



Frequency Stability

Test Conditions		LTE Band 26 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0011	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0010	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 38

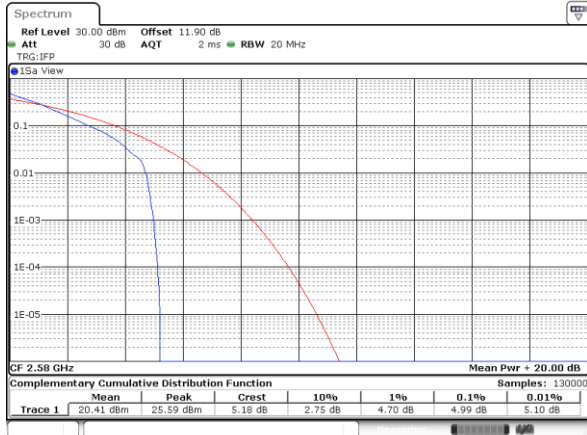
Peak-to-Average Ratio

Mode	LTE Band 38 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.99	5.33	5.71	6.29	PASS
Middle CH	4.87	5.33	5.83	6.35	
Highest CH	4.9	5.42	5.88	6.38	



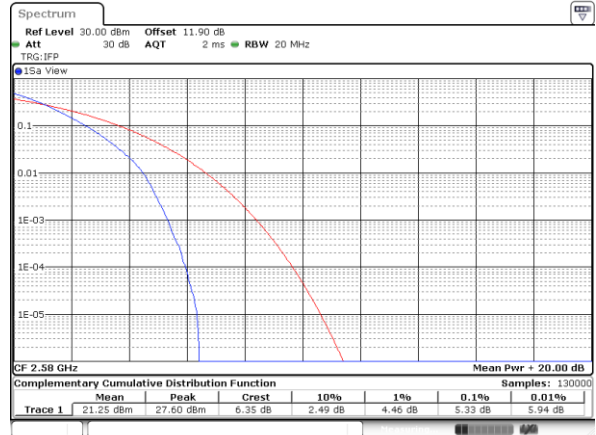
LTE Band 38 / 20MHz / QPSK

Lowest Channel / 1RB



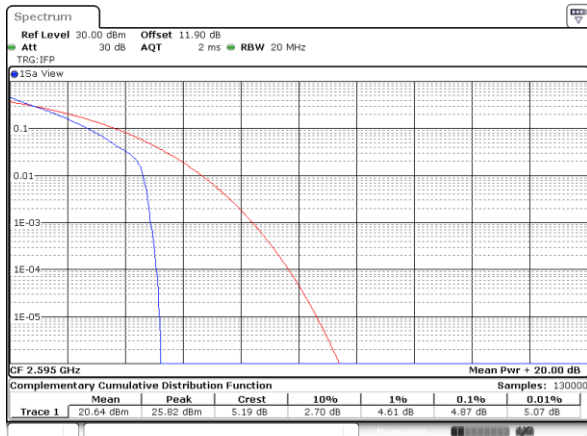
Date: 7 JAN 2018 10:26:39

Lowest Channel / Full RB



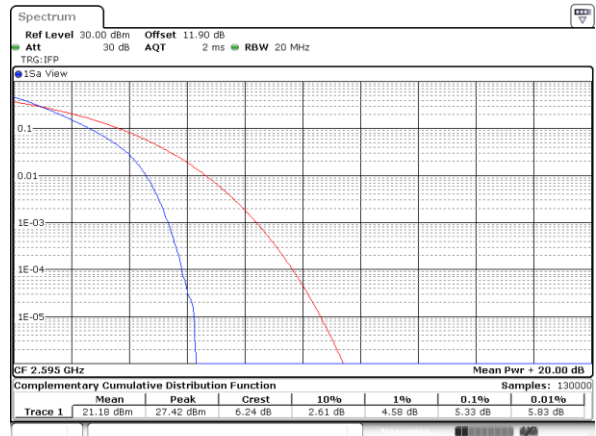
Date: 7 JAN 2018 10:27:11

Middle Channel / 1RB



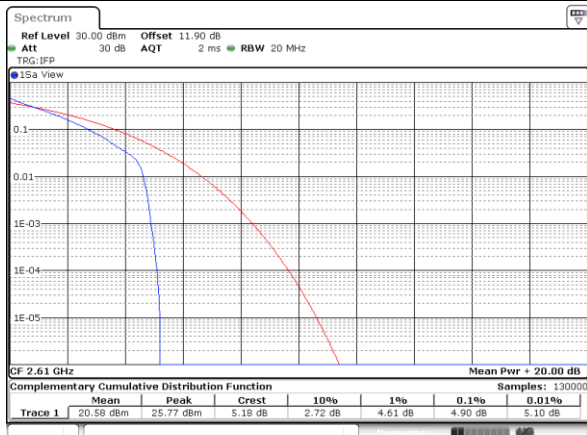
Date: 7 JAN 2018 10:27:33

Middle Channel / Full RB



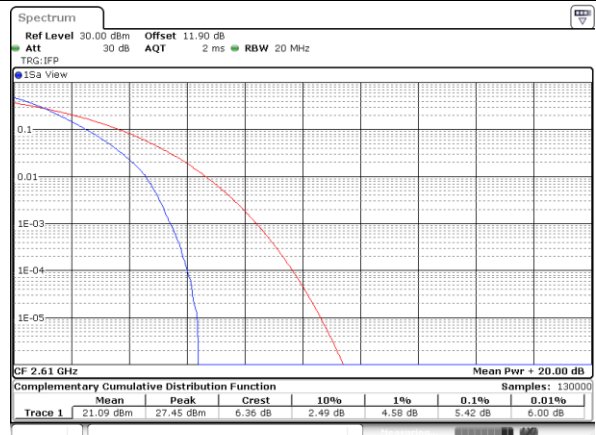
Date: 7 JAN 2018 10:27:47

Highest Channel / 1RB



Date: 7 JAN 2018 10:28:05

Highest Channel / Full RB

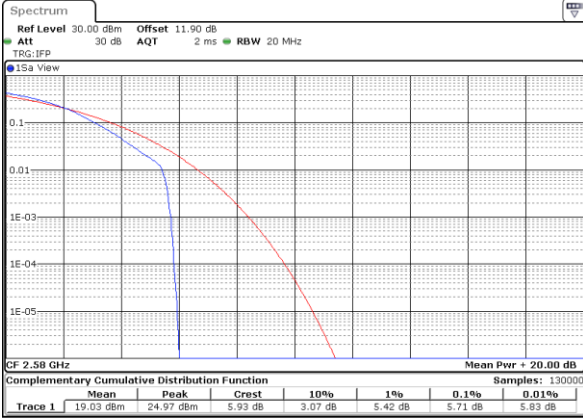


Date: 7 JAN 2018 10:28:44



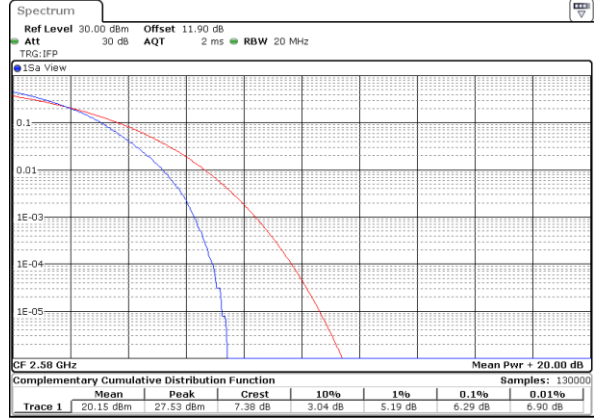
LTE Band 38 / 20MHz / 16QAM

Lowest Channel / 1RB



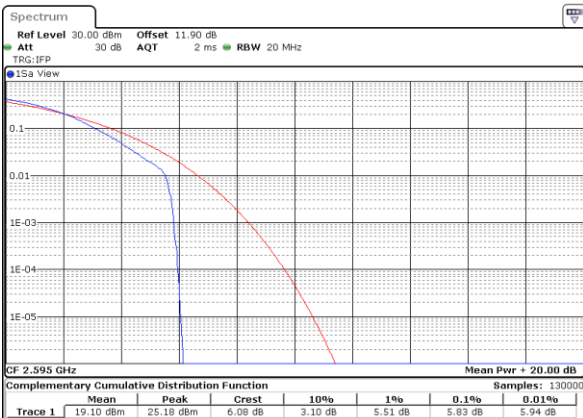
Date: 7 JAN 2018 10:24:11

Lowest Channel / Full RB



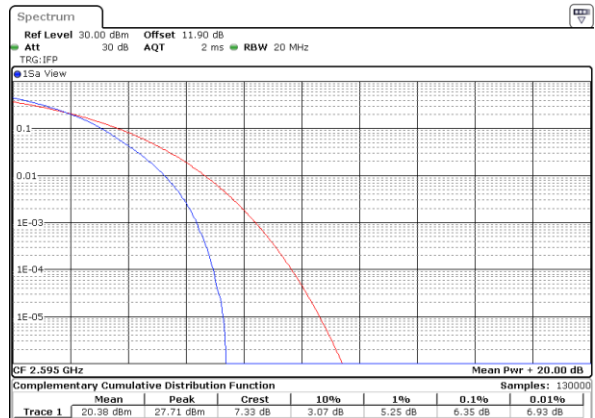
Date: 7 JAN 2018 10:24:25

Middle Channel / 1RB



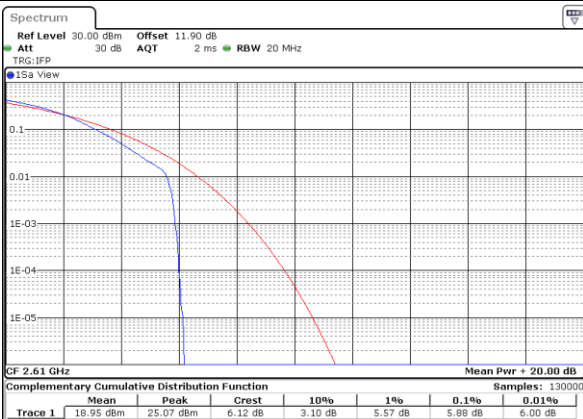
Date: 7 JAN 2018 10:24:41

Middle Channel / Full RB



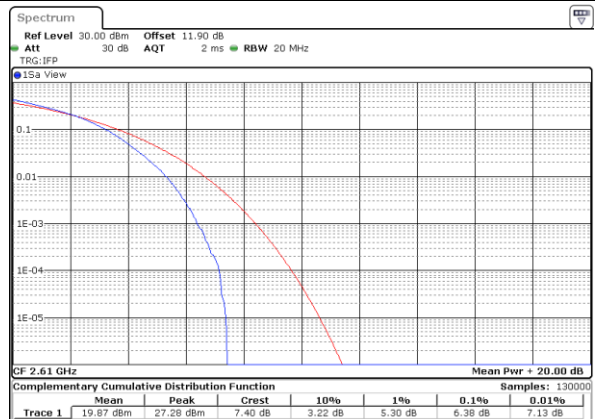
Date: 7 JAN 2018 10:25:06

Highest Channel / 1RB



Date: 7 JAN 2018 10:26:09

Highest Channel / Full RB



Date: 7 JAN 2018 10:26:24



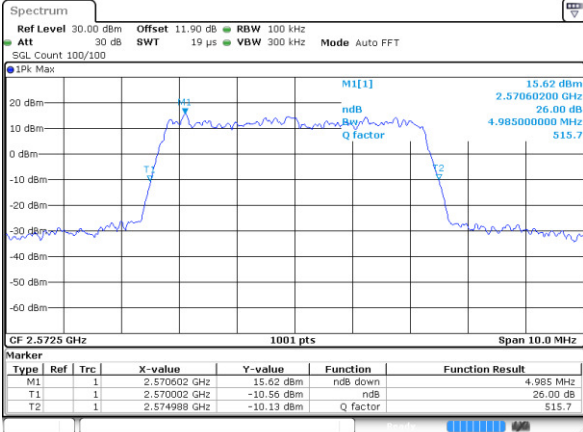
26dB Bandwidth

Mode	LTE Band 38 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.99	4.91	9.63	9.83	14.09	14.24	20.02	20.18
Middle CH	-	-	-	-	5.00	4.86	9.65	9.71	14.15	14.15	20.14	20.58
Highest CH	-	-	-	-	4.96	4.78	9.75	9.69	14.18	14.33	20.10	20.10



