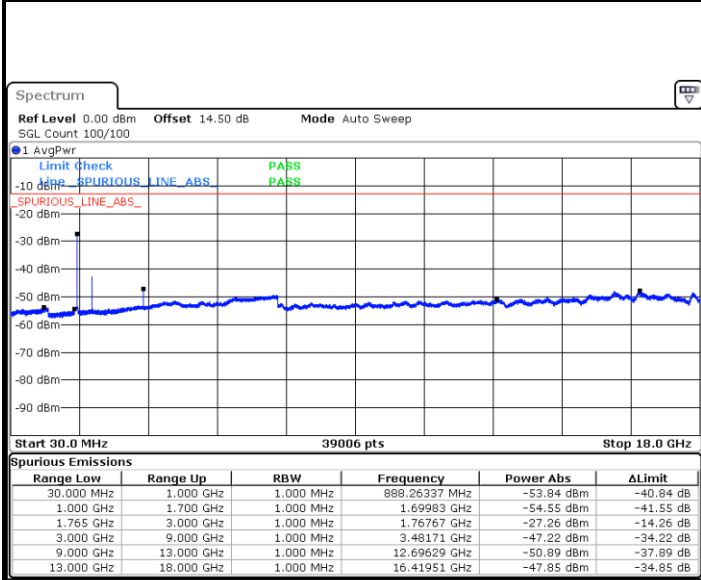




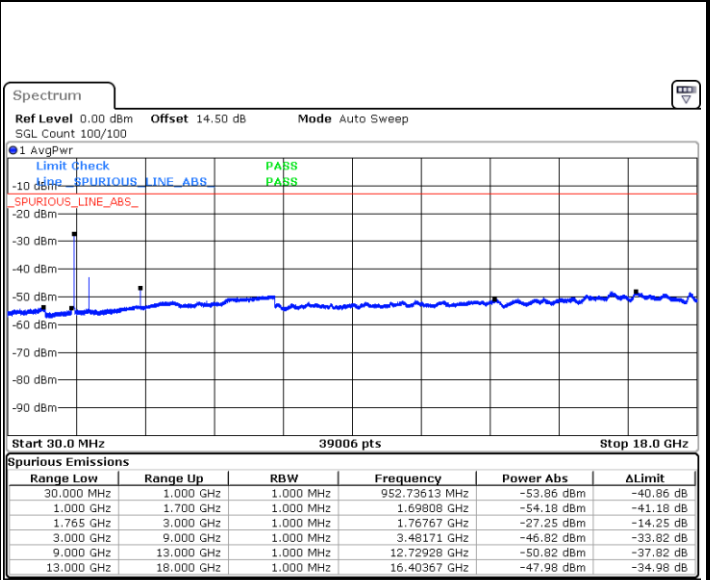
LTE Band 4 / 15MHz

Highest Channel / QPSK



Date: 14.MAR.2020 17:57:42

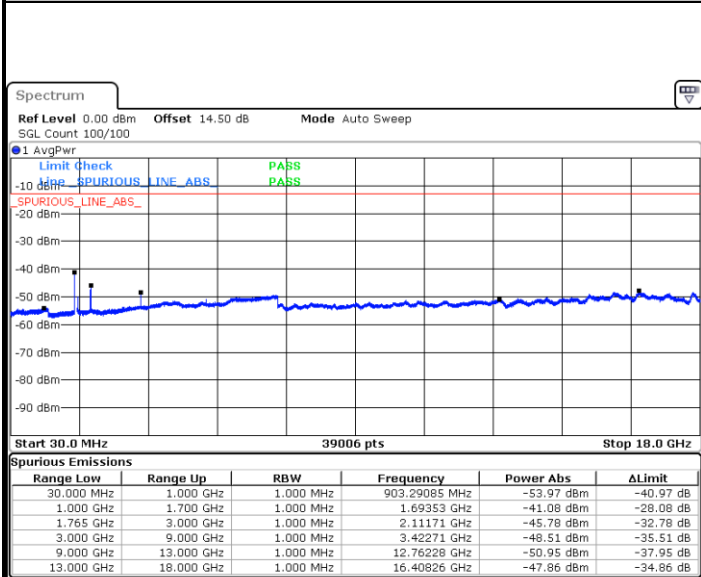
Highest Channel / 16QAM



Date: 14.MAR.2020 17:58:16

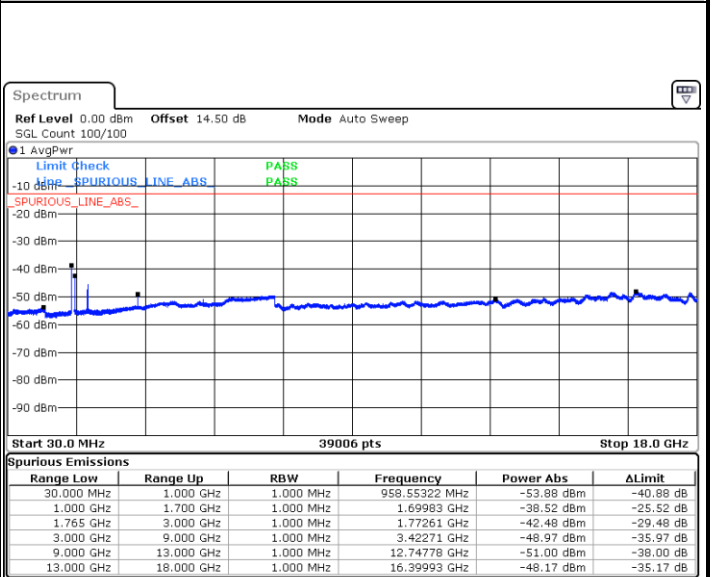
LTE Band 4 / 20MHz

Lowest Channel / QPSK



Date: 14.MAR.2020 18:03:30

Lowest Channel / 16QAM



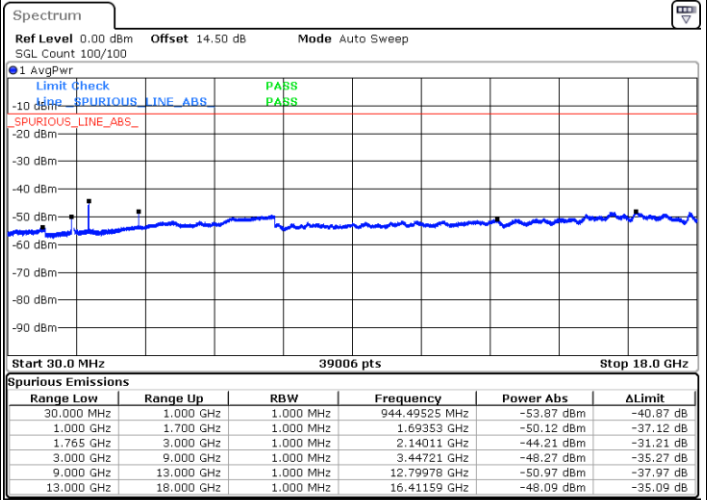
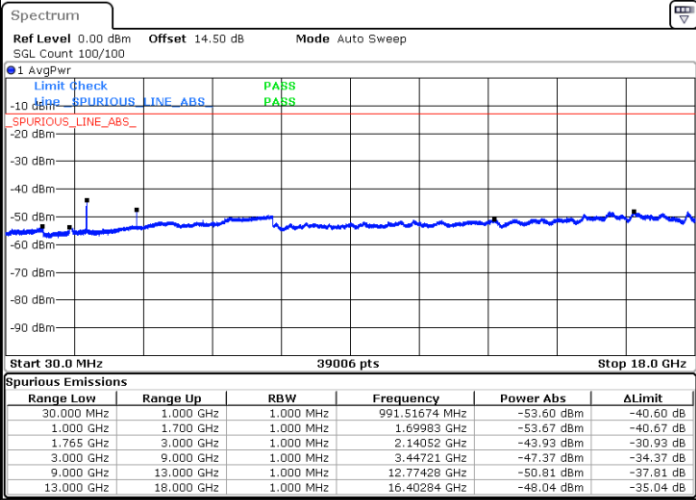
Date: 14.MAR.2020 18:04:05



LTE Band 4 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

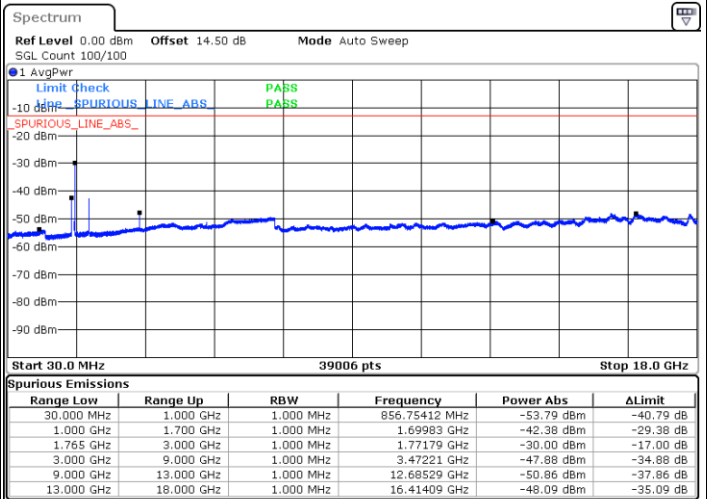
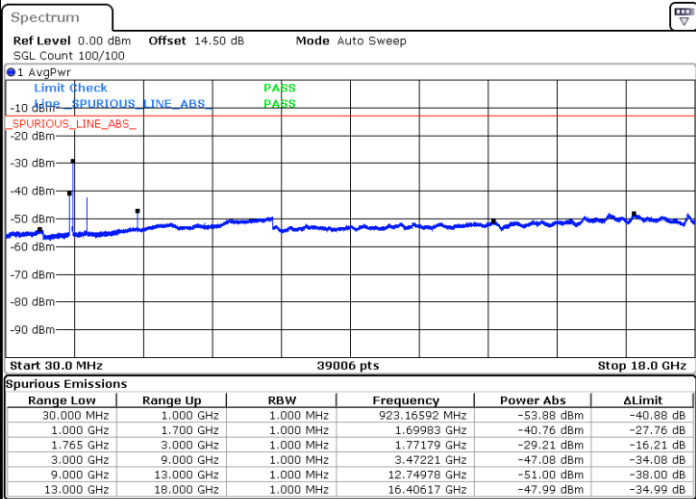


Date: 14.MAR.2020 18:05:23

Date: 14.MAR.2020 18:05:57

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 14.MAR.2020 18:11:11

Date: 14.MAR.2020 18:11:46



Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0023	PASS
40	Normal Voltage	0.0033	
30	Normal Voltage	0.0050	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0042	
0	Normal Voltage	0.0029	
-10	Normal Voltage	0.0039	
-20	Normal Voltage	0.0025	
-30	Normal Voltage	0.0055	
20	Maximum Voltage	0.0080	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

Note:

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



LTE Band 5

Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.64	5.28	5.39	6.09	PASS
Middle CH	4.93	5.16	6.00	6.06	
Highest CH	4.09	5.13	4.96	5.88	



