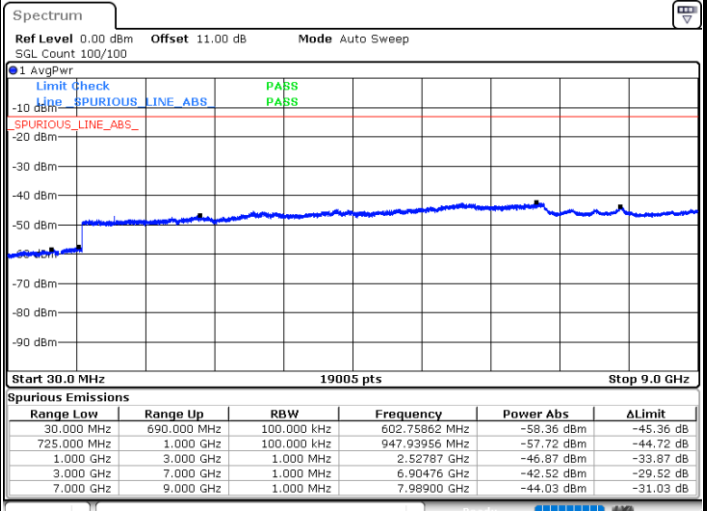
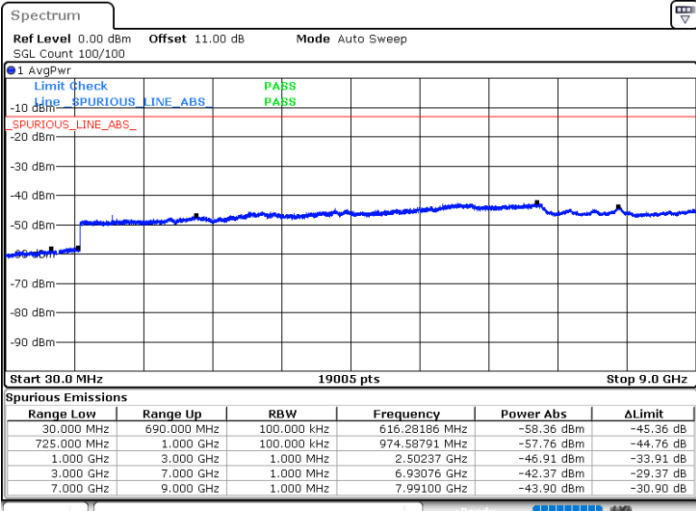




LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

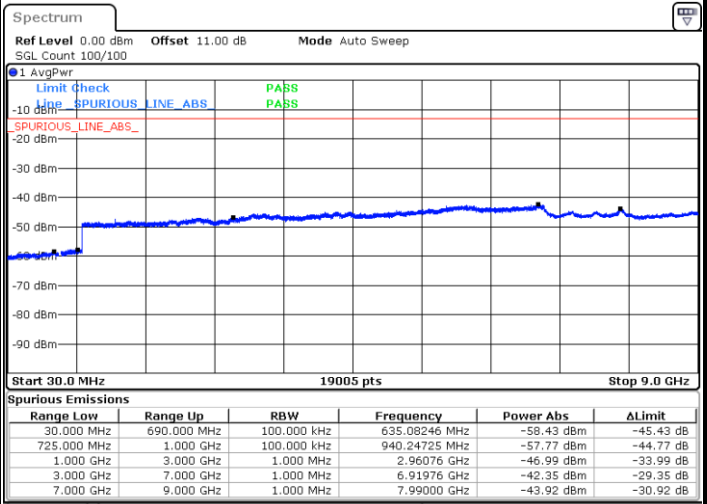
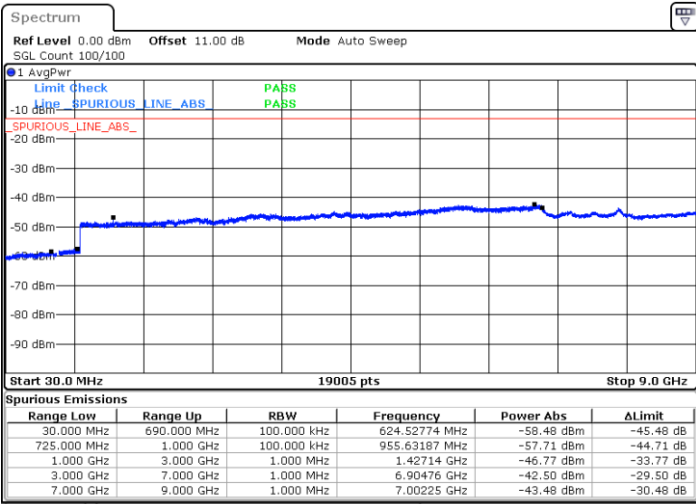


Date: 6 JUN.2020 12:30:55

Date: 6 JUN.2020 12:30:16

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 6 JUN.2020 12:32:22

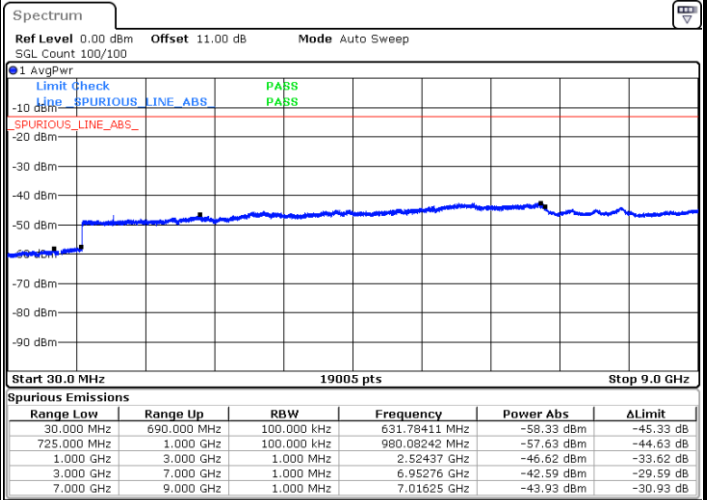
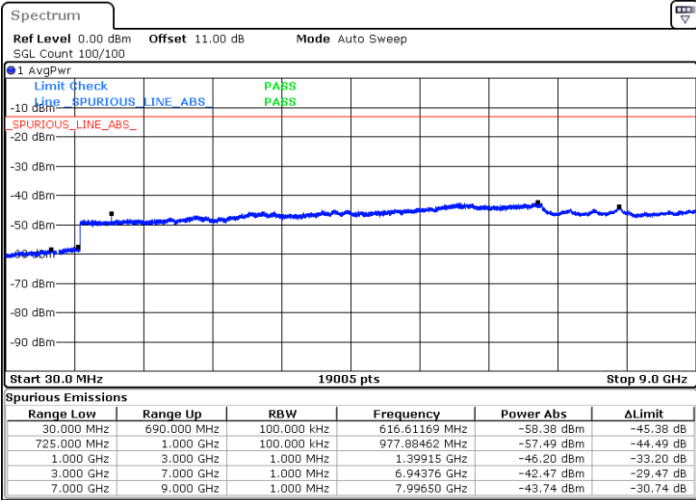
Date: 6 JUN.2020 12:33:02



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

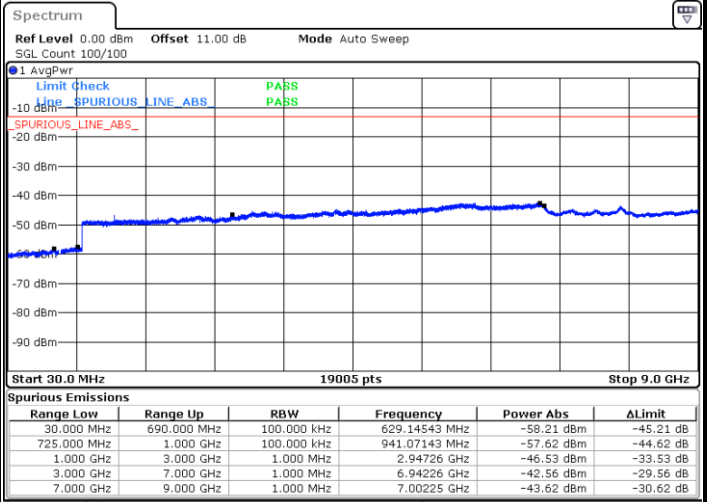
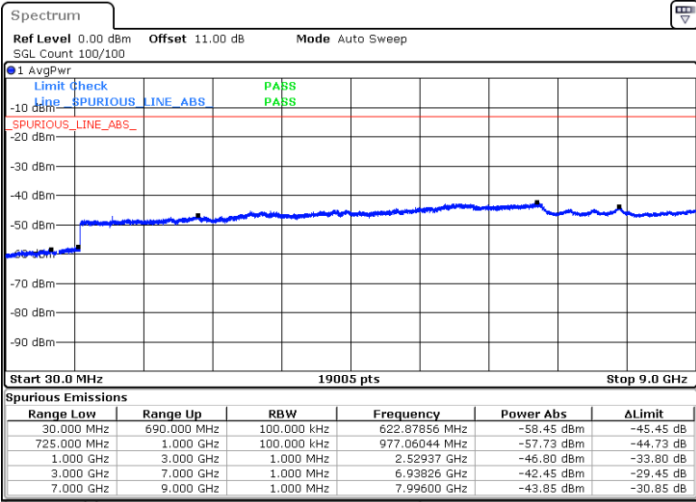


Date: 6 JUN.2020 12:46:08

Date: 6 JUN.2020 12:46:48

Middle Channel / QPSK

Middle Channel / 16QAM



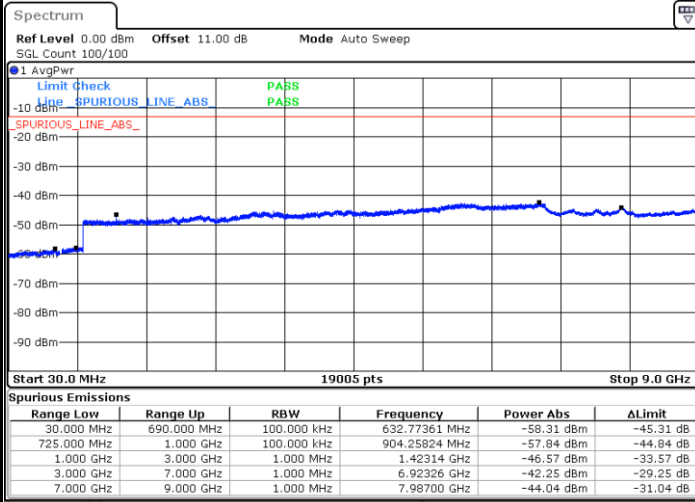
Date: 6 JUN.2020 12:48:53

Date: 6 JUN.2020 12:48:13



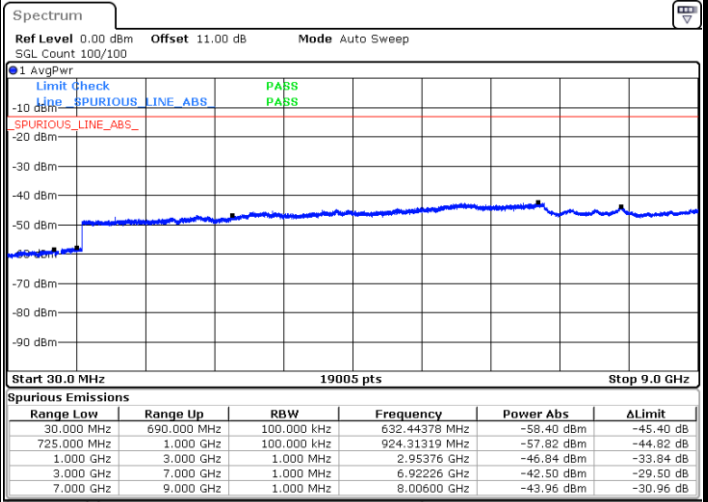
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 6 JUN.2020 12:53:40

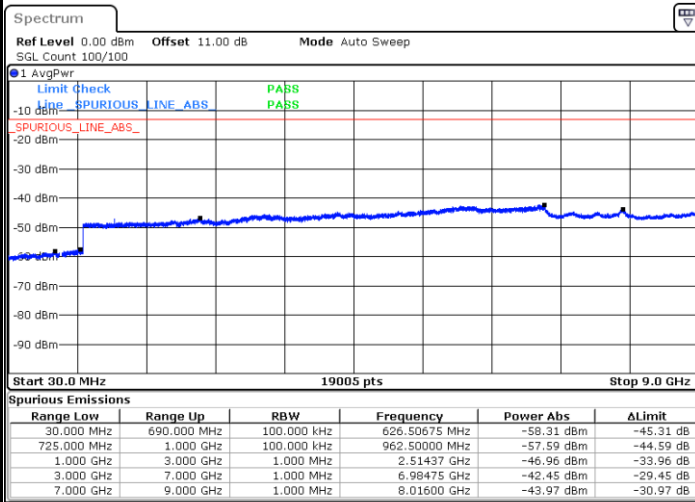
Highest Channel / 16QAM



Date: 6 JUN.2020 12:53:00

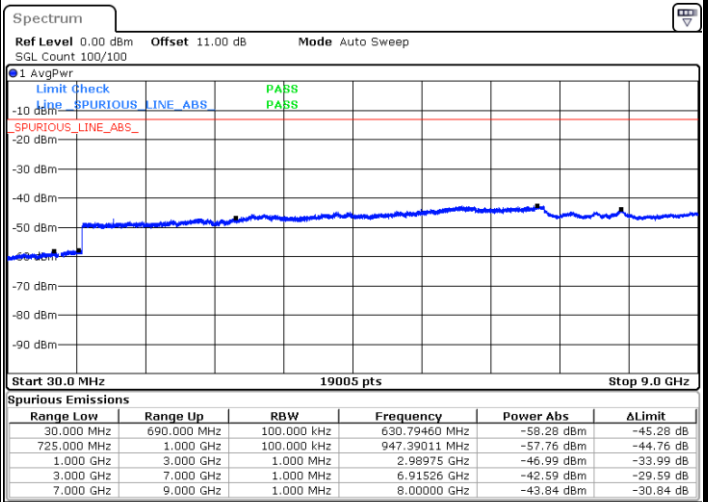
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 6 JUN.2020 12:57:47

