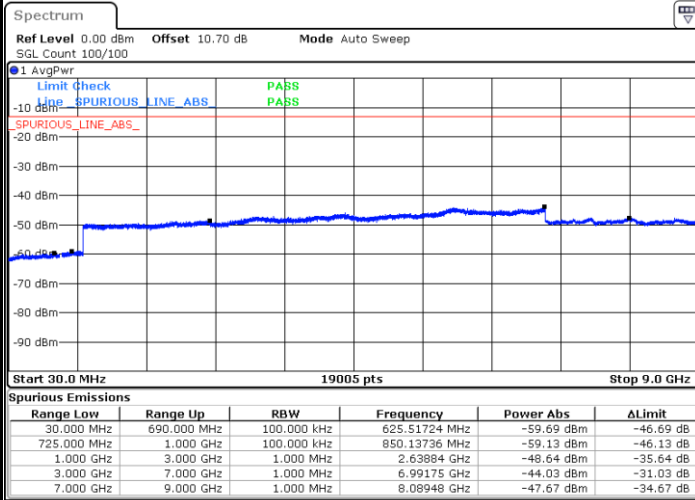




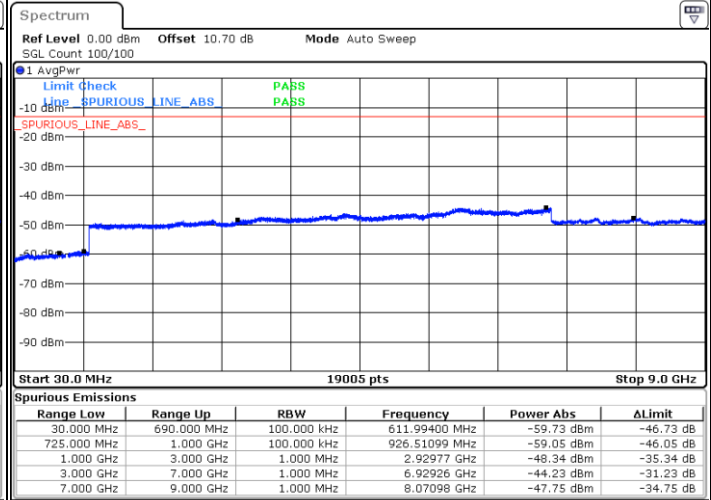
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

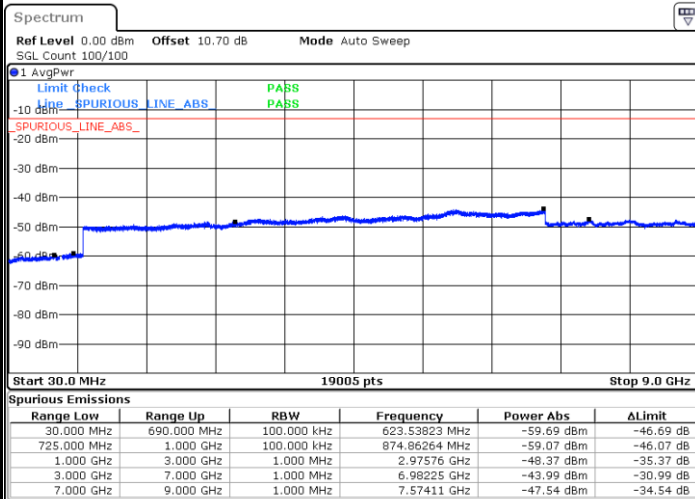


Date: 31.OCT.2019 10:26:40



Date: 31.OCT.2019 10:28:20

Highest Channel / 64QAM



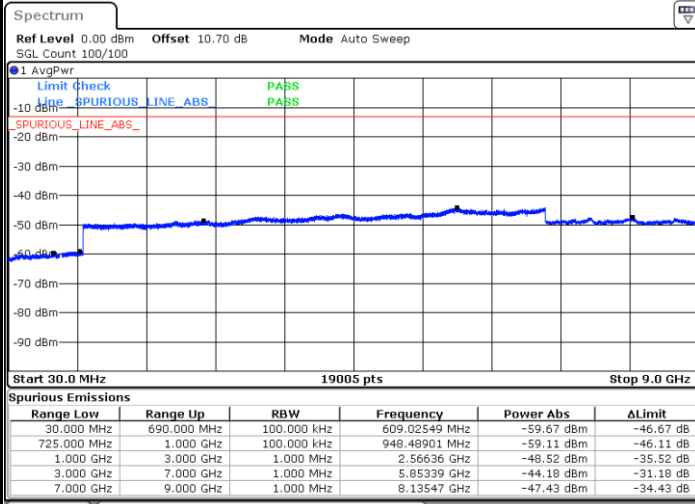
Date: 31.OCT.2019 10:31:59



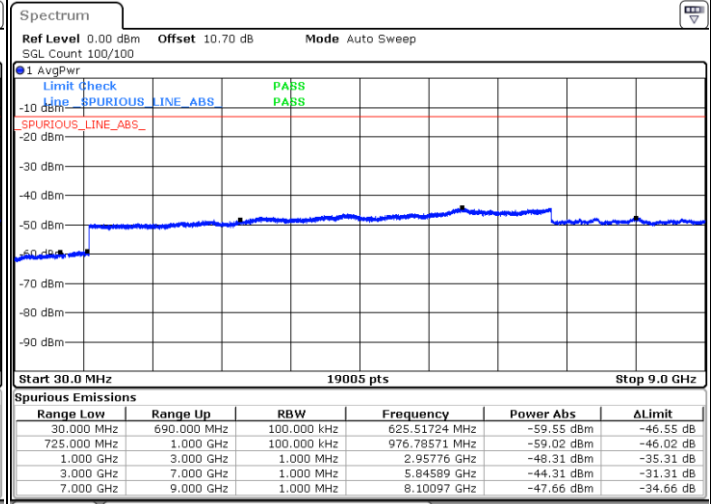
LTE Band 12 / 3MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

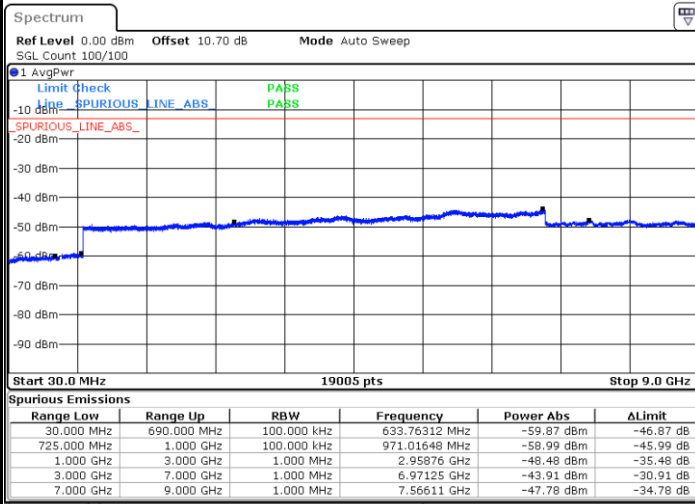


Date: 31.OCT.2019 10:53:33



Date: 31.OCT.2019 10:55:14

Highest Channel / 64QAM



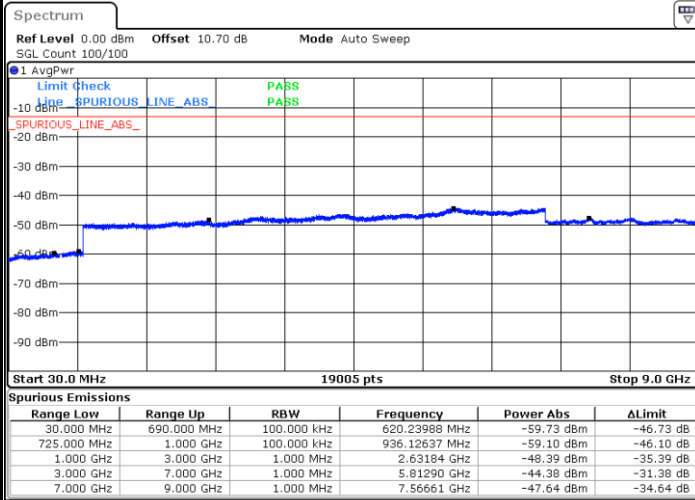
Date: 31.OCT.2019 10:58:53



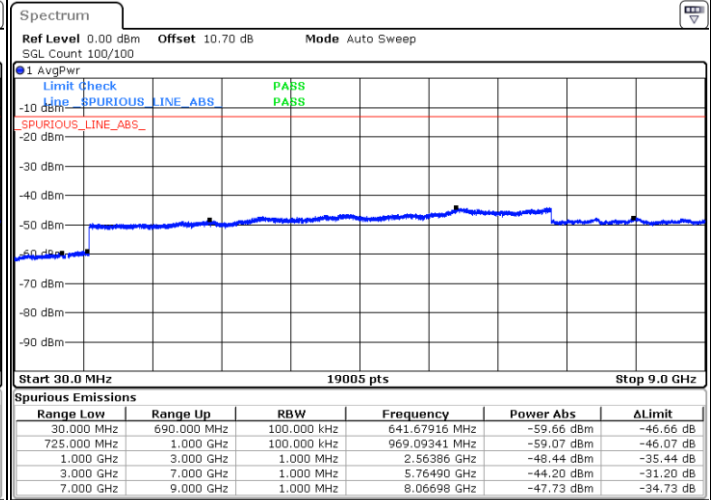
LTE Band 12 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

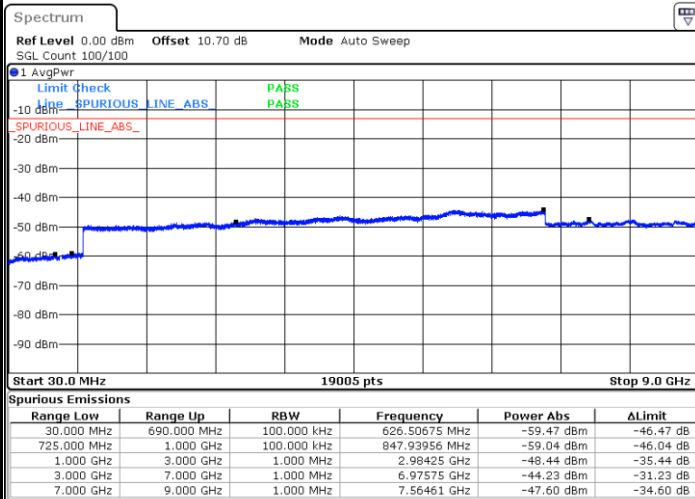


Date: 31.OCT.2019 11:02:31



Date: 31.OCT.2019 11:04:12

Highest Channel / 64QAM

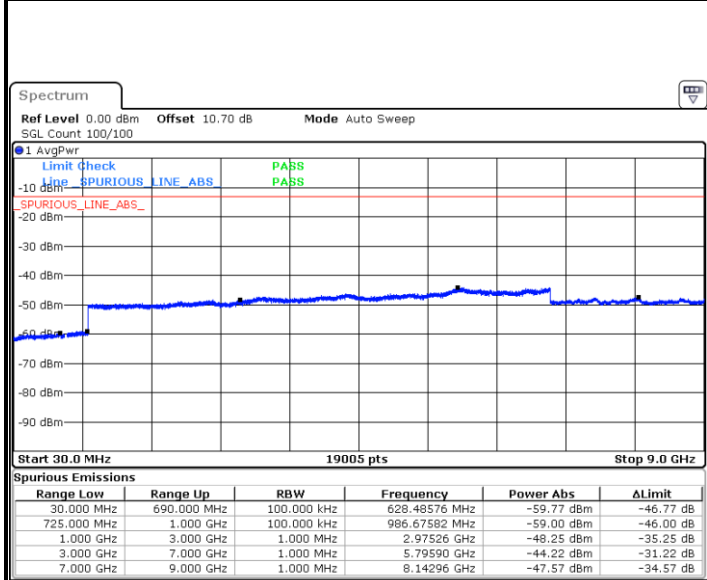


Date: 31.OCT.2019 11:07:50



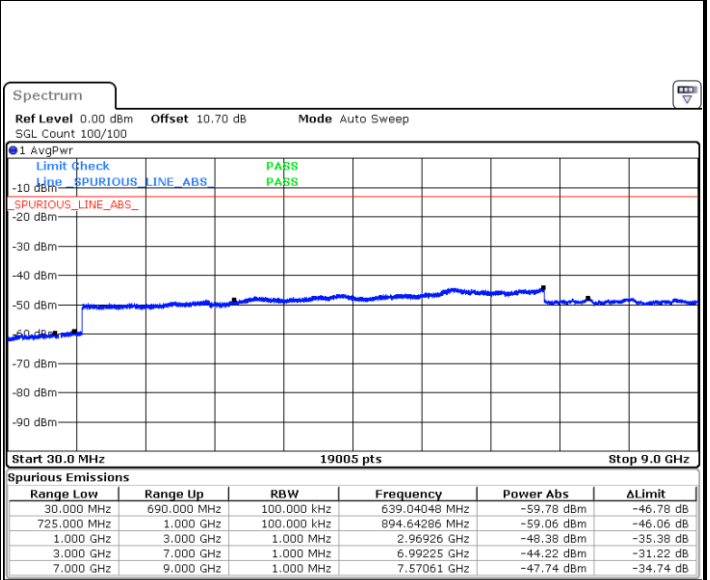
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



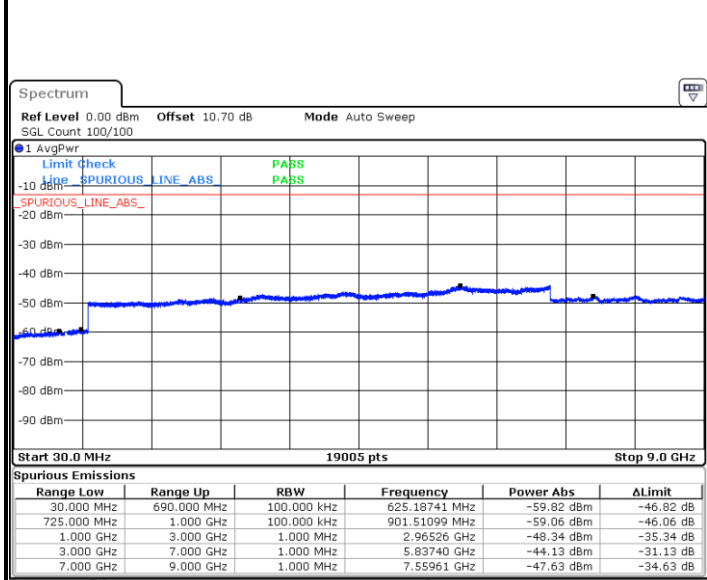
Date: 31.OCT.2019 11:47:20

Middle Channel / 64QAM



Date: 31.OCT.2019 11:49:01

Highest Channel / 64QAM



Date: 31.OCT.2019 11:52:40



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	0.0213	PASS
40	Normal Voltage	0.0305	
30	Normal Voltage	0.0086	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0342	
0	Normal Voltage	0.0083	
-10	Normal Voltage	0.0049	
-20	Normal Voltage	0.0096	
-30	Normal Voltage	0.0438	
20	Maximum Voltage	0.0352	
20	Normal Voltage	0.0048	
20	Battery End Point	0.0045	

