



## FCC PART 27

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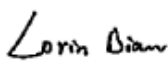
## MEASUREMENT AND TEST REPORT

For

### Huawei Technologies Co., Ltd

Administration Building, Headquarters of Huawei Technologies Co., Ltd, Bantian,  
Longgang District, Shenzhen, 518129, P.R.C

**Model: eA380-123**  
**FCC ID: QISEA380-123**  
**IC: 6369A-EA380123**

|                                            |                                                                                                                                                                                                           |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Report Type:</b><br>Original Report     | <b>Product Type:</b><br>LTE CPE                                                                                                                                                                           |
| <b>Test Engineer:</b> <u>Lorin Bian</u>    |                                                                                                                       |
| <b>Report Number:</b> <u>RDG170511006C</u> |                                                                                                                                                                                                           |
| <b>Report Date:</b> <u>2017-07-07</u>      |                                                                                                                                                                                                           |
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## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

The **Huawei Technologies Co.,Ltd**'s product, model number: **eA380-123** (**FCC ID: QISEA380-123, IC: 6369A-EA380123**) (the "EUT") in this report was a **LTE CPE**, which was measured approximately: 25.8 cm (L) x 22 cm (W) x 6.6 cm (H), rated input voltage: DC54V from POE port.

LTE Technical Parameters:

|                      |                                                                                                                                                                                                  |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Equipment Type       | Fixed CPE                                                                                                                                                                                        |
| Frequency Range      | LTE-FDD Band 7:2500-2570MHz(Tx), 2620-2690MHz(Rx)<br>LTE-TDD Band 40: 2305-2320MHz&2345-2360MHz(Tx/Rx)<br>LTE-TDD Band 41: 2500-2690MHz(Tx/Rx)                                                   |
| Maximum Output Power | LTE Band 7:23 dBm<br>LTE Band 40: 26.5dBm<br>LTE Band 41: 23 dBm                                                                                                                                 |
| Operation Bandwidth  | LTE Band 7: 5MHz/10MHz/15MHz/20MHz/ Intra-band contiguous Carrier Aggregation<br>LTE Band 40: 5MHz/10MHz/15MHz<br>LTE Band 41: 5MHz/10MHz/15MHz/20MHz/ Intra-band contiguous Carrier Aggregation |
| Maximum Antenna Gain | 13 dBi                                                                                                                                                                                           |

*\*All measurement and test data in this report was gathered from final production sample, serial number: 170511006 (assigned by the BACL, Chengdu). It may have deviation from any other sample. The EUT supplied by the applicant was received on 2017-02-08, and EUT conformed to test requirement.*

### Objective

This report is prepared on behalf of **Huawei Technologies Co., Ltd** in accordance with Part 2-Subpart J, part 27 of the Federal Communications Commission's rules. And RSS-Gen Issue 4, November 2014, RSS-199, Issue 3, December 2016, RSS-195, ISSUE 2, April 2014 of the Innovation, Science and Economic Development Canada.

### Related Submittal(s)/Grant(s)

FCC Part 15B JBP/15C DTS submissions with FCC ID: QISEA380-123.  
RSS-247 DTSS submissions with IC: 6369A-EA380123.

### Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2, Sub-part J, Part 27.

Applicable Standards:  
TIA/EIA 603-D-2010.

RSS-Gen Issue 4, November 2014, RSS-199, Issue 3, December 2016, RSS-195, ISSUE 2, April 2014 of the Innovation, Science and Economic Development Canada.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Chengdu).

## **Test Facility**

The test site used by BACL to collect test data is located in the No.5040, Huilongwan Plaza, No.1, Shawan Road, Jinniu District, Chengdu, Sichuan, China.

Test site at BACL has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on April 24, 2015. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 560332. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

## SYSTEM TEST CONFIGURATION

### Justification

The EUT was configured for testing according to TIA/EIA-603-D-2010.

The device operation on LTE band 7/40/41, test was performed with channels as below table:

| Frequency Bands             | Modes               | Bandwidth (MHz) | Test Frequency (MHz) |                |               |
|-----------------------------|---------------------|-----------------|----------------------|----------------|---------------|
|                             |                     |                 | Low                  | Middle         | High          |
| LTE Band 7                  | Single Carrier      | 5               | 2502.5               | 2535           | 2567.5        |
|                             |                     | 10              | 2505                 | 2535           | 2565          |
|                             |                     | 15              | 2507.5               | 2535           | 2562.5        |
|                             |                     | 20              | 2510                 | 2535           | 2560          |
|                             | Carrier Aggregation | 5+20            | 2503.3+2515          | 2525.8+2537.5  | 2548.3+2560   |
|                             |                     | 20+5            | 2510.0+2521.7        | 2532.5+2544.2  | 2555.0+2566.7 |
|                             |                     | 10+20           | 2505.5+2519.9        | 2525.6+2540    | 2545.6+2560   |
|                             |                     | 20+10           | 2510.0+2524.4        | 2530.1 +2544.5 | 2550.1+2564.5 |
|                             |                     | 15+15           | 2507.5+2522.5        | 2527.5+2542.5  | 2547.5+2562.5 |
|                             |                     | 15+20           | 2507.8+2524.9        | 2525.3+2542.4  | 2542.9+2560.0 |
|                             |                     | 20+15           | 2510.0+2527.1        | 2527.6+2544.7  | 2545.1+2562.2 |
|                             |                     | 20+20           | 2510.0+2529.8        | 2525.1+2544.9  | 2540.2+2560.0 |
| LTE Band 40<br>2305-2320MHz | Single Carrier      | 5               | 2307.5               | 2312.5         | 2317.5        |
|                             |                     | 10              | 2310                 | 2312.5         | 2315          |
|                             |                     | 15              | /                    | 2312.5         | /             |
| LTE Band 40<br>2345-2360MHz | Single Carrier      | 5               | 2347.5               | 2352.5         | 2357.5        |
|                             |                     | 10              | 2350                 | 2352.5         | 2355          |
|                             |                     | 15              | /                    | 2352.5         | /             |
| LTE Band 41                 | Single Carrier      | 5               | 2502.5               | 2593           | 2687.5        |
|                             |                     | 10              | 2505                 | 2593           | 2685          |
|                             |                     | 15              | 2507.5               | 2593           | 2682.5        |
|                             |                     | 20              | 2510                 | 2593           | 2680          |
|                             | Carrier Aggregation | 5+20            | 2503.3+2514          | 2583.8+2595.5  | 2668.3+2680   |
|                             |                     | 20+5            | 2514.0+2521.7        | 2590.5+2602.2  | 2675.0+2686.7 |
|                             |                     | 10+20           | 2505.5+2519.9        | 2583.6+2598    | 2665.6+2680   |
|                             |                     | 20+10           | 2510.0+2524.4        | 2588.1+2602.5  | 2670.1+2684.5 |
|                             |                     | 15+15           | 2507.5+2522.5        | 2585.5+2600.5  | 2667.5+2682.5 |
|                             |                     | 15+20           | 2507.8+2524.9        | 2583.3+2600.4  | 2662.9+2680.0 |
|                             |                     | 20+15           | 2510.0+2527.1        | 2585.6+2602.7  | 2665.1+2682.2 |
|                             |                     | 20+20           | 2510.0+2529.8        | 2585.1+2604.9  | 2660.2+2680.0 |

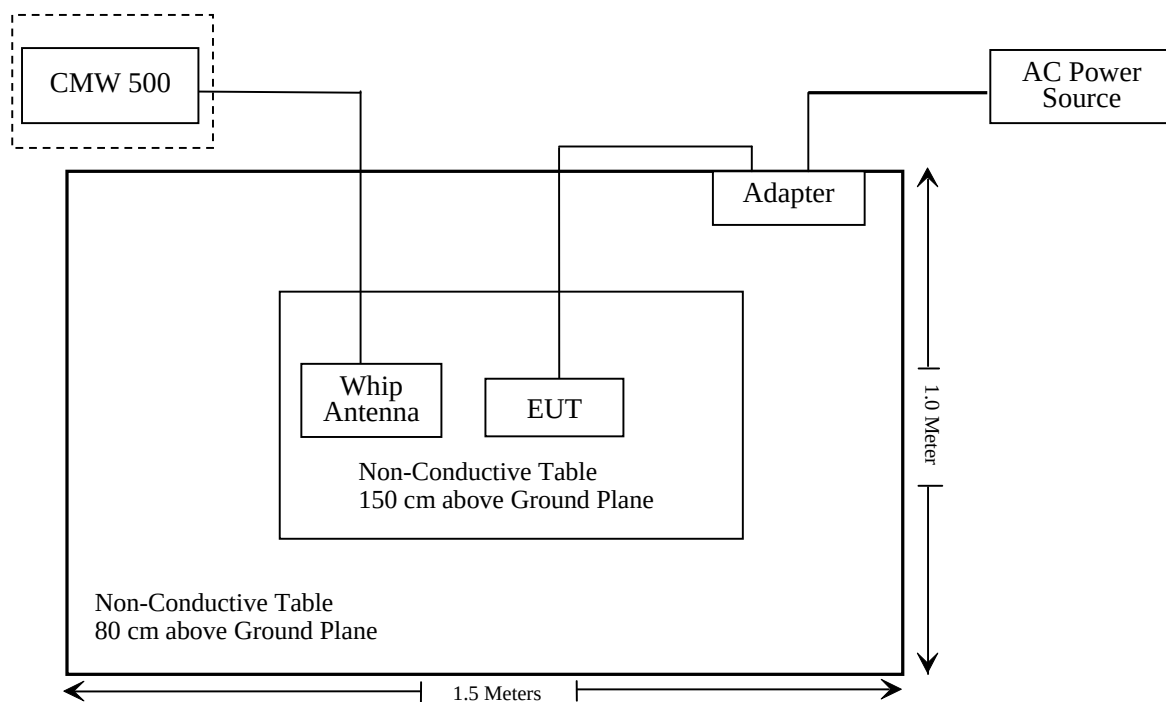
### Equipment Modifications

No modifications were made to the EUT.

## Support Equipment List and Details

| Manufacturer | Description                         | Model     | Serial Number |
|--------------|-------------------------------------|-----------|---------------|
| R&S          | Wideband Radio Communication Tester | CMW500    | 106891        |
| N/A          | ANTENNA                             | N/A       | N/A           |
| Huawei       | POE                                 | POE35-54V | N/A           |

## Block Diagram of Test Setup



## SUMMARY OF TEST RESULTS

| FCC Rules                                          | Description of Test                                                    | Result     |
|----------------------------------------------------|------------------------------------------------------------------------|------------|
| §1.1310, §2.1091<br>RSS-102§4                      | Maximum Permissible Exposure                                           | Compliance |
| §2.1046; §27.50<br>RSS-195 § 5.5,<br>RSS-199 § 4.4 | RF Output Power                                                        | Compliance |
| § 2.1047<br>RSS-195 § 5.3<br>RSS-199 § 4.1         | Modulation Type                                                        | Compliance |
| § 2.1049; §27.53<br>RSS-199§4.2<br>RSS-Gen§6.6     | Occupied Bandwidth                                                     | Compliance |
| § 2.1051; §27.53<br>RSS-195 § 5.6<br>RSS-199 § 4.5 | Spurious Emissions at Antenna Terminal                                 | Compliance |
| § 2.1053; §27.53<br>RSS-195 § 5.6<br>RSS-199 § 4.5 | Spurious Radiation Emissions                                           | Compliance |
| §27.53<br>RSS-195 § 5.6<br>RSS-199 § 4.5           | Band Edge                                                              | Compliance |
| § 2.1055; §27.54                                   | Frequency stability vs. temperature<br>Frequency stability vs. voltage | Compliance |

## FCC §1.1310, §2.1091& RSS-102 § 4 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

### Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

| (B) Limits for General Population/Uncontrolled Exposure |                               |                               |                                     |                          |
|---------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| Frequency Range (MHz)                                   | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density (mW/cm <sup>2</sup> ) | Averaging Time (minutes) |
| 0.3–1.34                                                | 614                           | 1.63                          | *(100)                              | 30                       |
| 1.34–30                                                 | 824/f                         | 2.19/f                        | *(180/f <sup>2</sup> )              | 30                       |
| 30–300                                                  | 27.5                          | 0.073                         | 0.2                                 | 30                       |
| 300–1500                                                | /                             | /                             | f/1500                              | 30                       |
| 1500–100,000                                            | /                             | /                             | 1.0                                 | 30                       |

f = frequency in MHz; \* = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

According to RSS-102 § 4Table 4, RF Field Strength Limits for Devices Used by the General Public (Uncontrolled Environment)

**Table 4: RF Field Strength Limits for Devices Used by the General Public (Uncontrolled Environment)**

| Frequency Range (MHz)   | Electric Field (V/m rms)  | Magnetic Field (A/m rms)                 | Power Density (W/m <sup>2</sup> ) | Reference Period (minutes) |
|-------------------------|---------------------------|------------------------------------------|-----------------------------------|----------------------------|
| 0.003-10 <sup>-21</sup> | 83                        | 90                                       | -                                 | Instantaneous*             |
| 0.1-10                  | -                         | 0.73/ f                                  | -                                 | 6**                        |
| 1.1-10                  | 87/ f <sup>0.5</sup>      | -                                        | -                                 | 6**                        |
| 10-20                   | 27.46                     | 0.0728                                   | 2                                 | 6                          |
| 20-48                   | 58.07/ f <sup>0.25</sup>  | 0.1540/ f <sup>0.25</sup>                | 8.944/ f <sup>0.5</sup>           | 6                          |
| 48-300                  | 22.06                     | 0.05852                                  | 1.291                             | 6                          |
| 300-6000                | 3.142 f <sup>0.3417</sup> | 0.008335 f <sup>0.3417</sup>             | 0.02619f <sup>0.6834</sup>        | 6                          |
| 6000-15000              | 61.4                      | 0.163                                    | 10                                | 6                          |
| 15000-150000            | 61.4                      | 0.163                                    | 10                                | 616000/ f <sup>1.2</sup>   |
| 150000-300000           | 0.158 f <sup>0.5</sup>    | 4.21 x 10 <sup>-4</sup> f <sup>0.5</sup> | 6.67 x 10 <sup>-5</sup> f         | 616000/ f <sup>1.2</sup>   |

Note: f is frequency in MHz.  
 \*Based on nerve stimulation (NS).  
 \*\* Based on specific absorption rate (SAR).

### Calculation Formula:

Prediction of power density at the distance of the applicable MPE limit:  
 $S = PG/4\pi R^2$  = power density (in appropriate units, e.g. mW/cm<sup>2</sup>);

P = power input to the antenna (in appropriate units, e.g., mW);  
 G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;  
 R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

#### Calculated Data:

| Mode        | Frequency (MHz) | Antenna Gain |           | Tune-up Power |        | Evaluation Distance (cm) | Power Density         |                     | MPE Limit                 |                             |
|-------------|-----------------|--------------|-----------|---------------|--------|--------------------------|-----------------------|---------------------|---------------------------|-----------------------------|
|             |                 | (dBi)        | (numeric) | (dBm)         | (mW)   |                          | (mW/cm <sup>2</sup> ) | (W/m <sup>2</sup> ) | FCC (mW/cm <sup>2</sup> ) | RSS-102 (W/m <sup>2</sup> ) |
| WLAN 2.4GHz | 2412-2462       | 2            | 1.58      | 28            | 630.96 | 40.00                    | 0.0498                | 0.498               | 1.0                       | 5.37                        |
| LTE Band 7  | 2500-2570       | 13           | 19.95     | 23            | 199.53 | 40.00                    | 0.20                  | 2.0                 | 1.0                       | 5.50                        |
| LTE Band 40 | 2305-2320       | 13           | 19.95     | 26.5          | 446.68 | 40.00                    | 0.443                 | 4.43                | 1.0                       | 5.20                        |
|             | 2345-2360       | 13           | 19.95     | 26.5          | 446.68 | 40.00                    | 0.443                 | 4.43                | 1.0                       | 5.26                        |
| LTE Band 41 | 2500-2690       | 13           | 19.95     | 23            | 199.53 | 40.00                    | 0.20                  | 2.0                 | 1.0                       | 5.49                        |

The 2.4GHz WLAN and LTE can transmit simultaneously:

#### For FCC:

$$\sum_i \frac{S_i}{S_{Limit,i}}$$

$$= S_{WLAN}/S_{limit-WLAN} + S_{LTE}/S_{limit-LTE}$$

$$= 0.0498/1 + 0.443/1$$

$$= 0.4928$$

$$< 1.0$$

#### For RSS-102:

$$\sum_i \frac{S_i}{S_{Limit,i}}$$

$$= S_{WLAN}/S_{limit-WLAN} + S_{LTE}/S_{limit-LTE}$$

$$= 0.498/5.37 + 4.43/5.20$$

$$= 0.94$$

$$< 1.0$$

**Result: Compliance,** The device meets MPE requirement for Devices Used by the General Public (Uncontrolled Environment) at distance ≥40 cm.

## **FCC §2.1047(d), RSS-195 § 5.3, RSS-199 § 4.1 - MODULATION TYPE**

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### **Applicable Standard**

According to FCC § 2.1047(d), Part 27 there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

According to RSS-195 § 5.3,

The modulation used shall be digital.

According to RSS-199 § 4.1

Equipment certified under this standard shall employ digital modulation.

### **Result**

Result: Compliant, the device employs digital modulation.

## **FCC § 2.1046 & § 27.50(a)(h), RSS-195 § 5.5, RSS-199 § 4.4- RF OUTPUT POWER**

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### **Applicable Standard**

According to FCC §2.1046 and §27.50

(a) The following power limits and related requirements apply to stations transmitting in the 2305-2320 MHz band or the 2345-2360 MHz band.

(2) Fixed customer premises equipment stations. For fixed customer premises equipment (CPE) stations transmitting in the 2305-2320 MHz band or in the 2345-2360 MHz band, the peak EIRP must not exceed 20 watts within any 5 megahertz of authorized bandwidth. Fixed CPE stations transmitting in the 2305-2320 MHz band or in the 2345-2360 MHz band must employ automatic transmit power control when operating so the stations operate with the minimum power necessary for successful communications. The use of outdoor antennas for CPE stations or outdoor CPE station installations operating with 2 watts per 5 megahertz or less average EIRP using the stepped emissions mask prescribed in §27.53(a)(3) is prohibited except if professionally installed in locations removed by 20 meters from roadways or in locations where it can be shown that the ground power level of -44 dBm in the A or B blocks or -55 dBm in the C or D blocks will not be exceeded at the nearest road location. The use of outdoor antennas for fixed CPE stations operating with 2 watts per 5 megahertz or less average EIRP and the emissions mask prescribed in §27.53(a)(1)(i) through (iii) is permitted in all locations. For fixed WCS CPE using TDD technology, the duty cycle must not exceed 38 percent;

(h) The following power limits shall apply in the BRS and EBS:

(2) Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

According to RSS-195 §5.5

The equivalent isotropically radiated power (e.i.r.p.) of base and fixed station equipment shall comply with the e.i.r.p. limit in SRSP-516.

The e.i.r.p. of fixed subscriber equipment shall not exceed 20 W/5 MHz.

The e.i.r.p. of mobile or portable equipment transmitting in the band 2305-2315 MHz or the band 2350-2360 MHz, employing 3GPP LTE (Third Generation Partnership Project Long Term Evolution) standards, shall not exceed 250 mW within any 5 MHz bandwidth. For other technologies, the e.i.r.p. shall not exceed 50 mW within any 1 MHz bandwidth.

According to RSS-199 §4.4

The transmitter output power shall be measured in terms of average value.

For base station equipment, refer to SRSP-517 for the maximum permissible e.i.r.p.

For mobile subscriber equipment, the e.i.r.p. shall not exceed 2 W. For fixed subscriber equipment, the transmitter output power shall not exceed 2 W and the e.i.r.p. shall be limited to 40 W.

In addition, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the highest PAPR during periods of continuous transmission.

For equipment with multiple antennas, the transmitter output power and e.i.r.p. shall be measured according to ANSI C63.26-2015.

## Test Procedure

### LTE (FDD):

The following tests were conducted according to the test requirements in 3GPP TS36.101

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3

| Modulation | Channel bandwidth / Transmission bandwidth (RB) |         |       |        |        |        | MPR (dB) |
|------------|-------------------------------------------------|---------|-------|--------|--------|--------|----------|
|            | 1.4 MHz                                         | 3.0 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz |          |
| QPSK       | > 5                                             | > 4     | > 8   | > 12   | > 16   | > 18   | ≤ 1      |
| 16 QAM     | ≤ 5                                             | ≤ 4     | ≤ 8   | ≤ 12   | ≤ 16   | ≤ 18   | ≤ 1      |
| 64 QAM     | > 5                                             | > 4     | > 8   | > 12   | > 16   | > 18   | ≤ 2      |

The allowed A-MPR values specified below in Table 6.2.4-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS\_01".

Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)

| Network Signalling value | Requirements (sub-clause) | E-UTRA Band              | Channel bandwidth (MHz) | Resources Blocks ( $N_{RB}$ ) | A-MPR (dB)    |
|--------------------------|---------------------------|--------------------------|-------------------------|-------------------------------|---------------|
| NS_01                    | 6.6.2.1.1                 | Table 5.5-1              | 1.4, 3, 5, 10, 15, 20   | Table 5.6-1                   | NA            |
| NS_03                    | 6.6.2.2.1                 | 2, 4, 10, 23, 25, 35, 36 | 3                       | >5                            | ≤ 1           |
|                          |                           |                          | 5                       | >6                            | ≤ 1           |
|                          |                           |                          | 10                      | >6                            | ≤ 1           |
|                          |                           |                          | 15                      | >8                            | ≤ 1           |
|                          |                           |                          | 20                      | >10                           | ≤ 1           |
| NS_04                    | 6.6.2.2.2                 | 41                       | 5                       | >6                            | ≤ 1           |
|                          |                           |                          | 10, 15, 20              | See Table 6.2.4-4             |               |
| NS_05                    | 6.6.3.3.1                 | 1                        | 10, 15, 20              | ≥ 50                          | ≤ 1           |
| NS_06                    | 6.6.2.2.3                 | 12, 13, 14, 17           | 1.4, 3, 5, 10           | Table 5.6-1                   | n/a           |
| NS_07                    | 6.6.2.2.3                 | 13                       | 10                      | Table 6.2.4-2                 | Table 6.2.4-2 |
|                          | 6.6.3.3.2                 |                          |                         |                               |               |
| NS_08                    | 6.6.3.3.3                 | 19                       | 10, 15                  | > 44                          | ≤ 3           |
| NS_09                    | 6.6.3.3.4                 | 21                       | 10, 15                  | > 40                          | ≤ 1           |
|                          |                           |                          |                         | > 55                          | ≤ 2           |
| NS_10                    |                           | 20                       | 15, 20                  | Table 6.2.4-3                 | Table 6.2.4-3 |
| NS_11                    | 6.6.2.2.1                 | 23 <sup>1</sup>          | 1.4, 3, 5, 10           | Table 6.2.4-5                 | Table 6.2.4-5 |
| ..                       |                           |                          |                         |                               |               |
| NS_32                    | -                         | -                        | -                       | -                             | -             |

Note 1: Applies to the lower block of Band 23, i.e. a carrier placed in the 2000-2010 MHz region.

## LTE(TDD):

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

| Special subframe configuration | Normal cyclic prefix in downlink |                                |                                  | Extended cyclic prefix in downlink |                                |                                  |
|--------------------------------|----------------------------------|--------------------------------|----------------------------------|------------------------------------|--------------------------------|----------------------------------|
|                                | DwPTS                            | UpPTS                          |                                  | DwPTS                              | UpPTS                          |                                  |
|                                |                                  | Normal cyclic prefix in uplink | Extended cyclic prefix in uplink |                                    | Normal cyclic prefix in uplink | Extended cyclic prefix in uplink |
| 0                              | $6592 \cdot T_s$                 | $2192 \cdot T_s$               | $2560 \cdot T_s$                 | $7680 \cdot T_s$                   | $2192 \cdot T_s$               | $2560 \cdot T_s$                 |
| 1                              | $19760 \cdot T_s$                |                                |                                  | $20480 \cdot T_s$                  |                                |                                  |
| 2                              | $21952 \cdot T_s$                |                                |                                  | $23040 \cdot T_s$                  |                                |                                  |
| 3                              | $24144 \cdot T_s$                |                                |                                  | $25600 \cdot T_s$                  |                                |                                  |
| 4                              | $26336 \cdot T_s$                | $4384 \cdot T_s$               | $5120 \cdot T_s$                 | $7680 \cdot T_s$                   | $4384 \cdot T_s$               | $5120 \cdot T_s$                 |
| 5                              | $6592 \cdot T_s$                 |                                |                                  | $20480 \cdot T_s$                  |                                |                                  |
| 6                              | $19760 \cdot T_s$                |                                |                                  | $23040 \cdot T_s$                  |                                |                                  |
| 7                              | $21952 \cdot T_s$                |                                |                                  | $12800 \cdot T_s$                  |                                |                                  |
| 8                              | $24144 \cdot T_s$                |                                |                                  | -                                  | -                              | -                                |
| 9                              | $13168 \cdot T_s$                |                                |                                  | -                                  | -                              | -                                |

Table 4.2-2: Uplink-downlink configurations.

| Uplink-downlink configuration | Downlink-to-Uplink Switch-point periodicity | Subframe number |   |   |   |   |   |   |   |   |   |
|-------------------------------|---------------------------------------------|-----------------|---|---|---|---|---|---|---|---|---|
|                               |                                             | 0               | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 0                             | 5 ms                                        | D               | S | U | U | U | D | S | U | U | U |
| 1                             | 5 ms                                        | D               | S | U | U | D | D | S | U | U | D |
| 2                             | 5 ms                                        | D               | S | U | D | D | D | S | U | D | D |
| 3                             | 10 ms                                       | D               | S | U | U | U | D | D | D | D | D |
| 4                             | 10 ms                                       | D               | S | U | U | D | D | D | D | D | D |
| 5                             | 10 ms                                       | D               | S | U | D | D | D | D | D | D | D |
| 6                             | 5 ms                                        | D               | S | U | U | U | D | S | U | U | D |

### Calculated Duty Cycle

| Uplink-Downlink Configuration | Downlink-to-Uplink Switch-point Periodicity | Subframe Number |   |   |   |   |   |   |   |   |   | Calculated Duty Cycle (%) |
|-------------------------------|---------------------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---------------------------|
|                               |                                             | 0               | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                           |
| 0                             | 5 ms                                        | D               | S | U | U | U | D | S | U | U | U | 63.33                     |
| 1                             | 5 ms                                        | D               | S | U | U | D | D | S | U | U | D | 43.33                     |
| 2                             | 5 ms                                        | D               | S | U | D | D | D | S | U | D | D | 23.33                     |
| 3                             | 10 ms                                       | D               | S | U | U | U | D | D | D | D | D | 31.67                     |
| 4                             | 10 ms                                       | D               | S | U | U | D | D | D | D | D | D | 21.67                     |
| 5                             | 10 ms                                       | D               | S | U | D | D | D | D | D | D | D | 11.67                     |
| 6                             | 5 ms                                        | D               | S | U | U | U | D | S | U | U | D | 53.33                     |

Calculated Duty Cycle = Extended cyclic prefix in uplink  $\times (T_s) \times \#$  of S +  $\#$  of U

Example for Calculated Duty Cycle for Uplink-Downlink Configuration 0:

Calculated Duty Cycle =  $5120 \times [1/(15000 \times 2048)] \times 2 + 6 \text{ ms} = 63.33\%$

where

$T_s = 1/(15000 \times 2048)$  seconds

## Radiated method:

ANSI/TIA 603-D section 2.2.17

### Test Equipment List and Details

| Manufacturer | Description                         | Model   | Serial Number | Calibration Date | Calibration Due Date |
|--------------|-------------------------------------|---------|---------------|------------------|----------------------|
| Unknown      | RF Cable                            | Unknown | C-2           | Each Time        | /                    |
| R&S          | Wideband Radio Communication Tester | CMW500  | 106891        | 2016-11-23       | 2017-11-23           |

\* **Statement of Traceability:** BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B "Implementation of traceability policy in accredited laboratories".

### Test Data

#### Environmental Conditions

|                    |              |
|--------------------|--------------|
| Temperature:       | 25~28.2 °C   |
| Relative Humidity: | 43.9~58 %    |
| ATM Pressure:      | 99~100.1 kPa |

*The testing was performed by Lorin Bian from 2017-06-03 to 2017-07-05.*

**Band 7, Single Carrier:**

| Channel Bandwidth | Modulation | Resource Block & RB offset | Conducted Output Power (dBm) |          |            |        | EIRP(For ISED) (dBm) |          |            |        |
|-------------------|------------|----------------------------|------------------------------|----------|------------|--------|----------------------|----------|------------|--------|
|                   |            |                            | 2502.5 MHz                   | 2535 MHz | 2567.5 MHz | Limits | 2502.5 MHz           | 2535 MHz | 2567.5 MHz | Limits |
| 5 MHz             | QPSK       | 1#0                        | 20.82                        | 20.63    | 20.57      | 33.00  | 33.82                | 33.63    | 33.57      | 46     |
|                   |            | 1#12                       | 20.57                        | 20.75    | 20.81      | 33.00  | 33.57                | 33.75    | 33.81      | 46     |
|                   |            | 1#24                       | 20.71                        | 20.64    | 19.98      | 33.00  | 33.71                | 33.64    | 32.98      | 46     |
|                   |            | 12#0                       | 20.76                        | 20.33    | 20.15      | 33.00  | 33.76                | 33.33    | 33.15      | 46     |
|                   |            | 12#6                       | 20.98                        | 20.79    | 19.87      | 33.00  | 33.98                | 33.79    | 32.87      | 46     |
|                   |            | 12#11                      | 21.06                        | 20.99    | 20.32      | 33.00  | 34.06                | 33.99    | 33.32      | 46     |
|                   |            | 25#0                       | 20.41                        | 20.46    | 20.12      | 33.00  | 33.41                | 33.46    | 33.12      | 46     |
|                   | 16-QAM     | 1#0                        | 20.44                        | 20.29    | 20.27      | 33.00  | 33.44                | 33.29    | 33.27      | 46     |
|                   |            | 1#12                       | 20.62                        | 20.41    | 20.38      | 33.00  | 33.62                | 33.41    | 33.38      | 46     |
|                   |            | 1#24                       | 20.45                        | 20.28    | 19.68      | 33.00  | 33.45                | 33.28    | 32.68      | 46     |
|                   |            | 12#0                       | 20.47                        | 20.23    | 19.48      | 33.00  | 33.47                | 33.23    | 32.48      | 46     |
|                   |            | 12#6                       | 20.70                        | 20.61    | 19.77      | 33.00  | 33.7                 | 33.61    | 32.77      | 46     |
|                   |            | 12#11                      | 20.20                        | 20.37    | 19.97      | 33.00  | 33.2                 | 33.37    | 32.97      | 46     |
|                   |            | 25#0                       | 19.47                        | 19.45    | 19.35      | 33.00  | 32.47                | 32.45    | 32.35      | 46     |

| Channel Bandwidth | Modulation | Resource Block & RB offset | Conducted Output Power (dBm) |          |          |        | EIRP(For ISED) (dBm) |          |          |        |
|-------------------|------------|----------------------------|------------------------------|----------|----------|--------|----------------------|----------|----------|--------|
|                   |            |                            | 2505 MHz                     | 2535 MHz | 2565 MHz | Limits | 2505 MHz             | 2535 MHz | 2565 MHz | Limits |
| 10 MHz            | QPSK       | 1#0                        | 20.77                        | 20.63    | 20.49    | 33.00  | 33.77                | 33.63    | 33.49    | 46     |
|                   |            | 1#24                       | 20.82                        | 20.78    | 20.85    | 33.00  | 33.82                | 33.78    | 33.85    | 46     |
|                   |            | 1#49                       | 20.92                        | 20.69    | 20.15    | 33.00  | 33.92                | 33.69    | 33.15    | 46     |
|                   |            | 25#0                       | 21.11                        | 20.45    | 20.41    | 33.00  | 34.11                | 33.45    | 33.41    | 46     |
|                   |            | 25#12                      | 20.77                        | 20.39    | 20.19    | 33.00  | 33.77                | 33.39    | 33.19    | 46     |
|                   |            | 25#24                      | 21.05                        | 20.64    | 19.93    | 33.00  | 34.05                | 33.64    | 32.93    | 46     |
|                   |            | 50#0                       | 20.49                        | 20.53    | 20.05    | 33.00  | 33.49                | 33.53    | 33.05    | 46     |
|                   | 16-QAM     | 1#0                        | 20.26                        | 20.23    | 19.94    | 33.00  | 33.26                | 33.23    | 32.94    | 46     |
|                   |            | 1#24                       | 20.62                        | 20.48    | 20.18    | 33.00  | 33.62                | 33.48    | 33.18    | 46     |
|                   |            | 1#49                       | 20.52                        | 20.32    | 19.66    | 33.00  | 33.52                | 33.32    | 32.66    | 46     |
|                   |            | 25#0                       | 20.38                        | 20.27    | 19.82    | 33.00  | 33.38                | 33.27    | 32.82    | 46     |
|                   |            | 25#12                      | 20.44                        | 20.66    | 19.40    | 33.00  | 33.44                | 33.66    | 32.4     | 46     |
|                   |            | 25#24                      | 20.52                        | 20.37    | 19.59    | 33.00  | 33.52                | 33.37    | 32.59    | 46     |
|                   |            | 50#0                       | 19.50                        | 19.51    | 19.29    | 33.00  | 32.5                 | 32.51    | 32.29    | 46     |

| Channel Bandwidth | Modulation | Resource Block & RB offset | Conducted Output Power (dBm) |          |            |        | EIRP(For ISED) (dBm) |          |            |        |
|-------------------|------------|----------------------------|------------------------------|----------|------------|--------|----------------------|----------|------------|--------|
|                   |            |                            | 2507.5 MHz                   | 2535 MHz | 2562.5 MHz | Limits | 2507.5 MHz           | 2535 MHz | 2562.5 MHz | Limits |
| 15 MHz            | QPSK       | 1#0                        | 20.56                        | 20.38    | 20.09      | 33.00  | 33.56                | 33.38    | 33.09      | 46     |
|                   |            | 1#37                       | 20.84                        | 20.49    | 20.12      | 33.00  | 33.84                | 33.49    | 33.12      | 46     |
|                   |            | 1#74                       | 20.68                        | 20.43    | 19.97      | 33.00  | 33.68                | 33.43    | 32.97      | 46     |
|                   |            | 36#0                       | 20.86                        | 20.41    | 19.65      | 33.00  | 33.86                | 33.41    | 32.65      | 46     |
|                   |            | 36#17                      | 20.73                        | 20.45    | 19.99      | 33.00  | 33.73                | 33.45    | 32.99      | 46     |
|                   |            | 36#35                      | 20.71                        | 20.43    | 20.24      | 33.00  | 33.71                | 33.43    | 33.24      | 46     |
|                   |            | 75#0                       | 20.58                        | 20.42    | 19.92      | 33.00  | 33.58                | 33.42    | 32.92      | 46     |
|                   | 16-QAM     | 1#0                        | 20.08                        | 19.95    | 19.58      | 33.00  | 33.08                | 32.95    | 32.58      | 46     |
|                   |            | 1#37                       | 20.17                        | 20.06    | 20.41      | 33.00  | 33.17                | 33.06    | 33.41      | 46     |
|                   |            | 1#74                       | 20.13                        | 20.13    | 19.36      | 33.00  | 33.13                | 33.13    | 32.36      | 46     |
|                   |            | 36#0                       | 20.21                        | 19.93    | 19.10      | 33.00  | 33.21                | 32.93    | 32.1       | 46     |
|                   |            | 36#17                      | 20.23                        | 20.10    | 19.69      | 33.00  | 33.23                | 33.1     | 32.69      | 46     |
|                   |            | 36#35                      | 20.34                        | 20.41    | 19.02      | 33.00  | 33.34                | 33.41    | 32.02      | 46     |
|                   |            | 75#0                       | 19.58                        | 19.44    | 19.13      | 33.00  | 32.58                | 32.44    | 32.13      | 46     |

| Channel Bandwidth | Modulation | Resource Block & RB offset | Conducted Output Power (dBm) |          |          |        | EIRP(For ISED) (dBm) |          |          |        |
|-------------------|------------|----------------------------|------------------------------|----------|----------|--------|----------------------|----------|----------|--------|
|                   |            |                            | 2510 MHz                     | 2535 MHz | 2560 MHz | Limits | 2510 MHz             | 2535 MHz | 2560 MHz | Limits |
| 20 MHz            | QPSK       | 1#0                        | 20.71                        | 20.57    | 20.58    | 33.00  | 33.71                | 33.57    | 33.58    | 46     |
|                   |            | 1#49                       | 20.59                        | 20.41    | 20.66    | 33.00  | 33.59                | 33.41    | 33.66    | 46     |
|                   |            | 1#99                       | 20.64                        | 20.56    | 20.25    | 33.00  | 33.64                | 33.56    | 33.25    | 46     |
|                   |            | 50#0                       | 20.78                        | 20.45    | 20.57    | 33.00  | 33.78                | 33.45    | 33.57    | 46     |
|                   |            | 50#24                      | 20.43                        | 20.69    | 19.93    | 33.00  | 33.43                | 33.69    | 32.93    | 46     |
|                   |            | 50#49                      | 20.78                        | 20.76    | 20.06    | 33.00  | 33.78                | 33.76    | 33.06    | 46     |
|                   |            | 100#0                      | 20.57                        | 20.47    | 20.01    | 33.00  | 33.57                | 33.47    | 33.01    | 46     |
|                   | 16-QAM     | 1#0                        | 20.45                        | 20.10    | 20.39    | 33.00  | 33.45                | 33.1     | 33.39    | 46     |
|                   |            | 1#49                       | 20.82                        | 20.41    | 20.62    | 33.00  | 33.82                | 33.41    | 33.62    | 46     |
|                   |            | 1#99                       | 20.38                        | 20.11    | 20.06    | 33.00  | 33.38                | 33.11    | 33.06    | 46     |
|                   |            | 50#0                       | 20.31                        | 20.00    | 20.02    | 33.00  | 33.31                | 33       | 33.02    | 46     |
|                   |            | 50#24                      | 20.11                        | 20.37    | 20.22    | 33.00  | 33.11                | 33.37    | 33.22    | 46     |
|                   |            | 50#49                      | 20.70                        | 20.21    | 20.35    | 33.00  | 33.7                 | 33.21    | 33.35    | 46     |
|                   |            | 100#0                      | 19.64                        | 19.52    | 19.13    | 33.00  | 32.64                | 32.52    | 32.13    | 46     |

Note: the device is fixed subscriber equipment.

#### PAR, Band 7 (Single Carrier):

| Test Modulation |        | Channel Bandwidth | 2510 MHz PAR (dB) | 2535MHz PAR (dB) | 2560MHz PAR (dB) | Limit (dB) |
|-----------------|--------|-------------------|-------------------|------------------|------------------|------------|
| QPSK            | 1 RB   | 20 MHz            | 4.72              | 5.36             | 4.88             | 13         |
|                 | 100 RB |                   | 6.52              | 6.32             | 6.40             | 13         |
| 16-QAM          | 1 RB   | 20 MHz            | 5.12              | 5.60             | 5.40             | 13         |
|                 | 100 RB |                   | 7.04              | 6.96             | 7.08             | 13         |

Note: peak-to-average ratio (PAR) <13 dB.

**Band 7, Carrier Aggregation:**

| Bandwidth    | Frequency (MHz) | Modulation | PCC RB | PCC RB | SCC1 RB | SCC1 RB | Conducted Power (dBm) |        | E.I.R.P. (For ISED) |        |
|--------------|-----------------|------------|--------|--------|---------|---------|-----------------------|--------|---------------------|--------|
|              |                 |            | Size   | Offset | Size    | Offset  | Reading               | Limits | Reading             | Limits |
| 5MHz + 20MHz | 2503.3+ 2515    | QPSK       | 1      | 24     | 1       | 0       | 21.27                 | 33.00  | 34.27               | 46.00  |
|              |                 |            | 1      | 12     | 1       | 49      | 21.66                 | 33.00  | 34.66               | 46.00  |
|              |                 |            | 25     | 0      | 100     | 0       | 22.30                 | 33.00  | 35.3                | 46.00  |
|              |                 | 16-QAM     | 1      | 24     | 1       | 0       | 21.35                 | 33.00  | 34.35               | 46.00  |
|              |                 |            | 1      | 12     | 1       | 49      | 21.82                 | 33.00  | 34.82               | 46.00  |
|              |                 |            | 25     | 0      | 100     | 0       | 22.22                 | 33.00  | 35.22               | 46.00  |
| 5MHz + 20MHz | 2525.8+ 2537.5  | QPSK       | 1      | 24     | 1       | 0       | 21.50                 | 33.00  | 34.5                | 46.00  |
|              |                 |            | 1      | 12     | 1       | 49      | 21.66                 | 33.00  | 34.66               | 46.00  |
|              |                 |            | 25     | 0      | 100     | 0       | 21.74                 | 33.00  | 34.74               | 46.00  |
|              |                 | 16-QAM     | 1      | 24     | 1       | 0       | 21.49                 | 33.00  | 34.49               | 46.00  |
|              |                 |            | 1      | 12     | 1       | 49      | 21.40                 | 33.00  | 34.4                | 46.00  |
|              |                 |            | 25     | 0      | 100     | 0       | 22.06                 | 33.00  | 35.06               | 46.00  |
| 5MHz + 20MHz | 2548.3+ 2560    | QPSK       | 1      | 24     | 1       | 0       | 21.30                 | 33.00  | 34.3                | 46.00  |
|              |                 |            | 1      | 12     | 1       | 49      | 21.56                 | 33.00  | 34.56               | 46.00  |
|              |                 |            | 25     | 0      | 100     | 0       | 21.33                 | 33.00  | 34.33               | 46.00  |
|              |                 | 16-QAM     | 1      | 24     | 1       | 0       | 21.07                 | 33.00  | 34.07               | 46.00  |
|              |                 |            | 1      | 12     | 1       | 49      | 21.11                 | 33.00  | 34.11               | 46.00  |
|              |                 |            | 25     | 0      | 100     | 0       | 21.96                 | 33.00  | 34.96               | 46.00  |
| 20MHz+ 5MHz  | 2510.0 + 2521.7 | QPSK       | 1      | 0      | 1       | 0       | 21.71                 | 33.00  | 34.71               | 46.00  |
|              |                 |            | 1      | 0      | 1       | 24      | 21.85                 | 33.00  | 34.85               | 46.00  |
|              |                 |            | 1      | 0      | 25      | 0       | 21.82                 | 33.00  | 34.82               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.71                 | 33.00  | 34.71               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 24      | 21.82                 | 33.00  | 34.82               | 46.00  |
|              |                 |            | 1      | 99     | 25      | 0       | 21.51                 | 33.00  | 34.51               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.86                 | 33.00  | 34.86               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 24      | 21.72                 | 33.00  | 34.72               | 46.00  |
|              |                 |            | 100    | 0      | 25      | 0       | 22.03                 | 33.00  | 35.03               | 46.00  |
|              |                 | 16-QAM     | 1      | 0      | 1       | 0       | 21.65                 | 33.00  | 34.65               | 46.00  |
|              |                 |            | 1      | 0      | 1       | 24      | 21.74                 | 33.00  | 34.74               | 46.00  |
|              |                 |            | 1      | 0      | 25      | 0       | 21.77                 | 33.00  | 34.77               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.69                 | 33.00  | 34.69               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 24      | 21.75                 | 33.00  | 34.75               | 46.00  |
|              |                 |            | 1      | 99     | 25      | 0       | 21.60                 | 33.00  | 34.6                | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.78                 | 33.00  | 34.78               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 24      | 21.50                 | 33.00  | 34.5                | 46.00  |
|              |                 |            | 100    | 0      | 25      | 0       | 21.56                 | 33.00  | 34.56               | 46.00  |

| Bandwidth    | Frequency (MHz) | Modulation | PCC RB | PCC RB | SCC1 RB | SCC1 RB | Conducted Power (dBm) |        | E.I.R.P. (For ISEDC) |        |
|--------------|-----------------|------------|--------|--------|---------|---------|-----------------------|--------|----------------------|--------|
|              |                 |            | Size   | Offset | Size    | Offset  | Reading               | Limits | Reading              | Limits |
| 20MHz+ 5MHz  | 2532.5 + 2544.2 | QPSK       | 1      | 0      | 1       | 0       | 20.63                 | 33.00  | 33.63                | 46.00  |
|              |                 |            | 1      | 0      | 1       | 24      | 20.29                 | 33.00  | 33.29                | 46.00  |
|              |                 |            | 1      | 0      | 25      | 0       | 20.45                 | 33.00  | 33.45                | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.04                 | 33.00  | 34.04                | 46.00  |
|              |                 |            | 1      | 99     | 1       | 24      | 20.74                 | 33.00  | 33.74                | 46.00  |
|              |                 |            | 1      | 99     | 25      | 0       | 20.91                 | 33.00  | 33.91                | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.83                 | 33.00  | 34.83                | 46.00  |
|              |                 |            | 100    | 0      | 1       | 24      | 21.44                 | 33.00  | 34.44                | 46.00  |
|              |                 |            | 100    | 0      | 25      | 0       | 21.90                 | 33.00  | 34.9                 | 46.00  |
|              |                 | 16-QAM     | 1      | 0      | 1       | 0       | 20.53                 | 33.00  | 33.53                | 46.00  |
|              |                 |            | 1      | 0      | 1       | 24      | 20.28                 | 33.00  | 33.28                | 46.00  |
|              |                 |            | 1      | 0      | 25      | 0       | 20.48                 | 33.00  | 33.48                | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.08                 | 33.00  | 34.08                | 46.00  |
|              |                 |            | 1      | 99     | 1       | 24      | 20.79                 | 33.00  | 33.79                | 46.00  |
|              |                 |            | 1      | 99     | 25      | 0       | 20.93                 | 33.00  | 33.93                | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.65                 | 33.00  | 34.65                | 46.00  |
|              |                 |            | 100    | 0      | 1       | 24      | 21.78                 | 33.00  | 34.78                | 46.00  |
|              |                 |            | 100    | 0      | 25      | 0       | 21.88                 | 33.00  | 34.88                | 46.00  |
| 20MHz+ 5MHz  | 2555.0 + 2566.7 | QPSK       | 1      | 0      | 1       | 0       | 21.68                 | 33.00  | 34.68                | 46.00  |
|              |                 |            | 1      | 0      | 1       | 24      | 21.65                 | 33.00  | 34.65                | 46.00  |
|              |                 |            | 1      | 0      | 25      | 0       | 21.62                 | 33.00  | 34.62                | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.55                 | 33.00  | 34.55                | 46.00  |
|              |                 |            | 1      | 99     | 1       | 24      | 21.54                 | 33.00  | 34.54                | 46.00  |
|              |                 |            | 1      | 99     | 25      | 0       | 21.76                 | 33.00  | 34.76                | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.88                 | 33.00  | 34.88                | 46.00  |
|              |                 |            | 100    | 0      | 1       | 24      | 21.40                 | 33.00  | 34.4                 | 46.00  |
|              |                 |            | 100    | 0      | 25      | 0       | 21.67                 | 33.00  | 34.67                | 46.00  |
|              |                 | 16-QAM     | 1      | 0      | 1       | 0       | 21.13                 | 33.00  | 34.13                | 46.00  |
|              |                 |            | 1      | 0      | 1       | 24      | 21.13                 | 33.00  | 34.13                | 46.00  |
|              |                 |            | 1      | 0      | 25      | 0       | 21.33                 | 33.00  | 34.33                | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.66                 | 33.00  | 34.66                | 46.00  |
|              |                 |            | 1      | 99     | 1       | 24      | 21.54                 | 33.00  | 34.54                | 46.00  |
|              |                 |            | 1      | 99     | 25      | 0       | 21.65                 | 33.00  | 34.65                | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.52                 | 33.00  | 34.52                | 46.00  |
|              |                 |            | 100    | 0      | 1       | 24      | 21.34                 | 33.00  | 34.34                | 46.00  |
|              |                 |            | 100    | 0      | 25      | 0       | 21.57                 | 33.00  | 34.57                | 46.00  |
| 10MHz+ 20MHz | 2505.5+ 2519.9  | QPSK       | 1      | 49     | 1       | 0       | 21.45                 | 33.00  | 34.45                | 46.00  |
|              |                 |            | 1      | 24     | 1       | 49      | 21.93                 | 33.00  | 34.93                | 46.00  |
|              |                 |            | 50     | 0      | 100     | 0       | 21.64                 | 33.00  | 34.64                | 46.00  |
|              |                 | 16-QAM     | 1      | 49     | 1       | 0       | 21.96                 | 33.00  | 34.96                | 46.00  |
|              |                 |            | 1      | 24     | 1       | 49      | 21.98                 | 33.00  | 34.98                | 46.00  |
|              |                 |            | 50     | 0      | 100     | 0       | 21.60                 | 33.00  | 34.6                 | 46.00  |

| Bandwidth    | Frequency (MHz) | Modulation | PCC RB | PCC RB | SCC1 RB | SCC1 RB | Conducted Power (dBm) |        | E.I.R.P. (For ISEDC) |        |
|--------------|-----------------|------------|--------|--------|---------|---------|-----------------------|--------|----------------------|--------|
|              |                 |            | Size   | Offset | Size    | Offset  | Reading               | Limits | Reading              | Limits |
| 10MHz+ 20MHz | 2525.6+ 2540    | QPSK       | 1      | 49     | 1       | 0       | 21.55                 | 33.00  | 34.55                | 46.00  |
|              |                 |            | 1      | 24     | 1       | 49      | 21.27                 | 33.00  | 34.27                | 46.00  |
|              |                 |            | 50     | 0      | 100     | 0       | 21.70                 | 33.00  | 34.7                 | 46.00  |
|              |                 | 16-QAM     | 1      | 49     | 1       | 0       | 21.26                 | 33.00  | 34.26                | 46.00  |
|              |                 |            | 1      | 24     | 1       | 49      | 20.92                 | 33.00  | 33.92                | 46.00  |
|              |                 |            | 50     | 0      | 100     | 0       | 21.63                 | 33.00  | 34.63                | 46.00  |
| 10MHz+ 20MHz | 2545.6+ 2560    | QPSK       | 1      | 49     | 1       | 0       | 21.27                 | 33.00  | 34.27                | 46.00  |
|              |                 |            | 1      | 24     | 1       | 49      | 21.35                 | 33.00  | 34.35                | 46.00  |
|              |                 |            | 50     | 0      | 100     | 0       | 21.96                 | 33.00  | 34.96                | 46.00  |
|              |                 | 16-QAM     | 1      | 49     | 1       | 0       | 21.40                 | 33.00  | 34.4                 | 46.00  |
|              |                 |            | 1      | 24     | 1       | 49      | 21.47                 | 33.00  | 34.47                | 46.00  |
|              |                 |            | 50     | 0      | 100     | 0       | 22.02                 | 33.00  | 35.02                | 46.00  |
| 20MHz+ 10MHz | 2510.0+ 2524.4  | QPSK       | 1      | 99     | 1       | 0       | 21.75                 | 33.00  | 34.75                | 46.00  |
|              |                 |            | 100    | 0      | 50      | 0       | 21.98                 | 33.00  | 34.98                | 46.00  |
|              |                 | 16-QAM     | 1      | 99     | 1       | 0       | 21.68                 | 33.00  | 34.68                | 46.00  |
|              |                 |            | 100    | 0      | 50      | 0       | 21.96                 | 33.00  | 34.96                | 46.00  |
| 20MHz+ 10MHz | 2530.1 + 2544.5 | QPSK       | 1      | 99     | 1       | 0       | 21.63                 | 33.00  | 34.63                | 46.00  |
|              |                 |            | 100    | 0      | 50      | 0       | 21.87                 | 33.00  | 34.87                | 46.00  |
|              |                 | 16-QAM     | 1      | 99     | 1       | 0       | 21.68                 | 33.00  | 34.68                | 46.00  |
|              |                 |            | 100    | 0      | 50      | 0       | 21.88                 | 33.00  | 34.88                | 46.00  |
| 20MHz+ 10MHz | 2550.1+ 2564.5  | QPSK       | 1      | 99     | 1       | 0       | 21.58                 | 33.00  | 34.58                | 46.00  |
|              |                 |            | 100    | 0      | 50      | 0       | 22.06                 | 33.00  | 35.06                | 46.00  |
|              |                 | 16-QAM     | 1      | 99     | 1       | 0       | 21.56                 | 33.00  | 34.56                | 46.00  |
|              |                 |            | 100    | 0      | 50      | 0       | 22.15                 | 33.00  | 35.15                | 46.00  |
| 15MHz+ 15MHz | 2507.5 + 2522.5 | QPSK       | 1      | 74     | 1       | 0       | 21.73                 | 33.00  | 34.73                | 46.00  |
|              |                 |            | 75     | 0      | 75      | 0       | 21.86                 | 33.00  | 34.86                | 46.00  |
|              |                 | 16-QAM     | 1      | 74     | 1       | 0       | 21.96                 | 33.00  | 34.96                | 46.00  |
|              |                 |            | 75     | 0      | 75      | 0       | 21.95                 | 33.00  | 34.95                | 46.00  |
| 15MHz+ 15MHz | 2527.5+ 2542.5  | QPSK       | 1      | 74     | 1       | 0       | 21.62                 | 33.00  | 34.62                | 46.00  |
|              |                 |            | 75     | 0      | 75      | 0       | 21.26                 | 33.00  | 34.26                | 46.00  |
|              |                 | 16-QAM     | 1      | 74     | 1       | 0       | 21.64                 | 33.00  | 34.64                | 46.00  |
|              |                 |            | 75     | 0      | 75      | 0       | 21.51                 | 33.00  | 34.51                | 46.00  |
| 15MHz+ 15MHz | 2547.5 + 2562.5 | QPSK       | 1      | 74     | 1       | 0       | 21.24                 | 33.00  | 34.24                | 46.00  |
|              |                 |            | 75     | 0      | 75      | 0       | 22.36                 | 33.00  | 35.36                | 46.00  |
|              |                 | 16-QAM     | 1      | 74     | 1       | 0       | 21.44                 | 33.00  | 34.44                | 46.00  |
|              |                 |            | 75     | 0      | 75      | 0       | 22.08                 | 33.00  | 35.08                | 46.00  |
| 15MHz+ 20MHz | 2507.8 + 2524.9 | QPSK       | 1      | 74     | 1       | 0       | 21.92                 | 33.00  | 34.92                | 46.00  |
|              |                 |            | 1      | 36     | 1       | 49      | 21.84                 | 33.00  | 34.84                | 46.00  |
|              |                 |            | 75     | 0      | 100     | 0       | 22.14                 | 33.00  | 35.14                | 46.00  |
|              |                 | 16QAM      | 1      | 74     | 1       | 0       | 21.97                 | 33.00  | 34.97                | 46.00  |
|              |                 |            | 1      | 36     | 1       | 49      | 22.84                 | 33.00  | 35.84                | 46.00  |
|              |                 |            | 75     | 0      | 100     | 0       | 22.56                 | 33.00  | 35.56                | 46.00  |

| Bandwidth    | Frequency (MHz) | Modulation | PCC RB | PCC RB | SCC1 RB | SCC1 RB | Conducted Power (dBm) |        | E.I.R.P. (For ISED) |        |
|--------------|-----------------|------------|--------|--------|---------|---------|-----------------------|--------|---------------------|--------|
|              |                 |            | Size   | Offset | Size    | Offset  | Reading               | Limits | Reading             | Limits |
| 15MHz+ 20MHz | 2525.3+ 2542.4  | QPSK       | 1      | 74     | 1       | 0       | 21.75                 | 33.00  | 34.75               | 46.00  |
|              |                 |            | 1      | 36     | 1       | 49      | 20.63                 | 33.00  | 33.63               | 46.00  |
|              |                 |            | 75     | 0      | 100     | 0       | 21.81                 | 33.00  | 34.81               | 46.00  |
|              |                 | 16-QAM     | 1      | 74     | 1       | 0       | 21.69                 | 33.00  | 34.69               | 46.00  |
|              |                 |            | 1      | 36     | 1       | 49      | 20.77                 | 33.00  | 33.77               | 46.00  |
|              |                 |            | 75     | 0      | 100     | 0       | 21.59                 | 33.00  | 34.59               | 46.00  |
| 15MHz+ 20MHz | 2542.9+ 2560.0  | QPSK       | 1      | 74     | 1       | 0       | 21.83                 | 33.00  | 34.83               | 46.00  |
|              |                 |            | 1      | 36     | 1       | 49      | 21.75                 | 33.00  | 34.75               | 46.00  |
|              |                 |            | 75     | 0      | 100     | 0       | 22.32                 | 33.00  | 35.32               | 46.00  |
|              |                 | 16-QAM     | 1      | 74     | 1       | 0       | 21.83                 | 33.00  | 34.83               | 46.00  |
|              |                 |            | 1      | 36     | 1       | 49      | 21.82                 | 33.00  | 34.82               | 46.00  |
|              |                 |            | 75     | 0      | 100     | 0       | 22.14                 | 33.00  | 35.14               | 46.00  |
| 20MHz+ 15MHz | 2510.0+ 2527.1  | QPSK       | 1      | 99     | 1       | 0       | 21.57                 | 33.00  | 34.57               | 46.00  |
|              |                 |            | 100    | 0      | 75      | 0       | 21.75                 | 33.00  | 34.75               | 46.00  |
|              |                 | 16-QAM     | 1      | 99     | 1       | 0       | 21.49                 | 33.00  | 34.49               | 46.00  |
|              |                 |            | 100    | 0      | 75      | 0       | 21.87                 | 33.00  | 34.87               | 46.00  |
| 20MHz+ 15MHz | 2527.6+ 2544.7  | QPSK       | 1      | 99     | 1       | 0       | 21.59                 | 33.00  | 34.59               | 46.00  |
|              |                 |            | 100    | 0      | 75      | 0       | 22.06                 | 33.00  | 35.06               | 46.00  |
|              |                 | 16-QAM     | 1      | 99     | 1       | 0       | 21.57                 | 33.00  | 34.57               | 46.00  |
|              |                 |            | 100    | 0      | 75      | 0       | 21.96                 | 33.00  | 34.96               | 46.00  |
| 20MHz+ 15MHz | 2545.1+ 2562.2  | QPSK       | 1      | 99     | 1       | 0       | 21.73                 | 33.00  | 34.73               | 46.00  |
|              |                 |            | 100    | 0      | 75      | 0       | 21.87                 | 33.00  | 34.87               | 46.00  |
|              |                 | 16-QAM     | 1      | 99     | 1       | 0       | 21.71                 | 33.00  | 34.71               | 46.00  |
|              |                 |            | 100    | 0      | 75      | 0       | 22.05                 | 33.00  | 35.05               | 46.00  |
| 20MHz+ 20MHz | 2510.0+ 2529.8  | QPSK       | 1      | 0      | 1       | 0       | 21.59                 | 33.00  | 34.59               | 46.00  |
|              |                 |            | 1      | 0      | 1       | 99      | 20.92                 | 33.00  | 33.92               | 46.00  |
|              |                 |            | 1      | 0      | 100     | 0       | 22.15                 | 33.00  | 35.15               | 46.00  |
|              |                 |            | 1      | 49     | 1       | 49      | 22.18                 | 33.00  | 35.18               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.37                 | 33.00  | 34.37               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 99      | 20.81                 | 33.00  | 33.81               | 46.00  |
|              |                 |            | 1      | 99     | 100     | 0       | 21.67                 | 33.00  | 34.67               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 22.03                 | 33.00  | 35.03               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 99      | 21.32                 | 33.00  | 34.32               | 46.00  |
|              |                 |            | 100    | 0      | 100     | 0       | 21.76                 | 33.00  | 34.76               | 46.00  |
|              |                 | 16-QAM     | 1      | 0      | 1       | 0       | 21.42                 | 33.00  | 34.42               | 46.00  |
|              |                 |            | 1      | 0      | 1       | 99      | 20.73                 | 33.00  | 33.73               | 46.00  |
|              |                 |            | 1      | 0      | 100     | 0       | 21.98                 | 33.00  | 34.98               | 46.00  |
|              |                 |            | 1      | 49     | 1       | 49      | 22.05                 | 33.00  | 35.05               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.28                 | 33.00  | 34.28               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 99      | 20.84                 | 33.00  | 33.84               | 46.00  |
|              |                 |            | 1      | 99     | 100     | 0       | 21.68                 | 33.00  | 34.68               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.84                 | 33.00  | 34.84               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 99      | 21.16                 | 33.00  | 34.16               | 46.00  |
|              |                 |            | 100    | 0      | 100     | 0       | 21.62                 | 33.00  | 34.62               | 46.00  |

| Bandwidth    | Frequency (MHz) | Modulation | PCC RB | PCC RB | SCC1 RB | SCC1 RB | Conducted Power (dBm) |        | E.I.R.P. (For ISED) |        |
|--------------|-----------------|------------|--------|--------|---------|---------|-----------------------|--------|---------------------|--------|
|              |                 |            | Size   | Offset | Size    | Offset  | Reading               | Limits | Reading             | Limits |
| 20MHz+ 20MHz | 2525.1 + 2544.9 | QPSK       | 1      | 0      | 1       | 0       | 21.70                 | 33.00  | 34.7                | 46.00  |
|              |                 |            | 1      | 0      | 1       | 99      | 20.59                 | 33.00  | 33.59               | 46.00  |
|              |                 |            | 1      | 0      | 100     | 0       | 20.74                 | 33.00  | 33.74               | 46.00  |
|              |                 |            | 1      | 49     | 1       | 49      | 21.18                 | 33.00  | 34.18               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.46                 | 33.00  | 34.46               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 99      | 20.84                 | 33.00  | 33.84               | 46.00  |
|              |                 |            | 1      | 99     | 100     | 0       | 20.71                 | 33.00  | 33.71               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.06                 | 33.00  | 34.06               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 99      | 21.07                 | 33.00  | 34.07               | 46.00  |
|              |                 |            | 100    | 0      | 100     | 0       | 21.58                 | 33.00  | 34.58               | 46.00  |
|              |                 | 16-QAM     | 1      | 0      | 1       | 0       | 21.18                 | 33.00  | 34.18               | 46.00  |
|              |                 |            | 1      | 0      | 1       | 99      | 20.16                 | 33.00  | 33.16               | 46.00  |
|              |                 |            | 1      | 0      | 100     | 0       | 20.63                 | 33.00  | 33.63               | 46.00  |
|              |                 |            | 1      | 49     | 1       | 49      | 20.74                 | 33.00  | 33.74               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.20                 | 33.00  | 34.2                | 46.00  |
|              |                 |            | 1      | 99     | 1       | 99      | 20.51                 | 33.00  | 33.51               | 46.00  |
|              |                 |            | 1      | 99     | 100     | 0       | 20.08                 | 33.00  | 33.08               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.11                 | 33.00  | 34.11               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 99      | 21.05                 | 33.00  | 34.05               | 46.00  |
|              |                 |            | 100    | 0      | 100     | 0       | 21.65                 | 33.00  | 34.65               | 46.00  |
| 20MHz+ 20MHz | 2540.2+ 2560.0  | QPSK       | 1      | 0      | 1       | 0       | 20.21                 | 33.00  | 33.21               | 46.00  |
|              |                 |            | 1      | 0      | 1       | 99      | 20.17                 | 33.00  | 33.17               | 46.00  |
|              |                 |            | 1      | 0      | 100     | 0       | 20.19                 | 33.00  | 33.19               | 46.00  |
|              |                 |            | 1      | 49     | 1       | 49      | 21.04                 | 33.00  | 34.04               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.14                 | 33.00  | 34.14               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 99      | 21.25                 | 33.00  | 34.25               | 46.00  |
|              |                 |            | 1      | 99     | 100     | 0       | 21.24                 | 33.00  | 34.24               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.01                 | 33.00  | 34.01               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 99      | 20.73                 | 33.00  | 33.73               | 46.00  |
|              |                 |            | 100    | 0      | 100     | 0       | 20.76                 | 33.00  | 33.76               | 46.00  |
|              |                 | 16-QAM     | 1      | 0      | 1       | 0       | 20.20                 | 33.00  | 33.2                | 46.00  |
|              |                 |            | 1      | 0      | 1       | 99      | 20.24                 | 33.00  | 33.24               | 46.00  |
|              |                 |            | 1      | 0      | 100     | 0       | 20.26                 | 33.00  | 33.26               | 46.00  |
|              |                 |            | 1      | 49     | 1       | 49      | 20.93                 | 33.00  | 33.93               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.14                 | 33.00  | 34.14               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 99      | 21.27                 | 33.00  | 34.27               | 46.00  |
|              |                 |            | 1      | 99     | 100     | 0       | 21.31                 | 33.00  | 34.31               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.10                 | 33.00  | 34.1                | 46.00  |
|              |                 |            | 100    | 0      | 1       | 99      | 21.06                 | 33.00  | 34.06               | 46.00  |
|              |                 |            | 100    | 0      | 100     | 0       | 21.37                 | 33.00  | 34.37               | 46.00  |

Note: the device is fixed subscriber equipment.

**PAR, Band 7 (Carrier Aggregation):**

| Bandwidth   | Frequency (MHz) | Modulation | PAR(dB) | Limit(dB) |
|-------------|-----------------|------------|---------|-----------|
| 5MHz+20MHz  | 2525.80+2537.50 | QPSK       | 6.11    | 13.00     |
|             |                 | 16-QAM     | 6.25    | 13.00     |
| 10MHz+20MHz | 2525.60+2540.00 | QPSK       | 6.57    | 13.00     |
|             |                 | 16-QAM     | 6.01    | 13.00     |
| 15MHz+15MHz | 2527.50+2542.50 | QPSK       | 6.16    | 13.00     |
|             |                 | 16-QAM     | 6.26    | 13.00     |
| 15MHz+20MHz | 2525.30+2542.40 | QPSK       | 6.39    | 13.00     |
|             |                 | 16-QAM     | 6.87    | 13.00     |
| 20MHz+5MHz  | 2532.50+2544.20 | QPSK       | 6.73    | 13.00     |
|             |                 | 16-QAM     | 6.31    | 13.00     |
| 20MHz+10MHz | 2550.10+2564.50 | QPSK       | 6.58    | 13.00     |
|             |                 | 16-QAM     | 7.06    | 13.00     |
| 20MHz+15MHz | 2527.60+2544.70 | QPSK       | 6.61    | 13.00     |
|             |                 | 16-QAM     | 6.29    | 13.00     |
| 20MHz+20MHz | 2525.10+2544.90 | QPSK       | 6.31    | 13.00     |
|             |                 | 16-QAM     | 6.87    | 13.00     |

Note: peak-to-average ratio (PAR) <13 dB.

