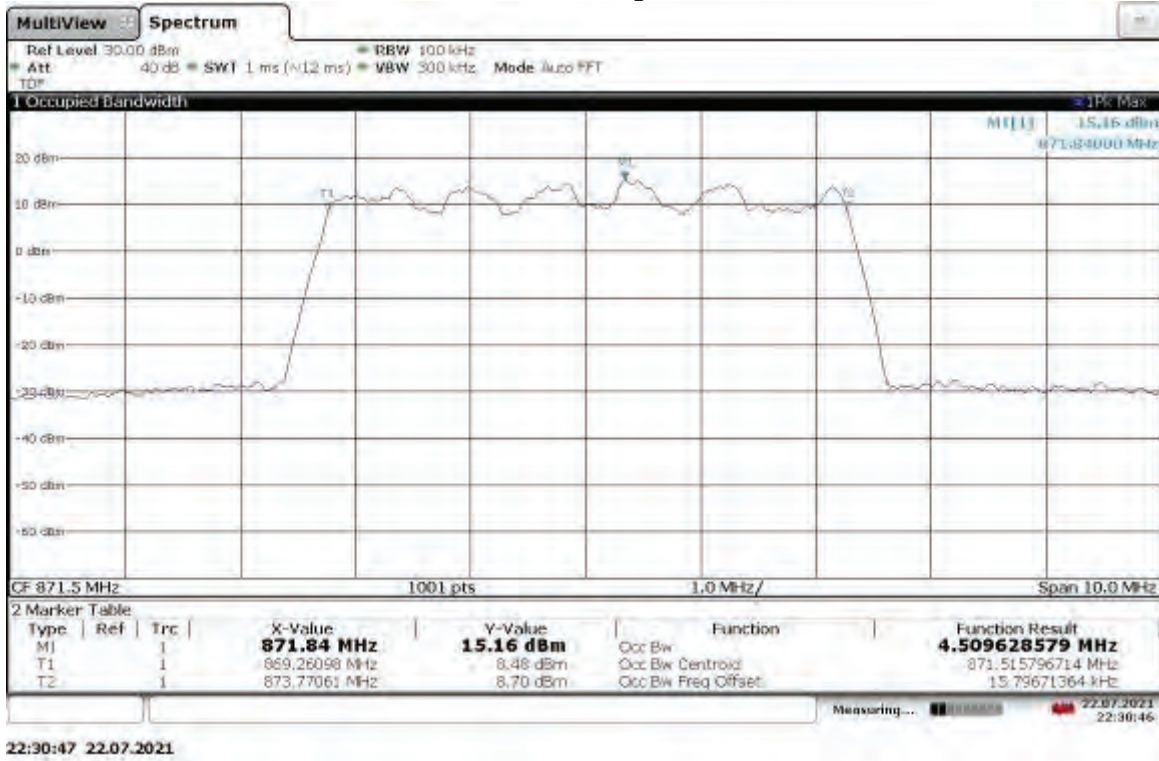
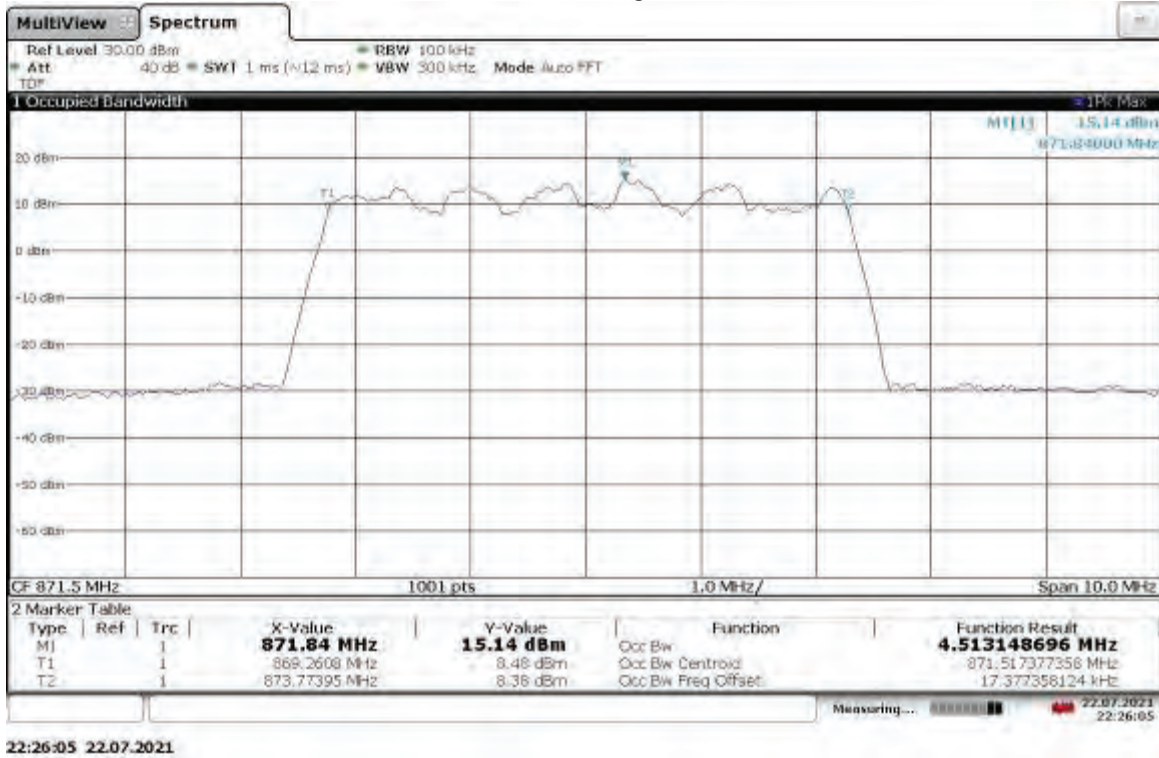


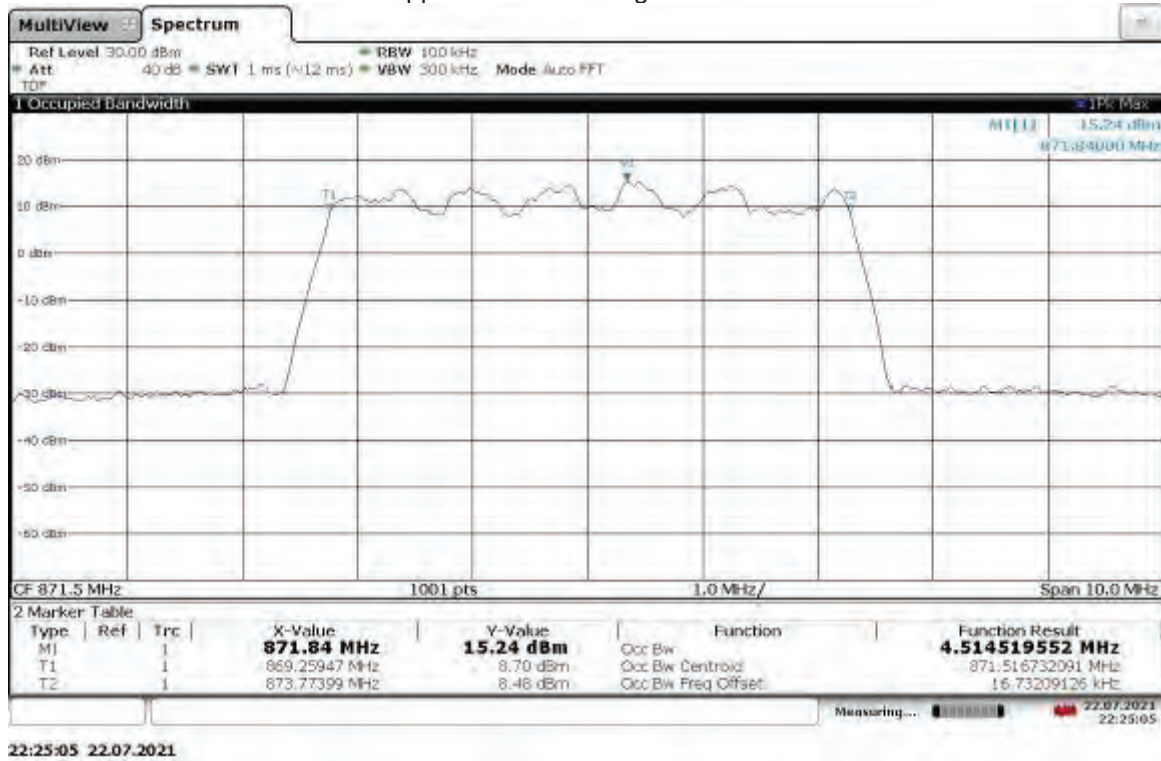
Slot 0 (Band 5), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, Low Channel,  
Lower Extreme Voltage: 41.1VDC



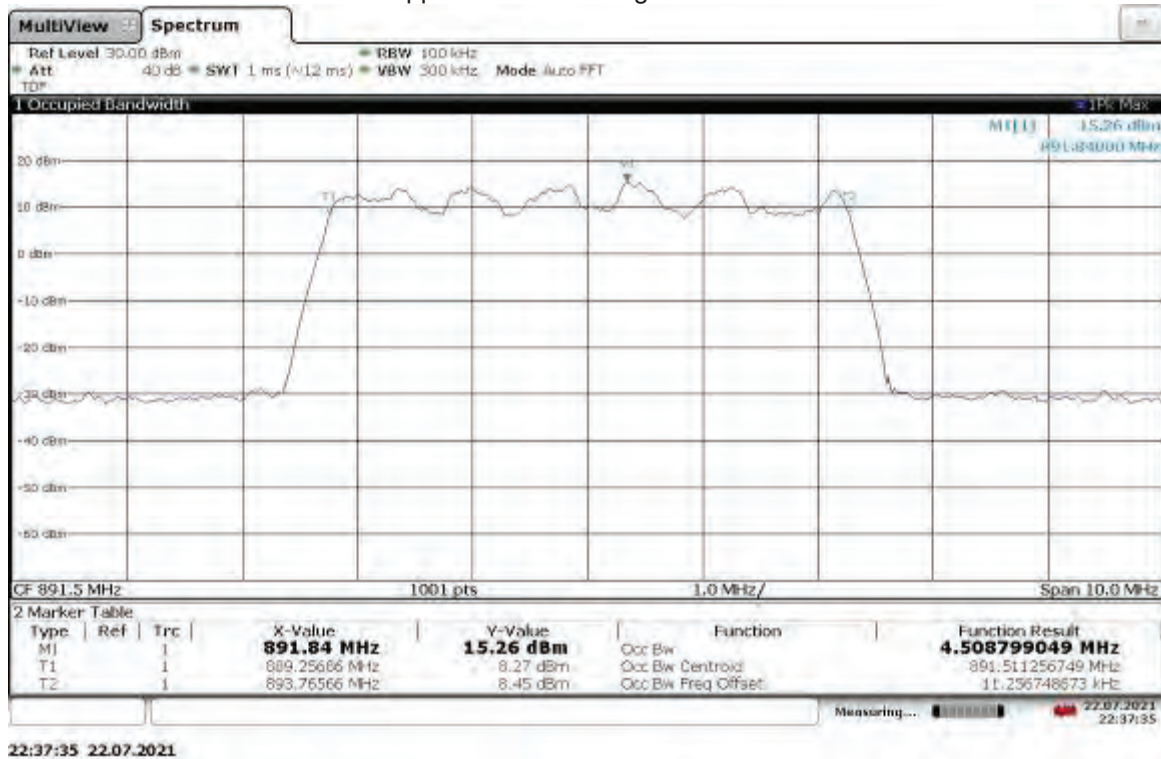
Slot 0 (Band 5), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, High Channel,  
Lower Extreme Voltage: 41.1VDC



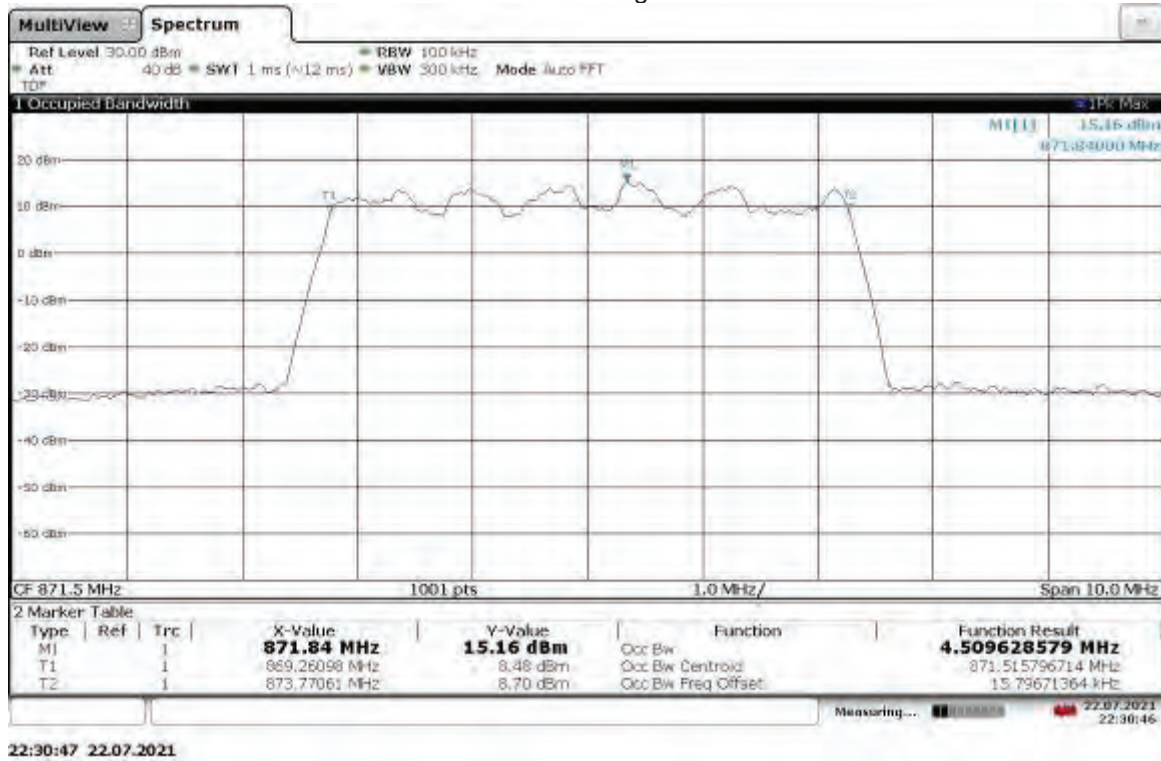
Slot 0 (Band 5), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, Low Channel,  
Upper Extreme Voltage: 57.0VDC



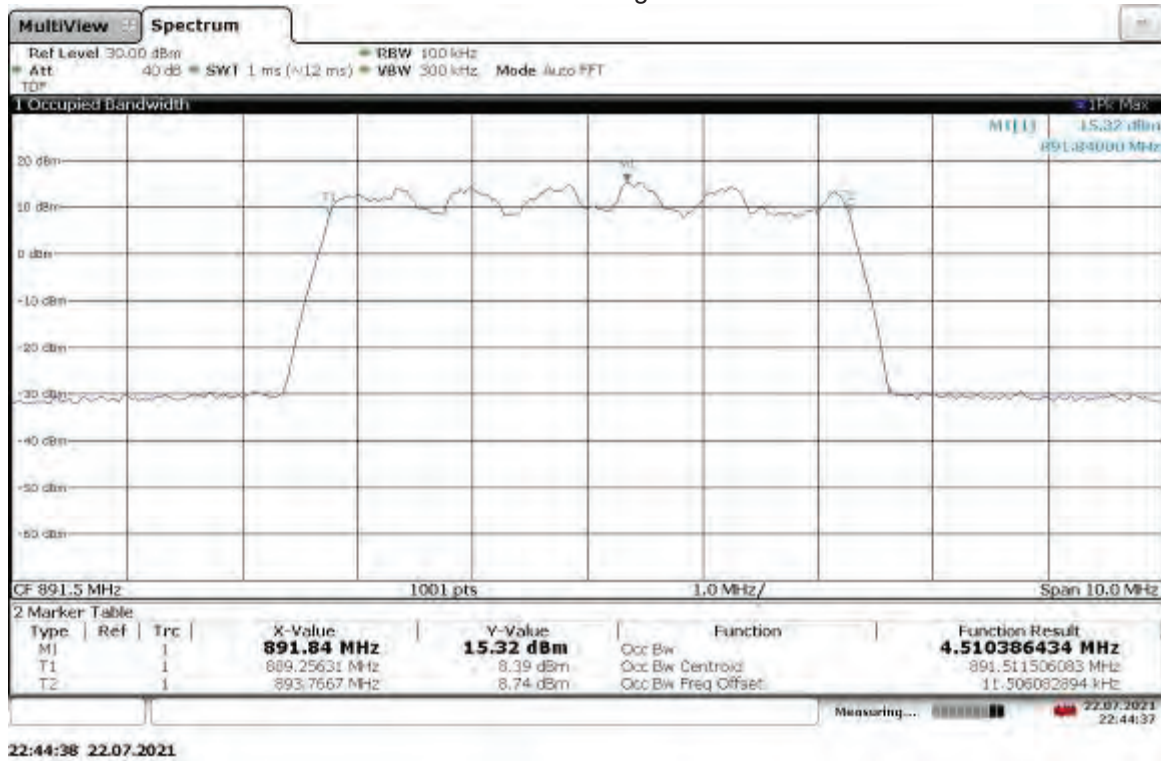
Slot 0 (Band 5), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, High Channel,  
Upper Extreme Voltage: 57.0VDC



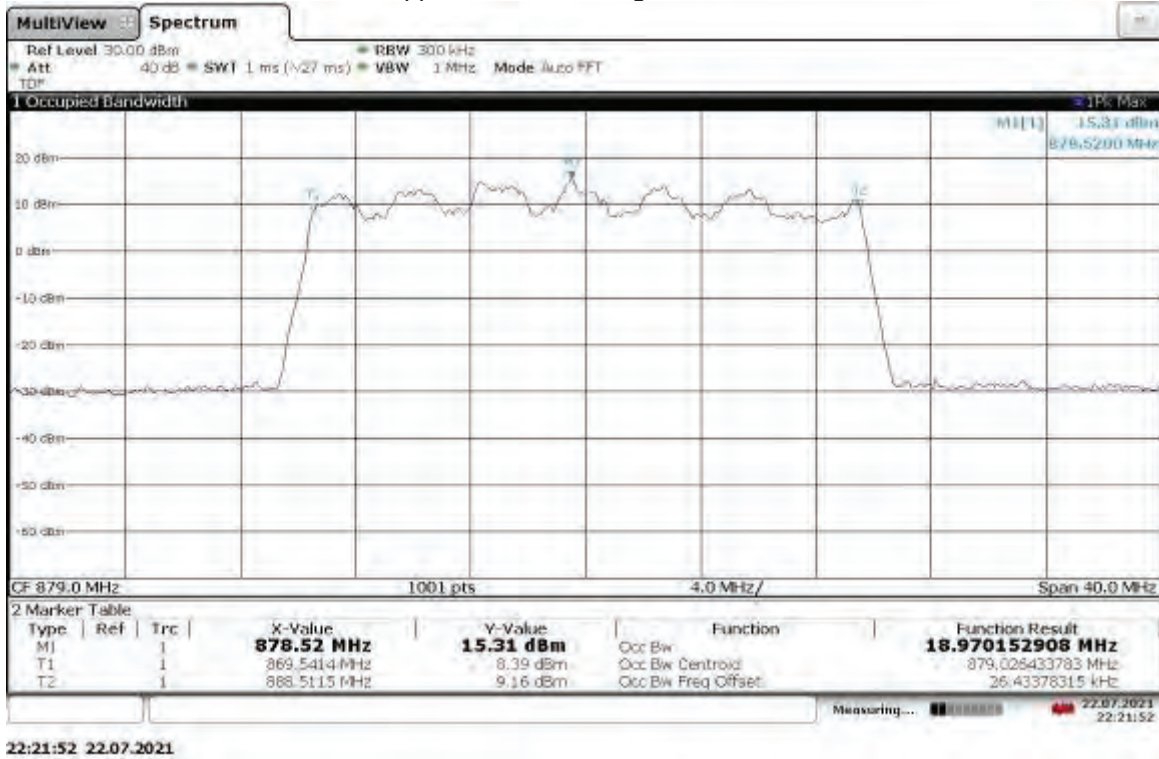
Slot 0 (Band 5), ANT0, Modulation: QPSK, Bandwidth: 20 MHz, Low Channel,  
Lower Extreme Voltage: 41.1VDC



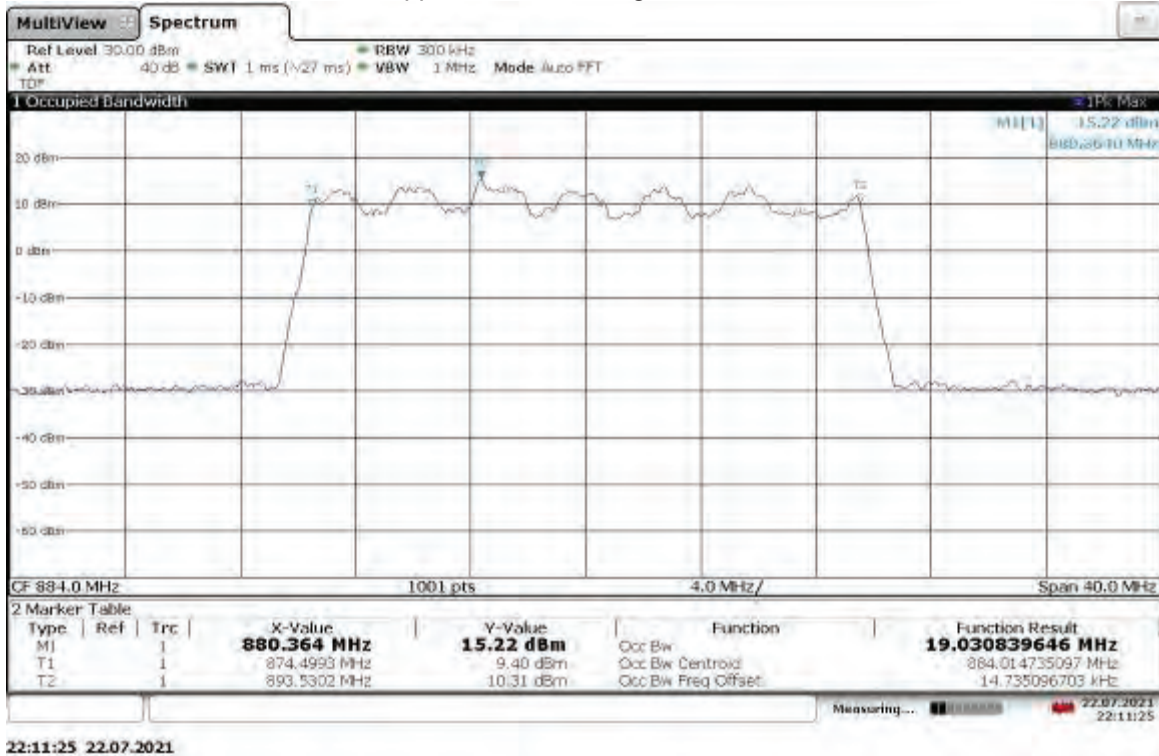
Slot 0 (Band 5), ANT0, Modulation: QPSK, Bandwidth: 20 MHz, High Channel,  
Lower Extreme Voltage: 41.1VDC



Slot 0 (Band 5), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, Low Channel,  
Upper Extreme Voltage: 57.0VDC



Slot 0 (Band 5), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, High Channel,  
Upper Extreme Voltage: 57.0VDC



Test Personnel: Vathana Ven   
Supervising/Reviewing  
Engineer:  
(Where Applicable) N/A  
  
Product Standard: FCC Part 22  
Input Voltage: 48VDC (POE)  
  
Pretest Verification w/  
Ambient Signals or  
BB Source: N/A

Test Date: 07/22/2021, 08/19/2021,  
08/31/2021

Limit Applied: See report section 10.3

Ambient Temperature: 22, 22, 23 °C

Relative Humidity: 41, 44, 34 %

Atmospheric Pressure: 1011, 1002, 1005 mbars

Deviations, Additions, or Exclusions: None

## 11 Transmitter spurious emissions

### 11.1 Method

Tests are performed in accordance with ANSI C63.26 and CFR47 FCC Parts 2.1051, 2.1053, 2.1057, and 22.

**TEST SITE:** EMC Lab & 10m ALSE

**The EMC Lab** has one Semi-anechoic Chamber and one Shielded Chamber. AC Mains Power is available at 120, 230, and 277 Single Phase; 208, 400, and 480 3-Phase. Large reference ground-planes are installed in the general lab area to facilitate EMC work not requiring a shielded environment.

**The 10m ALSE** is 13m (Length) x 21m (Depth) x 10m (Height) with the effective size in terms of space from the tips of the absorber is 12m (Length) x 20m (Depth) x 8.5m (Height). This chamber achieves broadband performance using a unique arrangement of hybrid and ferrite tile absorber. This chamber has a built in 3m diameter turntable (Embedded type). The metal structure of the table makes electrical connection around the entire circumference of the turntable to the ground plane with a metal brush type connection. The turntable is located on one end of the chamber and the antennas are mounted 3 and 10 meters away at the other end of the chamber on the adjustable an Antenna Mast. The antenna mast is a non-conductive bore sighted type with remote control of antenna height and polarization. The Antenna Mast and the turntable can be remotely controlled through the controller located in the adjacent Control room. A Styrofoam table 80 cm high is used for table-top equipment.

### Measurement Uncertainty

| Measurement             | Frequency Range | Expanded Uncertainty (k=2) | Ucisp  |
|-------------------------|-----------------|----------------------------|--------|
| Radiated Emissions, 10m | 30-1000 MHz     | 4.6dB                      | 6.3 dB |
| Radiated Emissions, 3m  | 30-1000 MHz     | 5.3 dB                     | 6.3 dB |
| Radiated Emissions, 3m  | 1-6 GHz         | 4.5 dB                     | 5.2 dB |
| Radiated Emissions, 3m  | 6-15 GHz        | 5.2 dB                     | 5.5 dB |
| Radiated Emissions, 3m  | 15-18 GHz       | 5.0 dB                     | 5.5 dB |
| Radiated Emissions, 3m  | 18-40 GHz       | 5.0 dB                     | 5.5 dB |

As shown in the table above our radiated emissions  $U_{lab}$  is less than the corresponding  $U_{CISPR}$  reference value in CISPR 16-4-2 Table 1, hence the compliance of the product is only based on the measured value, and no measurement uncertainty correction is required, based on CISPR 22 and CISPR 11 (for 2006 and later revisions) Clause 11.

### Sample Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CF - AG$$

Where

- FS = Field Strength in dB $\mu$ V/m
- RA = Receiver Amplitude (including preamplifier) in dB $\mu$ V
- CF = Cable Attenuation Factor in dB
- AF = Antenna Factor in dB
- AG = Amplifier Gain in dB

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows.

Assume a receiver reading of 52.0 dB $\mu$ V is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted, giving a field strength of 32 dB $\mu$ V/m. This value in dB $\mu$ V/m was converted to its corresponding level in  $\mu$ V/m.

$$RA = 52.0 \text{ dB}\mu\text{V}$$

$$AF = 7.4 \text{ dB/m}$$

$$CF = 1.6 \text{ dB}$$

$$AG = 29.0 \text{ dB}$$

$$FS = 32 \text{ dB}\mu\text{V/m}$$

To convert from dB $\mu$ V to  $\mu$ V or mV the following was used:

$$UF = 10^{(NF / 20)} \text{ where } UF = \text{Net Reading in } \mu\text{V}$$
$$NF = \text{Net Reading in dB}\mu\text{V}$$

#### Example:

$$FS = RA + AF + CF - AG = 52.0 + 7.4 + 1.6 - 29.0 = 32.0$$

$$UF = 10^{(32 \text{ dB}\mu\text{V} / 20)} = 39.8 \mu\text{V/m}$$

Alternately, when BAT-EMC Emission Software is used, the "Level" includes all losses and gains and is compared directly in the "Margin" column to the "Limit". The "Correction" includes Antenna Factor, Preamp, and Cable Loss. These are already accounted for in the "Level" column.

**11.2 Test Equipment Used:**

Test equipment used for antenna port conducted test

| Asset      | Description                                  | Manufacturer       | Model          | Serial          | Cal Date   | Cal Due    |
|------------|----------------------------------------------|--------------------|----------------|-----------------|------------|------------|
| CEN001'    | DC-40GHz attenuator 20dB                     | Centric RF         | C411-20        | CEN001          | 01/22/2021 | 01/22/2022 |
| CBLSHF204' | Cable, SMA - SMA, 9kHz -40GHz, (Cable Kit 5) | Huber + Suhner     | Sucoflex 102EA | 234714001       | 02/03/2021 | 02/03/2022 |
| ROS005-1'  | Signal and Spectrum Analyzer                 | Rohde and Schwartz | FSW43          | 100646          | 10/27/2020 | 10/27/2021 |
| DAV005'    | Weather Station                              | Davis              | 6250           | MS19121808<br>3 | 02/07/2021 | 02/07/2022 |

**Software Utilized:**

| Name | Manufacturer | Version |
|------|--------------|---------|
| None | --           | --      |

Test equipment used for Radiated emissions

| Asset      | Description                                  | Manufacturer         | Model          | Serial          | Cal Date   | Cal Due    |
|------------|----------------------------------------------|----------------------|----------------|-----------------|------------|------------|
| IW001'     | 2 meter cable                                | Insulated Wire       | 2801-NPS       | 001             | 10/07/2020 | 10/07/2021 |
| HS003'     | 10m under floor cable                        | Huber-Schuner        | 10m-1          | HS003           | 02/17/2021 | 02/17/2022 |
| HS002'     | DC-18GHz cable 1.4m long                     | Huber & Suhner       | SucoFlex 106A  | HS002           | 11/25/2020 | 11/25/2021 |
| PRE11'     | 50dB gain preamp                             | Pasternack           | PRE11          | PRE11           | 09/02/2021 | 09/02/2022 |
| IW006'     | DC-18GHz cable 8.4m long                     | Insulated Wire       | 2800-NPS       | IW006           | 11/25/2020 | 11/25/2021 |
| PRE12'     | Pre-amplifier                                | Corn Power           | PAM-118A       | 18040117        | 12/07/2020 | 12/07/2021 |
| 145145'    | Broadband Hybrid Antenna 30 MHz - 3 GHz      | Sunol Sciences Corp. | JB3            | A122313         | 06/09/2021 | 09/09/2022 |
| EMC04'     | ANTENNA, RIDGED GUIDE, 18-40 GHZ             | EMCO                 | 3116           | 2090            | 01/28/2021 | 01/28/2022 |
| CBLSHF204' | Cable, SMA - SMA, 9kHz -40GHz, (Cable Kit 5) | Huber + Suhner       | Sucoflex 102EA | 234714001       | 02/03/2021 | 02/03/2022 |
| 145108'    | EMI Test Receiver (20Hz - 40GHz)             | Rohde & Schwarz      | ESIB40         | 100209          | 06/22/2021 | 06/22/2022 |
| PRE8'      | PREAMPLIFIER 1- 40 GHz                       | MITEQ                | NSP4000-NF     | 507145          | 11/25/2020 | 11/25/2021 |
| DAV007'    | Weather Station Vantage Vue                  | Davis                | 6250           | MS19121200<br>3 | 03/22/2021 | 03/22/2022 |
| ETS005'    | 1-18GHz horn antenna                         | ETS-Lindgren         | 3117           | 00218279        | 09/28/2020 | 09/28/2021 |
| PRE10'     | 30-1000MHz pre-amp                           | ITS                  | PRE10          | PRE10           | 02/17/2021 | 02/17/2022 |

**Software Utilized:**

| Name    | Manufacturer | Version   |
|---------|--------------|-----------|
| BAT-EMC | Nexio        | 3.18.0.16 |

**11.3 Results:**

The sample tested was found to Comply. Where a resolution bandwidth of less than 1 MHz was used (in some cases, 120 kHz or 100 kHz), more than 10 dB margin to the limit is shown. Since the two antenna ports transmit uncorrelated data streams and use cross polarized antennas, no adjustments to the test results were applied due to MIMO operation, per KDB 662911.

§22.917(a)(b): The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB.

(b) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. 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. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

*Note: All spurious emissions were tested with narrowest bandwidth and QPSK modulation settings. Since there were no emissions within 30dB of limit, and settings had ~1dB effect on peak readings, other settings were not tested and EUT was considered compliant.*

#### **11.4 Setup Photographs:**

9kHz-30 MHz Test Setup

Photographs are available in a separate exhibit

30-1000 MHz Test Setup

Photographs are available in a separate exhibit

1-18 GHz Test Setup

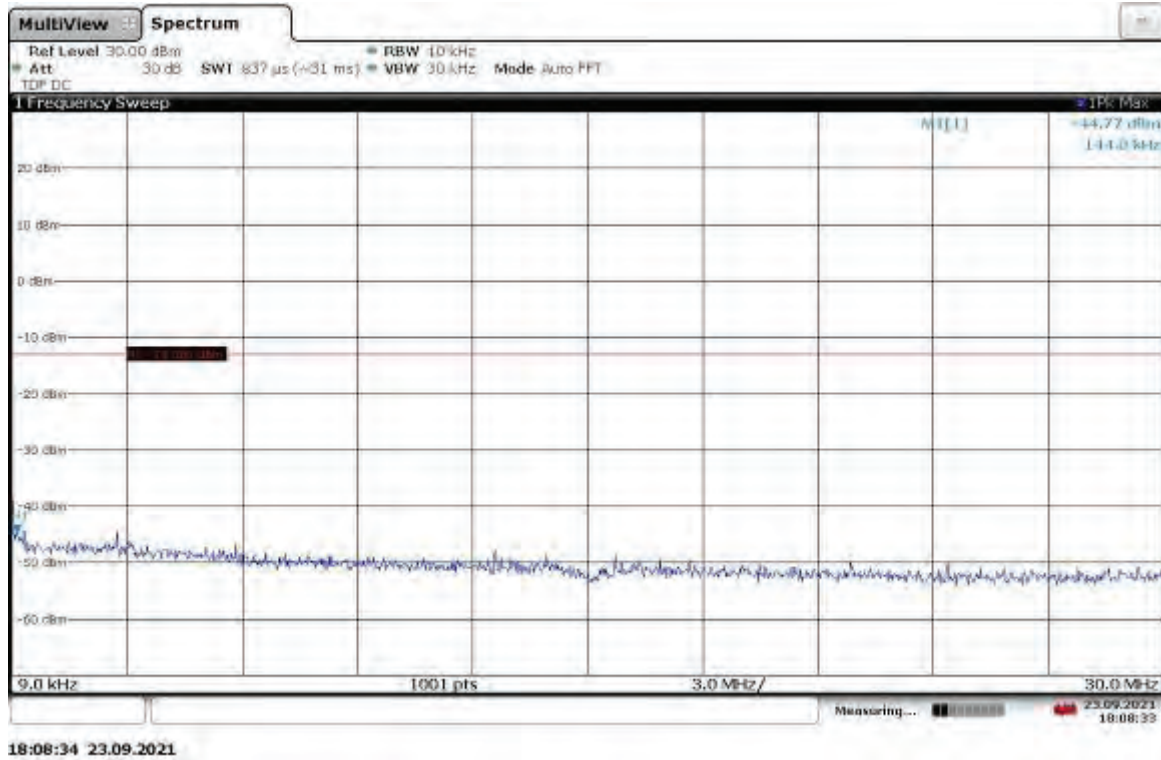
Photographs are available in a separate exhibit

Antenna Port Conducted Test Setup

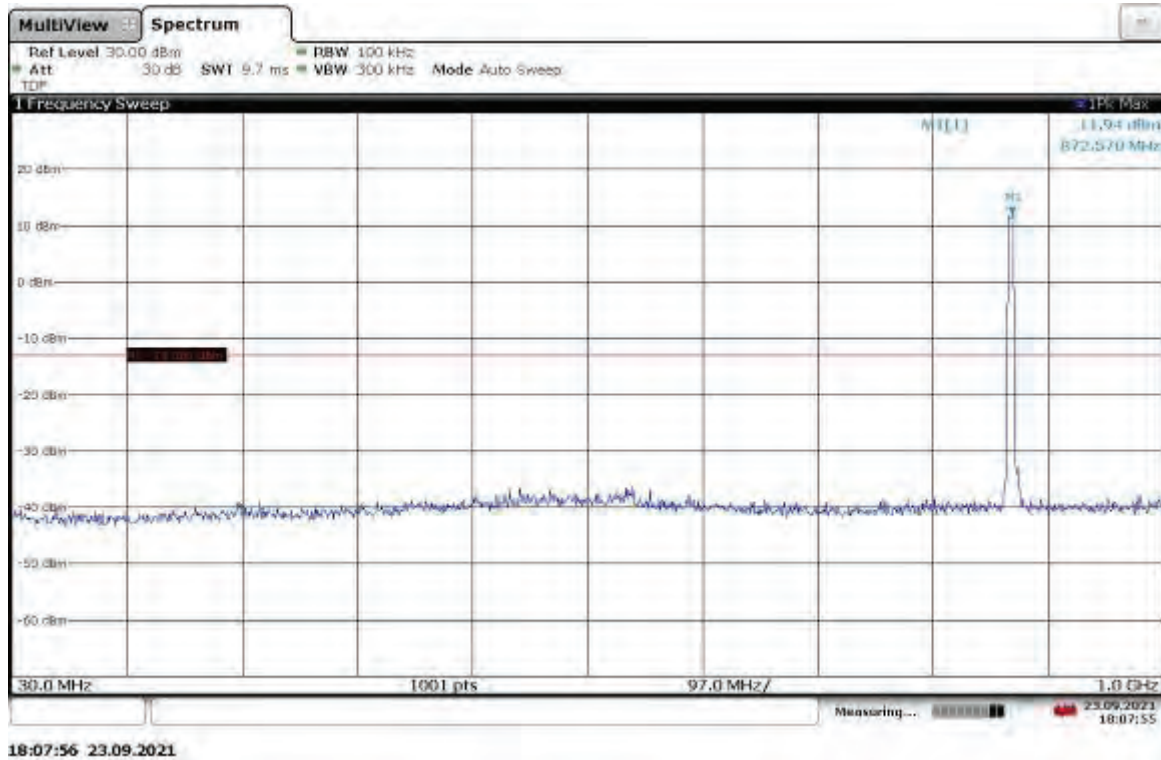
Photographs are available in a separate exhibit

# 11.5 Plots/Data:

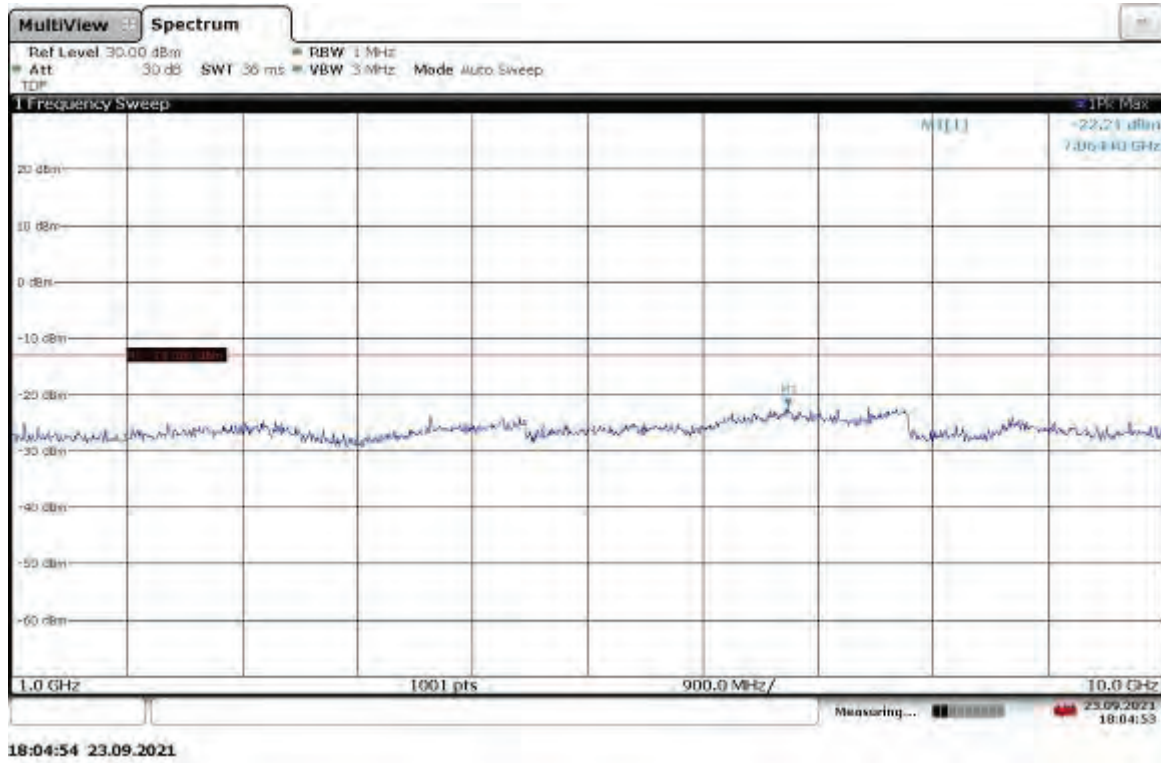
Slot 0 (Band 5), ANT0, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, Low Channel 871.5 MHz  
9kHz-30MHz



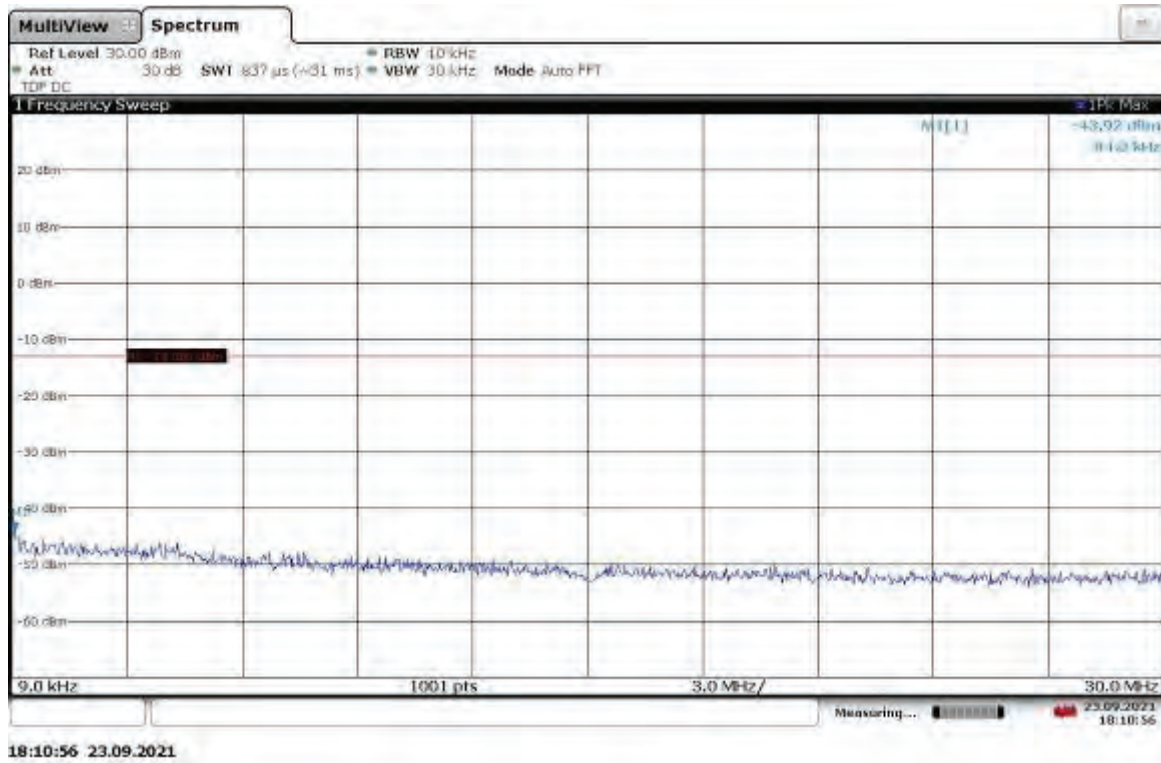
Slot 0 (Band 5), ANT0, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, Low Channel 871.5 MHz  
30MHz-1GHz



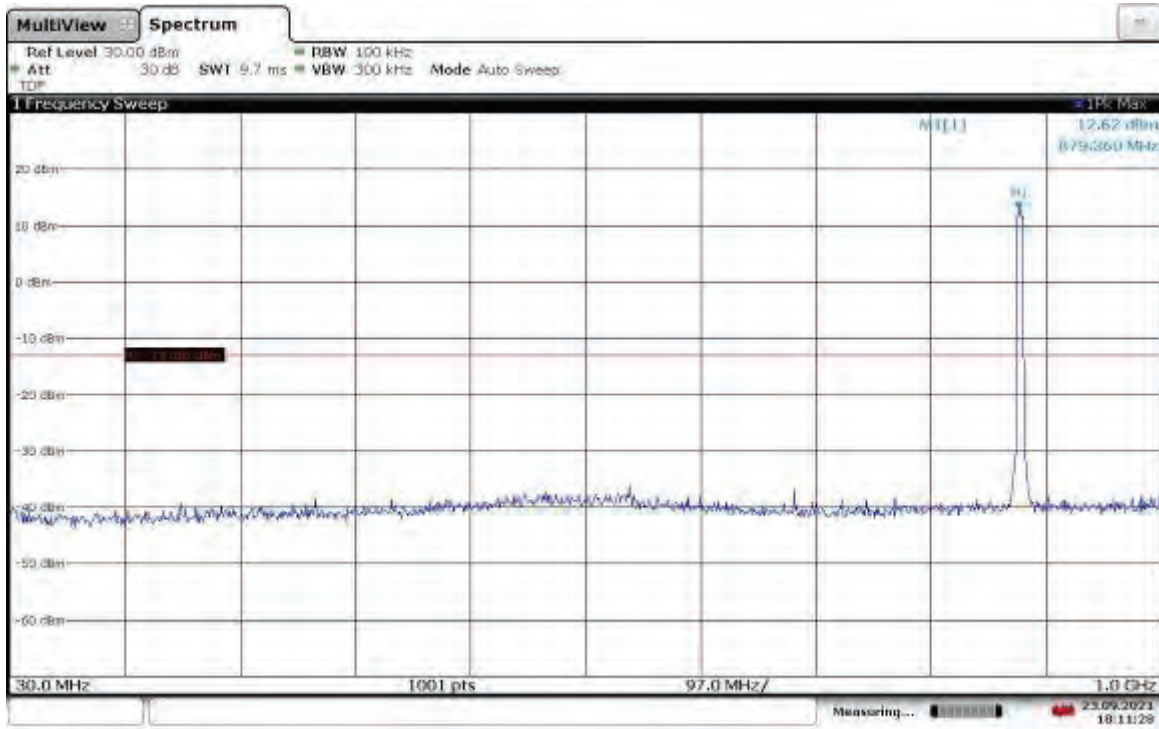
Slot 0 (Band 5), ANT0, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, Low Channel 871.5 MHz  
1-10 GHz



Slot 0 (Band 5), ANT0, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, Mid Channel 881 MHz  
9kHz-MHz

