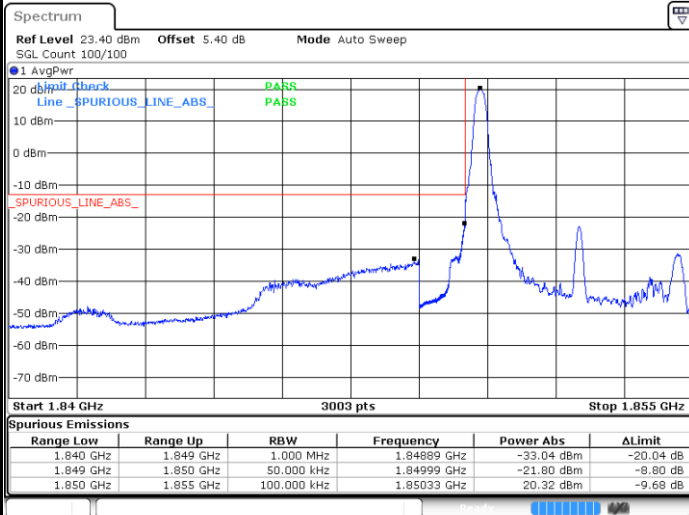


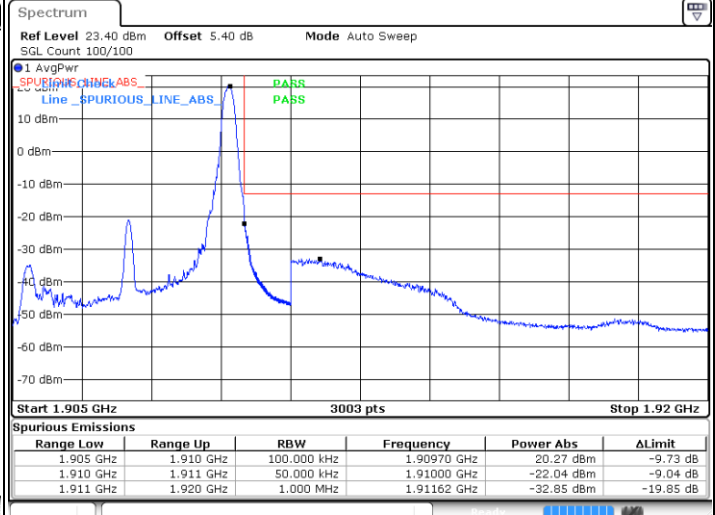


LTE Band 2 / 5MHz / 16QAM

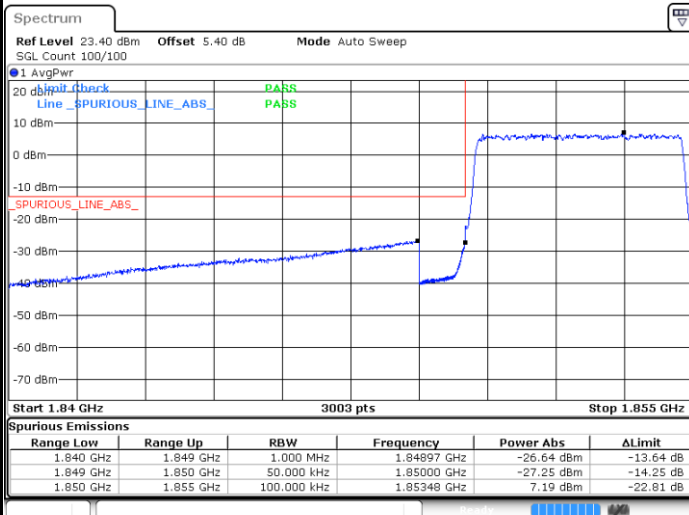
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



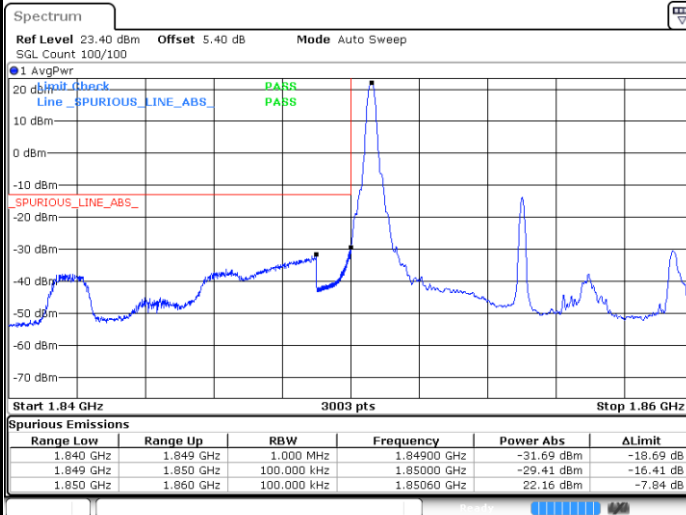
Highest Band Edge / Full RB



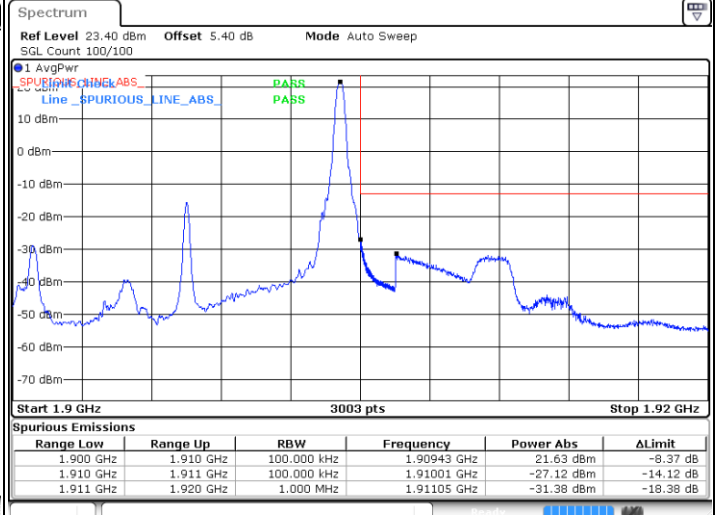


LTE Band 2 / 10MHz / QPSK

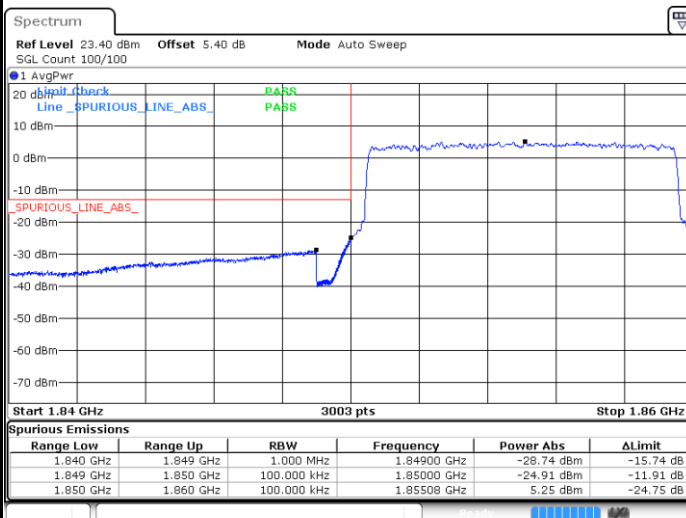
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



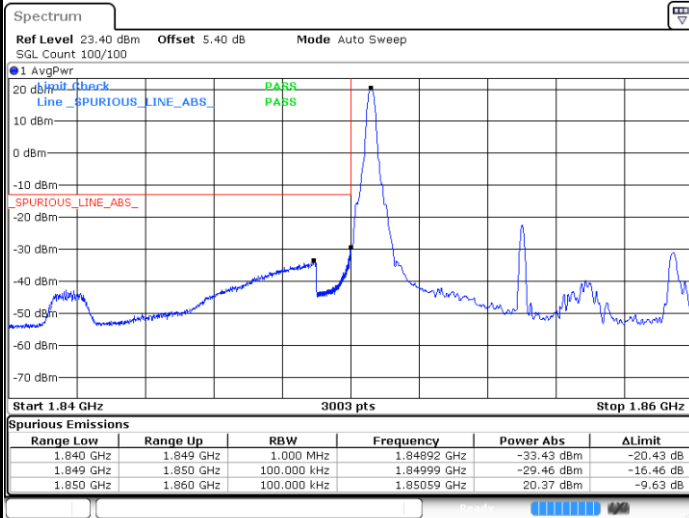
Highest Band Edge / Full RB



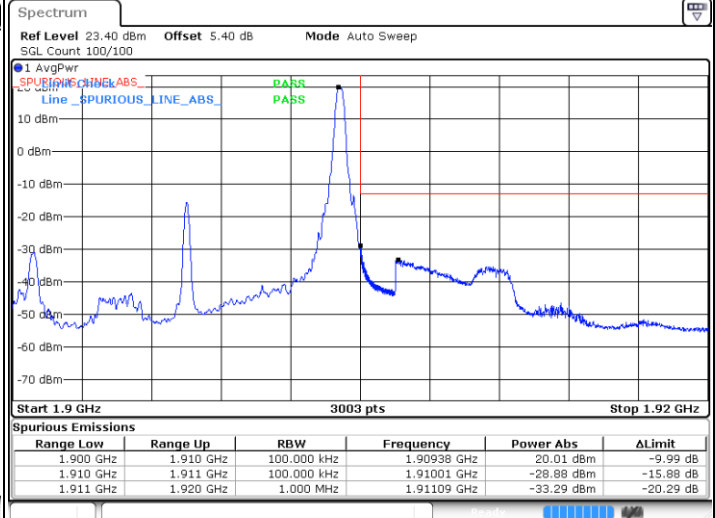


LTE Band 2 / 10MHz / 16QAM

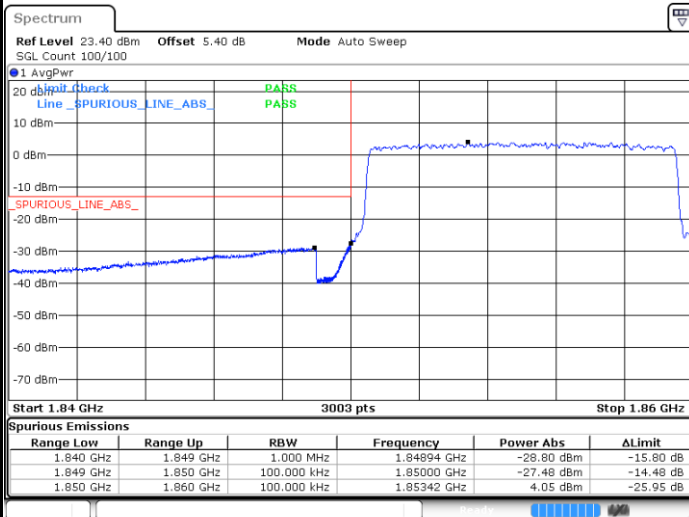
Lowest Band Edge / 1 RB



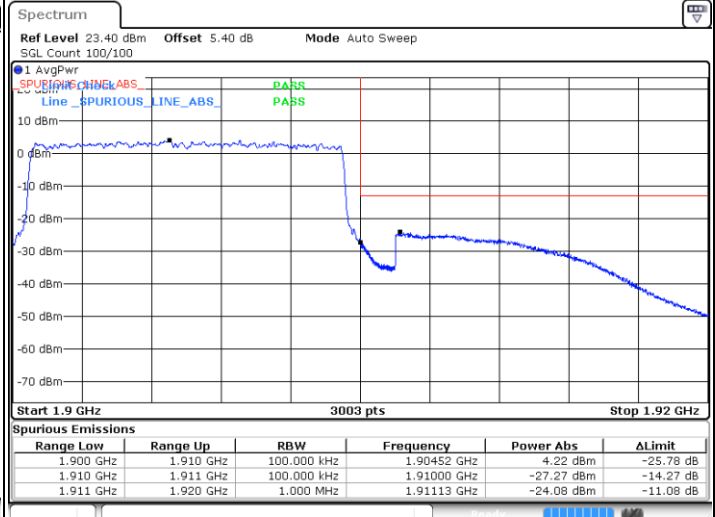
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



