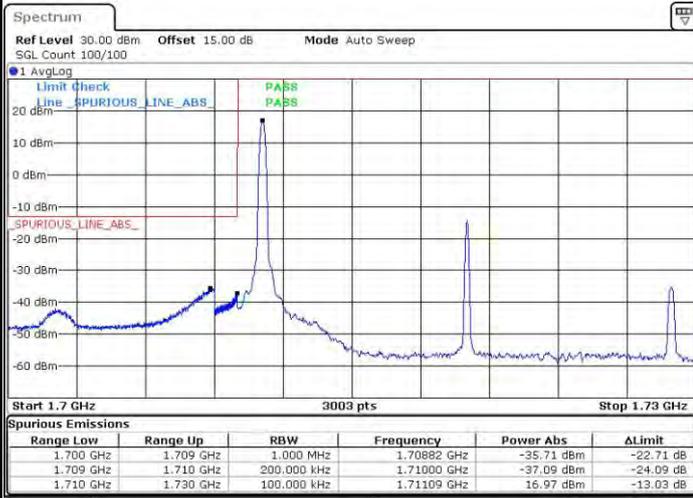




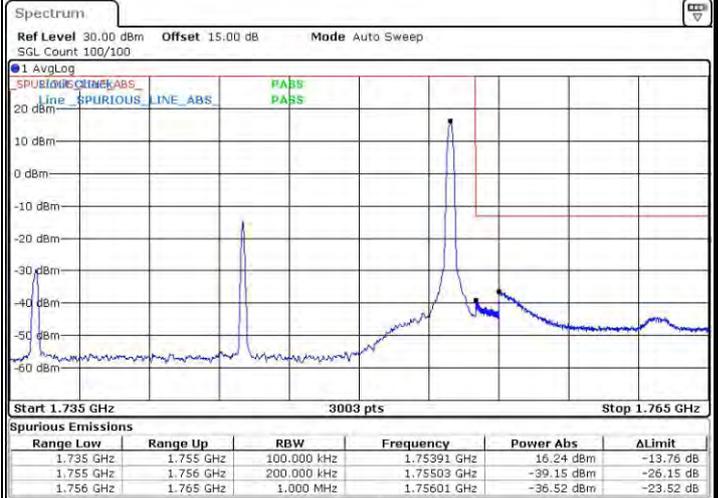
LTE Band 4 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



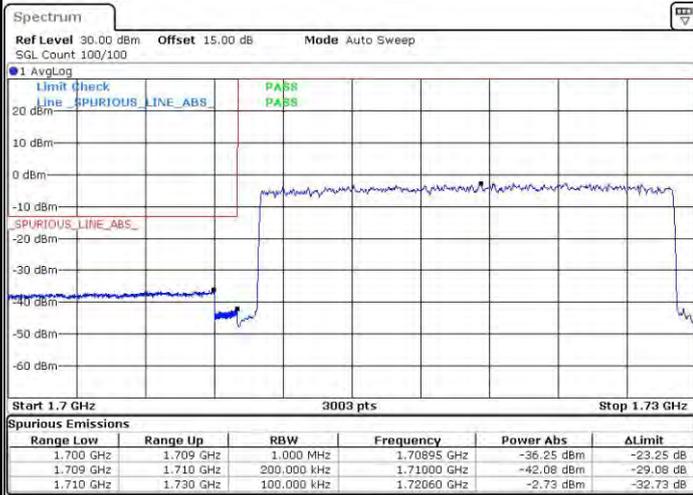
Date: 21.FEB.2015 22:29:35

Highest Band Edge / 1 RB



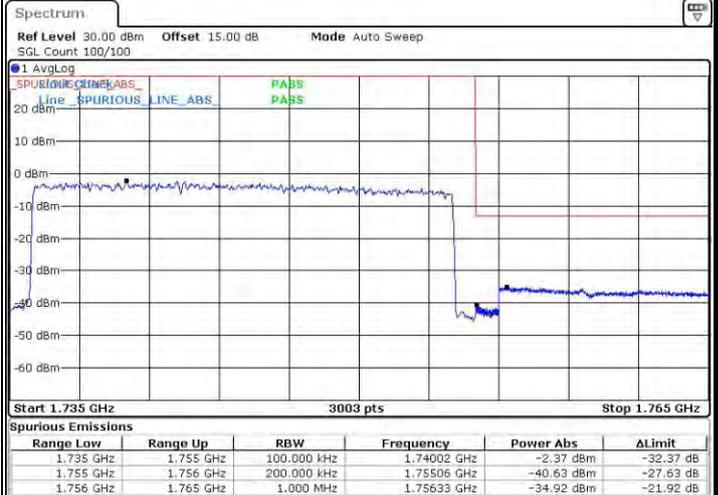
Date: 21.FEB.2015 22:41:46

Lowest Band Edge / Full RB



Date: 21.FEB.2015 22:32:15

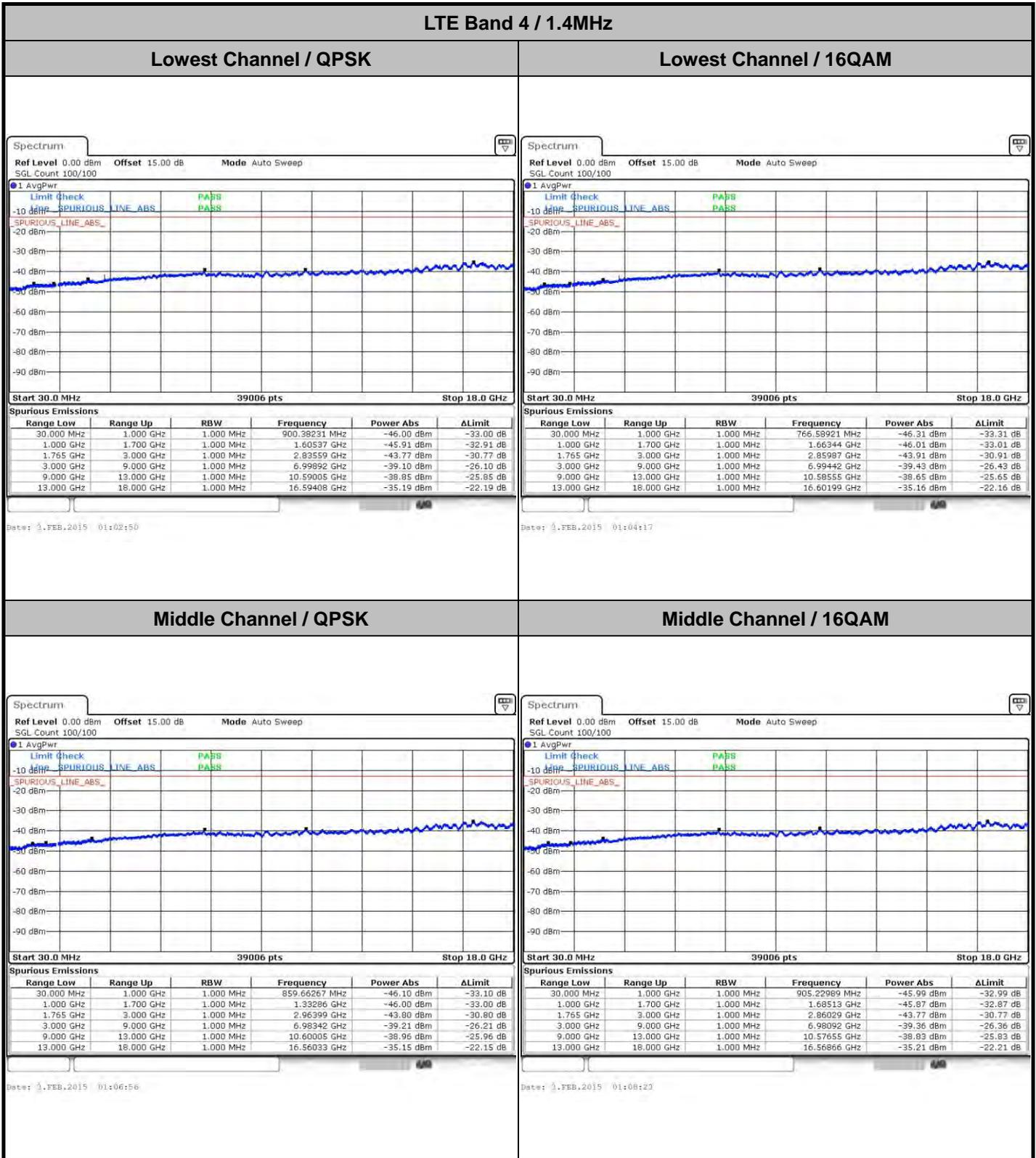
Highest Band Edge / Full RB



Date: 21.FEB.2015 22:44:26



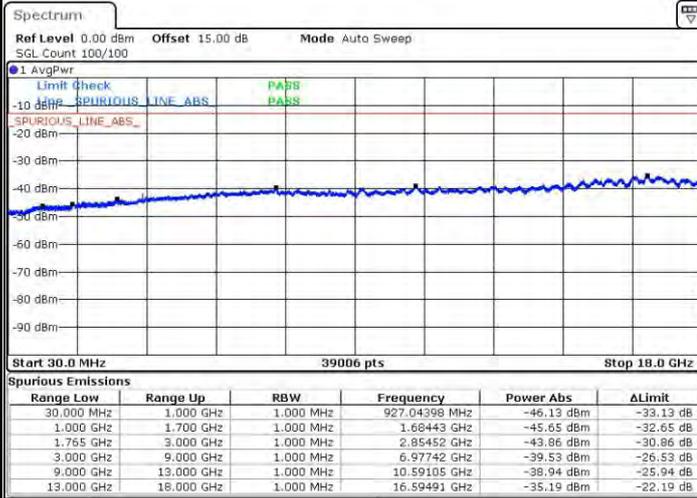
Conducted Spurious Emission





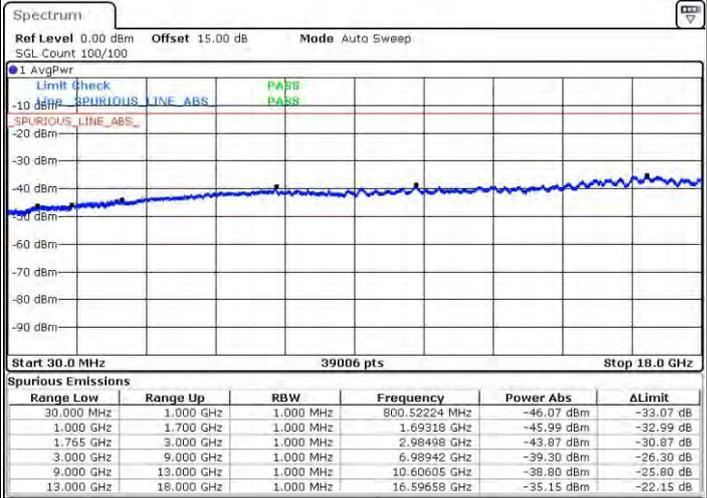
LTE Band 4 / 1.4MHz

Highest Channel / QPSK



Date: 3.FEB.2015 01:16:56

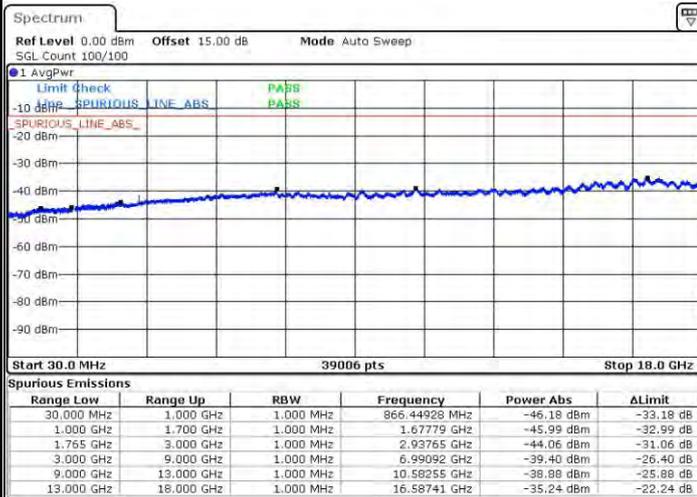
Highest Channel / 16QAM



Date: 3.FEB.2015 01:16:25

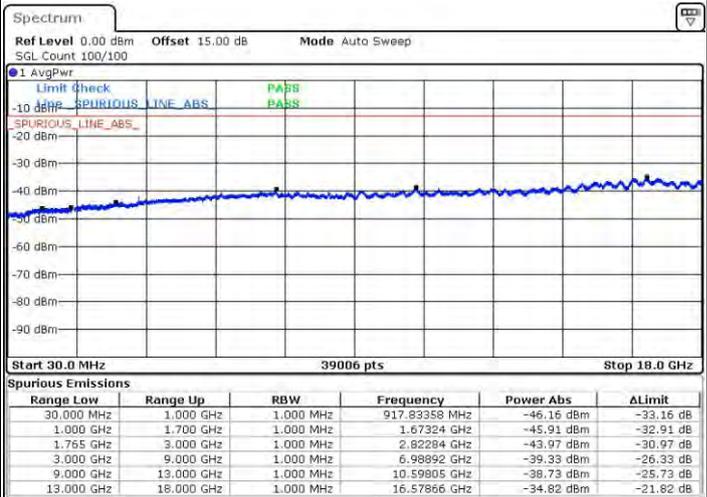
LTE Band 4 / 3MHz

Lowest Channel / QPSK



Date: 3.FEB.2015 00:30:32

Lowest Channel / 16QAM



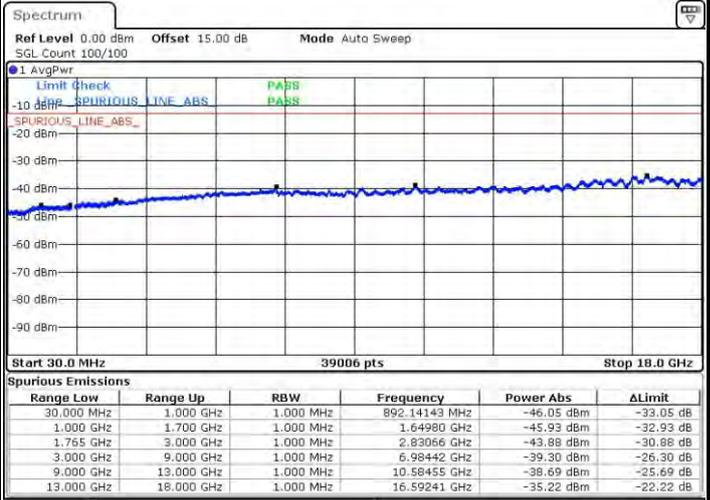
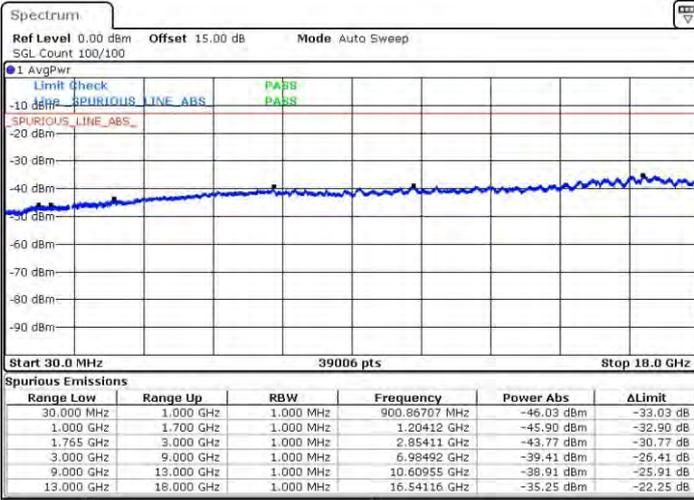
Date: 3.FEB.2015 00:31:56



LTE Band 4 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

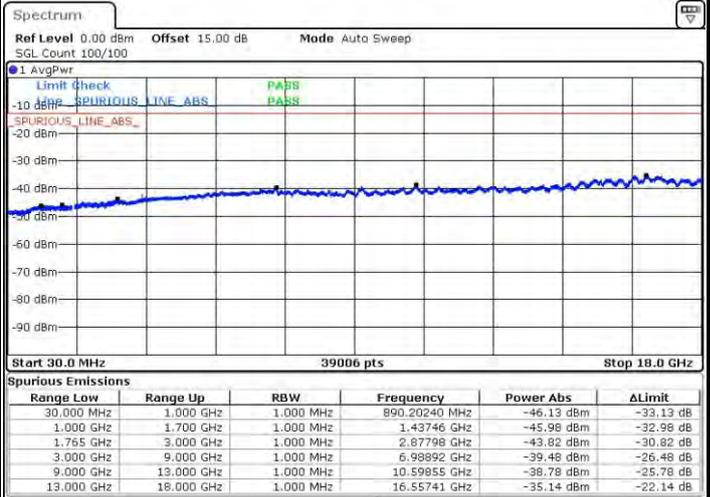
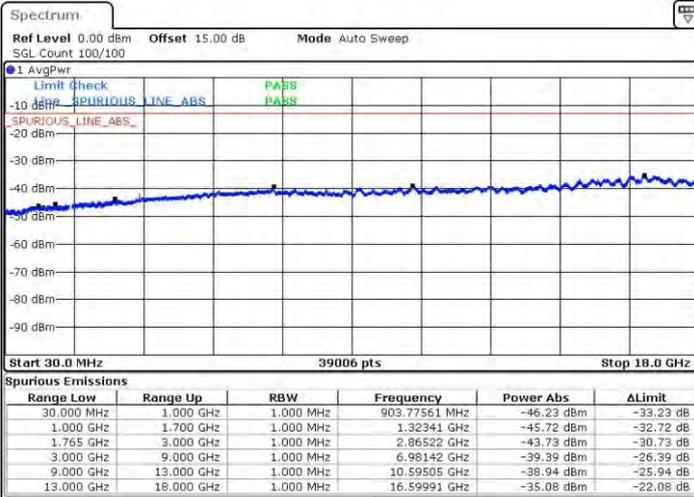


Date: 3.FEB.2015 00:24:19

Date: 3.FEB.2015 00:35:44

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 3.FEB.2015 00:43:49

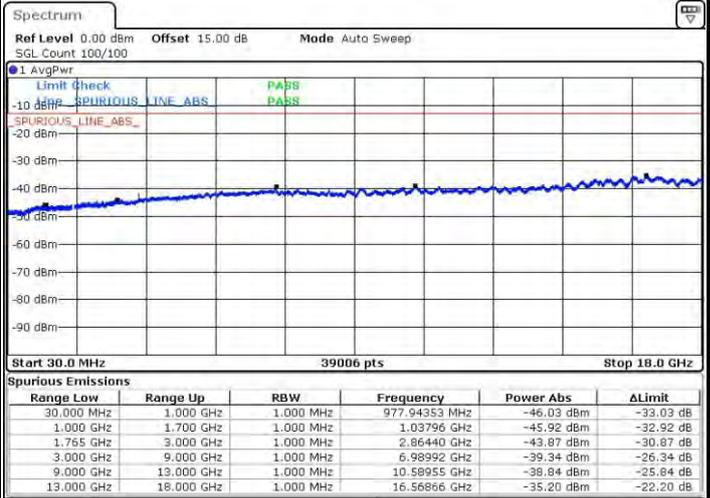
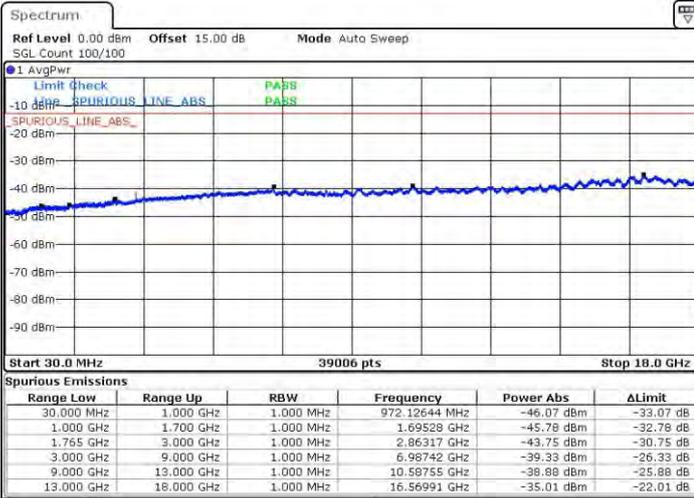
Date: 3.FEB.2015 00:45:13