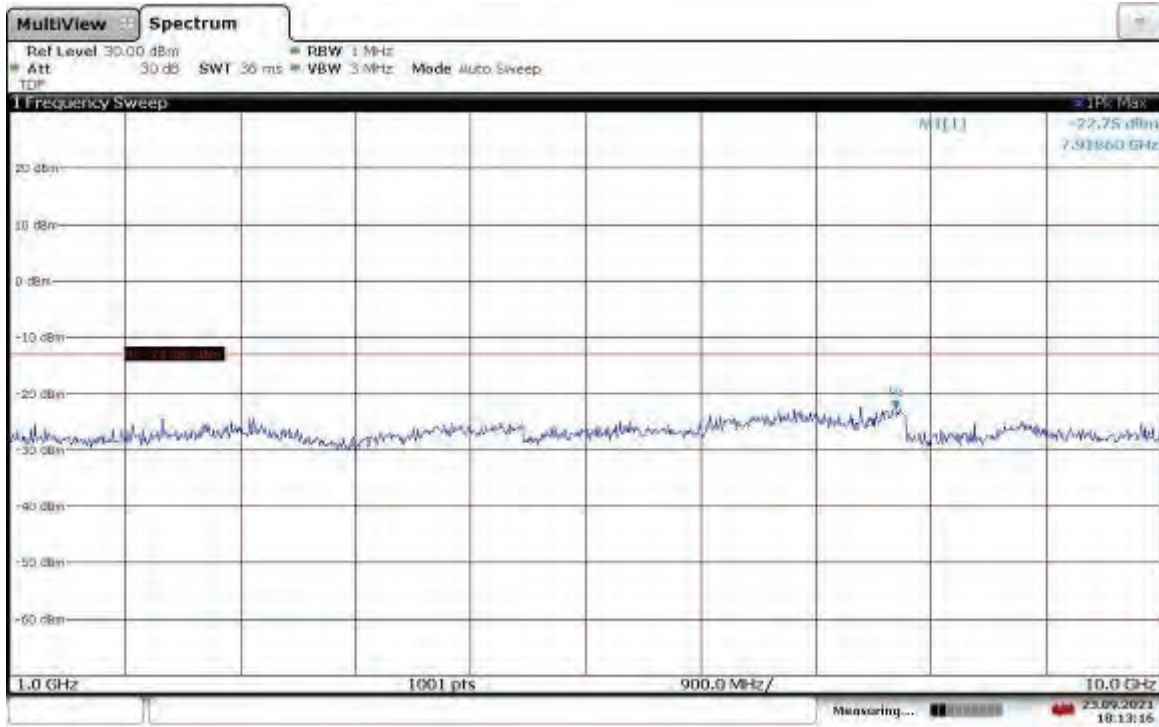


**Slot 0 (Band 5), ANT0, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, Mid Channel 881 MHz  
30MHz-1GHz**



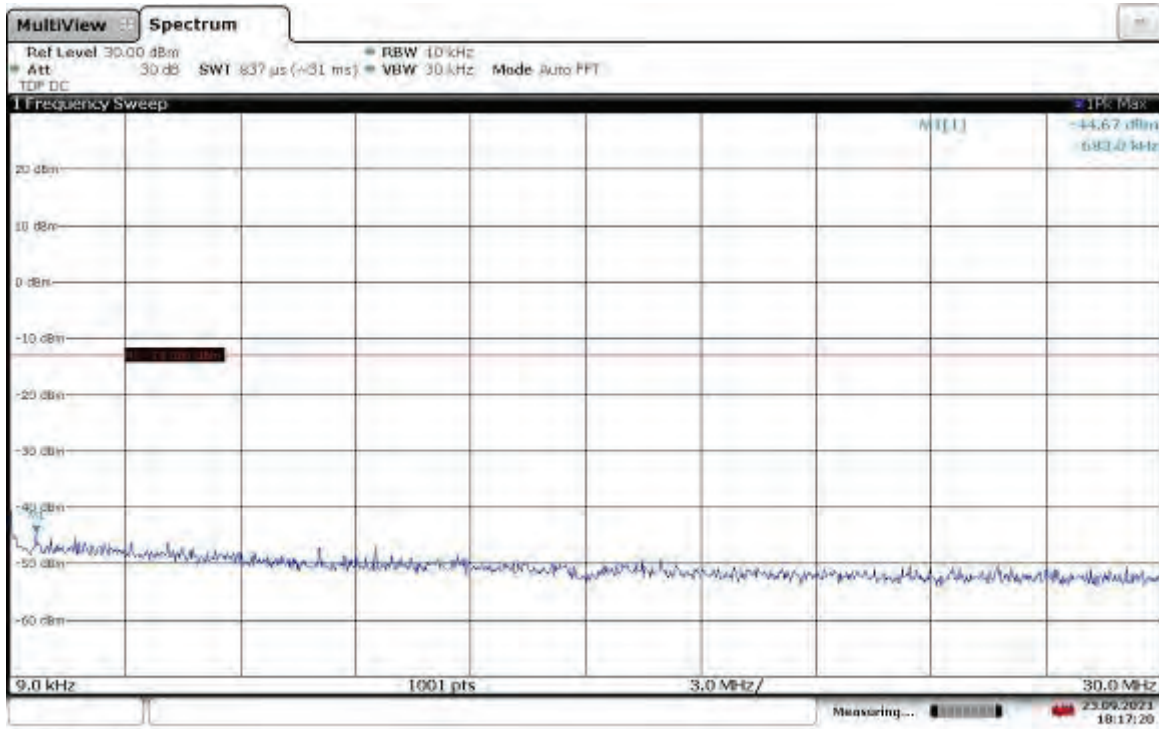
18:11:28 23.09.2021

**Slot 0 (Band 5), ANT0, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, Mid Channel 1960 MHz  
1-10GHz**



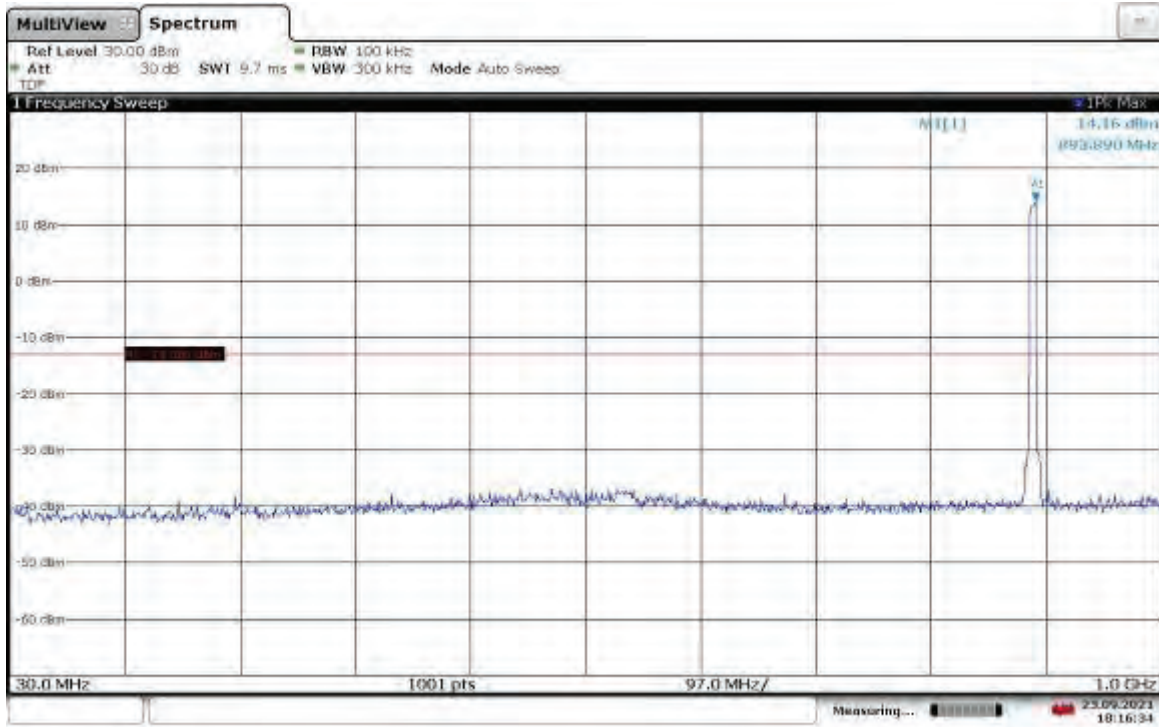
18:13:16 23.09.2021

Slot 0 (Band 5), ANT0, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, High Channel 891.5 MHz  
9kHz-30MHz



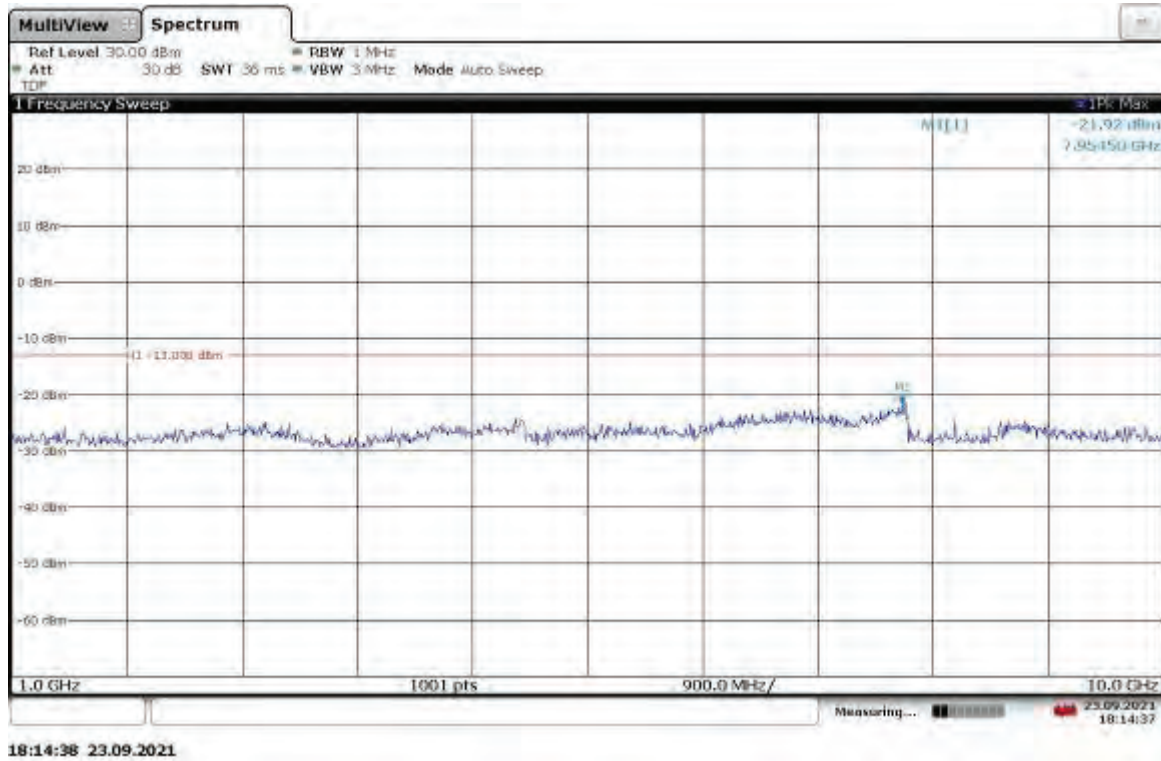
18:17:21 23.09.2021

Slot 0 (Band 5), ANT0, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, High Channel 891.5 MHz  
30MHz-1GHz

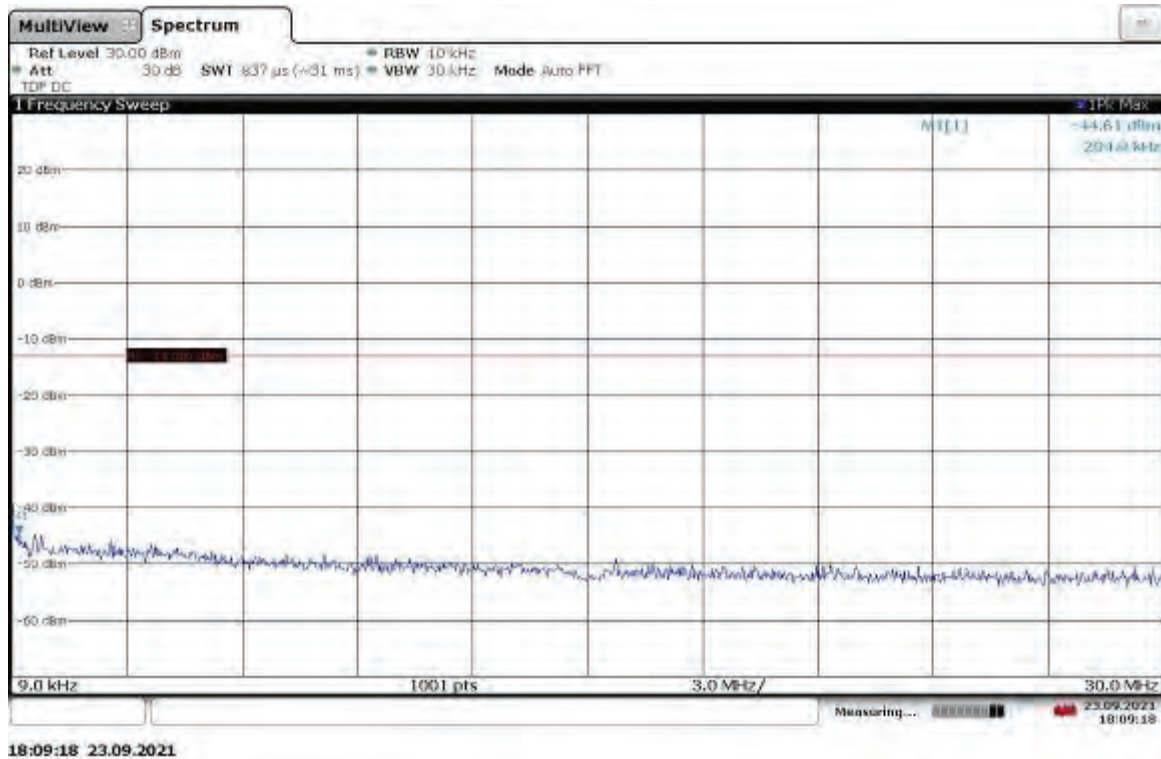


18:16:35 23.09.2021

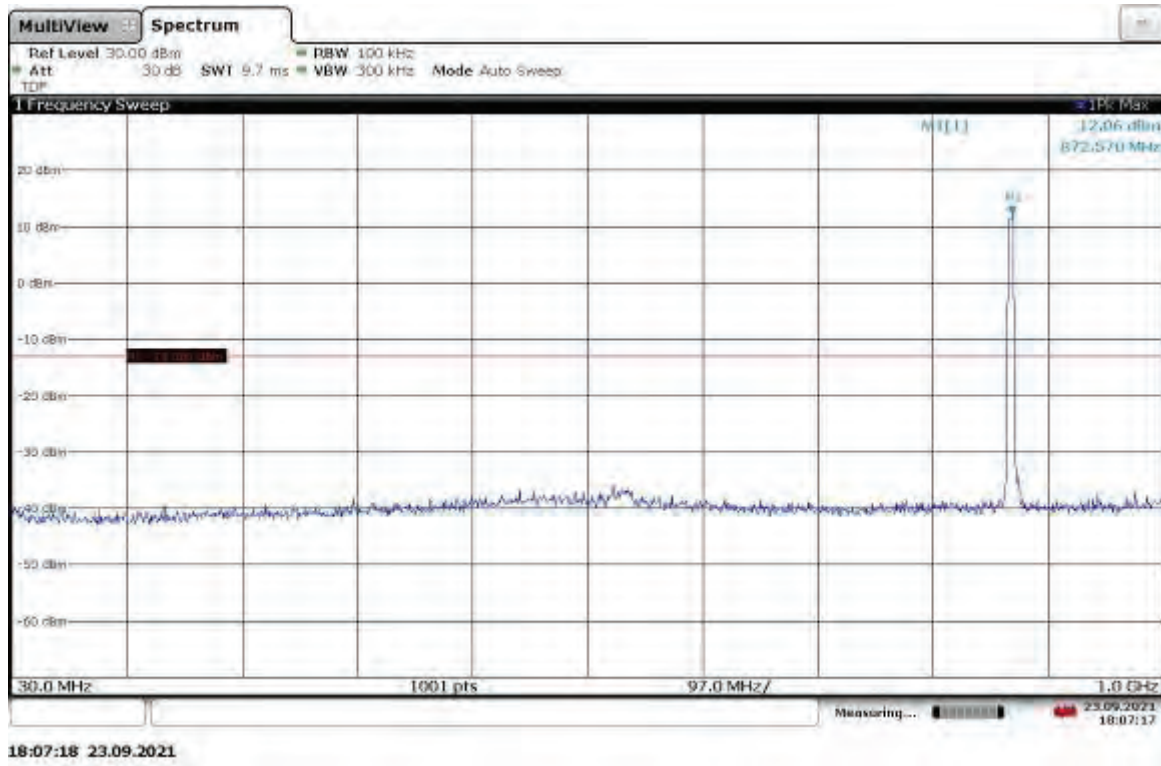
Slot 0 (Band 5), ANT0, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, High Channel 876.5 MHz  
1-10GHz



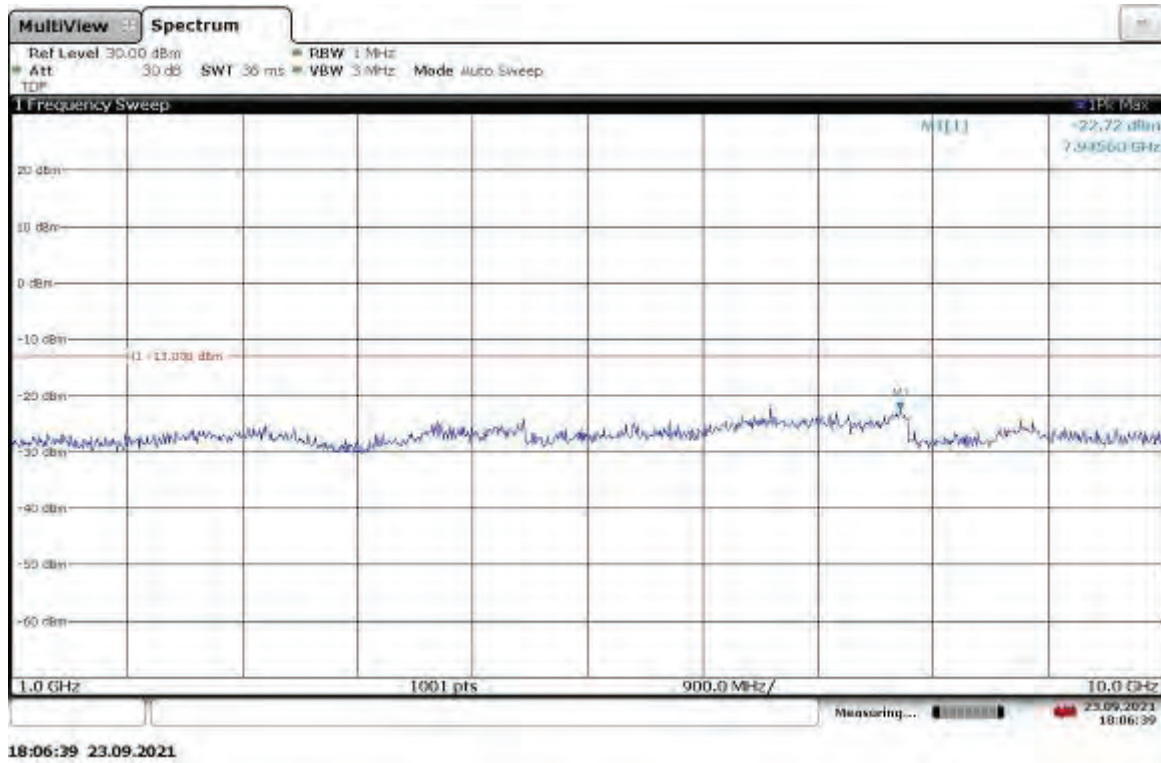
Slot 0 (Band 5), ANT1, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, Low Channel 871.5 MHz  
9kHz-30MHz



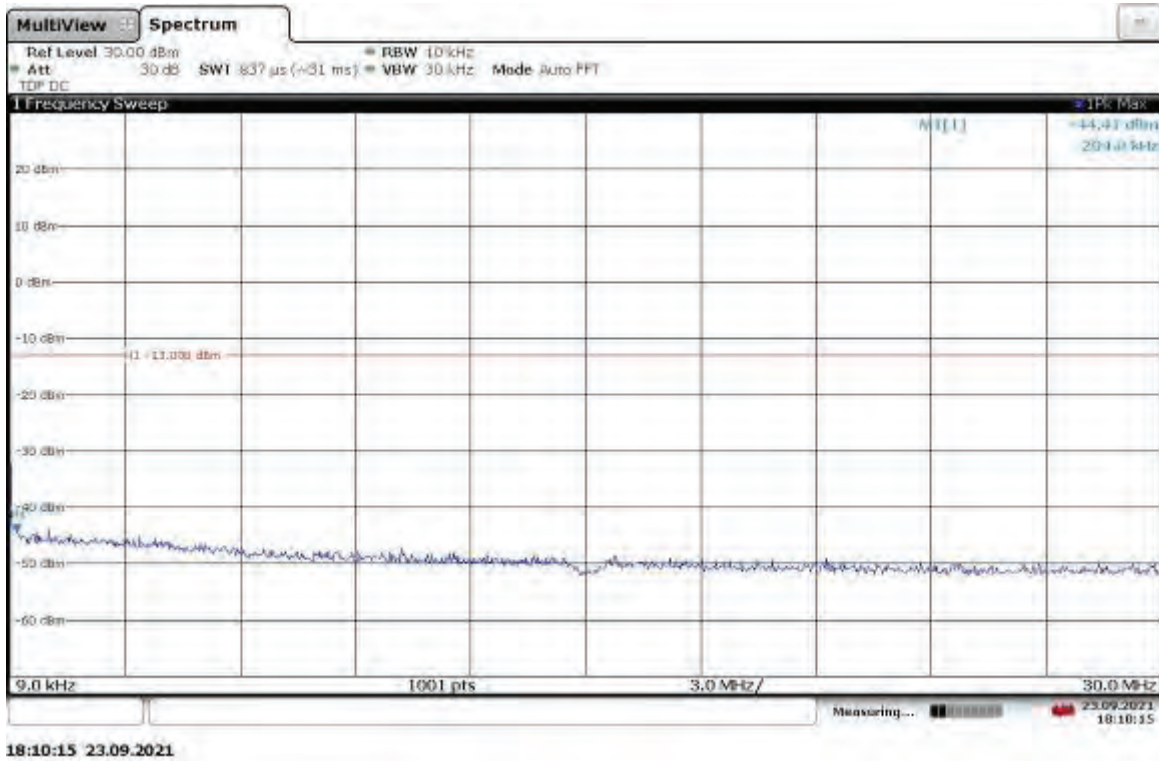
Slot 0 (Band 5), ANT1, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, Low Channel 871.5 MHz  
30MHz-1GHz



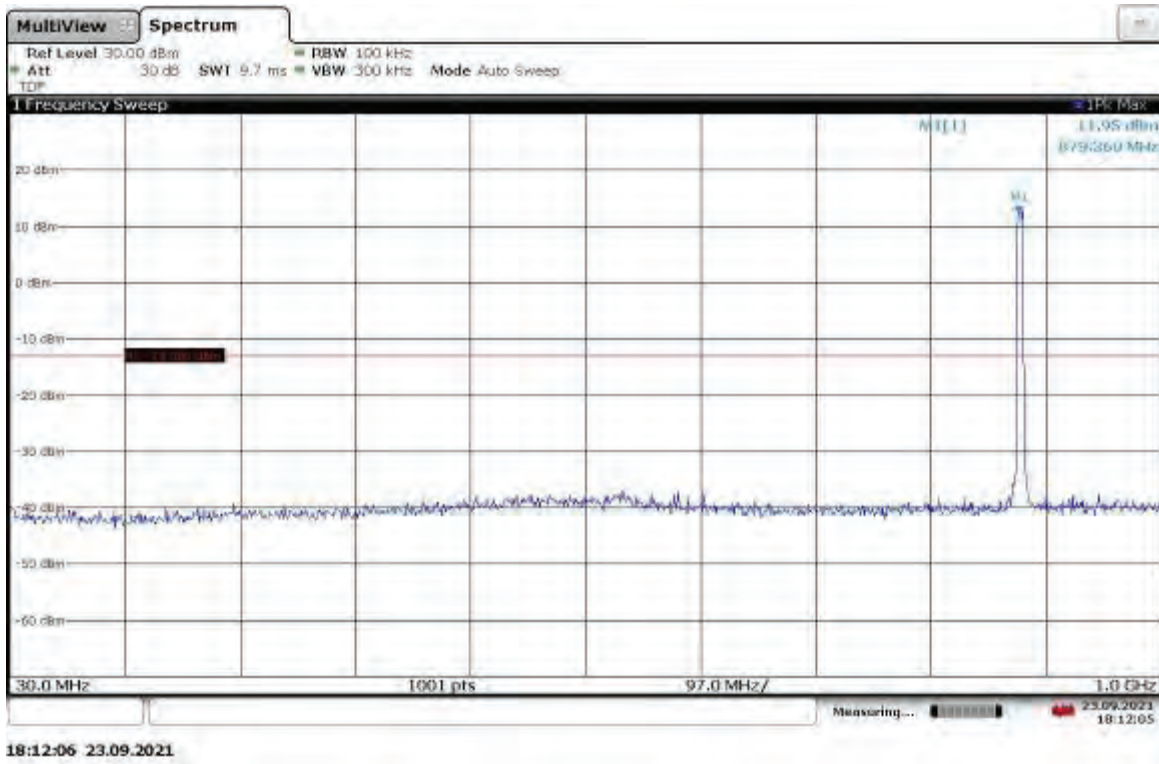
Slot 0 (Band 5), ANT1, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, Low Channel 8715 MHz  
1-10GHz



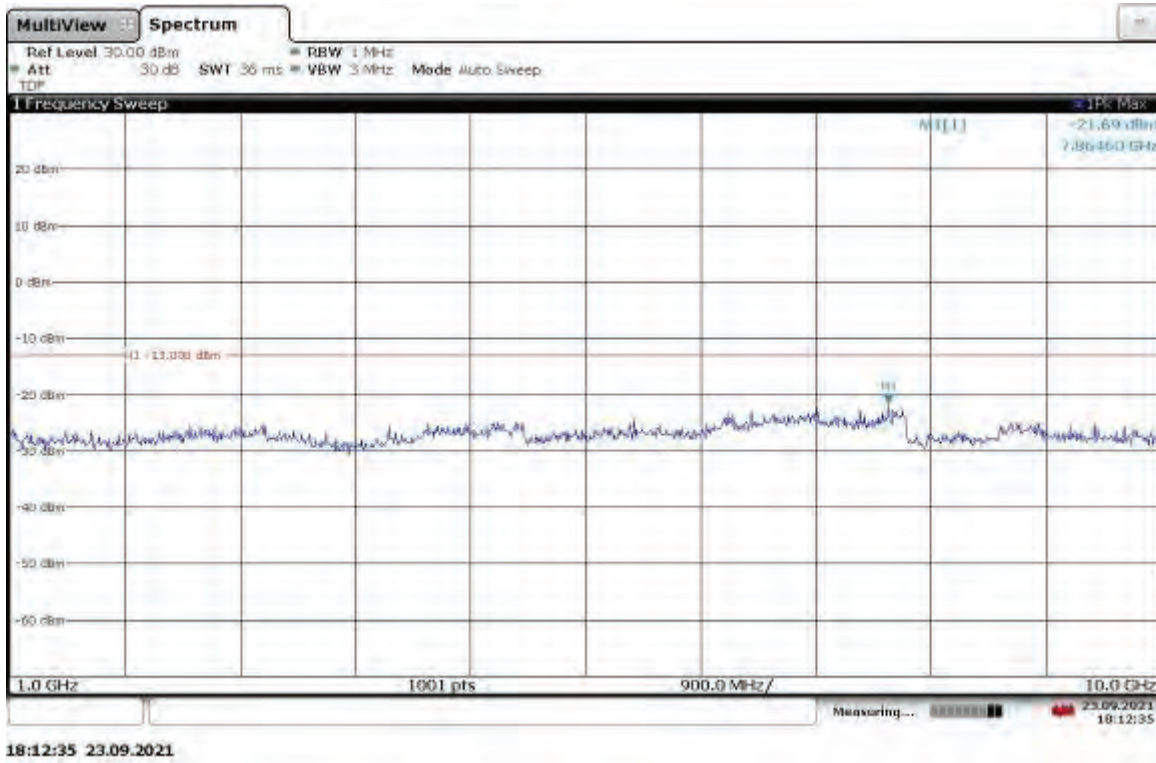
**Slot 0 (Band 5), ANT1, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, Mid Channel 881 MHz  
9kHz-30MHz**



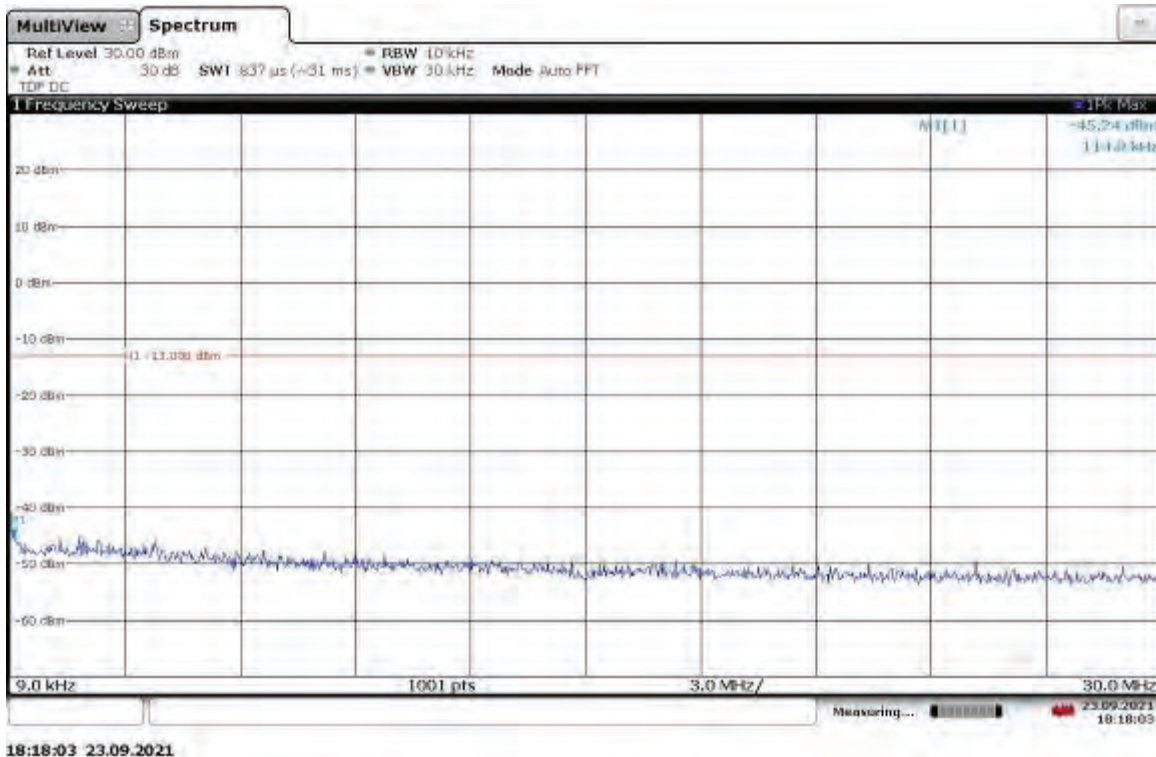
**Slot 0 (Band 5), ANT1, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, Mid Channel 881 MHz  
30MHz-1GHz**



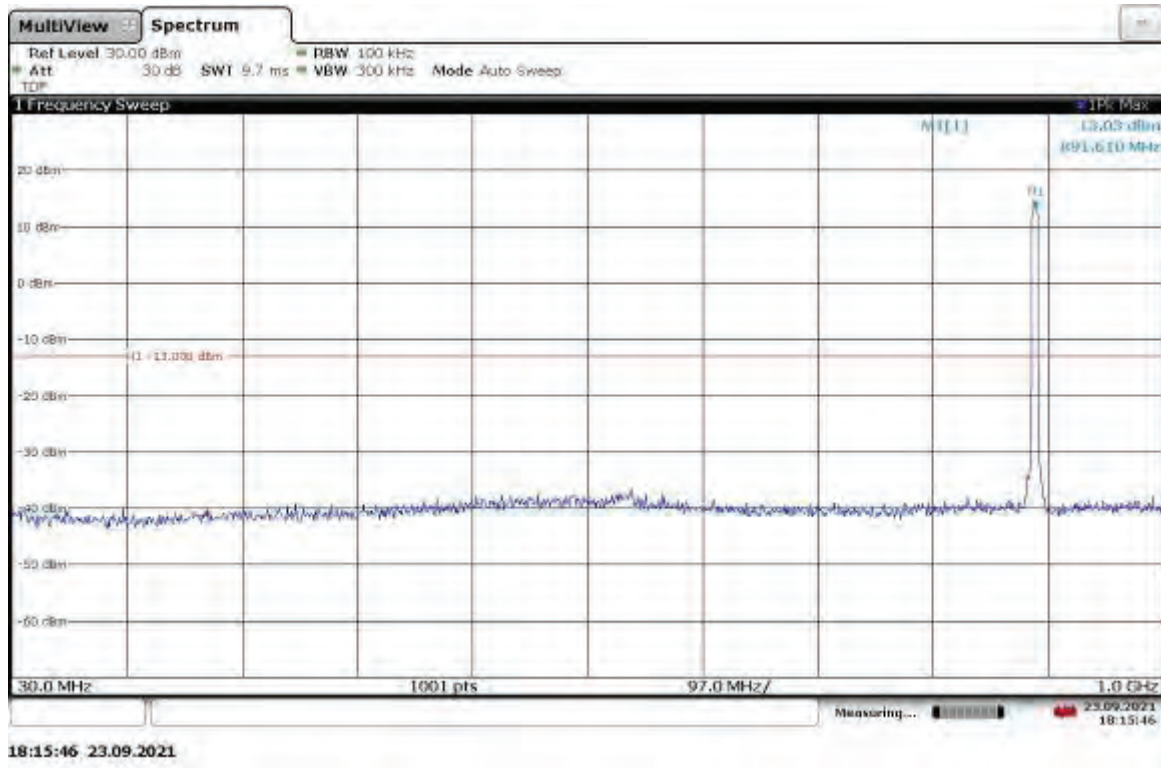
Slot 0 (Band 5), ANT1, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, Mid Channel 881 MHz  
1-10GHz



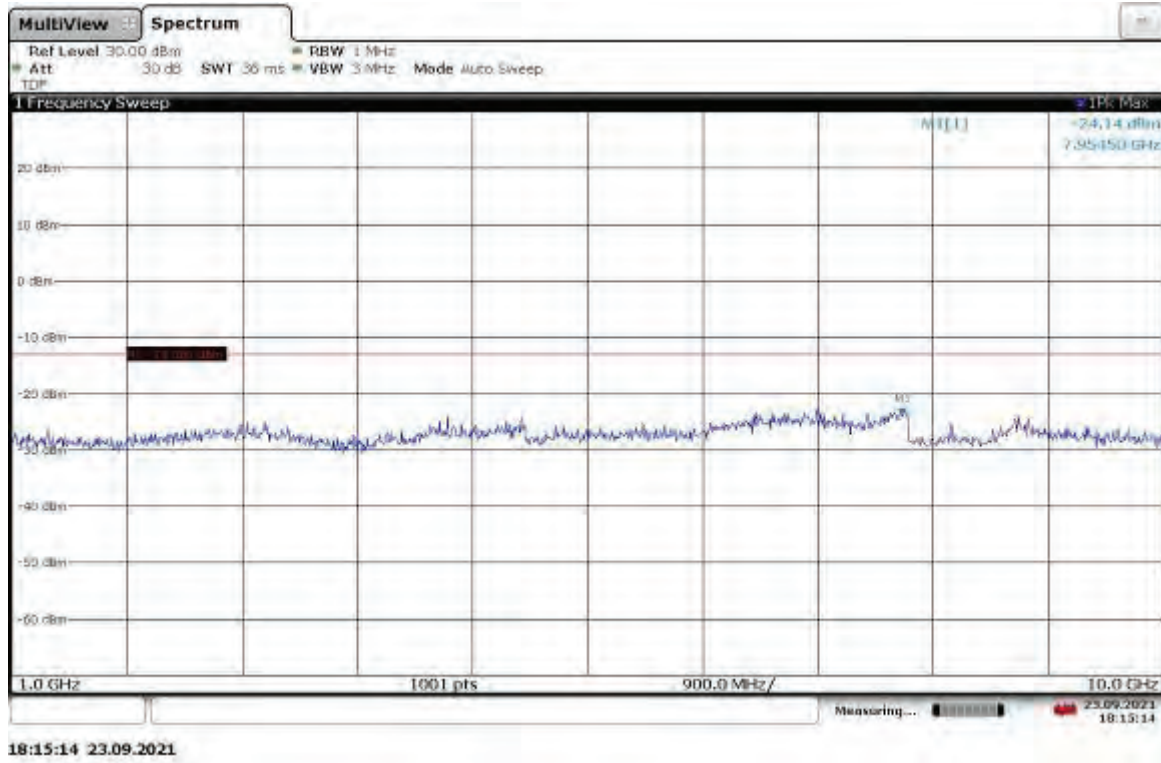
Slot 0 (Band 5), ANT1, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, High Channel 891.5 MHz  
9kHz-30MHz



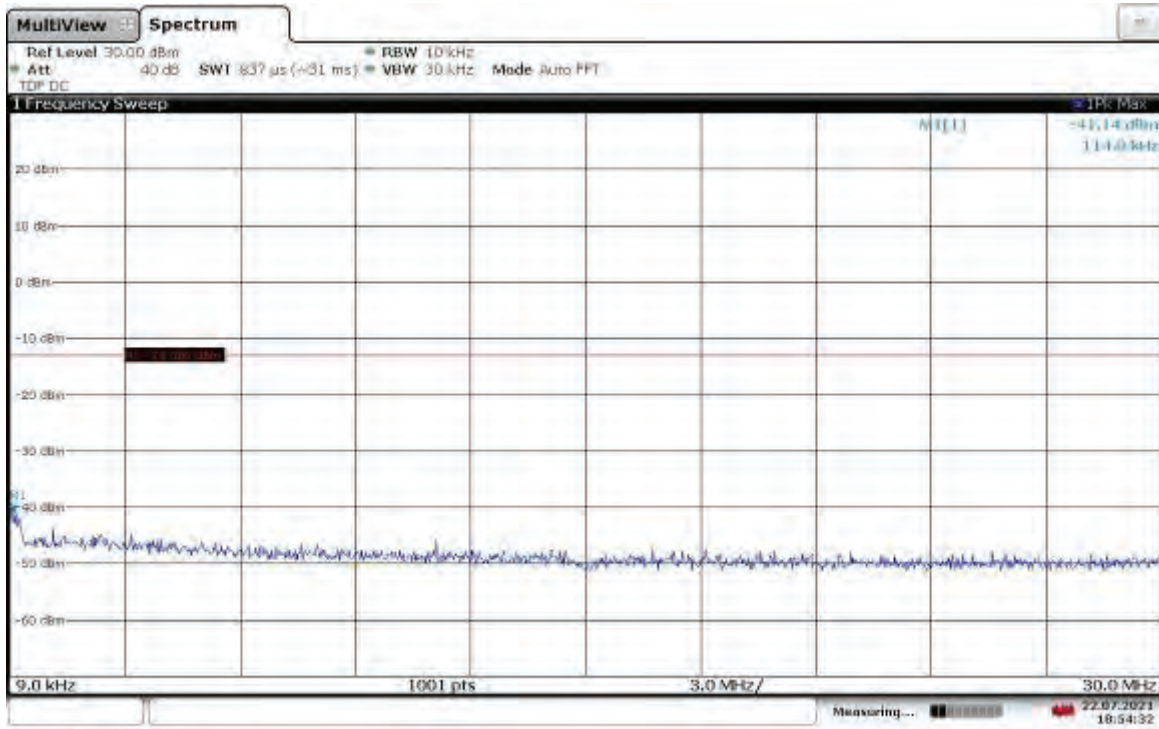
Slot 0 (Band 5), ANT1, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, High Channel 1987.5 MHz  
30MHz-1GHz



Slot 0 (Band 5), ANT1, Modulation: TM1.1-QPSK, Bandwidth: 5 MHz, High Channel 891.5 MHz  
1-10GHz

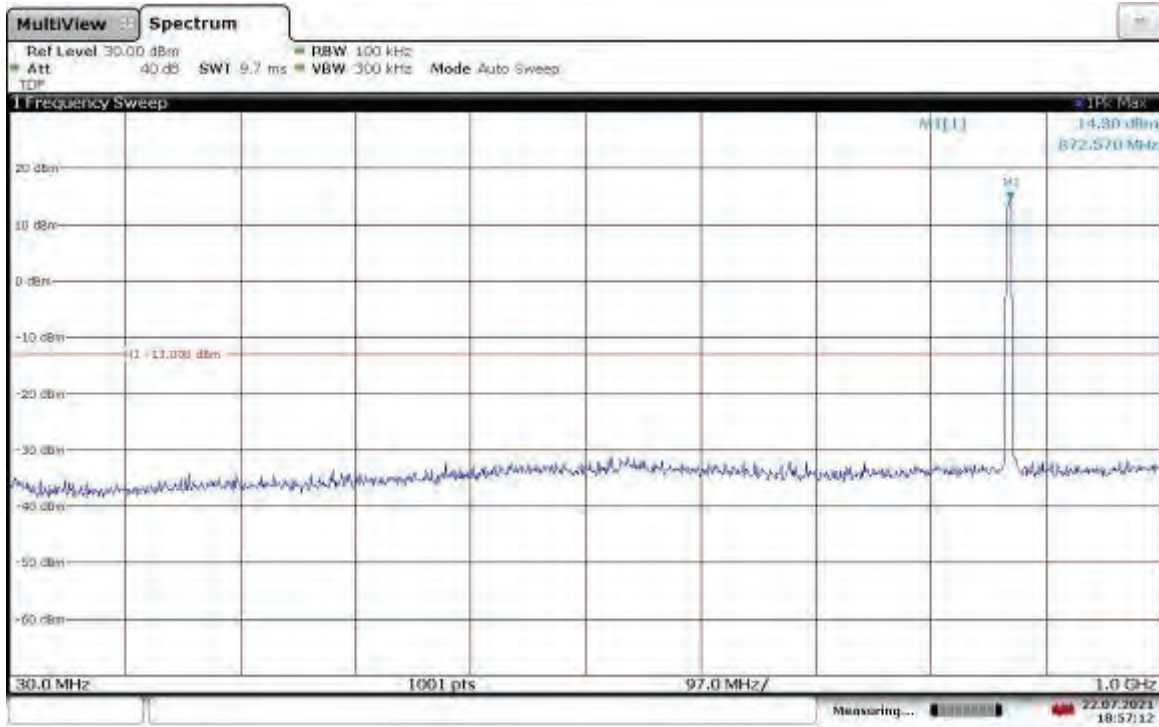


Slot 0 (Band 5), ANT0, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, Low Channel  
9kHz-30MHz



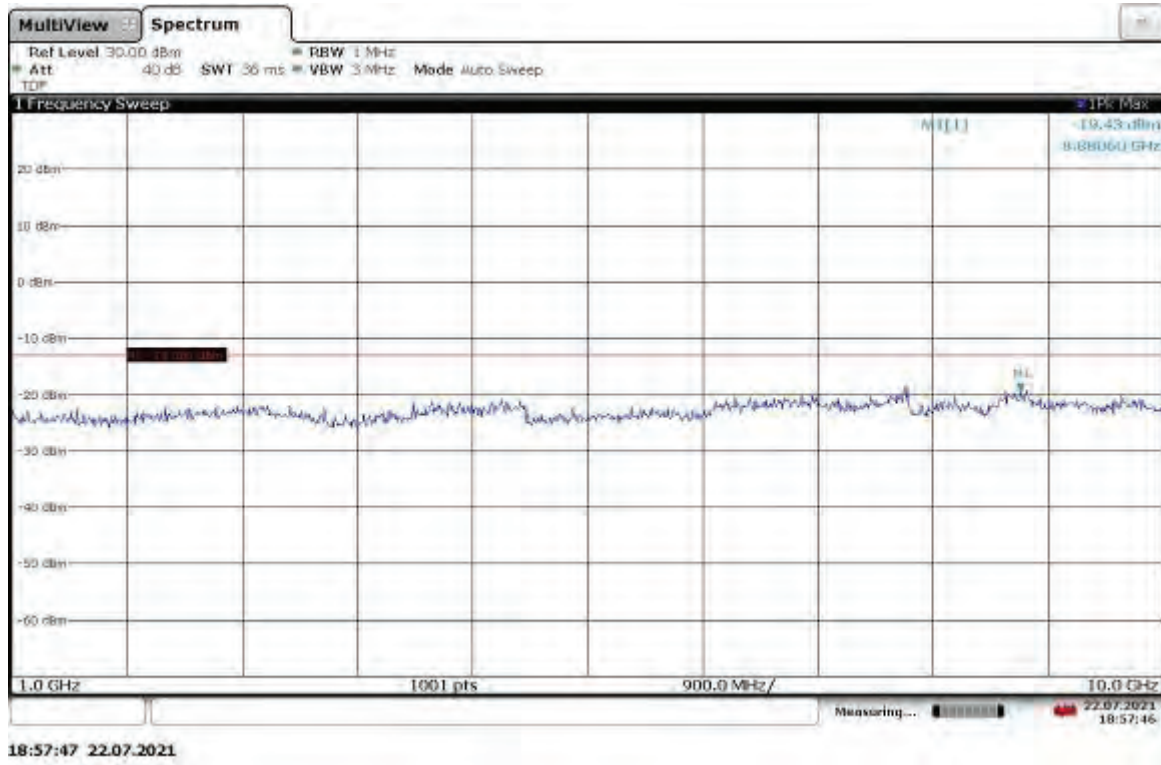
18:54:32 22.07.2021

Slot 0 (Band 5), ANT0, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, Low Channel  
30MHz-1GHz

