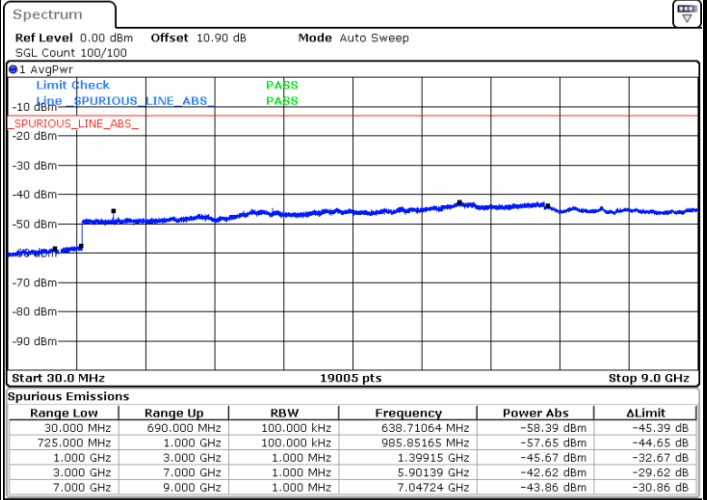
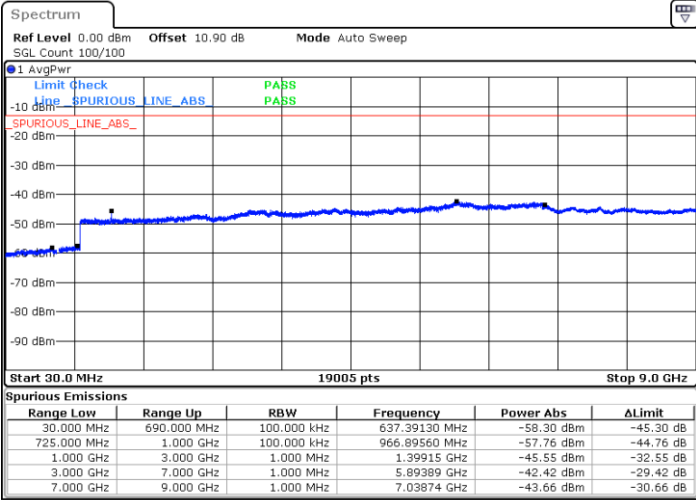




LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

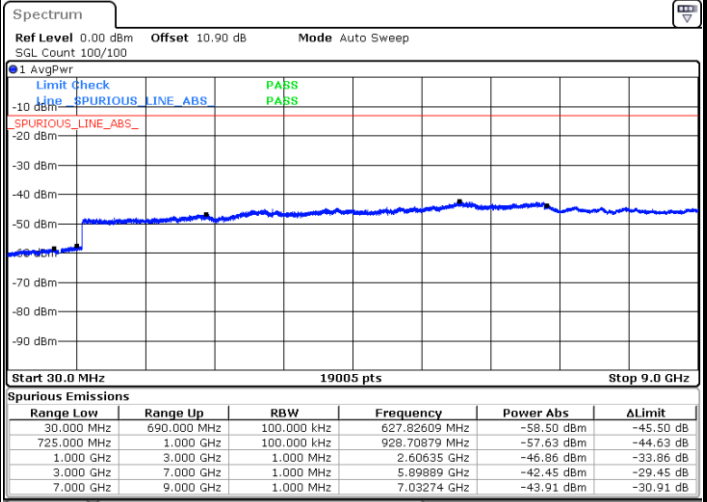
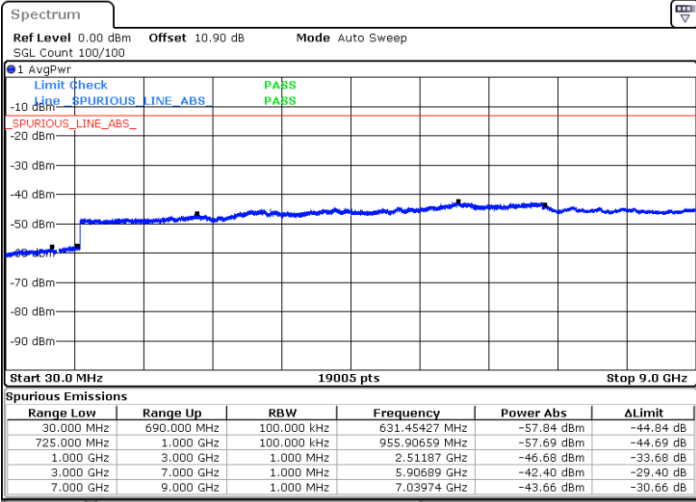


Date: 8.MAY.2020 00:05:05

Date: 8.MAY.2020 00:05:50

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 8.MAY.2020 00:08:04

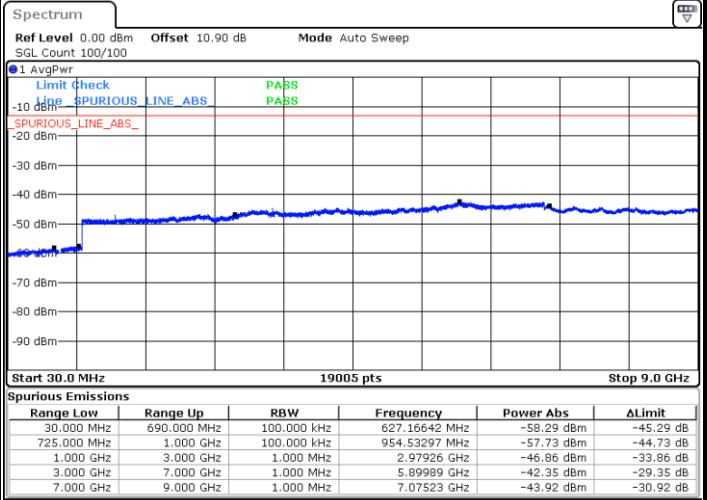
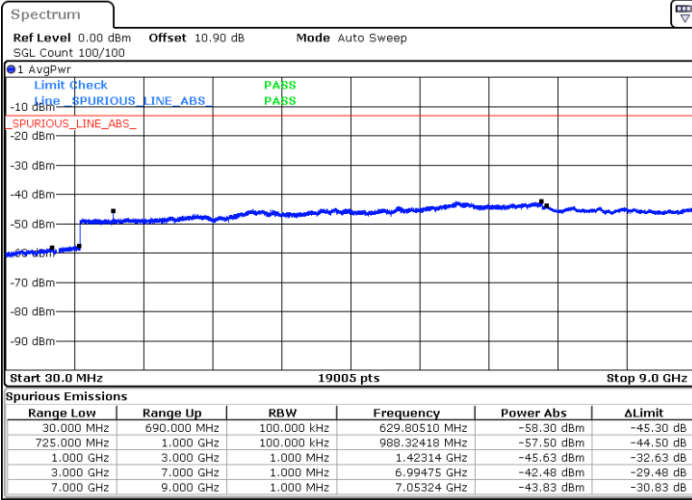
Date: 8.MAY.2020 00:07:19



LTE Band 12 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



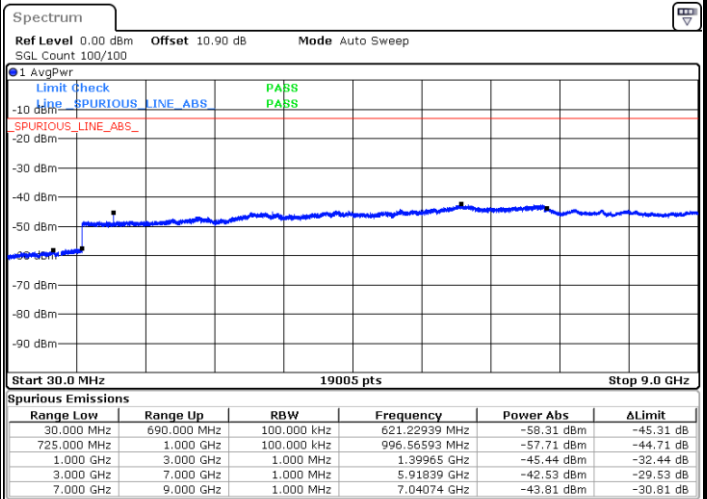
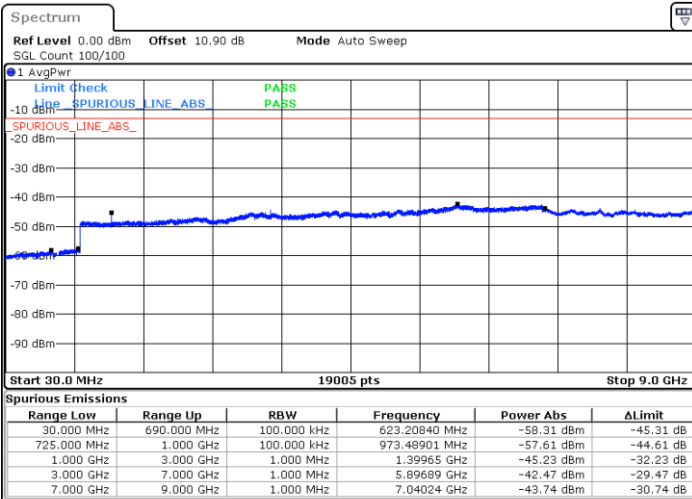
Date: 8.MAY.2020 00:12:57

Date: 8.MAY.2020 00:12:12

LTE Band 12 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 8.MAY.2020 00:17:05

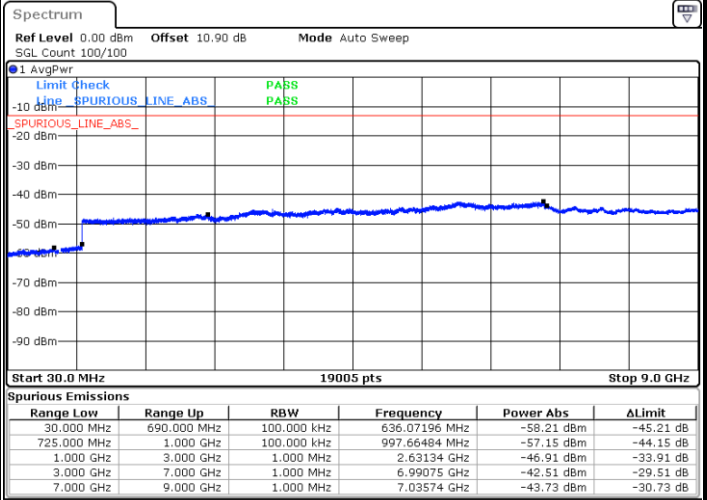
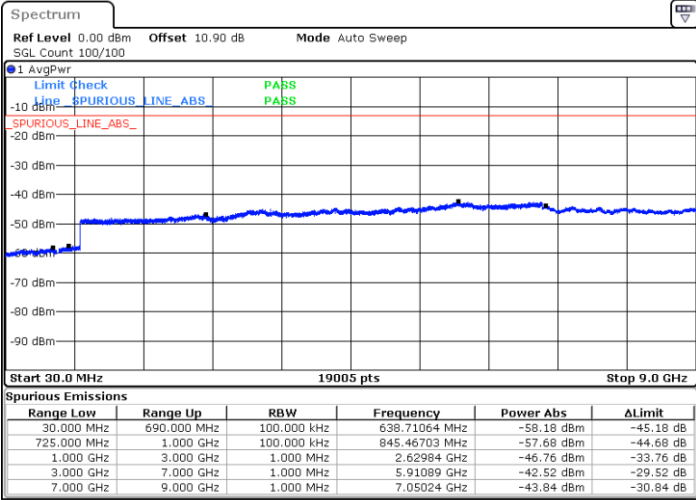
Date: 8.MAY.2020 00:17:49



LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

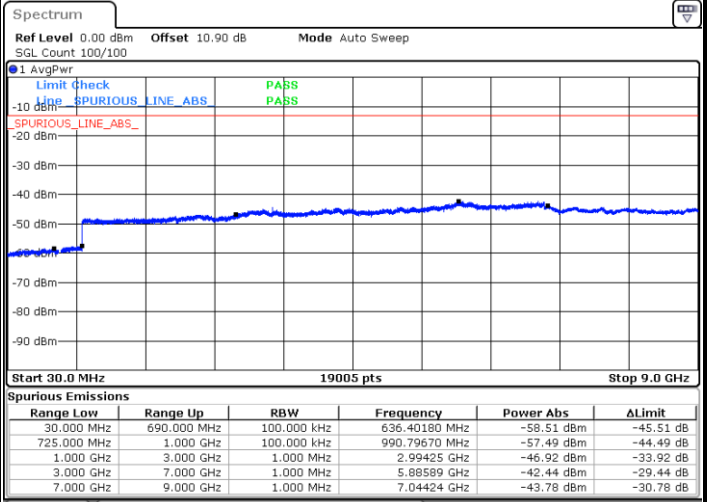
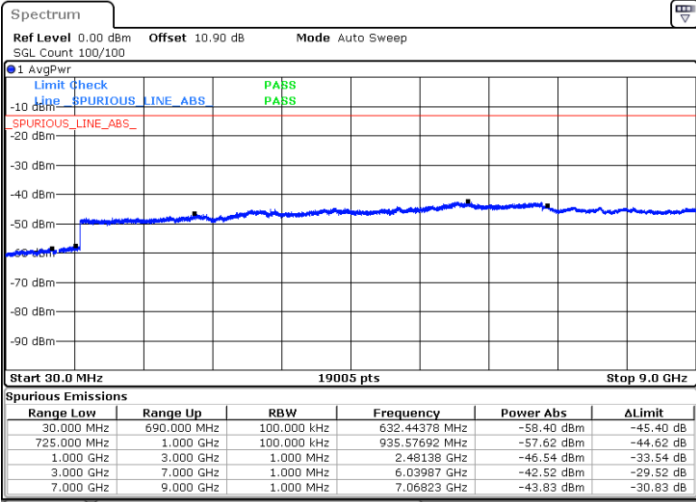


Date: 8.MAY.2020 00:20:04

Date: 8.MAY.2020 00:19:19

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 8.MAY.2020 00:24:11

Date: 8.MAY.2020 00:24:56



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	0.0011	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0020	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0034	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0037	
-20	Normal Voltage	0.0038	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0017	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

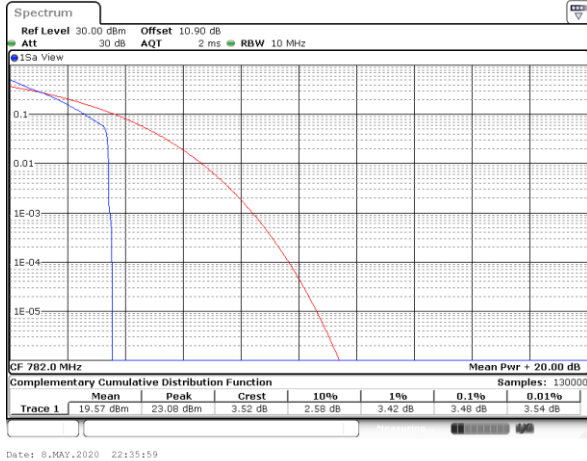
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.48	4.49	4.35	5.83	
Highest CH	-	-	-	-	



