 0.38               | 0.84                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.26    | 7.26    | 7.26    | 0.34               | 0.89                    | ± 12.0 %  |
| 5200                 | 49.0                               | 5.30                            | 4.70    | 4.70    | 4.70    | 0.35               | 1.90                    | ± 13.1 %  |
| 5300                 | 48.9                               | 5.42                            | 4.46    | 4.46    | 4.46    | 0.40               | 1.90                    | ± 13.1 %  |
| 5500                 | 48.6                               | 5.65                            | 4.04    | 4.04    | 4.04    | 0.40               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 4.00    | 4.00    | 4.00    | 0.40               | 1.90                    | ± 13.1 %  |
| 5800                 | 48.2                               | 6.00                            | 4.21    | 4.21    | 4.21    | 0.40               | 1.90                    | ± 13.1 %  |

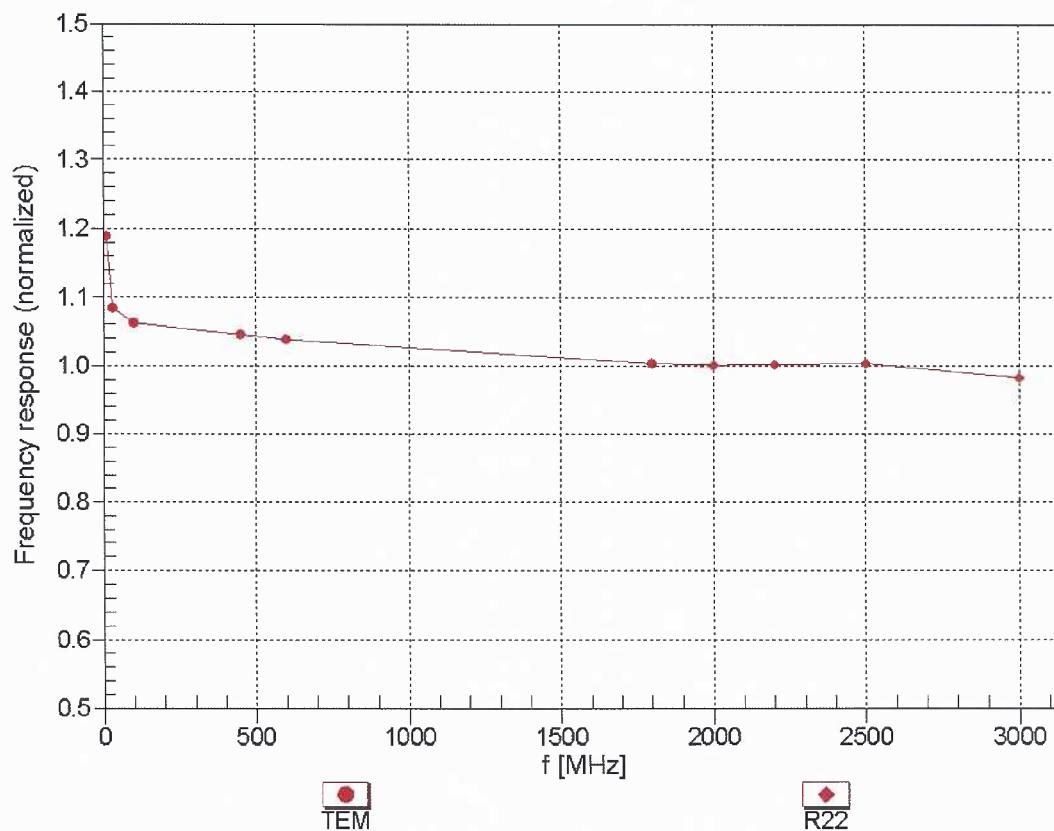
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

## Frequency Response of E-Field

(TEM-Cell:ifi110 EXX, Waveguide: R22)

