



LTE Band 12 Maximum Average Power [dBm]									
BW [MHz]	Mod	RB Size	RB Offset	Index			Lowest	Middle	Highest
				L	M	H			
10	QPSK	1	0	0	0	7	22.51	22.86	22.58
10		1	5	0	0	7	22.49	22.85	22.56
10		6	0	0	0	7	21.56	21.42	21.63
10	16-QAM	1	0	0	0	7	23.10	22.65	23.25
10		1	5	0	0	7	23.09	22.62	23.23
10		6	0	0	0	7	21.37	21.55	22.30
5	QPSK	1	0	0	0	3	22.63	22.89	22.73
5		1	5	0	0	3	22.39	22.61	22.95
5		6	0	0	0	3	21.38	21.45	21.56
5	16-QAM	1	0	0	0	3	22.91	22.35	22.39
5		1	5	0	0	3	22.97	22.43	22.55
5		6	0	0	0	3	21.88	21.55	21.26
3	QPSK	1	0	0	0	1	22.09	22.59	22.36
3		1	5	0	0	1	22.12	22.64	22.39
3		6	0	0	0	1	20.39	20.52	20.61
3	16-QAM	1	0	0	0	1	21.64	21.15	21.76
3		1	5	0	0	1	21.62	21.13	21.75
3		6	0	0	0	1	20.29	19.56	20.07
1.4	QPSK	1	0	0	0	0	22.03	22.46	22.55
1.4		1	5	0	0	0	22.04	22.41	22.56
1.4		6	0	0	0	0	20.31	20.41	20.49
1.4	16-QAM	1	0	0	0	0	21.89	20.98	21.05
1.4		1	5	0	0	0	21.86	21.08	21.15
1.4		6	0	0	0	0	20.26	20.96	19.99



LTE Band 13 Maximum Average Power [dBm]									
BW [MHz]	Mod	RB Size	RB Offset	Index			Lowest	Middle	Highest
				L	M	H			
10	QPSK	1	0	0	0	7	-	22.80	-
10		1	5	0	0	7	-	22.71	-
10		6	0	0	0	7	-	21.84	-
10	16-QAM	1	0	0	0	7	-	23.31	-
10		1	5	0	0	7	-	23.36	-
10		6	0	0	0	7	-	22.43	-
5	QPSK	1	0	0	0	3	23.54	22.88	23.21
5		1	5	0	0	3	23.45	22.67	22.99
5		6	0	0	0	3	22.43	21.77	21.83
5	16-QAM	1	0	0	0	3	22.84	22.47	22.79
5		1	5	0	0	3	22.83	22.48	22.83
5		6	0	0	0	3	21.87	21.83	21.42



LTE Band 26 Maximum Average Power [dBm]									
BW [MHz]	Mod	RB Size	RB Offset	Index			Lowest	Middle	Highest
				L	M	H			
15	QPSK	1	0	0	0	11	23.04	23.41	23.12
15		1	5	0	0	11	22.91	23.37	23.09
15		6	0	0	0	11	23.11	23.11	23.27
15	16-QAM	1	0	0	0	11	22.74	23.26	23.83
15		1	5	0	0	11	22.65	23.24	23.78
15		6	0	0	0	11	23.07	22.83	23.57
10	QPSK	1	0	0	0	7	23.22	22.99	23.06
10		1	5	0	0	7	23.25	23.04	23.08
10		6	0	0	0	7	22.16	22.15	22.18
10	16-QAM	1	0	0	0	7	23.28	23.71	23.79
10		1	5	0	0	7	23.35	23.72	23.81
10		6	0	0	0	7	22.22	21.97	22.32
5	QPSK	1	0	0	0	3	23.57	23.46	23.59
5		1	5	0	0	3	23.51	23.34	23.54
5		6	0	0	0	3	20.43	22.19	22.16
5	16-QAM	1	0	0	0	3	22.89	23.21	23.27
5		1	5	0	0	3	22.84	23.22	23.29
5		6	0	0	0	3	22.01	22.07	22.21
3	QPSK	1	0	0	0	1	23.34	23.54	22.98
3		1	5	0	0	1	23.35	23.58	22.97
3		6	0	0	0	1	21.22	21.39	21.34
3	16-QAM	1	0	0	0	1	21.59	21.76	22.43
3		1	5	0	0	1	21.74	21.83	22.47
3		6	0	0	0	1	20.07	20.13	20.07
1.4	QPSK	1	0	0	0	0	23.01	23.35	23.35
1.4		1	5	0	0	0	22.89	23.37	23.36
1.4		6	0	0	0	0	21.09	21.35	21.25
1.4	16-QAM	1	0	0	0	0	22.14	21.75	21.67
1.4		1	5	0	0	0	22.13	21.86	21.82
1.4		6	0	0	0	0	19.83	20.43	20.18



LTE M1 Band 2

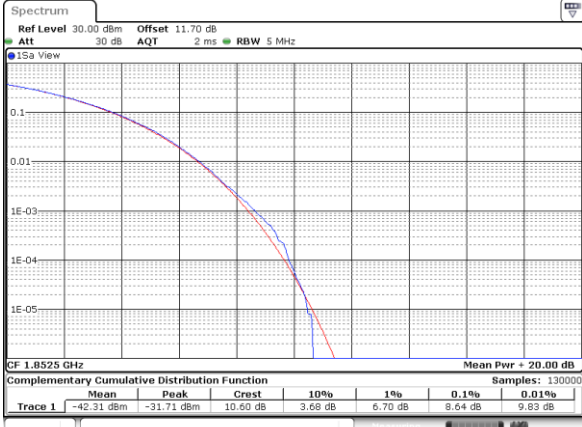
Peak-to-Average Ratio

Mode	LTE M1 Band 2 / 5MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	8.64	8.32	8.43	8.29	PASS
Middle CH	8.52	8.35	8.32	8.38	
Highest CH	8.61	8.46	8.58	8.35	