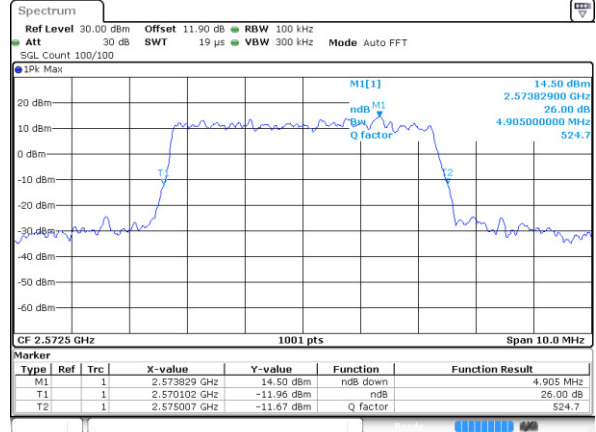
LTE Band 38

Lowest Channel / 5MHz / QPSK



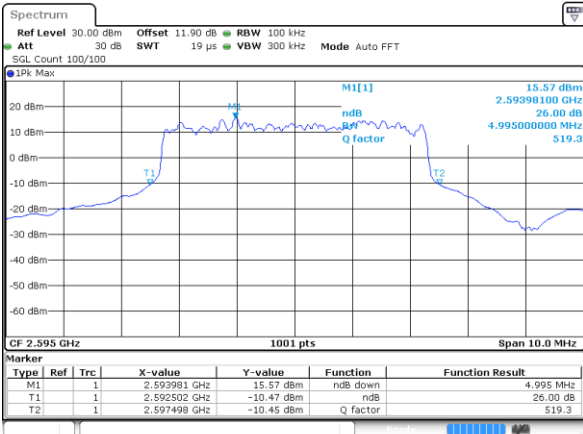
Date: 7 JAN 2018 10:13:49

Lowest Channel / 5MHz / 16QAM



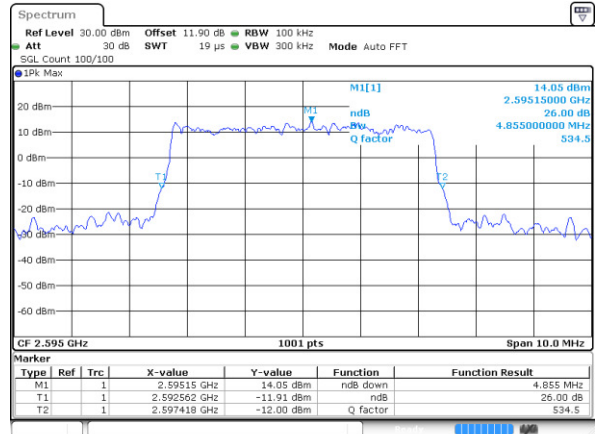
Date: 7 JAN 2018 10:13:59

Middle Channel / 5MHz / QPSK



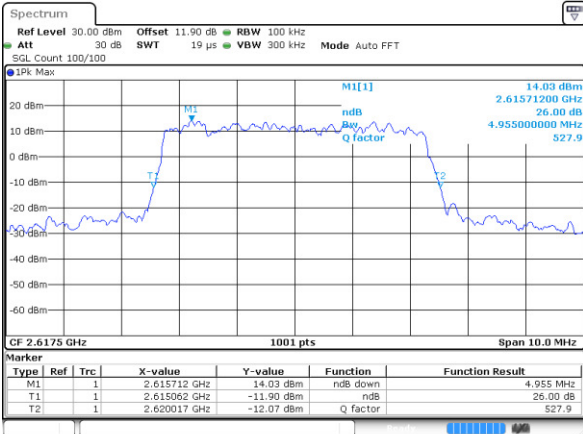
Date: 7 JAN 2018 10:14:29

Middle Channel / 5MHz / 16QAM



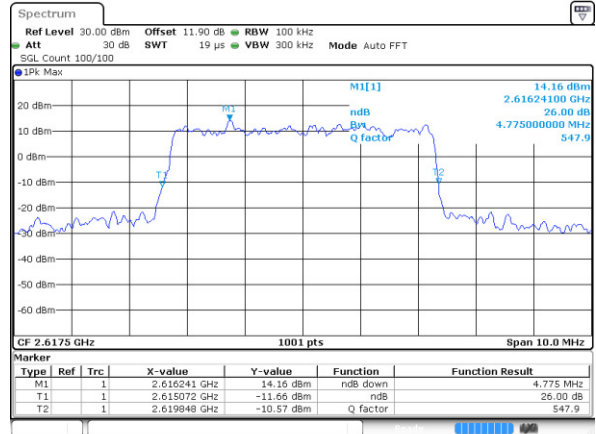
Date: 7 JAN 2018 10:14:39

Highest Channel / 5MHz / QPSK



Date: 7 JAN 2018 10:15:09

Highest Channel / 5MHz / 16QAM

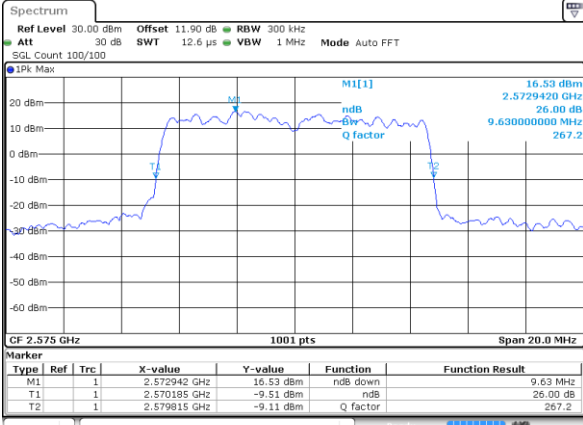


Date: 7 JAN 2018 10:15:19



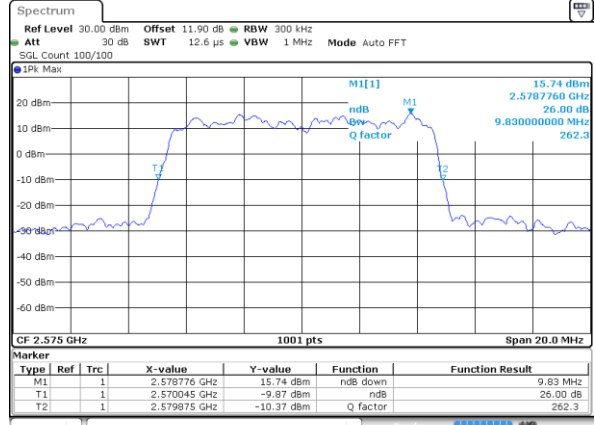
LTE Band 38

Lowest Channel / 10MHz / QPSK



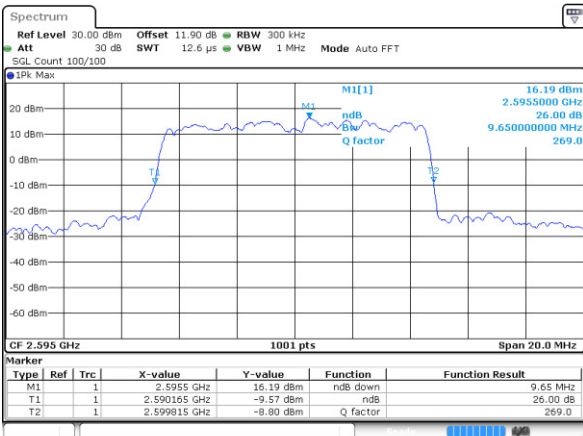
Date: 7 JAN 2018 10:15:49

Lowest Channel / 10MHz / 16QAM



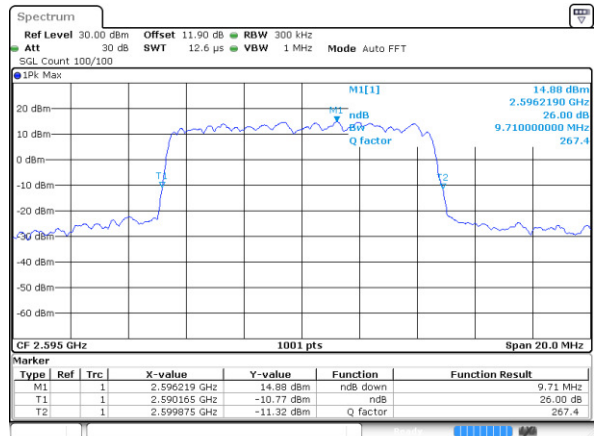
Date: 7 JAN 2018 10:16:00

Middle Channel / 10MHz / QPSK



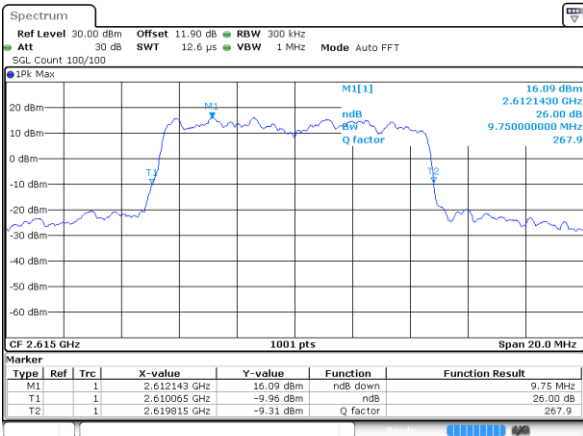
Date: 7 JAN 2018 10:16:30

Middle Channel / 10MHz / 16QAM



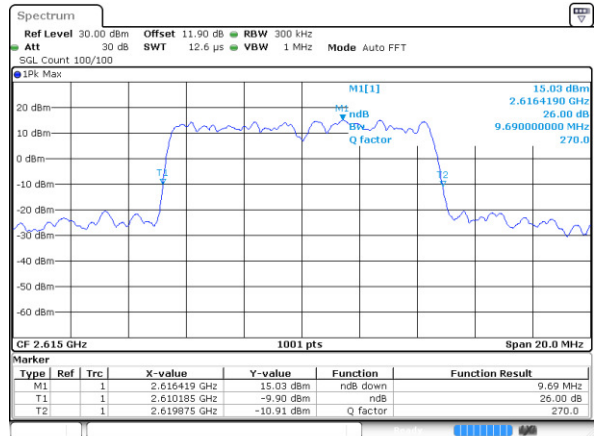
Date: 7 JAN 2018 10:16:40

Highest Channel / 10MHz / QPSK



Date: 7 JAN 2018 10:17:10

Highest Channel / 10MHz / 16QAM

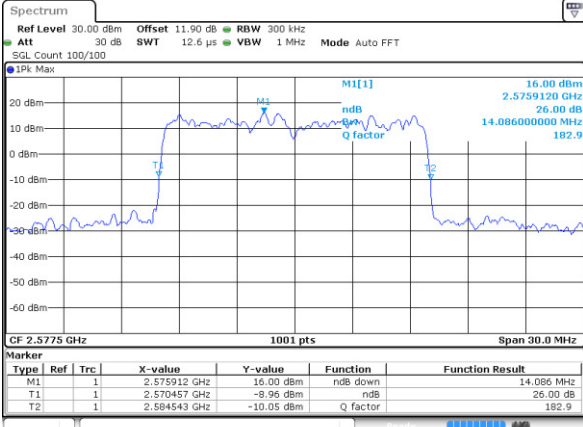


Date: 7 JAN 2018 10:17:20



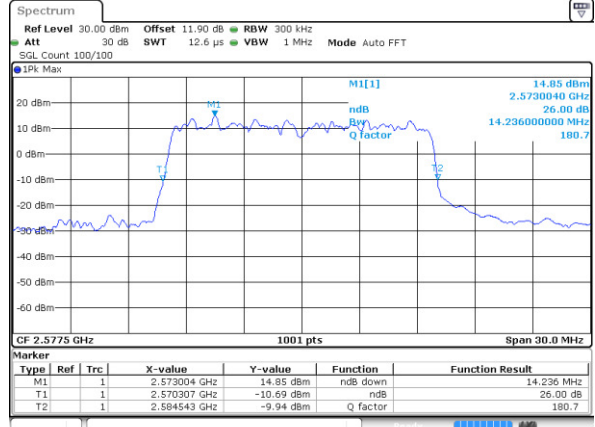
LTE Band 38

Lowest Channel / 15MHz / QPSK



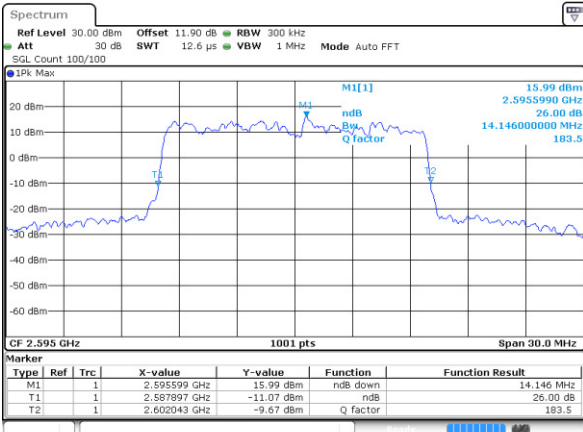
Date: 7 JAN 2018 10:17:50

Lowest Channel / 15MHz / 16QAM



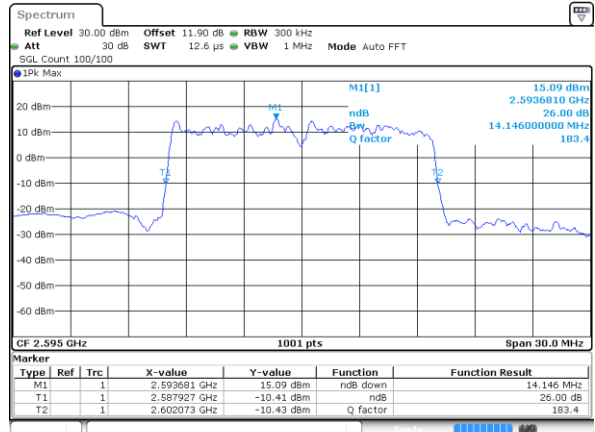
Date: 7 JAN 2018 10:18:00

Middle Channel / 15MHz / QPSK



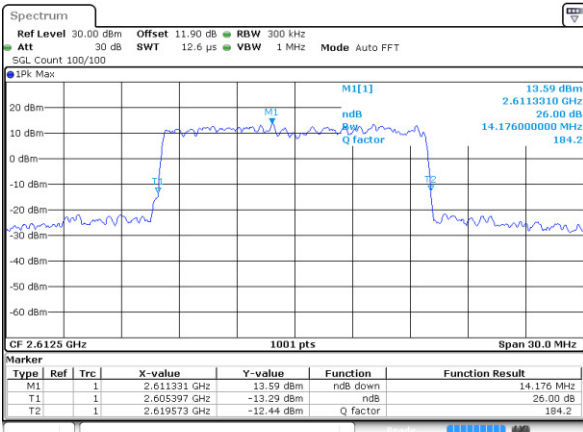
Date: 7 JAN 2018 10:18:30

Middle Channel / 15MHz / 16QAM



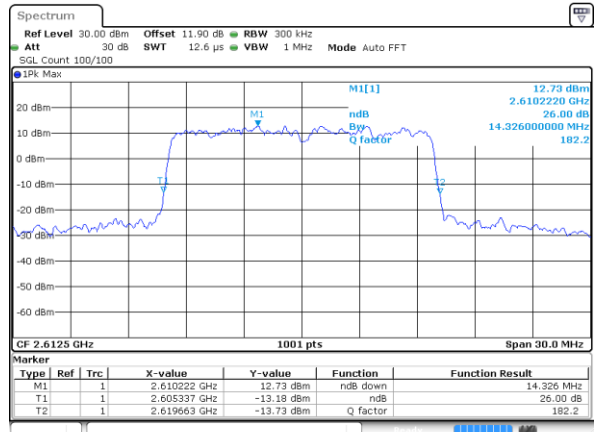
Date: 7 JAN 2018 10:18:40

Highest Channel / 15MHz / QPSK



Date: 7 JAN 2018 10:19:10

Highest Channel / 15MHz / 16QAM

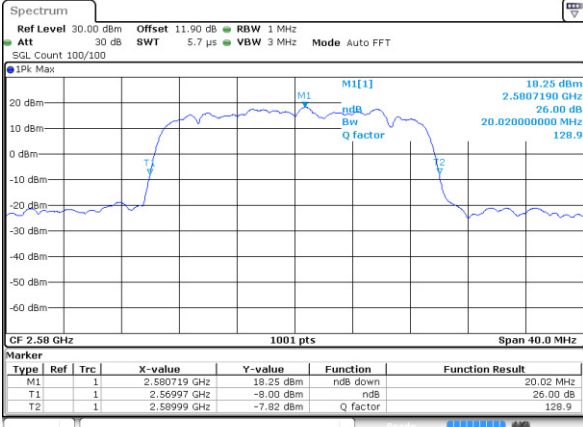


Date: 7 JAN 2018 10:19:20



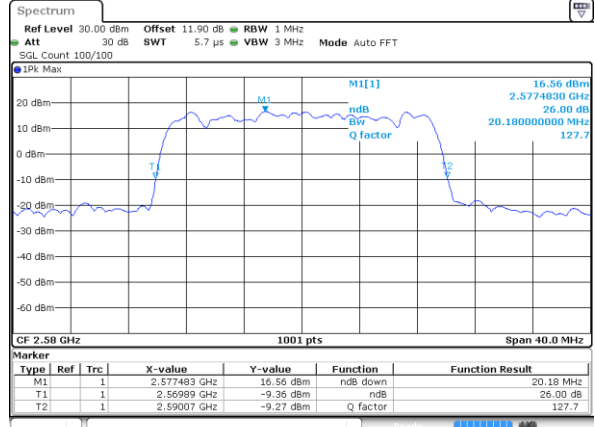
LTE Band 38

Lowest Channel / 20MHz / QPSK



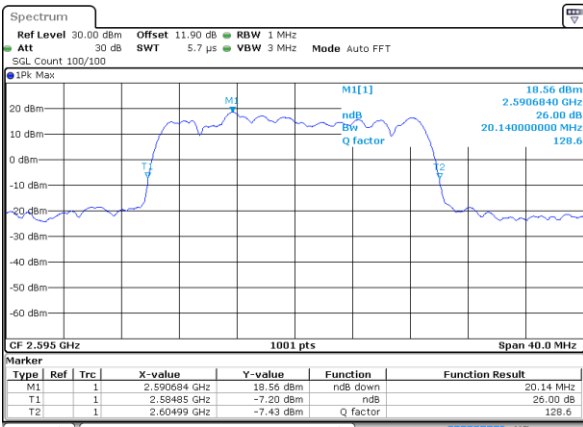
Date: 7 JAN 2018 10:19:50

Lowest Channel / 20MHz / 16QAM



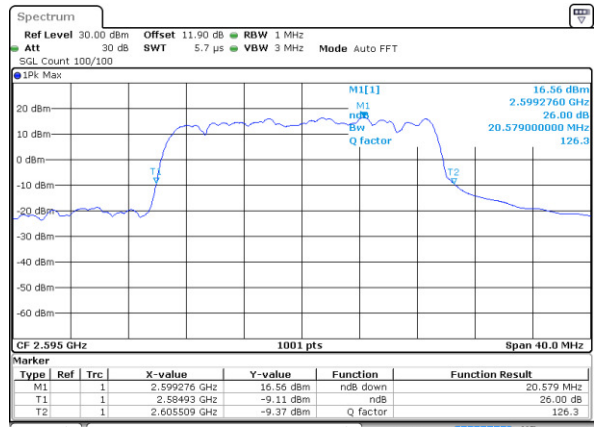
Date: 7 JAN 2018 10:20:00

Middle Channel / 20MHz / QPSK



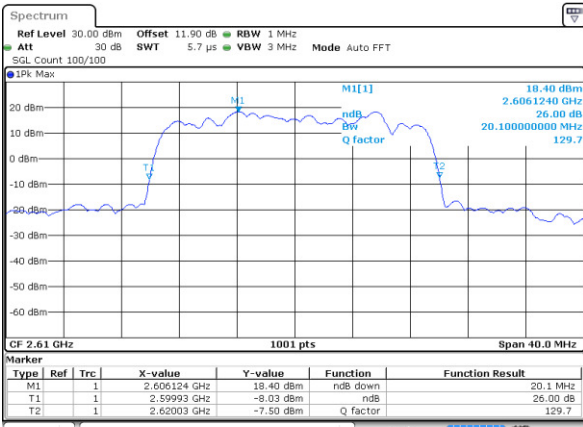
Date: 7 JAN 2018 10:20:30

Middle Channel / 20MHz / 16QAM



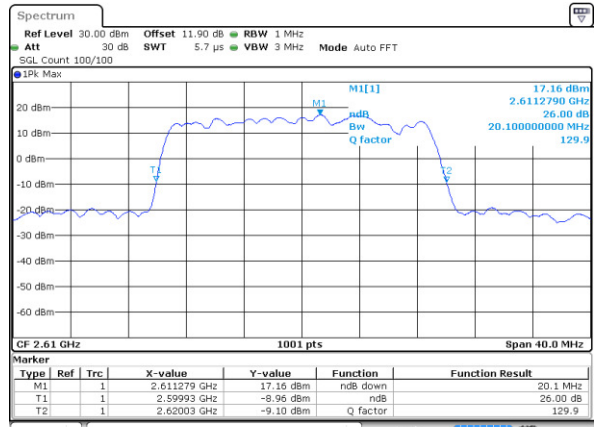
Date: 7 JAN 2018 10:20:40

Highest Channel / 20MHz / QPSK



Date: 7 JAN 2018 10:21:10

Highest Channel / 20MHz / 16QAM



Date: 7 JAN 2018 10:21:20



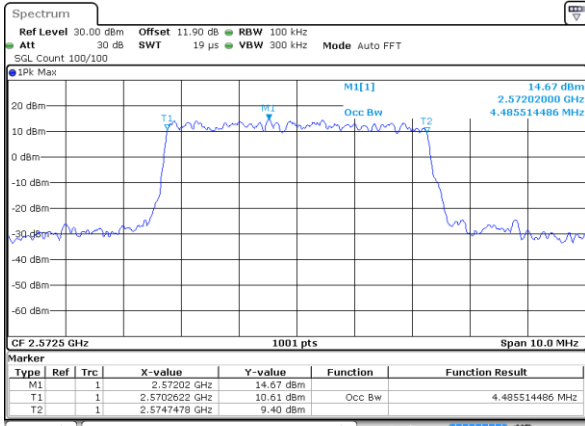
Occupied Bandwidth

Mode	LTE Band 38 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.46	9.07	8.87	13.46	13.46	18.26	18.1
Middle CH	-	-	-	-	4.49	4.5	9.05	9.03	13.49	13.4	18.22	18.42
Highest CH	-	-	-	-	4.52	4.51	9.01	8.97	13.43	13.4	18.1	18.46



