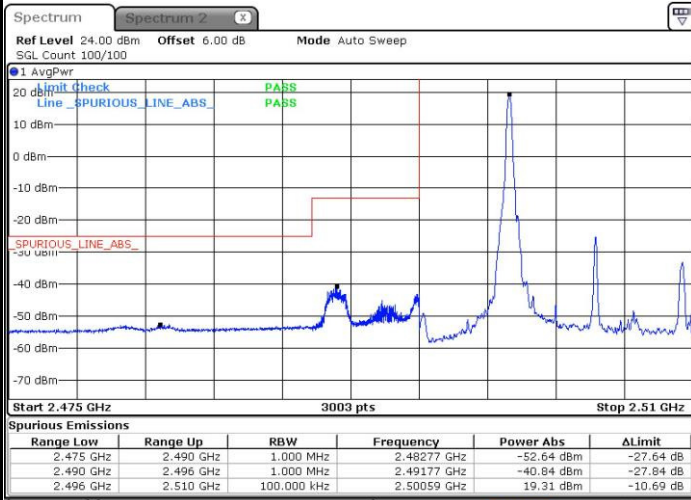




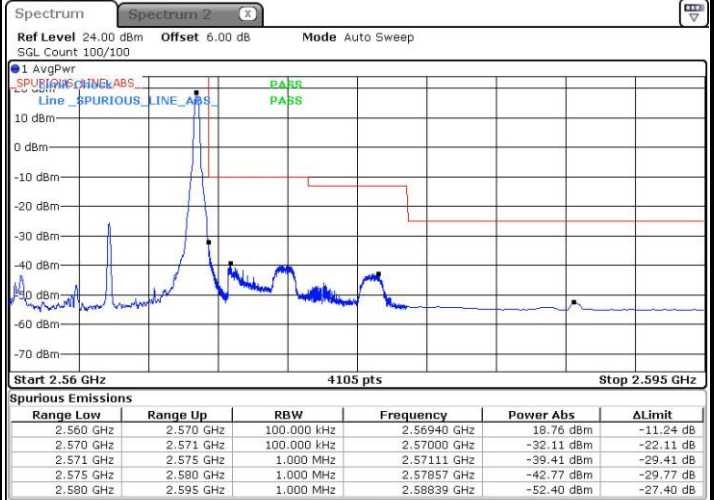
LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 30 AUG 2015 22:42:49

