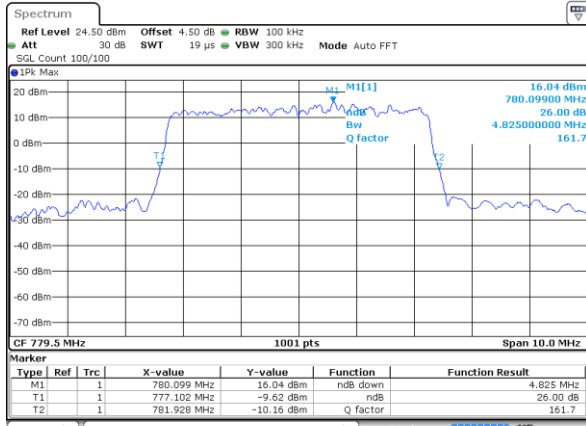


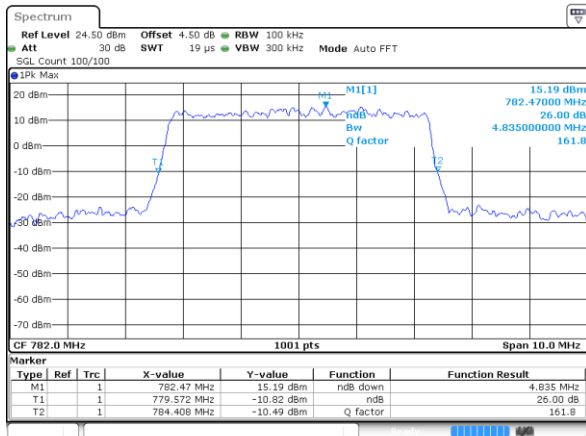


LTE Band 13

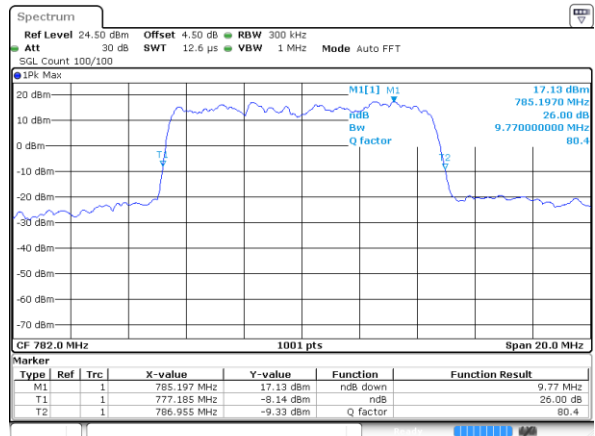
Lowest Channel / 5MHz / 64QAM



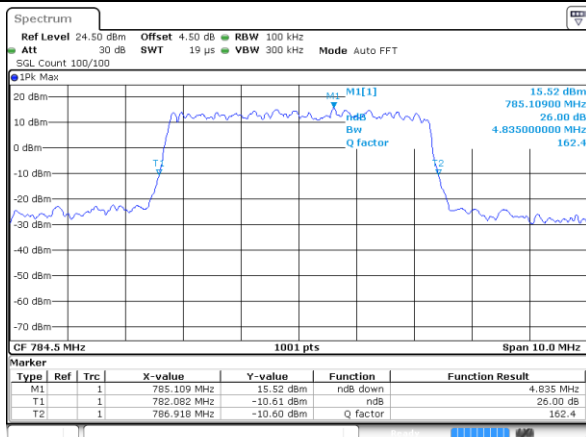
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM





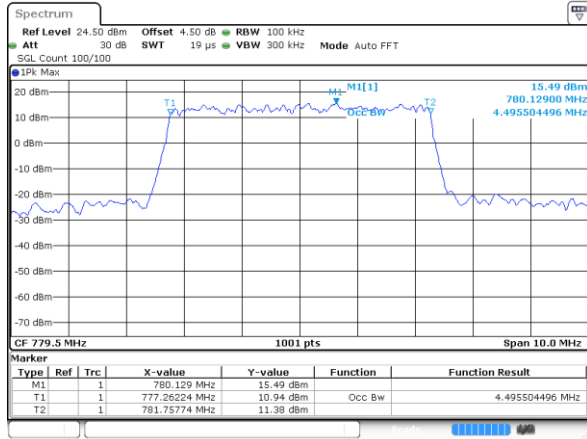
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	5MHz		10MHz		5MHz	10MHz						
Mod.	QPSK	16QAM	QPSK	16QAM	64QAM	64QAM						
Lowest CH	4.50	4.48			4.50							
Middle CH	4.47	4.48	9.07	9.03	4.50	9.03						
Highest CH	4.47	4.48			4.49							

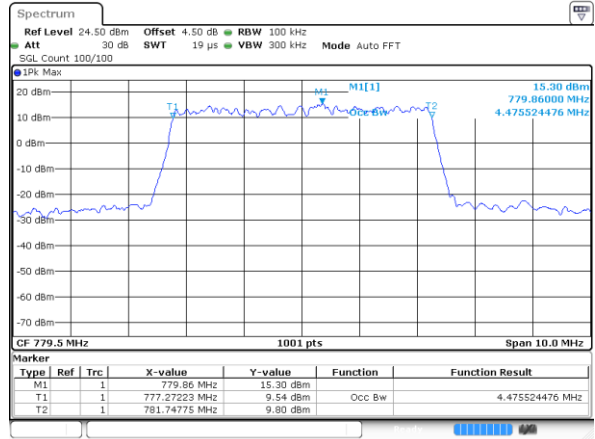


LTE Band 13

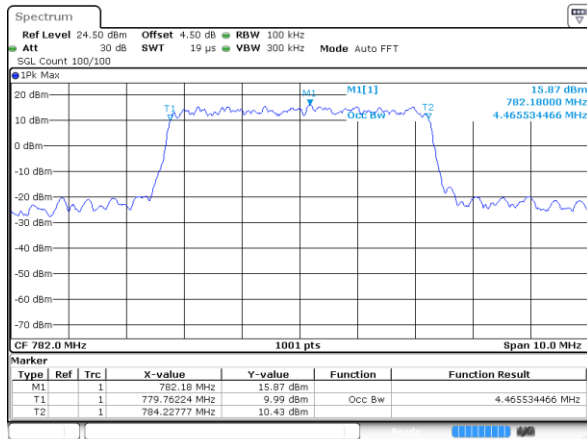
Lowest Channel / 5MHz / QPSK



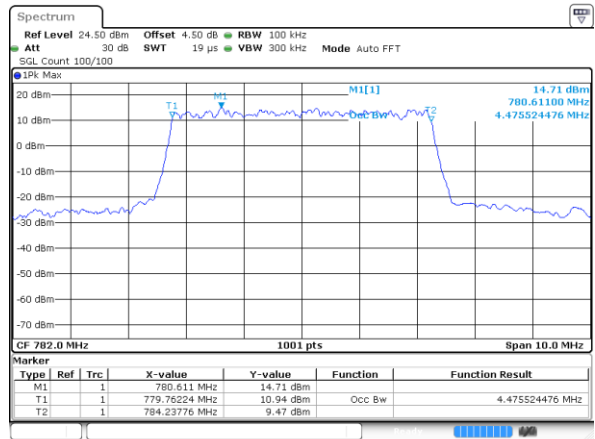
Lowest Channel / 5MHz / 16QAM



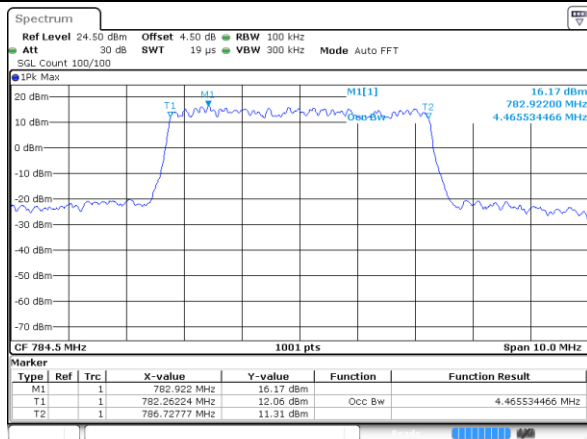
Middle Channel / 5MHz / QPSK



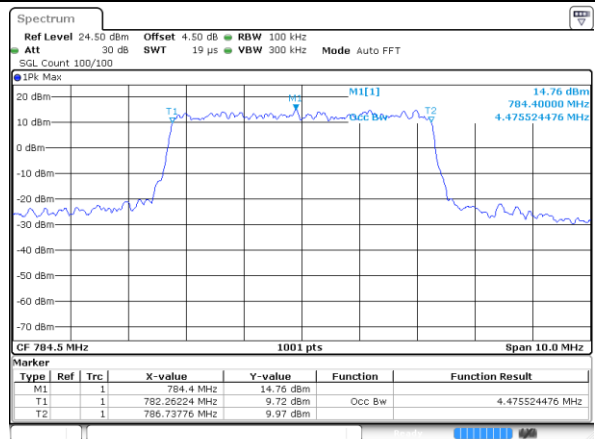
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



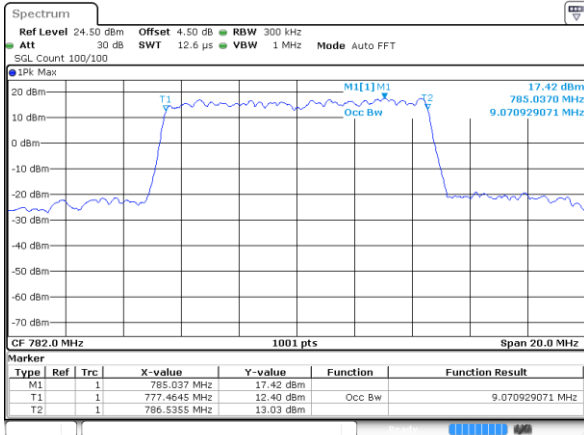
Highest Channel / 5MHz / 16QAM





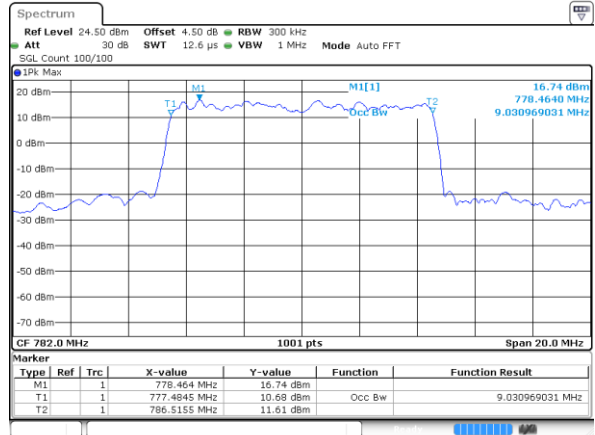
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 22 FEB 2020 07:25:18

Middle Channel / 10MHz / 16QAM

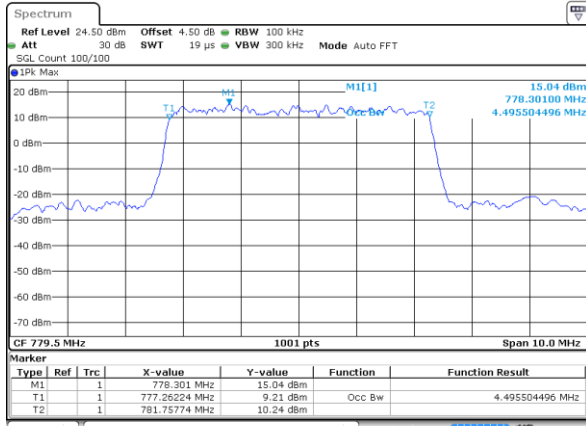


Date: 22 FEB 2020 07:25:28

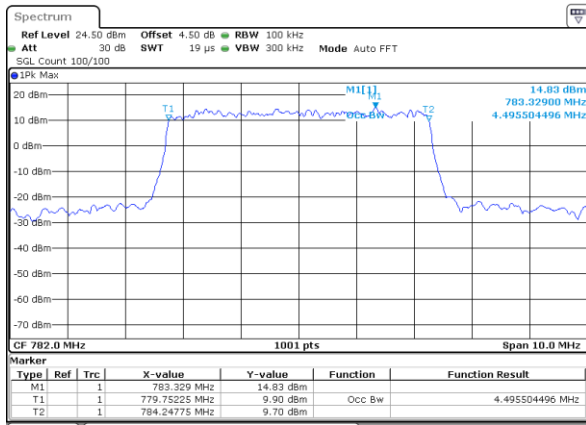


LTE Band 13

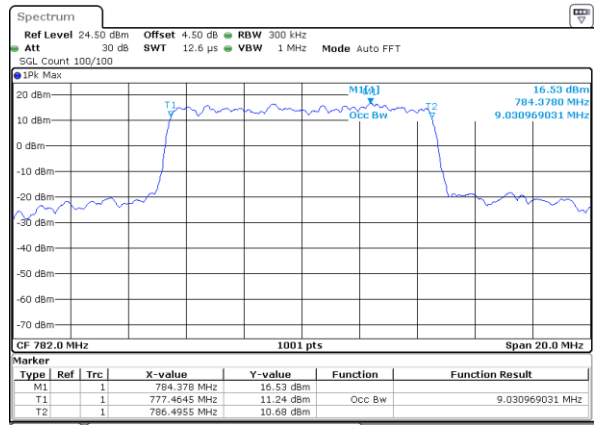
Lowest Channel / 5MHz / 64QAM



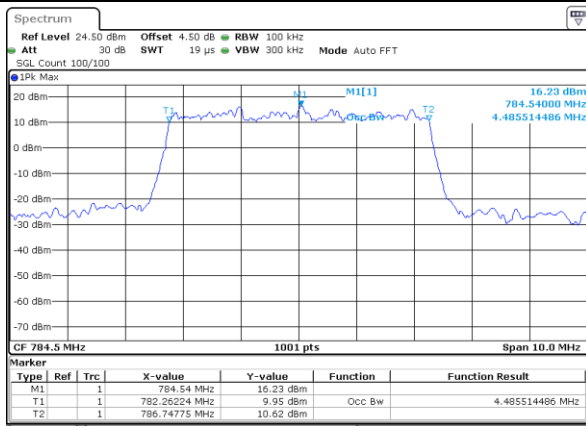
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

