



| Radiated Power (EIRP) for LTE Band 17 / 5M |              |        |         |                       |               |               |                     |                                |            |
|--------------------------------------------|--------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                 | RB           |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                            | Size         | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                       | 1            | 0      | Lowest  | 14.73                 | 1.21          | 6.40          | 19.92               | Horizontal                     | Pass       |
|                                            | 1            | 0      | Middle  | 14.77                 | 1.22          | 6.40          | 19.95               | Horizontal                     | Pass       |
|                                            | 1            | 0      | Highest | 14.79                 | 1.23          | 6.40          | 19.96               | Horizontal                     | Pass       |
|                                            | 1            | 0      | Lowest  | 16.21                 | 1.21          | 6.40          | 21.40               | Vertical                       | Pass       |
|                                            | 1            | 0      | Middle  | 16.15                 | 1.22          | 6.40          | 21.33               | Vertical                       | Pass       |
|                                            | 1            | 0      | Highest | 16.15                 | 1.23          | 6.40          | 21.32               | Vertical                       | Pass       |
| 16QAM                                      | 1            | 0      | Lowest  | 14.42                 | 1.21          | 6.40          | 19.61               | Horizontal                     | Pass       |
|                                            | 1            | 0      | Middle  | 14.67                 | 1.22          | 6.40          | 19.85               | Horizontal                     | Pass       |
|                                            | 1            | 0      | Highest | 14.44                 | 1.23          | 6.40          | 19.61               | Horizontal                     | Pass       |
|                                            | 1            | 0      | Lowest  | 15.85                 | 1.21          | 6.40          | 21.04               | Vertical                       | Pass       |
|                                            | 1            | 0      | Middle  | 16.05                 | 1.22          | 6.40          | 21.23               | Vertical                       | Pass       |
|                                            | 1            | 0      | Highest | 15.9                  | 1.23          | 6.40          | 21.07               | Vertical                       | Pass       |
| Limit                                      | ERP<2W=33dBm |        |         |                       |               |               |                     |                                |            |

| Radiated Power (EIRP) for LTE Band 17 / 10M |              |        |         |                       |               |               |                     |                                |            |
|---------------------------------------------|--------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                  | RB           |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                             | Size         | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                        | 1            | 0      | Lowest  | 15.43                 | 1.21          | 6.40          | 20.62               | Horizontal                     | Pass       |
|                                             | 1            | 0      | Middle  | 15.43                 | 1.22          | 6.40          | 20.61               | Horizontal                     | Pass       |
|                                             | 1            | 0      | Highest | 15.42                 | 1.23          | 6.40          | 20.59               | Horizontal                     | Pass       |
|                                             | 1            | 0      | Lowest  | 16.83                 | 1.21          | 6.40          | 22.02               | Vertical                       | Pass       |
|                                             | 1            | 0      | Middle  | 16.9                  | 1.22          | 6.40          | 22.08               | Vertical                       | Pass       |
|                                             | 1            | 0      | Highest | 16.84                 | 1.23          | 6.40          | 22.01               | Vertical                       | Pass       |
| 16QAM                                       | 1            | 0      | Lowest  | 15.12                 | 1.21          | 6.40          | 20.31               | Horizontal                     | Pass       |
|                                             | 1            | 0      | Middle  | 15.12                 | 1.22          | 6.40          | 20.30               | Horizontal                     | Pass       |
|                                             | 1            | 0      | Highest | 15.05                 | 1.23          | 6.40          | 20.22               | Horizontal                     | Pass       |
|                                             | 1            | 0      | Lowest  | 16.5                  | 1.21          | 6.40          | 21.69               | Vertical                       | Pass       |
|                                             | 1            | 0      | Middle  | 16.55                 | 1.22          | 6.40          | 21.73               | Vertical                       | Pass       |
|                                             | 1            | 0      | Highest | 16.54                 | 1.23          | 6.40          | 21.71               | Vertical                       | Pass       |
| Limit                                       | ERP<2W=33dBm |        |         |                       |               |               |                     |                                |            |



| Radiated Power (EIRP) for LTE Band 25 / 1.4M |               |        |         |                       |               |               |                     |                                |            |
|----------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                   | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                              | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                         | 1             | 0      | Lowest  | 10.2                  | 2.37          | 10.40         | 18.23               | Horizontal                     | Pass       |
|                                              | 1             | 0      | Middle  | 10                    | 2.39          | 10.42         | 18.03               | Horizontal                     | Pass       |
|                                              | 1             | 0      | Highest | 10.06                 | 2.40          | 10.44         | 18.10               | Horizontal                     | Pass       |
|                                              | 1             | 0      | Lowest  | 11.55                 | 2.37          | 10.40         | 19.58               | Vertical                       | Pass       |
|                                              | 1             | 0      | Middle  | 11.45                 | 2.39          | 10.42         | 19.48               | Vertical                       | Pass       |
|                                              | 1             | 0      | Highest | 11.47                 | 2.40          | 10.44         | 19.51               | Vertical                       | Pass       |
| 16QAM                                        | 1             | 0      | Lowest  | 9.88                  | 2.37          | 10.40         | 17.91               | Horizontal                     | Pass       |
|                                              | 1             | 0      | Middle  | 9.66                  | 2.39          | 10.42         | 17.69               | Horizontal                     | Pass       |
|                                              | 1             | 0      | Highest | 9.69                  | 2.40          | 10.44         | 17.73               | Horizontal                     | Pass       |
|                                              | 1             | 0      | Lowest  | 11.25                 | 2.37          | 10.40         | 19.28               | Vertical                       | Pass       |
|                                              | 1             | 0      | Middle  | 11.08                 | 2.39          | 10.42         | 19.11               | Vertical                       | Pass       |
|                                              | 1             | 0      | Highest | 11.08                 | 2.40          | 10.44         | 19.12               | Vertical                       | Pass       |
| Limit                                        | EIRP<2W=33dBm |        |         |                       |               |               |                     |                                |            |

| Radiated Power (EIRP) for LTE Band 25 / 3M |               |        |         |                       |               |               |                     |                                |            |
|--------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                 | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                            | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                       | 1             | 0      | Lowest  | 10.7                  | 2.37          | 10.40         | 18.73               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Middle  | 10.38                 | 2.39          | 10.42         | 18.41               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Highest | 10.69                 | 2.40          | 10.44         | 18.73               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Lowest  | 12.07                 | 2.37          | 10.40         | 20.10               | Vertical                       | Pass       |
|                                            | 1             | 0      | Middle  | 11.84                 | 2.39          | 10.42         | 19.87               | Vertical                       | Pass       |
|                                            | 1             | 0      | Highest | 12.04                 | 2.40          | 10.44         | 20.08               | Vertical                       | Pass       |
| 16QAM                                      | 1             | 0      | Lowest  | 10.48                 | 2.37          | 10.40         | 18.51               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Middle  | 10.09                 | 2.39          | 10.42         | 18.12               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Highest | 10.32                 | 2.40          | 10.44         | 18.36               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Lowest  | 11.96                 | 2.37          | 10.40         | 19.99               | Vertical                       | Pass       |
|                                            | 1             | 0      | Middle  | 11.51                 | 2.39          | 10.42         | 19.54               | Vertical                       | Pass       |
|                                            | 1             | 0      | Highest | 11.68                 | 2.40          | 10.44         | 19.72               | Vertical                       | Pass       |
| Limit                                      | EIRP<2W=33dBm |        |         |                       |               |               |                     |                                |            |



| Radiated Power (EIRP) for LTE Band 25 / 5M |               |        |         |                       |               |               |                     |                                |            |
|--------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                 | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                            | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                       | 1             | 0      | Lowest  | 12.03                 | 2.37          | 10.40         | 20.06               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Middle  | 11.51                 | 2.39          | 10.42         | 19.54               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Highest | 11.53                 | 2.40          | 10.44         | 19.57               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Lowest  | 13.36                 | 2.37          | 10.40         | 21.39               | Vertical                       | Pass       |
|                                            | 1             | 0      | Middle  | 12.86                 | 2.39          | 10.42         | 20.89               | Vertical                       | Pass       |
|                                            | 1             | 0      | Highest | 12.94                 | 2.40          | 10.44         | 20.98               | Vertical                       | Pass       |
| 16QAM                                      | 1             | 0      | Lowest  | 11.54                 | 2.37          | 10.40         | 19.57               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Middle  | 11.28                 | 2.39          | 10.42         | 19.31               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Highest | 11.37                 | 2.40          | 10.44         | 19.41               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Lowest  | 12.98                 | 2.37          | 10.40         | 21.01               | Vertical                       | Pass       |
|                                            | 1             | 0      | Middle  | 12.6                  | 2.39          | 10.42         | 20.63               | Vertical                       | Pass       |
|                                            | 1             | 0      | Highest | 12.73                 | 2.40          | 10.44         | 20.77               | Vertical                       | Pass       |
| Limit                                      | EIRP<2W=33dBm |        |         |                       |               |               |                     |                                |            |

| Radiated Power (EIRP) for LTE Band 25 / 10M |               |        |         |                       |               |               |                     |                                |            |
|---------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                  | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                             | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                        | 1             | 0      | Lowest  | 11.26                 | 2.37          | 10.40         | 19.29               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 10.77                 | 2.39          | 10.42         | 18.80               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 10.98                 | 2.40          | 10.44         | 19.02               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 12.64                 | 2.37          | 10.40         | 20.67               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 12.24                 | 2.39          | 10.42         | 20.27               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 12.35                 | 2.40          | 10.44         | 20.39               | Vertical                       | Pass       |
| 16QAM                                       | 1             | 0      | Lowest  | 11.02                 | 2.37          | 10.40         | 19.05               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 10.5                  | 2.39          | 10.42         | 18.53               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 10.7                  | 2.40          | 10.44         | 18.74               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 12.36                 | 2.37          | 10.40         | 20.39               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 11.85                 | 2.39          | 10.42         | 19.88               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 12.2                  | 2.40          | 10.44         | 20.24               | Vertical                       | Pass       |
| Limit                                       | EIRP<2W=33dBm |        |         |                       |               |               |                     |                                |            |



| Radiated Power (EIRP) for LTE Band 25 / 15M |               |        |         |                       |               |               |                     |                                |            |
|---------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                  | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                             | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                        | 1             | 0      | Lowest  | 9.96                  | 2.37          | 10.40         | 17.99               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 9.67                  | 2.39          | 10.42         | 17.70               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 10.12                 | 2.40          | 10.44         | 18.16               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 11.36                 | 2.37          | 10.40         | 19.39               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 10.99                 | 2.39          | 10.42         | 19.02               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 11.47                 | 2.40          | 10.44         | 19.51               | Vertical                       | Pass       |
| 16QAM                                       | 1             | 0      | Lowest  | 9.68                  | 2.37          | 10.40         | 17.71               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 9.28                  | 2.39          | 10.42         | 17.31               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 9.81                  | 2.40          | 10.44         | 17.85               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 11.04                 | 2.37          | 10.40         | 19.07               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 10.78                 | 2.39          | 10.42         | 18.81               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 11.2                  | 2.40          | 10.44         | 19.24               | Vertical                       | Pass       |
| Limit                                       | EIRP<2W=33dBm |        |         |                       |               |               |                     |                                |            |

| Radiated Power (EIRP) for LTE Band 25 / 20M |               |        |         |                       |               |               |                     |                                |            |
|---------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                  | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                             | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                        | 1             | 0      | Lowest  | 11.63                 | 2.37          | 10.40         | 19.66               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 10.84                 | 2.39          | 10.42         | 18.87               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 11.07                 | 2.40          | 10.44         | 19.11               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 12.98                 | 2.37          | 10.40         | 21.01               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 12.31                 | 2.39          | 10.42         | 20.34               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 12.56                 | 2.40          | 10.44         | 20.60               | Vertical                       | Pass       |
| 16QAM                                       | 1             | 0      | Lowest  | 11.33                 | 2.37          | 10.40         | 19.36               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 10.63                 | 2.39          | 10.42         | 18.66               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 10.96                 | 2.40          | 10.44         | 19.00               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 12.74                 | 2.37          | 10.40         | 20.77               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 12.03                 | 2.39          | 10.42         | 20.06               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 12.39                 | 2.40          | 10.44         | 20.43               | Vertical                       | Pass       |
| Limit                                       | EIRP<2W=33dBm |        |         |                       |               |               |                     |                                |            |