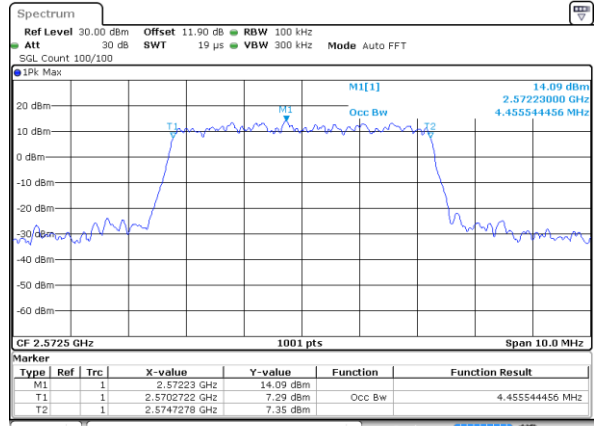
LTE Band 38

Lowest Channel / 5MHz / QPSK



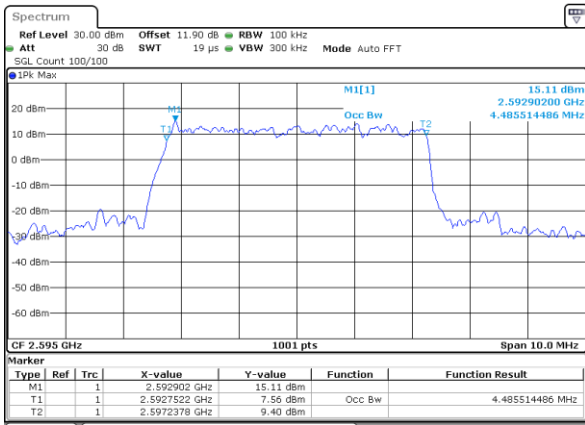
Date: 7 JAN 2018 10:13:29

Lowest Channel / 5MHz / 16QAM



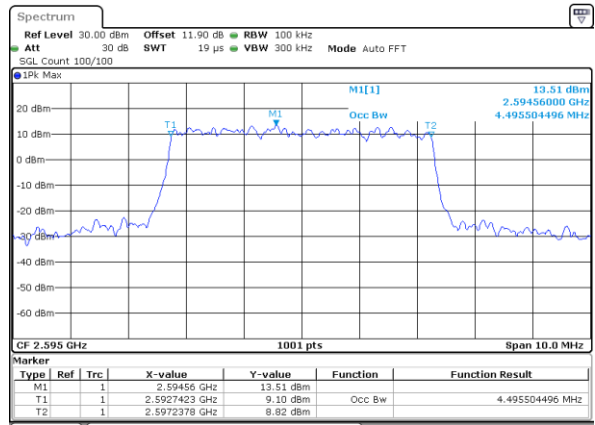
Date: 7 JAN 2018 10:13:39

Middle Channel / 5MHz / QPSK



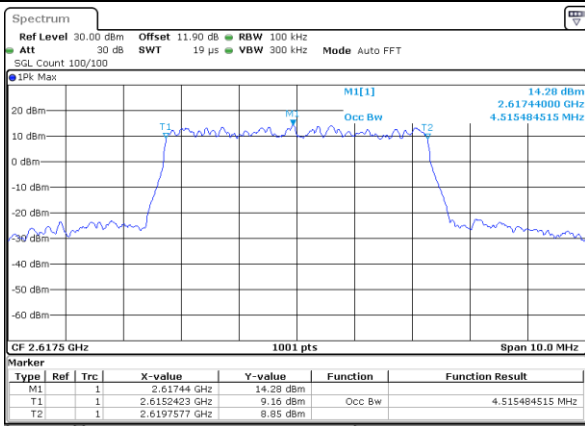
Date: 7 JAN 2018 10:14:09

Middle Channel / 5MHz / 16QAM



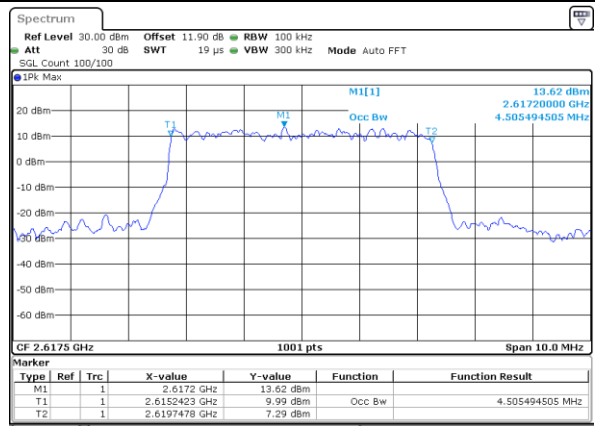
Date: 7 JAN 2018 10:14:19

Highest Channel / 5MHz / QPSK



Date: 7 JAN 2018 10:14:49

Highest Channel / 5MHz / 16QAM

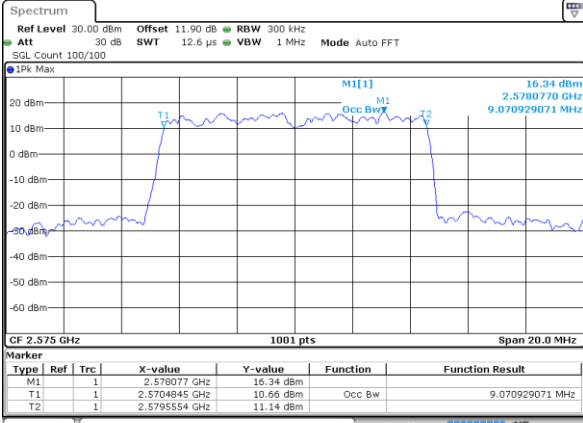


Date: 7 JAN 2018 10:14:59



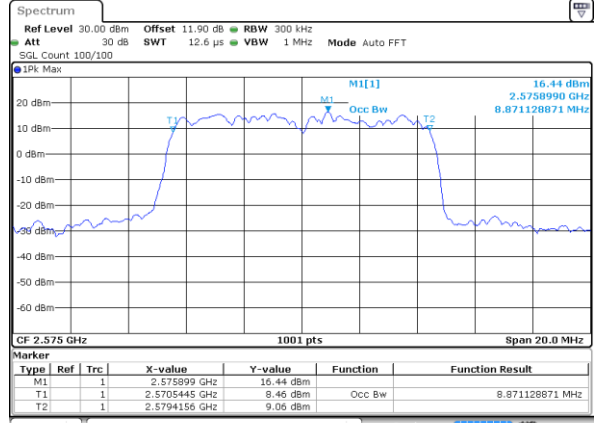
LTE Band 38

Lowest Channel / 10MHz / QPSK



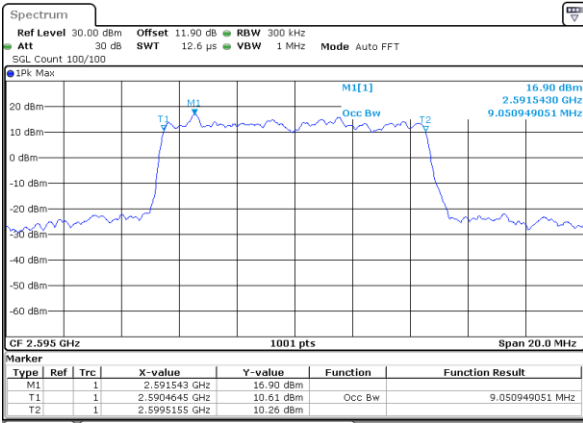
Date: 7 JAN 2018 10:15:29

Lowest Channel / 10MHz / 16QAM



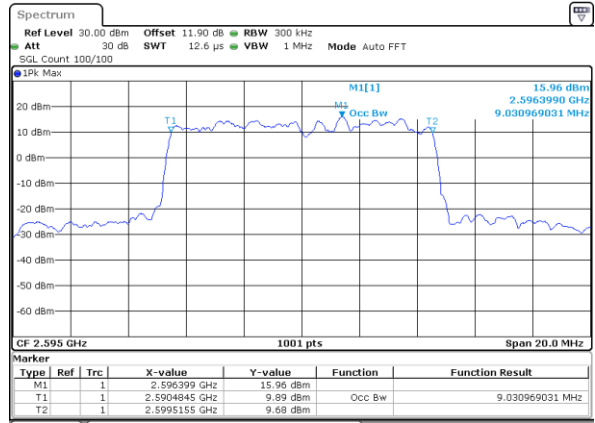
Date: 7 JAN 2018 10:15:40

Middle Channel / 10MHz / QPSK



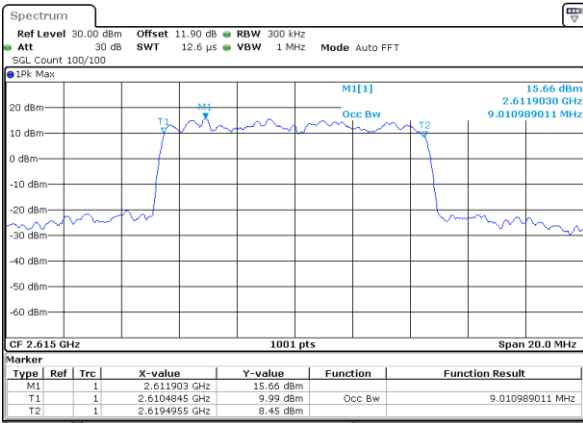
Date: 7 JAN 2018 10:16:10

Middle Channel / 10MHz / 16QAM



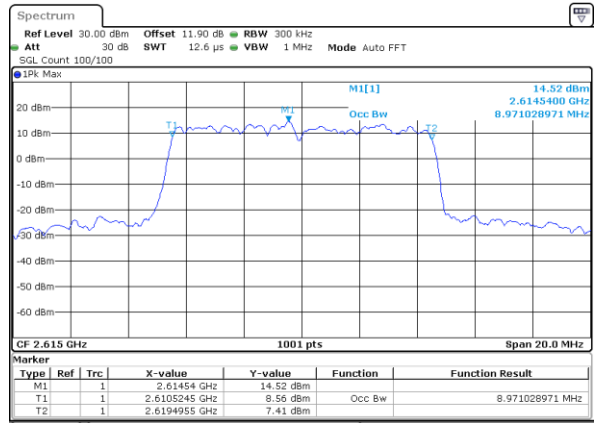
Date: 7 JAN 2018 10:16:20

Highest Channel / 10MHz / QPSK



Date: 7 JAN 2018 10:16:50

Highest Channel / 10MHz / 16QAM

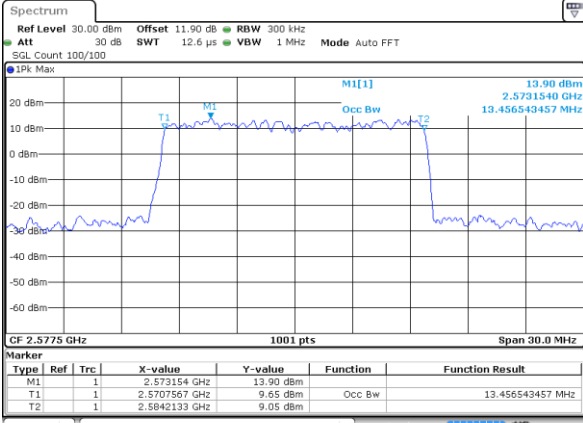


Date: 7 JAN 2018 10:17:00



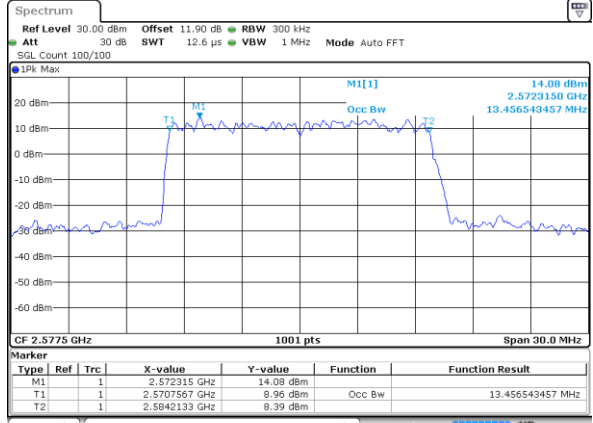