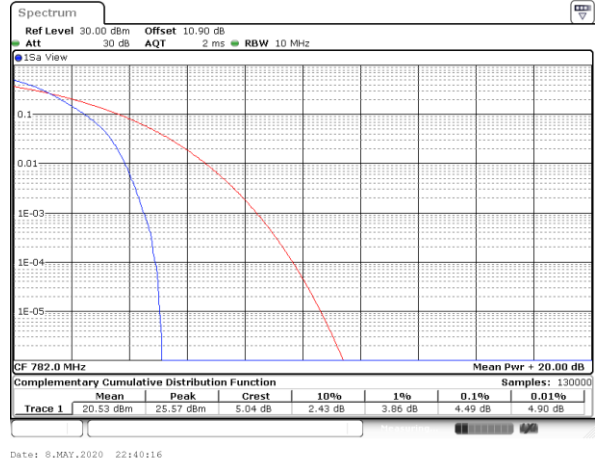
LTE Band 13 / 10MHz / QPSK

Middle Channel/ 1RB



Date: 8.MAY.2020 22:13:59

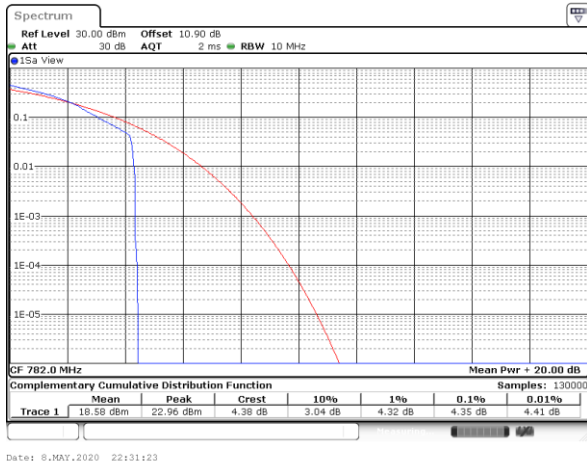
Middle Channel / Full RB



Date: 8.MAY.2020 22:14:16

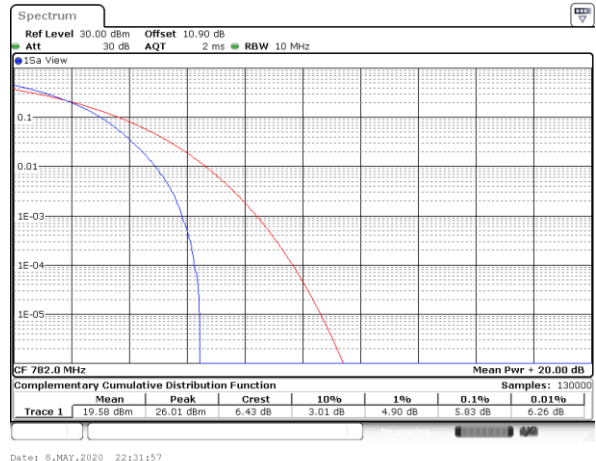
LTE Band 13 / 10MHz / 16QAM

Middle Channel/ 1RB



Date: 8.MAY.2020 22:13:123

Middle Channel / Full RB



Date: 8.MAY.2020 22:31:57



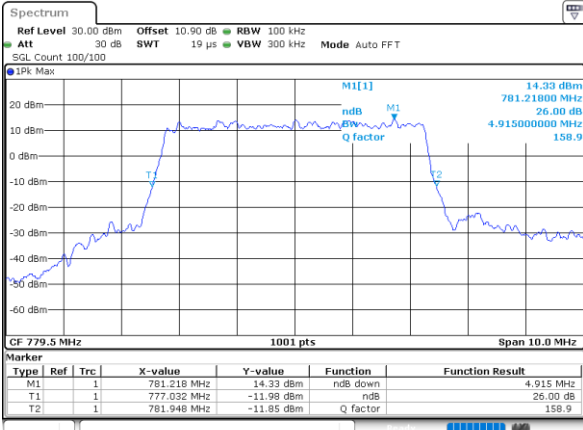
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.92	4.91	-	-	-	-	-	-
Middle CH	-	-	-	-	4.91	4.93	9.85	9.67	-	-	-	-
Highest CH	-	-	-	-	4.74	4.85	-	-	-	-	-	-



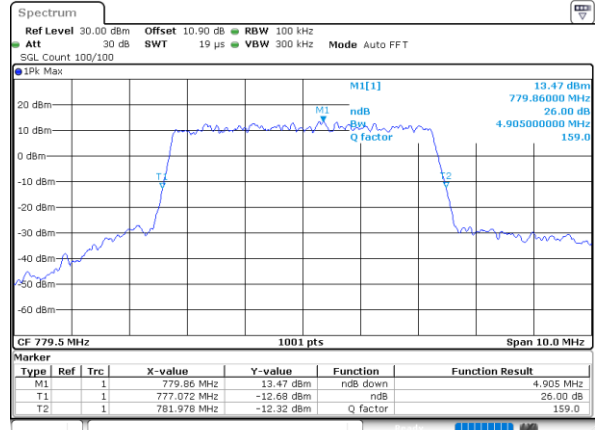
LTE Band 13

Lowest Channel / 5MHz / QPSK



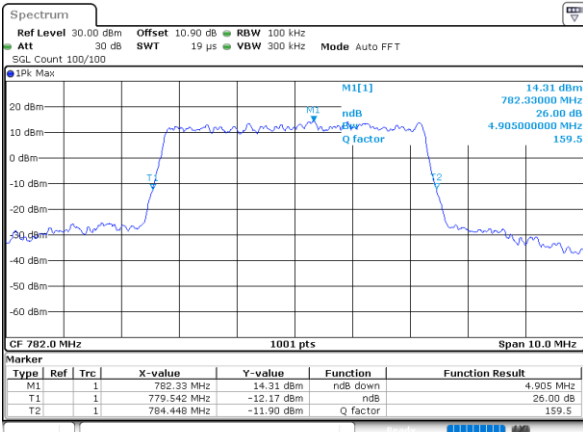
Date: 8.MAY.2020 21:58:48

Lowest Channel / 5MHz / 16QAM



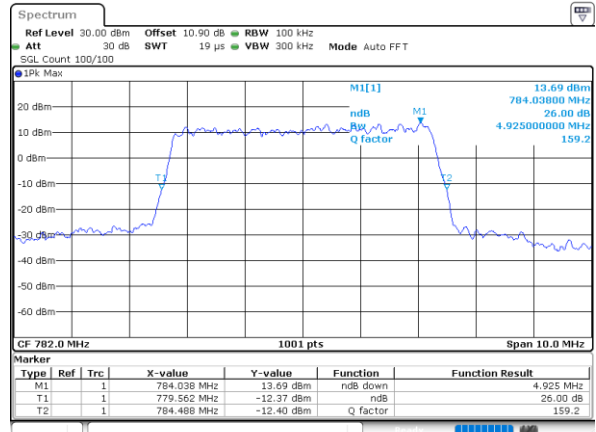
Date: 8.MAY.2020 21:58:36

Middle Channel / 5MHz / QPSK



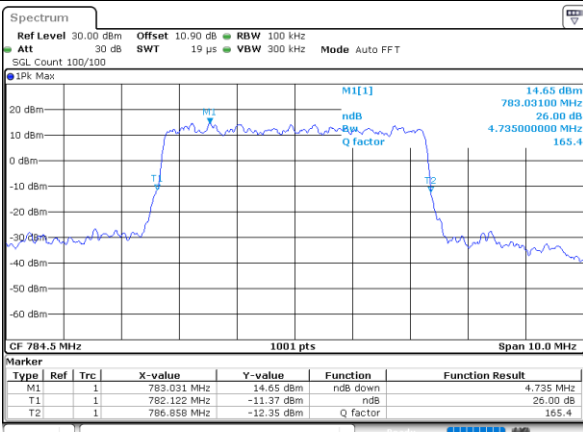
Date: 8.MAY.2020 22:08:22

Middle Channel / 5MHz / 16QAM



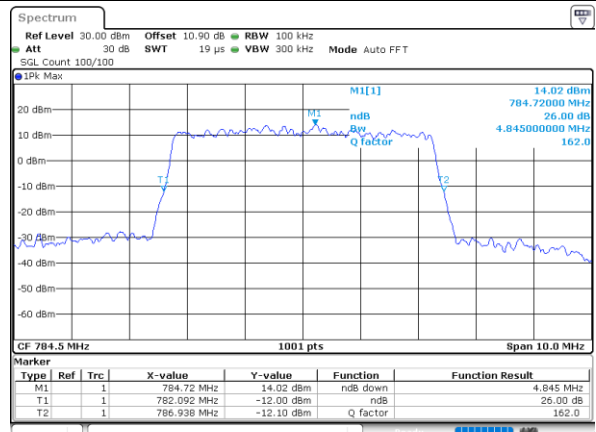
Date: 8.MAY.2020 22:08:34

Highest Channel / 5MHz / QPSK



Date: 8.MAY.2020 22:09:45

Highest Channel / 5MHz / 16QAM

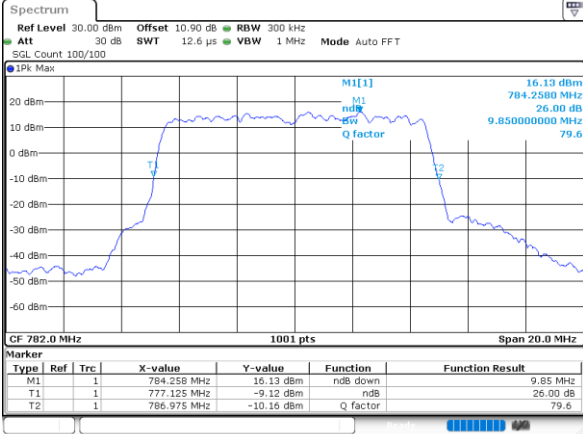


Date: 8.MAY.2020 22:09:33

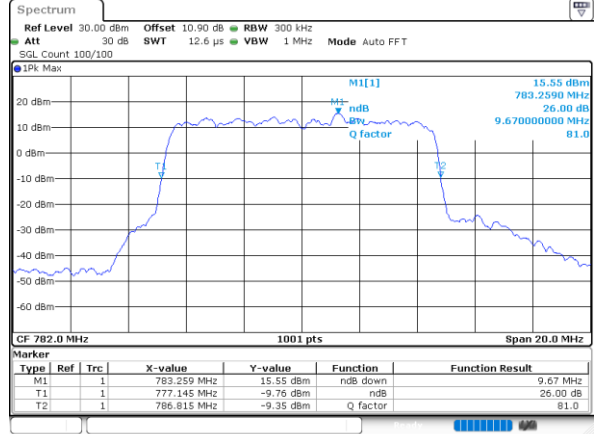


LTE Band 13

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM





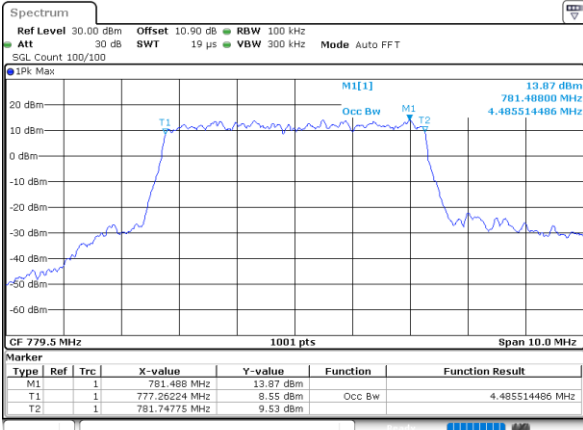
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	4.49	8.99	8.97	-	-	-	-
Highest CH	-	-	-	-	4.49	4.46	-	-	-	-	-	-



