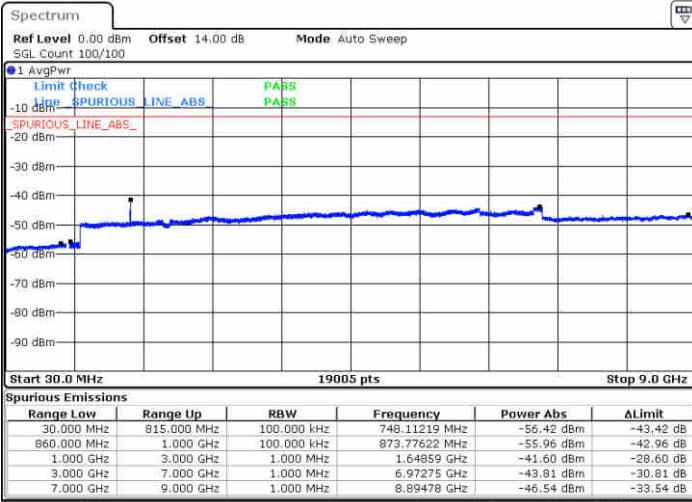




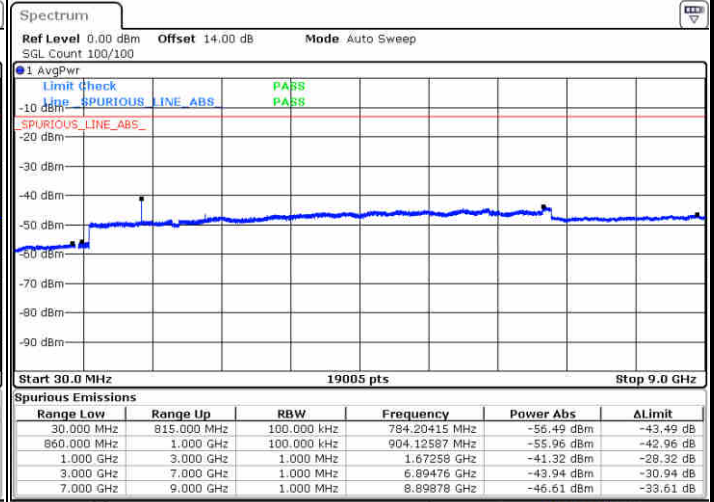
LTE Band 5 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

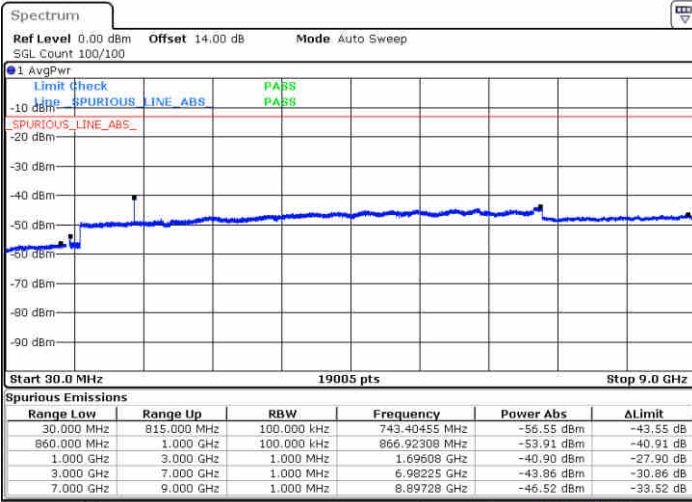


Date: 2 JUL 2020 03:53:32



Date: 2 JUL 2020 04:00:26

Highest Channel / 64QAM



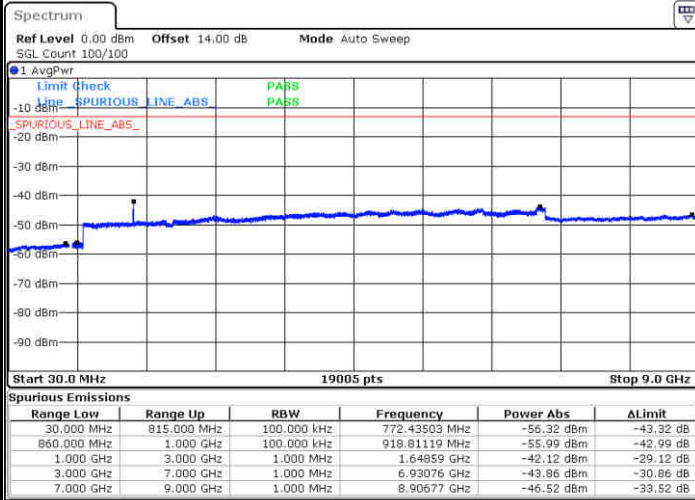
Date: 2 JUL 2020 04:09:36



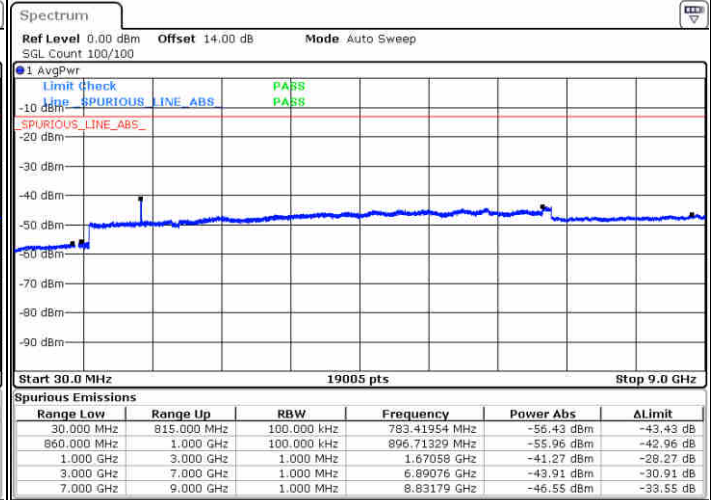
LTE Band 5 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

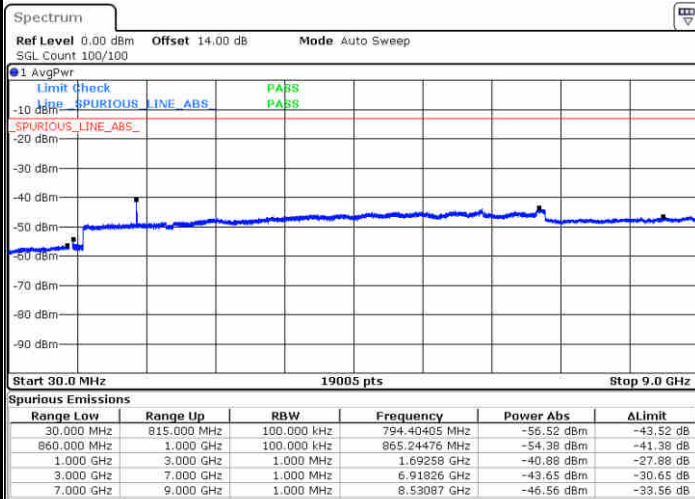


Date: 2 JUL 2020 04:48:34



Date: 2 JUL 2020 04:49:26

Highest Channel / 64QAM



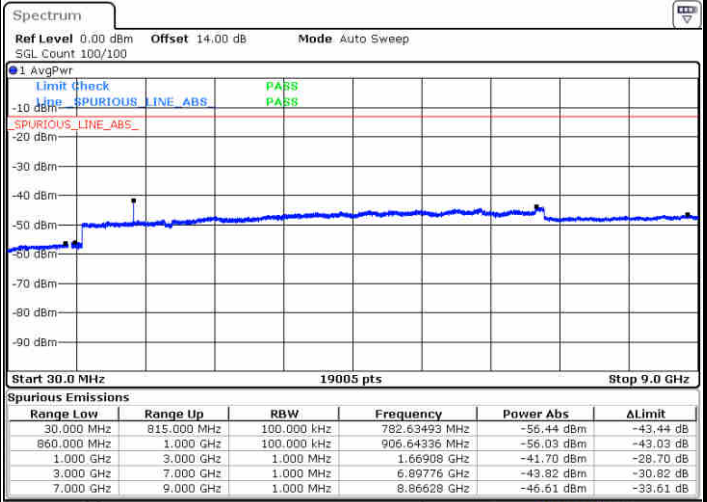
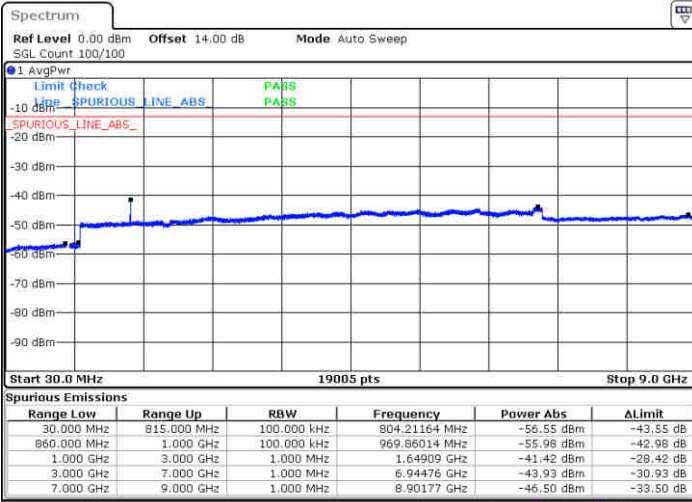
Date: 2 JUL 2020 05:03:32



LTE Band 5 / 5MHz

Lowest Channel / 64QAM

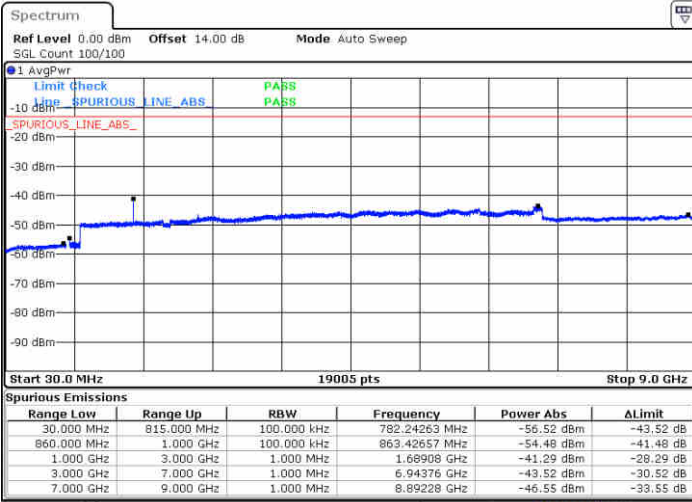
Middle Channel / 64QAM



Date: 2 JUL 2020 05:11:51

Date: 2 JUL 2020 05:16:47

Highest Channel / 64QAM



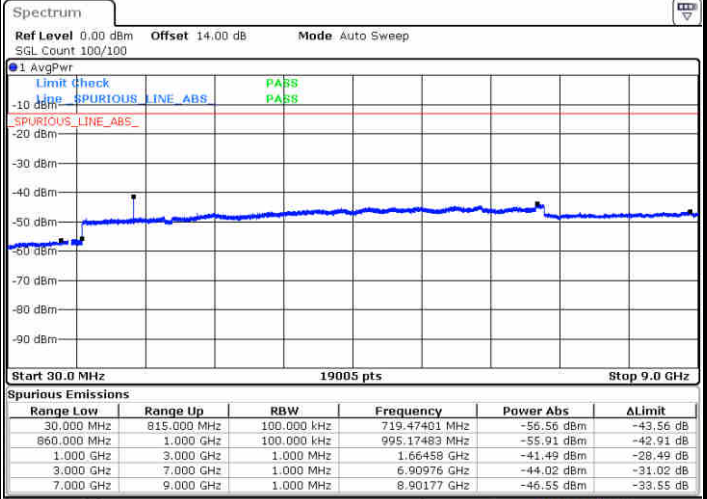
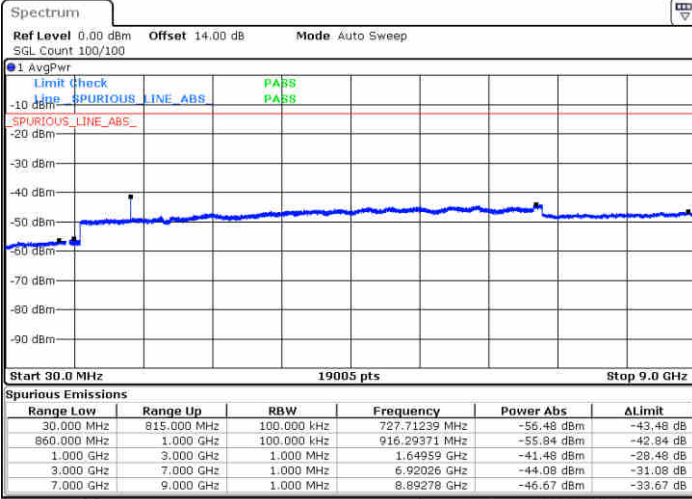
Date: 2 JUL 2020 05:46:56



LTE Band 5 / 10MHz

Lowest Channel / 64QAM

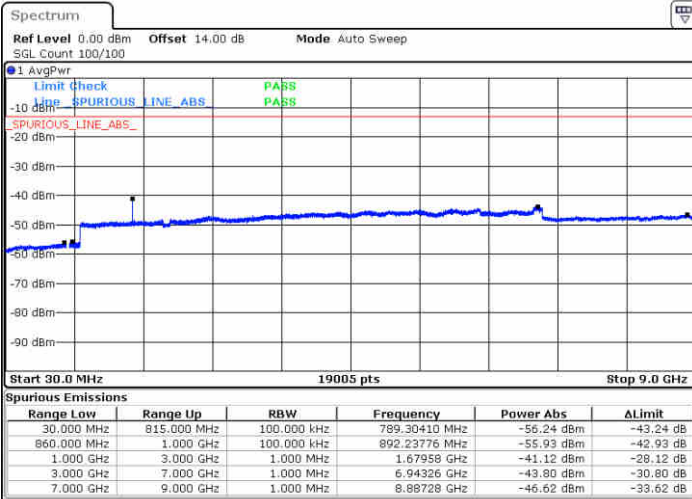
Middle Channel / 64QAM



Date: 2 JUL 2020 06:09:20

Date: 2 JUL 2020 06:35:54

Highest Channel / 64QAM



Date: 2 JUL 2020 07:17:23



Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0007	PASS
40	Normal Voltage	0.0010	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0013	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Note: Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.45 V. ; Maximum Voltage =4.45 V.



LTE Band 7

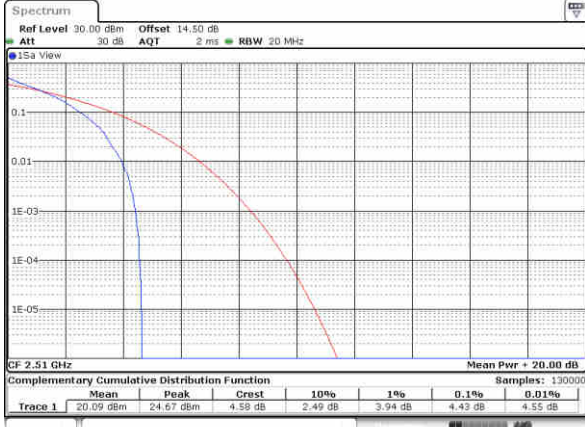
Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.43	4.58	5.57	5.51	PASS
Middle CH	4.09	4.52	5.07	5.57	
Highest CH	4.46	4.87	5.04	5.88	
Mode	LTE Band 7 / 20MHz				
Mod.	64QAM		-		Limit: 13dB
RB Size	1RB	Full RB	-	-	Result
Lowest CH	5.57	5.91	-	-	PASS
Middle CH	5.62	6.00	-	-	
Highest CH	6.06	6.17	-	-	