LTE Band 38

Lowest Channel / 15MHz / QPSK



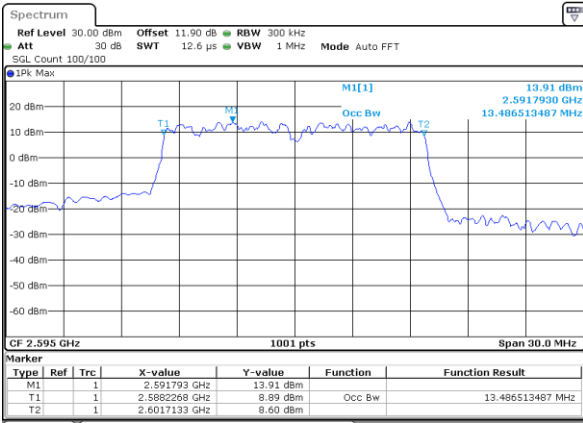
Date: 7 JAN 2018 10:17:30

Lowest Channel / 15MHz / 16QAM



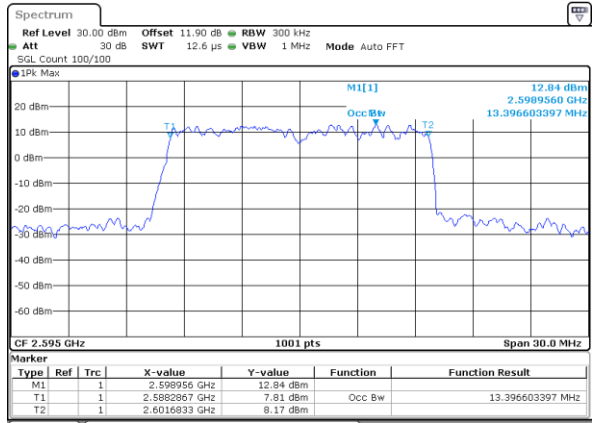
Date: 7 JAN 2018 10:17:40

Middle Channel / 15MHz / QPSK



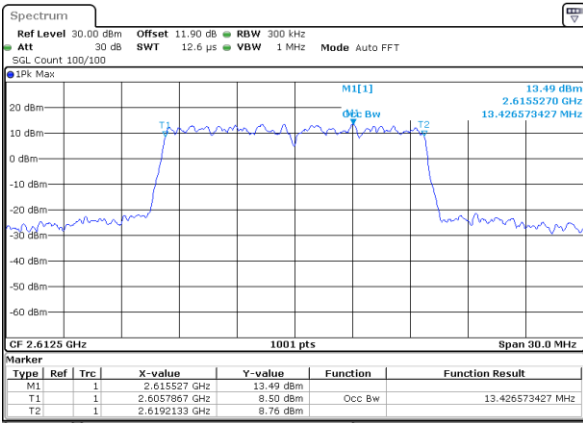
Date: 7 JAN 2018 10:18:10

Middle Channel / 15MHz / 16QAM



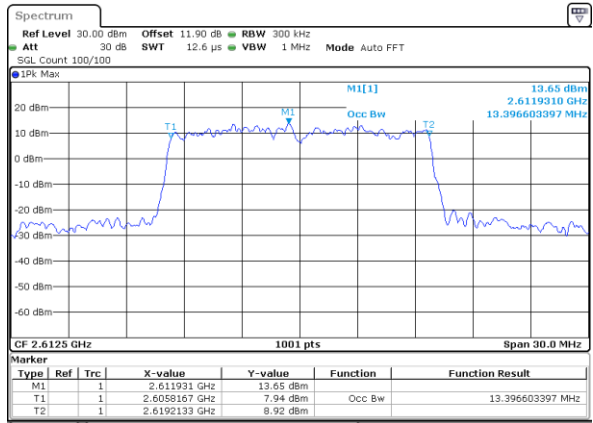
Date: 7 JAN 2018 10:18:20

Highest Channel / 15MHz / QPSK



Date: 7 JAN 2018 10:18:50

Highest Channel / 15MHz / 16QAM

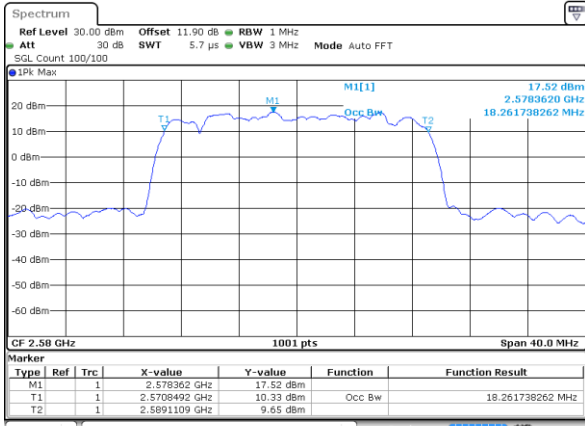


Date: 7 JAN 2018 10:19:00



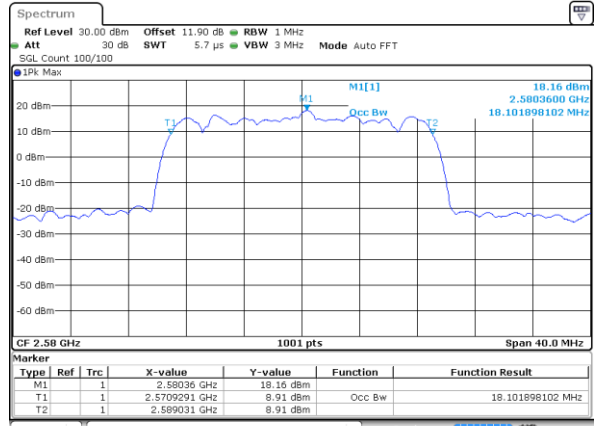
LTE Band 38

Lowest Channel / 20MHz / QPSK



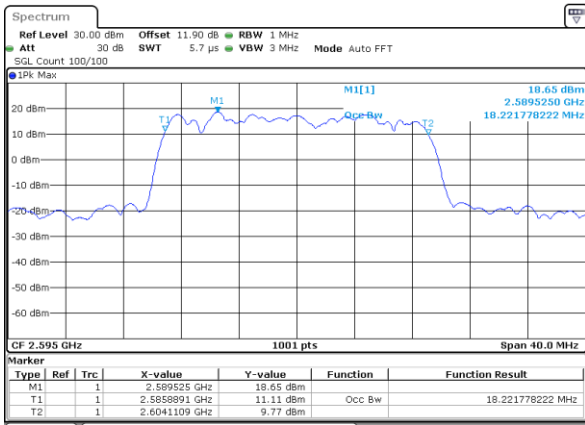
Date: 7 JAN 2018 10:19:30

Lowest Channel / 20MHz / 16QAM



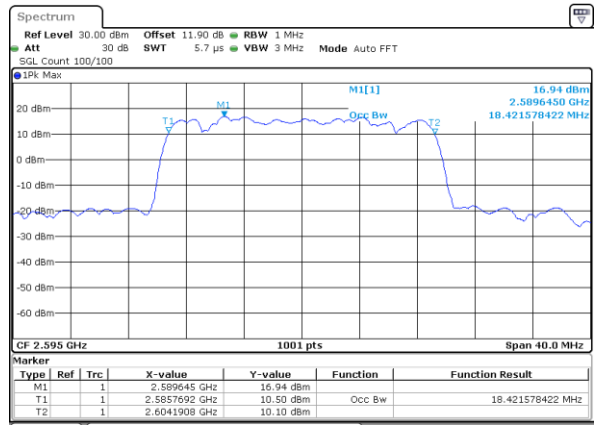
Date: 7 JAN 2018 10:19:40

Middle Channel / 20MHz / QPSK



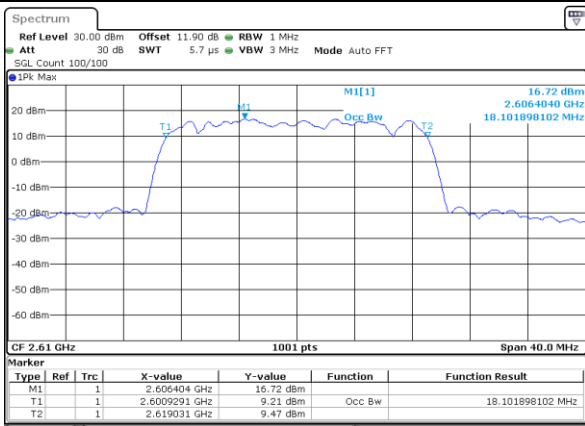
Date: 7 JAN 2018 10:20:10

Middle Channel / 20MHz / 16QAM



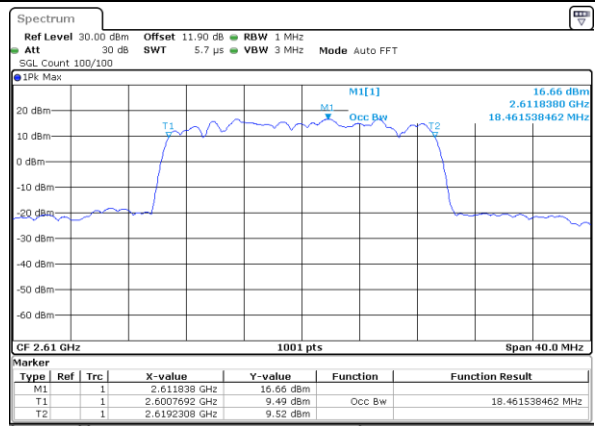
Date: 7 JAN 2018 10:20:20

Highest Channel / 20MHz / QPSK



Date: 7 JAN 2018 10:20:50

Highest Channel / 20MHz / 16QAM



Date: 7 JAN 2018 10:21:00

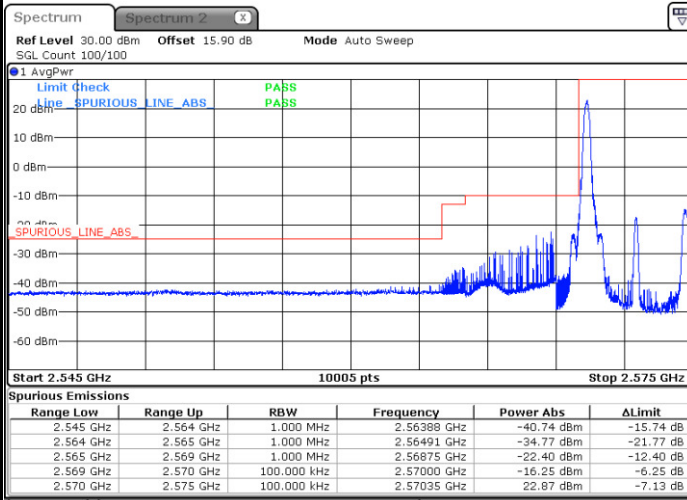


Conducted Band Edge



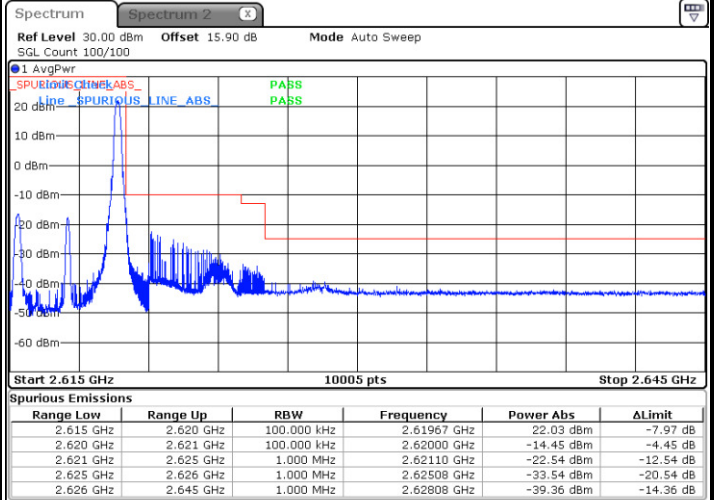
LTE Band 38 / 5MHz / QPSK

