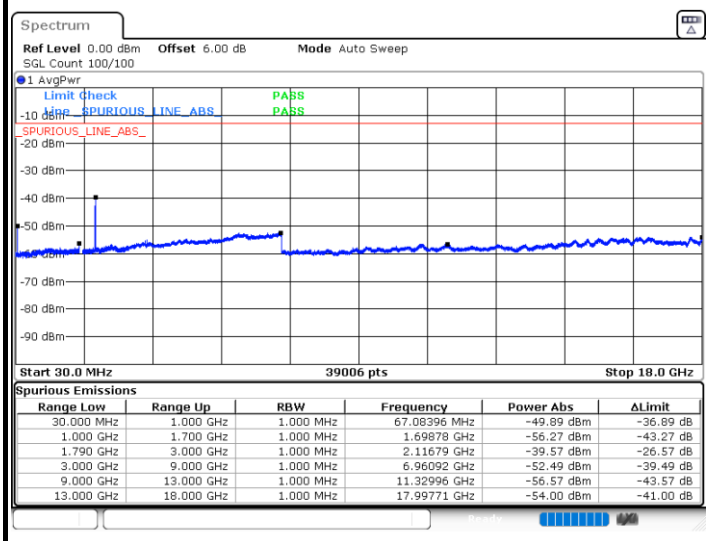
## LTE Band 66 / 10MHz

### Lowest Channel / QPSK




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 67.08396 MHz | -49.89 dBm | -36.89 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69878 GHz | -56.27 dBm | -43.27 dB |
| 1.790 GHz | 3.000 GHz | 1.000 MHz | 2.11679 GHz | -39.57 dBm | -26.57 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.96092 GHz | -52.49 dBm | -39.49 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 11.32996 GHz | -56.57 dBm | -43.57 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 17.99771 GHz | -54.00 dBm | -41.00 dB |

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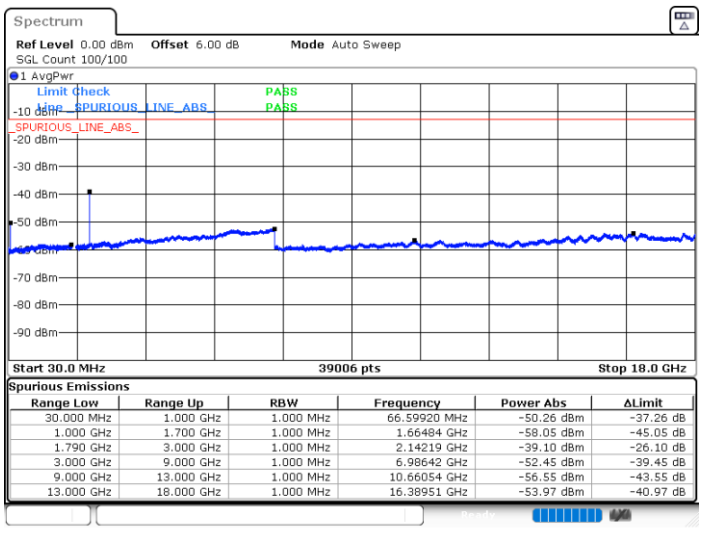
### Middle Channel / QPSK




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 66.59920 MHz | -50.26 dBm | -37.26 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.66484 GHz | -58.05 dBm | -45.05 dB |
| 1.790 GHz | 3.000 GHz | 1.000 MHz | 2.14219 GHz | -39.10 dBm | -26.10 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.98642 GHz | -52.45 dBm | -39.45 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.66054 GHz | -56.55 dBm | -43.55 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.38951 GHz | -53.97 dBm | -40.97 dB |