Lowest Channel / 16QAM



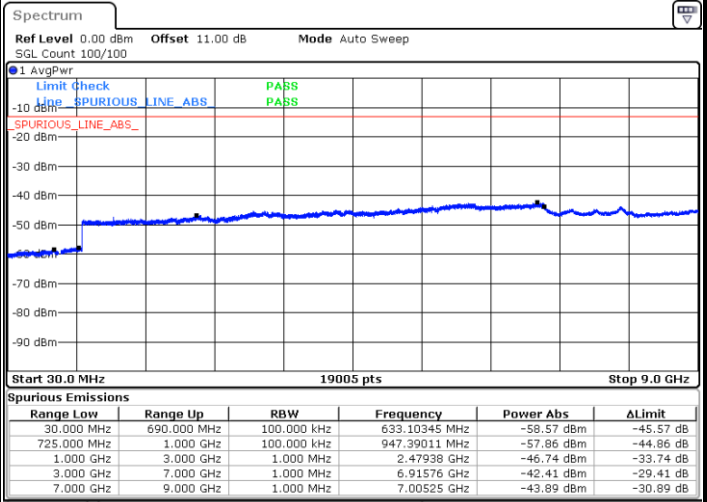
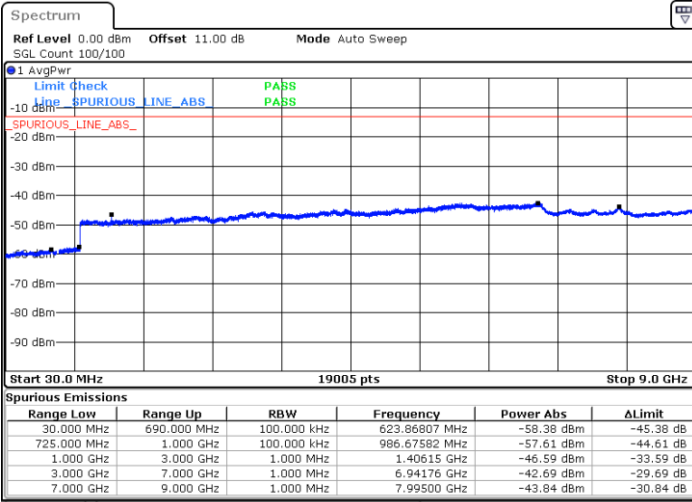
Date: 6 JUN.2020 12:58:27



LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

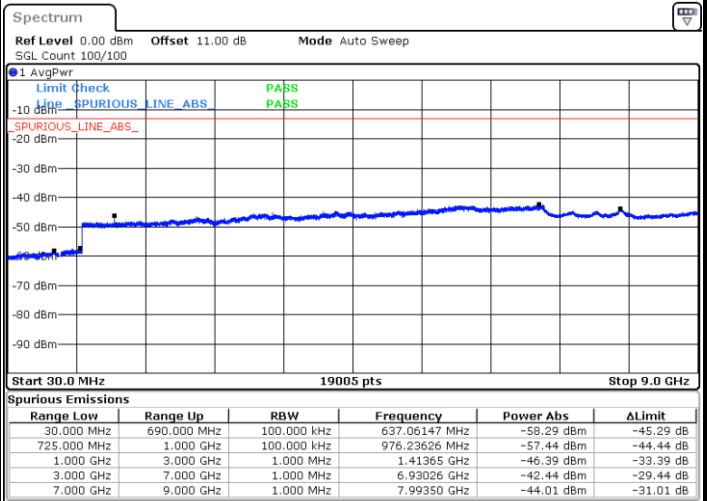
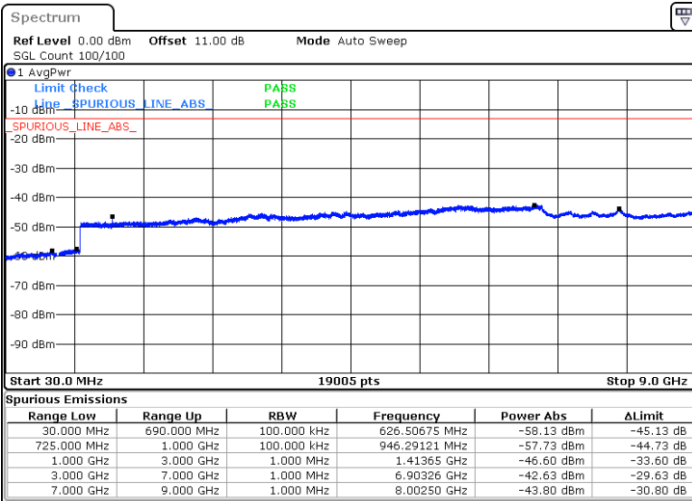


Date: 6 JUN.2020 13:00:32

Date: 6 JUN.2020 12:59:52

Highest Channel / QPSK

Highest Channel / 16QAM

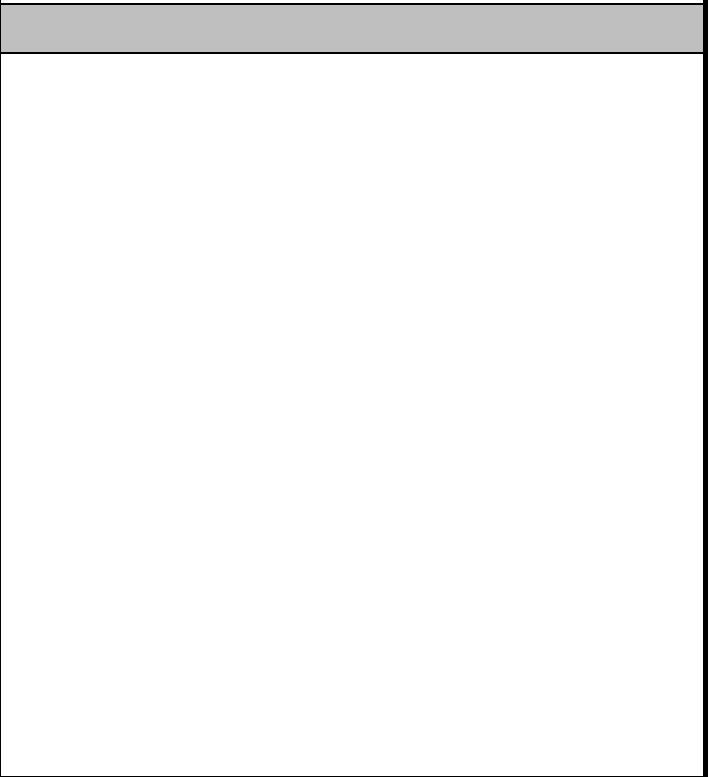
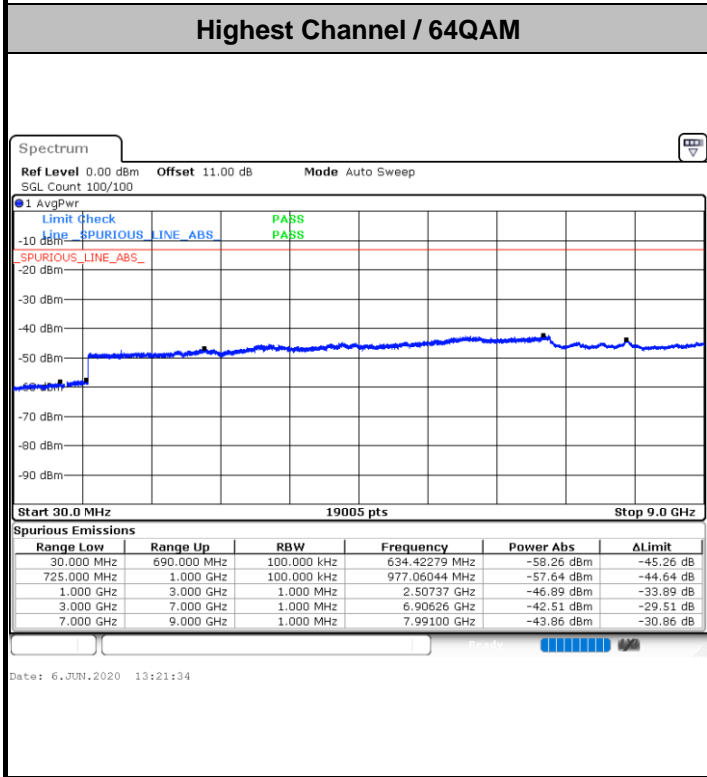
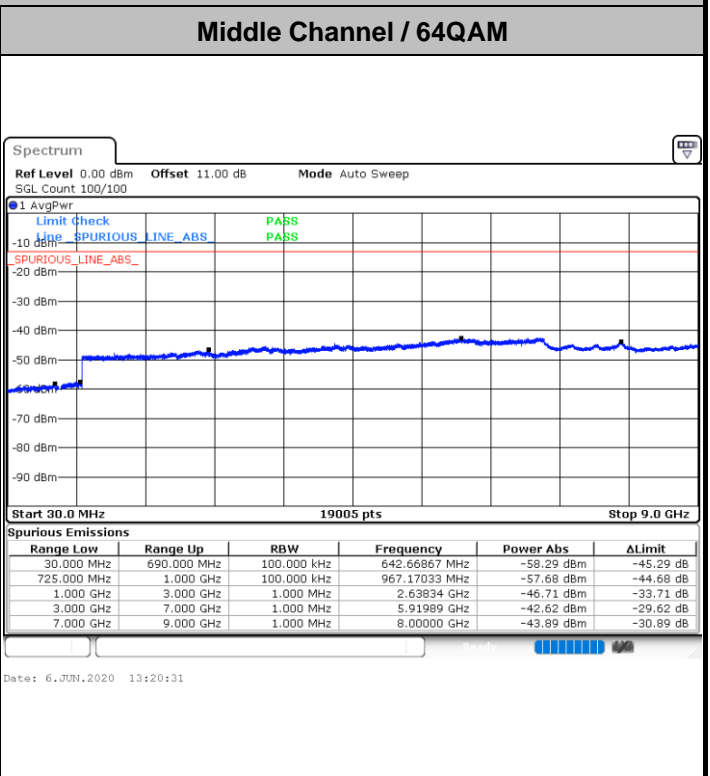
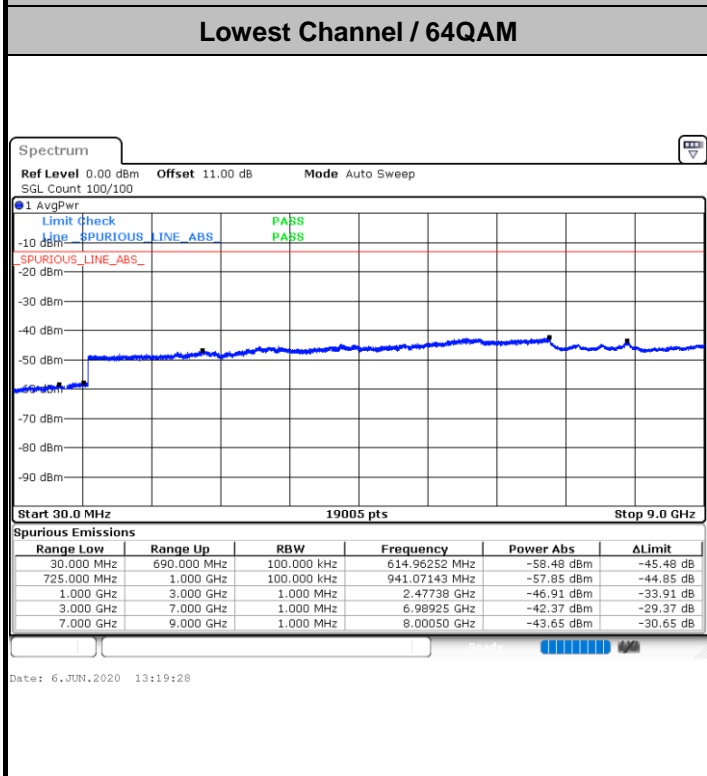


Date: 6 JUN.2020 13:04:39

Date: 6 JUN.2020 13:05:19



LTE Band 12 / 1.4MHz

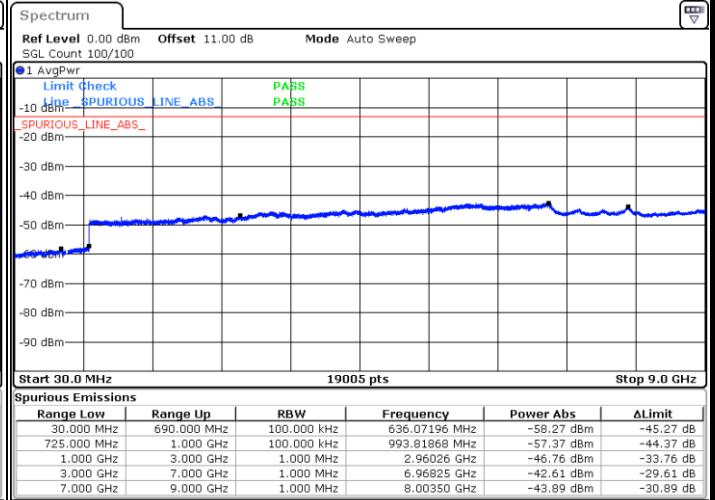
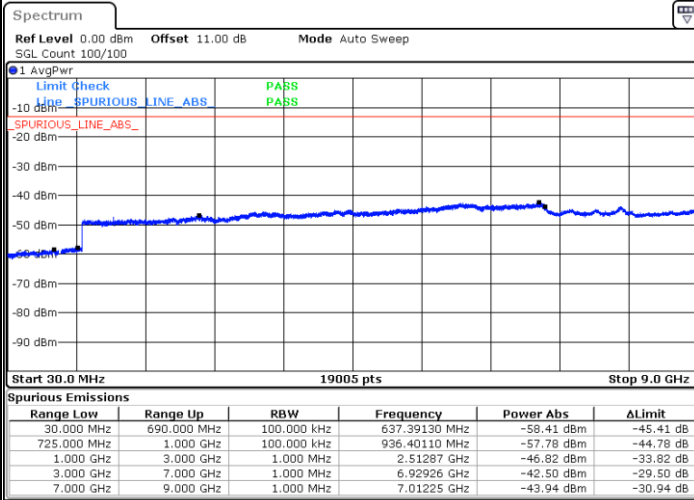




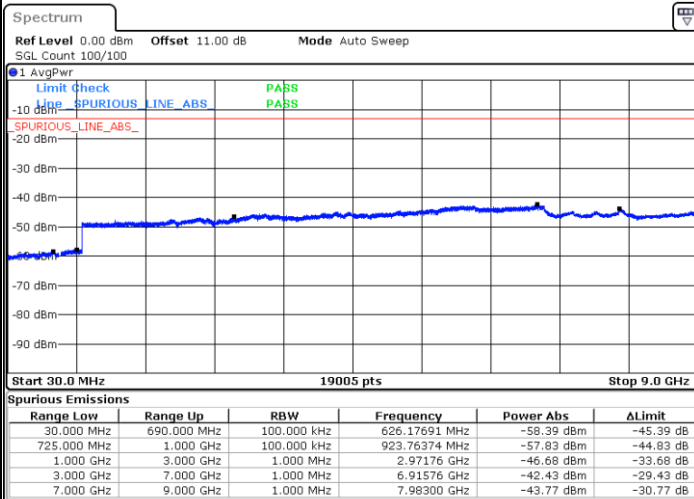
LTE Band 12 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM



