

# TEST REPORT

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|       |        |       |         |       |      |       |      |   |      |
|-------|--------|-------|---------|-------|------|-------|------|---|------|
| 20MHz | High   | QPSK  | RB1#0   | 0.71  | 17.8 | 18.51 | 0.07 | 2 | PASS |
|       |        |       | RB75#0  | 0.48  | 17.8 | 18.28 | 0.07 | 2 | PASS |
|       |        | 16QAM | RB1#0   | 1.21  | 17.8 | 19.01 | 0.08 | 2 | PASS |
|       |        |       | RB75#0  | 0.83  | 17.8 | 18.63 | 0.07 | 2 | PASS |
|       | Low    | QPSK  | RB1#0   | 1.32  | 17.8 | 19.12 | 0.08 | 2 | PASS |
|       |        |       | RB100#0 | 0.06  | 17.8 | 17.86 | 0.06 | 2 | PASS |
|       |        | 16QAM | RB1#0   | 0.66  | 17.8 | 18.46 | 0.07 | 2 | PASS |
|       |        |       | RB100#0 | -0.26 | 17.8 | 17.54 | 0.06 | 2 | PASS |
|       | Middle | QPSK  | RB1#0   | 0.91  | 17.8 | 18.71 | 0.07 | 2 | PASS |
|       |        |       | RB100#0 | 0.55  | 17.8 | 18.35 | 0.07 | 2 | PASS |
|       |        | 16QAM | RB1#0   | 0.41  | 17.8 | 18.21 | 0.07 | 2 | PASS |
|       |        |       | RB100#0 | -0.35 | 17.8 | 17.45 | 0.06 | 2 | PASS |
|       | High   | QPSK  | RB1#0   | 1.05  | 17.8 | 18.85 | 0.08 | 2 | PASS |
|       |        |       | RB100#0 | 0.68  | 17.8 | 18.48 | 0.07 | 2 | PASS |
|       |        | 16QAM | RB1#0   | 1.19  | 17.8 | 18.99 | 0.08 | 2 | PASS |
|       |        |       | RB100#0 | 0.42  | 17.8 | 18.22 | 0.07 | 2 | PASS |

| FDD LTE Band 4 |        |        |                      |                     |                        |            |          |           |         |
|----------------|--------|--------|----------------------|---------------------|------------------------|------------|----------|-----------|---------|
| Test BW        | CH     | Modul. | RB Set (Size#Offset) | Measured EIRP       |                        |            |          | Limit (W) | Verdict |
|                |        |        |                      | SA Read Value (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) |           |         |
| 1.4 MHz        | Low    | QPSK   | RB1#0                | 5.5                 | 14.4                   | 19.90      | 0.10     | 1         | PASS    |
|                |        |        | RB6#0                | 4.92                | 14.4                   | 19.32      | 0.09     | 1         | PASS    |
|                |        | 16QAM  | RB1#0                | 5.53                | 14.4                   | 19.93      | 0.10     | 1         | PASS    |
|                |        |        | RB6#0                | 4.67                | 14.4                   | 19.07      | 0.08     | 1         | PASS    |
|                | Middle | QPSK   | RB1#0                | 5.36                | 14.4                   | 19.76      | 0.09     | 1         | PASS    |
|                |        |        | RB6#0                | 5.29                | 14.4                   | 19.69      | 0.09     | 1         | PASS    |
|                |        | 16QAM  | RB1#0                | 5.28                | 14.4                   | 19.68      | 0.09     | 1         | PASS    |
|                |        |        | RB6#0                | 4.59                | 14.4                   | 18.99      | 0.08     | 1         | PASS    |
|                | High   | QPSK   | RB1#0                | 5.61                | 14.4                   | 20.01      | 0.10     | 1         | PASS    |
|                |        |        | RB6#0                | 4.55                | 14.4                   | 18.95      | 0.08     | 1         | PASS    |
|                |        | 16QAM  | RB1#0                | 5.57                | 14.4                   | 19.97      | 0.10     | 1         | PASS    |
|                |        |        | RB6#0                | 4.63                | 14.4                   | 19.03      | 0.08     | 1         | PASS    |
| 3 MHz          | Low    | QPSK   | RB1#0                | 5.89                | 14.4                   | 20.29      | 0.11     | 1         | PASS    |
|                |        |        | RB15#0               | 4.92                | 14.4                   | 19.32      | 0.09     | 1         | PASS    |
|                |        | 16QAM  | RB1#0                | 5.67                | 14.4                   | 20.07      | 0.10     | 1         | PASS    |
|                |        |        | RB15#0               | 4.8                 | 14.4                   | 19.20      | 0.08     | 1         | PASS    |
|                | Middle | QPSK   | RB1#0                | 5.49                | 14.4                   | 19.89      | 0.10     | 1         | PASS    |
|                |        |        | RB15#0               | 5.31                | 14.4                   | 19.71      | 0.09     | 1         | PASS    |

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|--------|--------|-------|--------|------|------|-------|------|---|------|
|        |        | 16QAM | RB1#0  | 5.18 | 14.4 | 19.58 | 0.09 | 1 | PASS |
|        |        |       | RB15#0 | 4.19 | 14.4 | 18.59 | 0.07 | 1 | PASS |
|        | High   | QPSK  | RB1#0  | 5.9  | 14.4 | 20.30 | 0.11 | 1 | PASS |
|        |        |       | RB15#0 | 4.43 | 14.4 | 18.83 | 0.08 | 1 | PASS |
|        |        | 16QAM | RB1#0  | 5.63 | 14.4 | 20.03 | 0.10 | 1 | PASS |
|        |        |       | RB15#0 | 4.33 | 14.4 | 18.73 | 0.07 | 1 | PASS |
| 5 MHz  | Low    | QPSK  | RB1#0  | 6.05 | 14.4 | 20.45 | 0.11 | 1 | PASS |
|        |        |       | RB25#0 | 5.26 | 14.4 | 19.66 | 0.09 | 1 | PASS |
|        |        | 16QAM | RB1#0  | 6.04 | 14.4 | 20.44 | 0.11 | 1 | PASS |
|        |        |       | RB25#0 | 4.39 | 14.4 | 18.79 | 0.08 | 1 | PASS |
|        | Middle | QPSK  | RB1#0  | 5.84 | 14.4 | 20.24 | 0.11 | 1 | PASS |
|        |        |       | RB25#0 | 5.27 | 14.4 | 19.67 | 0.09 | 1 | PASS |
|        |        | 16QAM | RB1#0  | 5.47 | 14.4 | 19.87 | 0.10 | 1 | PASS |
|        |        |       | RB25#0 | 4.9  | 14.4 | 19.30 | 0.09 | 1 | PASS |
|        | High   | QPSK  | RB1#0  | 5.7  | 14.4 | 20.10 | 0.10 | 1 | PASS |
|        |        |       | RB25#0 | 4.15 | 14.4 | 18.55 | 0.07 | 1 | PASS |
|        |        | 16QAM | RB1#0  | 5.62 | 14.4 | 20.02 | 0.10 | 1 | PASS |
|        |        |       | RB25#0 | 4.98 | 14.4 | 19.38 | 0.09 | 1 | PASS |
| 10 MHz | Low    | QPSK  | RB1#0  | 5.6  | 14.4 | 20.00 | 0.10 | 1 | PASS |
|        |        |       | RB50#0 | 5.01 | 14.4 | 19.41 | 0.09 | 1 | PASS |
|        |        | 16QAM | RB1#0  | 5.8  | 14.4 | 20.20 | 0.10 | 1 | PASS |
|        |        |       | RB50#0 | 5.06 | 14.4 | 19.46 | 0.09 | 1 | PASS |
|        | Middle | QPSK  | RB1#0  | 6.01 | 14.4 | 20.41 | 0.11 | 1 | PASS |
|        |        |       | RB50#0 | 4.96 | 14.4 | 19.36 | 0.09 | 1 | PASS |
|        |        | 16QAM | RB1#0  | 5.6  | 14.4 | 20.00 | 0.10 | 1 | PASS |
|        |        |       | RB50#0 | 4.47 | 14.4 | 18.87 | 0.08 | 1 | PASS |
|        | High   | QPSK  | RB1#0  | 5.71 | 14.4 | 20.11 | 0.10 | 1 | PASS |
|        |        |       | RB50#0 | 4.71 | 14.4 | 19.11 | 0.08 | 1 | PASS |
|        |        | 16QAM | RB1#0  | 6.1  | 14.4 | 20.50 | 0.11 | 1 | PASS |
|        |        |       | RB50#0 | 4.73 | 14.4 | 19.13 | 0.08 | 1 | PASS |
| 15 MHz | Low    | QPSK  | RB1#0  | 5.85 | 14.4 | 20.25 | 0.11 | 1 | PASS |
|        |        |       | RB75#0 | 5.57 | 14.4 | 19.97 | 0.10 | 1 | PASS |
|        |        | 16QAM | RB1#0  | 4.79 | 14.4 | 19.19 | 0.08 | 1 | PASS |
|        |        |       | RB75#0 | 5.96 | 14.4 | 20.36 | 0.11 | 1 | PASS |
|        | Middle | QPSK  | RB1#0  | 5.1  | 14.4 | 19.50 | 0.09 | 1 | PASS |
|        |        |       | RB75#0 | 5.07 | 14.4 | 19.47 | 0.09 | 1 | PASS |
|        |        | 16QAM | RB1#0  | 4.89 | 14.4 | 19.29 | 0.08 | 1 | PASS |
|        |        |       | RB75#0 | 5.76 | 14.4 | 20.16 | 0.10 | 1 | PASS |
|        | High   | QPSK  | RB1#0  | 4.74 | 14.4 | 19.14 | 0.08 | 1 | PASS |
|        |        |       | RB75#0 | 5.87 | 14.4 | 20.27 | 0.11 | 1 | PASS |

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|-------|--------|-------|---------|------|------|-------|------|---|------|
| 20MHz |        | 16QAM | RB1#0   | 4.44 | 14.4 | 18.84 | 0.08 | 1 | PASS |
|       |        |       | RB75#0  | 5.59 | 14.4 | 19.99 | 0.10 | 1 | PASS |
|       | Low    | QPSK  | RB1#0   | 4.97 | 14.4 | 19.37 | 0.09 | 1 | PASS |
|       |        |       | RB100#0 | 5.45 | 14.4 | 19.85 | 0.10 | 1 | PASS |
|       |        | 16QAM | RB1#0   | 4.71 | 14.4 | 19.11 | 0.08 | 1 | PASS |
|       |        |       | RB100#0 | 5.56 | 14.4 | 19.96 | 0.10 | 1 | PASS |
|       | Middle | QPSK  | RB1#0   | 5.27 | 14.4 | 19.67 | 0.09 | 1 | PASS |
|       |        |       | RB100#0 | 5.32 | 14.4 | 19.72 | 0.09 | 1 | PASS |
|       |        | 16QAM | RB1#0   | 4.61 | 14.4 | 19.01 | 0.08 | 1 | PASS |
|       |        |       | RB100#0 | 5.65 | 14.4 | 20.05 | 0.10 | 1 | PASS |
|       | High   | QPSK  | RB1#0   | 4.5  | 14.4 | 18.90 | 0.08 | 1 | PASS |
|       |        |       | RB100#0 | 5.71 | 14.4 | 20.11 | 0.10 | 1 | PASS |
|       |        | 16QAM | RB1#0   | 4.78 | 14.4 | 19.18 | 0.08 | 1 | PASS |
|       |        |       | RB100#0 | 4.73 | 14.4 | 19.13 | 0.08 | 1 | PASS |

| FDD LTE Band 5 |        |        |                      |                     |                        |           |         |           |         |
|----------------|--------|--------|----------------------|---------------------|------------------------|-----------|---------|-----------|---------|
| Test BW        | CH     | Modul. | RB Set (Size#Offset) | Measured ERP        |                        |           |         | Limit (W) | Verdict |
|                |        |        |                      | SA Read Value (dBm) | Correction Factor (dB) | ERP (dBm) | ERP (W) |           |         |
| 1.4 MHz        | Low    | QPSK   | RB1#0                | 8.57                | 9.83                   | 18.40     | 0.07    | 7         | PASS    |
|                |        |        | RB6#0                | 7.61                | 9.83                   | 17.44     | 0.06    | 7         | PASS    |
|                |        | 16QAM  | RB1#0                | 8.12                | 9.83                   | 17.95     | 0.06    | 7         | PASS    |
|                |        |        | RB6#0                | 7.55                | 9.83                   | 17.38     | 0.05    | 7         | PASS    |
|                | Middle | QPSK   | RB1#0                | 7.87                | 9.83                   | 17.70     | 0.06    | 7         | PASS    |
|                |        |        | RB6#0                | 7.47                | 9.83                   | 17.30     | 0.05    | 7         | PASS    |
|                |        | 16QAM  | RB1#0                | 7.5                 | 9.83                   | 17.33     | 0.05    | 7         | PASS    |
|                |        |        | RB6#0                | 7.91                | 9.83                   | 17.74     | 0.06    | 7         | PASS    |
|                | High   | QPSK   | RB1#0                | 8.52                | 9.83                   | 18.35     | 0.07    | 7         | PASS    |
|                |        |        | RB6#0                | 7.35                | 9.83                   | 17.18     | 0.05    | 7         | PASS    |
|                |        | 16QAM  | RB1#0                | 8.4                 | 9.83                   | 18.23     | 0.07    | 7         | PASS    |
|                |        |        | RB6#0                | 8.03                | 9.83                   | 17.86     | 0.06    | 7         | PASS    |
| 3 MHz          | Low    | QPSK   | RB1#0                | 8.18                | 9.83                   | 18.01     | 0.06    | 7         | PASS    |
|                |        |        | RB15#0               | 7.38                | 9.83                   | 17.21     | 0.05    | 7         | PASS    |
|                |        | 16QAM  | RB1#0                | 8.15                | 9.83                   | 17.98     | 0.06    | 7         | PASS    |
|                |        |        | RB15#0               | 7.6                 | 9.83                   | 17.43     | 0.06    | 7         | PASS    |
|                | Middle | QPSK   | RB1#0                | 8.4                 | 9.83                   | 18.23     | 0.07    | 7         | PASS    |
|                |        |        | RB15#0               | 7.53                | 9.83                   | 17.36     | 0.05    | 7         | PASS    |
|                |        | 16QAM  | RB1#0                | 7.61                | 9.83                   | 17.44     | 0.06    | 7         | PASS    |
|                |        |        | RB15#0               | 8.06                | 9.83                   | 17.89     | 0.06    | 7         | PASS    |