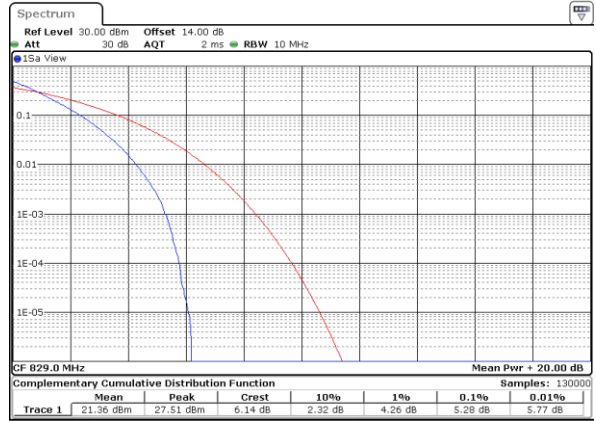
LTE Band 5 / 10MHz / QPSK

Lowest Channel / 1RB



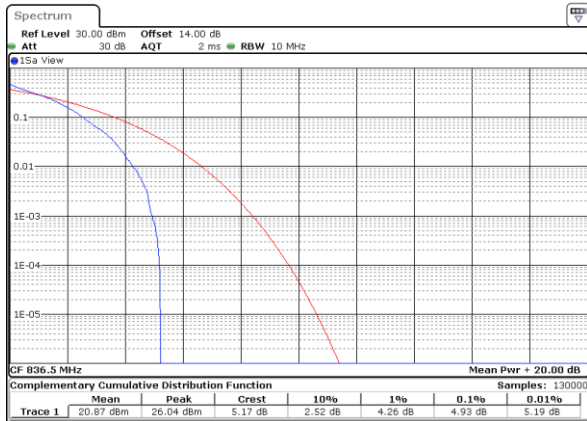
Date: 15_MAR_2020 14:04:27

Lowest Channel / Full RB



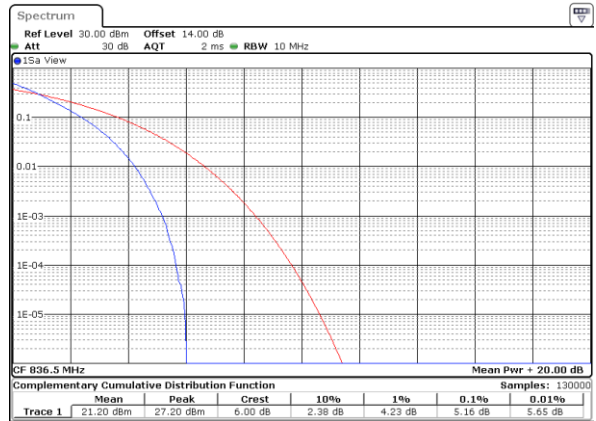
Date: 15_MAR_2020 14:05:00

Middle Channel / 1RB



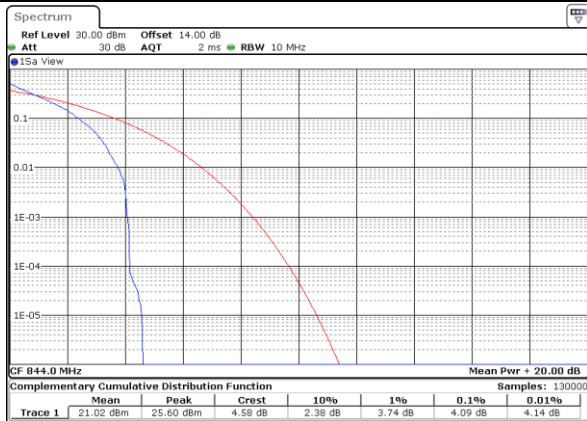
Date: 15_MAR_2020 14:05:23

Middle Channel / Full RB



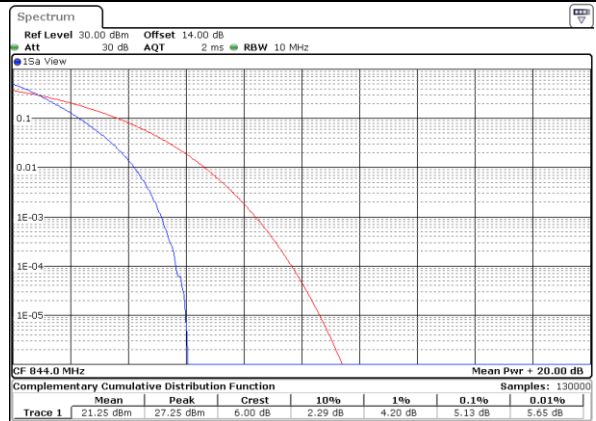
Date: 15_MAR_2020 14:05:34

Highest Channel / 1RB



Date: 15_MAR_2020 14:05:46

Highest Channel / Full RB

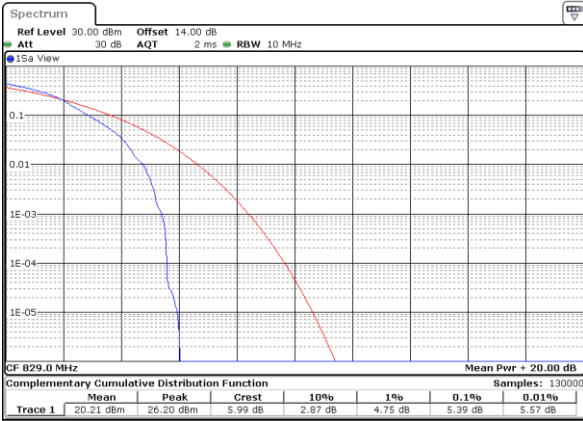


Date: 15_MAR_2020 14:05:57



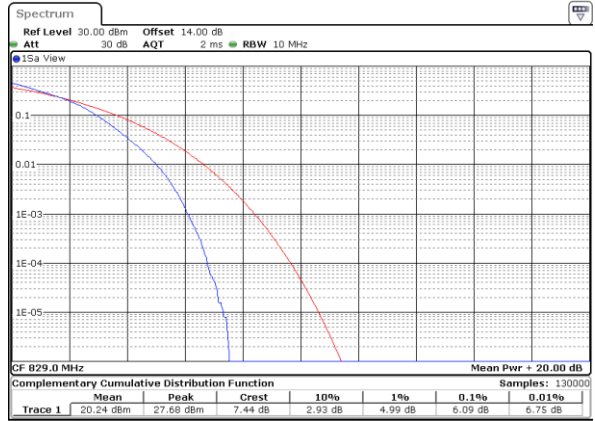
LTE Band 5 / 10MHz / 16QAM

Lowest Channel / 1RB



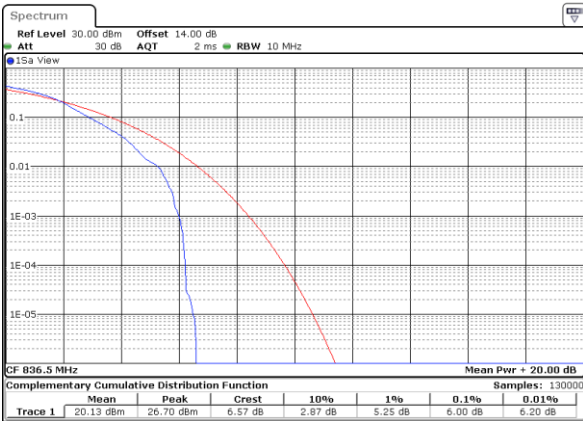
Date: 15_MAR.2020 11:57:43

Lowest Channel / Full RB



Date: 15_MAR.2020 11:57:58

Middle Channel / 1RB



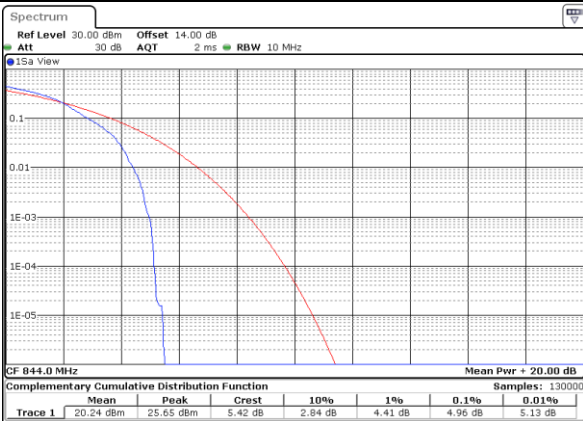
Date: 15_MAR.2020 11:58:42

Middle Channel / Full RB



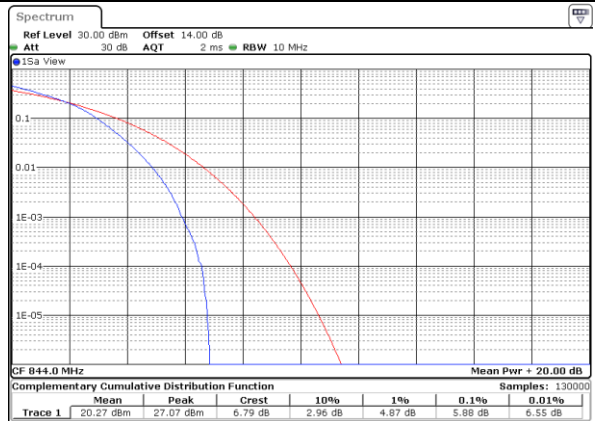
Date: 15_MAR.2020 11:58:54

Highest Channel / 1RB



Date: 15_MAR.2020 11:59:12

Highest Channel / Full RB



Date: 15_MAR.2020 11:59:23



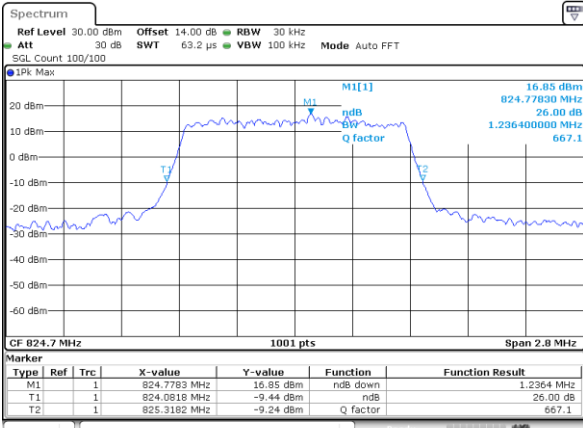
26dB Bandwidth

Mode	LTE Band 5 : 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	1.24	1.26	3.03	3.04	5.29	4.91	9.85	9.99	-	-	-	-
Middle CH	1.25	1.28	3.10	3.10	5.00	4.88	10.01	9.95	-	-	-	-
Highest CH	1.24	1.25	3.07	3.18	4.96	4.87	9.87	9.85	-	-	-	-



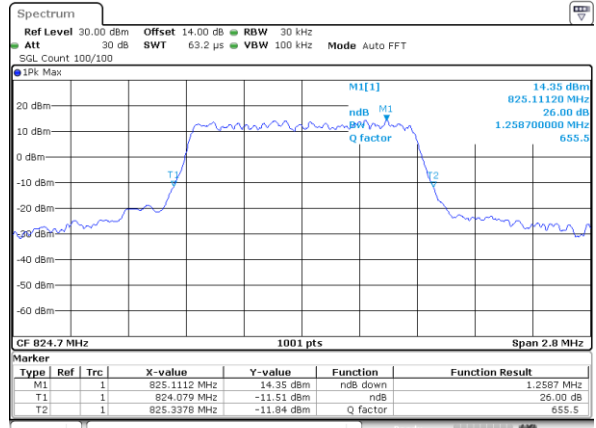
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