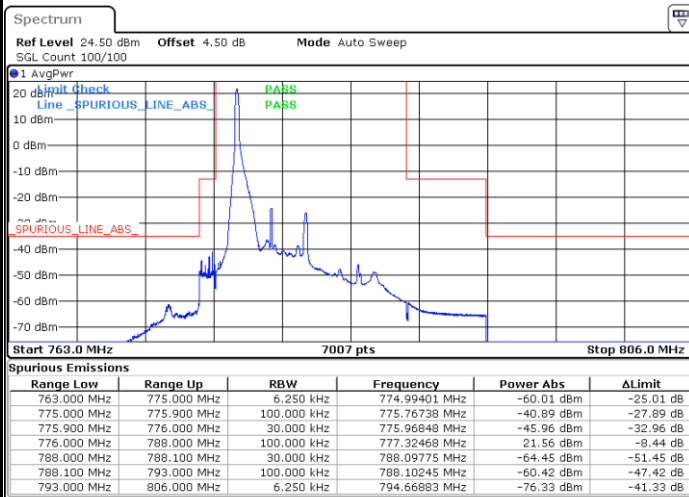




Conducted Band Edge

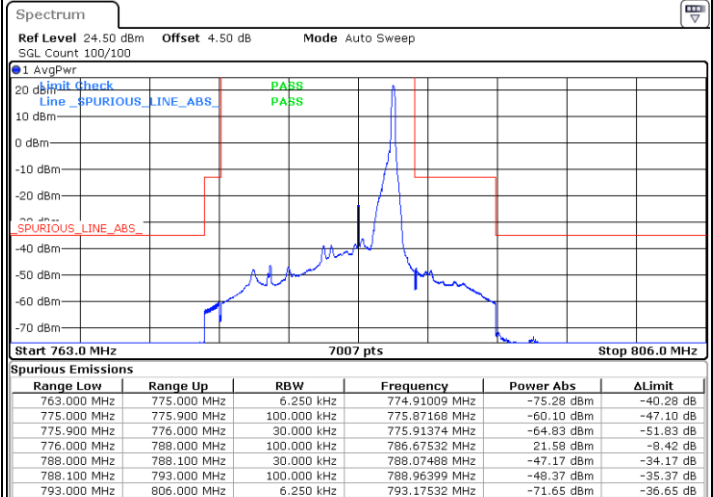
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



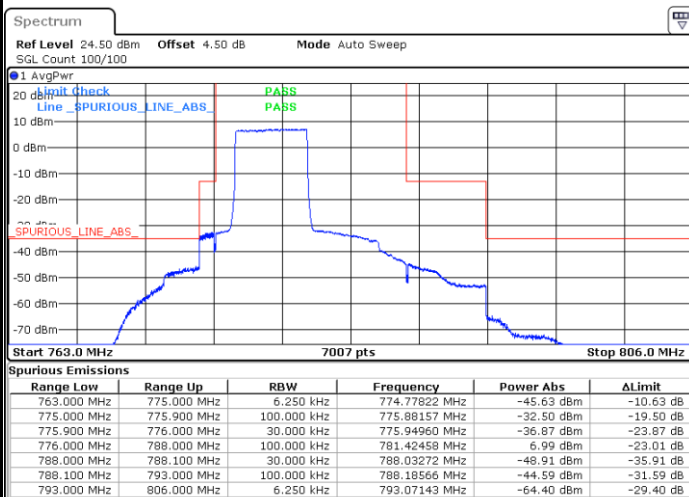
Date: 22 FEB 2020 07:08:06

Highest Band Edge / 1 RB



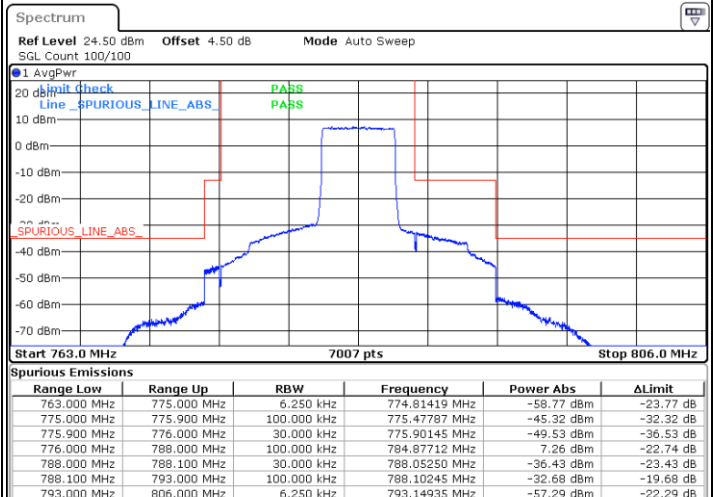
Date: 22 FEB 2020 07:19:34

Lowest Band Edge / Full RB



Date: 22 FEB 2020 07:06:29

Highest Band Edge / Full RB

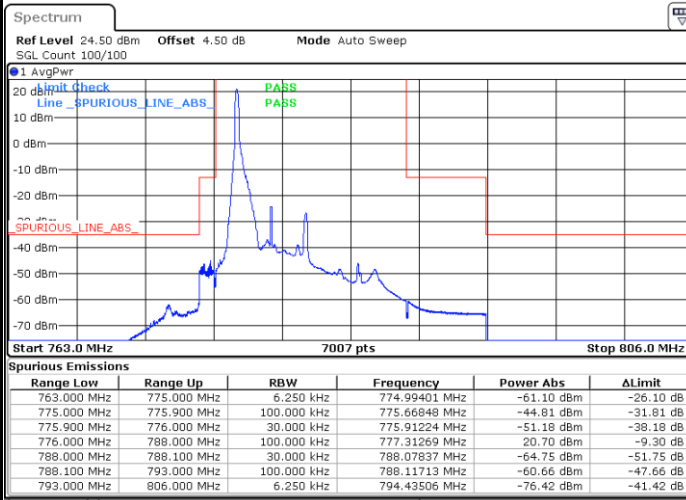


Date: 22 FEB 2020 07:17:56



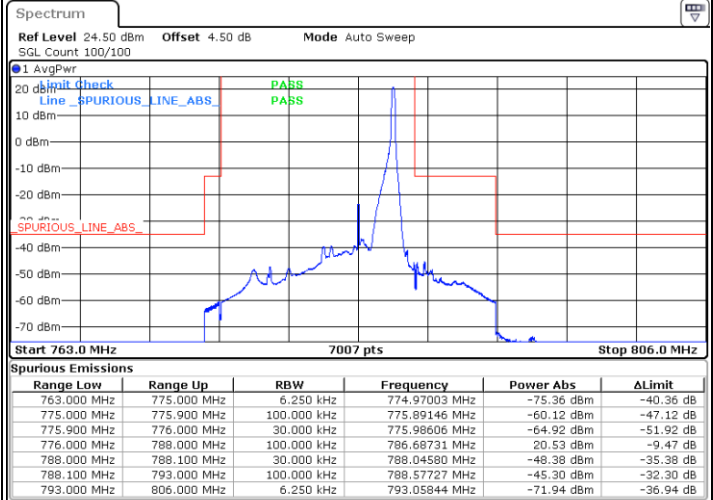
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



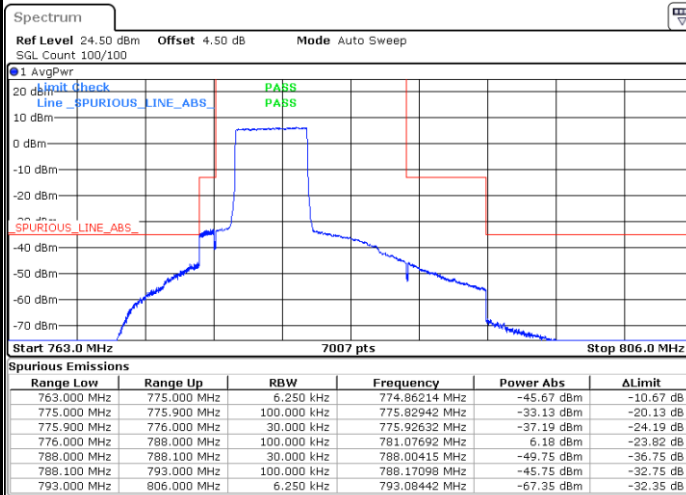
Date: 22.FEB.2020 07:09:44

Highest Band Edge / 1 RB



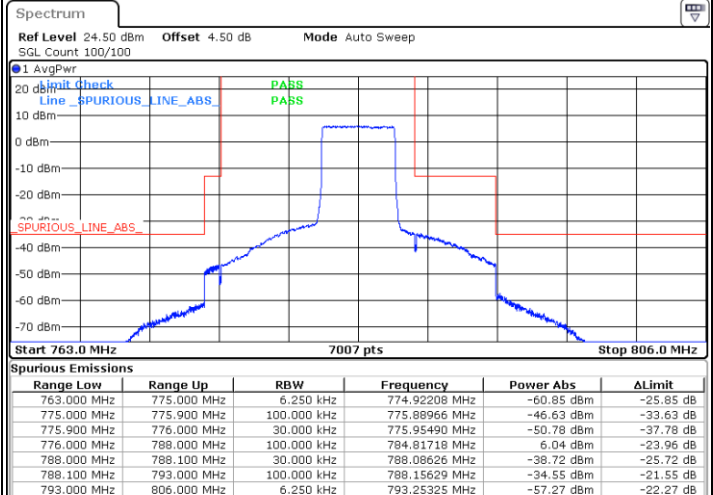
Date: 22.FEB.2020 07:21:11

Lowest Band Edge / Full RB



Date: 22.FEB.2020 07:04:51

Highest Band Edge / Full RB

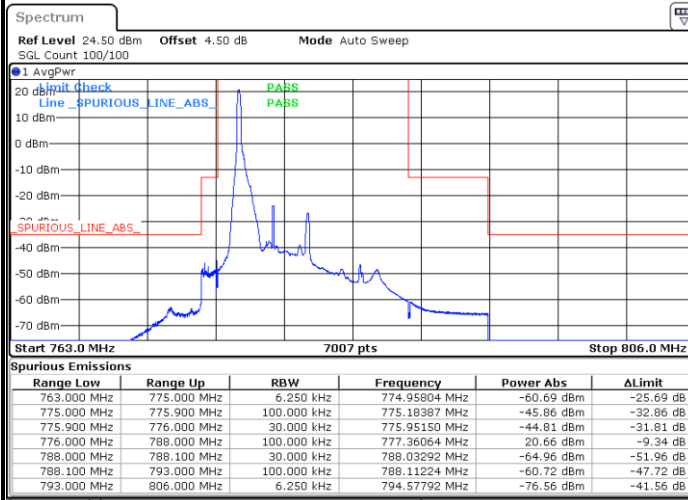


Date: 22.FEB.2020 07:16:19



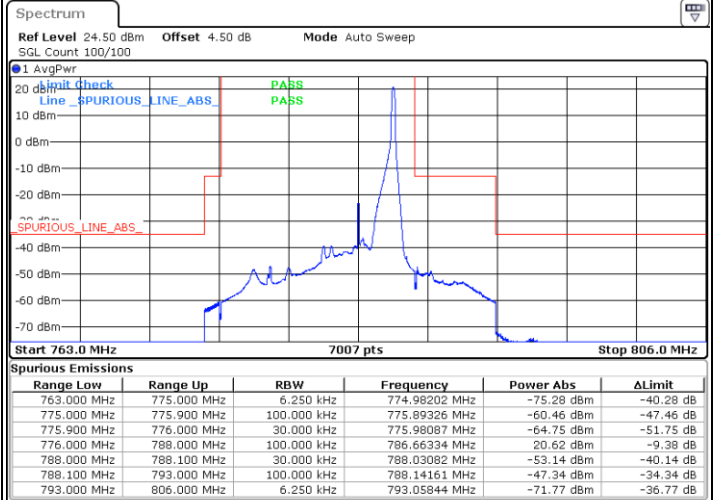
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



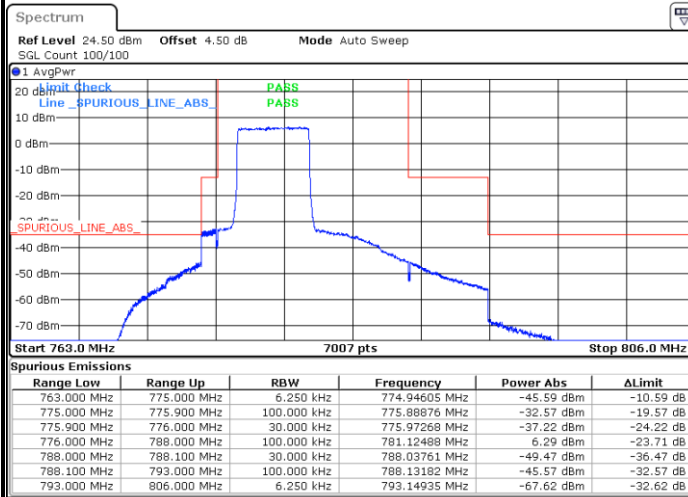
Date: 22 FEB 2020 07:38:33

Highest Band Edge / 1 RB



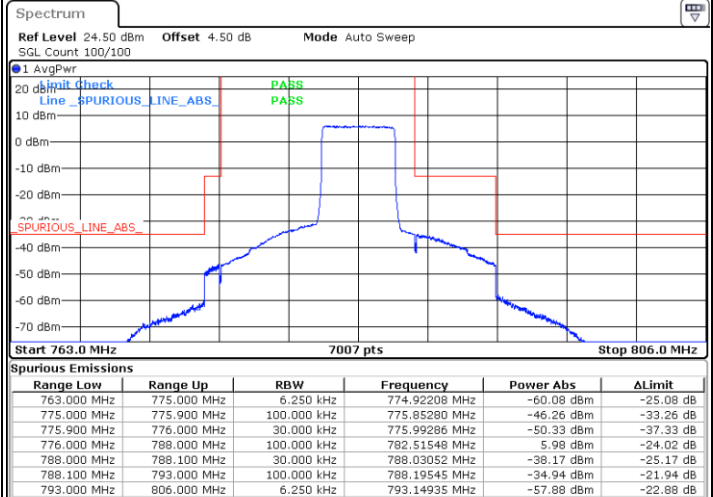
Date: 22 FEB 2020 07:43:26

Lowest Band Edge / Full RB



Date: 22 FEB 2020 07:40:11

Highest Band Edge / Full RB

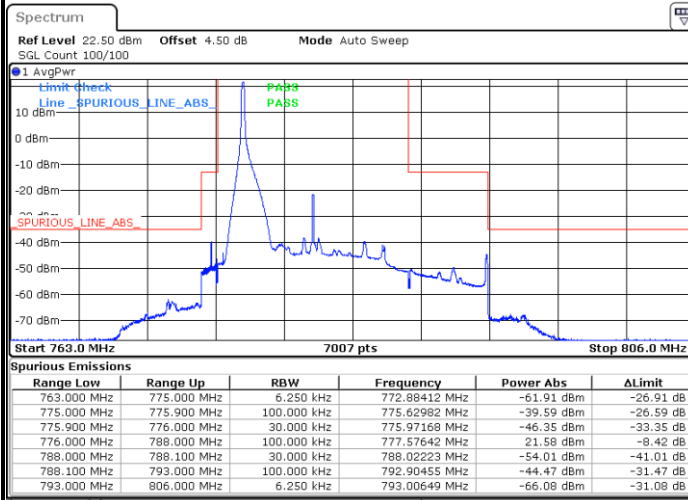


Date: 22 FEB 2020 07:41:48



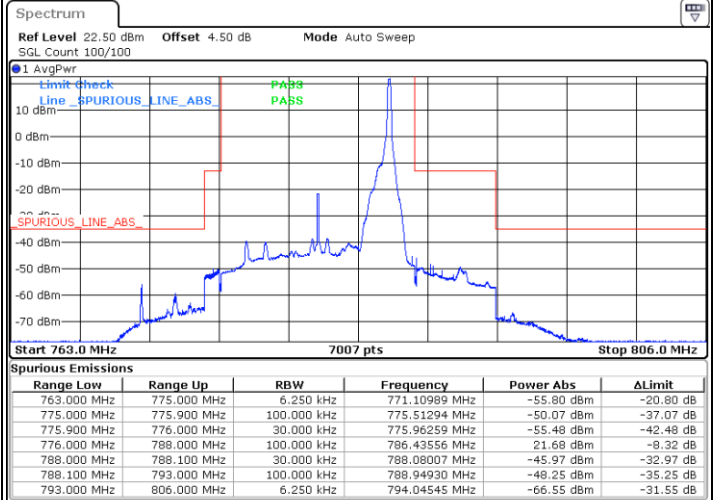
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