Highest Channel / 64QAM

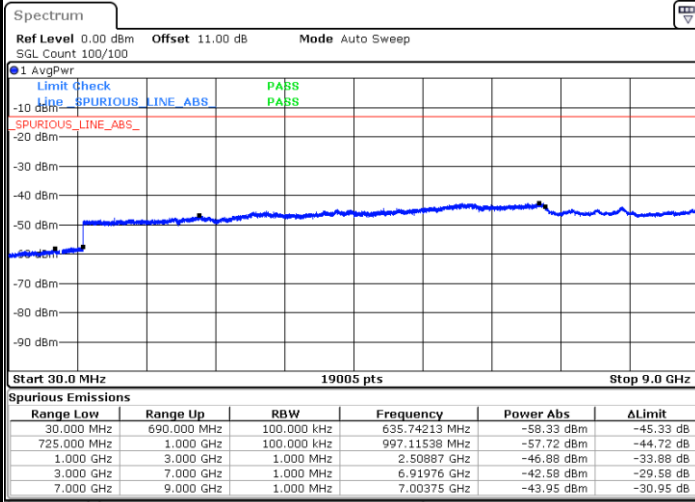




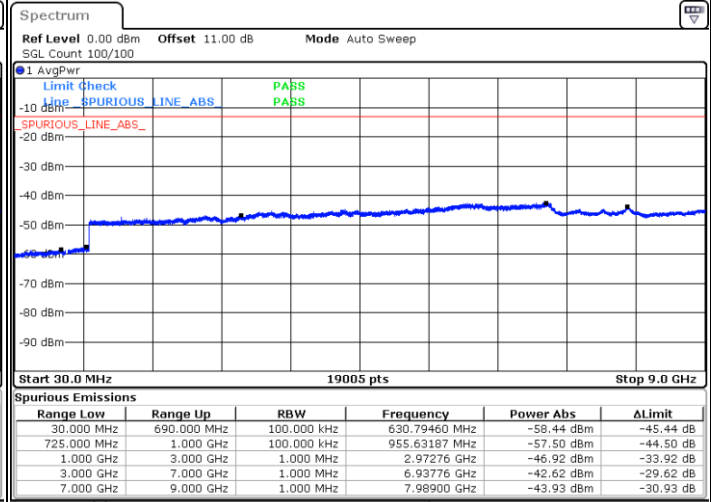
LTE Band 12 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

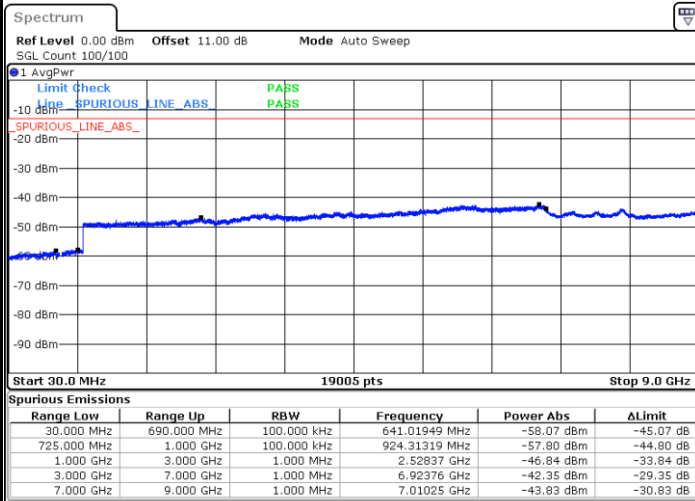


Date: 6 JUN.2020 12:38:36



Date: 6 JUN.2020 12:39:38

Highest Channel / 64QAM



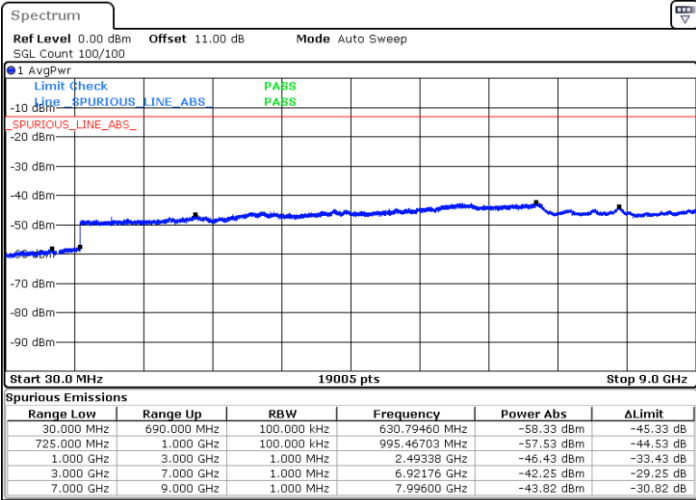
Date: 6 JUN.2020 12:42:01



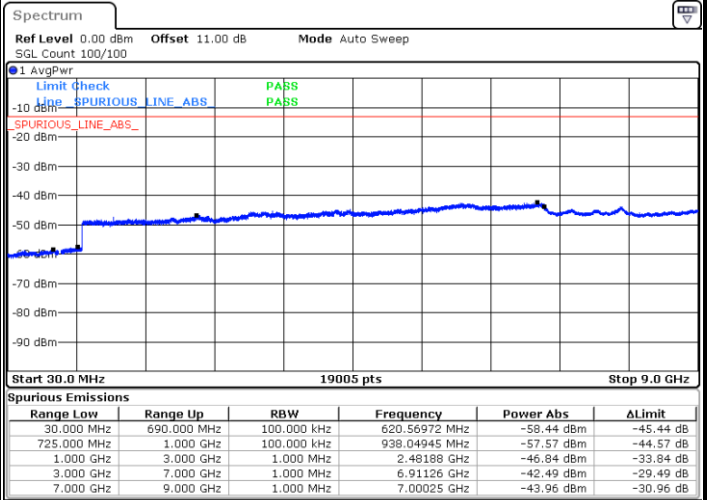
LTE Band 12 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

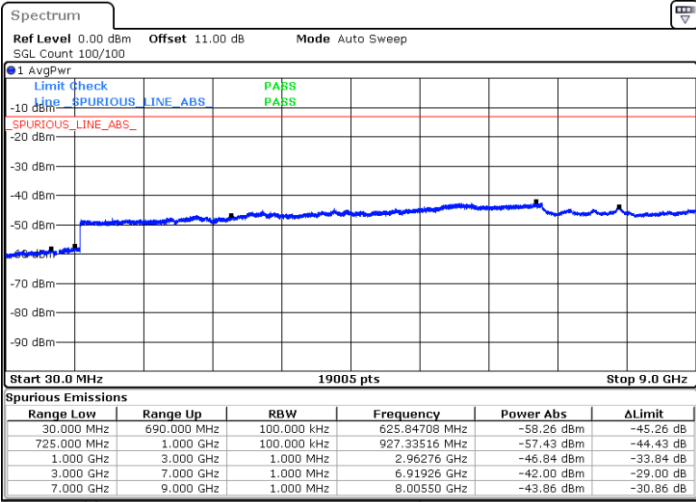


Date: 6 JUN.2020 13:07:42



Date: 6 JUN.2020 13:08:44

Highest Channel / 64QAM



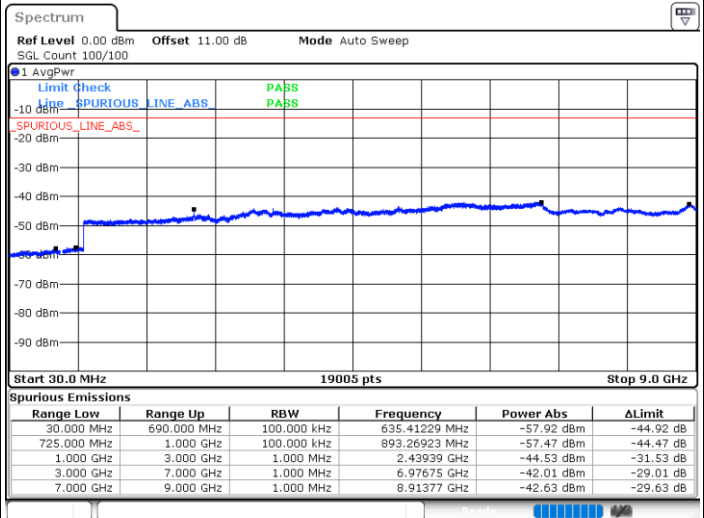
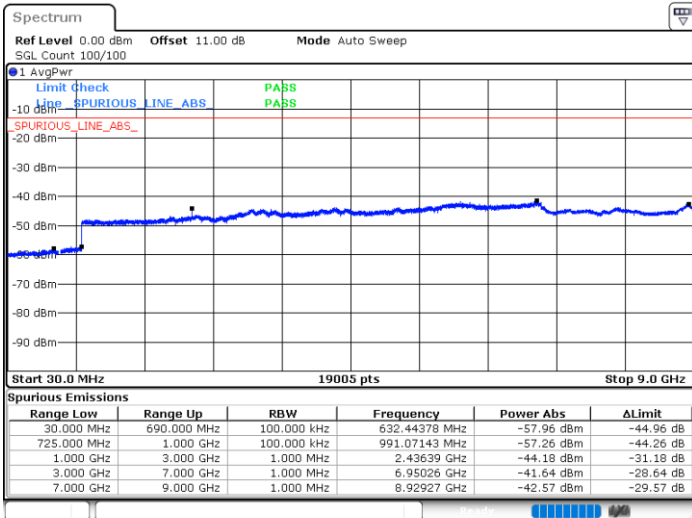
Date: 6 JUN.2020 13:11:07



LTE Band 12 / 1.4MHz

Lowest Channel / 256QAM

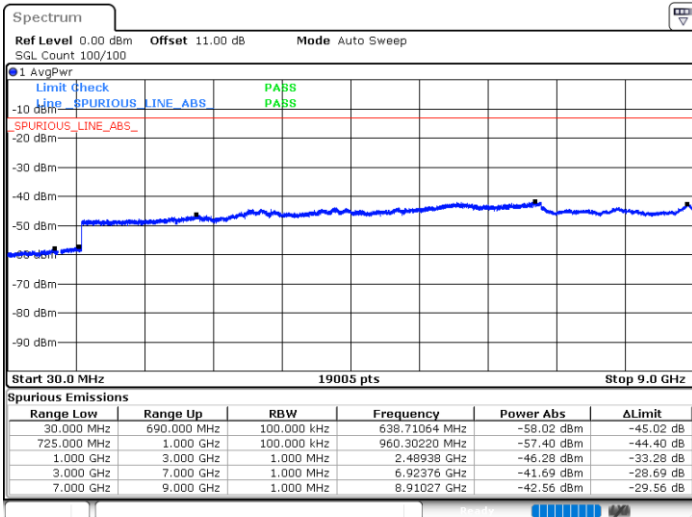
Middle Channel / 256QAM



Date: 24.JUL.2020 13:37:54

Date: 24.JUL.2020 13:36:26

Highest Channel / 256QAM



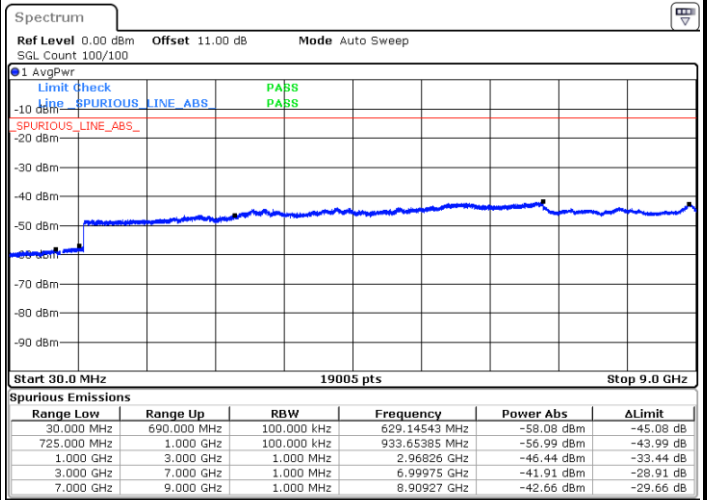
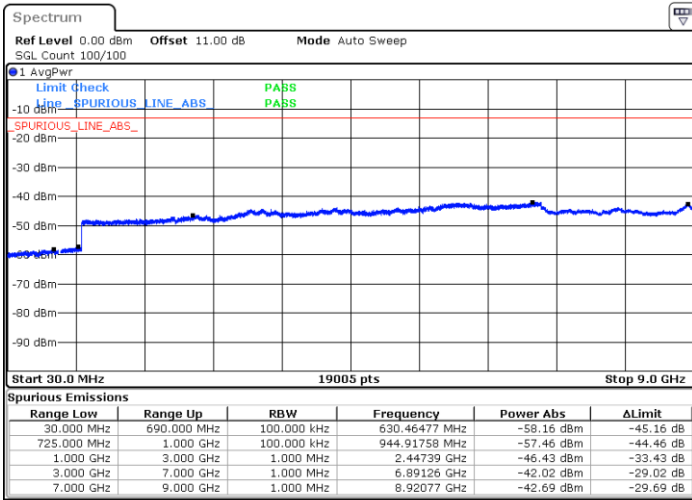
Date: 24.JUL.2020 13:42:18



LTE Band 12 / 3MHz

Lowest Channel / 256QAM

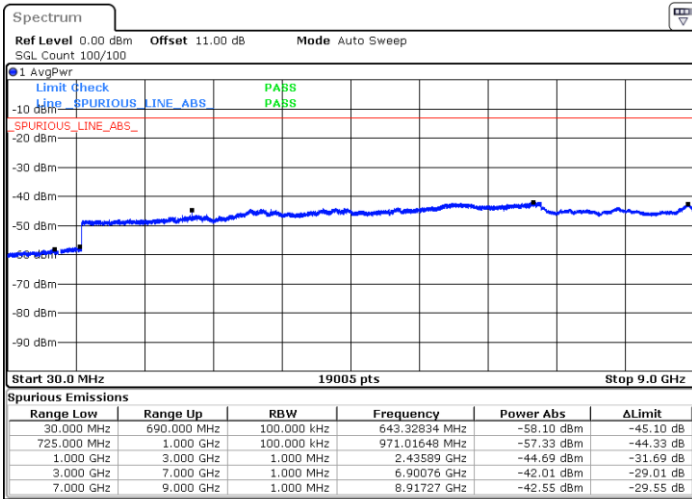
Middle Channel / 256QAM



Date: 24.JUL.2020 13:47:46

Date: 24.JUL.2020 13:46:00

Highest Channel / 256QAM



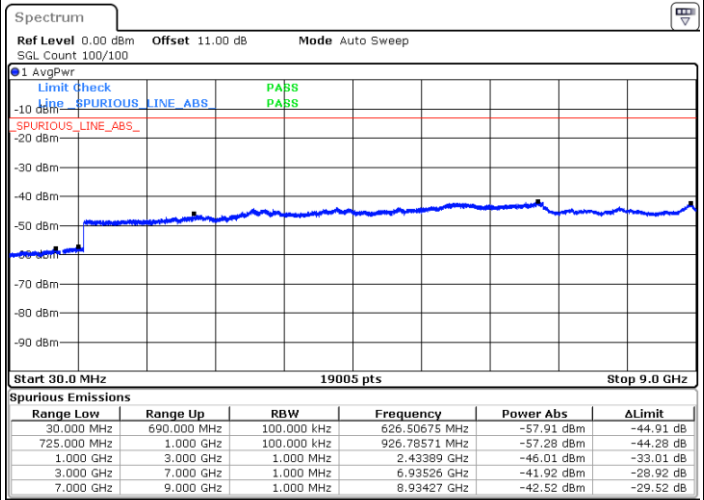
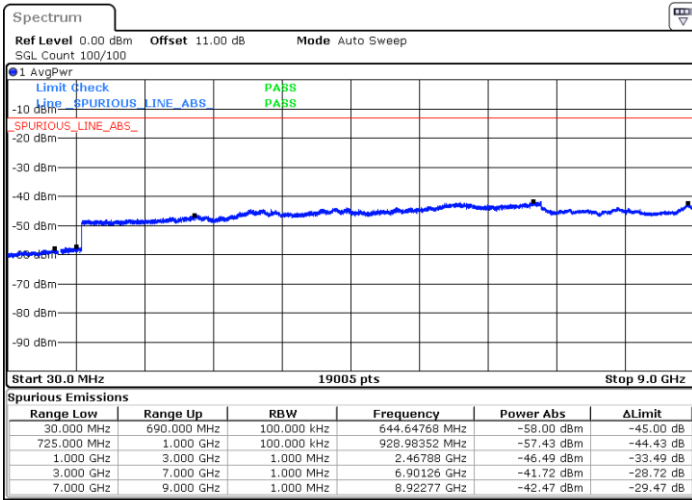
Date: 24.JUL.2020 13:51:57