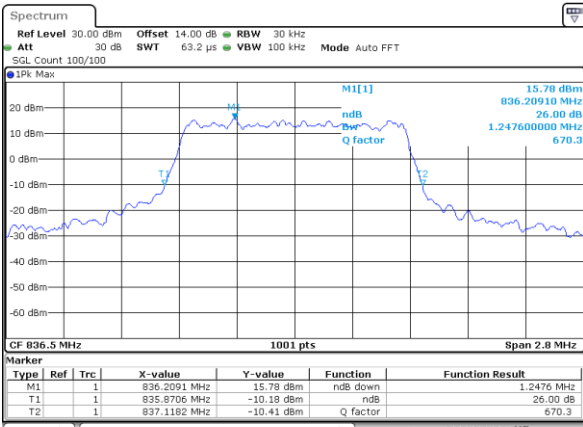
Date: 15_MAR_2020 13:52:16

Lowest Channel / 1.4MHz / 16QAM



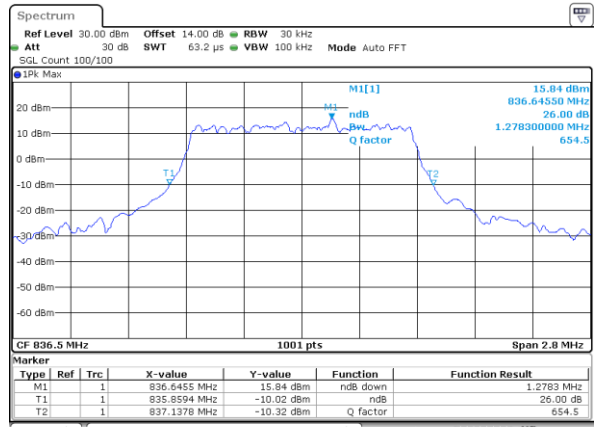
Date: 15_MAR_2020 11:35:54

Middle Channel / 1.4MHz / QPSK



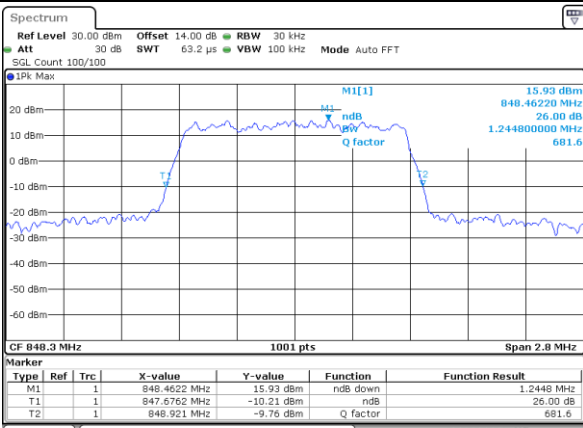
Date: 15_MAR_2020 13:54:57

Middle Channel / 1.4MHz / 16QAM



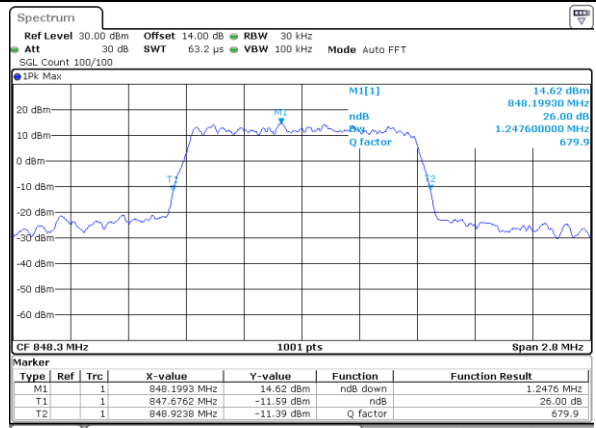
Date: 15_MAR_2020 11:38:34

Highest Channel / 1.4MHz / QPSK



Date: 15_MAR_2020 13:55:57

Highest Channel / 1.4MHz / 16QAM

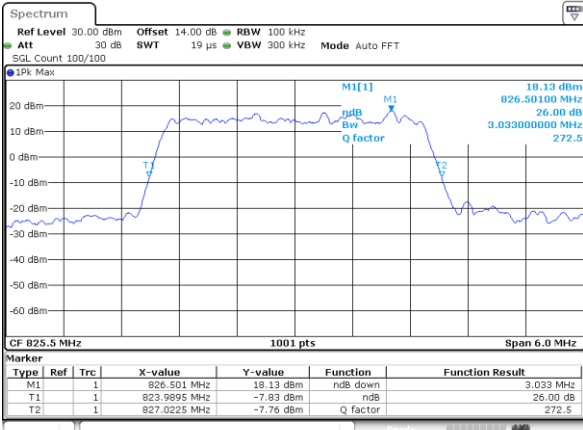


Date: 15_MAR_2020 11:39:34



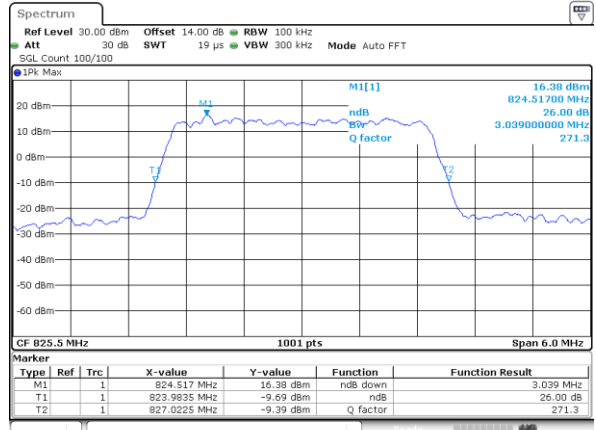
LTE Band 5

Lowest Channel / 3MHz / QPSK



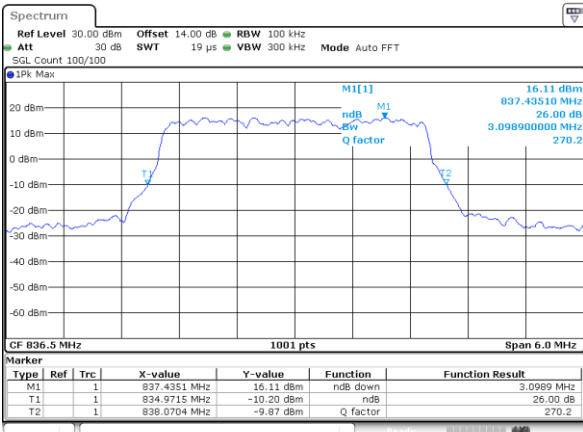
Date: 15_MAR_2020 12:14:50

Lowest Channel / 3MHz / 16QAM



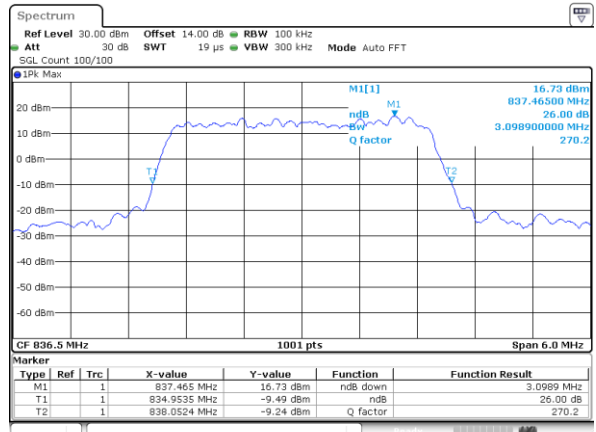
Date: 15_MAR_2020 11:06:55

Middle Channel / 3MHz / QPSK



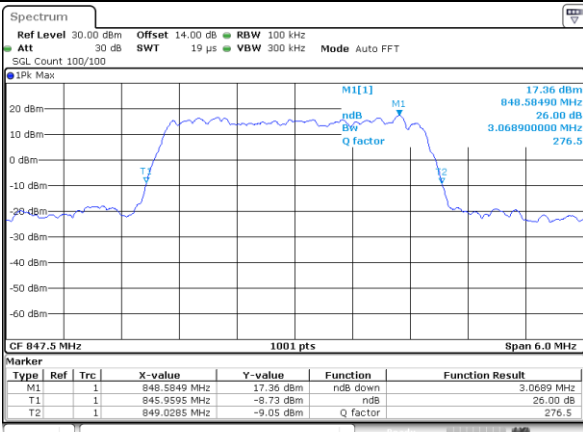
Date: 15_MAR_2020 12:19:18

Middle Channel / 3MHz / 16QAM



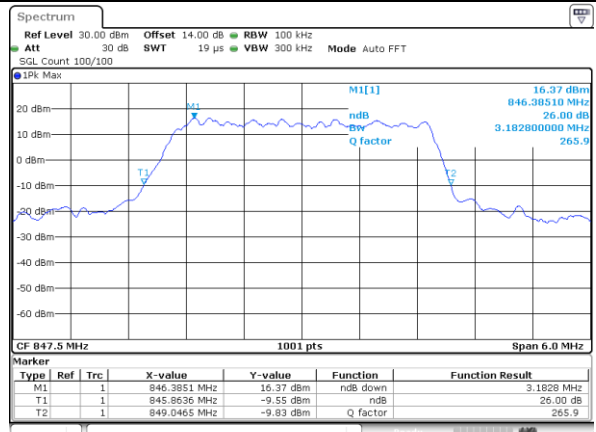
Date: 15_MAR_2020 11:11:15

Highest Channel / 3MHz / QPSK



Date: 15_MAR_2020 12:20:18

Highest Channel / 3MHz / 16QAM

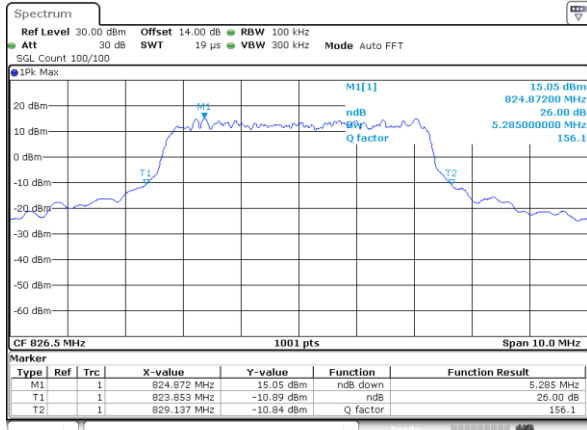


Date: 15_MAR_2020 11:12:15



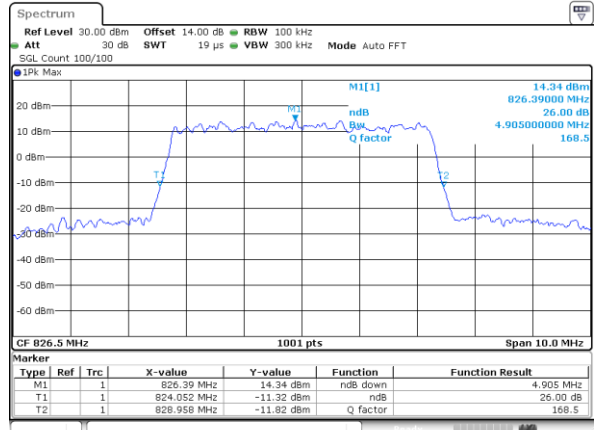
LTE Band 5

Lowest Channel / 5MHz / QPSK



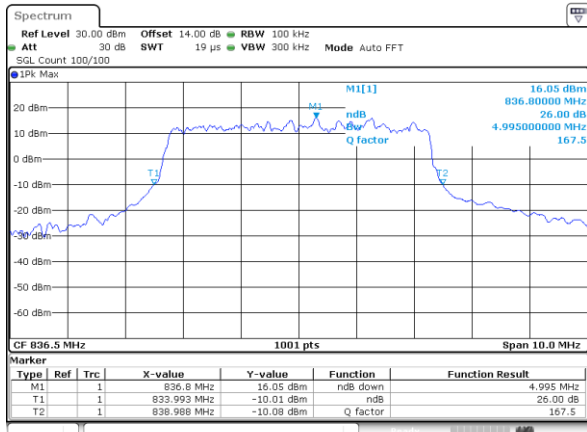
Date: 15_MAR_2020 12:24:38

Lowest Channel / 5MHz / 16QAM



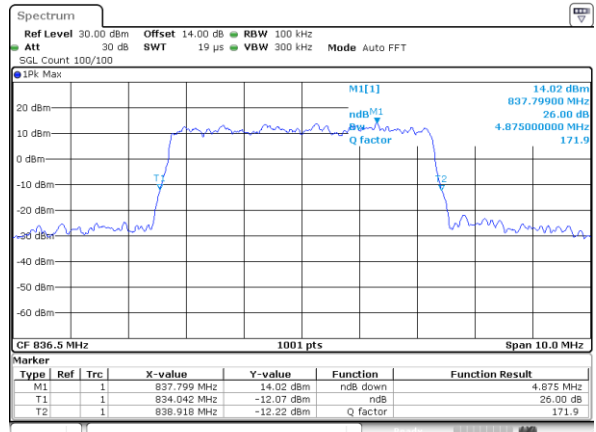
Date: 15_MAR_2020 11:16:35

Middle Channel / 5MHz / QPSK



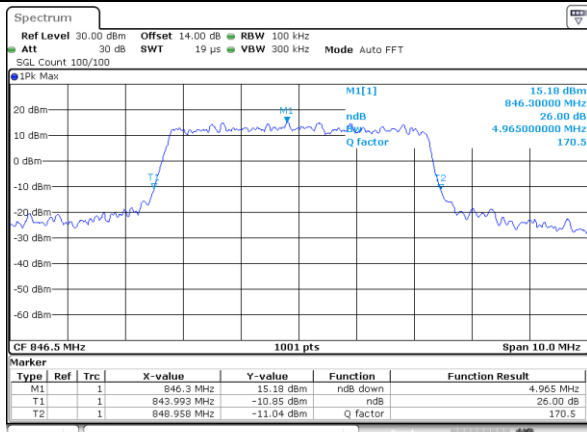
Date: 15_MAR_2020 12:28:58

Middle Channel / 5MHz / 16QAM



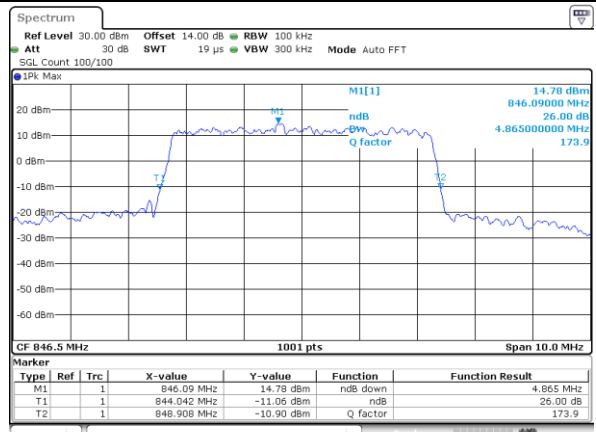
Date: 15_MAR_2020 11:20:56

Highest Channel / 5MHz / QPSK



Date: 15_MAR_2020 12:29:57

Highest Channel / 5MHz / 16QAM

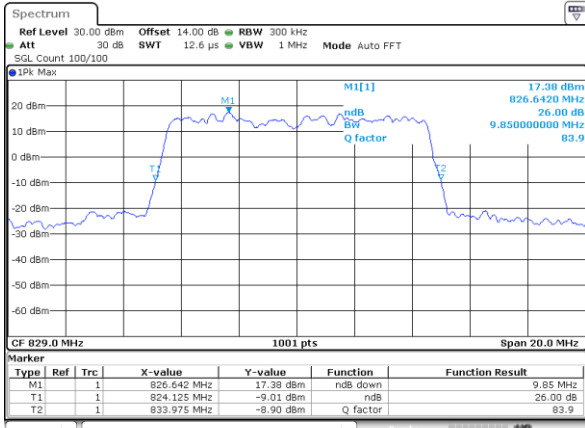


Date: 15_MAR_2020 11:21:55



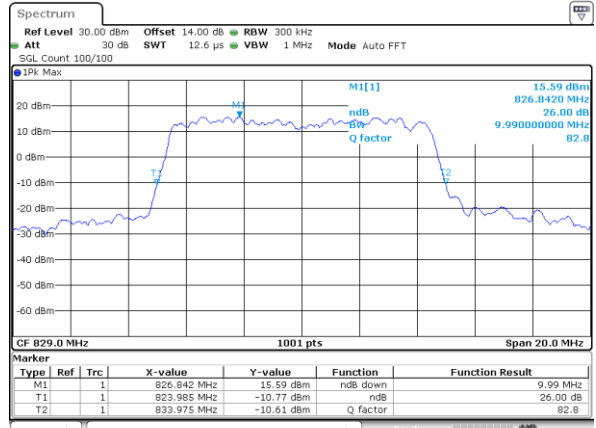
LTE Band 5

Lowest Channel / 10MHz / QPSK



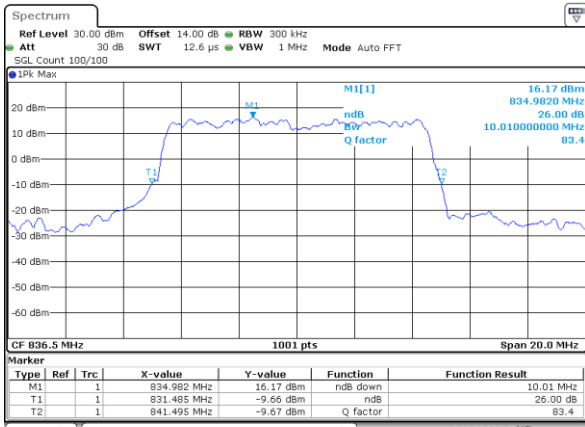
Date: 15_MAR_2020 13:28:11

Lowest Channel / 10MHz / 16QAM



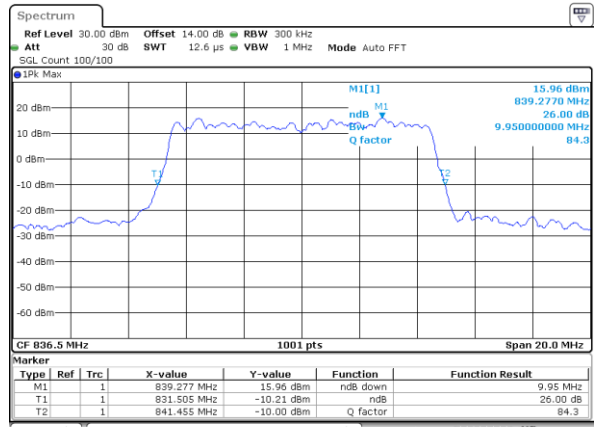
Date: 15_MAR_2020 11:26:15

Middle Channel / 10MHz / QPSK



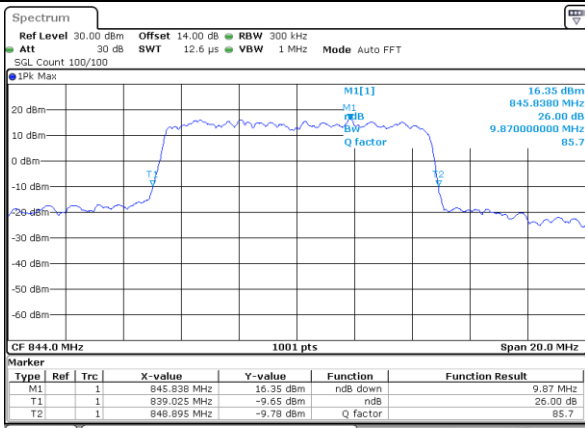
Date: 15_MAR_2020 13:37:05

Middle Channel / 10MHz / 16QAM



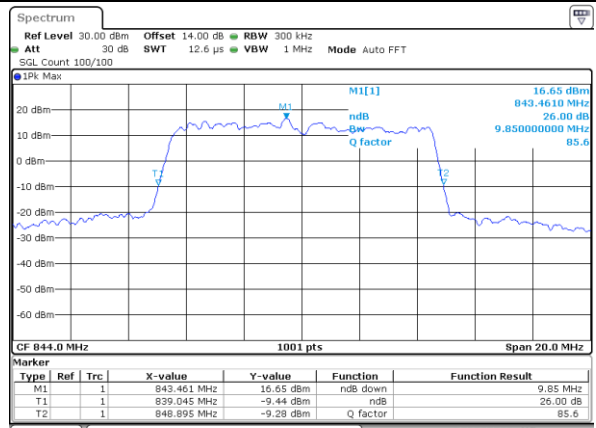
Date: 15_MAR_2020 11:30:35

Highest Channel / 10MHz / QPSK



Date: 15_MAR_2020 14:20:33

Highest Channel / 10MHz / 16QAM



Date: 15_MAR_2020 11:31:34



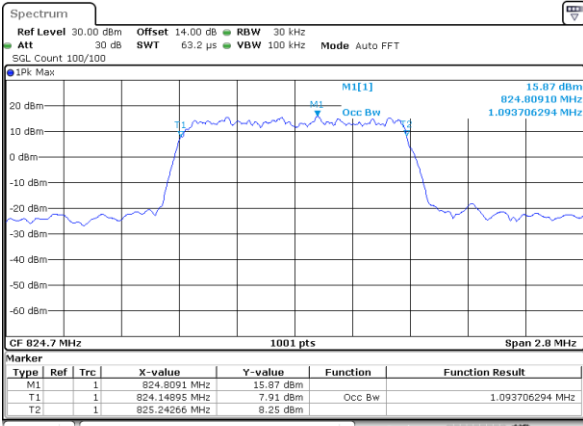
Occupied Bandwidth

Mode	LTE Band 5 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.09	2.75	2.72	4.49	4.48	9.13	9.01	-	-	-	-
Middle CH	1.10	1.09	2.73	2.72	4.49	4.49	9.01	9.07	-	-	-	-
Highest CH	1.09	1.09	2.77	2.73	4.51	4.48	9.01	9.01	-	-	-	-



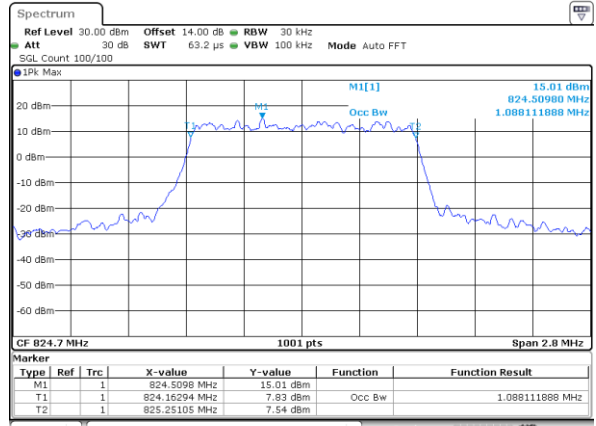
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