**Band 40(2305-2320MHz):**

**Peak Power within any 5 megahertz:**

| Test Bandwidth | Test Frequency (MHz) | Resource Block & RB offset | Peak Output Power (dBm/5MHz) |        | Antenna Gain (dBi) | Peak EIRP (dBm/5MHz) |        |        |
|----------------|----------------------|----------------------------|------------------------------|--------|--------------------|----------------------|--------|--------|
|                |                      |                            | QPSK                         | 16-QAM |                    | QPSK                 | 16-QAM | Limits |
| 5M             | 2307.5               | 1#0                        | 26.60                        | 26.09  | 13.00              | 39.60                | 39.09  | 43     |
|                |                      | 1#13                       | 26.42                        | 26.01  | 13.00              | 39.42                | 39.01  | 43     |
|                |                      | 1#24                       | 26.38                        | 25.75  | 13.00              | 39.38                | 38.75  | 43     |
|                |                      | 12#0                       | 26.17                        | 25.95  | 13.00              | 39.17                | 38.95  | 43     |
|                |                      | 12#6                       | 26.23                        | 25.69  | 13.00              | 39.23                | 38.69  | 43     |
|                |                      | 12#13                      | 26.23                        | 25.69  | 13.00              | 39.23                | 38.69  | 43     |
|                |                      | 25#0                       | 25.75                        | 26.33  | 13.00              | 38.75                | 39.33  | 43     |
|                | 2312.5               | 1#0                        | 25.75                        | 26.33  | 13.00              | 38.75                | 39.33  | 43     |
|                |                      | 1#13                       | 25.81                        | 26.48  | 13.00              | 38.81                | 39.48  | 43     |
|                |                      | 1#24                       | 25.34                        | 25.95  | 13.00              | 38.34                | 38.95  | 43     |
|                |                      | 12#0                       | 25.52                        | 26.12  | 13.00              | 38.52                | 39.12  | 43     |
|                |                      | 12#6                       | 25.22                        | 25.83  | 13.00              | 38.22                | 38.83  | 43     |
|                |                      | 12#13                      | 25.60                        | 26.08  | 13.00              | 38.60                | 39.08  | 43     |
|                |                      | 25#0                       | 25.60                        | 26.08  | 13.00              | 38.60                | 39.08  | 43     |
|                | 2317.5               | 1#0                        | 26.46                        | 26.33  | 13.00              | 39.46                | 39.33  | 43     |
|                |                      | 1#13                       | 26.31                        | 26.05  | 13.00              | 39.31                | 39.05  | 43     |
|                |                      | 1#24                       | 26.31                        | 26.32  | 13.00              | 39.31                | 39.32  | 43     |
|                |                      | 12#0                       | 26.29                        | 25.95  | 13.00              | 39.29                | 38.95  | 43     |
|                |                      | 12#6                       | 26.41                        | 25.99  | 13.00              | 39.41                | 38.99  | 43     |
|                |                      | 12#13                      | 26.35                        | 25.79  | 13.00              | 39.35                | 38.79  | 43     |
|                |                      | 25#0                       | 26.36                        | 26.34  | 13.00              | 39.36                | 39.34  | 43     |
| 10M            | 2310                 | 1#0                        | 26.12                        | 26.14  | 13.00              | 39.12                | 39.14  | 43     |
|                |                      | 1#25                       | 26.23                        | 26.01  | 13.00              | 39.23                | 39.01  | 43     |
|                |                      | 1#49                       | 26.13                        | 25.32  | 13.00              | 39.13                | 38.32  | 43     |
|                |                      | 25#0                       | 24.01                        | 23.76  | 13.00              | 37.01                | 36.76  | 43     |
|                |                      | 25#13                      | 24.60                        | 24.21  | 13.00              | 37.6                 | 37.21  | 43     |
|                |                      | 25#25                      | 24.52                        | 24.67  | 13.00              | 37.52                | 37.67  | 43     |
|                |                      | 50#0                       | 23.87                        | 23.23  | 13.00              | 36.87                | 36.23  | 43     |
|                | 2312.5               | 1#0                        | 26.09                        | 25.65  | 13.00              | 39.09                | 38.65  | 43     |
|                |                      | 1#25                       | 24.65                        | 25.76  | 13.00              | 37.65                | 38.76  | 43     |
|                |                      | 1#49                       | 25.65                        | 25.43  | 13.00              | 38.65                | 38.43  | 43     |
|                |                      | 25#0                       | 24.03                        | 24.07  | 13.00              | 37.03                | 37.07  | 43     |
|                |                      | 25#13                      | 24.43                        | 24.43  | 13.00              | 37.43                | 37.43  | 43     |
|                |                      | 25#25                      | 24.11                        | 24.32  | 13.00              | 37.11                | 37.32  | 43     |
|                |                      | 50#0                       | 24.25                        | 24.23  | 13.00              | 37.25                | 37.23  | 43     |
|                | 2315                 | 1#0                        | 24.41                        | 24.54  | 13.00              | 37.41                | 37.54  | 43     |
|                |                      | 1#25                       | 24.54                        | 24.11  | 13.00              | 37.54                | 37.11  | 43     |
|                |                      | 1#49                       | 24.56                        | 24.43  | 13.00              | 37.56                | 37.43  | 43     |
|                |                      | 25#0                       | 24.89                        | 24.76  | 13.00              | 37.89                | 37.76  | 43     |
|                |                      | 25#13                      | 24.85                        | 24.56  | 13.00              | 37.85                | 37.56  | 43     |
|                |                      | 25#25                      | 24.81                        | 26.54  | 13.00              | 37.81                | 39.54  | 43     |
|                |                      | 50#0                       | 25.42                        | 25.82  | 13.00              | 38.42                | 38.82  | 43     |

| Test Bandwidth | Test Frequency (MHz) | Resource Block & RB offset | Peak Output Power (dBm/5MHz) |        | Antenna Gain (dBi) | Peak EIRP (dBm/5MHz) |        |        |
|----------------|----------------------|----------------------------|------------------------------|--------|--------------------|----------------------|--------|--------|
|                |                      |                            | QPSK                         | 16-QAM |                    | QPSK                 | 16-QAM | Limits |
| 15M            | 2312.5               | 1#0                        | 25.09                        | 25.23  | 13.00              | 38.09                | 38.23  | 43     |
|                |                      | 1#38                       | 25.23                        | 25.31  | 13.00              | 38.23                | 38.31  | 43     |
|                |                      | 1#74                       | 24.33                        | 25.13  | 13.00              | 37.33                | 38.13  | 43     |
|                |                      | 36#0                       | 24.12                        | 24.88  | 13.00              | 37.12                | 37.88  | 43     |
|                |                      | 36#19                      | 23.45                        | 25.13  | 13.00              | 36.45                | 38.13  | 43     |
|                |                      | 36#39                      | 24.44                        | 25.44  | 13.00              | 37.44                | 38.44  | 43     |
|                |                      | 75#0                       | 25.23                        | 25.37  | 13.00              | 38.23                | 38.37  | 43     |

**Average Power within any 5 megahertz:**

| Test Bandwidth | Test Frequency (MHz) | Resource Block & RB offset | Average Output Power (dBm/5MHz) |        | Antenna Gain (dBi) | Average EIRP (dBm/5MHz) |        | Limit (dBm) |
|----------------|----------------------|----------------------------|---------------------------------|--------|--------------------|-------------------------|--------|-------------|
|                |                      |                            | QPSK                            | 16-QAM |                    | QPSK                    | 16-QAM |             |
| 5M             | 2307.5               | 1#0                        | 19.13                           | 19.51  | 13.00              | 32.13                   | 32.51  | 33          |
|                |                      | 1#13                       | 19.52                           | 19.48  | 13.00              | 32.52                   | 32.48  |             |
|                |                      | 1#24                       | 19.90                           | 19.30  | 13.00              | 32.90                   | 32.30  |             |
|                |                      | 12#0                       | 19.77                           | 19.31  | 13.00              | 32.77                   | 32.31  |             |
|                |                      | 12#6                       | 19.70                           | 19.20  | 13.00              | 32.70                   | 32.20  |             |
|                |                      | 12#13                      | 19.23                           | 19.23  | 13.00              | 32.23                   | 32.23  |             |
|                |                      | 25#0                       | 19.63                           | 19.56  | 13.00              | 32.63                   | 32.56  |             |
|                | 2312.5               | 1#0                        | 19.07                           | 19.55  | 13.00              | 32.07                   | 32.55  |             |
|                |                      | 1#13                       | 19.21                           | 19.65  | 13.00              | 32.21                   | 32.65  |             |
|                |                      | 1#24                       | 19.57                           | 19.07  | 13.00              | 32.57                   | 32.07  |             |
|                |                      | 12#0                       | 19.51                           | 18.90  | 13.00              | 32.51                   | 31.90  |             |
|                |                      | 12#6                       | 19.81                           | 18.90  | 13.00              | 32.81                   | 31.90  |             |
|                |                      | 12#13                      | 19.71                           | 19.05  | 13.00              | 32.71                   | 32.05  |             |
|                |                      | 25#0                       | 19.48                           | 19.40  | 13.00              | 32.48                   | 32.40  |             |
|                | 2317.5               | 1#0                        | 19.85                           | 19.75  | 13.00              | 32.85                   | 32.75  |             |
|                |                      | 1#13                       | 19.57                           | 19.68  | 13.00              | 32.57                   | 32.68  |             |
|                |                      | 1#24                       | 19.68                           | 19.51  | 13.00              | 32.68                   | 32.51  |             |
|                |                      | 12#0                       | 19.56                           | 19.54  | 13.00              | 32.56                   | 32.54  |             |
|                |                      | 12#6                       | 19.43                           | 19.41  | 13.00              | 32.43                   | 32.41  |             |
|                |                      | 12#13                      | 19.72                           | 19.36  | 13.00              | 32.72                   | 32.36  |             |
|                |                      | 25#0                       | 19.49                           | 19.42  | 13.00              | 32.49                   | 32.42  |             |
| 10M            | 2310                 | 1#0                        | 19.32                           | 19.73  | 13.00              | 32.32                   | 32.73  | 33          |
|                |                      | 1#25                       | 19.37                           | 19.87  | 13.00              | 32.37                   | 32.87  |             |
|                |                      | 1#49                       | 18.47                           | 19.79  | 13.00              | 31.47                   | 32.79  |             |
|                |                      | 25#0                       | 18.86                           | 18.50  | 13.00              | 31.86                   | 31.50  |             |
|                |                      | 25#13                      | 18.82                           | 18.30  | 13.00              | 31.82                   | 31.30  |             |
|                |                      | 25#25                      | 18.33                           | 17.94  | 13.00              | 31.33                   | 30.94  |             |
|                |                      | 50#0                       | 17.22                           | 16.62  | 13.00              | 30.22                   | 29.62  |             |
|                | 2312.5               | 1#0                        | 19.05                           | 19.47  | 13.00              | 32.05                   | 32.47  |             |
|                |                      | 1#25                       | 18.84                           | 19.33  | 13.00              | 31.84                   | 32.33  |             |
|                |                      | 1#49                       | 18.62                           | 19.91  | 13.00              | 31.62                   | 32.91  |             |
|                |                      | 25#0                       | 18.57                           | 18.21  | 13.00              | 31.57                   | 31.21  |             |
|                |                      | 25#13                      | 18.36                           | 18.02  | 13.00              | 31.36                   | 31.02  |             |
|                |                      | 25#25                      | 18.15                           | 17.92  | 13.00              | 31.15                   | 30.92  |             |
|                |                      | 50#0                       | 16.91                           | 16.10  | 13.00              | 29.91                   | 29.10  |             |
|                | 2315                 | 1#0                        | 19.64                           | 19.82  | 13.00              | 32.64                   | 32.82  |             |
|                |                      | 1#25                       | 19.40                           | 19.96  | 13.00              | 32.40                   | 32.96  |             |
|                |                      | 1#49                       | 19.85                           | 19.64  | 13.00              | 32.85                   | 32.64  |             |
|                |                      | 25#0                       | 18.21                           | 18.01  | 13.00              | 31.21                   | 31.01  |             |
|                |                      | 25#13                      | 18.45                           | 18.17  | 13.00              | 31.45                   | 31.17  |             |
|                |                      | 25#25                      | 18.55                           | 18.30  | 13.00              | 31.55                   | 31.30  |             |
|                |                      | 50#0                       | 17.43                           | 16.53  | 13.00              | 30.43                   | 29.53  |             |
| 15M            | 2312.5               | 1#0                        | 19.99                           | 19.85  | 13.00              | 32.99                   | 32.85  | 33          |
|                |                      | 1#38                       | 18.95                           | 19.62  | 13.00              | 31.95                   | 32.62  |             |
|                |                      | 1#74                       | 18.88                           | 19.60  | 13.00              | 31.88                   | 32.60  |             |
|                |                      | 36#0                       | 17.95                           | 17.39  | 13.00              | 30.95                   | 30.39  |             |
|                |                      | 36#19                      | 17.80                           | 17.20  | 13.00              | 30.80                   | 30.20  |             |
|                |                      | 36#39                      | 17.77                           | 17.19  | 13.00              | 30.77                   | 30.19  |             |
|                |                      | 75#0                       | 15.77                           | 15.07  | 13.00              | 28.77                   | 28.07  |             |

Note: the device is a fixed Outdoor customer premises equipment(CPE) using TDD technology. For 5MHz mode, the channel power is equal to the test result in dBm/5MHz. For 10MHz and 15MHz mode, the channel power as below:

**Average Power:**

| Test Bandwidth | Test Frequency (MHz) | Resource Block & RB offset | Average Output Power (dBm) |        | Antenna Gain (dBi) | Average EIRP (dBm) |        |
|----------------|----------------------|----------------------------|----------------------------|--------|--------------------|--------------------|--------|
|                |                      |                            | QPSK                       | 16-QAM |                    | QPSK               | 16-QAM |
| 10M            | 2310                 | 1#0                        | 19.91                      | 19.93  | 13.00              | 32.91              | 32.93  |
|                |                      | 1#25                       | 19.98                      | 19.98  | 13.00              | 32.98              | 32.98  |
|                |                      | 1#49                       | 19.81                      | 19.95  | 13.00              | 32.81              | 32.95  |
|                |                      | 25#0                       | 19.95                      | 19.32  | 13.00              | 32.95              | 32.32  |
|                |                      | 25#13                      | 19.71                      | 19.14  | 13.00              | 32.71              | 32.14  |
|                |                      | 25#25                      | 19.88                      | 19.29  | 13.00              | 32.88              | 32.29  |
|                |                      | 50#0                       | 19.62                      | 19.67  | 13.00              | 32.62              | 32.67  |
|                | 2312.5               | 1#0                        | 19.98                      | 19.92  | 13.00              | 32.98              | 32.92  |
|                |                      | 1#25                       | 19.76                      | 19.51  | 13.00              | 32.76              | 32.51  |
|                |                      | 1#49                       | 19.73                      | 19.98  | 13.00              | 32.73              | 32.98  |
|                |                      | 25#0                       | 19.49                      | 19.89  | 13.00              | 32.49              | 32.89  |
|                |                      | 25#13                      | 19.82                      | 19.76  | 13.00              | 32.82              | 32.76  |
|                |                      | 25#25                      | 19.73                      | 19.84  | 13.00              | 32.73              | 32.84  |
|                |                      | 50#0                       | 19.42                      | 19.36  | 13.00              | 32.42              | 32.36  |
|                | 2315                 | 1#0                        | 19.95                      | 19.98  | 13.00              | 32.95              | 32.98  |
|                |                      | 1#25                       | 19.88                      | 19.97  | 13.00              | 32.88              | 32.97  |
|                |                      | 1#49                       | 19.95                      | 19.95  | 13.00              | 32.95              | 32.95  |
|                |                      | 25#0                       | 19.87                      | 19.5   | 13.00              | 32.87              | 32.5   |
|                |                      | 25#13                      | 19.72                      | 19.25  | 13.00              | 32.72              | 32.25  |
|                |                      | 25#25                      | 19.86                      | 19.3   | 13.00              | 32.86              | 32.3   |
|                |                      | 50#0                       | 19.47                      | 19.56  | 13.00              | 32.47              | 32.56  |
| 15M            | 2312.5               | 1#0                        | 20.16                      | 20.21  | 13.00              | 33.16              | 33.21  |
|                |                      | 1#38                       | 19.68                      | 20.06  | 13.00              | 32.68              | 33.06  |
|                |                      | 1#74                       | 19.56                      | 20.16  | 13.00              | 32.56              | 33.16  |
|                |                      | 36#0                       | 19.84                      | 19.22  | 13.00              | 32.84              | 32.22  |
|                |                      | 36#19                      | 19.68                      | 19.55  | 13.00              | 32.68              | 32.55  |
|                |                      | 36#39                      | 19.8                       | 19.41  | 13.00              | 32.8               | 32.41  |
|                |                      | 75#0                       | 19.58                      | 19.61  | 13.00              | 32.58              | 32.61  |

**Band 40(2345-2360MHz):**

**Peak Power within any 5 megahertz:**

| Test Bandwidth | Test Frequency (MHz) | Resource Block & RB offset | Peak Output Power (dBm/5MHz) |        | Antenna Gain (dBi) | Peak EIRP (dBm/5MHz) |        |        |
|----------------|----------------------|----------------------------|------------------------------|--------|--------------------|----------------------|--------|--------|
|                |                      |                            | QPSK                         | 16-QAM |                    | QPSK                 | 16-QAM | Limits |
| 5M             | 2347.5               | 1#0                        | 26.60                        | 26.09  | 13.00              | 39.60                | 39.09  | 43     |
|                |                      | 1#13                       | 26.42                        | 26.01  | 13.00              | 39.42                | 39.01  | 43     |
|                |                      | 1#24                       | 26.38                        | 25.75  | 13.00              | 39.38                | 38.75  | 43     |
|                |                      | 12#0                       | 26.17                        | 25.95  | 13.00              | 39.17                | 38.95  | 43     |
|                |                      | 12#6                       | 26.23                        | 25.69  | 13.00              | 39.23                | 38.69  | 43     |
|                |                      | 12#13                      | 26.64                        | 25.85  | 13.00              | 39.64                | 38.85  | 43     |
|                |                      | 25#0                       | 26.62                        | 26.67  | 13.00              | 39.62                | 39.67  | 43     |
|                | 2352.5               | 1#0                        | 25.75                        | 26.33  | 13.00              | 38.75                | 39.33  | 43     |
|                |                      | 1#13                       | 25.81                        | 26.48  | 13.00              | 38.81                | 39.48  | 43     |
|                |                      | 1#24                       | 25.34                        | 25.95  | 13.00              | 38.34                | 38.95  | 43     |
|                |                      | 12#0                       | 25.52                        | 26.12  | 13.00              | 38.52                | 39.12  | 43     |
|                |                      | 12#6                       | 25.22                        | 25.83  | 13.00              | 38.22                | 38.83  | 43     |
|                |                      | 12#13                      | 25.60                        | 26.08  | 13.00              | 38.60                | 39.08  | 43     |
|                |                      | 25#0                       | 26.66                        | 26.25  | 13.00              | 39.66                | 39.25  | 43     |
|                | 2357.5               | 1#0                        | 26.46                        | 26.33  | 13.00              | 39.46                | 39.33  | 43     |
|                |                      | 1#13                       | 26.31                        | 26.05  | 13.00              | 39.31                | 39.05  | 43     |
|                |                      | 1#24                       | 26.31                        | 26.32  | 13.00              | 39.31                | 39.32  | 43     |
|                |                      | 12#0                       | 26.29                        | 25.95  | 13.00              | 39.29                | 38.95  | 43     |
|                |                      | 12#6                       | 26.41                        | 25.99  | 13.00              | 39.41                | 38.99  | 43     |
|                |                      | 12#13                      | 26.35                        | 25.79  | 13.00              | 39.35                | 38.79  | 43     |
|                |                      | 25#0                       | 26.36                        | 26.34  | 13.00              | 39.36                | 39.34  | 43     |
| 10M            | 2350                 | 1#0                        | 26.31                        | 26.38  | 13.00              | 39.31                | 39.38  | 43     |
|                |                      | 1#25                       | 26.45                        | 26.25  | 13.00              | 39.45                | 39.25  | 43     |
|                |                      | 1#49                       | 26.39                        | 25.65  | 13.00              | 39.39                | 38.65  | 43     |
|                |                      | 25#0                       | 26.44                        | 26.20  | 13.00              | 39.44                | 39.20  | 43     |
|                |                      | 25#13                      | 26.60                        | 26.01  | 13.00              | 39.60                | 39.01  | 43     |
|                |                      | 25#25                      | 26.57                        | 26.40  | 13.00              | 39.57                | 39.40  | 43     |
|                |                      | 50#0                       | 27.43                        | 27.35  | 13.00              | 40.43                | 40.35  | 43     |
|                | 2352.5               | 1#0                        | 26.41                        | 25.92  | 13.00              | 39.41                | 38.92  | 43     |
|                |                      | 1#25                       | 26.18                        | 26.05  | 13.00              | 39.18                | 39.05  | 43     |
|                |                      | 1#49                       | 26.16                        | 25.71  | 13.00              | 39.16                | 38.71  | 43     |
|                |                      | 25#0                       | 26.03                        | 26.07  | 13.00              | 39.03                | 39.07  | 43     |
|                |                      | 25#13                      | 25.89                        | 25.82  | 13.00              | 38.89                | 38.82  | 43     |
|                |                      | 25#25                      | 26.28                        | 26.08  | 13.00              | 39.28                | 39.08  | 43     |
|                |                      | 50#0                       | 26.65                        | 26.18  | 13.00              | 39.65                | 39.18  | 43     |
|                | 2355                 | 1#0                        | 26.49                        | 26.28  | 13.00              | 39.49                | 39.28  | 43     |
|                |                      | 1#25                       | 26.55                        | 26.05  | 13.00              | 39.55                | 39.05  | 43     |
|                |                      | 1#49                       | 26.61                        | 26.28  | 13.00              | 39.61                | 39.28  | 43     |
|                |                      | 25#0                       | 26.80                        | 26.26  | 13.00              | 39.80                | 39.26  | 43     |
|                |                      | 25#13                      | 26.81                        | 26.56  | 13.00              | 39.81                | 39.56  | 43     |
|                |                      | 25#25                      | 26.82                        | 26.54  | 13.00              | 39.82                | 39.54  | 43     |
|                |                      | 50#0                       | 27.42                        | 26.86  | 13.00              | 40.42                | 39.86  | 43     |

| Test Bandwidth | Test Frequency (MHz) | Resource Block & RB offset | Peak Output Power (dBm/5MHz) |        | Antenna Gain (dBi) | Peak EIRP (dBm/5MHz) |        |        |
|----------------|----------------------|----------------------------|------------------------------|--------|--------------------|----------------------|--------|--------|
|                |                      |                            | QPSK                         | 16-QAM |                    | QPSK                 | 16-QAM | Limits |
| 15M            | 2352.5               | 1#0                        | 25.93                        | 26.29  | 13.00              | 38.93                | 39.29  | 43     |
|                |                      | 1#38                       | 26.05                        | 26.35  | 13.00              | 39.05                | 39.35  | 43     |
|                |                      | 1#74                       | 25.70                        | 26.16  | 13.00              | 38.70                | 39.16  | 43     |
|                |                      | 36#0                       | 25.53                        | 26.41  | 13.00              | 38.53                | 39.41  | 43     |
|                |                      | 36#19                      | 25.45                        | 26.14  | 13.00              | 38.45                | 39.14  | 43     |
|                |                      | 36#39                      | 25.68                        | 26.20  | 13.00              | 38.68                | 39.20  | 43     |
|                |                      | 75#0                       | 26.92                        | 26.37  | 13.00              | 39.92                | 39.37  | 43     |

**Average Power within any 5 megahertz:**

| Test Bandwidth | Test Frequency (MHz) | Resource Block & RB offset | Average Output Power (dBm/5MHz) |        | Antenna Gain (dBi) | Average EIRP (dBm/5MHz) |        | Limit (dBm) |
|----------------|----------------------|----------------------------|---------------------------------|--------|--------------------|-------------------------|--------|-------------|
|                |                      |                            | QPSK                            | 16-QAM |                    | QPSK                    | 16-QAM |             |
| 5M             | 2347.5               | 1#0                        | 19.93                           | 19.32  | 13.00              | 32.93                   | 32.32  | 33          |
|                |                      | 1#13                       | 19.88                           | 19.51  | 13.00              | 32.88                   | 32.51  |             |
|                |                      | 1#24                       | 19.78                           | 19.06  | 13.00              | 32.78                   | 32.06  |             |
|                |                      | 12#0                       | 19.90                           | 18.95  | 13.00              | 32.90                   | 31.95  |             |
|                |                      | 12#6                       | 19.69                           | 18.82  | 13.00              | 32.69                   | 31.82  |             |
|                |                      | 12#13                      | 19.79                           | 19.35  | 13.00              | 32.79                   | 32.35  |             |
|                |                      | 25#0                       | 19.57                           | 19.64  | 13.00              | 32.57                   | 32.64  |             |
|                | 2352.5               | 1#0                        | 19.89                           | 19.41  | 13.00              | 32.89                   | 32.41  |             |
|                |                      | 1#13                       | 19.81                           | 19.62  | 13.00              | 32.81                   | 32.62  |             |
|                |                      | 1#24                       | 19.66                           | 19.95  | 13.00              | 32.66                   | 32.95  |             |
|                |                      | 12#0                       | 19.70                           | 19.96  | 13.00              | 32.70                   | 32.96  |             |
|                |                      | 12#6                       | 19.94                           | 20.22  | 13.00              | 32.94                   | 33.22  |             |
|                |                      | 12#13                      | 19.45                           | 19.96  | 13.00              | 32.45                   | 32.96  |             |
|                |                      | 25#0                       | 19.58                           | 19.63  | 13.00              | 32.58                   | 32.63  |             |
|                | 2357.5               | 1#0                        | 19.55                           | 18.74  | 13.00              | 32.55                   | 31.74  |             |
|                |                      | 1#13                       | 19.64                           | 18.88  | 13.00              | 32.64                   | 31.88  |             |
|                |                      | 1#24                       | 19.19                           | 18.41  | 13.00              | 32.19                   | 31.41  |             |
|                |                      | 12#0                       | 19.32                           | 18.71  | 13.00              | 32.32                   | 31.71  |             |
|                |                      | 12#6                       | 19.47                           | 18.30  | 13.00              | 32.47                   | 31.30  |             |
|                |                      | 12#13                      | 19.13                           | 18.51  | 13.00              | 32.13                   | 31.51  |             |
|                |                      | 25#0                       | 19.58                           | 18.59  | 13.00              | 32.58                   | 31.59  |             |
| 10M            | 2350                 | 1#0                        | 19.15                           | 19.11  | 13.00              | 32.15                   | 32.11  | 33          |
|                |                      | 1#25                       | 19.57                           | 19.2   | 13.00              | 32.57                   | 32.2   |             |
|                |                      | 1#49                       | 19.47                           | 18.88  | 13.00              | 32.47                   | 31.88  |             |
|                |                      | 25#0                       | 18.74                           | 18.97  | 13.00              | 31.74                   | 31.97  |             |
|                |                      | 25#13                      | 18.79                           | 18.41  | 13.00              | 31.79                   | 31.41  |             |
|                |                      | 25#25                      | 18.77                           | 18.46  | 13.00              | 31.77                   | 31.46  |             |
|                |                      | 50#0                       | 17.69                           | 17.44  | 13.00              | 30.69                   | 30.44  |             |
|                | 2352.5               | 1#0                        | 19.18                           | 18.97  | 13.00              | 32.18                   | 31.97  |             |
|                |                      | 1#25                       | 19.29                           | 19.22  | 13.00              | 32.29                   | 32.22  |             |
|                |                      | 1#49                       | 19.74                           | 19.47  | 13.00              | 32.74                   | 32.47  |             |
|                |                      | 25#0                       | 18.44                           | 19.36  | 13.00              | 31.44                   | 32.36  |             |
|                |                      | 25#13                      | 18.62                           | 18.71  | 13.00              | 31.62                   | 31.71  |             |
|                |                      | 25#25                      | 18.48                           | 18.65  | 13.00              | 31.48                   | 31.65  |             |
|                |                      | 50#0                       | 17.49                           | 17.96  | 13.00              | 30.49                   | 30.96  |             |
|                | 2355                 | 1#0                        | 19.53                           | 19.11  | 13.00              | 32.53                   | 32.11  |             |
|                |                      | 1#25                       | 19.42                           | 19.06  | 13.00              | 32.42                   | 32.06  |             |
|                |                      | 1#49                       | 19.11                           | 18.78  | 13.00              | 32.11                   | 31.78  |             |
|                |                      | 25#0                       | 18.46                           | 18.91  | 13.00              | 31.46                   | 31.91  |             |
|                |                      | 25#13                      | 18.32                           | 18.23  | 13.00              | 31.32                   | 31.23  |             |
|                |                      | 25#25                      | 18.24                           | 18.11  | 13.00              | 31.24                   | 31.11  |             |
|                |                      | 50#0                       | 17.56                           | 17.45  | 13.00              | 30.56                   | 30.45  |             |
| 15M            | 2352.5               | 1#0                        | 19.46                           | 18.47  | 13.00              | 32.46                   | 31.47  | 33          |
|                |                      | 1#38                       | 19.21                           | 19.02  | 13.00              | 32.21                   | 32.02  |             |
|                |                      | 1#74                       | 19.44                           | 19.01  | 13.00              | 32.44                   | 32.01  |             |
|                |                      | 36#0                       | 18.41                           | 18.45  | 13.00              | 31.41                   | 31.45  |             |
|                |                      | 36#19                      | 18.26                           | 18.14  | 13.00              | 31.26                   | 31.14  |             |
|                |                      | 36#39                      | 18.74                           | 18.22  | 13.00              | 31.74                   | 31.22  |             |
|                |                      | 75#0                       | 17.36                           | 17.69  | 13.00              | 30.36                   | 30.69  |             |

Note: the device is a fixed Outdoor customer premises equipment(CPE) using TDD technology. For 5MHz mode, the channel power is equal to the test result in dBm/5MHz. For 10MHz and 15MHz mode, the channel power as below:

**Average Power:**

| Test Bandwidth | Test Frequency (MHz) | Resource Block & RB offset | Peak Output Power (dBm) |        | Antenna Gain (dBi) | EIRP (dBm) |        |
|----------------|----------------------|----------------------------|-------------------------|--------|--------------------|------------|--------|
|                |                      |                            | QPSK                    | 16-QAM |                    | QPSK       | 16-QAM |
| 10M            | 2350                 | 1#0                        | 19.91                   | 19.53  | 13.00              | 32.91      | 32.53  |
|                |                      | 1#25                       | 19.98                   | 19.68  | 13.00              | 32.98      | 32.68  |
|                |                      | 1#49                       | 19.81                   | 19.25  | 13.00              | 32.81      | 32.25  |
|                |                      | 25#0                       | 19.95                   | 19.32  | 13.00              | 32.95      | 32.32  |
|                |                      | 25#13                      | 19.71                   | 19.14  | 13.00              | 32.71      | 32.14  |
|                |                      | 25#25                      | 19.88                   | 19.29  | 13.00              | 32.88      | 32.29  |
|                |                      | 50#0                       | 19.62                   | 19.67  | 13.00              | 32.62      | 32.67  |
|                | 2352.5               | 1#0                        | 19.98                   | 19.32  | 13.00              | 32.98      | 32.32  |
|                |                      | 1#25                       | 19.76                   | 19.51  | 13.00              | 32.76      | 32.51  |
|                |                      | 1#49                       | 19.73                   | 19.98  | 13.00              | 32.73      | 32.98  |
|                |                      | 25#0                       | 19.49                   | 19.89  | 13.00              | 32.49      | 32.89  |
|                |                      | 25#13                      | 19.82                   | 19.76  | 13.00              | 32.82      | 32.76  |
|                |                      | 25#25                      | 19.73                   | 29.84  | 13.00              | 32.73      | 42.84  |
|                |                      | 50#0                       | 19.42                   | 19.36  | 13.00              | 32.42      | 32.36  |
|                | 2355                 | 1#0                        | 19.95                   | 19.58  | 13.00              | 32.95      | 32.58  |
|                |                      | 1#25                       | 19.88                   | 19.67  | 13.00              | 32.88      | 32.67  |
|                |                      | 1#49                       | 19.65                   | 19.25  | 13.00              | 32.65      | 32.25  |
|                |                      | 25#0                       | 19.87                   | 19.50  | 13.00              | 32.87      | 32.50  |
|                |                      | 25#13                      | 19.72                   | 19.25  | 13.00              | 32.72      | 32.25  |
|                |                      | 25#25                      | 19.86                   | 19.30  | 13.00              | 32.86      | 32.30  |
|                |                      | 50#0                       | 19.47                   | 19.56  | 13.00              | 32.47      | 32.56  |
| 15M            | 2352.5               | 1#0                        | 19.92                   | 19.25  | 13.00              | 32.92      | 32.25  |
|                |                      | 1#38                       | 19.68                   | 19.51  | 13.00              | 32.68      | 32.51  |
|                |                      | 1#74                       | 19.56                   | 19.46  | 13.00              | 32.56      | 32.46  |
|                |                      | 36#0                       | 19.84                   | 19.22  | 13.00              | 32.84      | 32.22  |
|                |                      | 36#19                      | 19.68                   | 19.55  | 13.00              | 32.68      | 32.55  |
|                |                      | 36#39                      | 19.80                   | 19.41  | 13.00              | 32.80      | 32.41  |
|                |                      | 75#0                       | 19.58                   | 19.61  | 13.00              | 32.58      | 32.61  |

**Duty cycle:**

**Band 40(2305-2320MHz)**

| Test Modulation | Test Bandwidth | Ton (ms) | Total (ms) | Duty Cycle (%) | Limit (%) |
|-----------------|----------------|----------|------------|----------------|-----------|
| QPSK            | 5M             | 3.15     | 10.06      | 31.31          | 38        |
|                 | 10M            | 3.15     | 10.00      | 31.50          |           |
|                 | 15M            | 3.15     | 10.00      | 31.50          |           |
| 16-QAM          | 5M             | 3.21     | 10.06      | 31.91          |           |
|                 | 10M            | 3.21     | 10.06      | 31.91          |           |
|                 | 15M            | 3.15     | 10.00      | 31.50          |           |

**Band 40(2345-2360MHz)**

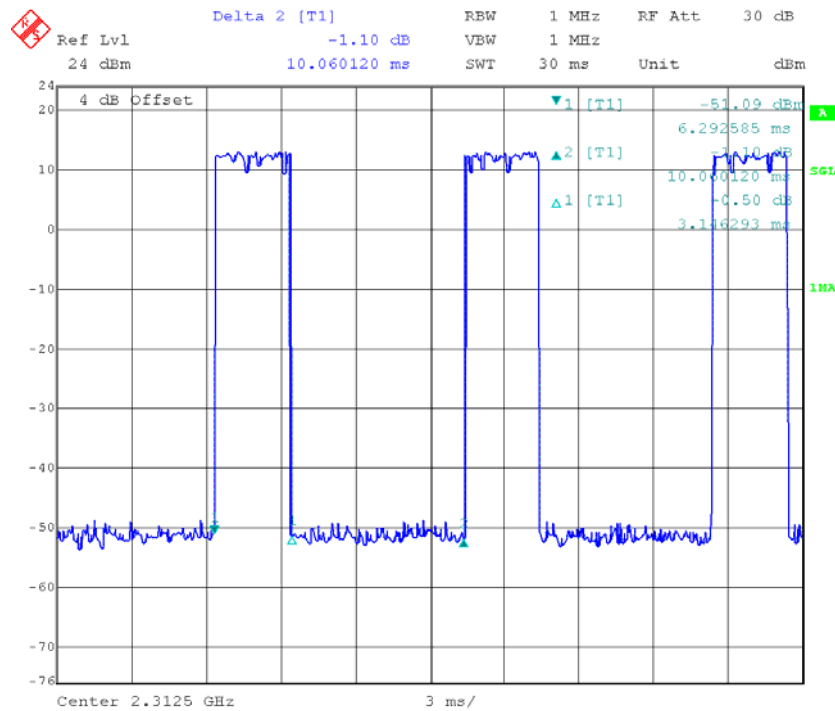
| Test Modulation | Test Bandwidth | Ton (ms) | Total (ms) | Duty Cycle (%) | Limit (%) |
|-----------------|----------------|----------|------------|----------------|-----------|
| QPSK            | 5M             | 3.15     | 10.06      | 31.31          | 38        |
|                 | 10M            | 3.15     | 10.00      | 31.50          |           |
|                 | 15M            | 3.15     | 10.06      | 31.31          |           |
| 16-QAM          | 5M             | 3.15     | 10.00      | 31.50          |           |
|                 | 10M            | 3.15     | 10.00      | 31.50          |           |
|                 | 15M            | 3.15     | 10.06      | 31.31          |           |

Note: EUT setup is as following:

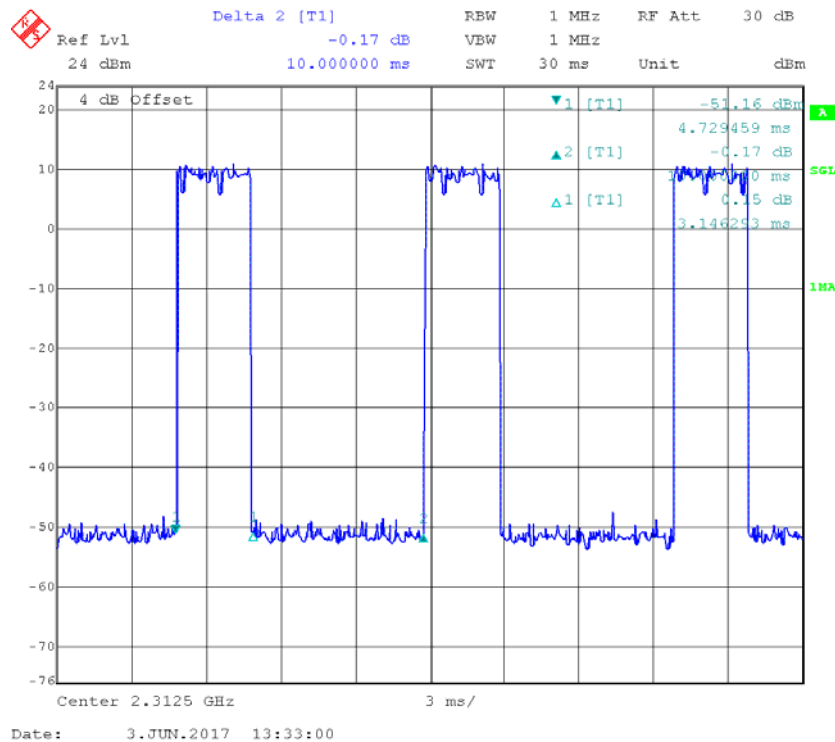
| Uplink Downlink configuration | Subframe number |   |   |   |   |   |   |   |   |   |
|-------------------------------|-----------------|---|---|---|---|---|---|---|---|---|
|                               | 0               | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 3                             | D               | S | U | U | U | D | D | D | D | D |

# Band 40(2305-2320MHz)

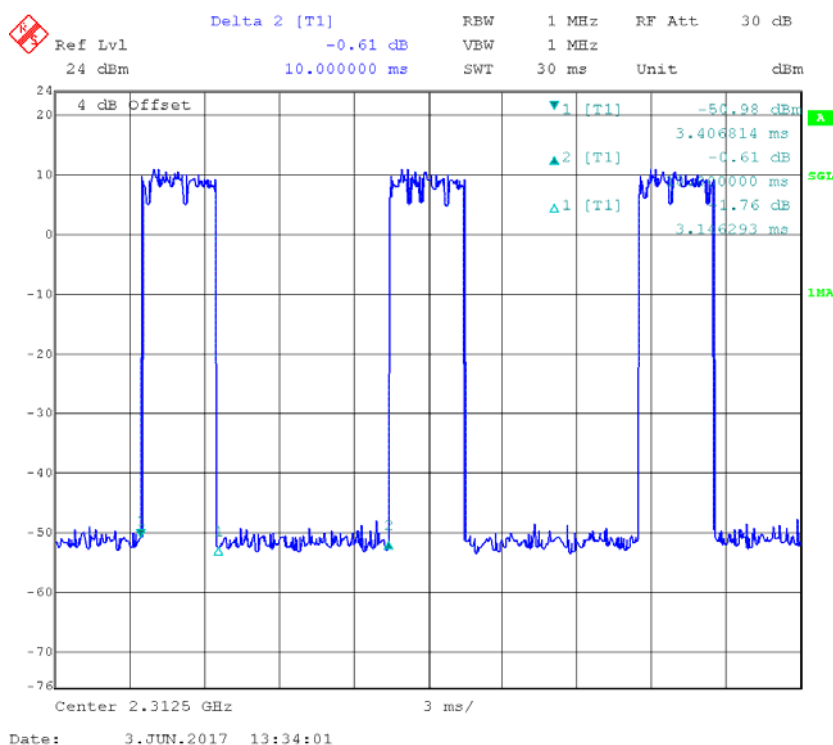
## QPSK\_5MHz\_RB25



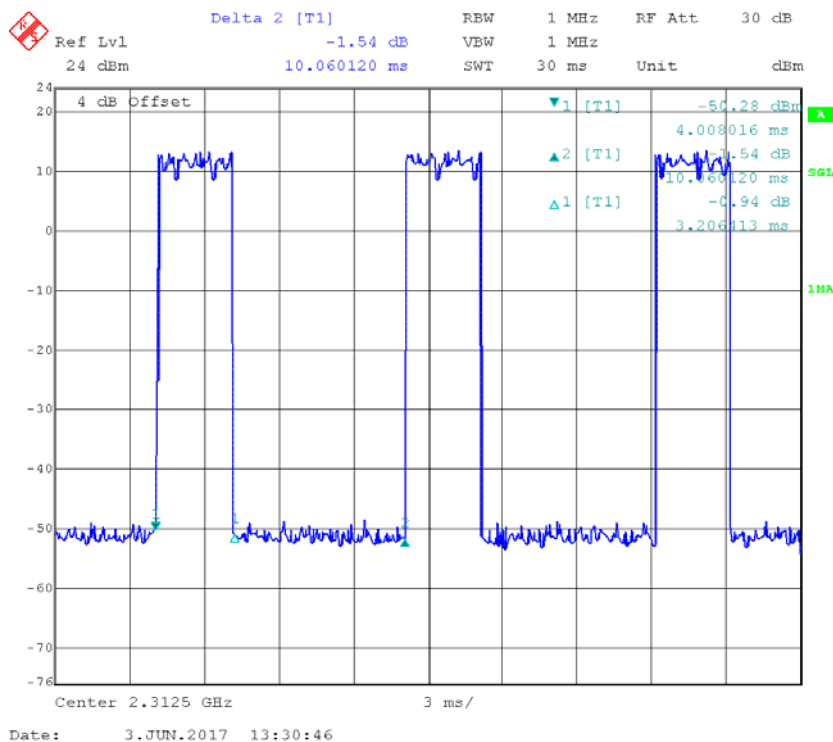
## QPSK\_10MHz\_RB50



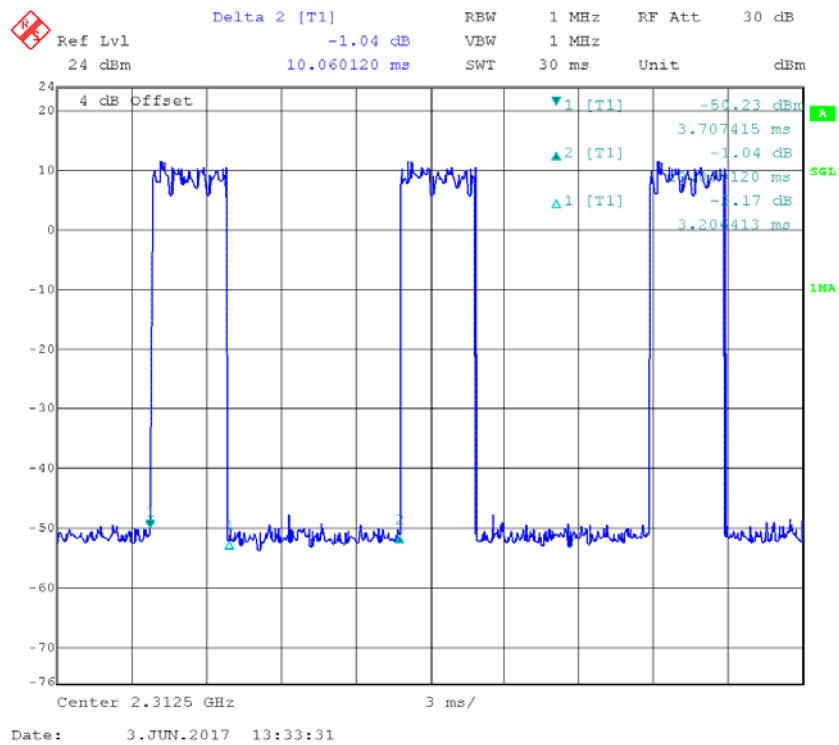
### QPSK\_15MHz\_RB75



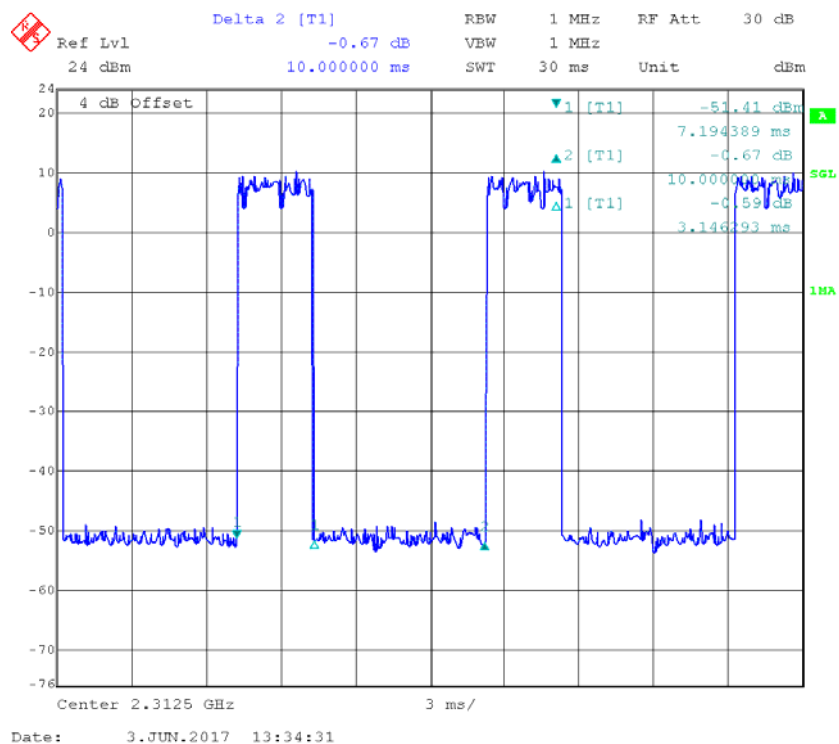
### 16-QAM\_5MHz\_RB25



### 16-QAM\_10MHz\_RB50

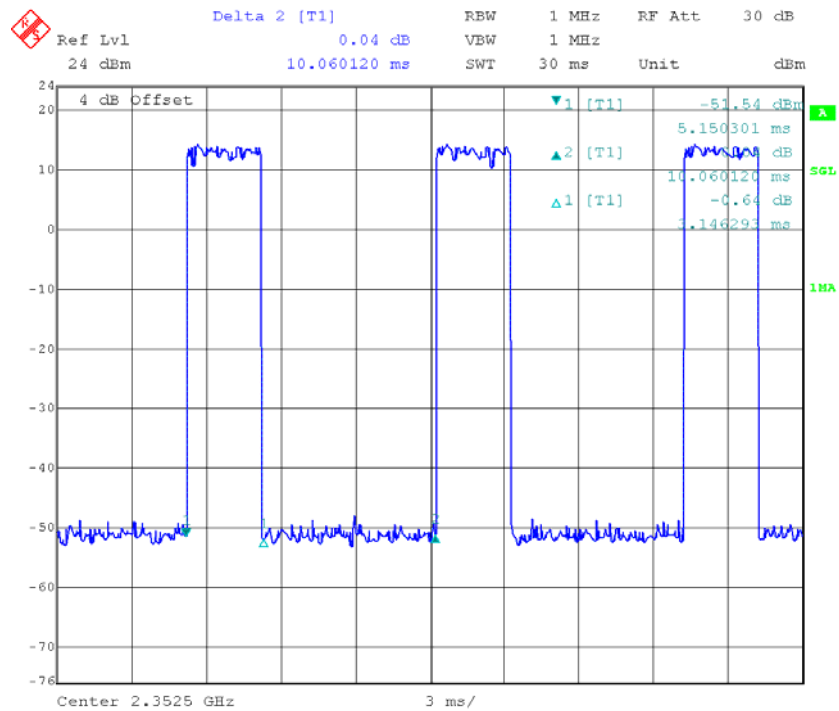


### 16-QAM\_15MHz\_RB75

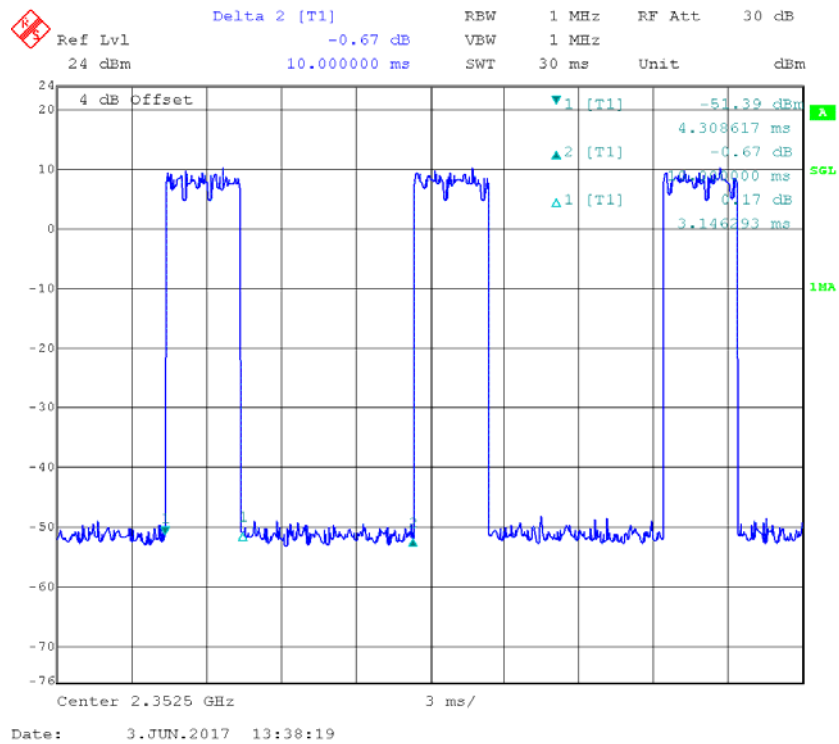


**Band 40(2345-2360MHz)**

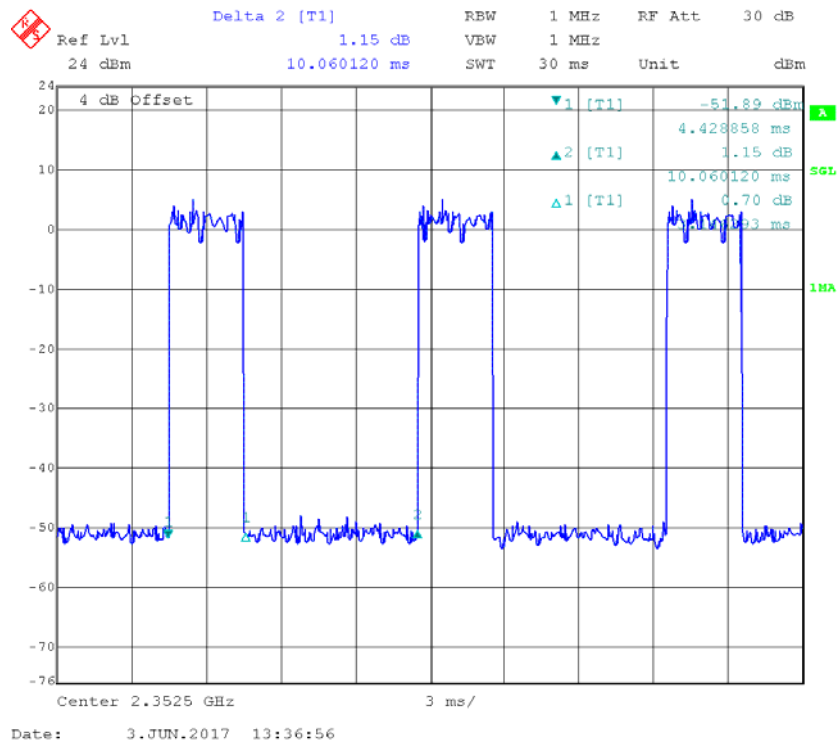
**QPSK\_5MHz\_RB25**



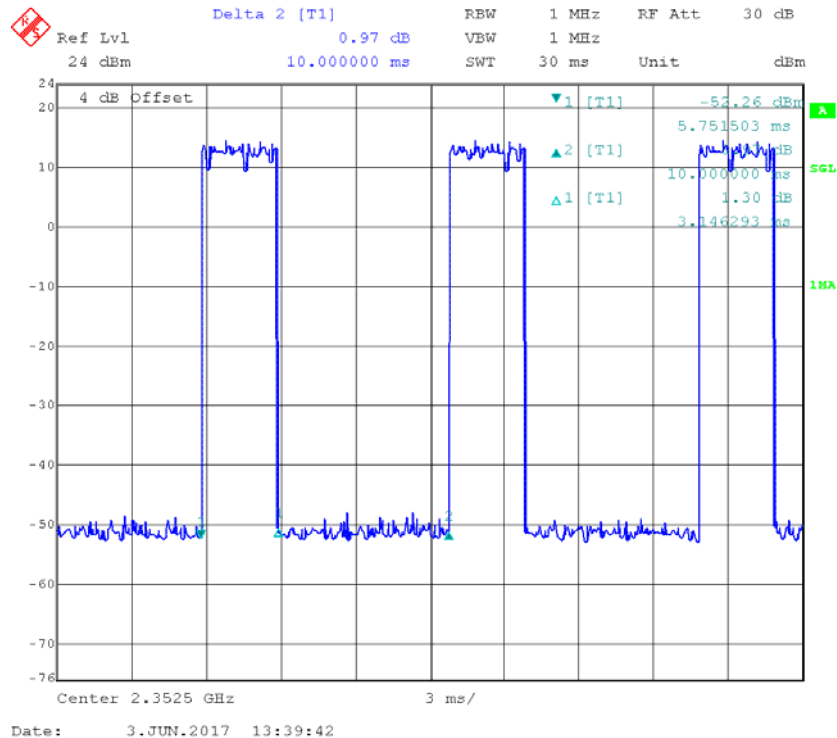
**QPSK\_10MHz\_RB50**



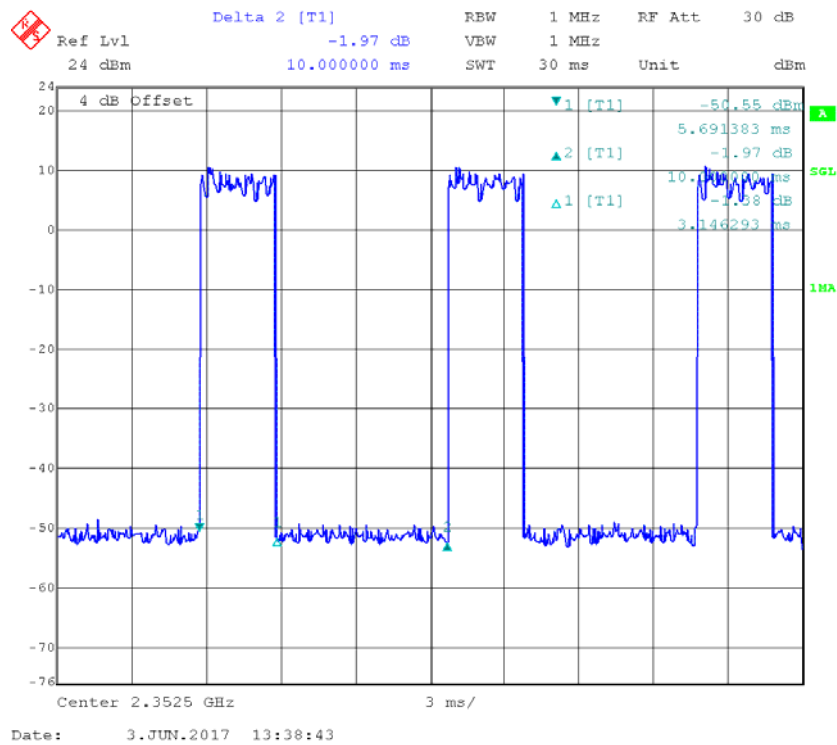
### QPSK\_15MHz\_RB75



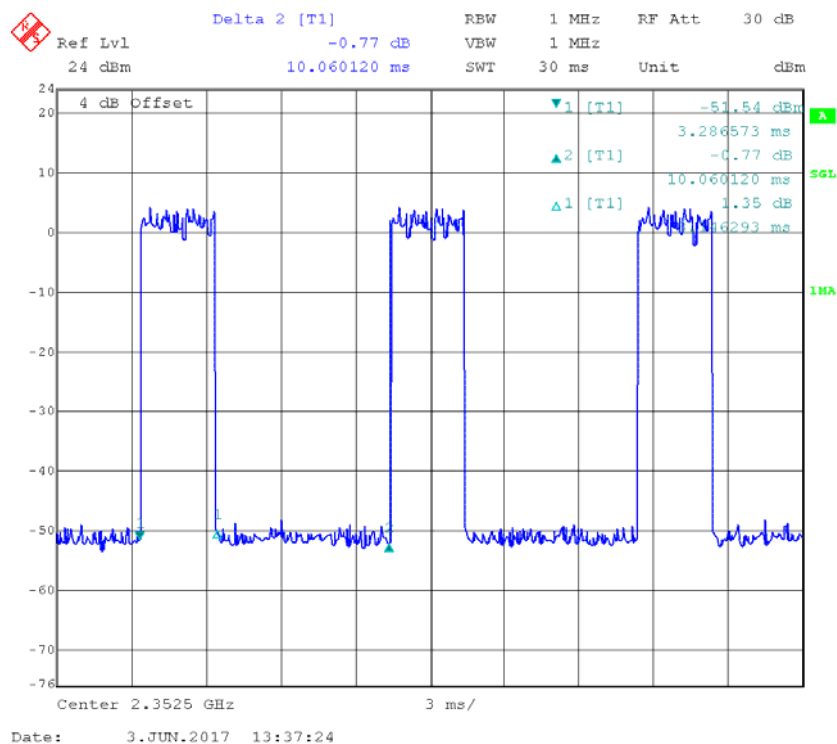
### 16-QAM\_5MHz\_RB25



### 16-QAM\_10MHz\_RB50



### 16-QAM\_15MHz\_RB75



**Band 41, Single Carrier:**

| Channel Bandwidth | Modulation | Resource Block & RB offset | Conducted Output Power (dBm) |          |            |        | EIRP(For ISED) (dBm) |          |            |        |
|-------------------|------------|----------------------------|------------------------------|----------|------------|--------|----------------------|----------|------------|--------|
|                   |            |                            | 2502.5 MHz                   | 2593 MHz | 2687.5 MHz | Limits | 2502.5 MHz           | 2593 MHz | 2687.5 MHz | Limits |
| 5 MHz             | QPSK       | 1#0                        | 21.04                        | 21.60    | 21.22      | 33.00  | 34.04                | 34.6     | 34.22      | 46     |
|                   |            | 1#12                       | 21.52                        | 21.36    | 21.52      | 33.00  | 34.52                | 34.36    | 34.52      | 46     |
|                   |            | 1#24                       | 20.61                        | 21.41    | 20.79      | 33.00  | 33.61                | 34.41    | 33.79      | 46     |
|                   |            | 12#0                       | 20.30                        | 21.10    | 20.74      | 33.00  | 33.3                 | 34.1     | 33.74      | 46     |
|                   |            | 12#6                       | 20.65                        | 21.28    | 20.97      | 33.00  | 33.65                | 34.28    | 33.97      | 46     |
|                   |            | 12#11                      | 20.58                        | 21.08    | 21.03      | 33.00  | 33.58                | 34.08    | 34.03      | 46     |
|                   |            | 25#0                       | 20.93                        | 21.32    | 20.60      | 33.00  | 33.93                | 34.32    | 33.6       | 46     |
|                   | 16-QAM     | 1#0                        | 21.06                        | 21.33    | 20.61      | 33.00  | 34.06                | 34.33    | 33.61      | 46     |
|                   |            | 1#12                       | 21.30                        | 21.16    | 20.85      | 33.00  | 34.3                 | 34.16    | 33.85      | 46     |
|                   |            | 1#24                       | 20.69                        | 21.02    | 20.21      | 33.00  | 33.69                | 34.02    | 33.21      | 46     |
|                   |            | 12#0                       | 20.65                        | 21.32    | 20.63      | 33.00  | 33.65                | 34.32    | 33.63      | 46     |
|                   |            | 12#6                       | 20.37                        | 20.71    | 20.26      | 33.00  | 33.37                | 33.71    | 33.26      | 46     |
|                   |            | 12#11                      | 20.94                        | 20.76    | 20.45      | 33.00  | 33.94                | 33.76    | 33.45      | 46     |
|                   |            | 25#0                       | 20.58                        | 20.28    | 19.87      | 33.00  | 33.58                | 33.28    | 32.87      | 46     |

| Channel Bandwidth | Modulation | Resource Block & RB offset | Conducted Output Power (dBm) |          |          |        | EIRP(For ISED) (dBm) |          |          |        |
|-------------------|------------|----------------------------|------------------------------|----------|----------|--------|----------------------|----------|----------|--------|
|                   |            |                            | 2505 MHz                     | 2593 MHz | 2685 MHz | Limits | 2505 MHz             | 2593 MHz | 2685 MHz | Limits |
| 10 MHz            | QPSK       | 1#0                        | 20.85                        | 21.59    | 21.01    | 33.00  | 33.85                | 34.59    | 34.01    | 46     |
|                   |            | 1#24                       | 20.75                        | 21.41    | 21.41    | 33.00  | 33.75                | 34.41    | 34.41    | 46     |
|                   |            | 1#49                       | 20.73                        | 21.45    | 20.78    | 33.00  | 33.73                | 34.45    | 33.78    | 46     |
|                   |            | 25#0                       | 20.46                        | 21.75    | 20.52    | 33.00  | 33.46                | 34.75    | 33.52    | 46     |
|                   |            | 25#12                      | 21.03                        | 21.58    | 20.97    | 33.00  | 34.03                | 34.58    | 33.97    | 46     |
|                   |            | 25#24                      | 20.66                        | 21.29    | 21.03    | 33.00  | 33.66                | 34.29    | 34.03    | 46     |
|                   |            | 50#0                       | 20.85                        | 21.31    | 20.62    | 33.00  | 33.85                | 34.31    | 33.62    | 46     |
|                   | 16-QAM     | 1#0                        | 20.83                        | 21.14    | 20.77    | 33.00  | 33.83                | 34.14    | 33.77    | 46     |
|                   |            | 1#24                       | 20.96                        | 21.08    | 20.87    | 33.00  | 33.96                | 34.08    | 33.87    | 46     |
|                   |            | 1#49                       | 20.74                        | 20.91    | 20.48    | 33.00  | 33.74                | 33.91    | 33.48    | 46     |
|                   |            | 25#0                       | 20.68                        | 20.59    | 20.33    | 33.00  | 33.68                | 33.59    | 33.33    | 46     |
|                   |            | 25#12                      | 20.83                        | 20.46    | 20.47    | 33.00  | 33.83                | 33.46    | 33.47    | 46     |
|                   |            | 25#24                      | 20.59                        | 20.72    | 20.17    | 33.00  | 33.59                | 33.72    | 33.17    | 46     |
|                   |            | 50#0                       | 20.79                        | 20.30    | 19.86    | 33.00  | 33.79                | 33.3     | 32.86    | 46     |

| Channel Bandwidth | Modulation | Resource Block & RB offset | Conducted Output Power (dBm) |          |            |        | EIRP(For ISED) (dBm) |          |            |        |
|-------------------|------------|----------------------------|------------------------------|----------|------------|--------|----------------------|----------|------------|--------|
|                   |            |                            | 2507.5 MHz                   | 2593 MHz | 2682.5 MHz | Limits | 2507.5 MHz           | 2593 MHz | 2682.5 MHz | Limits |
| 15 MHz            | QPSK       | 1#0                        | 20.58                        | 21.27    | 20.74      | 33.00  | 33.58                | 34.27    | 33.74      | 46     |
|                   |            | 1#37                       | 20.68                        | 21.12    | 20.95      | 33.00  | 33.68                | 34.12    | 33.95      | 46     |
|                   |            | 1#74                       | 20.74                        | 21.20    | 20.61      | 33.00  | 33.74                | 34.2     | 33.61      | 46     |
|                   |            | 36#0                       | 20.99                        | 21.35    | 20.51      | 33.00  | 33.99                | 34.35    | 33.51      | 46     |
|                   |            | 36#17                      | 20.85                        | 21.11    | 20.86      | 33.00  | 33.85                | 34.11    | 33.86      | 46     |
|                   |            | 36#35                      | 20.52                        | 21.07    | 20.75      | 33.00  | 33.52                | 34.07    | 33.75      | 46     |
|                   |            | 75#0                       | 20.81                        | 21.25    | 20.51      | 33.00  | 33.81                | 34.25    | 33.51      | 46     |
|                   | 16-QAM     | 1#0                        | 20.52                        | 20.79    | 20.21      | 33.00  | 33.52                | 33.79    | 33.21      | 46     |
|                   |            | 1#37                       | 20.82                        | 20.65    | 20.68      | 33.00  | 33.82                | 33.65    | 33.68      | 46     |
|                   |            | 1#74                       | 20.73                        | 20.54    | 20.01      | 33.00  | 33.73                | 33.54    | 33.01      | 46     |
|                   |            | 36#0                       | 20.44                        | 20.34    | 20.13      | 33.00  | 33.44                | 33.34    | 33.13      | 46     |
|                   |            | 36#17                      | 20.96                        | 20.48    | 19.68      | 33.00  | 33.96                | 33.48    | 32.68      | 46     |
|                   |            | 36#35                      | 20.39                        | 20.20    | 20.07      | 33.00  | 33.39                | 33.2     | 33.07      | 46     |
|                   |            | 75#0                       | 20.70                        | 20.25    | 19.73      | 33.00  | 33.7                 | 33.25    | 32.73      | 46     |

| Channel Bandwidth | Modulation | Resource Block & RB offset | Conducted Output Power (dBm) |          |          |        | EIRP(For ISED) (dBm) |          |          |        |
|-------------------|------------|----------------------------|------------------------------|----------|----------|--------|----------------------|----------|----------|--------|
|                   |            |                            | 2510 MHz                     | 2593 MHz | 2680 MHz | Limits | 2510 MHz             | 2593 MHz | 2680 MHz | Limits |
| 20 MHz            | QPSK       | 1#0                        | 20.88                        | 21.51    | 20.48    | 33.00  | 33.88                | 34.51    | 33.48    | 46     |
|                   |            | 1#49                       | 20.65                        | 21.62    | 20.64    | 33.00  | 33.65                | 34.62    | 33.64    | 46     |
|                   |            | 1#99                       | 21.31                        | 21.48    | 20.27    | 33.00  | 34.31                | 34.48    | 33.27    | 46     |
|                   |            | 50#0                       | 21.13                        | 21.20    | 20.59    | 33.00  | 34.13                | 34.2     | 33.59    | 46     |
|                   |            | 50#24                      | 21.31                        | 21.39    | 20.18    | 33.00  | 34.31                | 34.39    | 33.18    | 46     |
|                   |            | 50#49                      | 21.25                        | 21.65    | 20.43    | 33.00  | 34.25                | 34.65    | 33.43    | 46     |
|                   |            | 100#0                      | 21.02                        | 21.35    | 19.87    | 33.00  | 34.02                | 34.35    | 32.87    | 46     |
|                   | 16-QAM     | 1#0                        | 20.76                        | 21.44    | 21.04    | 33.00  | 33.76                | 34.44    | 34.04    | 46     |
|                   |            | 1#49                       | 20.88                        | 21.30    | 21.25    | 33.00  | 33.88                | 34.3     | 34.25    | 46     |
|                   |            | 1#99                       | 21.24                        | 21.24    | 20.88    | 33.00  | 34.24                | 34.24    | 33.88    | 46     |
|                   |            | 50#0                       | 21.84                        | 21.23    | 20.93    | 33.00  | 34.84                | 34.23    | 33.93    | 46     |
|                   |            | 50#24                      | 21.45                        | 21.43    | 21.22    | 33.00  | 34.45                | 34.43    | 34.22    | 46     |
|                   |            | 50#49                      | 21.11                        | 21.52    | 20.77    | 33.00  | 34.11                | 34.52    | 33.77    | 46     |
|                   |            | 100#0                      | 20.92                        | 20.31    | 20.68    | 33.00  | 33.92                | 33.31    | 33.68    | 46     |

Note: the device is fixed subscriber equipment.