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|--------|--------|-------|--------|------|------|-------|------|---|------|
|        | High   | QPSK  | RB1#0  | 8.13 | 9.83 | 17.96 | 0.06 | 7 | PASS |
|        |        |       | RB15#0 | 7.49 | 9.83 | 17.32 | 0.05 | 7 | PASS |
|        |        | 16QAM | RB1#0  | 8.13 | 9.83 | 17.96 | 0.06 | 7 | PASS |
|        |        |       | RB15#0 | 7.78 | 9.83 | 17.61 | 0.06 | 7 | PASS |
| 5 MHz  | Low    | QPSK  | RB1#0  | 8.26 | 9.83 | 18.09 | 0.06 | 7 | PASS |
|        |        |       | RB25#0 | 7.2  | 9.83 | 17.03 | 0.05 | 7 | PASS |
|        |        | 16QAM | RB1#0  | 8.04 | 9.83 | 17.87 | 0.06 | 7 | PASS |
|        |        |       | RB25#0 | 7.83 | 9.83 | 17.66 | 0.06 | 7 | PASS |
|        | Middle | QPSK  | RB1#0  | 8.01 | 9.83 | 17.84 | 0.06 | 7 | PASS |
|        |        |       | RB25#0 | 7.47 | 9.83 | 17.30 | 0.05 | 7 | PASS |
|        |        | 16QAM | RB1#0  | 7.4  | 9.83 | 17.23 | 0.05 | 7 | PASS |
|        |        |       | RB25#0 | 7.49 | 9.83 | 17.32 | 0.05 | 7 | PASS |
|        | High   | QPSK  | RB1#0  | 7.86 | 9.83 | 17.69 | 0.06 | 7 | PASS |
|        |        |       | RB25#0 | 7.97 | 9.83 | 17.80 | 0.06 | 7 | PASS |
|        |        | 16QAM | RB1#0  | 8.15 | 9.83 | 17.98 | 0.06 | 7 | PASS |
|        |        |       | RB25#0 | 7.69 | 9.83 | 17.52 | 0.06 | 7 | PASS |
| 10 MHz | Low    | QPSK  | RB1#0  | 8.16 | 9.83 | 17.99 | 0.06 | 7 | PASS |
|        |        |       | RB50#0 | 7.34 | 9.83 | 17.17 | 0.05 | 7 | PASS |
|        |        | 16QAM | RB1#0  | 8.53 | 9.83 | 18.36 | 0.07 | 7 | PASS |
|        |        |       | RB50#0 | 7.8  | 9.83 | 17.63 | 0.06 | 7 | PASS |
|        | Middle | QPSK  | RB1#0  | 8.68 | 9.83 | 18.51 | 0.07 | 7 | PASS |
|        |        |       | RB50#0 | 7.57 | 9.83 | 17.40 | 0.05 | 7 | PASS |
|        |        | 16QAM | RB1#0  | 7.71 | 9.83 | 17.54 | 0.06 | 7 | PASS |
|        |        |       | RB50#0 | 8.25 | 9.83 | 18.08 | 0.06 | 7 | PASS |
|        | High   | QPSK  | RB1#0  | 8.39 | 9.83 | 18.22 | 0.07 | 7 | PASS |
|        |        |       | RB50#0 | 7.7  | 9.83 | 17.53 | 0.06 | 7 | PASS |
|        |        | 16QAM | RB1#0  | 7.96 | 9.83 | 17.79 | 0.06 | 7 | PASS |
|        |        |       | RB50#0 | 7.78 | 9.83 | 17.61 | 0.06 | 7 | PASS |

| FDD LTE Band 7 |        |        |                      |                     |                        |            |          |           |         |
|----------------|--------|--------|----------------------|---------------------|------------------------|------------|----------|-----------|---------|
| Test BW        | CH     | Modul. | RB Set (Size#Offset) | Measured EIRP       |                        |            |          | Limit (W) | Verdict |
|                |        |        |                      | SA Read Value (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) |           |         |
| 5 MHz          | Low    | QPSK   | RB1#0                | 1.21                | 19.5                   | 20.71      | 0.12     | 2         | PASS    |
|                |        |        | RB25#0               | 0.18                | 19.5                   | 19.68      | 0.09     | 2         | PASS    |
|                |        | 16QAM  | RB1#0                | 0.87                | 19.5                   | 20.37      | 0.11     | 2         | PASS    |
|                |        |        | RB25#0               | 0.01                | 19.5                   | 19.51      | 0.09     | 2         | PASS    |
|                | Middle | QPSK   | RB1#0                | 1.1                 | 19.5                   | 20.60      | 0.11     | 2         | PASS    |
|                |        |        | RB25#0               | 0.13                | 19.5                   | 19.63      | 0.09     | 2         | PASS    |

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|--------|--------|-------|---------|-------|------|-------|------|---|------|
|        |        | 16QAM | RB1#0   | 0.57  | 19.5 | 20.07 | 0.10 | 2 | PASS |
|        |        |       | RB25#0  | -0.48 | 19.5 | 19.02 | 0.08 | 2 | PASS |
|        | High   | QPSK  | RB1#0   | 0.99  | 19.5 | 20.49 | 0.11 | 2 | PASS |
|        |        |       | RB25#0  | 0.49  | 19.5 | 19.99 | 0.10 | 2 | PASS |
|        |        | 16QAM | RB1#0   | 1.34  | 19.5 | 20.84 | 0.12 | 2 | PASS |
|        |        |       | RB25#0  | 0.5   | 19.5 | 20.00 | 0.10 | 2 | PASS |
| 10 MHz | Low    | QPSK  | RB1#0   | 1.1   | 19.5 | 20.60 | 0.11 | 2 | PASS |
|        |        |       | RB50#0  | 0.26  | 19.5 | 19.76 | 0.09 | 2 | PASS |
|        |        | 16QAM | RB1#0   | 1.12  | 19.5 | 20.62 | 0.12 | 2 | PASS |
|        |        |       | RB50#0  | 0.46  | 19.5 | 19.96 | 0.10 | 2 | PASS |
|        | Middle | QPSK  | RB1#0   | 0.75  | 19.5 | 20.25 | 0.11 | 2 | PASS |
|        |        |       | RB50#0  | 0.29  | 19.5 | 19.79 | 0.10 | 2 | PASS |
|        |        | 16QAM | RB1#0   | 0.16  | 19.5 | 19.66 | 0.09 | 2 | PASS |
|        |        |       | RB50#0  | -0.51 | 19.5 | 18.99 | 0.08 | 2 | PASS |
|        | High   | QPSK  | RB1#0   | 0.81  | 19.5 | 20.31 | 0.11 | 2 | PASS |
|        |        |       | RB50#0  | 0.49  | 19.5 | 19.99 | 0.10 | 2 | PASS |
|        |        | 16QAM | RB1#0   | 1.23  | 19.5 | 20.73 | 0.12 | 2 | PASS |
|        |        |       | RB50#0  | 0.74  | 19.5 | 20.24 | 0.11 | 2 | PASS |
| 15 MHz | Low    | QPSK  | RB1#0   | 1.4   | 19.5 | 20.90 | 0.12 | 2 | PASS |
|        |        |       | RB75#0  | 0.47  | 19.5 | 19.97 | 0.10 | 2 | PASS |
|        |        | 16QAM | RB1#0   | 0.68  | 19.5 | 20.18 | 0.10 | 2 | PASS |
|        |        |       | RB75#0  | 0.37  | 19.5 | 19.87 | 0.10 | 2 | PASS |
|        | Middle | QPSK  | RB1#0   | 1.15  | 19.5 | 20.65 | 0.12 | 2 | PASS |
|        |        |       | RB75#0  | 0.22  | 19.5 | 19.72 | 0.09 | 2 | PASS |
|        |        | 16QAM | RB1#0   | 0.37  | 19.5 | 19.87 | 0.10 | 2 | PASS |
|        |        |       | RB75#0  | -0.29 | 19.5 | 19.21 | 0.08 | 2 | PASS |
|        | High   | QPSK  | RB1#0   | 1.35  | 19.5 | 20.85 | 0.12 | 2 | PASS |
|        |        |       | RB75#0  | 0.72  | 19.5 | 20.22 | 0.11 | 2 | PASS |
|        |        | 16QAM | RB1#0   | 1.25  | 19.5 | 20.75 | 0.12 | 2 | PASS |
|        |        |       | RB75#0  | 0.62  | 19.5 | 20.12 | 0.10 | 2 | PASS |
| 20MHz  | Low    | QPSK  | RB1#0   | 1.13  | 19.5 | 20.63 | 0.12 | 2 | PASS |
|        |        |       | RB100#0 | 0.43  | 19.5 | 19.93 | 0.10 | 2 | PASS |
|        |        | 16QAM | RB1#0   | 0.9   | 19.5 | 20.40 | 0.11 | 2 | PASS |
|        |        |       | RB100#0 | 0.07  | 19.5 | 19.57 | 0.09 | 2 | PASS |
|        | Middle | QPSK  | RB1#0   | 1.16  | 19.5 | 20.66 | 0.12 | 2 | PASS |
|        |        |       | RB100#0 | 0.53  | 19.5 | 20.03 | 0.10 | 2 | PASS |
|        |        | 16QAM | RB1#0   | 0.25  | 19.5 | 19.75 | 0.09 | 2 | PASS |
|        |        |       | RB100#0 | -0.35 | 19.5 | 19.15 | 0.08 | 2 | PASS |
|        | High   | QPSK  | RB1#0   | 0.97  | 19.5 | 20.47 | 0.11 | 2 | PASS |
|        |        |       | RB100#0 | 0.37  | 19.5 | 19.87 | 0.10 | 2 | PASS |

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|--|--|-------|---------|------|------|-------|------|---|------|
|  |  | 16QAM | RB1#0   | 0.93 | 19.5 | 20.43 | 0.11 | 2 | PASS |
|  |  |       | RB100#0 | 0.66 | 19.5 | 20.16 | 0.10 | 2 | PASS |

| FDD LTE Band 17 |        |        |                      |                     |                        |           |         |           |         |
|-----------------|--------|--------|----------------------|---------------------|------------------------|-----------|---------|-----------|---------|
| Test BW         | CH     | Modul. | RB Set (Size#Offset) | Measured ERP        |                        |           |         | Limit (W) | Verdict |
|                 |        |        |                      | SA Read Value (dBm) | Correction Factor (dB) | ERP (dBm) | ERP (W) |           |         |
| 5 MHz           | Low    | QPSK   | RB1#0                | 10.16               | 8.1                    | 18.26     | 0.07    | 3         | PASS    |
|                 |        |        | RB25#0               | 9.3                 | 8.1                    | 17.40     | 0.05    | 3         | PASS    |
|                 |        | 16QAM  | RB1#0                | 9.29                | 8.1                    | 17.39     | 0.05    | 3         | PASS    |
|                 |        |        | RB25#0               | 8.59                | 8.1                    | 16.69     | 0.05    | 3         | PASS    |
|                 | Middle | QPSK   | RB1#0                | 9.77                | 8.1                    | 17.87     | 0.06    | 3         | PASS    |
|                 |        |        | RB25#0               | 9.52                | 8.1                    | 17.62     | 0.06    | 3         | PASS    |
|                 |        | 16QAM  | RB1#0                | 8.31                | 8.1                    | 16.41     | 0.04    | 3         | PASS    |
|                 |        |        | RB25#0               | 8.6                 | 8.1                    | 16.70     | 0.05    | 3         | PASS    |
|                 | High   | QPSK   | RB1#0                | 9.84                | 8.1                    | 17.94     | 0.06    | 3         | PASS    |
|                 |        |        | RB25#0               | 9.67                | 8.1                    | 17.77     | 0.06    | 3         | PASS    |
|                 |        | 16QAM  | RB1#0                | 9.19                | 8.1                    | 17.29     | 0.05    | 3         | PASS    |
|                 |        |        | RB25#0               | 8.71                | 8.1                    | 16.81     | 0.05    | 3         | PASS    |
| 10 MHz          | Low    | QPSK   | RB1#0                | 10.03               | 8.1                    | 18.13     | 0.07    | 3         | PASS    |
|                 |        |        | RB50#0               | 9.15                | 8.1                    | 17.25     | 0.05    | 3         | PASS    |
|                 |        | 16QAM  | RB1#0                | 8.75                | 8.1                    | 16.85     | 0.05    | 3         | PASS    |
|                 |        |        | RB50#0               | 8.34                | 8.1                    | 16.44     | 0.04    | 3         | PASS    |
|                 | Middle | QPSK   | RB1#0                | 10.05               | 8.1                    | 18.15     | 0.07    | 3         | PASS    |
|                 |        |        | RB50#0               | 9.1                 | 8.1                    | 17.20     | 0.05    | 3         | PASS    |
|                 |        | 16QAM  | RB1#0                | 8.42                | 8.1                    | 16.52     | 0.04    | 3         | PASS    |
|                 |        |        | RB50#0               | 8.84                | 8.1                    | 16.94     | 0.05    | 3         | PASS    |
|                 | High   | QPSK   | RB1#0                | 10.15               | 8.1                    | 18.25     | 0.07    | 3         | PASS    |
|                 |        |        | RB50#0               | 9.45                | 8.1                    | 17.55     | 0.06    | 3         | PASS    |
|                 |        | 16QAM  | RB1#0                | 8.84                | 8.1                    | 16.94     | 0.05    | 3         | PASS    |
|                 |        |        | RB50#0               | 8.87                | 8.1                    | 16.97     | 0.05    | 3         | PASS    |

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## 5.1.2 Peak to Average Ratio

### Note(s):

1. For GSM, GPRS and EGPRS, there are peak power to demonstrate compliance, PAR measurements are not required.
2. Test plots please refer to the document "Annex No: EXHIBIT A of SHE19090021-01IE.pdf".