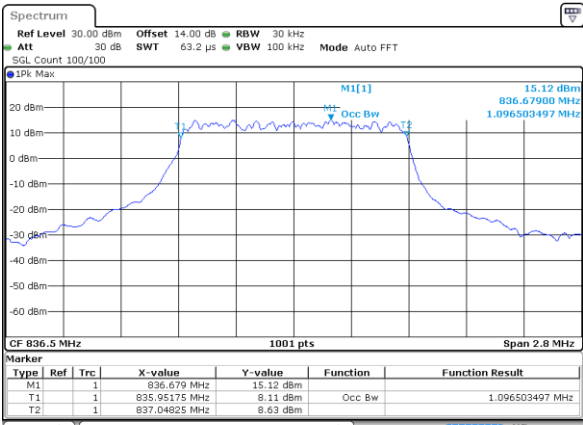
Date: 15_MAR_2020 13:52:05

Lowest Channel / 1.4MHz / 16QAM



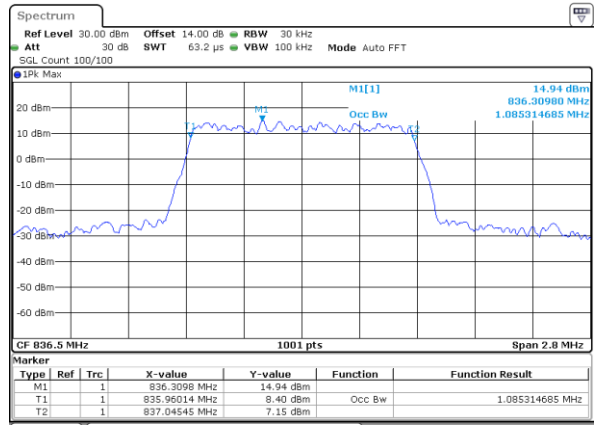
Date: 15_MAR_2020 11:35:42

Middle Channel / 1.4MHz / QPSK



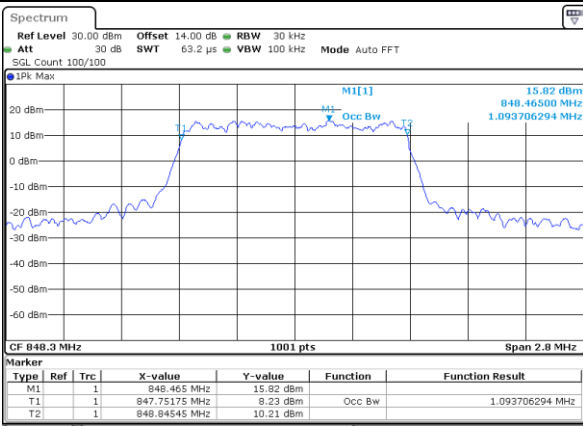
Date: 20 MAR 2020 23:43:04

Middle Channel / 1.4MHz / 16QAM



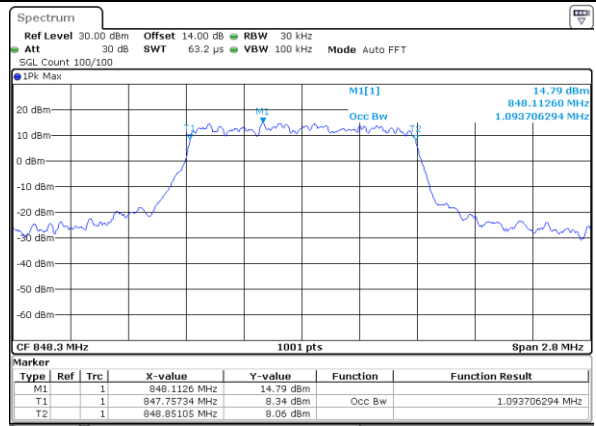
Date: 15_MAR_2020 11:38:23

Highest Channel / 1.4MHz / QPSK



Date: 15_MAR_2020 13:55:45

Highest Channel / 1.4MHz / 16QAM

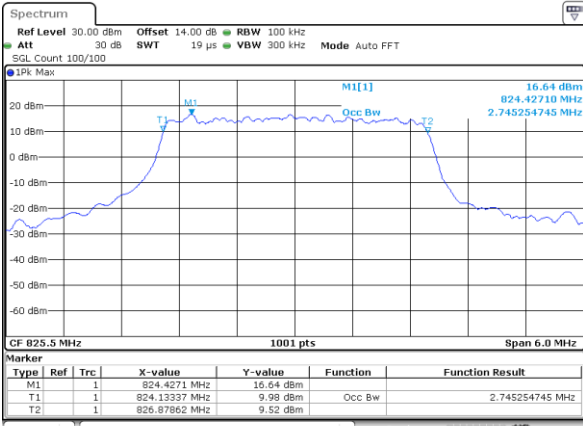


Date: 15_MAR_2020 11:39:22



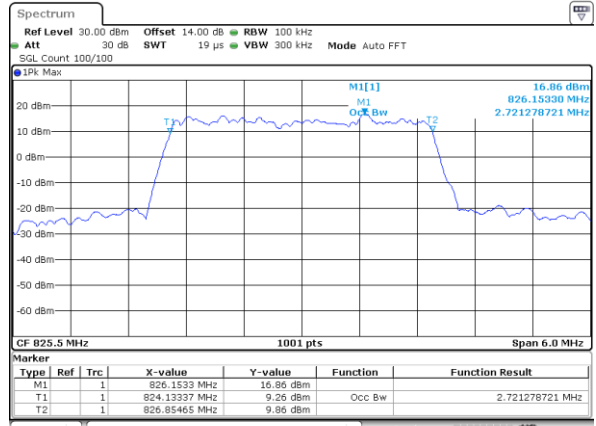
LTE Band 5

Lowest Channel / 3MHz / QPSK



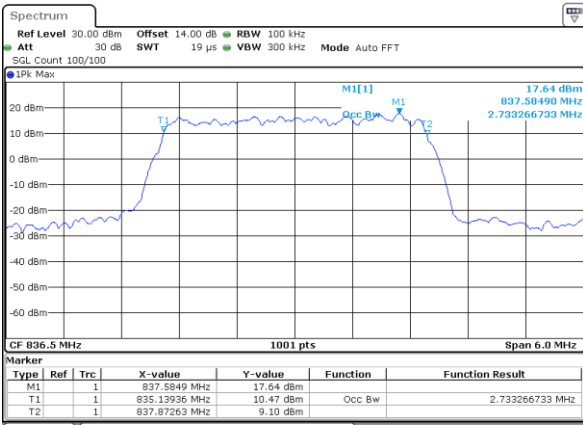
Date: 15_MAR_2020 12:14:46

Lowest Channel / 3MHz / 16QAM



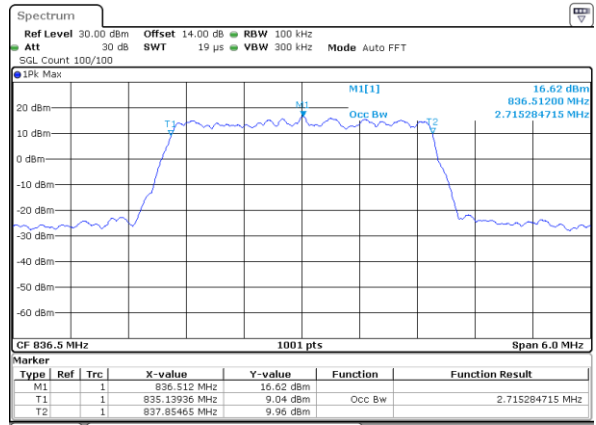
Date: 15_MAR_2020 11:10:43

Middle Channel / 3MHz / QPSK



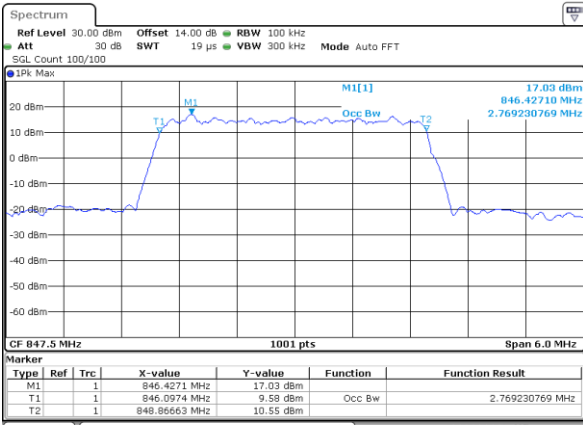
Date: 15_MAR_2020 12:19:07

Middle Channel / 3MHz / 16QAM



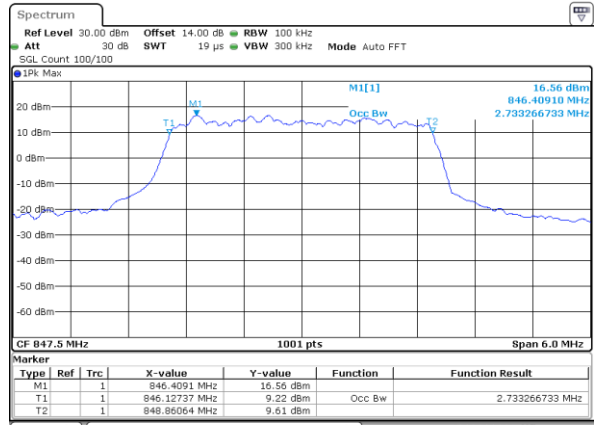
Date: 15_MAR_2020 11:11:04

Highest Channel / 3MHz / QPSK



Date: 15_MAR_2020 12:20:07

Highest Channel / 3MHz / 16QAM

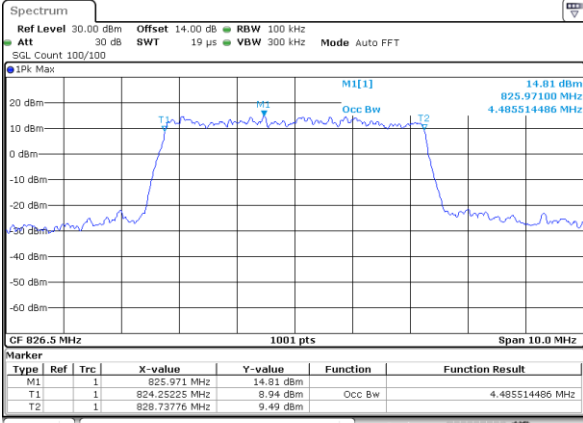


Date: 15_MAR_2020 11:12:04



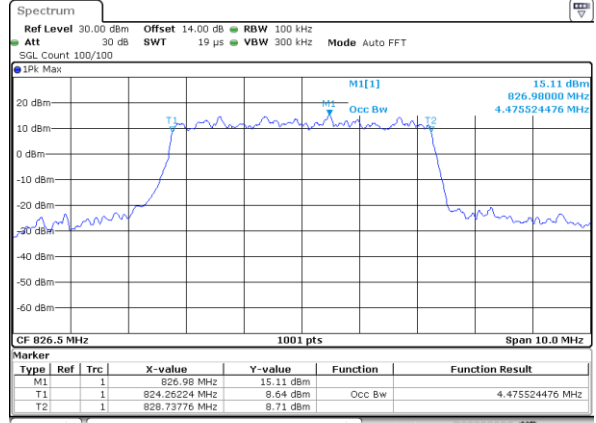
LTE Band 5

Lowest Channel / 5MHz / QPSK



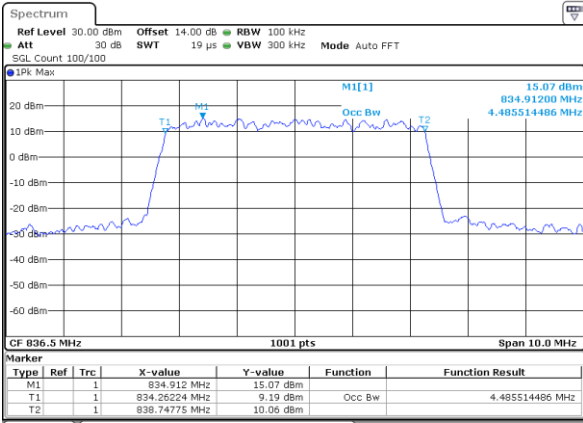
Date: 15_MAR_2020 12:24:27

Lowest Channel / 5MHz / 16QAM



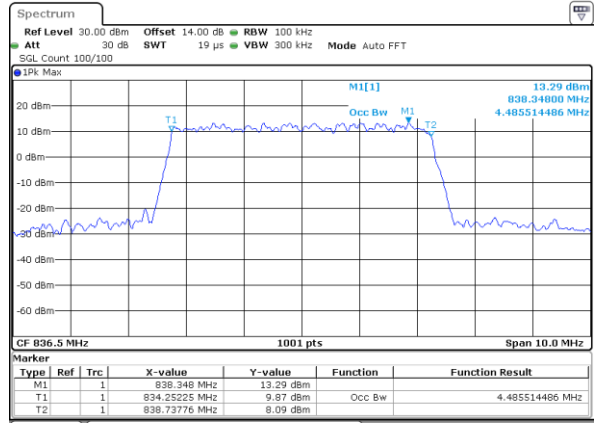
Date: 15_MAR_2020 11:16:24

Middle Channel / 5MHz / QPSK



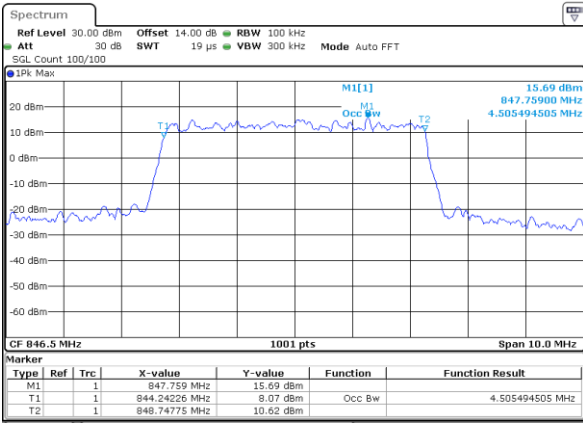
Date: 15_MAR_2020 12:28:46

Middle Channel / 5MHz / 16QAM



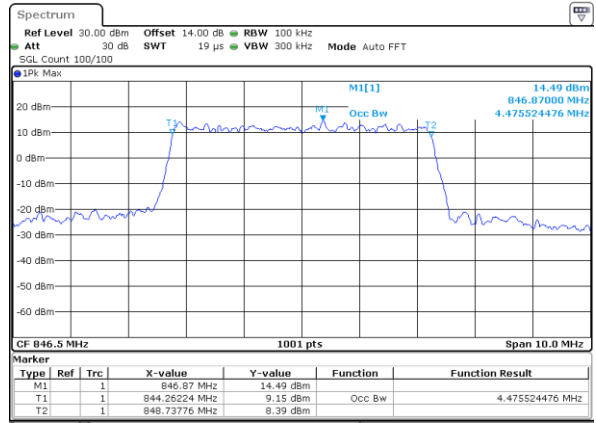
Date: 15_MAR_2020 11:20:44

Highest Channel / 5MHz / QPSK



Date: 15_MAR_2020 12:29:46

Highest Channel / 5MHz / 16QAM

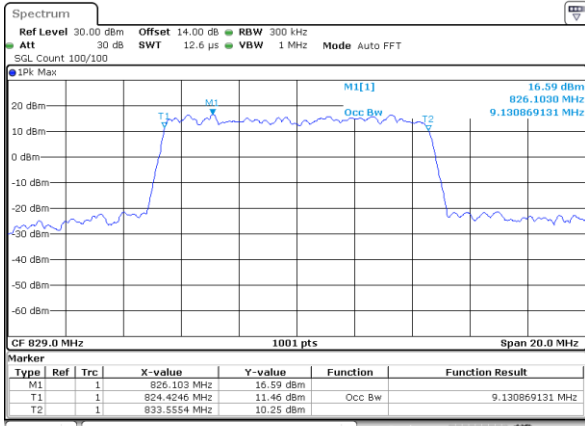