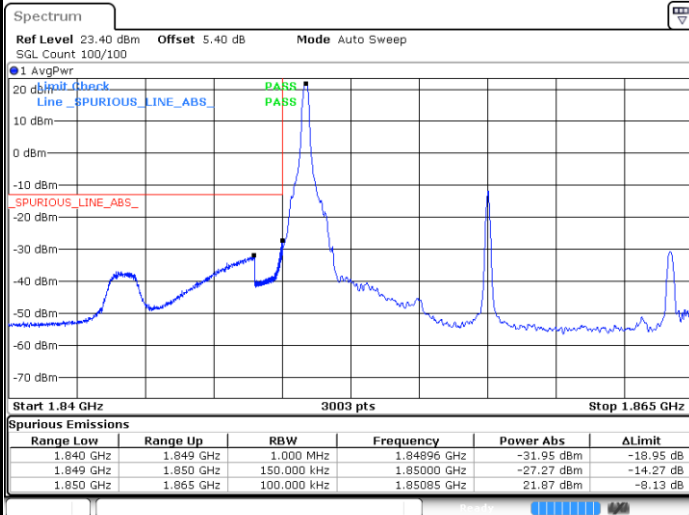
Highest Band Edge / Full RB





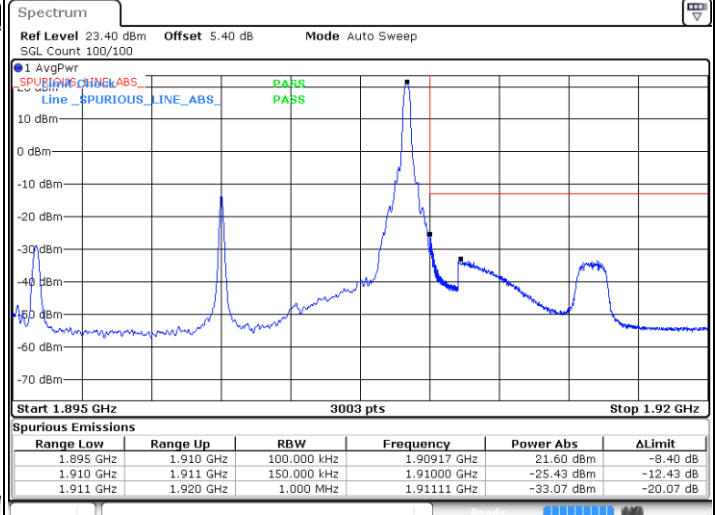
LTE Band 2 / 15MHz / QPSK

Lowest Band Edge / 1 RB



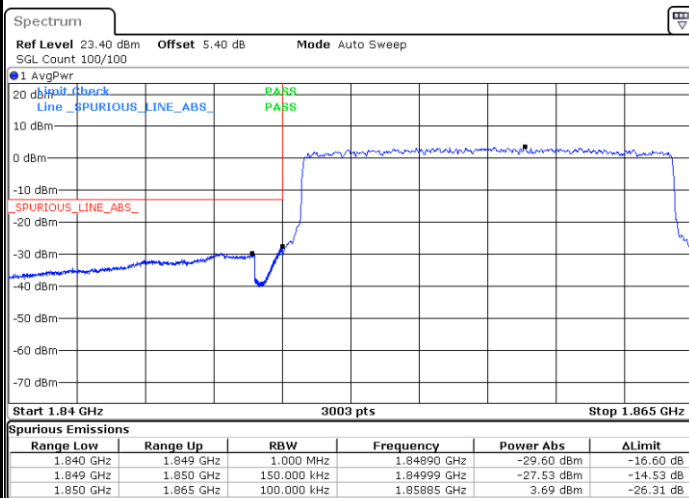
Date: 19.OCT.2019 10:55:21

Highest Band Edge / 1 RB



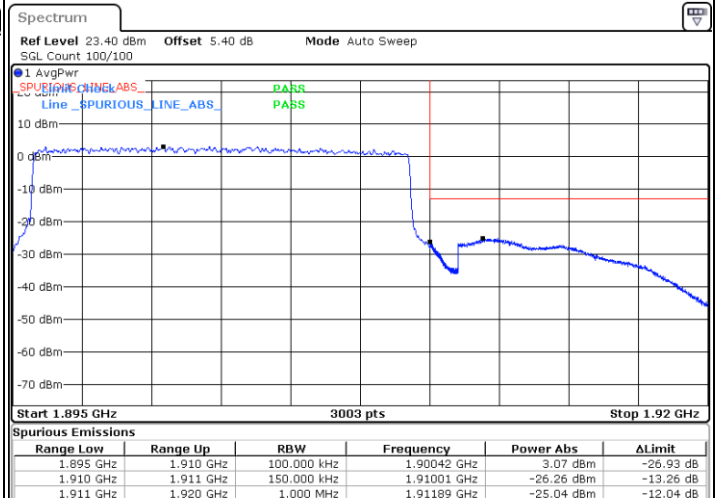
Date: 19.OCT.2019 11:04:51

Lowest Band Edge / Full RB



Date: 19.OCT.2019 10:57:36

Highest Band Edge / Full RB

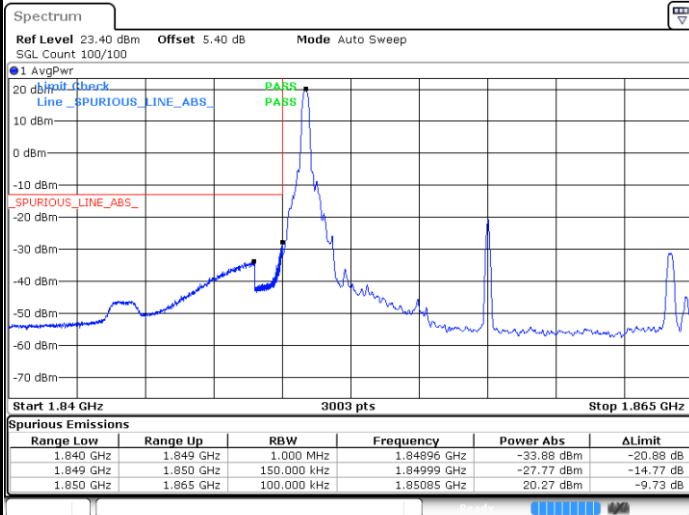


Date: 19.OCT.2019 11:07:06

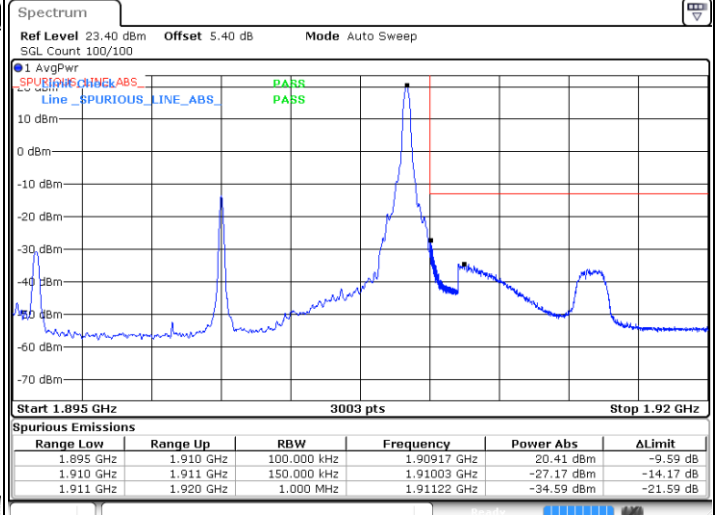


LTE Band 2 / 15MHz / 16QAM

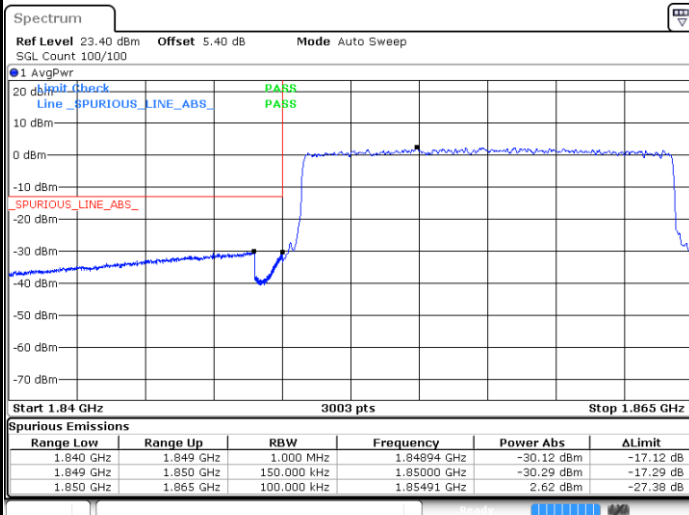
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



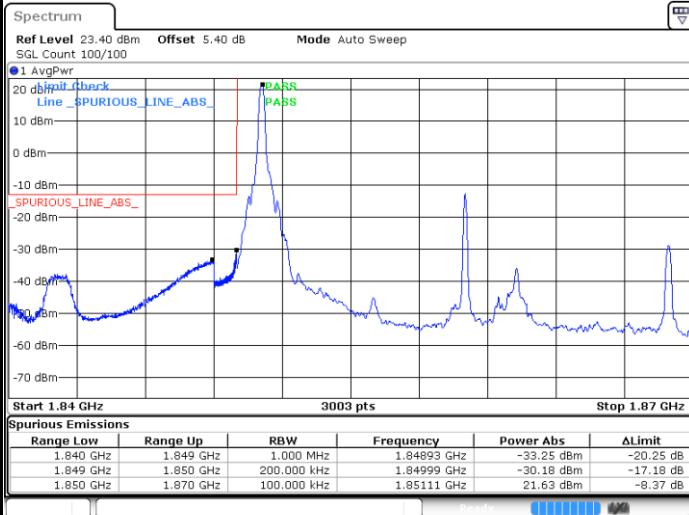
Highest Band Edge / Full RB



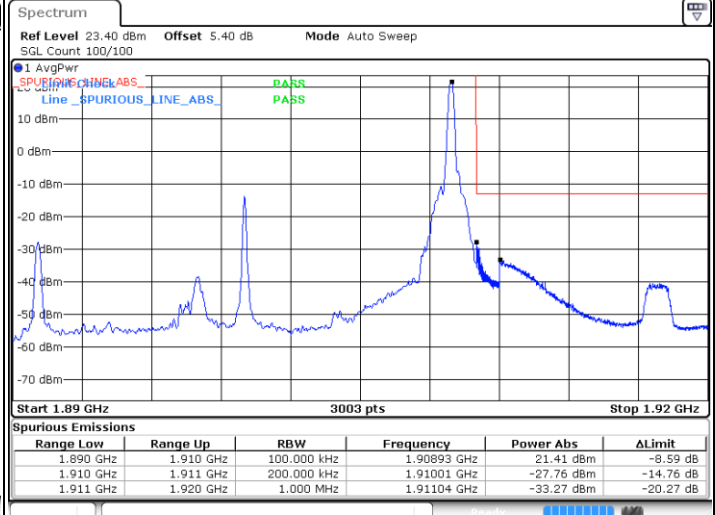


LTE Band 2 / 20MHz / QPSK

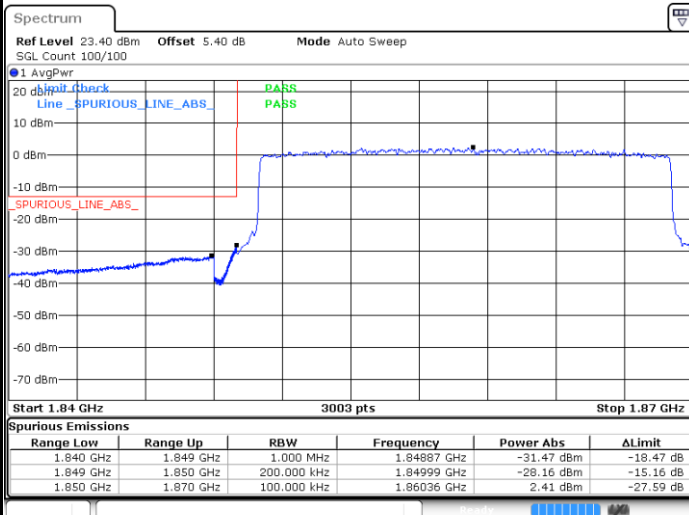
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



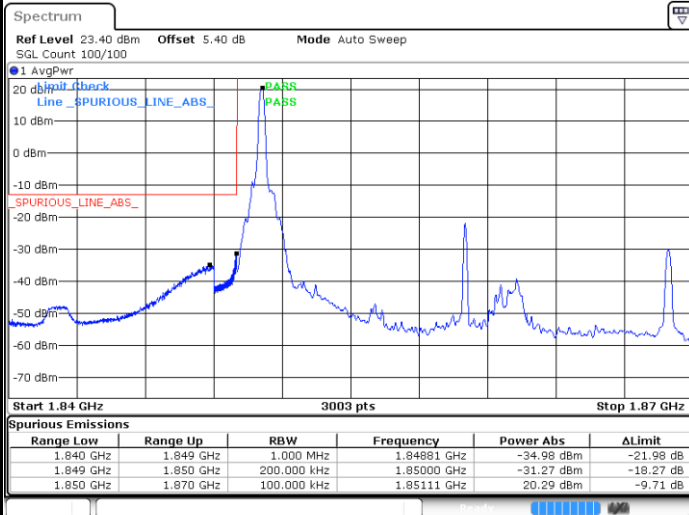
Highest Band Edge / Full RB



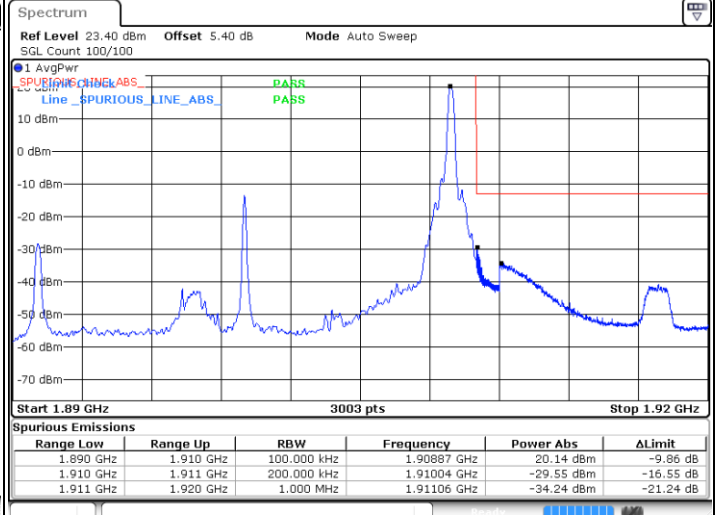


LTE Band 2 / 20MHz / 16QAM

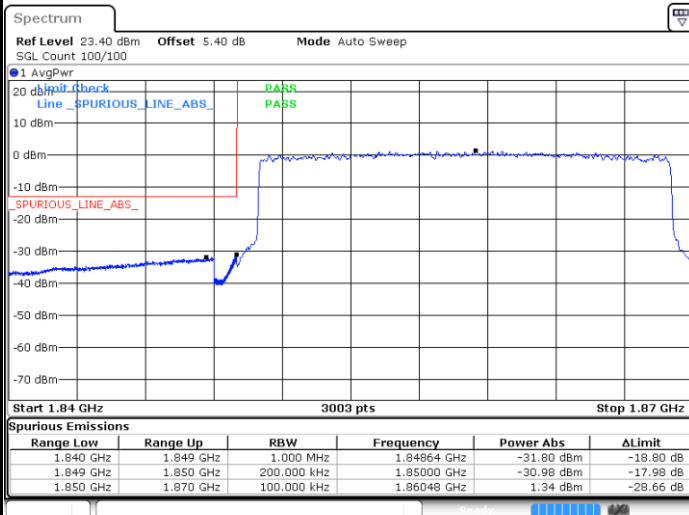
Lowest Band Edge / 1 RB



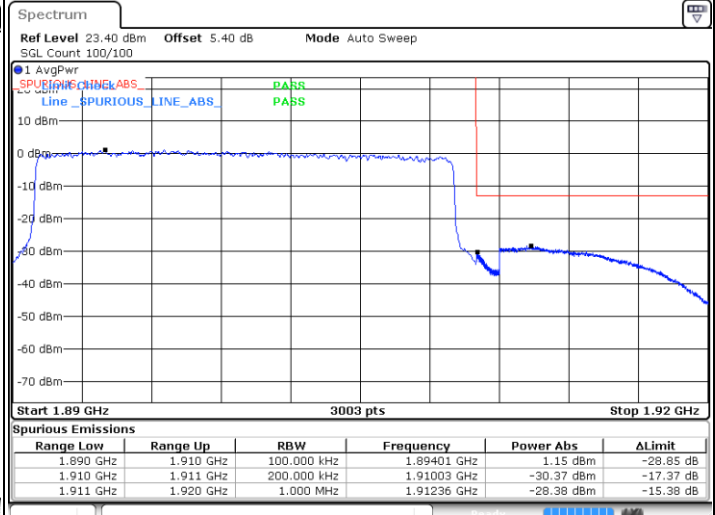
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

