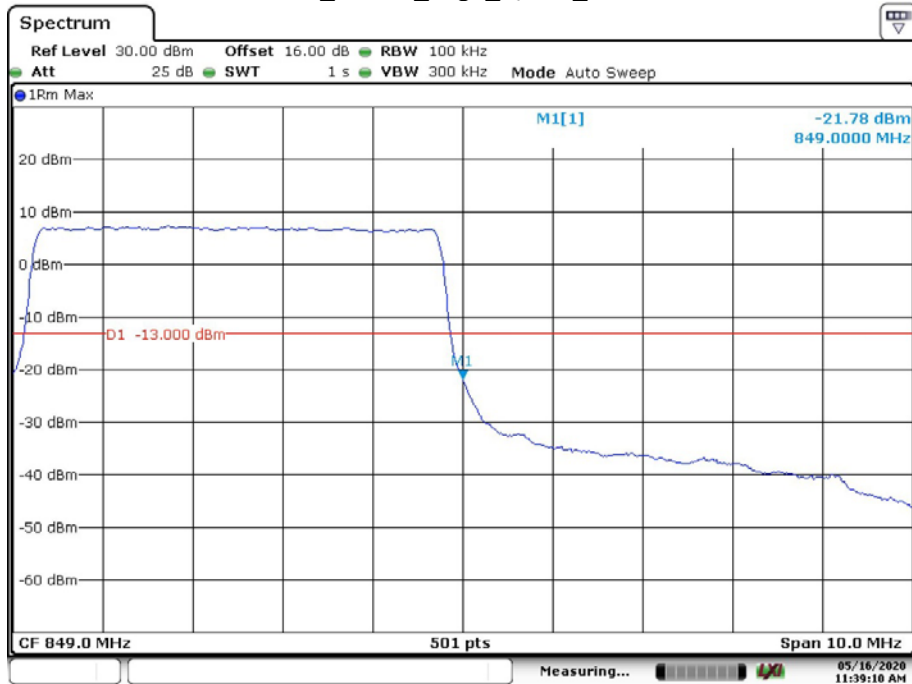
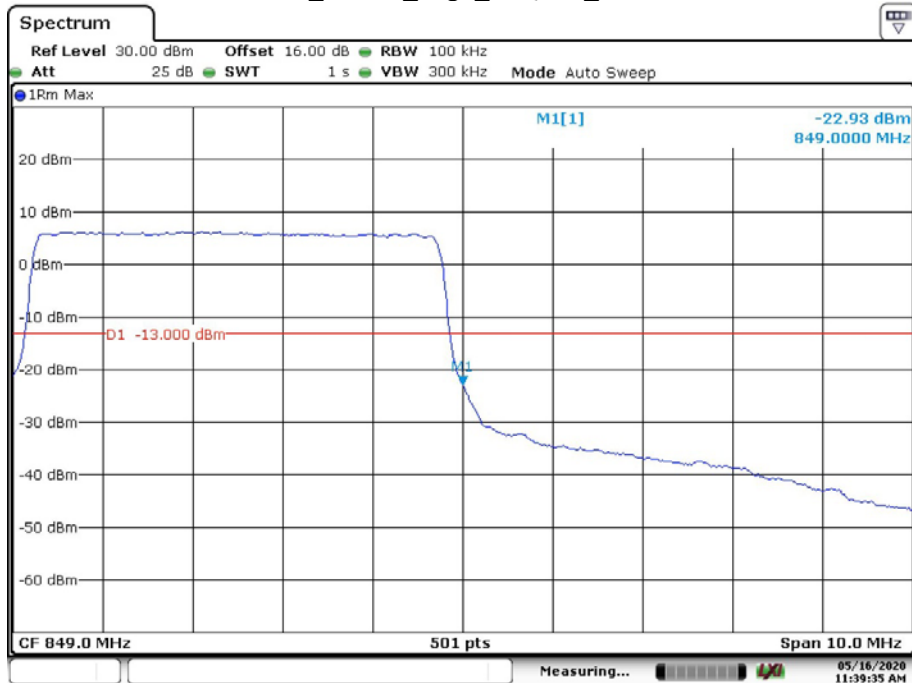