Date: 15_MAR_2020 11:21:44



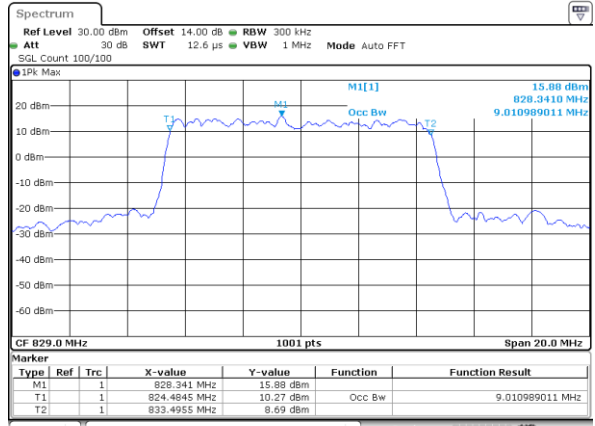
LTE Band 5

Lowest Channel / 10MHz / QPSK



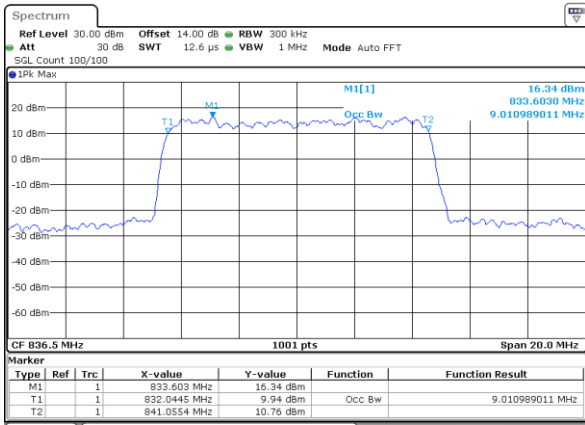
Date: 15_MAR_2020 13:28:00

Lowest Channel / 10MHz / 16QAM



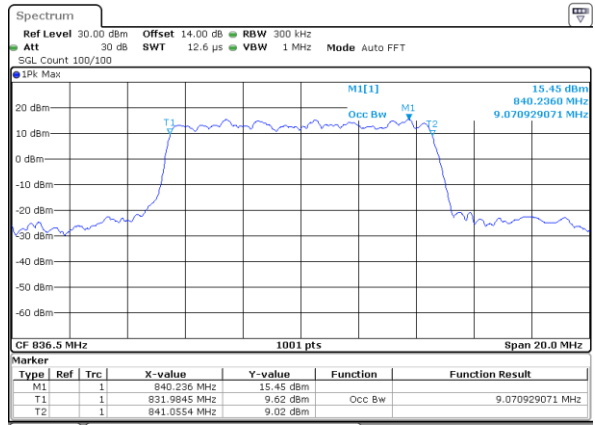
Date: 15_MAR_2020 11:26:04

Middle Channel / 10MHz / QPSK



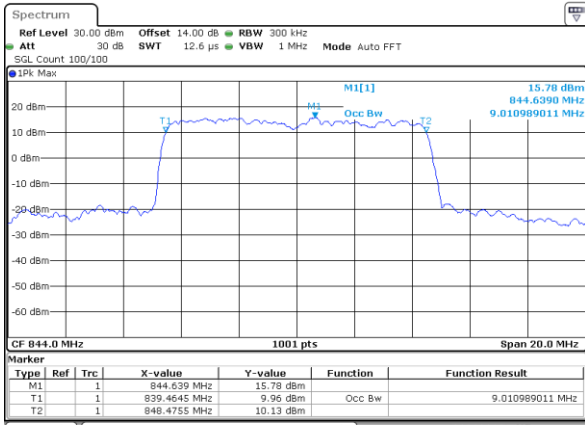
Date: 15_MAR_2020 13:37:23

Middle Channel / 10MHz / 16QAM



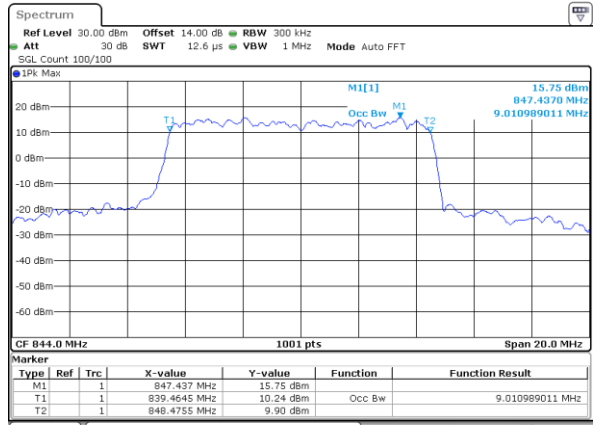
Date: 15_MAR_2020 11:30:23

Highest Channel / 10MHz / QPSK



Date: 15_MAR_2020 13:38:23

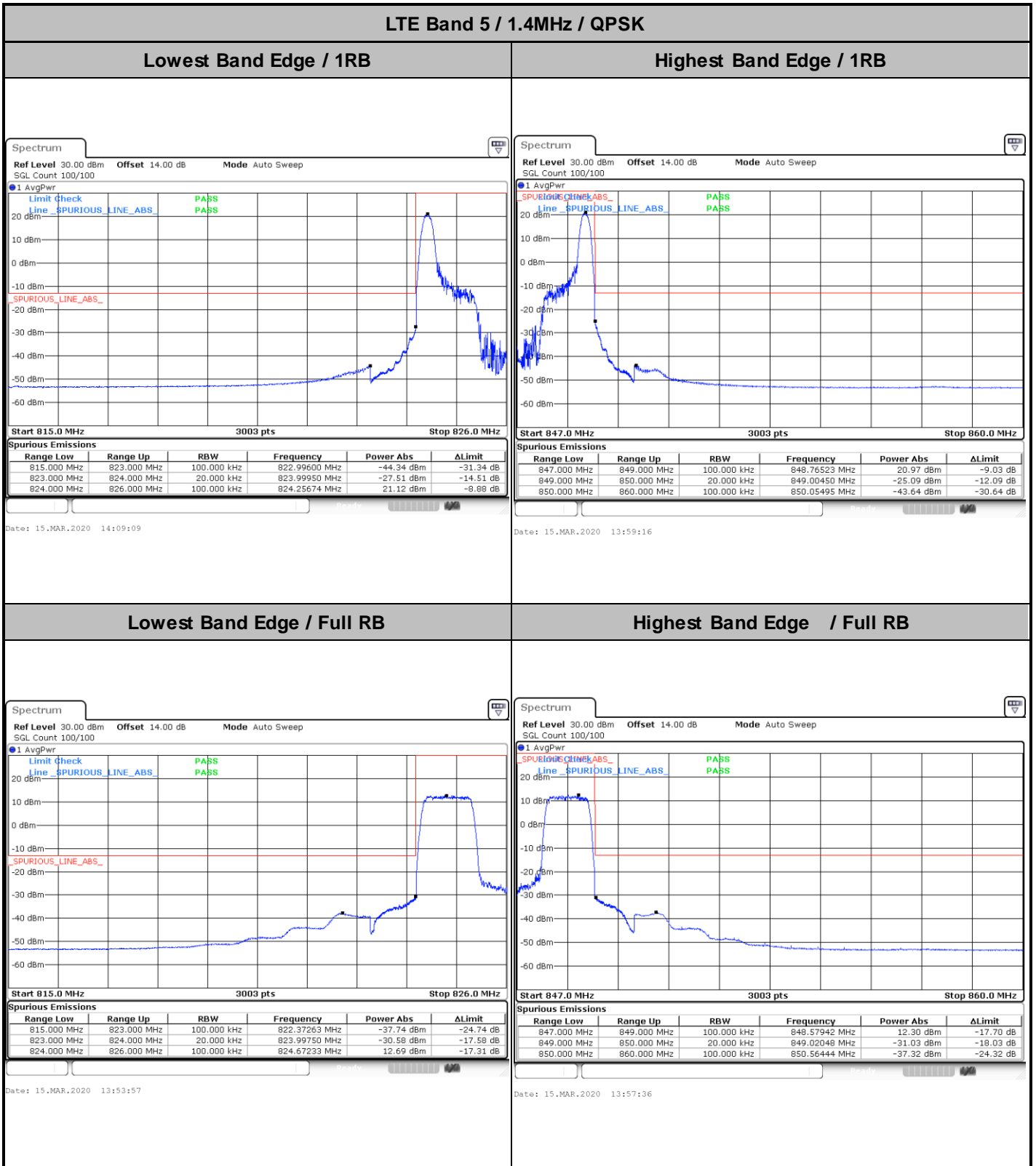
Highest Channel / 10MHz / 16QAM



Date: 15_MAR_2020 11:31:23



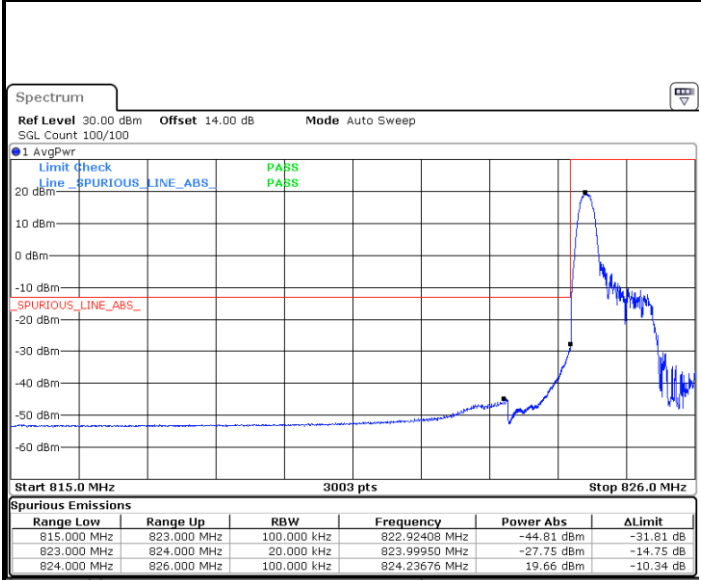
Conducted Band Edge





LTE Band 5 / 1.4MHz / 16QAM

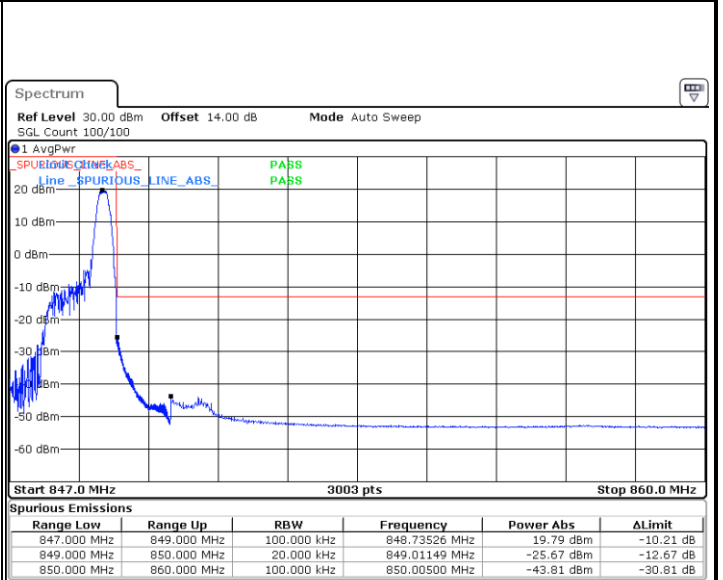
Lowest Band Edge / 1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
815.000 MHz	823.000 MHz	100.000 kHz	822.92408 MHz	-44.81 dBm	-31.81 dB
823.000 MHz	824.000 MHz	20.000 kHz	823.99950 MHz	-27.75 dBm	-14.75 dB
824.000 MHz	826.000 MHz	100.000 kHz	824.23676 MHz	19.66 dBm	-10.34 dB

Date: 15.MAR.2020 14:11:07

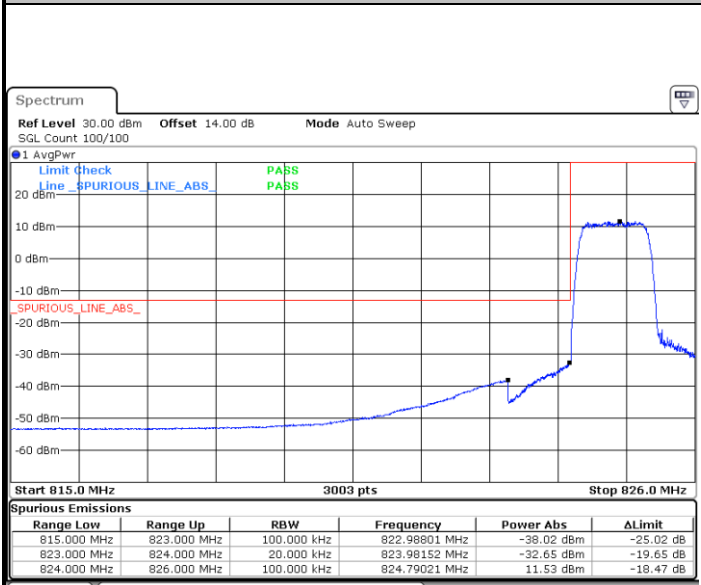
Highest Band Edge / 1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
847.000 MHz	849.000 MHz	100.000 kHz	848.73526 MHz	19.79 dBm	-10.21 dB
849.000 MHz	850.000 MHz	20.000 kHz	849.01149 MHz	-25.67 dBm	-12.67 dB
850.000 MHz	860.000 MHz	100.000 kHz	850.00500 MHz	-43.81 dBm	-30.81 dB

Date: 15.MAR.2020 11:42:53

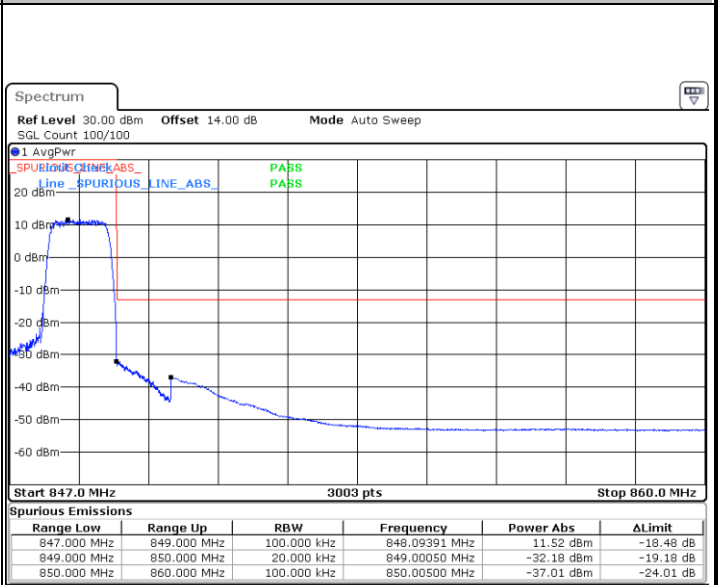
Lowest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
815.000 MHz	823.000 MHz	100.000 kHz	822.98801 MHz	-38.02 dBm	-25.02 dB
823.000 MHz	824.000 MHz	20.000 kHz	823.98152 MHz	-32.65 dBm	-19.65 dB
824.000 MHz	826.000 MHz	100.000 kHz	824.79021 MHz	11.53 dBm	-18.47 dB