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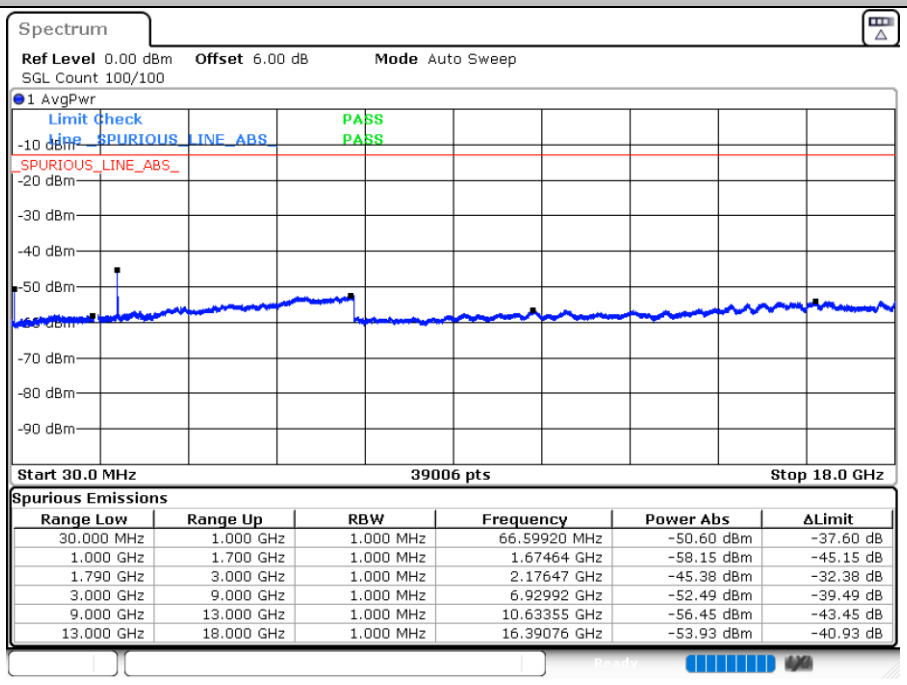
### Highest Channel / QPSK



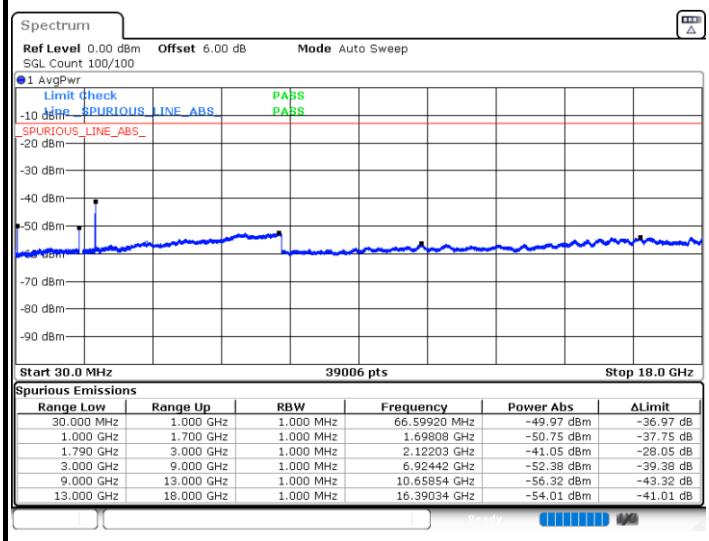

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 66.59920 MHz | -50.60 dBm | -37.60 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.67464 GHz | -58.15 dBm | -45.15 dB |
| 1.790 GHz | 3.000 GHz | 1.000 MHz | 2.17647 GHz | -45.38 dBm | -32.38 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.92992 GHz | -52.49 dBm | -39.49 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.63355 GHz | -56.45 dBm | -43.45 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.39076 GHz | -53.93 dBm | -40.93 dB |

Date: 29.MAR.2023 20:45:13

## LTE Band 66 / 15MHz

### Lowest Channel / QPSK




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 66.59920 MHz | -49.97 dBm | -36.97 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69808 GHz | -50.75 dBm | -37.75 dB |
| 1.790 GHz | 3.000 GHz | 1.000 MHz | 2.12203 GHz | -41.05 dBm | -28.05 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.92442 GHz | -52.38 dBm | -39.38 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.65854 GHz | -56.32 dBm | -43.32 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.39034 GHz | -54.01 dBm | -41.01 dB |

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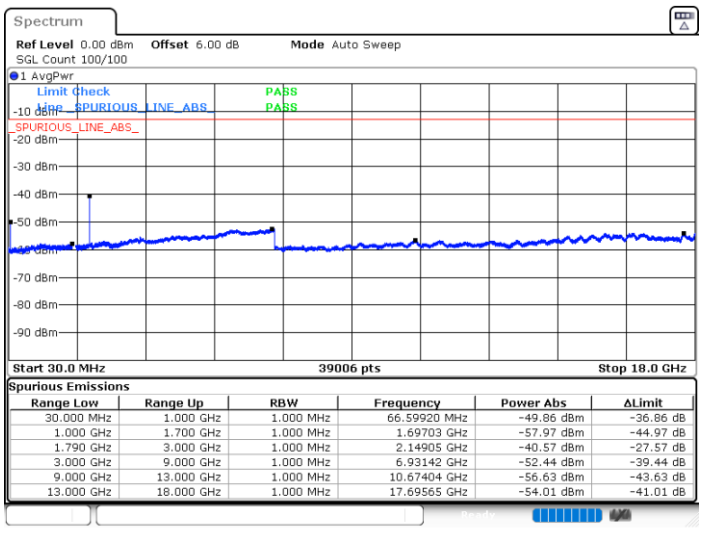
### Middle Channel / QPSK




