

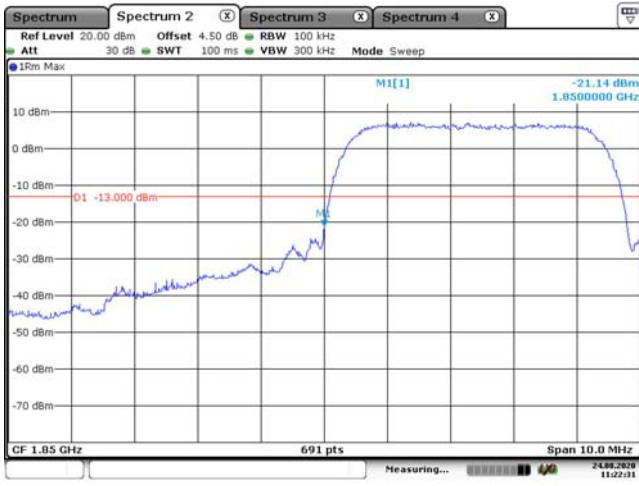
WCDMA Band II,Rel99, Left Band Edge



WCDMA Band II,Rel99, Right Band Edge



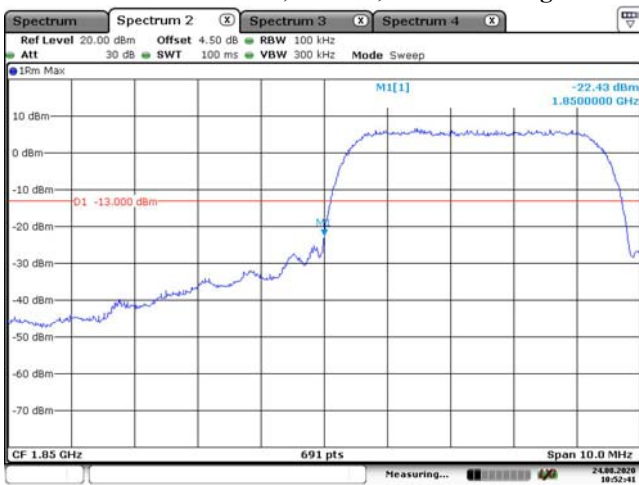
WCDMA Band II,HSDPA, Left Band Edge



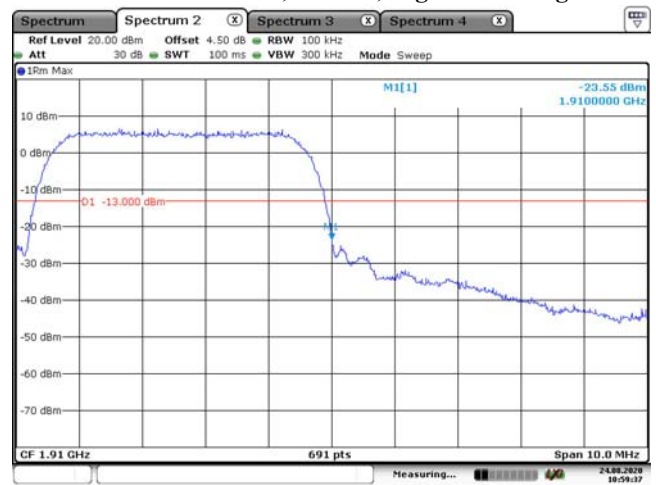
WCDMA Band II,HSDPA,Right Band Edge



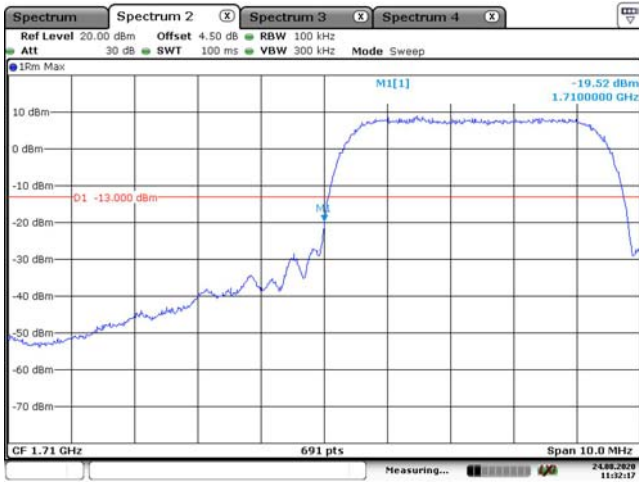
WCDMA Band II,HSUPA, Left Band Edge



WCDMA Band II,HSUPA, Right Band Edge



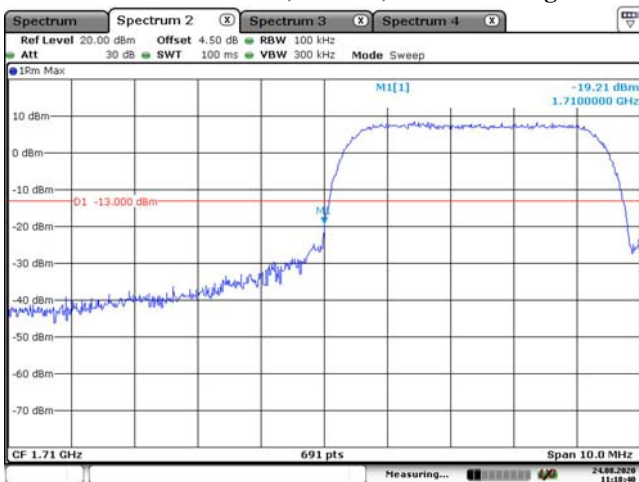
WCDMA Band IV,Rel99, Left Band Edge



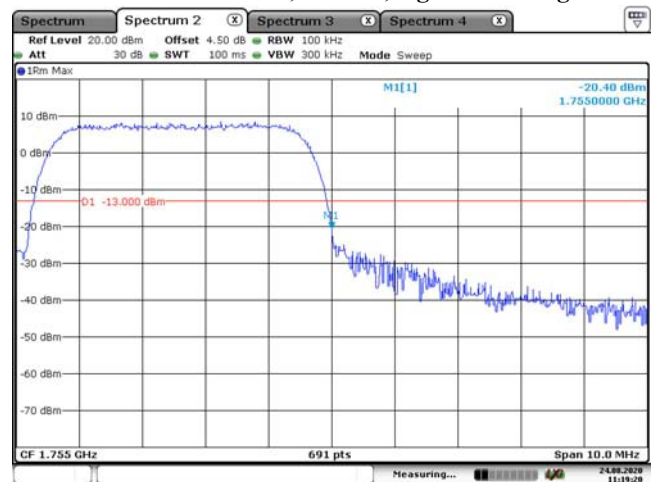
WCDMA Band IV,Rel99, Right Band Edge



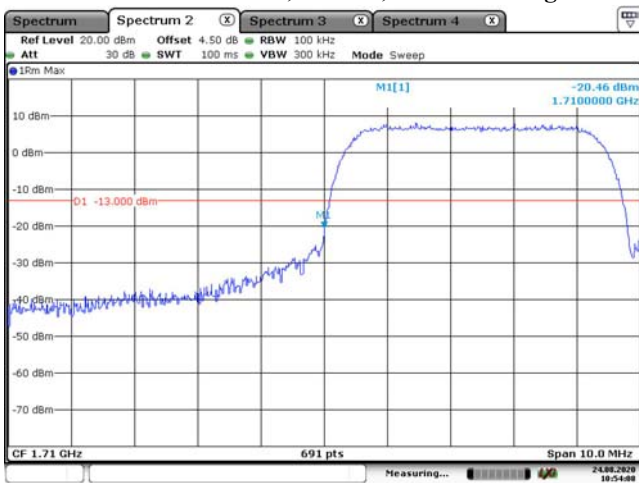
WCDMA Band IV,HSDPA, Left Band Edge



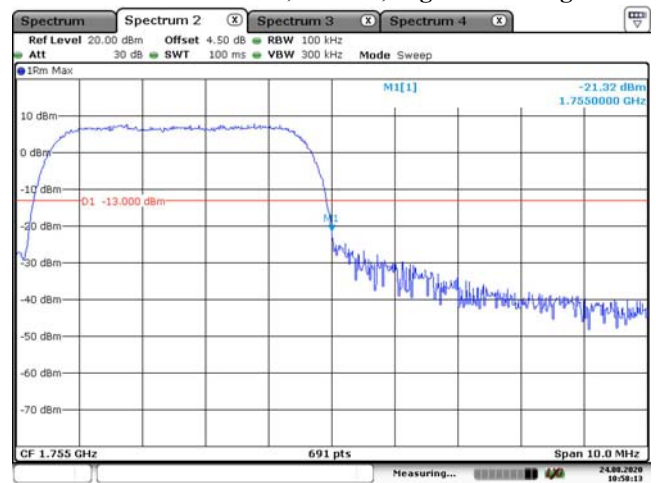
WCDMA Band IV,HSDPA,Right Band Edge



WCDMA Band IV,HSUPA, Left Band Edge



WCDMA Band IV,HSUPA, Right Band Edge



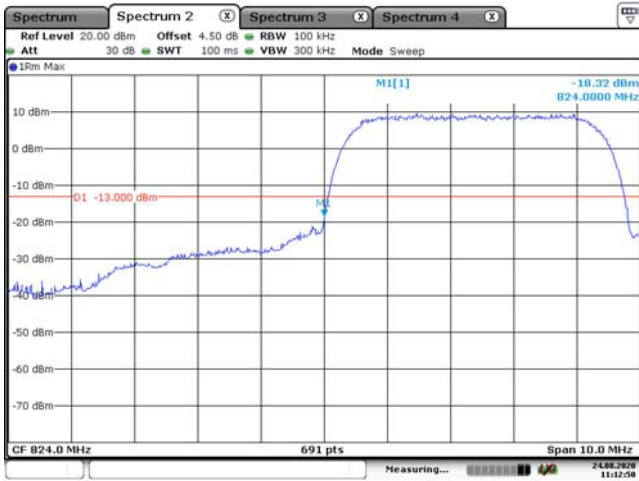
WCDMA Band V,Rel99, Left Band Edge



WCDMA Band V,Rel99, Right Band Edge



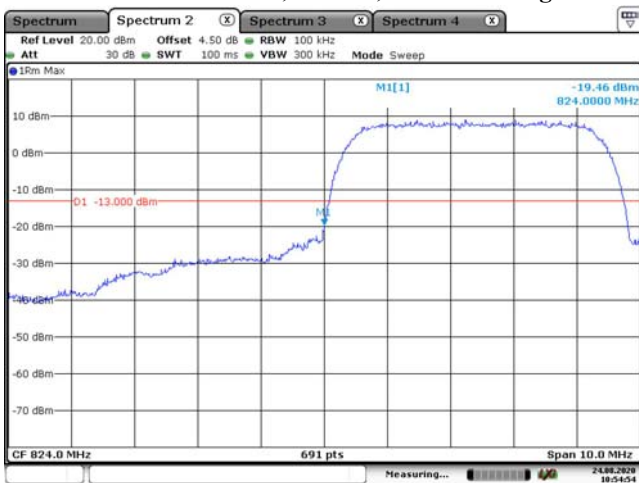
WCDMA Band V,HSDPA, Left Band Edge



WCDMA Band V,HSDPA,Right Band Edge



WCDMA Band V,HSUPA, Left Band Edge

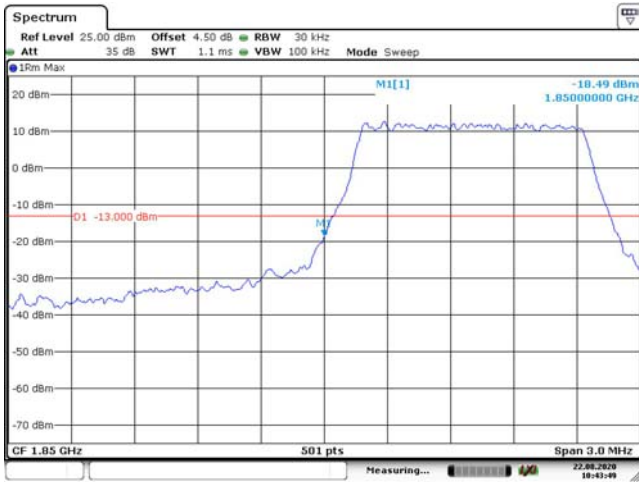


WCDMA Band V,HSUPA, Right Band Edge



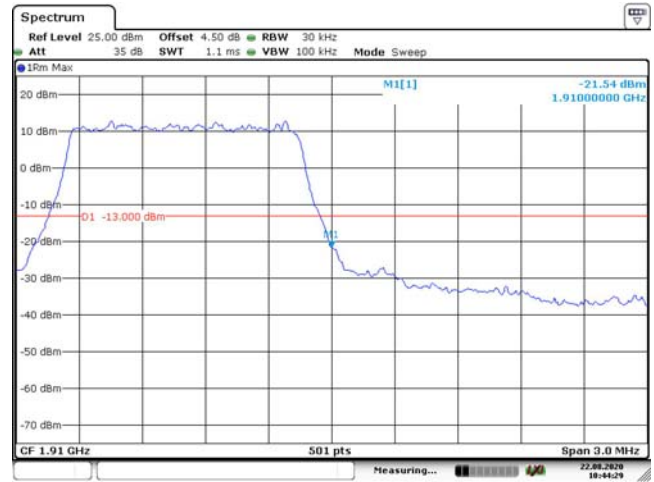
LTE Band 2:

1.4M, QPSK, Left Band Edge



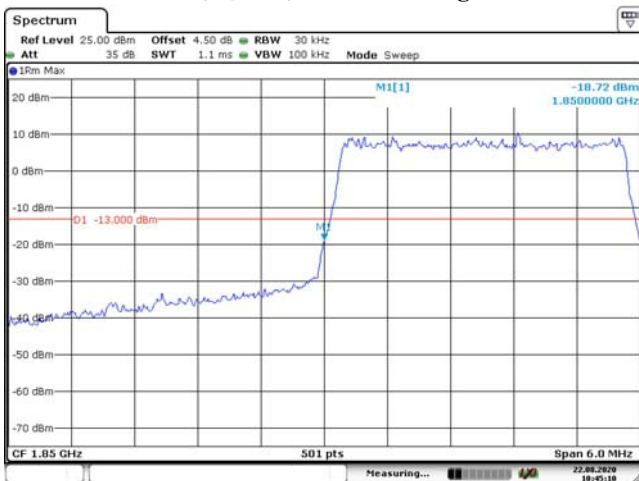
Date: 22.AUG.2020 10:43:50

1.4M, QPSK, Right Band Edge



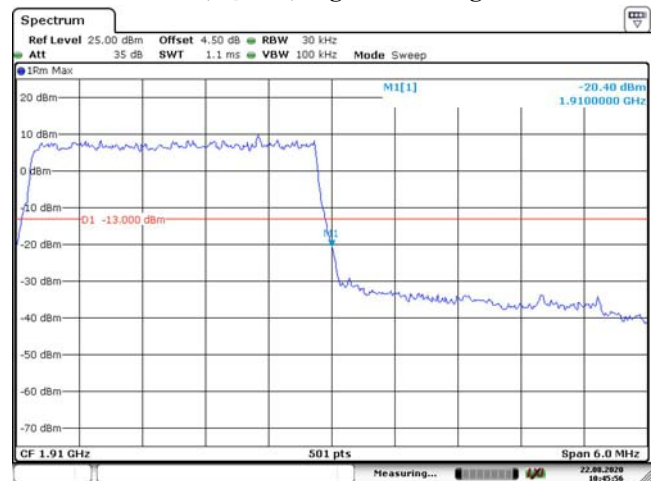
Date: 22.AUG.2020 10:44:30

3M, QPSK, Left Band Edge



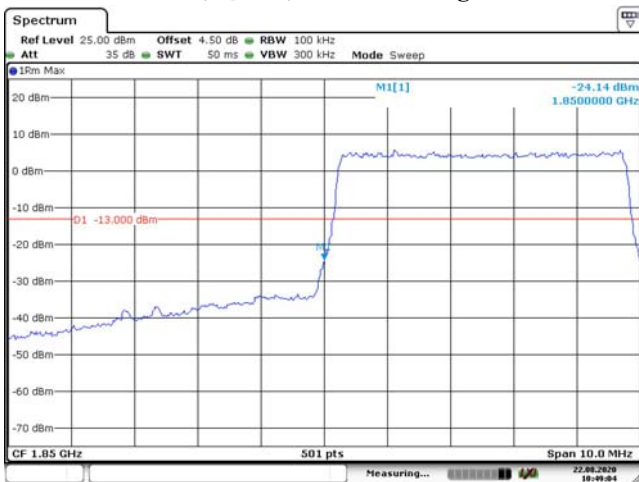
Date: 22.AUG.2020 10:45:11

3M, QPSK, Right Band Edge



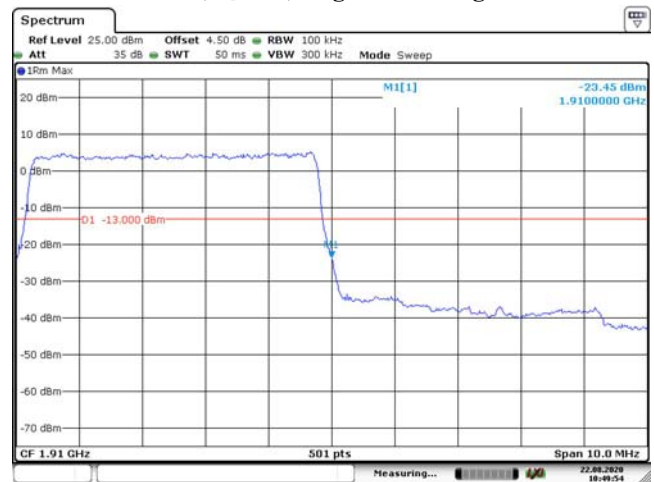
Date: 22.AUG.2020 10:45:57

5M, QPSK, Left Band Edge



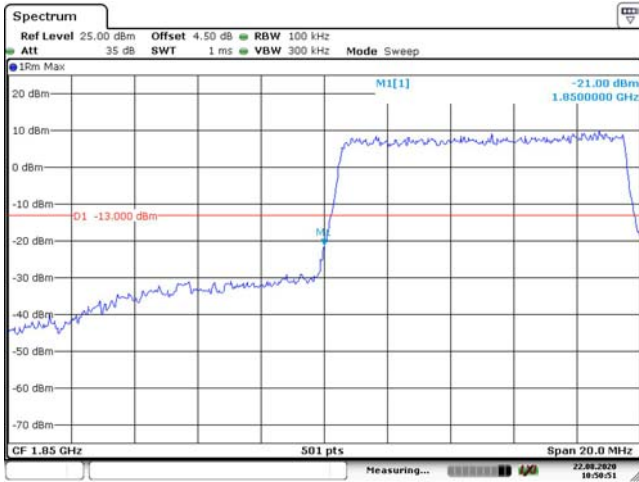
Date: 22.AUG.2020 10:49:04

5M, QPSK, Right Band Edge



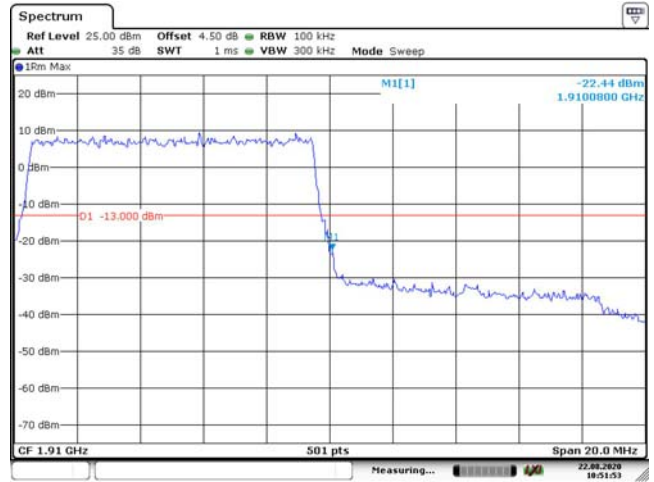
Date: 22.AUG.2020 10:49:55

10M, QPSK, Left Band Edge



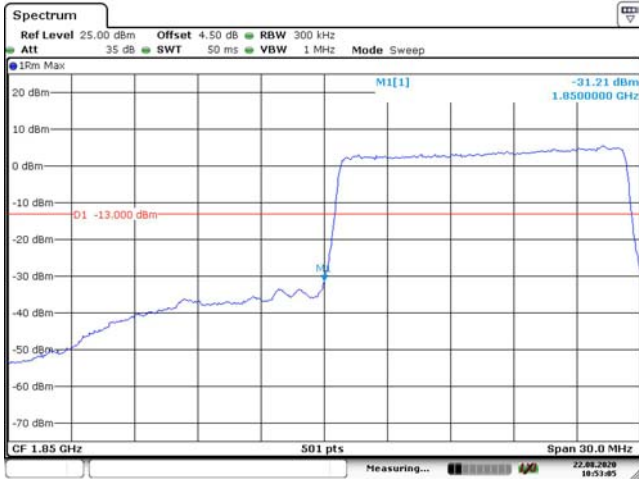
Date: 22.AUG.2020 10:50:51

10M, QPSK, Right Band Edge



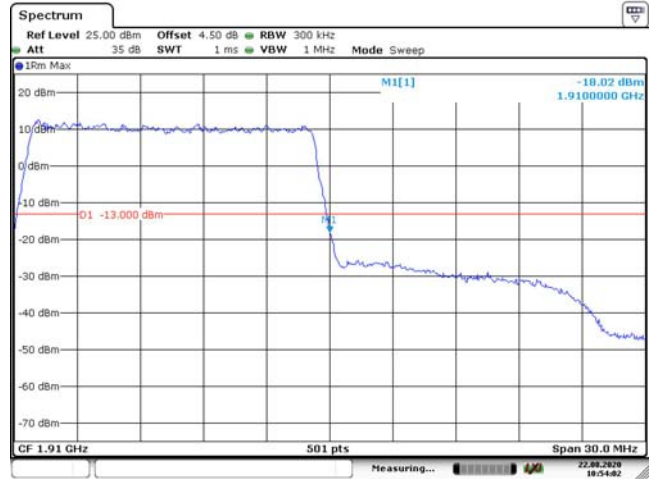
Date: 22.AUG.2020 10:51:54

15M, QPSK, Left Band Edge



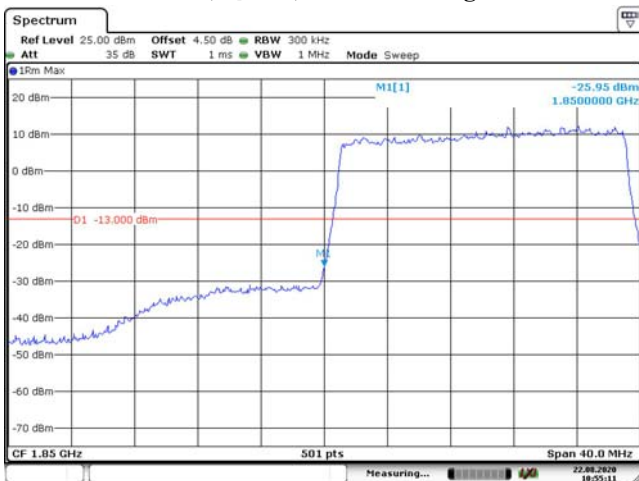
Date: 22.AUG.2020 10:53:06

15M, QPSK, Right Band Edge



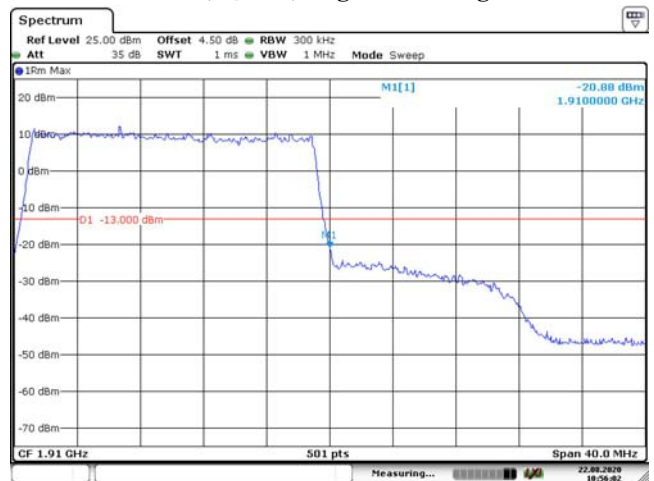
Date: 22.AUG.2020 10:54:03

20M, QPSK, Left Band Edge



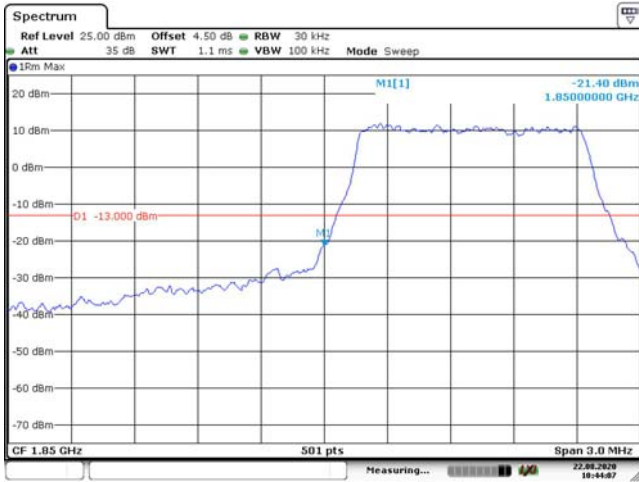
Date: 22.AUG.2020 10:55:12

20M, QPSK, Right Band Edge

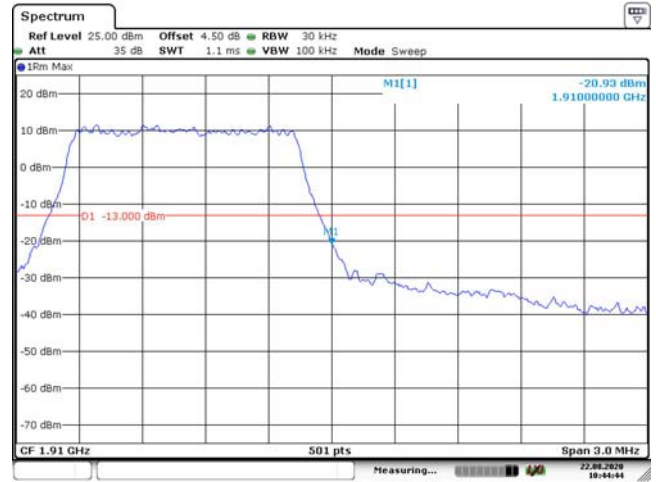


Date: 22.AUG.2020 10:56:03

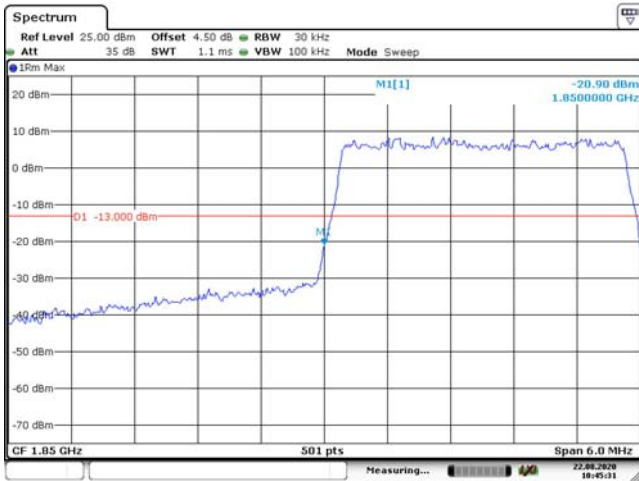
1.4M, 16QAM, Left Band Edge



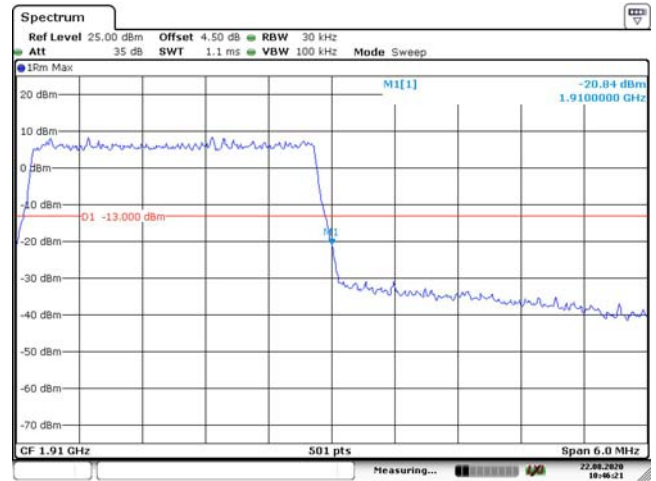
1.4M, 16QAM, Right Band Edge



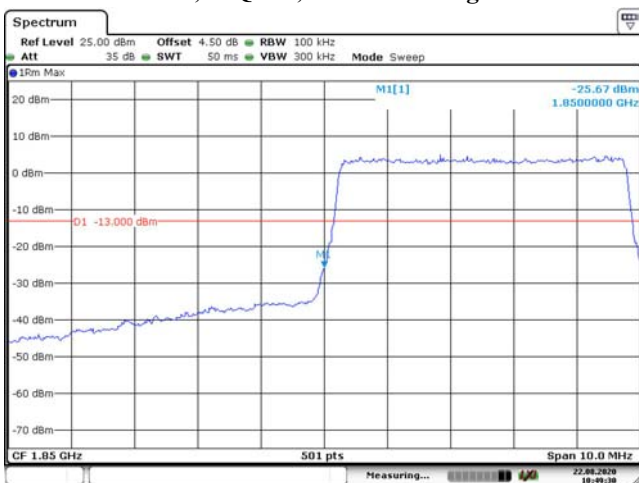
3M, 16QAM, Left Band Edge



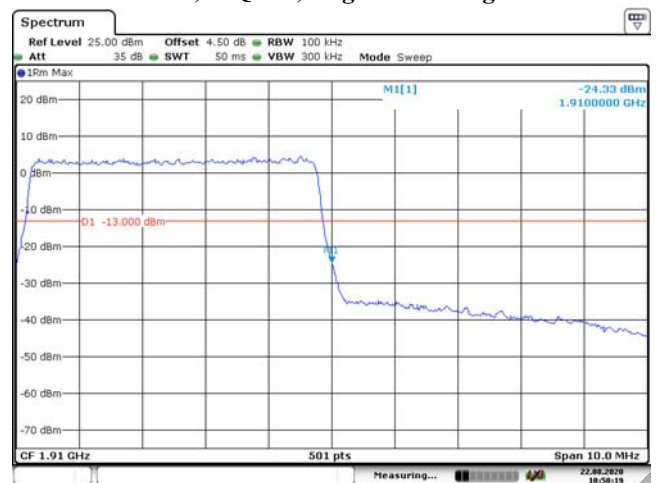
3M, 16QAM, Right Band Edge



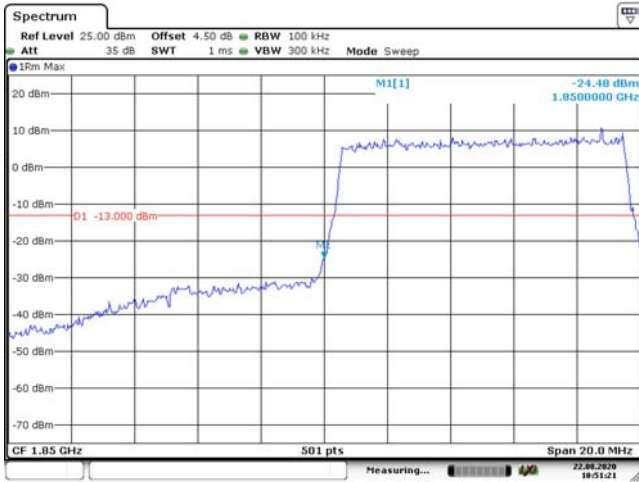
5M, 16QAM, Left Band Edge



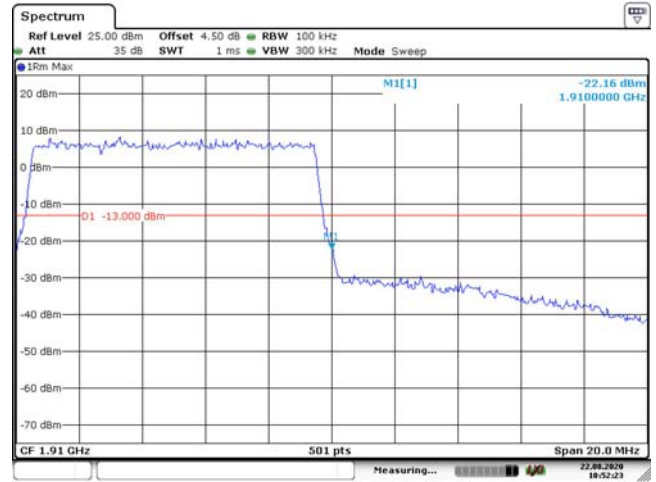
5M, 16QAM, Right Band Edge



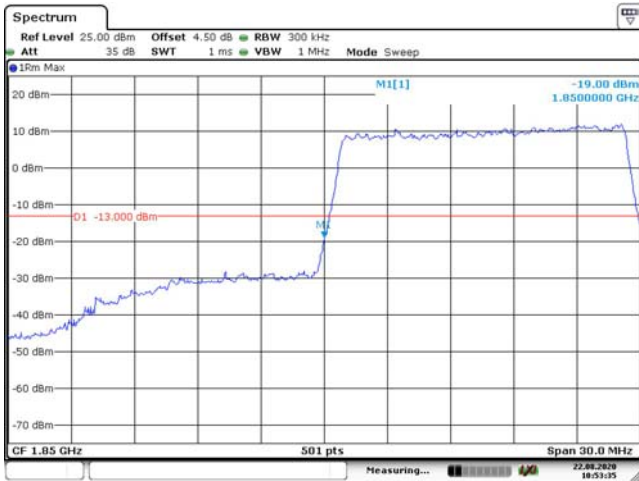
10M, 16QAM, Left Band Edge



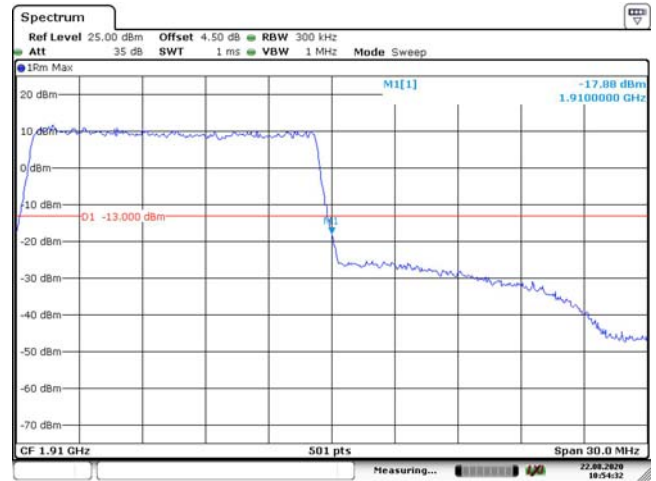
10M, 16QAM, Right Band Edge



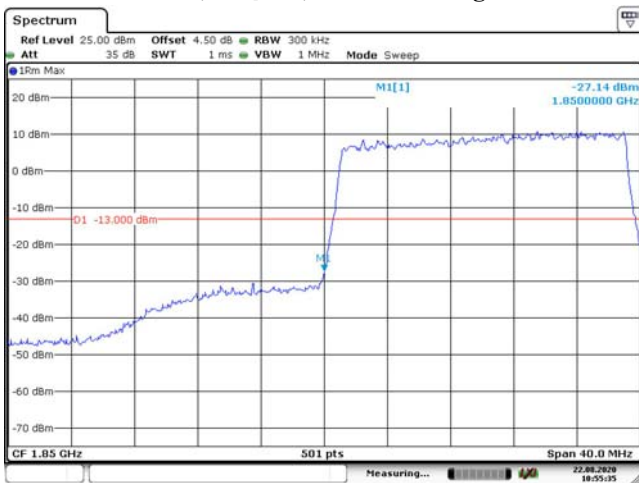
15M, 16QAM, Left Band Edge



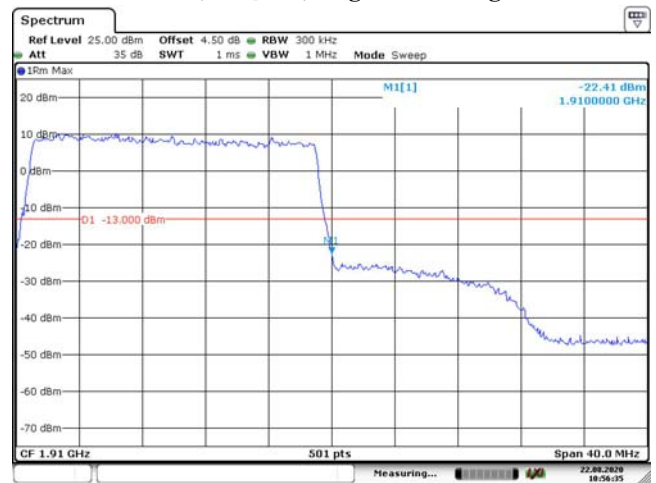
15M, 16QAM, Right Band Edge



20M, 16QAM, Left Band Edge

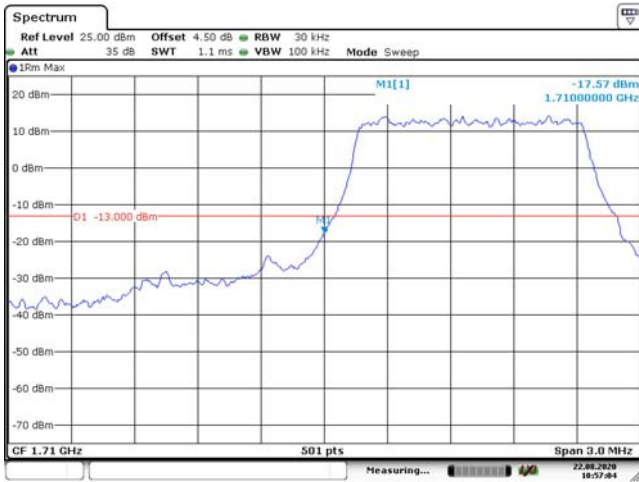


20M, 16QAM, Right Band Edge



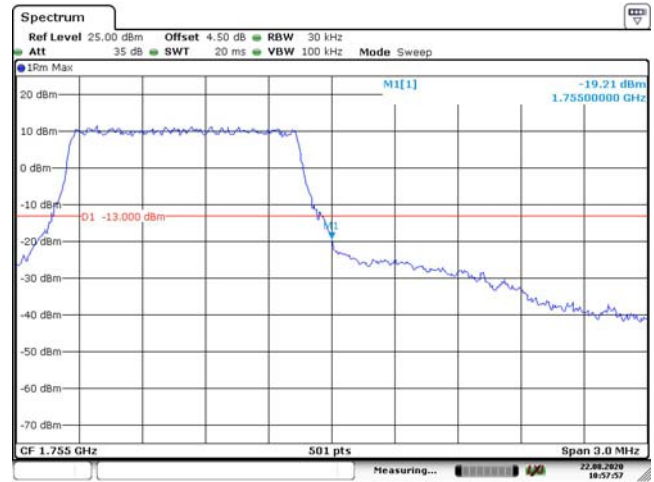
LTE Band 4:

1.4M, QPSK, Left Band Edge



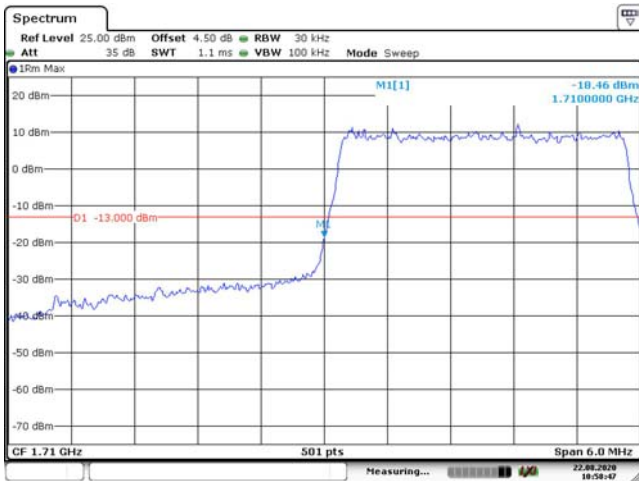
Date: 22.AUG.2020 10:57:04

1.4M, QPSK, Right Band Edge



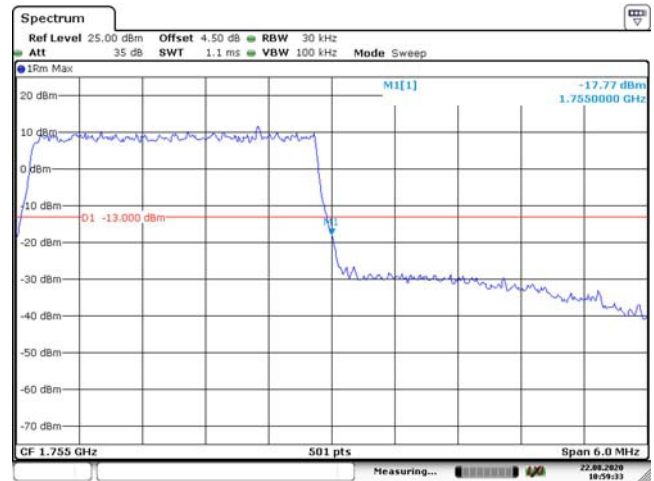
Date: 22.AUG.2020 10:57:58

3M, QPSK, Left Band Edge



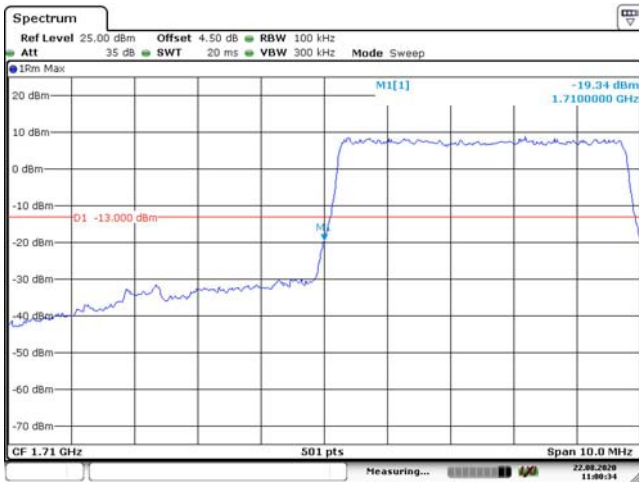
Date: 22.AUG.2020 10:58:48

3M, QPSK, Right Band Edge



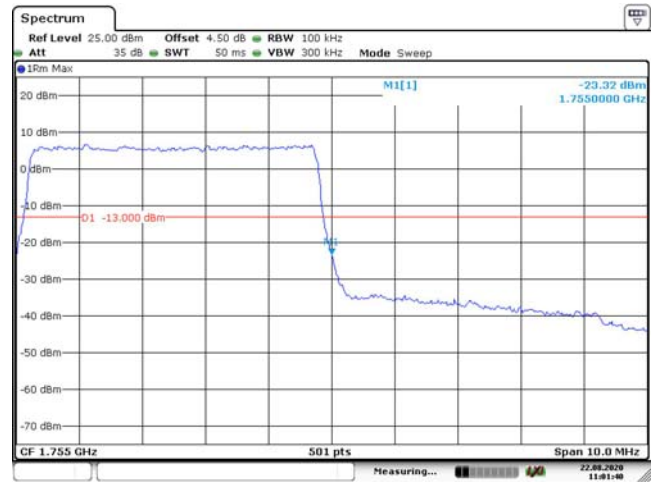
Date: 22.AUG.2020 10:59:34

5M, QPSK, Left Band Edge



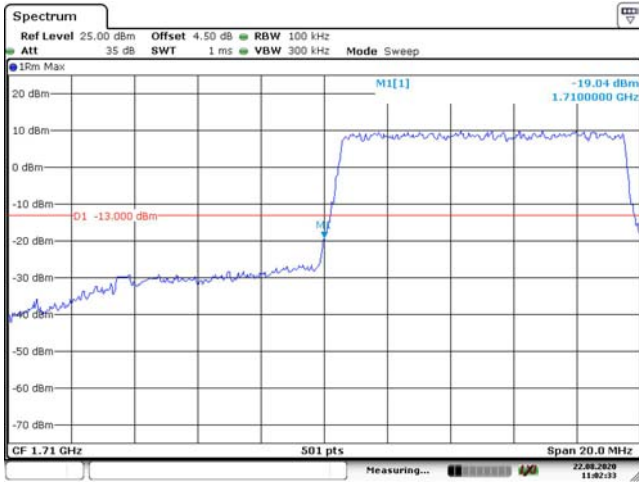
Date: 22.AUG.2020 11:00:35

5M, QPSK, Right Band Edge



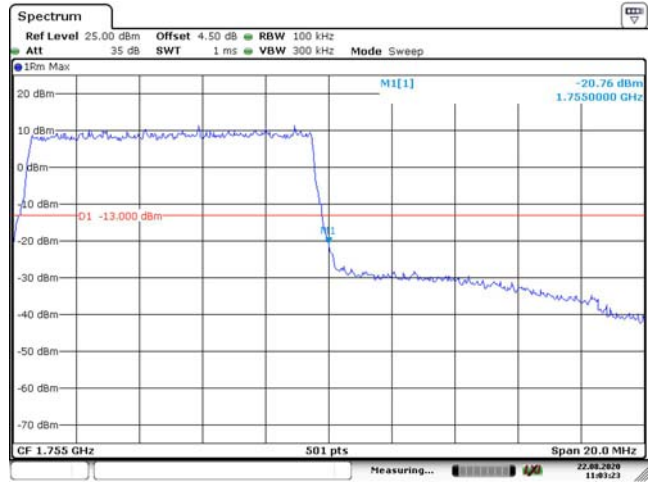
Date: 22.AUG.2020 11:01:40

10M, QPSK, Left Band Edge



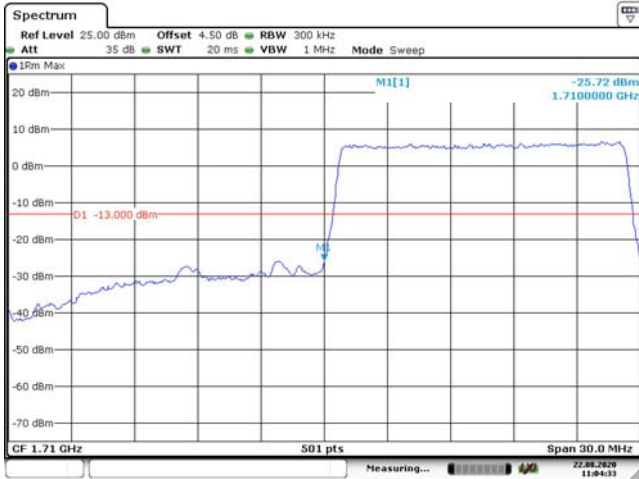
Date: 22.AUG.2020 11:02:34

10M, QPSK, Right Band Edge



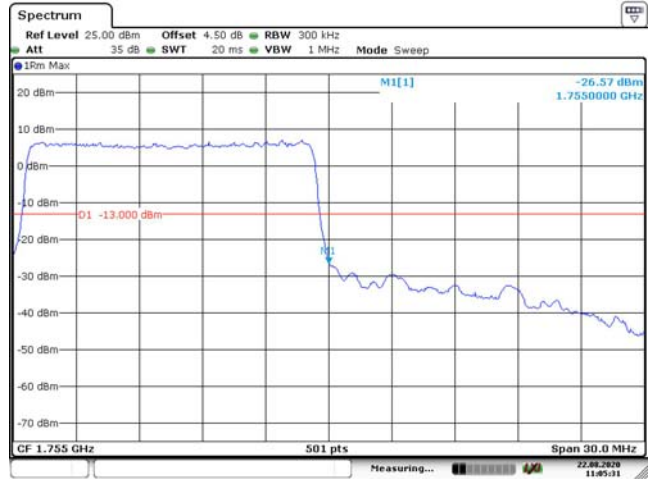
Date: 22.AUG.2020 11:03:23

15M, QPSK, Left Band Edge



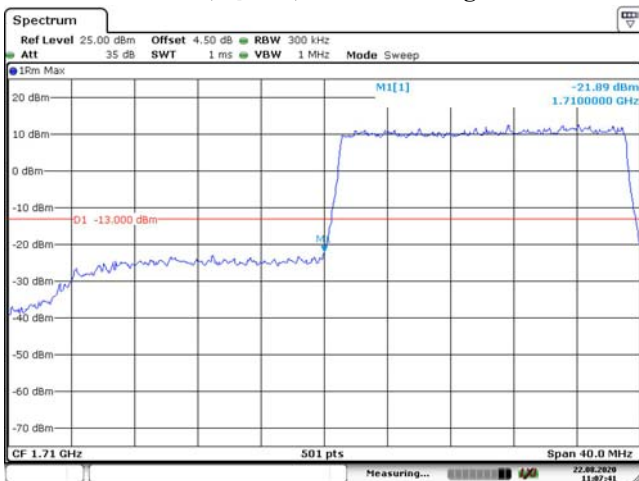
Date: 22.AUG.2020 11:04:34

15M, QPSK, Right Band Edge



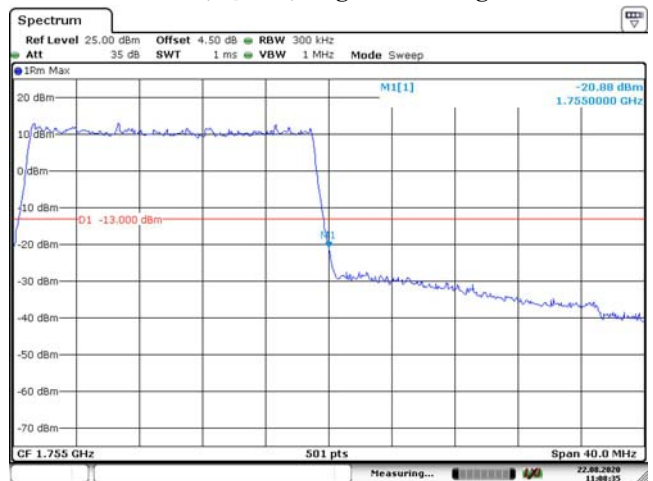
Date: 22.AUG.2020 11:05:31

20M, QPSK, Left Band Edge



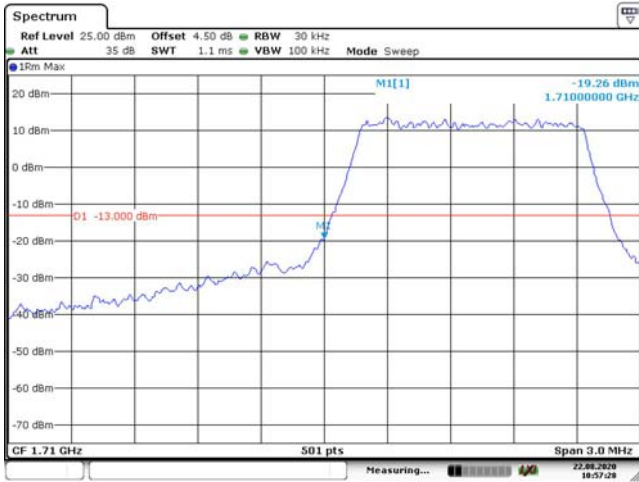
Date: 22.AUG.2020 11:07:41

20M, QPSK, Right Band Edge

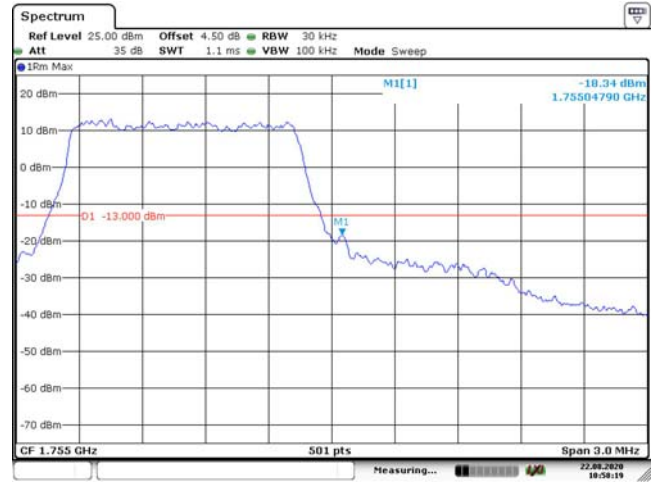


Date: 22.AUG.2020 11:08:36

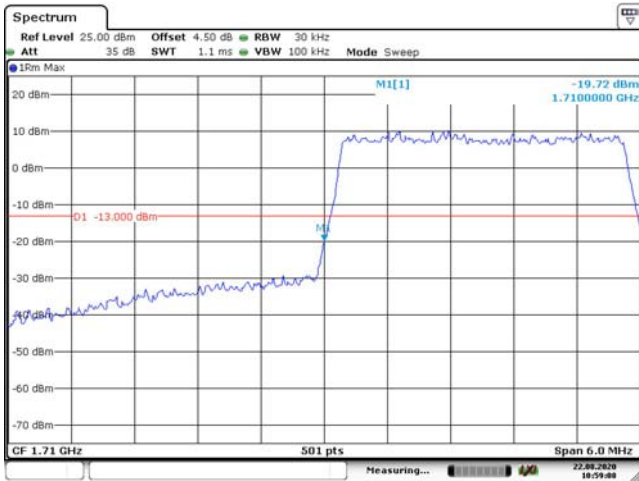
1.4M, 16QAM, Left Band Edge



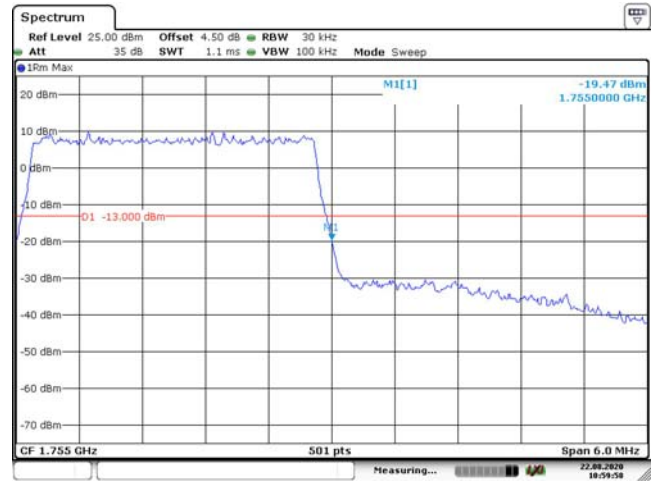
1.4M, 16QAM, Right Band Edge



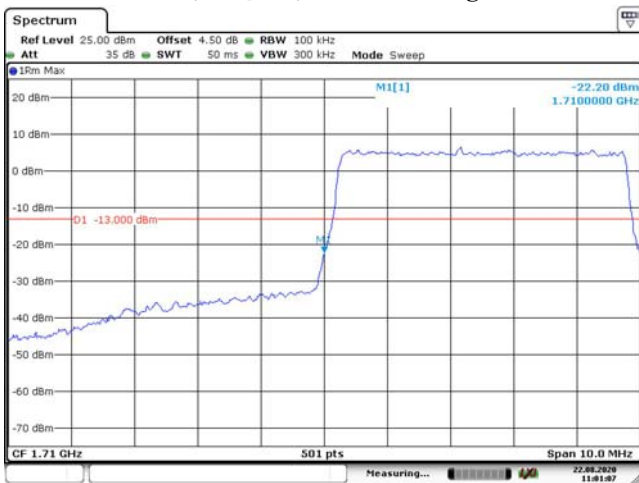
3M, 16QAM, Left Band Edge



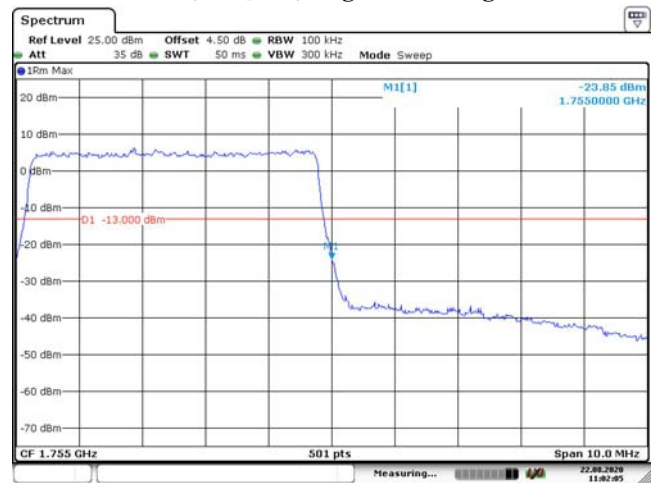
3M, 16QAM, Right Band Edge



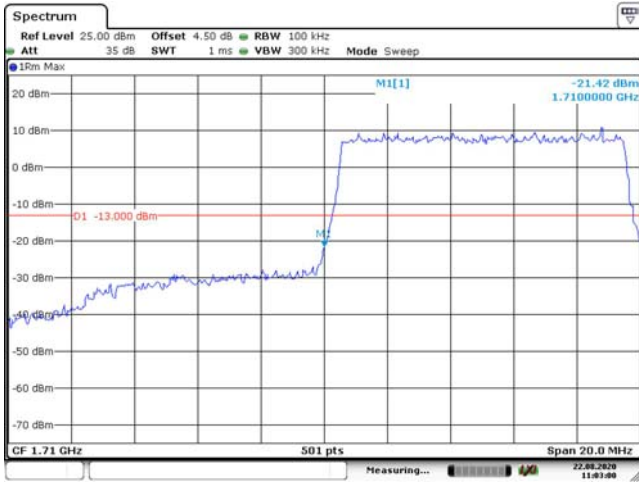
5M, 16QAM, Left Band Edge



5M, 16QAM, Right Band Edge

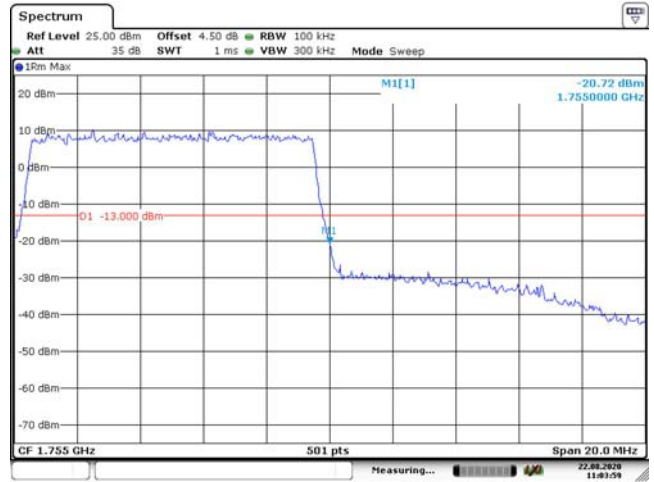


10M, 16QAM, Left Band Edge



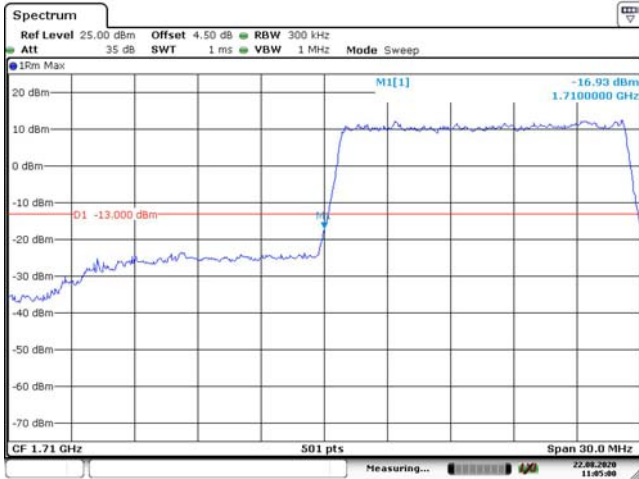
Date: 22.AUG.2020 11:03:01

10M, 16QAM, Right Band Edge



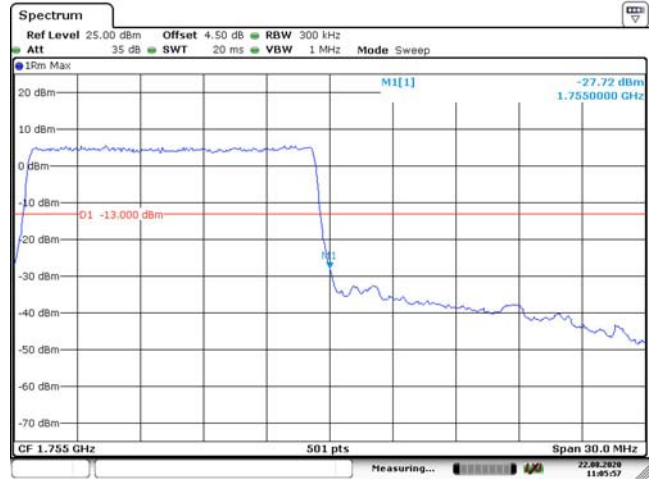
Date: 22.AUG.2020 11:04:00

15M, 16QAM, Left Band Edge



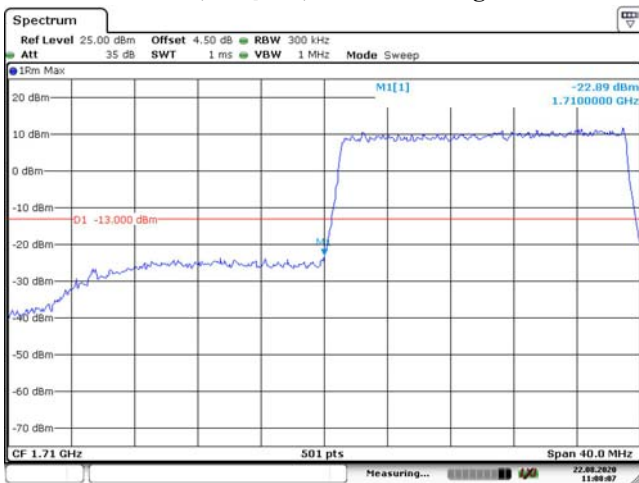
Date: 22.AUG.2020 11:05:00

15M, 16QAM, Right Band Edge



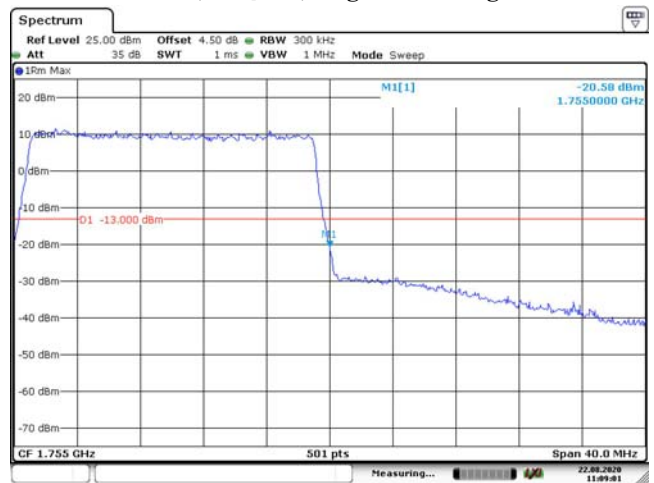
Date: 22.AUG.2020 11:05:57

20M, 16QAM, Left Band Edge



Date: 22.AUG.2020 11:08:08

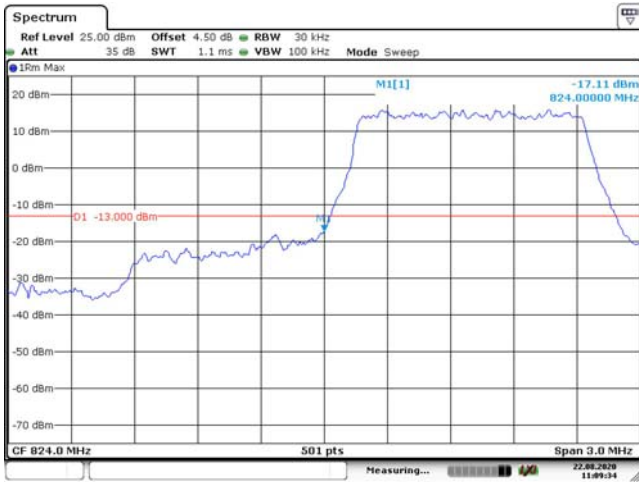
20M, 16QAM, Right Band Edge



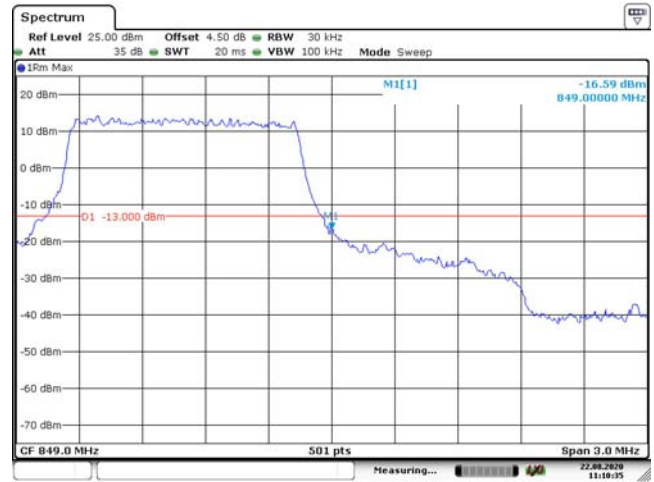
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LTE Band 5:

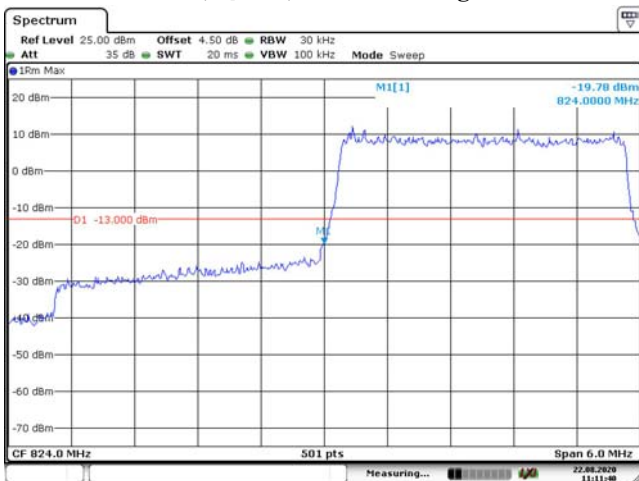
1.4M, QPSK, Left Band Edge



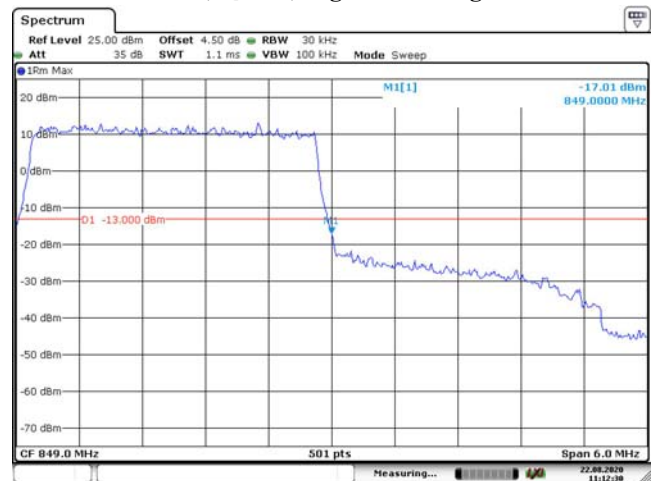
1.4M, QPSK, Right Band Edge



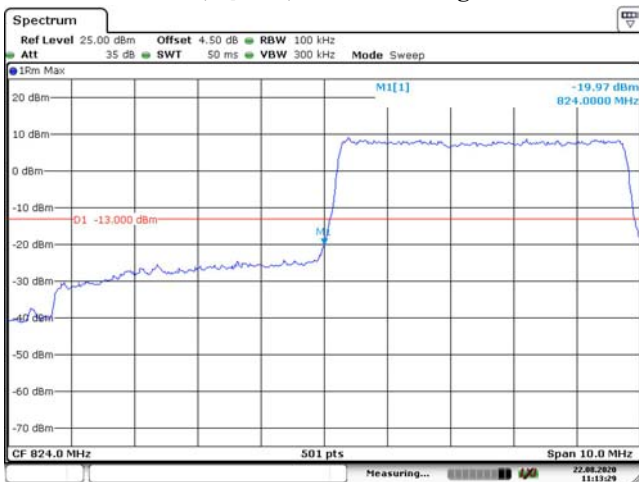
3M, QPSK, Left Band Edge



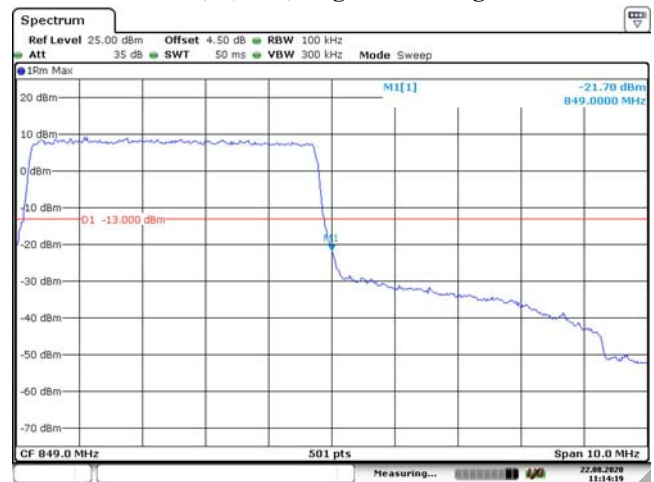
3M, QPSK, Right Band Edge



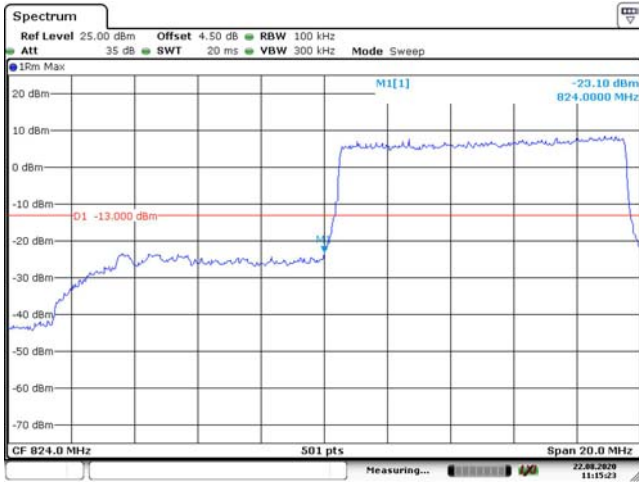
5M, QPSK, Left Band Edge



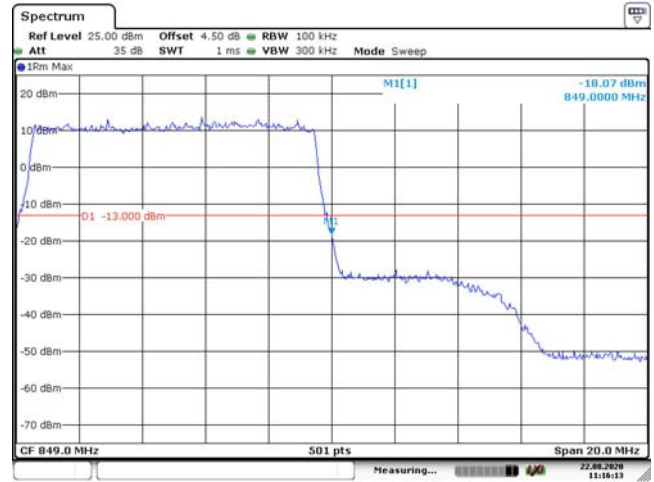
5M, QPSK, Right Band Edge



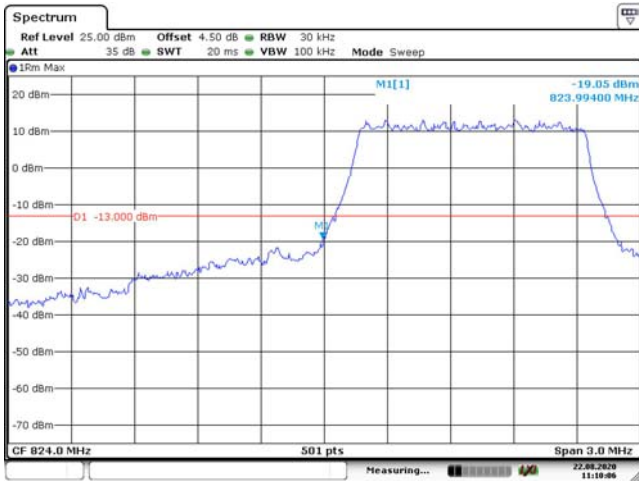
10M, QPSK, Left Band Edge



10M, QPSK, Right Band Edge



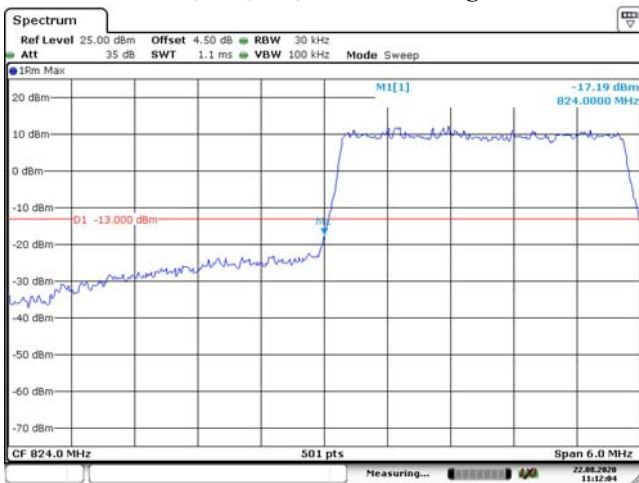
1.4M, 16QAM, Left Band Edge



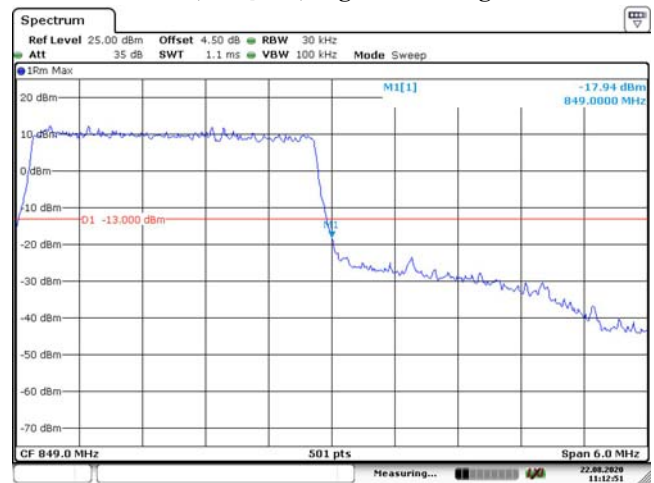
1.4M, 16QAM, Right Band Edge



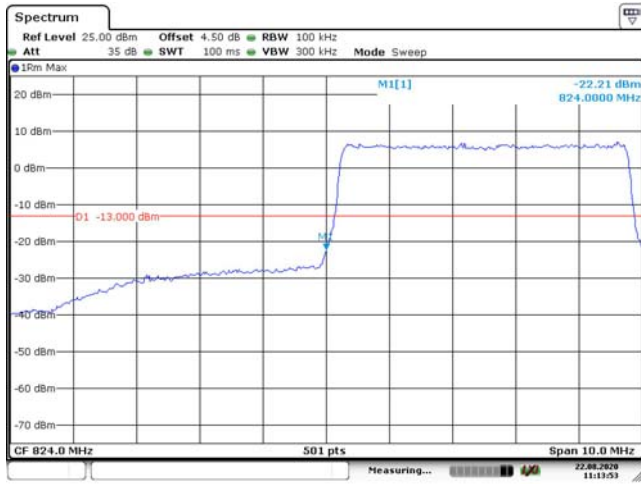
3M, 16QAM, Left Band Edge



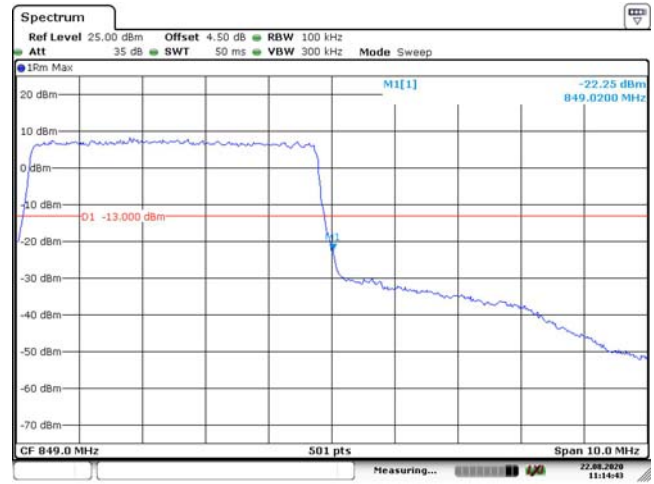
3M, 16QAM, Right Band Edge



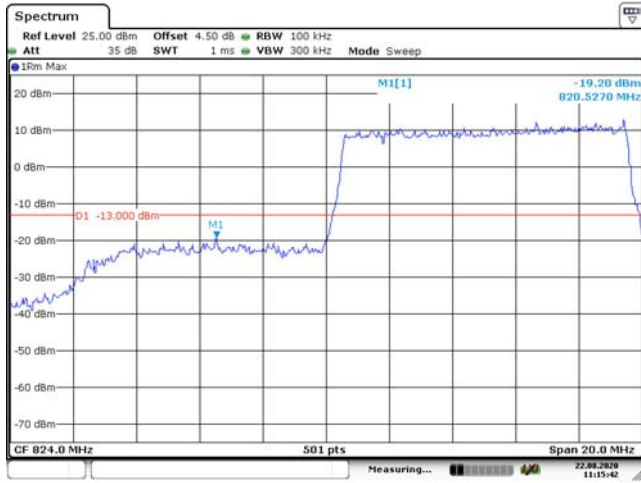
5M, 16QAM, Left Band Edge



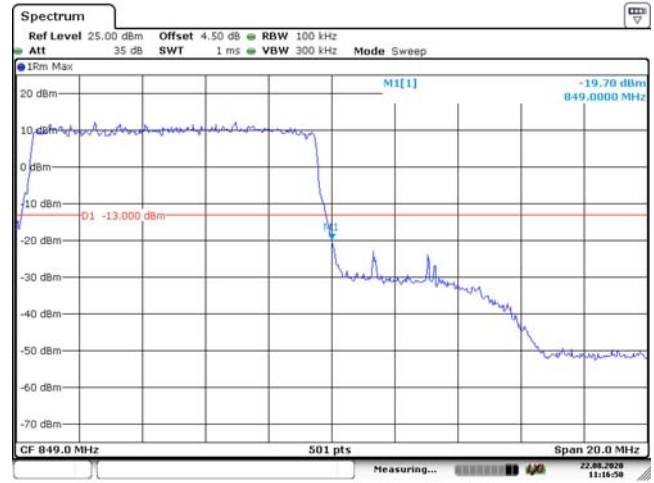
5M, 16QAM, Right Band Edge



10M, 16QAM, Left Band Edge

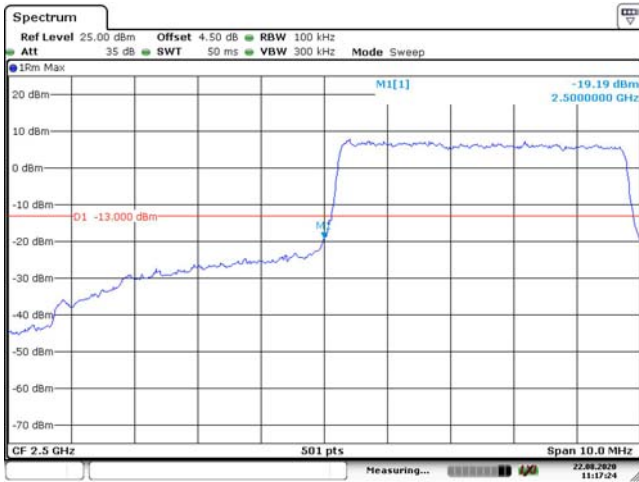


10M, 16QAM, Right Band Edge



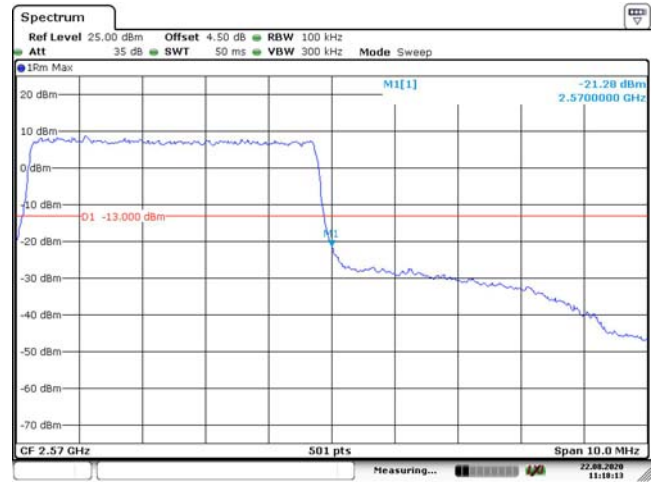
LTE Band 7:

5M, QPSK, Left Band Edge



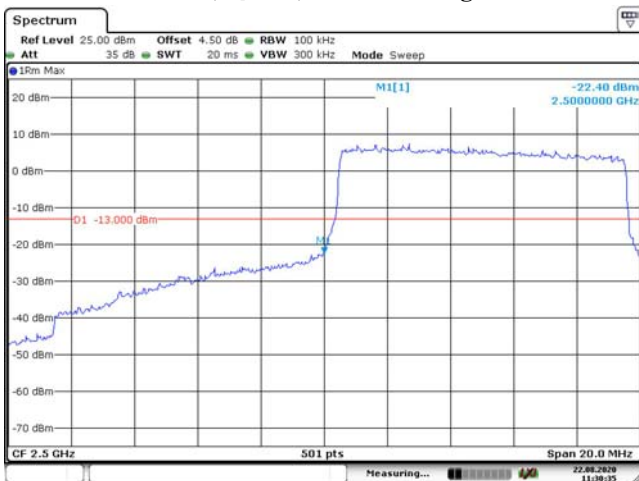
Date: 22.AUG.2020 11:17:24

5M, QPSK, Right Band Edge



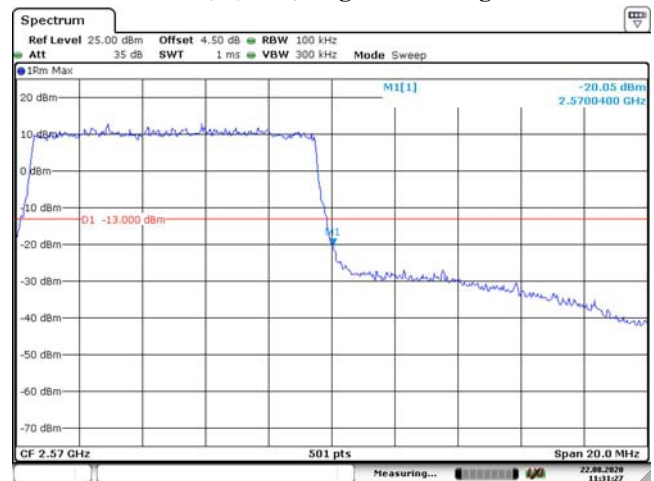
Date: 22.AUG.2020 11:18:13

10M, QPSK, Left Band Edge



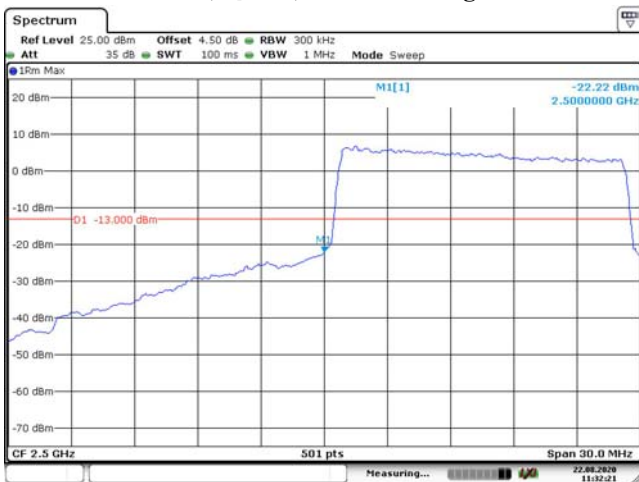
Date: 22.AUG.2020 11:30:35

10M, QPSK, Right Band Edge



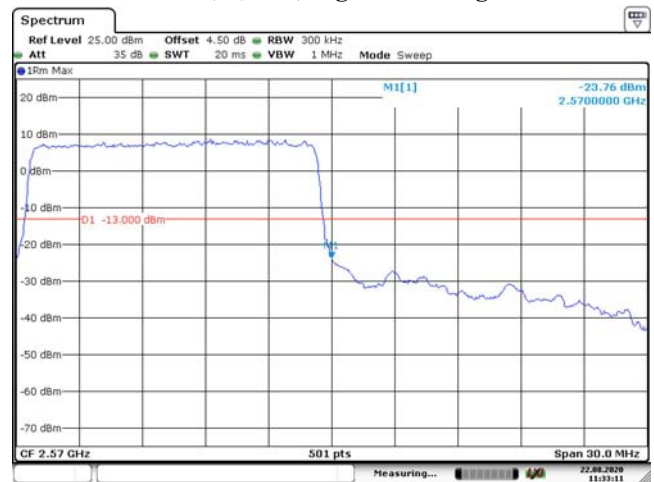
Date: 22.AUG.2020 11:31:27

15M, QPSK, Left Band Edge



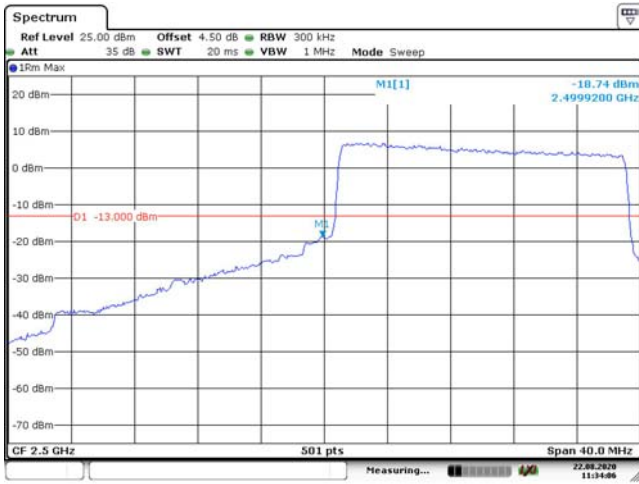
Date: 22.AUG.2020 11:32:21

15M, QPSK, Right Band Edge



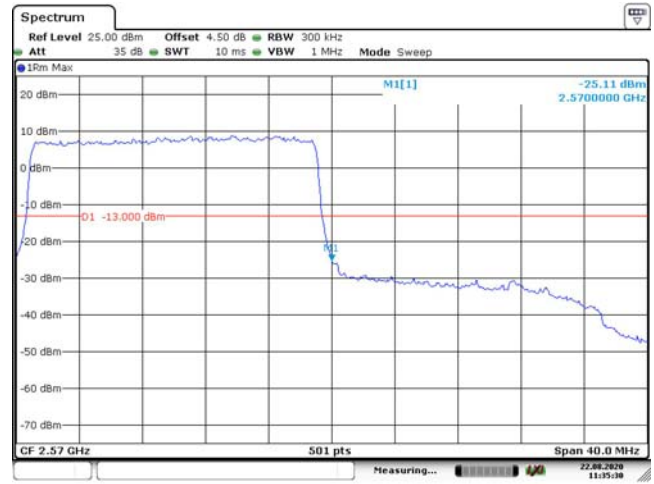
Date: 22.AUG.2020 11:33:11

20M, QPSK, Left Band Edge



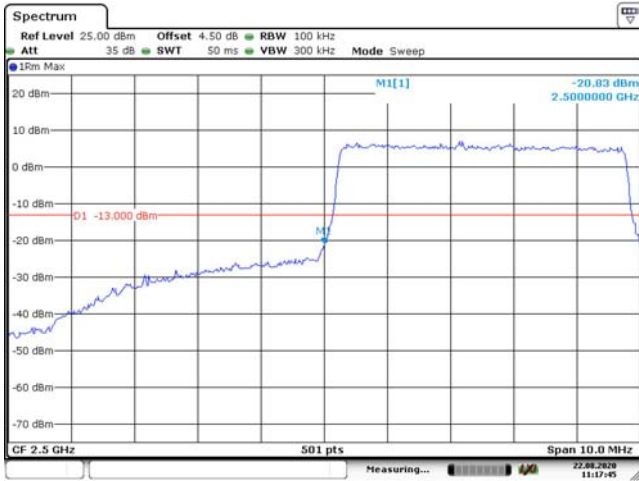
Date: 22.AUG.2020 11:34:06

20M, QPSK, Right Band Edge



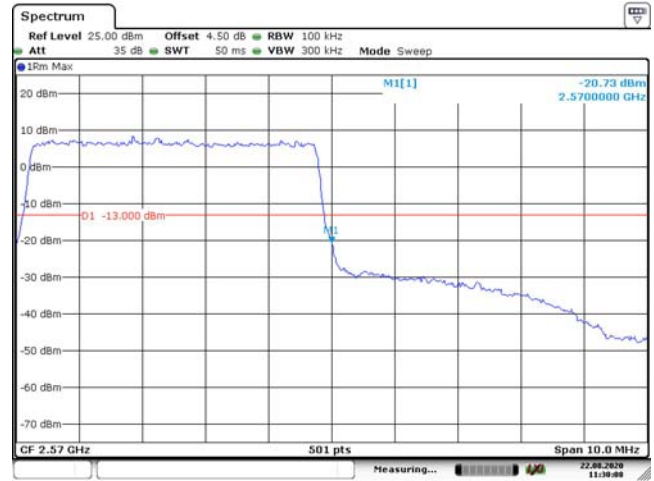
Date: 22.AUG.2020 11:35:30

5M, 16QAM, Left Band Edge



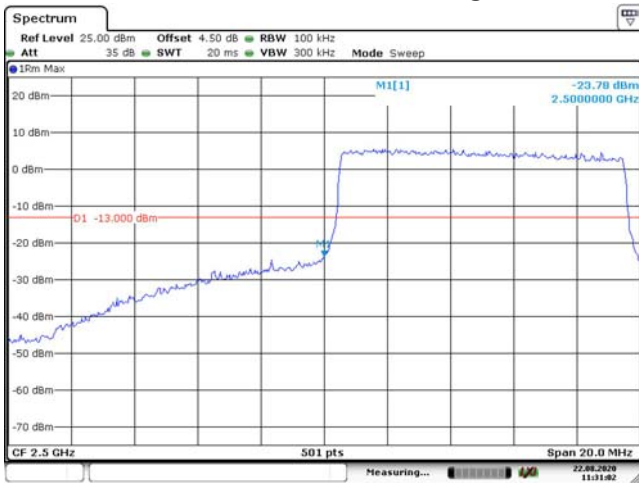
Date: 22.AUG.2020 11:17:45

5M, 16QAM, Right Band Edge



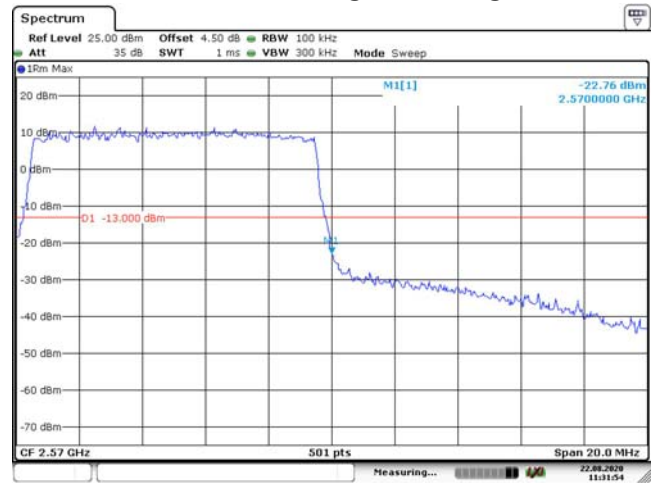
Date: 22.AUG.2020 11:30:08

10M, 16QAM, Left Band Edge



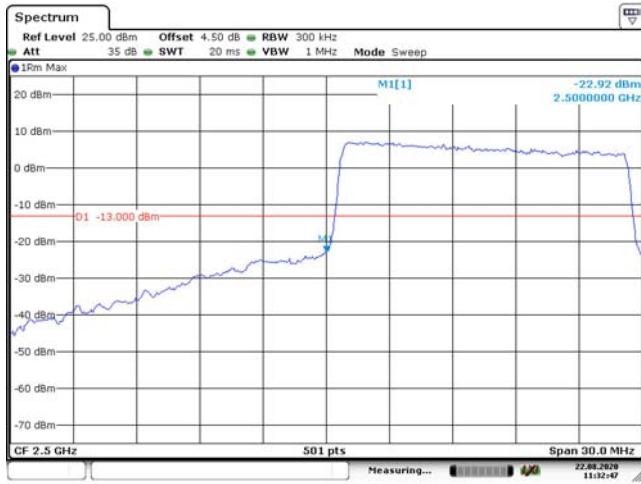
Date: 22.AUG.2020 11:31:02

10M, 16QAM, Right Band Edge



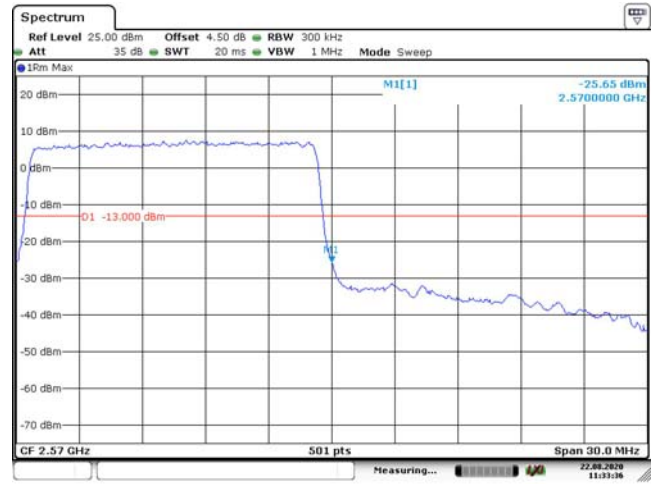
Date: 22.AUG.2020 11:31:54

15M, 16QAM, Left Band Edge



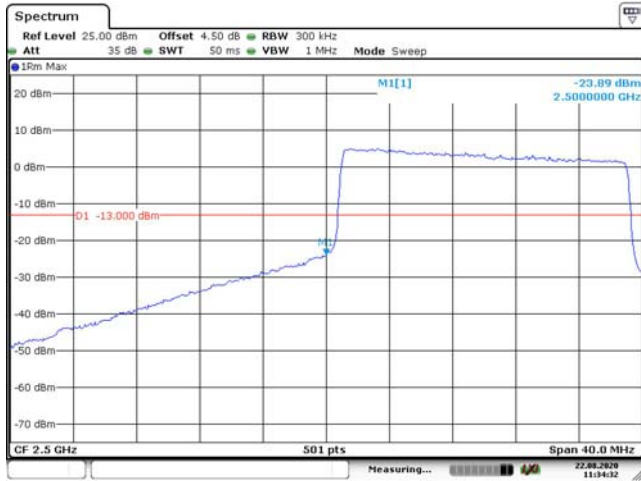
Date: 22.AUG.2020 11:32:47

15M, 16QAM, Right Band Edge



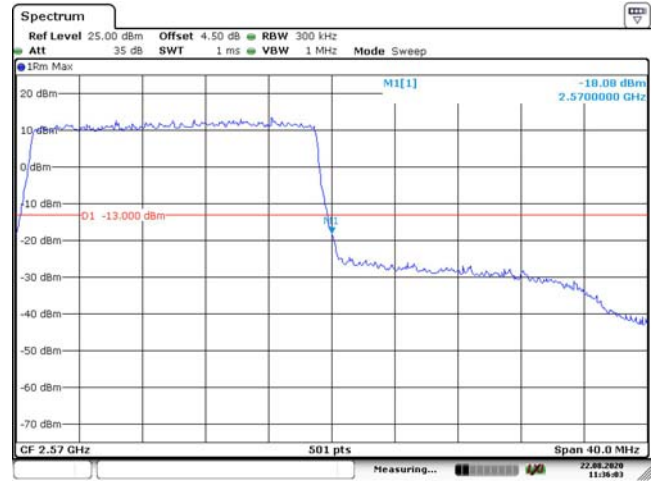
Date: 22.AUG.2020 11:33:36

20M, 16QAM, Left Band Edge



Date: 22.AUG.2020 11:34:31

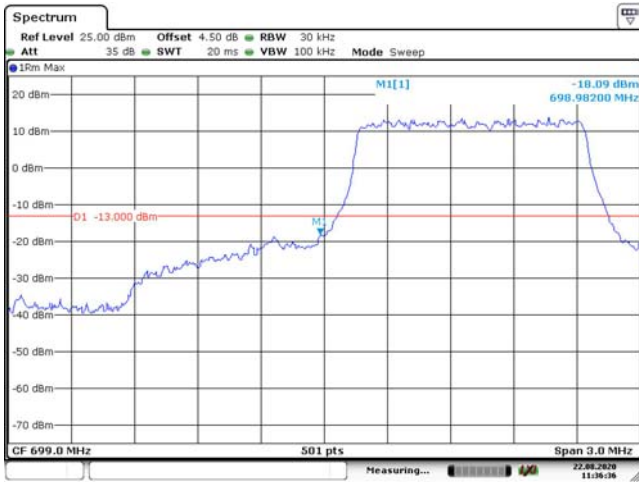
20M, 16QAM, Right Band Edge



Date: 22.AUG.2020 11:36:03

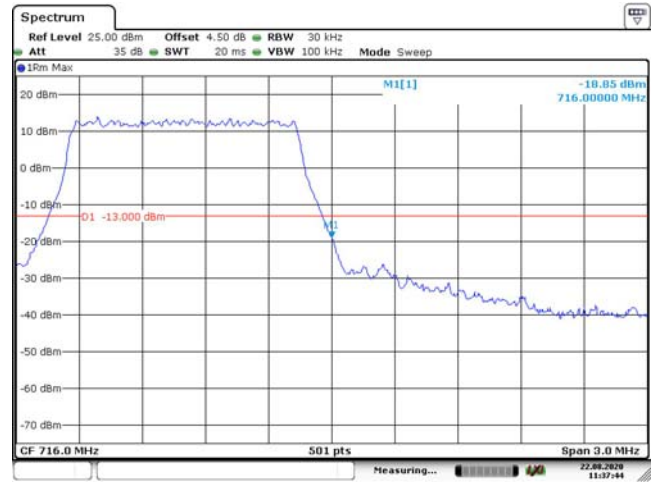
LTE Band 12:

1.4M, QPSK, Left Band Edge



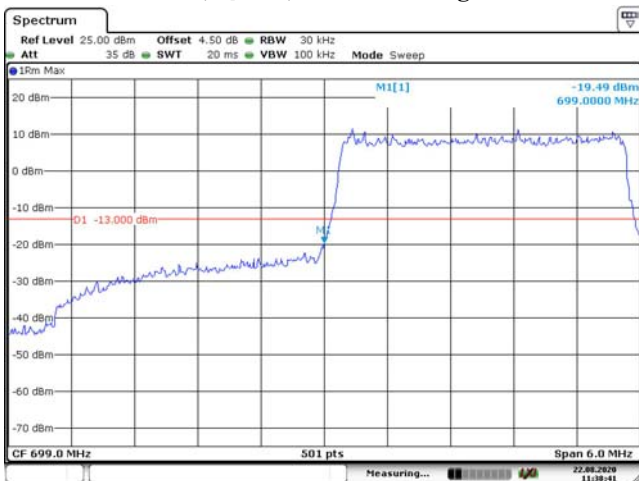
Date: 22.AUG.2020 11:36:36

1.4M, QPSK, Right Band Edge



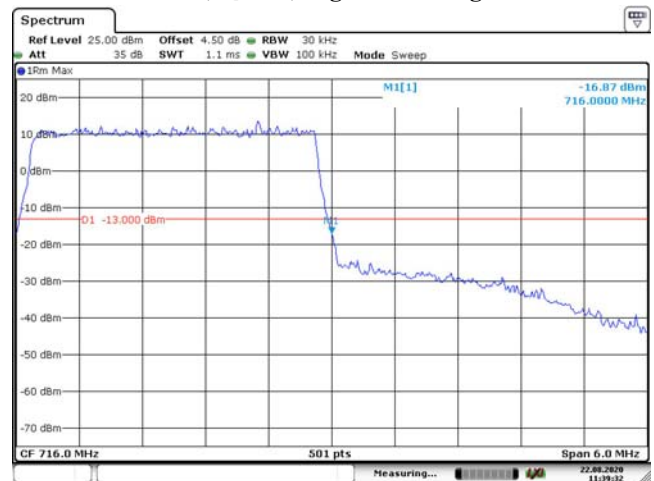
Date: 22.AUG.2020 11:37:44

3M, QPSK, Left Band Edge



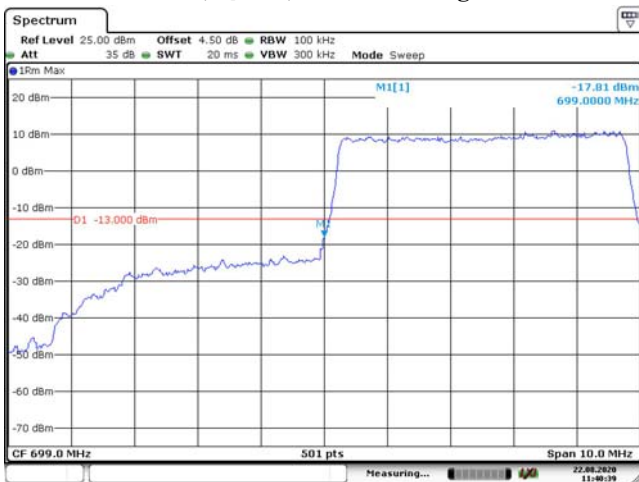
Date: 22.AUG.2020 11:38:41

3M, QPSK, Right Band Edge



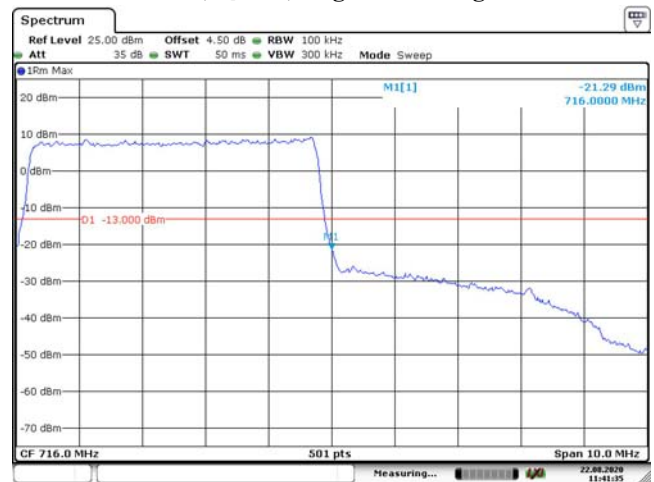
Date: 22.AUG.2020 11:39:32

5M, QPSK, Left Band Edge



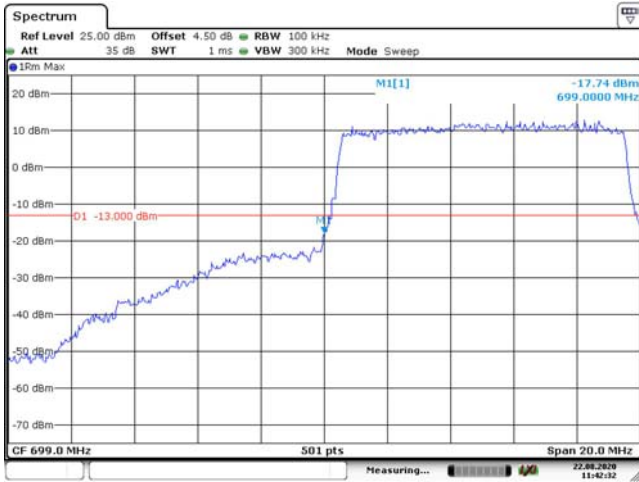
Date: 22.AUG.2020 11:40:39

5M, QPSK, Right Band Edge

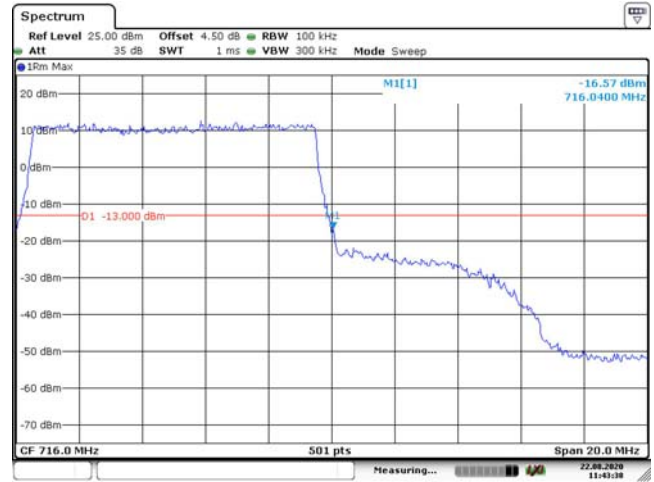


Date: 22.AUG.2020 11:41:35

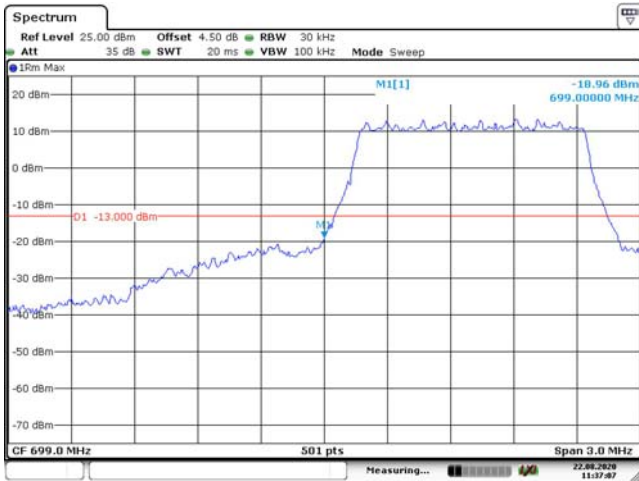
10M, QPSK, Left Band Edge



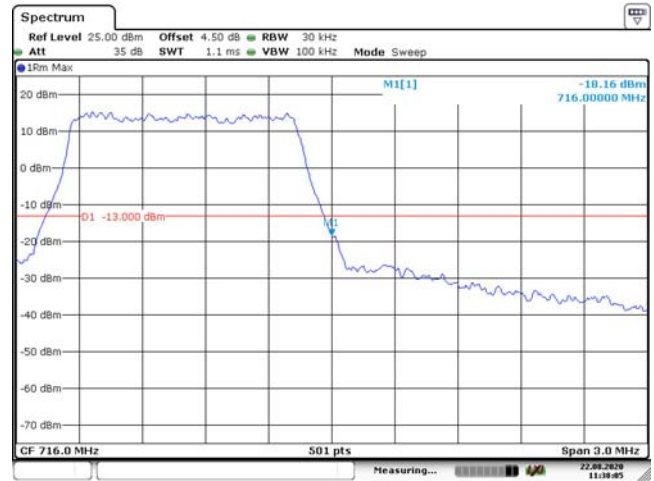
10M, QPSK, Right Band Edge



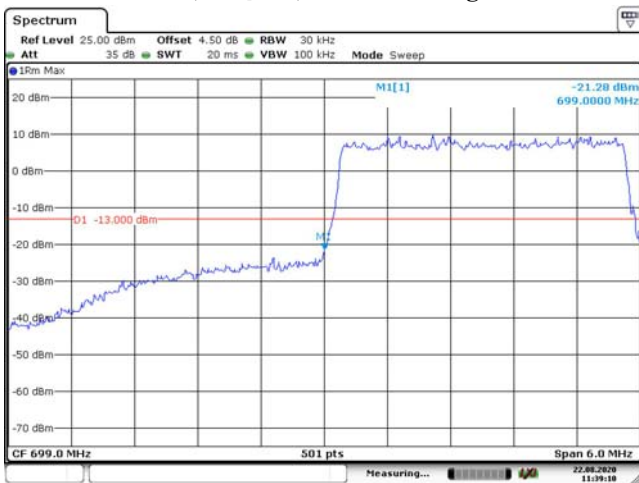
1.4M, 16QAM, Left Band Edge



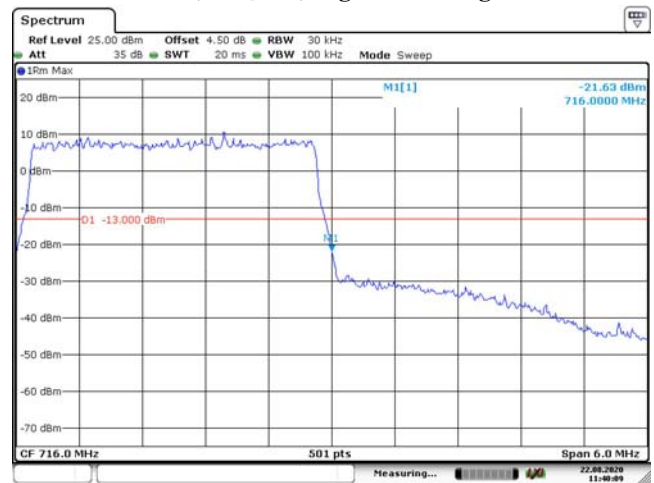
1.4M, 16QAM, Right Band Edge



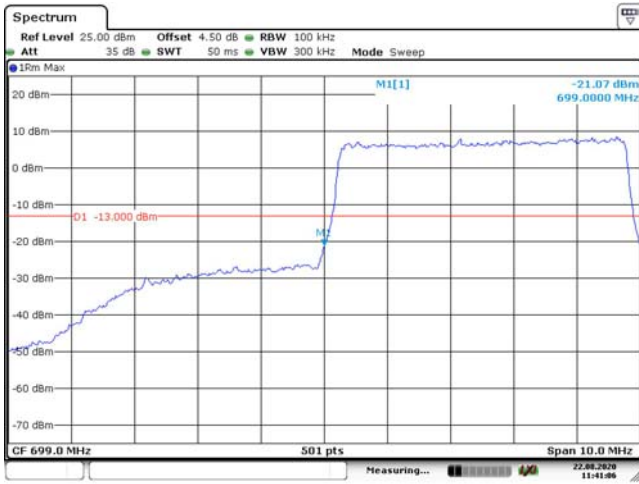
3M, 16QAM, Left Band Edge



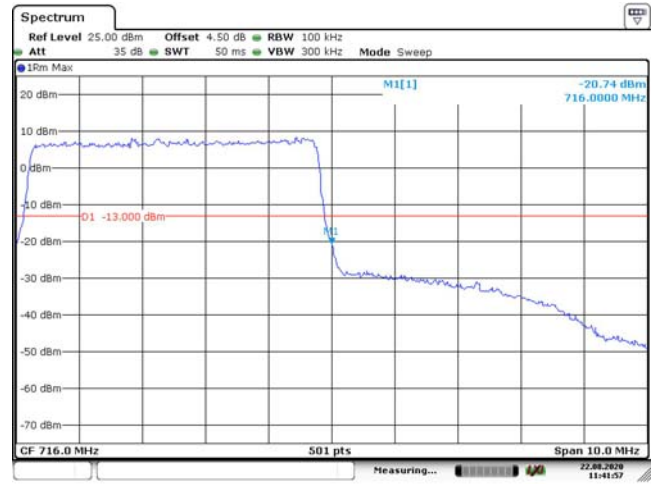
3M, 16QAM, Right Band Edge



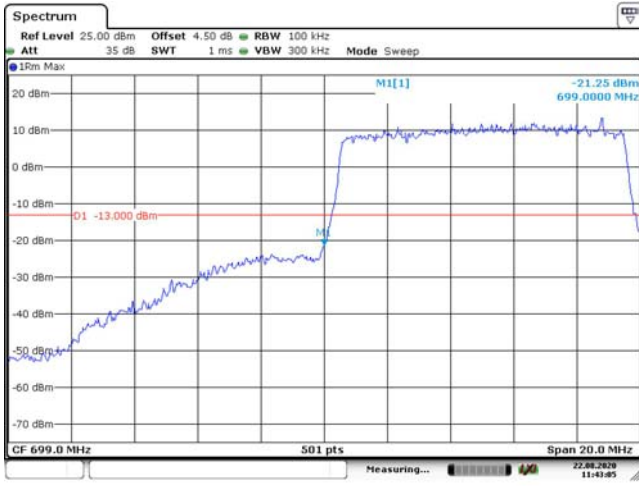
5M, 16QAM, Left Band Edge



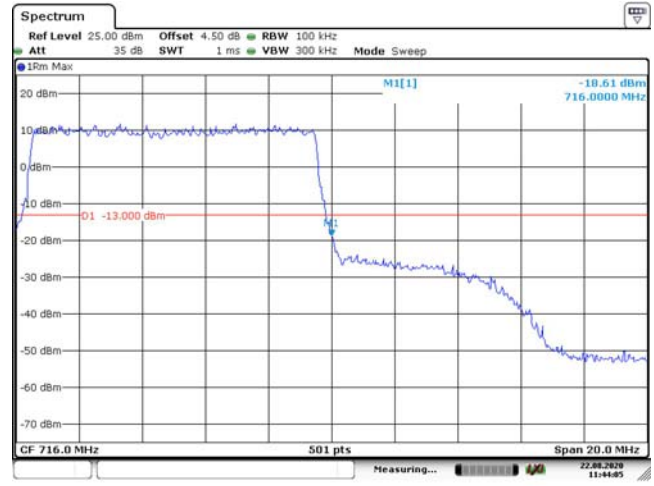
5M, 16QAM, Right Band Edge



10M, 16QAM, Left Band Edge

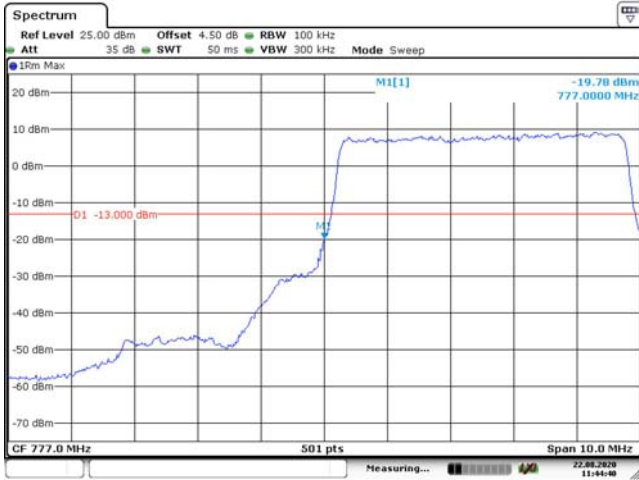


10M, 16QAM, Right Band Edge

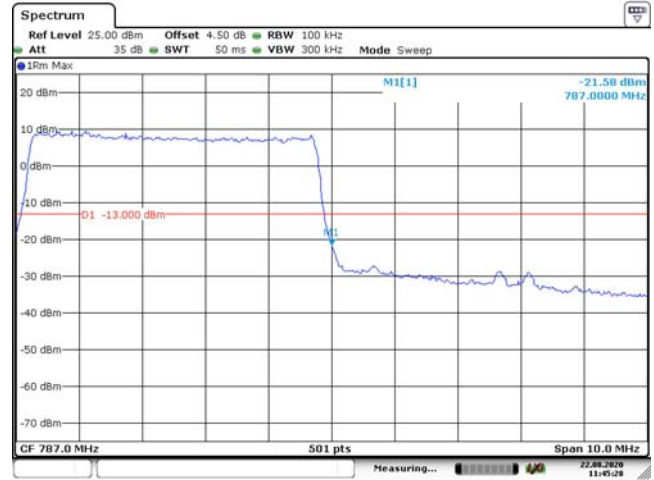


LTE Band 13:

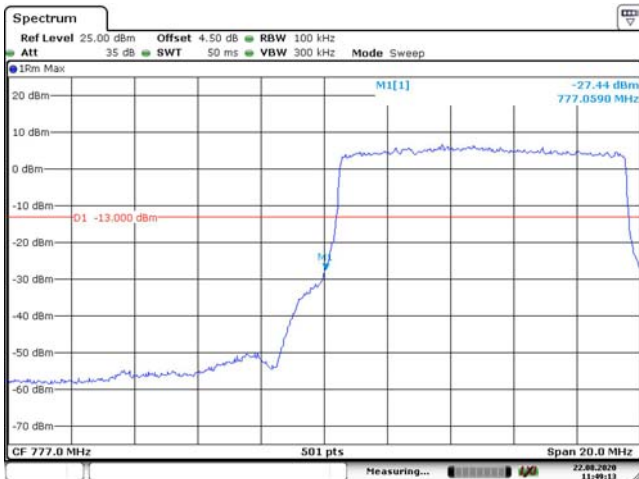
5M, QPSK, Left Band Edge



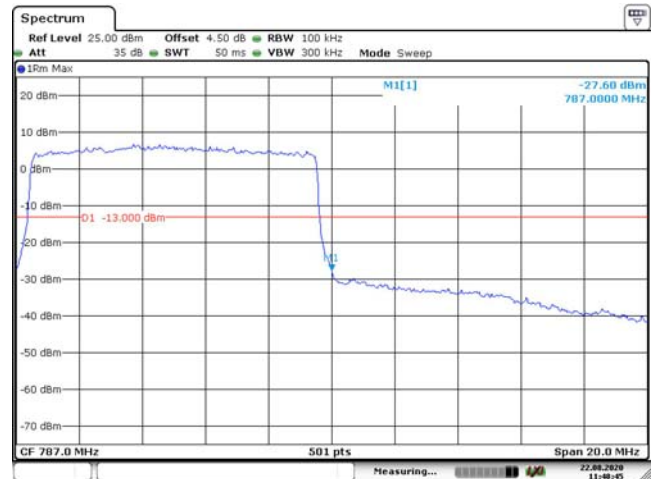
5M, QPSK, Right Band Edge



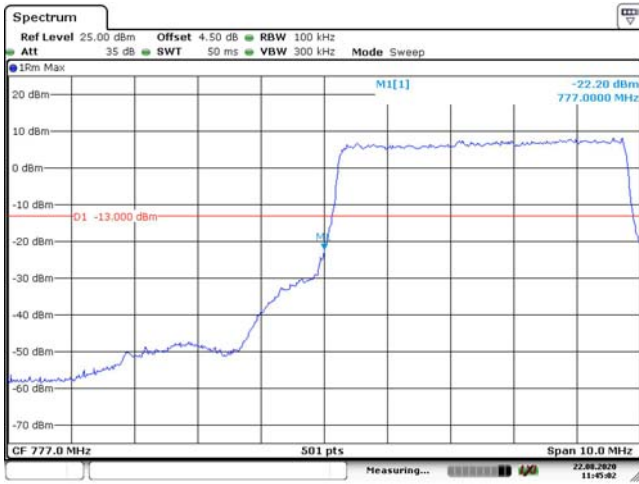
10M, QPSK, Left Band Edge



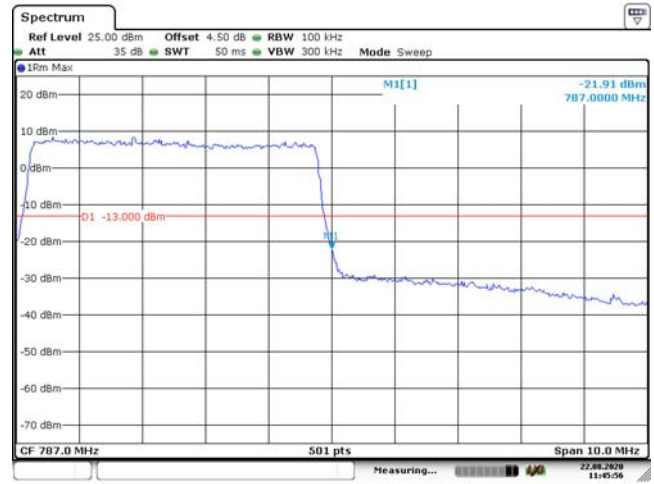
10M, QPSK, Right Band Edge



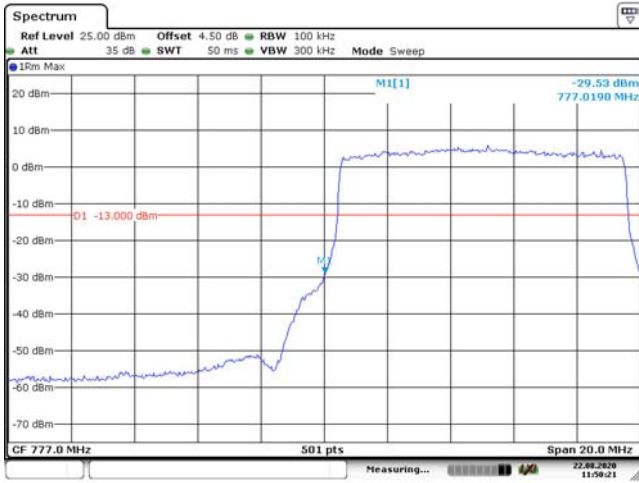
5M, 16QAM, Left Band Edge



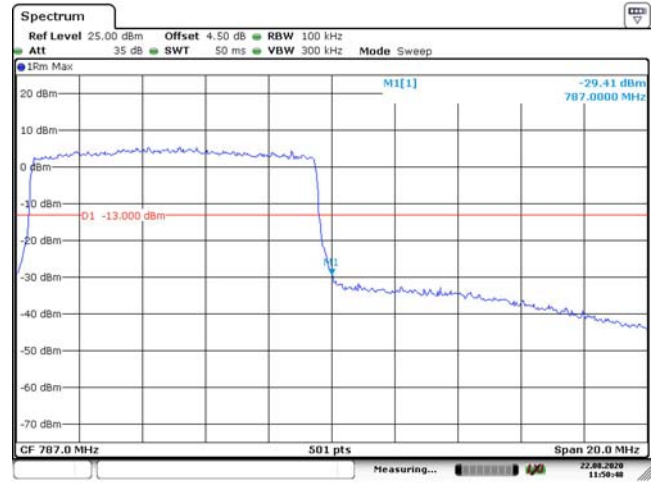
5M, 16QAM, Right Band Edge



10M, 16QAM, Left Band Edge

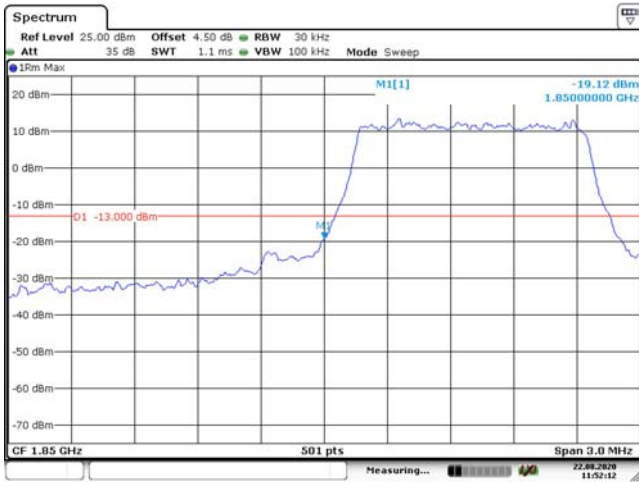


10M, 16QAM, Right Band Edge



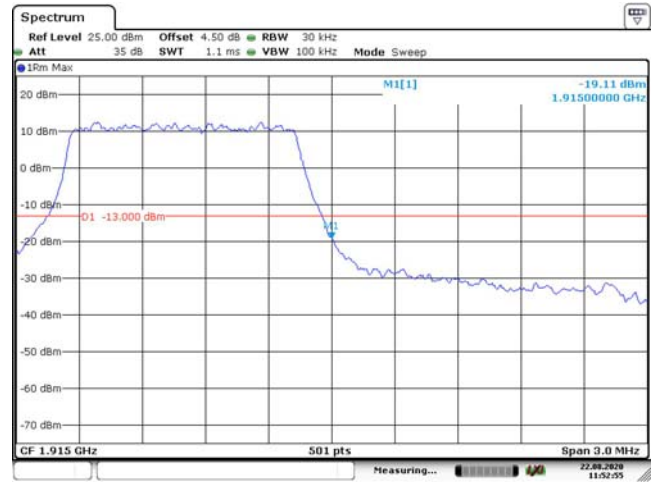
LTE Band 25:

1.4M, QPSK, Left Band Edge



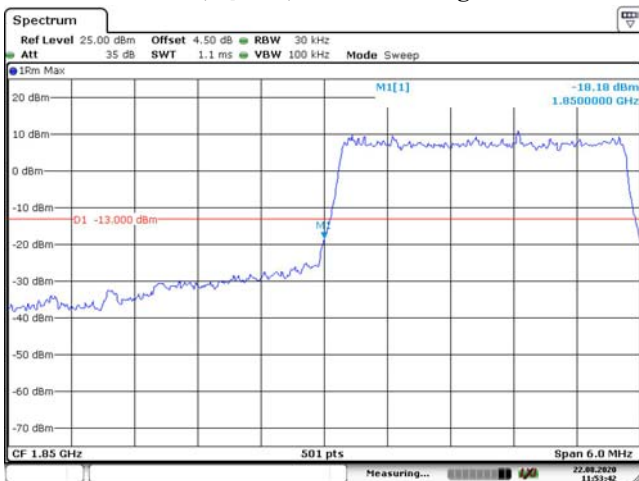
Date: 22.AUG.2020 11:52:12

1.4M, QPSK, Right Band Edge



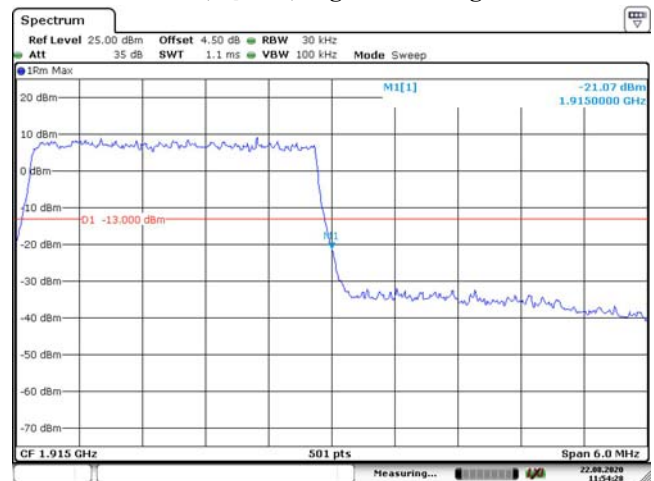
Date: 22.AUG.2020 11:52:55

3M, QPSK, Left Band Edge



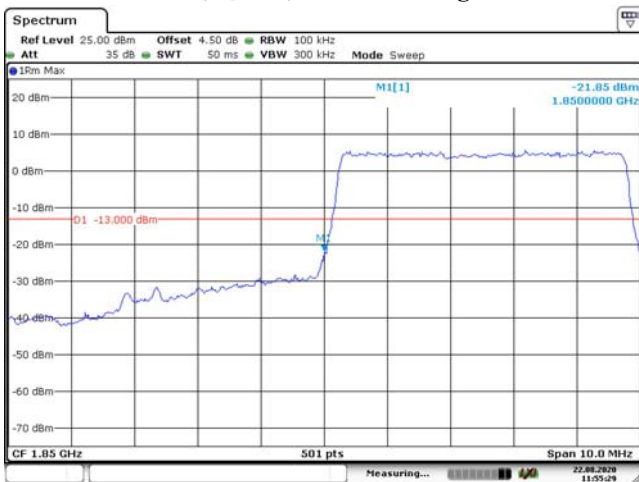
Date: 22.AUG.2020 11:53:42

3M, QPSK, Right Band Edge



Date: 22.AUG.2020 11:54:28

5M, QPSK, Left Band Edge



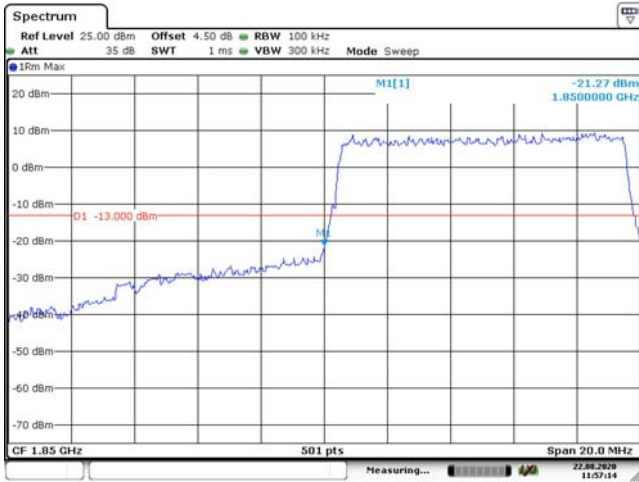
Date: 22.AUG.2020 11:55:29

5M, QPSK, Right Band Edge



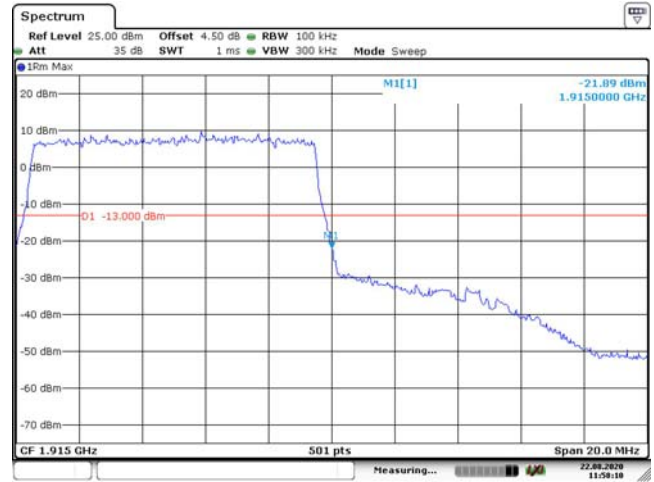
Date: 22.AUG.2020 11:56:22

10M, QPSK, Left Band Edge



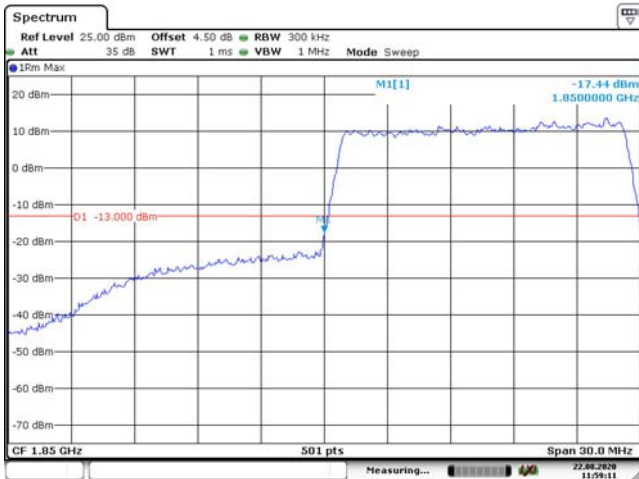
Date: 22.AUG.2020 11:57:14

10M, QPSK, Right Band Edge



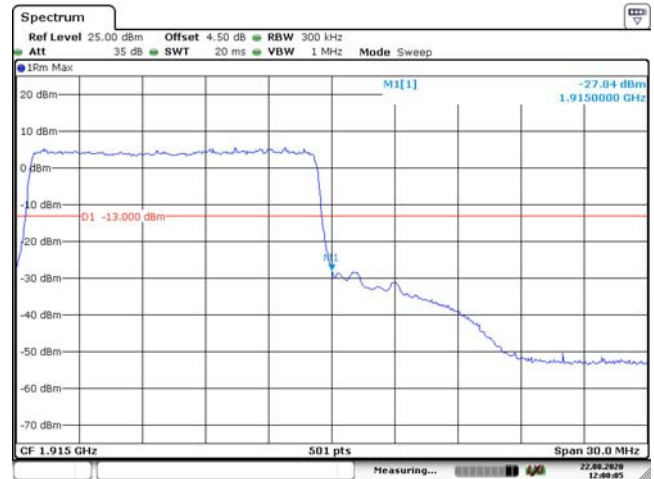
Date: 22.AUG.2020 11:58:10

15M, QPSK, Left Band Edge



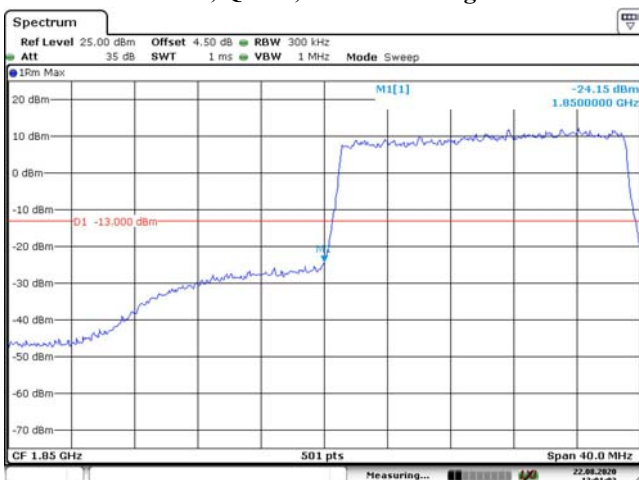
Date: 22.AUG.2020 11:59:11

15M, QPSK, Right Band Edge



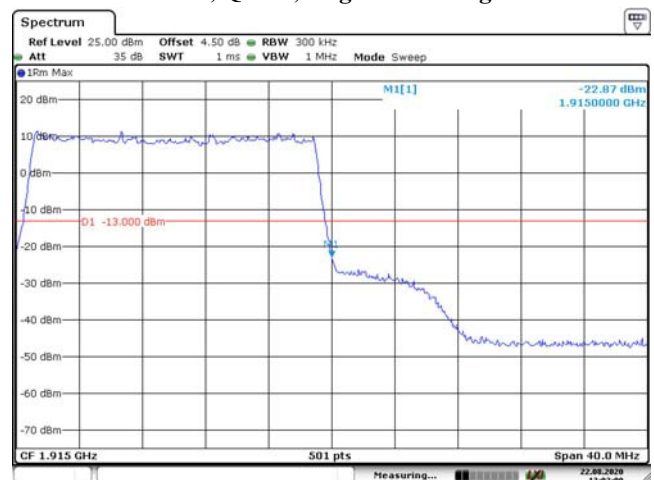
Date: 22.AUG.2020 12:00:05

20M, QPSK, Left Band Edge



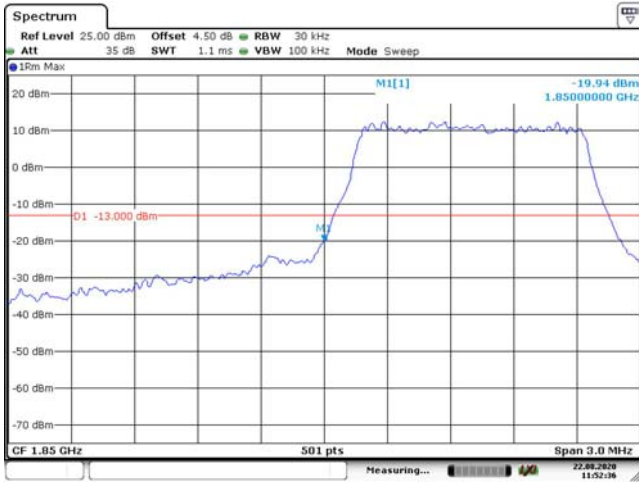
Date: 22.AUG.2020 12:01:03

20M, QPSK, Right Band Edge



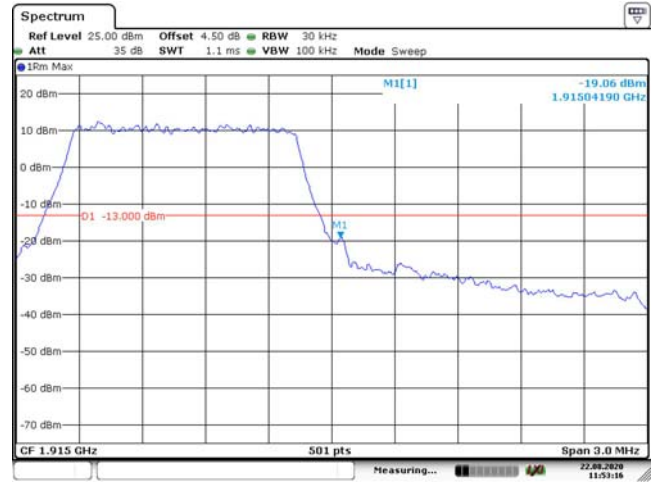
Date: 22.AUG.2020 12:02:00

1.4M, 16QAM, Left Band Edge



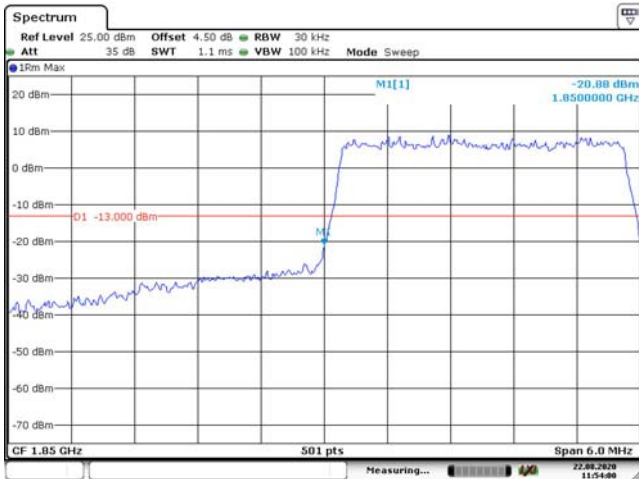
Date: 22.AUG.2020 11:52:36

1.4M, 16QAM, Right Band Edge



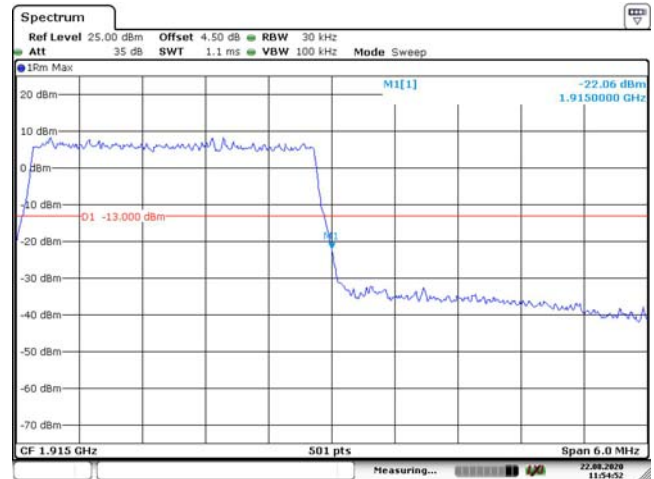
Date: 22.AUG.2020 11:53:16

3M, 16QAM, Left Band Edge



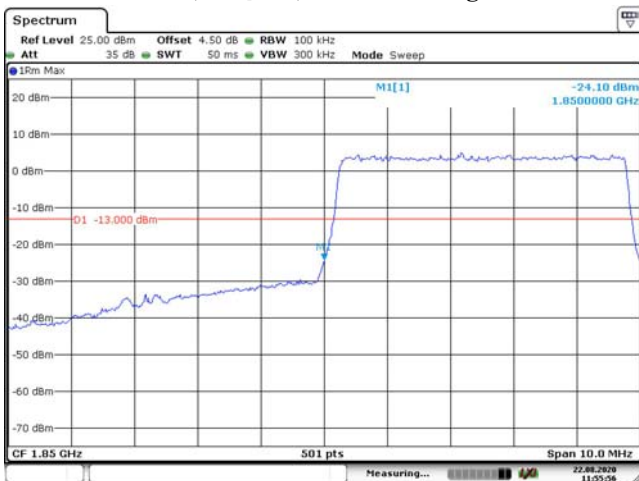
Date: 22.AUG.2020 11:54:00

3M, 16QAM, Right Band Edge



Date: 22.AUG.2020 11:54:52

5M, 16QAM, Left Band Edge



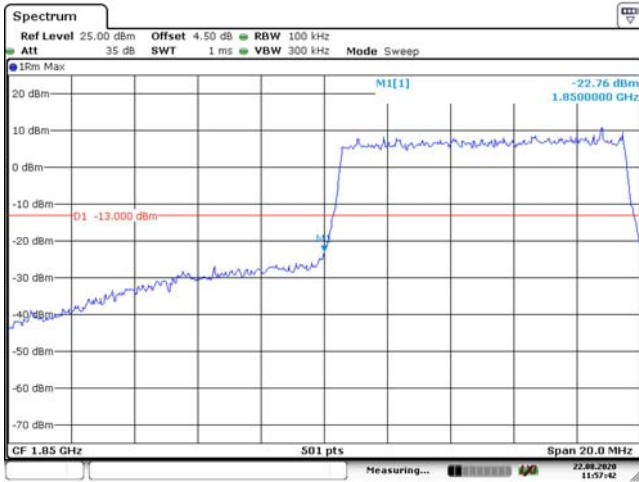
Date: 22.AUG.2020 11:55:56

5M, 16QAM, Right Band Edge



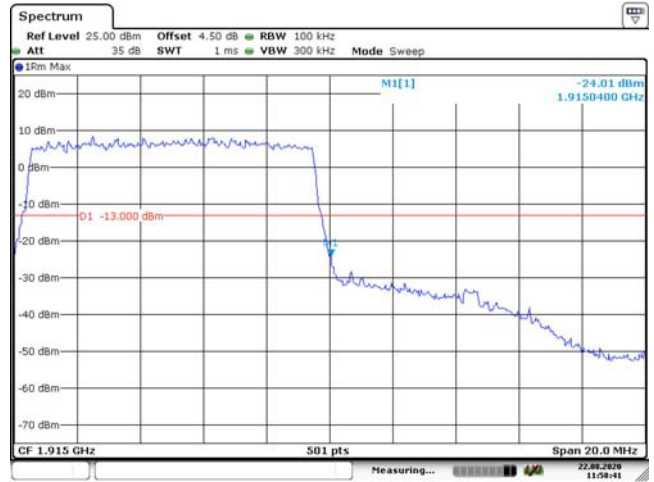
Date: 22.AUG.2020 11:56:46

10M, 16QAM, Left Band Edge



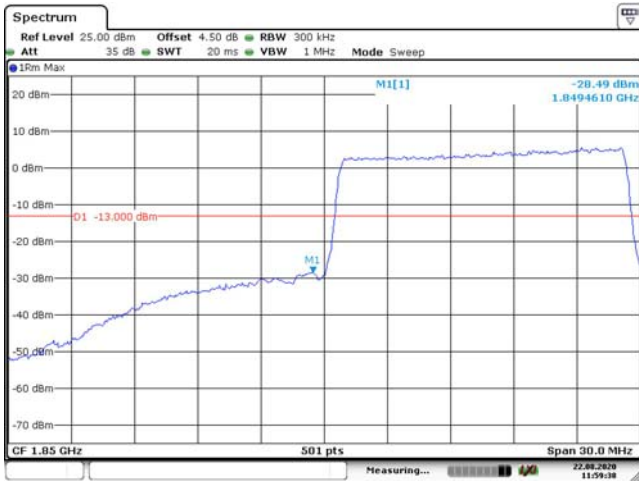
Date: 22.AUG.2020 11:57:42

10M, 16QAM, Right Band Edge



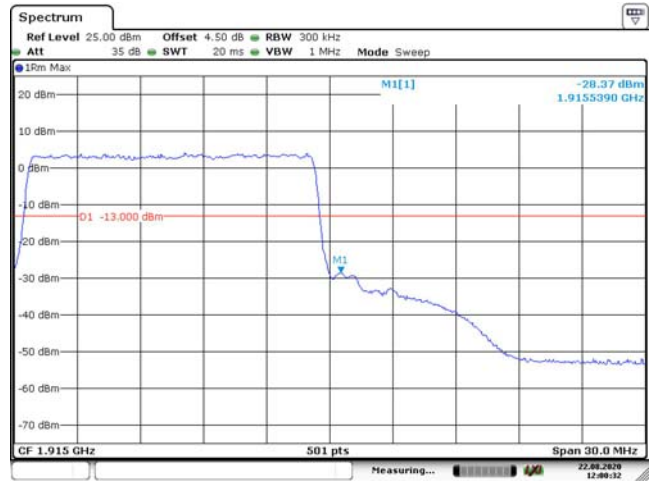
Date: 22.AUG.2020 11:58:41

15M, 16QAM, Left Band Edge



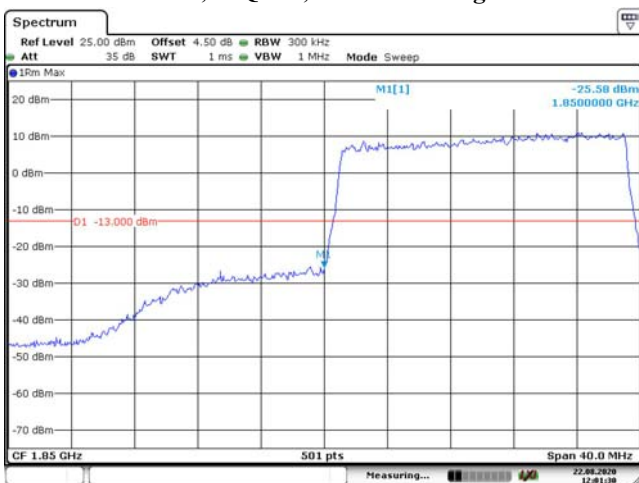
Date: 22.AUG.2020 11:59:37

15M, 16QAM, Right Band Edge



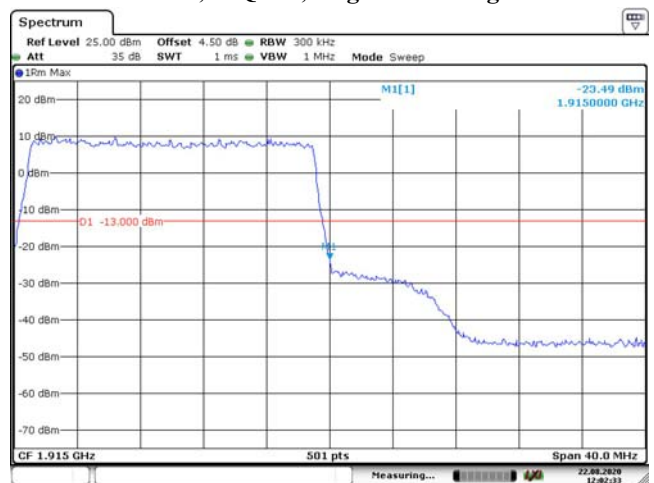
Date: 22.AUG.2020 12:00:32

20M, 16QAM, Left Band Edge



Date: 22.AUG.2020 12:01:29

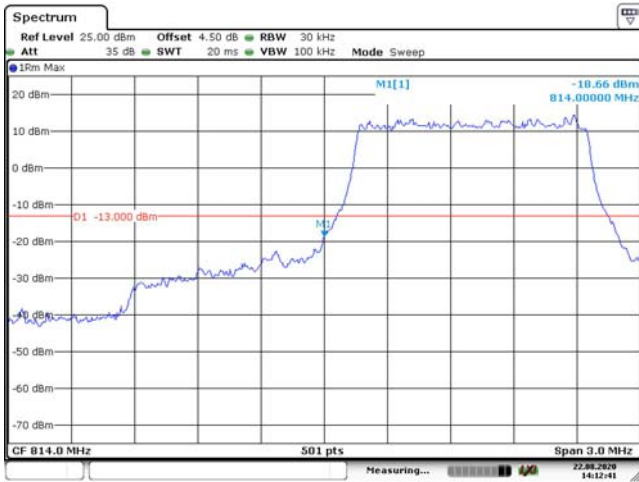
20M, 16QAM, Right Band Edge



Date: 22.AUG.2020 12:02:33

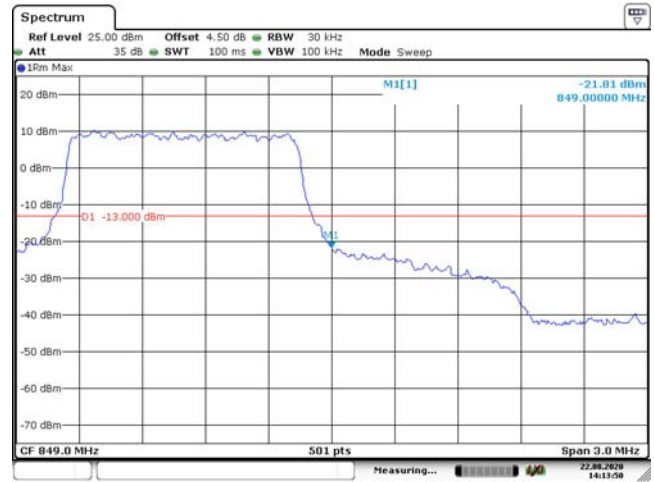
LTE Band 26:

1.4M, QPSK, Left Band Edge



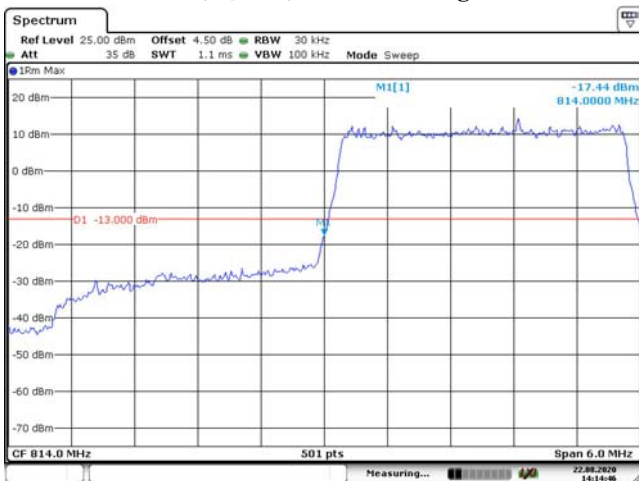
Date: 22.AUG.2020 14:12:41

1.4M, QPSK, Right Band Edge



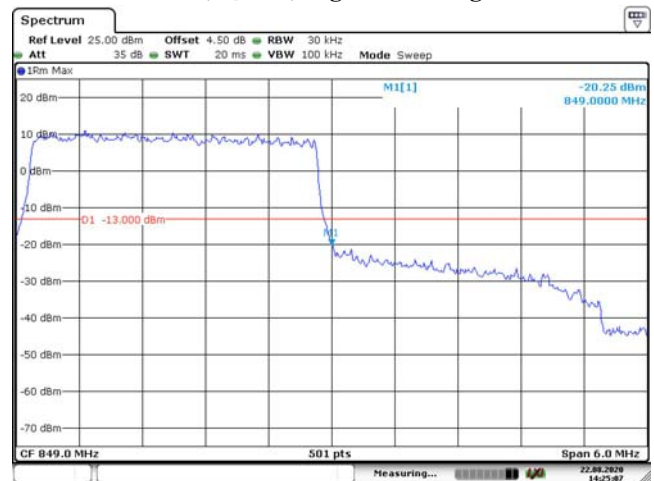
Date: 22.AUG.2020 14:13:50

3M, QPSK, Left Band Edge



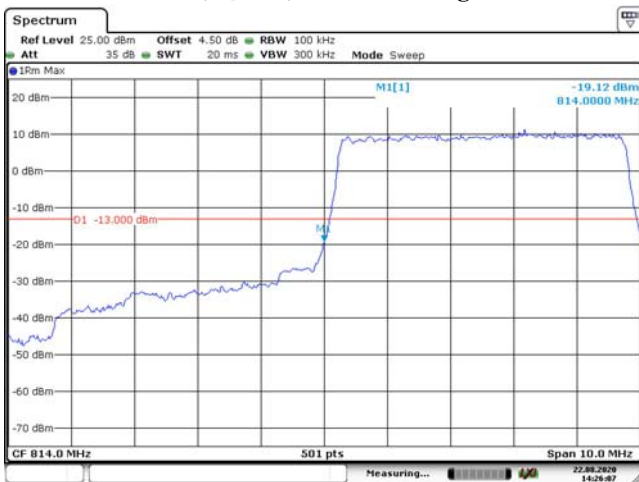
Date: 22.AUG.2020 14:14:46

3M, QPSK, Right Band Edge



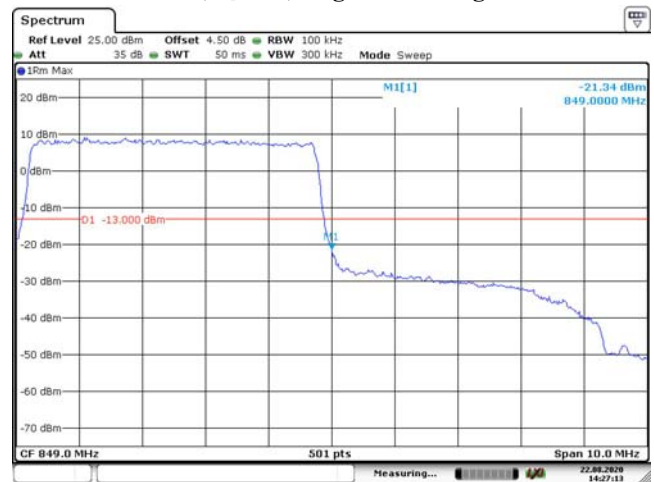
Date: 22.AUG.2020 14:25:07

5M, QPSK, Left Band Edge



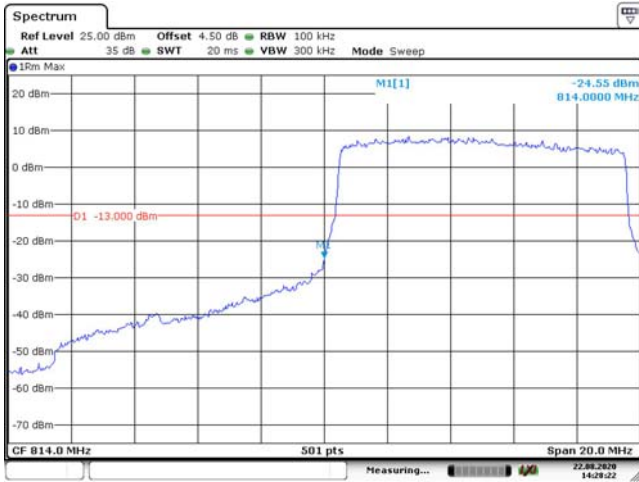
Date: 22.AUG.2020 14:26:07

5M, QPSK, Right Band Edge



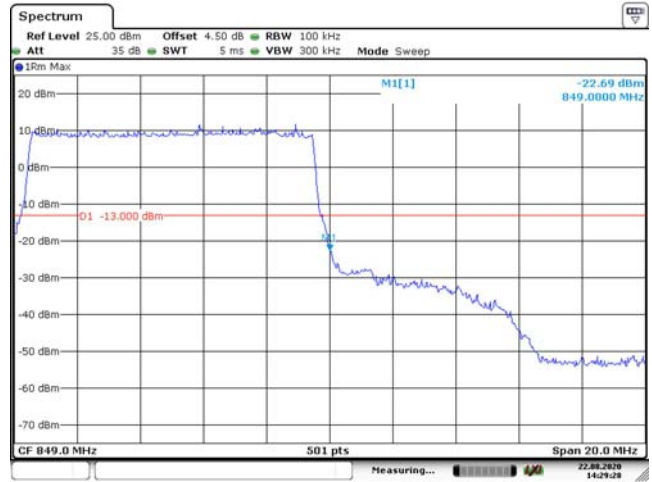
Date: 22.AUG.2020 14:27:13

10M, QPSK, Left Band Edge



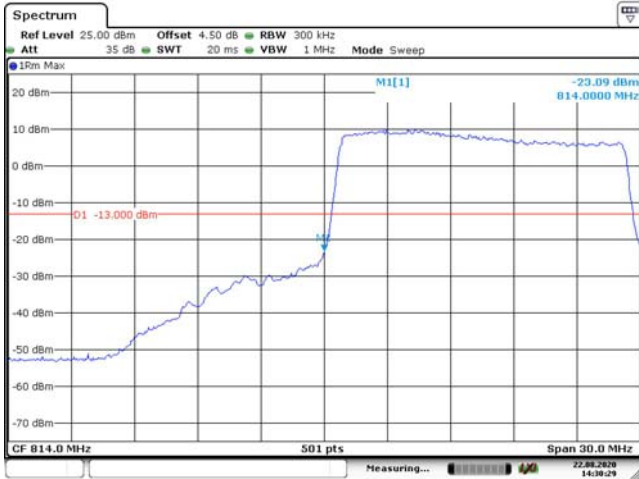
Date: 22.AUG.2020 14:28:22

10M, QPSK, Right Band Edge



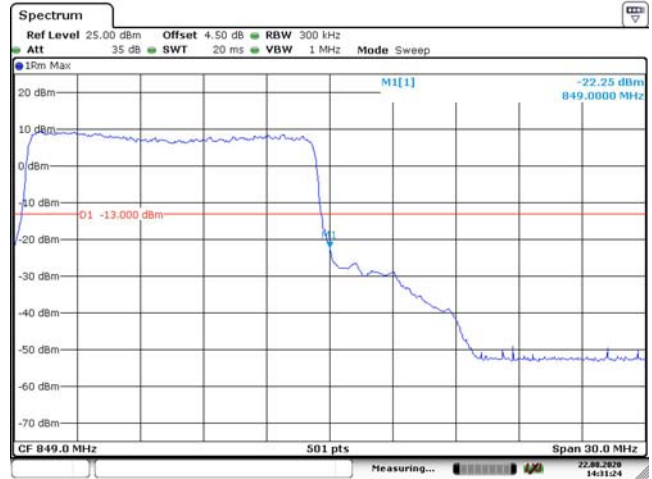
Date: 22.AUG.2020 14:29:28

15M, QPSK, Left Band Edge



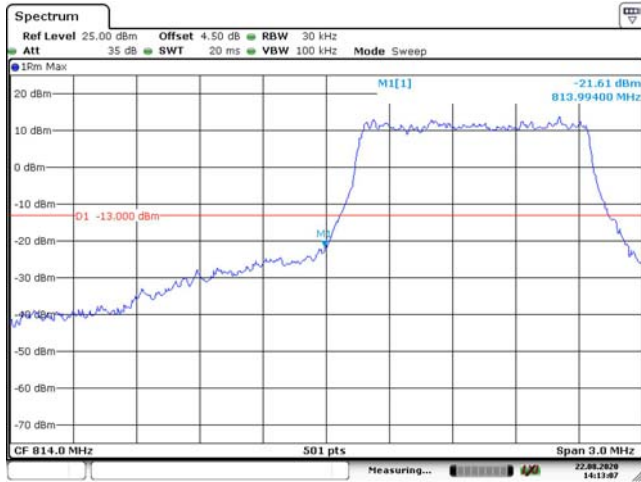
Date: 22.AUG.2020 14:30:30

15M, QPSK, Right Band Edge

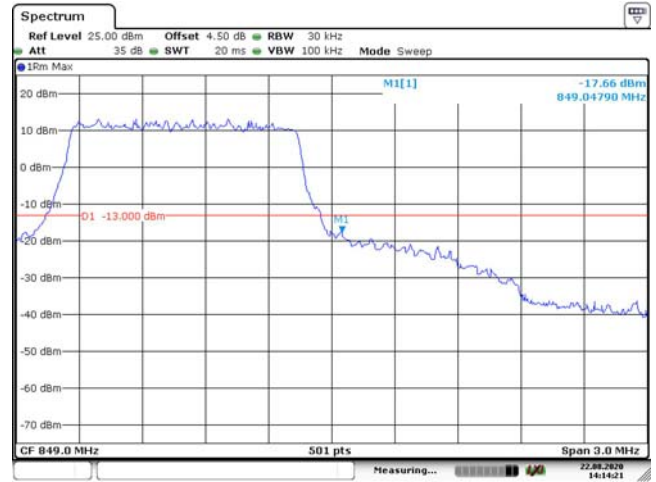


Date: 22.AUG.2020 14:31:24

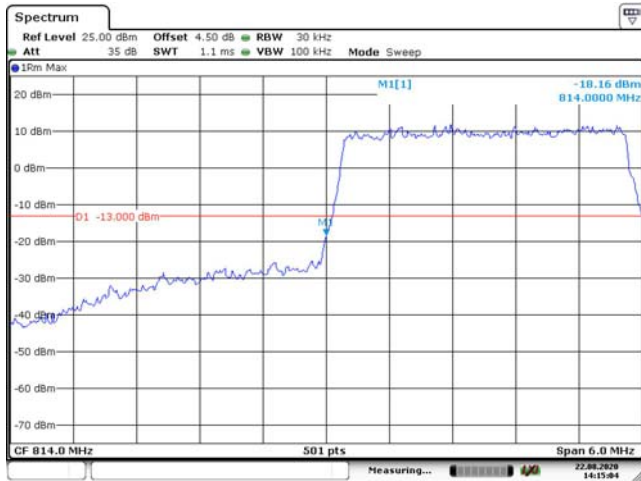
1.4M, 16QAM, Left Band Edge



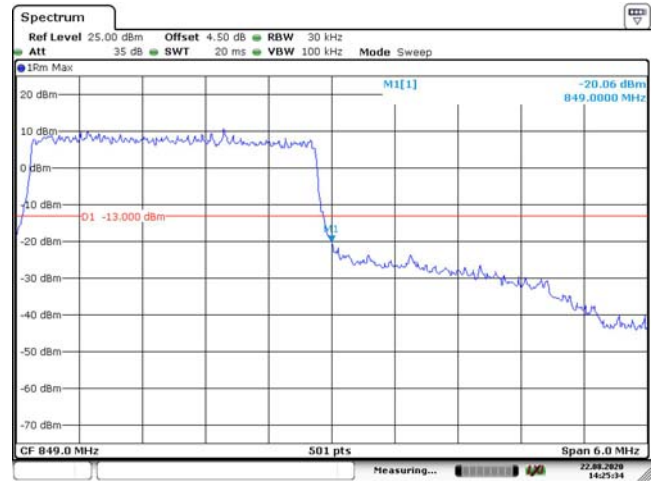
1.4M, 16QAM, Right Band Edge



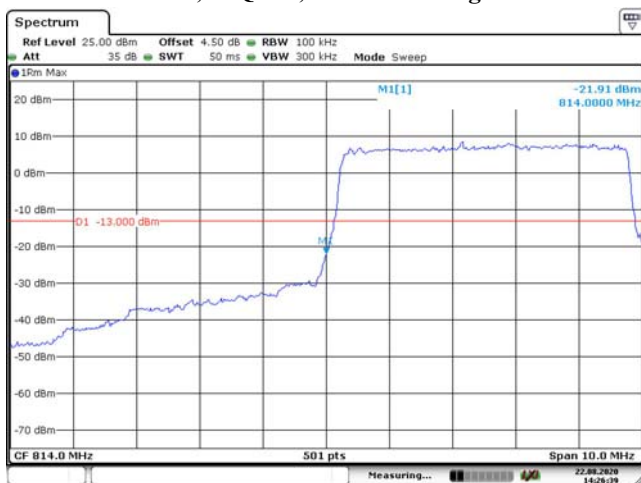
3M, 16QAM, Left Band Edge



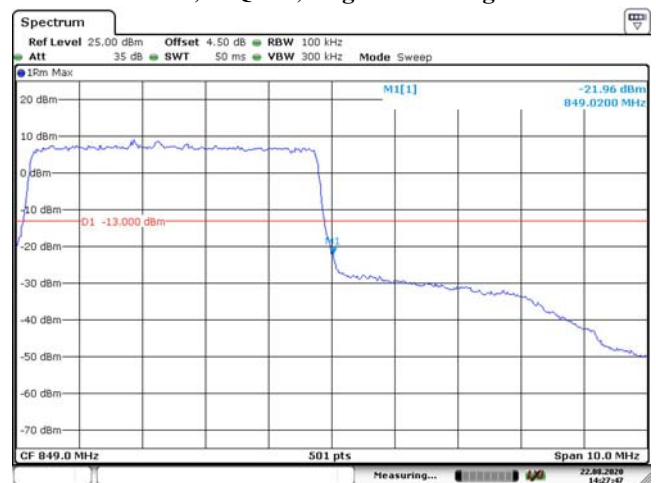
3M, 16QAM, Right Band Edge



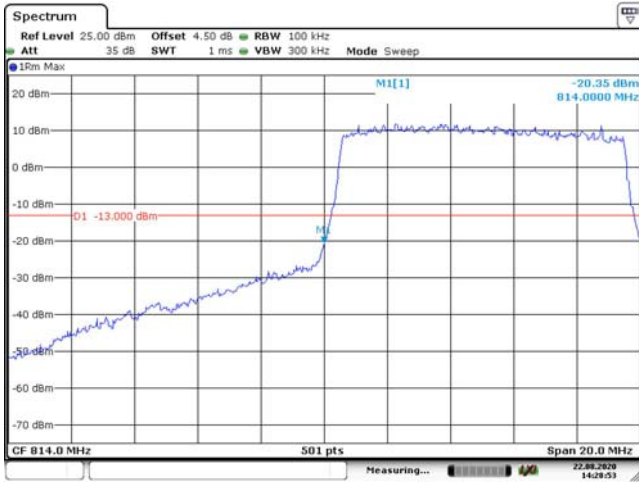
5M, 16QAM, Left Band Edge



5M, 16QAM, Right Band Edge

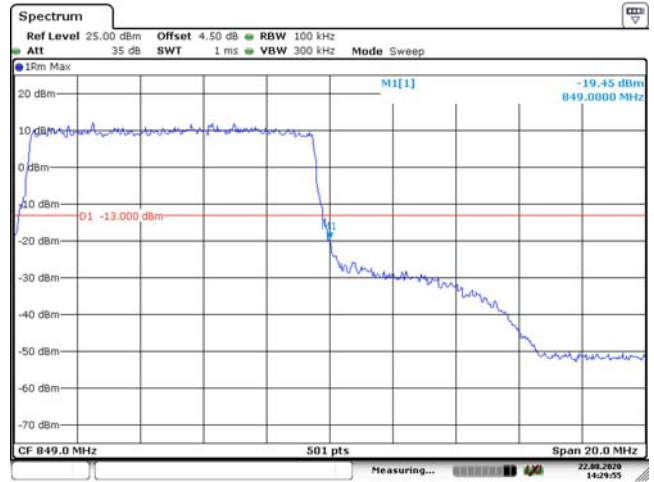


10M, 16QAM, Left Band Edge



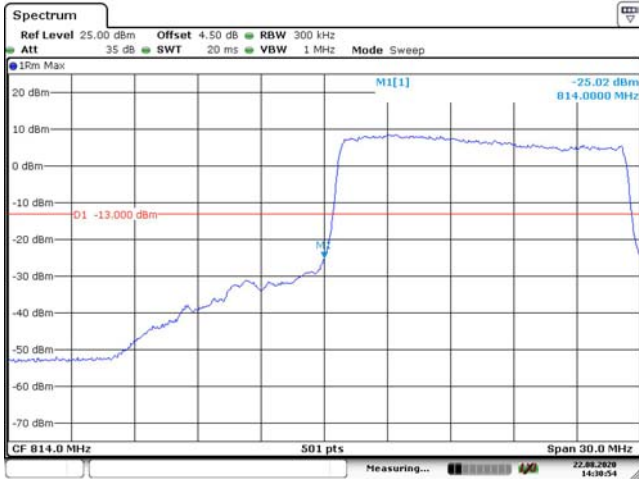
Date: 22.AUG.2020 14:28:53

10M, 16QAM, Right Band Edge



Date: 22.AUG.2020 14:29:55

15M, 16QAM, Left Band Edge



Date: 22.AUG.2020 14:30:54

15M, 16QAM, Right Band Edge



Date: 22.AUG.2020 14:31:51

FCC §2.1055, §22.355 & §24.235 & §27.54 & §90.213 - FREQUENCY STABILITY

Applicable Standard

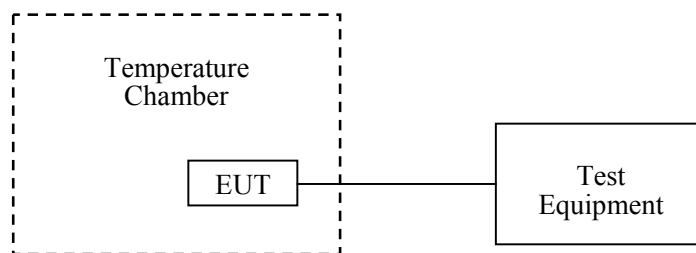
FCC § 2.1055 (a), § 2.1055 (d), §22.355, §24.235, §27.54, §90.213

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	FSU 26	200256	2020-05-09	2021-05-09
yzjingcheng	Coaxial Cable	KTRFBU-141-50	41005011	Each time	/
yzjingcheng	Coaxial Cable	KTRFBU-141-50	41002201	Each Time	/
E-Microwave	Blocking Control	EMDCB-00036	0E01201048	Each time	/
E-Microwave	Coaxial Attenuators	EMCA10-5RN-6	OE01203239	Each time	/
E-Microwave	Two-way Splitter	ODP-1-6-2S	OE0120142	Each Time	/
ESPEC	Constant temperature and humidity Tester	ESX-4CA	018 463	2020-03-10	2021-03-09
UNI-T	Multimeter	UT39A	M130199938	2020-07-24	2021-07-24
Pro instrument	DC Power Supply	pps3300	3300012	N/A	N/A
R&S	Universal Radio Communication Tester	CMU200	106 891	2019-09-12	2020-09-12
R&S	Wideband Radio Communication Tester	CMW500	147473	2019-09-12	2020-09-12

* **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**

Temperature:	27.1~30 °C
Relative Humidity:	54~74 %
ATM Pressure:	99.8~100.8kPa
Tester:	Chris Mo
Test Date:	2020-08.22~2020-08.24

Test Result: Compliance.

WCDMA Band II: R99

Middle Channel, $f_c = 1880.0$ MHz				
Temperature	Voltage	Frequency Error	Frequency Error	Result
°C	V _{DC}	Hz	ppm	
-30	7.4	3	0.00160	Pass
-20		7	0.00372	
-10		10	0.00532	
0		8	0.00426	
10		6	0.00319	
20		2	0.00106	
30		6	0.00319	
40		1	0.00053	
50		9	0.00479	
20		6.4	3	
20	8.4	6	0.00319	

WCDMA Band IV: R99

Power Supplied	Temperature	F _L	Limit	F _H	Limit
Vdc	°C	MHz	MHz	MHz	MHz
7.4	-30	1710.525	1710	1754.558	1755
	-20	1710.517		1754.456	
	-10	1710.897		1754.865	
	0	1710.682		1754.761	
	10	1710.812		1754.743	
	20	1710.849		1754.617	
	30	1710.212		1754.459	
	40	1710.675		1754.636	
	50	1710.491		1754.754	
	6.4	20		1710.587	
8.4	20	1710.846	1754.831		

WCDMA Band V: R99

Frequency (MHz)	Temperature (°C)	Voltage	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
836.6	-30	7.4	2	0.00115	2.5
	-20		8	0.00462	
	-10		1	0.00058	
	0		1	0.00058	
	10		10	0.00577	
	20		3	0.00173	
	30		3	0.00173	
	40		1	0.00058	
	50		0	0.00000	
	20		6.4	4	
	20	8.4	1	0.00058	

LTE Band 2:

QPSK, Channel Bandwidth:10MHz Middle Channel, $f_c = 1880$ MHz				
Temperature	Voltage	Frequency Error	Frequency Error	Result
°C	V_{DC}	Hz	ppm	
-30	7.4	-1.34	-0.0007	Pass
-20		-2.69	-0.0014	
-10		8.50	0.0045	
0		-6.80	-0.0036	
10		3.72	0.002	
20		2.33	0.0012	
30		-1.34	-0.0007	
40		3.18	0.0017	
50		-6.36	-0.0034	
20		6.4	3.48	
20	8.4	-6.78	-0.0036	

16QAM, Channel Bandwidth:10MHz Middle Channel, $f_c = 1880$ MHz				
Temperature	Voltage	Frequency Error	Frequency Error	Result
°C	V_{DC}	Hz	ppm	
-30	7.4	-2.40	-0.0013	Pass
-20		2.91	0.0015	
-10		0.33	0.0002	
0		-0.58	-0.0003	
10		1.44	0.0008	
20		1.15	0.0006	
30		3.74	0.002	
40		10.83	0.0058	
50		0.53	0.0003	
20		6.4	-7.45	
20	8.4	-2.19	-0.0012	

LTE Band 4

QPSK, Channel Bandwidth:10MHz					
Power Supplied	Temperature	F_L	Limit	F_H	Limit
Vdc	°C	MHz	MHz	MHz	MHz
7.4	-30	1710.526700	1710	1754.480400	1755
	-20	1710.519500		1754.465000	
	-10	1710.518900		1754.460300	
	0	1710.521600		1754.455700	
	10	1710.518800		1754.450800	
	20	1710.528900		1754.471100	
	30	1710.524000		1754.473200	
	40	1710.535000		1754.475900	
	50	1710.529600		1754.477800	
6.4	20	1710.538000		1754.468300	
8.4	20	1710.541200		1754.469700	

16QAM, Channel Bandwidth:10MHz					
Power Supplied	Temperature	F_L	Limit	F_H	Limit
Vdc	°C	MHz	MHz	MHz	MHz
7.4	-30	1710.530900	1710	1754.509200	1755
	-20	1710.522900		1754.504800	
	-10	1710.523300		1754.503300	
	0	1710.526900		1754.497500	
	10	1710.518400		1754.490700	
	20	1710.528900		1754.511000	
	30	1710.521300		1754.513500	
	40	1710.530000		1754.515400	
	50	1710.535200		1754.510100	
6.4	20	1710.530000		1754.521300	
8.4	20	1710.536000		1754.511600	

LTE Band 5

QPSK, Channel Bandwidth:10MHz					
Middle Channel, $f_c = 836.5$ MHz					
Temperature	Voltage	Frequency Error	Frequency Error	Limit	
°C	V_{DC}	Hz	ppm	ppm	
-30	7.4	-0.36	-0.0004	2.5	
-20		9.62	0.0115		
-10		-4.85	-0.0058		
0		1.08	0.0013		
10		-7.62	-0.0091		
20		8.60	0.0103		
30		-8.48	-0.0101		
40		9.37	0.0112		
50		-1.99	-0.0024		
20		6.4	-5.67		-0.0068
20		8.4	-1.01		-0.0012

16QAM, Channel Bandwidth:10MHz					
Middle Channel, $f_c = 836.5$ MHz					
Temperature	Voltage	Frequency Error	Frequency Error	Limit	
°C	V_{DC}	Hz	ppm	ppm	
-30	7.4	-1.17	-0.0014	2.5	
-20		-4.64	-0.0055		
-10		-3.39	-0.0041		
0		-4.23	-0.0051		
10		4.23	0.0051		
20		-3.36	-0.004		
30		6.02	0.0072		
40		4.87	0.0058		
50		0.45	0.0005		
20		6.4	3.25		0.0039
20		8.4	-5.08		-0.0061

LTE Band 7:

QPSK, Channel Bandwidth:10MHz					
Temperature	Voltage	Test Result (MHz)		Limit (MHz)	
°C	V _{DC}	F _L	F _H	F _L	F _H
-30	7.4	2500.530900	2569.462200	2500	2570
-20		2500.536100	2569.462600	2500	2570
-10		2500.531700	2569.466700	2500	2570
0		2500.538100	2569.469800	2500	2570
10		2500.533000	2569.470700	2500	2570
20		2500.528900	2569.471100	2500	2570
30		2500.534500	2569.465900	2500	2570
40		2500.528000	2569.472100	2500	2570
50		2500.535600	2569.478800	2500	2570
20		6.4	2500.526500	2569.477700	2500
20	8.4	2500.516600	2569.470300	2500	2570

16QAM, Channel Bandwidth:10MHz					
Temperature	Voltage	Test Result (MHz)		Limit (MHz)	
°C	V _{DC}	F _L	F _H	F _L	F _H
-30	7.4	2500.523300	2569.478900	2500	2570
-20		2500.533900	2569.475900	2500	2570
-10		2500.528700	2569.478700	2500	2570
0		2500.527700	2569.466400	2500	2570
10		2500.530300	2569.467700	2500	2570
20		2500.528900	2569.471100	2500	2570
30		2500.531600	2569.471100	2500	2570
40		2500.522700	2569.467000	2500	2570
50		2500.531800	2569.463300	2500	2570
20		6.4	2500.527900	2569.461900	2500
20	8.4	2500.523800	2569.460000	2500	2570

LTE Band 12:

QPSK, Channel Bandwidth:10MHz					
Temperature	Voltage	Test Result (MHz)		Limit (MHz)	
°C	V _{DC}	F _L	F _H	F _L	F _H
-30	7.4	699.5191	715.519200	699	716
-20		699.5312	715.511600	699	716
-10		699.5384	715.506900	699	716
0		699.5315	715.507500	699	716
10		699.5319	715.508700	699	716
20		699.528900	715.511000	699	716
30		699.529400	715.501000	699	716
40		699.530300	715.513000	699	716
50		699.526800	715.512200	699	716
20		6.4	699.537500	715.517200	699
20	8.4	699.541200	715.513100	699	716

16QAM, Channel Bandwidth:10MHz					
Temperature	Voltage	Test Result (MHz)		Limit (MHz)	
°C	V _{DC}	F _L	F _H	F _L	F _H
-30	7.4	699.559400	715.520200	699	716
-20		699.564700	715.503500	699	716
-10		699.572300	715.512300	699	716
0		699.568500	715.494300	699	716
10		699.567100	715.487800	699	716
20		699.568900	715.511000	699	716
30		699.577100	715.511100	699	716
40		699.574800	715.507100	699	716
50		699.573700	715.513800	699	716
20		6.4	699.568000	715.516300	699
20	8.4	699.572200	715.523900	699	716

LTE Band 13:

QPSK, Channel Bandwidth:10MHz					
Temperature	Voltage	Test Result (MHz)		Limit (MHz)	
°C	V _{DC}	F _L	F _H	F _L	F _H
-30	7.4	777.533400	786.470500	777	787
-20		777.535800	786.464200	777	787
-10		777.535500	786.457600	777	787
0		777.538600	786.464000	777	787
10		777.542600	786.468900	777	787
20		777.528900	786.471100	777	787
30		777.527200	786.476100	777	787
40		777.528800	786.462700	777	787
50		777.536200	786.465000	777	787
20		6.4	777.535500	786.472100	777
20	8.4	777.531800	786.469500	777	787

16QAM, Channel Bandwidth:10MHz					
Temperature	Voltage	Test Result (MHz)		Limit (MHz)	
°C	V _{DC}	F _L	F _H	F _L	F _H
-30	7.4	777.577000	786.462400	777	787
-20		777.574200	786.462300	777	787
-10		777.577700	786.457200	777	787
0		777.569800	786.455300	777	787
10		777.570600	786.449000	777	787
20		777.568900	786.471100	777	787
30		777.564500	786.466300	777	787
40		777.562300	786.470100	777	787
50		777.554600	786.471800	777	787
20		6.4	777.556100	786.474100	777
20	8.4	777.564700	786.465800	777	787

LTE Band 25:

QPSK, Channel Bandwidth:10MHz				
Middle Channel, $f_c = 1882.5$ MHz				
Temperature	Voltage	Frequency Error	Frequency Error	Result
°C	V_{DC}	Hz	ppm	
-30	7.4	1.34	0.0016	Pass
-20		2.56	0.0031	
-10		-1.43	-0.0017	
0		8.36	0.01	
10		-3.84	-0.0046	
20		-6.46	-0.0077	
30		-5.59	-0.0067	
40		8.00	0.0096	
50		9.97	0.0119	
20		6.4	-3.65	
20	8.4	1.86	0.0022	

16QAM, Channel Bandwidth:10MHz				
Middle Channel, $f_c = 1882.5$ MHz				
Temperature	Voltage	Frequency Error	Frequency Error	Result
°C	V_{DC}	Hz	ppm	
-30	7.4	1.19	0.0014	Pass
-20		5.08	0.0061	
-10		-4.35	-0.0052	
0		5.94	0.0071	
10		-6.51	-0.0078	
20		-3.05	-0.0036	
30		1.62	0.0019	
40		-8.46	-0.0101	
50		-7.16	-0.0086	
20		6.4	-1.17	
20	8.4	-8.31	-0.0099	

LTE Band 26:

Middle Channel, $f_c = 831.5$ MHz, Channel Bandwidth:10MHz				
Temperature	Voltage	Frequency Error	Frequency Error	Limit
°C	V _{DC}	Hz	ppm	ppm
-30	7.4	-8.02	-0.0096	2.5
-20		-9.03	-0.0109	
-10		9.69	0.0117	
0		-8.93	-0.0107	
10		-8.17	-0.0098	
20		-7.27	-0.0087	
30		-7.81	-0.0094	
40		5.79	0.007	
50		6.72	0.0081	
20	6.4	-0.66	-0.0008	
20	8.4	-9.36	-0.0113	

Middle Channel, $f_c = 831.5$ MHz, Channel Bandwidth:10MHz				
Temperature	Voltage	Frequency Error	Frequency Error	Limit
°C	V _{DC}	Hz	ppm	ppm
-30	7.4	9.66	0.0116	2.5
-20		-8.32	-0.01	
-10		-0.93	-0.0011	
0		7.62	0.0092	
10		6.80	0.0082	
20		5.24	0.0063	
30		-6.54	-0.0079	
40		-6.81	-0.0082	
50		5.40	0.0065	
20	6.4	-7.99	-0.0096	
20	8.4	-9.44	-0.0114	

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 *******