| Radiated Power (EIRP) for LTE Band 26 / 1.4M |               |        |         |                       |               |               |                     |                                |            |
|----------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                   | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                              | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                         | 1             | 0      | Lowest  | 11.32                 | 2.35          | 10.13         | 19.10               | Horizontal                     | Pass       |
|                                              | 1             | 0      | Middle  | 11.65                 | 2.36          | 10.16         | 19.45               | Horizontal                     | Pass       |
|                                              | 1             | 0      | Highest | 11.53                 | 2.37          | 10.22         | 19.38               | Horizontal                     | Pass       |
|                                              | 1             | 0      | Lowest  | 12.67                 | 2.35          | 10.13         | 20.45               | Vertical                       | Pass       |
|                                              | 1             | 0      | Middle  | 12.99                 | 2.36          | 10.16         | 20.79               | Vertical                       | Pass       |
|                                              | 1             | 0      | Highest | 12.99                 | 2.37          | 10.22         | 20.84               | Vertical                       | Pass       |
| 16QAM                                        | 1             | 0      | Lowest  | 11.08                 | 2.35          | 10.13         | 18.86               | Horizontal                     | Pass       |
|                                              | 1             | 0      | Middle  | 11.44                 | 2.36          | 10.16         | 19.24               | Horizontal                     | Pass       |
|                                              | 1             | 0      | Highest | 11.37                 | 2.37          | 10.22         | 19.22               | Horizontal                     | Pass       |
|                                              | 1             | 0      | Lowest  | 12.5                  | 2.35          | 10.13         | 20.28               | Vertical                       | Pass       |
|                                              | 1             | 0      | Middle  | 12.82                 | 2.36          | 10.16         | 20.62               | Vertical                       | Pass       |
|                                              | 1             | 0      | Highest | 12.72                 | 2.37          | 10.22         | 20.57               | Vertical                       | Pass       |
| Limit                                        | EIRP<1W=30dBm |        |         |                       |               |               |                     |                                |            |

| Radiated Power (EIRP) for LTE Band 26 / 3M |               |        |         |                       |               |               |                     |                                |            |
|--------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                 | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                            | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                       | 1             | 0      | Lowest  | 11.73                 | 2.35          | 10.13         | 19.51               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Middle  | 12.18                 | 2.36          | 10.16         | 19.98               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Highest | 12                    | 2.37          | 10.22         | 19.85               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Lowest  | 13.15                 | 2.35          | 10.13         | 20.93               | Vertical                       | Pass       |
|                                            | 1             | 0      | Middle  | 13.52                 | 2.36          | 10.16         | 21.32               | Vertical                       | Pass       |
|                                            | 1             | 0      | Highest | 13.47                 | 2.37          | 10.22         | 21.32               | Vertical                       | Pass       |
| 16QAM                                      | 1             | 0      | Lowest  | 11.49                 | 2.35          | 10.13         | 19.27               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Middle  | 11.75                 | 2.36          | 10.16         | 19.55               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Highest | 11.89                 | 2.37          | 10.22         | 19.74               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Lowest  | 12.88                 | 2.35          | 10.13         | 20.66               | Vertical                       | Pass       |
|                                            | 1             | 0      | Middle  | 13.13                 | 2.36          | 10.16         | 20.93               | Vertical                       | Pass       |
|                                            | 1             | 0      | Highest | 13.26                 | 2.37          | 10.22         | 21.11               | Vertical                       | Pass       |
| Limit                                      | EIRP<1W=30dBm |        |         |                       |               |               |                     |                                |            |



| Radiated Power (EIRP) for LTE Band 26 / 5M |               |        |         |                       |               |               |                     |                                |            |
|--------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                 | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                            | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                       | 1             | 0      | Lowest  | 11.94                 | 2.35          | 10.13         | 19.72               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Middle  | 12.03                 | 2.36          | 10.16         | 19.83               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Highest | 11.68                 | 2.37          | 10.22         | 19.53               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Lowest  | 13.36                 | 2.35          | 10.13         | 21.14               | Vertical                       | Pass       |
|                                            | 1             | 0      | Middle  | 13.39                 | 2.36          | 10.16         | 21.19               | Vertical                       | Pass       |
|                                            | 1             | 0      | Highest | 13.15                 | 2.37          | 10.22         | 21.00               | Vertical                       | Pass       |
| 16QAM                                      | 1             | 0      | Lowest  | 11.64                 | 2.35          | 10.13         | 19.42               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Middle  | 11.7                  | 2.36          | 10.16         | 19.50               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Highest | 11.37                 | 2.37          | 10.22         | 19.22               | Horizontal                     | Pass       |
|                                            | 1             | 0      | Lowest  | 13                    | 2.35          | 10.13         | 20.78               | Vertical                       | Pass       |
|                                            | 1             | 0      | Middle  | 13.11                 | 2.36          | 10.16         | 20.91               | Vertical                       | Pass       |
|                                            | 1             | 0      | Highest | 12.85                 | 2.37          | 10.22         | 20.70               | Vertical                       | Pass       |
| Limit                                      | EIRP<1W=30dBm |        |         |                       |               |               |                     |                                |            |

| Radiated Power (EIRP) for LTE Band 26 / 10M |               |        |         |                       |               |               |                     |                                |            |
|---------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                  | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                             | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                        | 1             | 0      | Lowest  | 11.82                 | 2.35          | 10.13         | 19.60               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 12.15                 | 2.36          | 10.16         | 19.95               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 11.78                 | 2.37          | 10.22         | 19.63               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 13.31                 | 2.35          | 10.13         | 21.09               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 13.48                 | 2.36          | 10.16         | 21.28               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 13.23                 | 2.37          | 10.22         | 21.08               | Vertical                       | Pass       |
| 16QAM                                       | 1             | 0      | Lowest  | 11.65                 | 2.35          | 10.13         | 19.43               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 11.74                 | 2.36          | 10.16         | 19.54               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 11.41                 | 2.37          | 10.22         | 19.26               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 13.14                 | 2.35          | 10.13         | 20.92               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 13.22                 | 2.36          | 10.16         | 21.02               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 12.91                 | 2.37          | 10.22         | 20.76               | Vertical                       | Pass       |
| Limit                                       | EIRP<1W=30dBm |        |         |                       |               |               |                     |                                |            |





| Radiated Power (EIRP) for LTE Band 26 / 15M |               |        |         |                       |               |               |                     |                                |            |
|---------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                  | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                             | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                        | 1             | 0      | Lowest  | 12.32                 | 2.35          | 10.13         | 20.10               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 12.38                 | 2.36          | 10.16         | 20.18               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 12.5                  | 2.37          | 10.22         | 20.35               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 13.68                 | 2.35          | 10.13         | 21.46               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 13.82                 | 2.36          | 10.16         | 21.62               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 13.94                 | 2.37          | 10.22         | 21.79               | Vertical                       | Pass       |
| 16QAM                                       | 1             | 0      | Lowest  | 12                    | 2.35          | 10.13         | 19.78               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 12.16                 | 2.36          | 10.16         | 19.96               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 12.24                 | 2.37          | 10.22         | 20.09               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 13.49                 | 2.35          | 10.13         | 21.27               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 13.62                 | 2.36          | 10.16         | 21.42               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 13.67                 | 2.37          | 10.22         | 21.52               | Vertical                       | Pass       |
| Limit                                       | EIRP<1W=30dBm |        |         |                       |               |               |                     |                                |            |



**Band 26(Part 90)**

| Radiated Power (EIRP) for LTE Band 26 / 1.4M |                 |        |         |                       |               |               |                     |                                |            |
|----------------------------------------------|-----------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                   | RB              |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                              | Size            | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                         | 1               | 0      | Middle  | 10.88                 | 2.36          | 10.16         | 18.68               | Horizontal                     | Pass       |
|                                              | 1               | 0      | Middle  | 12.28                 | 2.36          | 10.16         | 20.08               | Vertical                       | Pass       |
| 16QAM                                        | 1               | 0      | Middle  | 10.6                  | 2.36          | 10.16         | 18.40               | Horizontal                     | Pass       |
|                                              | 1               | 0      | Middle  | 11.94                 | 2.36          | 10.16         | 19.74               | Vertical                       | Pass       |
| Limit                                        | EIRP<100W=50dBm |        |         |                       |               |               |                     |                                |            |

| Radiated Power (EIRP) for LTE Band 26 / 3M |                 |        |         |                       |               |               |                     |                                |            |
|--------------------------------------------|-----------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                 | RB              |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                            | Size            | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                       | 1               | 0      | Middle  | 10.67                 | 2.36          | 10.16         | 18.47               | Horizontal                     | Pass       |
|                                            | 1               | 0      | Middle  | 12.11                 | 2.36          | 10.16         | 19.91               | Vertical                       | Pass       |
| 16QAM                                      | 1               | 0      | Middle  | 10.37                 | 2.36          | 10.16         | 18.17               | Horizontal                     | Pass       |
|                                            | 1               | 0      | Middle  | 11.83                 | 2.36          | 10.16         | 19.63               | Vertical                       | Pass       |
| Limit                                      | EIRP<100W=50dBm |        |         |                       |               |               |                     |                                |            |

| Radiated Power (EIRP) for LTE Band 26 / 5M |                 |        |         |                       |               |               |                     |                                |            |
|--------------------------------------------|-----------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                 | RB              |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                            | Size            | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                       | 1               | 0      | Middle  | 11.05                 | 2.36          | 10.16         | 18.85               | Horizontal                     | Pass       |
|                                            | 1               | 0      | Middle  | 12.44                 | 2.36          | 10.16         | 20.24               | Vertical                       | Pass       |
| 16QAM                                      | 1               | 0      | Middle  | 10.71                 | 2.36          | 10.16         | 18.51               | Horizontal                     | Pass       |
|                                            | 1               | 0      | Middle  | 12.03                 | 2.36          | 10.16         | 19.83               | Vertical                       | Pass       |
| Limit                                      | EIRP<100W=50dBm |        |         |                       |               |               |                     |                                |            |

| Radiated Power (EIRP) for LTE Band 26 / 10M |                 |        |         |                       |               |               |                     |                                |            |
|---------------------------------------------|-----------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                  | RB              |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                             | Size            | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                        | 1               | 0      | Middle  | 10.82                 | 2.36          | 10.16         | 18.62               | Horizontal                     | Pass       |
|                                             | 1               | 0      | Middle  | 12.27                 | 2.36          | 10.16         | 20.07               | Vertical                       | Pass       |
| 16QAM                                       | 1               | 0      | Middle  | 10.72                 | 2.36          | 10.16         | 18.52               | Horizontal                     | Pass       |
|                                             | 1               | 0      | Middle  | 12.15                 | 2.36          | 10.16         | 19.95               | Vertical                       | Pass       |
| Limit                                       | EIRP<100W=50dBm |        |         |                       |               |               |                     |                                |            |





| Radiated Power (EIRP) for LTE Band41 / 5M |               |        |         |                       |               |               |                     |                                |            |
|-------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                           | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                      | 1             | 0      | Lowest  | 10.44                 | 2.56          | 10.60         | 18.48               | Horizontal                     | Pass       |
|                                           | 1             | 0      | Middle  | 10.6                  | 2.67          | 10.65         | 18.58               | Horizontal                     | Pass       |
|                                           | 1             | 0      | Highest | 10.44                 | 2.72          | 10.70         | 18.42               | Horizontal                     | Pass       |
|                                           | 1             | 0      | Lowest  | 11.77                 | 2.56          | 10.60         | 19.81               | Vertical                       | Pass       |
|                                           | 1             | 0      | Middle  | 12                    | 2.67          | 10.65         | 19.98               | Vertical                       | Pass       |
|                                           | 1             | 0      | Highest | 11.88                 | 2.72          | 10.70         | 19.86               | Vertical                       | Pass       |
| 16QAM                                     | 1             | 0      | Lowest  | 10.12                 | 2.56          | 10.60         | 18.16               | Horizontal                     | Pass       |
|                                           | 1             | 0      | Middle  | 10.51                 | 2.67          | 10.65         | 18.49               | Horizontal                     | Pass       |
|                                           | 1             | 0      | Highest | 10.21                 | 2.72          | 10.70         | 18.19               | Horizontal                     | Pass       |
|                                           | 1             | 0      | Lowest  | 11.52                 | 2.56          | 10.60         | 19.56               | Vertical                       | Pass       |
|                                           | 1             | 0      | Middle  | 11.94                 | 2.67          | 10.65         | 19.92               | Vertical                       | Pass       |
|                                           | 1             | 0      | Highest | 11.64                 | 2.72          | 10.70         | 19.62               | Vertical                       | Pass       |
| Limit                                     | EIRP<2W=33dBm |        |         |                       |               |               |                     |                                |            |

