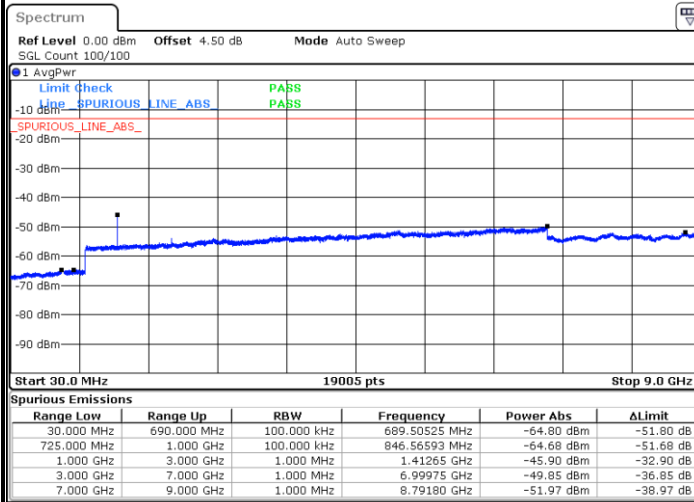




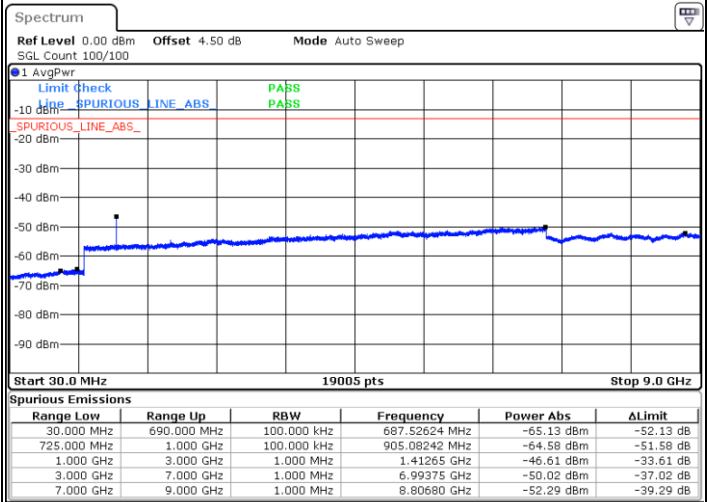
LTE Band 12 / 3MHz

Middle Channel / QPSK



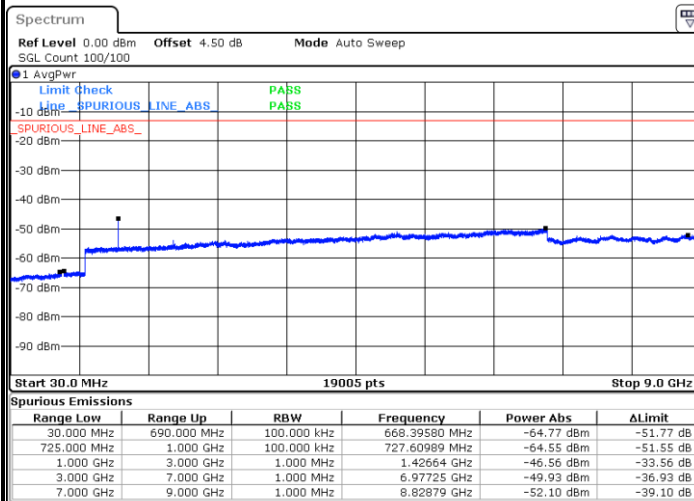
Date: 4 DEC. 2019 15:57:33

Middle Channel / 16QAM



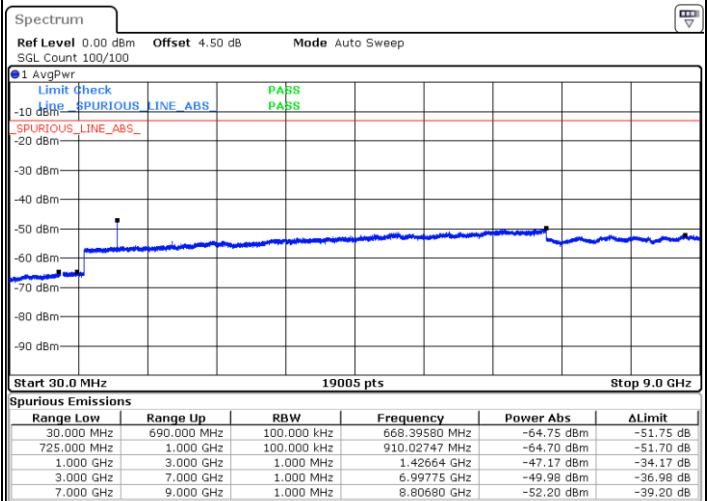
Date: 4 DEC. 2019 15:56:39

Highest Channel / QPSK



Date: 4 DEC. 2019 15:58:27

Highest Channel / 16QAM

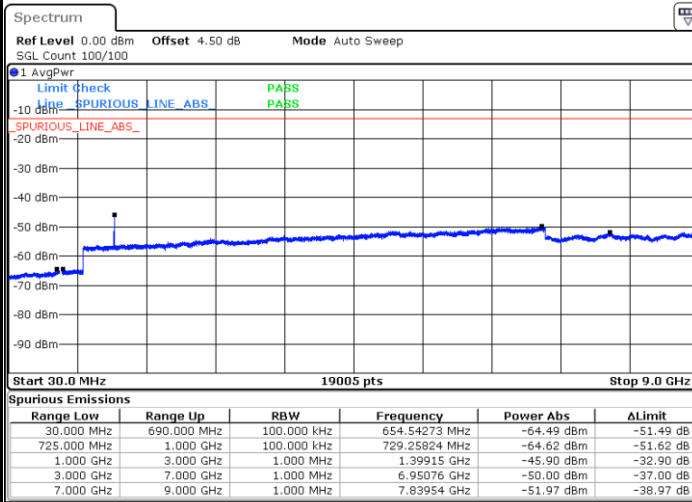


Date: 4 DEC. 2019 15:59:21



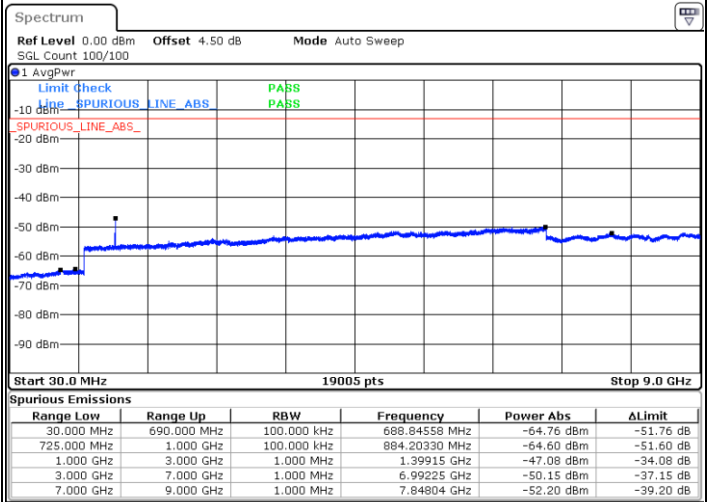
LTE Band 12 / 5MHz

Lowest Channel / QPSK



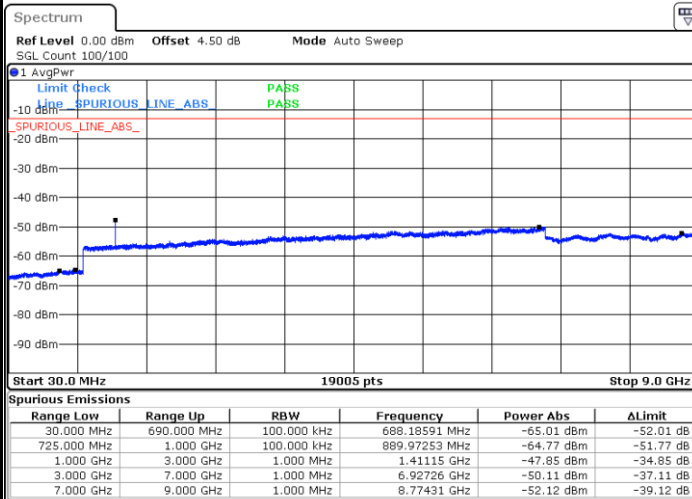
Date: 4 DEC. 2019 16:11:15

Lowest Channel / 16QAM



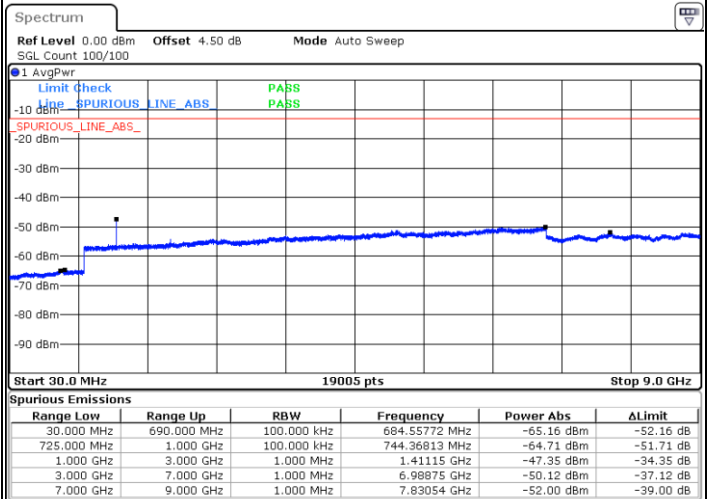
Date: 4 DEC. 2019 16:12:09

Middle Channel / QPSK



Date: 4 DEC. 2019 16:13:58

Middle Channel / 16QAM

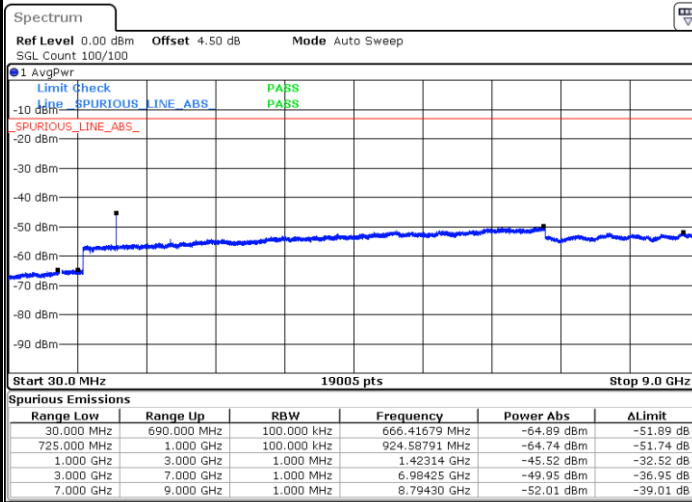


Date: 4 DEC. 2019 16:13:03



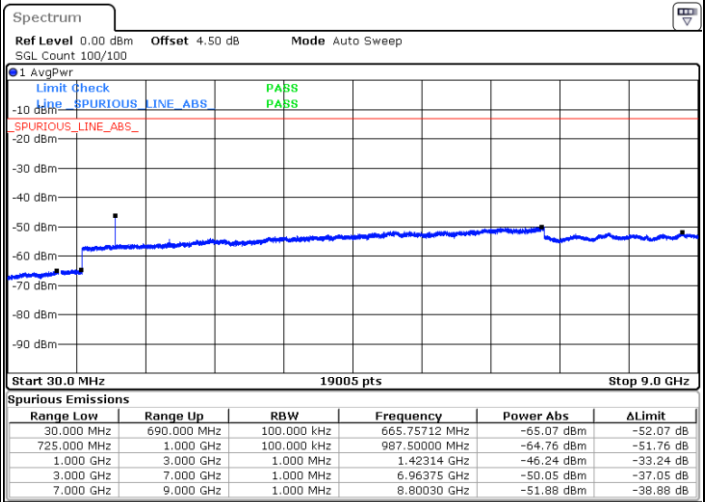
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 4 DEC. 2019 16:14:52

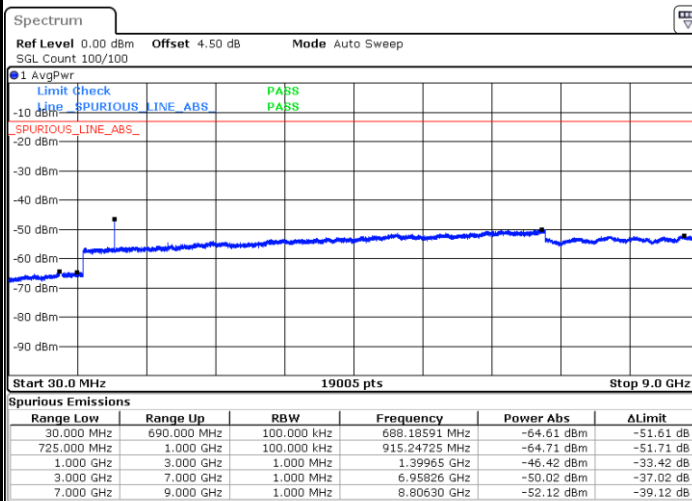
Highest Channel / 16QAM



Date: 4 DEC. 2019 16:15:46

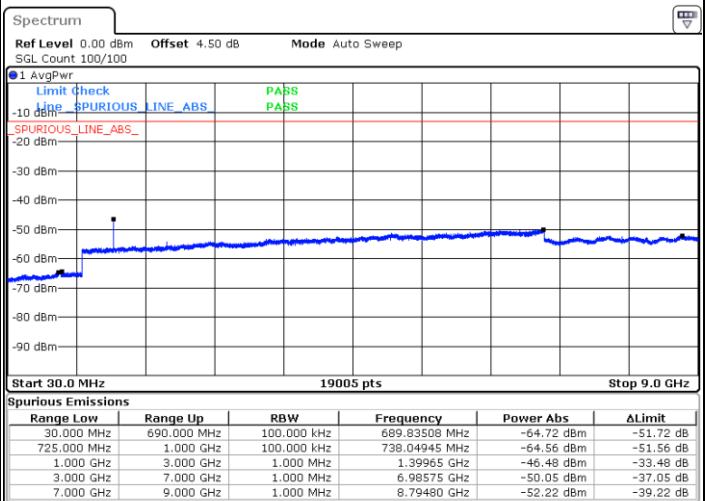
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 4 DEC. 2019 16:27:39