Highest Band Edge / 1 RB



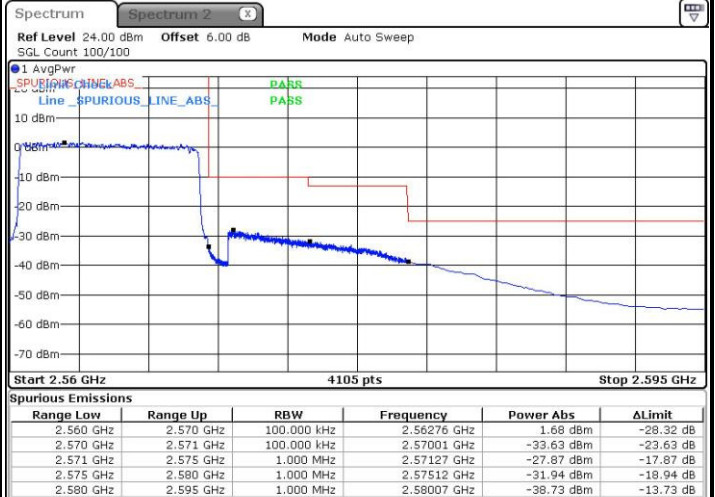
Date: 30 AUG 2015 22:53:34

Lowest Band Edge / Full RB



Date: 30 AUG 2015 22:45:06

Highest Band Edge / Full RB

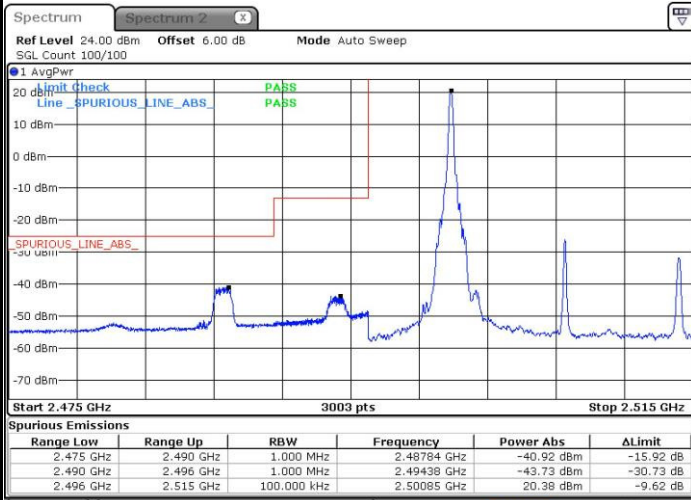


Date: 30 AUG 2015 22:55:52



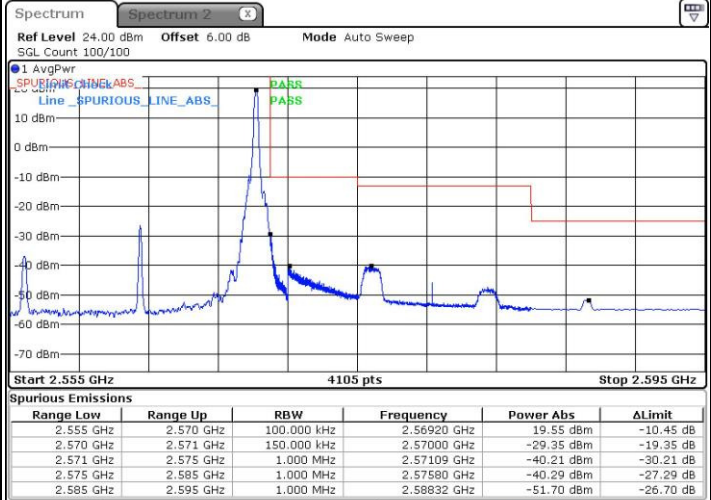
LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB



