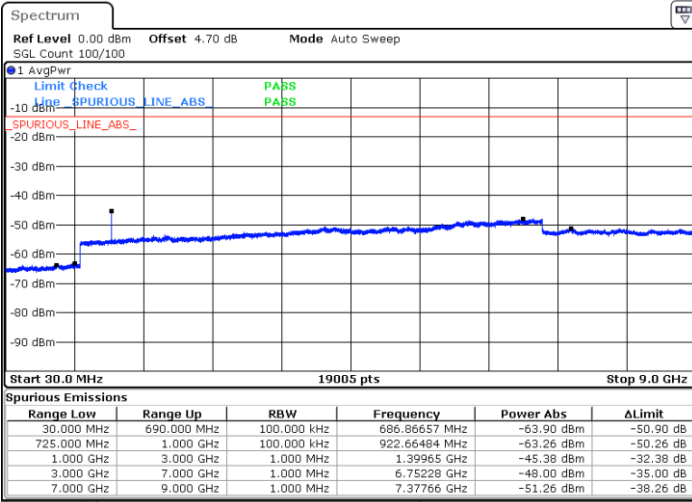




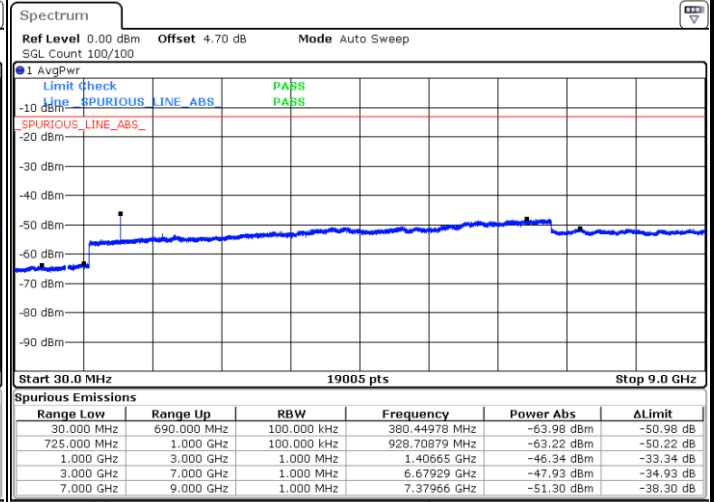
LTE Band 12 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

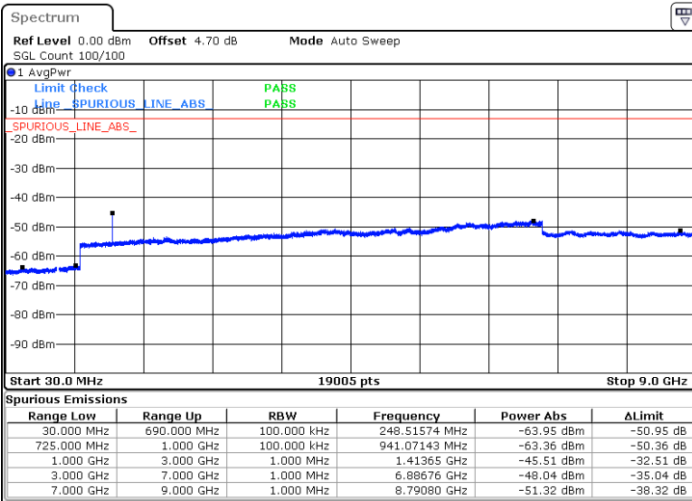


Date: 8.NOV.2020 02:56:26



Date: 8.NOV.2020 02:57:22

Highest Channel / 64QAM



Date: 8.NOV.2020 02:58:18



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	0.0034	PASS
40	Normal Voltage	0.0086	
30	Normal Voltage	0.0081	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0025	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0072	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0085	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0099	

Note:

1. Normal Voltage =3.8V. ; Battery End Point (BEP) =3.4V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

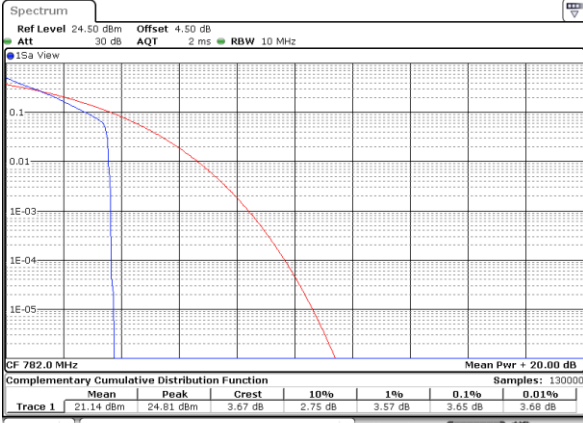
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.65	4.7	4.99	5.77	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.12	6.35	-	-	
Highest CH	-	-	-	-	

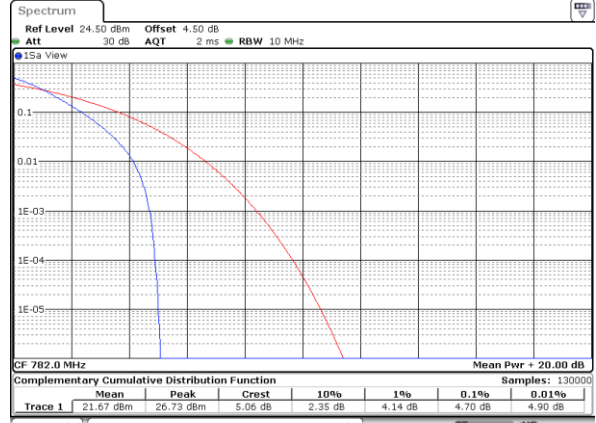


LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Middle Channel / Full RB

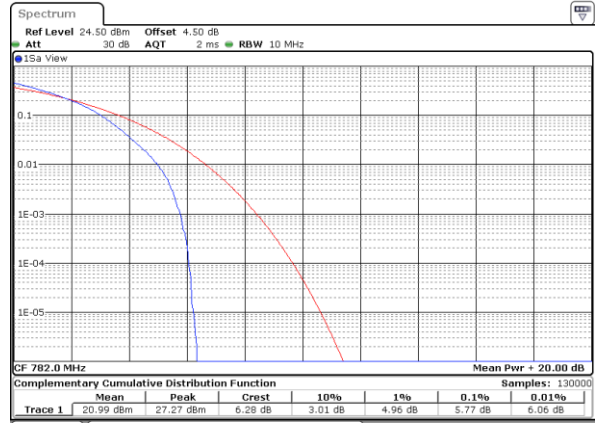


LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB

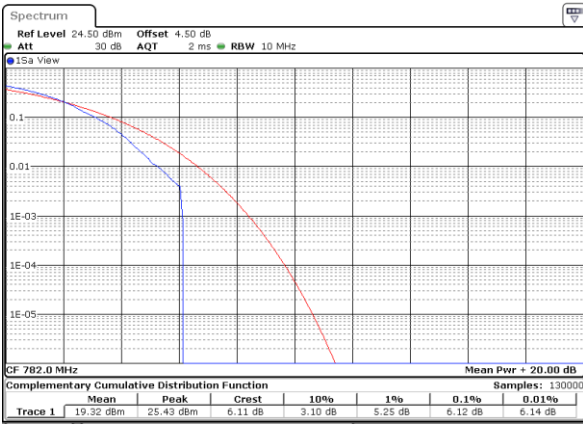


Middle Channel / Full RB



LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Middle Channel / Full RB



Date: 8 NOV 2020 06:10:51

Date: 8 NOV 2020 06:11:18



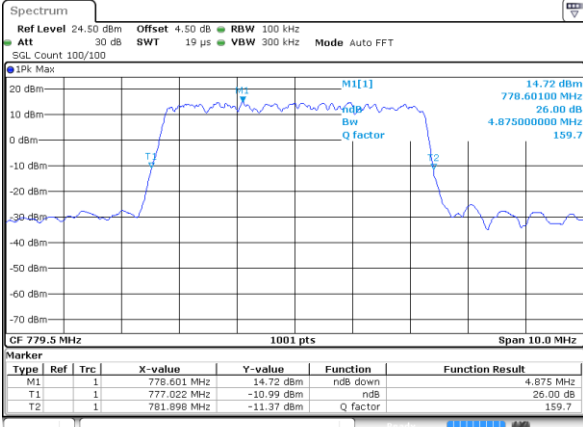
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)					
	5MHz			10MHz		
BW						
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	4.87	4.77	4.86	-	-	-
Middle CH	4.87	4.84	4.91	9.63	9.83	9.81
Highest CH	4.98	4.85	4.86	-	-	-



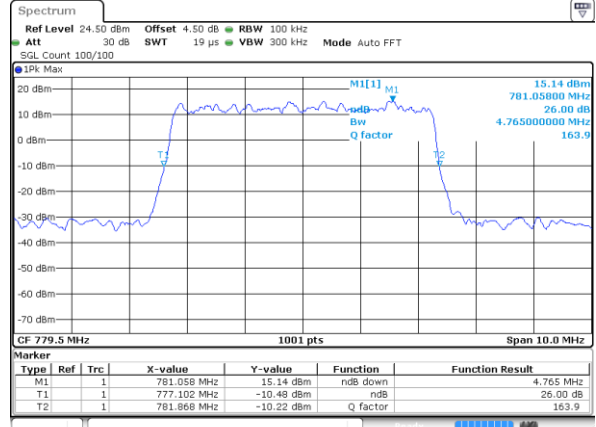
LTE Band 13

Lowest Channel / 5MHz / QPSK



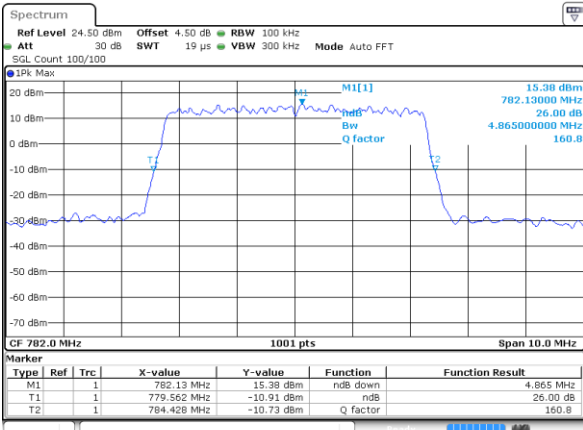
Date: 8 NOV 2020 05:12:10

Lowest Channel / 5MHz / 16QAM



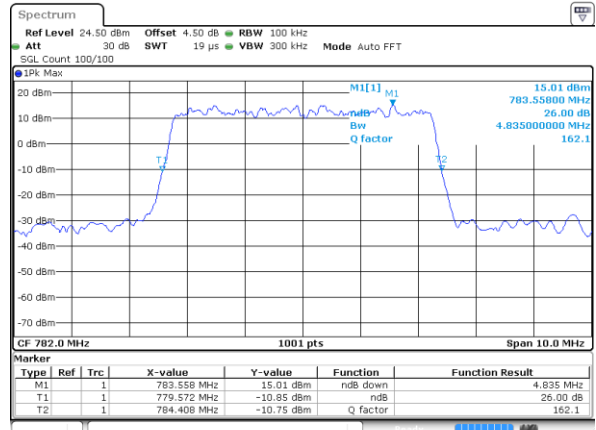
Date: 8 NOV 2020 05:12:20

Middle Channel / 5MHz / QPSK



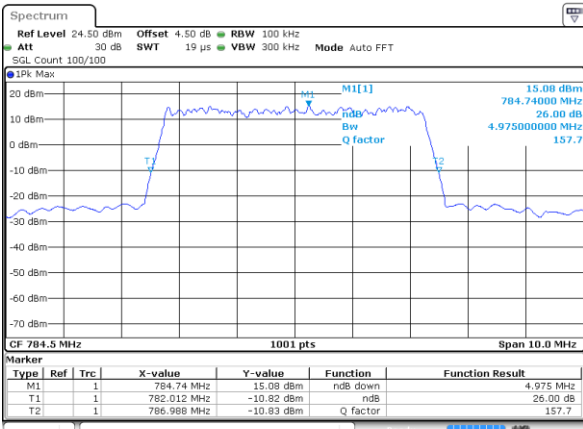
Date: 8 NOV 2020 05:21:08

Middle Channel / 5MHz / 16QAM



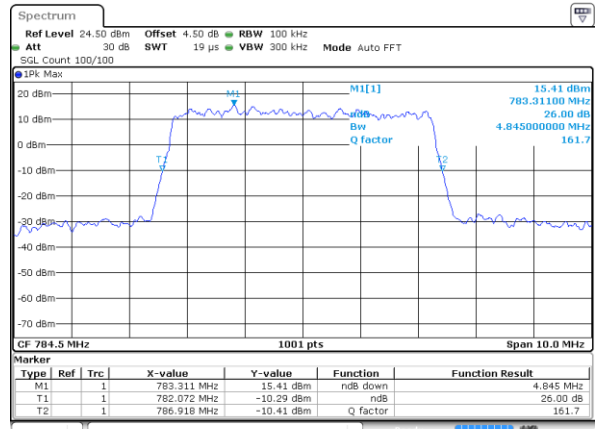
Date: 8 NOV 2020 05:21:17

Highest Channel / 5MHz / QPSK



Date: 8 NOV 2020 05:23:45

Highest Channel / 5MHz / 16QAM

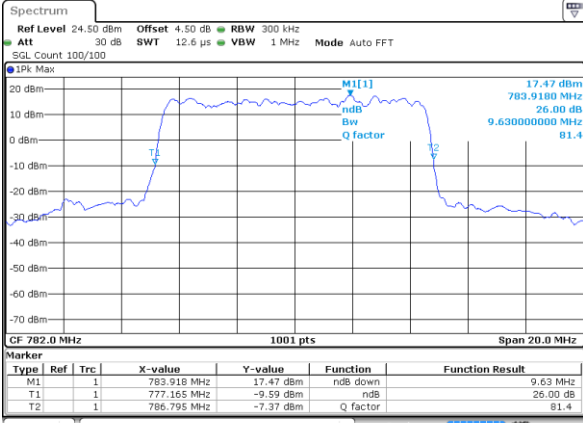


Date: 8 NOV 2020 05:23:35



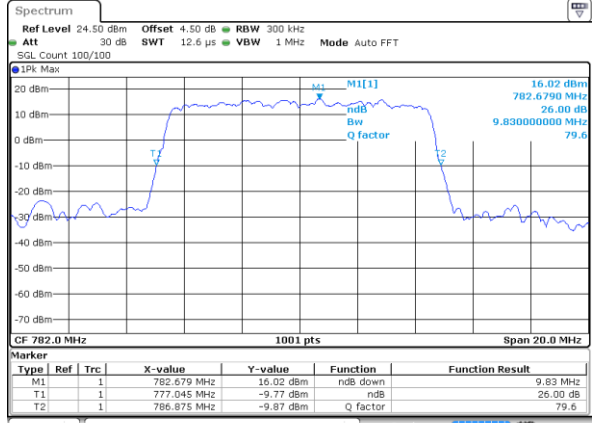
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 8 NOV 2020 05:37:48