LTE Band 12 / 5MHz

Lowest Channel / 256QAM

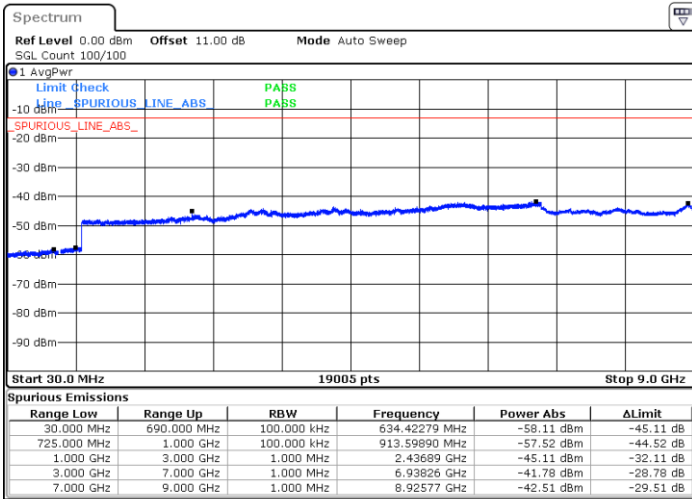
Middle Channel / 256QAM



Date: 24.JUL.2020 13:56:34

Date: 24.JUL.2020 13:54:54

Highest Channel / 256QAM



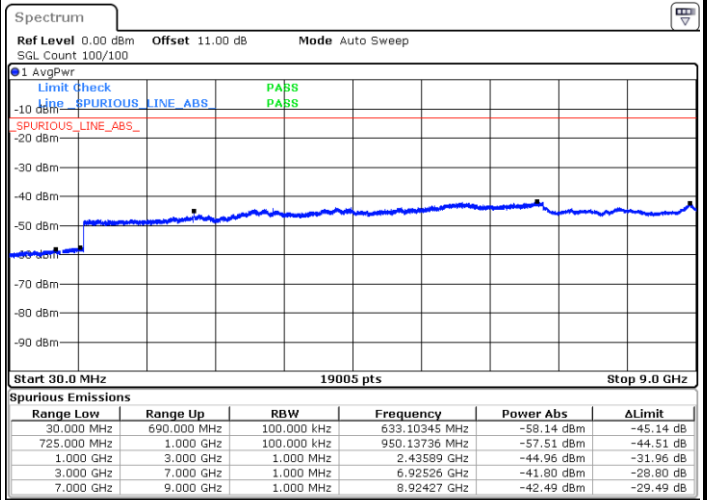
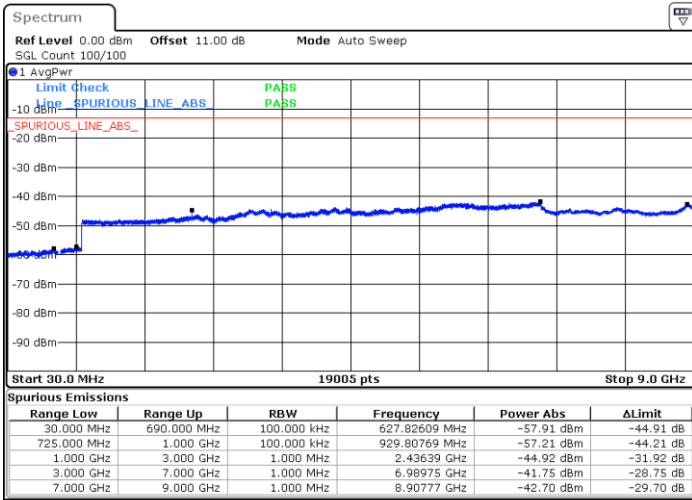
Date: 24.JUL.2020 14:02:06



LTE Band 12 / 10MHz

Lowest Channel / 256QAM

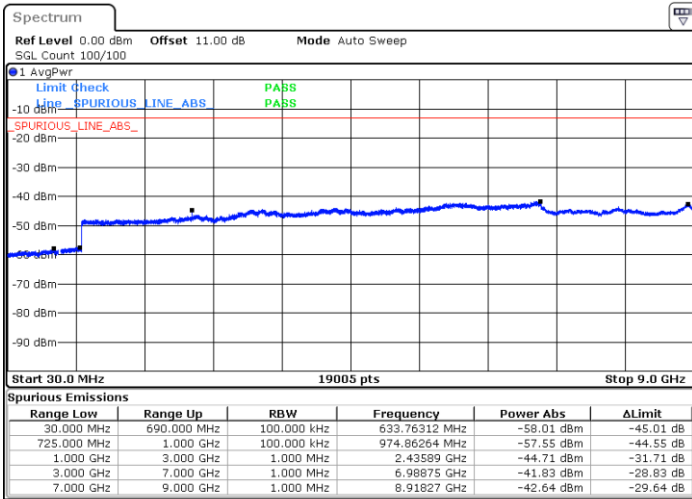
Middle Channel / 256QAM



Date: 24.JUL.2020 14:08:04

Date: 24.JUL.2020 14:06:27

Highest Channel / 256QAM



Date: 24.JUL.2020 14:15:15



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	0.0007	
30	Normal Voltage	0.0020	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0139	
0	Normal Voltage	0.0131	
-10	Normal Voltage	0.0148	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0008	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0010	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.30 V. ; Maximum Voltage =4.25 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

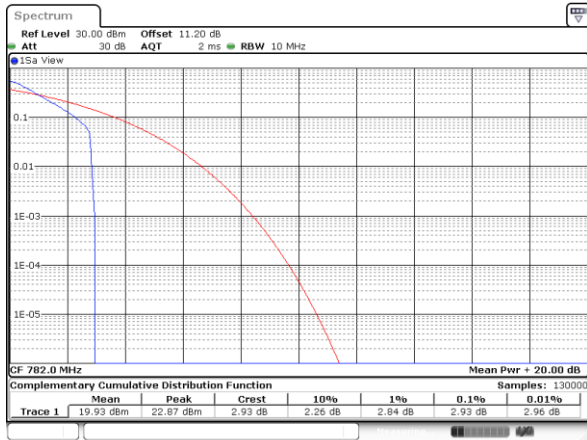
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	2.93	4.55	4.87	5.48	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM		256QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.72	6.46	7.45	6.38	
Highest CH	-	-	-	-	



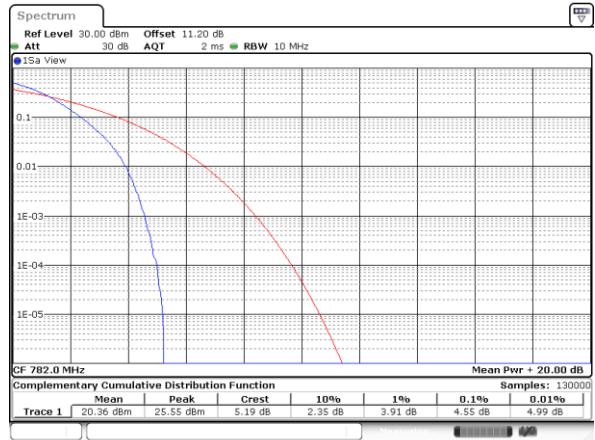
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 7 JUN 2020 13:26:29

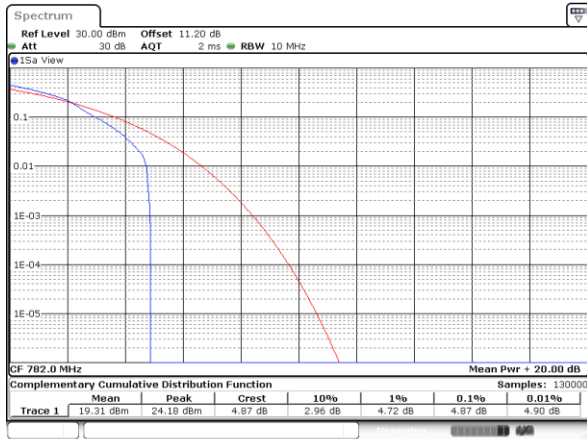
Middle Channel / Full RB



Date: 7 JUN 2020 13:26:40

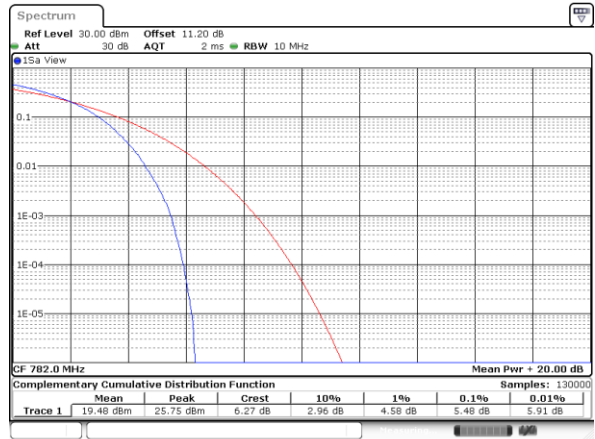
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 7 JUN 2020 13:26:08

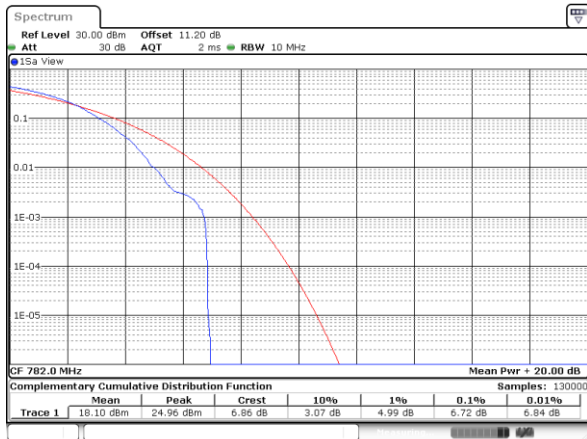
Middle Channel / Full RB



Date: 7 JUN 2020 13:26:19

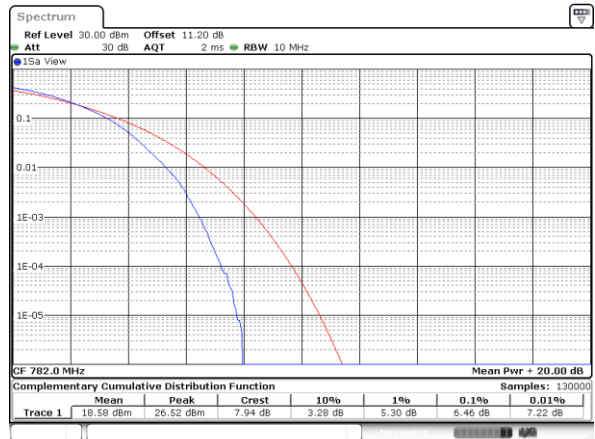
LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 7 JUN 2020 13:25:46

Middle Channel / Full RB

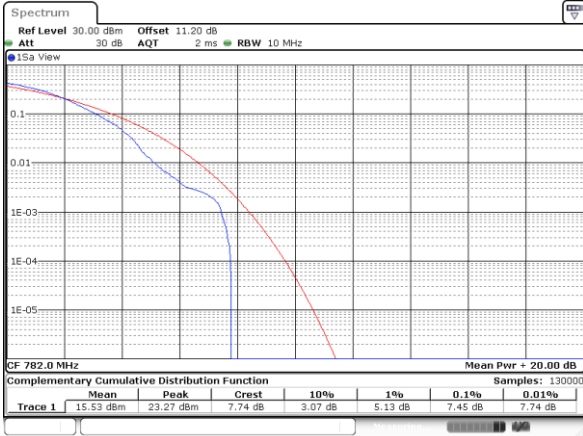


Date: 7 JUN 2020 13:25:57



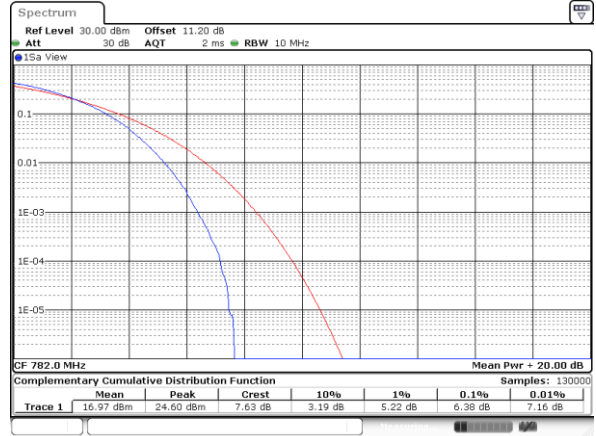
LTE Band 13 / 10MHz / 256QAM

Middle Channel / 1RB



Date: 16.JUL.2020 11:57:39

Middle Channel / Full RB



Date: 16.JUL.2020 11:52:58



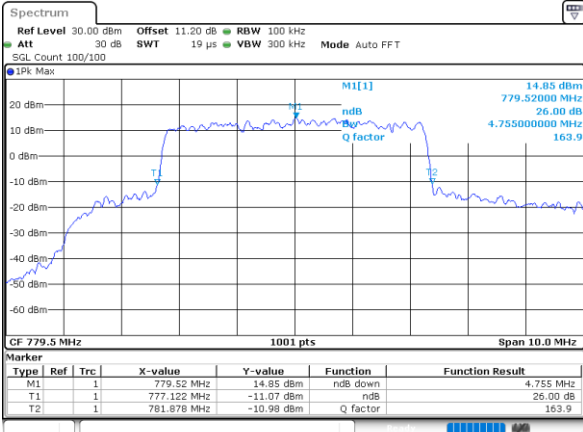
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.76	4.89	-	-	-	-	-	-
Middle CH	-	-	-	-	4.88	4.85	9.93	9.87	-	-	-	-
Highest CH	-	-	-	-	4.96	4.92	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM	256QAM	64QAM	256QAM	64QAM		64QAM	
Lowest CH	-	-	-	-	4.96	4.92	-	-	-	-	-	-
Middle CH	-	-	-	-	4.87	4.91	9.75	9.69	-	-	-	-
Highest CH	-	-	-	-	4.84	4.90	-	-	-	-	-	-



