

## APPENDIX A: SAR TEST DATA

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05249**

Communication System: UID 0, GSM GPRS; 3 Tx slots; Frequency: 836.6 MHz; Duty Cycle: 1:2.76

Medium: 835 Head; Medium parameters used (interpolated):

$f = 836.6$  MHz;  $\sigma = 0.946$  S/m;  $\epsilon_r = 41.97$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Test Date: 12/30/2020; Ambient Temp: 24.7°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3589; ConvF(8.58, 8.58, 8.58) @ 836.6 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: GPRS 850, Right Head, Cheek, Mid.ch, 3 Tx slots**

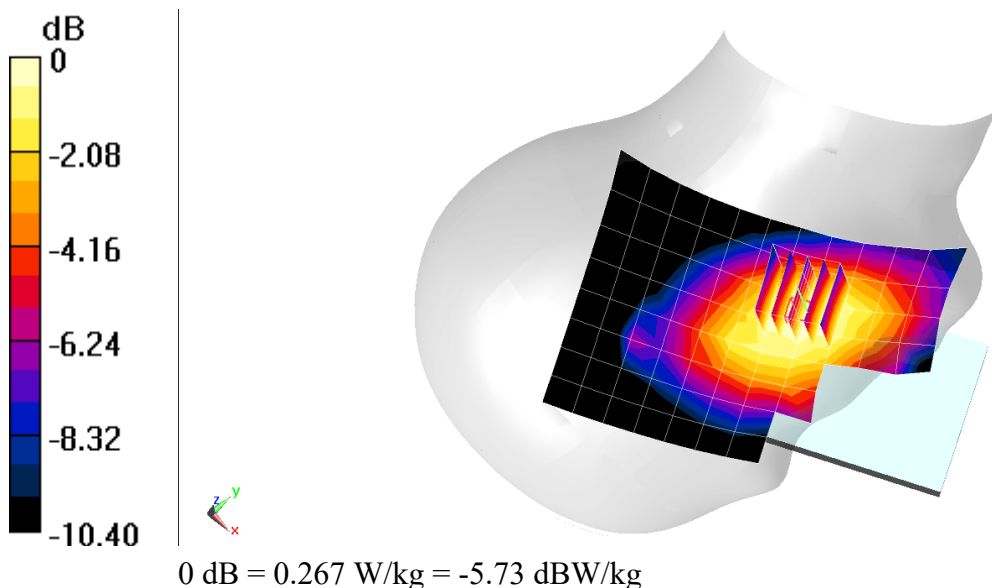
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 15.49 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.293 W/kg

**SAR(1 g) = 0.218 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05249**

Communication System: UID 0, GSM GPRS; 3 Tx slots; Frequency: 1880 MHz; Duty Cycle: 1:2.76

Medium: 1900 Head; Medium parameters used:

$f = 1880 \text{ MHz}$ ;  $\sigma = 1.387 \text{ S/m}$ ;  $\epsilon_r = 38.856$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 01/05/2021; Ambient Temp: 23.7°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7539; ConvF(8.03, 8.03, 8.03) @ 1880 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: GPRS 1900, Left Head, Cheek, Mid.ch, 3 Tx slots**

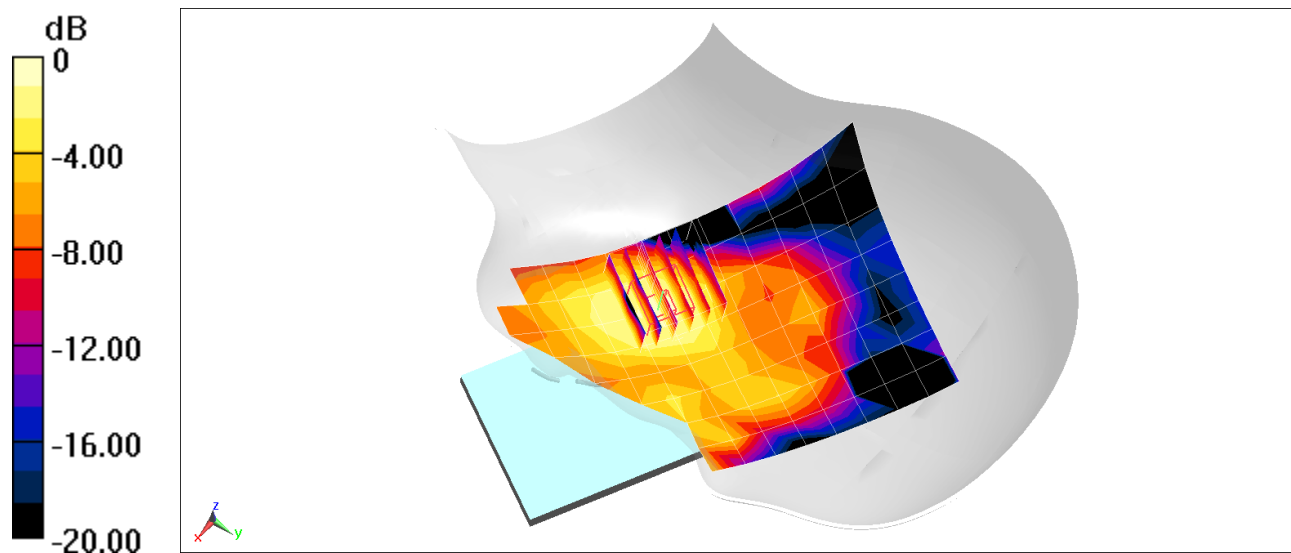
**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (6x6x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 7.316 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.122 W/kg

**SAR(1 g) = 0.078 W/kg**



0 dB = 0.105 W/kg = -9.79 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05272**

Communication System: UID 0, UMTS; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 835 Head; Medium parameters used (interpolated):

$f = 836.6 \text{ MHz}$ ;  $\sigma = 0.919 \text{ S/m}$ ;  $\epsilon_r = 42.989$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Test Date: 12/22/2020; Ambient Temp: 23.3°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN3589; ConvF(8.58, 8.58, 8.58) @ 836.6 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: UMTS 850, Right Head, Cheek, Mid.ch**

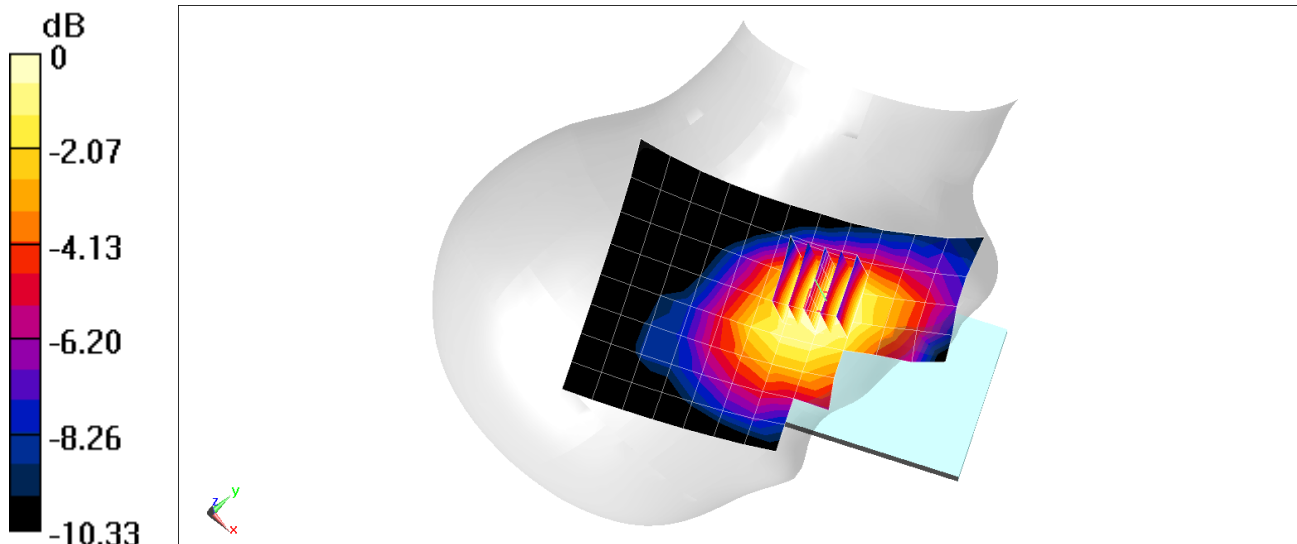
**Area Scan (9x13x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 15.99 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.304 W/kg

**SAR(1 g) = 0.226 W/kg**



0 dB = 0.275 W/kg = -5.61 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05264**

Communication System: UID 0, UMTS; Frequency: 1732.4 MHz; Duty Cycle: 1:1  
Medium: 1750 Head; Medium parameters used (interpolated):  
 $f = 1732.4 \text{ MHz}$ ;  $\sigma = 1.392 \text{ S/m}$ ;  $\epsilon_r = 38.654$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Left Section

Test Date: 12/17/2020; Ambient Temp: 22.0°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7308; ConvF(8.55, 8.55, 8.55) @ 1732.4 MHz; Calibrated: 7/31/2020  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1450; Calibrated: 8/11/2020  
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792  
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: UMTS 1750, Left Head, Cheek, Mid.ch**

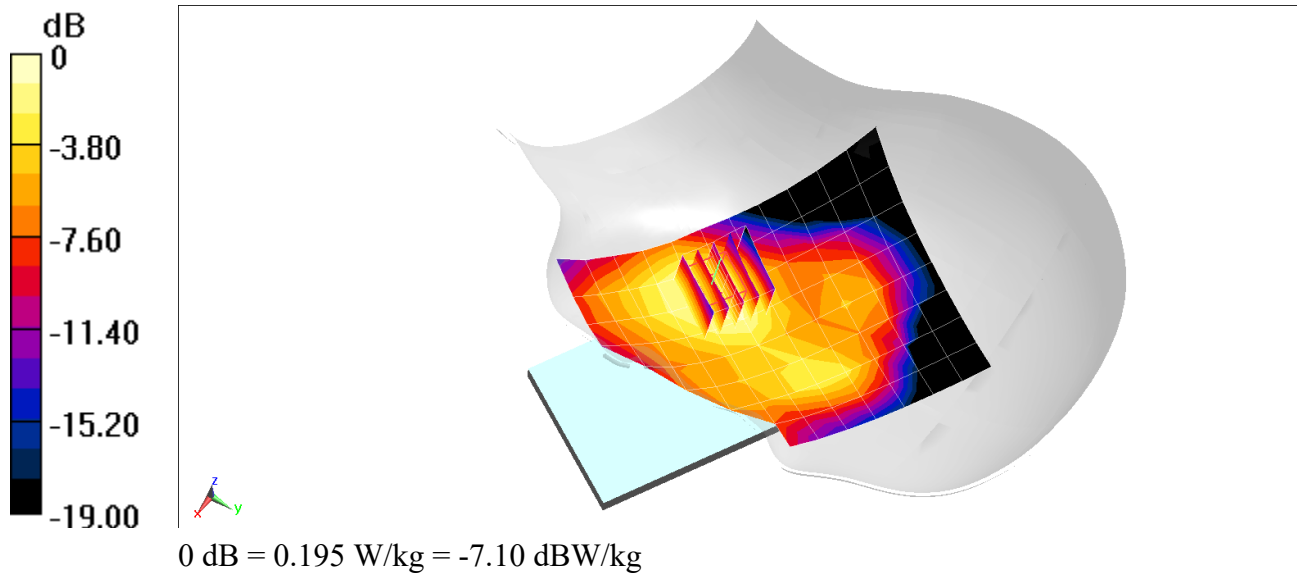
**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 10.67 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.236 W/kg

**SAR(1 g) = 0.147 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05231**

Communication System: UID 0, UMTS; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: 1900 Head; Medium parameters used:

$f = 1880 \text{ MHz}$ ;  $\sigma = 1.39 \text{ S/m}$ ;  $\epsilon_r = 40.285$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 12/20/2020; Ambient Temp: 23.3°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7308; ConvF(8.2, 8.2, 8.2) @ 1880 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: UMTS 1900, Left Head, Cheek, Mid.ch**

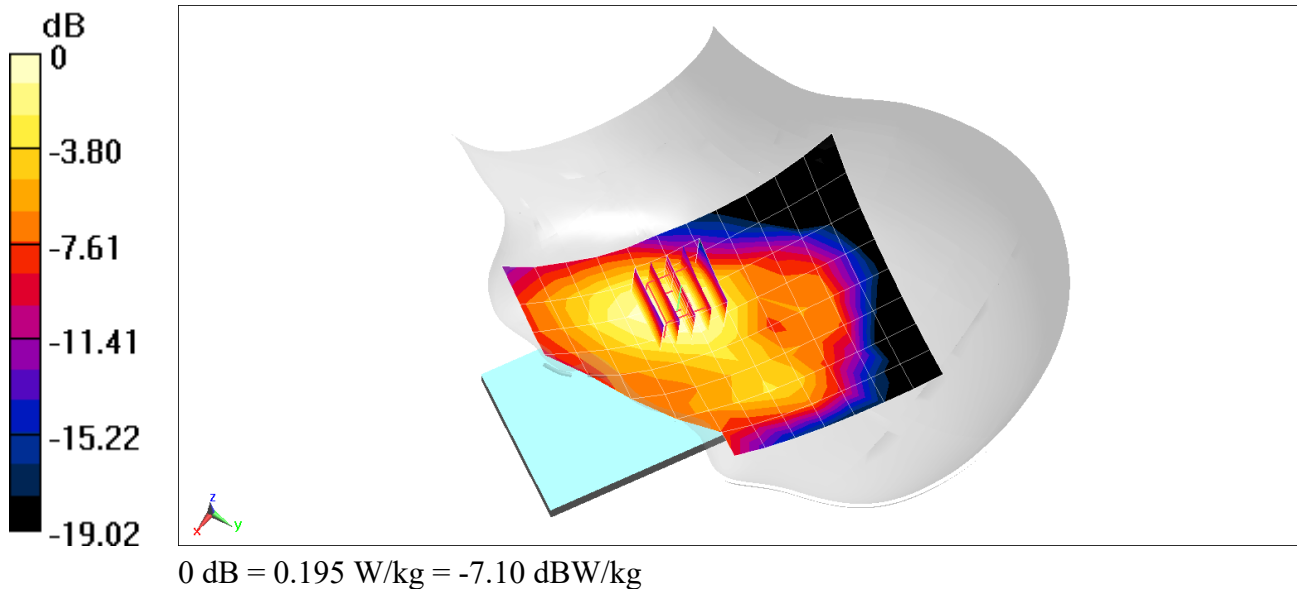
**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 10.46 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.235 W/kg

**SAR(1 g) = 0.144 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05231**

Communication System: UID 0, LTE Band 71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium: 750 Head; Medium parameters used (interpolated):

$f = 680.5 \text{ MHz}$ ;  $\sigma = 0.856 \text{ S/m}$ ;  $\epsilon_r = 43.217$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Test Date: 12/22/2020; Ambient Temp: 20.0°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7357; ConvF(10.23, 10.23, 10.23) @ 680.5 MHz; Calibrated: 4/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/15/2020

Phantom: Twin-SAM V5.0 Left 30; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 71, Right Head, Cheek, Mid.ch**  
**20 MHz Bandwidth, QPSK, 1 RB, 50 RB Offset**

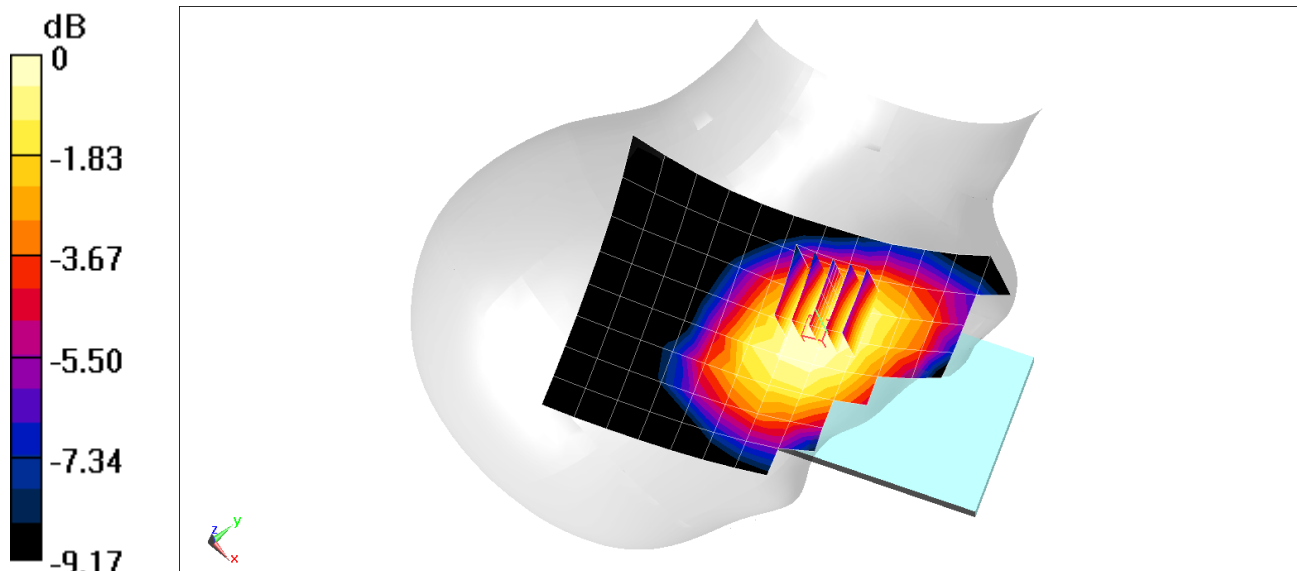
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 11.99 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.134 W/kg

**SAR(1 g) = 0.114 W/kg**



0 dB = 0.128 W/kg = -8.93 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05231**

Communication System: UID 0, LTE Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: 750 Head; Medium parameters used (interpolated):

$f = 707.5 \text{ MHz}$ ;  $\sigma = 0.866 \text{ S/m}$ ;  $\epsilon_r = 43.123$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Test Date: 12/22/2020; Ambient Temp: 20.0°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7357; ConvF(10.23, 10.23, 10.23) @ 707.5 MHz; Calibrated: 4/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/15/2020

Phantom: Twin-SAM V5.0 Left 30; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 12, Right Head, Cheek, Mid.ch**  
**10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

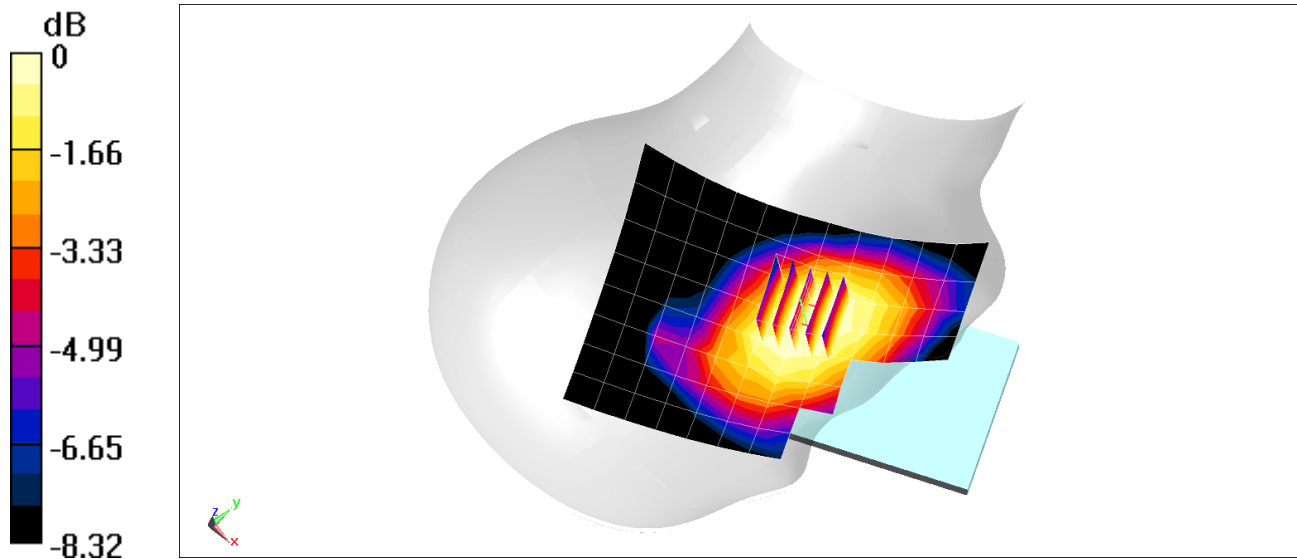
**Area Scan (9x13x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 12.52 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.146 W/kg

**SAR(1 g) = 0.122 W/kg**



0 dB = 0.139 W/kg = -8.57 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05231**

Communication System: UID 0, LTE Band 13; Frequency: 782 MHz; Duty Cycle: 1:1

Medium: 750 Head; Medium parameters used (interpolated):

$f = 782 \text{ MHz}$ ;  $\sigma = 0.893 \text{ S/m}$ ;  $\epsilon_r = 42.903$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Test Date: 12/22/2020; Ambient Temp: 20.0°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7357; ConvF(10.23, 10.23, 10.23) @ 782 MHz; Calibrated: 4/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/15/2020

Phantom: Twin-SAM V5.0 Left 30; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 13, Right Head, Cheek, Mid.ch**  
**10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

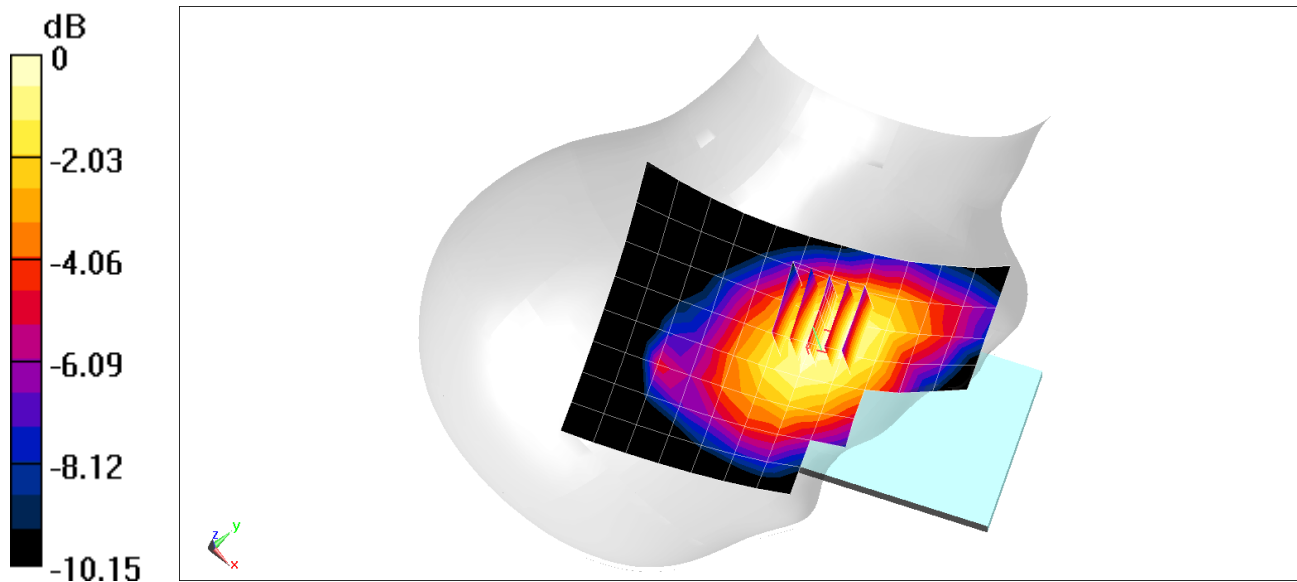
**Area Scan (9x13x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 11.48 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 0.135 W/kg

**SAR(1 g) = 0.112 W/kg**



0 dB = 0.128 W/kg = -8.93 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05272**

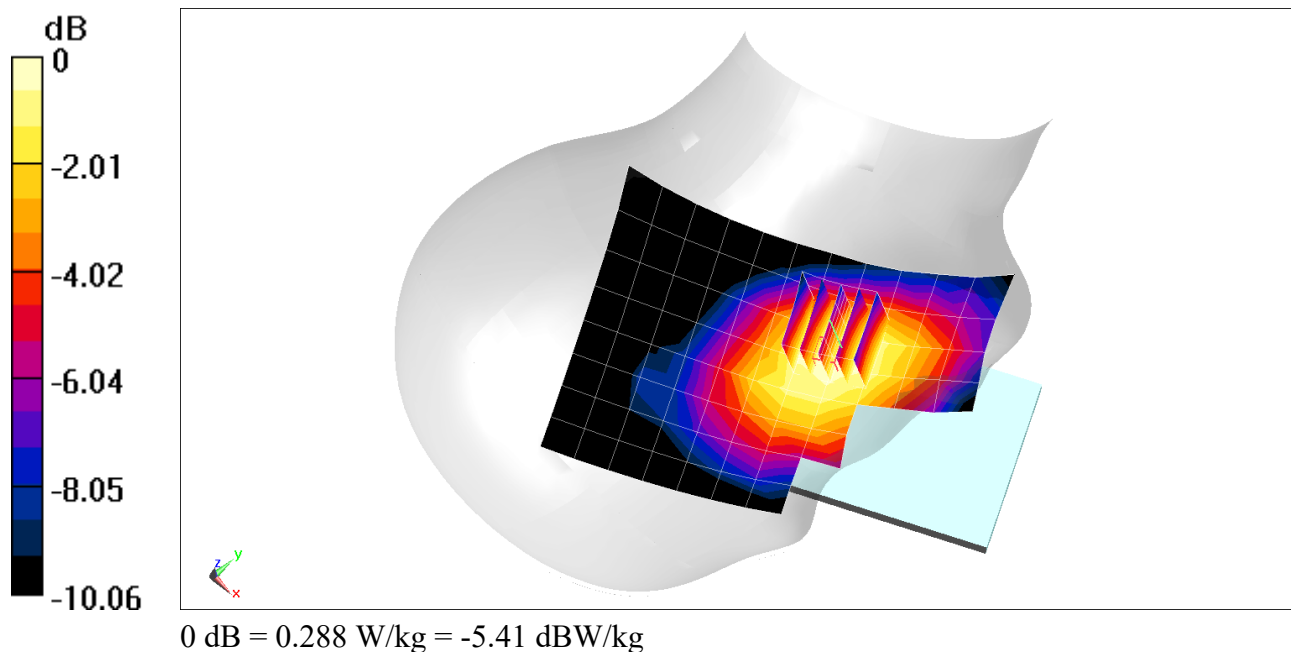
Communication System: UID 0, LTE Band 26; Frequency: 831.5 MHz; Duty Cycle: 1:1  
Medium: 835 Head; Medium parameters used (interpolated):  
 $f = 831.5 \text{ MHz}$ ;  $\sigma = 0.913 \text{ S/m}$ ;  $\epsilon_r = 43.062$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Right Section

Test Date: 12/22/2020; Ambient Temp: 23.3°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN3589; ConvF(8.58, 8.58, 8.58) @ 831.5 MHz; Calibrated: 1/21/2020  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1558; Calibrated: 1/13/2020  
Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647  
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 26 (Cell.), Right Head, Cheek, Mid.ch**  
**15 MHz Bandwidth, QPSK, 1 RB, 74 RB Offset**

**Area Scan (9x13x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 16.99 V/m; Power Drift = -0.01 dB  
Peak SAR (extrapolated) = 0.316 W/kg  
**SAR(1 g) = 0.240 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05264**

Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1770 MHz; Duty Cycle: 1:1

Medium: 1750 Head; Medium parameters used:

$f = 1770 \text{ MHz}$ ;  $\sigma = 1.431 \text{ S/m}$ ;  $\epsilon_r = 38.465$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 12/17/2020; Ambient Temp: 22.0°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7308; ConvF(8.55, 8.55, 8.55) @ 1770 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 66 (AWS), Left Head, Cheek, High.ch**  
**20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset**

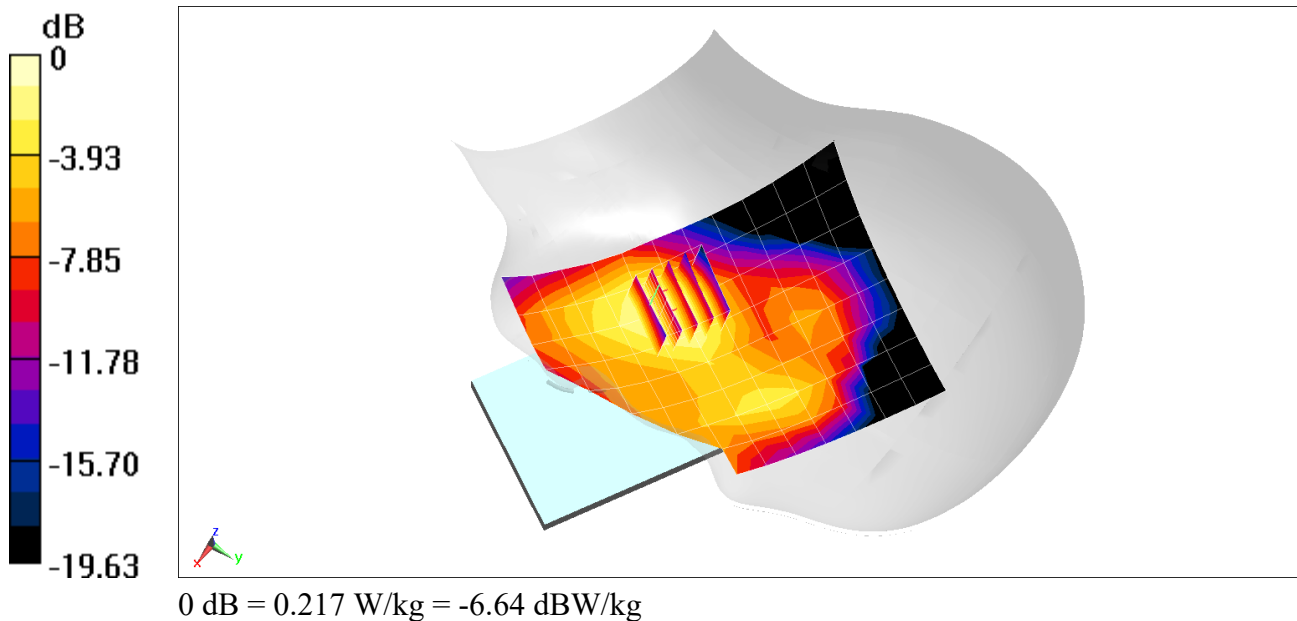
**Area Scan (9x13x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 11.14 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.260 W/kg