| Radiated Power (EIRP) for LTE Band 41 / 10M |               |        |         |                       |               |               |                     |                                |            |
|---------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                  | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                             | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                        | 1             | 0      | Lowest  | 10.53                 | 2.56          | 10.60         | 18.57               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 10.77                 | 2.67          | 10.65         | 18.75               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 10.76                 | 2.72          | 10.70         | 18.74               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 11.99                 | 2.56          | 10.60         | 20.03               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 12.22                 | 2.67          | 10.65         | 20.20               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 12.16                 | 2.72          | 10.70         | 20.14               | Vertical                       | Pass       |
| 16QAM                                       | 1             | 0      | Lowest  | 10.47                 | 2.56          | 10.60         | 18.51               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 10.34                 | 2.67          | 10.65         | 18.32               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 10.63                 | 2.72          | 10.70         | 18.61               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 11.81                 | 2.56          | 10.60         | 19.85               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 11.81                 | 2.67          | 10.65         | 19.79               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 11.94                 | 2.72          | 10.70         | 19.92               | Vertical                       | Pass       |
| Limit                                       | EIRP<2W=33dBm |        |         |                       |               |               |                     |                                |            |



| Radiated Power (EIRP) for LTE Band 41 / 15M |               |        |         |                       |               |               |                     |                                |            |
|---------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                  | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                             | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                        | 1             | 0      | Lowest  | 11.16                 | 2.56          | 10.60         | 19.20               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 11.58                 | 2.67          | 10.65         | 19.56               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 11.53                 | 2.72          | 10.70         | 19.51               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 12.65                 | 2.56          | 10.60         | 20.69               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 12.91                 | 2.67          | 10.65         | 20.89               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 12.91                 | 2.72          | 10.70         | 20.89               | Vertical                       | Pass       |
| 16QAM                                       | 1             | 0      | Lowest  | 10.97                 | 2.56          | 10.60         | 19.01               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 11.46                 | 2.67          | 10.65         | 19.44               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 11.31                 | 2.72          | 10.70         | 19.29               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 12.45                 | 2.56          | 10.60         | 20.49               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 12.82                 | 2.67          | 10.65         | 20.80               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 12.71                 | 2.72          | 10.70         | 20.69               | Vertical                       | Pass       |
| Limit                                       | EIRP<2W=33dBm |        |         |                       |               |               |                     |                                |            |

| Radiated Power (EIRP) for LTE Band 41 / 20M |               |        |         |                       |               |               |                     |                                |            |
|---------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|---------------------|--------------------------------|------------|
| Modulation                                  | RB            |        | Channel | Result                |               |               |                     |                                | Conclusion |
|                                             | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.R.P(dBm) | Polarization<br>Of Max.<br>ERP |            |
| QPSK                                        | 1             | 0      | Lowest  | 11.57                 | 2.56          | 10.60         | 19.61               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 11.8                  | 2.67          | 10.65         | 19.78               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 11.98                 | 2.72          | 10.70         | 19.96               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 13.05                 | 2.56          | 10.60         | 21.09               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 13.15                 | 2.67          | 10.65         | 21.13               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 13.41                 | 2.72          | 10.70         | 21.39               | Vertical                       | Pass       |
| 16QAM                                       | 1             | 0      | Lowest  | 11.36                 | 2.56          | 10.60         | 19.40               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Middle  | 11.59                 | 2.67          | 10.65         | 19.57               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Highest | 11.67                 | 2.72          | 10.70         | 19.65               | Horizontal                     | Pass       |
|                                             | 1             | 0      | Lowest  | 12.82                 | 2.56          | 10.60         | 20.86               | Vertical                       | Pass       |
|                                             | 1             | 0      | Middle  | 13.05                 | 2.67          | 10.65         | 21.03               | Vertical                       | Pass       |
|                                             | 1             | 0      | Highest | 13.1                  | 2.72          | 10.70         | 21.08               | Vertical                       | Pass       |
| Limit                                       | EIRP<2W=33dBm |        |         |                       |               |               |                     |                                |            |

## 6. OCCUPIED BANDWIDTH

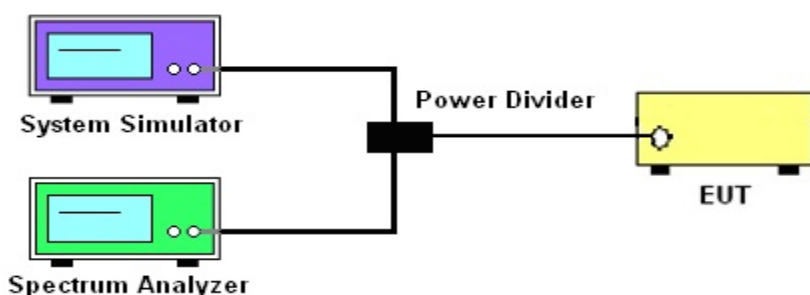
### 6.1 DESCRIPTION OF OCCUPIED BANDWIDTH MEASUREMENT

#### 6.1.1 MEASUREMENT METHOD

1.The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

2.The 26 db emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 db below the maximum in-band spectral density of the modulated signal. spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

#### 6.1.2 TEST SETUP



#### 6.1.3 TEST PROCEDURES

1. The testing follows FCC KDB 971168 D01 v03r01 Section 4.1.and 4.2
2. The EUT was connected to spectrum and system simulator via a power divider
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Set the test probe and measure the Occupied Bandwidth of the spectrum analyzer
5. Measure and record the Occupied Bandwidth from the Spectrum Analyzer.

|             | LTE    |        |        |        |         |         |
|-------------|--------|--------|--------|--------|---------|---------|
| LTE BW      | 1.4M   | 3M     | 5M     | 10M    | 15M     | 20M     |
| Span        | 3MHz   | 6MHz   | 10MHz  | 20MHz  | 30MHz   | 40MHz   |
| RBW         | 30kHz  | 30kHz  | 100kHz | 100kHz | 300kHz  | 300kHz  |
| VBW         | 100kHz | 100kHz | 300kHz | 300kHz | 1000kHz | 1000kHz |
| Detector    | PK     | PK     | PK     | PK     | PK      | PK      |
| Trace       | Max    | Max    | Max    | Max    | Max     | Max     |
| Sweep Count | Auto   | Auto   | Auto   | Auto   | Auto    | Auto    |



## 6.1.4 MEASUREMENT RESULT

| LTE Band 2 Bandwidth [MHz] |        |        |         |        |         |         |         |
|----------------------------|--------|--------|---------|--------|---------|---------|---------|
| BW [MHz]                   | Mod    | Lowest |         | Middle |         | Highest |         |
|                            |        | 99% BW | 26dB BW | 99% BW | 26dB BW | 99% BW  | 26dB BW |
| 1.4                        | QPSK   | 1.097  | 1.31    | 1.1052 | 1.279   | 1.096   | 1.297   |
| 1.4                        | 16-QAM | 1.1004 | 1.307   | 1.094  | 1.271   | 1.096   | 1.289   |
| 3                          | QPSK   | 2.689  | 2.918   | 2.6835 | 2.928   | 2.681   | 2.928   |
| 3                          | 16-QAM | 2.6837 | 2.926   | 2.6812 | 2.915   | 2.68    | 2.926   |
| 5                          | QPSK   | 4.503  | 5.002   | 4.499  | 4.966   | 4.512   | 5.019   |
| 5                          | 16-QAM | 4.508  | 4.988   | 4.517  | 5.034   | 4.515   | 5.005   |
| 10                         | QPSK   | 8.921  | 9.677   | 8.932  | 9.726   | 8.932   | 9.712   |
| 10                         | 16-QAM | 8.923  | 9.546   | 8.931  | 9.644   | 8.92    | 9.718   |
| 15                         | QPSK   | 13.39  | 14.54   | 13.454 | 14.76   | 13.492  | 14.76   |
| 15                         | 16-QAM | 13.434 | 14.66   | 13.47  | 14.63   | 13.479  | 14.75   |
| 20                         | QPSK   | 17.815 | 19.14   | 17.896 | 19.43   | 17.936  | 19.26   |
| 20                         | 16-QAM | 17.852 | 19.13   | 17.892 | 19.37   | 17.911  | 19.36   |

| LTE Band 4 Bandwidth [MHz] |        |        |         |        |         |         |         |
|----------------------------|--------|--------|---------|--------|---------|---------|---------|
| BW [MHz]                   | Mod    | Lowest |         | Middle |         | Highest |         |
|                            |        | 99% BW | 26dB BW | 99% BW | 26dB BW | 99% BW  | 26dB BW |
| 1.4                        | QPSK   | 1.098  | 1.309   | 1.104  | 1.283   | 1.0926  | 1.299   |
| 1.4                        | 16-QAM | 1.099  | 1.293   | 1.092  | 1.273   | 1.0948  | 1.3     |
| 3                          | QPSK   | 2.686  | 2.922   | 2.6831 | 2.93    | 2.684   | 2.919   |
| 3                          | 16-QAM | 2.682  | 2.935   | 2.682  | 2.934   | 2.679   | 2.921   |
| 5                          | QPSK   | 4.505  | 4.985   | 4.503  | 4.987   | 4.526   | 5.006   |
| 5                          | 16-QAM | 4.507  | 4.99    | 4.528  | 5.022   | 4.528   | 5.029   |
| 10                         | QPSK   | 8.906  | 9.649   | 8.932  | 9.666   | 8.933   | 9.742   |
| 10                         | 16-QAM | 8.915  | 9.602   | 8.927  | 9.656   | 8.921   | 9.623   |
| 15                         | QPSK   | 13.392 | 14.56   | 13.447 | 14.76   | 13.438  | 14.74   |
| 15                         | 16-QAM | 13.427 | 14.63   | 13.462 | 14.73   | 13.412  | 14.64   |
| 20                         | QPSK   | 17.806 | 19.17   | 17.91  | 19.43   | 17.861  | 19.06   |
| 20                         | 16-QAM | 17.852 | 19.13   | 17.893 | 19.45   | 17.836  | 19.23   |

| LTE Band 5 Bandwidth [MHz] |        |        |         |        |         |         |         |
|----------------------------|--------|--------|---------|--------|---------|---------|---------|
| BW [MHz]                   | Mod    | Lowest |         | Middle |         | Highest |         |
|                            |        | 99% BW | 26dB BW | 99% BW | 26dB BW | 99% BW  | 26dB BW |
| 1.4                        | QPSK   | 1.0985 | 1.307   | 1.106  | 1.282   | 1.095   | 1.289   |
| 1.4                        | 16-QAM | 1.099  | 1.304   | 1.093  | 1.278   | 1.098   | 1.288   |
| 3                          | QPSK   | 2.683  | 2.919   | 2.688  | 2.924   | 2.6835  | 2.932   |
| 3                          | 16-QAM | 2.68   | 2.93    | 2.68   | 2.947   | 2.679   | 2.926   |
| 5                          | QPSK   | 4.505  | 5.01    | 4.496  | 4.991   | 4.52    | 5.007   |
| 5                          | 16-QAM | 4.506  | 5.001   | 4.518  | 5.016   | 4.516   | 5.023   |
| 10                         | QPSK   | 8.9337 | 9.653   | 8.926  | 9.643   | 8.928   | 9.713   |
| 10                         | 16-QAM | 8.9352 | 9.638   | 8.918  | 9.628   | 8.919   | 9.663   |



| LTE Band 12 Bandwidth [MHz] |        |        |         |        |         |         |         |
|-----------------------------|--------|--------|---------|--------|---------|---------|---------|
| BW [MHz]                    | Mod    | Lowest |         | Middle |         | Highest |         |
|                             |        | 99% BW | 26dB BW | 99% BW | 26dB BW | 99% BW  | 26dB BW |
| 1.4                         | QPSK   | 1.0985 | 1.307   | 1.106  | 1.282   | 1.095   | 1.289   |
| 1.4                         | 16-QAM | 1.099  | 1.304   | 1.093  | 1.278   | 1.098   | 1.288   |
| 3                           | QPSK   | 2.683  | 2.919   | 2.688  | 2.924   | 2.6835  | 2.932   |
| 3                           | 16-QAM | 2.68   | 2.93    | 2.68   | 2.947   | 2.679   | 2.926   |
| 5                           | QPSK   | 4.505  | 5.01    | 4.496  | 4.991   | 4.52    | 5.007   |
| 5                           | 16-QAM | 4.506  | 5.001   | 4.518  | 5.016   | 4.516   | 5.023   |
| 10                          | QPSK   | 8.9337 | 9.653   | 8.926  | 9.643   | 8.928   | 9.713   |
| 10                          | 16-QAM | 8.9352 | 9.638   | 8.918  | 9.628   | 8.919   | 9.663   |