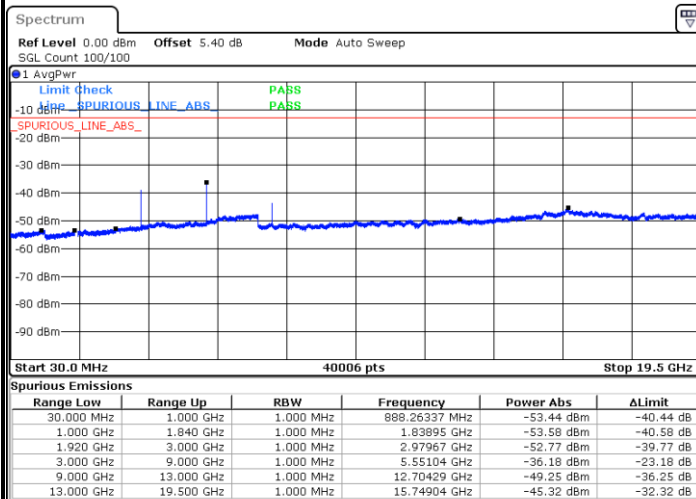




Conducted Spurious Emission

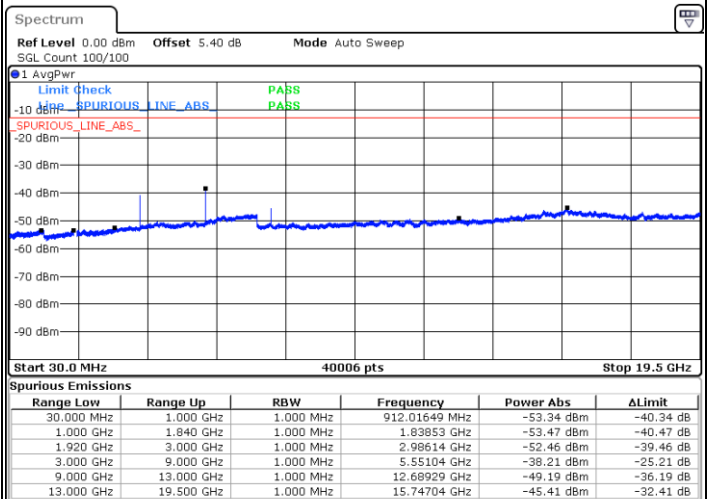
LTE Band 2 / 1.4MHz

Lowest Channel / QPSK



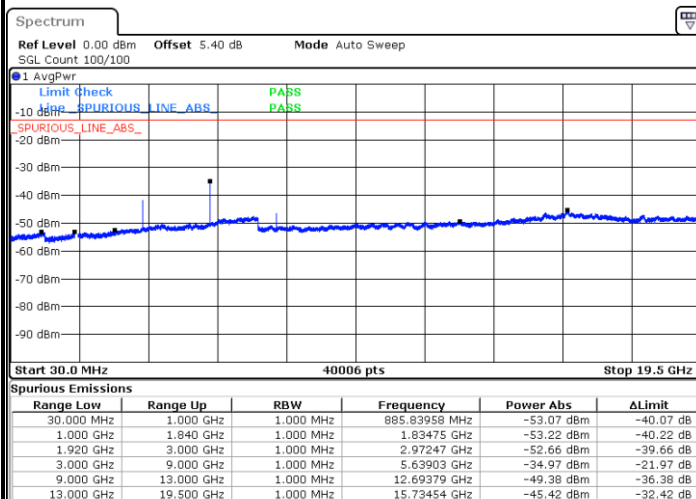
Date: 19.OCT.2019 09:52:26

Lowest Channel / 16QAM



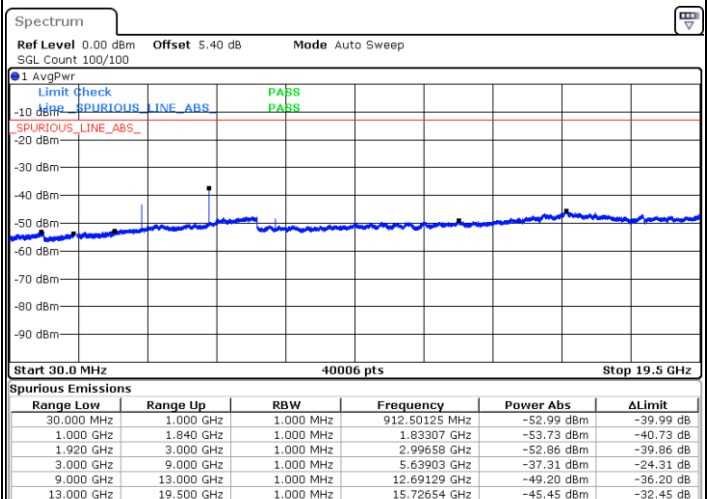
Date: 19.OCT.2019 09:54:32

Middle Channel / QPSK



Date: 19.OCT.2019 09:56:07

Middle Channel / 16QAM

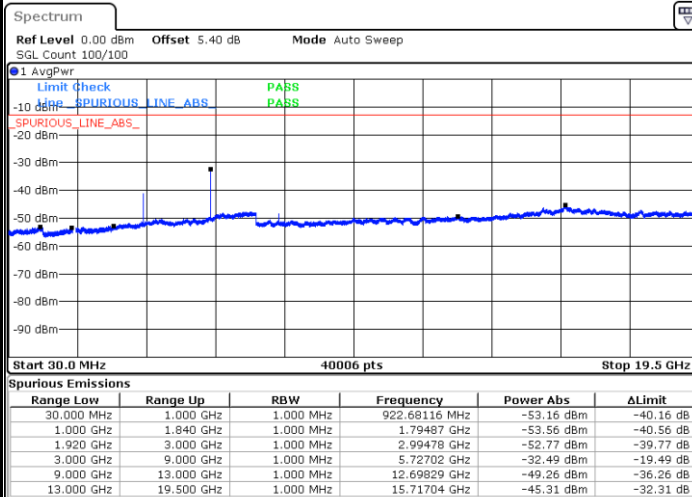


Date: 19.OCT.2019 09:57:02



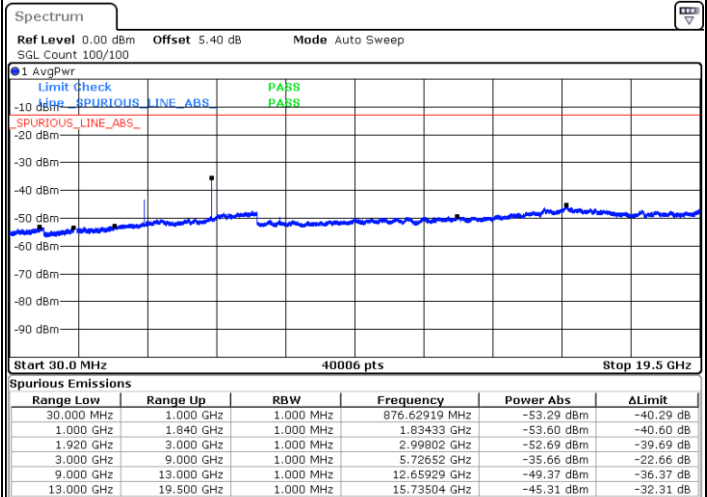
LTE Band 2 / 1.4MHz

Highest Channel / QPSK



Date: 19.OCT.2019 10:03:07

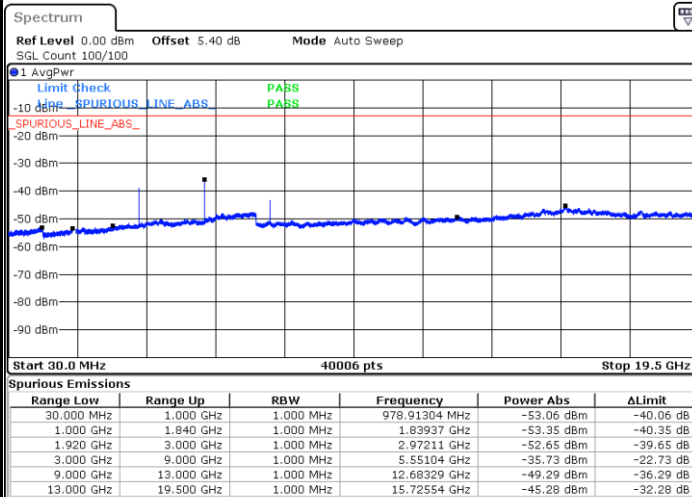
Highest Channel / 16QAM



Date: 19.OCT.2019 10:04:02

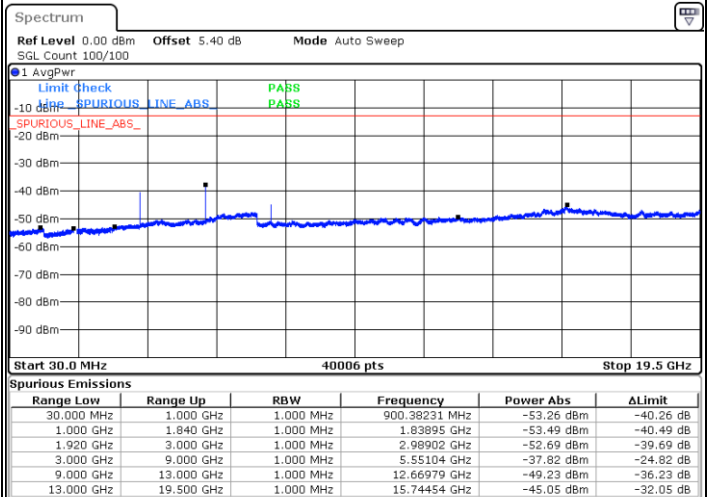
LTE Band 2 / 3MHz

Lowest Channel / QPSK



Date: 19.OCT.2019 10:10:07

Lowest Channel / 16QAM

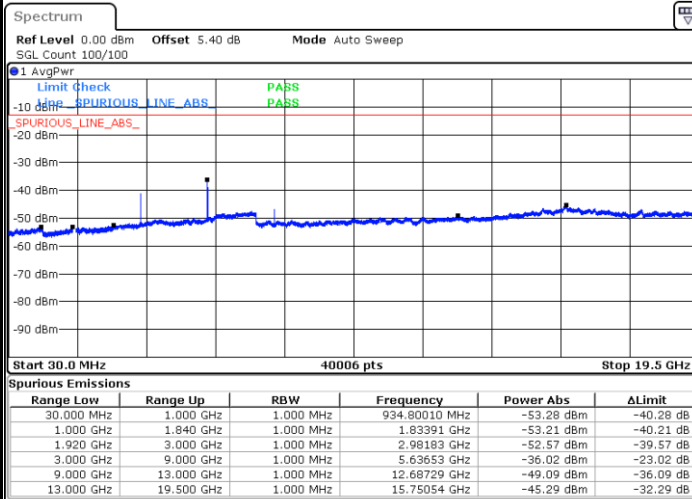


Date: 19.OCT.2019 10:11:02



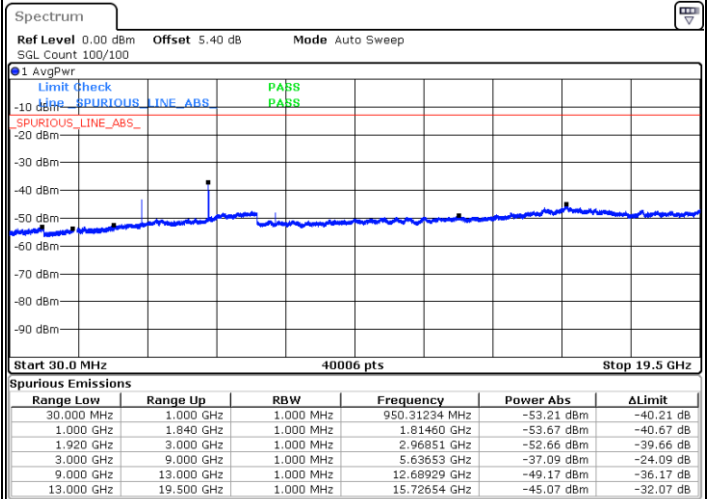
LTE Band 2 / 3MHz

Middle Channel / QPSK



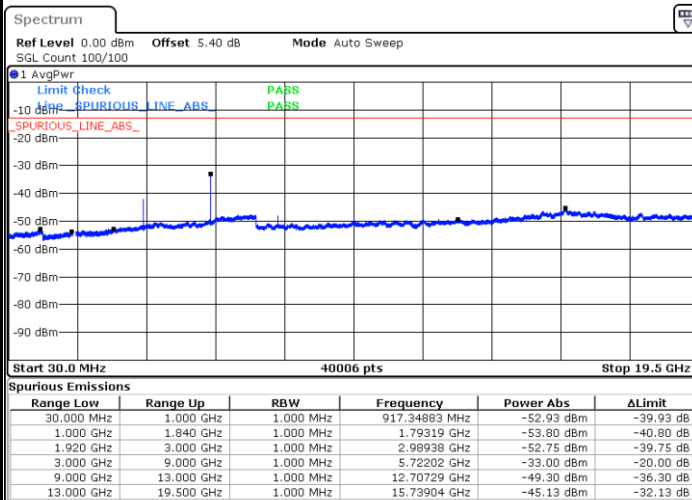
Date: 19.OCT.2019 10:12:37

Middle Channel / 16QAM



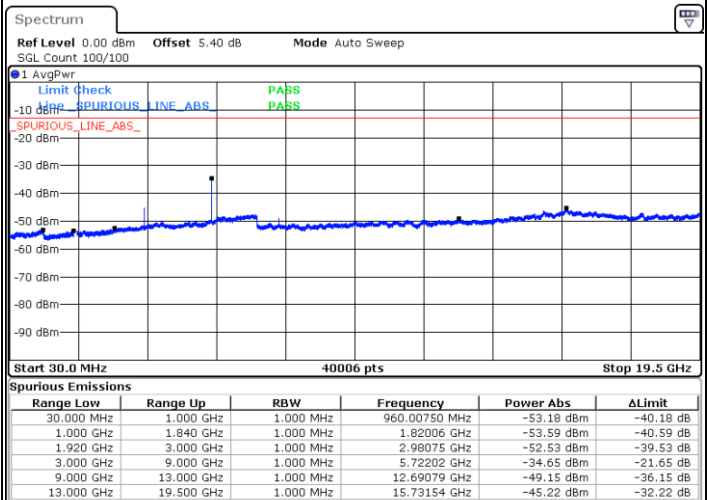
Date: 19.OCT.2019 10:13:32

Highest Channel / QPSK



Date: 19.OCT.2019 10:19:37

Highest Channel / 16QAM

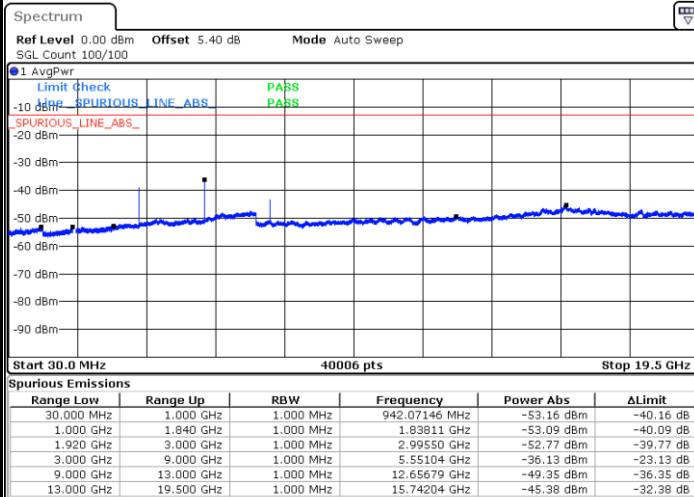


Date: 19.OCT.2019 10:20:32



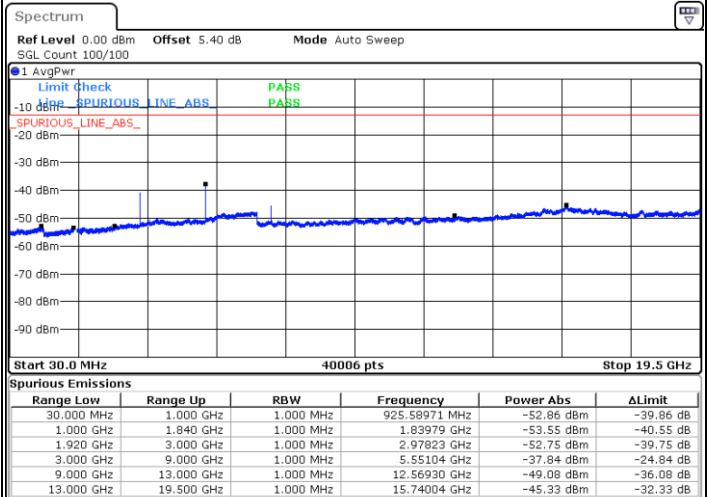