Band 5\_5 MHz\_High\_QPSK\_RB25#0



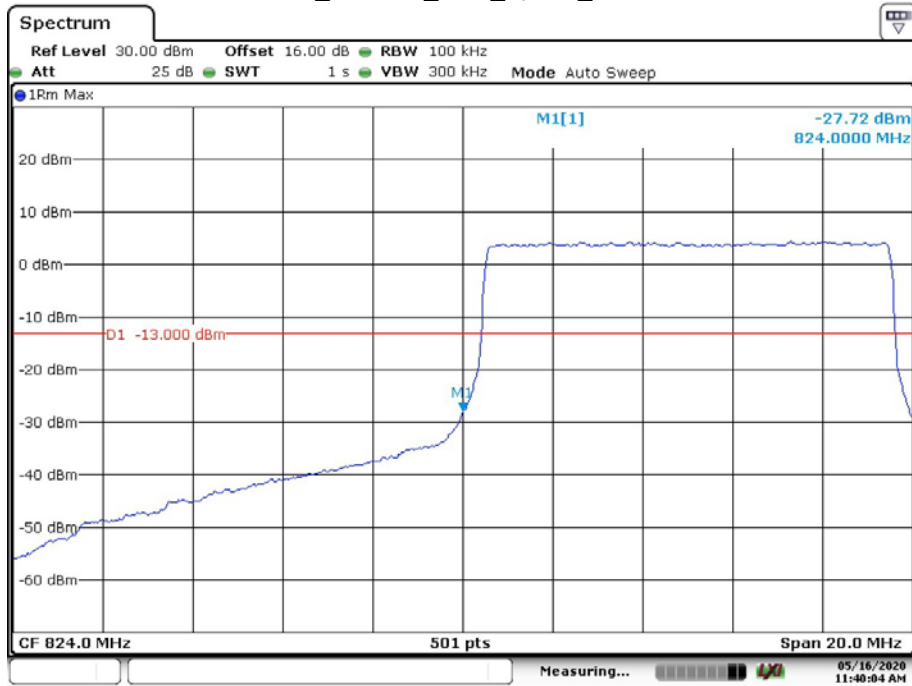
Date: 16.MAY.2020 11:39:10

Band 5\_5 MHz\_High\_16QAM\_RB25#0



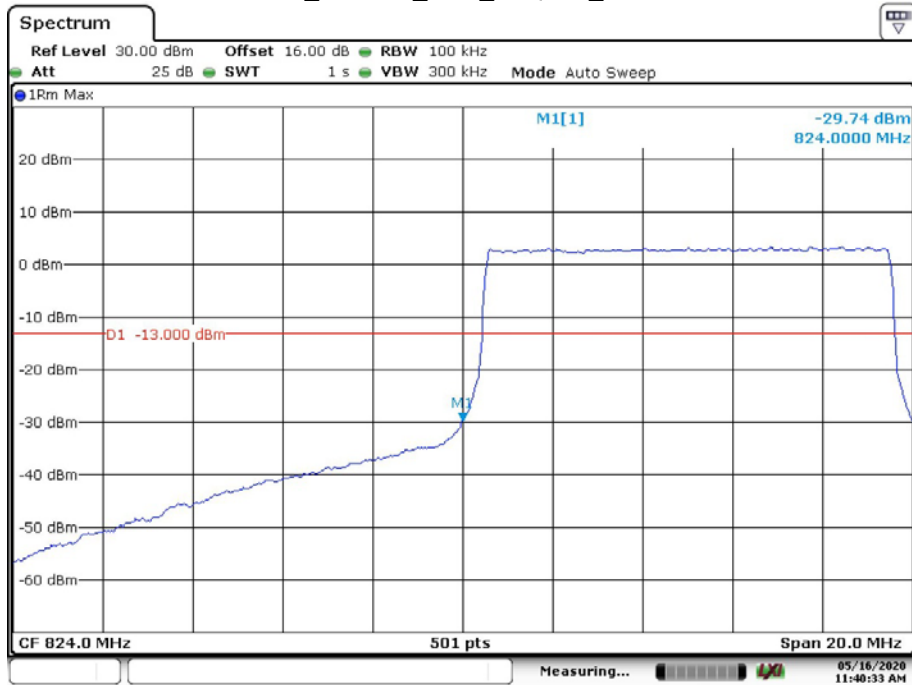
Date: 16.MAY.2020 11:39:35

Band 5\_10 MHz\_Low\_QPSK\_RB50#0



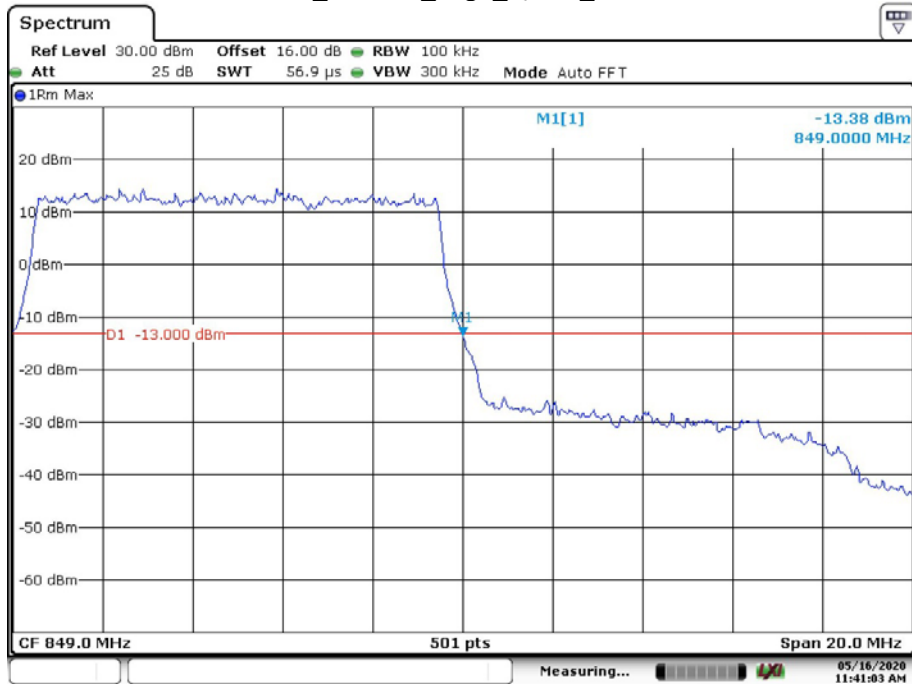
Date: 16.MAY.2020 11:40:04

Band 5\_10 MHz\_Low\_16QAM\_RB50#0



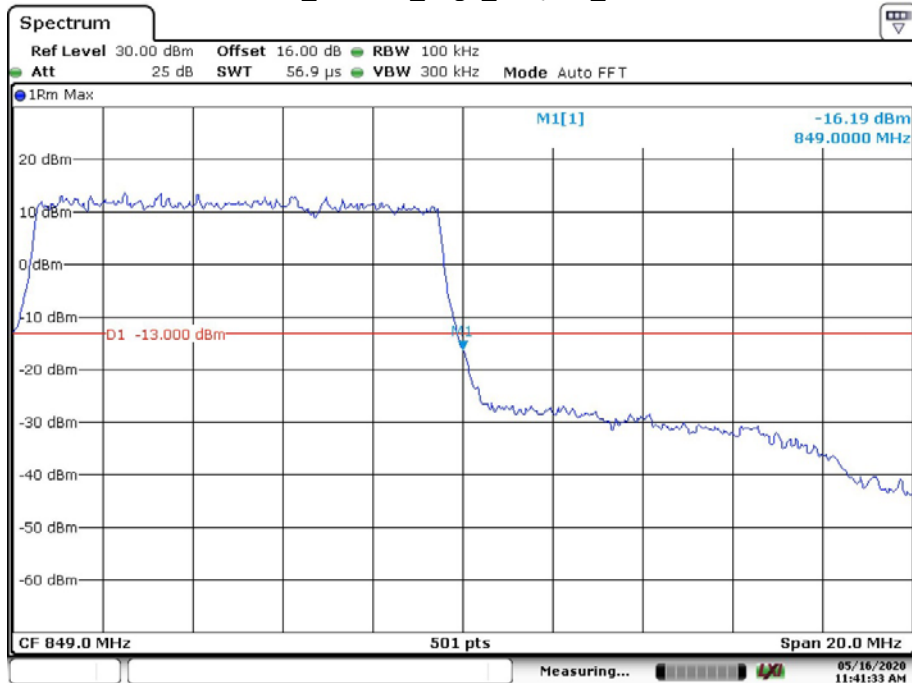
Date: 16.MAY.2020 11:40:34

Band 5\_10 MHz\_High\_QPSK\_RB50#0



Date: 16.MAY.2020 11:41:04

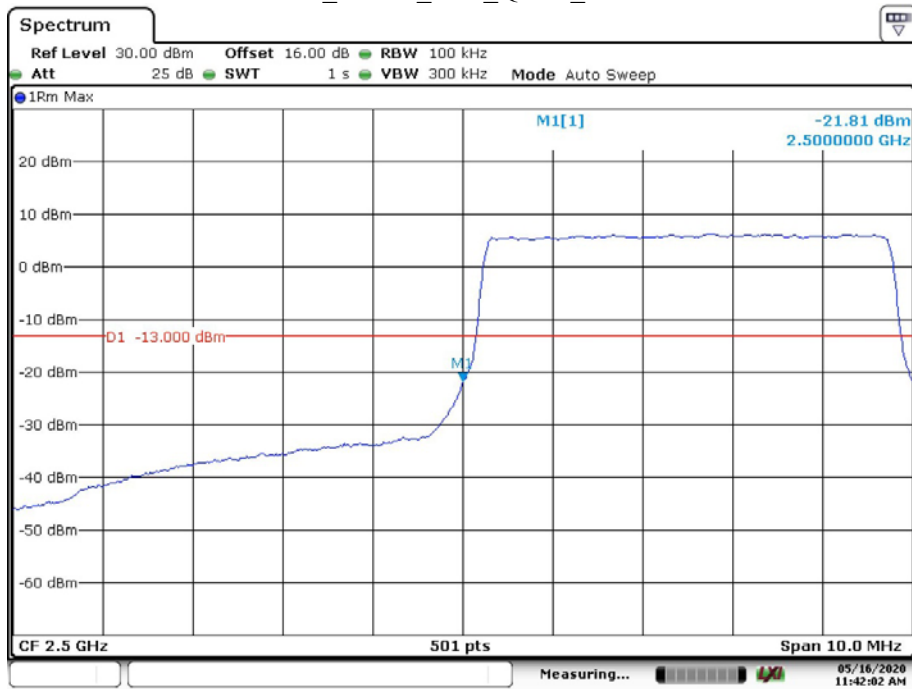
Band 5\_10 MHz\_High\_16QAM\_RB50#0



Date: 16.MAY.2020 11:41:34

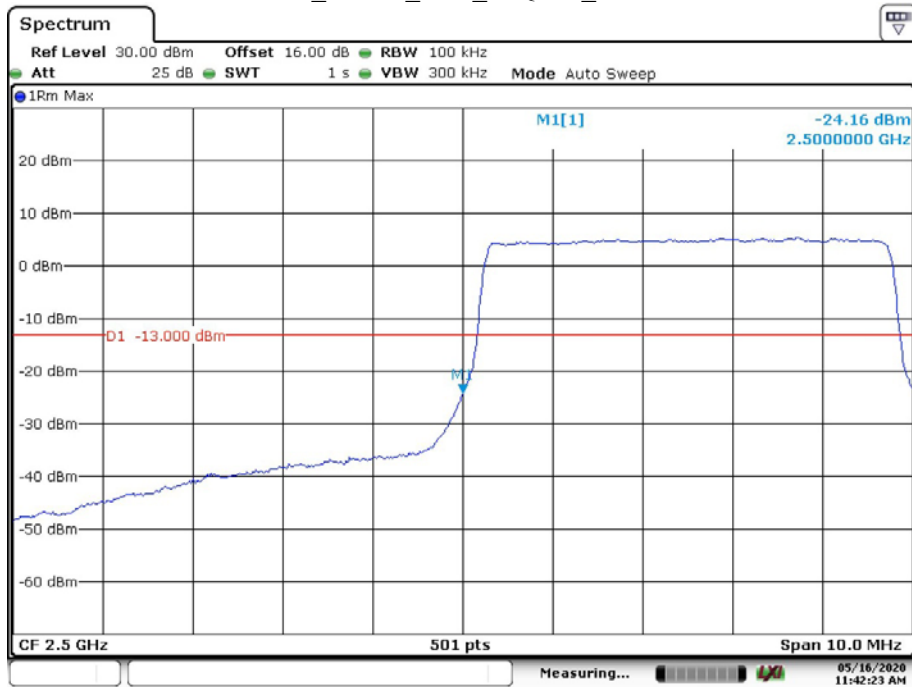
LTE Band 7

Band 7\_5 MHz\_Low\_QPSK\_RB25#0



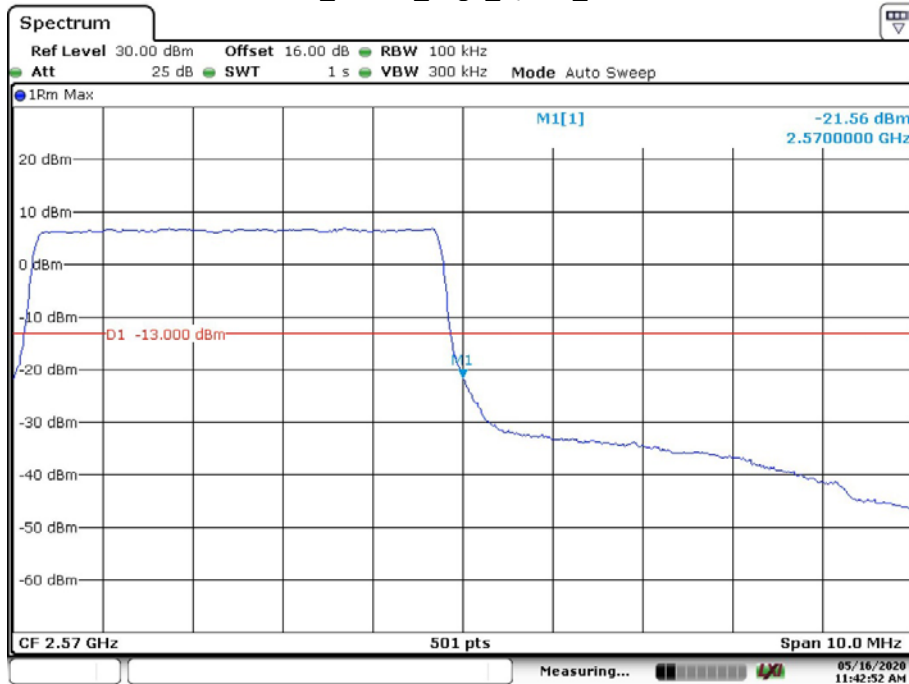
Date: 16.MAY.2020 11:42:02

Band 7\_5 MHz\_Low\_16QAM\_RB25#0



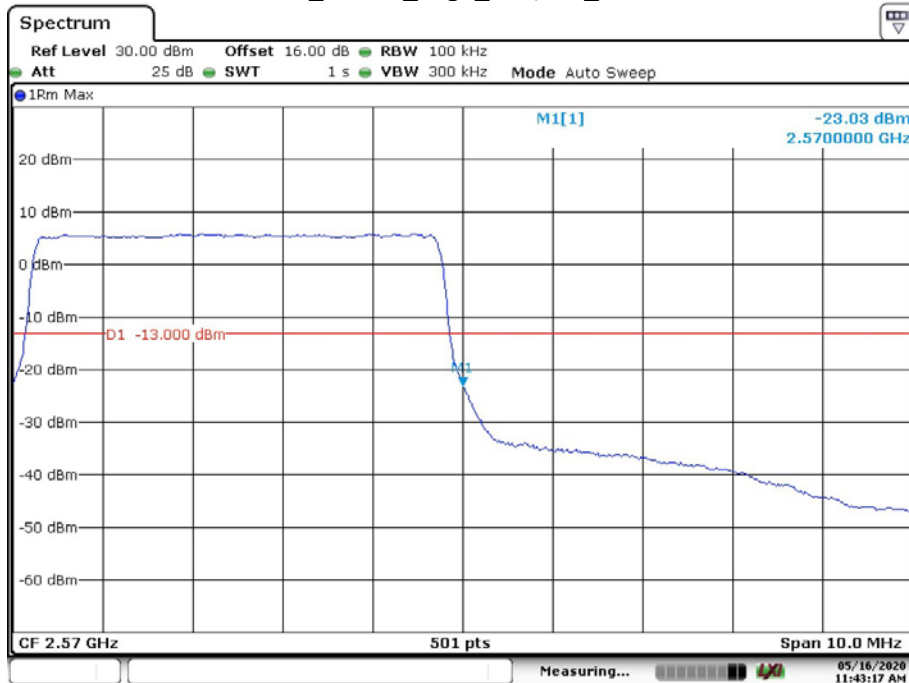
Date: 16.MAY.2020 11:42:24

Band 7\_5 MHz\_High\_QPSK\_RB25#0



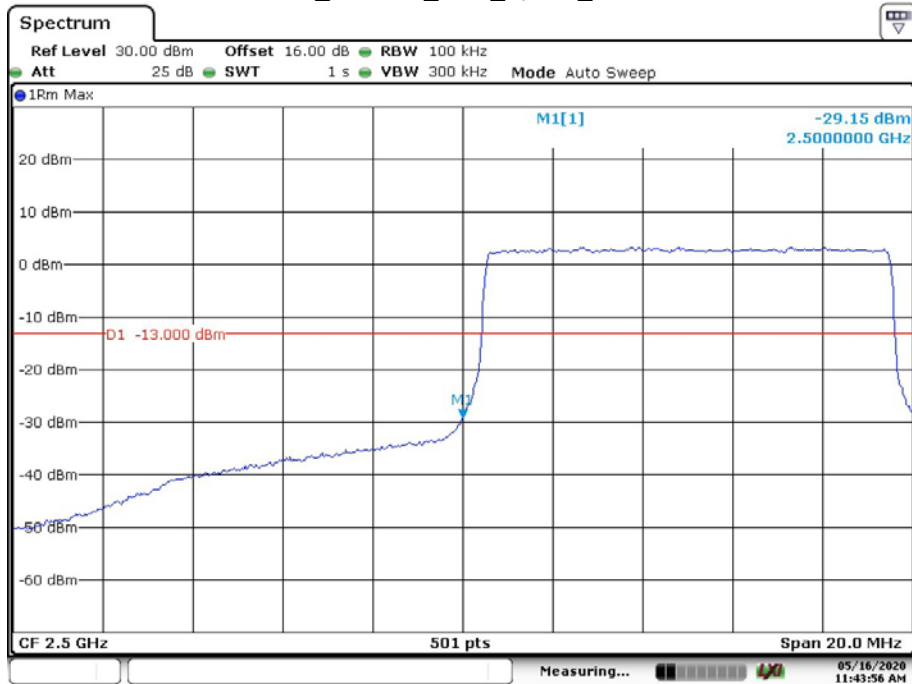
Date: 16.MAY.2020 11:42:53

Band 7\_5 MHz\_High\_16QAM\_RB25#0



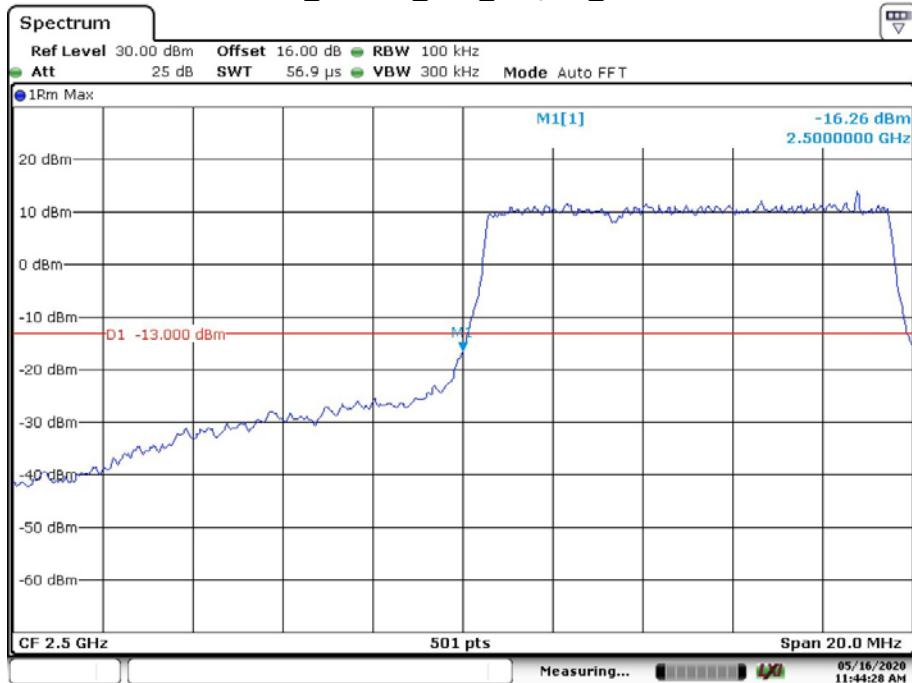
Date: 16.MAY.2020 11:43:18

Band 7\_10 MHz\_Low\_QPSK\_RB50#0



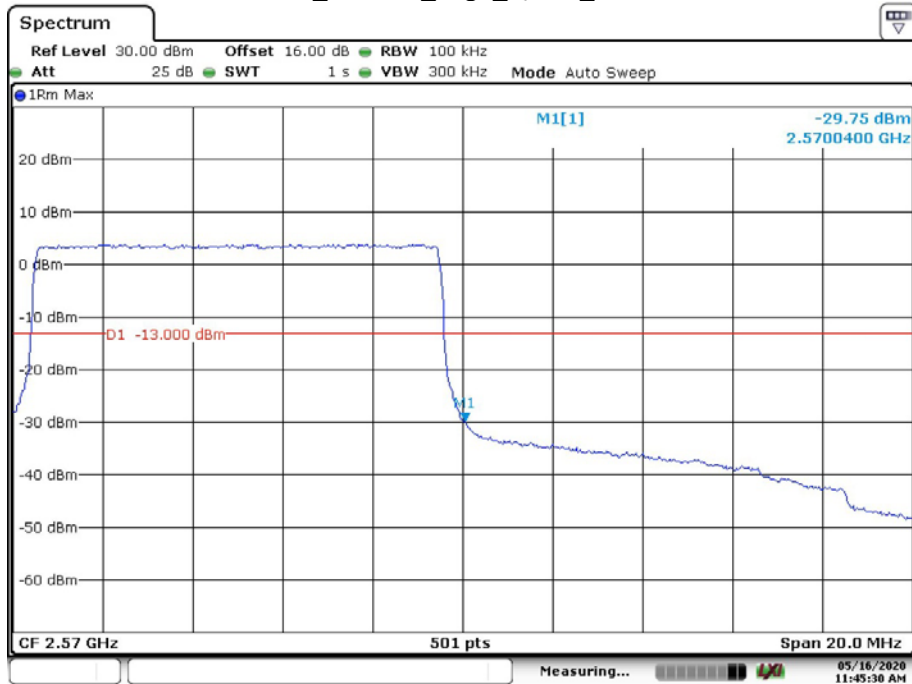
Date: 16.MAY.2020 11:43:56

Band 7\_10 MHz\_Low\_16QAM\_RB50#0



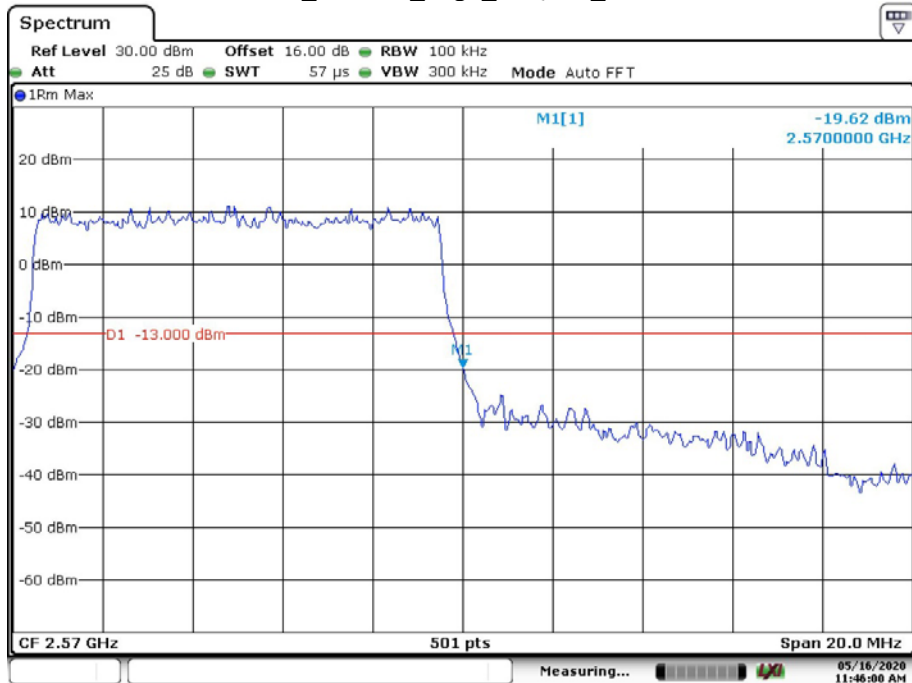
Date: 16.MAY.2020 11:44:29

Band 7\_10 MHz\_High\_QPSK\_RB50#0



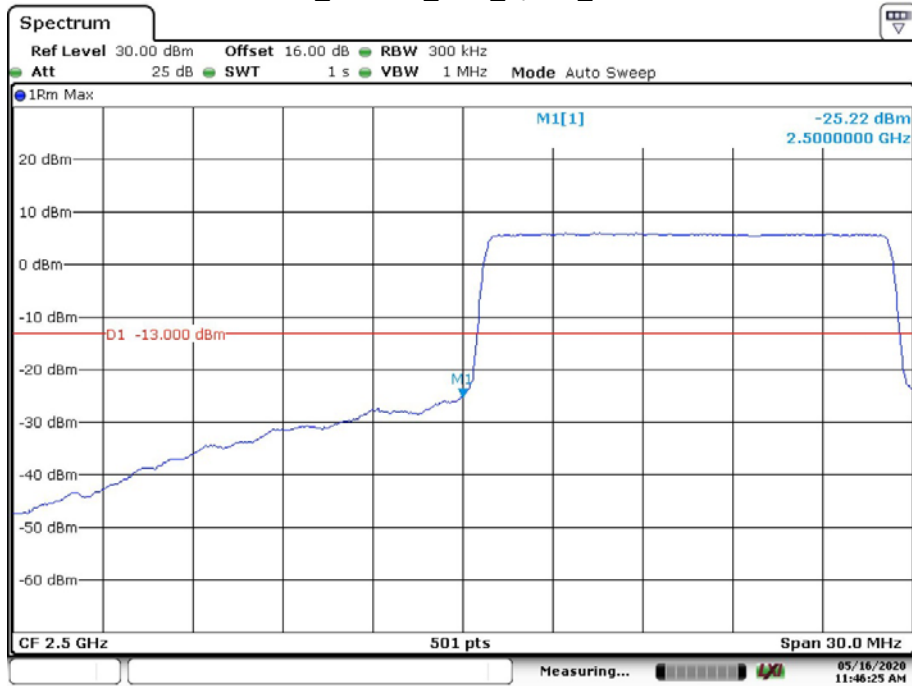
Date: 16.MAY.2020 11:45:31

Band 7\_10 MHz\_High\_16QAM\_RB50#0



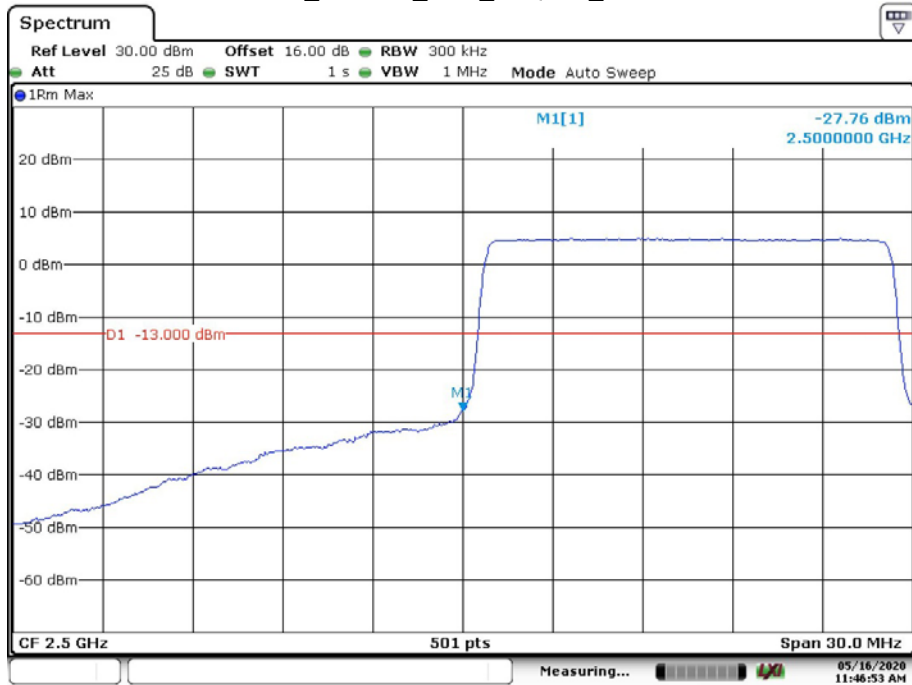
Date: 16.MAY.2020 11:46:00

Band 7\_15 MHz\_Low\_QPSK\_RB75#0



Date: 16.MAY.2020 11:46:25

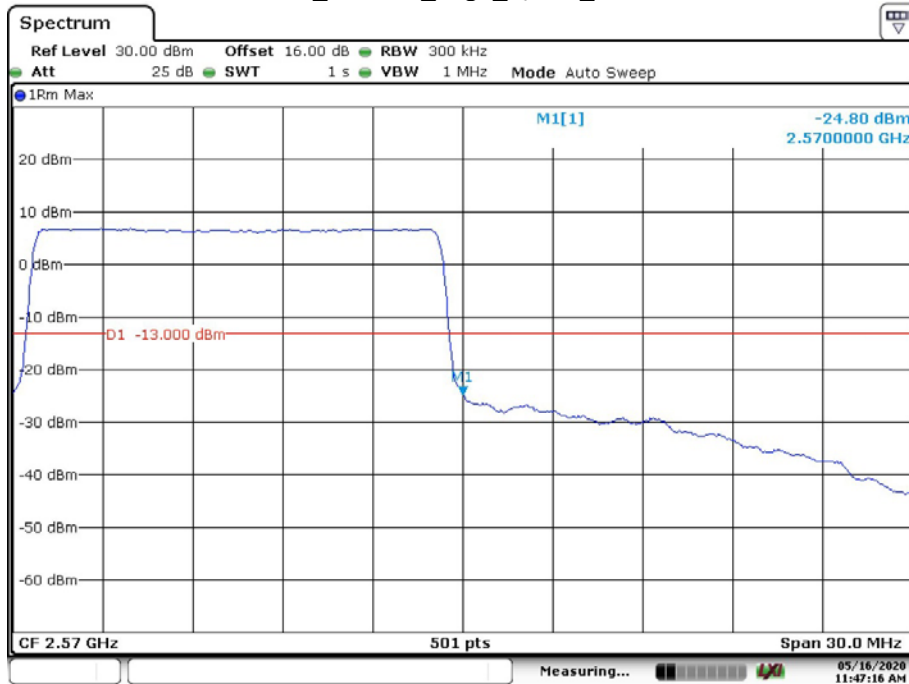
Band 7\_15 MHz\_Low\_16QAM\_RB75#0



Date: 16.MAY.2020 11:46:54



Band 7\_15 MHz\_High\_QPSK\_RB75#0



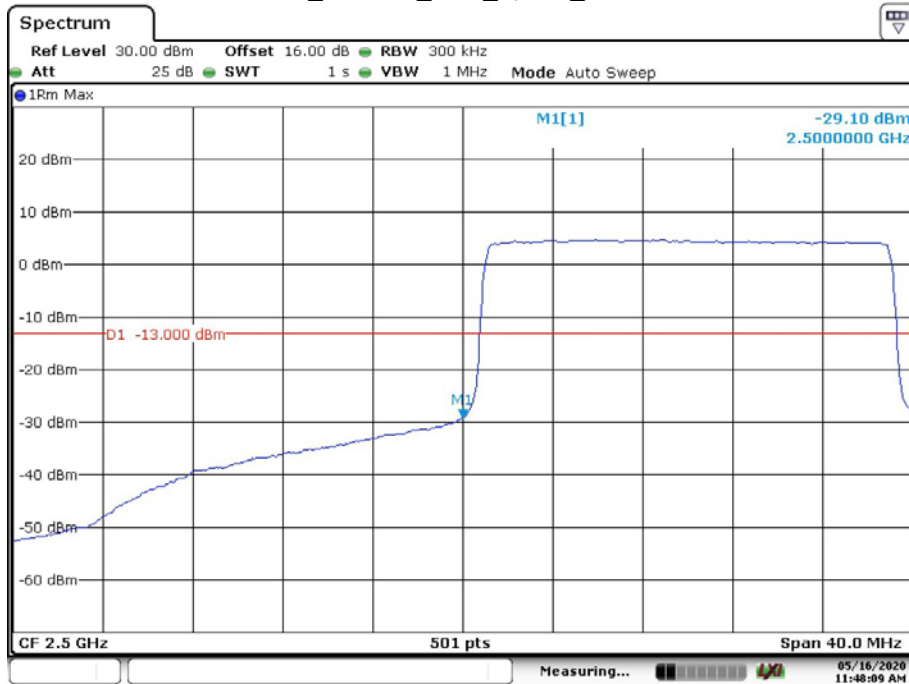
Date: 16.MAY.2020 11:47:17

Band 7\_15 MHz\_High\_16QAM\_RB75#0



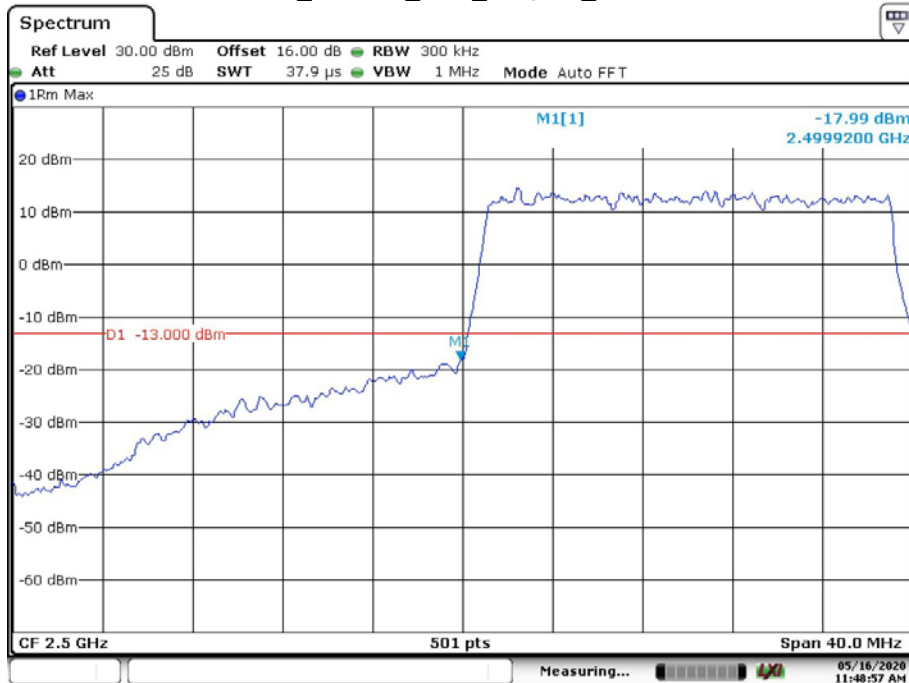
Date: 16.MAY.2020 11:47:42

Band 7\_20 MHz\_Low\_QPSK\_RB100#0



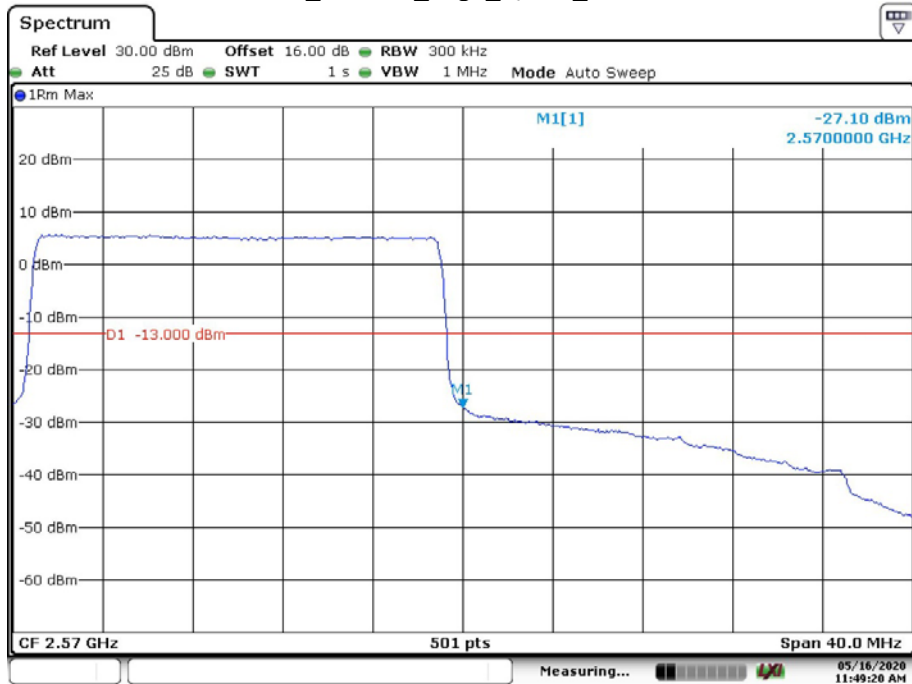
Date: 16.MAY.2020 11:48:10