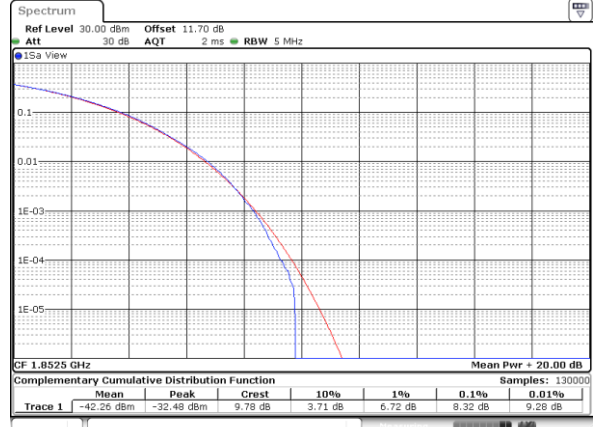
LTE M1 Band 2 / 5MHz / QPSK

Lowest Channel / 1RB



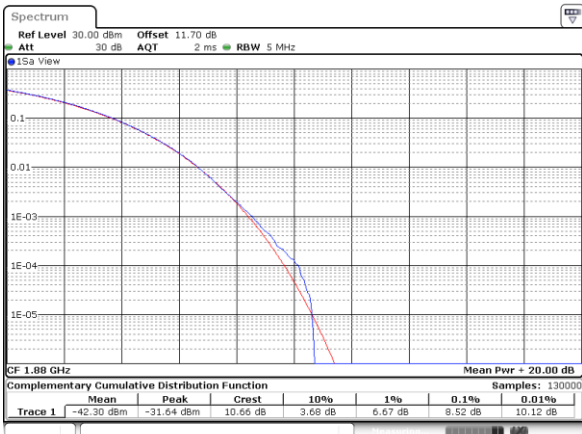
Date: 26 DEC 2017 16:34:05

Lowest Channel / Full RB



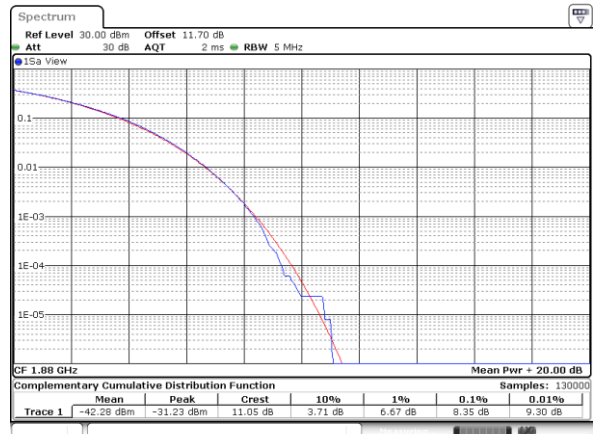
Date: 26 DEC 2017 16:35:30

Middle Channel / 1RB



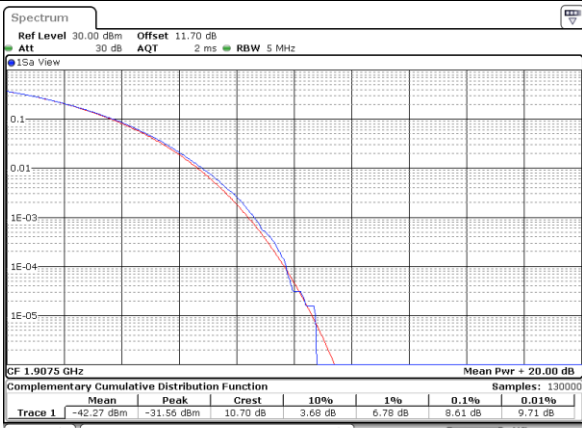
Date: 26 DEC 2017 16:37:02

Middle Channel / Full RB



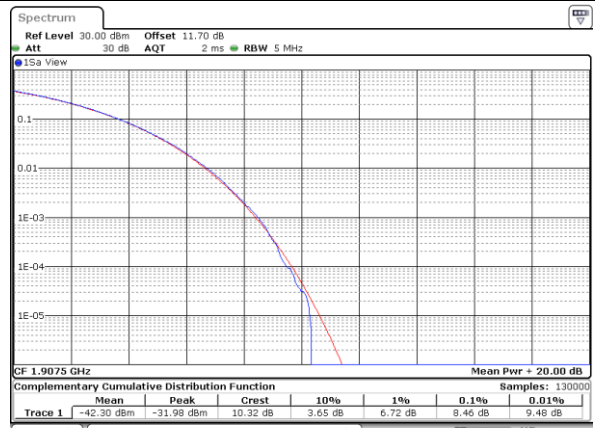
Date: 26 DEC 2017 16:36:03

Highest Channel / 1RB



Date: 26 DEC 2017 16:37:57

Highest Channel / Full RB

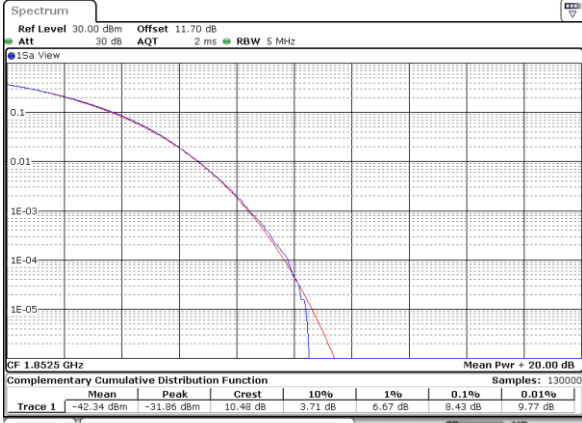


Date: 26 DEC 2017 16:42:03



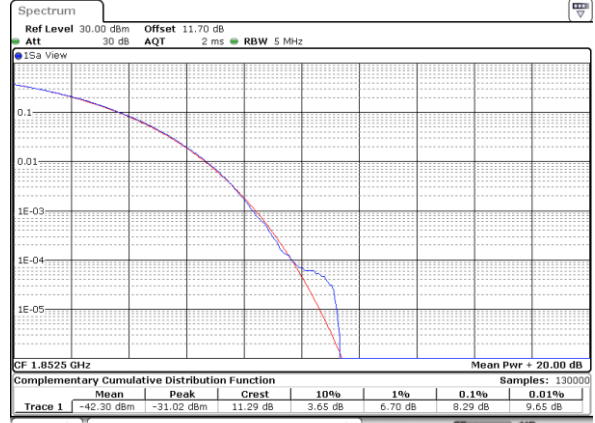
LTE M1 Band 2 / 5MHz / 16QAM

Lowest Channel / 1RB



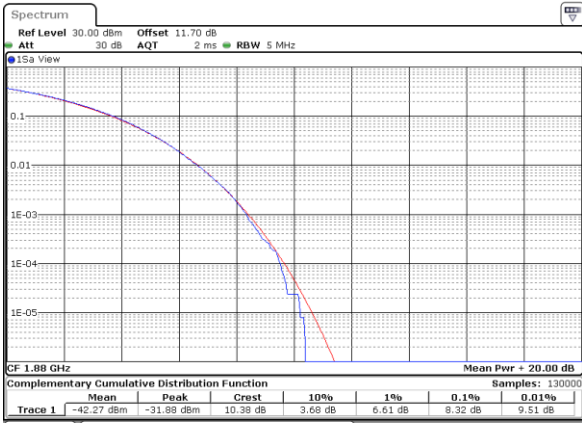
Date: 26 DEC 2017 16:34:46

Lowest Channel / Full RB



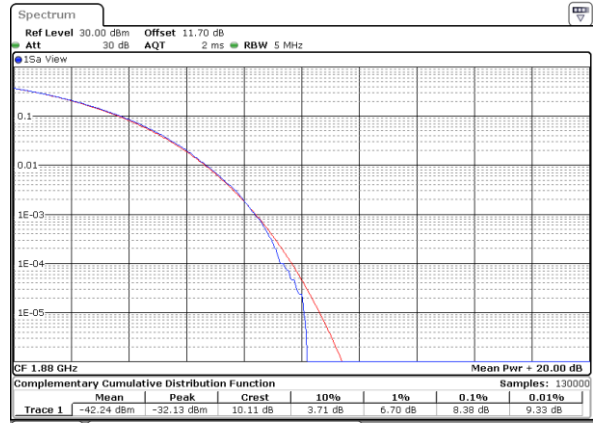
Date: 26 DEC 2017 16:35:11

Middle Channel / 1RB



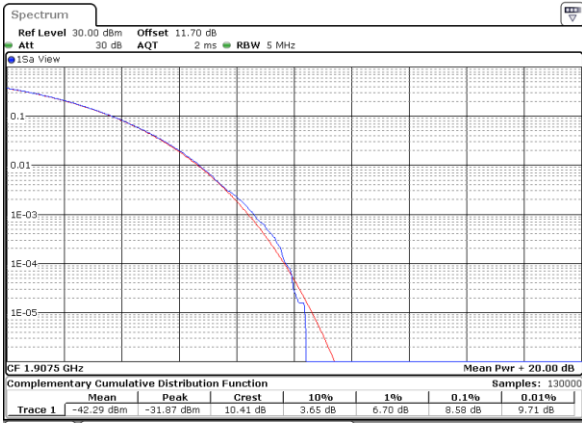
Date: 26 DEC 2017 16:36:50

Middle Channel / Full RB



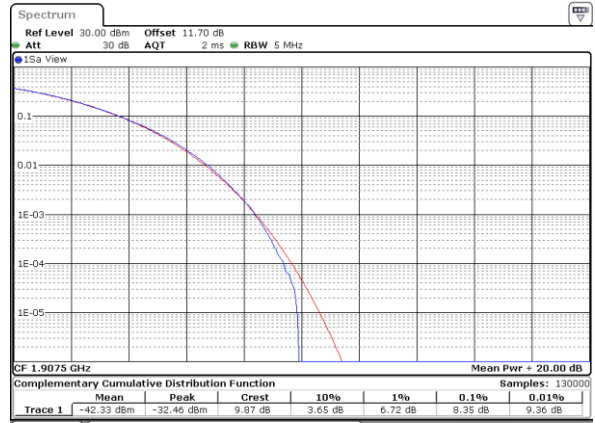
Date: 26 DEC 2017 16:36:28

Highest Channel / 1RB



Date: 26 DEC 2017 16:38:39

Highest Channel / Full RB



Date: 26 DEC 2017 16:41:45



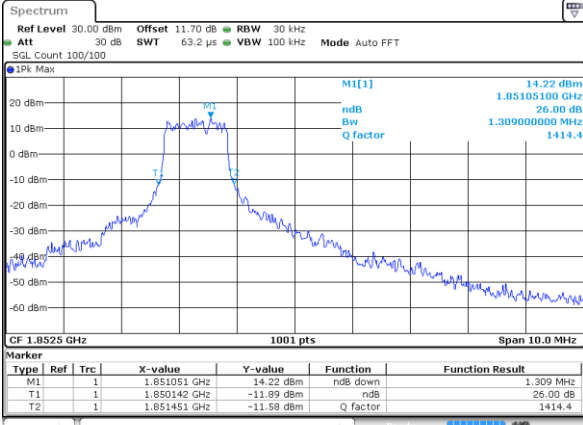
26dB Bandwidth

Mode BW Mod.	LTE M1 Band 2 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	1.31	1.33	-	-	-	-	-	-
Middle CH	-	-	-	-	1.30	1.30	-	-	-	-	-	-
Highest CH	-	-	-	-	1.31	1.37	-	-	-	-	-	-



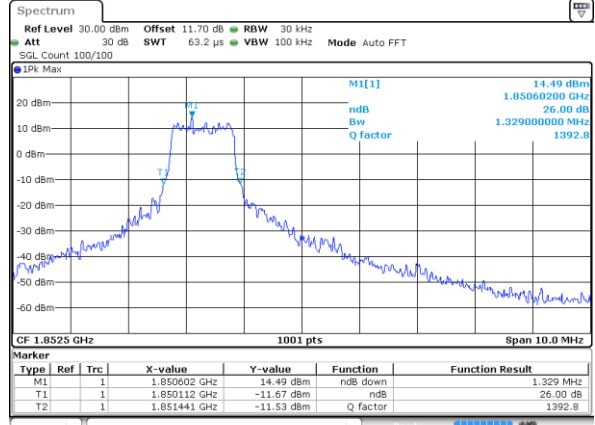
LTE M1 Band 2

Lowest Channel / 5MHz / QPSK



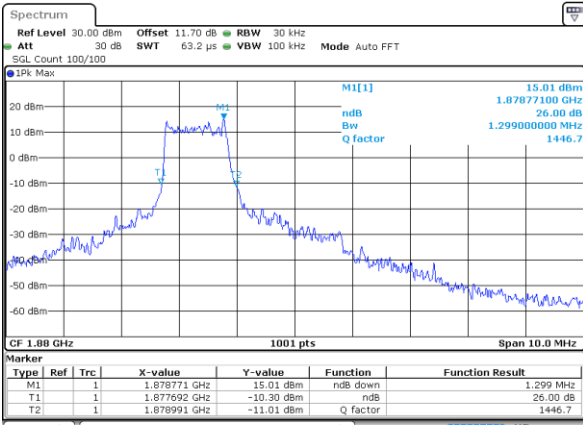
Date: 26 DEC 2017 15:25:03

Lowest Channel / 5MHz / 16QAM



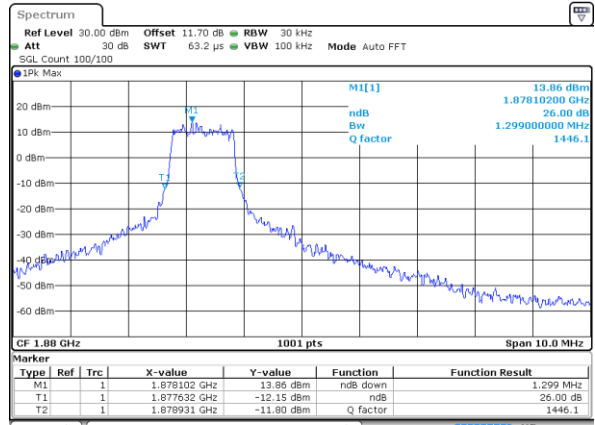
Date: 26 DEC 2017 15:27:14

Middle Channel / 5MHz / QPSK



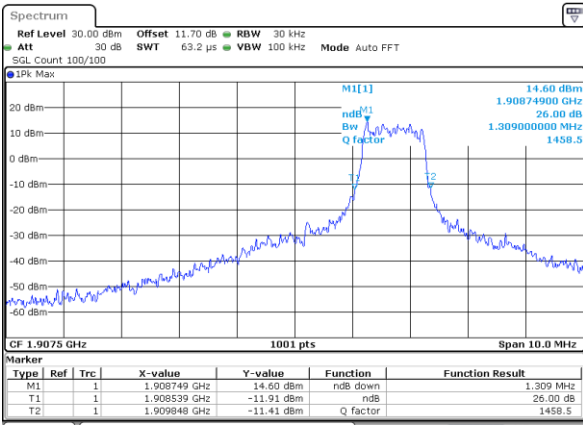
Date: 26 DEC 2017 15:30:13

Middle Channel / 5MHz / 16QAM



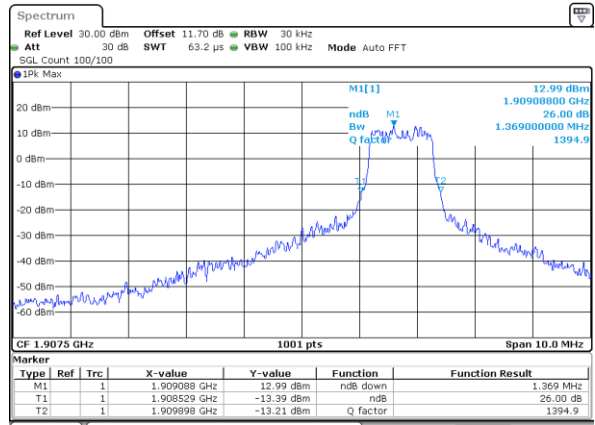
Date: 26 DEC 2017 15:29:29

Highest Channel / 5MHz / QPSK



Date: 26 DEC 2017 15:32:27

Highest Channel / 5MHz / 16QAM



Date: 26 DEC 2017 15:33:31



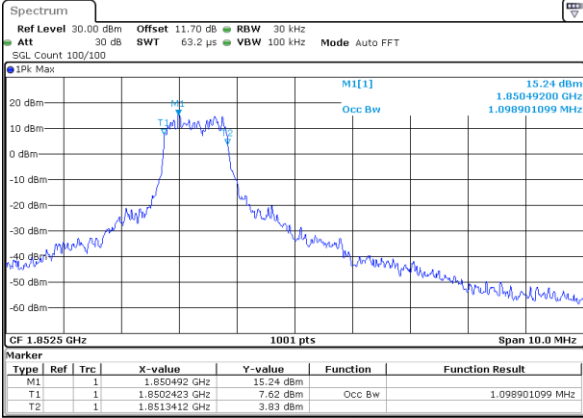
Occupied Bandwidth

Mode BW Mod.	LTE M1 Band 2 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	-	-	-	1.1	1.12	-	-	-	-	-	-
Middle CH	-	-	-	-	1.08	1.09	-	-	-	-	-	-
Highest CH	-	-	-	-	1.11	1.09	-	-	-	-	-	-