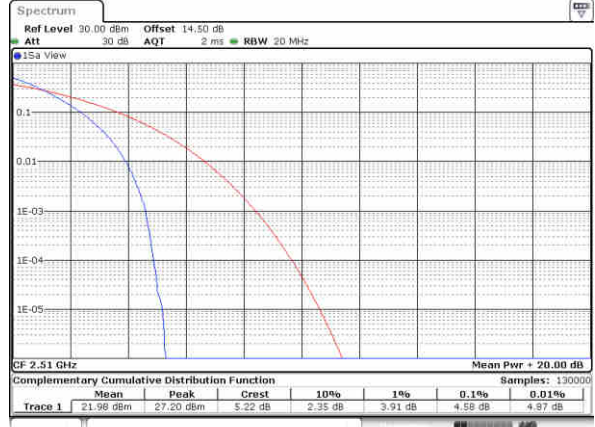
LTE Band 7 / 20MHz / QPSK

Lowest Channel / 1RB



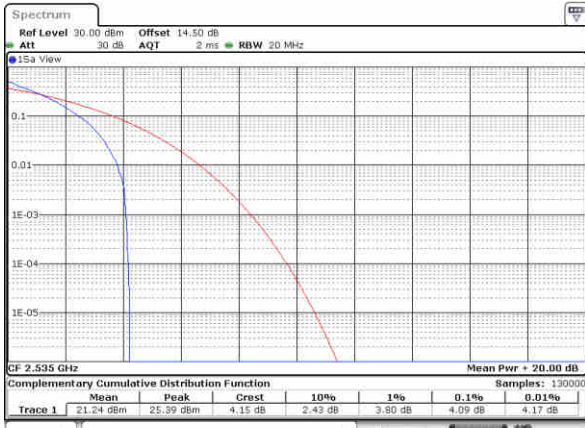
Date: 30 JUN 2020 16:59:38

Lowest Channel / Full RB



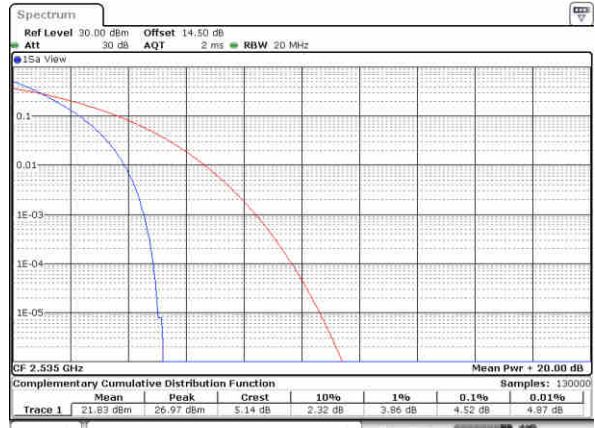
Date: 30 JUN 2020 16:59:13

Middle Channel / 1RB



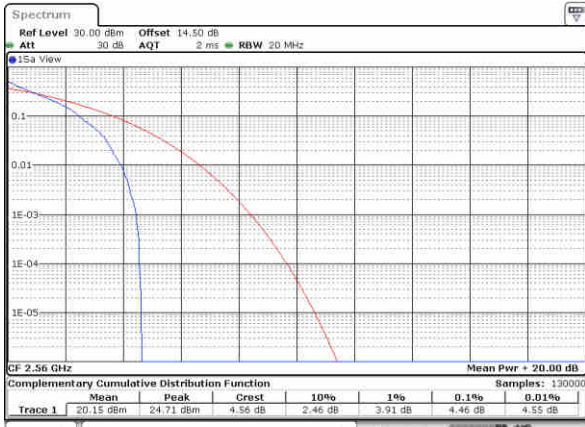
Date: 30 JUN 2020 17:00:23

Middle Channel / Full RB



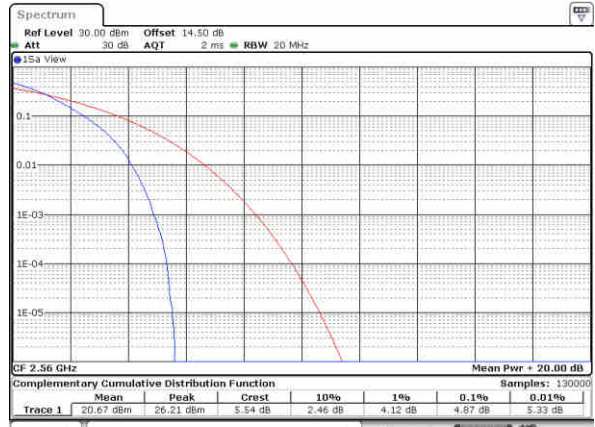
Date: 30 JUN 2020 16:59:54

Highest Channel / 1RB



Date: 30 JUN 2020 17:00:50

Highest Channel / Full RB

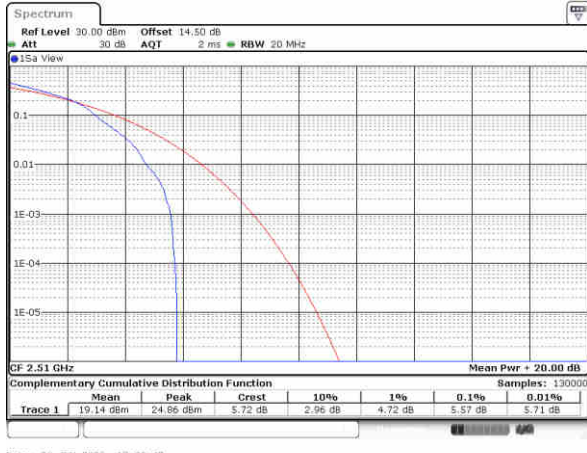


Date: 30 JUN 2020 16:59:35



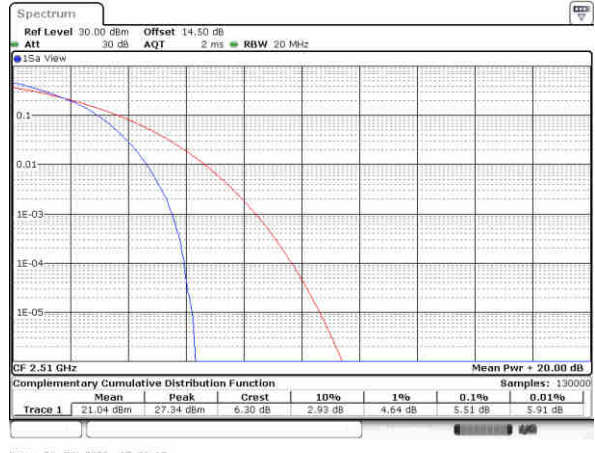
LTE Band 7 / 20MHz / 16QAM

Lowest Channel / 1RB



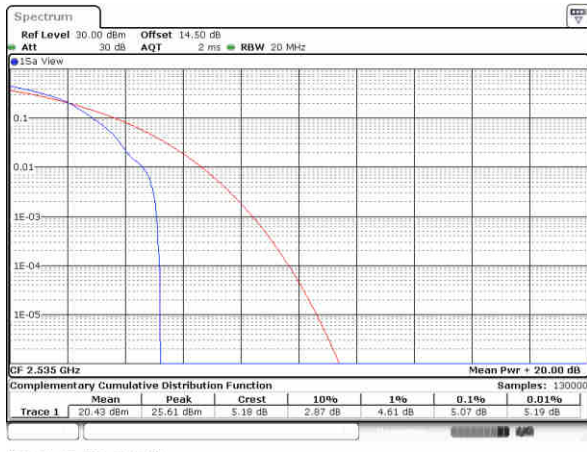
Date: 30_JUN,2020 17:02:47

Lowest Channel / Full RB



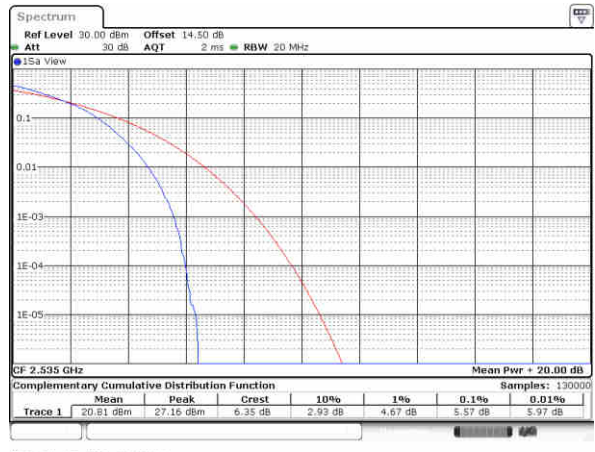
Date: 30_JUN,2020 17:03:19

Middle Channel / 1RB



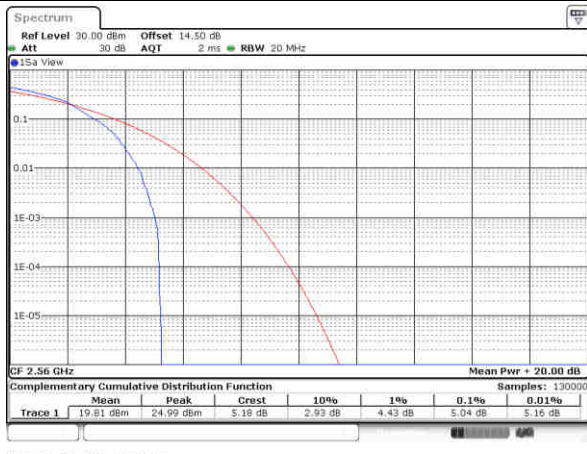
Date: 30_JUN,2020 17:02:21

Middle Channel / Full RB



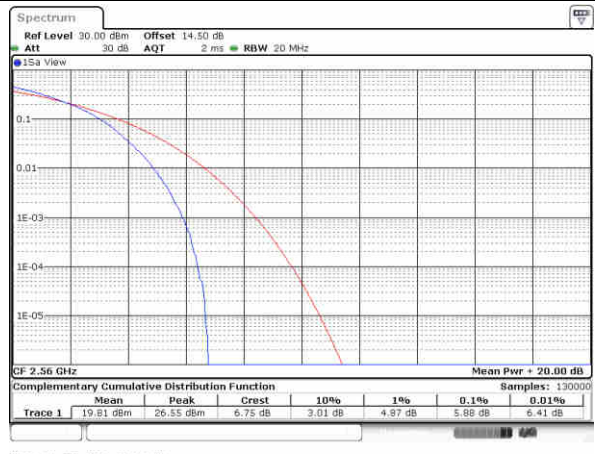
Date: 30_JUN,2020 17:03:45

Highest Channel / 1RB



Date: 30_JUN,2020 17:01:48

Highest Channel / Full RB

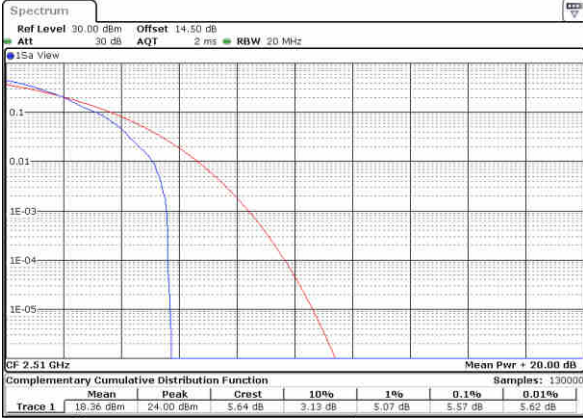


Date: 30_JUN,2020 17:04:25



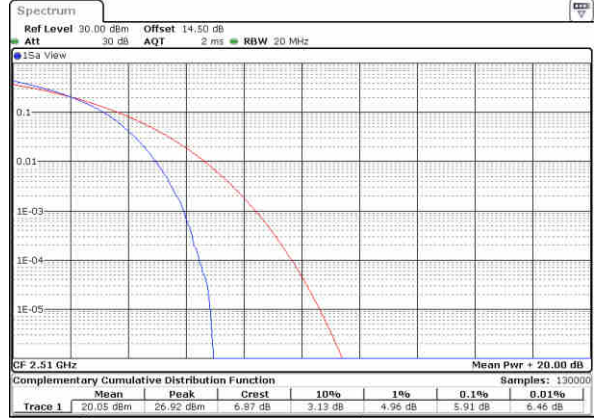
LTE Band 7 / 20MHz / 64QAM

Lowest Channel / 1RB



Date: 30 JUN 2020 17:07:47

Lowest Channel / Full RB



Date: 30 JUN 2020 17:06:59

Middle Channel / 1RB



Date: 30 JUN 2020 17:08:07

Middle Channel / Full RB



Date: 30 JUN 2020 17:05:53

Highest Channel / 1RB



Date: 30 JUN 2020 17:08:41

Highest Channel / Full RB



Date: 30 JUN 2020 17:05:06



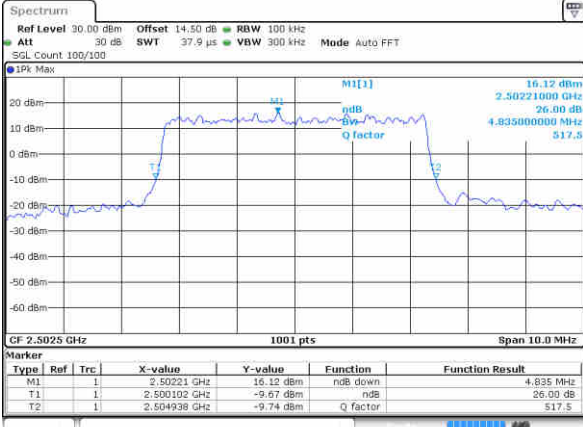
26dB Bandwidth

Mode	LTE Band 7 : 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	-	-	-	-	4.84	4.92	9.81	9.87	14.39	14.27	18.94	18.94
Middle CH	-	-	-	-	4.96	4.99	9.83	9.79	14.42	14.39	18.94	18.98
Highest CH	-	-	-	-	4.90	4.97	9.95	9.83	14.39	14.42	18.90	19.02
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.89	-	10.03	-	14.30	-	18.98	-
Middle CH	-	-	-	-	4.86	-	9.85	-	14.57	-	18.98	-
Highest CH	-	-	-	-	4.92	-	9.81	-	14.18	-	19.38	-