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 66.59920 MHz | -49.86 dBm | -36.86 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69703 GHz | -57.97 dBm | -44.97 dB |
| 1.790 GHz | 3.000 GHz | 1.000 MHz | 2.14905 GHz | -40.57 dBm | -27.57 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.93142 GHz | -52.44 dBm | -39.44 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.67404 GHz | -56.63 dBm | -43.63 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 17.69565 GHz | -54.01 dBm | -41.01 dB |

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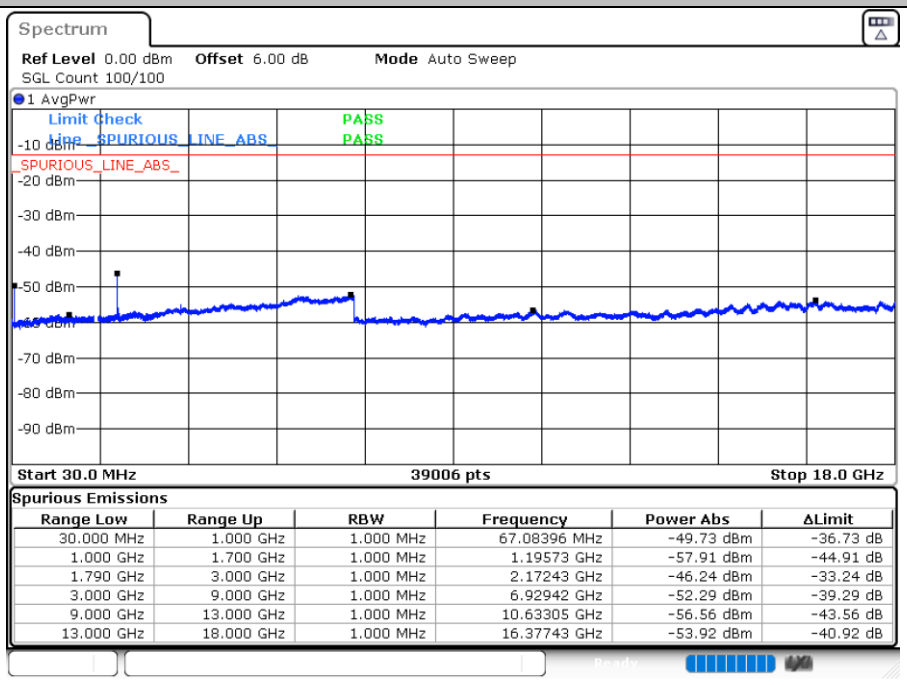
### Highest Channel / QPSK



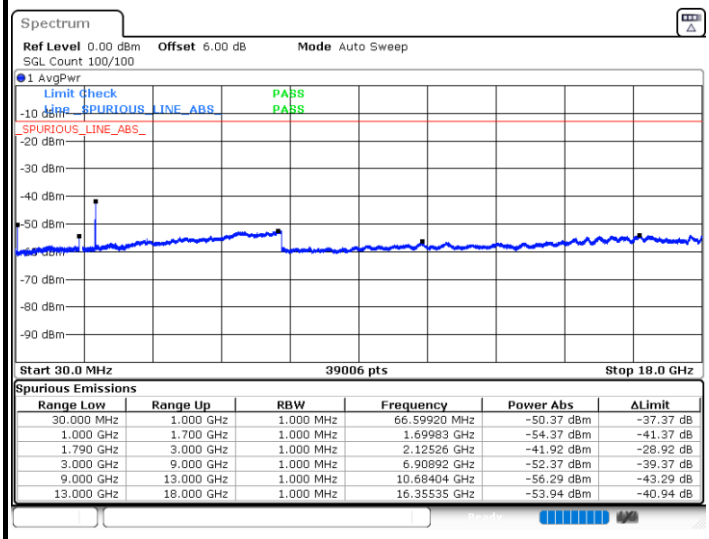

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 67.08396 MHz | -49.73 dBm | -36.73 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.19573 GHz | -57.91 dBm | -44.91 dB |
| 1.790 GHz | 3.000 GHz | 1.000 MHz | 2.17243 GHz | -46.24 dBm | -33.24 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.92942 GHz | -52.29 dBm | -39.29 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.63305 GHz | -56.56 dBm | -43.56 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.37743 GHz | -53.92 dBm | -40.92 dB |