**SAR(1 g) = 0.156 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05249**

Communication System: UID 0, LTE Band 25 (PCS); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium: 1900 Head; Medium parameters used:

$f = 1860 \text{ MHz}$ ;  $\sigma = 1.369 \text{ S/m}$ ;  $\epsilon_r = 40.365$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 12/20/2020; Ambient Temp: 23.3°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7308; ConvF(8.2, 8.2, 8.2) @ 1860 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 25 (PCS), Left Head, Cheek, Low.ch**  
**20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

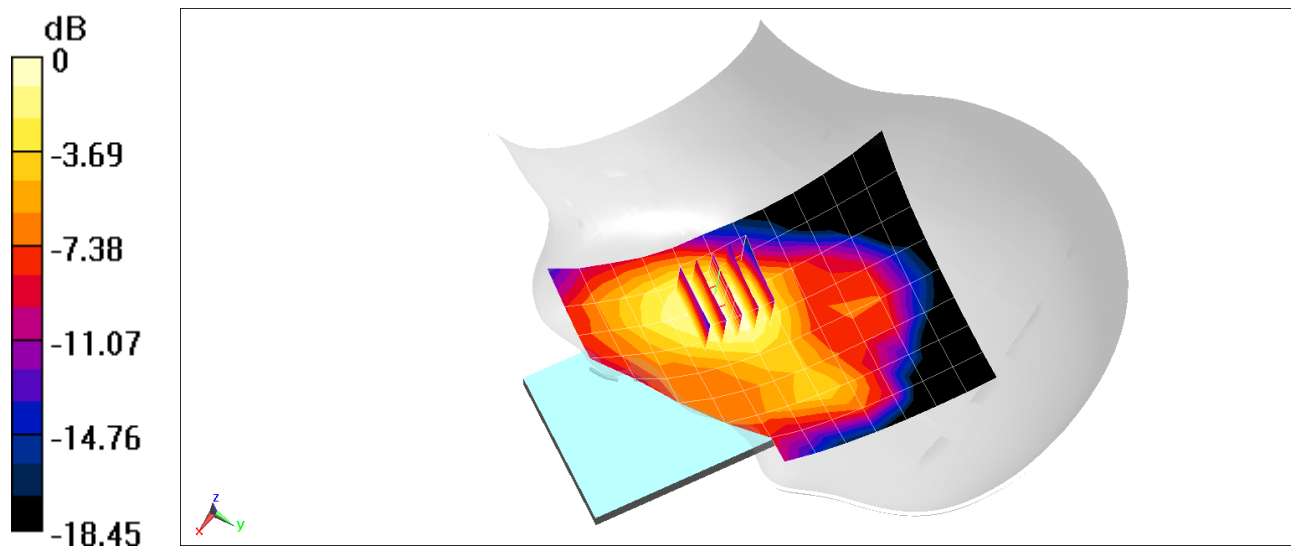
**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 11.86 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.274 W/kg

**SAR(1 g) = 0.169 W/kg**



0 dB = 0.226 W/kg = -6.46 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05256**

Communication System: UID 0, LTE Band 41 (Class 3); Frequency: 2593 MHz; Duty Cycle: 1:1.58

Medium: 2450 Head; Medium parameters used (interpolated):

$f = 2593 \text{ MHz}$ ;  $\sigma = 1.987 \text{ S/m}$ ;  $\epsilon_r = 38.689$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 01/25/2021; Ambient Temp: 22.5°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7571; ConvF(7.05, 7.05, 7.05) @ 2593 MHz; Calibrated: 12/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/7/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 41 PC3 ULCA, Left Head, Cheek**

**PCC: Ch. 40620, 20MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

**SCC: Ch. 40422, 20MHz Bandwidth, QPSK, 1 RB, 99 RB Offset**

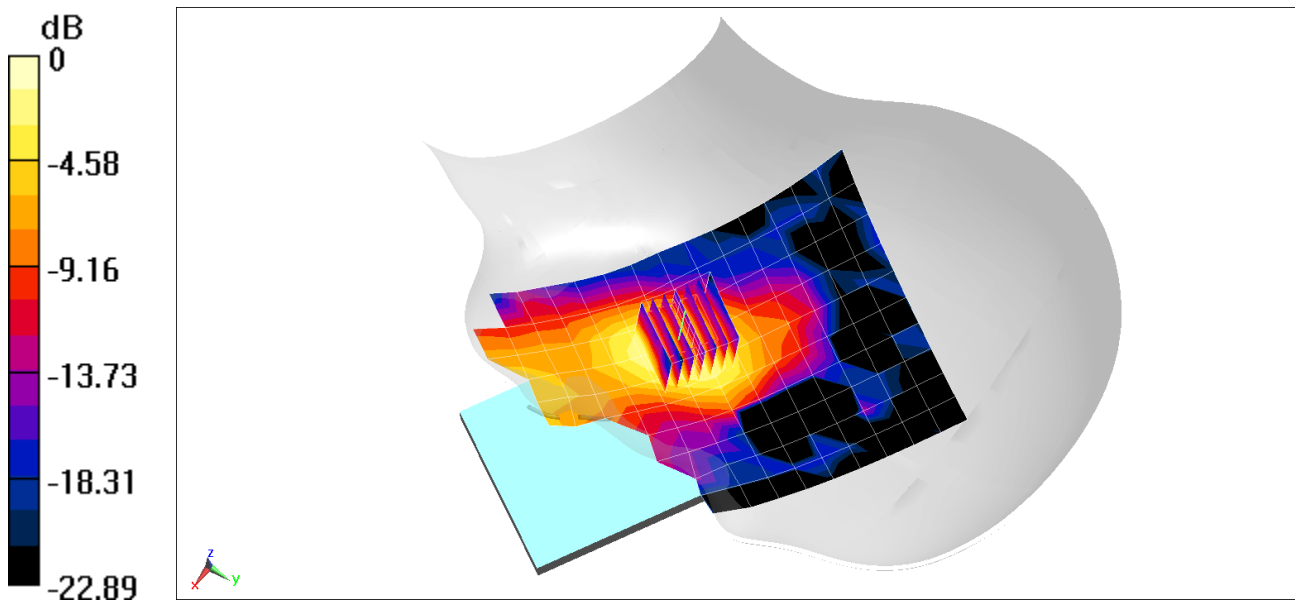
**Area Scan (11x17x1):** Measurement grid:  $dx=12\text{mm}$ ,  $dy=12\text{mm}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 6.172 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.117 W/kg

**SAR(1 g) = 0.062 W/kg**



0 dB = 0.0965 W/kg = -10.15 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05173**

Communication System: UID 0, 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: 2450 Head; Medium parameters used (interpolated):

$f = 2437 \text{ MHz}$ ;  $\sigma = 1.832 \text{ S/m}$ ;  $\epsilon_r = 39.771$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 01/07/2021; Ambient Temp: 23.1°C; Tissue Temp: 24.7°C

Probe: EX3DV4 - SN7571; ConvF(7.28, 7.28, 7.28) @ 2437 MHz; Calibrated: 12/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/7/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11b, 22 MHz Bandwidth**

**Left Head, Tilt, Ch 6, 1 Mbps**

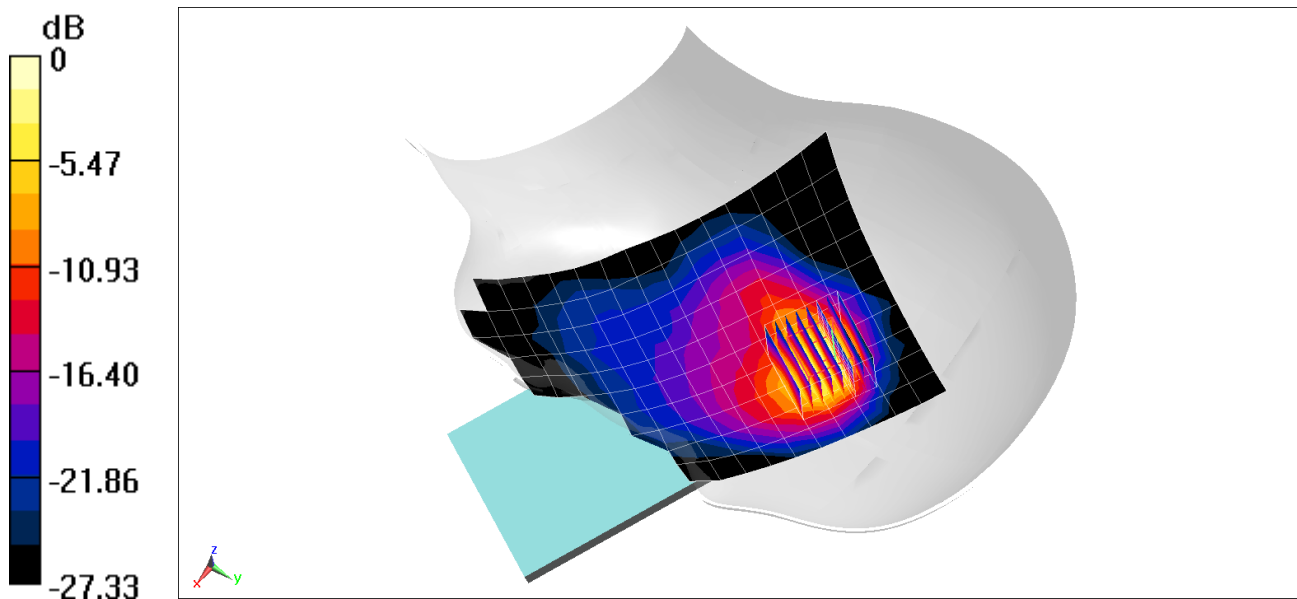
**Area Scan (11x18x1):** Measurement grid:  $dx=12\text{mm}$ ,  $dy=12\text{mm}$

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 9.241 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 2.03 W/kg

**SAR(1 g) = 0.680 W/kg**



0 dB = 1.43 W/kg = 1.55 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05181**

Communication System: UID 0, 802.11n 5.2-5.8 GHz Band; Frequency: 5590 MHz; Duty Cycle: 1:1  
Medium: 5200-5800 Head; Medium parameters used (interpolated):  
 $f = 5590 \text{ MHz}$ ;  $\sigma = 5.074 \text{ S/m}$ ;  $\epsilon_r = 34.361$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Left Section

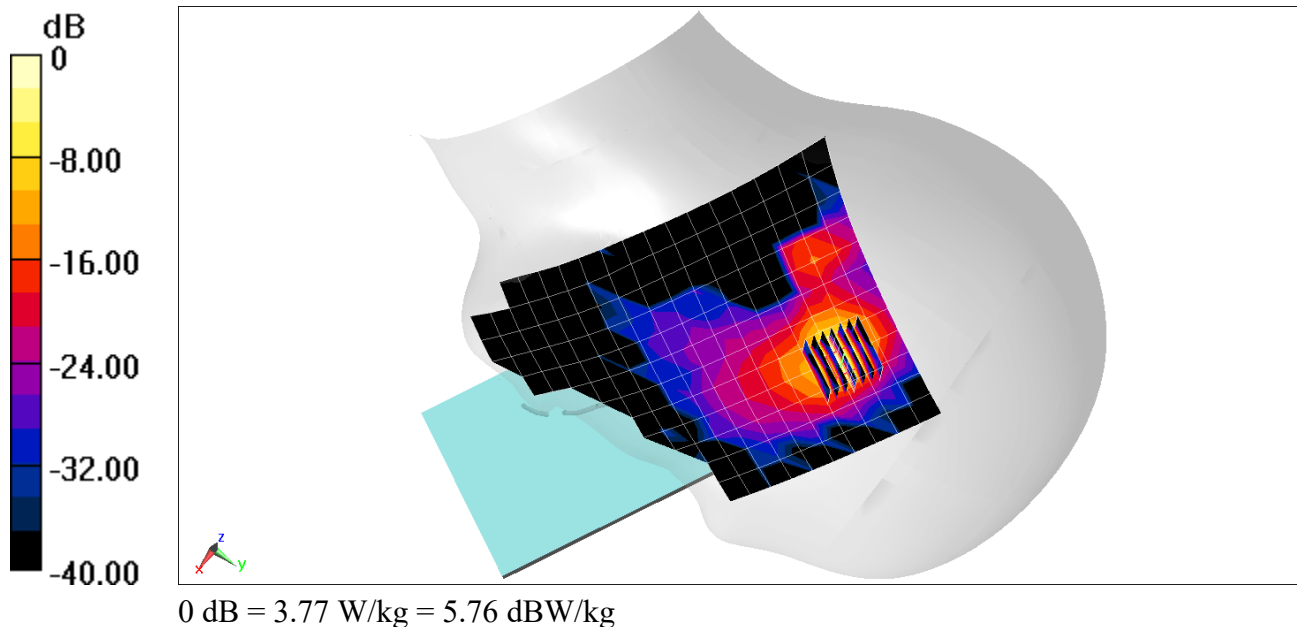
Test Date: 01/05/2021; Ambient Temp: 20.7°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7357; ConvF(4.93, 4.93, 4.93) @ 5590 MHz; Calibrated: 4/21/2020  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/15/2020  
Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715  
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11n, U-NII-2C, 40 MHz Bandwidth**  
**Left Head, Tilt, Ch 118, 13.5 Mbps**

**Area Scan (13x19x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=1.4\text{mm}$ ; Graded Ratio: 1.4  
Reference Value = 2.132 V/m; Power Drift = 0.20 dB  
Peak SAR (extrapolated) = 6.93 W/kg  
**SAR(1 g) = 1.21 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05173**

Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.300

Medium: 2450 Head; Medium parameters used (interpolated):

$f = 2441 \text{ MHz}$ ;  $\sigma = 1.822 \text{ S/m}$ ;  $\epsilon_r = 39.579$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 01/10/2021; Ambient Temp: 22.2°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7571; ConvF(7.28, 7.28, 7.28) @ 2441 MHz; Calibrated: 12/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/7/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Mode: Bluetooth, Left Head, Cheek, Ch 39, 1 Mbps**

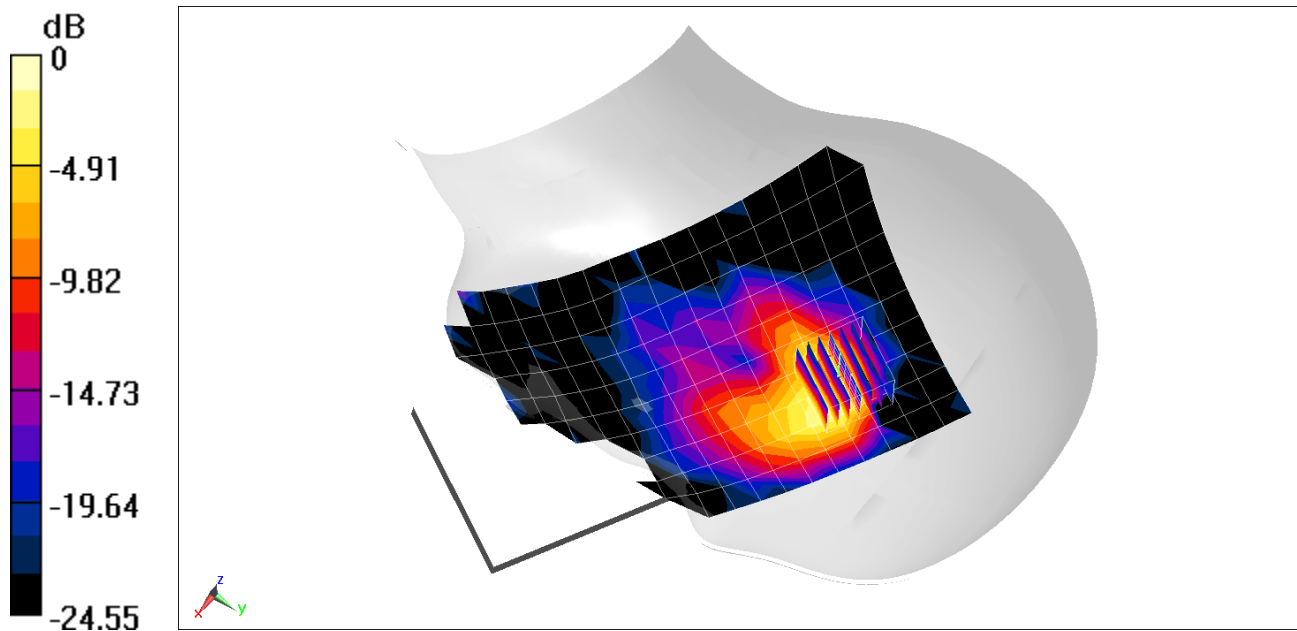
**Area Scan (11x19x1):** Measurement grid:  $dx=12\text{mm}$ ,  $dy=12\text{mm}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 5.820 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.206 W/kg

**SAR(1 g) = 0.072 W/kg**



0 dB = 0.148 W/kg = -8.30 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05249**

Communication System: UID 0, GSM GPRS; 3 Tx slots; Frequency: 836.6 MHz; Duty Cycle: 1:2.76

Medium: 835 Body; Medium parameters used (interpolated):

$f = 836.6 \text{ MHz}$ ;  $\sigma = 0.958 \text{ S/m}$ ;  $\epsilon_r = 54.656$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/07/2021; Ambient Temp: 22.8°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7552; ConvF(9.96, 9.96, 9.96) @ 836.6 MHz; Calibrated: 9/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1449; Calibrated: 9/10/2020

Phantom: Twin-SAM V4.0 Left 30; Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: GPRS 850, Body SAR, Back side, Mid.ch, 3 Tx Slots**

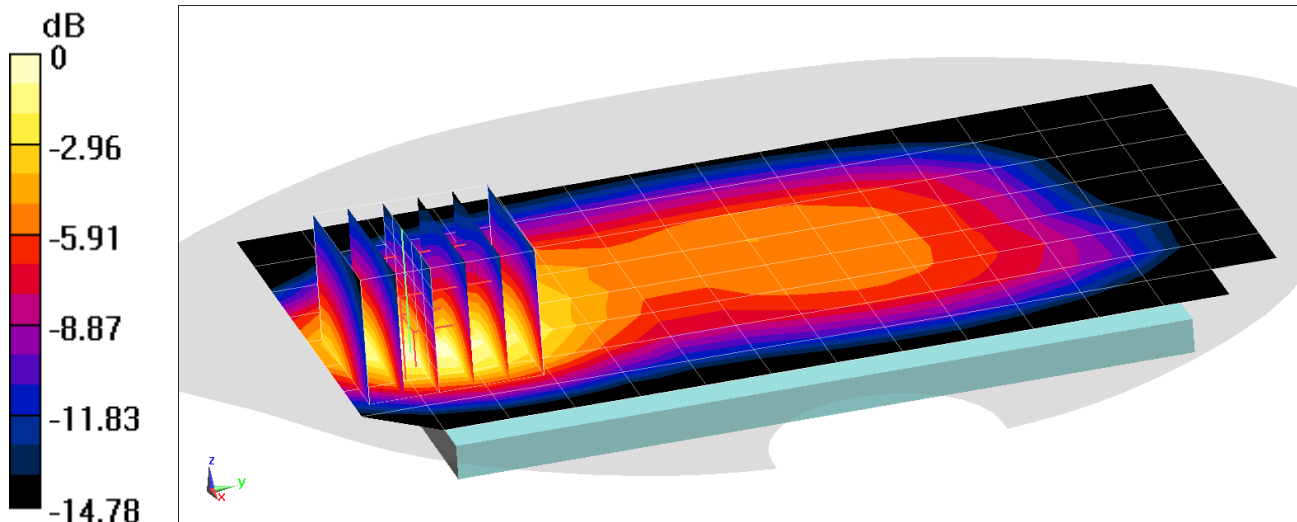
**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (6x6x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 22.75 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.868 W/kg

**SAR(1 g) = 0.465 W/kg**



0 dB = 0.699 W/kg = -1.56 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05231**

Communication System: UID 0, GSM GPRS; 3 Tx slots; Frequency: 1880 MHz; Duty Cycle: 1:2.76

Medium: 1900 Body; Medium parameters used:

$f = 1880 \text{ MHz}$ ;  $\sigma = 1.501 \text{ S/m}$ ;  $\epsilon_r = 53.126$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/05/2021; Ambient Temp: 21.3°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7551; ConvF(7.84, 7.84, 7.84) @ 1880 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 10/16/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: GSM 1900, Body SAR, Back side, Mid.ch**

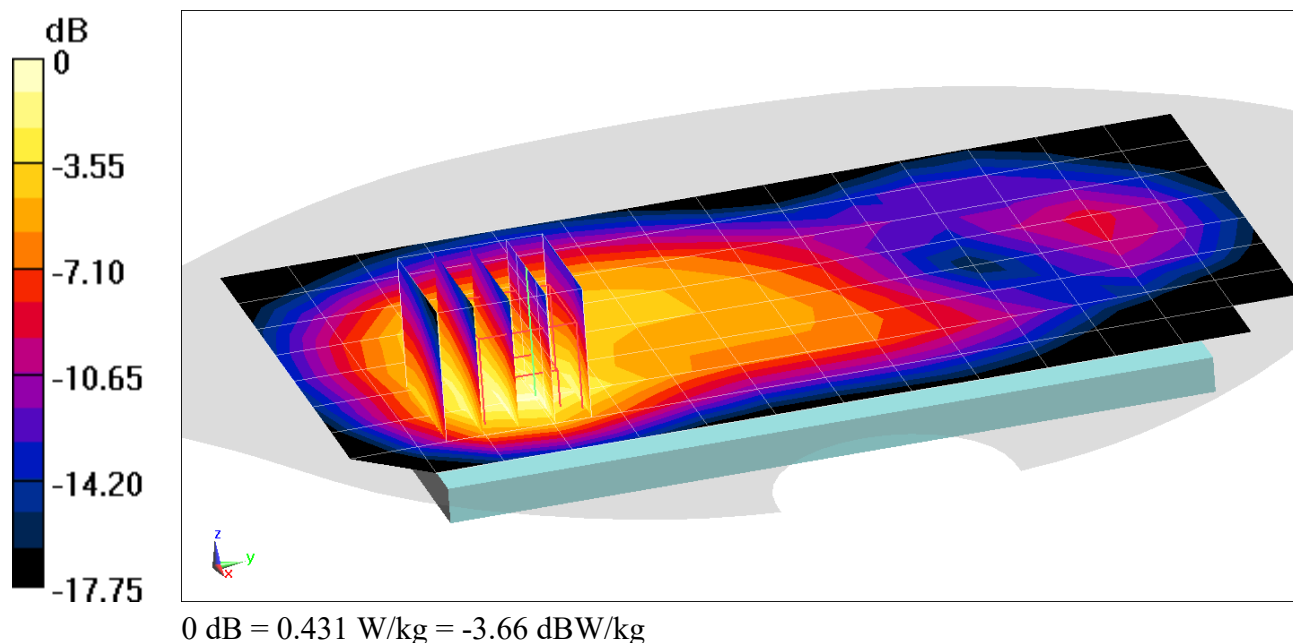
**Area Scan (9x15x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 14.18 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.534 W/kg

**SAR(1 g) = 0.302 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05231**

Communication System: UID 0, GSM GPRS; 3 Tx slots; Frequency: 1880 MHz; Duty Cycle: 1:2.76

Medium: 1900 Body; Medium parameters used:

$f = 1880 \text{ MHz}$ ;  $\sigma = 1.501 \text{ S/m}$ ;  $\epsilon_r = 53.126$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/05/2021; Ambient Temp: 21.3°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7551; ConvF(7.84, 7.84, 7.84) @ 1880 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 10/16/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: GPRS 1900, Body SAR, Bottom Edge, Mid.ch, 3 Tx Slots**

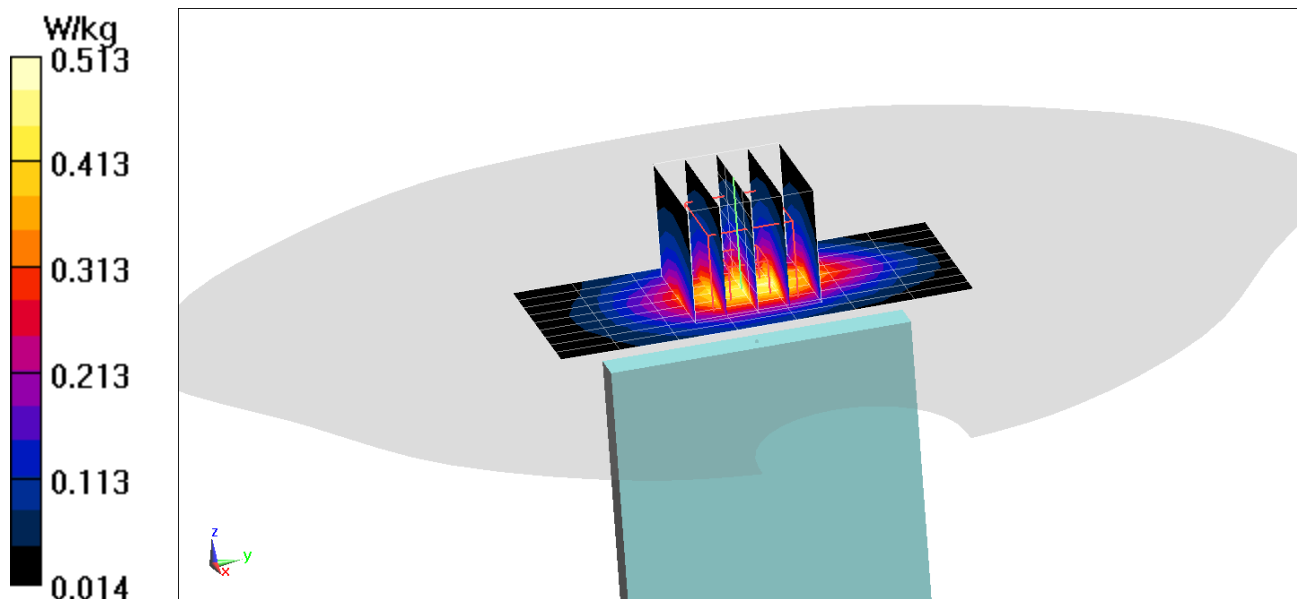
**Area Scan (10x8x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 15.66 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.587 W/kg

**SAR(1 g) = 0.367 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05231**

Communication System: UID 0, UMTS; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: 835 Body; Medium parameters used (interpolated):

$f = 836.6 \text{ MHz}$ ;  $\sigma = 0.968 \text{ S/m}$ ;  $\epsilon_r = 55.305$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/17/2020; Ambient Temp: 23.3°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7539; ConvF(9.95, 9.95, 9.95) @ 836.6 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V8.0 (20); Type: QD 000 P41 Ax; Serial: 1966

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: UMTS 850, Body SAR, Back side, Mid.ch**

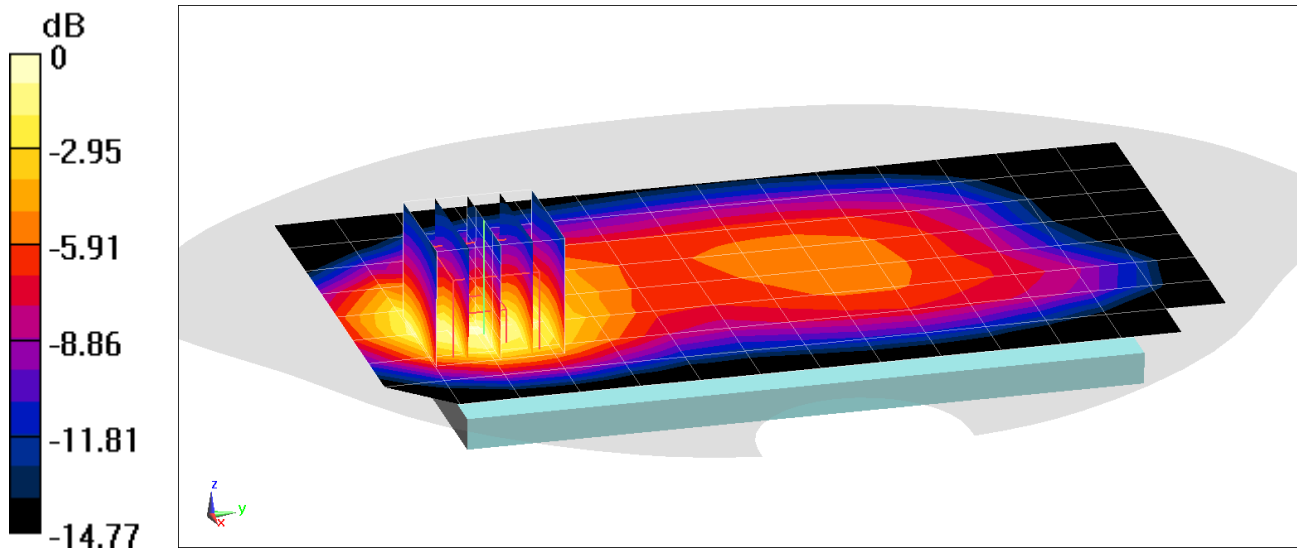
**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 23.26 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.905 W/kg

**SAR(1 g) = 0.483 W/kg**



0 dB = 0.744 W/kg = -1.28 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05249**

Communication System: UID 0, UMTS; Frequency: 1732.4 MHz; Duty Cycle: 1:1  
Medium: 1750 Body; Medium parameters used (interpolated):  
 $f = 1732.4 \text{ MHz}$ ;  $\sigma = 1.525 \text{ S/m}$ ;  $\epsilon_r = 51.132$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/18/2020; Ambient Temp: 22.0°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7357; ConvF(8.17, 8.17, 8.17) @ 1732.4 MHz; Calibrated: 4/21/2020  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1407; Calibrated: 4/15/2020  
Phantom: Twin-SAM V5.0 Right 30; Type: QD 000 P40 CD; Serial: 1759  
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: UMTS 1750, Body SAR, Back side, Mid.ch**