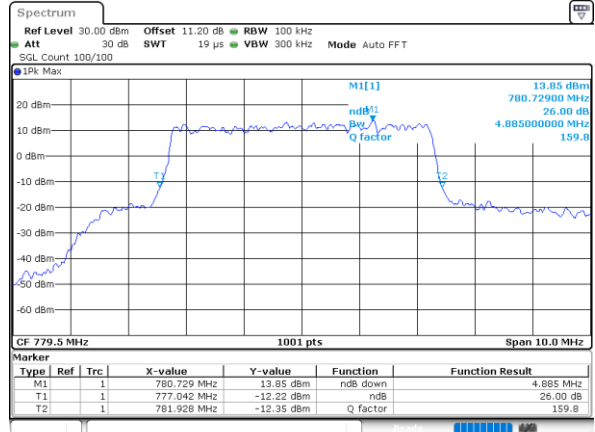
LTE Band 13

Lowest Channel / 5MHz / QPSK



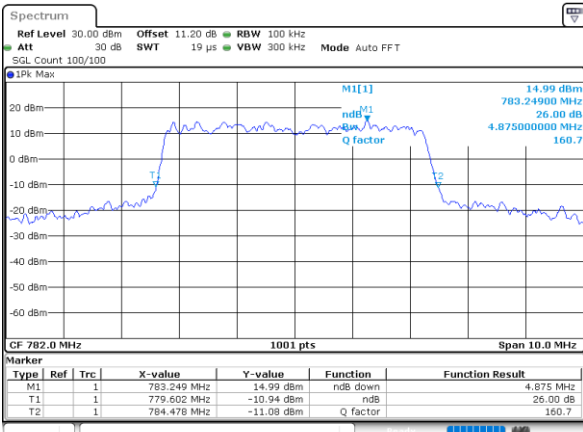
Date: 7 JUN 2020 12:38:41

Lowest Channel / 5MHz / 16QAM



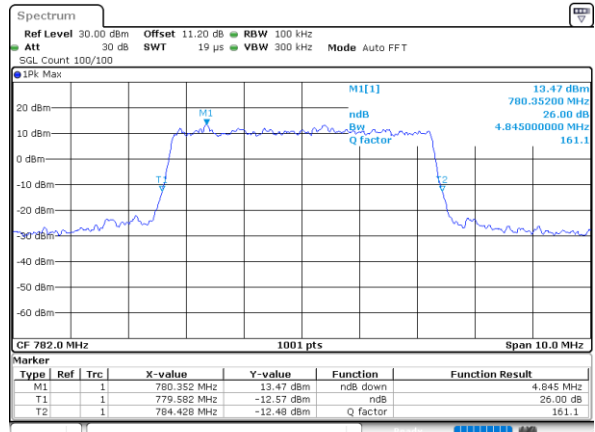
Date: 7 JUN 2020 12:38:29

Middle Channel / 5MHz / QPSK



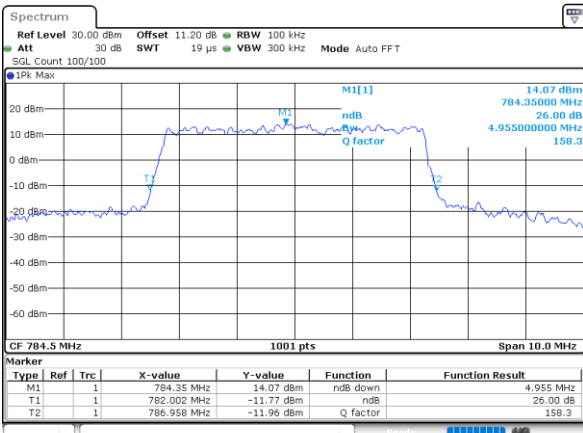
Date: 7 JUN 2020 12:48:10

Middle Channel / 5MHz / 16QAM



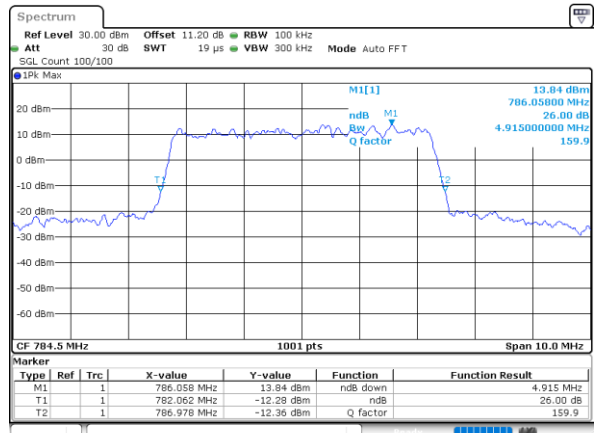
Date: 7 JUN 2020 12:48:22

Highest Channel / 5MHz / QPSK



Date: 7 JUN 2020 12:49:31

Highest Channel / 5MHz / 16QAM

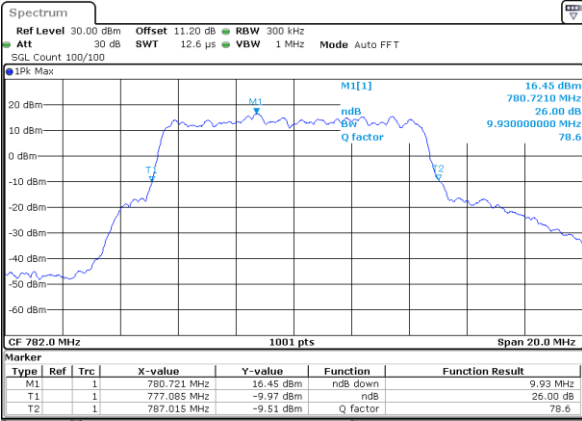


Date: 7 JUN 2020 12:49:19



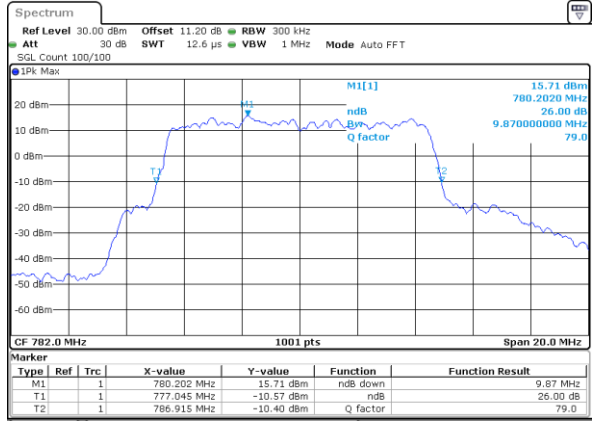
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 7 JUN 2020 13:08:05

Middle Channel / 10MHz / 16QAM

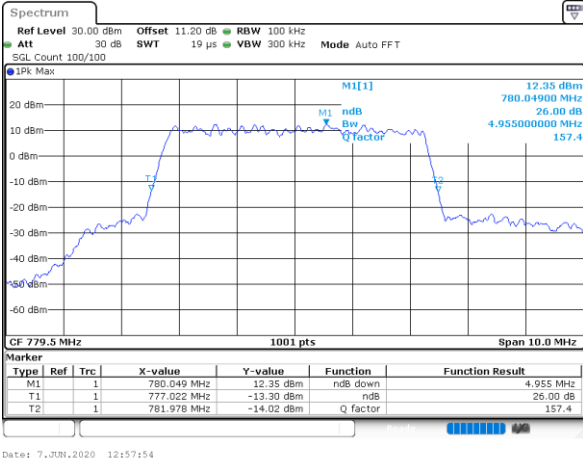


Date: 7 JUN 2020 13:07:53

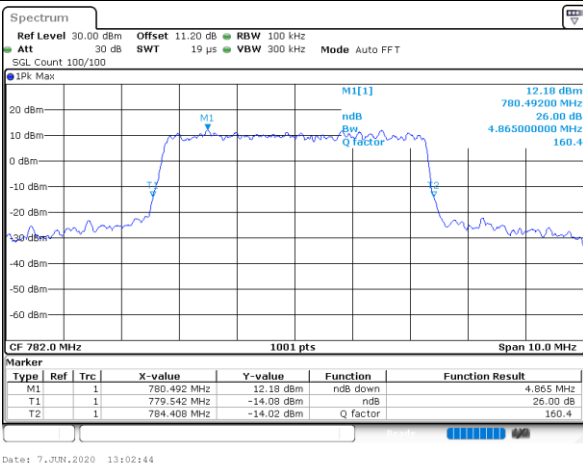


LTE Band 13

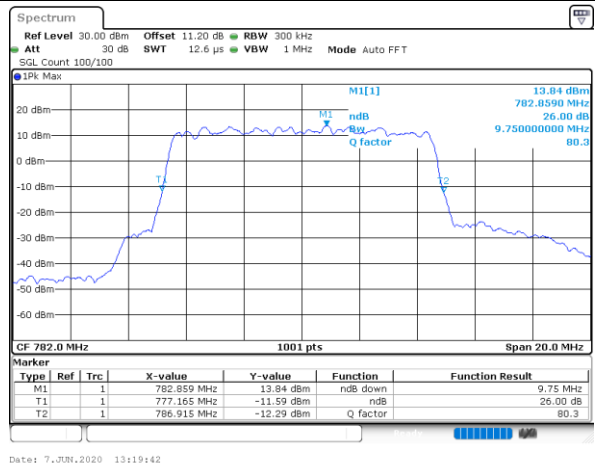
Lowest Channel / 5MHz / 64QAM



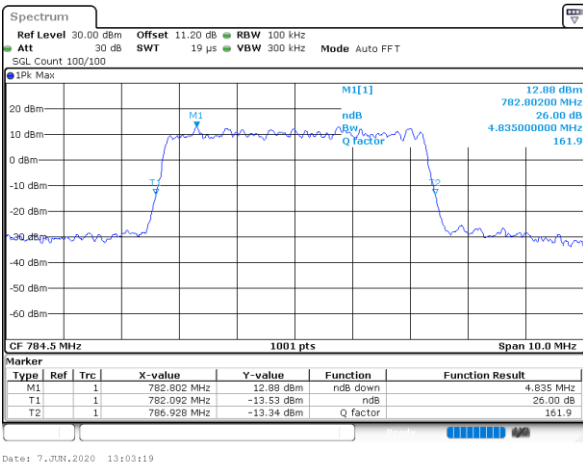
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



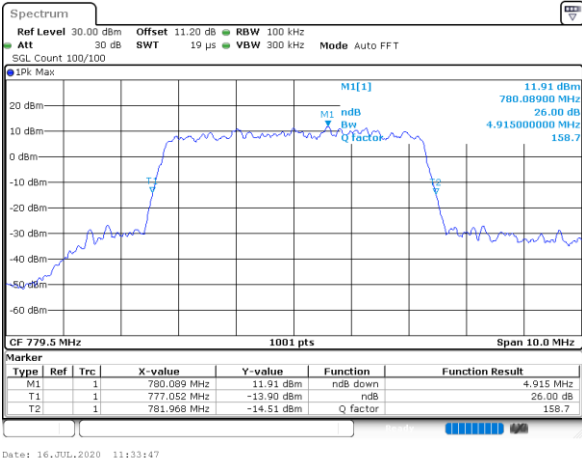
Highest Channel / 5MHz / 64QAM





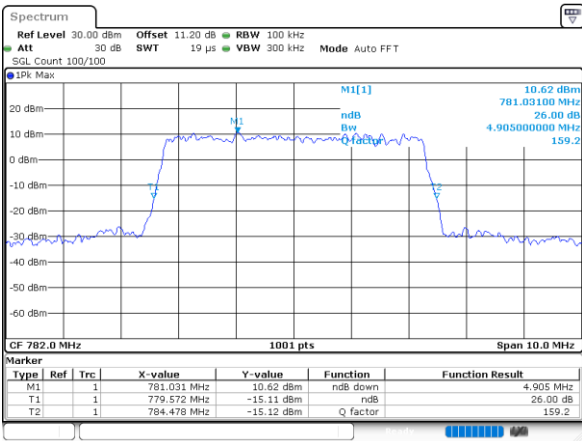
LTE Band 13

Lowest Channel / 5MHz / 256QAM



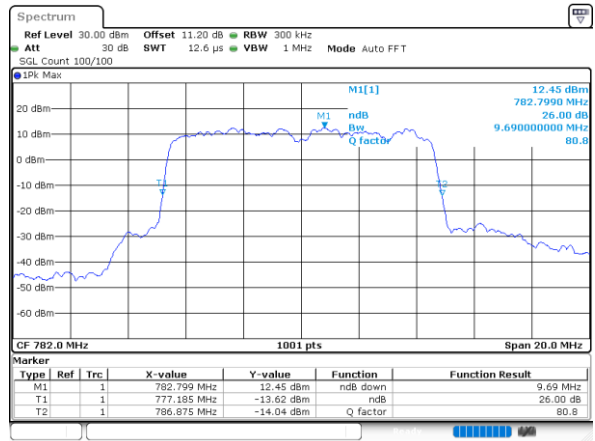
Date: 16_JUL_2020 11:33:47

Middle Channel / 5MHz / 256QAM



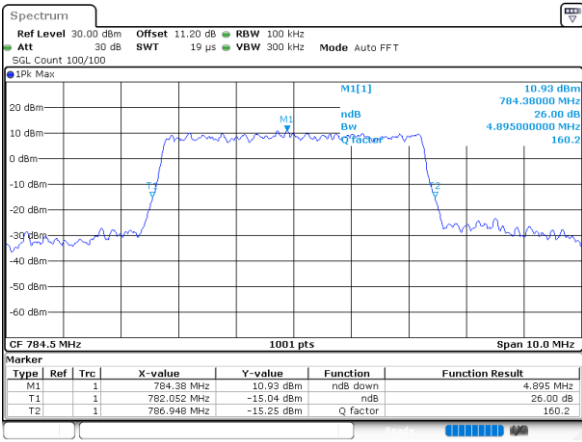
Date: 16_JUL_2020 11:40:41

Middle Channel / 10MHz / 256QAM



Date: 16_JUL_2020 11:52:43

Highest Channel / 5MHz / 256QAM



Date: 16_JUL_2020 11:42:16



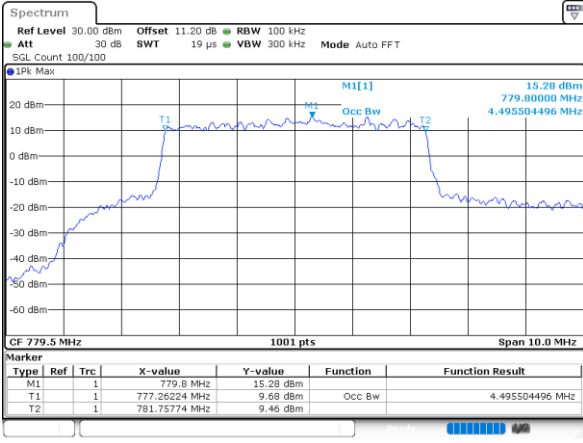
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.50	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	4.48	9.01	8.97	-	-	-	-
Highest CH	-	-	-	-	4.48	4.50	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM	256QAM	64QAM	256QAM	64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	4.50	8.99	8.97	-	-	-	-
Highest CH	-	-	-	-	4.50	4.49	-	-	-	-	-	-



