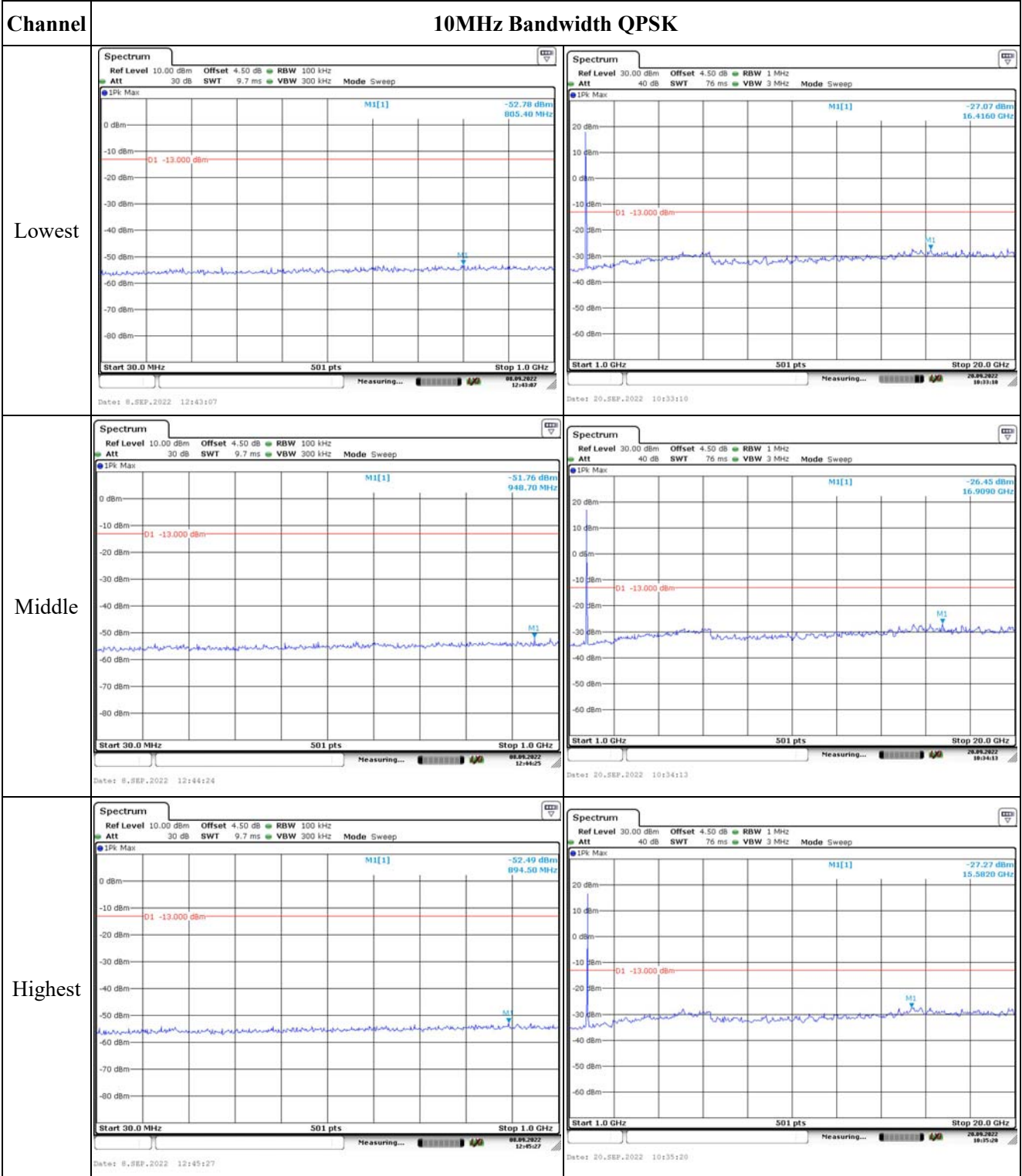


Spurious Emissions at Antenna Terminal

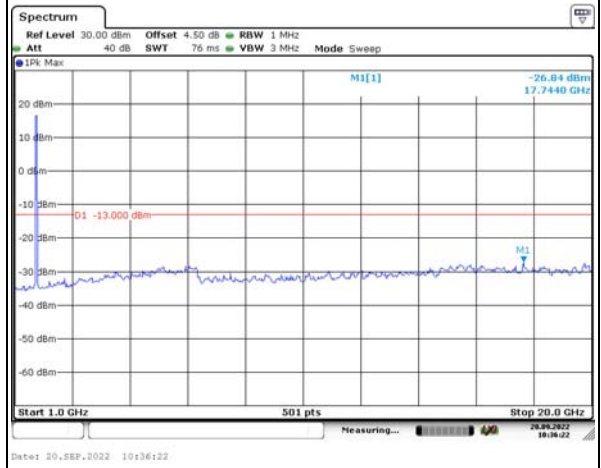
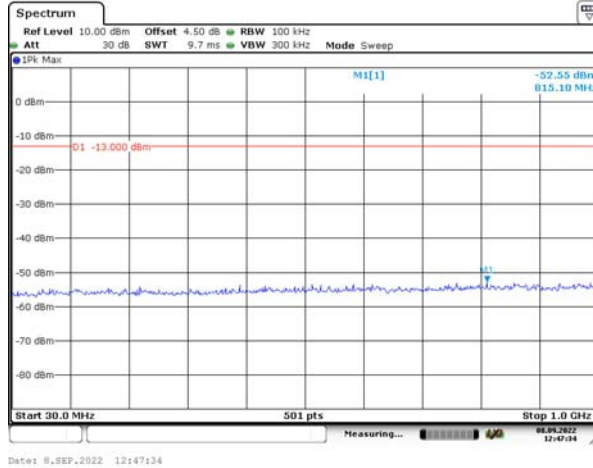


Spurious Emissions at Antenna Terminal

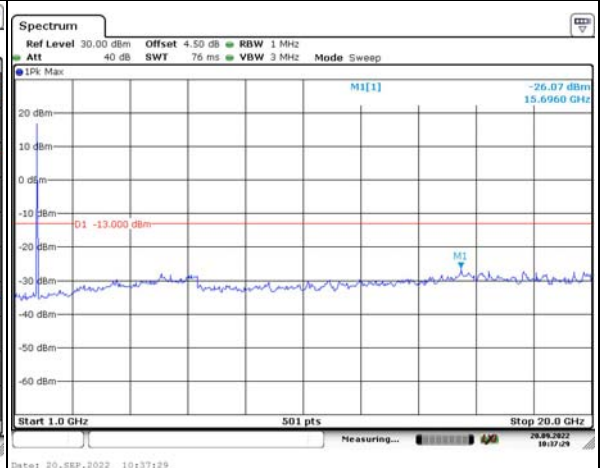
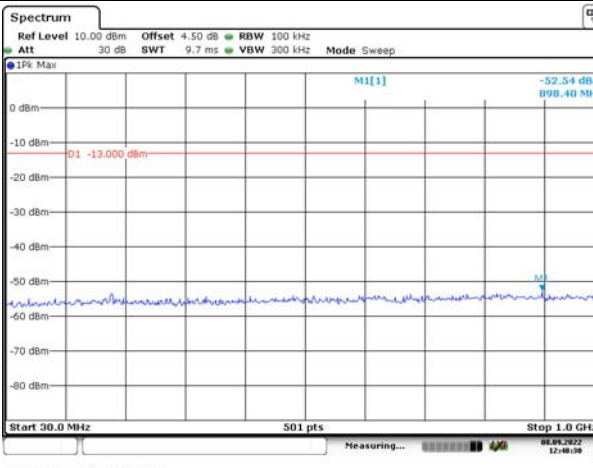
Channel

15MHz Bandwidth QPSK

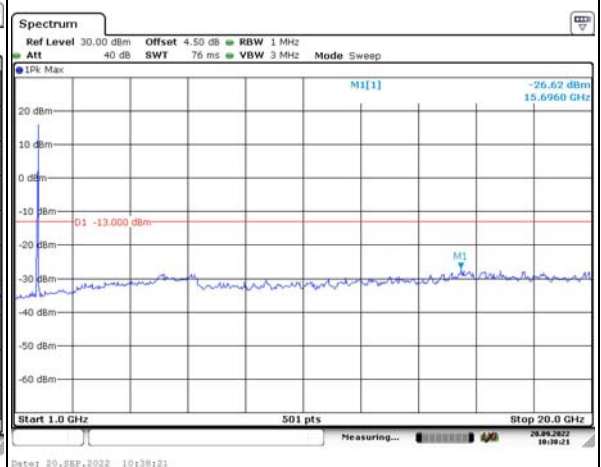
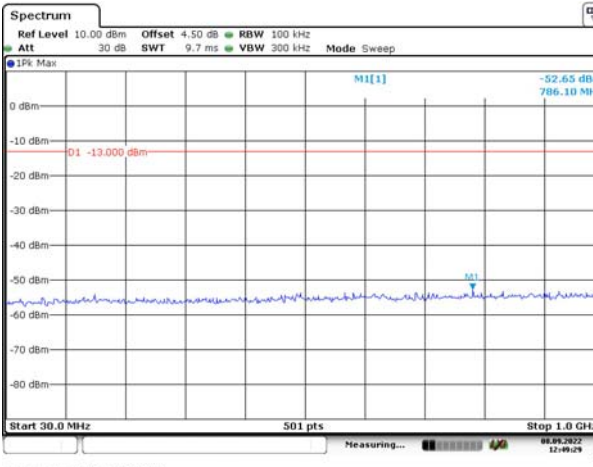
Lowest