Date: 30 AUG 2015 23:00:06

Highest Band Edge / 1 RB



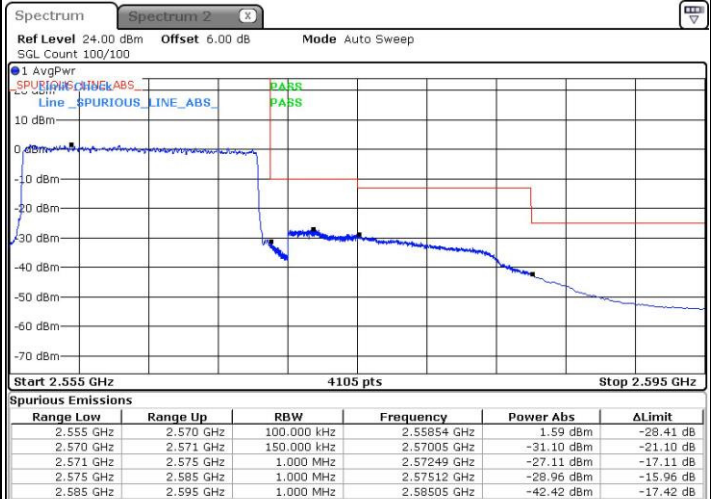
Date: 30 AUG 2015 23:10:52

Lowest Band Edge / Full RB



Date: 30 AUG 2015 23:02:23

Highest Band Edge / Full RB

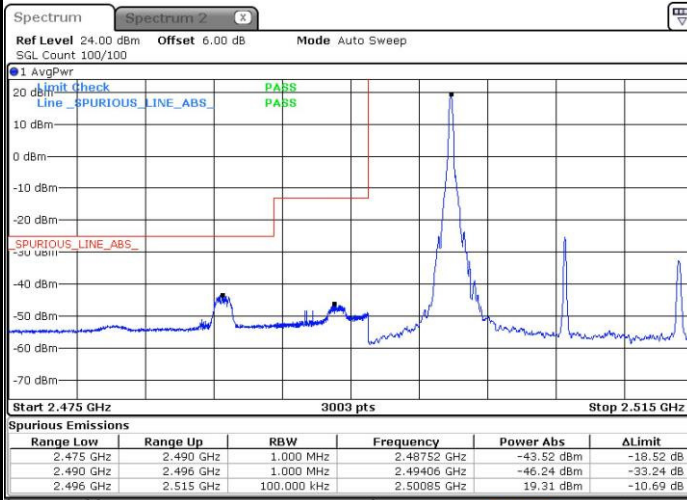


Date: 30 AUG 2015 23:13:09



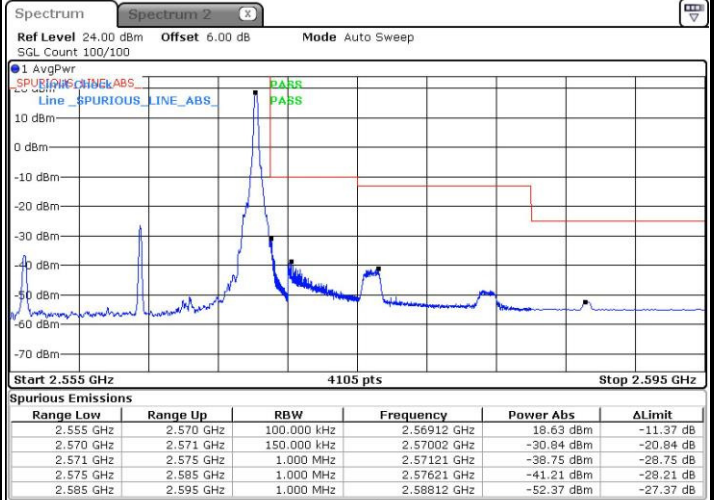
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