Lowest Channel / 16QAM

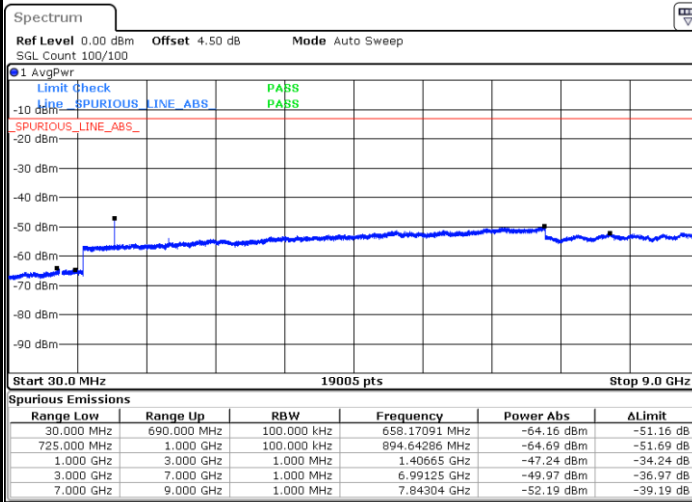


Date: 4 DEC. 2019 16:28:34



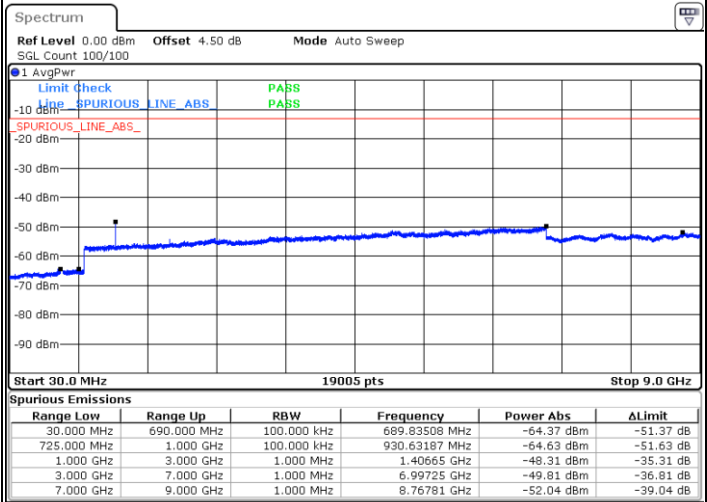
LTE Band 12 / 10MHz

Middle Channel / QPSK



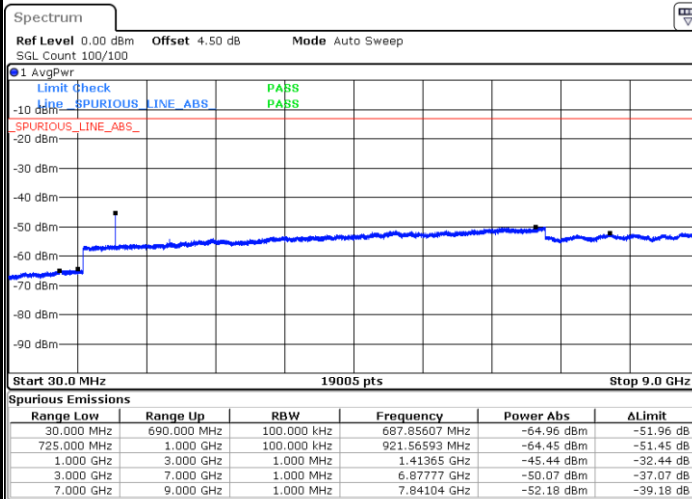
Date: 4 DEC. 2019 16:30:22

Middle Channel / 16QAM



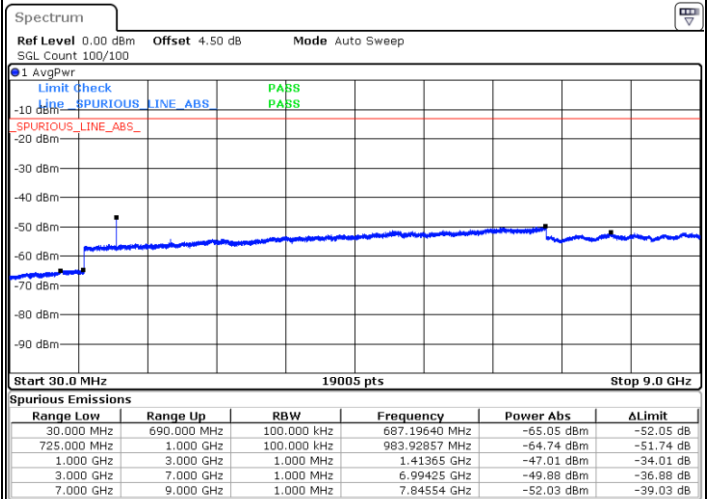
Date: 4 DEC. 2019 16:29:28

Highest Channel / QPSK



Date: 4 DEC. 2019 16:31:16

Highest Channel / 16QAM



Date: 4 DEC. 2019 16:32:10

**Frequency Stability**

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0021	PASS
40	Normal Voltage	0.0034	
30	Normal Voltage	0.0070	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0082	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0036	
-30	Normal Voltage	0.0048	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0027	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

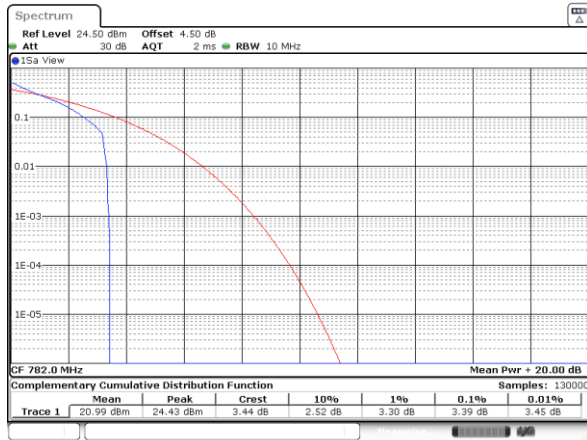
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH					PASS
Middle CH	3.39	4.49	4.84	5.74	
Highest CH					

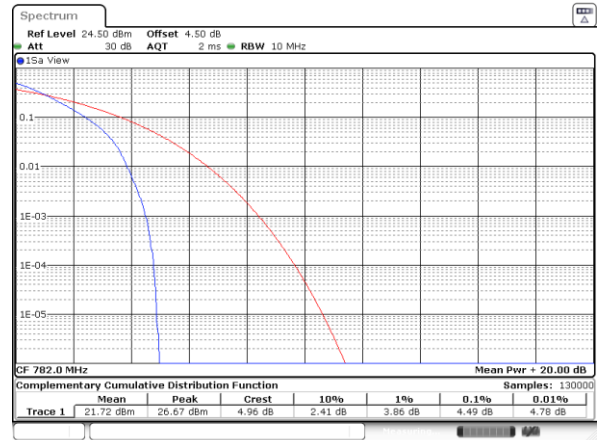


LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB

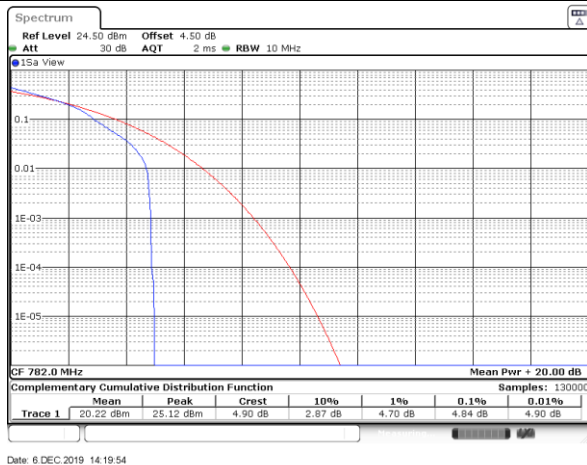


Middle Channel / Full RB

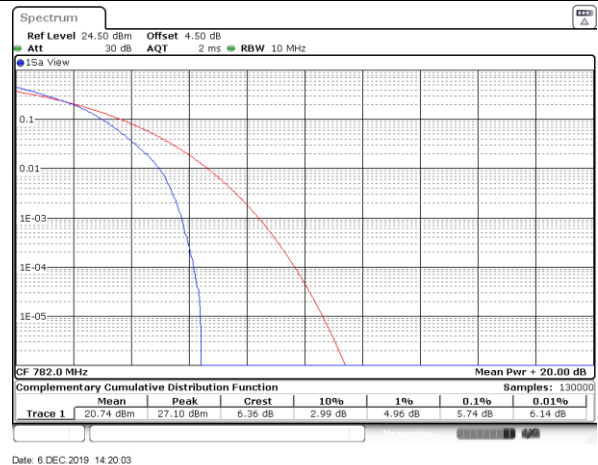


LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Middle Channel / Full RB





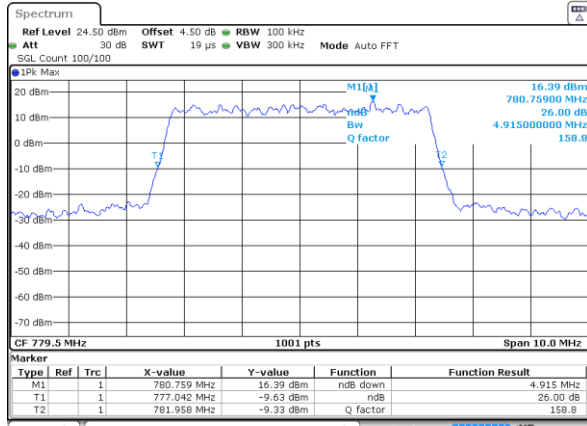
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH					4.915	4.895						
Middle CH					4.875	4.875	9.85	9.97				
Highest CH					4.925	4.935						

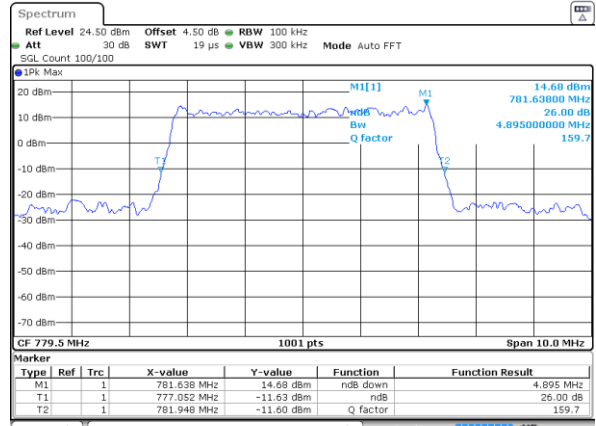


LTE Band 13

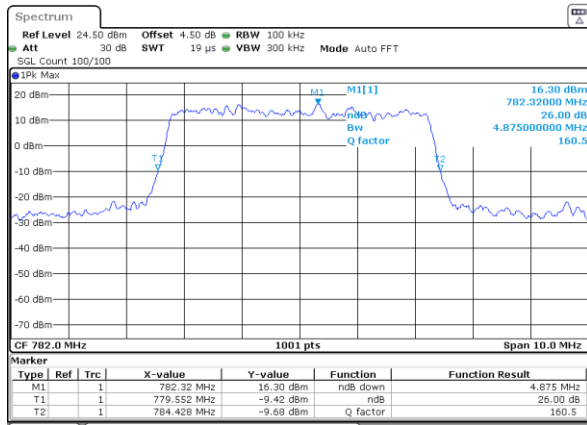
Lowest Channel / 5MHz / QPSK



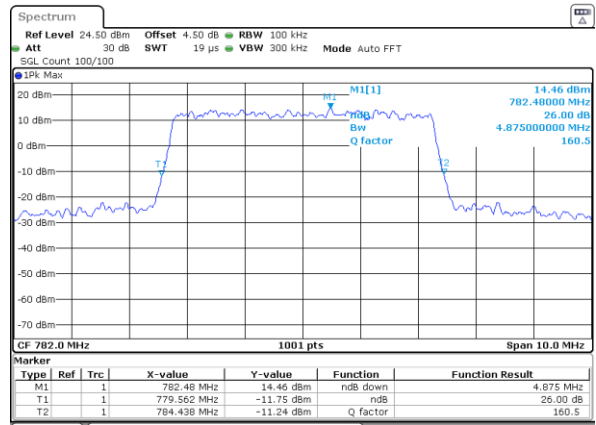
Lowest Channel / 5MHz / 16QAM



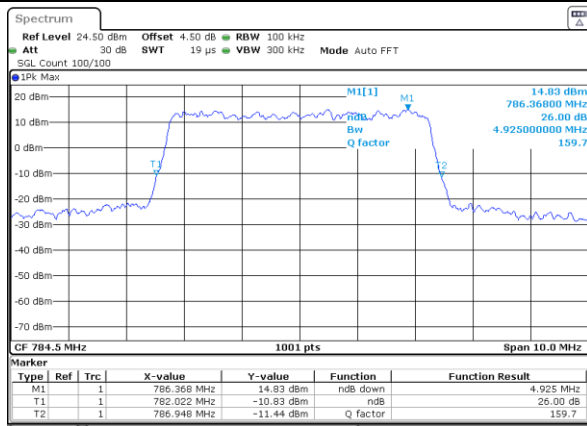
Middle Channel / 5MHz / QPSK



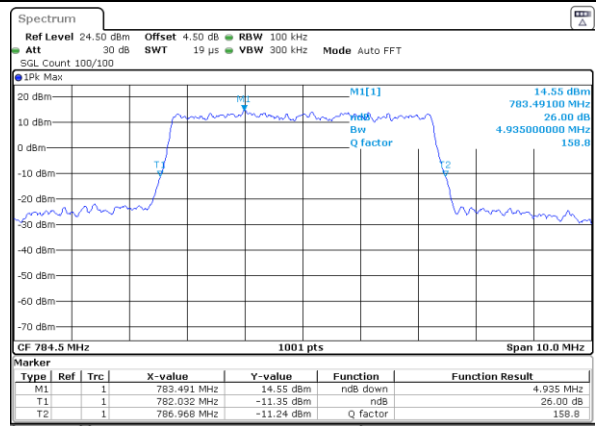
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