Note:

1. Normal Voltage =4.0 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 38

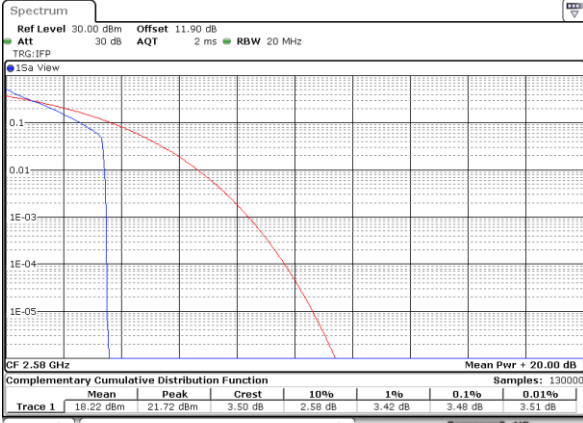
Peak-to-Average Ratio

Mode	LTE Band 38 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.48	5.04	4.14	6.72	PASS
Middle CH	3.51	5.04	4.20	5.97	
Highest CH	3.65	4.96	4.23	5.88	
Mode	LTE Band 38 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.28	6.52	-	-	PASS
Middle CH	5.01	6.41	-	-	
Highest CH	5.42	6.49	-	-	