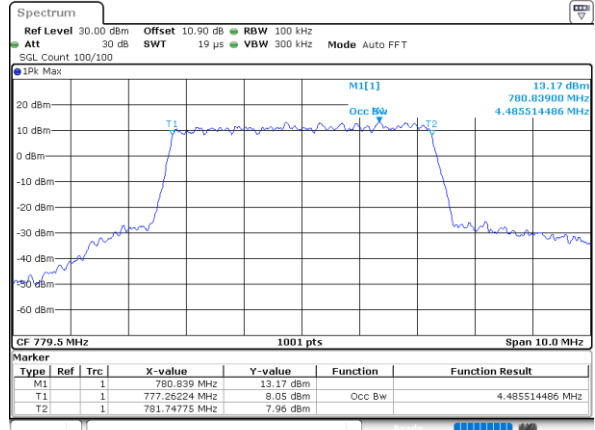
LTE Band 13

Lowest Channel / 5MHz / QPSK



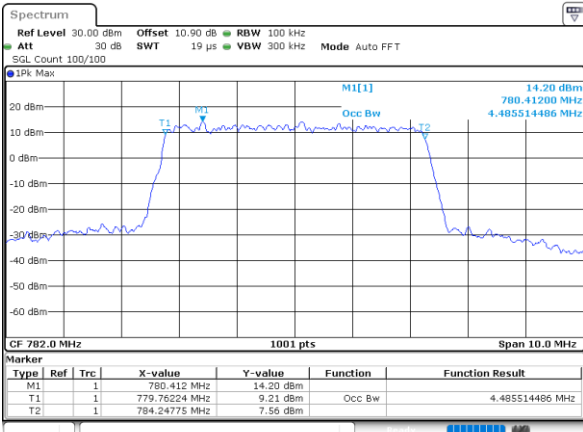
Date: 8_MAY.2020 21:58:12

Lowest Channel / 5MHz / 16QAM



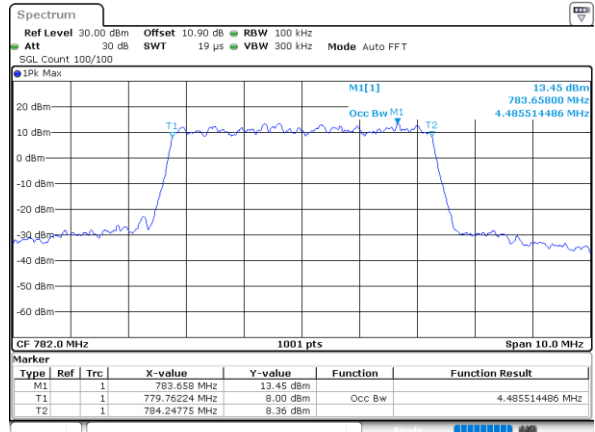
Date: 8_MAY.2020 21:58:24

Middle Channel / 5MHz / QPSK



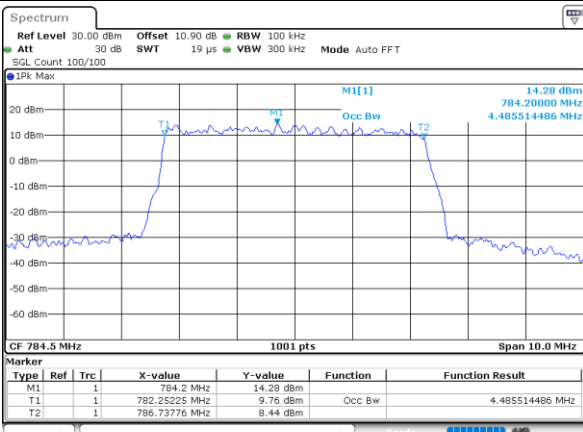
Date: 8_MAY.2020 22:08:57

Middle Channel / 5MHz / 16QAM



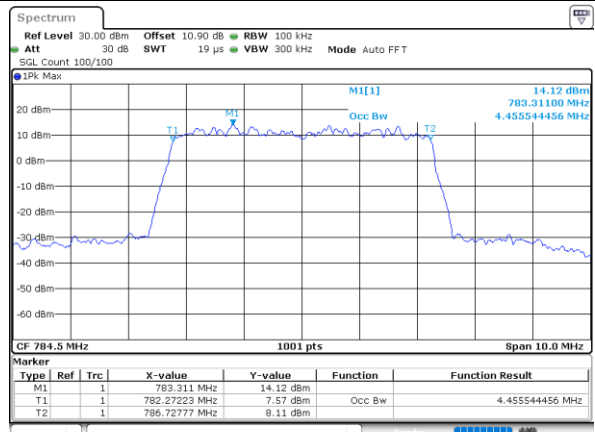
Date: 8_MAY.2020 22:08:45

Highest Channel / 5MHz / QPSK



Date: 8_MAY.2020 22:09:09

Highest Channel / 5MHz / 16QAM

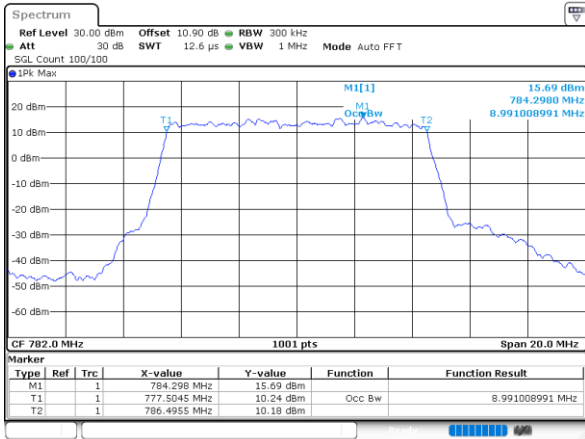


Date: 8_MAY.2020 22:09:21



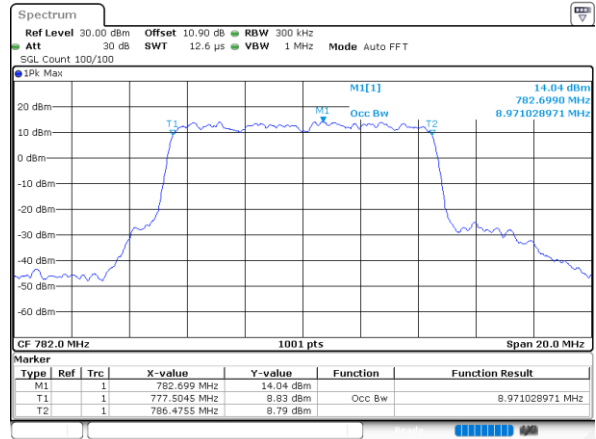
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 8.MAY.2020 22:18:00

Middle Channel / 10MHz / 16QAM



Date: 8.MAY.2020 22:18:12

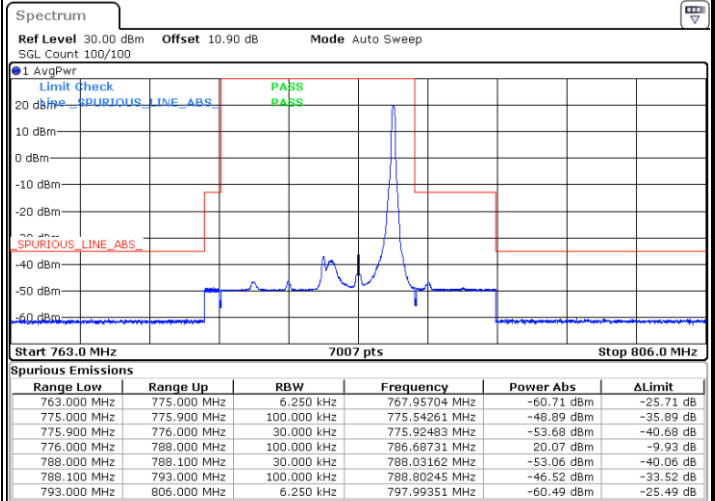
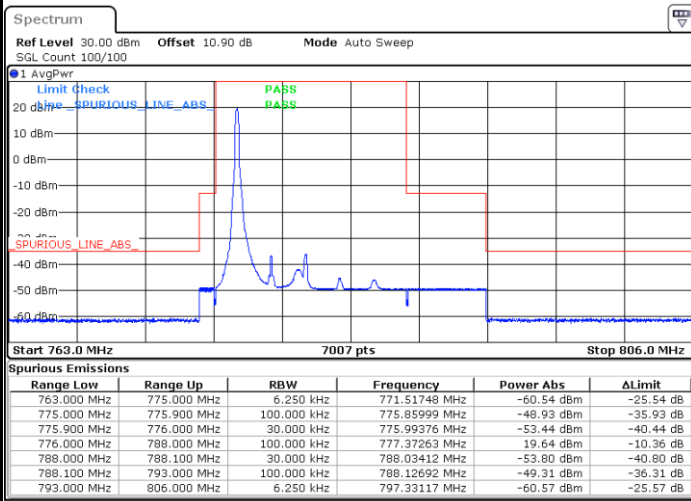


Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

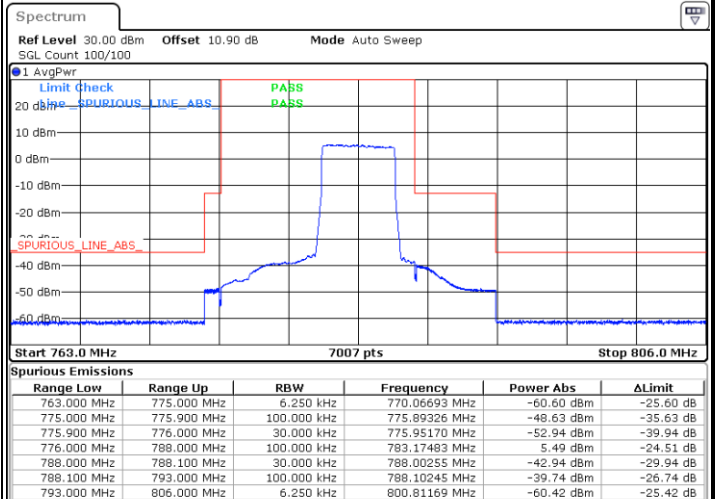
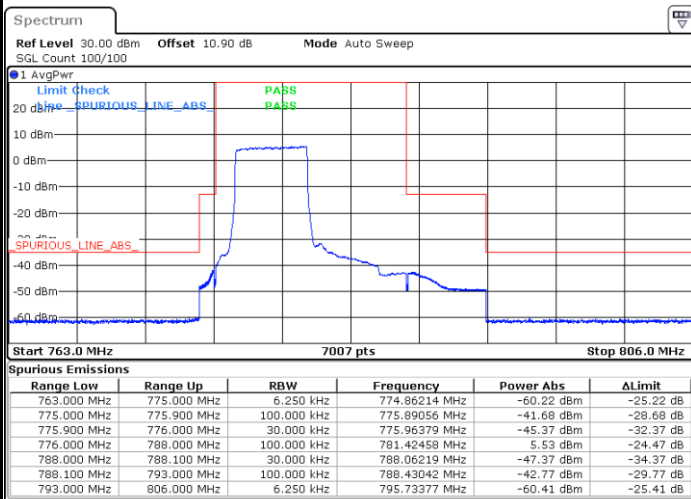


Date: 8.MAY.2020 21:43:06

Date: 8.MAY.2020 21:54:02

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 8.MAY.2020 21:38:04

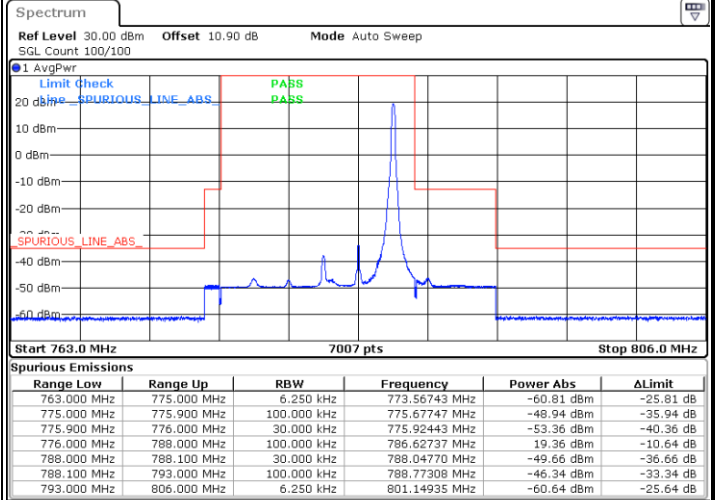
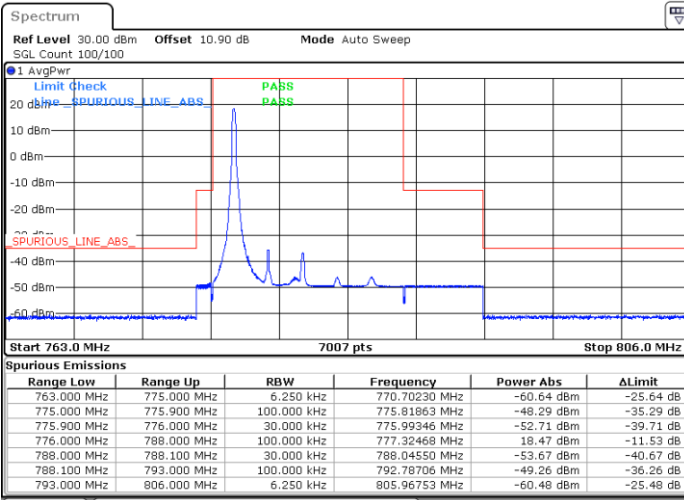
Date: 8.MAY.2020 21:49:01



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

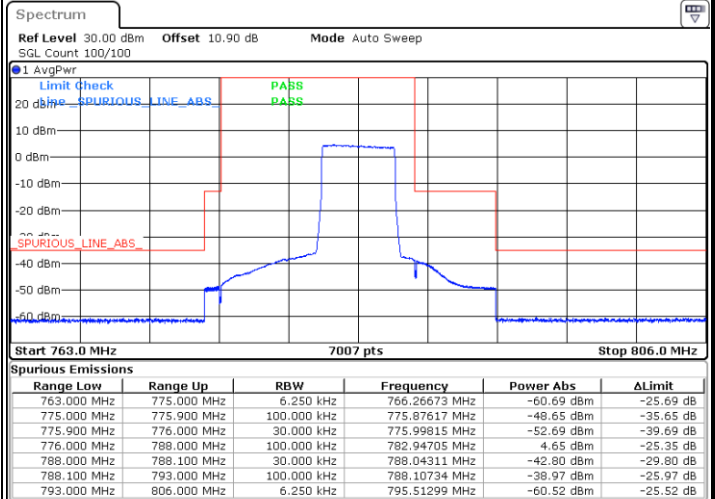
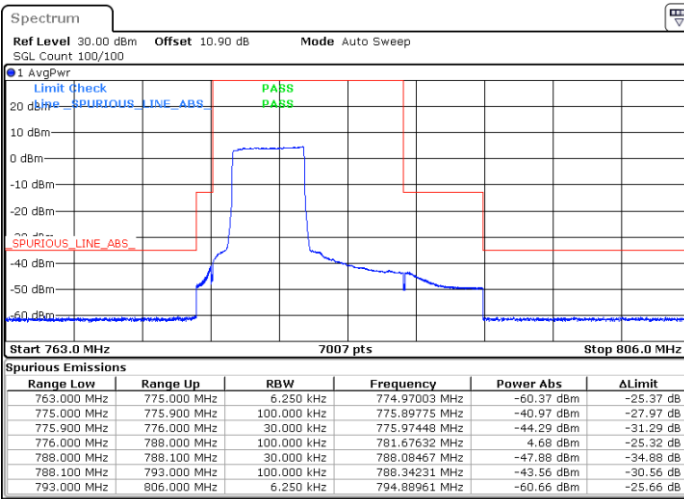


Date: 8.MAY.2020 21:41:25

Date: 8.MAY.2020 21:52:22

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



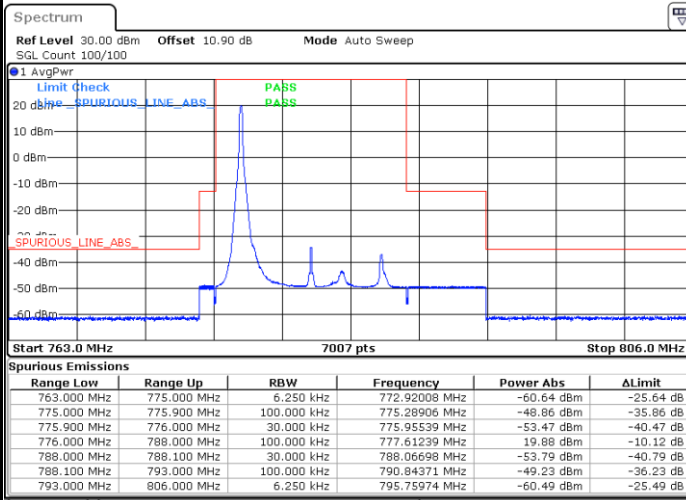
Date: 8.MAY.2020 21:39:45

Date: 8.MAY.2020 21:50:42



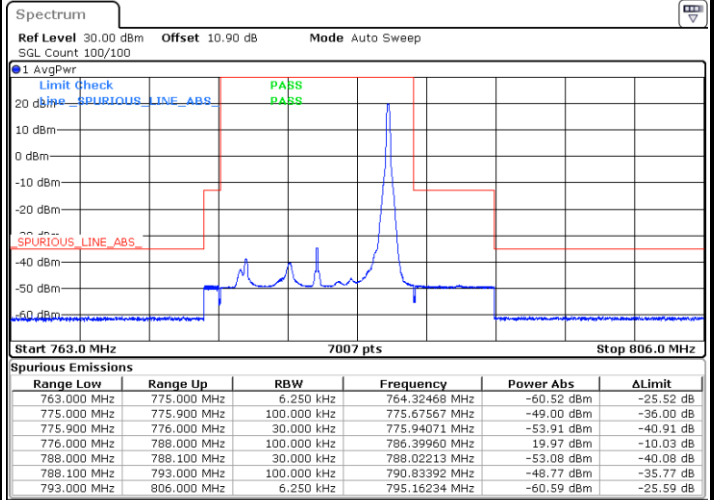
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