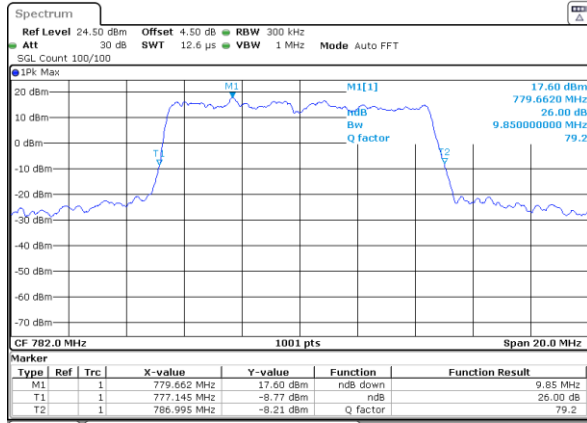
Highest Channel / 5MHz / 16QAM





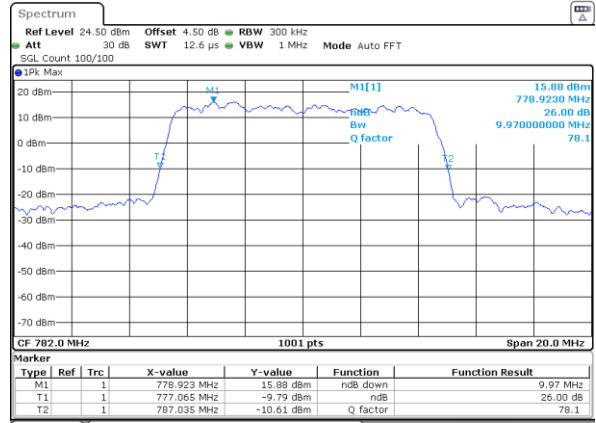
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 6 DEC 2019 14:09:24

Middle Channel / 10MHz / 16QAM



Date: 6 DEC 2019 14:09:14



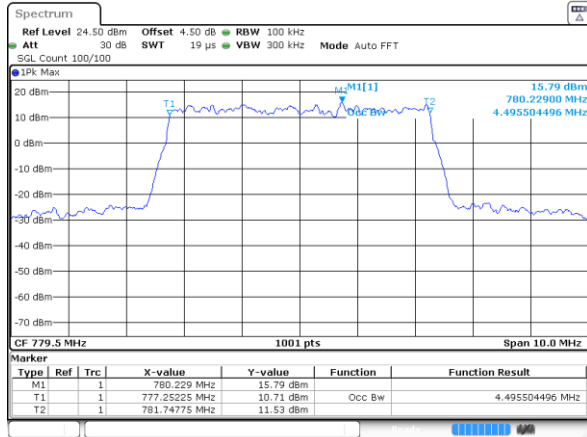
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH					4.496	4.486						
Middle CH					4.476	4.496	9.011	9.011				
Highest CH					4.496	4.496						

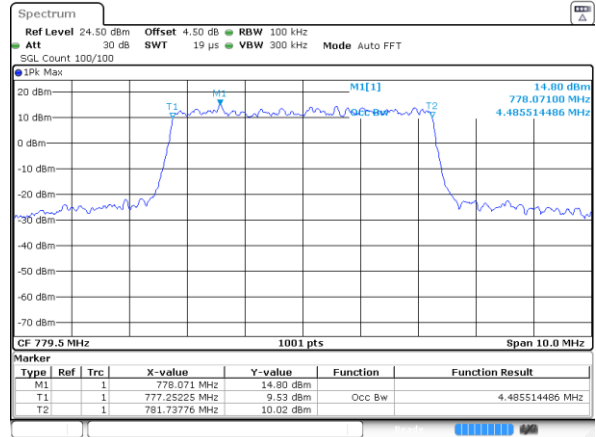


LTE Band 13

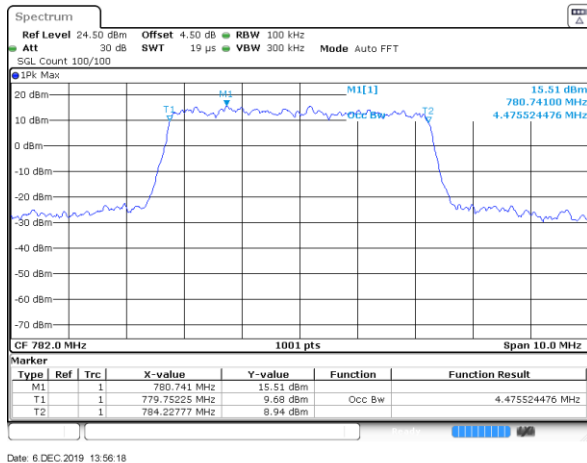
Lowest Channel / 5MHz / QPSK



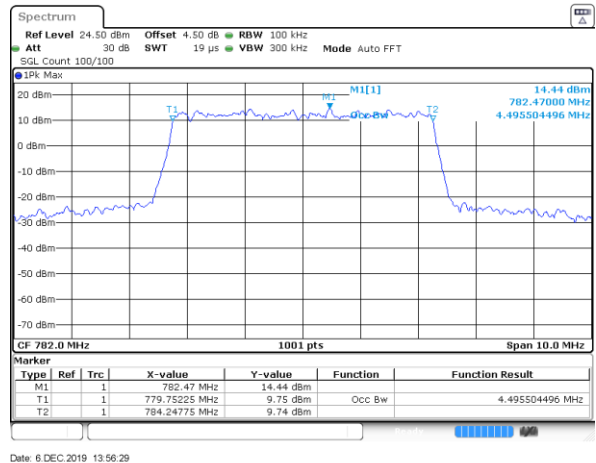
Lowest Channel / 5MHz / 16QAM



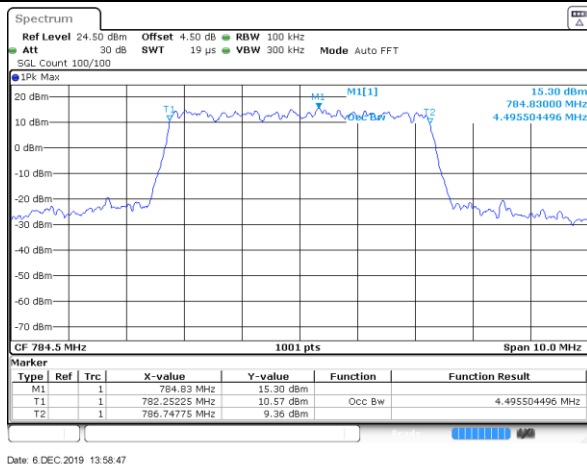
Middle Channel / 5MHz / QPSK



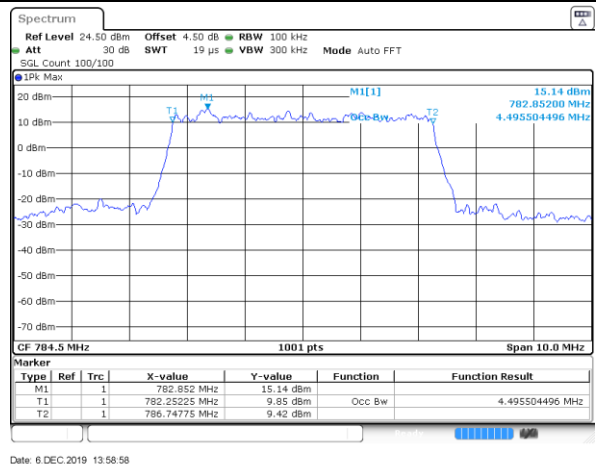
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



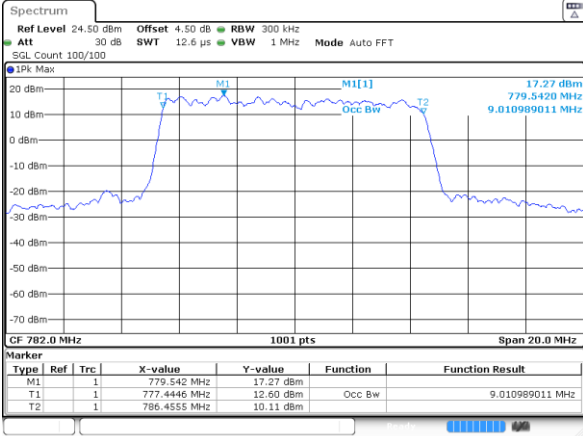
Highest Channel / 5MHz / 16QAM



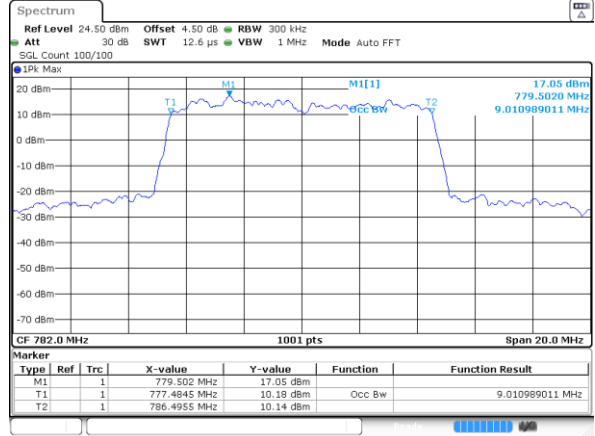


LTE Band 13

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

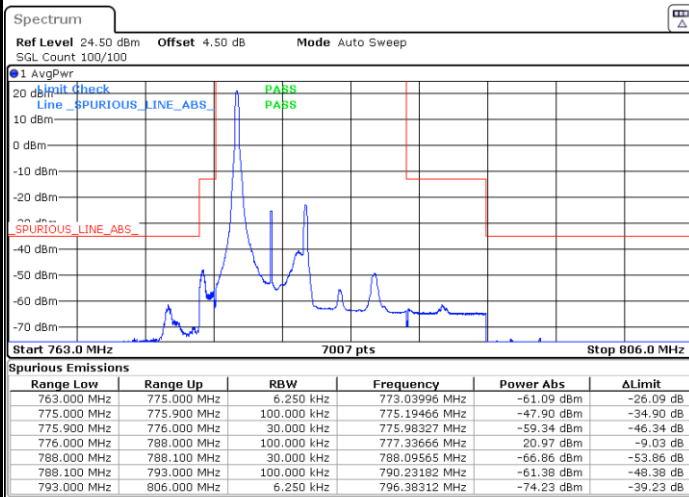




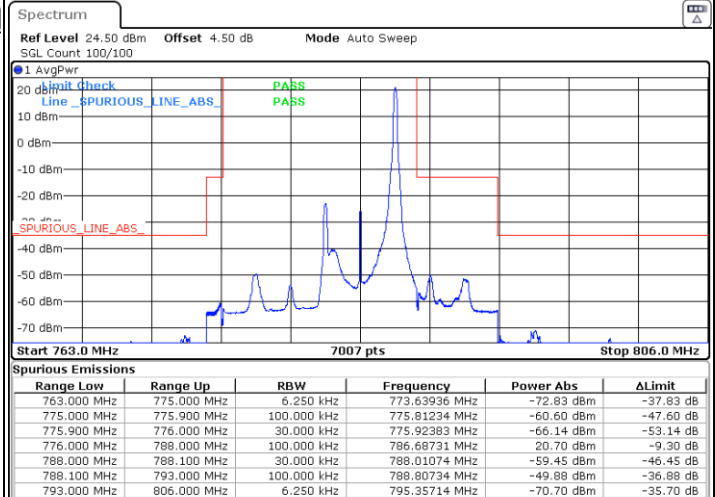
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

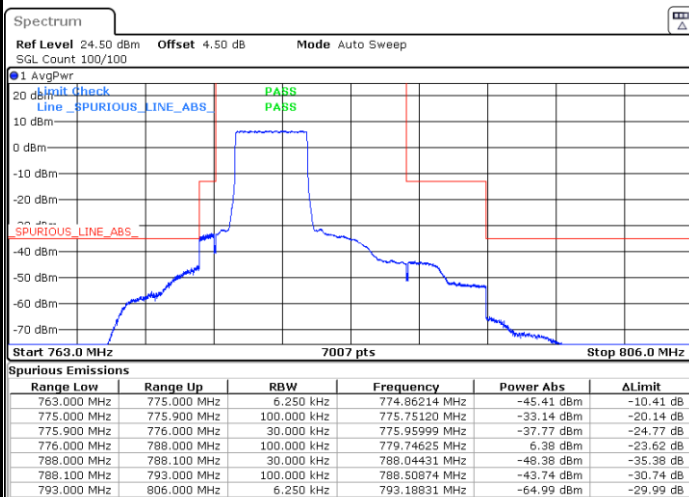
Lowest Band Edge / 1 RB



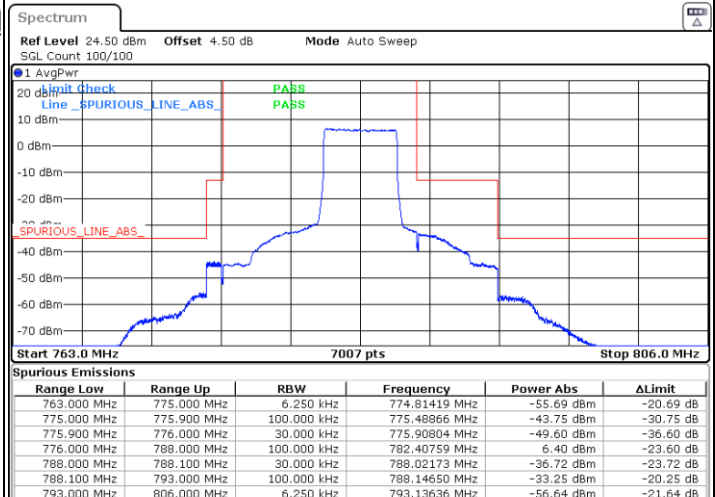
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