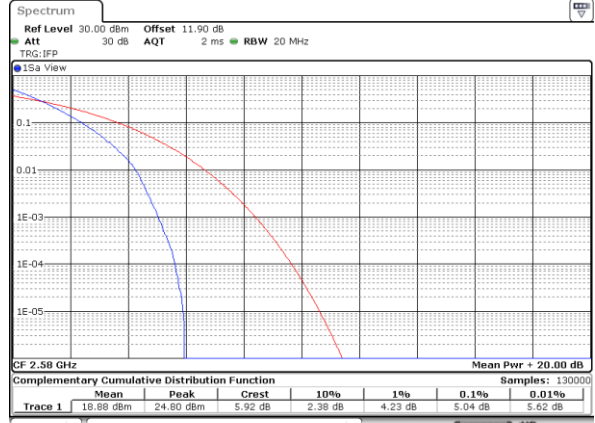
LTE Band 38 / 20MHz / QPSK

Lowest Channel / 1RB



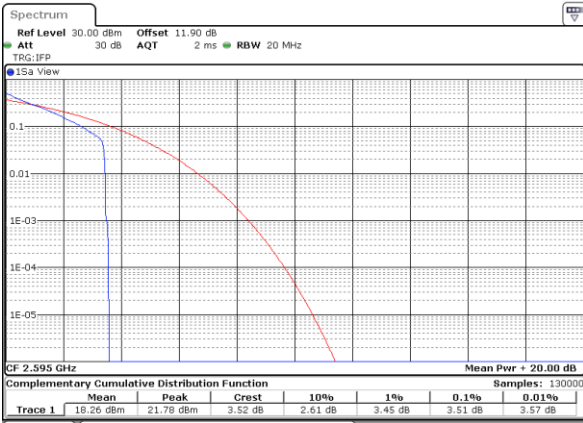
Date: 1 NOV 2019 01:24:47

Lowest Channel / Full RB



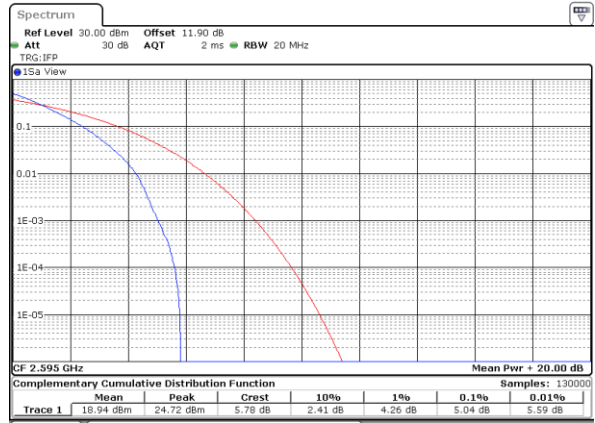
Date: 1 NOV 2019 01:25:21

Middle Channel / 1RB



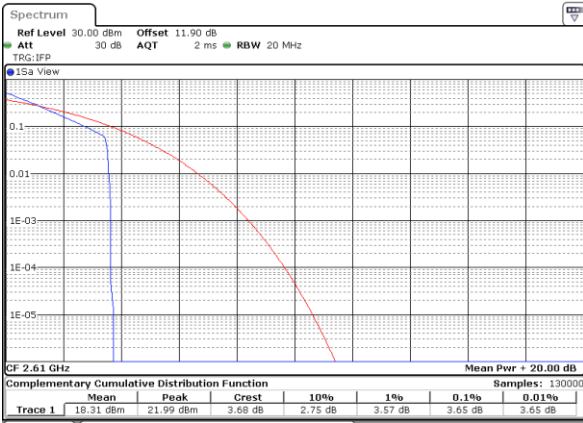
Date: 1 NOV 2019 01:25:51

Middle Channel / Full RB



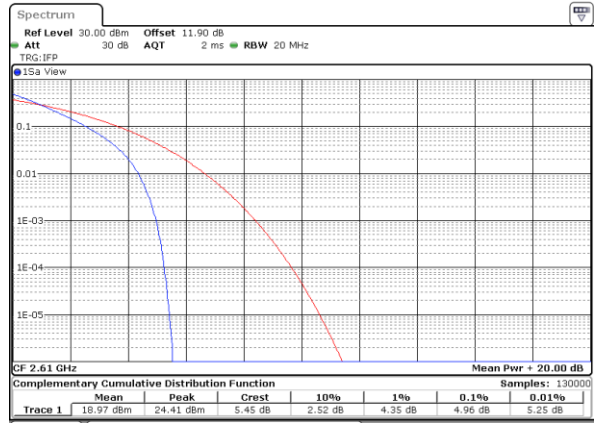
Date: 1 NOV 2019 01:28:01

Highest Channel / 1RB



Date: 1 NOV 2019 01:28:26

Highest Channel / Full RB

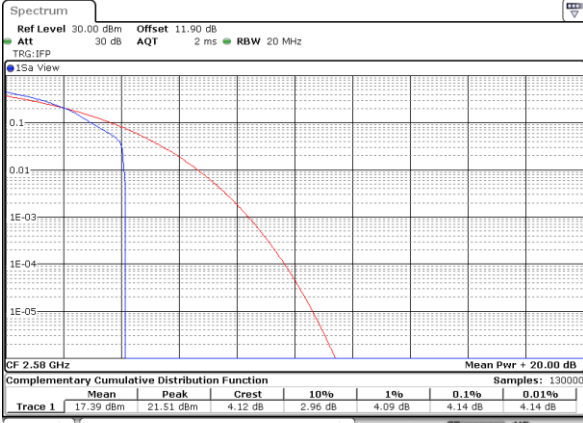


Date: 1 NOV 2019 01:29:01



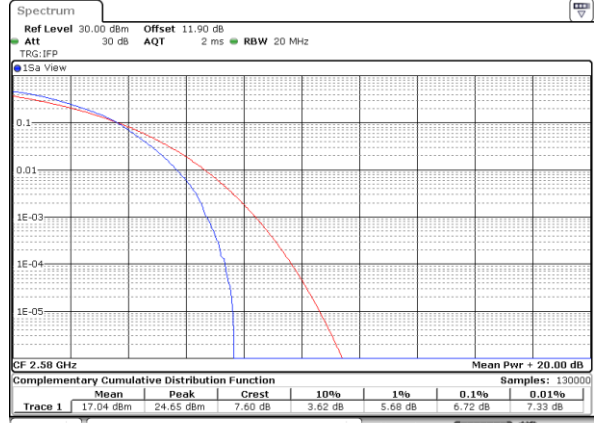
LTE Band 38 / 20MHz / 16QAM

Lowest Channel / 1RB



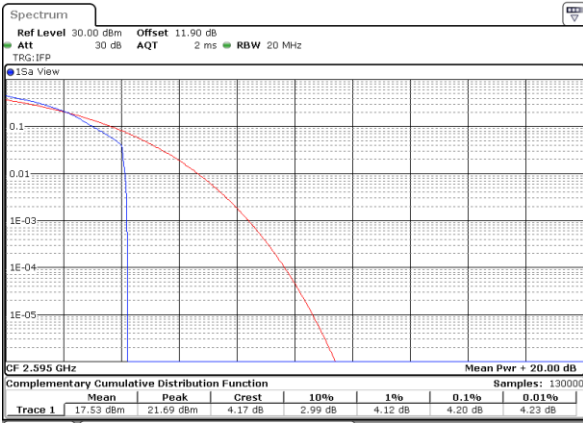
Date: 1 NOV 2019 01:12:20

Lowest Channel / Full RB



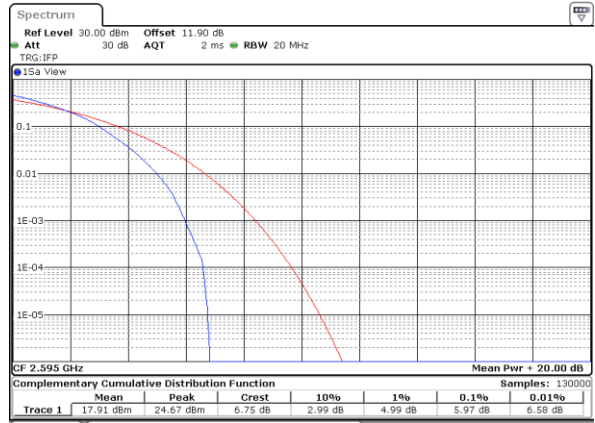
Date: 1 NOV 2019 01:19:07

Middle Channel / 1RB



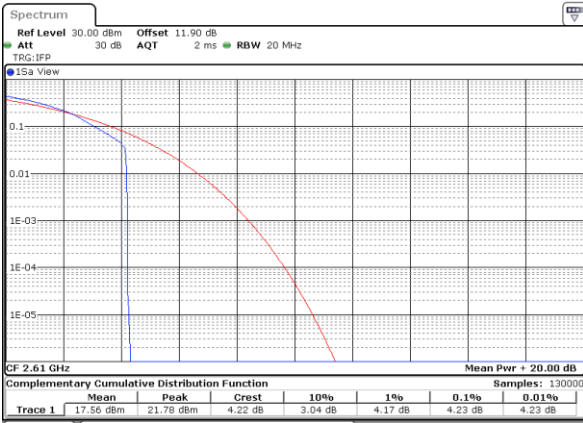
Date: 1 NOV 2019 01:19:53

Middle Channel / Full RB



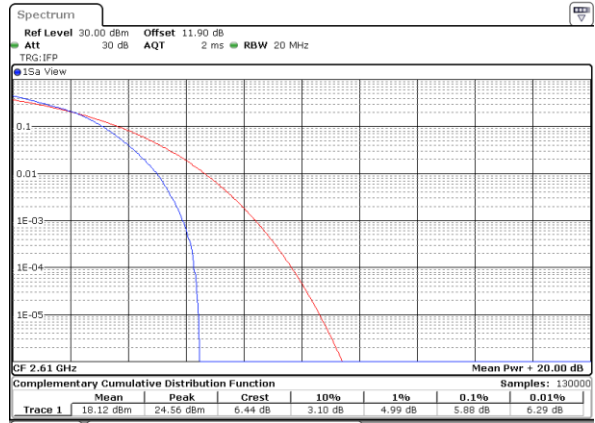
Date: 1 NOV 2019 01:20:23

Highest Channel / 1RB



Date: 1 NOV 2019 01:22:51

Highest Channel / Full RB

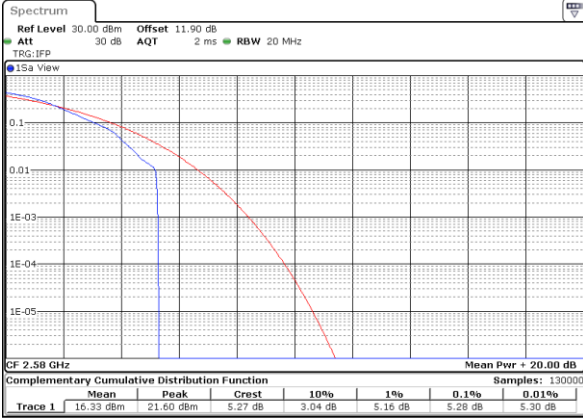


Date: 1 NOV 2019 01:24:15



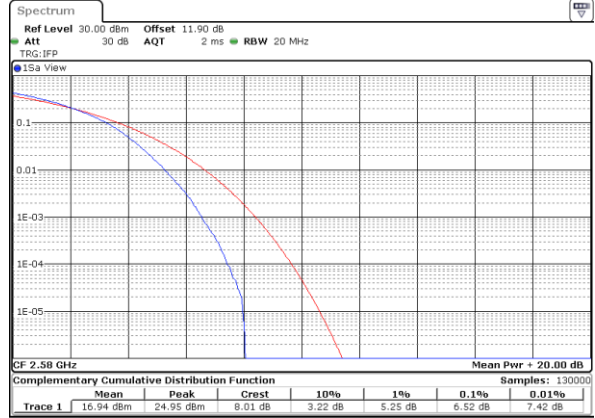
LTE Band 38 / 20MHz / 64QAM

Lowest Channel / 1RB



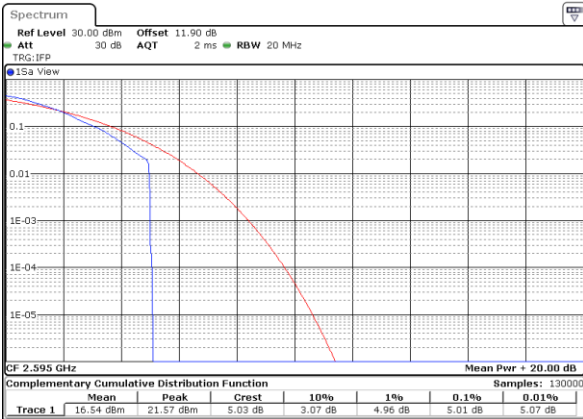
Date: 1 NOV 2019 01:03:48

Lowest Channel / Full RB



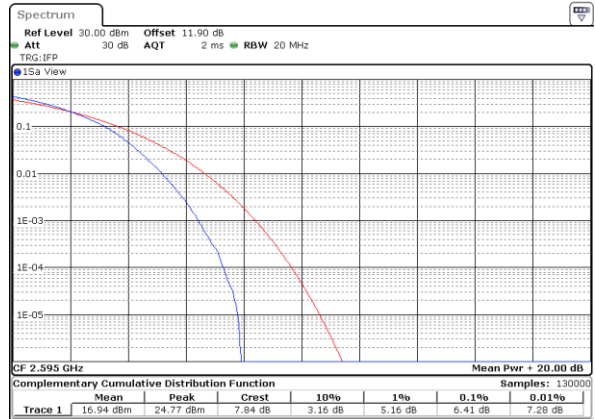
Date: 1 NOV 2019 01:05:07

Middle Channel / 1RB



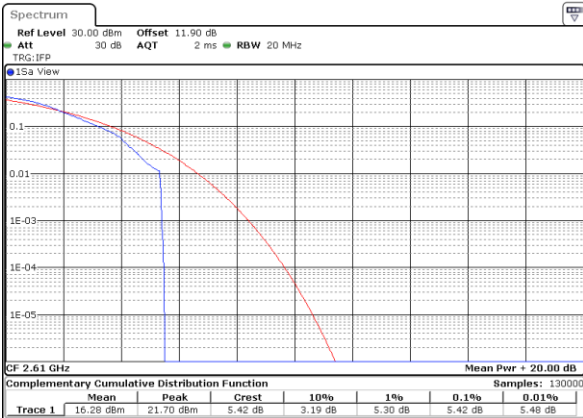
Date: 1 NOV 2019 01:08:04

Middle Channel / Full RB



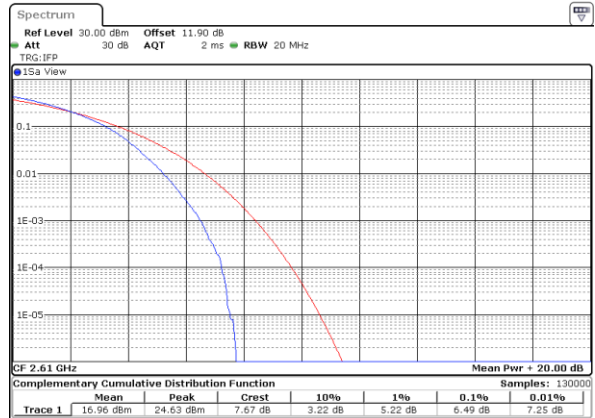
Date: 1 NOV 2019 01:08:43

Highest Channel / 1RB



Date: 1 NOV 2019 01:10:00

Highest Channel / Full RB



Date: 1 NOV 2019 01:10:57



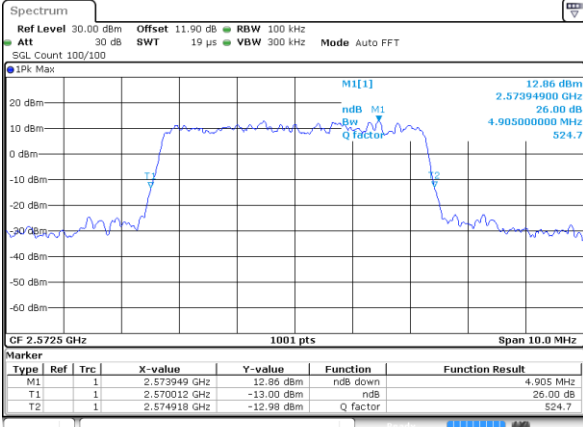
26dB Bandwidth

Mode	LTE Band 38 : 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	-	-	-	-	4.91	4.95	9.63	9.73	14.39	14.12	18.98	18.66
Middle CH	-	-	-	-	4.94	4.92	9.61	9.75	14.36	14.24	18.86	18.70
Highest CH	-	-	-	-	4.90	4.83	9.63	9.67	14.30	14.45	18.62	18.62
Mode	LTE Band 38 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.85	-	9.73	-	14.27	-	18.62	-
Middle CH	-	-	-	-	4.84	-	9.63	-	14.33	-	18.98	-
Highest CH	-	-	-	-	4.83	-	9.65	-	14.42	-	18.82	-