LTE Band 2 / 5MHz

Lowest Channel / QPSK



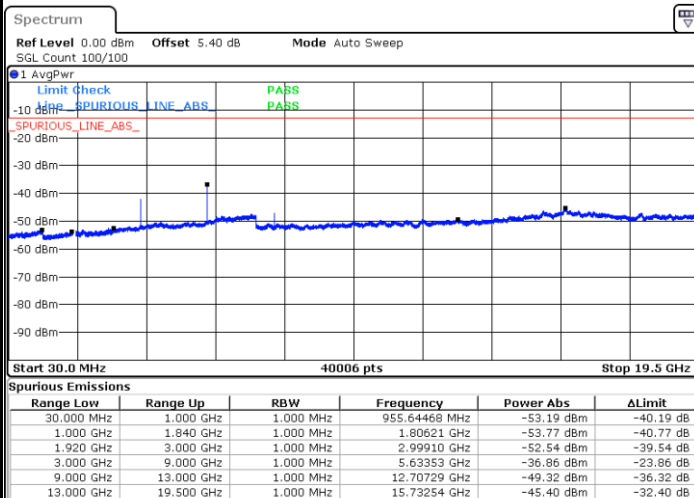
Date: 19.OCT.2019 10:26:37

Lowest Channel / 16QAM



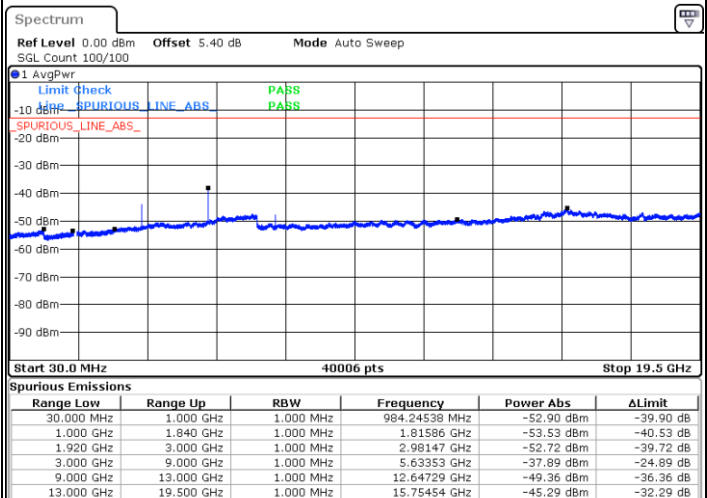
Date: 19.OCT.2019 10:27:32

Middle Channel / QPSK



Date: 19.OCT.2019 10:29:07

Middle Channel / 16QAM

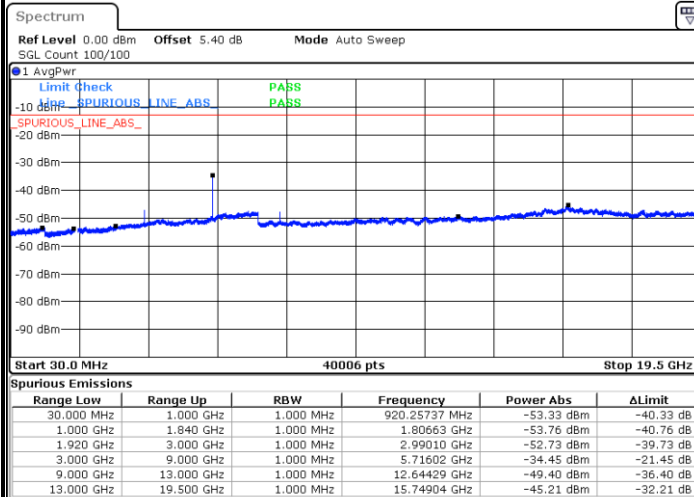


Date: 19.OCT.2019 10:30:02



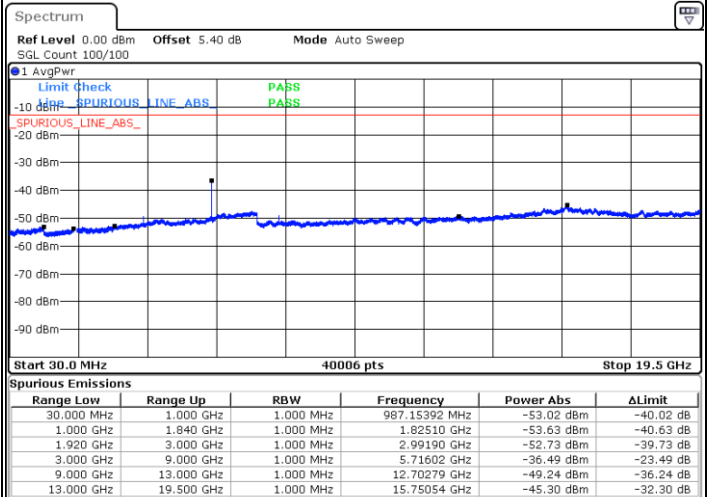
LTE Band 2 / 5MHz

Highest Channel / QPSK



Date: 19.OCT.2019 10:36:07

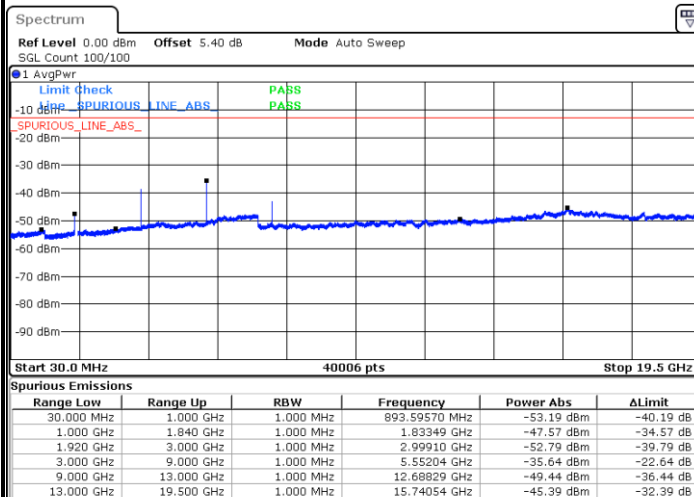
Highest Channel / 16QAM



Date: 19.OCT.2019 10:37:02

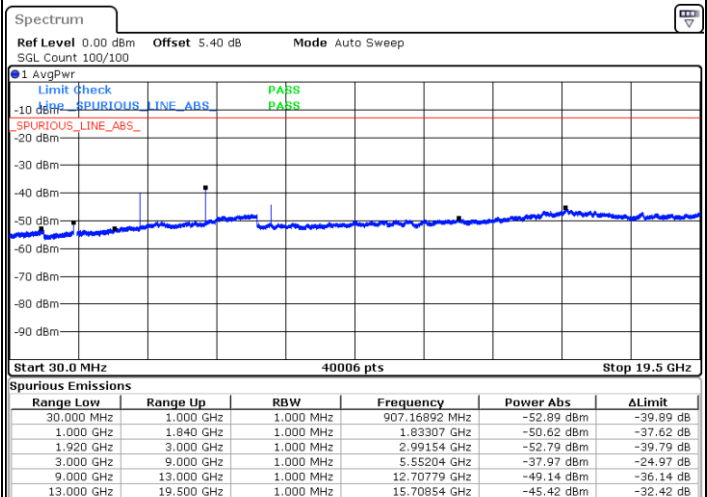
LTE Band 2 / 10MHz

Lowest Channel / QPSK



Date: 19.OCT.2019 10:43:07

Lowest Channel / 16QAM

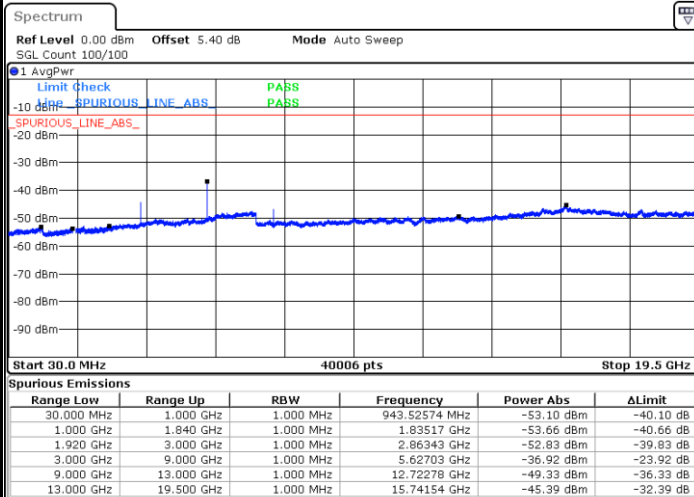


Date: 19.OCT.2019 10:44:02



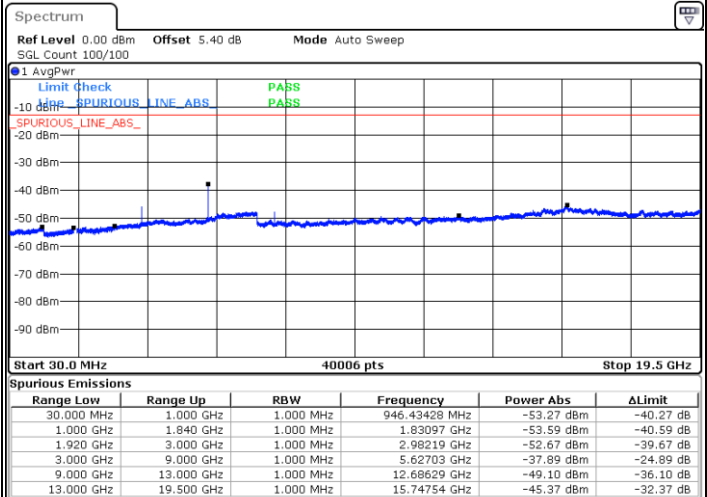
LTE Band 2 / 10MHz

Middle Channel / QPSK



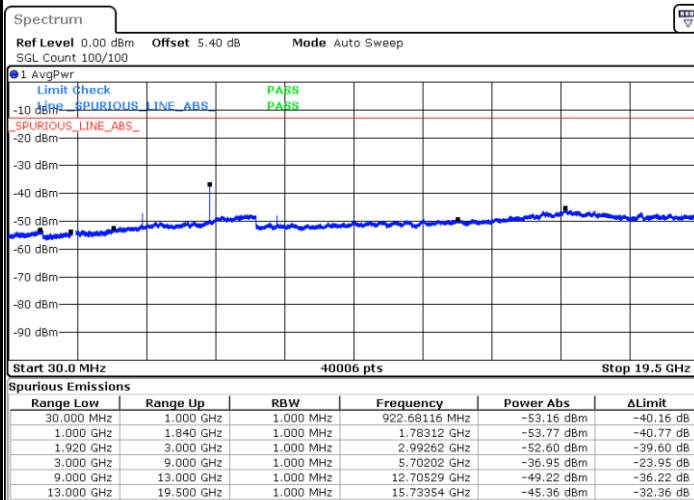
Date: 19.OCT.2019 10:45:37

Middle Channel / 16QAM



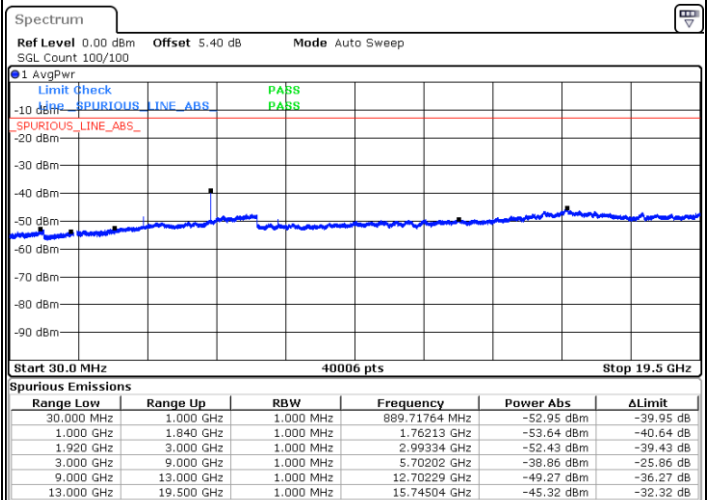
Date: 19.OCT.2019 10:46:32

Highest Channel / QPSK



Date: 19.OCT.2019 10:52:37

Highest Channel / 16QAM

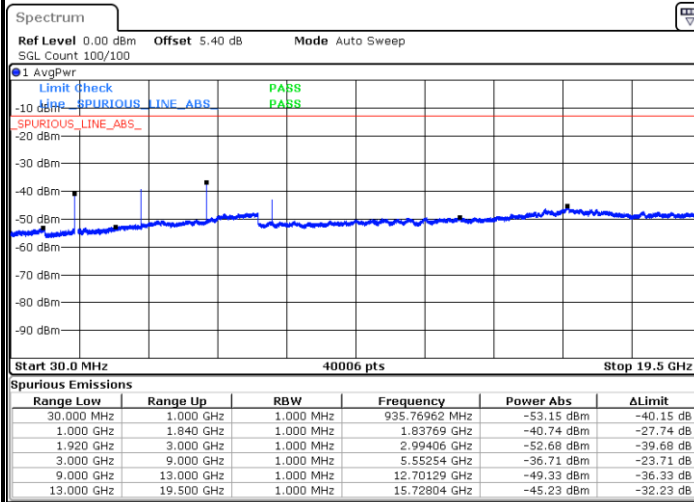


Date: 19.OCT.2019 10:53:32



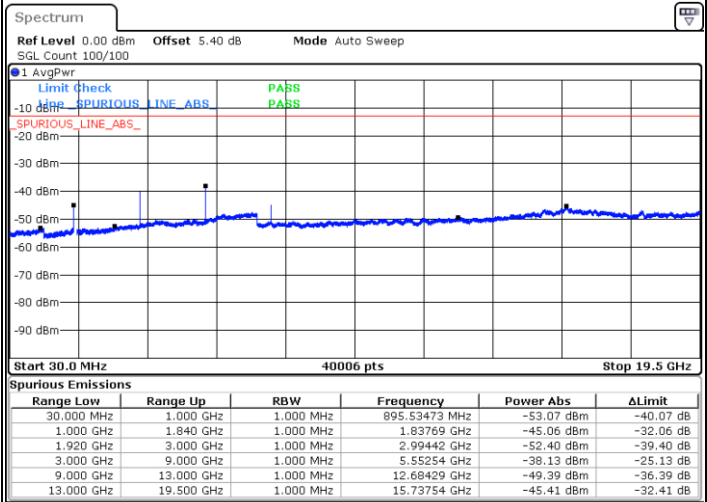
LTE Band 2 / 15MHz

Lowest Channel / QPSK



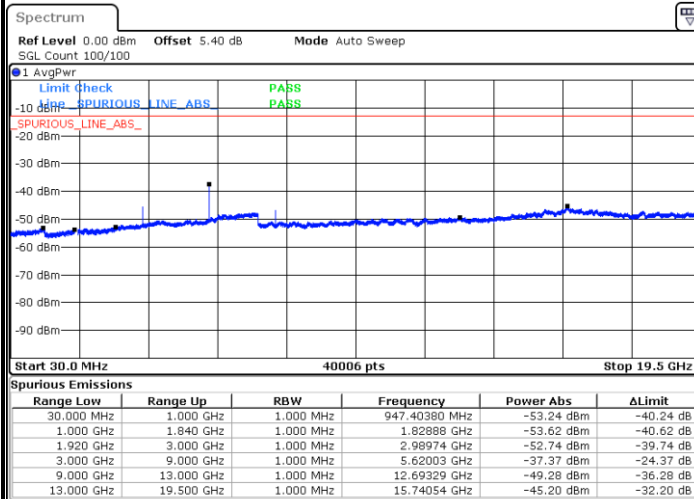
Date: 19.OCT.2019 10:59:37