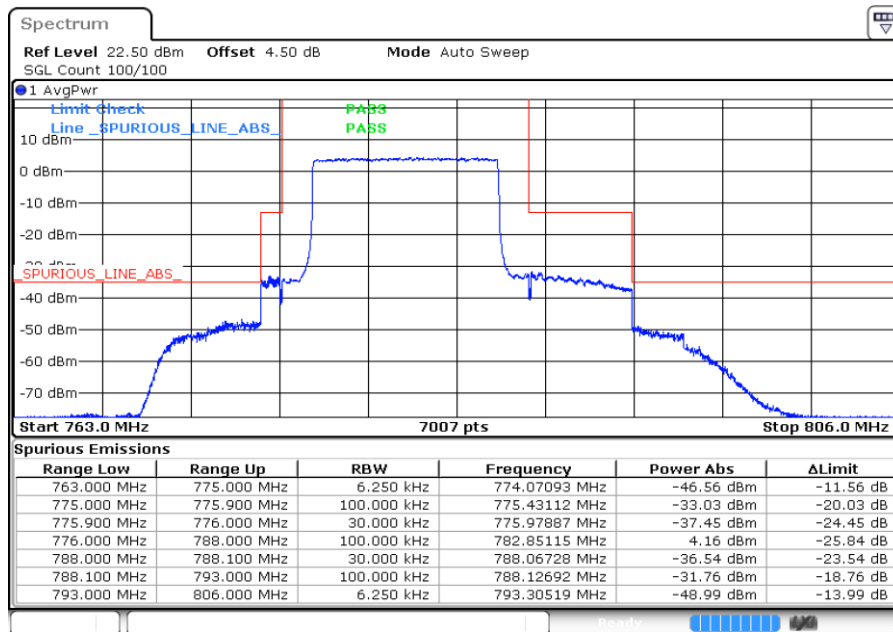
Date: 22.FEB.2020 07:28:44

Highest Band Edge / 1 RB



Date: 22.FEB.2020 07:35:14

Band Edge / Full RB

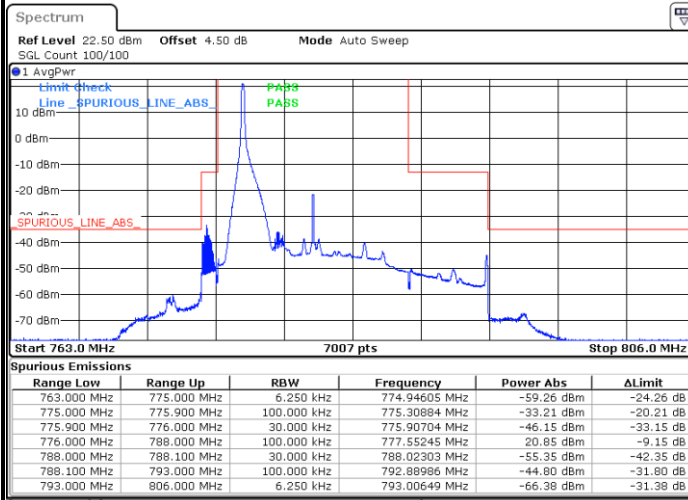


Date: 22.FEB.2020 07:30:21

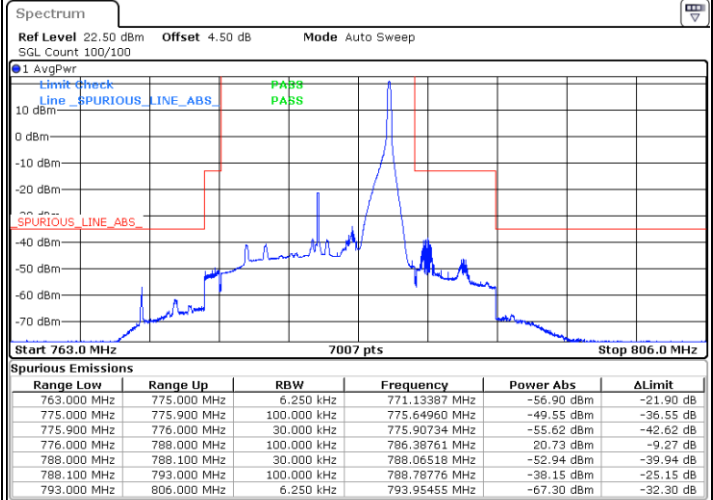


LTE Band 13 / 10MHz / 16QAM

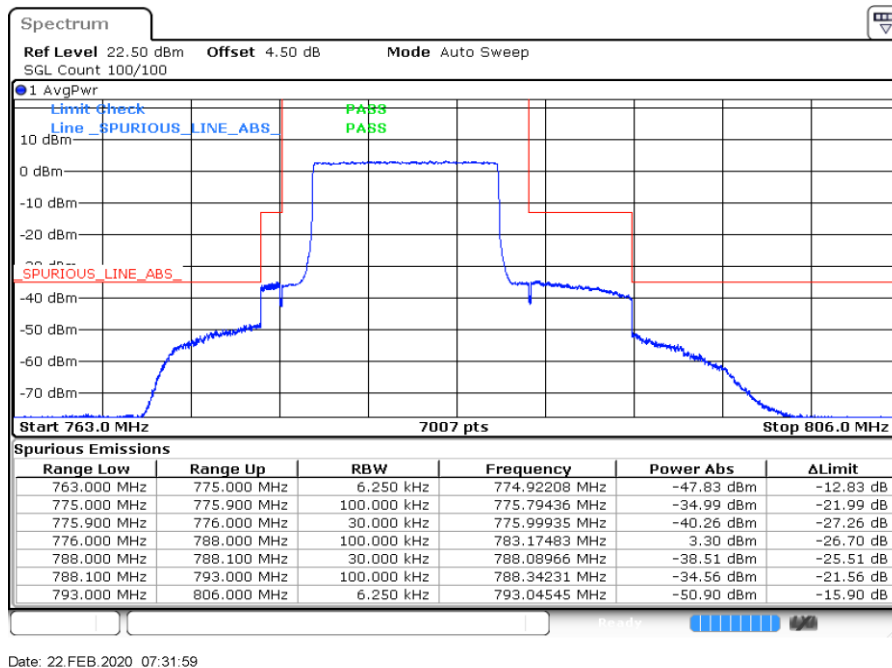
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



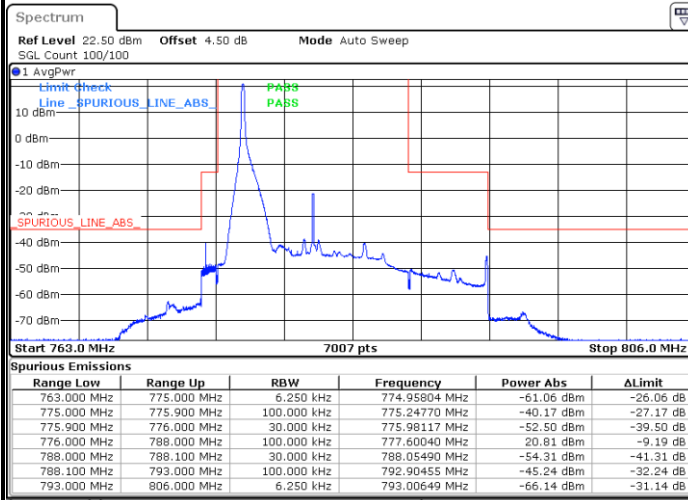
Band Edge / Full RB





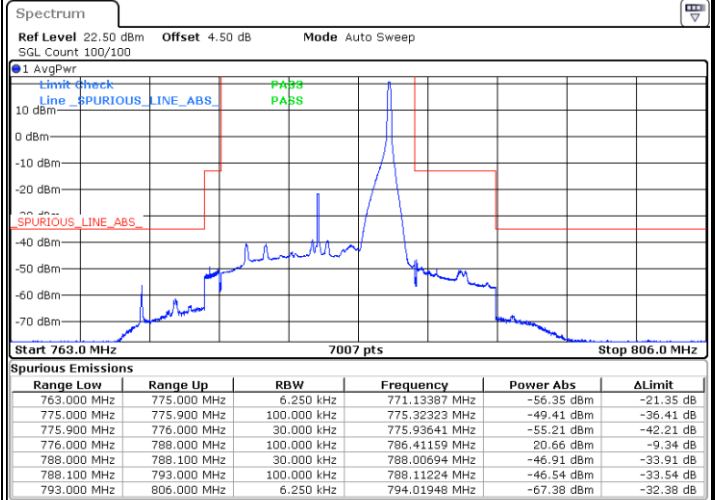
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