Middle



Highest

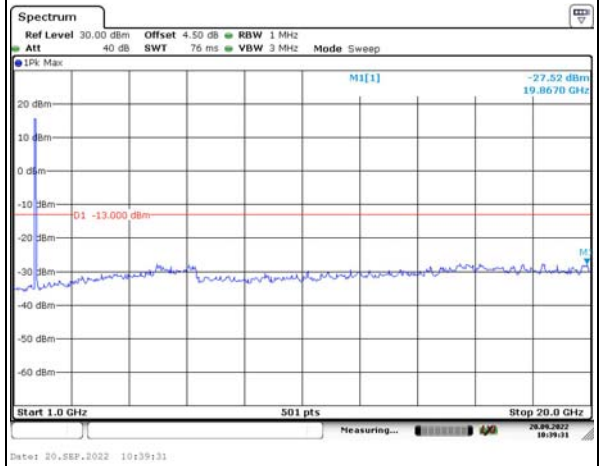
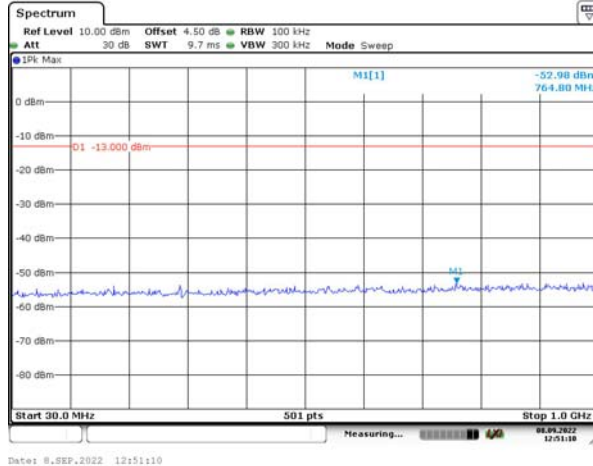


Spurious Emissions at Antenna Terminal

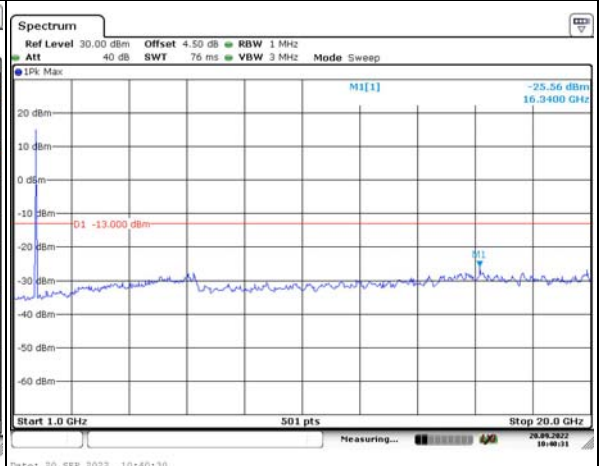
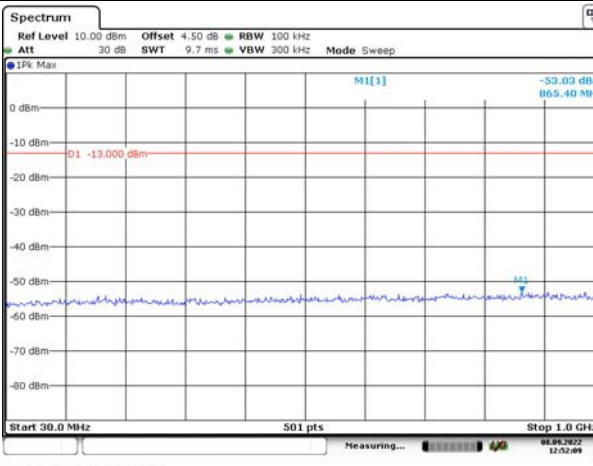
Channel

20MHz Bandwidth QPSK

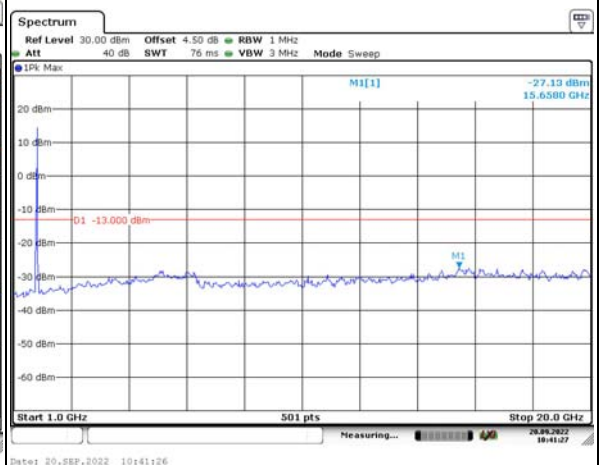
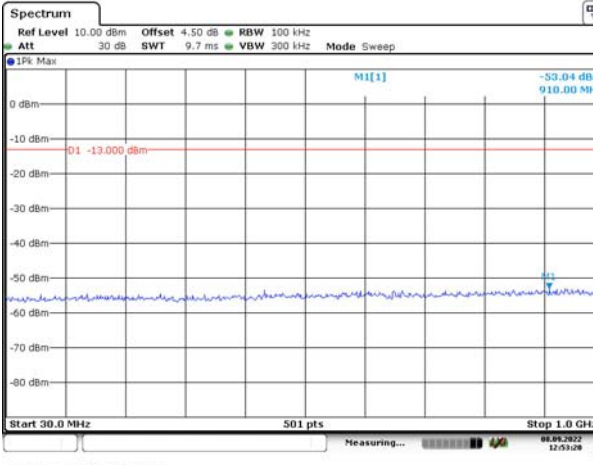
Lowest