LTE Band 4 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

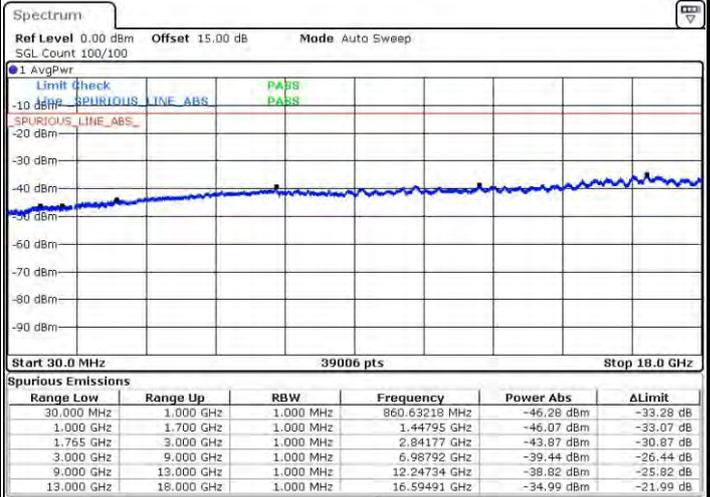
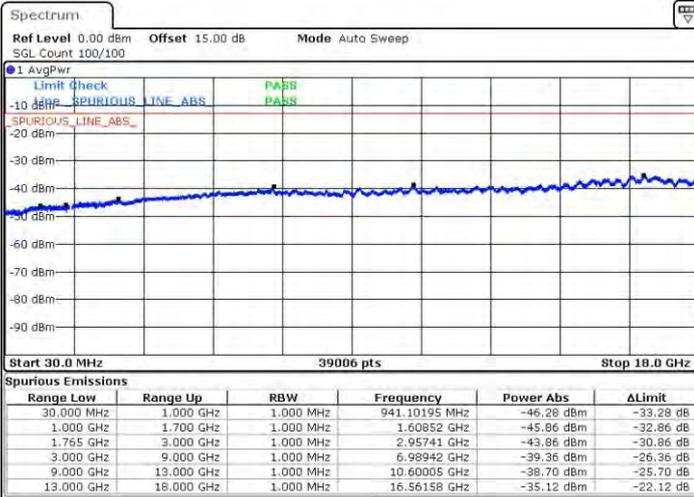


Date: 3.FEB.2015 00:04:29

Date: 3.FEB.2015 00:05:46

Middle Channel / QPSK

Middle Channel / 16QAM



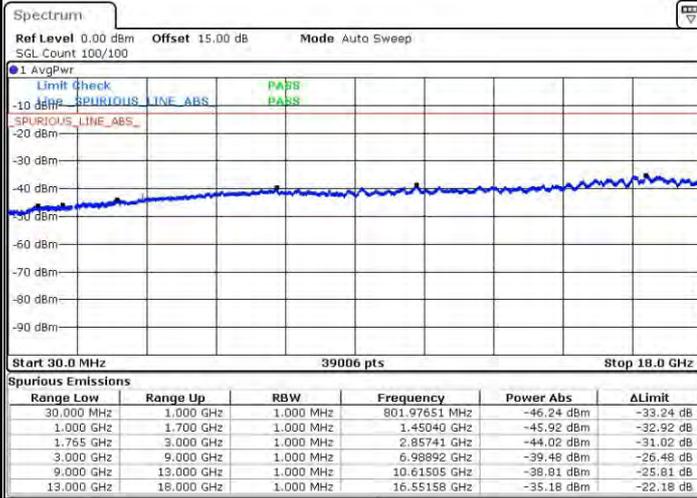
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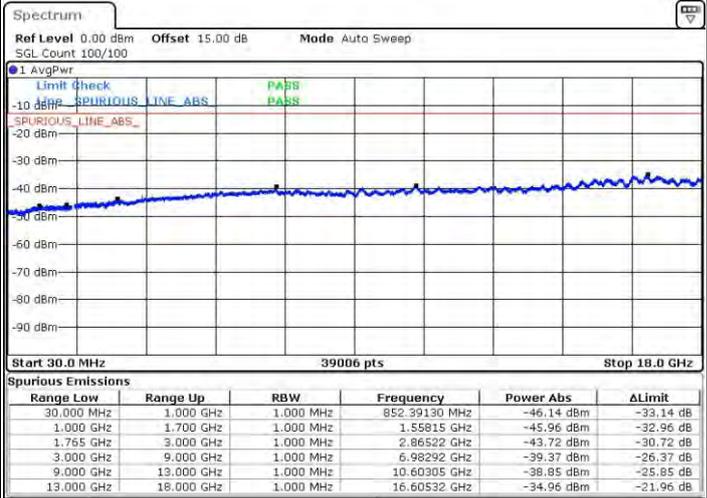
LTE Band 4 / 5MHz

Highest Channel / QPSK



Date: 3.FEB.2015 00:16:53

Highest Channel / 16QAM



Date: 3.FEB.2015 00:16:17

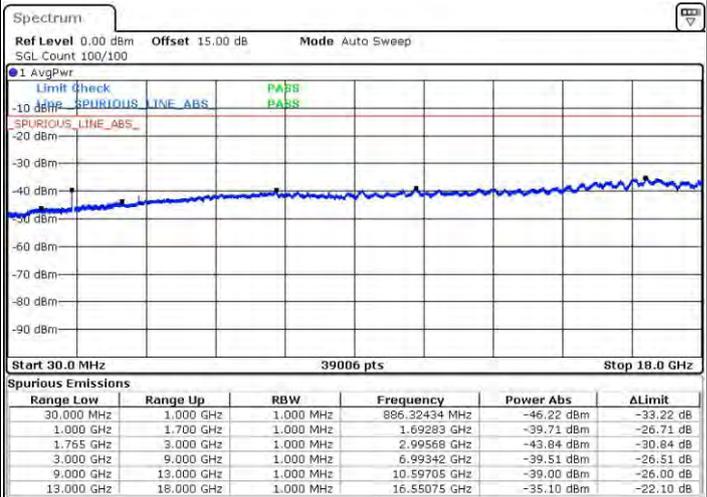
LTE Band 4 / 10MHz

Lowest Channel / QPSK



Date: 2.FEB.2015 21:45:30

Lowest Channel / 16QAM



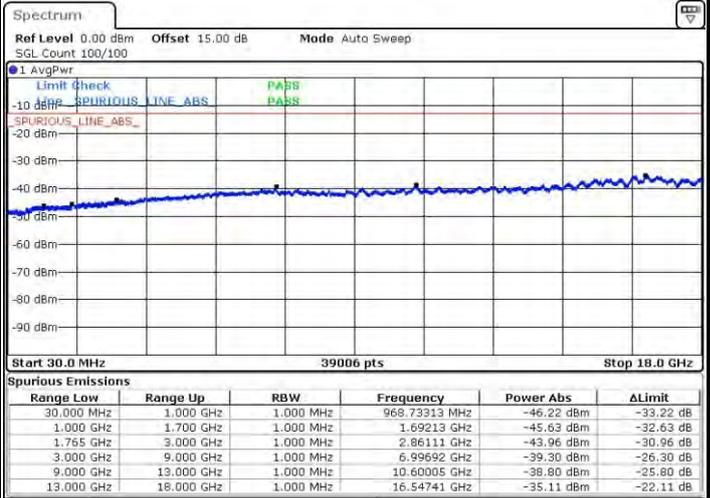
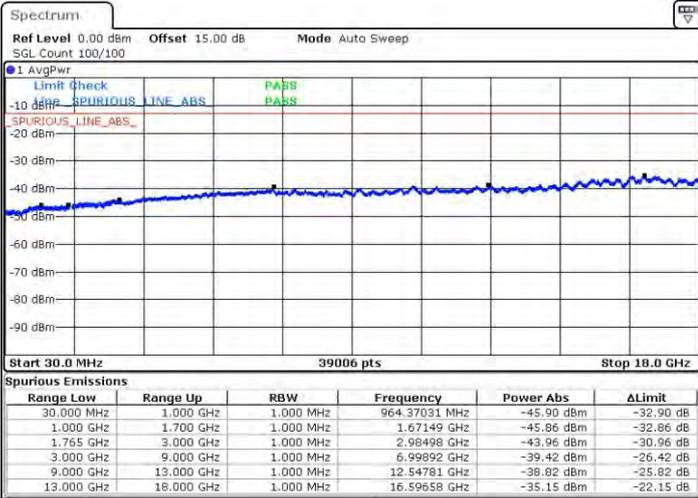
Date: 2.FEB.2015 21:46:51



LTE Band 4 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

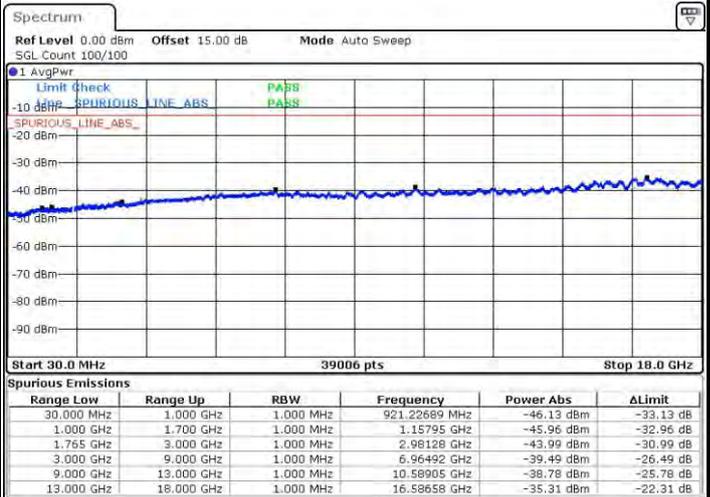
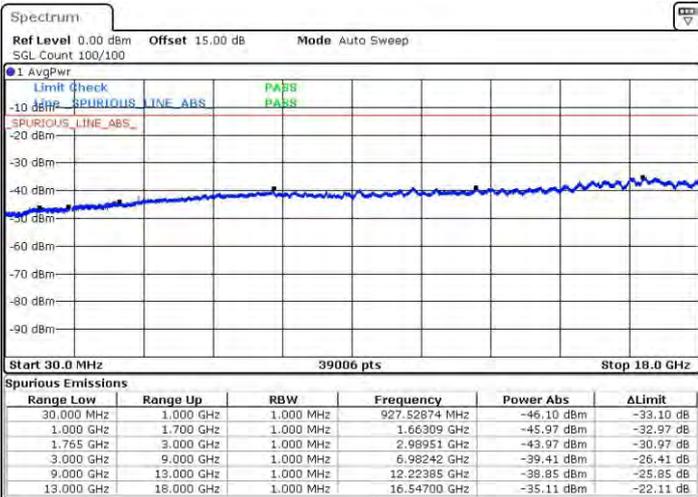


Date: 2.FEB.2015 21:48:57

Date: 2.FEB.2015 21:50:18

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2.FEB.2015 21:57:44

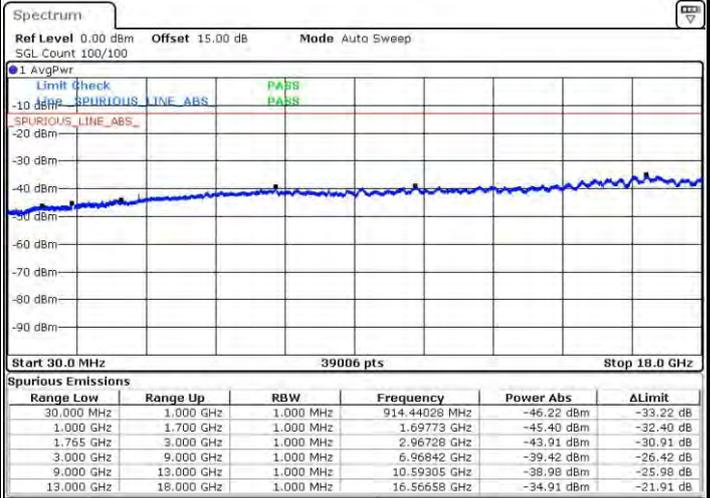
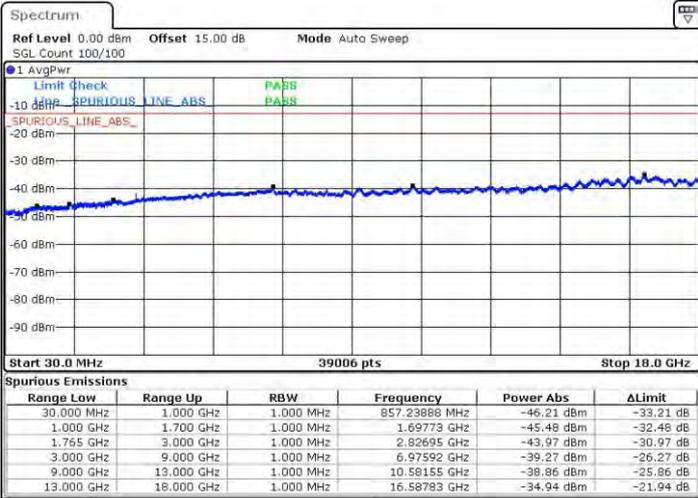
Date: 2.FEB.2015 21:58:04



LTE Band 4 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

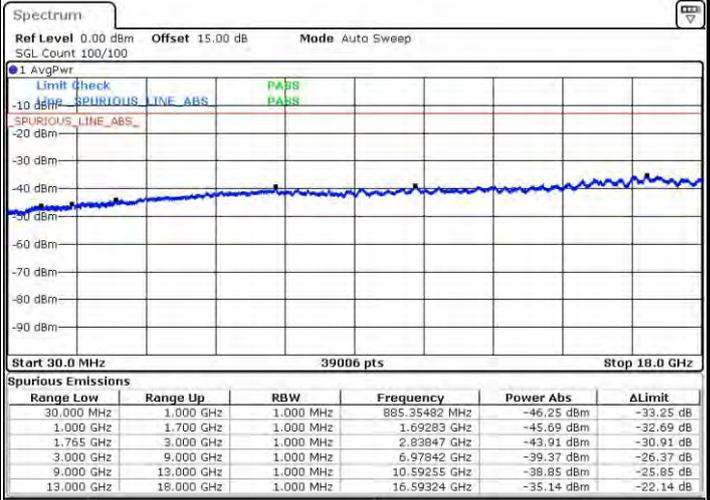


Date: 2.FEB.2015 22:09:24

Date: 2.FEB.2015 22:10:45

Middle Channel / QPSK

Middle Channel / 16QAM



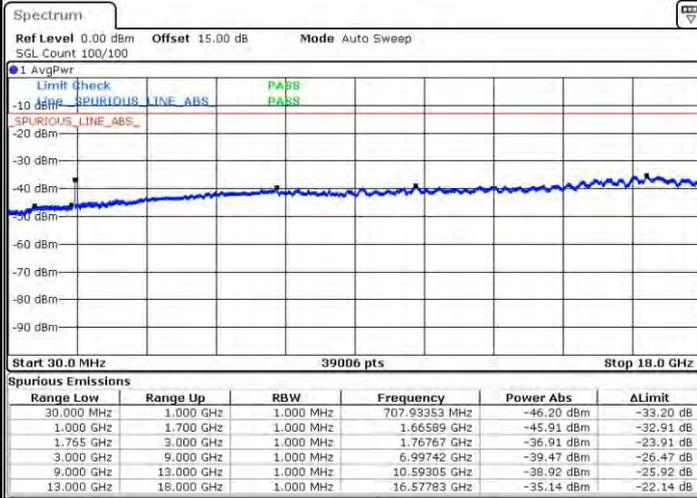
Date: 2.FEB.2015 22:12:50

Date: 2.FEB.2015 22:14:11



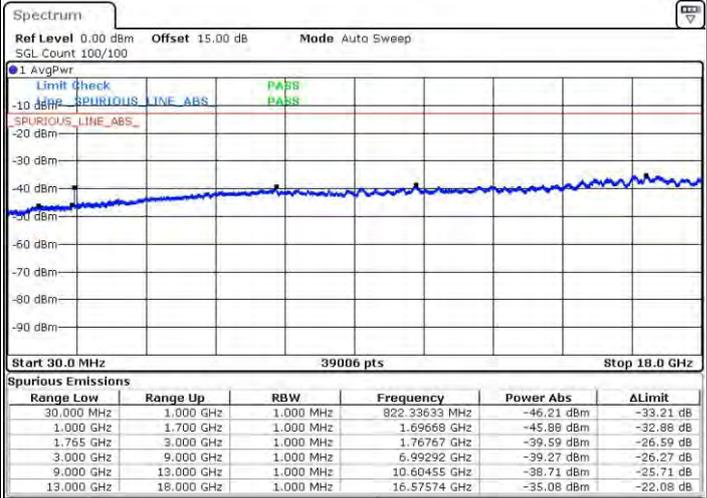
LTE Band 4 / 15MHz

Highest Channel / QPSK



Date: 2.FEB.2019 22:21:36

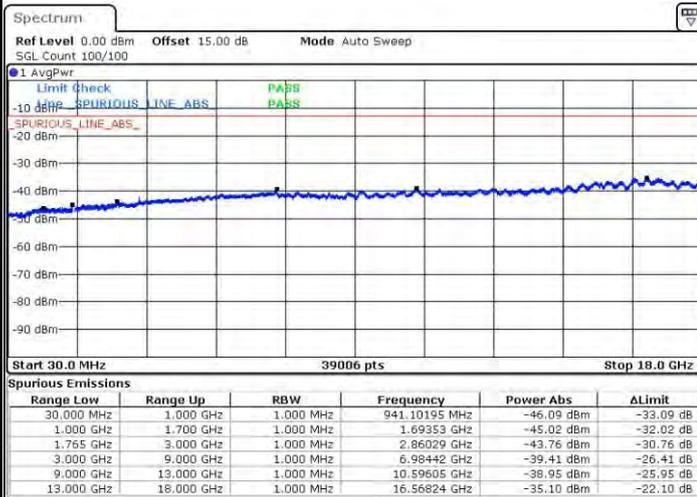
Highest Channel / 16QAM



Date: 2.FEB.2019 22:22:57

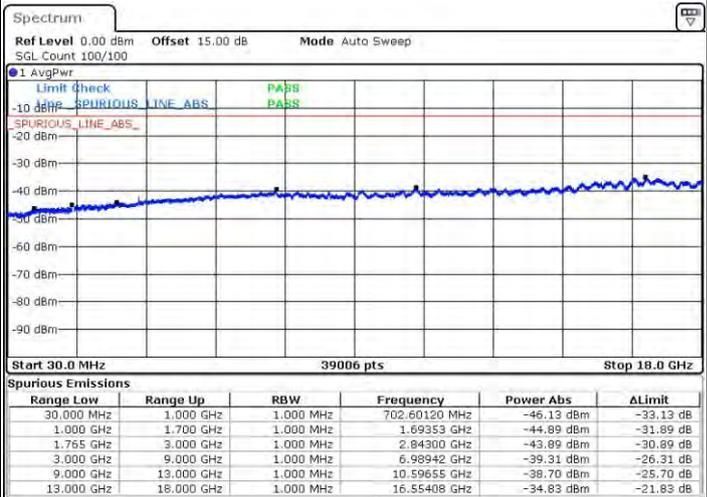
LTE Band 4 / 20MHz

Lowest Channel / QPSK



Date: 2.FEB.2019 22:33:36

Lowest Channel / 16QAM



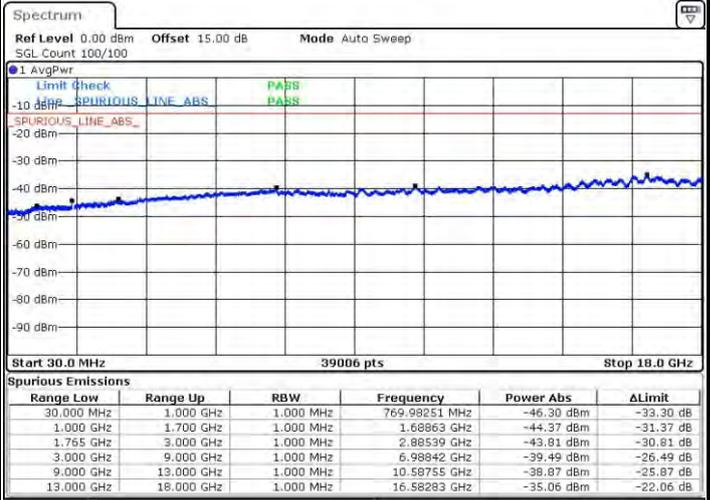
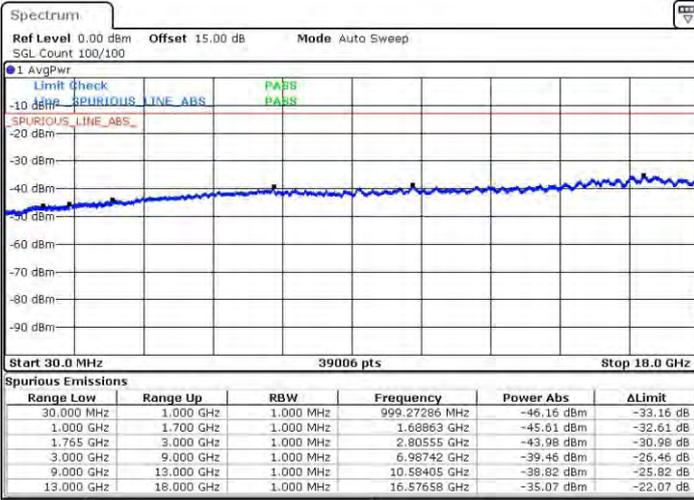
Date: 2.FEB.2019 22:34:56