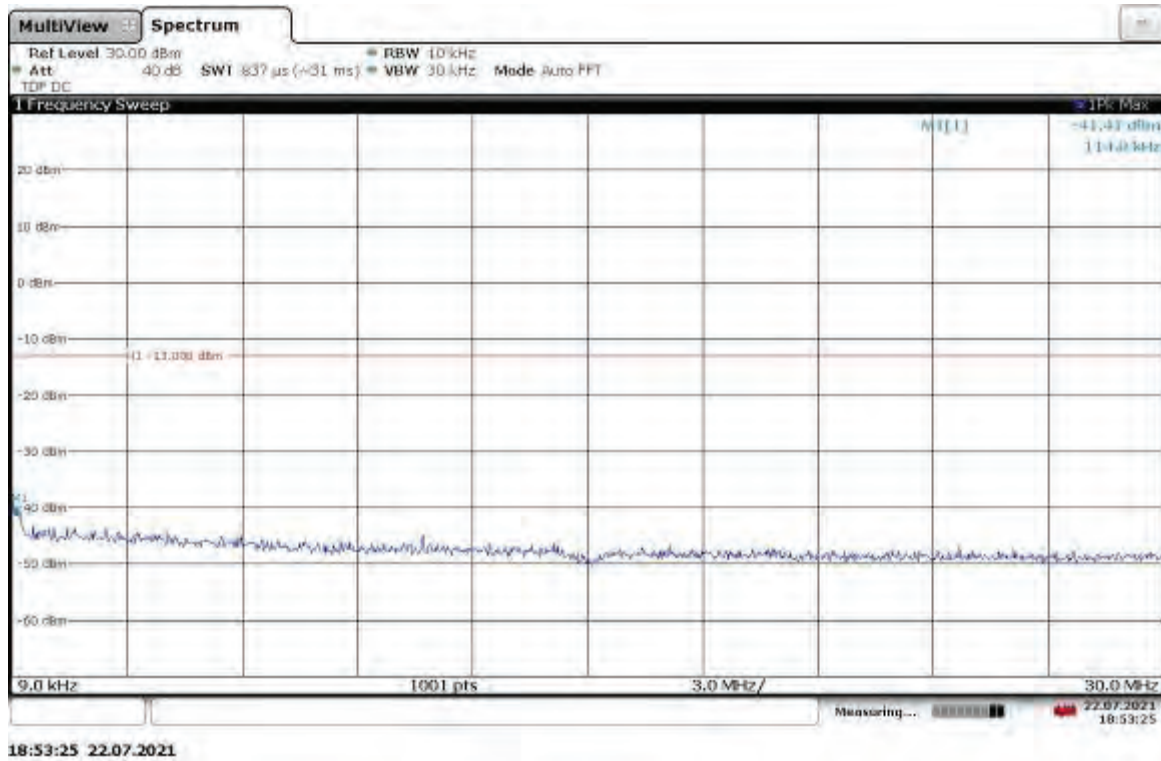


18:57:12 22.07.2021

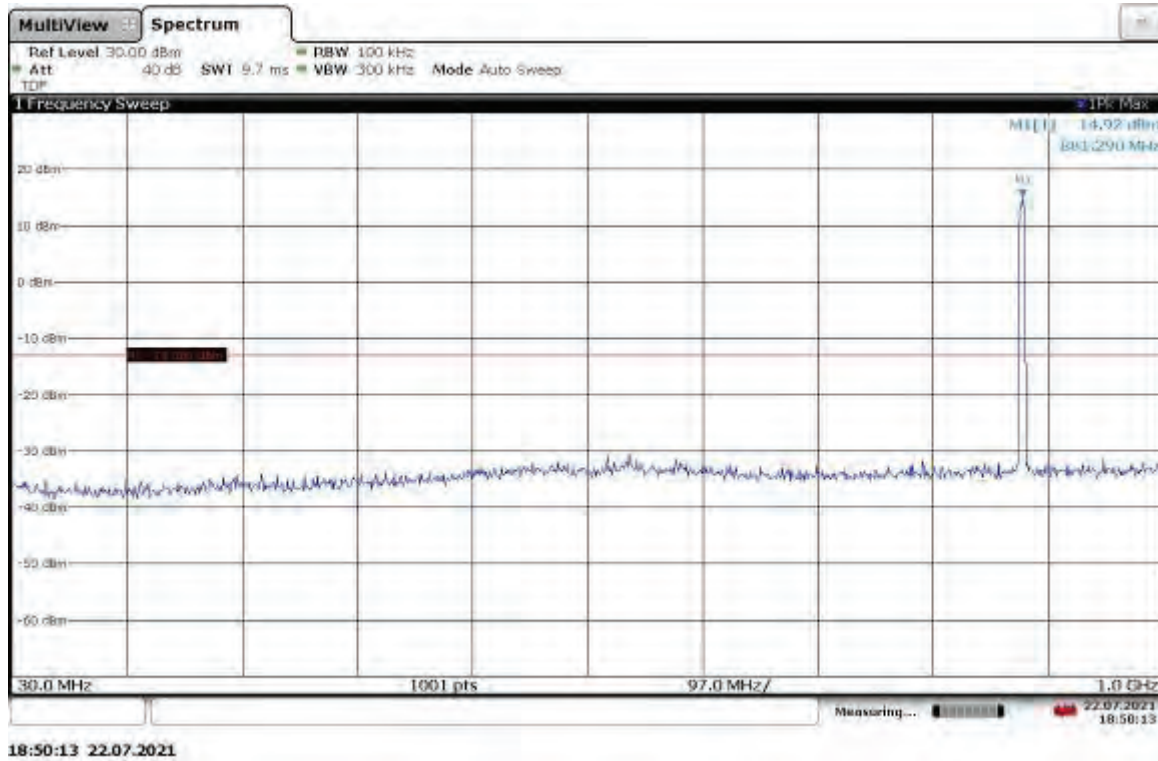
Slot 0 (Band 5), ANT0, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, Low Channel  
1-10GHz



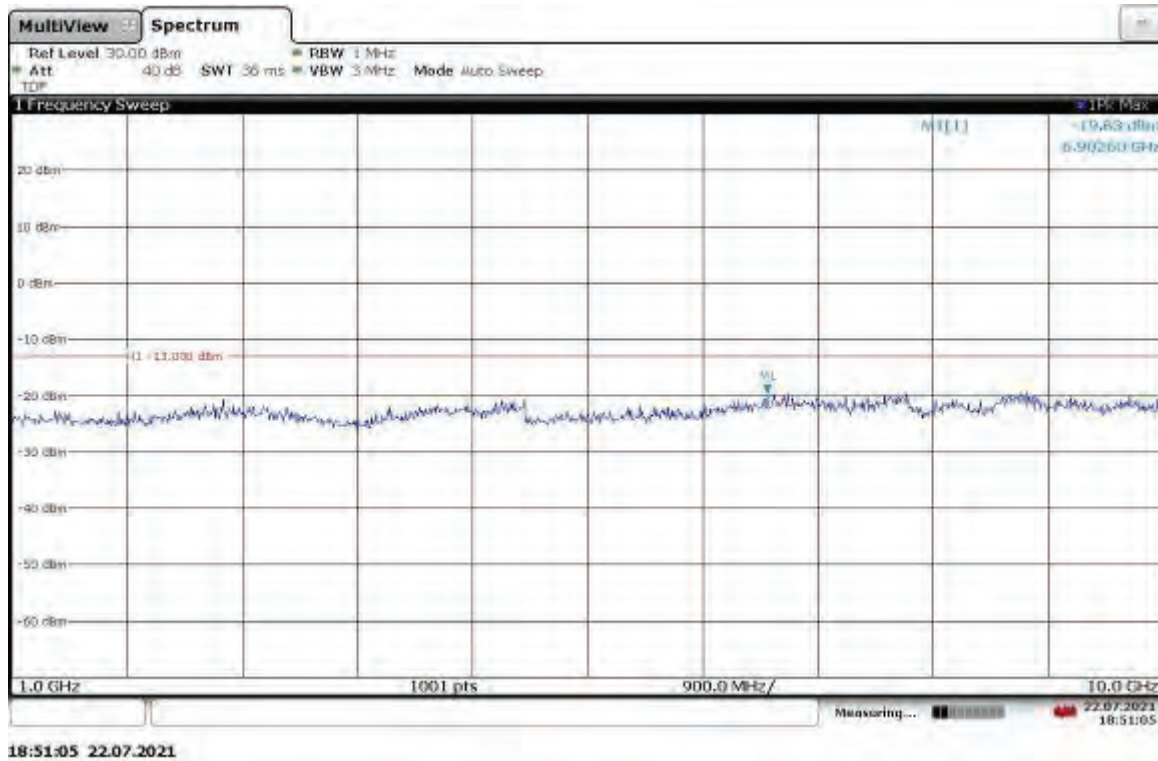
Slot 0 (Band 5), ANT0, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, Mid Channel  
9kHz-30MHz



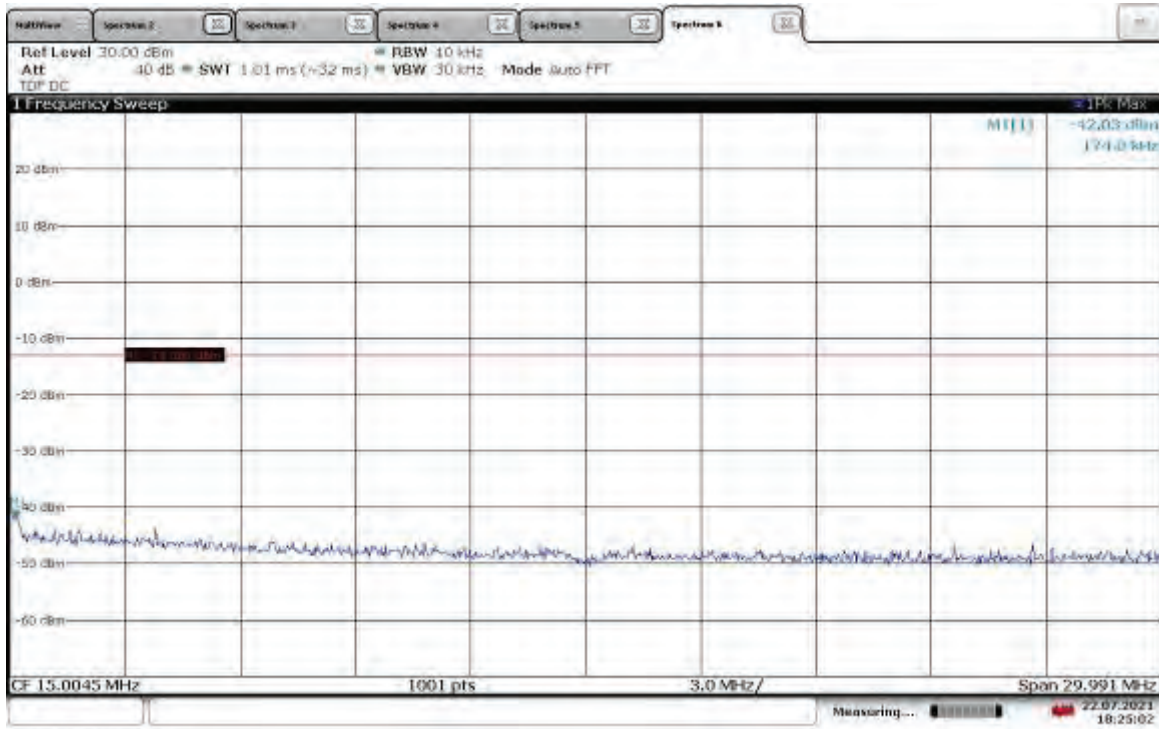
Slot 0 (Band 5), ANT0, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, Mid Channel  
30MHz-1GHz



Slot 0 (Band 5), ANT0, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, Mid Channel  
1-10GHz

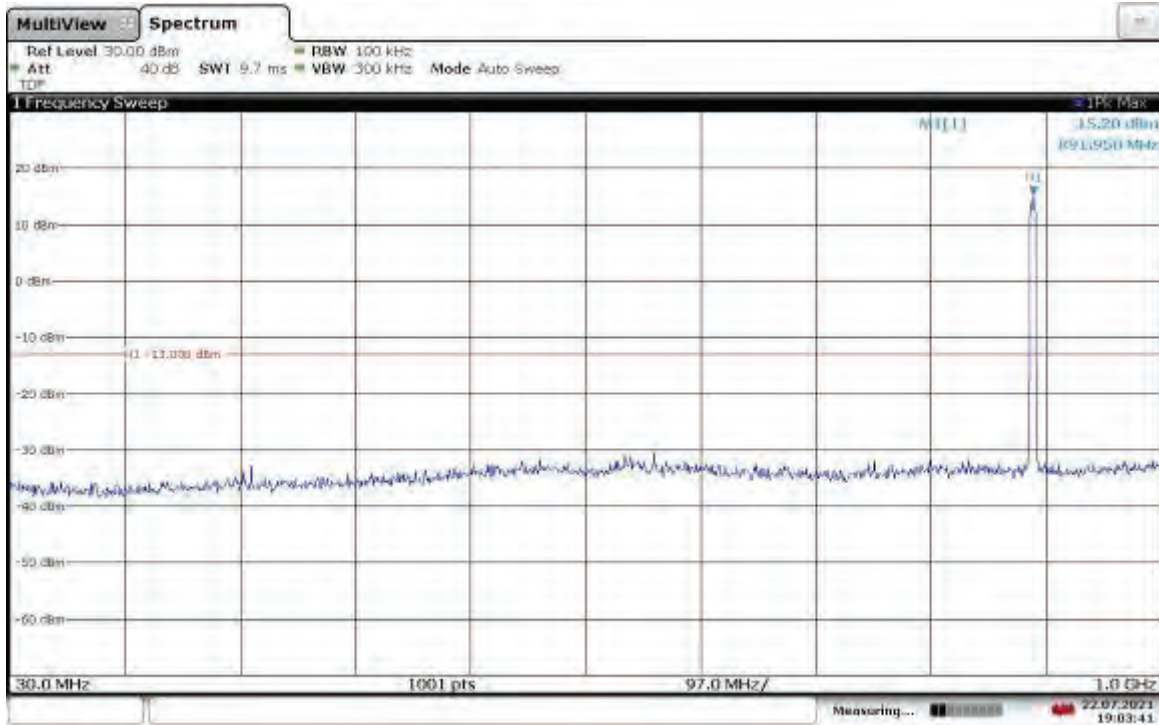


Slot 0 (Band 5), ANT0, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, High Channel  
9kHz-30MHz



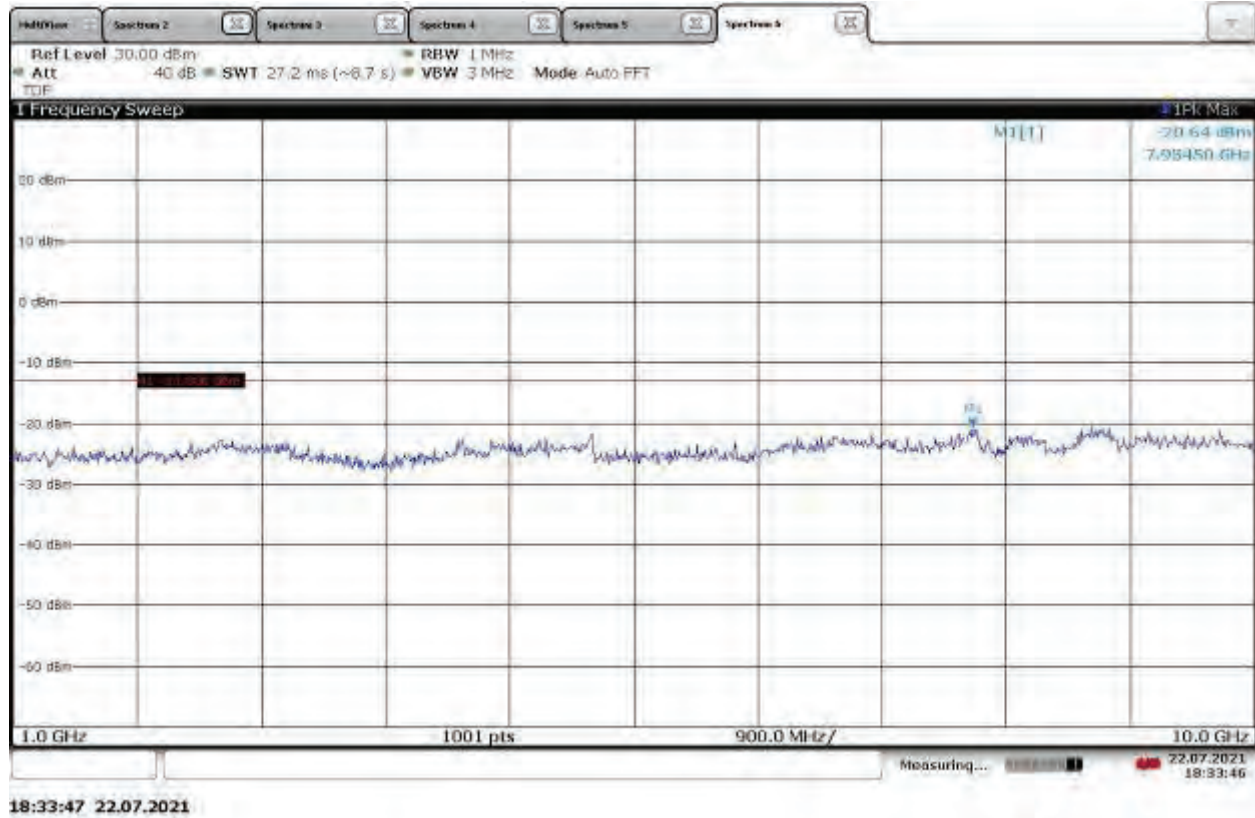
18:25:03 22.07.2021

Slot 0 (Band 5), ANT0, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, High Channel  
30MHz-1GHz

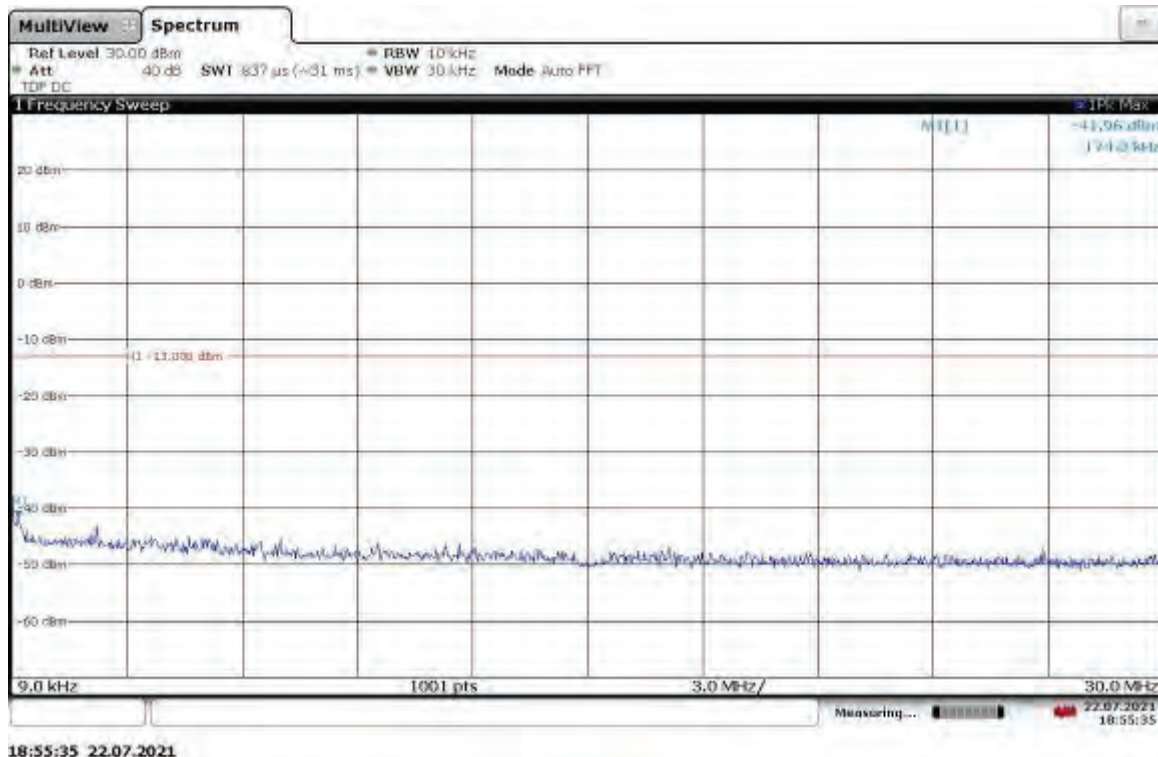


19:03:41 22.07.2021

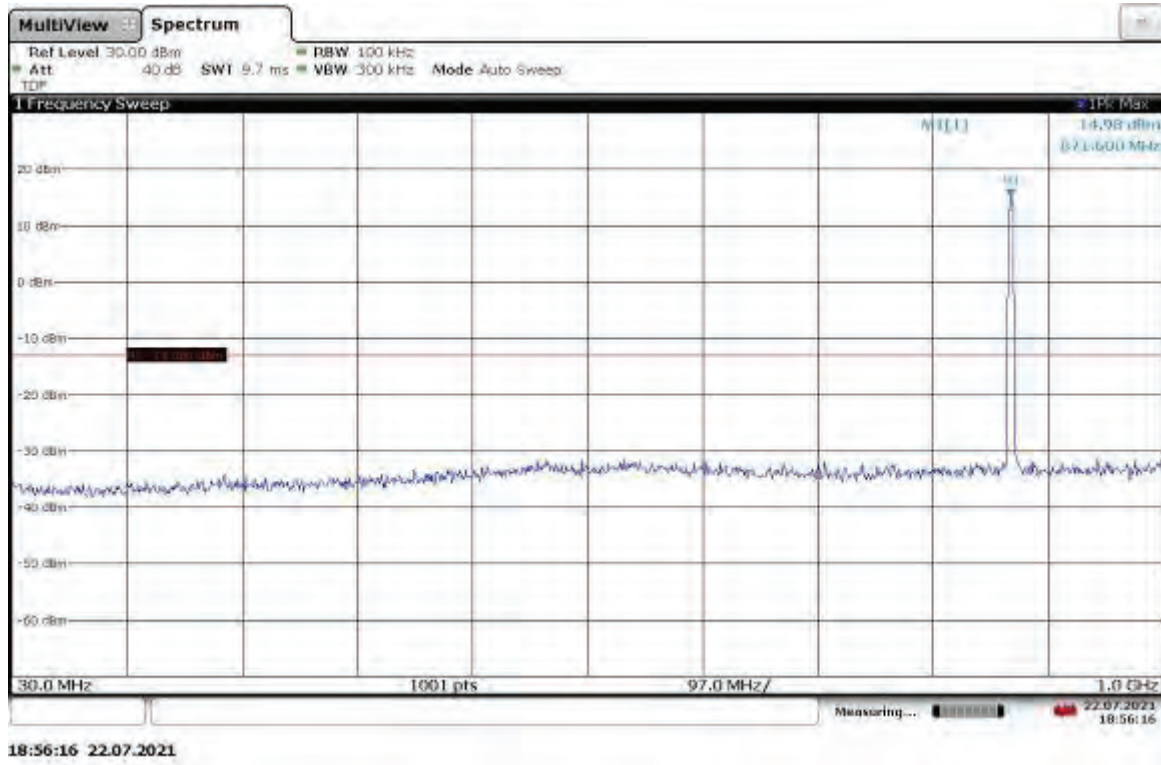
Slot 0 (Band 5), ANT0, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, High Channel  
1-10GHz



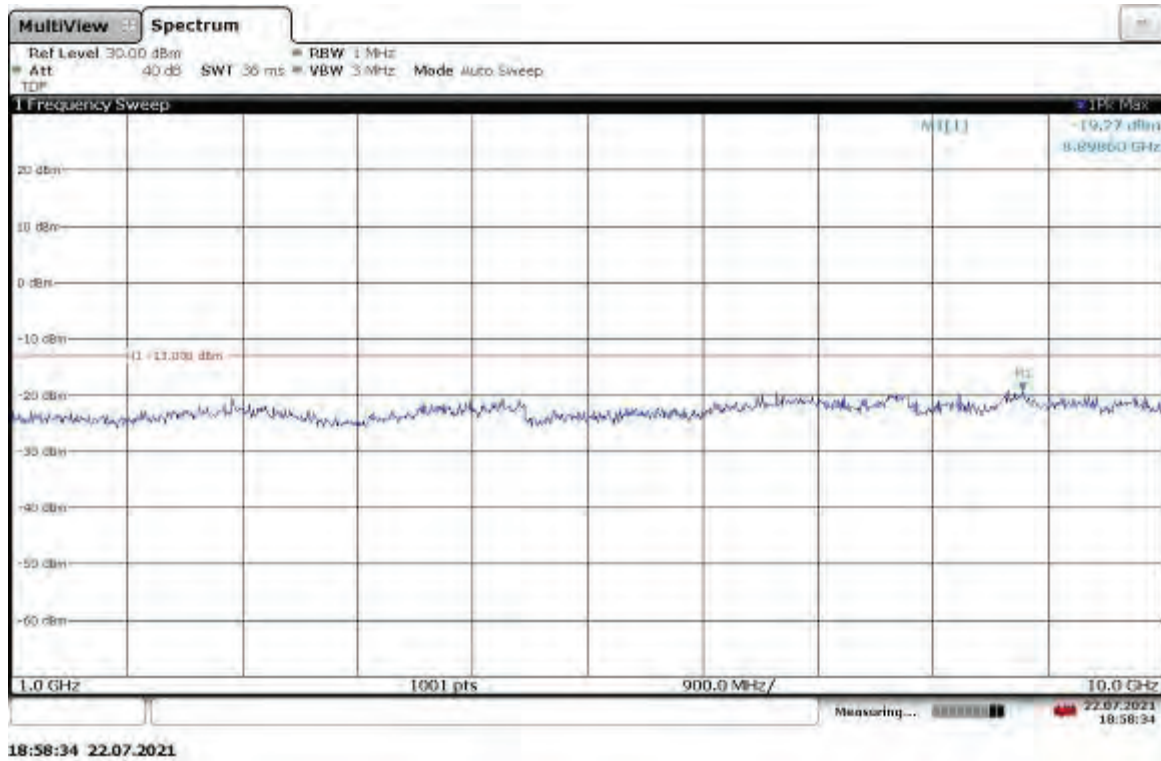
Slot 0 (Band 5), ANT1, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, Low Channel  
9kHz-30MHz



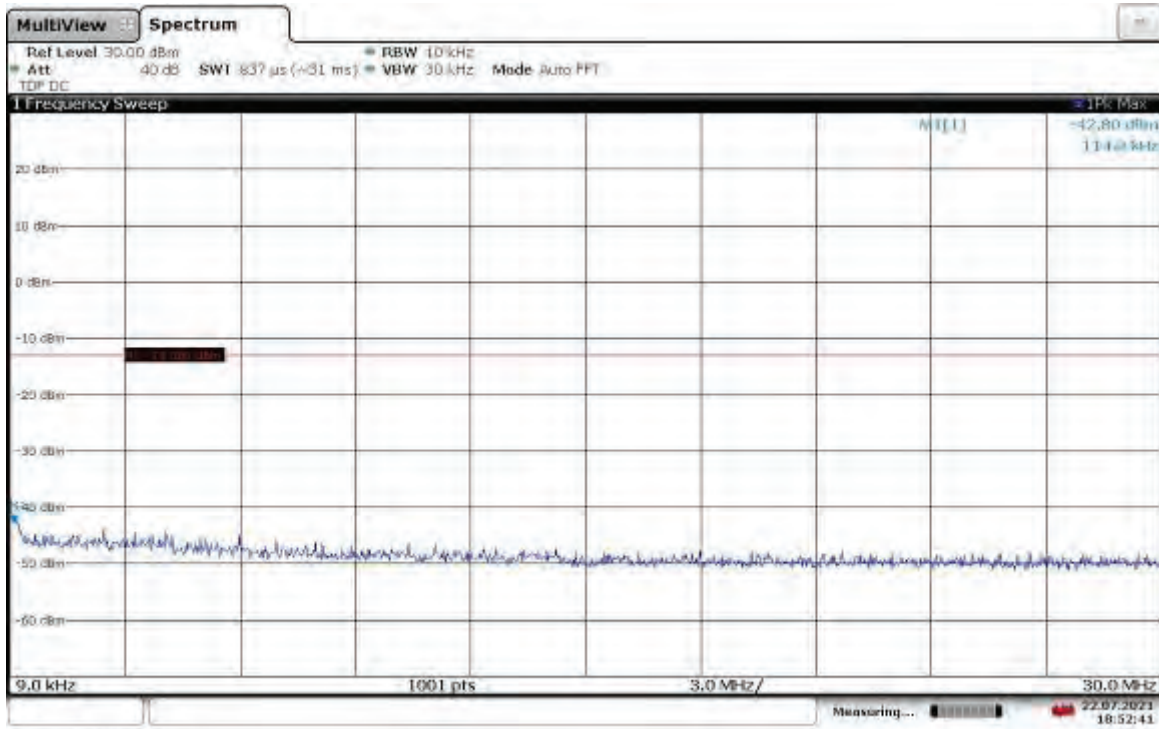
Slot 0 (Band 5), ANT1, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, Low Channel  
30MHz-1GHz



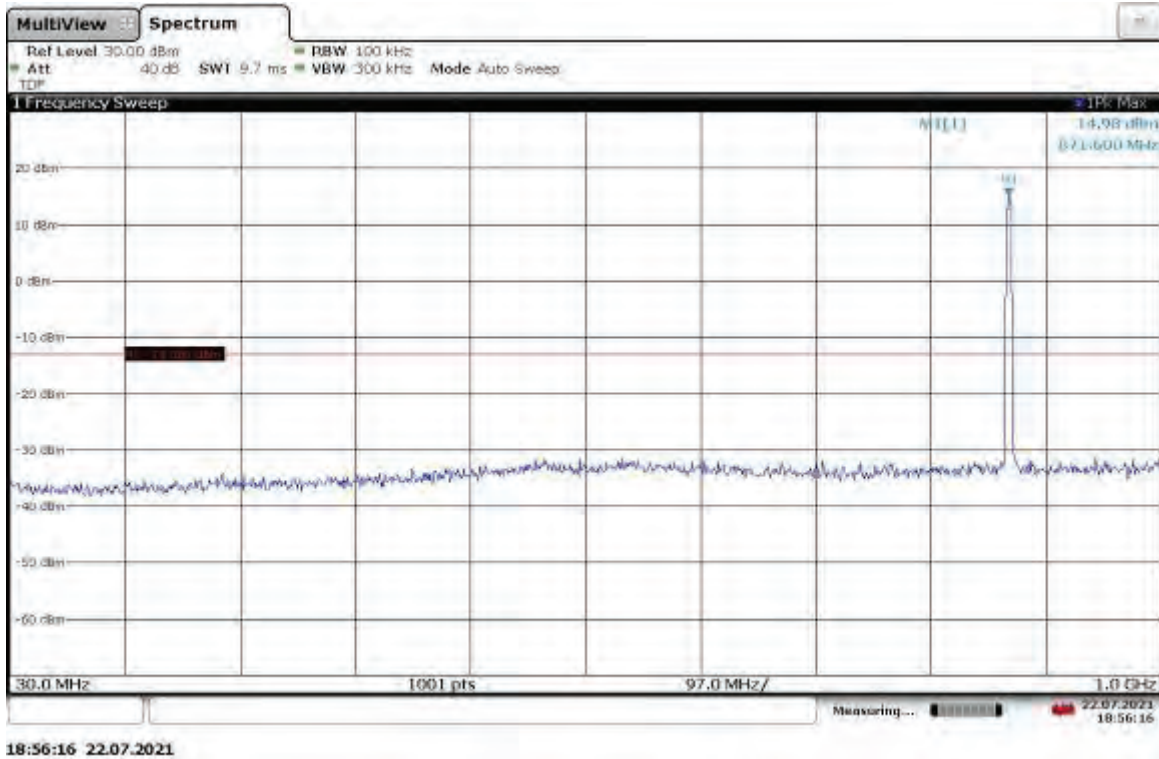
Slot 0 (Band 5), ANT1, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, Low Channel  
1-10GHz



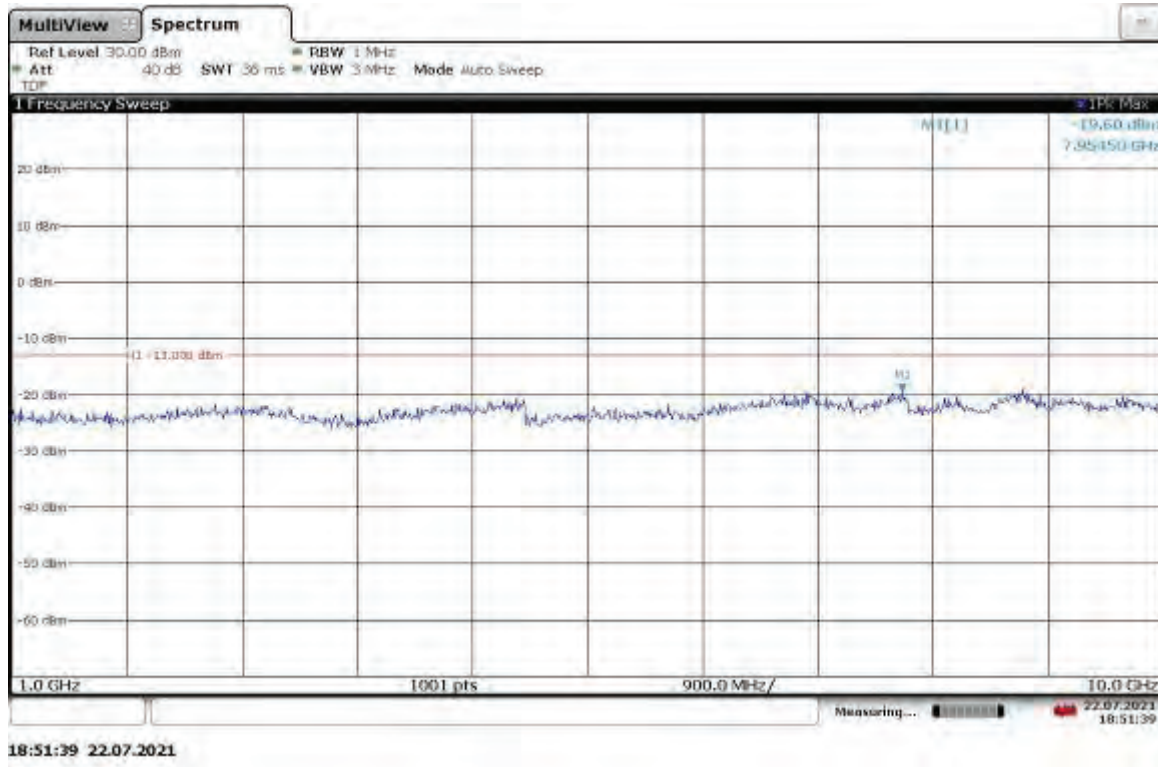
Slot 0 (Band 5), ANT1, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, Mid Channel  
9kHz-30MHz



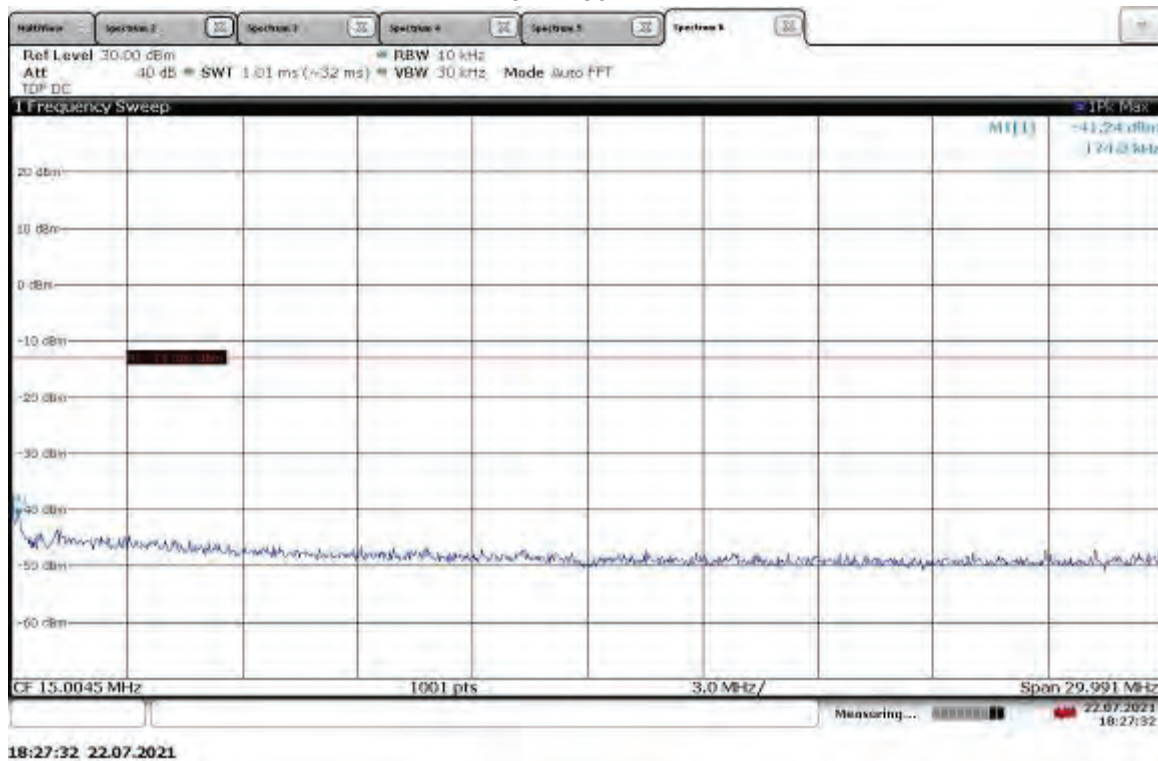
Slot 0 (Band 5), ANT1, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, Mid Channel  
30MHz-1GHz



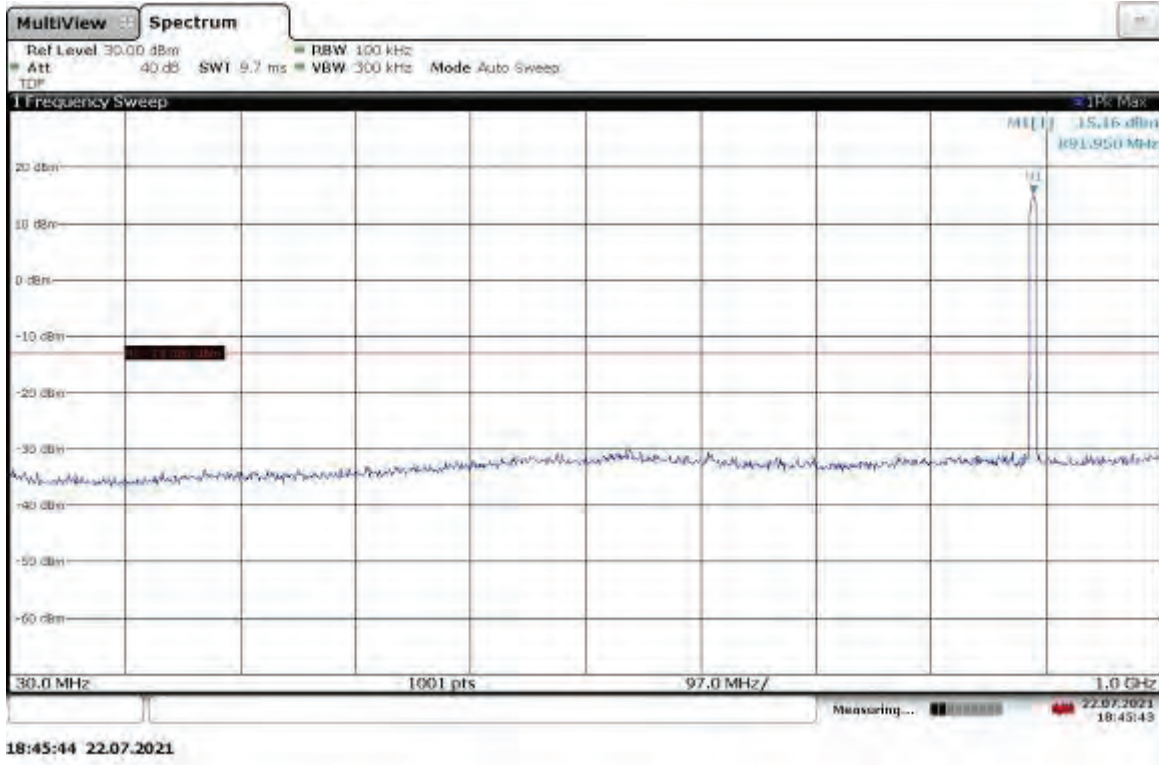
Slot 0 (Band 5), ANT1, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, Mid Channel  
1-10GHz



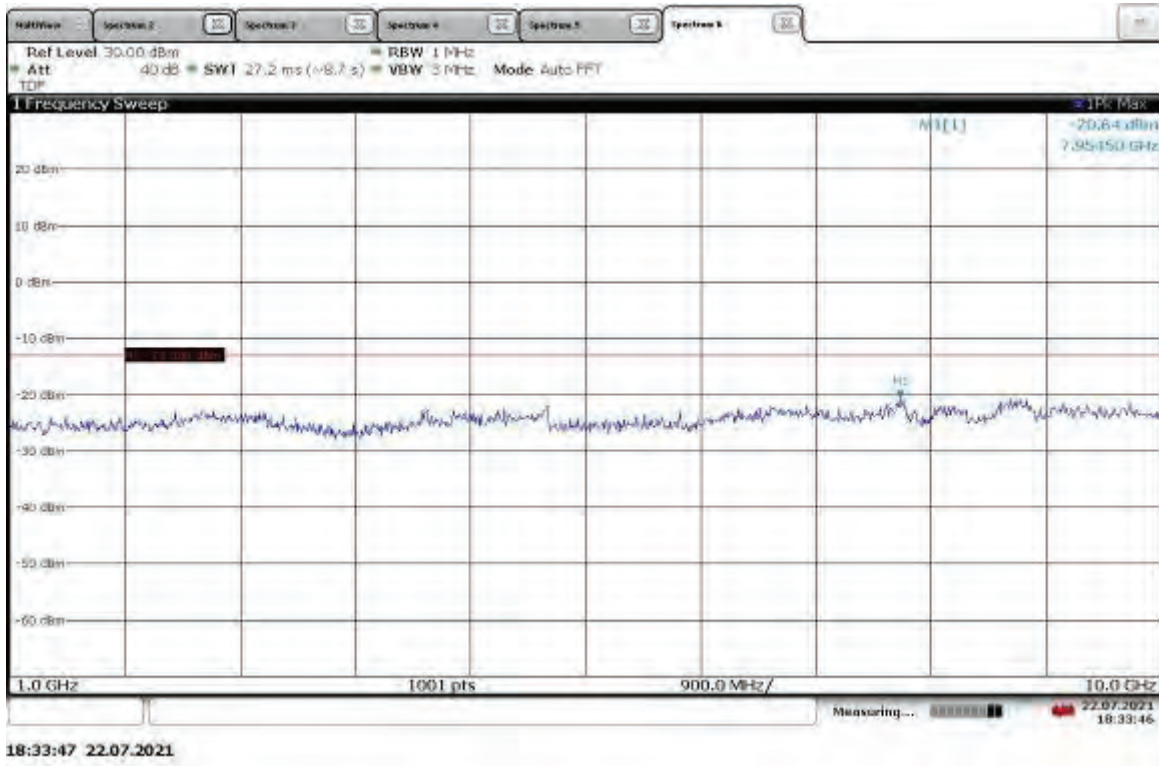
Slot 0 (Band 5), ANT1, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, High Channel  
9kHz-30MHz



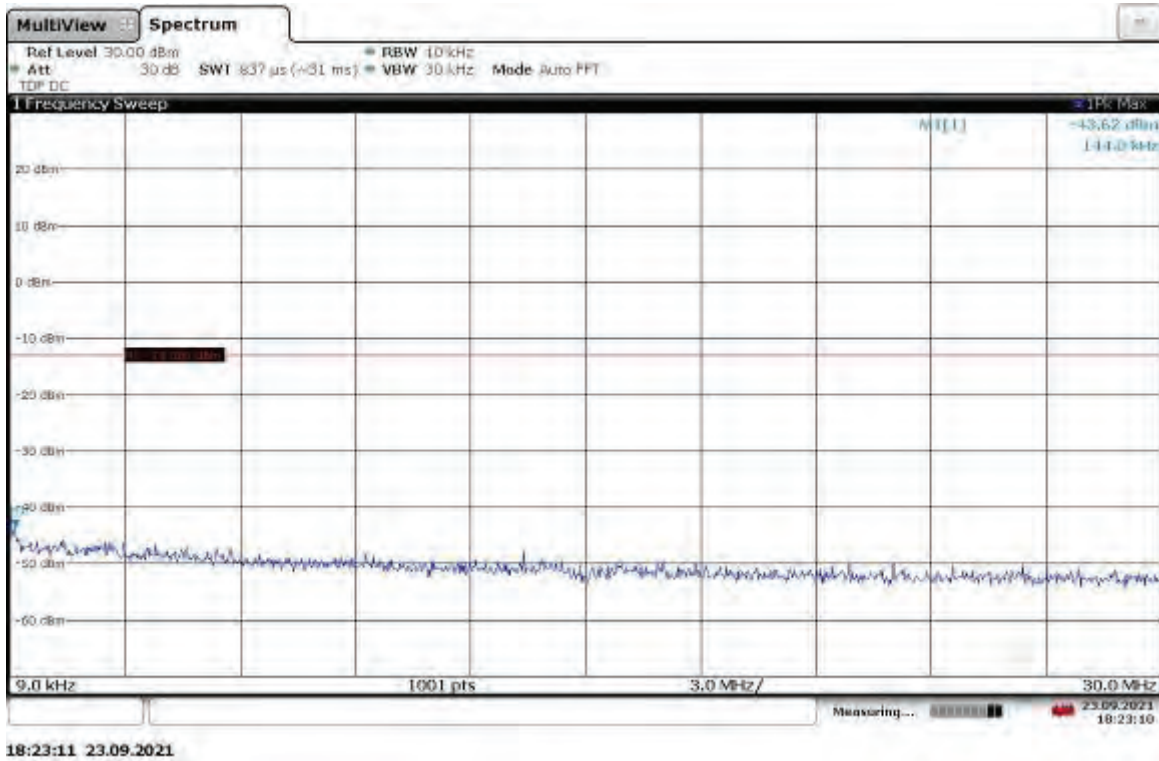
Slot 0 (Band 5), ANT1, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, High Channel  
30MHz-1GHz



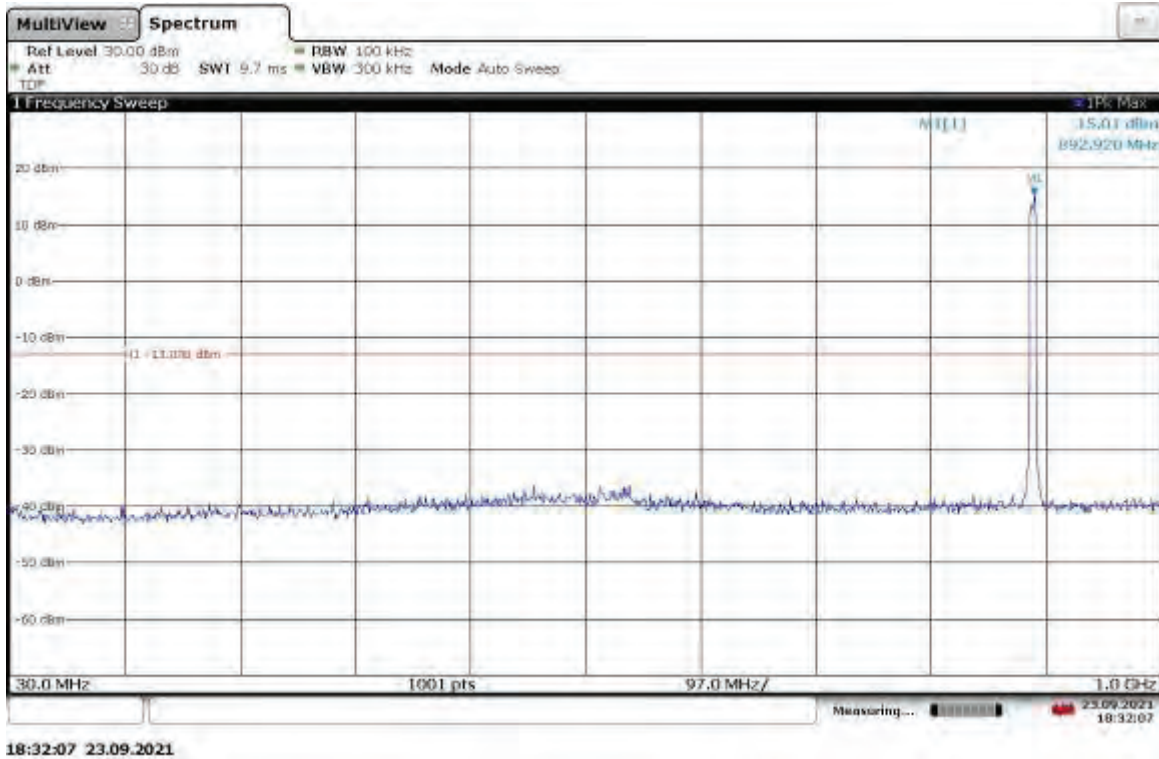
Slot 0 (Band 5), ANT1, Modulation: TM3.2-16QAM, Bandwidth: 5 MHz, High Channel 1-10GHz