Middle Channel / 10MHz / 16QAM

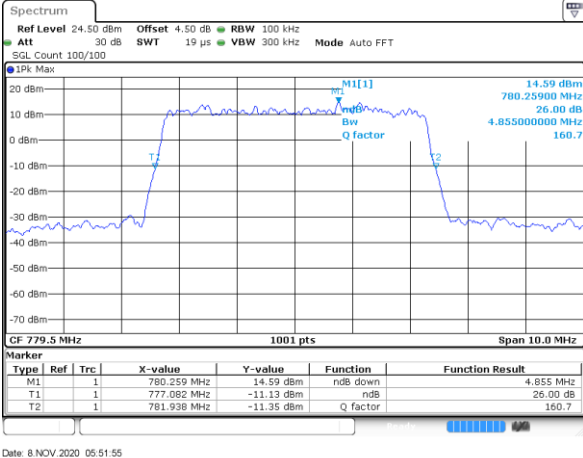


Date: 8 NOV 2020 05:37:38



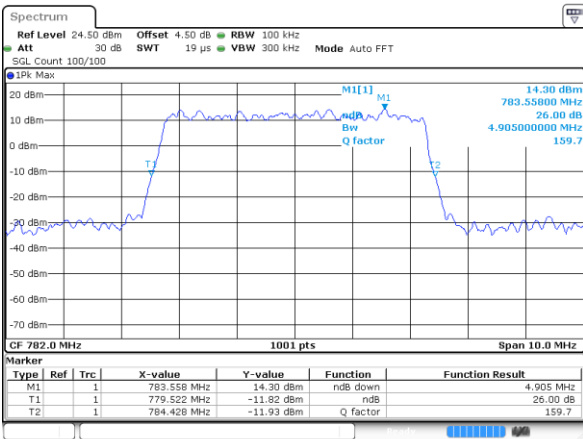
LTE Band 13

Lowest Channel / 5MHz / 64QAM



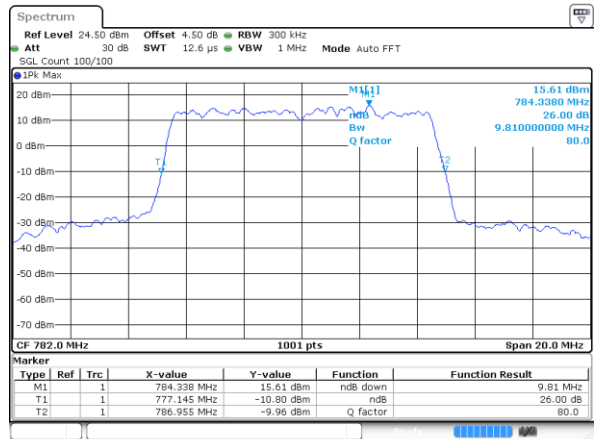
Date: 8 NOV 2020 05:51:55

Middle Channel / 5MHz / 64QAM



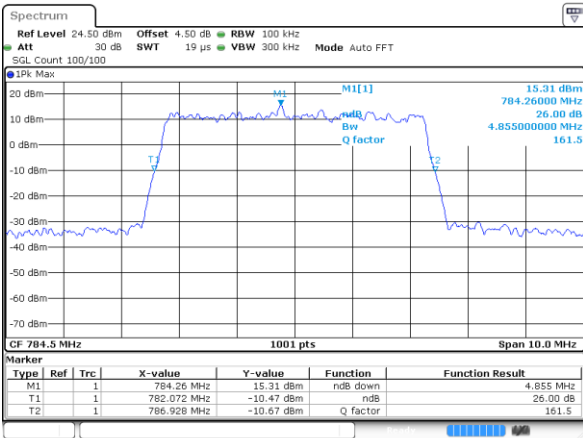
Date: 8 NOV 2020 05:52:05

Middle Channel / 10MHz / 64QAM



Date: 8 NOV 2020 06:02:33

Highest Channel / 5MHz / 64QAM



Date: 8 NOV 2020 05:52:15



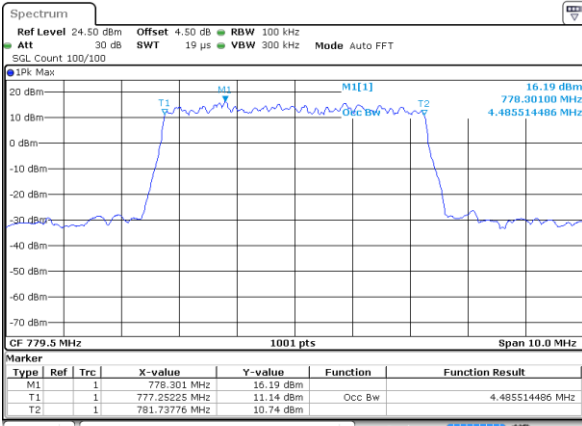
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)					
	5MHz			10MHz		
BW						
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	4.49	4.50	4.47	-	-	-
Middle CH	4.49	4.49	4.51	9.03	8.99	9.03
Highest CH	4.50	4.49	4.50	-	-	-



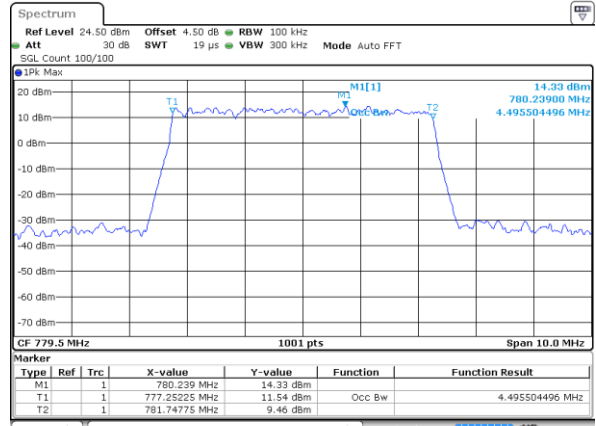
LTE Band 13

Lowest Channel / 5MHz / QPSK



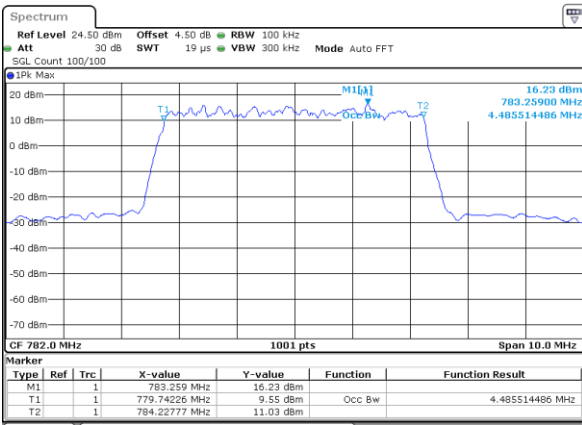
Date: 8 NOV 2020 05:12:40

Lowest Channel / 5MHz / 16QAM



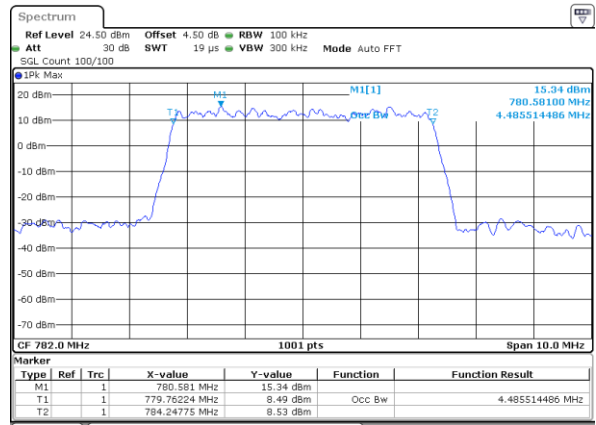
Date: 8 NOV 2020 05:12:30

Middle Channel / 5MHz / QPSK



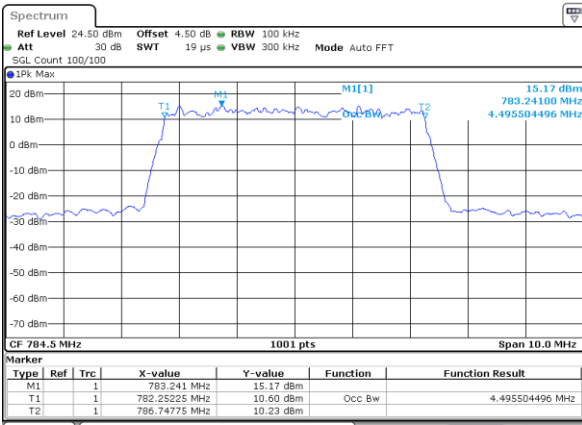
Date: 8 NOV 2020 05:21:27

Middle Channel / 5MHz / 16QAM



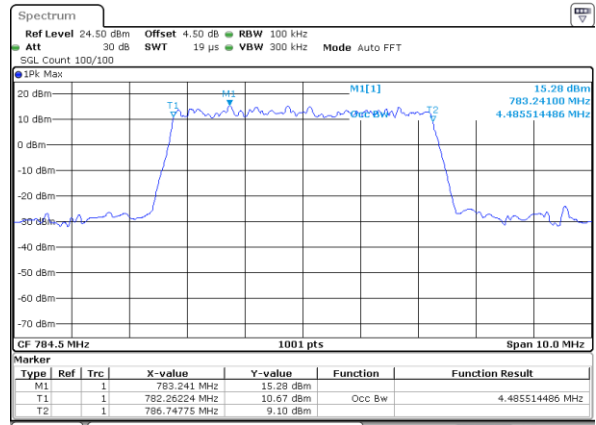
Date: 8 NOV 2020 05:21:37

Highest Channel / 5MHz / QPSK



Date: 8 NOV 2020 05:23:55

Highest Channel / 5MHz / 16QAM

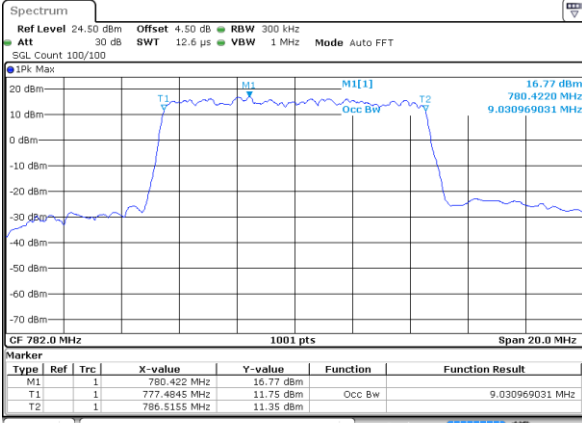


Date: 8 NOV 2020 05:24:05



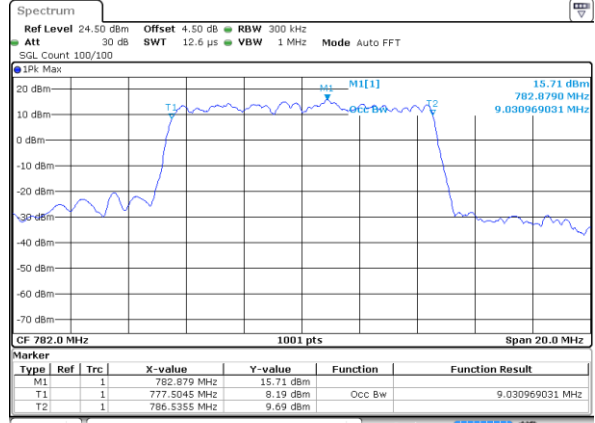
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 8 NOV 2020 05:37:58