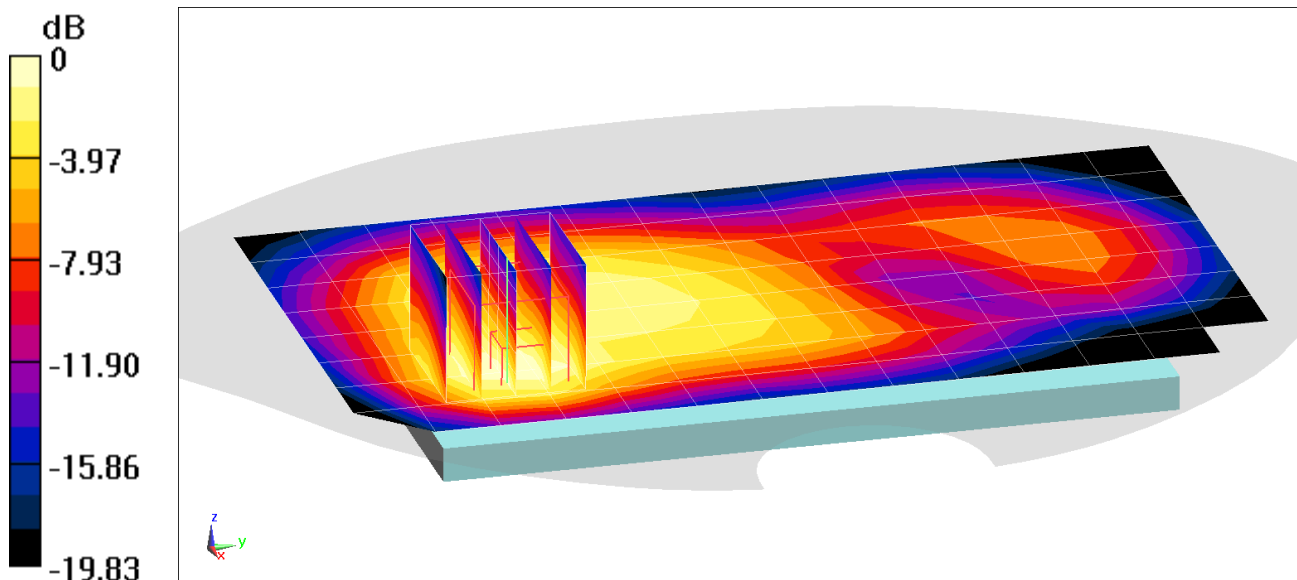
**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 18.30 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.949 W/kg

**SAR(1 g) = 0.507 W/kg**



0 dB = 0.738 W/kg = -1.32 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05264**

Communication System: UID 0, UMTS; Frequency: 1852.4 MHz; Duty Cycle: 1:1  
Medium: 1900 Body; Medium parameters used (interpolated):  
 $f = 1852.4 \text{ MHz}$ ;  $\sigma = 1.481 \text{ S/m}$ ;  $\epsilon_r = 52.912$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/28/2020; Ambient Temp: 20.7°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7410; ConvF(7.76, 7.76, 7.76) @ 1852.4 MHz; Calibrated: 7/20/2020  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1322; Calibrated: 7/15/2020  
Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375  
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: UMTS 1900, Body SAR, Back side, Low.ch**

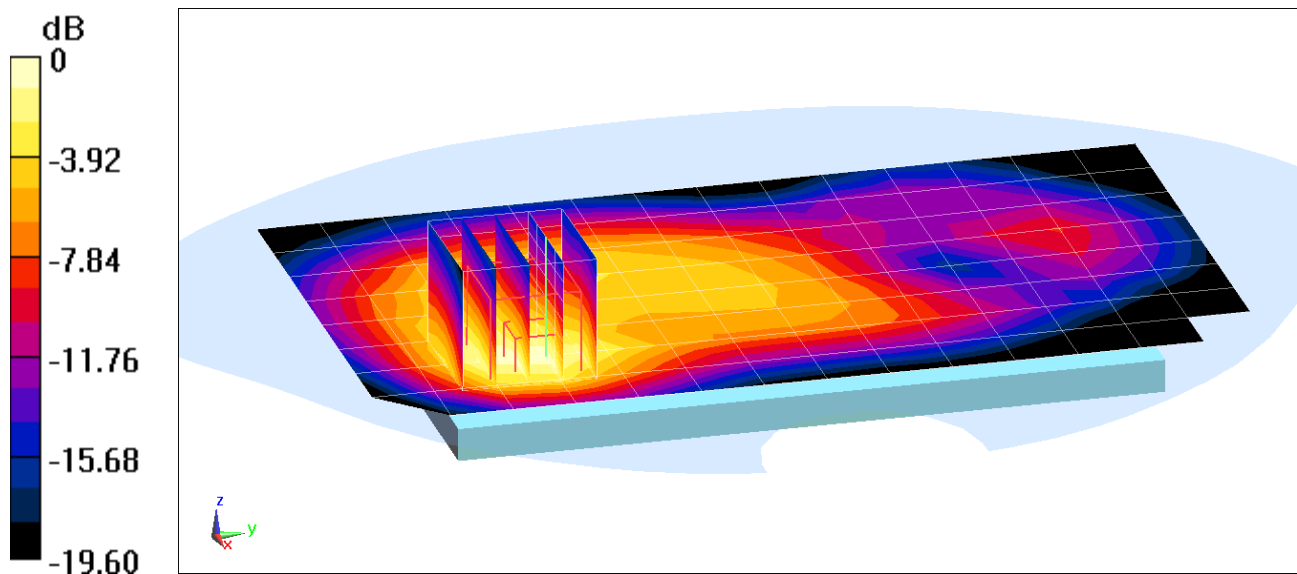
**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 22.40 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.37 W/kg

**SAR(1 g) = 0.718 W/kg**



0 dB = 1.04 W/kg = 0.17 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05264**

Communication System: UID 0, UMTS; Frequency: 1852.4 MHz; Duty Cycle: 1:1  
Medium: 1900 Body; Medium parameters used (interpolated):  
 $f = 1852.4 \text{ MHz}$ ;  $\sigma = 1.481 \text{ S/m}$ ;  $\epsilon_r = 52.912$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/28/2020; Ambient Temp: 20.7°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7410; ConvF(7.76, 7.76, 7.76) @ 1852.4 MHz; Calibrated: 7/20/2020  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1322; Calibrated: 7/15/2020  
Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375  
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: UMTS 1900, Body SAR, Bottom Edge, Low.ch**

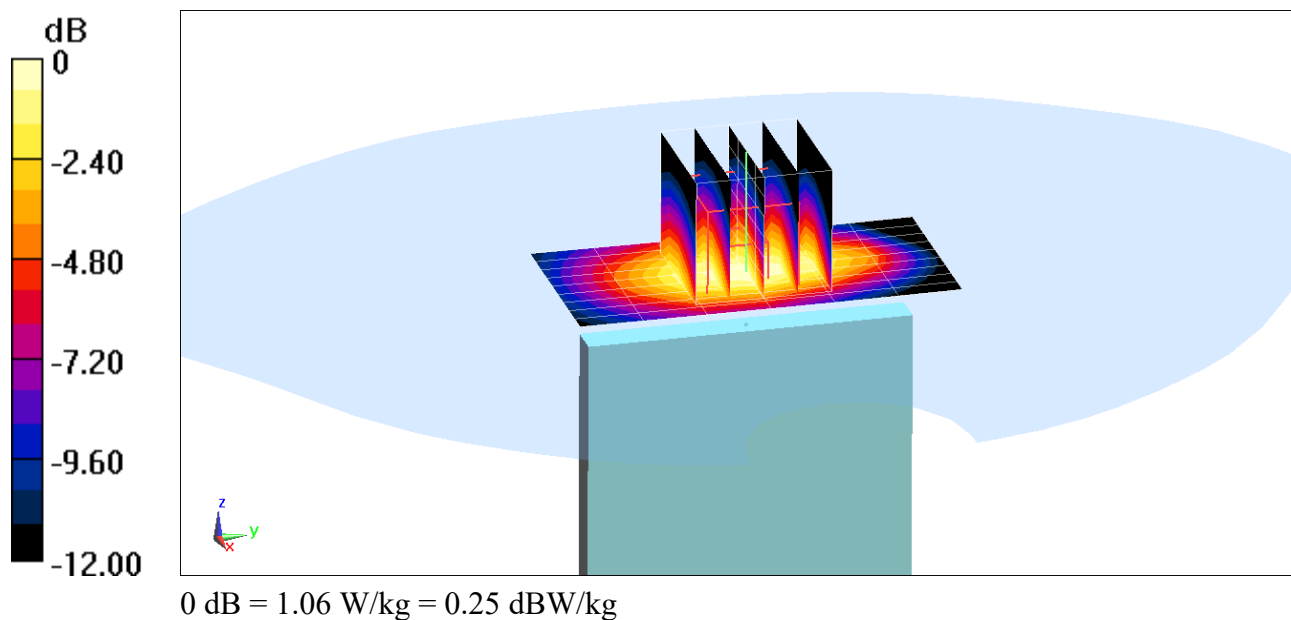
**Area Scan (10x7x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 23.44 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.23 W/kg

**SAR(1 g) = 0.735 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05256**

Communication System: UID 0, LTE Band 71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 680.5 \text{ MHz}$ ;  $\sigma = 0.92 \text{ S/m}$ ;  $\epsilon_r = 54.38$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/28/2020; Ambient Temp: 20.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7539; ConvF(10.24, 10.24, 10.24) @ 680.5 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 71, Body SAR, Back side, Mid.ch**  
**20 MHz Bandwidth, QPSK, 1 RB, 50 RB Offset**

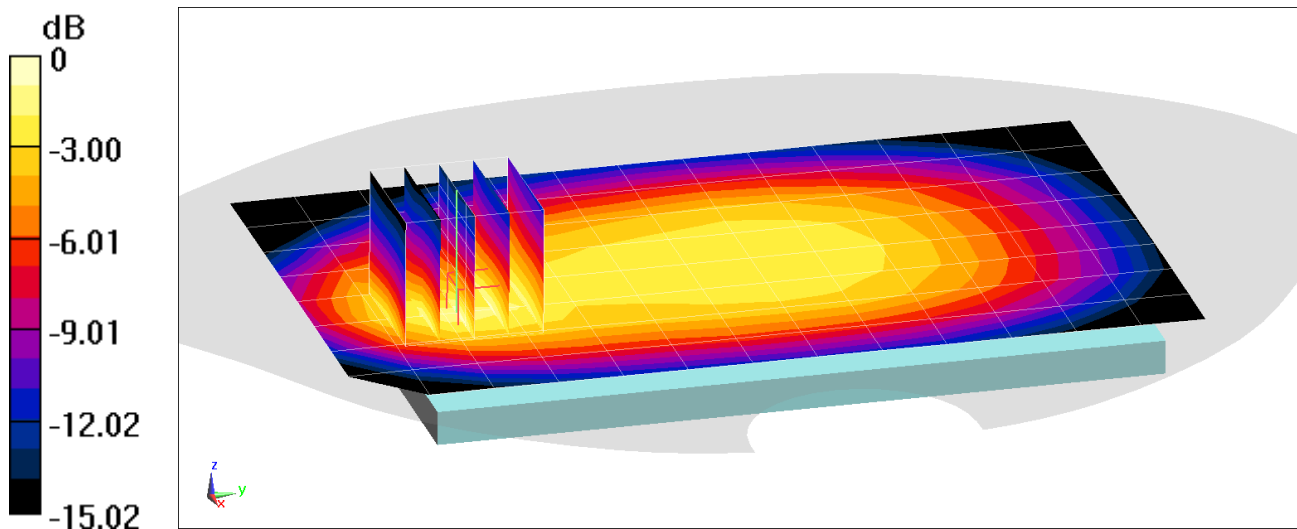
**Area Scan (9x14x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 13.37 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.385 W/kg

**SAR(1 g) = 0.192 W/kg**



0 dB = 0.303 W/kg = -5.19 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05256**

Communication System: UID 0, LTE Band 71; Frequency: 680.5 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 680.5 \text{ MHz}$ ;  $\sigma = 0.92 \text{ S/m}$ ;  $\epsilon_r = 54.38$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/28/2020; Ambient Temp: 20.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7539; ConvF(10.24, 10.24, 10.24) @ 680.5 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 71, Body SAR, Right Edge, Mid.ch**  
**20 MHz Bandwidth, QPSK, 1 RB, 50 RB Offset**

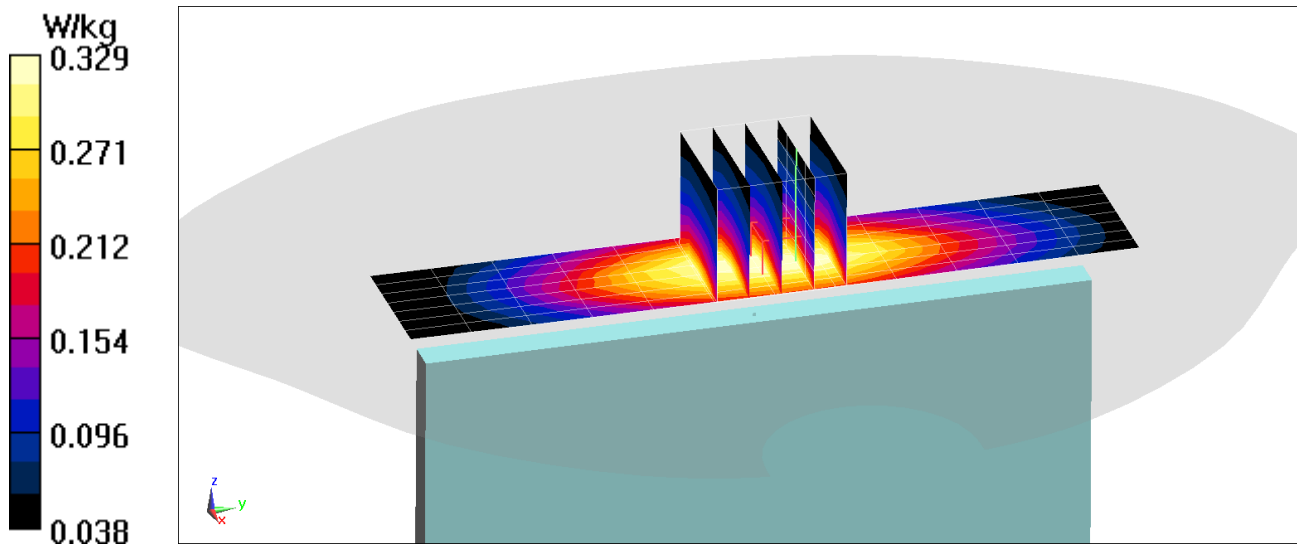
**Area Scan (8x13x1):** Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 16.99 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.377 W/kg

**SAR(1 g) = 0.247 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05256**

Communication System: UID 0, LTE Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 707.5 \text{ MHz}$ ;  $\sigma = 0.93 \text{ S/m}$ ;  $\epsilon_r = 54.319$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/28/2020; Ambient Temp: 20.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7539; ConvF(10.24, 10.24, 10.24) @ 707.5 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 12, Body SAR, Back side, Mid.ch**  
**10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

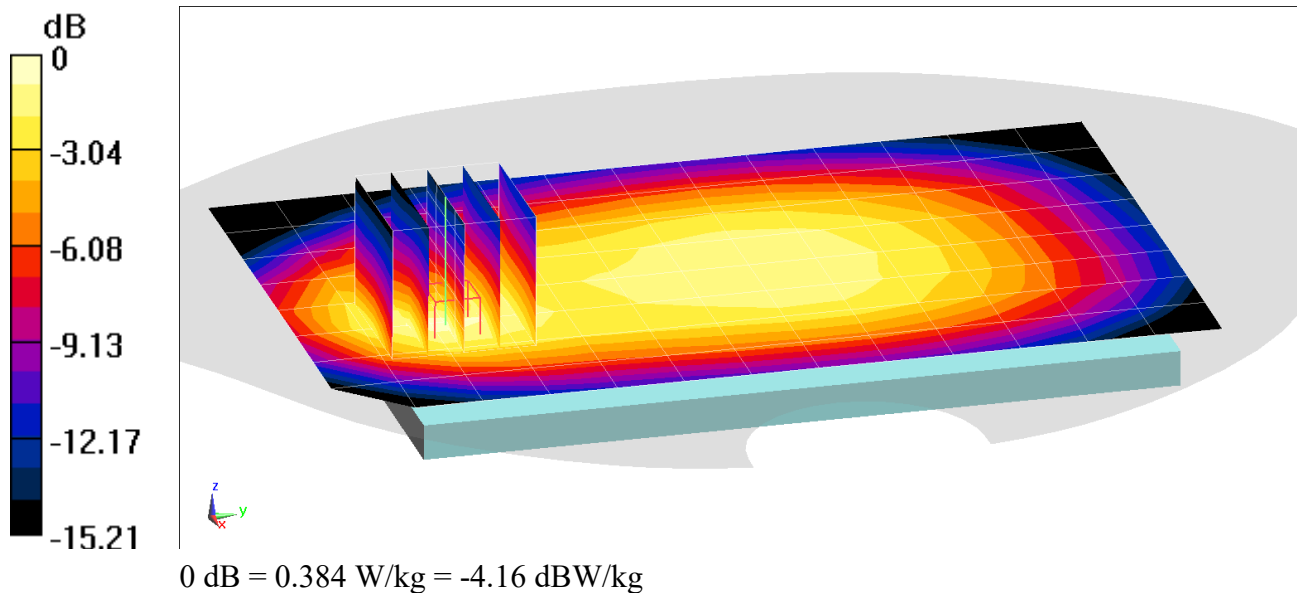
**Area Scan (9x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 16.49 V/m; Power Drift = -0.20 dB

Peak SAR (extrapolated) = 0.480 W/kg

**SAR(1 g) = 0.235 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05256**

Communication System: UID 0, LTE Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 707.5 \text{ MHz}$ ;  $\sigma = 0.93 \text{ S/m}$ ;  $\epsilon_r = 54.319$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/28/2020; Ambient Temp: 20.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7539; ConvF(10.24, 10.24, 10.24) @ 707.5 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 12, Body SAR, Right Edge, Mid.ch**  
**10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

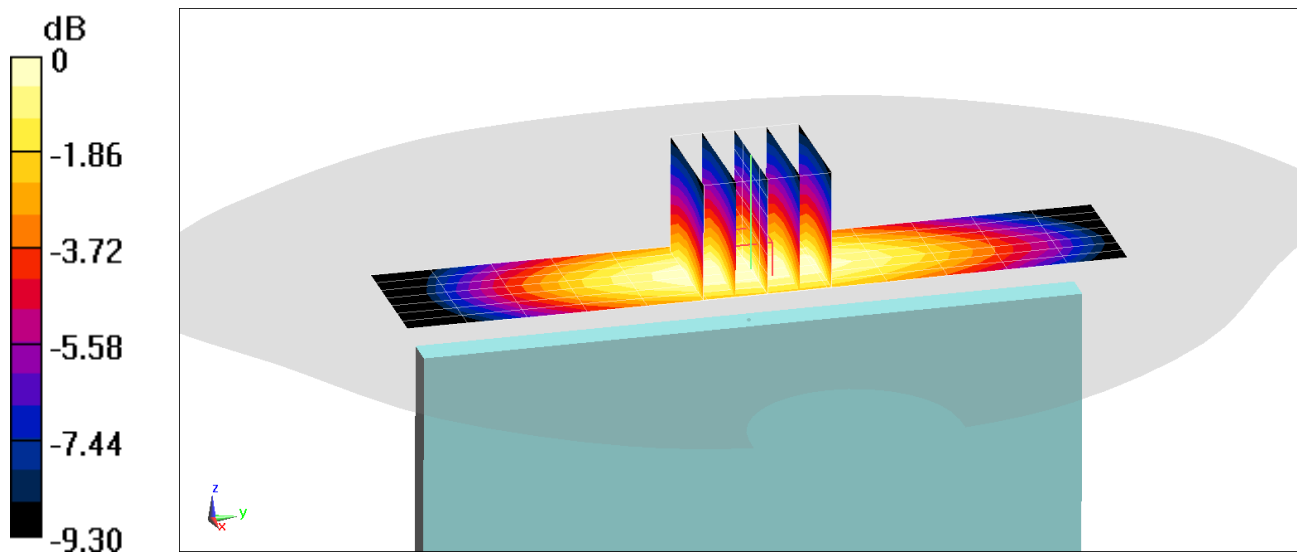
**Area Scan (8x13x1):** Measurement grid: dx=5mm, dy=15mm

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

Reference Value = 17.05 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.390 W/kg

**SAR(1 g) = 0.258 W/kg**



0 dB = 0.342 W/kg = -4.66 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05256**

Communication System: UID 0, LTE Band 13; Frequency: 782 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 782 \text{ MHz}$ ;  $\sigma = 0.959 \text{ S/m}$ ;  $\epsilon_r = 54.134$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/28/2020; Ambient Temp: 20.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7539; ConvF(10.24, 10.24, 10.24) @ 782 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 13, Body SAR, Back side, Mid.ch**  
**10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

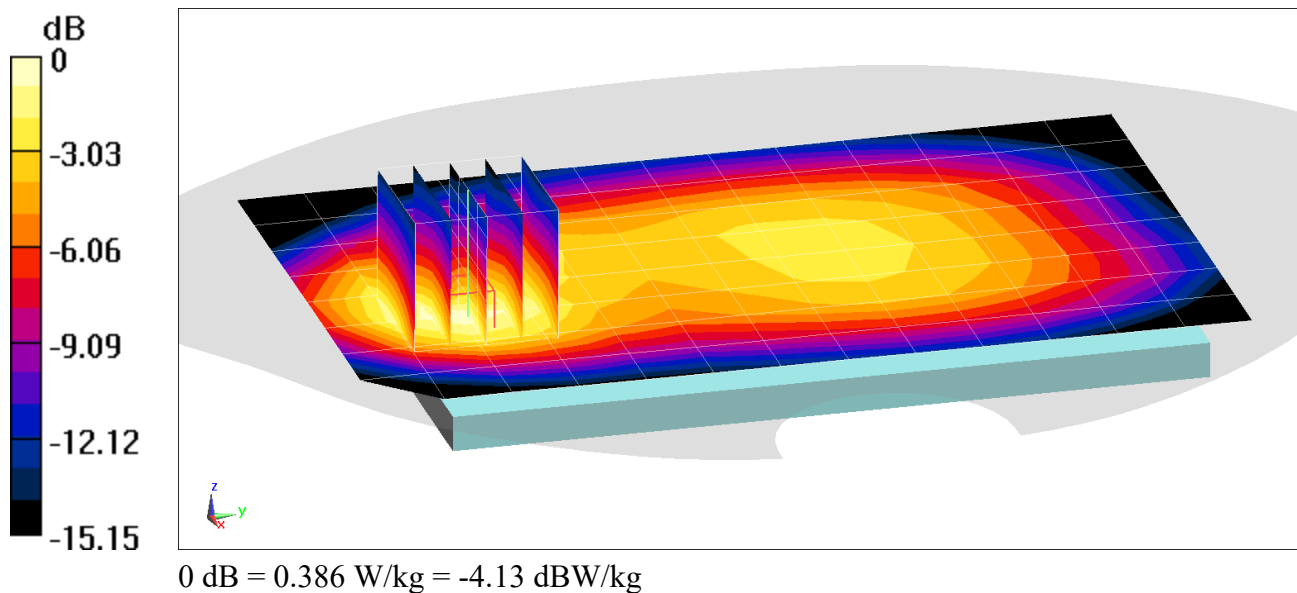
**Area Scan (9x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 16.67 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.478 W/kg

**SAR(1 g) = 0.249 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05256**

Communication System: UID 0, LTE Band 13; Frequency: 782 MHz; Duty Cycle: 1:1

Medium: 750 Body; Medium parameters used (interpolated):

$f = 782 \text{ MHz}$ ;  $\sigma = 0.959 \text{ S/m}$ ;  $\epsilon_r = 54.134$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/28/2020; Ambient Temp: 20.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7539; ConvF(10.24, 10.24, 10.24) @ 782 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 13, Body SAR, Front side, Mid.ch**

**10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

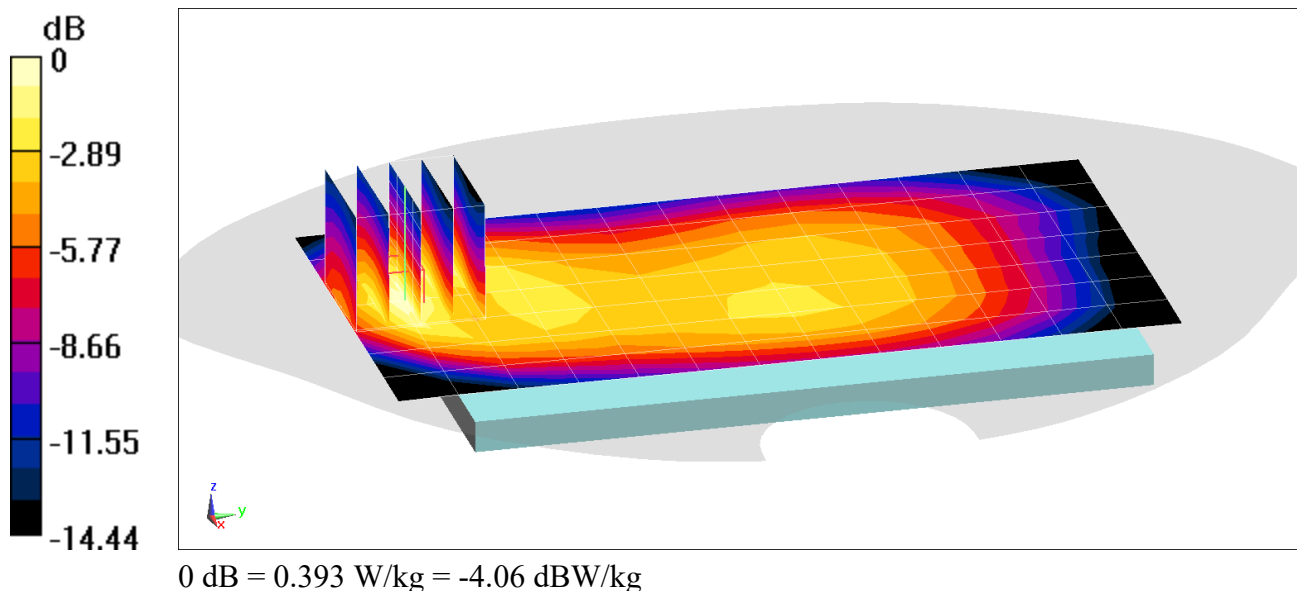
**Area Scan (8x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 16.75 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.481 W/kg

**SAR(1 g) = 0.252 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05231**

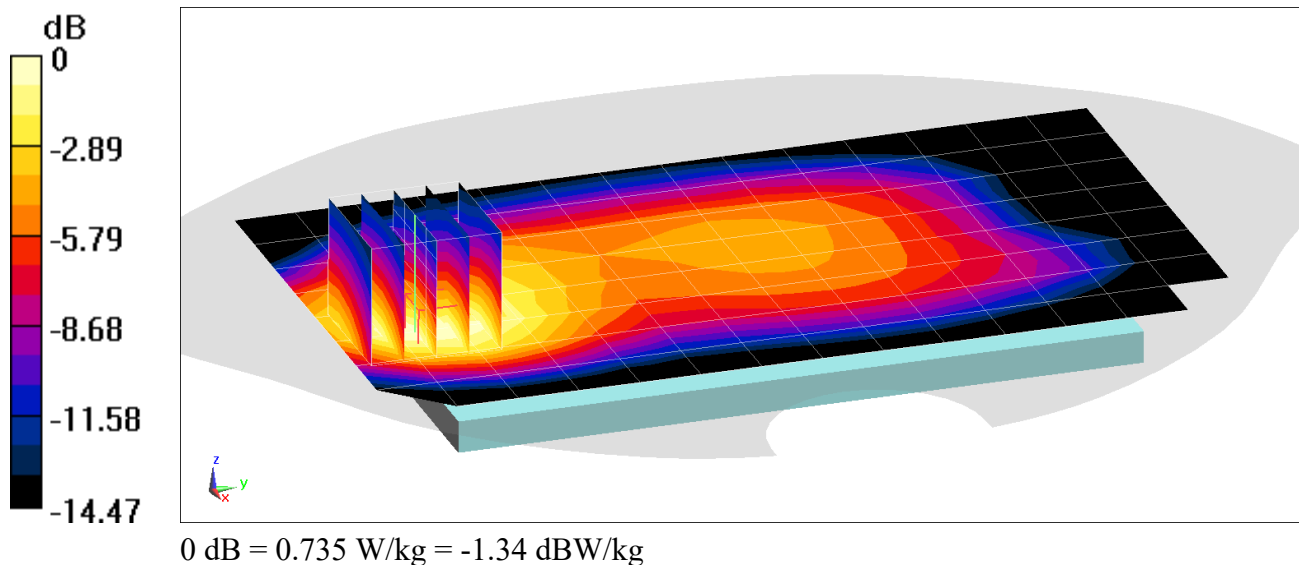
Communication System: UID 0, LTE Band 26; Frequency: 831.5 MHz; Duty Cycle: 1:1  
Medium: 835 Body; Medium parameters used (interpolated):  
 $f = 831.5 \text{ MHz}$ ;  $\sigma = 0.953 \text{ S/m}$ ;  $\epsilon_r = 54.712$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/07/2021; Ambient Temp: 22.8°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7552; ConvF(9.96, 9.96, 9.96) @ 831.5 MHz; Calibrated: 9/11/2020  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1449; Calibrated: 9/10/2020  
Phantom: Twin-SAM V4.0 Left 30; Type: QD 000 P40 CC; Serial: 1687  
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 26 (Cell.), Body SAR, Back side, Mid.ch**  
**15 MHz Bandwidth, QPSK, 1 RB, 74 RB Offset**

**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 23.37 V/m; Power Drift = -0.06 dB  
Peak SAR (extrapolated) = 0.897 W/kg  
**SAR(1 g) = 0.487 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05264**

Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1770 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1770 \text{ MHz}$ ;  $\sigma = 1.494 \text{ S/m}$ ;  $\epsilon_r = 51.33$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/04/2021; Ambient Temp: 22.5°C; Tissue Temp: 23.7°C

Probe: EX3DV4 - SN7539; ConvF(8.16, 8.16, 8.16) @ 1770 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 66 (AWS), Body SAR, Back side, High.ch**  
**20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset**