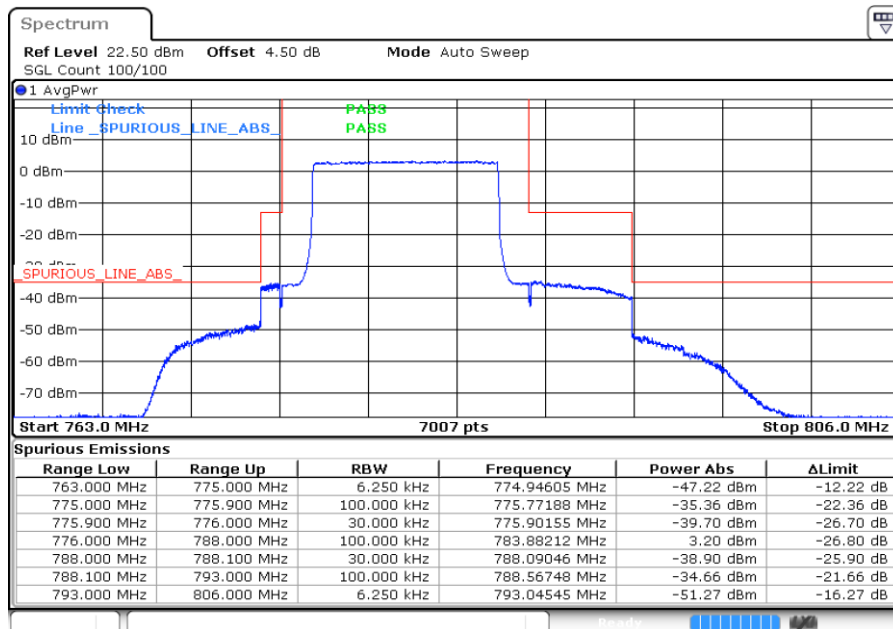
Date: 22.FEB.2020 07:48:06

Highest Band Edge / 1 RB



Date: 22.FEB.2020 07:49:43

Band Edge / Full RB



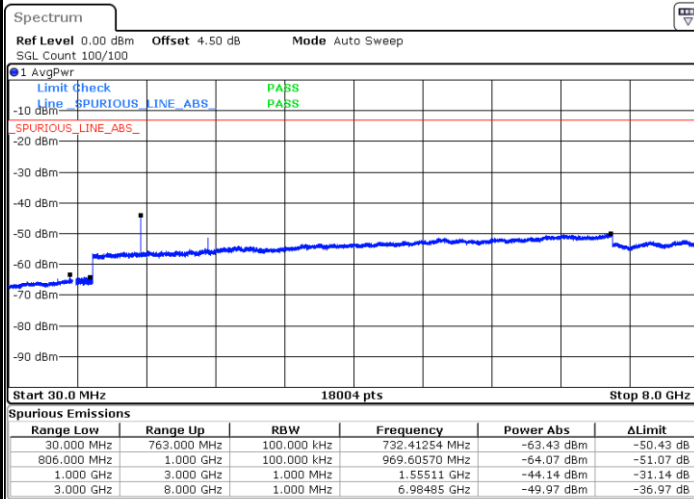
Date: 22.FEB.2020 07:51:21



Conducted Spurious Emission

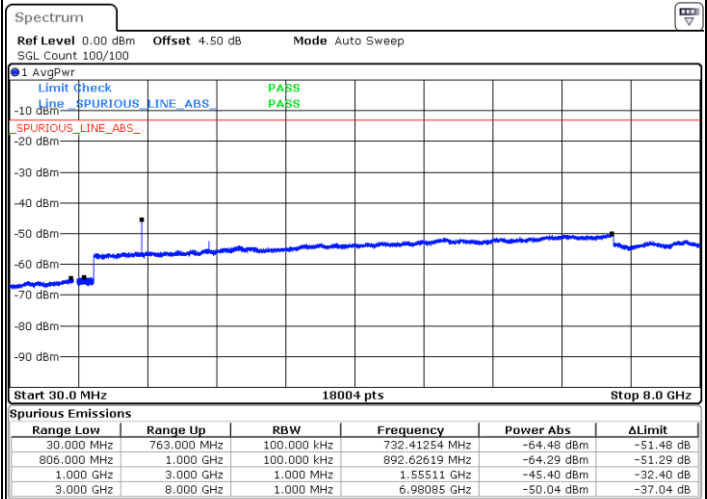
LTE Band 13 / 5MHz

Lowest Channel / QPSK



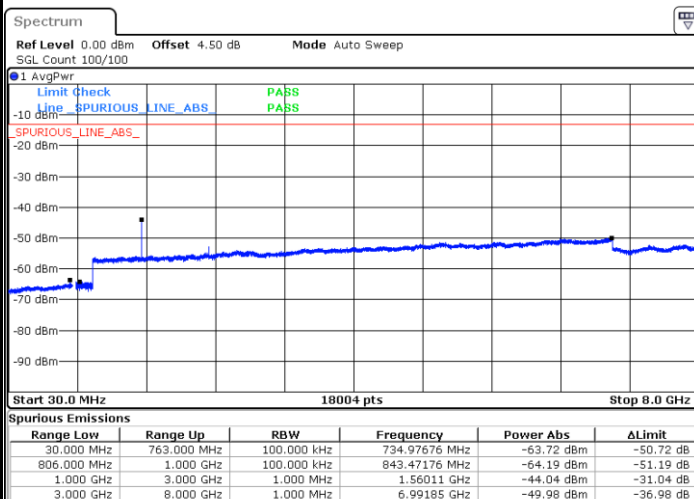
Date: 22 FEB 2020 07:11:32

Lowest Channel / 16QAM



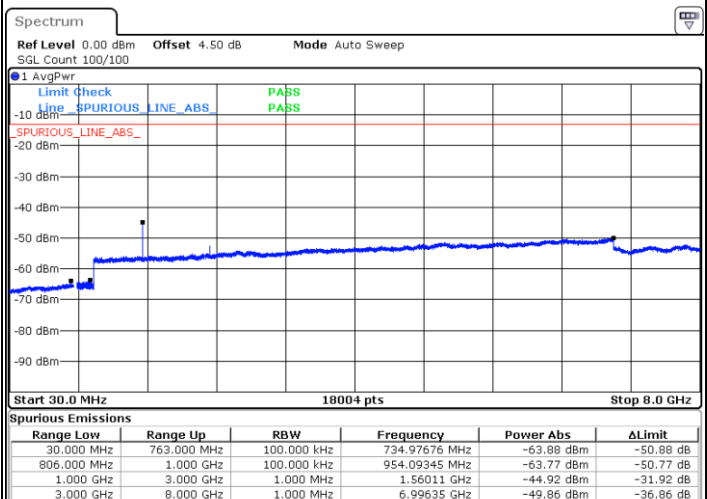
Date: 22 FEB 2020 07:10:37

Middle Channel / QPSK



Date: 22 FEB 2020 07:13:06

Middle Channel / 16QAM

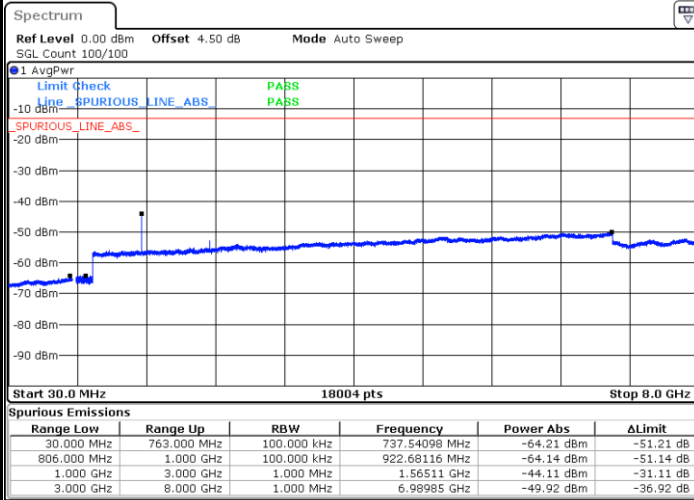


Date: 22 FEB 2020 07:14:00



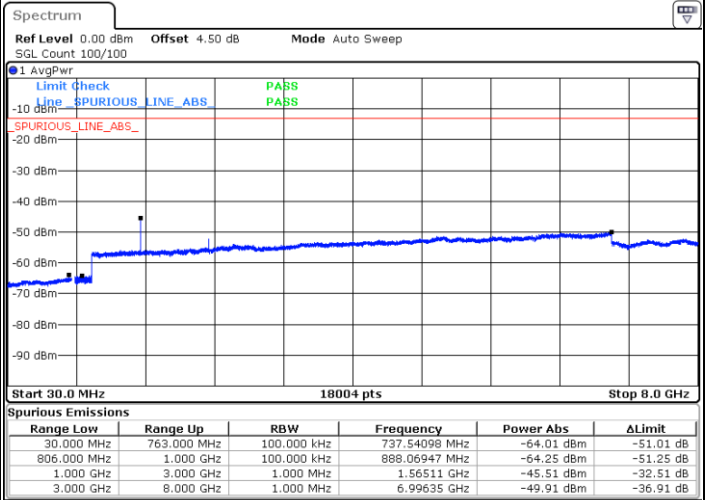
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 22 FEB 2020 07:22:59

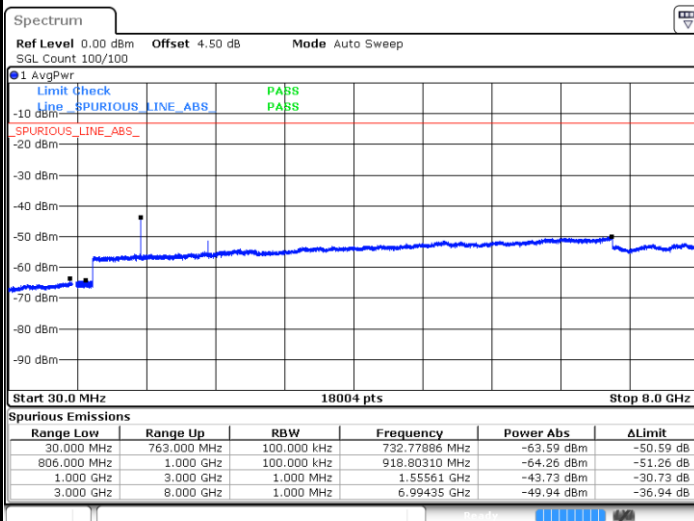
Highest Channel / 16QAM



Date: 22 FEB 2020 07:22:05

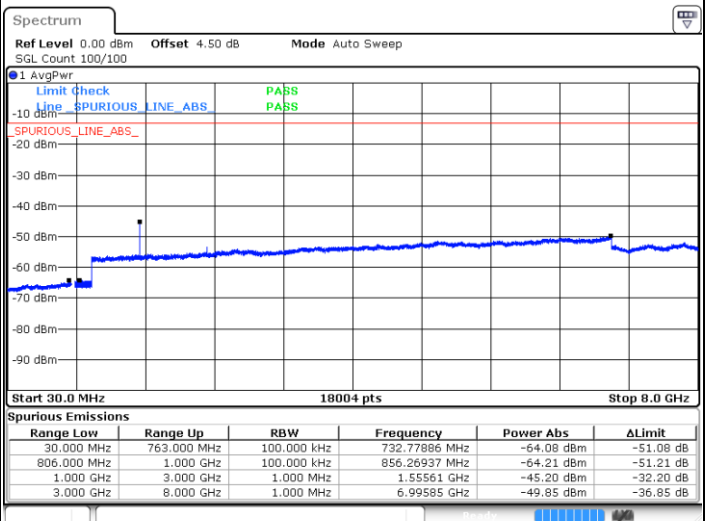
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 22 FEB 2020 07:23:53

Middle Channel / 16QAM

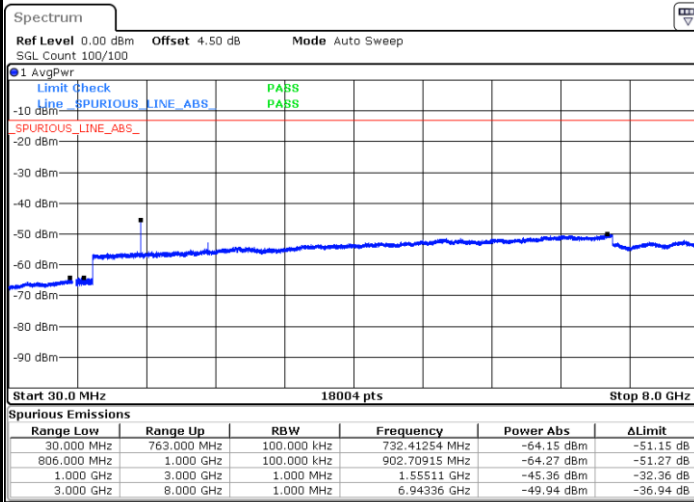


Date: 22 FEB 2020 07:24:47



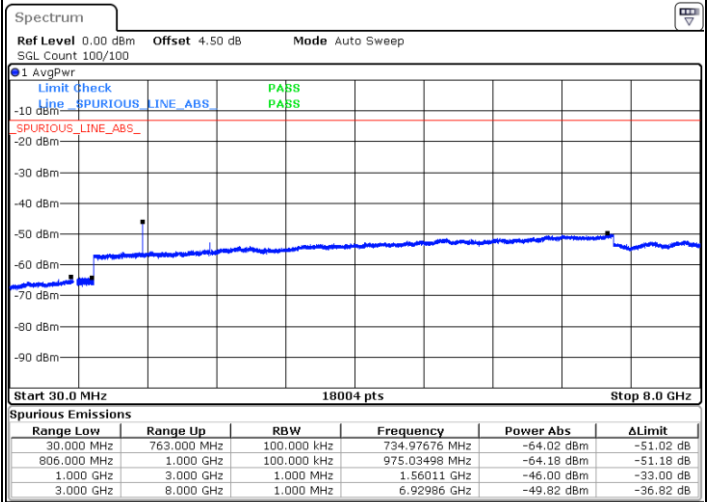
LTE Band 13 / 5MHz

Lowest Channel / 64QAM



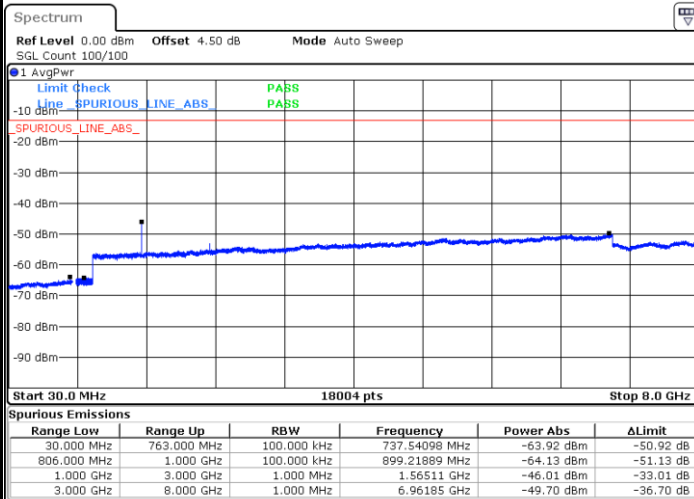
Date: 22 FEB 2020 07:44:19

Middle Channel / 64QAM



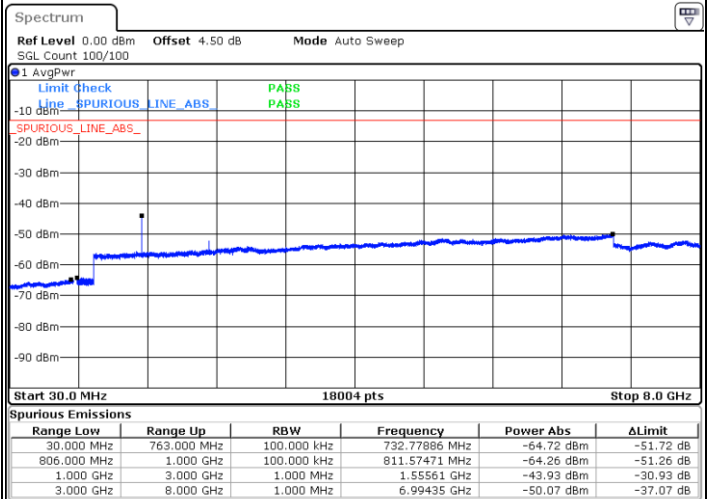
Date: 22 FEB 2020 07:45:13

Highest Channel / 64QAM



Date: 22 FEB 2020 07:46:07

10MHz / Middle Channel / 64QAM



Date: 22 FEB 2020 07:52:14

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	0.0034	PASS
40	Normal Voltage	0.0009	
30	Normal Voltage	0.0027	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0054	
0	Normal Voltage	0.0073	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0058	
-30	Normal Voltage	0.0066	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0009	
20	Battery End Point	0.0046	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 66

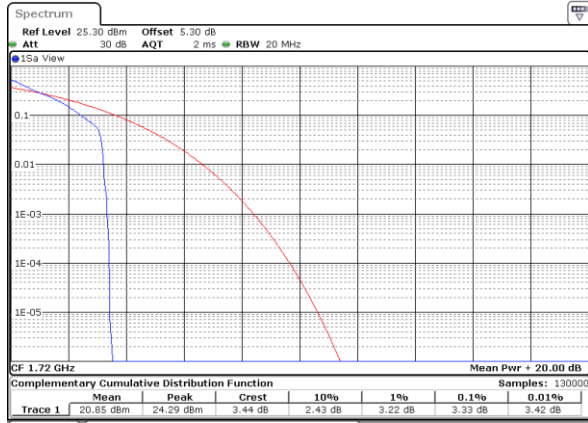
Peak-to-Average Ratio

Mode	LTE Band 66 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.33	4.43	4.72	5.77	PASS
Middle CH	3.28	4.46	4.46	5.86	
Highest CH	3.39	4.49	5.22	5.86	
Mode	LTE Band 66 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.77	6.32			PASS
Middle CH	5.91	6.43			
Highest CH	6.41	6.35			