Middle Channel / 10MHz / 16QAM

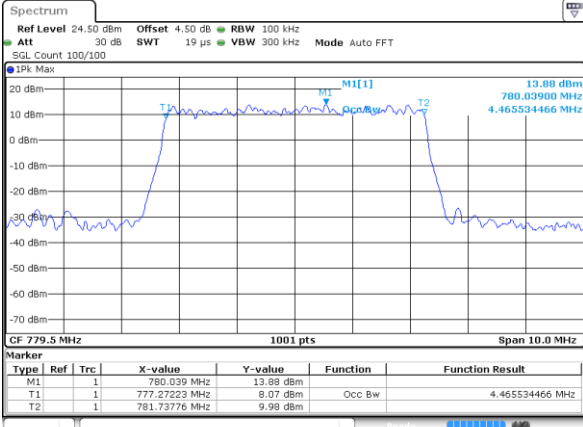


Date: 8 NOV 2020 06:02:23

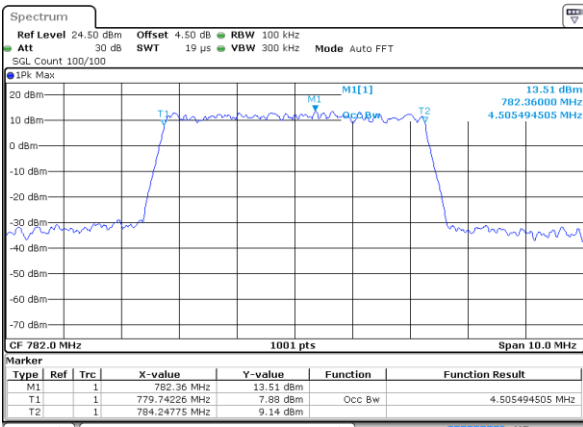


LTE Band 13

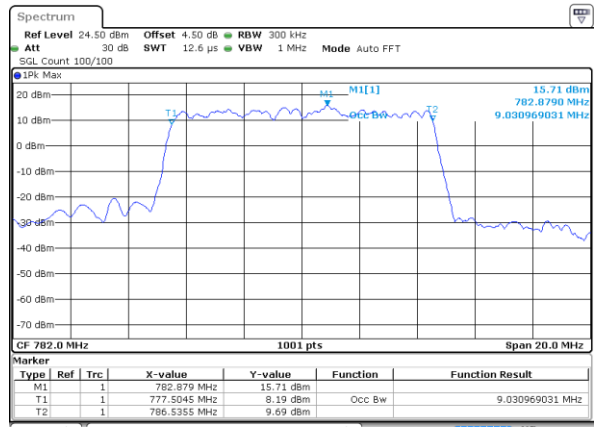
Lowest Channel / 5MHz / 64QAM



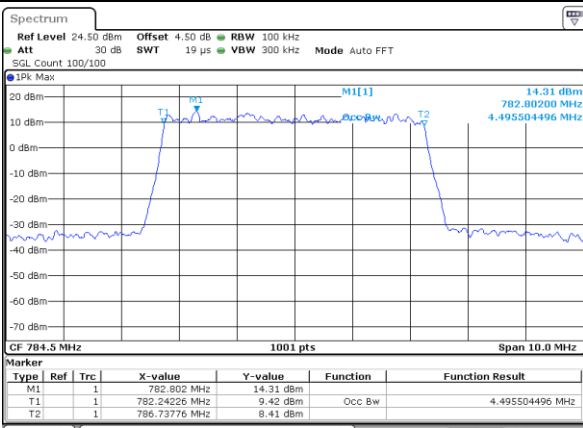
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

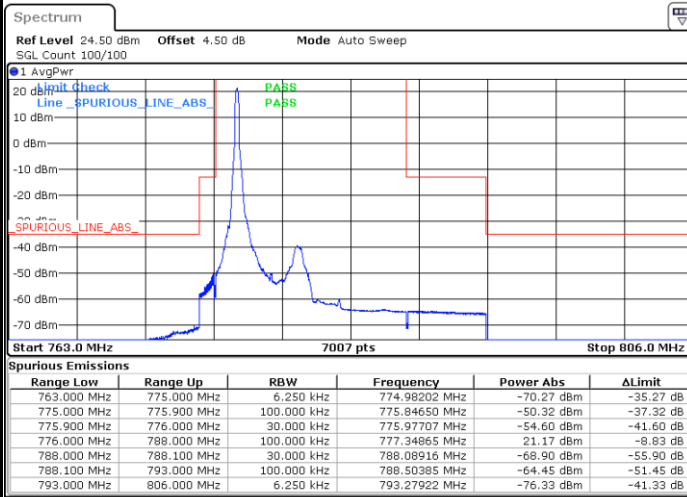




Conducted Band Edge

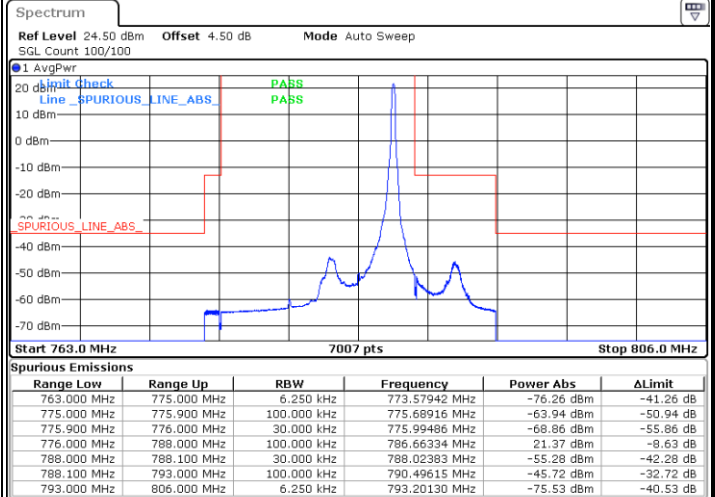
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



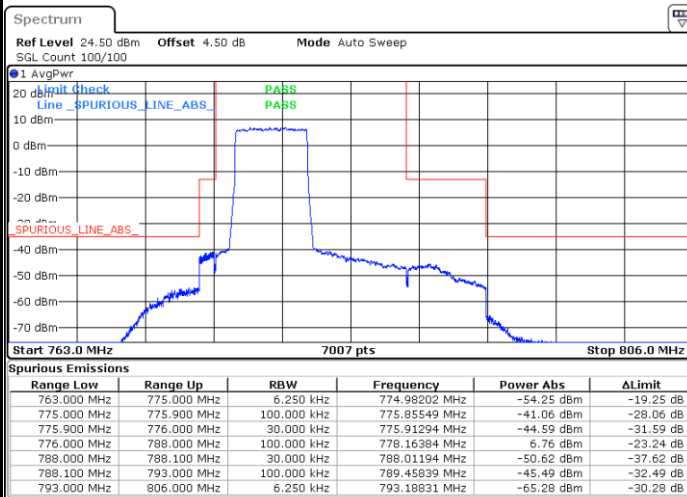
Date: 8 NOV. 2020 05:17:32

Highest Band Edge / 1 RB



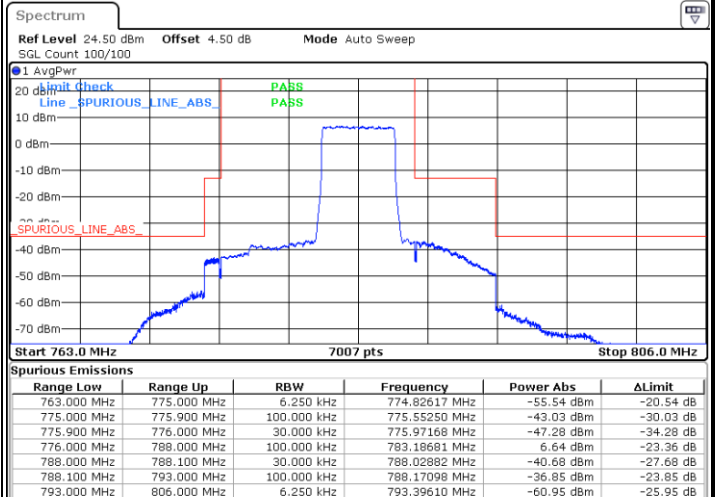
Date: 8 NOV. 2020 05:28:57

Lowest Band Edge / Full RB



Date: 8 NOV. 2020 05:15:55

Highest Band Edge / Full RB



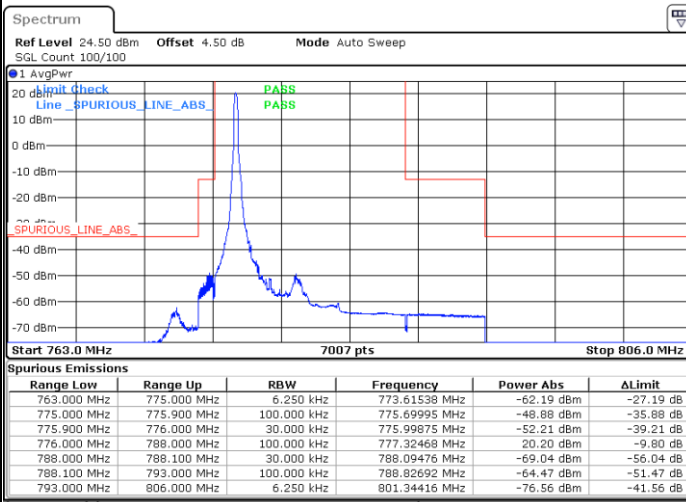
Date: 8 NOV. 2020 05:27:20



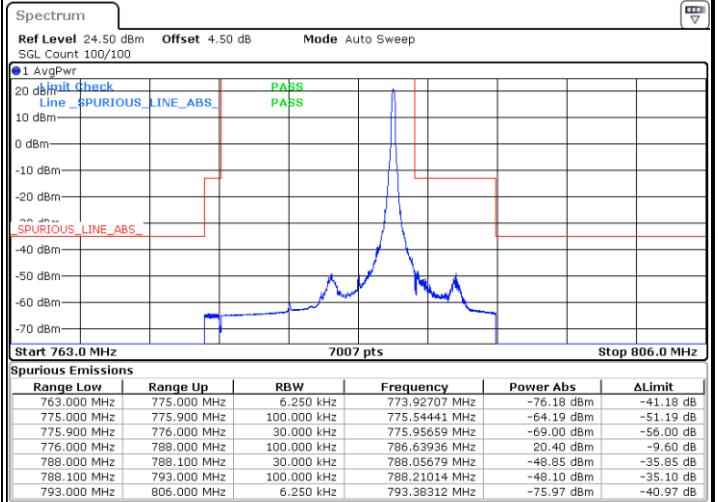
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



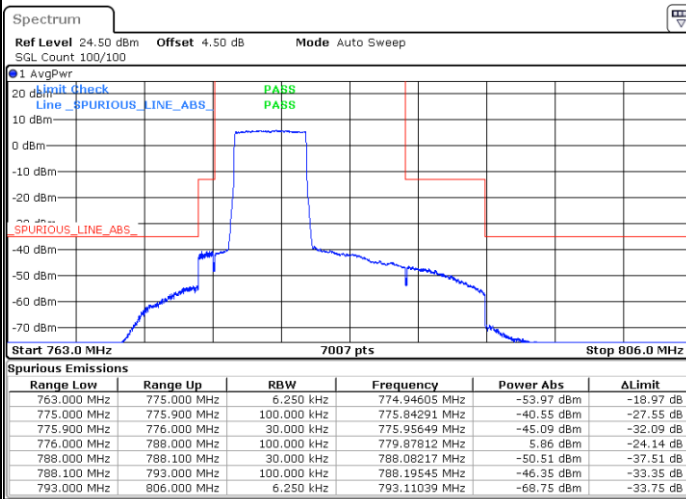
Date: 8 NOV.2020 05:19:10



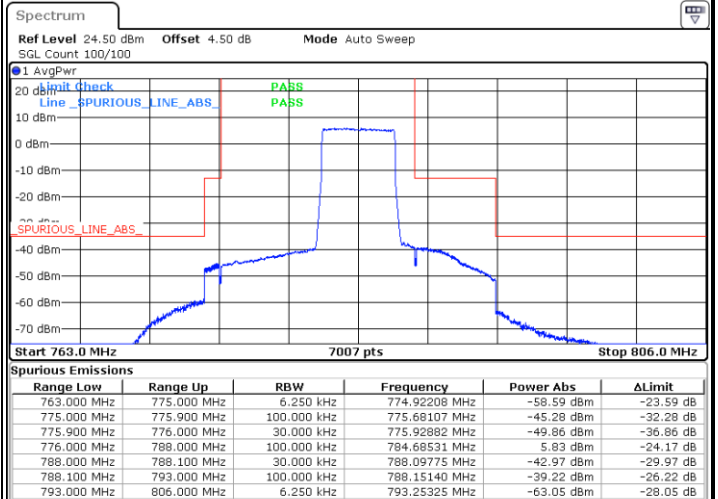
Date: 8 NOV.2020 05:30:35

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 8 NOV.2020 05:14:17



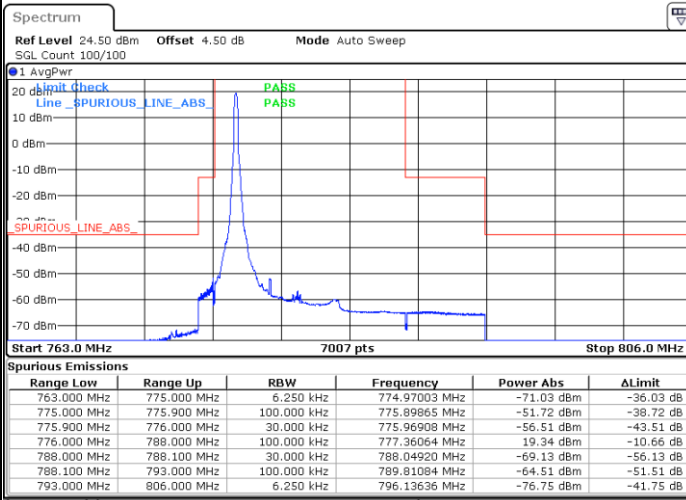
Date: 8 NOV.2020 05:25:43



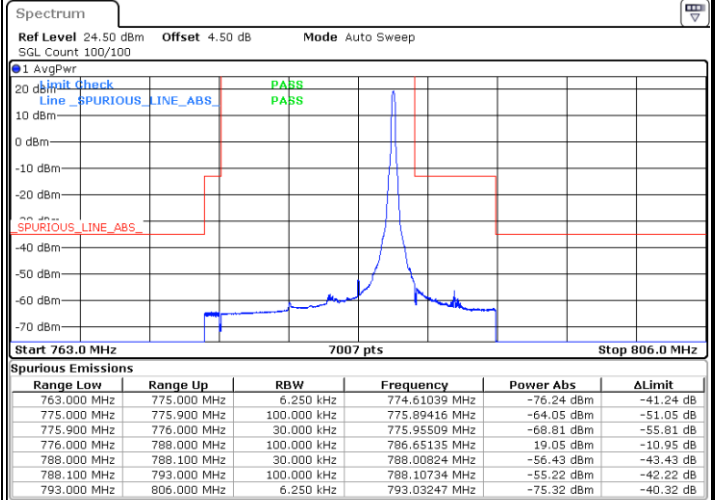
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