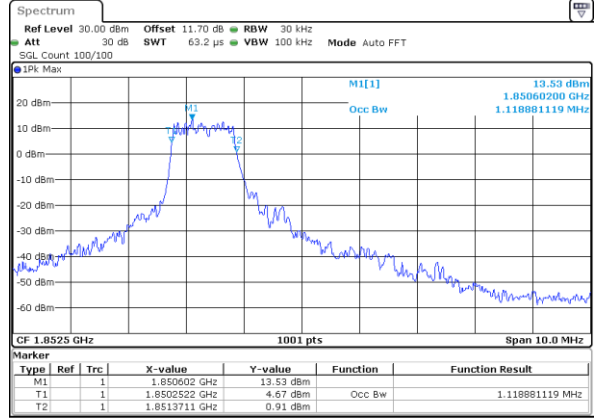
LTE M1 Band 2

Lowest Channel / 5MHz / QPSK



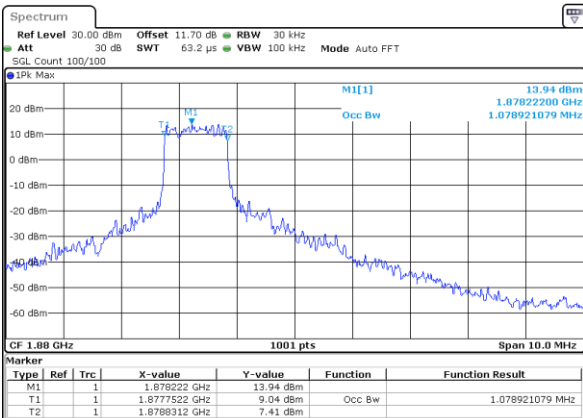
Date: 26 DEC 2017 15:24:48

Lowest Channel / 5MHz / 16QAM



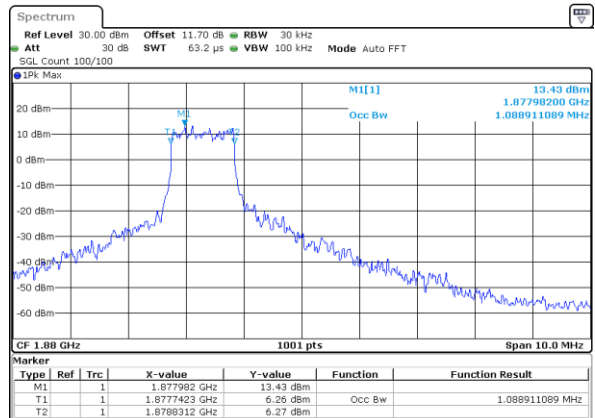
Date: 26 DEC 2017 15:26:57

Middle Channel / 5MHz / QPSK



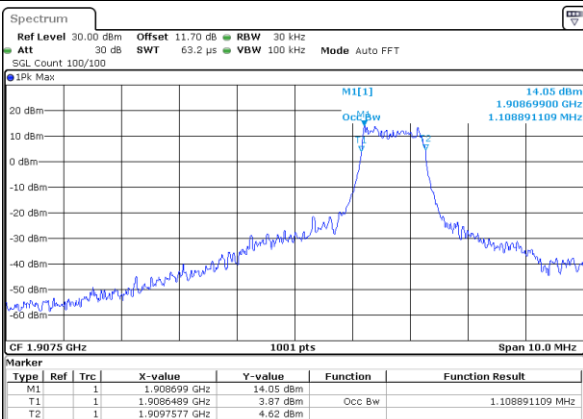
Date: 26 DEC 2017 15:30:04

Middle Channel / 5MHz / 16QAM



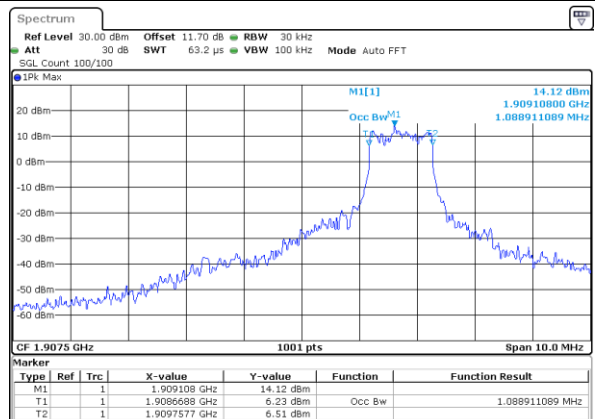
Date: 26 DEC 2017 15:29:13

Highest Channel / 5MHz / QPSK



Date: 26 DEC 2017 15:32:18

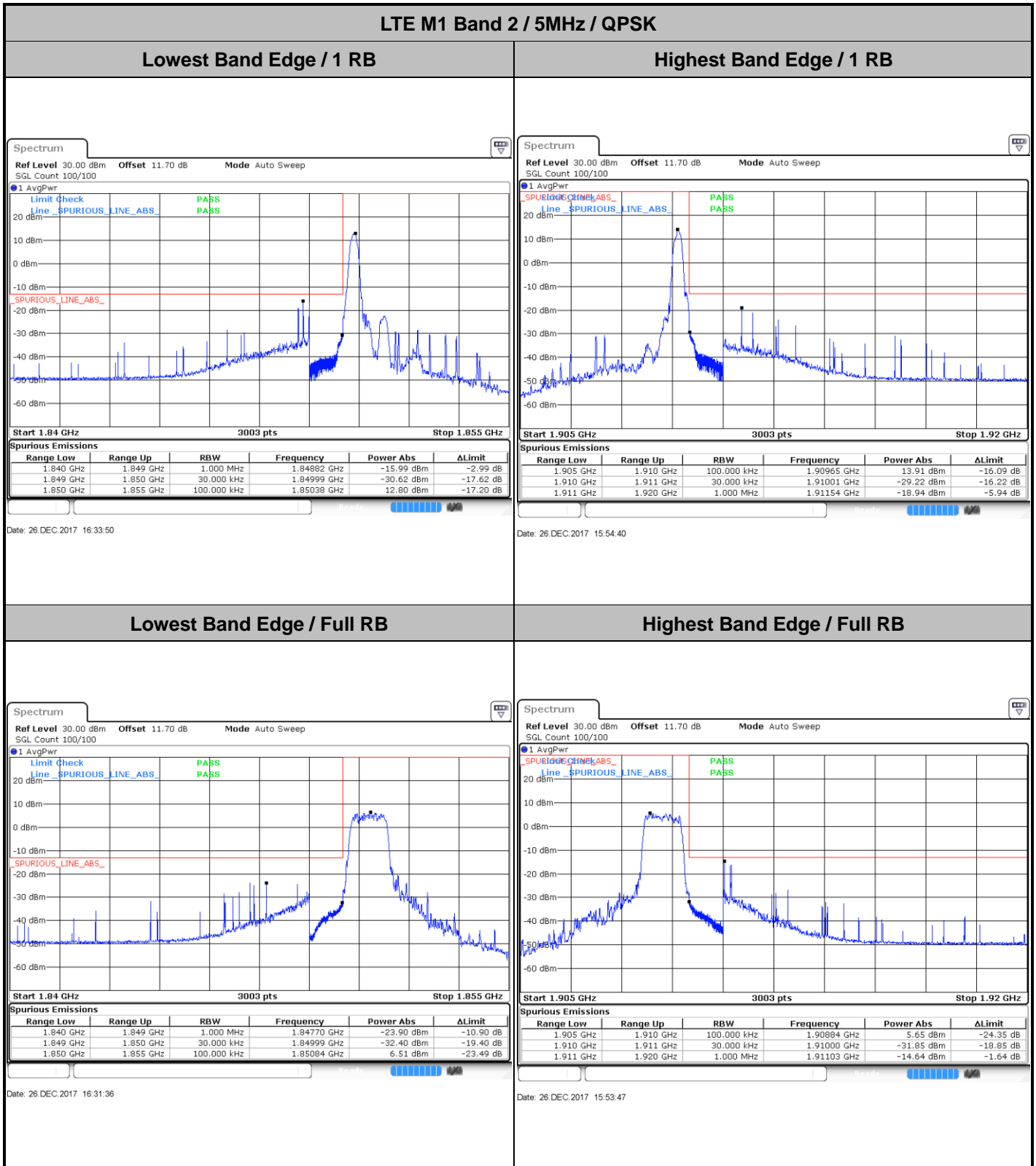
Highest Channel / 5MHz / 16QAM



Date: 26 DEC 2017 15:33:01



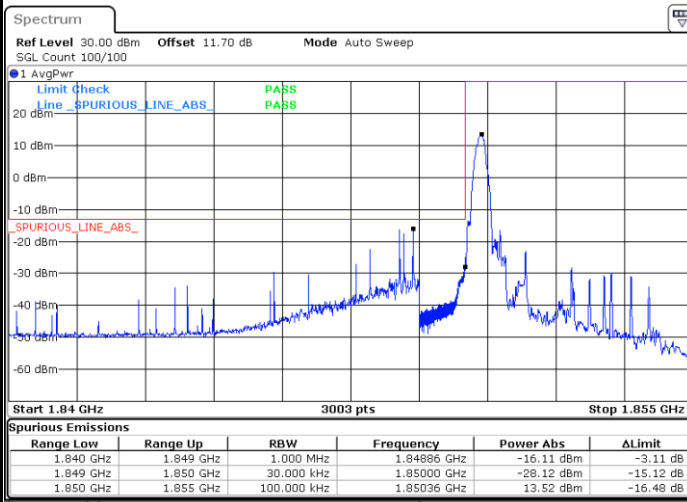
Conducted Band Edge





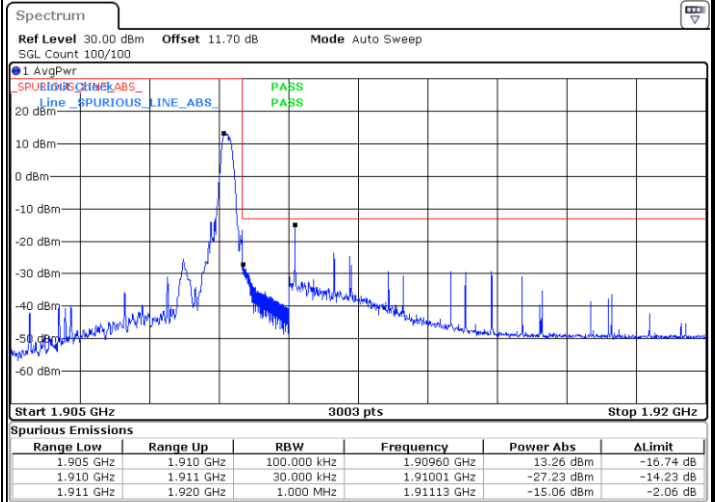
LTE M1 Band 2 / 5MHz / 16QAM

Lowest Band Edge / 1RB



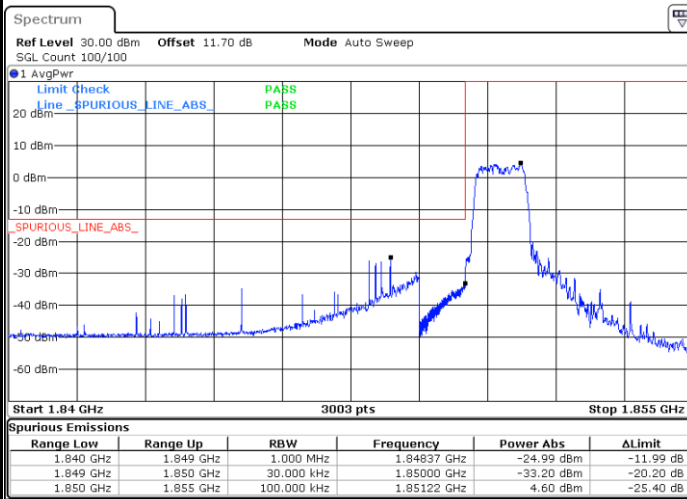
Date: 26 DEC 2017 16:33:04

Highest Band Edge / 1 RB



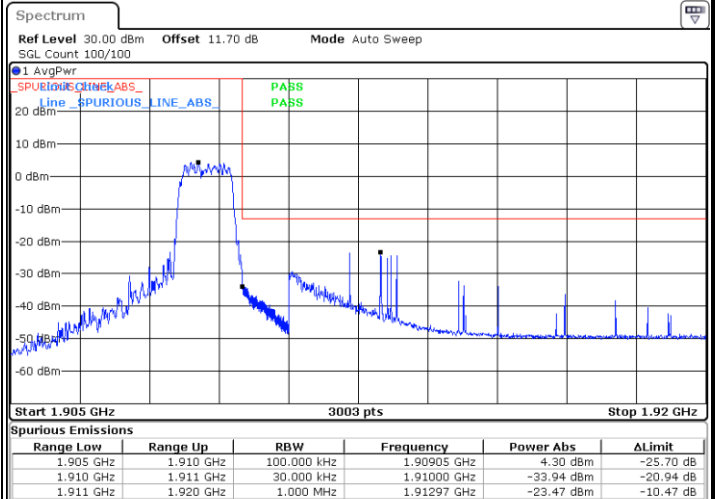
Date: 26 DEC 2017 15:56:38