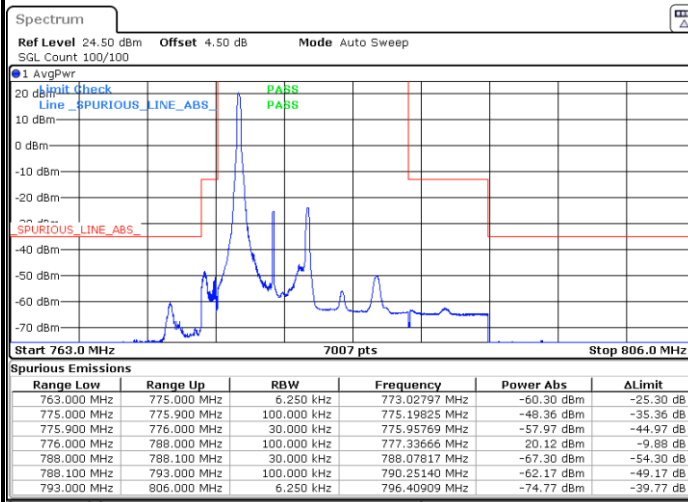
Highest Band Edge / Full RB





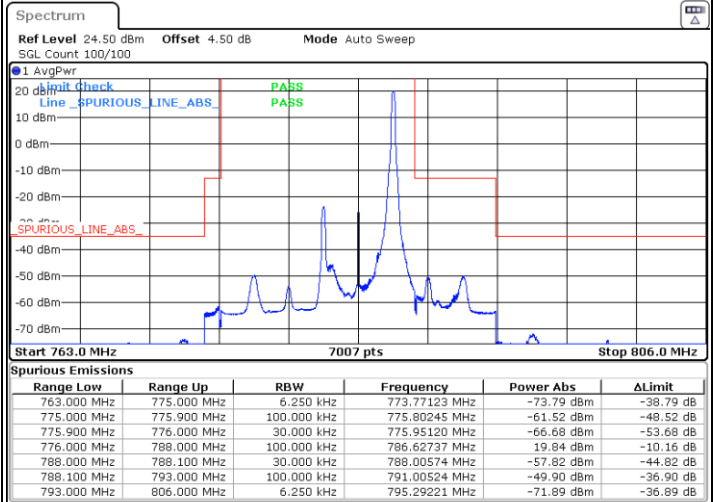
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



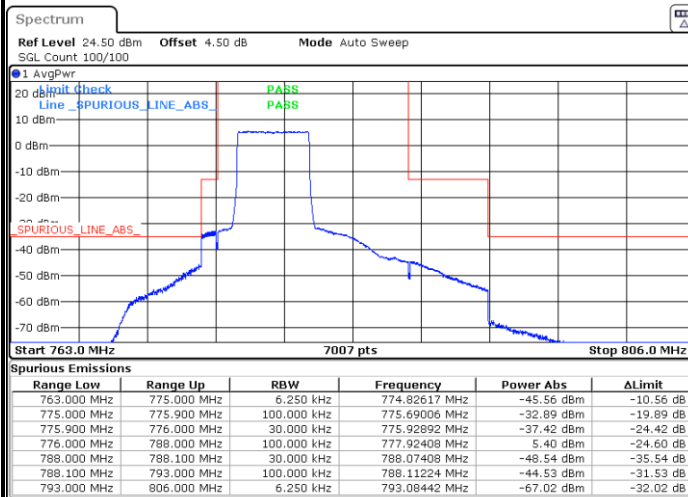
Date: 6 DEC. 2019 13:54:00

Highest Band Edge / 1 RB



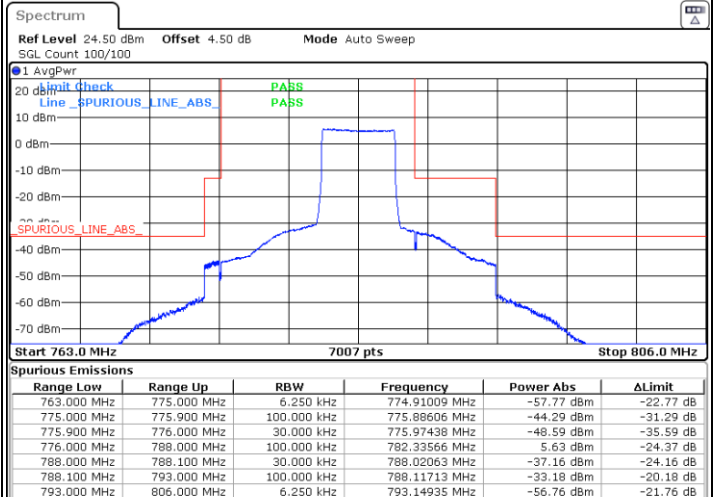
Date: 6 DEC. 2019 14:05:28

Lowest Band Edge / Full RB



Date: 6 DEC. 2019 13:49:08

Highest Band Edge / Full RB

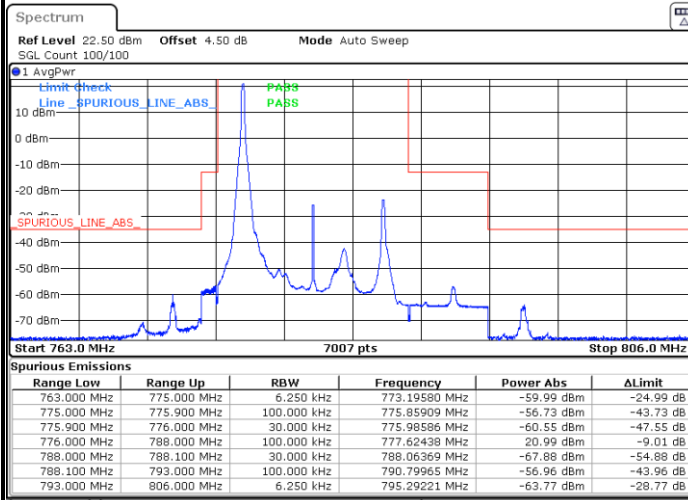


Date: 6 DEC. 2019 14:00:36

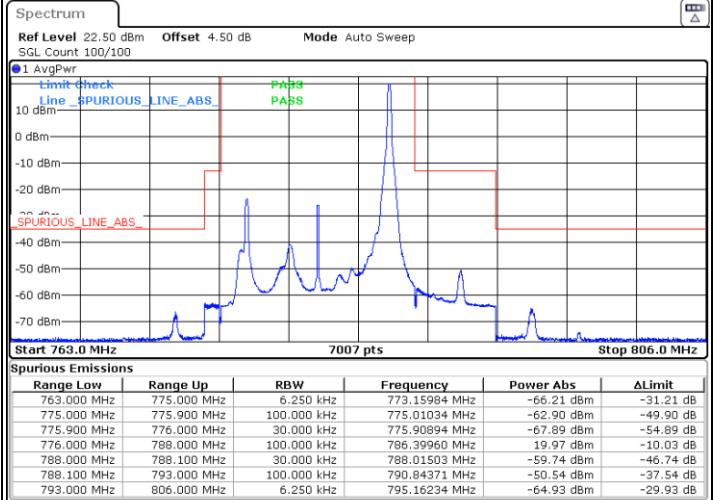


LTE Band 13 / 10MHz / QPSK

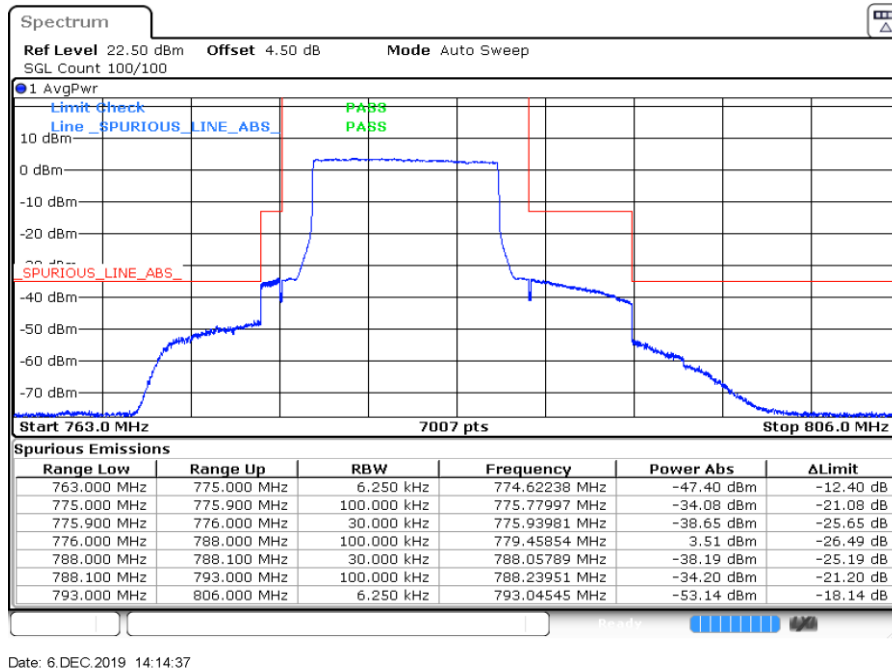
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



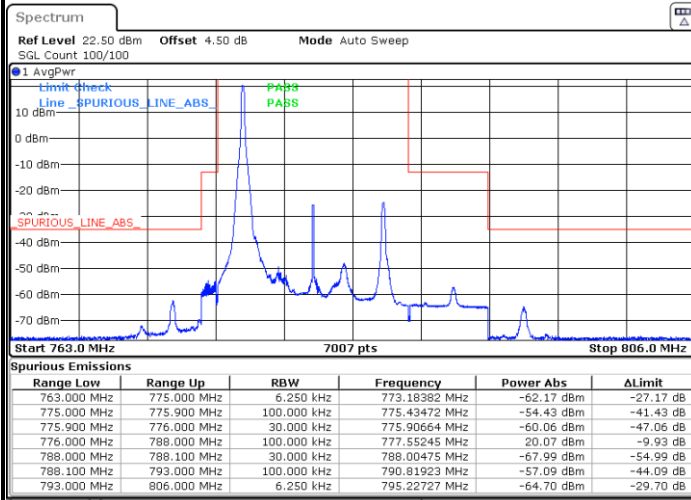
Band Edge / Full RB





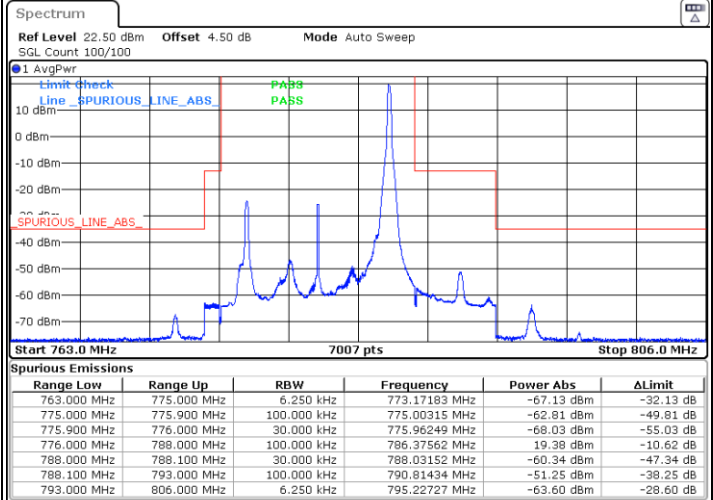
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