| LTE Band 13 Bandwidth [MHz] |        |        |         |        |         |         |         |
|-----------------------------|--------|--------|---------|--------|---------|---------|---------|
| BW [MHz]                    | Mod    | Lowest |         | Middle |         | Highest |         |
|                             |        | 99% BW | 26dB BW | 99% BW | 26dB BW | 99% BW  | 26dB BW |
| 5                           | QPSK   | 4.495  | 4.981   | 4.497  | 5.008   | 4.53    | 5.054   |
| 5                           | 16-QAM | 4.488  | 4.962   | 4.525  | 5.006   | 4.537   | 5.041   |
| 10                          | QPSK   |        |         | 8.931  | 9.688   |         |         |
| 10                          | 16-QAM |        |         | 8.928  | 9.639   |         |         |

| LTE Band 17 Bandwidth [MHz] |        |        |         |        |         |         |         |
|-----------------------------|--------|--------|---------|--------|---------|---------|---------|
| BW [MHz]                    | Mod    | Lowest |         | Middle |         | Highest |         |
|                             |        | 99% BW | 26dB BW | 99% BW | 26dB BW | 99% BW  | 26dB BW |
| 5                           | QPSK   | 4.497  | 4.977   | 4.513  | 5       | 4.524   | 4.998   |
| 5                           | 16-QAM | 4.485  | 4.98    | 4.531  | 5.003   | 4.528   | 5.059   |
| 10                          | QPSK   | 8.937  | 9.648   | 8.954  | 9.814   | 8.985   | 9.741   |
| 10                          | 16-QAM | 8.931  | 9.63    | 8.96   | 9.722   | 8.961   | 9.786   |

| LTE Band 25 Bandwidth [MHz] |        |        |         |        |         |         |         |
|-----------------------------|--------|--------|---------|--------|---------|---------|---------|
| BW [MHz]                    | Mod    | Lowest |         | Middle |         | Highest |         |
|                             |        | 99% BW | 26dB BW | 99% BW | 26dB BW | 99% BW  | 26dB BW |
| 1.4                         | QPSK   | 1.0986 | 1.311   | 1.105  | 1.283   | 1.096   | 1.281   |
| 1.4                         | 16-QAM | 1.09   | 1.273   | 1.096  | 1.3     | 1.1006  | 1.3     |
| 3                           | QPSK   | 2.689  | 2.926   | 2.685  | 2.934   | 2.684   | 2.93    |
| 3                           | 16-QAM | 2.682  | 2.946   | 2.6818 | 2.927   | 2.681   | 2.933   |
| 5                           | QPSK   | 4.51   | 5.032   | 4.499  | 4.981   | 4.5183  | 5.032   |
| 5                           | 16-QAM | 4.527  | 5.021   | 4.521  | 5.036   | 4.507   | 5.006   |
| 10                          | QPSK   | 8.914  | 9.629   | 8.927  | 9.668   | 8.92    | 9.672   |
| 10                          | 16-QAM | 8.926  | 9.665   | 8.9291 | 9.703   | 8.908   | 9.633   |
| 15                          | QPSK   | 13.398 | 14.64   | 13.446 | 14.78   | 13.403  | 14.57   |
| 15                          | 16-QAM | 13.423 | 14.65   | 13.444 | 14.62   | 13.419  | 14.59   |
| 20                          | QPSK   | 17.826 | 19.16   | 17.887 | 19.5    | 17.876  | 19.22   |
| 20                          | 16-QAM | 7.821  | 19.23   | 17.873 | 19.27   | 17.858  | 19.28   |



| LTE Band 26 Bandwidth [MHz] |        |        |         |         |         |
|-----------------------------|--------|--------|---------|---------|---------|
| BW [MHz]                    | Mod    | Middle |         | Highest |         |
|                             |        | 99% BW | 26dB BW | 99% BW  | 26dB BW |
| 1.4                         | QPSK   | 1.104  | 1.28    | 1.095   | 1.29    |
| 1.4                         | 16-QAM | 1.097  | 1.29    | 1.1     | 1.296   |
| 3                           | QPSK   | 2.684  | 2.928   | 2.6831  | 2.912   |
| 3                           | 16-QAM | 2.6797 | 2.93    | 2.6814  | 2.934   |
| 5                           | QPSK   | 4.499  | 4.987   | 4.52    | 5.009   |
| 5                           | 16-QAM | 4.524  | 5.036   | 4.5     | 4.951   |
| 10                          | QPSK   | 8.936  | 9.652   | 8.929   | 9.757   |
| 10                          | 16-QAM | 8.938  | 9.697   | 8.917   | 9.629   |
| 15                          | QPSK   | 13.463 | 14.76   | 13.429  | 14.7    |
| 15                          | 16-QAM | 13.471 | 14.7    | 13.434  | 14.6    |

| LTE Band 26(Part 90) Bandwidth [MHz] |        |        |         |
|--------------------------------------|--------|--------|---------|
| BW [MHz]                             | Mod    | Middle |         |
|                                      |        | 99% BW | 26dB BW |
| 1.4                                  | QPSK   | 1.0987 | 1.315   |
| 1.4                                  | 16-QAM | 1.099  | 1.305   |
| 3                                    | QPSK   | 2.6835 | 2.936   |
| 3                                    | 16-QAM | 2.68   | 2.927   |
| 5                                    | QPSK   | 4.492  | 4.967   |
| 5                                    | 16-QAM | 4.522  | 5.038   |
| 10                                   | QPSK   | 8.8933 | 9.58    |
| 10                                   | 16-QAM | 8.9055 | 9.636   |

| LTE Band 41 Bandwidth [MHz] |        |        |         |        |         |         |         |
|-----------------------------|--------|--------|---------|--------|---------|---------|---------|
| BW [MHz]                    | Mod    | Lowest |         | Middle |         | Highest |         |
|                             |        | 99% BW | 26dB BW | 99% BW | 26dB BW | 99% BW  | 26dB BW |
| 5                           | QPSK   | 4.507  | 4.932   | 4.491  | 4.941   | 4.491   | 4.991   |
| 5                           | 16-QAM | 4.4962 | 5.078   | 4.504  | 5.076   | 4.499   | 4.965   |
| 10                          | QPSK   | 8.921  | 9.735   | 8.928  | 9.61    | 8.932   | 9.718   |
| 10                          | 16-QAM | 8.917  | 9.485   | 19.37  | 9.665   | 8.925   | 9.535   |
| 15                          | QPSK   | 13.477 | 14.89   | 13.437 | 14.64   | 13.415  | 14.97   |
| 15                          | 16-QAM | 13.451 | 14.68   | 13.471 | 15.6    | 13.47   | 14.9    |
| 20                          | QPSK   | 17.835 | 19.15   | 17.874 | 19.37   | 17.874  | 19.09   |
| 20                          | 16-QAM | 17.852 | 19.23   | 17.842 | 19.77   | 17.863  | 19.42   |

Note: Test chart See Appendix A





## 7. CONDUCTED BAND EDGE

### 7.1 DESCRIPTION OF CONDUCTED BAND EDGE MEASUREMENT

#### 7.1.1 MEASUREMENT METHOD

##### 1. §22.917(a)

For operations in the 824 – 849 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power  $P(\text{Watts})$  in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

##### 2. §24.238 (a)

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power  $P(\text{Watts})$  in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed

##### 3. §27.53 (h)

For operations in the 1710 – 1755 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power  $P(\text{Watts})$  in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

##### 4. §27.53(m)(4)

For operations in the 2500 MHz ~ 2570 MHz band this section, the attenuation factor shall be not less than  $40 + 10 \log (P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log (P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log (P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that  $43 + 10 \log (P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log (P)$  dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

##### 5. §27.53 (g)

For operations in the 698 -746 MHz band, the FCC limit is  $43 + 10\log_{10}(P[\text{Watts}])$  dB below the transmitter power  $P(\text{Watts})$  in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

##### 6. §90.691

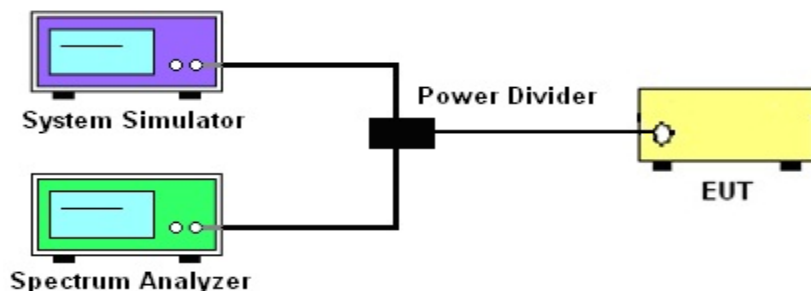
Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power ( $P$ ) in watts by at least  $116 \log_{10}(f/6.1)$  decibels or  $50 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where  $f$  is the frequency removed from the center of the outer channel in the block in kilohertz and where  $f$  is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the

power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10\log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

### 7.1.2 TEST SETUP



### 7.1.3 TEST PROCEDURES

1. The testing FCC KDB 971168 D01 v03r01 Section 6.0. and ANSI C63.26 2015 Section 5.7.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured. Set RBW  $\geq 1\%$  EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Set spectrum analyzer with RMS/AVG detector.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)  
 $= P(W) - [43 + 10\log(P)]$  (dB)  
 $= [30 + 10\log(P)]$  (dBm) -  $[43 + 10\log(P)]$  (dB)  
 $= -13$  dBm.

Band 7:

$$\begin{aligned}
 &= P(W) - [55 + 10\log(P)] \text{ (dB)} \\
 &= [30 + 10\log(P)] \text{ (dBm)} - [55 + 10\log(P)] \text{ (dB)} \\
 &= -25 \text{ dBm.}
 \end{aligned}$$

|             | LTE    |        |        |        |         |         |
|-------------|--------|--------|--------|--------|---------|---------|
| LTE BW      | 1.4M   | 3M     | 5M     | 10M    | 15M     | 20M     |
| Span        | 12MHz  | 13MHz  | 15MHz  | 20MHz  | 25MHz   | 30MHz   |
| RBW         | 30kHz  | 30kHz  | 100kHz | 100kHz | 300kHz  | 300kHz  |
| VBW         | 100kHz | 100kHz | 300kHz | 300kHz | 1000kHz | 1000kHz |
| Detector    | RMS    | RMS    | RMS    | RMS    | RMS     | RMS     |
| Trace       | Max    | Max    | Max    | Max    | Max     | Max     |
| Sweep Count | Auto   | Auto   | Auto   | Auto   | Auto    | Auto    |

### 7.1.4 MEASUREMENT RESULT

Note: Test chart See Appendix B

## 8. CONDUCTED SPURIOUS EMISSION

### 8.1 DESCRIPTION OF CONDUCTED SPURIOUS EMISSION MEASUREMENT

#### 8.1.1 MEASUREMENT METHOD

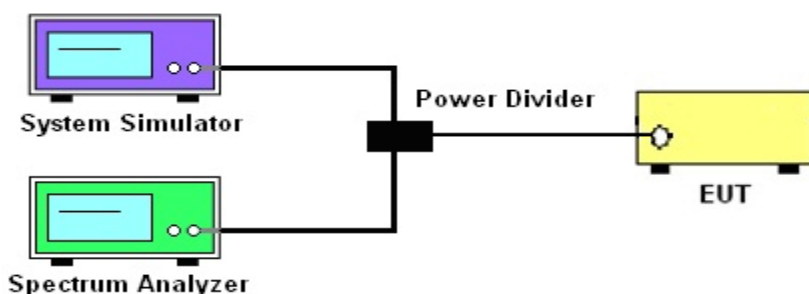
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least  $43 + 10 \log (P)$  dB.