Lowest Band Edge / 1 RB



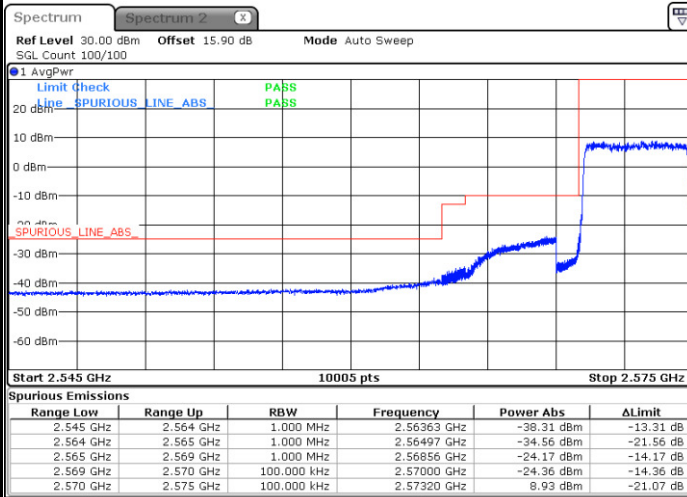
Date: 27.JAN.2018 00:29:49

Highest Band Edge / 1 RB



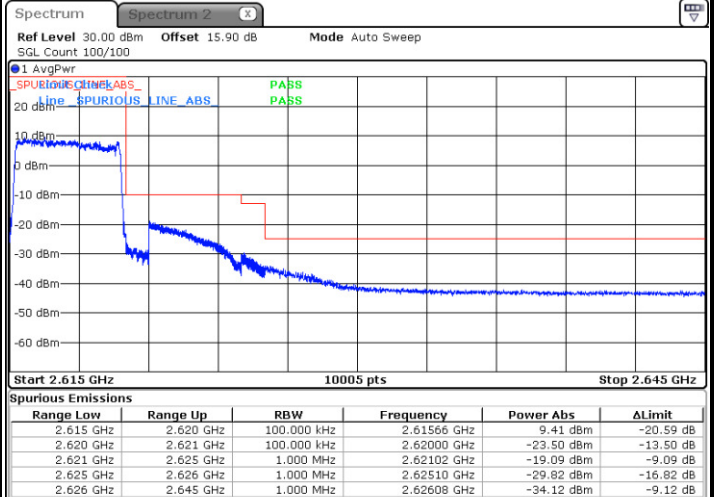
Date: 27.JAN.2018 00:36:45

Lowest Band Edge / Full RB



Date: 27.JAN.2018 00:32:08

Highest Band Edge / Full RB

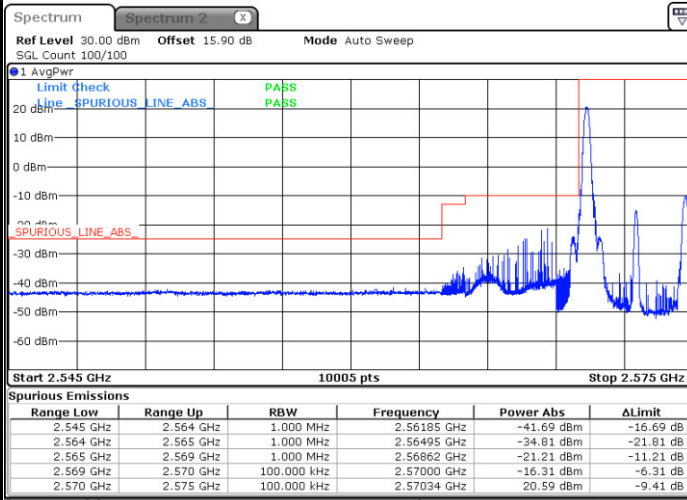


Date: 27.JAN.2018 00:34:26



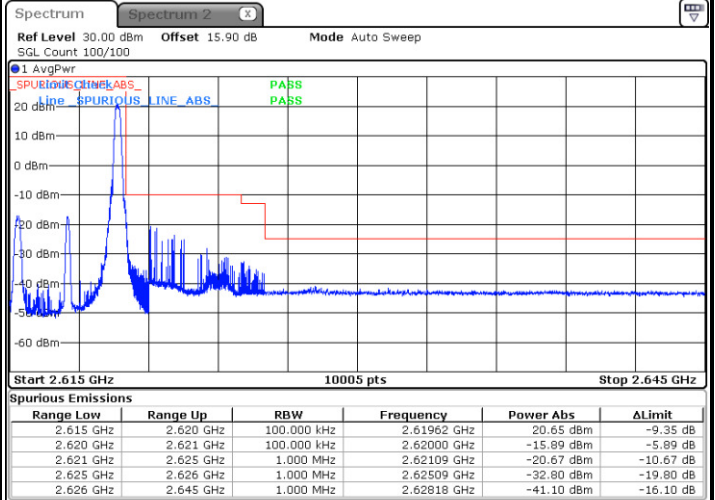
LTE Band 38 / 5MHz / 16QAM

Lowest Band Edge / 1RB



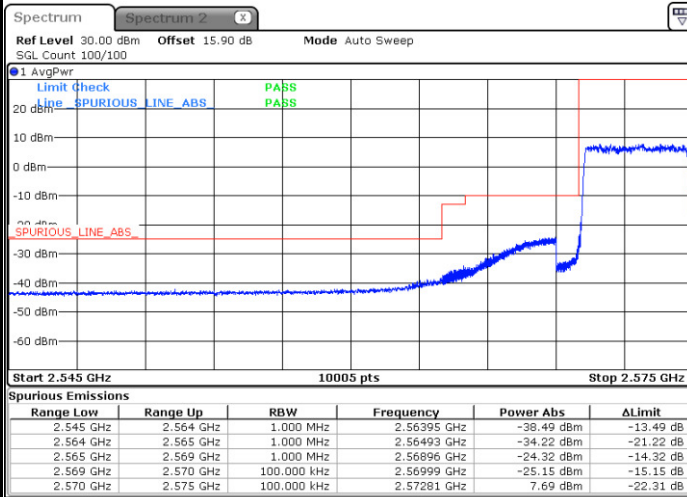
Date: 27.JAN.2018 00:30:58

Highest Band Edge / 1 RB



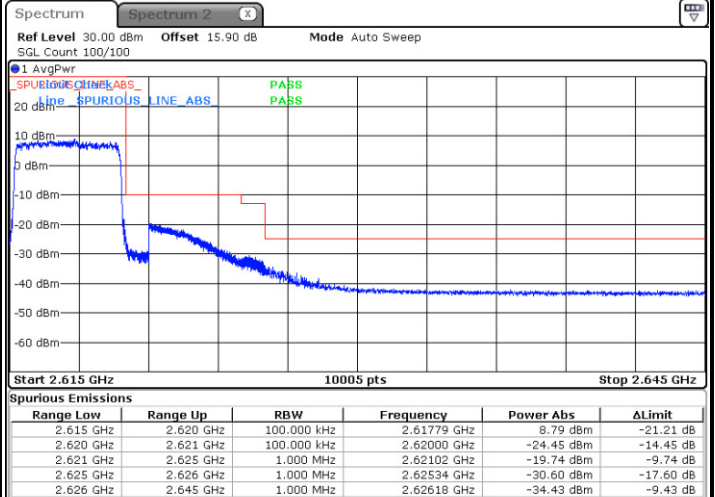
Date: 27.JAN.2018 00:37:54

Lowest Band Edge / Full RB



Date: 27.JAN.2018 00:33:17

Highest Band Edge / Full RB



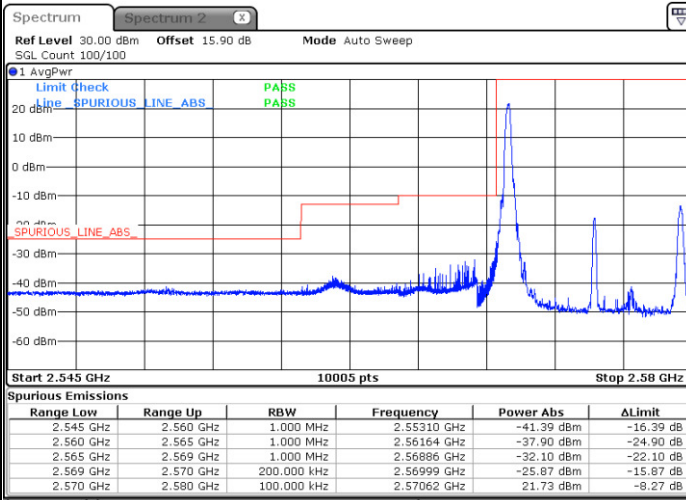
Date: 27.JAN.2018 00:35:36



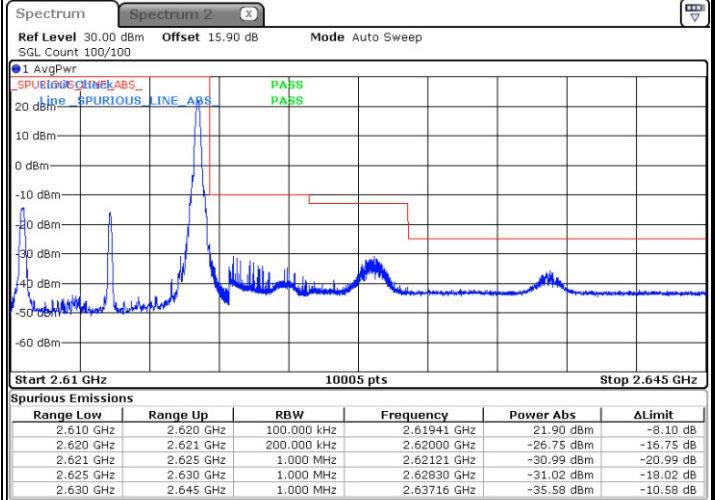
LTE Band 38 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



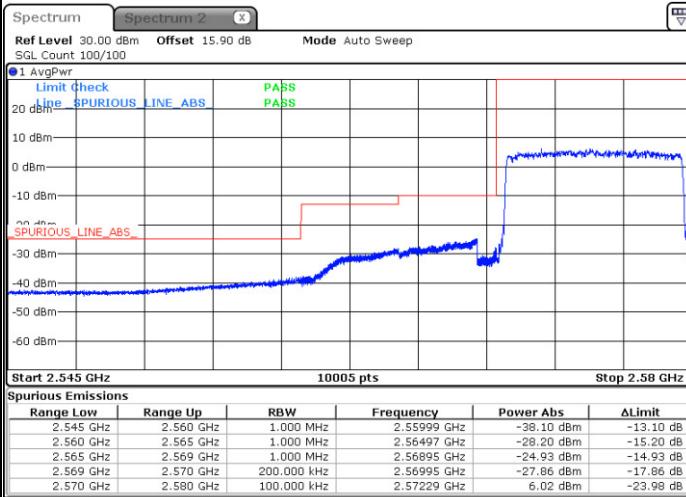
Date: 27.JAN.2018 00:39:04



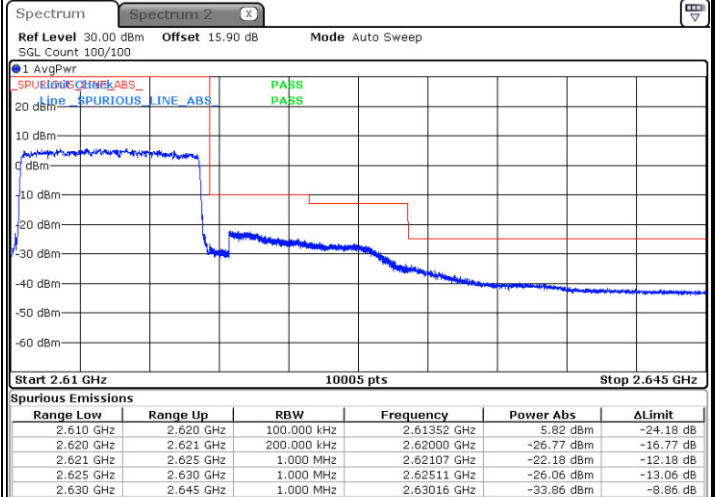
Date: 27.JAN.2018 00:45:59

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 27.JAN.2018 00:41:22

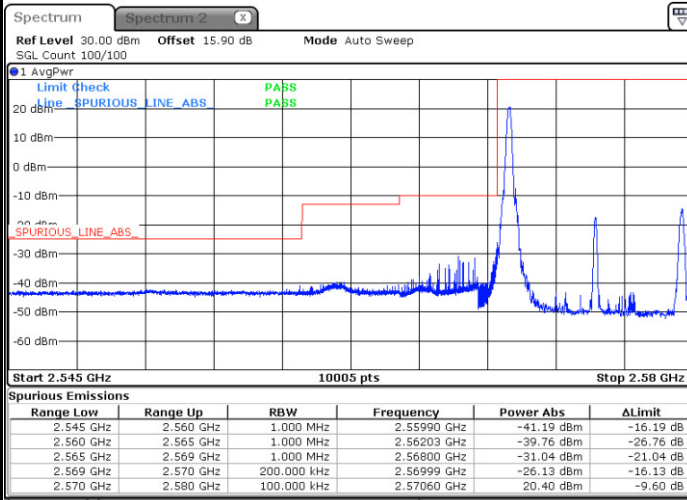


Date: 27.JAN.2018 00:43:41



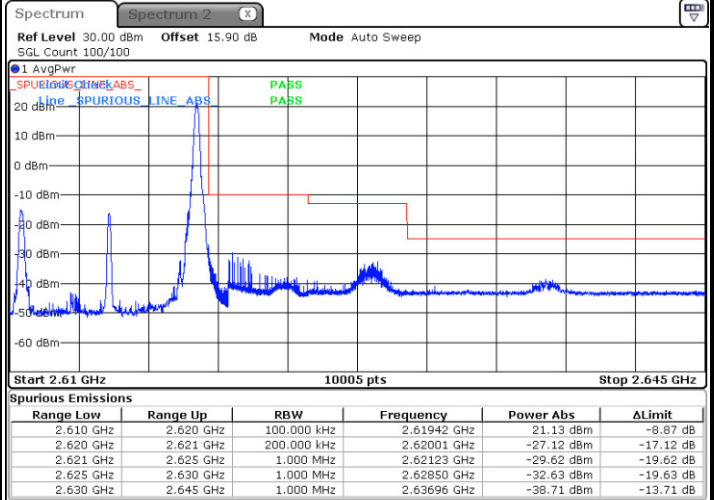
LTE Band 38 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