Lowest Channel / 16QAM



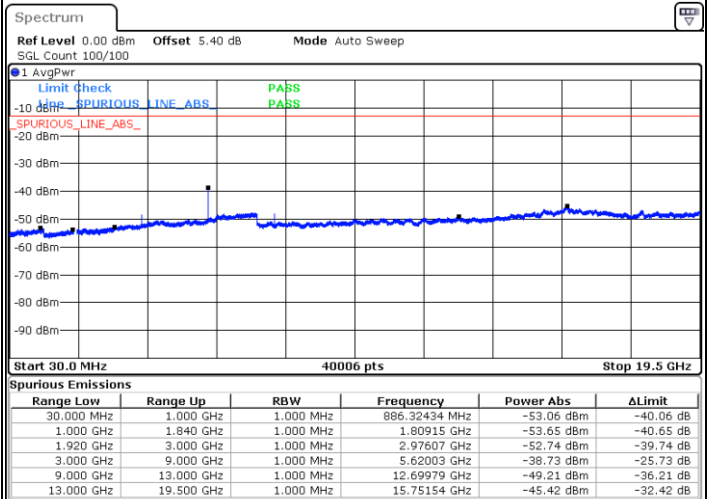
Date: 19.OCT.2019 11:00:32

Middle Channel / QPSK



Date: 19.OCT.2019 11:02:07

Middle Channel / 16QAM

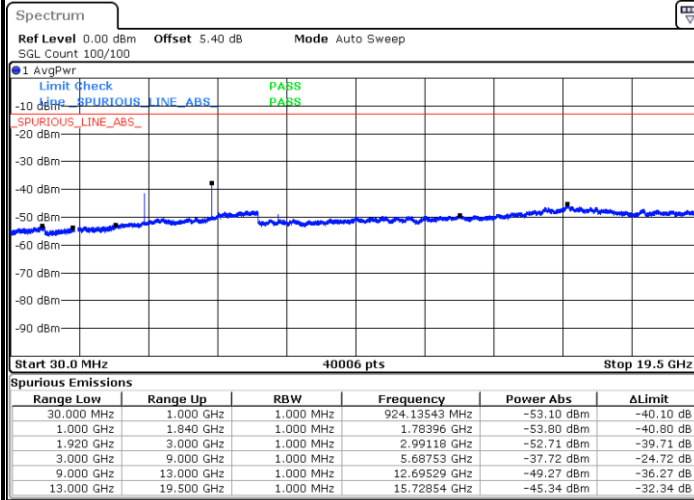


Date: 19.OCT.2019 11:03:02



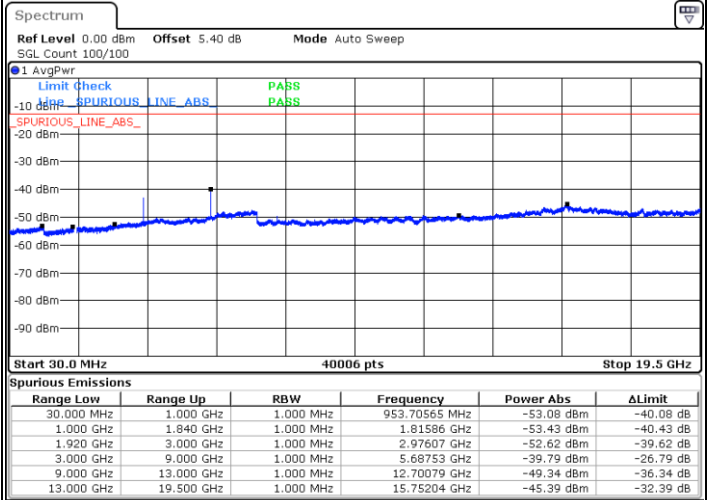
LTE Band 2 / 15MHz

Highest Channel / QPSK



Date: 19.OCT.2019 11:09:07

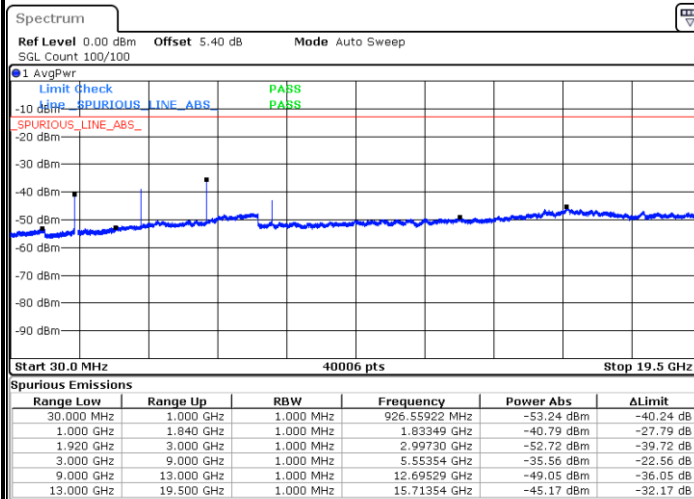
Highest Channel / 16QAM



Date: 19.OCT.2019 11:10:02

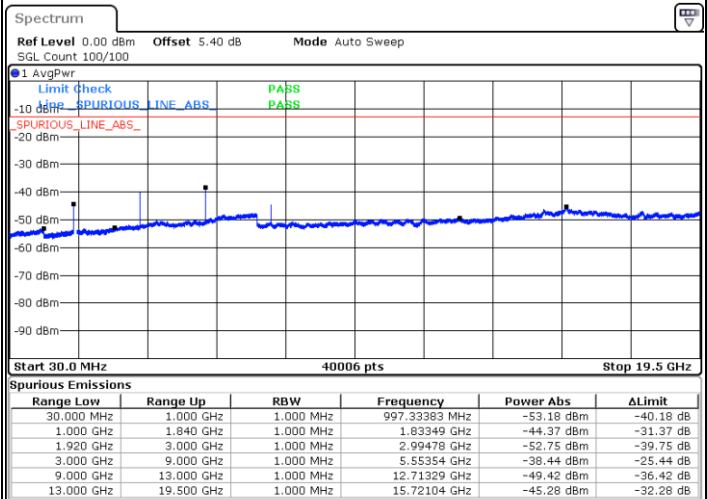
LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 19.OCT.2019 11:16:07

Lowest Channel / 16QAM

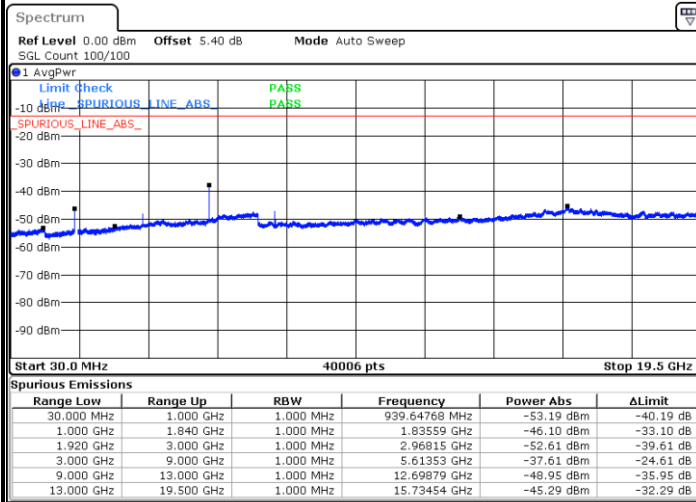


Date: 19.OCT.2019 11:17:02



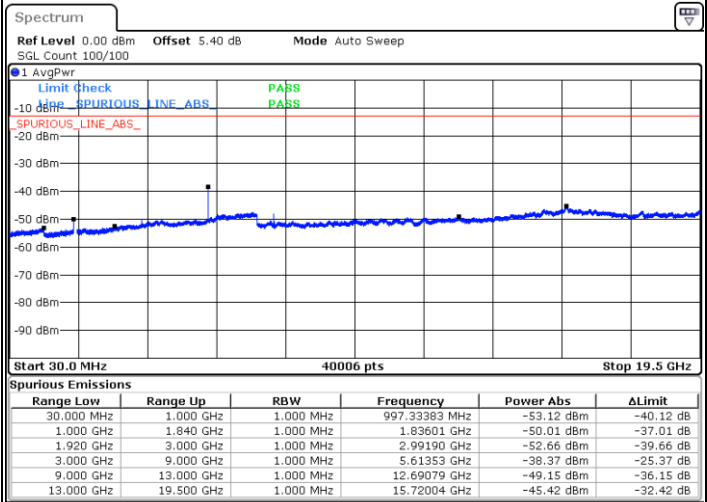
LTE Band 2 / 20MHz

Middle Channel / QPSK



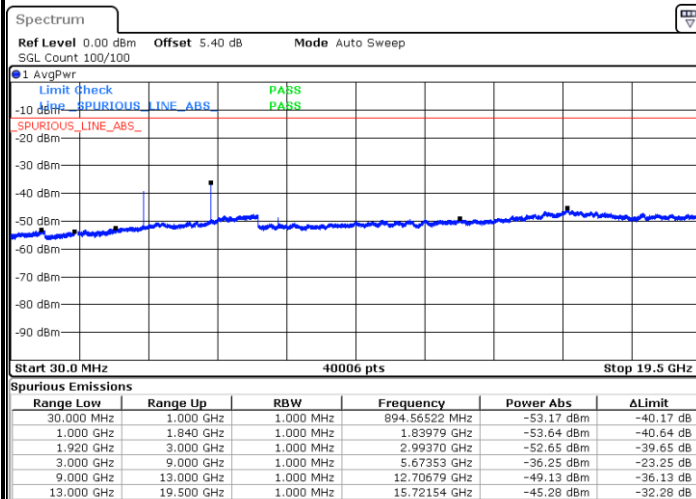
Date: 19.OCT.2019 11:18:37

Middle Channel / 16QAM



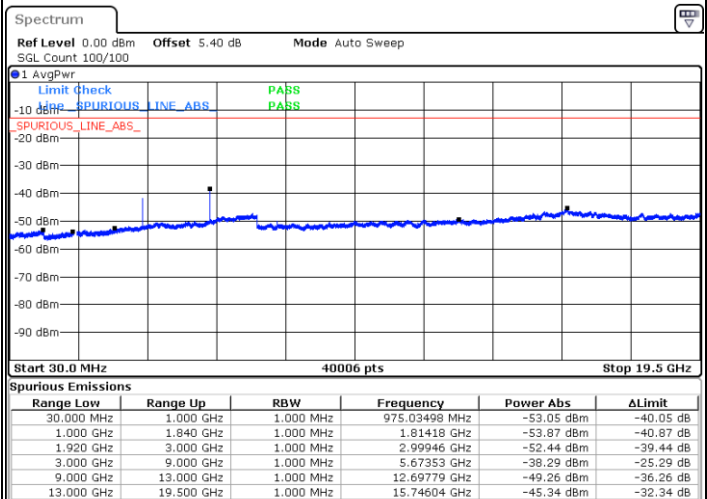
Date: 19.OCT.2019 11:19:31

Highest Channel / QPSK



Date: 19.OCT.2019 11:25:37

Highest Channel / 16QAM



Date: 19.OCT.2019 11:26:32

Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0048	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0024	
0	Normal Voltage	0.0034	
-10	Normal Voltage	0.0052	
-20	Normal Voltage	0.0019	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0037	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 4