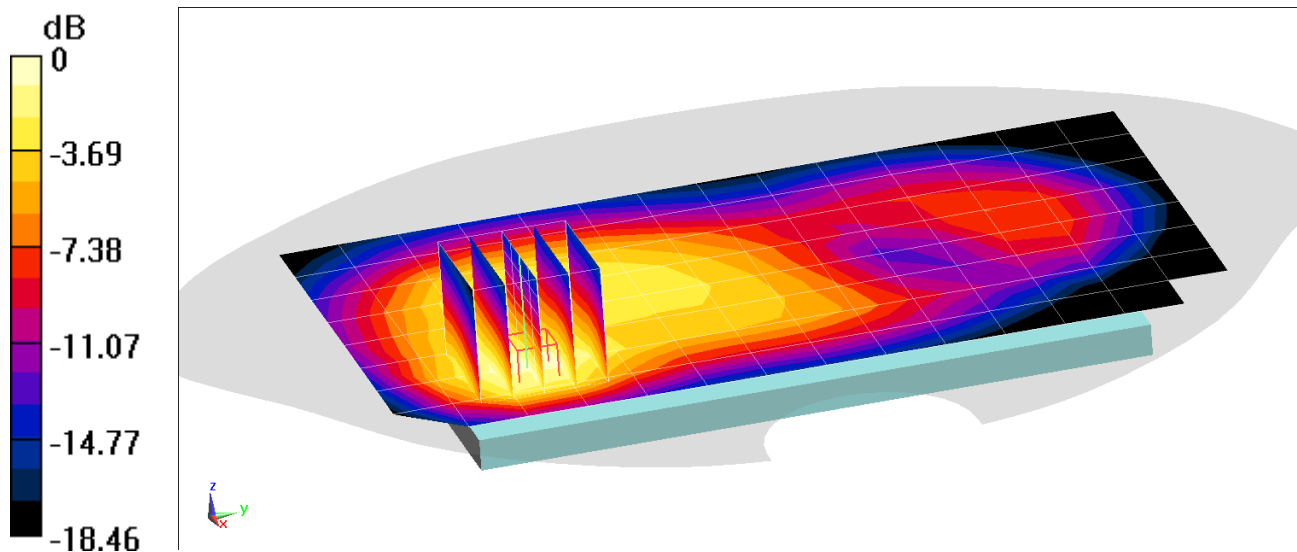
**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 18.47 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.925 W/kg

**SAR(1 g) = 0.476 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05264**

Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1770 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1770 \text{ MHz}$ ;  $\sigma = 1.494 \text{ S/m}$ ;  $\epsilon_r = 51.33$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/04/2021; Ambient Temp: 22.5°C; Tissue Temp: 23.7°C

Probe: EX3DV4 - SN7539; ConvF(8.16, 8.16, 8.16) @ 1770 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 66 (AWS), Body SAR, Bottom Edge, High.ch**  
**20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset**

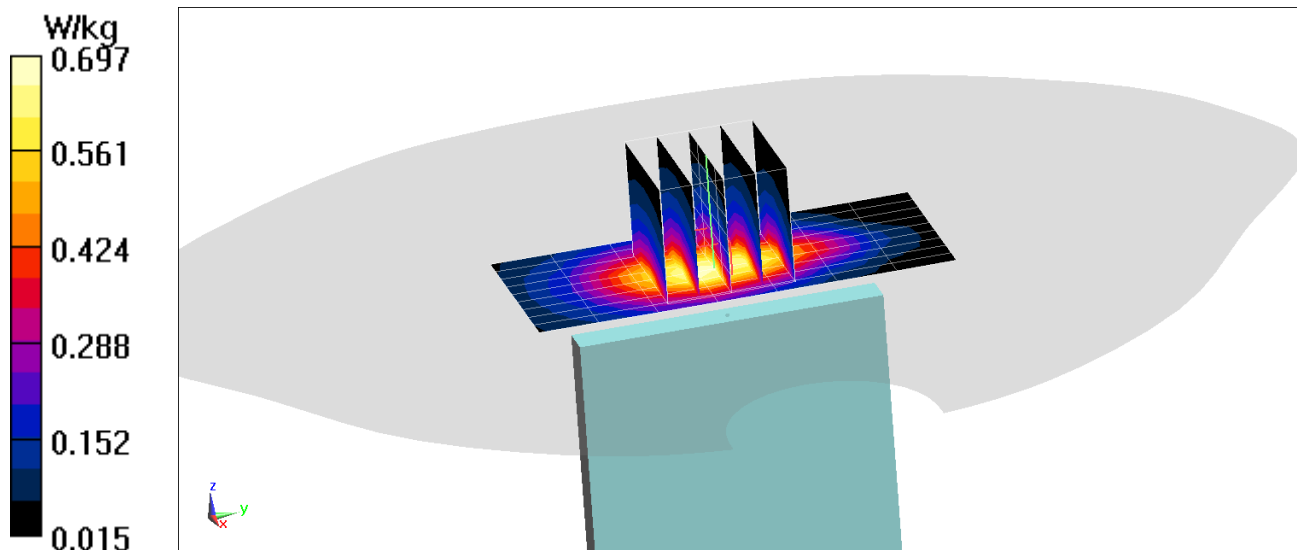
**Area Scan (10x8x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=15\text{mm}$

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

Reference Value = 18.58 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.827 W/kg

**SAR(1 g) = 0.483 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05264**

Communication System: UID 0, LTE Band 25 (PCS); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1860 \text{ MHz}$ ;  $\sigma = 1.489 \text{ S/m}$ ;  $\epsilon_r = 52.895$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/28/2020; Ambient Temp: 20.7°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7410; ConvF(7.76, 7.76, 7.76) @ 1860 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 25 (PCS), Body SAR, Back side, Low.ch**  
**20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

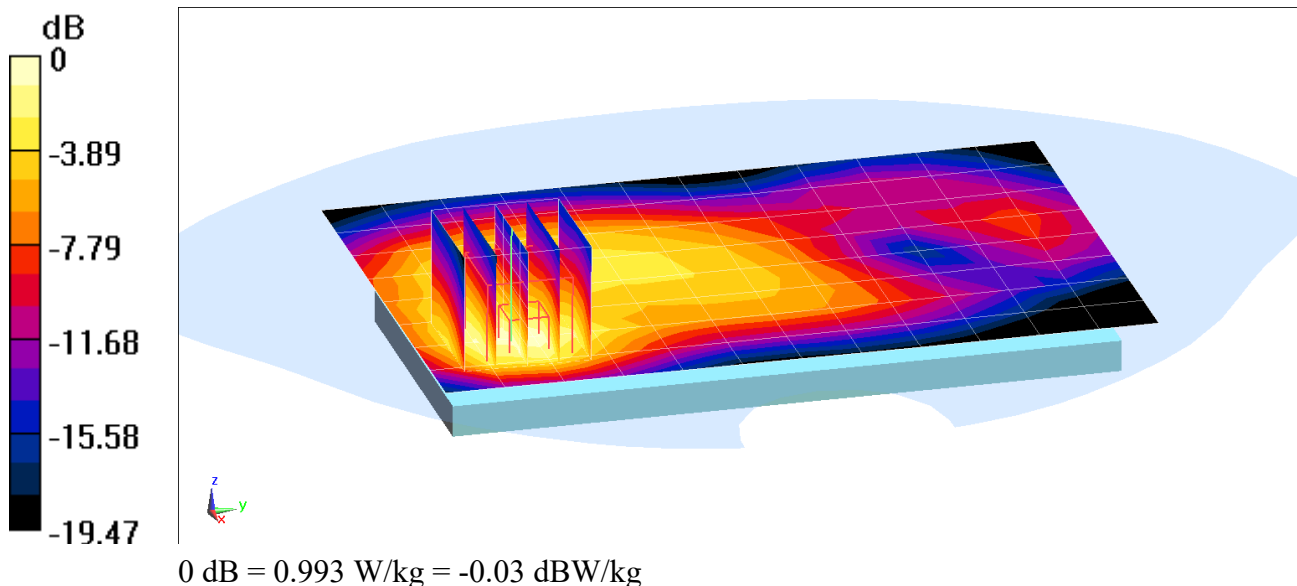
**Area Scan (9x13x1):** Measurement grid: dx=15mm, dy=15mm

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

Reference Value = 21.99 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.24 W/kg

**SAR(1 g) = 0.667 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05256**

Communication System: UID 0, LTE Band 41 (Class 2); Frequency: 2593 MHz; Duty Cycle: 1:2.31

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2593 \text{ MHz}$ ;  $\sigma = 2.218 \text{ S/m}$ ;  $\epsilon_r = 51.382$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/21/2021; Ambient Temp: 23.9°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN7308; ConvF(7.37, 7.37, 7.37) @ 2593 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 41 PC2, Body SAR, Back side, Mid.ch**  
**20 MHz Bandwidth, QPSK, 1 RB, 50 RB Offset**

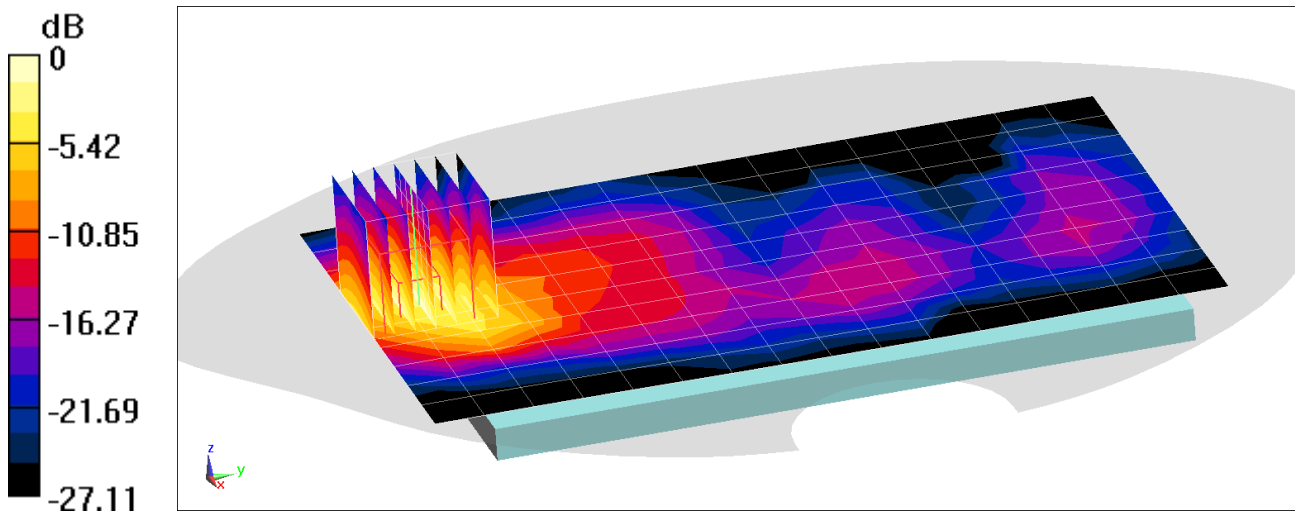
**Area Scan (11x8x1):** Measurement grid:  $dx=12\text{mm}$ ,  $dy=12\text{mm}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 14.30 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.866 W/kg

**SAR(1 g) = 0.404 W/kg**



0 dB = 0.685 W/kg = -1.64 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05256**

Communication System: UID 0, LTE Band 41 (Class 3); Frequency: 2506 MHz; Duty Cycle: 1:1.58

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2506$  MHz;  $\sigma = 2.106$  S/m;  $\epsilon_r = 51.228$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/03/2021; Ambient Temp: 23.1°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7409; ConvF(7.24, 7.24, 7.24) @ 2506 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/18/2020

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 41 PC3 ULCA, Body SAR, Bottom Edge**

**PCC: Ch. 39750, 20MHz Bandwidth, QPSK, 50 RB, 50 RB Offset**

**SCC: Ch. 39948, 20MHz Bandwidth, QPSK, 50 RB, 0 RB Offset**

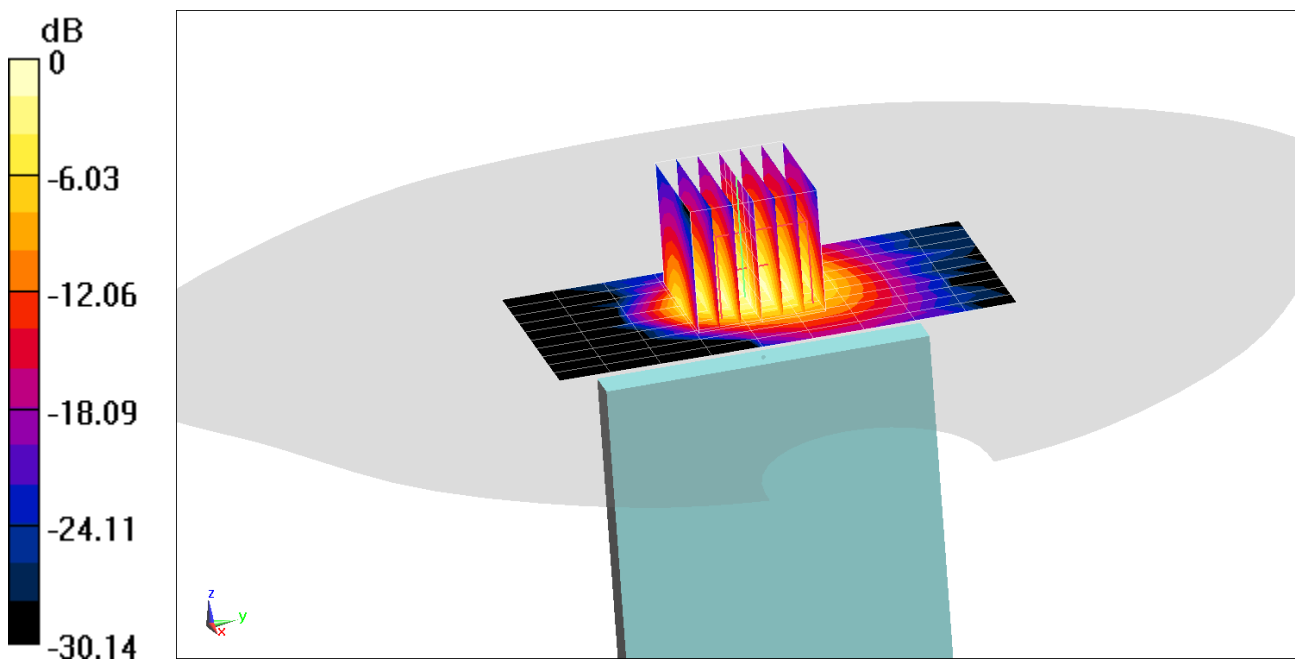
**Area Scan (11x10x1):** Measurement grid: dx=5mm, dy=12mm

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

Reference Value = 19.55 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.59 W/kg

**SAR(1 g) = 0.721 W/kg**



0 dB = 1.21 W/kg = 0.83 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05173**

Communication System: UID 0, IEEE 802.11b; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2412 \text{ MHz}$ ;  $\sigma = 1.998 \text{ S/m}$ ;  $\epsilon_r = 51.189$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/17/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7409; ConvF(7.24, 7.24, 7.24) @ 2412 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/18/2020

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11b, 22 MHz Bandwidth**

**Body SAR, Ch 1, 1 Mbps, Back Side**

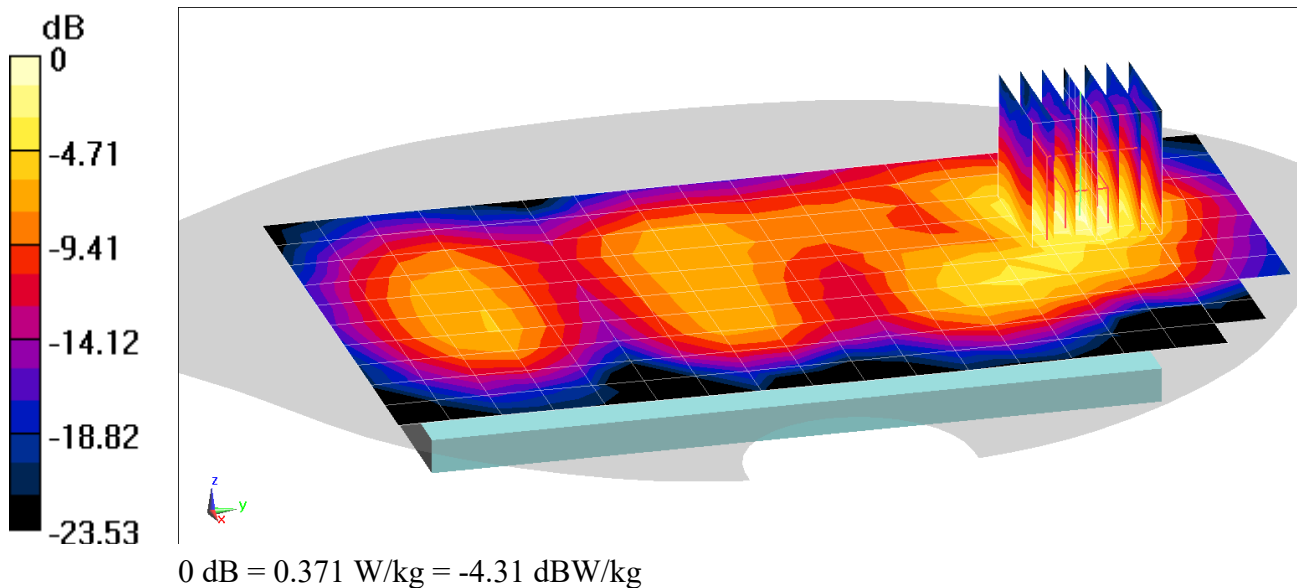
**Area Scan (11x3x1):** Measurement grid:  $dx=12\text{mm}$ ,  $dy=12\text{mm}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 11.25 V/m; Power Drift = -0.21 dB

Peak SAR (extrapolated) = 0.472 W/kg

**SAR(1 g) = 0.219 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05173**

Communication System: UID 0, 802.11b; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2412 \text{ MHz}$ ;  $\sigma = 1.998 \text{ S/m}$ ;  $\epsilon_r = 51.189$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/17/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7409; ConvF(7.24, 7.24, 7.24) @ 2412 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/18/2020

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11b, 22 MHz Bandwidth**

**Body SAR, Ch 1, 1 Mbps, Top Edge**

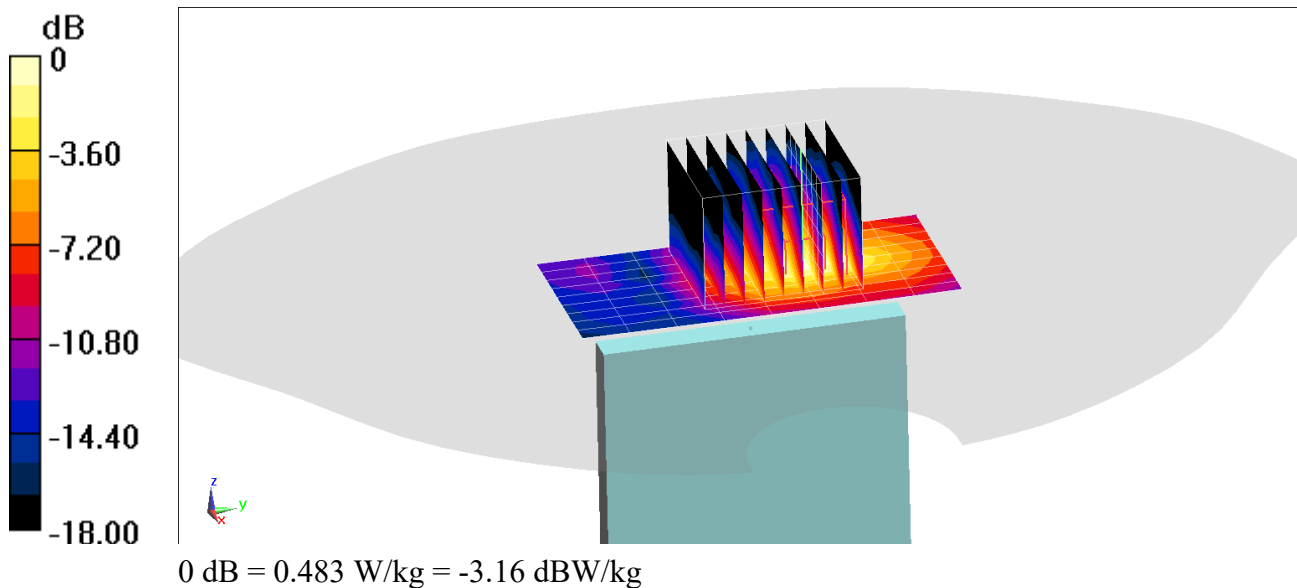
**Area Scan (10x9x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=12\text{mm}$

**Zoom Scan (8x9x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 8.221 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.610 W/kg

**SAR(1 g) = 0.295 W/kg**



# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05181**

Communication System: UID 0, 802.11a 5.2-5.8 GHz Band; Frequency: 5825 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body; Medium parameters used:

$f = 5825 \text{ MHz}$ ;  $\sigma = 6.306 \text{ S/m}$ ;  $\epsilon_r = 46.31$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/04/2021; Ambient Temp: 22.8°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7406; ConvF(4.56, 4.56, 4.56) @ 5825 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1583; Calibrated: 5/14/2020

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11a, U-NII-3, 20 MHz Bandwidth**  
**Body SAR, Ch 165, 6 Mbps, Back Side**

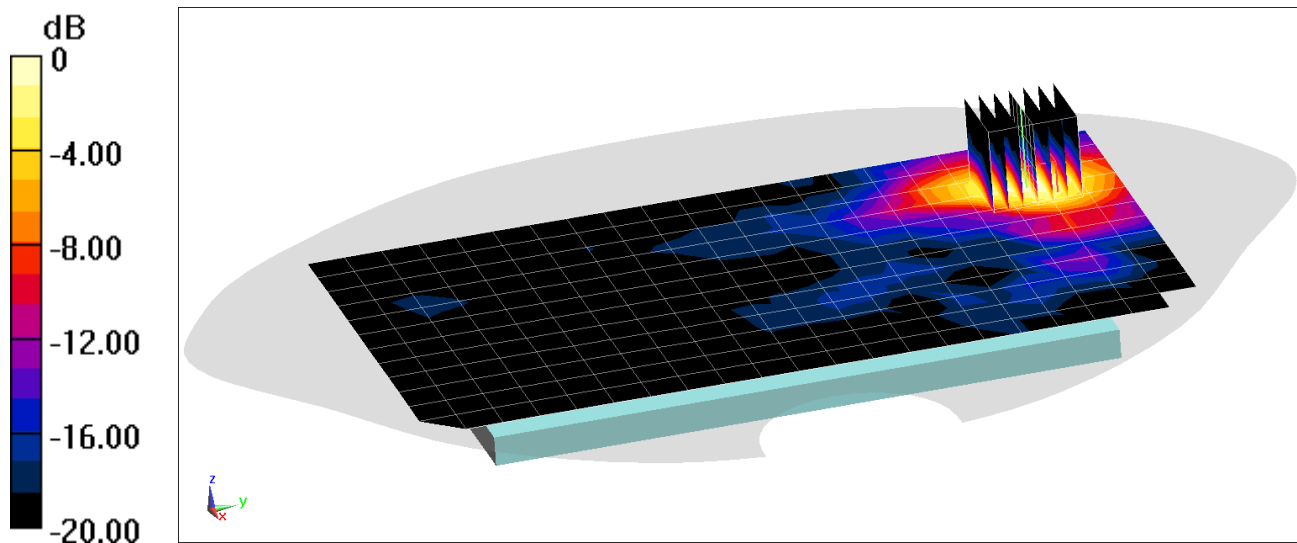
**Area Scan (13x22x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=4\text{mm}$ ,  $dy=4\text{mm}$ ,  $dz=1.4\text{mm}$ ; Graded Ratio: 1.4

Reference Value = 1.054 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 2.10 W/kg

**SAR(1 g) = 0.524 W/kg**



0 dB = 1.22 W/kg = 0.86 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05181**

Communication System: UID 0, 802.11a 5.2-5.8 GHz Band; Frequency: 5765 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body; Medium parameters used:

$f = 5765$  MHz;  $\sigma = 6.223$  S/m;  $\epsilon_r = 46.399$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/04/2021; Ambient Temp: 22.8°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7406; ConvF(4.56, 4.56, 4.56) @ 5765 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1583; Calibrated: 5/14/2020

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11a, U-NII-3, 20 MHz Bandwidth**

**Body SAR, Ch 153, 6 Mbps, Top Edge**

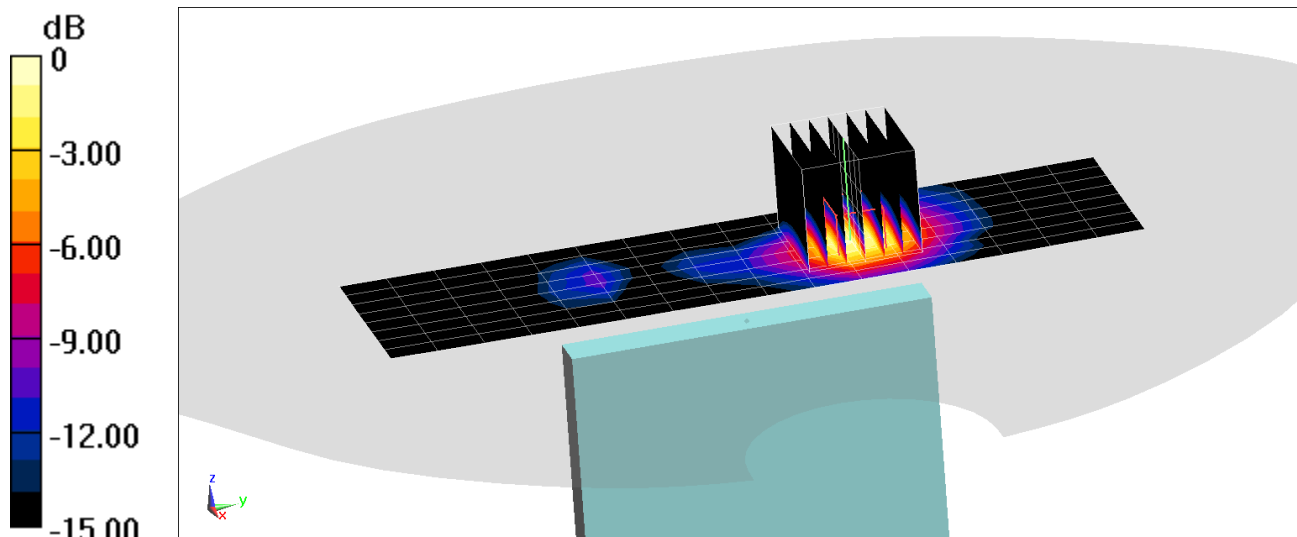
**Area Scan (9x17x1):** Measurement grid: dx=5mm, dy=10mm

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 3.843 V/m; Power Drift = 0.21 dB

Peak SAR (extrapolated) = 4.34 W/kg

**SAR(1 g) = 0.993 W/kg**



0 dB = 2.50 W/kg = 3.98 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05173**

Communication System: UID 0, Bluetooth; Frequency: 2441 MHz; Duty Cycle: 1:1.300

Medium: 2450 Body; Medium parameters used (interpolated):

$f = 2441 \text{ MHz}$ ;  $\sigma = 1.992 \text{ S/m}$ ;  $\epsilon_r = 51.72$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/04/2021; Ambient Temp: 22.0°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7308; ConvF(7.41, 7.41, 7.41) @ 2441 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: Bluetooth, Body SAR, Ch 39, 1 Mbps, Back Side**

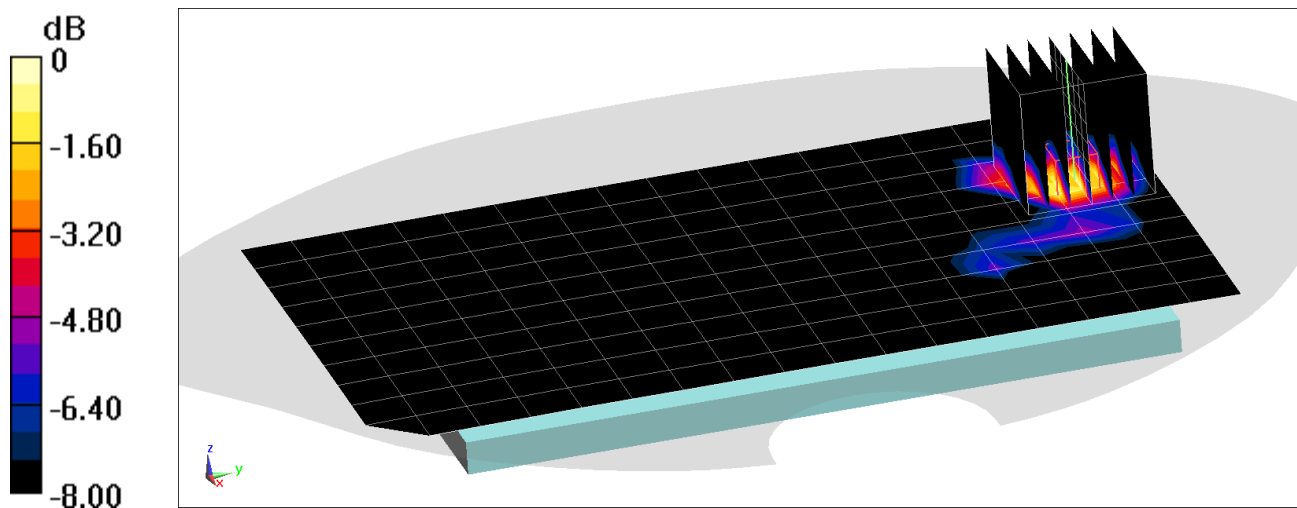
**Area Scan (11x18x1):** Measurement grid:  $dx=12\text{mm}$ ,  $dy=12\text{mm}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 2.885 V/m; Power Drift = 0.20 dB

Peak SAR (extrapolated) = 0.0350 W/kg

**SAR(1 g) = 0.016 W/kg**



0 dB = 0.0270 W/kg = -15.69 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05256**

Communication System: UID 0, UMTS; Frequency: 1752.6 MHz; Duty Cycle: 1:1  
Medium: 1750 Body; Medium parameters used (interpolated):  
 $f = 1752.6 \text{ MHz}$ ;  $\sigma = 1.535 \text{ S/m}$ ;  $\epsilon_r = 52.265$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01/08/2021; Ambient Temp: 19.7°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7410; ConvF(8.17, 8.17, 8.17) @ 1752.6 MHz; Calibrated: 7/20/2020  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1322; Calibrated: 7/15/2020  
Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1800  
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: UMTS 1750, Phablet SAR, Back side, High.ch**