For Band 7:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least  $55 + 10 \log (P)$  dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

#### 8.1.2 TEST SETUP



#### 8.1.3 TEST PROCEDURES

1. The testing FCC KDB 971168 D01 v03r01 Section 6.0. and ANSI C63.26 2015 Section 5.7.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement
4. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)  
 $= P(W) - [43 + 10\log(P)] \text{ (dB)} = [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$   
 $= -13\text{dBm}.$

For Band 7:  $P(W) - [43 + 10\log(P)] \text{ (dB)} = -25\text{dBm}$

|          | LTE     |         |         |         |         |         |
|----------|---------|---------|---------|---------|---------|---------|
| LTE BW   | 1.4M    | 3M      | 5M      | 10M     | 15M     | 20M     |
| Span     | Auto    | Auto    | Auto    | Auto    | Auto    | Auto    |
| RBW      | 1000kHz | 1000kHz | 1000kHz | 1000kHz | 1000kHz | 1000kHz |
| VBW      | 3000kHz | 3000kHz | 3000kHz | 3000kHz | 3000kHz | 3000kHz |
| Detector | PK      | PK      | PK      | PK      | PK      | PK      |
| Trace    | Max     | Max     | Max     | Max     | Max     | Max     |

#### 8.1.4 TEST RESULTS

Note: Test chart See Appendix C

## 9. RADIATED SPURIOUS EMISSION

### 9.1 DESCRIPTION OF RADIATED SPURIOUS EMISSION

#### 9.1.1 MEASUREMENT METHOD

The radiated spurious emission was measured by substitution method according to ANSI C63.26 2015. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $43 + 10 \log (P)$  dB. For Band 7 The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $55 + 10 \log (P)$  dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

#### 9.1.2 TEST SETUP

The procedure of radiated spurious emissions is as follows:

a) Pre-calibration With pre-calibration method, the Radiated Spurious Emissions(RSE) is calculated as,  $RSE = R_x (\text{dBuV}) + CL (\text{dB}) + SA (\text{dB}) + \text{Gain} (\text{dBi}) - 107 (\text{dBuV to dBm})$  The SA is calibrated using following setup.

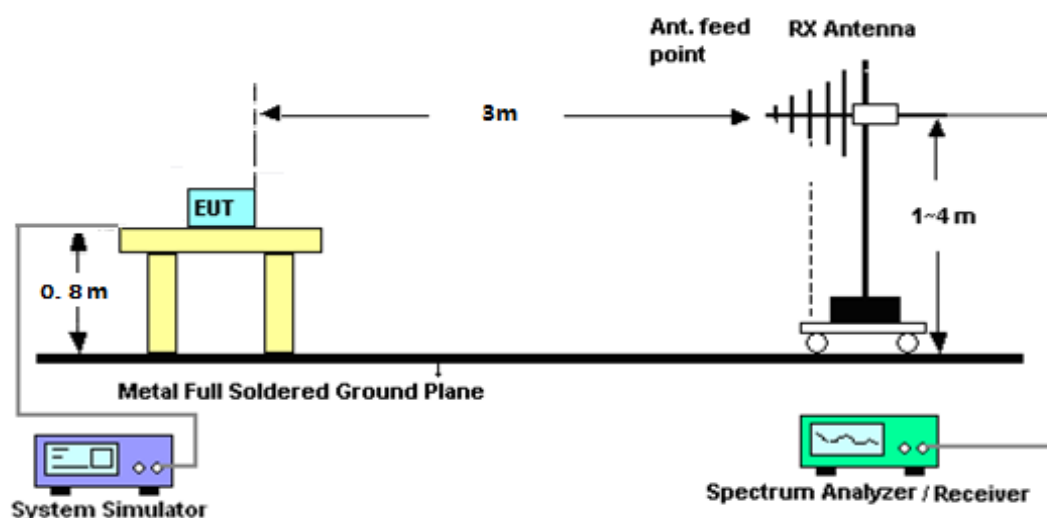
b) EUT was placed on 1.5 m non-conductive stand at a 3 m test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 m from the test item for emission measurements. The height of receiving antenna is 0.8m. The test setup refers to figure below. Detected emissions were maximized at each frequency by rotating the test item and adjusting the receiving antenna polarization. The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic measured with peak detector and 1MHz bandwidth.

Radiated emissions measurements were made only at the upper, middle, and lower carrier frequencies It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of any band into any of the other blocks.

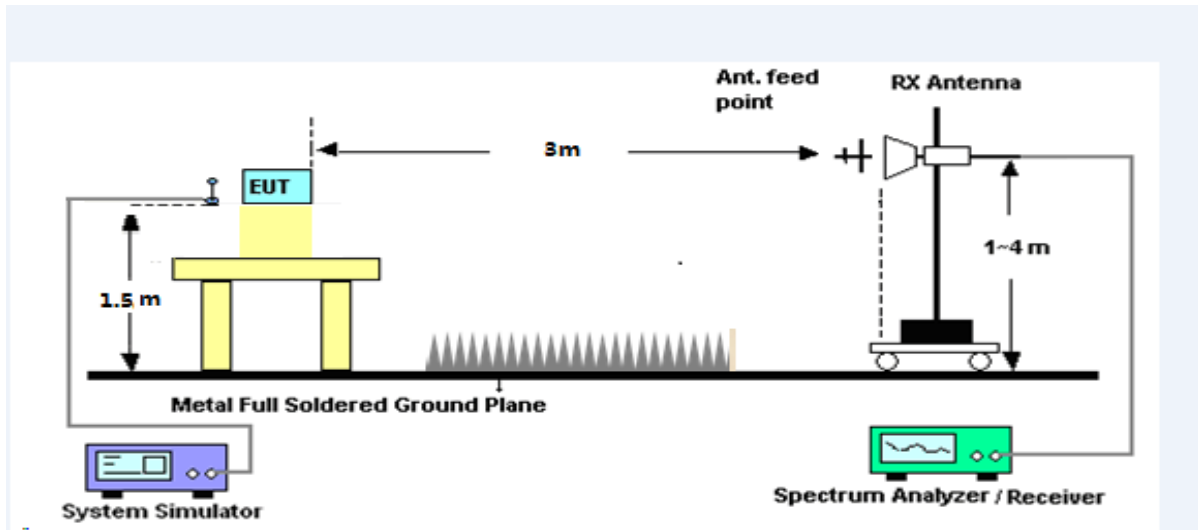
The substitution method is used. Substitution values at each frequency are measured before and saved to the test software. A "reference path loss" is established and the ARpl is the attenuation of "reference path loss", and including the gain of receive antenna, the gain of the preamplifier, the cable loss and the air loss. The measurement results are obtained as described below:

Power=PMea+ARpl

For radiated test from 30MHz to 1GHz



For radiated test from above 1GHz



### 9.1.3 TEST PROCEDURES

1. The testing FCC KDB 971168 D01 Section 5.8 and ANSI C63.26 2015 Section 5.5.
2. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)  
 $= P(W) - [43 + 10\log(P)]$  (dB)  
 $= [30 + 10\log(P)]$  (dBm) -  $[43 + 10\log(P)]$  (dB)  
 $= -13$  dBm

For Band 7:

The limit line is derived from  $55 + 10\log(P)$  dB below the transmitter power P(Watts)  
 $= [30 + 10\log(P)]$  (dBm) -  $[55 + 10\log(P)]$  (dB)  
 $= -25$  dBm

EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain

ERP (dBm) = EIRP - 2.15



## 9.1.4 TEST RESULTS

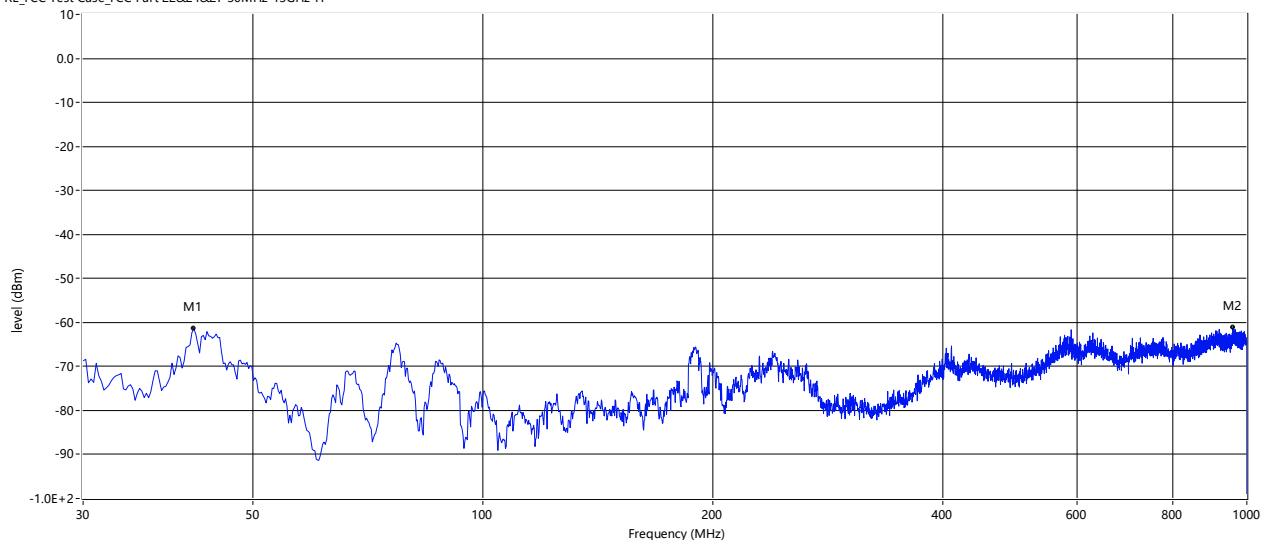
## 30MHz to 1GHz test data

Remark: The all modes had been test, but only worse test data was recorded in the test report.

Band 2(Worst case)

Horitonal

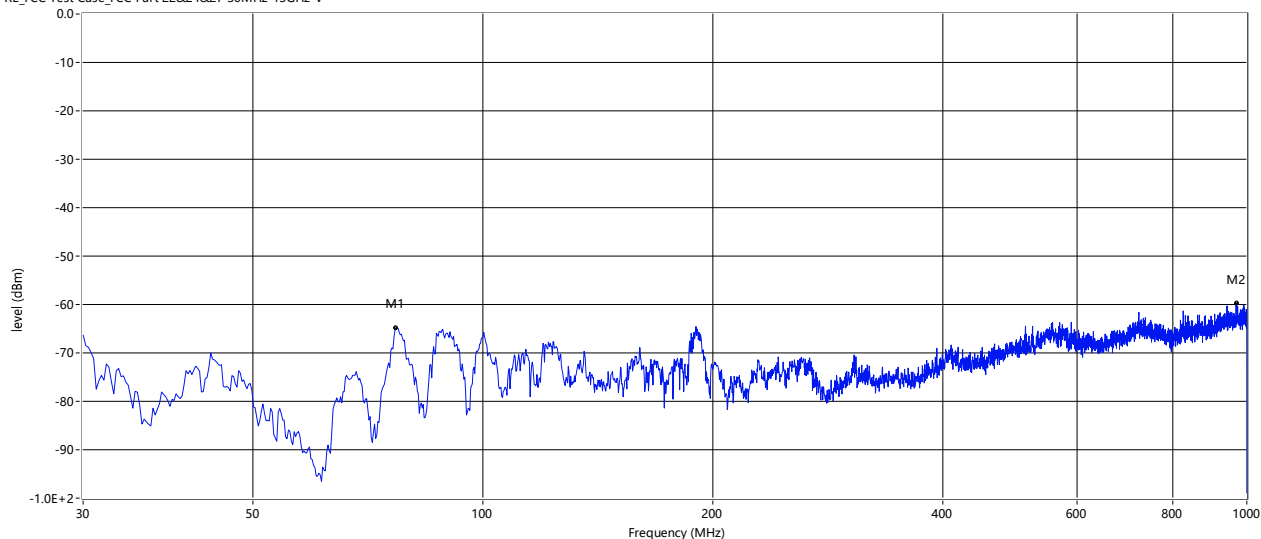
RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-H



| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT        | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|------------|----------|---------|
| 41.883          | -61.41       | -3.83       | -13.0          | -48.41          | 10.00     | Horizontal | Vertical | Pass    |
| 959.018         | -61.24       | 12.26       | -13.0          | -48.24          | 1.00      | Horizontal | Vertical | Pass    |