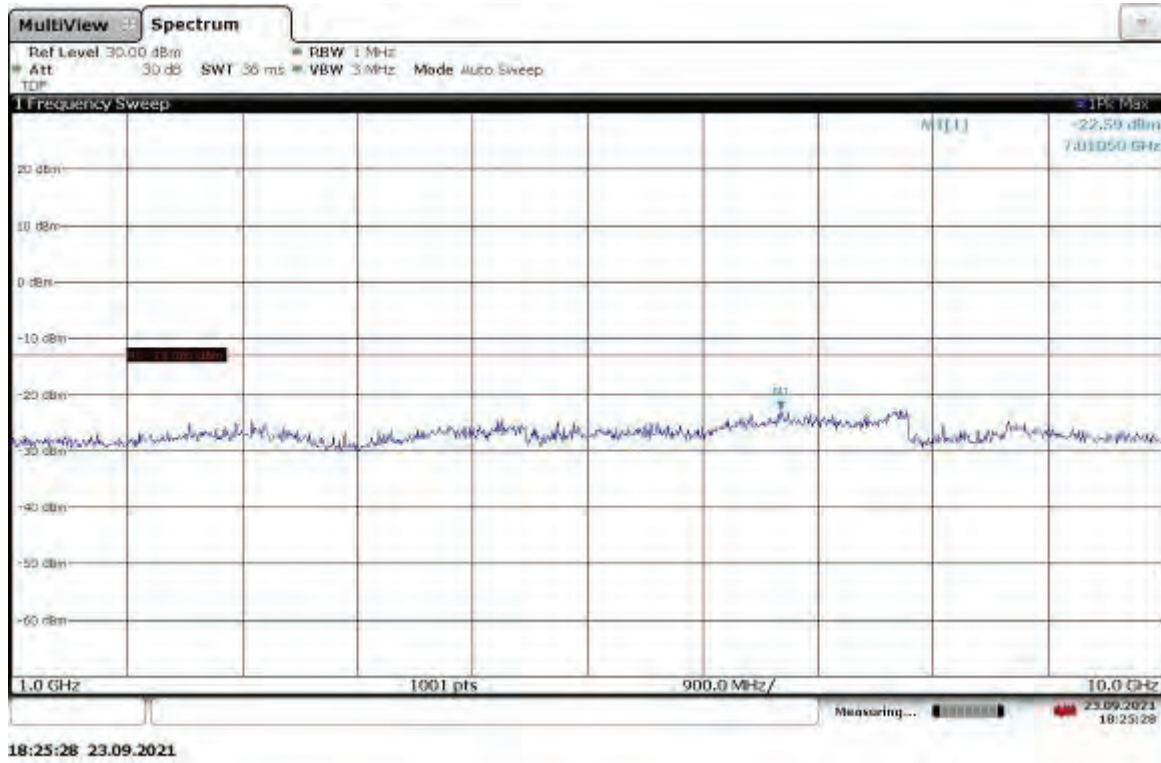
Slot 0 (Band 5), ANT0, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, Low Channel  
9kHz-30MHz



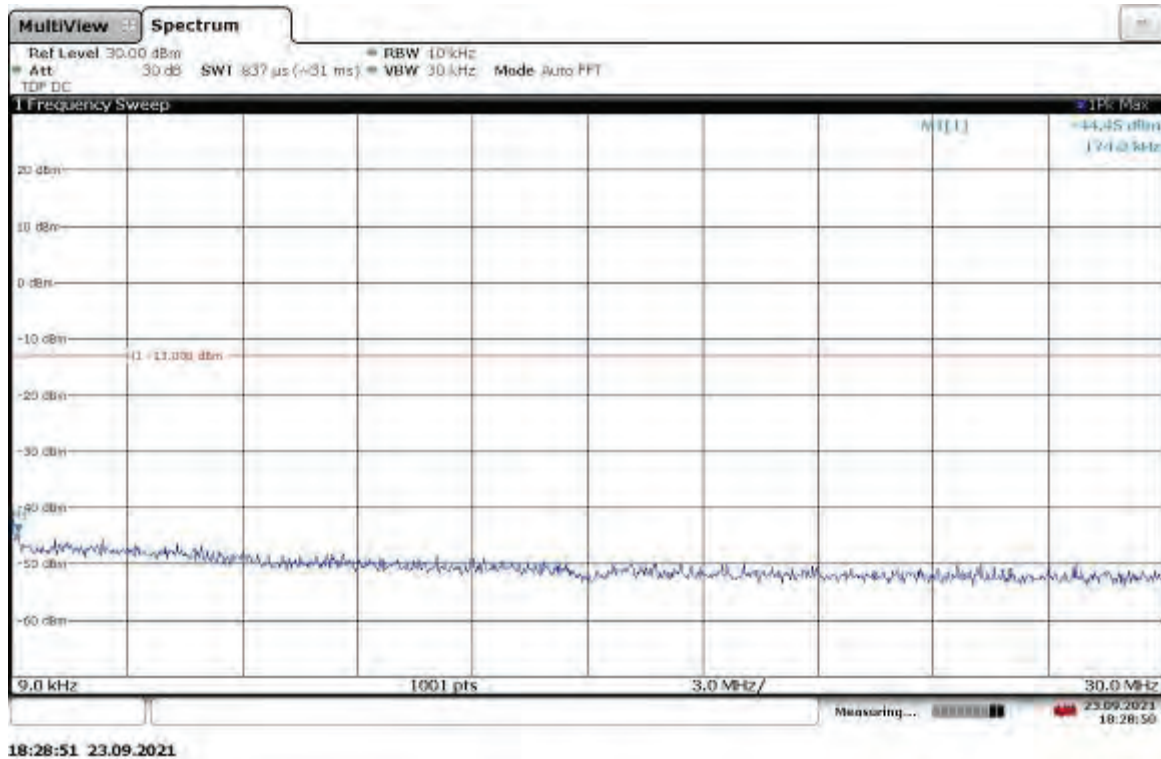
Slot 0 (Band 5), ANT0, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, Low Channel  
30MHz-1GHz



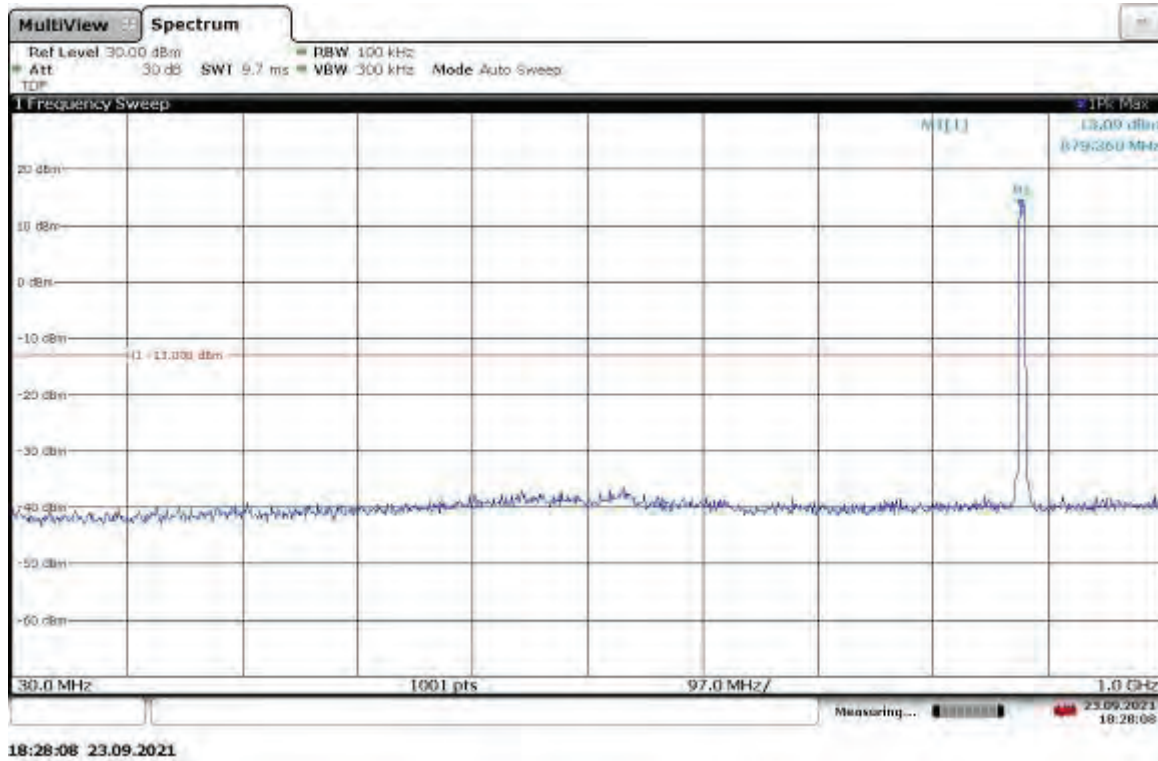
Slot 0 (Band 5), ANT0, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, Low Channel  
1-10GHz



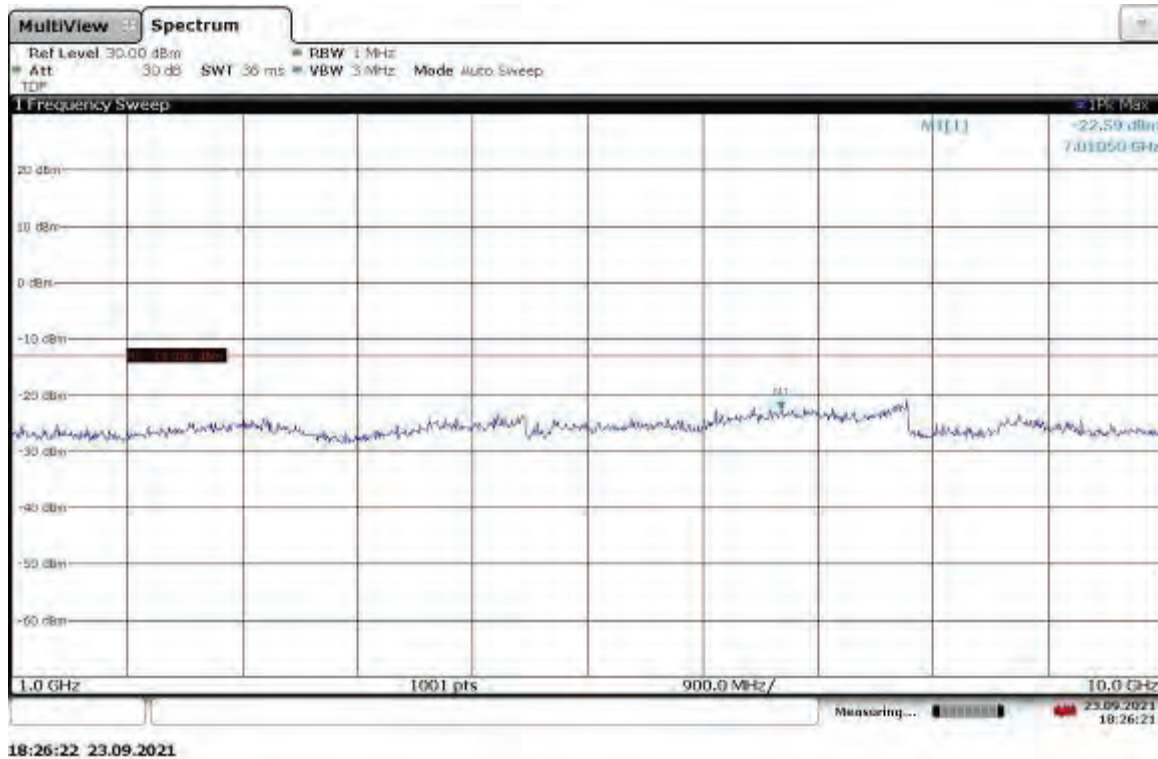
Slot 0 (Band 5), ANT0, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, Mid Channel  
9kHz-30MHz



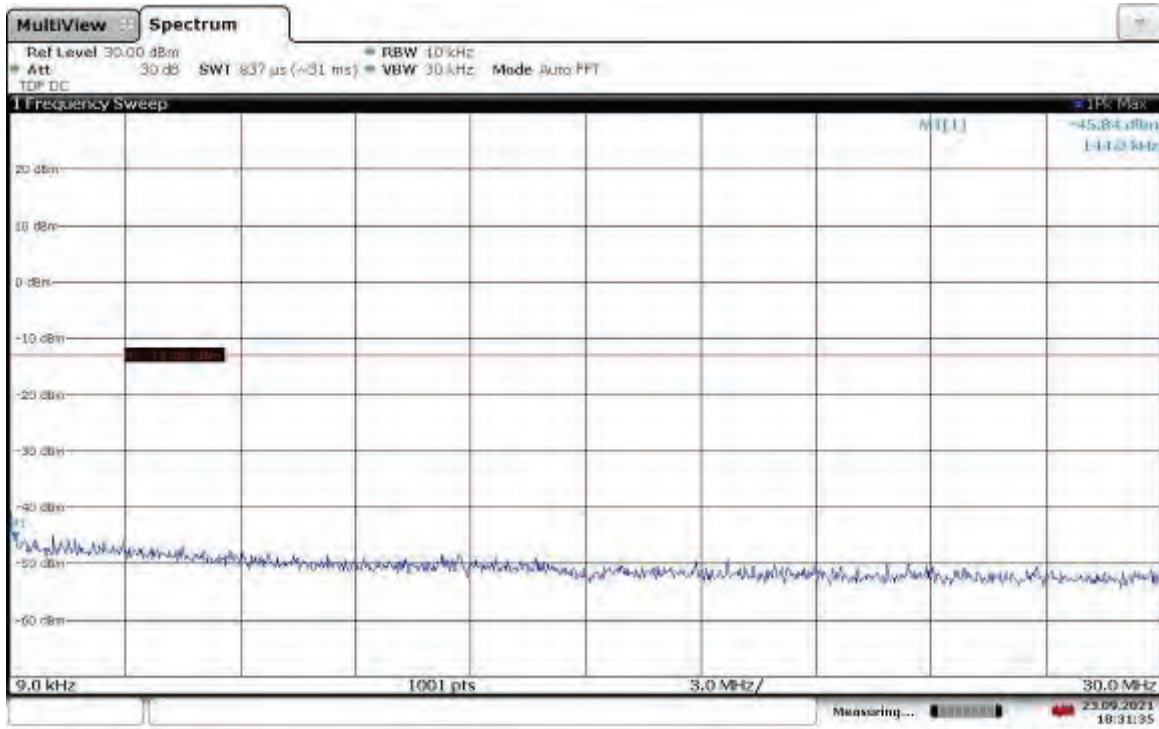
Slot 0 (Band 5), ANT0, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, Mid Channel  
30MHz-1GHz



Slot 0 (Band 5), ANT0, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, Mid Channel  
1-10GHz

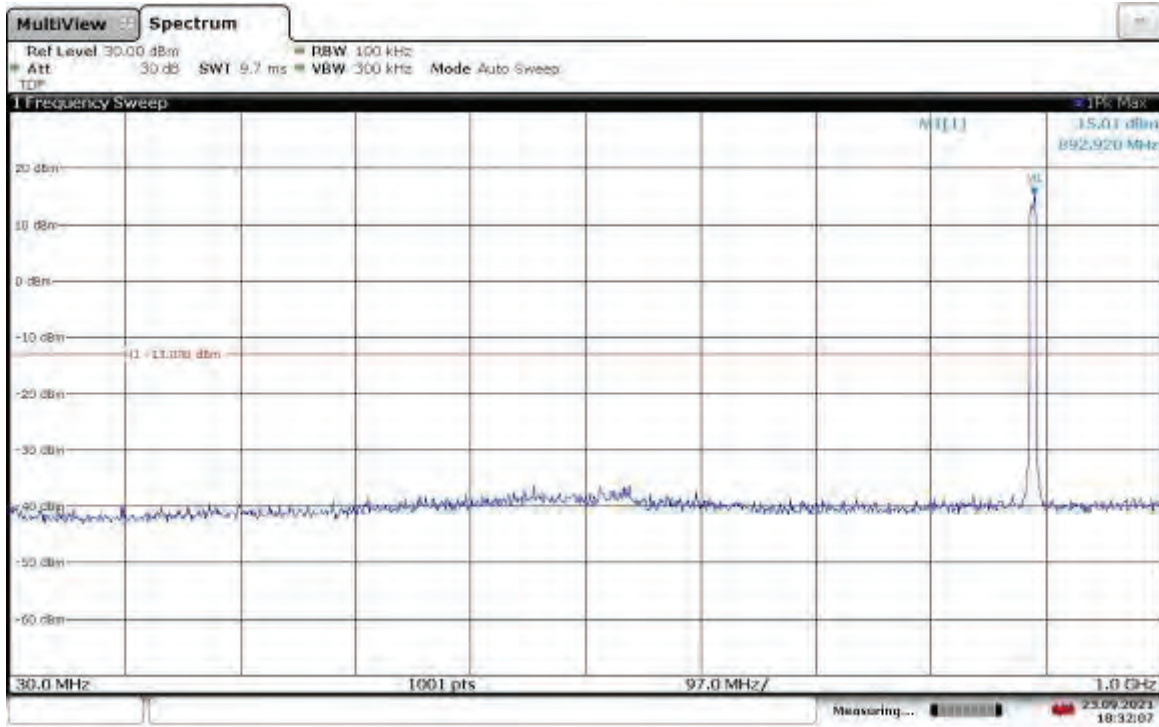


Slot 0 (Band 5), ANT0, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, High Channel  
9kHz-30MHz



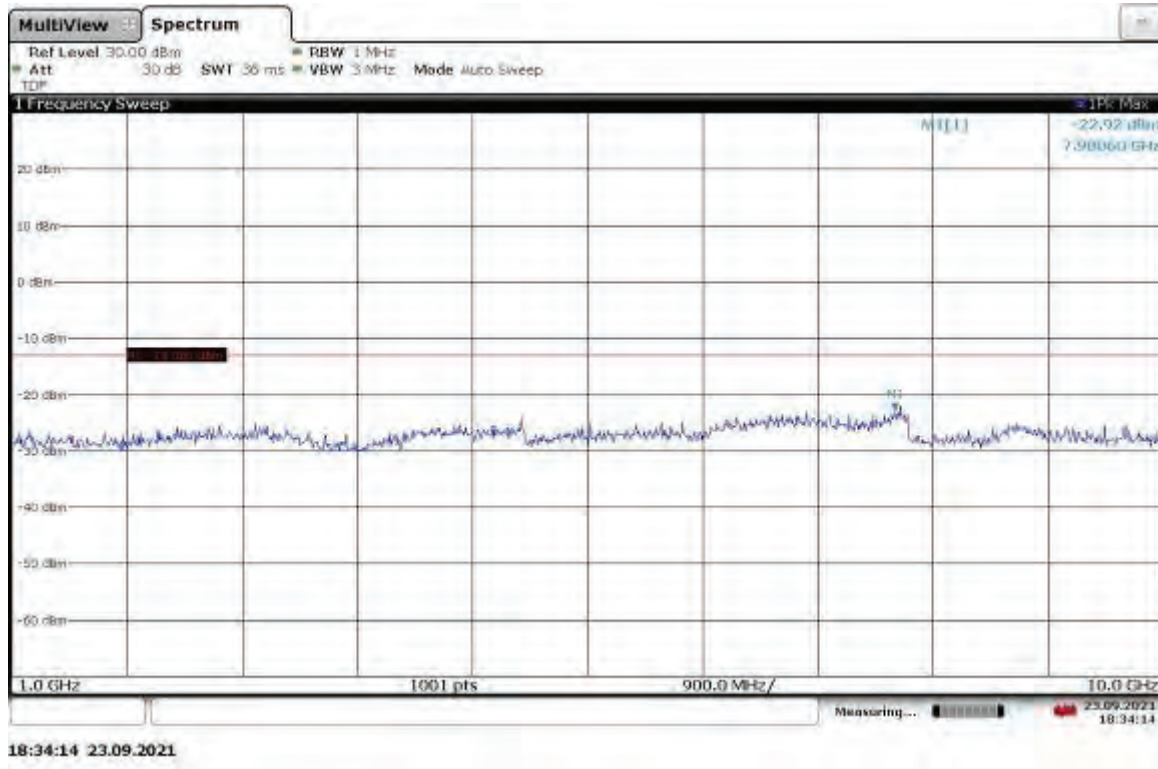
18:31:36 23.09.2021

Slot 0 (Band 5), ANT0, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, High Channel  
30MHz-1GHz

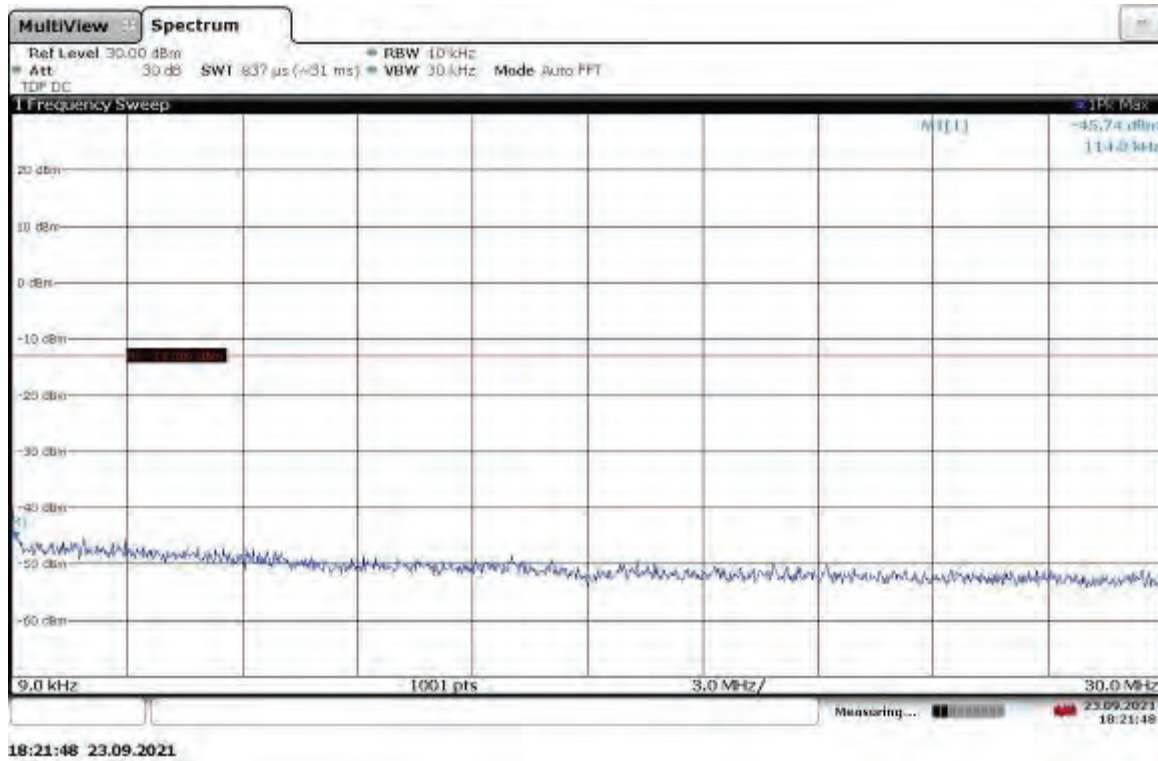


18:32:07 23.09.2021

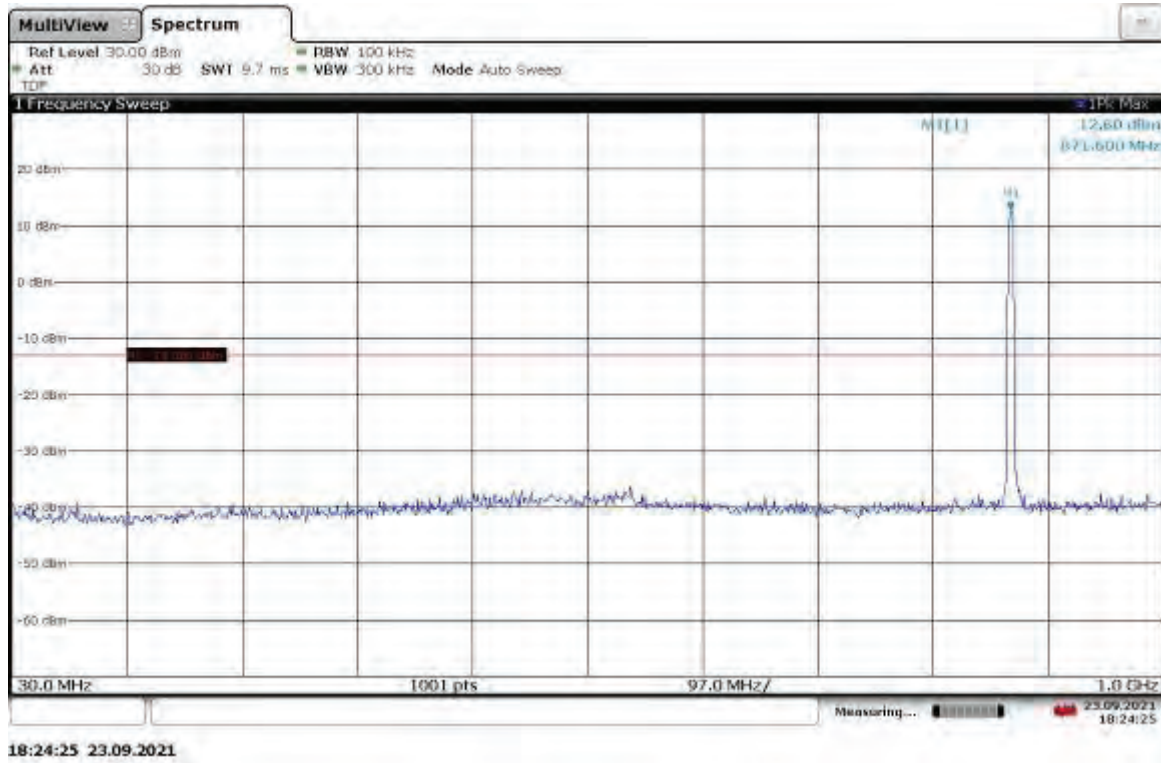
Slot 0 (Band 5), ANT0, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, High Channel  
1-10GHz



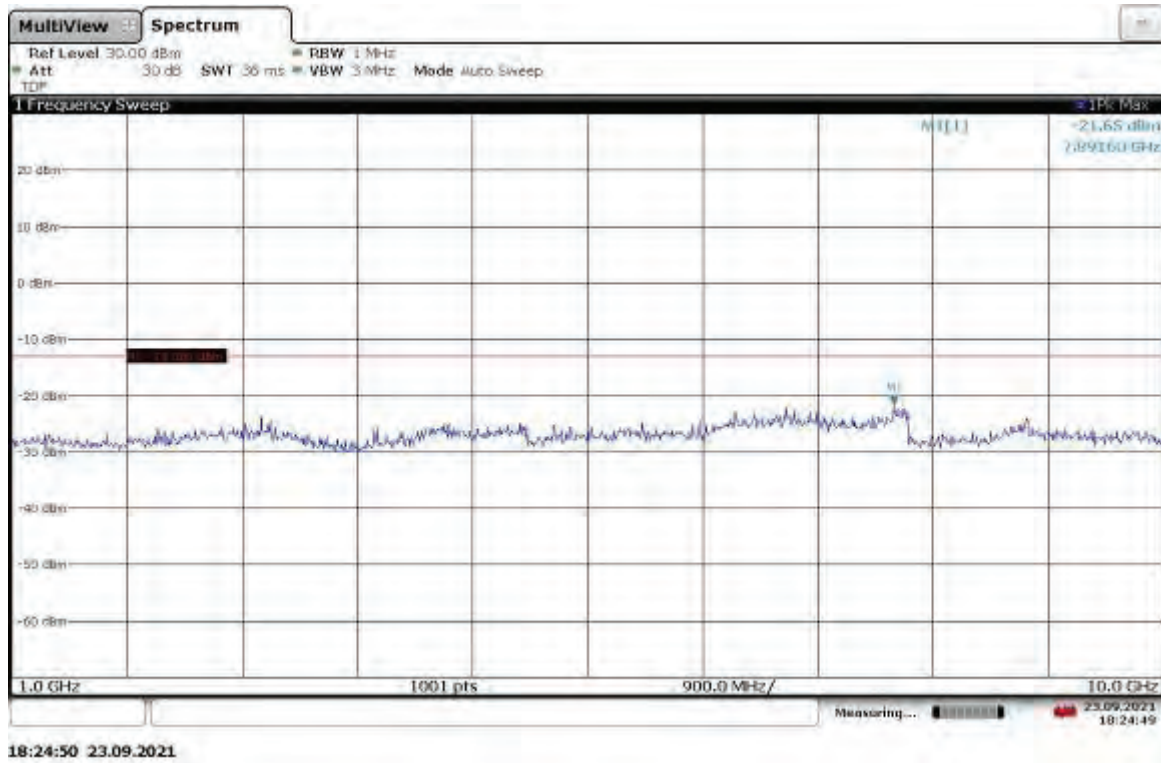
Slot 0 (Band 5), ANT1, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, Low Channel  
9kHz-30MHz



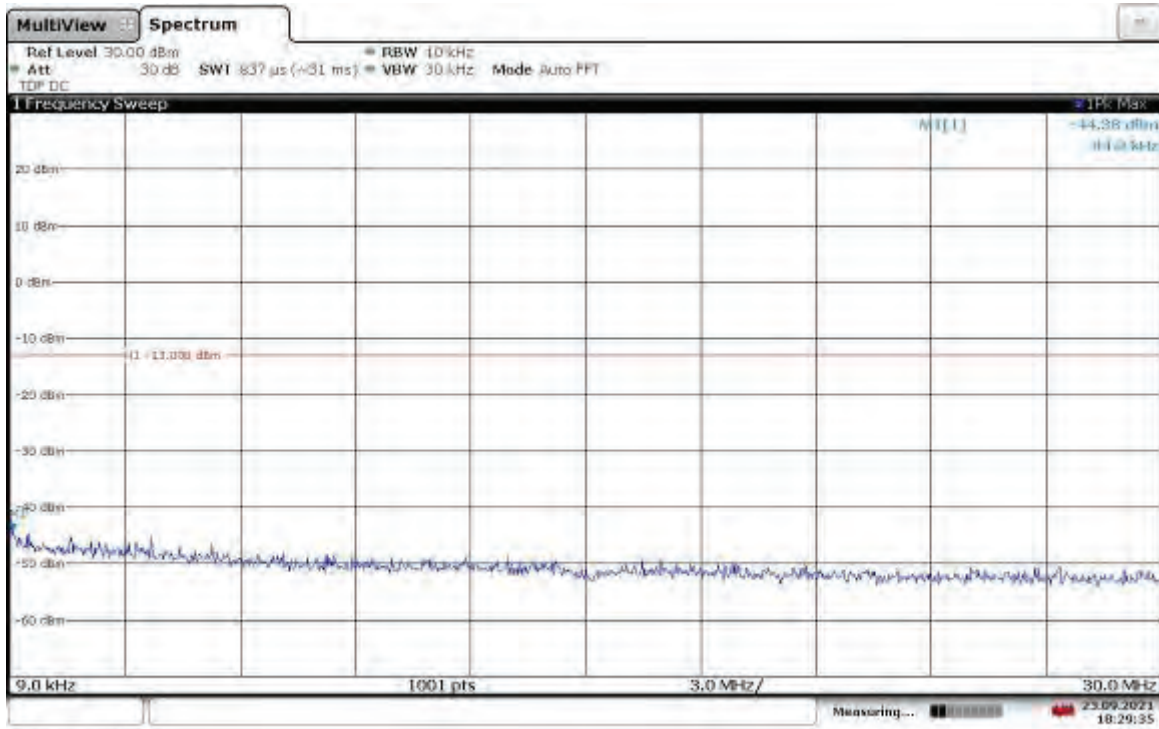
Slot 0 (Band 5), ANT1, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, Low Channel  
30MHz-1GHz



Slot 0 (Band 5), ANT1, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, Low Channel  
1-10GHz

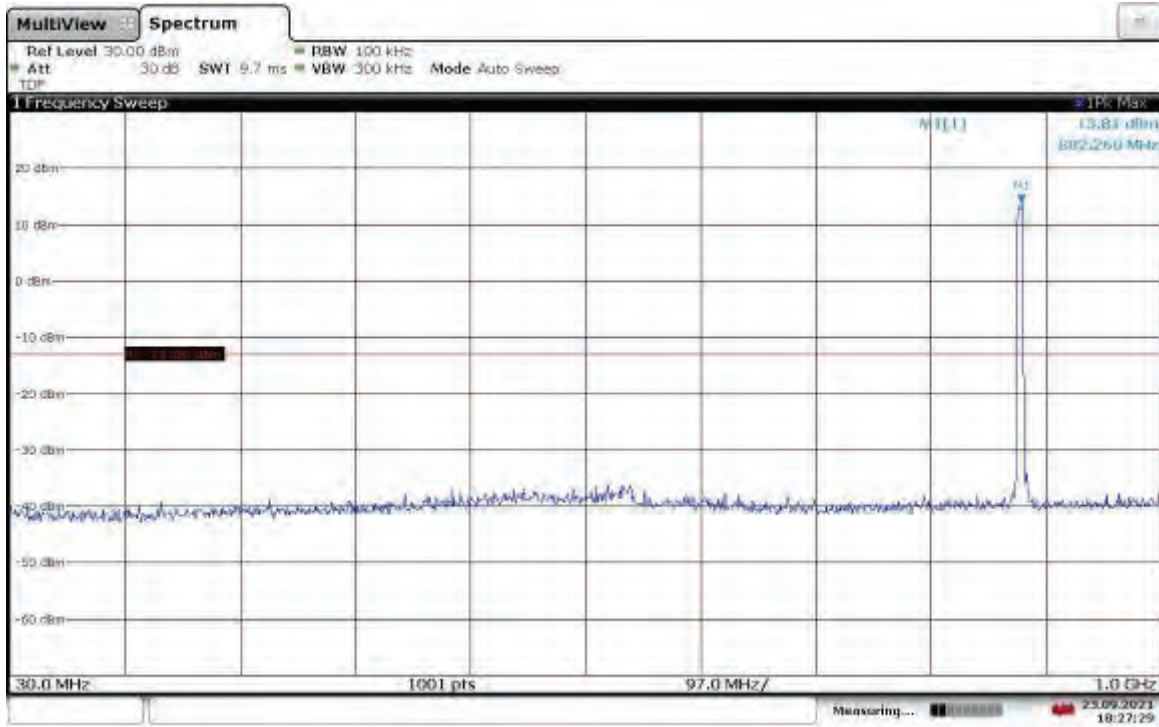


Slot 0 (Band 5), ANT1, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, Mid Channel  
9kHz-30MHz



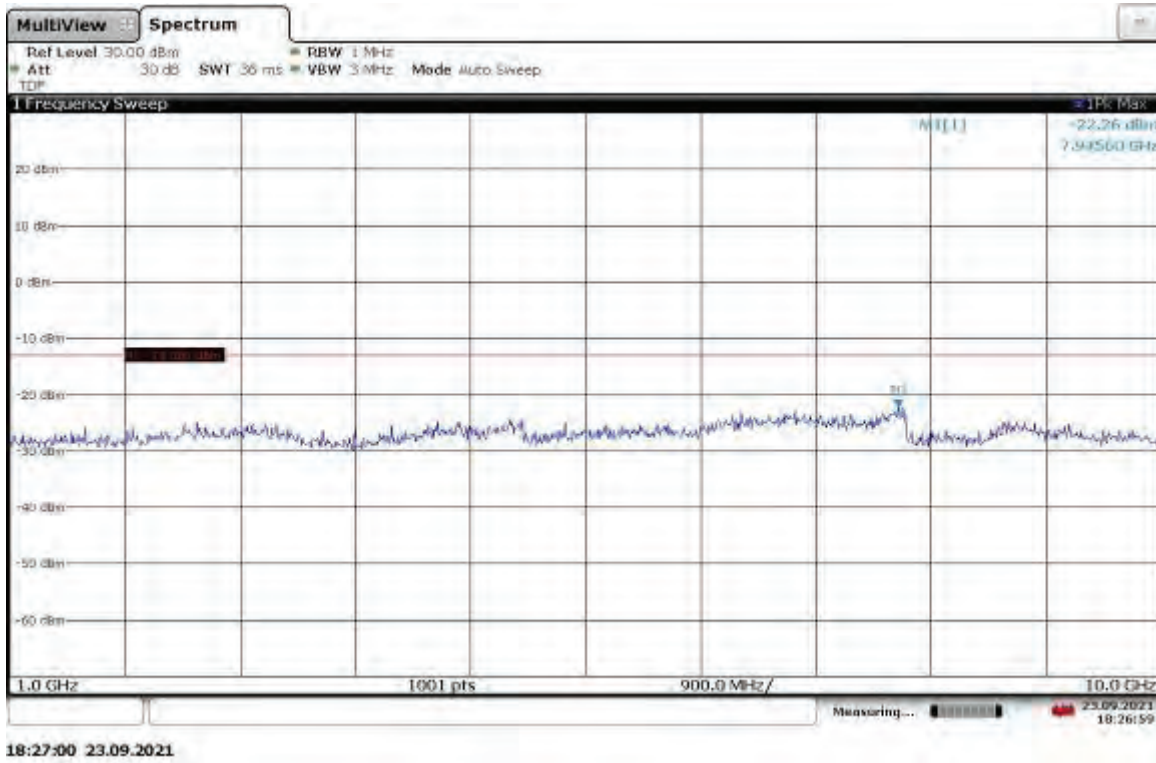
18:29:35 23.09.2021

Slot 0 (Band 5), ANT1, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, Mid Channel  
30MHz-1GHz

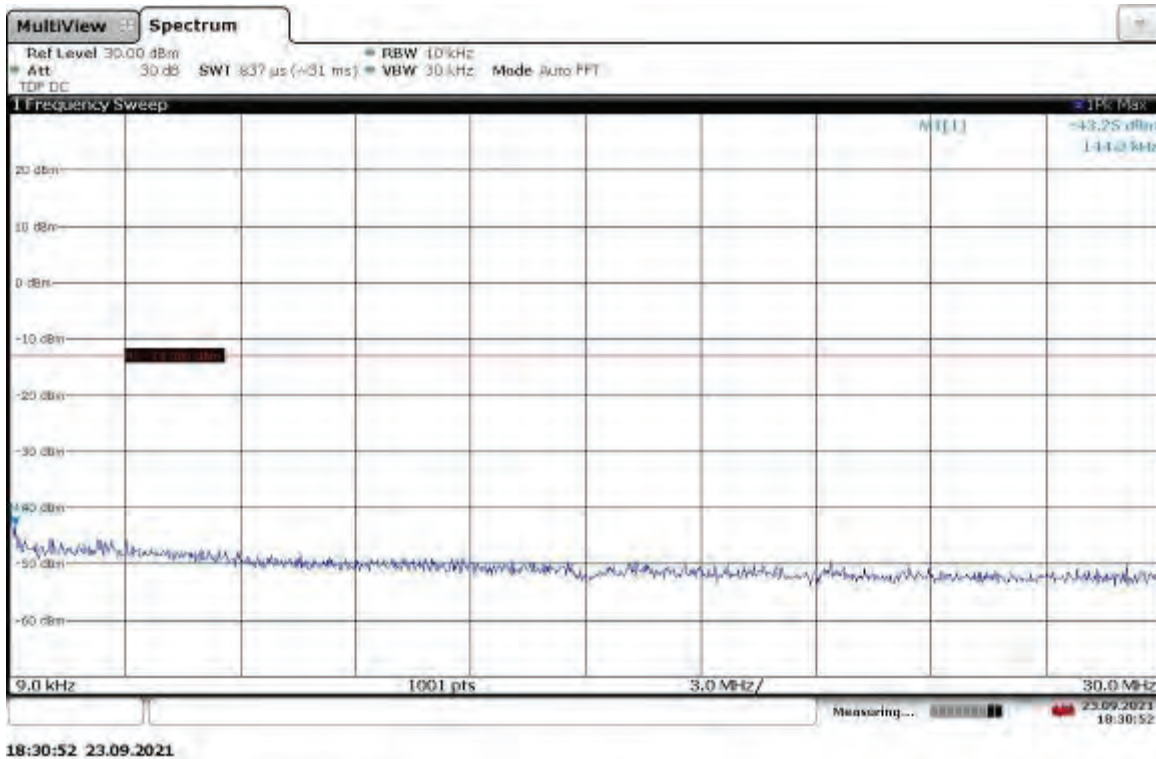


18:27:30 23.09.2021

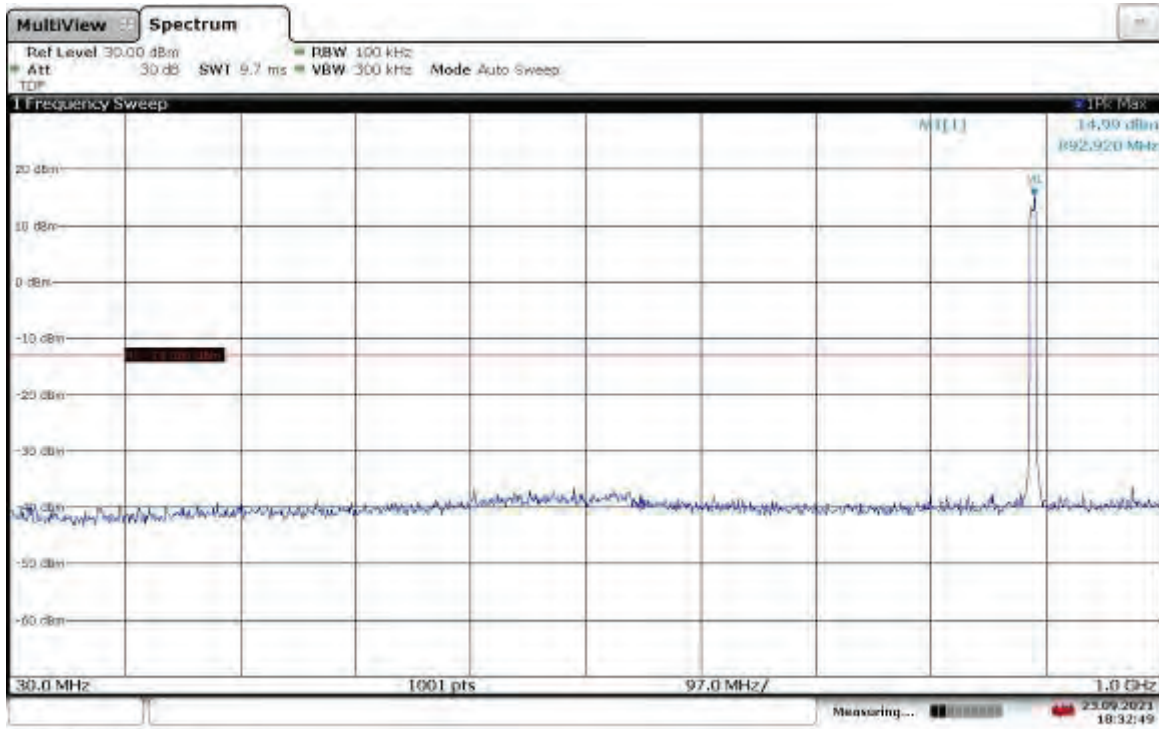
Slot 0 (Band 5), ANT1, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, Mid Channel  
1-10GHz



Slot 0 (Band 5), ANT1, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, High Channel  
9kHz-30MHz

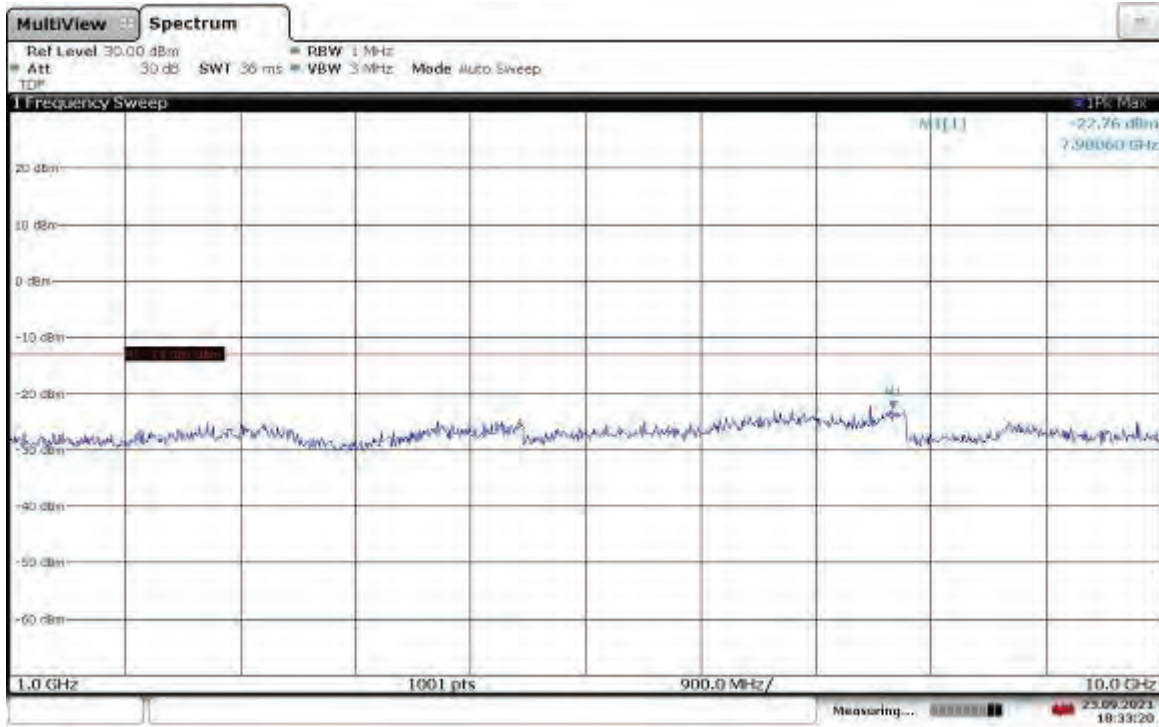


Slot 0 (Band 5), ANT1, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, High Channel  
30MHz-1GHz



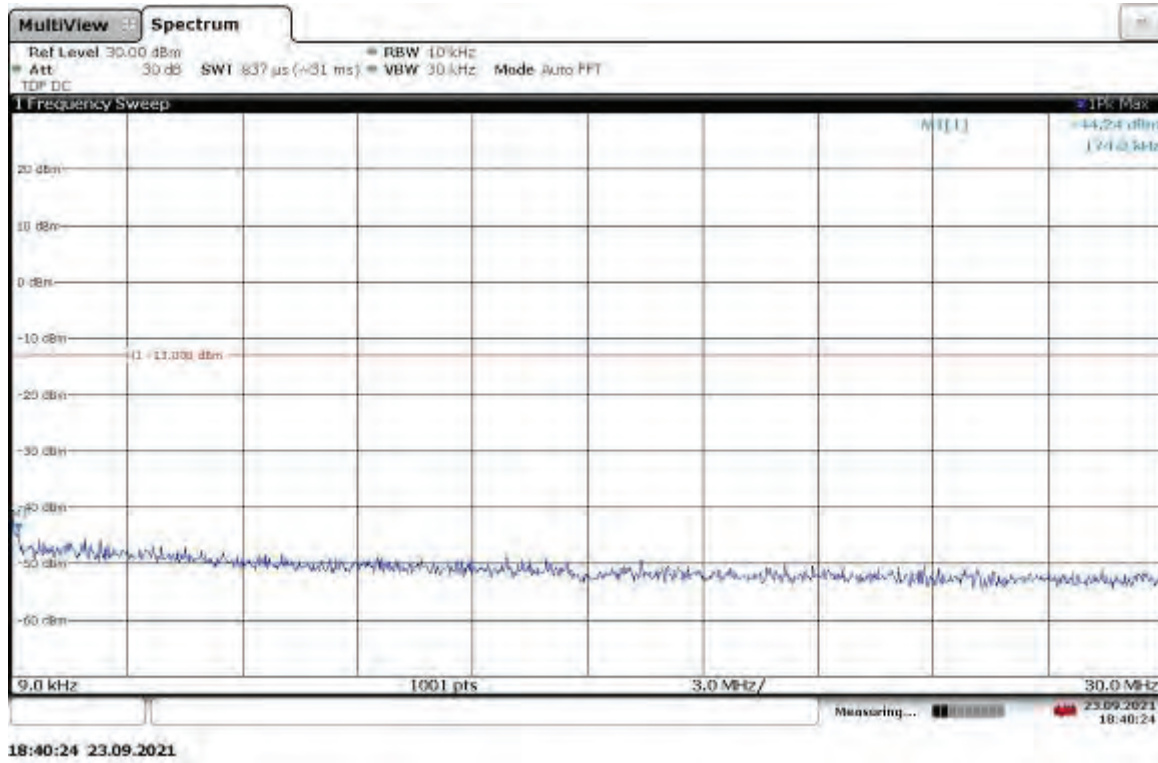
18:32:49 23.09.2021

Slot 0 (Band 5), ANT1, Modulation: TM3.1-64QAM, Bandwidth: 5 MHz, High Channel  
1-10GHz