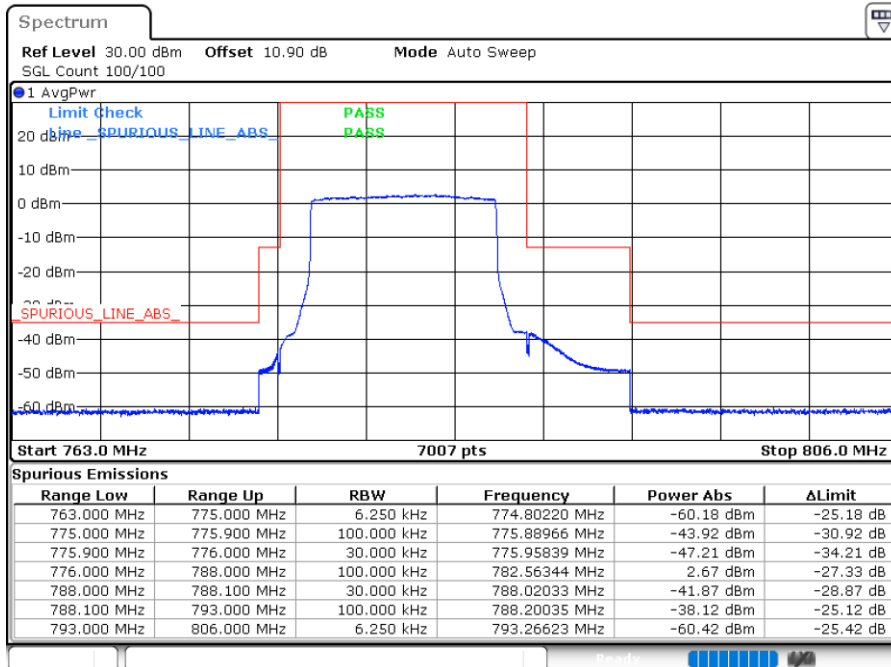
Date: 8.MAY.2020 20:06:35

Highest Band Edge / 1 RB



Date: 8.MAY.2020 20:08:15

Band Edge / Full RB



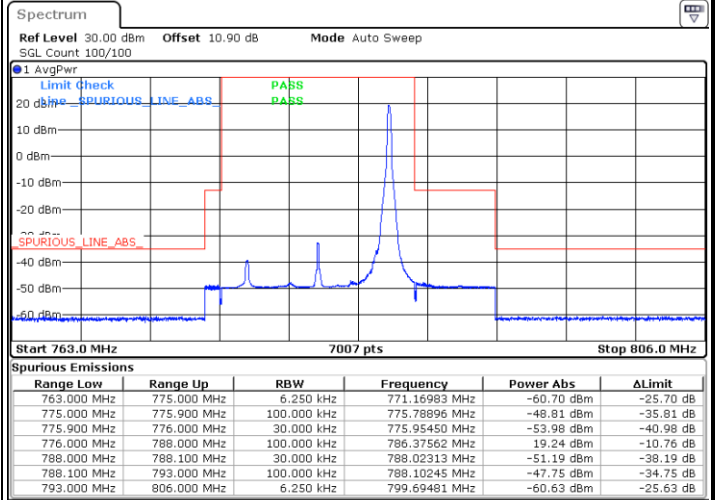
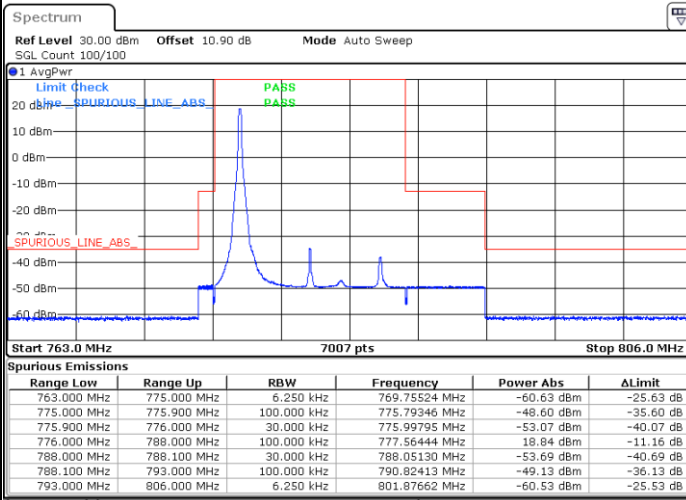
Date: 8.MAY.2020 20:01:35



LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

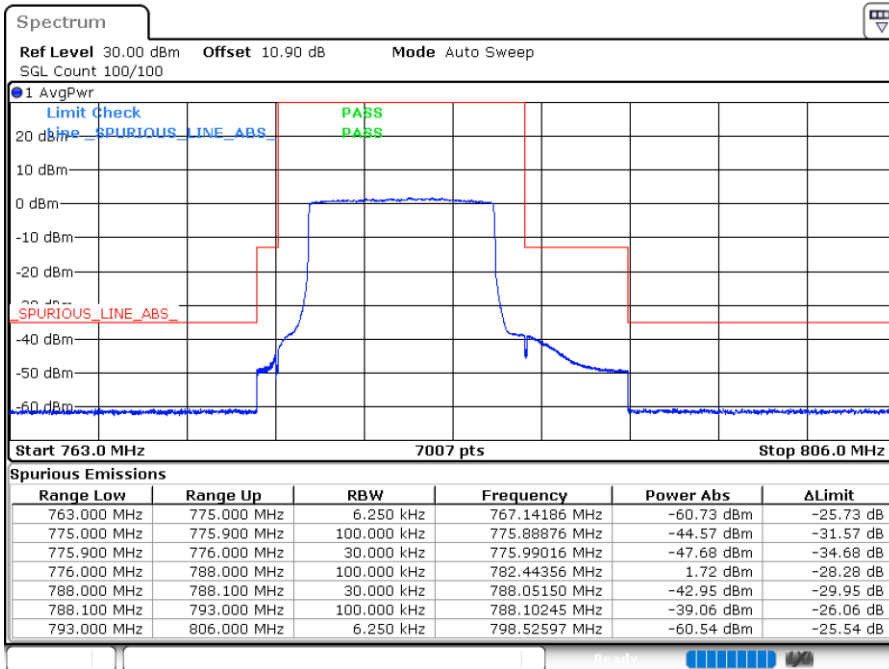
Highest Band Edge / 1 RB



Date: 8.MAY.2020 20:04:55

Date: 8.MAY.2020 20:09:55

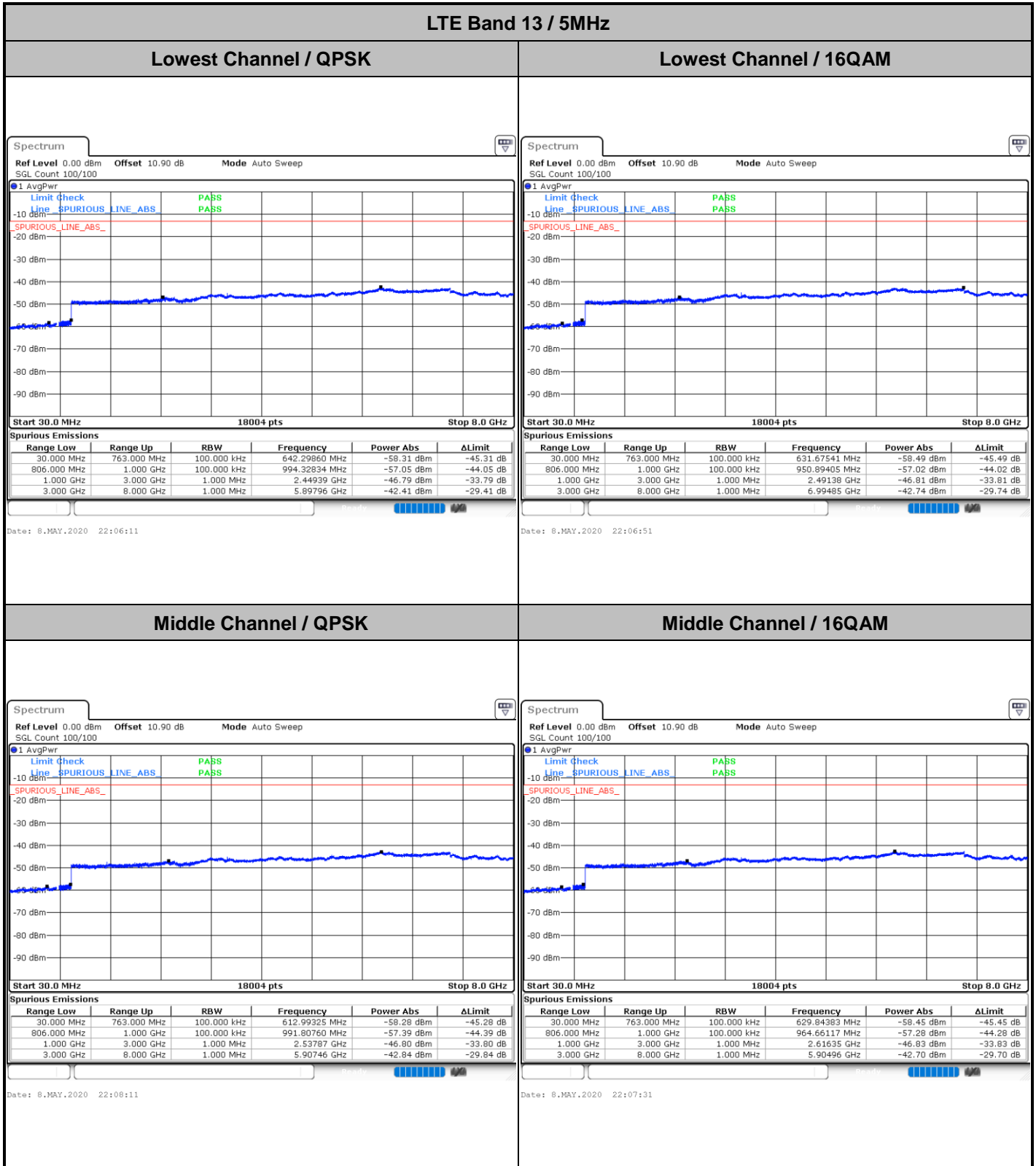
Band Edge / Full RB



Date: 8.MAY.2020 20:03:15



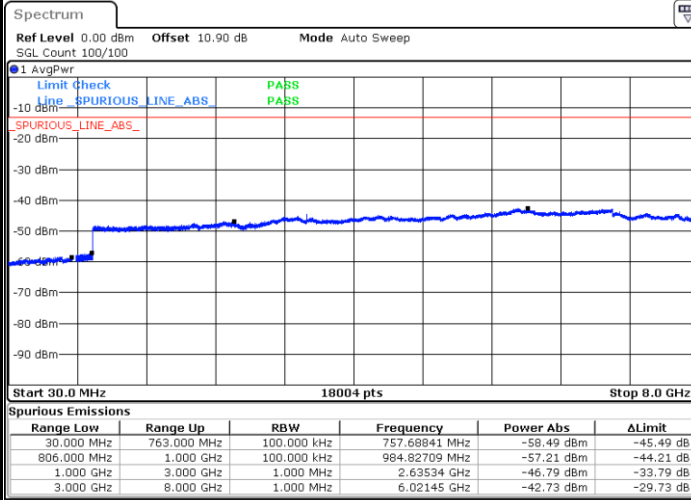
Conducted Spurious Emission





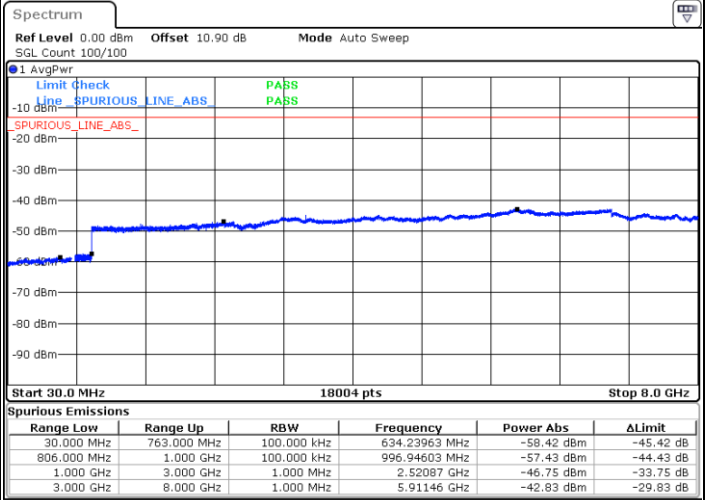
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 8.MAY.2020 22:17:08