Date: 29.MAR.2023 21:20:38

## LTE Band 66 / 20MHz

### Lowest Channel / QPSK




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 66.59920 MHz | -50.37 dBm | -37.37 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.69983 GHz | -54.37 dBm | -41.37 dB |
| 1.790 GHz | 3.000 GHz | 1.000 MHz | 2.12526 GHz | -41.92 dBm | -28.92 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.90892 GHz | -52.37 dBm | -39.37 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 10.68404 GHz | -56.29 dBm | -43.29 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.35535 GHz | -53.94 dBm | -40.94 dB |

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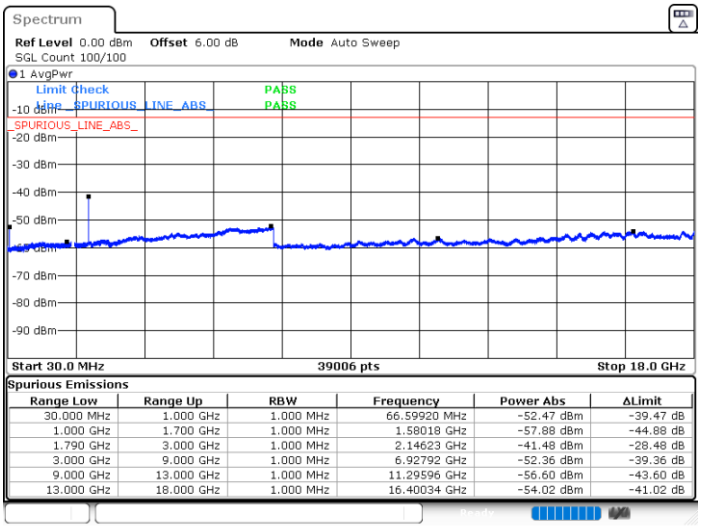
### Middle Channel / QPSK

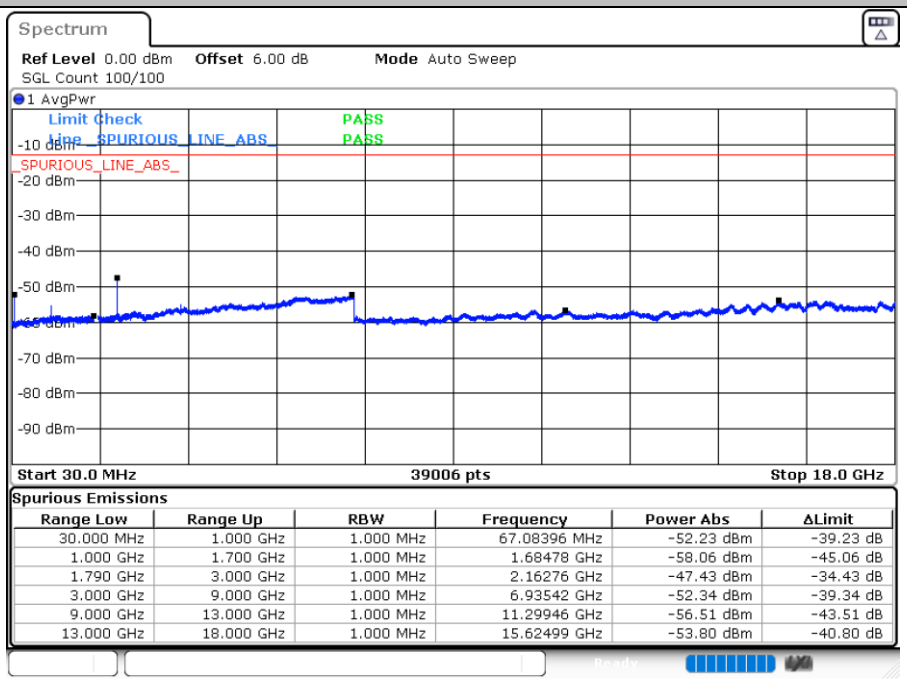



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 66.59920 MHz | -52.47 dBm | -39.47 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.58018 GHz | -57.88 dBm | -44.88 dB |
| 1.790 GHz | 3.000 GHz | 1.000 MHz | 2.14623 GHz | -41.48 dBm | -28.48 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.92792 GHz | -52.36 dBm | -39.36 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 11.29596 GHz | -56.60 dBm | -43.60 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 16.40034 GHz | -54.02 dBm | -41.02 dB |