LTE Band 4 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

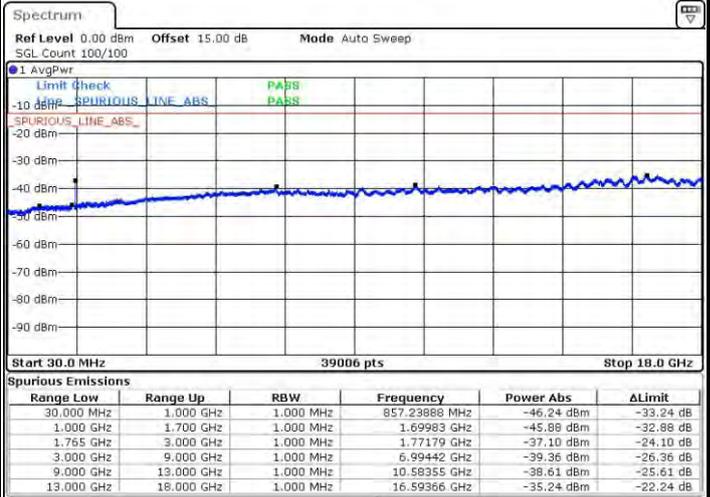


Date: 2.FEB.2015 22:37:02

Date: 2.FEB.2015 22:38:22

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2.FEB.2015 22:45:46

Date: 2.FEB.2015 22:47:07



Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0012	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0004	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0008	

Note:

1. Normal Voltage = 3.80V. ; Battery End Point (BEP) = 3.60V. ; Maximum Voltage =4.35 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



LTE Band 7

Conducted Output Power(Average power)

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	21.97	22.21	22.01
5	1	12		21.84	22.26	22.02
5	1	24		21.83	22.38	22.25
5	12	0		21.00	21.36	21.29
5	12	6		20.95	21.40	21.27
5	12	11		20.82	21.37	21.28
5	25	0		20.85	21.38	21.24
5	1	0	16-QAM	21.06	21.45	21.43
5	1	12		20.81	21.49	21.40
5	1	24		21.19	21.65	21.18
5	12	0		20.08	20.54	20.37
5	12	6		20.10	20.54	20.38
5	12	11		20.04	20.61	20.35
5	25	0		20.07	20.47	20.26
10	1	0	QPSK	21.98	22.20	22.11
10	1	24		21.77	22.32	22.21
10	1	49		21.87	22.36	22.22
10	25	0		21.05	21.30	21.39
10	25	12		20.95	21.46	21.36
10	25	24		21.01	21.47	21.32
10	50	0		20.98	21.28	21.38
10	1	0	16-QAM	20.63	21.16	21.10
10	1	24		20.49	21.26	20.94
10	1	49		20.58	21.44	21.37
10	25	0		20.09	20.47	20.43
10	25	12		19.90	20.47	20.47
10	25	24		20.01	20.50	20.23
10	50	0		20.14	20.35	20.26



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	21.99	22.05	22.36
15	1	37		21.94	22.30	22.15
15	1	74		21.98	22.43	22.11
15	36	0		21.15	21.29	21.37
15	36	18		21.06	21.37	21.43
15	36	37		21.03	21.29	21.36
15	75	0		20.93	21.23	21.36
15	1	0	16-QAM	21.02	21.02	21.21
15	1	37		20.98	21.24	21.05
15	1	74		20.90	21.40	21.22
15	36	0		20.09	20.68	20.60
15	36	18		20.27	20.47	20.34
15	36	37		20.19	20.53	20.37
15	75	0		20.12	20.48	20.49
20	1	0	QPSK	22.05	22.13	22.24
20	1	49		22.11	22.26	22.12
20	1	99		22.34	22.46	22.39
20	50	0		21.07	21.28	21.32
20	50	24		21.00	21.35	21.23
20	50	49		21.08	21.39	21.35
20	100	0		21.02	21.42	21.40
20	1	0	16-QAM	20.85	21.28	21.31
20	1	49		20.84	21.08	21.00
20	1	99		20.81	21.33	21.12
20	50	0		20.35	20.49	20.46
20	50	24		20.25	20.57	20.35
20	50	49		20.18	20.53	20.27
20	100	0		20.13	20.48	20.29



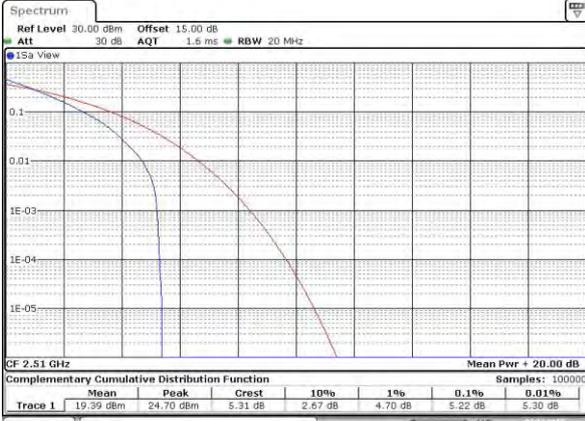
Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	RB Size	Result
Lowest CH	5.22	4.99	5.68	6.09	PASS
Middle CH	5.28	5.36	6.38	6.38	
Highest CH	5.04	5.45	6.67	6.52	



LTE Band 7 / 20MHz / QPSK

Lowest Channel / 1RB



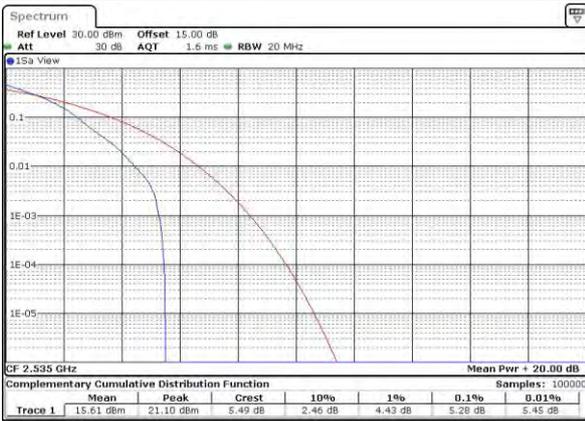
Date: 3.FEB.2015 12:38:15

Lowest Channel / Full RB



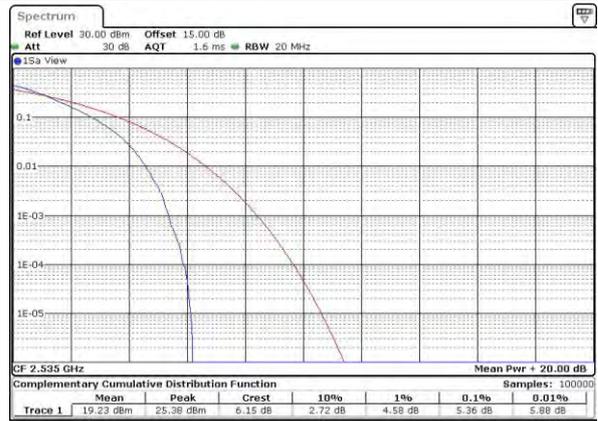
Date: 3.FEB.2015 12:38:25

Middle Channel / 1RB



Date: 3.FEB.2015 12:38:34

Middle Channel / Full RB



Date: 3.FEB.2015 12:38:46

Highest Channel / 1RB



Date: 3.FEB.2015 12:38:58

Highest Channel / Full RB



Date: 3.FEB.2015 12:39:11



LTE Band 7 / 20MHz / 16QAM

Lowest Channel / 1RB



Date: 3,FEB,2015 12:35:58

Lowest Channel / Full RB



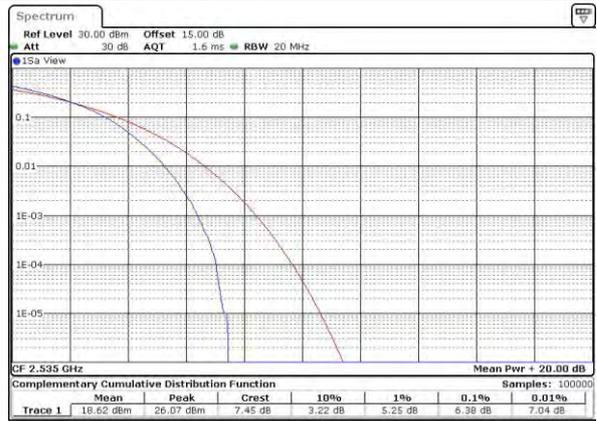
Date: 3,FEB,2015 12:36:13

Middle Channel / 1RB



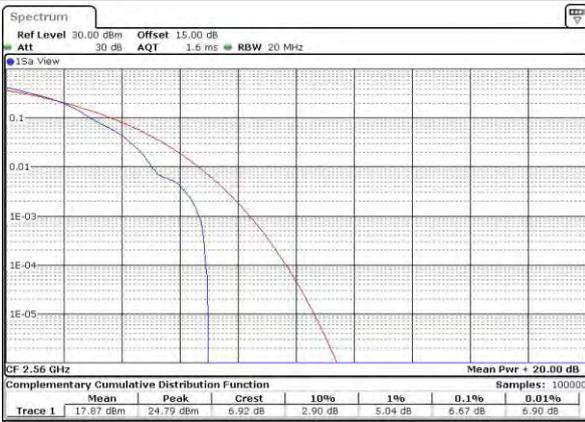
Date: 3,FEB,2015 12:37:32

Middle Channel / Full RB



Date: 3,FEB,2015 12:37:44

Highest Channel / 1RB



Date: 3,FEB,2015 12:37:55

Highest Channel / Full RB



Date: 3,FEB,2015 12:38:05



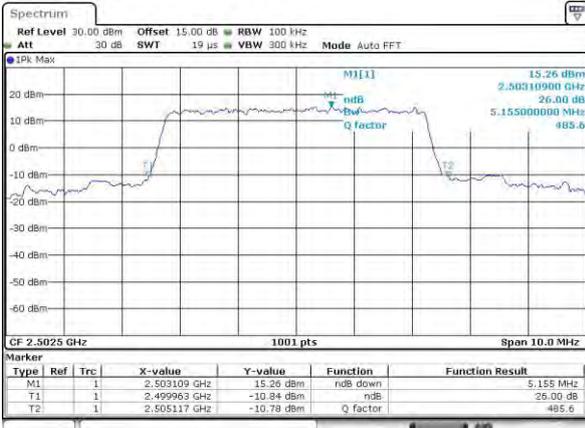
26dB Bandwidth

Mode	LTE Band 7 : 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	-	-	-	-	5.16	5.17	10.09	10.01	14.63	14.69	20.54	20.42
Middle CH	-	-	-	-	5.07	5.04	10.01	10.13	14.78	14.84	20.42	20.26
Highest CH	-	-	-	-	5.06	5.04	10.13	10.13	14.69	14.78	20.42	20.58



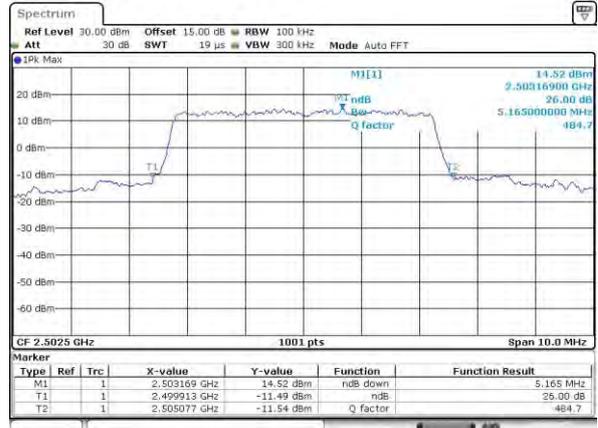
LTE Band 7

Lowest Channel / 5MHz / QPSK



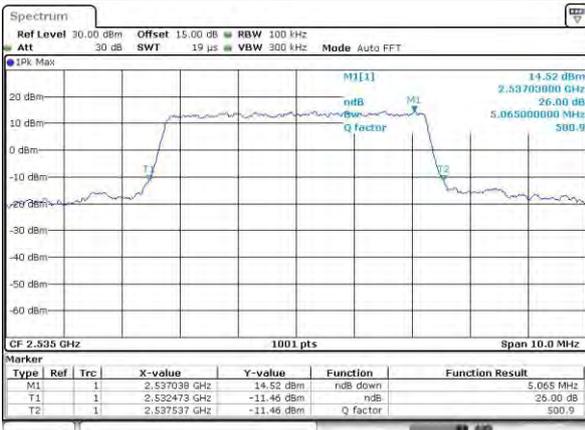
Date: 3,FEB,2015 11:08:54

Lowest Channel / 5MHz / 16QAM



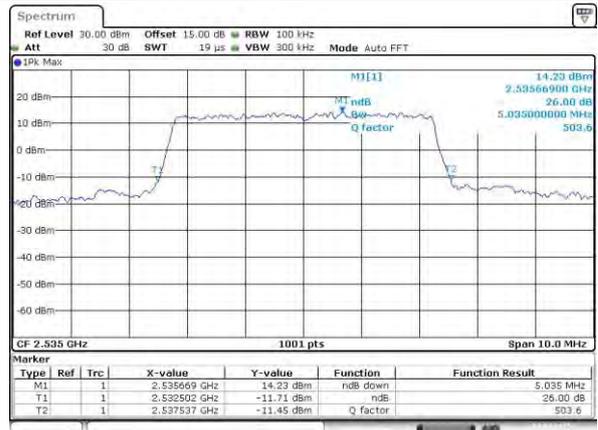
Date: 3,FEB,2015 11:09:06

Middle Channel / 5MHz / QPSK



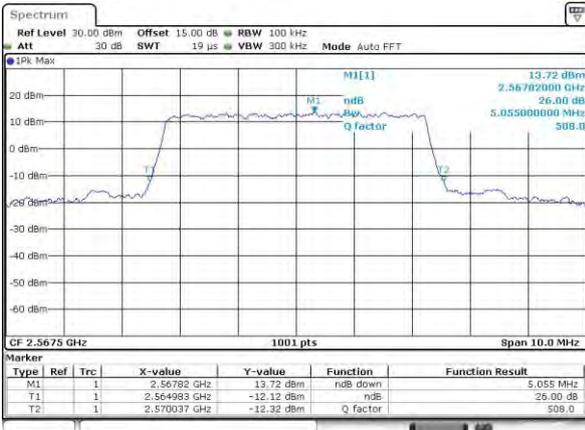
Date: 3,FEB,2015 11:11:30

Middle Channel / 5MHz / 16QAM



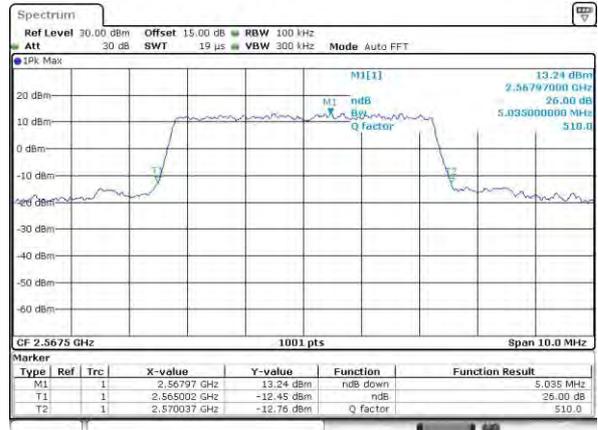
Date: 3,FEB,2015 11:11:31

Highest Channel / 5MHz / QPSK



Date: 3,FEB,2015 11:21:05

Highest Channel / 5MHz / 16QAM



Date: 3,FEB,2015 11:21:17



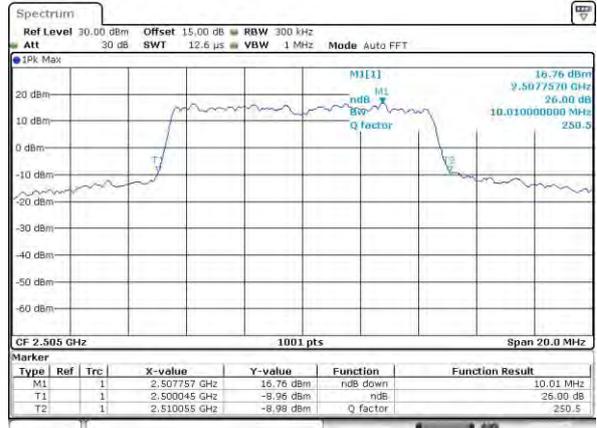
LTE Band 7

Lowest Channel / 10MHz / QPSK



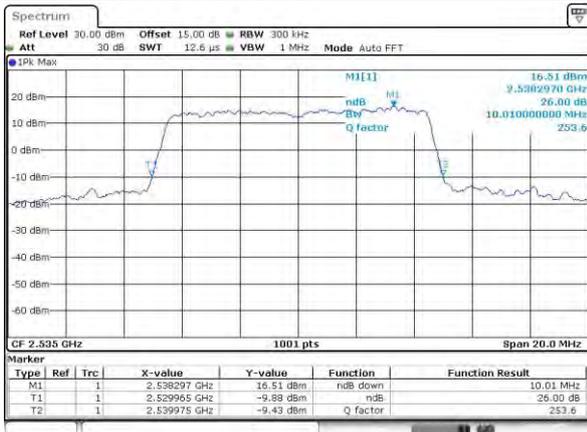
Date: 3.FEB.2015 11:29:53

Lowest Channel / 10MHz / 16QAM



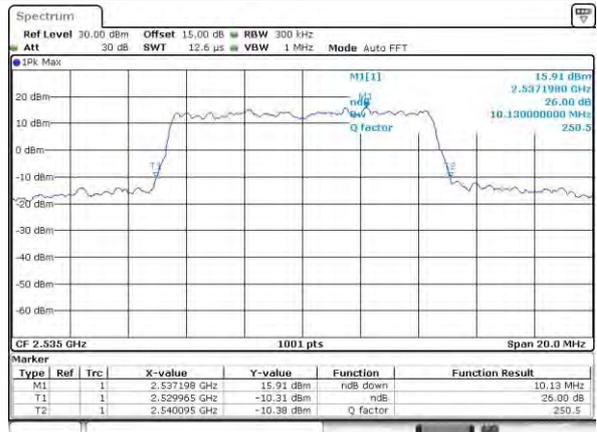
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Middle Channel / 10MHz / QPSK