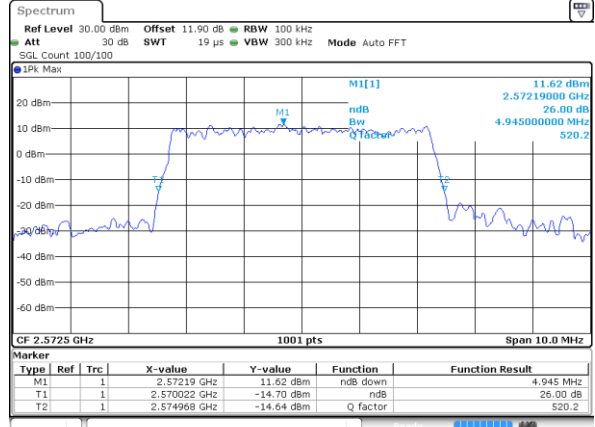
LTE Band 38

Lowest Channel / 5MHz / QPSK



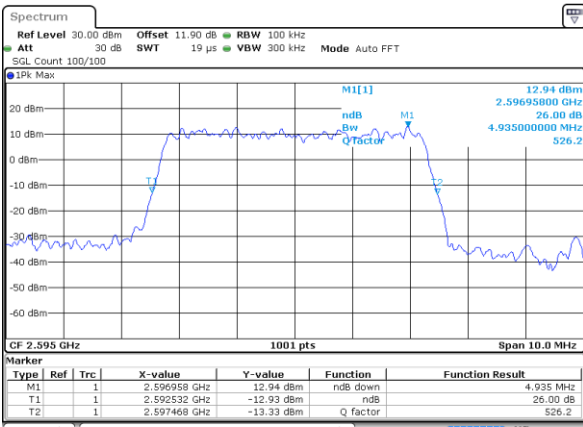
Date: 1 NOV 2019 08:49:27

Lowest Channel / 5MHz / 16QAM



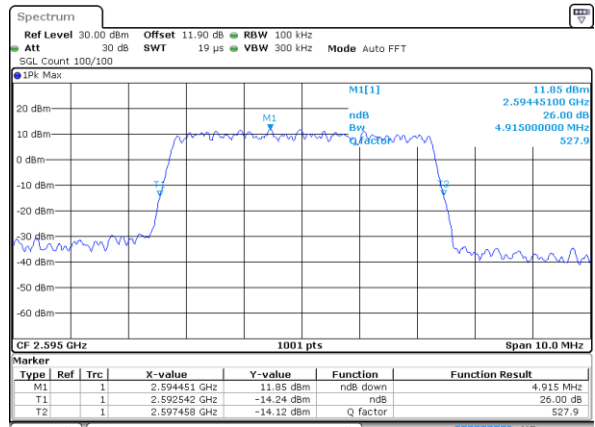
Date: 1 NOV 2019 08:49:38

Middle Channel / 5MHz / QPSK



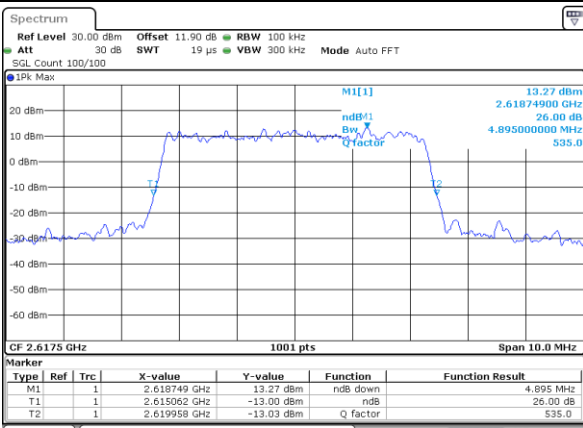
Date: 1 NOV 2019 08:50:11

Middle Channel / 5MHz / 16QAM



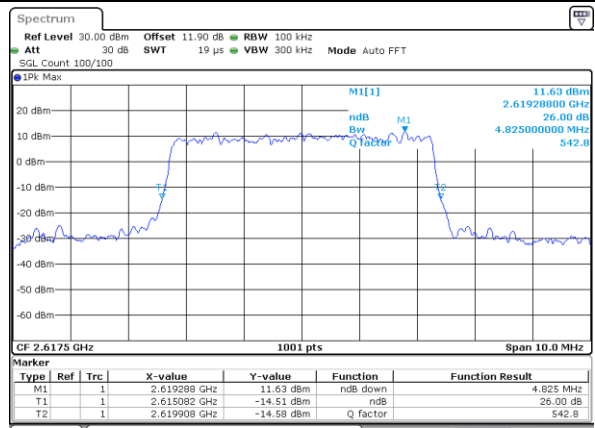
Date: 1 NOV 2019 08:50:22

Highest Channel / 5MHz / QPSK



Date: 1 NOV 2019 08:50:55

Highest Channel / 5MHz / 16QAM

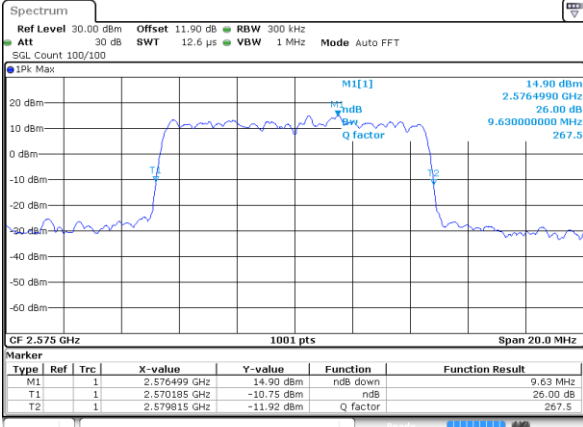


Date: 1 NOV 2019 08:51:06



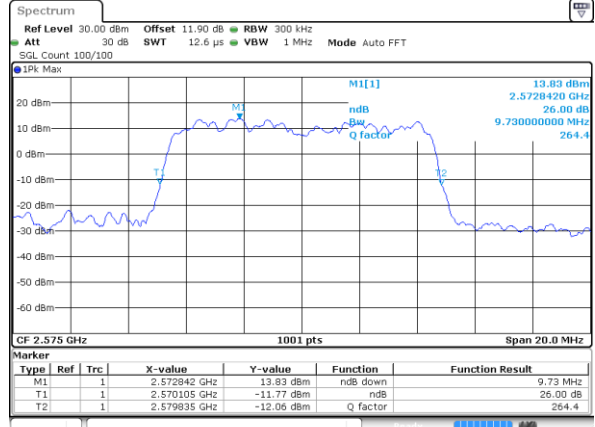
LTE Band 38

Lowest Channel / 10MHz / QPSK



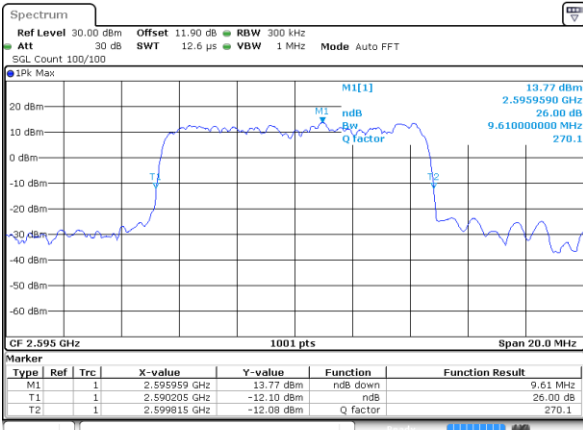
Date: 1 NOV 2019 08:51:38

Lowest Channel / 10MHz / 16QAM



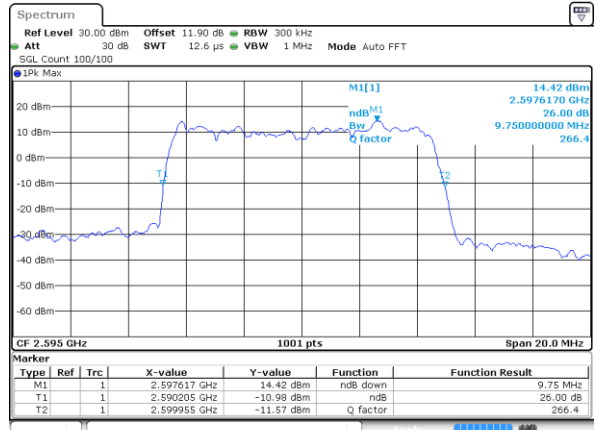
Date: 1 NOV 2019 08:51:49

Middle Channel / 10MHz / QPSK



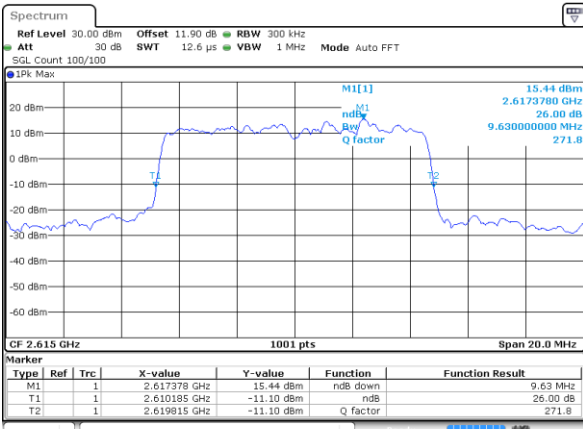
Date: 1 NOV 2019 08:52:22

Middle Channel / 10MHz / 16QAM



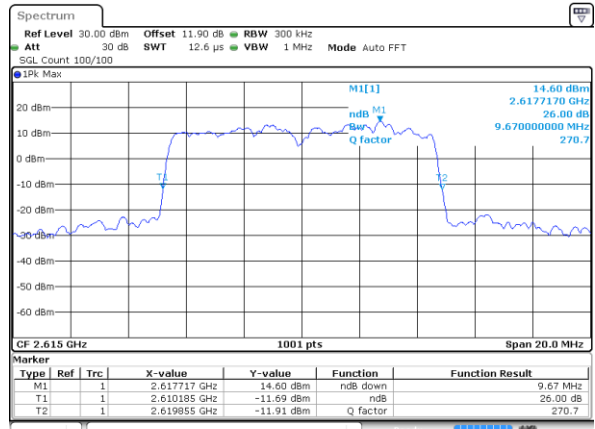
Date: 1 NOV 2019 08:52:33

Highest Channel / 10MHz / QPSK



Date: 1 NOV 2019 08:53:06

Highest Channel / 10MHz / 16QAM

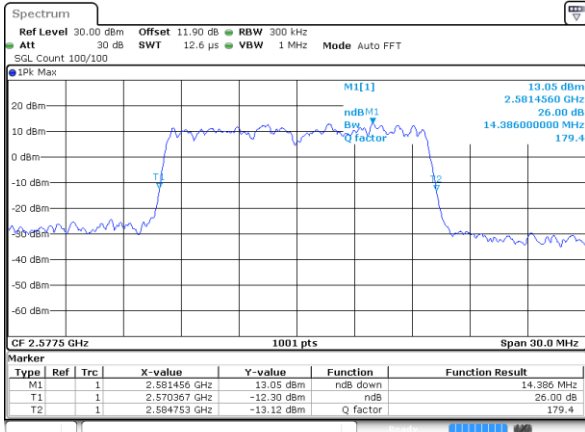


Date: 1 NOV 2019 08:53:17



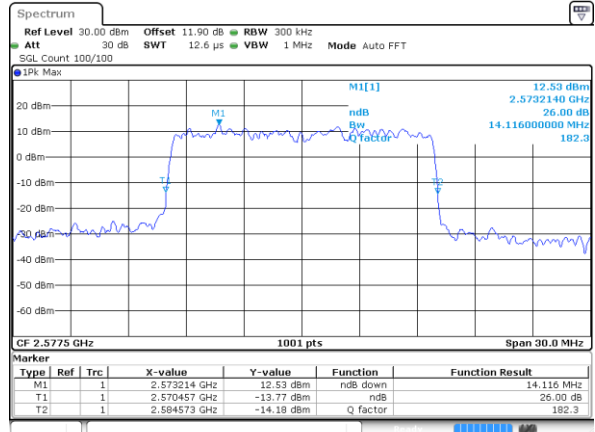
LTE Band 38

Lowest Channel / 15MHz / QPSK



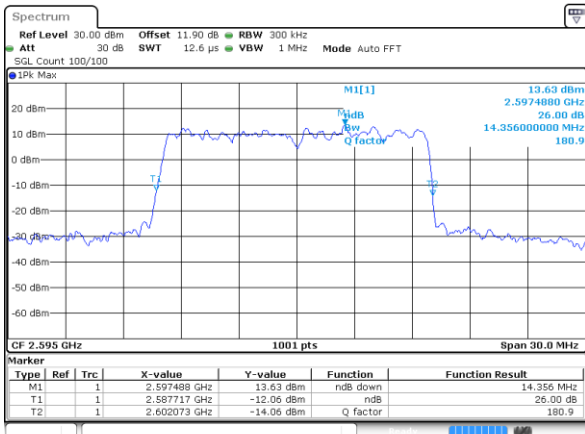
Date: 1 NOV 2019 08:53:49

Lowest Channel / 15MHz / 16QAM



Date: 1 NOV 2019 08:54:00

Middle Channel / 15MHz / QPSK



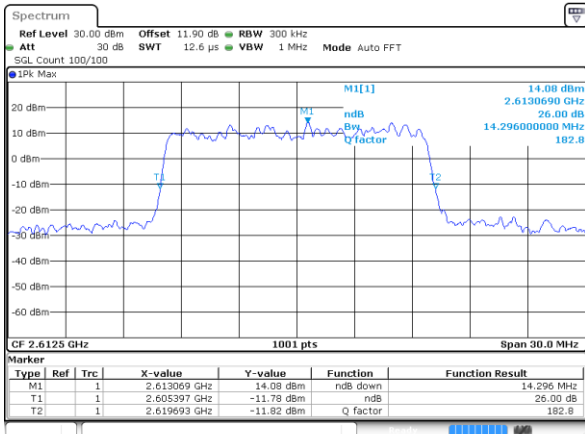
Date: 1 NOV 2019 08:54:33

Middle Channel / 15MHz / 16QAM



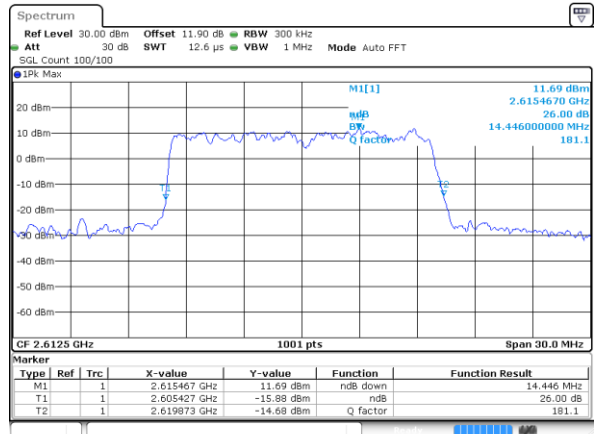
Date: 1 NOV 2019 08:54:44

Highest Channel / 15MHz / QPSK



Date: 1 NOV 2019 08:55:17

Highest Channel / 15MHz / 16QAM

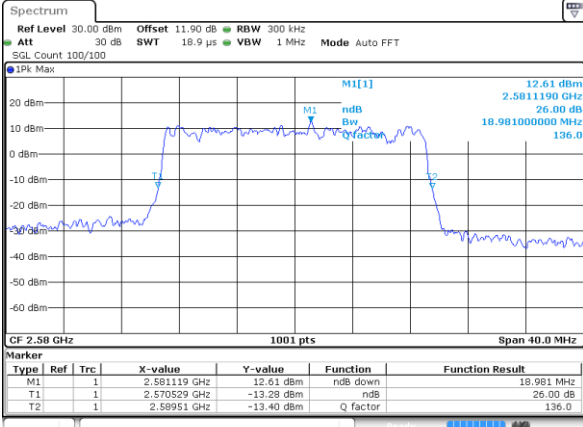


Date: 1 NOV 2019 08:55:28



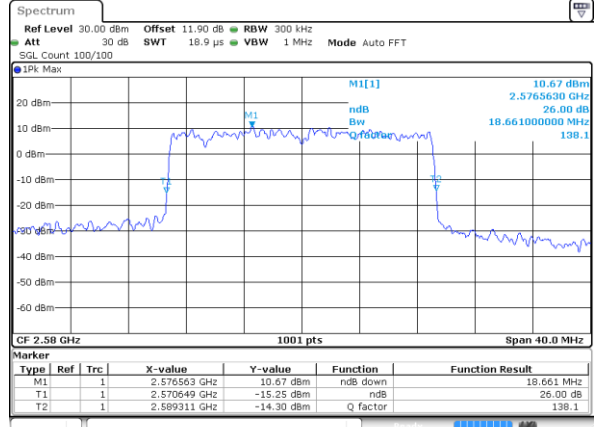
LTE Band 38

Lowest Channel / 20MHz / QPSK



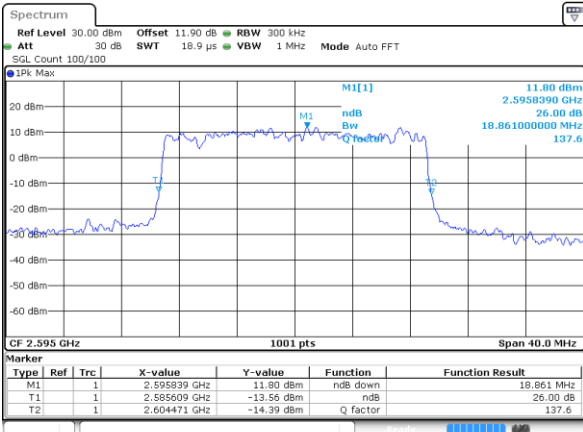
Date: 1 NOV 2019 08:56:00

Lowest Channel / 20MHz / 16QAM



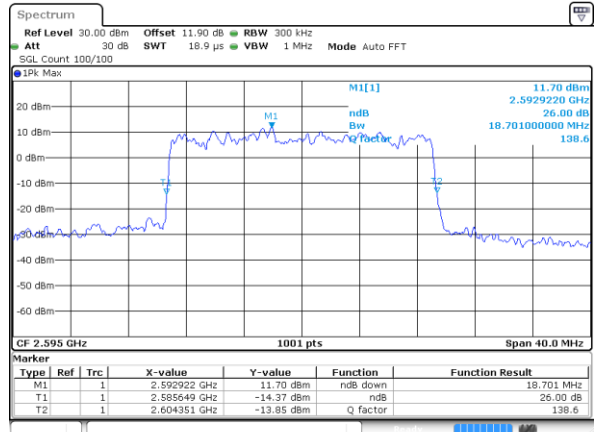