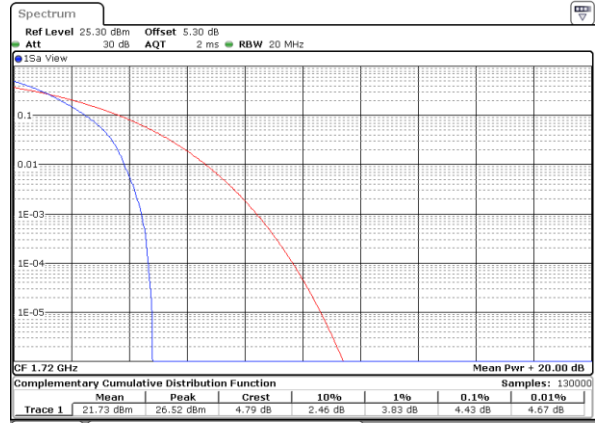


LTE Band 66 / 20MHz / QPSK

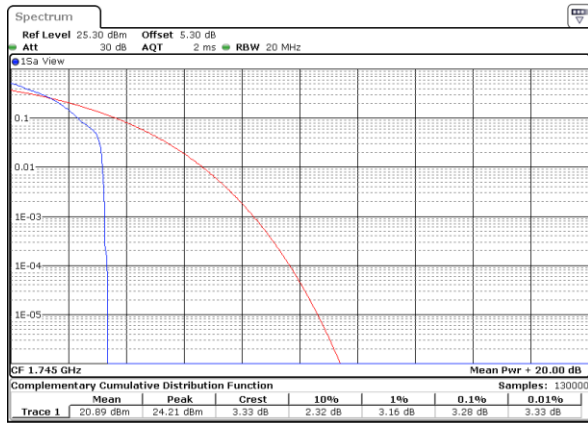
Lowest Channel / 1RB



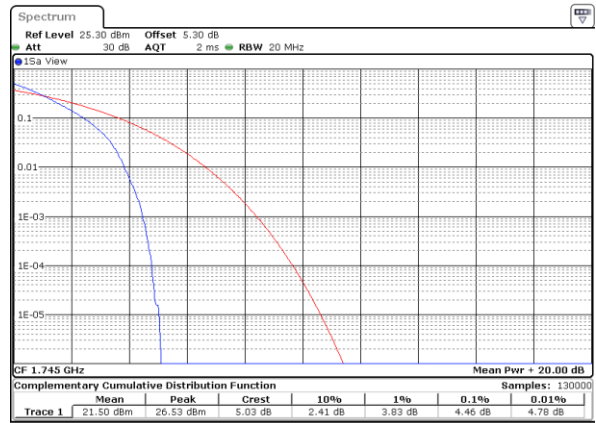
Lowest Channel / Full RB



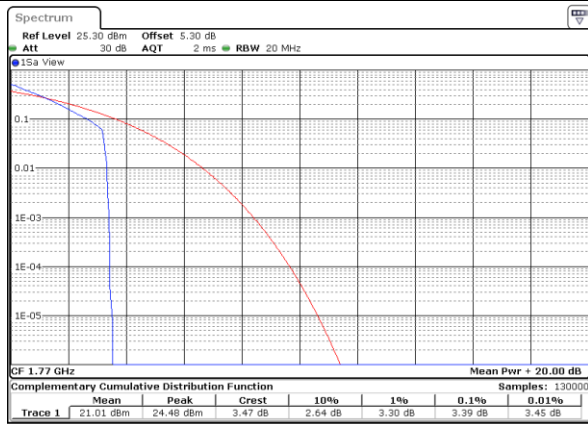
Middle Channel / 1RB



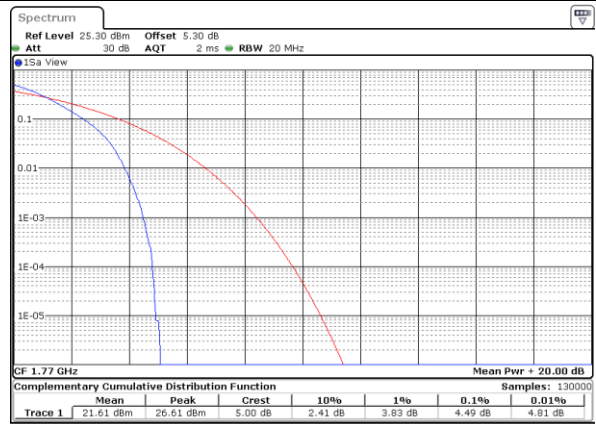
Middle Channel / Full RB



Highest Channel / 1RB



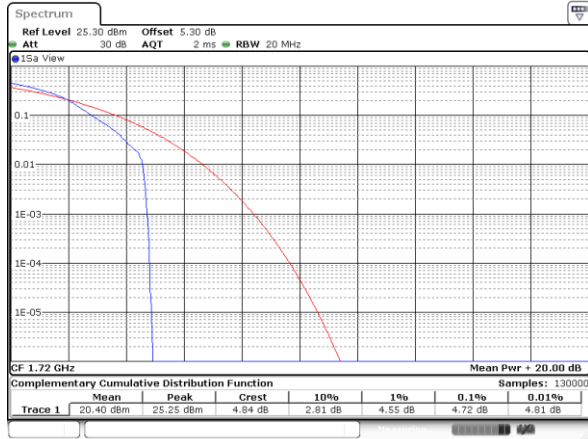
Highest Channel / Full RB



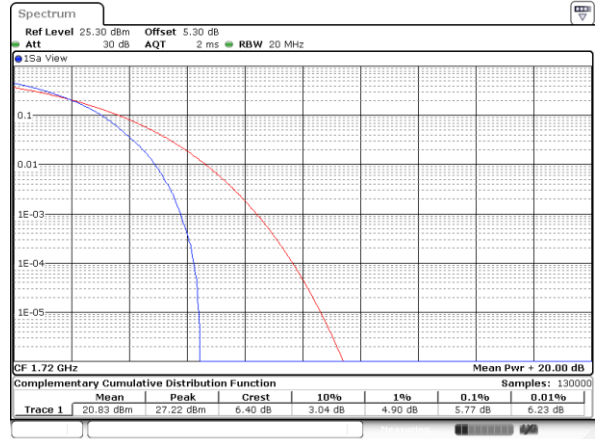


LTE Band 66 / 20MHz / 16QAM

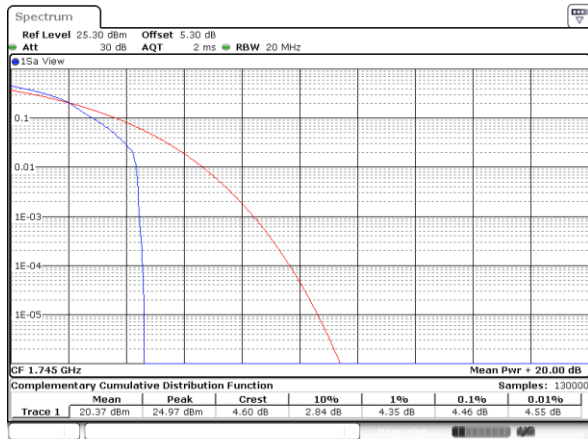
Lowest Channel / 1RB



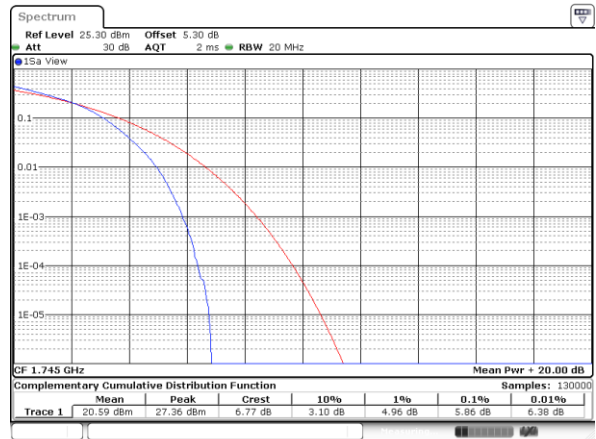
Lowest Channel / Full RB



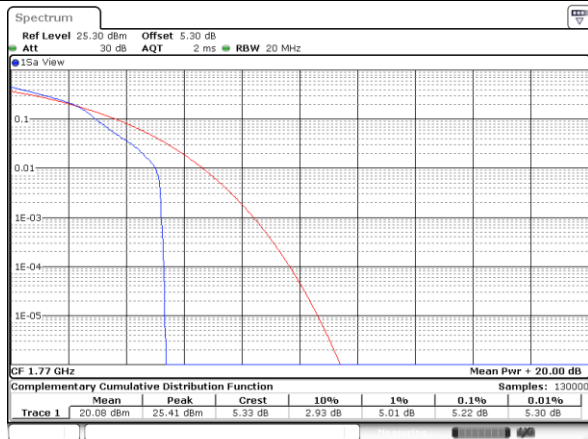
Middle Channel / 1RB



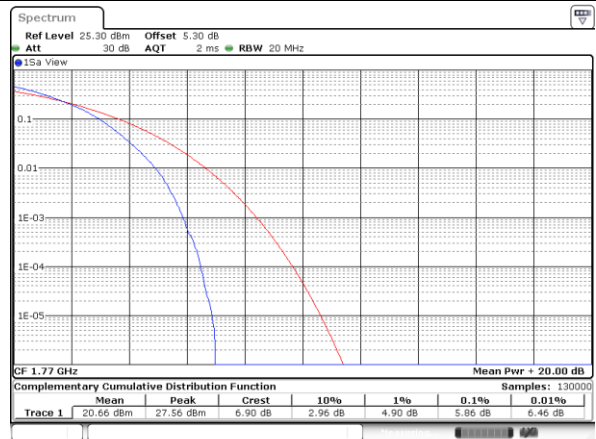
Middle Channel / Full RB



Highest Channel / 1RB



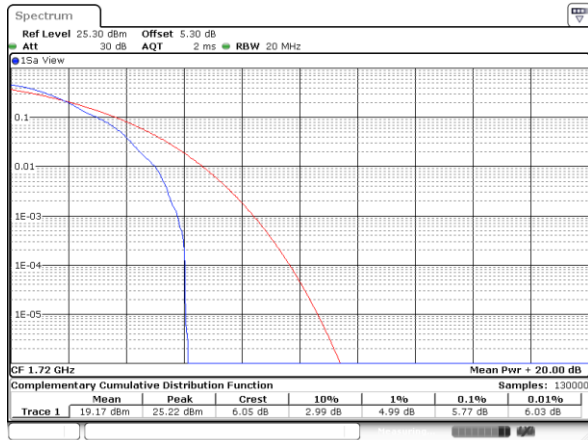
Highest Channel / Full RB



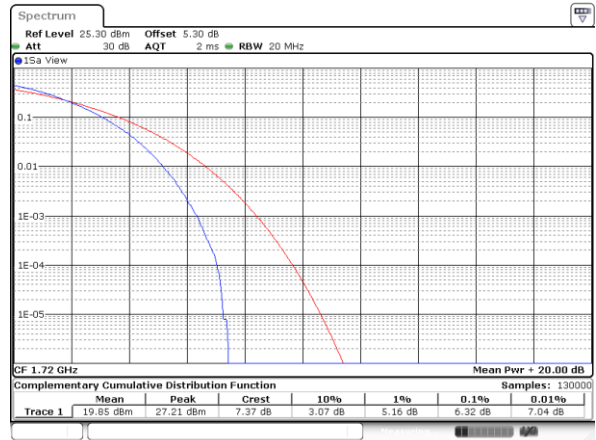


LTE Band 66 / 20MHz / 64QAM

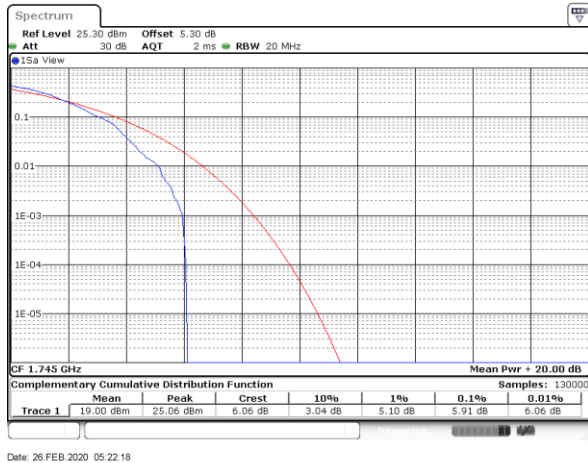
Lowest Channel / 1RB



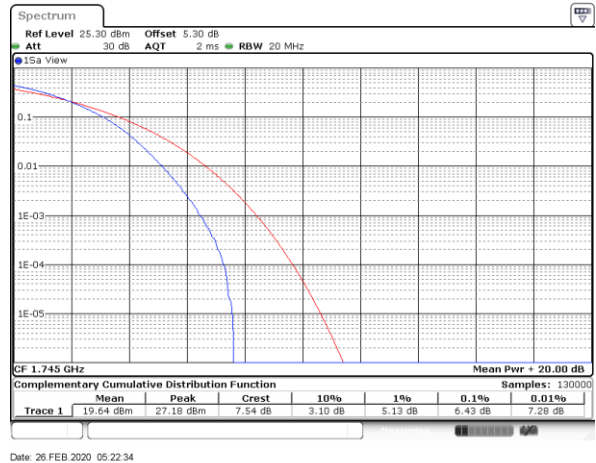
Lowest Channel / Full RB



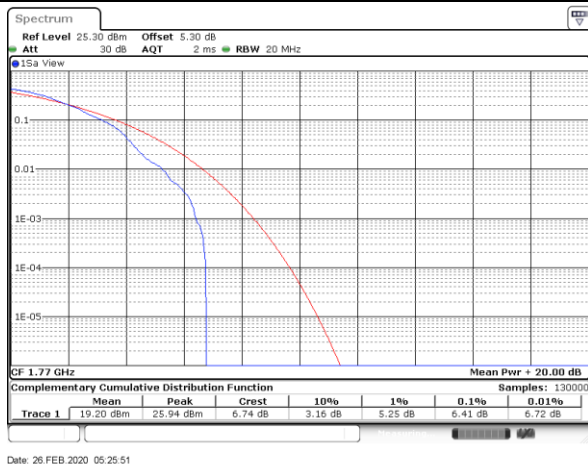
Middle Channel / 1RB



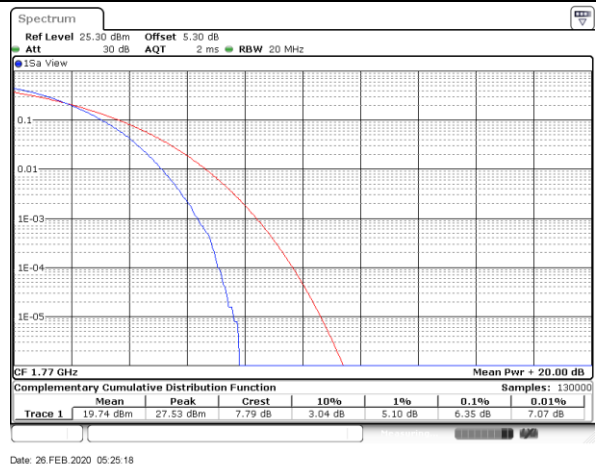
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



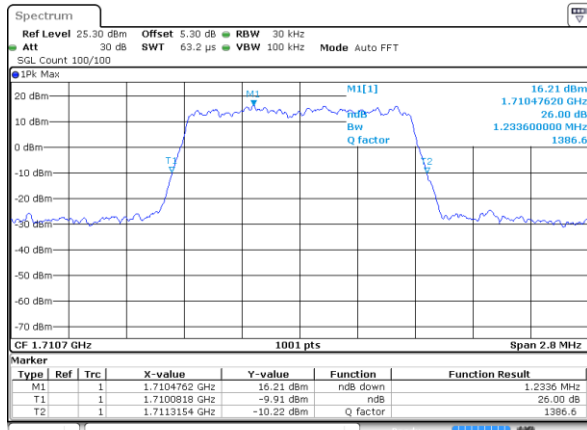
**26dB Bandwidth**

Mode	LTE Band 66 : 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	1.2336	1.2336	2.991	3.033	4.875	4.925	9.65	9.75	14.356	14.476	20.18	20.1
Middle CH	1.2364	1.228	2.979	3.0569	4.865	4.905	9.71	9.77	14.715	14.236	20.22	20.26
Highest CH	1.2364	1.2112	3.045	3.003	4.905	4.865	9.81	9.79	14.356	14.416	20.06	20.1
Mode	LTE Band 66 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.2336		2.997		4.965		9.95		14.476		20.1	
Middle CH	1.214		3.021		4.815		9.69		14.416		20.1	
Highest CH	1.2392		3.003		4.865		10.03		14.326		20.1	