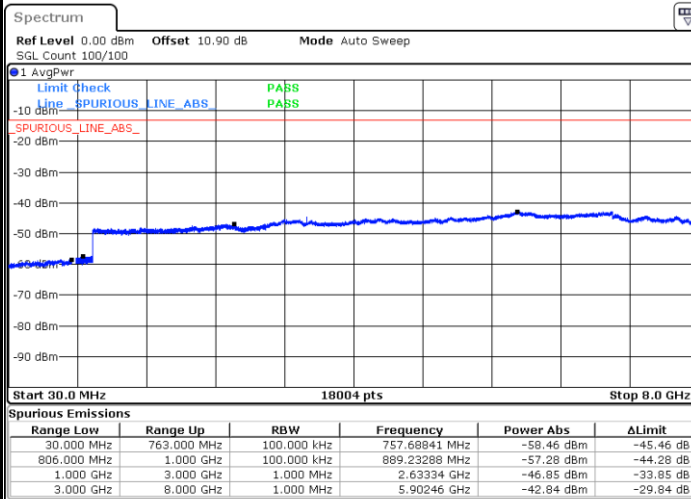
Highest Channel / 16QAM



Date: 8.MAY.2020 22:17:48

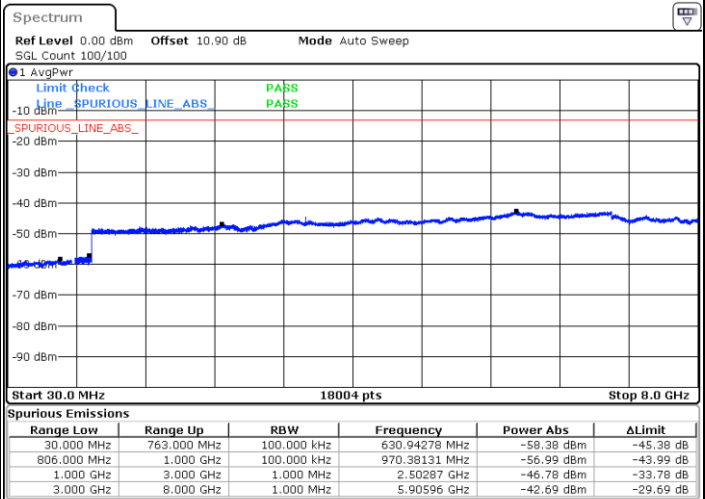
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 8.MAY.2020 22:29:54

Middle Channel / 16QAM



Date: 8.MAY.2020 22:29:15



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	0.0051	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0029	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0036	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0031	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0026	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 66

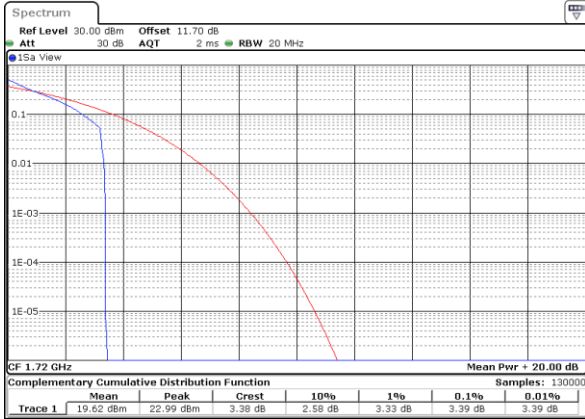
Peak-to-Average Ratio

Mode	LTE Band 66 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.39	4.35	3.94	5.62	PASS
Middle CH	3.54	4.35	4.9	5.65	
Highest CH	3.48	4.26	4.38	5.54	



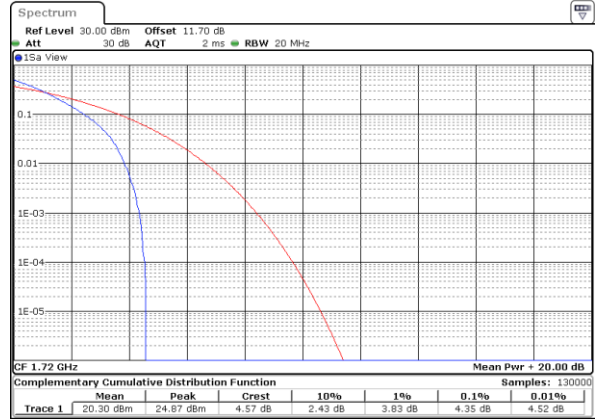
LTE Band 66 / 20MHz / QPSK

Lowest Channel / 1RB



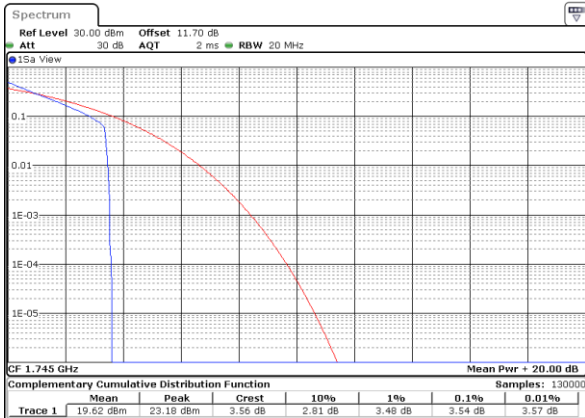
Date: 9_MAY.2020 00:40:31

Lowest Channel / Full RB



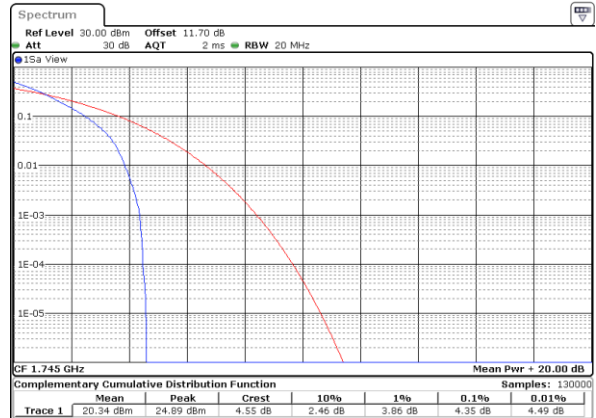
Date: 9_MAY.2020 00:40:41

Middle Channel / 1RB



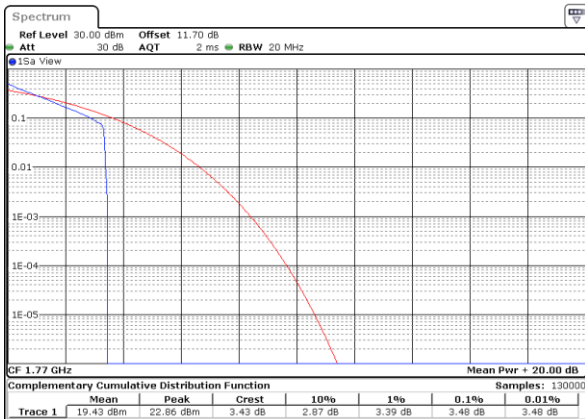
Date: 9_MAY.2020 00:40:52

Middle Channel / Full RB



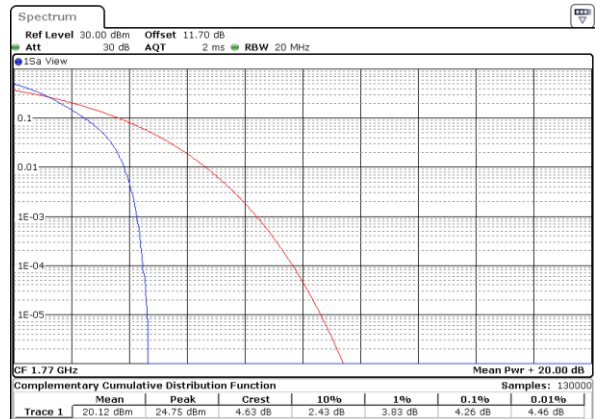
Date: 9_MAY.2020 00:41:02

Highest Channel / 1RB



Date: 9_MAY.2020 00:41:12

Highest Channel / Full RB

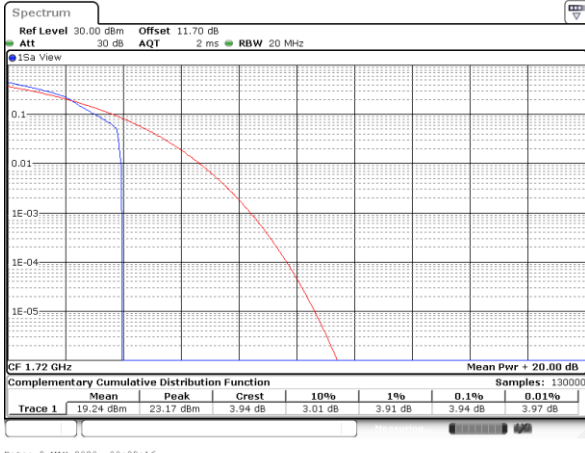


Date: 9_MAY.2020 00:41:22



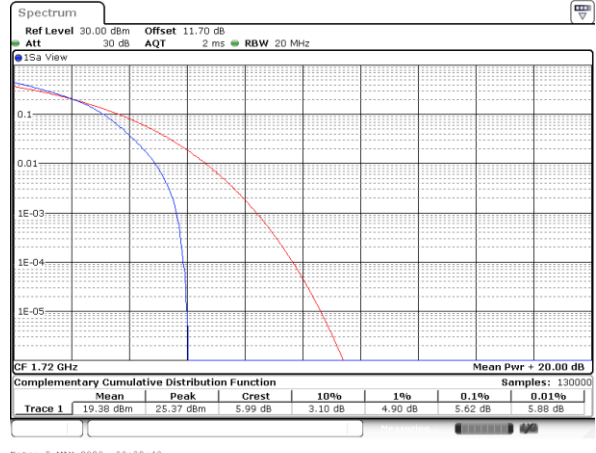
LTE Band 66 / 20MHz / 16QAM

Lowest Channel / 1RB



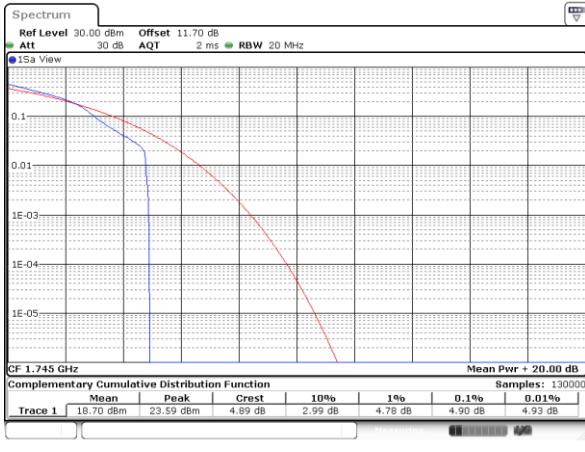
Date: 9.MAY.2020 00:39:16

Lowest Channel / Full RB



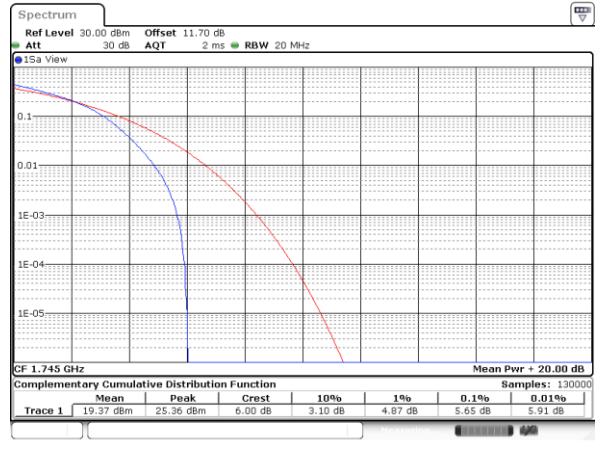
Date: 9.MAY.2020 00:39:40

Middle Channel / 1RB



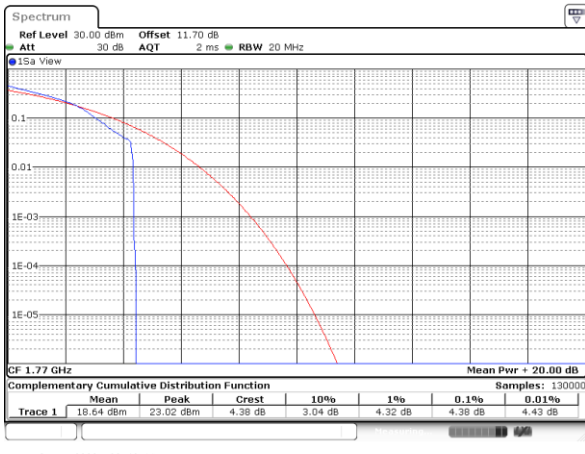
Date: 9.MAY.2020 00:39:50

Middle Channel / Full RB



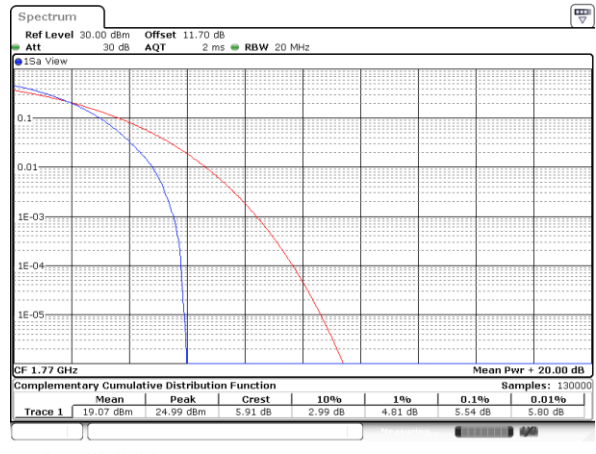
Date: 9.MAY.2020 00:40:01

Highest Channel / 1RB



Date: 9.MAY.2020 00:40:11

Highest Channel / Full RB



Date: 9.MAY.2020 00:40:21



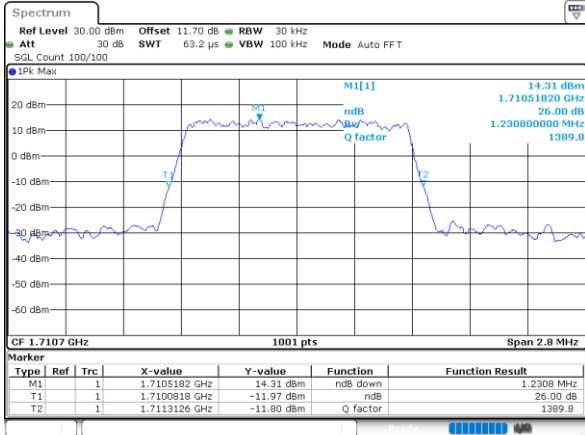
26dB Bandwidth

Mode	LTE Band 66 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.23	1.23	3.02	2.96	4.93	4.83	9.79	9.77	14.36	14.27	19.06	19.18
Middle CH	1.23	1.22	3.02	3.02	4.86	4.95	9.95	9.69	14.63	14.24	19.02	19.10
Highest CH	1.22	1.22	2.99	2.98	4.79	4.93	9.75	9.77	14.63	14.18	19.10	19.06