**Band 41, Carrier Aggregation:**

| Bandwidth    | Frequency (MHz) | Modulation | PCC RB | PCC RB | SCC1 RB | SCC1 RB | Conducted Power (dBm) |        | E.I.R.P. (For ISED) (dBm) |        |
|--------------|-----------------|------------|--------|--------|---------|---------|-----------------------|--------|---------------------------|--------|
|              |                 |            | Size   | Offset | Size    | Offset  | Reading               | Limits | Reading                   | Limits |
| 5MHz + 20MHz | 2503.3+ 2514    | QPSK       | 1      | 24     | 1       | 0       | 21.18                 | 33.00  | 34.18                     | 46.00  |
|              |                 |            | 1      | 12     | 1       | 49      | 21.46                 | 33.00  | 34.46                     | 46.00  |
|              |                 |            | 25     | 0      | 100     | 0       | 21.54                 | 33.00  | 34.54                     | 46.00  |
|              |                 | 16-QAM     | 1      | 24     | 1       | 0       | 21.05                 | 33.00  | 34.05                     | 46.00  |
|              |                 |            | 1      | 12     | 1       | 49      | 21.26                 | 33.00  | 34.26                     | 46.00  |
|              |                 |            | 25     | 0      | 100     | 0       | 21.40                 | 33.00  | 34.4                      | 46.00  |
| 5MHz + 20MHz | 2583.8+ 2595.5  | QPSK       | 1      | 24     | 1       | 0       | 20.94                 | 33.00  | 33.94                     | 46.00  |
|              |                 |            | 1      | 12     | 1       | 49      | 20.26                 | 33.00  | 33.26                     | 46.00  |
|              |                 |            | 25     | 0      | 100     | 0       | 22.93                 | 33.00  | 35.93                     | 46.00  |
|              |                 | 16-QAM     | 1      | 24     | 1       | 0       | 20.98                 | 33.00  | 33.98                     | 46.00  |
|              |                 |            | 1      | 12     | 1       | 49      | 20.31                 | 33.00  | 33.31                     | 46.00  |
|              |                 |            | 25     | 0      | 100     | 0       | 22.83                 | 33.00  | 35.83                     | 46.00  |
| 5MHz + 20MHz | 2668.3+ 2680    | QPSK       | 1      | 24     | 1       | 0       | 31.39                 | 33.00  | 44.39                     | 46.00  |
|              |                 |            | 1      | 12     | 1       | 49      | 20.78                 | 33.00  | 33.78                     | 46.00  |
|              |                 |            | 25     | 0      | 100     | 0       | 23.29                 | 33.00  | 36.29                     | 46.00  |
|              |                 | 16-QAM     | 1      | 24     | 1       | 0       | 21.38                 | 33.00  | 34.38                     | 46.00  |
|              |                 |            | 1      | 12     | 1       | 49      | 20.71                 | 33.00  | 33.71                     | 46.00  |
|              |                 |            | 25     | 0      | 100     | 0       | 23.29                 | 33.00  | 36.29                     | 46.00  |
| 20MHz+ 5MHz  | 2514.0 + 2521.7 | QPSK       | 1      | 0      | 1       | 0       | 20.83                 | 33.00  | 33.83                     | 46.00  |
|              |                 |            | 1      | 0      | 1       | 24      | 20.96                 | 33.00  | 33.96                     | 46.00  |
|              |                 |            | 1      | 0      | 25      | 0       | 22.13                 | 33.00  | 35.13                     | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.15                 | 33.00  | 34.15                     | 46.00  |
|              |                 |            | 1      | 99     | 1       | 24      | 21.40                 | 33.00  | 34.4                      | 46.00  |
|              |                 |            | 1      | 99     | 25      | 0       | 22.26                 | 33.00  | 35.26                     | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.36                 | 33.00  | 34.36                     | 46.00  |
|              |                 |            | 100    | 0      | 1       | 24      | 21.35                 | 33.00  | 34.35                     | 46.00  |
|              |                 |            | 100    | 0      | 25      | 0       | 21.45                 | 33.00  | 34.45                     | 46.00  |
|              |                 | 16-QAM     | 1      | 0      | 1       | 0       | 21.25                 | 33.00  | 34.25                     | 46.00  |
|              |                 |            | 1      | 0      | 1       | 24      | 21.41                 | 33.00  | 34.41                     | 46.00  |
|              |                 |            | 1      | 0      | 25      | 0       | 22.07                 | 33.00  | 35.07                     | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.63                 | 33.00  | 34.63                     | 46.00  |
|              |                 |            | 1      | 99     | 1       | 24      | 21.77                 | 33.00  | 34.77                     | 46.00  |
|              |                 |            | 1      | 99     | 25      | 0       | 22.21                 | 33.00  | 35.21                     | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.20                 | 33.00  | 34.2                      | 46.00  |
|              |                 |            | 100    | 0      | 1       | 24      | 21.22                 | 33.00  | 34.22                     | 46.00  |
|              |                 |            | 100    | 0      | 25      | 0       | 21.36                 | 33.00  | 34.36                     | 46.00  |

| Bandwidth    | Frequency (MHz) | Modulation | PCC RB | PCC RB | SCC1 RB | SCC1 RB | Conducted Power (dBm) |        | E.I.R.P. (For ISEDC) (dBm) |        |
|--------------|-----------------|------------|--------|--------|---------|---------|-----------------------|--------|----------------------------|--------|
|              |                 |            | Size   | Offset | Size    | Offset  | Reading               | Limits | Reading                    | Limits |
| 20MHz+ 5MHz  | 2590.5+ 2602.2  | QPSK       | 1      | 0      | 1       | 0       | 21.62                 | 33.00  | 34.62                      | 46.00  |
|              |                 |            | 1      | 0      | 1       | 24      | 21.48                 | 33.00  | 34.48                      | 46.00  |
|              |                 |            | 1      | 0      | 25      | 0       | 22.01                 | 33.00  | 35.01                      | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.96                 | 33.00  | 34.96                      | 46.00  |
|              |                 |            | 1      | 99     | 1       | 24      | 21.88                 | 33.00  | 34.88                      | 46.00  |
|              |                 |            | 1      | 99     | 25      | 0       | 22.34                 | 33.00  | 35.34                      | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.73                 | 33.00  | 34.73                      | 46.00  |
|              |                 |            | 100    | 0      | 1       | 24      | 21.75                 | 33.00  | 34.75                      | 46.00  |
|              |                 |            | 100    | 0      | 25      | 0       | 22.36                 | 33.00  | 35.36                      | 46.00  |
|              |                 | 16-QAM     | 1      | 0      | 1       | 0       | 21.23                 | 33.00  | 34.23                      | 46.00  |
|              |                 |            | 1      | 0      | 1       | 24      | 21.12                 | 33.00  | 34.12                      | 46.00  |
|              |                 |            | 1      | 0      | 25      | 0       | 22.01                 | 33.00  | 35.01                      | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.58                 | 33.00  | 34.58                      | 46.00  |
|              |                 |            | 1      | 99     | 1       | 24      | 21.49                 | 33.00  | 34.49                      | 46.00  |
|              |                 |            | 1      | 99     | 25      | 0       | 22.33                 | 33.00  | 35.33                      | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.62                 | 33.00  | 34.62                      | 46.00  |
|              |                 |            | 100    | 0      | 1       | 24      | 21.61                 | 33.00  | 34.61                      | 46.00  |
|              |                 |            | 100    | 0      | 25      | 0       | 22.24                 | 33.00  | 35.24                      | 46.00  |
| 20MHz+ 5MHz  | 2675.0+ 2686.7  | QPSK       | 1      | 0      | 1       | 0       | 20.57                 | 33.00  | 33.57                      | 46.00  |
|              |                 |            | 1      | 0      | 1       | 24      | 20.38                 | 33.00  | 33.38                      | 46.00  |
|              |                 |            | 1      | 0      | 25      | 0       | 22.44                 | 33.00  | 35.44                      | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 20.87                 | 33.00  | 33.87                      | 46.00  |
|              |                 |            | 1      | 99     | 1       | 24      | 20.38                 | 33.00  | 33.38                      | 46.00  |
|              |                 |            | 1      | 99     | 25      | 0       | 22.46                 | 33.00  | 35.46                      | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.42                 | 33.00  | 34.42                      | 46.00  |
|              |                 |            | 100    | 0      | 1       | 24      | 21.41                 | 33.00  | 34.41                      | 46.00  |
|              |                 |            | 100    | 0      | 25      | 0       | 22.64                 | 33.00  | 35.64                      | 46.00  |
|              |                 | 16-QAM     | 1      | 0      | 1       | 0       | 20.66                 | 33.00  | 33.66                      | 46.00  |
|              |                 |            | 1      | 0      | 1       | 24      | 20.47                 | 33.00  | 33.47                      | 46.00  |
|              |                 |            | 1      | 0      | 25      | 0       | 22.32                 | 33.00  | 35.32                      | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 20.99                 | 33.00  | 33.99                      | 46.00  |
|              |                 |            | 1      | 99     | 1       | 24      | 20.87                 | 33.00  | 33.87                      | 46.00  |
|              |                 |            | 1      | 99     | 25      | 0       | 22.45                 | 33.00  | 35.45                      | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.41                 | 33.00  | 34.41                      | 46.00  |
|              |                 |            | 100    | 0      | 1       | 24      | 21.42                 | 33.00  | 34.42                      | 46.00  |
|              |                 |            | 100    | 0      | 25      | 0       | 22.56                 | 33.00  | 35.56                      | 46.00  |
| 10MHz+ 20MHz | 2505.5+ 2519.9  | QPSK       | 1      | 49     | 1       | 0       | 21.07                 | 33.00  | 34.07                      | 46.00  |
|              |                 |            | 1      | 24     | 1       | 49      | 21.43                 | 33.00  | 34.43                      | 46.00  |
|              |                 |            | 50     | 0      | 100     | 0       | 21.33                 | 33.00  | 34.33                      | 46.00  |
|              |                 | 16-QAM     | 1      | 49     | 1       | 0       | 21.01                 | 33.00  | 34.01                      | 46.00  |
|              |                 |            | 1      | 24     | 1       | 49      | 21.39                 | 33.00  | 34.39                      | 46.00  |
|              |                 |            | 50     | 0      | 100     | 0       | 21.25                 | 33.00  | 34.25                      | 46.00  |

| Bandwidth    | Frequency (MHz) | Modulation | PCC RB | PCC RB | SCC1 RB | SCC1 RB | Conducted Power (dBm) |        | E.I.R.P. (For ISED) (dBm) |        |
|--------------|-----------------|------------|--------|--------|---------|---------|-----------------------|--------|---------------------------|--------|
|              |                 |            | Size   | Offset | Size    | Offset  | Reading               | Limits | Reading                   | Limits |
| 10MHz+ 20MHz | 2583.6+ 2598    | QPSK       | 1      | 49     | 1       | 0       | 21.45                 | 33.00  | 34.45                     | 46.00  |
|              |                 |            | 1      | 24     | 1       | 49      | 21.74                 | 33.00  | 34.74                     | 46.00  |
|              |                 |            | 50     | 0      | 100     | 0       | 21.75                 | 33.00  | 34.75                     | 46.00  |
|              |                 | 16-QAM     | 1      | 49     | 1       | 0       | 21.43                 | 33.00  | 34.43                     | 46.00  |
|              |                 |            | 1      | 24     | 1       | 49      | 21.31                 | 33.00  | 34.31                     | 46.00  |
|              |                 |            | 50     | 0      | 100     | 0       | 21.69                 | 33.00  | 34.69                     | 46.00  |
| 10MHz+ 20MHz | 2665.6+ 2680    | QPSK       | 1      | 49     | 1       | 0       | 20.85                 | 33.00  | 33.85                     | 46.00  |
|              |                 |            | 1      | 24     | 1       | 49      | 20.88                 | 33.00  | 33.88                     | 46.00  |
|              |                 |            | 50     | 0      | 100     | 0       | 21.63                 | 33.00  | 34.63                     | 46.00  |
|              |                 | 16-QAM     | 1      | 49     | 1       | 0       | 20.79                 | 33.00  | 33.79                     | 46.00  |
|              |                 |            | 1      | 24     | 1       | 49      | 20.85                 | 33.00  | 33.85                     | 46.00  |
|              |                 |            | 50     | 0      | 100     | 0       | 21.58                 | 33.00  | 34.58                     | 46.00  |
| 20MHz+ 10MHz | 2510.0+ 2524.4  | QPSK       | 1      | 99     | 1       | 0       | 21.44                 | 33.00  | 34.44                     | 46.00  |
|              |                 |            | 100    | 0      | 50      | 0       | 21.66                 | 33.00  | 34.66                     | 46.00  |
|              |                 | 16-QAM     | 1      | 99     | 1       | 0       | 21.58                 | 33.00  | 34.58                     | 46.00  |
|              |                 |            | 100    | 0      | 50      | 0       | 21.64                 | 33.00  | 34.64                     | 46.00  |
| 20MHz+ 10MHz | 2588.1 + 2602.5 | QPSK       | 1      | 99     | 1       | 0       | 20.69                 | 33.00  | 33.69                     | 46.00  |
|              |                 |            | 100    | 0      | 50      | 0       | 22.42                 | 33.00  | 35.42                     | 46.00  |
|              |                 | 16-QAM     | 1      | 99     | 1       | 0       | 20.93                 | 33.00  | 33.93                     | 46.00  |
|              |                 |            | 100    | 0      | 50      | 0       | 22.35                 | 33.00  | 35.35                     | 46.00  |
| 20MHz+ 10MHz | 2670.1+ 2684.5  | QPSK       | 1      | 99     | 1       | 0       | 20.65                 | 33.00  | 33.65                     | 46.00  |
|              |                 |            | 100    | 0      | 50      | 0       | 22.92                 | 33.00  | 35.92                     | 46.00  |
|              |                 | 16-QAM     | 1      | 99     | 1       | 0       | 20.91                 | 33.00  | 33.91                     | 46.00  |
|              |                 |            | 100    | 0      | 50      | 0       | 22.83                 | 33.00  | 35.83                     | 46.00  |
| 15MHz+ 15MHz | 2507.5+ 2522.5  | QPSK       | 1      | 74     | 1       | 0       | 21.43                 | 33.00  | 34.43                     | 46.00  |
|              |                 |            | 75     | 0      | 75      | 0       | 21.47                 | 33.00  | 34.47                     | 46.00  |
|              |                 | 16-QAM     | 1      | 74     | 1       | 0       | 21.52                 | 33.00  | 34.52                     | 46.00  |
|              |                 |            | 75     | 0      | 75      | 0       | 21.54                 | 33.00  | 34.54                     | 46.00  |
| 15MHz+ 15MHz | 2585.5+ 2600.5  | QPSK       | 1      | 74     | 1       | 0       | 20.84                 | 33.00  | 33.84                     | 46.00  |
|              |                 |            | 75     | 0      | 75      | 0       | 21.91                 | 33.00  | 34.91                     | 46.00  |
|              |                 | 16-QAM     | 1      | 74     | 1       | 0       | 21.02                 | 33.00  | 34.02                     | 46.00  |
|              |                 |            | 75     | 0      | 75      | 0       | 21.78                 | 33.00  | 34.78                     | 46.00  |
| 15MHz+ 15MHz | 2667.5+ 2682.5  | QPSK       | 1      | 74     | 1       | 0       | 20.77                 | 33.00  | 33.77                     | 46.00  |
|              |                 |            | 75     | 0      | 75      | 0       | 21.87                 | 33.00  | 34.87                     | 46.00  |
|              |                 | 16-QAM     | 1      | 74     | 1       | 0       | 20.73                 | 33.00  | 33.73                     | 46.00  |
|              |                 |            | 75     | 0      | 75      | 0       | 21.77                 | 33.00  | 34.77                     | 46.00  |
| 15MHz+ 20MHz | 2507.8+ 2524.9  | QPSK       | 1      | 74     | 1       | 0       | 20.85                 | 33.00  | 33.85                     | 46.00  |
|              |                 |            | 1      | 36     | 1       | 49      | 21.28                 | 33.00  | 34.28                     | 46.00  |
|              |                 |            | 75     | 0      | 100     | 0       | 21.47                 | 33.00  | 34.47                     | 46.00  |
|              |                 | 16QAM      | 1      | 74     | 1       | 0       | 21.61                 | 33.00  | 34.61                     | 46.00  |
|              |                 |            | 1      | 36     | 1       | 49      | 21.81                 | 33.00  | 34.81                     | 46.00  |
|              |                 |            | 75     | 0      | 100     | 0       | 21.49                 | 33.00  | 34.49                     | 46.00  |

| Bandwidth    | Frequency (MHz) | Modulation | PCC RB | PCC RB | SCC1 RB | SCC1 RB | Conducted Power (dBm) |        | E.I.R.P. (For ISEDC) (dBm) |        |
|--------------|-----------------|------------|--------|--------|---------|---------|-----------------------|--------|----------------------------|--------|
|              |                 |            | Size   | Offset | Size    | Offset  | Reading               | Limits | Reading                    | Limits |
| 15MHz+ 20MHz | 2583.3 + 2600.4 | QPSK       | 1      | 74     | 1       | 0       | 20.64                 | 33.00  | 33.64                      | 46.00  |
|              |                 |            | 1      | 36     | 1       | 49      | 20.48                 | 33.00  | 33.48                      | 46.00  |
|              |                 |            | 75     | 0      | 100     | 0       | 21.81                 | 33.00  | 34.81                      | 46.00  |
|              |                 | 16-QAM     | 1      | 74     | 1       | 0       | 20.86                 | 33.00  | 33.86                      | 46.00  |
|              |                 |            | 1      | 36     | 1       | 49      | 21.34                 | 33.00  | 34.34                      | 46.00  |
|              |                 |            | 75     | 0      | 100     | 0       | 21.83                 | 33.00  | 34.83                      | 46.00  |
| 15MHz+ 20MHz | 2662.9 + 2680.0 | QPSK       | 1      | 74     | 1       | 0       | 20.58                 | 33.00  | 33.58                      | 46.00  |
|              |                 |            | 1      | 36     | 1       | 49      | 20.66                 | 33.00  | 33.66                      | 46.00  |
|              |                 |            | 75     | 0      | 100     | 0       | 21.77                 | 33.00  | 34.77                      | 46.00  |
|              |                 | 16-QAM     | 1      | 74     | 1       | 0       | 21.11                 | 33.00  | 34.11                      | 46.00  |
|              |                 |            | 1      | 36     | 1       | 49      | 21.13                 | 33.00  | 34.13                      | 46.00  |
|              |                 |            | 75     | 0      | 100     | 0       | 21.72                 | 33.00  | 34.72                      | 46.00  |
| 20MHz+ 15MHz | 2510.0+ 2527.1  | QPSK       | 1      | 99     | 1       | 0       | 20.96                 | 33.00  | 33.96                      | 46.00  |
|              |                 |            | 100    | 0      | 75      | 0       | 21.52                 | 33.00  | 34.52                      | 46.00  |
|              |                 | 16-QAM     | 1      | 99     | 1       | 0       | 21.18                 | 33.00  | 34.18                      | 46.00  |
|              |                 |            | 100    | 0      | 75      | 0       | 21.43                 | 33.00  | 34.43                      | 46.00  |
| 20MHz+ 15MHz | 2585.6+ 2602.7  | QPSK       | 1      | 99     | 1       | 0       | 20.81                 | 33.00  | 33.81                      | 46.00  |
|              |                 |            | 100    | 0      | 75      | 0       | 22.54                 | 33.00  | 35.54                      | 46.00  |
|              |                 | 16-QAM     | 1      | 99     | 1       | 0       | 21.15                 | 33.00  | 34.15                      | 46.00  |
|              |                 |            | 100    | 0      | 75      | 0       | 22.44                 | 33.00  | 35.44                      | 46.00  |
| 20MHz+ 15MHz | 2665.1+ 2682.2  | QPSK       | 1      | 99     | 1       | 0       | 20.67                 | 33.00  | 33.67                      | 46.00  |
|              |                 |            | 100    | 0      | 75      | 0       | 22.79                 | 33.00  | 35.79                      | 46.00  |
|              |                 | 16-QAM     | 1      | 99     | 1       | 0       | 20.89                 | 33.00  | 33.89                      | 46.00  |
|              |                 |            | 100    | 0      | 75      | 0       | 22.56                 | 33.00  | 35.56                      | 46.00  |
| 20MHz+ 20MHz | 2510.0+ 2529.8  | QPSK       | 1      | 0      | 1       | 0       | 21.22                 | 33.00  | 34.22                      | 46.00  |
|              |                 |            | 1      | 0      | 1       | 99      | 21.45                 | 33.00  | 34.45                      | 46.00  |
|              |                 |            | 1      | 0      | 100     | 0       | 21.87                 | 33.00  | 34.87                      | 46.00  |
|              |                 |            | 1      | 49     | 1       | 49      | 21.86                 | 33.00  | 34.86                      | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.63                 | 33.00  | 34.63                      | 46.00  |
|              |                 |            | 1      | 99     | 1       | 99      | 21.97                 | 33.00  | 34.97                      | 46.00  |
|              |                 |            | 1      | 99     | 100     | 0       | 22.14                 | 33.00  | 35.14                      | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.20                 | 33.00  | 34.2                       | 46.00  |
|              |                 |            | 100    | 0      | 1       | 99      | 21.19                 | 33.00  | 34.19                      | 46.00  |
|              |                 |            | 100    | 0      | 100     | 0       | 21.42                 | 33.00  | 34.42                      | 46.00  |
|              |                 | 16-QAM     | 1      | 0      | 1       | 0       | 21.36                 | 33.00  | 34.36                      | 46.00  |
|              |                 |            | 1      | 0      | 1       | 99      | 21.65                 | 33.00  | 34.65                      | 46.00  |
|              |                 |            | 1      | 0      | 100     | 0       | 22.07                 | 33.00  | 35.07                      | 46.00  |
|              |                 |            | 1      | 49     | 1       | 49      | 22.13                 | 33.00  | 35.13                      | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.78                 | 33.00  | 34.78                      | 46.00  |
|              |                 |            | 1      | 99     | 1       | 99      | 22.14                 | 33.00  | 35.14                      | 46.00  |
|              |                 |            | 1      | 99     | 100     | 0       | 22.26                 | 33.00  | 35.26                      | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.16                 | 33.00  | 34.16                      | 46.00  |
|              |                 |            | 100    | 0      | 1       | 99      | 21.15                 | 33.00  | 34.15                      | 46.00  |
|              |                 |            | 100    | 0      | 100     | 0       | 21.39                 | 33.00  | 34.39                      | 46.00  |

| Bandwidth    | Frequency (MHz) | Modulation | PCC RB | PCC RB | SCC1 RB | SCC1 RB | Conducted Power (dBm) |        | E.I.R.P. (For ISED) |        |
|--------------|-----------------|------------|--------|--------|---------|---------|-----------------------|--------|---------------------|--------|
|              |                 |            | Size   | Offset | Size    | Offset  | Reading               | Limits | Reading             | Limits |
| 20MHz+ 20MHz | 2585.1+ 2604.9  | QPSK       | 1      | 0      | 1       | 0       | 20.98                 | 33.00  | 33.98               | 46.00  |
|              |                 |            | 1      | 0      | 1       | 99      | 20.07                 | 33.00  | 33.07               | 46.00  |
|              |                 |            | 1      | 0      | 100     | 0       | 21.64                 | 33.00  | 34.64               | 46.00  |
|              |                 |            | 1      | 49     | 1       | 49      | 21.01                 | 33.00  | 34.01               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.27                 | 33.00  | 34.27               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 99      | 20.57                 | 33.00  | 33.57               | 46.00  |
|              |                 |            | 1      | 99     | 100     | 0       | 21.94                 | 33.00  | 34.94               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.94                 | 33.00  | 34.94               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 99      | 21.88                 | 33.00  | 34.88               | 46.00  |
|              |                 |            | 100    | 0      | 100     | 0       | 22.44                 | 33.00  | 35.44               | 46.00  |
|              |                 | 16-QAM     | 1      | 0      | 1       | 0       | 20.88                 | 33.00  | 33.88               | 46.00  |
|              |                 |            | 1      | 0      | 1       | 99      | 20.03                 | 33.00  | 33.03               | 46.00  |
|              |                 |            | 1      | 0      | 100     | 0       | 21.53                 | 33.00  | 34.53               | 46.00  |
|              |                 |            | 1      | 49     | 1       | 49      | 20.92                 | 33.00  | 33.92               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 21.21                 | 33.00  | 34.21               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 99      | 20.52                 | 33.00  | 33.52               | 46.00  |
|              |                 |            | 1      | 99     | 100     | 0       | 21.78                 | 33.00  | 34.78               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.80                 | 33.00  | 34.8                | 46.00  |
|              |                 |            | 100    | 0      | 1       | 99      | 21.79                 | 33.00  | 34.79               | 46.00  |
|              |                 |            | 100    | 0      | 100     | 0       | 22.34                 | 33.00  | 35.34               | 46.00  |
| 20MHz+ 20MHz | 2660.2+ 2680.0  | QPSK       | 1      | 0      | 1       | 0       | 21.77                 | 33.00  | 34.77               | 46.00  |
|              |                 |            | 1      | 0      | 1       | 99      | 20.83                 | 33.00  | 33.83               | 46.00  |
|              |                 |            | 1      | 0      | 100     | 0       | 21.96                 | 33.00  | 34.96               | 46.00  |
|              |                 |            | 1      | 49     | 1       | 49      | 22.03                 | 33.00  | 35.03               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 22.15                 | 33.00  | 35.15               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 99      | 21.35                 | 33.00  | 34.35               | 46.00  |
|              |                 |            | 1      | 99     | 100     | 0       | 22.26                 | 33.00  | 35.26               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.54                 | 33.00  | 34.54               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 99      | 21.51                 | 33.00  | 34.51               | 46.00  |
|              |                 |            | 100    | 0      | 100     | 0       | 22.67                 | 33.00  | 35.67               | 46.00  |
|              |                 | 16-QAM     | 1      | 0      | 1       | 0       | 21.90                 | 33.00  | 34.9                | 46.00  |
|              |                 |            | 1      | 0      | 1       | 99      | 21.15                 | 33.00  | 34.15               | 46.00  |
|              |                 |            | 1      | 0      | 100     | 0       | 21.92                 | 33.00  | 34.92               | 46.00  |
|              |                 |            | 1      | 49     | 1       | 49      | 22.14                 | 33.00  | 35.14               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 0       | 22.22                 | 33.00  | 35.22               | 46.00  |
|              |                 |            | 1      | 99     | 1       | 99      | 21.56                 | 33.00  | 34.56               | 46.00  |
|              |                 |            | 1      | 99     | 100     | 0       | 22.48                 | 33.00  | 35.48               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 0       | 21.49                 | 33.00  | 34.49               | 46.00  |
|              |                 |            | 100    | 0      | 1       | 99      | 21.48                 | 33.00  | 34.48               | 46.00  |
|              |                 |            | 100    | 0      | 100     | 0       | 22.53                 | 33.00  | 35.53               | 46.00  |

Note: the device is fixed subscriber equipment.

**PAR, Band 41:**

| Bandwidth   | Frequency (MHz) | Modulation | PAR (dB) | Limit (dB) |
|-------------|-----------------|------------|----------|------------|
| 5MHz+20MHz  | 2583.80+2595.50 | QPSK       | 6.36     | 13.00      |
|             |                 | 16-QAM     | 6.85     | 13.00      |
| 10MHz+20MHz | 2583.60+2598.00 | QPSK       | 6.13     | 13.00      |
|             |                 | 16-QAM     | 6.03     | 13.00      |
| 15MHz+15MHz | 2585.50+2600.50 | QPSK       | 6.24     | 13.00      |
|             |                 | 16-QAM     | 6.35     | 13.00      |
| 15MHz+20MHz | 2583.30+2600.40 | QPSK       | 6.19     | 13.00      |
|             |                 | 16-QAM     | 6.26     | 13.00      |
| 20MHz+5MHz  | 2590.50+2602.20 | QPSK       | 6.67     | 13.00      |
|             |                 | 16-QAM     | 6.35     | 13.00      |
| 20MHz+10MHz | 2588.10+2602.50 | QPSK       | 6.63     | 13.00      |
|             |                 | 16-QAM     | 6.75     | 13.00      |
| 20MHz+15MHz | 2585.60+2602.70 | QPSK       | 6.55     | 13.00      |
|             |                 | 16-QAM     | 6.41     | 13.00      |
| 20MHz+20MHz | 2585.10+2604.90 | QPSK       | 6.17     | 13.00      |
|             |                 | 16-QAM     | 6.28     | 13.00      |

Note: peak-to-average ratio (PAR) <13 dB.

## FCC §2.1049 & §27.53, RSS-199 § 4.2, RSS-Gen § 6.6 - OCCUPIED BANDWIDTH

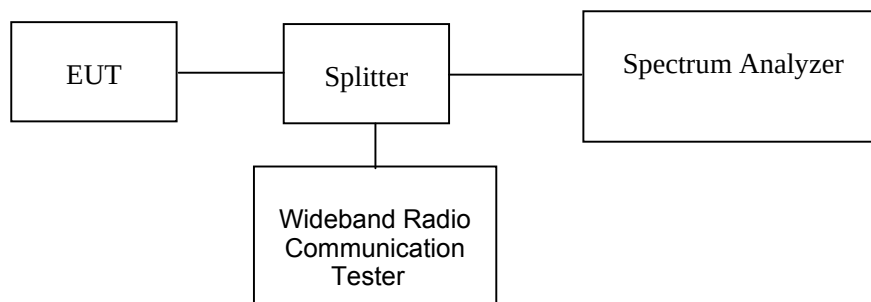
### Applicable Standards

FCC 47 §2.1049 and §27.53. RSS-199 § 4.2

### Test Procedure

The RF output of the transmitter was connected to the simulator and the spectrum analyzer through sufficient attenuation.

The 26 dB & 99% bandwidth was recorded.



### Test Equipment List and Details

| Manufacturer    | Description                         | Model   | Serial Number | Calibration Date | Calibration Due Date |
|-----------------|-------------------------------------|---------|---------------|------------------|----------------------|
| Rohde & Schwarz | Signal Analyzer                     | FSIQ26  | 831929/005    | 2016-09-21       | 2017-09-20           |
| Unknown         | RF Cable                            | Unknown | C-2           | Each Time        | /                    |
| R&S             | Wideband Radio Communication Tester | CMW500  | 106891        | 2016-11-23       | 2017-11-23           |

**\* Statement of Traceability:** BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B "Implementation of traceability policy in accredited laboratories".

## Test Data

### Environmental Conditions

|                           |                |
|---------------------------|----------------|
| <b>Temperature:</b>       | 27~28.1 °C     |
| <b>Relative Humidity:</b> | 41~57 %        |
| <b>ATM Pressure:</b>      | 99.9~100.1 kPa |

The testing was performed by Lorin Bian from 2017-05-20 to 2017-07-04.

### Test Result: Compliant

#### Single Carrier Band 7:

| Test Modulation | Test Bandwidth | Test Channel | 99% Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|-----------------|----------------|--------------|------------------------------|-----------------------|
| QPSK            | 5M             | M            | 4.549                        | 4.990                 |
|                 | 10M            |              | 8.978                        | 9.790                 |
|                 | 15M            |              | 13.587                       | 15.471                |
|                 | 20M            |              | 18.036                       | 20.070                |
| 16-QAM          | 5M             |              | 4.549                        | 5.030                 |
|                 | 10M            |              | 8.978                        | 9.830                 |
|                 | 15M            |              | 13.587                       | 15.291                |
|                 | 20M            |              | 18.116                       | 20.150                |

Note: the Bandwidth is more than 1MHz.

#### Band 40(2305-2320MHz):

| Test Modulation | Test Bandwidth | Test Channel | 99% Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|-----------------|----------------|--------------|------------------------------|-----------------------|
| QPSK            | 5M             | M            | 4.529                        | 5.025                 |
|                 | 10M            |              | 8.978                        | 9.684                 |
|                 | 15M            |              | 13.587                       | 15.286                |
| 16-QAM          | 5M             |              | 4.549                        | 5.025                 |
|                 | 10M            |              | 8.978                        | 9.765                 |
|                 | 15M            |              | 13.587                       | 15.286                |

**Band 40(2345-2360MHz):**

| Test Modulation | Test Bandwidth | Test Channel | 99% Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|-----------------|----------------|--------------|------------------------------|-----------------------|
| QPSK            | 5M             | M            | 4.549                        | 5.030                 |
|                 | 10M            |              | 8.978                        | 9.810                 |
|                 | 15M            |              | 13.647                       | 16.052                |
| 16-QAM          | 5M             |              | 4.549                        | 5.030                 |
|                 | 10M            |              | 8.978                        | 9.770                 |
|                 | 15M            |              | 13.587                       | 15.451                |

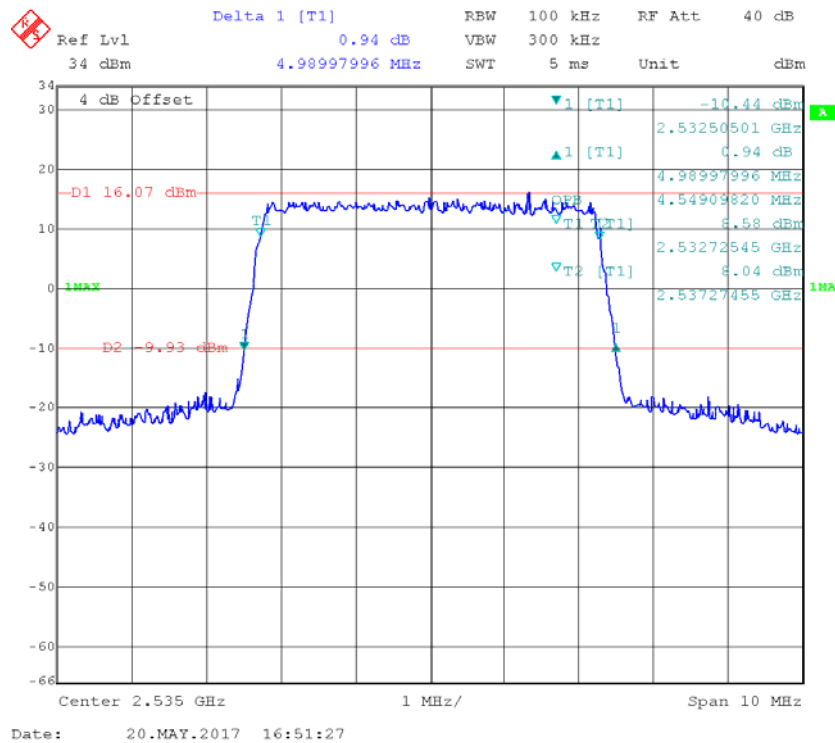
**Band 41:**

| Test Modulation | Test Bandwidth | Test Channel | 99% Occupied Bandwidth (MHz) | 26 dB Bandwidth (MHz) |
|-----------------|----------------|--------------|------------------------------|-----------------------|
| QPSK            | 5M             | M            | 4.529                        | 5.090                 |
|                 | 10M            |              | 8.978                        | 9.870                 |
|                 | 15M            |              | 13.587                       | 15.210                |
|                 | 20M            |              | 18.036                       | 19.770                |
| 16-QAM          | 5M             |              | 4.529                        | 5.010                 |
|                 | 10M            |              | 8.978                        | 9.870                 |
|                 | 15M            |              | 13.647                       | 15.270                |
|                 | 20M            |              | 18.036                       | 19.770                |

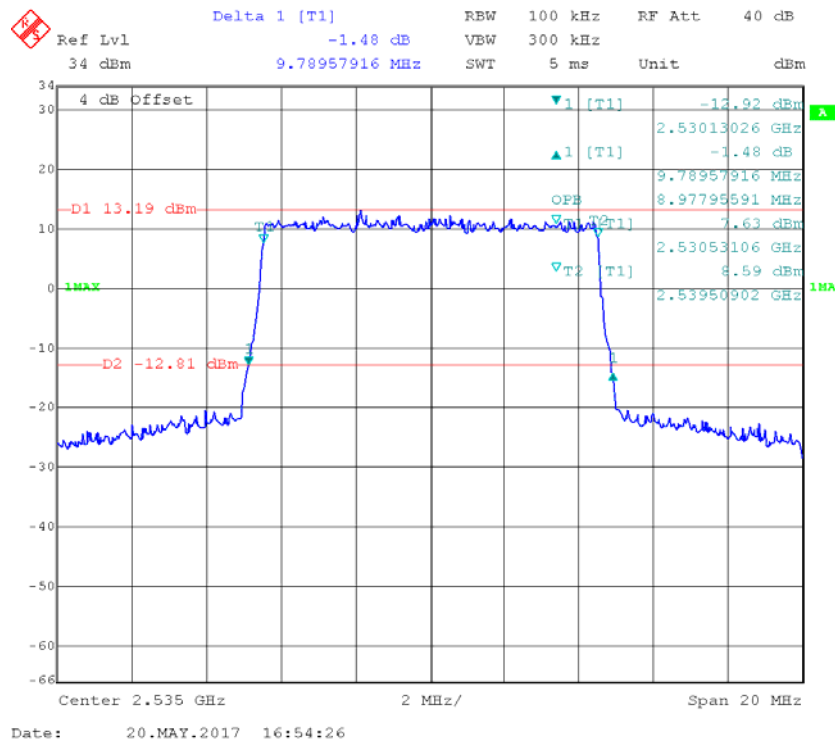
Note: the Bandwidth is more than 1MHz.