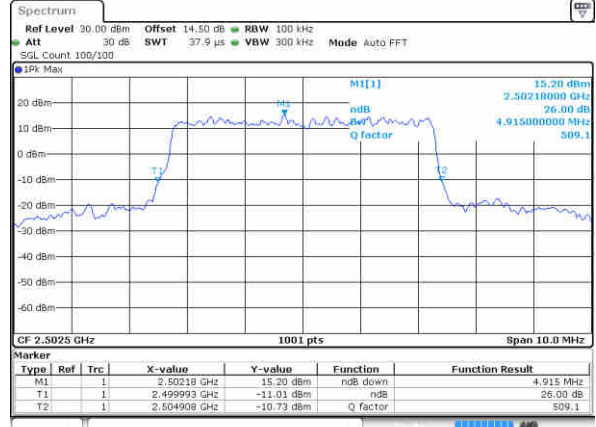
LTE Band 7

Lowest Channel / 5MHz / QPSK



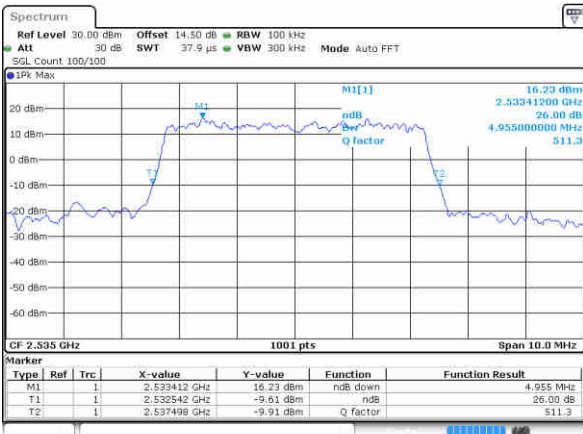
Date: 29 JUN 2020 12:20:27

Lowest Channel / 5MHz / 16QAM



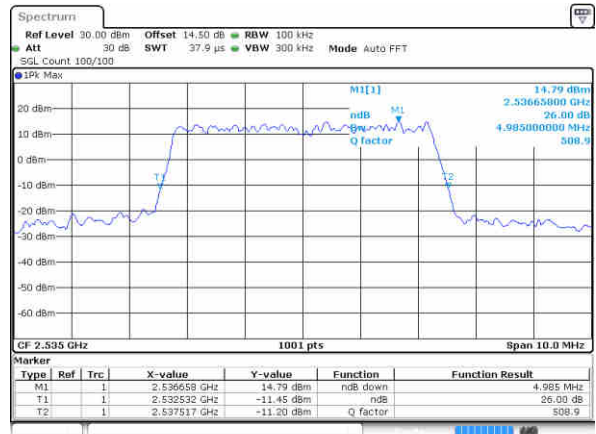
Date: 29 JUN 2020 15:05:54

Middle Channel / 5MHz / QPSK



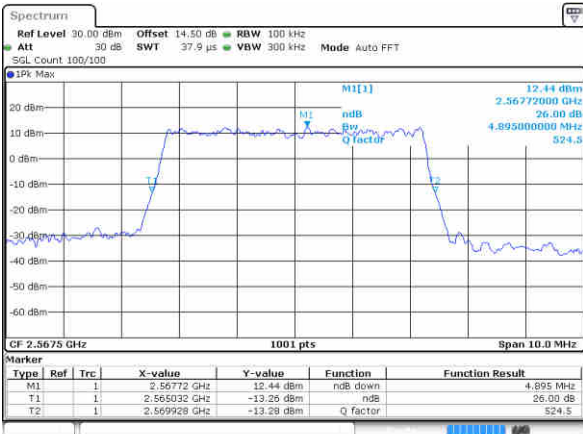
Date: 29 JUN 2020 12:27:07

Middle Channel / 5MHz / 16QAM



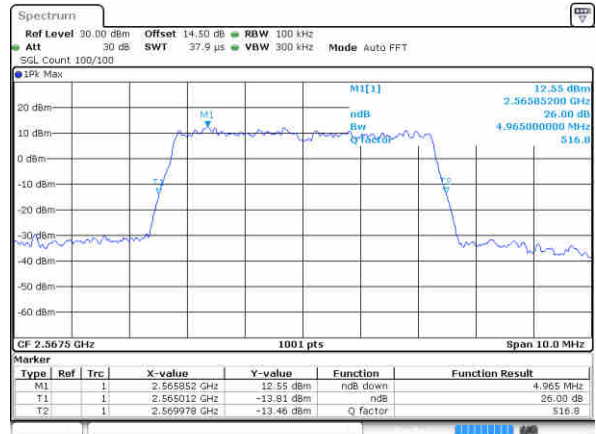
Date: 29 JUN 2020 12:49:57

Highest Channel / 5MHz / QPSK



Date: 29 JUN 2020 12:29:58

Highest Channel / 5MHz / 16QAM

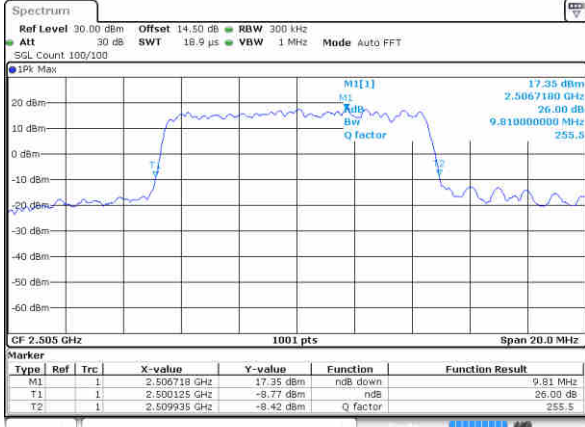


Date: 29 JUN 2020 12:51:02



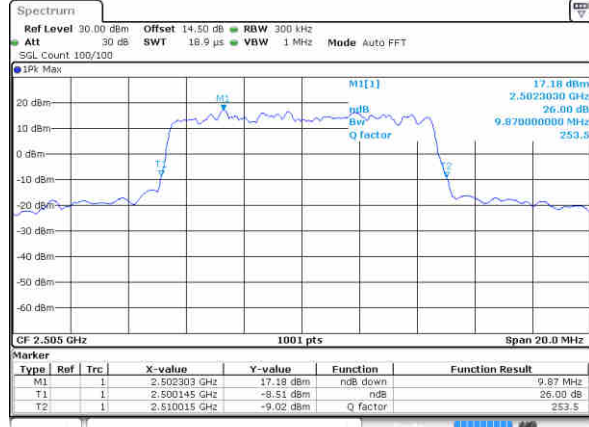
LTE Band 7

Lowest Channel / 10MHz / QPSK



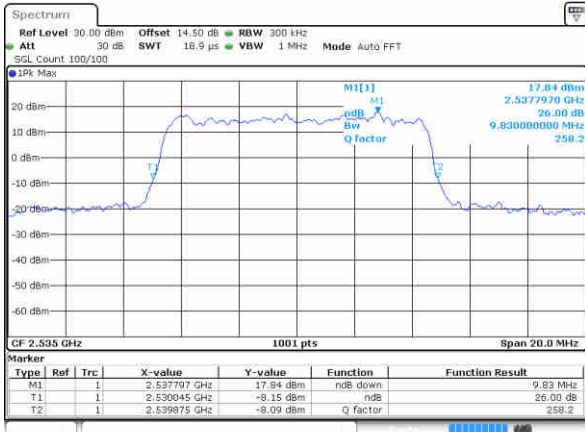
Date: 29 JUN 2020 15:47:12

Lowest Channel / 10MHz / 16QAM



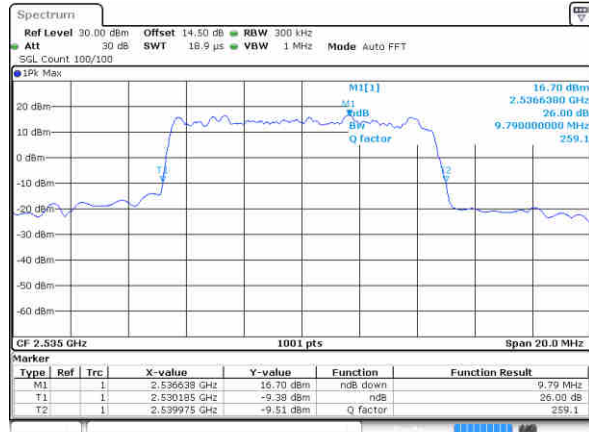
Date: 29 JUN 2020 16:11:50

Middle Channel / 10MHz / QPSK



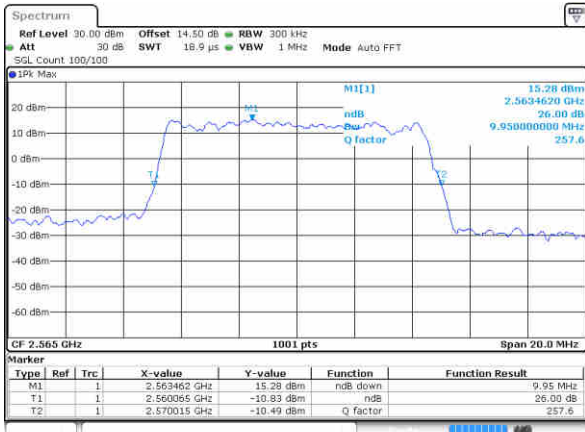
Date: 29 JUN 2020 15:48:21

Middle Channel / 10MHz / 16QAM



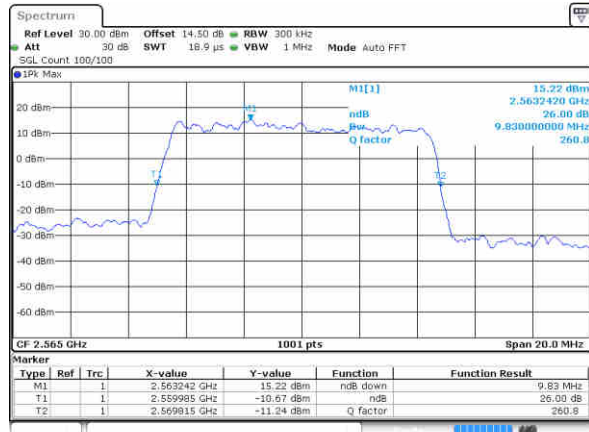
Date: 29 JUN 2020 16:13:36

Highest Channel / 10MHz / QPSK



Date: 29 JUN 2020 16:02:03

Highest Channel / 10MHz / 16QAM

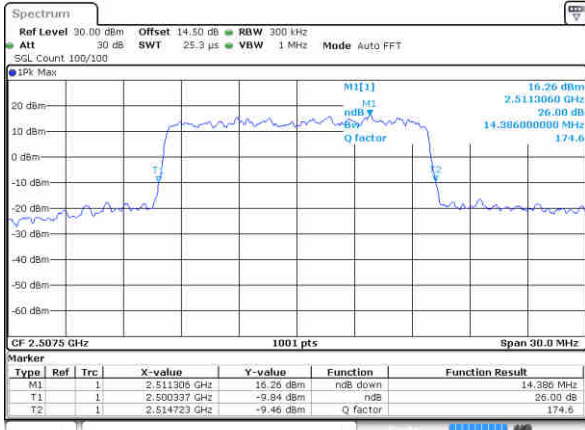


Date: 29 JUN 2020 16:14:15



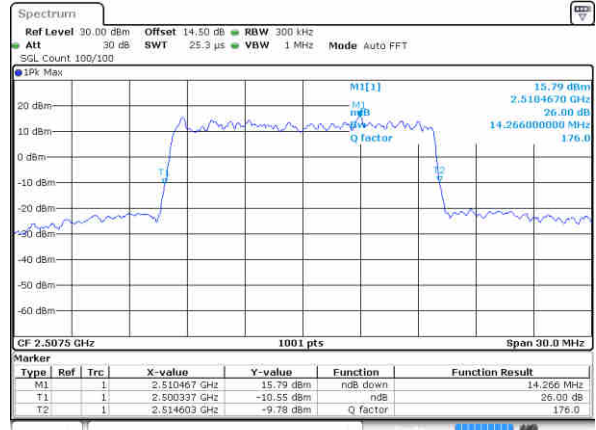
LTE Band 7

Lowest Channel / 15MHz / QPSK



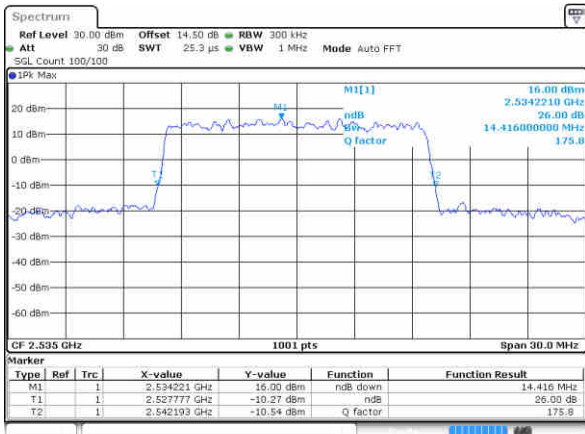
Date: 29 JUN 2020 16:33:51

Lowest Channel / 15MHz / 16QAM



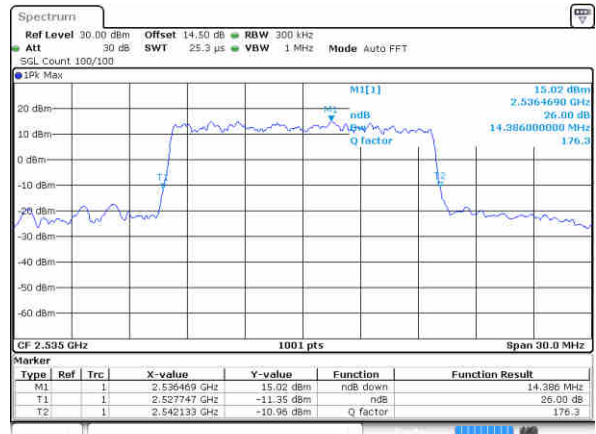
Date: 29 JUN 2020 17:10:22

Middle Channel / 15MHz / QPSK



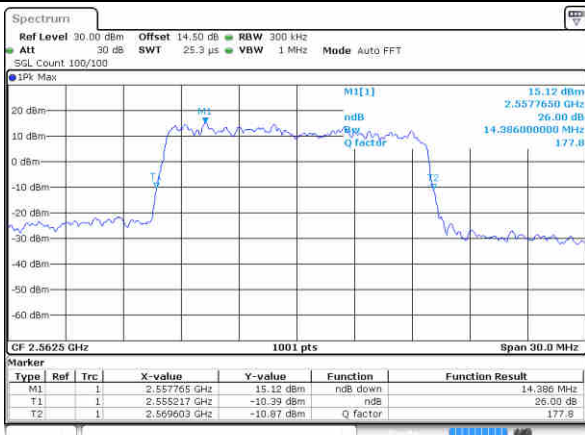
Date: 29 JUN 2020 16:34:58

Middle Channel / 15MHz / 16QAM



Date: 29 JUN 2020 17:11:53

Highest Channel / 15MHz / QPSK



Date: 29 JUN 2020 16:35:48

Highest Channel / 15MHz / 16QAM

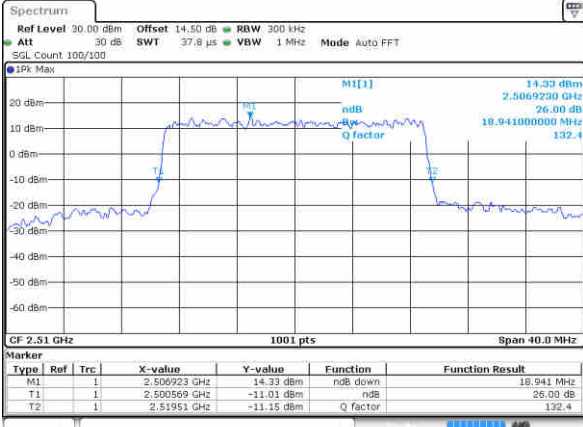


Date: 29 JUN 2020 17:12:41



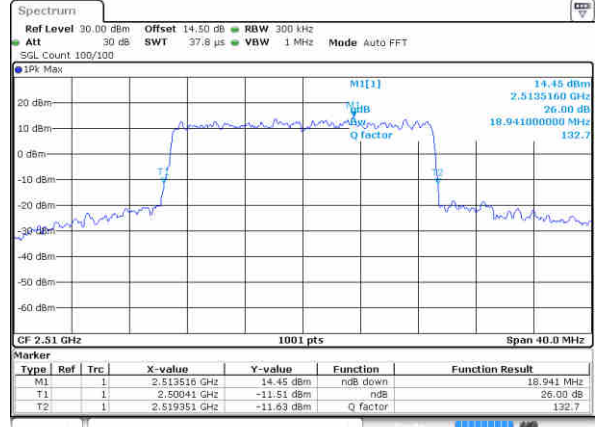
LTE Band 7

Lowest Channel / 20MHz / QPSK



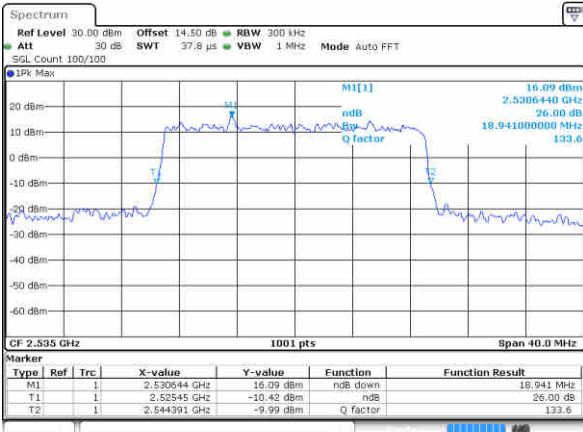
Date: 29 JUN 2020 17:37:24

Lowest Channel / 20MHz / 16QAM



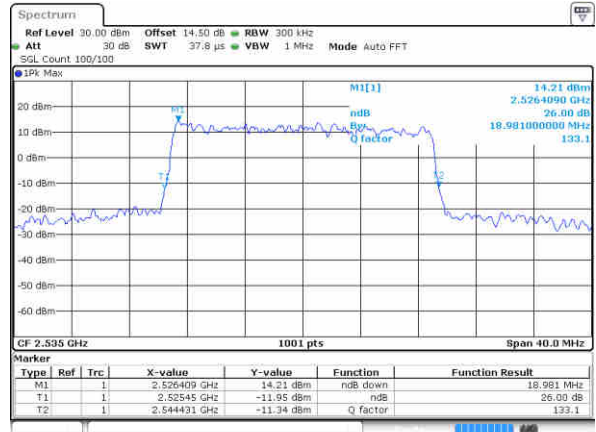
Date: 29 JUN 2020 17:54:41