### Peak to Average Ratio Measurement Results for WCDMA

| Test Band     | Channel | Peak to Average Ratio (dB) | Limit (W) | Refer to Plot <sup>Note 2</sup> | Verdict |
|---------------|---------|----------------------------|-----------|---------------------------------|---------|
| WCDMA Band II | Low     | 2.94                       | 13        | 1.1                             | PASS    |
|               | Middle  | 2.90                       | 13        | 1.2                             | PASS    |
|               | High    | 2.87                       | 13        | 1.3                             | PASS    |

### Peak to Average Ratio Measurement Results for LTE

| FDD LTE Band 2 |         |        |                      |                            |            |                                 |         |
|----------------|---------|--------|----------------------|----------------------------|------------|---------------------------------|---------|
| Test BW        | Channel | Modul. | RB Set (Size#Offset) | Peak to Average Ratio (dB) | Limit (dB) | Refer to Plot <sup>Note 2</sup> | Verdict |
| 20 MHz         | Low     | QPSK   | RB1#0                | 4.01                       | 13         | 2.1                             | PASS    |
|                |         |        | RB100#0              | 4.73                       | 13         | 2.2                             | PASS    |
|                |         | 16QAM  | RB1#0                | 4.86                       | 13         | 2.3                             | PASS    |
|                |         |        | RB100#0              | 5.56                       | 13         | 2.4                             | PASS    |
|                | Middle  | QPSK   | RB1#0                | 3.91                       | 13         | 2.5                             | PASS    |
|                |         |        | RB100#0              | 4.88                       | 13         | 2.6                             | PASS    |
|                |         | 16QAM  | RB1#0                | 4.83                       | 13         | 2.7                             | PASS    |
|                |         |        | RB100#0              | 5.74                       | 13         | 2.8                             | PASS    |
|                | High    | QPSK   | RB1#0                | 3.59                       | 13         | 2.9                             | PASS    |
|                |         |        | RB100#0              | 4.50                       | 13         | 2.10                            | PASS    |
|                |         | 16QAM  | RB1#0                | 4.65                       | 13         | 2.11                            | PASS    |
|                |         |        | RB100#0              | 5.30                       | 13         | 2.12                            | PASS    |

| FDD LTE Band 4 |         |        |                      |                            |            |                                 |         |
|----------------|---------|--------|----------------------|----------------------------|------------|---------------------------------|---------|
| Test BW        | Channel | Modul. | RB Set (Size#Offset) | Peak to Average Ratio (dB) | Limit (dB) | Refer to Plot <sup>Note 2</sup> | Verdict |
| 20 MHz         | Low     | QPSK   | RB1#0                | 4.06                       | 13         | 3.1                             | PASS    |
|                |         |        | RB100#0              | 4.75                       | 13         | 3.2                             | PASS    |
|                |         | 16QAM  | RB1#0                | 4.85                       | 13         | 3.3                             | PASS    |
|                |         |        | RB100#0              | 5.61                       | 13         | 3.4                             | PASS    |
|                | Middle  | QPSK   | RB1#0                | 3.90                       | 13         | 3.5                             | PASS    |

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|  |      |       |         |      |    |      |      |
|--|------|-------|---------|------|----|------|------|
|  |      | 16QAM | RB100#0 | 4.73 | 13 | 3.6  | PASS |
|  |      |       | RB1#0   | 4.86 | 13 | 3.7  | PASS |
|  |      |       | RB100#0 | 5.53 | 13 | 3.8  | PASS |
|  | High | QPSK  | RB1#0   | 3.57 | 13 | 3.9  | PASS |
|  |      |       | RB100#0 | 4.76 | 13 | 3.10 | PASS |
|  |      | 16QAM | RB1#0   | 4.68 | 13 | 3.11 | PASS |
|  |      |       | RB100#0 | 5.56 | 13 | 3.12 | PASS |
|  |      |       |         |      |    |      |      |

| FDD LTE Band 5 |         |        |                      |                            |            |                                 |         |
|----------------|---------|--------|----------------------|----------------------------|------------|---------------------------------|---------|
| Test BW        | Channel | Modul. | RB Set (Size#Offset) | Peak to Average Ratio (dB) | Limit (dB) | Refer to Plot <sup>Note 2</sup> | Verdict |
| 10 MHz         | Low     | QPSK   | RB1#0                | 3.46                       | 13         | 4.1                             | PASS    |
|                |         |        | RB50#0               | 4.98                       | 13         | 4.2                             | PASS    |
|                |         | 16QAM  | RB1#0                | 4.22                       | 13         | 4.3                             | PASS    |
|                |         |        | RB50#0               | 5.73                       | 13         | 4.4                             | PASS    |
|                | Middle  | QPSK   | RB1#0                | 3.47                       | 13         | 4.5                             | PASS    |
|                |         |        | RB50#0               | 4.85                       | 13         | 4.6                             | PASS    |
|                |         | 16QAM  | RB1#0                | 4.37                       | 13         | 4.7                             | PASS    |
|                |         |        | RB50#0               | 5.73                       | 13         | 4.8                             | PASS    |
|                | High    | QPSK   | RB1#0                | 3.46                       | 13         | 4.9                             | PASS    |
|                |         |        | RB50#0               | 4.94                       | 13         | 4.10                            | PASS    |
|                |         | 16QAM  | RB1#0                | 4.37                       | 13         | 4.11                            | PASS    |
|                |         |        | RB50#0               | 5.73                       | 13         | 4.12                            | PASS    |

| FDD LTE Band 7 |         |        |                      |                            |            |                                 |         |
|----------------|---------|--------|----------------------|----------------------------|------------|---------------------------------|---------|
| Test BW        | Channel | Modul. | RB Set (Size#Offset) | Peak to Average Ratio (dB) | Limit (dB) | Refer to Plot <sup>Note 2</sup> | Verdict |
| 20 MHz         | Low     | QPSK   | RB1#0                | 3.91                       | 13         | 5.1                             | PASS    |
|                |         |        | RB100#0              | 4.42                       | 13         | 5.2                             | PASS    |
|                |         | 16QAM  | RB1#0                | 4.60                       | 13         | 5.3                             | PASS    |
|                |         |        | RB100#0              | 5.36                       | 13         | 5.4                             | PASS    |
|                | Middle  | QPSK   | RB1#0                | 4.27                       | 13         | 5.5                             | PASS    |
|                |         |        | RB100#0              | 4.28                       | 13         | 5.6                             | PASS    |
|                |         | 16QAM  | RB1#0                | 5.23                       | 13         | 5.7                             | PASS    |
|                |         |        | RB100#0              | 5.12                       | 13         | 5.8                             | PASS    |
|                | High    | QPSK   | RB1#0                | 4.28                       | 13         | 5.9                             | PASS    |
|                |         |        | RB100#0              | 4.18                       | 13         | 5.10                            | PASS    |
|                |         | 16QAM  | RB1#0                | 5.27                       | 13         | 5.11                            | PASS    |
|                |         |        |                      |                            |            |                                 |         |



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|  |  |  |         |      |    |      |      |
|--|--|--|---------|------|----|------|------|
|  |  |  | RB100#0 | 4.96 | 13 | 5.12 | PASS |
|--|--|--|---------|------|----|------|------|

| FDD LTE Band 17 |         |        |                      |                            |            |                                 |         |
|-----------------|---------|--------|----------------------|----------------------------|------------|---------------------------------|---------|
| Test BW         | Channel | Modul. | RB Set (Size#Offset) | Peak to Average Ratio (dB) | Limit (dB) | Refer to Plot <sup>Note 2</sup> | Verdict |
| 10 MHz          | Low     | QPSK   | RB1#0                | 4.22                       | 13         | 6.1                             | PASS    |
|                 |         |        | RB50#0               | 5.14                       | 13         | 6.2                             | PASS    |
|                 |         | 16QAM  | RB1#0                | 5.18                       | 13         | 6.3                             | PASS    |
|                 |         |        | RB50#0               | 5.95                       | 13         | 6.4                             | PASS    |
|                 | Middle  | QPSK   | RB1#0                | 4.19                       | 13         | 6.5                             | PASS    |
|                 |         |        | RB50#0               | 5.07                       | 13         | 6.6                             | PASS    |
|                 |         | 16QAM  | RB1#0                | 5.22                       | 13         | 6.7                             | PASS    |
|                 |         |        | RB50#0               | 5.97                       | 13         | 6.8                             | PASS    |
|                 | High    | QPSK   | RB1#0                | 4.19                       | 13         | 6.9                             | PASS    |
|                 |         |        | RB50#0               | 5.03                       | 13         | 6.10                            | PASS    |
|                 |         | 16QAM  | RB1#0                | 5.27                       | 13         | 6.11                            | PASS    |
|                 |         |        | RB50#0               | 5.96                       | 13         | 6.12                            | PASS    |

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## 5.1.3 Occupied Bandwidth

### Note(s):

1. All modes were tested, but only the typical data were reported in this report.
2. Test plots please refer to the document "Annex No: EXHIBIT B of SHE19090021-01IE.pdf".

### Occupied Bandwidth Measurement Results for GSM/WCDMA/CDMA

| Test Band     | Channel | Measured 99%<br>Occupied Bandwidth (MHz) | Measured -26 dB<br>Occupied Bandwidth (MHz) | Refer to<br>Plot <sup>Note 2</sup> |
|---------------|---------|------------------------------------------|---------------------------------------------|------------------------------------|
| GSM 850       | Low     | 0.25                                     | 0.31                                        | 1.1                                |
|               | Middle  | 0.24                                     | 0.32                                        | 1.2                                |
|               | High    | 0.24                                     | 0.31                                        | 1.3                                |
| GSM 1900      | Low     | 0.24                                     | 0.31                                        | 2.1                                |
|               | Middle  | 0.24                                     | 0.31                                        | 2.2                                |
|               | High    | 0.25                                     | 0.30                                        | 2.3                                |
| EDGE 850      | Low     | 0.25                                     | 0.31                                        | 3.1                                |
|               | Middle  | 0.24                                     | 0.31                                        | 3.2                                |
|               | High    | 0.24                                     | 0.31                                        | 3.3                                |
| EDGE 1900     | Low     | 0.24                                     | 0.31                                        | 4.1                                |
|               | Middle  | 0.24                                     | 0.31                                        | 4.2                                |
|               | High    | 0.24                                     | 0.31                                        | 4.3                                |
| WCDMA Band II | Low     | 4.12                                     | 4.71                                        | 5.1                                |
|               | Middle  | 4.12                                     | 4.72                                        | 5.2                                |
|               | High    | 4.12                                     | 4.71                                        | 5.3                                |
| WCDMA Band V  | Low     | 4.13                                     | 4.72                                        | 6.1                                |
|               | Middle  | 4.11                                     | 4.71                                        | 6.2                                |
|               | High    | 4.12                                     | 4.71                                        | 6.3                                |
| CDMA BC0      | Low     | 1.28                                     | 1.43                                        | 7.1                                |
|               | Middle  | 1.27                                     | 1.42                                        | 7.2                                |
|               | High    | 1.27                                     | 1.43                                        | 7.3                                |
| EVDO BC0      | Low     | 1.27                                     | 1.42                                        | 8.1                                |
|               | Middle  | 1.27                                     | 1.42                                        | 8.2                                |
|               | High    | 1.27                                     | 1.42                                        | 8.3                                |

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## Occupied Bandwidth Measurement Results for LTE

| FDD LTE Band 2 |        |        |                      |                              |                        |                                 |
|----------------|--------|--------|----------------------|------------------------------|------------------------|---------------------------------|
| Test BW        | CH     | Modul. | RB Set (Size#Offset) | 99% Occupied Bandwidth (MHz) | -26 dB Bandwidth (MHz) | Refer to Plot <sup>Note 2</sup> |
| 1.4 MHz        | Low    | QPSK   | RB6#0                | 1.09                         | 1.30                   | 9.1                             |
|                |        | 16QAM  | RB6#0                | 1.09                         | 1.30                   | 9.2                             |
|                | Middle | QPSK   | RB6#0                | 1.09                         | 1.33                   | 9.3                             |
|                |        | 16QAM  | RB6#0                | 1.09                         | 1.29                   | 9.4                             |
|                | High   | QPSK   | RB6#0                | 1.10                         | 1.32                   | 9.5                             |
|                |        | 16QAM  | RB6#0                | 1.09                         | 1.31                   | 9.6                             |
| 3 MHz          | Low    | QPSK   | RB15#0               | 2.70                         | 2.97                   | 9.7                             |
|                |        | 16QAM  | RB15#0               | 2.71                         | 2.99                   | 9.8                             |
|                | Middle | QPSK   | RB15#0               | 2.70                         | 3.01                   | 9.9                             |
|                |        | 16QAM  | RB15#0               | 2.70                         | 3.00                   | 9.10                            |
|                | High   | QPSK   | RB15#0               | 2.71                         | 2.99                   | 9.11                            |
|                |        | 16QAM  | RB15#0               | 2.70                         | 3.00                   | 9.12                            |
| 5 MHz          | Low    | QPSK   | RB25#0               | 4.51                         | 5.01                   | 9.13                            |
|                |        | 16QAM  | RB25#0               | 4.50                         | 5.01                   | 9.14                            |
|                | Middle | QPSK   | RB25#0               | 4.50                         | 5.00                   | 9.15                            |
|                |        | 16QAM  | RB25#0               | 4.50                         | 5.01                   | 9.16                            |
|                | High   | QPSK   | RB25#0               | 4.50                         | 5.00                   | 9.17                            |
|                |        | 16QAM  | RB25#0               | 4.51                         | 5.03                   | 9.18                            |
| 10 MHz         | Low    | QPSK   | RB50#0               | 8.97                         | 9.99                   | 9.19                            |
|                |        | 16QAM  | RB50#0               | 8.95                         | 9.82                   | 9.20                            |
|                | Middle | QPSK   | RB50#0               | 8.94                         | 9.83                   | 9.21                            |
|                |        | 16QAM  | RB50#0               | 8.96                         | 9.83                   | 9.22                            |
|                | High   | QPSK   | RB50#0               | 8.96                         | 9.88                   | 9.23                            |
|                |        | 16QAM  | RB50#0               | 8.94                         | 9.86                   | 9.24                            |
| 15 MHz         | Low    | QPSK   | RB75#0               | 13.44                        | 14.78                  | 9.25                            |
|                |        | 16QAM  | RB75#0               | 13.44                        | 14.65                  | 9.26                            |
|                | Middle | QPSK   | RB75#0               | 13.40                        | 14.59                  | 9.27                            |
|                |        | 16QAM  | RB75#0               | 13.44                        | 14.65                  | 9.28                            |
|                | High   | QPSK   | RB75#0               | 13.37                        | 14.71                  | 9.29                            |
|                |        | 16QAM  | RB75#0               | 13.39                        | 14.58                  | 9.30                            |
| 20 MHz         | Low    | QPSK   | RB100#0              | 17.89                        | 19.33                  | 9.31                            |
|                |        | 16QAM  | RB100#0              | 17.86                        | 19.30                  | 9.32                            |
|                | Middle | QPSK   | RB100#0              | 17.87                        | 19.41                  | 9.33                            |
|                |        | 16QAM  | RB100#0              | 17.89                        | 19.67                  | 9.34                            |
|                | High   | QPSK   | RB100#0              | 17.85                        | 19.51                  | 9.35                            |
|                |        | 16QAM  | RB100#0              | 17.83                        | 19.46                  | 9.36                            |