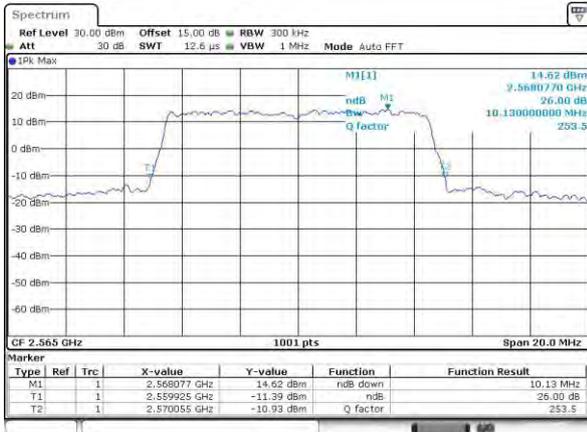
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Middle Channel / 10MHz / 16QAM



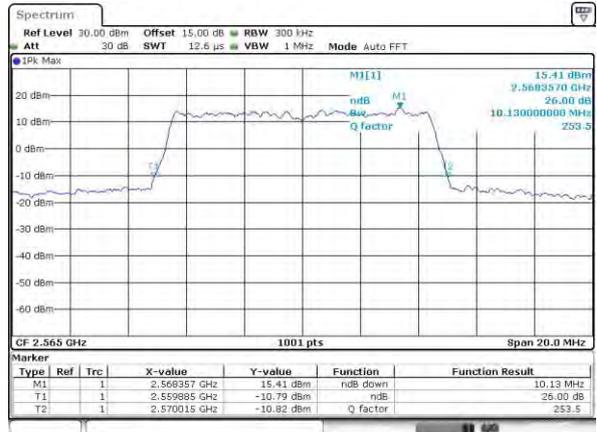
Date: 3.FEB.2015 11:30:03

Highest Channel / 10MHz / QPSK



Date: 3.FEB.2015 11:42:06

Highest Channel / 10MHz / 16QAM

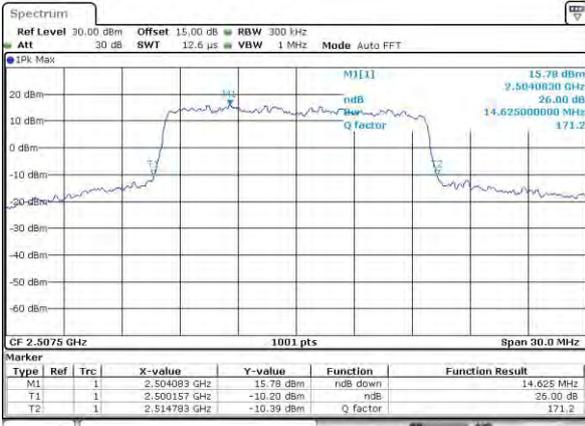


Date: 3.FEB.2015 11:42:39



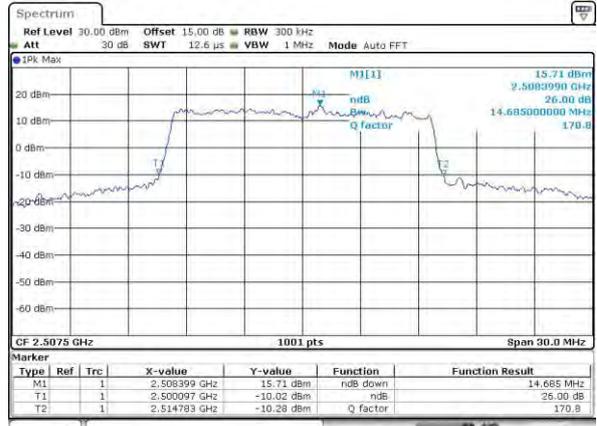
LTE Band 7

Lowest Channel / 15MHz / QPSK



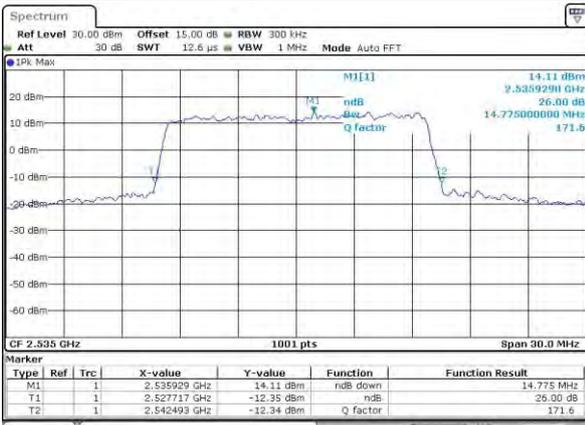
Date: 3.FEB.2015 11:51:13

Lowest Channel / 15MHz / 16QAM



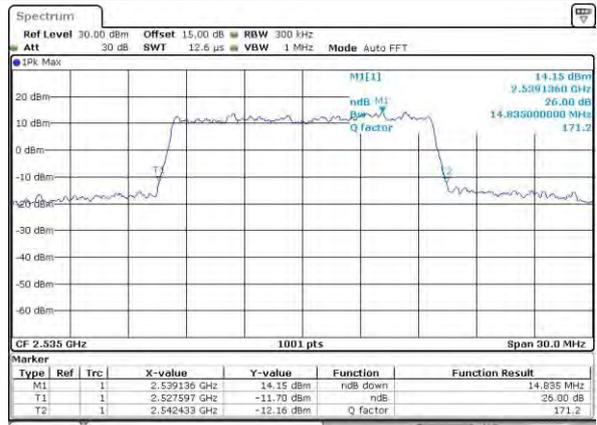
Date: 3.FEB.2015 11:51:25

Middle Channel / 15MHz / QPSK



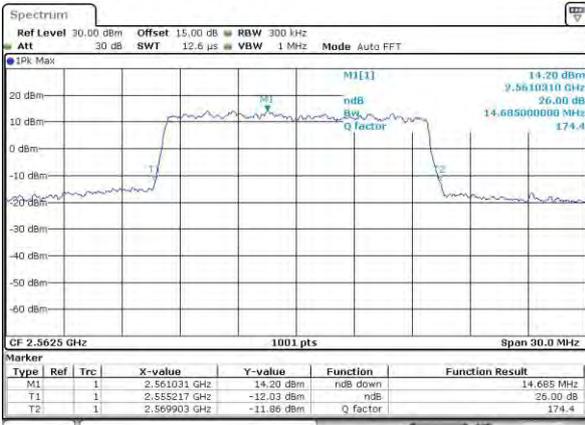
Date: 3.FEB.2015 11:59:57

Middle Channel / 15MHz / 16QAM



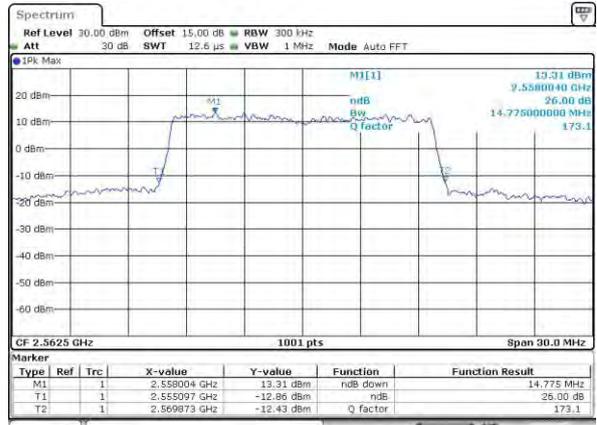
Date: 3.FEB.2015 12:00:10

Highest Channel / 15MHz / QPSK



Date: 3.FEB.2015 12:03:24

Highest Channel / 15MHz / 16QAM

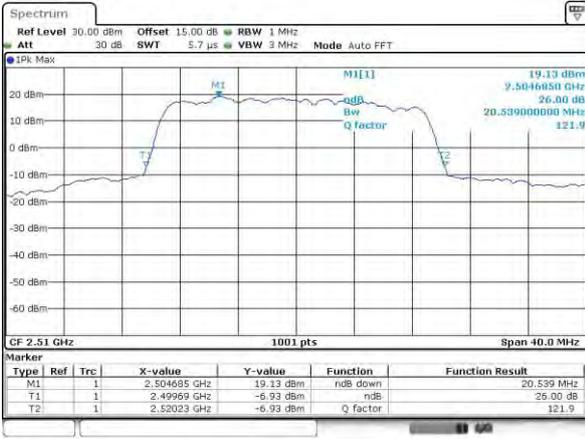


Date: 3.FEB.2015 12:03:36



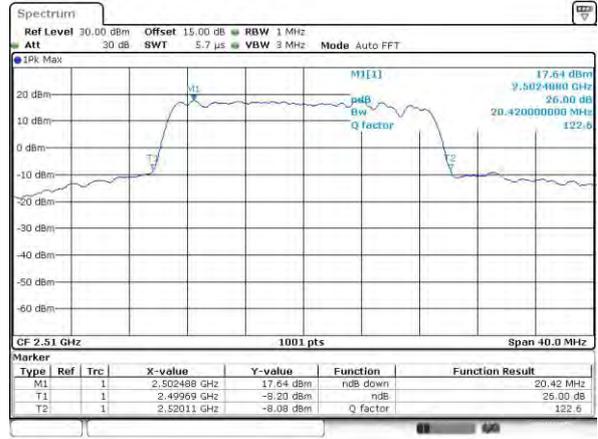
LTE Band 7

Lowest Channel / 20MHz / QPSK



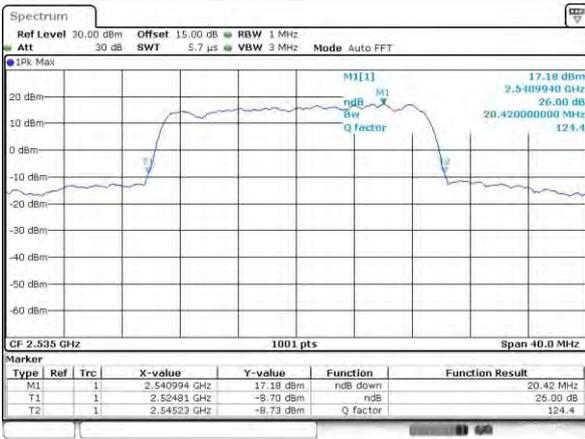
Date: 3,FEB,2015 12:11:08

Lowest Channel / 20MHz / 16QAM



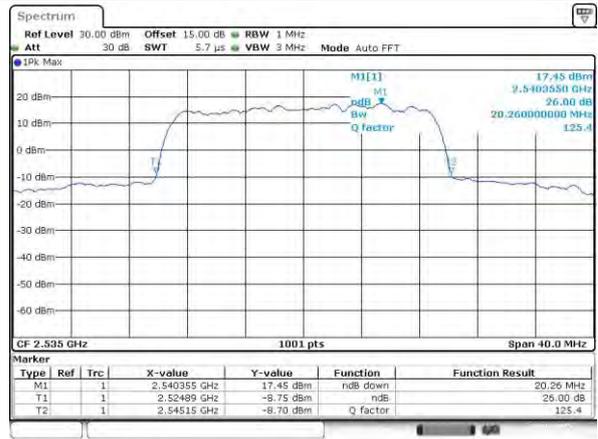
Date: 3,FEB,2015 12:11:20

Middle Channel / 20MHz / QPSK



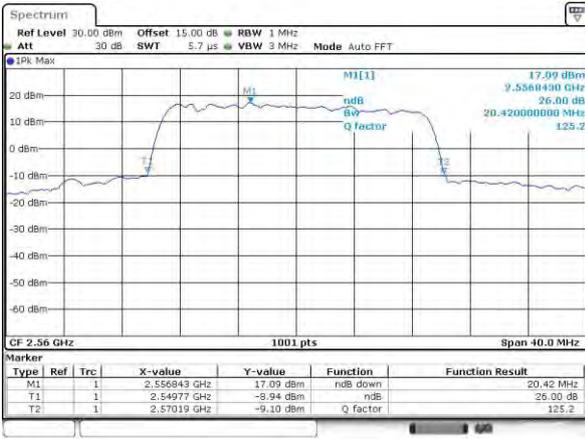
Date: 3,FEB,2015 12:12:02

Middle Channel / 20MHz / 16QAM



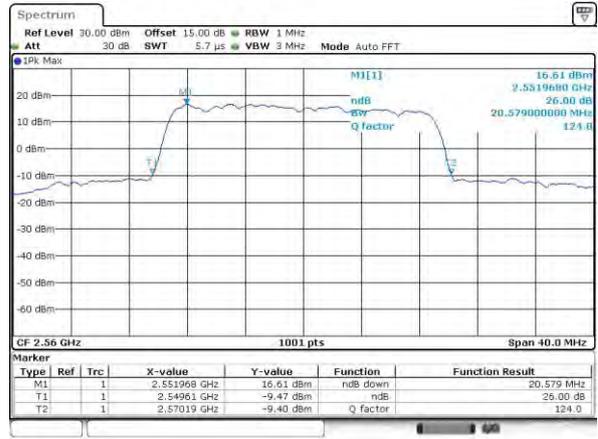
Date: 3,FEB,2015 12:12:04

Highest Channel / 20MHz / QPSK



Date: 3,FEB,2015 12:12:10

Highest Channel / 20MHz / 16QAM



Date: 3,FEB,2015 12:12:30



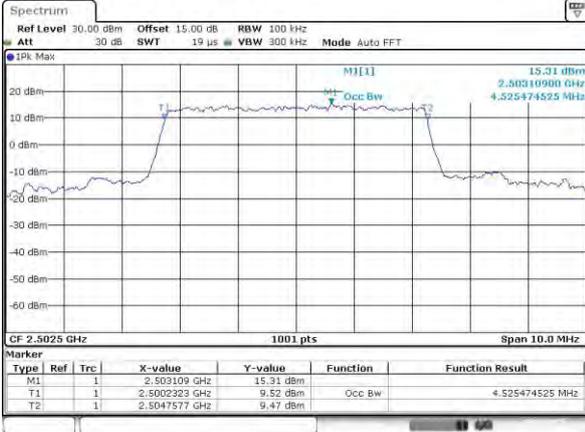
Occupied Bandwidth

Mode	LTE Band 7 : 99%OBW(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	-	-	-	-	4.53	4.53	9.05	9.05	13.49	13.46	18.30	18.26
Middle CH	-	-	-	-	4.5	4.51	9.07	9.01	13.49	13.52	18.38	18.46
Highest CH	-	-	-	-	4.51	4.51	9.09	9.03	13.49	13.49	18.54	18.42