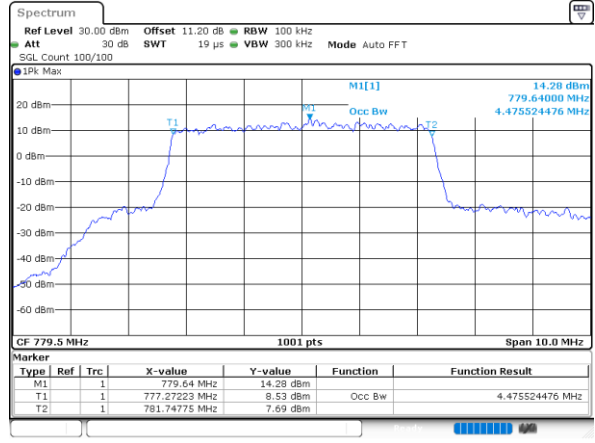
LTE Band 13

Lowest Channel / 5MHz / QPSK



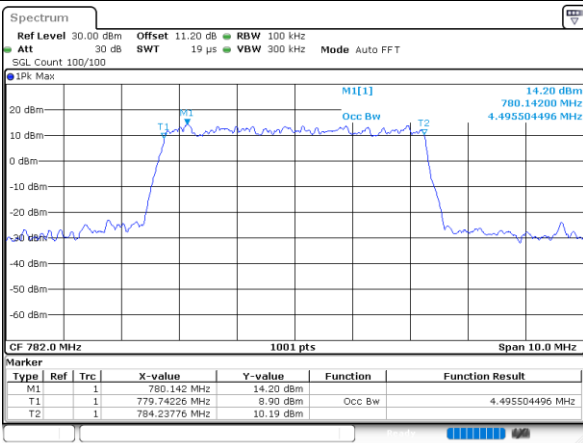
Date: 7 JUN 2020 12:37:53

Lowest Channel / 5MHz / 16QAM



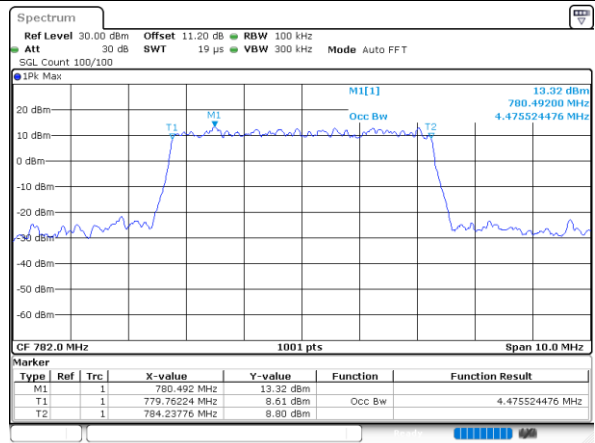
Date: 7 JUN 2020 12:38:17

Middle Channel / 5MHz / QPSK



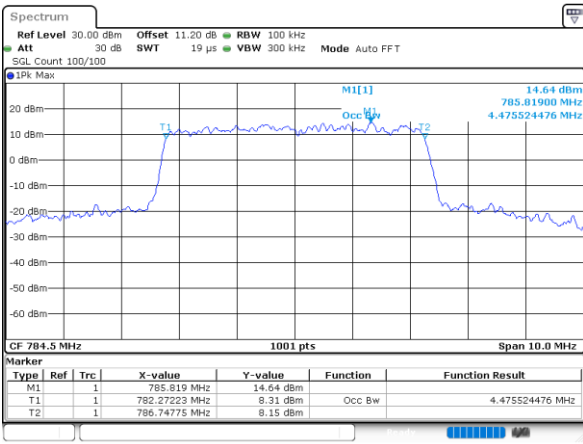
Date: 7 JUN 2020 12:48:44

Middle Channel / 5MHz / 16QAM



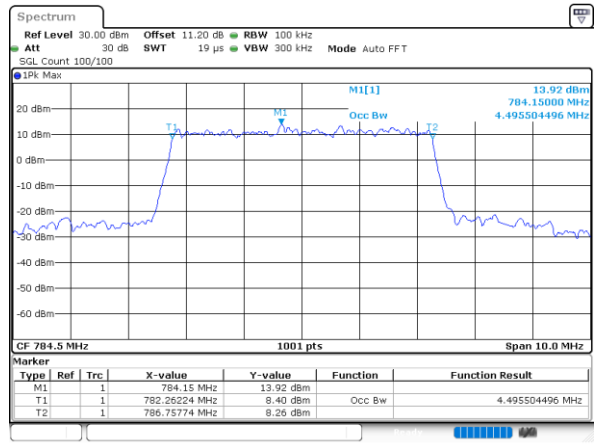
Date: 7 JUN 2020 12:48:33

Highest Channel / 5MHz / QPSK



Date: 7 JUN 2020 12:48:56

Highest Channel / 5MHz / 16QAM

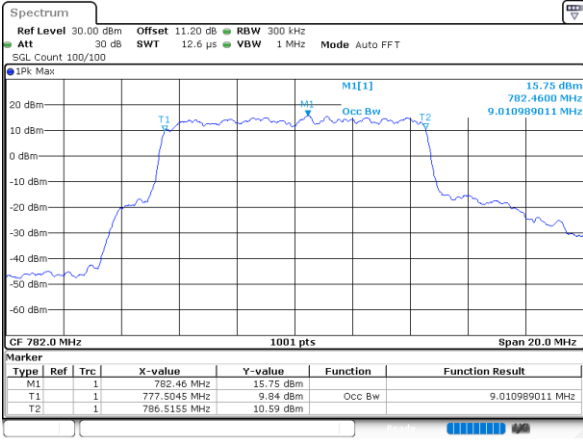


Date: 7 JUN 2020 12:49:07



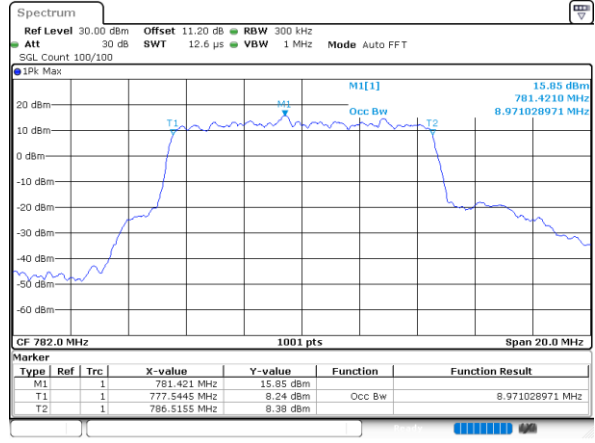
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 7 JUN 2020 13:07:31

Middle Channel / 10MHz / 16QAM

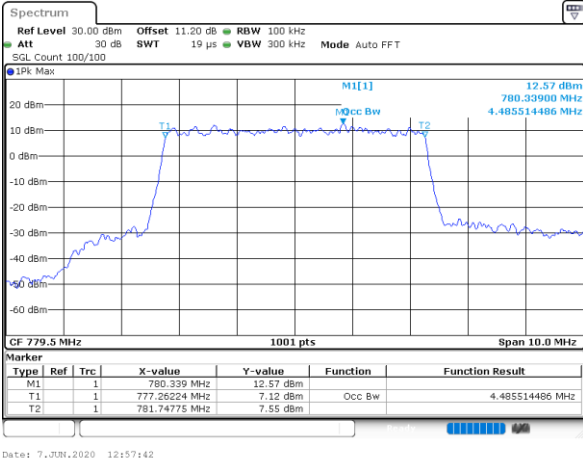


Date: 7 JUN 2020 13:07:42

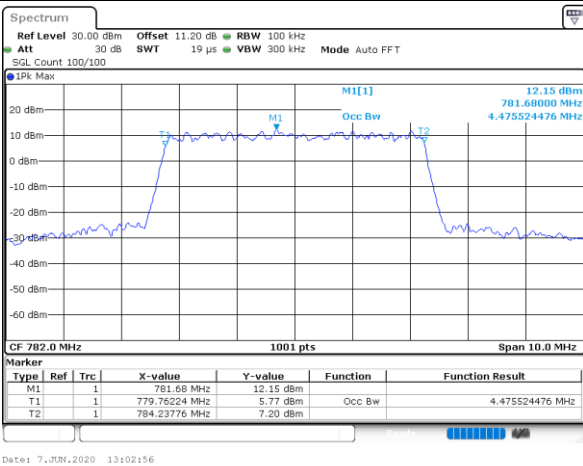


LTE Band 13

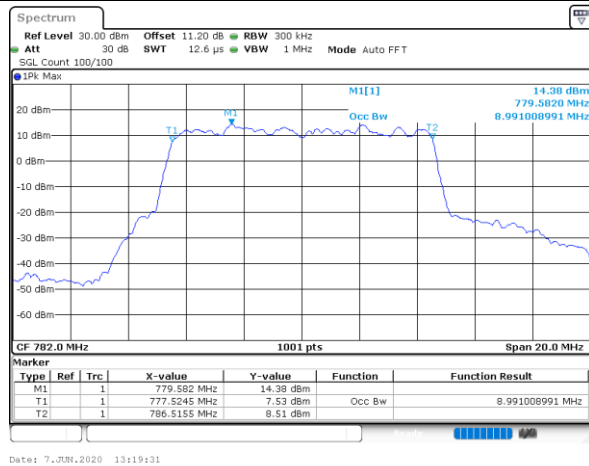
Lowest Channel / 5MHz / 64QAM



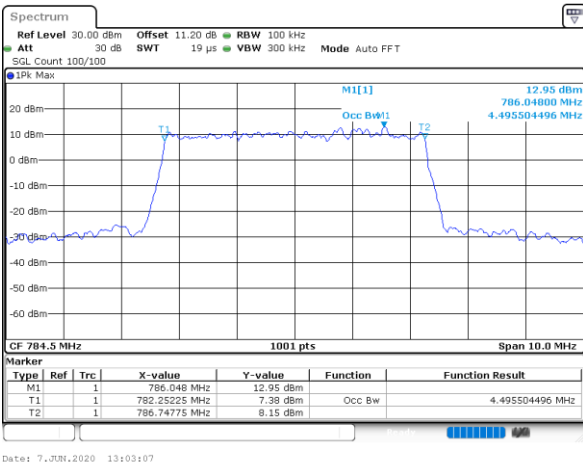
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



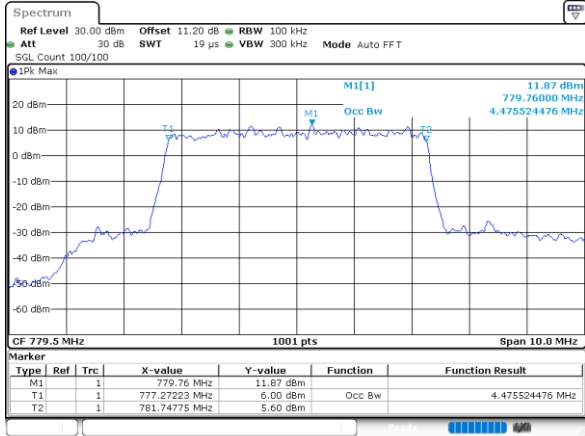
Highest Channel / 5MHz / 64QAM





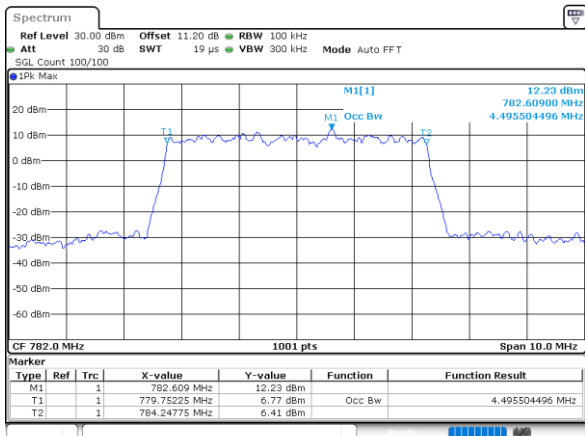
LTE Band 13

Lowest Channel / 5MHz / 256QAM



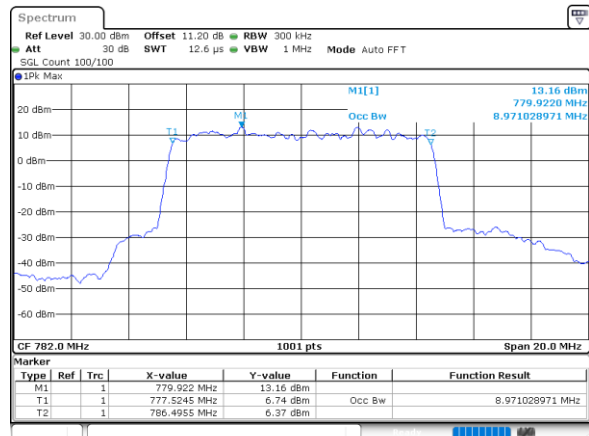
Date: 16_JUL_2020 11:33:39

Middle Channel / 5MHz / 256QAM



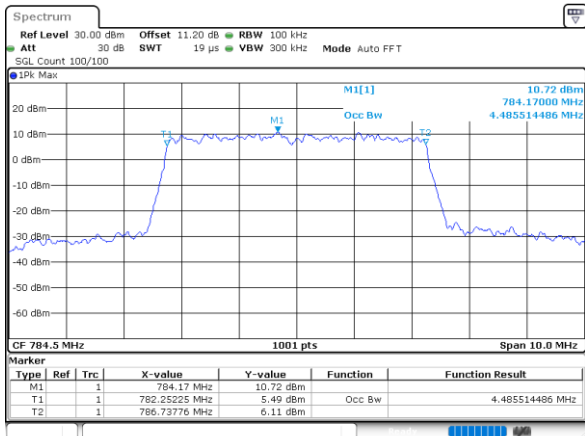
Date: 16_JUL_2020 11:40:35

Middle Channel / 10MHz / 256QAM



Date: 16_JUL_2020 11:52:36

Highest Channel / 5MHz / 256QAM



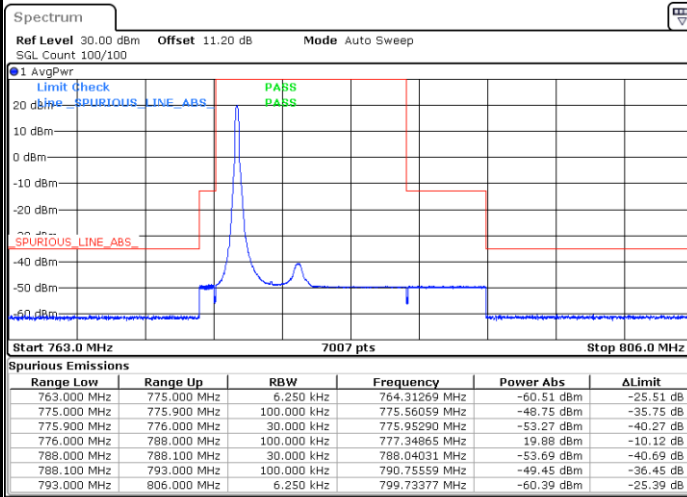
Date: 16_JUL_2020 11:42:09



Conducted Band Edge

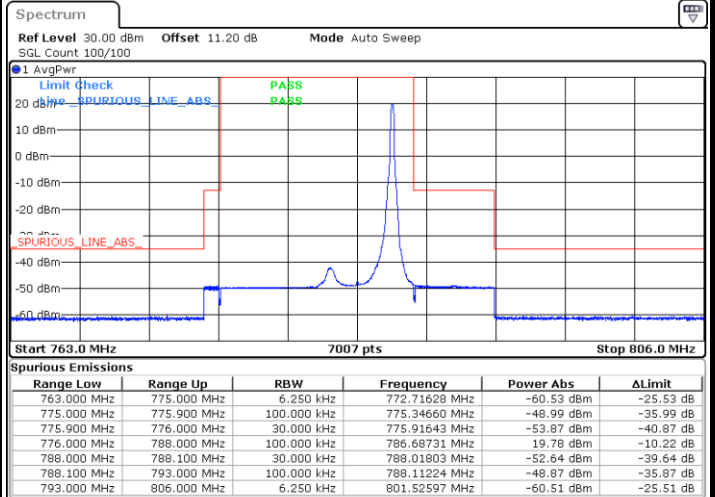
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