Date: 1 NOV 2019 08:56:11

Middle Channel / 20MHz / QPSK



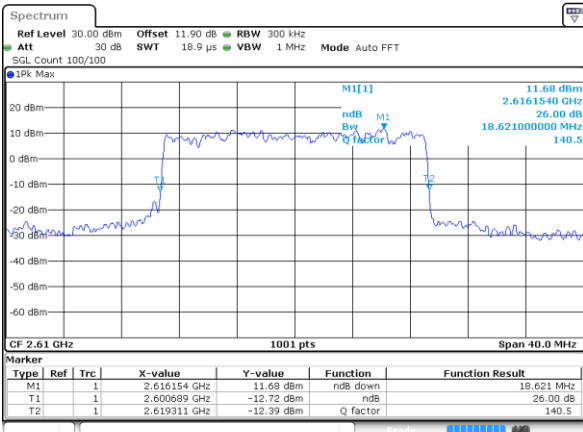
Date: 1 NOV 2019 08:56:44

Middle Channel / 20MHz / 16QAM



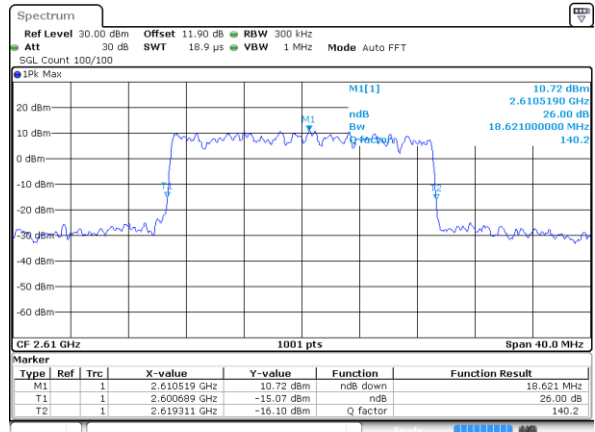
Date: 1 NOV 2019 08:56:55

Highest Channel / 20MHz / QPSK



Date: 1 NOV 2019 08:57:28

Highest Channel / 20MHz / 16QAM

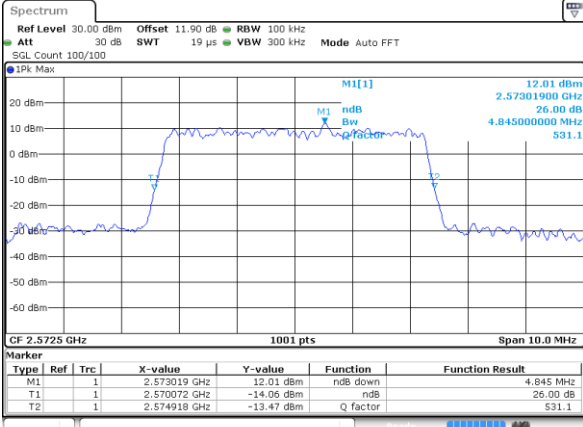


Date: 1 NOV 2019 08:57:39



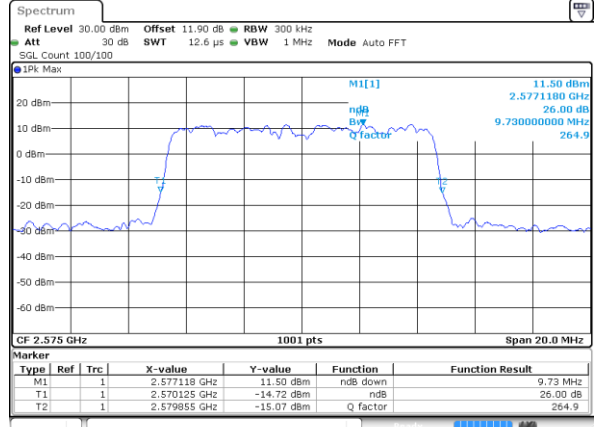
LTE Band 38

Lowest Channel / 5MHz / 64QAM



Date: 1 NOV 2019 08:58:01

Lowest Channel / 10MHz / 64QAM



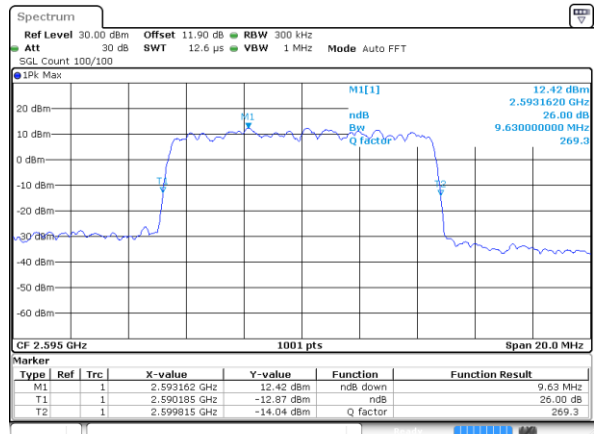
Date: 1 NOV 2019 08:59:06

Middle Channel / 5MHz / 64QAM



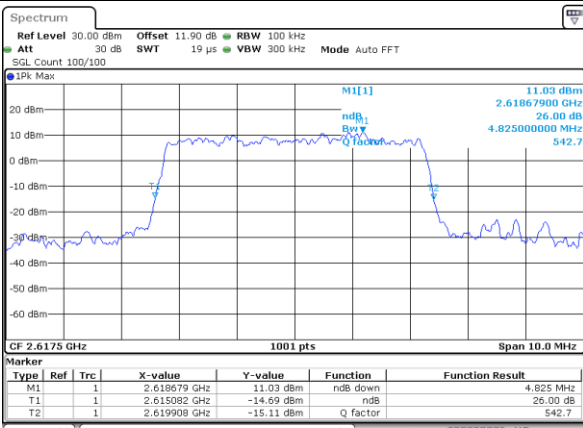
Date: 1 NOV 2019 08:58:22

Middle Channel / 10MHz / 64QAM



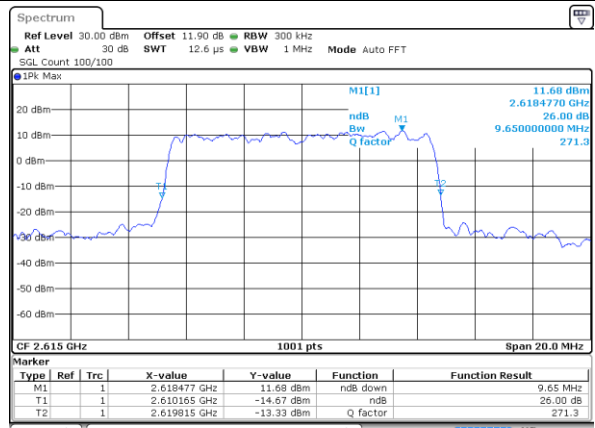
Date: 1 NOV 2019 08:59:28

Highest Channel / 5MHz / 64QAM



Date: 1 NOV 2019 08:58:44

Highest Channel / 10MHz / 64QAM

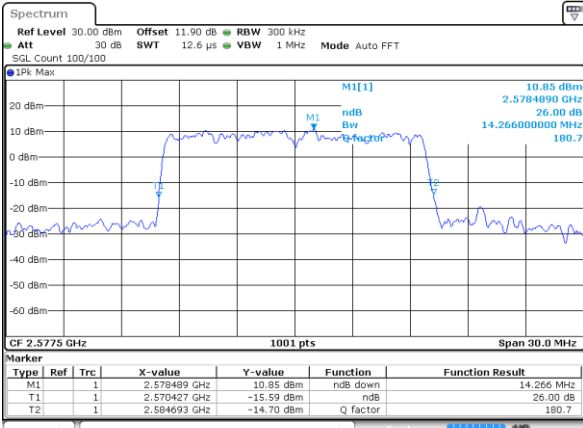


Date: 1 NOV 2019 08:59:50



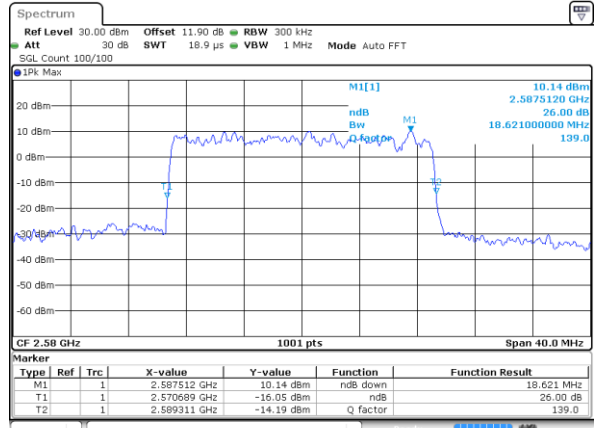
LTE Band 38

Lowest Channel / 15MHz / 64QAM



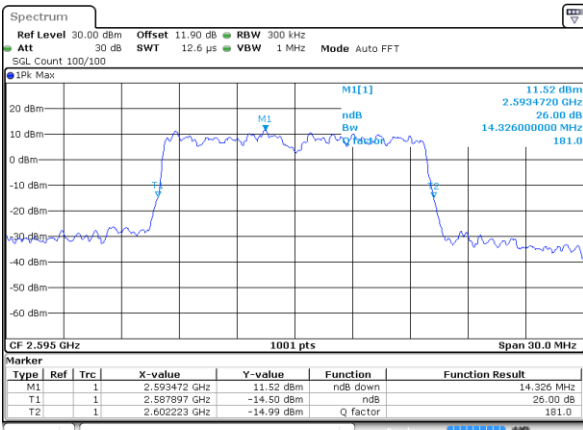
Date: 1 NOV 2019 09:00:12

Lowest Channel / 20MHz / 64QAM



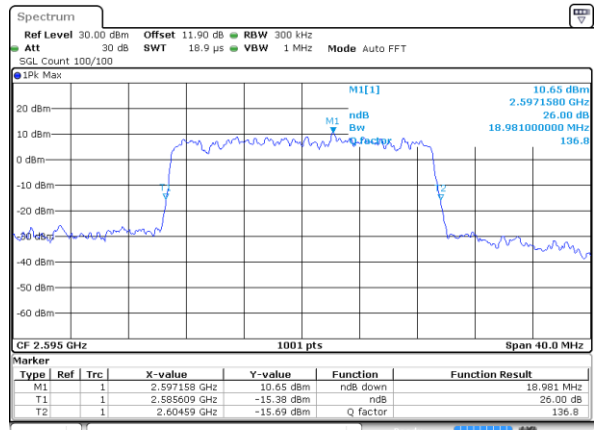
Date: 1 NOV 2019 09:01:17

Middle Channel / 15MHz / 64QAM



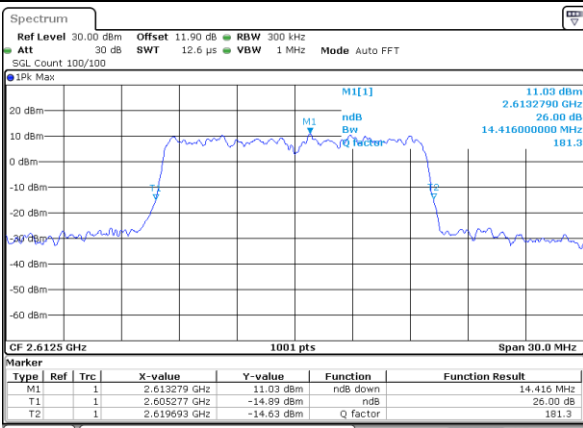
Date: 1 NOV 2019 09:00:33

Middle Channel / 20MHz / 64QAM



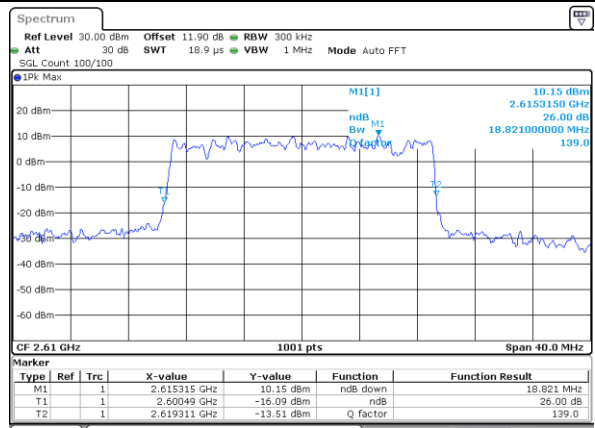
Date: 1 NOV 2019 09:01:39

Highest Channel / 15MHz / 64QAM



Date: 1 NOV 2019 09:00:55

Highest Channel / 20MHz / 64QAM



Date: 1 NOV 2019 09:02:01



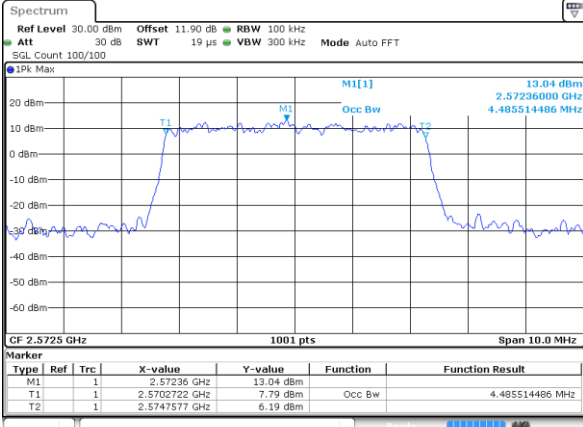
Occupied Bandwidth

Mode	LTE Band 38 : 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	-	-	-	-	4.49	4.49	9.03	9.05	13.43	13.43	17.86	17.86
Middle CH	-	-	-	-	4.47	4.48	8.93	8.95	13.40	13.43	17.94	17.82
Highest CH	-	-	-	-	4.50	4.50	9.01	9.03	13.40	13.40	17.90	17.90
Mode	LTE Band 38 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.47	-	9.03	-	13.46	-	17.82	-
Middle CH	-	-	-	-	4.50	-	9.03	-	13.37	-	17.86	-
Highest CH	-	-	-	-	4.50	-	8.99	-	13.46	-	17.90	-