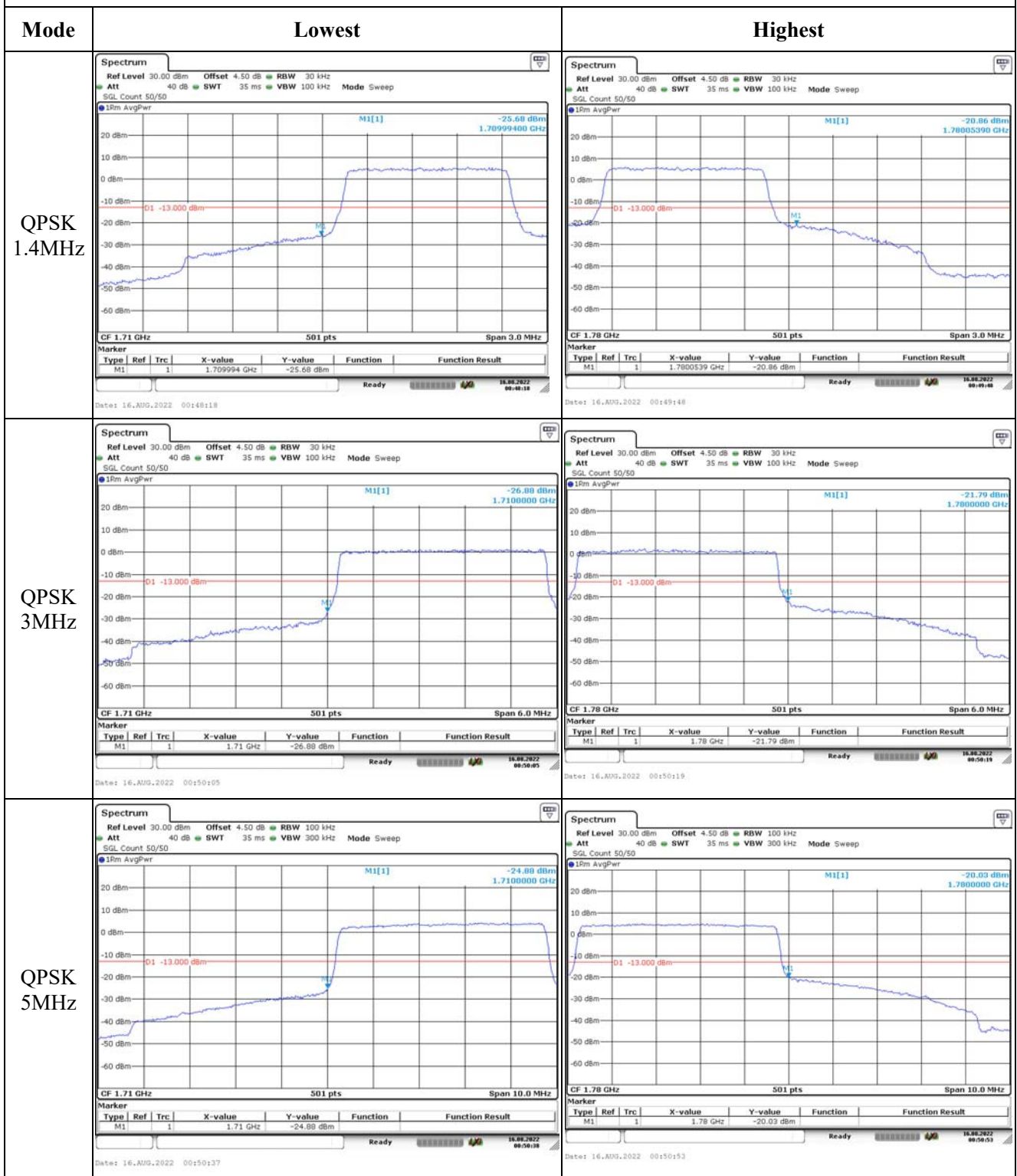
Middle



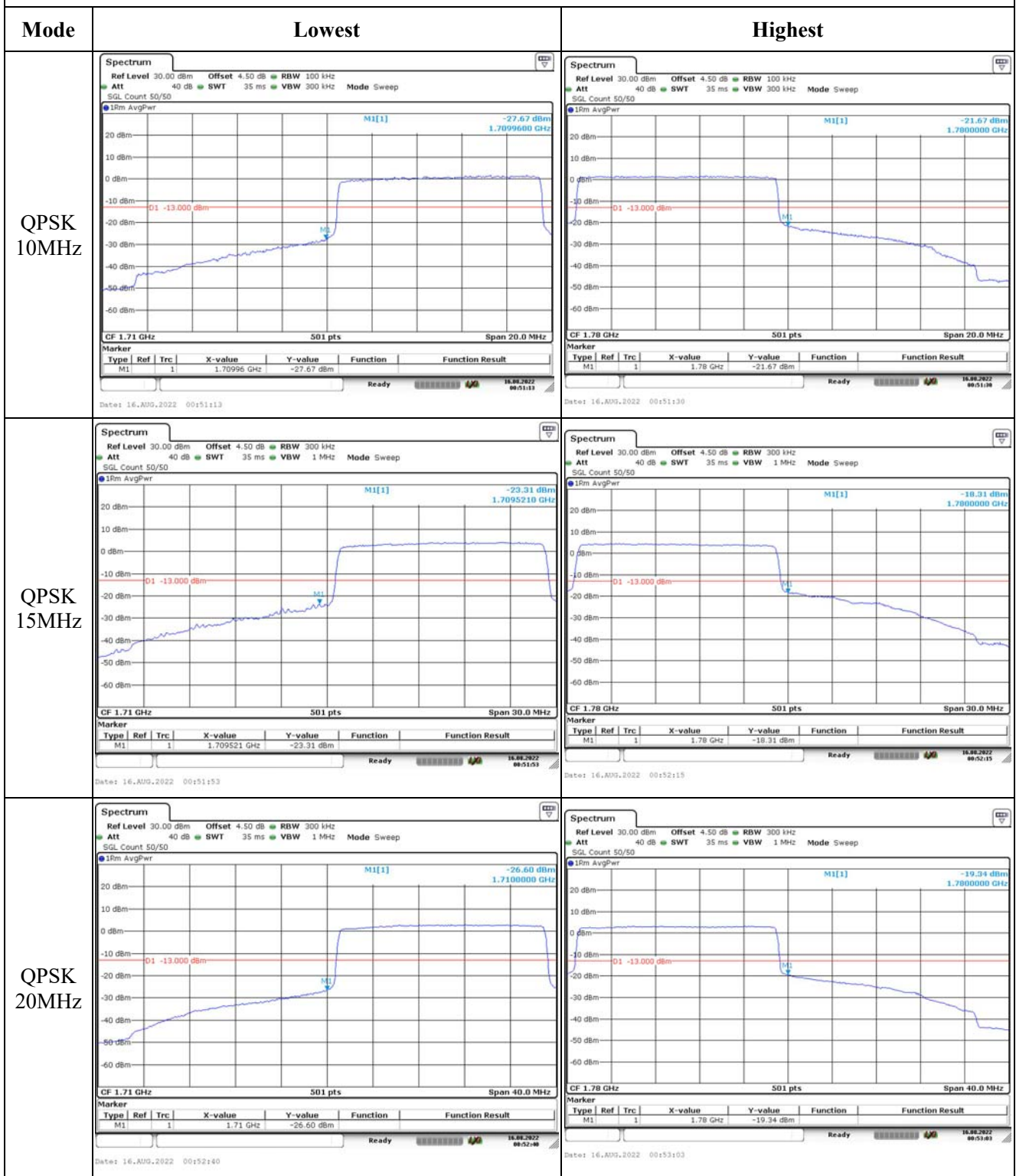
Highest



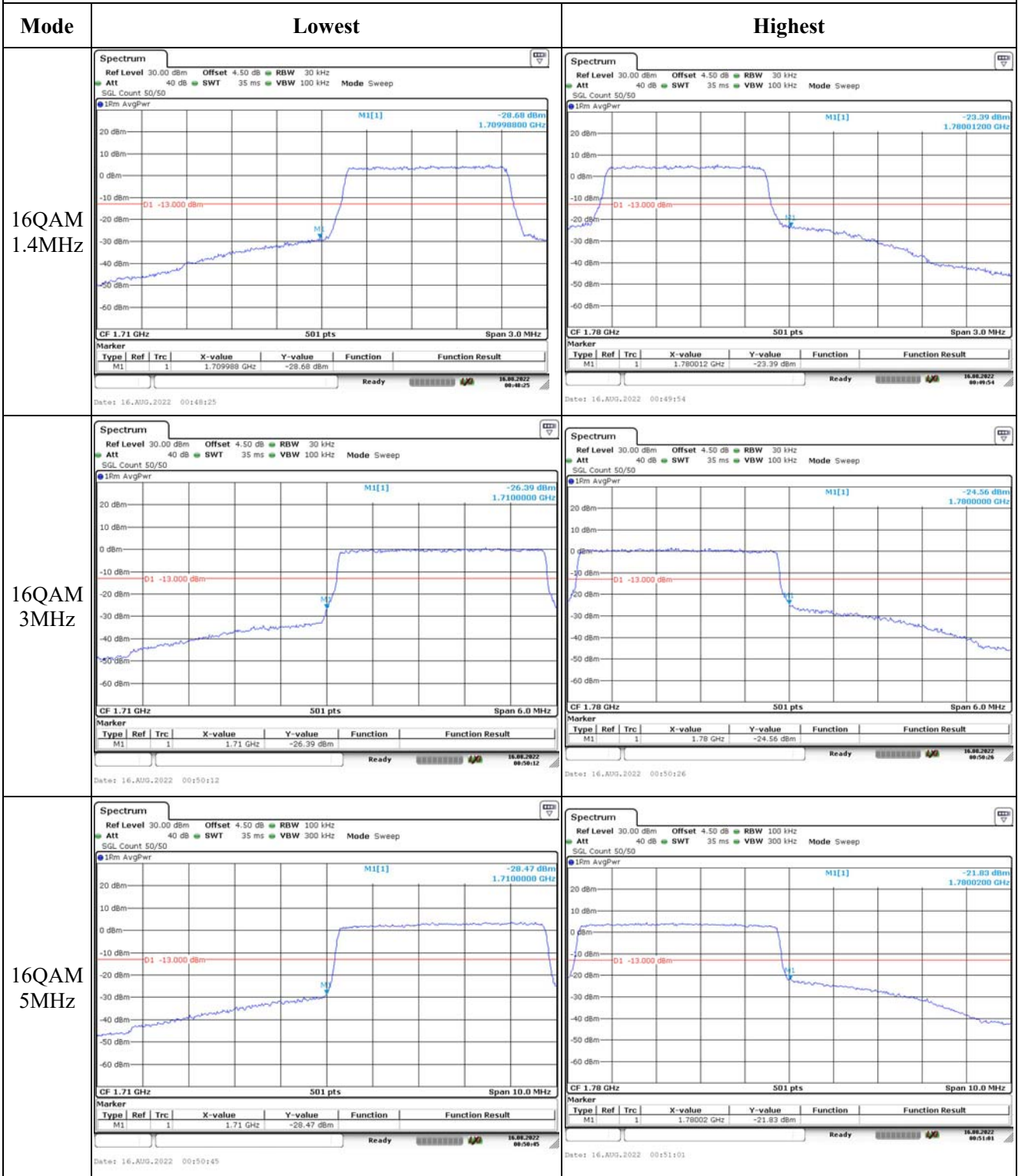
Out of band emission, Band Edge



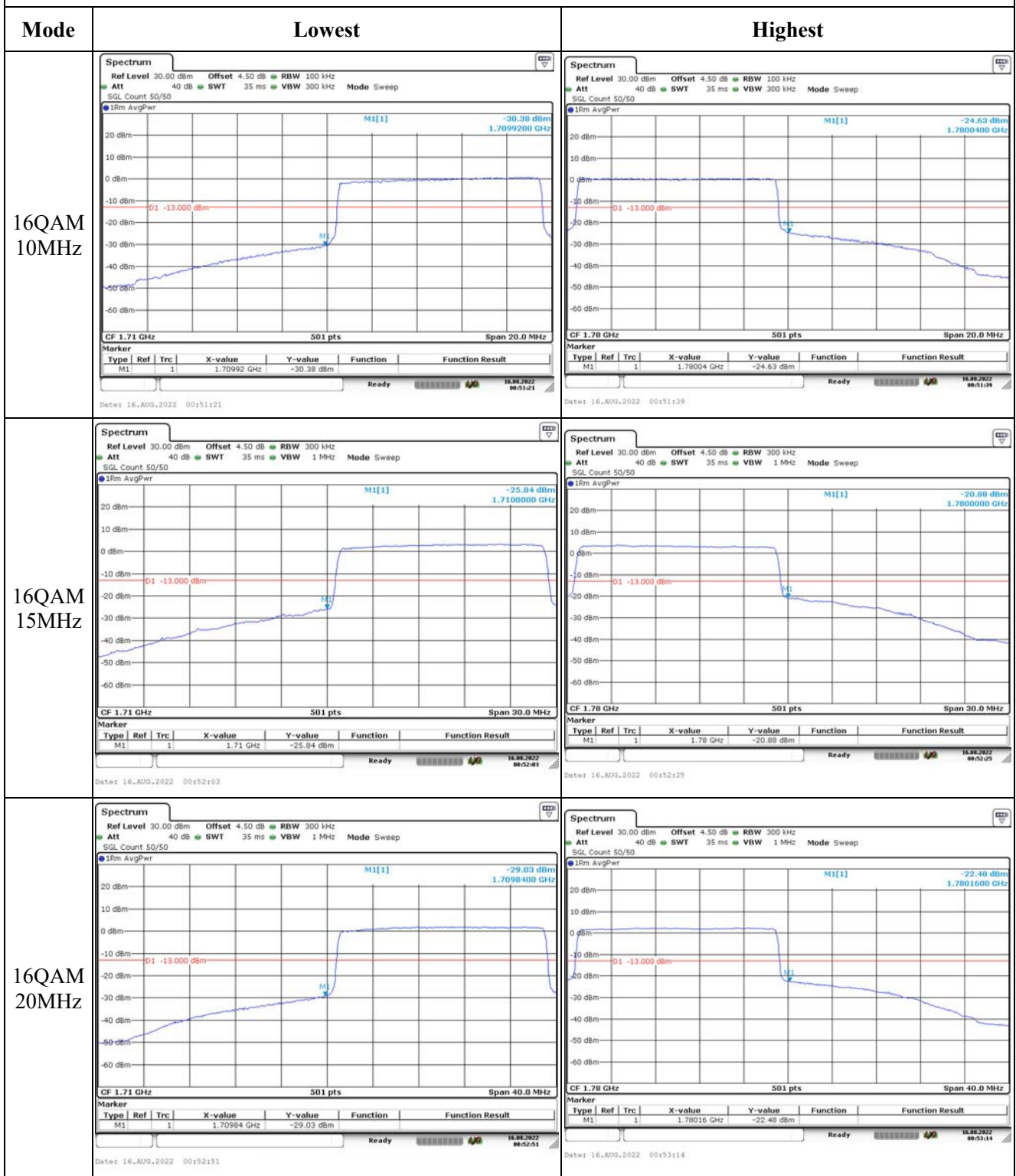
Out of band emission, Band Edge



Out of band emission, Band Edge



Out of band emission, Band Edge



4.12 Radiated Spurious Emissions

| | | | |
|----------------|---------------------|--------------|-----------------------|
| Serial Number: | CR22080013-RF-S1 | Test Date: | 2022-08-30~2022-09-02 |
| Test Site: | 966-2, 966-1 | Test Mode: | Transmitting |
| Tester: | Carl Xue, Nick Tang | Test Result: | Pass |

Environmental Conditions:

| | | | | | |
|----------------------|-----------|---------------------------|-------|------------------------|-------------|
| Temperature: (°C) | 25.5~26.7 | Relative Humidity: (%) | 48~54 | ATM Pressure: (kPa) | 100.3~100.4 |
|----------------------|-----------|---------------------------|-------|------------------------|-------------|

Test Equipment List and Details:

| Manufacturer | Description | Model | Serial Number | Calibration Date | Calibration Due Date |
|-----------------|---------------------------------|-----------------------|---------------|------------------|----------------------|
| Sunol Sciences | Antenna | JB6 | A082520-5 | 2020-10-19 | 2023-10-18 |
| R&S | EMI Test Receiver | ESR3 | 102724 | 2022-07-15 | 2023-07-14 |
| TIMES MICROWAVE | Coaxial Cable | LMR-600-UltraFlex | C-0470-02 | 2022-07-17 | 2023-07-16 |