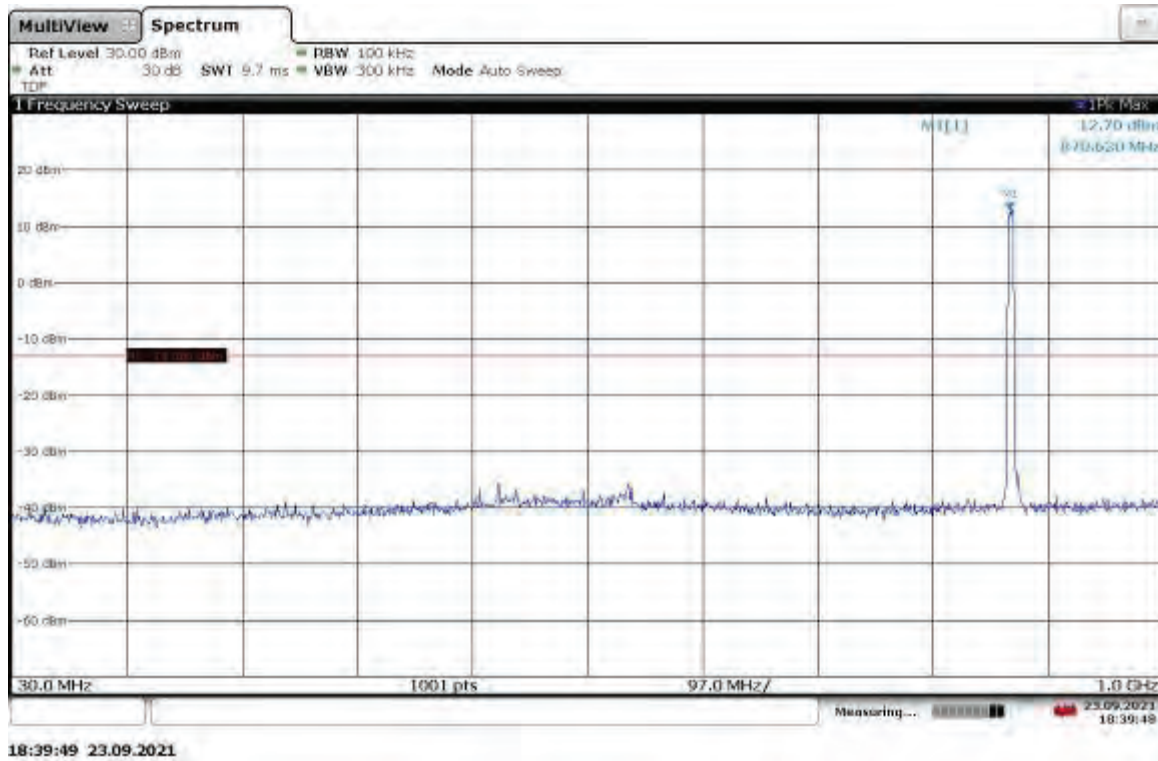


18:33:20 23.09.2021

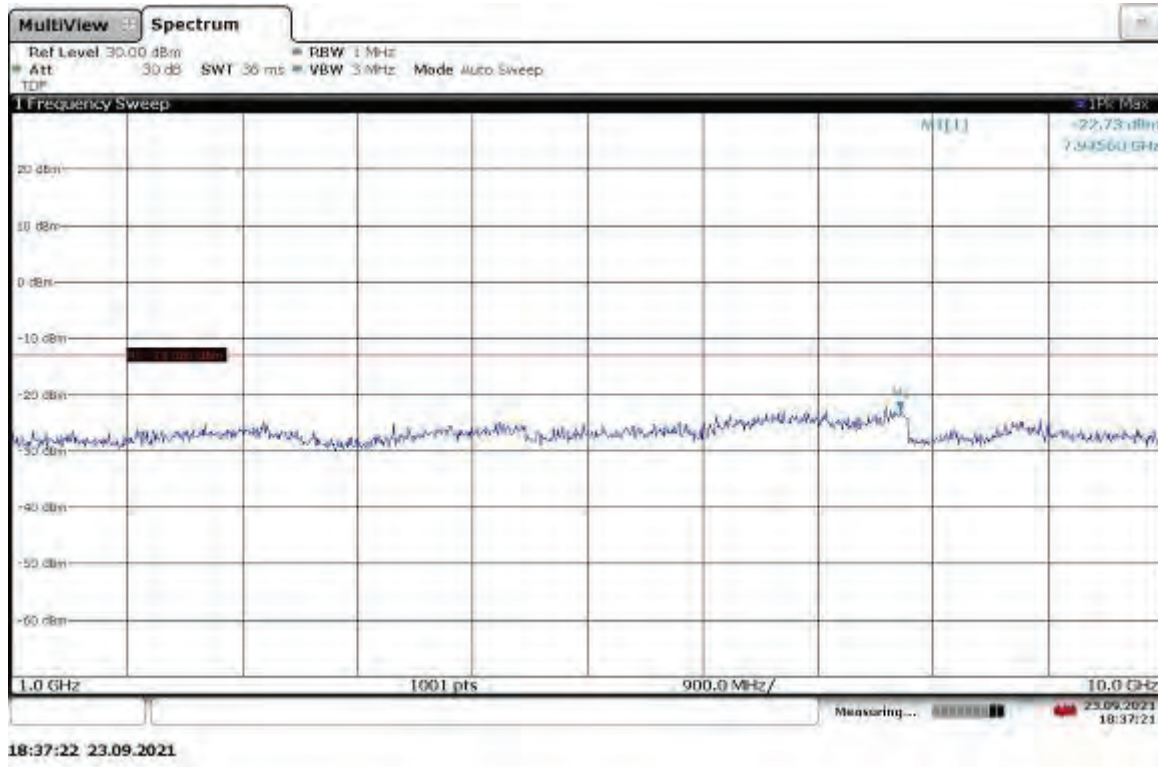
Slot 0 (Band 5), ANT0, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, Low Channel  
9kHz-30MHz



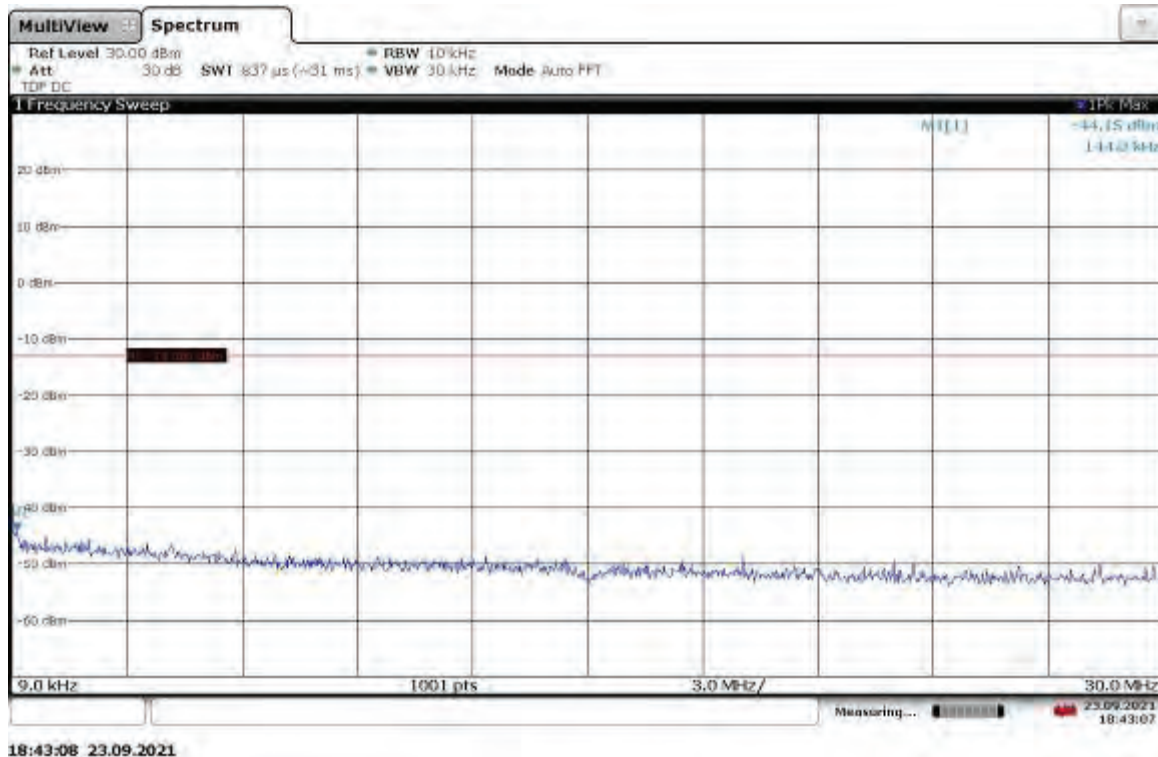
Slot 0 (Band 5), ANT0, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, Low Channel  
30MHz-1GHz



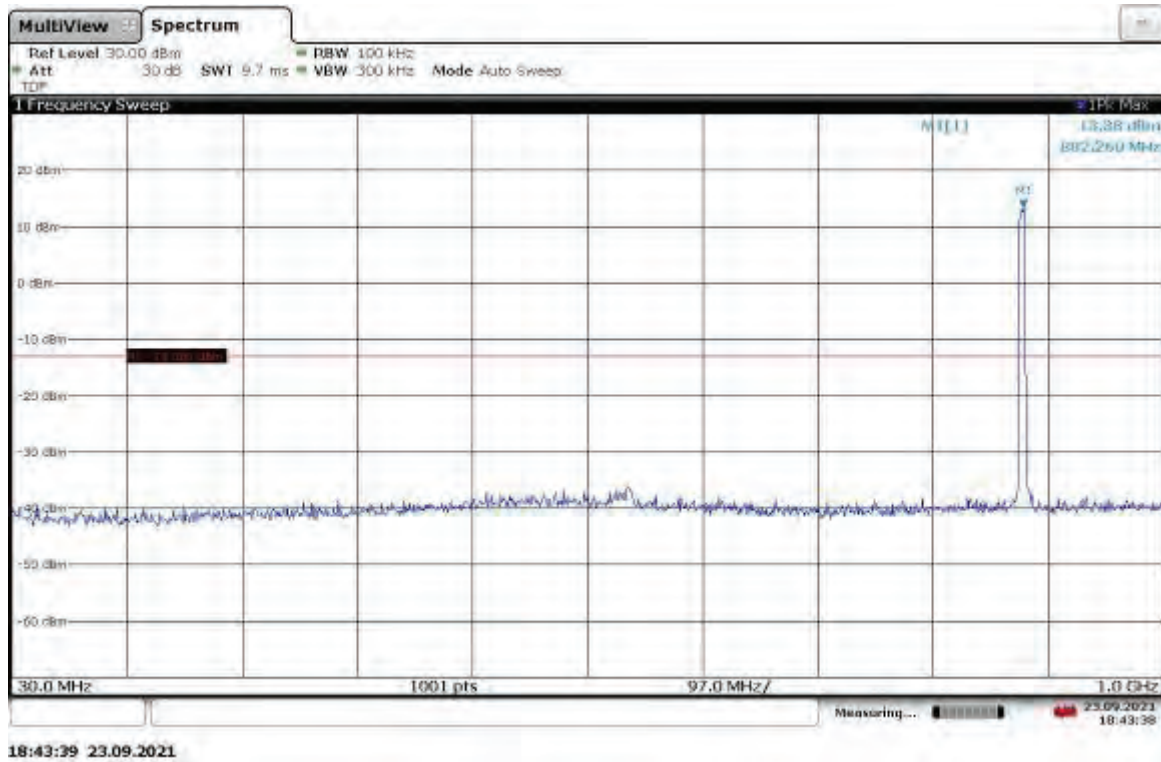
Slot 0 (Band 5), ANT0, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, Low Channel  
1-10GHz



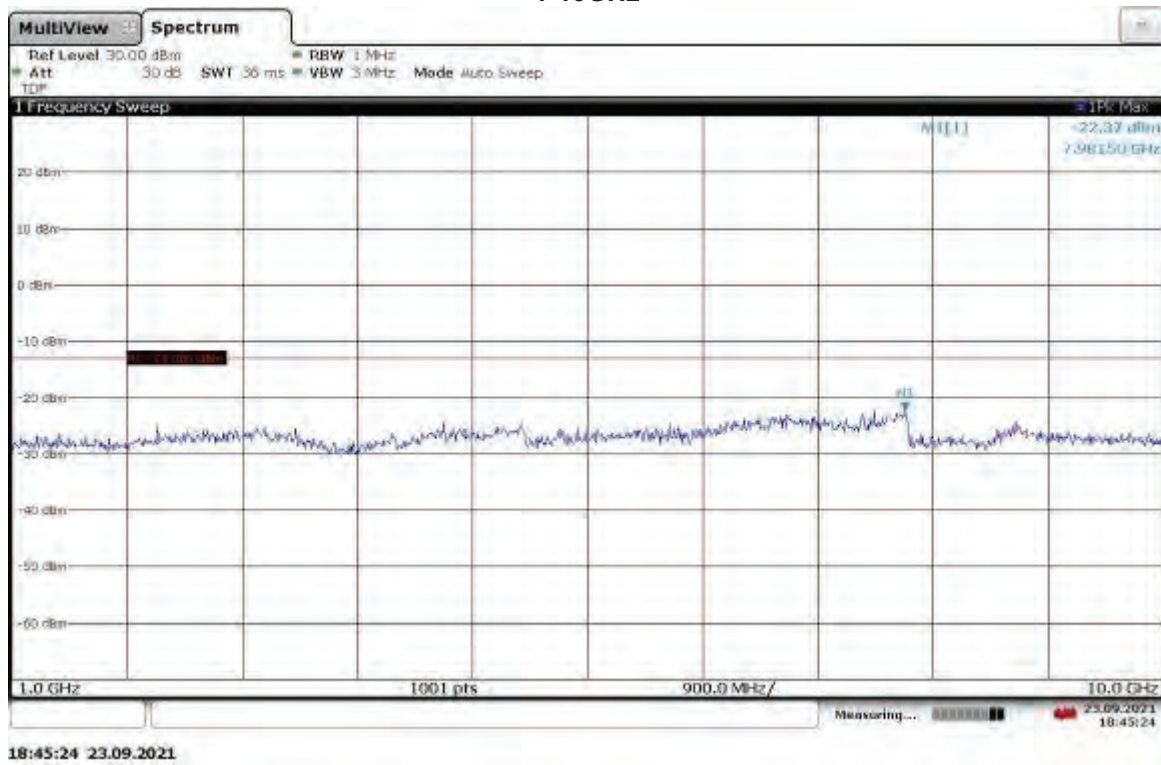
Slot 0 (Band 5), ANT0, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, Mid Channel  
9kHz-30MHz



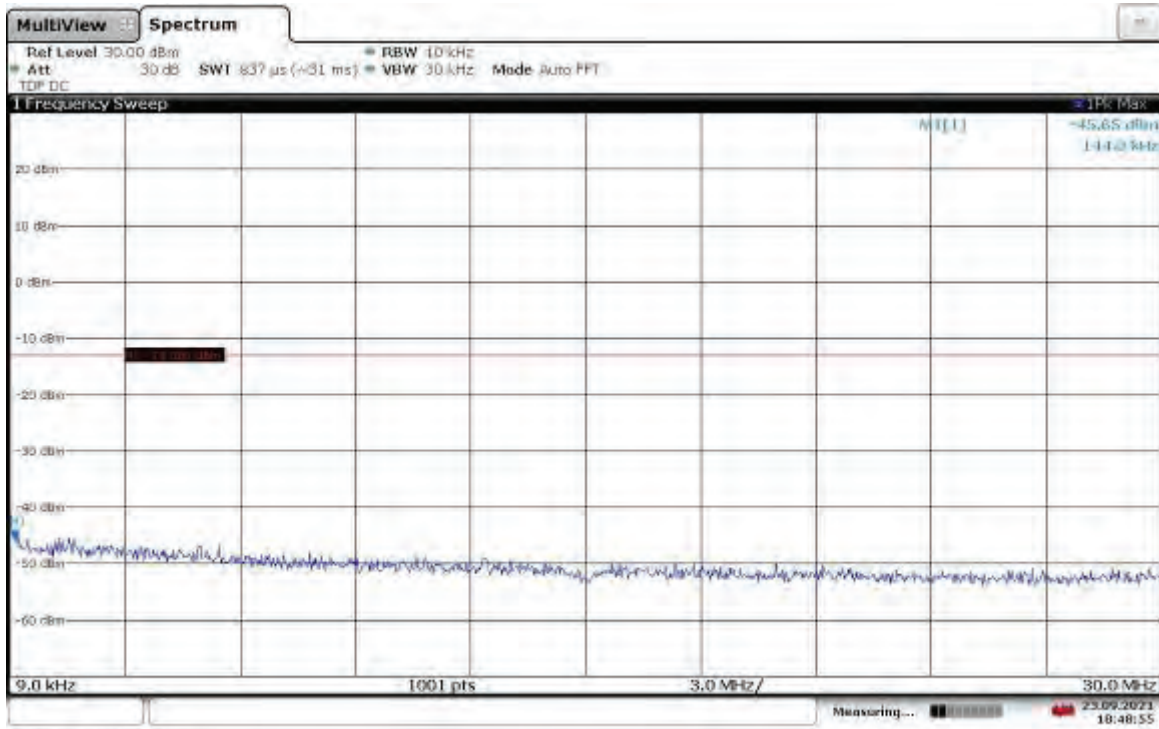
Slot 0 (Band 2), ANT0, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, Mid Channel  
30MHz-1GHz



Slot 0 (Band 5), ANT0, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, Mid Channel 1-10GHz

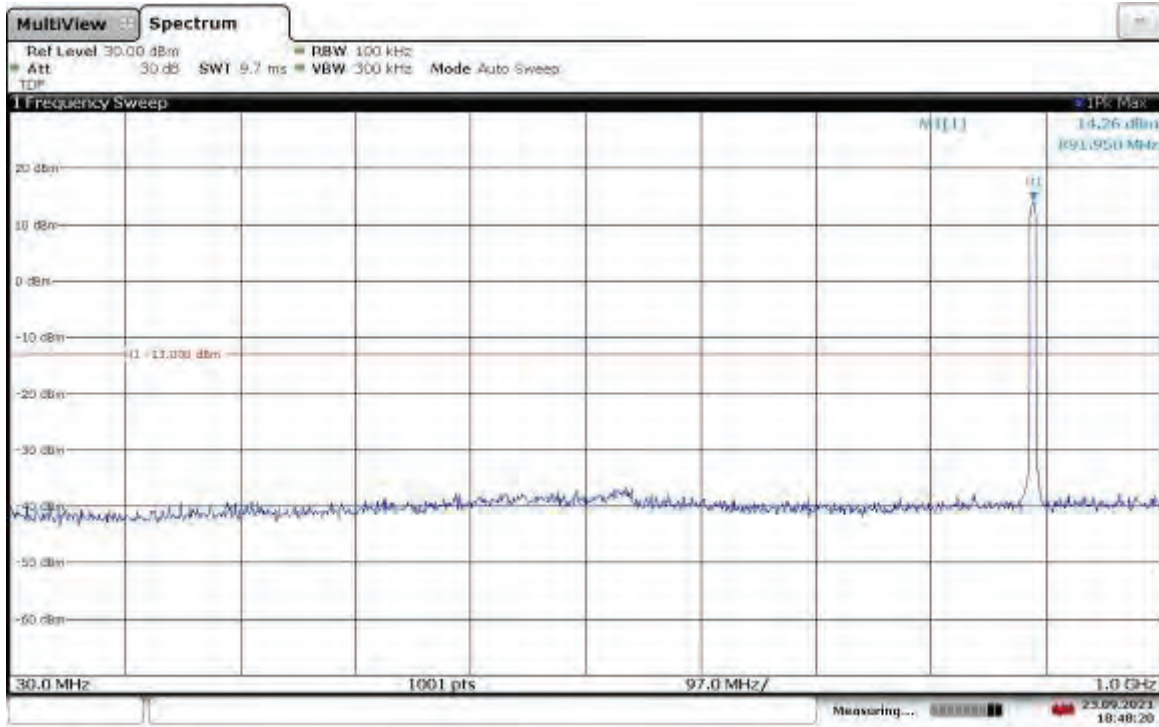


Slot 0 (Band 5), ANT0, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, High Channel  
9kHz-30MHz



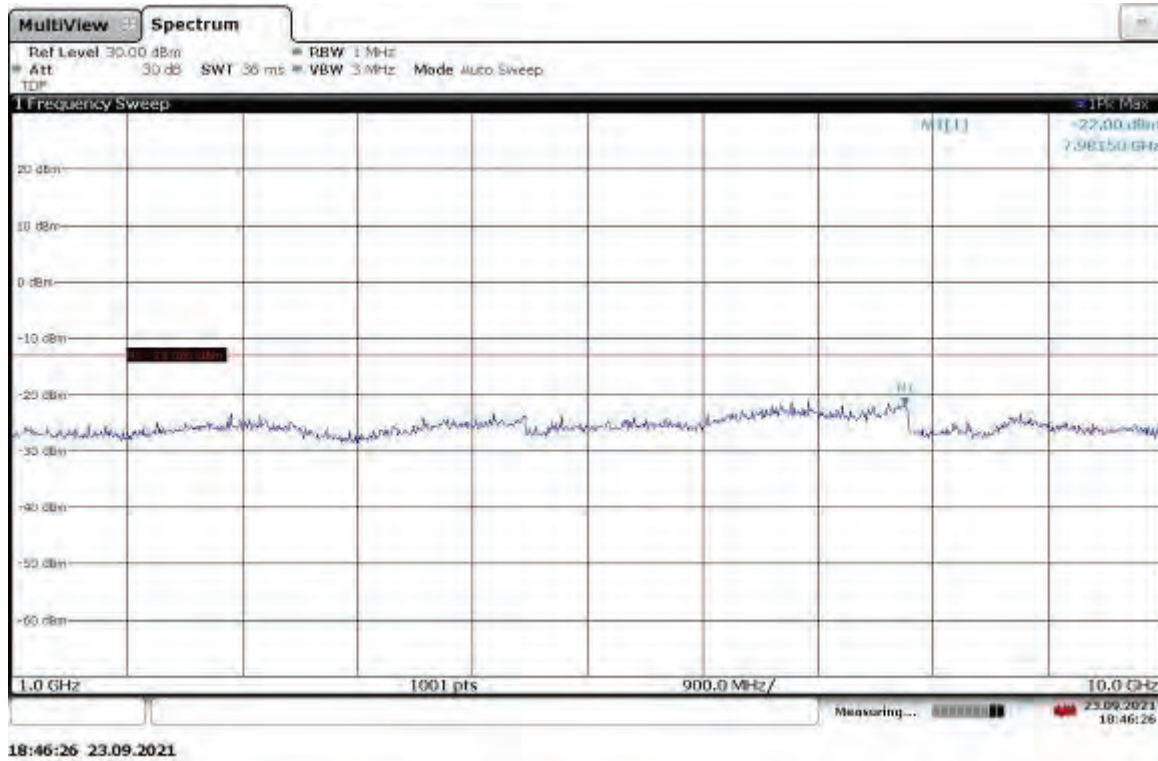
18:48:55 23.09.2021

Slot 0 (Band 5), ANT0, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, High Channel  
30MHz-1GHz

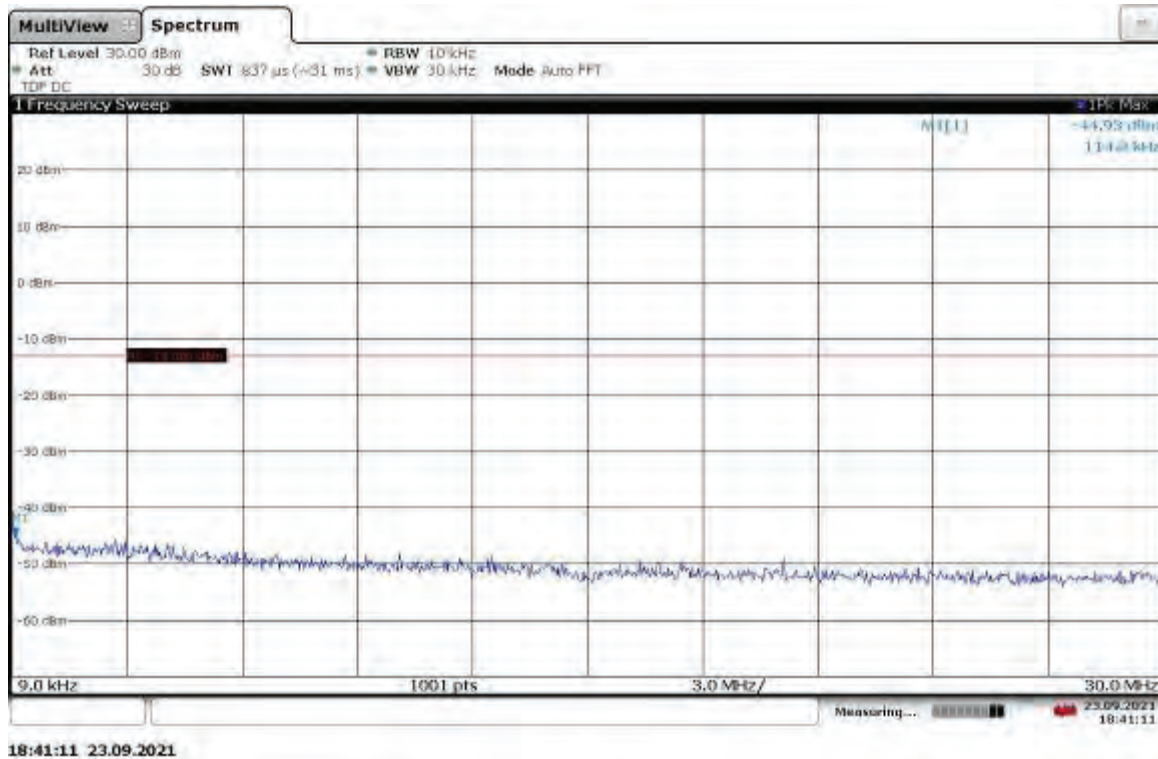


18:48:21 23.09.2021

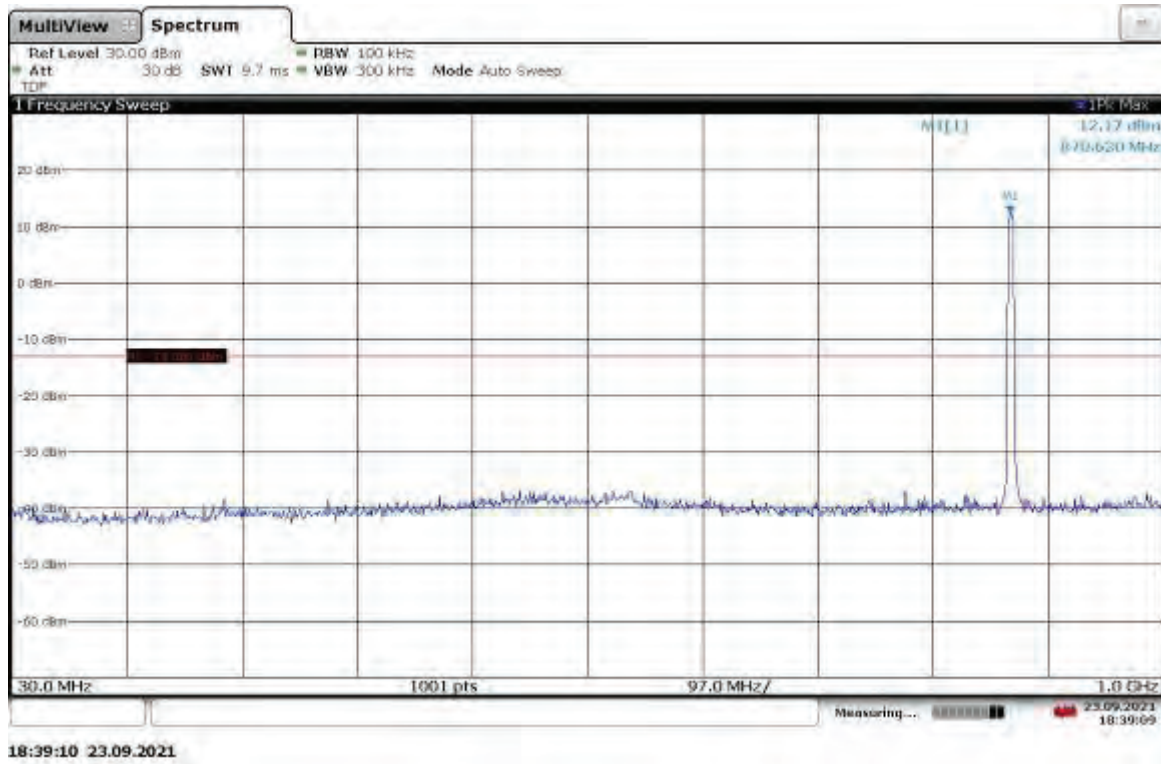
**Slot 0 (Band 5), ANT0, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, High Channel 1-10GHz**



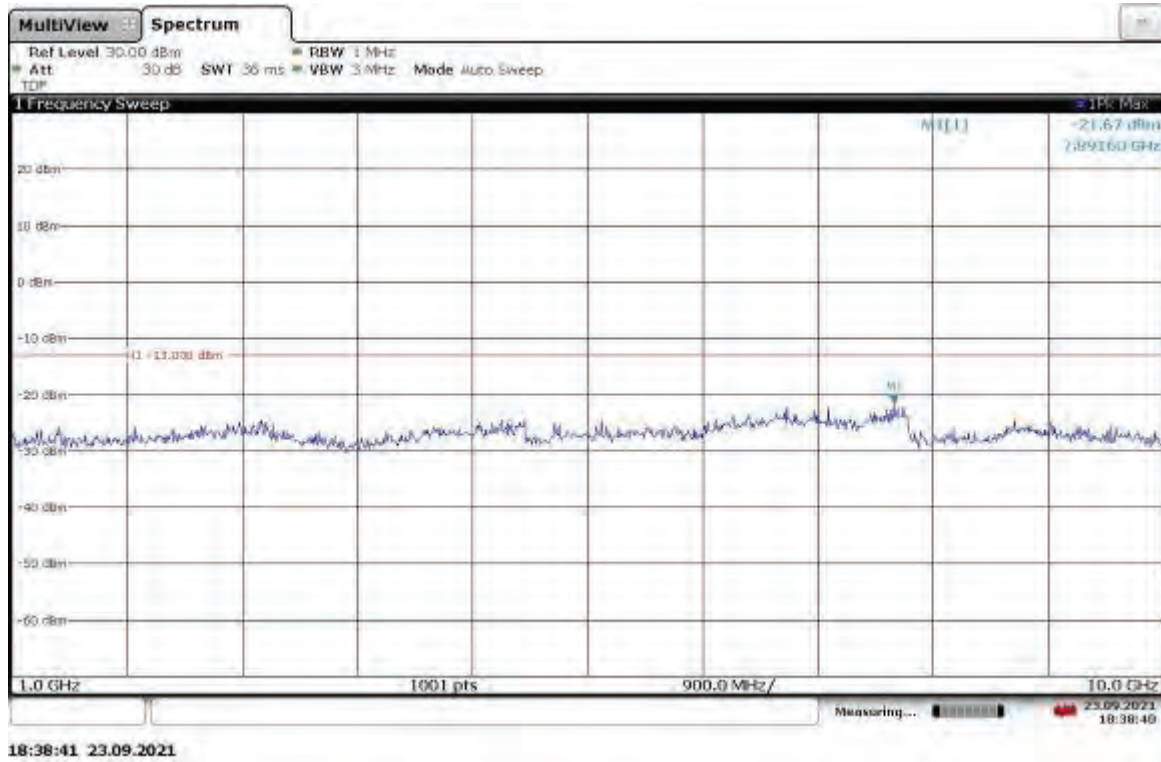
**Slot 0 (Band 5), ANT1, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, Low Channel 9kHz-30MHz**



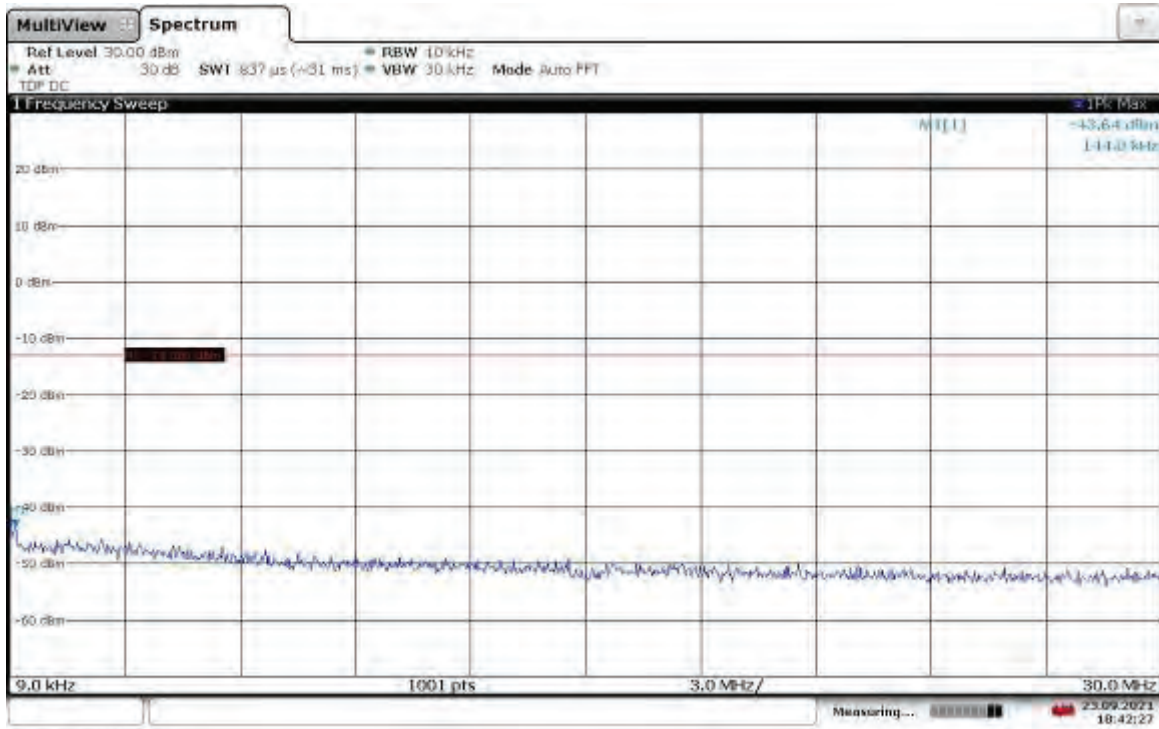
**Slot 0 (Band 5), ANT1, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, Low Channel 30MHz-1GHz**



Slot 0 (Band 5), ANT1, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, Low Channel 1-10GHz

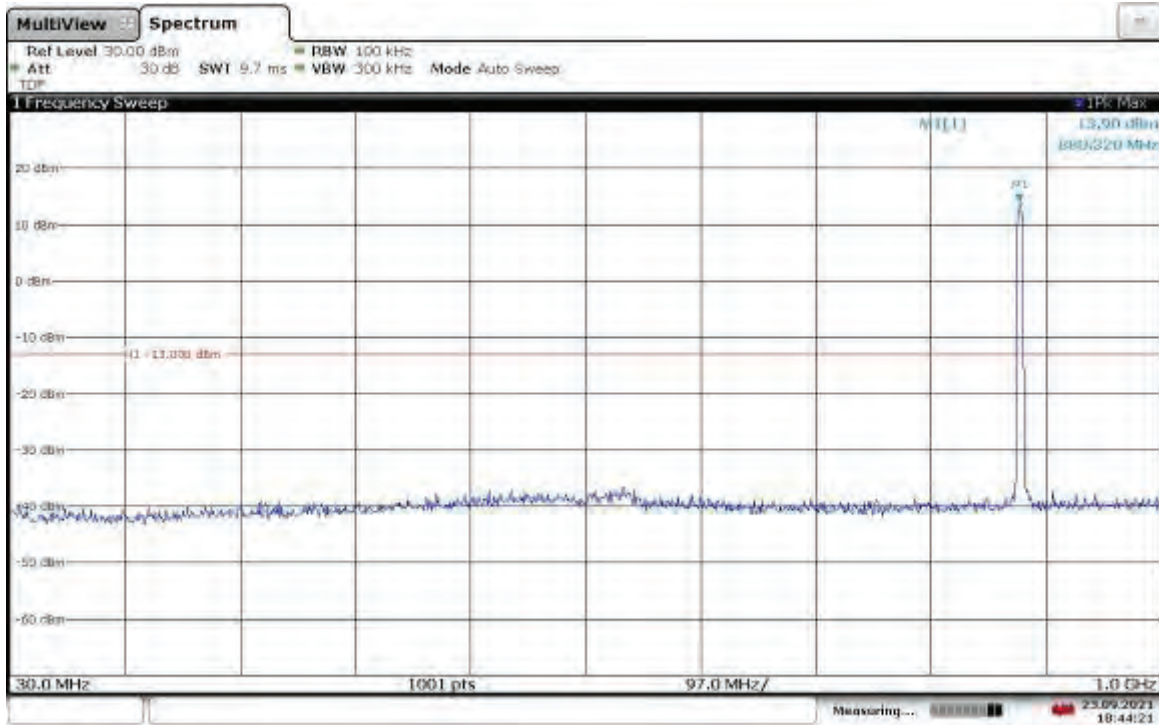


Slot 0 (Band 5), ANT1, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, Mid Channel  
9kHz-30MHz



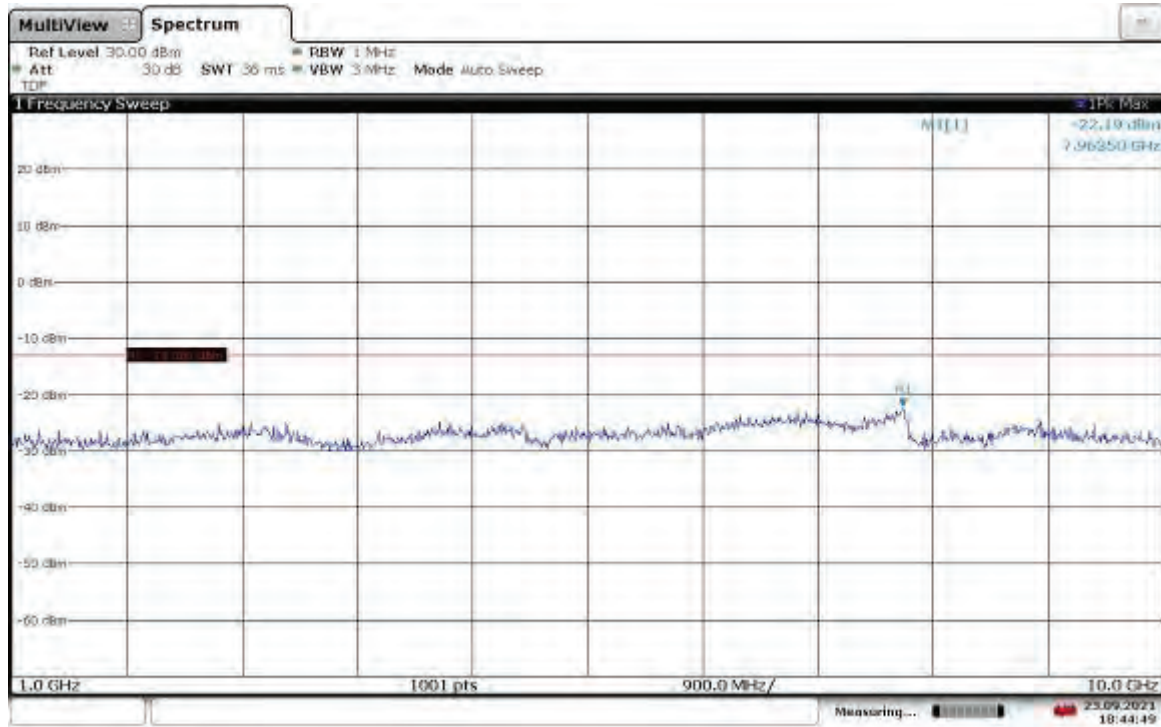
18:42:28 23.09.2021

Slot 0 (Band 5), ANT1, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, Mid Channel  
30MHz-1GHz



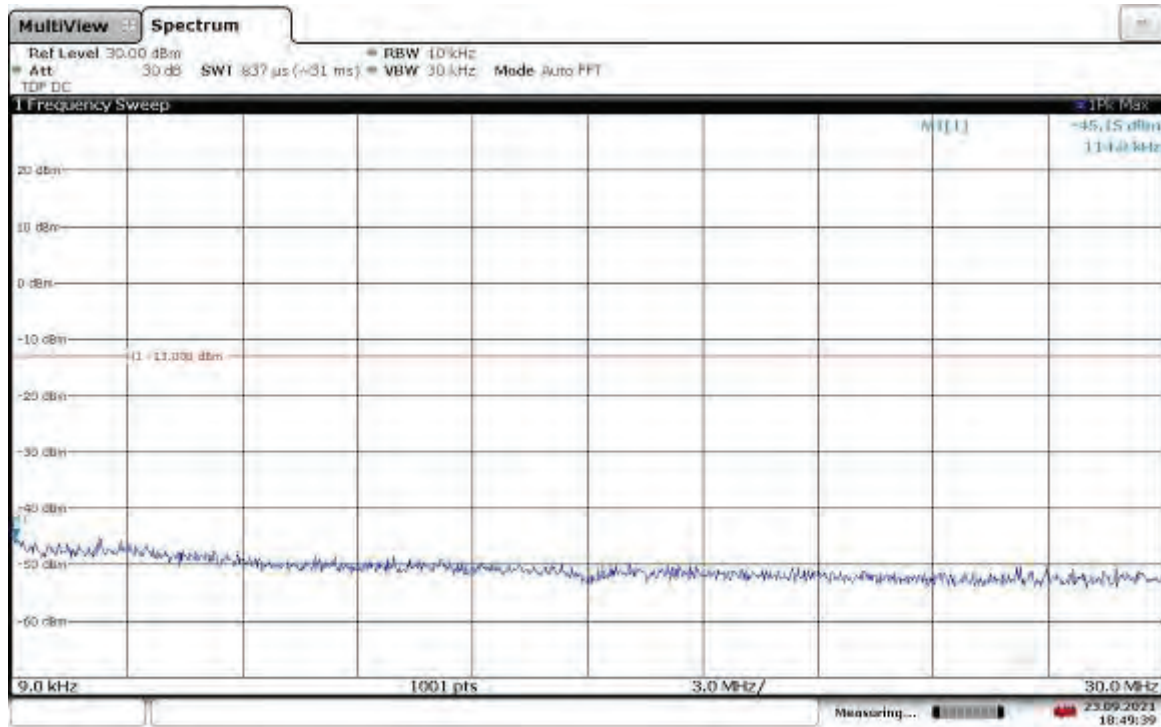
18:44:22 23.09.2021

Slot 0 (Band 5), ANT1, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, Mid Channel 1-10GHz



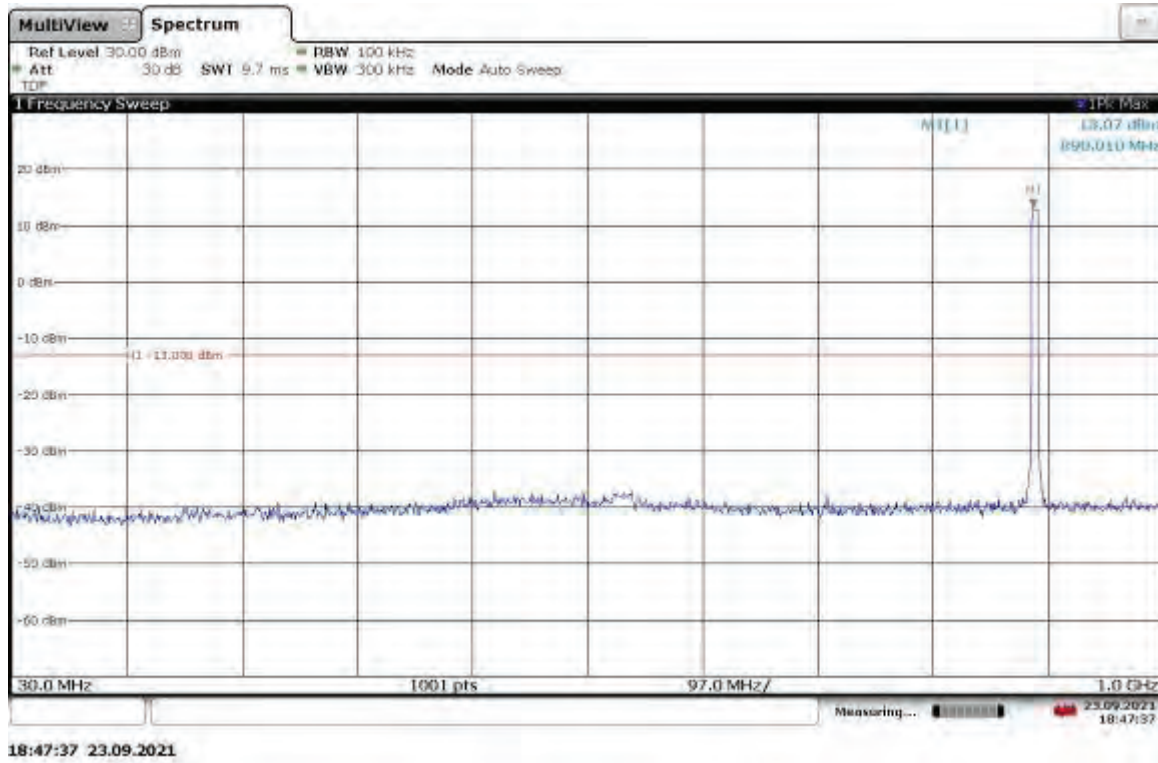
18:44:50 23.09.2021

Slot 0 (Band 5), ANT1, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, High Channel 9kHz-30MHz