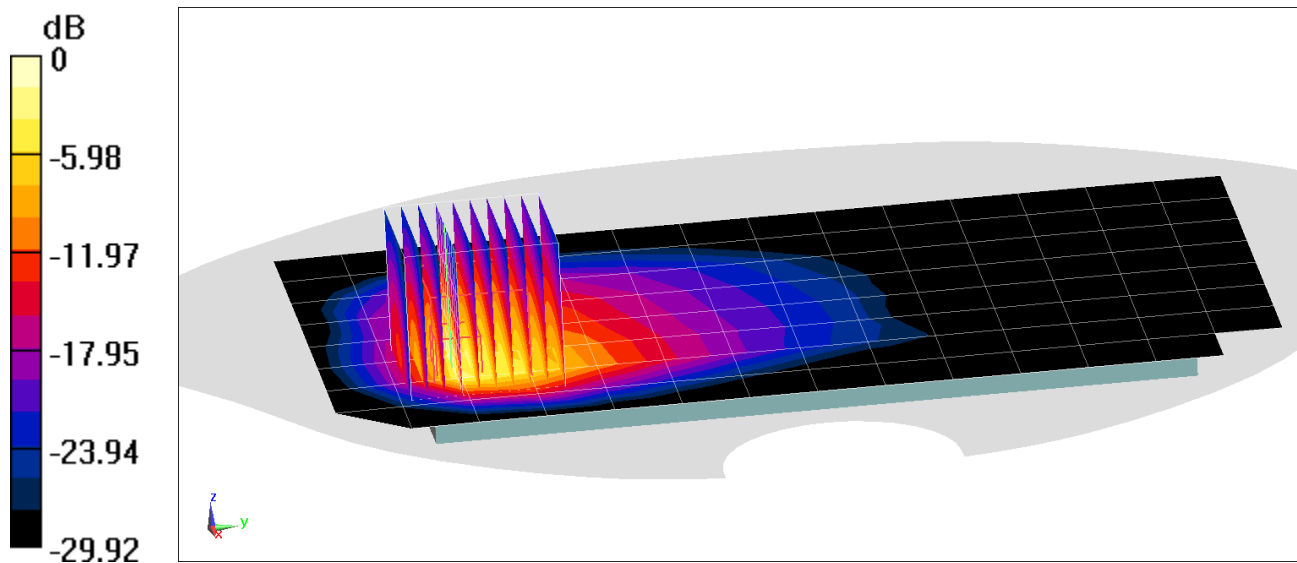
**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (10x10x8)/Cube 0:** Measurement grid:  $dx=3.8\text{mm}$ ,  $dy=3.8\text{mm}$ ,  $dz=1.4\text{mm}$ ; Graded Ratio: 1.4

Reference Value = 58.59 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 26.9 W/kg

**SAR(10 g) = 2.6 W/kg**



0 dB = 15.5 W/kg = 11.90 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05249**

Communication System: UID 0, UMTS; Frequency: 1852.4 MHz; Duty Cycle: 1:1  
Medium: 1900 Body; Medium parameters used (interpolated):  
 $f = 1852.4 \text{ MHz}$ ;  $\sigma = 1.468 \text{ S/m}$ ;  $\epsilon_r = 53.211$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01/05/2021; Ambient Temp: 21.3°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7551; ConvF(7.84, 7.84, 7.84) @ 1852.4 MHz; Calibrated: 10/20/2020  
Sensor-Surface: 1.4mm (Mechanical Surface Detection)  
Electronics: DAE4 Sn1333; Calibrated: 10/16/2020  
Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692  
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

**Mode: UMTS 1900, Phablet SAR, Back side, Low.ch**

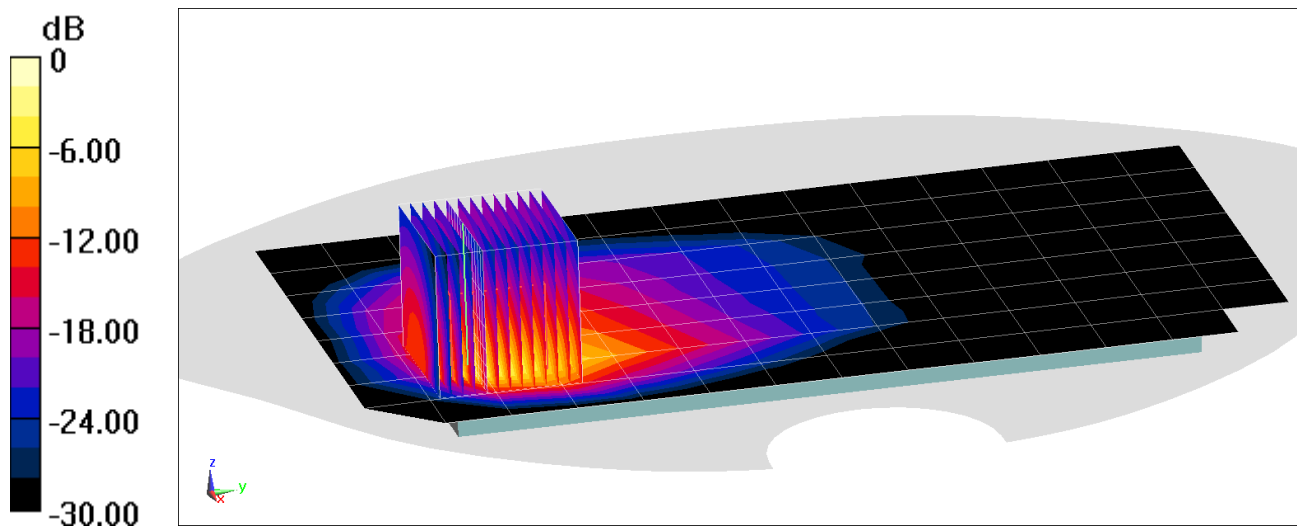
**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (14x13x8)/Cube 0:** Measurement grid:  $dx=2.7\text{mm}$ ,  $dy=2.7\text{mm}$ ,  $dz=1.4\text{mm}$ ; Graded Ratio: 1.4

Reference Value = 77.92 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 29.9 W/kg

**SAR(10 g) = 2.78 W/kg**



0 dB = 15.0 W/kg = 11.76 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05256**

Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1770 MHz; Duty Cycle: 1:1

Medium: 1750 Body; Medium parameters used:

$f = 1770 \text{ MHz}$ ;  $\sigma = 1.561 \text{ S/m}$ ;  $\epsilon_r = 50.944$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01/11/2021; Ambient Temp: 21.3°C; Tissue Temp: 20.3°C

Probe: EX3DV4 - SN7410; ConvF(8.17, 8.17, 8.17) @ 1770 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1800

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 66 (AWS), Phablet SAR, Back side, High.ch**  
**20 MHz Bandwidth, QPSK, 100 RB, 0 RB Offset**

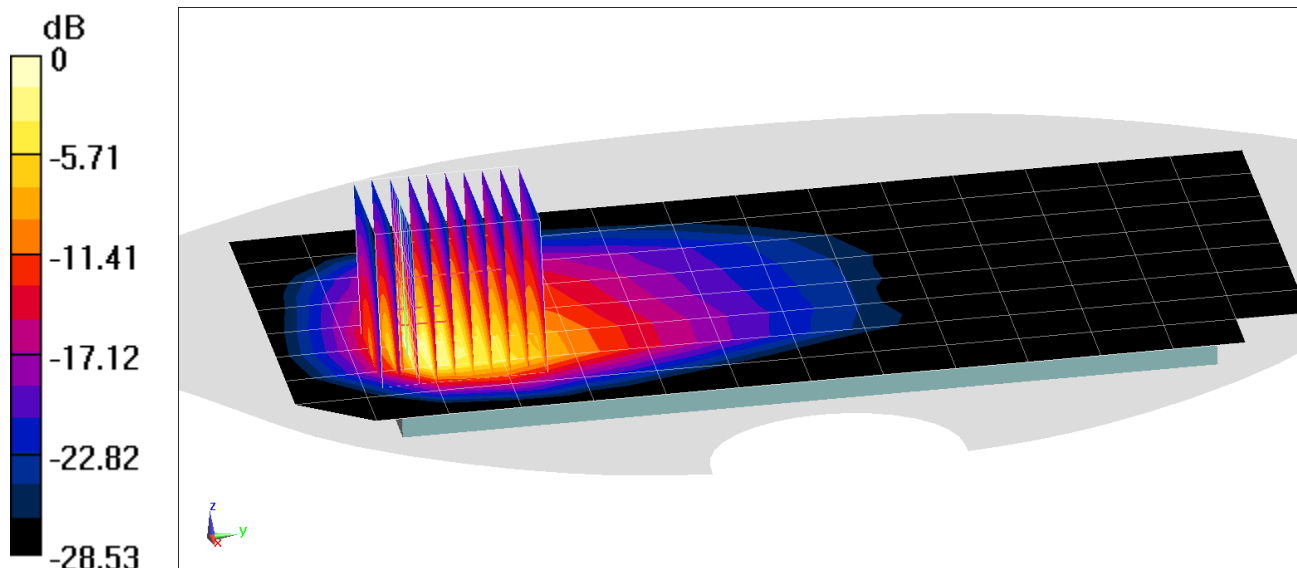
**Area Scan (9x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

**Zoom Scan (10x10x8)/Cube 0:** Measurement grid:  $dx=3.8\text{mm}$ ,  $dy=3.8\text{mm}$ ,  $dz=1.4\text{mm}$ ; Graded Ratio: 1.4

Reference Value = 56.50 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 29.5 W/kg

**SAR(10 g) = 2.62 W/kg**



0 dB = 13.5 W/kg = 11.30 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05264**

Communication System: UID 0, LTE Band 25 (PCS); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium: 1900 Body; Medium parameters used:

$f = 1860$  MHz;  $\sigma = 1.493$  S/m;  $\epsilon_r = 52.66$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 12/30/2020; Ambient Temp: 20.8°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7410; ConvF(7.76, 7.76, 7.76) @ 1860 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 25 (PCS), Phablet SAR, Back side, Low.ch**  
**20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset**

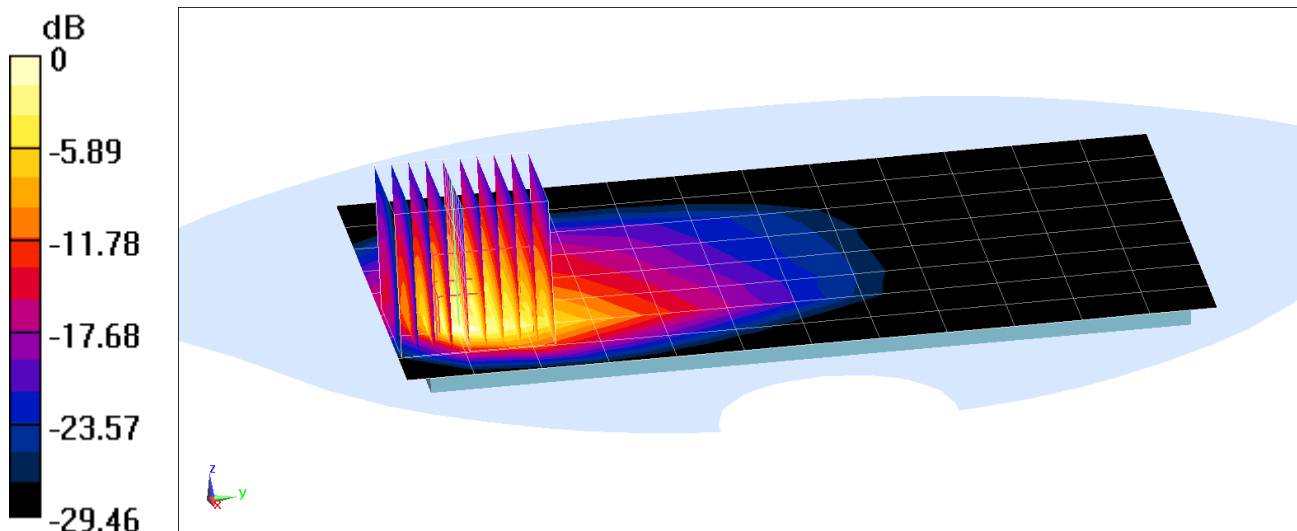
**Area Scan (9x13x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (10x10x8)/Cube 0:** Measurement grid: dx=3.8mm, dy=3.8mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 63.87 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 21.6 W/kg

**SAR(10 g) = 2.62 W/kg**



0 dB = 11.7 W/kg = 10.68 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05256**

Communication System: UID 0, LTE Band 41 (Class 2); Frequency: 2549.5 MHz; Duty Cycle: 1:2.31

Medium: 2450 Body; Medium parameters used:

$f = 2550$  MHz;  $\sigma = 2.141$  S/m;  $\epsilon_r = 50.709$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 02/02/2021; Ambient Temp: 23.0°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7409; ConvF(7.12, 7.12, 7.12) @ 2549.5 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/18/2020

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: LTE Band 41 PC2, Phablet SAR, Bottom Edge, Low-Mid.ch**  
**20 MHz Bandwidth, QPSK, 1 RB, 50 RB Offset**

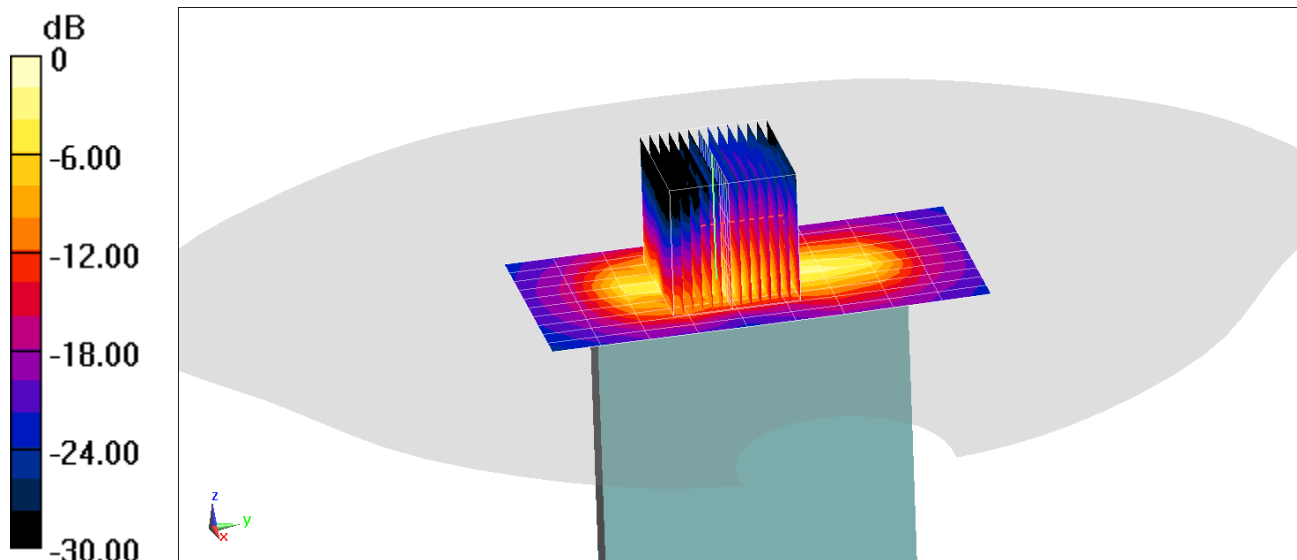
**Area Scan (11x10x1):** Measurement grid: dx=5mm, dy=12mm

**Zoom Scan (14x14x8)/Cube 0:** Measurement grid: dx=2.4mm, dy=2.4mm, dz=1.4mm; Graded Ratio: 1.4

Reference Value = 36.68 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 9.83 W/kg

**SAR(10 g) = 0.828 W/kg**



0 dB = 5.76 W/kg = 7.60 dBW/kg

# PCTEST

**DUT: ZNFK735MM; Type: Portable Handset; Serial: 05181**

Communication System: UID 0, IEEE 802.11a; Frequency: 5520 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body; Medium parameters used:

$f = 5520 \text{ MHz}$ ;  $\sigma = 5.88 \text{ S/m}$ ;  $\epsilon_r = 46.815$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 0.0 cm

Test Date: 01/04/2021; Ambient Temp: 22.8°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7406; ConvF(4.37, 4.37, 4.37) @ 5520 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1583; Calibrated: 5/14/2020

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

**Mode: IEEE 802.11a, U-NII-2C, 20 MHz Bandwidth**  
**Phablet SAR, Ch 104, 6 Mbps, Top Edge**

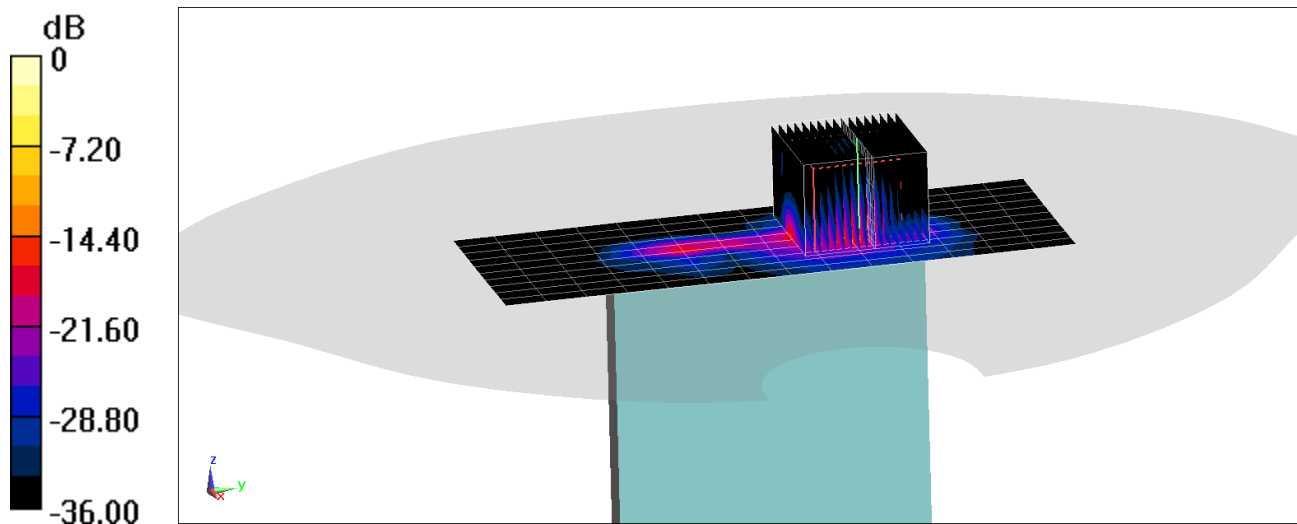
**Area Scan (11x15x1):** Measurement grid:  $dx=5\text{mm}$ ,  $dy=10\text{mm}$

**Zoom Scan (17x17x7)/Cube 0:** Measurement grid:  $dx=1.9\text{mm}$ ,  $dy=1.9\text{mm}$ ,  $dz=1.4\text{mm}$ ; Graded Ratio: 1.4

Reference Value = 4.713 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 113 W/kg

**SAR(10 g) = 2.33 W/kg**



0 dB = 61.6 W/kg = 17.90 dBW/kg

## APPENDIX B: SYSTEM VERIFICATION

# PCTEST

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1003**

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Head Medium parameters used:

$f = 750 \text{ MHz}$ ;  $\sigma = 0.881 \text{ S/m}$ ;  $\epsilon_r = 42.984$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 12/22/2020; Ambient Temp: 20.0°C; Tissue Temp: 20.0°C

Probe: EX3DV4 - SN7357; ConvF(10.23, 10.23, 10.23) @ 750 MHz; Calibrated: 4/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/15/2020

Phantom: Twin-SAM V5.0 Left 30; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 750 MHz System Verification at 23.0 dBm (200 mW)

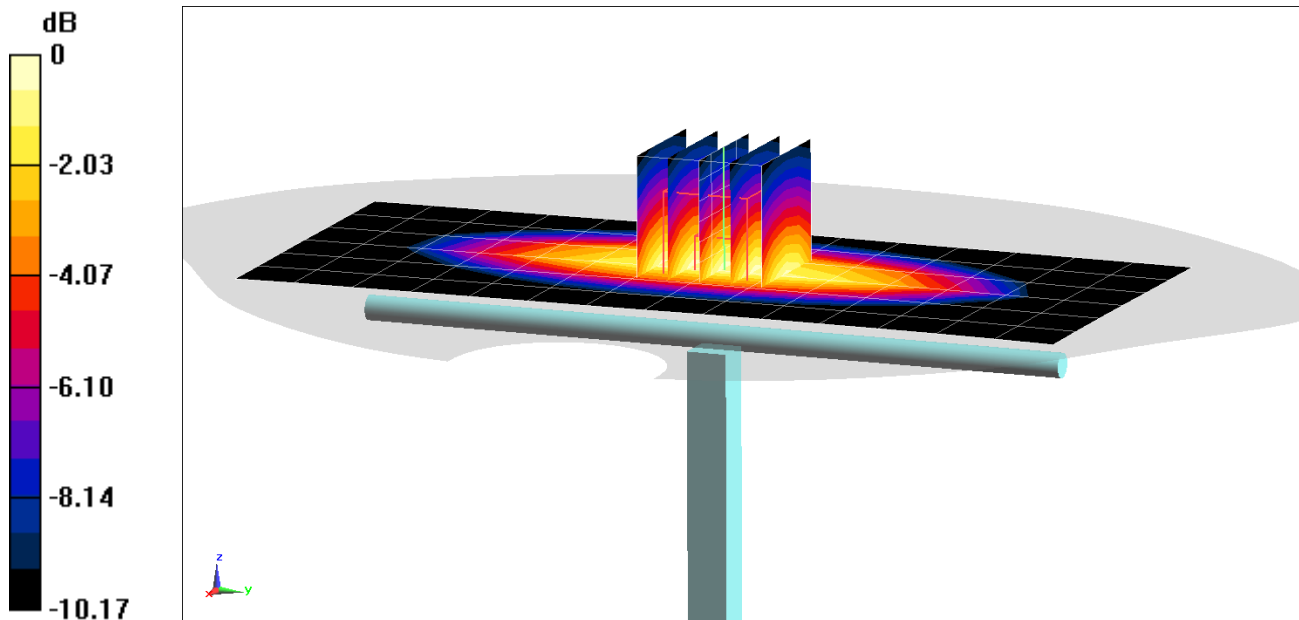
**Area Scan (7x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 2.42 W/kg

SAR(1 g) = 1.66 W/kg

Deviation(1 g) = -5.47%



0 dB = 2.11 W/kg = 3.24 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.917 \text{ S/m}$ ;  $\epsilon_r = 43.012$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 12/22/2020; Ambient Temp: 23.3°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN3589; ConvF(8.58, 8.58, 8.58) @ 835 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

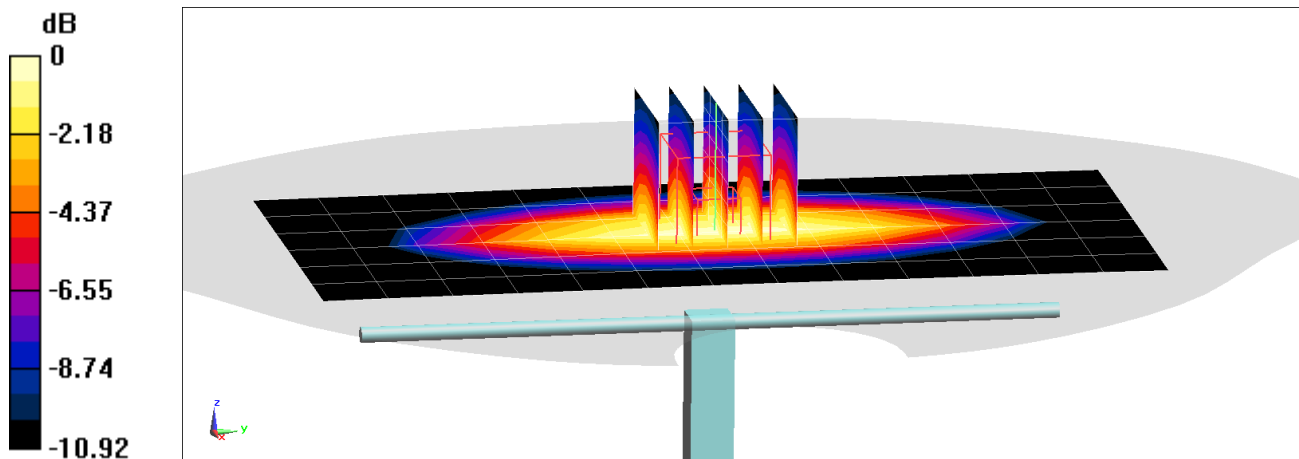
**Area Scan (7x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 3.03 W/kg

**SAR(1 g) = 1.93 W/kg**

Deviation(1 g) = 2.44%



0 dB = 2.65 W/kg = 4.23 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d047**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Head Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.945 \text{ S/m}$ ;  $\epsilon_r = 41.975$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 12/30/2020; Ambient Temp: 24.7°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN3589; ConvF(8.58, 8.58, 8.58) @ 835 MHz; Calibrated: 1/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1558; Calibrated: 1/13/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

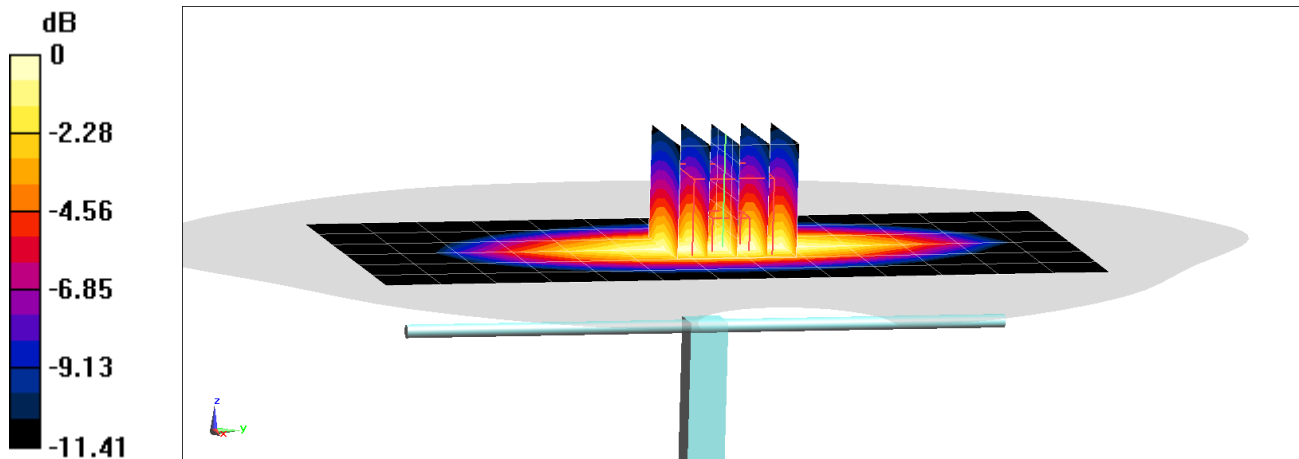
**Area Scan (7x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 3.21 W/kg

**SAR(1 g) = 1.94 W/kg**

Deviation(1 g) = 2.97%



# PCTEST

**DUT: Dipole 1750 MHz; Type: D1765V2; Serial: 1008**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Head Medium parameters used:

$f = 1750 \text{ MHz}$ ;  $\sigma = 1.41 \text{ S/m}$ ;  $\epsilon_r = 38.564$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/17/2020; Ambient Temp: 22.0°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN7308; ConvF(8.55, 8.55, 8.55) @ 1750 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

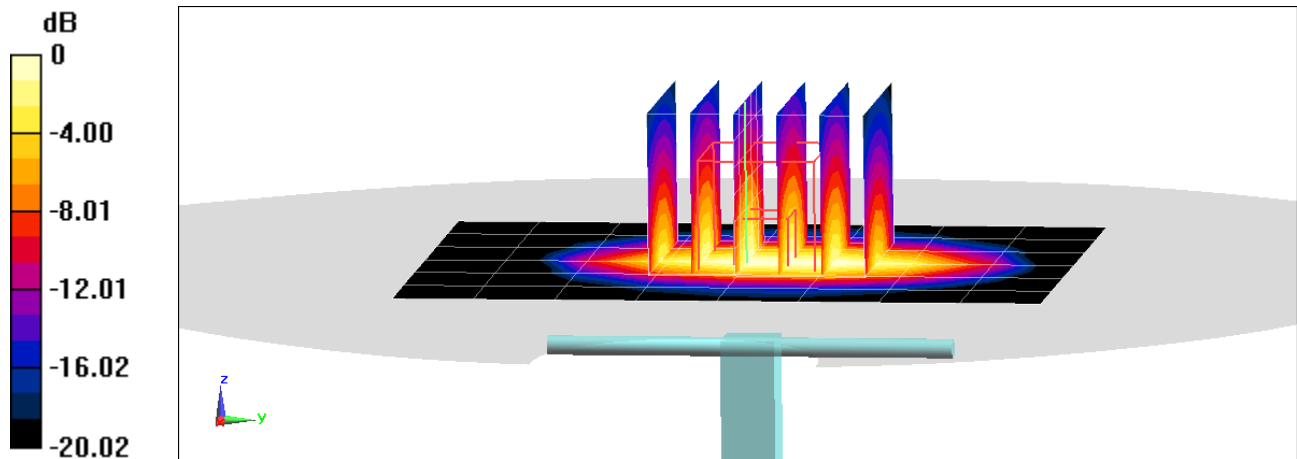
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

**Zoom Scan (6x6x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Peak SAR (extrapolated) = 6.59 W/kg

**SAR(1 g) = 3.41 W/kg**

Deviation(1 g) = -5.80%



# PCTEST

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d148**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Head Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.41 \text{ S/m}$ ;  $\epsilon_r = 40.208$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/20/2020; Ambient Temp: 23.3°C; Tissue Temp: 21.9°C

Probe: EX3DV4 - SN7308; ConvF(8.2, 8.2, 8.2) @ 1900 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