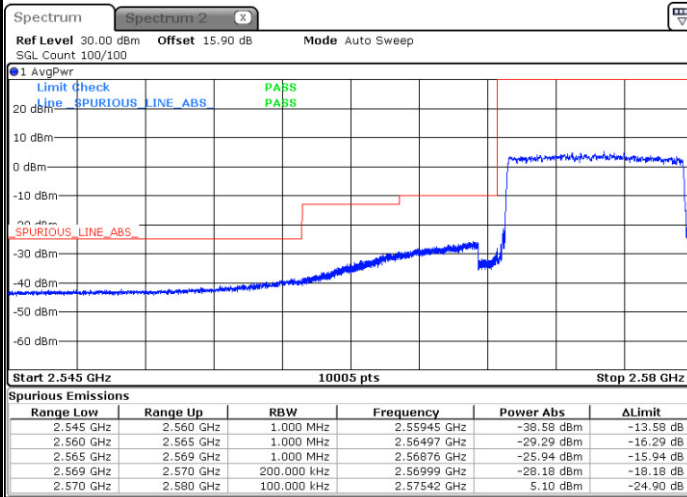
Date: 27.JAN.2018 00:40:13

Highest Band Edge / 1 RB



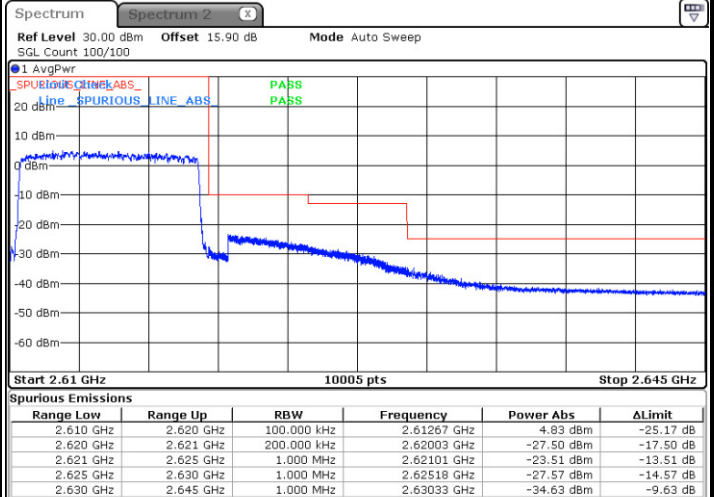
Date: 27.JAN.2018 00:47:09

Lowest Band Edge / Full RB



Date: 27.JAN.2018 00:42:32

Highest Band Edge / Full RB

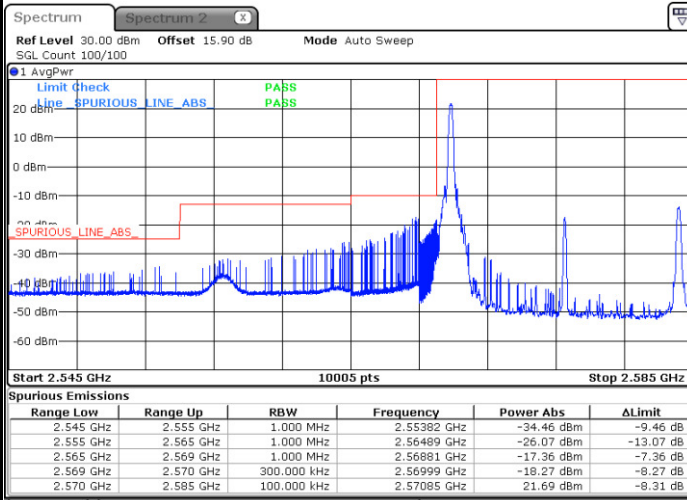


Date: 27.JAN.2018 00:44:50



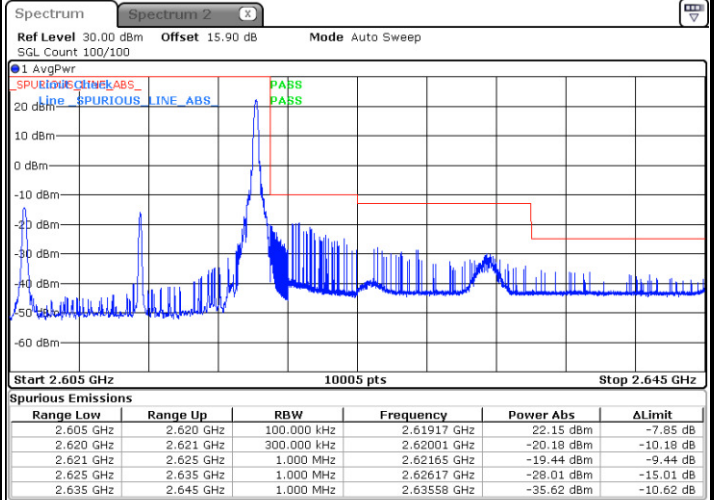
LTE Band 38 / 15MHz / QPSK

Lowest Band Edge / 1 RB



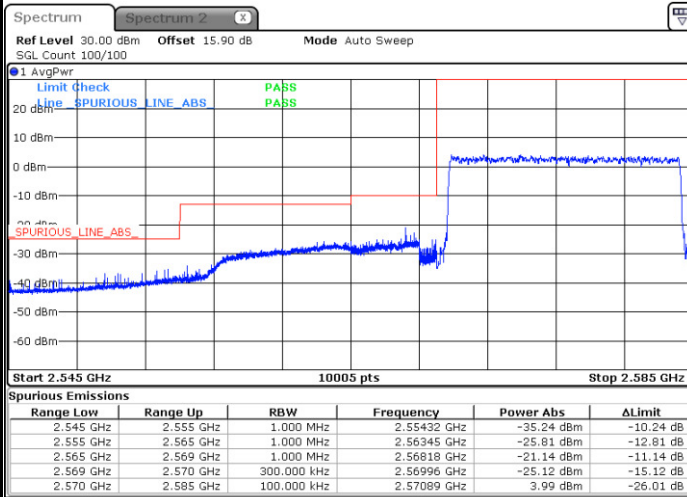
Date: 27.JAN.2018 00:48:18

Highest Band Edge / 1 RB



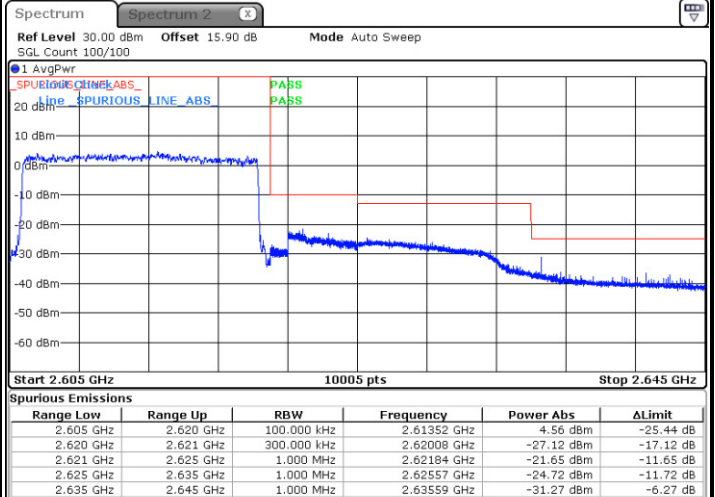
Date: 27.JAN.2018 00:55:14

Lowest Band Edge / Full RB



Date: 27.JAN.2018 00:50:37

Highest Band Edge / Full RB

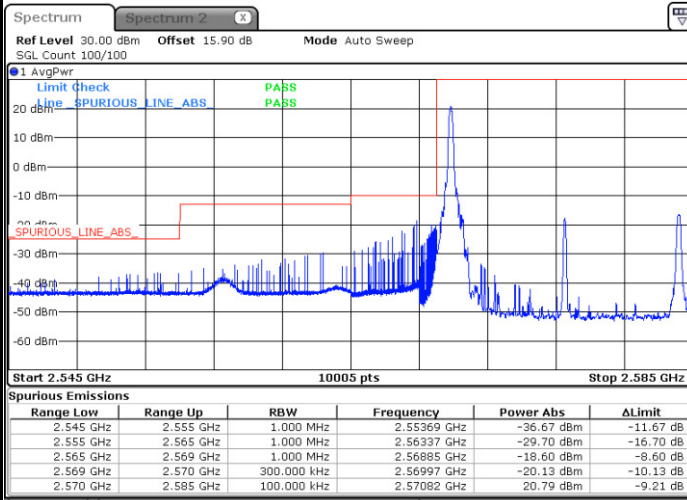


Date: 27.JAN.2018 00:52:56



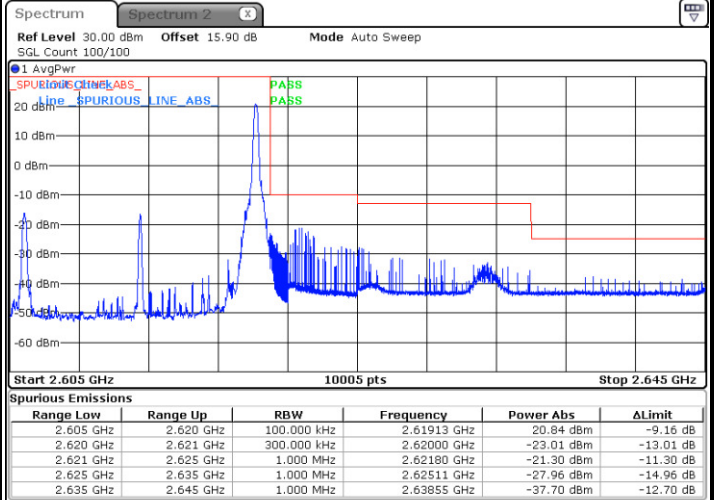
LTE Band 38 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