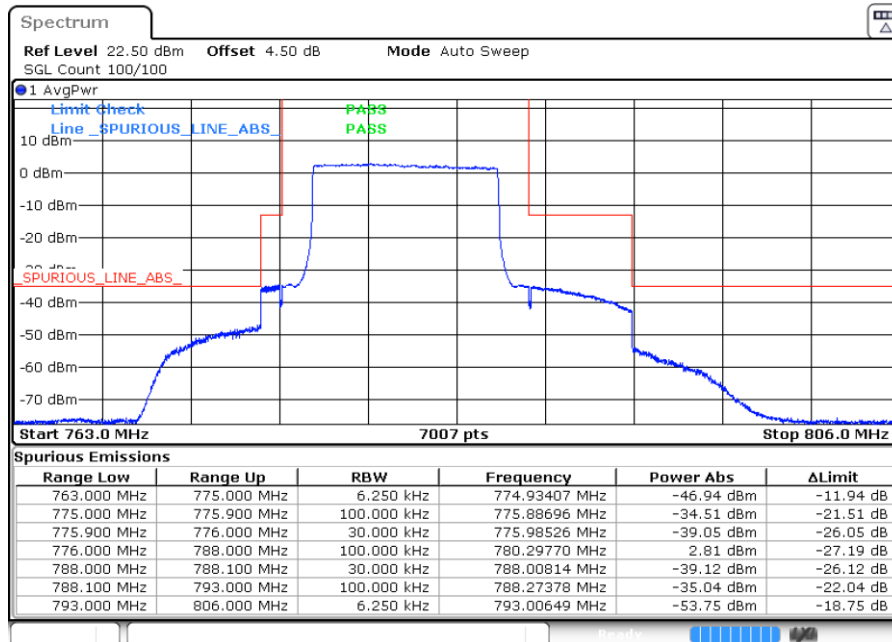
Date: 6 DEC. 2019 14:11:22

Highest Band Edge / 1 RB



Date: 6 DEC. 2019 14:17:52

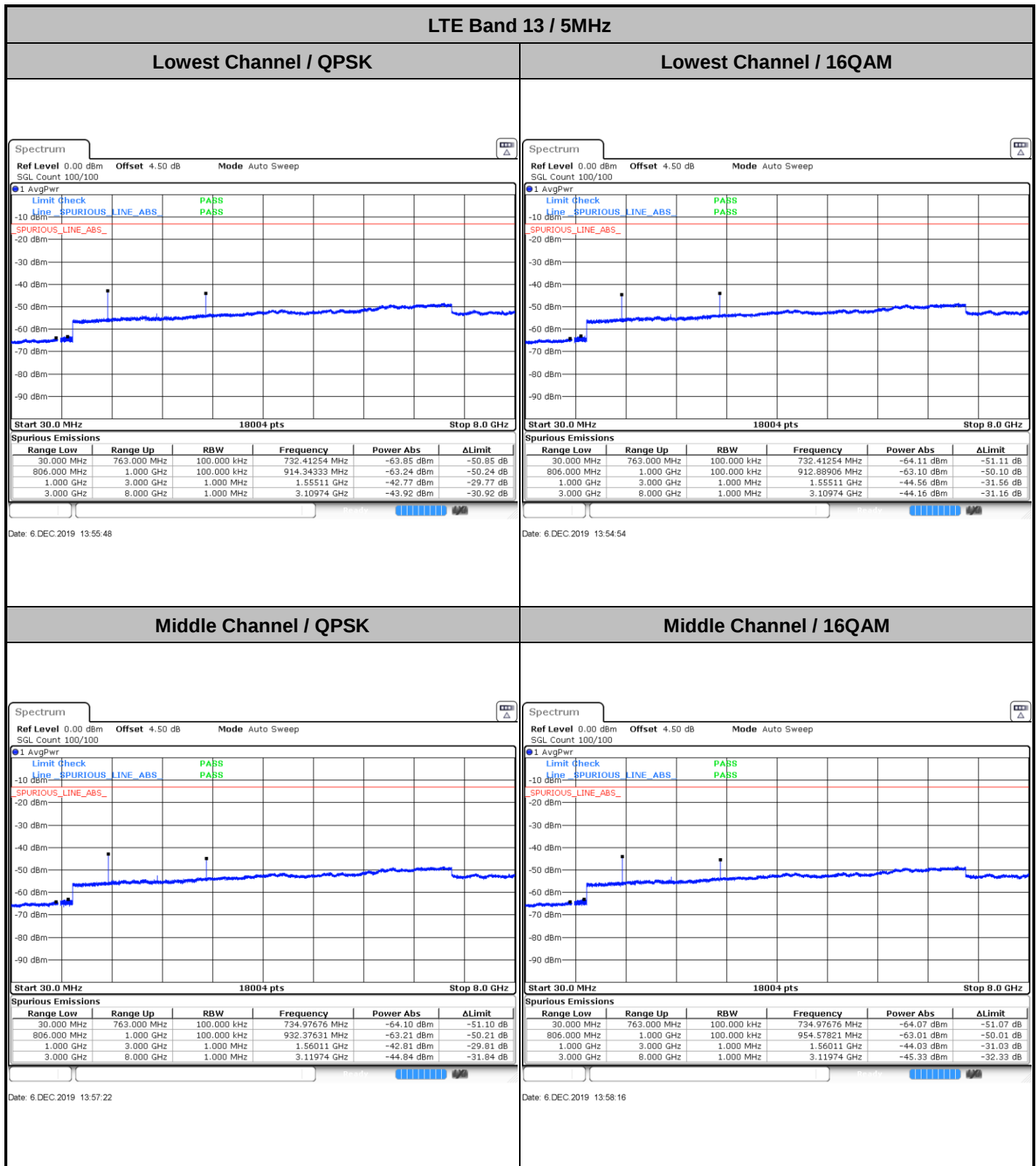
Band Edge / Full RB



Date: 6 DEC. 2019 14:16:15



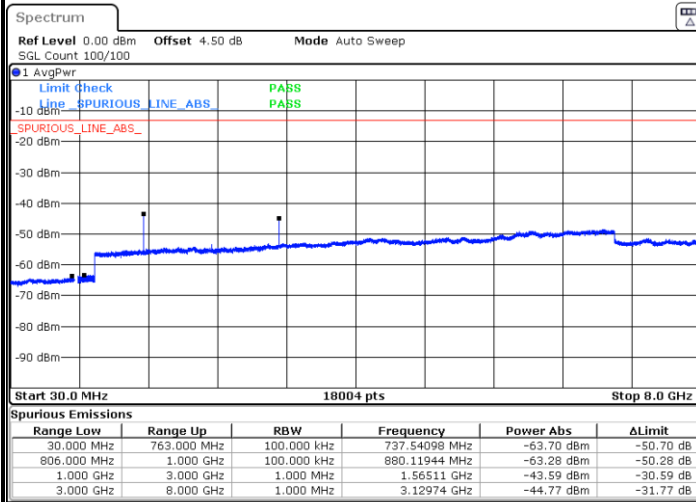
Conducted Spurious Emission





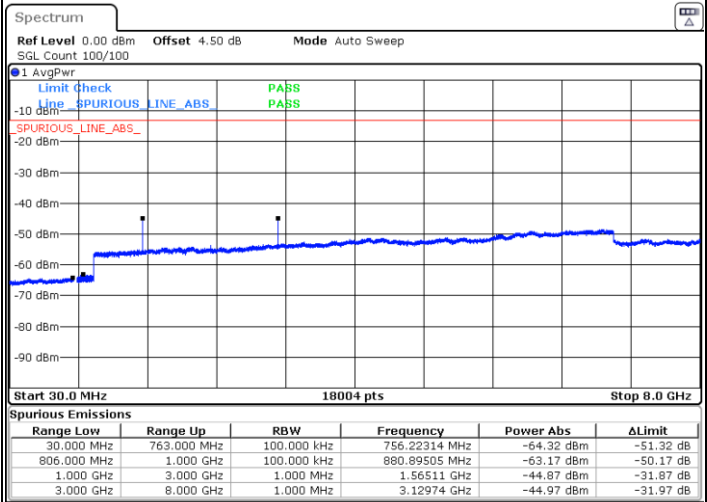
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 6 DEC. 2019 14:07:16

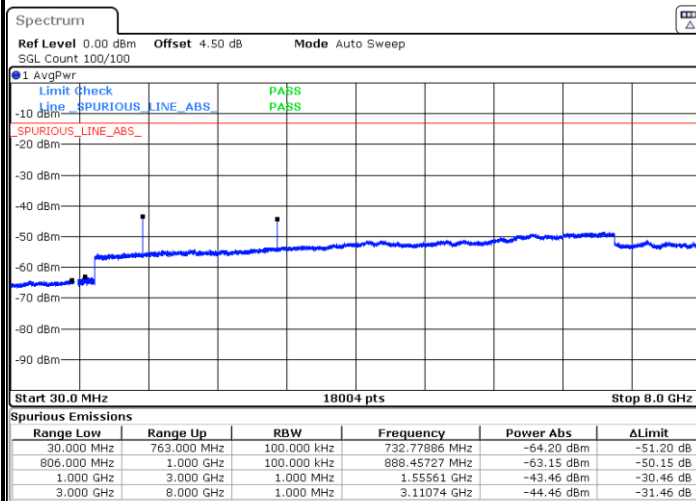
Highest Channel / 16QAM



Date: 6 DEC. 2019 14:06:22

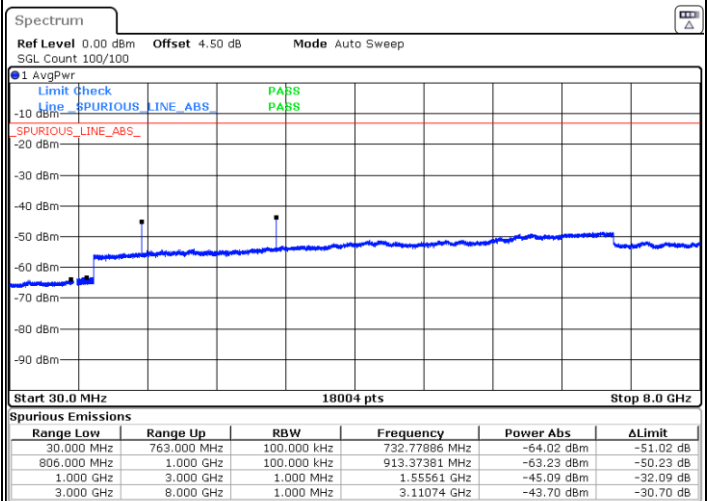
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 6 DEC. 2019 14:08:10

Middle Channel / 16QAM



Date: 6 DEC. 2019 14:09:04

Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0026	PASS
40	Normal Voltage	0.0014	
30	Normal Voltage	0.0040	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0026	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0029	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0006	
20	Battery End Point	0.0020	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 26

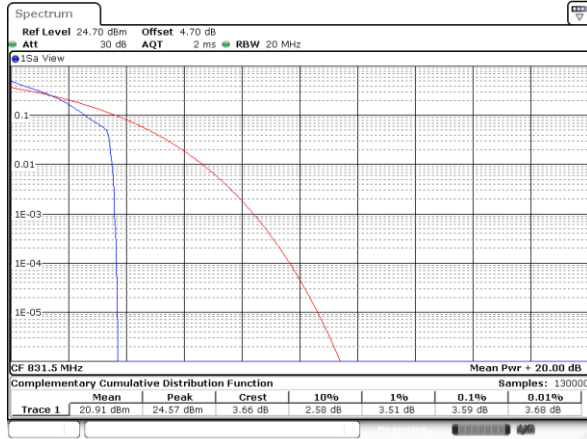
Peak-to-Average Ratio

Mode	LTE Band 26 / 15MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.59	4.64	5.07	5.91	PASS
Middle CH	3.68	4.72	5.39	5.97	
Highest CH	3.59	4.87	5.25	6.00	