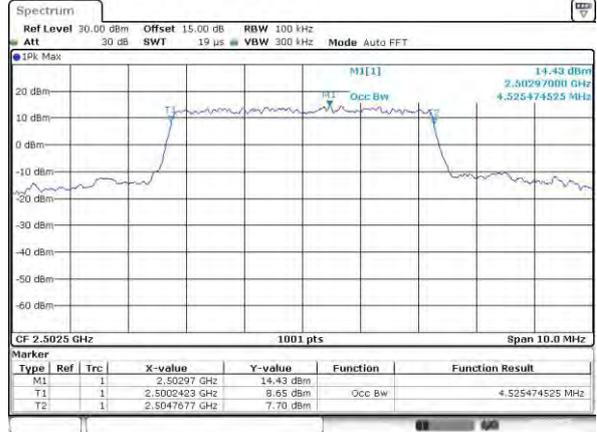
LTE Band 7

Lowest Channel / 5MHz / QPSK



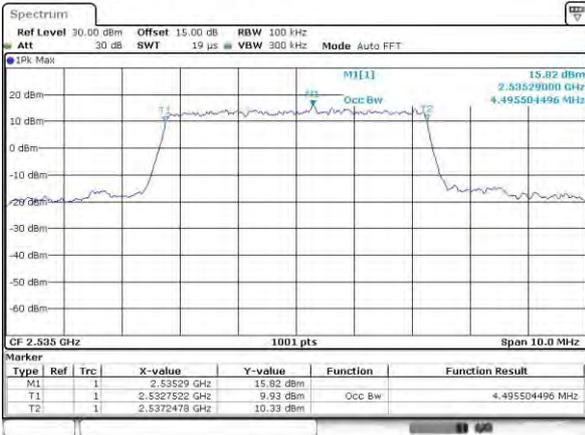
Date: 3.FEB.2015 11:08:32

Lowest Channel / 5MHz / 16QAM



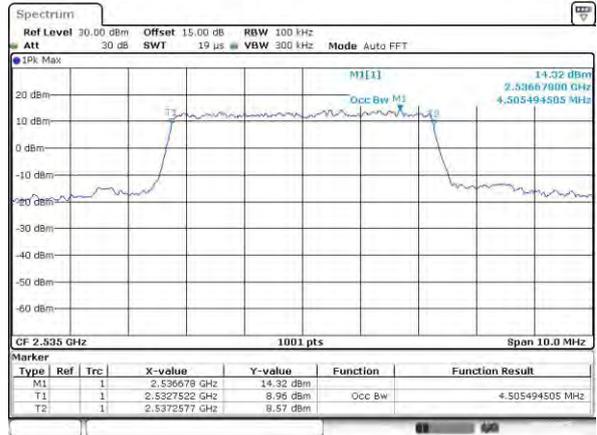
Date: 3.FEB.2015 11:09:42

Middle Channel / 5MHz / QPSK



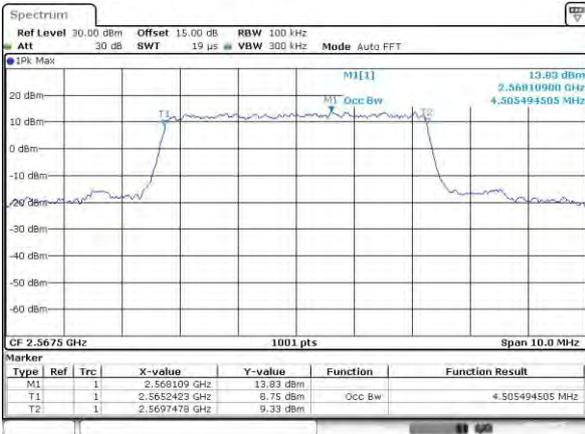
Date: 3.FEB.2015 11:11:17

Middle Channel / 5MHz / 16QAM



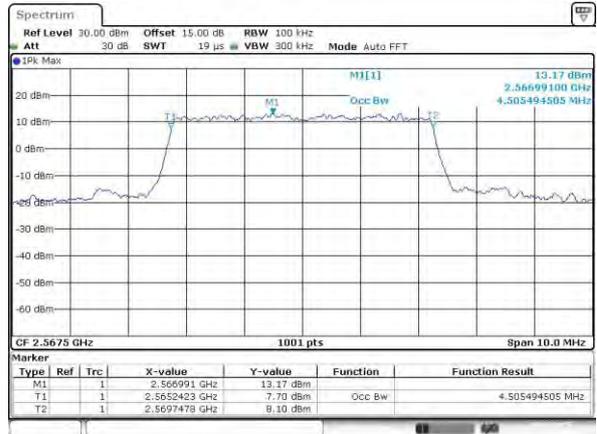
Date: 3.FEB.2015 11:13:27

Highest Channel / 5MHz / QPSK



Date: 3.FEB.2015 11:20:43

Highest Channel / 5MHz / 16QAM

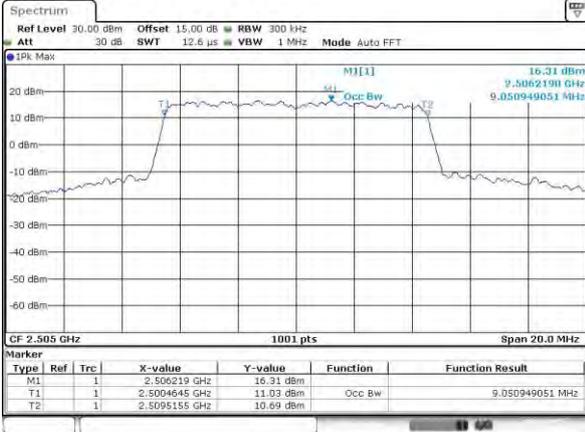


Date: 3.FEB.2015 11:20:53



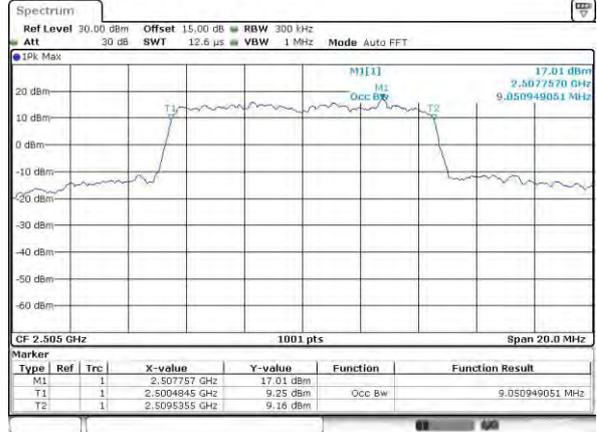
LTE Band 7

Lowest Channel / 10MHz / QPSK



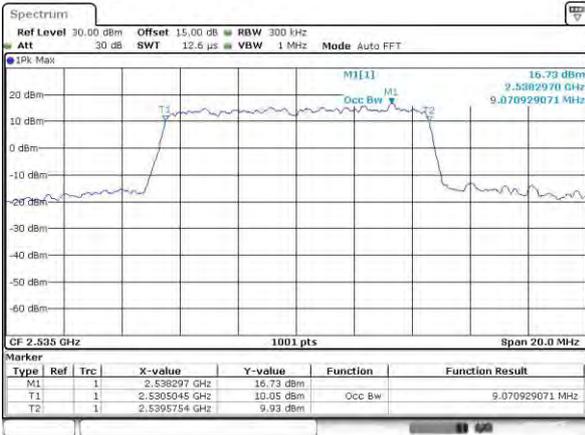
Date: 3,FEB,2015 11:29:31

Lowest Channel / 10MHz / 16QAM



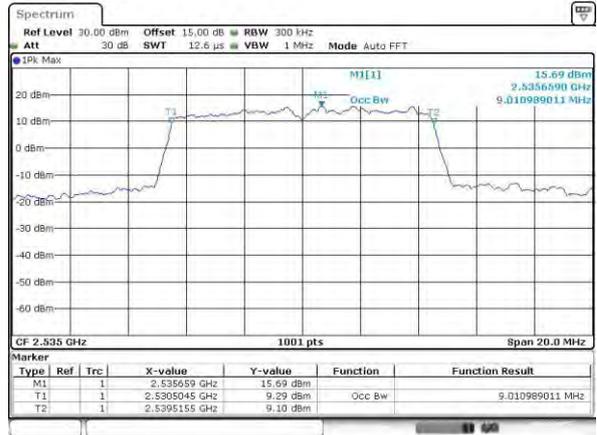
Date: 3,FEB,2015 11:29:41

Middle Channel / 10MHz / QPSK



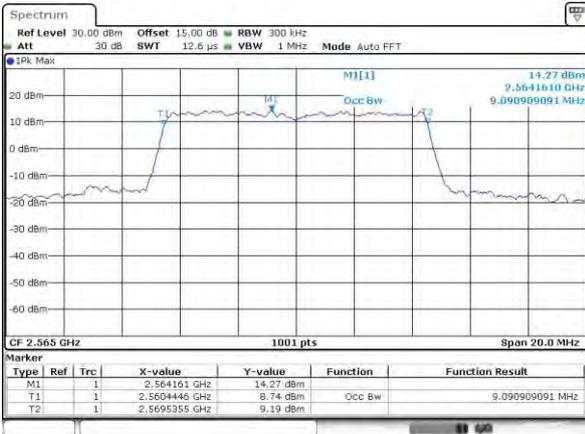
Date: 3,FEB,2015 11:30:24

Middle Channel / 10MHz / 16QAM



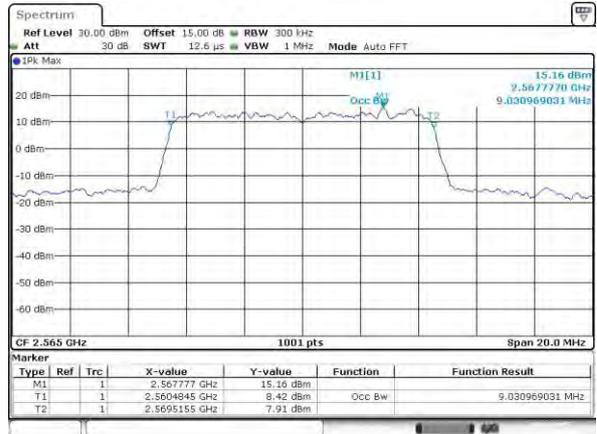
Date: 3,FEB,2015 11:30:36

Highest Channel / 10MHz / QPSK



Date: 3,FEB,2015 11:30:30

Highest Channel / 10MHz / 16QAM

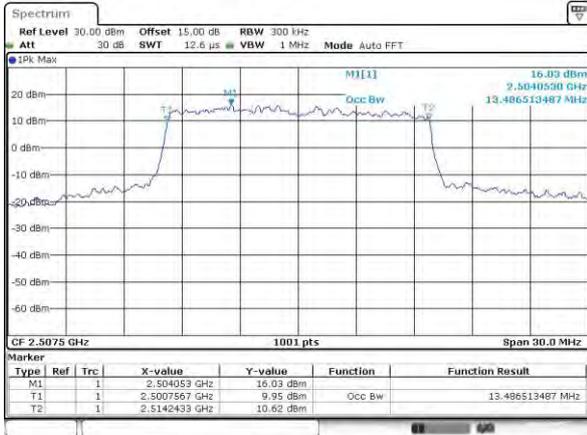


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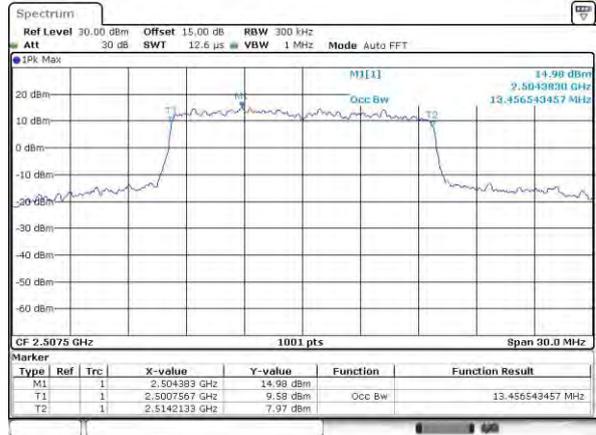


LTE Band 7

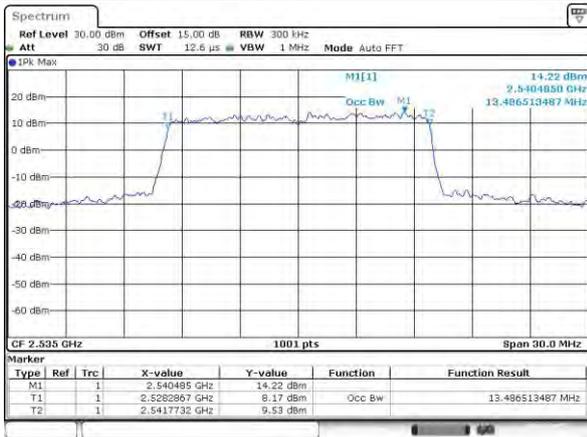
Lowest Channel / 15MHz / QPSK



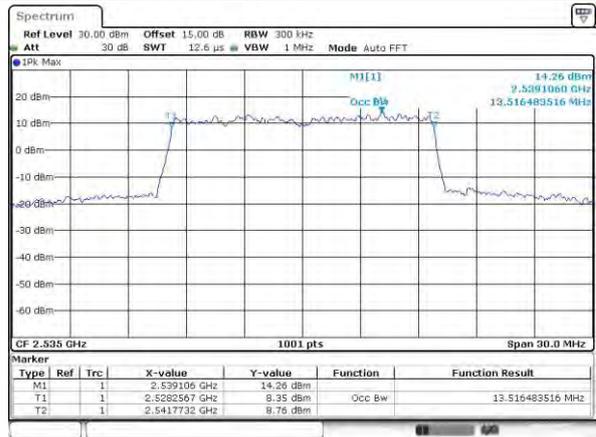
Lowest Channel / 15MHz / 16QAM



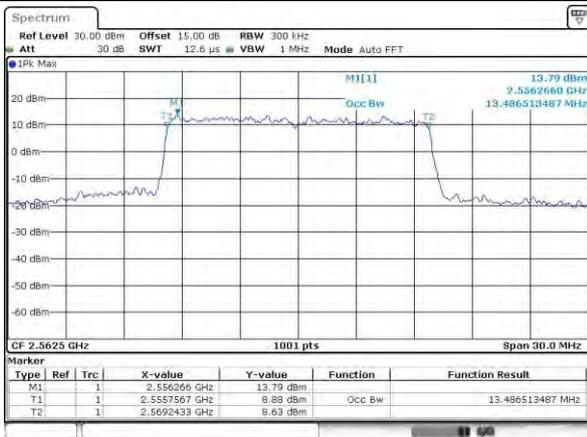
Middle Channel / 15MHz / QPSK



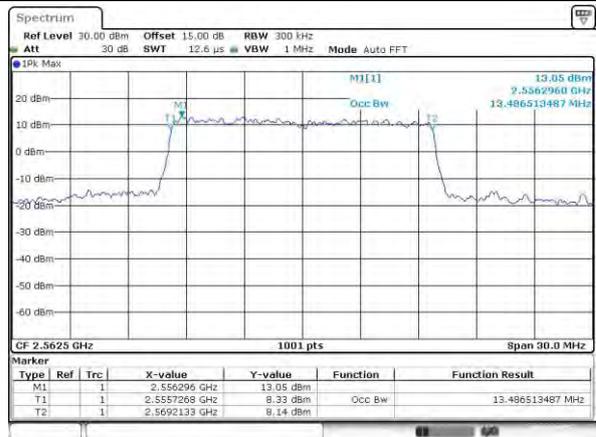
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