| TIMES MICROWAVE | Coaxial Cable | LMR-600-UltraFlex | C-0780-01 | 2022-07-17 | 2023-07-16 |
| Sonoma | Amplifier | 310N | 186165 | 2022-07-17 | 2023-07-16 |
| EMCO | Adjustable Dipole Antenna | 3121C | 9109-756 | N/A | N/A |
| ETS-Lindgren | Horn Antenna | 3115 | 9912-5985 | 2020-10-13 | 2023-10-12 |
| R&S | Spectrum Analyzer | FSV40 | 101591 | 2022-07-15 | 2023-07-14 |
| MICRO-COAX | Coaxial Cable | UFA210A-1-1200-70U300 | 217423-008 | 2022-08-07 | 2023-08-06 |
| MICRO-COAX | Coaxial Cable | UFA210A-1-2362-300300 | 235780-001 | 2022-08-07 | 2023-08-06 |
| Mini | Pre-amplifier | ZVA-183-S+ | 5969001149 | 2021-11-10 | 2022-11-09 |
| AH | Double Ridge Guide Horn Antenna | SAS-571 | 1396 | 2021-10-18 | 2024-10-17 |
| MICRO-COAX | Coaxial Cable | UFA210B-0-0720-300300 | 99G1448 | 2022-07-17 | 2023-07-16 |
| Agilent | Signal Generator | E8247C | MY43321352 | 2022-04-01 | 2023-03-31 |
| PASTERNAK | Horn Antenna | PE9852/2F-20 | 112002 | 2021-02-05 | 2024-02-04 |
| PASTERNAK | Horn Antenna | PE9852/2F-20 | 112001 | 2021-02-05 | 2024-02-04 |
| AH | Preamplifier | PAM-1840VH | 190 | 2021-11-19 | 2022-11-18 |
| MICRO-COAX | Coaxial Cable | UFB142A-1-2362-200200 | 235772-001 | 2022-08-07 | 2023-08-06 |

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

Please refer to the below table and plots.

Note: The device can be mounted in multiple orientations, test was performed with X,Y, Z Axis according to C63.26 figure 5, the worst orientation was photographed and it's data was recorded.

Cellular Band (PART 22H)