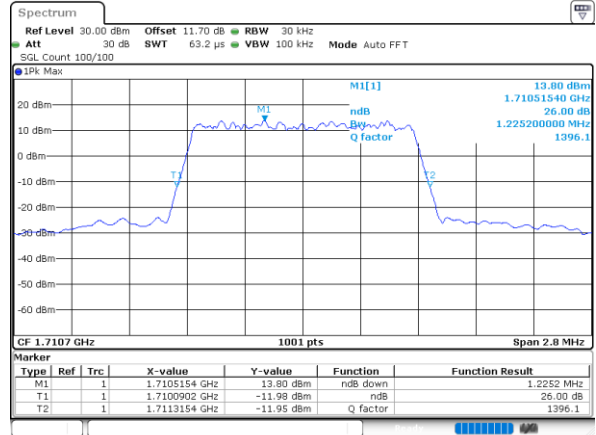
LTE Band 66

Lowest Channel / 1.4MHz / QPSK



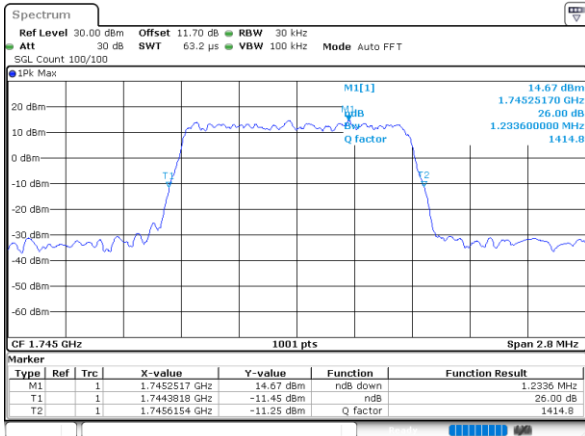
Date: 8.MAY.2020 23:10:53

Lowest Channel / 1.4MHz / 16QAM



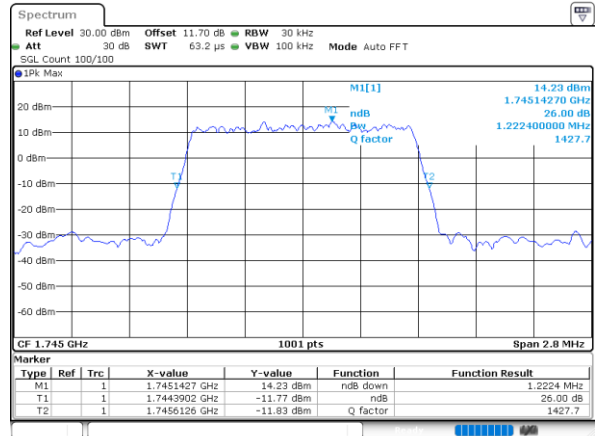
Date: 8.MAY.2020 23:11:05

Middle Channel / 1.4MHz / QPSK



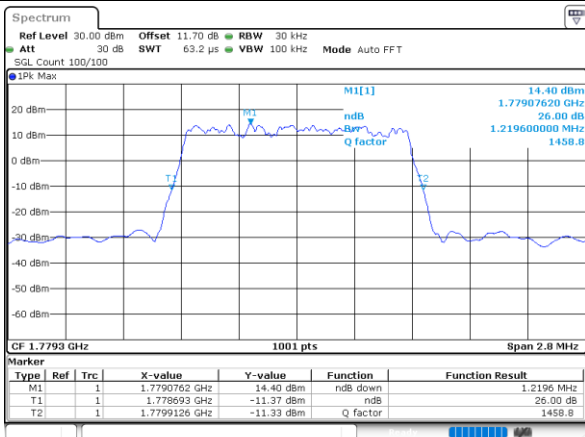
Date: 8.MAY.2020 23:17:18

Middle Channel / 1.4MHz / 16QAM



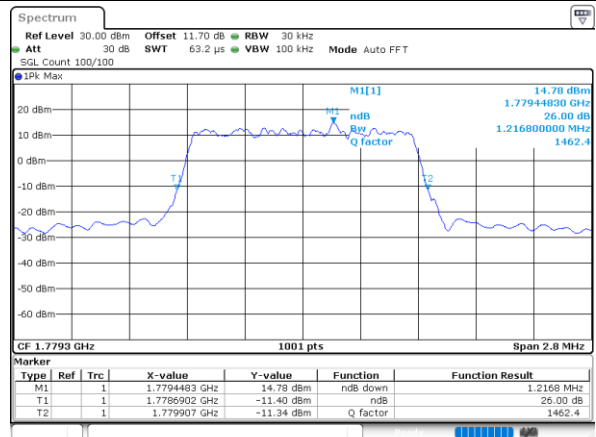
Date: 8.MAY.2020 23:17:30

Highest Channel / 1.4MHz / QPSK



Date: 8.MAY.2020 23:19:30

Highest Channel / 1.4MHz / 16QAM

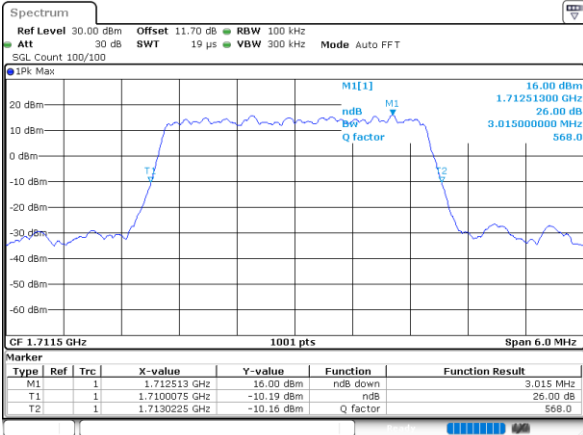


Date: 8.MAY.2020 23:19:42



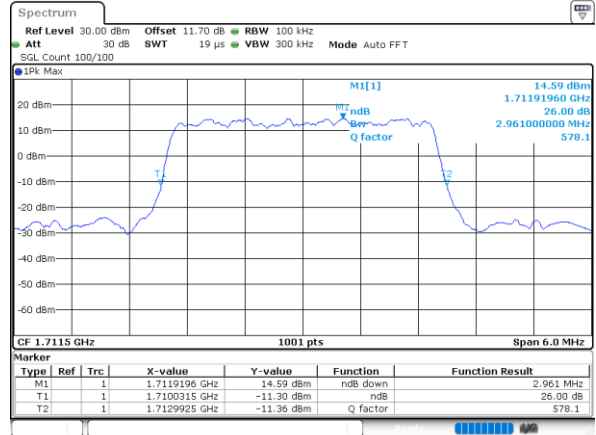
LTE Band 66

Lowest Channel / 3MHz / QPSK



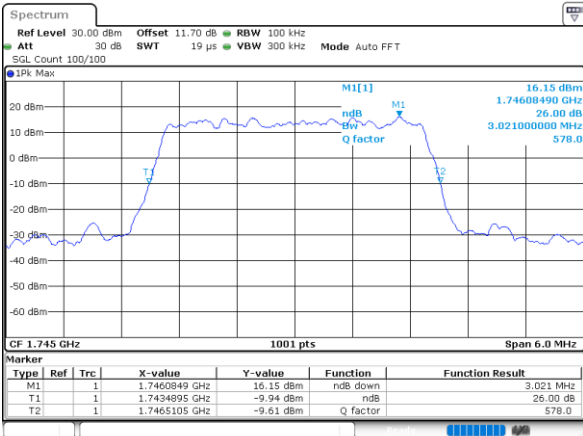
Date: 8_MAY.2020 23:25:55

Lowest Channel / 3MHz / 16QAM



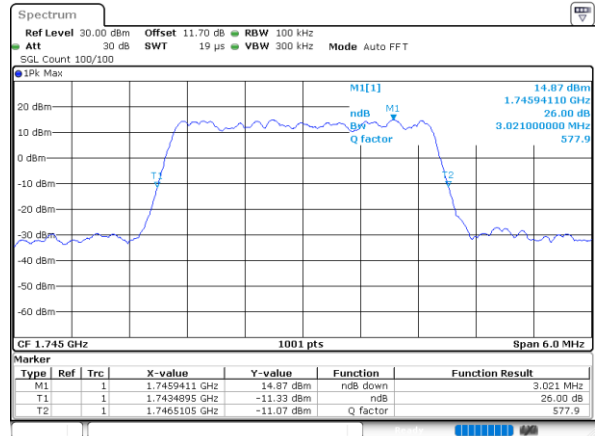
Date: 8_MAY.2020 23:26:07

Middle Channel / 3MHz / QPSK



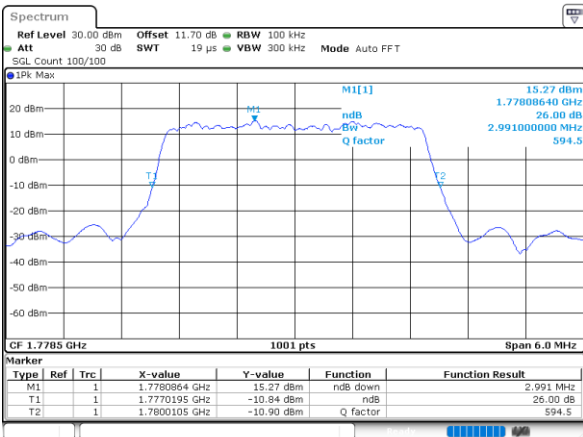
Date: 8_MAY.2020 23:32:09

Middle Channel / 3MHz / 16QAM



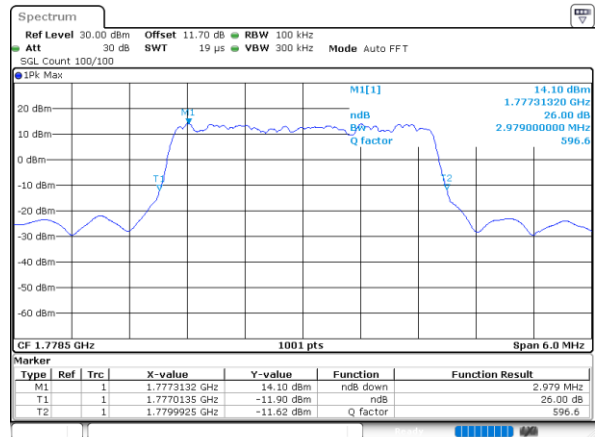
Date: 8_MAY.2020 23:32:21

Highest Channel / 3MHz / QPSK



Date: 8_MAY.2020 23:34:20

Highest Channel / 3MHz / 16QAM

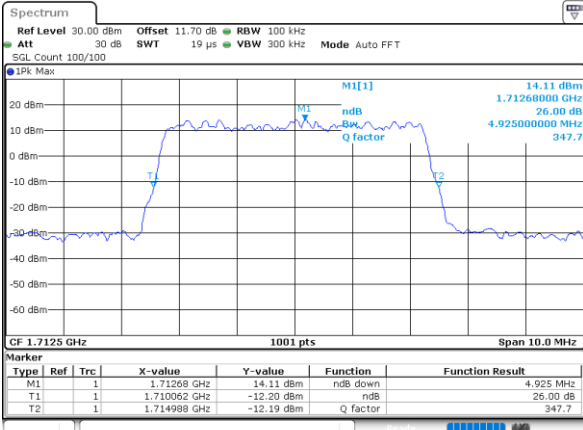


Date: 8_MAY.2020 23:34:32



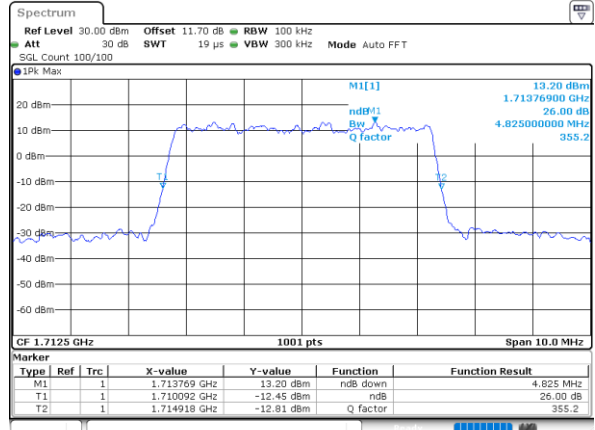
LTE Band 66

Lowest Channel / 5MHz / QPSK



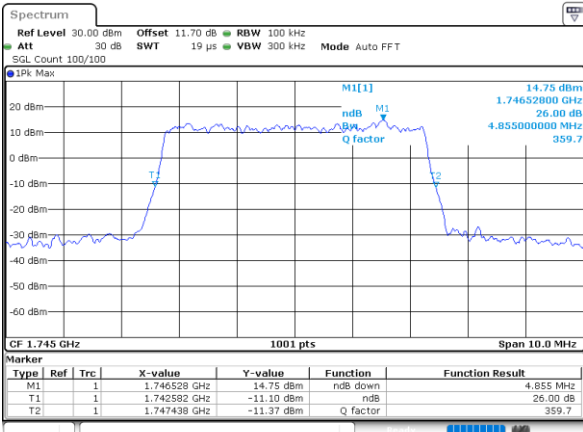
Date: 8.MAY.2020 23:40:33

Lowest Channel / 5MHz / 16QAM



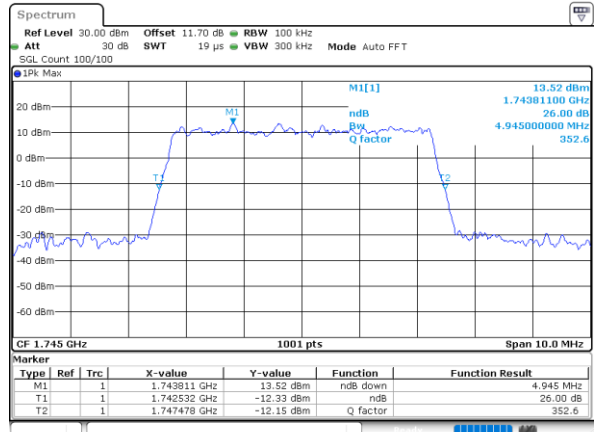
Date: 8.MAY.2020 23:40:45

Middle Channel / 5MHz / QPSK



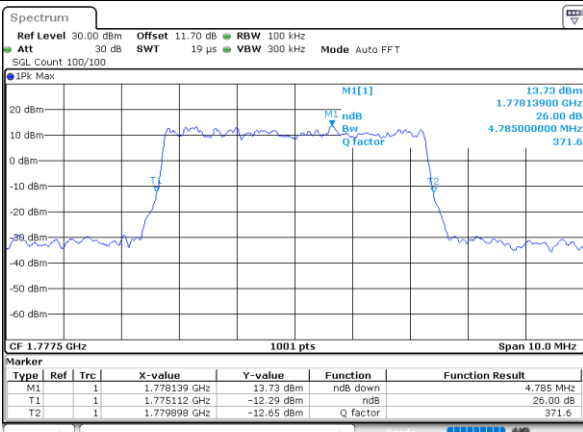
Date: 8.MAY.2020 23:46:47

Middle Channel / 5MHz / 16QAM



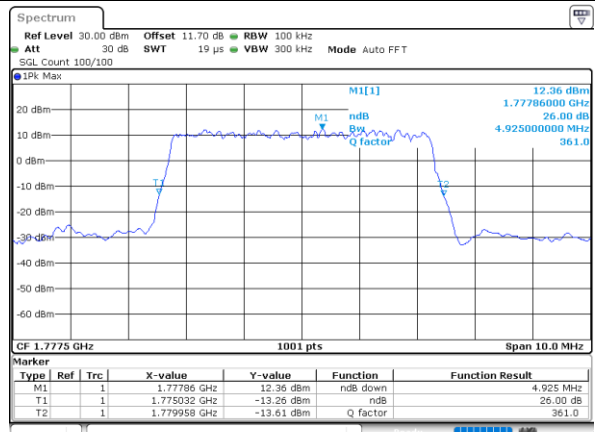
Date: 8.MAY.2020 23:46:59

Highest Channel / 5MHz / QPSK