Band 7\_20 MHz\_Low\_16QAM\_RB100#0



Date: 16.MAY.2020 11:48:57

Band 7\_20 MHz\_High\_QPSK\_RB100#0



Date: 16.MAY.2020 11:49:20

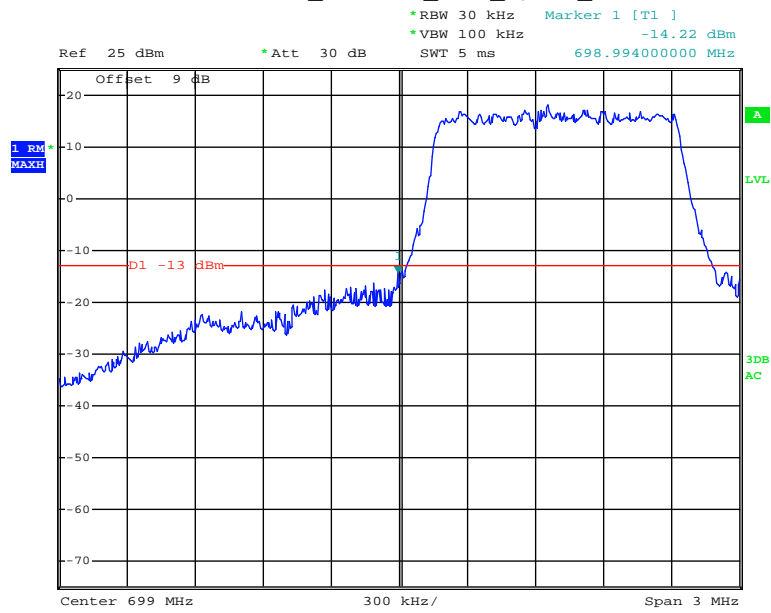
Band 7\_20 MHz\_High\_16QAM\_RB100#0



Date: 16.MAY.2020 11:49:52

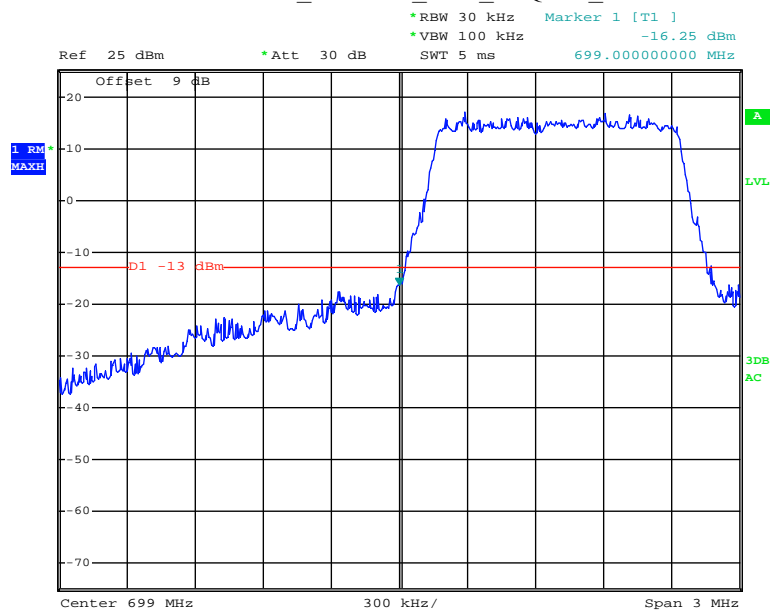
LTE Band 12

Band 12\_1.4 MHz\_Low\_QPSK\_RB6#0



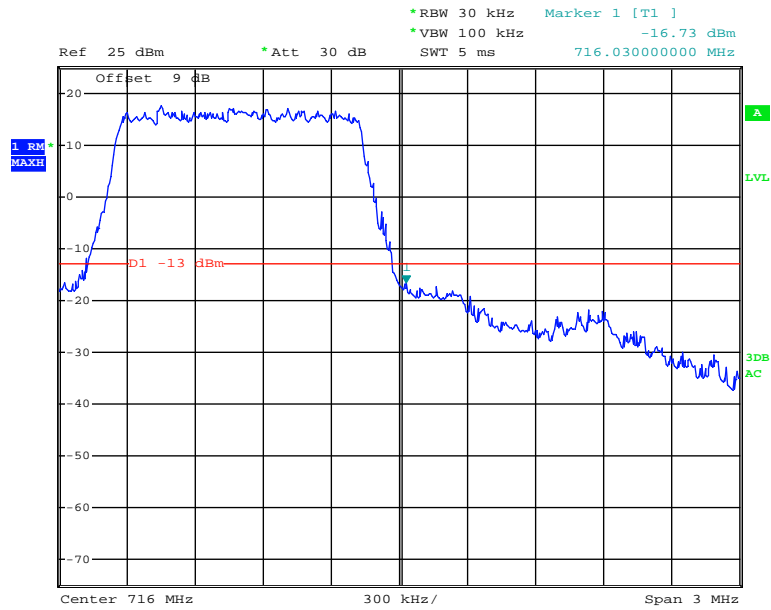
Date: 25.JUL.2020 13:08:11

Band 12\_1.4 MHz\_Low\_16QAM\_RB6#0



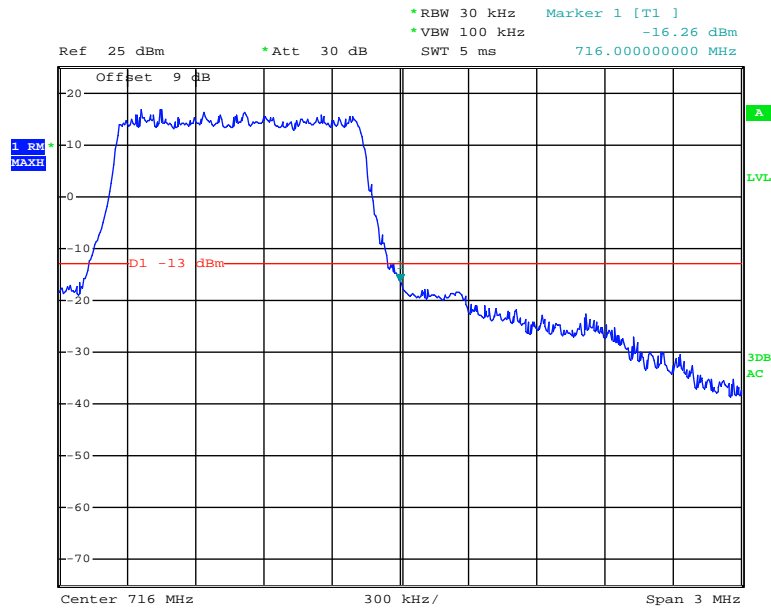
Date: 25.JUL.2020 13:08:31

### Band 12\_1.4 MHz\_High\_QPSK\_RB6#0



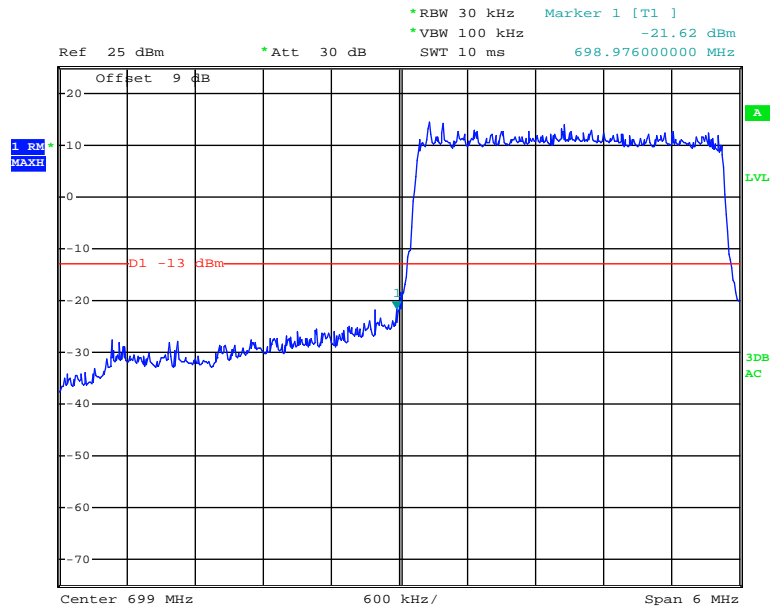
Date: 25.JUL.2020 13:08:52

### Band 12\_1.4 MHz\_High\_16QAM\_RB6#0



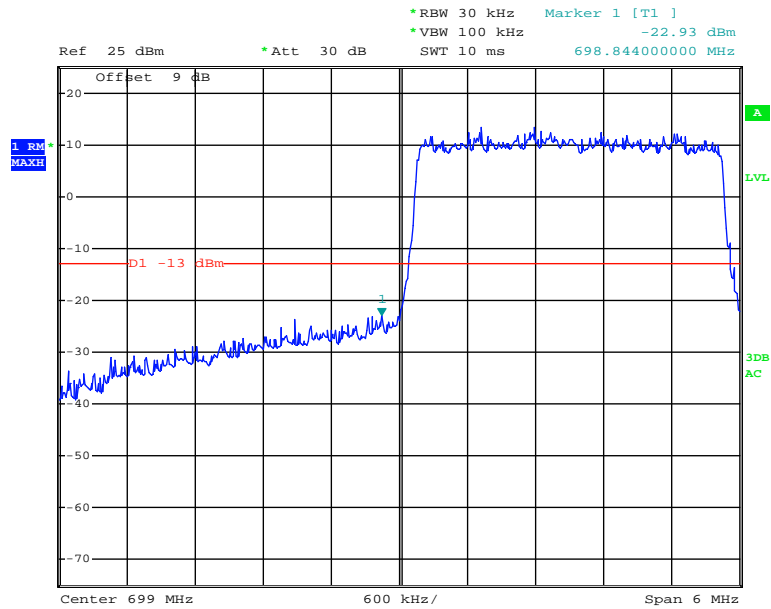
Date: 25.JUL.2020 13:09:09

### Band 12\_3 MHz\_Low\_QPSK\_RB15#0



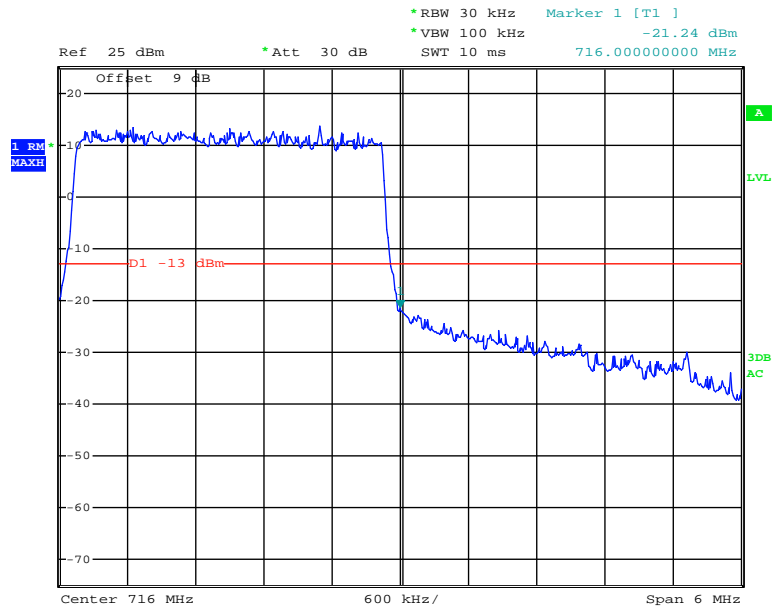
Date: 25.JUL.2020 13:09:32

### Band 12\_3 MHz\_Low\_16QAM\_RB15#0



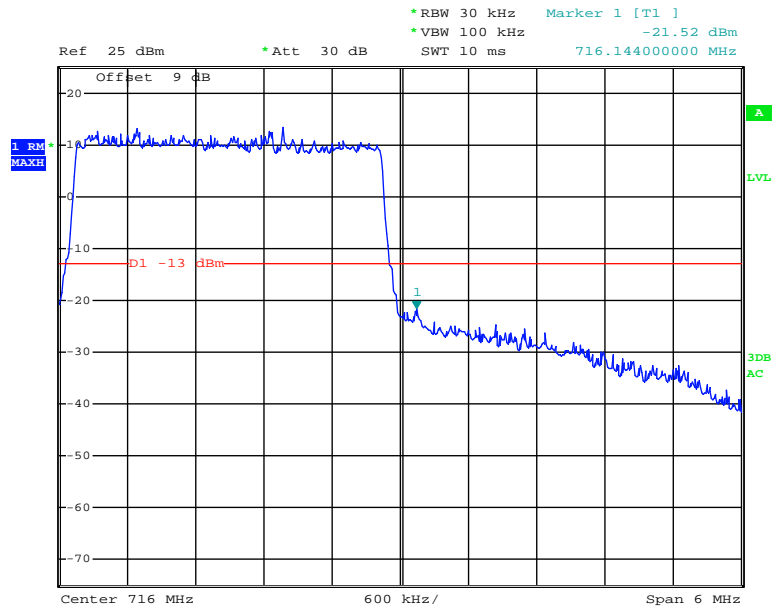
Date: 25.JUL.2020 13:09:52

### Band 12\_3 MHz\_High\_QPSK\_RB15#0



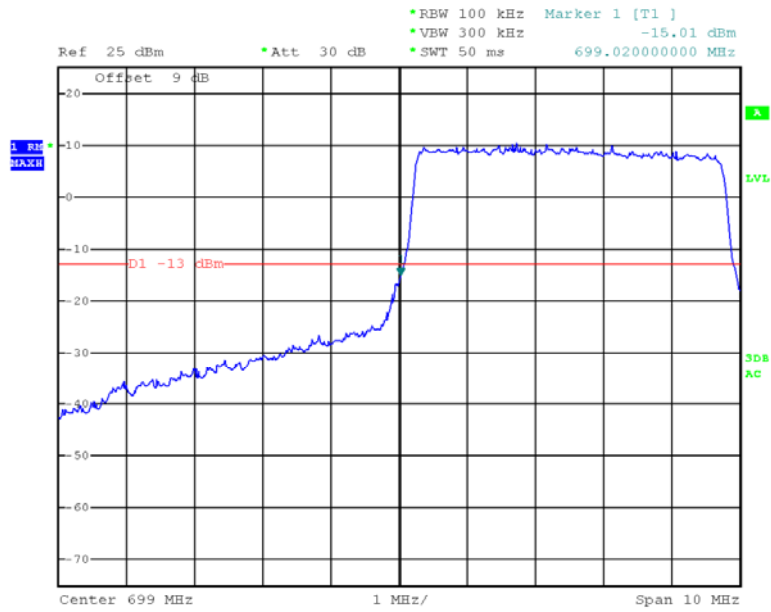
Date: 25.JUL.2020 13:10:13

### Band 12\_3 MHz\_High\_16QAM\_RB15#0



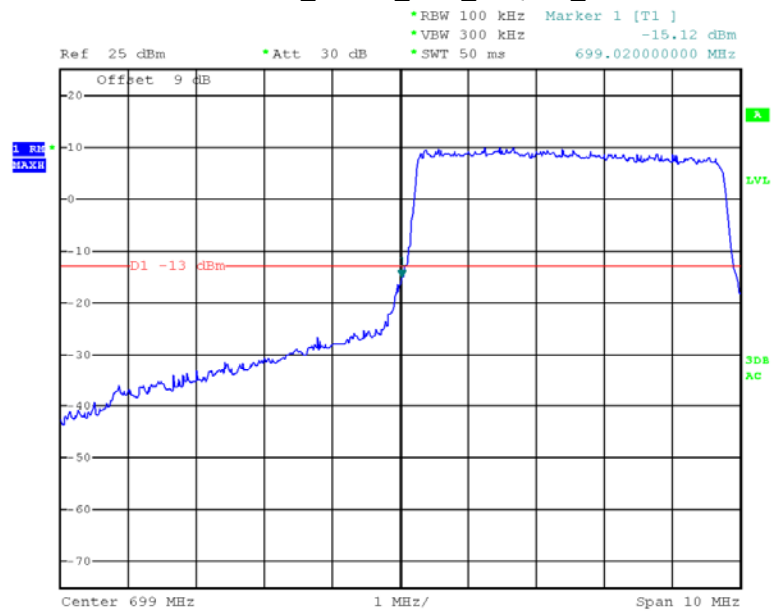
Date: 25.JUL.2020 13:10:33

### Band 12\_5 MHz\_Low\_QPSK\_RB25#0



Date: 25.JUL.2020 14:56:15

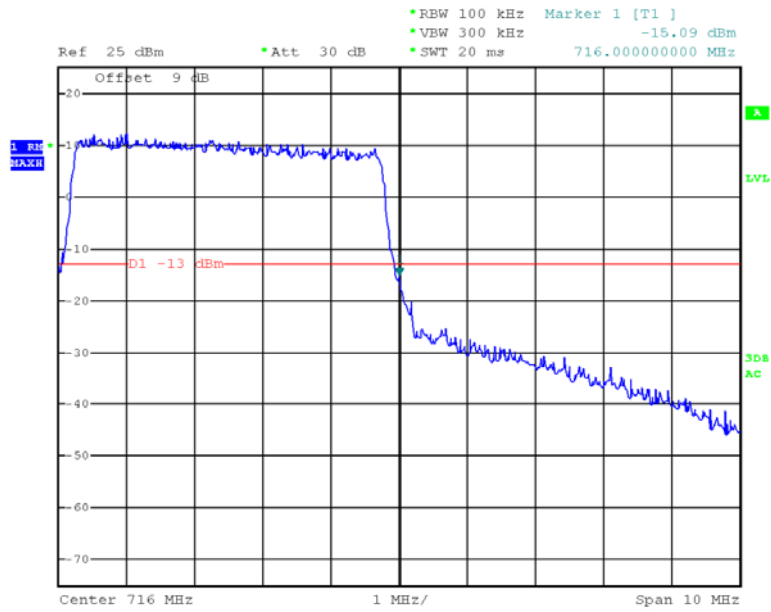
### Band 12\_5 MHz\_Low\_16QAM\_RB25#0



Date: 25.JUL.2020 14:55:10

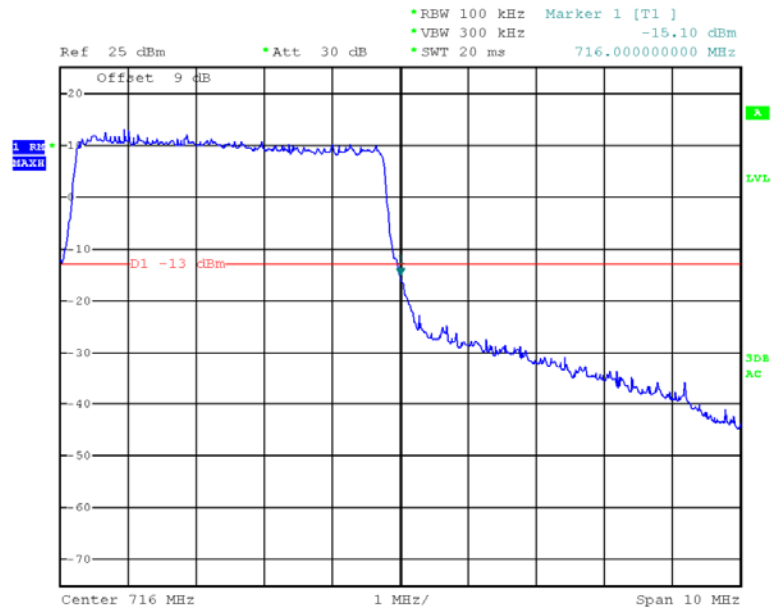


Band 12\_5 MHz\_High\_QPSK\_RB25#0



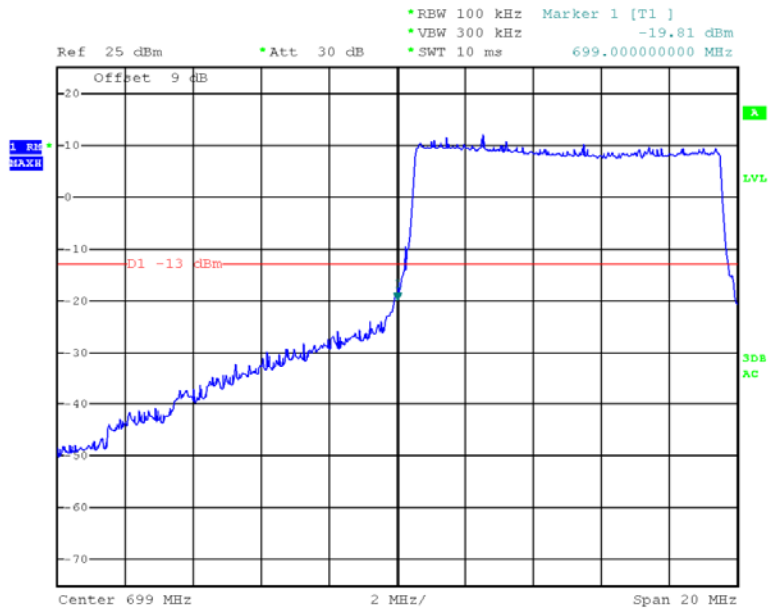
Date: 25.JUL.2020 14:53:55

Band 12\_5 MHz\_High\_16QAM\_RB25#0



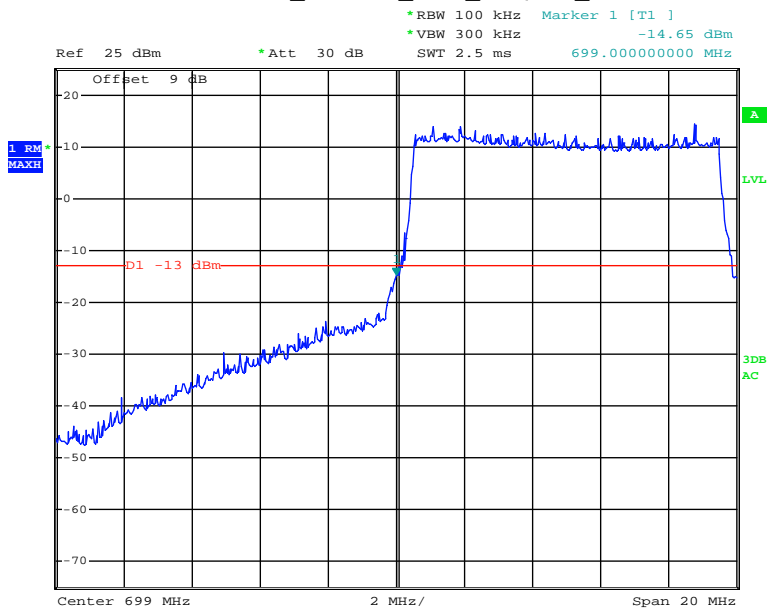
Date: 25.JUL.2020 14:53:33

Band 12\_10 MHz\_Low\_QPSK\_RB50#0



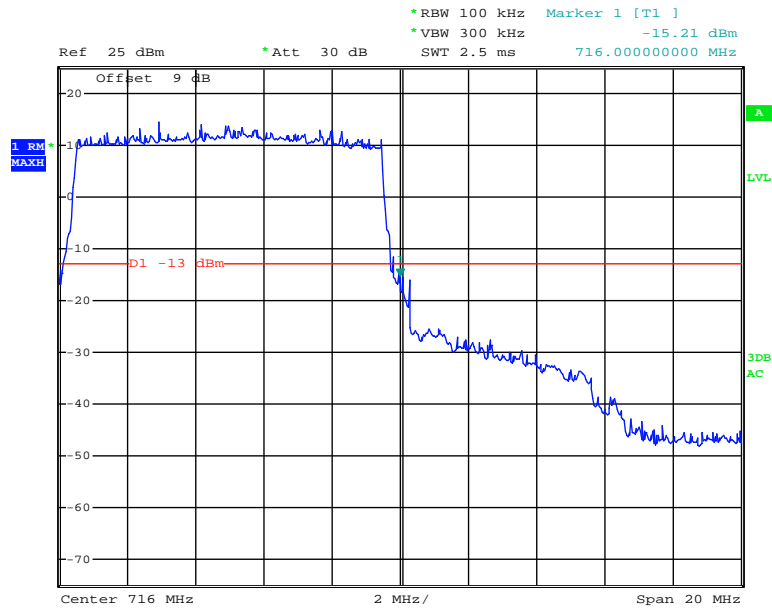
Date: 25.JUL.2020 14:52:09

Band 12\_10 MHz\_Low\_16QAM\_RB50#0



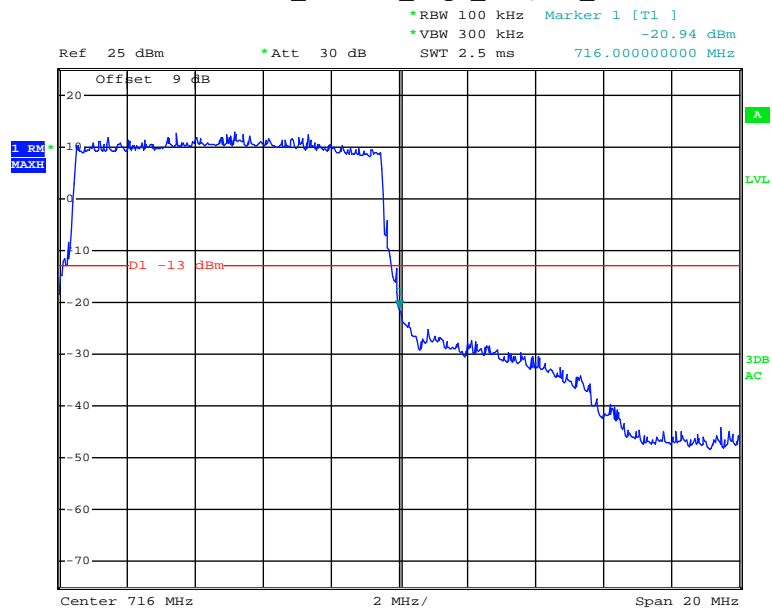
Date: 25.JUL.2020 13:12:43

### Band 12\_10 MHz\_High\_QPSK\_RB50#0



Date: 25.JUL.2020 13:13:02

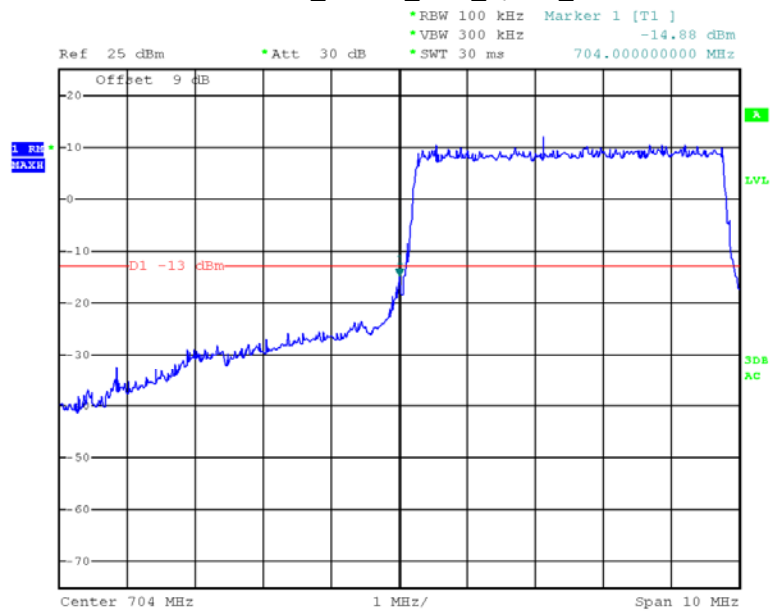
### Band 12\_10 MHz\_High\_16QAM\_RB50#0