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| FDD LTE Band 4 |        |        |                      |                              |                        |                                 |
|----------------|--------|--------|----------------------|------------------------------|------------------------|---------------------------------|
| Test BW        | CH     | Modul. | RB Set (Size#Offset) | 99% Occupied Bandwidth (MHz) | -26 dB Bandwidth (MHz) | Refer to Plot <sup>Note 2</sup> |
| 1.4 MHz        | Low    | QPSK   | RB6#0                | 1.09                         | 1.33                   | 10.1                            |
|                |        | 16QAM  | RB6#0                | 1.10                         | 1.30                   | 10.2                            |
|                | Middle | QPSK   | RB6#0                | 1.09                         | 1.32                   | 10.3                            |
|                |        | 16QAM  | RB6#0                | 1.09                         | 1.31                   | 10.4                            |
|                | High   | QPSK   | RB6#0                | 1.09                         | 1.31                   | 10.5                            |
|                |        | 16QAM  | RB6#0                | 1.09                         | 1.29                   | 10.6                            |
| 3 MHz          | Low    | QPSK   | RB15#0               | 2.70                         | 2.99                   | 10.7                            |
|                |        | 16QAM  | RB15#0               | 2.71                         | 2.99                   | 10.8                            |
|                | Middle | QPSK   | RB15#0               | 2.71                         | 3.00                   | 10.9                            |
|                |        | 16QAM  | RB15#0               | 2.70                         | 3.00                   | 10.10                           |
|                | High   | QPSK   | RB15#0               | 2.70                         | 3.00                   | 10.11                           |
|                |        | 16QAM  | RB15#0               | 2.70                         | 2.99                   | 10.12                           |
| 5 MHz          | Low    | QPSK   | RB25#0               | 4.51                         | 5.01                   | 10.13                           |
|                |        | 16QAM  | RB25#0               | 4.50                         | 4.98                   | 10.14                           |
|                | Middle | QPSK   | RB25#0               | 4.50                         | 5.01                   | 10.15                           |
|                |        | 16QAM  | RB25#0               | 4.51                         | 5.01                   | 10.16                           |
|                | High   | QPSK   | RB25#0               | 4.50                         | 4.97                   | 10.17                           |
|                |        | 16QAM  | RB25#0               | 4.50                         | 5.01                   | 10.18                           |
| 10 MHz         | Low    | QPSK   | RB50#0               | 8.97                         | 9.94                   | 10.19                           |
|                |        | 16QAM  | RB50#0               | 8.97                         | 9.81                   | 10.20                           |
|                | Middle | QPSK   | RB50#0               | 8.94                         | 9.87                   | 10.21                           |
|                |        | 16QAM  | RB50#0               | 8.93                         | 9.82                   | 10.22                           |
|                | High   | QPSK   | RB50#0               | 8.96                         | 9.83                   | 10.23                           |
|                |        | 16QAM  | RB50#0               | 8.96                         | 9.90                   | 10.24                           |
| 15 MHz         | Low    | QPSK   | RB75#0               | 13.43                        | 14.77                  | 10.25                           |
|                |        | 16QAM  | RB75#0               | 13.41                        | 14.59                  | 10.26                           |
|                | Middle | QPSK   | RB75#0               | 13.39                        | 14.65                  | 10.27                           |
|                |        | 16QAM  | RB75#0               | 13.40                        | 14.61                  | 10.28                           |
|                | High   | QPSK   | RB75#0               | 13.41                        | 14.7                   | 10.29                           |
|                |        | 16QAM  | RB75#0               | 13.42                        | 14.74                  | 10.30                           |
| 20 MHz         | Low    | QPSK   | RB100#0              | 17.88                        | 19.43                  | 10.31                           |
|                |        | 16QAM  | RB100#0              | 17.93                        | 19.43                  | 10.32                           |
|                | Middle | QPSK   | RB100#0              | 17.86                        | 19.36                  | 10.33                           |
|                |        | 16QAM  | RB100#0              | 17.87                        | 19.62                  | 10.34                           |
|                | High   | QPSK   | RB100#0              | 17.91                        | 19.56                  | 10.35                           |
|                |        | 16QAM  | RB100#0              | 17.91                        | 19.51                  | 10.36                           |

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| FDD LTE Band 5 |        |        |                      |                              |                        |                                 |
|----------------|--------|--------|----------------------|------------------------------|------------------------|---------------------------------|
| Test BW        | CH     | Modul. | RB Set (Size#Offset) | 99% Occupied Bandwidth (MHz) | -26 dB Bandwidth (MHz) | Refer to Plot <sup>Note 2</sup> |
| 1.4 MHz        | Low    | QPSK   | RB6#0                | 1.09                         | 1.30                   | 11.1                            |
|                |        | 16QAM  | RB6#0                | 1.09                         | 1.30                   | 11.2                            |
|                | Middle | QPSK   | RB6#0                | 1.09                         | 1.30                   | 11.3                            |
|                |        | 16QAM  | RB6#0                | 1.09                         | 1.28                   | 11.4                            |
|                | High   | QPSK   | RB6#0                | 1.09                         | 1.26                   | 11.5                            |
|                |        | 16QAM  | RB6#0                | 1.09                         | 1.30                   | 11.6                            |
| 3 MHz          | Low    | QPSK   | RB15#0               | 2.70                         | 2.99                   | 11.7                            |
|                |        | 16QAM  | RB15#0               | 2.71                         | 2.99                   | 11.8                            |
|                | Middle | QPSK   | RB15#0               | 2.70                         | 2.98                   | 11.9                            |
|                |        | 16QAM  | RB15#0               | 2.70                         | 2.98                   | 11.10                           |
|                | High   | QPSK   | RB15#0               | 2.70                         | 2.99                   | 11.11                           |
|                |        | 16QAM  | RB15#0               | 2.70                         | 2.99                   | 11.12                           |
| 5 MHz          | Low    | QPSK   | RB25#0               | 4.51                         | 5.02                   | 11.13                           |
|                |        | 16QAM  | RB25#0               | 4.50                         | 4.98                   | 11.14                           |
|                | Middle | QPSK   | RB25#0               | 4.49                         | 4.99                   | 11.15                           |
|                |        | 16QAM  | RB25#0               | 4.49                         | 4.99                   | 11.16                           |
|                | High   | QPSK   | RB25#0               | 4.49                         | 4.98                   | 11.17                           |
|                |        | 16QAM  | RB25#0               | 4.51                         | 5.00                   | 11.18                           |
| 10 MHz         | Low    | QPSK   | RB50#0               | 8.99                         | 9.95                   | 11.19                           |
|                |        | 16QAM  | RB50#0               | 8.99                         | 9.85                   | 11.20                           |
|                | Middle | QPSK   | RB50#0               | 8.94                         | 9.78                   | 11.21                           |
|                |        | 16QAM  | RB50#0               | 8.94                         | 9.91                   | 11.22                           |
|                | High   | QPSK   | RB50#0               | 8.97                         | 9.84                   | 11.23                           |
|                |        | 16QAM  | RB50#0               | 8.97                         | 9.89                   | 11.24                           |

| FDD LTE Band 7 |        |        |                      |                              |                        |                                 |
|----------------|--------|--------|----------------------|------------------------------|------------------------|---------------------------------|
| Test BW        | CH     | Modul. | RB Set (Size#Offset) | 99% Occupied Bandwidth (MHz) | -26 dB Bandwidth (MHz) | Refer to Plot <sup>Note 2</sup> |
| 5 MHz          | Low    | QPSK   | RB25#0               | 4.51                         | 5.03                   | 12.1                            |
|                |        | 16QAM  | RB25#0               | 4.50                         | 4.99                   | 12.2                            |
|                | Middle | QPSK   | RB25#0               | 4.50                         | 5.03                   | 12.3                            |
|                |        | 16QAM  | RB25#0               | 4.52                         | 5.05                   | 12.4                            |
|                | High   | QPSK   | RB25#0               | 4.49                         | 5.04                   | 12.5                            |
|                |        | 16QAM  | RB25#0               | 4.52                         | 5.07                   | 12.6                            |
| 10 MHz         | Low    | QPSK   | RB50#0               | 8.98                         | 10.01                  | 12.7                            |
|                |        | 16QAM  | RB50#0               | 8.98                         | 9.87                   | 12.8                            |

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|        |        |       |         |       |       |       |
|--------|--------|-------|---------|-------|-------|-------|
|        | Middle | QPSK  | RB50#0  | 8.96  | 9.94  | 12.9  |
|        |        | 16QAM | RB50#0  | 8.97  | 9.95  | 12.10 |
|        | High   | QPSK  | RB50#0  | 8.97  | 9.93  | 12.11 |
|        |        | 16QAM | RB50#0  | 8.97  | 9.93  | 12.12 |
| 15 MHz | Low    | QPSK  | RB75#0  | 13.44 | 14.83 | 12.13 |
|        |        | 16QAM | RB75#0  | 13.45 | 14.68 | 12.14 |
|        | Middle | QPSK  | RB75#0  | 13.40 | 14.78 | 12.15 |
|        |        | 16QAM | RB75#0  | 13.44 | 14.74 | 12.16 |
|        | High   | QPSK  | RB75#0  | 13.42 | 14.82 | 12.17 |
|        |        | 16QAM | RB75#0  | 13.46 | 14.85 | 12.18 |
| 20 MHz | Low    | QPSK  | RB100#0 | 17.88 | 19.44 | 12.19 |
|        |        | 16QAM | RB100#0 | 17.96 | 19.51 | 12.20 |
|        | Middle | QPSK  | RB100#0 | 17.91 | 19.48 | 12.21 |
|        |        | 16QAM | RB100#0 | 17.90 | 19.69 | 12.22 |
|        | High   | QPSK  | RB100#0 | 17.94 | 19.75 | 12.23 |
|        |        | 16QAM | RB100#0 | 17.94 | 19.58 | 12.24 |

| FDD LTE Band 17 |        |        |                      |                              |                        |                                 |
|-----------------|--------|--------|----------------------|------------------------------|------------------------|---------------------------------|
| Test BW         | CH     | Modul. | RB Set (Size#Offset) | 99% Occupied Bandwidth (MHz) | -26 dB Bandwidth (MHz) | Refer to Plot <sup>Note 2</sup> |
| 5 MHz           | Low    | QPSK   | RB25#0               | 4.50                         | 4.97                   | 13.1                            |
|                 |        | 16QAM  | RB25#0               | 4.49                         | 4.95                   | 13.2                            |
|                 | Middle | QPSK   | RB25#0               | 4.49                         | 5.00                   | 13.3                            |
|                 |        | 16QAM  | RB25#0               | 4.50                         | 4.98                   | 13.4                            |
|                 | High   | QPSK   | RB25#0               | 4.49                         | 4.95                   | 13.5                            |
|                 |        | 16QAM  | RB25#0               | 4.50                         | 5.01                   | 13.6                            |
| 10 MHz          | Low    | QPSK   | RB50#0               | 8.96                         | 9.93                   | 13.7                            |
|                 |        | 16QAM  | RB50#0               | 8.96                         | 9.79                   | 13.8                            |
|                 | Middle | QPSK   | RB50#0               | 8.93                         | 9.87                   | 13.9                            |
|                 |        | 16QAM  | RB50#0               | 8.93                         | 9.82                   | 13.10                           |
|                 | High   | QPSK   | RB50#0               | 8.95                         | 9.8                    | 13.11                           |
|                 |        | 16QAM  | RB50#0               | 8.93                         | 9.87                   | 13.12                           |

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## 5.1.4 Frequency Stability

### Frequency Stability Measurement Results for GSM/GPRS/EDGE

| GSM 850         |                  |                          |             |                             |             |                           |             |         |
|-----------------|------------------|--------------------------|-------------|-----------------------------|-------------|---------------------------|-------------|---------|
| Test Conditions |                  | Frequency Deviation      |             |                             |             |                           |             | Verdict |
| Power (V)       | Temperature (°C) | Low channel<br>824.2 MHz |             | Middle channel<br>836.6 MHz |             | High channel<br>848.8 MHz |             |         |
|                 |                  | Value (Hz)               | Limits (Hz) | Value (Hz)                  | Limits (Hz) | Value (Hz)                | Limits (Hz) |         |
| 3.85 V          | -20              | --                       | ±2060.5     | --                          | ±2091.5     | --                        | ±2122       | PASS    |
|                 | -15              | --                       |             | --                          |             | --                        |             |         |
|                 | -10              | --                       |             | --                          |             | --                        |             |         |
|                 | 0                | 12.22                    |             | -12.66                      |             | -6.67                     |             |         |
|                 | 10               | 3.43                     |             | 18.92                       |             | 6.26                      |             |         |
|                 | 20               | -5.14                    |             | -4.13                       |             | 0.85                      |             |         |
|                 | 25               | 8.68                     |             | 13.62                       |             | 8.81                      |             |         |
|                 | 30               | 2.56                     |             | 2.25                        |             | 6.10                      |             |         |
|                 | 40               | 7.54                     |             | -5.06                       |             | 10.09                     |             |         |
|                 | 50               | --                       |             | --                          |             | --                        |             |         |
| 3.6 V           | 25               | 5.55                     |             | -0.80                       |             | -0.54                     |             |         |
| 4.4 V           | 25               | 3.62                     |             | -17.65                      |             | -15.29                    |             |         |

| GSM 1900        |                  |                           |             |                            |             |                            |             |         |
|-----------------|------------------|---------------------------|-------------|----------------------------|-------------|----------------------------|-------------|---------|
| Test Conditions |                  | Frequency Deviation       |             |                            |             |                            |             | Verdict |
| Power (V)       | Temperature (°C) | Low channel<br>1850.2 MHz |             | Middle channel<br>1880 MHz |             | High channel<br>1909.8 MHz |             |         |
|                 |                  | Value (Hz)                | Limits (Hz) | Value (Hz)                 | Limits (Hz) | Value (Hz)                 | Limits (Hz) |         |
| 3.85 V          | -20              | --                        | ±4625.5     | --                         | ±4700.0     | --                         | ±4774.5     | PASS    |
|                 | -15              | --                        |             | --                         |             |                            |             |         |
|                 | -10              | --                        |             | --                         |             |                            |             |         |
|                 | 0                | 0.98                      |             | -6.12                      |             | -11.34                     |             |         |
|                 | 10               | -15.93                    |             | -0.96                      |             | -15.24                     |             |         |
|                 | 20               | 0.52                      |             | -15.65                     |             | 19.40                      |             |         |
|                 | 25               | -8.20                     |             | -11.17                     |             | -18.14                     |             |         |
|                 | 30               | -3.84                     |             | -0.52                      |             | -0.46                      |             |         |
|                 | 40               | -5.75                     |             | 10.13                      |             | 3.19                       |             |         |
|                 | 50               | --                        |             | --                         |             | --                         |             |         |
| 3.6 V           | 25               | -10.37                    |             | -19.15                     |             | 2.85                       |             |         |
| 4.4 V           | 25               | 13.77                     |             | -13.61                     |             | 10.54                      |             |         |