Lowest Band Edge / Full RB



Date: 26 DEC 2017 16:32:23

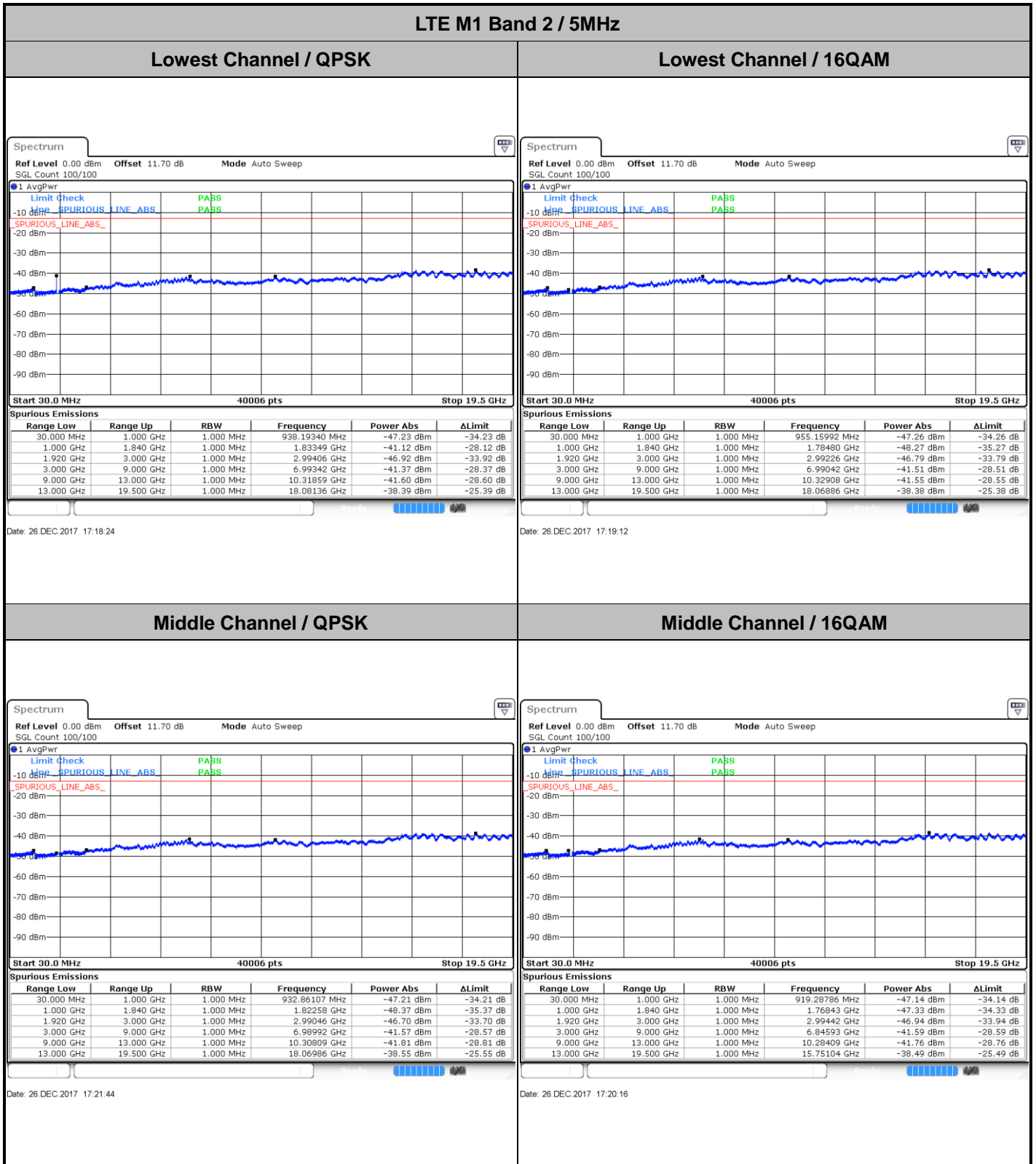
Highest Band Edge / Full RB

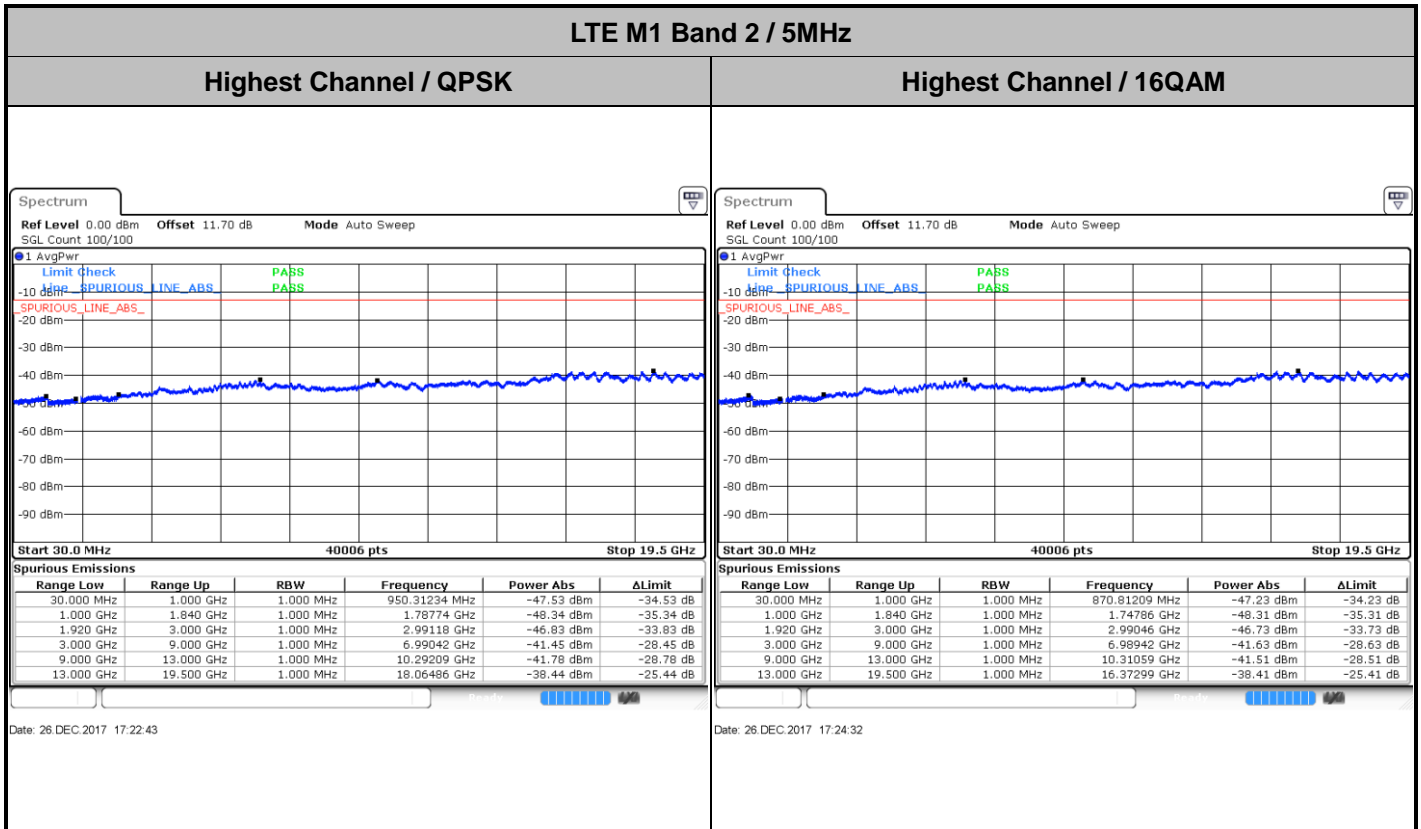


Date: 26 DEC 2017 15:52:47



Conducted Spurious Emission







Frequency Stability

Test Conditions		LTE M1 Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0007	PASS
40	Normal Voltage	0.0010	
30	Normal Voltage	0.0042	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0046	
0	Normal Voltage	0.0048	
-10	Normal Voltage	0.0040	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0047	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0039	

Note:

1. Normal Voltage =3.7 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE M1 Band 4

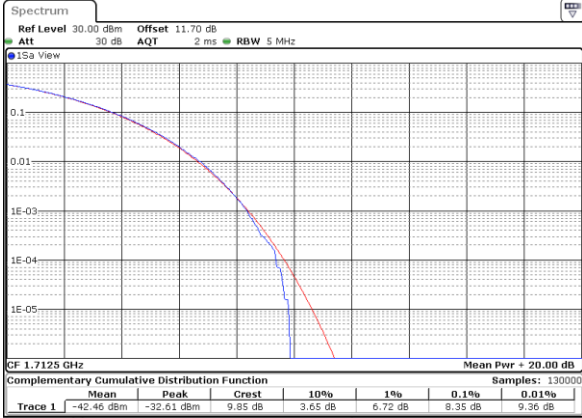
Peak-to-Average Ratio

Mode	LTE M1 Band 4 / 5MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	8.35	8.38	8.46	8.64	PASS
Middle CH	8.41	8.58	8.41	8.52	
Highest CH	8.32	8.46	8.43	8.41	