Date: 25.JUL.2020 13:13:21

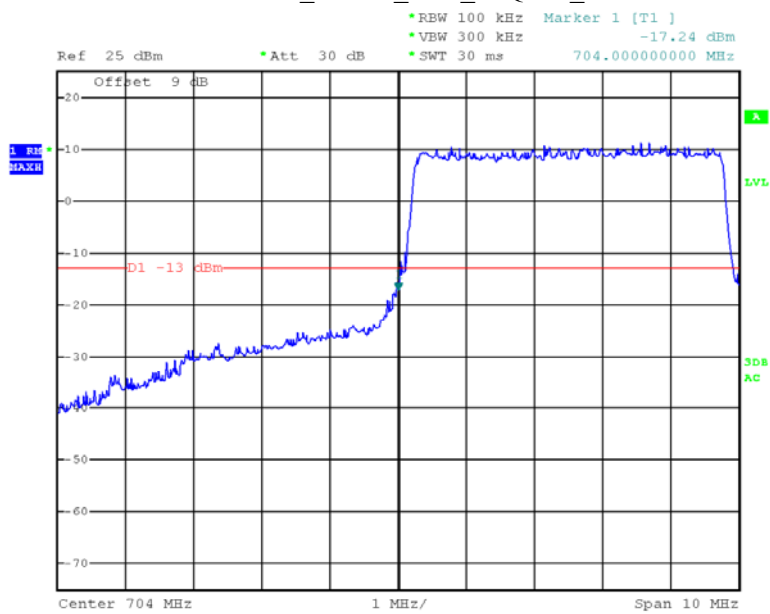
LTE Band 17

Band 17\_5 MHz\_Low\_QPSK\_RB25#0



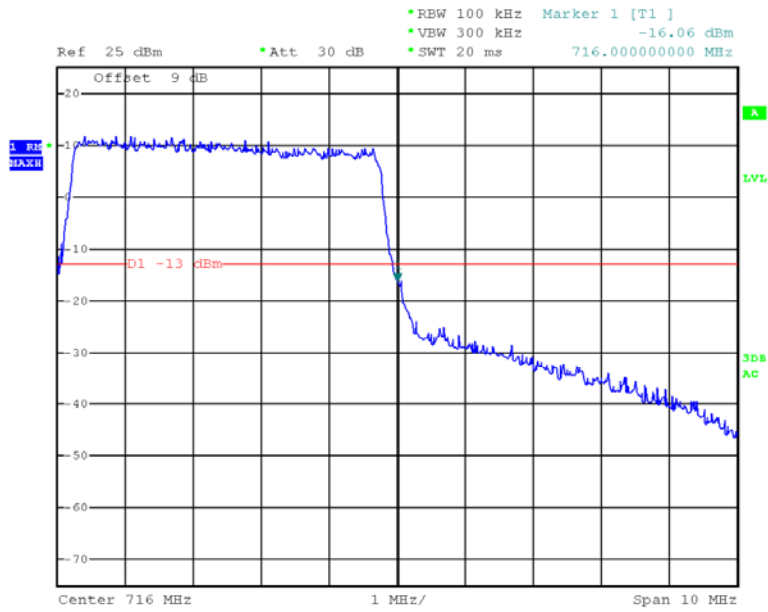
Date: 25.JUL.2020 14:49:35

Band 17\_5 MHz\_Low\_16QAM\_RB25#0



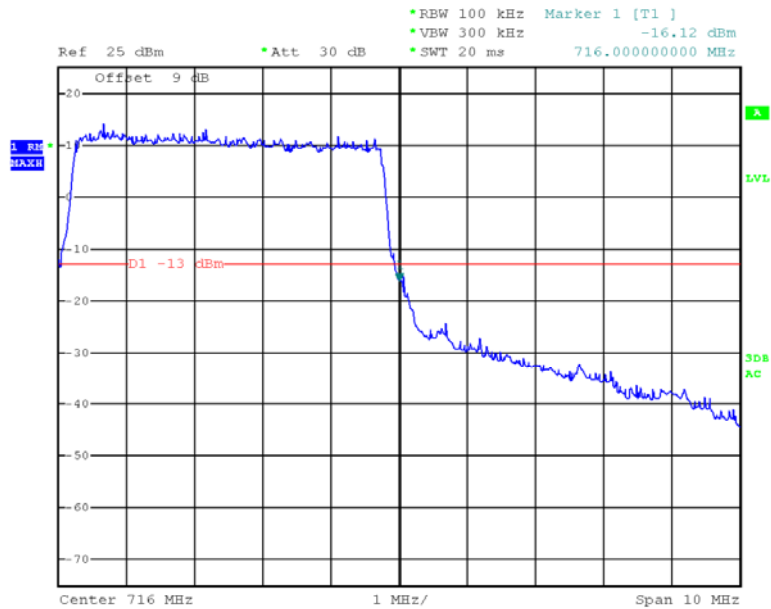
Date: 25.JUL.2020 14:49:09

### Band 17\_5 MHz\_High\_QPSK\_RB25#0



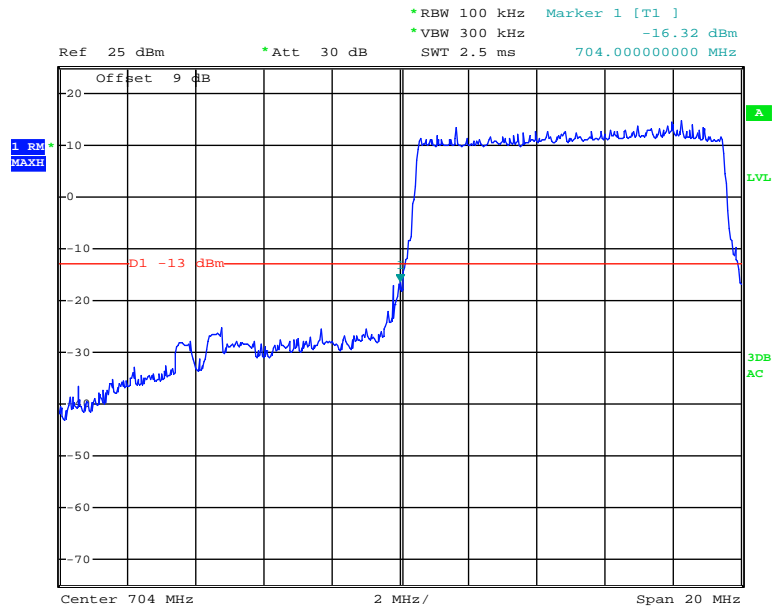
Date: 25.JUL.2020 14:47:58

### Band 17\_5 MHz\_High\_16QAM\_RB25#0



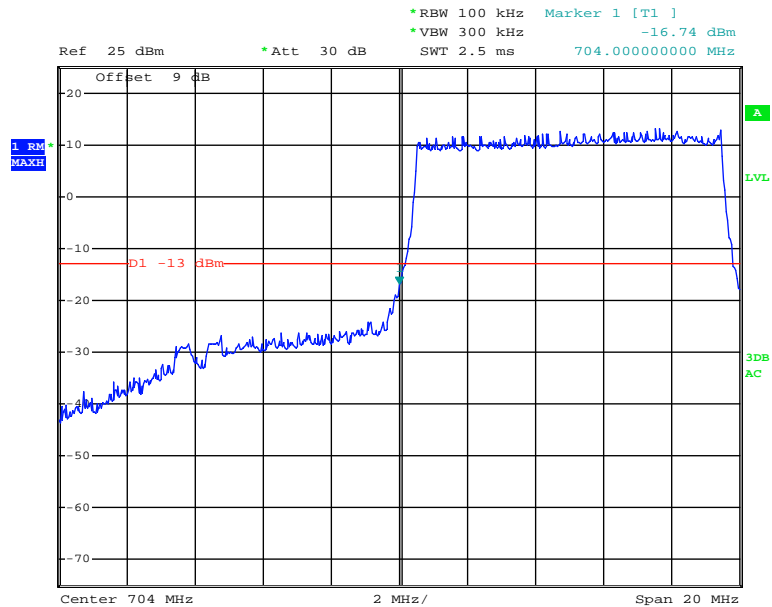
Date: 25.JUL.2020 14:47:26

Band 17\_10 MHz\_Low\_QPSK\_RB50#0



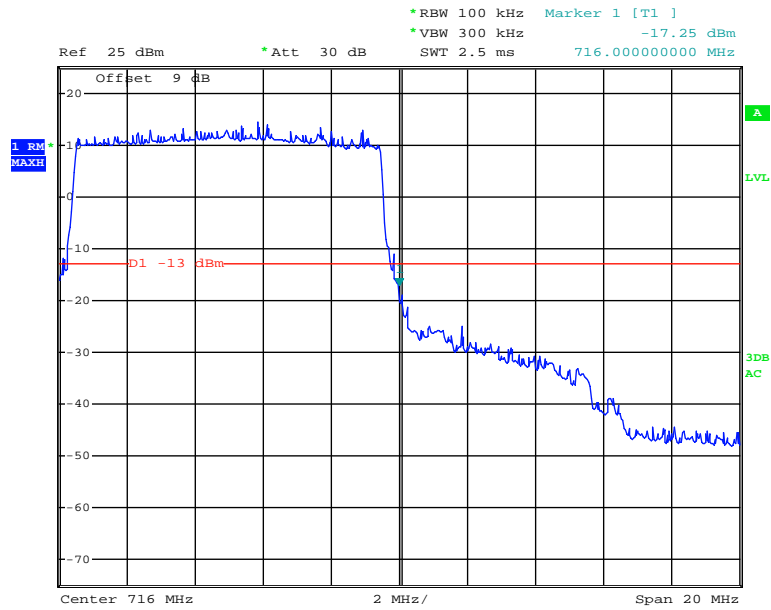
Date: 25.JUL.2020 13:15:06

Band 17\_10 MHz\_Low\_16QAM\_RB50#0



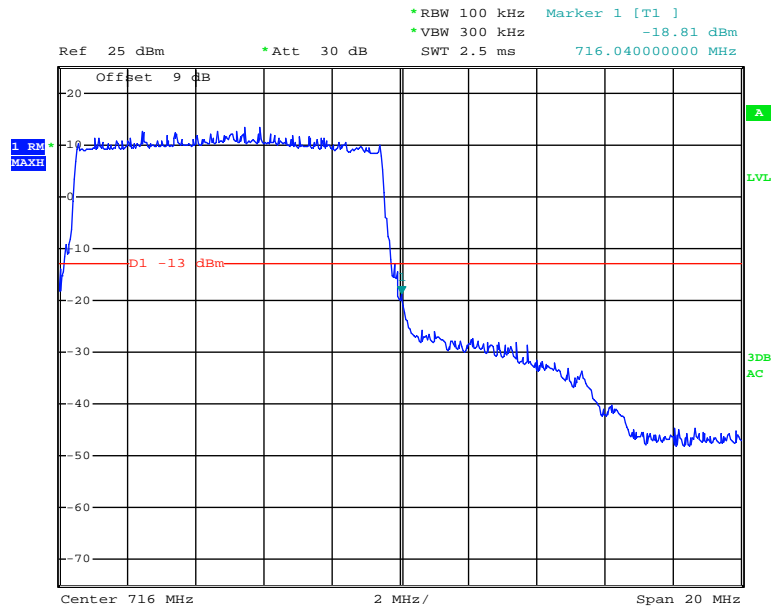
Date: 25.JUL.2020 13:15:28

### Band 17\_10 MHz\_High\_QPSK\_RB50#0



Date: 25.JUL.2020 13:15:47

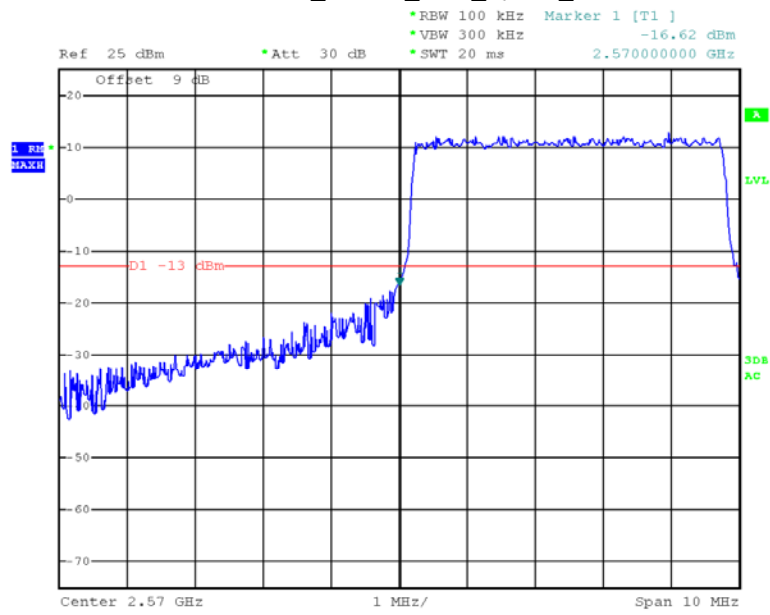
### Band 17\_10 MHz\_High\_16QAM\_RB50#0