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| GPRS 850        |                  |                          |             |                             |             |                           |             |         |
|-----------------|------------------|--------------------------|-------------|-----------------------------|-------------|---------------------------|-------------|---------|
| Test Conditions |                  | Frequency Deviation      |             |                             |             |                           |             | Verdict |
| Power (V)       | Temperature (°C) | Low channel<br>824.2 MHz |             | Middle channel<br>836.6 MHz |             | High channel<br>848.8 MHz |             |         |
|                 |                  | Value (Hz)               | Limits (Hz) | Value (Hz)                  | Limits (Hz) | Value (Hz)                | Limits (Hz) |         |
| 3.85 V          | -20              | --                       | ±2060.5     | --                          | ±2091.5     | --                        | ±2122       | PASS    |
|                 | -15              | --                       |             | --                          |             |                           |             |         |
|                 | -10              | --                       |             | --                          |             |                           |             |         |
|                 | 0                | -17.71                   |             | -4.14                       |             | 0.58                      |             |         |
|                 | 10               | -3.41                    |             | -19.82                      |             | -15.06                    |             |         |
|                 | 20               | -5.75                    |             | -1.30                       |             | 19.67                     |             |         |
|                 | 25               | 22.21                    |             | 20.95                       |             | 22.08                     |             |         |
|                 | 30               | 1.58                     |             | 11.22                       |             | 10.50                     |             |         |
|                 | 40               | -2.94                    |             | -1.18                       |             | 7.03                      |             |         |
|                 | 50               | --                       |             | --                          |             | --                        |             |         |
| 3.6 V           | 25               | -18.35                   |             | 15.88                       |             | -8.19                     |             |         |
| 4.4 V           | 25               | -16.20                   |             | -19.57                      |             | -4.71                     |             |         |

| GPRS 1900       |                  |                           |             |                            |             |                            |             |         |
|-----------------|------------------|---------------------------|-------------|----------------------------|-------------|----------------------------|-------------|---------|
| Test Conditions |                  | Frequency Deviation       |             |                            |             |                            |             | Verdict |
| Power (V)       | Temperature (°C) | Low channel<br>1850.2 MHz |             | Middle channel<br>1880 MHz |             | High channel<br>1909.8 MHz |             |         |
|                 |                  | Value (Hz)                | Limits (Hz) | Value (Hz)                 | Limits (Hz) | Value (Hz)                 | Limits (Hz) |         |
| 3.85 V          | -20              | --                        | ±4625.5     | --                         | ±4700.0     | --                         | ±4774.5     | PASS    |
|                 | -15              | --                        |             | --                         |             |                            |             |         |
|                 | -10              | --                        |             | --                         |             |                            |             |         |
|                 | 0                | 11.22                     |             | -4.86                      |             | 7.16                       |             |         |
|                 | 10               | -1.18                     |             | -8.19                      |             | 8.05                       |             |         |
|                 | 20               | 9.08                      |             | -4.71                      |             | -6.84                      |             |         |
|                 | 25               | 9.78                      |             | 10.49                      |             | -9.23                      |             |         |
|                 | 30               | 15.88                     |             | -0.03                      |             | -16.64                     |             |         |
|                 | 40               | -19.57                    |             | -19.76                     |             | 11.88                      |             |         |
|                 | 50               | --                        |             | --                         |             | --                         |             |         |
| 3.6 V           | 25               | 10.50                     |             | -18.36                     |             | 4.59                       |             |         |
| 4.4 V           | 25               | 7.03                      |             | 5.84                       |             | 8.67                       |             |         |



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| EDGE 850        |                  |                          |             |                             |             |                           |             |         |
|-----------------|------------------|--------------------------|-------------|-----------------------------|-------------|---------------------------|-------------|---------|
| Test Conditions |                  | Frequency Deviation      |             |                             |             |                           |             | Verdict |
| Power (V)       | Temperature (°C) | Low channel<br>824.2 MHz |             | Middle channel<br>836.6 MHz |             | High channel<br>848.8 MHz |             |         |
|                 |                  | Value (Hz)               | Limits (Hz) | Value (Hz)                  | Limits (Hz) | Value (Hz)                | Limits (Hz) |         |
| 3.85 V          | -20              | --                       | ±2060.5     | --                          | ±2091.5     | --                        | ±2122       | PASS    |
|                 | -15              | --                       |             | --                          |             |                           |             |         |
|                 | -10              | --                       |             | --                          |             |                           |             |         |
|                 | 0                | 9.38                     |             | 2.42                        |             | -13.02                    |             |         |
|                 | 10               | -14.30                   |             | -15.72                      |             | -13.91                    |             |         |
|                 | 20               | 18.46                    |             | -8.19                       |             | -7.72                     |             |         |
|                 | 25               | 24.25                    |             | 23.73                       |             | 23.28                     |             |         |
|                 | 30               | -13.00                   |             | -16.53                      |             | 7.91                      |             |         |
|                 | 40               | -9.00                    |             | 6.94                        |             | -11.10                    |             |         |
|                 | 50               | --                       |             | --                          |             | --                        |             |         |
| 3.6 V           | 25               | 8.22                     |             | 18.62                       |             | -17.18                    |             |         |
| 4.4 V           | 25               | 11.56                    |             | -4.76                       |             | 2.94                      |             |         |

| EDGE 1900       |                  |                           |             |                            |             |                            |             |         |
|-----------------|------------------|---------------------------|-------------|----------------------------|-------------|----------------------------|-------------|---------|
| Test Conditions |                  | Frequency Deviation       |             |                            |             |                            |             | Verdict |
| Power (V)       | Temperature (°C) | Low channel<br>1850.2 MHz |             | Middle channel<br>1880 MHz |             | High channel<br>1909.8 MHz |             |         |
|                 |                  | Value (Hz)                | Limits (Hz) | Value (Hz)                 | Limits (Hz) | Value (Hz)                 | Limits (Hz) |         |
| 3.85 V          | -20              | --                        | ±4625.5     | --                         | ±4700.0     | --                         | ±4774.5     | PASS    |
|                 | -15              | --                        |             | --                         |             |                            |             |         |
|                 | -10              | --                        |             | --                         |             |                            |             |         |
|                 | 0                | 0.35                      |             | -9.60                      |             | -17.35                     |             |         |
|                 | 10               | -19.83                    |             | -0.28                      |             | -17.01                     |             |         |
|                 | 20               | 1.25                      |             | -0.33                      |             | 15.79                      |             |         |
|                 | 25               | 11.11                     |             | -14.75                     |             | -17.34                     |             |         |
|                 | 30               | -11.07                    |             | 11.19                      |             | 7.55                       |             |         |
|                 | 40               | -2.74                     |             | 7.85                       |             | 0.86                       |             |         |
|                 | 50               | --                        |             | --                         |             | --                         |             |         |
| 3.6 V           | 25               | -9.04                     |             | -4.65                      |             | 19.74                      |             |         |
| 4.4 V           | 25               | 7.94                      |             | -16.46                     |             | 4.61                       |             |         |

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## Frequency Stability Measurement Results for WCDMA

| WCDMA Band II   |                  |                           |             |                            |             |                            |             |         |
|-----------------|------------------|---------------------------|-------------|----------------------------|-------------|----------------------------|-------------|---------|
| Test Conditions |                  | Frequency Deviation       |             |                            |             |                            |             | Verdict |
| Power (V)       | Temperature (°C) | Low channel<br>1852.4 MHz |             | Middle channel<br>1880 MHz |             | High channel<br>1907.6 MHz |             |         |
|                 |                  | Value (Hz)                | Limits (Hz) | Value (Hz)                 | Limits (Hz) | Value (Hz)                 | Limits (Hz) |         |
| 3.85 V          | -20              | --                        | ±4631       | --                         | ±4700       | --                         | ±4769       | PASS    |
|                 | -15              | --                        |             | --                         |             | --                         |             |         |
|                 | -10              | --                        |             | --                         |             | --                         |             |         |
|                 | 0                | -5.63                     |             | 16.73                      |             | 8.71                       |             |         |
|                 | 10               | -15.27                    |             | 3.62                       |             | 3.45                       |             |         |
|                 | 20               | -18.31                    |             | -13.46                     |             | 6.14                       |             |         |
|                 | 25               | 1.39                      |             | -5.75                      |             | -8.35                      |             |         |
|                 | 30               | -12.19                    |             | 18.75                      |             | -0.77                      |             |         |
|                 | 40               | -0.85                     |             | 3.25                       |             | 17.00                      |             |         |
|                 | 50               | --                        |             | --                         |             | --                         |             |         |
| 3.6 V           | 25               | 0.06                      | ±4631       | -10.27                     | ±4700       | 17.75                      | ±4769       | PASS    |
| 4.4 V           | 25               | -9.94                     |             | 0.26                       |             | 2.81                       |             |         |

| WCDMA Band V    |                  |                          |             |                             |             |                           |             |         |
|-----------------|------------------|--------------------------|-------------|-----------------------------|-------------|---------------------------|-------------|---------|
| Test Conditions |                  | Frequency Deviation      |             |                             |             |                           |             | Verdict |
| Power (V)       | Temperature (°C) | Low channel<br>826.4 MHz |             | Middle channel<br>836.4 MHz |             | High channel<br>846.6 MHz |             |         |
|                 |                  | Value (Hz)               | Limits (Hz) | Value (Hz)                  | Limits (Hz) | Value (Hz)                | Limits (Hz) |         |
| 3.85 V          | -20              | --                       | ±2066       | --                          | ±2091       | --                        | ±2116.5     | PASS    |
|                 | -15              | --                       |             | --                          |             | --                        |             |         |
|                 | -10              | --                       |             | --                          |             | --                        |             |         |
|                 | 0                | 16.28                    |             | -11.70                      |             | 18.35                     |             |         |
|                 | 10               | 3.80                     |             | -9.09                       |             | 10.83                     |             |         |
|                 | 20               | -0.91                    |             | 17.45                       |             | 8.45                      |             |         |
|                 | 25               | -0.02                    |             | -2.02                       |             | -3.28                     |             |         |
|                 | 30               | -7.80                    |             | 7.03                        |             | -1.80                     |             |         |
|                 | 40               | 16.10                    |             | -15.14                      |             | 0.03                      |             |         |
|                 | 50               | --                       |             | --                          |             | --                        |             |         |
| 3.6 V           | 25               | -13.77                   |             | -7.59                       |             | 14.45                     |             |         |
| 4.4 V           | 25               | 18.66                    |             | -16.05                      |             | 7.05                      |             |         |

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## Frequency Stability Measurement Results for CDMA/EVDO

| CDMA BC0        |                  |                       |             |                           |             |                         |             |         |
|-----------------|------------------|-----------------------|-------------|---------------------------|-------------|-------------------------|-------------|---------|
| Test Conditions |                  | Frequency Deviation   |             |                           |             |                         |             | Verdict |
| Power (V)       | Temperature (°C) | Low channel 824.7 MHz |             | Middle channel 836.52 MHz |             | High channel 848.31 MHz |             |         |
|                 |                  | Value (Hz)            | Limits (Hz) | Value (Hz)                | Limits (Hz) | Value (Hz)              | Limits (Hz) |         |
| 3.85 V          | -20              | --                    | ±2061.75    | --                        | ±2091.5     | --                      | ±2120.775   | PASS    |
|                 | -15              | --                    |             | --                        |             |                         |             |         |
|                 | -10              | --                    |             | --                        |             |                         |             |         |
|                 | 0                | -16.29                |             | 3.68                      |             | -12.98                  |             |         |
|                 | 10               | 5.41                  |             | -5.44                     |             | 4.53                    |             |         |
|                 | 20               | 1.61                  |             | -3.27                     |             | 16.44                   |             |         |
|                 | 25               | 0.15                  |             | -0.32                     |             | -0.29                   |             |         |
|                 | 30               | 8.23                  |             | 6.99                      |             | -18.40                  |             |         |
|                 | 40               | -13.22                |             | 2.51                      |             | -10.04                  |             |         |
|                 | 50               | --                    |             | --                        |             | --                      |             |         |
| 3.6 V           | 25               | -3.44                 |             | -11.45                    |             | 16.39                   |             |         |
| 4.4 V           | 25               | -1.59                 |             | 12.58                     |             | -13.07                  |             |         |

| EVDO BC0        |                  |                       |             |                           |             |                         |             |         |
|-----------------|------------------|-----------------------|-------------|---------------------------|-------------|-------------------------|-------------|---------|
| Test Conditions |                  | Frequency Deviation   |             |                           |             |                         |             | Verdict |
| Power (V)       | Temperature (°C) | Low channel 824.7 MHz |             | Middle channel 836.52 MHz |             | High channel 848.31 MHz |             |         |
|                 |                  | Value (Hz)            | Limits (Hz) | Value (Hz)                | Limits (Hz) | Value (Hz)              | Limits (Hz) |         |
| 3.85 V          | -20              | --                    | ±2061.75    | --                        | ±2091.5     | --                      | ±2120.775   | PASS    |
|                 | -15              | --                    |             | --                        |             |                         |             |         |
|                 | -10              | --                    |             | --                        |             |                         |             |         |
|                 | 0                | 10.70                 |             | 6.47                      |             | 19.78                   |             |         |
|                 | 10               | 14.50                 |             | 13.47                     |             | -12.87                  |             |         |
|                 | 20               | 0.30                  |             | -10.36                    |             | -10.42                  |             |         |
|                 | 25               | 0.66                  |             | 0.81                      |             | 0.73                    |             |         |
|                 | 30               | 11.22                 |             | 16.79                     |             | -8.09                   |             |         |
|                 | 40               | -16.67                |             | 17.63                     |             | 17.53                   |             |         |
|                 | 50               | --                    |             | --                        |             | --                      |             |         |
| 3.6 V           | 25               | 7.82                  |             | 12.42                     |             | -0.55                   |             |         |
| 4.4 V           | 25               | 8.70                  |             | 8.18                      |             | 18.26                   |             |         |