30 MHz-10 GHz:

| Frequency (MHz) | Polar (H/V) | Receiver Reading (dB μ V) | Substituted Method | | | Absolute Level (dBm) | Limit (dBm) | Margin (dB) |
|----------------------------|-------------|-------------------------------|-------------------------|------------------------|-----------------|----------------------|-------------|-------------|
| | | | Substituted Level (dBm) | Antenna Gain (dBd/dBi) | Cable Loss (dB) | | | |
| GSM 850 Frequency:824.2MHz | | | | | | | | |
| 612.87 | H | 36.55 | -68.23 | 0.00 | 0.48 | -68.71 | -13.00 | 55.71 |
| 890.98 | V | 38.57 | -58.07 | 0.00 | 0.64 | -58.71 | -13.00 | 45.71 |
| 1648.40 | H | 51.67 | -52.66 | 8.68 | 0.80 | -44.78 | -13.00 | 31.78 |
| 1648.40 | V | 52.80 | -51.61 | 8.68 | 0.80 | -43.73 | -13.00 | 30.73 |
| 2472.60 | H | 39.34 | -61.44 | 9.38 | 1.00 | -53.06 | -13.00 | 40.06 |
| 2472.60 | V | 39.86 | -60.87 | 9.38 | 1.00 | -52.49 | -13.00 | 39.49 |
| 3296.80 | H | 38.24 | -58.44 | 10.32 | 1.15 | -49.27 | -13.00 | 36.27 |
| 3296.80 | V | 41.74 | -54.70 | 10.32 | 1.15 | -45.53 | -13.00 | 32.53 |
| GSM 850 Frequency:836.6MHz | | | | | | | | |
| 868.70 | H | 36.94 | -63.31 | 0.00 | 0.58 | -63.89 | -13.00 | 50.89 |
| 519.85 | V | 37.18 | -65.71 | 0.00 | 0.41 | -66.12 | -13.00 | 53.12 |
| 1673.20 | H | 46.47 | -57.84 | 8.71 | 0.85 | -49.98 | -13.00 | 36.98 |
| 1673.20 | V | 44.88 | -59.53 | 8.71 | 0.85 | -51.67 | -13.00 | 38.67 |
| 2509.80 | H | 43.92 | -56.69 | 9.42 | 1.01 | -48.28 | -13.00 | 35.28 |
| 2509.80 | V | 42.30 | -58.32 | 9.42 | 1.01 | -49.91 | -13.00 | 36.91 |
| 3346.40 | H | 39.87 | -57.30 | 10.34 | 1.16 | -48.12 | -13.00 | 35.12 |
| 3346.40 | V | 42.78 | -54.25 | 10.34 | 1.16 | -45.07 | -13.00 | 32.07 |
| GSM 850 Frequency:848.8MHz | | | | | | | | |
| 191.34 | H | 35.84 | -76.88 | 0.00 | 0.26 | -77.14 | -13.00 | 64.14 |
| 71.18 | V | 38.92 | -64.39 | -4.41 | 0.15 | -68.95 | -13.00 | 55.95 |
| 1697.60 | H | 44.44 | -59.85 | 8.74 | 0.90 | -52.01 | -13.00 | 39.01 |
| 1697.60 | V | 40.93 | -63.49 | 8.74 | 0.90 | -55.65 | -13.00 | 42.65 |
| 2546.40 | H | 43.12 | -57.21 | 9.47 | 1.01 | -48.75 | -13.00 | 35.75 |
| 2546.40 | V | 44.17 | -56.11 | 9.47 | 1.01 | -47.65 | -13.00 | 34.65 |
| 3395.20 | H | 40.94 | -56.75 | 10.36 | 1.19 | -47.58 | -13.00 | 34.58 |
| 3395.20 | V | 43.35 | -54.31 | 10.36 | 1.19 | -45.14 | -13.00 | 32.14 |

| Frequency (MHz) | Polar (H/V) | Receiver Reading (dBμV) | Substituted Method | | | Absolute Level (dBm) | Limit (dBm) | Margin (dB) |
|----------------------------------|-------------|-------------------------|-------------------------|------------------------|-----------------|----------------------|-------------|-------------|
| | | | Substituted Level (dBm) | Antenna Gain (dBd/dBi) | Cable Loss (dB) | | | |
| WCDMA Band 5 Frequency:826.4 MHz | | | | | | | | |
| 161.30 | H | 37.82 | -73.84 | 0.00 | 0.24 | -74.08 | -13.00 | 61.08 |
| 47.93 | V | 37.96 | -61.23 | -16.93 | 0.12 | -78.28 | -13.00 | 65.28 |
| 1652.80 | H | 40.05 | -64.28 | 8.68 | 0.81 | -56.41 | -13.00 | 43.41 |
| 1652.80 | V | 41.68 | -62.73 | 8.68 | 0.81 | -54.86 | -13.00 | 41.86 |
| 2479.20 | H | 38.42 | -62.34 | 9.39 | 1.01 | -53.96 | -13.00 | 40.96 |
| 2479.20 | V | 37.01 | -63.72 | 9.39 | 1.01 | -55.34 | -13.00 | 42.34 |
| 3305.60 | H | 38.18 | -58.55 | 10.32 | 1.15 | -49.38 | -13.00 | 36.38 |
| 3305.60 | V | 42.17 | -54.33 | 10.32 | 1.15 | -45.16 | -13.00 | 32.16 |
| WCDMA Band 5 Frequency:836.6MHz | | | | | | | | |
| 57.62 | H | 37.73 | -65.43 | -11.39 | 0.14 | -76.96 | -13.00 | 63.96 |
| 46.96 | V | 41.25 | -56.98 | -17.88 | 0.12 | -74.98 | -13.00 | 61.98 |
| 1673.20 | H | 41.00 | -63.31 | 8.71 | 0.85 | -55.45 | -13.00 | 42.45 |
| 1673.20 | V | 40.71 | -63.70 | 8.71 | 0.85 | -55.84 | -13.00 | 42.84 |
| 2509.80 | H | 39.39 | -61.22 | 9.42 | 1.01 | -52.81 | -13.00 | 39.81 |
| 2509.80 | V | 37.45 | -63.17 | 9.42 | 1.01 | -54.76 | -13.00 | 41.76 |
| 3346.40 | H | 40.08 | -57.09 | 10.34 | 1.16 | -47.91 | -13.00 | 34.91 |
| 3346.40 | V | 43.17 | -53.86 | 10.34 | 1.16 | -44.68 | -13.00 | 31.68 |
| WCDMA Band 5 Frequency:846.6MHz | | | | | | | | |
| 205.88 | H | 37.25 | -75.52 | 0.00 | 0.26 | -75.78 | -13.00 | 62.78 |
| 42.11 | V | 38.18 | -54.37 | -23.61 | 0.12 | -78.10 | -13.00 | 65.10 |
| 1693.20 | H | 42.65 | -61.65 | 8.73 | 0.89 | -53.81 | -13.00 | 40.81 |
| 1693.20 | V | 41.64 | -62.78 | 8.73 | 0.89 | -54.94 | -13.00 | 41.94 |
| 2539.80 | H | 41.53 | -58.85 | 9.46 | 1.01 | -50.40 | -13.00 | 37.40 |
| 2539.80 | V | 38.88 | -61.46 | 9.46 | 1.01 | -53.01 | -13.00 | 40.01 |
| 3386.40 | H | 36.27 | -61.32 | 10.35 | 1.18 | -52.15 | -13.00 | 39.15 |
| 3386.40 | V | 39.14 | -58.40 | 10.35 | 1.18 | -49.23 | -13.00 | 36.23 |

PCS Band (PART 24E)**30 MHz-20 GHz:**

| Frequency (MHz) | Polar (H/V) | Receiver Reading (dB μ V) | Substituted Method | | | Absolute Level (dBm) | Limit (dBm) | Margin (dB) |
|------------------------------|-------------|-------------------------------|-------------------------|------------------------|-----------------|----------------------|-------------|-------------|
| | | | Substituted Level (dBm) | Antenna Gain (dBd/dBi) | Cable Loss (dB) | | | |
| GSM 1900 Frequency:1850.2MHz | | | | | | | | |
| 641.94 | H | 36.88 | -67.85 | 0.00 | 0.52 | -68.37 | -13.00 | 55.37 |
| 67.31 | V | 39.45 | -64.07 | -6.43 | 0.15 | -70.65 | -13.00 | 57.65 |
| 3700.40 | H | 39.13 | -58.19 | 10.60 | 1.25 | -48.84 | -13.00 | 35.84 |
| 3700.40 | V | 40.61 | -56.69 | 10.60 | 1.25 | -47.34 | -13.00 | 34.34 |
| 5550.60 | H | 38.18 | -55.08 | 11.44 | 1.49 | -45.13 | -13.00 | 32.13 |
| 5550.60 | V | 38.72 | -54.38 | 11.44 | 1.49 | -44.43 | -13.00 | 31.43 |
| GSM 1900 Frequency:1880MHz | | | | | | | | |
| 883.23 | H | 36.71 | -63.10 | 0.00 | 0.60 | -63.70 | -13.00 | 50.70 |
| 52.77 | V | 39.70 | -62.85 | -13.63 | 0.13 | -76.61 | -13.00 | 63.61 |
| 3760.00 | H | 42.73 | -53.68 | 10.66 | 1.24 | -44.26 | -13.00 | 31.26 |
| 3760.00 | V | 39.79 | -56.50 | 10.66 | 1.24 | -47.08 | -13.00 | 34.08 |
| 5640.00 | H | 44.87 | -48.58 | 11.33 | 1.54 | -38.79 | -13.00 | 25.79 |
| 5640.00 | V | 43.24 | -50.09 | 11.33 | 1.54 | -40.30 | -13.00 | 27.30 |
| GSM 1900 Frequency:1909.8MHz | | | | | | | | |
| 271.77 | H | 36.31 | -75.08 | 0.00 | 0.31 | -75.39 | -13.00 | 62.39 |
| 66.34 | V | 39.68 | -64.17 | -6.94 | 0.15 | -71.26 | -13.00 | 58.26 |
| 3819.60 | H | 43.91 | -51.95 | 10.72 | 1.29 | -42.52 | -13.00 | 29.52 |
| 3819.60 | V | 41.17 | -54.55 | 10.72 | 1.29 | -45.12 | -13.00 | 32.12 |
| 5729.40 | H | 48.43 | -45.05 | 11.22 | 1.59 | -35.42 | -13.00 | 22.42 |
| 5729.40 | V | 45.84 | -47.52 | 11.22 | 1.59 | -37.89 | -13.00 | 24.89 |