Date: 25.JUL.2020 13:16:05

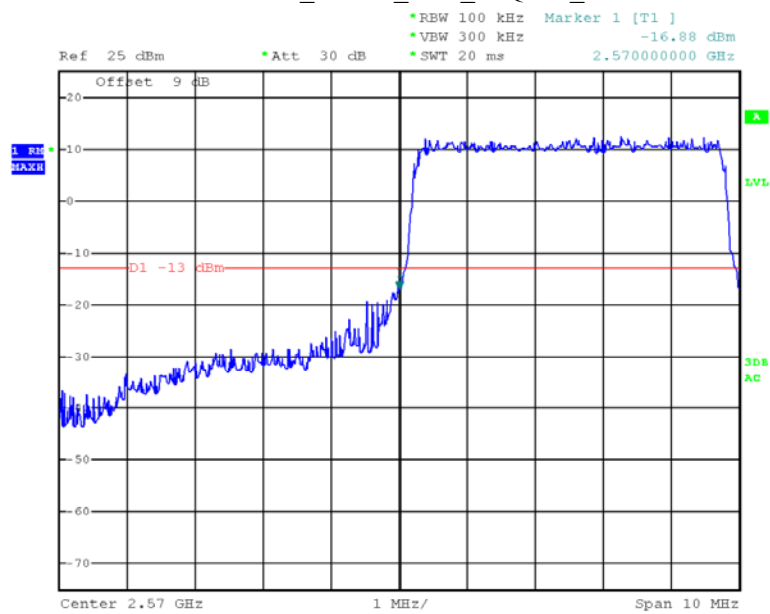
LTE Band 38

Band 38\_5 MHz\_Low\_QPSK\_RB25#0



Date: 25.JUL.2020 15:10:19

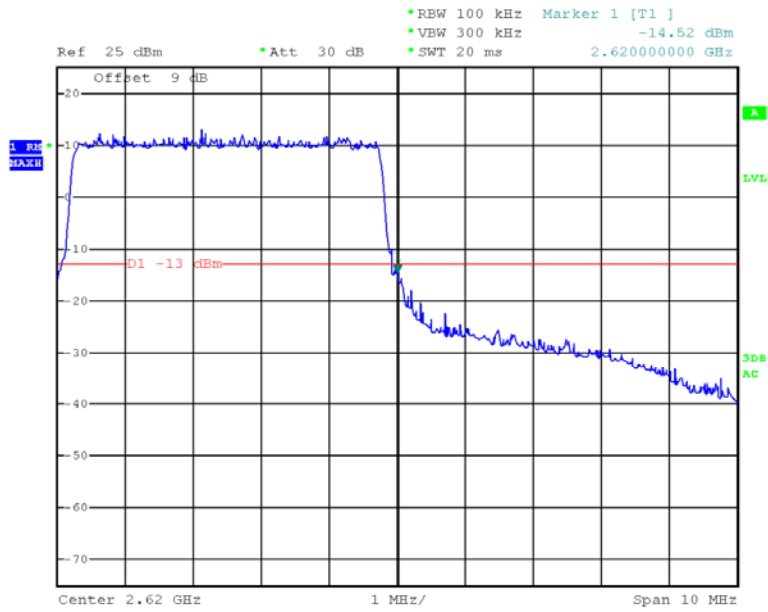
Band 38\_5 MHz\_Low\_16QAM\_RB25#0



Date: 25.JUL.2020 15:10:37

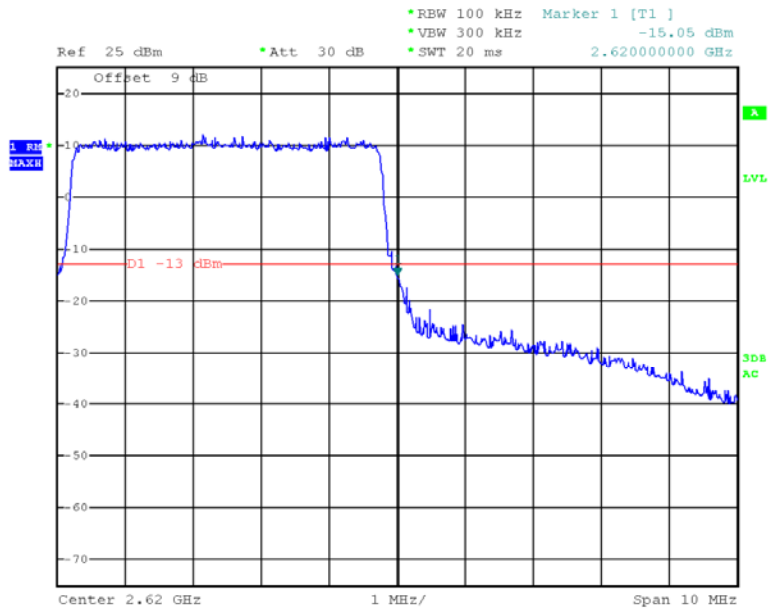


### Band 38\_5 MHz\_High\_QPSK\_RB25#0



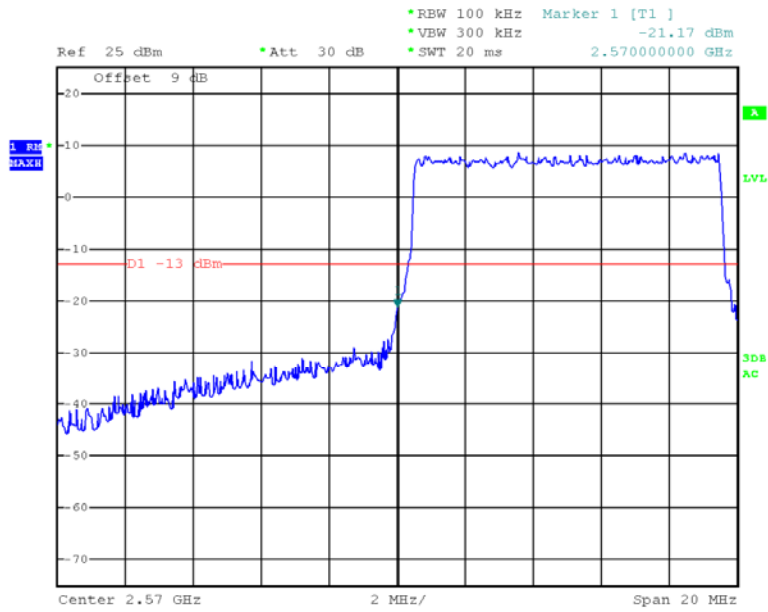
Date: 25.JUL.2020 15:11:38

### Band 38\_5 MHz\_High\_16QAM\_RB25#0



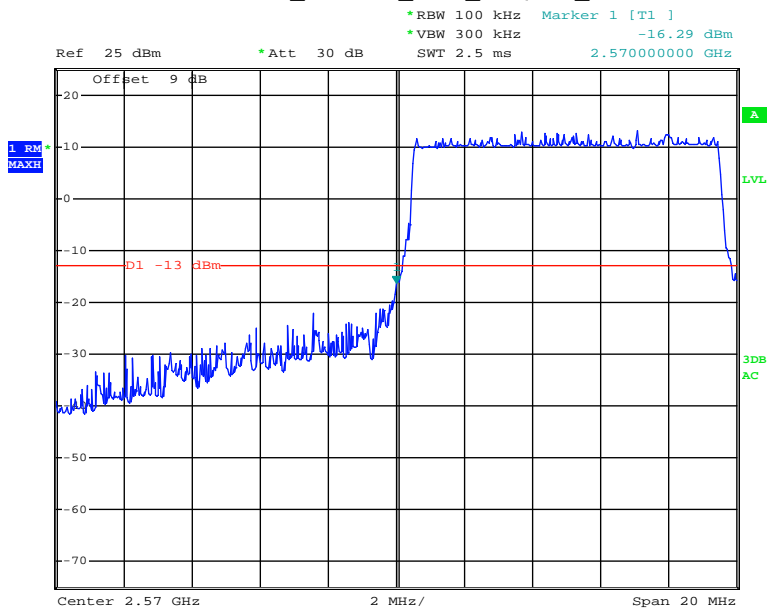
Date: 25.JUL.2020 15:11:59

Band 38\_10 MHz\_Low\_QPSK\_RB50#0



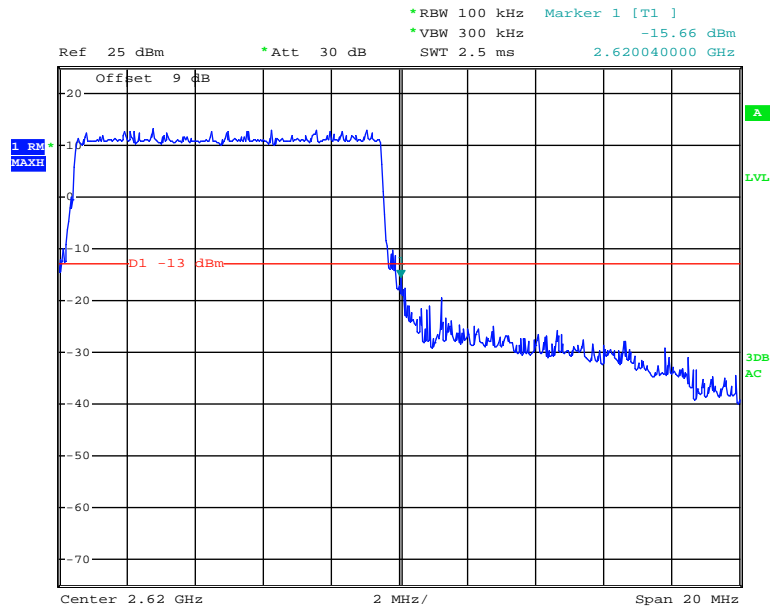
Date: 25.JUL.2020 15:13:17

Band 38\_10 MHz\_Low\_16QAM\_RB50#0



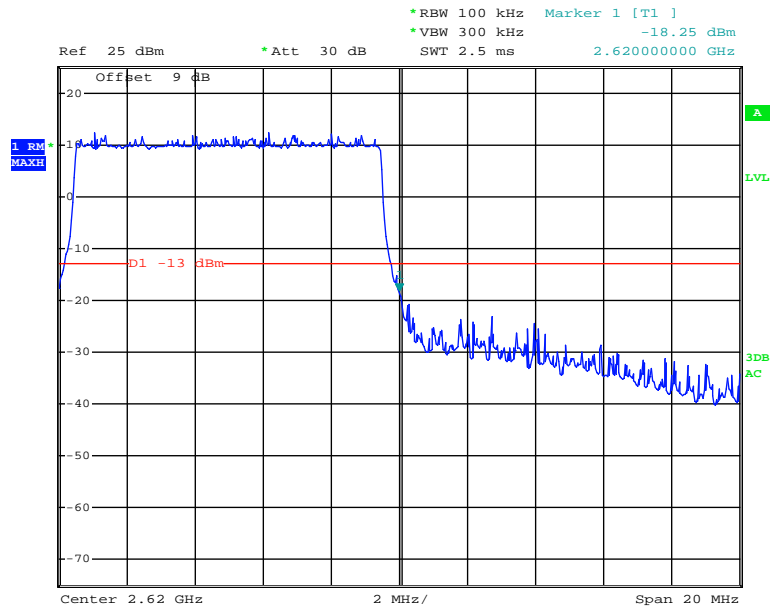
Date: 25.JUL.2020 13:18:53

Band 38\_10 MHz\_High\_QPSK\_RB50#0



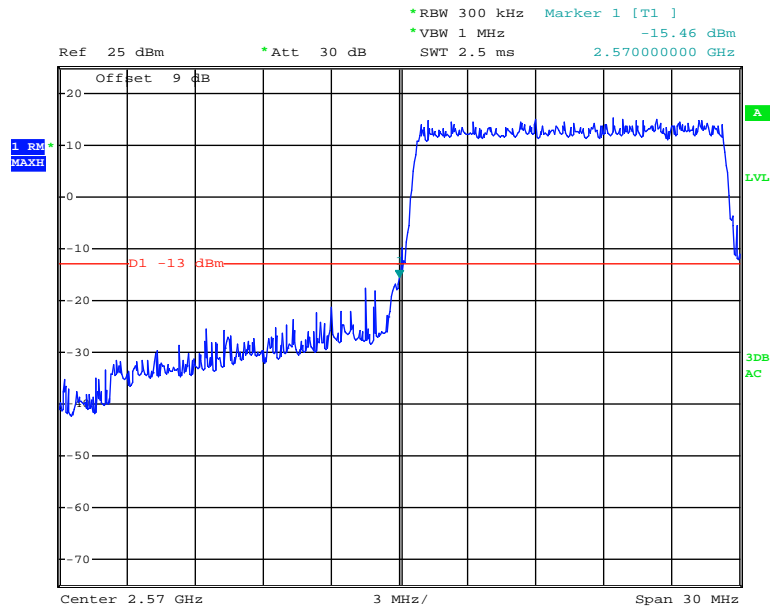
Date: 25.JUL.2020 13:19:15

Band 38\_10 MHz\_High\_16QAM\_RB50#0



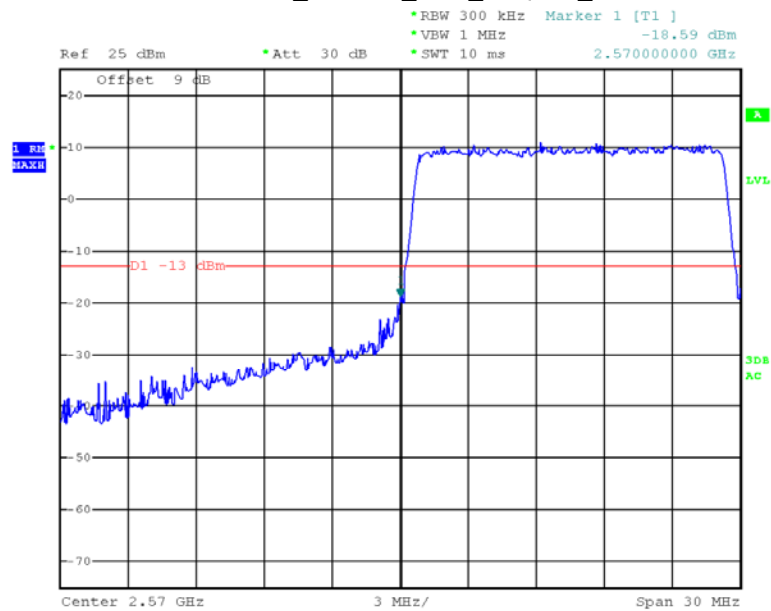
Date: 25.JUL.2020 13:19:36

Band 38\_15 MHz\_Low\_QPSK\_RB75#0



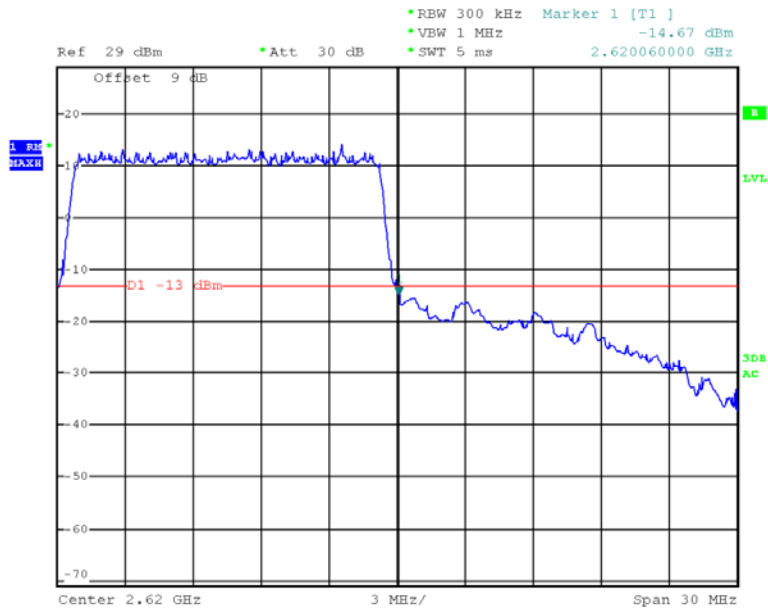
Date: 25.JUL.2020 13:20:04

Band 38\_15 MHz\_Low\_16QAM\_RB75#0



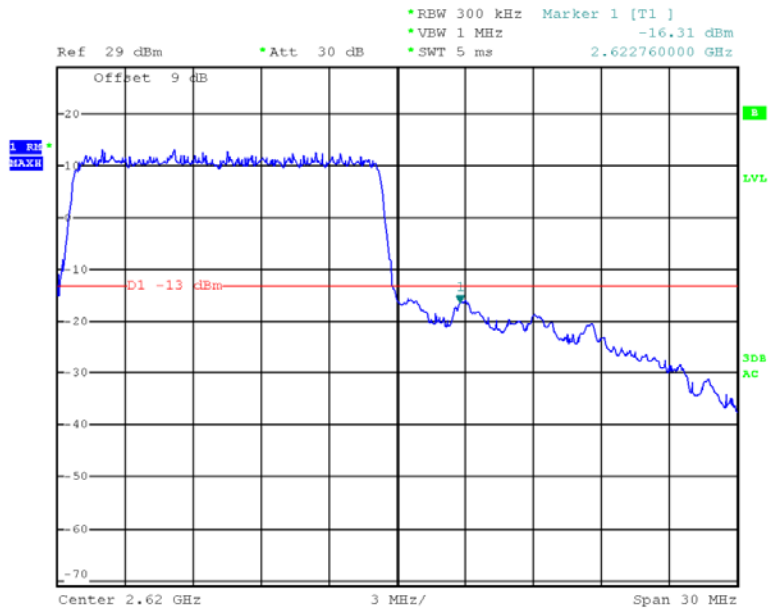
Date: 25.JUL.2020 15:15:13

### Band 38\_15 MHz\_High\_QPSK\_RB75#0



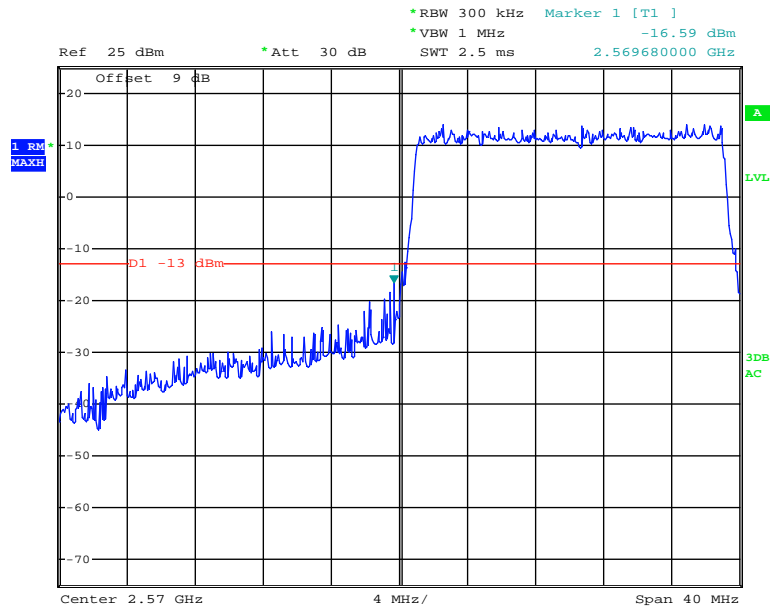
Date: 25.JUL.2020 18:24:52

### Band 38\_15 MHz\_High\_16QAM\_RB75#0



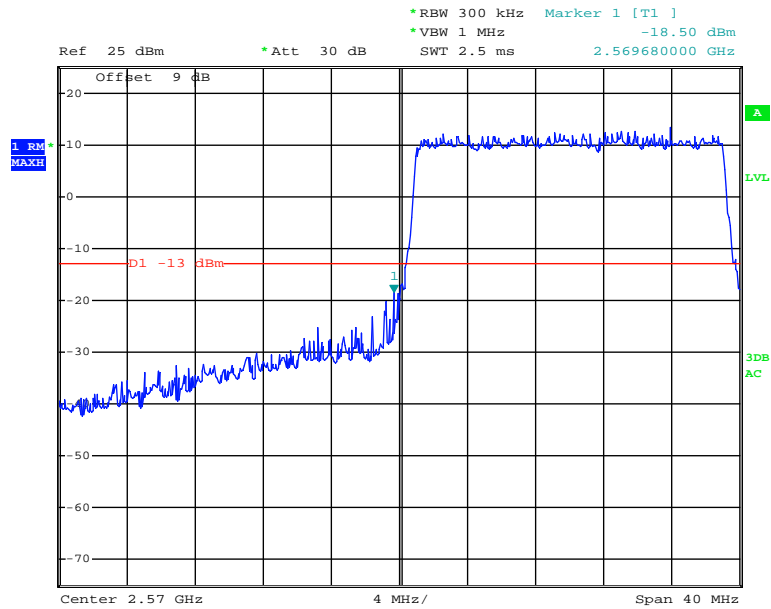
Date: 25.JUL.2020 18:25:25

Band 38\_20 MHz\_Low\_QPSK\_RB100#0



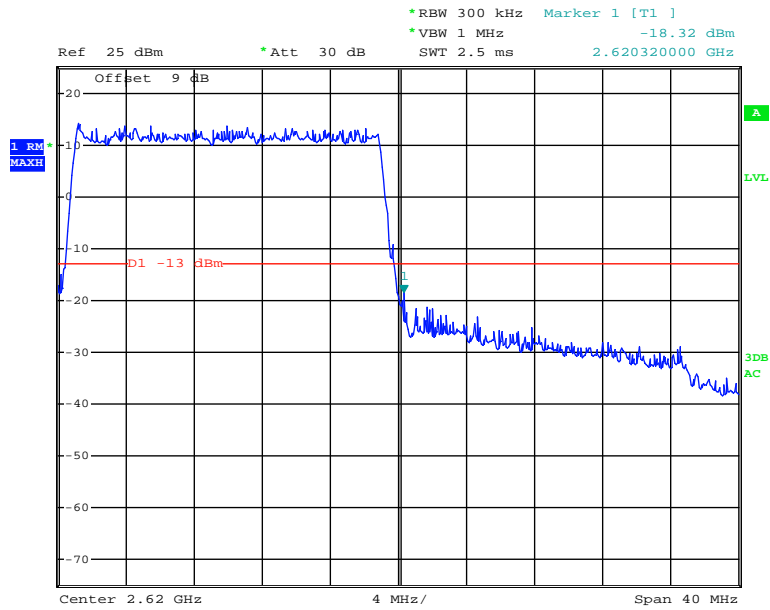
Date: 25.JUL.2020 13:21:48

Band 38\_20 MHz\_Low\_16QAM\_RB100#0



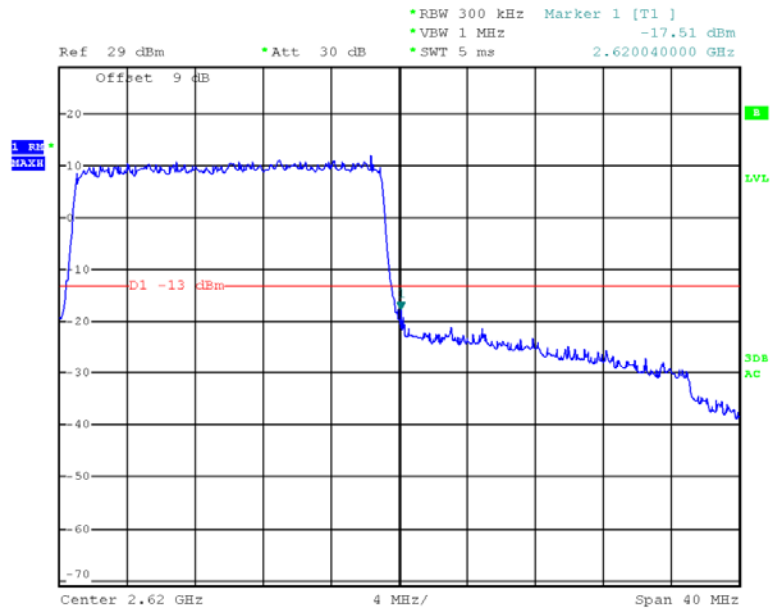
Date: 25.JUL.2020 13:22:12

### Band 38\_20 MHz\_High\_QPSK\_RB100#0



Date: 25.JUL.2020 13:22:39

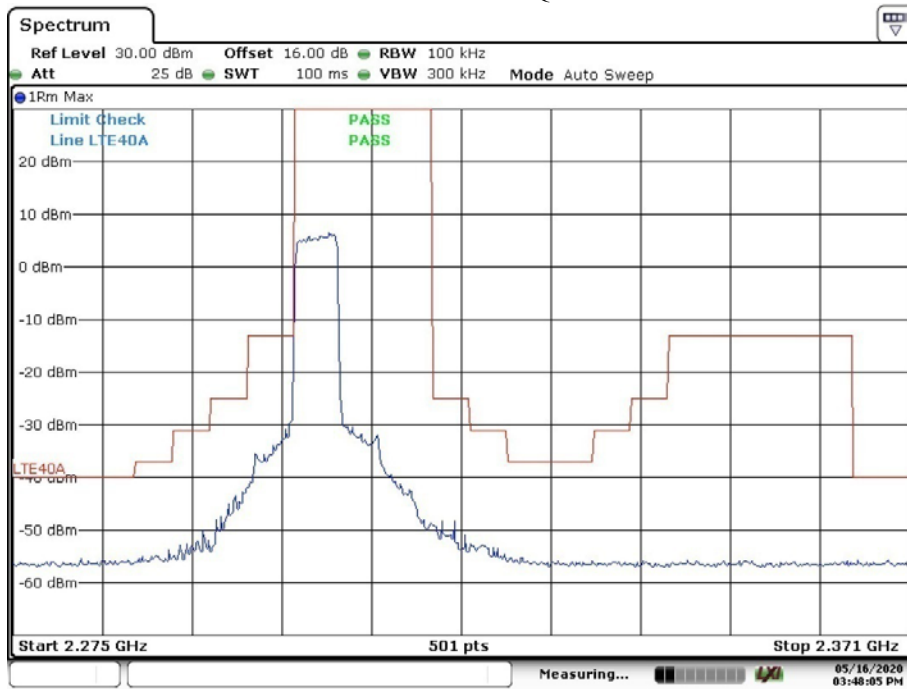
### Band 38\_20 MHz\_High\_16QAM\_RB100#0