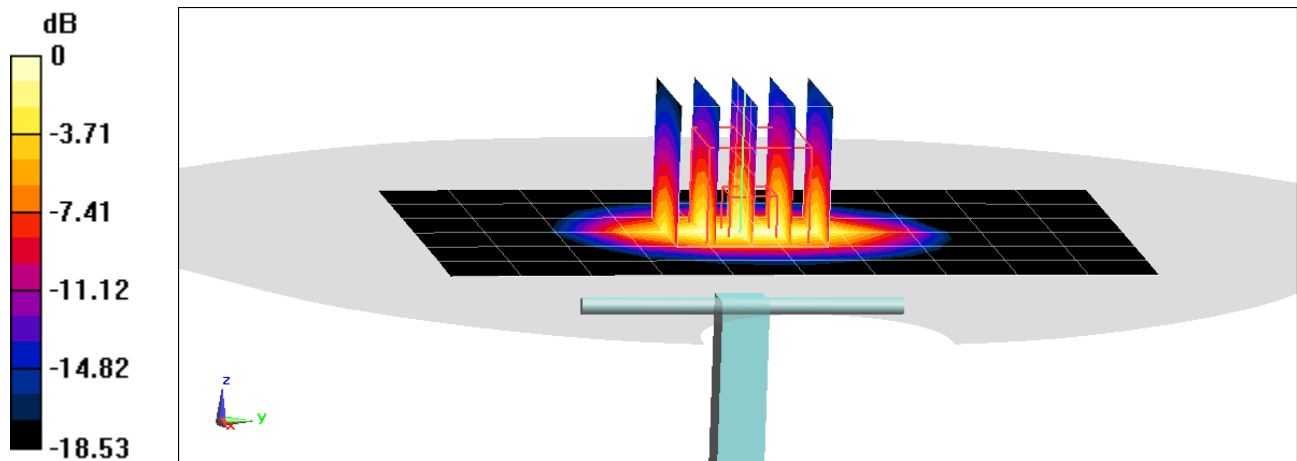
**Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.35 W/kg

**SAR(1 g) = 3.8 W/kg**

Deviation(1 g) = -2.81%



0 dB = 5.98 W/kg = 7.77 dBW/kg

# PCTEST

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d148**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Head Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.408 \text{ S/m}$ ;  $\epsilon_r = 38.778$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/05/2021; Ambient Temp: 23.7°C; Tissue Temp: 21.8°C

Probe: EX3DV4 - SN7539; ConvF(8.03, 8.03, 8.03) @ 1900 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

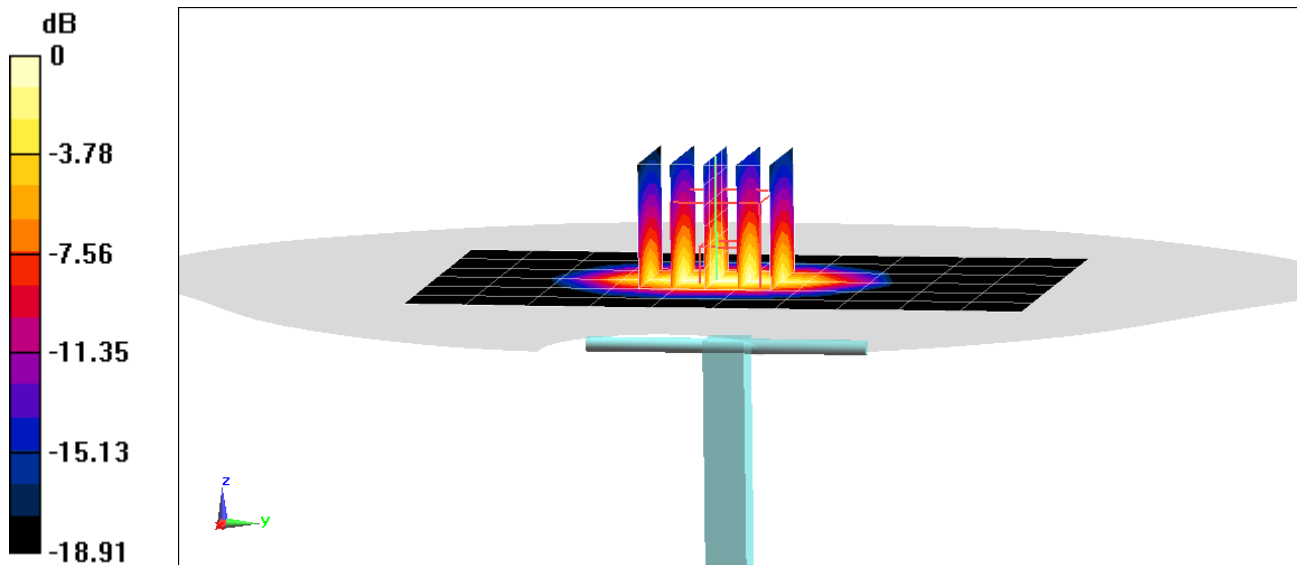
**Area Scan (7x11x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 7.90 W/kg

**SAR(1 g) = 4.16 W/kg**

Deviation(1 g) = 6.39%



0 dB = 6.57 W/kg = 8.18 dBW/kg

# PCTEST

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used:

$f = 2450$  MHz;  $\sigma = 1.847$  S/m;  $\epsilon_r = 39.716$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/07/2021; Ambient Temp: 23.1°C; Tissue Temp: 24.7°C

Probe: EX3DV4 - SN7571; ConvF(7.28, 7.28, 7.28) @ 2450 MHz; Calibrated: 12/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/7/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

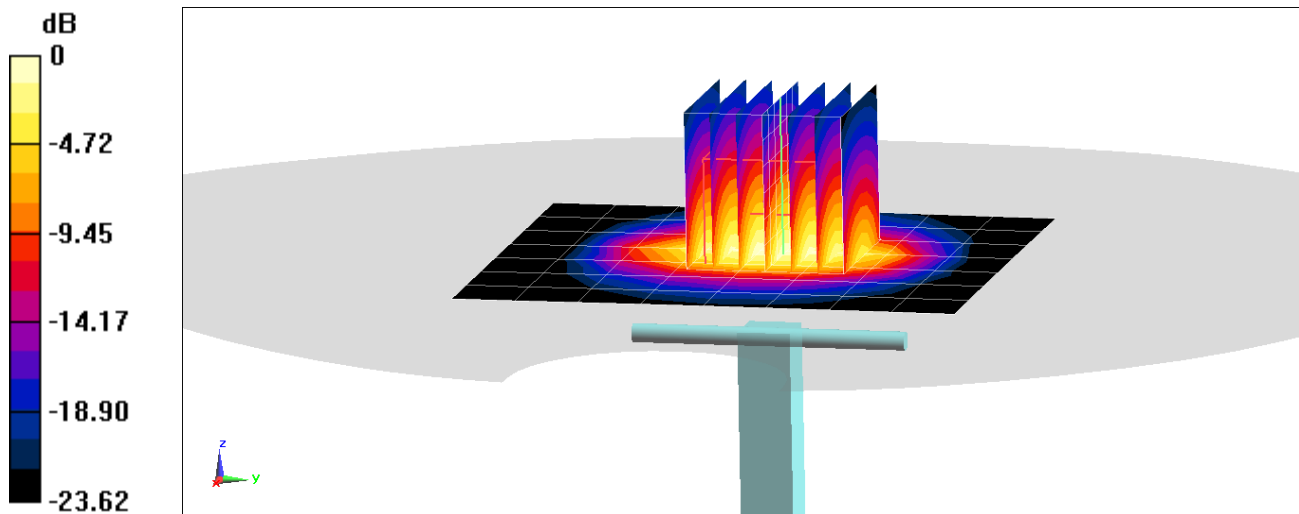
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 11.3 W/kg

**SAR(1 g) = 5.18 W/kg**

Deviation(1 g) = 0.78%



0 dB = 8.90 W/kg = 9.49 dBW/kg

# PCTEST

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 719**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used:

$f = 2450$  MHz;  $\sigma = 1.832$  S/m;  $\epsilon_r = 39.546$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/10/2021; Ambient Temp: 22.2°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7571; ConvF(7.28, 7.28, 7.28) @ 2450 MHz; Calibrated: 12/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/7/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

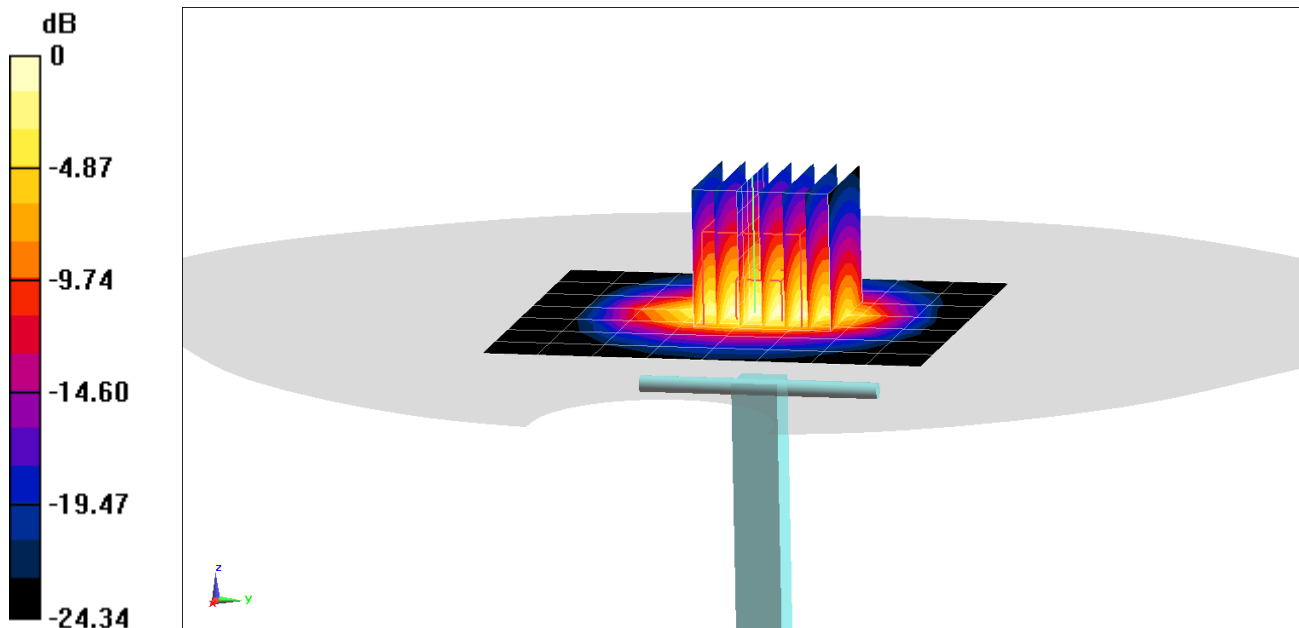
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 11.0 W/kg

**SAR(1 g) = 4.97 W/kg**

Deviation(1 g) = -3.31%



0 dB = 8.51 W/kg = 9.30 dBW/kg

# PCTEST

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1064**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Head Medium parameters used: |

$f = 2600$  MHz;  $\sigma = 1.995$  S/m;  $\epsilon_r = 38.658$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/25/2021; Ambient Temp: 22.5°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7571; ConvF(7.05, 7.05, 7.05) @ 2600 MHz; Calibrated: 12/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1533; Calibrated: 12/7/2020

Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

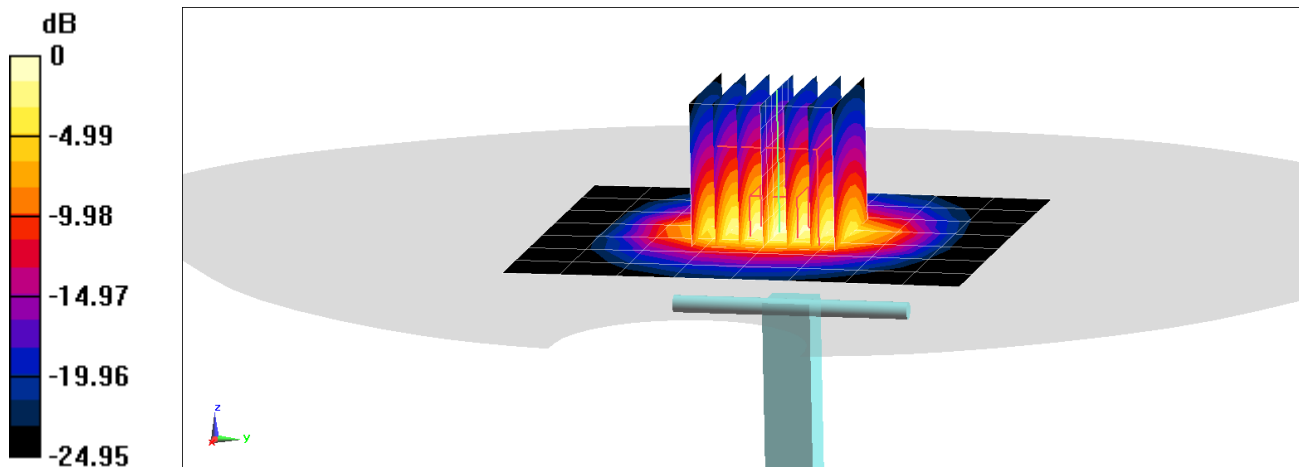
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 12.6 W/kg

**SAR(1 g) = 5.52 W/kg**

Deviation(1 g) = -4.99%



0 dB = 9.84 W/kg = 9.93 dBW/kg

# PCTEST

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1057**

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Head Medium parameters used:

$f = 5250$  MHz;  $\sigma = 4.692$  S/m;  $\epsilon_r = 34.957$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/05/2021; Ambient Temp: 20.7°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7357; ConvF(5.5, 5.5, 5.5) @ 5250 MHz; Calibrated: 4/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 5250 MHz System Verification at 17.0 dBm (50 mW)

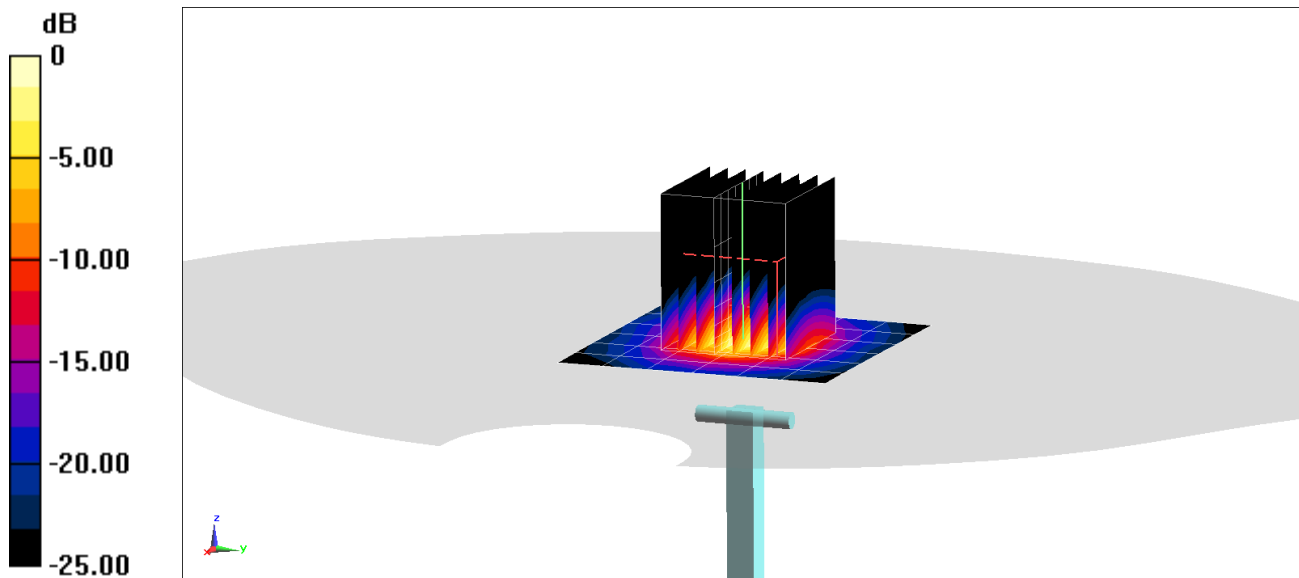
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 15.5 W/kg

**SAR(1 g) = 3.86 W/kg**

Deviation(1 g) = -2.53%



0 dB = 9.03 W/kg = 9.56 dBW/kg

# PCTEST

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1057**

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Head Medium parameters used:

$f = 5600$  MHz;  $\sigma = 5.087$  S/m;  $\epsilon_r = 34.331$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/05/2021; Ambient Temp: 20.7°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7357; ConvF(4.93, 4.93, 4.93) @ 5600 MHz; Calibrated: 4/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 5600 MHz System Verification at 17.0 dBm (50 mW)

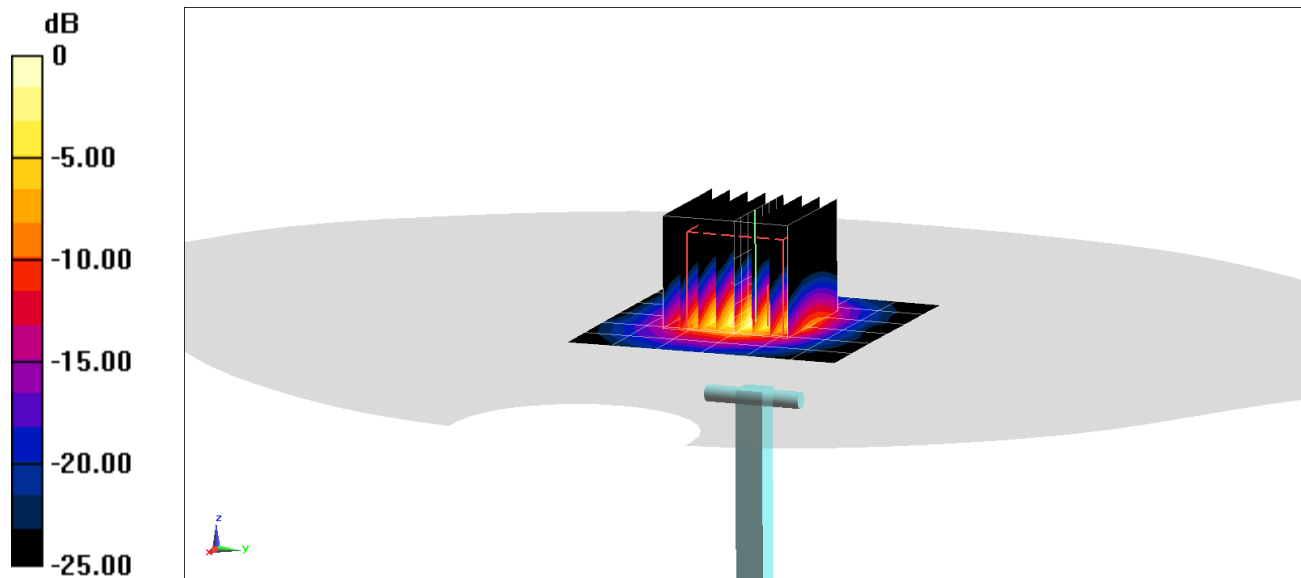
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.8 W/kg

**SAR(1 g) = 3.98 W/kg**

Deviation(1 g) = -5.35%



0 dB = 9.78 W/kg = 9.90 dBW/kg

# PCTEST

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1057**

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Head Medium parameters used:

$f = 5750$  MHz;  $\sigma = 5.272$  S/m;  $\epsilon_r = 34.085$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/05/2021; Ambient Temp: 20.7°C; Tissue Temp: 20.8°C

Probe: EX3DV4 - SN7357; ConvF(5.05, 5.05, 5.05) @ 5750 MHz; Calibrated: 4/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/15/2020

Phantom: Twin-SAM V5.0 Left 20; Type: QD 000 P40 CD; Serial: 1715

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 5750 MHz System Verification at 17.0 dBm (50 mW)

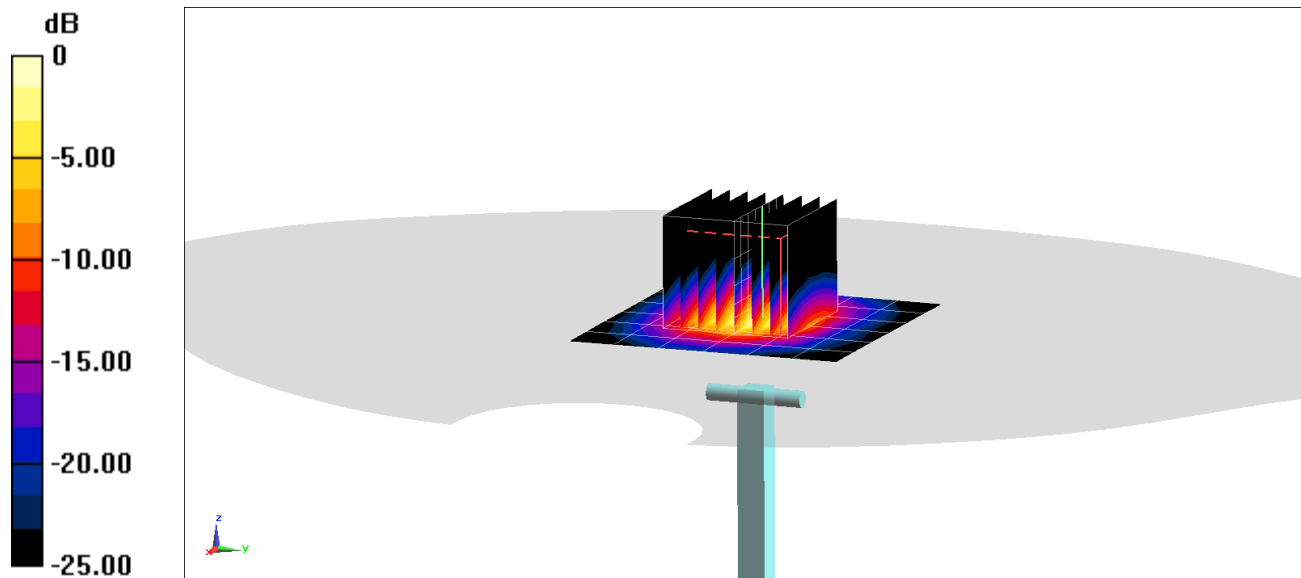
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.3 W/kg

**SAR(1 g) = 3.79 W/kg**

Deviation(1 g) = -5.84%



0 dB = 9.56 W/kg = 9.80 dBW/kg

# PCTEST

**DUT: Dipole 750 MHz; Type: D750V3; Serial: 1161**

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium: 750 Body Medium parameters used:

$f = 750 \text{ MHz}$ ;  $\sigma = 0.947 \text{ S/m}$ ;  $\epsilon_r = 54.217$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 12/28/2020; Ambient Temp: 20.1°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7539; ConvF(10.24, 10.24, 10.24) @ 750 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

## 750 MHz System Verification at 23.0 dBm (200 mW)

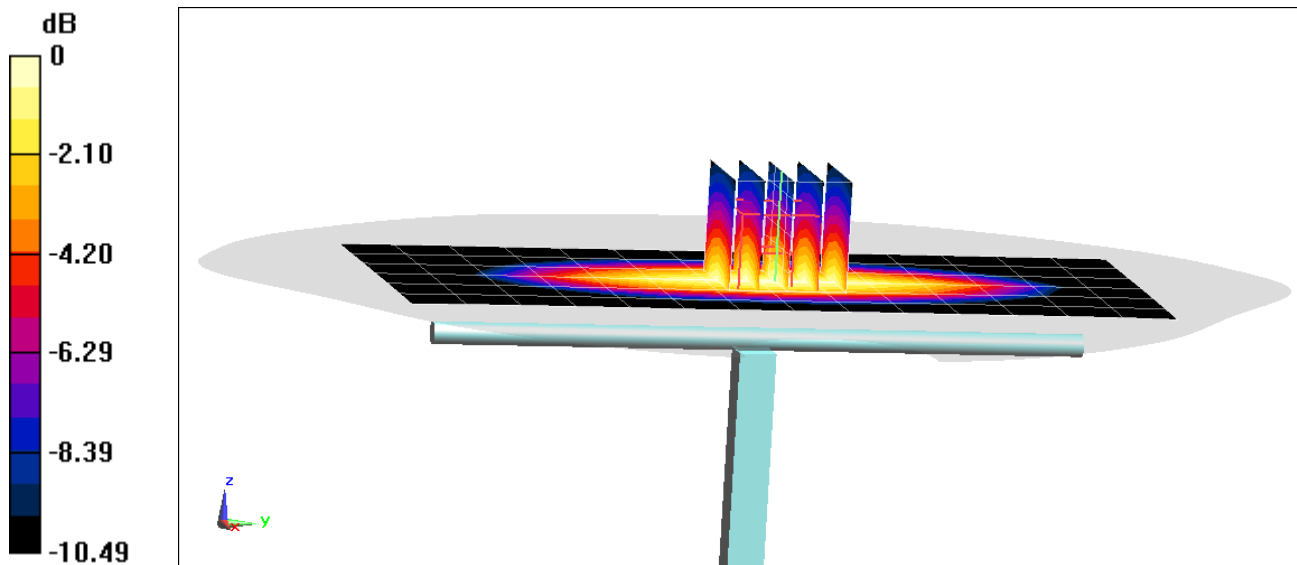
**Area Scan (7x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 2.67 W/kg

**SAR(1 g) = 1.74 W/kg**

Deviation(1 g) = 3.20%



0 dB = 2.34 W/kg = 3.69 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.967 \text{ S/m}$ ;  $\epsilon_r = 55.324$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 12/17/2020; Ambient Temp: 23.3°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7539; ConvF(9.95, 9.95, 9.95) @ 835 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V8.0 (20); Type: QD 000 P41 Ax; Serial: 1966

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

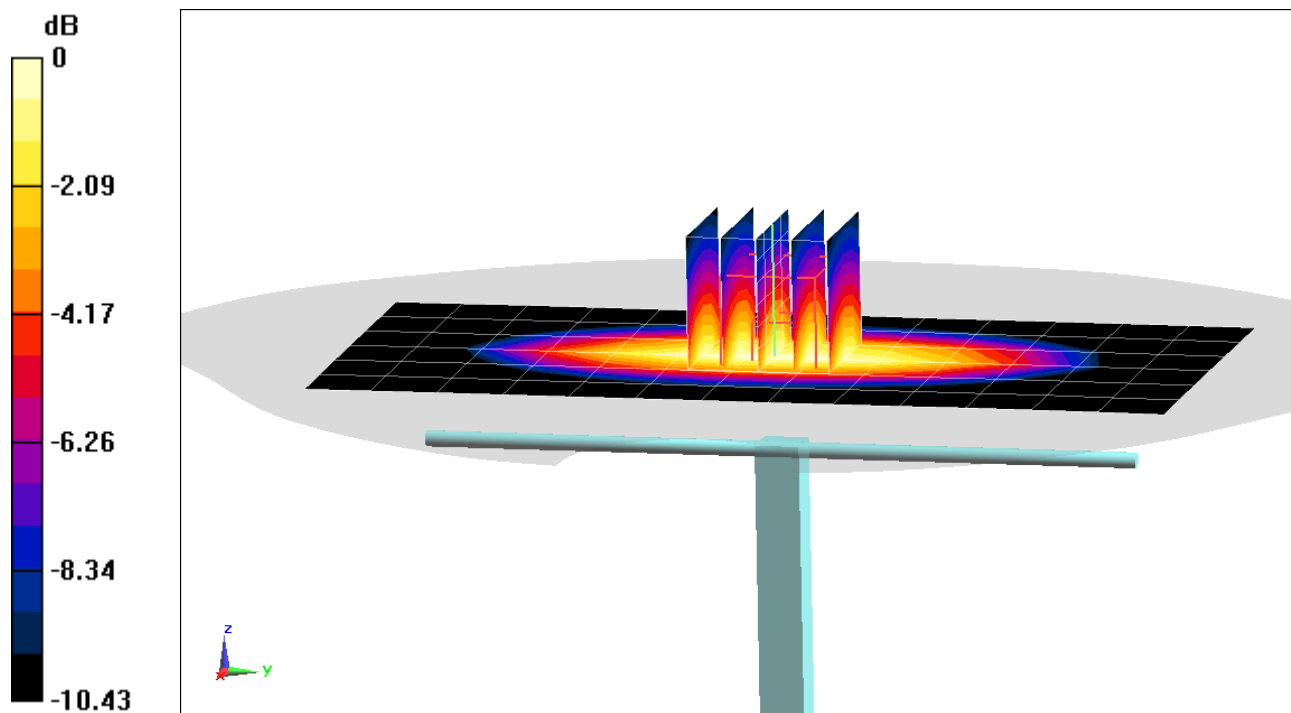
**Area Scan (7x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 2.90 W/kg

**SAR(1 g) = 1.9 W/kg**

Deviation(1 g) = -2.56%



0 dB = 2.55 W/kg = 4.07 dBW/kg

# PCTEST

**DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d133**

Communication System: UID 0, CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: 835 Body Medium parameters used:

$f = 835 \text{ MHz}$ ;  $\sigma = 0.956 \text{ S/m}$ ;  $\epsilon_r = 54.674$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.5 cm

Test Date: 01/07/2021; Ambient Temp: 22.8°C; Tissue Temp: 22.1°C

Probe: EX3DV4 - SN7552; ConvF(9.96, 9.96, 9.96) @ 835 MHz; Calibrated: 9/11/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1449; Calibrated: 9/10/2020

Phantom: Twin-SAM V4.0 Left 30; Type: QD 000 P40 CC; Serial: 1687

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 835 MHz System Verification at 23.0 dBm (200 mW)

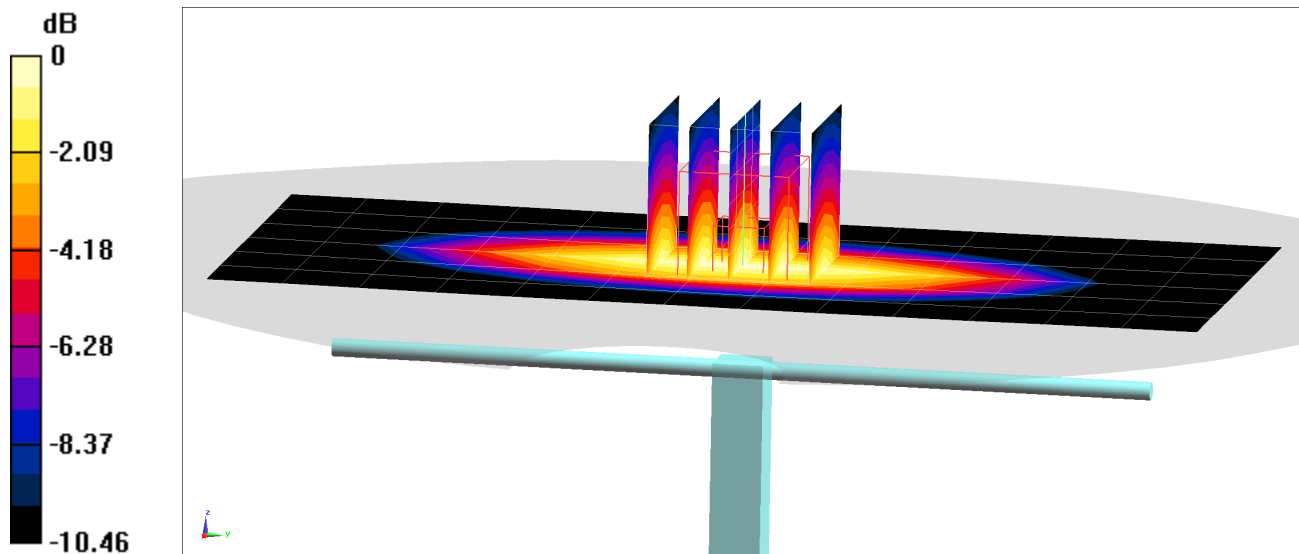
**Area Scan (7x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 2.92 W/kg