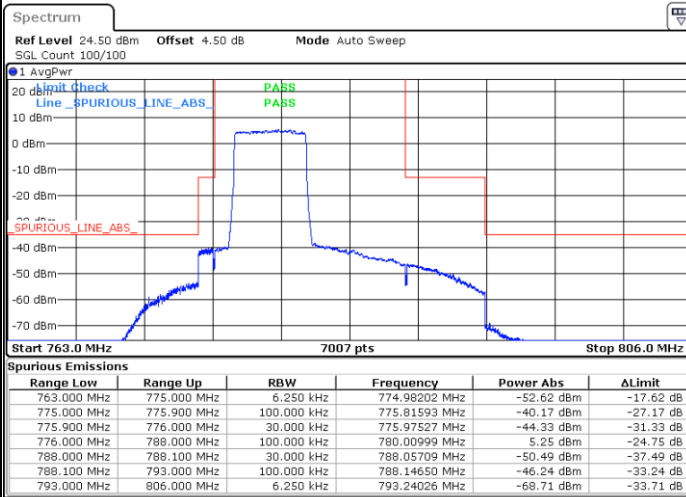
Date: 8 NOV. 2020 05:53:53



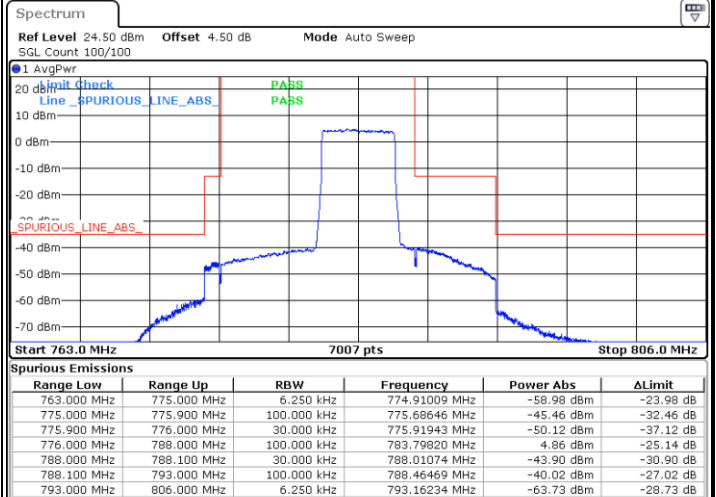
Date: 8 NOV. 2020 05:58:45

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 8 NOV. 2020 05:55:30

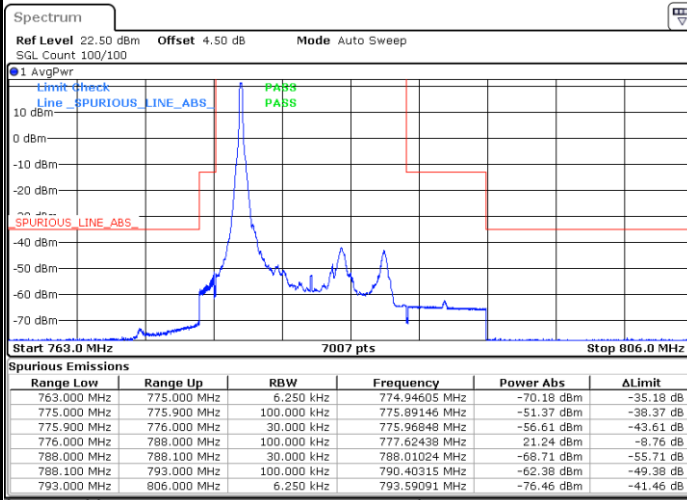


Date: 8 NOV. 2020 05:57:08



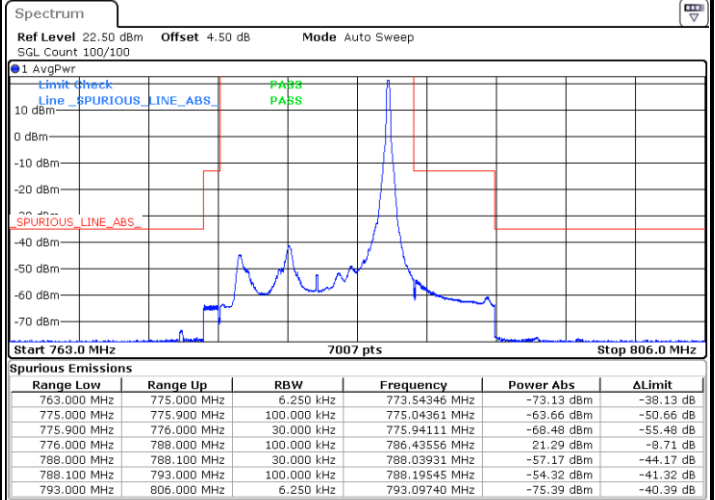
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



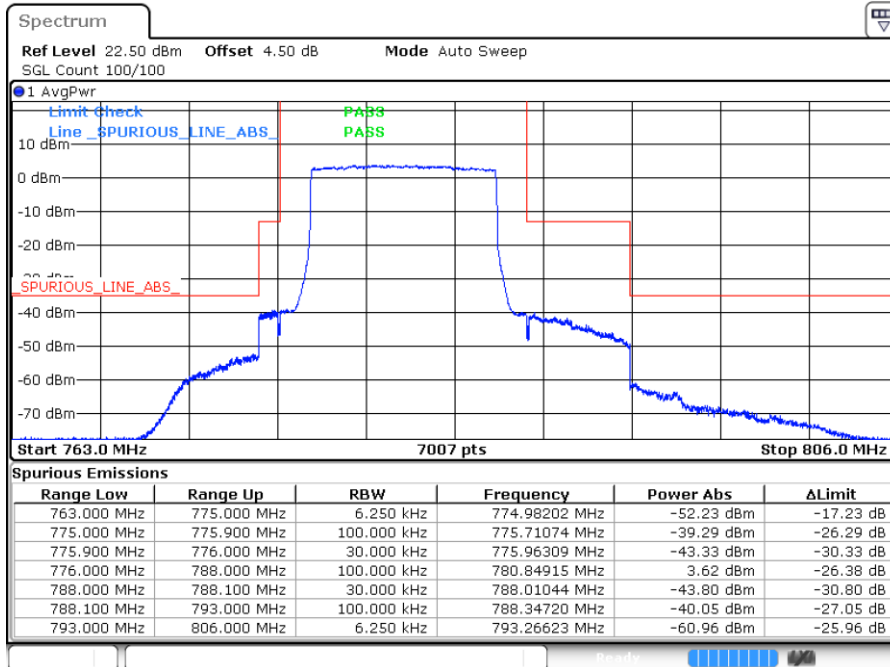
Date: 8 NOV. 2020 05:41:23

Highest Band Edge / 1 RB



Date: 8 NOV. 2020 05:47:52

Band Edge / Full RB

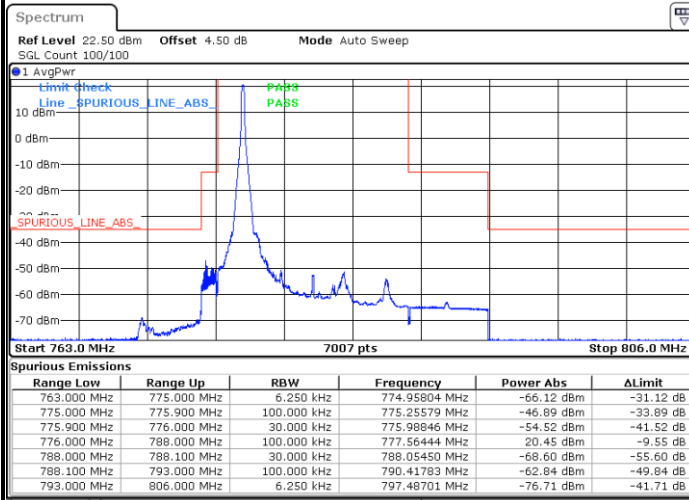


Date: 8 NOV. 2020 05:43:00



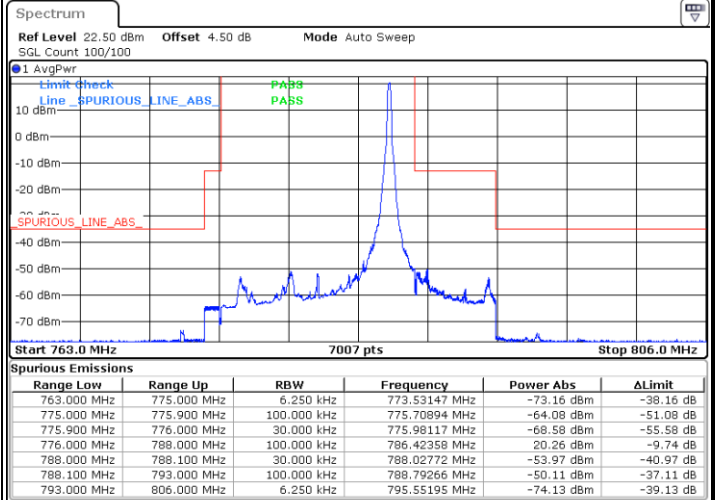
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