Date: 25.JUL.2020 18:27:59

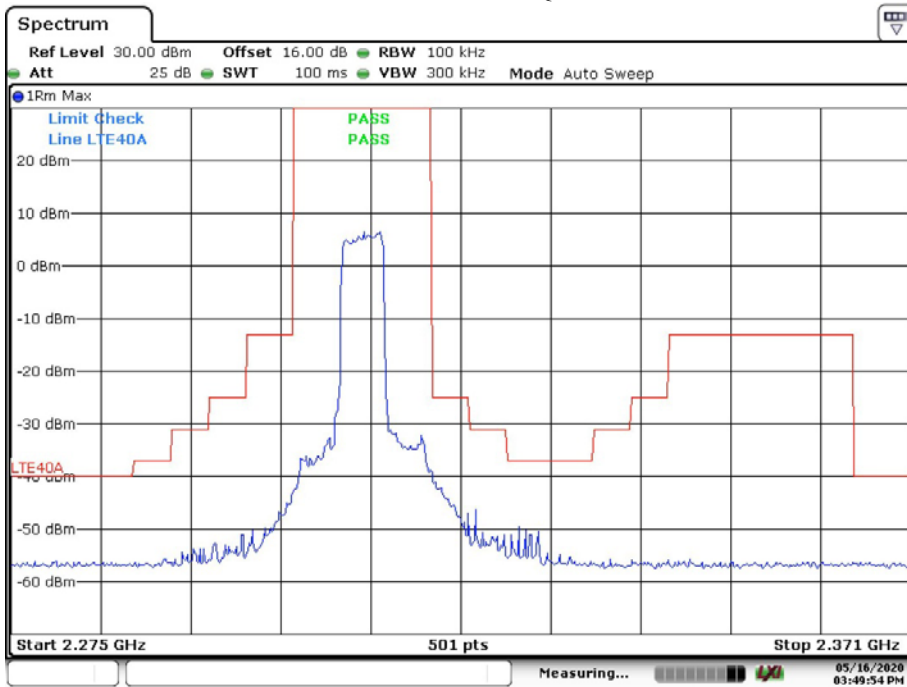
LTE Band 40

Band 40-Lower 5M-QPSK-L



Date: 16.MAY.2020 15:48:05

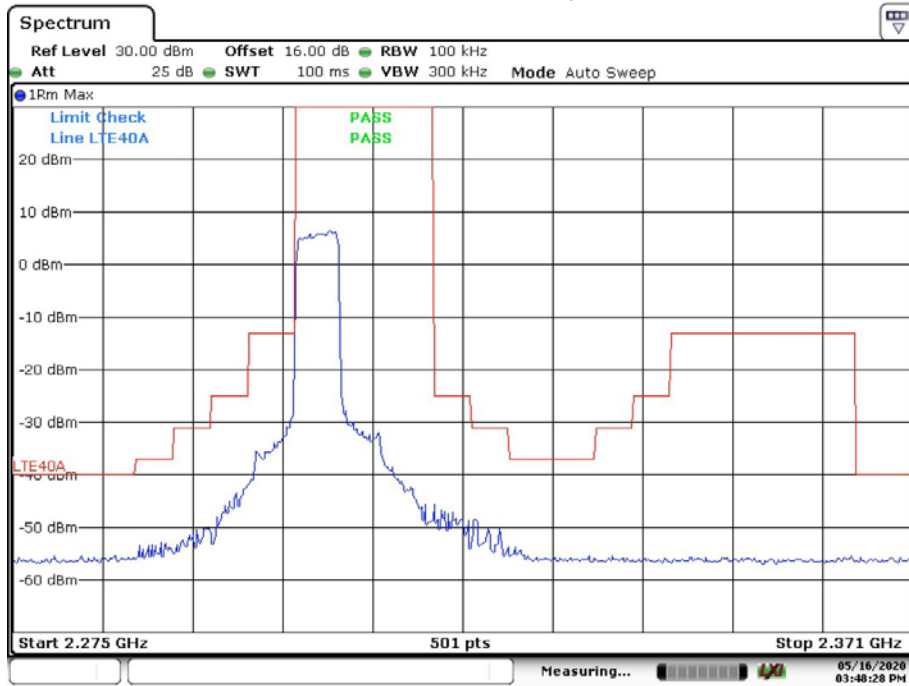
Band 40- Lower 5M-QPSK-H



Date: 16.MAY.2020 15:49:54

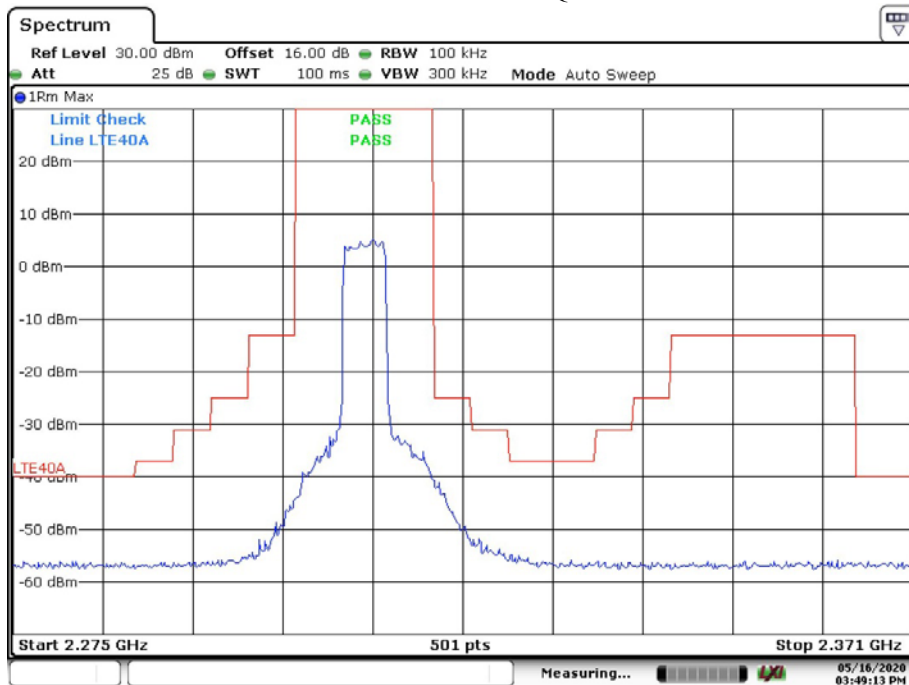


Band 40- Lower 5M-16QAM-L



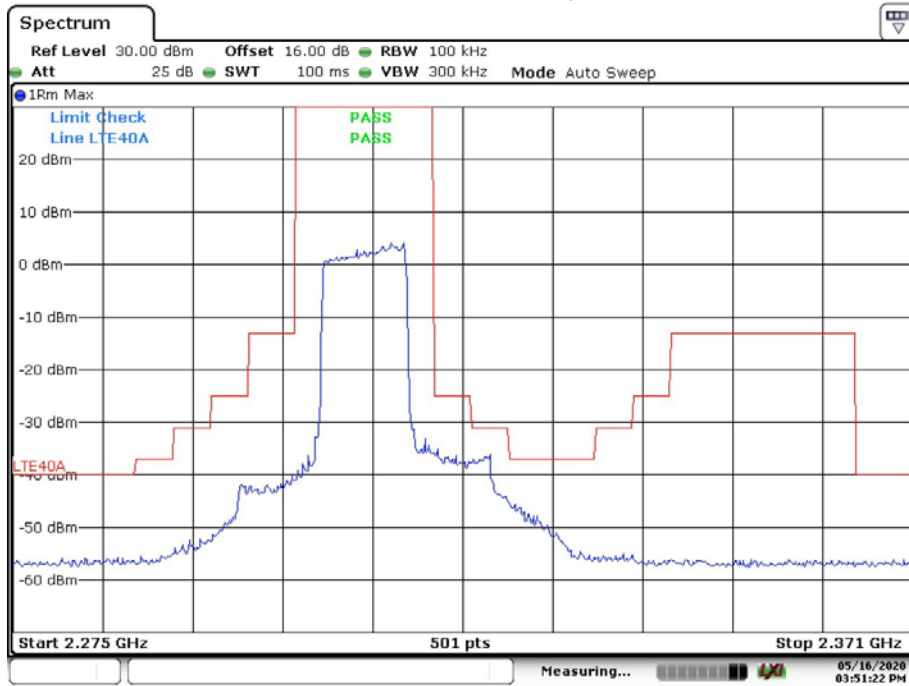
Date: 16.MAY.2020 15:48:28

Band 40- Lower 5M-16QAM-H



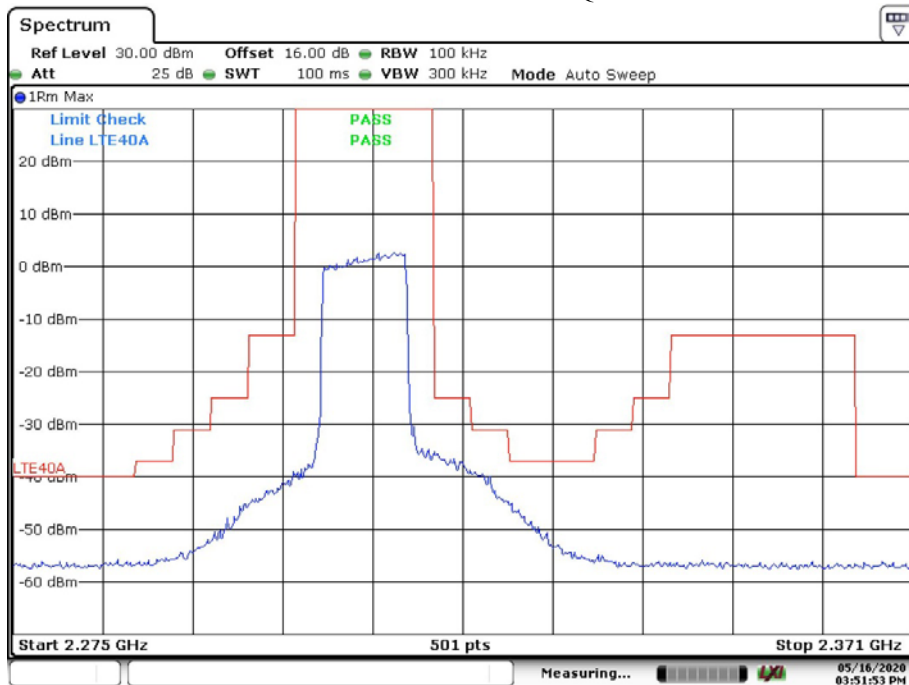
Date: 16.MAY.2020 15:49:13

### Band 40- Lower 10M-QPSK



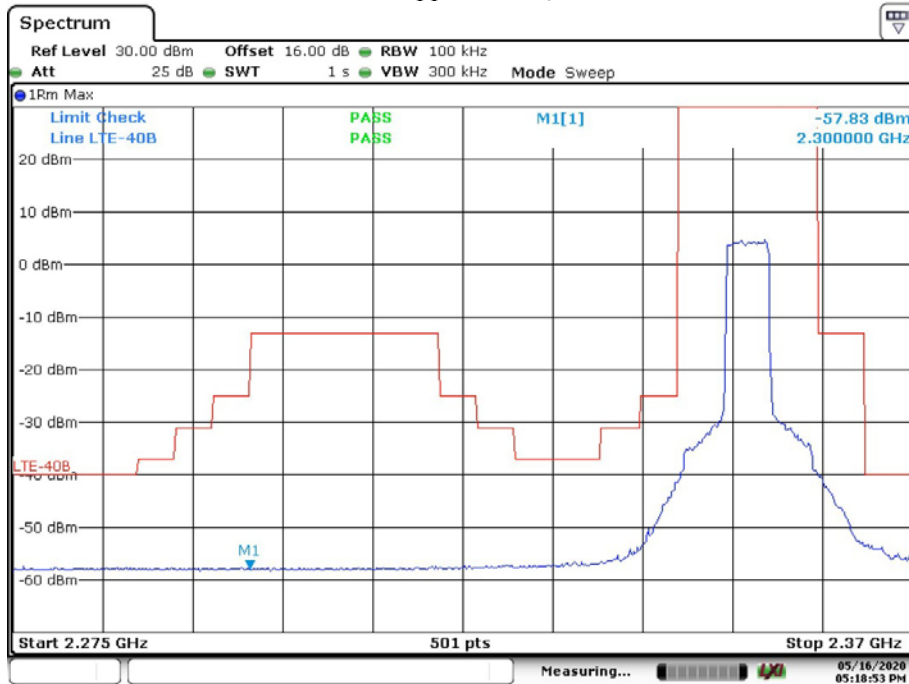
Date: 16.MAY.2020 15:51:22

### Band 40- Lower 10M-16QAM



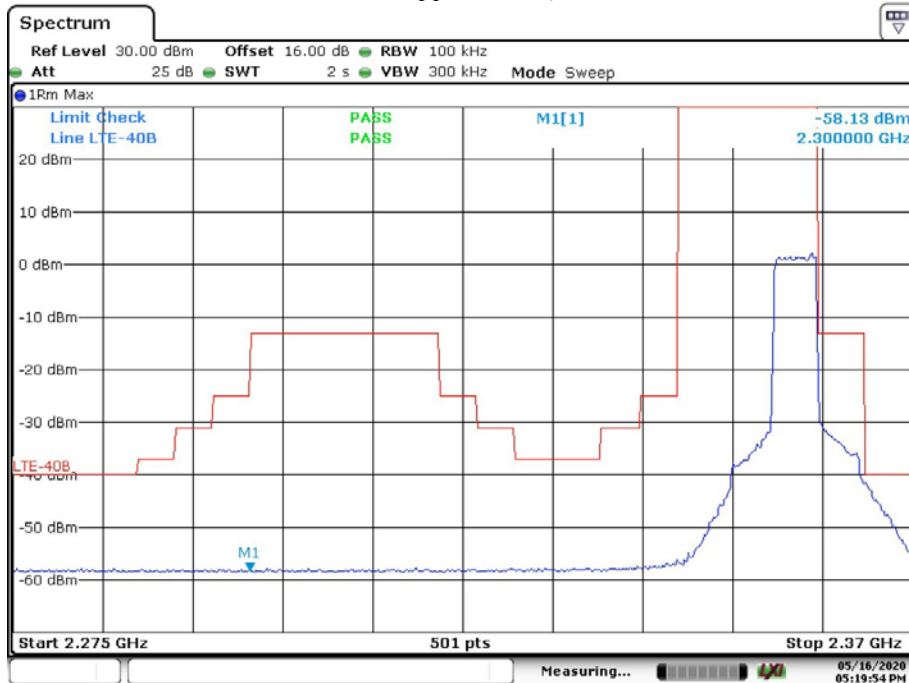
Date: 16.MAY.2020 15:51:53

Band 40-Upper 5M-QPSK-L



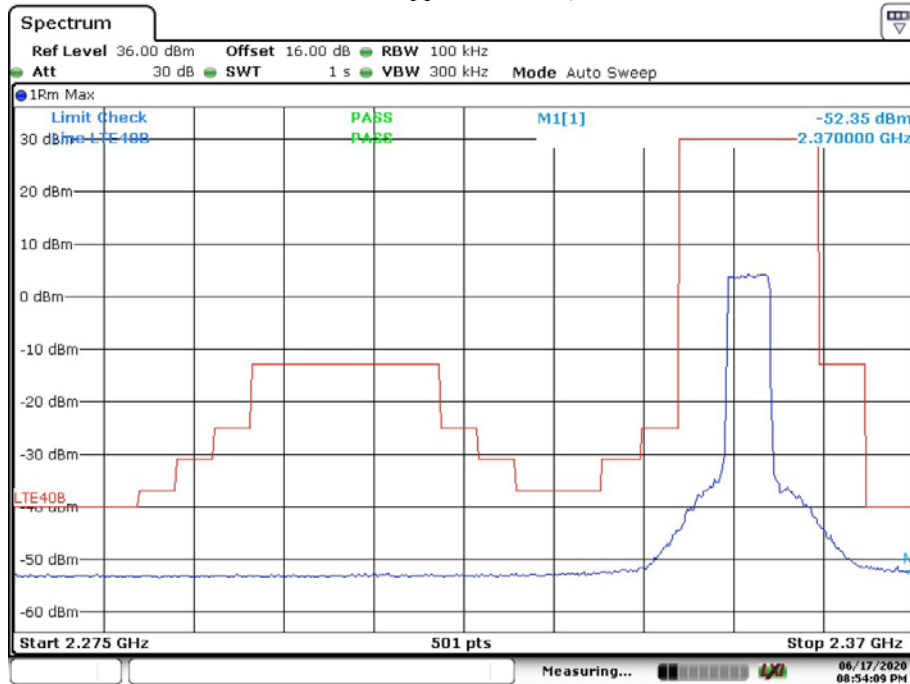
Date: 16.MAY.2020 17:18:53

Band 40- Upper 5M-QPSK-H

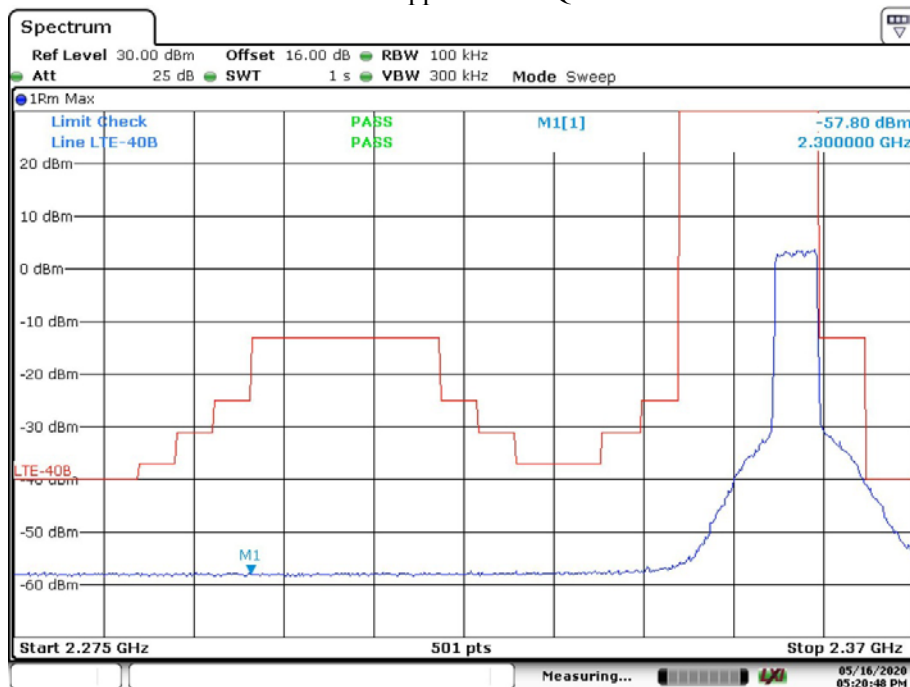


Date: 16.MAY.2020 17:19:54

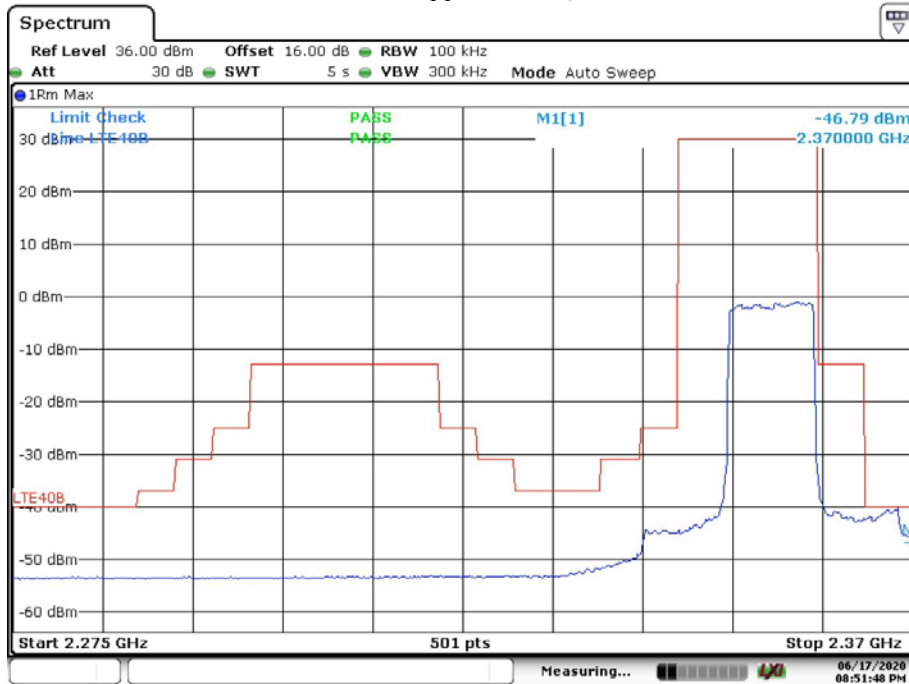
Band 40- Upper 5M-16QAM-L



Band 40- Upper 5M-16QAM-H

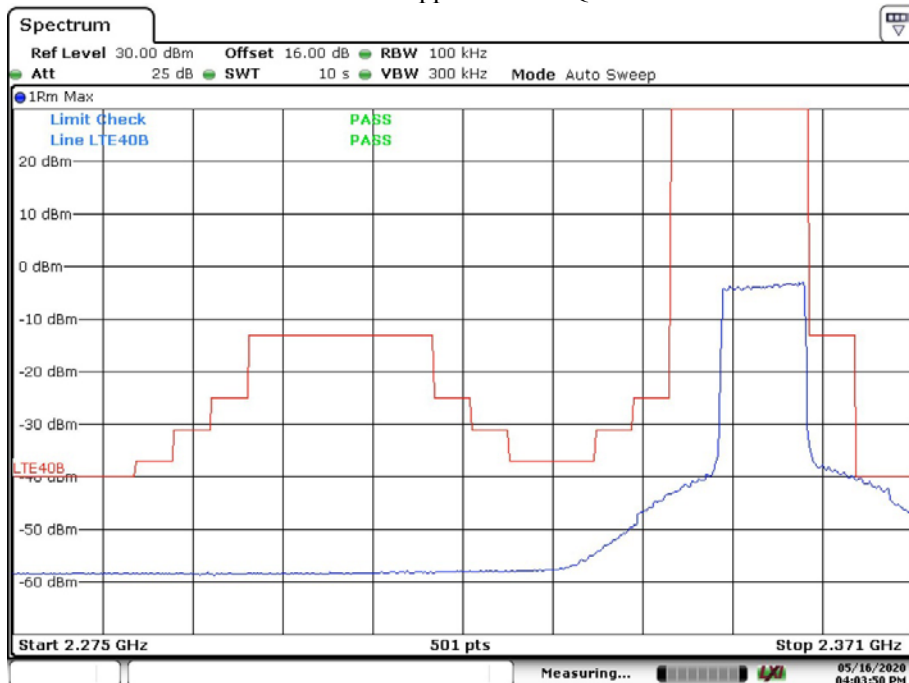


### Band 40- Upper 10M-QPSK



Date: 17.JUN.2020 20:51:48

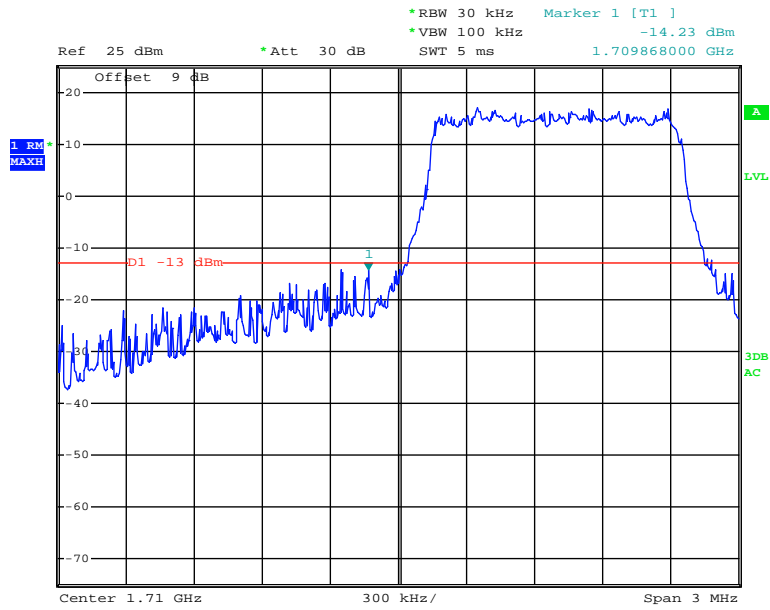
### Band 40- Upper 10M-16QAM



Date: 16.MAY.2020 16:03:50

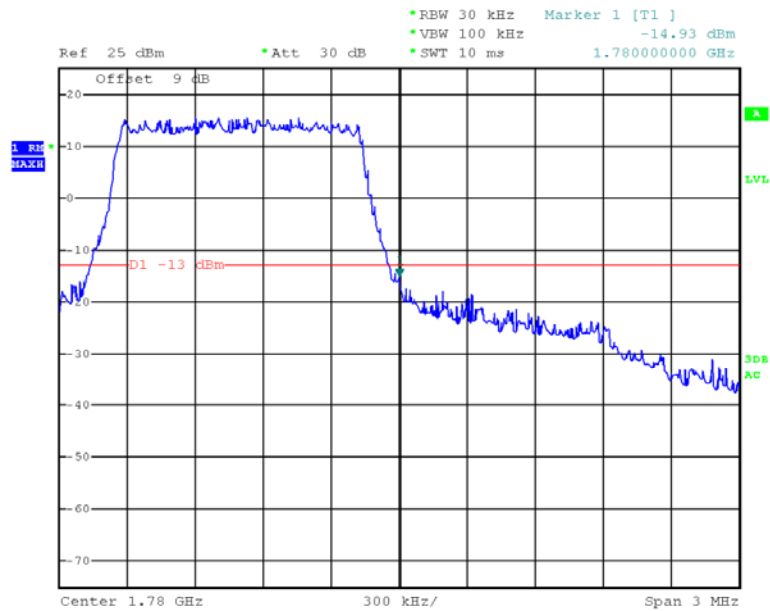
LTE Band 66

Band 66\_1.4 MHz\_Low\_QPSK\_RB6#0



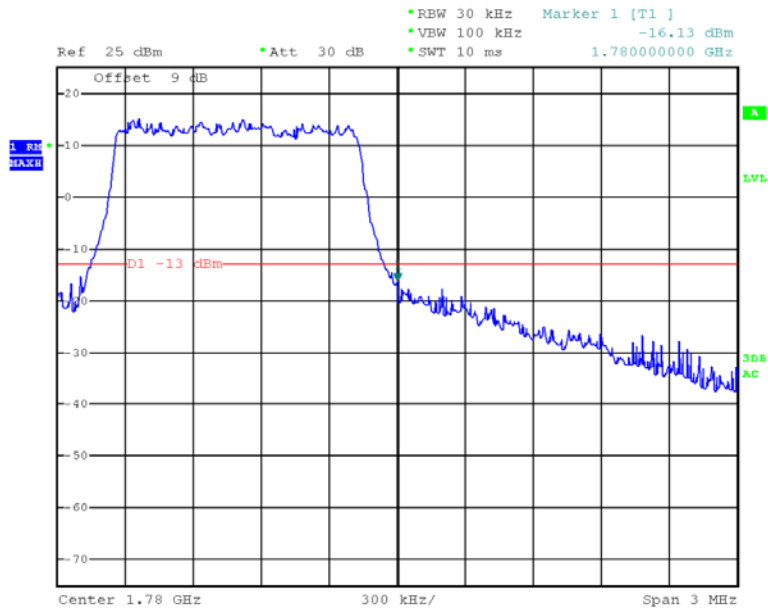
Date: 25.JUL.2020 13:23:28

Band 66\_1.4 MHz\_Low\_16QAM\_RB6#0



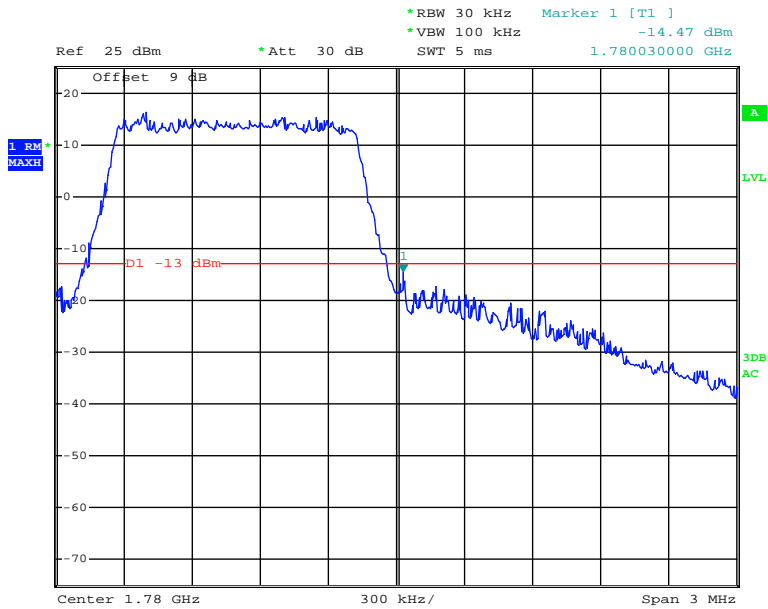
Date: 25.JUL.2020 14:44:45

### Band 66\_1.4 MHz\_High\_QPSK\_RB6#0



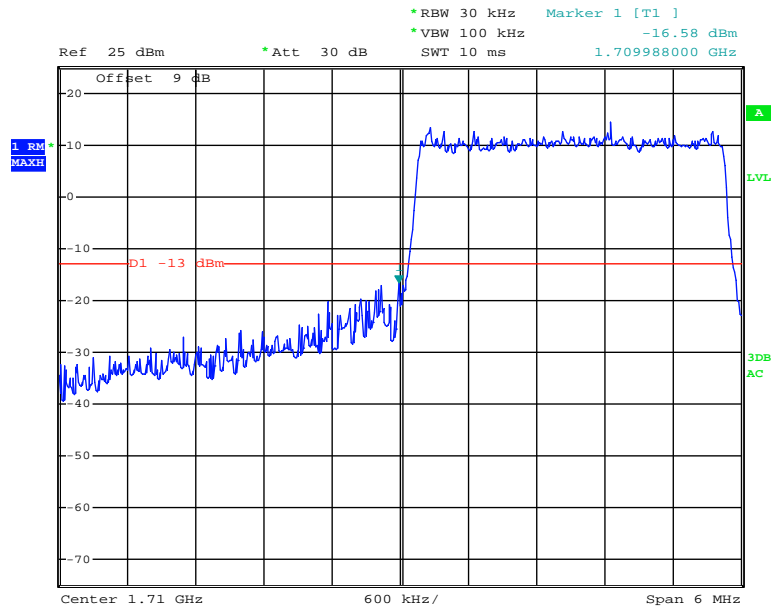
Date: 25.JUL.2020 14:44:03

### Band 66\_1.4 MHz\_High\_16QAM\_RB6#0



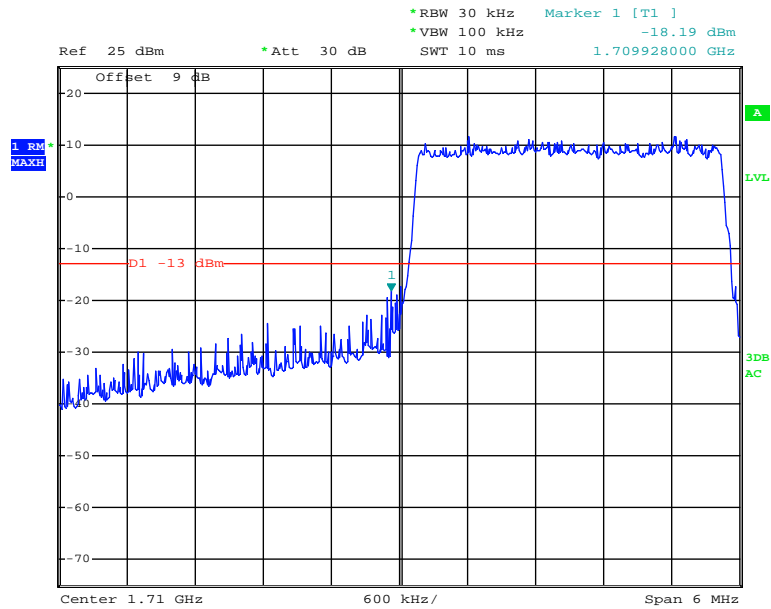
Date: 25.JUL.2020 13:24:30

Band 66\_3 MHz\_Low\_QPSK\_RB15#0



Date: 25.JUL.2020 13:24:59

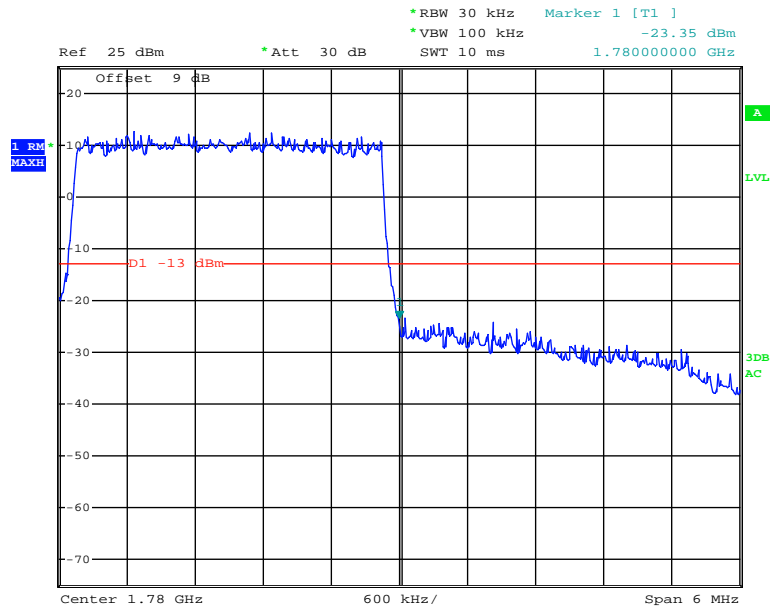
Band 66\_3 MHz\_Low\_16QAM\_RB15#0



Date: 25.JUL.2020 13:25:16

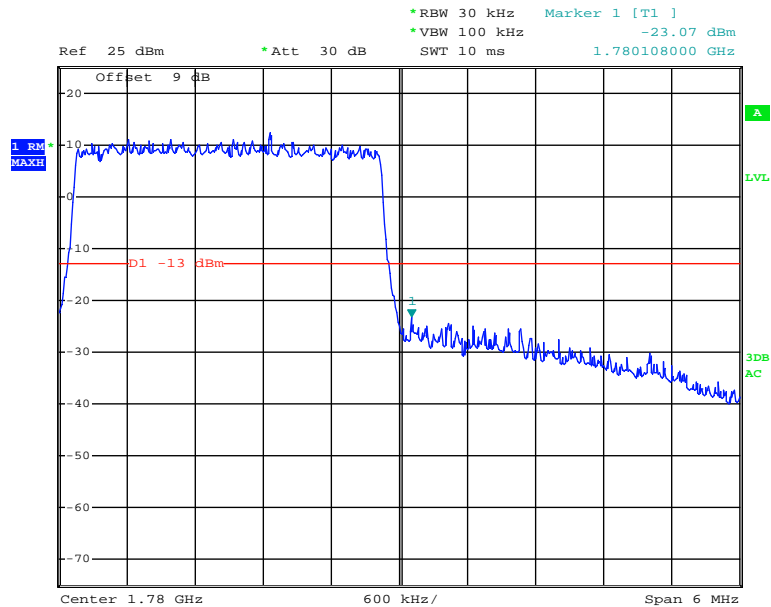


### Band 66\_3 MHz\_High\_QPSK\_RB15#0



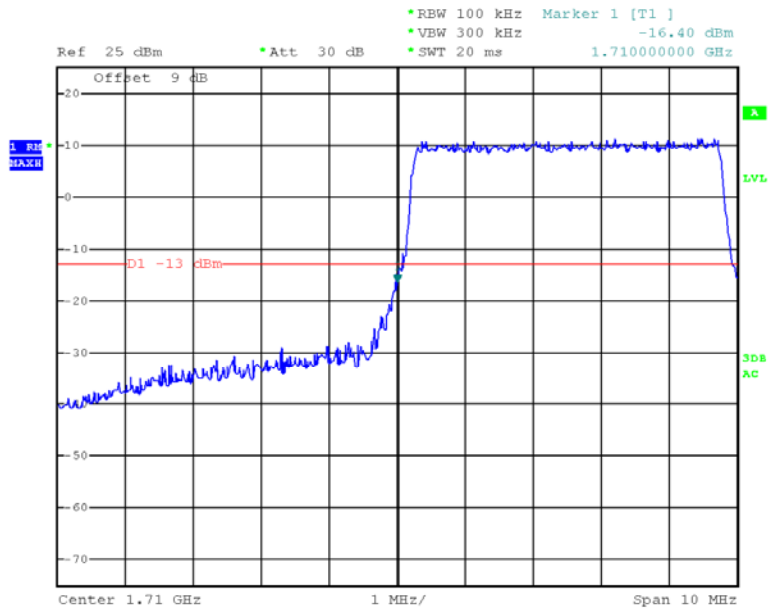
Date: 25.JUL.2020 13:25:34

### Band 66\_3 MHz\_High\_16QAM\_RB15#0



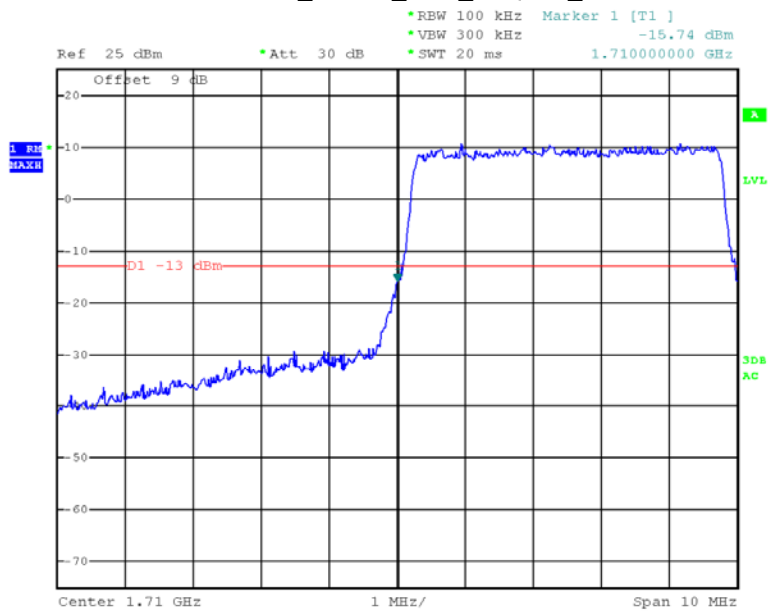
Date: 25.JUL.2020 13:25:54

Band 66\_5 MHz\_Low\_QPSK\_RB25#0



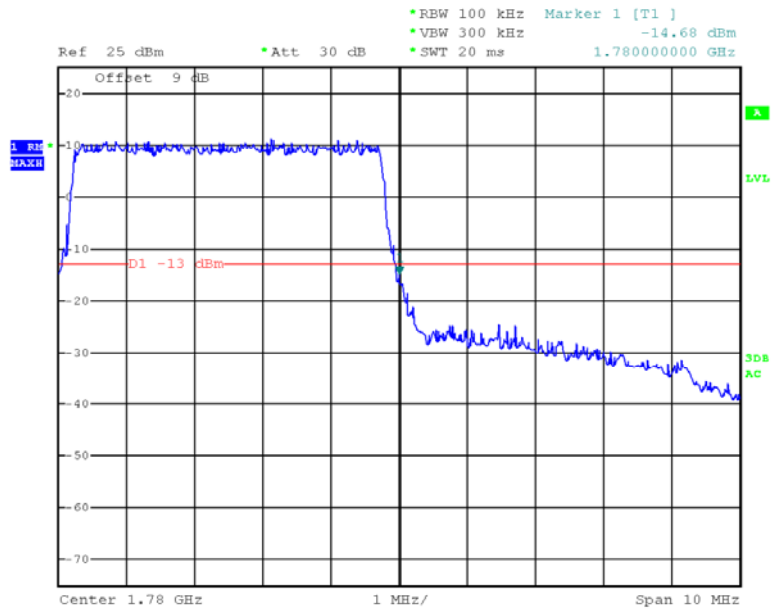
Date: 25.JUL.2020 14:42:34

Band 66\_5 MHz\_Low\_16QAM\_RB25#0



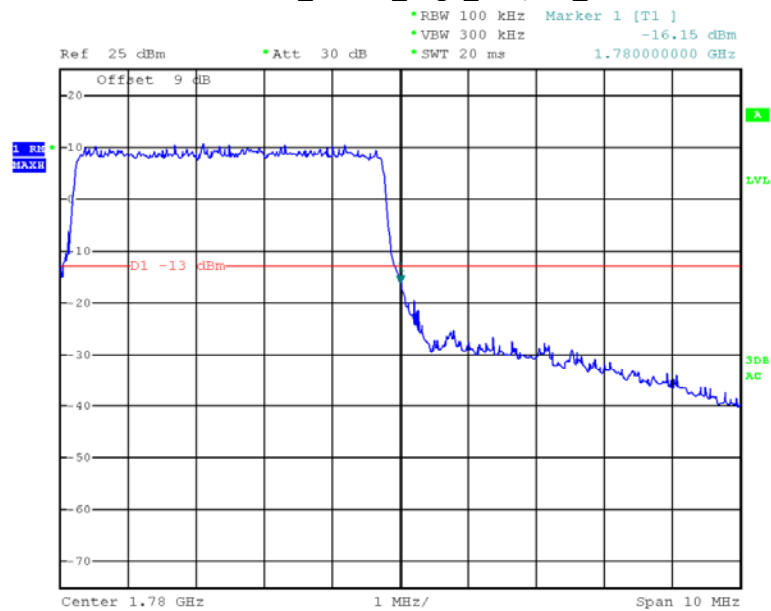
Date: 25.JUL.2020 14:42:01

### Band 66\_5 MHz\_High\_QPSK\_RB25#0



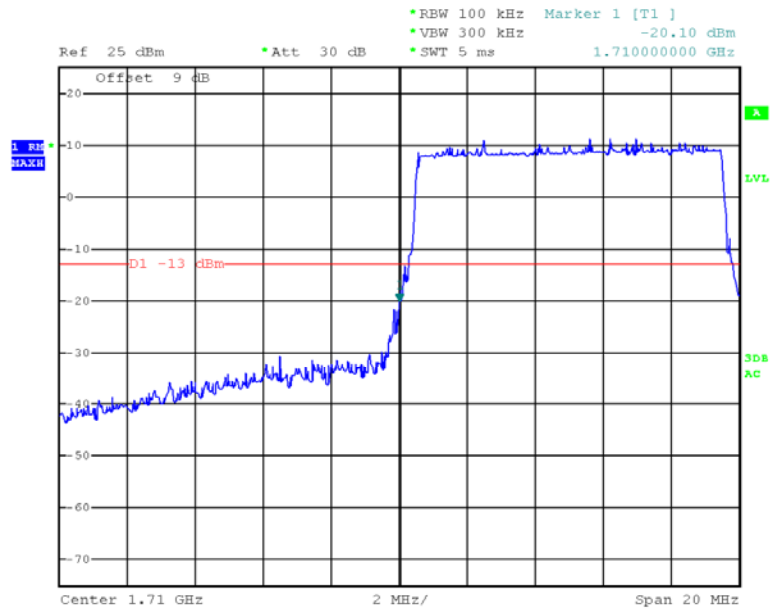
Date: 25.JUL.2020 14:40:57

### Band 66\_5 MHz\_High\_16QAM\_RB25#0



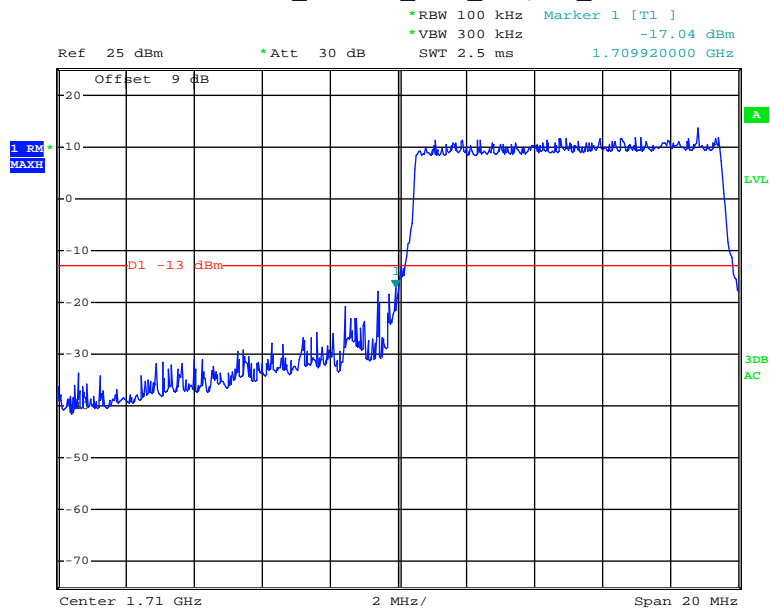
Date: 25.JUL.2020 14:40:23

Band 66\_10 MHz\_Low\_QPSK\_RB50#0



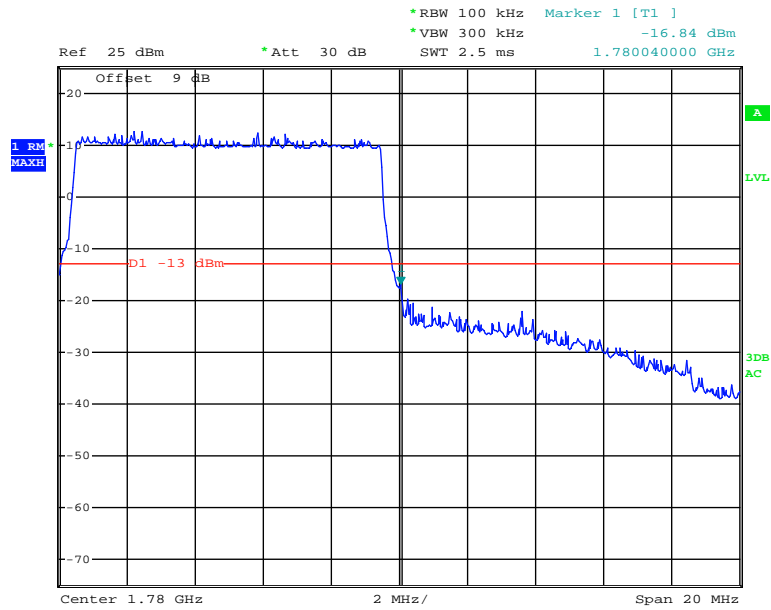
Date: 25.JUL.2020 14:36:27

Band 66\_10 MHz\_Low\_16QAM\_RB50#0



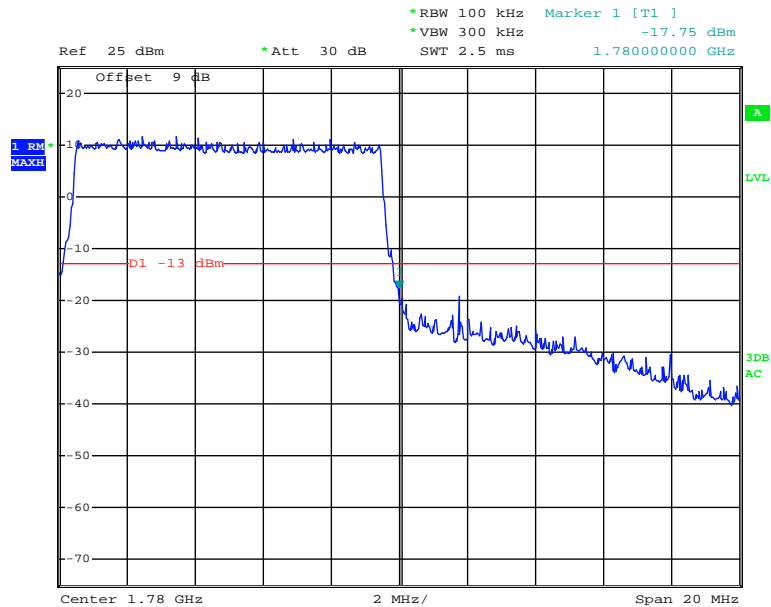
Date: 25.JUL.2020 13:28:07

### Band 66\_10 MHz\_High\_QPSK\_RB50#0



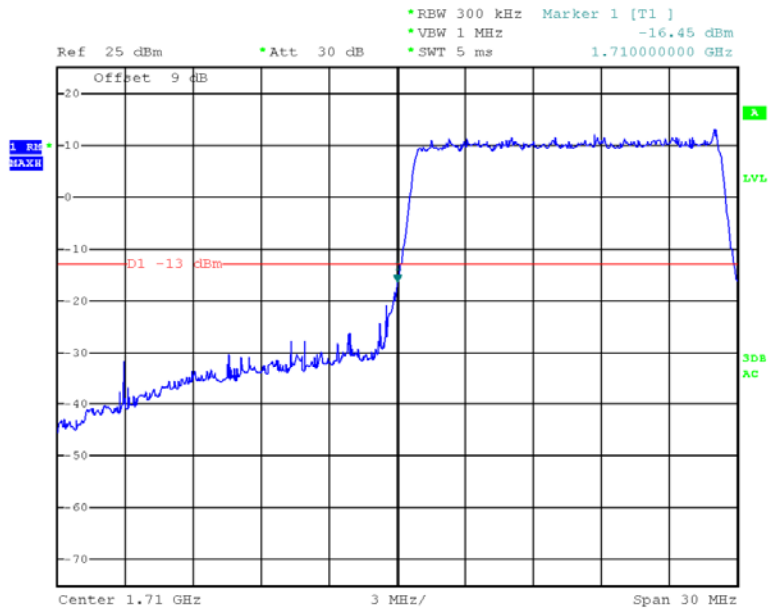
Date: 25.JUL.2020 13:28:26

### Band 66\_10 MHz\_High\_16QAM\_RB50#0



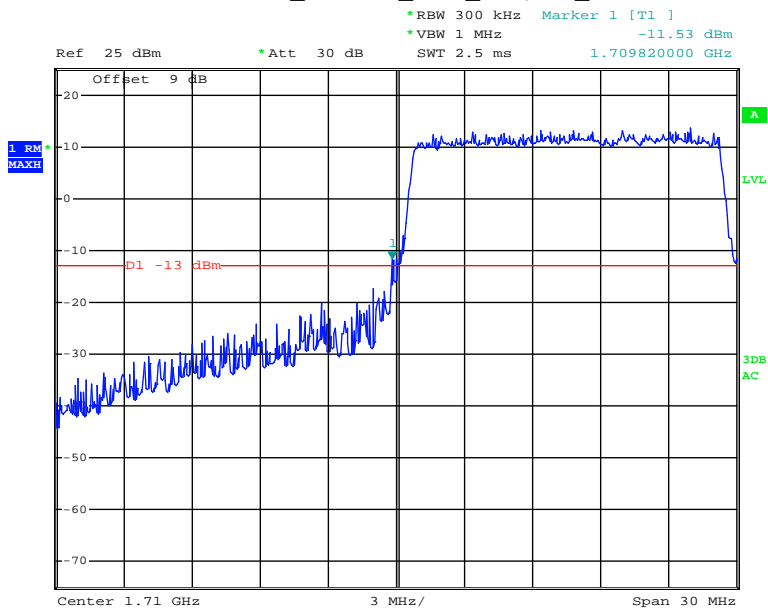
Date: 25.JUL.2020 13:28:48

Band 66\_15 MHz\_Low\_QPSK\_RB75#0



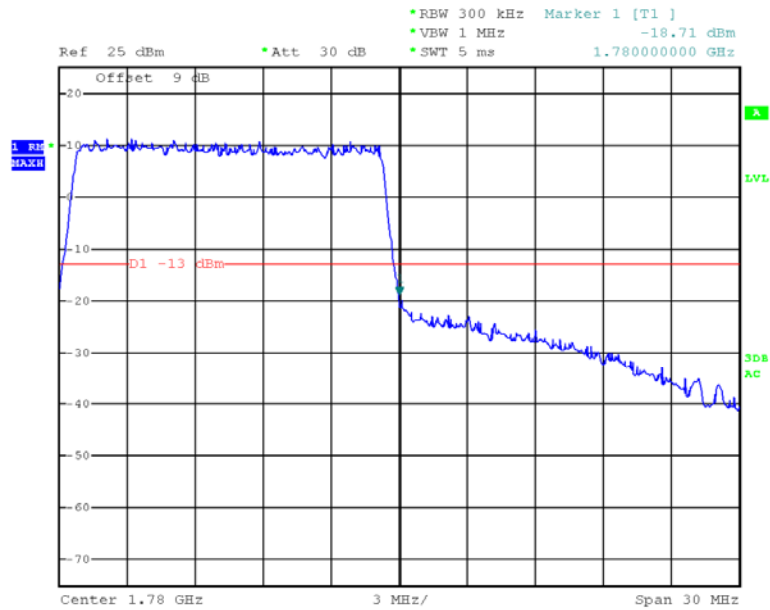
Date: 25.JUL.2020 14:34:14

Band 66\_15 MHz\_Low\_16QAM\_RB75#0



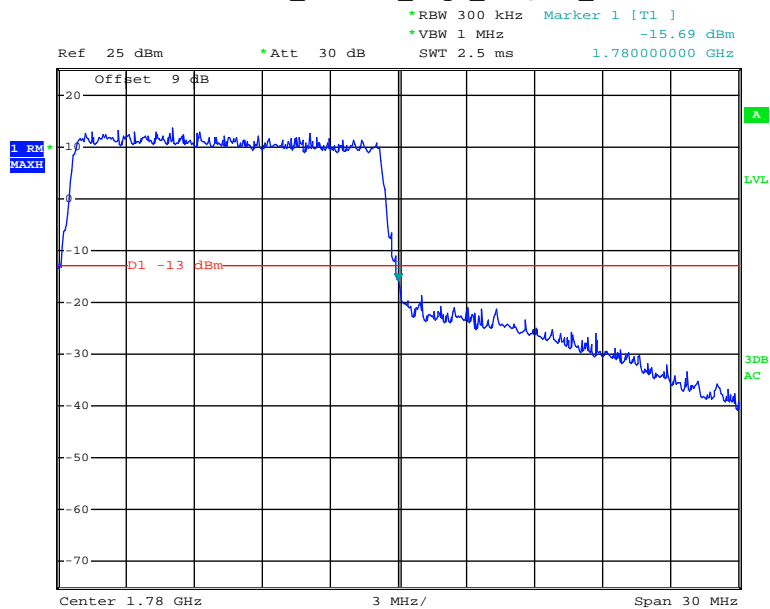
Date: 25.JUL.2020 13:29:47

Band 66\_15 MHz\_High\_QPSK\_RB75#0



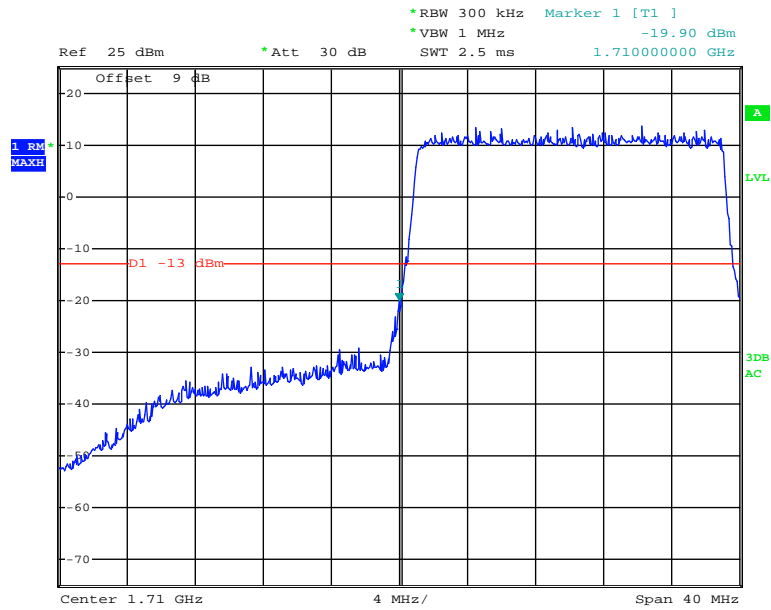
Date: 25.JUL.2020 14:32:43

Band 66\_15 MHz\_High\_16QAM\_RB75#0



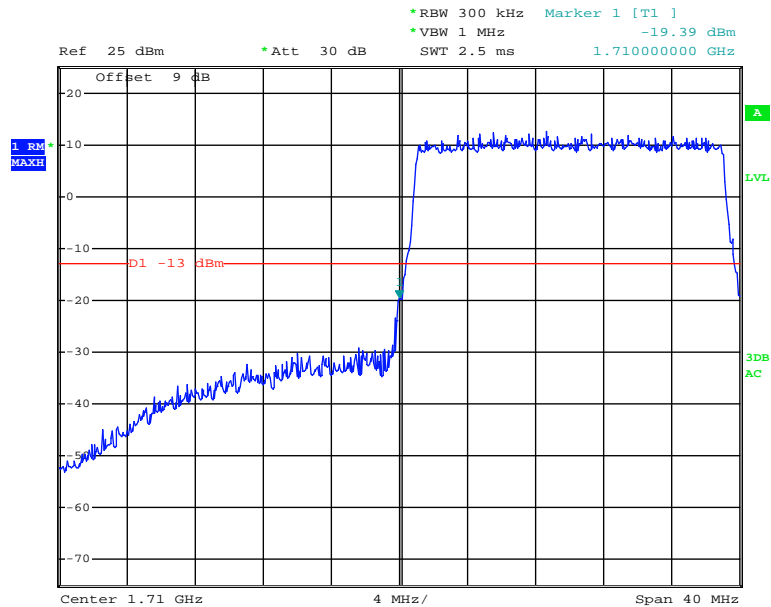
Date: 25.JUL.2020 13:30:29

Band 66\_20 MHz\_Low\_QPSK\_RB100#0



Date: 25.JUL.2020 13:30:56

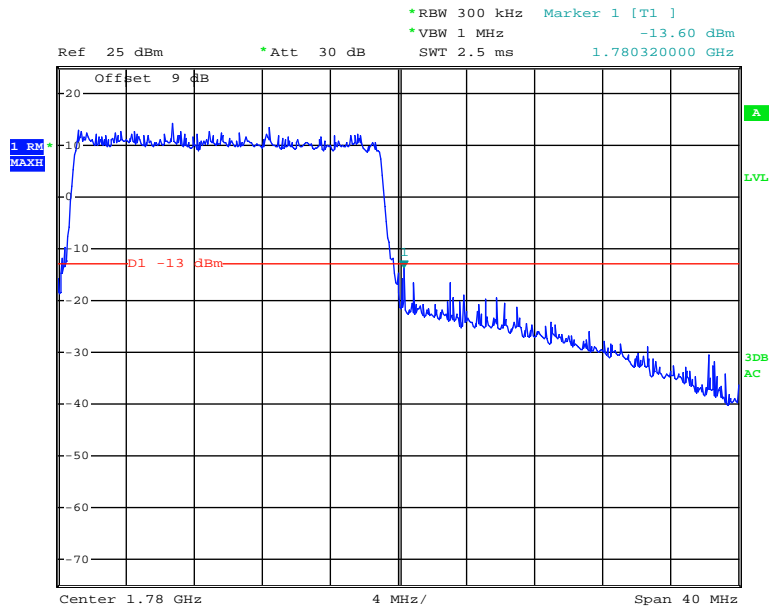
Band 66\_20 MHz\_Low\_16QAM\_RB100#0



Date: 25.JUL.2020 13:31:22

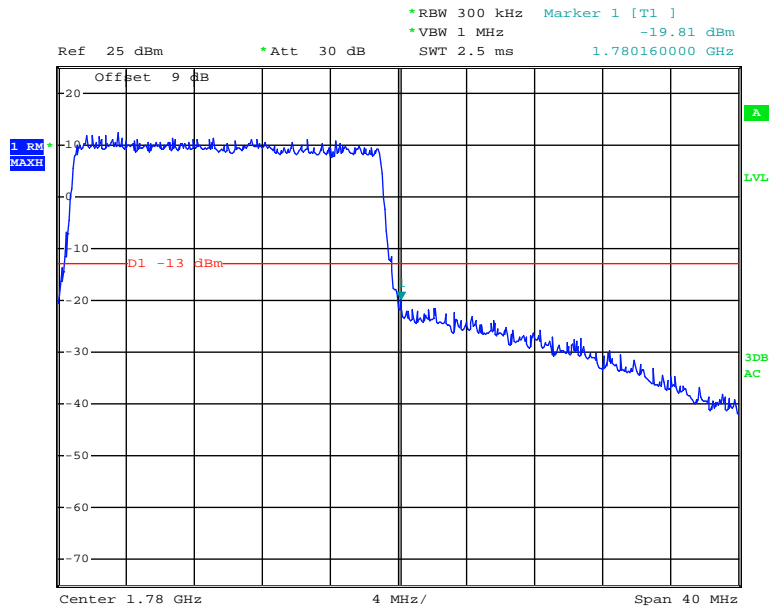


Band 66\_20 MHz\_High\_QPSK\_RB100#0



Date: 25.JUL.2020 13:31:44

Band 66\_20 MHz\_High\_16QAM\_RB100#0



Date: 25.JUL.2020 13:32:07

**FCC §2.1055, §22.355 & §24.235 & §27.54 - FREQUENCY STABILITY****Applicable Standard**

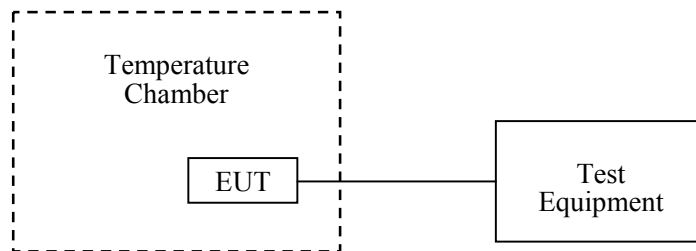
FCC § 2.1055 (a), § 2.1055 (d), §22.355, §24.235, §27.54

**Test Procedure**

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to communication test set via feed-through attenuators. The EUT was placed inside the temperature chamber. The leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the communication test set.

Frequency Stability vs. Voltage: An external variable DC power supply was connected to the battery terminals of the equipment under test. The voltage was set from 85% to 115% of the nominal value and was then decreased until the transmitter light no longer illuminated; i.e., the battery end point. The output frequency was recorded for each battery voltage.



**Test Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2020-01-09	2021-01-09
R&S	Spectrum Analyzer	FSU 26	200256	2020-01-04	2021-01-04
yzjingcheng	Coaxial Cable	KTRFBU-141-50	41005011	Each time	N/A
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each time	N/A
E-Microwave	Blocking Control	EMDCB-00036	0E01201047	Each time	N/A
Unknown	Attenuator	UNAT-3+	15529	Each time	N/A
E-Microwave	Coaxial Attenuators	EMCA10-5RN-6	OE01203239	Each time	N/A
R&S	Universal Radio Communication Tester	CMU200	106 891	2019-09-12	2020-09-12
ESPEC	Constant temperature and humidity Tester	ESX-4CA	018 463	2019-03-26	2020-03-26
UNI-T	Multimeter	UT39A	M130199938	2019-07-23	2020-07-23
Pro instrument	DC Power Supply	pps3300	3300012	N/A	N/A

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

**Test Data****Environmental Conditions**

<b>Temperature:</b>	26.3°C~ 28.2 °C
<b>Relative Humidity:</b>	60 %~66 %