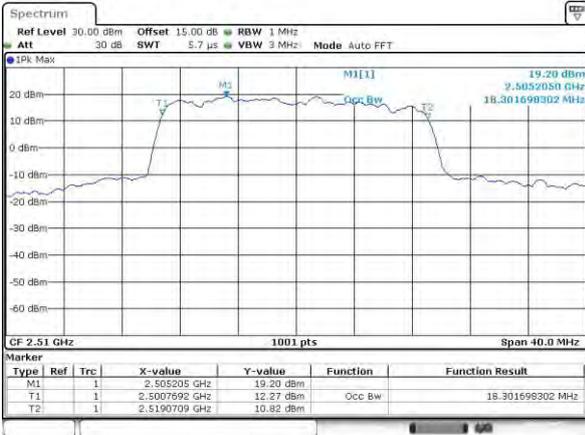
Highest Channel / 15MHz / 16QAM





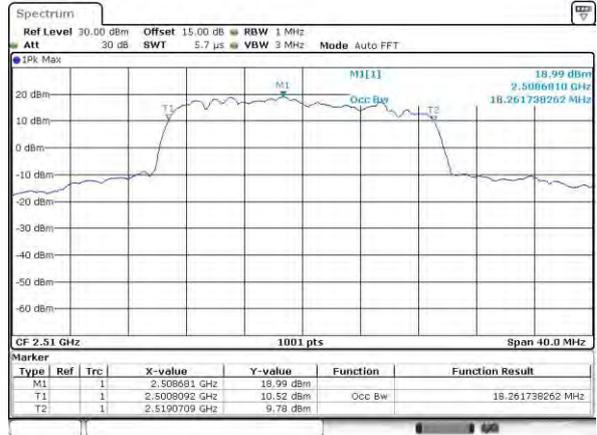
LTE Band 7

Lowest Channel / 20MHz / QPSK



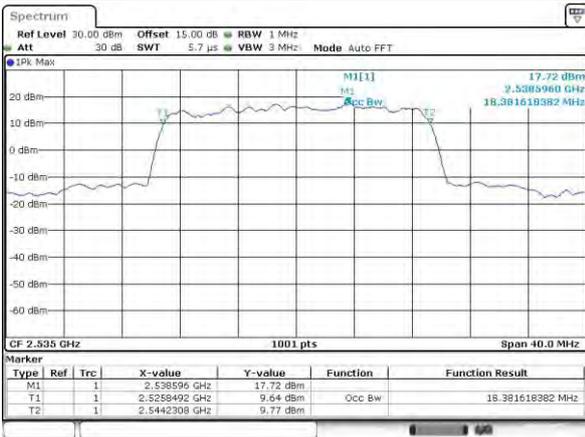
Date: 3,FEB,2015 12:11:44

Lowest Channel / 20MHz / 16QAM



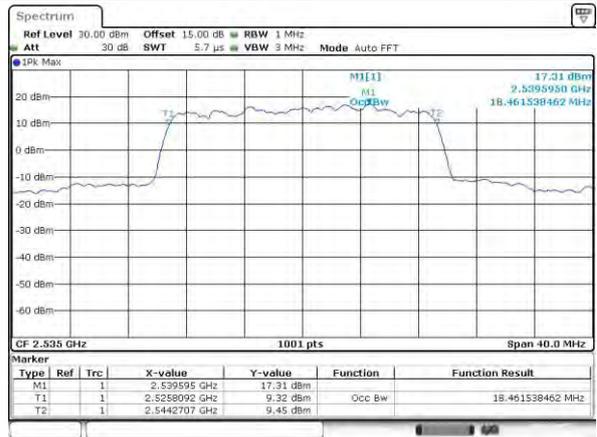
Date: 3,FEB,2015 12:11:56

Middle Channel / 20MHz / QPSK



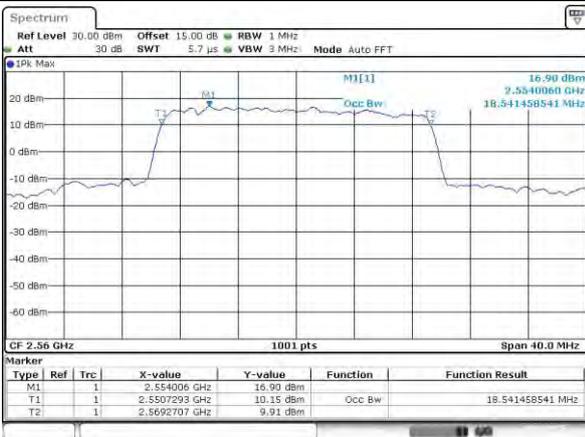
Date: 3,FEB,2015 12:12:20

Middle Channel / 20MHz / 16QAM



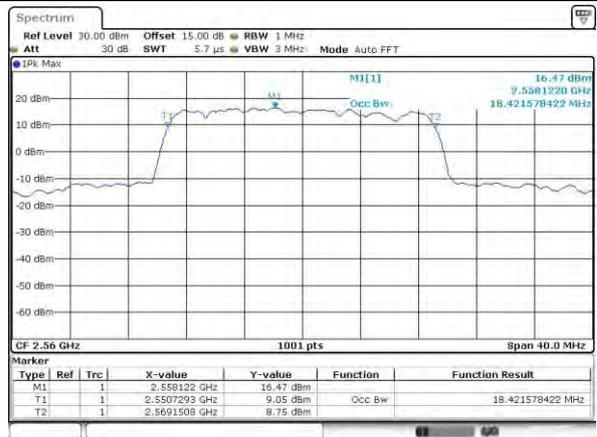
Date: 3,FEB,2015 12:12:40

Highest Channel / 20MHz / QPSK



Date: 3,FEB,2015 12:12:55

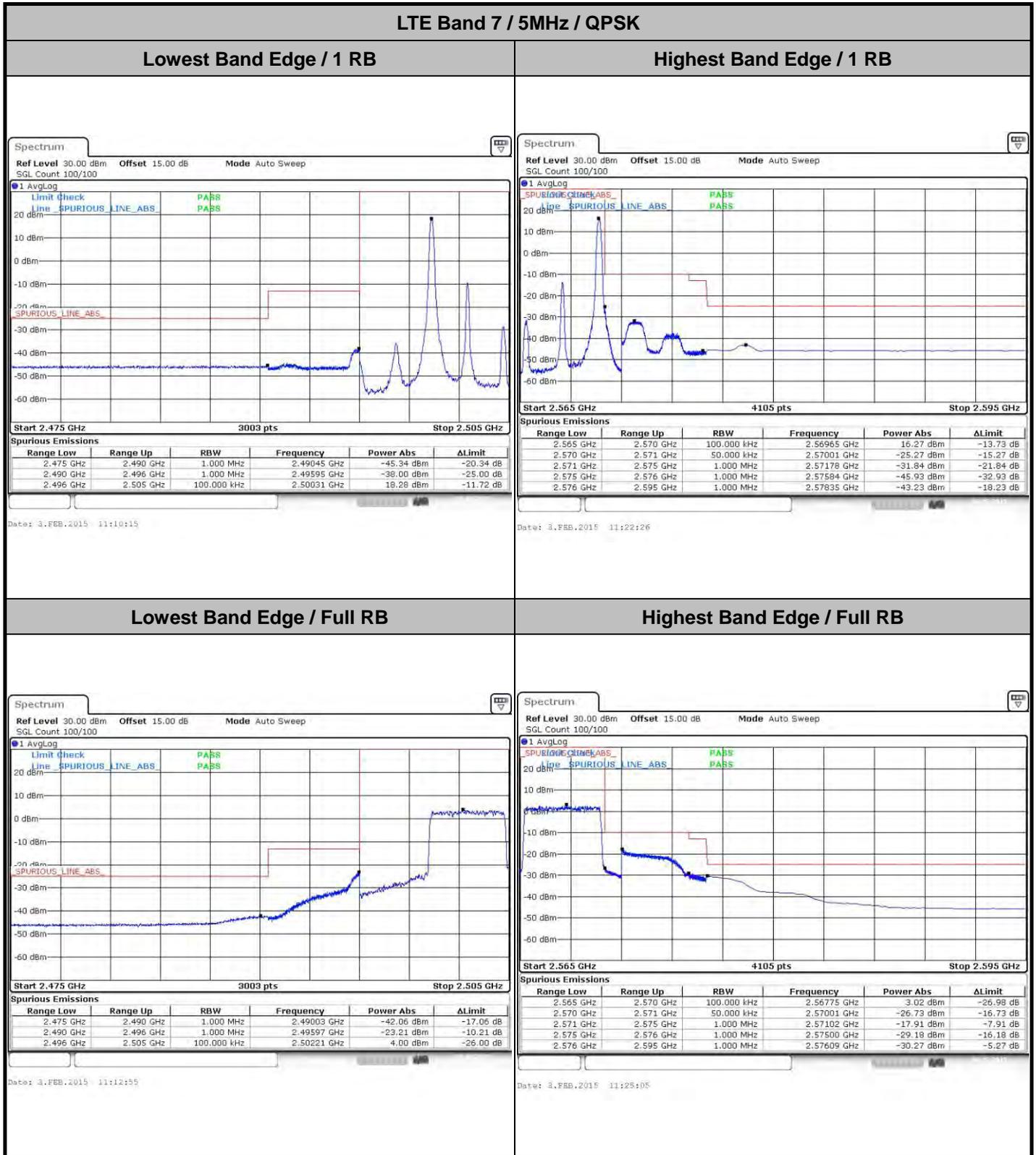
Highest Channel / 20MHz / 16QAM



Date: 3,FEB,2015 12:12:06



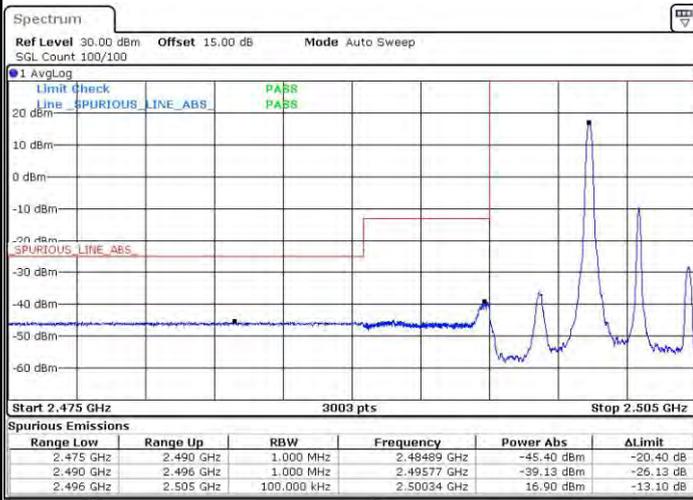
Conducted Band Edge





LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 3.FEB.2015 11:11:35

Highest Band Edge / 1 RB



Date: 3.FEB.2015 11:23:45

Lowest Band Edge / Full RB



Date: 3.FEB.2015 11:14:14

Highest Band Edge / Full RB

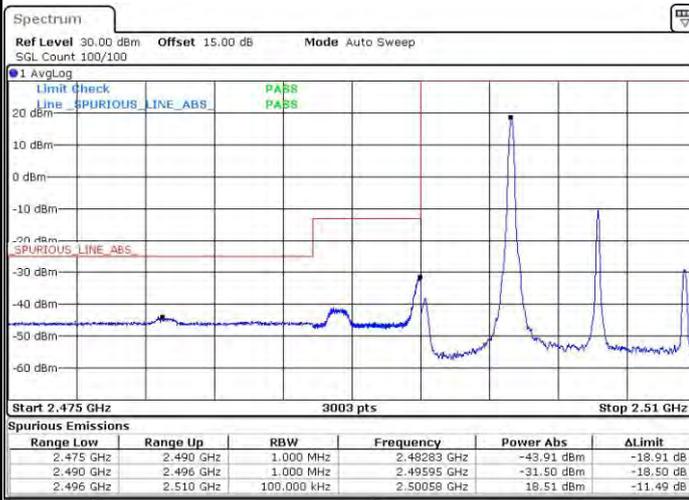


Date: 3.FEB.2015 11:26:24

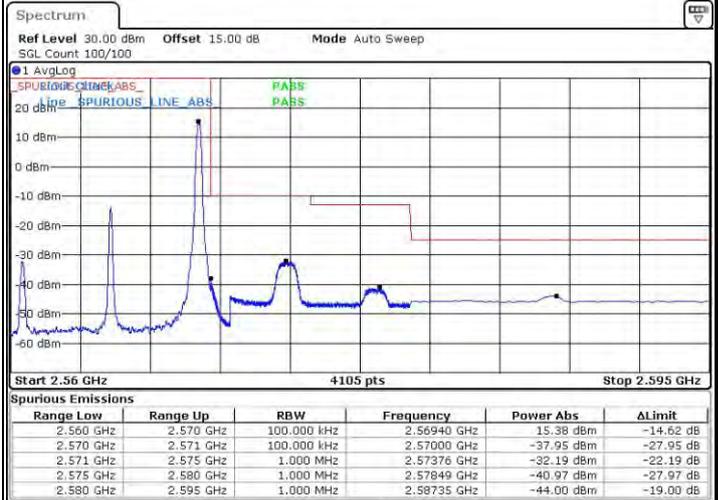


LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



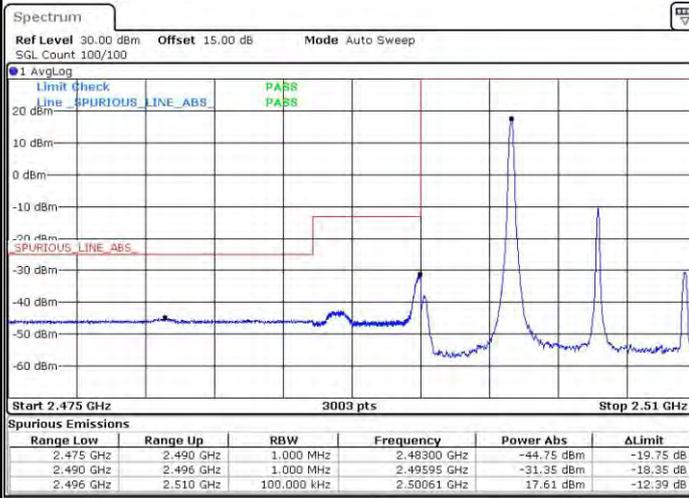
Highest Band Edge / Full RB





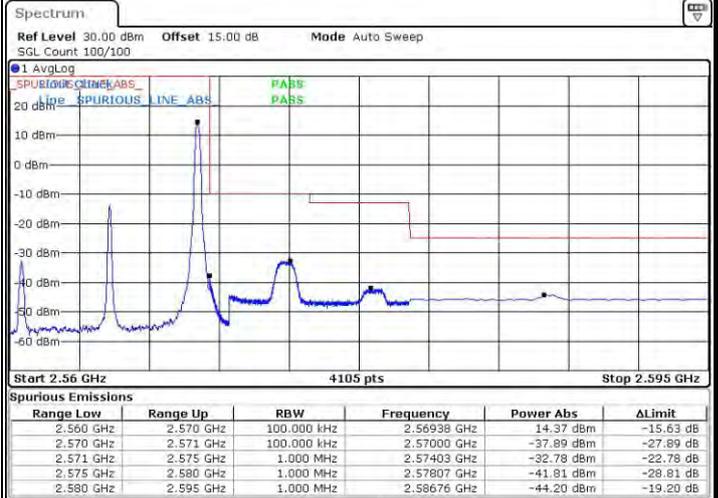
LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 3.FEB.2015 11:32:38

Highest Band Edge / 1 RB



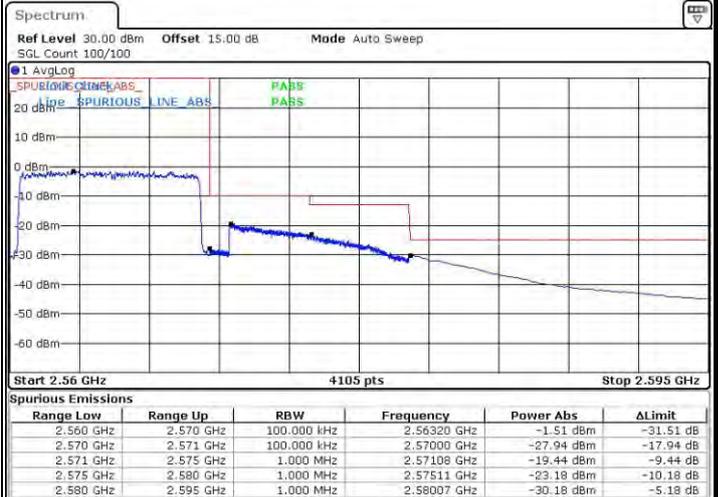
Date: 3.FEB.2015 11:45:10

Lowest Band Edge / Full RB



Date: 3.FEB.2015 11:35:17

Highest Band Edge / Full RB

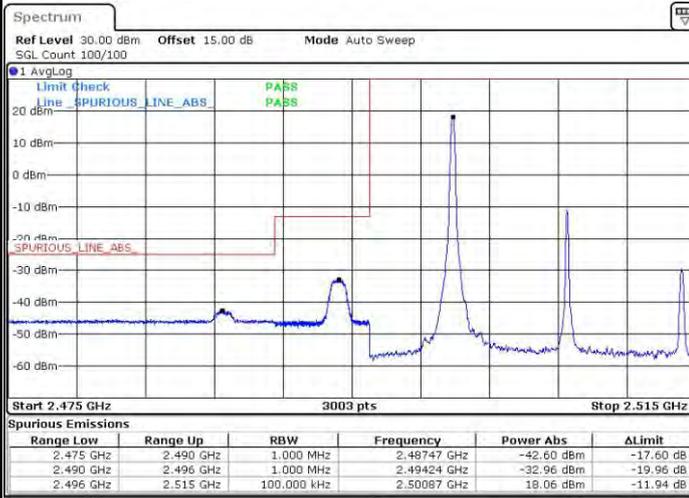


Date: 3.FEB.2015 11:47:49



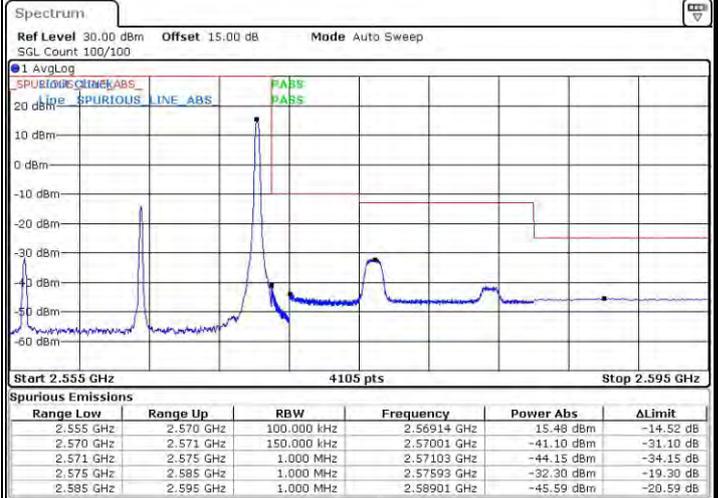
LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB



Date: 3.FEB.2015 11:52:34

Highest Band Edge / 1 RB



Date: 3.FEB.2015 12:04:44

Lowest Band Edge / Full RB



Date: 3.FEB.2015 11:55:13

Highest Band Edge / Full RB

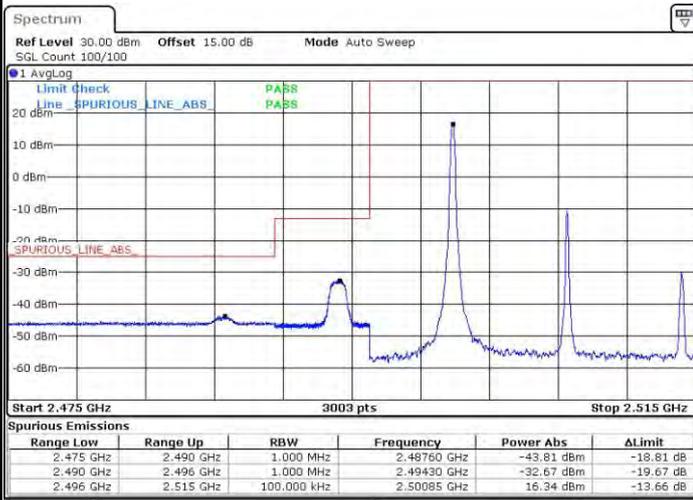


Date: 3.FEB.2015 12:07:24

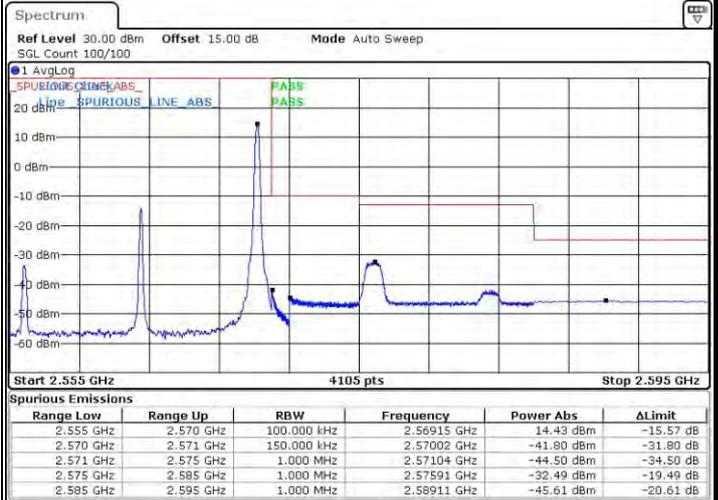


LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



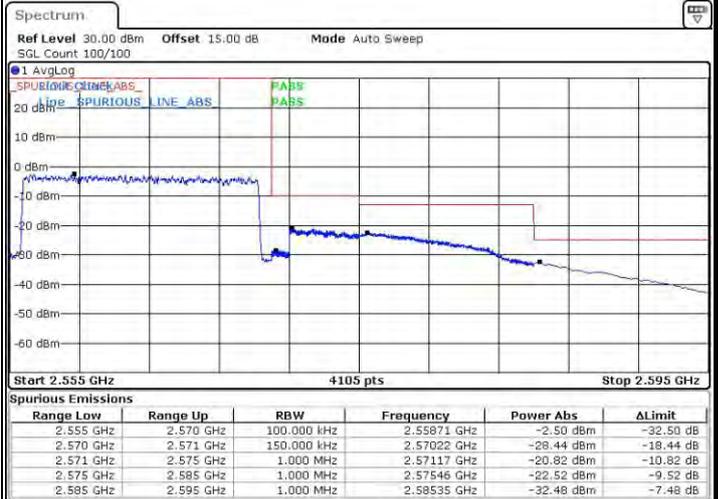
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



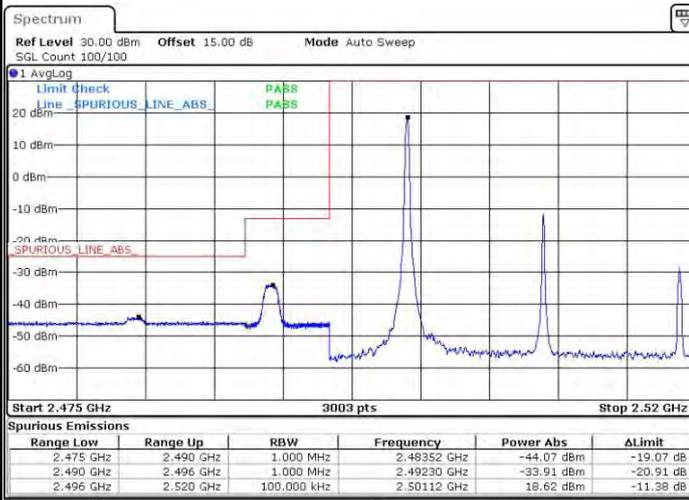
Highest Band Edge / Full RB





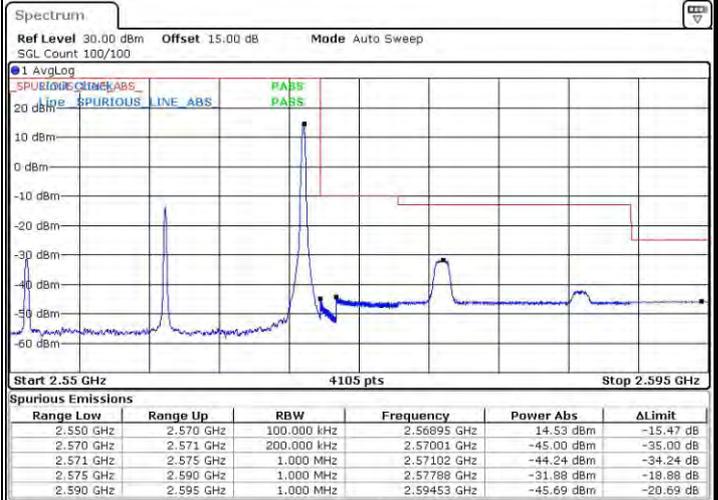
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB



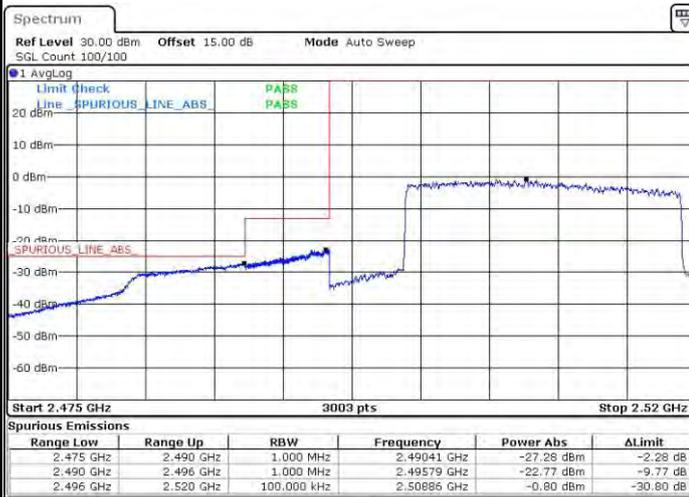
Date: 3.FEB.2015 12:13:29

Highest Band Edge / 1 RB



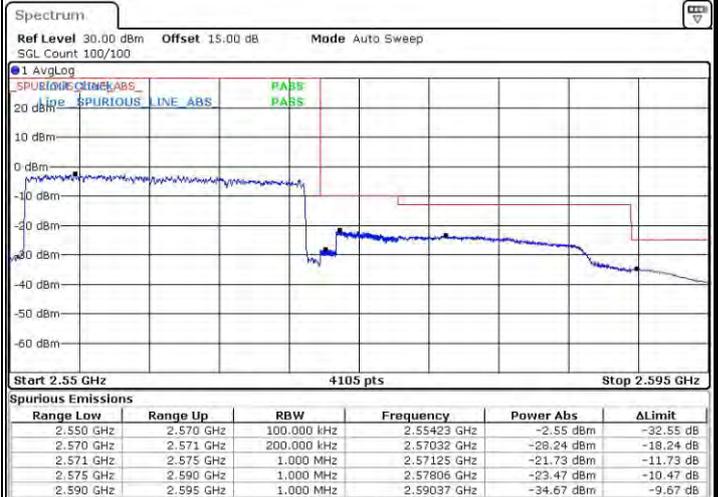
Date: 3.FEB.2015 12:25:38

Lowest Band Edge / Full RB



Date: 3.FEB.2015 12:16:08

Highest Band Edge / Full RB

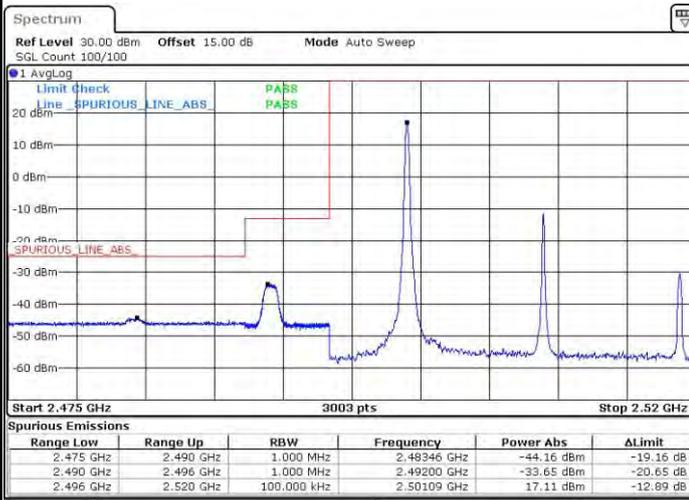


Date: 3.FEB.2015 12:29:36



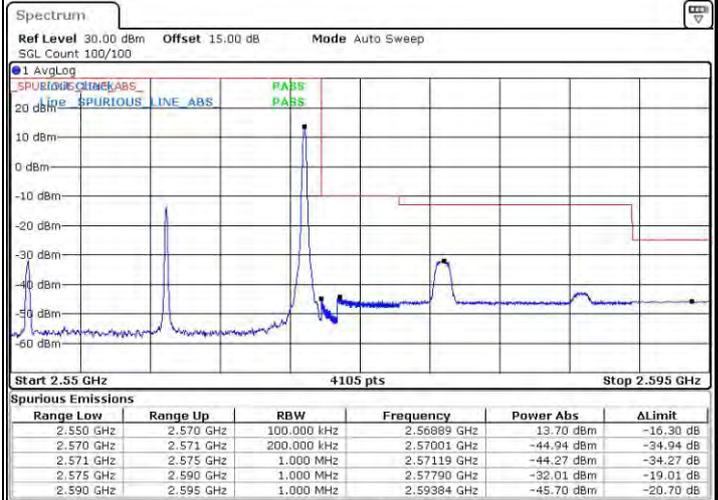
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 3.FEB.2015 12:14:48