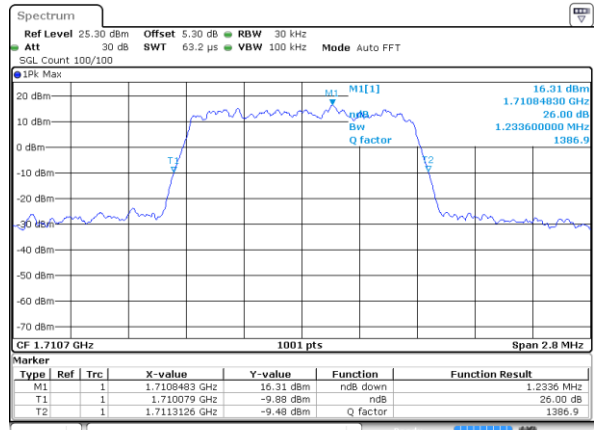
LTE Band 66

Lowest Channel / 1.4MHz / QPSK



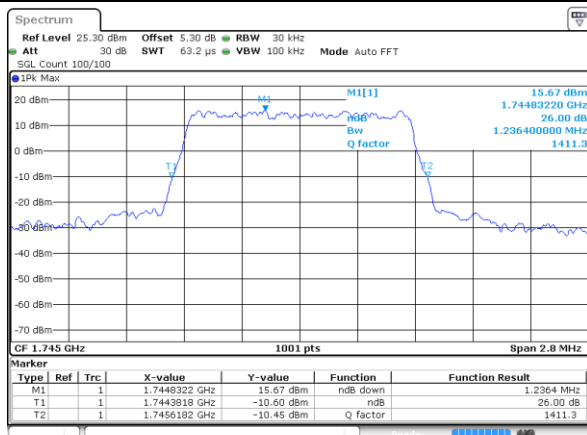
Date: 25 FEB 2020 22:35:59

Lowest Channel / 1.4MHz / 16QAM



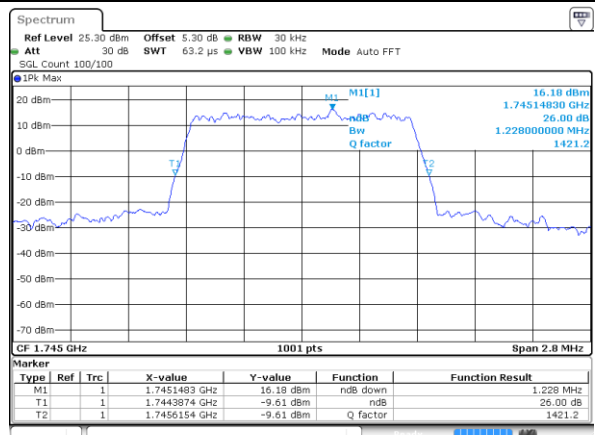
Date: 25 FEB 2020 22:51:49

Middle Channel / 1.4MHz / QPSK



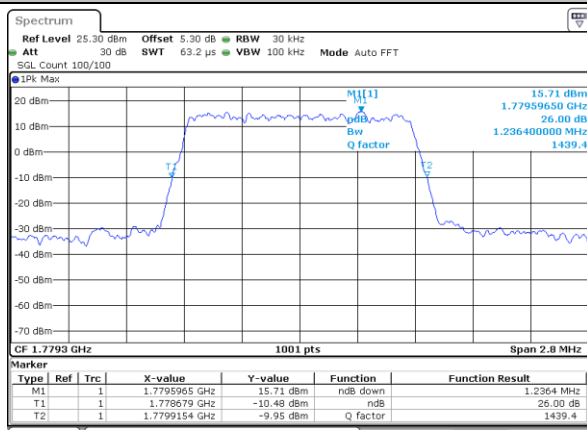
Date: 25 FEB 2020 22:34:51

Middle Channel / 1.4MHz / 16QAM



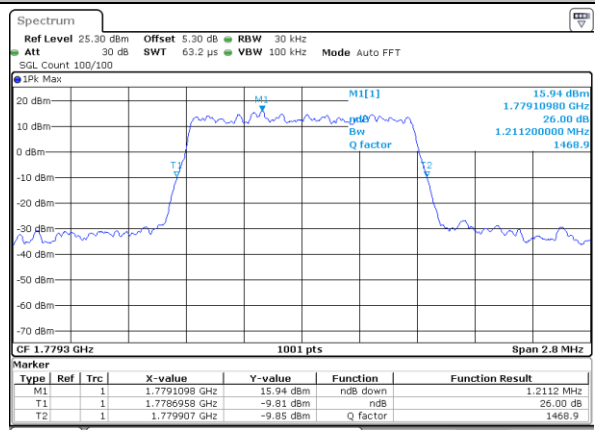
Date: 25 FEB 2020 22:34:36

Highest Channel / 1.4MHz / QPSK



Date: 26 FEB 2020 01:03:05

Highest Channel / 1.4MHz / 16QAM

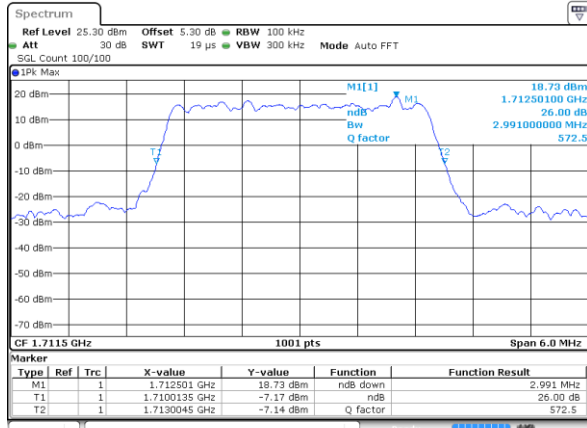


Date: 26 FEB 2020 01:04:40



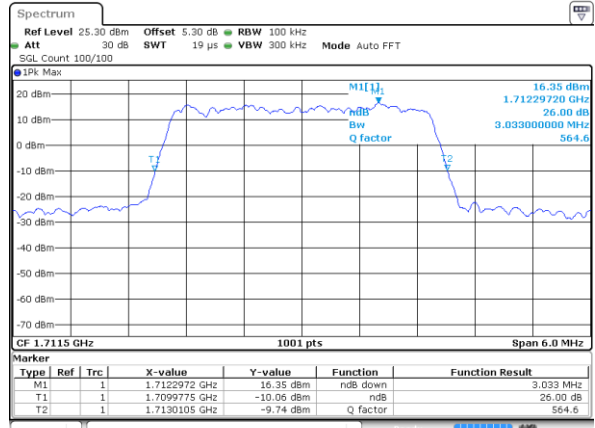
LTE Band 66

Lowest Channel / 3MHz / QPSK



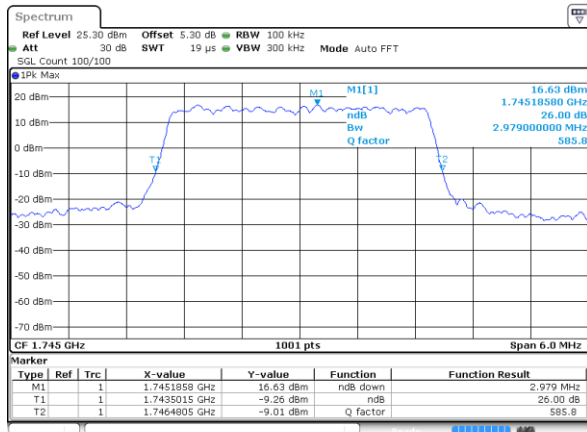
Date: 26 FEB 2020 01:22:52

Lowest Channel / 3MHz / 16QAM



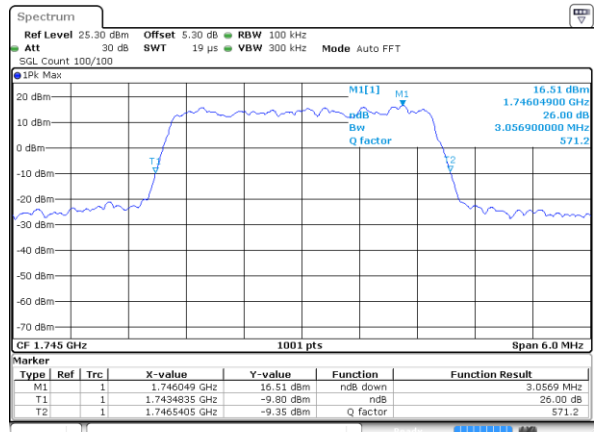
Date: 26 FEB 2020 01:24:00

Middle Channel / 3MHz / QPSK



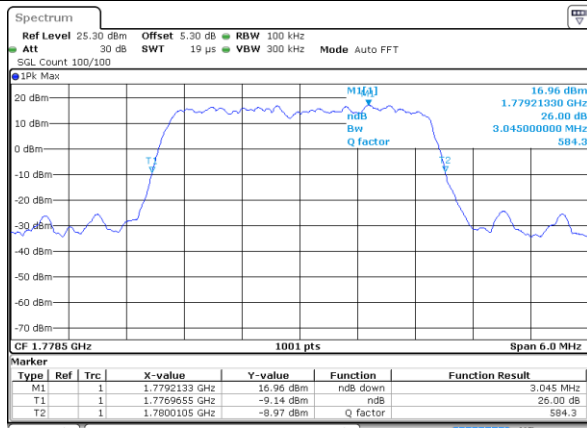
Date: 26 FEB 2020 01:11:16

Middle Channel / 3MHz / 16QAM



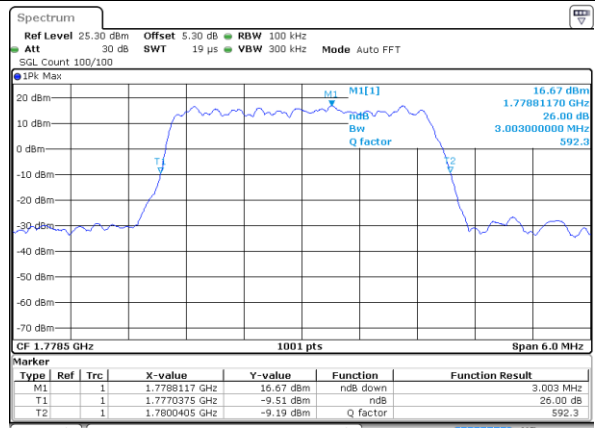
Date: 26 FEB 2020 01:11:01

Highest Channel / 3MHz / QPSK



Date: 26 FEB 2020 01:30:04

Highest Channel / 3MHz / 16QAM

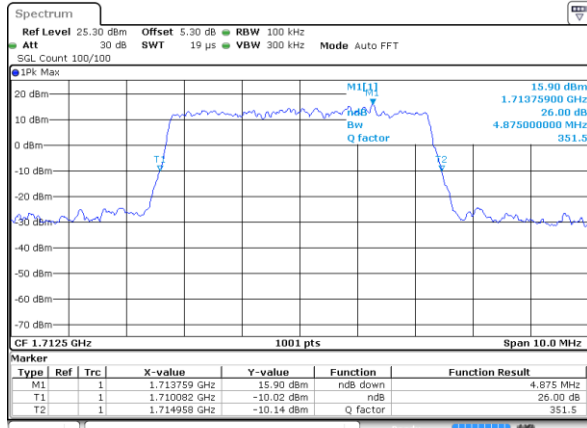


Date: 26 FEB 2020 01:29:09



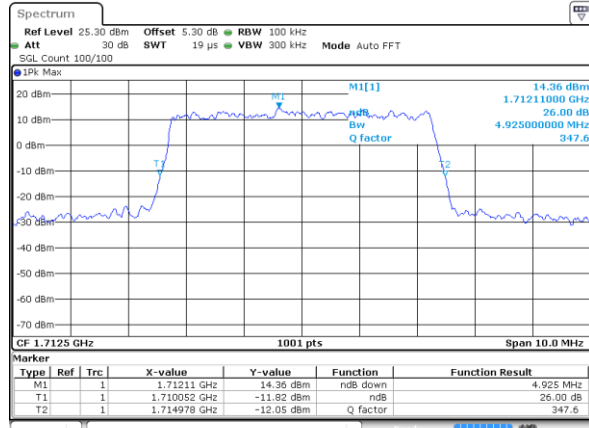
LTE Band 66

Lowest Channel / 5MHz / QPSK



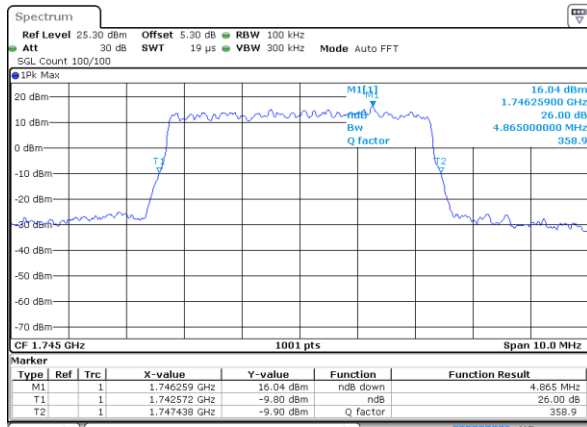
Date: 26 FEB 2020 02:08:56

Lowest Channel / 5MHz / 16QAM



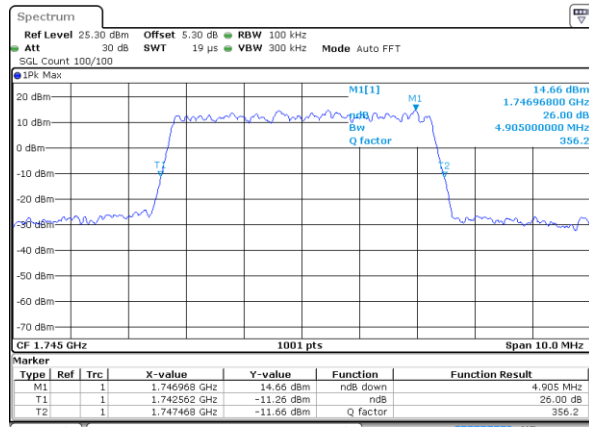
Date: 26 FEB 2020 02:09:30

Middle Channel / 5MHz / QPSK



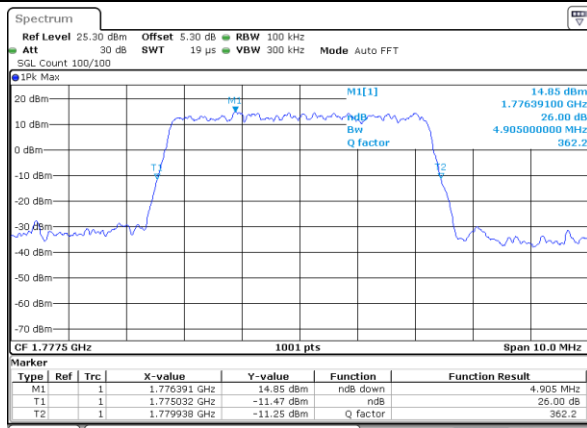
Date: 26 FEB 2020 02:07:28

Middle Channel / 5MHz / 16QAM



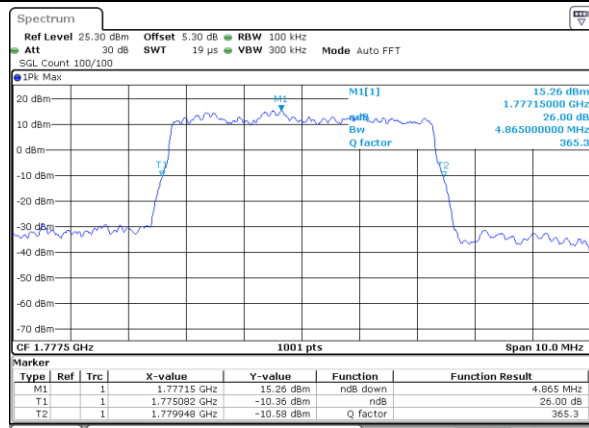
Date: 26 FEB 2020 02:07:12

Highest Channel / 5MHz / QPSK



Date: 26 FEB 2020 02:27:42

Highest Channel / 5MHz / 16QAM

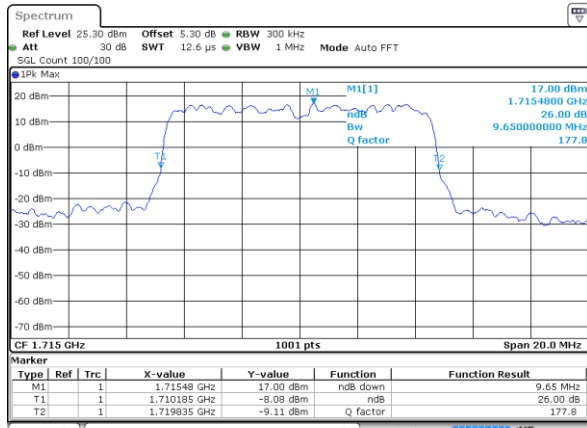


Date: 26 FEB 2020 02:28:17

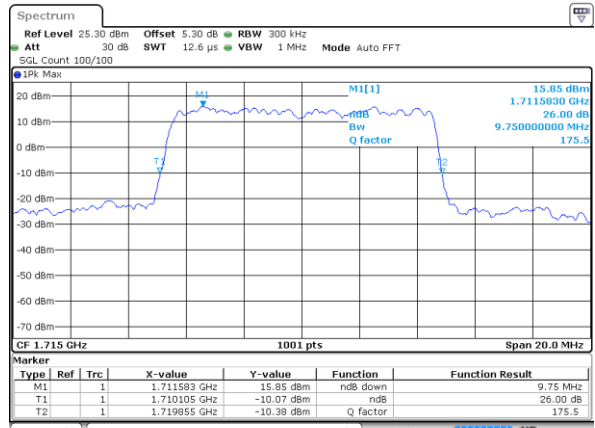


LTE Band 66

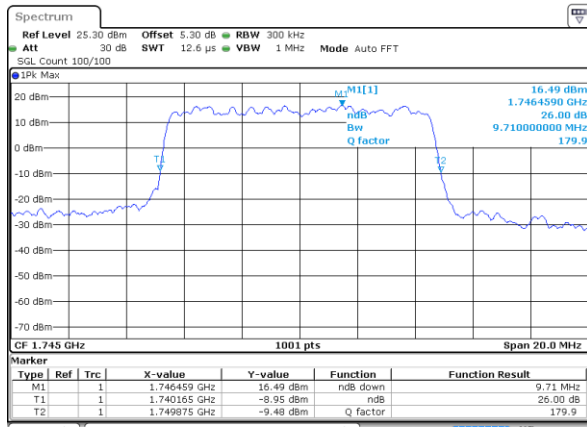
Lowest Channel / 10MHz / QPSK



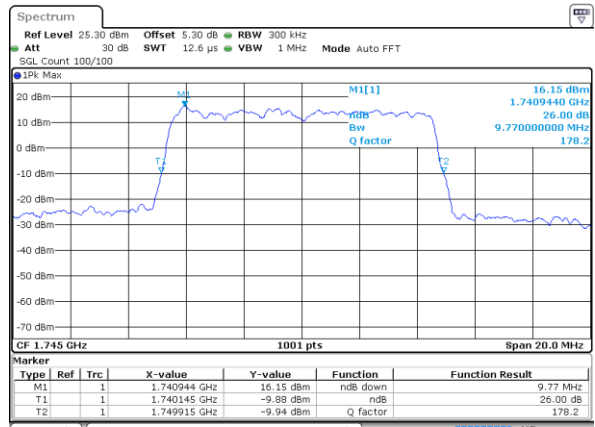
Lowest Channel / 10MHz / 16QAM



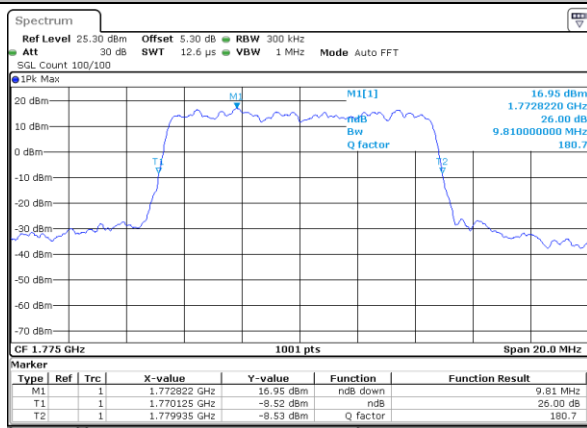
Middle Channel / 10MHz / QPSK



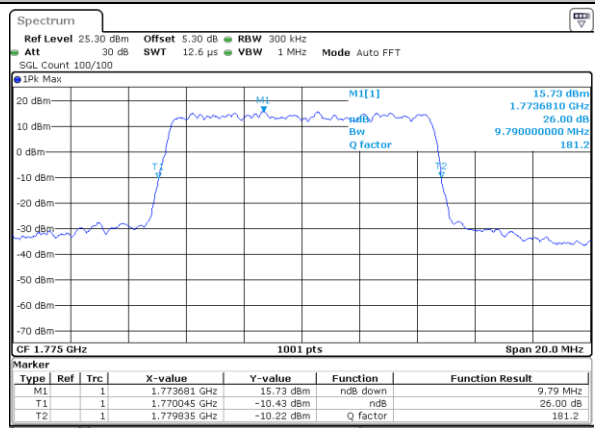
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