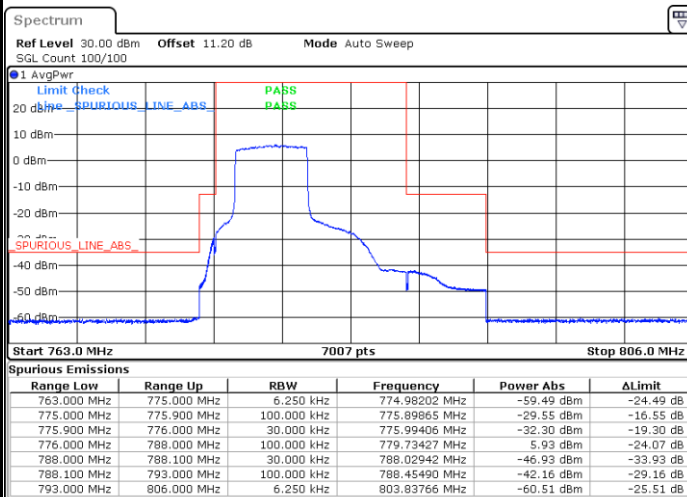
Date: 7 JUN.2020 12:45:20

Highest Band Edge / 1 RB



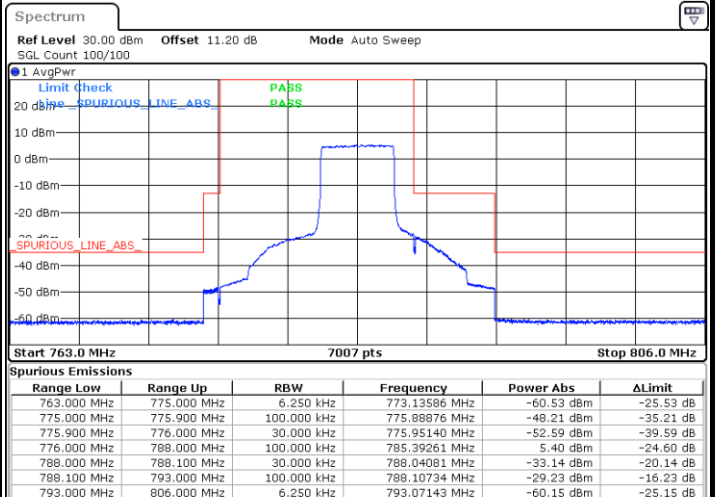
Date: 7 JUN.2020 12:56:10

Lowest Band Edge / Full RB



Date: 7 JUN.2020 12:40:20

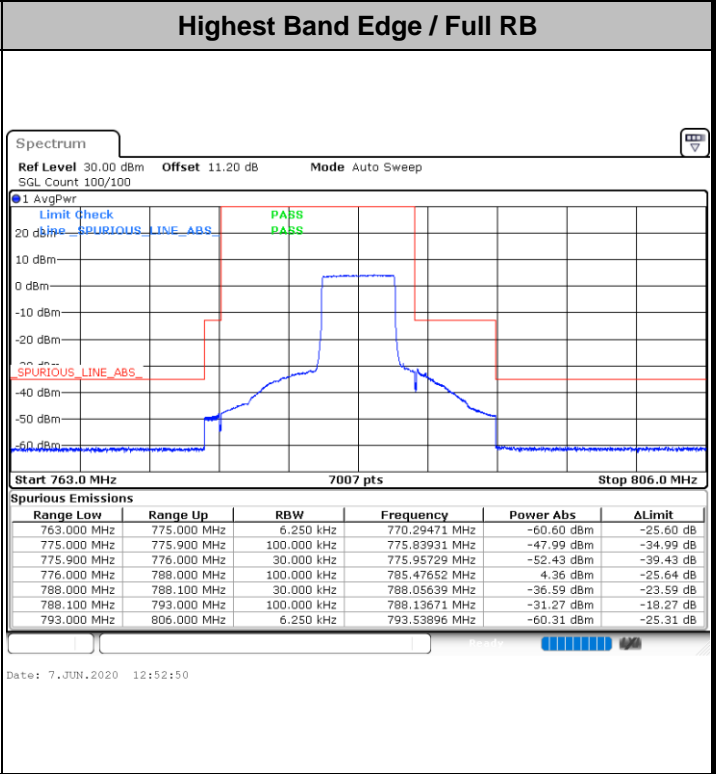
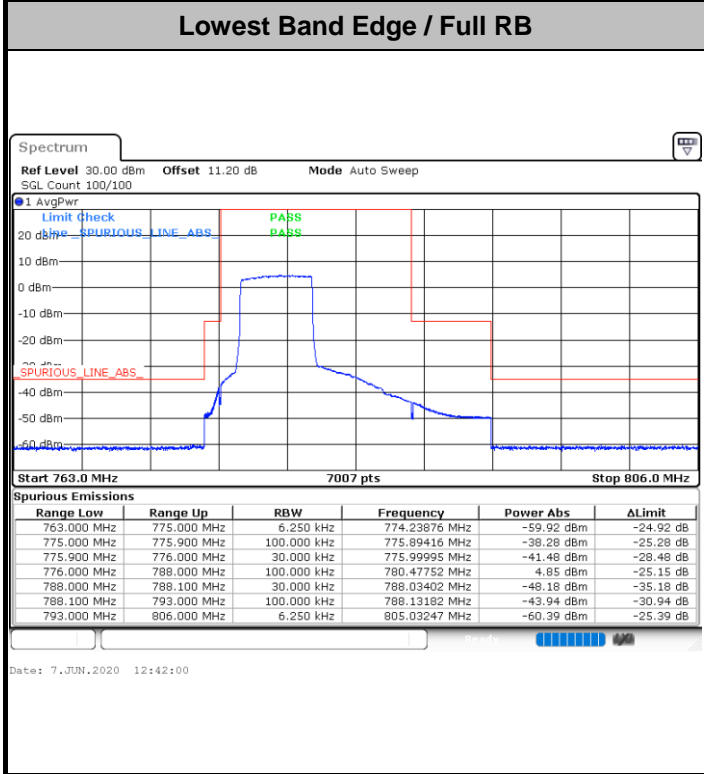
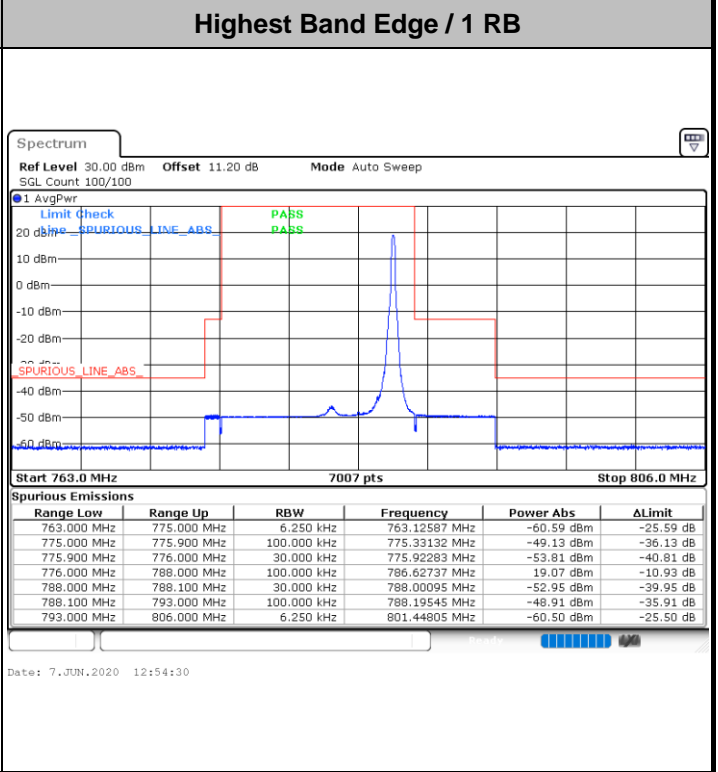
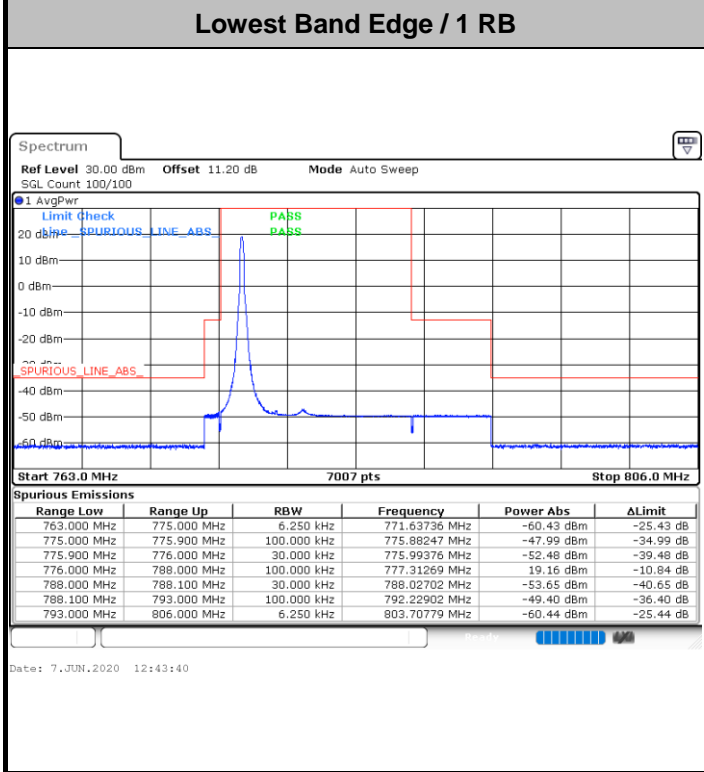
Highest Band Edge / Full RB



Date: 7 JUN.2020 12:51:10



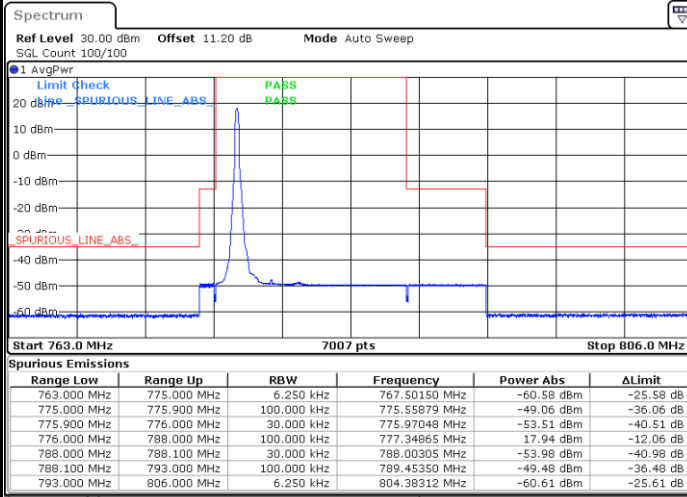
LTE Band 13 / 5MHz / 16QAM





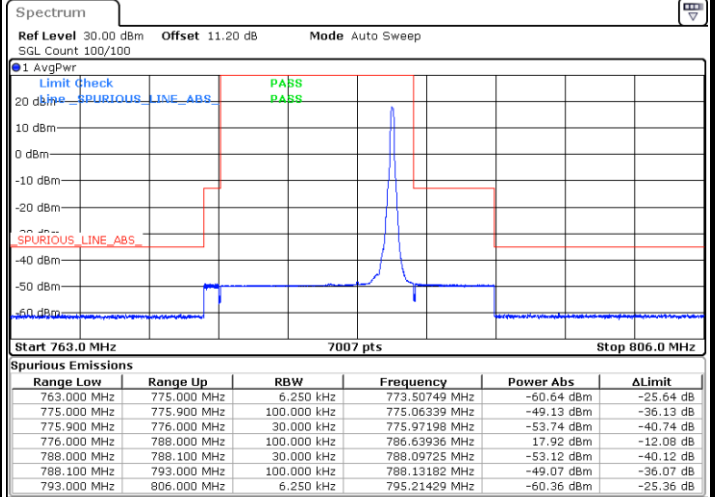
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