Date: 29.MAR.2023 22:00:58

### Highest Channel / QPSK




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 1.000 GHz | 1.000 MHz | 67.08396 MHz | -52.23 dBm | -39.23 dB |
| 1.000 GHz | 1.700 GHz | 1.000 MHz | 1.68478 GHz | -58.06 dBm | -45.06 dB |
| 1.790 GHz | 3.000 GHz | 1.000 MHz | 2.16276 GHz | -47.43 dBm | -34.43 dB |
| 3.000 GHz | 9.000 GHz | 1.000 MHz | 6.93542 GHz | -52.34 dBm | -39.34 dB |
| 9.000 GHz | 13.000 GHz | 1.000 MHz | 11.29946 GHz | -56.51 dBm | -43.51 dB |
| 13.000 GHz | 18.000 GHz | 1.000 MHz | 15.62499 GHz | -53.80 dBm | -40.80 dB |

Date: 29.MAR.2023 22:04:20

# Frequency Stability

| Test Conditions | | LTE Band 66 (QPSK) / Middle Channel | Limit |
|---|---|---|---|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0022 | PASS |
| 40 | Normal Voltage | 0.0017 | |
| 30 | Normal Voltage | 0.0016 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0018 | |
| 0 | Normal Voltage | 0.0032 | |
| -10 | Normal Voltage | 0.0019 | |
| -20 | Normal Voltage | 0.0026 | |
| -30 | Normal Voltage | 0.0021 | |
| 20 | Maximum Voltage | 0.0017 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Battery End Point | 0.0015 | |

**Note:**

**1.** Normal Voltage =3.91 V.；Battery End Point (BEP) =3.4 V.；Maximum Voltage =4.5 V.

**2.** The frequency fundamental emissions stay within the authorized frequency block.

# Appendix B. Test Results of Radiated Test

## Radiated Spurious Emission

| Test Engineer : | Carl Ni | Temperature : | 23~25℃ |
|---|---|---|---|
| | | Relative Humidity : | 41~42% |

**RSE pre-scanned harmonic for different antennas, choose the worst antenna perform final test and record in the report.**

| LTE Band 66 / 20MHz / QPSK(Ant.0) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest | 3420 | -58.36 | -13 | -45.36 | -69.10 | 2.604 | 13.34 | H |
| | 5130 | -55.93 | -13 | -42.93 | -66.44 | 3.011 | 13.52 | H |
| | 6840 | -55.13 | -13 | -42.13 | -65.33 | 3.271 | 13.47 | H |
| | 3420 | -58.92 | -13 | -45.92 | -69.66 | 2.604 | 13.34 | V |
| | 5130 | -56.13 | -13 | -43.13 | -66.64 | 3.011 | 13.52 | V |
| | 6840 | -55.20 | -13 | -42.20 | -65.40 | 3.271 | 13.47 | V |
| Middle | 3465 | -58.62 | -13 | -45.62 | -69.36 | 2.604 | 13.34 | H |
| | 5205 | -53.98 | -13 | -40.98 | -64.49 | 3.011 | 13.52 | H |
| | 6945 | -54.76 | -13 | -41.76 | -64.96 | 3.271 | 13.47 | H |
| | 3465 | -58.61 | -13 | -45.61 | -69.35 | 2.604 | 13.34 | V |
| | 5205 | -54.79 | -13 | -41.79 | -65.30 | 3.011 | 13.52 | V |
| | 6945 | -55.06 | -13 | -42.06 | -65.26 | 3.271 | 13.47 | V |
| Highest | 3525 | -58.54 | -13 | -45.54 | -69.28 | 2.604 | 13.34 | H |
| | 5280 | -57.03 | -13 | -44.03 | -67.54 | 3.011 | 13.52 | H |
| | 7050 | -54.53 | -13 | -41.53 | -64.73 | 3.271 | 13.47 | H |
| | 3525 | -58.71 | -13 | -45.71 | -69.45 | 2.604 | 13.34 | V |
| | 5280 | -56.23 | -13 | -43.23 | -66.74 | 3.011 | 13.52 | V |
| | 7050 | -54.46 | -13 | -41.46 | -64.66 | 3.271 | 13.47 | V |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.