| Frequency (MHz) | Polar (H/V) | Receiver Reading (dBμV) | Substituted Method | | | Absolute Level (dBm) | Limit (dBm) | Margin (dB) |
|-------------------------------------|-------------|-------------------------|-------------------------|------------------------|-----------------|----------------------|-------------|-------------|
| | | | Substituted Level (dBm) | Antenna Gain (dBd/dBi) | Cable Loss (dB) | | | |
| WCDMA Band II, Frequency:1852.4 MHz | | | | | | | | |
| 82.81 | H | 32.30 | -78.39 | 0.00 | 0.17 | -78.56 | -13.00 | 65.56 |
| 46.96 | V | 39.26 | -58.97 | -17.88 | 0.12 | -76.97 | -13.00 | 63.97 |
| 3704.80 | H | 39.66 | -57.60 | 10.60 | 1.25 | -48.25 | -13.00 | 35.25 |
| 3704.80 | V | 39.42 | -57.81 | 10.60 | 1.25 | -48.46 | -13.00 | 35.46 |
| 5557.20 | H | 34.86 | -58.42 | 11.43 | 1.49 | -48.48 | -13.00 | 35.48 |
| 5557.20 | V | 33.93 | -59.20 | 11.43 | 1.49 | -49.26 | -13.00 | 36.26 |
| WCDMA Band II, Frequency:1880 MHz | | | | | | | | |
| 82.81 | H | 31.77 | -78.92 | 0.00 | 0.17 | -79.09 | -13.00 | 66.09 |
| 47.93 | V | 39.27 | -59.92 | -16.93 | 0.12 | -76.97 | -13.00 | 63.97 |
| 3760.00 | H | 39.57 | -56.84 | 10.66 | 1.24 | -47.42 | -13.00 | 34.42 |
| 3760.00 | V | 38.43 | -57.86 | 10.66 | 1.24 | -48.44 | -13.00 | 35.44 |
| 5640.00 | H | 34.63 | -58.82 | 11.33 | 1.54 | -49.03 | -13.00 | 36.03 |
| 5640.00 | V | 34.23 | -59.10 | 11.33 | 1.54 | -49.31 | -13.00 | 36.31 |
| WCDMA Band II, Frequency:1907.6MHz | | | | | | | | |
| 82.81 | H | 32.15 | -78.54 | 0.00 | 0.17 | -78.71 | -13.00 | 65.71 |
| 46.96 | V | 39.07 | -59.16 | -17.88 | 0.12 | -77.16 | -13.00 | 64.16 |
| 3815.20 | H | 38.80 | -57.05 | 10.72 | 1.29 | -47.62 | -13.00 | 34.62 |
| 3815.20 | V | 37.68 | -58.01 | 10.72 | 1.29 | -48.58 | -13.00 | 35.58 |
| 5722.80 | H | 35.28 | -58.21 | 11.23 | 1.58 | -48.56 | -13.00 | 35.56 |
| 5722.80 | V | 34.89 | -58.46 | 11.23 | 1.58 | -48.81 | -13.00 | 35.81 |

AWS Band(Part 27)

30 MHz-20 GHz:

| Frequency (MHz) | Polar (H/V) | Receiver Reading (dBμV) | Substituted Method | | | Absolute Level (dBm) | Limit (dBm) | Margin (dB) |
|-------------------------------------|-------------|-------------------------|-------------------------|------------------------|-----------------|----------------------|-------------|-------------|
| | | | Substituted Level (dBm) | Antenna Gain (dBd/dBi) | Cable Loss (dB) | | | |
| WCDMA Band IV, Frequency:1712.4 MHz | | | | | | | | |
| 82.81 | H | 32.07 | -78.62 | 0.00 | 0.17 | -78.79 | -13.00 | 65.79 |
| 42.11 | V | 38.61 | -53.94 | -23.61 | 0.12 | -77.67 | -13.00 | 64.67 |
| 3424.80 | H | 36.63 | -61.14 | 10.37 | 1.17 | -51.94 | -13.00 | 38.94 |
| 3424.80 | V | 35.63 | -62.11 | 10.37 | 1.17 | -52.91 | -13.00 | 39.91 |
| 5137.20 | H | 33.99 | -59.63 | 11.28 | 1.46 | -49.81 | -13.00 | 36.81 |
| 5137.20 | V | 34.82 | -58.68 | 11.28 | 1.46 | -48.86 | -13.00 | 35.86 |
| WCDMA Band IV, Frequency:1732.6 MHz | | | | | | | | |
| 83.78 | H | 32.37 | -78.64 | 0.00 | 0.17 | -78.81 | -13.00 | 65.81 |
| 45.99 | V | 39.25 | -58.03 | -18.83 | 0.12 | -76.98 | -13.00 | 63.98 |
| 3465.20 | H | 35.93 | -61.88 | 10.39 | 1.15 | -52.64 | -13.00 | 39.64 |
| 3465.20 | V | 36.08 | -61.69 | 10.39 | 1.15 | -52.45 | -13.00 | 39.45 |
| 5197.80 | H | 34.68 | -59.45 | 11.32 | 1.44 | -49.57 | -13.00 | 36.57 |
| 5197.80 | V | 34.56 | -59.42 | 11.32 | 1.44 | -49.54 | -13.00 | 36.54 |
| WCDMA Band IV, Frequency:1752.6MHz | | | | | | | | |
| 82.81 | H | 32.32 | -78.37 | 0.00 | 0.17 | -78.54 | -13.00 | 65.54 |
| 46.96 | V | 40.56 | -57.67 | -17.88 | 0.12 | -75.67 | -13.00 | 62.67 |
| 3505.20 | H | 35.81 | -62.02 | 10.41 | 1.18 | -52.79 | -13.00 | 39.79 |
| 3505.20 | V | 35.02 | -62.75 | 10.41 | 1.18 | -53.52 | -13.00 | 40.52 |
| 5257.80 | H | 34.56 | -59.17 | 11.35 | 1.47 | -49.29 | -13.00 | 36.29 |
| 5257.80 | V | 34.28 | -59.23 | 11.35 | 1.47 | -49.35 | -13.00 | 36.35 |

LTE Bands:**LTE Band 2 (30MHz-20GHz):**

| Frequency (MHz) | Polar (H/V) | Receiver Reading (dBμV) | Substituted Method | | | Absolute Level (dBm) | Limit (dBm) | Margin (dB) |
|-----------------------------|-------------|-------------------------|-------------------------|------------------------|-----------------|----------------------|-------------|-------------|
| | | | Substituted Level (dBm) | Antenna Gain (dBd/dBi) | Cable Loss (dB) | | | |
| QPSK, Frequency: 1850.7 MHz | | | | | | | | |
| 82.81 | H | 33.39 | -77.30 | 0.00 | 0.17 | -77.47 | -13.00 | 64.47 |
| 46.96 | V | 38.15 | -60.08 | -17.88 | 0.12 | -78.08 | -13.00 | 65.08 |
| 3701.40 | H | 45.25 | -52.06 | 10.60 | 1.25 | -42.71 | -13.00 | 29.71 |
| 3701.40 | V | 43.57 | -53.72 | 10.60 | 1.25 | -44.37 | -13.00 | 31.37 |
| 5552.10 | H | 35.55 | -57.72 | 11.44 | 1.49 | -47.77 | -13.00 | 34.77 |
| 5552.10 | V | 35.39 | -57.71 | 11.44 | 1.49 | -47.76 | -13.00 | 34.76 |
| QPSK, Frequency: 1880 MHz | | | | | | | | |
| 90.56 | H | 34.12 | -78.87 | 0.00 | 0.18 | -79.05 | -13.00 | 66.05 |
| 46.96 | V | 39.72 | -58.51 | -17.88 | 0.12 | -76.51 | -13.00 | 63.51 |
| 3760.00 | H | 44.14 | -52.27 | 10.66 | 1.24 | -42.85 | -13.00 | 29.85 |
| 3760.00 | V | 41.20 | -55.09 | 10.66 | 1.24 | -45.67 | -13.00 | 32.67 |
| 5640.00 | H | 34.60 | -58.85 | 11.33 | 1.54 | -49.06 | -13.00 | 36.06 |
| 5640.00 | V | 35.29 | -58.04 | 11.33 | 1.54 | -48.25 | -13.00 | 35.25 |
| QPSK, Frequency: 1909.3 MHz | | | | | | | | |
| 82.81 | H | 33.52 | -77.17 | 0.00 | 0.17 | -77.34 | -13.00 | 64.34 |
| 66.34 | V | 38.46 | -65.39 | -6.94 | 0.15 | -72.48 | -13.00 | 59.48 |
| 3818.60 | H | 40.16 | -55.70 | 10.72 | 1.29 | -46.27 | -13.00 | 33.27 |
| 3818.60 | V | 39.16 | -56.55 | 10.72 | 1.29 | -47.12 | -13.00 | 34.12 |
| 5727.90 | H | 37.80 | -55.68 | 11.23 | 1.59 | -46.04 | -13.00 | 33.04 |
| 5727.90 | V | 35.58 | -57.78 | 11.23 | 1.59 | -48.14 | -13.00 | 35.14 |