**Band 7:**

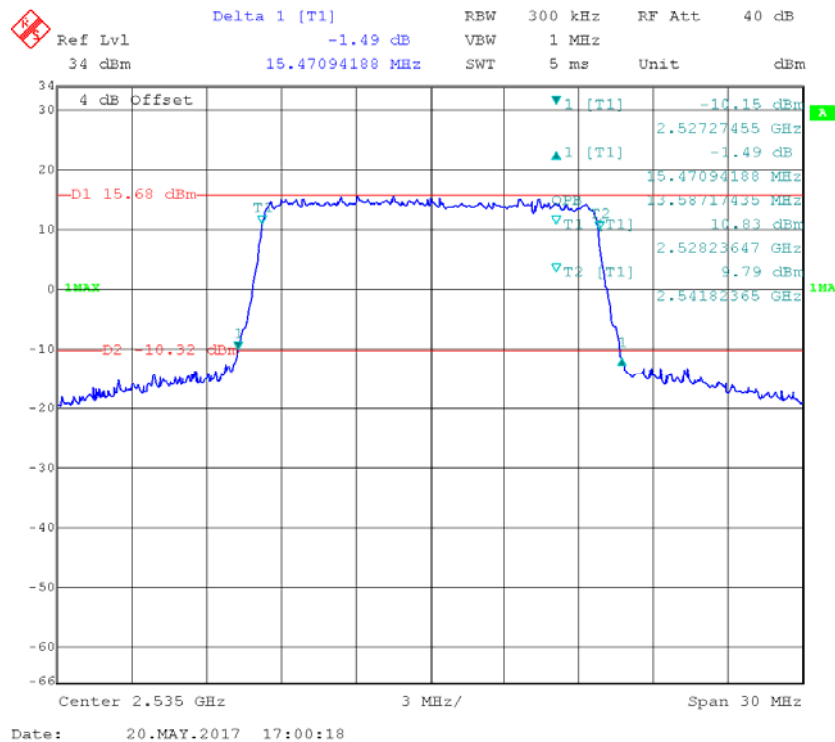
**QPSK\_5MHz\_RB25**



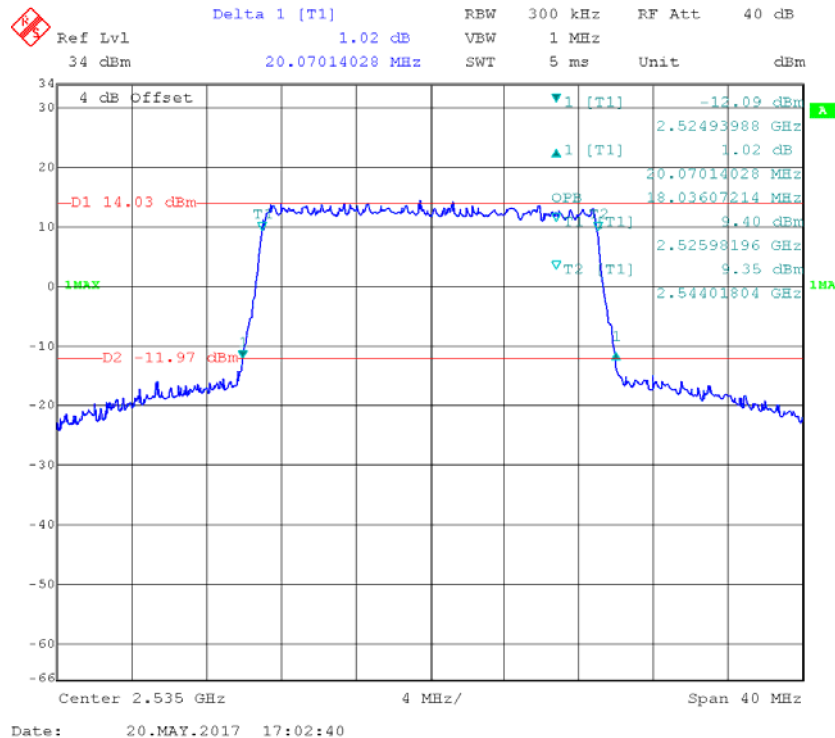
**QPSK\_10MHz\_RB50**



### QPSK\_15MHz\_RB75

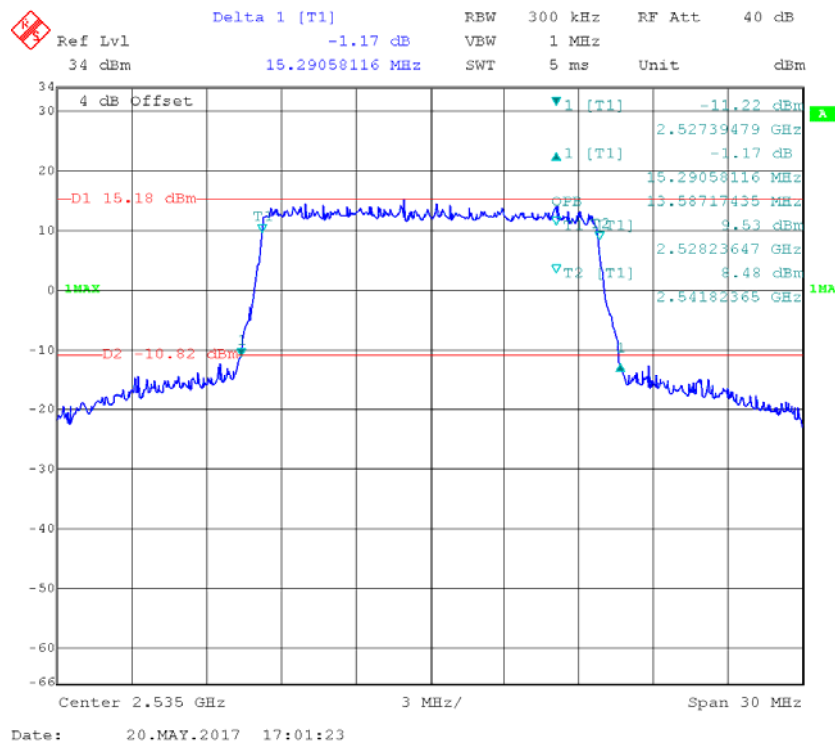


### QPSK\_20MHz\_RB100

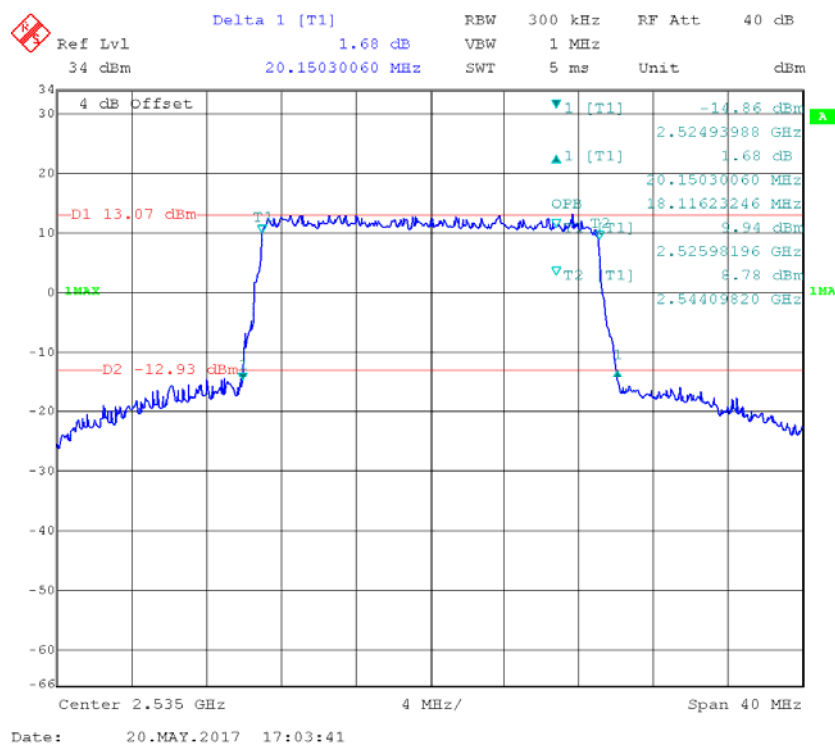




### 16-QAM\_15MHz\_RB75

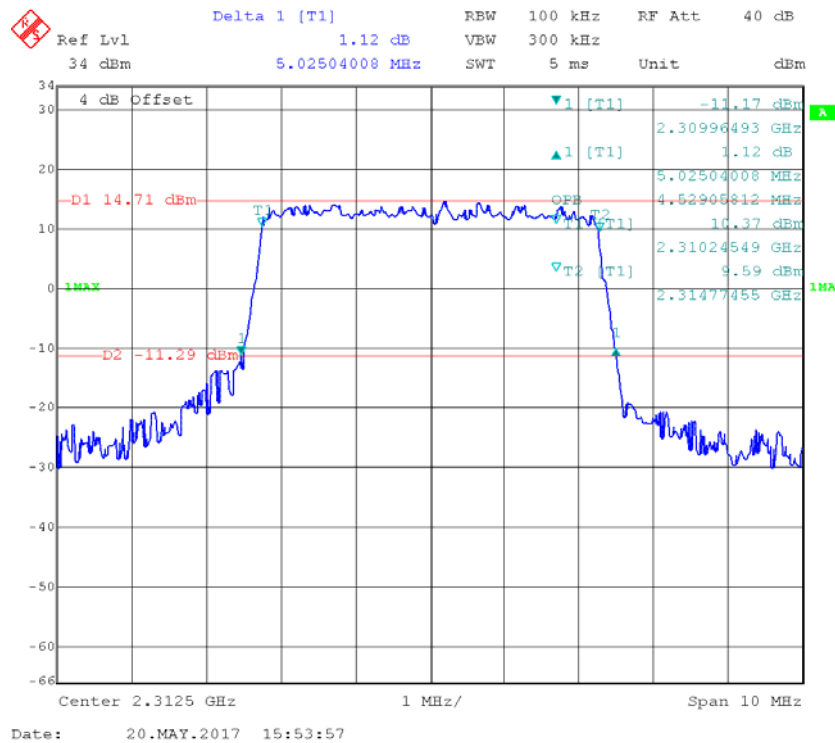


### 16-QAM\_20MHz\_RB100

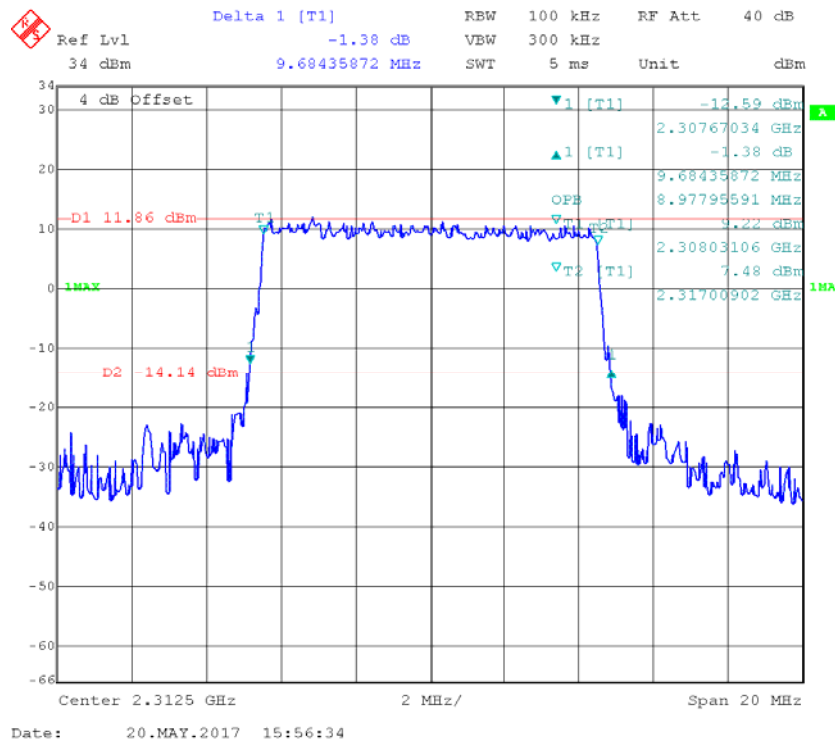


**Band 40(2305MHz-2320MHz):**

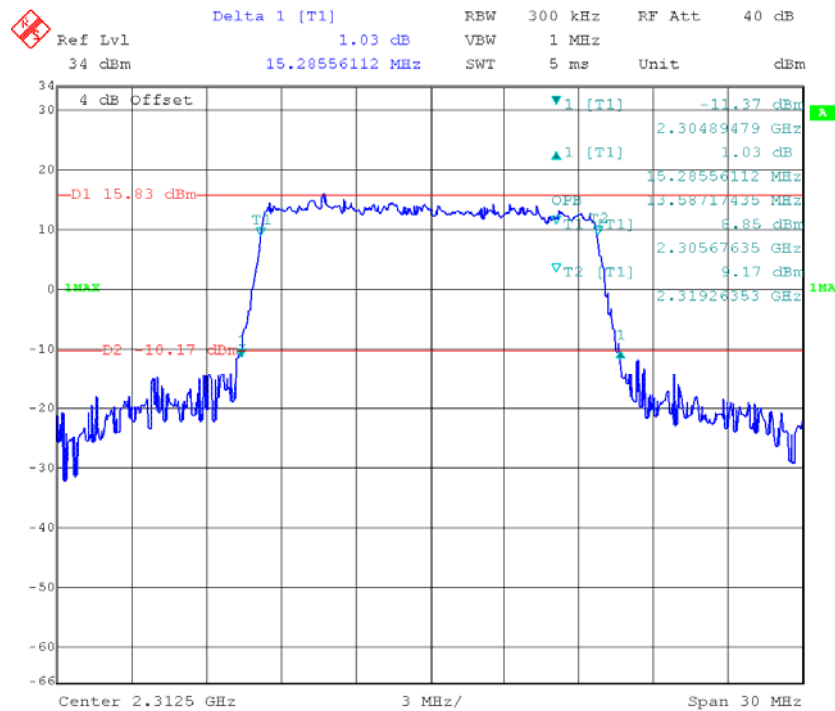
**QPSK\_5MHz\_RB25**



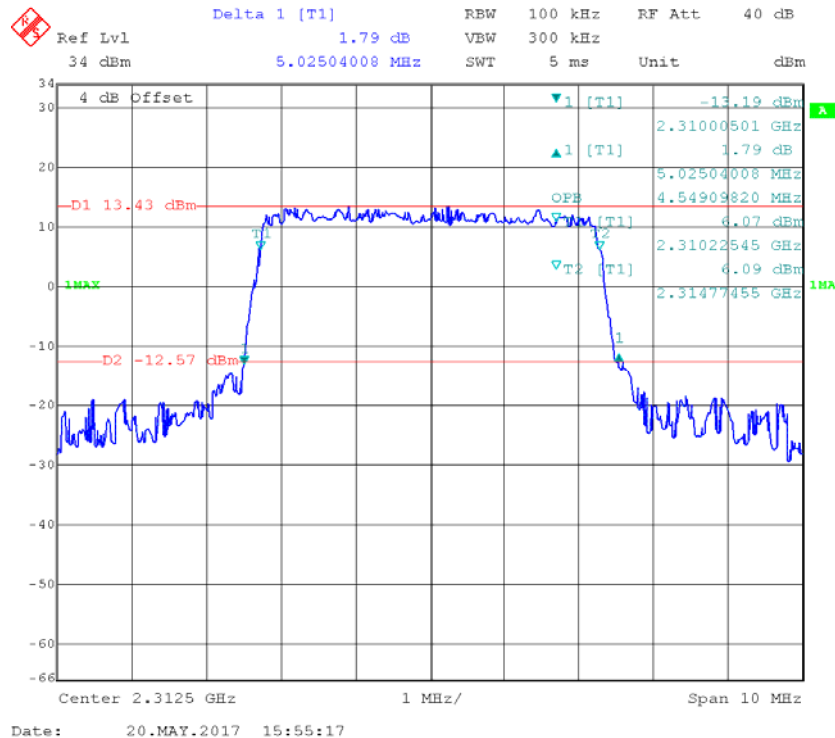
**QPSK\_10MHz\_RB50**



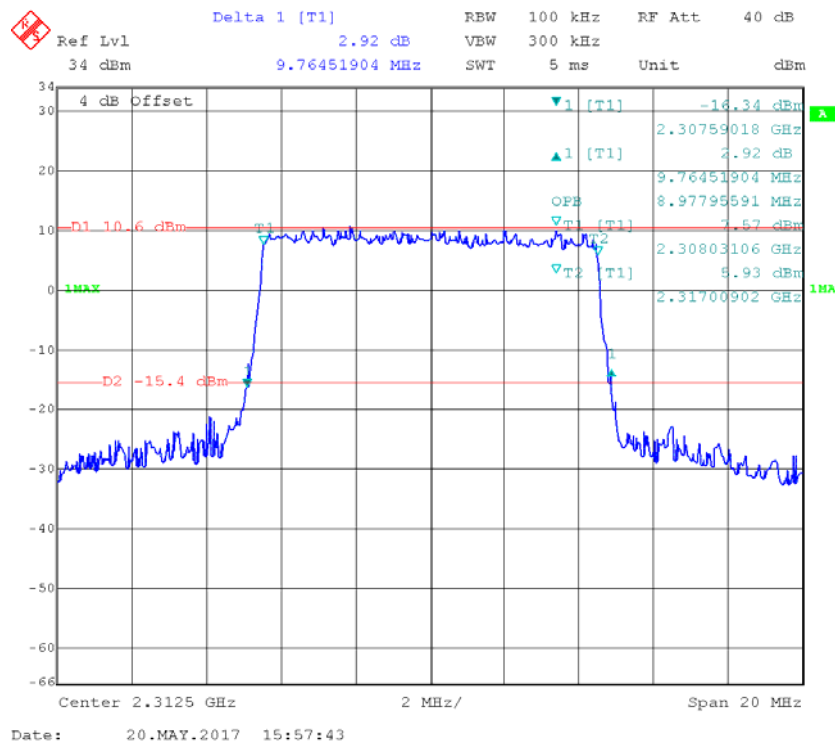
### QPSK\_15MHz\_RB75



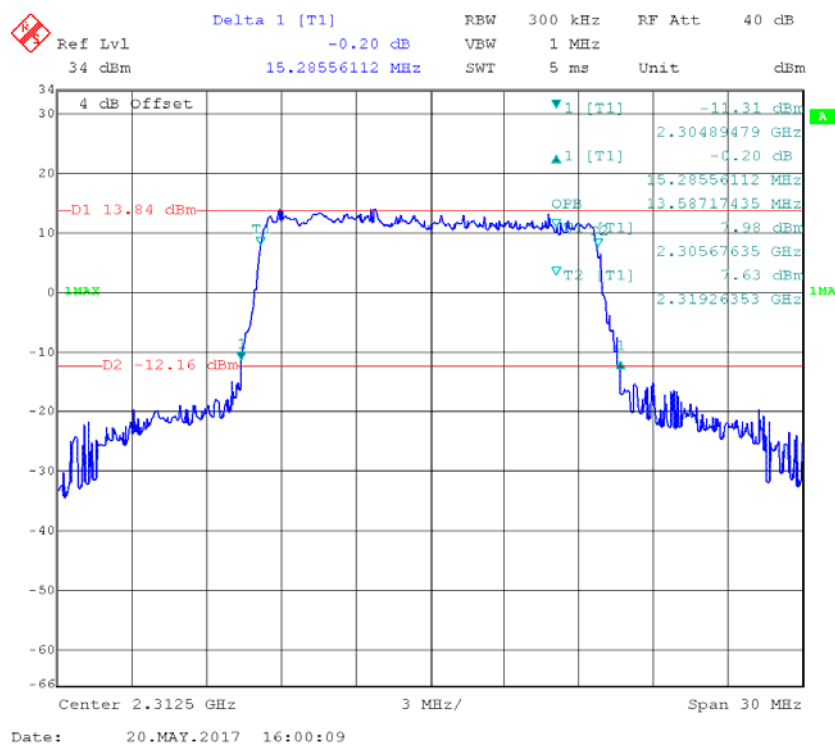
### 16-QAM\_5MHz\_RB25



### 16-QAM\_10MHz\_RB50

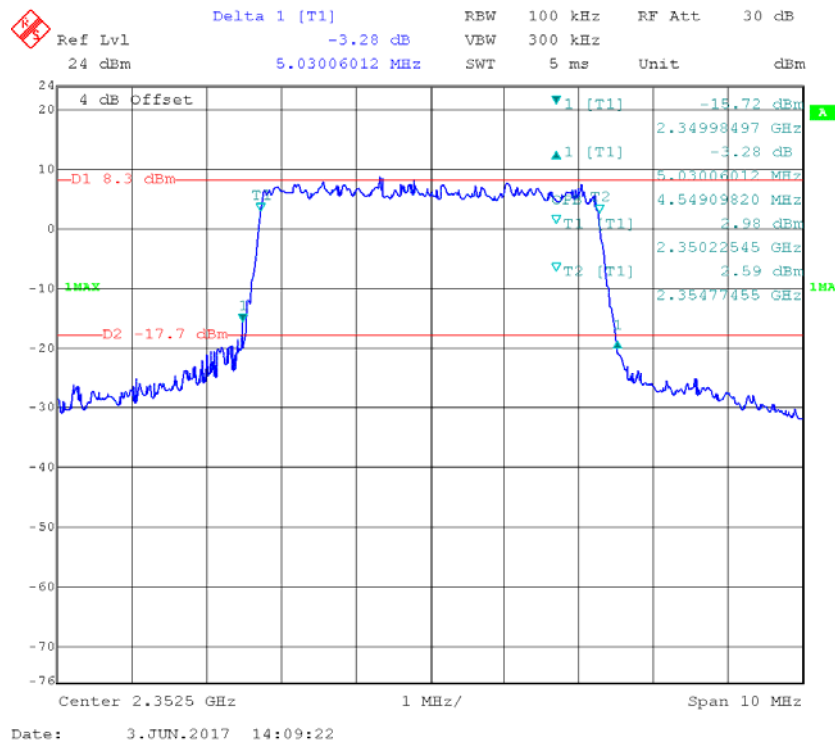


### 16-QAM\_15MHz\_RB75

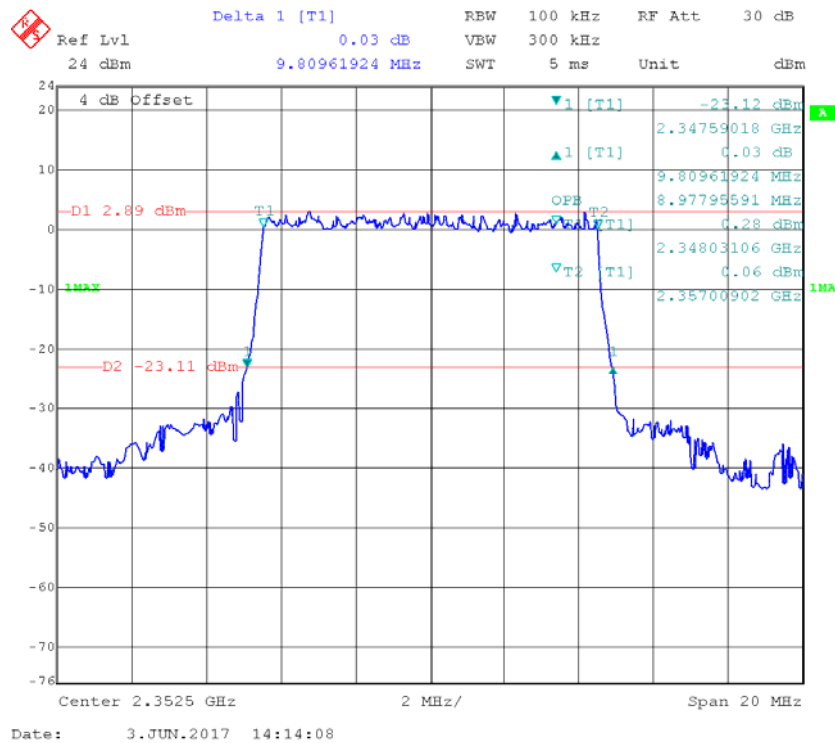


**Band 40(2345MHz-2360MHz):**

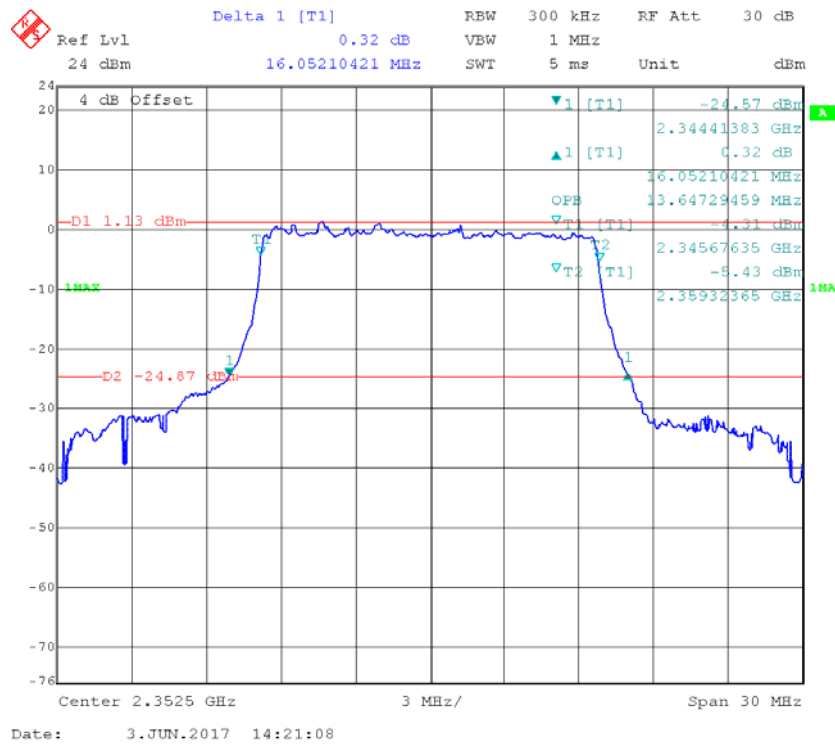
**QPSK\_5MHz\_RB25**



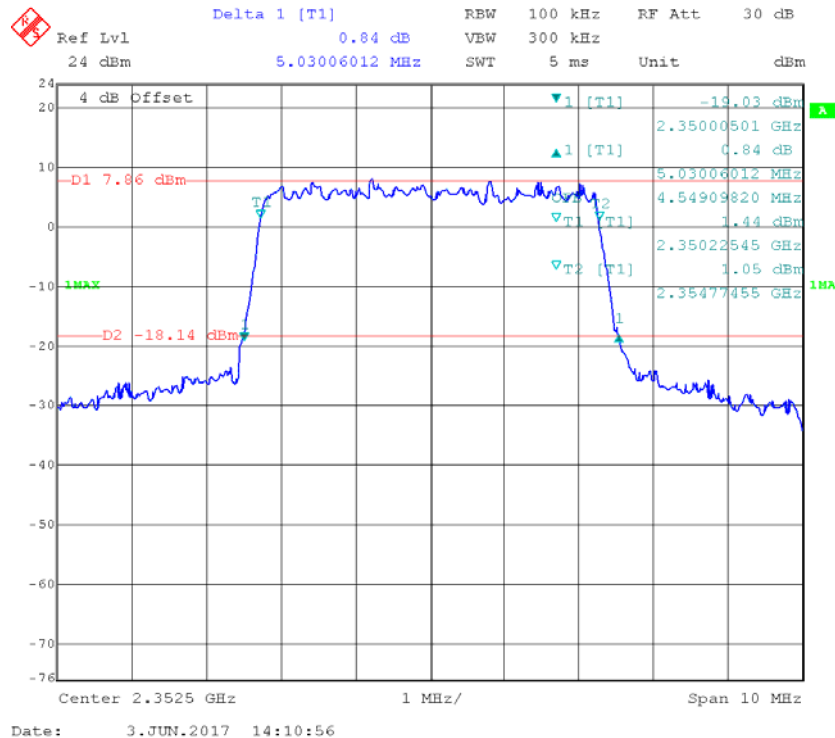
**QPSK\_10MHz\_RB50**



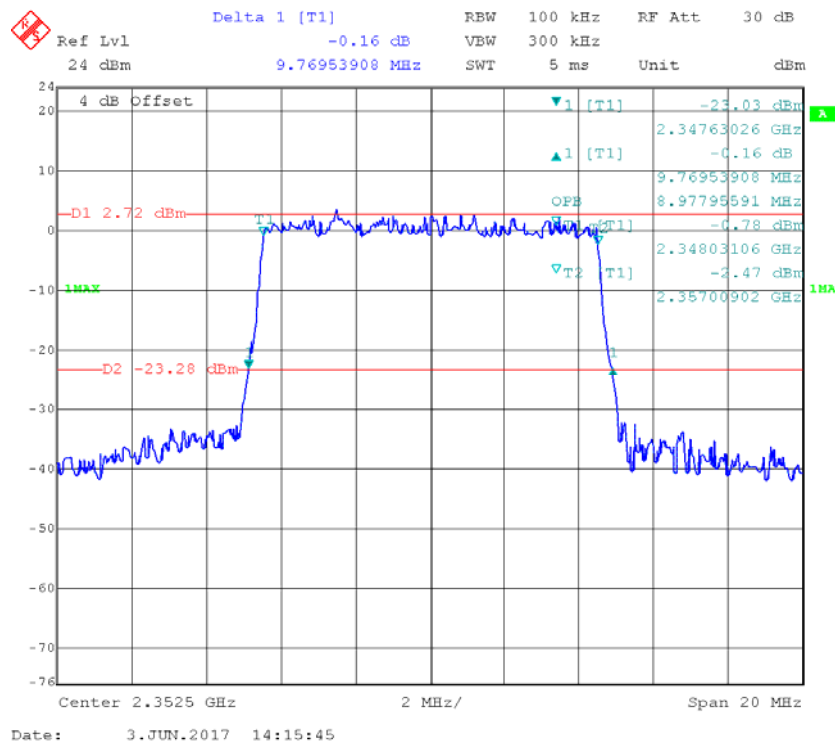
### QPSK\_15MHz\_RB75



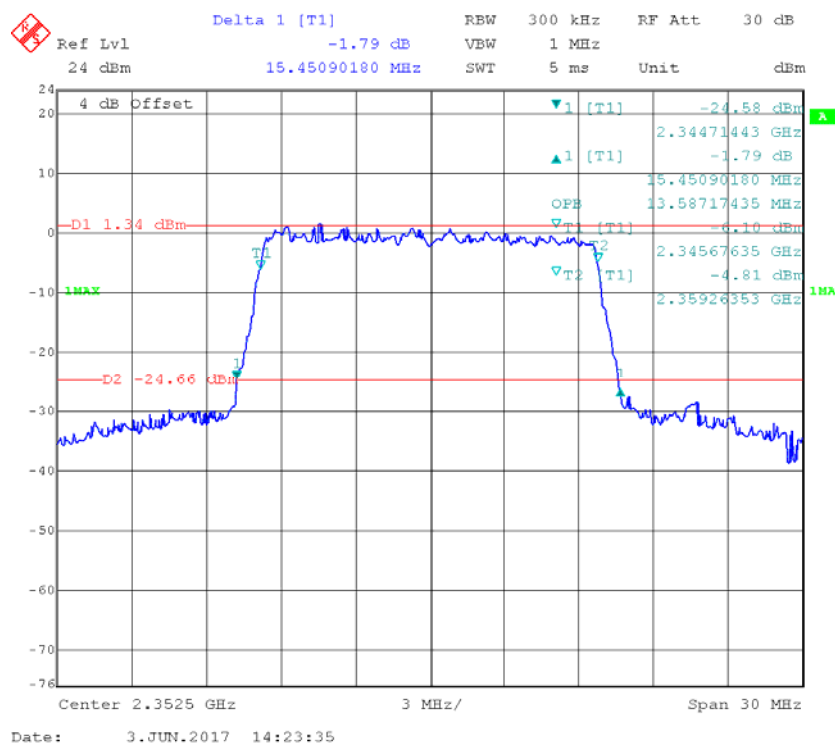
### 16-QAM\_5MHz\_RB25



### 16-QAM\_10MHz\_RB50

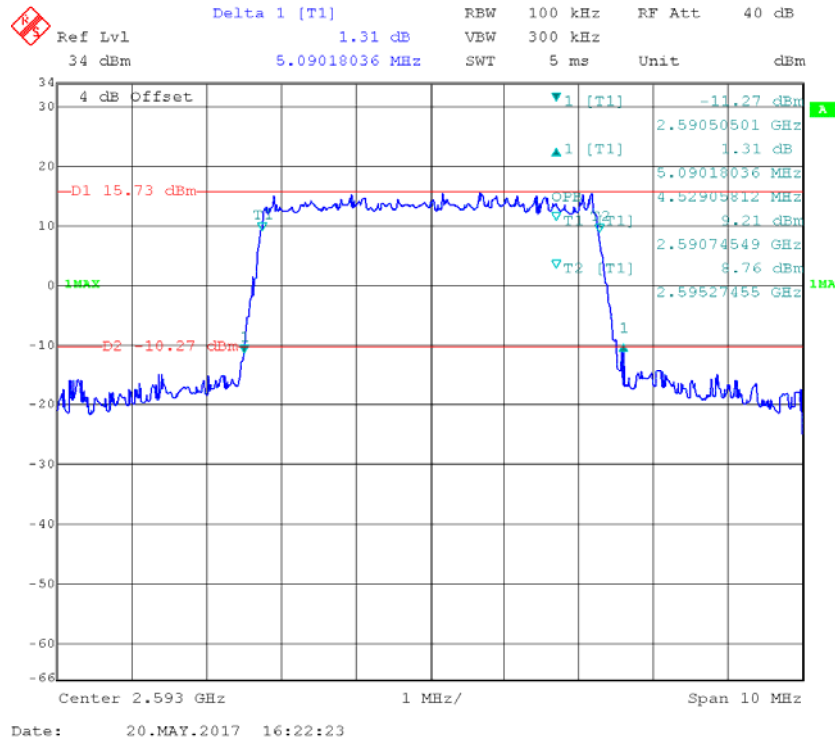


### 16-QAM\_15MHz\_RB75

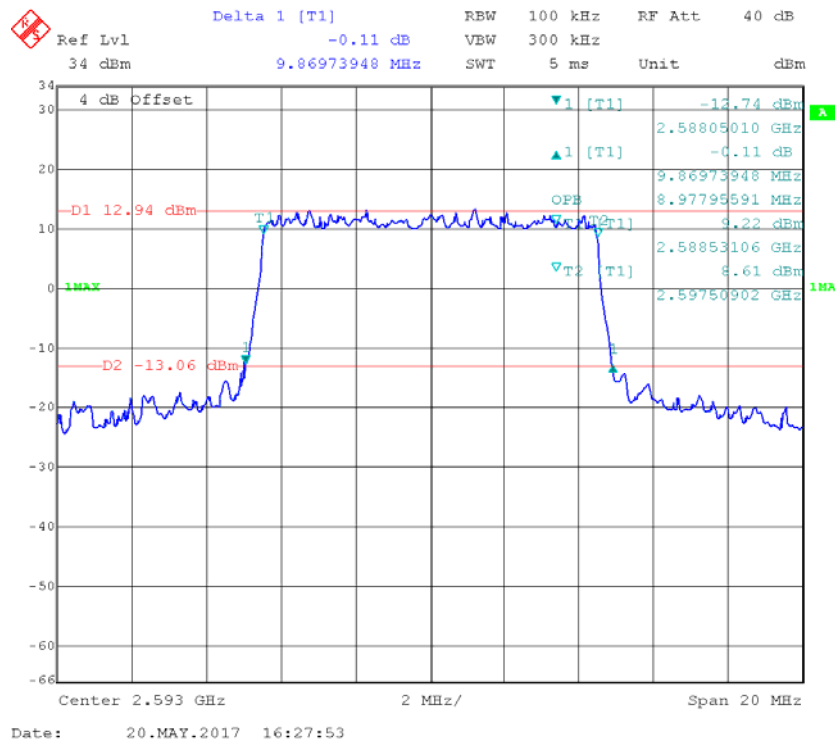


**Band 41:**

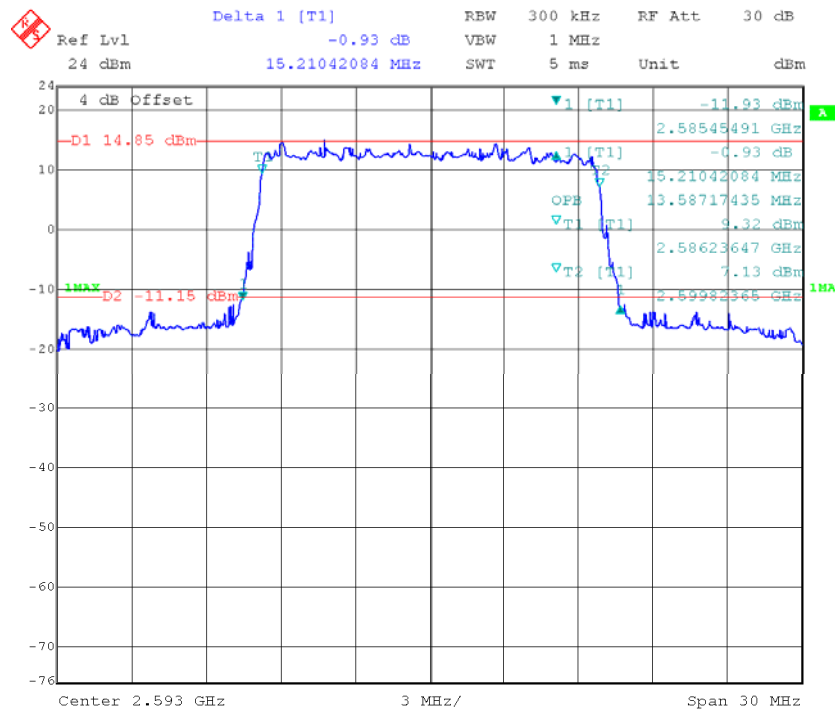
**QPSK\_5MHz\_RB25**



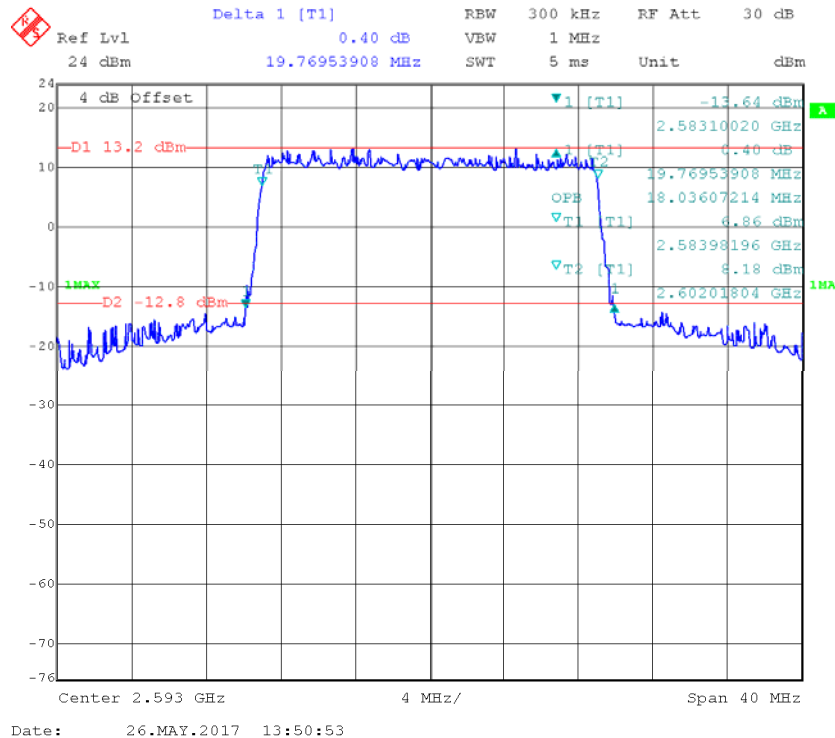
**QPSK\_10MHz\_RB50**



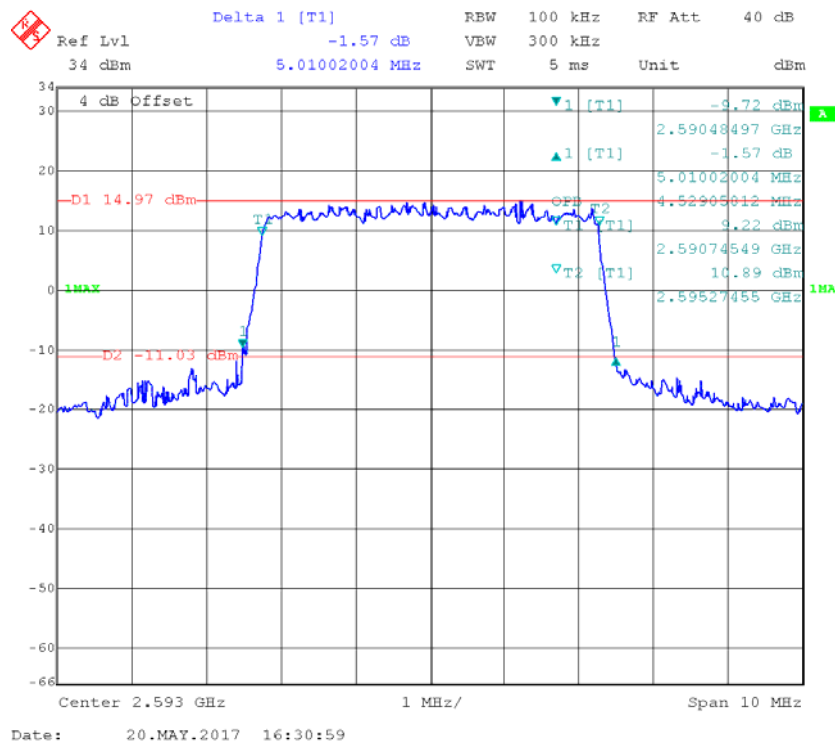
### QPSK\_15MHz\_RB75



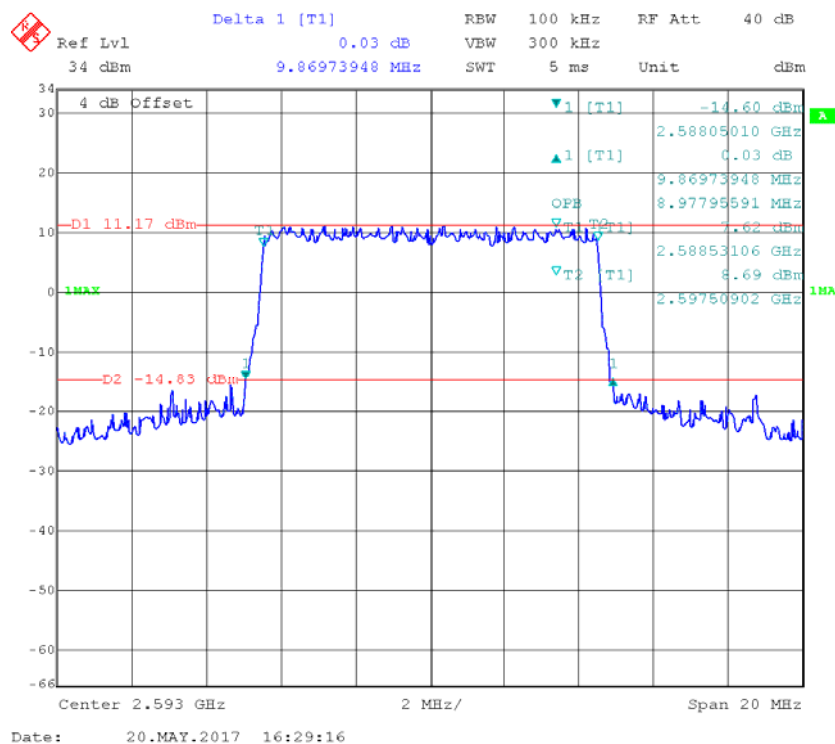
### QPSK\_20MHz\_RB100



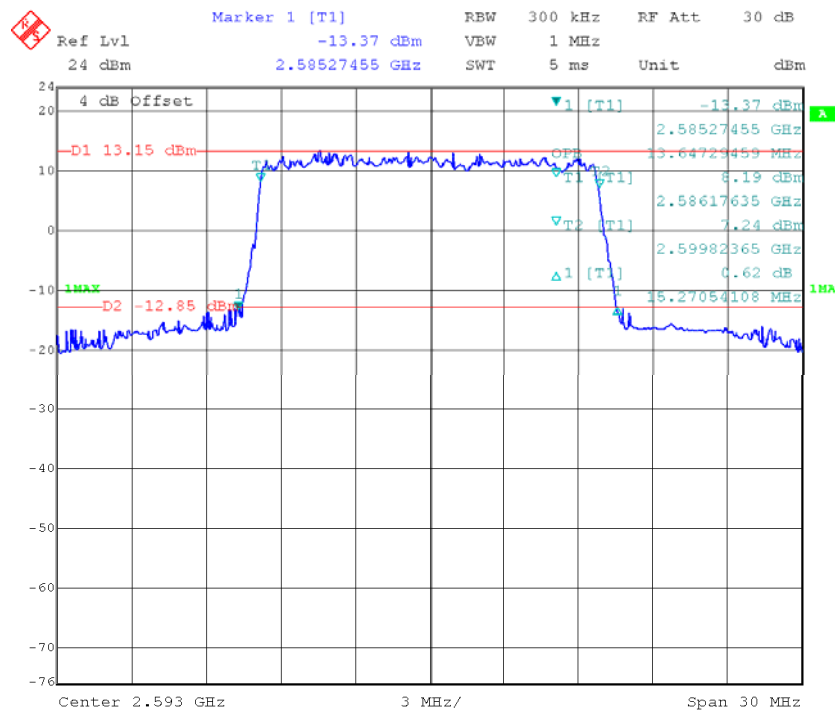
### 16-QAM\_5MHz\_RB25



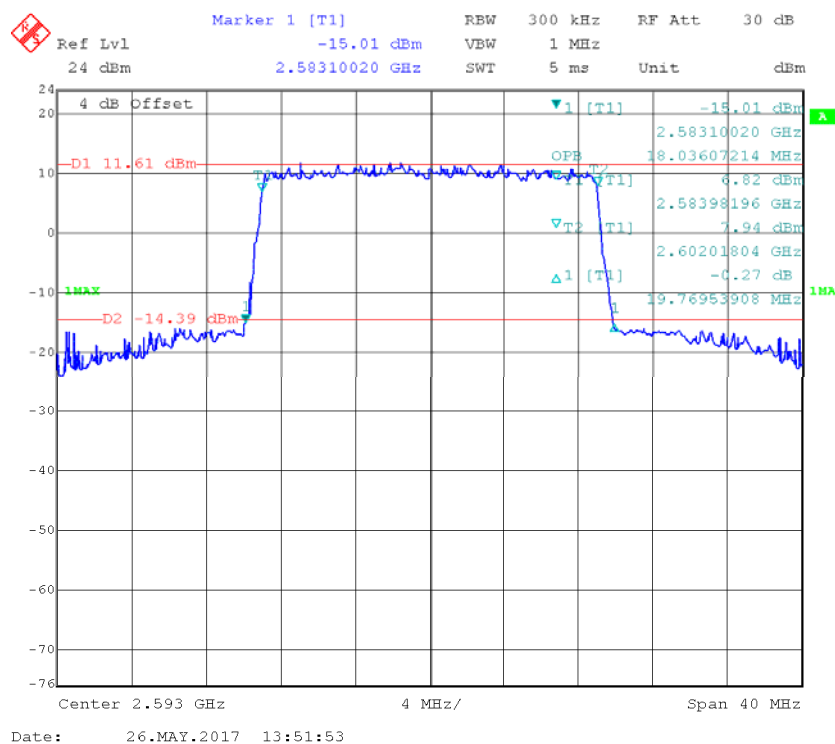
### 16-QAM\_10MHz\_RB50



### 16-QAM\_15MHz\_RB75



### 16-QAM\_20MHz\_RB100



**Carrier Aggregation:  
Band 7:**

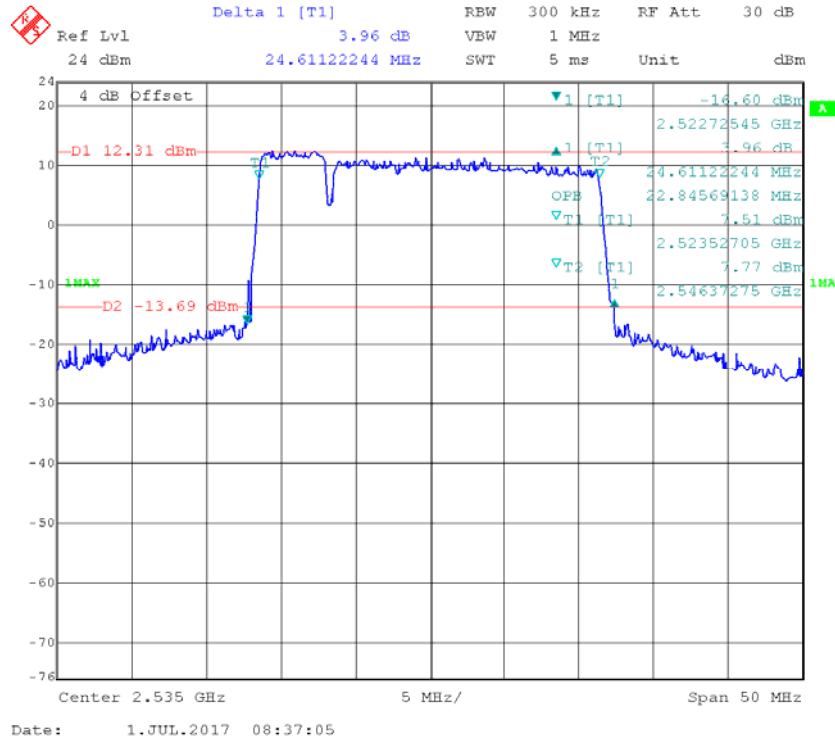
| Bandwidth<br>(MHz) | Frequency<br>(MHz) | Modulation | PCC<br>RB | PCC<br>RB | SCC1<br>RB | SCC1<br>RB | 99%<br>Occupied<br>Bandwidth<br>(MHz) | 26dB<br>Bandwidth<br>(MHz) |
|--------------------|--------------------|------------|-----------|-----------|------------|------------|---------------------------------------|----------------------------|
|                    |                    |            | Size      | Offset    | Size       | Offset     |                                       |                            |
| 20+5               | 2535.00            | QPSK       | 100       | 0         | 25         | 0          | 22.85                                 | 24.55                      |
|                    |                    | 16-QAM     | 100       | 0         | 25         | 0          | 22.85                                 | 24.85                      |
| 5                  | 2544.20            | QPSK       | 25        | 0         | 0          | 0          | 4.53                                  | 5.01                       |
|                    |                    |            | 1         | 0         | 0          | 0          | 0.26                                  | 0.45                       |
|                    |                    | 16-QAM     | 25        | 0         | 0          | 0          | 4.55                                  | 5.03                       |
|                    |                    |            | 1         | 0         | 0          | 0          | 0.28                                  | 0.47                       |
| 20+20              | 2535.00            | QPSK       | 100       | 0         | 100        | 0          | 37.84                                 | 40.67                      |
|                    |                    | 16-QAM     | 100       | 0         | 100        | 0          | 37.84                                 | 41.09                      |
| 20                 | 2544.90            | QPSK       | 100       | 0         | 0          | 0          | 18.04                                 | 19.77                      |
|                    |                    |            | 1         | 0         | 0          | 0          | 0.24                                  | 0.50                       |
|                    |                    | 16-QAM     | 100       | 0         | 0          | 0          | 18.04                                 | 19.69                      |
|                    |                    |            | 1         | 0         | 0          | 0          | 0.32                                  | 0.54                       |
| 5+20               | 2535.00            | QPSK       | 25        | 0         | 100        | 0          | 22.85                                 | 24.61                      |
|                    |                    | 16-QAM     | 25        | 0         | 100        | 0          | 22.95                                 | 24.61                      |
| 10+20              | 2535.00            | QPSK       | 50        | 0         | 100        | 0          | 27.78                                 | 29.37                      |
|                    |                    | 16-QAM     | 50        | 0         | 100        | 0          | 27.78                                 | 29.61                      |
| 20+10              | 2535.00            | QPSK       | 100       | 0         | 50         | 0          | 27.90                                 | 29.41                      |
|                    |                    | 16-QAM     | 100       | 0         | 50         | 0          | 27.90                                 | 29.65                      |
| 15+15              | 2535.00            | QPSK       | 75        | 0         | 75         | 0          | 28.38                                 | 29.97                      |
|                    |                    | 16-QAM     | 75        | 0         | 75         | 0          | 28.38                                 | 30.21                      |
| 15+20              | 2535.00            | QPSK       | 75        | 0         | 100        | 0          | 33.11                                 | 35.95                      |
|                    |                    | 16-QAM     | 75        | 0         | 100        | 0          | 32.97                                 | 35.95                      |
| 20+15              | 2535.00            | QPSK       | 100       | 0         | 75         | 0          | 32.97                                 | 36.07                      |
|                    |                    | 16-QAM     | 100       | 0         | 75         | 0          | 32.97                                 | 35.93                      |

**Band 41:**

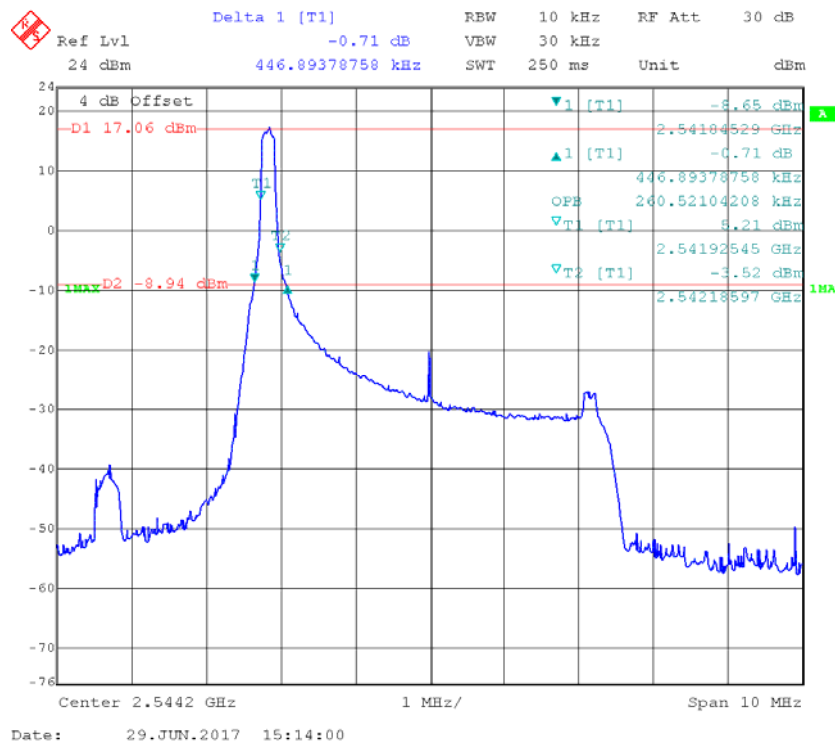
| Bandwidth<br>(MHz) | Frequency<br>(MHz) | Modulation | PCC<br>RB | PCC<br>RB | SCC1<br>RB | SCC1<br>RB | 99%<br>Occupied<br>Bandwidth<br>(MHz) | 26dB<br>Bandwidth<br>(MHz) |
|--------------------|--------------------|------------|-----------|-----------|------------|------------|---------------------------------------|----------------------------|
|                    |                    |            | Size      | Offset    | Size       | Offset     |                                       |                            |
| 20+5               | 2593.00            | QPSK       | 100       | 0         | 25         | 0          | 22.95                                 | 24.25                      |
|                    |                    | 16-QAM     | 100       | 0         | 25         | 0          | 22.95                                 | 24.56                      |
| 5                  | 2602.20            | QPSK       | 25        | 0         | 0          | 0          | 4.55                                  | 5.46                       |
|                    |                    |            | 1         | 0         | 0          | 0          | 0.30                                  | 0.43                       |
|                    |                    | 16-QAM     | 25        | 0         | 0          | 0          | 4.55                                  | 5.42                       |
|                    |                    |            | 1         | 0         | 0          | 0          | 0.34                                  | 0.45                       |
| 20+20              | 2593.00            | QPSK       | 100       | 0         | 100        | 0          | 38.16                                 | 52.42                      |
|                    |                    | 16-QAM     | 100       | 0         | 100        | 0          | 38.00                                 | 56.43                      |
| 20                 | 2583.10            | QPSK       | 100       | 0         | 0          | 0          | 18.04                                 | 20.70                      |
|                    |                    |            | 1         | 0         | 0          | 0          | 0.28                                  | 0.47                       |
|                    |                    | 16-QAM     | 100       | 0         | 0          | 0          | 18.12                                 | 21.02                      |
|                    |                    |            | 1         | 0         | 0          | 0          | 0.40                                  | 0.56                       |
| 5+20               | 2593.00            | QPSK       | 25        | 0         | 100        | 0          | 22.85                                 | 23.95                      |
|                    |                    | 16-QAM     | 25        | 0         | 100        | 0          | 22.85                                 | 24.05                      |
| 10+20              | 2593.00            | QPSK       | 50        | 0         | 100        | 0          | 27.90                                 | 29.35                      |
|                    |                    | 16-QAM     | 50        | 0         | 100        | 0          | 27.90                                 | 29.46                      |
| 20+10              | 2593.00            | QPSK       | 100       | 0         | 50         | 0          | 27.78                                 | 29.46                      |
|                    |                    | 16-QAM     | 100       | 0         | 50         | 0          | 27.78                                 | 30.18                      |
| 15+15              | 2593.00            | QPSK       | 75        | 0         | 75         | 0          | 28.26                                 | 29.70                      |
|                    |                    | 16-QAM     | 75        | 0         | 75         | 0          | 28.26                                 | 29.82                      |
| 15+20              | 2593.00            | QPSK       | 75        | 0         | 100        | 0          | 38.27                                 | 38.63                      |
|                    |                    | 16-QAM     | 75        | 0         | 100        | 0          | 33.25                                 | 46.76                      |
| 20+15              | 2593.00            | QPSK       | 100       | 0         | 75         | 0          | 33.11                                 | 39.61                      |
|                    |                    | 16-QAM     | 100       | 0         | 75         | 0          | 33.11                                 | 48.17                      |

**Carrier Aggregation:  
Band 7:**

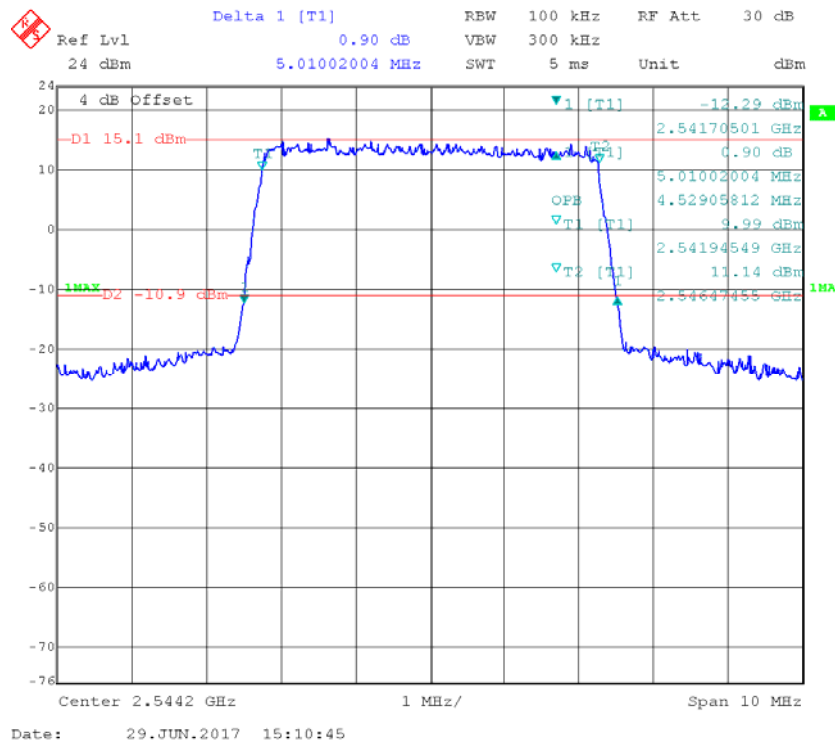
**5&20MHz\_QPSK\_P25#0&S100#0**



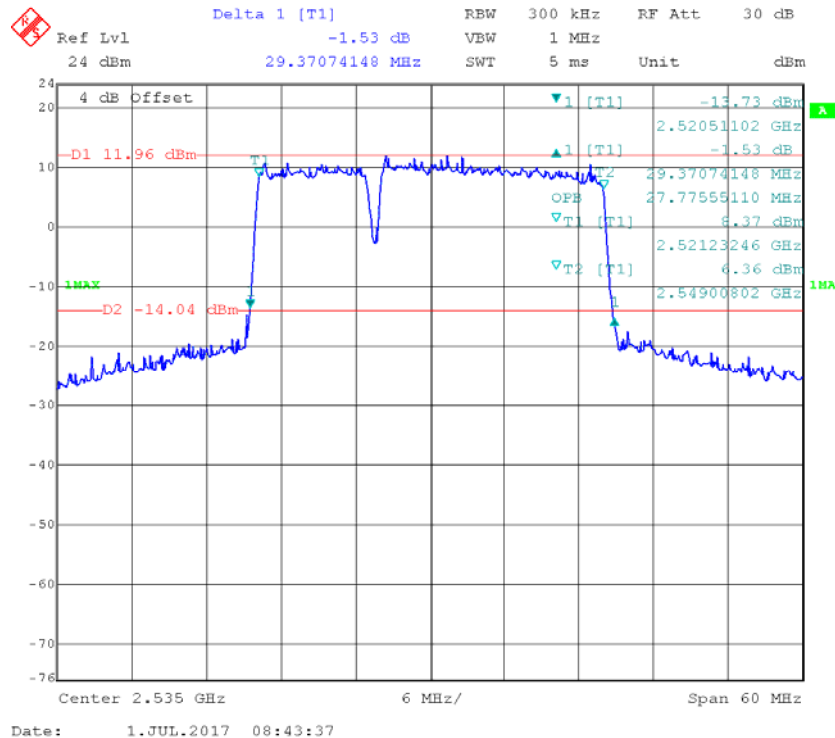
**5MHz\_QPSK\_RB1**



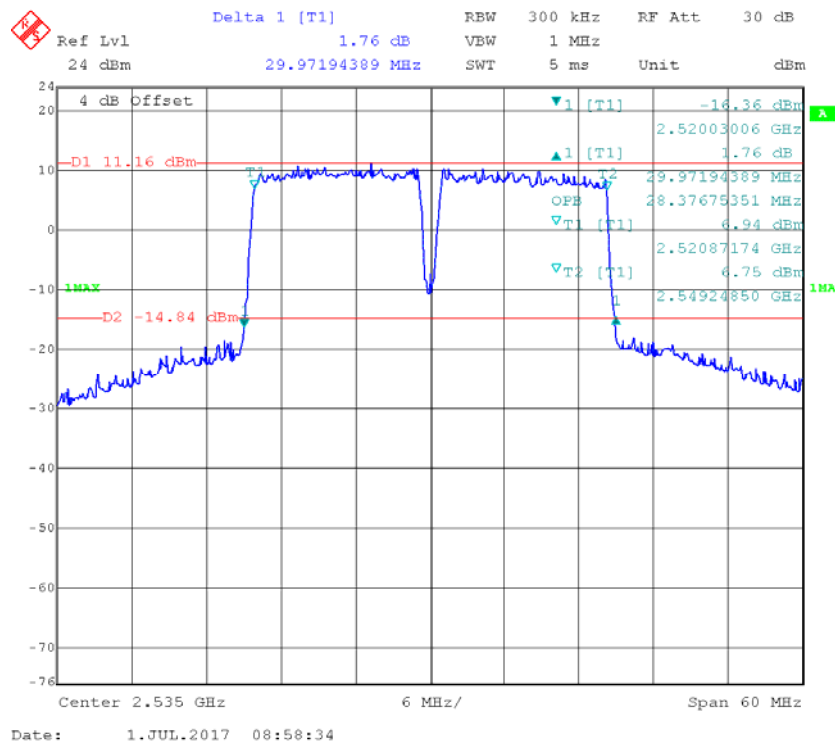
### 5MHz\_QPSK\_RB25



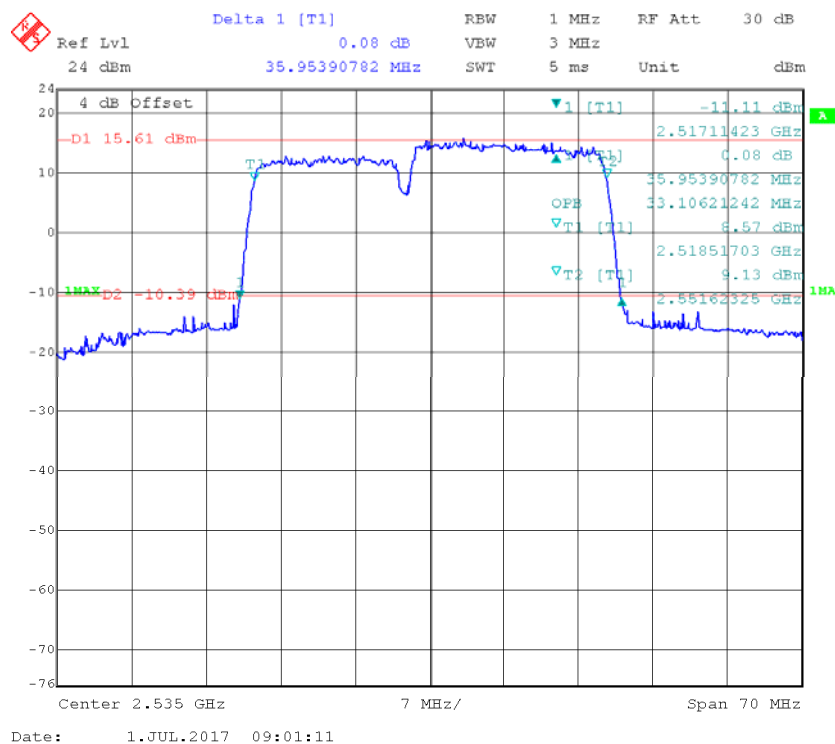
### 10&20MHz\_QPSK\_P50#0&S100#0



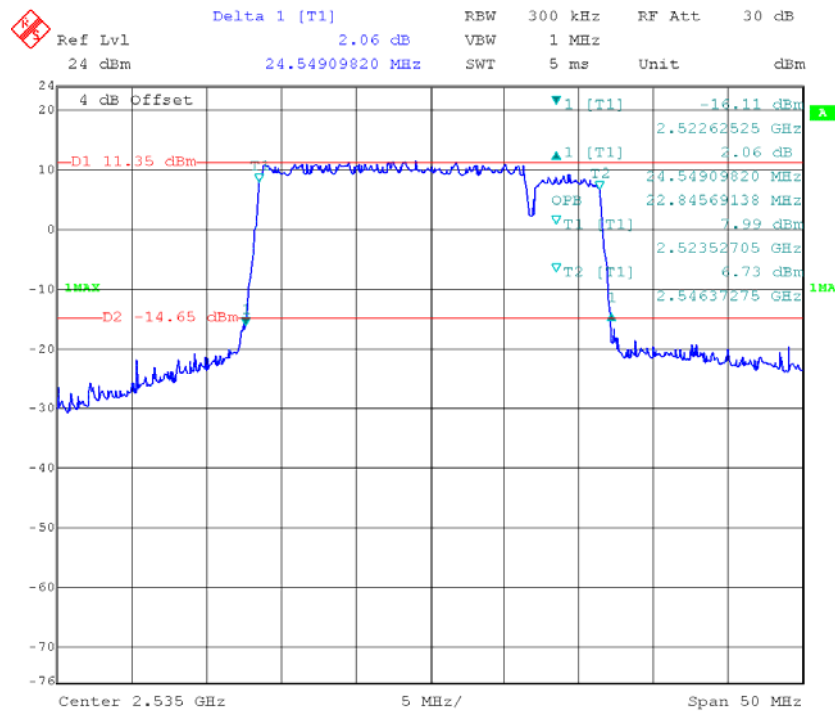
### 15&15MHz\_QPSK\_P75#0&S75#0



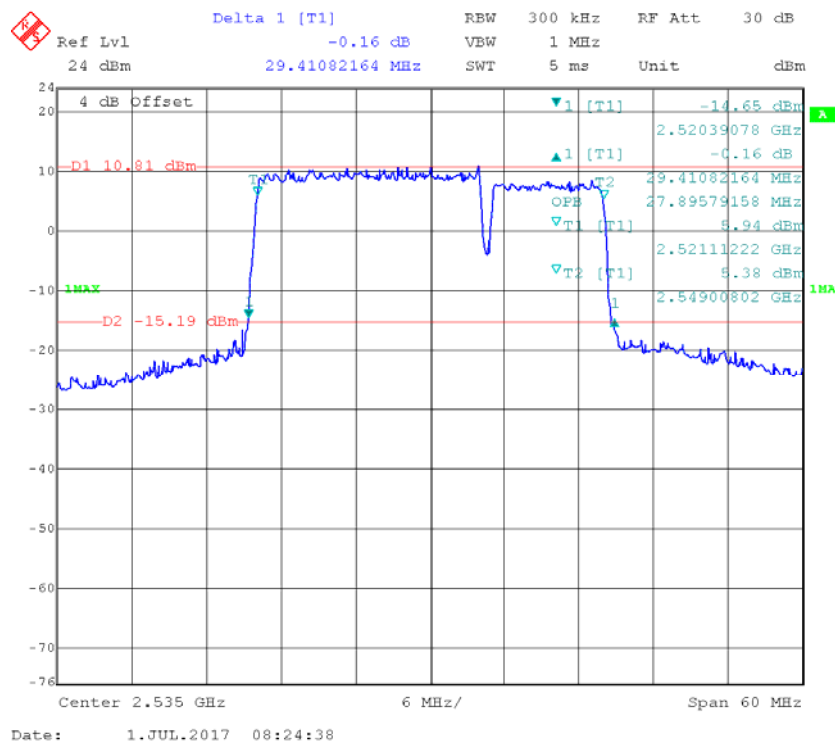
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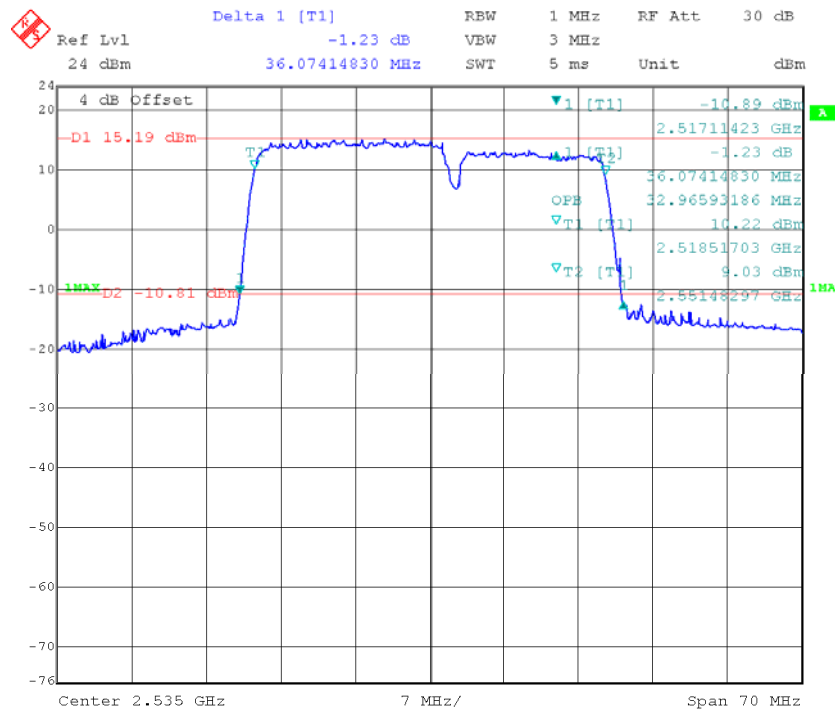
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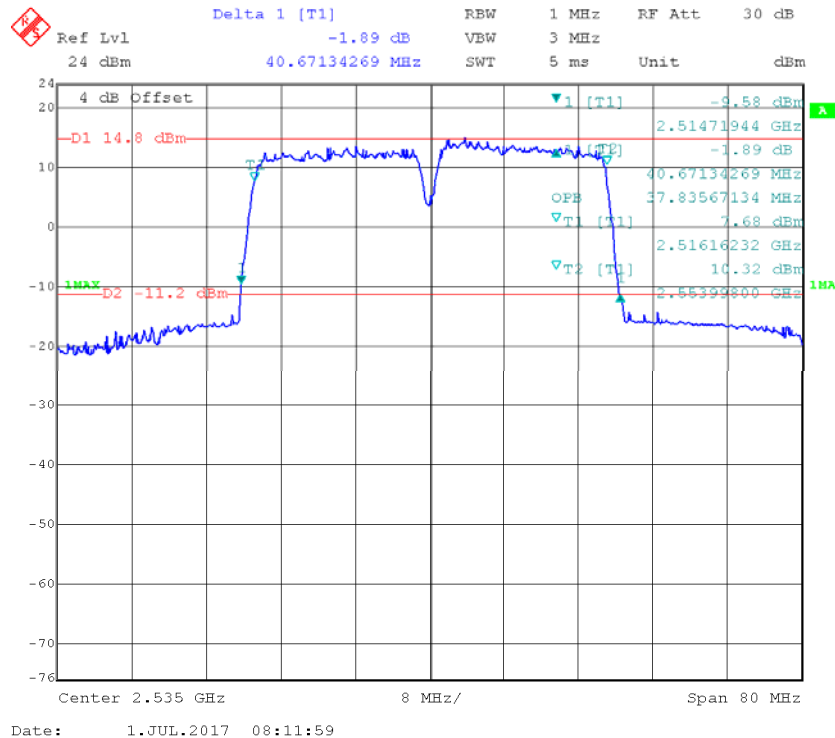
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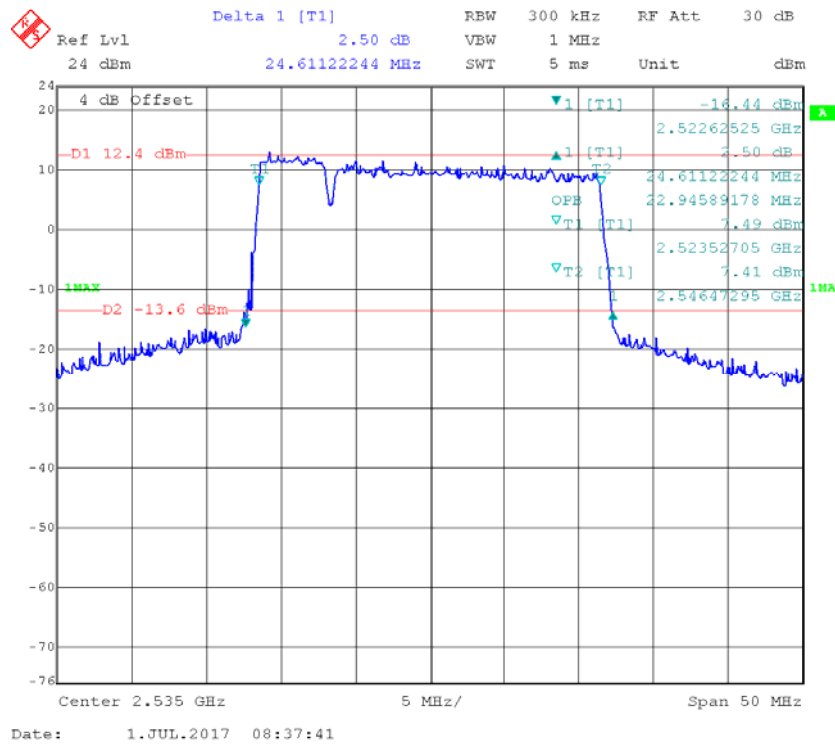


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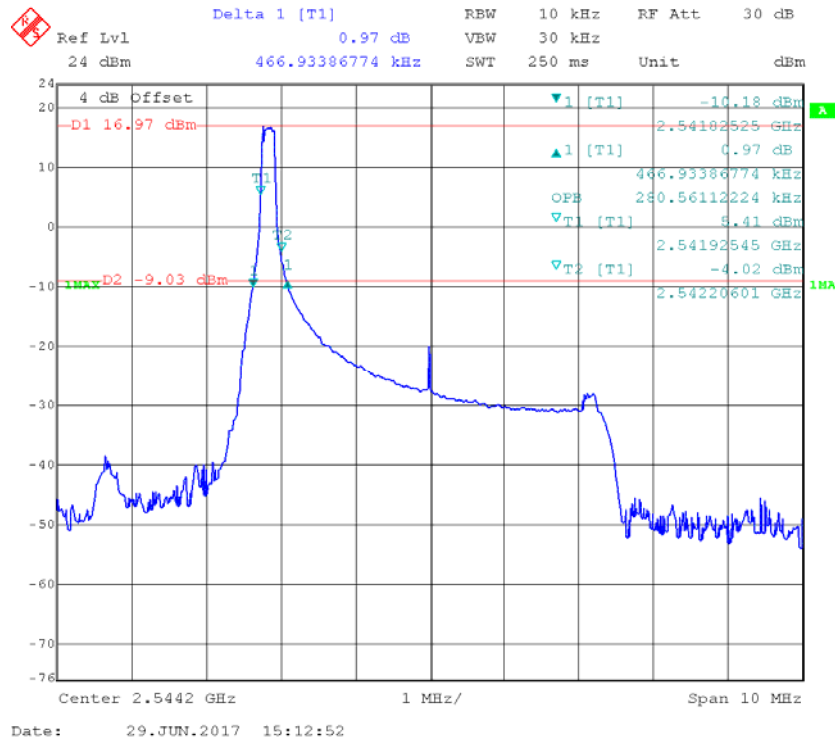




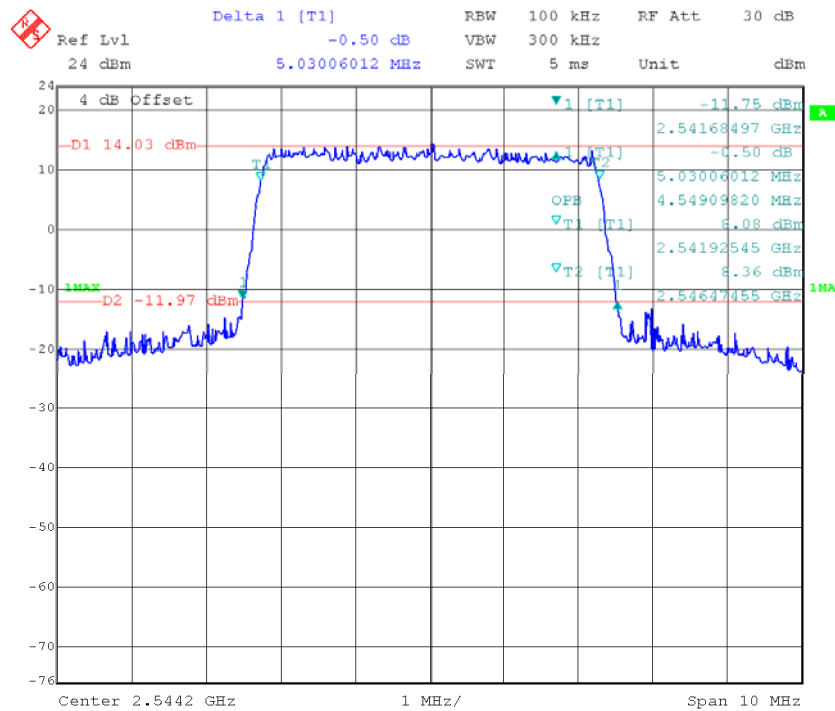
### 5&20MHz 16QAM\_P25#0&S100#0



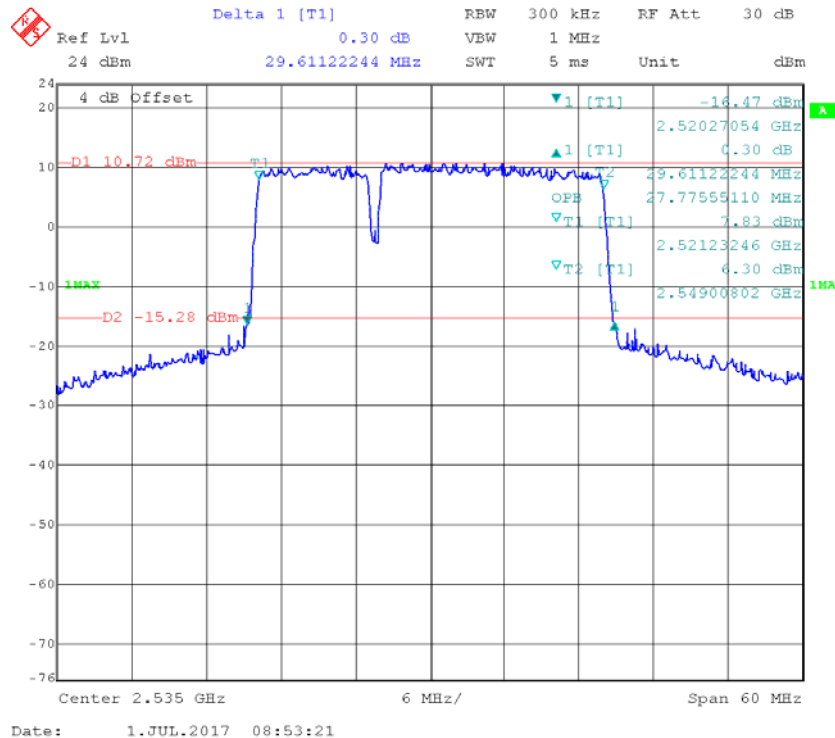
### 5MHz 16-QAM\_RB1



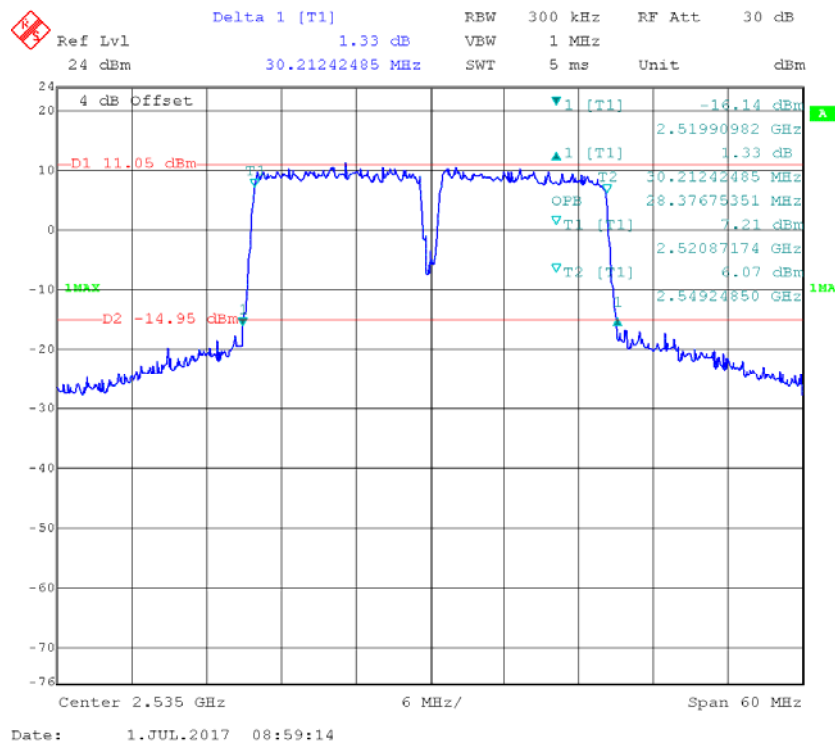
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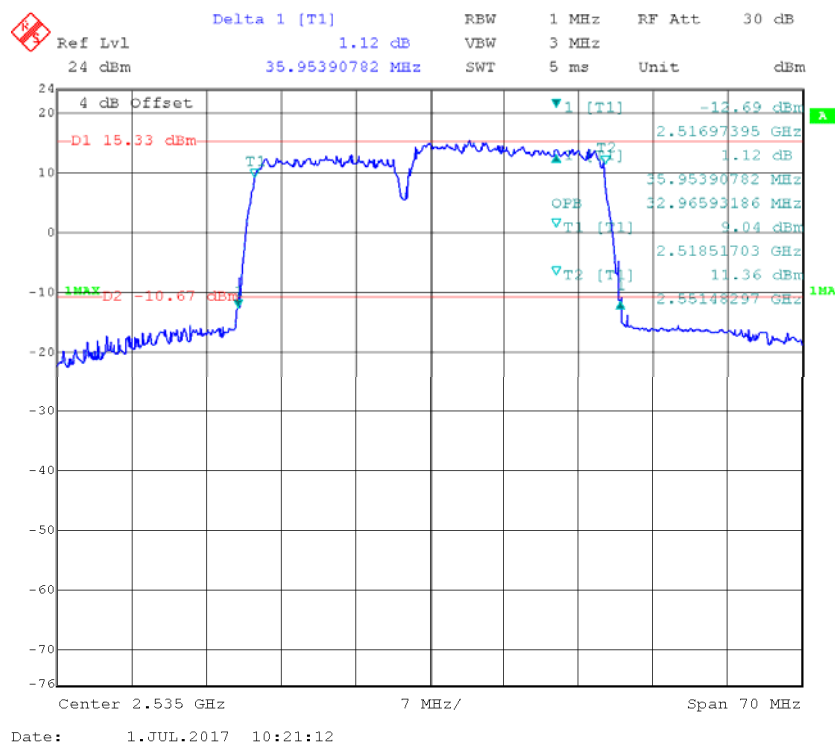
### 10&20MHz 16-QAM\_P50#0&S100#0



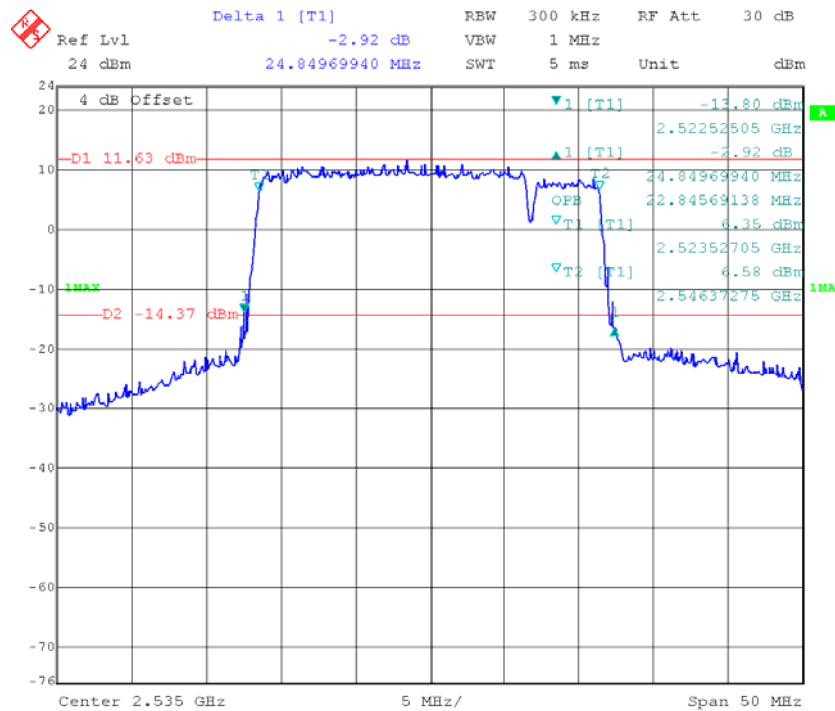
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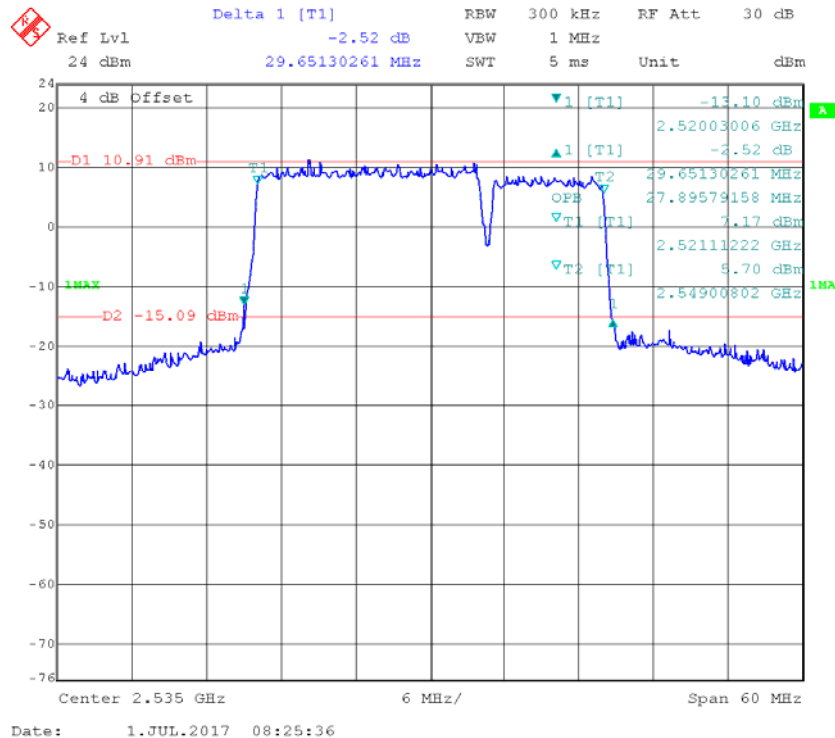
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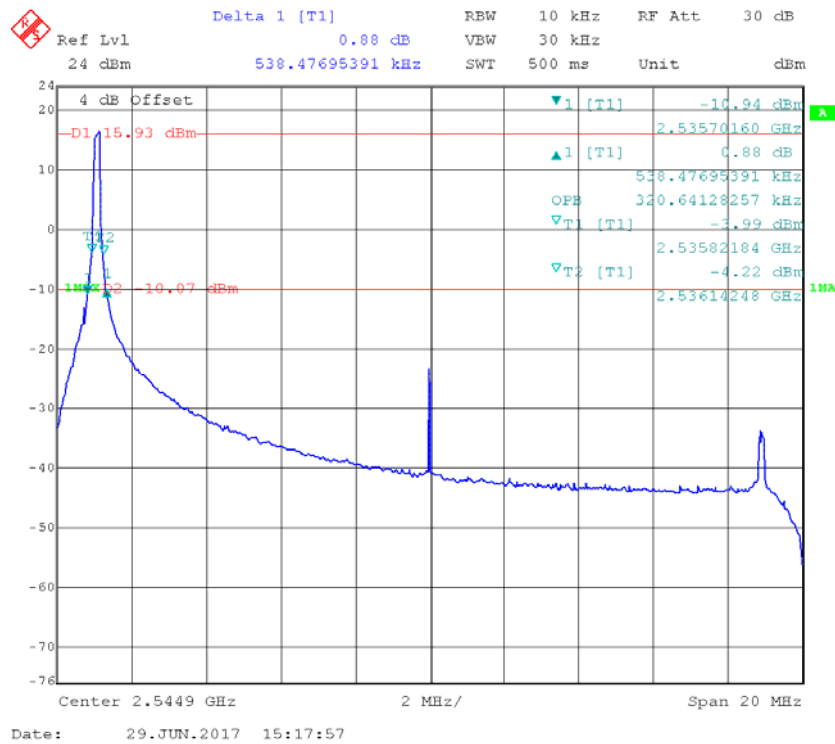


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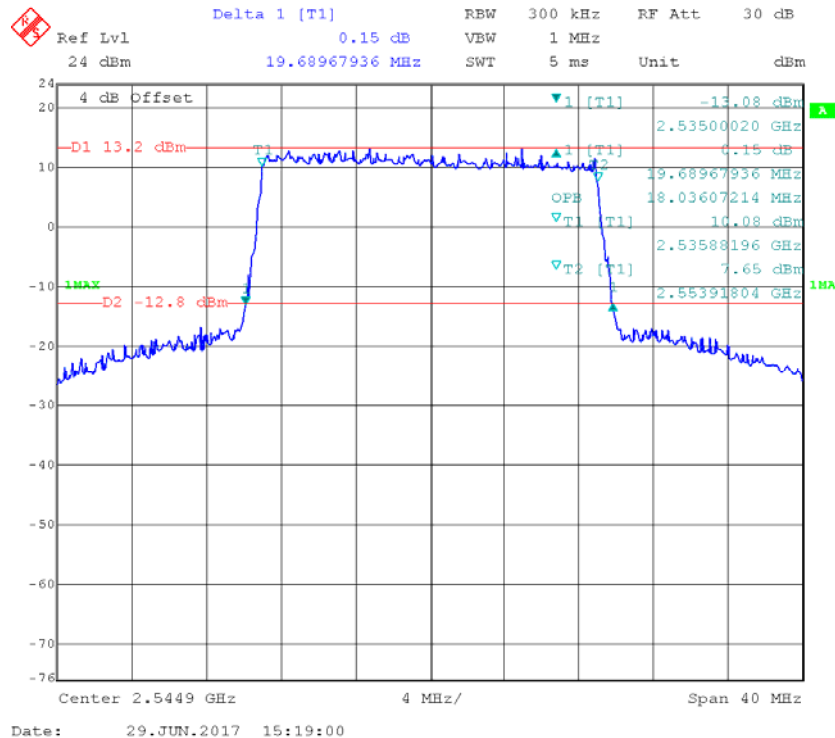




### 20MHz 16-QAM\_RB1

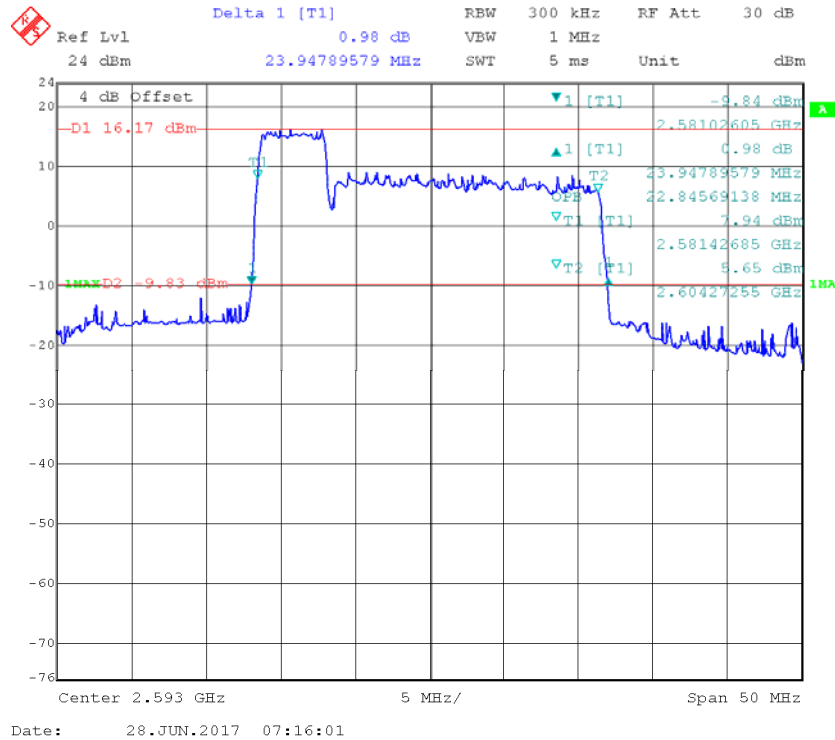


### 20MHz 16-QAM\_RB100

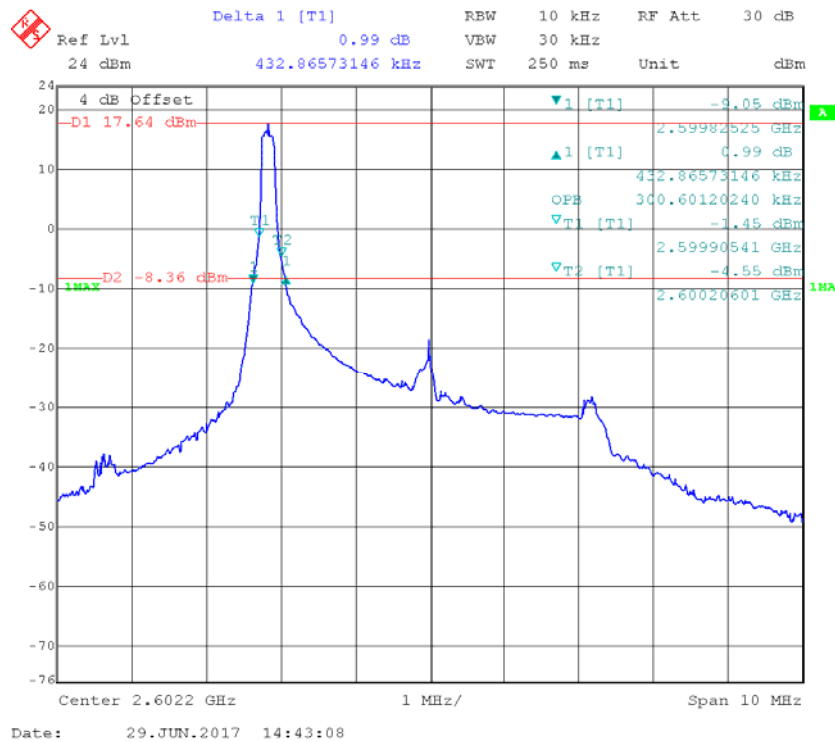


**Band 41:**

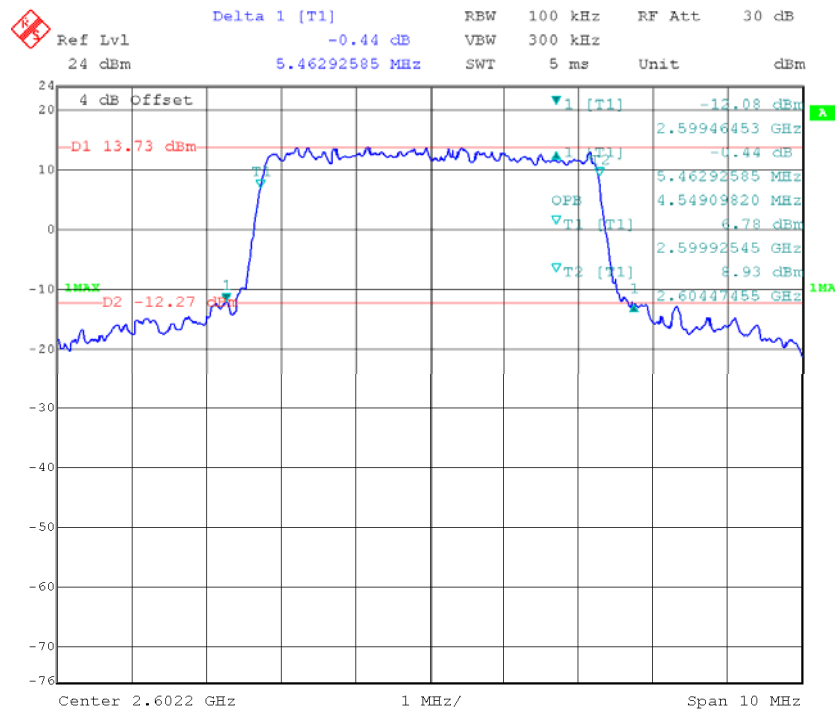
**5&20MHz\_QPSK\_P25#0&S100#0**



**5MHz\_QPSK\_RB1**

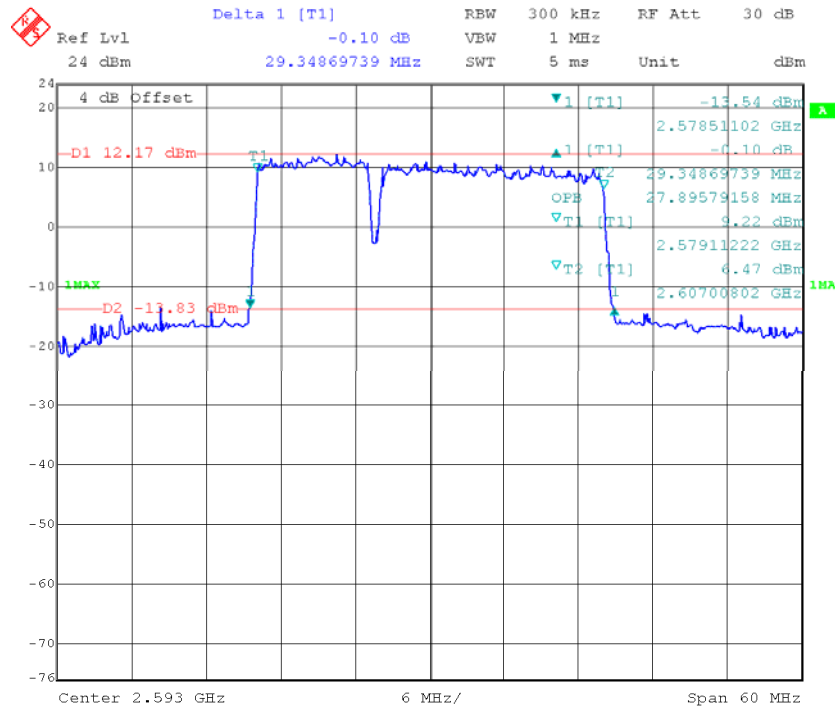


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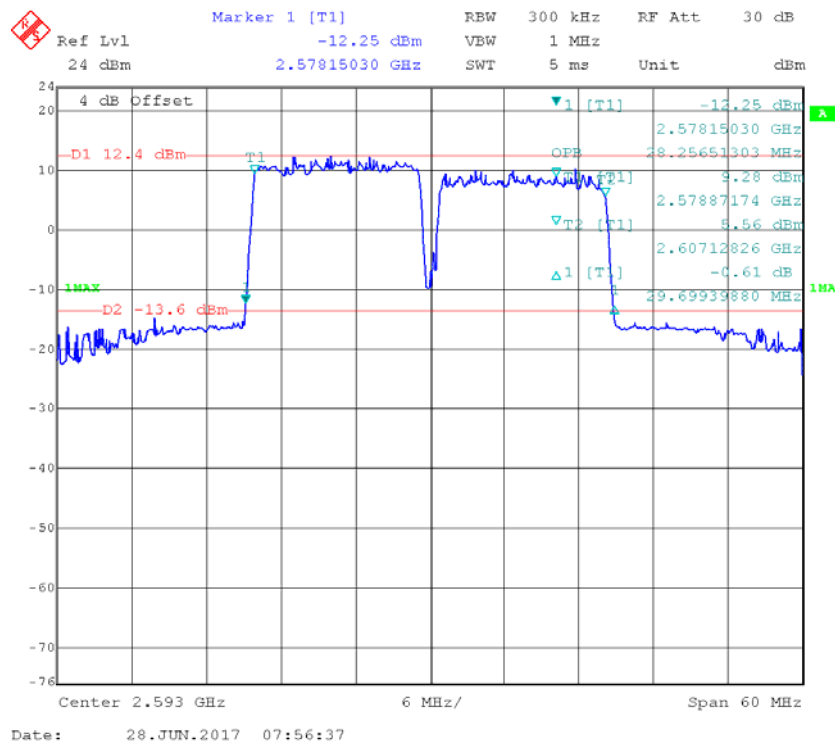
Date: 29.JUN.2017 14:51:15