Date: 15.MAR.2020 11:37:34

Highest Band Edge / Full RB



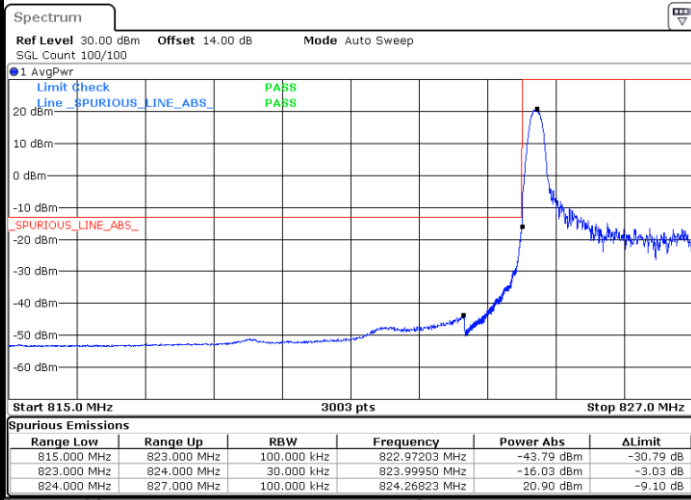
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
847.000 MHz	849.000 MHz	100.000 kHz	848.09391 MHz	11.52 dBm	-18.48 dB
849.000 MHz	850.000 MHz	20.000 kHz	849.00050 MHz	-32.18 dBm	-19.18 dB
850.000 MHz	860.000 MHz	100.000 kHz	850.00500 MHz	-37.01 dBm	-24.01 dB

Date: 15.MAR.2020 11:41:13



LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



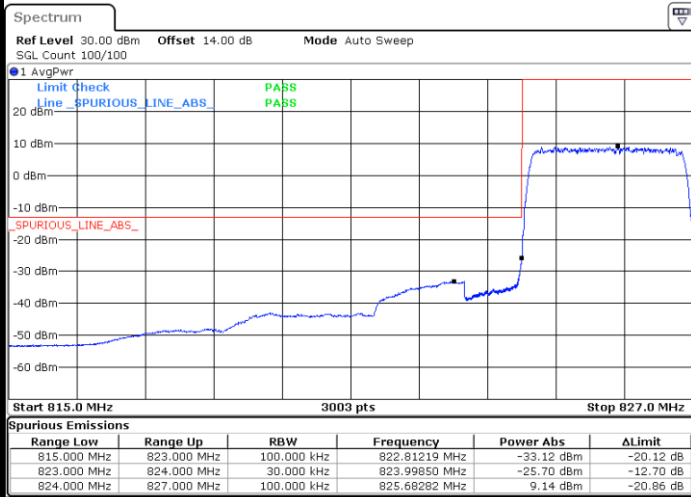
Date: 15.MAR.2020 12:16:37

Highest Band Edge / 1 RB



Date: 20.MAR.2020 17:49:10

Lowest Band Edge / Full RB



Date: 15.MAR.2020 12:18:18

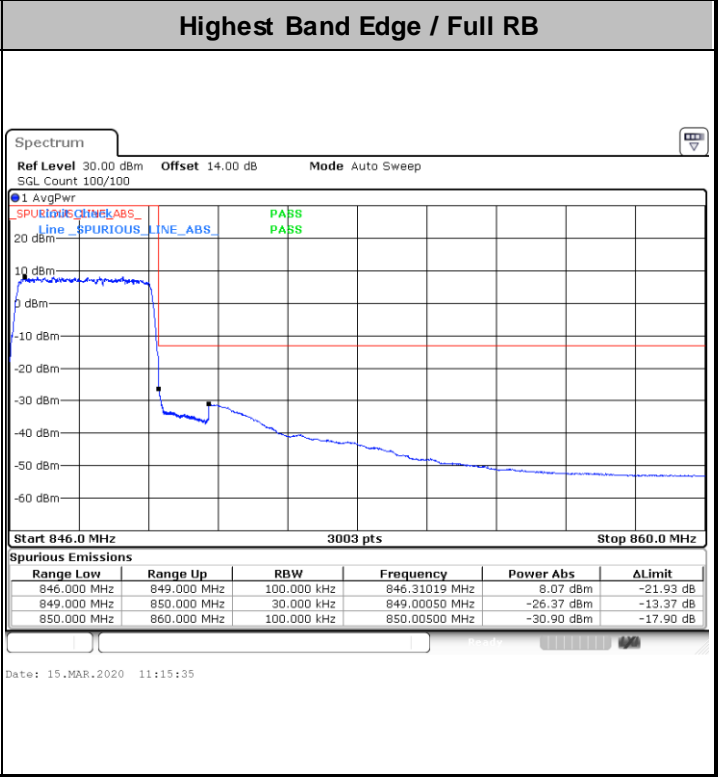
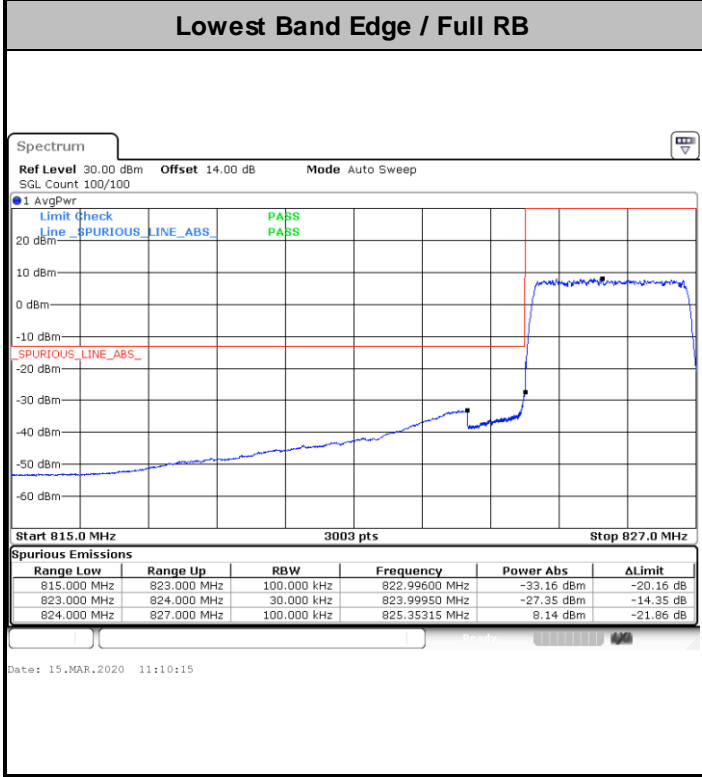
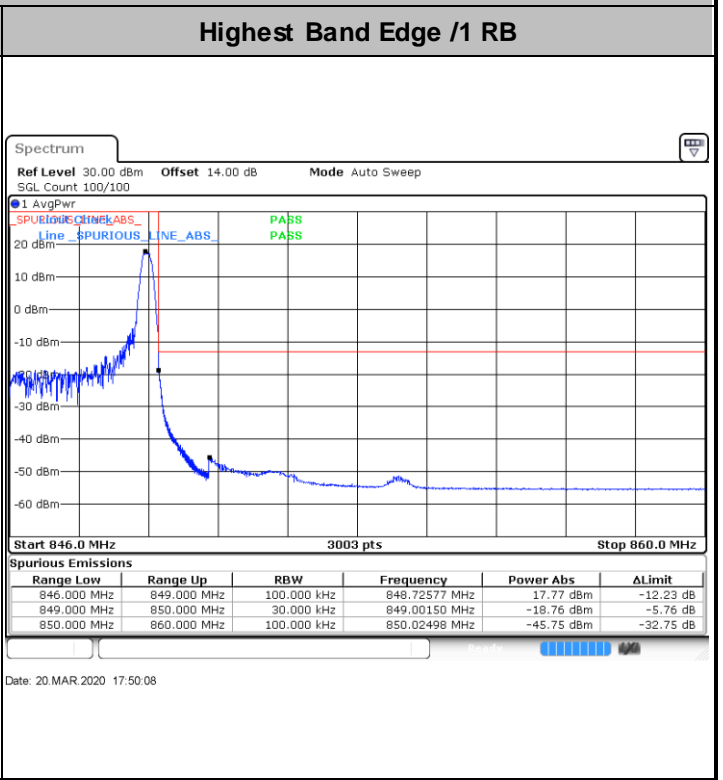
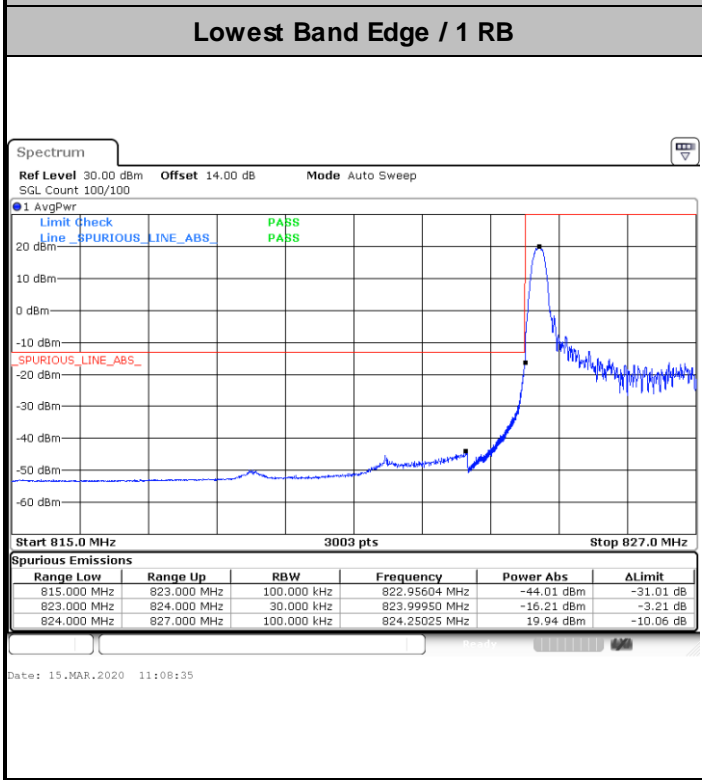
Highest Band Edge / Full RB



Date: 15.MAR.2020 12:23:38



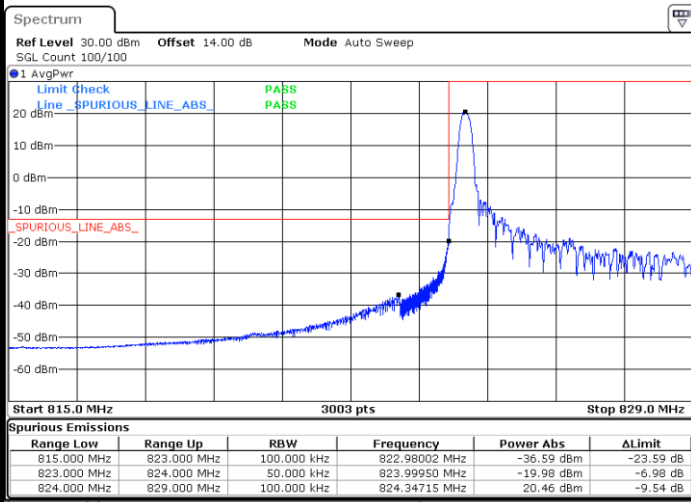
LTE Band 5 / 3MHz / 16QAM





LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



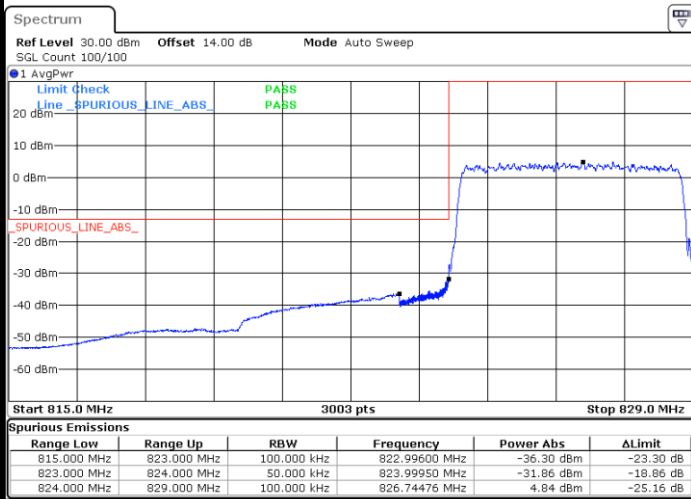
Date: 15.MAR.2020 12:26:17

Highest Band Edge / 1 RB



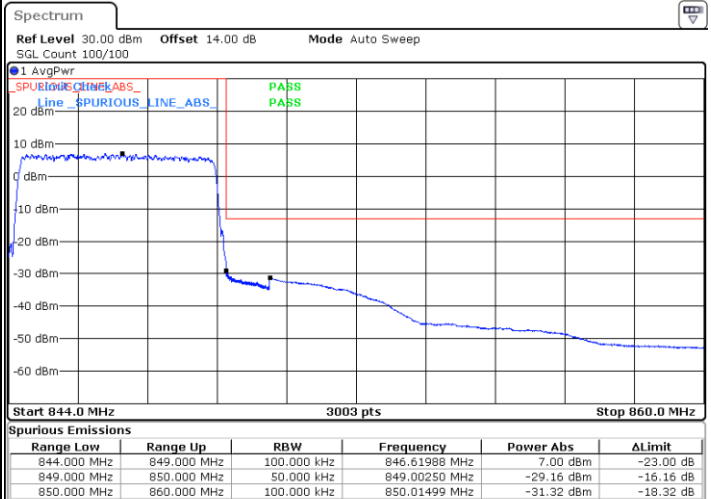
Date: 15.MAR.2020 12:31:37

Lowest Band Edge / Full RB



Date: 15.MAR.2020 12:27:58

Highest Band Edge / Full RB

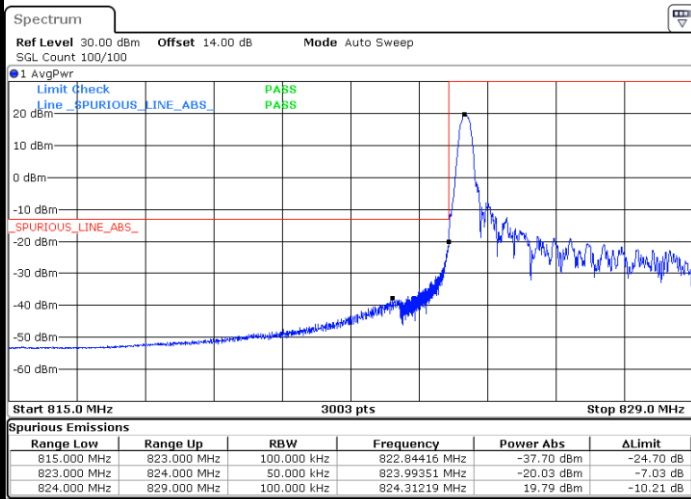


Date: 15.MAR.2020 13:27:11



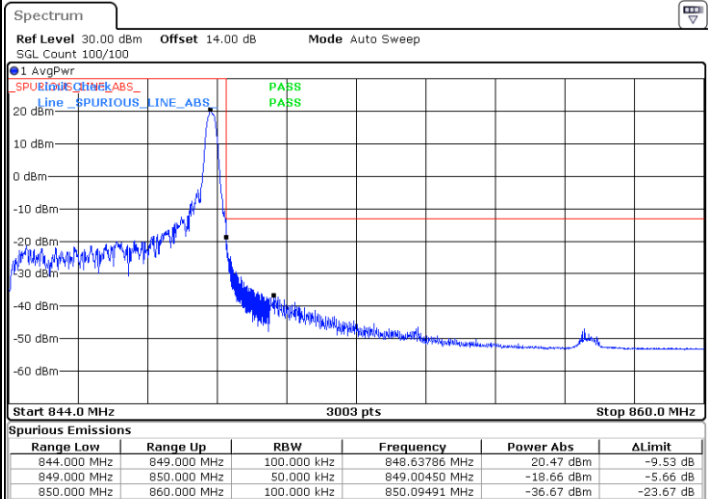
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