<b>ATM Pressure:</b>	100.4kPa ~100.9kPa
<b>Tester:</b>	Rita Huang
<b>Test Date:</b>	2020-06-18~2020-07-28

*Test Result: Compliance.*

**Cellular Band**

GMSK, Middle Channel, $f_c = 836.6$ MHz				
Temperature	Voltage	Frequency Error	Frequency Error	Limit
°C	V <sub>DC</sub>	Hz	ppm	ppm
-30	3.7	1	0.00120	2.5
-20		16	0.01913	
-10		-2	-0.00239	
0		-11	-0.01315	
10		-18	-0.02152	
20		2	0.00239	
30		-12	-0.01434	
40		11	0.01315	
50		14	0.01673	
20		3.5	-20	
20	4.2	-21	-0.02510	

8PSK, Middle Channel, $f_c = 836.6$ MHz				
Temperature	Voltage	Frequency Error	Frequency Error	Limit
°C	V <sub>DC</sub>	Hz	ppm	ppm
-30	3.7	-5	-0.00598	2.5
-20		4	0.00478	
-10		-12	-0.01434	
0		6	0.00717	
10		1	0.00120	
20		-10	-0.01195	
30		5	0.00598	
40		11	0.01315	
50		-17	-0.02032	
20		3.5	18	
20	4.2	-13	-0.01554	

**PCS Band**

GMSK, Middle Channel, $f_c = 1880.0$ MHz				
Temperature	Voltage	Frequency Error	Frequency Error	Results
°C	V <sub>DC</sub>	Hz	ppm	
-30	3.7	-7	-0.00372	Pass
-20		5	0.00266	
-10		6	0.00319	
0		1	0.00053	
10		-21	-0.01117	
20		8	0.00426	
30		12	0.00638	
40		-18	-0.00957	
50		-20	-0.01064	
20		3.5	-2	
20	4.2	-13	-0.00691	

8PSK, Middle Channel, $f_c = 1880.0$ MHz				
Temperature	Voltage	Frequency Error	Frequency Error	Results
°C	V <sub>DC</sub>	Hz	ppm	
-30	3.7	18	0.00957	Pass
-20		-6	-0.00319	
-10		6	0.00319	
0		-4	-0.00213	
10		-12	-0.00638	
20		9	0.00479	
30		-19	-0.01011	
40		9	0.00479	
50		-14	-0.00745	
20		3.5	16	
20	4.2	10	0.00532	

**WCDMA Band II: R99**

Middle Channel, $f_c = 1880.0$ MHz				
Temperature	Voltage	Frequency Error	Frequency Error	Result
°C	V <sub>DC</sub>	Hz	ppm	
-30	3.7	-7	-0.00372	Pass
-20		-3	-0.00160	
-10		13	0.00691	
0		-11	-0.00585	
10		4	0.00213	
20		-17	-0.00904	
30		-16	-0.00851	
40		-4	-0.00213	
50		14	0.00745	
20		3.5	1	
20	4.2	18	0.00957	

**WCDMA Band V: R99**

Middle Channel, $f_c = 836.6$ MHz				
Temperature	Voltage	Frequency Error	Frequency Error	Limit
°C	V <sub>DC</sub>	Hz	ppm	ppm
-30	3.7	-12	-0.01434	2.5
-20		-8	-0.00956	
-10		-5	-0.00598	
0		3	0.00359	
10		-5	-0.00598	
20		-8	-0.00956	
30		-12	-0.01434	
40		-8	-0.00956	
50		-9	-0.01076	
20		3.5	-7	
20	4.2	-12	-0.01434	

**LTE Band 2:**

<b>QPSK, Channel Bandwidth:10MHz</b>				
<b>Middle Channel, <math>f_c = 1880</math> MHz</b>				
<b>Temperature</b>	<b>Voltage</b>	<b>Frequency Error</b>	<b>Frequency Error</b>	<b>Result</b>
<b>°C</b>	<b>V<sub>DC</sub></b>	<b>Hz</b>	<b>ppm</b>	
-30	3.7	-11.44	-0.0061	Pass
-20		-9.97	-0.0053	
-10		-6.13	-0.0033	
0		6.17	0.0033	
10		7.92	0.0042	
20		6.46	0.0034	
30		-6.52	-0.0035	
40		7.18	0.0038	
50		-9.69	-0.0052	
20		3.5	-8.17	
20	4.2	-7.05	-0.0038	

<b>16QAM, Channel Bandwidth:10MHz</b>				
<b>Middle Channel, <math>f_c = 1880</math> MHz</b>				
<b>Temperature</b>	<b>Voltage</b>	<b>Frequency Error</b>	<b>Frequency Error</b>	<b>Result</b>
<b>°C</b>	<b>V<sub>DC</sub></b>	<b>Hz</b>	<b>ppm</b>	
-30	3.7	-4.43	-0.0024	Pass
-20		-6.68	-0.0036	
-10		9.77	0.0052	
0		-7.62	-0.0041	
10		-9.91	-0.0053	
20		-9.82	-0.0052	
30		-6.68	-0.0036	
40		-8.85	-0.0047	
50		5.67	0.003	
20		3.5	6.05	
20	4.2	7.52	0.004	

**LTE Band 4**

<b>QPSK, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	1710.519380	1710	1754.480620	1755
	-20	1710.520000		1754.479752	
	-10	1710.520124		1754.479380	
	0	1710.520620		1754.479876	
	10	1710.519876		1754.479628	
	20	1710.520000		1754.480000	
	30	1710.519504		1754.479876	
	40	1710.520248		1754.479628	
40	1710.520372	1754.479752	1754.479628		
3.5	20	1710.520744	1754.479628		
4.2	20	1710.519504	1754.479504		

<b>16QAM, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	1710.519504	1710	1754.479380	1755
	-20	1710.520124		1754.480620	
	-10	1710.519380		1754.480248	
	0	1710.519628		1754.479752	
	10	1710.519628		1754.480744	
	20	1710.520000		1754.480000	
	30	1710.519380		1754.479628	
	40	1710.520744		1754.480248	
50	1710.519876	1754.480000	1754.480000		
3.5	20	1710.519628	1754.480496		
4.2	20	1710.519876	1754.479876		

**LTE Band 5**

<b>QPSK, Channel Bandwidth:10MHz</b>				
<b>Middle Channel, <math>f_c = 836.5</math> MHz</b>				
<b>Temperature</b>	<b>Voltage</b>	<b>Frequency Error</b>	<b>Frequency Error</b>	<b>Limit</b>
<b>°C</b>	<b>V<sub>DC</sub></b>	<b>Hz</b>	<b>ppm</b>	<b>ppm</b>
-30	3.7	-9.02	-0.0108	2.5
-20		9.11	0.0109	
-10		8.51	0.0102	
0		-7.15	-0.0085	
10		-5.29	-0.0063	
20		7.24	0.0087	
30		-5.81	-0.0069	
40		5.59	0.0067	
50		6.87	0.0082	
20		3.5	9.94	
20	4.2	9.99	0.0119	

<b>16QAM, Channel Bandwidth:10MHz</b>				
<b>Middle Channel, <math>f_c = 836.5</math> MHz</b>				
<b>Temperature</b>	<b>Voltage</b>	<b>Frequency Error</b>	<b>Frequency Error</b>	<b>Limit</b>
<b>°C</b>	<b>V<sub>DC</sub></b>	<b>Hz</b>	<b>ppm</b>	<b>ppm</b>
-30	3.7	-2.00	-0.0024	2.5
-20		6.80	0.0081	
-10		-9.52	-0.0114	
0		-8.15	-0.0097	
10		-8.88	-0.0106	
20		-9.82	-0.0117	
30		8.38	0.01	
40		6.75	0.0081	
50		-5.89	-0.007	
20		3.5	8.98	
20	4.2	-7.83	-0.0094	



**LTE Band 7**

<b>QPSK, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	2500.527100	2500	2569.472900	2570
	-20	2500.529500		2569.471100	
	-10	2500.528900		2569.472300	
	0	2500.530400		2569.470200	
	10	2500.527700		2569.472300	
	20	2500.528900		2569.471100	
	30	2500.526800		2569.467800	
	40	2500.530400		2569.472000	
50	2500.529200	2569.471700			
3.5	20	2500.531900		2569.472000	
4.2	20	2500.527700		2569.472900	

<b>16QAM, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	2500.527700	2500	2569.470200	2570
	-20	2500.529200		2569.469000	
	-10	2500.529200		2569.470800	
	0	2500.528600		2569.471700	
	10	2500.529800		2569.473200	