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Date: 28.JUN.2017 07:45:32

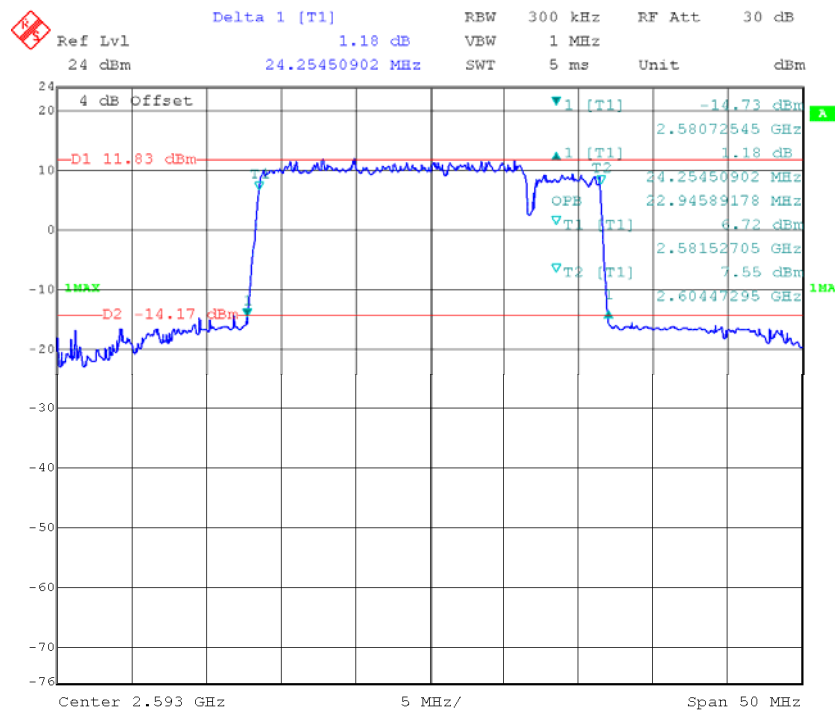
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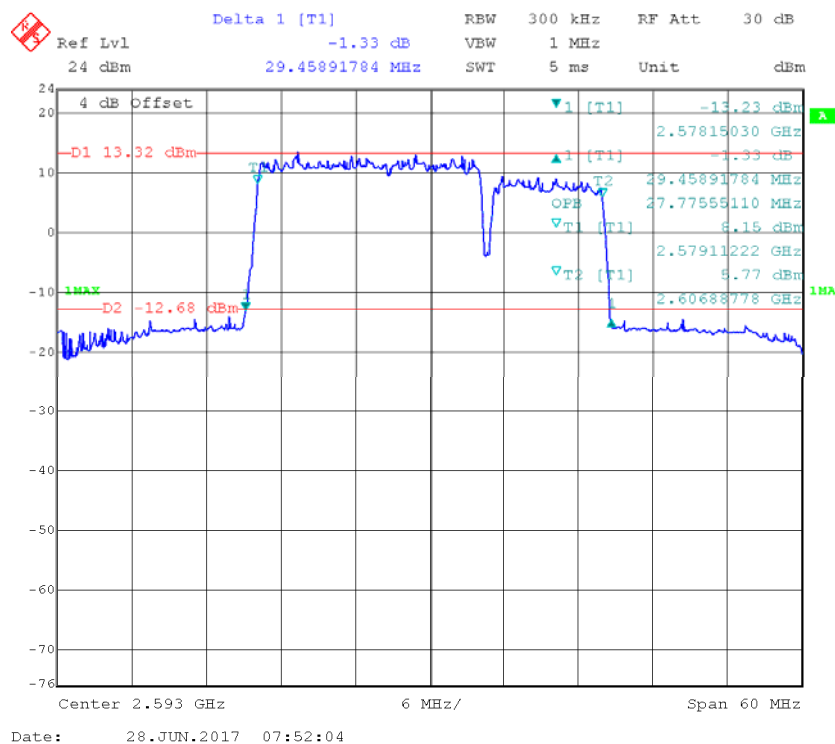
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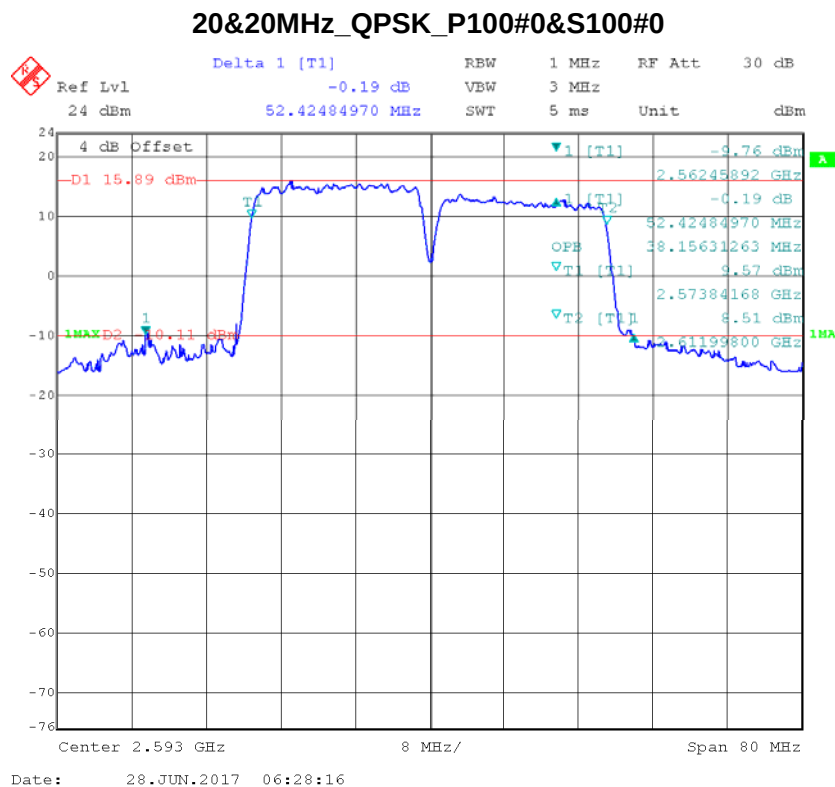
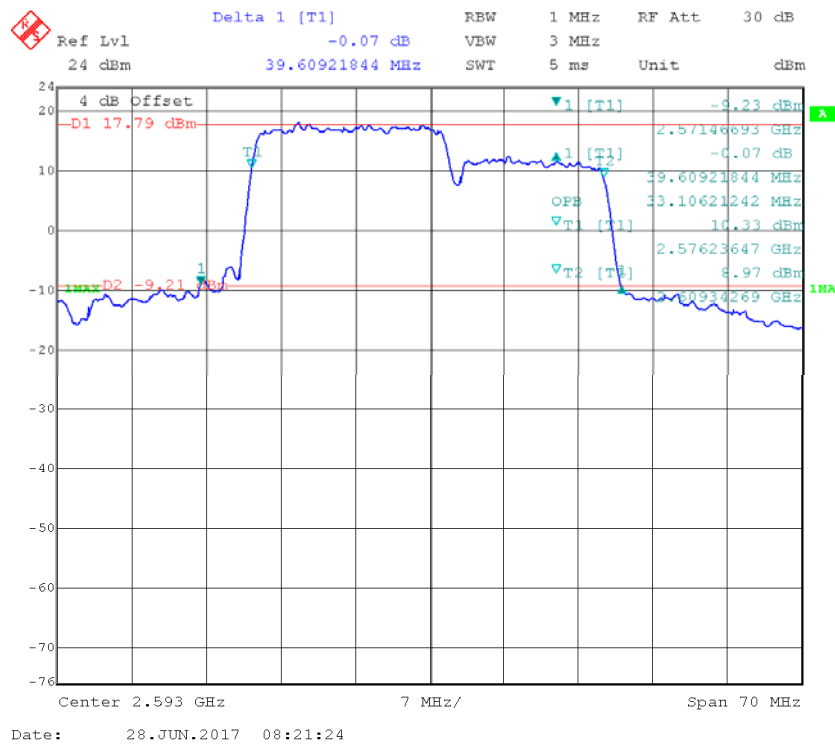
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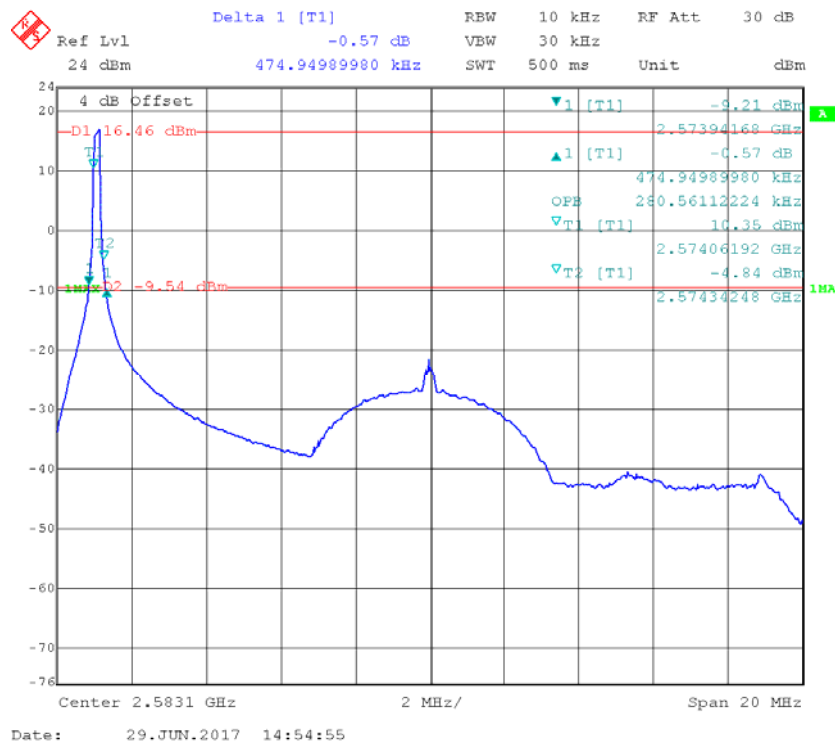
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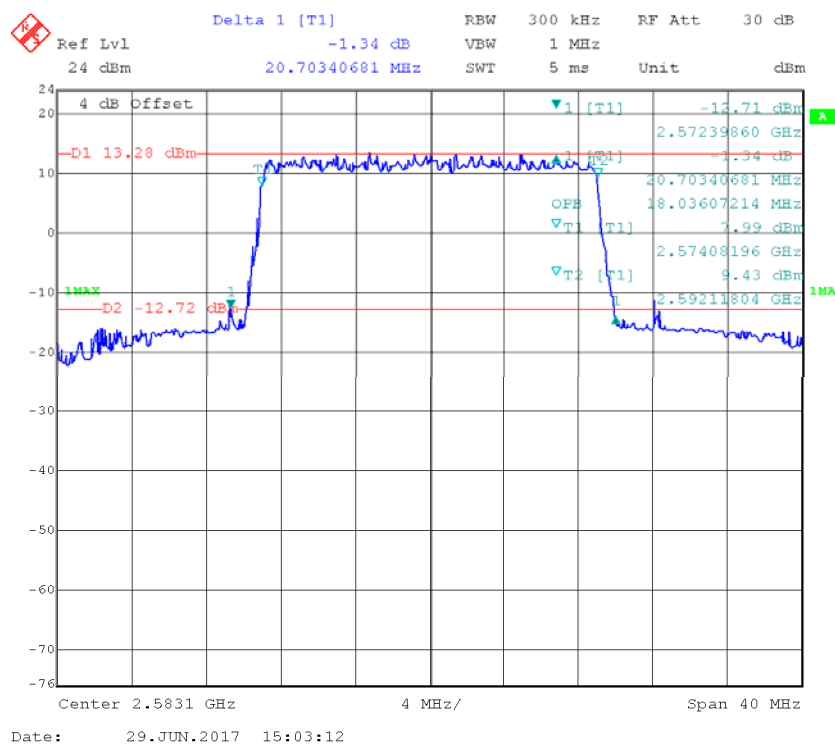
## Page 82 of 173



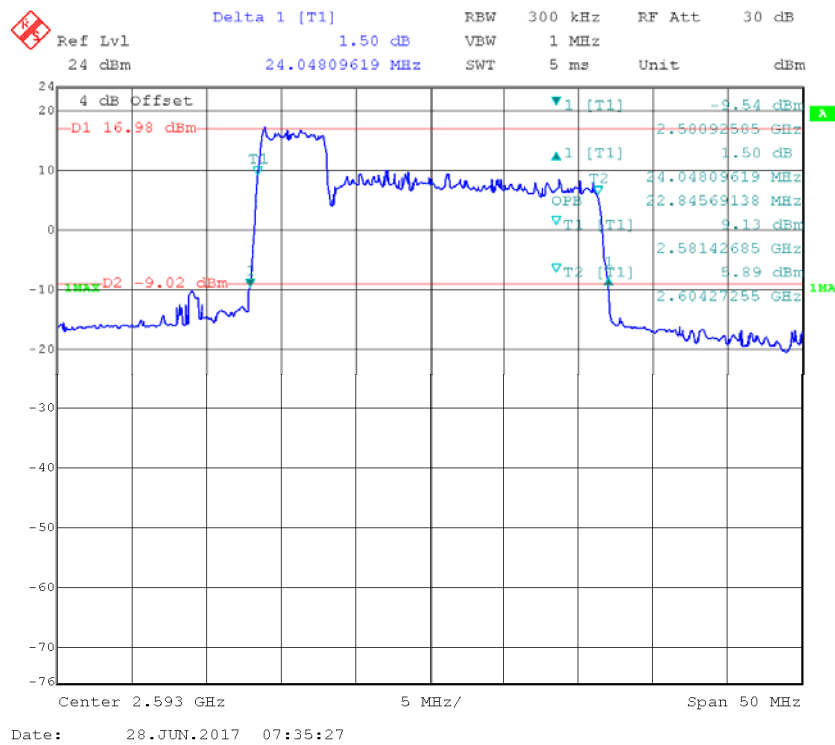
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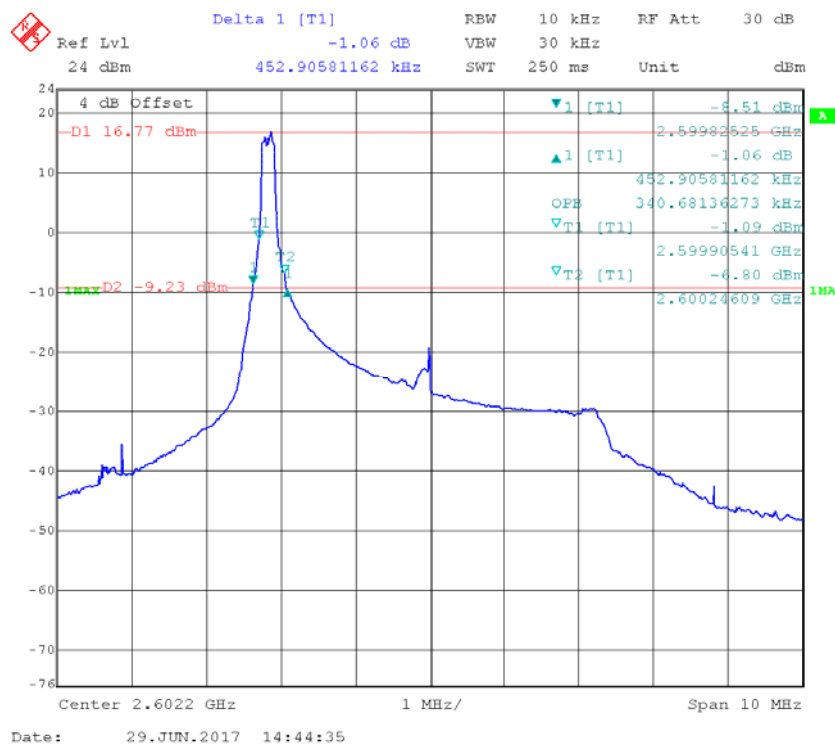
### 20MHz\_QPSK\_RB100



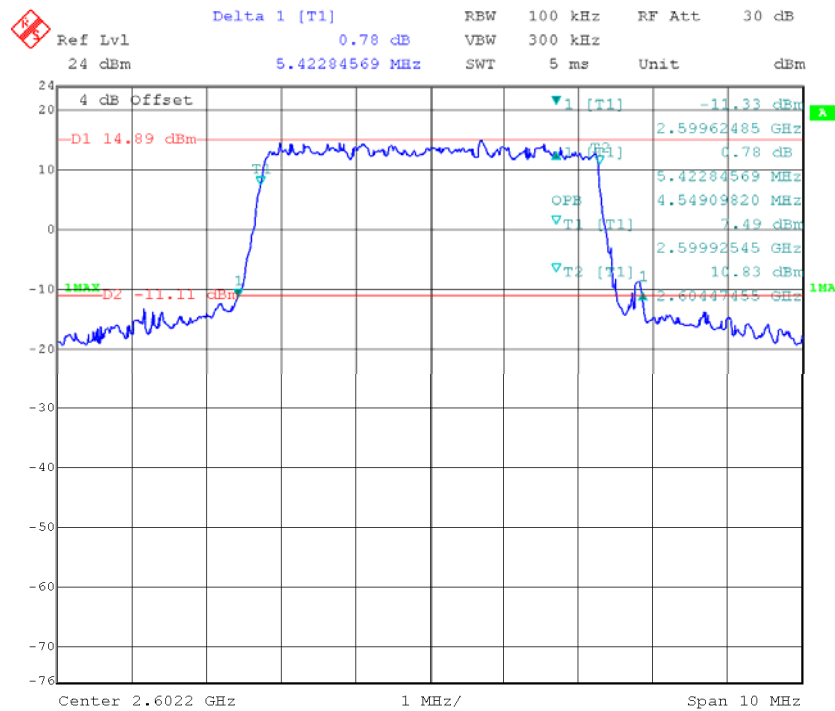
### 5&20MHz\_16-QAM\_P25#0&S100#0



### 5MHz\_16-QAM\_RB1



### 5MHz 16-QAM\_RB25

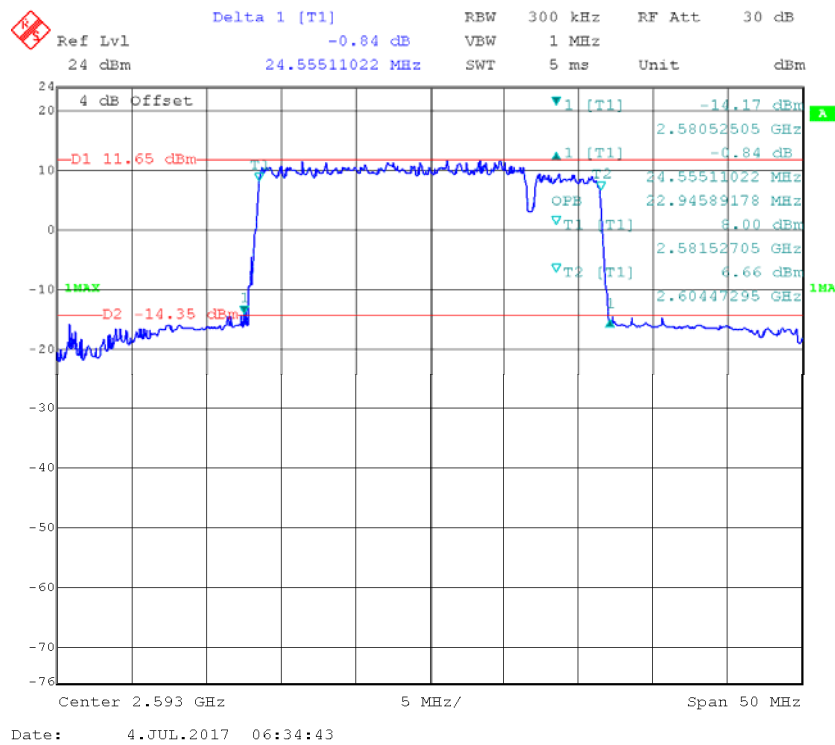


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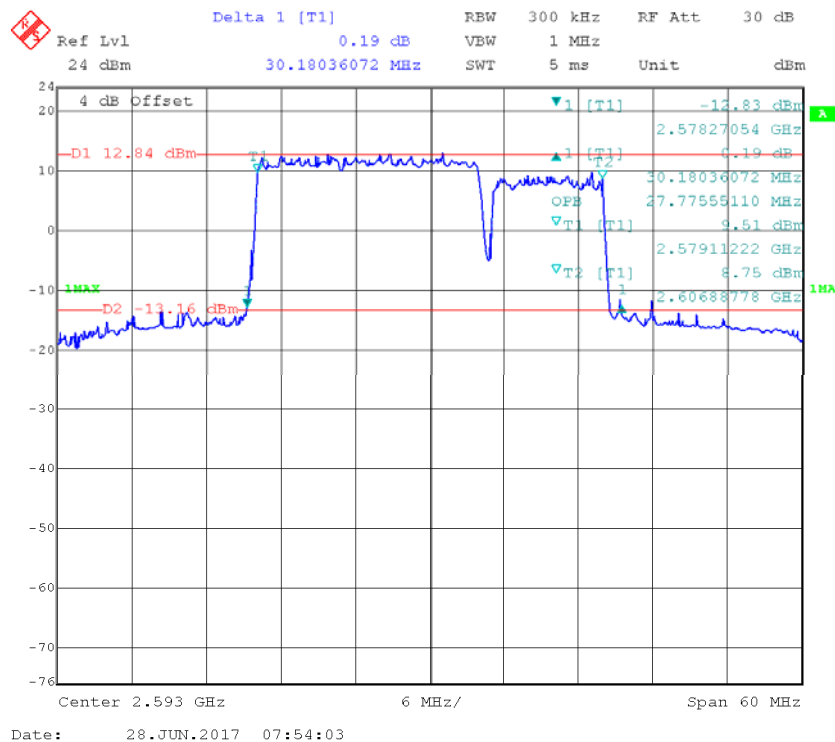




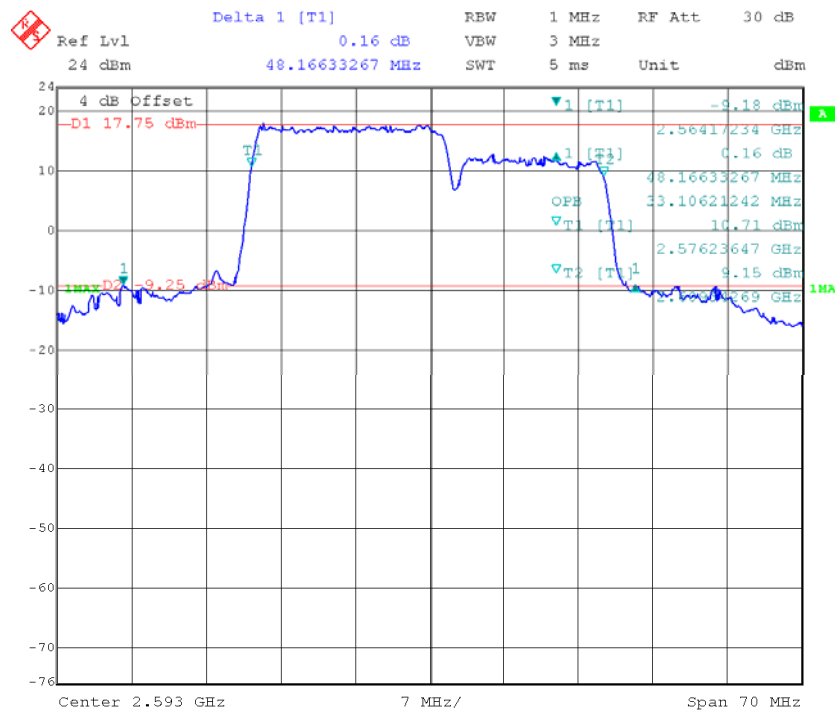
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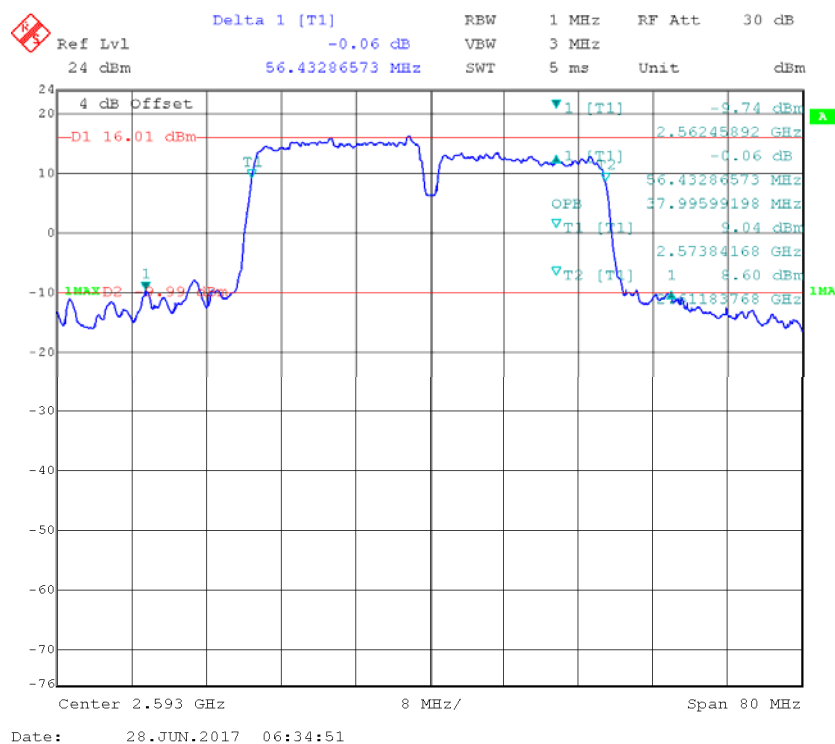
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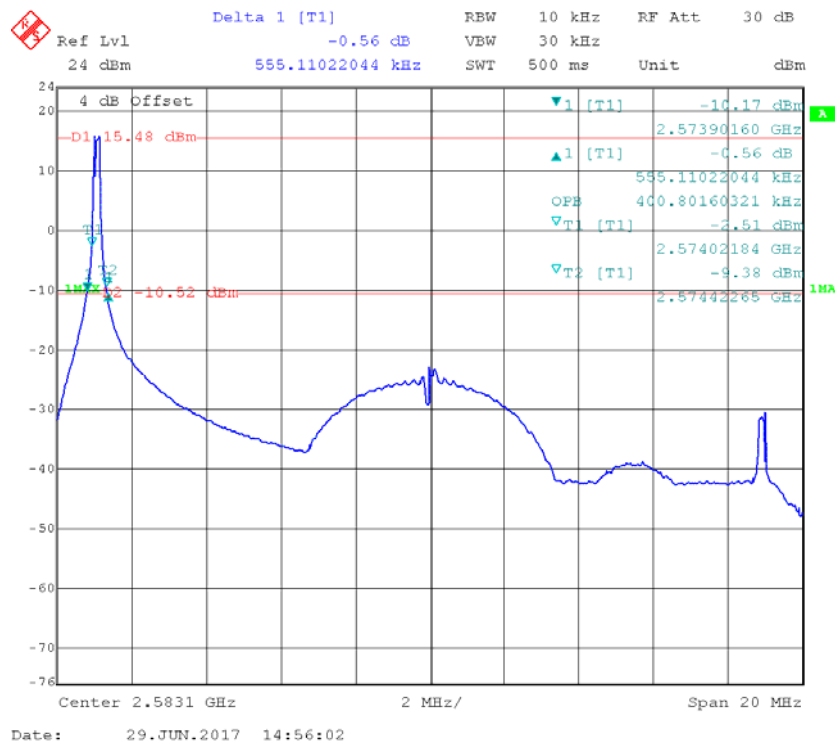
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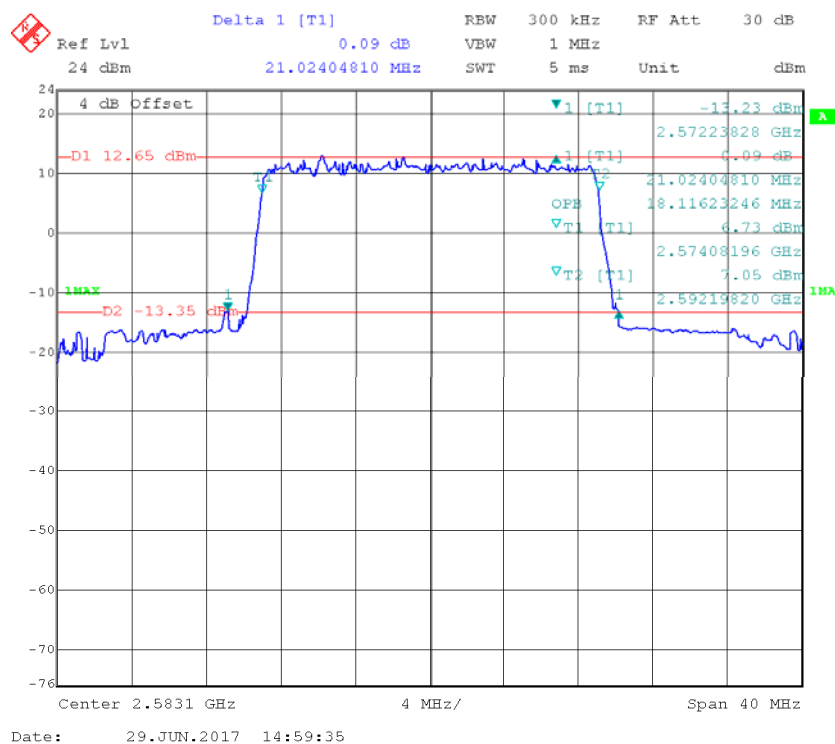
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### 20MHz\_16-QAM\_RB1



### 20MHz\_16-QAM\_RB100



## **FCC §2.1051, §27.53, RSS-195 § 5.6, RSS-199 § 4.5- SPURIOUS EMISSIONS AT ANTENNA TERMINALS**

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### **Applicable Standards**

FCC §2.1051 and §27.53.

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in § 2.1051.

FCC§27.53(a)

(3) For fixed CPE stations operating in the 2305-2320 MHz and 2345-2360 MHz bands transmitting with 2 watts per 5 megahertz average EIRP or less:

(i) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than  $55 + 10 \log (P)$  dB on all frequencies between 2320 and 2324 MHz and between 2341 and 2345 MHz, not less than  $61 + 10 \log (P)$  dB on all frequencies between 2324 and 2328 MHz and between 2337 and 2341 MHz, and not less than  $67 + 10 \log (P)$  dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2300 and 2305 MHz,  $55 + 10 \log (P)$  dB on all frequencies between 2296 and 2300 MHz,  $61 + 10 \log (P)$  dB on all frequencies between 2292 and 2296 MHz,  $67 + 10 \log (P)$  dB on all frequencies between 2288 and 2292 MHz, and  $70 + 10 \log (P)$  dB below 2288 MHz;

(iii) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2360 and 2365 MHz, and not less than  $70 + 10 \log (P)$  dB above 2365 MHz.

FCC§27.53(m)

(2) For digital base stations, the attenuation shall be not less than  $43 + 10 \log (P)$  dB, unless a documented interference complaint is received from an adjacent channel licensee with an overlapping Geographic Service Area. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS No. 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. Provided that a documented interference complaint cannot be mutually resolved between the parties prior to the applicable deadline, then the following additional attenuation requirements shall apply:

(i) If a pre-existing base station suffers harmful interference from emissions caused by a new or modified base station located 1.5 km or more away, within 24 hours of the receipt of a documented interference complaint the licensee of the new or modified base station must attenuate its emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block and shall immediately notify the complaining licensee upon implementation of the additional attenuation. No later than 60 days after the implementation of such additional attenuation, the licensee of the complaining base station must attenuate its base station emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the new or modified base station.

(ii) If a pre-existing base station suffers harmful interference from emissions caused by a new or modified base station located less than 1.5 km away, within 24 hours of receipt of a documented interference complaint the licensee of the new or modified base station must

attenuate its emissions by at least  $67 + 10 \log (P) - 20 \log (D\text{km}/1.5)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the complaining licensee, or if both base stations are co-located, limit its undesired signal level at the pre-existing base station receiver(s) to no more than  $-107$  dBm measured in a 5.5 megahertz bandwidth and shall immediately notify the complaining licensee upon such reduction in the undesired signal level. No later than 60 days after such reduction in the undesired signal level, the complaining licensee must attenuate its base station emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the new or modified base station.

(iii) If a new or modified base station suffers harmful interference from emissions caused by a pre-existing base station located 1.5 km or more away, within 60 days of receipt of a documented interference complaint the licensee of each base station must attenuate its base station emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the other licensee.

(iv) If a new or modified base station suffers harmful interference from emissions caused by a pre-existing base station located less than 1.5 km away, within 60 days of receipt of a documented interference complaint: (a) The licensee of the new or modified base station must attenuate its OOB by at least  $67 + 10 \log (P) - 20 \log (D\text{km}/1.5)$  measured 3 megahertz above or below, from the channel edge of its frequency block of the other licensee, or if the base stations are co-located, limit its undesired signal level at the other base station receiver(s) to no more than  $-107$  dBm measured in a 5.5-megahertz bandwidth; and (b) the licensee causing the interference must attenuate its emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the new or modified base station.

(v) For all fixed digital user stations, the attenuation factor shall be not less than  $43 + 10 \log (P)$  dB at the channel edge.

#### RSS-195 § 5.6

The transmitter unwanted emissions shall be measured with a resolution bandwidth of 1 MHz. A smaller resolution bandwidth is permitted provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz. However, in the 1 MHz bands immediately adjacent to the edges of the frequency range(s) in which the equipment is allowed to operate, a resolution bandwidth of as close as possible to, without being less than 1% of the occupied bandwidth, shall be employed provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz.

##### 5.6.2 Mobile, Portable and Low-Power Fixed Subscriber Equipment

The power of any emission outside the frequency range(s) in which the equipment operates shall be attenuated below the transmitter power,  $P(\text{dBW})$ , by the amount indicated in Table 2 and graphically represented in Figure 2, where  $p$  is the transmitter output power measured in watts.

| Frequency (MHz) | Attenuation (dB)                       |
|-----------------|----------------------------------------|
| <2200           | $43 + 10 \log_{10}(p)$                 |
| 2200 - 2288     | $70 + 10 \log_{10}(p)$                 |
| 2288 - 2292     | $67 + 10 \log_{10}(p)$                 |
| 2292 - 2296     | $61 + 10 \log_{10}(p)$                 |
| 2296 - 2300     | $55 + 10 \log_{10}(p)$                 |
| 2300 - 2305     | $43 + 10 \log_{10}(p)$                 |
| 2305 - 2320     | $43 + 10 \log_{10}(p)$ <sup>Note</sup> |
| 2320 - 2324     | $55 + 10 \log_{10}(p)$                 |
| 2324 - 2328     | $61 + 10 \log_{10}(p)$                 |
| 2328 - 2337     | $67 + 10 \log_{10}(p)$                 |
| 2337 - 2341     | $61 + 10 \log_{10}(p)$                 |
| 2341 - 2345     | $55 + 10 \log_{10}(p)$                 |
| 2345 - 2360     | $43 + 10 \log_{10}(p)$ <sup>Note</sup> |
| 2360 - 2365     | $43 + 10 \log_{10}(p)$                 |
| 2365 - 2395     | $70 + 10 \log_{10}(p)$                 |
| >2395           | $43 + 10 \log_{10}(p)$                 |

Note: Measured at the edges of the highest and lowest frequency range(s) in which the equipment is designed to operate. See Section 5.2 for the permitted frequency ranges for various equipment types.

#### RSS-199 § 4.5

In the 1 MHz band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment, and 2% for mobile subscriber equipment. Beyond the 1 MHz band, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% or 2% of the occupied bandwidth, as applicable.

Equipment shall comply with the following unwanted emission limits:

(a) for base station and fixed subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power,  $P$  (dBW), by at least  $43 + 10 \log_{10} p$ .

(b) for mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power,  $P$  (dBW), by at least:

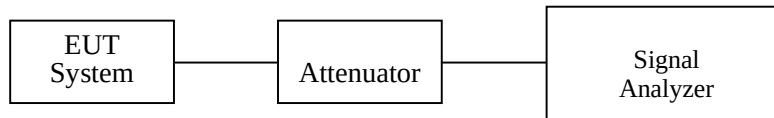
- (i)  $40 + 10 \log_{10} p$  from the channel edges to 5 MHz away
- (ii)  $43 + 10 \log_{10} p$  between 5 MHz and  $X$  MHz from the channel edges, and
- (iii)  $55 + 10 \log_{10} p$  at  $X$  MHz and beyond from the channel edges

In addition, the attenuation shall not be less than  $43 + 10 \log_{10} p$  on all frequencies between 2490.5 MHz and 2496 MHz, and  $55 + 10 \log_{10} p$  at or below 2490.5 MHz.

In (a) and (b),  $p$  is the transmitter power measured in watts and  $X$  is 6 MHz or the equipment occupied bandwidth, whichever is greater.

## Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer and simulator through appropriate attenuation. The resolution bandwidths of the spectrum analyzer were set at 100 kHz @ below 1GHz, 1MHz @ above 1GHz. sufficient scans were taken to show any out of band emissions up to 10<sup>th</sup> harmonic.



## Test Equipment List and Details

| Manufacturer    | Description                         | Model   | Serial Number | Calibration Date | Calibration Due Date |
|-----------------|-------------------------------------|---------|---------------|------------------|----------------------|
| Rohde & Schwarz | Signal Analyzer                     | FSIQ26  | 831929/005    | 2016-09-21       | 2017-09-20           |
| Unknown         | RF Cable                            | Unknown | C-2           | Each Time        | /                    |
| Unknown         | Two-way Splitter                    | Unknown | OE0120121     | Each Time        | /                    |
| R&S             | Wideband Radio Communication Tester | CMW500  | 106891        | 2016-11-23       | 2017-11-23           |

**\* Statement of Traceability:** BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B "Implementation of traceability policy in accredited laboratories".

## Test Data

### Environmental Conditions

|                    |                 |
|--------------------|-----------------|
| Temperature:       | 27.1~27.5 °C    |
| Relative Humidity: | 41~58 %         |
| ATM Pressure:      | 100.1~100.5 kPa |

*The testing was performed by Lorin Bian from 2017-05-22 to 2017-07-04.*

Please refer to the Appendix A for plots.

## **FCC §2.1053, §27.53, RSS-195 §5.6, RSS-199 §4.5- SPURIOUS RADIATED EMISSIONS**

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### **Applicable Standards**

FCC §2.1051 and §27.53.

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in § 2.1051.

FCC§27.53(a)

(3) For fixed CPE stations operating in the 2305-2320 MHz and 2345-2360 MHz bands transmitting with 2 watts per 5 megahertz average EIRP or less:

(i) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than  $55 + 10 \log (P)$  dB on all frequencies between 2320 and 2324 MHz and between 2341 and 2345 MHz, not less than  $61 + 10 \log (P)$  dB on all frequencies between 2324 and 2328 MHz and between 2337 and 2341 MHz, and not less than  $67 + 10 \log (P)$  dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2300 and 2305 MHz,  $55 + 10 \log (P)$  dB on all frequencies between 2296 and 2300 MHz,  $61 + 10 \log (P)$  dB on all frequencies between 2292 and 2296 MHz,  $67 + 10 \log (P)$  dB on all frequencies between 2288 and 2292 MHz, and  $70 + 10 \log (P)$  dB below 2288 MHz;

(iii) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2360 and 2365 MHz, and not less than  $70 + 10 \log (P)$  dB above 2365 MHz.

FCC§27.53(m)

(2) For digital base stations, the attenuation shall be not less than  $43 + 10 \log (P)$  dB, unless a documented interference complaint is received from an adjacent channel licensee with an overlapping Geographic Service Area. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS No. 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. Provided that a documented interference complaint cannot be mutually resolved between the parties prior to the applicable deadline, then the following additional attenuation requirements shall apply:

(i) If a pre-existing base station suffers harmful interference from emissions caused by a new or modified base station located 1.5 km or more away, within 24 hours of the receipt of a documented interference complaint the licensee of the new or modified base station must attenuate its emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block and shall immediately notify the complaining licensee upon implementation of the additional attenuation. No later than 60 days after the implementation of such additional attenuation, the licensee of the complaining base station must attenuate its base station emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the new or modified base station.

(ii) If a pre-existing base station suffers harmful interference from emissions caused by a new or modified base station located less than 1.5 km away, within 24 hours of receipt of a documented interference complaint the licensee of the new or modified base station must

attenuate its emissions by at least  $67 + 10 \log (P) - 20 \log (D\text{km}/1.5)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the complaining licensee, or if both base stations are co-located, limit its undesired signal level at the pre-existing base station receiver(s) to no more than  $-107$  dBm measured in a 5.5 megahertz bandwidth and shall immediately notify the complaining licensee upon such reduction in the undesired signal level. No later than 60 days after such reduction in the undesired signal level, the complaining licensee must attenuate its base station emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the new or modified base station.

(iii) If a new or modified base station suffers harmful interference from emissions caused by a pre-existing base station located 1.5 km or more away, within 60 days of receipt of a documented interference complaint the licensee of each base station must attenuate its base station emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the other licensee.

(iv) If a new or modified base station suffers harmful interference from emissions caused by a pre-existing base station located less than 1.5 km away, within 60 days of receipt of a documented interference complaint: (a) The licensee of the new or modified base station must attenuate its OOB by at least  $67 + 10 \log (P) - 20 \log (D\text{km}/1.5)$  measured 3 megahertz above or below, from the channel edge of its frequency block of the other licensee, or if the base stations are co-located, limit its undesired signal level at the other base station receiver(s) to no more than  $-107$  dBm measured in a 5.5-megahertz bandwidth; and (b) the licensee causing the interference must attenuate its emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the new or modified base station.

(v) For all fixed digital user stations, the attenuation factor shall be not less than  $43 + 10 \log (P)$  dB at the channel edge.

#### RSS-195 § 5.6

The transmitter unwanted emissions shall be measured with a resolution bandwidth of 1 MHz. A smaller resolution bandwidth is permitted provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz. However, in the 1 MHz bands immediately adjacent to the edges of the frequency range(s) in which the equipment is allowed to operate, a resolution bandwidth of as close as possible to, without being less than 1% of the occupied bandwidth, shall be employed provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz.

##### 5.6.2 Mobile, Portable and Low-Power Fixed Subscriber Equipment

The power of any emission outside the frequency range(s) in which the equipment operates shall be attenuated below the transmitter power,  $P(\text{dBW})$ , by the amount indicated in Table 2 and graphically represented in Figure 2, where  $p$  is the transmitter output power measured in watts.

| Frequency (MHz) | Attenuation (dB)                       |
|-----------------|----------------------------------------|
| <2200           | $43 + 10 \log_{10}(p)$                 |
| 2200 - 2288     | $70 + 10 \log_{10}(p)$                 |
| 2288 - 2292     | $67 + 10 \log_{10}(p)$                 |
| 2292 - 2296     | $61 + 10 \log_{10}(p)$                 |
| 2296 - 2300     | $55 + 10 \log_{10}(p)$                 |
| 2300 - 2305     | $43 + 10 \log_{10}(p)$                 |
| 2305 - 2320     | $43 + 10 \log_{10}(p)$ <sup>Note</sup> |
| 2320 - 2324     | $55 + 10 \log_{10}(p)$                 |
| 2324 - 2328     | $61 + 10 \log_{10}(p)$                 |
| 2328 - 2337     | $67 + 10 \log_{10}(p)$                 |
| 2337 - 2341     | $61 + 10 \log_{10}(p)$                 |
| 2341 - 2345     | $55 + 10 \log_{10}(p)$                 |
| 2345 - 2360     | $43 + 10 \log_{10}(p)$ <sup>Note</sup> |
| 2360 - 2365     | $43 + 10 \log_{10}(p)$                 |
| 2365 - 2395     | $70 + 10 \log_{10}(p)$                 |
| >2395           | $43 + 10 \log_{10}(p)$                 |

Note: Measured at the edges of the highest and lowest frequency range(s) in which the equipment is designed to operate. See Section 5.2 for the permitted frequency ranges for various equipment types.

#### RSS-199 § 4.5

In the 1 MHz band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment, and 2% for mobile subscriber equipment. Beyond the 1 MHz band, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% or 2% of the occupied bandwidth, as applicable.

Equipment shall comply with the following unwanted emission limits:

(a) for base station and fixed subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power,  $P$  (dBW), by at least  $43 + 10 \log_{10} p$ .

(b) for mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power,  $P$  (dBW), by at least:

- (i)  $40 + 10 \log_{10} p$  from the channel edges to 5 MHz away
- (ii)  $43 + 10 \log_{10} p$  between 5 MHz and  $X$  MHz from the channel edges, and
- (iii)  $55 + 10 \log_{10} p$  at  $X$  MHz and beyond from the channel edges

In addition, the attenuation shall not be less than  $43 + 10 \log_{10} p$  on all frequencies between 2490.5 MHz and 2496 MHz, and  $55 + 10 \log_{10} p$  at or below 2490.5 MHz.

In (a) and (b),  $p$  is the transmitter power measured in watts and  $X$  is 6 MHz or the equipment occupied bandwidth, whichever is greater.

## Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Spurious emissions in dB =  $10 \lg (\text{TXpwr in Watts}/0.001)$  – the absolute level

Spurious attenuation limit in dB =  $43 + 10 \log_{10} (\text{power out in Watts})$

## Test Equipment List and Details

| Manufacturer          | Description                 | Model       | Serial Number   | Calibration Date | Calibration Due Date |
|-----------------------|-----------------------------|-------------|-----------------|------------------|----------------------|
| Agilent               | Amplifier                   | 8447D       | 2944A10442      | 2016-12-02       | 2017-12-01           |
| Rohde & Schwarz       | EMI Test Receiver           | ESCI        | 100028          | 2016-12-02       | 2017-12-01           |
| Sunol Sciences        | Broadband Antenna           | JB3         | A121808         | 2016-04-10       | 2019-04-09           |
| Rohde & Schwarz       | Spectrum Analyzer           | FSEM30      | 100018          | 2016-12-02       | 2017-12-01           |
| ETS                   | Horn Antenna                | 3115        | 003-6076        | 2016-12-02       | 2017-12-01           |
| Ducommun Technologies | Horn Antenna                | ARH-4223-02 | 1007726-0113024 | 2017-06-16       | 2020-06-15           |
| EMCO                  | Adjustable Dipole Antenna   | 3121C       | 9109-258        | N/A              | N/A                  |
| HP                    | Signal Generator            | 8648C       | 3623A04150      | 2017-05-23       | 2018-05-22           |
| WILTRON               | SWEPT FREQUENCY SYNTHESIZER | 6737        | 213001          | 2017-05-23       | 2018-05-22           |
| Mini-circuits         | Amplifier                   | ZVA-183-S+  | 771001215       | 2017-05-20       | 2018-05-19           |
| HP                    | Amplifier                   | 8449B       | 3008A00277      | 2016-12-02       | 2017-12-01           |
| EMCT                  | Semi-Anechoic Chamber       | 966         | 966-1           | 2015-04-24       | 2018-04-23           |
| Unknown               | RF Cable (below 1GHz)       | Unknown     | NO.1            | 2016-11-10       | 2017-11-09           |
| Unknown               | RF Cable (below 1GHz)       | Unknown     | NO.4            | 2016-11-10       | 2017-11-09           |
| Unknown               | RF Cable (above 1GHz)       | Unknown     | NO.2            | 2016-11-10       | 2017-11-09           |
| Ducommun Technologies | Horn Antenna                | ARH-4223-02 | 1007726-011315  | 2016-08-18       | 2017-08-18           |
| Ducommun Technologies | Horn Antenna                | ARH-2823-02 | 1007726-011312  | 2016-08-18       | 2017-08-18           |

**\* Statement of Traceability:** BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B "Implementation of traceability policy in accredited laboratories".

## Test Data

### Environmental Conditions

|                    |                 |
|--------------------|-----------------|
| Temperature:       | 27~28.1 °C      |
| Relative Humidity: | 41~60 %         |
| ATM Pressure:      | 100.1~100.2 kPa |

The testing was performed by Lorin Bian from 2017-07-04 to 2017-07-06.

Test mode: Transmitting (Pre-scan with all the bandwidth, and worse case as below)

**Band 7: 30MHz-26GHz**

| Frequency<br>(MHz)             | Polar<br>(H/V) | Receiver<br>Reading<br>(dBμV) | Substituted Method            |                              |                       | Absolute<br>Level<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) |
|--------------------------------|----------------|-------------------------------|-------------------------------|------------------------------|-----------------------|----------------------------|----------------|----------------|
|                                |                |                               | Substituted<br>Level<br>(dBm) | Antenna<br>Gain<br>(dBd/dBi) | Cable<br>Loss<br>(dB) |                            |                |                |
| QPSK,Frequency:2535.000 MHz    |                |                               |                               |                              |                       |                            |                |                |
| 5070.000                       | H              | 41.34                         | -52                           | 13.9                         | 4.5                   | -42.6                      | -13.0          | 29.6           |
| 5070.000                       | V              | 38.49                         | -55.6                         | 13.9                         | 4.5                   | -46.2                      | -13.0          | 33.2           |
| 7605.000                       | H              | 37.62                         | -53.3                         | 13.2                         | 5.7                   | -45.8                      | -13.0          | 32.8           |
| 7605.000                       | V              | 34.58                         | -56.3                         | 13.2                         | 5.7                   | -48.8                      | -13.0          | 35.8           |
| 375.000                        | H              | 45.85                         | -52.5                         | 0.0                          | 0.6                   | -53.1                      | -13.0          | 40.1           |
| 246.000                        | V              | 49.70                         | -56                           | 0.0                          | 0.5                   | -56.5                      | -13.0          | 43.5           |
| 16-QAM,Frequency: 2535.000 MHz |                |                               |                               |                              |                       |                            |                |                |
| 5070.000                       | H              | 41.89                         | -51.4                         | 13.9                         | 4.5                   | -42.0                      | -13.0          | 29.0           |
| 5070.000                       | V              | 38.93                         | -55.2                         | 13.9                         | 4.5                   | -45.8                      | -13.0          | 32.8           |
| 7605.000                       | H              | 38.04                         | -52.8                         | 13.2                         | 5.7                   | -45.3                      | -13.0          | 32.3           |
| 7605.000                       | V              | 35.29                         | -55.6                         | 13.2                         | 5.7                   | -48.1                      | -13.0          | 35.1           |
| 543.000                        | H              | 45.37                         | -45                           | 0.0                          | 0.7                   | -45.7                      | -13.0          | 32.7           |
| 438.000                        | V              | 48.36                         | -42.2                         | 0.0                          | 0.6                   | -42.8                      | -13.0          | 29.8           |

**Band 40(2305MHz-2320MHz): 30MHz-24GHz**

| Frequency (MHz)                 | Polar (H/V) | Receiver Reading (dBμV) | Substituted Method      |                        |                 | Absolute Level (dBm) | Limit (dBm) | Margin (dB) |
|---------------------------------|-------------|-------------------------|-------------------------|------------------------|-----------------|----------------------|-------------|-------------|
|                                 |             |                         | Substituted Level (dBm) | Antenna Gain (dBd/dBi) | Cable Loss (dB) |                      |             |             |
| QPSK, Frequency: 2312.000 MHz   |             |                         |                         |                        |                 |                      |             |             |
| 4625.000                        | H           | 38.79                   | -55.7                   | 14.3                   | 4.4             | -45.8                | -13.0       | 32.8        |
| 4625.000                        | V           | 36.31                   | -58.8                   | 14.3                   | 4.4             | -48.9                | -13.0       | 35.9        |
| 6937.500                        | H           | 35.74                   | -57.5                   | 13.6                   | 5.3             | -49.2                | -13.0       | 36.2        |
| 6937.500                        | V           | 33.56                   | -59.2                   | 13.6                   | 5.3             | -50.9                | -13.0       | 37.9        |
| 267.000                         | H           | 42.37                   | -65.5                   | 0.0                    | 0.5             | -66.0                | -13.0       | 53.0        |
| 347.000                         | V           | 46.42                   | -52.8                   | 0.0                    | 0.6             | -53.4                | -13.0       | 40.4        |
| 16-QAM, Frequency: 2312.000 MHz |             |                         |                         |                        |                 |                      |             |             |
| 4625.000                        | H           | 37.03                   | -57.4                   | 14.3                   | 4.4             | -47.5                | -13.0       | 34.5        |
| 4625.000                        | V           | 36.42                   | -58.7                   | 14.3                   | 4.4             | -48.8                | -13.0       | 35.8        |
| 6937.500                        | H           | 35.65                   | -57.6                   | 13.6                   | 5.3             | -49.3                | -13.0       | 36.3        |
| 6937.500                        | V           | 33.87                   | -58.9                   | 13.6                   | 5.3             | -50.6                | -13.0       | 37.6        |
| 377.000                         | H           | 42.66                   | -55.5                   | 0.0                    | 0.6             | -56.1                | -13.0       | 43.1        |
| 436.000                         | V           | 48.77                   | -41.9                   | 0.0                    | 0.6             | -42.5                | -13.0       | 29.5        |

**Band 40(2345MHz-2360MHz): 30MHz-24GHz**

| Frequency<br>(MHz)             | Polar<br>(H/V) | Receiver<br>Reading<br>(dBμV) | Substituted Method            |                              |                       | Absolute<br>Level<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) |
|--------------------------------|----------------|-------------------------------|-------------------------------|------------------------------|-----------------------|----------------------------|----------------|----------------|
|                                |                |                               | Substituted<br>Level<br>(dBm) | Antenna<br>Gain<br>(dBd/dBi) | Cable<br>Loss<br>(dB) |                            |                |                |
| QPSK,Frequency:2352.500 MHz    |                |                               |                               |                              |                       |                            |                |                |
| 4705.000                       | H              | 38.69                         | -55.5                         | 14.4                         | 4.2                   | -45.3                      | -13.0          | 32.3           |
| 4705.000                       | V              | 36.39                         | -57.9                         | 14.4                         | 4.2                   | -47.7                      | -13.0          | 34.7           |
| 7057.500                       | H              | 35.76                         | -57.2                         | 13.3                         | 5.4                   | -49.3                      | -13.0          | 36.3           |
| 7057.500                       | V              | 33.46                         | -59.1                         | 13.3                         | 5.4                   | -51.2                      | -13.0          | 38.2           |
| 252.000                        | H              | 42.42                         | -65.7                         | 0.0                          | 0.5                   | -66.2                      | -13.0          | 53.2           |
| 284.000                        | V              | 46.58                         | -58.6                         | 0.0                          | 0.5                   | -59.1                      | -13.0          | 46.1           |
| 16-QAM,Frequency: 2352.500 MHz |                |                               |                               |                              |                       |                            |                |                |
| 4705.000                       | H              | 37.17                         | -57                           | 14.4                         | 4.2                   | -46.8                      | -13.0          | 33.8           |
| 4705.000                       | V              | 36.65                         | -57.7                         | 14.4                         | 4.2                   | -47.5                      | -13.0          | 34.5           |
| 7057.500                       | H              | 35.53                         | -57.5                         | 13.3                         | 5.4                   | -49.6                      | -13.0          | 36.6           |
| 7057.500                       | V              | 33.73                         | -58.8                         | 13.3                         | 5.4                   | -50.9                      | -13.0          | 37.9           |
| 332.000                        | H              | 42.91                         | -60.7                         | 0.0                          | 0.5                   | -61.2                      | -13.0          | 48.2           |
| 415.000                        | V              | 48.91                         | -42.9                         | 0.0                          | 0.6                   | -43.5                      | -13.0          | 30.5           |

**Band 41: 30MHz-26GHz**

| Frequency<br>(MHz)             | Polar<br>(H/V) | Receiver<br>Reading<br>(dBμV) | Substituted Method            |                              |                       | Absolute<br>Level<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) |
|--------------------------------|----------------|-------------------------------|-------------------------------|------------------------------|-----------------------|----------------------------|----------------|----------------|
|                                |                |                               | Substituted<br>Level<br>(dBm) | Antenna<br>Gain<br>(dBd/dBi) | Cable<br>Loss<br>(dB) |                            |                |                |
| QPSK,Frequency:2593.000 MHz    |                |                               |                               |                              |                       |                            |                |                |
| 5186.000                       | H              | 38.42                         | -55                           | 14.0                         | 4.8                   | -45.8                      | -13.0          | 32.8           |
| 5186.000                       | V              | 36.05                         | -58.8                         | 14.0                         | 4.8                   | -49.6                      | -13.0          | 36.6           |
| 7779.000                       | H              | 35.27                         | -55.8                         | 13.3                         | 5.8                   | -48.3                      | -13.0          | 35.3           |
| 7779.000                       | V              | 33.68                         | -57.7                         | 13.3                         | 5.8                   | -50.2                      | -13.0          | 37.2           |
| 227.000                        | H              | 42.80                         | -65.1                         | 0.0                          | 0.5                   | -65.6                      | -13.0          | 52.6           |
| 573.000                        | V              | 47.74                         | -40.5                         | 0.0                          | 0.7                   | -41.2                      | -13.0          | 28.2           |
| 16-QAM,Frequency: 2593.000 MHz |                |                               |                               |                              |                       |                            |                |                |
| 5186.000                       | H              | 37.36                         | -56.1                         | 14.0                         | 4.8                   | -46.9                      | -13.0          | 33.9           |
| 5186.000                       | V              | 35.89                         | -59                           | 14.0                         | 4.8                   | -49.8                      | -13.0          | 36.8           |
| 7779.000                       | H              | 35.43                         | -55.6                         | 13.3                         | 5.8                   | -48.1                      | -13.0          | 35.1           |
| 7779.000                       | V              | 34.05                         | -57.4                         | 13.3                         | 5.8                   | -49.9                      | -13.0          | 36.9           |
| 759.000                        | H              | 43.20                         | -47.4                         | 0.0                          | 0.9                   | -48.3                      | -13.0          | 35.3           |
| 425.000                        | V              | 48.67                         | -42.6                         | 0.0                          | 0.6                   | -43.2                      | -13.0          | 30.2           |

**Note:**

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

**Carrier Aggregation:  
Band 7: 30MHz-26GHz**

| Frequency<br>(MHz)                          | Polar<br>(H/V) | Receiver<br>Reading<br>(dBμV) | Substituted Method            |                              |                       | Absolute<br>Level<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) |
|---------------------------------------------|----------------|-------------------------------|-------------------------------|------------------------------|-----------------------|----------------------------|----------------|----------------|
|                                             |                |                               | Substituted<br>Level<br>(dBm) | Antenna<br>Gain<br>(dBd/dBi) | Cable<br>Loss<br>(dB) |                            |                |                |
| BW:20M+5M, QPSK, Frequency:2535.000 MHz     |                |                               |                               |                              |                       |                            |                |                |
| 5070.000                                    | H              | 46.08                         | -60.7                         | 13.9                         | 1.3                   | -48.1                      | -13.0          | 35.1           |
| 5070.000                                    | V              | 46.31                         | -60.3                         | 13.9                         | 1.3                   | -47.7                      | -13.0          | 34.7           |
| 7605.000                                    | H              | 40.31                         | -60                           | 13.2                         | 1.4                   | -48.2                      | -13.0          | 35.2           |
| 7605.000                                    | V              | 40.29                         | -60.5                         | 13.2                         | 1.4                   | -48.7                      | -13.0          | 35.7           |
| 10140.000                                   | H              | 31.59                         | -66.9                         | 13.8                         | 0.6                   | -53.7                      | -13.0          | 40.7           |
| 10140.000                                   | V              | 32.14                         | -66.1                         | 13.8                         | 0.6                   | -52.9                      | -13.0          | 39.9           |
| 215.300                                     | H              | 46.25                         | -58                           | 0.0                          | 0.5                   | -58.5                      | -13.0          | 45.5           |
| 254.200                                     | V              | 48.06                         | -60                           | 0.0                          | 0.5                   | -60.5                      | -13.0          | 47.5           |
| BW:20M+5M, 16-QAM, Frequency: 2535.000 MHz  |                |                               |                               |                              |                       |                            |                |                |
| 5070.000                                    | H              | 43.04                         | -63.8                         | 13.9                         | 1.3                   | -51.2                      | -13.0          | 38.2           |
| 5070.000                                    | V              | 44.08                         | -62.5                         | 13.9                         | 1.3                   | -49.9                      | -13.0          | 36.9           |
| 7605.000                                    | H              | 39.38                         | -61                           | 13.2                         | 1.4                   | -49.2                      | -13.0          | 36.2           |
| 7605.000                                    | V              | 41.04                         | -59.7                         | 13.2                         | 1.4                   | -47.9                      | -13.0          | 34.9           |
| 10140.000                                   | H              | 31.76                         | -66.8                         | 13.8                         | 0.6                   | -53.6                      | -13.0          | 40.6           |
| 10140.000                                   | V              | 32.34                         | -65.9                         | 13.8                         | 0.6                   | -52.7                      | -13.0          | 39.7           |
| 253.600                                     | H              | 46.58                         | -58.2                         | 0.0                          | 0.5                   | -58.7                      | -13.0          | 45.7           |
| 325.600                                     | V              | 48.25                         | -57                           | 0.0                          | 0.5                   | -57.5                      | -13.0          | 44.5           |
| BW:20M+20M, QPSK, Frequency:2535.000 MHz    |                |                               |                               |                              |                       |                            |                |                |
| 5070.000                                    | H              | 47.61                         | -59.2                         | 13.9                         | 1.3                   | -46.6                      | -13.0          | 33.6           |
| 5070.000                                    | V              | 47.26                         | -59.4                         | 13.9                         | 1.3                   | -46.8                      | -13.0          | 33.8           |
| 7605.000                                    | H              | 40.15                         | -60.2                         | 13.2                         | 1.4                   | -48.4                      | -13.0          | 35.4           |
| 7605.000                                    | V              | 40.32                         | -60.4                         | 13.2                         | 1.4                   | -48.6                      | -13.0          | 35.6           |
| 10140.000                                   | H              | 31.95                         | -66.6                         | 13.8                         | 0.6                   | -53.4                      | -13.0          | 40.4           |
| 10140.000                                   | V              | 31.62                         | -66.7                         | 13.8                         | 0.6                   | -53.5                      | -13.0          | 40.5           |
| 216.800                                     | H              | 45.82                         | -58.4                         | 0.0                          | 0.5                   | -58.9                      | -13.0          | 45.9           |
| 305.600                                     | V              | 48.67                         | -57.1                         | 0.0                          | 0.5                   | -57.6                      | -13.0          | 44.6           |
| BW:20M+20M, 16-QAM, Frequency: 2535.000 MHz |                |                               |                               |                              |                       |                            |                |                |
| 5070.000                                    | H              | 48.26                         | -58.5                         | 13.9                         | 1.3                   | -45.9                      | -13.0          | 32.9           |
| 5070.000                                    | V              | 48.19                         | -58.4                         | 13.9                         | 1.3                   | -45.8                      | -13.0          | 32.8           |
| 7605.000                                    | H              | 40.29                         | -60.1                         | 13.2                         | 1.4                   | -48.3                      | -13.0          | 35.3           |
| 7605.000                                    | V              | 40.32                         | -60.4                         | 13.2                         | 1.4                   | -48.6                      | -13.0          | 35.6           |
| 10140.000                                   | H              | 31.56                         | -67                           | 13.8                         | 0.6                   | -53.8                      | -13.0          | 40.8           |
| 10140.000                                   | V              | 31.26                         | -67                           | 13.8                         | 0.6                   | -53.8                      | -13.0          | 40.8           |
| 276.900                                     | H              | 46.22                         | -58.4                         | 0.0                          | 0.5                   | -58.9                      | -13.0          | 45.9           |
| 421.600                                     | V              | 49.08                         | -54.3                         | 0.0                          | 0.6                   | -54.9                      | -13.0          | 41.9           |

**Band 41: 30MHz-26GHz**

| Frequency<br>(MHz)                         | Polar<br>(H/V) | Receiver<br>Reading<br>(dBμV) | Substituted Method            |                              |                       | Absolute<br>Level<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) |
|--------------------------------------------|----------------|-------------------------------|-------------------------------|------------------------------|-----------------------|----------------------------|----------------|----------------|
|                                            |                |                               | Substituted<br>Level<br>(dBm) | Antenna<br>Gain<br>(dBd/dBi) | Cable<br>Loss<br>(dB) |                            |                |                |
| BW:20M+5M, QPSK, Frequency:2593.000 MHz    |                |                               |                               |                              |                       |                            |                |                |
| 5186.000                                   | H              | 49.05                         | -57.4                         | 14.0                         | 1.5                   | -44.9                      | -13.0          | 31.9           |
| 5186.000                                   | V              | 46.97                         | -59.5                         | 14.0                         | 1.5                   | -47.0                      | -13.0          | 34.0           |
| 7779.000                                   | H              | 38.23                         | -62.2                         | 13.3                         | 1.5                   | -50.4                      | -13.0          | 37.4           |
| 7779.000                                   | V              | 40.23                         | -60.5                         | 13.3                         | 1.5                   | -48.7                      | -13.0          | 35.7           |
| 10372.000                                  | H              | 31.36                         | -67.1                         | 13.4                         | 0.4                   | -54.1                      | -13.0          | 41.1           |
| 10372.000                                  | V              | 31.05                         | -66.8                         | 13.4                         | 0.4                   | -53.8                      | -13.0          | 40.8           |
| 320.500                                    | H              | 46.85                         | -56.8                         | 0.0                          | 0.5                   | -57.3                      | -13.0          | 44.3           |
| 356.500                                    | V              | 48.32                         | -56.2                         | 0.0                          | 0.6                   | -56.8                      | -13.0          | 43.8           |
| BW:20M+5M,16-QAM, Frequency: 2593.000 MHz  |                |                               |                               |                              |                       |                            |                |                |
| 5186.000                                   | H              | 49.15                         | -57.3                         | 14.0                         | 1.5                   | -44.8                      | -13.0          | 31.8           |
| 5186.000                                   | V              | 46.51                         | -59.9                         | 14.0                         | 1.5                   | -47.4                      | -13.0          | 34.4           |
| 7779.000                                   | H              | 39.27                         | -61.2                         | 13.3                         | 1.5                   | -49.4                      | -13.0          | 36.4           |
| 7779.000                                   | V              | 40.29                         | -60.4                         | 13.3                         | 1.5                   | -48.6                      | -13.0          | 35.6           |
| 10372.000                                  | H              | 31.06                         | -67.4                         | 13.4                         | 0.4                   | -54.4                      | -13.0          | 41.4           |
| 10372.000                                  | V              | 30.19                         | -67.7                         | 13.4                         | 0.4                   | -54.7                      | -13.0          | 41.7           |
| 259.200                                    | H              | 47.21                         | -57.5                         | 0.0                          | 0.5                   | -58.0                      | -13.0          | 45.0           |
| 421.800                                    | V              | 49.63                         | -53.7                         | 0.0                          | 0.6                   | -54.3                      | -13.0          | 41.3           |
| BW:20M+20M, QPSK, Frequency:2593.000 MHz   |                |                               |                               |                              |                       |                            |                |                |
| 5186.000                                   | H              | 44.74                         | -61.7                         | 14.0                         | 1.5                   | -49.2                      | -13.0          | 36.2           |
| 5186.000                                   | V              | 44.15                         | -62.3                         | 14.0                         | 1.5                   | -49.8                      | -13.0          | 36.8           |
| 7779.000                                   | H              | 38.21                         | -62.2                         | 13.3                         | 1.5                   | -50.4                      | -13.0          | 37.4           |
| 7779.000                                   | V              | 39.02                         | -61.7                         | 13.3                         | 1.5                   | -49.9                      | -13.0          | 36.9           |
| 10372.000                                  | H              | 31.29                         | -67.2                         | 13.4                         | 0.4                   | -54.2                      | -13.0          | 41.2           |
| 10372.000                                  | V              | 31.75                         | -66.1                         | 13.4                         | 0.4                   | -53.1                      | -13.0          | 40.1           |
| 281.000                                    | H              | 46.87                         | -57.7                         | 0.0                          | 0.5                   | -58.2                      | -13.0          | 45.2           |
| 368.700                                    | V              | 49.51                         | -54.8                         | 0.0                          | 0.6                   | -55.4                      | -13.0          | 42.4           |
| BW:20M+20M,16-QAM, Frequency: 2593.000 MHz |                |                               |                               |                              |                       |                            |                |                |
| 5186.000                                   | H              | 47.81                         | -58.6                         | 14.0                         | 1.5                   | -46.1                      | -13.0          | 33.1           |
| 5186.000                                   | V              | 47.02                         | -59.4                         | 14.0                         | 1.5                   | -46.9                      | -13.0          | 33.9           |
| 7779.000                                   | H              | 37.89                         | -62.5                         | 13.3                         | 1.5                   | -50.7                      | -13.0          | 37.7           |
| 7779.000                                   | V              | 40.24                         | -60.4                         | 13.3                         | 1.5                   | -48.6                      | -13.0          | 35.6           |
| 10372.000                                  | H              | 31.59                         | -66.9                         | 13.4                         | 0.4                   | -53.9                      | -13.0          | 40.9           |
| 10372.000                                  | V              | 30.29                         | -67.6                         | 13.4                         | 0.4                   | -54.6                      | -13.0          | 41.6           |
| 246.200                                    | H              | 46.54                         | -58.2                         | 0.0                          | 0.5                   | -58.7                      | -13.0          | 45.7           |
| 351.600                                    | V              | 48.20                         | -56.5                         | 0.0                          | 0.6                   | -57.1                      | -13.0          | 44.1           |

**Note:**

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

## **FCC §27.53, RSS-195§5.6, RSS-199§4.5 - BAND EDGES**

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### **Applicable Standards**

#### **FCC§27.53(a)**

(3) For fixed CPE stations operating in the 2305-2320 MHz and 2345-2360 MHz bands transmitting with 2 watts per 5 megahertz average EIRP or less:

(i) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than  $55 + 10 \log (P)$  dB on all frequencies between 2320 and 2324 MHz and between 2341 and 2345 MHz, not less than  $61 + 10 \log (P)$  dB on all frequencies between 2324 and 2328 MHz and between 2337 and 2341 MHz, and not less than  $67 + 10 \log (P)$  dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2300 and 2305 MHz,  $55 + 10 \log (P)$  dB on all frequencies between 2296 and 2300 MHz,  $61 + 10 \log (P)$  dB on all frequencies between 2292 and 2296 MHz,  $67 + 10 \log (P)$  dB on all frequencies between 2288 and 2292 MHz, and  $70 + 10 \log (P)$  dB below 2288 MHz;

(iii) By a factor of not less than  $43 + 10 \log (P)$  dB on all frequencies between 2360 and 2365 MHz, and not less than  $70 + 10 \log (P)$  dB above 2365 MHz.

#### **FCC§27.53(m)**

(2) For digital base stations, the attenuation shall be not less than  $43 + 10 \log (P)$  dB, unless a documented interference complaint is received from an adjacent channel licensee with an overlapping Geographic Service Area. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS No. 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. Provided that a documented interference complaint cannot be mutually resolved between the parties prior to the applicable deadline, then the following additional attenuation requirements shall apply:

(i) If a pre-existing base station suffers harmful interference from emissions caused by a new or modified base station located 1.5 km or more away, within 24 hours of the receipt of a documented interference complaint the licensee of the new or modified base station must attenuate its emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block and shall immediately notify the complaining licensee upon implementation of the additional attenuation. No later than 60 days after the implementation of such additional attenuation, the licensee of the complaining base station must attenuate its base station emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the new or modified base station.

(ii) If a pre-existing base station suffers harmful interference from emissions caused by a new or modified base station located less than 1.5 km away, within 24 hours of receipt of a documented interference complaint the licensee of the new or modified base station must attenuate its emissions by at least  $67 + 10 \log (P) - 20 \log (D_{\text{km}}/1.5)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the complaining licensee, or if both base stations are co-located, limit its undesired signal level at the pre-existing base station receiver(s) to no more than -107 dBm measured in a 5.5 megahertz bandwidth and shall immediately notify the complaining licensee upon such reduction in the undesired signal

level. No later than 60 days after such reduction in the undesired signal level, the complaining licensee must attenuate its base station emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the new or modified base station.

(iii) If a new or modified base station suffers harmful interference from emissions caused by a pre-existing base station located 1.5 km or more away, within 60 days of receipt of a documented interference complaint the licensee of each base station must attenuate its base station emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the other licensee.

(iv) If a new or modified base station suffers harmful interference from emissions caused by a pre-existing base station located less than 1.5 km away, within 60 days of receipt of a documented interference complaint: (a) The licensee of the new or modified base station must attenuate its OOB by at least  $67 + 10 \log (P) - 20 \log (D \text{ km} / 1.5)$  measured 3 megahertz above or below, from the channel edge of its frequency block of the other licensee, or if the base stations are co-located, limit its undesired signal level at the other base station receiver(s) to no more than  $-107$  dBm measured in a 5.5-megahertz bandwidth; and (b) the licensee causing the interference must attenuate its emissions by at least  $67 + 10 \log (P)$  dB measured at 3 megahertz, above or below, from the channel edge of its frequency block of the new or modified base station.

(v) For all fixed digital user stations, the attenuation factor shall be not less than  $43 + 10 \log (P)$  dB at the channel edge.

#### RSS-195 § 5.6

The transmitter unwanted emissions shall be measured with a resolution bandwidth of 1 MHz. A smaller resolution bandwidth is permitted provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz. However, in the 1 MHz bands immediately adjacent to the edges of the frequency range(s) in which the equipment is allowed to operate, a resolution bandwidth of as close as possible to, without being less than 1% of the occupied bandwidth, shall be employed provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz.

##### 5.6.2 Mobile, Portable and Low-Power Fixed Subscriber Equipment

The power of any emission outside the frequency range(s) in which the equipment operates shall be attenuated below the transmitter power,  $P(\text{dBW})$ , by the amount indicated in Table 2 and graphically represented in Figure 2, where  $p$  is the transmitter output power measured in watts.

| Frequency (MHz) | Attenuation (dB)                       |
|-----------------|----------------------------------------|
| <2200           | $43 + 10 \log_{10}(p)$                 |
| 2200 - 2288     | $70 + 10 \log_{10}(p)$                 |
| 2288 - 2292     | $67 + 10 \log_{10}(p)$                 |
| 2292 - 2296     | $61 + 10 \log_{10}(p)$                 |
| 2296 - 2300     | $55 + 10 \log_{10}(p)$                 |
| 2300 - 2305     | $43 + 10 \log_{10}(p)$                 |
| 2305 - 2320     | $43 + 10 \log_{10}(p)$ <sup>Note</sup> |
| 2320 - 2324     | $55 + 10 \log_{10}(p)$                 |
| 2324 - 2328     | $61 + 10 \log_{10}(p)$                 |
| 2328 - 2337     | $67 + 10 \log_{10}(p)$                 |
| 2337 - 2341     | $61 + 10 \log_{10}(p)$                 |
| 2341 - 2345     | $55 + 10 \log_{10}(p)$                 |
| 2345 - 2360     | $43 + 10 \log_{10}(p)$ <sup>Note</sup> |
| 2360 - 2365     | $43 + 10 \log_{10}(p)$                 |
| 2365 - 2395     | $70 + 10 \log_{10}(p)$                 |
| >2395           | $43 + 10 \log_{10}(p)$                 |

Note: Measured at the edges of the highest and lowest frequency range(s) in which the equipment is designed to operate. See Section 5.2 for the permitted frequency ranges for various equipment types.