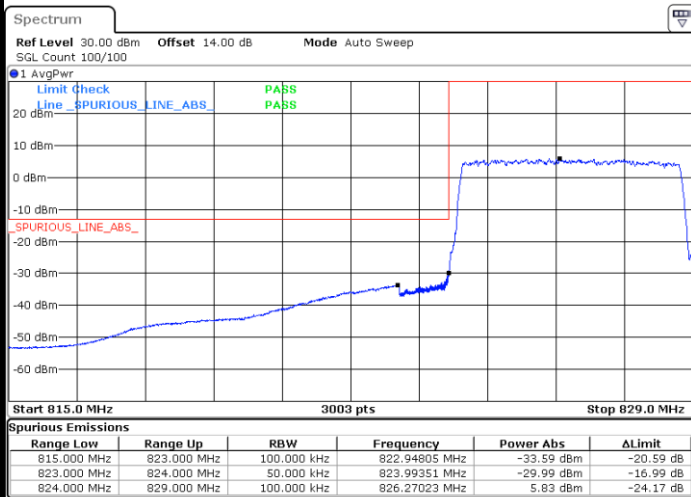
Date: 15.MAR.2020 11:18:15

Highest Band Edge / 1 RB



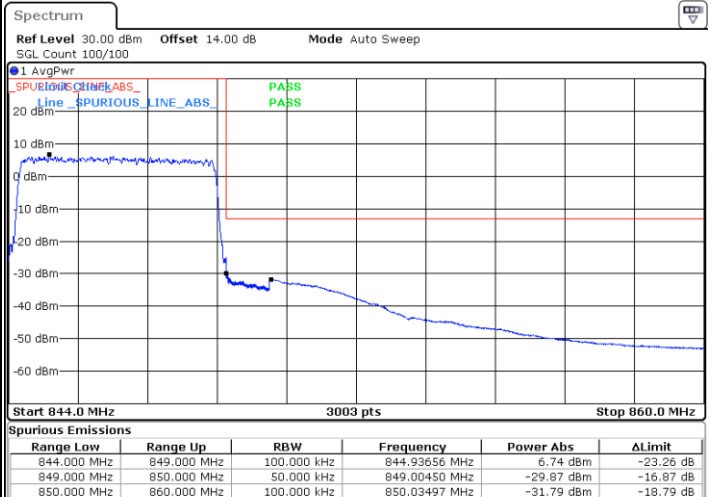
Date: 15.MAR.2020 11:23:35

Lowest Band Edge / Full RB



Date: 15.MAR.2020 11:19:55

Highest Band Edge / Full RB



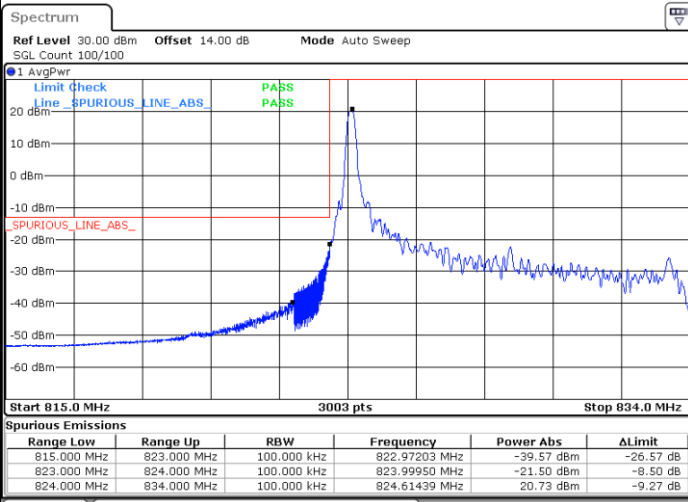
Date: 15.MAR.2020 11:25:15



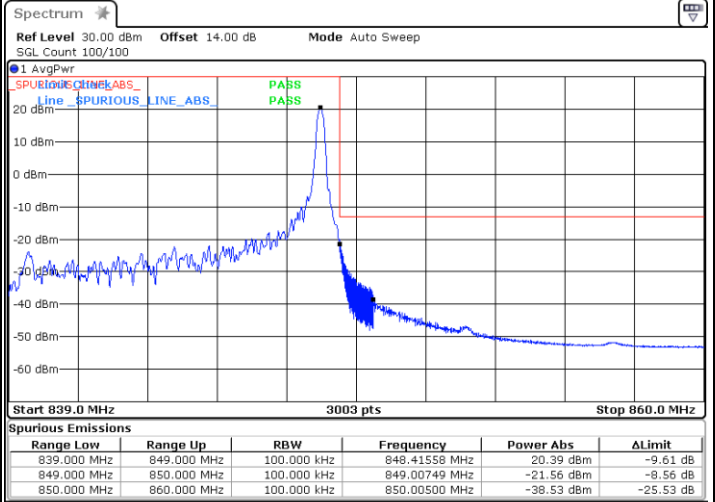
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



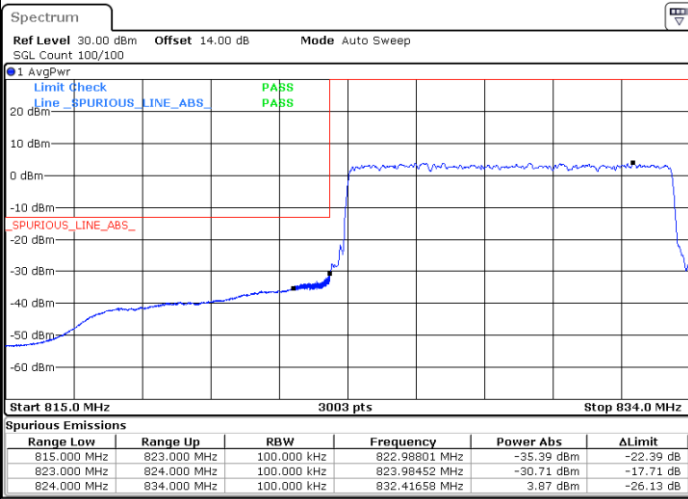
Date: 15.MAR.2020 13:29:51



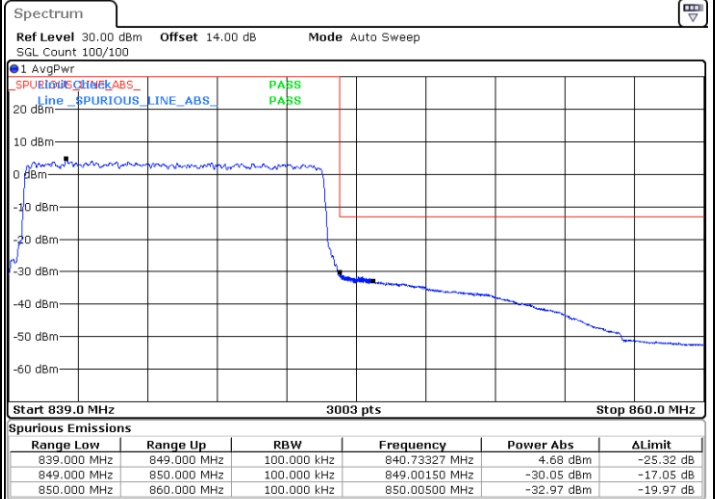
Date: 15.MAR.2020 13:47:36

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.MAR.2020 13:36:35

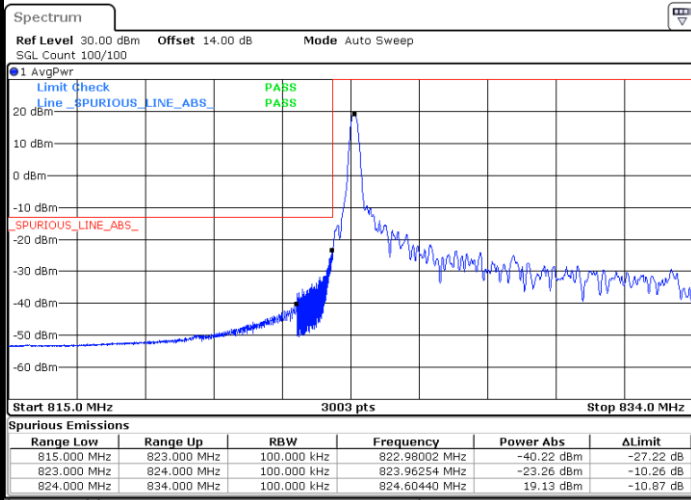


Date: 15.MAR.2020 13:51:16



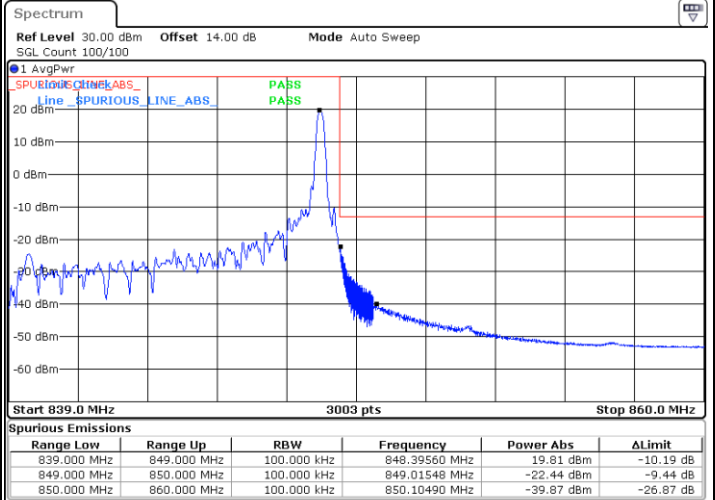
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