LTE Band 4 (30MHz-20GHz):

| Frequency (MHz) | Polar (H/V) | Receiver Reading (dBμV) | Substituted Method | | | Absolute Level (dBm) | Limit (dBm) | Margin (dB) |
|-----------------------------|-------------|-------------------------|-------------------------|------------------------|-----------------|----------------------|-------------|-------------|
| | | | Substituted Level (dBm) | Antenna Gain (dBd/dBi) | Cable Loss (dB) | | | |
| QPSK, Frequency: 1710.7 MHz | | | | | | | | |
| 82.81 | H | 31.51 | -79.18 | 0.00 | 0.17 | -79.35 | -13.00 | 66.35 |
| 67.31 | V | 40.71 | -62.81 | -6.43 | 0.15 | -69.39 | -13.00 | 56.39 |
| 3421.40 | H | 37.80 | -59.96 | 10.37 | 1.17 | -50.76 | -13.00 | 37.76 |
| 3421.40 | V | 39.19 | -58.54 | 10.37 | 1.17 | -49.34 | -13.00 | 36.34 |
| 5132.10 | H | 34.14 | -59.43 | 11.28 | 1.47 | -49.62 | -13.00 | 36.62 |
| 5132.10 | V | 33.85 | -59.61 | 11.28 | 1.47 | -49.80 | -13.00 | 36.80 |
| QPSK, Frequency: 1732.5 MHz | | | | | | | | |
| 82.81 | H | 32.18 | -78.51 | 0.00 | 0.17 | -78.68 | -13.00 | 65.68 |
| 46.96 | V | 38.47 | -59.76 | -17.88 | 0.12 | -77.76 | -13.00 | 64.76 |
| 3465.00 | H | 38.97 | -58.84 | 10.39 | 1.15 | -49.60 | -13.00 | 36.60 |
| 3465.00 | V | 38.70 | -59.07 | 10.39 | 1.15 | -49.83 | -13.00 | 36.83 |
| 5197.50 | H | 34.83 | -59.30 | 11.32 | 1.44 | -49.42 | -13.00 | 36.42 |
| 5197.50 | V | 34.67 | -59.31 | 11.32 | 1.44 | -49.43 | -13.00 | 36.43 |
| QPSK, Frequency: 1752.6MHz | | | | | | | | |
| 126.42 | H | 34.04 | -78.12 | 0.00 | 0.21 | -78.33 | -13.00 | 65.33 |
| 96.38 | V | 40.38 | -67.48 | 0.00 | 0.19 | -67.67 | -13.00 | 54.67 |
| 3505.20 | H | 34.83 | -63.00 | 10.41 | 1.18 | -53.77 | -13.00 | 40.77 |
| 3505.20 | V | 35.53 | -62.24 | 10.41 | 1.18 | -53.01 | -13.00 | 40.01 |
| 5257.80 | H | 34.64 | -59.09 | 11.35 | 1.47 | -49.21 | -13.00 | 36.21 |
| 5257.80 | V | 34.33 | -59.18 | 11.35 | 1.47 | -49.30 | -13.00 | 36.30 |

LTE Band 5(30MHz-10GHz):

| Frequency (MHz) | Polar (H/V) | Receiver Reading (dBμV) | Substituted Method | | | Absolute Level (dBm) | Limit (dBm) | Margin (dB) |
|----------------------------|-------------|-------------------------|-------------------------|------------------------|-----------------|----------------------|-------------|-------------|
| | | | Substituted Level (dBm) | Antenna Gain (dBd/dBi) | Cable Loss (dB) | | | |
| QPSK, Frequency: 824.7 MHz | | | | | | | | |
| 176.81 | H | 37.61 | -74.74 | 0.00 | 0.25 | -74.99 | -13.00 | 61.99 |
| 89.60 | V | 42.05 | -67.25 | 0.00 | 0.18 | -67.43 | -13.00 | 54.43 |
| 1649.40 | H | 43.26 | -61.07 | 8.68 | 0.80 | -53.19 | -13.00 | 40.19 |
| 1649.40 | V | 43.02 | -61.39 | 8.68 | 0.80 | -53.51 | -13.00 | 40.51 |
| 2474.10 | H | 48.96 | -51.82 | 9.38 | 1.00 | -43.44 | -13.00 | 30.44 |
| 2474.10 | V | 41.33 | -59.40 | 9.38 | 1.00 | -51.02 | -13.00 | 38.02 |
| 3298.80 | H | 43.81 | -52.87 | 10.32 | 1.15 | -43.70 | -13.00 | 30.70 |
| 3298.80 | V | 45.37 | -51.07 | 10.32 | 1.15 | -41.90 | -13.00 | 28.90 |
| QPSK, Frequency: 836.5 MHz | | | | | | | | |
| 180.68 | H | 40.65 | -71.85 | 0.00 | 0.25 | -72.10 | -13.00 | 59.10 |
| 81.84 | V | 41.68 | -67.04 | 0.00 | 0.16 | -67.20 | -13.00 | 54.20 |
| 1673.00 | H | 41.15 | -63.16 | 8.71 | 0.85 | -55.30 | -13.00 | 42.30 |
| 1673.00 | V | 42.47 | -61.94 | 8.71 | 0.85 | -54.08 | -13.00 | 41.08 |
| 2509.50 | H | 49.40 | -51.21 | 9.42 | 1.01 | -42.80 | -13.00 | 29.80 |
| 2509.50 | V | 41.77 | -58.85 | 9.42 | 1.01 | -50.44 | -13.00 | 37.44 |
| 3346.00 | H | 45.27 | -51.89 | 10.34 | 1.16 | -42.71 | -13.00 | 29.71 |
| 3346.00 | V | 46.80 | -50.22 | 10.34 | 1.16 | -41.04 | -13.00 | 28.04 |
| QPSK, Frequency: 848.3 MHz | | | | | | | | |
| 288.25 | H | 35.73 | -75.27 | 0.00 | 0.33 | -75.60 | -13.00 | 62.60 |
| 94.44 | V | 41.87 | -66.44 | 0.00 | 0.18 | -66.62 | -13.00 | 53.62 |
| 1696.60 | H | 45.55 | -58.74 | 8.74 | 0.89 | -50.89 | -13.00 | 37.89 |
| 1696.60 | V | 43.69 | -60.73 | 8.74 | 0.89 | -52.88 | -13.00 | 39.88 |
| 2544.90 | H | 49.46 | -50.88 | 9.47 | 1.01 | -42.42 | -13.00 | 29.42 |
| 2544.90 | V | 41.90 | -58.40 | 9.47 | 1.01 | -49.94 | -13.00 | 36.94 |
| 3393.20 | H | 40.86 | -56.81 | 10.36 | 1.19 | -47.64 | -13.00 | 34.64 |
| 3393.20 | V | 42.77 | -54.86 | 10.36 | 1.19 | -45.69 | -13.00 | 32.69 |

LTE Band 12 (30MHz-10GHz):

| Frequency (MHz) | Polar (H/V) | Receiver Reading (dB μ V) | Substituted Method | | | Absolute Level (dBm) | Limit (dBm) | Margin (dB) |
|----------------------------|-------------|-------------------------------|-------------------------|------------------------|-----------------|----------------------|-------------|-------------|
| | | | Substituted Level (dBm) | Antenna Gain (dBd/dBi) | Cable Loss (dB) | | | |
| QPSK, Frequency: 699.7 MHz | | | | | | | | |
| 82.81 | H | 33.06 | -77.63 | 0.00 | 0.17 | -77.80 | -13.00 | 64.80 |
| 81.84 | V | 43.53 | -65.19 | 0.00 | 0.16 | -65.35 | -13.00 | 52.35 |
| 1399.40 | H | 48.58 | -55.12 | 8.22 | 0.71 | -47.61 | -13.00 | 34.61 |
| 1399.40 | V | 45.46 | -58.29 | 8.22 | 0.71 | -50.78 | -13.00 | 37.78 |
| 2099.10 | H | 36.75 | -65.13 | 9.16 | 0.91 | -56.88 | -13.00 | 43.88 |
| 2099.10 | V | 36.37 | -65.46 | 9.16 | 0.91 | -57.21 | -13.00 | 44.21 |
| 2798.80 | H | 35.53 | -64.40 | 9.88 | 1.04 | -55.56 | -13.00 | 42.56 |
| 2798.80 | V | 35.59 | -64.21 | 9.88 | 1.04 | -55.37 | -13.00 | 42.37 |
| QPSK, Frequency: 707.5 MHz | | | | | | | | |
| 84.75 | H | 34.27 | -77.05 | 0.00 | 0.17 | -77.22 | -13.00 | 64.22 |
| 41.14 | V | 43.26 | -48.04 | -24.90 | 0.12 | -73.06 | -13.00 | 60.06 |
| 1415.00 | H | 52.32 | -51.35 | 8.26 | 0.72 | -43.81 | -13.00 | 30.81 |
| 1415.00 | V | 50.91 | -52.81 | 8.26 | 0.72 | -45.27 | -13.00 | 32.27 |
| 2122.50 | H | 35.13 | -66.86 | 9.17 | 0.92 | -58.61 | -13.00 | 45.61 |
| 2122.50 | V | 35.67 | -66.30 | 9.17 | 0.92 | -58.05 | -13.00 | 45.05 |
| 2830.00 | H | 36.72 | -63.08 | 9.93 | 1.06 | -54.21 | -13.00 | 41.21 |
| 2830.00 | V | 31.82 | -67.91 | 9.93 | 1.06 | -59.04 | -13.00 | 46.04 |
| QPSK, Frequency: 715.3 MHz | | | | | | | | |
| 150.64 | H | 36.42 | -75.51 | 0.00 | 0.22 | -75.73 | -13.00 | 62.73 |
| 86.69 | V | 39.56 | -69.52 | 0.00 | 0.17 | -69.69 | -13.00 | 56.69 |
| 1430.60 | H | 50.80 | -52.83 | 8.31 | 0.73 | -45.25 | -13.00 | 32.25 |
| 1430.60 | V | 49.59 | -54.10 | 8.31 | 0.73 | -46.52 | -13.00 | 33.52 |
| 2145.90 | H | 36.44 | -65.66 | 9.19 | 0.93 | -57.40 | -13.00 | 44.40 |
| 2145.90 | V | 35.25 | -66.86 | 9.19 | 0.93 | -58.60 | -13.00 | 45.60 |
| 2861.20 | H | 35.62 | -64.03 | 9.98 | 1.07 | -55.12 | -13.00 | 42.12 |
| 2861.20 | V | 34.89 | -64.78 | 9.98 | 1.07 | -55.87 | -13.00 | 42.87 |