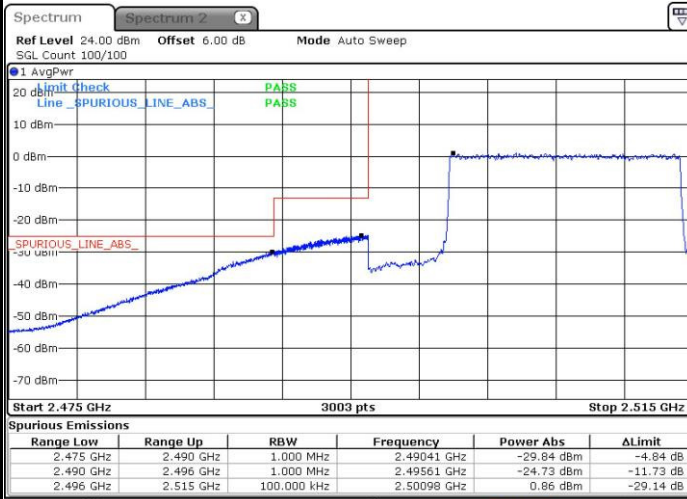
Date: 30 AUG 2015 23:01:14

Highest Band Edge / 1 RB



Date: 30 AUG 2015 23:12:00

Lowest Band Edge / Full RB



Date: 30 AUG 2015 23:03:31

Highest Band Edge / Full RB

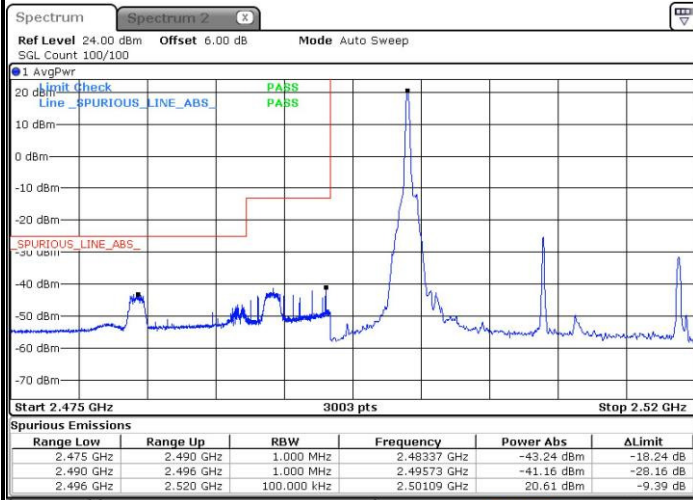


Date: 30 AUG 2015 23:14:18



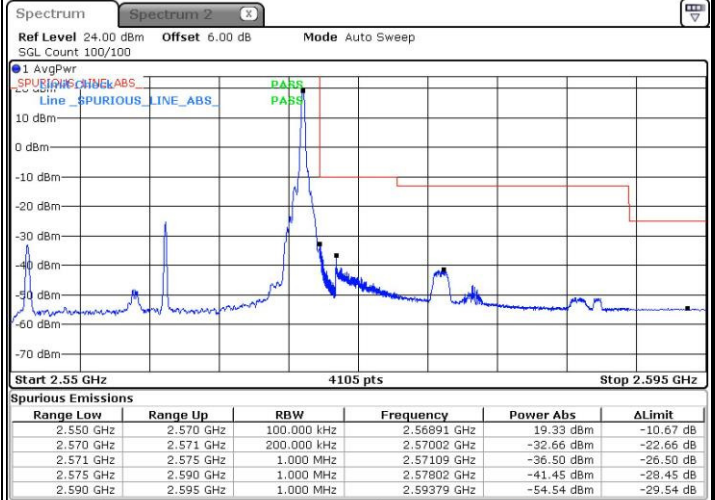
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB



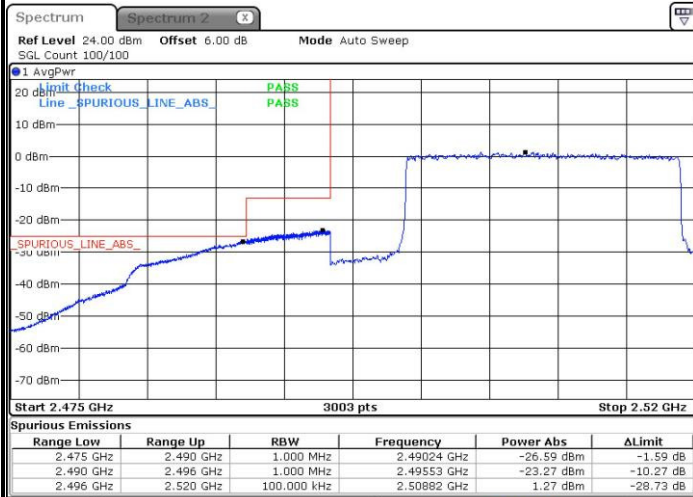
Date: 30 AUG 2015 23:18:32

Highest Band Edge / 1 RB



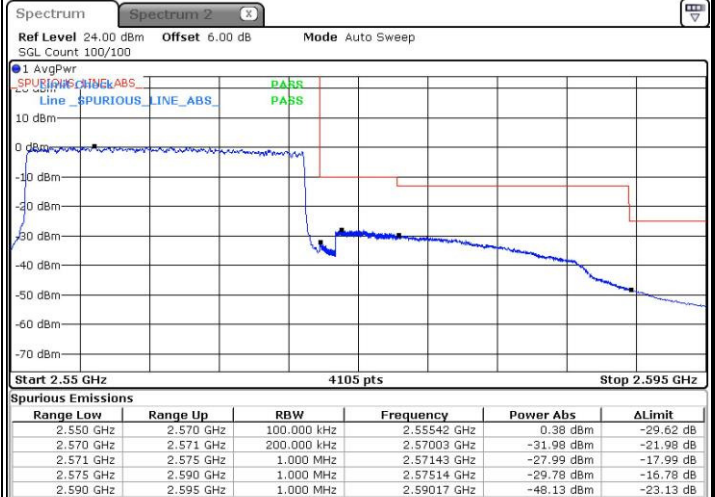
Date: 30 AUG 2015 23:29:18

Lowest Band Edge / Full RB



Date: 30 AUG 2015 23:20:49

Highest Band Edge / Full RB

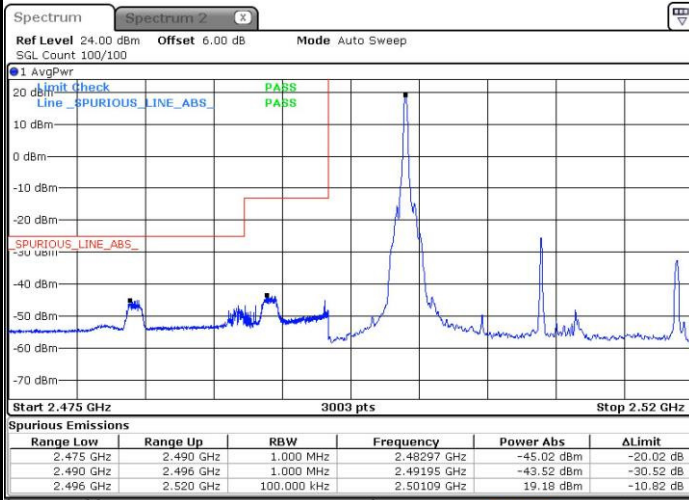


Date: 30 AUG 2015 23:32:44



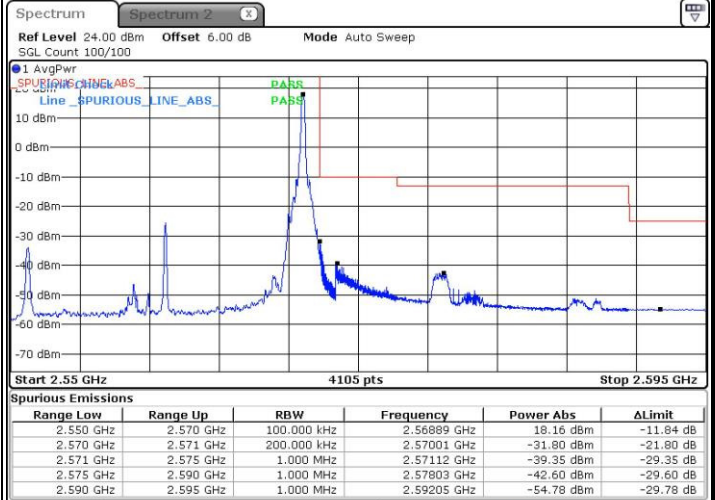
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