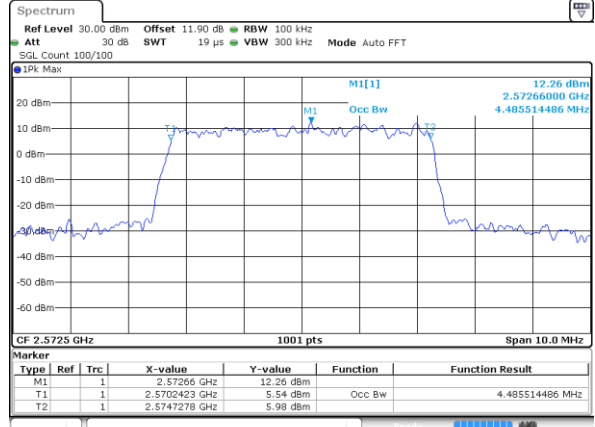
LTE Band 38

Lowest Channel / 5MHz / QPSK



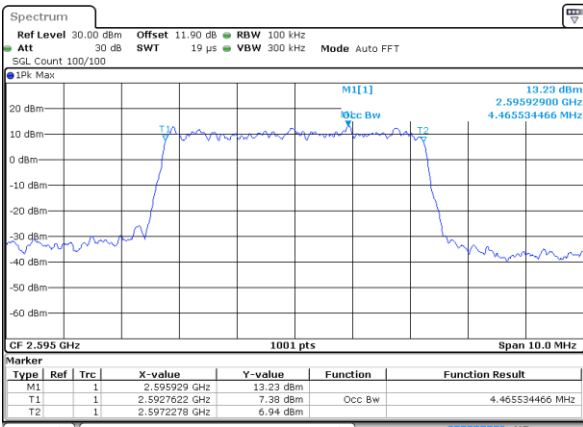
Date: 1 NOV 2019 08:49:05

Lowest Channel / 5MHz / 16QAM



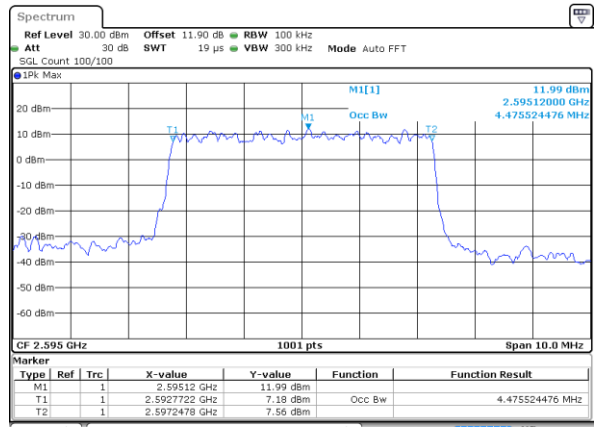
Date: 1 NOV 2019 08:49:16

Middle Channel / 5MHz / QPSK



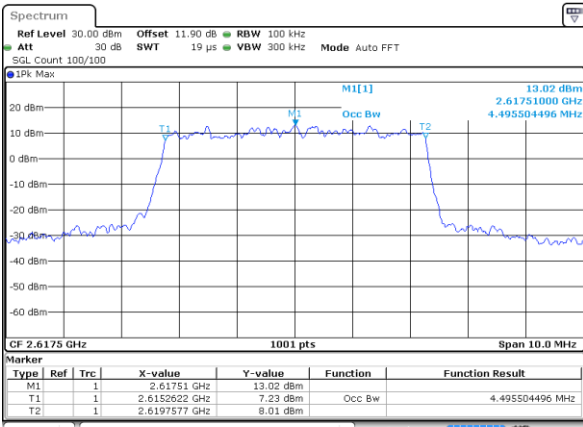
Date: 1 NOV 2019 08:49:49

Middle Channel / 5MHz / 16QAM



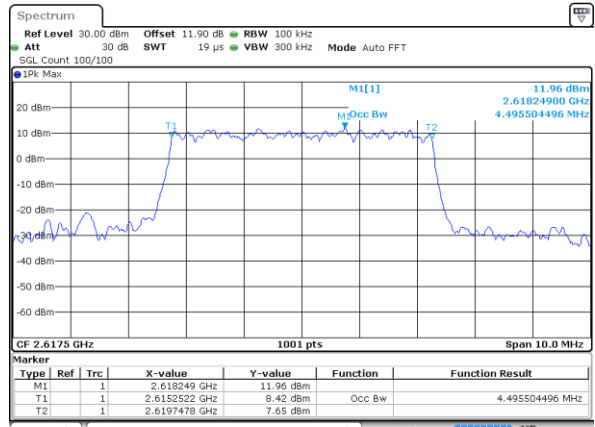
Date: 1 NOV 2019 08:50:00

Highest Channel / 5MHz / QPSK



Date: 1 NOV 2019 08:50:33

Highest Channel / 5MHz / 16QAM

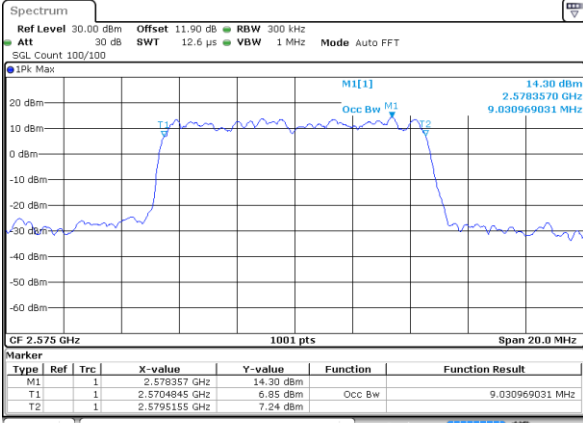


Date: 1 NOV 2019 08:50:44



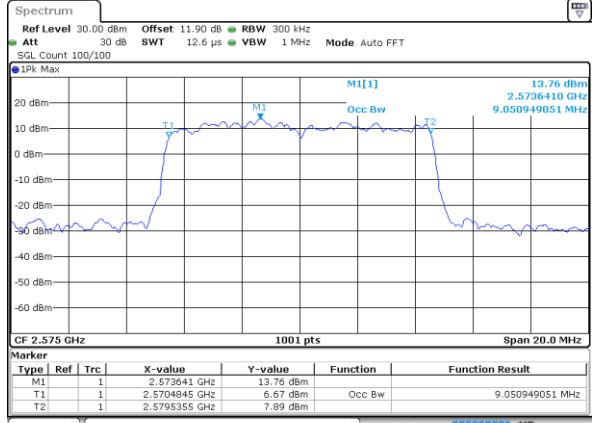
LTE Band 38

Lowest Channel / 10MHz / QPSK



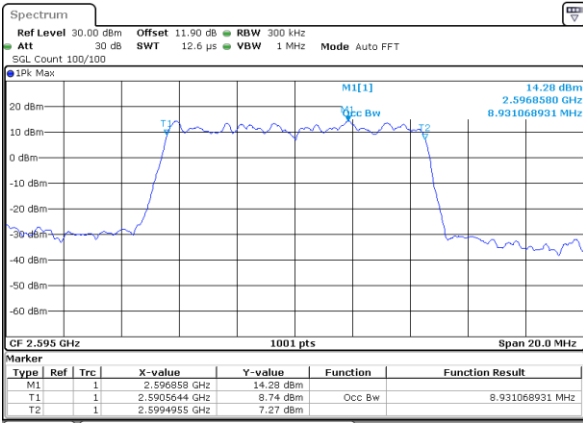
Date: 1 NOV 2019 08:51:16

Lowest Channel / 10MHz / 16QAM



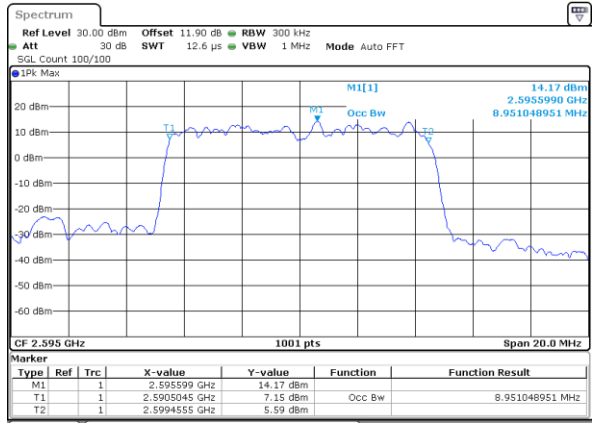
Date: 1 NOV 2019 08:51:27

Middle Channel / 10MHz / QPSK



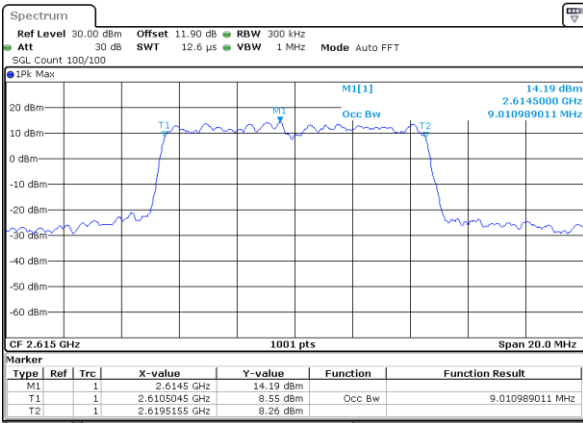
Date: 1 NOV 2019 08:52:00

Middle Channel / 10MHz / 16QAM



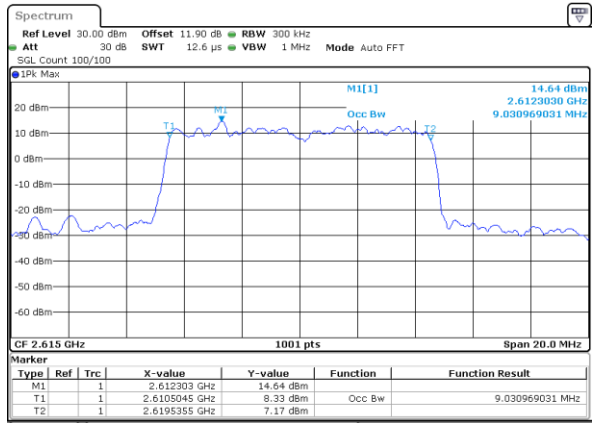
Date: 1 NOV 2019 08:52:11

Highest Channel / 10MHz / QPSK



Date: 1 NOV 2019 08:52:44

Highest Channel / 10MHz / 16QAM

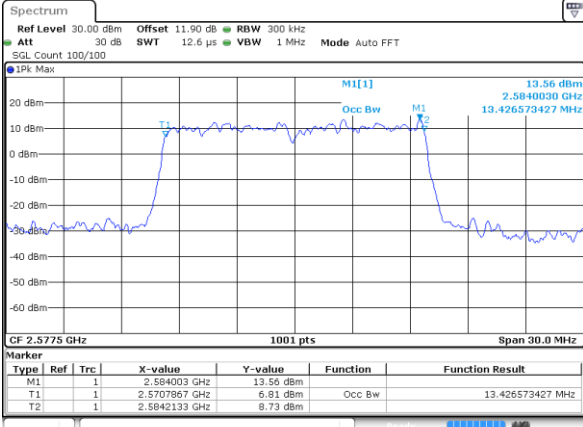


Date: 1 NOV 2019 08:52:55



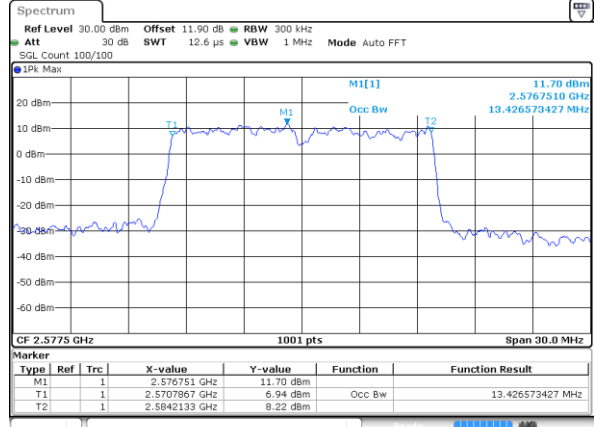
LTE Band 38

Lowest Channel / 15MHz / QPSK



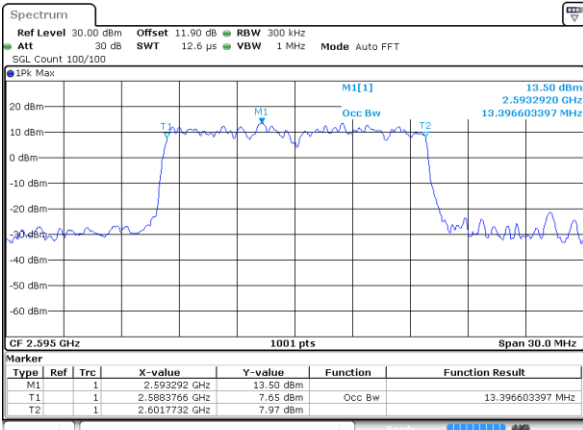
Date: 1 NOV 2019 08:53:27

Lowest Channel / 15MHz / 16QAM



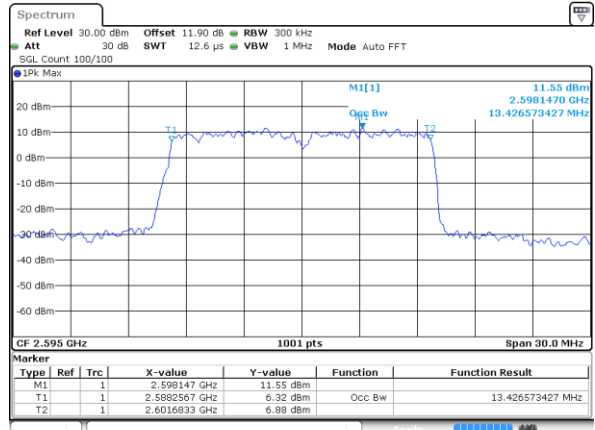
Date: 1 NOV 2019 08:53:38

Middle Channel / 15MHz / QPSK



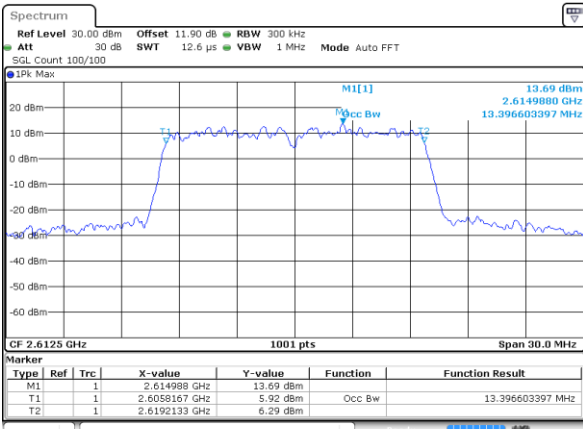
Date: 1 NOV 2019 08:54:11

Middle Channel / 15MHz / 16QAM



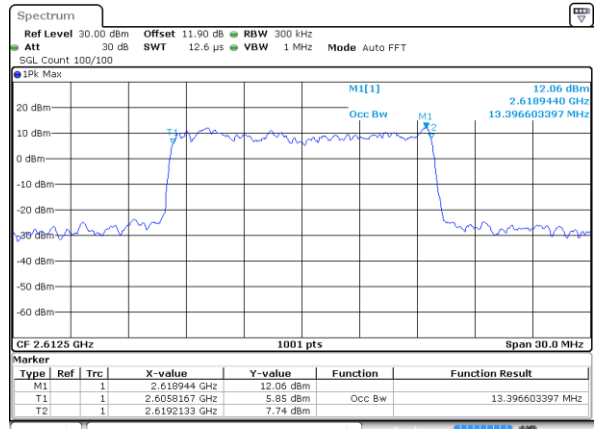