Date: 8.MAY.2020 23:48:58

Highest Channel / 5MHz / 16QAM

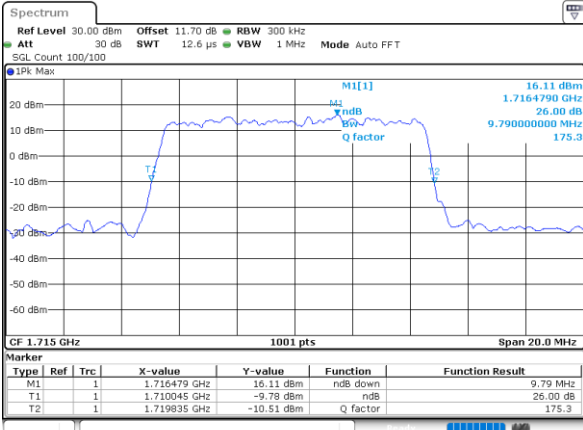


Date: 8.MAY.2020 23:49:10



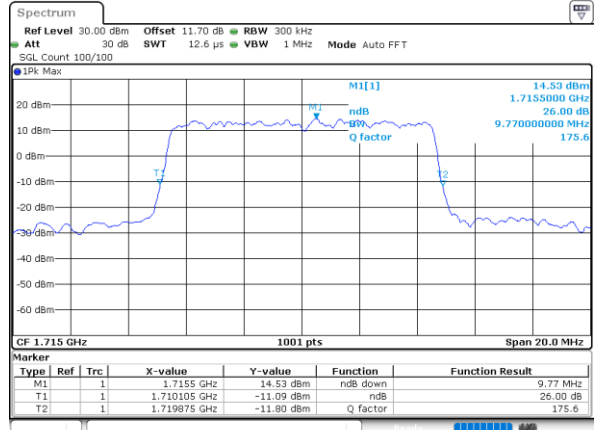
LTE Band 66

Lowest Channel / 10MHz / QPSK



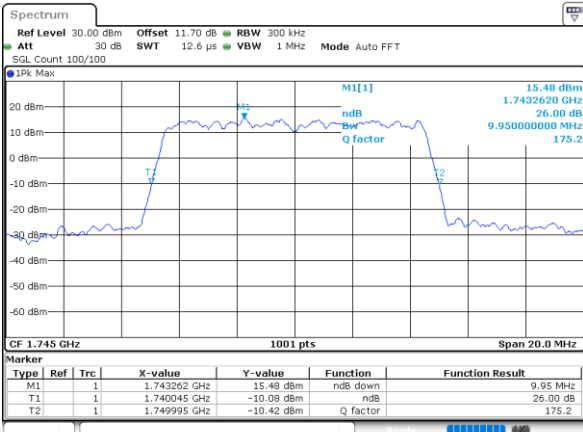
Date: 8.MAY.2020 23:55:11

Lowest Channel / 10MHz / 16QAM



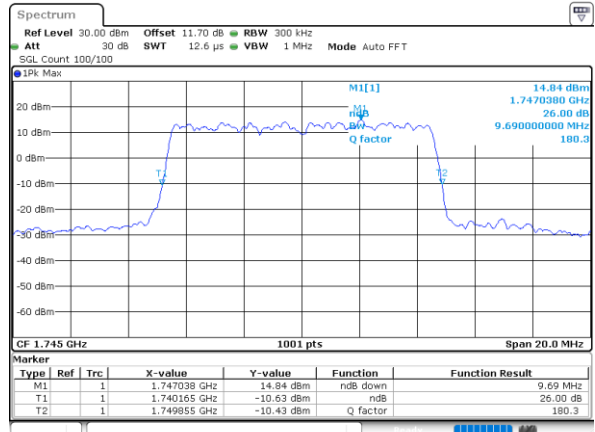
Date: 8.MAY.2020 23:55:24

Middle Channel / 10MHz / QPSK



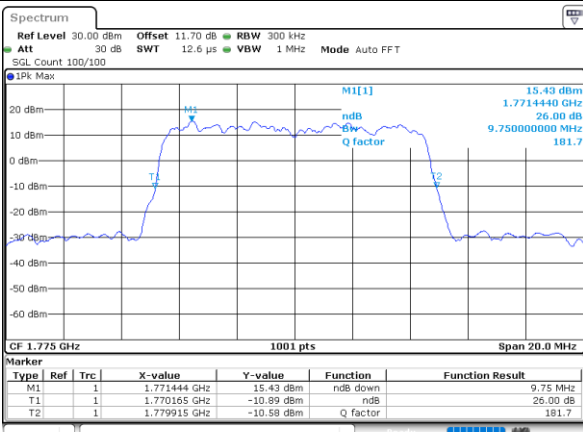
Date: 9.MAY.2020 00:01:25

Middle Channel / 10MHz / 16QAM



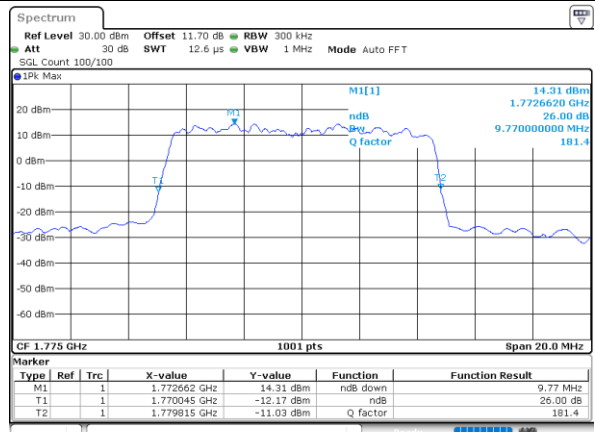
Date: 9.MAY.2020 00:01:37

Highest Channel / 10MHz / QPSK



Date: 9.MAY.2020 00:01:36

Highest Channel / 10MHz / 16QAM

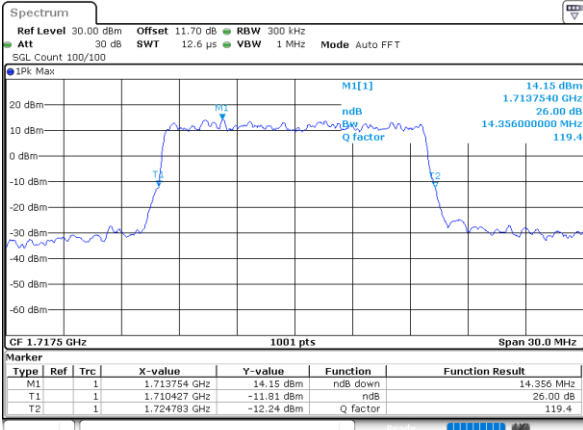


Date: 9.MAY.2020 00:01:48



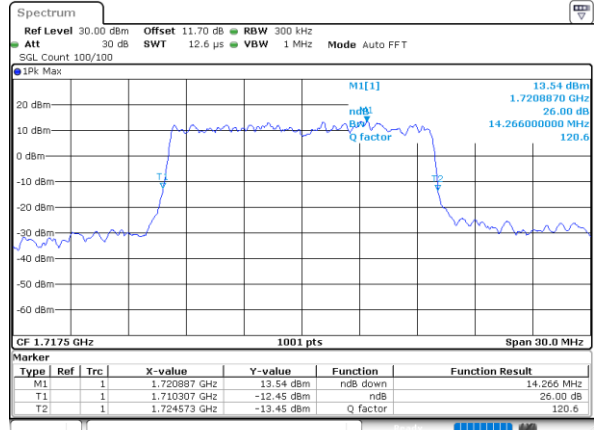
LTE Band 66

Lowest Channel / 15MHz / QPSK



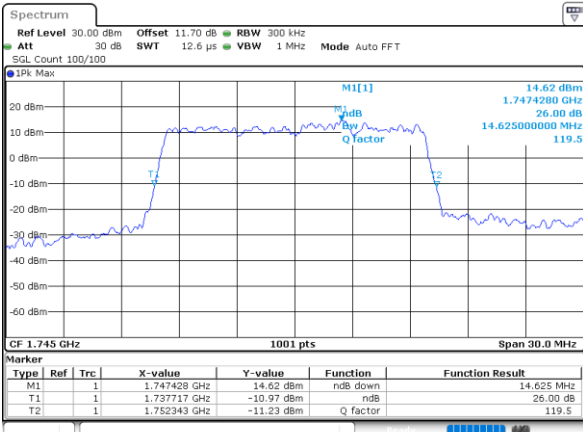
Date: 9.MAY.2020 00:10:50

Lowest Channel / 15MHz / 16QAM



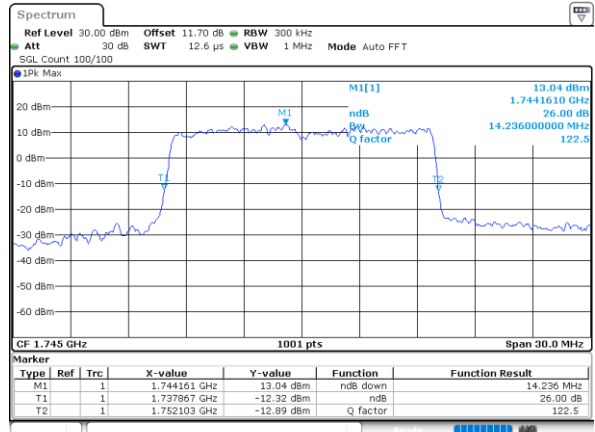
Date: 9.MAY.2020 00:10:02

Middle Channel / 15MHz / QPSK



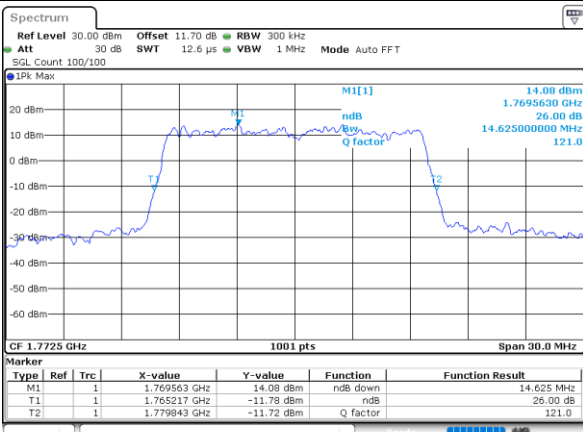
Date: 9.MAY.2020 00:16:03

Middle Channel / 15MHz / 16QAM



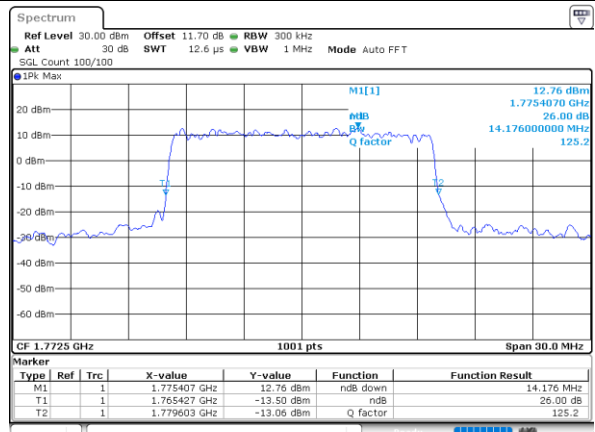
Date: 9.MAY.2020 00:16:15

Highest Channel / 15MHz / QPSK



Date: 9.MAY.2020 00:18:14

Highest Channel / 15MHz / 16QAM

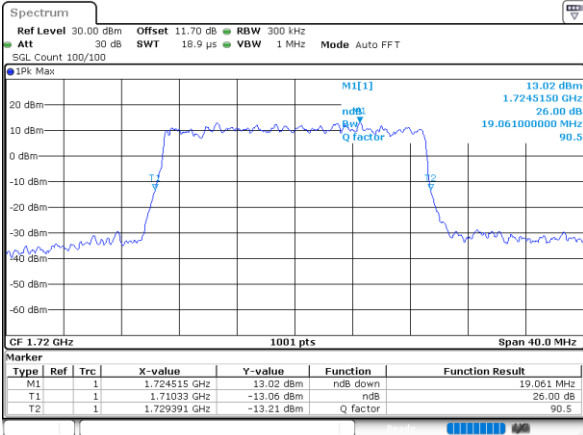


Date: 9.MAY.2020 00:18:26



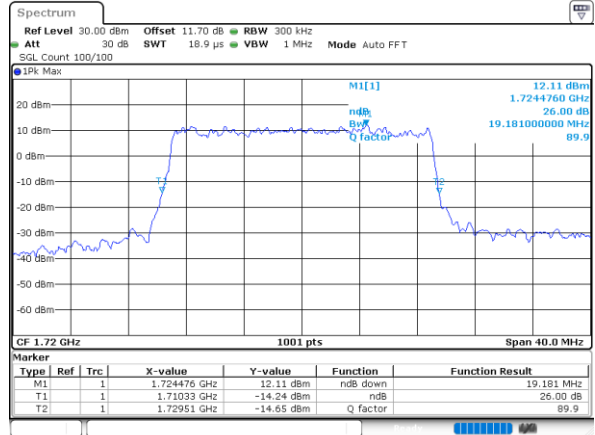
LTE Band 66

Lowest Channel / 20MHz / QPSK



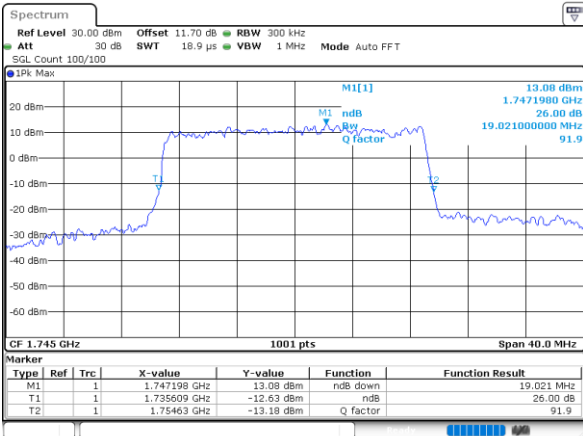
Date: 9_MAY.2020 00:24:28

Lowest Channel / 20MHz / 16QAM



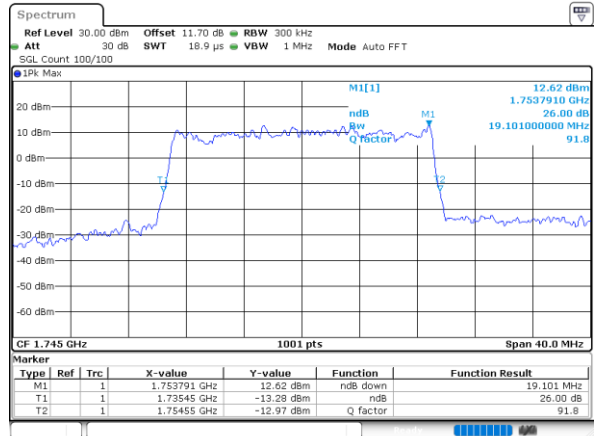
Date: 9_MAY.2020 00:24:40

Middle Channel / 20MHz / QPSK



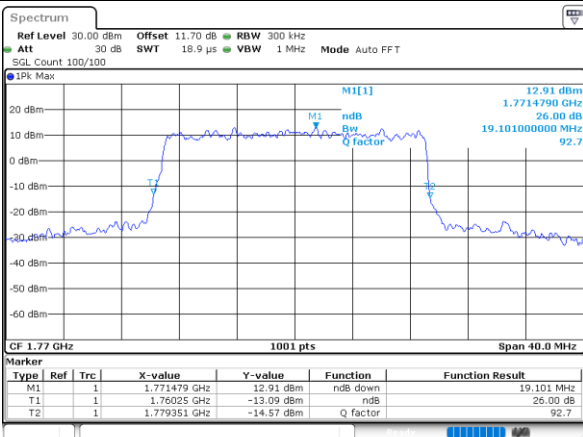
Date: 9_MAY.2020 00:30:41

Middle Channel / 20MHz / 16QAM