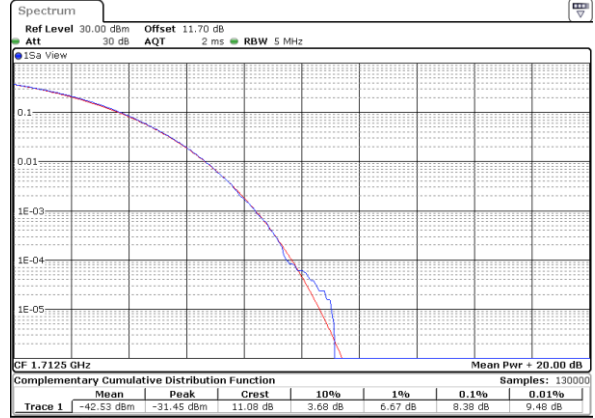
LTE M1 Band 4 / 5MHz / QPSK

Lowest Channel / 1RB



Date: 26 DEC 2017 16:48:47

Lowest Channel / Full RB



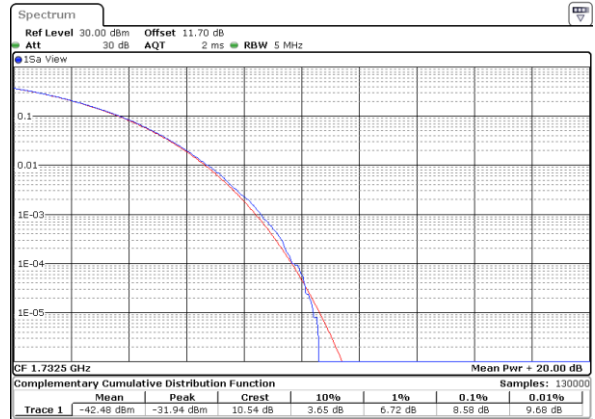
Date: 26 DEC 2017 16:43:46

Middle Channel / 1RB



Date: 26 DEC 2017 16:52:28

Middle Channel / Full RB



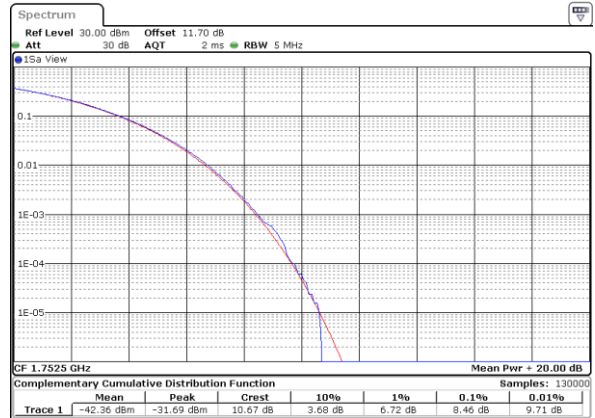
Date: 26 DEC 2017 16:51:44

Highest Channel / 1RB



Date: 26 DEC 2017 16:59:50

Highest Channel / Full RB

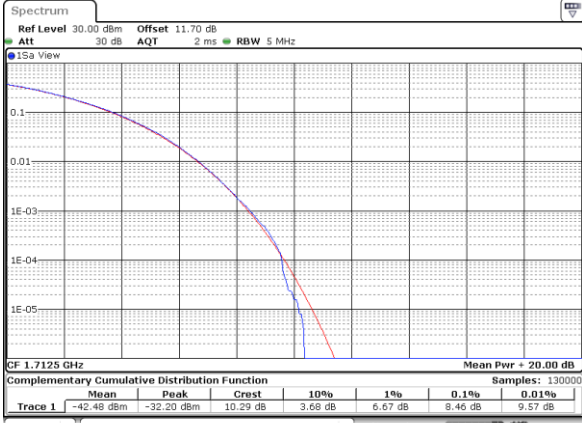


Date: 26 DEC 2017 17:00:13



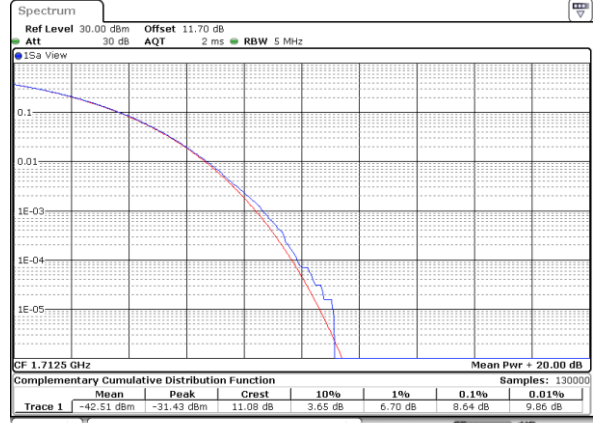
LTE M1 Band 4 / 5MHz / 16QAM

Lowest Channel / 1RB



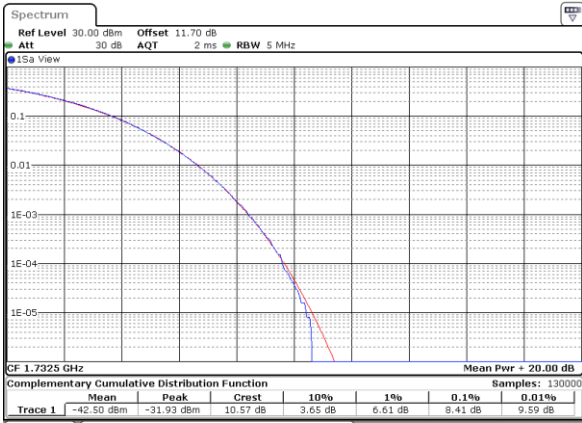
Date: 26 DEC.2017 16:47:12

Lowest Channel / Full RB



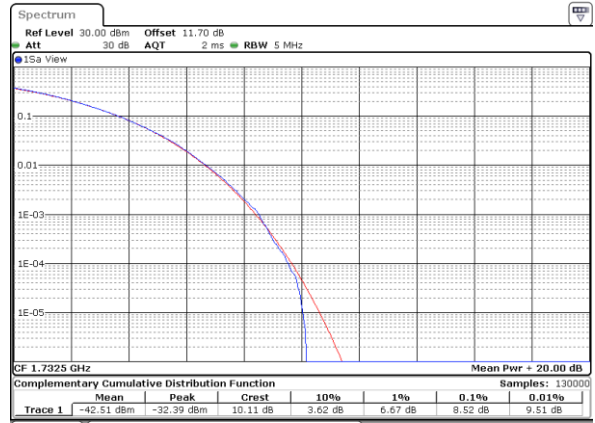
Date: 26 DEC.2017 16:50:28

Middle Channel / 1RB



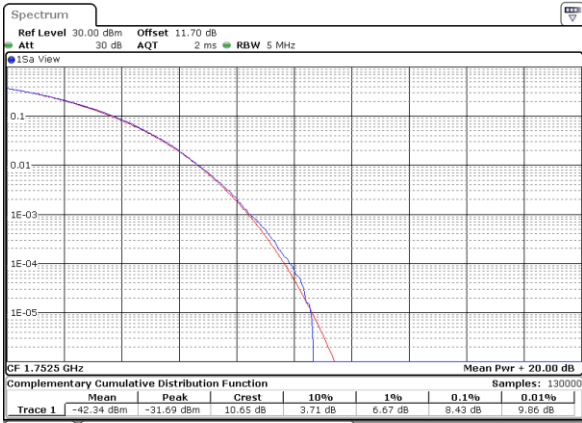
Date: 26 DEC.2017 16:52:47

Middle Channel / Full RB



Date: 26 DEC.2017 16:50:56

Highest Channel / 1RB



Date: 26 DEC.2017 16:59:33

Highest Channel / Full RB



Date: 26 DEC.2017 17:02:14



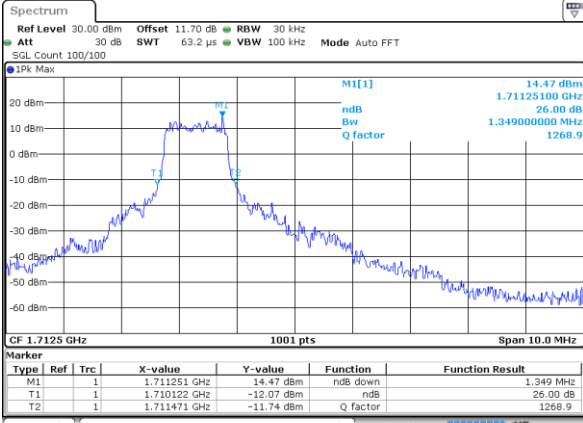
26dB Bandwidth

Mode BW Mod.	LTE M1 Band 4 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	1.35	1.34	-	-	-	-	-	-
Middle CH	-	-	-	-	1.33	1.32	-	-	-	-	-	-
Highest CH	-	-	-	-	1.36	1.33	-	-	-	-	-	-



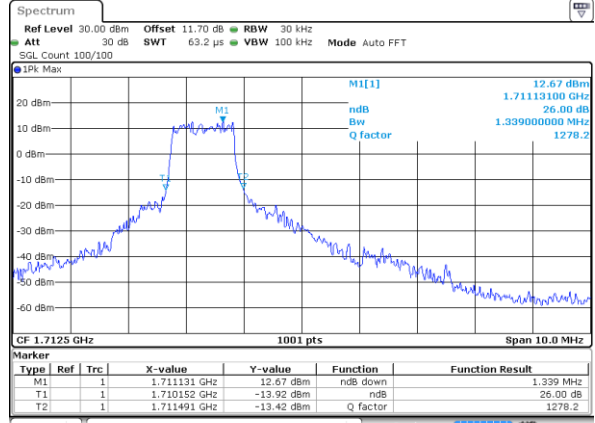
LTE M1 Band 4

Lowest Channel / 5MHz / QPSK



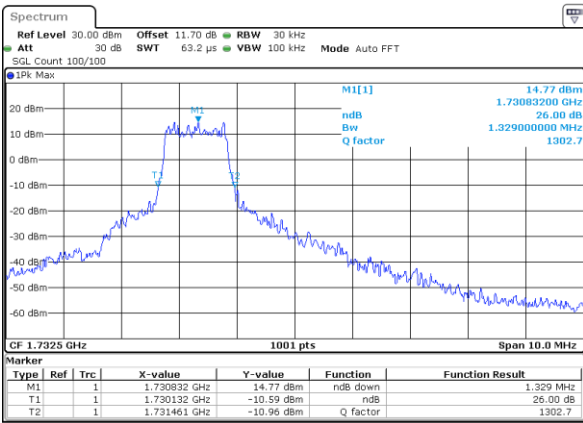
Date: 26 DEC 2017 16:44:19

Lowest Channel / 5MHz / 16QAM



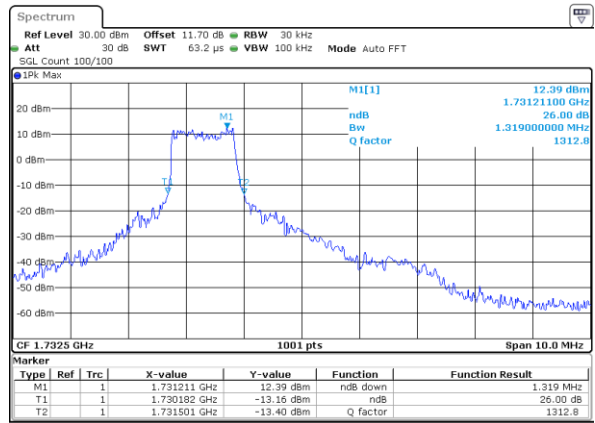
Date: 26 DEC 2017 16:45:34

Middle Channel / 5MHz / QPSK



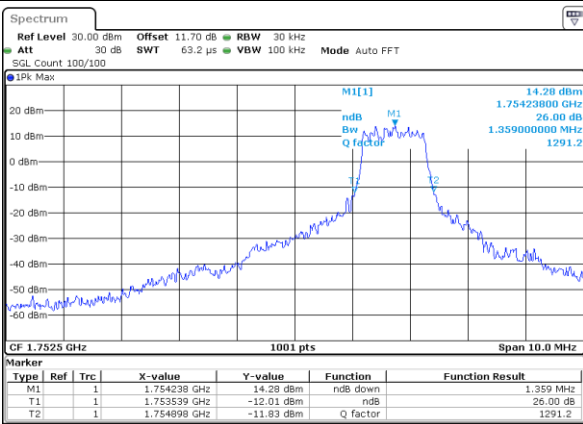
Date: 26 DEC 2017 16:52:00

Middle Channel / 5MHz / 16QAM



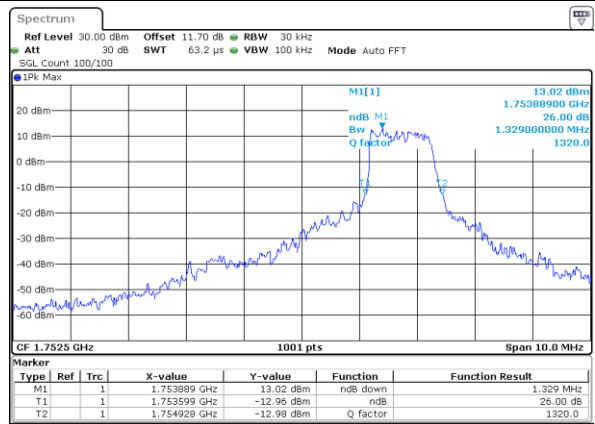
Date: 26 DEC 2017 16:51:17

Highest Channel / 5MHz / QPSK



Date: 26 DEC 2017 17:00:35

Highest Channel / 5MHz / 16QAM



Date: 26 DEC 2017 17:02:52



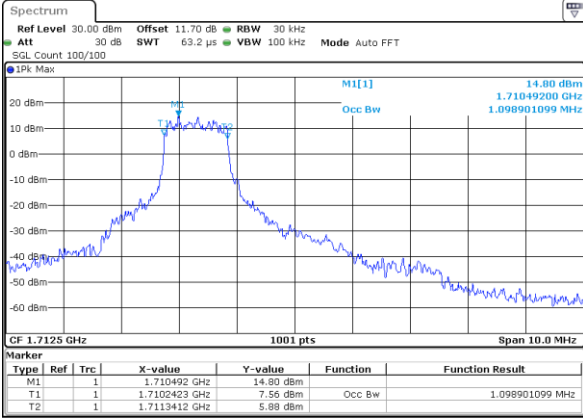
Occupied Bandwidth

Mode BW Mod.	LTE M1 Band 4 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	1.1	1.13	-	-	-	-	-	-
Middle CH	-	-	-	-	1.09	1.11	-	-	-	-	-	-
Highest CH	-	-	-	-	1.08	1.09	-	-	-	-	-	-