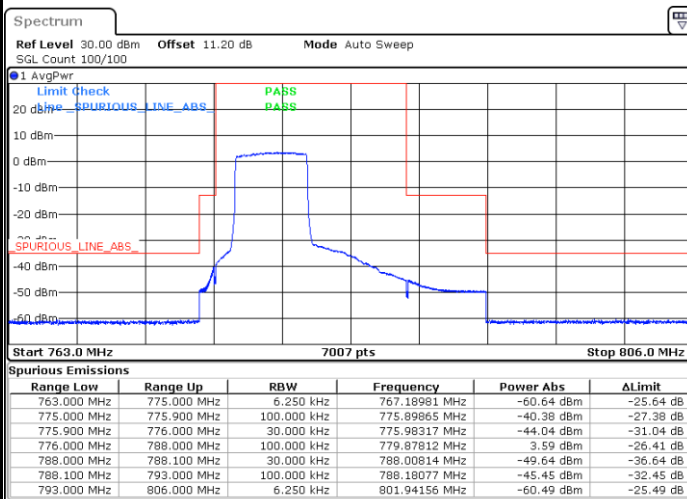
Date: 7.JUN.2020 13:01:14

Highest Band Edge / 1 RB



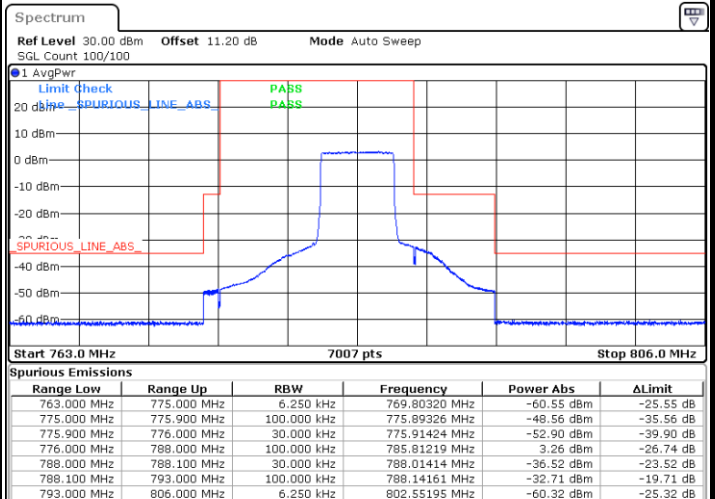
Date: 7.JUN.2020 13:06:39

Lowest Band Edge / Full RB



Date: 7.JUN.2020 12:59:34

Highest Band Edge / Full RB



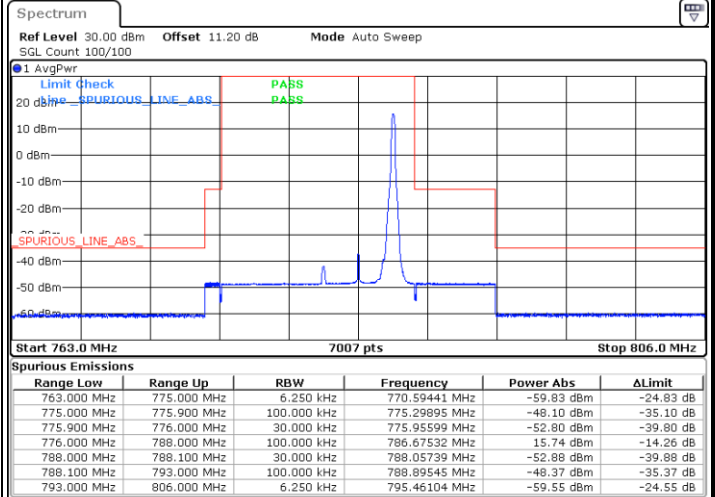
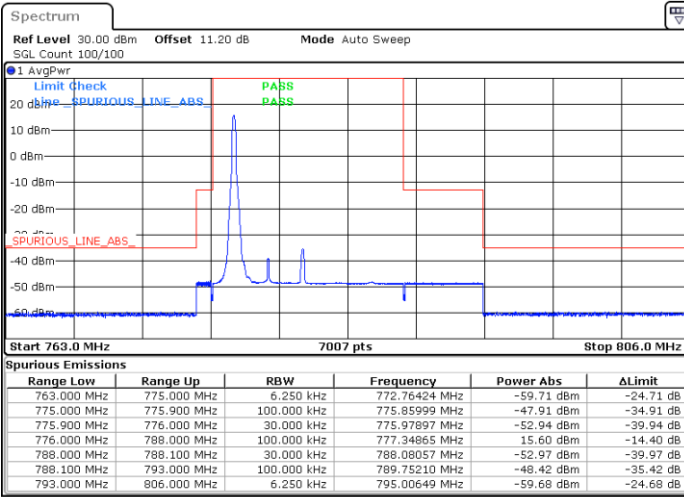
Date: 7.JUN.2020 13:04:59



LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

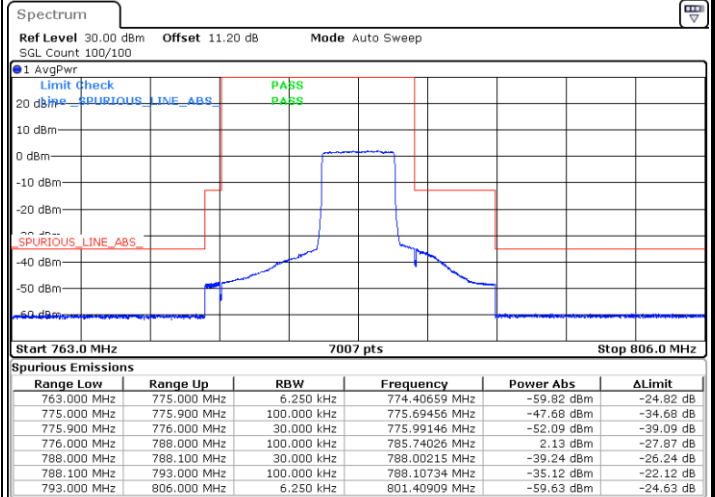
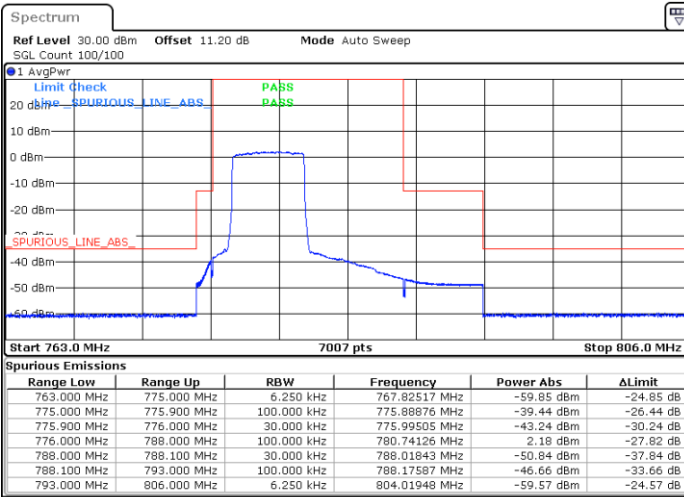


Date: 16.JUL.2020 11:36:43

Date: 16.JUL.2020 11:50:12

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



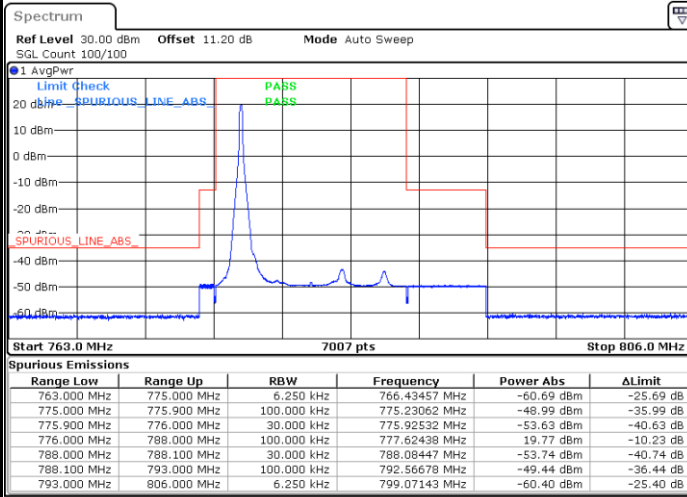
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Date: 16.JUL.2020 11:46:41



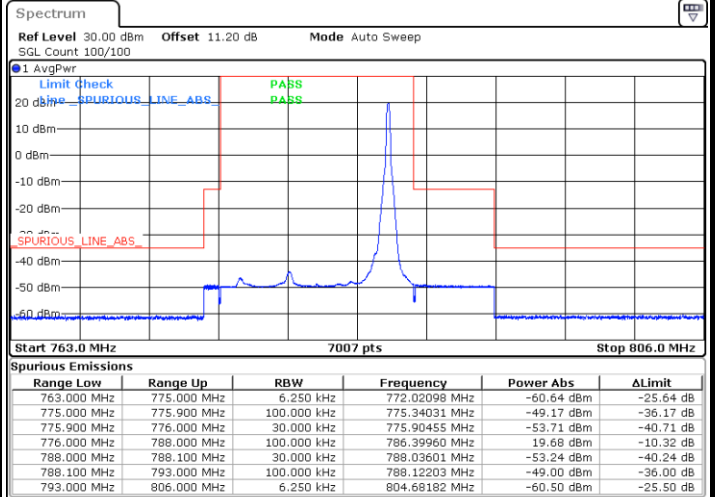
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



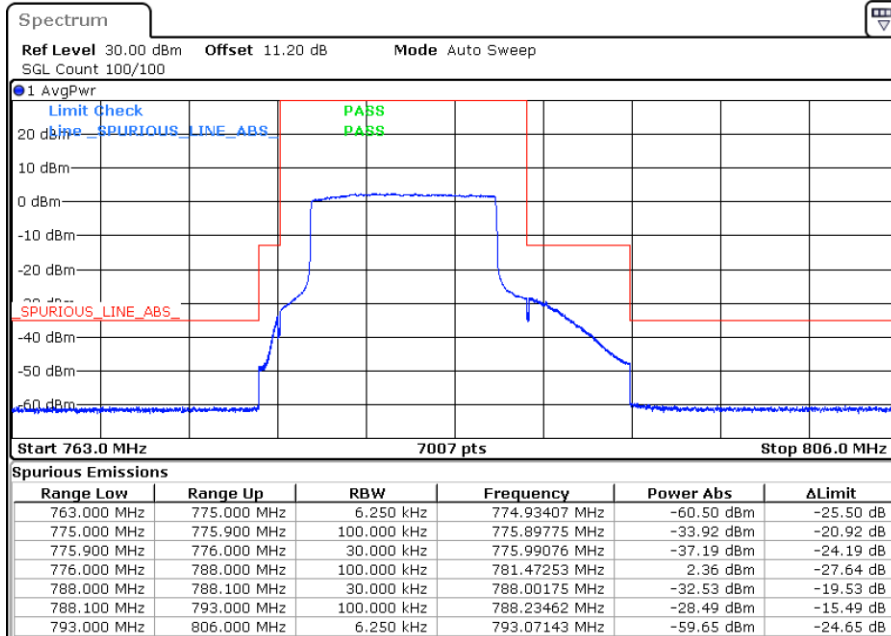
Date: 7.JUN.2020 13:14:42

Highest Band Edge / 1 RB



Date: 7.JUN.2020 13:16:21

Band Edge / Full RB

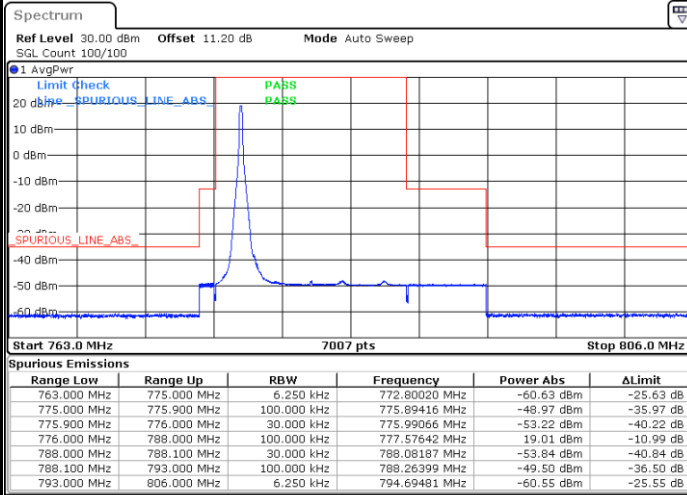


Date: 7 JUN 2020 13:09:44



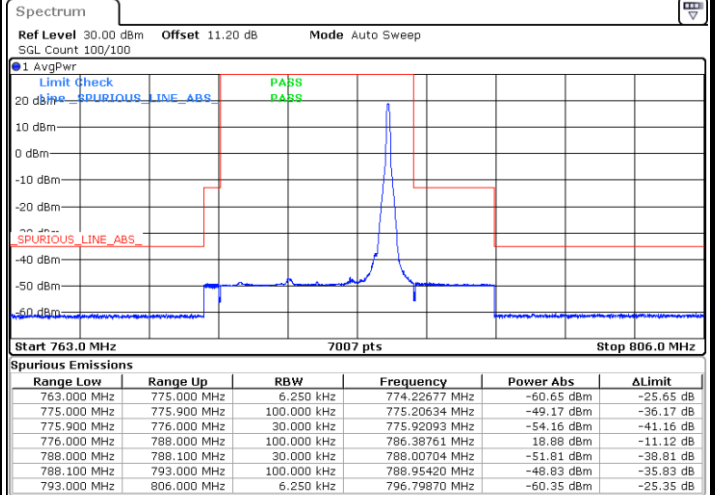
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



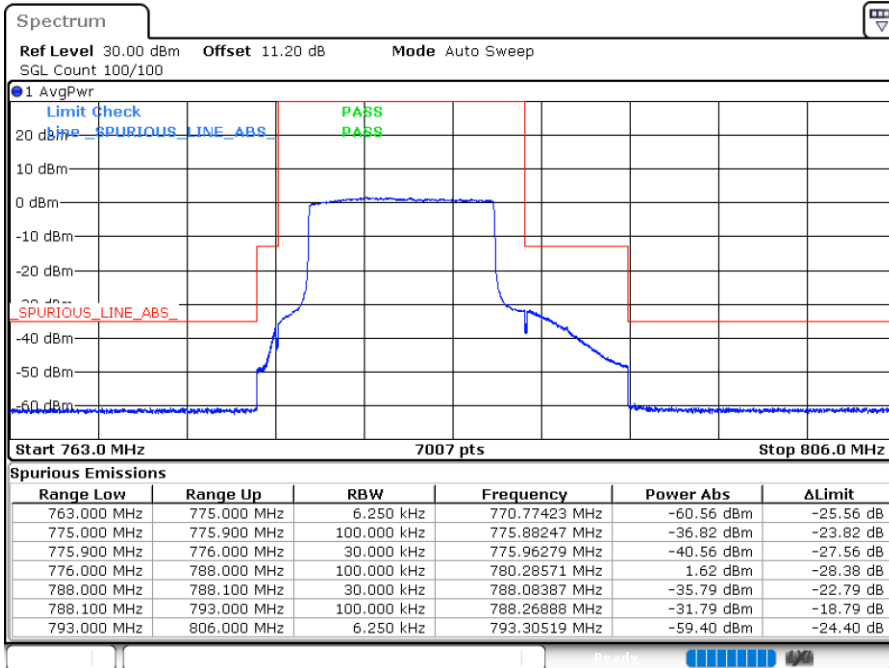
Date: 7.JUN.2020 13:13:03

Highest Band Edge / 1 RB



Date: 7.JUN.2020 13:18:01

Band Edge / Full RB



Date: 7 JUN 2020 13:11:23