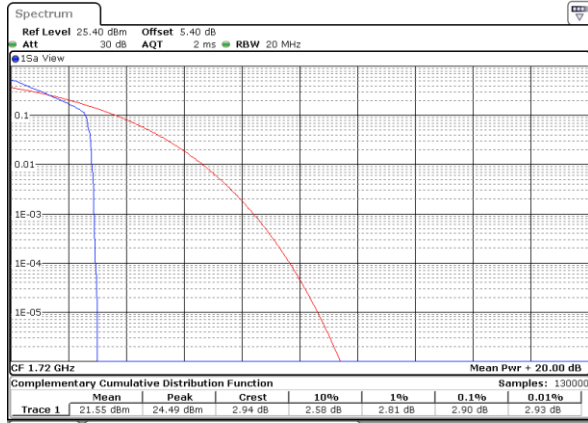
Peak-to-Average Ratio

Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	2.90	4.00	3.65	4.87	PASS
Middle CH	2.90	3.88	3.88	4.81	
Highest CH	2.90	4.09	3.74	4.96	

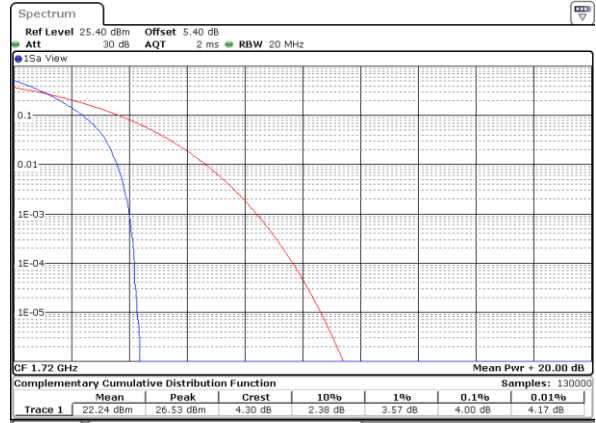


LTE Band 4 / 20MHz / QPSK

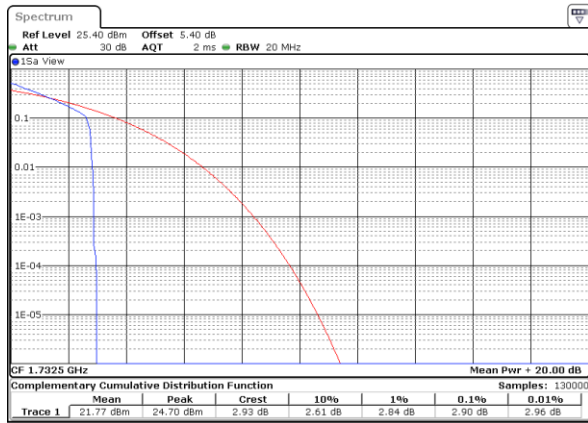
Lowest Channel / 1RB



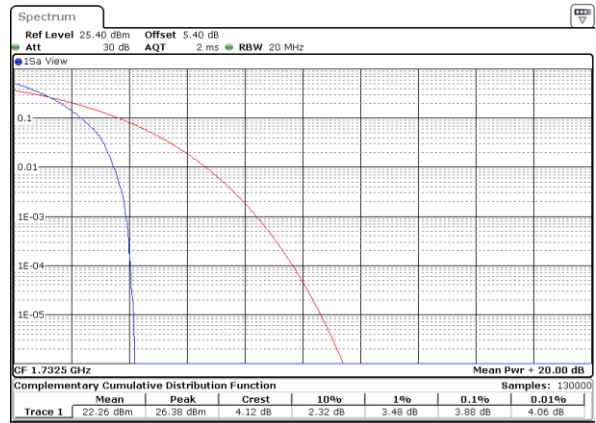
Lowest Channel / Full RB



Middle Channel / 1RB



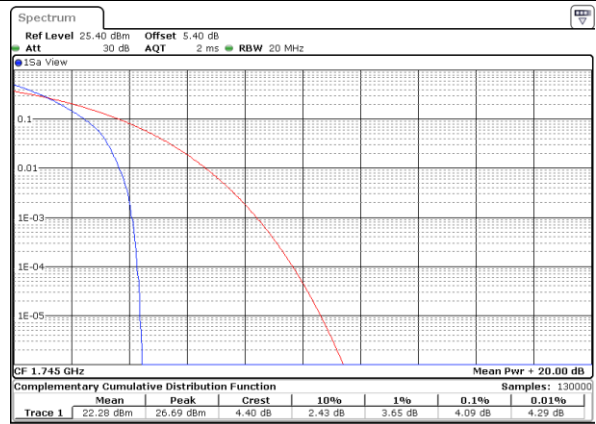
Middle Channel / Full RB



Highest Channel / 1RB



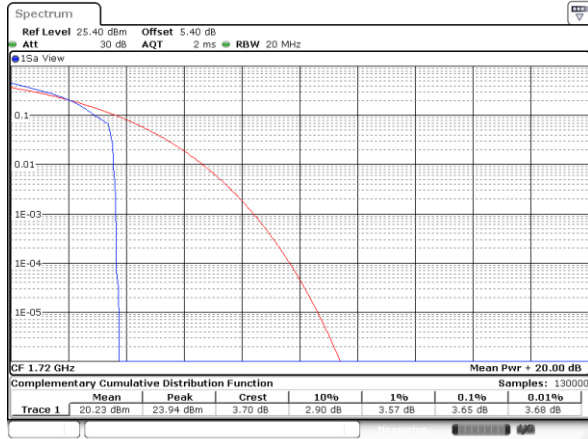
Highest Channel / Full RB



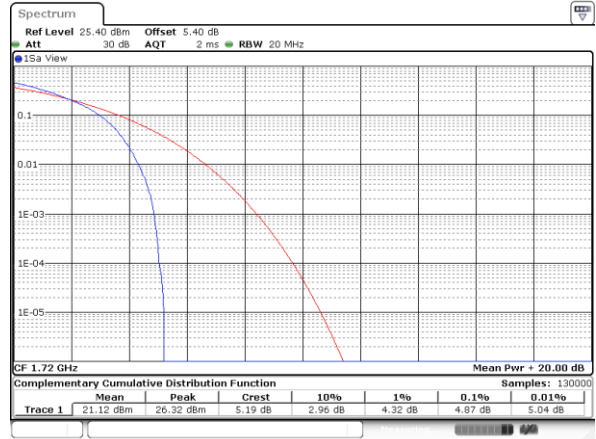


LTE Band 4 / 20MHz / 16QAM

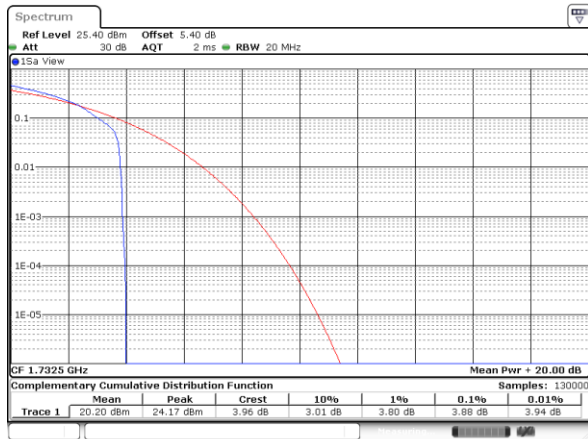
Lowest Channel / 1RB



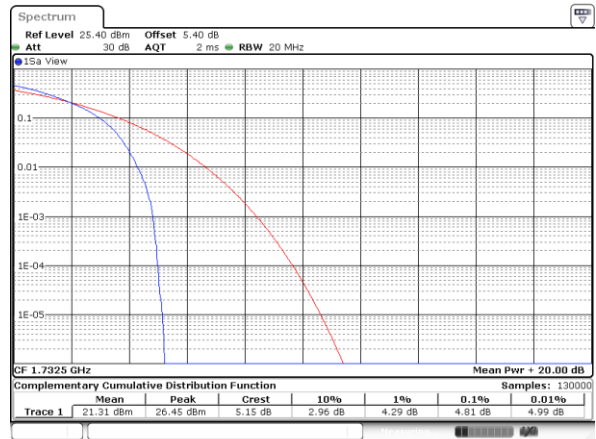
Lowest Channel / Full RB



Middle Channel / 1RB



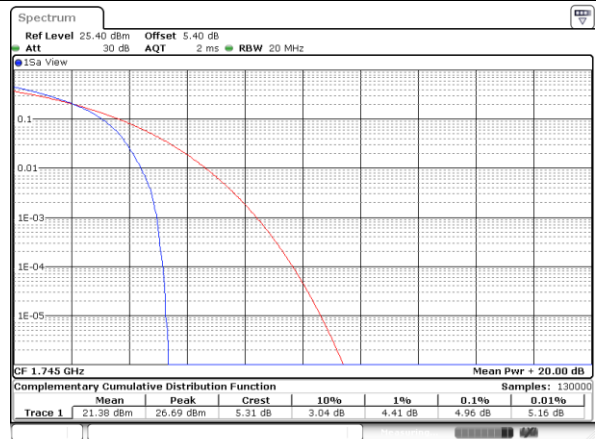
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB





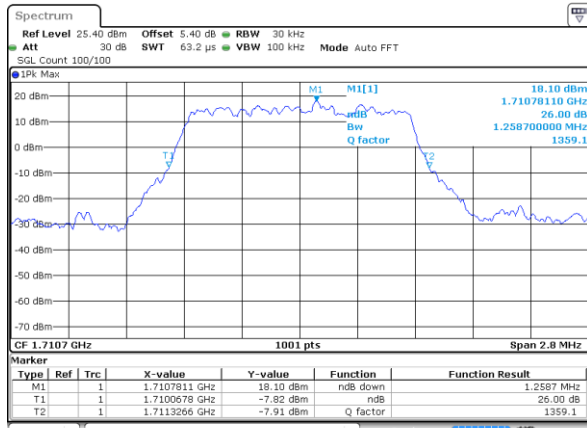
26dB Bandwidth

Mode	LTE Band 4 : 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	1.259	1.298	3.009	2.973	4.985	4.895	9.69	9.89	14.386	14.685	20.26	20.18
Middle CH	1.264	1.256	3.027	3.027	4.965	5.005	9.89	9.89	14.595	14.476	20.22	20.02
Highest CH	1.295	1.298	3.027	2.997	4.985	4.965	9.75	9.91	14.386	14.446	20.26	20.02



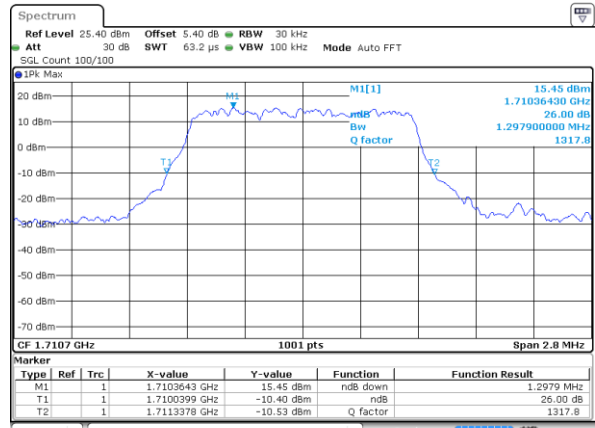
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