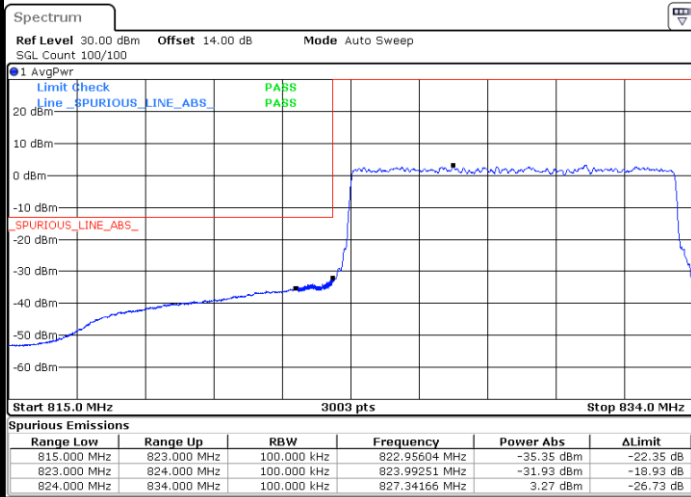
Date: 15.MAR.2020 11:27:55

Highest Band Edge / 1 RB



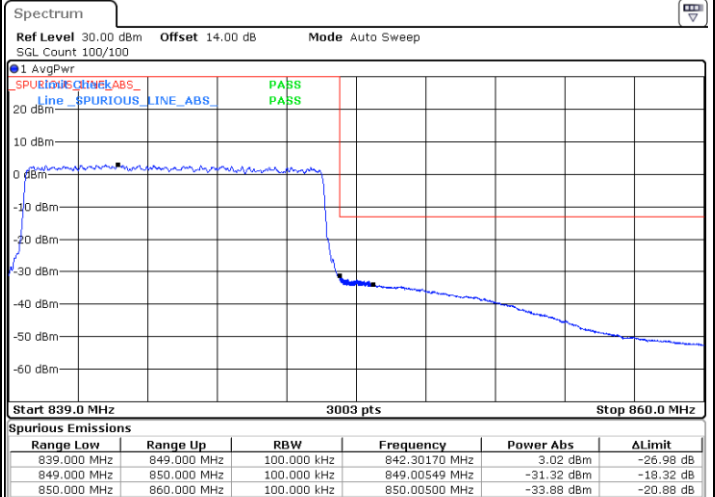
Date: 15.MAR.2020 11:33:14

Lowest Band Edge / Full RB



Date: 15.MAR.2020 11:29:35

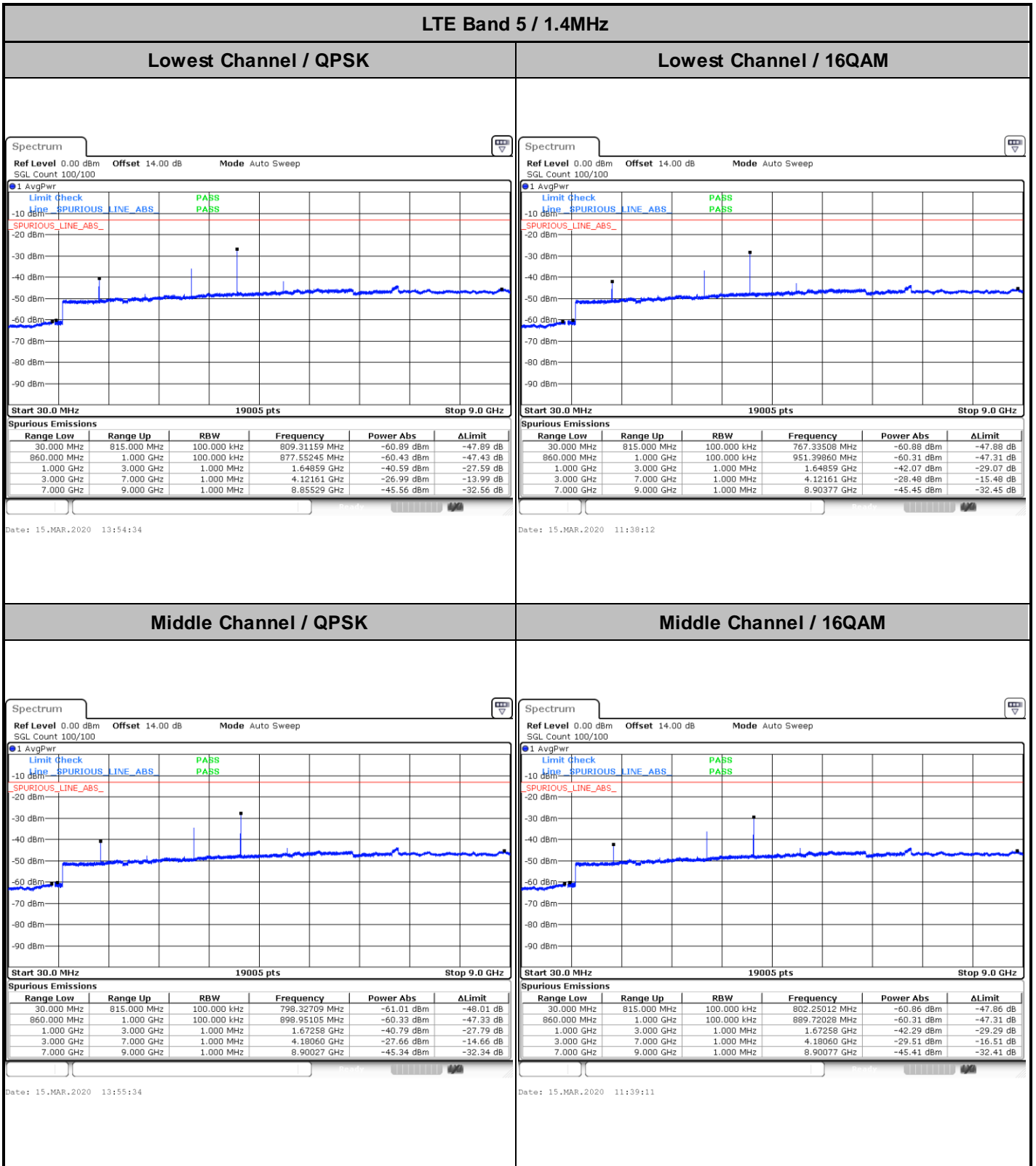
Highest Band Edge / Full RB



Date: 15.MAR.2020 11:34:54



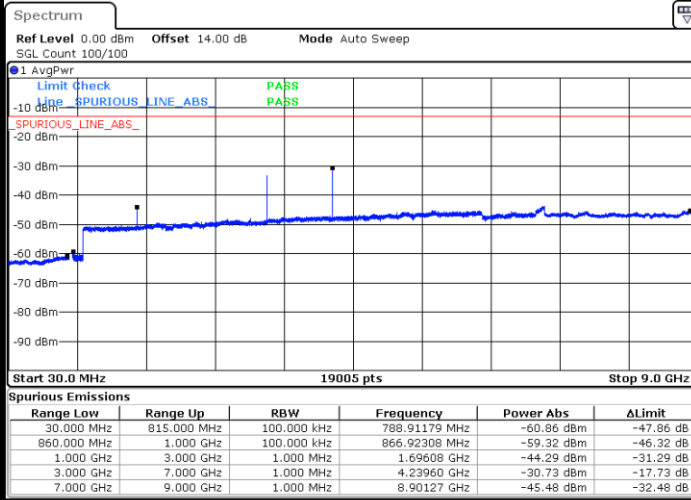
Conducted Spurious Emission





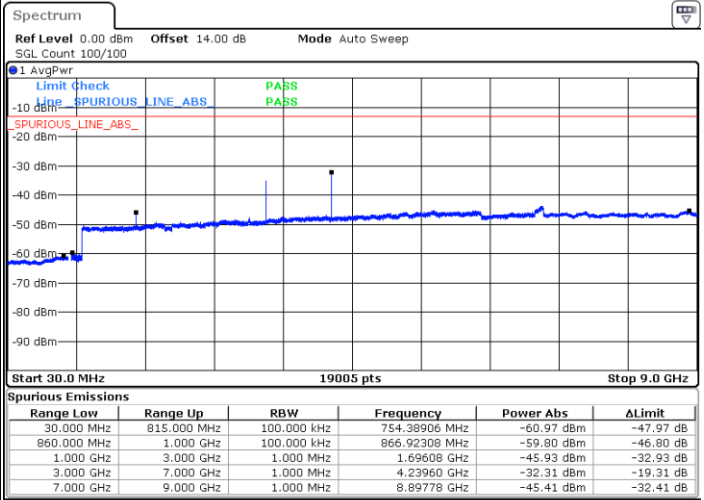
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 15.MAR.2020 13:59:54

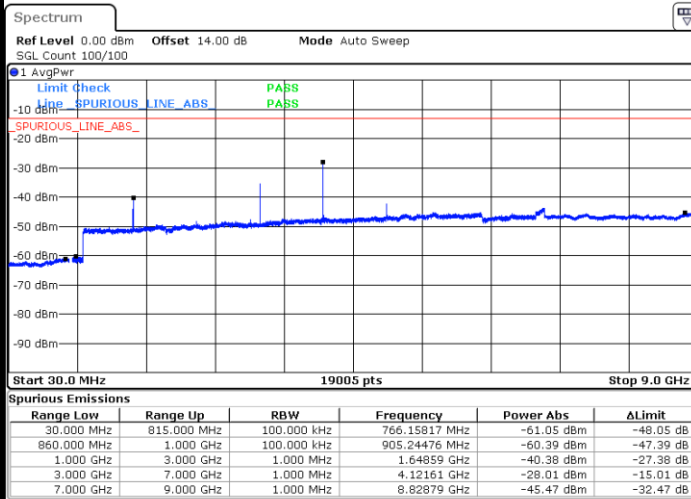
Highest Channel / 16QAM



Date: 15.MAR.2020 11:43:31

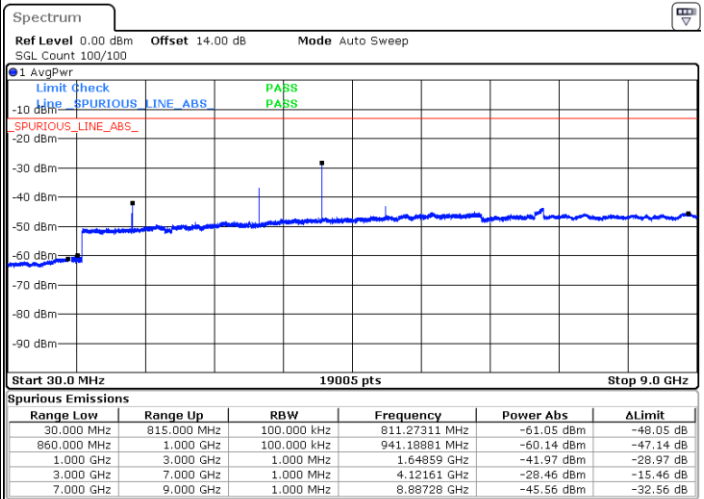
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 15.MAR.2020 12:18:56

Lowest Channel / 16QAM



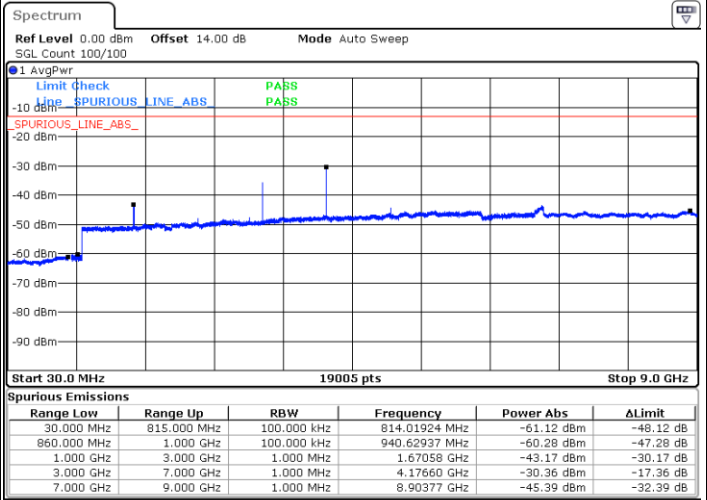
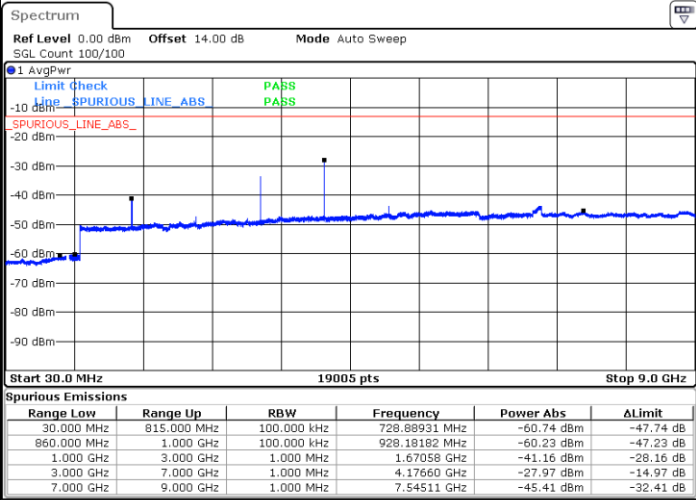
Date: 15.MAR.2020 11:10:53



LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

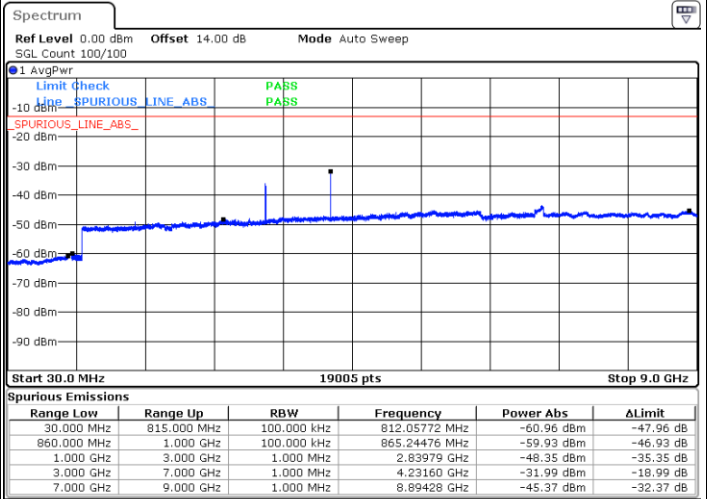
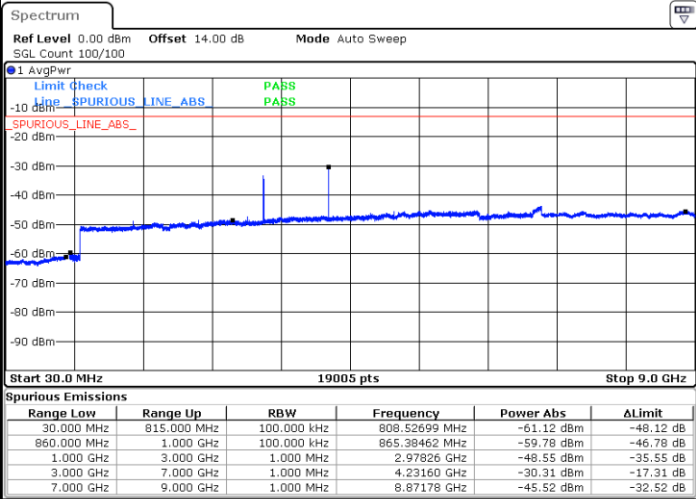


Date: 15.MAR.2020 12:19:56

Date: 15.MAR.2020 11:11:53

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 15.MAR.2020 12:24:16

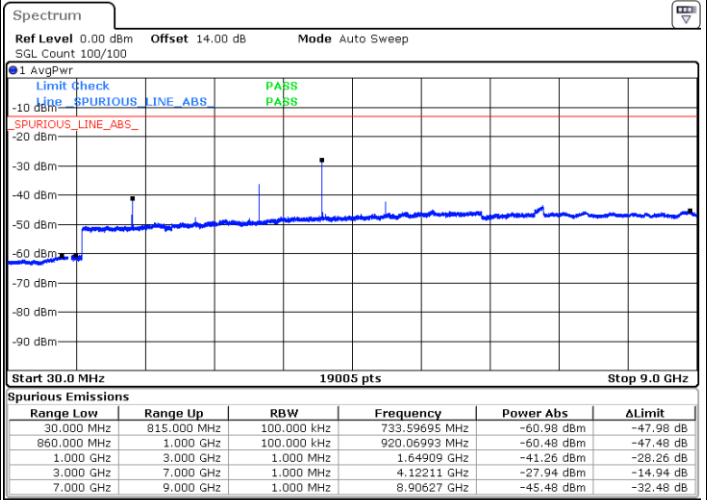
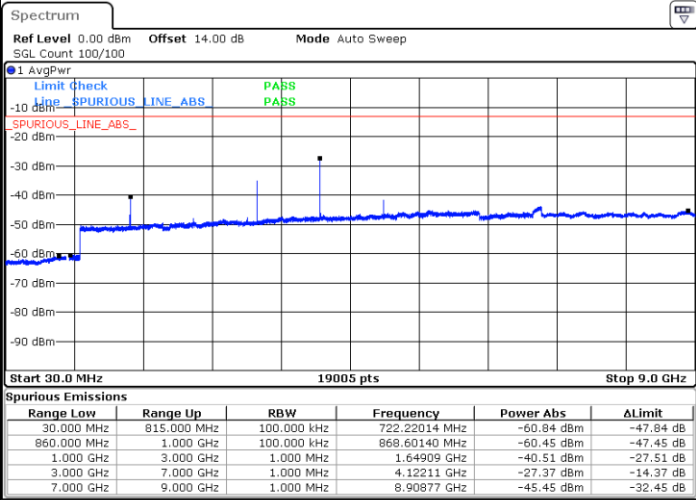
Date: 15.MAR.2020 11:16:13



LTE Band 5 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

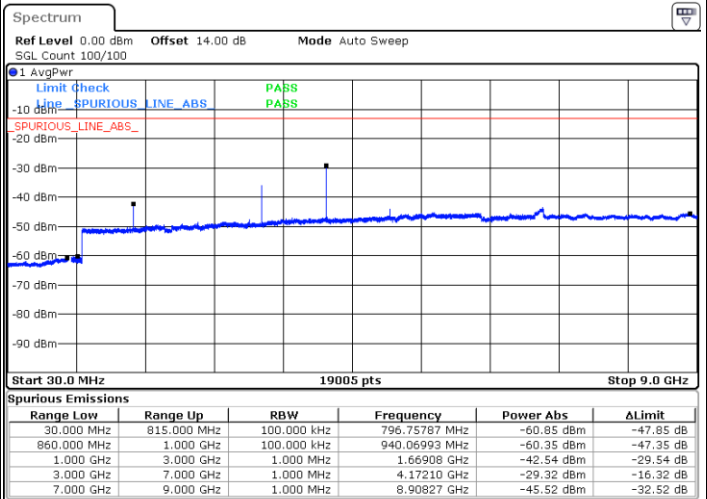
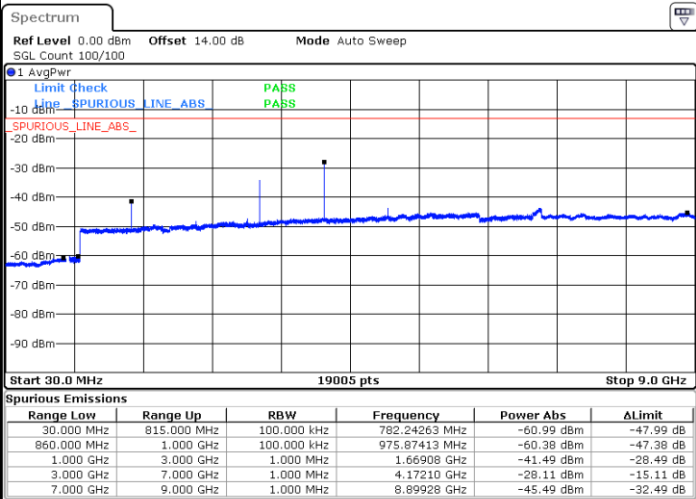


Date: 15.MAR.2020 12:28:35

Date: 15.MAR.2020 11:20:33

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 15.MAR.2020 12:29:35

Date: 15.MAR.2020 11:21:33