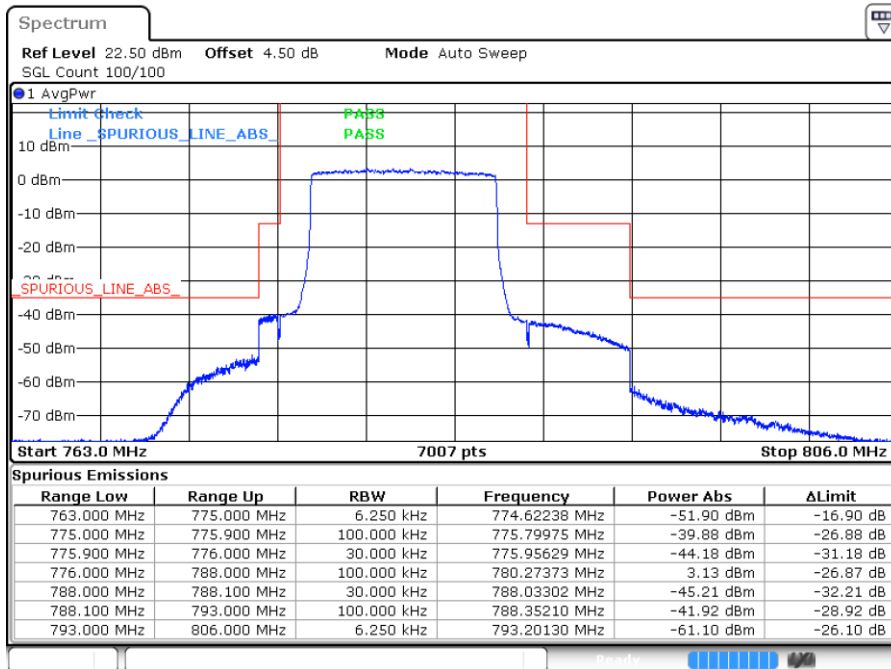
Date: 8 NOV 2020 05:39:45

Highest Band Edge / 1 RB



Date: 8 NOV 2020 05:46:15

Band Edge / Full RB

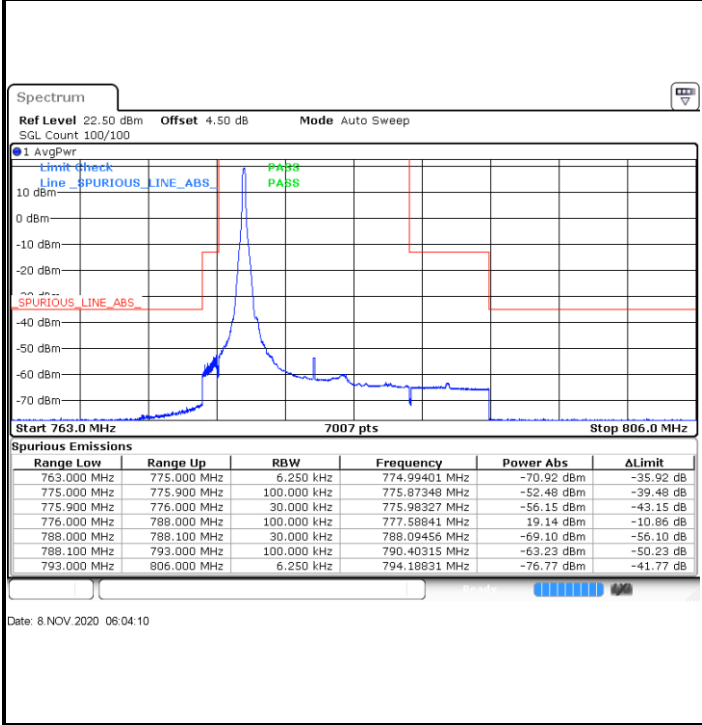


Date: 8 NOV 2020 05:44:38

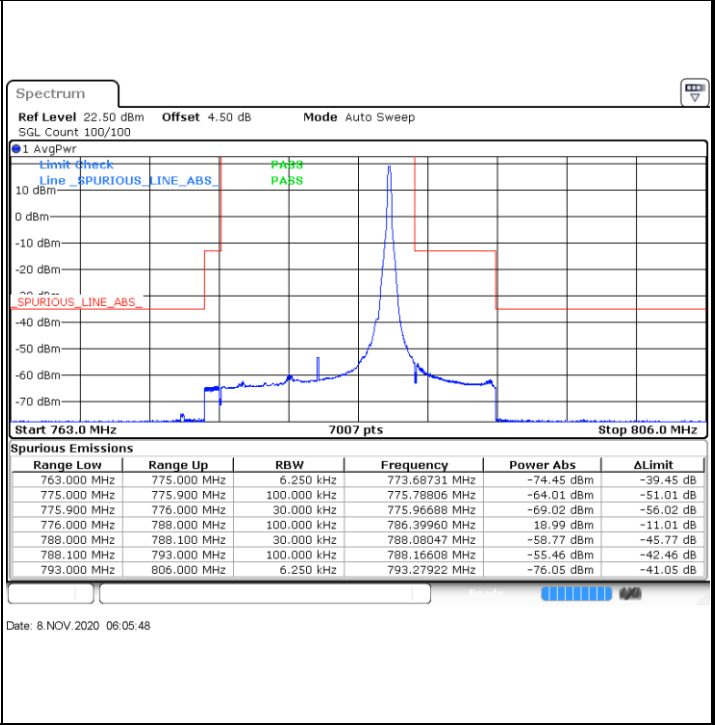


LTE Band 13 / 10MHz / 64QAM

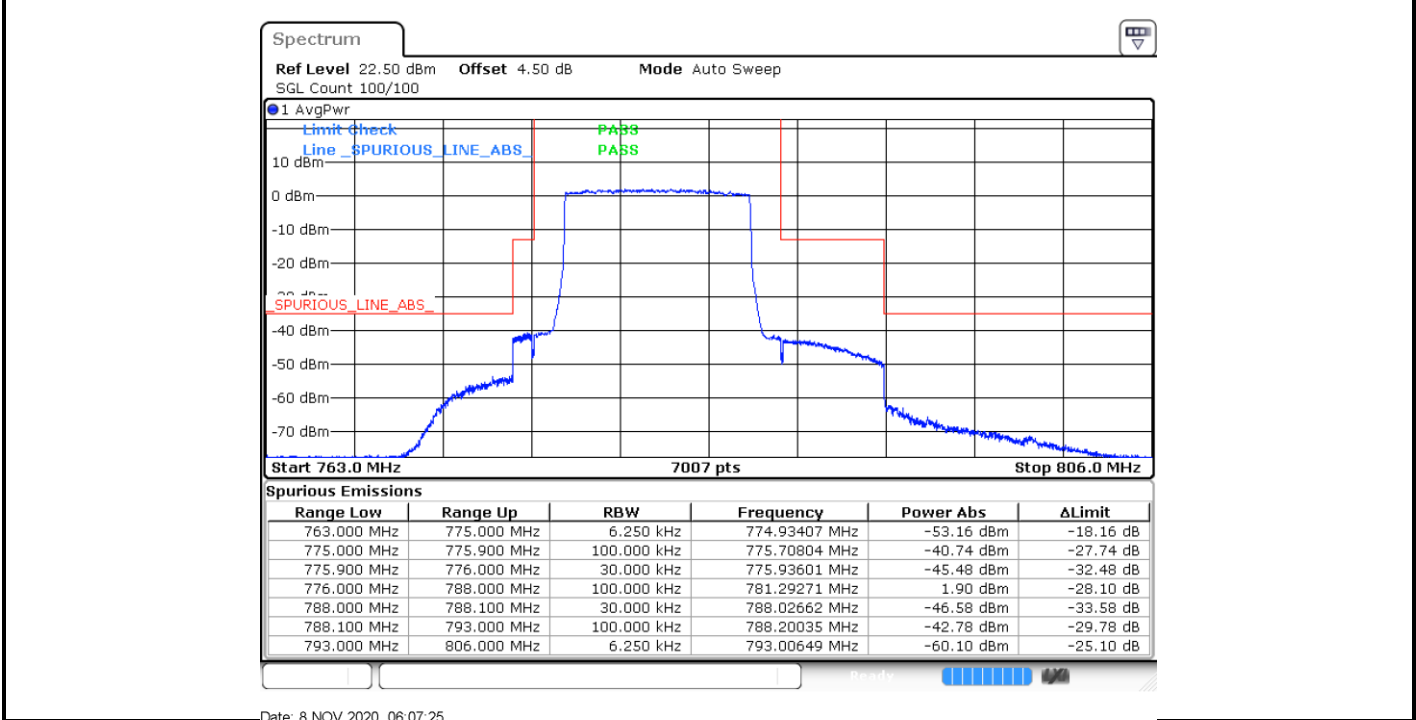
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

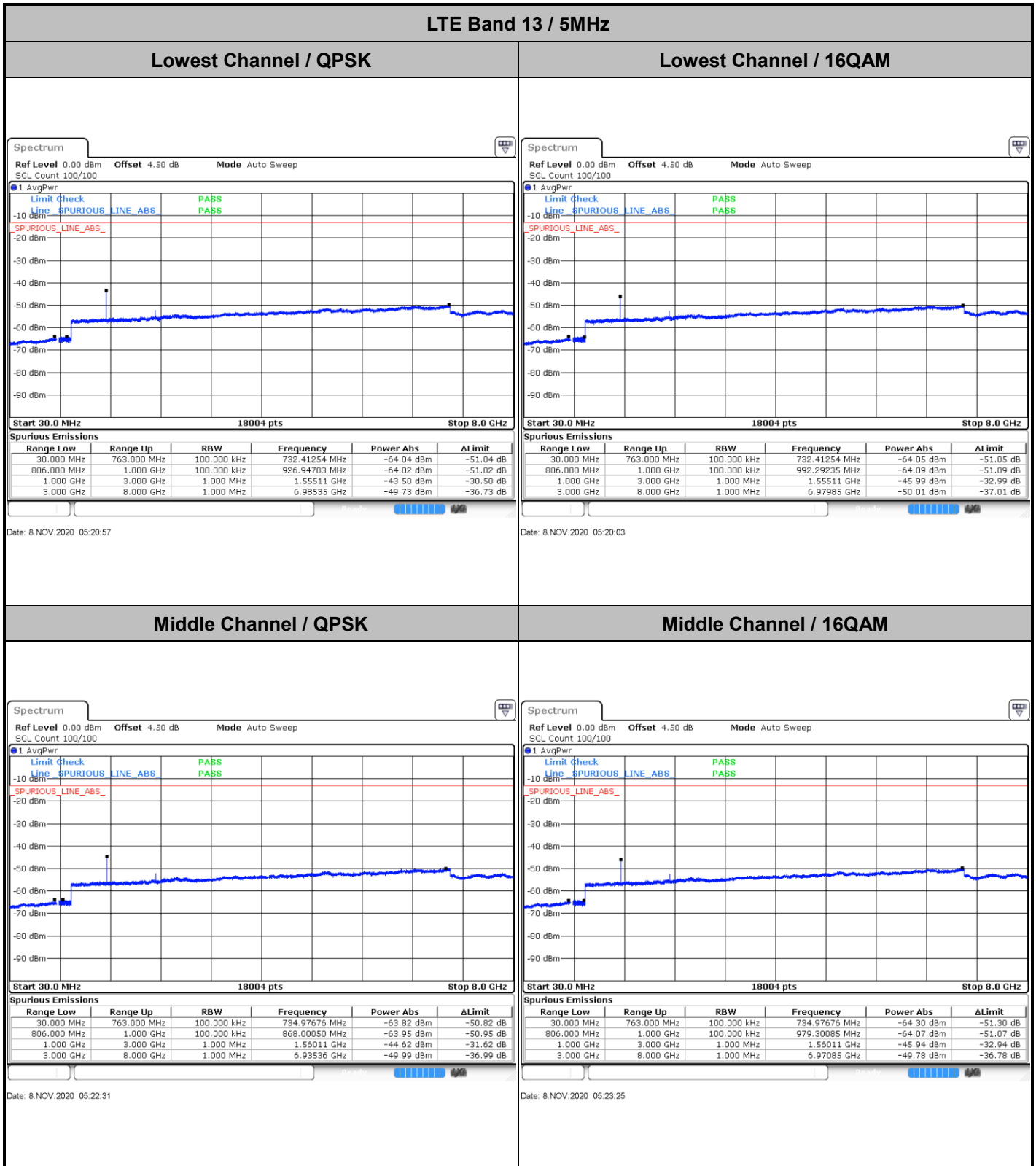


Band Edge / Full RB





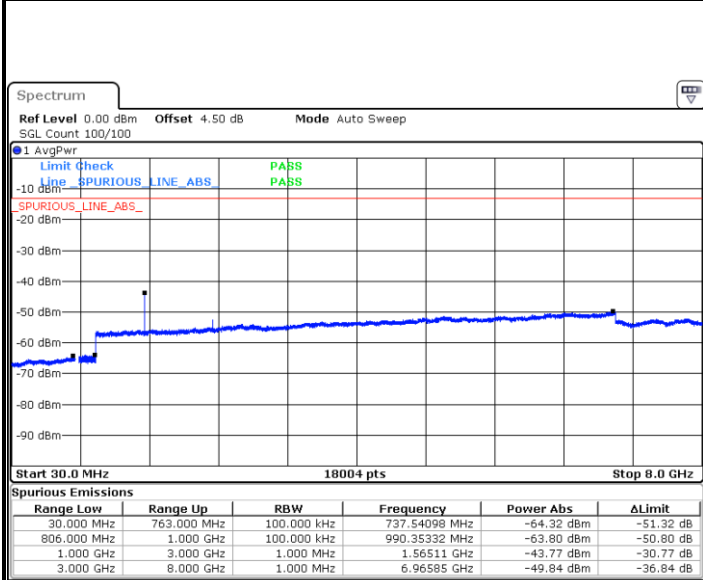
Conducted Spurious Emission





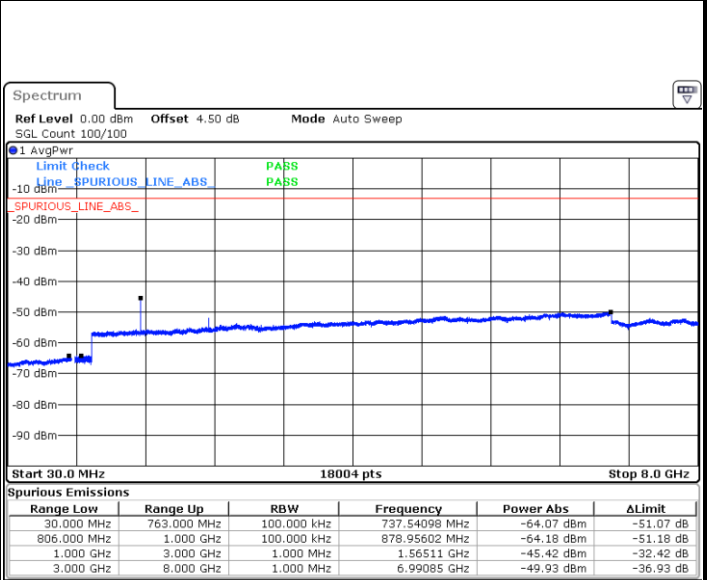
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 8 NOV 2020 05:32:22