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## Frequency Stability Measurement Results for LTE

| FDD LTE Band 2  |                 |                         |             |                         |             |         |
|-----------------|-----------------|-------------------------|-------------|-------------------------|-------------|---------|
| Test Conditions |                 | Frequency Deviation     |             |                         |             | Verdict |
| Power (V)       | Temperature (℃) | QPSK 10MHz              |             | 16QAM 10MHz             |             |         |
|                 |                 | Middle channel 1880 MHz |             | Middle channel 1880 MHz |             |         |
|                 |                 | Value (Hz)              | Limits (Hz) | Value (Hz)              | Limits (Hz) |         |
| 3.85 V          | -20             | --                      | ±4700       | --                      | ±4700       | PASS    |
|                 | -15             | --                      |             | --                      |             |         |
|                 | -10             | --                      |             | --                      |             |         |
|                 | 0               | -17.29                  |             | 9.46                    |             |         |
|                 | 10              | 3.66                    |             | -18.38                  |             |         |
|                 | 20              | 19.26                   |             | -17.36                  |             |         |
|                 | 25              | -2.75                   |             | -4.33                   |             |         |
|                 | 30              | -2.76                   |             | -15.38                  |             |         |
|                 | 40              | -15.05                  |             | 5.22                    |             |         |
|                 | 50              | --                      |             | --                      |             |         |
| 3.6 V           | 25              | -0.50                   |             | 10.87                   |             |         |
| 4.4 V           | 25              | -5.85                   |             | 1.42                    |             |         |

| FDD LTE Band 4  |                  |                           |             |                           |             |         |
|-----------------|------------------|---------------------------|-------------|---------------------------|-------------|---------|
| Test Conditions |                  | Frequency Deviation       |             |                           |             | Verdict |
| Power (V)       | Temperature (°C) | QPSK 10MHz                |             | 16QAM 10MHz               |             |         |
|                 |                  | Middle channel 1732.5 MHz |             | Middle channel 1732.5 MHz |             |         |
|                 |                  | Value (Hz)                | Limits (Hz) | Value (Hz)                | Limits (Hz) |         |
| 3.85 V          | -20              | --                        | ±4331.25    | --                        | ±4331.25    | PASS    |
|                 | -15              | --                        |             | --                        |             |         |
|                 | -10              | --                        |             | --                        |             |         |
|                 | 0                | -3.21                     |             | -17.71                    |             |         |
|                 | 10               | -6.14                     |             | 8.17                      |             |         |
|                 | 20               | -13.97                    |             | -16.85                    |             |         |
|                 | 25               | 0.03                      |             | -0.27                     |             |         |
|                 | 30               | -15.52                    |             | 8.15                      |             |         |
|                 | 40               | -19.32                    |             | -8.26                     |             |         |
|                 | 50               | --                        |             | --                        |             |         |
| 3.6 V           | 25               | 19.95                     |             | -17.62                    |             |         |
| 4.4 V           | 25               | -15.37                    |             | -18.82                    |             |         |

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| FDD LTE Band 5  |                  |                          |             |                          |             |         |
|-----------------|------------------|--------------------------|-------------|--------------------------|-------------|---------|
| Test Conditions |                  | Frequency Deviation      |             |                          |             | Verdict |
| Power (V)       | Temperature (°C) | QPSK 10MHz               |             | 16QAM 10MHz              |             |         |
|                 |                  | Middle channel 836.5 MHz |             | Middle channel 836.5 MHz |             |         |
|                 |                  | Value (Hz)               | Limits (Hz) | Value (Hz)               | Limits (Hz) |         |
| 3.85 V          | -20              | --                       | ±2091.25    | --                       | ±2091.25    | PASS    |
|                 | -15              | --                       |             | --                       |             |         |
|                 | -10              | --                       |             | --                       |             |         |
|                 | 0                | -11.58                   |             | 5.46                     |             |         |
|                 | 10               | 2.60                     |             | 10.59                    |             |         |
|                 | 20               | -7.23                    |             | -4.02                    |             |         |
|                 | 25               | -0.54                    |             | 1.80                     |             |         |
|                 | 30               | 15.84                    |             | 15.43                    |             |         |
|                 | 40               | 0.72                     |             | -18.07                   |             |         |
|                 | 50               | --                       |             | --                       |             |         |
| 3.6 V           | 25               | 10.97                    |             | 7.00                     |             |         |
| 4.4 V           | 25               | -18.24                   |             | -6.72                    |             |         |

| FDD LTE Band 7  |                  |                         |             |                         |             |         |
|-----------------|------------------|-------------------------|-------------|-------------------------|-------------|---------|
| Test Conditions |                  | Frequency Deviation     |             |                         |             | Verdict |
| Power (V)       | Temperature (°C) | QPSK 10MHz              |             | 16QAM 10MHz             |             |         |
|                 |                  | Middle channel 2535 MHz |             | Middle channel 2535 MHz |             |         |
|                 |                  | Value (Hz)              | Limits (Hz) | Value (Hz)              | Limits (Hz) |         |
| 3.85 V          | -20              | --                      | ±6337.5     | --                      | ±6337.5     | PASS    |
|                 | -15              | --                      |             | --                      |             |         |
|                 | -10              | --                      |             | --                      |             |         |
|                 | 0                | 13.84                   |             | 14.63                   |             |         |
|                 | 10               | 14.95                   |             | 16.99                   |             |         |
|                 | 20               | -17.76                  |             | -4.67                   |             |         |
|                 | 25               | -4.89                   |             | -3.63                   |             |         |
|                 | 30               | 5.51                    |             | 15.15                   |             |         |
|                 | 40               | 17.83                   |             | 18.27                   |             |         |
|                 | 50               | --                      |             | --                      |             |         |
| 3.6 V           | 25               | 8.81                    |             | -7.35                   |             |         |
| 4.4 V           | 25               | 5.60                    |             | 17.32                   |             |         |

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| FDD LTE Band 17 |                 |                        |             |                        |             |         |
|-----------------|-----------------|------------------------|-------------|------------------------|-------------|---------|
| Test Conditions |                 | Frequency Deviation    |             |                        |             | Verdict |
| Power (V)       | Temperature (℃) | QPSK 10MHz             |             | 16QAM 10MHz            |             |         |
|                 |                 | Middle channel 710 MHz |             | Middle channel 710 MHz |             |         |
|                 |                 | Value (Hz)             | Limits (Hz) | Value (Hz)             | Limits (Hz) |         |
| 3.85 V          | -20             | --                     | ±1775       | --                     | ±1775       | PASS    |
|                 | -15             | --                     |             | --                     |             |         |
|                 | -10             | --                     |             | --                     |             |         |
|                 | 0               | 15.21                  |             | -7.39                  |             |         |
|                 | 10              | -15.64                 |             | 6.78                   |             |         |
|                 | 20              | 7.70                   |             | 17.70                  |             |         |
|                 | 25              | -0.51                  |             | -0.53                  |             |         |
|                 | 30              | 1.40                   |             | 14.48                  |             |         |
|                 | 40              | 0.84                   |             | 14.12                  |             |         |
|                 | 50              | --                     |             | --                     |             |         |
| 3.6 V           | 25              | -5.86                  | ±1775       | 10.67                  | ±1775       | PASS    |
| 4.4 V           | 25              | -19.70                 |             | 5.51                   |             |         |

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## 5.1.5 Spurious Emission at Antenna Terminals

### Note(s):

1. GSM and EGPRS modes have been verified, and only the worst data with different bandwidth for LTE are shown here.
2. The frequencies of verdict which are marked by "N/A" should be ignored because they are MS carrier frequency.
3. Test plots please refer to the document "Annex No: EXHIBIT C of SHE19090021-01IE.pdf".

### Spurious Emission Measurement Results for GSM/WCDMA/CDMA

| Test Band     | Channel | Refer to Plot <sup>Note 3</sup> | Verdict |
|---------------|---------|---------------------------------|---------|
| GSM 850       | Low     | 1.1                             | PASS    |
|               | Middle  | 1.2                             | PASS    |
|               | High    | 1.3                             | PASS    |
| GSM 1900      | Low     | 2.1                             | PASS    |
|               | Middle  | 2.2                             | PASS    |
|               | High    | 2.3                             | PASS    |
| EDGE 850      | Low     | 3.1                             | PASS    |
|               | Middle  | 3.2                             | PASS    |
|               | High    | 3.3                             | PASS    |
| EDGE 1900     | Low     | 4.1                             | PASS    |
|               | Middle  | 4.2                             | PASS    |
|               | High    | 4.3                             | PASS    |
| WCDMA Band II | Low     | 5.1                             | PASS    |
|               | Middle  | 5.2                             | PASS    |
|               | High    | 5.3                             | PASS    |
| WCDMA Band V  | Low     | 6.1                             | PASS    |
|               | Middle  | 6.2                             | PASS    |
|               | High    | 6.3                             | PASS    |
| CDMA BC0      | Low     | 7.1                             | PASS    |
|               | Middle  | 7.2                             | PASS    |
|               | High    | 7.3                             | PASS    |
| EVDO BC0      | Low     | 8.1                             | PASS    |
|               | Middle  | 8.2                             | PASS    |
|               | High    | 8.3                             | PASS    |

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## Spurious Emission Measurement Results for LTE

| FDD LTE Band 2 |        |        |                      |                                  |         |
|----------------|--------|--------|----------------------|----------------------------------|---------|
| Test BW        | CH     | Modul. | RB Set (Size#Offset) | Refer to Plot <sup>†Note 3</sup> | Verdict |
| 1.4 MHz        | Low    | QPSK   | RB1#0                | 9.1                              | PASS    |
|                |        | 16QAM  | RB1#0                | 9.2                              | PASS    |
|                | Middle | QPSK   | RB1#0                | 9.3                              | PASS    |
|                |        | 16QAM  | RB1#0                | 9.4                              | PASS    |
|                | High   | QPSK   | RB1#0                | 9.5                              | PASS    |
|                |        | 16QAM  | RB1#0                | 9.6                              | PASS    |
| 3 MHz          | Low    | QPSK   | RB1#0                | 9.7                              | PASS    |
|                |        | 16QAM  | RB1#0                | 9.8                              | PASS    |
|                | Middle | QPSK   | RB1#0                | 9.9                              | PASS    |
|                |        | 16QAM  | RB1#0                | 9.10                             | PASS    |
|                | High   | QPSK   | RB1#0                | 9.11                             | PASS    |
|                |        | 16QAM  | RB1#0                | 9.12                             | PASS    |
| 5 MHz          | Low    | QPSK   | RB1#0                | 9.13                             | PASS    |
|                |        | 16QAM  | RB1#0                | 9.14                             | PASS    |
|                | Middle | QPSK   | RB1#0                | 9.15                             | PASS    |
|                |        | 16QAM  | RB1#0                | 9.16                             | PASS    |
|                | High   | QPSK   | RB1#0                | 9.17                             | PASS    |
|                |        | 16QAM  | RB1#0                | 9.18                             | PASS    |
| 10 MHz         | Low    | QPSK   | RB1#0                | 9.19                             | PASS    |
|                |        | 16QAM  | RB1#0                | 9.20                             | PASS    |
|                | Middle | QPSK   | RB1#0                | 9.21                             | PASS    |
|                |        | 16QAM  | RB1#0                | 9.22                             | PASS    |
|                | High   | QPSK   | RB1#0                | 9.23                             | PASS    |
|                |        | 16QAM  | RB1#0                | 9.24                             | PASS    |
| 15 MHz         | Low    | QPSK   | RB1#0                | 9.25                             | PASS    |
|                |        | 16QAM  | RB1#0                | 9.26                             | PASS    |
|                | Middle | QPSK   | RB1#0                | 9.27                             | PASS    |
|                |        | 16QAM  | RB1#0                | 9.28                             | PASS    |
|                | High   | QPSK   | RB1#0                | 9.29                             | PASS    |
|                |        | 16QAM  | RB1#0                | 9.30                             | PASS    |
| 20 MHz         | Low    | QPSK   | RB1#0                | 9.31                             | PASS    |
|                |        | 16QAM  | RB1#0                | 9.32                             | PASS    |
|                | Middle | QPSK   | RB1#0                | 9.33                             | PASS    |
|                |        | 16QAM  | RB1#0                | 9.34                             | PASS    |
|                | High   | QPSK   | RB1#0                | 9.35                             | PASS    |
|                |        | 16QAM  | RB1#0                | 9.36                             | PASS    |



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| FDD LTE Band 4 |        |        |                      |                                  |         |
|----------------|--------|--------|----------------------|----------------------------------|---------|
| Test BW        | CH     | Modul. | RB Set (Size#Offset) | Refer to Plot <sup>†Note 3</sup> | Verdict |
| 1.4 MHz        | Low    | QPSK   | RB1#0                | 10.1                             | PASS    |
|                |        | 16QAM  | RB1#0                | 10.2                             | PASS    |
|                | Middle | QPSK   | RB1#0                | 10.3                             | PASS    |
|                |        | 16QAM  | RB1#0                | 10.4                             | PASS    |
|                | High   | QPSK   | RB1#0                | 10.5                             | PASS    |
|                |        | 16QAM  | RB1#0                | 10.6                             | PASS    |
| 3 MHz          | Low    | QPSK   | RB1#0                | 10.7                             | PASS    |
|                |        | 16QAM  | RB1#0                | 10.8                             | PASS    |
|                | Middle | QPSK   | RB1#0                | 10.9                             | PASS    |
|                |        | 16QAM  | RB1#0                | 10.10                            | PASS    |
|                | High   | QPSK   | RB1#0                | 10.11                            | PASS    |
|                |        | 16QAM  | RB1#0                | 10.12                            | PASS    |
| 5 MHz          | Low    | QPSK   | RB1#0                | 10.13                            | PASS    |
|                |        | 16QAM  | RB1#0                | 10.14                            | PASS    |
|                | Middle | QPSK   | RB1#0                | 10.15                            | PASS    |
|                |        | 16QAM  | RB1#0                | 10.16                            | PASS    |
|                | High   | QPSK   | RB1#0                | 10.17                            | PASS    |
|                |        | 16QAM  | RB1#0                | 10.18                            | PASS    |
| 10 MHz         | Low    | QPSK   | RB1#0                | 10.19                            | PASS    |
|                |        | 16QAM  | RB1#0                | 10.20                            | PASS    |
|                | Middle | QPSK   | RB1#0                | 10.21                            | PASS    |
|                |        | 16QAM  | RB1#0                | 10.22                            | PASS    |
|                | High   | QPSK   | RB1#0                | 10.23                            | PASS    |
|                |        | 16QAM  | RB1#0                | 10.24                            | PASS    |
| 15 MHz         | Low    | QPSK   | RB1#0                | 10.25                            | PASS    |
|                |        | 16QAM  | RB1#0                | 10.26                            | PASS    |
|                | Middle | QPSK   | RB1#0                | 10.27                            | PASS    |
|                |        | 16QAM  | RB1#0                | 10.28                            | PASS    |
|                | High   | QPSK   | RB1#0                | 10.29                            | PASS    |
|                |        | 16QAM  | RB1#0                | 10.30                            | PASS    |
| 20 MHz         | Low    | QPSK   | RB1#0                | 10.31                            | PASS    |
|                |        | 16QAM  | RB1#0                | 10.32                            | PASS    |
|                | Middle | QPSK   | RB1#0                | 10.33                            | PASS    |
|                |        | 16QAM  | RB1#0                | 10.34                            | PASS    |
|                | High   | QPSK   | RB1#0                | 10.35                            | PASS    |
|                |        | 16QAM  | RB1#0                | 10.36                            | PASS    |