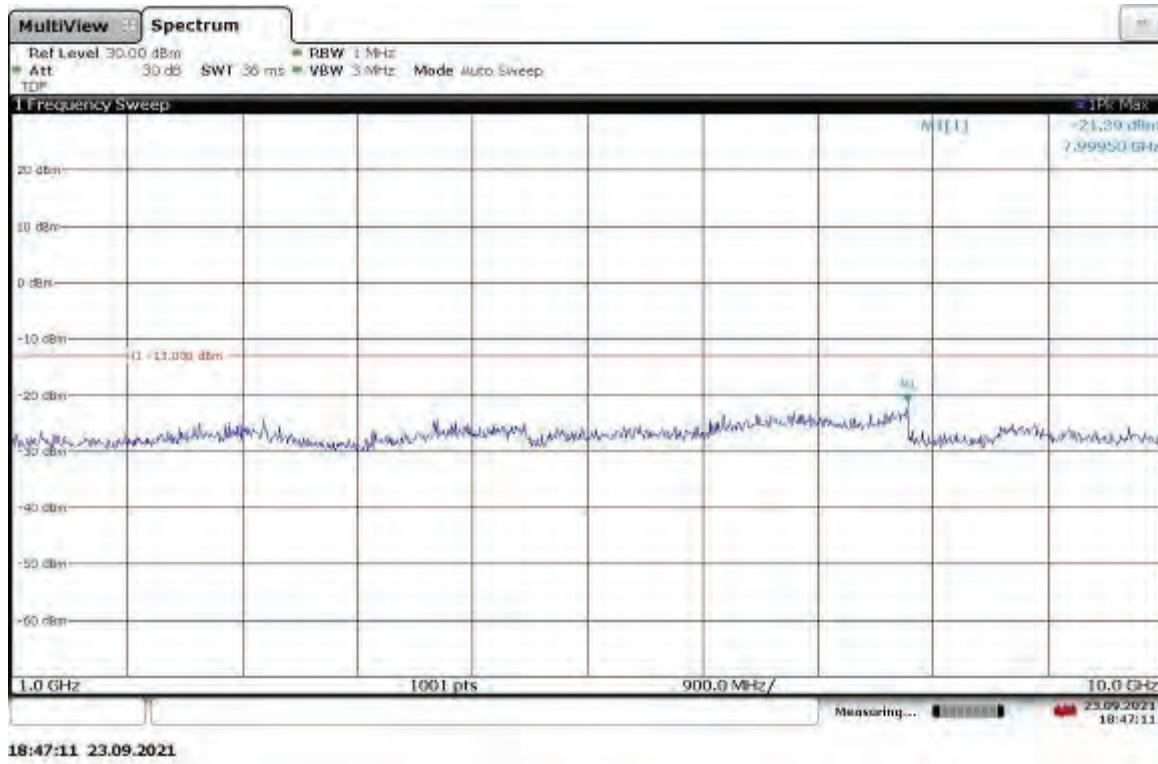


18:49:39 23.09.2021

Slot 0 (Band 5), ANT1, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, High Channel  
30MHz-1GHz



Slot 0 (Band 5), ANT1, Modulation: TM3.1a-256QAM, Bandwidth: 5 MHz, High Channel  
1-10GHz

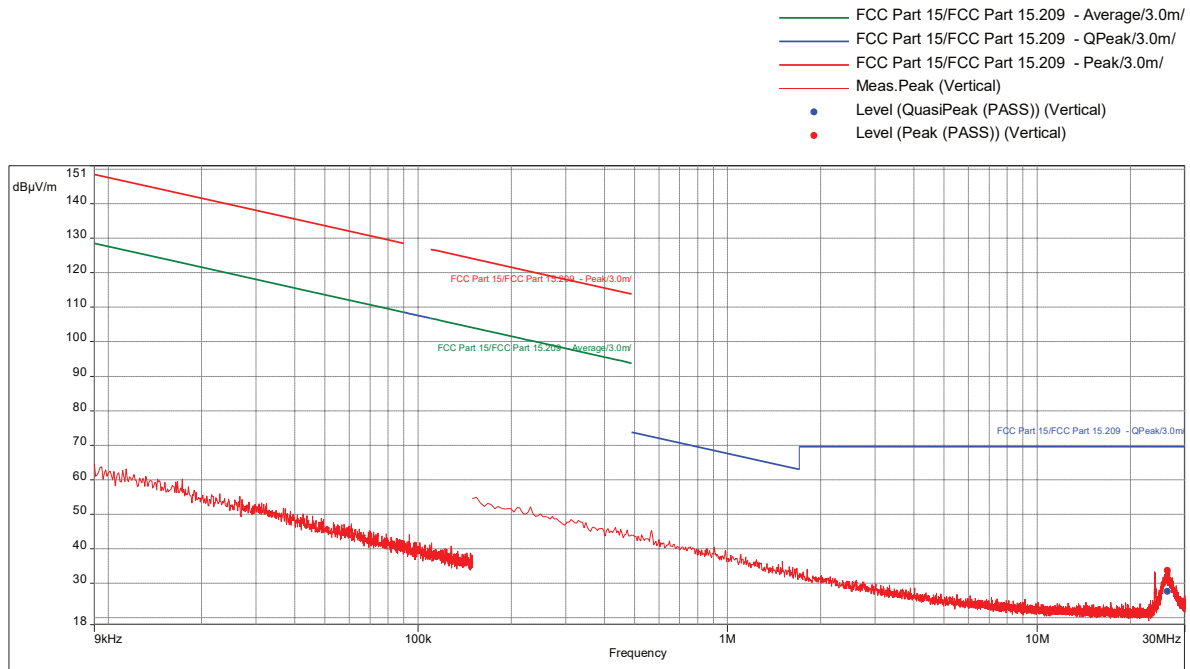


**Radiated Emissions, 9k-30 MHz**  
**Slot 0 (Band 5), Modulation: TM1.1-QPSK, Bandwidth 5 MHz, Transmit @ Low Channel**

**Test Information:**

|                           |                                                   |
|---------------------------|---------------------------------------------------|
| Date and Time             | 8/24/2021 10:53:16 PM                             |
| Client and Project Number | CommScope G104751739                              |
| Engineer                  | Vathana Ven                                       |
| Temperature               | 28 deg C                                          |
| Humidity                  | 42%                                               |
| Atmospheric Pressure      | 1003 mB                                           |
| Comments                  | RE 9kHz-30MHz_POE_Band 5 TM1.1_Tx Low CH 871.5MHz |

**Graph:**



**Results:**

**Peak (PASS) (1)**

| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 26.35065789     | 33.73          | 69.54          | -35.81      | 104.00      | 1.00       | Vertical | 9000.00  | 10.36           |

**QuasiPeak (PASS) (1)**

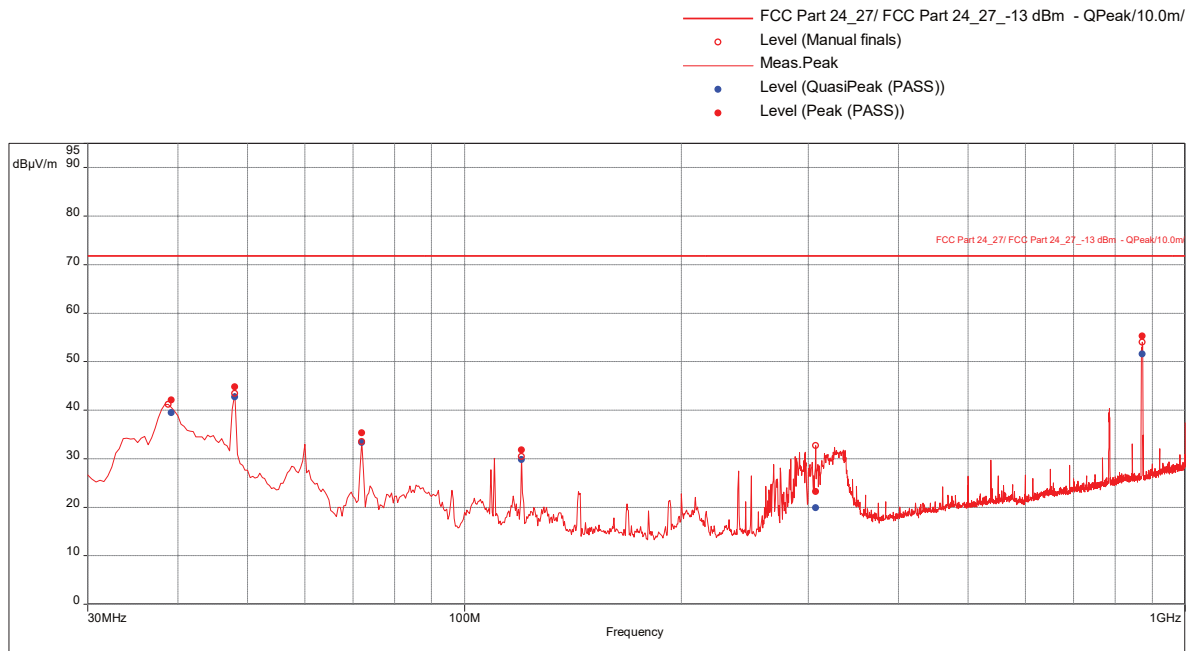
| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 26.35065789     | 27.65          | 69.54          | -41.89      | 104.00      | 1.00       | Vertical | 9000.00  | 10.36           |

**Radiated Emissions, 30-1000 MHz**  
**Slot 0 (Band 5), Modulation: TM1.1-QPSK, Bandwidth 5 MHz, Transmit @ Low Channel**

**Test Information:**

|                           |                                                           |
|---------------------------|-----------------------------------------------------------|
| Date and Time             | 8/24/2021 6:52:17 PM                                      |
| Client and Project Number | CommScope_G104751739                                      |
| Engineer                  | Vathana Ven                                               |
| Temperature               | 28 deg C                                                  |
| Humidity                  | 42%                                                       |
| Atmospheric Pressure      | 1003 mB                                                   |
| Comments                  | RE 30-1000MHz_POE_Band 5 5MHz BW_TM3.1_Tx Low CH 871.5MHz |

**Graph:**



**Results:**

**Peak (PASS) (6)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.       | RBW (Hz)  | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|------------|-----------|-----------------|
| 39.02105263     | 42.13          | -42.67      | -13.00      | -29.67      | 192.00      | 1.00       | Vertical   | 120000.00 | -18.88          |
| 48              | 44.81          | -39.99      | -13.00      | -26.99      | 213.00      | 1.00       | Vertical   | 120000.00 | -24.52          |
| 72              | 35.31          | -49.49      | -13.00      | -36.49      | 337.00      | 1.80       | Vertical   | 120000.00 | -24.85          |
| 120.0315789     | 31.79          | -53.01      | -13.00      | -40.01      | 287.00      | 1.00       | Vertical   | 120000.00 | -18.77          |
| 307.2           | 23.23          | -61.57      | -13.00      | -48.57      | 258.00      | 2.73       | Horizontal | 120000.00 | -18.08          |
| 872.5684211     | 55.30          | -29.50      | -13.00      | -16.50      | 53.00       | 1.97       | Vertical   | 120000.00 | -7.08           |

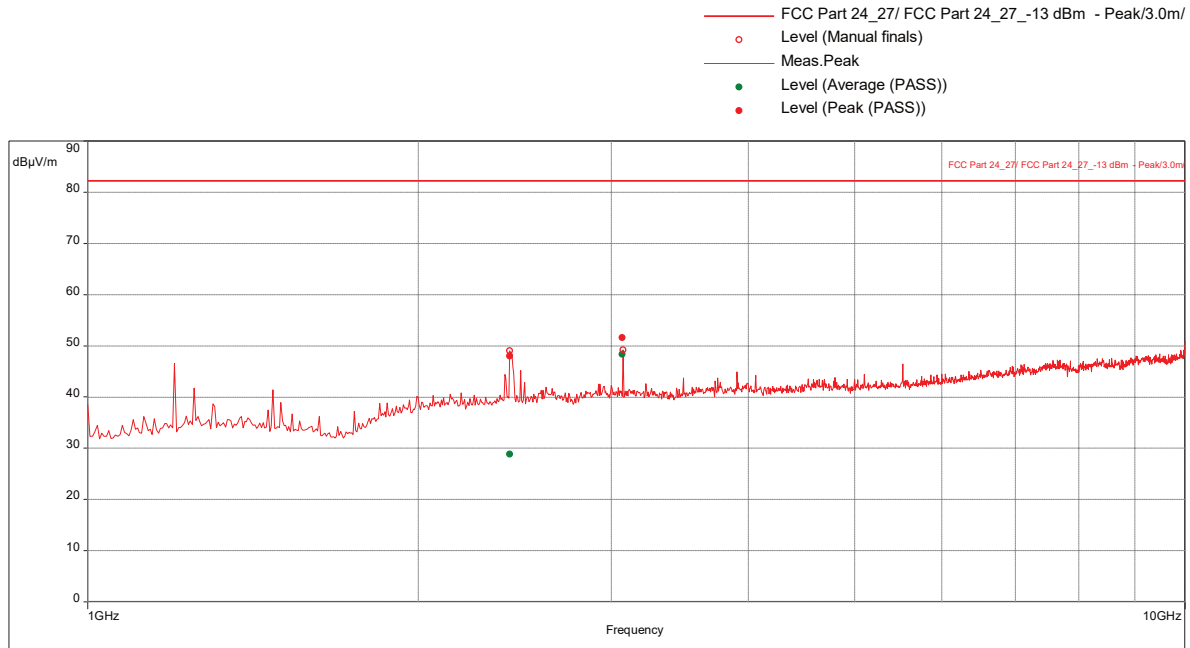
Level EIRP (dBm) = Level Peak (dBuV/m) – 84.8

**Radiated Emissions, 1-10 GHz**  
**Slot 0 (Band 5), Modulation: TM1.1-QPSK, Bandwidth 5 MHz, Transmit @ Low Channel**

**Test Information:**

|                           |                                                                        |
|---------------------------|------------------------------------------------------------------------|
| Date and Time             | 9/26/2021 9:59:05 AM                                                   |
| Client and Project Number | CommScope_G104751739                                                   |
| Engineer                  | Vathana Ven                                                            |
| Temperature               | 23 deg C                                                               |
| Humidity                  | 48%                                                                    |
| Atmospheric Pressure      | 999 mB                                                                 |
| Comments                  | RE 1 to 10 GHz_POE_Band 5 5MHz BW_TM1.1_Tx Low CH 871.5MHz_RP5200 host |

**Graph:**



**Results:**

Peak (PASS) (2)

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)   | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|------------|-----------------|
| 2425.789474     | 47.96          | -47.30      | -13.00      | -34.30      | 122.00      | 1.00       | Vertical | 1000000.00 | -3.43           |
| 3072.105263     | 51.63          | -43.63      | -13.00      | -30.63      | 108.00      | 1.50       | Vertical | 1000000.00 | -2.23           |

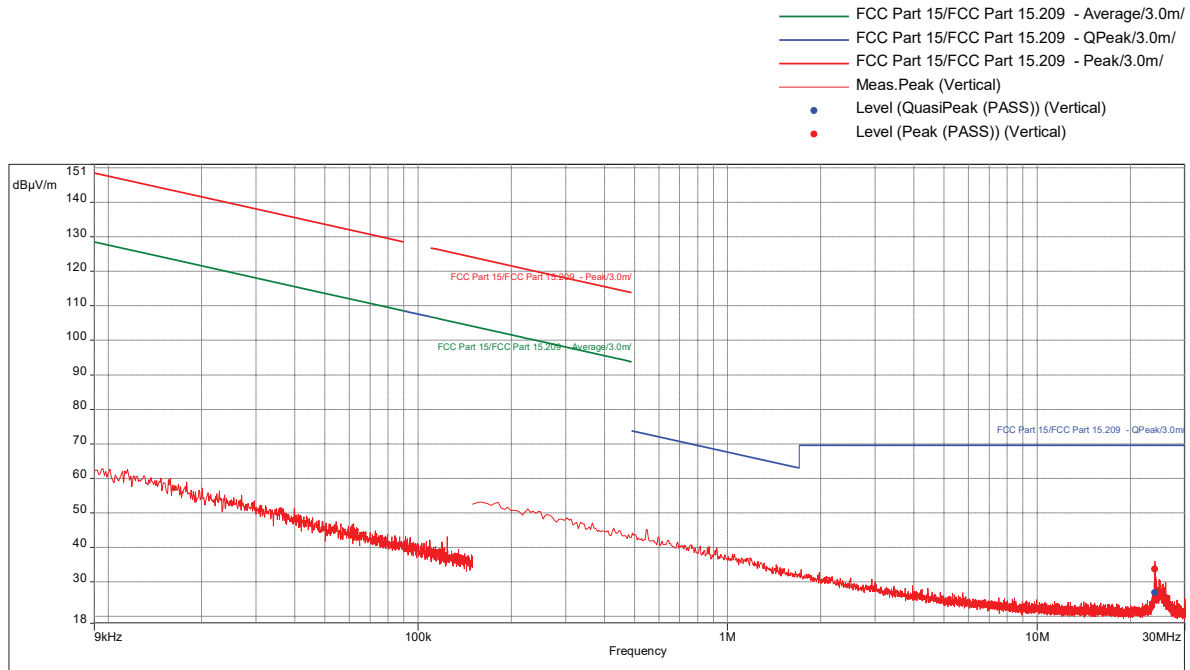
Level EIRP (dBm) = Level Peak (dBuV/m) – 95.20

**Radiated Emissions, 9kHz-30 MHz**  
**Slot 0 (Band 5), Modulation: TM1.1-QPSK, Bandwidth 5 MHz, Transmit @ Mid Channel**

**Test Information:**

|                           |                                                 |
|---------------------------|-------------------------------------------------|
| Date and Time             | 8/26/2021 4:27:18 PM                            |
| Client and Project Number | CommScope_G104751739                            |
| Engineer                  | Vathana Ven                                     |
| Temperature               | 31 deg C                                        |
| Humidity                  | 39%                                             |
| Atmospheric Pressure      | 1007 mB                                         |
| Comments                  | RE 9kHz-30MHz_POE_Band 5 TM1.1 Tx Mid CH 881MHz |

**Graph:**



**Results:**

**Peak (PASS) (1)**

| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 23.99194737     | 33.67          | 69.54          | -35.87      | 151.00      | 1.00       | Vertical | 9000.00  | 10.70           |

**QuasiPeak (PASS) (1)**

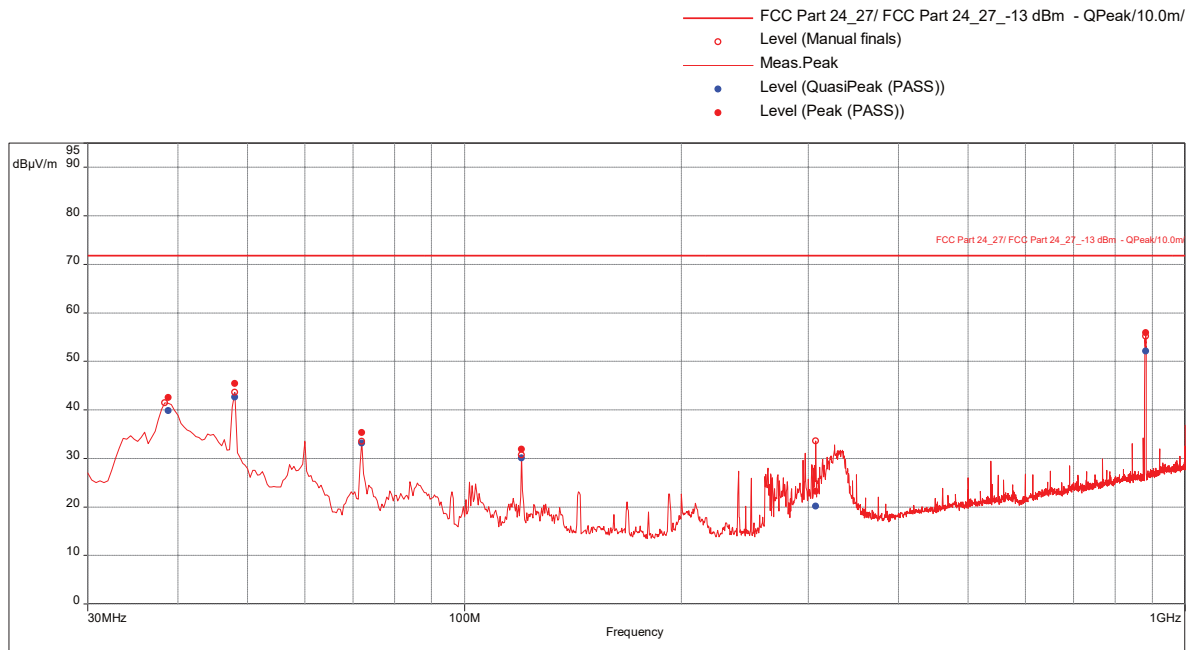
| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 23.99194737     | 26.87          | 69.54          | -42.67      | 151.00      | 1.00       | Vertical | 9000.00  | 10.70           |

**Radiated Emissions, 30-1000 MHz**  
**Slot 0 (Band 5), Modulation: TM1.1-QPSK, Bandwidth 5 MHz, Transmit @ Mid Channel**

**Test Information:**

|                           |                                                         |
|---------------------------|---------------------------------------------------------|
| Date and Time             | 8/24/2021 7:38:56 PM                                    |
| Client and Project Number | CommScope_G104751739                                    |
| Engineer                  | Vathana Ven                                             |
| Temperature               | 28 deg C                                                |
| Humidity                  | 42%                                                     |
| Atmospheric Pressure      | 1003 mB                                                 |
| Comments                  | RE 30-1000MHz_POE_Band 5 5MHz BW_TM3.1_Tx Mid CH 881MHz |

**Graph:**



**Results:**

**Peak (PASS) (6)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.       | RBW (Hz)  | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|------------|-----------|-----------------|
| 38.84210526     | 42.53          | 42.53       | -13.00      | -29.27      | 83.00       | 1.00       | Vertical   | 120000.00 | -18.75          |
| 48              | 45.45          | -45.45      | -13.00      | -26.35      | 141.00      | 1.00       | Vertical   | 120000.00 | -24.52          |
| 72              | 35.36          | -35.36      | -13.00      | -36.44      | 251.00      | 1.70       | Vertical   | 120000.00 | -24.85          |
| 120.0315789     | 31.91          | -52.89      | -13.00      | -39.89      | 317.00      | 1.97       | Vertical   | 120000.00 | -18.77          |
| 307.2           | 23.26          | -61.54      | -13.00      | -48.54      | 133.00      | 3.53       | Horizontal | 120000.00 | -18.08          |
| 882.0631579     | 55.94          | -28.86      | -13.00      | -15.86      | 39.00       | 1.86       | Vertical   | 120000.00 | -6.99           |

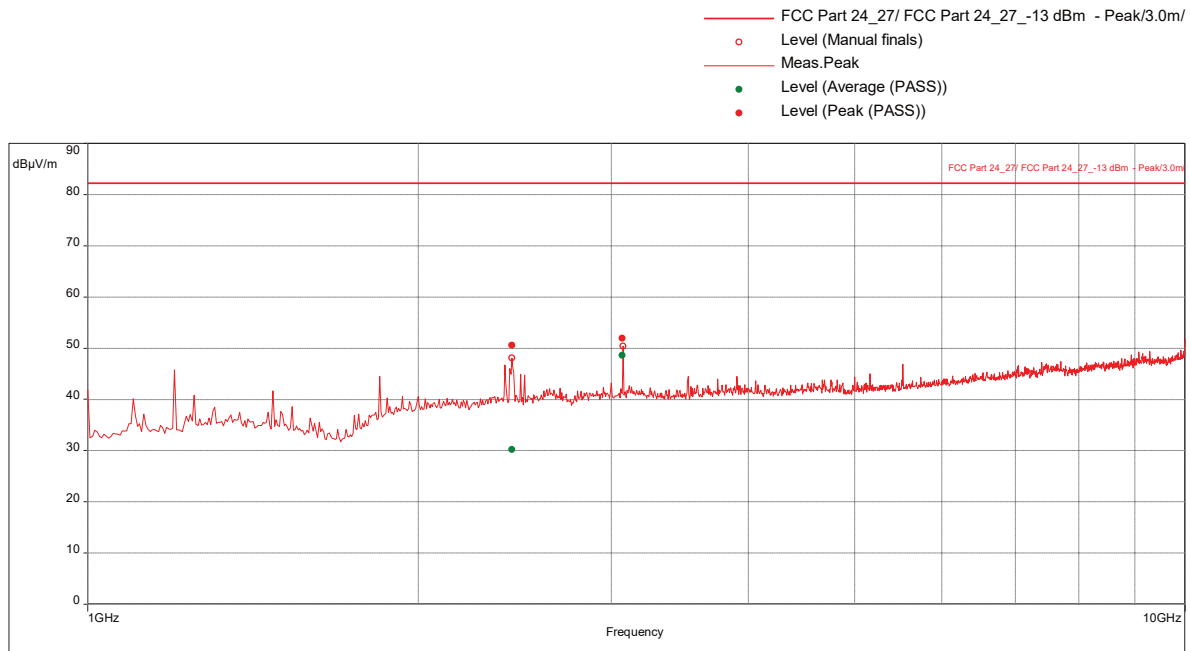
Level EIRP (dBm) = Level Peak (dBuV/m) – 84.8

**Radiated Emissions, 1-10 GHz**  
**Slot 0 (Band 5), Modulation: TM1.1-QPSK, Bandwidth 5 MHz, Transmit @ Mid Channel**

**Test Information:**

|                           |                                                                      |
|---------------------------|----------------------------------------------------------------------|
| Date and Time             | 9/26/2021 9:41:52 AM                                                 |
| Client and Project Number | CommScope_G104751739                                                 |
| Engineer                  | Vathana Ven                                                          |
| Temperature               | 23 deg C                                                             |
| Humidity                  | 48%                                                                  |
| Atmospheric Pressure      | 999 mB                                                               |
| Comments                  | RE 1 to 10 GHz_POE_Band 5 5MHz BW_TM1.1 Tx Mid CH 881MHz_RP5200 host |

**Graph:**



**Results:**

**Peak (PASS) (2)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)   | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|------------|-----------------|
| 2433.421053     | 50.53          | -44.73      | -13.00      | -31.73      | 174.00      | 1.00       | Vertical | 1000000.00 | -3.48           |
| 3072.105263     | 51.92          | -43.34      | -13.00      | -30.34      | 122.00      | 1.40       | Vertical | 1000000.00 | -2.23           |

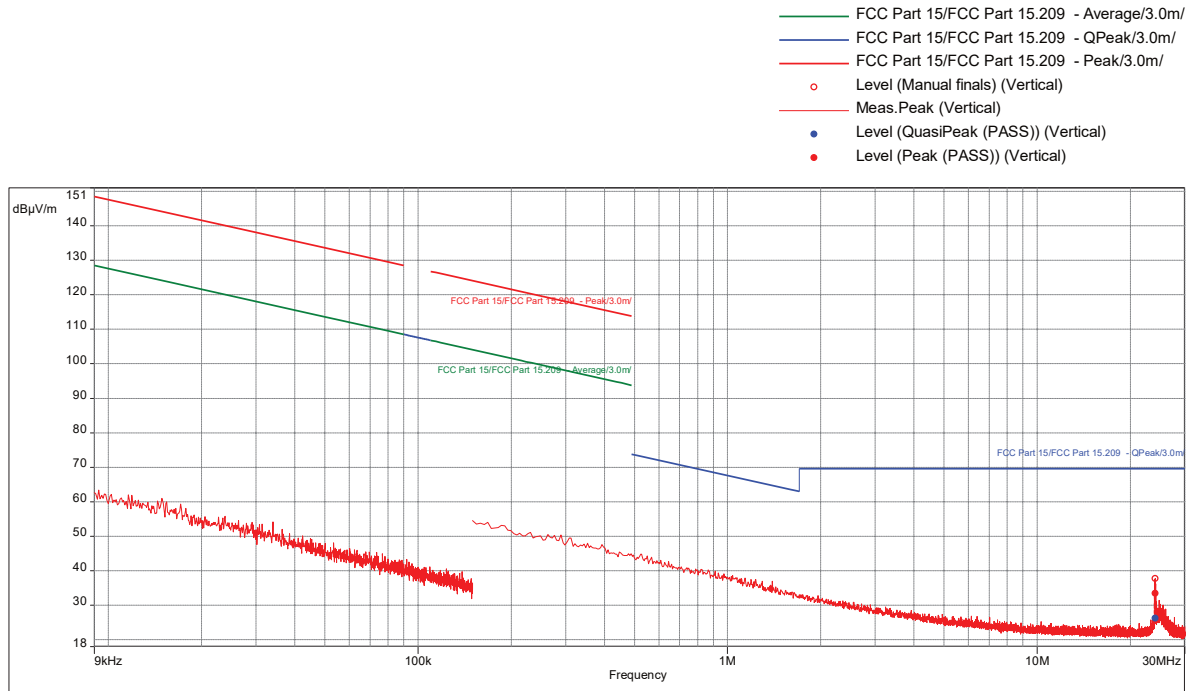
Level EIRP (dBm) = Level Peak (dBuV/m) – 95.20

**Radiated Emissions, 9kHz-30 MHz**  
**Slot 0 (Band 5), Modulation: TM1.1-QPSK, Bandwidth 5 MHz, Transmit @ High Channel**

**Test Information:**

|                           |                                                    |
|---------------------------|----------------------------------------------------|
| Date and Time             | 8/26/2021 5:00:23 PM                               |
| Client and Project Number | CommScope_G104751739                               |
| Engineer                  | Vathana Ven                                        |
| Temperature               | 31 deg C                                           |
| Humidity                  | 39%                                                |
| Atmospheric Pressure      | 1007 mB                                            |
| Comments                  | RE 9kHz-30MHz_POE_Band 5 TM1.1 Tx High CH 891.5MHz |

**Graph:**



**Results:**

**Peak (PASS) (1)**

| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 24.06773684     | 33.43          | 69.54          | -36.11      | 348.00      | 1.00       | Vertical | 9000.00  | 10.70           |

**QuasiPeak (PASS) (1)**

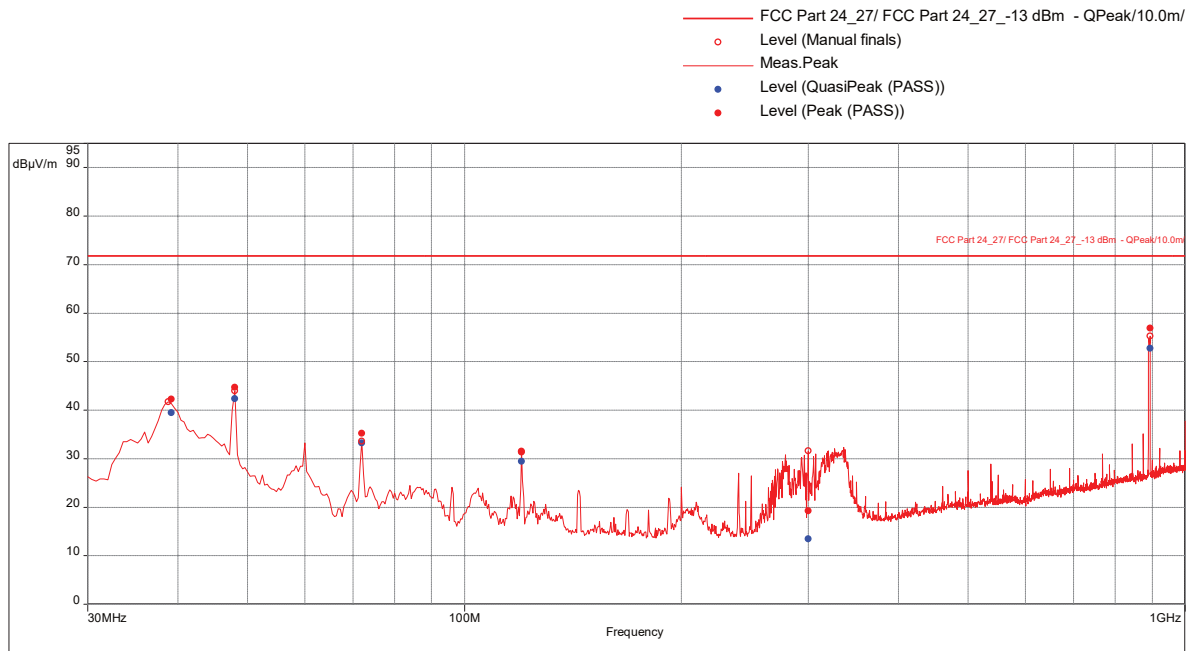
| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 24.06773684     | 26.27          | 69.54          | -43.27      | 348.00      | 1.00       | Vertical | 9000.00  | 10.70           |

**Radiated Emissions, 30-1000 MHz**  
**Slot 0 (Band 5), Modulation: TM1.1-QPSK, Bandwidth 5 MHz, Transmit @ High Channel**

**Test Information:**

|                           |                                                            |
|---------------------------|------------------------------------------------------------|
| Date and Time             | 8/24/2021 6:03:36 PM                                       |
| Client and Project Number | CommScope_G104751739                                       |
| Engineer                  | Vathana Ven                                                |
| Temperature               | 28 deg C                                                   |
| Humidity                  | 42%                                                        |
| Atmospheric Pressure      | 1003 mB                                                    |
| Comments                  | RE 30-1000MHz_POE_Band 5 5MHz BW_TM1.1_Tx High CH 891.5MHz |

**Graph:**



**Results:**

**Peak (PASS) (6)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.       | RBW (Hz)  | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|------------|-----------|-----------------|
| 39.17894737     | 42.29          | -42.51      | -13.00      | -29.51      | 97.00       | 1.00       | Vertical   | 120000.00 | -19.00          |
| 48              | 44.72          | -40.08      | -13.00      | -27.08      | 149.00      | 1.00       | Vertical   | 120000.00 | -24.52          |
| 72              | 35.21          | -49.59      | -13.00      | -36.59      | 74.00       | 1.85       | Vertical   | 120000.00 | -24.85          |
| 120.0315789     | 31.32          | -53.48      | -13.00      | -40.48      | 300.00      | 2.14       | Vertical   | 120000.00 | -18.77          |
| 300.0315789     | 19.22          | -65.58      | -13.00      | -52.58      | 10.00       | 2.74       | Horizontal | 120000.00 | -18.32          |
| 893.4736842     | 56.86          | -27.94      | -13.00      | -14.94      | 60.00       | 1.81       | Vertical   | 120000.00 | -6.84           |

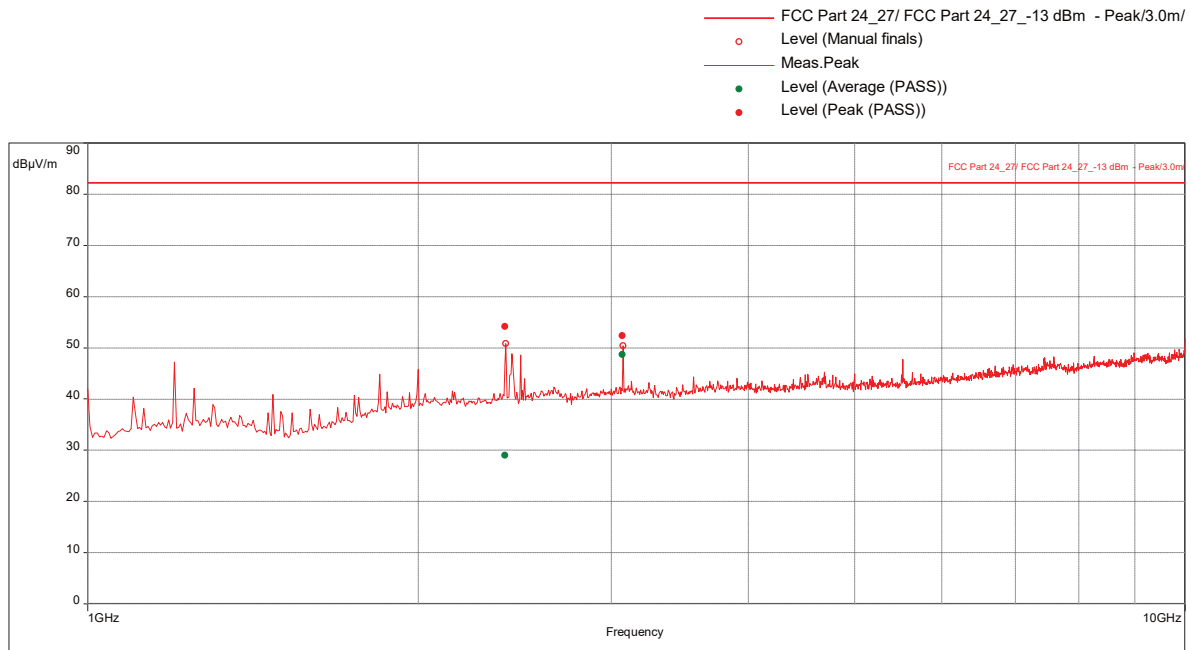
Level EIRP (dBm) = Level Peak (dBuV/m) – 84.8

**Radiated Emissions, 1-10 GHz**  
**Slot 0 (Band 5), Modulation: TM1.1-QPSK, Bandwidth 5 MHz, Transmit @ High Channel**

**Test Information:**

|                           |                                                                         |
|---------------------------|-------------------------------------------------------------------------|
| Date and Time             | 9/26/2021 9:21:33 AM                                                    |
| Client and Project Number | CommScope_G104751739                                                    |
| Engineer                  | Vathana Ven                                                             |
| Temperature               | 23 deg C                                                                |
| Humidity                  | 48%                                                                     |
| Atmospheric Pressure      | 999 mB                                                                  |
| Comments                  | RE 1 to 10 GHz_POE_Band 5 5MHz BW_TM1.1_Tx High CH 891.5MHz_RP5200 host |

**Graph:**



**Results:**

Peak (PASS) (2)

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)   | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|------------|-----------------|
| 2402.105263     | 54.15          | -41.11      | -13.00      | -28.11      | 0.00        | 1.45       | Vertical | 1000000.00 | -3.30           |
| 3072.105263     | 52.34          | -42.92      | -13.00      | -29.92      | 108.00      | 1.01       | Vertical | 1000000.00 | -2.23           |

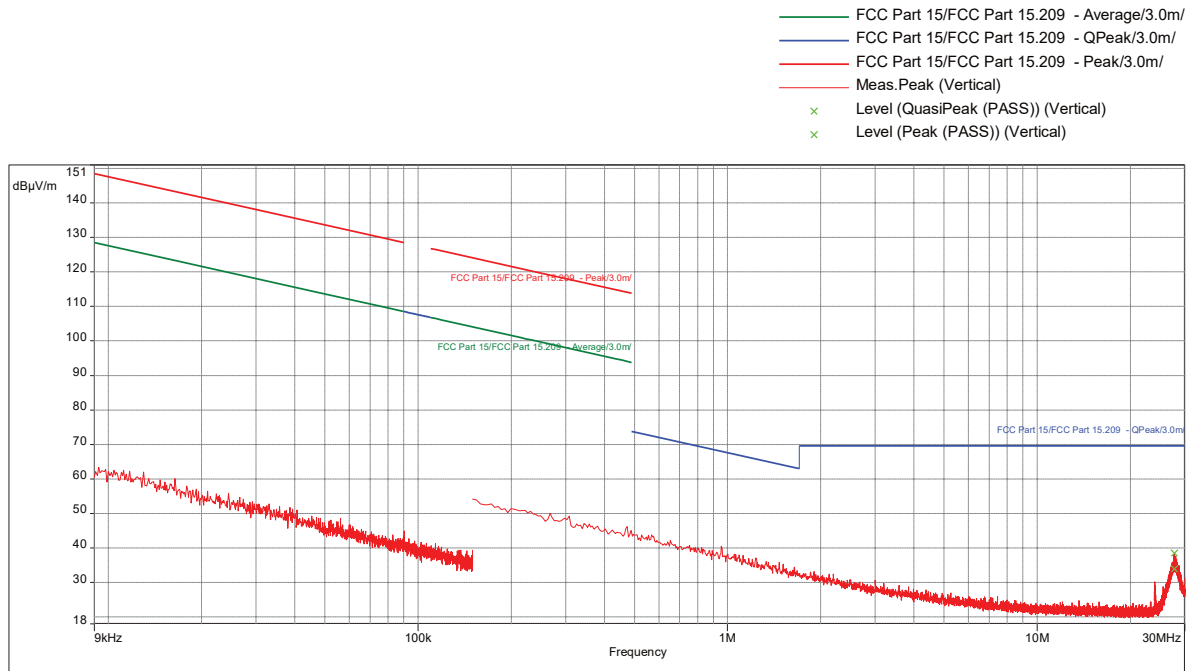
Level EIRP (dBm) = Level Peak (dBuV/m) – 95.20

**Radiated Emissions, 9kHz-30 MHz**  
**Slot 0 (Band 5), Modulation: TM3.2-16QAM, Bandwidth 5 MHz, Transmit @ Low Channel**

**Test Information:**

|                           |                                                   |
|---------------------------|---------------------------------------------------|
| Date and Time             | 8/20/2021 5:01:32 PM                              |
| Client and Project Number | CommScope_G104751739                              |
| Engineer                  | Vathana Ven                                       |
| Temperature               | 26 deg C                                          |
| Humidity                  | 42%                                               |
| Atmospheric Pressure      | 1002 mB                                           |
| Comments                  | RE 9kHz-30MHz_POE_Band 5 TM3.2 Tx Low CH 871.5MHz |

**Graph:**



**Results:**

**QuasiPeak (PASS) (1)**

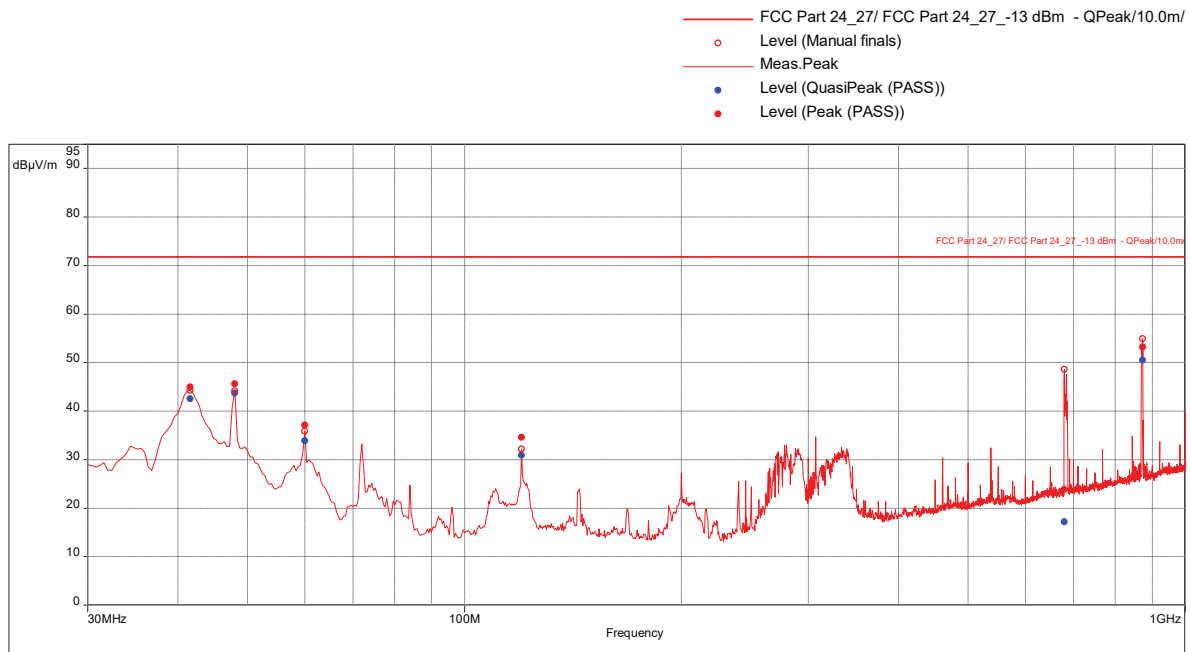
| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 27.75939474     | 33.95          | 69.54          | -35.59      | 141.00      | 1.00       | Vertical | 9000.00  | 10.15           |

**Radiated Emissions, 30-1000 MHz**  
**Slot 0 (Band 5), Modulation: TM3.2-16QAM, Bandwidth 5 MHz, Transmit @ Low Channel**

**Test Information:**

|                           |                                                           |
|---------------------------|-----------------------------------------------------------|
| Date and Time             | 8/20/2021 8:29:36 PM                                      |
| Client and Project Number | CommScope G104751739                                      |
| Engineer                  | Vathana Ven                                               |
| Temperature               | 26 deg C                                                  |
| Humidity                  | 42%                                                       |
| Atmospheric Pressure      | 1002 mB                                                   |
| Comments                  | RE 30-1000MHz POE Band 5 5MHz BW TM3.2 Tx Low CH 871.5MHz |

**Graph:**



**Results:**

Peak (PASS) (6)

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)  | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|-----------|-----------------|
| 41.66315789     | 45.00          | -39.80      | -13.00      | -26.80      | 82.00       | 1.00       | Vertical | 120000.00 | -20.84          |
| 48              | 45.62          | -39.18      | -13.00      | -26.18      | 201.00      | 1.00       | Vertical | 120000.00 | -24.52          |
| 60              | 37.08          | -47.72      | -13.00      | -34.72      | 68.00       | 2.37       | Vertical | 120000.00 | -25.58          |
| 120.0315789     | 34.63          | -50.17      | -13.00      | -37.17      | 194.00      | 1.00       | Vertical | 120000.00 | -18.77          |
| 679.6947368     | 23.87          | -60.93      | -13.00      | -47.93      | 324.00      | 1.91       | Vertical | 120000.00 | -10.22          |
| 872.6421053     | 53.17          | -31.63      | -13.00      | -18.63      | 75.00       | 1.74       | Vertical | 120000.00 | -7.07           |

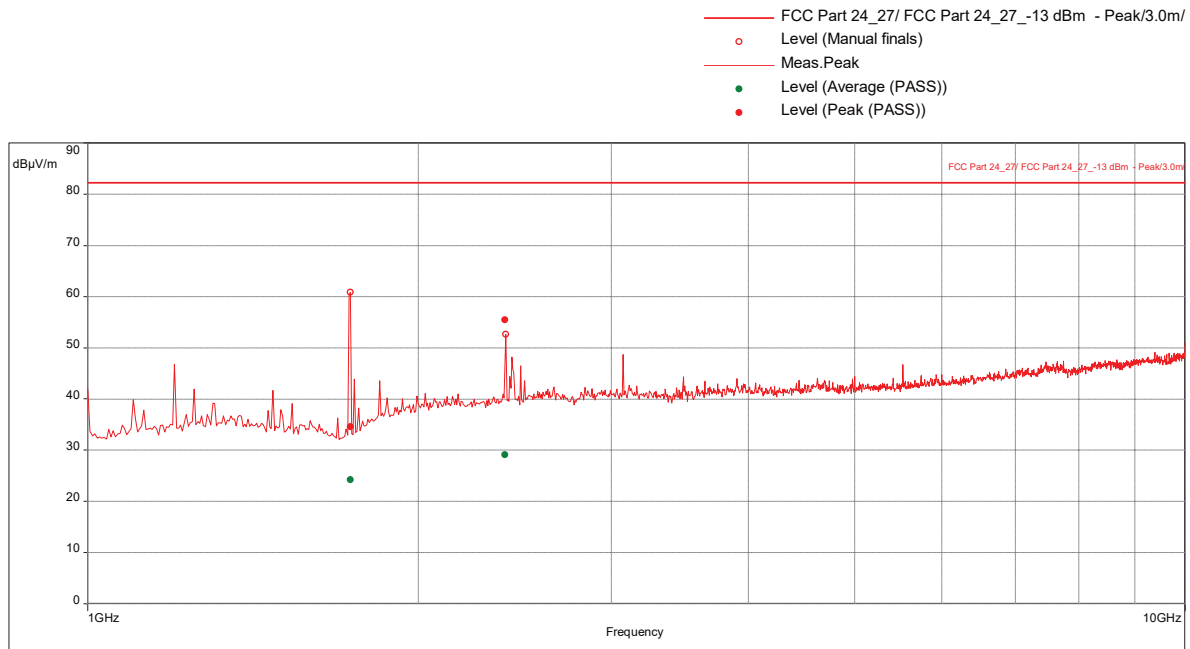
Level EIRP (dBm) = Level Peak (dBuV/m) – 84.8