Date: 1 NOV 2019 08:54:22

Highest Channel / 15MHz / QPSK



Date: 1 NOV 2019 08:54:55

Highest Channel / 15MHz / 16QAM

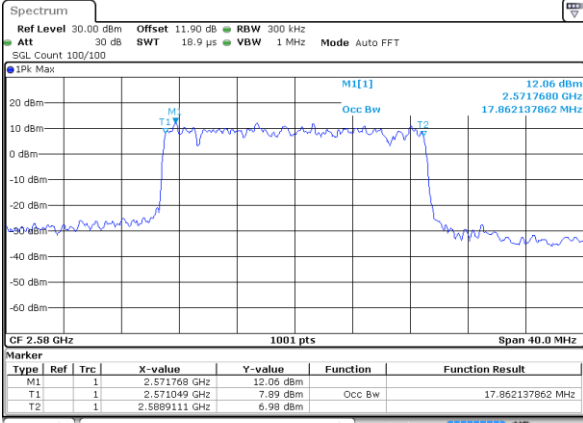


Date: 1 NOV 2019 08:55:06



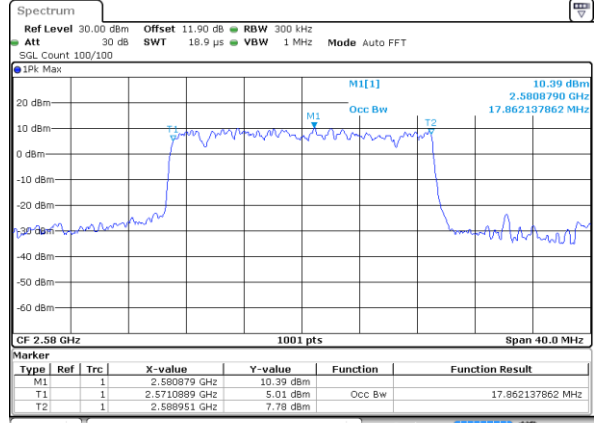
LTE Band 38

Lowest Channel / 20MHz / QPSK



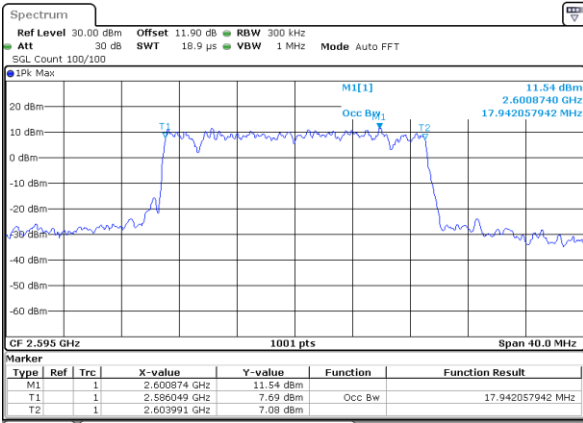
Date: 1 NOV 2019 08:55:39

Lowest Channel / 20MHz / 16QAM



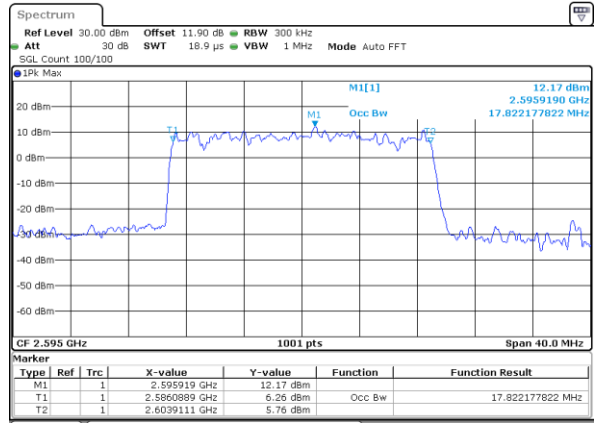
Date: 1 NOV 2019 08:55:49

Middle Channel / 20MHz / QPSK



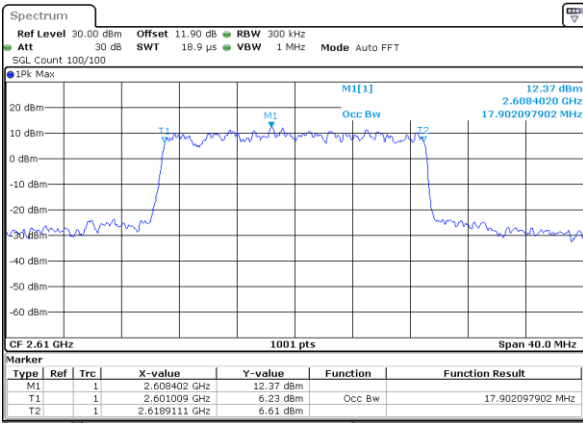
Date: 1 NOV 2019 08:56:22

Middle Channel / 20MHz / 16QAM



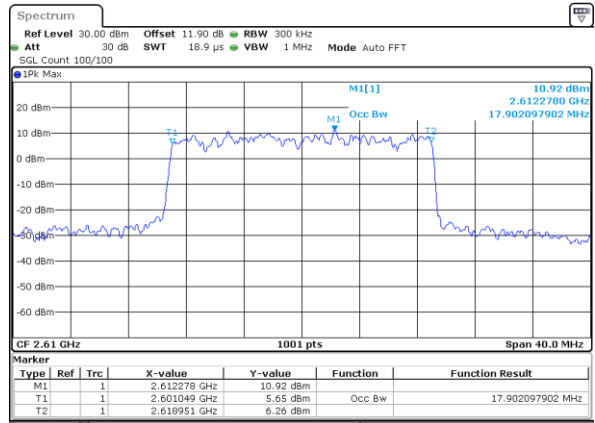
Date: 1 NOV 2019 08:56:33

Highest Channel / 20MHz / QPSK



Date: 1 NOV 2019 08:57:06

Highest Channel / 20MHz / 16QAM

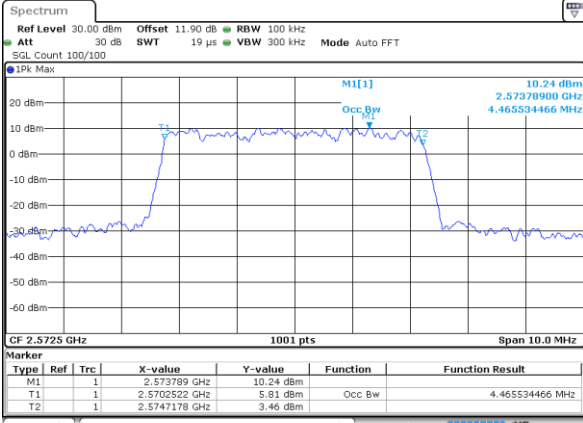


Date: 1 NOV 2019 08:57:17



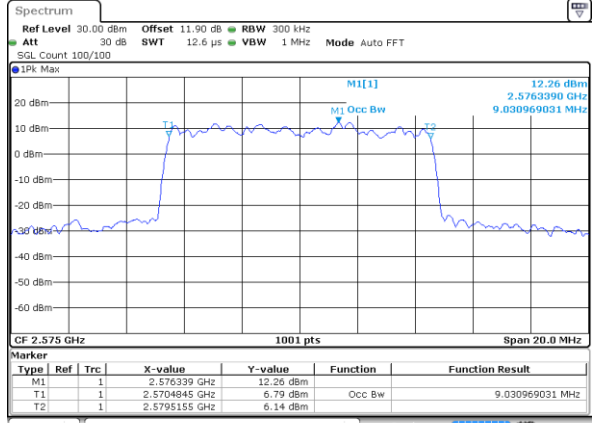
LTE Band 38

Lowest Channel / 5MHz / 64QAM



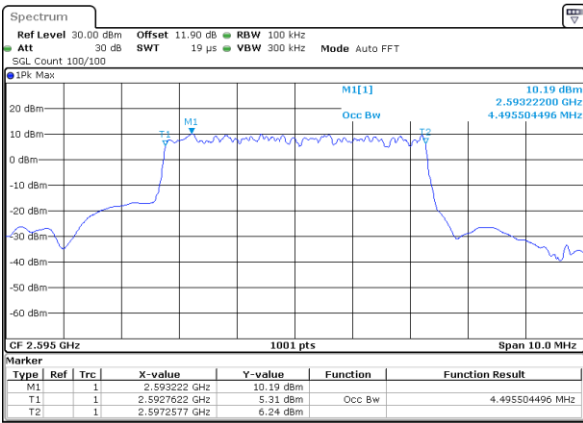
Date: 1 NOV 2019 08:57:50

Lowest Channel / 10MHz / 64QAM



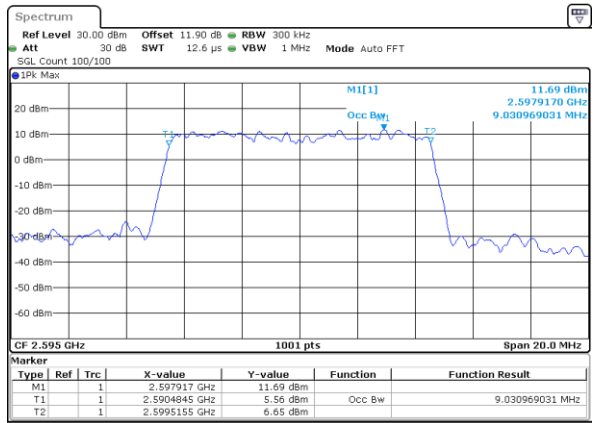
Date: 1 NOV 2019 08:58:55

Middle Channel / 5MHz / 64QAM



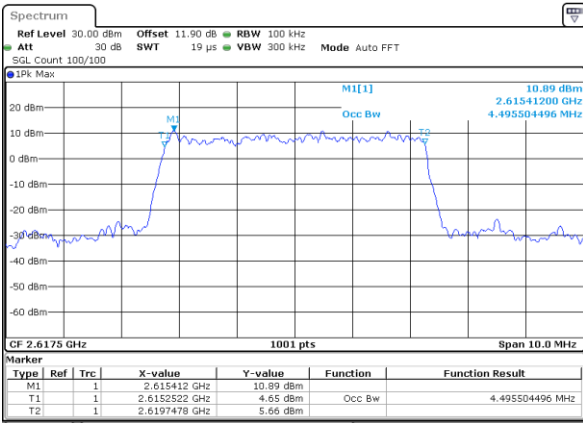
Date: 1 NOV 2019 08:58:12

Middle Channel / 10MHz / 64QAM



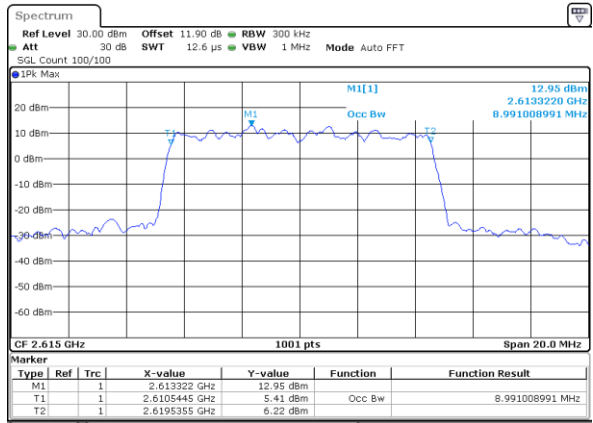
Date: 1 NOV 2019 08:59:17

Highest Channel / 5MHz / 64QAM



Date: 1 NOV 2019 08:58:33

Highest Channel / 10MHz / 64QAM

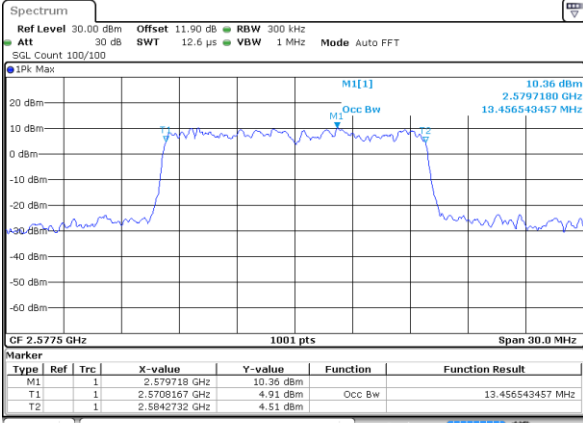


Date: 1 NOV 2019 08:59:39



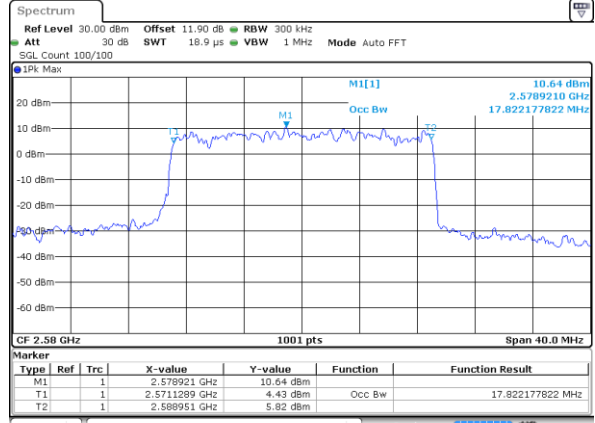
LTE Band 38

Lowest Channel / 15MHz / 64QAM



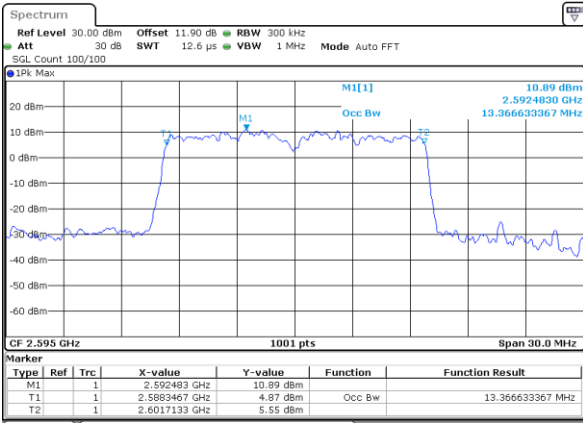
Date: 1 NOV 2019 09:00:1

Lowest Channel / 20MHz / 64QAM



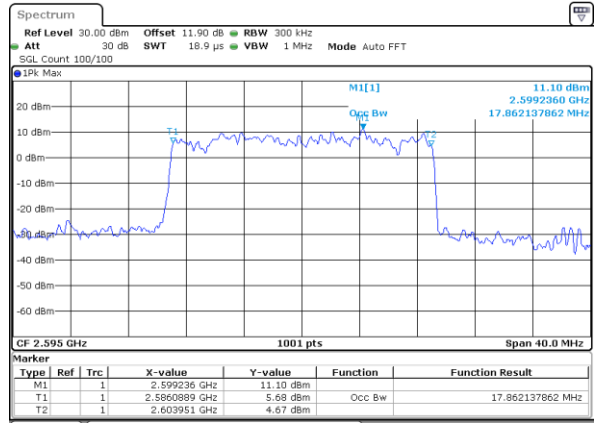