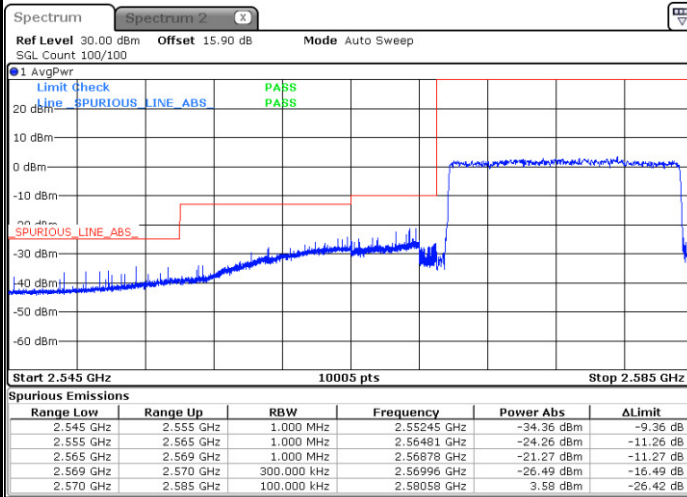
Date: 27.JAN.2018 00:49:28

Highest Band Edge / 1 RB



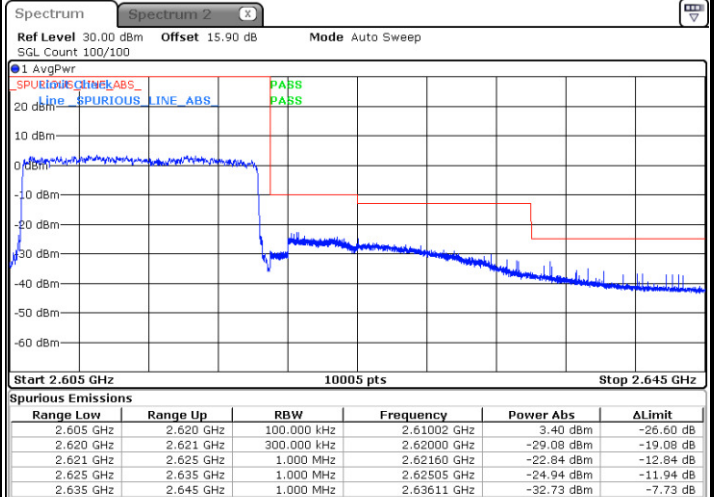
Date: 27.JAN.2018 00:56:23

Lowest Band Edge / Full RB



Date: 27.JAN.2018 00:51:46

Highest Band Edge / Full RB

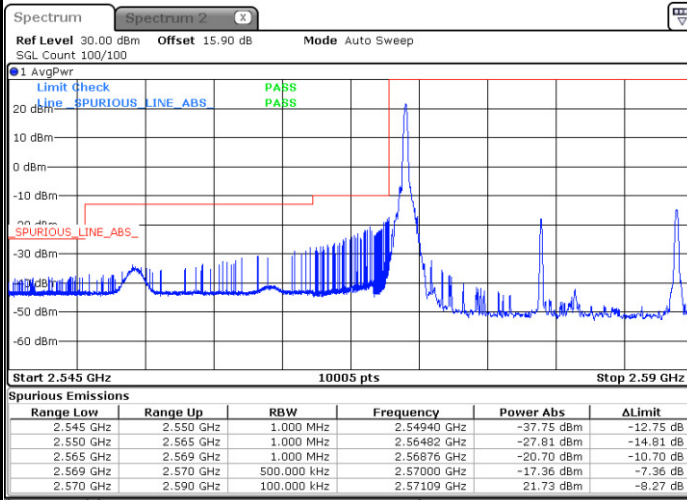


Date: 27.JAN.2018 00:54:05



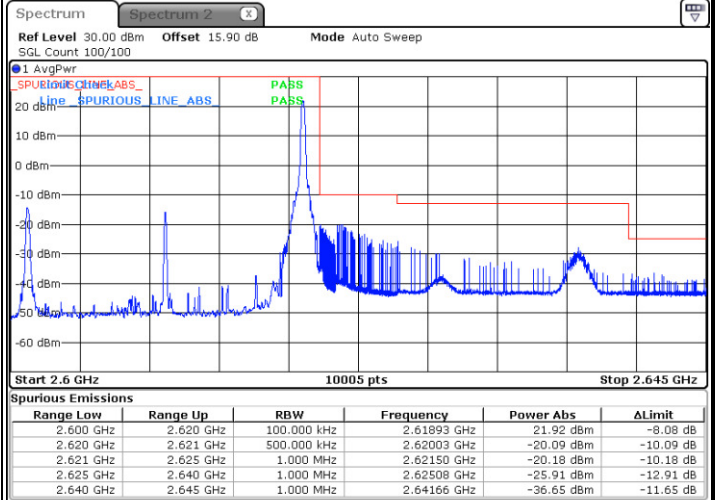
LTE Band 38 / 20MHz / QPSK

Lowest Band Edge / 1 RB



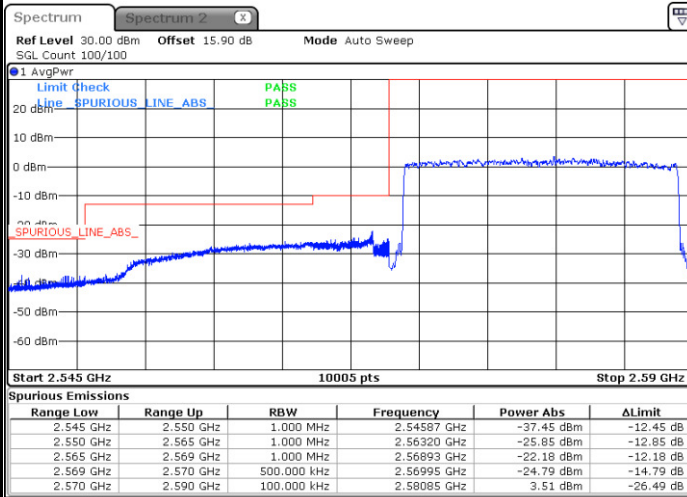
Date: 27.JAN.2018 00:57:33

Highest Band Edge / 1 RB



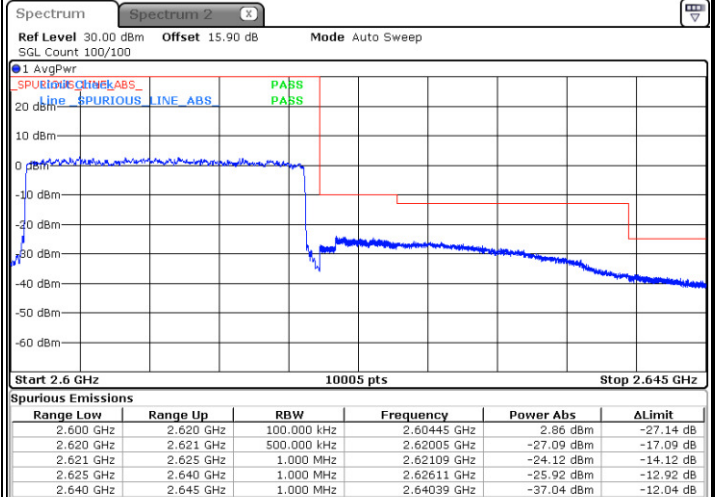
Date: 27.JAN.2018 01:04:29

Lowest Band Edge / Full RB



Date: 27.JAN.2018 00:59:51

Highest Band Edge / Full RB

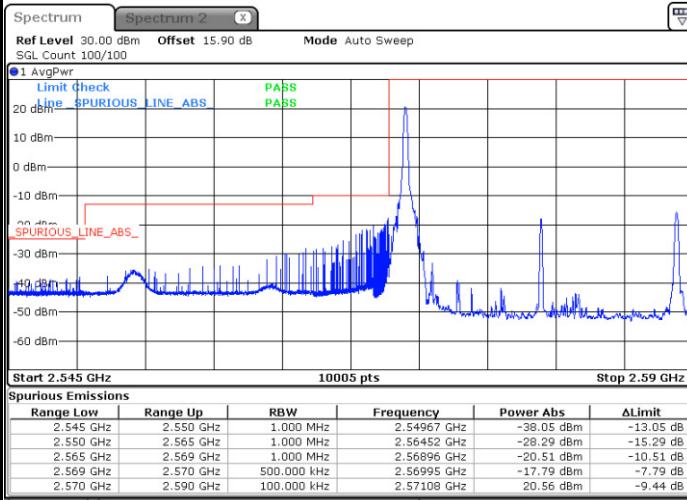


Date: 27.JAN.2018 01:02:10



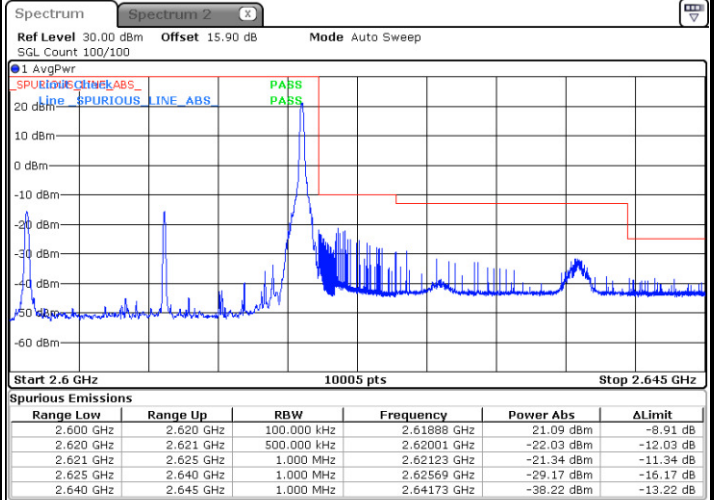
LTE Band 38 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



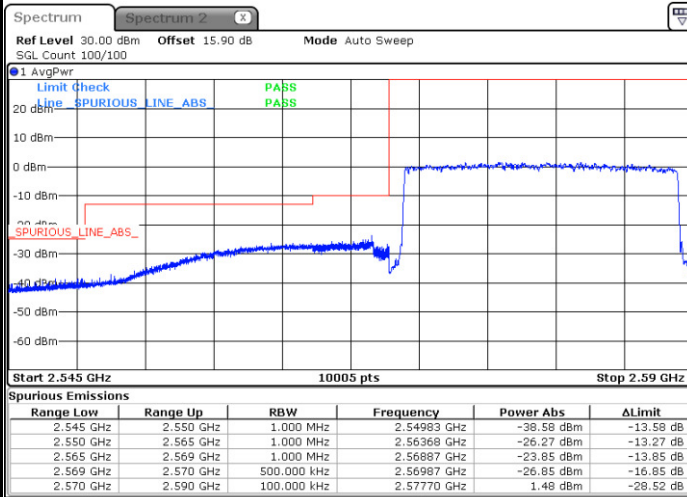
Date: 27.JAN.2018 00:58:42

Highest Band Edge / 1 RB



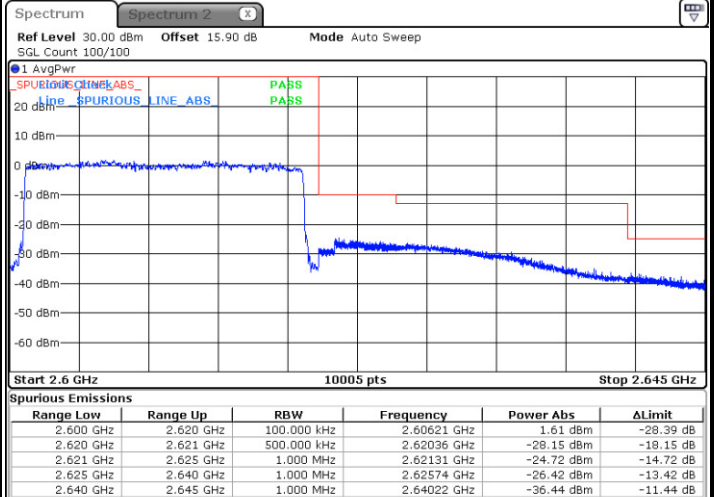
Date: 27.JAN.2018 01:05:38

Lowest Band Edge / Full RB



Date: 27.JAN.2018 01:01:01

Highest Band Edge / Full RB



Date: 27.JAN.2018 01:03:19



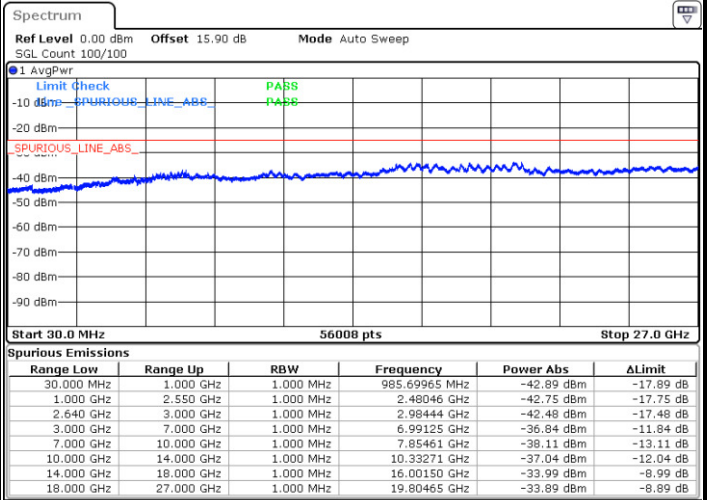
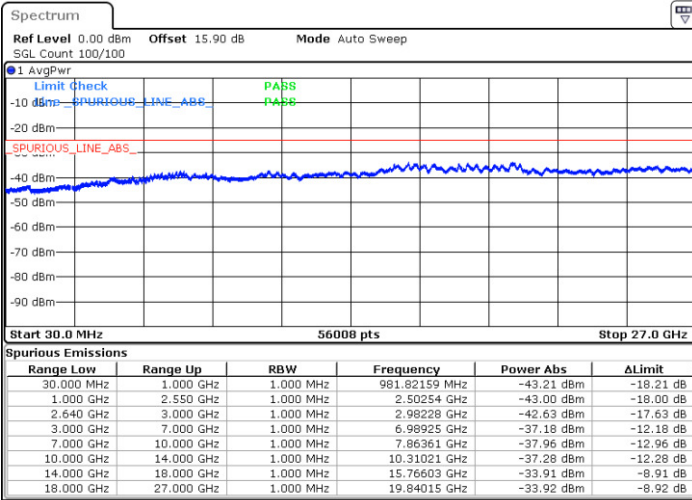
Conducted Spurious Emission



LTE Band 38 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

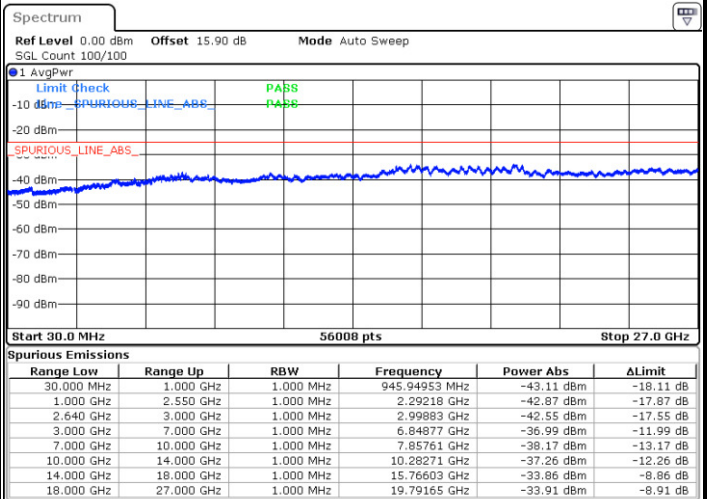
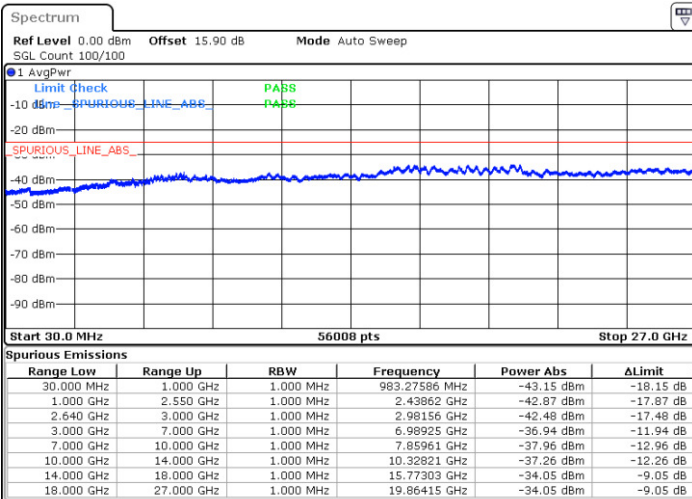