**Radiated Emissions, 1-10 GHz**  
**Slot 0 (Band 5), Modulation: TM3.2-16QAM, Bandwidth 5 MHz, Transmit @ Low Channel**

**Test Information:**

|                           |                                                                        |
|---------------------------|------------------------------------------------------------------------|
| Date and Time             | 9/26/2021 11:59:40 AM                                                  |
| Client and Project Number | CommScope_G104751739                                                   |
| Engineer                  | Vathana Ven                                                            |
| Temperature               | 23 deg C                                                               |
| Humidity                  | 48%                                                                    |
| Atmospheric Pressure      | 999 mB                                                                 |
| Comments                  | RE 1 to 10 GHz_POE_Band 5 5MHz BW_TM3.2_Tx Low CH 871.5MHz_RP5200 host |

**Graph:**



**Results:**

**Peak (PASS) (2)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)   | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|------------|-----------------|
| 1736.842105     | 34.59          | -60.67      | -13.00      | -47.67      | 149.00      | 3.94       | Vertical | 1000000.00 | -6.55           |
| 2401.842105     | 55.45          | -39.81      | -13.00      | -26.81      | 49.00       | 1.15       | Vertical | 1000000.00 | -3.30           |

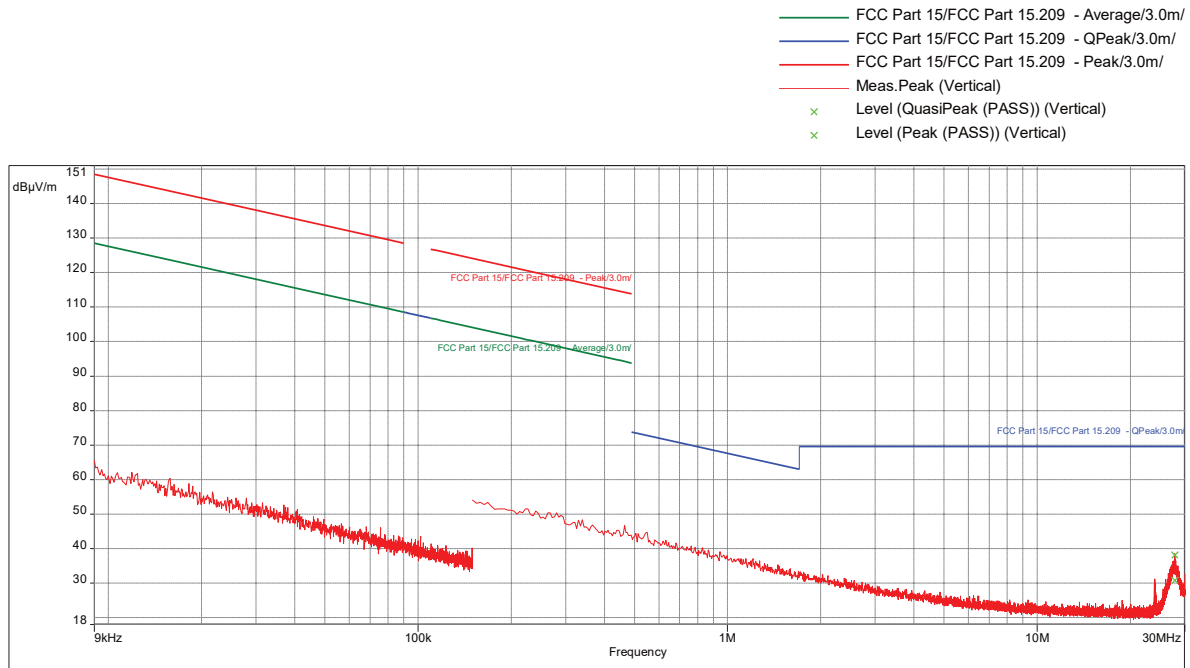
Level EIRP (dBm) = Level Peak (dBuV/m) – 95.20

**Radiated Emissions, 9kHz-30 MHz**  
**Slot 0 (Band 5), Modulation: TM3.2-16QAM, Bandwidth 5 MHz, Transmit @ Mid Channel**

**Test Information:**

|                           |                                                                         |
|---------------------------|-------------------------------------------------------------------------|
| Date and Time             | 8/20/2021 5:35:08 PM                                                    |
| Client and Project Number | CommScope_G104751739                                                    |
| Engineer                  | Vathana Ven                                                             |
| Temperature               | 26 deg C                                                                |
| Humidity                  | 42%                                                                     |
| Atmospheric Pressure      | 1002 mB                                                                 |
| Comments                  | RE 9kHz-30MHz_POE_Band 5 TM3.2_Tx Mid CH 881MHz_Worst-case output power |

**Graph:**



**Results:**

QuasiPeak (PASS) (1)

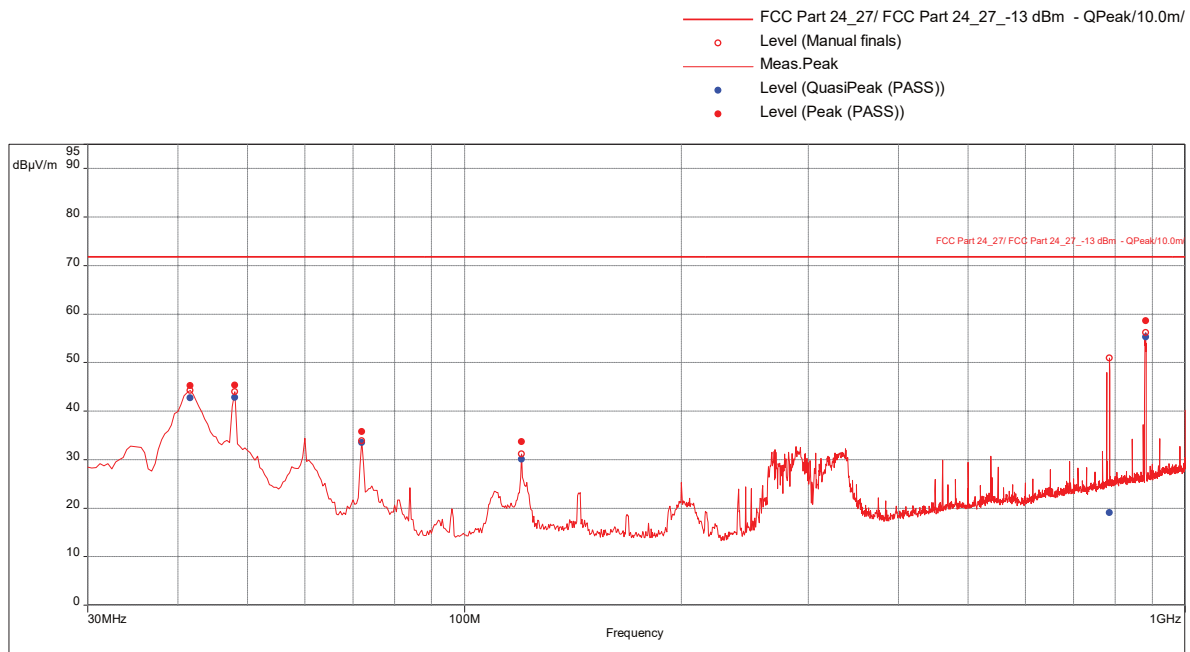
| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 27.81126316     | 30.73          | 69.54          | -38.81      | 266.00      | 1.00       | Vertical | 9000.00  | 10.14           |

**Radiated Emissions, 30-1000 MHz**  
**Slot 0 (Band 5), Modulation: TM3.2-16QAM, Bandwidth 5 MHz, Transmit @ Mid Channel**

**Test Information:**

|                           |                                                         |
|---------------------------|---------------------------------------------------------|
| Date and Time             | 8/20/2021 7:37:17 PM                                    |
| Client and Project Number | CommScope_G104751739                                    |
| Engineer                  | Vathana Ven                                             |
| Temperature               | 26 deg C                                                |
| Humidity                  | 42%                                                     |
| Atmospheric Pressure      | 1002 mB                                                 |
| Comments                  | RE 30-1000MHz POE Band 5 5MHz BW TM3.2 Tx Mid CH 881MHz |

**Graph:**



**Results:**

**Peak (PASS) (6)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)  | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|-----------|-----------------|
| 41.69473684     | 45.22          | -39.58      | -13.00      | -26.58      | 75.00       | 1.00       | Vertical | 120000.00 | -20.87          |
| 48              | 45.35          | -39.45      | -13.00      | -26.45      | 323.00      | 1.00       | Vertical | 120000.00 | -24.52          |
| 72              | 35.78          | -49.02      | -13.00      | -36.02      | 118.00      | 1.87       | Vertical | 120000.00 | -24.85          |
| 120.0315789     | 33.65          | -51.15      | -13.00      | -38.15      | 171.00      | 1.85       | Vertical | 120000.00 | -18.77          |
| 785.2842105     | 25.17          | -59.63      | -13.00      | -46.63      | 69.00       | 3.07       | Vertical | 120000.00 | -8.24           |
| 881.3263158     | 58.61          | -26.19      | -13.00      | -13.19      | 62.00       | 1.69       | Vertical | 120000.00 | -6.92           |

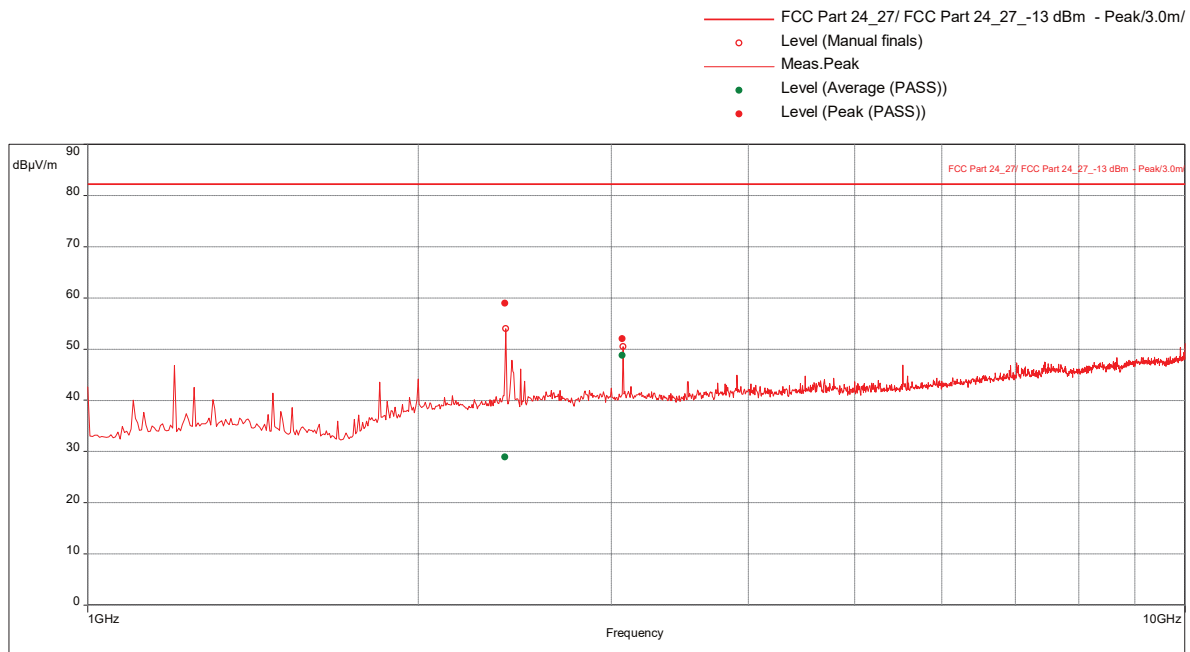
Level EIRP (dBm) = Level Peak (dBuV/m) – 84.8

**Radiated Emissions, 1-10 GHz**  
**Slot 0 (Band 5), Modulation: TM3.2-16QAM, Bandwidth 5 MHz, Transmit @ Mid Channel**

**Test Information:**

|                           |                                                                      |
|---------------------------|----------------------------------------------------------------------|
| Date and Time             | 9/26/2021 12:18:06 PM                                                |
| Client and Project Number | CommScope_G104751739                                                 |
| Engineer                  | Vathana Ven                                                          |
| Temperature               | 23 deg C                                                             |
| Humidity                  | 48%                                                                  |
| Atmospheric Pressure      | 999 mB                                                               |
| Comments                  | RE 1 to 10 GHz POE Band 5 5MHz BW TM3.2 Tx Mid CH 881MHz RP5200 host |

**Graph:**



**Results:**

Peak (PASS) (2)

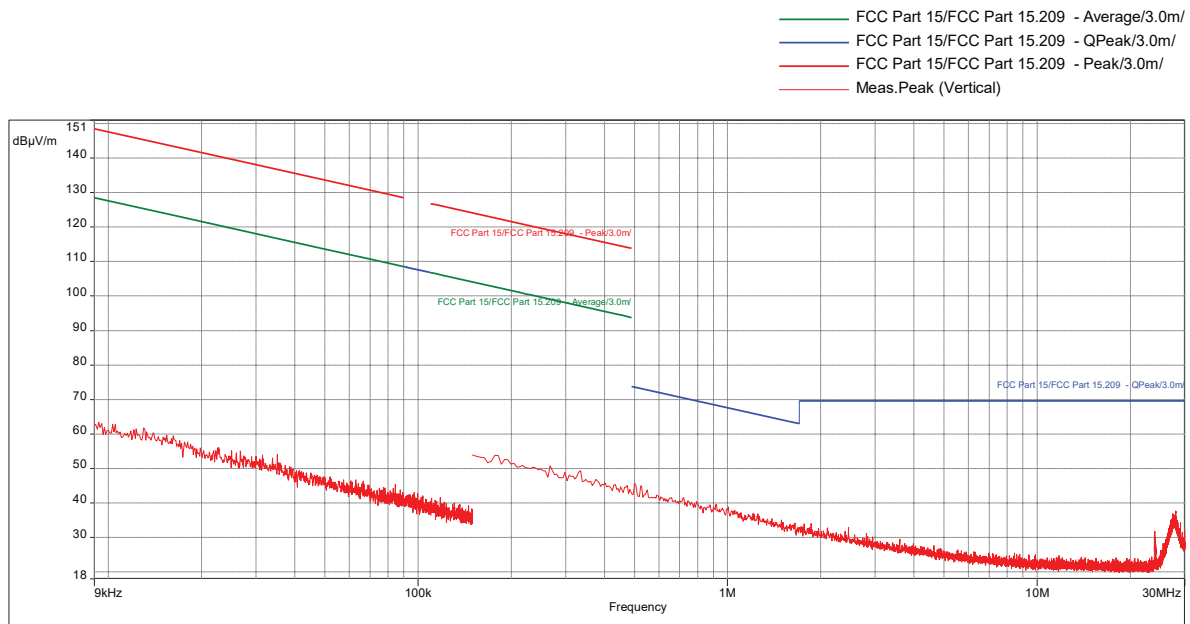
| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)   | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|------------|-----------------|
| 2402.105263     | 58.98          | -36.28      | -13.00      | -23.28      | 230.00      | 1.05       | Vertical | 1000000.00 | -3.30           |
| 3072.105263     | 52.06          | -43.20      | -13.00      | -30.20      | 112.00      | 1.35       | Vertical | 1000000.00 | -2.23           |

Level EIRP (dBm) = Level Peak (dBuV/m) – 95.20

**Radiated Emissions, 9kHz-30 MHz**  
**Slot 0 (Band 5), Modulation: TM3.2-16QAM, Bandwidth 5 MHz, Transmit @ High Channel**

**Test Information:**

|                           |                                                    |
|---------------------------|----------------------------------------------------|
| Date and Time             | 8/20/2021 6:07:05 PM                               |
| Client and Project Number | CommScope_G104751739                               |
| Engineer                  | Vathana Ven                                        |
| Temperature               | 26 deg C                                           |
| Humidity                  | 42%                                                |
| Atmospheric Pressure      | 1002 mB                                            |
| Comments                  | RE 9kHz-30MHz POE Band 5 TM3.2 Tx High CH 891.5MHz |

**Graph:**

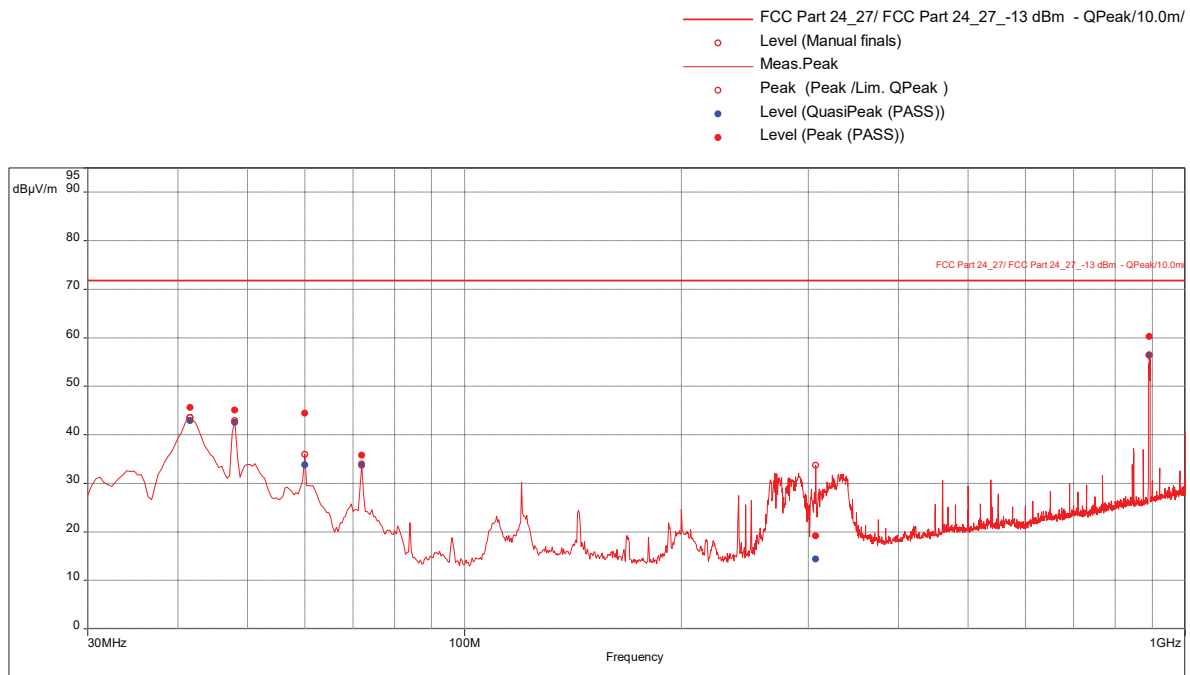
**Results:** No emission was detected.

**Radiated Emissions, 30-1000 MHz**  
**Slot 0 (Band 5), Modulation: TM3.2-16QAM, Bandwidth 5 MHz, Transmit @ High Channel**

**Test Information:**

|                           |                                                    |
|---------------------------|----------------------------------------------------|
| Date and Time             | 8/20/2021 6:45:12 PM                               |
| Client and Project Number | CommScope_G104751739                               |
| Engineer                  | Vathana Ven                                        |
| Temperature               | 26 deg C                                           |
| Humidity                  | 42%                                                |
| Atmospheric Pressure      | 1002 mB                                            |
| Comments                  | RE 30-1000MHz_POE Band 5 TM3.2 Tx High CH 891.5MHz |

**Graph:**



**Results:**

**Peak (PASS) (6)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.       | RBW (Hz)  | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|------------|-----------|-----------------|
| 41.63157895     | 45.61          | -39.19      | -13.00      | -26.19      | 98.00       | 1.00       | Vertical   | 120000.00 | -20.82          |
| 48              | 45.04          | -39.76      | -13.00      | -26.76      | 294.00      | 2.13       | Vertical   | 120000.00 | -24.52          |
| 60              | 44.45          | -40.35      | -13.00      | -27.35      | 75.00       | 1.90       | Vertical   | 120000.00 | -25.58          |
| 72              | 35.80          | -49.00      | -13.00      | -36.00      | 54.00       | 1.88       | Vertical   | 120000.00 | -24.85          |
| 307.1684211     | 19.12          | -65.68      | -13.00      | -52.68      | 47.00       | 3.35       | Horizontal | 120000.00 | -18.08          |
| 891.3263158     | 60.25          | -24.55      | -13.00      | -11.55      | 259.00      | 1.69       | Vertical   | 120000.00 | -6.85           |

Level EIRP (dBm) = Level Peak (dBuV/m) – 84.8

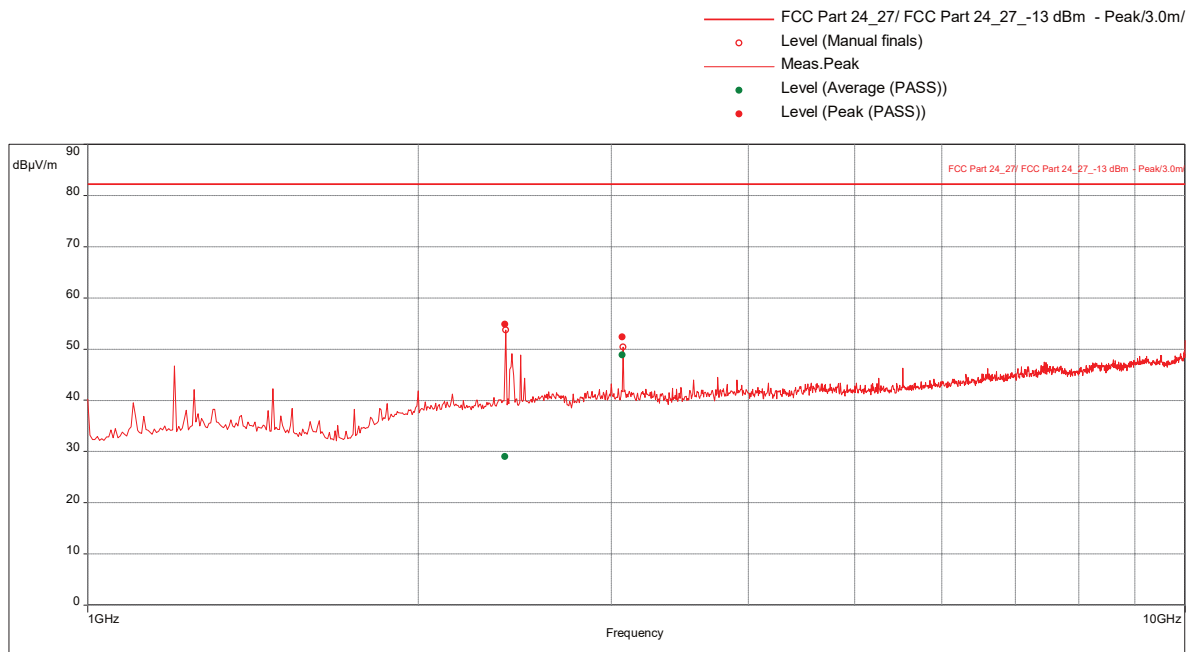
**Radiated Emissions, 1-10 GHz**

**Slot 0 (Band 5), Modulation: TM3.2-16QAM, Bandwidth 5 MHz, Transmit @ High Channel**

**Test Information:**

|                           |                                                                         |
|---------------------------|-------------------------------------------------------------------------|
| Date and Time             | 9/26/2021 12:35:09 PM                                                   |
| Client and Project Number | CommScope_G104751739                                                    |
| Engineer                  | Vathana Ven                                                             |
| Temperature               | 23 deg C                                                                |
| Humidity                  | 48%                                                                     |
| Atmospheric Pressure      | 999 mB                                                                  |
| Comments                  | RE 1 to 10 GHz_POE_Band 5 5MHz BW_TM3.2_Tx High CH 891.5MHz_RP5200 host |

**Graph:**



**Results:**

Peak (PASS) (2)

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)   | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|------------|-----------------|
| 2401.842105     | 54.82          | -40.44      | 82.26       | -27.44      | 193.00      | 1.00       | Vertical | 1000000.00 | -3.30           |
| 3072.105263     | 52.34          | -42.92      | 82.26       | -29.92      | 115.00      | 1.65       | Vertical | 1000000.00 | -2.23           |

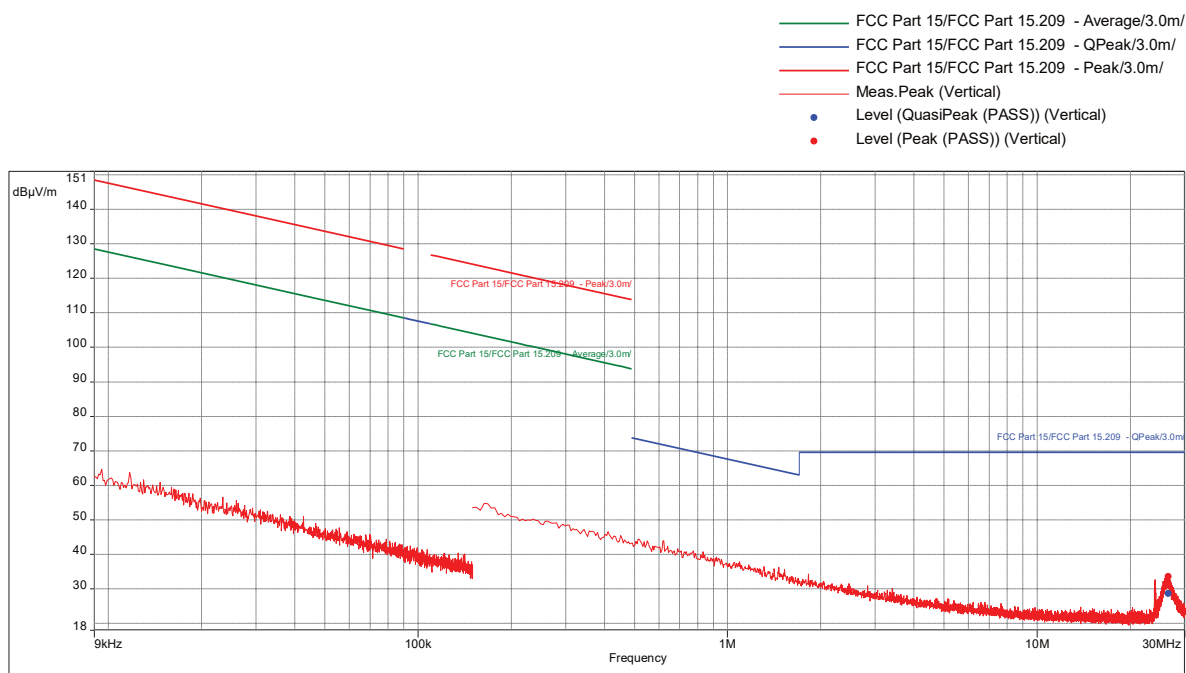
Level EIRP (dBm) = Level Peak (dBuV/m) – 95.20

**Radiated Emissions, 9kHz-30 MHz**  
**Slot 0 (Band 5), Modulation: TM3.1-64QAM, Bandwidth 5 MHz, Transmit @ Low Channel**

**Test Information:**

|                           |                                                   |
|---------------------------|---------------------------------------------------|
| Date and Time             | 8/24/2021 10:21:34 PM                             |
| Client and Project Number | CommScope_G104751739                              |
| Engineer                  | Vathana Ven                                       |
| Temperature               | 28 deg C                                          |
| Humidity                  | 42%                                               |
| Atmospheric Pressure      | 1003 mB                                           |
| Comments                  | RE 9kHz-30MHz_POE_Band 5 TM3.1 Tx Low CH 871.5MHz |

**Graph:**



**Results:**

**Peak (PASS) (1)**

| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 26.52213158     | 33.62          | 69.54          | -35.92      | 252.00      | 1.00       | Vertical | 9000.00  | 10.33           |

**QuasiPeak (PASS) (1)**

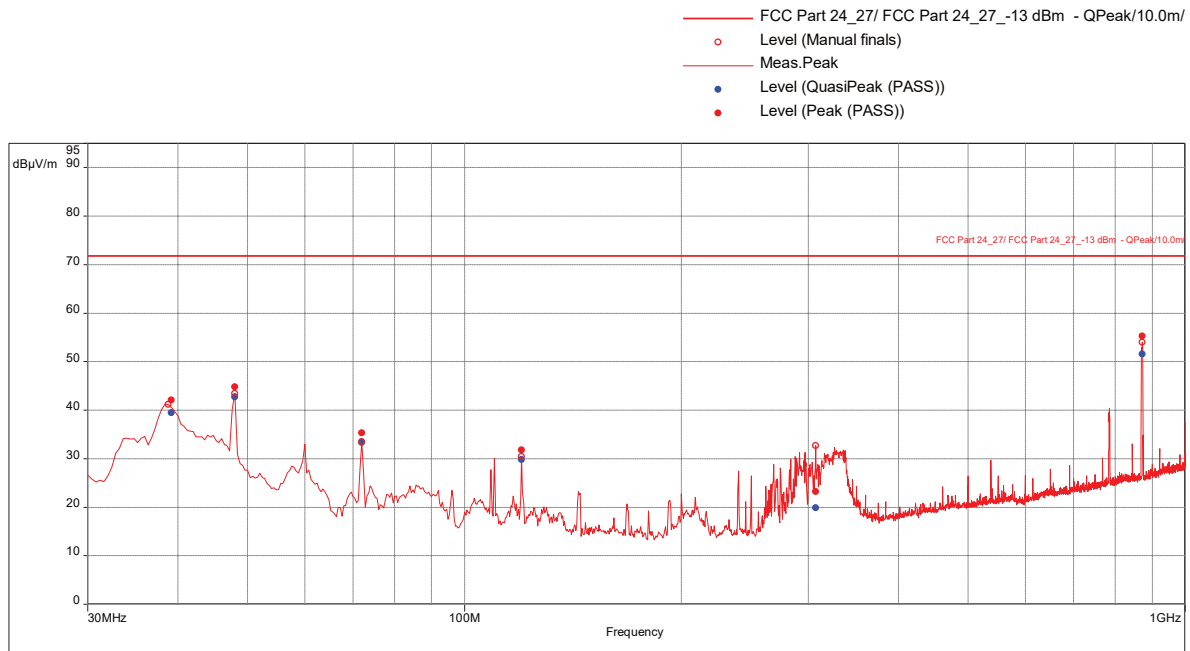
| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 26.52213158     | 28.57          | 69.54          | -40.97      | 252.00      | 1.00       | Vertical | 9000.00  | 10.33           |

**Radiated Emissions, 30-1000 MHz**  
**Slot 0 (Band 5), Modulation: TM3.1-64QAM, Bandwidth 5 MHz, Transmit @ Low Channel**

**Test Information:**

|                           |                                                           |
|---------------------------|-----------------------------------------------------------|
| Date and Time             | 8/24/2021 6:52:17 PM                                      |
| Client and Project Number | CommScope_G104751739                                      |
| Engineer                  | Vathana Ven                                               |
| Temperature               | 28 deg C                                                  |
| Humidity                  | 42%                                                       |
| Atmospheric Pressure      | 1003 mB                                                   |
| Comments                  | RE 30-1000MHz_POE_Band 5 5MHz BW_TM3.1_Tx Low CH 871.5MHz |

**Graph:**



**Results:**

**Peak (PASS) (6)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.       | RBW (Hz)  | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|------------|-----------|-----------------|
| 39.02105263     | 42.13          | -42.67      | -13.00      | -29.67      | 192.00      | 1.00       | Vertical   | 120000.00 | -18.88          |
| 48              | 44.81          | -39.99      | -13.00      | -26.99      | 213.00      | 1.00       | Vertical   | 120000.00 | -24.52          |
| 72              | 35.31          | -49.49      | -13.00      | -36.49      | 337.00      | 1.80       | Vertical   | 120000.00 | -24.85          |
| 120.0315789     | 31.79          | -53.01      | -13.00      | -40.01      | 287.00      | 1.00       | Vertical   | 120000.00 | -18.77          |
| 307.2           | 23.23          | -61.57      | -13.00      | -48.57      | 258.00      | 2.73       | Horizontal | 120000.00 | -18.08          |
| 872.5684211     | 55.30          | -29.50      | -13.00      | -16.50      | 53.00       | 1.97       | Vertical   | 120000.00 | -7.08           |

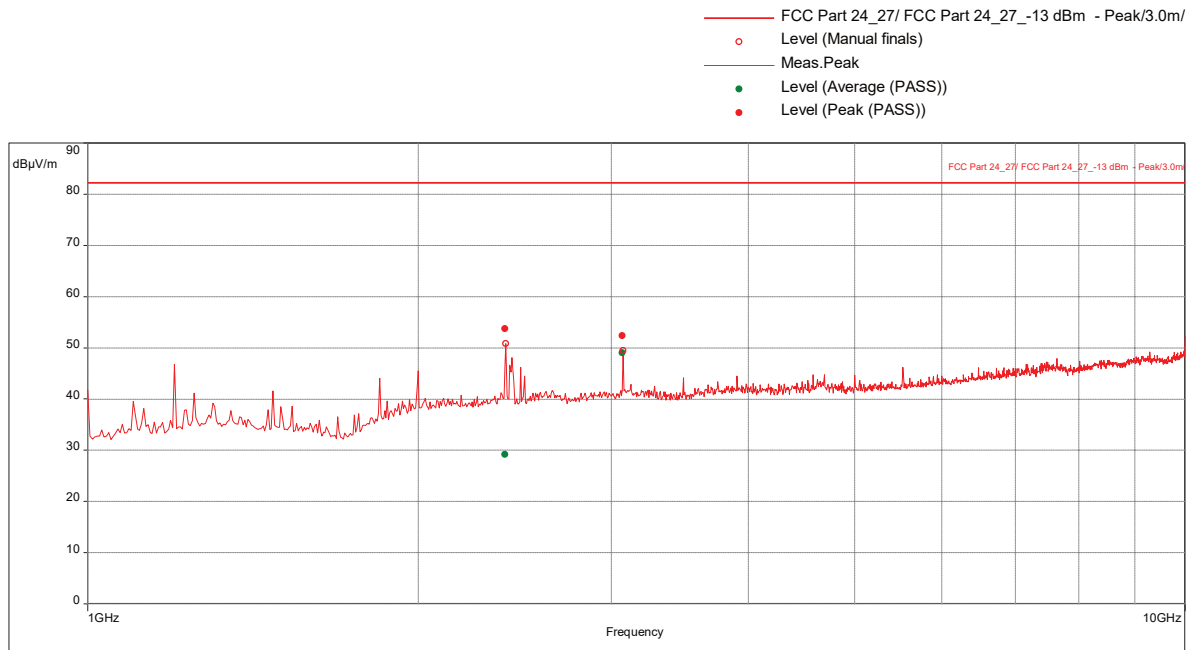
Level EIRP (dBm) = Level Peak (dBuV/m) – 84.8

**Radiated Emissions, 1-10 GHz**  
**Slot 0 (Band 5), Modulation: TM3.1-64QAM, Bandwidth 5 MHz, Transmit @ Low Channel**

**Test Information:**

|                           |                                                                        |
|---------------------------|------------------------------------------------------------------------|
| Date and Time             | 9/26/2021 10:14:06 AM                                                  |
| Client and Project Number | CommScope_G104751739                                                   |
| Engineer                  | Vathana Ven                                                            |
| Temperature               | 23 deg C                                                               |
| Humidity                  | 48%                                                                    |
| Atmospheric Pressure      | 999 mB                                                                 |
| Comments                  | RE 1 to 10 GHz_POE_Band 5 5MHz BW_TM3.1_Tx Low CH 871.5MHz_RP5200 host |

**Graph:**



**Results:**

Peak (PASS) (2)

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)   | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|------------|-----------------|
| 2401.842105     | 53.76          | -41.50      | -13.00      | -28.50      | 320.00      | 1.00       | Vertical | 1000000.00 | -3.30           |
| 3072.105263     | 52.34          | -42.92      | -13.00      | -29.92      | 107.00      | 1.35       | Vertical | 1000000.00 | -2.23           |

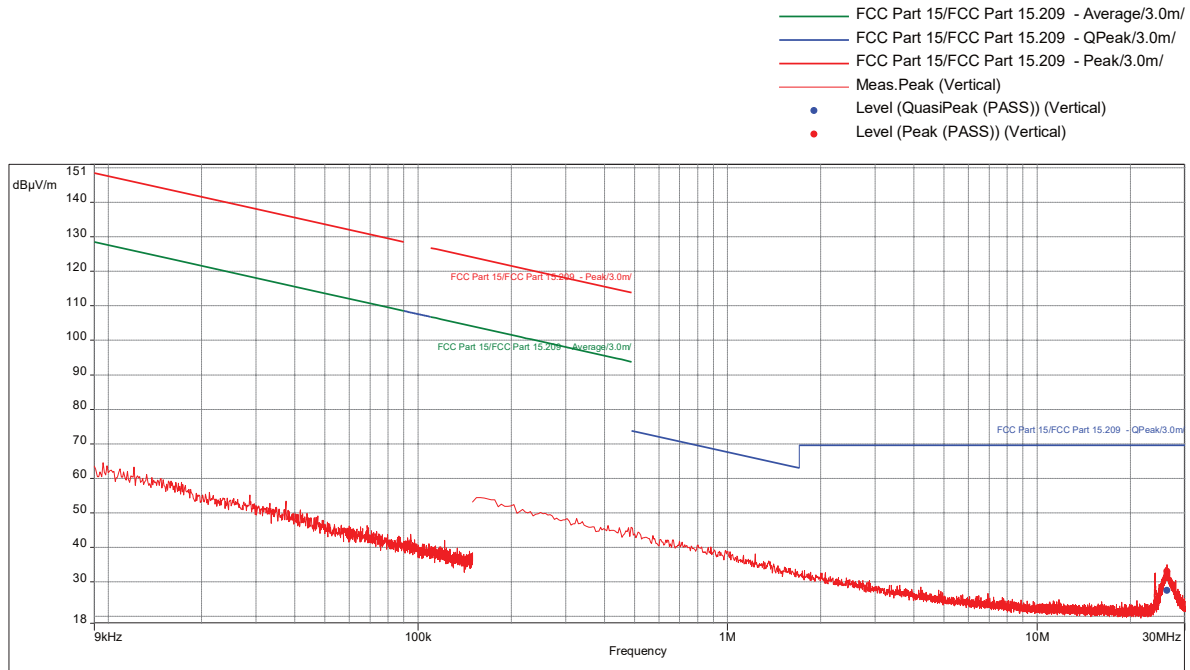
Level EIRP (dBm) = Level Peak (dBuV/m) – 95.20

**Radiated Emissions, 9kHz-1000 MHz**  
**Slot 0 (Band 5), Modulation: TM3.1-64QAM, Bandwidth 5 MHz, Transmit @ Mid Channel**

**Test Information:**

|                           |                                                 |
|---------------------------|-------------------------------------------------|
| Date and Time             | 8/24/2021 9:49:15 PM                            |
| Client and Project Number | CommScope_G104751739                            |
| Engineer                  | Vathana Ven                                     |
| Temperature               | 28 deg C                                        |
| Humidity                  | 42%                                             |
| Atmospheric Pressure      | 1003 mB                                         |
| Comments                  | RE 9kHz-30MHz_POE_Band 5 TM3.1_Tx Mid CH 881MHz |

**Graph:**



**Results:**

**Peak (PASS) (1)**

| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 26.29121053     | 33.00          | 69.54          | -36.54      | 0.00        | 1.00       | Vertical | 9000.00  | 10.37           |

**QuasiPeak (PASS) (1)**

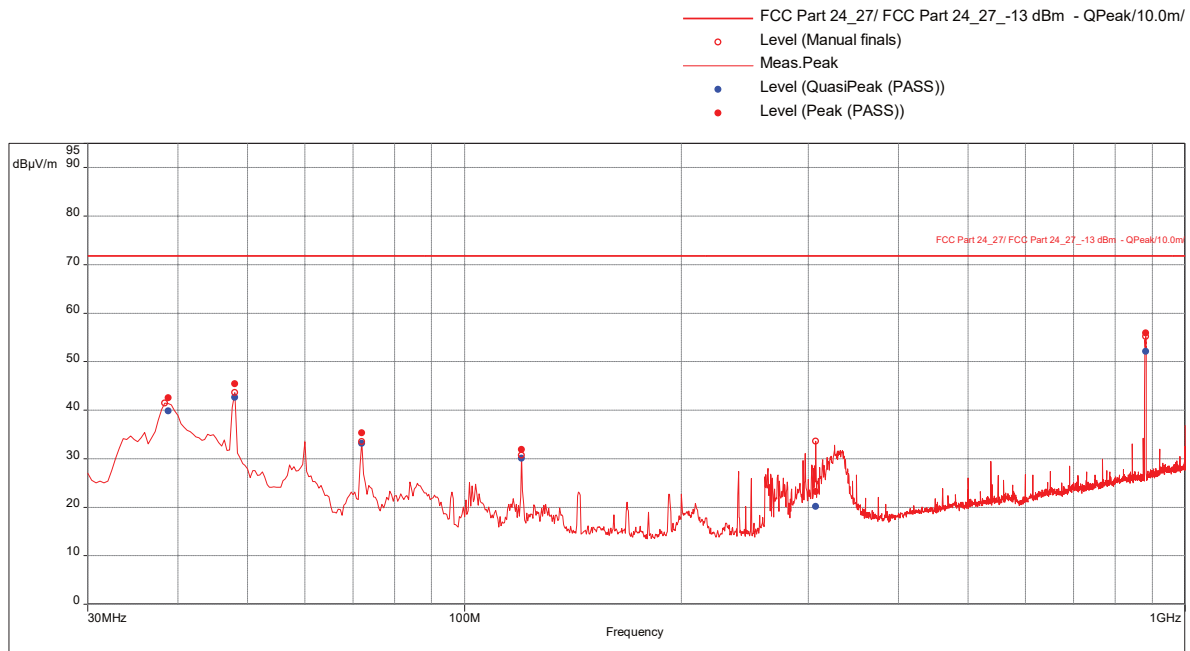
| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 26.29121053     | 27.47          | 69.54          | -42.07      | 0.00        | 1.00       | Vertical | 9000.00  | 10.37           |

**Radiated Emissions, 30-1000 MHz**  
**Slot 0 (Band 5), Modulation: TM3.1-64QAM, Bandwidth 5 MHz, Transmit @ Mid Channel**

**Test Information:**

|                           |                                                         |
|---------------------------|---------------------------------------------------------|
| Date and Time             | 8/24/2021 7:38:56 PM                                    |
| Client and Project Number | CommScope_G104751739                                    |
| Engineer                  | Vathana Ven                                             |
| Temperature               | 28 deg C                                                |
| Humidity                  | 42%                                                     |
| Atmospheric Pressure      | 1003 mB                                                 |
| Comments                  | RE 30-1000MHz_POE_Band 5 5MHz BW_TM3.1_Tx Mid CH 881MHz |

**Graph:**



**Results:**

**Peak (PASS) (6)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.       | RBW (Hz)  | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|------------|-----------|-----------------|
| 38.84210526     | 42.53          | 42.53       | -13.00      | -29.27      | 83.00       | 1.00       | Vertical   | 120000.00 | -18.75          |
| 48              | 45.45          | -45.45      | -13.00      | -26.35      | 141.00      | 1.00       | Vertical   | 120000.00 | -24.52          |
| 72              | 35.36          | -35.36      | -13.00      | -36.44      | 251.00      | 1.70       | Vertical   | 120000.00 | -24.85          |
| 120.0315789     | 31.91          | -52.89      | -13.00      | -39.89      | 317.00      | 1.97       | Vertical   | 120000.00 | -18.77          |
| 307.2           | 23.26          | -61.54      | -13.00      | -48.54      | 133.00      | 3.53       | Horizontal | 120000.00 | -18.08          |
| 882.0631579     | 55.94          | -28.86      | -13.00      | -15.86      | 39.00       | 1.86       | Vertical   | 120000.00 | -6.99           |

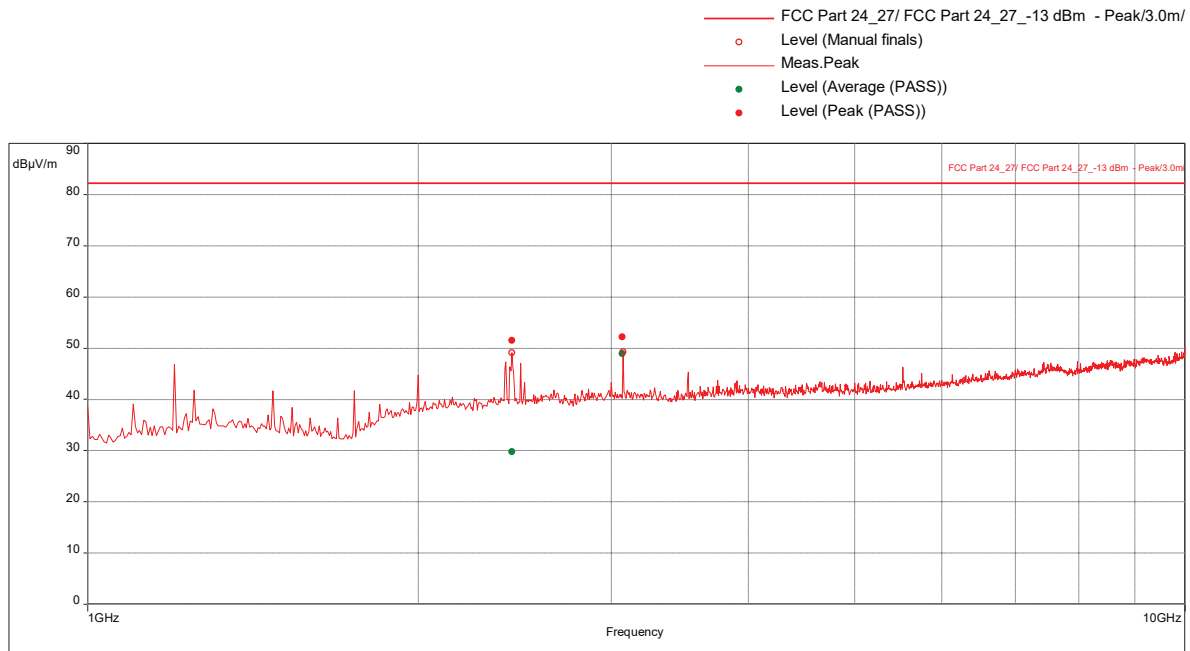
Level EIRP (dBm) = Level Peak (dBuV/m) – 84.8

**Radiated Emissions, 1-10 GHz**  
**Slot 0 (Band 5), Modulation: TM3.1-64QAM, Bandwidth 5 MHz, Transmit @ Mid Channel**

**Test Information:**

|                           |                                                                      |
|---------------------------|----------------------------------------------------------------------|
| Date and Time             | 9/26/2021 10:35:29 AM                                                |
| Client and Project Number | CommScope_G104751739                                                 |
| Engineer                  | Vathana Ven                                                          |
| Temperature               | 23 deg C                                                             |
| Humidity                  | 48%                                                                  |
| Atmospheric Pressure      | 999 mB                                                               |
| Comments                  | RE 1 to 10 GHz_POE_Band 5 5MHz BW_TM3.1_Tx Mid CH 881MHz_RP5200 host |

**Graph:**



**Results:**

**Peak (PASS) (2)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)   | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|------------|-----------------|
| 2434.473684     | 51.51          | -43.75      | -13.00      | -30.75      | 164.00      | 2.40       | Vertical | 1000000.00 | -3.48           |
| 3072.105263     | 52.20          | -43.06      | -13.00      | -30.06      | 119.00      | 1.55       | Vertical | 1000000.00 | -2.23           |