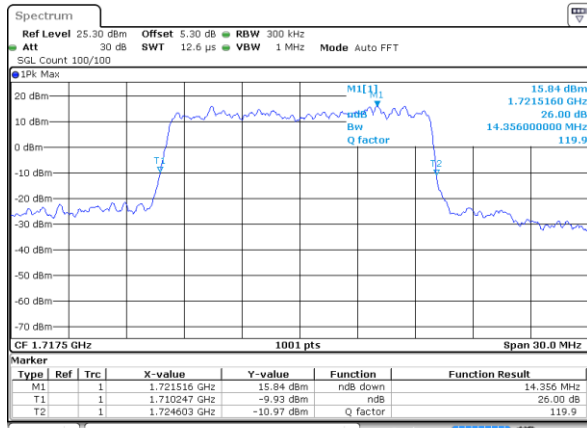
Highest Channel / 10MHz / 16QAM





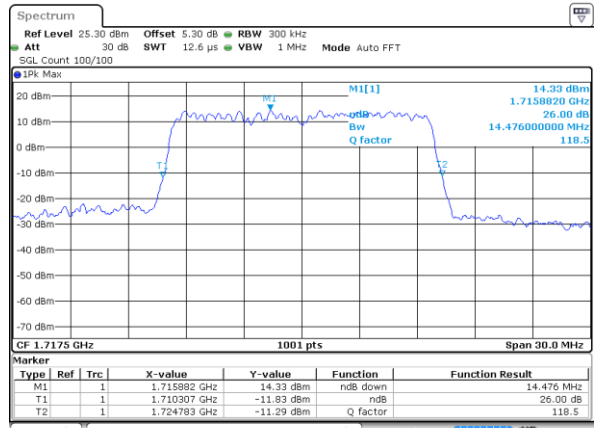
LTE Band 66

Lowest Channel / 15MHz / QPSK



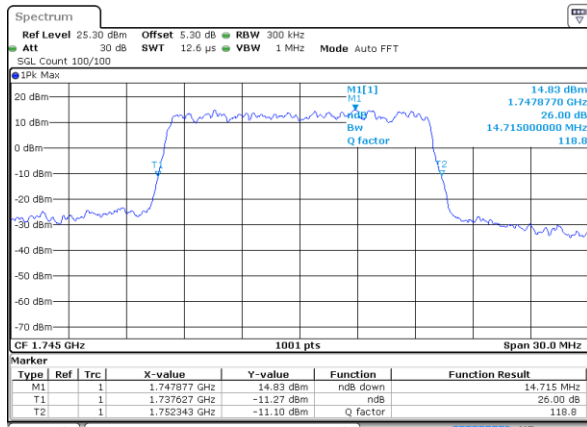
Date: 26 FEB 2020 03:56:14

Lowest Channel / 15MHz / 16QAM



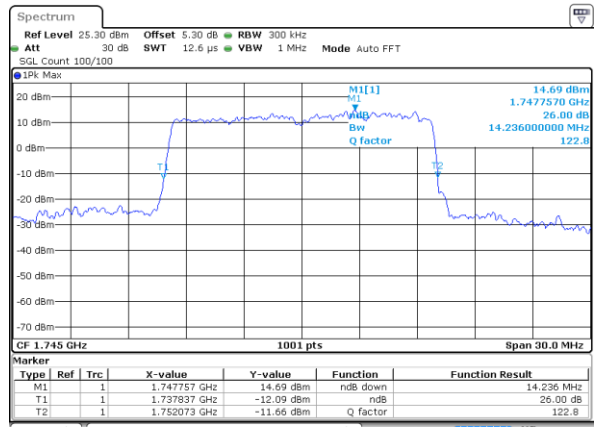
Date: 26 FEB 2020 03:56:59

Middle Channel / 15MHz / QPSK



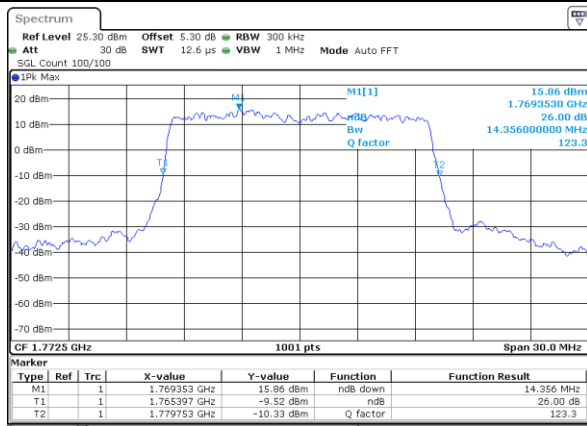
Date: 26 FEB 2020 04:38:18

Middle Channel / 15MHz / 16QAM



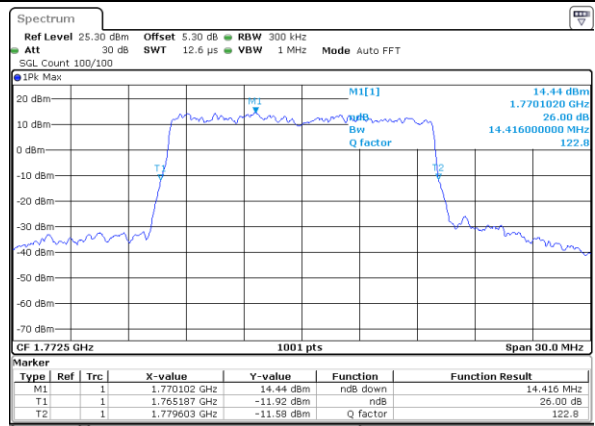
Date: 26 FEB 2020 04:37:55

Highest Channel / 15MHz / QPSK



Date: 26 FEB 2020 04:50:26

Highest Channel / 15MHz / 16QAM

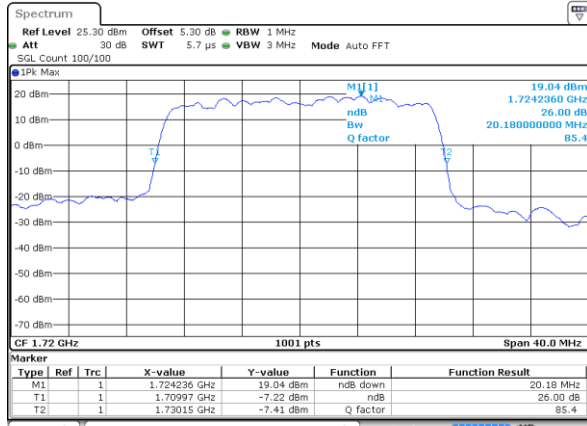


Date: 26 FEB 2020 04:39:27

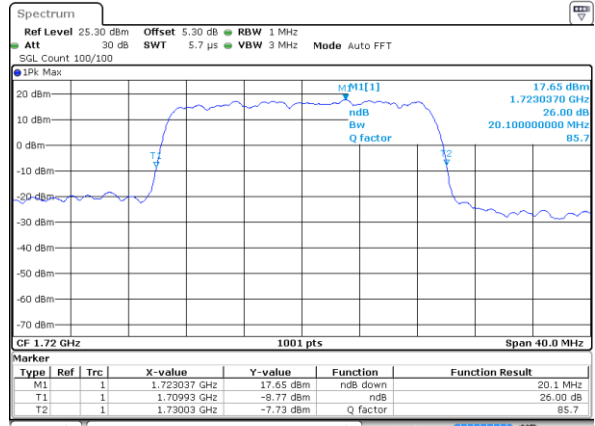


LTE Band 66

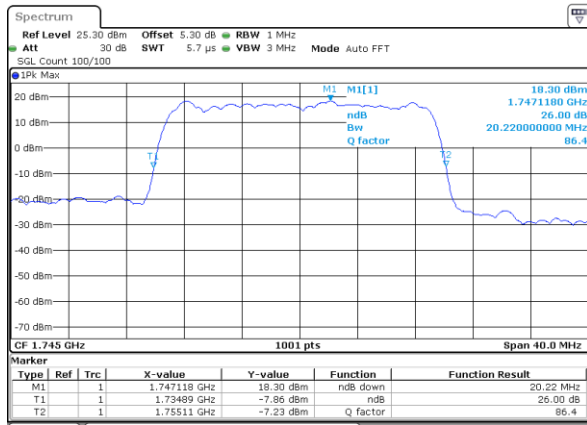
Lowest Channel / 20MHz / QPSK



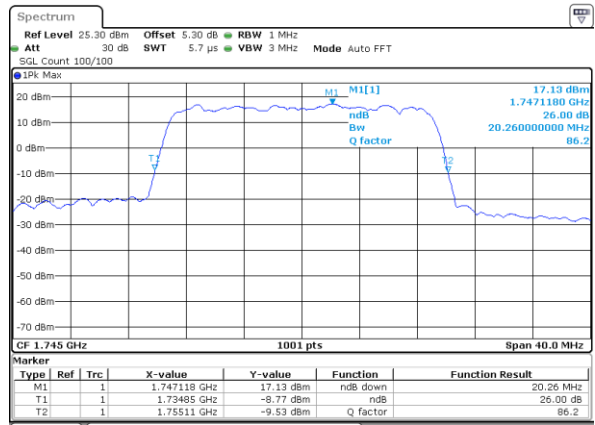
Lowest Channel / 20MHz / 16QAM



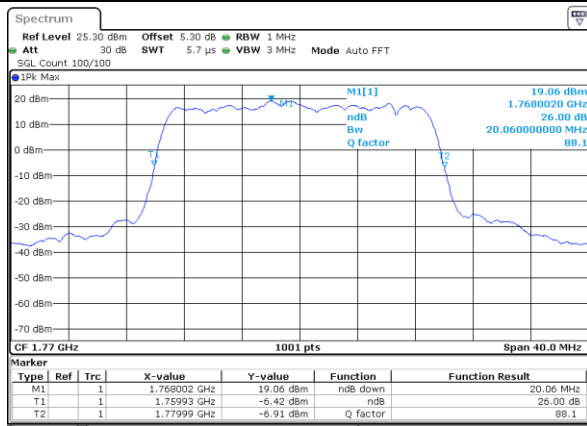
Middle Channel / 20MHz / QPSK



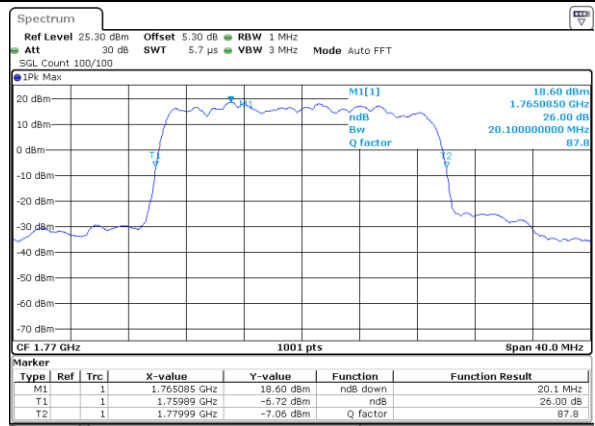
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



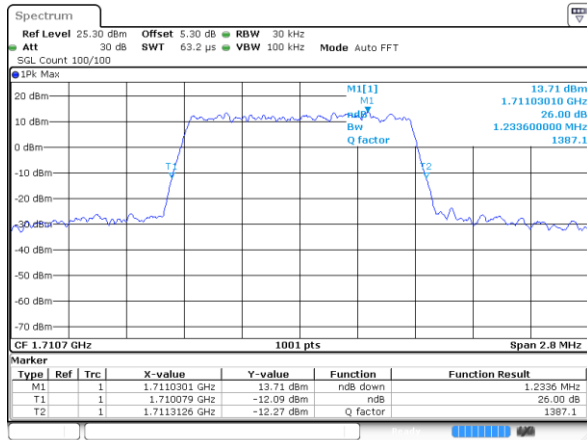