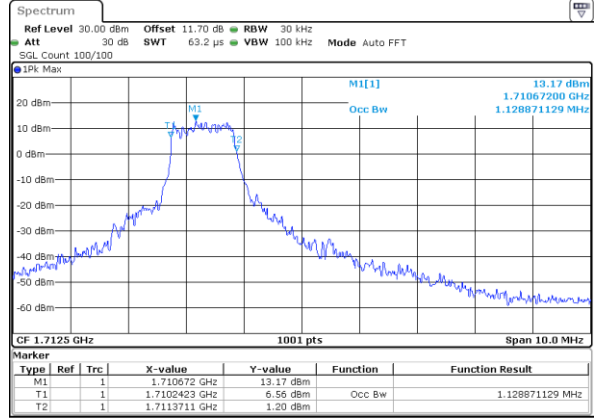
LTE M1 Band 4

Lowest Channel / 5MHz / QPSK



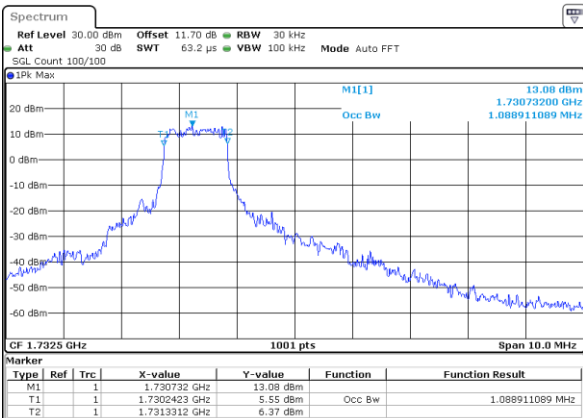
Date: 26 DEC 2017 16:43:55

Lowest Channel / 5MHz / 16QAM



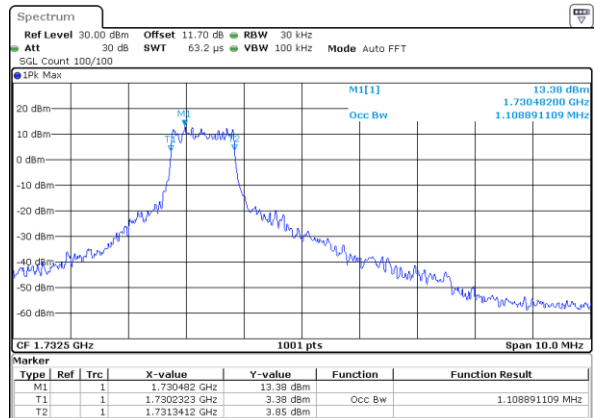
Date: 26 DEC 2017 16:45:24

Middle Channel / 5MHz / QPSK



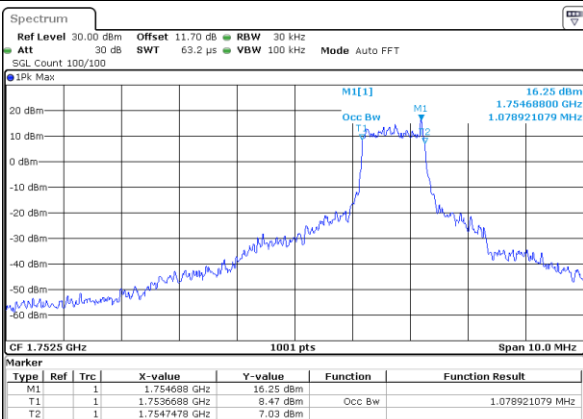
Date: 26 DEC 2017 16:51:52

Middle Channel / 5MHz / 16QAM



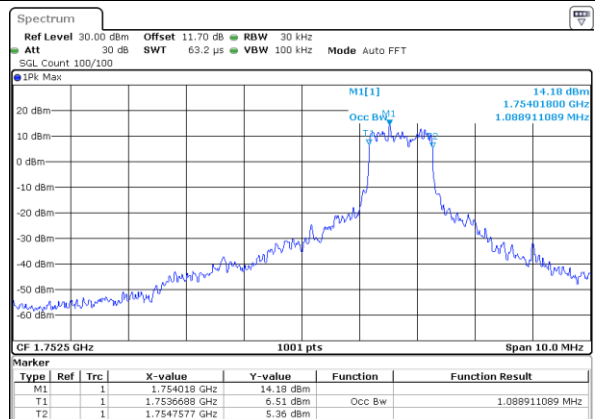
Date: 26 DEC 2017 16:51:03

Highest Channel / 5MHz / QPSK



Date: 26 DEC 2017 17:00:27

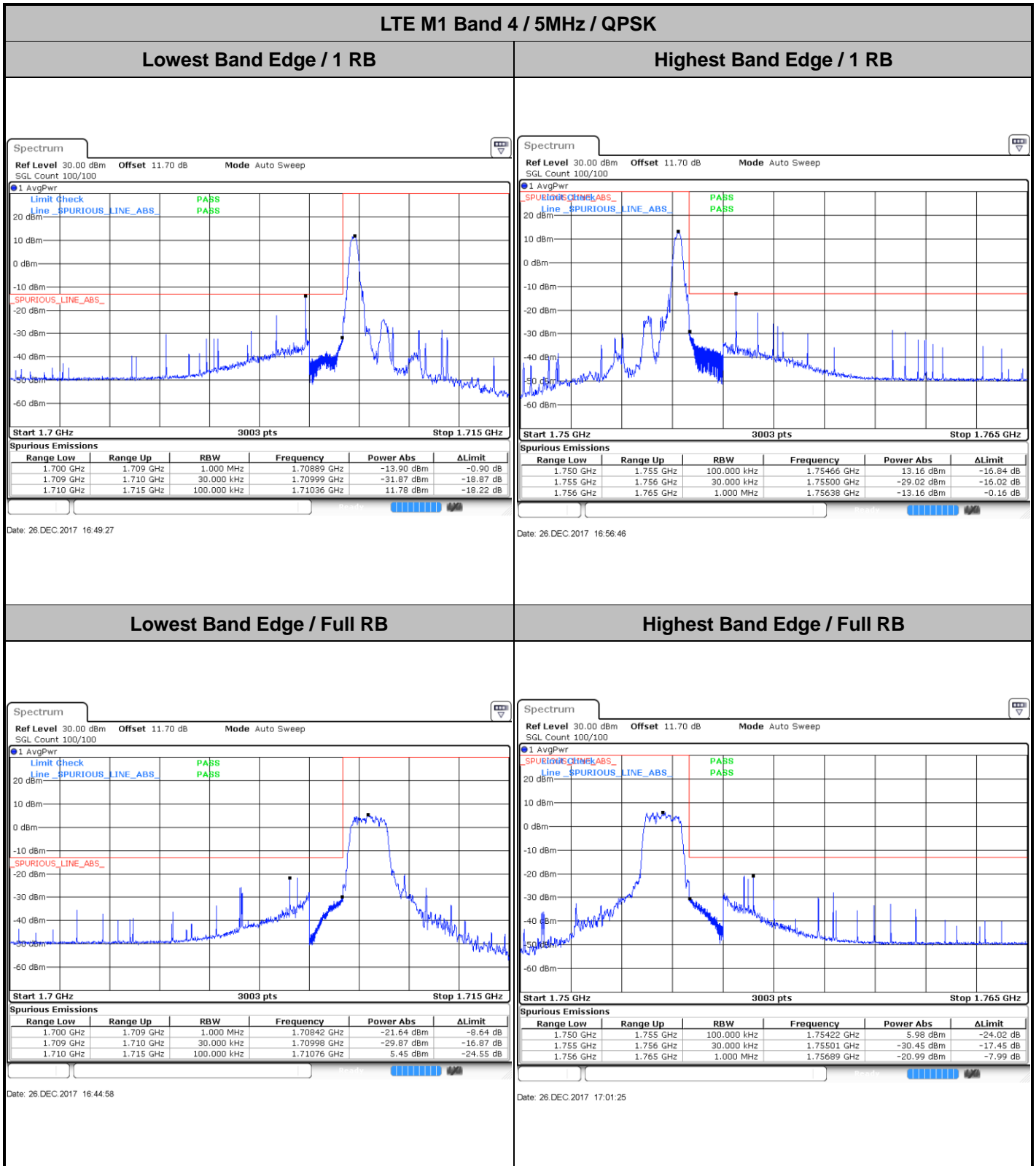
Highest Channel / 5MHz / 16QAM



Date: 26 DEC 2017 17:02:40



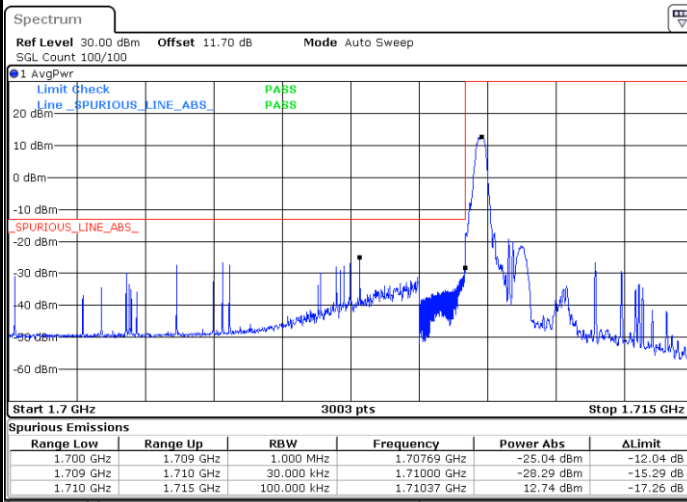
Conducted Band Edge





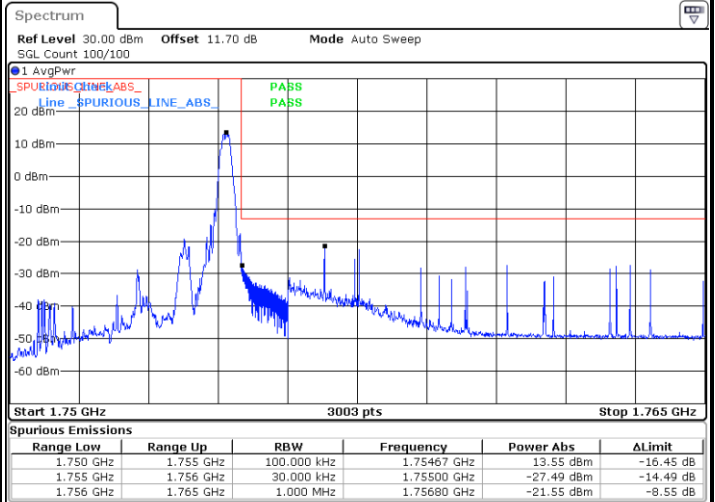
LTE M1 Band 4 / 5MHz / 16QAM

Lowest Band Edge / 1RB



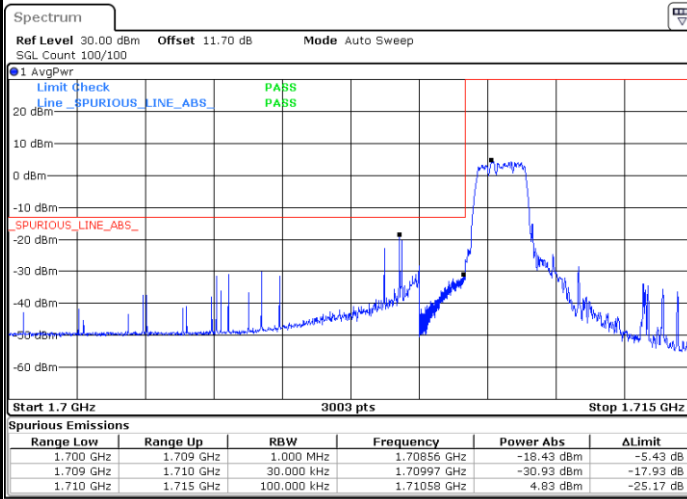
Date: 26 DEC 2017 16:47:48

Highest Band Edge / 1 RB



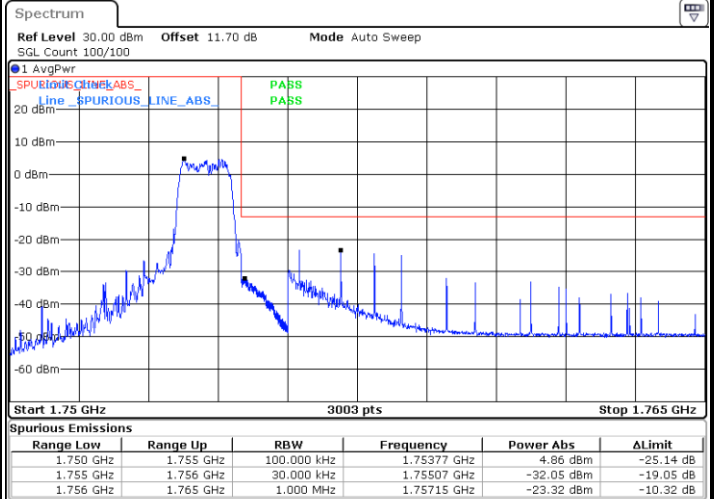