Middle Channel / 20MHz / QPSK



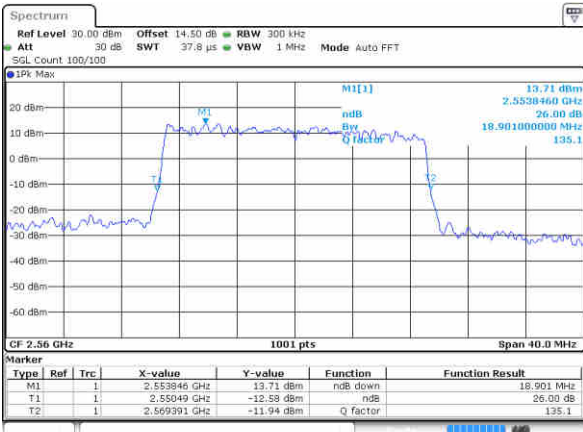
Date: 29 JUN 2020 17:39:56

Middle Channel / 20MHz / 16QAM



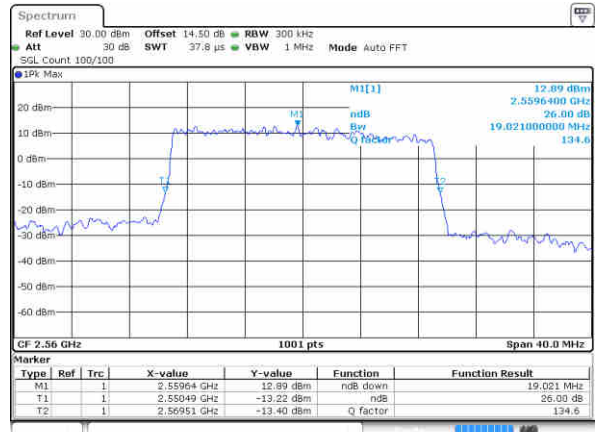
Date: 29 JUN 2020 17:55:53

Highest Channel / 20MHz / QPSK



Date: 29 JUN 2020 17:41:36

Highest Channel / 20MHz / 16QAM

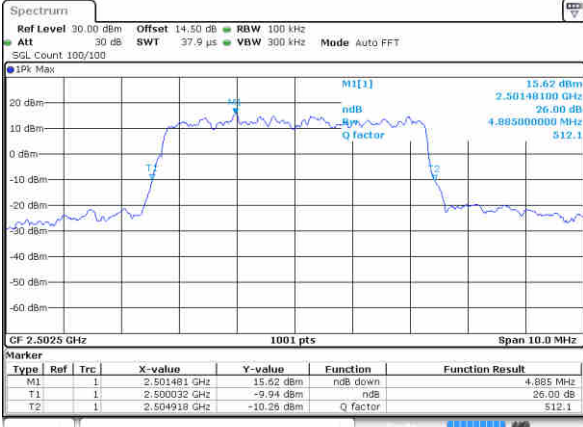


Date: 29 JUN 2020 17:56:54



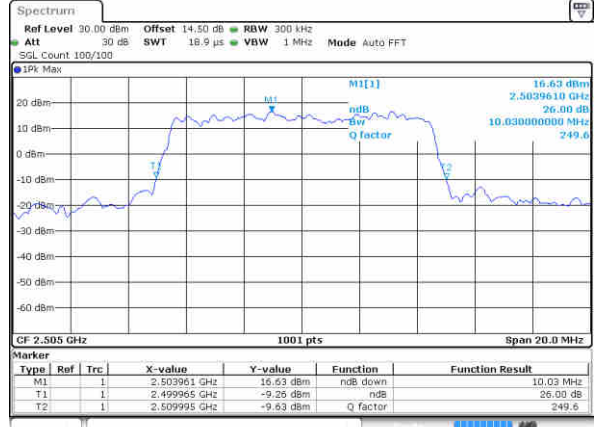
LTE Band 7

Lowest Channel / 5MHz / 64QAM



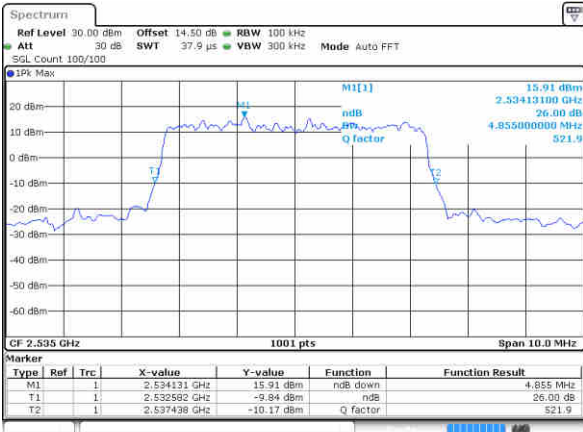
Date: 29 JUN 2020 13:06:45

Lowest Channel / 10MHz / 64QAM



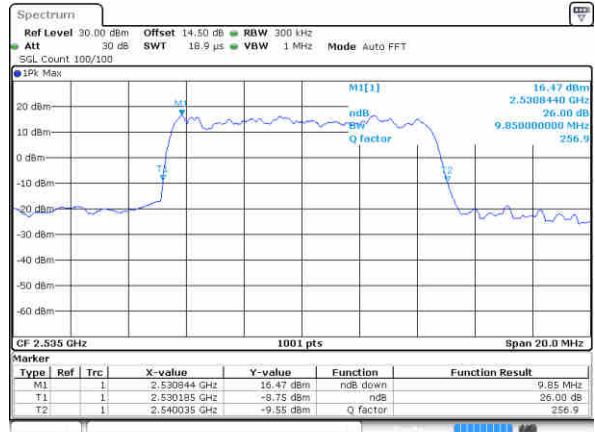
Date: 29 JUN 2020 16:23:34

Middle Channel / 5MHz / 64QAM



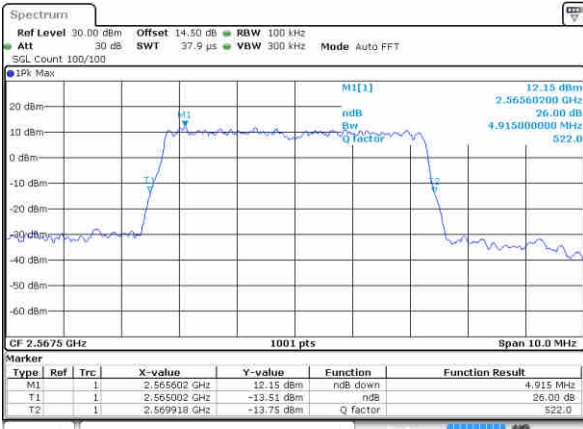
Date: 29 JUN 2020 13:11:46

Middle Channel / 10MHz / 64QAM



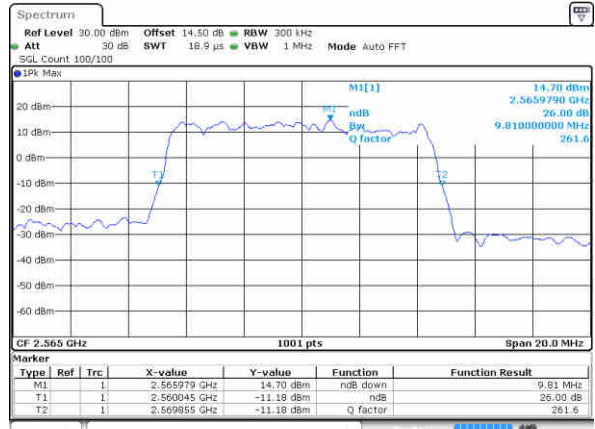
Date: 29 JUN 2020 16:24:34

Highest Channel / 5MHz / 64QAM



Date: 29 JUN 2020 15:11:01

Highest Channel / 10MHz / 64QAM

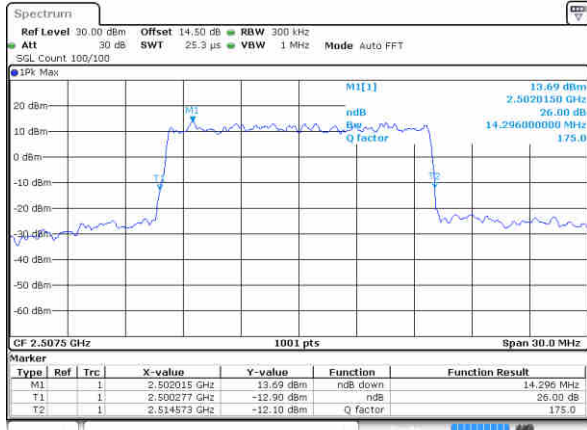


Date: 29 JUN 2020 16:25:20



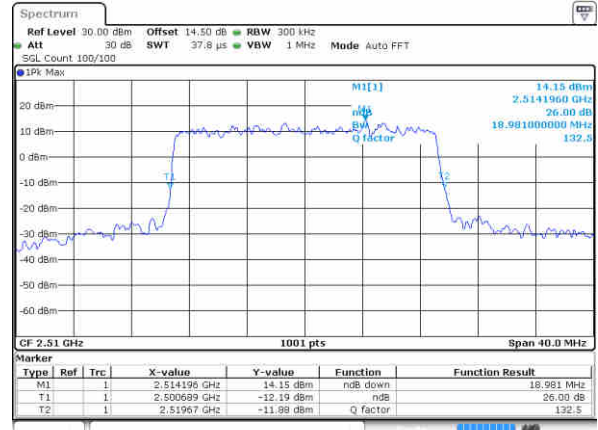
LTE Band 7

Lowest Channel / 15MHz / 64QAM



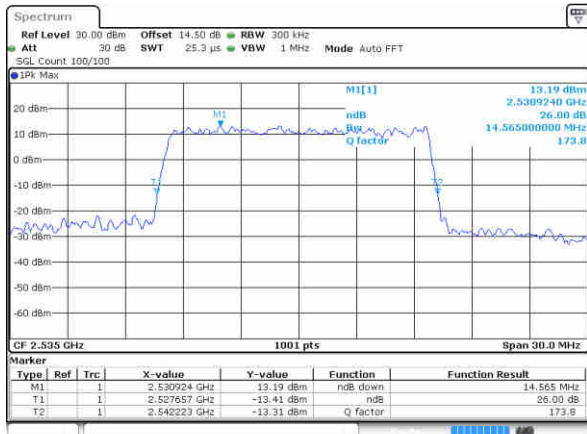
Date: 29 JUN 2020 17:28:37

Lowest Channel / 20MHz / 64QAM



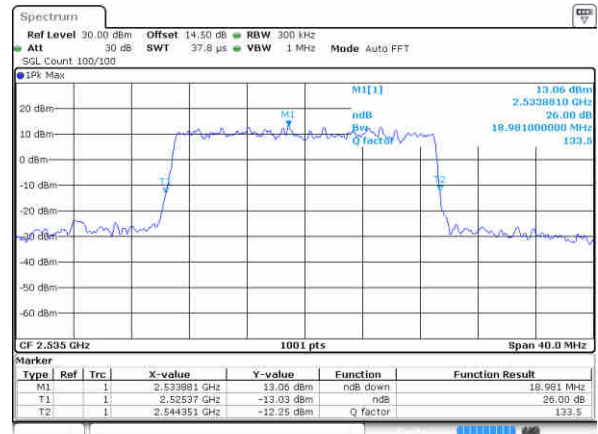
Date: 29 JUN 2020 18:04:10

Middle Channel / 15MHz / 64QAM



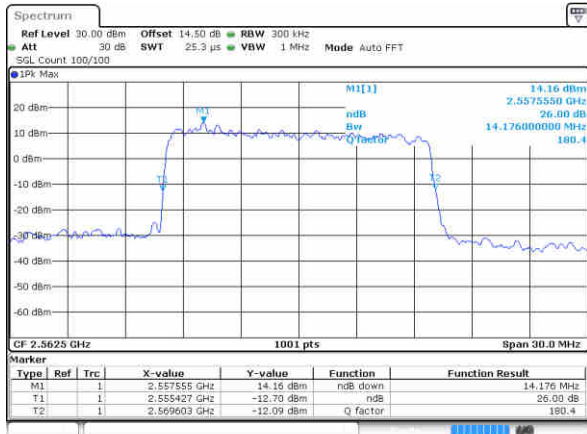
Date: 29 JUN 2020 17:27:53

Middle Channel / 20MHz / 64QAM



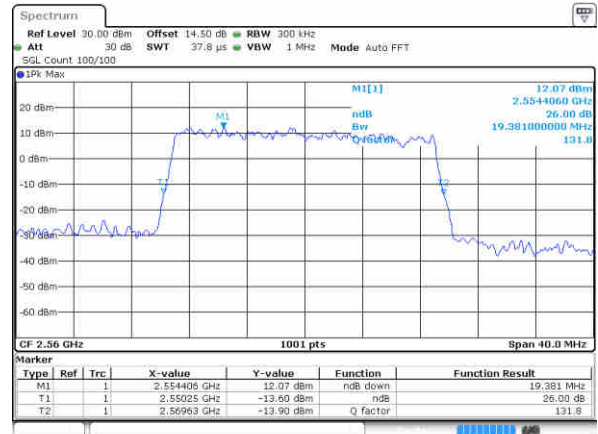
Date: 29 JUN 2020 18:05:14

Highest Channel / 15MHz / 64QAM



Date: 29 JUN 2020 17:26:22

Highest Channel / 20MHz / 64QAM



Date: 29 JUN 2020 18:05:55



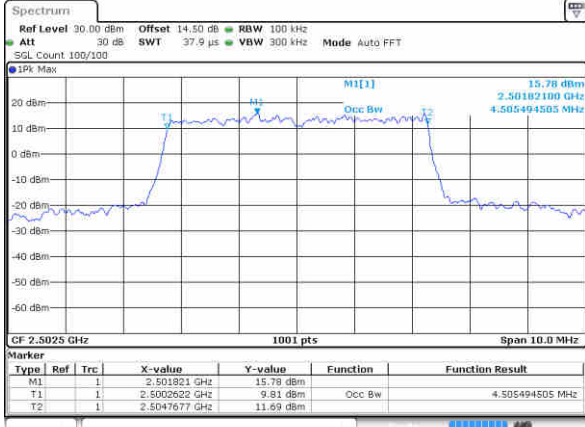
Occupied Bandwidth

Mode	LTE Band 7 : 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	-	-	-	-	4.51	4.49	9.01	9.05	13.46	13.43	17.78	17.86
Middle CH	-	-	-	-	4.49	4.49	9.05	8.97	13.43	13.43	17.90	17.94
Highest CH	-	-	-	-	4.48	4.48	9.03	9.03	13.37	13.40	17.86	17.86
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	9.07	-	13.43	-	17.82	-
Middle CH	-	-	-	-	4.48	-	9.03	-	13.46	-	17.90	-
Highest CH	-	-	-	-	4.47	-	9.01	-	13.37	-	17.82	-