#### RSS-199 § 4.5

In the 1 MHz band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment, and 2% for mobile subscriber equipment. Beyond the 1 MHz band, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% or 2% of the occupied bandwidth, as applicable.

Equipment shall comply with the following unwanted emission limits:

(a) for base station and fixed subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power,  $P$  (dBW), by at least  $43 + 10 \log_{10} p$ .

(b) for mobile subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power,  $P$  (dBW), by at least:

- (i)  $40 + 10 \log_{10} p$  from the channel edges to 5 MHz away
- (ii)  $43 + 10 \log_{10} p$  between 5 MHz and  $X$  MHz from the channel edges, and
- (iii)  $55 + 10 \log_{10} p$  at  $X$  MHz and beyond from the channel edges

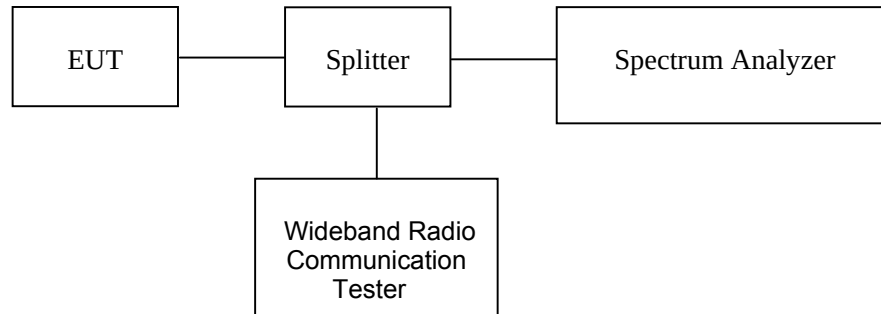
In addition, the attenuation shall not be less than  $43 + 10 \log_{10} p$  on all frequencies between 2490.5 MHz and 2496 MHz, and  $55 + 10 \log_{10} p$  at or below 2490.5 MHz.

In (a) and (b),  $p$  is the transmitter power measured in watts and  $X$  is 6 MHz or the equipment occupied bandwidth, whichever is greater.

## Test Procedure

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

The center of the spectrum analyzer was set to block edge frequency.



## Test Equipment List and Details

| Manufacturer    | Description                         | Model   | Serial Number | Calibration Date | Calibration Due Date |
|-----------------|-------------------------------------|---------|---------------|------------------|----------------------|
| Rohde & Schwarz | Signal Analyzer                     | FSIQ26  | 831929/005    | 2016-09-21       | 2017-09-20           |
| Unknown         | RF Cable                            | Unknown | C-2           | Each Time        | /                    |
| Unknown         | Two-way Splitter                    | Unknown | OE0120121     | Each Time        | /                    |
| R&S             | Wideband Radio Communication Tester | CMW500  | 106891        | 2016-11-23       | 2017-11-23           |

**\* Statement of Traceability:** BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B "Implementation of traceability policy in accredited laboratories".

## Test Data

### Environmental Conditions

|                    |               |
|--------------------|---------------|
| Temperature:       | 19.3~27 °C    |
| Relative Humidity: | 48~55 %       |
| ATM Pressure:      | 96.8~98.9 kPa |

The testing was performed by Lorin Bian from 2017-02-09 to 2017-07-01.

**Single Carrier  
Band 7:**

**5M\_RB25\_QPSK\_Low Channel**



Date: 20.MAY.2017 17:19:12

**5M\_RB25\_QPSK\_High Channel**

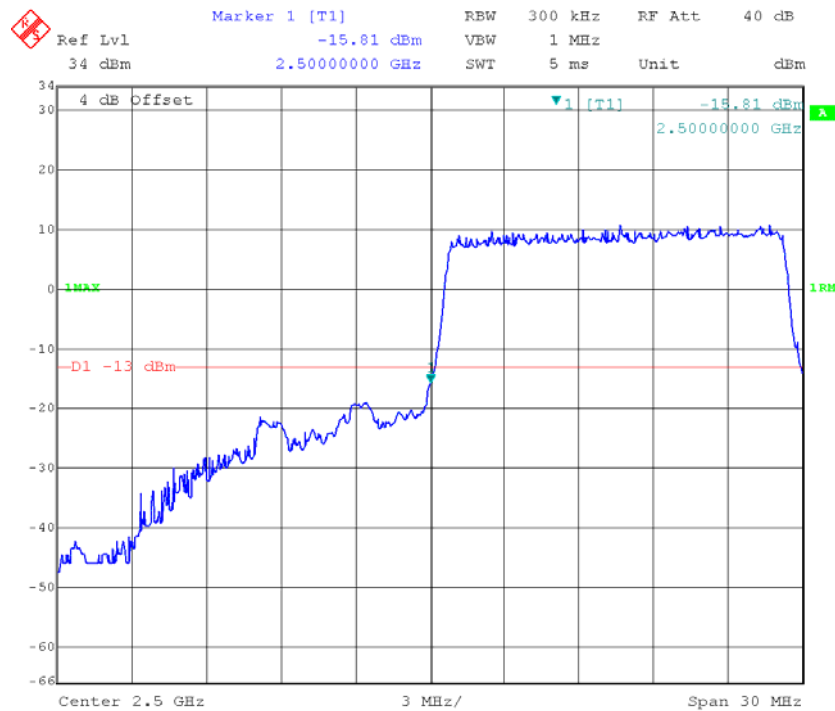


Date: 20.MAY.2017 17:21:12

Date: 20.MAY.2017 17:24:22

Date: 20.MAY.2017 17:23:09

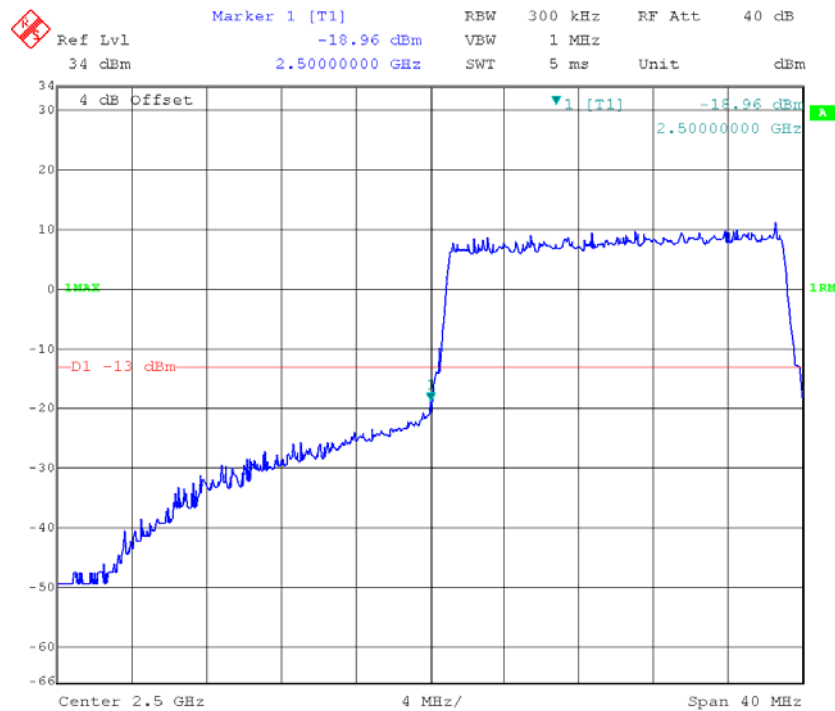
### 15M\_RB75\_QPSK\_Low Channel



### 15M\_RB75\_QPSK\_High Channel



### 20M\_RB100\_QPSK\_Low Channel



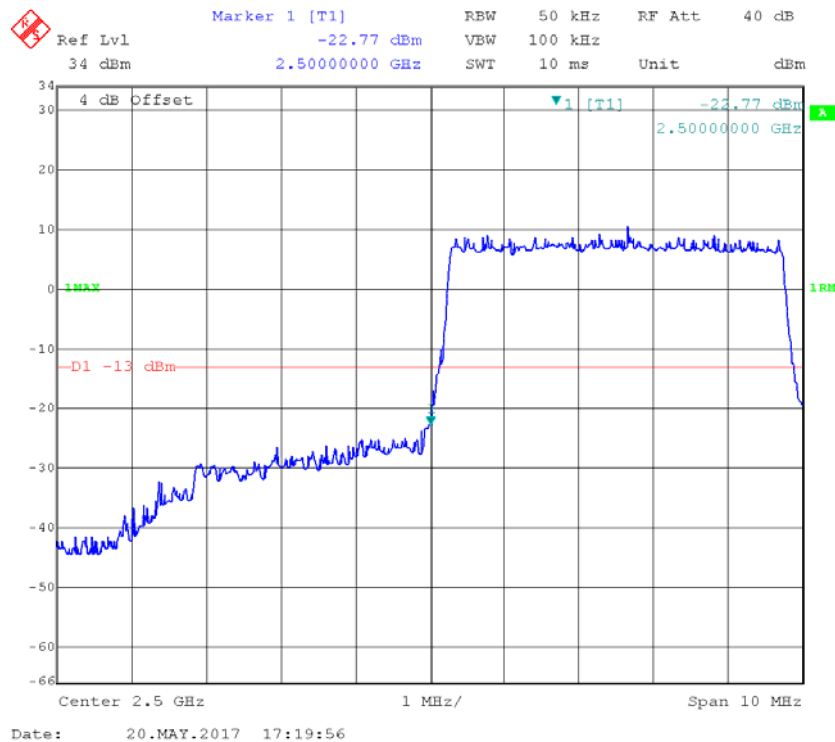
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### 20M\_RB100\_QPSK\_High Channel

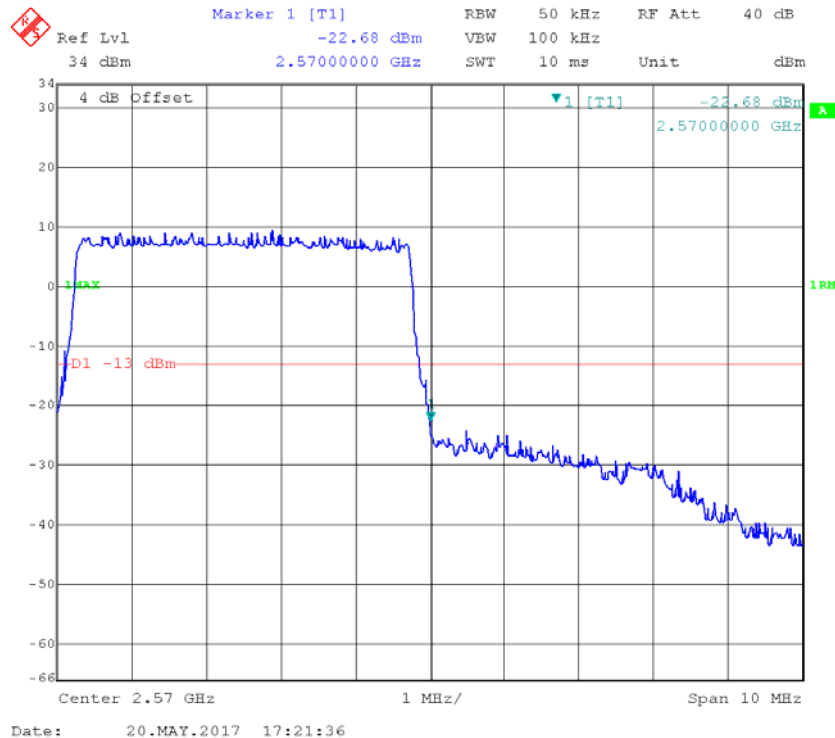


Date: 20.MAY.2017 17:28:23

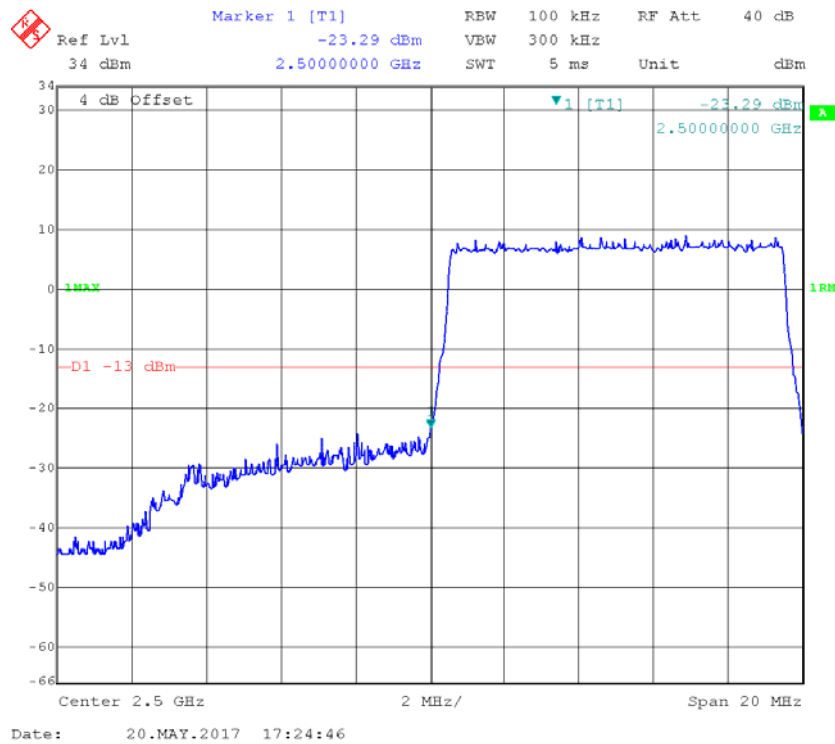
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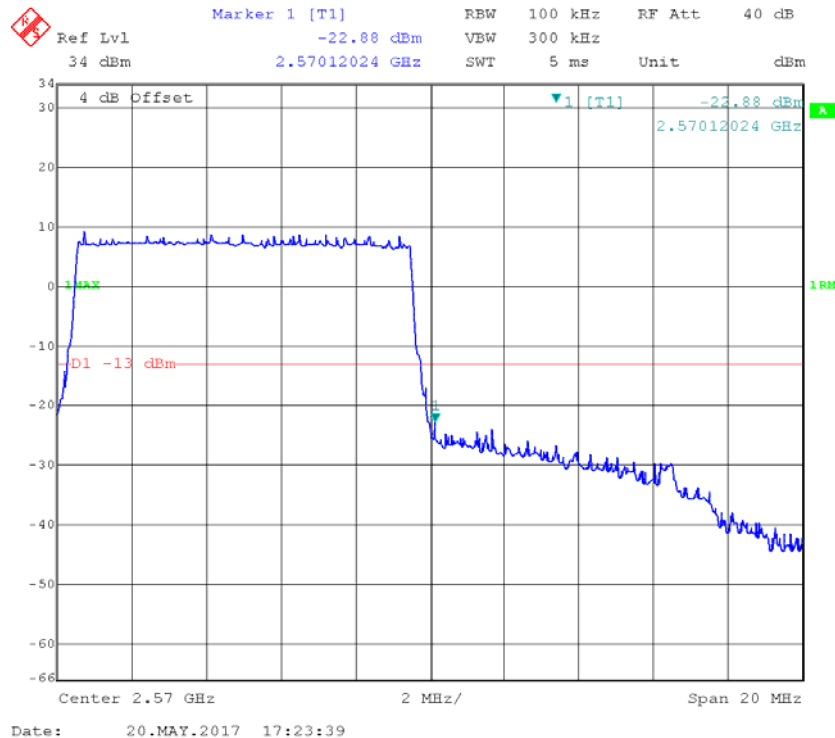
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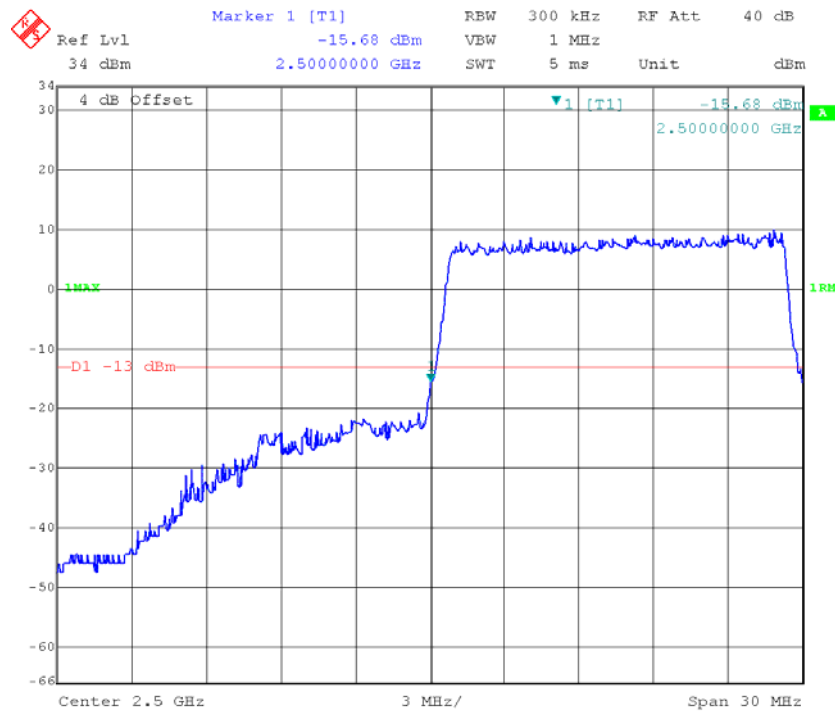
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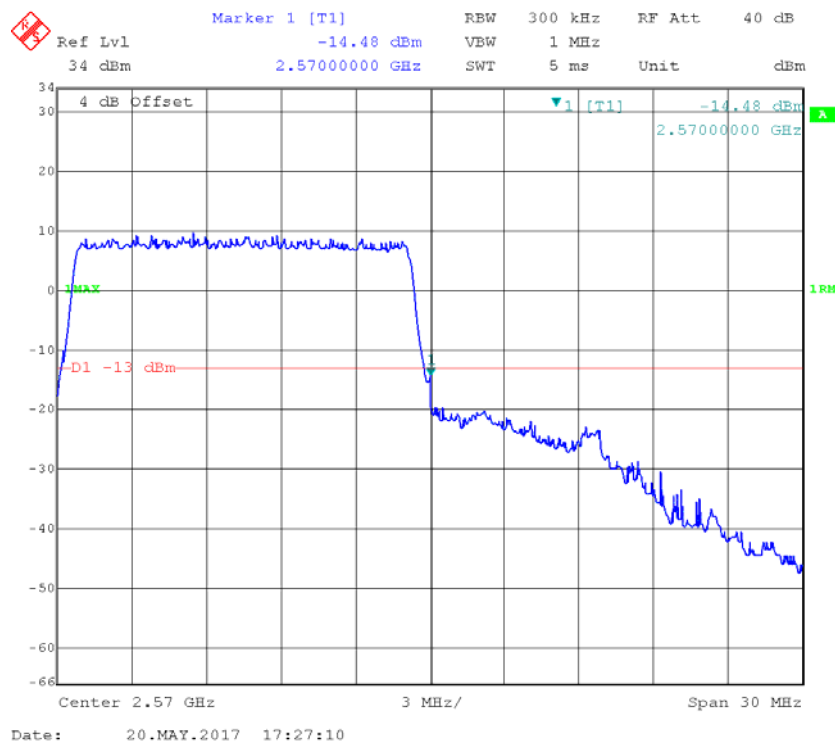
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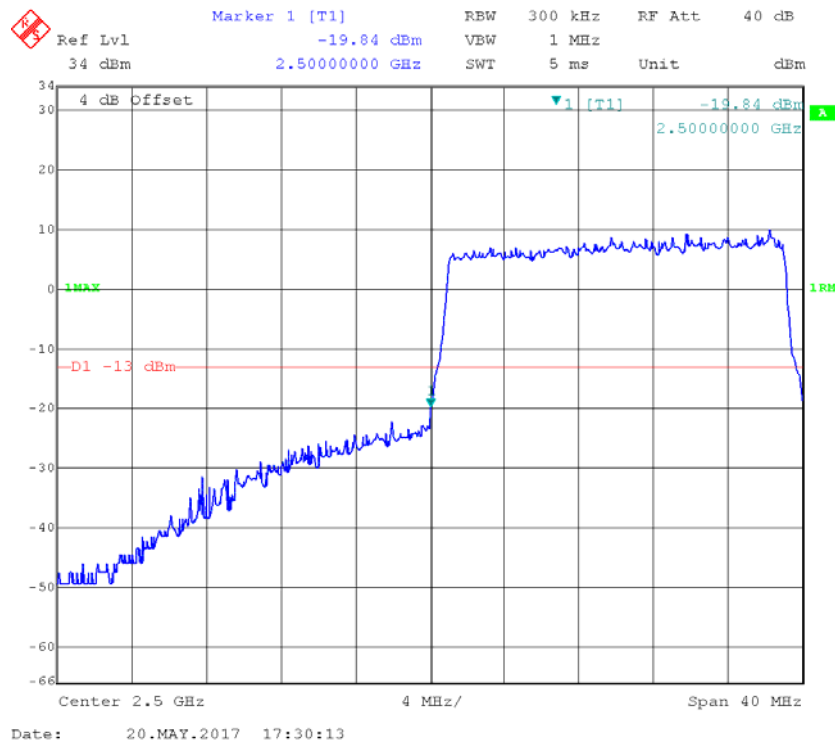
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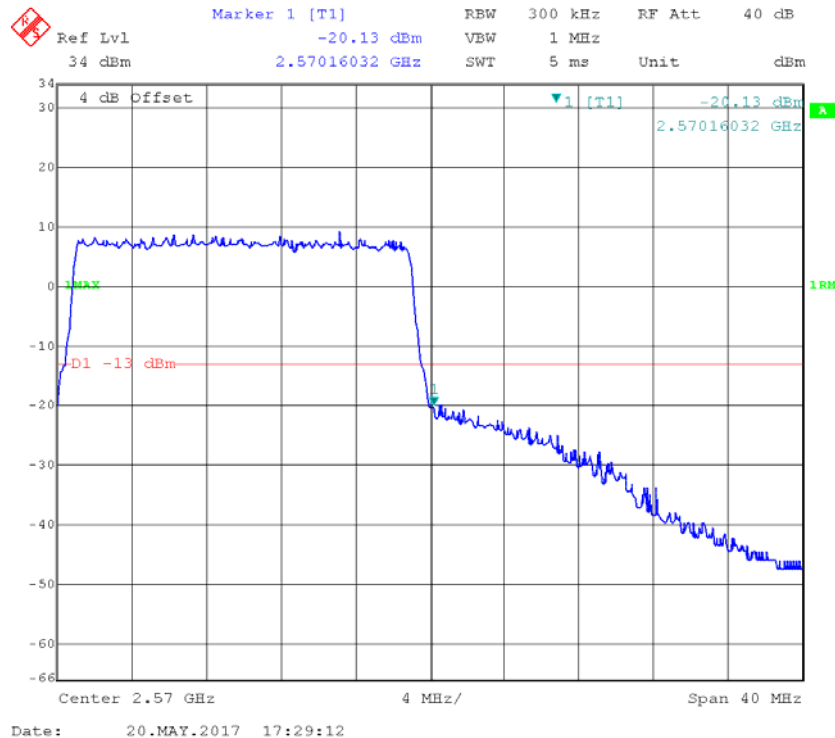
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### 20M\_RB100\_16-QAM\_Low Channel

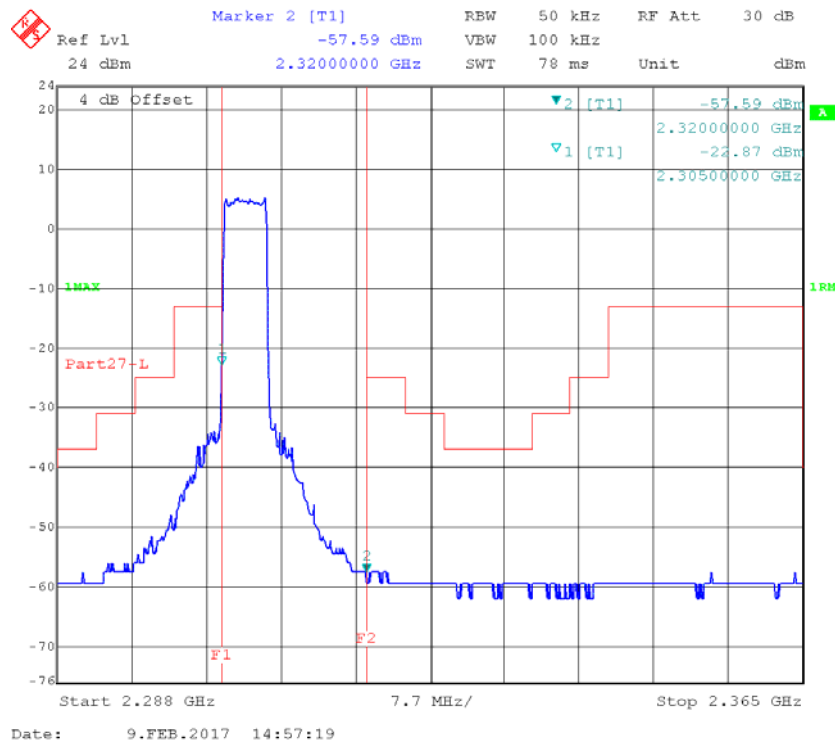


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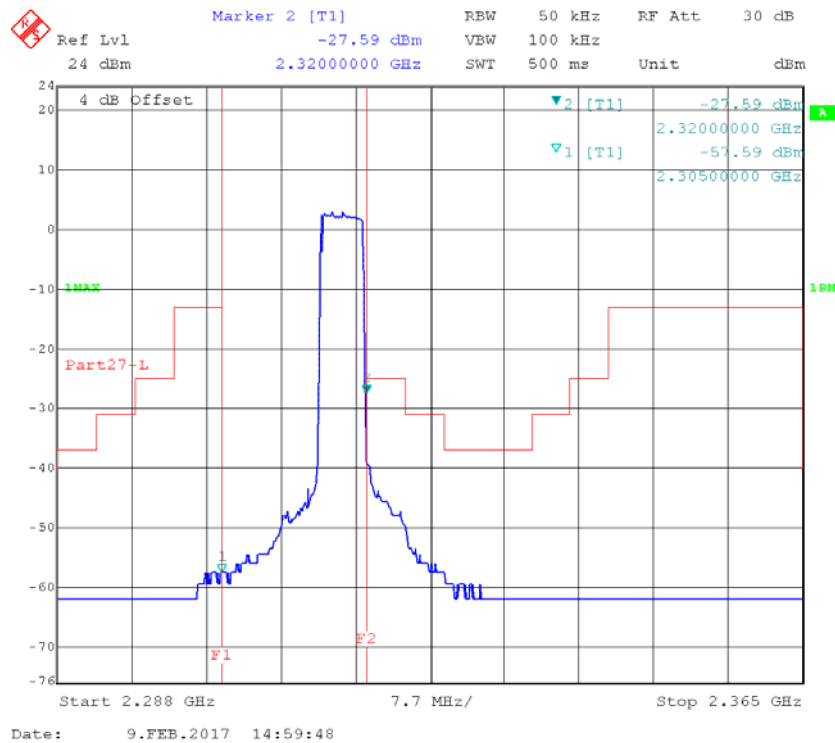


**Band 40 (2305MHz-2320MHz):**

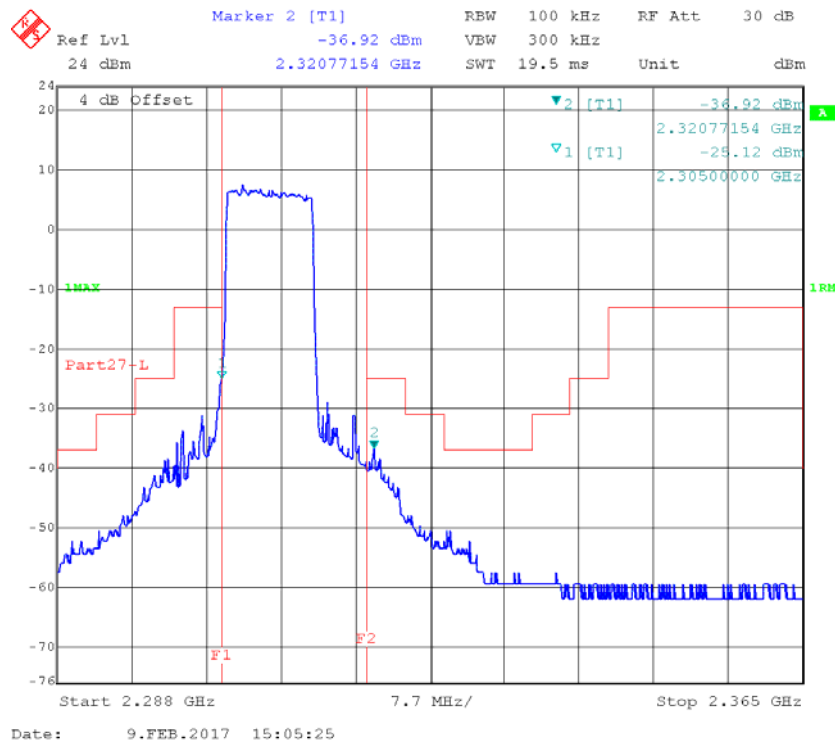
**5M\_RB25\_QPSK\_Low Channel**



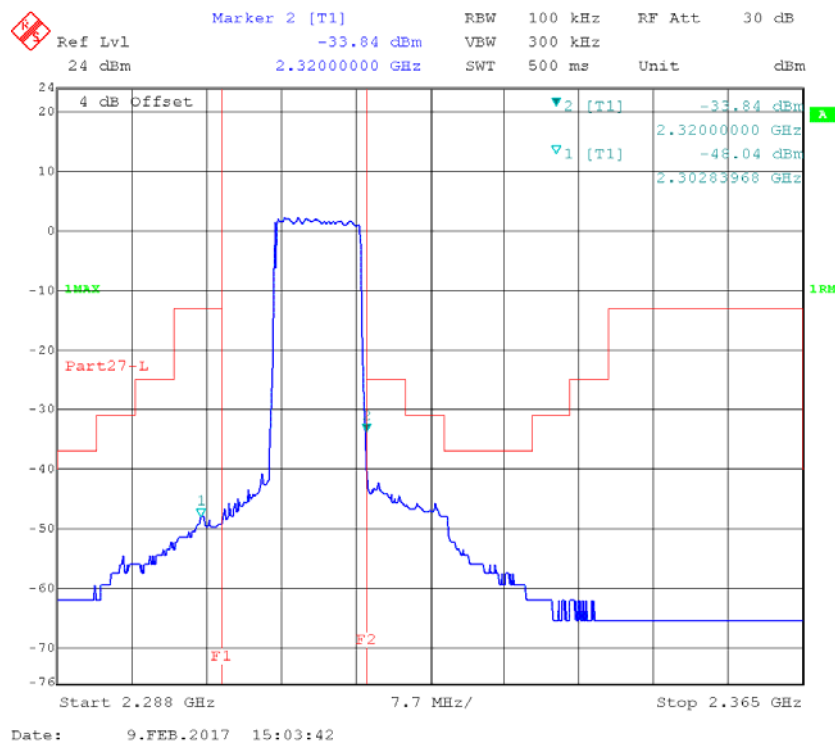
**5M\_RB25\_QPSK\_High Channel**



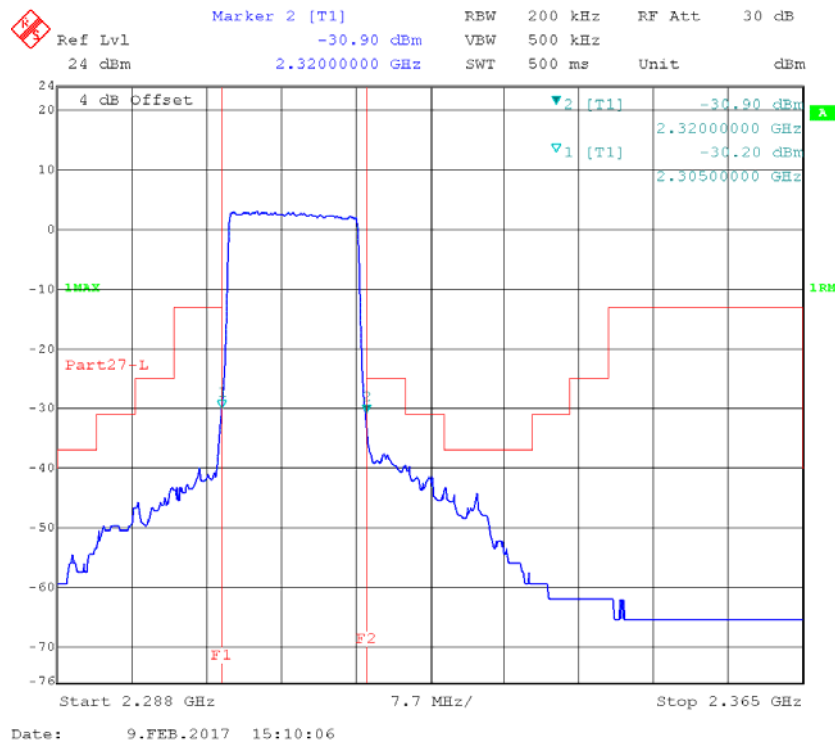
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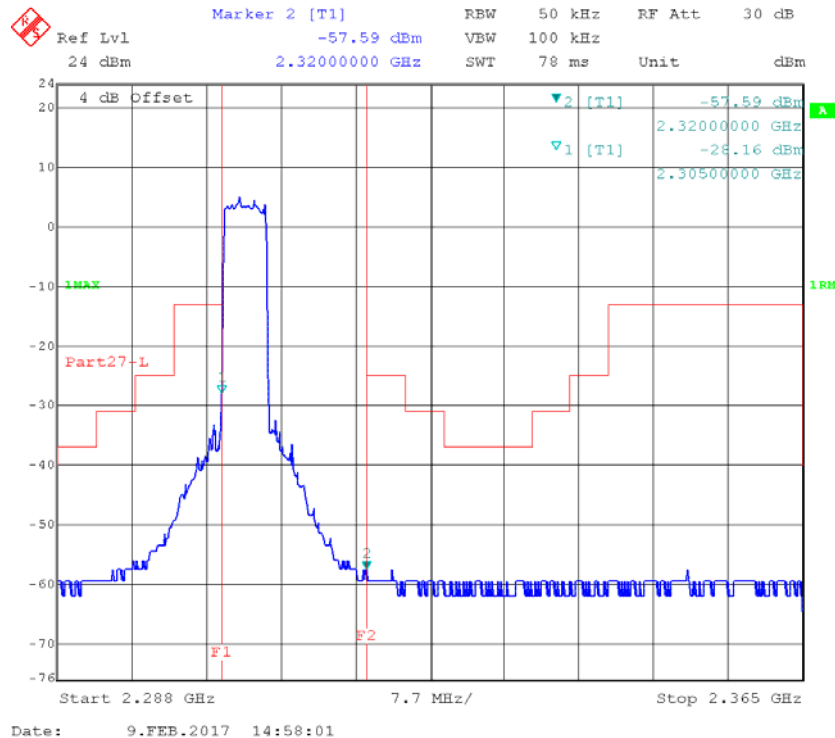
### 10M\_RB50\_QPSK\_High Channel



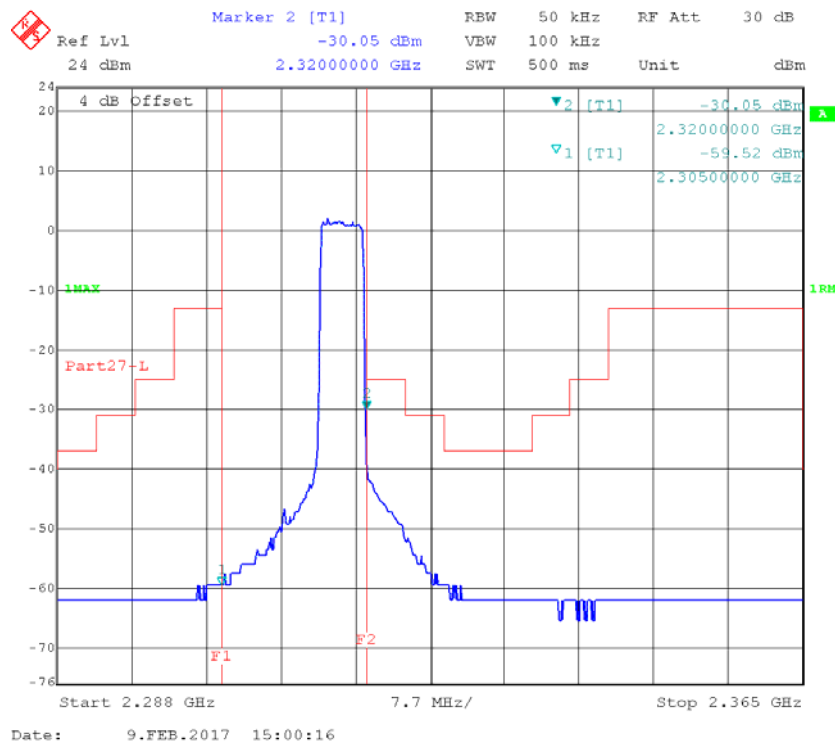
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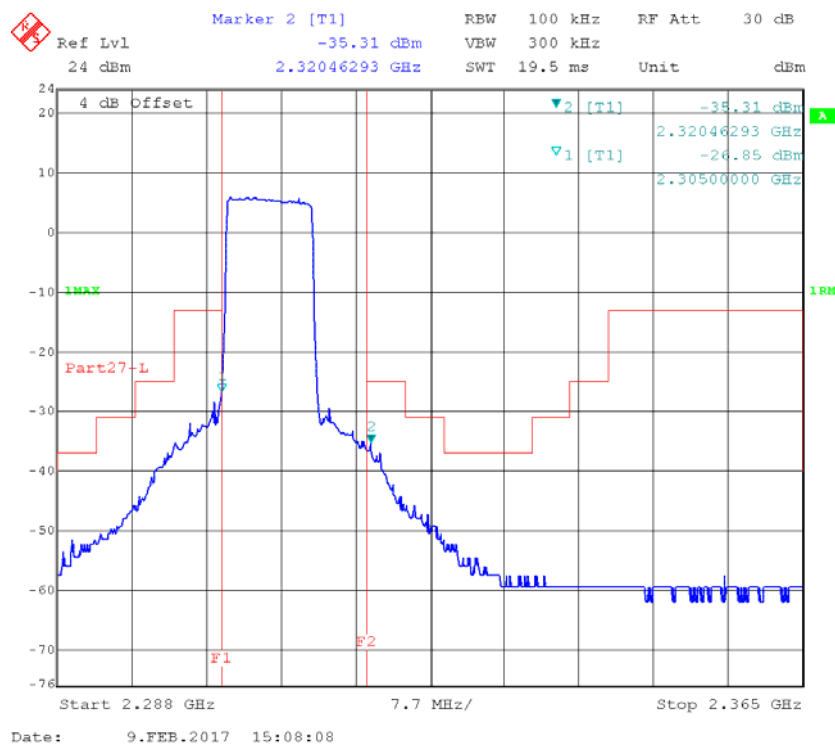
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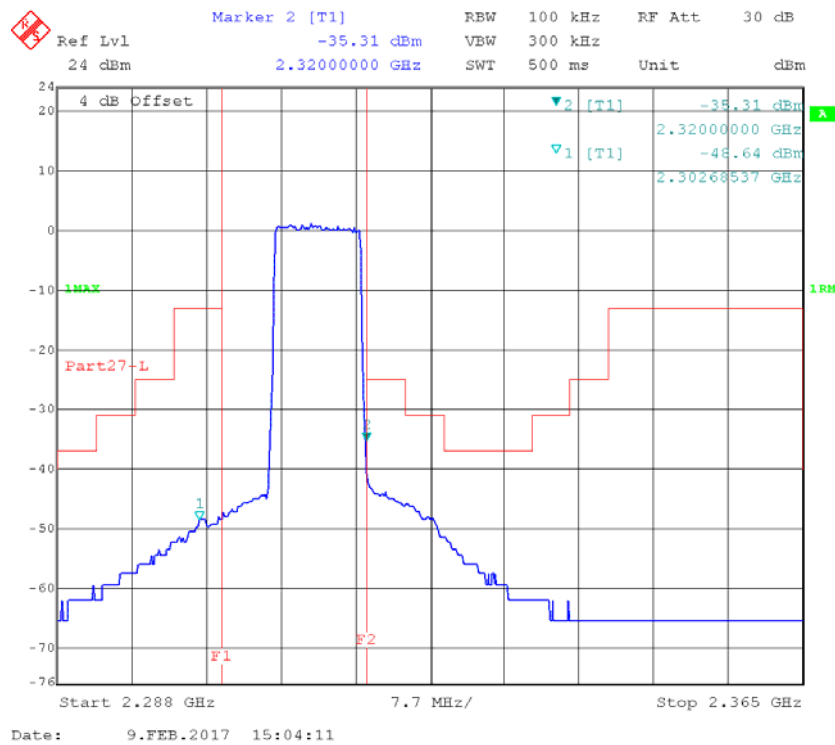
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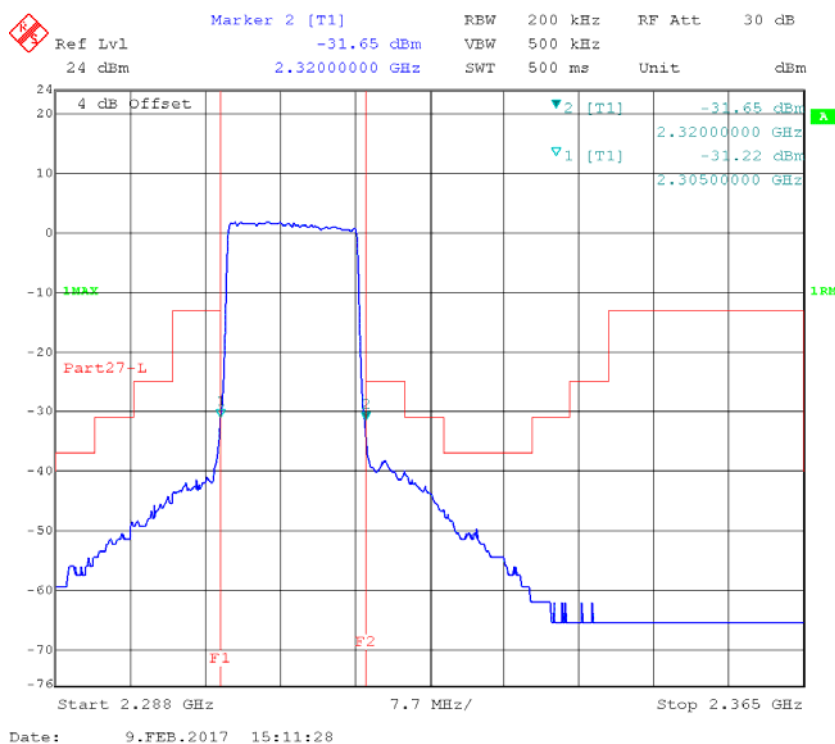
### 10M\_RB50\_16-QAM\_Low Channel



### 10M\_RB50\_16-QAM\_High Channel

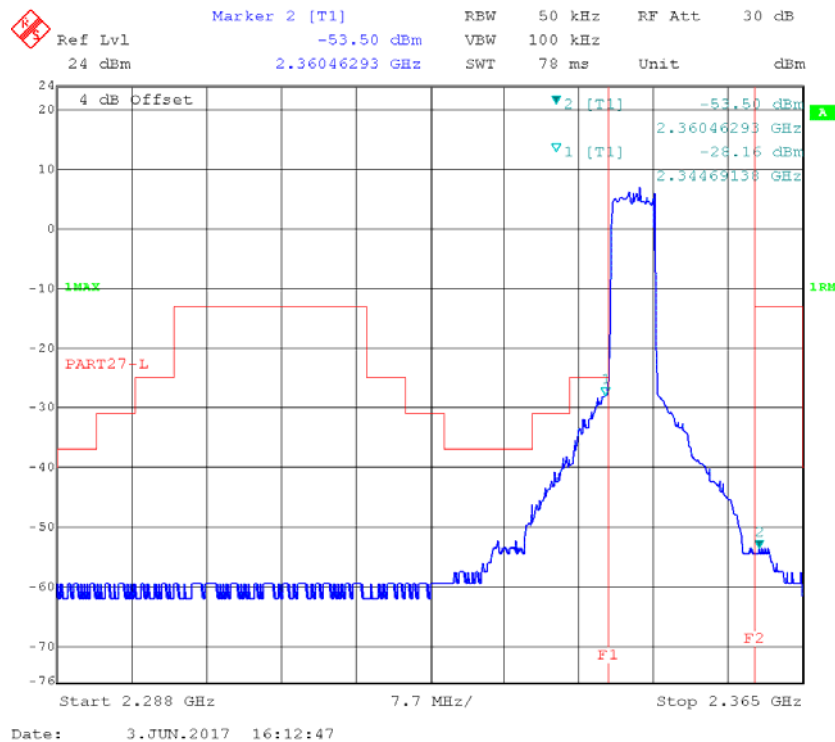


### 15M\_RB75\_16-QAM

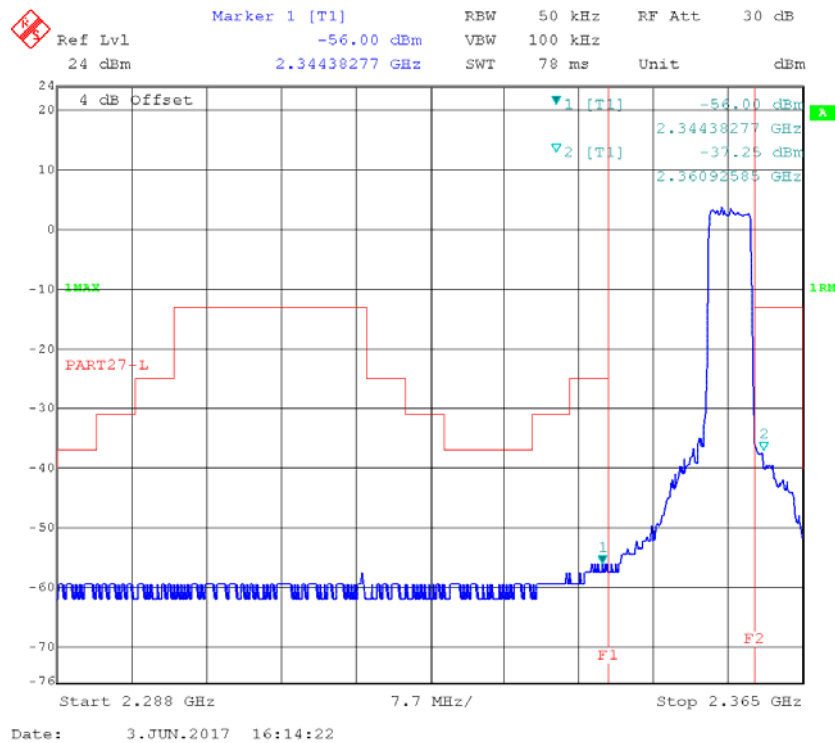


**Band 40(2345MHz-2360MHz):**

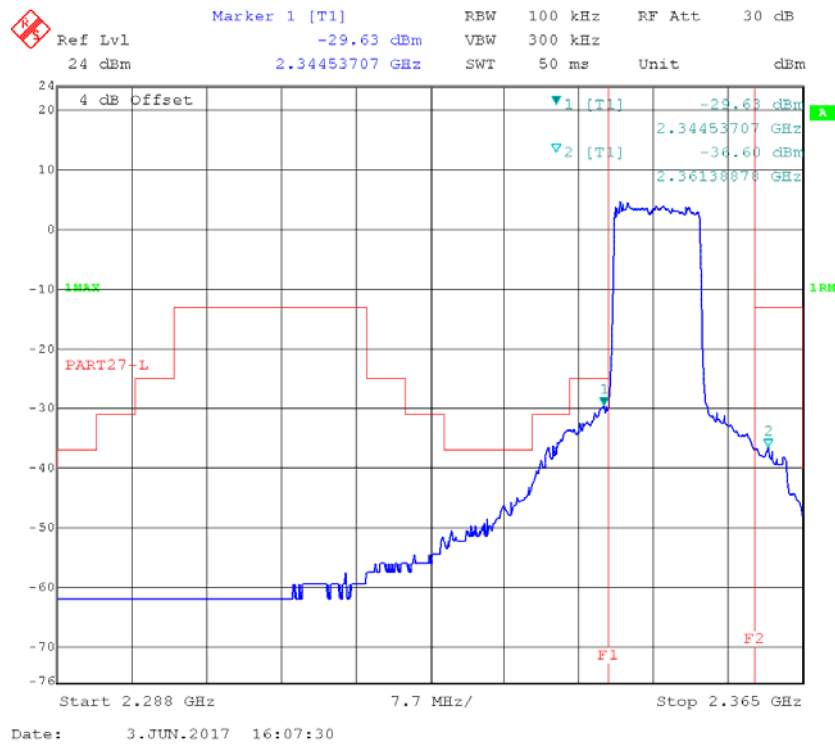
**5M\_RB25\_QPSK\_Low Channel**



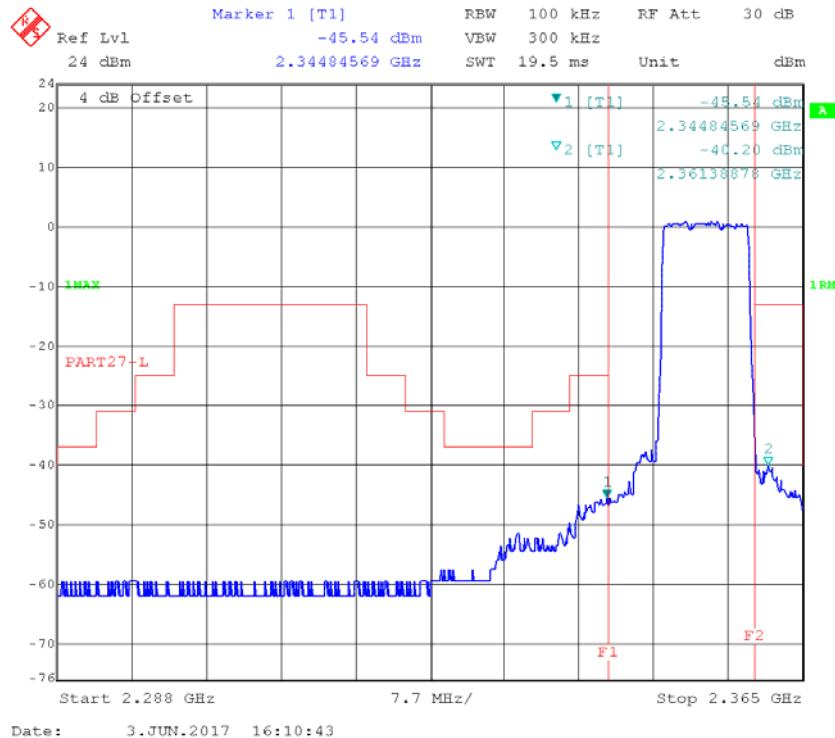
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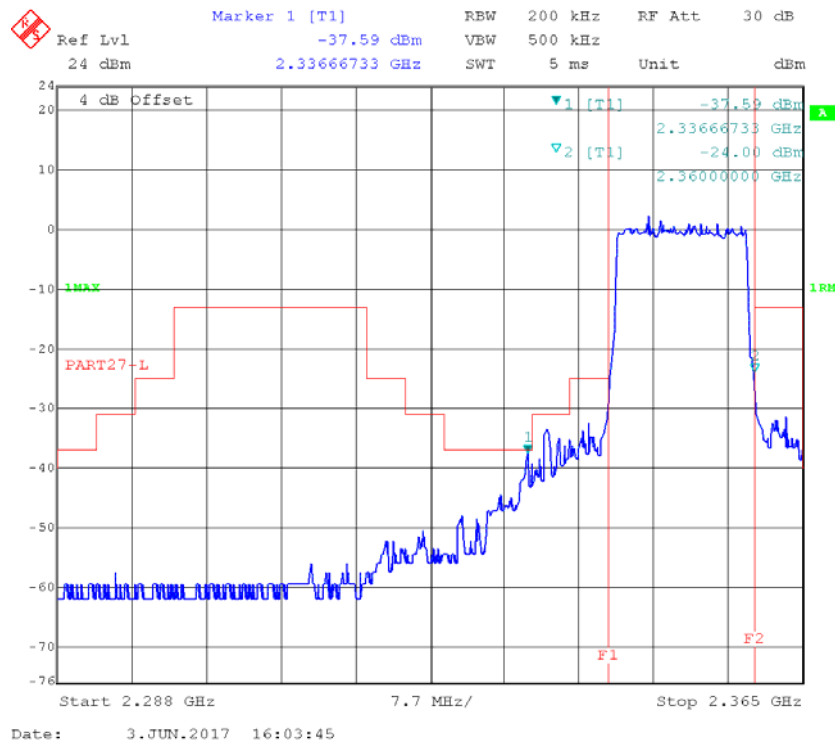
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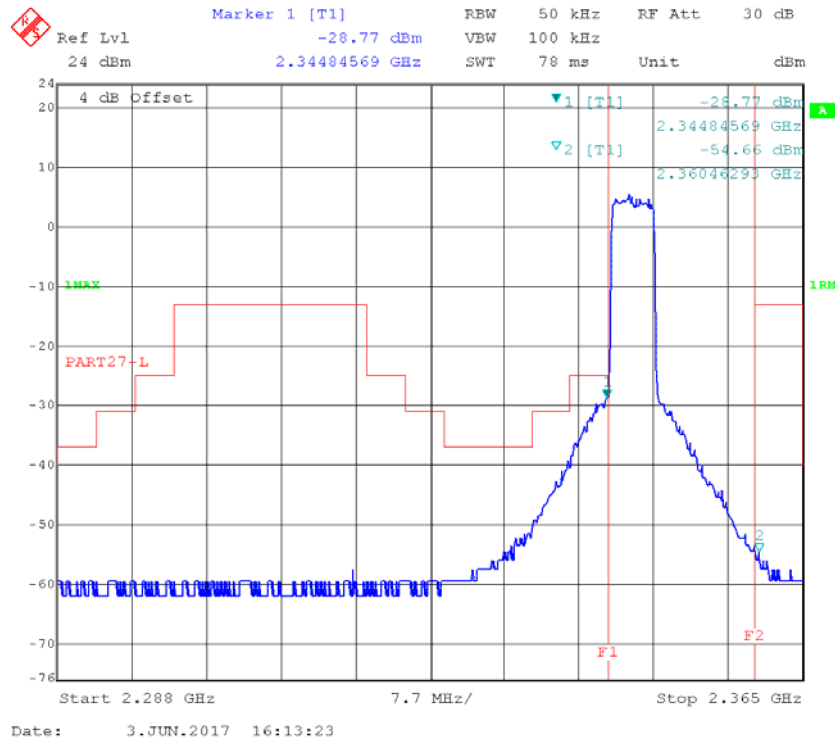
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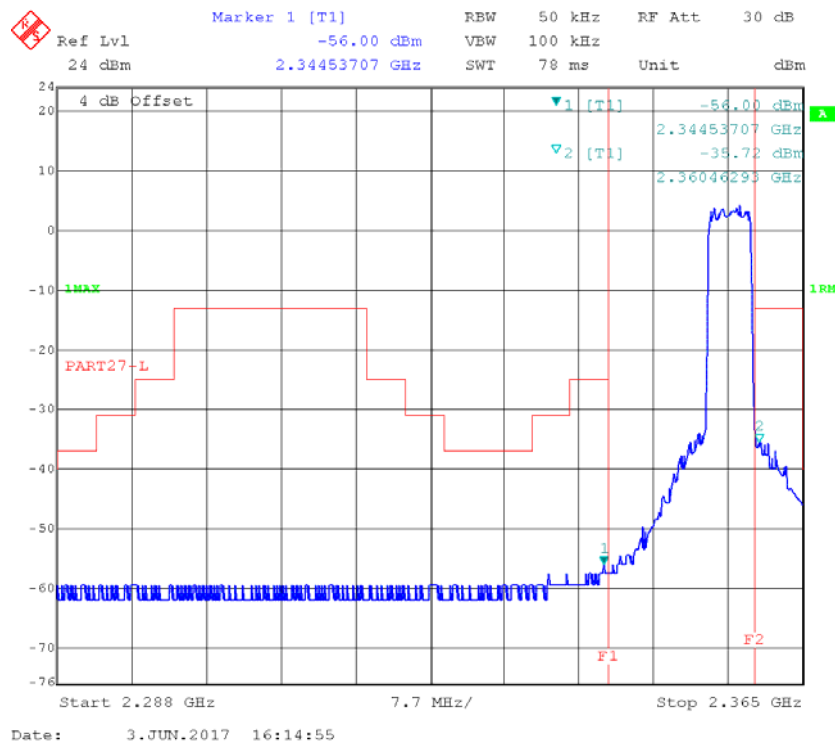
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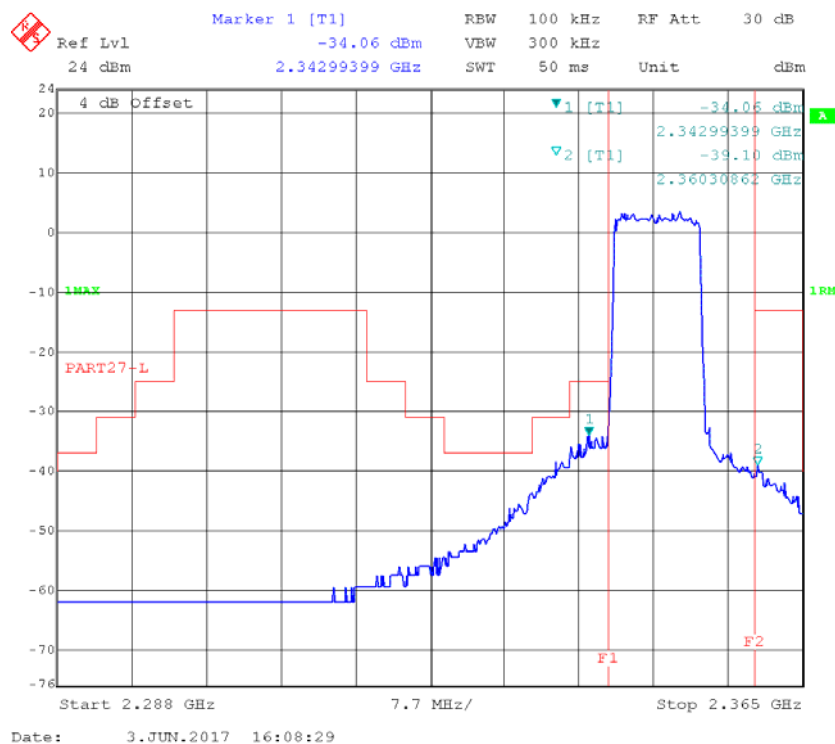
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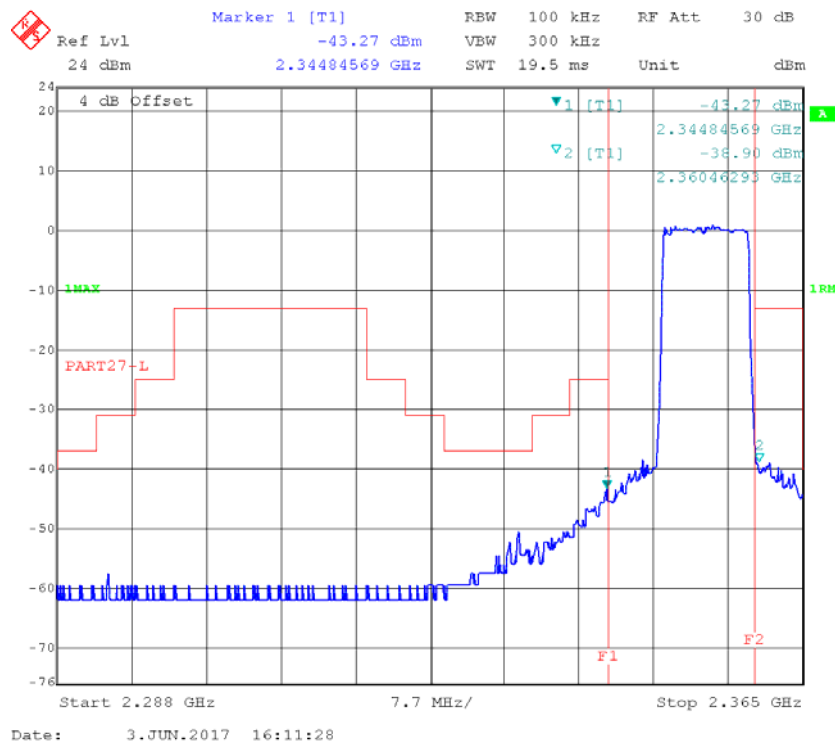
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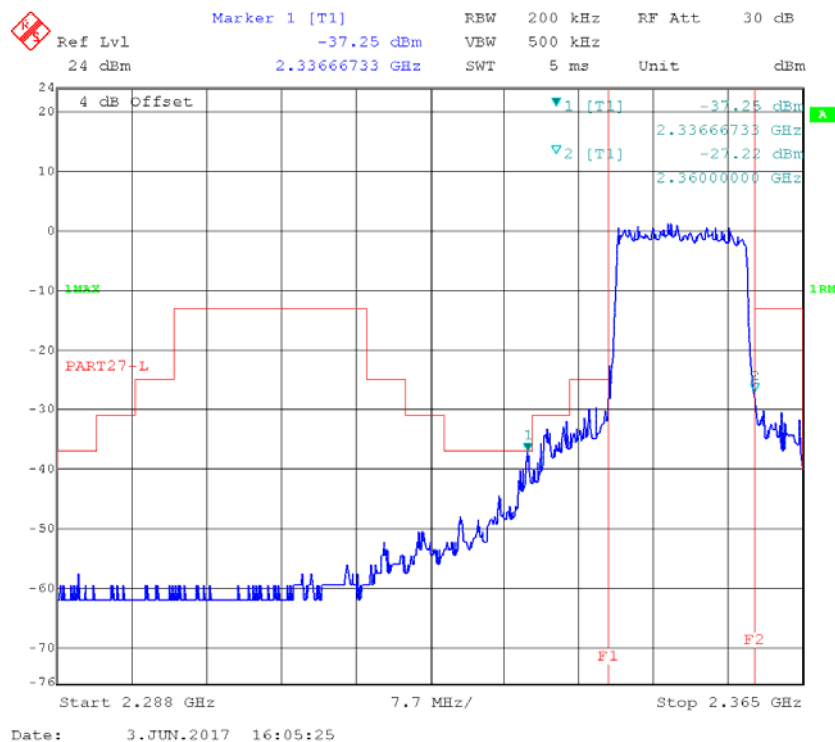
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### 10M\_RB50\_16-QAM\_High Channel