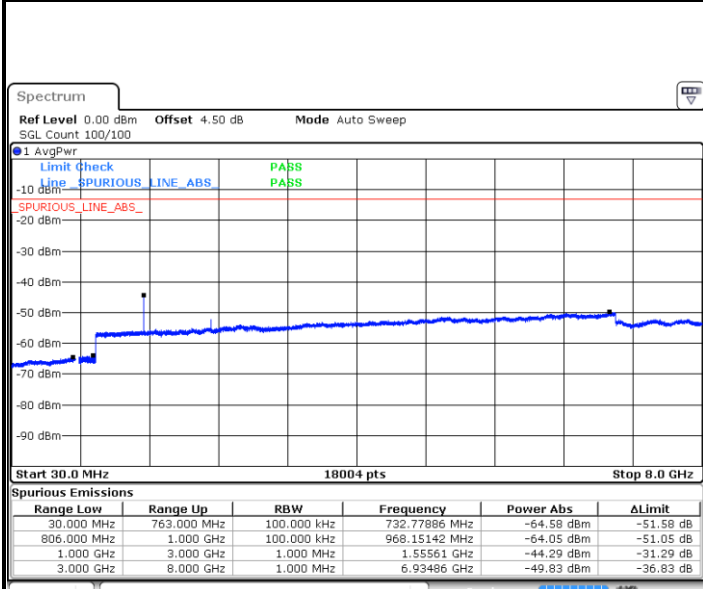
Highest Channel / 16QAM



Date: 8 NOV 2020 05:31:28

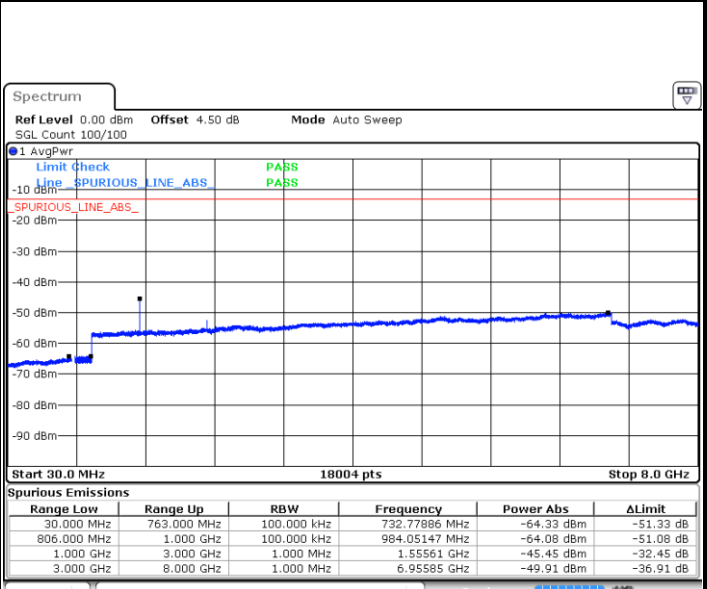
LTE Band 13 / 10MHz

Middle Channel / QPSK

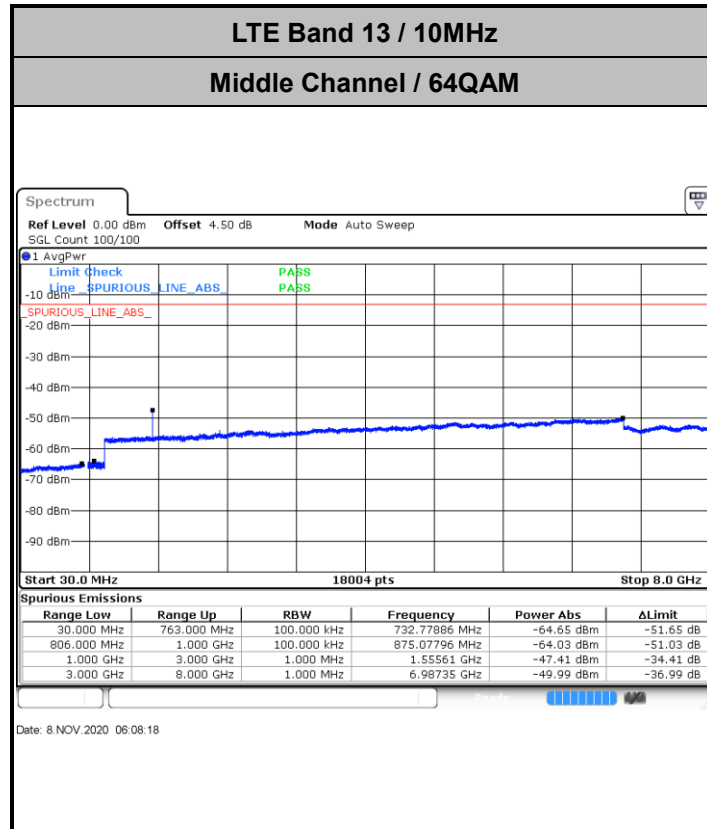


Date: 8 NOV 2020 05:36:33

Middle Channel / 16QAM



Date: 8 NOV 2020 05:37:27





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	0.0014	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0047	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0054	
0	Normal Voltage	0.0063	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0058	
-30	Normal Voltage	0.0066	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0046	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 26

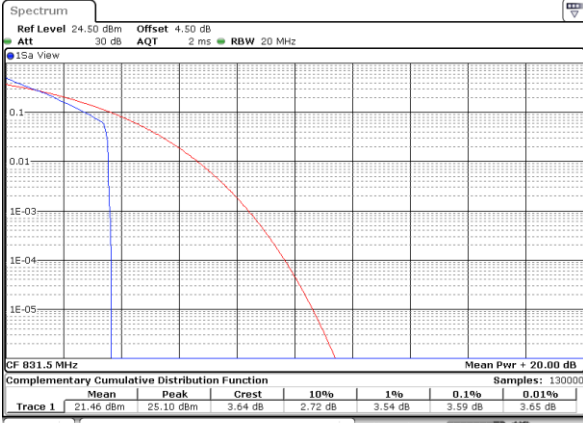
Peak-to-Average Ratio

Mode	LTE Band 26 / 15MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.59	5.42	5.28	6.14	PASS
Middle CH	3.59	5.36	5.59	6.03	
Highest CH	3.65	5.13	5.36	6.06	
Mode	LTE Band 26 / 15MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	7.39	6.67	-	-	PASS
Middle CH	7.01	6.72	-	-	
Highest CH	7.30	6.70	-	-	