Highest Band Edge / 1RB



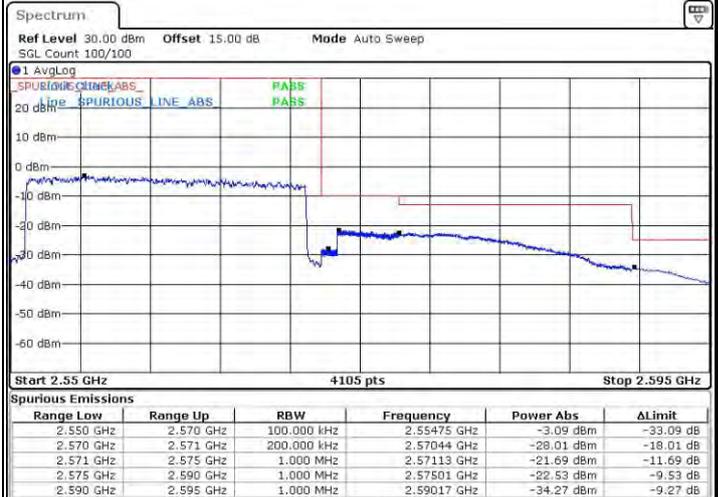
Date: 3.FEB.2015 12:26:57

Lowest Band Edge / Full RB



Date: 3.FEB.2015 12:17:27

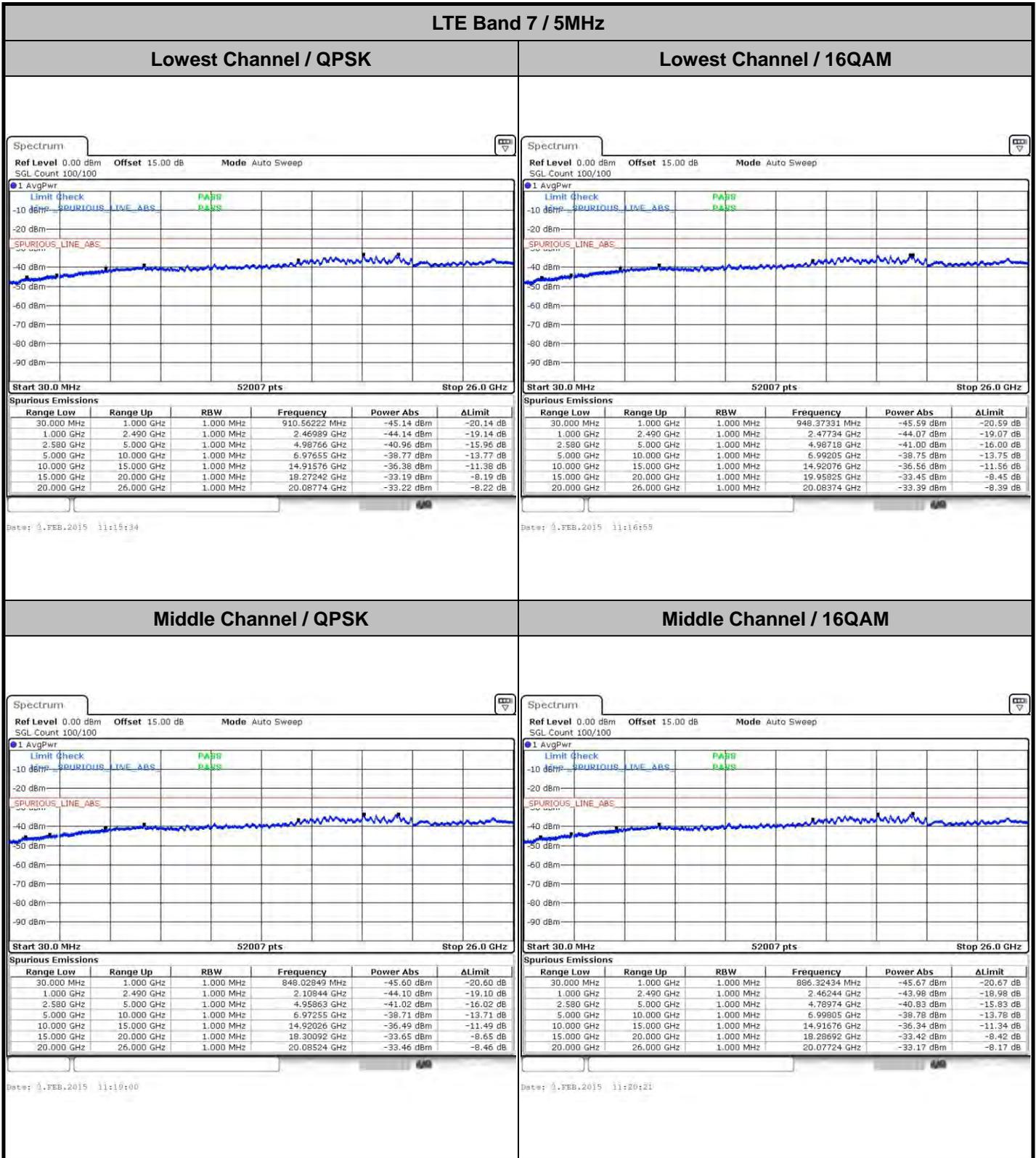
Highest Band Edge / Full RB



Date: 3.FEB.2015 12:28:17



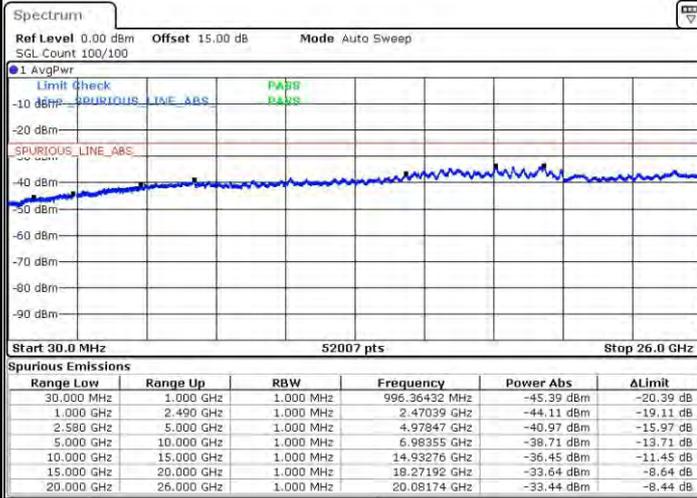
Conducted Spurious Emission





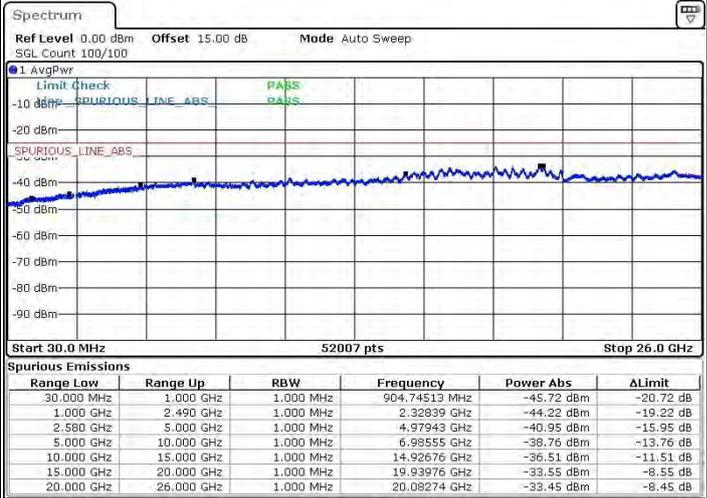
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 3.FEB.2015 11:27:44

Highest Channel / 16QAM



Date: 3.FEB.2015 11:29:05

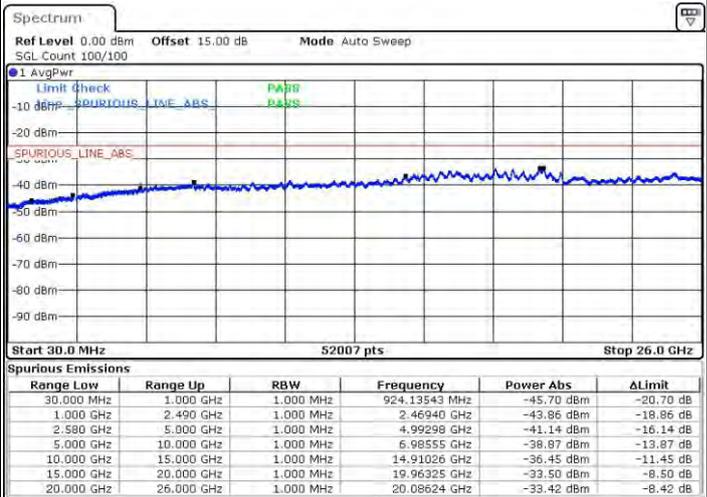
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 3.FEB.2015 11:36:39

Lowest Channel / 16QAM



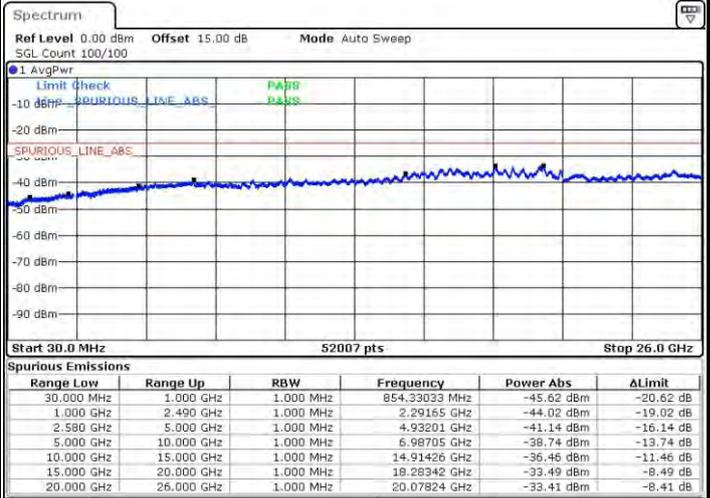
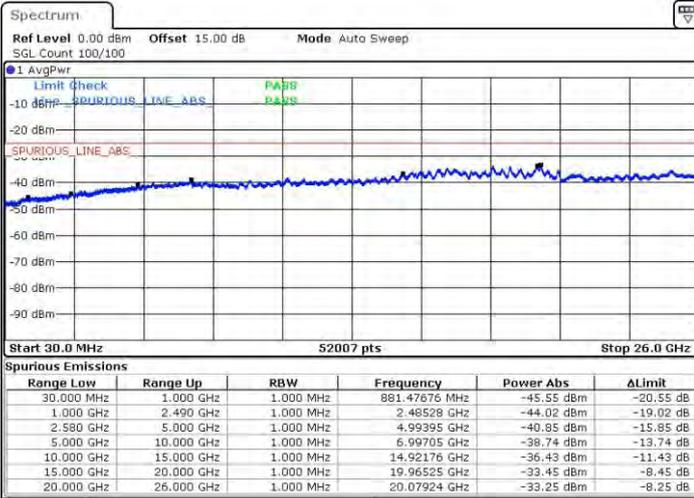
Date: 3.FEB.2015 11:38:02



LTE Band 7 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

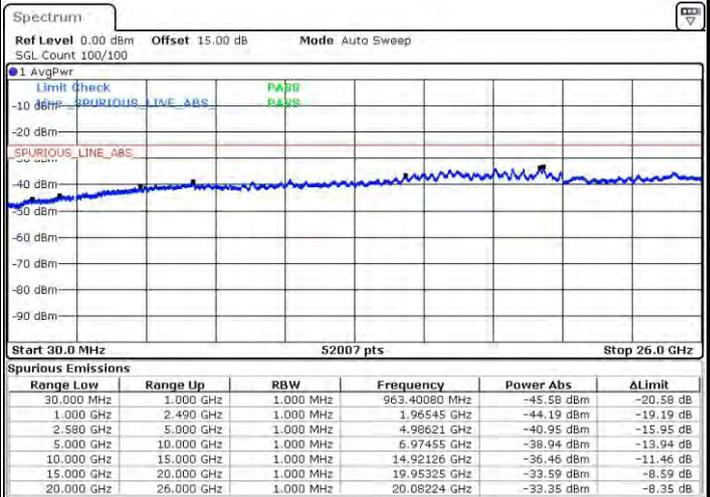
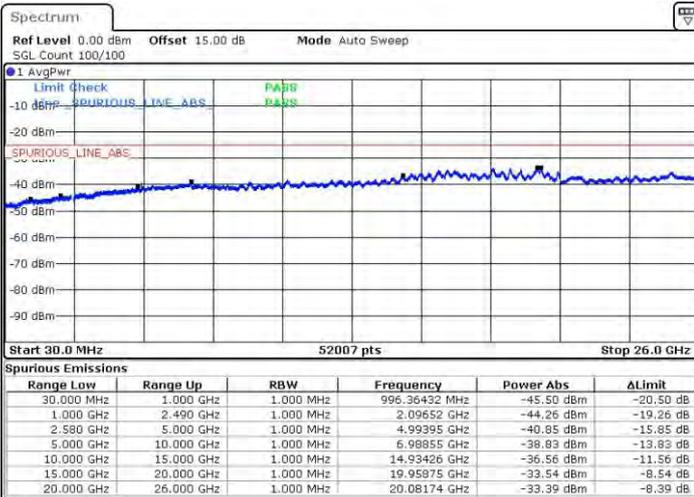


Date: 3.FEB.2015 11:40:13

Date: 3.FEB.2015 11:41:37

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 3.FEB.2015 11:49:09

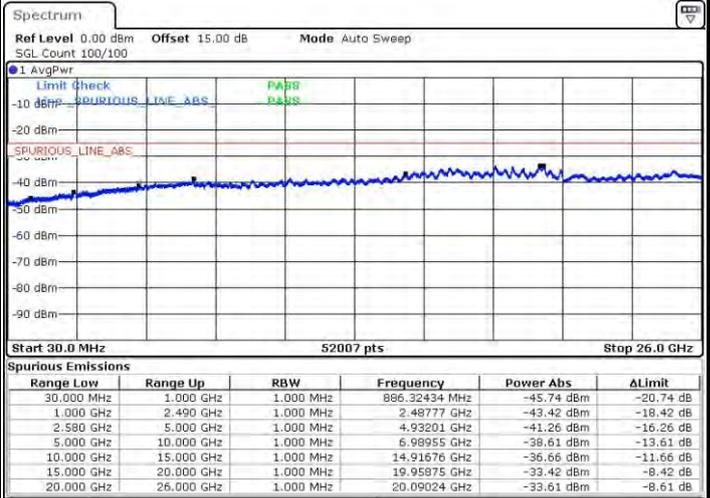
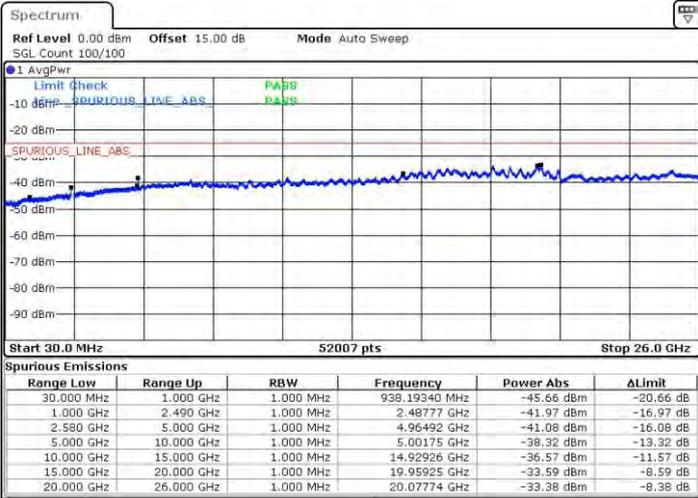
Date: 3.FEB.2015 11:50:29



LTE Band 7 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

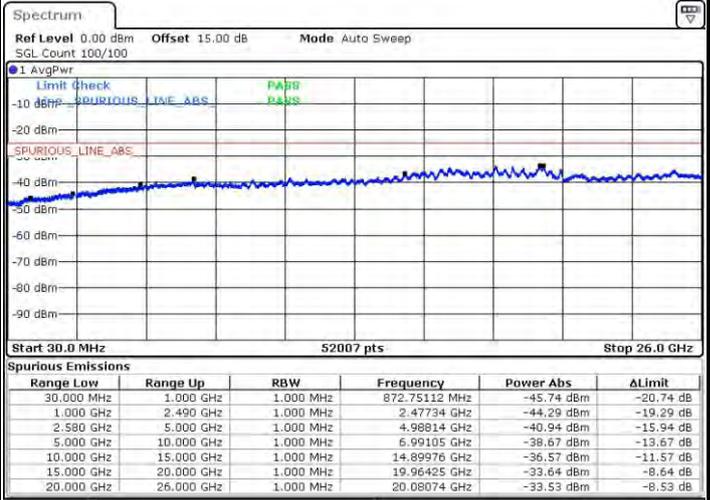
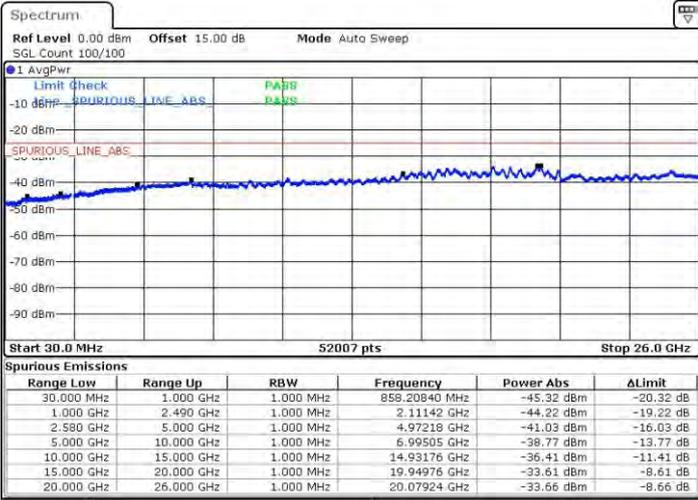


Date: 3.FEB.2015 11:57:53

Date: 3.FEB.2015 11:59:14

Middle Channel / QPSK

Middle Channel / 16QAM



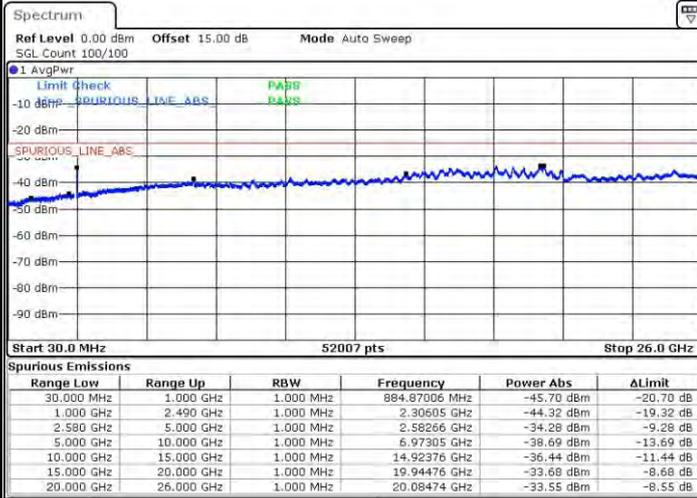
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Date: 3.FEB.2015 12:03:39