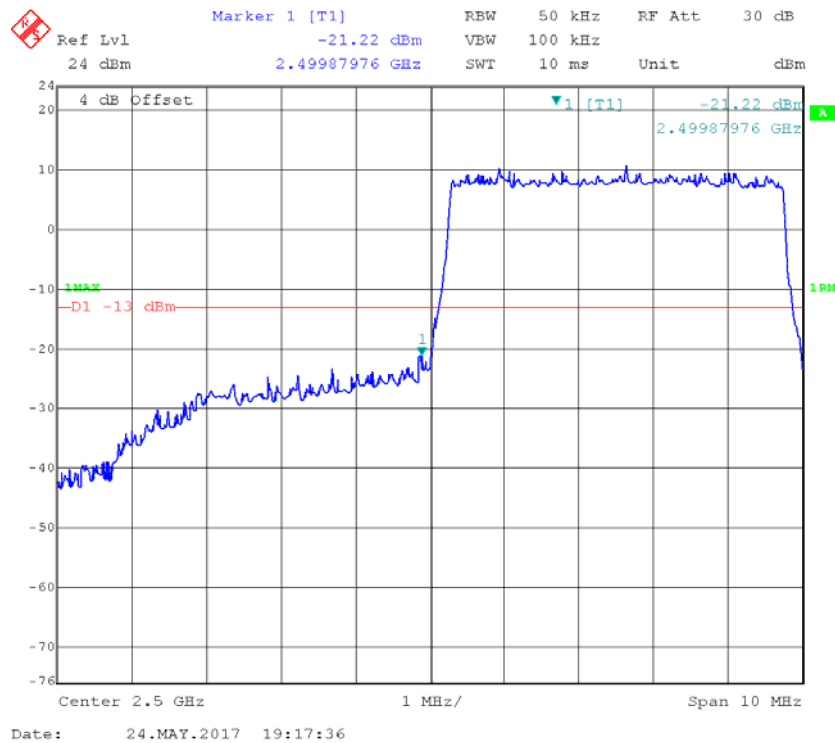


### 15M\_RB75\_16-QAM

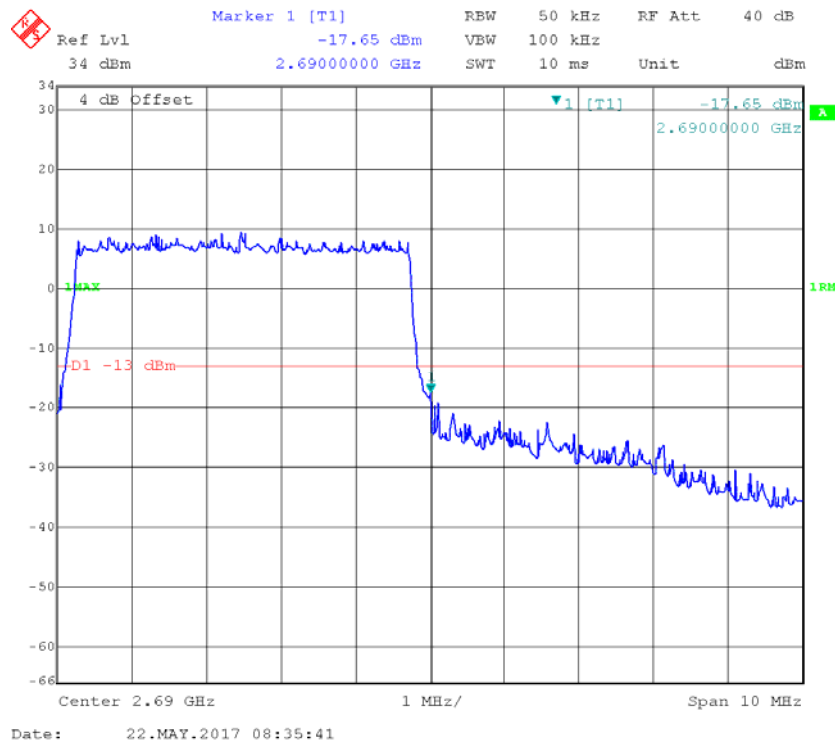


**Band 41:**

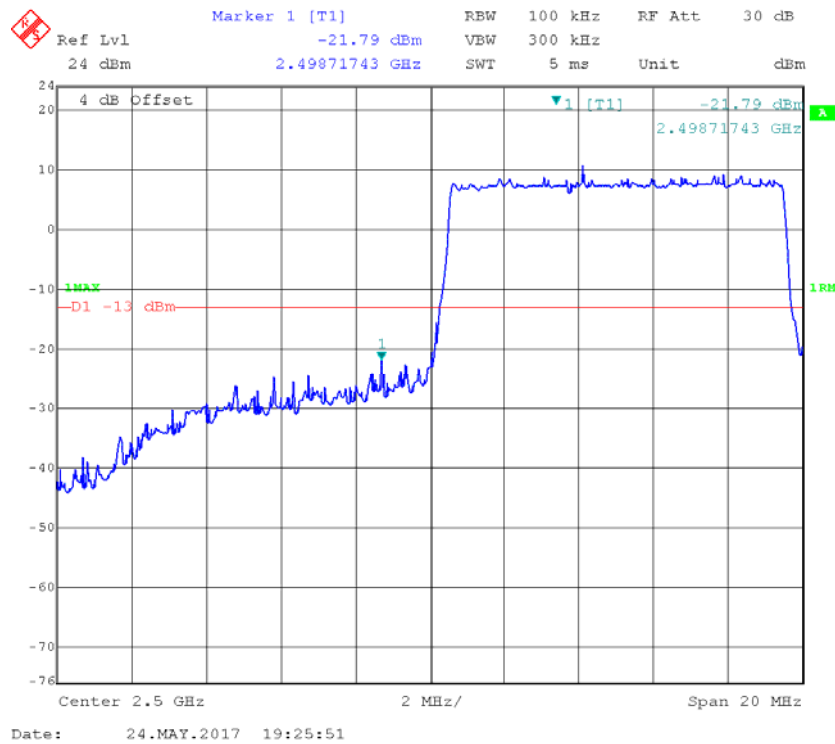
**5M\_RB25\_QPSK\_Low Channel**



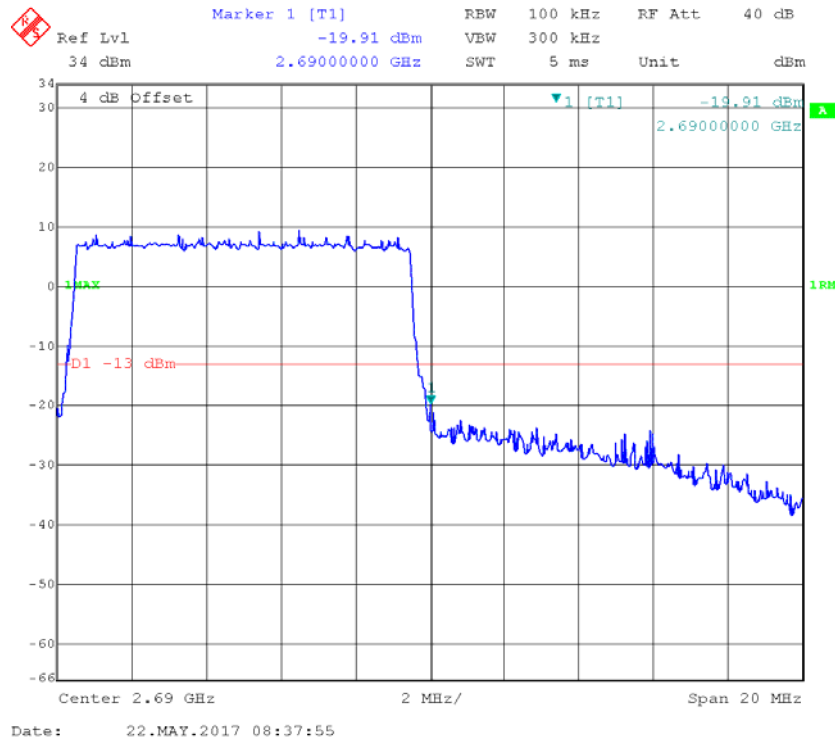
**5M\_RB25\_QPSK\_High Channel**



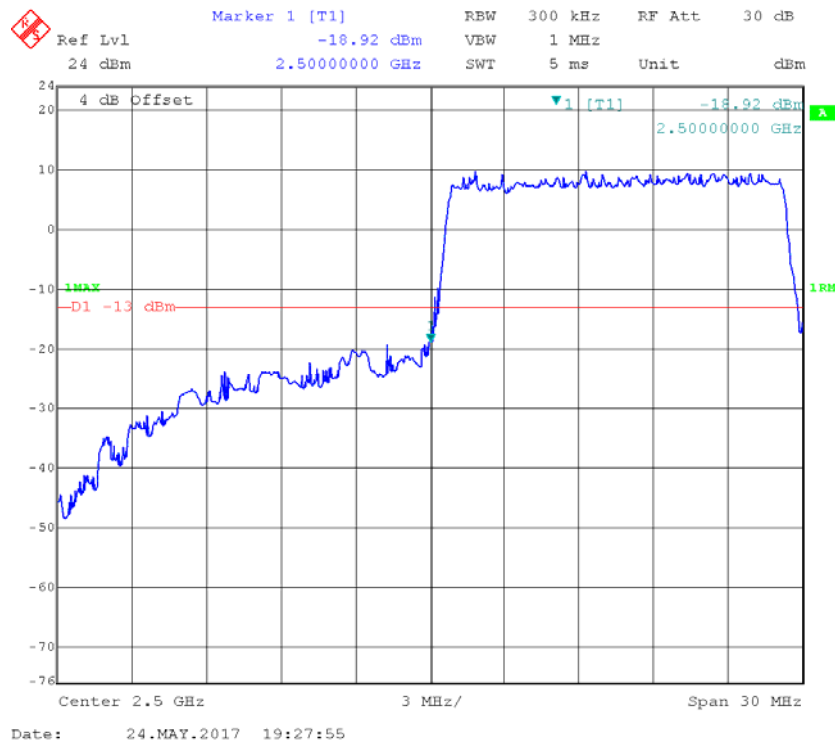
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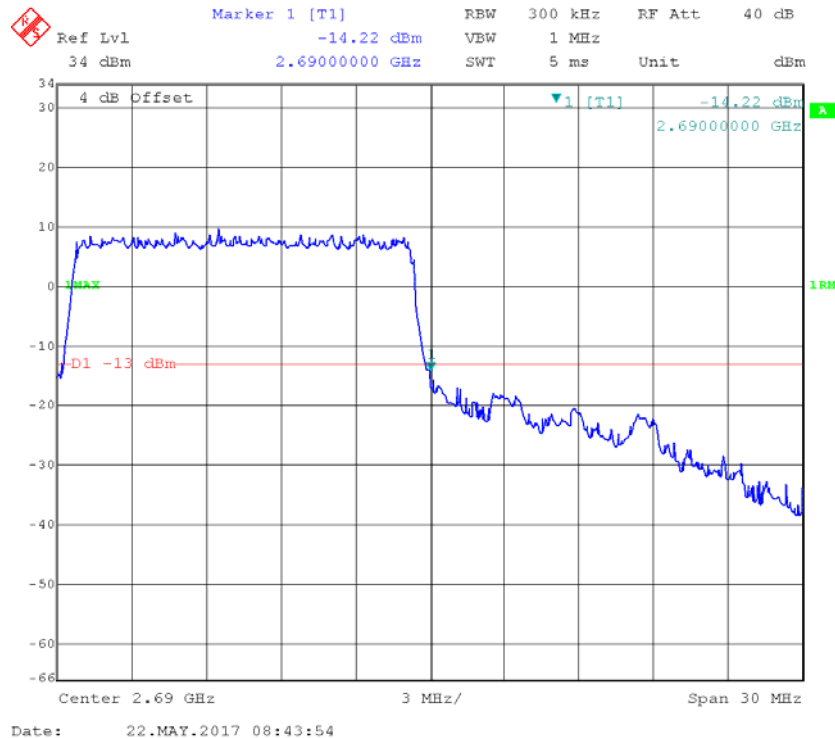
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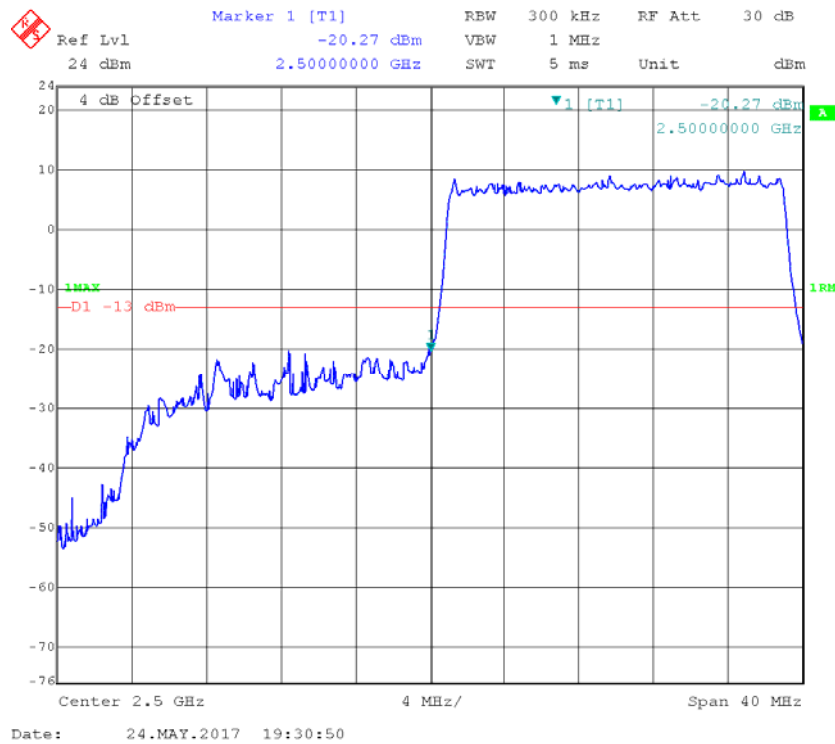
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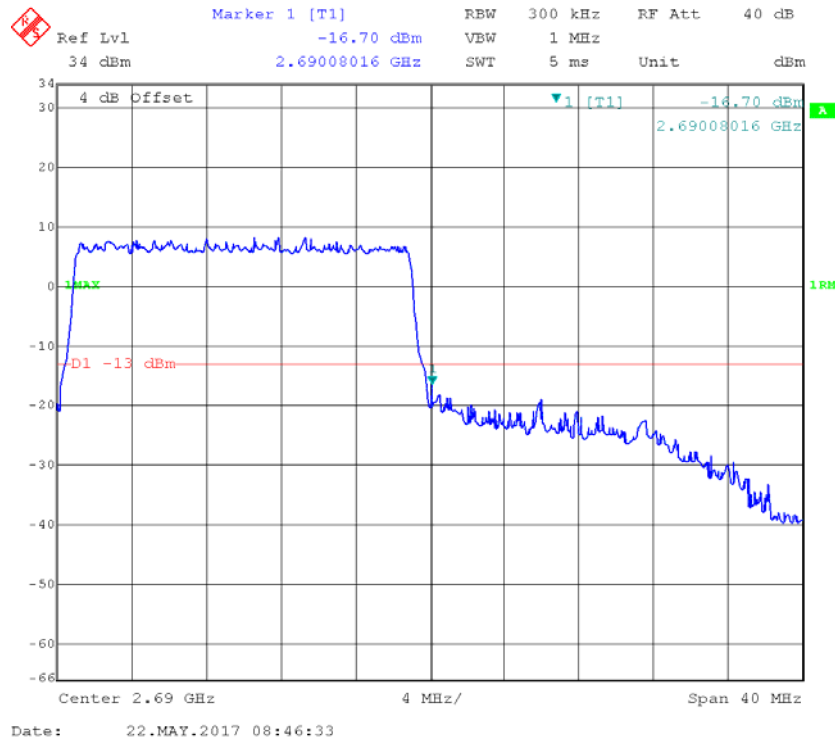
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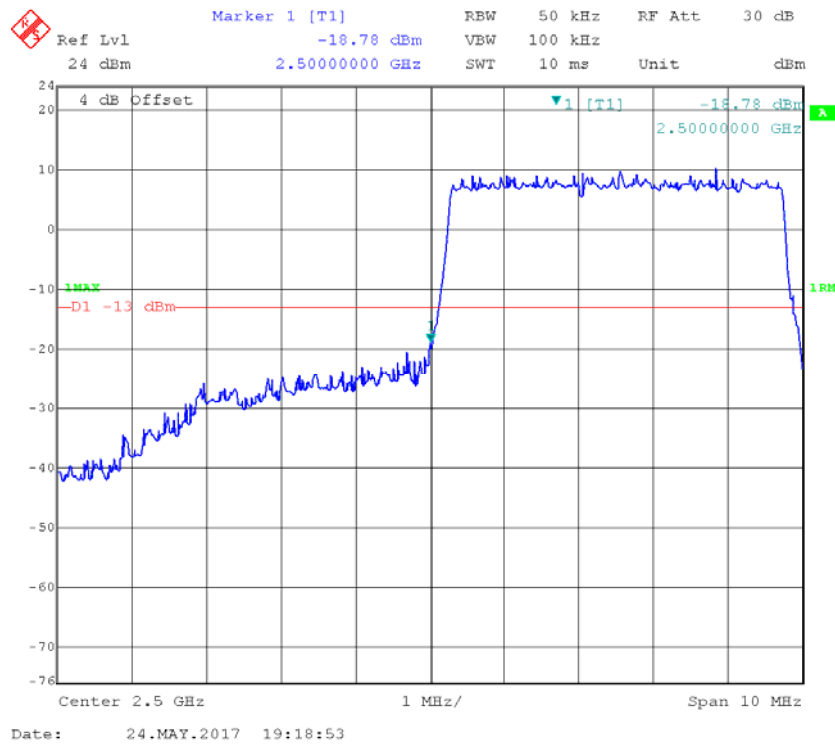
### 20M\_RB100\_QPSK\_Low Channel



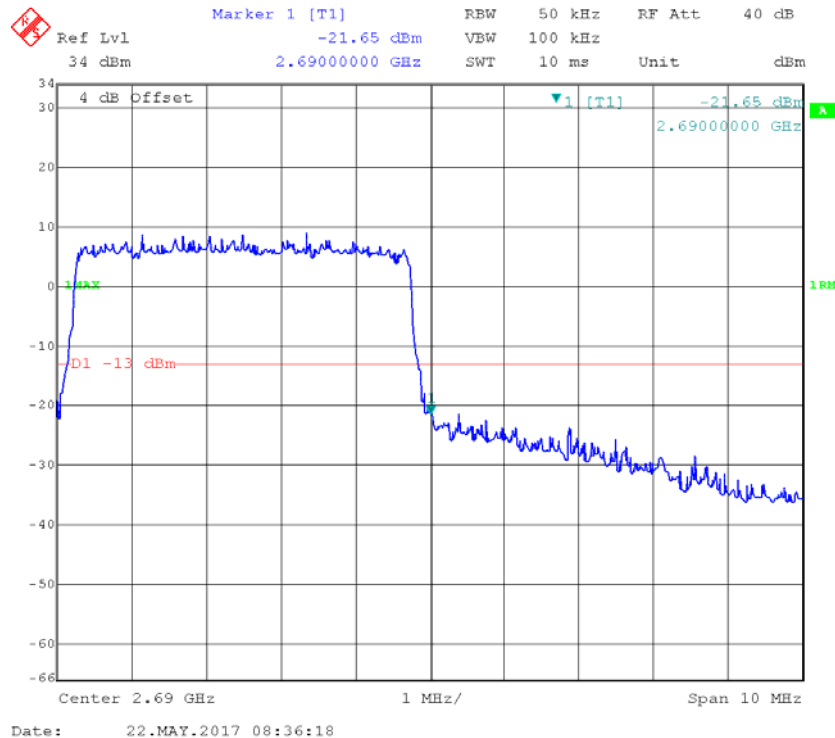
### 20M\_RB100\_QPSK\_High Channel



### 5M\_RB25\_16-QAM\_Low Channel

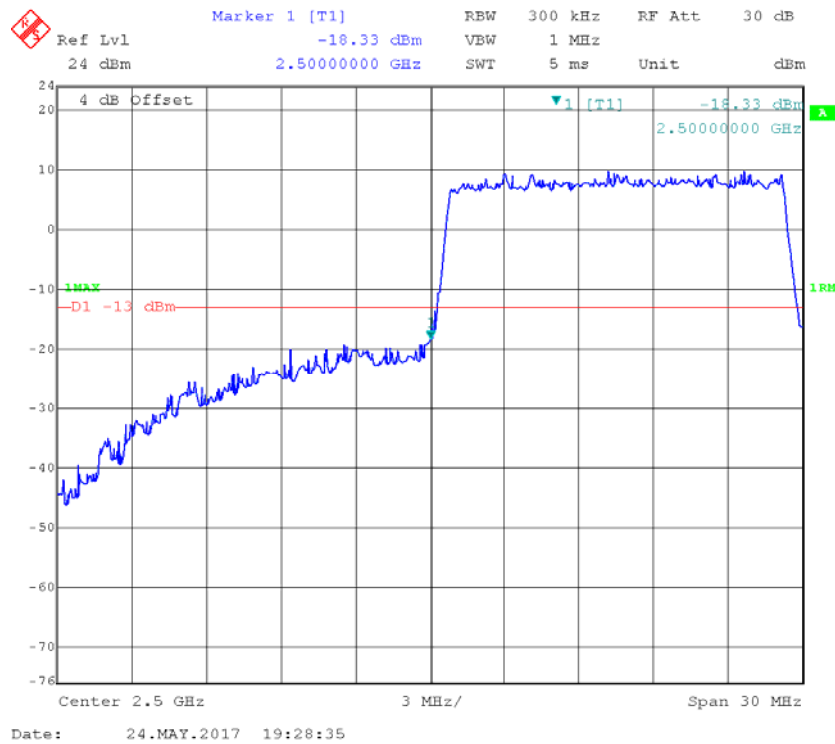


### 5M\_RB25\_16-QAM\_High Channel

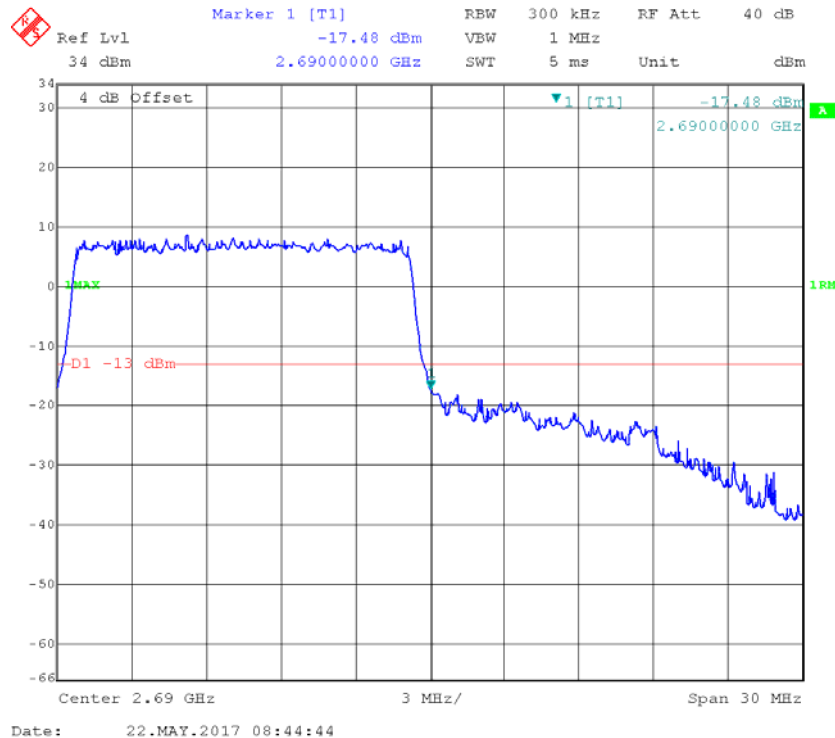




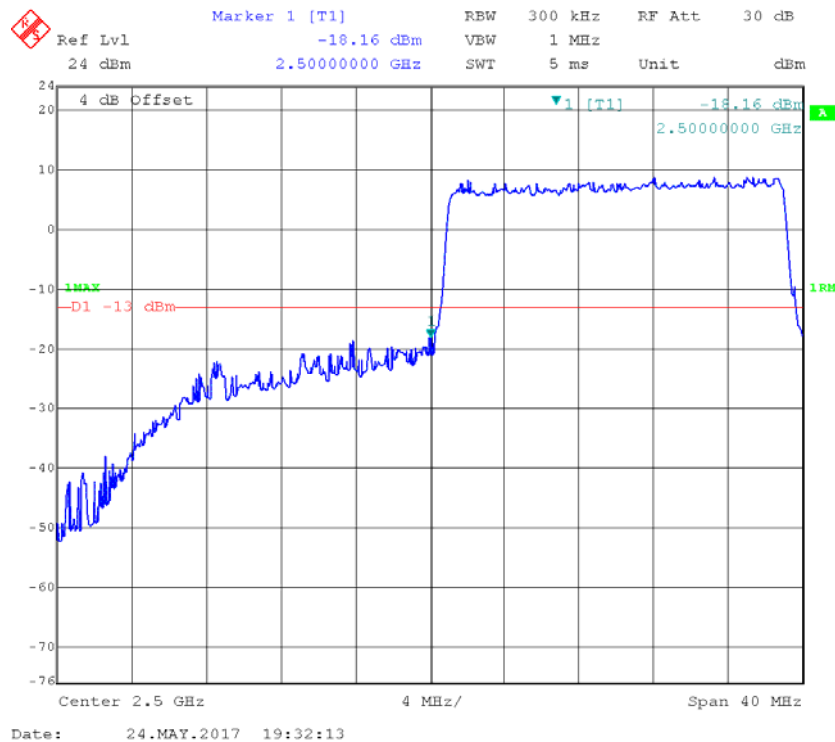
### 15M\_RB75\_16-QAM\_Low Channel



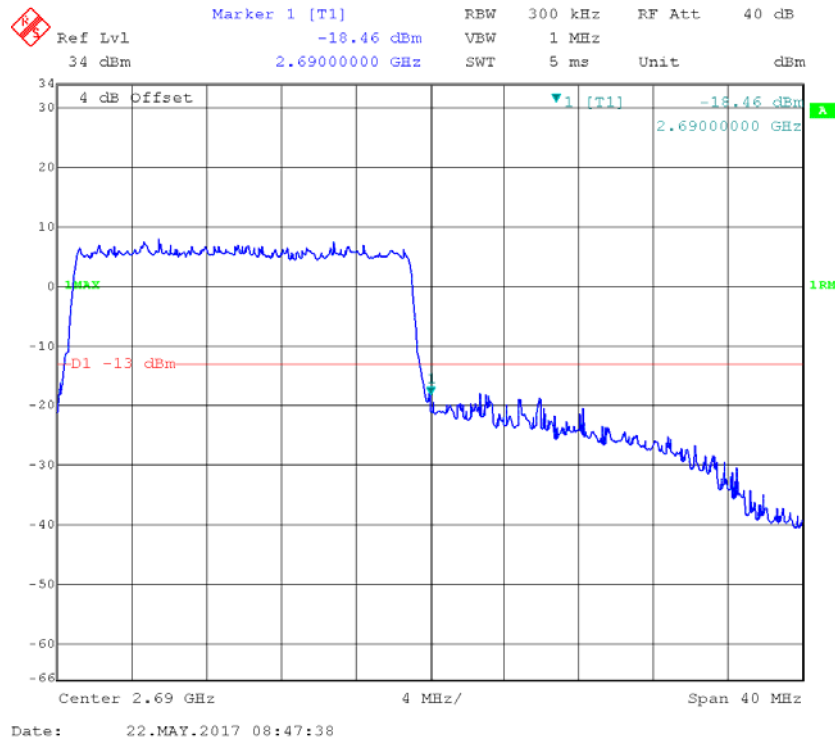
### 15M\_RB75\_16-QAM\_High Channel



### 20M\_RB100\_16-QAM\_Low Channel

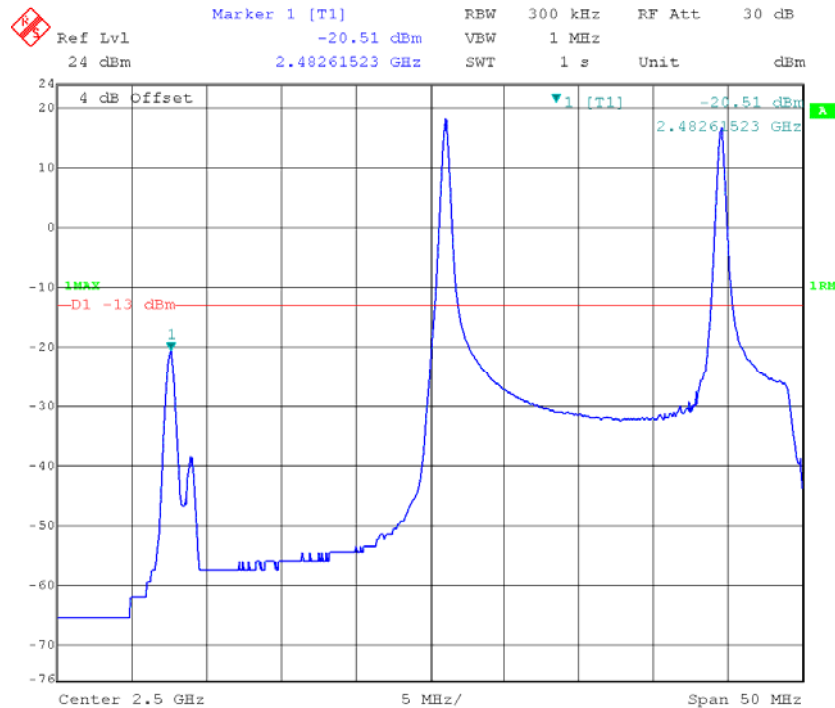


### 20M\_RB100\_16-QAM\_High Channel



**Carrier Aggregation:  
Band 7:**

**20&5MHz\_QPSK\_P1#0&S1#0\_Low Channel**



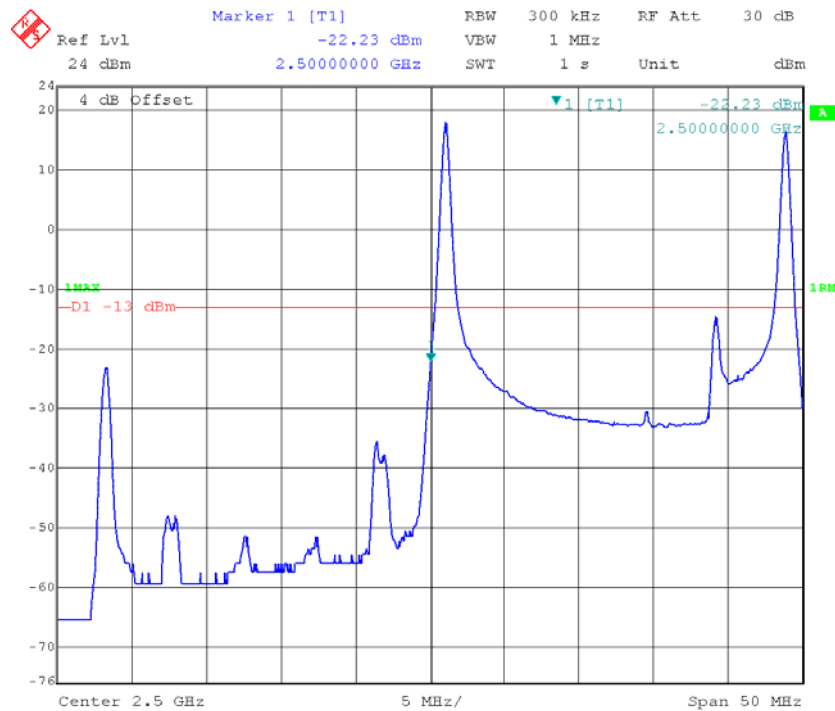
Date: 29.JUN.2017 17:55:24

**20&5MHz\_QPSK\_P1#0&S1#0\_High Channel**

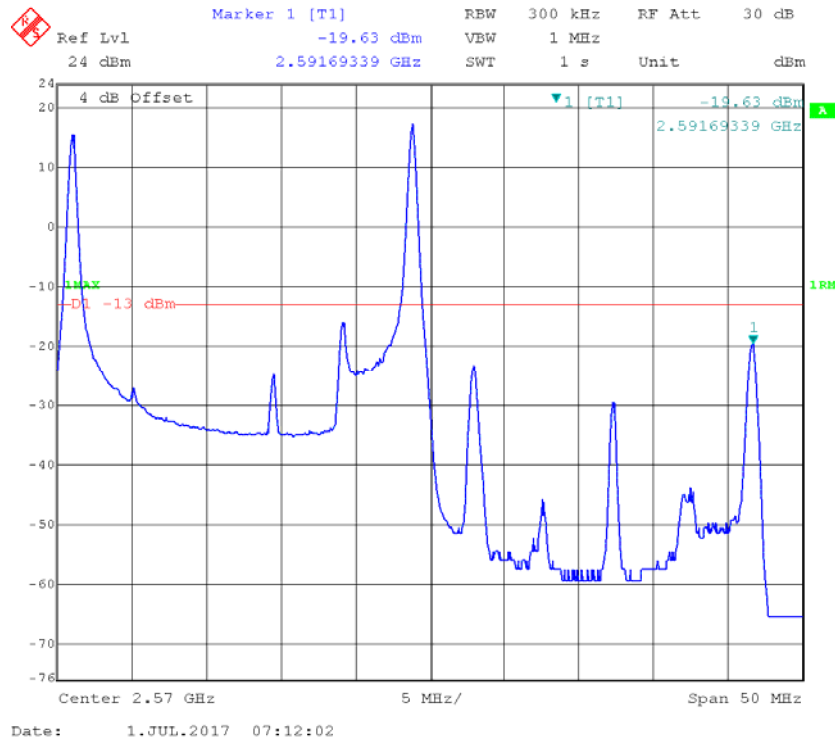


Date: 1.JUL.2017 07:11:35

### 20&5MHz\_QPSK\_P1#0&S1#24\_Low Channel



### 20&5MHz\_QPSK\_P1#0&S1#24\_High Channel

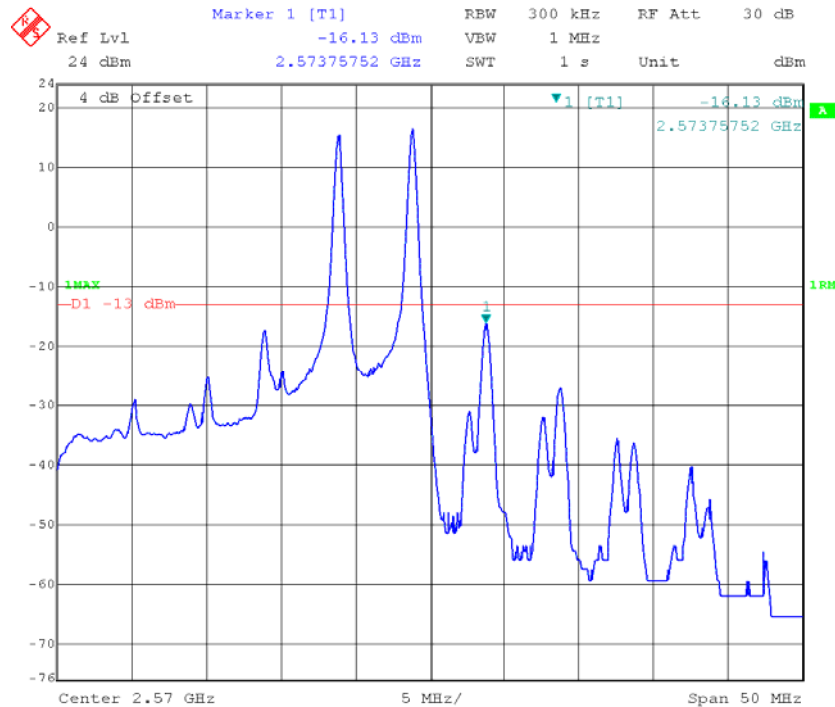


### 20&5MHz\_QPSK\_P1#99&S1#24\_Low Channel



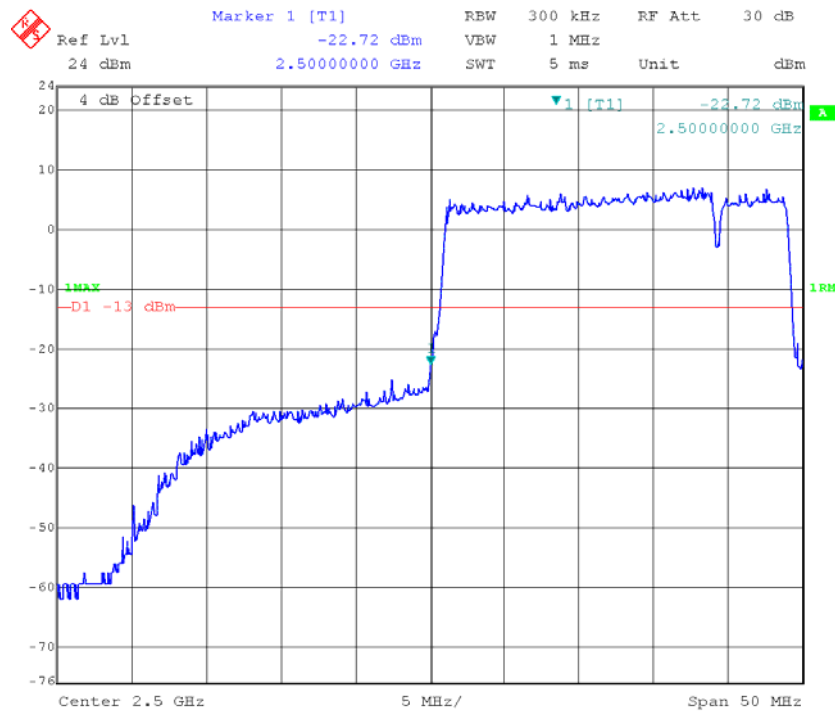
Date: 29.JUN.2017 18:01:58

### 20&5MHz\_QPSK\_P1#99&S1#24\_High Channel



Date: 1.JUL.2017 07:12:26

### 20&5MHz\_QPSK\_P100#0&S25#0\_Low Channel



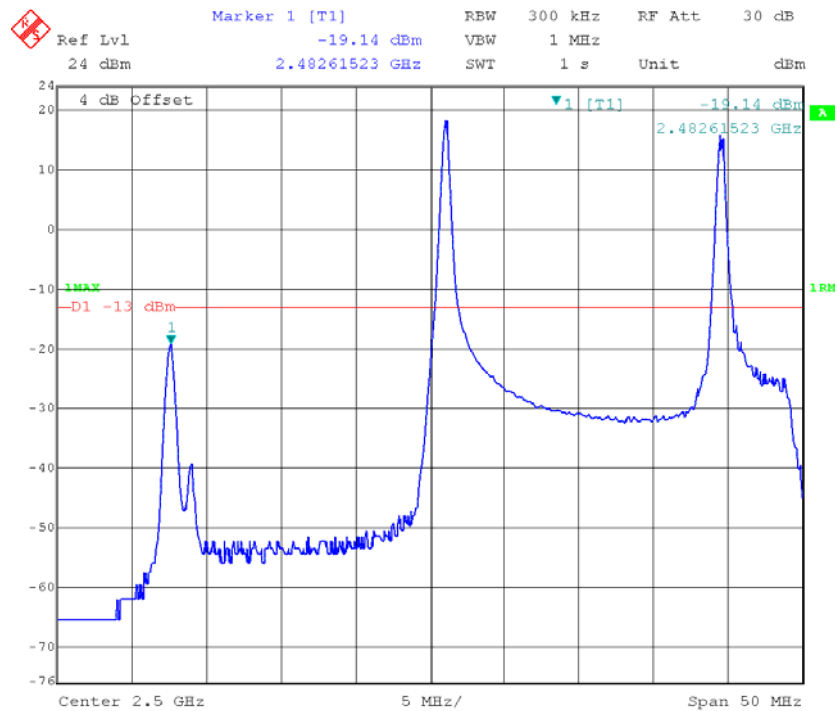
Date: 1.JUL.2017 07:37:00

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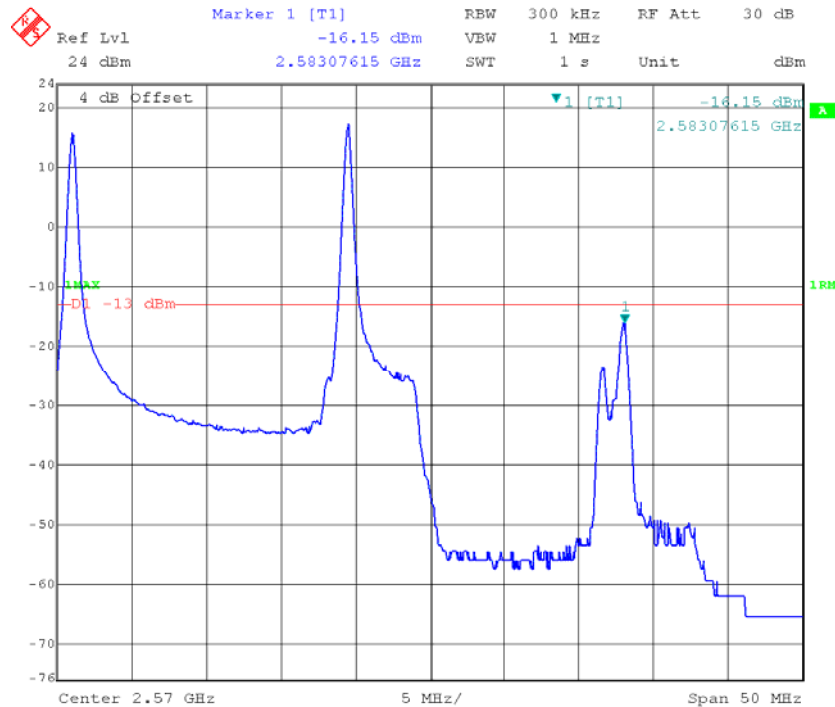
Date: 1.JUL.2017 06:19:58

### 20&5MHz 16-QAM\_P1#0&S1#0\_Low Channel



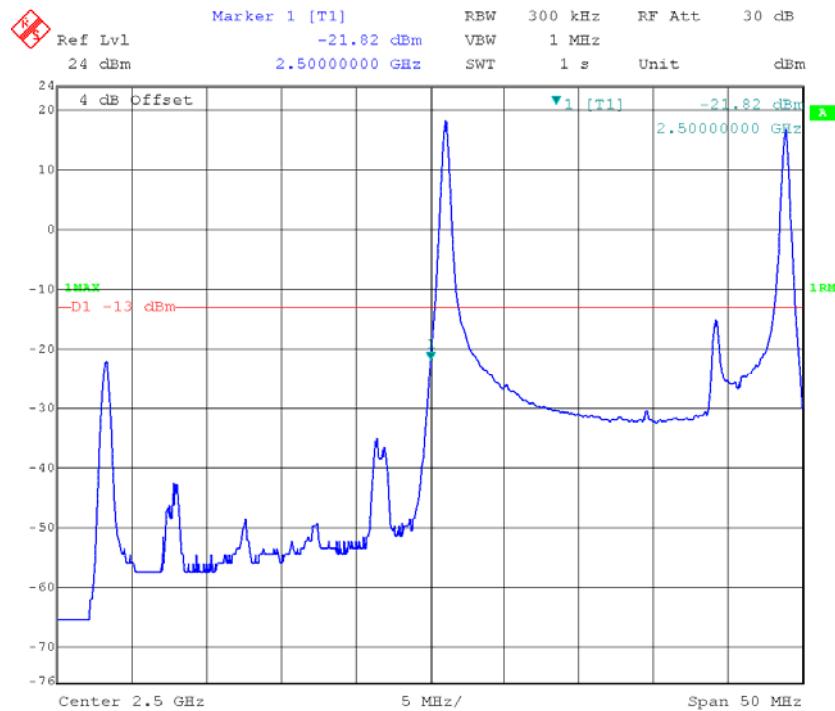
Date: 29.JUN.2017 18:06:09

### 20&5MHz 16-QAM\_P1#0&S1#0\_High Channel

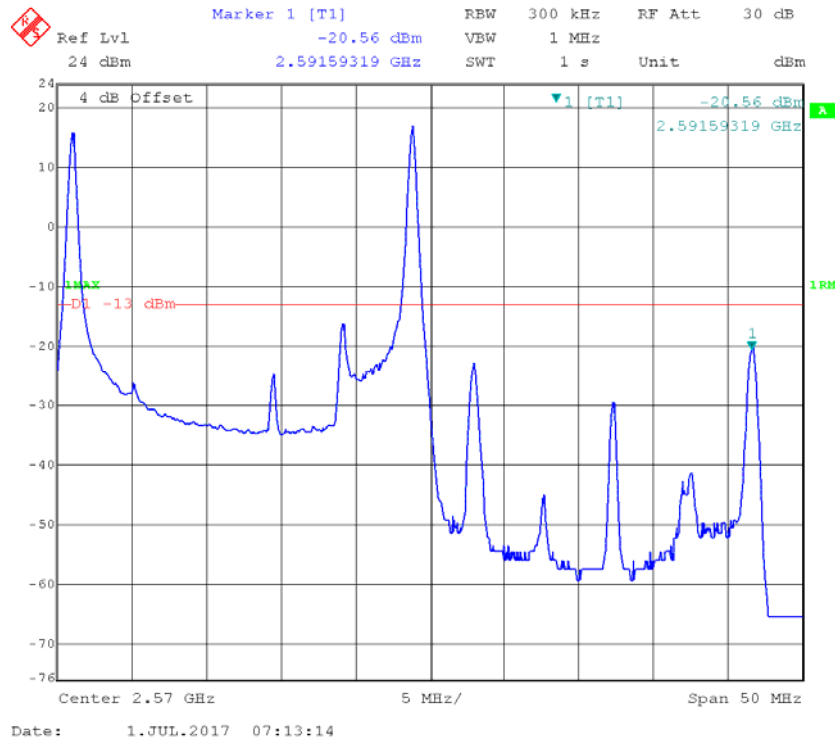


Date: 1.JUL.2017 07:13:37

### 20&5MHz\_16-QAM\_P1#0&S1#24\_Low Channel



### 20&5MHz\_16-QAM\_P1#0&S1#24\_High Channel

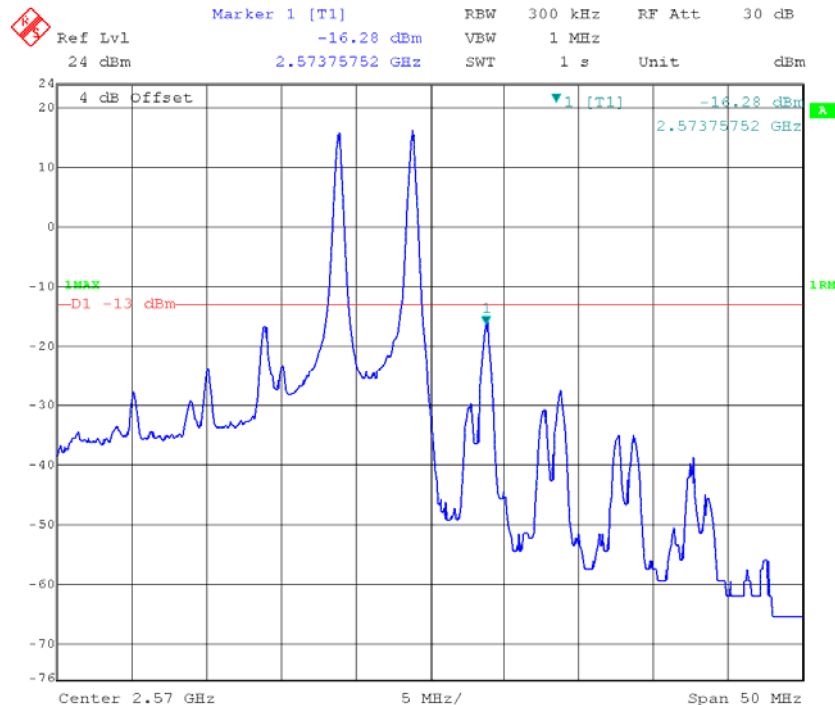


### 20&5MHz 16-QAM\_P1#99&S1#24\_Low Channel



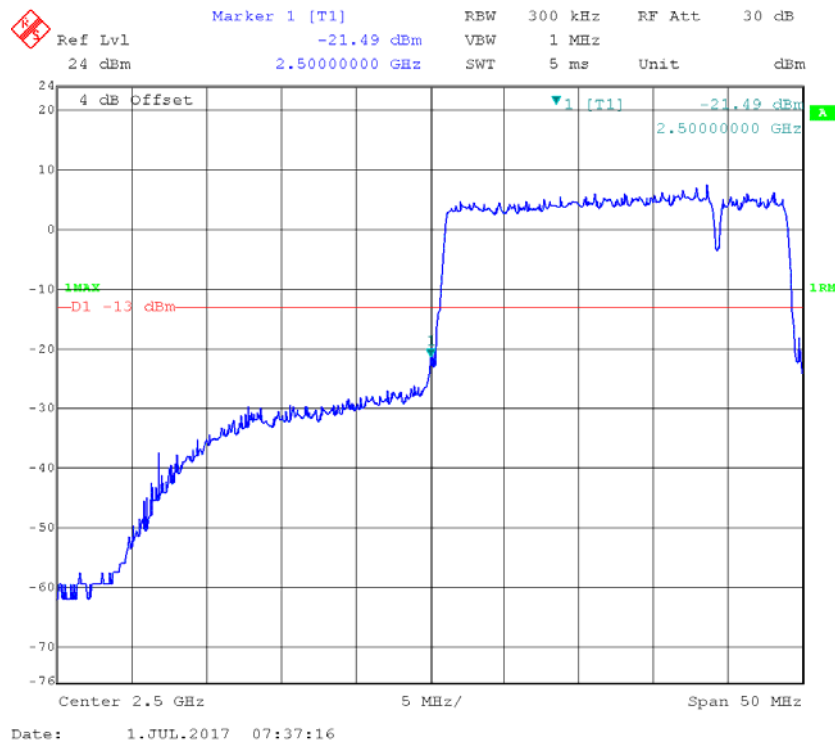
Date: 29.JUN.2017 18:05:04

### 20&5MHz 16-QAM\_P1#99&S1#24\_High Channel

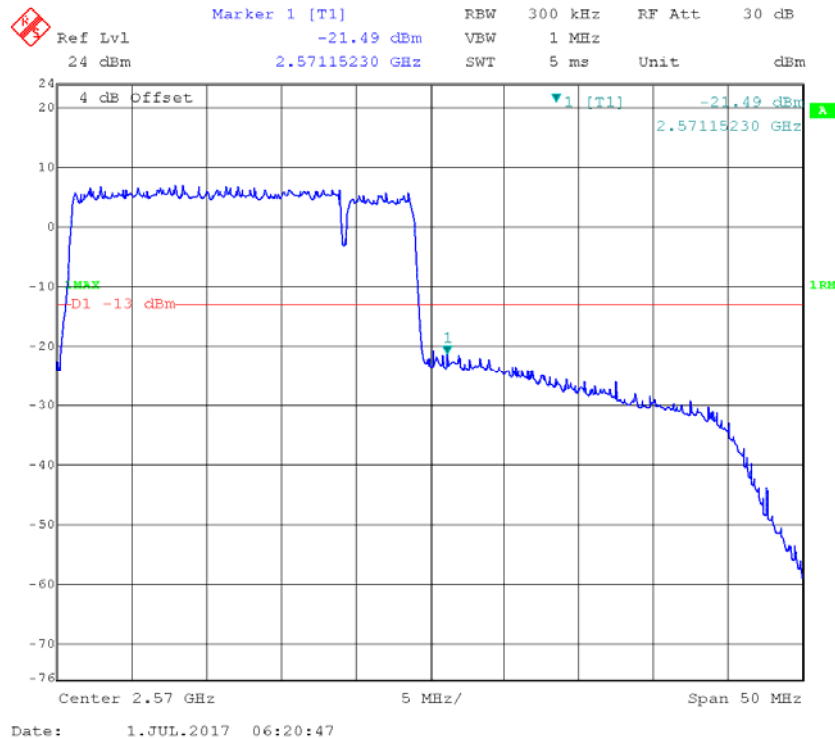


Date: 1.JUL.2017 07:12:45

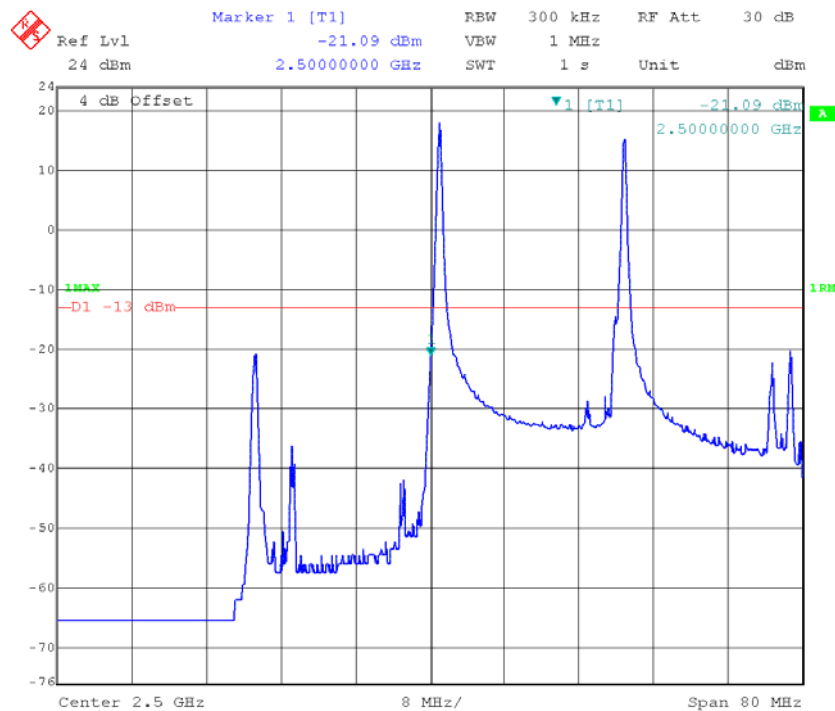
### 20&5MHz\_16-QAM\_P100#0&S25#0\_Low Channel



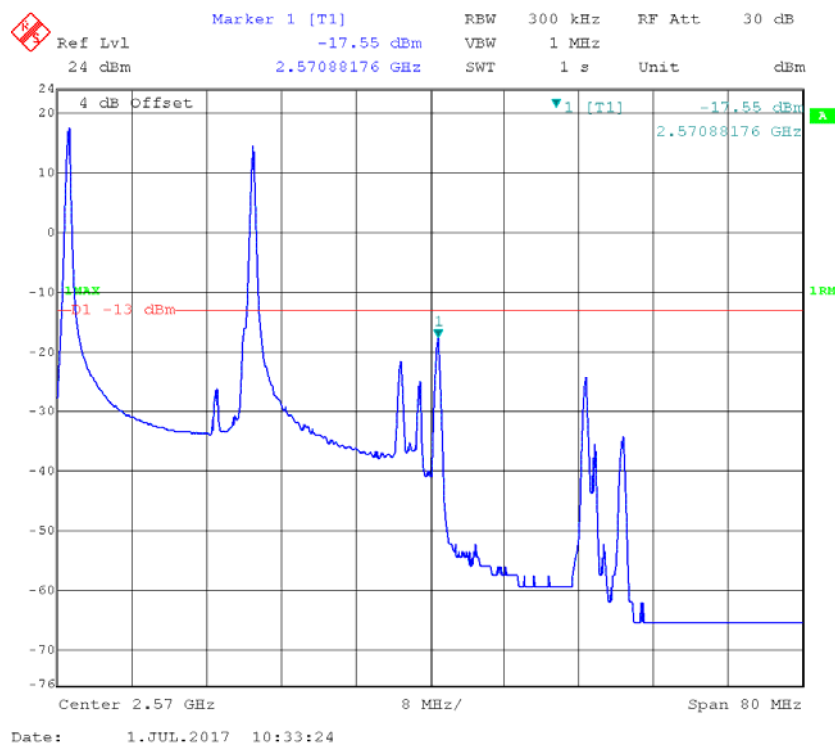
### 20&5MHz\_16QAM\_P100#0&S50#0\_High Channel



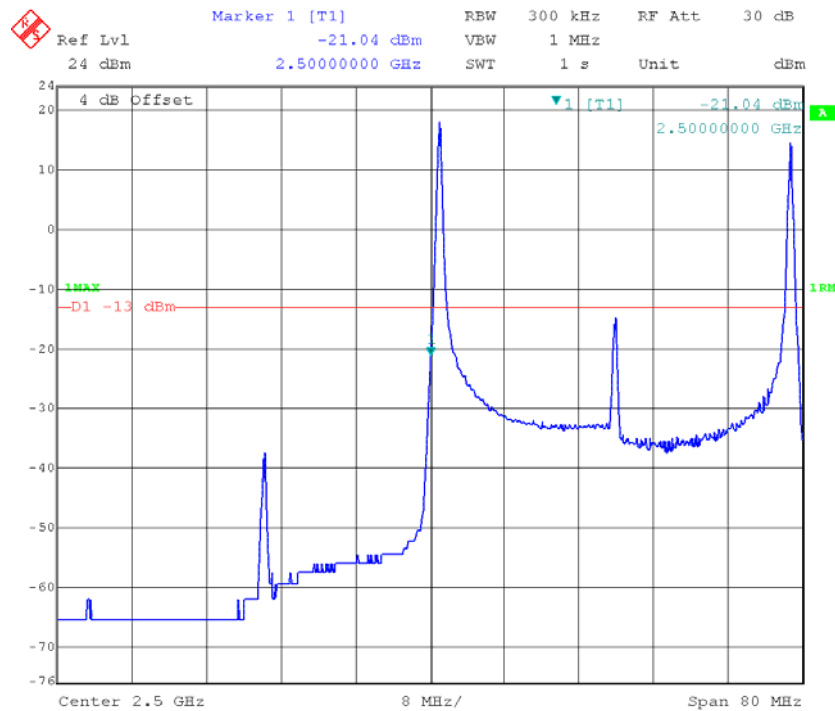
### 20&20MHz\_QPSK\_P1#0&S1#0\_Low Channel



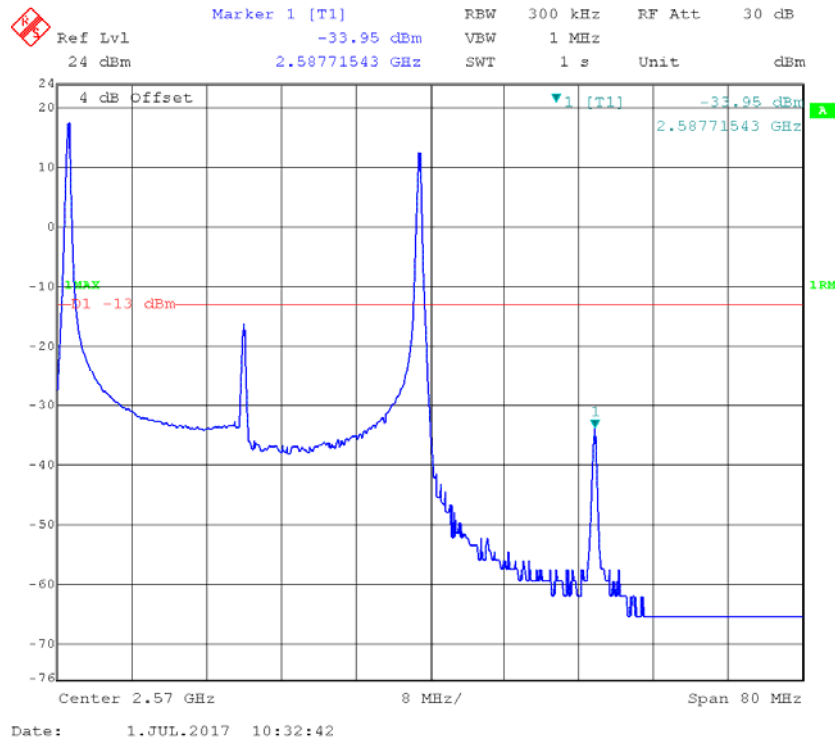
### 20&20MHz\_QPSK\_P1#0&S1#0\_High Channel



### 20&20MHz\_QPSK\_P1#0&S1#99\_Low Channel



### 20&20MHz\_QPSK\_P1#0&S1#99\_High Channel

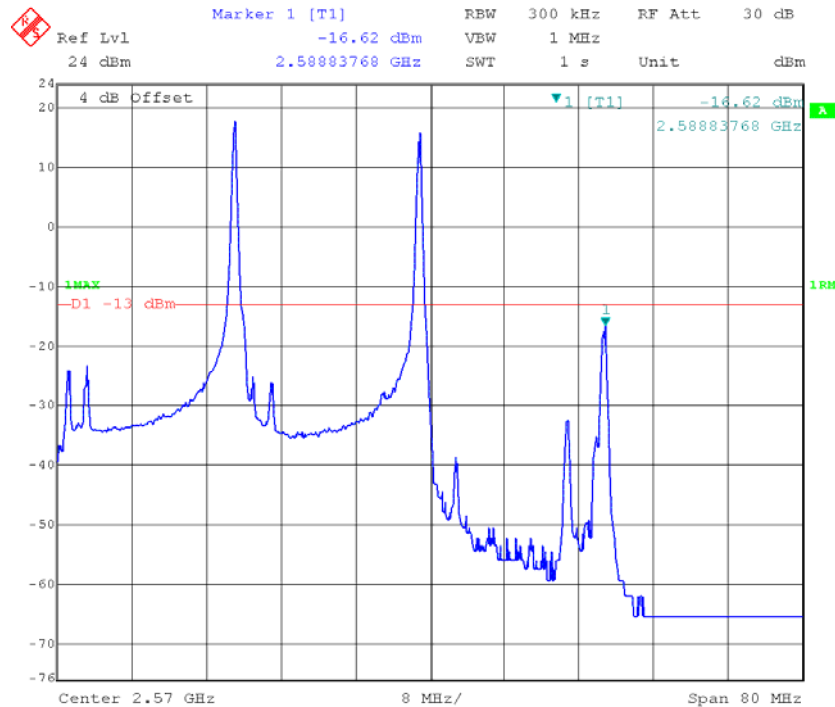


### 20&20MHz\_QPSK\_P1#99&S1#99\_Low Channel



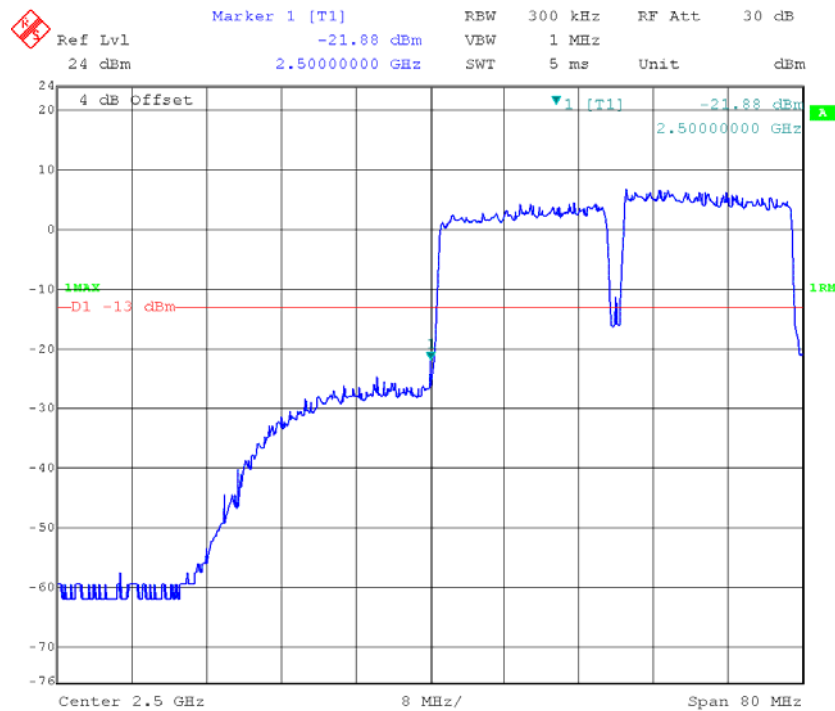
Date: 29.JUN.2017 18:22:19

### 20&20MHz\_QPSK\_P1#99&S1#99\_High Channel



Date: 1.JUL.2017 10:32:11

### 20&20MHz\_QPSK\_P100#0&S100#0\_Low Channel



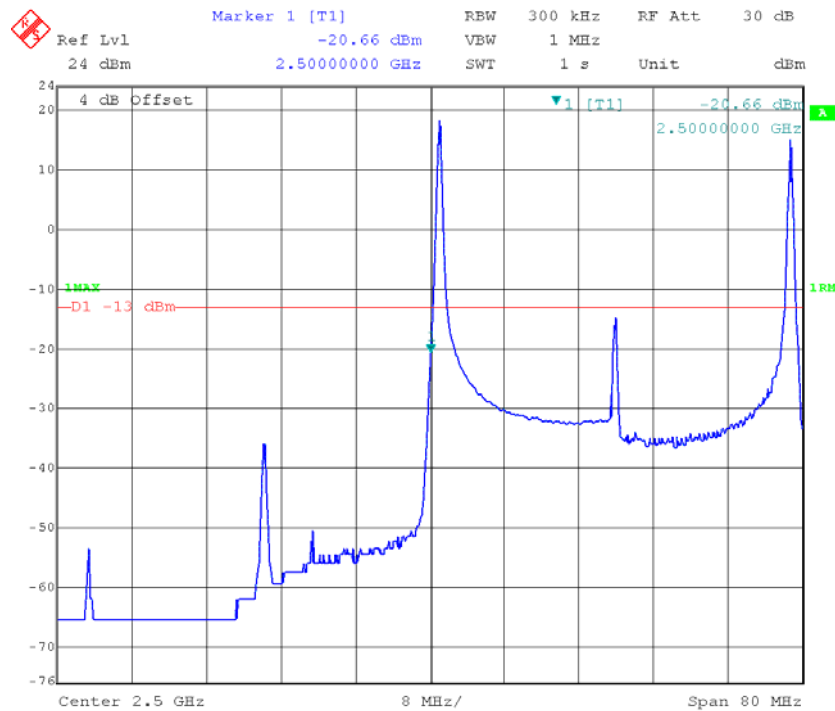
Date: 1.JUL.2017 07:39:19

### 20&20MHz\_QPSK\_P100#0&S100#0\_High Channel



Date: 1.JUL.2017 06:52:32

### 20&20MHz\_16-QAM\_P1#0&S1#0\_Low Channel



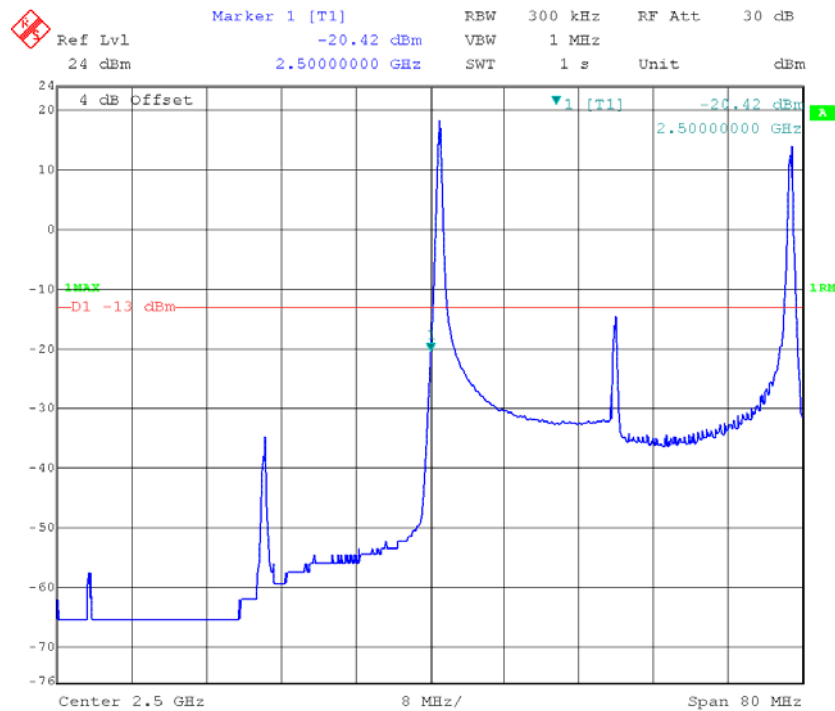
Date: 29.JUN.2017 18:23:39

### 20&20MHz\_16-QAM\_P1#0&S1#0\_High Channel

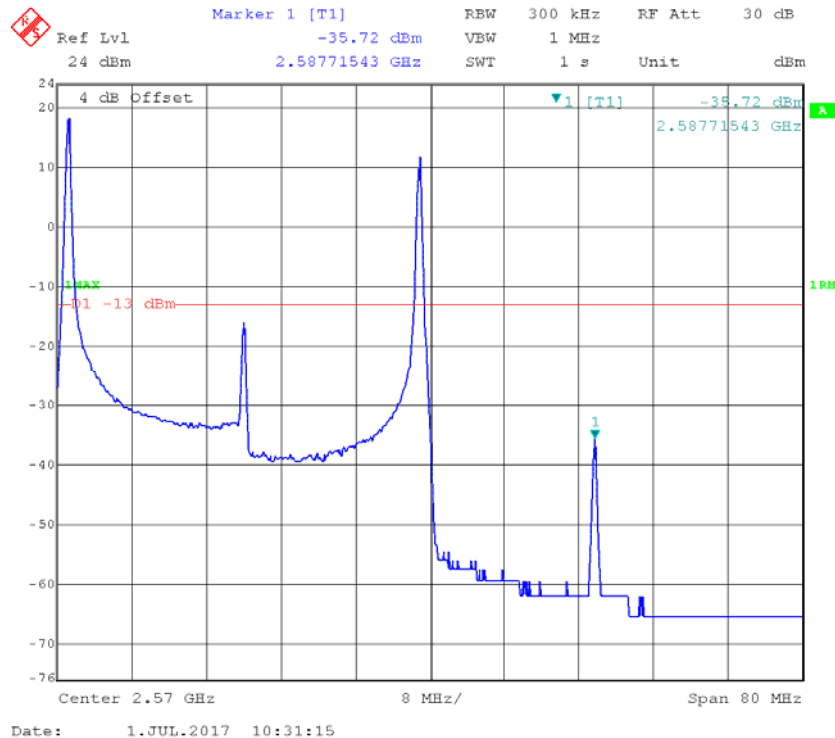


Date: 1.JUL.2017 10:30:41

### 20&20MHz 16-QAM\_P1#0&S1#99\_Low Channel



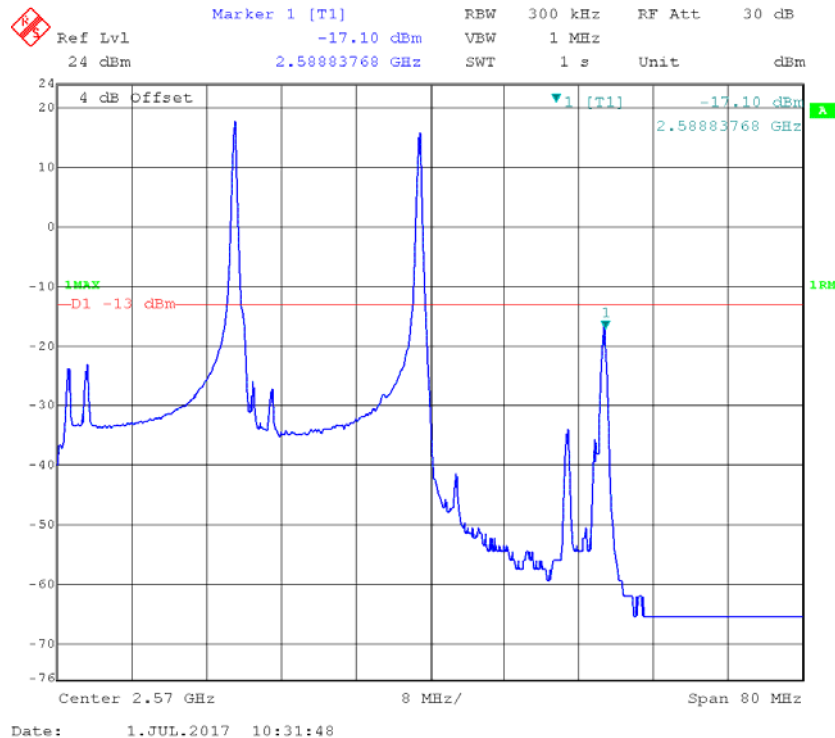
### 20&20MHz 16-QAM\_P1#0&S1#99\_High Channel



### 20&20MHz\_16-QAM\_P1#99&S1#99\_Low Channel



### 20&20MHz\_16-QAM\_P1#99&S1#99\_High Channel



### 20&20MHz\_16QAM\_P100#0&S100#0\_Low Channel



Date: 1.JUL.2017 07:39:34

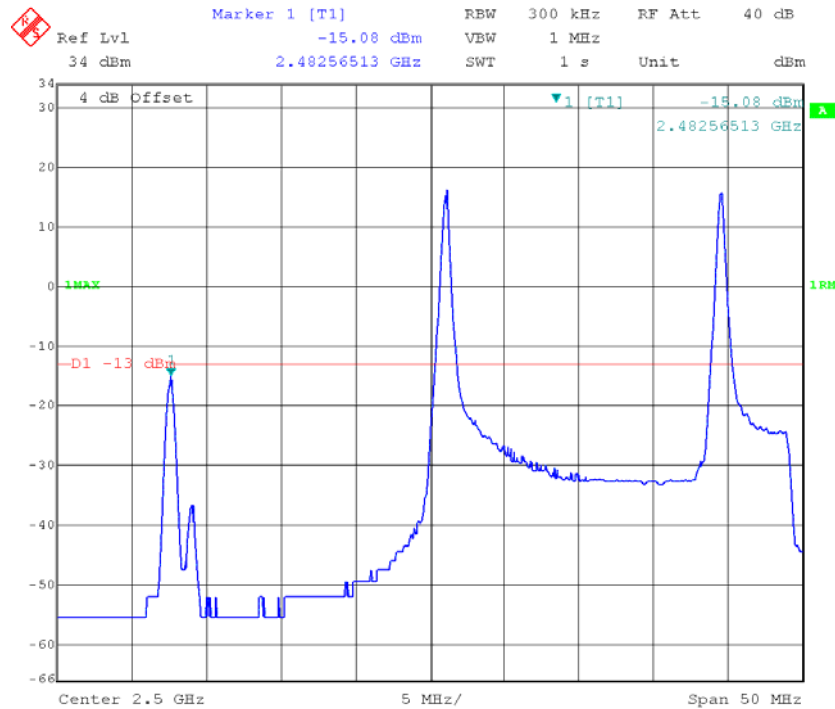
### 20&20MHz\_16QAM\_P100#0&S100#0\_High Channel