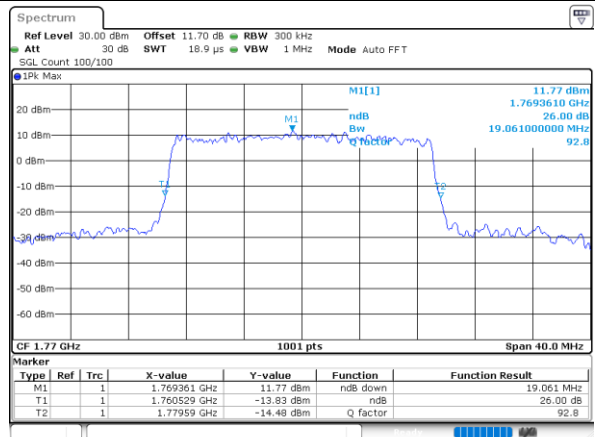
Date: 9_MAY.2020 00:30:54

Highest Channel / 20MHz / QPSK



Date: 9_MAY.2020 00:32:53

Highest Channel / 20MHz / 16QAM



Date: 9_MAY.2020 00:33:05



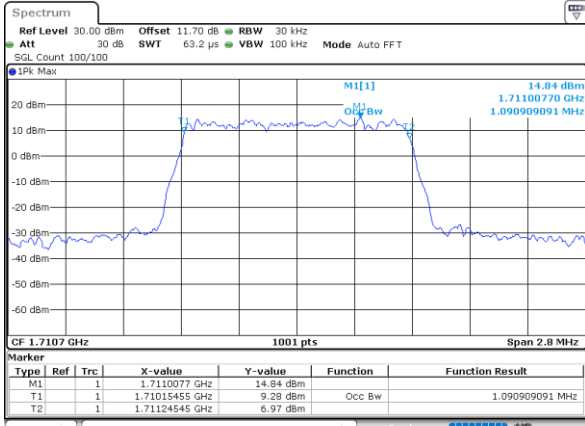
Occupied Bandwidth

Mode	LTE Band 66 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.09	2.72	2.73	4.49	4.49	8.99	9.07	13.49	13.43	17.82	17.98
Middle CH	1.09	1.09	2.71	2.72	4.50	4.46	8.97	8.99	13.46	13.43	17.82	17.82
Highest CH	1.09	1.09	2.72	2.72	4.50	4.49	9.03	8.99	13.49	13.43	17.82	17.82



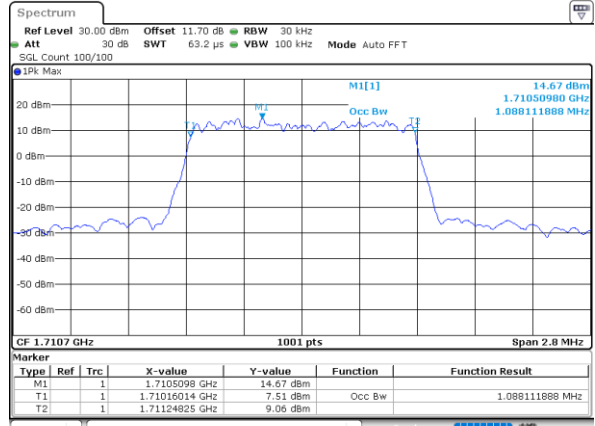
LTE Band 66

Lowest Channel / 1.4MHz / QPSK



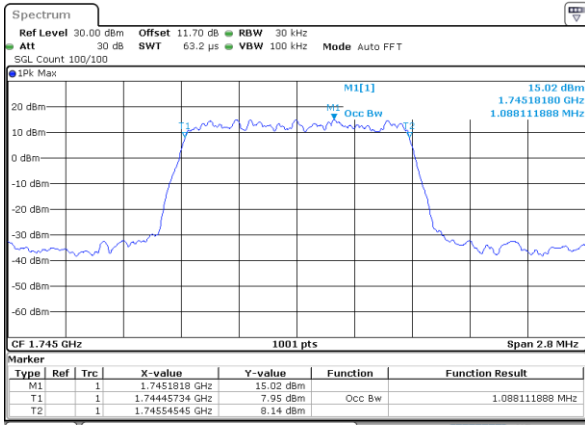
Date: 8.MAY.2020 23:10:28

Lowest Channel / 1.4MHz / 16QAM



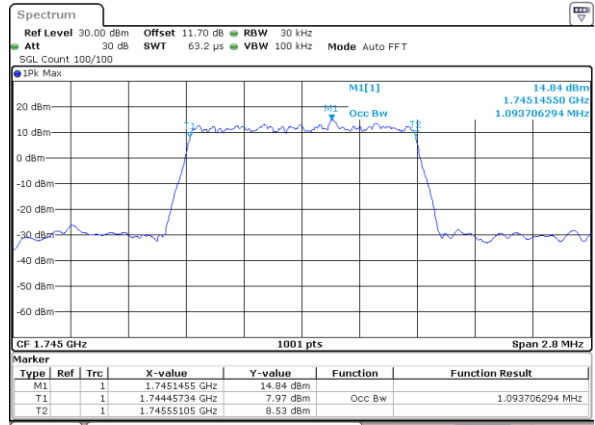
Date: 8.MAY.2020 23:10:40

Middle Channel / 1.4MHz / QPSK



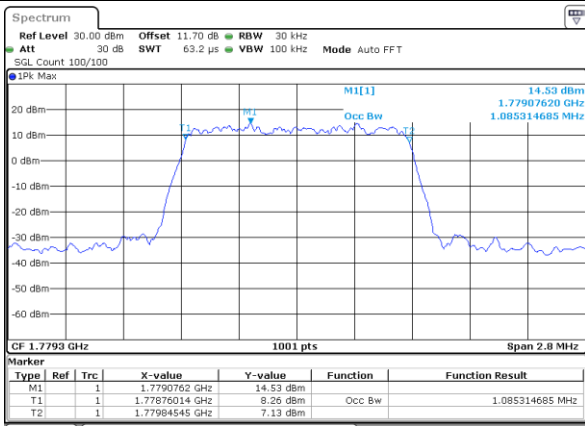
Date: 8.MAY.2020 23:16:54

Middle Channel / 1.4MHz / 16QAM



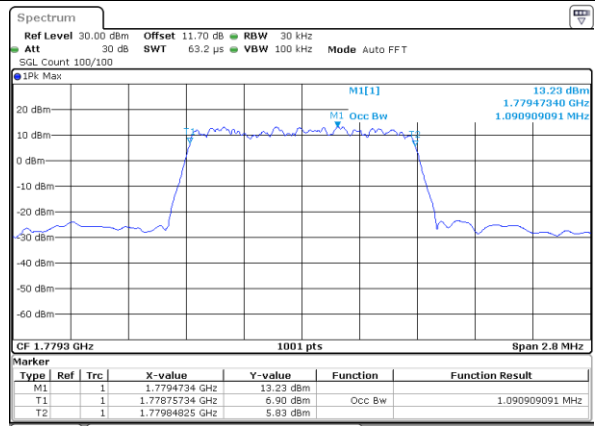
Date: 8.MAY.2020 23:17:06

Highest Channel / 1.4MHz / QPSK



Date: 8.MAY.2020 23:19:05

Highest Channel / 1.4MHz / 16QAM

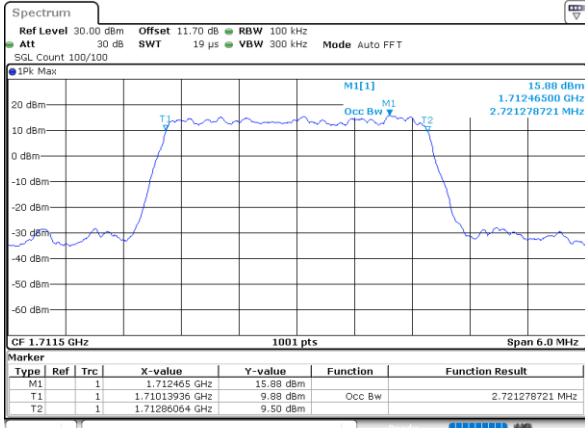


Date: 8.MAY.2020 23:19:17



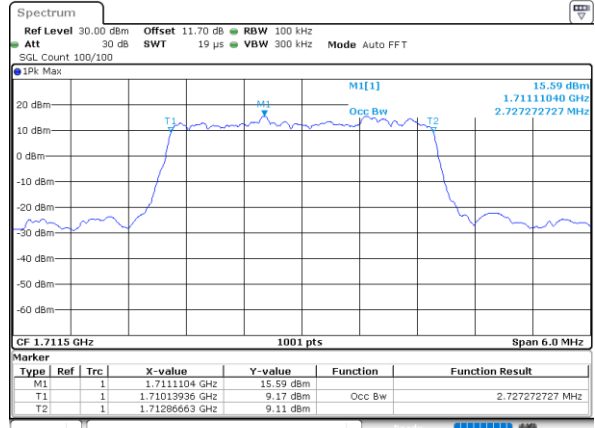
LTE Band 66

Lowest Channel / 3MHz / QPSK



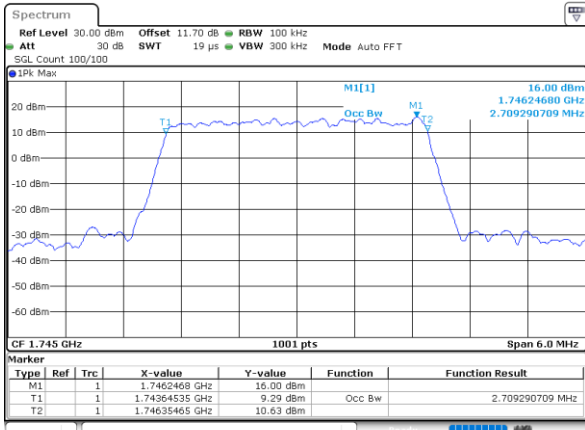
Date: 8_MAY.2020 23:25:13

Lowest Channel / 3MHz / 16QAM



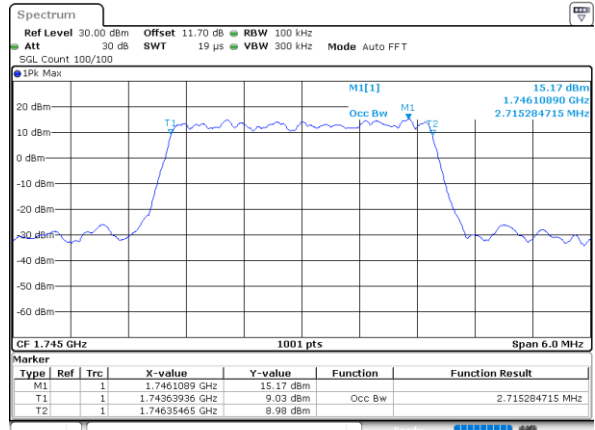
Date: 8_MAY.2020 23:25:43

Middle Channel / 3MHz / QPSK



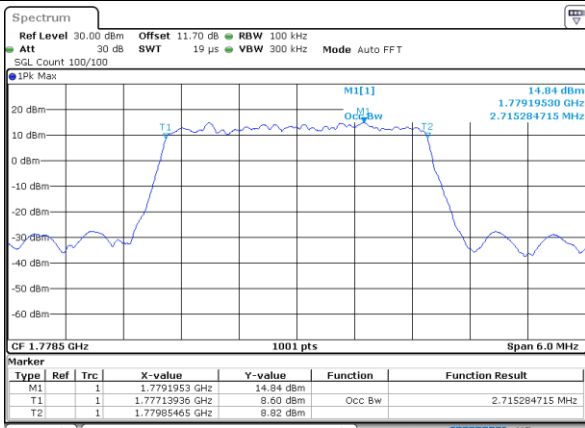
Date: 8_MAY.2020 23:31:44

Middle Channel / 3MHz / 16QAM



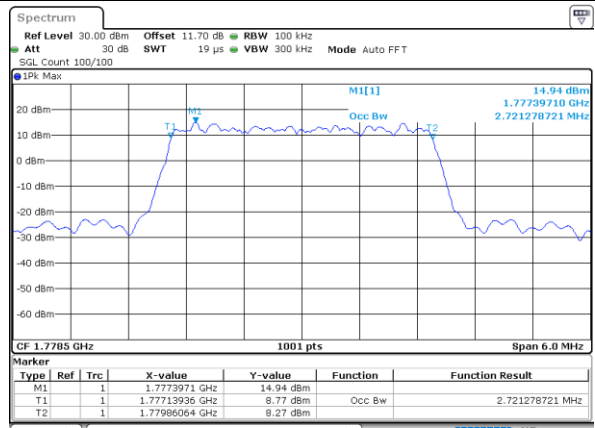
Date: 8_MAY.2020 23:31:56

Highest Channel / 3MHz / QPSK



Date: 8_MAY.2020 23:33:56

Highest Channel / 3MHz / 16QAM



Date: 8_MAY.2020 23:34:08