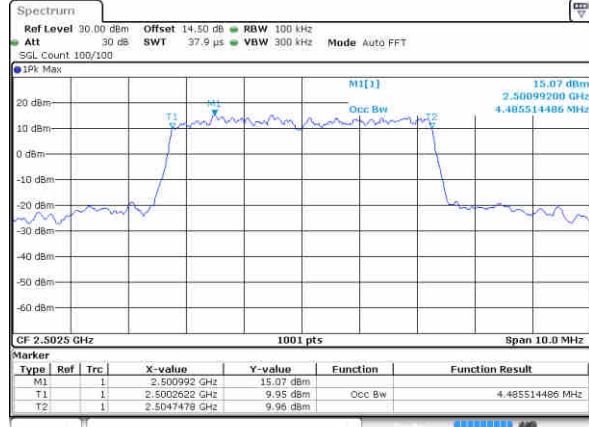
LTE Band 7

Lowest Channel / 5MHz / QPSK



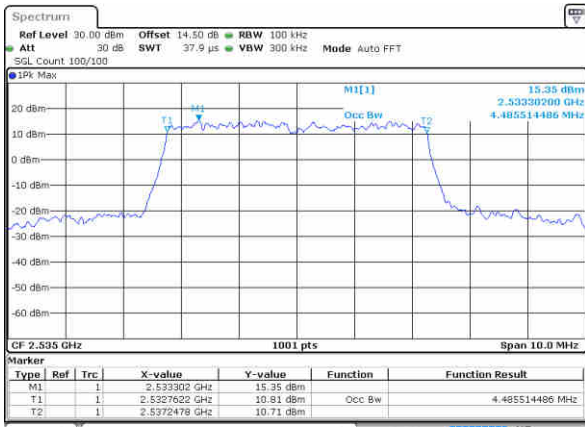
Date: 29 JUN 2020 12:15:30

Lowest Channel / 5MHz / 16QAM



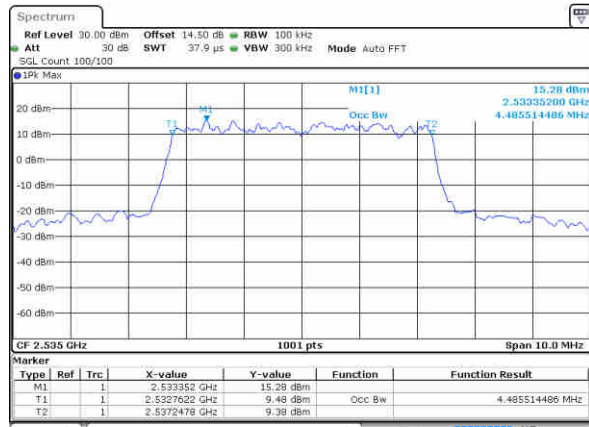
Date: 29 JUN 2020 15:07:16

Middle Channel / 5MHz / QPSK



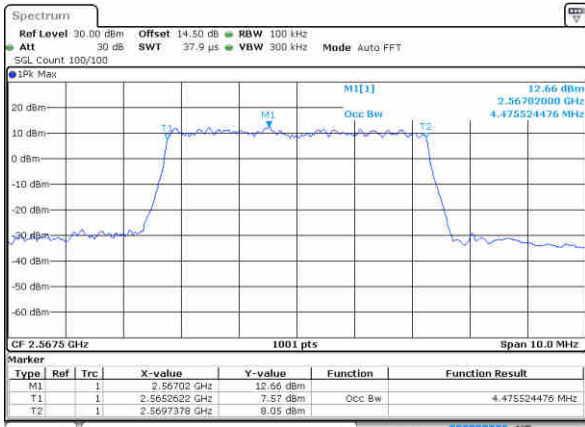
Date: 29 JUN 2020 12:17:23

Middle Channel / 5MHz / 16QAM



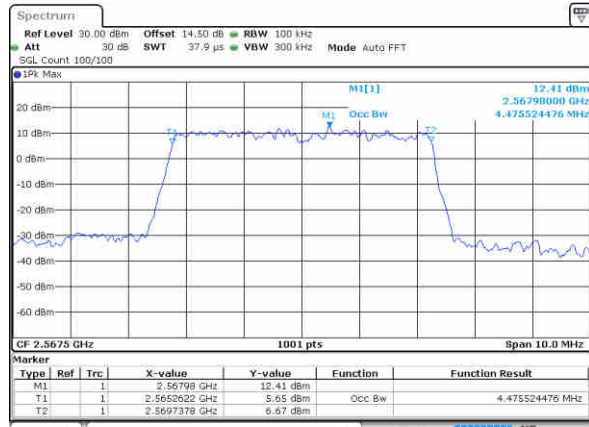
Date: 29 JUN 2020 12:49:45

Highest Channel / 5MHz / QPSK



Date: 29 JUN 2020 12:18:10

Highest Channel / 5MHz / 16QAM

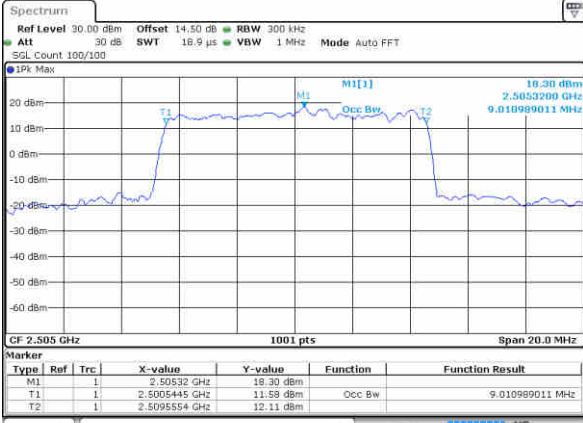


Date: 29 JUN 2020 12:50:45



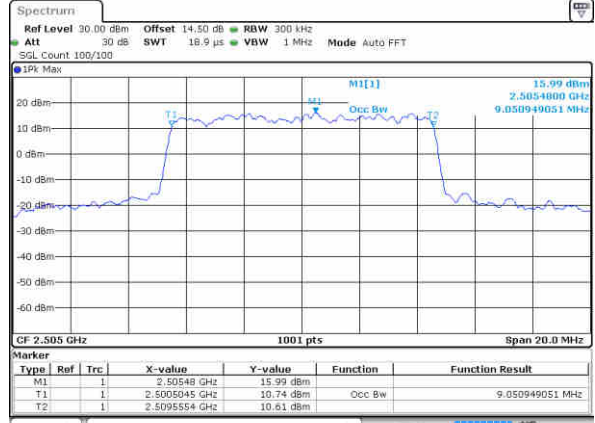
LTE Band 7

Lowest Channel / 10MHz / QPSK



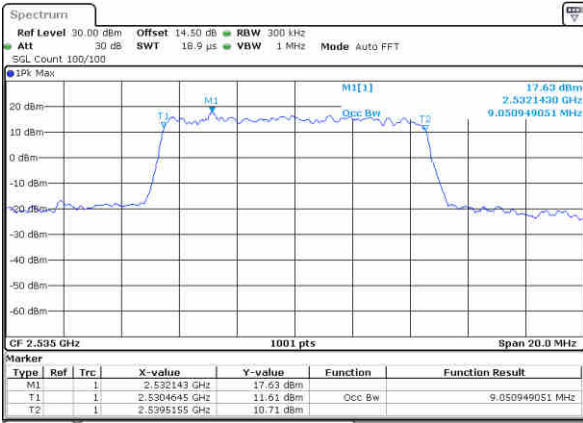
Date: 29 JUN 2020 15:48:56

Lowest Channel / 10MHz / 16QAM



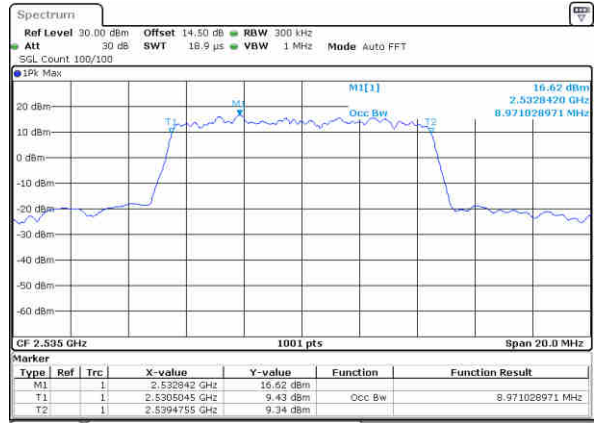
Date: 29 JUN 2020 16:11:25

Middle Channel / 10MHz / QPSK



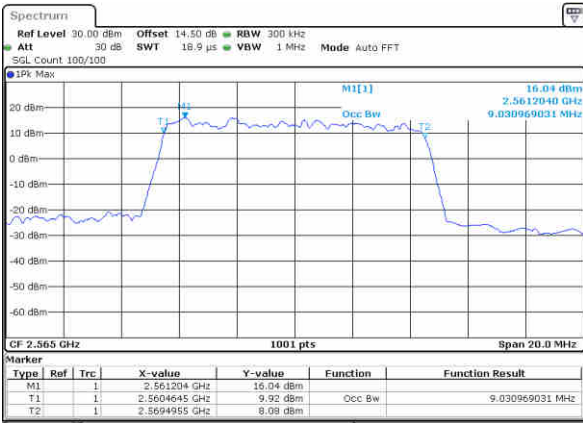
Date: 29 JUN 2020 15:48:04

Middle Channel / 10MHz / 16QAM



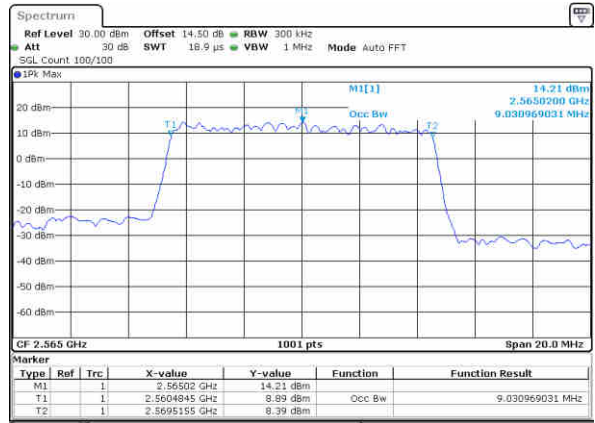
Date: 29 JUN 2020 16:13:25

Highest Channel / 10MHz / QPSK



Date: 29 JUN 2020 16:01:53

Highest Channel / 10MHz / 16QAM

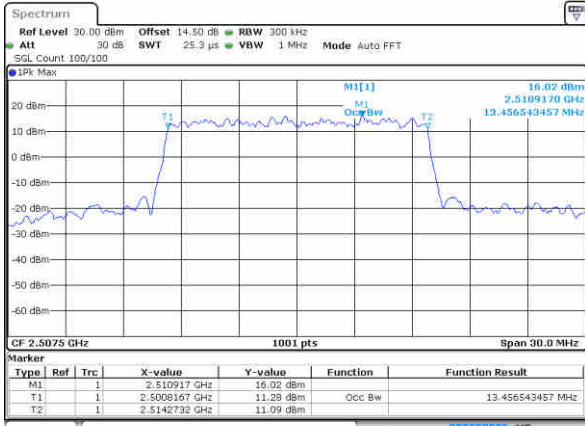


Date: 29 JUN 2020 16:14:03



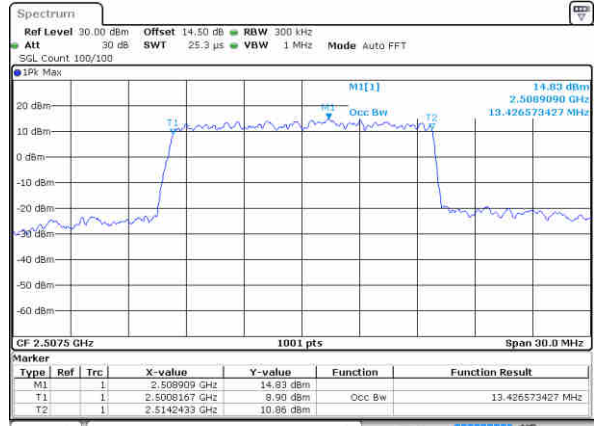
LTE Band 7

Lowest Channel / 15MHz / QPSK



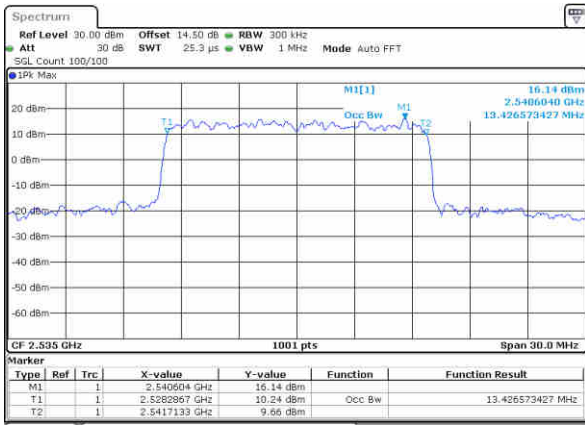
Date: 29 JUN 2020 16:33:43

Lowest Channel / 15MHz / 16QAM



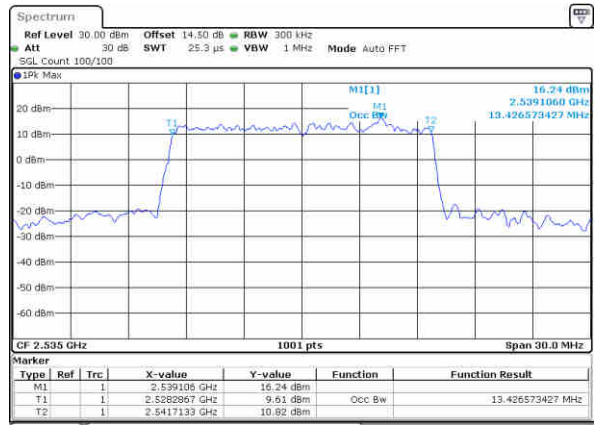
Date: 29 JUN 2020 17:10:08

Middle Channel / 15MHz / QPSK



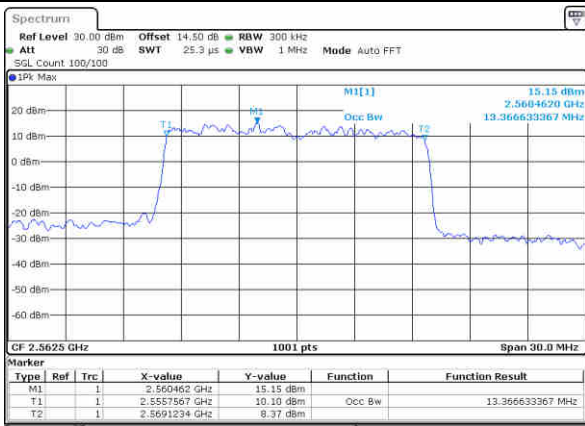
Date: 29 JUN 2020 16:34:47

Middle Channel / 15MHz / 16QAM



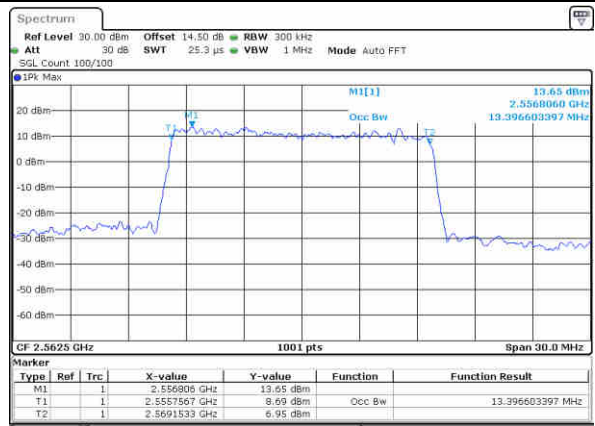
Date: 29 JUN 2020 17:11:39

Highest Channel / 15MHz / QPSK



Date: 29 JUN 2020 16:35:37

Highest Channel / 15MHz / 16QAM

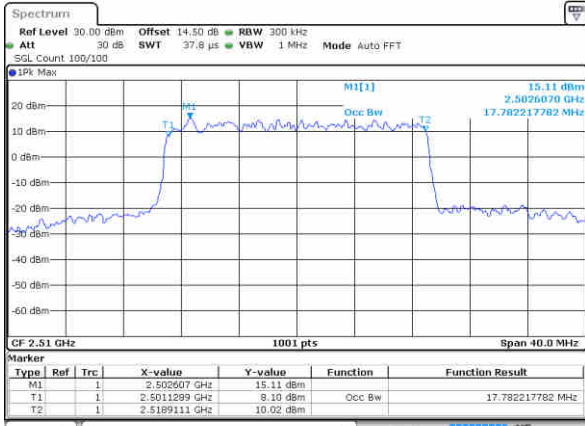


Date: 29 JUN 2020 17:12:26



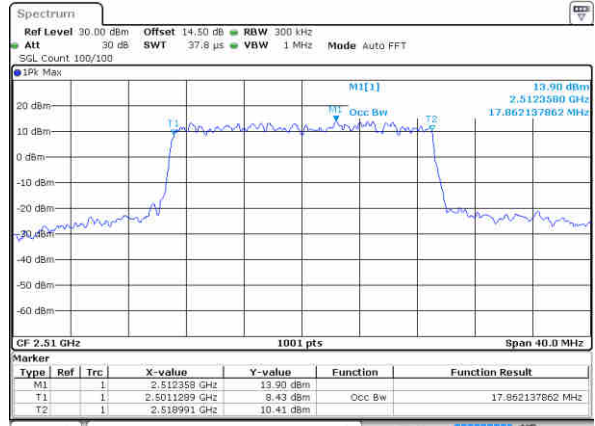
LTE Band 7

Lowest Channel / 20MHz / QPSK



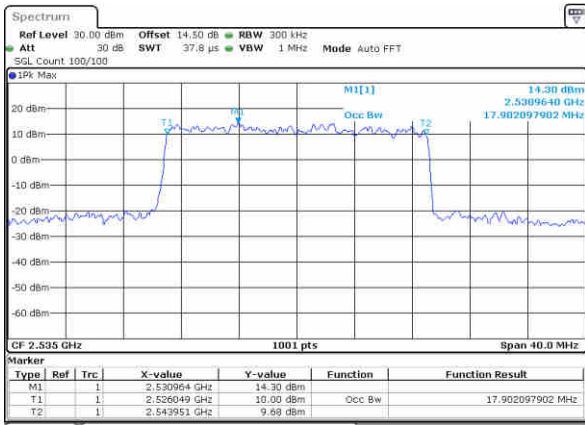
Date: 29 JUN 2020 17:37:06

Lowest Channel / 20MHz / 16QAM



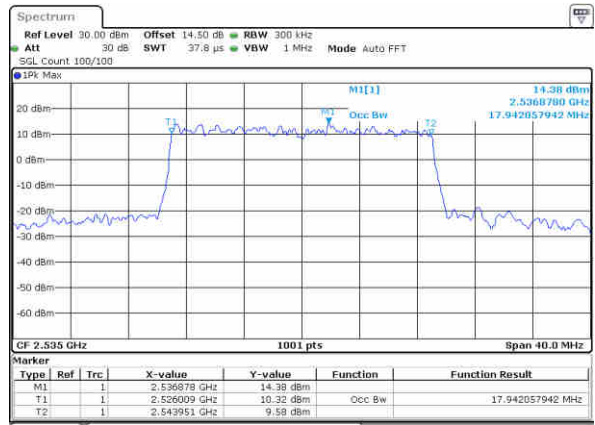
Date: 29 JUN 2020 17:53:59

Middle Channel / 20MHz / QPSK



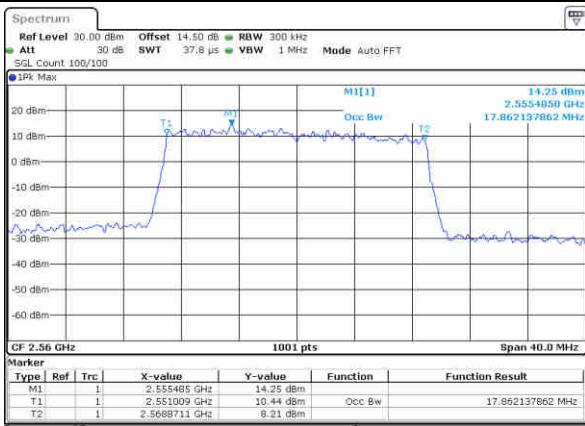
Date: 29 JUN 2020 17:38:40

Middle Channel / 20MHz / 16QAM



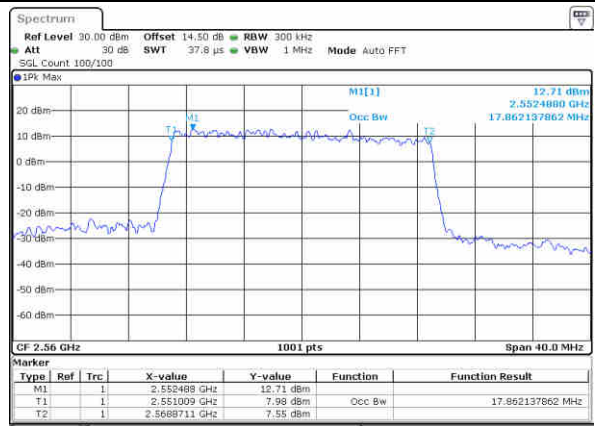
Date: 29 JUN 2020 17:55:34

Highest Channel / 20MHz / QPSK



Date: 29 JUN 2020 17:41:22

Highest Channel / 20MHz / 16QAM

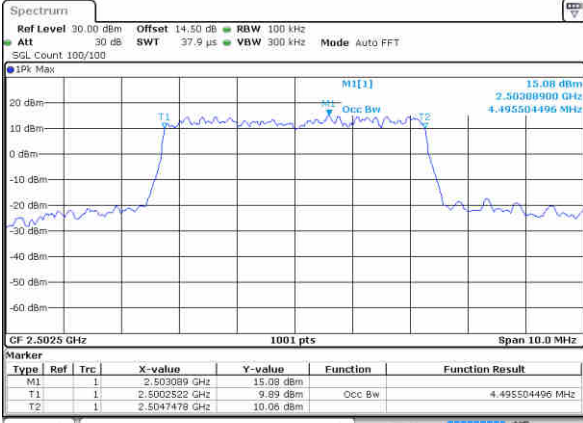


Date: 29 JUN 2020 17:56:38