Highest Channel / 20MHz / 16QAM



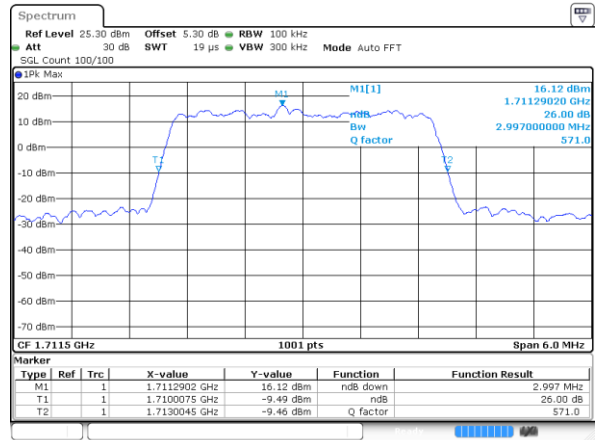


LTE Band 66

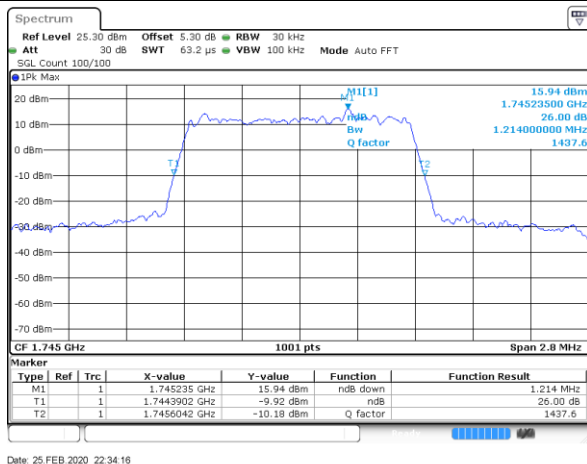
Lowest Channel / 1.4MHz / 64QAM



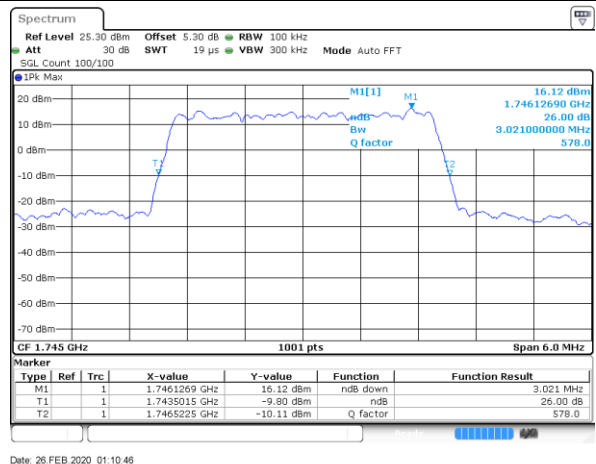
Lowest Channel / 3MHz / 64QAM



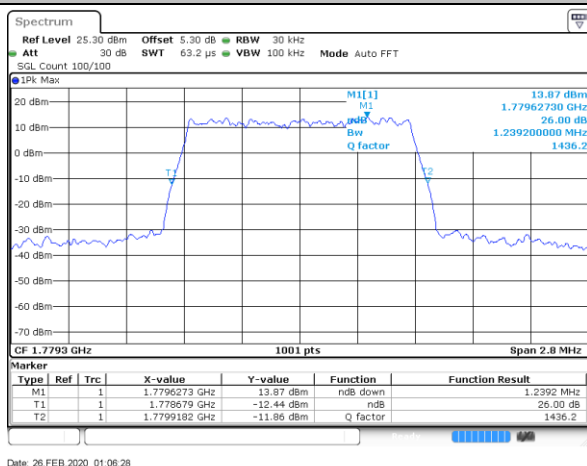
Middle Channel / 1.4MHz / 64QAM



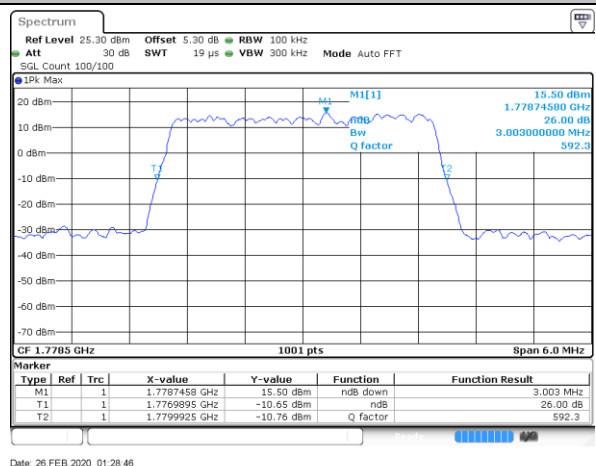
Middle Channel / 3MHz / 64QAM



Highest Channel / 1.4MHz / 64QAM



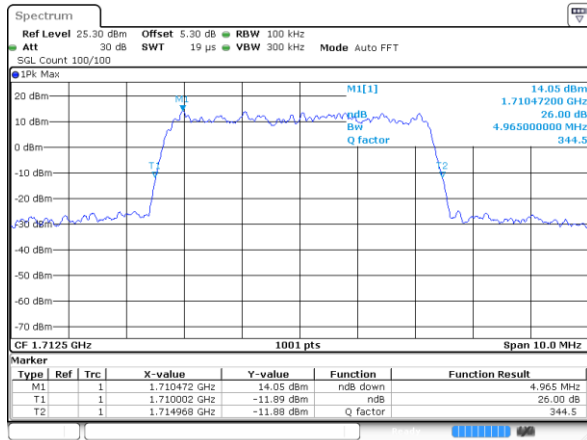
Highest Channel / 3MHz / 64QAM





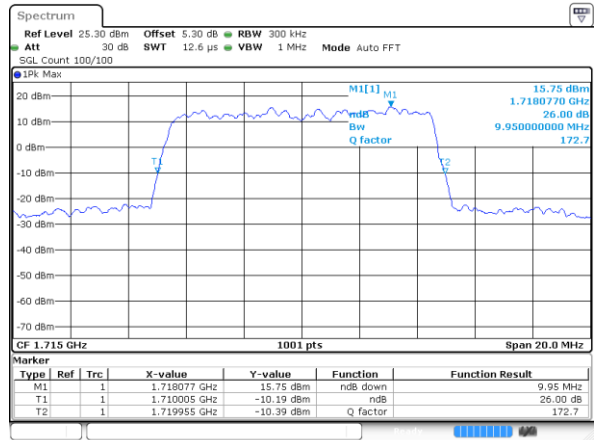
LTE Band 66

Lowest Channel / 5MHz / 64QAM



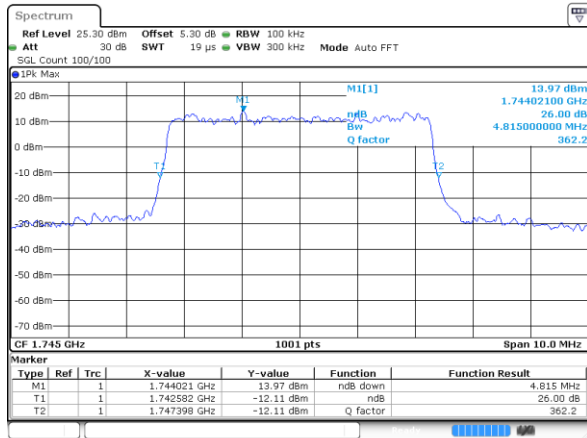
Date: 26 FEB 2020 02:10:08

Lowest Channel / 10MHz / 64QAM



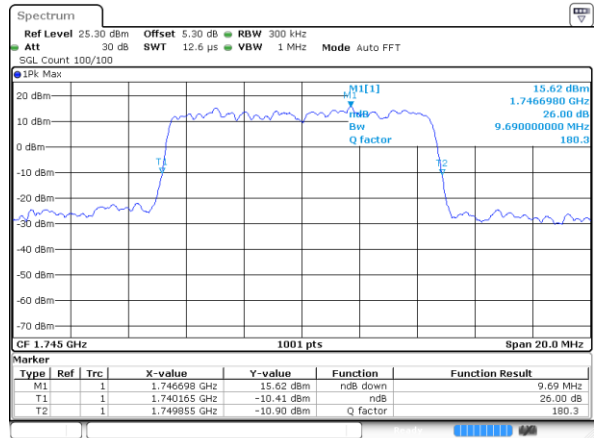
Date: 26 FEB 2020 03:02:14

Middle Channel / 5MHz / 64QAM



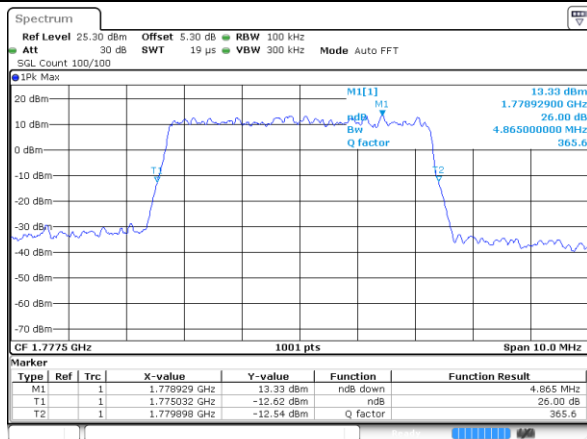
Date: 26 FEB 2020 02:06:52

Middle Channel / 10MHz / 64QAM



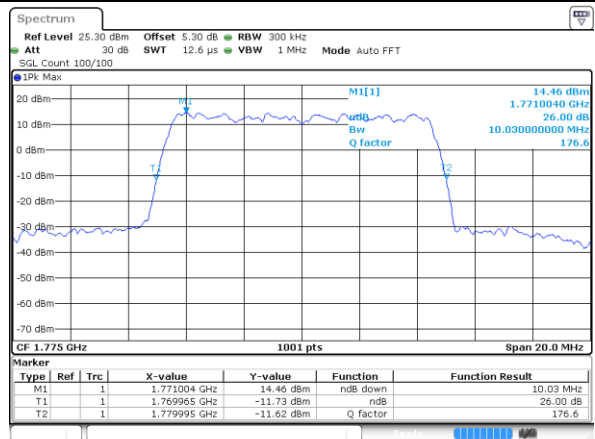
Date: 26 FEB 2020 03:27:23

Highest Channel / 5MHz / 64QAM



Date: 26 FEB 2020 02:28:58

Highest Channel / 10MHz / 64QAM



Date: 26 FEB 2020 03:27:53