**SAR(1 g) = 1.91 W/kg**

Deviation(1 g) = -2.05%



0 dB = 2.57 W/kg = 4.10 dBW/kg

# PCTEST

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1150**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750 \text{ MHz}$ ;  $\sigma = 1.545 \text{ S/m}$ ;  $\epsilon_r = 51.047$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/18/2020; Ambient Temp: 22.0°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7357; ConvF(8.17, 8.17, 8.17) @ 1750 MHz; Calibrated: 4/21/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1407; Calibrated: 4/15/2020

Phantom: Twin-SAM V5.0 Right 30; Type: QD 000 P40 CD; Serial: 1759

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

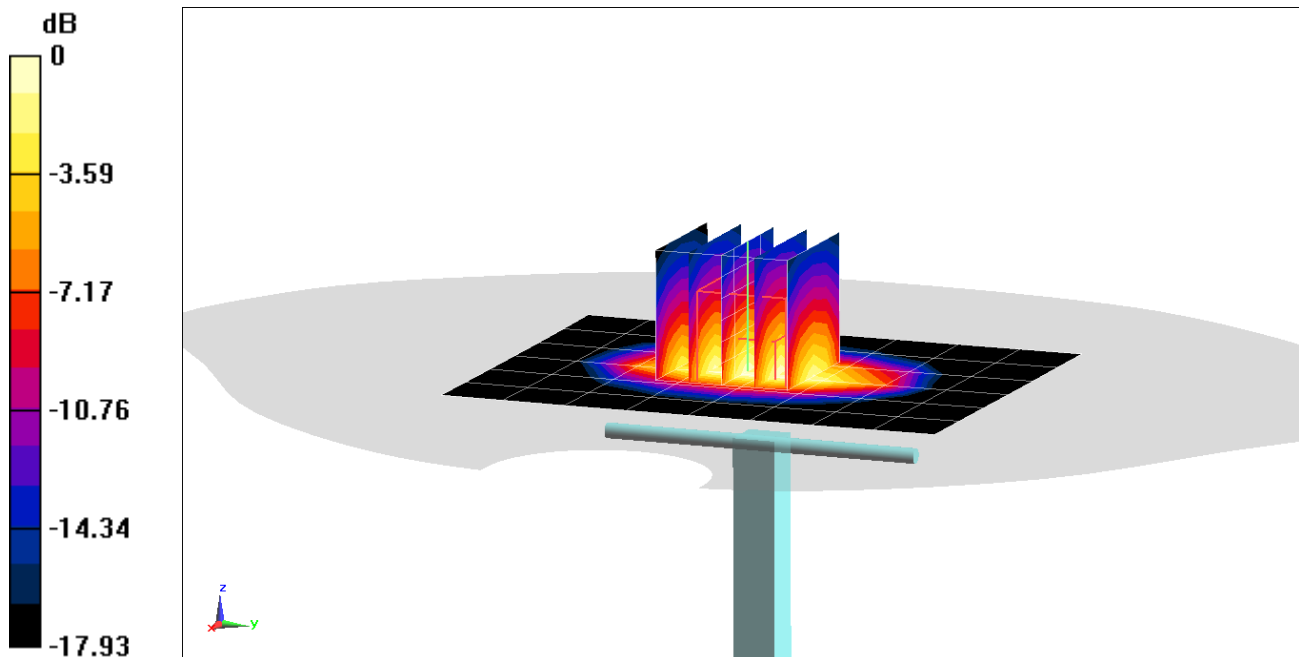
**Area Scan (7x9x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 6.98 W/kg

**SAR(1 g) = 3.8 W/kg**

Deviation(1 g) = 3.83%



0 dB = 5.81 W/kg = 7.64 dBW/kg

# PCTEST

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1148**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750$  MHz;  $\sigma = 1.474$  S/m;  $\epsilon_r = 51.396$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/04/2021; Ambient Temp: 22.5°C; Tissue Temp: 23.7°C

Probe: EX3DV4 - SN7539; ConvF(8.16, 8.16, 8.16) @ 1750 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn728; Calibrated: 5/20/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1630

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

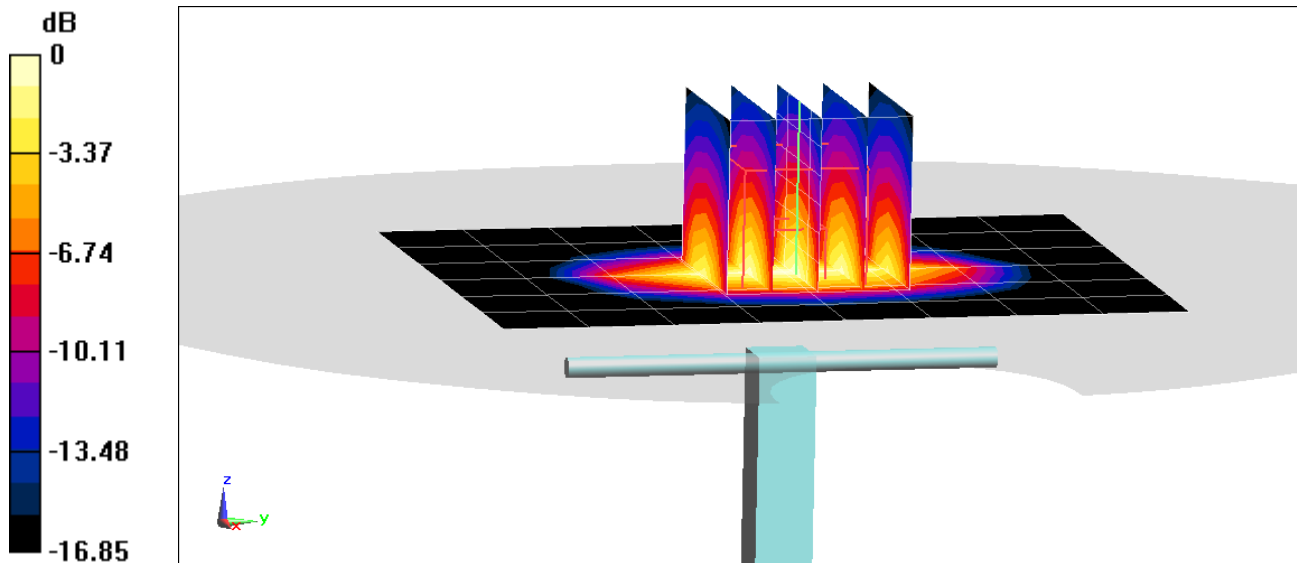
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.06 W/kg

**SAR(1 g) = 3.9 W/kg**

Deviation(1 g) = 7.44%



0 dB = 5.97 W/kg = 7.76 dBW/kg

# PCTEST

**DUT: Dipole 1750 MHz; Type: D1765V2; Serial: 1008**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750$  MHz;  $\sigma = 1.532$  S/m;  $\epsilon_r = 52.275$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/08/2021; Ambient Temp: 19.7°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7410; ConvF(8.17, 8.17, 8.17) @ 1750 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1800

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

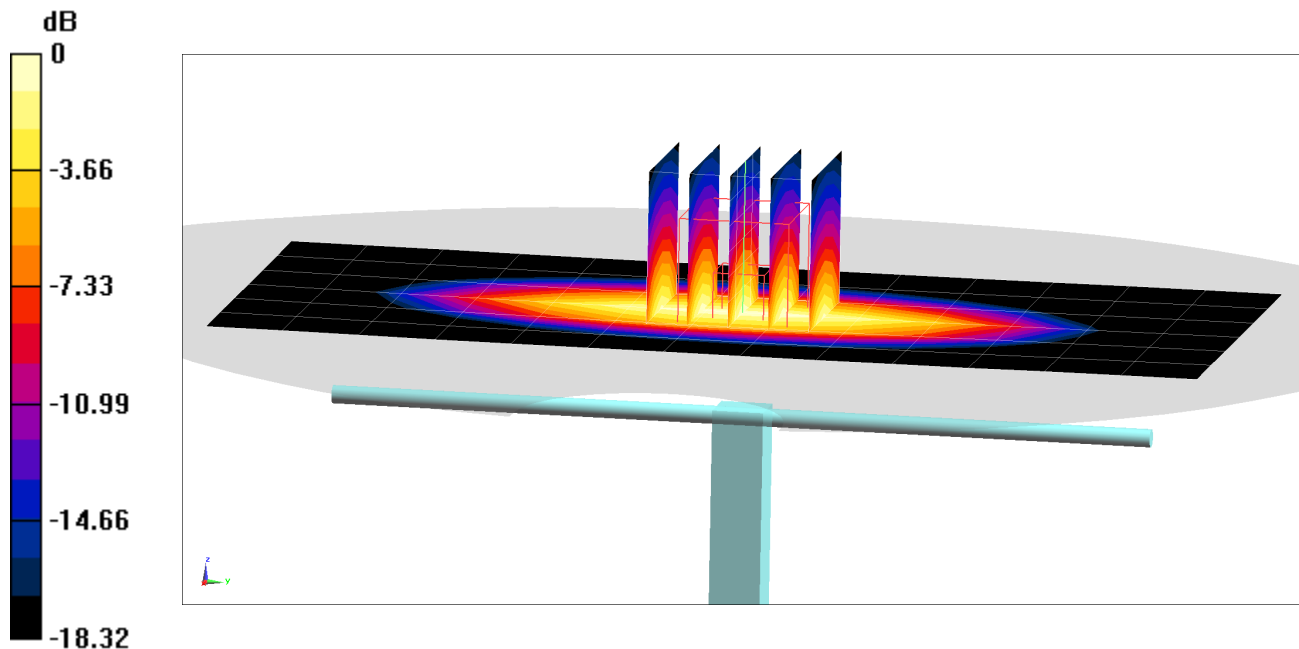
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 6.95 W/kg

**SAR(10 g) = 1.96 W/kg**

Deviation(10 g) = -1.51%



0 dB = 5.72 W/kg = 7.57 dBW/kg

# PCTEST

**DUT: Dipole 1750 MHz; Type: D1765V2; Serial: 1008**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: 1750 Body Medium parameters used:

$f = 1750$  MHz;  $\sigma = 1.539$  S/m;  $\epsilon_r = 51.024$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/11/2021; Ambient Temp: 21.3°C; Tissue Temp: 20.3°C

Probe: EX3DV4 - SN7410; ConvF(8.17, 8.17, 8.17) @ 1750 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1800

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 1750 MHz System Verification at 20.0 dBm (100 mW)

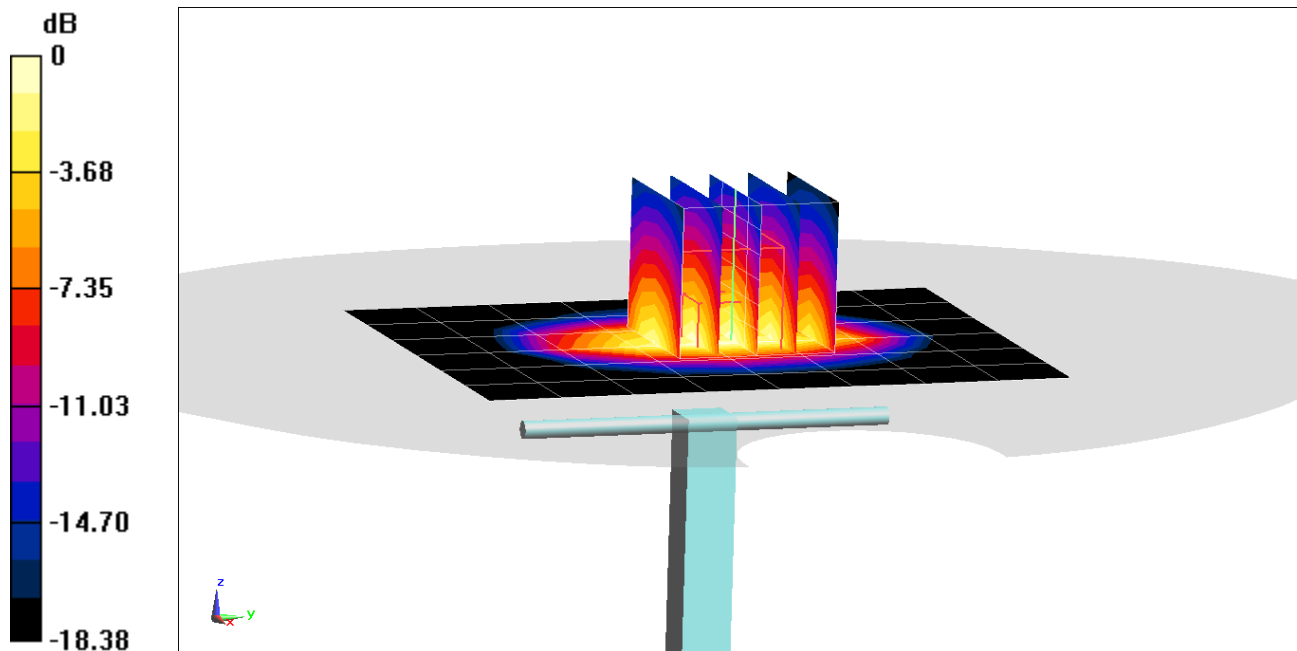
**Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 7.30 W/kg

**SAR(10 g) = 2.04 W/kg**

Deviation(10 g) = 2.51%



0 dB = 6.04 W/kg = 7.81 dBW/kg

# PCTEST

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.532 \text{ S/m}$ ;  $\epsilon_r = 52.765$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/28/2020; Ambient Temp: 20.7°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN7410; ConvF(7.76, 7.76, 7.76) @ 1900 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

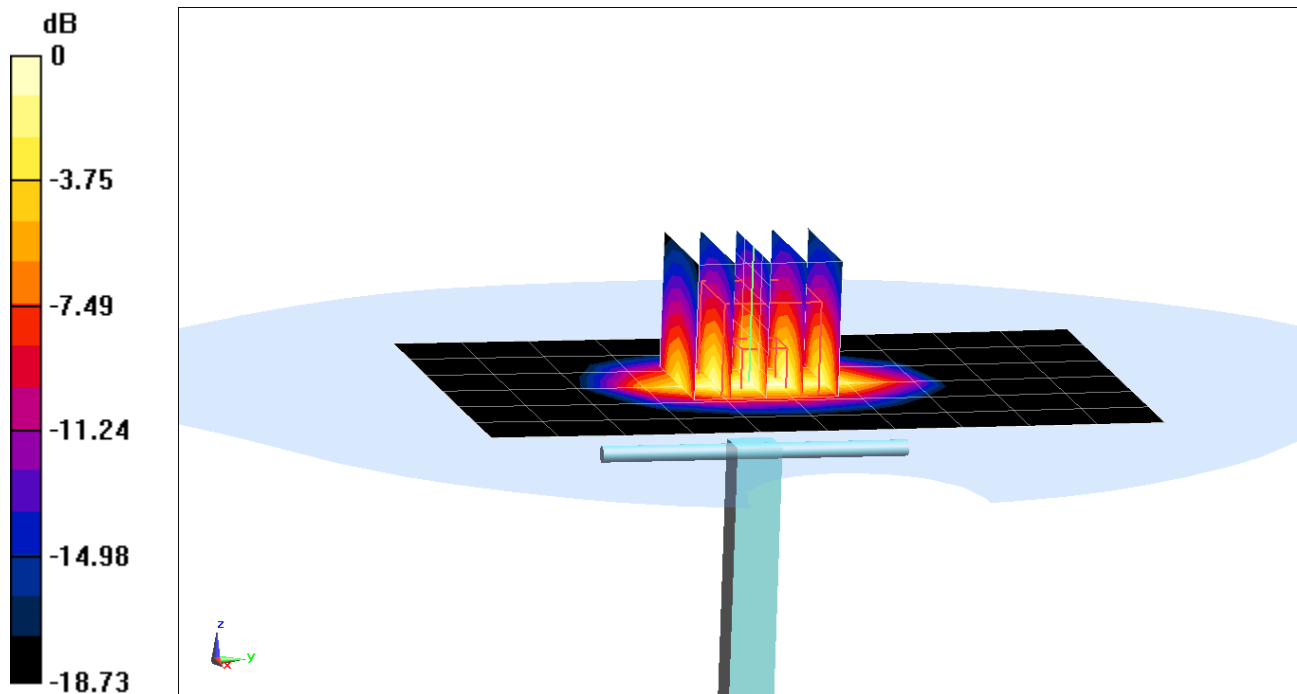
**Area Scan (7x11x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 7.32 W/kg

**SAR(1 g) = 3.99 W/kg**

Deviation(1 g) = 1.79%



0 dB = 6.13 W/kg = 7.87 dBW/kg

# PCTEST

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d080**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.535 \text{ S/m}$ ;  $\epsilon_r = 52.531$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/30/2020; Ambient Temp: 20.8°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7410; ConvF(7.76, 7.76, 7.76) @ 1900 MHz; Calibrated: 7/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1322; Calibrated: 7/15/2020

Phantom: SAM Left; Type: QD000P40CC; Serial: TP: 1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

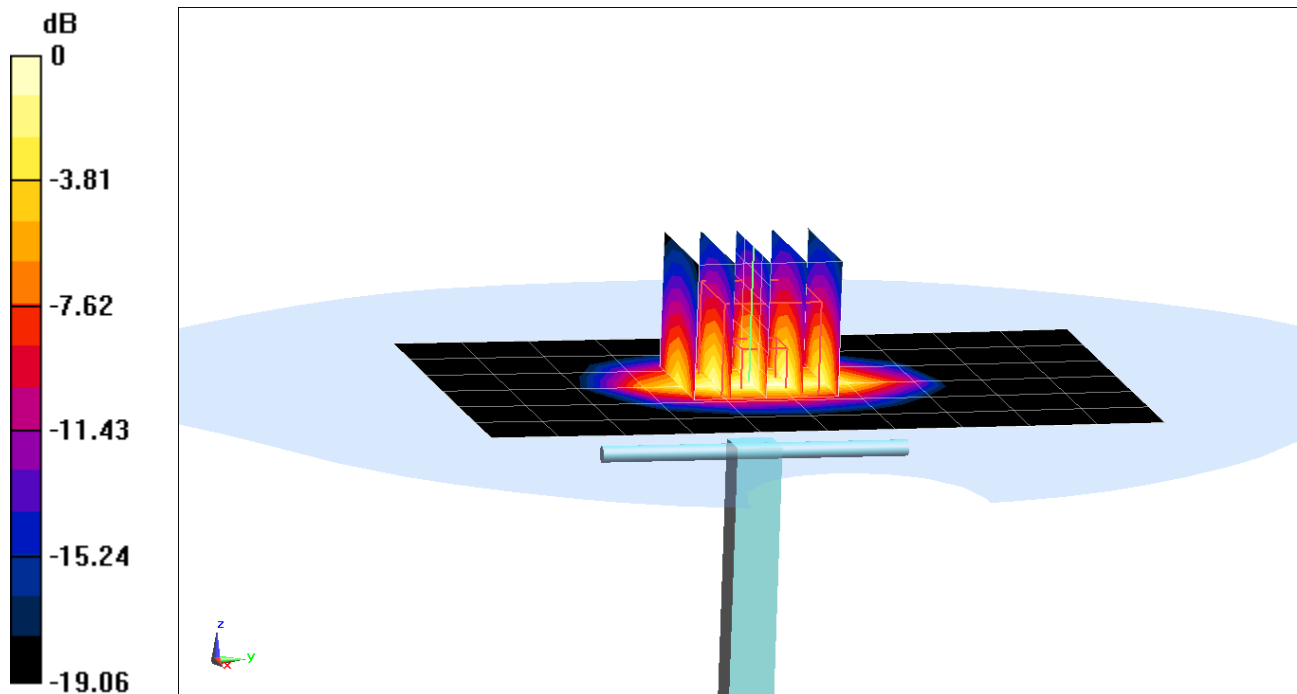
**Area Scan (7x11x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 7.55 W/kg

**SAR(10 g) = 2.05 W/kg**

Deviation(10 g) = -0.49%



0 dB = 6.28 W/kg = 7.98 dBW/kg

# PCTEST

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d149**

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: 1900 Body Medium parameters used:

$f = 1900 \text{ MHz}$ ;  $\sigma = 1.52 \text{ S/m}$ ;  $\epsilon_r = 53.063$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/05/2021; Ambient Temp: 21.3°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7551; ConvF(7.84, 7.84, 7.84) @ 1900 MHz; Calibrated: 10/20/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1333; Calibrated: 10/16/2020

Phantom: Right Back Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1692

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 1900 MHz System Verification at 20.0 dBm (100 mW)

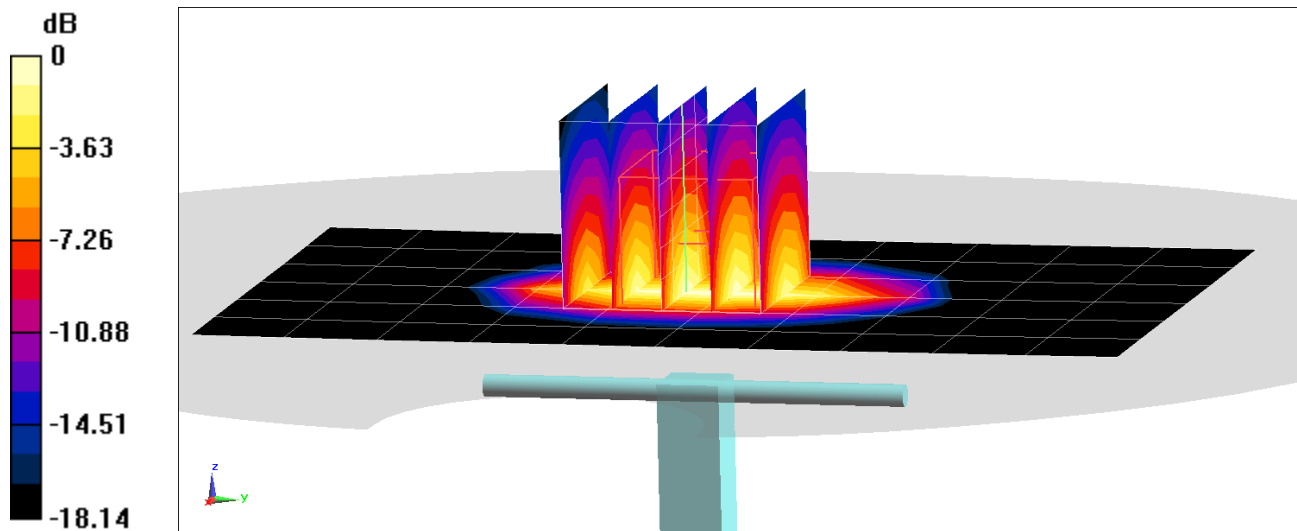
**Area Scan (7x11x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Peak SAR (extrapolated) = 7.22 W/kg

**SAR(1 g) = 4.08 W/kg; SAR(10 g) = 2.14 W/kg**

Deviation(1 g) = 3.55%; Deviation(10 g) = 3.38%



0 dB = 6.15 W/kg = 7.89 dBW/kg

# PCTEST

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 981**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2450$  MHz;  $\sigma = 2.042$  S/m;  $\epsilon_r = 51.065$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 12/17/2020; Ambient Temp: 21.6°C; Tissue Temp: 21.6°C

Probe: EX3DV4 - SN7409; ConvF(7.24, 7.24, 7.24) @ 2450 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/18/2020

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

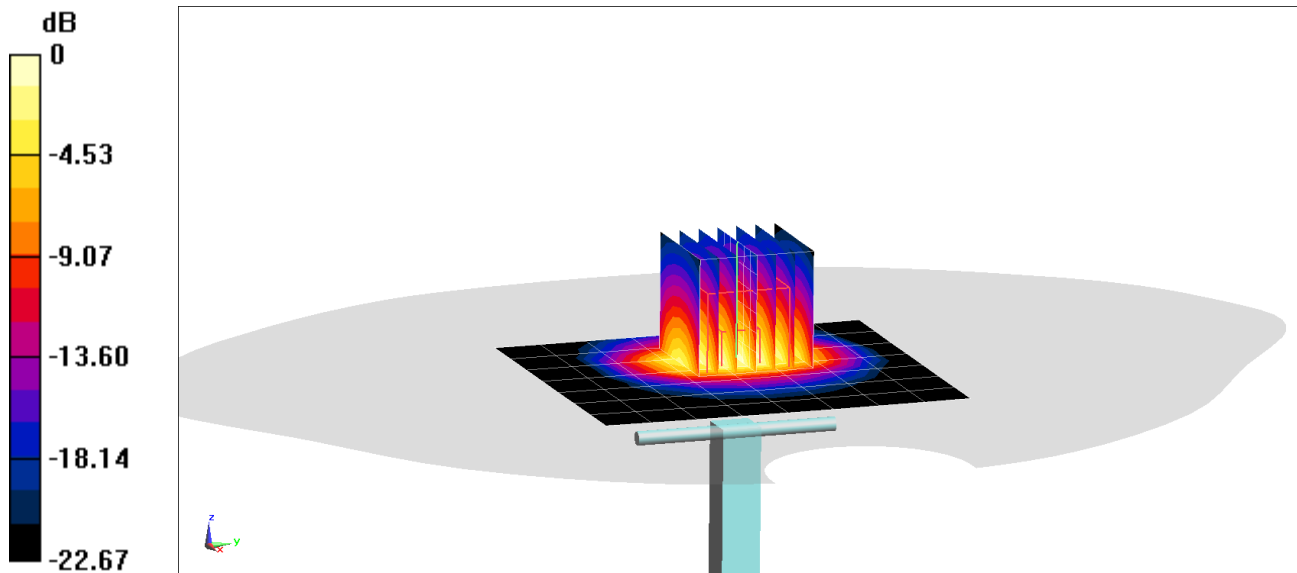
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 10.9 W/kg

**SAR(1 g) = 5.19 W/kg**

Deviation(1 g) = 1.96%



0 dB = 8.68 W/kg = 9.39 dBW/kg

# PCTEST

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 981**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2450 \text{ MHz}$ ;  $\sigma = 2.041 \text{ S/m}$ ;  $\epsilon_r = 51.375$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/03/2021; Ambient Temp: 23.1°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7409; ConvF(7.24, 7.24, 7.24) @ 2450 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/18/2020

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

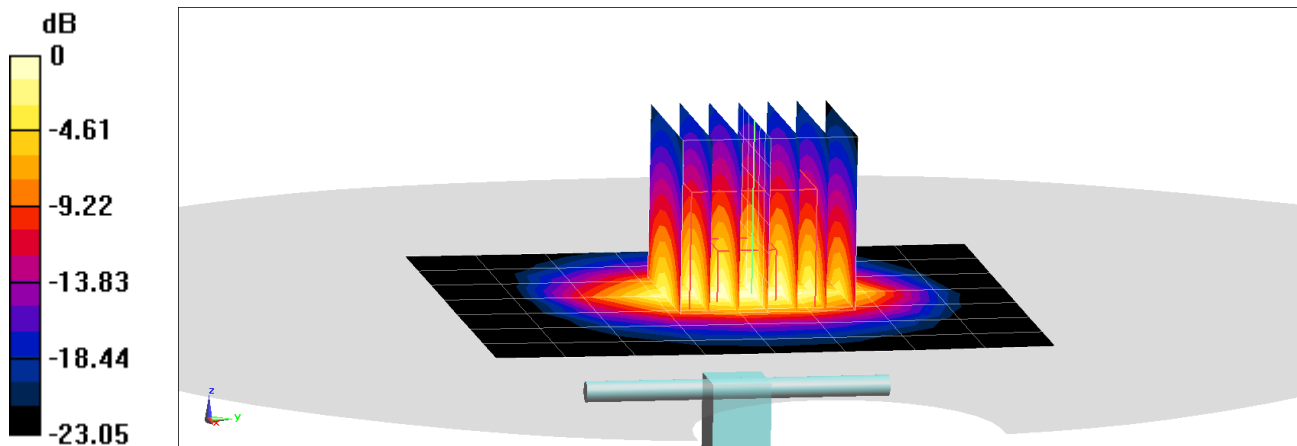
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 11.2 W/kg

**SAR(1 g) = 5.19 W/kg**

Deviation(1 g) = 1.96%



0 dB = 8.86 W/kg = 9.47 dBW/kg

# PCTEST

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 797**

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2450$  MHz;  $\sigma = 2.004$  S/m;  $\epsilon_r = 51.686$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/04/2021; Ambient Temp: 22.0°C; Tissue Temp: 21.5°C

Probe: EX3DV4 - SN7308; ConvF(7.41, 7.41, 7.41) @ 2450 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 2450 MHz System Verification at 20.0 dBm (100 mW)

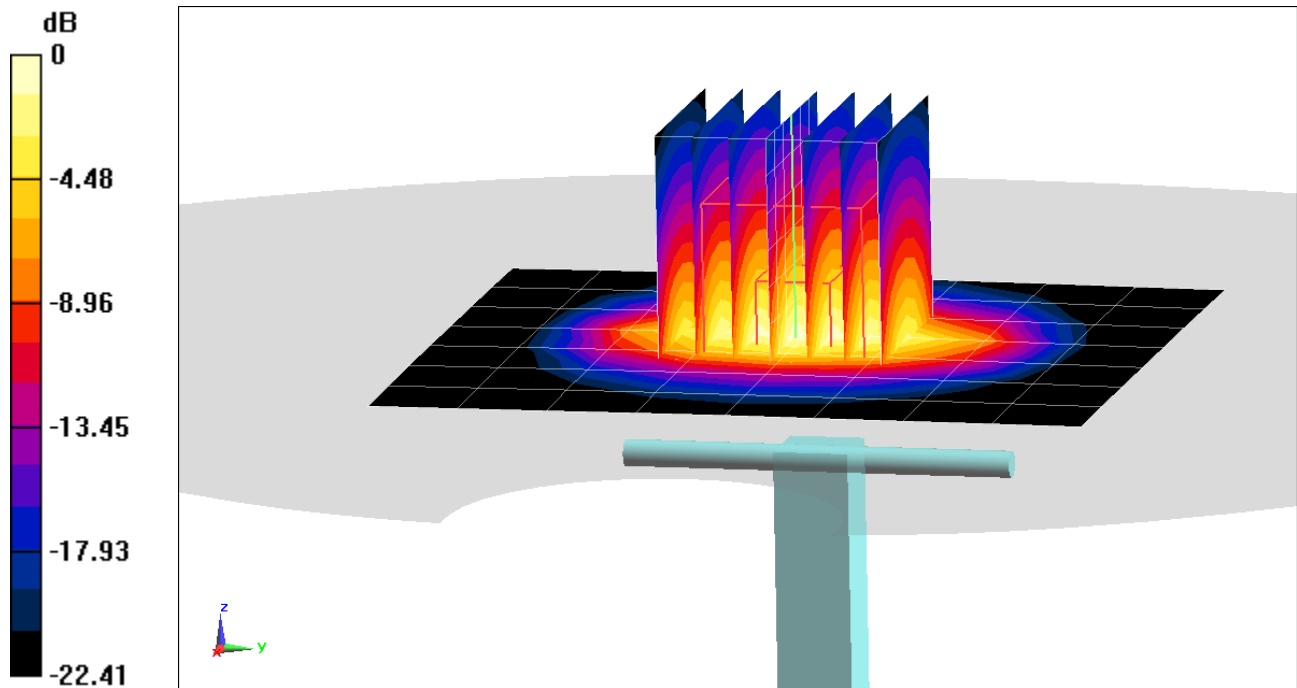
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 10.6 W/kg