LTE Band 17 (30MHz-10GHz):

| Frequency (MHz) | Polar (H/V) | Receiver Reading (dBμV) | Substituted Method | | | Absolute Level (dBm) | Limit (dBm) | Margin (dB) |
|----------------------------|-------------|-------------------------|-------------------------|------------------------|-----------------|----------------------|-------------|-------------|
| | | | Substituted Level (dBm) | Antenna Gain (dBd/dBi) | Cable Loss (dB) | | | |
| QPSK, Frequency: 706.5 MHz | | | | | | | | |
| 82.81 | H | 32.53 | -78.16 | 0.00 | 0.17 | -78.33 | -13.00 | 65.33 |
| 46.96 | V | 38.61 | -59.62 | -17.88 | 0.12 | -77.62 | -13.00 | 64.62 |
| 1413.00 | H | 39.58 | -64.09 | 8.26 | 0.72 | -56.55 | -13.00 | 43.55 |
| 1413.00 | V | 39.64 | -64.08 | 8.26 | 0.72 | -56.54 | -13.00 | 43.54 |
| 2119.50 | H | 35.65 | -66.32 | 9.17 | 0.92 | -58.07 | -13.00 | 45.07 |
| 2119.50 | V | 35.76 | -66.19 | 9.17 | 0.92 | -57.94 | -13.00 | 44.94 |
| 2826.00 | H | 35.48 | -64.33 | 9.92 | 1.06 | -55.47 | -13.00 | 42.47 |
| 2826.00 | V | 35.83 | -63.91 | 9.92 | 1.06 | -55.05 | -13.00 | 42.05 |
| QPSK, Frequency: 710 MHz | | | | | | | | |
| 170.02 | H | 35.31 | -76.74 | 0.00 | 0.24 | -76.98 | -13.00 | 63.98 |
| 46.96 | V | 40.17 | -58.06 | -17.88 | 0.12 | -76.06 | -13.00 | 63.06 |
| 1420.00 | H | 40.36 | -63.30 | 8.28 | 0.73 | -55.75 | -13.00 | 42.75 |
| 1420.00 | V | 38.40 | -65.31 | 8.28 | 0.73 | -57.76 | -13.00 | 44.76 |
| 2130.00 | H | 35.58 | -66.44 | 9.18 | 0.92 | -58.18 | -13.00 | 45.18 |
| 2130.00 | V | 36.08 | -65.93 | 9.18 | 0.92 | -57.67 | -13.00 | 44.67 |
| 2840.00 | H | 36.69 | -63.06 | 9.94 | 1.06 | -54.18 | -13.00 | 41.18 |
| 2840.00 | V | 36.32 | -63.39 | 9.94 | 1.06 | -54.51 | -13.00 | 41.51 |
| QPSK, Frequency: 713.5 MHz | | | | | | | | |
| 87.66 | H | 35.33 | -76.94 | 0.00 | 0.17 | -77.11 | -13.00 | 64.11 |
| 66.30 | V | 39.71 | -64.16 | -6.96 | 0.15 | -71.27 | -13.00 | 58.27 |
| 1427.00 | H | 37.26 | -66.38 | 8.30 | 0.73 | -58.81 | -13.00 | 45.81 |
| 1427.00 | V | 38.56 | -65.13 | 8.30 | 0.73 | -57.56 | -13.00 | 44.56 |
| 2140.50 | H | 35.36 | -66.71 | 9.18 | 0.93 | -58.46 | -13.00 | 45.46 |
| 2140.50 | V | 35.54 | -66.54 | 9.18 | 0.93 | -58.29 | -13.00 | 45.29 |
| 2854.00 | H | 35.37 | -64.32 | 9.97 | 1.07 | -55.42 | -13.00 | 42.42 |
| 2854.00 | V | 36.17 | -63.51 | 9.97 | 1.07 | -54.61 | -13.00 | 41.61 |

LTE Band 66(30MHz-20GHz):

| Frequency (MHz) | Polar (H/V) | Receiver Reading (dBμV) | Substituted Method | | | Absolute Level (dBm) | Limit (dBm) | Margin (dB) |
|-----------------------------|-------------|-------------------------|-------------------------|------------------------|-----------------|----------------------|-------------|-------------|
| | | | Substituted Level (dBm) | Antenna Gain (dBd/dBi) | Cable Loss (dB) | | | |
| QPSK, Frequency: 1710.7 MHz | | | | | | | | |
| 235.92 | H | 37.05 | -75.13 | 0.00 | 0.29 | -75.42 | -13.00 | 62.42 |
| 53.74 | V | 41.79 | -61.23 | -13.18 | 0.13 | -74.54 | -13.00 | 61.54 |
| 3421.40 | H | 37.39 | -60.37 | 10.37 | 1.17 | -51.17 | -13.00 | 38.17 |
| 3421.40 | V | 38.64 | -59.09 | 10.37 | 1.17 | -49.89 | -13.00 | 36.89 |
| 5132.10 | H | 34.05 | -59.52 | 11.28 | 1.47 | -49.71 | -13.00 | 36.71 |
| 5132.10 | V | 34.65 | -58.81 | 11.28 | 1.47 | -49.00 | -13.00 | 36.00 |
| QPSK, Frequency:1745 MHz | | | | | | | | |
| 237.86 | H | 35.31 | -76.83 | 0.00 | 0.29 | -77.12 | -13.00 | 64.12 |
| 46.96 | V | 39.03 | -59.20 | -17.88 | 0.12 | -77.20 | -13.00 | 64.20 |
| 3490.00 | H | 38.30 | -59.54 | 10.40 | 1.17 | -50.31 | -13.00 | 37.31 |
| 3490.00 | V | 37.87 | -59.91 | 10.40 | 1.17 | -50.68 | -13.00 | 37.68 |
| 5235.00 | H | 35.47 | -58.43 | 11.34 | 1.46 | -48.55 | -13.00 | 35.55 |
| 5235.00 | V | 34.24 | -59.47 | 11.34 | 1.46 | -49.59 | -13.00 | 36.59 |
| QPSK, Frequency: 1779.3 MHz | | | | | | | | |
| 172.93 | H | 37.84 | -74.34 | 0.00 | 0.24 | -74.58 | -13.00 | 61.58 |
| 46.96 | V | 40.47 | -57.76 | -17.88 | 0.12 | -75.76 | -13.00 | 62.76 |
| 3558.60 | H | 40.24 | -57.43 | 10.46 | 1.22 | -48.19 | -13.00 | 35.19 |
| 3558.60 | V | 35.19 | -62.38 | 10.46 | 1.22 | -53.14 | -13.00 | 40.14 |
| 5337.90 | H | 34.37 | -59.10 | 11.40 | 1.47 | -49.17 | -13.00 | 36.17 |
| 5337.90 | V | 34.74 | -58.59 | 11.40 | 1.47 | -48.66 | -13.00 | 35.66 |

Note:

- 1) The unit of Antenna Gain is dBd for frequency below 1GHz, and the unit of Antenna Gain is dBi for frequency above 1GHz.
- 2) Absolute Level = Substituted Level - Cable loss + Antenna Gain
- 3) Margin = Limit-Absolute Level

==== END OF REPORT =====