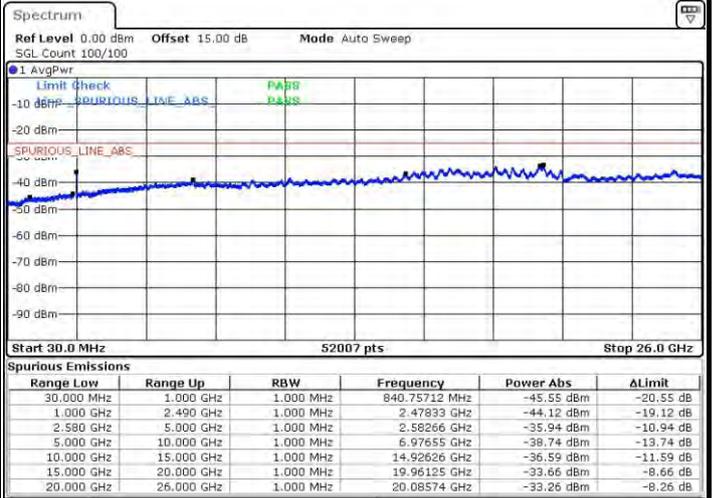
LTE Band 7 / 15MHz

Highest Channel / QPSK



Date: 3.FEB.2015 12:10:03

Highest Channel / 16QAM



Date: 3.FEB.2015 12:11:24

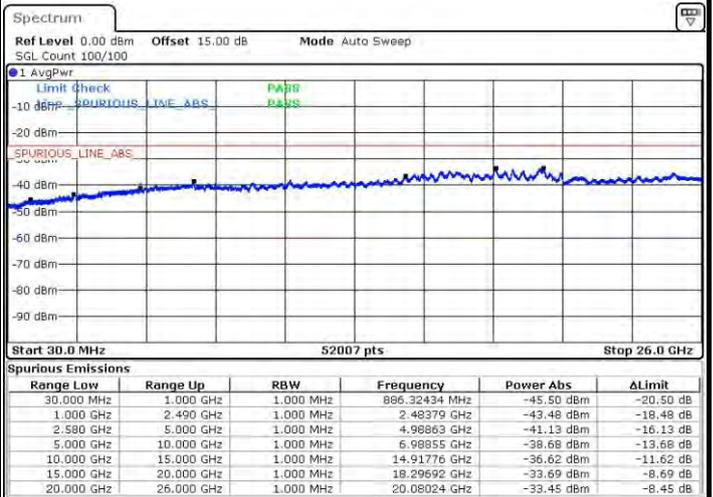
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 3.FEB.2015 12:16:47

Lowest Channel / 16QAM



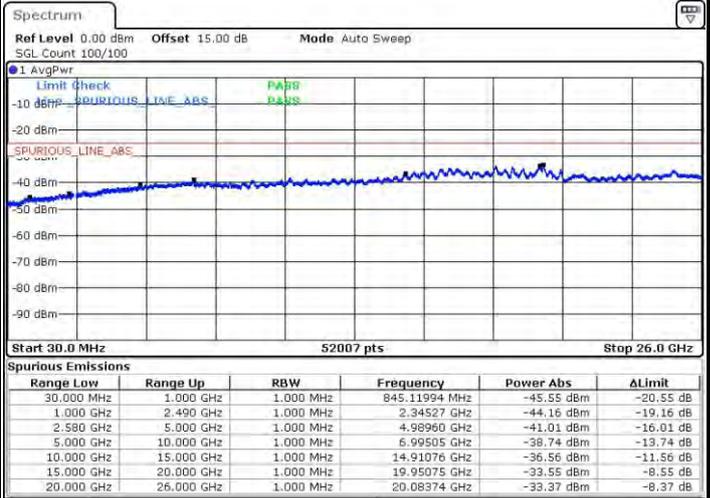
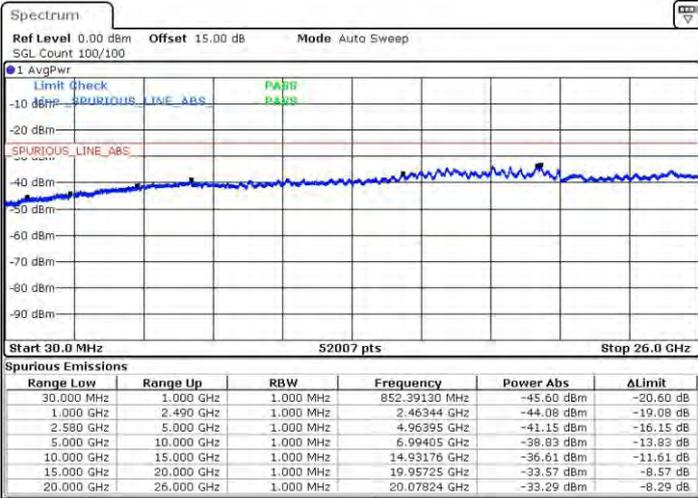
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LTE Band 7 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

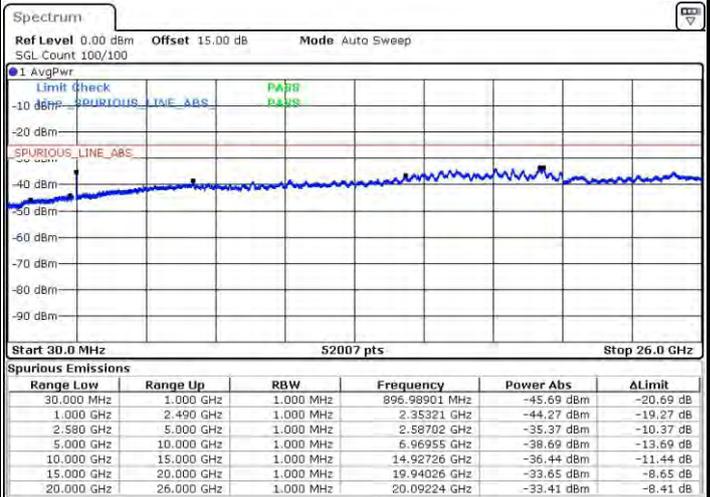
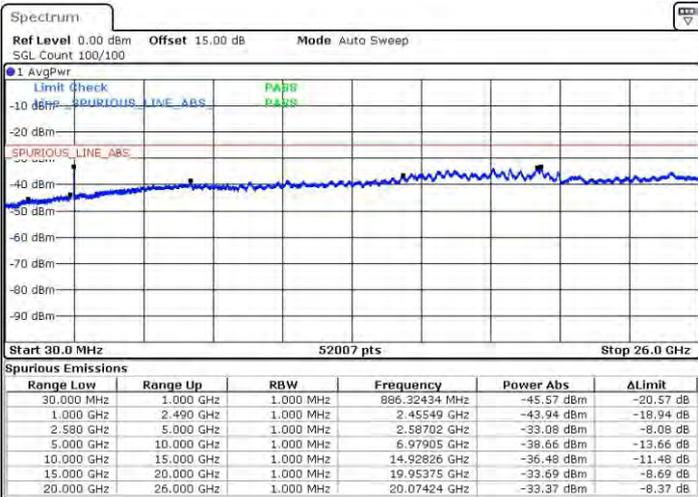


Date: 3.FEB.2015 12:22:13

Date: 3.FEB.2015 12:23:34

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 3.FEB.2015 12:30:56

Date: 3.FEB.2015 12:32:17



Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0032	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage = 3.80V. ; Battery End Point (BEP) = 3.60V. ; Maximum Voltage =4.35 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Appendix B. Test Results of Radiated Test

EIRP

LTE Band 4 / 1.4MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	3	2	22.98	0.1986	23.51	0.2244
Middle		1	2	23.89	0.2449	24.33	0.2710
Highest		1	5	24.30	0.2692	23.79	0.2393
Lowest	16QAM	1	2	22.09	0.1618	22.63	0.1832
Middle		1	2	22.82	0.1914	23.40	0.2188
Highest		1	2	23.42	0.2198	22.95	0.1972
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 3MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	23.15	0.2065	23.57	0.2275
Middle		1	0	24.09	0.2564	24.36	0.2729
Highest		1	0	23.64	0.2312	23.40	0.2188
Lowest	16QAM	1	7	22.37	0.1726	22.72	0.1871
Middle		1	0	23.13	0.2056	23.38	0.2178
Highest		1	7	23.30	0.2138	22.86	0.1932
Limit	EIRP < 1W			Result		PASS	



LTE Band 4 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.70	0.1862	23.01	0.2000
Middle		1	0	24.33	0.2710	24.34	0.2716
Highest		1	12	23.90	0.2455	23.41	0.2193
Lowest	16QAM	1	0	22.07	0.1611	22.37	0.1726
Middle		1	0	23.28	0.2128	23.30	0.2138
Highest		1	12	23.32	0.2148	22.83	0.1919
Limit	EIRP < 1W			Result		PASS	



LTE Band 4/ 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.60	0.1820	23.00	0.1995
Middle		1	0	24.35	0.2723	24.38	0.2742
Highest		1	24	23.15	0.2065	23.14	0.2061
Lowest	16QAM	1	0	21.96	0.1570	22.35	0.1718
Middle		1	0	23.44	0.2208	23.33	0.2153
Highest		1	24	22.58	0.1811	22.58	0.1811
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 15MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	74	24.20	0.2630	24.34	0.2716
Middle		1	0	24.34	0.2716	24.37	0.2735
Highest		1	37	23.27	0.2123	23.20	0.2089
Lowest	16QAM	1	0	21.57	0.1435	21.95	0.1567
Middle		1	0	23.32	0.2148	23.35	0.2163
Highest		1	74	23.11	0.2046	22.51	0.1782
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 20MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	24.40	0.2754	24.10	0.2570
Middle		1	49	24.01	0.2518	24.36	0.2729
Highest		1	49	23.50	0.2239	23.51	0.2244
Lowest	16QAM	1	0	21.21	0.1321	21.59	0.1442
Middle		1	99	23.26	0.2118	23.30	0.2138
Highest		1	49	22.88	0.1941	22.89	0.1945
Limit	EIRP < 1W			Result		PASS	



LTE Band 7 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	26.20	0.4169	26.34	0.4305
Middle		1	24	25.68	0.3698	25.96	0.3945
Highest		1	24	25.27	0.3365	26.00	0.3981
Lowest	16QAM	1	24	25.02	0.3177	25.06	0.3206
Middle		1	24	24.61	0.2891	24.75	0.2985
Highest		1	0	24.52	0.2831	25.24	0.3342
Limit	EIRP < 2W			Result		PASS	

LTE Band 7 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	26.16	0.4130	26.29	0.4256
Middle		1	49	26.08	0.4055	26.16	0.4130
Highest		1	49	25.36	0.3436	26.06	0.4036
Lowest	16QAM	1	0	25.09	0.3228	25.43	0.3491
Middle		1	49	25.03	0.3184	25.26	0.3357
Highest		1	49	24.39	0.2748	25.16	0.3281
Limit	EIRP < 2W			Result		PASS	



LTE Band 7 / 15MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	26.19	0.4159	26.34	0.4305
Middle		1	74	26.27	0.4236	26.34	0.4305
Highest		1	0	26.36	0.4325	26.33	0.4295
Lowest	16QAM	1	0	25.18	0.3296	25.44	0.3499
Middle		1	74	25.24	0.3342	25.24	0.3342
Highest		1	74	24.42	0.2767	25.21	0.3319
Limit	EIRP < 2W			Result		PASS	

LTE Band 7 / 20MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	99	26.06	0.4036	26.29	0.4256
Middle		1	99	26.31	0.4276	26.21	0.4178
Highest		1	99	25.57	0.3606	26.35	0.4315
Lowest	16QAM	1	0	25.16	0.3281	25.35	0.3428
Middle		1	99	25.42	0.3483	25.28	0.3373
Highest		1	0	25.48	0.3532	25.55	0.3589
Limit	EIRP < 2W			Result		PASS	



Radiated Spurious Emission

Band :	LTE Band 4	Temperature :	23~25°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3463.92	-43.08	-13	-30.08	-69.71	-54.87	0.81	12.60	H	Pass
5195.88	-42.10	-13	-29.10	-71.62	-53.85	0.95	12.70	H	Pass
6927.84	-45.14	-13	-32.14	-75.54	-55.71	1.13	11.70	H	Pass

Band :	LTE Band 4	Temperature :	23~25°C						
Test Mode :	1.4MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3463.92	-48.42	-13	-35.42	-70.7	-60.21	0.81	12.6	V	Pass
5195.88	-44.25	-13	-31.25	-70.87	-56.00	0.95	12.7	V	Pass
6927.84	-44.02	-13	-31.02	-75.83	-54.59	1.13	11.7	V	Pass



Band :	LTE Band 4		Temperature :	23~25°C					
Test Mode :	3MHz QPSK RB Size 1 Offset 0		Relative Humidity :	48~52%					
Test Engineer :	Sam Li		Polarization :	Horizontal					
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3462.48	-43.91	-13	-30.91	-70.54	-55.70	0.81	12.60	H	Pass
5193.72	-43.88	-13	-30.88	-73.40	-55.63	0.95	12.70	H	Pass
6924.96	-45.06	-13	-32.06	-75.46	-55.63	1.13	11.70	H	Pass

Band :	LTE Band 4		Temperature :	23~25°C					
Test Mode :	3MHz QPSK RB Size 1 Offset 0		Relative Humidity :	48~52%					
Test Engineer :	Sam Li		Polarization :	Vertical					
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3462.48	-47.96	-13	-34.96	-70.24	-59.75	0.81	12.6	V	Pass
5193.72	-47.66	-13	-34.66	-72.19	-59.41	0.95	12.7	V	Pass
6924.96	-42.80	-13	-29.80	-74.61	-53.37	1.13	11.7	V	Pass



Band :	LTE Band 4	Temperature :	23~25°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3460.68	-43.72	-13	-30.72	-70.35	-55.51	0.81	12.60	H	Pass
5191.02	-42.19	-13	-29.19	-71.71	-53.94	0.95	12.70	H	Pass
6921.36	-44.06	-13	-31.06	-74.46	-54.63	1.13	11.70	H	Pass

Band :	LTE Band 4	Temperature :	23~25°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3460.68	-48.12	-13	-35.12	-70.4	-59.91	0.81	12.6	V	Pass
5191.02	-47.46	-13	-34.46	-71.99	-59.21	0.95	12.7	V	Pass
6921.36	-43.56	-13	-30.56	-75.37	-54.13	1.13	11.7	V	Pass



Band :	LTE Band 4	Temperature :	23~25°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3456.18	-43.56	-13	-30.56	-70.19	-55.35	0.81	12.60	H	Pass
5184.27	-39.49	-13	-26.49	-69.01	-51.24	0.95	12.70	H	Pass
6912.36	-44.62	-13	-31.62	-75.02	-55.19	1.13	11.70	H	Pass

Band :	LTE Band 4	Temperature :	23~25°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3456.18	-48.94	-13	-35.94	-71.22	-60.73	0.81	12.6	V	Pass
5184.27	-47.21	-13	-34.21	-71.74	-58.96	0.95	12.7	V	Pass
6912.36	-42.40	-13	-29.40	-74.21	-52.97	1.13	11.7	V	Pass



Band :	LTE Band 4	Temperature :	23~25°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3451.68	-44.05	-13	-31.05	-70.68	-55.84	0.81	12.60	H	Pass
5177.52	-43.68	-13	-30.68	-73.20	-55.43	0.95	12.70	H	Pass
6903.36	-45.10	-13	-32.10	-75.50	-55.67	1.13	11.70	H	Pass

Band :	LTE Band 4	Temperature :	23~25°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3451.68	-48.00	-13	-35.00	-70.28	-59.79	0.81	12.6	V	Pass
5177.52	-48.56	-13	-35.56	-73.09	-60.31	0.95	12.7	V	Pass
6903.36	-43.35	-13	-30.35	-75.16	-53.92	1.13	11.7	V	Pass



Band :	LTE Band 4	Temperature :	23~25°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3447.18	-43.85	-13	-30.85	-70.48	-55.64	0.81	12.60	H	Pass
5170.77	-43.38	-13	-30.38	-72.90	-55.13	0.95	12.70	H	Pass
6894.36	-45.40	-13	-32.40	-75.80	-55.97	1.13	11.70	H	Pass

Band :	LTE Band 4	Temperature :	23~25°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
3447.18	-48.06	-13	-35.06	-70.34	-59.85	0.81	12.6	V	Pass
5170.77	-48.27	-13	-35.27	-72.8	-60.02	0.95	12.7	V	Pass
6894.36	-43.65	-13	-30.65	-75.46	-54.22	1.13	11.7	V	Pass



Band :	LTE Band 7	Temperature :	23~25°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
5065.68	-37.31	-25	-12.31	-70.80	-49.06	0.95	12.70	H	Pass
7598.52	-35.30	-25	-10.30	-72.19	-45.54	1.46	11.70	H	Pass
10131.36	-37.90	-25	-12.90	-76.37	-48.69	1.31	12.10	H	Pass

Band :	LTE Band 7	Temperature :	23~25°C						
Test Mode :	5MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
5065.68	-36.83	-25	-11.83	-71.08	-48.5832068	0.95	12.70	V	Pass
7598.52	-38.26	-25	-13.26	-75.14	-48.4956	1.46	11.70	V	Pass
10131.36	-40.06	-25	-15.06	-76.96	-50.8456	1.31	12.10	V	Pass



Band :	LTE Band 7	Temperature :	23~25°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
5061.18	-36.19	-25	-11.19	-70.27	-47.94	0.95	12.70	H	Pass
7591.77	-36.39	-25	-11.39	-73.28	-46.63	1.46	11.70	H	Pass
10122.36	-38.53	-25	-13.53	-77.00	-49.32	1.31	12.10	H	Pass

Band :	LTE Band 7	Temperature :	23~25°C						
Test Mode :	10MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
5061.18	-38.57	-25	-13.57	-71.95	-50.321687	0.95	12.70	V	Pass
7591.77	-36.93	-25	-11.93	-73.81	-47.1656	1.46	11.70	V	Pass
10122.36	-42.11	-25	-17.11	-79.01	-52.8956	1.31	12.10	V	Pass



Band :	LTE Band 7	Temperature :	23~25°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
5056.68	-36.91	-25	-11.91	-70.69	-48.66	0.95	12.70	H	Pass
7585.02	-35.59	-25	-10.59	-72.48	-45.83	1.46	11.70	H	Pass
10131.36	-37.98	-25	-12.98	-76.45	-48.77	1.31	12.10	H	Pass

Band :	LTE Band 7	Temperature :	23~25°C						
Test Mode :	15MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
5056.68	-38.96	-25	-13.96	-72.31	-50.7129913	0.95	12.70	V	Pass
7585.02	-37.27	-25	-12.27	-74.15	-47.5056	1.46	11.70	V	Pass
10131.36	-39.26	-25	-14.26	-76.16	-50.0456	1.31	12.10	V	Pass



Band :	LTE Band 7	Temperature :	23~25°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Horizontal						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
5052.18	-38.30	-25	-13.30	-71.26	-50.05	0.95	12.70	H	Pass
7578.27	-34.05	-25	-9.05	-70.94	-44.29	1.46	11.70	H	Pass
10104.36	-38.78	-25	-13.78	-77.25	-49.57	1.31	12.10	H	Pass

Band :	LTE Band 7	Temperature :	23~25°C						
Test Mode :	20MHz QPSK RB Size 1 Offset 0	Relative Humidity :	48~52%						
Test Engineer :	Sam Li	Polarization :	Vertical						
Remark :	Spurious emissions below 1000MHz were found more than 20dB below limit line.								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
5052.18	-38.78	-25	-13.78	-72.14	-50.5282087	0.95	12.70	V	Pass
7578.27	-36.99	-25	-11.99	-73.87	-47.2256	1.46	11.70	V	Pass
10104.36	-40.29	-25	-15.29	-77.19	-51.0756	1.31	12.10	V	Pass