Date: 1.JUL.2017 07:42:53

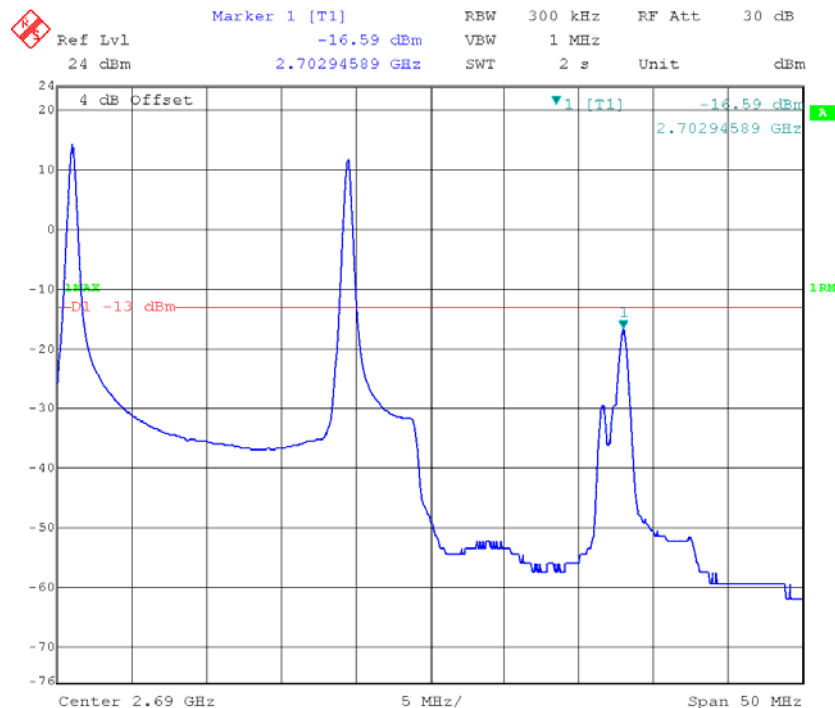
**Band 41:**

**20&5MHz\_QPSK\_P1#0&S1#0\_Low Channel**



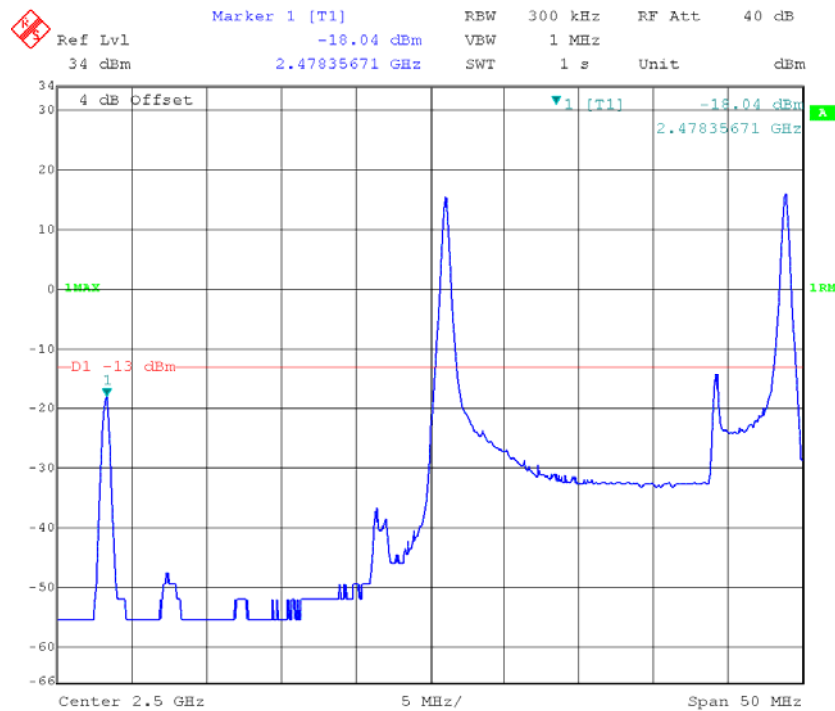
Date: 24.JUN.2017 20:10:04

**20&5MHz\_QPSK\_P1#0&S1#0\_High Channel**

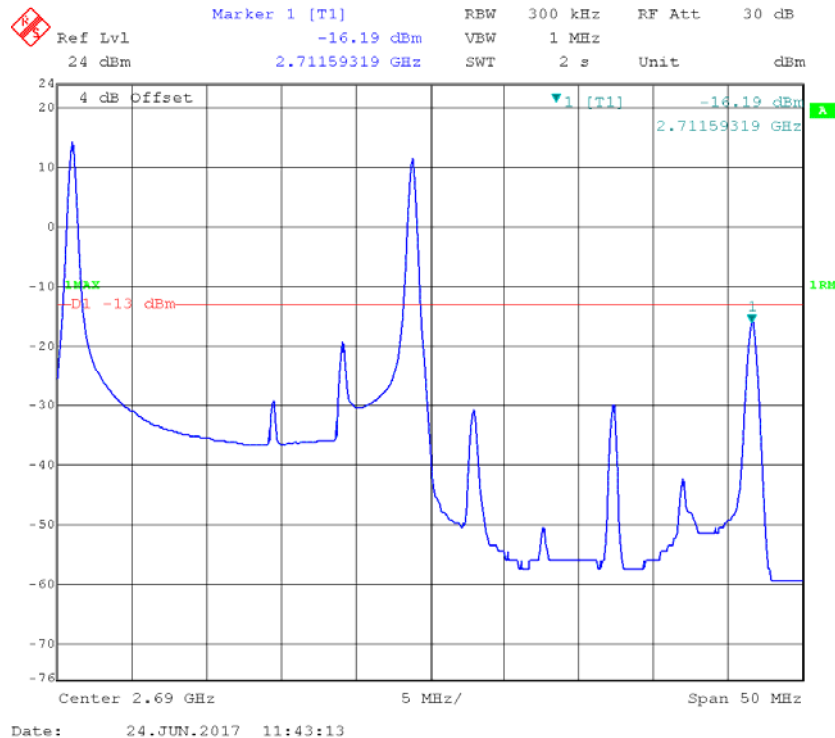


Date: 24.JUN.2017 11:42:20

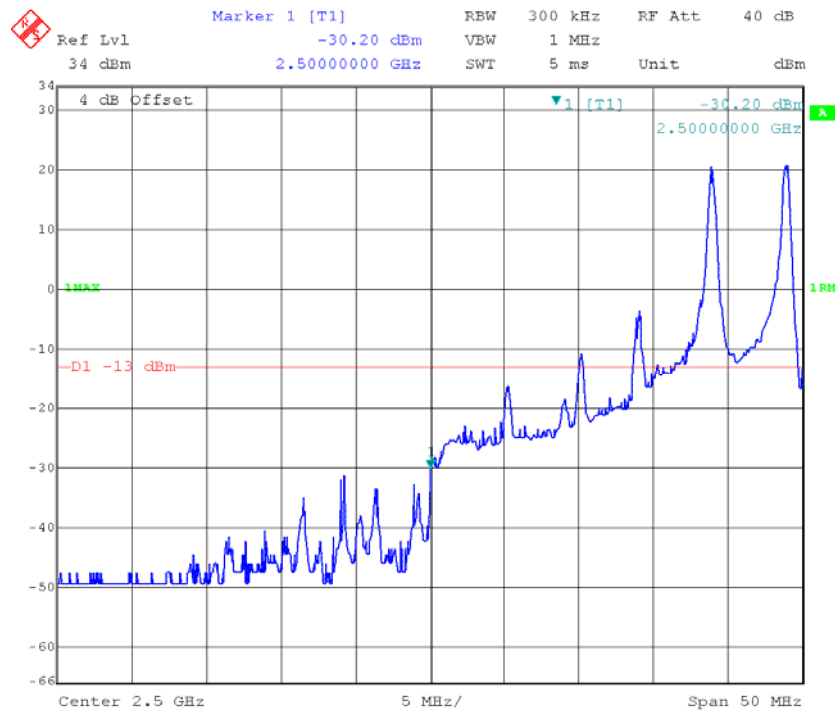
### 20&5MHz\_QPSK\_P1#0&S1#24\_Low Channel



### 20&5MHz\_QPSK\_P1#0&S1#24\_High Channel

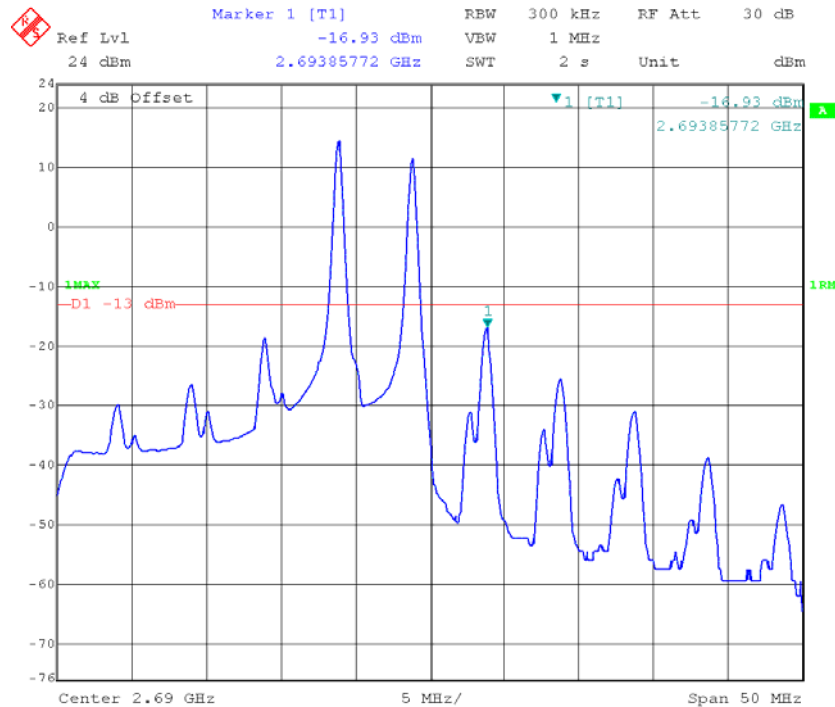


### 20&5MHz\_QPSK\_P1#99&S1#24\_Low Channel



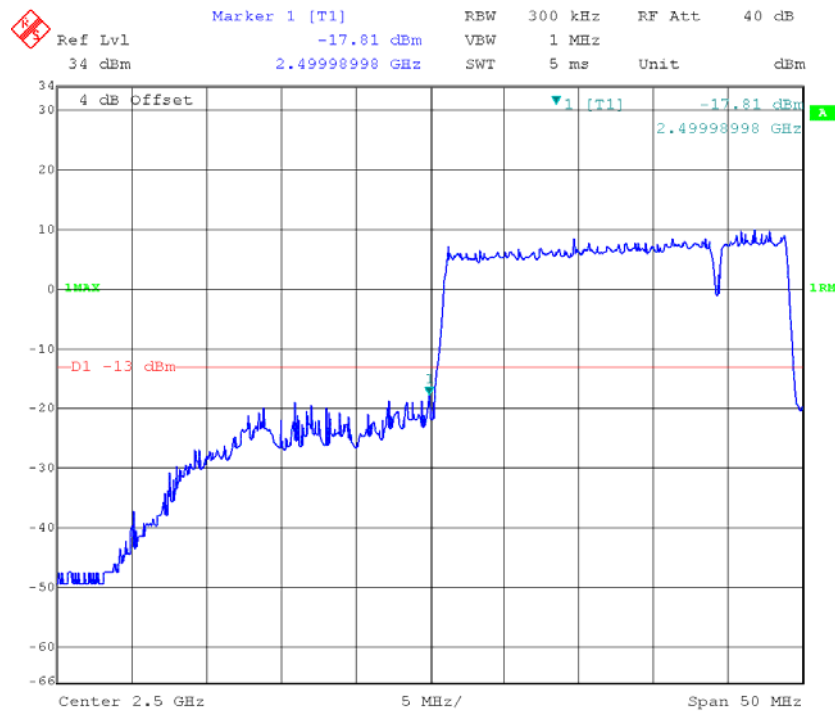
Date: 24.JUN.2017 20:12:04

### 20&5MHz\_QPSK\_P1#99&S1#24\_High Channel

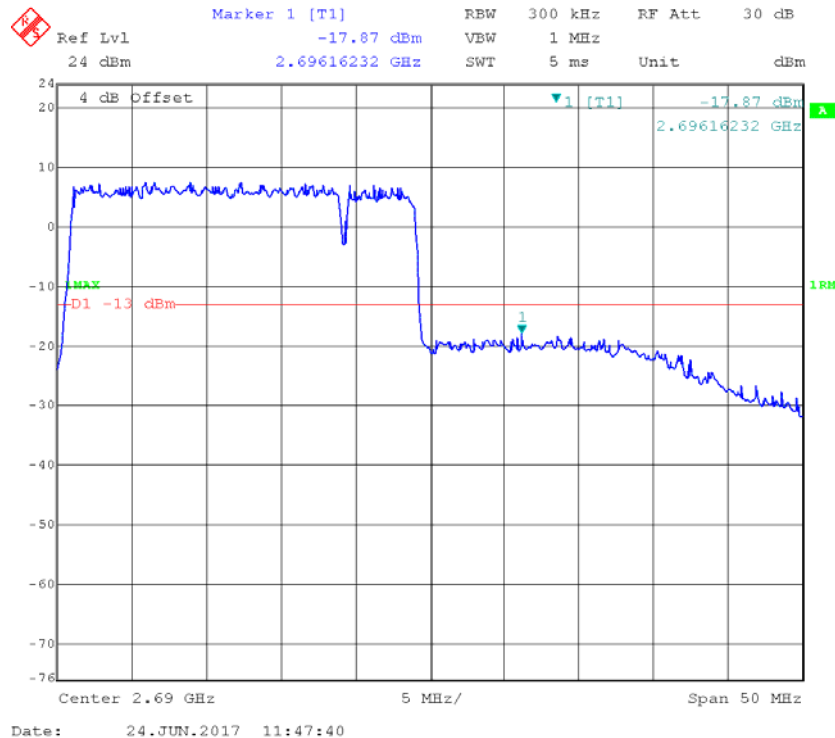


Date: 24.JUN.2017 11:44:07

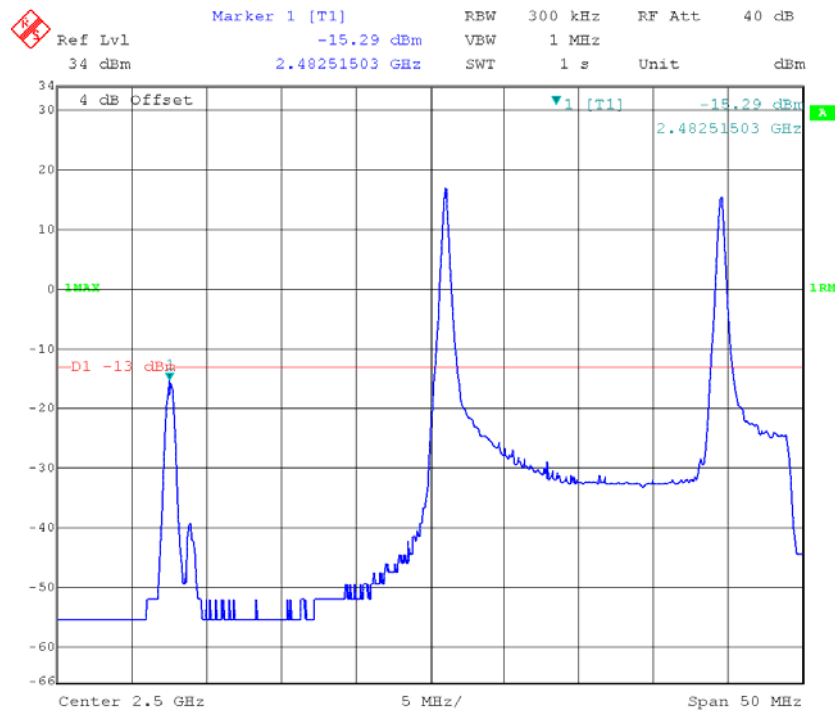
### 20&5MHz\_QPSK\_P100#0&S25#0\_Low Channel



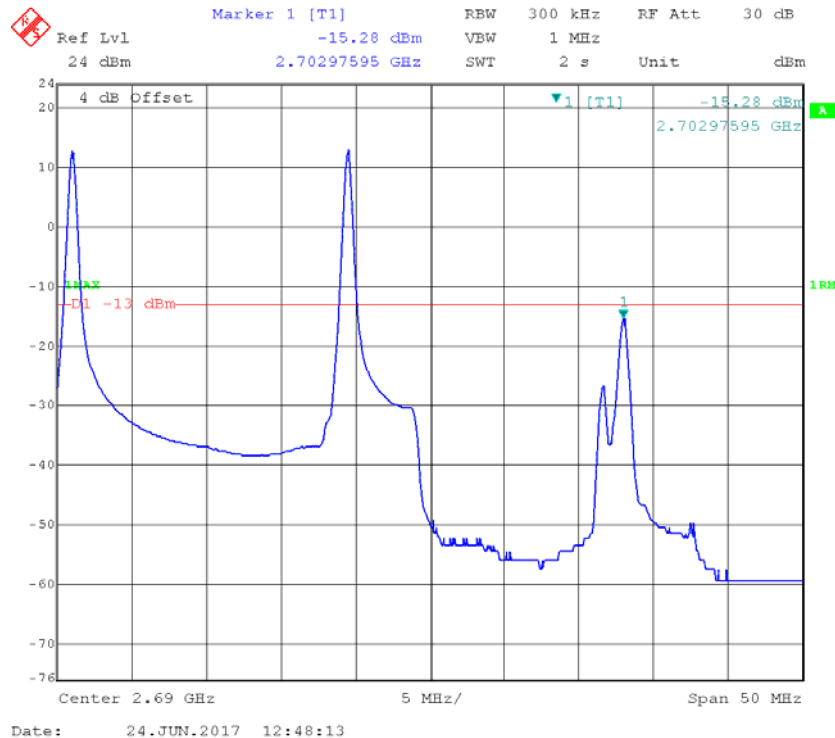
### 20&5MHz\_QPSK\_P100#0&S25#0\_High Channel



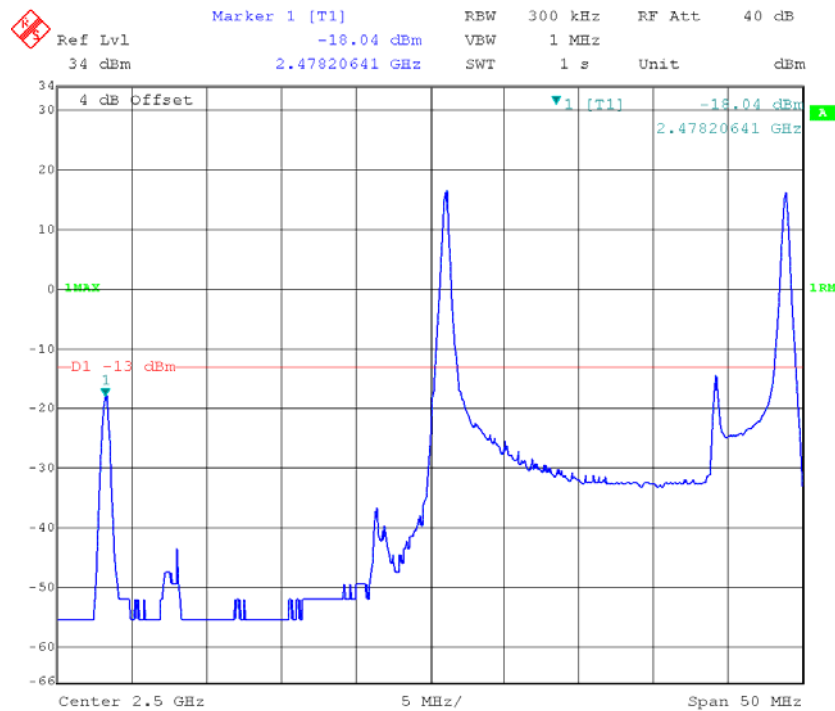
### 20&5MHz 16-QAM\_P1#0&S1#0\_Low Channel



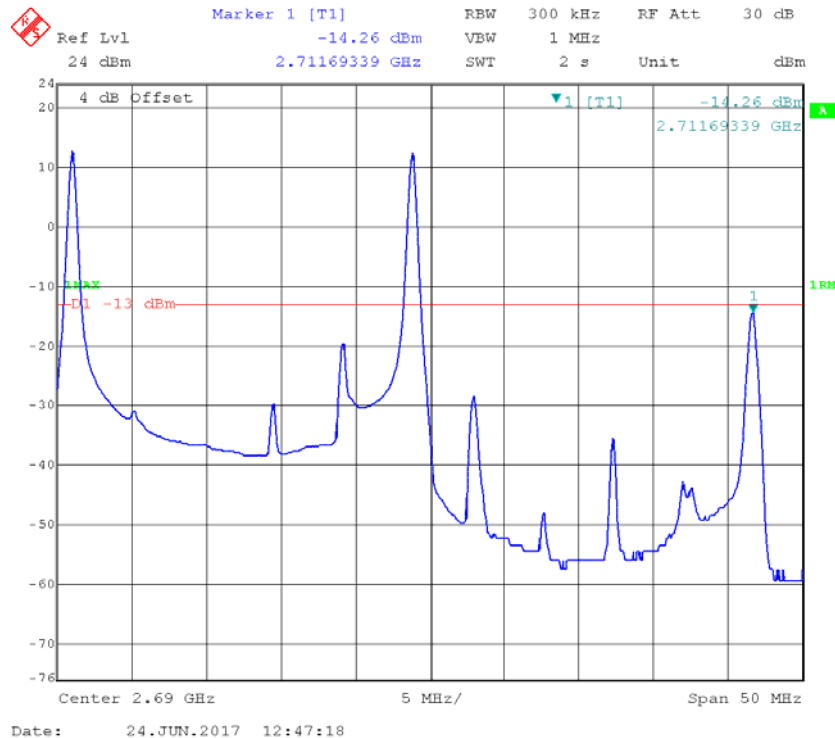
### 20&5MHz 16-QAM\_P1#0&S1#0\_High Channel



### 20&5MHz\_16-QAM\_P1#0&S1#24\_Low Channel



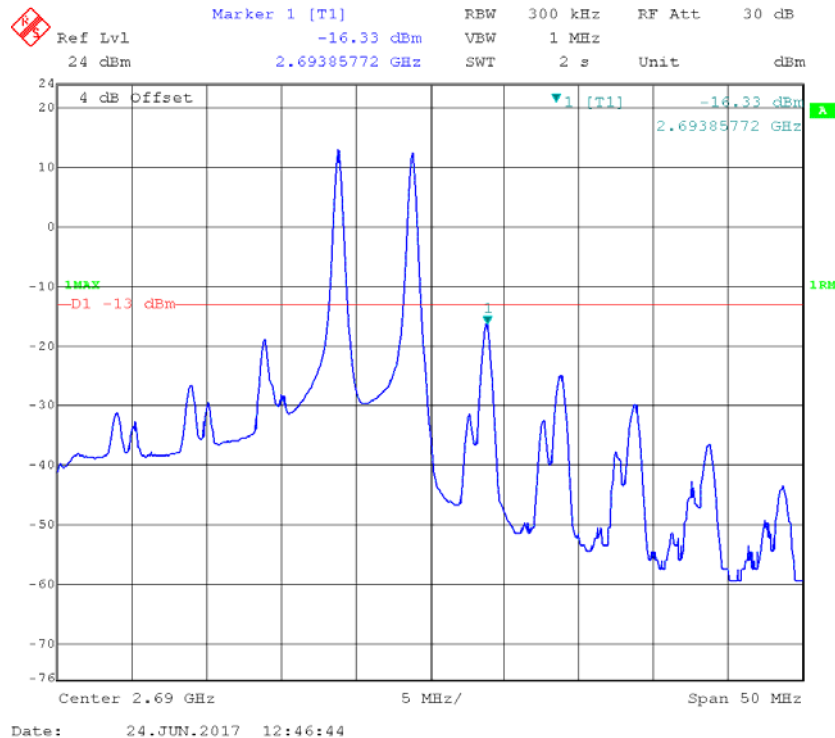
### 20&5MHz\_16-QAM\_P1#0&S1#24\_High Channel



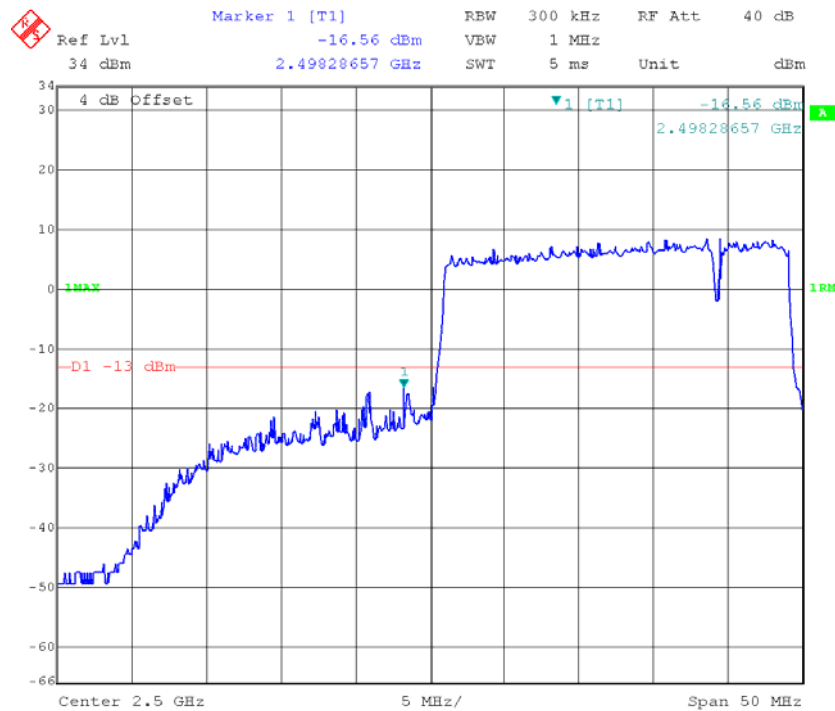
### 20&5MHz 16-QAM\_P1#99&S1#24\_Low Channel



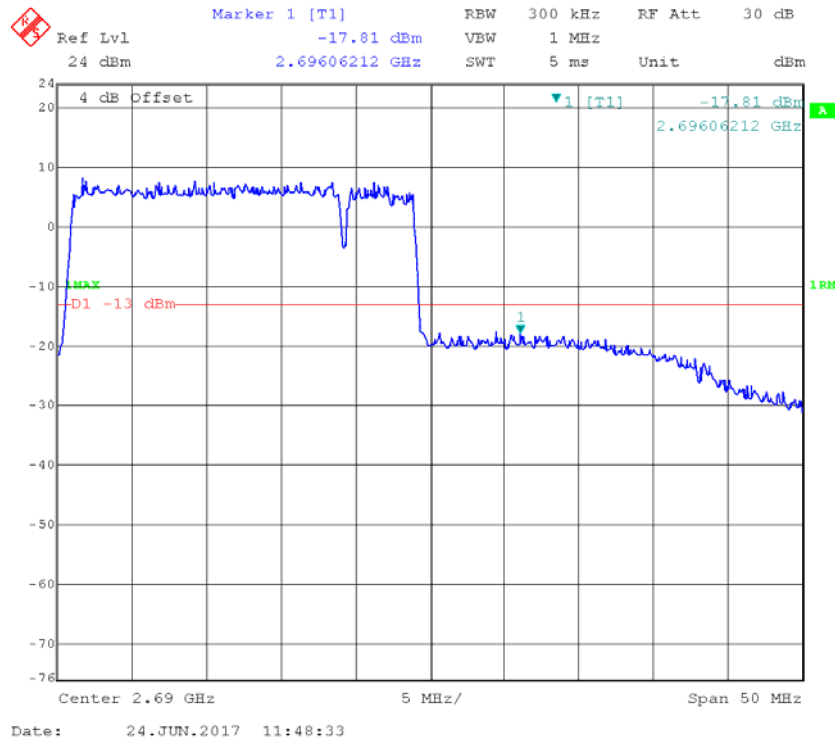
### 20&5MHz 16-QAM\_P1#99&S1#24\_High Channel



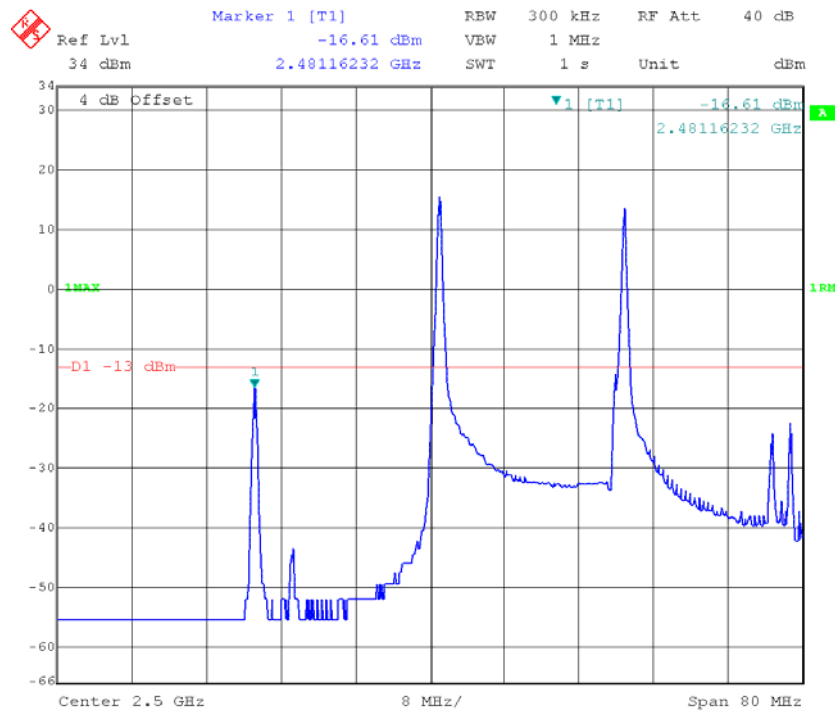
### 20&5MHz\_16-QAM\_P100#0&S25#0\_Low Channel



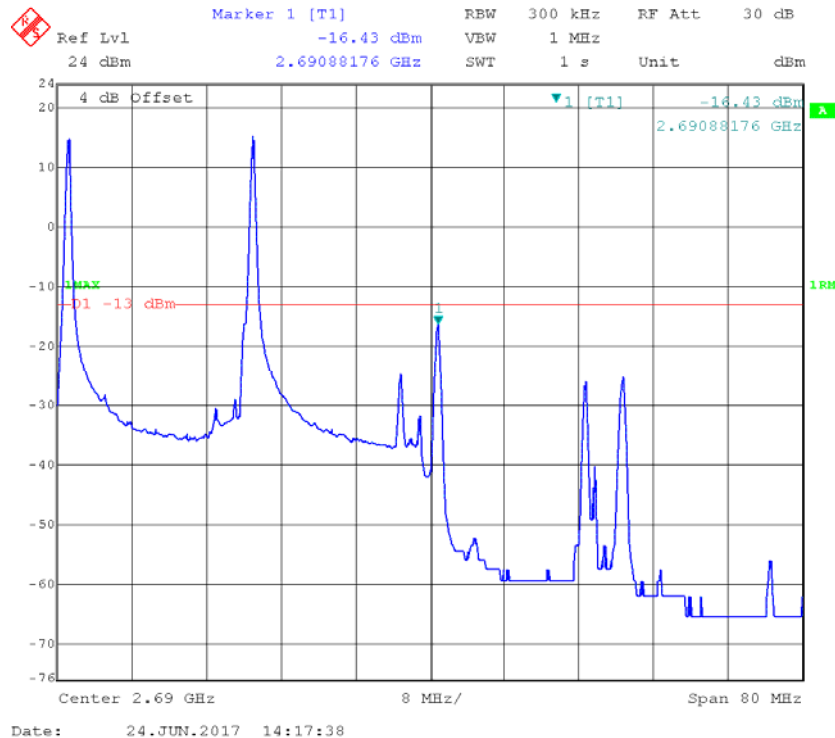
### 20&5MHz\_16-QAM\_P100#0&S25#0\_High Channel



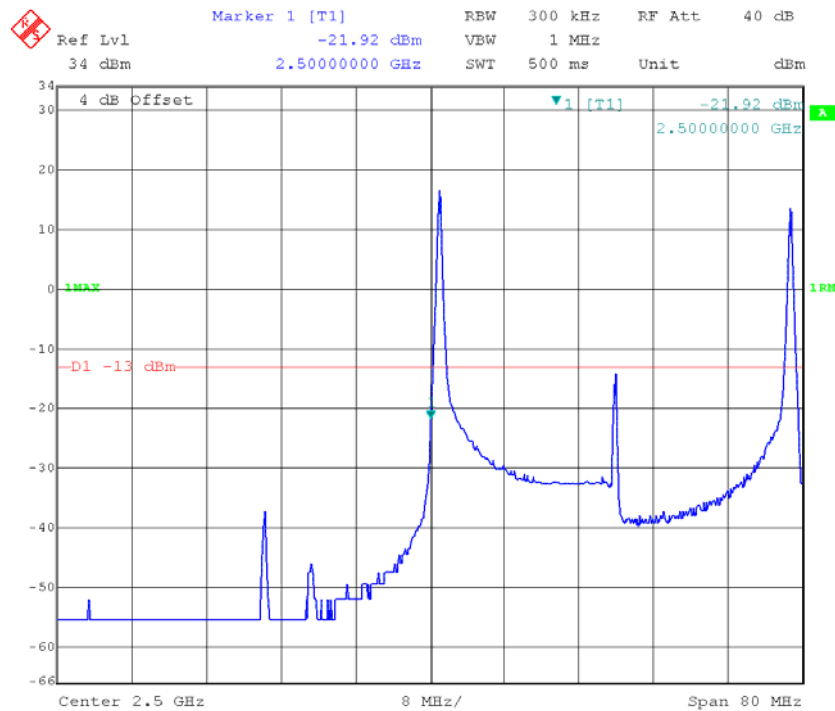
### 20&20MHz\_QPSK\_P1#0&S1#0\_Low Channel



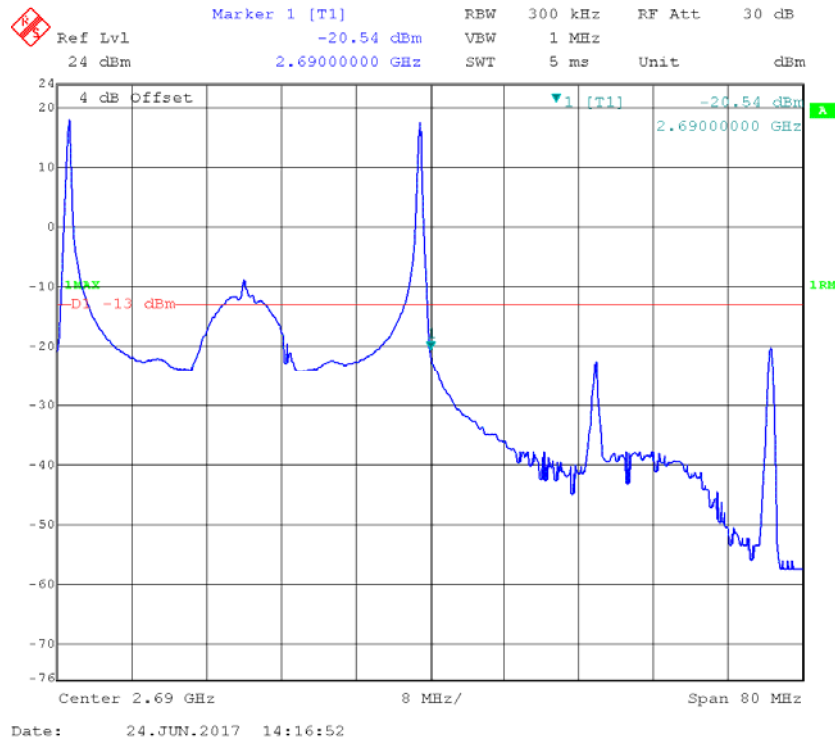
### 20&20MHz\_QPSK\_P1#0&S1#0\_High Channel



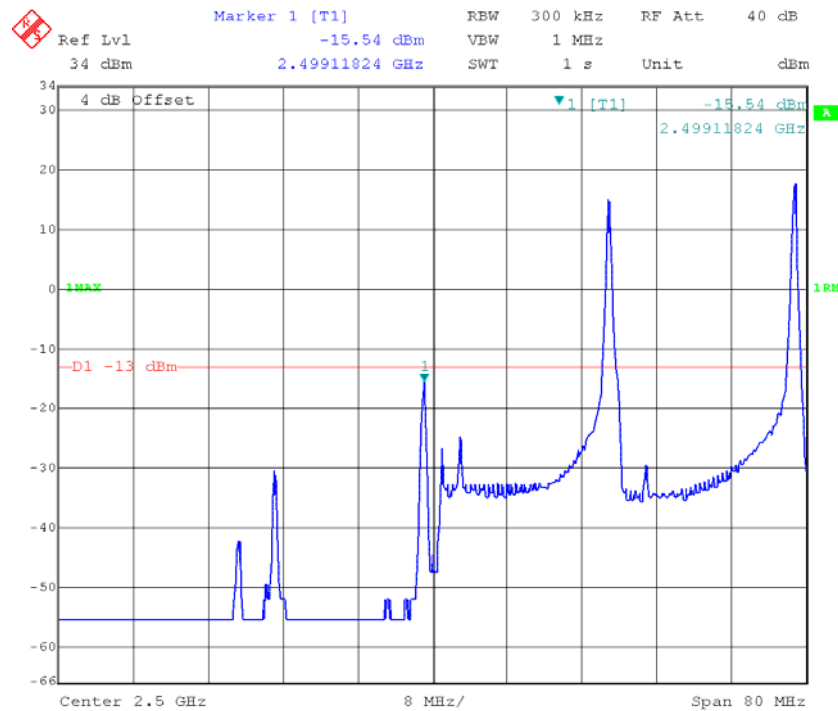
### 20&20MHz\_QPSK\_P1#0&S1#99\_Low Channel



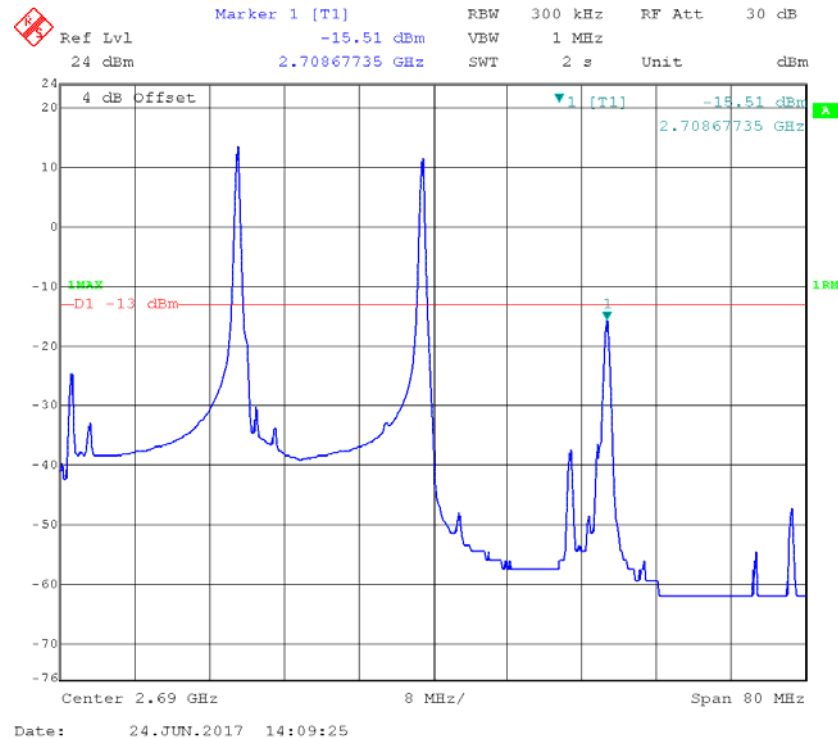
### 20&20MHz\_QPSK\_P1#0&S1#99\_High Channel



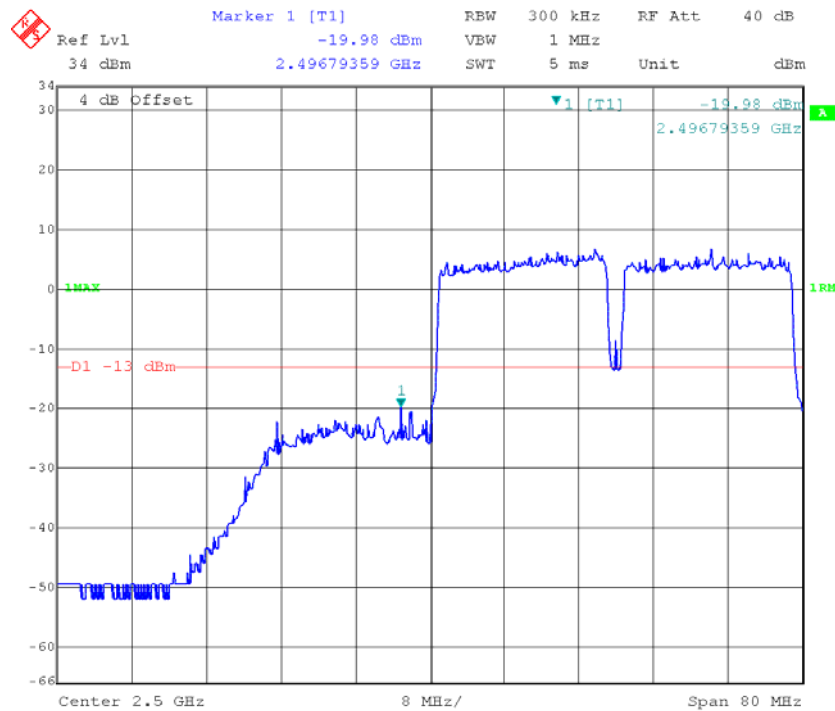
### 20&20MHz\_QPSK\_P1#99&S1#99\_Low Channel



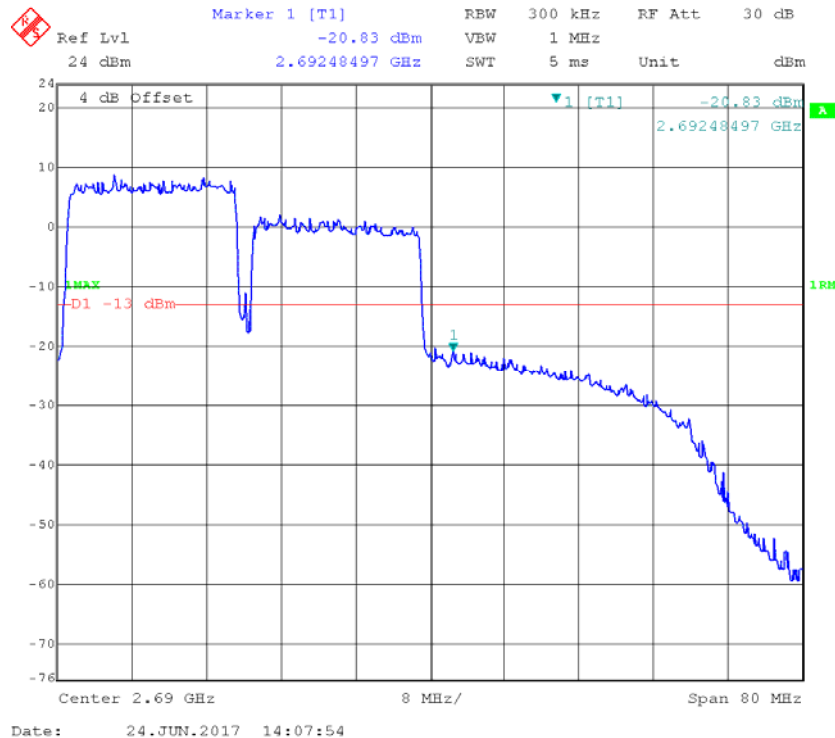
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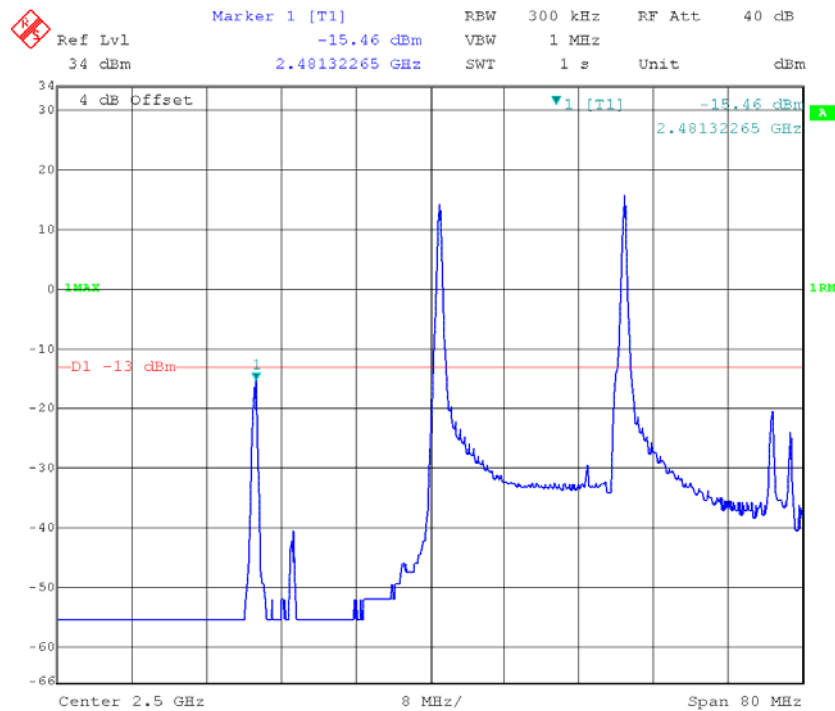
### 20&20MHz\_QPSK\_P100#0&S100#0\_Low Channel



### 20&20MHz\_QPSK\_P100#0&S100#0\_High Channel



### 20&20MHz\_16-QAM\_P1#0&S1#0\_Low Channel



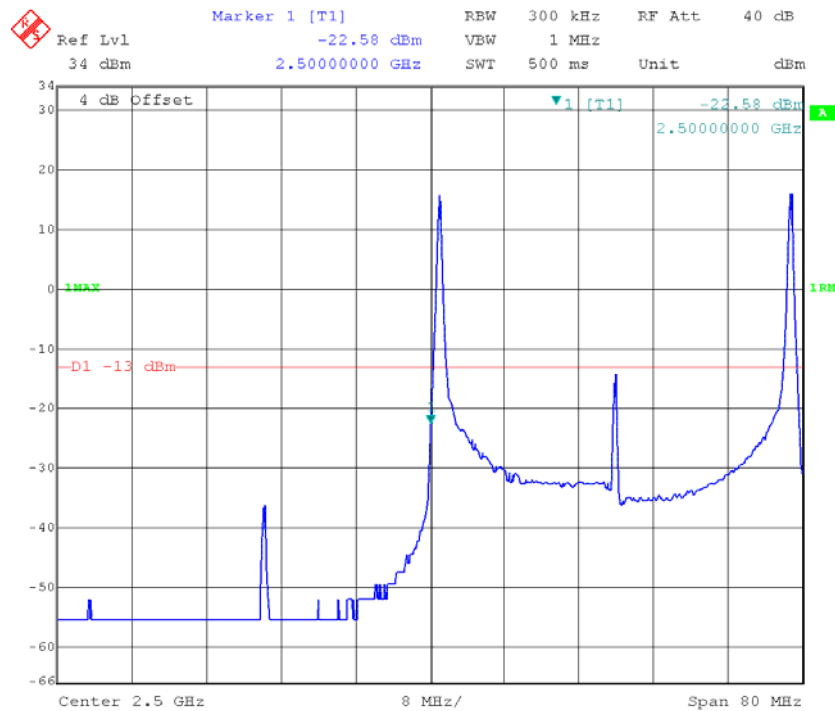
Date: 24.JUN.2017 20:29:35

### 20&20MHz\_16-QAM\_P1#0&S1#0\_High Channel

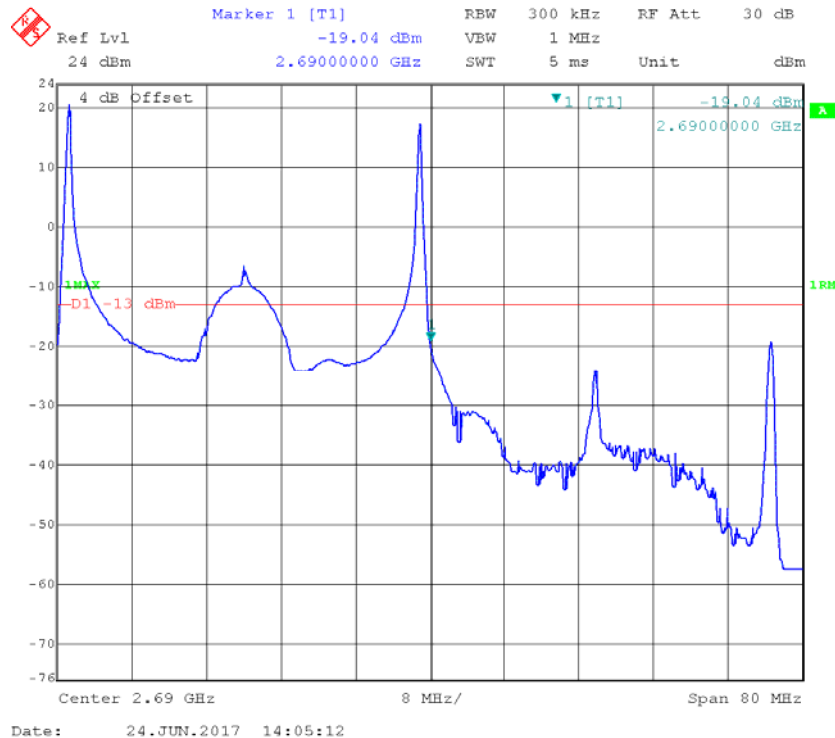


Date: 24.JUN.2017 14:00:15

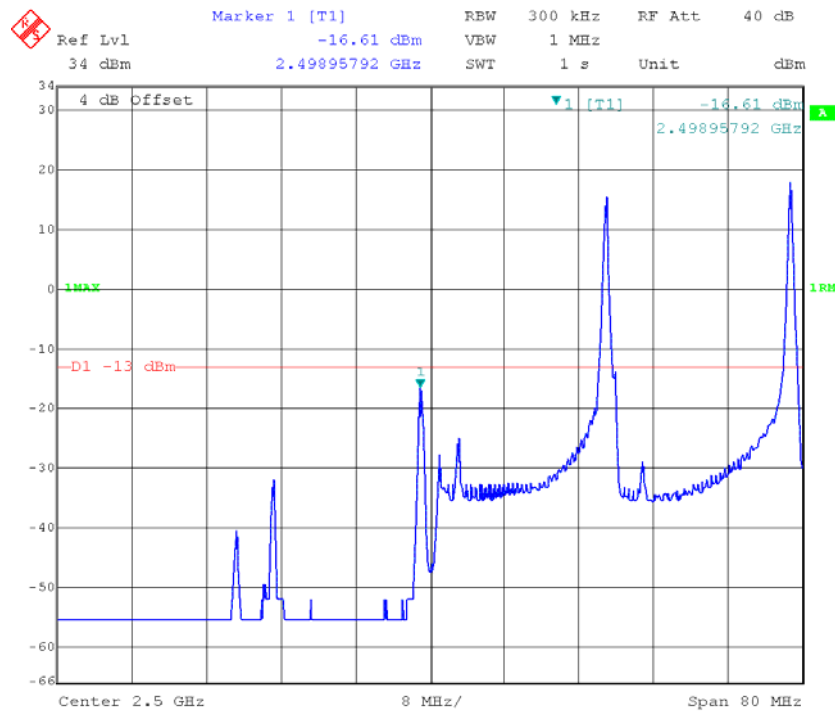
### 20&20MHz 16-QAM\_P1#0&S1#99\_Low Channel



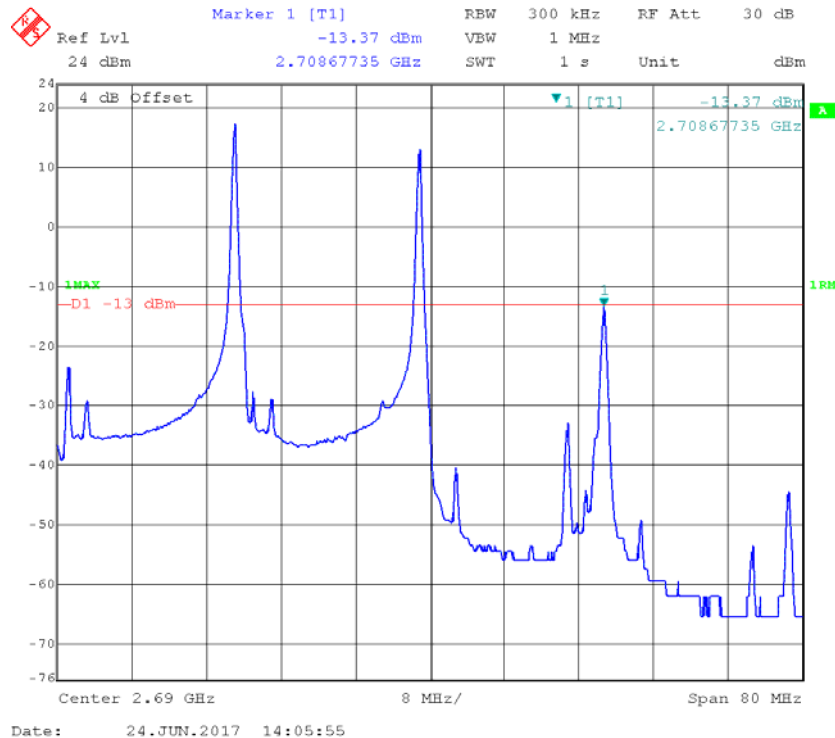
### 20&20MHz 16-QAM\_P1#0&S1#99\_High Channel



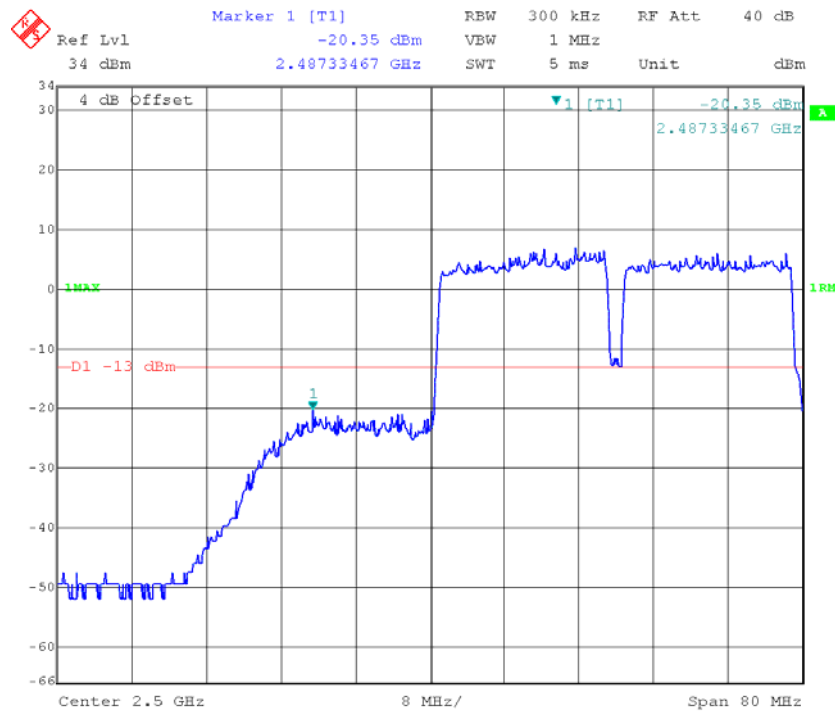
### 20&20MHz\_16-QAM\_P1#99&S1#99\_Low Channel



### 20&20MHz\_16-QAM\_P1#99&S1#99\_High Channel



### 20&20MHz\_16-QAM\_P100#0&S100#0\_Low Channel



Date: 24.JUN.2017 20:25:05

### 20&20MHz\_16QAM\_P100#0&S100#0\_High Channel



Date: 24.JUN.2017 14:07:09

## **FCC §2.1055 & §27.54 - FREQUENCY STABILITY**

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### **Applicable Standards**

According to FCC§27.54, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

According to RSS-195 §5.4

The applicant shall ensure frequency stability by showing that the occupied bandwidth is maintained within the range of the operating frequency blocks when testing under the temperature and supply voltage variations specified for the frequency stability measurement in RSS-Gen.

According to RSS-199 §4.3

The transmitter frequency stability limit shall be determined as follows:

(a) the frequency offset shall be measured according to the procedure described in RSS-Gen and recorded.

(b) using a resolution bandwidth equal to that permitted within the 1 MHz band immediately outside the channel edge, as found in section 4.5, reference points will be selected at the unwanted emission limits, which comply with the attenuation specified in section 4.5 for the type of device under test, on the emission mask of the lowest and highest channels. The frequency at these points shall be recorded as  $f_L$  and  $f_H$  respectively.

The applicant shall ensure compliance with frequency stability requirements by showing that  $f_L$  minus the frequency offset and  $f_H$  plus the frequency offset is within the frequency range in which the equipment is designed to operate.

### **Test Procedure**

The frequency stability of the transmitter is measured by:

a.) **Temperature:** The temperature is varied from - 30 °C to + 50 °C using an environmental chamber.

b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

### Test Equipment List and Details

| Manufacturer | Description                         | Model   | Serial Number | Calibration Date | Calibration Due Date |
|--------------|-------------------------------------|---------|---------------|------------------|----------------------|
| BACL         | High Temperature Test Chamber       | BTH-150 | 30024         | 2016-12-02       | 2017-12-01           |
| FLUKE        | Multimeter                          | 1587    | 27870099      | 2016-12-30       | 2017-12-29           |
| R&S          | Wideband Radio Communication Tester | CMW500  | 106891        | 2016-11-23       | 2017-11-23           |
| Unknown      | RF Cable                            | Unknown | C-2           | Each Time        | /                    |

**\* Statement of Traceability:** BACL(Chengdu) attests that all of the calibrations on the equipment items listed above were traceable to NIM or to another internationally recognized National Metrology Institute (NMI), and were compliant with the NIST HB 150-2016 Normative Annex B "Implementation of traceability policy in accredited laboratories".

### Test Data

#### Environmental Conditions

|                    |                |
|--------------------|----------------|
| Temperature:       | 27~28.1 °C     |
| Relative Humidity: | 41~55 %        |
| ATM Pressure:      | 98.9~100.1 kPa |

*The testing was performed by Lorin Bian on 2017-07-01&2017-07-04.*

**Single Carrier  
Band 7:**

| QPSK, Channel Bandwidth:10MHz<br>Middle Channel, $f_c = 2535$ MHz |                    |                 |                 |        |
|-------------------------------------------------------------------|--------------------|-----------------|-----------------|--------|
| Power Supplied                                                    | Temperature        | Frequency Error | Frequency Error | Result |
| $V_{dc}$                                                          | $^{\circ}\text{C}$ | Hz              | ppm             |        |
| 54                                                                | -30                | -0.37           | -0.0001         | Pass   |
|                                                                   | -20                | 2.73            | 0.0011          | Pass   |
|                                                                   | -10                | 4.13            | 0.0016          | Pass   |
|                                                                   | 0                  | 2.96            | 0.0012          | Pass   |
|                                                                   | 10                 | -3.37           | -0.0013         | Pass   |
|                                                                   | 20                 | 0.68            | 0.0003          | Pass   |
|                                                                   | 30                 | -4.14           | -0.0016         | Pass   |
|                                                                   | 40                 | 1.65            | 0.0007          | Pass   |
|                                                                   | 50                 | 3.35            | 0.0013          | Pass   |
| 48.6                                                              | 25                 | -2.36           | -0.0009         | Pass   |
| 59.4                                                              | 25                 | -0.70           | -0.0003         | Pass   |

| 16-QAM, Channel Bandwidth:10MHz<br>Middle Channel, $f_c = 2535$ MHz |                    |                 |                 |        |
|---------------------------------------------------------------------|--------------------|-----------------|-----------------|--------|
| Power Supplied                                                      | Temperature        | Frequency Error | Frequency Error | Result |
| $V_{dc}$                                                            | $^{\circ}\text{C}$ | Hz              | ppm             |        |
| 54                                                                  | -30                | 0.74            | 0.0003          | Pass   |
|                                                                     | -20                | 1.15            | 0.0005          | Pass   |
|                                                                     | -10                | 2.74            | 0.0011          | Pass   |
|                                                                     | 0                  | 5.02            | 0.0020          | Pass   |
|                                                                     | 10                 | 3.45            | 0.0014          | Pass   |
|                                                                     | 20                 | 0.64            | 0.0003          | Pass   |
|                                                                     | 30                 | 5.08            | 0.0020          | Pass   |
|                                                                     | 40                 | -3.59           | -0.0014         | Pass   |
|                                                                     | 50                 | 5.54            | 0.0022          | Pass   |
| 48.6                                                                | 25                 | -0.73           | -0.0003         | Pass   |
| 59.4                                                                | 25                 | 2.75            | 0.0011          | Pass   |

**Band 40 (2305-2320MHz)**

| Middle Channel  |             |                 |                 |
|-----------------|-------------|-----------------|-----------------|
| Power Supplied  | Temperature | Frequency Error | Frequency Error |
| V <sub>dc</sub> | °C          | Hz              | ppm             |
| 54              | -30         | 3.21            | 0.0014          |
|                 | -20         | 4.28            | 0.0019          |
|                 | -10         | -1.29           | -0.0006         |
|                 | 0           | 7.31            | 0.0032          |
|                 | 10          | 6.55            | 0.0028          |
|                 | 20          | 5.05            | 0.0022          |
|                 | 30          | 0.4             | 0.0002          |
|                 | 40          | 0.91            | 0.0004          |
|                 | 50          | 7.93            | 0.0034          |
| 48.6            | 25          | 6.06            | 0.0026          |
| 59.4            | 25          | 2.87            | 0.0012          |

**Band 40 (2345-2360MHz)**

| Middle Channel  |             |                 |                 |
|-----------------|-------------|-----------------|-----------------|
| Power Supplied  | Temperature | Frequency Error | Frequency Error |
| V <sub>dc</sub> | °C          | Hz              | ppm             |
| 54              | -30         | 3.52            | 0.0015          |
|                 | -20         | 0.84            | 0.0004          |
|                 | -10         | 8.43            | 0.0036          |
|                 | 0           | 3.17            | 0.0013          |
|                 | 10          | 0.72            | 0.0003          |
|                 | 20          | 1.03            | 0.0004          |
|                 | 30          | 5.5             | 0.0023          |
|                 | 40          | 1.3             | 0.0006          |
|                 | 50          | 6.86            | 0.0029          |
| 48.6            | 25          | 0.52            | 0.0002          |
| 59.4            | 25          | 7.71            | 0.0033          |

**Band 41:**

| QPSK, Channel Bandwidth:10MHz<br>Middle Channel, $f_c = 2593$ MHz |                    |                 |                 |        |
|-------------------------------------------------------------------|--------------------|-----------------|-----------------|--------|
| Power Supplied                                                    | Temperature        | Frequency Error | Frequency Error | Result |
| $V_{dc}$                                                          | $^{\circ}\text{C}$ | Hz              | ppm             |        |
| 54                                                                | -30                | 0.46            | 0.0002          | Pass   |
|                                                                   | -20                | -4.40           | -0.0017         | Pass   |
|                                                                   | -10                | 3.41            | 0.0013          | Pass   |
|                                                                   | 0                  | -2.39           | -0.0009         | Pass   |
|                                                                   | 10                 | -3.28           | -0.0013         | Pass   |
|                                                                   | 20                 | 0.40            | 0.0002          | Pass   |
|                                                                   | 30                 | 5.04            | 0.0019          | Pass   |
|                                                                   | 40                 | 4.80            | 0.0019          | Pass   |
|                                                                   | 50                 | 0.18            | 0.0001          | Pass   |
| 48.6                                                              | 25                 | 2.88            | 0.0011          | Pass   |
| 59.4                                                              | 25                 | 1.25            | 0.0005          | Pass   |

| 16-QAM, Channel Bandwidth:10MHz<br>Middle Channel, $f_c = 2593$ MHz |                    |                 |                 |        |
|---------------------------------------------------------------------|--------------------|-----------------|-----------------|--------|
| Power Supplied                                                      | Temperature        | Frequency Error | Frequency Error | Result |
| $V_{dc}$                                                            | $^{\circ}\text{C}$ | Hz              | ppm             |        |
| 54                                                                  | -30                | 0.85            | 0.0003          | Pass   |
|                                                                     | -20                | -3.33           | -0.0013         | Pass   |
|                                                                     | -10                | -3.88           | -0.0015         | Pass   |
|                                                                     | 0                  | -2.42           | -0.0009         | Pass   |
|                                                                     | 10                 | -2.49           | -0.0010         | Pass   |
|                                                                     | 20                 | 1.46            | 0.0006          | Pass   |
|                                                                     | 30                 | 5.70            | 0.0022          | Pass   |
|                                                                     | 40                 | -3.43           | -0.0013         | Pass   |
|                                                                     | 50                 | 2.13            | 0.0008          | Pass   |
| 48.6                                                                | 25                 | -1.00           | -0.0004         | Pass   |
| 59.4                                                                | 25                 | -2.32           | -0.0009         | Pass   |

**Carrier Aggregation  
Band 7:**

| 20MHz+5MHz, Middle Channel, QPSK |             |                 |                 |
|----------------------------------|-------------|-----------------|-----------------|
| Power Supplied                   | Temperature | Frequency Error | Frequency Error |
| V <sub>dc</sub>                  | °C          | Hz              | ppm             |
| 54                               | -30         | -0.21           | -0.0001         |
|                                  | -20         | -0.39           | -0.0002         |
|                                  | -10         | -0.11           | 0.0000          |
|                                  | 0           | -1.94           | -0.0008         |
|                                  | 10          | -0.44           | -0.0002         |
|                                  | 20          | 4.36            | 0.0017          |
|                                  | 30          | 3.11            | 0.0012          |
|                                  | 40          | -0.61           | -0.0002         |
|                                  | 50          | 1.52            | 0.0006          |
| 48.6                             | 25          | -2.71           | -0.0011         |
| 59.4                             | 25          | 4.79            | 0.0019          |

| 20MHz+5MHz, Middle Channel, 16-QAM |             |                 |                 |
|------------------------------------|-------------|-----------------|-----------------|
| Power Supplied                     | Temperature | Frequency Error | Frequency Error |
| V <sub>dc</sub>                    | °C          | Hz              | ppm             |
| 54                                 | -30         | 1.62            | 0.0006          |
|                                    | -20         | -0.26           | -0.0001         |
|                                    | -10         | -4.34           | -0.0017         |
|                                    | 0           | 1.61            | 0.0006          |
|                                    | 10          | -4.60           | -0.0018         |
|                                    | 20          | -2.13           | -0.0008         |
|                                    | 30          | -5.09           | -0.0020         |
|                                    | 40          | 3.18            | 0.0013          |
|                                    | 50          | -0.38           | -0.0001         |
| 48.6                               | 25          | -4.00           | -0.0016         |
| 59.4                               | 25          | -0.55           | -0.0002         |

| 20MHz+20MHz, Middle Channel, QPSK |             |                 |                 |
|-----------------------------------|-------------|-----------------|-----------------|
| Power Supplied                    | Temperature | Frequency Error | Frequency Error |
| V <sub>dc</sub>                   | °C          | Hz              | ppm             |
| 54                                | -30         | -1.06           | -0.0004         |
|                                   | -20         | -3.42           | -0.0013         |
|                                   | -10         | 1.69            | 0.0007          |
|                                   | 0           | -0.73           | -0.0003         |
|                                   | 10          | 0.10            | 0.0000          |
|                                   | 20          | -0.22           | -0.0001         |
|                                   | 30          | -4.59           | -0.0018         |
|                                   | 40          | 1.79            | 0.0007          |
|                                   | 50          | -4.93           | -0.0019         |
| 48.6                              | 25          | 2.72            | 0.0011          |
| 59.4                              | 25          | 4.66            | 0.0018          |

| 20MHz+20MHz, Middle Channel, 16-QAM |             |                 |                 |
|-------------------------------------|-------------|-----------------|-----------------|
| Power Supplied                      | Temperature | Frequency Error | Frequency Error |
| V <sub>dc</sub>                     | °C          | Hz              | ppm             |
| 54                                  | -30         | -1.76           | -0.0007         |
|                                     | -20         | 4.27            | 0.0017          |
|                                     | -10         | 3.71            | 0.0015          |
|                                     | 0           | -4.85           | -0.0019         |
|                                     | 10          | 1.72            | 0.0007          |
|                                     | 20          | -5.11           | -0.0020         |
|                                     | 30          | 0.86            | 0.0003          |
|                                     | 40          | 2.39            | 0.0009          |
|                                     | 50          | 2.54            | 0.0010          |
| 48.6                                | 25          | -2.91           | -0.0011         |
| 59.4                                | 25          | -3.64           | -0.0014         |

**Band 41:**

| 20MHz+5MHz, Middle Channel, QPSK |             |                 |                 |
|----------------------------------|-------------|-----------------|-----------------|
| Power Supplied                   | Temperature | Frequency Error | Frequency Error |
| V <sub>dc</sub>                  | °C          | Hz              | ppm             |
| 54                               | -30         | 12.50           | 0.0048          |
|                                  | -20         | 16.06           | 0.0062          |
|                                  | -10         | 10.65           | 0.0041          |
|                                  | 0           | 16.91           | 0.0065          |
|                                  | 10          | 9.59            | 0.0037          |
|                                  | 20          | 14.07           | 0.0054          |
|                                  | 30          | 15.45           | 0.0060          |
|                                  | 40          | 15.56           | 0.0060          |
|                                  | 50          | 16.54           | 0.0064          |
| 48.6                             | 25          | 8.30            | 0.0032          |
| 59.4                             | 25          | 9.16            | 0.0035          |

| 20MHz+5MHz,Middle Channel,16-QAM |             |                 |                 |
|----------------------------------|-------------|-----------------|-----------------|
| Power Supplied                   | Temperature | Frequency Error | Frequency Error |
| V <sub>dc</sub>                  | °C          | Hz              | ppm             |
| 54                               | -30         | 23.10           | 0.0089          |
|                                  | -20         | 21.62           | 0.0083          |
|                                  | -10         | 18.63           | 0.0072          |
|                                  | 0           | 26.06           | 0.0101          |
|                                  | 10          | 27.81           | 0.0107          |
|                                  | 20          | 20.61           | 0.0079          |
|                                  | 30          | 18.69           | 0.0072          |
|                                  | 40          | 22.35           | 0.0086          |
|                                  | 50          | 19.18           | 0.0074          |
| 48.6                             | 25          | 24.94           | 0.0096          |
| 59.4                             | 25          | 20.33           | 0.0078          |

| 20MHz+20MHz, Middle Channel, QPSK |             |                 |                 |
|-----------------------------------|-------------|-----------------|-----------------|
| Power Supplied                    | Temperature | Frequency Error | Frequency Error |
| V <sub>dc</sub>                   | °C          | Hz              | ppm             |
| 54                                | -30         | 10.30           | 0.0040          |
|                                   | -20         | 6.01            | 0.0023          |
|                                   | -10         | 6.39            | 0.0025          |
|                                   | 0           | 11.04           | 0.0043          |
|                                   | 10          | 14.26           | 0.0055          |
|                                   | 20          | 10.98           | 0.0042          |
|                                   | 30          | 10.04           | 0.0039          |
|                                   | 40          | 8.88            | 0.0034          |
|                                   | 50          | 12.89           | 0.0050          |
| 48.6                              | 25          | 6.23            | 0.0024          |
| 59.4                              | 25          | 5.53            | 0.0021          |

| 20MHz+20MHz, Middle Channel, 16-QAM |             |                 |                 |
|-------------------------------------|-------------|-----------------|-----------------|
| Power Supplied                      | Temperature | Frequency Error | Frequency Error |
| V <sub>dc</sub>                     | °C          | Hz              | ppm             |
| 54                                  | -30         | 15.20           | 0.0059          |
|                                     | -20         | 12.32           | 0.0048          |
|                                     | -10         | 16.86           | 0.0065          |
|                                     | 0           | 18.02           | 0.0069          |
|                                     | 10          | 11.93           | 0.0046          |
|                                     | 20          | 10.67           | 0.0041          |
|                                     | 30          | 18.37           | 0.0071          |
|                                     | 40          | 17.96           | 0.0069          |
|                                     | 50          | 13.45           | 0.0052          |
| 48.6                                | 25          | 19.85           | 0.0077          |
| 59.4                                | 25          | 19.67           | 0.0076          |

\*\*\*\*\* END OF REPORT \*\*\*\*\*