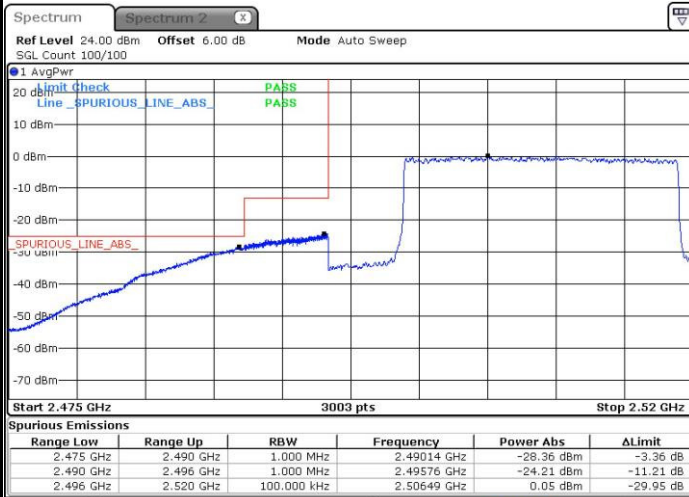
Date: 30 AUG 2015 23:19:40

Highest Band Edge / 1RB



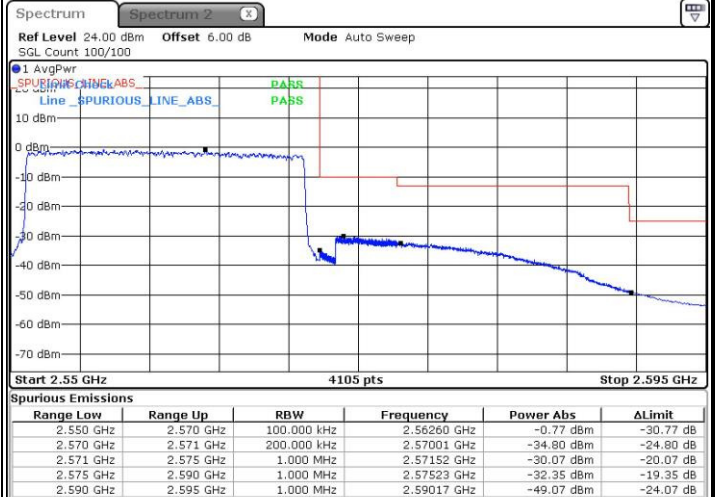
Date: 30 AUG 2015 23:30:28

Lowest Band Edge / Full RB



Date: 30 AUG 2015 23:21:58

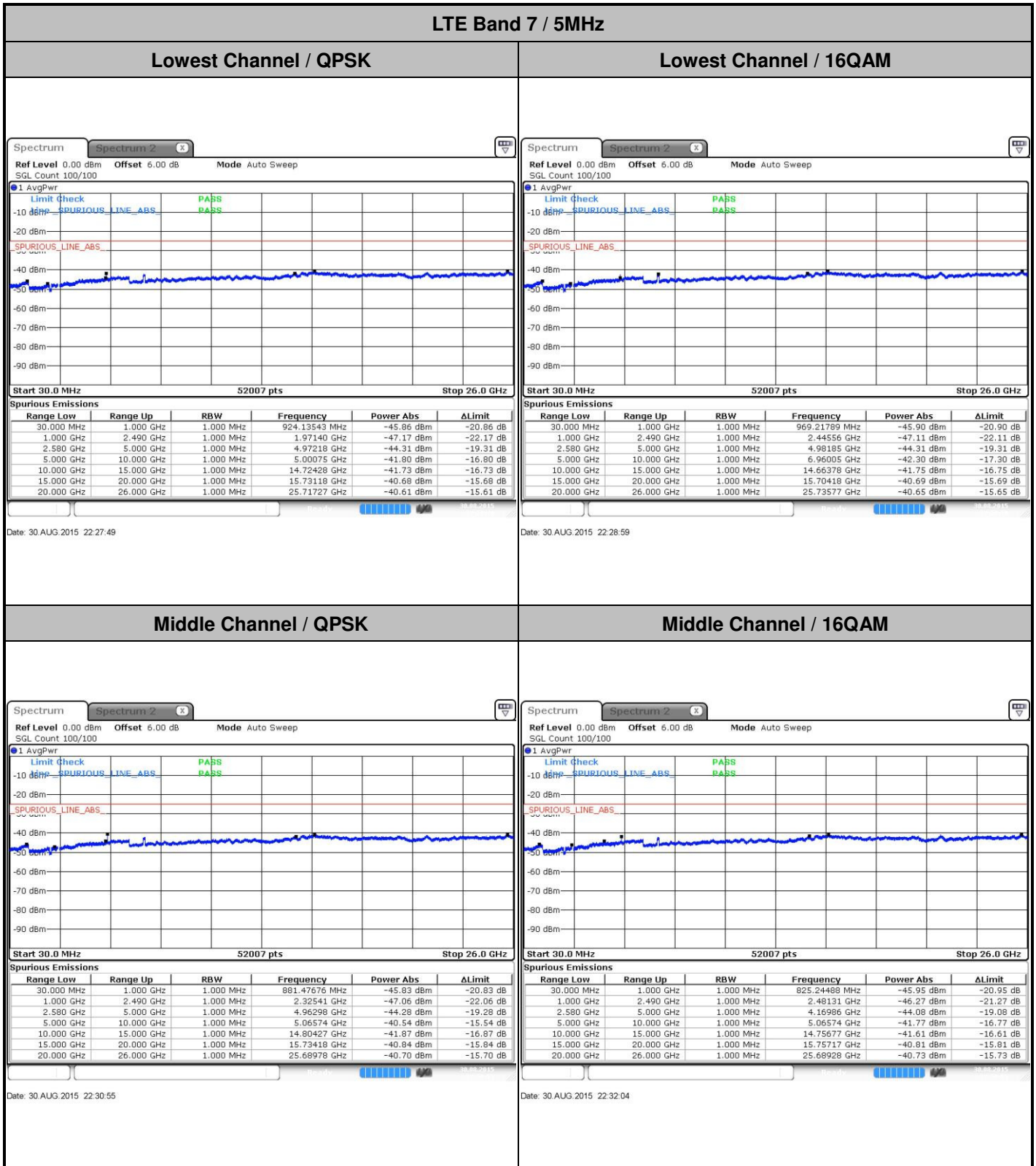
Highest Band Edge / Full RB