Vertical

RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-V



| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT      | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|----------|----------|---------|
| 77.045          | -64.84       | -14.24      | -13.0          | -51.84          | 6.00      | Vertical | Vertical | Pass    |
| 969.687         | -59.78       | 12.91       | -13.0          | -46.78          | 1.00      | Vertical | Vertical | Pass    |

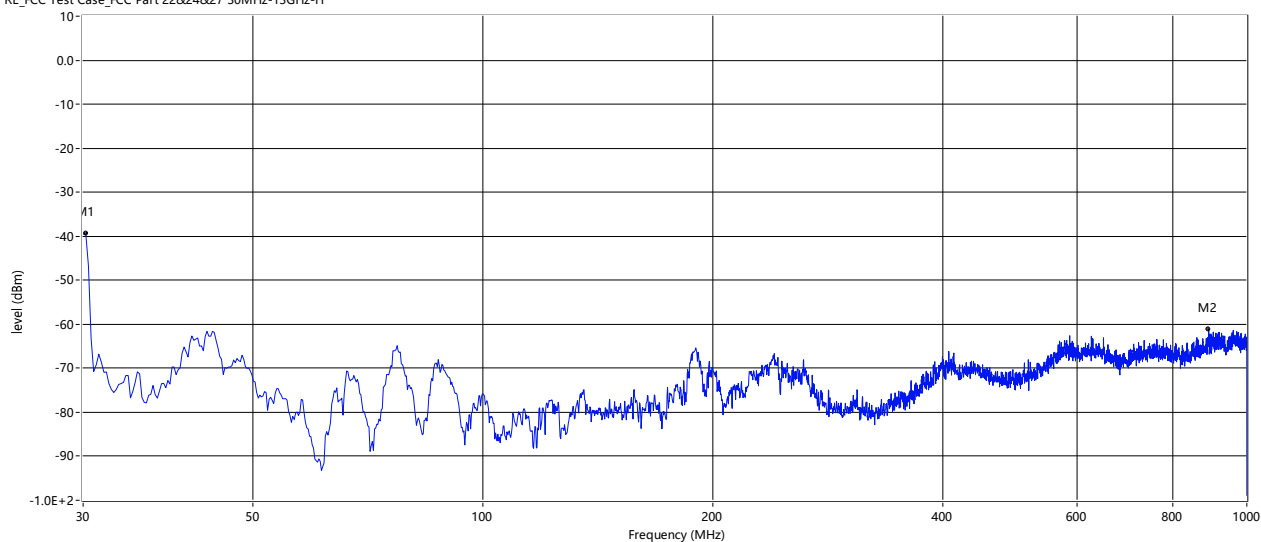




## Band 4(Worst case)

## Horizontal

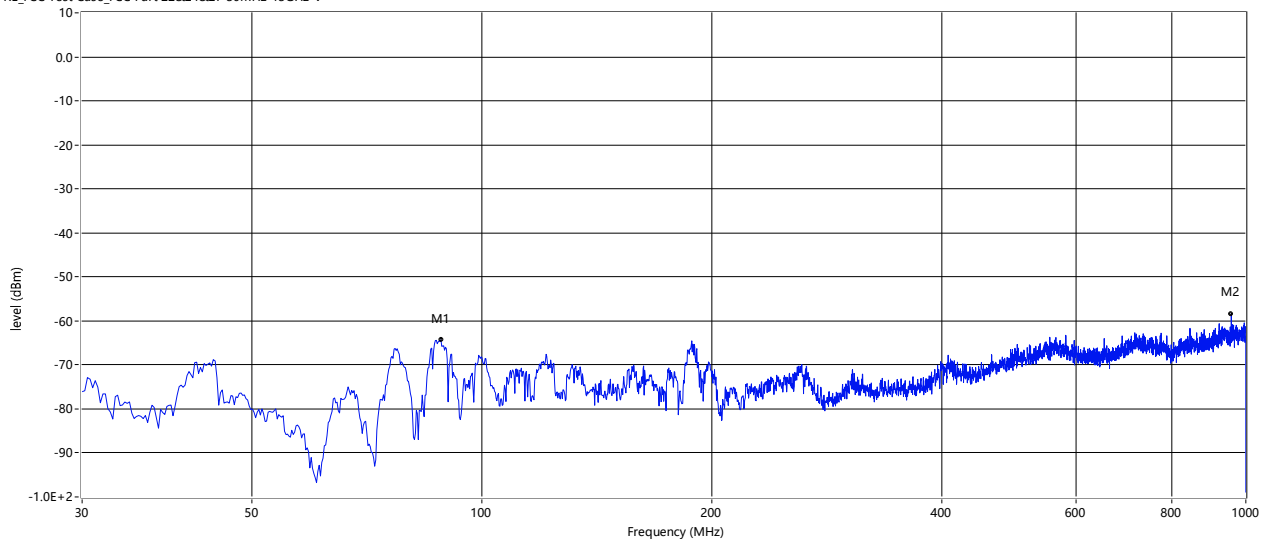
RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-H



| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT        | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|------------|----------|---------|
| 30.242          | -39.43       | -2.48       | -13.0          | -26.43          | 6.00      | Horizontal | Vertical | Pass    |
| 891.602         | -61.22       | 11.15       | -13.0          | -48.22          | 10.00     | Horizontal | Vertical | Pass    |

## Vertical

RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-V



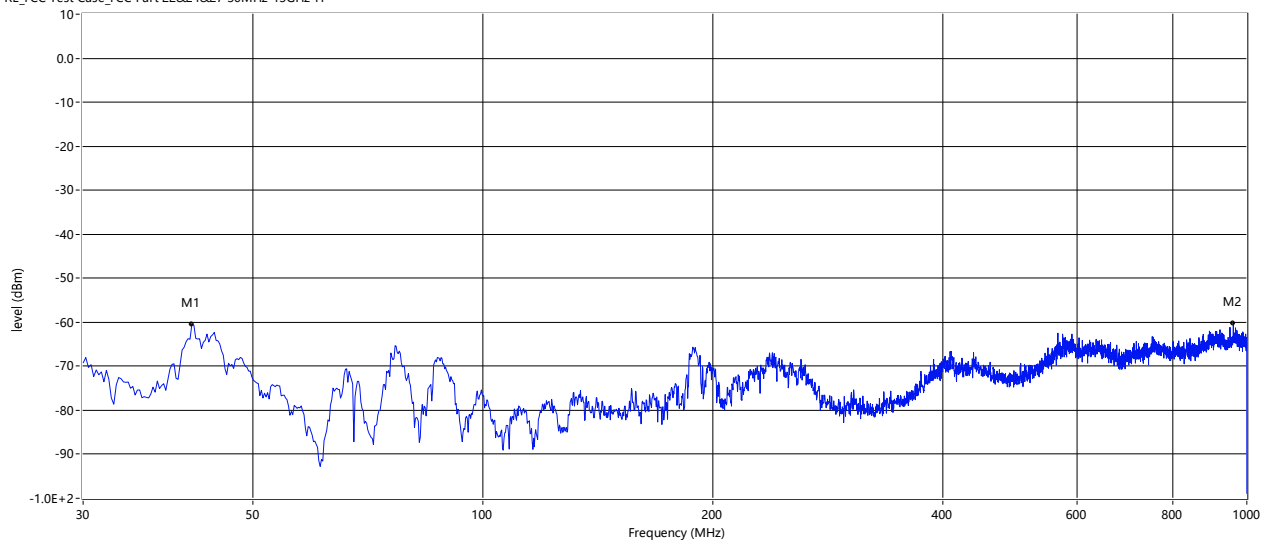
| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT      | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|----------|----------|---------|
| 88.442          | -64.31       | -8.62       | -13.0          | -51.31          | 1.00      | Vertical | Vertical | Pass    |
| 957.078         | -58.38       | 12.74       | -13.0          | -45.38          | 4.00      | Vertical | Vertical | Pass    |



## Band 5(Worst case)

## Horizontal

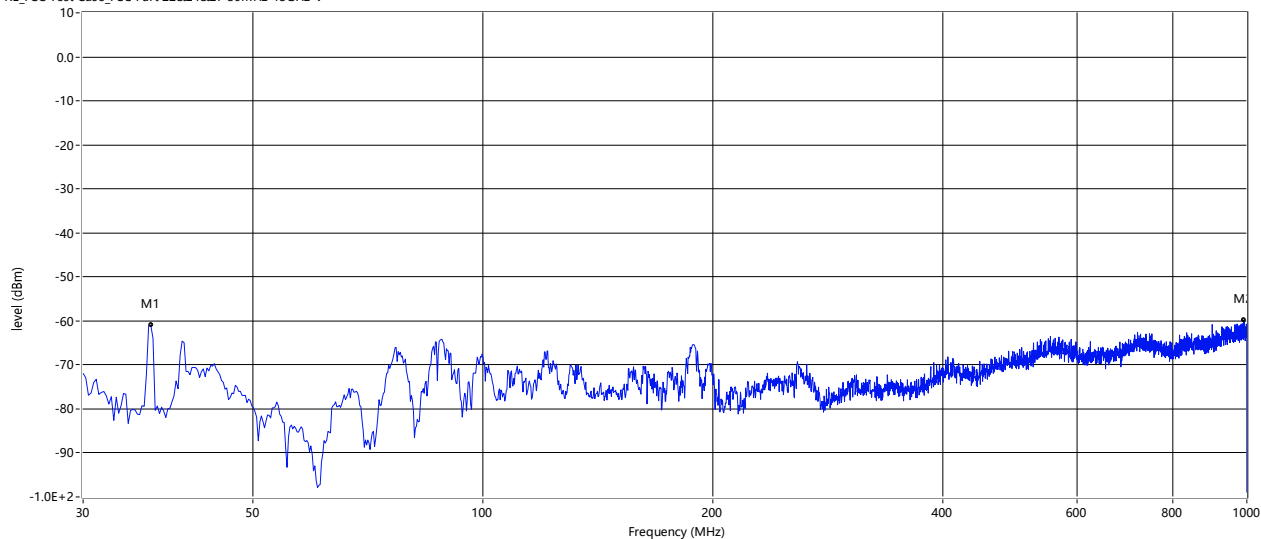
RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-H



| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT        | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|------------|----------|---------|
| 41.640          | -60.45       | -3.65       | -13.0          | -47.45          | 8.00      | Horizontal | Vertical | Pass    |
| 959.987         | -60.30       | 12.33       | -13.0          | -47.30          | 6.00      | Horizontal | Vertical | Pass    |

## Vertical

RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-V



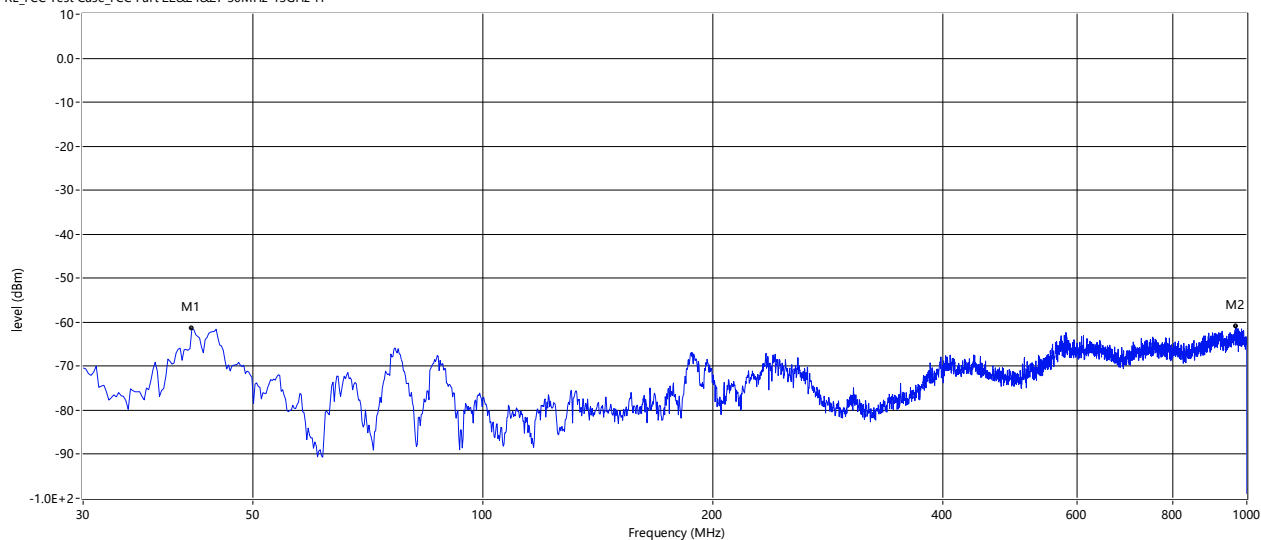
| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT      | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|----------|----------|---------|
| 36.790          | -61.04       | -8.63       | -13.0          | -48.04          | 4.00      | Vertical | Vertical | Pass    |
| 991.513         | -59.80       | 13.25       | -13.0          | -46.80          | 9.00      | Vertical | Vertical | Pass    |