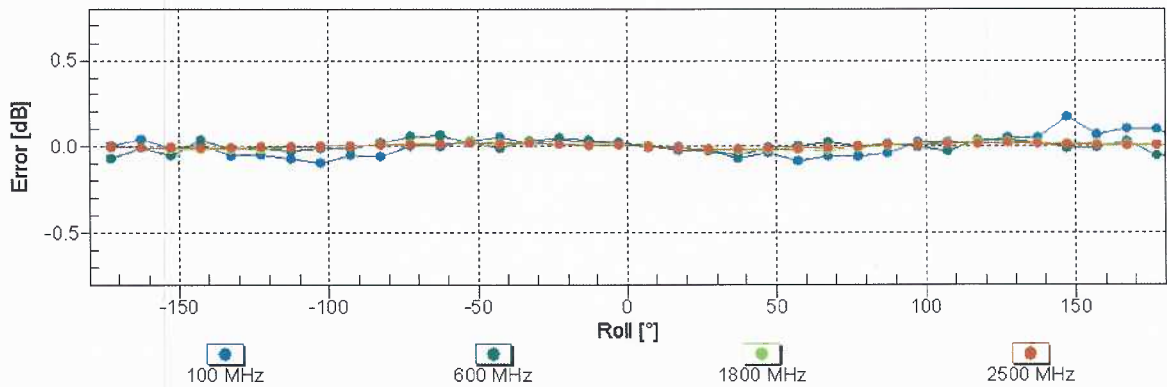
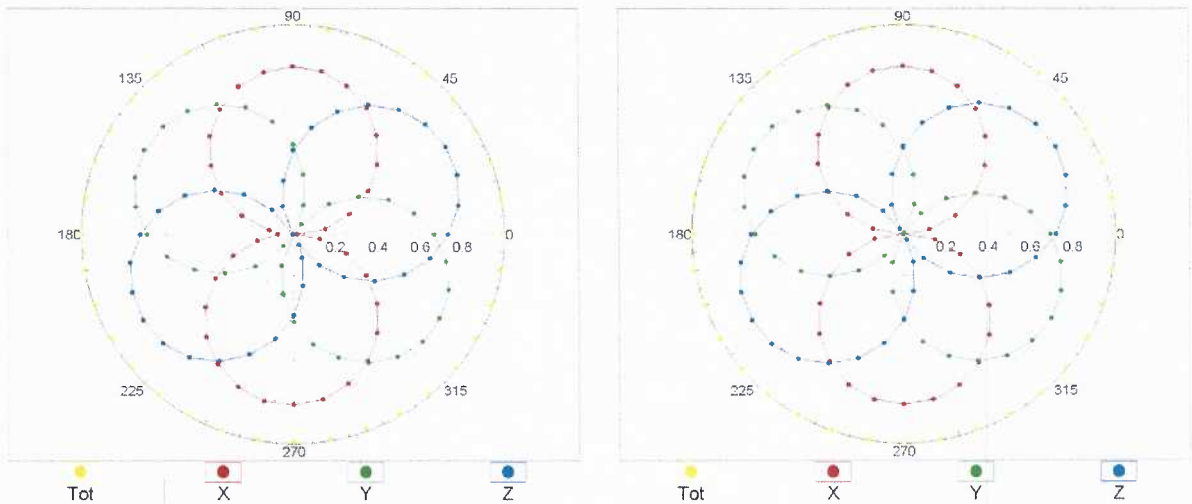


Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

Receiving Pattern ( $\phi$ ),  $\theta = 0^\circ$

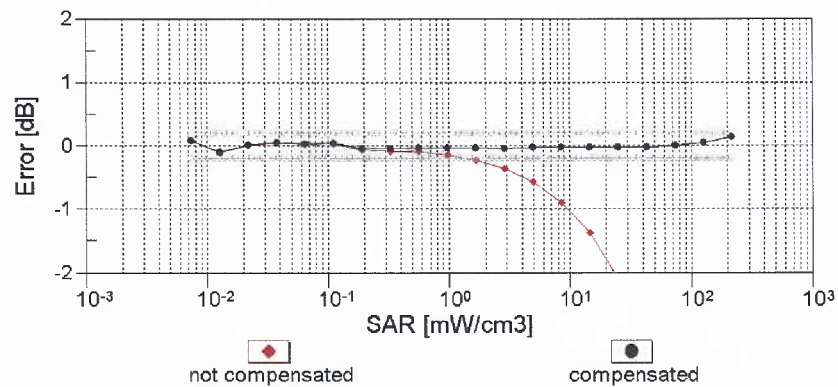
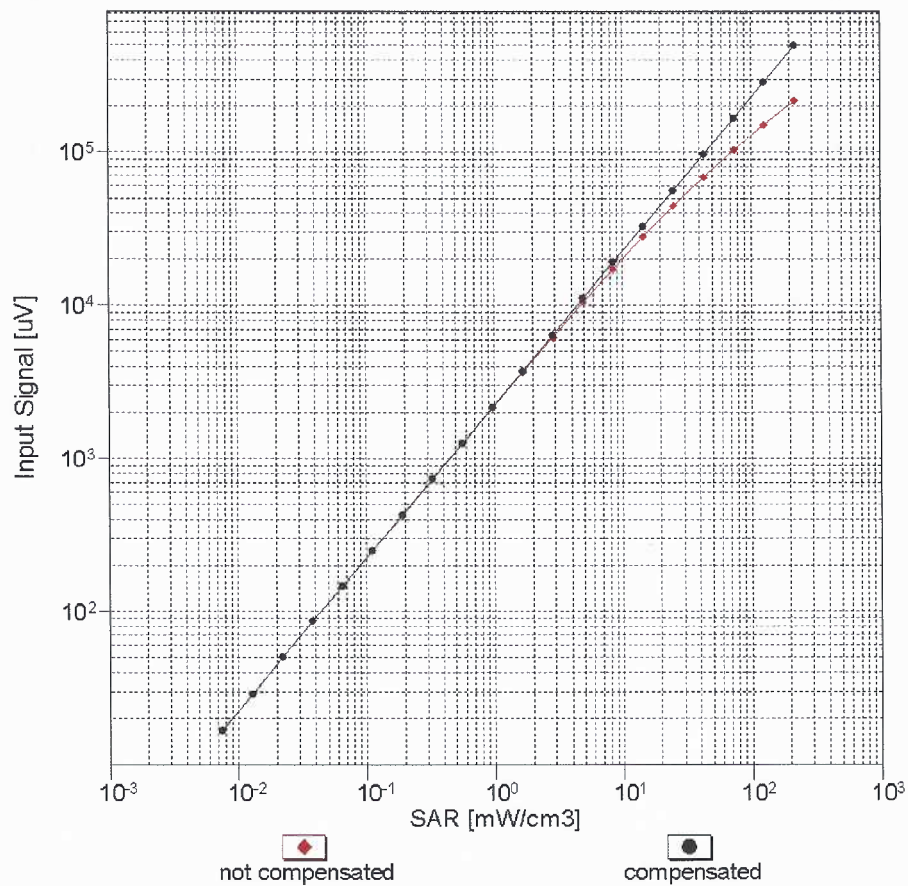
f=600 MHz,TEM

f=1800 MHz,R22



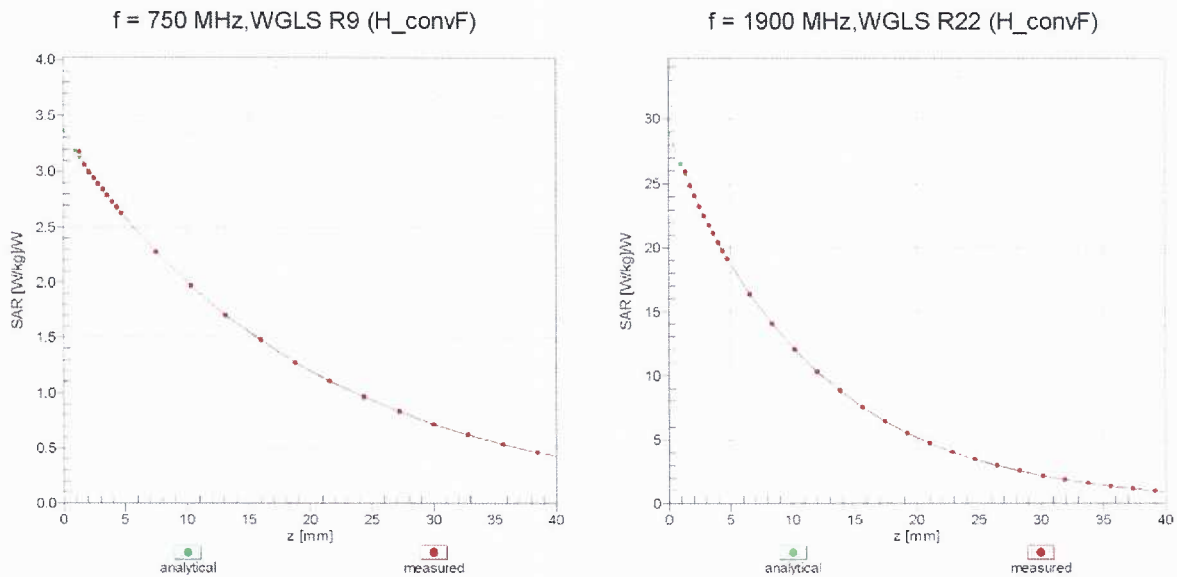
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

# Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell , $f_{\text{eval}} = 1900 \text{ MHz}$ )



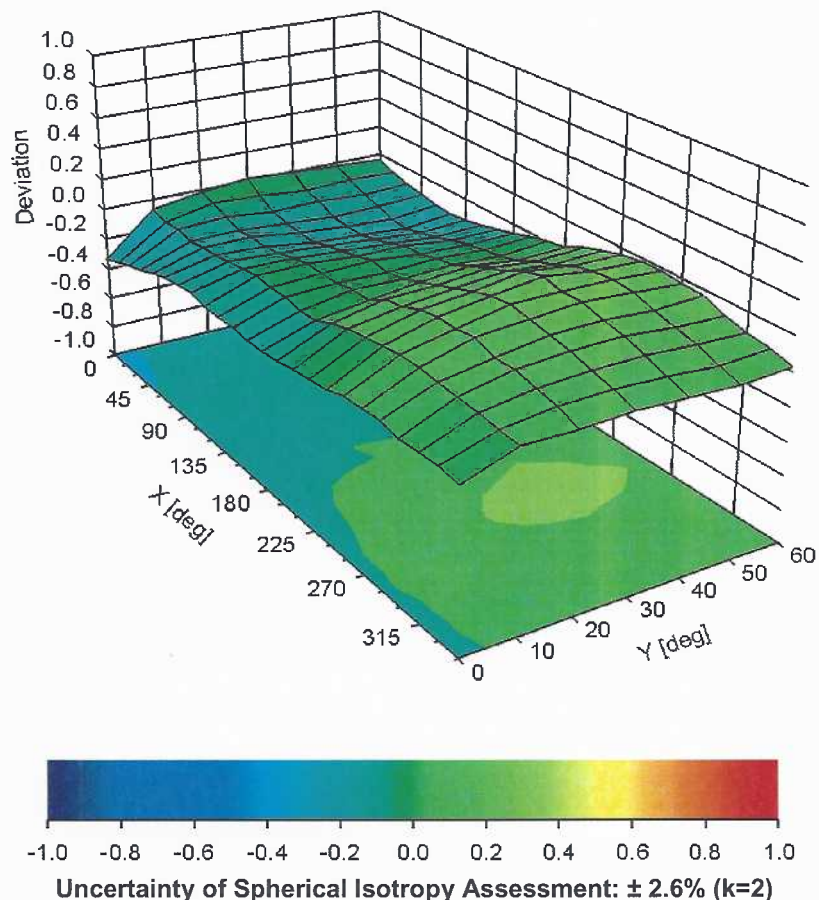
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

Error ( $\phi, \theta$ ),  $f = 900 \text{ MHz}$



## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3693

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 107.3      |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 9 mm       |
| Tip Diameter                                  | 2.5 mm     |
| Probe Tip to Sensor X Calibration Point       | 1 mm       |
| Probe Tip to Sensor Y Calibration Point       | 1 mm       |
| Probe Tip to Sensor Z Calibration Point       | 1 mm       |
| Recommended Measurement Distance from Surface | 1.4 mm     |