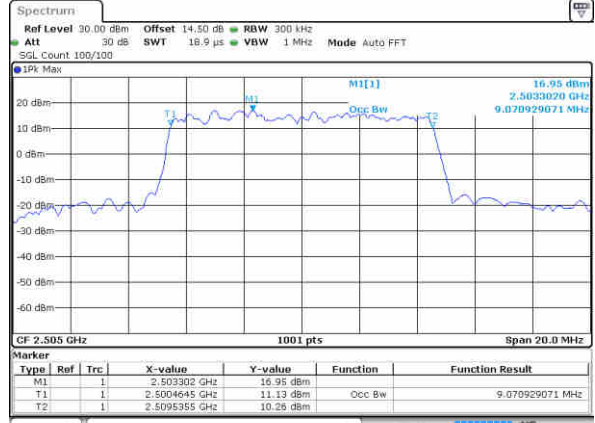
LTE Band 7

Lowest Channel / 5MHz / 64QAM



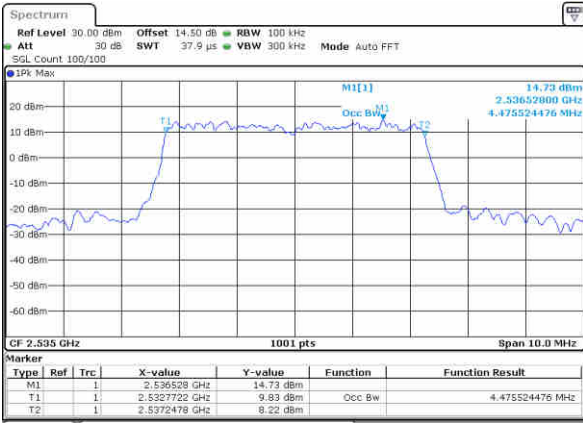
Date: 29 JUN 2020 13:06:29

Lowest Channel / 10MHz / 64QAM



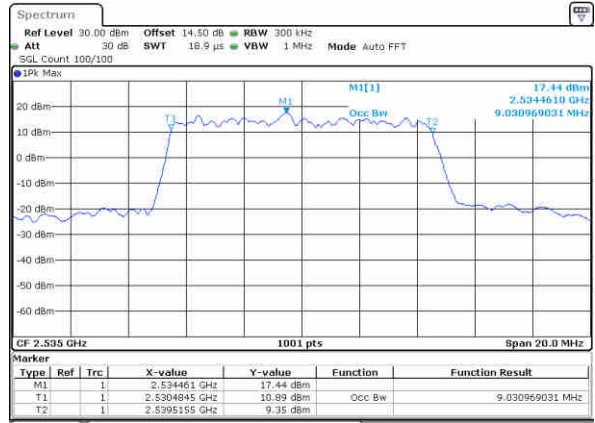
Date: 29 JUN 2020 16:23:24

Middle Channel / 5MHz / 64QAM



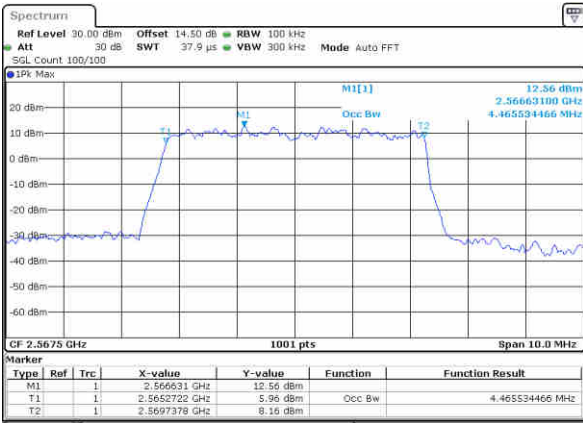
Date: 29 JUN 2020 13:11:29

Middle Channel / 10MHz / 64QAM



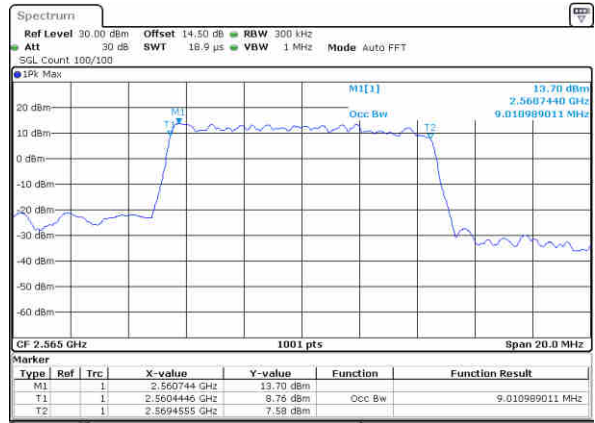
Date: 29 JUN 2020 16:24:19

Highest Channel / 5MHz / 64QAM



Date: 29 JUN 2020 15:10:41

Highest Channel / 10MHz / 64QAM

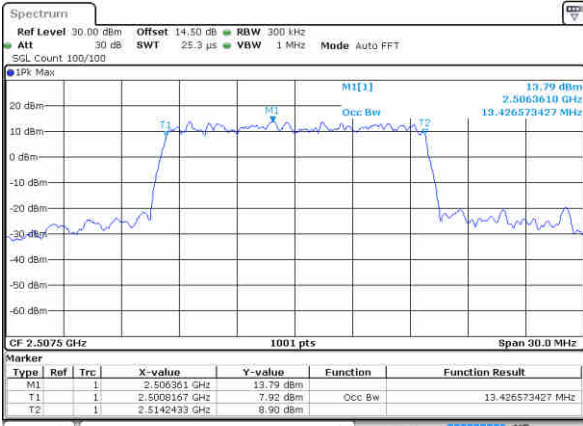


Date: 29 JUN 2020 16:25:07



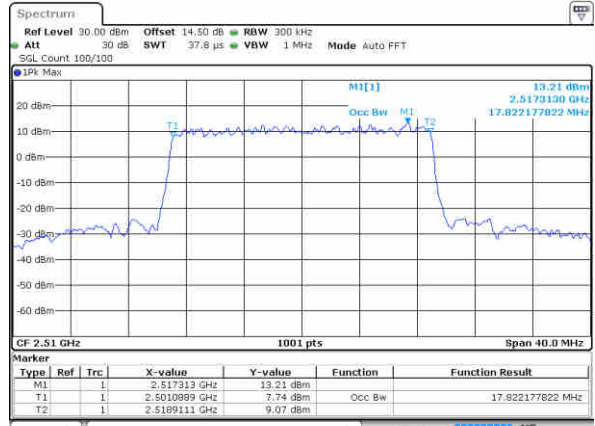
LTE Band 7

Lowest Channel / 15MHz / 64QAM



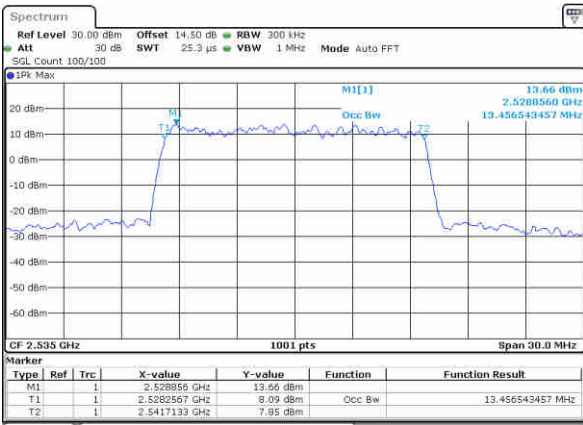
Date: 29 JUN 2020 17:28:19

Lowest Channel / 20MHz / 64QAM



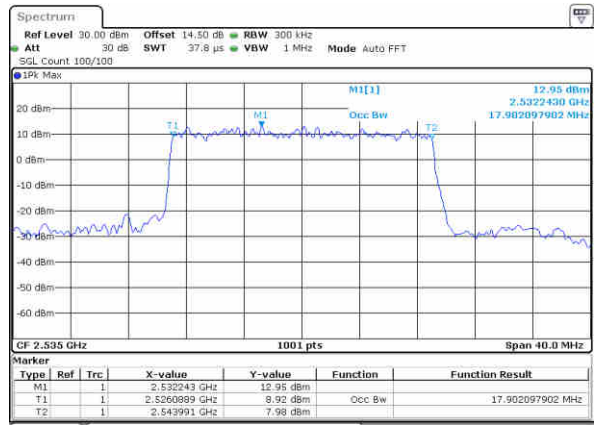
Date: 29 JUN 2020 18:03:57

Middle Channel / 15MHz / 64QAM



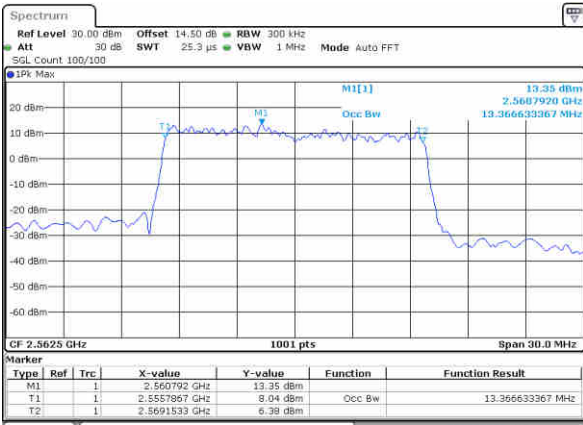
Date: 29 JUN 2020 17:27:37

Middle Channel / 20MHz / 64QAM



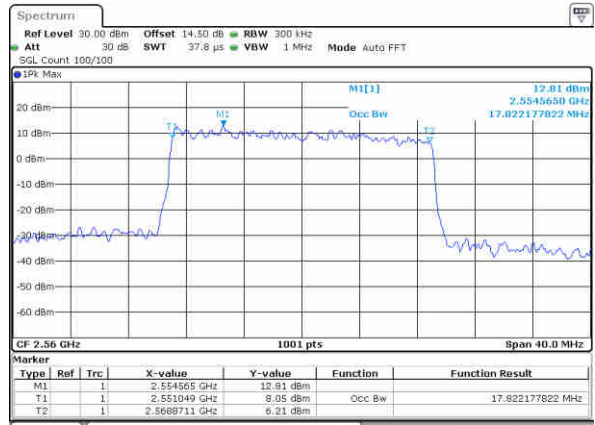
Date: 29 JUN 2020 18:05:05

Highest Channel / 15MHz / 64QAM



Date: 29 JUN 2020 17:26:12

Highest Channel / 20MHz / 64QAM



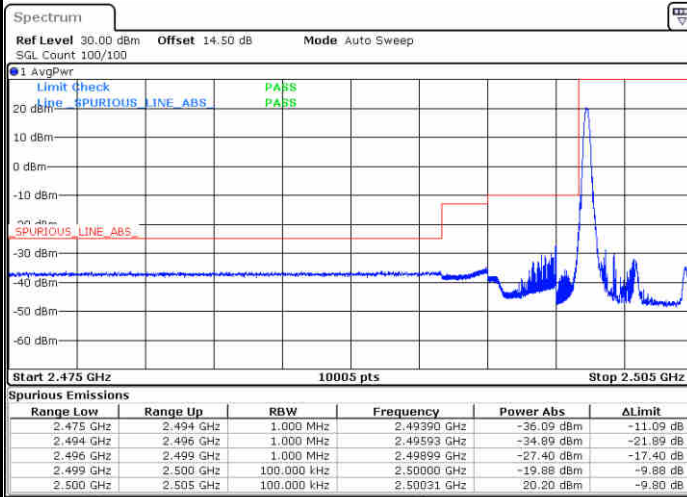
Date: 29 JUN 2020 18:05:44



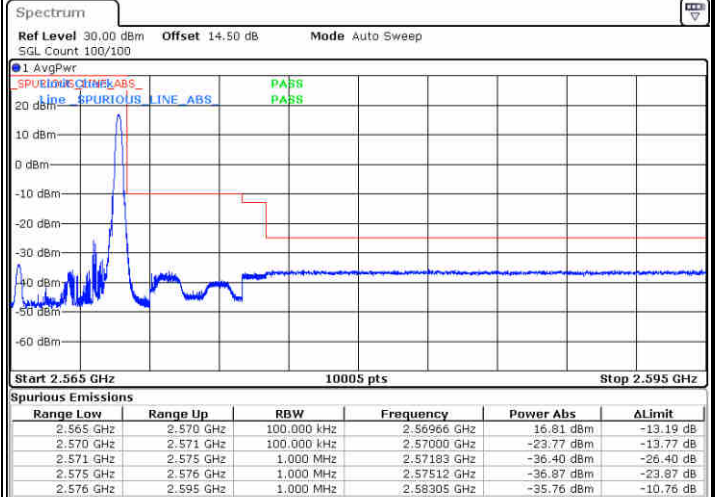
Conducted Band Edge

LTE Band 7 / 5MHz / QPSK

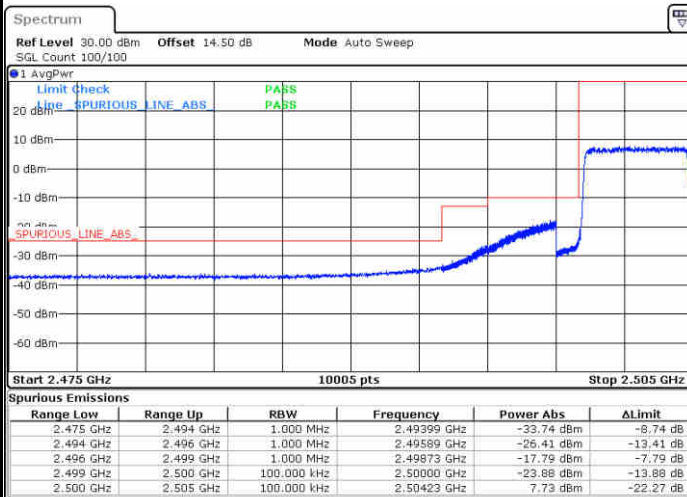
Lowest Band Edge / 1 RB



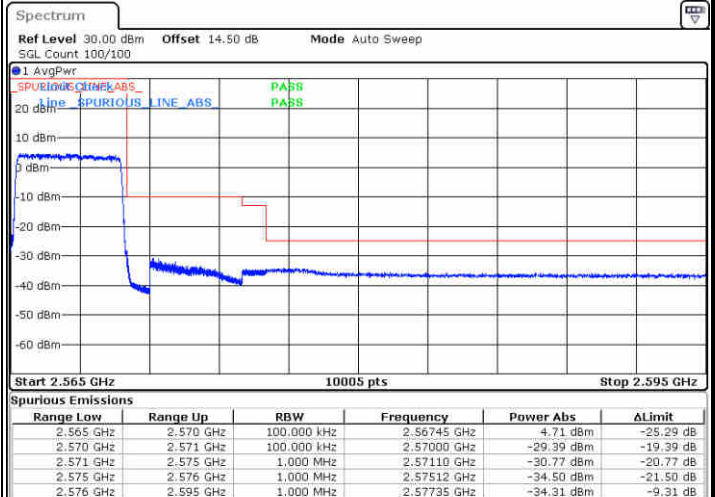
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



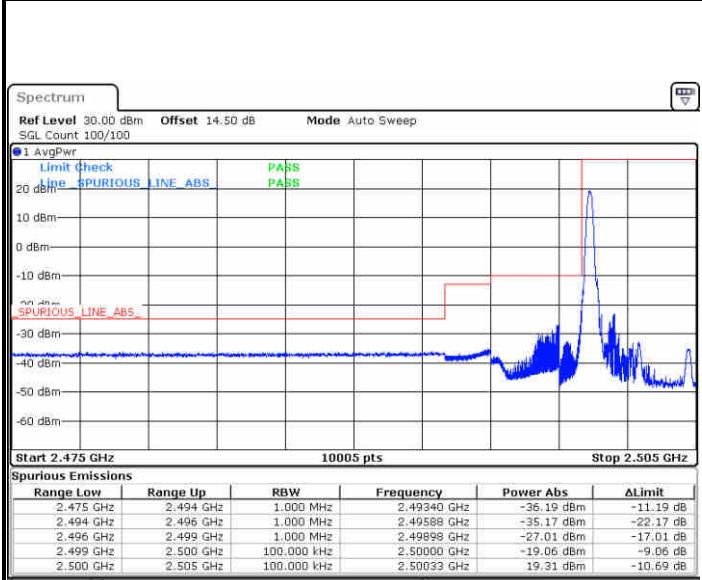
Highest Band Edge / Full RB





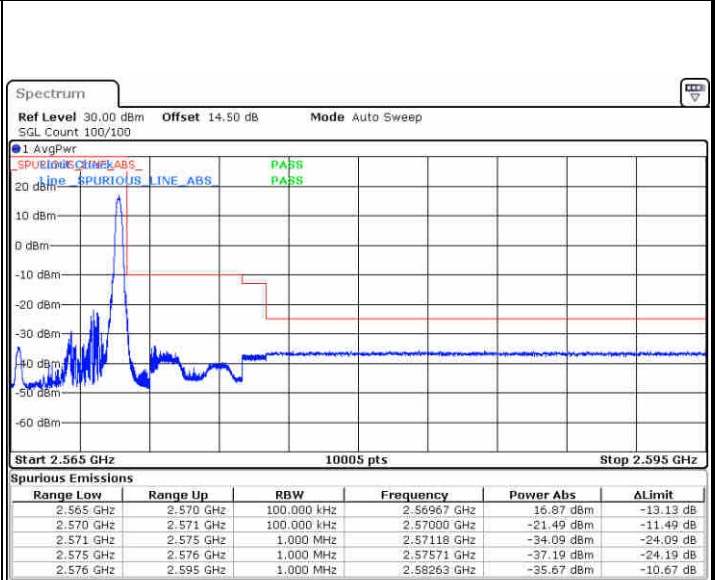
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



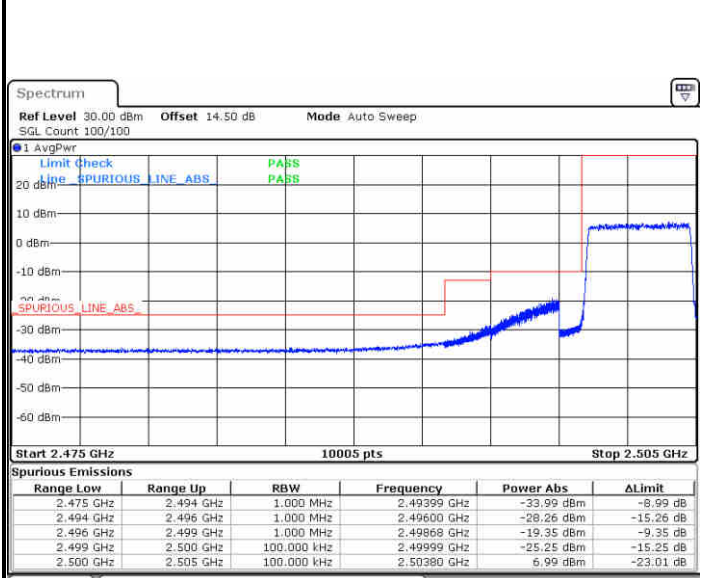
Date: 29 JUN 2020 13:01:38

Highest Band Edge / 1 RB



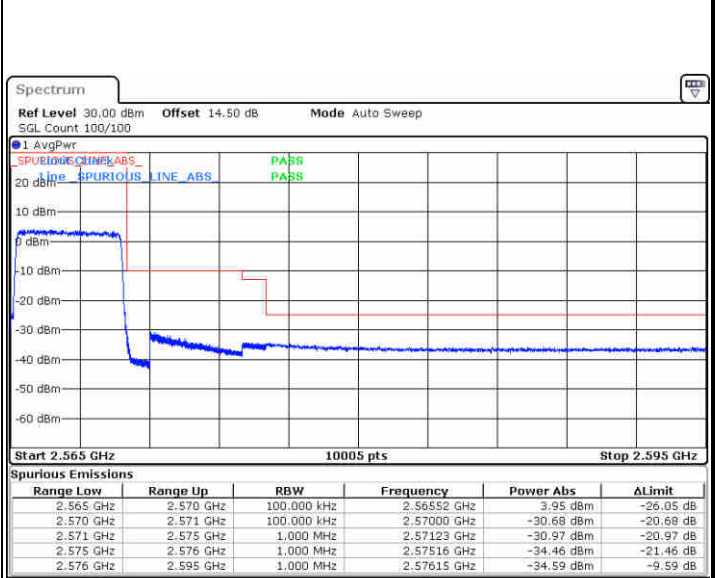
Date: 29 JUN 2020 12:53:26

Lowest Band Edge / Full RB



Date: 29 JUN 2020 13:05:05

Highest Band Edge / Full RB

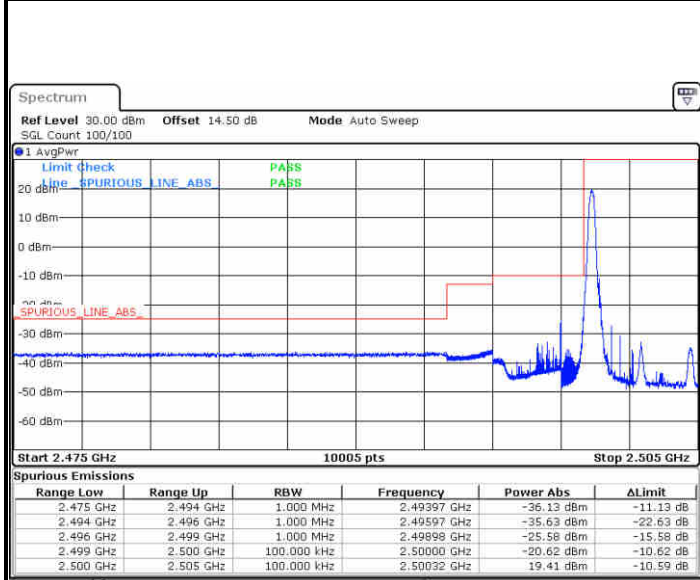


Date: 29 JUN 2020 12:51:23



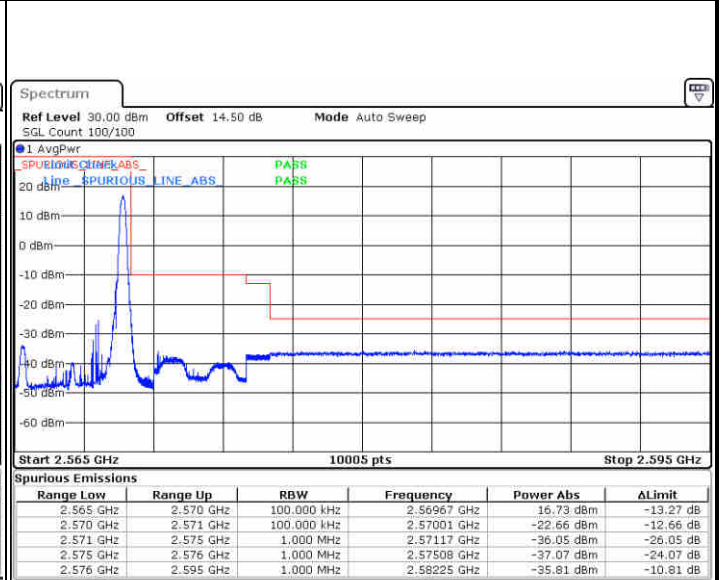
LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB



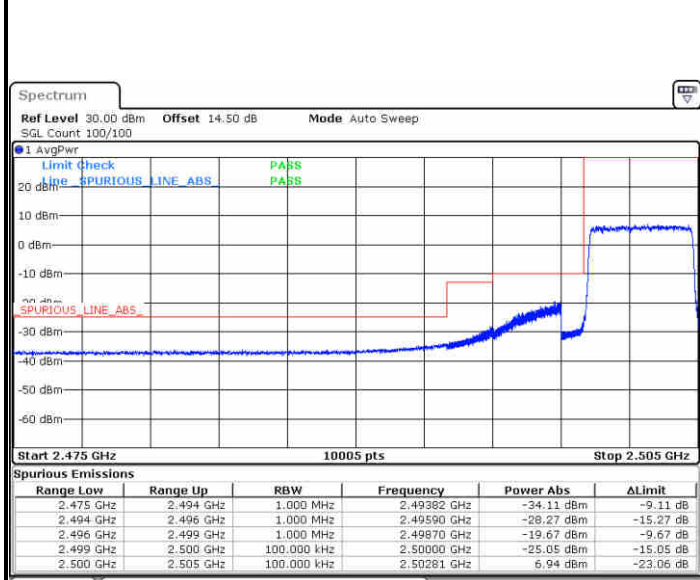
Date: 29 JUN 2020 13:09:18

Highest Band Edge / 1 RB



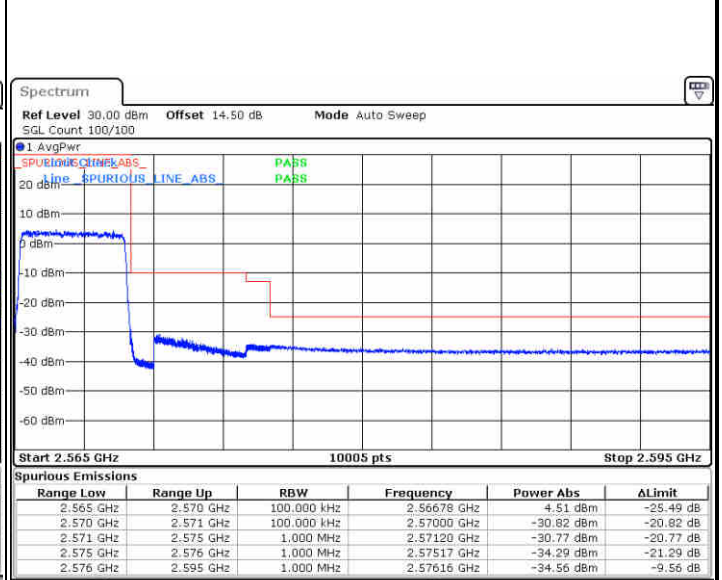
Date: 29 JUN 2020 15:14:01

Lowest Band Edge / Full RB



Date: 29 JUN 2020 13:07:23

Highest Band Edge / Full RB



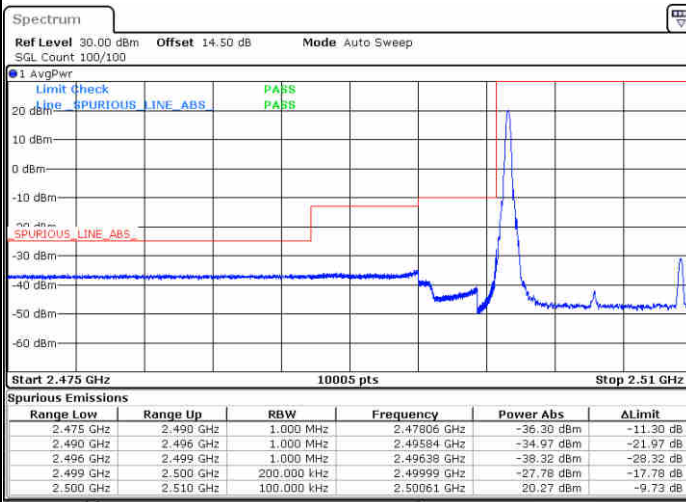
Date: 29 JUN 2020 15:11:34



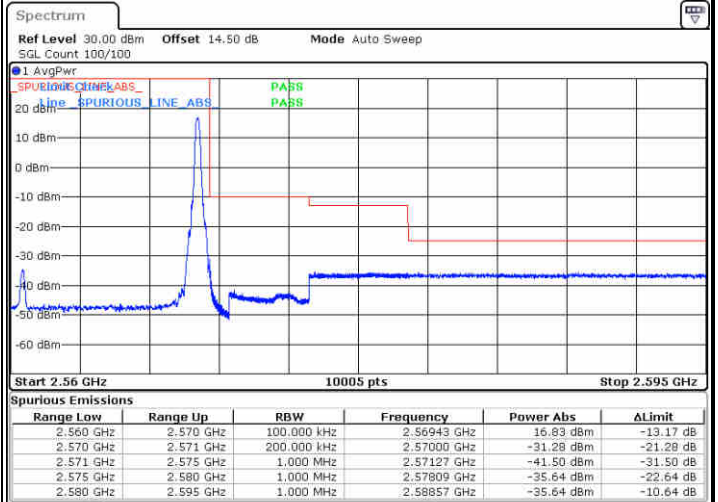
LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