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| FDD LTE Band 5 |        |        |                      |                                   |         |
|----------------|--------|--------|----------------------|-----------------------------------|---------|
| Test BW        | CH     | Modul. | RB Set (Size#Offset) | Refer to Plot <sup>†</sup> Note 3 | Verdict |
| 1.4 MHz        | Low    | QPSK   | RB1#0                | 11.1                              | PASS    |
|                |        | 16QAM  | RB1#0                | 11.2                              | PASS    |
|                | Middle | QPSK   | RB1#0                | 11.3                              | PASS    |
|                |        | 16QAM  | RB1#0                | 11.4                              | PASS    |
|                | High   | QPSK   | RB1#0                | 11.5                              | PASS    |
|                |        | 16QAM  | RB1#0                | 11.6                              | PASS    |
| 3 MHz          | Low    | QPSK   | RB1#0                | 11.7                              | PASS    |
|                |        | 16QAM  | RB1#0                | 11.8                              | PASS    |
|                | Middle | QPSK   | RB1#0                | 11.9                              | PASS    |
|                |        | 16QAM  | RB1#0                | 11.10                             | PASS    |
|                | High   | QPSK   | RB1#0                | 11.11                             | PASS    |
|                |        | 16QAM  | RB1#0                | 11.12                             | PASS    |
| 5 MHz          | Low    | QPSK   | RB1#0                | 11.13                             | PASS    |
|                |        | 16QAM  | RB1#0                | 11.14                             | PASS    |
|                | Middle | QPSK   | RB1#0                | 11.15                             | PASS    |
|                |        | 16QAM  | RB1#0                | 11.16                             | PASS    |
|                | High   | QPSK   | RB1#0                | 11.17                             | PASS    |
|                |        | 16QAM  | RB1#0                | 11.18                             | PASS    |
| 10 MHz         | Low    | QPSK   | RB1#0                | 11.19                             | PASS    |
|                |        | 16QAM  | RB1#0                | 11.20                             | PASS    |
|                | Middle | QPSK   | RB1#0                | 11.21                             | PASS    |
|                |        | 16QAM  | RB1#0                | 11.22                             | PASS    |
|                | High   | QPSK   | RB1#0                | 11.23                             | PASS    |
|                |        | 16QAM  | RB1#0                | 11.24                             | PASS    |

| FDD LTE Band 7 |        |        |                      |                                   |         |
|----------------|--------|--------|----------------------|-----------------------------------|---------|
| Test BW        | CH     | Modul. | RB Set (Size#Offset) | Refer to Plot <sup>†</sup> Note 3 | Verdict |
| 5 MHz          | Low    | QPSK   | RB1#0                | 12.1                              | PASS    |
|                |        | 16QAM  | RB1#0                | 12.2                              | PASS    |
|                | Middle | QPSK   | RB1#0                | 12.3                              | PASS    |
|                |        | 16QAM  | RB1#0                | 12.4                              | PASS    |
|                | High   | QPSK   | RB1#0                | 12.5                              | PASS    |
|                |        | 16QAM  | RB1#0                | 12.6                              | PASS    |
| 10 MHz         | Low    | QPSK   | RB1#0                | 12.7                              | PASS    |
|                |        | 16QAM  | RB1#0                | 12.8                              | PASS    |

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|        |        |       |       |       |      |
|--------|--------|-------|-------|-------|------|
|        | Middle | QPSK  | RB1#0 | 12.9  | PASS |
|        |        | 16QAM | RB1#0 | 12.10 | PASS |
|        | High   | QPSK  | RB1#0 | 12.11 | PASS |
|        |        | 16QAM | RB1#0 | 12.12 | PASS |
| 15 MHz | Low    | QPSK  | RB1#0 | 12.13 | PASS |
|        |        | 16QAM | RB1#0 | 12.14 | PASS |
|        | Middle | QPSK  | RB1#0 | 12.15 | PASS |
|        |        | 16QAM | RB1#0 | 12.16 | PASS |
|        | High   | QPSK  | RB1#0 | 12.17 | PASS |
|        |        | 16QAM | RB1#0 | 12.18 | PASS |
| 20 MHz | Low    | QPSK  | RB1#0 | 12.19 | PASS |
|        |        | 16QAM | RB1#0 | 12.20 | PASS |
|        | Middle | QPSK  | RB1#0 | 12.21 | PASS |
|        |        | 16QAM | RB1#0 | 12.22 | PASS |
|        | High   | QPSK  | RB1#0 | 12.23 | PASS |
|        |        | 16QAM | RB1#0 | 12.24 | PASS |

| FDD LTE Band 17 |        |        |                         |                                 |         |
|-----------------|--------|--------|-------------------------|---------------------------------|---------|
| Test BW         | CH     | Modul. | RB Set<br>(Size#Offset) | Refer to Plot <sup>Note 3</sup> | Verdict |
| 5 MHz           | Low    | QPSK   | RB1#0                   | 13.1                            | PASS    |
|                 |        | 16QAM  | RB1#0                   | 13.2                            | PASS    |
|                 | Middle | QPSK   | RB1#0                   | 13.3                            | PASS    |
|                 |        | 16QAM  | RB1#0                   | 13.4                            | PASS    |
|                 | High   | QPSK   | RB1#0                   | 13.5                            | PASS    |
|                 |        | 16QAM  | RB1#0                   | 13.6                            | PASS    |
| 10 MHz          | Low    | QPSK   | RB1#0                   | 13.7                            | PASS    |
|                 |        | 16QAM  | RB1#0                   | 13.8                            | PASS    |
|                 | Middle | QPSK   | RB1#0                   | 13.9                            | PASS    |
|                 |        | 16QAM  | RB1#0                   | 13.10                           | PASS    |
|                 | High   | QPSK   | RB1#0                   | 13.11                           | PASS    |
|                 |        | 16QAM  | RB1#0                   | 13.12                           | PASS    |

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## 5.1.6 Band Edge

### Note(s):

1. Test plots please refer to the document "Annex No: EXHIBIT D of SHE19090021-01IE.pdf".

### Band Edge Measurement Results for GSM/WCDMA/CDMA

| Test Band     | Channel | Refer to Plot <sup>Note 1</sup> | Verdict |
|---------------|---------|---------------------------------|---------|
| GSM 850       | Low     | 1.1                             | PASS    |
|               | High    | 1.2                             | PASS    |
| GSM 1900      | Low     | 2.1                             | PASS    |
|               | High    | 2.2                             | PASS    |
| EDGE 850      | Low     | 3.1                             | PASS    |
|               | High    | 3.2                             | PASS    |
| EDGE 1900     | Low     | 4.1                             | PASS    |
|               | High    | 4.2                             | PASS    |
| WCDMA Band II | Low     | 5.1                             | PASS    |
|               | High    | 5.2                             | PASS    |
| WCDMA Band V  | Low     | 6.1                             | PASS    |
|               | High    | 6.2                             | PASS    |
| CDMA BC0      | Low     | 7.1                             | PASS    |
|               | High    | 7.2                             | PASS    |
| EVDO BC0      | Low     | 8.1                             | PASS    |
|               | High    | 8.2                             | PASS    |

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## Band Edge Measurement Results for LTE

| FDD LTE Band 2 |      |        |                      |                                   |         |
|----------------|------|--------|----------------------|-----------------------------------|---------|
| Test BW        | CH   | Modul. | RB Set (Size#Offset) | Refer to Plot <sup>†</sup> Note 1 | Verdict |
| 1.4 MHz        | Low  | QPSK   | RB1#0                | 9.1                               | PASS    |
|                |      |        | RB6#0                | 9.2                               | PASS    |
|                |      | 16QAM  | RB1#0                | 9.3                               | PASS    |
|                |      |        | RB6#0                | 9.4                               | PASS    |
|                | High | QPSK   | RB1#0                | 9.5                               | PASS    |
|                |      |        | RB6#0                | 9.6                               | PASS    |
|                |      | 16QAM  | RB1#0                | 9.7                               | PASS    |
|                |      |        | RB6#0                | 9.8                               | PASS    |
| 3 MHz          | Low  | QPSK   | RB1#0                | 9.9                               | PASS    |
|                |      |        | RB15#0               | 9.10                              | PASS    |
|                |      | 16QAM  | RB1#0                | 9.11                              | PASS    |
|                |      |        | RB15#0               | 9.12                              | PASS    |
|                | High | QPSK   | RB1#0                | 9.13                              | PASS    |
|                |      |        | RB15#0               | 9.14                              | PASS    |
|                |      | 16QAM  | RB1#0                | 9.15                              | PASS    |
|                |      |        | RB15#0               | 9.16                              | PASS    |
| 5 MHz          | Low  | QPSK   | RB1#0                | 9.17                              | PASS    |
|                |      |        | RB25#0               | 9.18                              | PASS    |
|                |      | 16QAM  | RB1#0                | 9.19                              | PASS    |
|                |      |        | RB25#0               | 9.20                              | PASS    |
|                | High | QPSK   | RB1#0                | 9.21                              | PASS    |
|                |      |        | RB25#0               | 9.22                              | PASS    |
|                |      | 16QAM  | RB1#0                | 9.23                              | PASS    |
|                |      |        | RB25#0               | 9.24                              | PASS    |
| 10 MHz         | Low  | QPSK   | RB1#0                | 9.25                              | PASS    |
|                |      |        | RB50#0               | 9.26                              | PASS    |
|                |      | 16QAM  | RB1#0                | 9.27                              | PASS    |
|                |      |        | RB50#0               | 9.28                              | PASS    |
|                | High | QPSK   | RB1#0                | 9.29                              | PASS    |
|                |      |        | RB50#0               | 9.30                              | PASS    |
|                |      | 16QAM  | RB1#0                | 9.31                              | PASS    |
|                |      |        | RB50#0               | 9.32                              | PASS    |
| 15 MHz         | Low  | QPSK   | RB1#0                | 9.33                              | PASS    |
|                |      |        | RB75#0               | 9.34                              | PASS    |
|                |      | 16QAM  | RB1#0                | 9.35                              | PASS    |
|                |      |        | RB75#0               | 9.36                              | PASS    |

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|        |      |       |         |      |      |
|--------|------|-------|---------|------|------|
| 20 MHz | High | QPSK  | RB1#0   | 9.37 | PASS |
|        |      |       | RB75#0  | 9.38 | PASS |
|        |      | 16QAM | RB1#0   | 9.39 | PASS |
|        |      |       | RB75#0  | 9.40 | PASS |
|        | Low  | QPSK  | RB1#0   | 9.41 | PASS |
|        |      |       | RB100#0 | 9.42 | PASS |
|        |      | 16QAM | RB1#0   | 9.43 | PASS |
|        |      |       | RB100#0 | 9.44 | PASS |
| 20 MHz | High | QPSK  | RB1#0   | 9.45 | PASS |
|        |      |       | RB100#0 | 9.46 | PASS |
|        |      | 16QAM | RB1#0   | 9.47 | PASS |
|        |      |       | RB100#0 | 9.48 | PASS |

| FDD LTE Band 4 |      |        |                      |                                 |         |
|----------------|------|--------|----------------------|---------------------------------|---------|
| Test BW        | CH   | Modul. | RB Set (Size#Offset) | Refer to Plot <sup>Note 1</sup> | Verdict |
| 1.4 MHz        | Low  | QPSK   | RB1#0                | 10.1                            | PASS    |
|                |      |        | RB6#0                | 10.2                            | PASS    |
|                |      | 16QAM  | RB1#0                | 10.3                            | PASS    |
|                |      |        | RB6#0                | 10.4                            | PASS    |
|                | High | QPSK   | RB1#0                | 10.5                            | PASS    |
|                |      |        | RB6#0                | 10.6                            | PASS    |
|                |      | 16QAM  | RB1#0                | 10.7                            | PASS    |
|                |      |        | RB6#0                | 10.8                            | PASS    |
| 3 MHz          | Low  | QPSK   | RB1#0                | 10.9                            | PASS    |
|                |      |        | RB15#0               | 10.10                           | PASS    |
|                |      | 16QAM  | RB1#0                | 10.11                           | PASS    |
|                |      |        | RB15#0               | 10.12                           | PASS    |
|                | High | QPSK   | RB1#0                | 10.13                           | PASS    |
|                |      |        | RB15#0               | 10.14                           | PASS    |
|                |      | 16QAM  | RB1#0                | 10.15                           | PASS    |
|                |      |        | RB15#0               | 10.16                           | PASS    |
| 5 MHz          | Low  | QPSK   | RB1#0                | 10.17                           | PASS    |
|                |      |        | RB25#0               | 10.18                           | PASS    |
|                |      | 16QAM  | RB1#0                | 10.19                           | PASS    |
|                |      |        | RB25#0               | 10.20                           | PASS    |
|                | High | QPSK   | RB1#0                | 10.21                           | PASS    |
|                |      |        | RB25#0               | 10.22                           | PASS    |
|                |      | 16QAM  | RB1#0                | 10.23                           | PASS    |
|                |      |        | RB25#0               | 10.24                           | PASS    |

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|        |      |       |         |       |      |
|--------|------|-------|---------|-------|------|
| 10 MHz | Low  | QPSK  | RB1#0   | 10.25 | PASS |
|        |      |       | RB50#0  | 10.26 | PASS |
|        |      | 16QAM | RB1#0   | 10.27 | PASS |
|        |      |       | RB50#0  | 10.28 | PASS |
|        | High | QPSK  | RB1#0   | 10.29 | PASS |
|        |      |       | RB50#0  | 10.30 | PASS |
|        |      | 16QAM | RB1#0   | 10.31 | PASS |
|        |      |       | RB50#0  | 10.32 | PASS |
| 15 MHz | Low  | QPSK  | RB1#0   | 10.33 | PASS |
|        |      |       | RB75#0  | 10.34 | PASS |
|        |      | 16QAM | RB1#0   | 10.35 | PASS |
|        |      |       | RB75#0  | 10.36 | PASS |
|        | High | QPSK  | RB1#0   | 10.37 | PASS |
|        |      |       | RB75#0  | 10.38 | PASS |
|        |      | 16QAM | RB1#0   | 10.39 | PASS |
|        |      |       | RB75#0  | 10.40 | PASS |
| 20 MHz | Low  | QPSK  | RB1#0   | 10.41 | PASS |
|        |      |       | RB100#0 | 10.42 | PASS |
|        |      | 16QAM | RB1#0   | 10.43 | PASS |
|        |      |       | RB100#0 | 10.44 | PASS |
|        | High | QPSK  | RB1#0   | 10.45 | PASS |
|        |      |       | RB100#0 | 10.46 | PASS |
|        |      | 16QAM | RB1#0   | 10.47 | PASS |
|        |      |       | RB100#0 | 10.48 | PASS |

| FDD LTE Band 5 |      |        |                         |                                 |         |
|----------------|------|--------|-------------------------|---------------------------------|---------|
| Test BW        | CH   | Modul. | RB Set<br>(Size#Offset) | Refer to Plot <sup>Note 1</sup> | Verdict |
| 1.4 MHz        | Low  | QPSK   | RB1#0                   | 11.1                            | PASS    |
|                |      |        | RB6#0                   | 11.2                            | PASS    |
|                |      | 16QAM  | RB1#0                   | 11.3                            | PASS    |
|                |      |        | RB6#0                   | 11.4                            | PASS    |
|                | High | QPSK   | RB1#0                   | 11.5                            | PASS    |
|                |      |        | RB6#0                   | 11.6                            | PASS    |
|                |      | 16QAM  | RB1#0                   | 11.7                            | PASS    |
|                |      |        | RB6#0                   | 11.8                            | PASS    |
| 3 MHz          | Low  | QPSK   | RB1#0                   | 11.9                            | PASS    |
|                |      |        | RB15#0                  | 11.10                           | PASS    |
|                |      | 16QAM  | RB1#0                   | 11.11                           | PASS    |
|                |      |        | RB15#0                  | 11.12                           | PASS    |