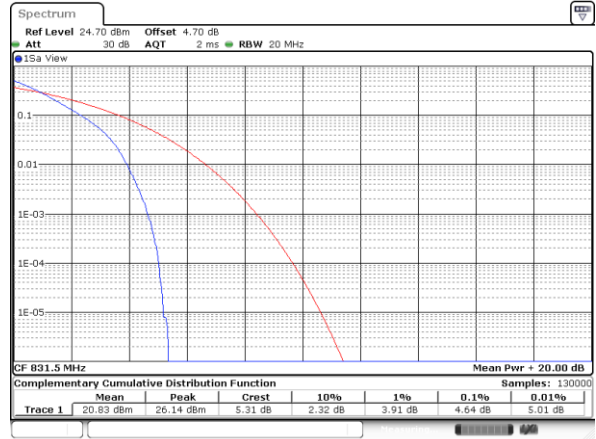


LTE Band 26 / 15MHz / QPSK

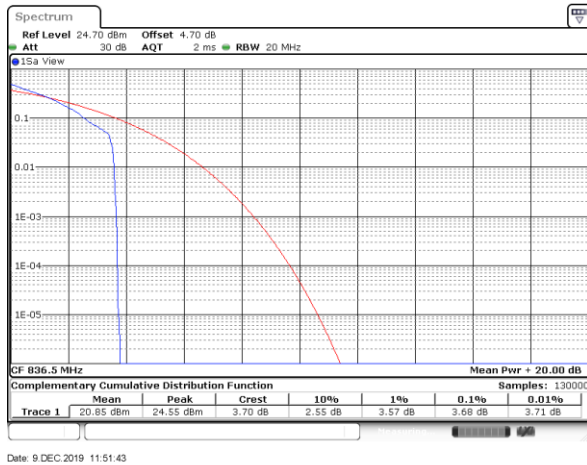
Lowest Channel / 1RB



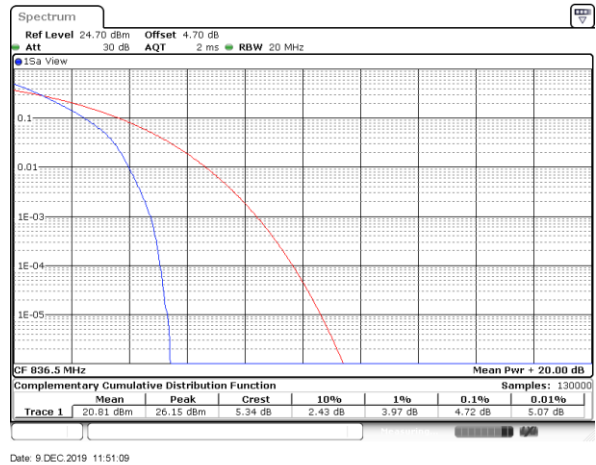
Lowest Channel / Full RB



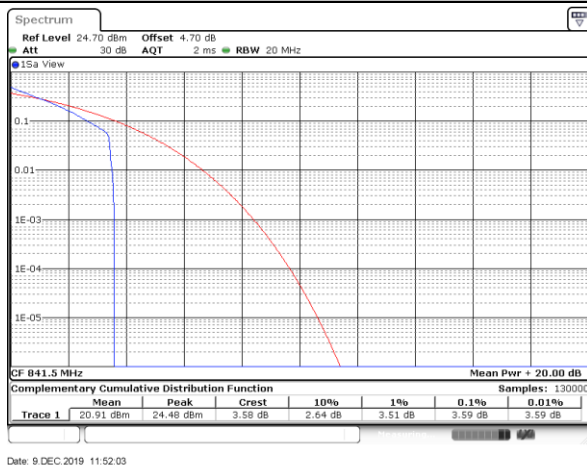
Middle Channel / 1RB



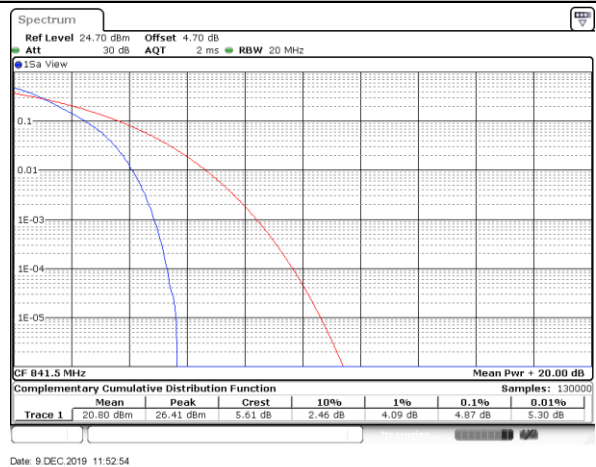
Middle Channel / Full RB

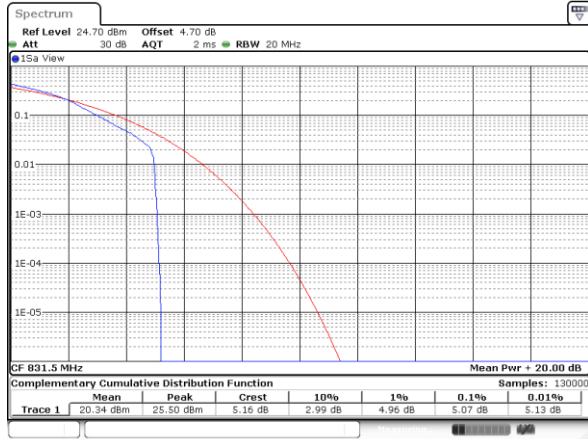


Highest Channel / 1RB

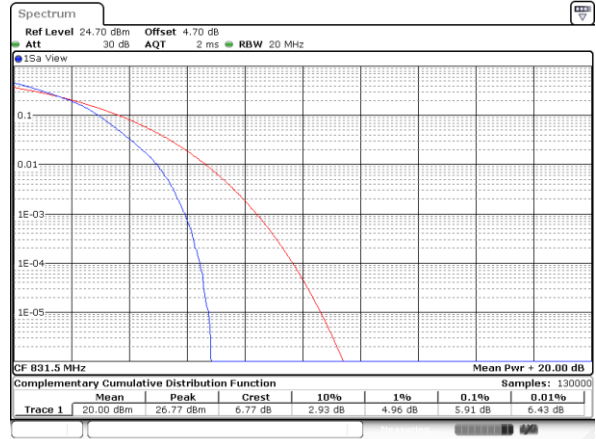


Highest Channel / Full RB

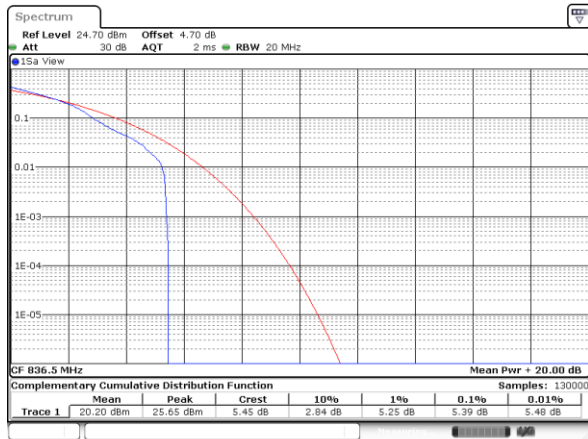


LTE Band 26 / 15MHz / 16QAM
Lowest Channel / 1RB


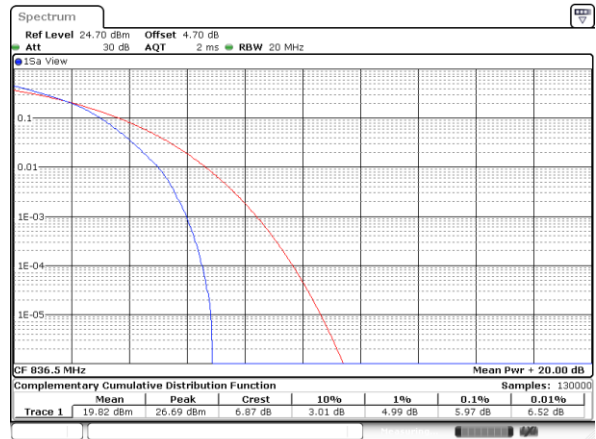
Date: 9 DEC 2019 11:50:16

Lowest Channel / Full RB


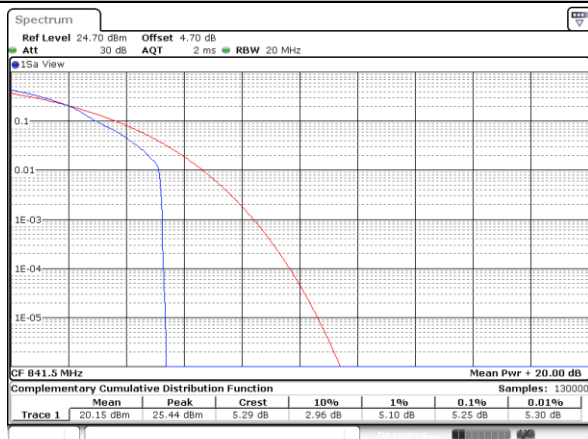
Date: 9 DEC 2019 11:50:29

Middle Channel / 1RB


Date: 9 DEC 2019 11:51:31

Middle Channel / Full RB


Date: 9 DEC 2019 11:51:19

Highest Channel / 1RB


Date: 9 DEC 2019 11:52:20

Highest Channel / Full RB


Date: 9 DEC 2019 11:52:42



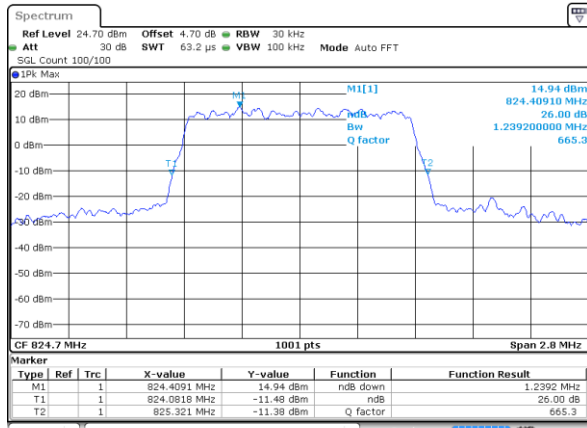
26dB Bandwidth

Mode	LTE Band 26 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		CH26765	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.239	1.220	3.051	2.973	4.905	4.845	9.91	9.69	14.326	14.236	14.206	14.236
Middle CH	1.200	1.228	3.009	3.045	4.945	4.915	9.79	9.77	14.356	14.386	-	-
Highest CH	1.231	1.220	3.045	3.045	4.895	4.915	9.81	9.81	14.236	14.505	-	-



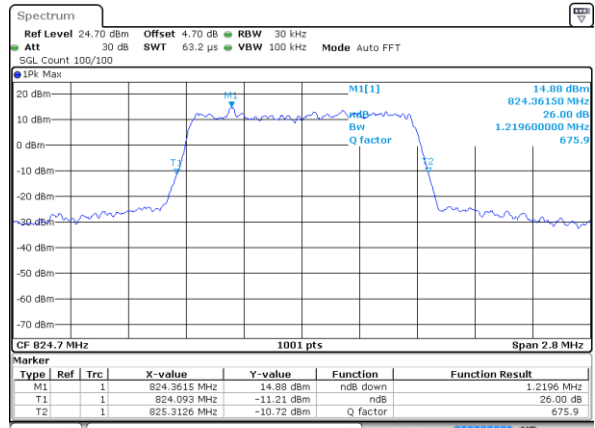
LTE Band 26

Lowest Channel / 1.4MHz / QPSK



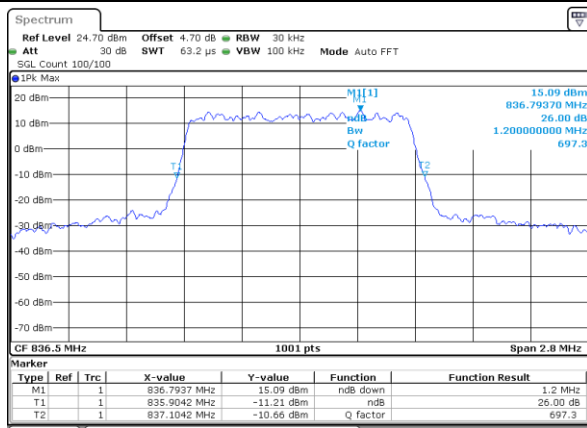
Date: 9 DEC 2019 19:02:12

Lowest Channel / 1.4MHz / 16QAM



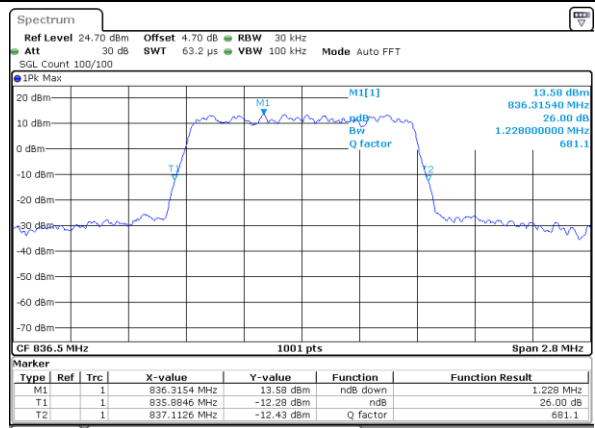
Date: 9 DEC 2019 19:02:42

Middle Channel / 1.4MHz / QPSK



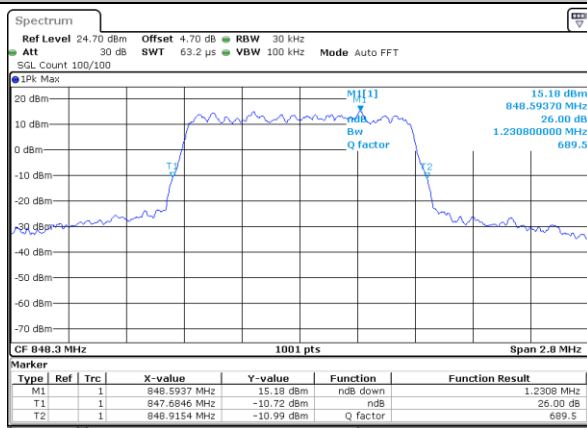
Date: 9 DEC 2019 19:04:45

Middle Channel / 1.4MHz / 16QAM



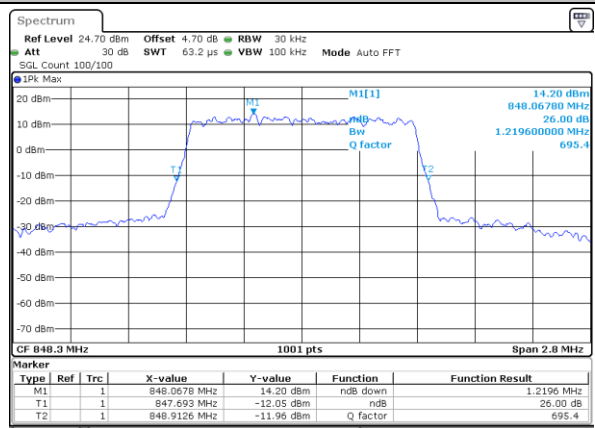
Date: 9 DEC 2019 19:04:21

Highest Channel / 1.4MHz / QPSK



Date: 9 DEC 2019 19:05:07

Highest Channel / 1.4MHz / 16QAM

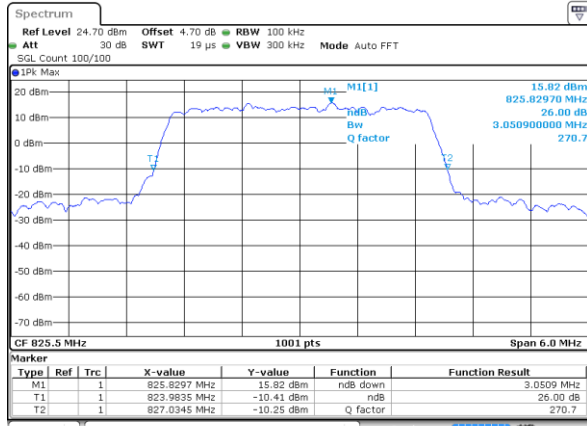


Date: 9 DEC 2019 19:05:26

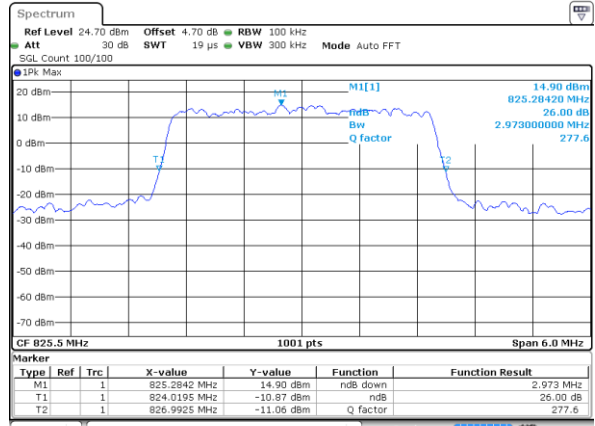


LTE Band 26

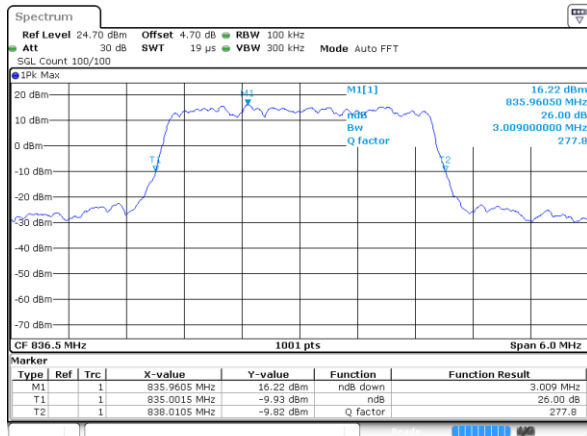
Lowest Channel / 3MHz / QPSK



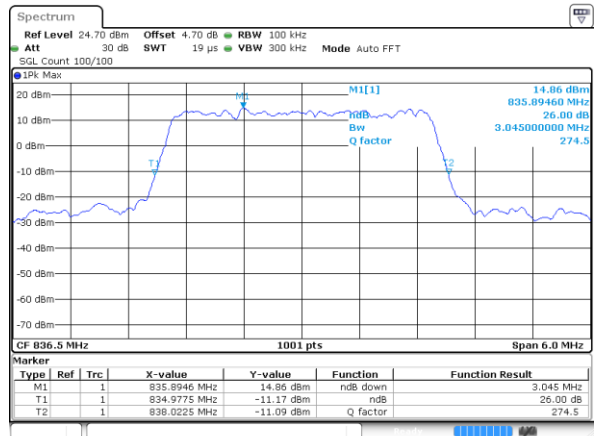
Lowest Channel / 3MHz / 16QAM



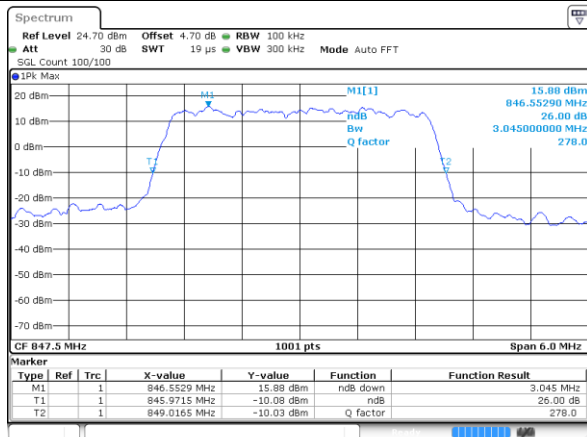
Middle Channel / 3MHz / QPSK



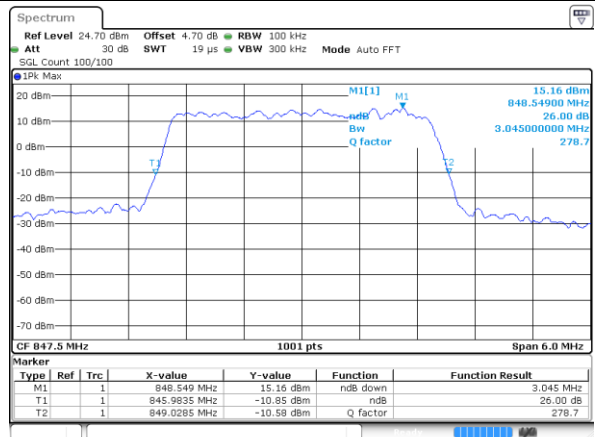
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