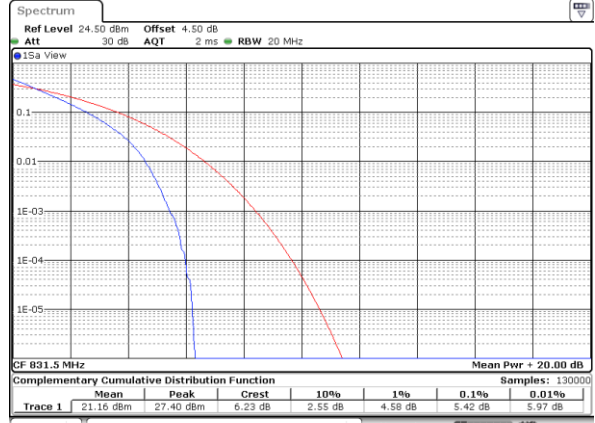
LTE Band 26 / 15MHz / QPSK

Lowest Channel / 1RB



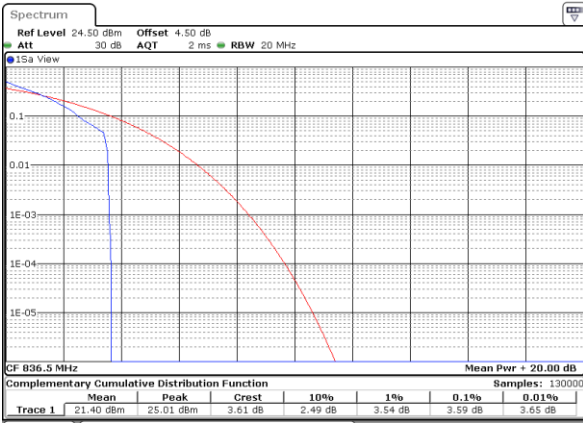
Date: 8 NOV 2020 02:01:05

Lowest Channel / Full RB



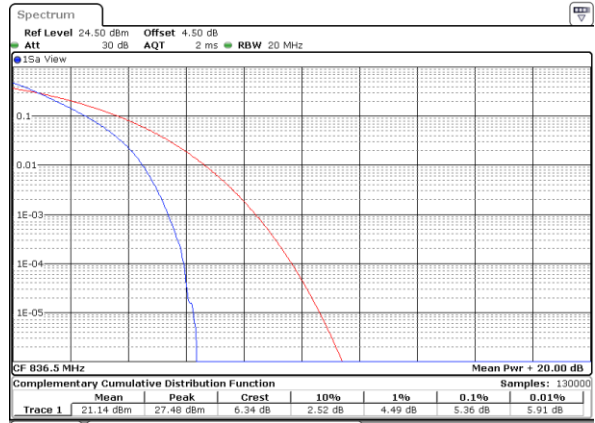
Date: 8 NOV 2020 02:02:20

Middle Channel / 1RB



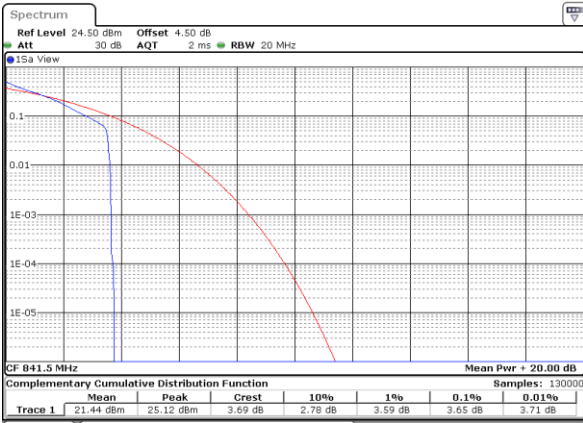
Date: 8 NOV 2020 02:01:46

Middle Channel / Full RB



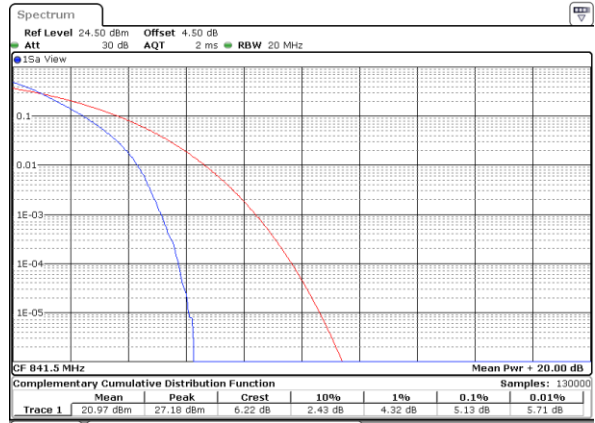
Date: 8 NOV 2020 02:03:01

Highest Channel / 1RB



Date: 8 NOV 2020 02:01:55

Highest Channel / Full RB

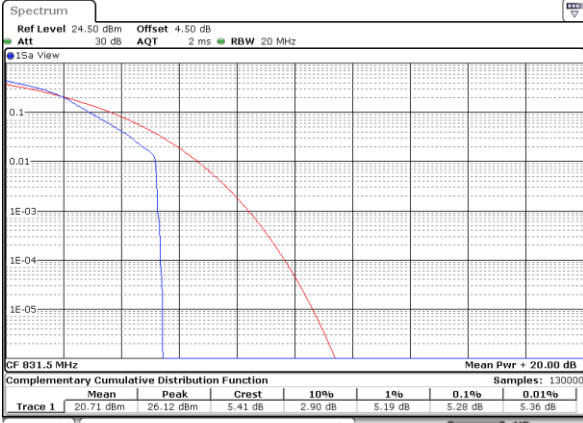


Date: 8 NOV 2020 02:03:09



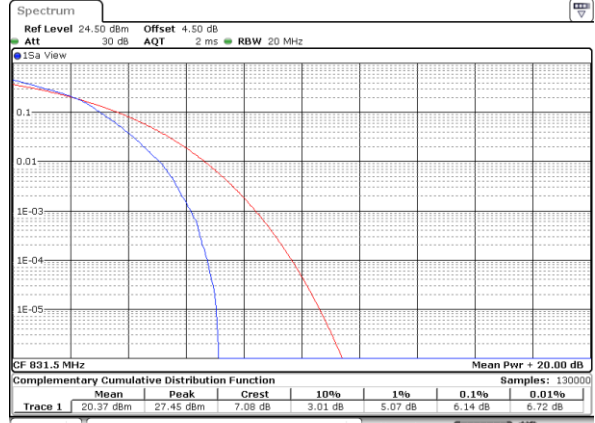
LTE Band 26 / 15MHz / 16QAM

Lowest Channel / 1RB



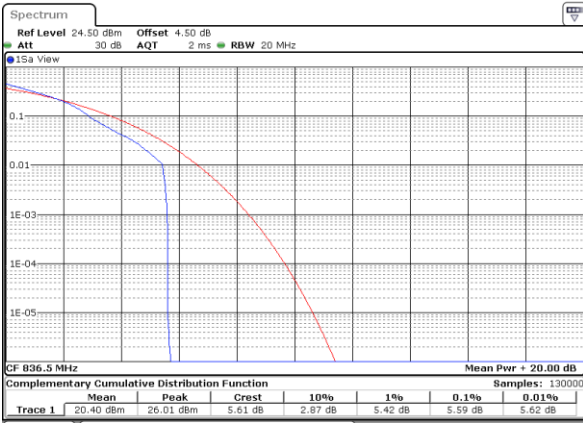
Date: 8 NOV 2020 02:01:14

Lowest Channel / Full RB



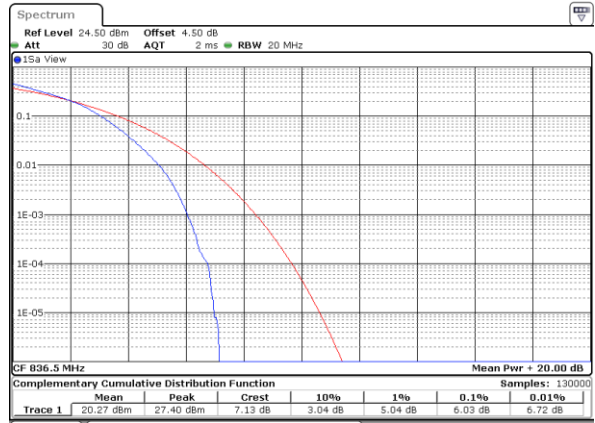
Date: 8 NOV 2020 02:02:28

Middle Channel / 1RB



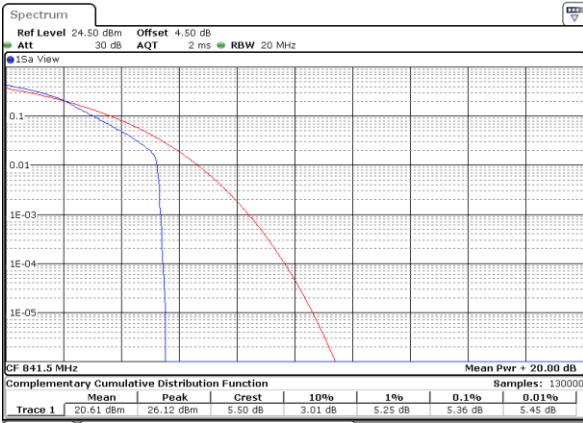
Date: 8 NOV 2020 02:01:38

Middle Channel / Full RB



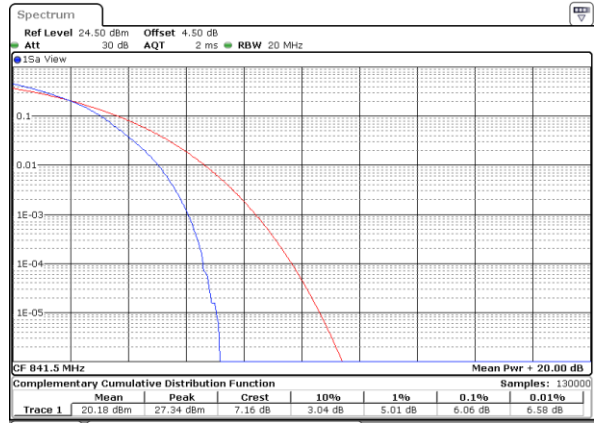
Date: 8 NOV 2020 02:02:53

Highest Channel / 1RB



Date: 8 NOV 2020 02:02:03

Highest Channel / Full RB

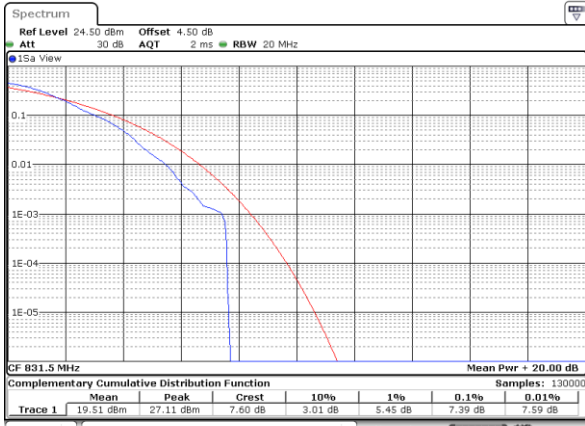


Date: 8 NOV 2020 02:03:17



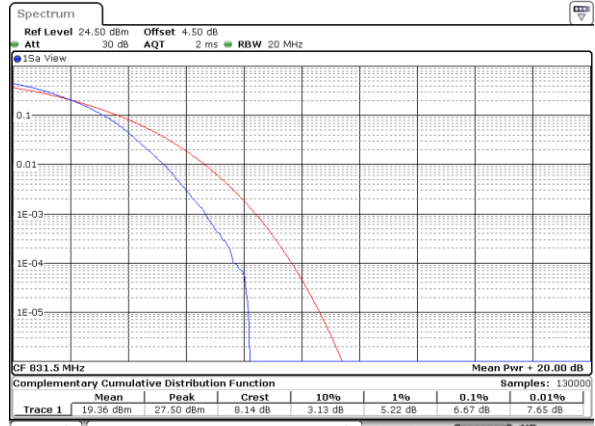
LTE Band 26 / 15MHz / 64QAM

Lowest Channel / 1RB



Date: 8 NOV 2020 02:01:22

Lowest Channel / Full RB



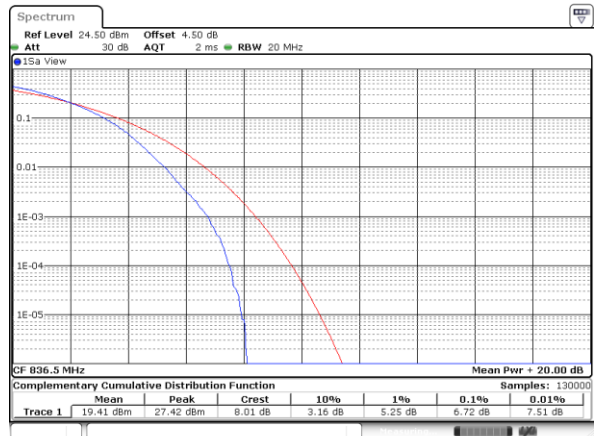
Date: 8 NOV 2020 02:02:36

Middle Channel / 1RB



Date: 8 NOV 2020 02:01:30

Middle Channel / Full RB



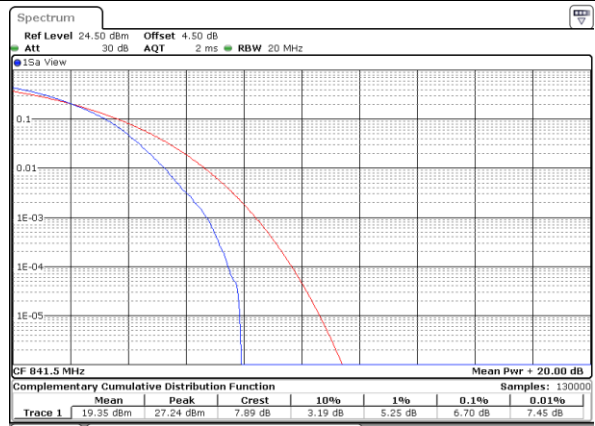
Date: 8 NOV 2020 02:02:44

Highest Channel / 1RB



Date: 8 NOV 2020 02:02:12

Highest Channel / Full RB



Date: 8 NOV 2020 02:03:26



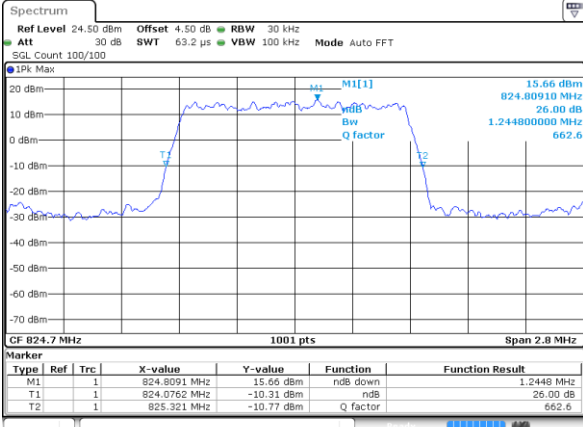
26dB Bandwidth

Mode	LTE Band 26 : 26dB BW(MHz)									
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.24	1.23	3.00	3.00	4.92	4.88	9.75	9.83	14.72	14.33
Middle CH	1.22	1.22	3.02	3.06	4.88	4.91	9.71	9.83	14.33	14.15
Highest CH	1.23	1.23	2.97	3.05	4.90	4.87	9.89	9.71	14.15	14.57
Mode	LTE Band 26 : 26dB BW(MHz)									
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.23	-	3.02	-	4.84	-	9.75	-	14.54	-
Middle CH	1.22	-	3.01	-	4.90	-	9.77	-	14.39	-
Highest CH	1.22	-	3.05	-	4.83	-	9.65	-	14.21	-