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|        |      |       |        |       |      |
|--------|------|-------|--------|-------|------|
| 5 MHz  | High | QPSK  | RB1#0  | 11.13 | PASS |
|        |      |       | RB15#0 | 11.14 | PASS |
|        |      | 16QAM | RB1#0  | 11.15 | PASS |
|        |      |       | RB15#0 | 11.16 | PASS |
|        | Low  | QPSK  | RB1#0  | 11.17 | PASS |
|        |      |       | RB25#0 | 11.18 | PASS |
|        |      | 16QAM | RB1#0  | 11.19 | PASS |
|        |      |       | RB25#0 | 11.20 | PASS |
| 10 MHz | High | QPSK  | RB1#0  | 11.21 | PASS |
|        |      |       | RB25#0 | 11.22 | PASS |
|        |      | 16QAM | RB1#0  | 11.23 | PASS |
|        |      |       | RB25#0 | 11.24 | PASS |
|        | Low  | QPSK  | RB1#0  | 11.25 | PASS |
|        |      |       | RB50#0 | 11.26 | PASS |
|        |      | 16QAM | RB1#0  | 11.27 | PASS |
|        |      |       | RB50#0 | 11.28 | PASS |

| FDD LTE Band 7 |      |        |                      |                                 |         |
|----------------|------|--------|----------------------|---------------------------------|---------|
| Test BW        | CH   | Modul. | RB Set (Size#Offset) | Refer to Plot <sup>Note 1</sup> | Verdict |
| 5 MHz          | Low  | QPSK   | RB1#0                | 12.1                            | PASS    |
|                |      |        | RB25#0               | 12.2                            | PASS    |
|                |      | 16QAM  | RB1#0                | 12.3                            | PASS    |
|                |      |        | RB25#0               | 12.4                            | PASS    |
|                | High | QPSK   | RB1#0                | 12.5                            | PASS    |
|                |      |        | RB25#0               | 12.6                            | PASS    |
|                |      | 16QAM  | RB1#0                | 12.7                            | PASS    |
|                |      |        | RB25#0               | 12.8                            | PASS    |
| 10 MHz         | Low  | QPSK   | RB1#0                | 12.9                            | PASS    |
|                |      |        | RB50#0               | 12.10                           | PASS    |
|                |      | 16QAM  | RB1#0                | 12.11                           | PASS    |
|                |      |        | RB50#0               | 12.12                           | PASS    |
|                | High | QPSK   | RB1#0                | 12.13                           | PASS    |
|                |      |        | RB50#0               | 12.14                           | PASS    |
|                |      | 16QAM  | RB1#0                | 12.15                           | PASS    |
|                |      |        | RB50#0               | 12.16                           | PASS    |



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|        |      |       |         |       |      |
|--------|------|-------|---------|-------|------|
| 15 MHz | Low  | QPSK  | RB1#0   | 12.17 | PASS |
|        |      |       | RB75#0  | 12.18 | PASS |
|        |      | 16QAM | RB1#0   | 12.19 | PASS |
|        |      |       | RB75#0  | 12.20 | PASS |
|        | High | QPSK  | RB1#0   | 12.21 | PASS |
|        |      |       | RB75#0  | 12.22 | PASS |
|        |      | 16QAM | RB1#0   | 12.23 | PASS |
|        |      |       | RB75#0  | 12.24 | PASS |
| 20 MHz | Low  | QPSK  | RB1#0   | 12.25 | PASS |
|        |      |       | RB100#0 | 12.26 | PASS |
|        |      | 16QAM | RB1#0   | 12.27 | PASS |
|        |      |       | RB100#0 | 12.28 | PASS |
|        | High | QPSK  | RB1#0   | 12.29 | PASS |
|        |      |       | RB100#0 | 12.30 | PASS |
|        |      | 16QAM | RB1#0   | 12.31 | PASS |
|        |      |       | RB100#0 | 12.32 | PASS |

| FDD LTE Band 17 |      |        |                      |                                 |         |
|-----------------|------|--------|----------------------|---------------------------------|---------|
| Test BW         | CH   | Modul. | RB Set (Size#Offset) | Refer to Plot <sup>Note 1</sup> | Verdict |
| 5 MHz           | Low  | QPSK   | RB1#0                | 13.1                            | PASS    |
|                 |      |        | RB25#0               | 13.2                            | PASS    |
|                 |      | 16QAM  | RB1#0                | 13.3                            | PASS    |
|                 |      |        | RB25#0               | 13.4                            | PASS    |
|                 | High | QPSK   | RB1#0                | 13.5                            | PASS    |
|                 |      |        | RB25#0               | 13.6                            | PASS    |
|                 |      | 16QAM  | RB1#0                | 13.7                            | PASS    |
|                 |      |        | RB25#0               | 13.8                            | PASS    |
| 10 MHz          | Low  | QPSK   | RB1#0                | 13.9                            | PASS    |
|                 |      |        | RB50#0               | 13.10                           | PASS    |
|                 |      | 16QAM  | RB1#0                | 13.11                           | PASS    |
|                 |      |        | RB50#0               | 13.12                           | PASS    |
|                 | High | QPSK   | RB1#0                | 13.13                           | PASS    |
|                 |      |        | RB50#0               | 13.14                           | PASS    |
|                 |      | 16QAM  | RB1#0                | 13.15                           | PASS    |
|                 |      |        | RB50#0               | 13.16                           | PASS    |

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## 5.1.7 Field Strength of Spurious Radiation

### Note(s):

1. GSM and EGPRS modes have been verified, only the worst data with different transmit bandwidth for LTE are shown here.
2. The frequencies of verdict which are marked by "N/A" should be ignored because they are MS carrier frequency.
3. When measurement frequency is above 18GHz, there is only noise floor of test system existing. So that there is no test data above 18GHz in the report.
4. Test plots please refer to the document "Annex No: EXHIBIT E of SHE19090021-01IE.pdf".

### Field Strength of Spurious Radiation Measurement Results for GSM/WCDMA/CDMA

| Test Band     | Channel | Refer to Plot <sup>Note 4</sup> | Verdict |
|---------------|---------|---------------------------------|---------|
| GSM 850       | Low     | 1.1                             | PASS    |
|               | Middle  | 1.2                             | PASS    |
|               | High    | 1.3                             | PASS    |
| GSM 1900      | Low     | 2.1                             | PASS    |
|               | Middle  | 2.2                             | PASS    |
|               | High    | 2.3                             | PASS    |
| EDGE 850      | Low     | 3.1                             | PASS    |
|               | Middle  | 3.2                             | PASS    |
|               | High    | 3.3                             | PASS    |
| EDGE 1900     | Low     | 4.1                             | PASS    |
|               | Middle  | 4.2                             | PASS    |
|               | High    | 4.3                             | PASS    |
| WCDMA Band II | Low     | 5.1                             | PASS    |
|               | Middle  | 5.2                             | PASS    |
|               | High    | 5.3                             | PASS    |
| WCDMA Band V  | Low     | 6.1                             | PASS    |
|               | Middle  | 6.2                             | PASS    |
|               | High    | 6.3                             | PASS    |
| CDMA BC0      | Low     | 7.1                             | PASS    |
|               | Middle  | 7.2                             | PASS    |
|               | High    | 7.3                             | PASS    |
| EVDO BC0      | Low     | 8.1                             | PASS    |
|               | Middle  | 8.2                             | PASS    |
|               | High    | 8.3                             | PASS    |

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## Band Edge Measurement Results for LTE

| FDD LTE Band 2 |         |        |                      |                                 |         |
|----------------|---------|--------|----------------------|---------------------------------|---------|
| Test BW        | Channel | Modul. | RB Set (Size#Offset) | Refer to Plot <sup>Note 4</sup> | Verdict |
| 1.4 MHz        | Middle  | QPSK   | RB1#0                | 9.1                             | Pass    |
| 3 MHz          | Middle  | QPSK   | RB1#0                | 9.2                             | Pass    |
| 5 MHz          | Middle  | QPSK   | RB1#0                | 9.3                             | Pass    |
| 10 MHz         | Middle  | QPSK   | RB1#0                | 9.4                             | Pass    |
| 15 MHz         | Middle  | QPSK   | RB1#0                | 9.5                             | Pass    |
| 20 MHz         | Middle  | QPSK   | RB1#0                | 9.6                             | Pass    |

| FDD LTE Band 4 |         |        |                      |                                 |         |
|----------------|---------|--------|----------------------|---------------------------------|---------|
| Test BW        | Channel | Modul. | RB Set (Size#Offset) | Refer to Plot <sup>Note 4</sup> | Verdict |
| 1.4 MHz        | Middle  | QPSK   | RB1#0                | 10.1                            | Pass    |
| 3 MHz          | Middle  | QPSK   | RB1#0                | 10.2                            | Pass    |
| 5 MHz          | Middle  | QPSK   | RB1#0                | 10.3                            | Pass    |
| 10 MHz         | Middle  | QPSK   | RB1#0                | 10.4                            | Pass    |
| 15 MHz         | Middle  | QPSK   | RB1#0                | 10.5                            | Pass    |
| 20 MHz         | Middle  | QPSK   | RB1#0                | 10.6                            | Pass    |

| FDD LTE Band 5 |         |        |                      |                                 |         |
|----------------|---------|--------|----------------------|---------------------------------|---------|
| Test BW        | Channel | Modul. | RB Set (Size#Offset) | Refer to Plot <sup>Note 4</sup> | Verdict |
| 1.4 MHz        | Middle  | QPSK   | RB1#0                | 11.1                            | Pass    |
| 3 MHz          | Middle  | QPSK   | RB1#0                | 11.2                            | Pass    |
| 5 MHz          | Middle  | QPSK   | RB1#0                | 11.3                            | Pass    |
| 10 MHz         | Middle  | QPSK   | RB1#0                | 11.4                            | Pass    |

| FDD LTE Band 7 |         |        |                      |                                 |         |
|----------------|---------|--------|----------------------|---------------------------------|---------|
| Test BW        | Channel | Modul. | RB Set (Size#Offset) | Refer to Plot <sup>Note 4</sup> | Verdict |
| 5 MHz          | Middle  | QPSK   | RB1#0                | 12.1                            | Pass    |
| 10 MHz         | Middle  | QPSK   | RB1#0                | 12.2                            | Pass    |
| 15 MHz         | Middle  | QPSK   | RB1#0                | 12.3                            | Pass    |
| 20 MHz         | Middle  | QPSK   | RB1#0                | 12.4                            | Pass    |

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| FDD LTE Band 17 |         |        |                      |                                  |         |
|-----------------|---------|--------|----------------------|----------------------------------|---------|
| Test BW         | Channel | Modul. | RB Set (Size#Offset) | Refer to Plot <sup>†Note 4</sup> | Verdict |
| 5 MHz           | Middle  | QPSK   | RB1#0                | 13.1                             | Pass    |
| 10 MHz          | Middle  | QPSK   | RB1#0                | 13.2                             | Pass    |

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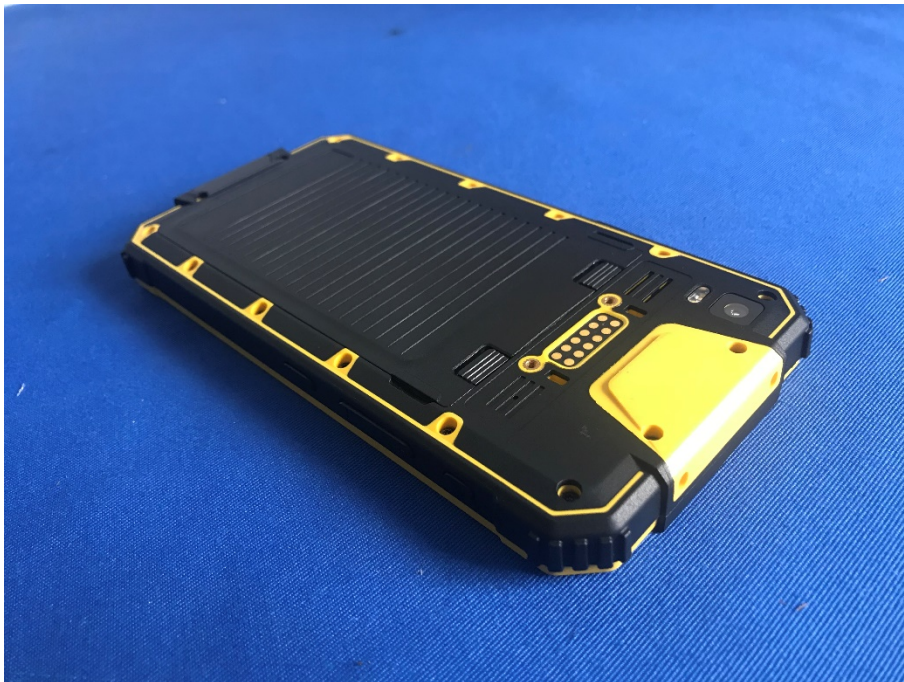
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## 5.2 Photographs of the Sample



Front of the sample



Rear of the sample

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## 5.3 Set-up for Conducted RF test at Antenna Port



## 5.4 Set-up for Spurious Emissions below 1GHz





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## 5.5 Set-up for Spurious Emissions above 1GHz



\*\*\*End of the report\*\*\*