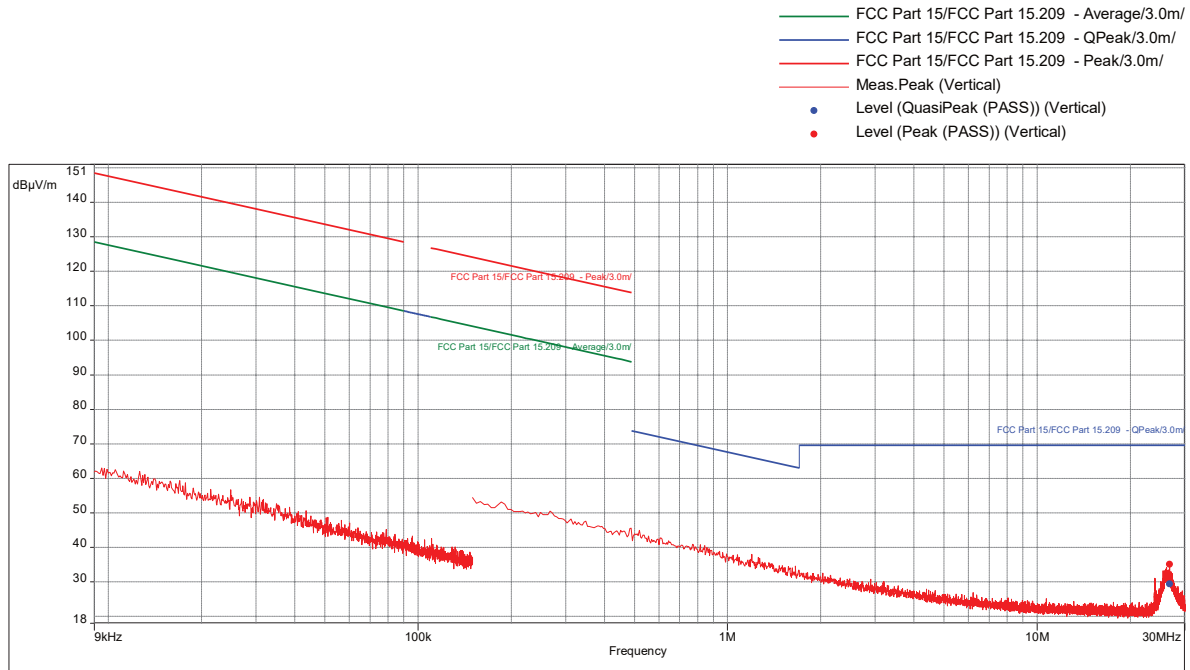
Level EIRP (dBm) = Level Peak (dBuV/m) – 95.20

**Radiated Emissions, 9kHz-30 MHz**  
**Slot 0 (Band 5), Modulation: TM3.1-64QAM, Bandwidth 5 MHz, Transmit @ High Channel**

**Test Information:**

|                           |                                                    |
|---------------------------|----------------------------------------------------|
| Date and Time             | 8/24/2021 9:16:39 PM                               |
| Client and Project Number | CommScope_G104751739                               |
| Engineer                  | Vathana Ven                                        |
| Temperature               | 28 deg C                                           |
| Humidity                  | 42%                                                |
| Atmospheric Pressure      | 1003 mB                                            |
| Comments                  | RE 9kHz-30MHz_POE_Band 5 TM3.1 Tx High CH 891.5MHz |

**Graph:**



**Results:**

**Peak (PASS) (1)**

| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 26.76939474     | 35.13          | 69.54          | -34.41      | 273.00      | 1.00       | Vertical | 9000.00  | 10.29           |

**QuasiPeak (PASS) (1)**

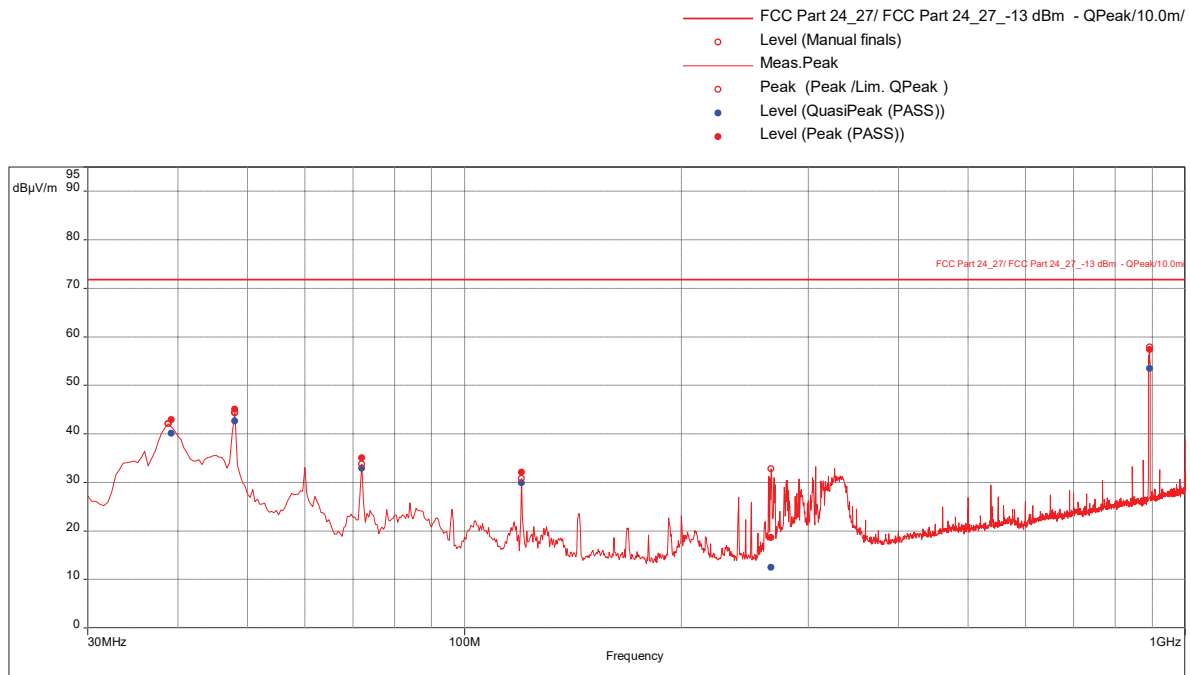
| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 26.76939474     | 29.44          | 69.54          | -40.10      | 273.00      | 1.00       | Vertical | 9000.00  | 10.29           |

**Radiated Emissions, 30-1000 MHz**  
**Slot 0 (Band 5), Modulation: TM3.1-64QAM, Bandwidth 5 MHz, Transmit @ High Channel**

**Test Information:**

|                           |                                                           |
|---------------------------|-----------------------------------------------------------|
| Date and Time             | 8/24/2021 8:25:22 PM                                      |
| Client and Project Number | CommScope_G104751739                                      |
| Engineer                  | Vathana Ven                                               |
| Temperature               | 28 deg C                                                  |
| Humidity                  | 42%                                                       |
| Atmospheric Pressure      | 1003 mB                                                   |
| Comments                  | RE 30-1000MHz_POE_Band 5 5MHz BW_TM3.1_Tx Mid CH 891.5MHz |

**Graph:**



**Results:**

**Peak (PASS) (6)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.       | RBW (Hz)  | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|------------|-----------|-----------------|
| 39.11578947     | 42.87          | -41.93      | -13.00      | -28.93      | 345.00      | 1.00       | Vertical   | 120000.00 | -18.95          |
| 48              | 45.03          | -39.77      | -13.00      | -26.77      | 214.00      | 1.00       | Vertical   | 120000.00 | -24.52          |
| 72              | 35.05          | -49.75      | -13.00      | -36.75      | 324.00      | 1.86       | Vertical   | 120000.00 | -24.85          |
| 120             | 32.04          | -52.76      | -13.00      | -39.76      | 316.00      | 1.00       | Vertical   | 120000.00 | -18.77          |
| 266.5263158     | 18.62          | -66.18      | -13.00      | -53.18      | 250.00      | 1.94       | Horizontal | 120000.00 | -19.01          |
| 892.5578947     | 57.31          | -27.49      | -13.00      | -14.49      | 54.00       | 1.86       | Vertical   | 120000.00 | -6.89           |

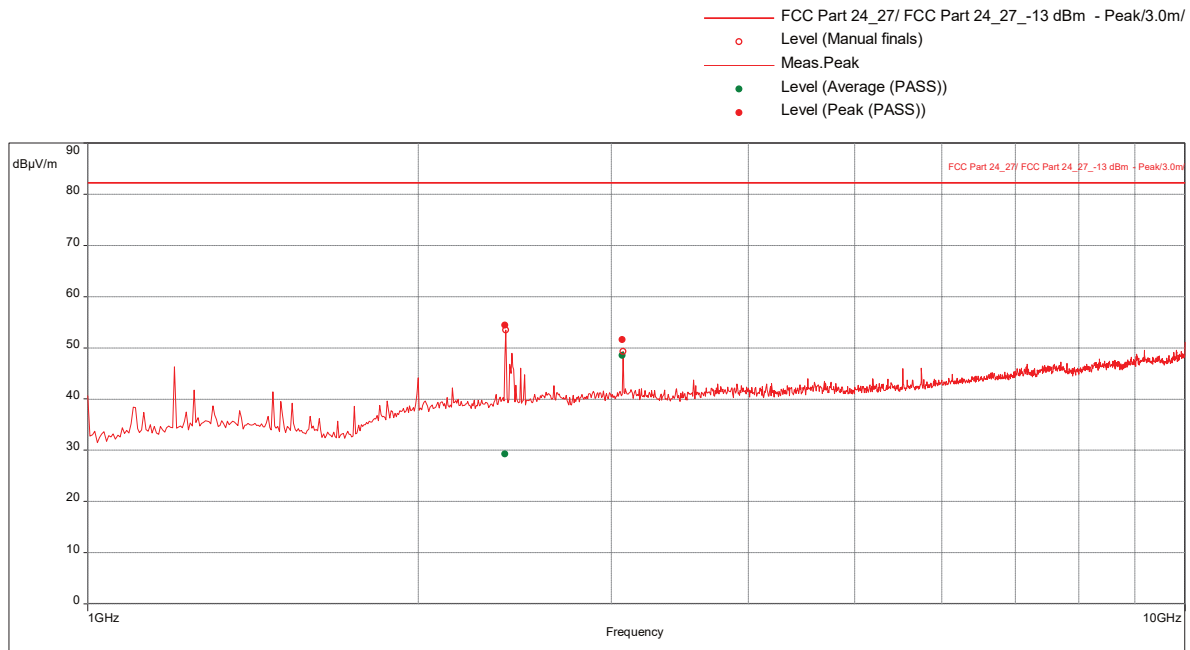
Level EIRP (dBm) = Level Peak (dBuV/m) – 84.8

**Radiated Emissions, 1-10 GHz**  
**Slot 0 (Band 5), Modulation: TM3.1-64QAM, Bandwidth 5 MHz, Transmit @ High Channel**

**Test Information:**

|                           |                                                                         |
|---------------------------|-------------------------------------------------------------------------|
| Date and Time             | 9/26/2021 10:50:54 AM                                                   |
| Client and Project Number | CommScope_G104751739                                                    |
| Engineer                  | Vathana Ven                                                             |
| Temperature               | 23 deg C                                                                |
| Humidity                  | 48%                                                                     |
| Atmospheric Pressure      | 999 mB                                                                  |
| Comments                  | RE 1 to 10 GHz_POE_Band 5 5MHz BW_TM3.1_Tx High CH 891.5MHz_RP5200 host |

**Graph:**



**Results:**

Peak (PASS) (2)

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)   | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|------------|-----------------|
| 2402.105263     | 54.42          | -40.84      | -13.00      | -27.84      | 82.00       | 1.15       | Vertical | 1000000.00 | -3.30           |
| 3072.105263     | 51.63          | -43.63      | -13.00      | -30.63      | 111.00      | 1.65       | Vertical | 1000000.00 | -2.23           |

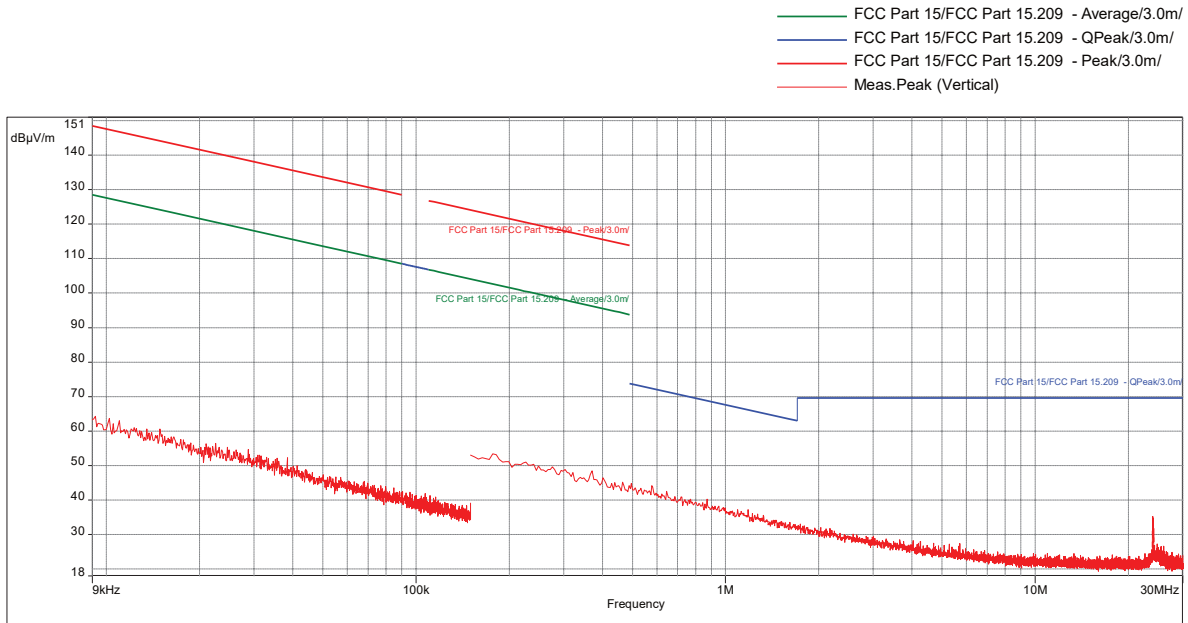
Level EIRP (dBm) = Level Peak (dBuV/m) – 95.20

**Radiated Emissions, 9kHz-30 MHz  
Slot 0 (Band 5), Modulation: TM3.1a-256QAM, Bandwidth 5 MHz, Transmit @ Low Channel**

**Test Information:**

|                           |                                                    |
|---------------------------|----------------------------------------------------|
| Date and Time             | 8/26/2021 6:06:22 PM                               |
| Client and Project Number | CommScope_G104751739                               |
| Engineer                  | Vathana Ven                                        |
| Temperature               | 31 deg C                                           |
| Humidity                  | 39%                                                |
| Atmospheric Pressure      | 1007 mB                                            |
| Comments                  | RE 9kHz-30MHz_POE_Band 5 TM3.1a_Tx Low CH 871.5MHz |

**Graph:**



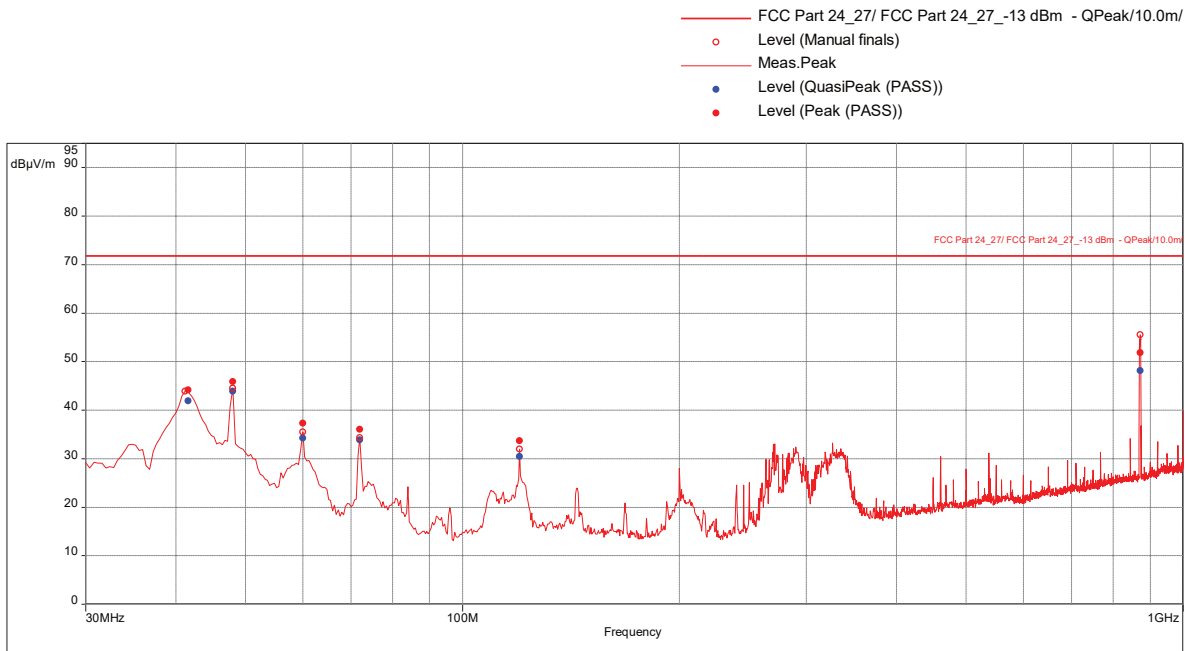
**Results:** No emissions detected.

**Radiated Emissions, 30-1000 MHz**  
**Slot 0 (Band 5), Modulation: TM3.1a-256QAM, Bandwidth 5 MHz, Transmit @ Low Channel**

**Test Information:**

|                           |                                                            |
|---------------------------|------------------------------------------------------------|
| Date and Time             | 8/20/2021 9:18:14 PM                                       |
| Client and Project Number | CommScope_G104751739                                       |
| Engineer                  | Vathana Ven                                                |
| Temperature               | 26 deg C                                                   |
| Humidity                  | 42%                                                        |
| Atmospheric Pressure      | 1002 mB                                                    |
| Comments                  | RE 30-1000MHz_POE_Band 5 5MHz BW_TM3.1a_Tx Low CH 871.5MHz |

**Graph:**



**Results:**

**Peak (PASS) (6)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)  | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|-----------|-----------------|
| 41.48421053     | 44.21          | -40.59      | -13.00      | -27.59      | 74.00       | 1.35       | Vertical | 120000.00 | -20.70          |
| 48              | 45.85          | -38.95      | -13.00      | -25.95      | 281.00      | 1.00       | Vertical | 120000.00 | -24.52          |
| 60              | 37.33          | -47.47      | -13.00      | -34.47      | 98.00       | 1.51       | Vertical | 120000.00 | -25.58          |
| 72              | 36.04          | -48.76      | -13.00      | -35.76      | 53.00       | 1.76       | Vertical | 120000.00 | -24.85          |
| 120.0315789     | 33.65          | -51.15      | -13.00      | -38.15      | 140.00      | 1.00       | Vertical | 120000.00 | -18.77          |
| 871.6315789     | 51.88          | -32.92      | -13.00      | -19.92      | 61.00       | 1.72       | Vertical | 120000.00 | -7.10           |

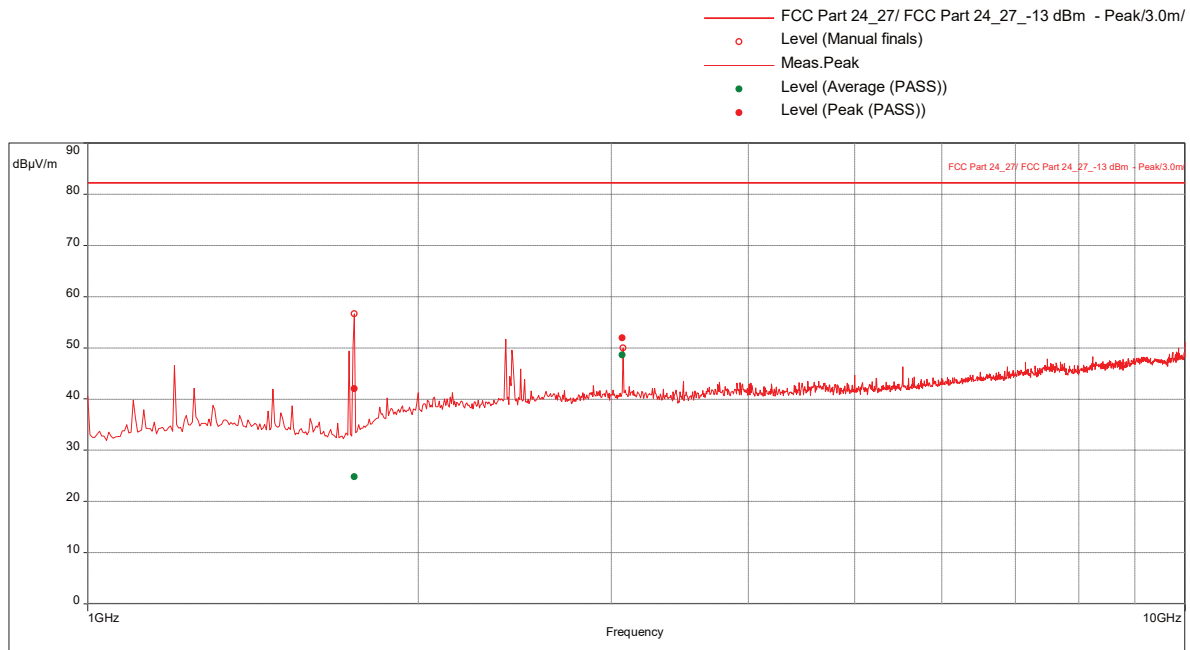
Level EIRP (dBm) = Level Peak (dBuV/m) – 84.8

**Radiated Emissions, 1-10 GHz**  
**Slot 0 (Band 5), Modulation: TM3.1a-256QAM, Bandwidth 5 MHz, Transmit @ Low Channel**

**Test Information:**

|                           |                                                                         |
|---------------------------|-------------------------------------------------------------------------|
| Date and Time             | 9/26/2021 11:08:01 AM                                                   |
| Client and Project Number | CommScope_G104751739                                                    |
| Engineer                  | Vathana Ven                                                             |
| Temperature               | 23 deg C                                                                |
| Humidity                  | 48%                                                                     |
| Atmospheric Pressure      | 999 mB                                                                  |
| Comments                  | RE 1 to 10 GHz_POE_Band 5 5MHz BW_TM3.1a_Tx Low CH 871.5MHz_RP5200 host |

**Graph:**



**Results:**

Peak (PASS) (2)

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)   | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|------------|-----------------|
| 1749.736842     | 42.03          | -53.23      | -13.00      | -40.23      | 187.00      | 1.01       | Vertical | 1000000.00 | -6.34           |
| 3071.842105     | 51.91          | -43.35      | -13.00      | -30.35      | 108.00      | 1.31       | Vertical | 1000000.00 | -2.23           |

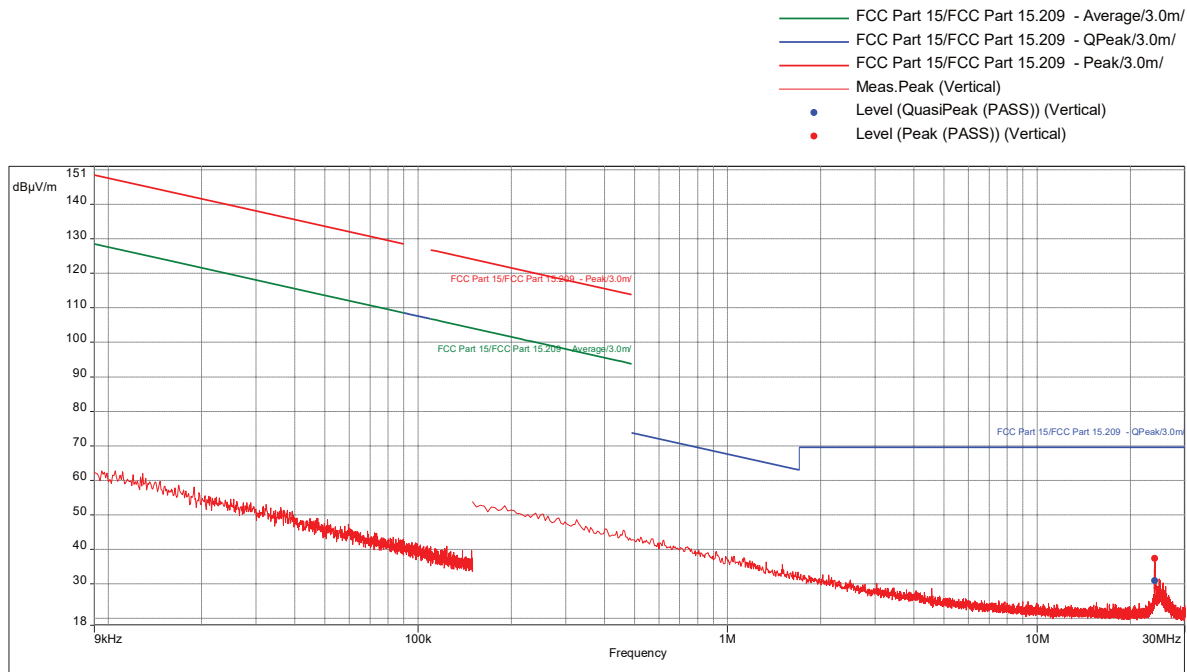
Level EIRP (dBm) = Level Peak (dBuV/m) – 95.20

**Radiated Emissions, 9kHz-30 MHz**  
**Slot 0 (Band 5), Modulation: TM3.1a-256QAM, Bandwidth 5 MHz, Transmit @ Mid Channel**

**Test Information:**

|                           |                                                  |
|---------------------------|--------------------------------------------------|
| Date and Time             | 8/26/2021 6:37:20 PM                             |
| Client and Project Number | CommScope_G104751739                             |
| Engineer                  | Vathana Ven                                      |
| Temperature               | 31 deg C                                         |
| Humidity                  | 39%                                              |
| Atmospheric Pressure      | 1007 mB                                          |
| Comments                  | RE 9kHz-30MHz_POE_Band 5 TM3.1a_Tx Mid CH 881MHz |

**Graph:**



**Results:**

**Peak (PASS) (1)**

| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 24.02084211     | 37.35          | 69.54          | -32.19      | 125.00      | 1.00       | Vertical | 9000.00  | 10.70           |

**QuasiPeak (PASS) (1)**

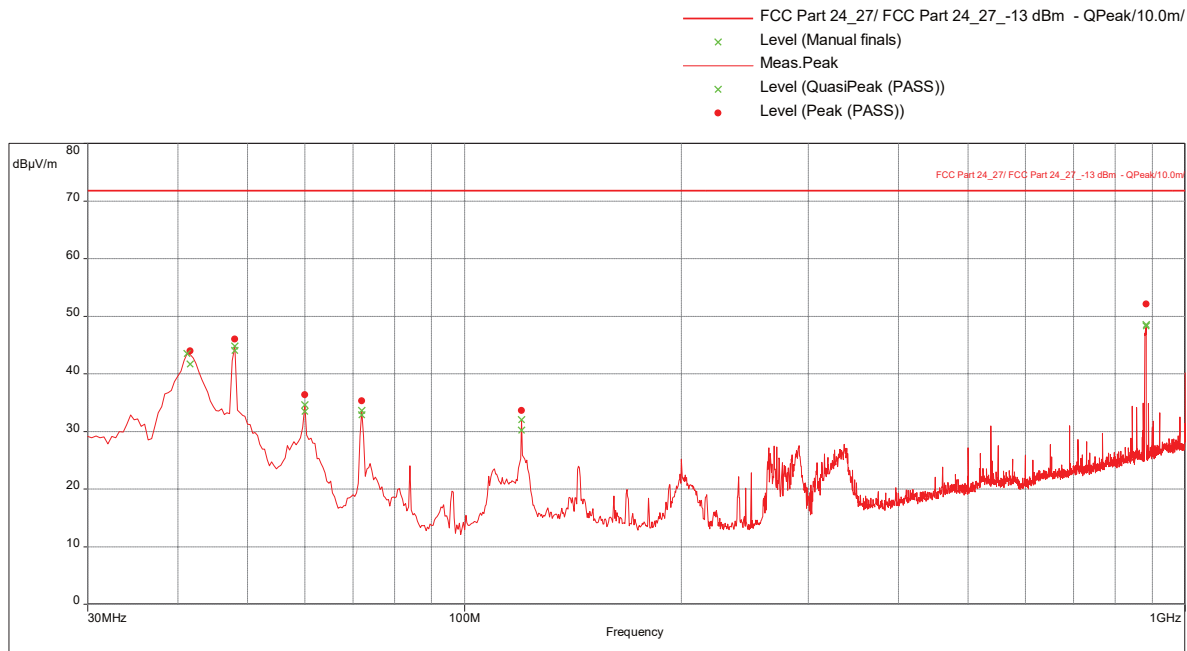
| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 24.02084211     | 30.89          | 69.54          | -38.65      | 125.00      | 1.00       | Vertical | 9000.00  | 10.70           |

**Radiated Emissions, 30-1000 MHz**  
**Slot 0 (Band 5), Modulation: TM3.1a-256QAM, Bandwidth 5 MHz, Transmit @ Mid Channel**

**Test Information:**

|                           |                                                          |
|---------------------------|----------------------------------------------------------|
| Date and Time             | 8/20/2021 10:05:52 PM                                    |
| Client and Project Number | CommScope_G104751739                                     |
| Engineer                  | Vathana Ven                                              |
| Temperature               | 26 deg C                                                 |
| Humidity                  | 42%                                                      |
| Atmospheric Pressure      | 1002 mB                                                  |
| Comments                  | RE 30-1000MHz_POE_Band 5 5MHz BW_TM3.1a_Tx Mid CH 881MHz |

**Graph:**



**Results:**

**Peak (PASS) (6)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)  | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|-----------|-----------------|
| 41.48421053     | 43.94          | -40.86      | -13.00      | -27.86      | 98.00       | 1.76       | Vertical | 120000.00 | -20.70          |
| 48              | 46.01          | -38.79      | -13.00      | -25.79      | 332.00      | 1.00       | Vertical | 120000.00 | -24.52          |
| 60              | 36.36          | -48.44      | -13.00      | -35.44      | 39.00       | 3.08       | Vertical | 120000.00 | -25.58          |
| 72              | 35.31          | -49.49      | -13.00      | -36.49      | 0.00        | 2.26       | Vertical | 120000.00 | -24.85          |
| 120.0315789     | 33.65          | -51.15      | -13.00      | -38.15      | 148.00      | 1.00       | Vertical | 120000.00 | -18.77          |
| 882.9263158     | 52.10          | -32.70      | -13.00      | -19.70      | 76.00       | 1.75       | Vertical | 120000.00 | -6.98           |

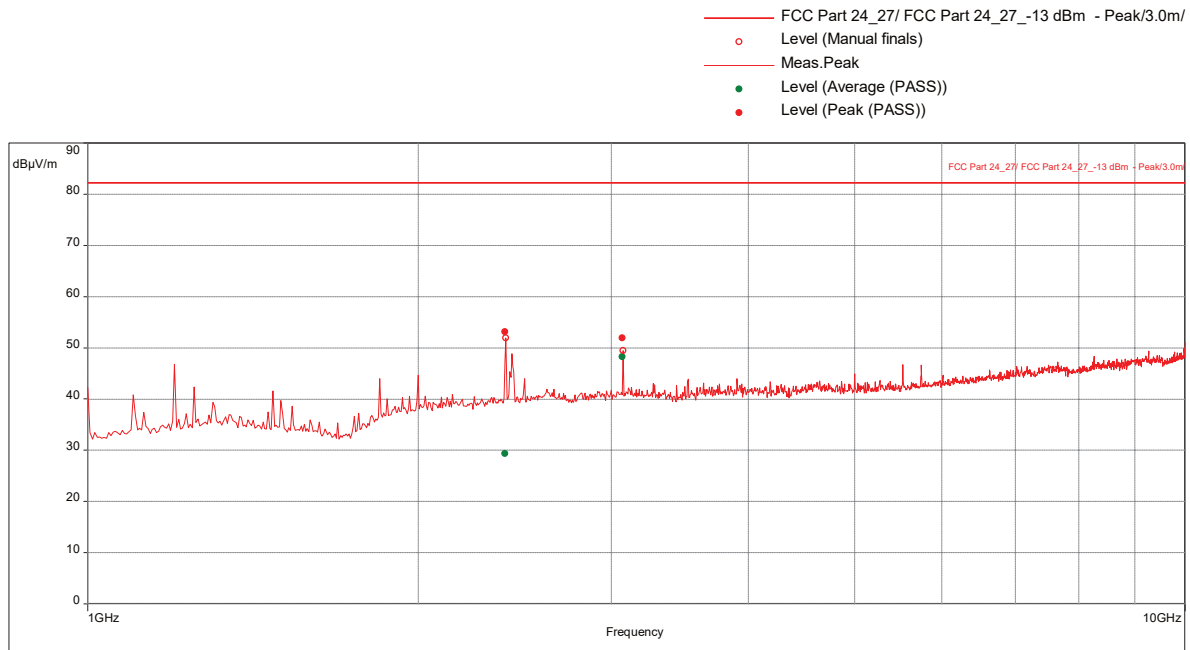
Level EIRP (dBm) = Level Peak (dBuV/m) – 84.8

**Radiated Emissions, 1-10 GHz**  
**Slot 0 (Band 5), Modulation: TM3.1a-256QAM, Bandwidth 5 MHz, Transmit @ Mid Channel**

**Test Information:**

|                           |                                                                       |
|---------------------------|-----------------------------------------------------------------------|
| Date and Time             | 9/26/2021 11:24:24 AM                                                 |
| Client and Project Number | CommScope_G104751739                                                  |
| Engineer                  | Vathana Ven                                                           |
| Temperature               | 23 deg C                                                              |
| Humidity                  | 48%                                                                   |
| Atmospheric Pressure      | 999 mB                                                                |
| Comments                  | RE 1 to 10 GHz_POE_Band 5 5MHz BW_TM3.1a_Tx Mid CH 881MHz_RP5200 host |

**Graph:**



**Results:**

Peak (PASS) (2)

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) (dB) | Height (m) (dB) | Pol. (dB) | RBW (dB)   | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|------------------|-----------------|-----------|------------|-----------------|
| 2401.842105     | 53.11          | -42.15      | -13.00      | -29.15      | 48.00            | 1.25            | Vertical  | 1000000.00 | -3.30           |
| 3071.842105     | 51.91          | -43.35      | -13.00      | -30.35      | 124.00           | 1.45            | Vertical  | 1000000.00 | -2.23           |

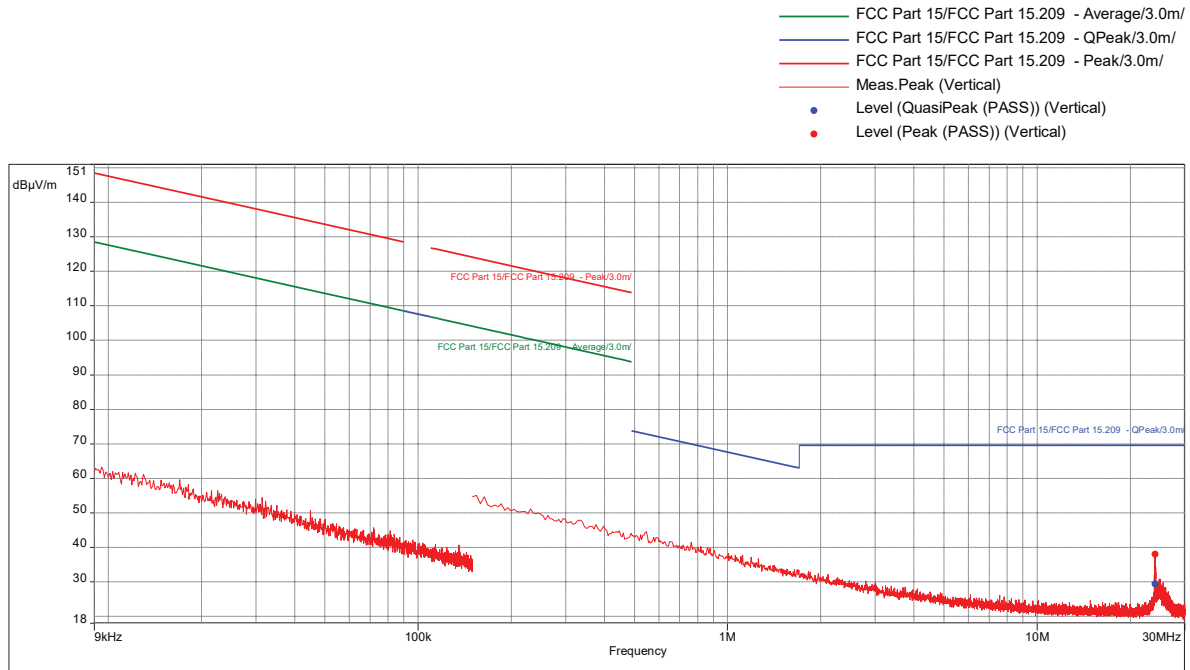
Level EIRP (dBm) = Level Peak (dBuV/m) – 95.20

**Radiated Emissions, 9kHz-30 MHz**  
**Slot 0 (Band 5), Modulation: TM3.1a-256QAM, Bandwidth 5 MHz, Transmit @ High Channel**

**Test Information:**

|                           |                                                     |
|---------------------------|-----------------------------------------------------|
| Date and Time             | 8/26/2021 7:10:10 PM                                |
| Client and Project Number | CommScope_G104751739                                |
| Engineer                  | Vathana Ven                                         |
| Temperature               | 31 deg C                                            |
| Humidity                  | 39%                                                 |
| Atmospheric Pressure      | 1007 mB                                             |
| Comments                  | RE 9kHz-30MHz_POE_Band 5 TM3.1a_Tx High CH 891.5MHz |

**Graph:**



**Results:**

**Peak (PASS) (1)**

| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 24.06252632     | 37.96          | 69.54          | -31.58      | 144.00      | 1.00       | Vertical | 9000.00  | 10.70           |

**QuasiPeak (PASS) (1)**

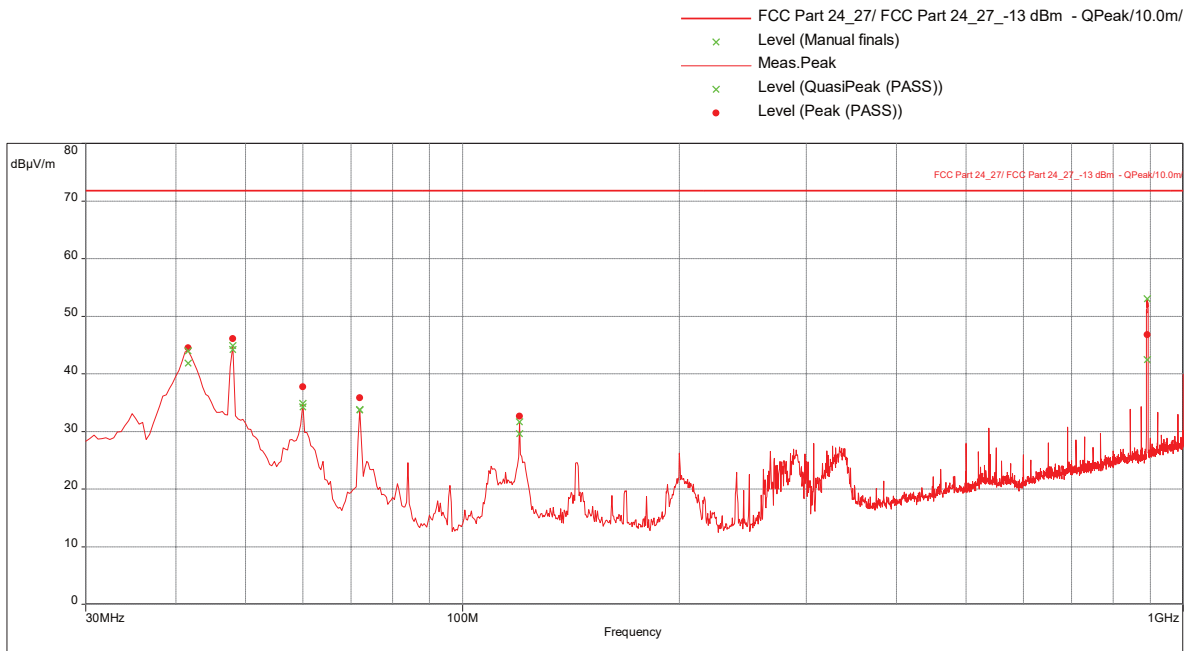
| Frequency (MHz) | Level (dBμV/m) | Limit (dBμV/m) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz) | Correction (dB) |
|-----------------|----------------|----------------|-------------|-------------|------------|----------|----------|-----------------|
| 24.06252632     | 29.38          | 69.54          | -40.16      | 144.00      | 1.00       | Vertical | 9000.00  | 10.70           |

**Radiated Emissions, 30-1000 MHz**  
**Slot 0 (Band 5), Modulation: TM3.1a-256QAM, Bandwidth 5 MHz, Transmit @ High Channel**

**Test Information:**

|                           |                                                             |
|---------------------------|-------------------------------------------------------------|
| Date and Time             | 8/20/2021 10:31:53 PM                                       |
| Client and Project Number | CommScope_G104751739                                        |
| Engineer                  | Vathana Ven                                                 |
| Temperature               | 26 deg C                                                    |
| Humidity                  | 42%                                                         |
| Atmospheric Pressure      | 1002 mB                                                     |
| Comments                  | RE 30-1000MHz_POE_Band 5 5MHz BW_TM3.1a_Tx High CH 891.5MHz |

**Graph:**



**Results:**

**Peak (PASS) (6)**

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) | Height (m) | Pol.     | RBW (Hz)  | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|-------------|------------|----------|-----------|-----------------|
| 41.63157895     | 44.47          | -40.33      | -13.00      | -27.33      | 75.00       | 1.00       | Vertical | 120000.00 | -20.82          |
| 48              | 46.08          | -38.72      | -13.00      | -25.72      | 339.00      | 1.00       | Vertical | 120000.00 | -24.52          |
| 60              | 37.70          | -47.10      | -13.00      | -34.10      | 333.00      | 2.34       | Vertical | 120000.00 | -25.58          |
| 72              | 35.86          | -48.94      | -13.00      | -35.94      | 0.00        | 1.73       | Vertical | 120000.00 | -24.85          |
| 120             | 32.64          | -52.16      | -13.00      | -39.16      | 142.00      | 1.30       | Vertical | 120000.00 | -18.77          |
| 892.0631579     | 46.80          | -38.00      | -13.00      | -25.00      | 76.00       | 1.64       | Vertical | 120000.00 | -6.85           |

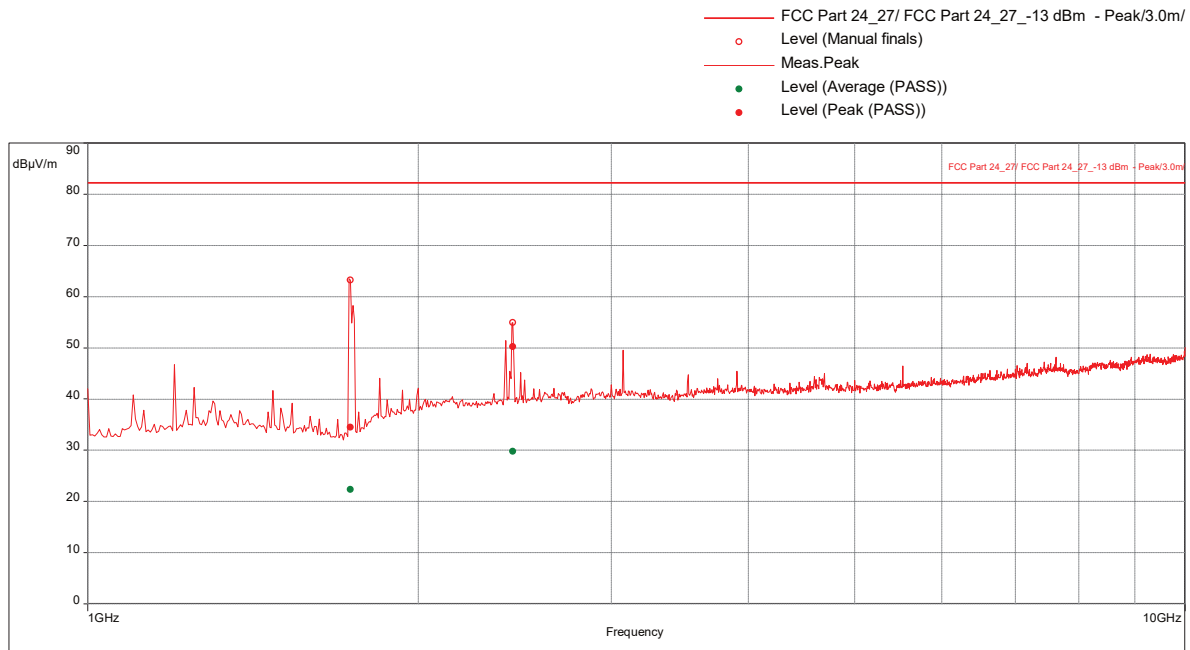
Level EIRP (dBm) = Level Peak (dBuV/m) – 84.8

**Radiated Emissions, 1-10 GHz**  
**Slot 0 (Band 5), Modulation: TM3.1a-256QAM, Bandwidth 5 MHz, Transmit @ High Channel**

**Test Information:**

|                           |                                                                          |
|---------------------------|--------------------------------------------------------------------------|
| Date and Time             | 9/26/2021 11:41:59 AM                                                    |
| Client and Project Number | CommScope_G104751739                                                     |
| Engineer                  | Vathana Ven                                                              |
| Temperature               | 23 deg C                                                                 |
| Humidity                  | 48%                                                                      |
| Atmospheric Pressure      | 999 mB                                                                   |
| Comments                  | RE 1 to 10 GHz_POE_Band 5 5MHz BW_TM3.1a_Tx High CH 891.5MHz_RP5200 host |

**Graph:**



**Results:**

Peak (PASS) (2)

| Frequency (MHz) | Level (dBuV/m) | Level (dBm) | Limit (dBm) | Margin (dB) | Azimuth (°) (dB) | Height (m) (dB) | Pol. (dB) | RBW (dB)   | Correction (dB) |
|-----------------|----------------|-------------|-------------|-------------|------------------|-----------------|-----------|------------|-----------------|
| 1737.105263     | 34.45          | -60.81      | -13.00      | -47.81      | 339.00           | 1.15            | Vertical  | 1000000.00 | -6.54           |
| 2439.473684     | 50.22          | -45.04      | -13.00      | -32.04      | 111.00           | 1.01            | Vertical  | 1000000.00 | -3.51           |

Level EIRP (dBm) = Level Peak (dBuV/m) – 95.20

Test Personnel: Vathana Ven  
Supervising/Reviewing  
Engineer:  
(Where Applicable) N/A

Test Date: 08/20/2021, 08/24/2021, 08/26/2021,  
09/26/2021

Product Standard: FCC Part 22  
Input Voltage: 48 VDC (POE)

Limit Applied: See report section 11.3

Pretest Verification w/  
Ambient Signals or  
BB Source: N/A

Ambient Temperature: 26, 28, 31, 23 °C

Relative Humidity: 42, 42, 39, 48 %

Atmospheric Pressure: 1002, 1003, 1007, 999 mbars

Deviations, Additions, or Exclusions: None

**12 Revision History**

| Revision Level | Date       | Report Number    | Prepared By    | Reviewed By    | Notes                                                                                                                   |
|----------------|------------|------------------|----------------|----------------|-------------------------------------------------------------------------------------------------------------------------|
| 0              | 10/12/2021 | 104751739BOX-009 | VFV <i>VFV</i> | KPS <i>KPS</i> | Original Issue                                                                                                          |
| 1              | 01/12/2022 | 104751739BOX-009 | VFV <i>VFV</i> | KPS <i>KPS</i> | Removed test setup photos, referenced the original LTE and new 5G NR capabilities of this device in product description |
| 2              | 02/02/2022 | 104751739BOX-009 | VFV <i>VFV</i> | KPS <i>KPS</i> | worst case for spurious emissions on page 288                                                                           |
|                |            |                  |                |                |                                                                                                                         |
|                |            |                  |                |                |                                                                                                                         |
|                |            |                  |                |                |                                                                                                                         |