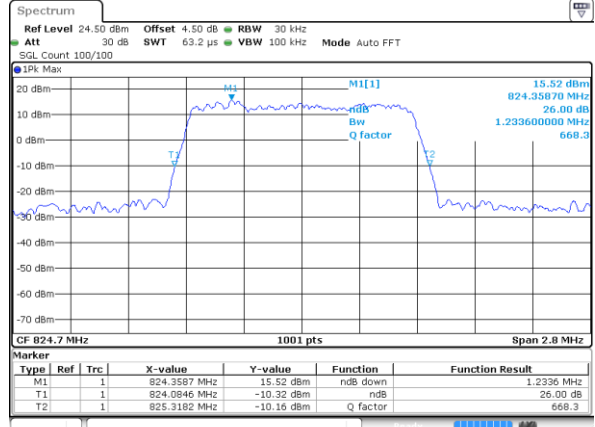
LTE Band 26

Lowest Channel / 1.4MHz / QPSK



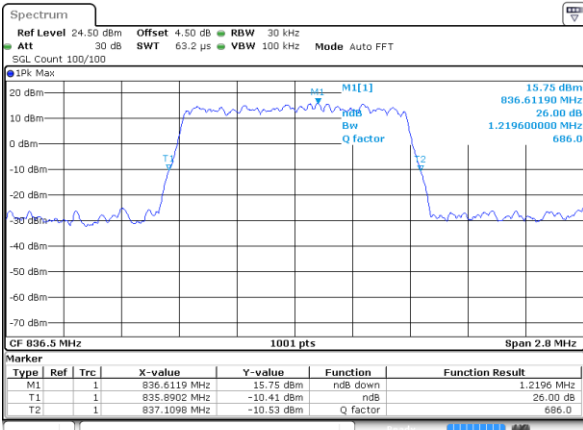
Date: 8 NOV 2020 00:06:06

Lowest Channel / 1.4MHz / 16QAM



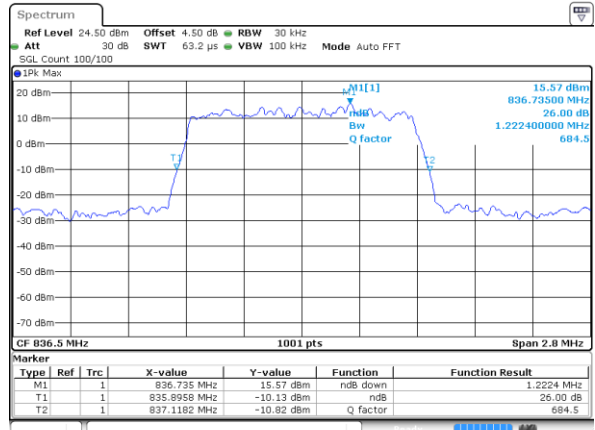
Date: 8 NOV 2020 00:06:26

Middle Channel / 1.4MHz / QPSK



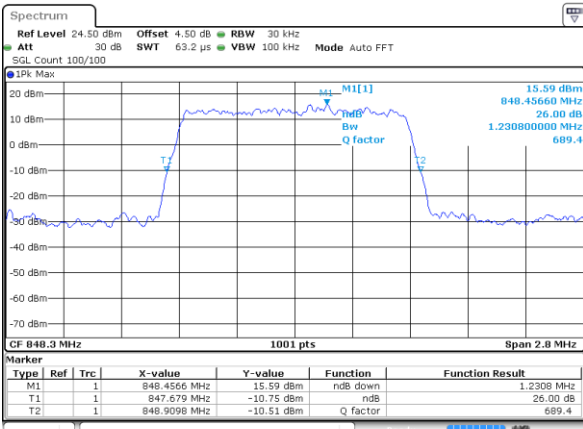
Date: 8 NOV 2020 00:22:39

Middle Channel / 1.4MHz / 16QAM



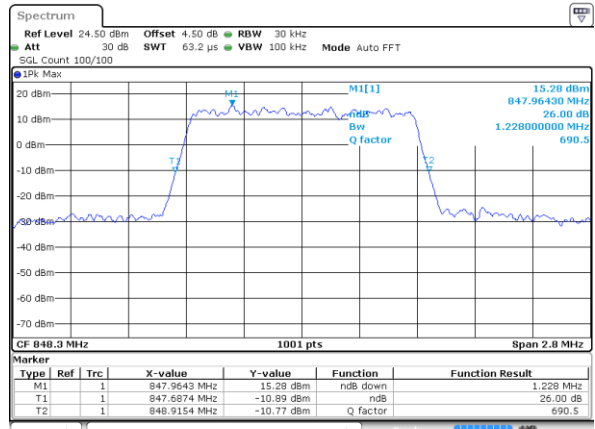
Date: 8 NOV 2020 00:23:15

Highest Channel / 1.4MHz / QPSK



Date: 8 NOV 2020 00:28:17

Highest Channel / 1.4MHz / 16QAM

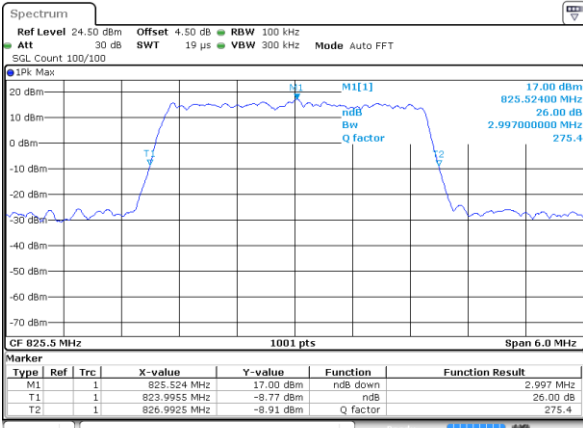


Date: 8 NOV 2020 00:26:07



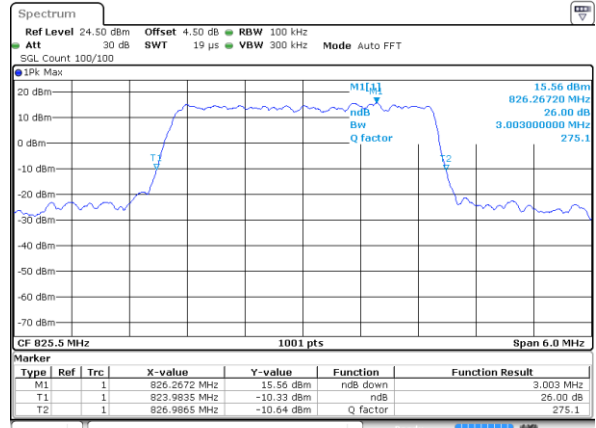
LTE Band 26

Lowest Channel / 3MHz / QPSK



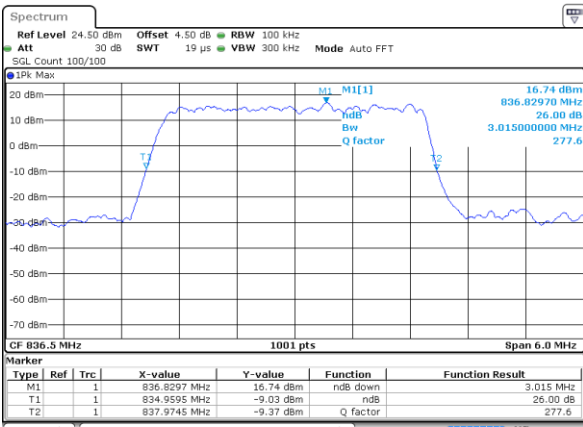
Date: 8 NOV 2020 00:39:28

Lowest Channel / 3MHz / 16QAM



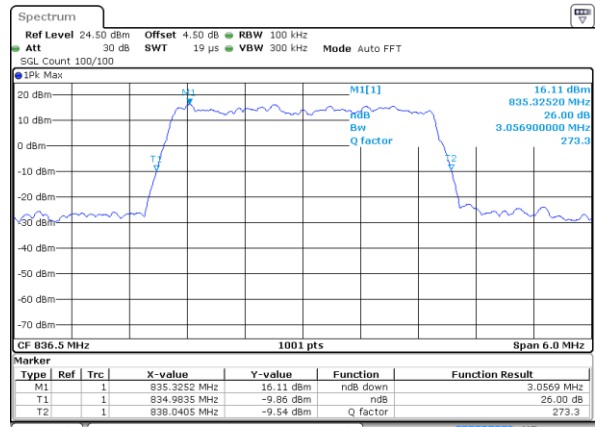
Date: 8 NOV 2020 00:39:48

Middle Channel / 3MHz / QPSK



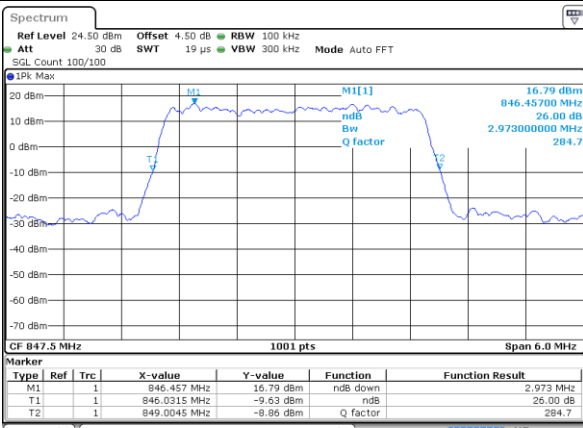
Date: 8 NOV 2020 00:41:07

Middle Channel / 3MHz / 16QAM



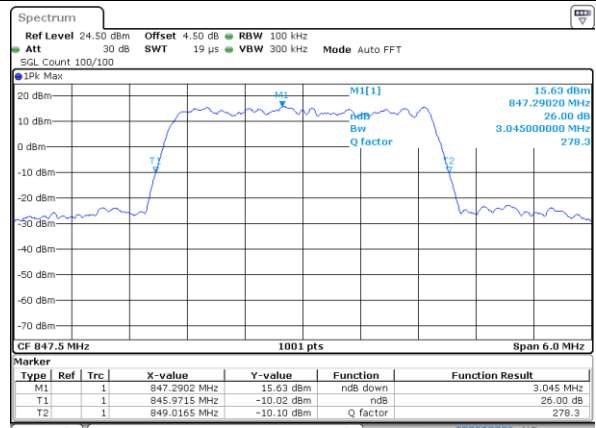
Date: 8 NOV 2020 00:40:47

Highest Channel / 3MHz / QPSK



Date: 8 NOV 2020 00:41:27

Highest Channel / 3MHz / 16QAM

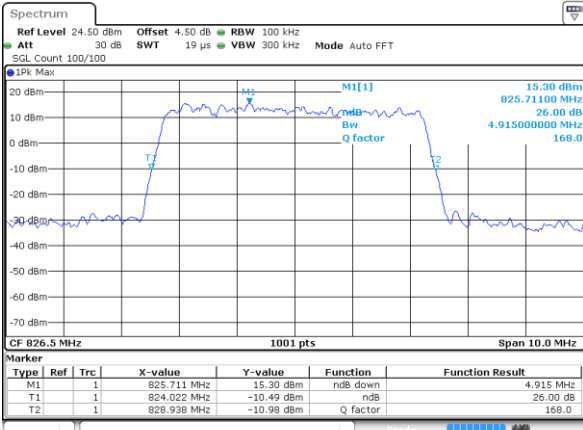


Date: 8 NOV 2020 00:41:47



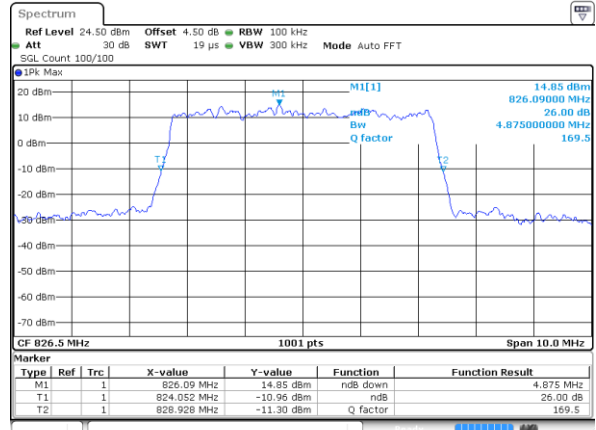
LTE Band 26

Lowest Channel / 5MHz / QPSK



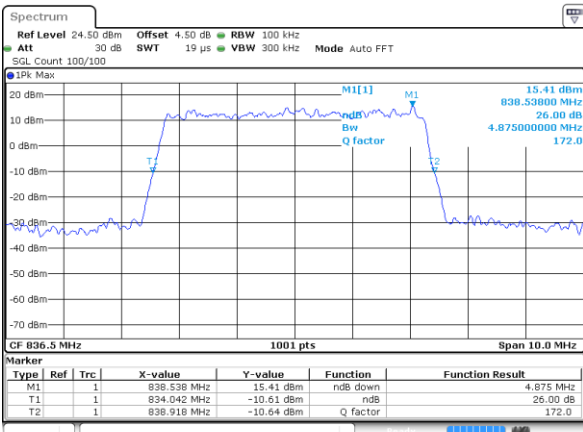
Date: 8 NOV 2020 01:05:36

Lowest Channel / 5MHz / 16QAM



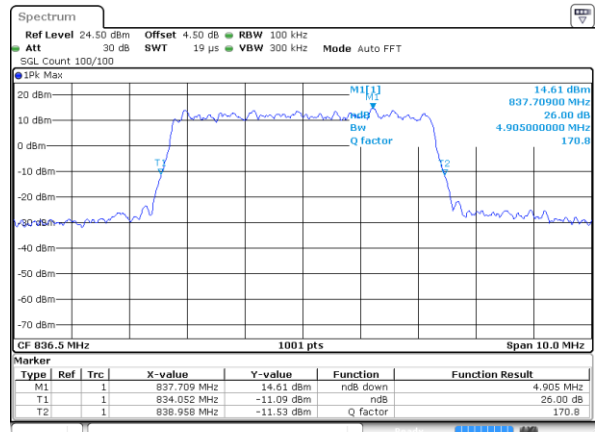
Date: 8 NOV 2020 01:05:55

Middle Channel / 5MHz / QPSK



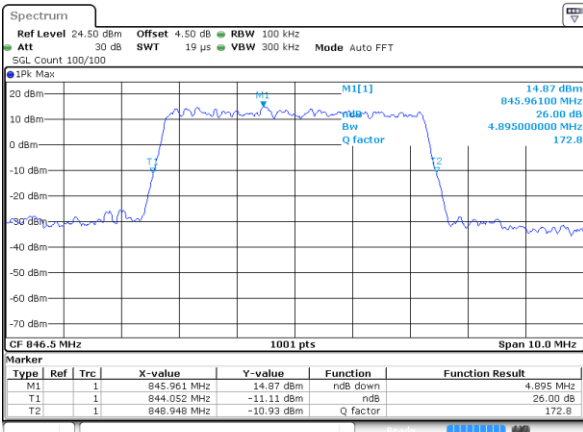
Date: 8 NOV 2020 01:07:15

Middle Channel / 5MHz / 16QAM



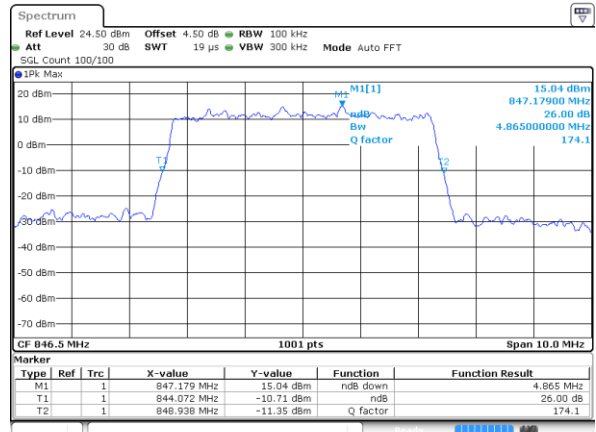
Date: 8 NOV 2020 01:06:55

Highest Channel / 5MHz / QPSK



Date: 8 NOV 2020 01:07:35

Highest Channel / 5MHz / 16QAM

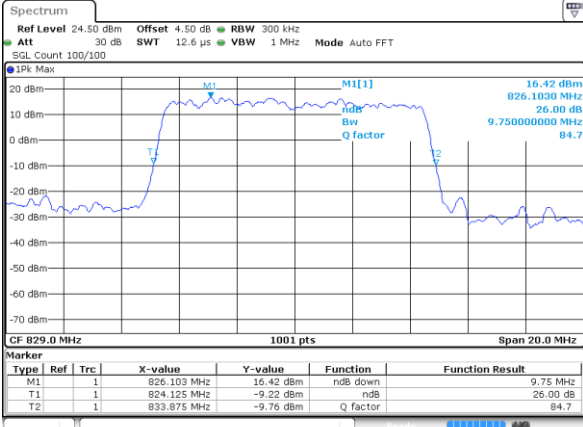


Date: 8 NOV 2020 01:07:55



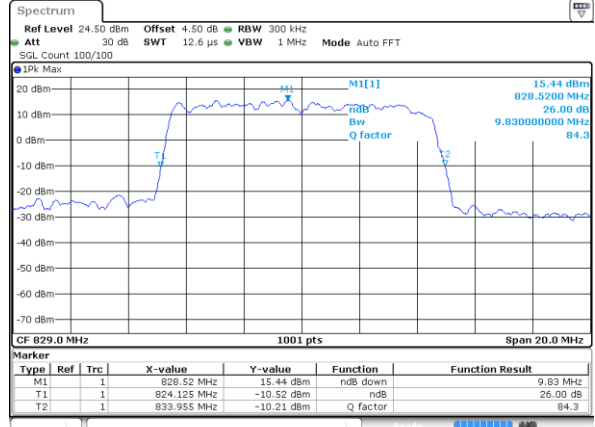
LTE Band 26

Lowest Channel / 10MHz / QPSK



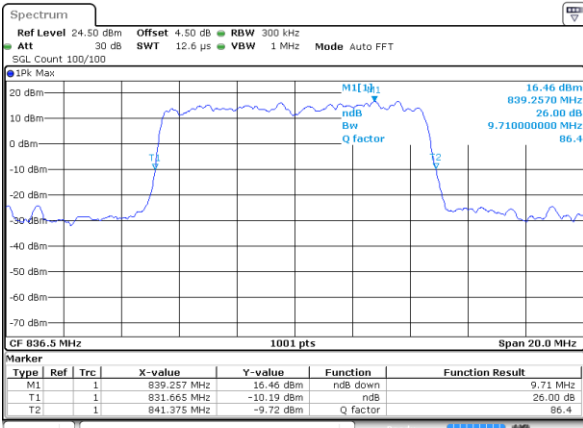
Date: 8 NOV 2020 01:24:14

Lowest Channel / 10MHz / 16QAM



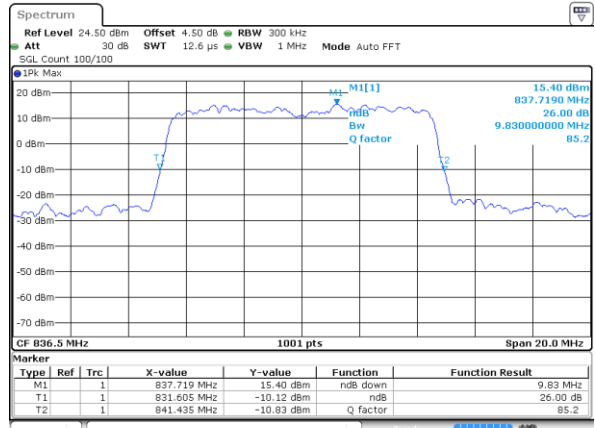
Date: 8 NOV 2020 01:24:34

Middle Channel / 10MHz / QPSK



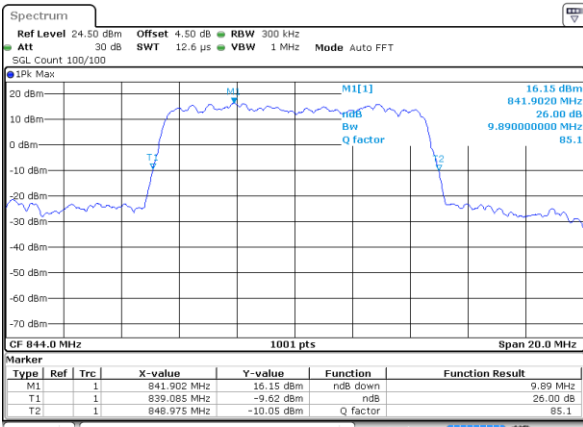
Date: 8 NOV 2020 01:25:53

Middle Channel / 10MHz / 16QAM



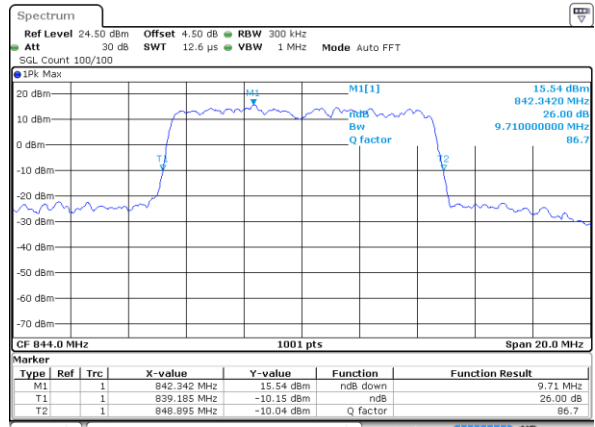
Date: 8 NOV 2020 01:25:33

Highest Channel / 10MHz / QPSK



Date: 8 NOV 2020 01:26:13

Highest Channel / 10MHz / 16QAM



Date: 8 NOV 2020 01:26:33