## Band 12(Worst case)

## Horizontal

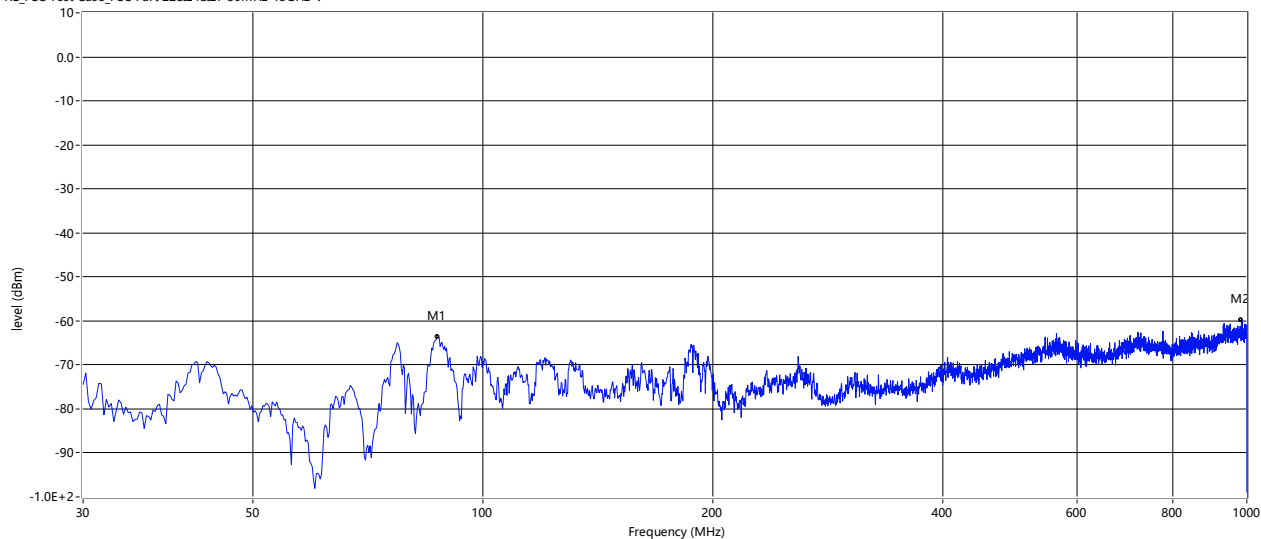
RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-H



| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT        | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|------------|----------|---------|
| 41.640          | -61.49       | -3.65       | -13.0          | -48.49          | 9.00      | Horizontal | Vertical | Pass    |
| 967.748         | -61.03       | 12.10       | -13.0          | -48.03          | 9.00      | Horizontal | Vertical | Pass    |

## Vertical

RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-V



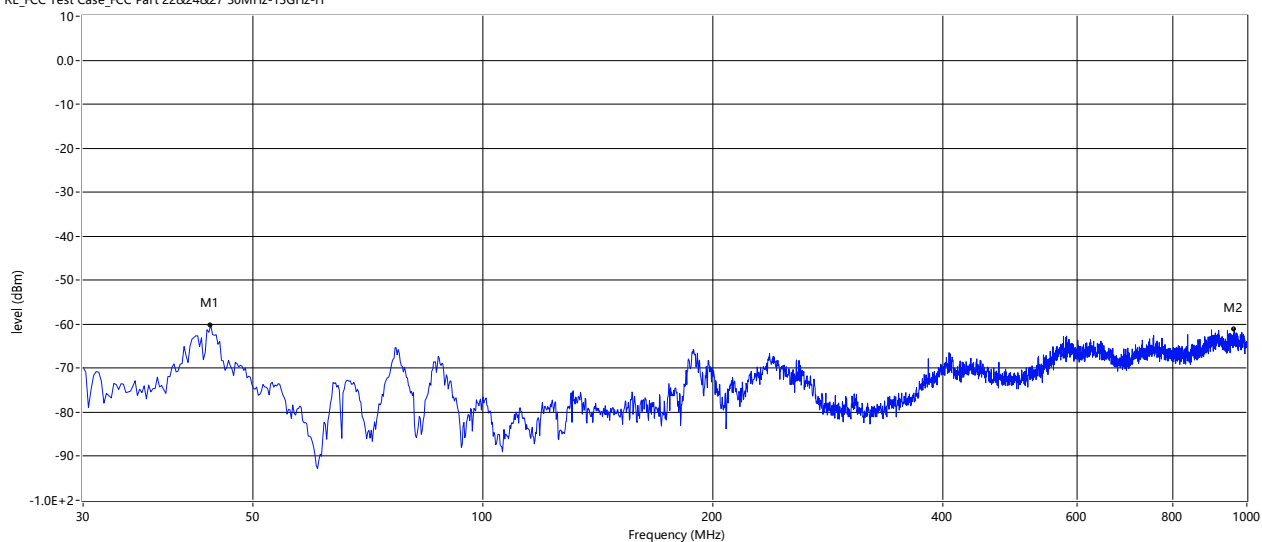
| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT      | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|----------|----------|---------|
| 87.230          | -63.73       | -9.22       | -13.0          | -50.73          | 1.00      | Vertical | Vertical | Pass    |
| 983.753         | -59.81       | 13.16       | -13.0          | -46.81          | 3.00      | Vertical | Vertical | Pass    |



## Band 13(Worst case)

## Horizontal

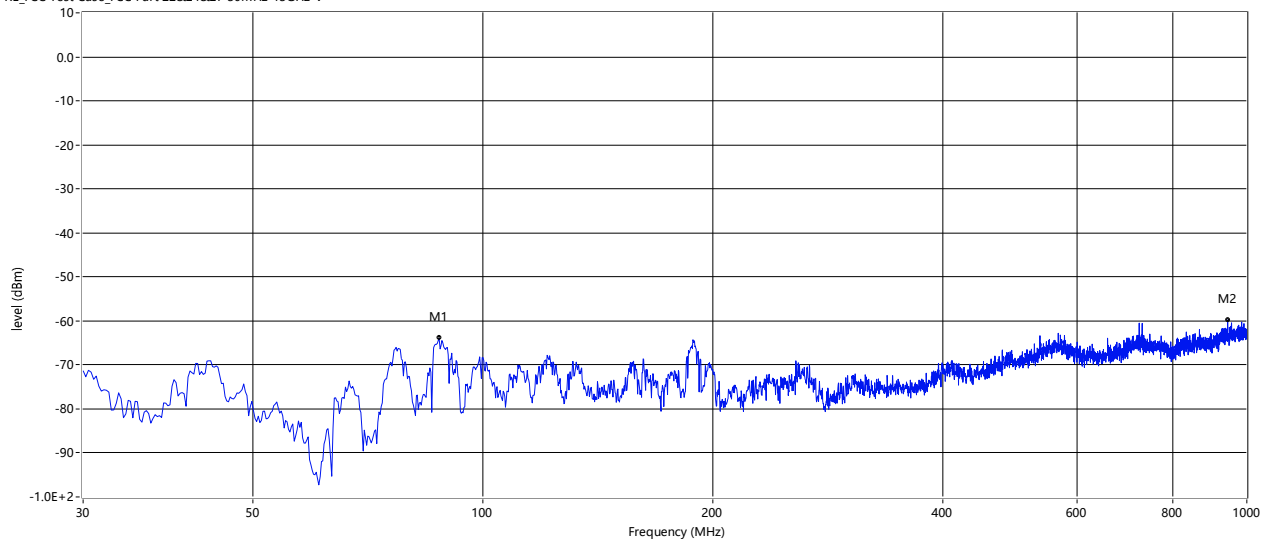
RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-H



| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT        | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|------------|----------|---------|
| 44.065          | -60.18       | -5.43       | -13.0          | -47.18          | 6.00      | Horizontal | Vertical | Pass    |
| 962.412         | -61.05       | 12.26       | -13.0          | -48.05          | 4.00      | Horizontal | Vertical | Pass    |

## Vertical

RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-V



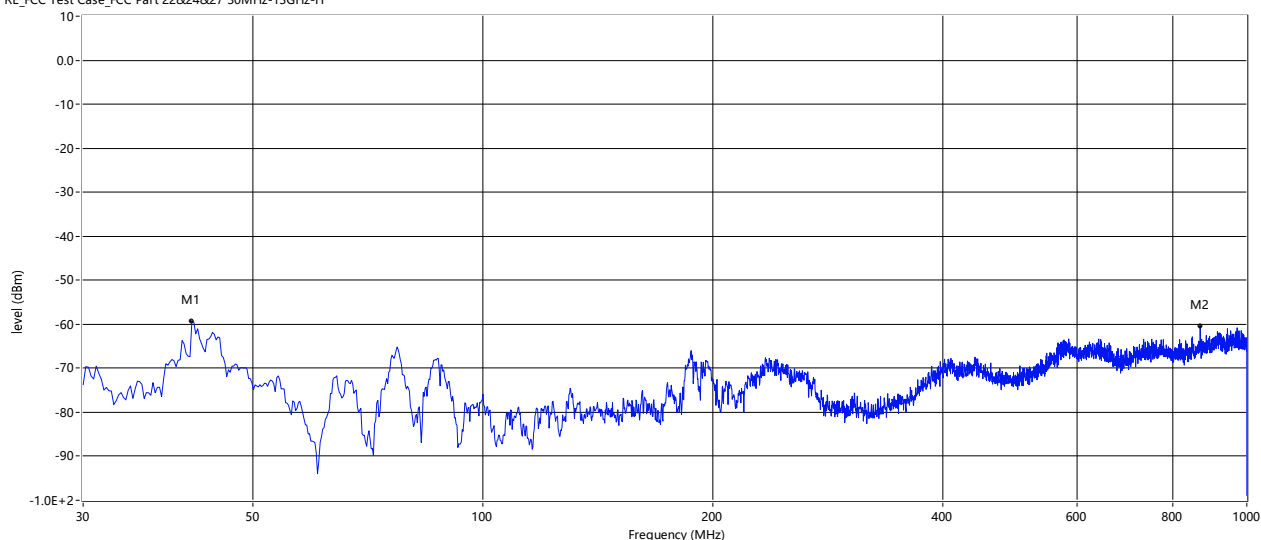
| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT      | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|----------|----------|---------|
| 87.715          | -63.97       | -8.98       | -13.0          | -50.97          | 5.00      | Vertical | Vertical | Pass    |
| 943.982         | -59.80       | 12.85       | -13.0          | -46.80          | 5.00      | Vertical | Vertical | Pass    |



## Band 17(Worst case)

## Horizontal

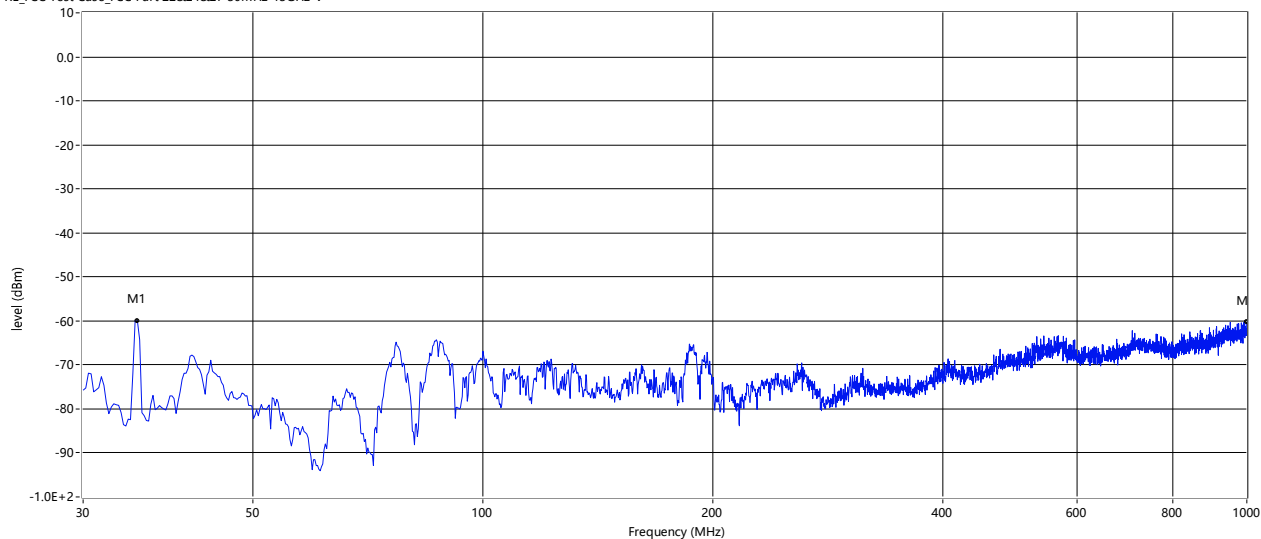
RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-H



| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT        | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|------------|----------|---------|
| 41.640          | -59.35       | -3.65       | -13.0          | -46.35          | 4.00      | Horizontal | Vertical | Pass    |
| 868.807         | -60.46       | 10.19       | -13.0          | -47.46          | 3.00      | Horizontal | Vertical | Pass    |