Date: 1 NOV 2019 09:01:06

Middle Channel / 15MHz / 64QAM



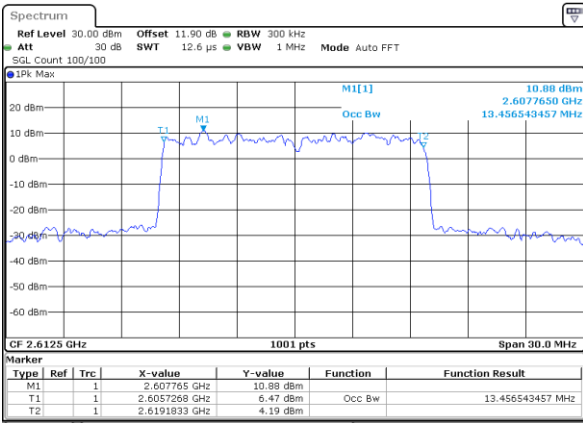
Date: 1 NOV 2019 09:00:23

Middle Channel / 20MHz / 64QAM



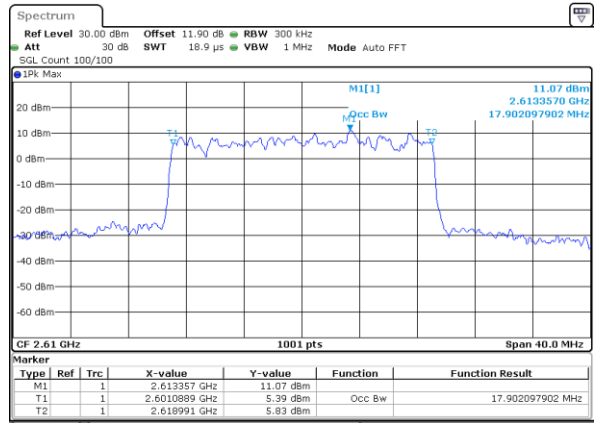
Date: 1 NOV 2019 09:01:28

Highest Channel / 15MHz / 64QAM



Date: 1 NOV 2019 09:00:44

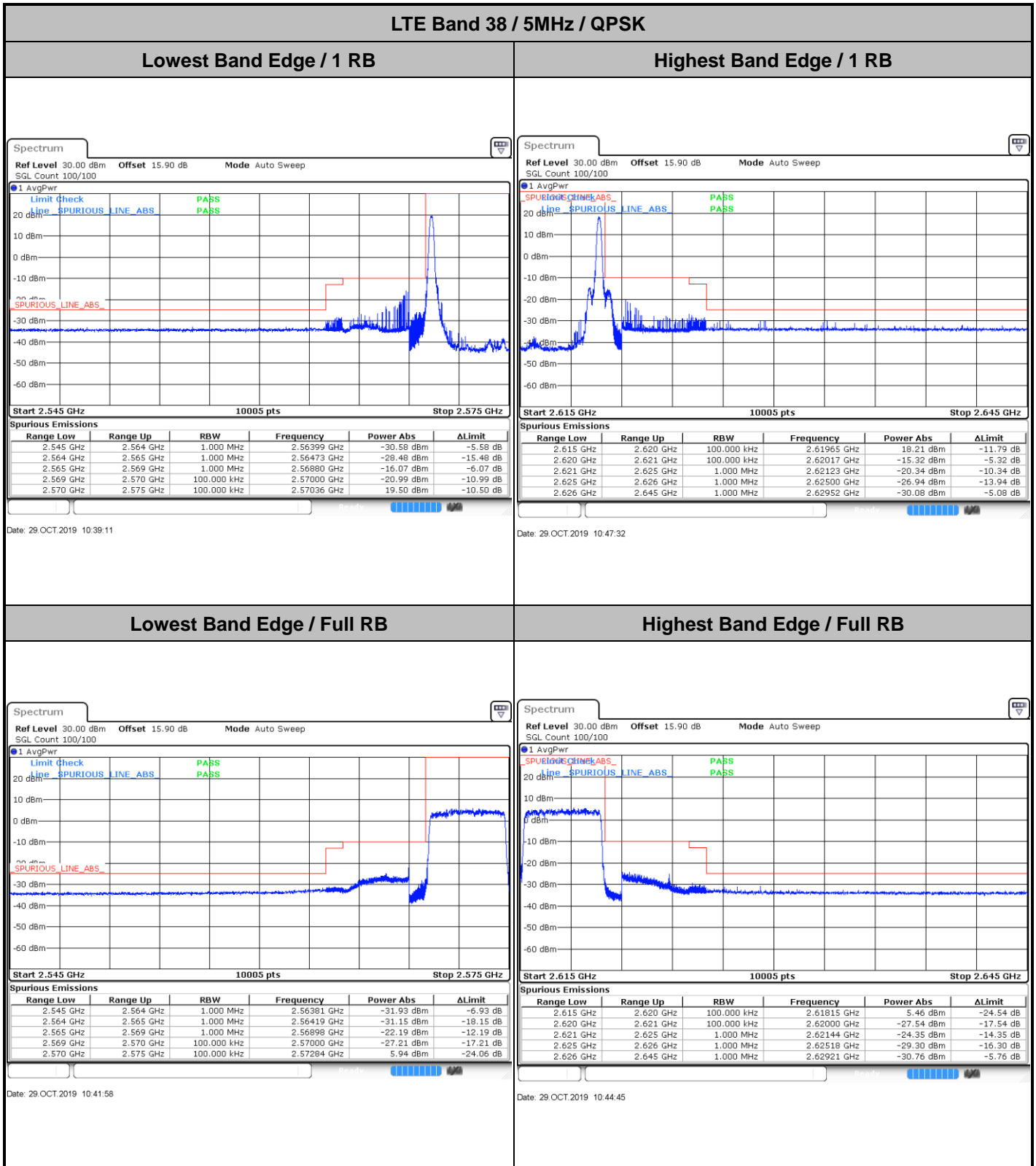
Highest Channel / 20MHz / 64QAM



Date: 1 NOV 2019 09:01:50



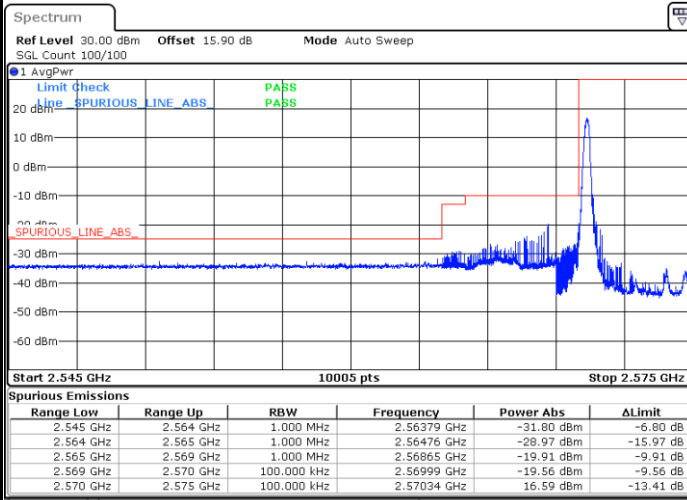
Conducted Band Edge





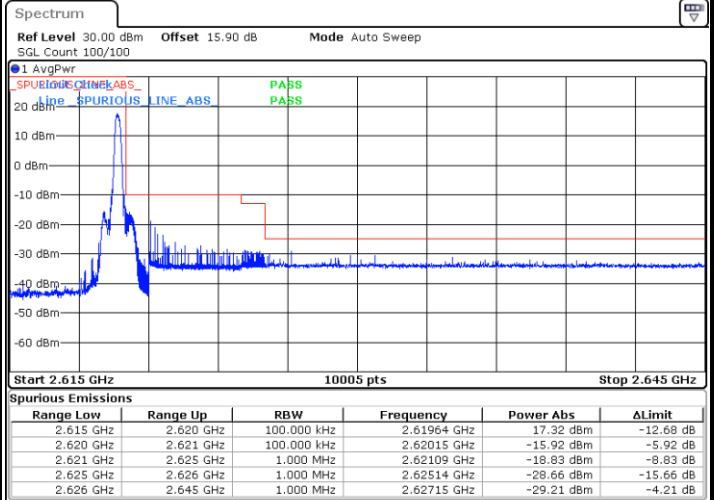
LTE Band 38 / 5MHz / 16QAM

Lowest Band Edge / 1RB



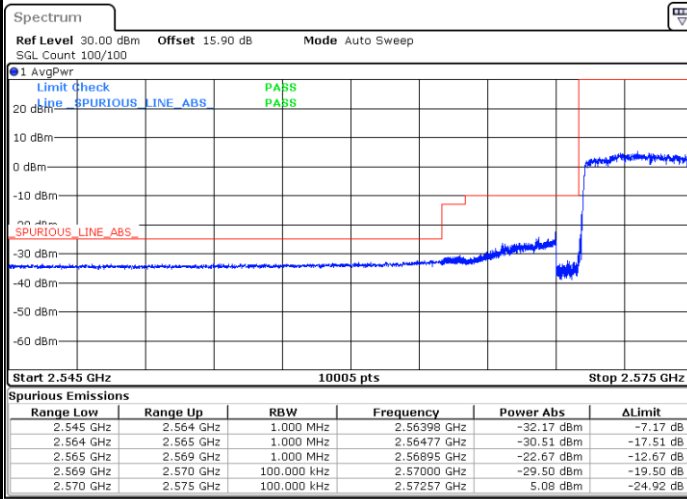
Date: 29.OCT.2019 10:40:34

Highest Band Edge / 1 RB



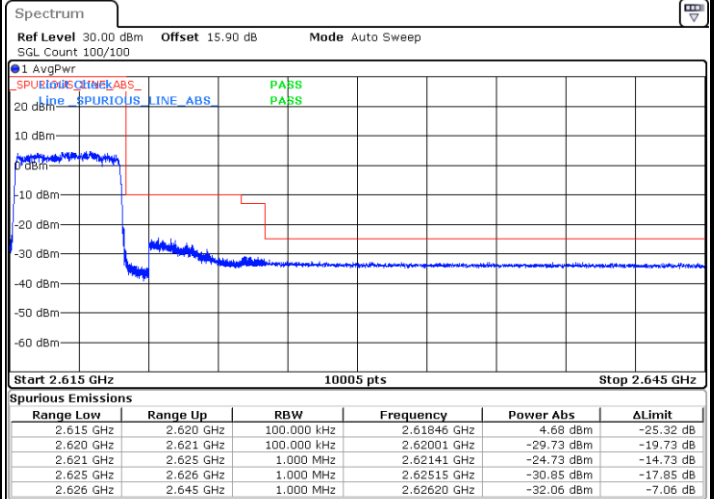
Date: 29.OCT.2019 10:48:55

Lowest Band Edge / Full RB



Date: 29.OCT.2019 10:43:21

Highest Band Edge / Full RB

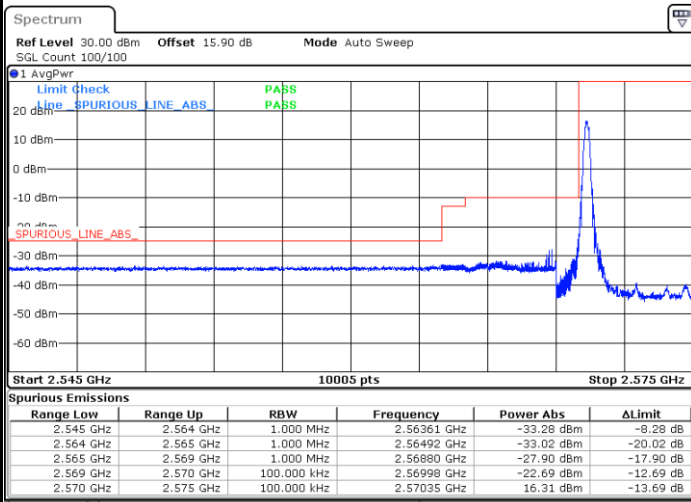


Date: 29.OCT.2019 10:46:08



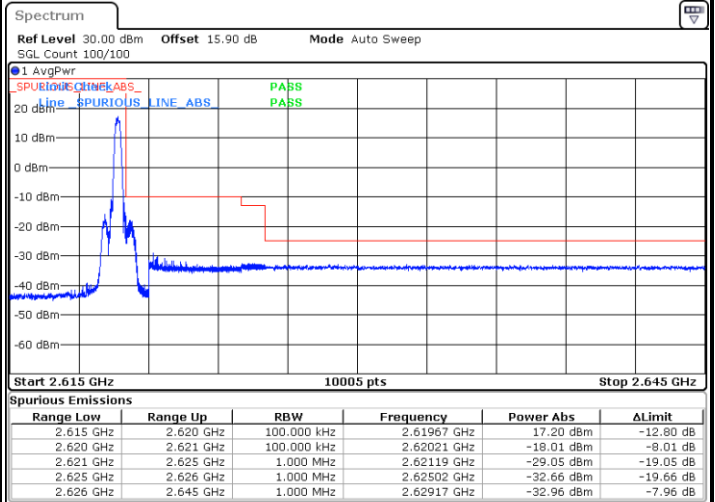
LTE Band 38 / 5MHz / 64QAM

Lowest Band Edge / 1RB



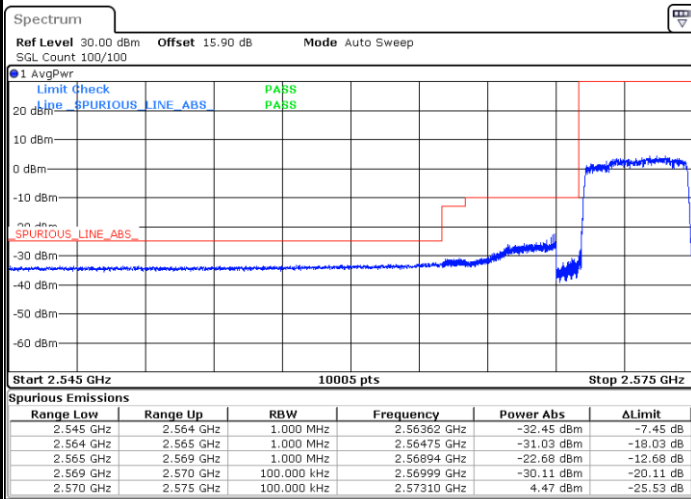
Date: 29.OCT.2019 10:50:19

Highest Band Edge / 1 RB



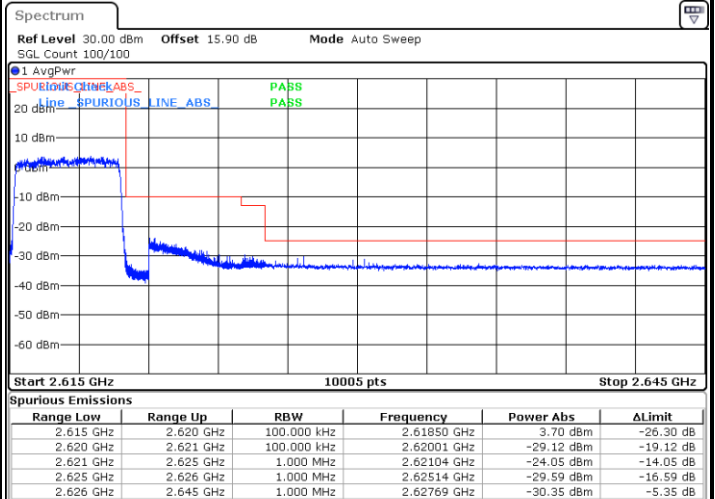
Date: 29.OCT.2019 10:54:29

Lowest Band Edge / Full RB



Date: 29.OCT.2019 10:51:42

Highest Band Edge / Full RB

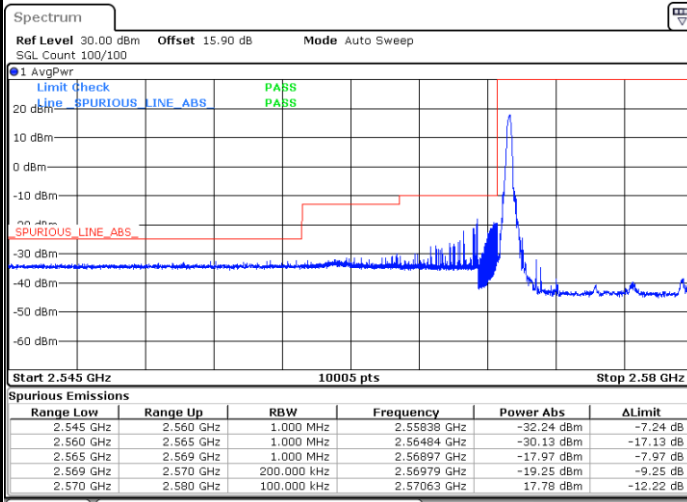


Date: 29.OCT.2019 10:53:06



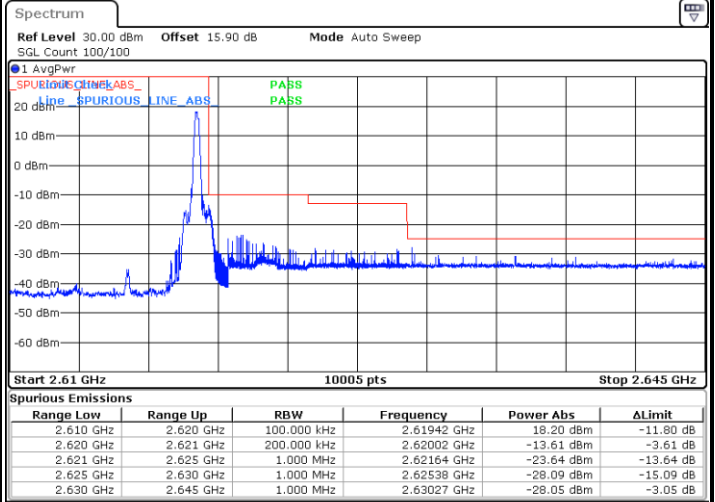
LTE Band 38 / 10MHz / QPSK

Lowest Band Edge / 1 RB



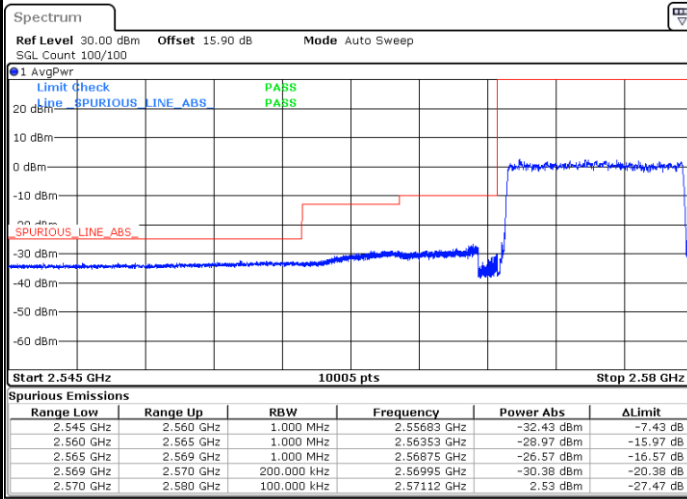
Date: 29.OCT.2019 11:01:27

Highest Band Edge / 1 RB



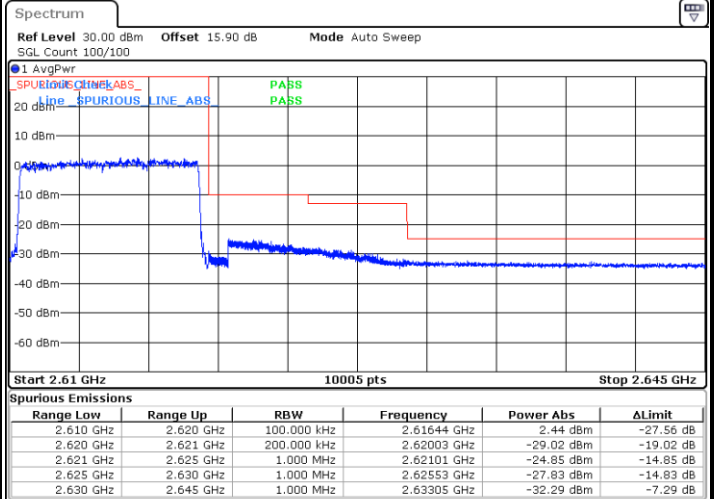
Date: 29.OCT.2019 11:09:48

Lowest Band Edge / Full RB



Date: 29.OCT.2019 11:04:14

Highest Band Edge / Full RB



Date: 29.OCT.2019 11:07:01