**SAR(1 g) = 4.95 W/kg**

Deviation(1 g) = 0.20%



# PCTEST

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1004**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2600$  MHz;  $\sigma = 2.218$  S/m;  $\epsilon_r = 50.951$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/03/2021; Ambient Temp: 23.1°C; Tissue Temp: 22.2°C

Probe: EX3DV4 - SN7409; ConvF(7.12, 7.12, 7.12) @ 2600 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/18/2020

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

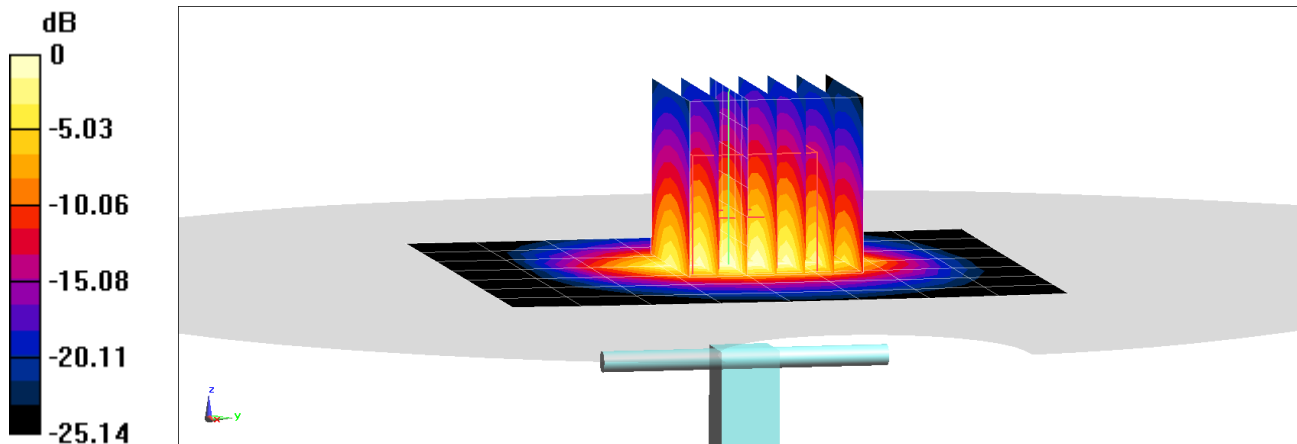
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 12.6 W/kg

**SAR(1 g) = 5.55 W/kg**

Deviation(1 g) = 1.28%



0 dB = 9.63 W/kg = 9.84 dBW/kg

# PCTEST

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1064**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2600$  MHz;  $\sigma = 2.228$  S/m;  $\epsilon_r = 51.353$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/21/2021; Ambient Temp: 23.9°C; Tissue Temp: 22.7°C

Probe: EX3DV4 - SN7308; ConvF(7.37, 7.37, 7.37) @ 2600 MHz; Calibrated: 7/31/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1450; Calibrated: 8/11/2020

Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: 1792

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

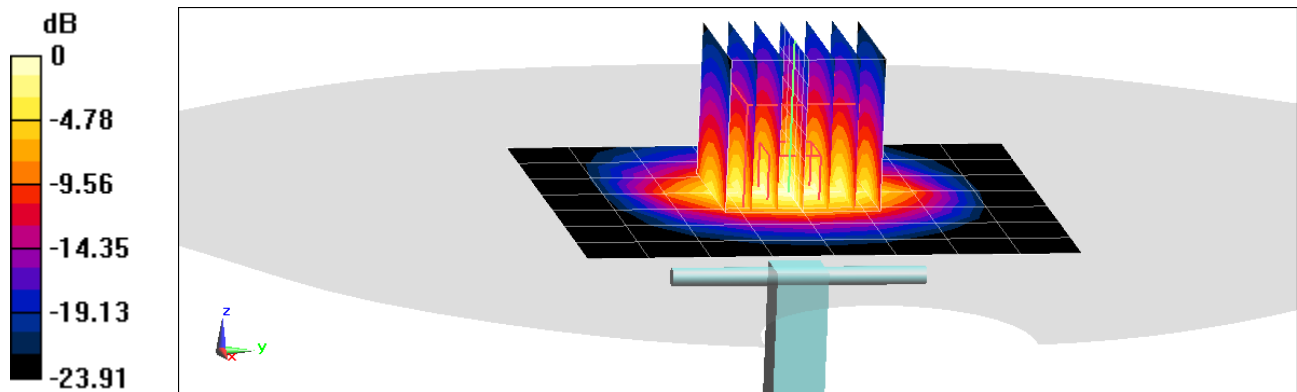
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 12.2 W/kg

**SAR(1 g) = 5.47 W/kg**

Deviation(1 g) = -1.62%



0 dB = 9.60 W/kg = 9.82 dBW/kg

# PCTEST

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1004**

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: 2450 Body Medium parameters used:

$f = 2600$  MHz;  $\sigma = 2.199$  S/m;  $\epsilon_r = 50.565$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 02/02/2021; Ambient Temp: 23.0°C; Tissue Temp: 22.5°C

Probe: EX3DV4 - SN7409; ConvF(7.12, 7.12, 7.12) @ 2600 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1334; Calibrated: 6/18/2020

Phantom: LeftTwin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP1375

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 2600 MHz System Verification at 20.0 dBm (100 mW)

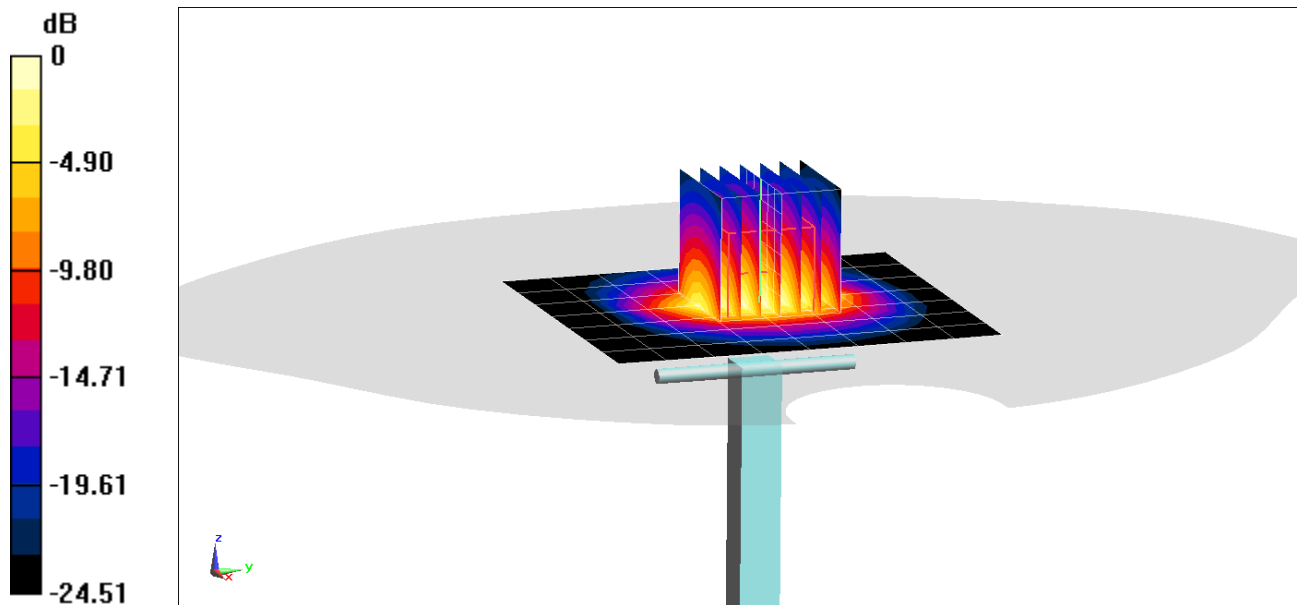
**Area Scan (8x9x1):** Measurement grid: dx=12mm, dy=12mm

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

Peak SAR (extrapolated) = 12.2 W/kg

**SAR(10 g) = 2.39 W/kg**

Deviation(10 g) = -3.24%



# PCTEST

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1237**

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body Medium parameters used:

$f = 5250$  MHz;  $\sigma = 5.531$  S/m;  $\epsilon_r = 47.268$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/04/2021; Ambient Temp: 22.8°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7406; ConvF(5.05, 5.05, 5.05) @ 5250 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1583; Calibrated: 5/14/2020

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 5250 MHz System Verification at 17.0 dBm (50 mW)

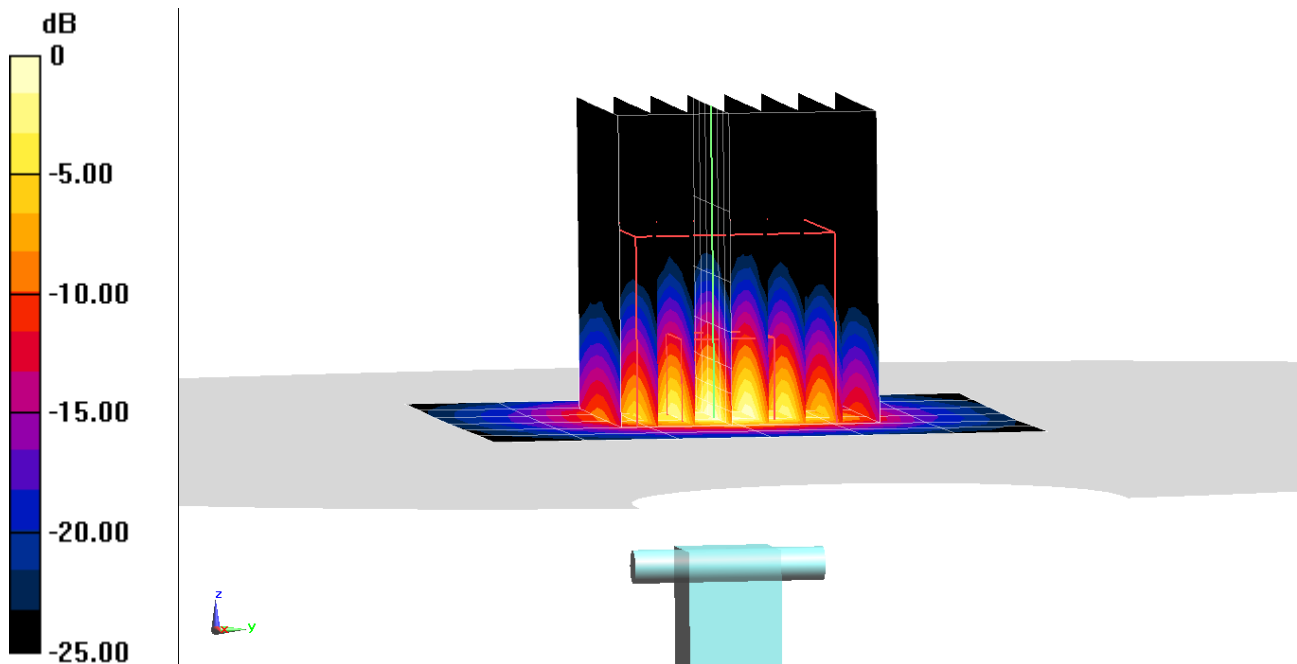
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 14.3 W/kg

**SAR(1 g) = 3.51 W/kg; SAR(10 g) = 0.981 W/kg**

Deviation(1 g) = -7.14%; Deviation(10 g) = -7.45%



# PCTEST

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1237**

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body Medium parameters used:

$f = 5600 \text{ MHz}$ ;  $\sigma = 5.989 \text{ S/m}$ ;  $\epsilon_r = 46.681$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/04/2021; Ambient Temp: 22.8°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7406; ConvF(4.37, 4.37, 4.37) @ 5600 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1583; Calibrated: 5/14/2020

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 5600 MHz System Verification at 17.0 dBm (50 mW)

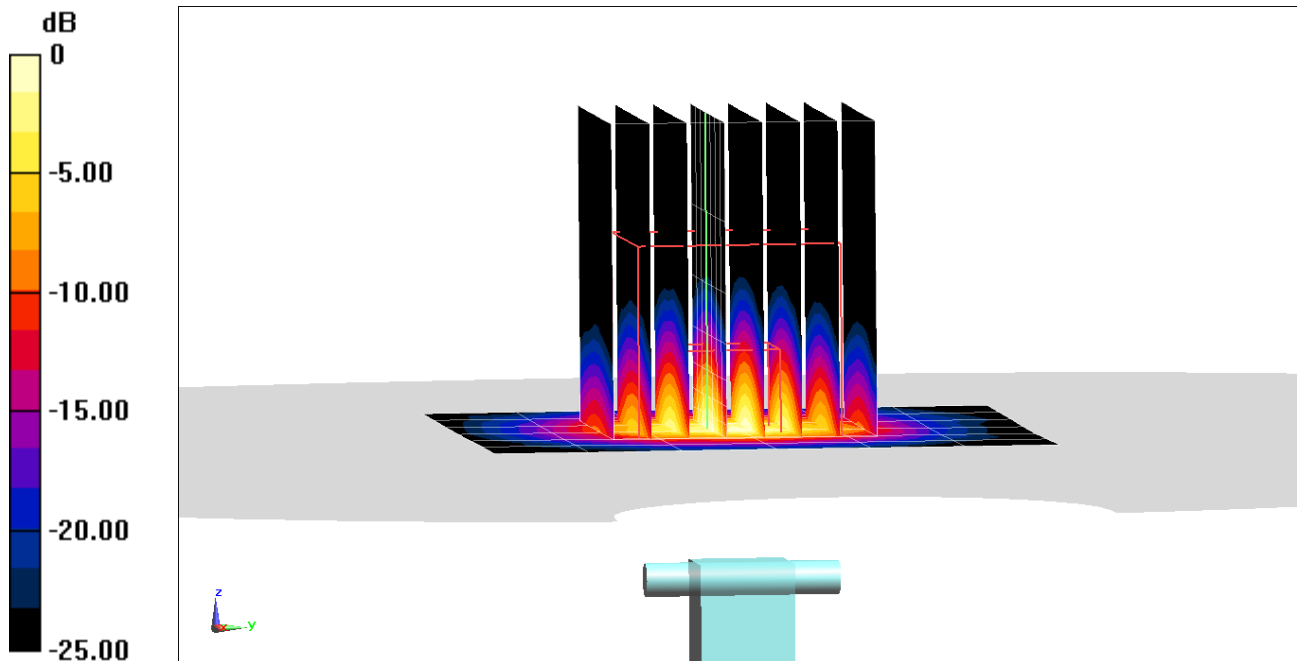
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 17.0 W/kg

**SAR(1 g) = 3.86 W/kg; SAR(10 g) = 1.07 W/kg**

Deviation(1 g) = -1.66%; Deviation(10 g) = -2.73%



# PCTEST

**DUT: Dipole 5 GHz; Type: D5GHzV2; Serial: 1237**

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: 5200-5800 Body Medium parameters used:

$f = 5750$  MHz;  $\sigma = 6.203$  S/m;  $\epsilon_r = 46.43$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section; Space: 1.0 cm

Test Date: 01/04/2021; Ambient Temp: 22.8°C; Tissue Temp: 23.0°C

Probe: EX3DV4 - SN7406; ConvF(4.56, 4.56, 4.56) @ 5750 MHz; Calibrated: 6/23/2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1583; Calibrated: 5/14/2020

Phantom: Front; Type: QD 000 P40 CD; Serial: 1686

Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

## 5750 MHz System Verification at 17.0 dBm (50 mW)

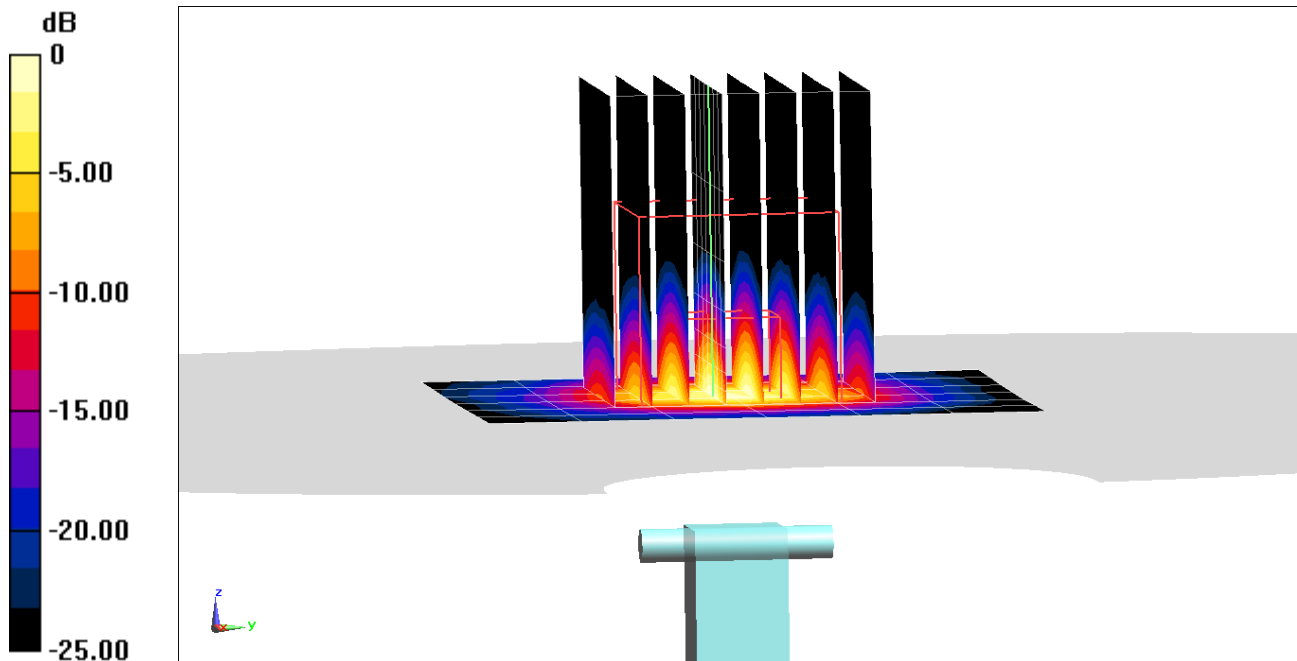
**Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm

**Zoom Scan (8x8x8)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm; Graded Ratio: 1.4

Peak SAR (extrapolated) = 16.8 W/kg

**SAR(1 g) = 3.6 W/kg; SAR(10 g) = 0.989 W/kg**

Deviation(1 g) = -5.14%; Deviation(10 g) = -6.70%



0 dB = 8.72 W/kg = 9.41 dBW/kg

## APPENDIX C: SAR TISSUE SPECIFICATIONS

Measurement Procedure for Tissue verification:

- 1) The network analyzer and probe system was configured and calibrated.
- 2) The probe was immersed in the tissue. The tissue was placed in a nonmetallic container. Trapped air bubbles beneath the flange were minimized by placing the probe at a slight angle.
- 3) The complex admittance with respect to the probe aperture was measured
- 4) The complex relative permittivity  $\epsilon'$  can be calculated from the below equation (Pournaropoulos and Misra):

$$Y = \frac{j2\omega\epsilon_r\epsilon_0}{[\ln(b/a)]^2} \int_a^b \int_a^b \int_0^\pi \cos\phi' \frac{\exp[-j\omega r(\mu_0\epsilon_r'\epsilon_0)^{1/2}]}{r} d\phi' d\rho' d\rho$$

where  $Y$  is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to source and observation points, respectively,  $r^2 = \rho^2 + \rho'^2 - 2\rho\rho'\cos\phi'$ ,  $\omega$  is the angular frequency, and  $j = \sqrt{-1}$ .

### 3 Composition / Information on ingredients

#### 3.2 Mixtures

**Description:** Aqueous solution with surfactants and inhibitors

**Declarable, or hazardous components:**

|                                                                        |                                                                                                                        |           |
|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------|
| CAS: 107-21-1<br>EINECS: 203-473-3<br>Reg.nr.: 01-2119456816-28-0000   | <b>Ethanedial</b><br>STOT RE 2, H373;<br>Acute Tox. 4, H302                                                            | >1.0-4.9% |
| CAS: 68608-26-4<br>EINECS: 271-781-5<br>Reg.nr.: 01-2119527859-22-0000 | <b>Sodium petroleum sulfonate</b><br>Eye Irrit. 2, H319                                                                | < 2.9%    |
| CAS: 107-41-5<br>EINECS: 203-489-0<br>Reg.nr.: 01-2119539582-35-0000   | <b>Hexylene Glycol / 2-Methyl-pentane-2,4-diol</b><br>Skin Irrit. 2, H315; Eye Irrit. 2, H319                          | < 2.9%    |
| CAS: 68920-66-1<br>NLP: 500-236-9<br>Reg.nr.: 01-2119489407-26-0000    | <b>Alkoxylated alcohol, &gt; C<sub>16</sub></b><br>Aquatic Chronic 2, H411;<br>Skin Irrit. 2, H315; Eye Irrit. 2, H319 | < 2.0%    |

**Additional information:**

For the wording of the listed risk phrases refer to section 16.  
Not mentioned CAS-, EINECS- or registration numbers are to be regarded as Proprietary/Confidential.  
The specific chemical identity and/or exact percentage concentration of proprietary components is withheld as a trade secret.

**Figure C-1**

Note: Liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

|                                    |                                                                                                                                                                                                              |                       |                                                                                       |                                 |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: ZNFK735MM                  |  <b>PCTEST</b><br>Proud to be part of  | SAR EVALUATION REPORT |  | Approved by:<br>Quality Manager |
| Test Dates:<br>12/17/20 - 02/02/21 | DUT Type:<br>Portable Handset                                                                                                                                                                                |                       |                                                                                       | APPENDIX C:<br>Page 1 of 3      |

**Measurement Certificate / Material Test**

|              |                                                |
|--------------|------------------------------------------------|
| Item Name    | Body Tissue Simulating Liquid (MBBL600-6000V6) |
| Product No.  | SL AAM U16 BC (Batch: 200803-1)                |
| Manufacturer | SPEAG                                          |

**Measurement Method**

TSL dielectric parameters measured using calibrated DAK probe.

**Target Parameters**

Target parameters as defined in the KDB 865664 compliance standard.

**Test Condition**

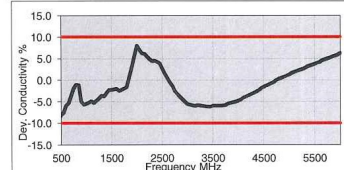
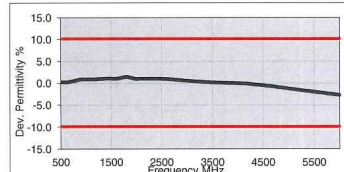
Ambient Condition 22°C ; 30% humidity  
 TSL Temperature 22°C  
 Test Date 6-Aug-20  
 Operator CL

**Additional Information**

TSL Density  
 TSL Heat-capacity

**Results**

| f [MHz] | Measured |      |       | Target |       | Diff.to Target [%] |         |
|---------|----------|------|-------|--------|-------|--------------------|---------|
|         | e'       | e''  | sigma | eps    | sigma | Δ-eps              | Δ-sigma |
| 600     | 56.3     | 26.8 | 0.89  | 56.1   | 0.95  | 0.3                | -6.3    |
| 750     | 55.8     | 22.6 | 0.94  | 55.5   | 0.96  | 0.5                | -2.1    |
| 800     | 55.7     | 21.6 | 0.96  | 55.3   | 0.97  | 0.7                | -1.0    |
| 825     | 55.7     | 21.1 | 0.97  | 55.2   | 0.98  | 0.8                | -1.0    |
| 835     | 55.7     | 20.9 | 0.98  | 55.1   | 0.99  | 1.0                | -0.5    |
| 850     | 55.6     | 20.7 | 0.98  | 55.2   | 0.99  | 0.8                | -1.0    |
| 900     | 55.5     | 19.9 | 1.00  | 55.0   | 1.05  | 0.9                | -4.8    |
| 1400    | 54.7     | 15.9 | 1.24  | 54.1   | 1.28  | 1.1                | -3.1    |
| 1450    | 54.6     | 15.8 | 1.27  | 54.0   | 1.30  | 1.1                | -2.3    |
| 1600    | 54.4     | 15.3 | 1.36  | 53.8   | 1.39  | 1.1                | -2.2    |
| 1625    | 54.4     | 15.3 | 1.38  | 53.8   | 1.41  | 1.2                | -2.1    |
| 1640    | 54.4     | 15.2 | 1.39  | 53.7   | 1.42  | 1.3                | -2.1    |
| 1650    | 54.3     | 15.2 | 1.39  | 53.7   | 1.43  | 1.1                | -2.8    |
| 1700    | 54.2     | 15.1 | 1.43  | 53.6   | 1.46  | 1.2                | -2.1    |
| 1750    | 54.2     | 15.0 | 1.46  | 53.4   | 1.49  | 1.4                | -2.0    |
| 1800    | 54.1     | 14.9 | 1.50  | 53.3   | 1.52  | 1.5                | -1.3    |
| 1810    | 54.1     | 14.9 | 1.51  | 53.3   | 1.52  | 1.5                | -0.7    |
| 1825    | 54.1     | 14.9 | 1.52  | 53.3   | 1.52  | 1.5                | 0.0     |
| 1850    | 54.0     | 14.9 | 1.53  | 53.3   | 1.52  | 1.3                | 0.7     |
| 1900    | 54.0     | 14.8 | 1.57  | 53.3   | 1.52  | 1.3                | 3.3     |
| 1950    | 53.9     | 14.8 | 1.60  | 53.3   | 1.52  | 1.1                | 5.3     |
| 2000    | 53.8     | 14.8 | 1.64  | 53.3   | 1.52  | 0.9                | 7.9     |
| 2050    | 53.8     | 14.7 | 1.68  | 53.2   | 1.57  | 1.1                | 7.0     |
| 2100    | 53.7     | 14.7 | 1.72  | 53.2   | 1.62  | 1.0                | 6.2     |
| 2150    | 53.7     | 14.7 | 1.76  | 53.1   | 1.66  | 1.1                | 6.0     |
| 2200    | 53.6     | 14.7 | 1.80  | 53.0   | 1.71  | 1.1                | 5.3     |
| 2250    | 53.5     | 14.8 | 1.85  | 53.0   | 1.76  | 1.0                | 5.1     |
| 2300    | 53.5     | 14.8 | 1.89  | 52.9   | 1.81  | 1.1                | 4.4     |
| 2350    | 53.4     | 14.8 | 1.94  | 52.8   | 1.85  | 1.1                | 4.9     |
| 2400    | 53.3     | 14.8 | 1.98  | 52.8   | 1.90  | 1.0                | 4.2     |
| 2450    | 53.3     | 14.9 | 2.03  | 52.7   | 1.95  | 1.1                | 4.1     |
| 2500    | 53.2     | 14.9 | 2.07  | 52.6   | 2.02  | 1.1                | 2.5     |
| 2550    | 53.1     | 15.0 | 2.12  | 52.6   | 2.09  | 1.0                | 1.4     |
| 2600    | 53.0     | 15.0 | 2.17  | 52.5   | 2.16  | 0.9                | 0.5     |



|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 3500  | 51.4 | 16.0 | 3.11 | 51.3 | 3.31 | 0.2  | -6.0 |
| 3700  | 51.1 | 16.2 | 3.34 | 51.1 | 3.55 | 0.1  | -5.9 |
| 5200  | 48.3 | 18.7 | 5.42 | 49.0 | 5.30 | -1.5 | 2.3  |
| 5250  | 48.2 | 18.8 | 5.50 | 49.0 | 5.36 | -1.6 | 2.5  |
| 5300  | 48.1 | 18.9 | 5.57 | 48.9 | 5.42 | -1.7 | 2.8  |
| 5500  | 47.7 | 19.2 | 5.86 | 48.6 | 5.65 | -2.0 | 3.8  |
| 5600  | 47.5 | 19.3 | 6.01 | 48.5 | 5.77 | -2.1 | 4.2  |
| 5700  | 47.3 | 19.4 | 6.16 | 48.3 | 5.88 | -2.3 | 4.8  |
| 5800  | 47.0 | 19.6 | 6.32 | 48.2 | 6.00 | -2.4 | 5.3  |
| 6000  | 46.6 | 19.8 | 6.62 | 47.9 | 6.23 | -2.7 | 6.3  |
| 6500  |      |      |      |      |      |      |      |
| 7000  |      |      |      |      |      |      |      |
| 7500  |      |      |      |      |      |      |      |
| 8000  |      |      |      |      |      |      |      |
| 8500  |      |      |      |      |      |      |      |
| 9000  |      |      |      |      |      |      |      |
| 9500  |      |      |      |      |      |      |      |
| 10000 |      |      |      |      |      |      |      |

**Figure C-2**  
**600 – 5800 MHz Body Tissue Equivalent Matter**

|                                    |                                                                                                                                  |                       |                                                                                                 |                                 |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------|---------------------------------|
| FCC ID: ZNFK735MM                  |  <b>PCTEST</b><br>Proud to be part of element | SAR EVALUATION REPORT |  <b>LG</b> | Approved by:<br>Quality Manager |
| Test Dates:<br>12/17/20 - 02/02/21 | DUT Type:<br>Portable Handset                                                                                                    |                       |                                                                                                 | APPENDIX C:<br>Page 2 of 3      |