## Vertical

RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-V



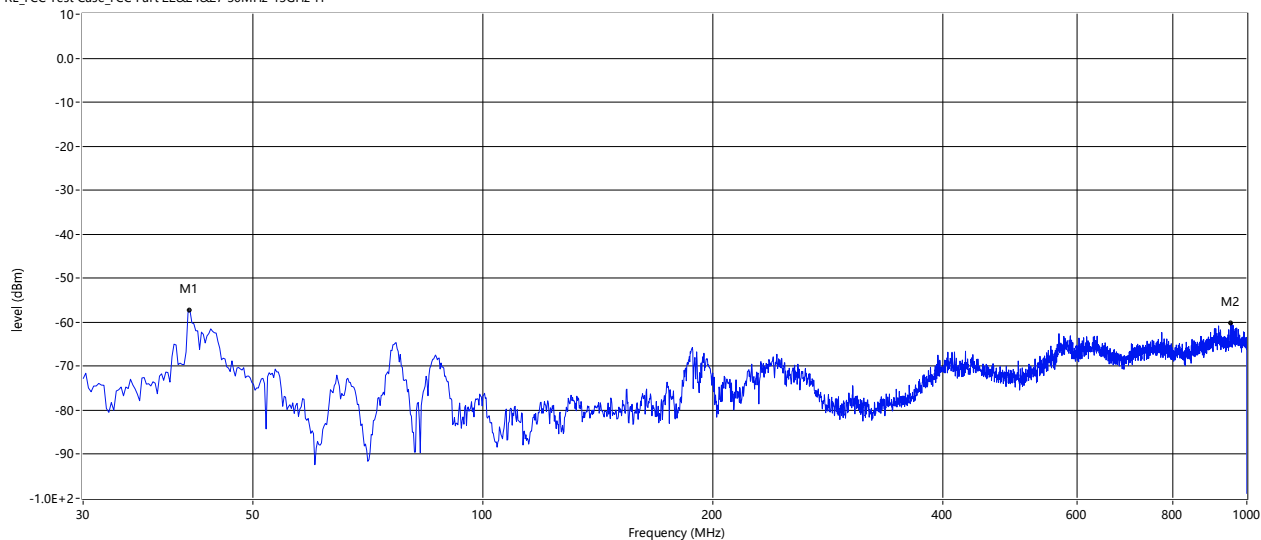
| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT      | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|----------|----------|---------|
| 35.335          | -59.96       | -7.69       | -13.0          | -46.96          | 1.00      | Vertical | Vertical | Pass    |
| 999.758         | -60.37       | 13.34       | -13.0          | -47.37          | 7.00      | Vertical | Vertical | Pass    |



## Band 25(Worst case)

## Horizontal

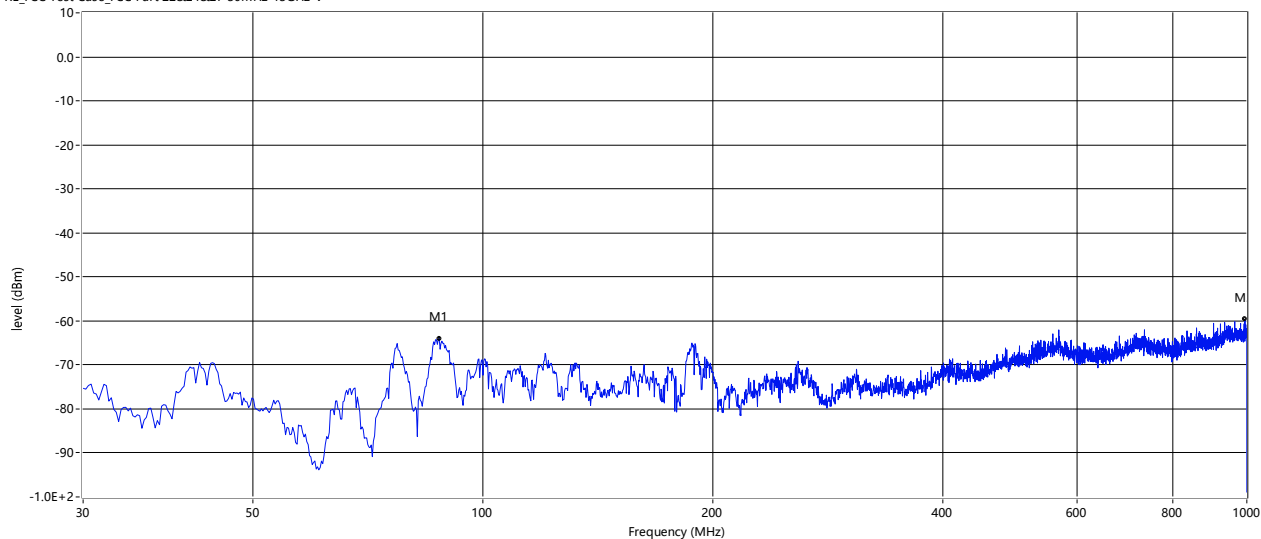
RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-H



| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT        | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|------------|----------|---------|
| 41.398          | -57.40       | -3.47       | -13.0          | -44.40          | 4.00      | Horizontal | Vertical | Pass    |
| 952.470         | -60.25       | 11.80       | -13.0          | -47.25          | 1.00      | Horizontal | Vertical | Pass    |

## Vertical

RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-V



| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT      | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|----------|----------|---------|
| 87.715          | -63.98       | -8.98       | -13.0          | -50.98          | 6.00      | Vertical | Vertical | Pass    |
| 994.180         | -59.69       | 13.28       | -13.0          | -46.69          | 1.00      | Vertical | Vertical | Pass    |

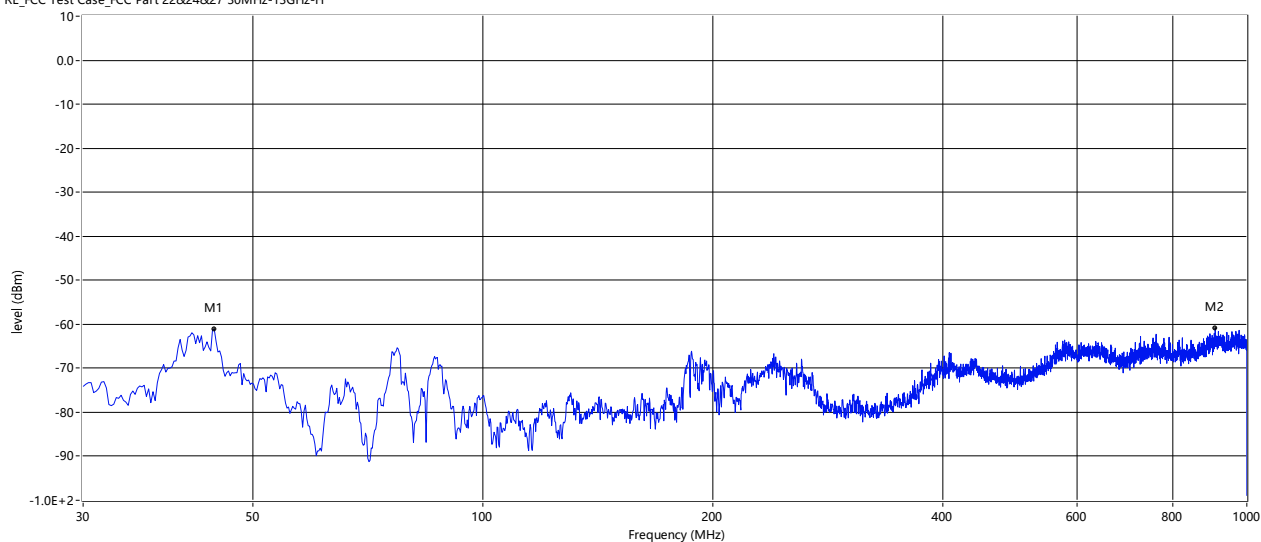




## Band 26(Worst case)

## Horizontal

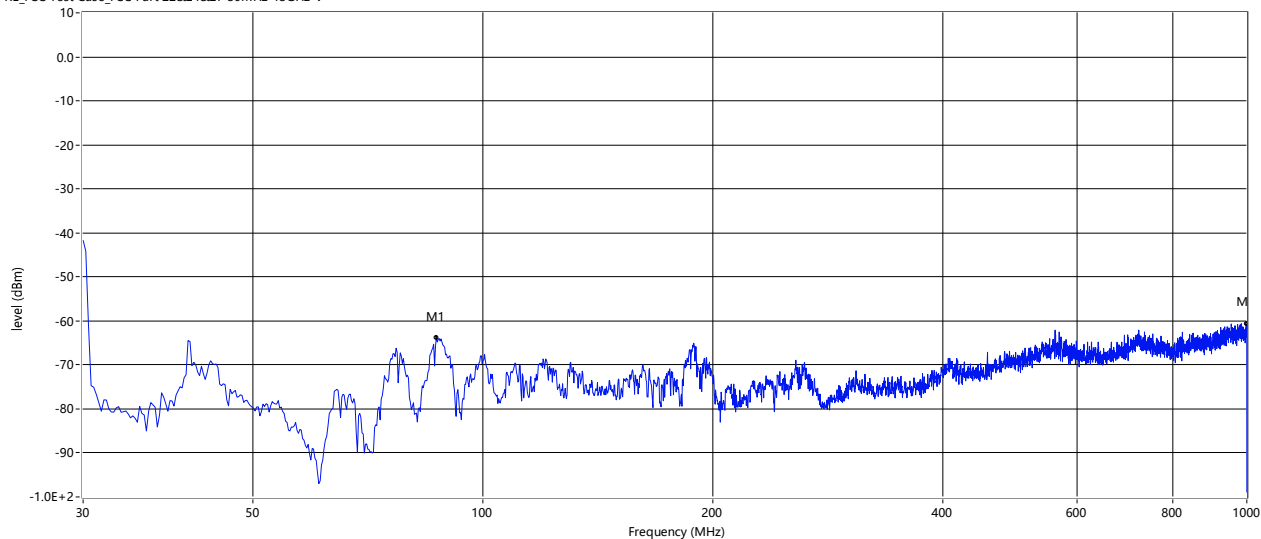
RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-H



| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT        | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|------------|----------|---------|
| 44.550          | -61.21       | -5.79       | -13.0          | -48.21          | 9.00      | Horizontal | Vertical | Pass    |
| 909.063         | -61.01       | 11.86       | -13.0          | -48.01          | 7.00      | Horizontal | Vertical | Pass    |

## Vertical

RE\_FCC Test Case\_FCC Part 22&amp;24&amp;27 30MHz-13GHz-V



| Frequency (MHz) | Result (dBm) | Factor (dB) | PK Limit (dBm) | Over Limit (dB) | Table (o) | ANT      | EUT      | Verdict |
|-----------------|--------------|-------------|----------------|-----------------|-----------|----------|----------|---------|
| 86.988          | -63.80       | -9.35       | -13.0          | -50.80          | 10.00     | Vertical | Vertical | Pass    |
| 999.515         | -60.67       | 13.33       | -13.0          | -47.67          | 9.00      | Vertical | Vertical | Pass    |