Date: 26 DEC 2017 16:58:14

Lowest Band Edge / Full RB



Date: 26 DEC 2017 16:46:10

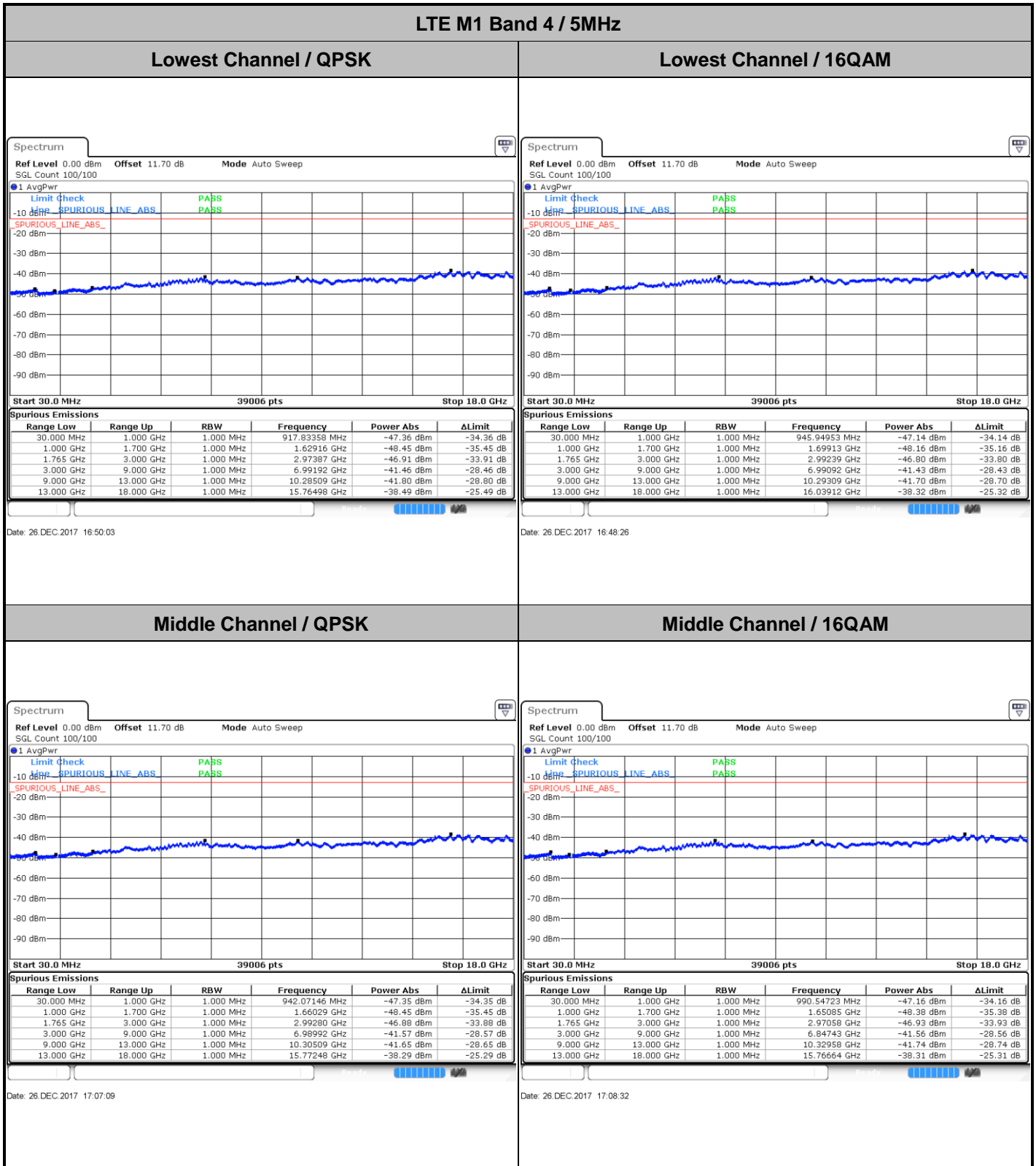
Highest Band Edge / Full RB

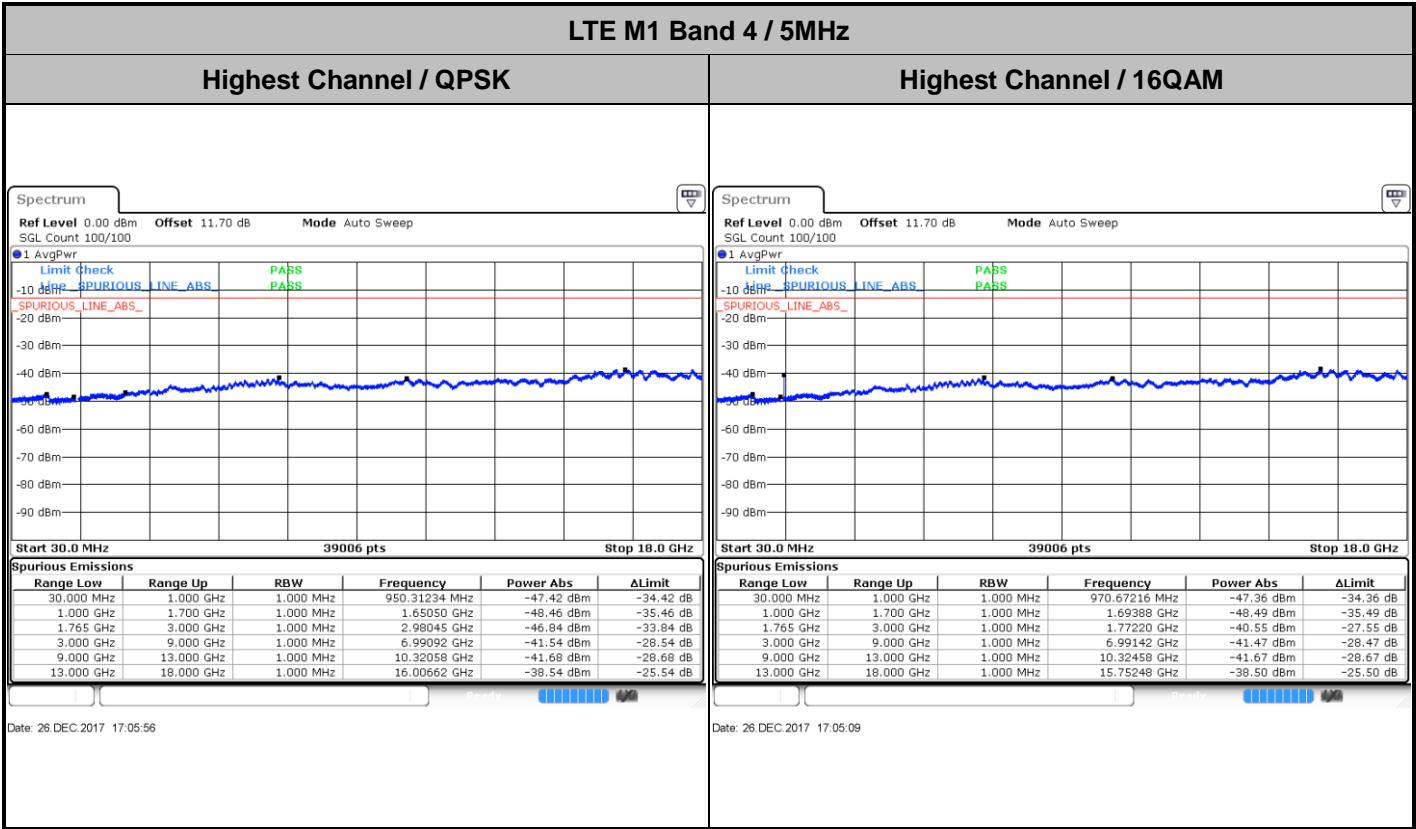


Date: 26 DEC 2017 17:04:05



Conducted Spurious Emission







Frequency Stability

Test Conditions		LTE M1 Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0055	PASS
40	Normal Voltage	0.0059	
30	Normal Voltage	0.0062	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0065	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0053	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0057	

Note:

1. Normal Voltage =3.7 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE M1 Band 12

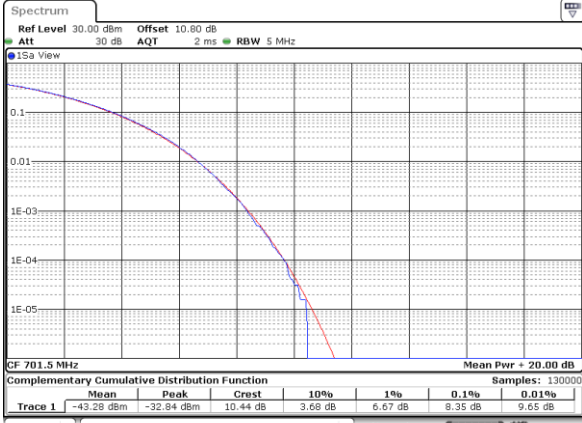
Peak-to-Average Ratio

Mode	LTE M1 Band 12 / 5MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	8.35	8.46	8.32	8.38	PASS
Middle CH	4.23	5.1	5.1	6	
Highest CH	8.55	8.35	8.41	8.52	