	20	2500.528900		2569.471100	
	30	2500.528000		2569.469900	
	40	2500.528900		2569.468400	
50	2500.528000	2569.470800			
3.5	20	2500.529800		2569.472900	
4.2	20	2500.529500		2569.472900	

**LTE Band 12**

<b>QPSK, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	699.520496	699	715.520620	716
	-20	699.519752		715.520124	
	-10	699.520620		715.520620	
	0	699.520248		715.519876	
	10	699.520124		715.519628	
	20	699.520000		715.520000	
	30	699.519504		715.520000	
	40	699.520496		715.519628	
	50	699.520496		715.520248	
3.5	20	699.519876		715.519628	
4.2	20	699.519504		715.520124	

<b>16QAM, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	699.520000	699	715.519504	716
	-20	699.520372		715.520372	
	-10	699.519752		715.520372	
	0	699.519504		715.519752	
	10	699.519380		715.520124	
	20	699.480000		715.480000	
	30	699.519380		715.519752	
	40	699.519380		715.520744	
	50	699.520372		715.519380	
3.5	20	699.519504		715.520620	
4.2	20	699.520248		715.520248	

**LTE Band 17**

<b>QPSK, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	704.520372	704	715.480744	716
	-20	704.519504		715.479752	
	-10	704.520248		715.480744	
	0	704.520372		715.480000	
	10	704.520744		715.479752	
	20	704.520000		715.480000	
	30	704.520372		715.480248	
	40	704.519504		715.480248	
	50	704.520744		715.479380	
3.5	20	704.519380		715.480372	
4.2	20	704.519504		715.480744	

<b>16QAM, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	704.519628	704	715.480124	716
	-20	704.520744		715.480496	
	-10	704.520372		715.480124	
	0	704.519628		715.480372	
	10	704.520620		715.479504	
	20	704.520000		715.480000	
	30	704.520620		715.480372	
	40	704.520496		715.479504	
	50	704.520248		715.480124	
3.5	20	704.520248		715.480248	
4.2	20	704.519876		715.480620	

**LTE Band 38**

<b>QPSK, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	2570.519504	2570	2619.479504	2620
	-20	2570.520000		2619.480124	
	-10	2570.519628		2619.479876	
	0	2570.520248		2619.480620	
	10	2570.520248		2619.480744	
	20	2570.520000		2619.480000	
	30	2570.520620		2619.480496	
	40	2570.520744		2619.480620	
	50	2570.520248		2619.480000	
3.5	20	2570.519504		2619.479752	
4.2	20	2570.519504		2619.480124	

<b>16QAM, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	2570.520248	2570	2619.479752	2620
	-20	2570.520496		2619.479628	
	-10	2570.519752		2619.480620	
	0	2570.519504		2619.480124	
	10	2570.519876		2619.479628	
	20	2570.520000		2619.520000	
	30	2570.519380		2619.480000	
	40	2570.520372		2619.480124	
	50	2570.520372		2619.480124	
3.5	20	2570.519504		2619.480124	
4.2	20	2570.519752		2619.480744	

**LTE Band 40**

**Lower:**

<b>QPSK, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	2305.527100	2305	2314.470800	2315
	-20	2305.528600		2314.469000	
	-10	2305.529200		2314.471400	
	0	2305.531000		2314.470800	
	10	2305.531900		2314.469900	
	20	2305.528900		2314.471100	
	30	2305.528300		2314.473200	
	40	2305.528900		2314.468100	
	50	2305.525600		2314.470500	
3.5	20	2305.528900		2314.472000	
4.2	20	2305.527400		2314.475300	

<b>16QAM, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	2305.527700	2305	2314.472900	2315
	-20	2305.526800		2314.467200	
	-10	2305.529200		2314.469600	
	0	2305.531600		2314.470800	
	10	2305.533700		2314.474100	
	20	2305.528900		2314.471100	
	30	2305.528000		2314.471700	
	40	2305.528600		2314.469300	
	50	2305.524100		2314.473200	
3.5	20	2305.529500		2314.472300	
4.2	20	2305.525600		2314.471400	

**Upper:**

<b>QPSK, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	2350.528600	2350	2359.470200	2360
	-20	2350.530700		2359.473200	
	-10	2350.528300		2359.472900	
	0	2350.525600		2359.472600	
	10	2350.529500		2359.471400	
	20	2350.528900		2359.471100	
	30	2350.529800		2359.469300	
	40	2350.527700		2359.470500	
50	2350.528600	2359.470800			
3.5	20	2350.527100		2359.471400	
4.2	20	2350.530100		2359.470800	

<b>16QAM, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	2350.528900	2350	2359.470800	2360
	-20	2350.531000		2359.470800	
	-10	2350.530400		2359.470200	
	0	2350.529800		2359.470500	
	10	2350.530100		2359.472300	
	20	2350.528900		2359.471100	
	30	2350.528600		2359.468400	
	40	2350.527700		2359.472900	
50	2350.528300	2359.472000			
3.5	20	2350.527400		2359.474400	
4.2	20	2350.531000		2359.471400	

**LTE Band 66**

<b>QPSK, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	1710.519752	1710	1779.480248	1780
	-20	1710.520372		1779.479628	
	-10	1710.519752		1779.479876	
	0	1710.520620		1779.480372	
	10	1710.520372		1779.479380	
	20	1710.520000		1779.480000	
	30	1710.520620		1779.480744	
	40	1710.520124		1779.479628	
50	1710.519504	1779.480248			
3.5	20	1710.519628		1779.480372	
4.2	20	1710.520124		1779.479628	

<b>16QAM, Channel Bandwidth:10MHz</b>					
<b>Power Supplied</b>	<b>Temperature</b>	<b>F<sub>L</sub></b>	<b>Limit</b>	<b>F<sub>H</sub></b>	<b>Limit</b>
<b>Vdc</b>	<b>°C</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>	<b>MHz</b>
3.7	-30	1710.520000	1710	1779.479504	1780
	-20	1710.520372		1779.479504	
	-10	1710.519628		1779.480000	
	0	1710.520372		1779.479628	
	10	1710.520620		1779.480000	
	20	1710.520000		1779.480000	
	30	1710.519752		1779.479876	
	40	1710.519380		1779.479628	
50	1710.520000	1779.479504			
3.5	20	1710.519752		1779.479380	
4.2	20	1710.520124		1779.480620	

Note: The fundamental emissions stay within the authorized bands of operation based on the frequency deviation measured is small, the extreme voltage was declared by applicant.

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