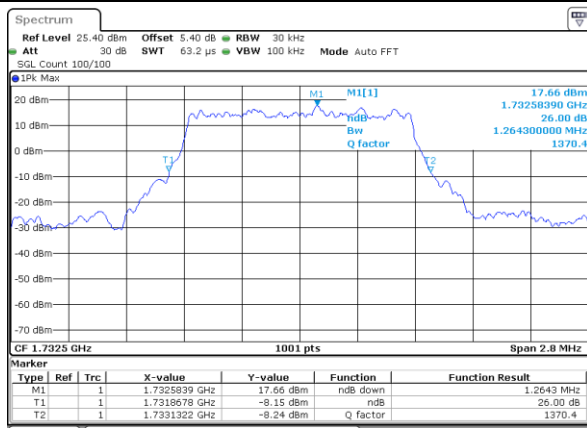
Date: 19.OCT.2019 11:35:02

Lowest Channel / 1.4MHz / 16QAM



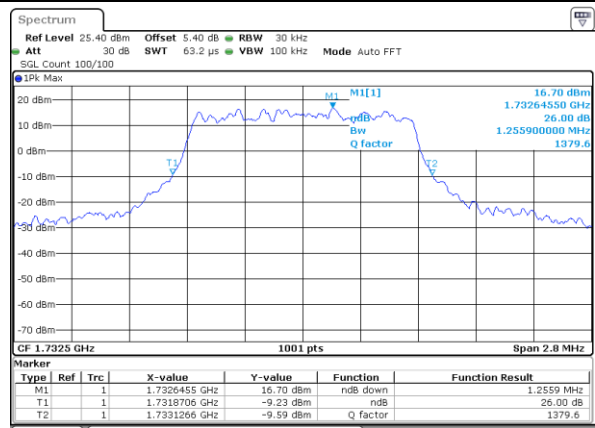
Date: 19.OCT.2019 11:35:12

Middle Channel / 1.4MHz / QPSK



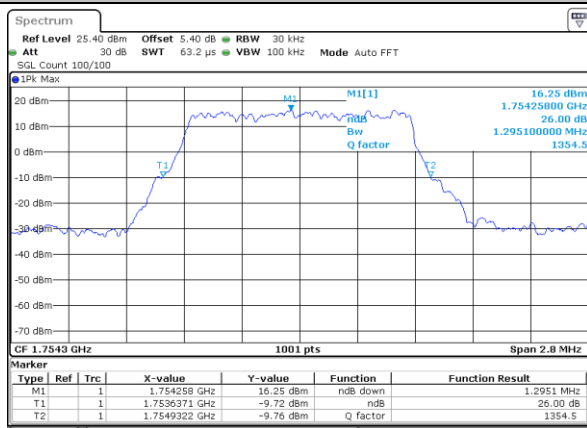
Date: 19.OCT.2019 11:43:26

Middle Channel / 1.4MHz / 16QAM



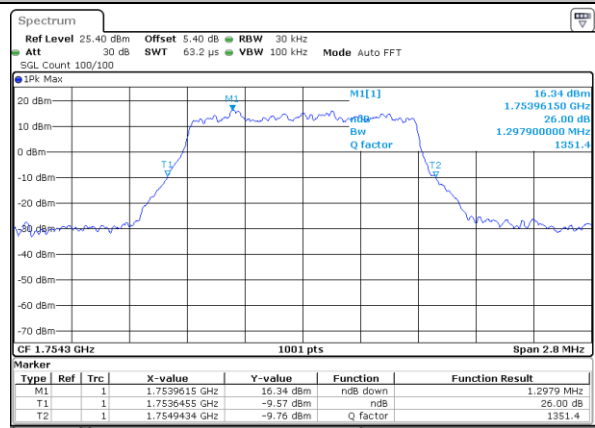
Date: 19.OCT.2019 11:43:36

Highest Channel / 1.4MHz / QPSK



Date: 19.OCT.2019 11:45:55

Highest Channel / 1.4MHz / 16QAM

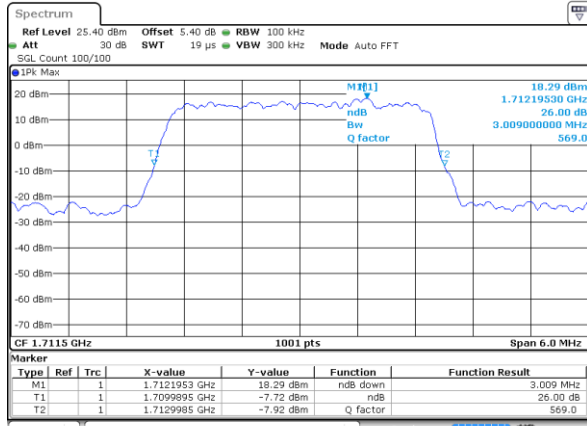


Date: 19.OCT.2019 11:46:05

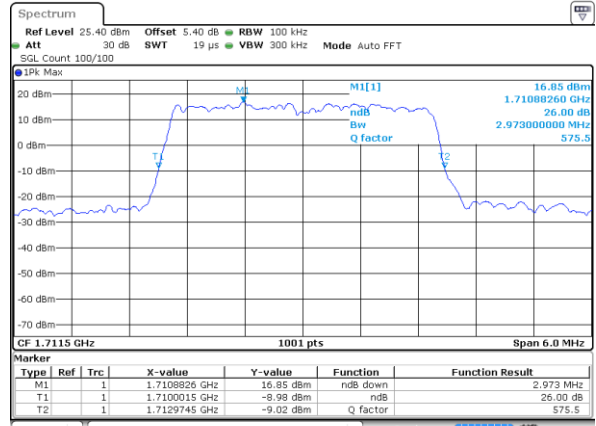


LTE Band 4

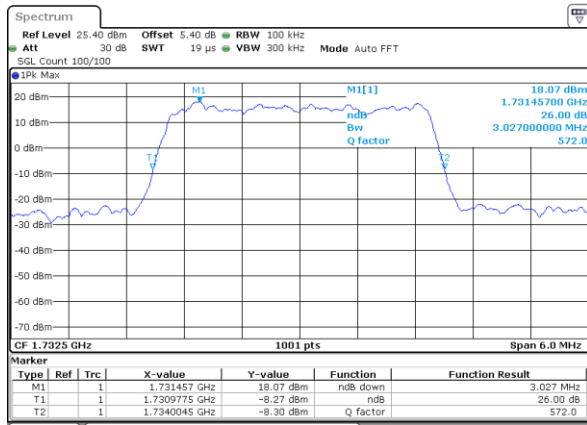
Lowest Channel / 3MHz / QPSK



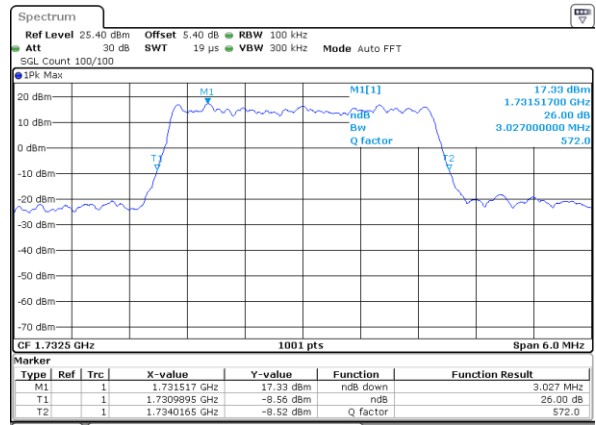
Lowest Channel / 3MHz / 16QAM



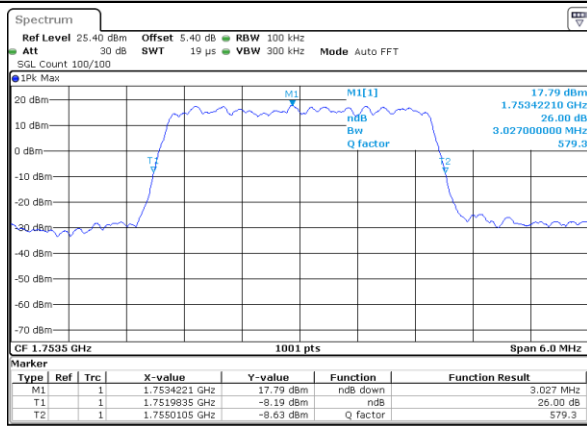
Middle Channel / 3MHz / QPSK



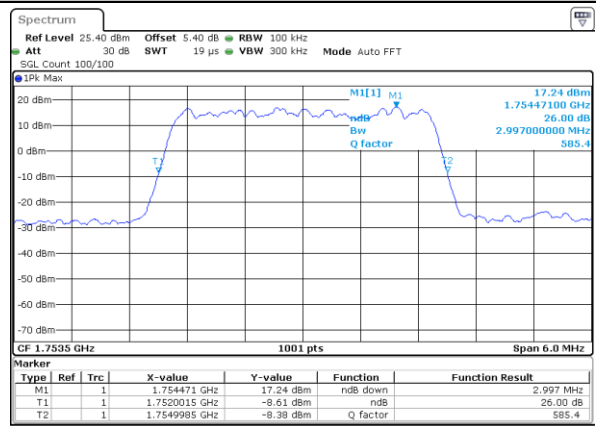
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



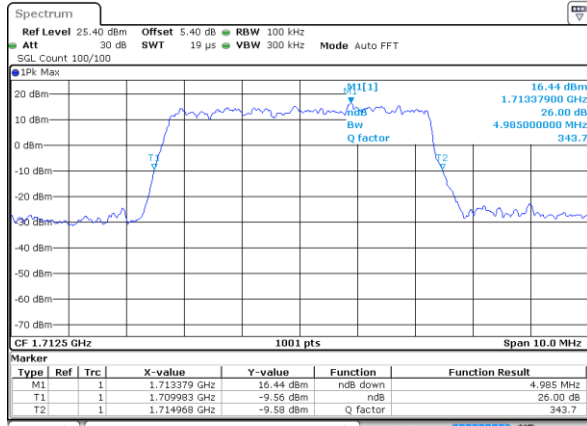
Highest Channel / 3MHz / 16QAM



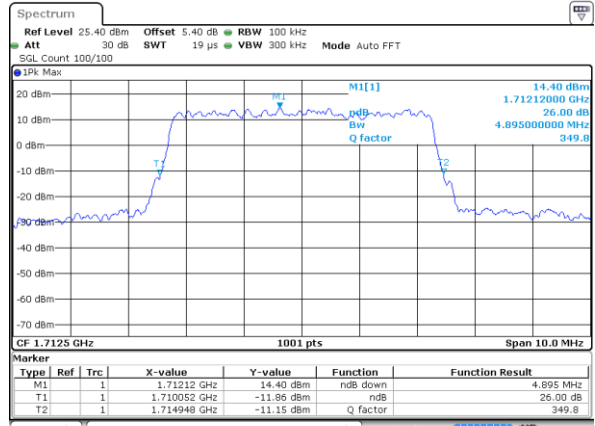


LTE Band 4

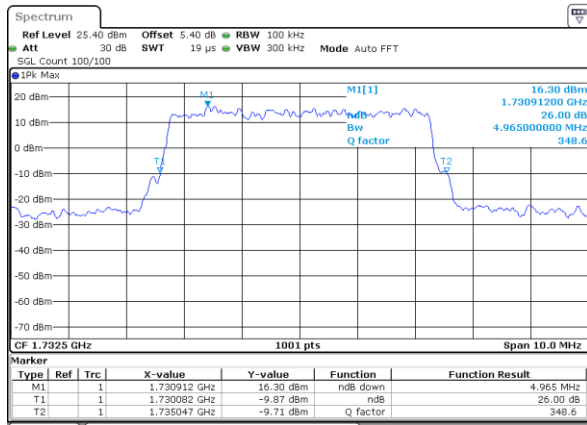
Lowest Channel / 5MHz / QPSK



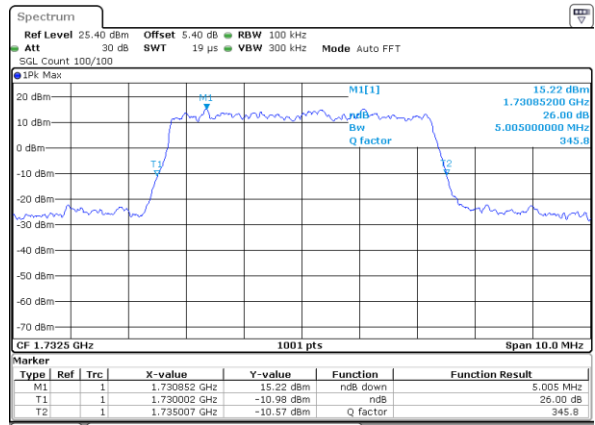
Lowest Channel / 5MHz / 16QAM



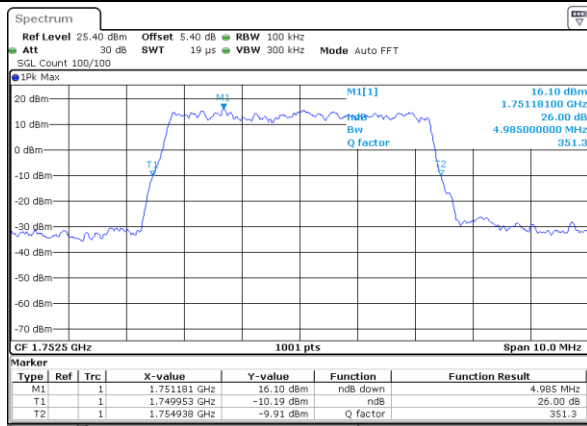
Middle Channel / 5MHz / QPSK



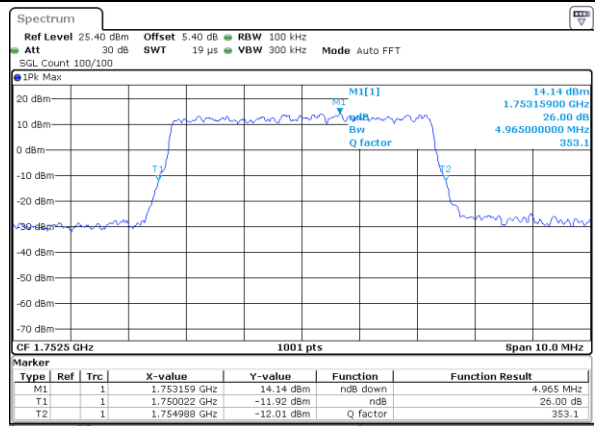
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