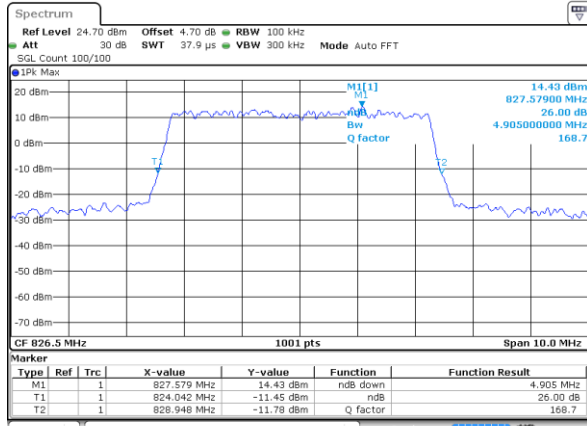
Highest Channel / 3MHz / 16QAM



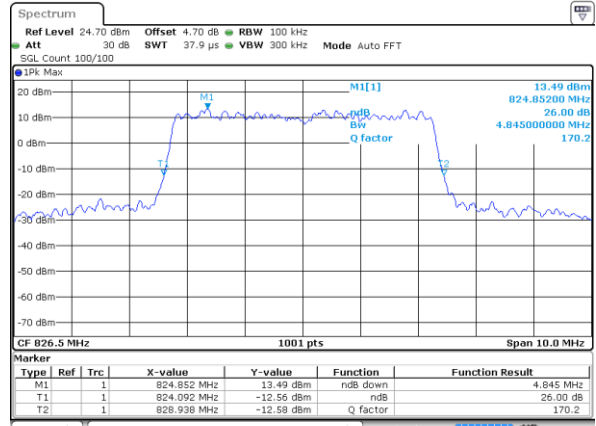


LTE Band 26

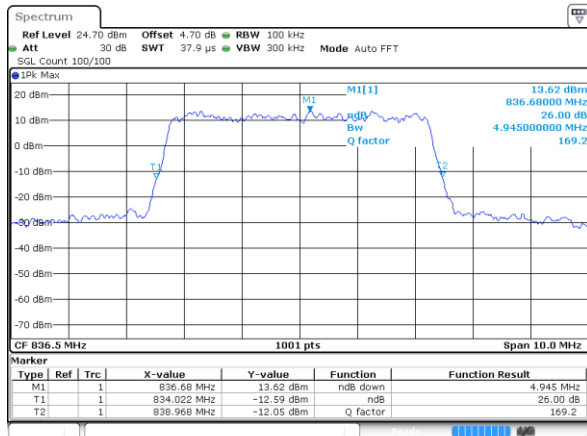
Lowest Channel / 5MHz / QPSK



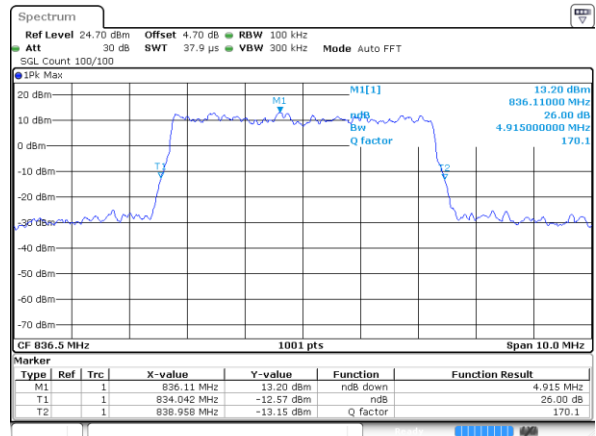
Lowest Channel / 5MHz / 16QAM



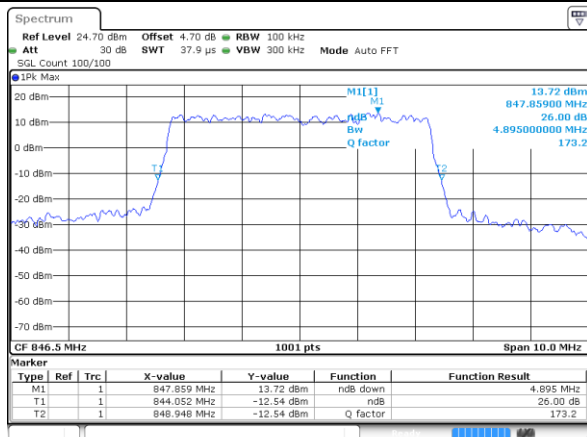
Middle Channel / 5MHz / QPSK



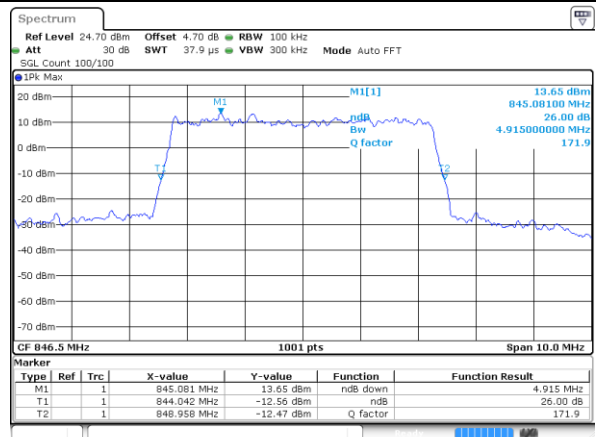
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



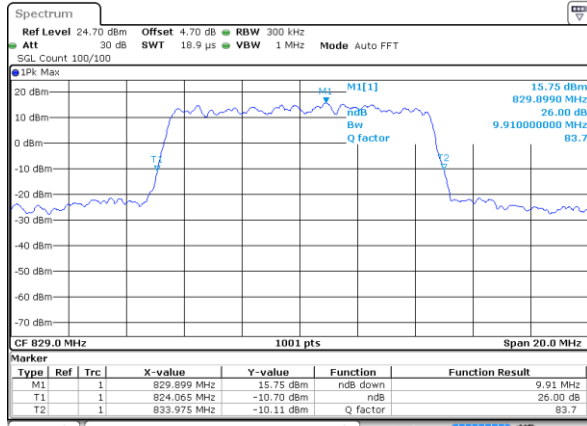
Highest Channel / 5MHz / 16QAM



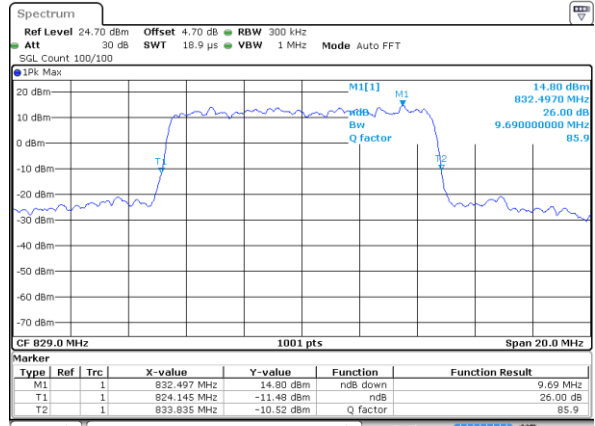


LTE Band 26

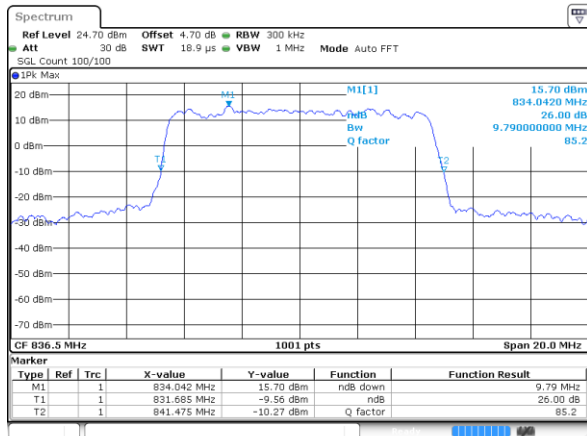
Lowest Channel / 10MHz / QPSK



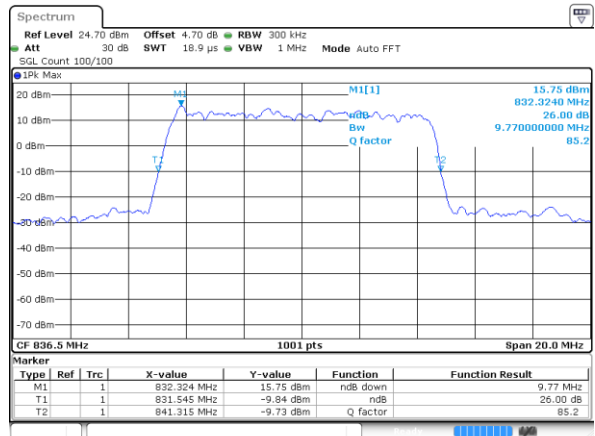
Lowest Channel / 10MHz / 16QAM



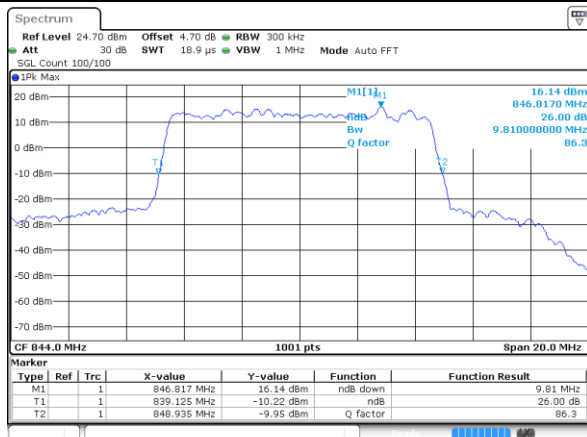
Middle Channel / 10MHz / QPSK



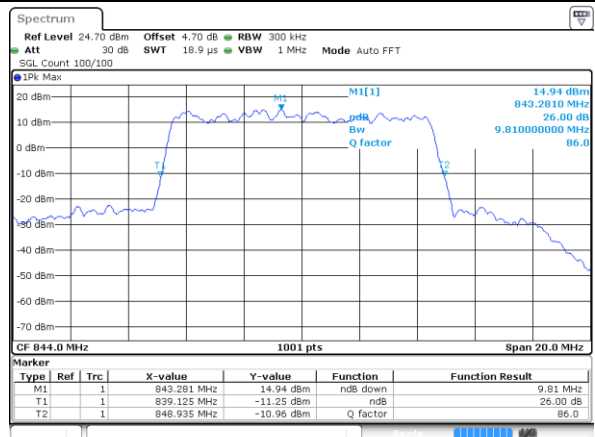
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



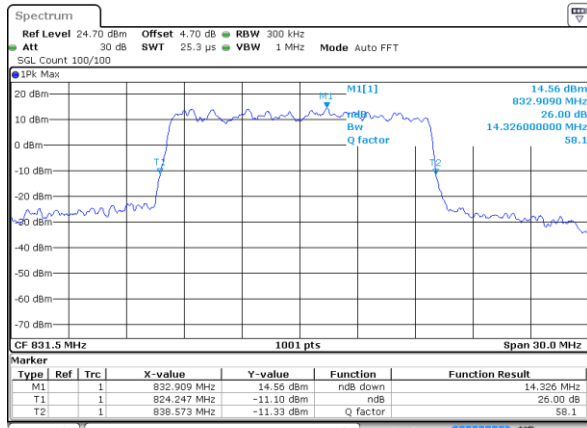
Highest Channel / 10MHz / 16QAM



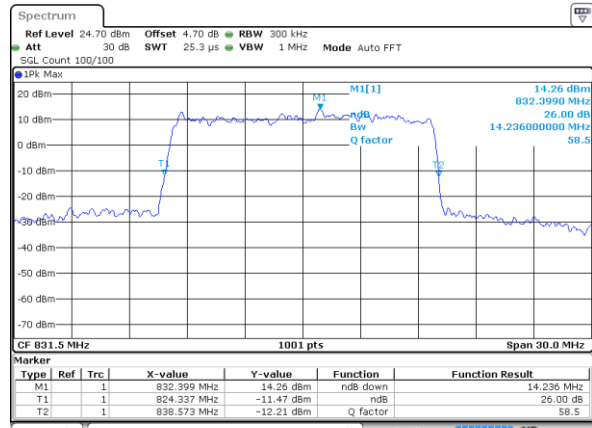


LTE Band 26

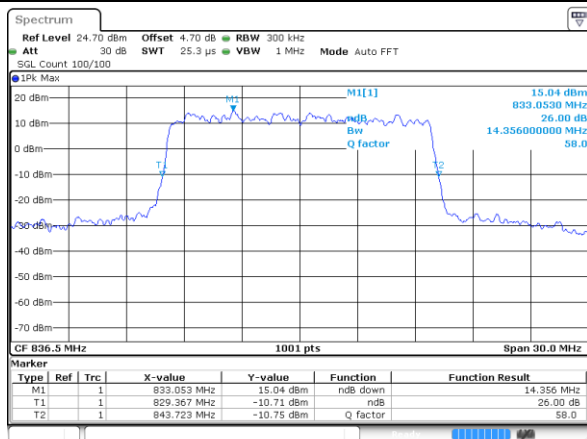
Lowest Channel / 15MHz / QPSK



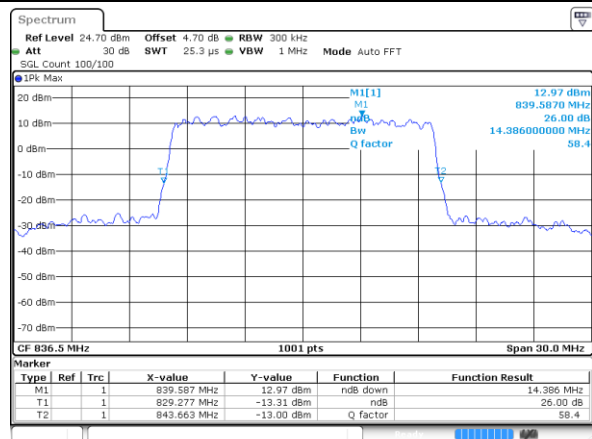
Lowest Channel / 15MHz / 16QAM



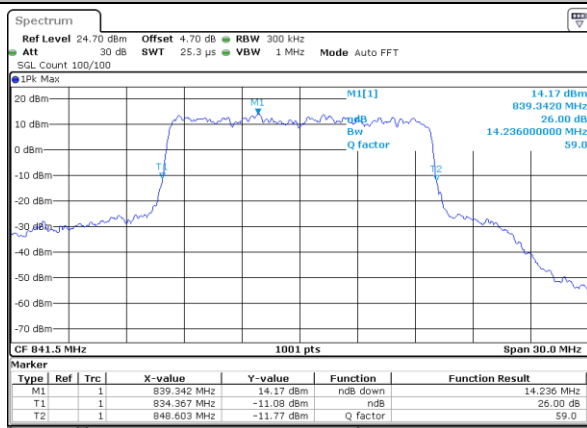
Middle Channel / 15MHz / QPSK



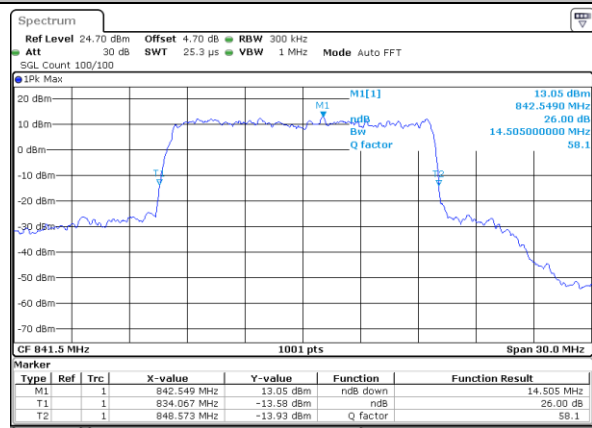
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