Date: 7.JAN 2018 11:11:35

Date: 7.JAN 2018 11:12:30

Middle Channel / QPSK

Middle Channel / 16QAM



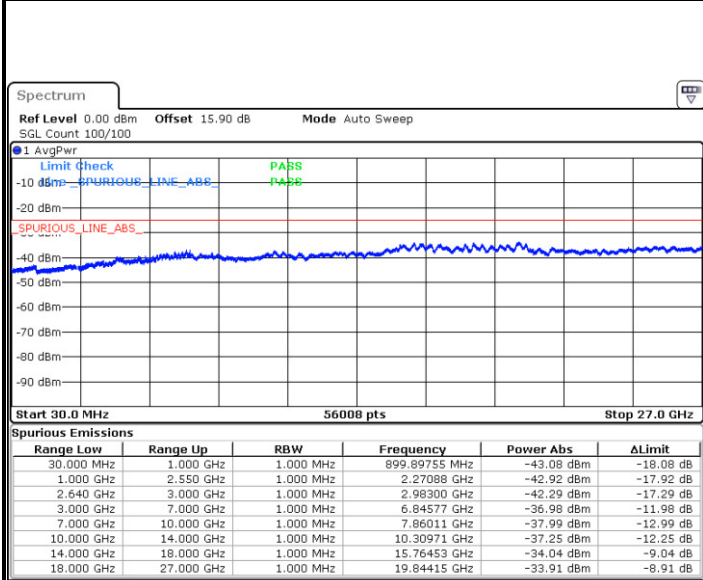
Date: 7.JAN 2018 11:13:24

Date: 7.JAN 2018 11:14:18



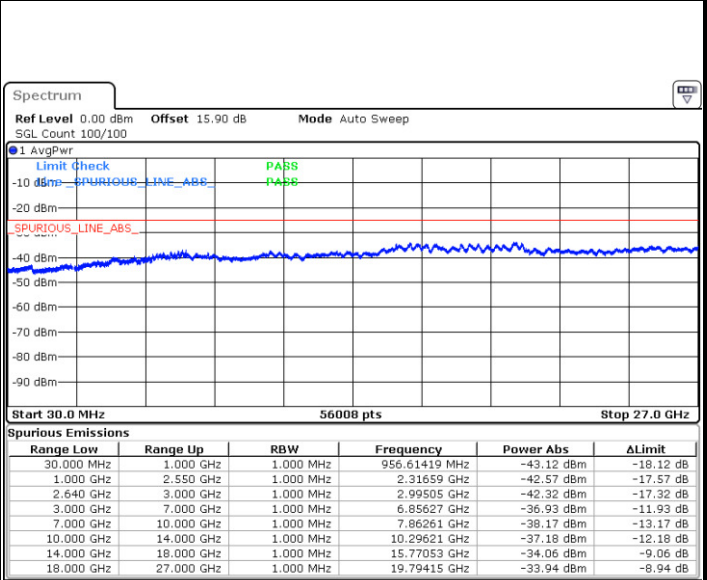
LTE Band 38 / 5MHz

Highest Channel / QPSK



Date: 7.JAN 2018 11:15:12

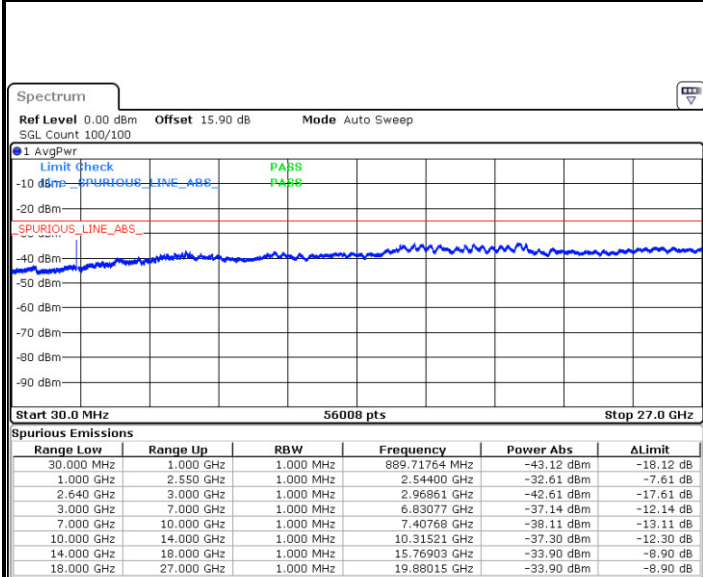
Highest Channel / 16QAM



Date: 7.JAN 2018 11:16:07

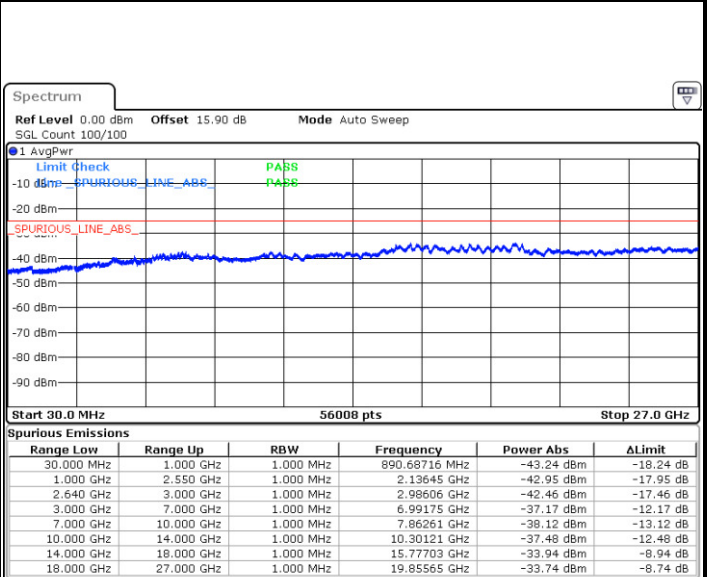
LTE Band 38 / 10MHz

Lowest Channel / QPSK



Date: 7.JAN 2018 11:17:01

Lowest Channel / 16QAM



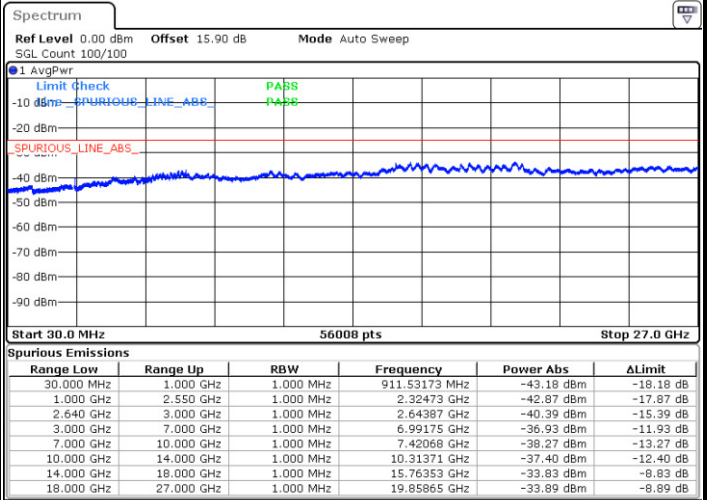
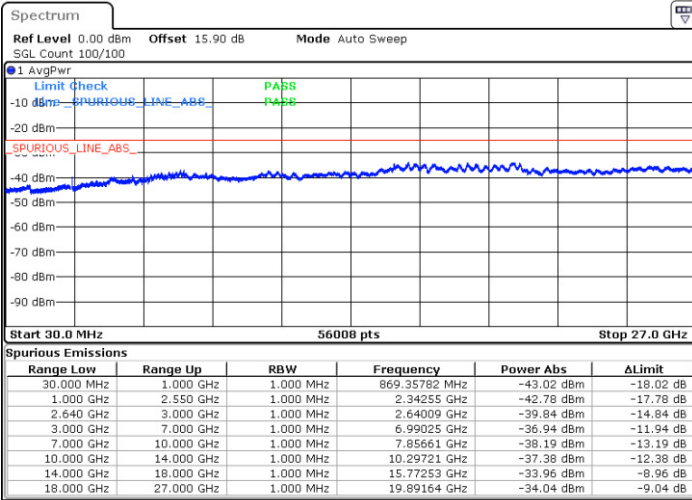
Date: 7.JAN 2018 11:17:55



LTE Band 38 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

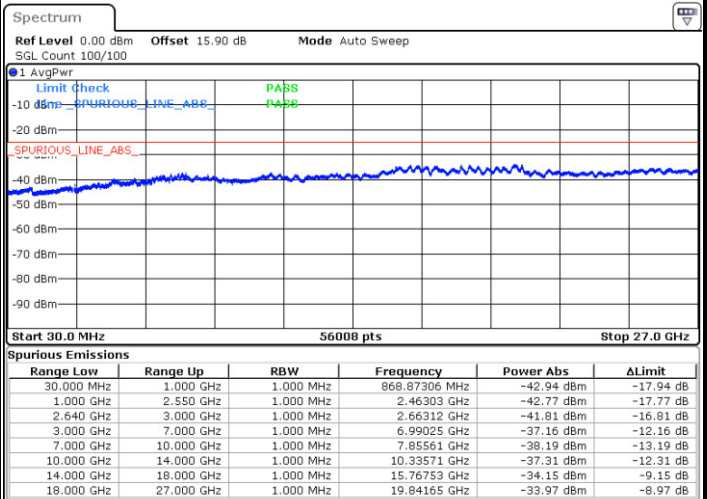
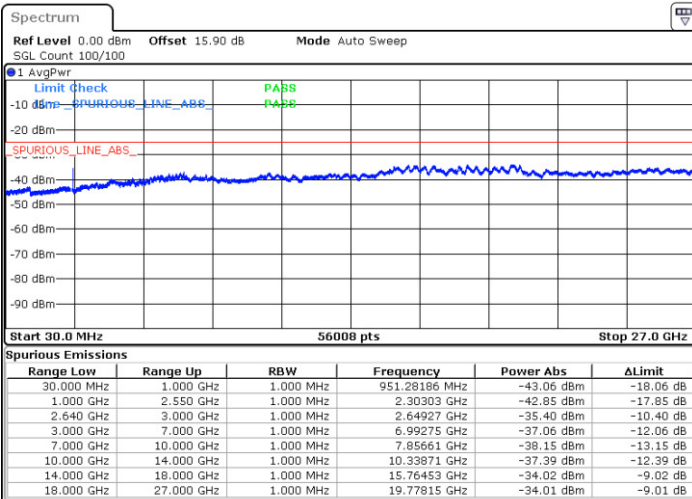


Date: 7.JAN 2018 11:18:49

Date: 7.JAN 2018 11:19:43

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 7.JAN 2018 11:20:37

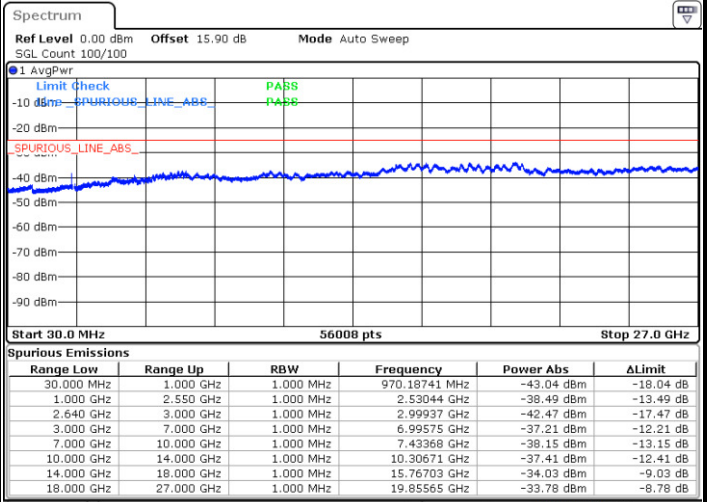
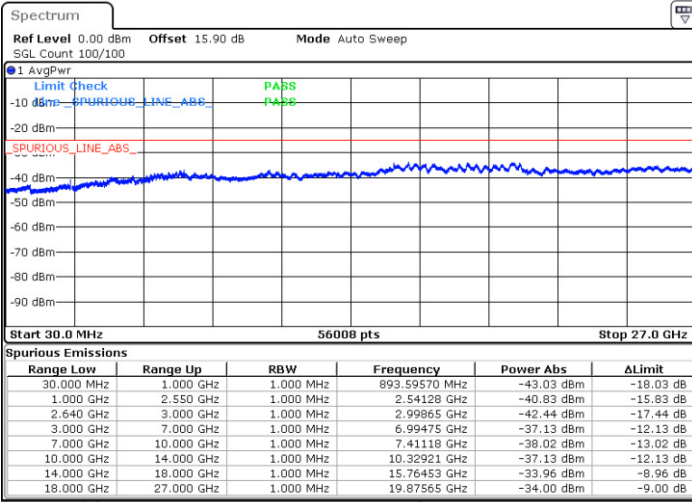
Date: 7.JAN 2018 11:21:32



LTE Band 38 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

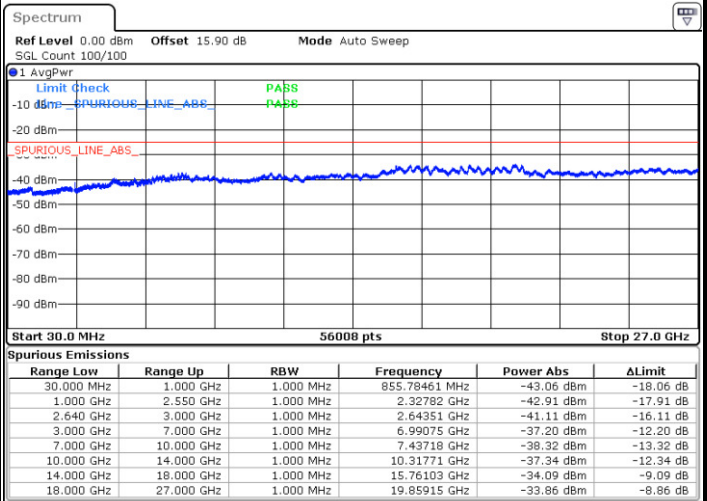
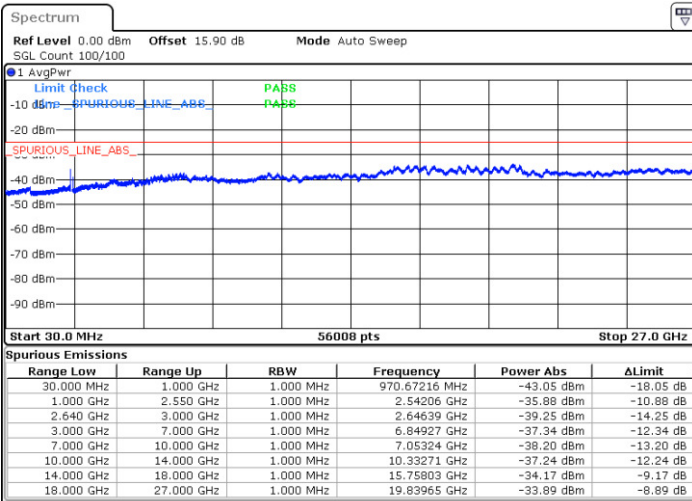


Date: 7. JAN 2018 11:22:26

Date: 7. JAN 2018 11:23:20

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 7. JAN 2018 11:24:14

Date: 7. JAN 2018 11:25:08