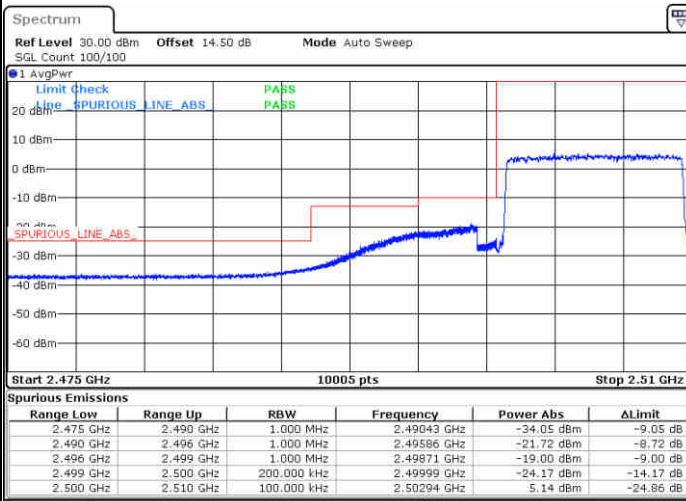
Date: 29 JUN 2020 16:08:38



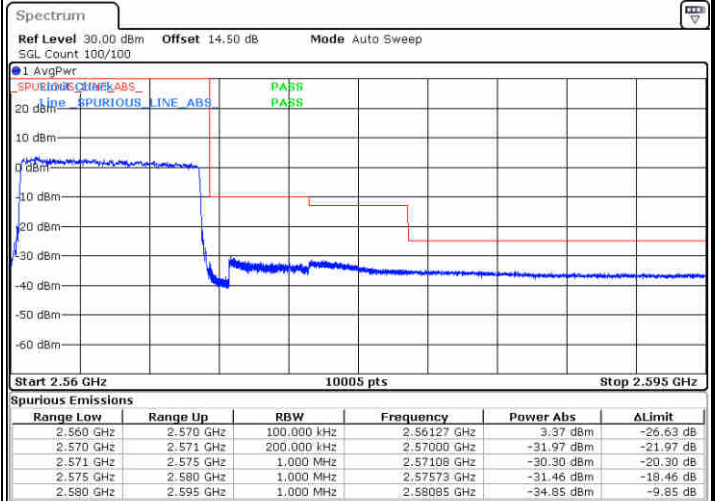
Date: 29 JUN 2020 16:05:21

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 29 JUN 2020 15:47:31



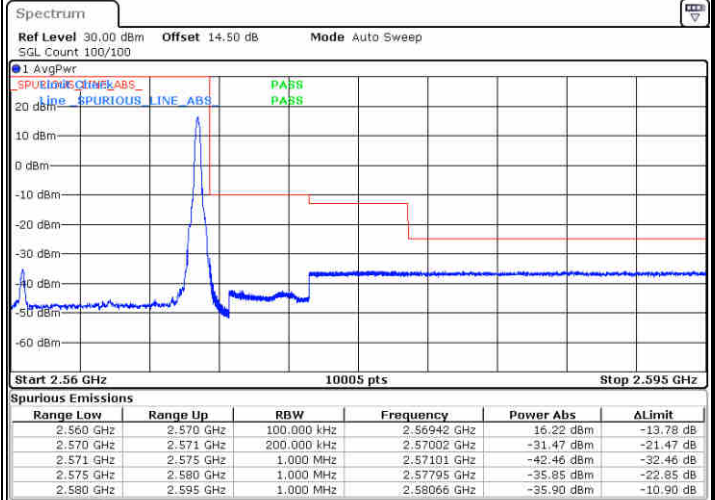
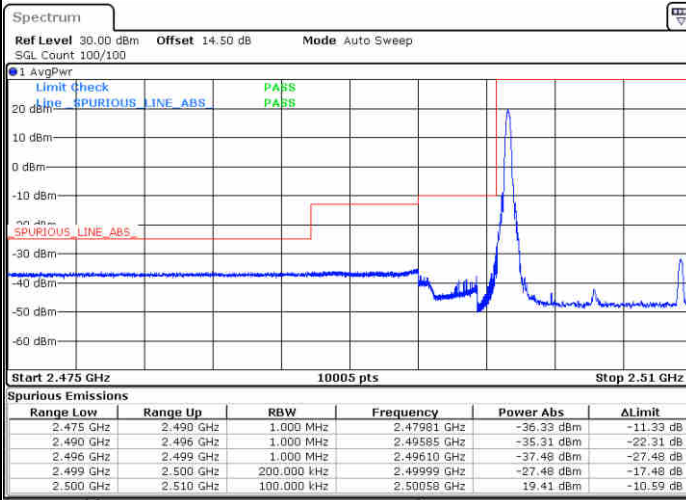
Date: 29 JUN 2020 16:02:24



LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

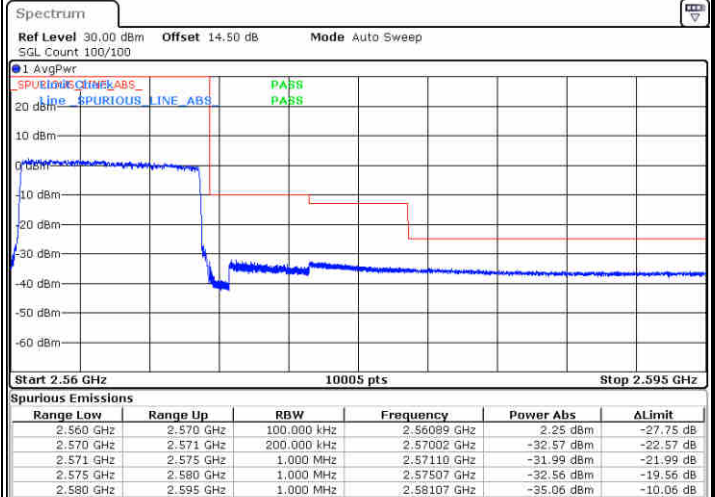
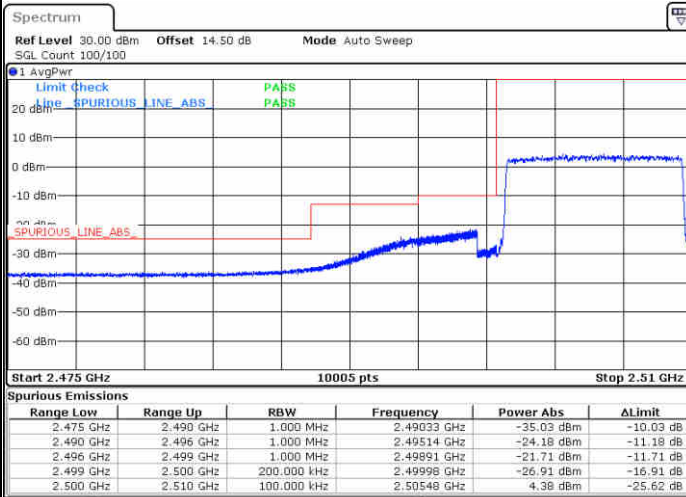


Date: 29 JUN 2020 16:22:28

Date: 29 JUN 2020 16:19:23

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



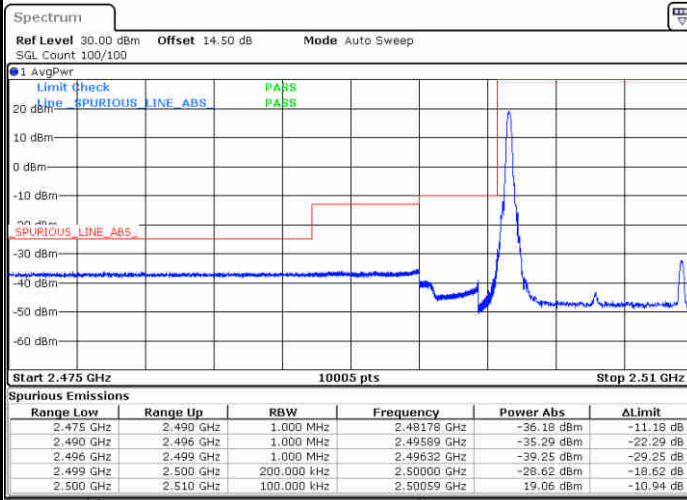
Date: 29 JUN 2020 16:12:49

Date: 29 JUN 2020 16:14:33



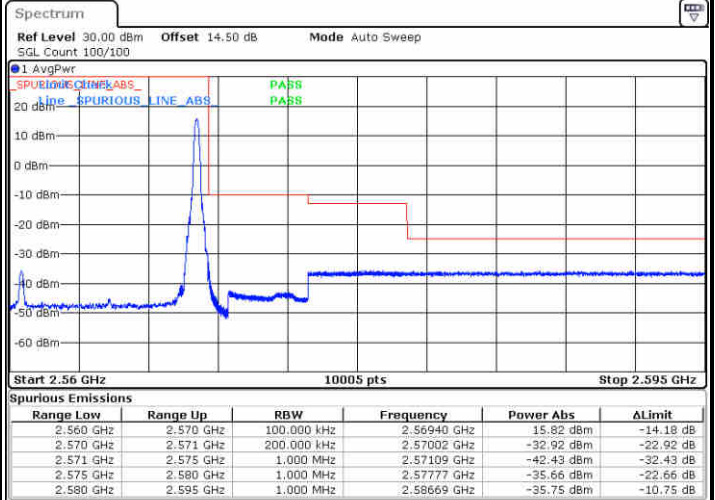
LTE Band 7 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



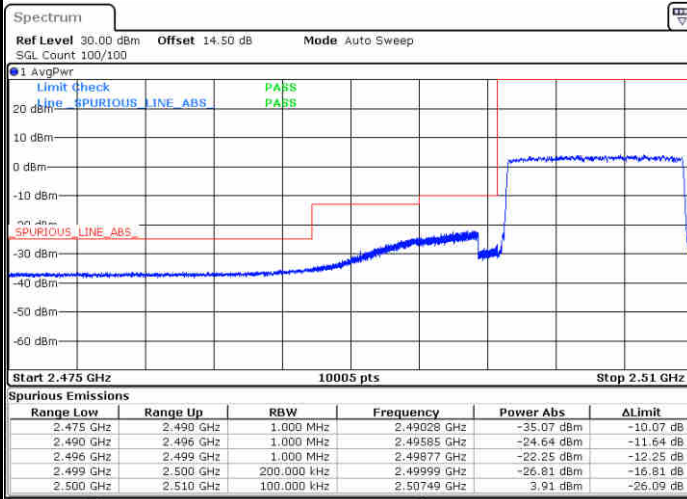
Date: 29 JUN 2020 16:30:14

Highest Band Edge / 1 RB



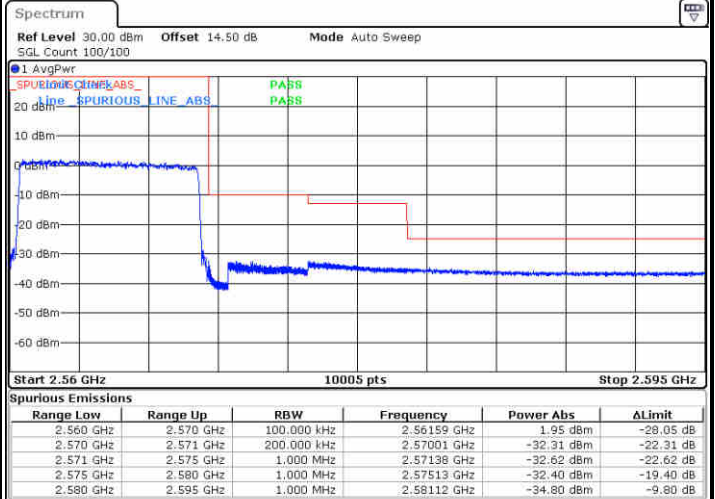
Date: 29 JUN 2020 16:26:32

Lowest Band Edge / Full RB



Date: 29 JUN 2020 16:23:51

Highest Band Edge / Full RB

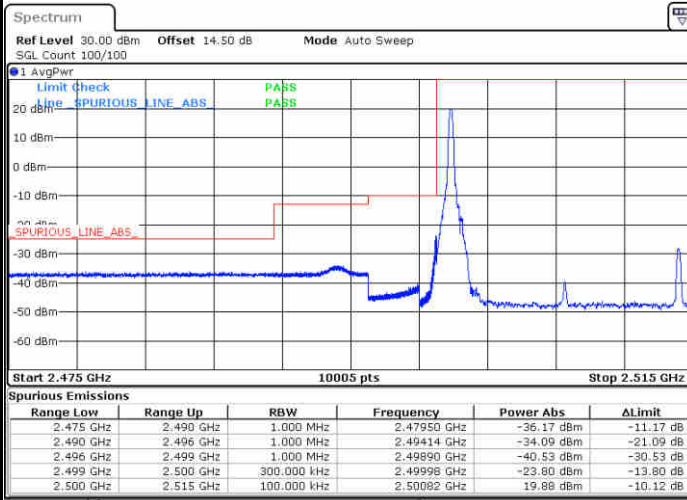


Date: 29 JUN 2020 16:25:46



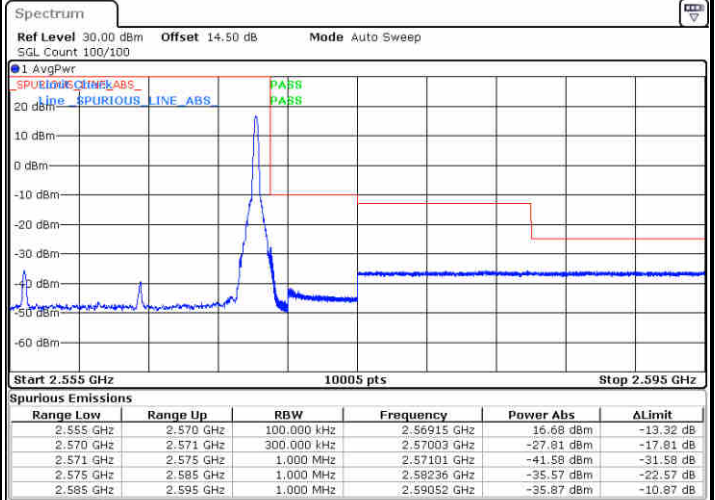
LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB



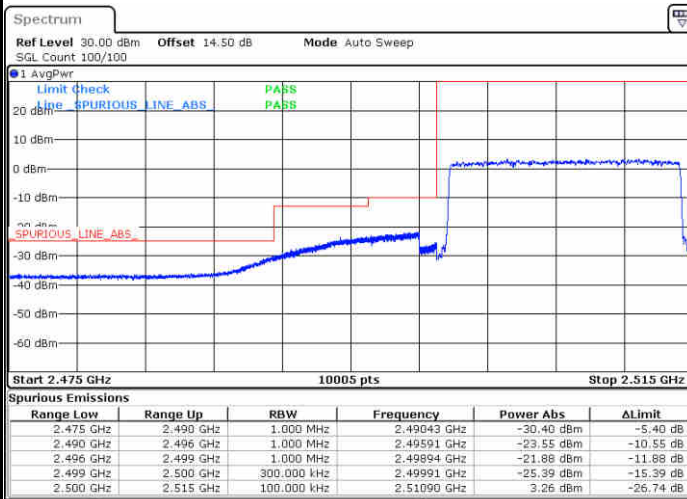
Date: 29 JUN 2020 16:40:49

Highest Band Edge / 1 RB



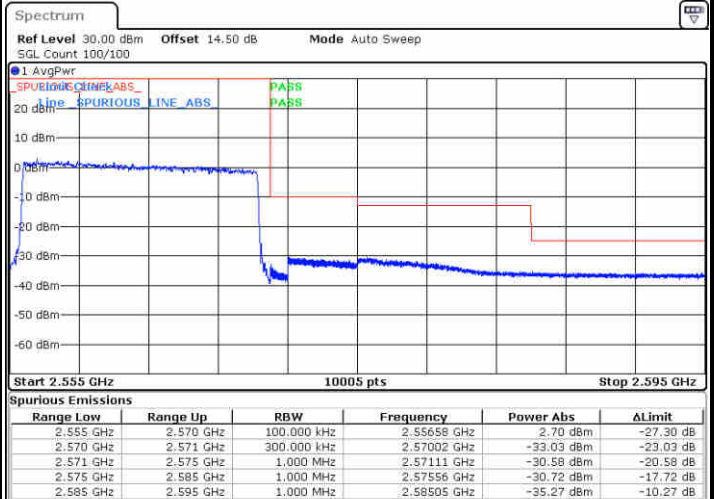
Date: 29 JUN 2020 16:36:44

Lowest Band Edge / Full RB



Date: 29 JUN 2020 16:34:21

Highest Band Edge / Full RB

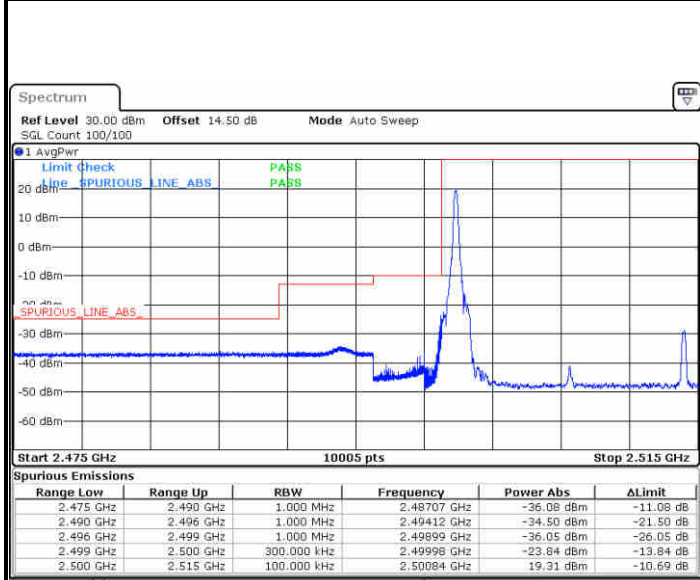


Date: 29 JUN 2020 16:36:05



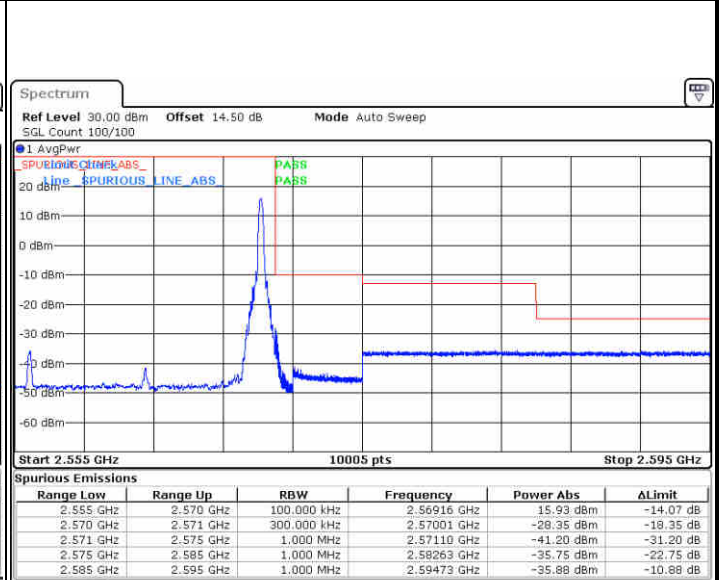
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



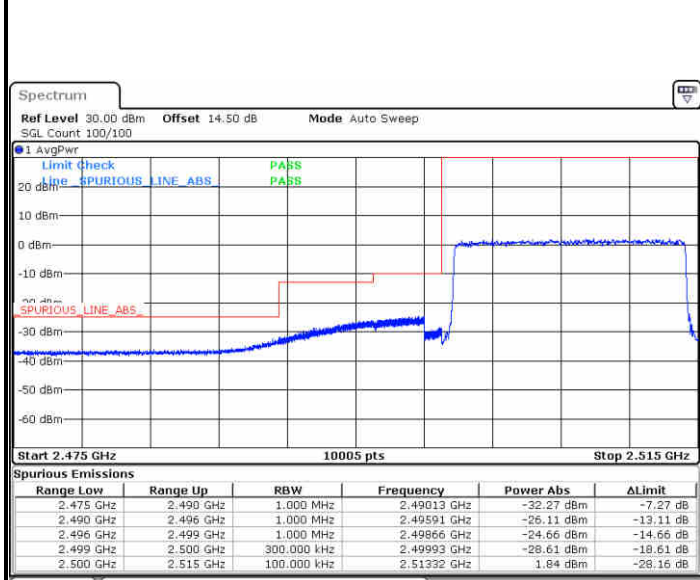
Date: 29 JUN 2020 17:17:17

Highest Band Edge / 1 RB



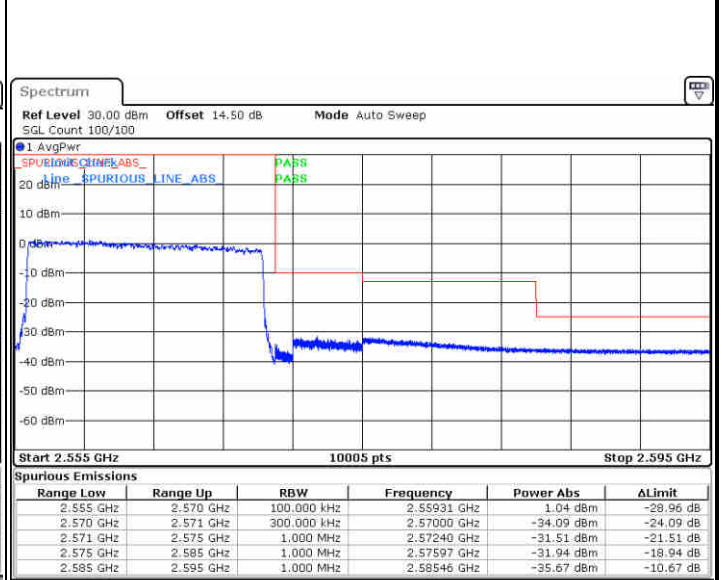
Date: 29 JUN 2020 17:13:28

Lowest Band Edge / Full RB



Date: 29 JUN 2020 17:10:45

Highest Band Edge / Full RB

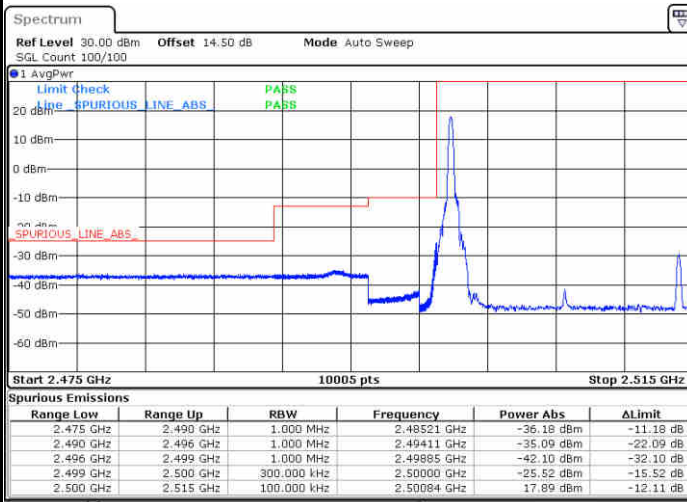


Date: 29 JUN 2020 17:12:55



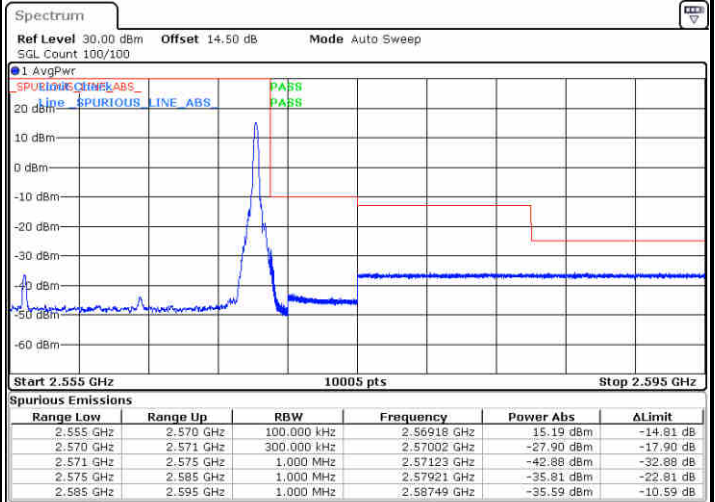
LTE Band 7 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



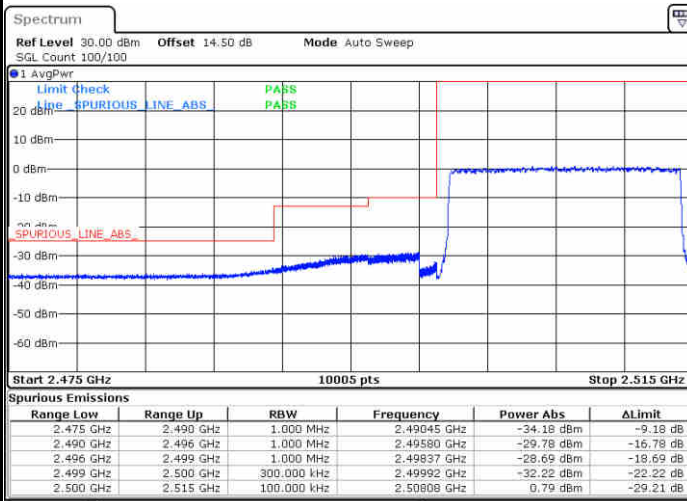
Date: 29 JUN 2020 17:18:28

Highest Band Edge / 1 RB



Date: 29 JUN 2020 17:25:25

Lowest Band Edge / Full RB



Date: 29 JUN 2020 17:29:03

Highest Band Edge / Full RB

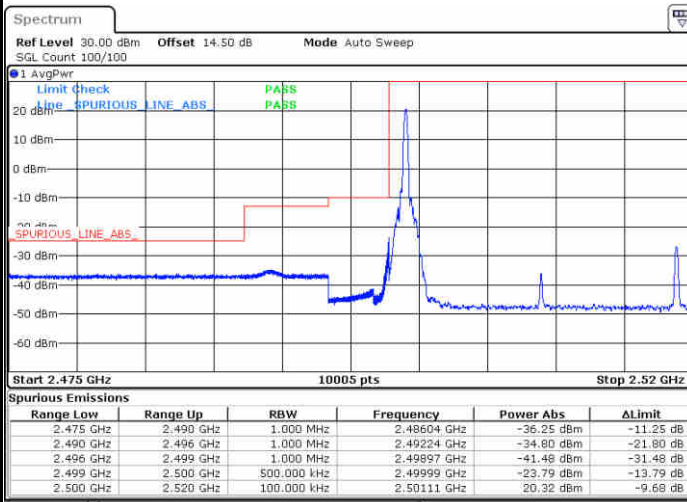


Date: 29 JUN 2020 17:26:42



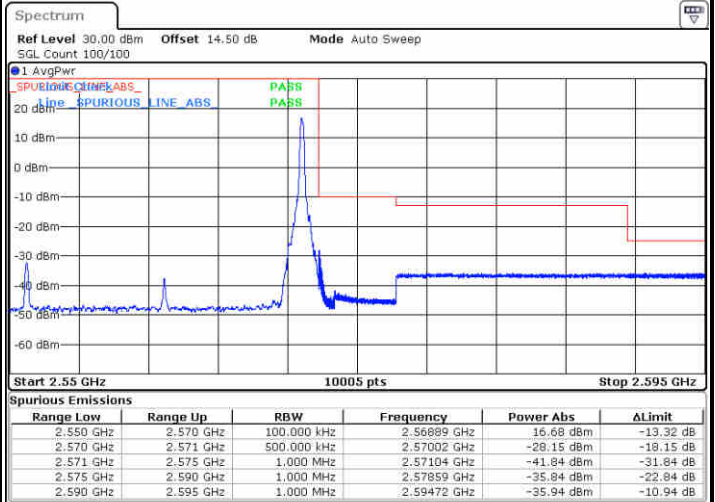
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB



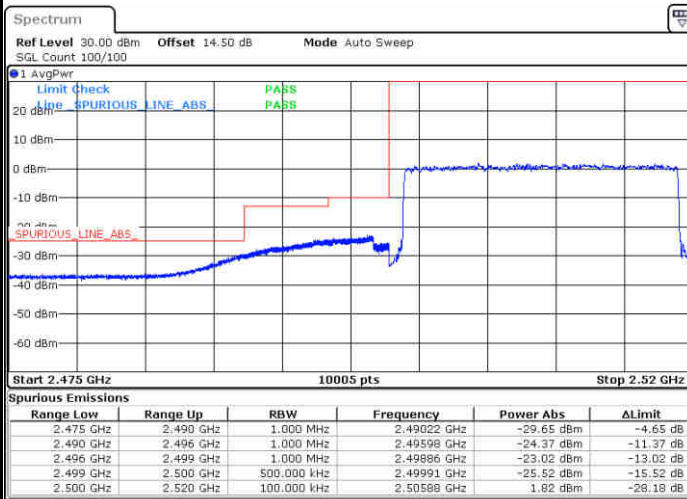
Date: 29 JUN 2020 17:51:22

Highest Band Edge / 1 RB



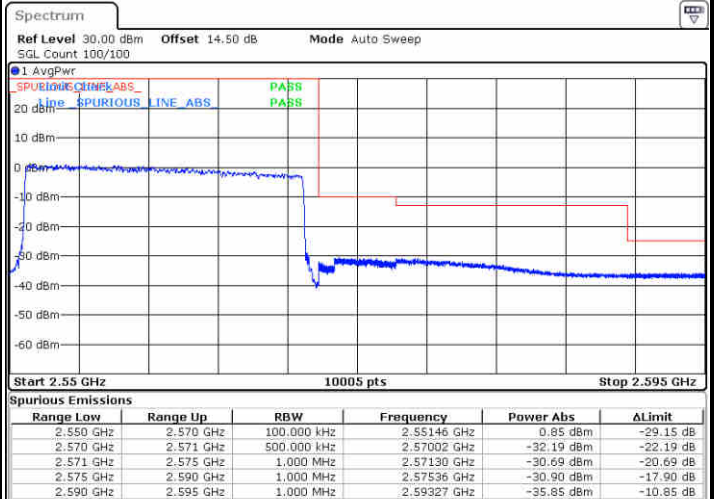
Date: 29 JUN 2020 17:46:12

Lowest Band Edge / Full RB



Date: 29 JUN 2020 17:38:22

Highest Band Edge / Full RB

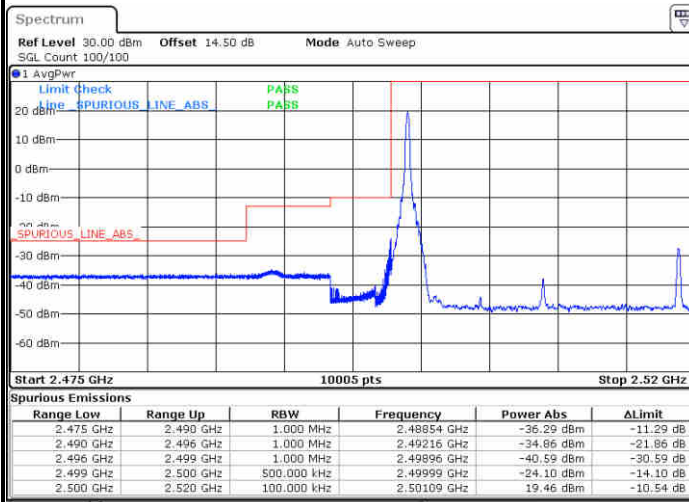


Date: 29 JUN 2020 17:42:41



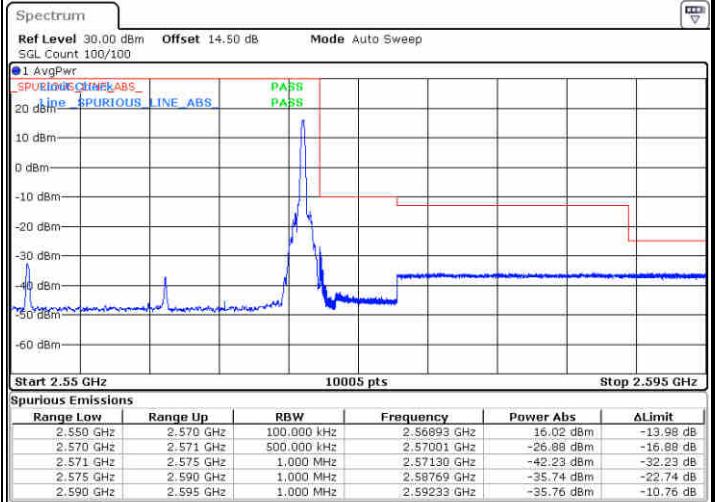
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



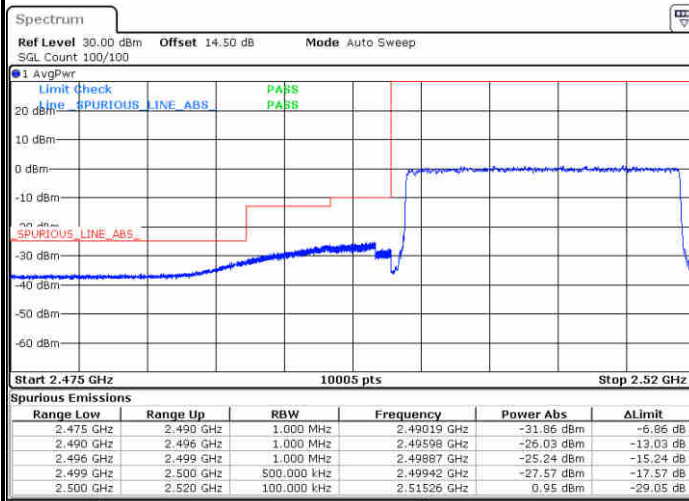
Date: 29 JUN 2020 18:02:48

Highest Band Edge / 1RB



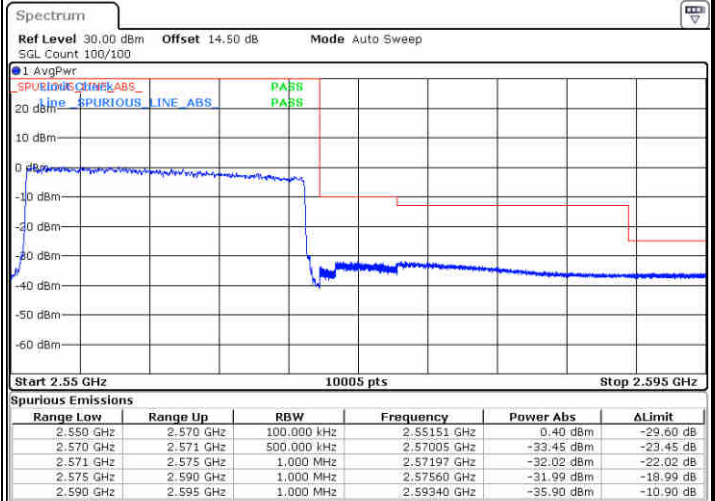
Date: 29 JUN 2020 17:58:27

Lowest Band Edge / Full RB



Date: 29 JUN 2020 17:54:58

Highest Band Edge / Full RB



Date: 29 JUN 2020 17:57:14