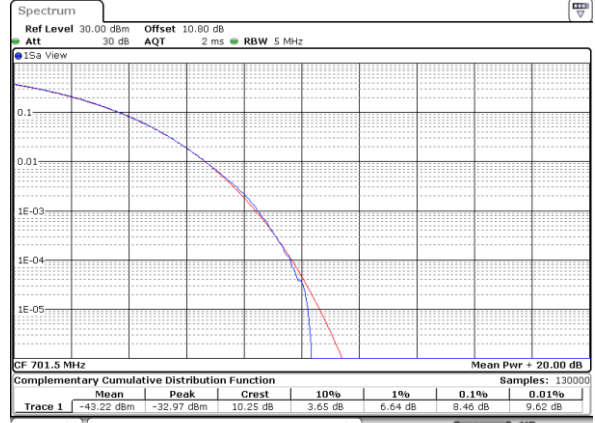
LTE M1 Band 12 / 5MHz / QPSK

Lowest Channel / 1RB



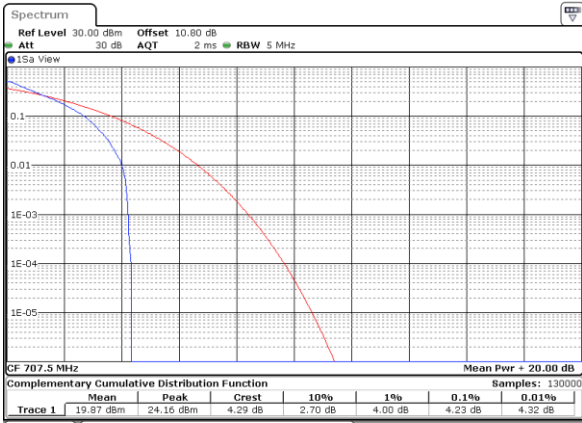
Date: 26 DEC 2017 19:48:17

Lowest Channel / Full RB



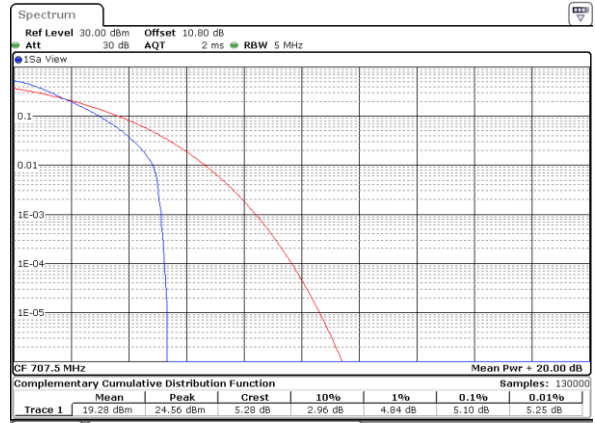
Date: 26 DEC 2017 19:48:17

Middle Channel / 1RB



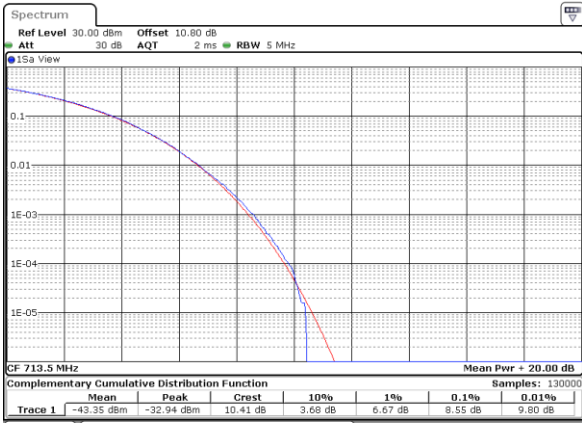
Date: 26 DEC 2017 19:05:42

Middle Channel / Full RB



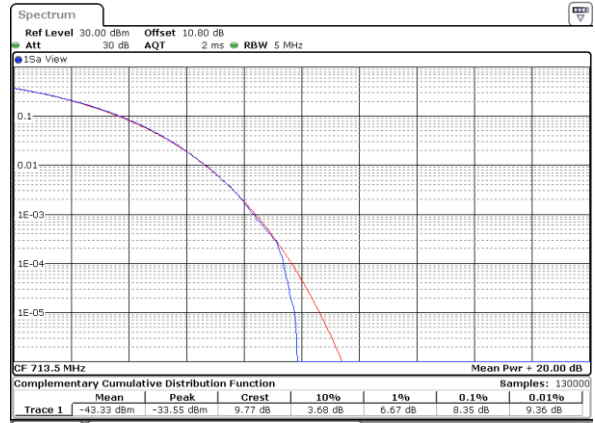
Date: 26 DEC 2017 19:05:15

Highest Channel / 1RB



Date: 26 DEC 2017 19:07:43

Highest Channel / Full RB

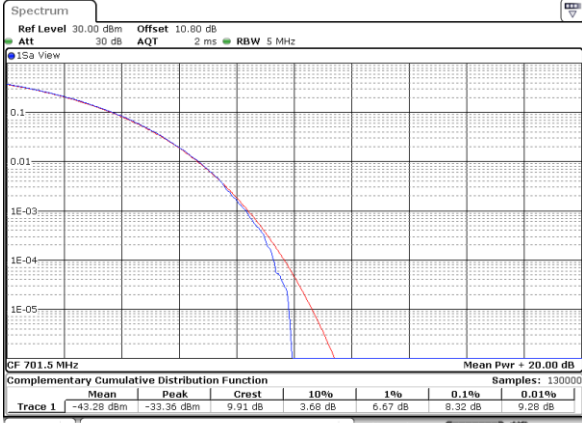


Date: 26 DEC 2017 19:08:27



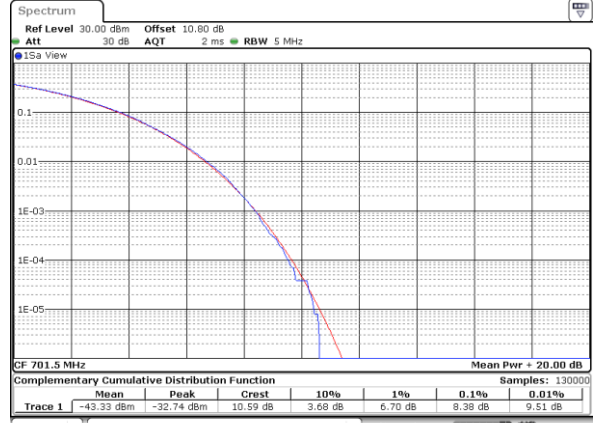
LTE M1 Band 12 / 5MHz / 16QAM

Lowest Channel / 1RB



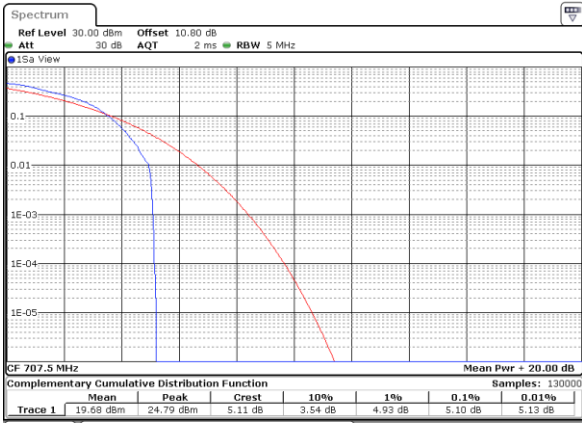
Date: 26 DEC 2017 19:46:42

Lowest Channel / Full RB



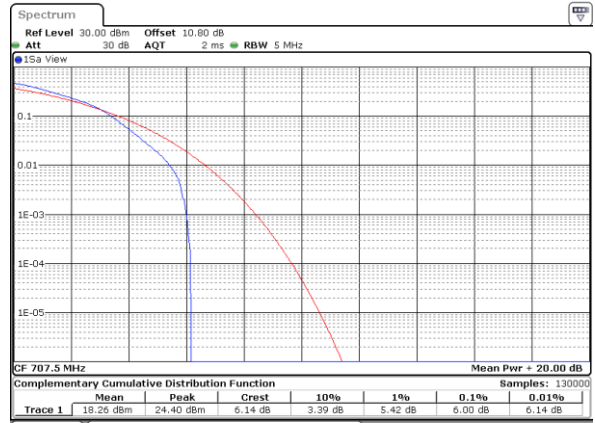
Date: 26 DEC 2017 19:49:40

Middle Channel / 1RB



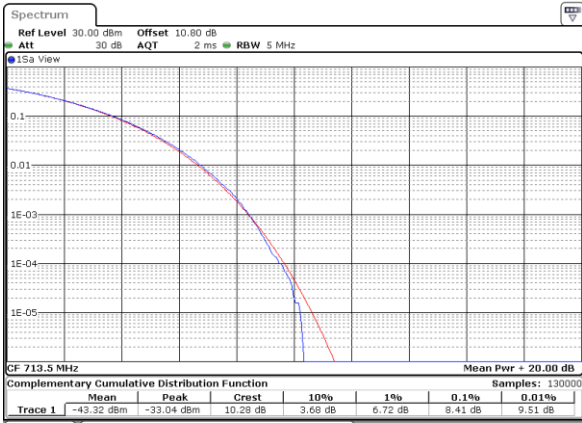
Date: 26 DEC 2017 19:06:18

Middle Channel / Full RB



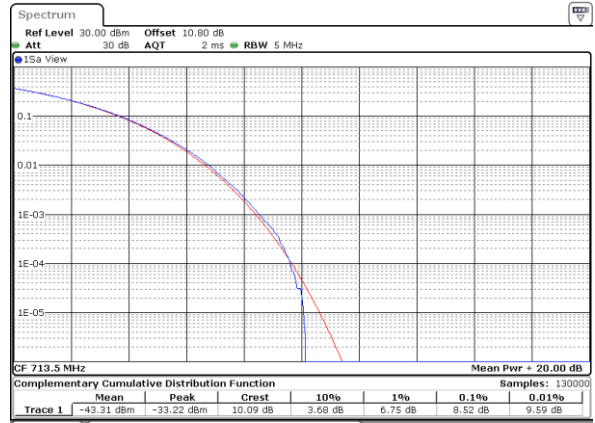
Date: 26 DEC 2017 19:04:33

Highest Channel / 1RB



Date: 26 DEC 2017 19:07:26

Highest Channel / Full RB



Date: 26 DEC 2017 19:32:42



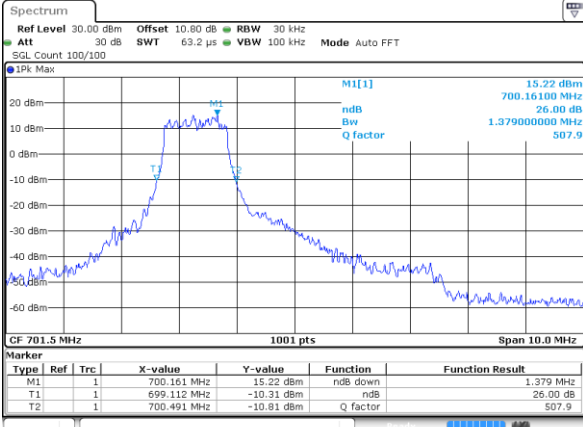
26dB Bandwidth

Mode BW Mod.	LTE M1 Band 12 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	1.38	1.31	-	-	-	-	-	-
Middle CH	-	-	-	-	1.26	1.32	-	-	-	-	-	-
Highest CH	-	-	-	-	1.27	1.41	-	-	-	-	-	-



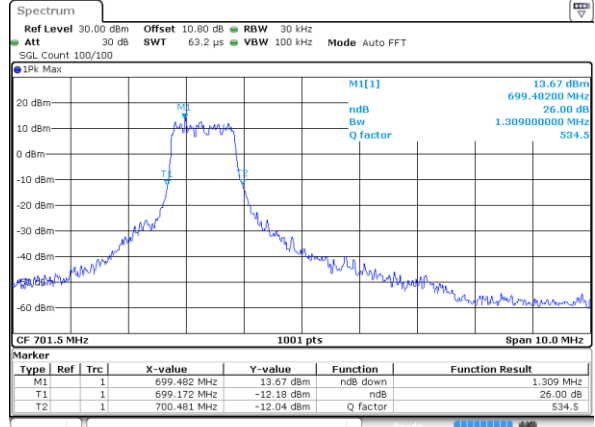
LTE M1 Band 12

Lowest Channel / 5MHz / QPSK



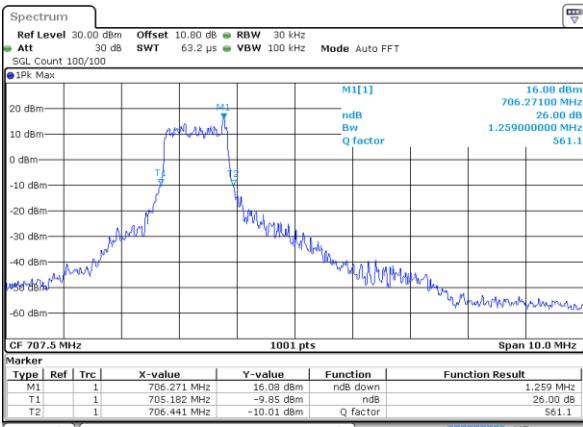
Date: 26 DEC 2017 18:00:52

Lowest Channel / 5MHz / 16QAM



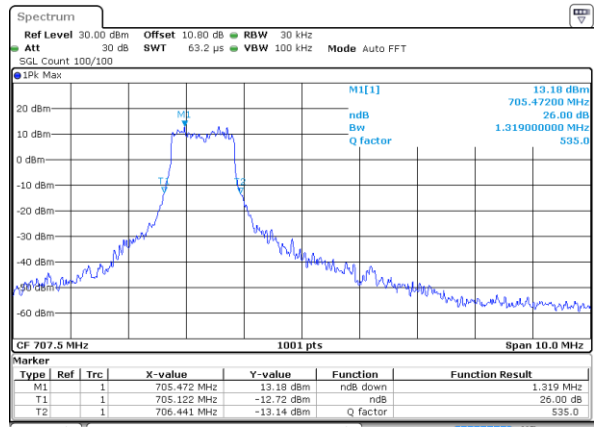
Date: 26 DEC 2017 18:00:05

Middle Channel / 5MHz / QPSK



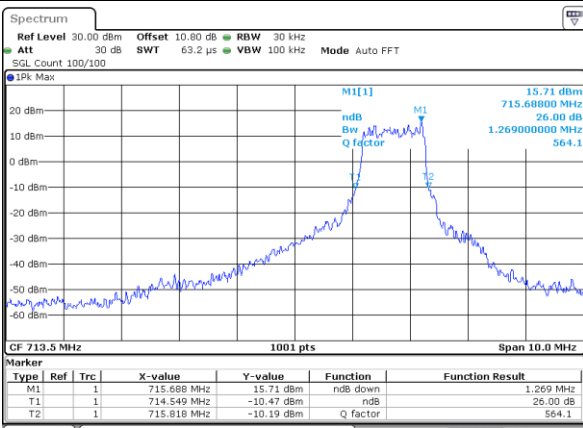
Date: 26 DEC 2017 19:02:07

Middle Channel / 5MHz / 16QAM



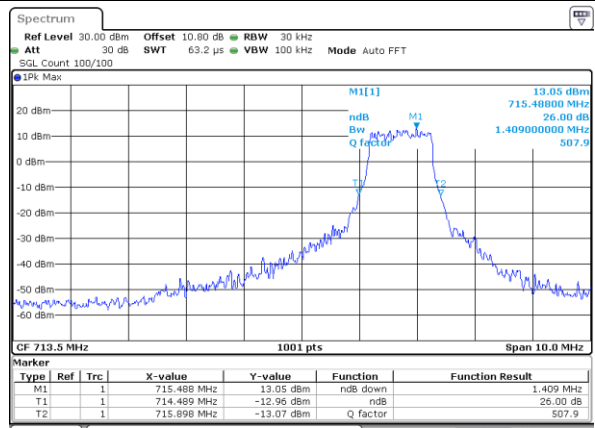
Date: 26 DEC 2017 19:03:00

Highest Channel / 5MHz / QPSK



Date: 26 DEC 2017 19:29:52

Highest Channel / 5MHz / 16QAM



Date: 26 DEC 2017 19:33:18



Occupied Bandwidth

Mode BW Mod.	LTE M1 Band 12 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	1.11	1.1	-	-	-	-	-	-
Middle CH	-	-	-	-	1.12	1.09	-	-	-	-	-	-
Highest CH	-	-	-	-	1.1	1.1	-	-	-	-	-	-