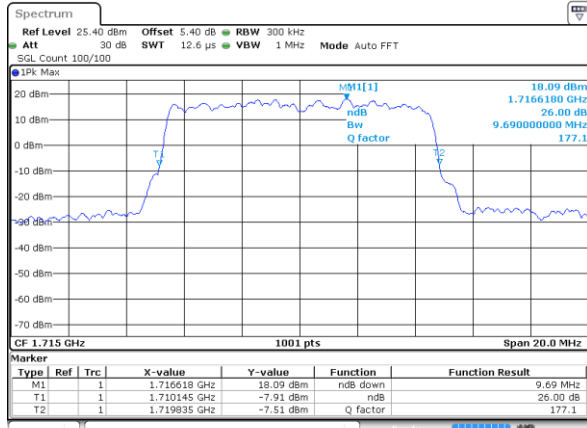
Highest Channel / 5MHz / 16QAM



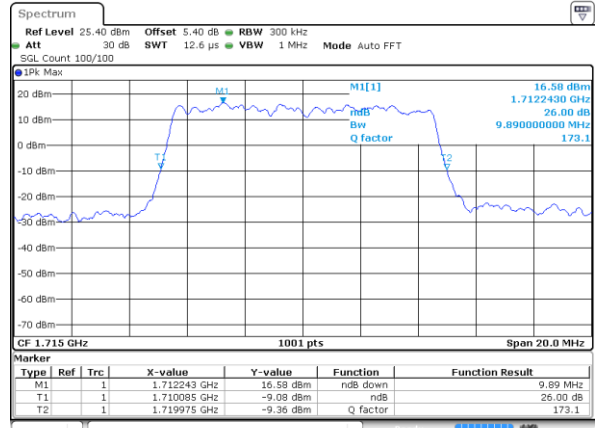


LTE Band 4

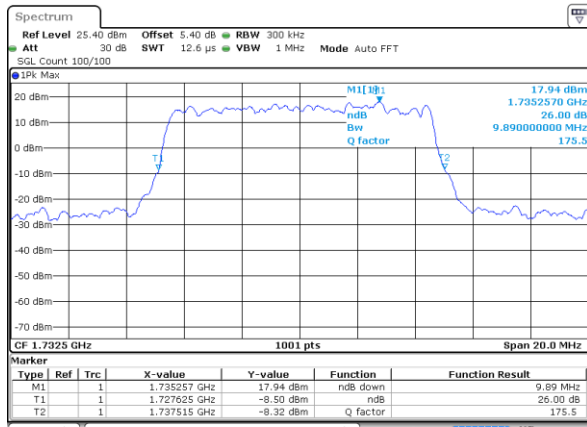
Lowest Channel / 10MHz / QPSK



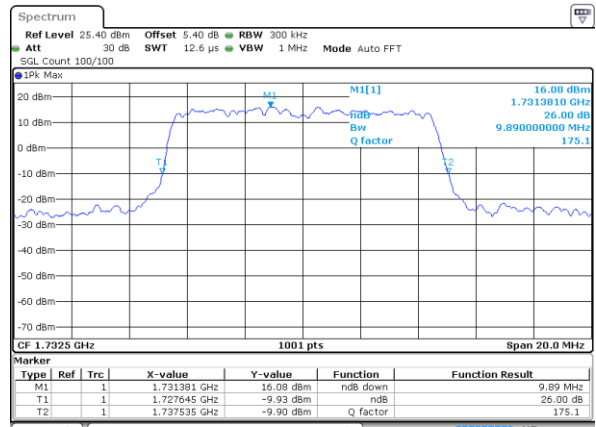
Lowest Channel / 10MHz / 16QAM



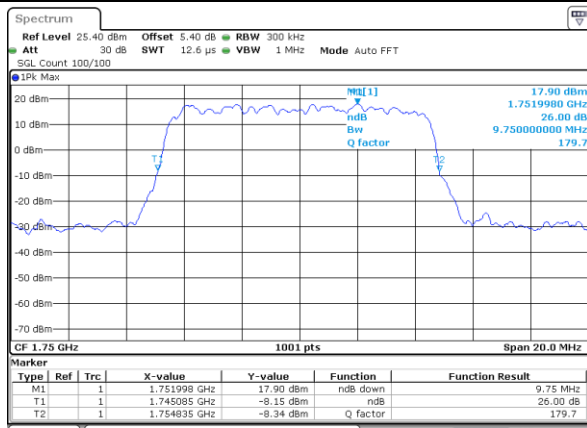
Middle Channel / 10MHz / QPSK



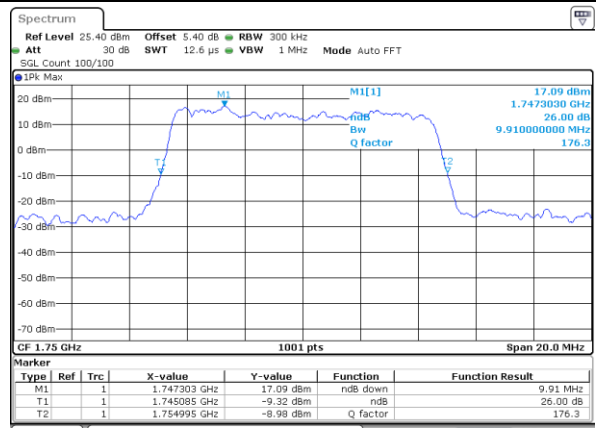
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



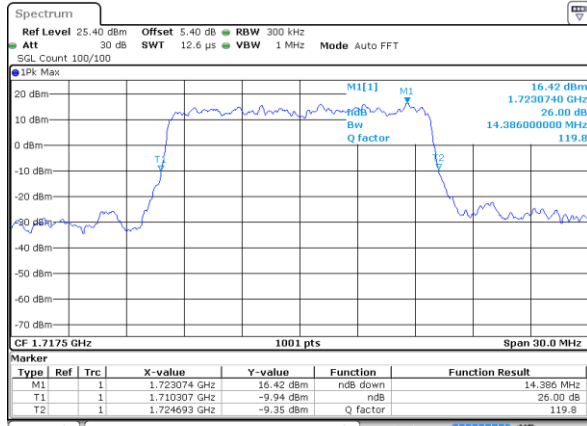
Highest Channel / 10MHz / 16QAM





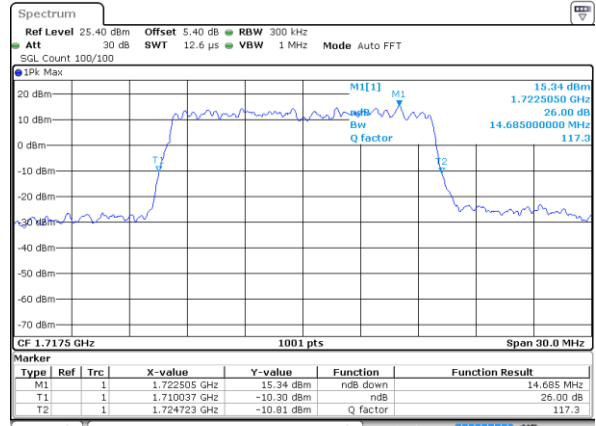
LTE Band 4

Lowest Channel / 15MHz / QPSK



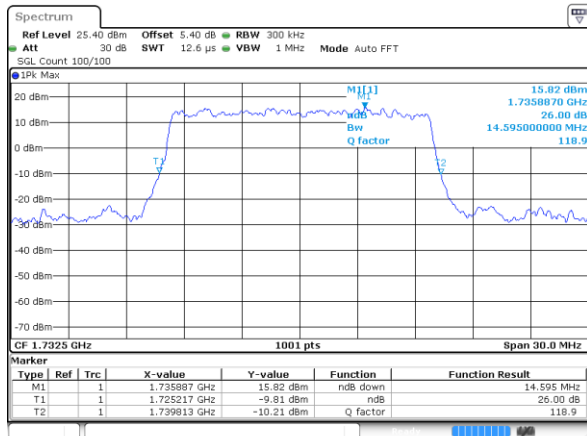
Date: 19.OCT.2019 13:15:12

Lowest Channel / 15MHz / 16QAM



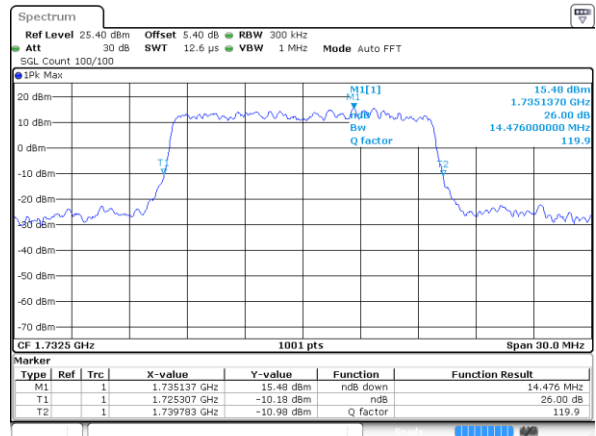
Date: 19.OCT.2019 13:15:22

Middle Channel / 15MHz / QPSK



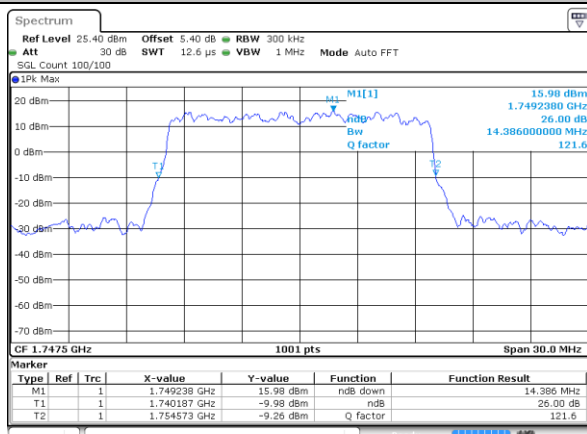
Date: 19.OCT.2019 13:22:13

Middle Channel / 15MHz / 16QAM



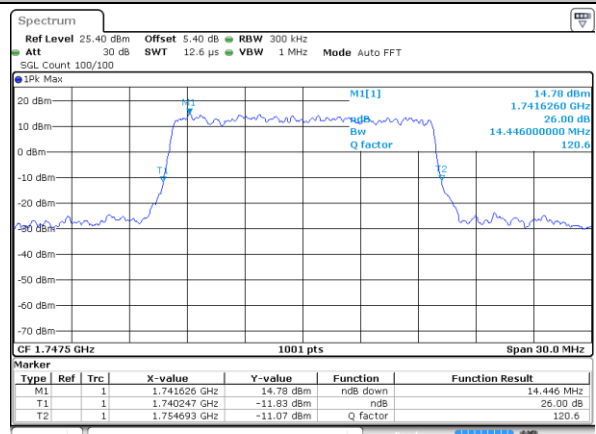
Date: 19.OCT.2019 13:22:23

Highest Channel / 15MHz / QPSK



Date: 19.OCT.2019 13:24:42

Highest Channel / 15MHz / 16QAM

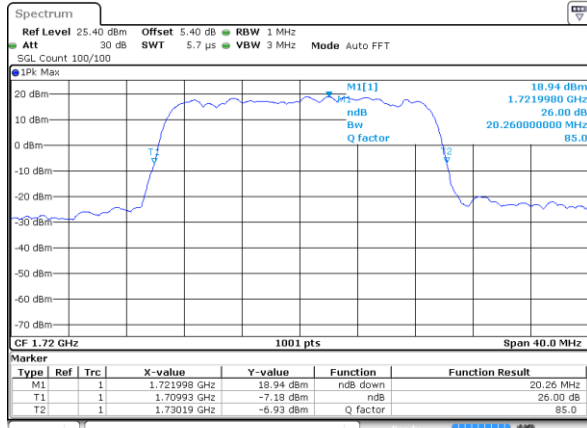


Date: 19.OCT.2019 13:24:52

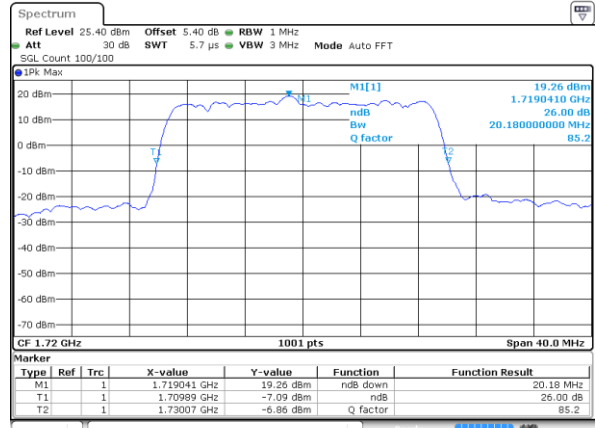


LTE Band 4

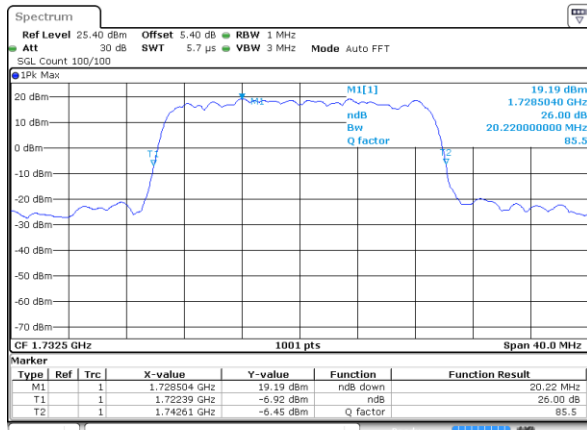
Lowest Channel / 20MHz / QPSK



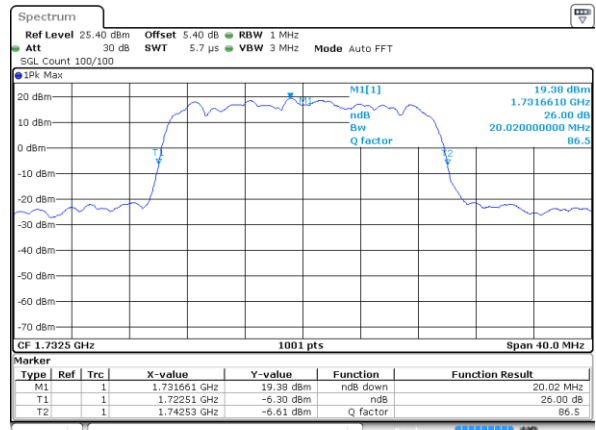
Lowest Channel / 20MHz / 16QAM



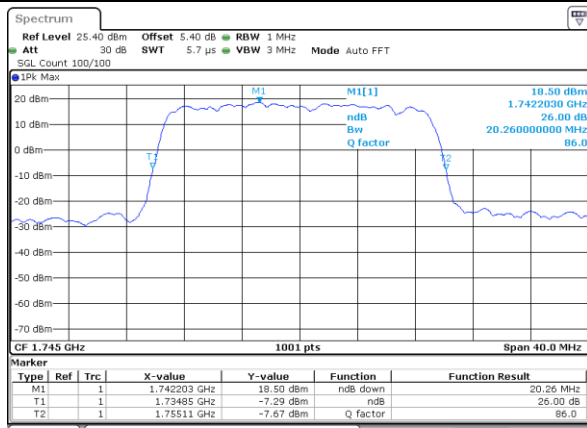
Middle Channel / 20MHz / QPSK



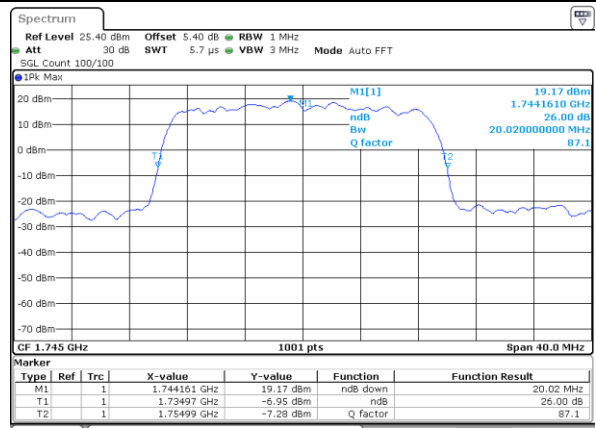
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM





Occupied Bandwidth

Mode	LTE Band 4 : 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	1.10	1.10	2.72	2.73	4.48	4.49	8.99	9.03	13.37	13.52	18.10	18.46
Middle CH	1.10	1.09	2.73	2.72	4.49	4.51	9.03	8.99	13.49	13.34	18.14	18.30
Highest CH	1.09	1.09	2.72	2.73	4.49	4.49	9.03	8.99	13.43	13.43	18.18	18.34