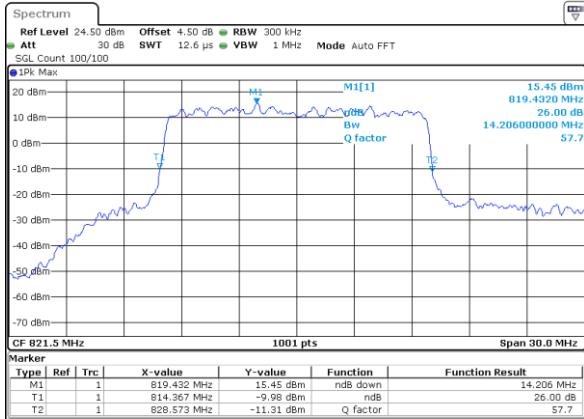
Highest Channel / 15MHz / 16QAM





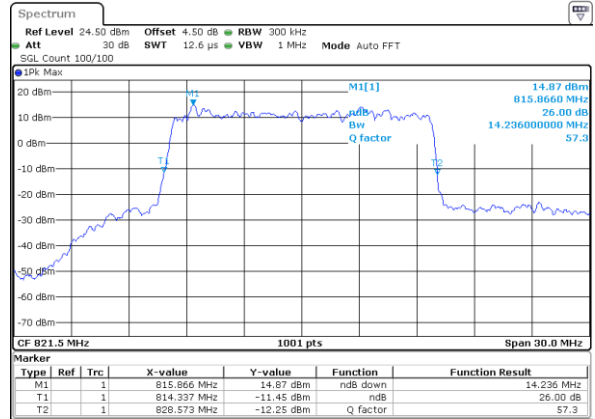
LTE Band 26

Channel 26765 / 15MHz / QPSK



Date: 3 JAN 2020 20:31:43

Channel 26765 / 15MHz / 16QAM



Date: 3 JAN 2020 20:31:53



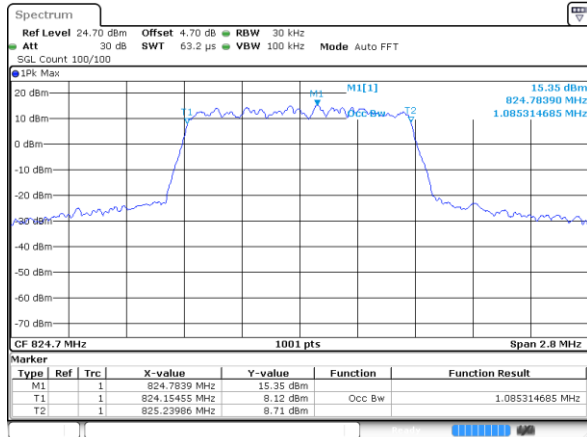
Occupied Bandwidth

Mode	LTE Band 26 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		CH26765	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.085	1.094	2.727	2.721	4.486	4.505	9.091	9.031	13.427	13.397	13.397	13.486
Middle CH	1.097	1.091	2.709	2.703	4.496	4.505	9.031	9.031	13.427	13.397	-	-
Highest CH	1.088	1.099	2.727	2.715	4.496	4.496	9.051	9.011	13.367	13.487	-	-

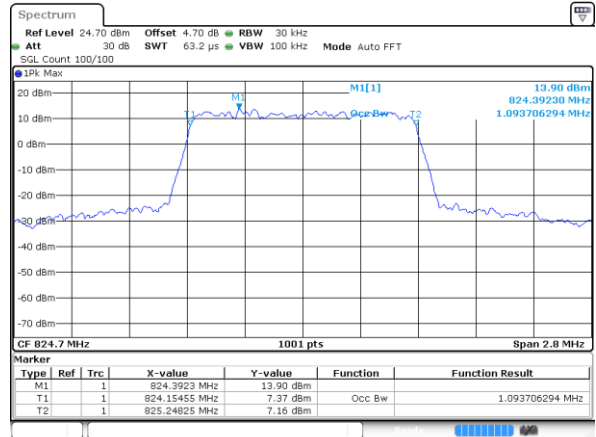


LTE Band 26

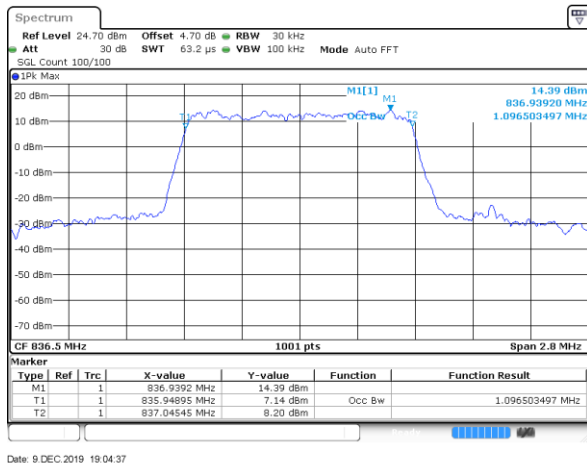
Lowest Channel / 1.4MHz / QPSK



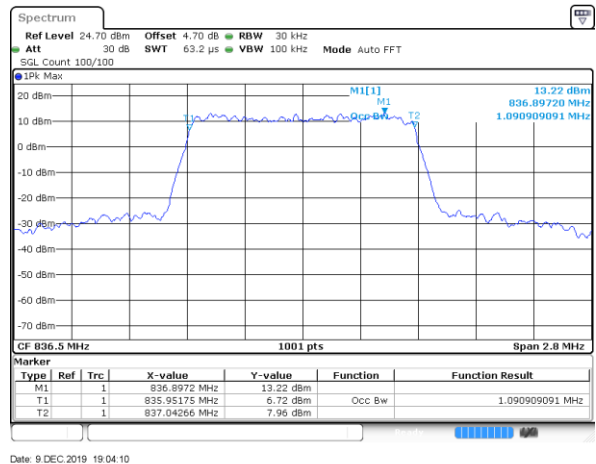
Lowest Channel / 1.4MHz / 16QAM



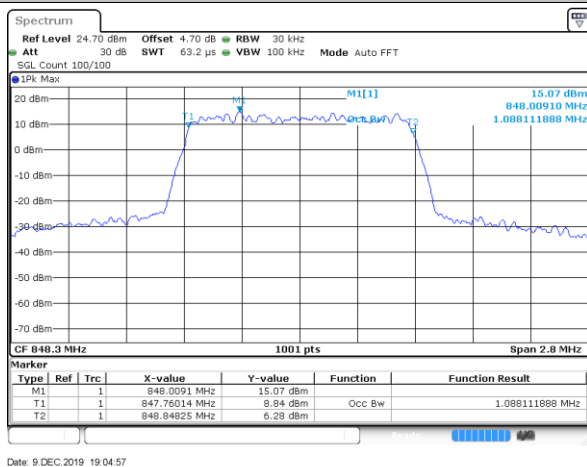
Middle Channel / 1.4MHz / QPSK



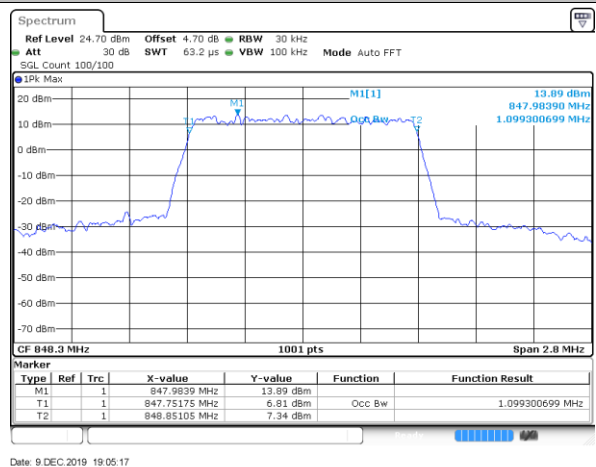
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



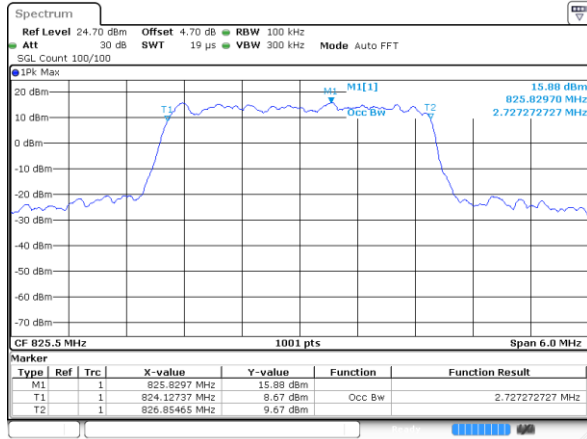
Highest Channel / 1.4MHz / 16QAM



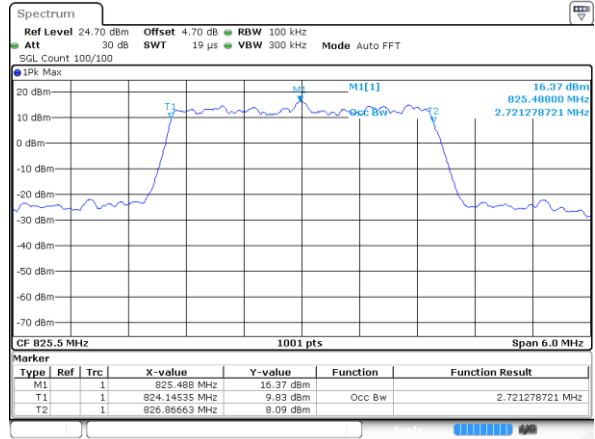


LTE Band 26

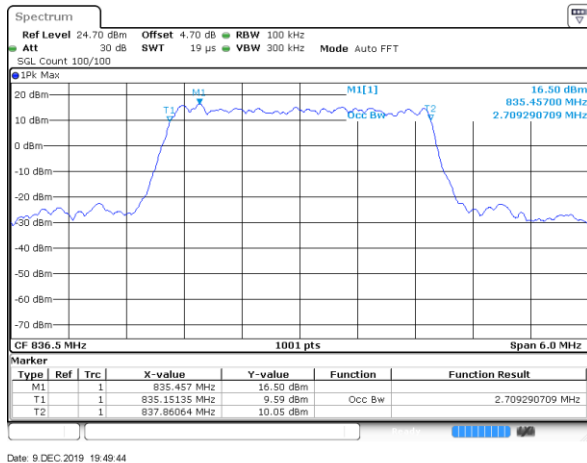
Lowest Channel / 3MHz / QPSK



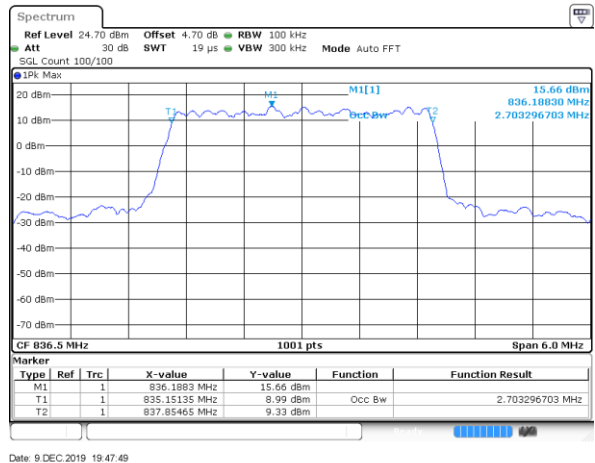
Lowest Channel / 3MHz / 16QAM



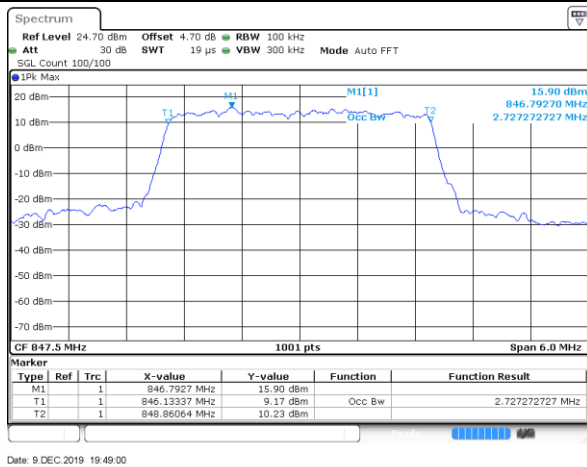
Middle Channel / 3MHz / QPSK



Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



Highest Channel / 3MHz / 16QAM