Date: 30 AUG 2015 23:31:35



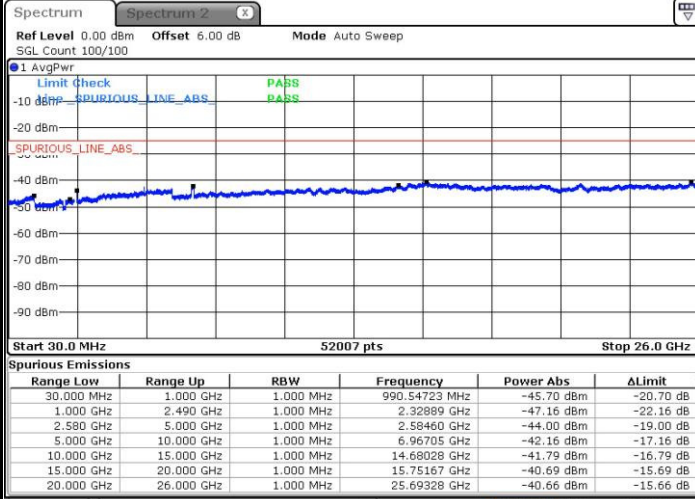
# Conducted Spurious Emission





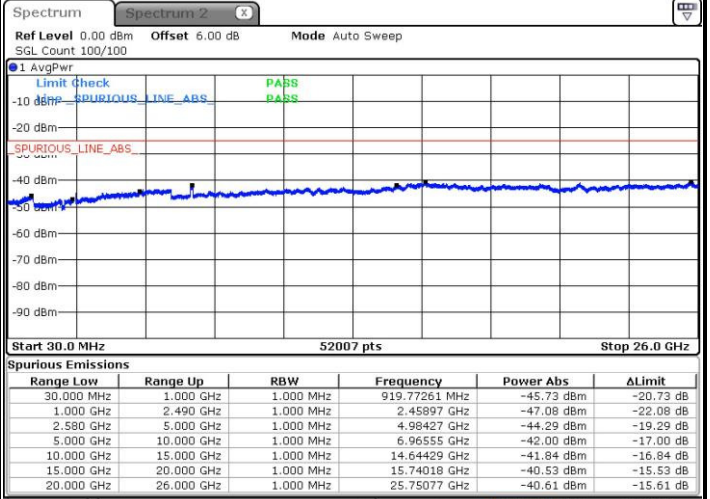
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 30 AUG.2015 22:38:35

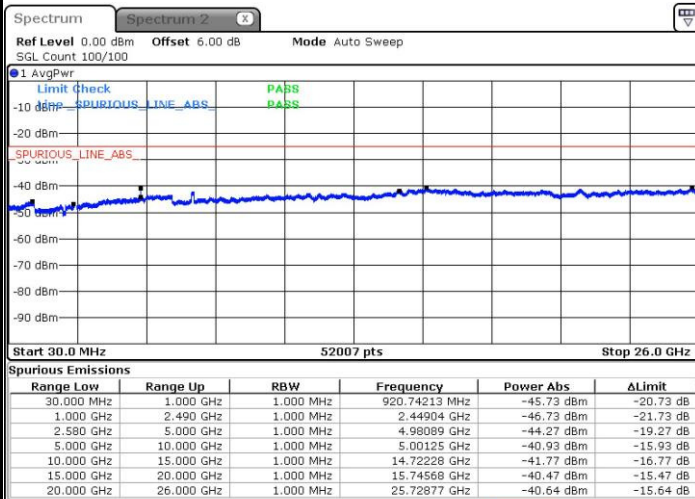
Highest Channel / 16QAM



Date: 30 AUG.2015 22:39:44

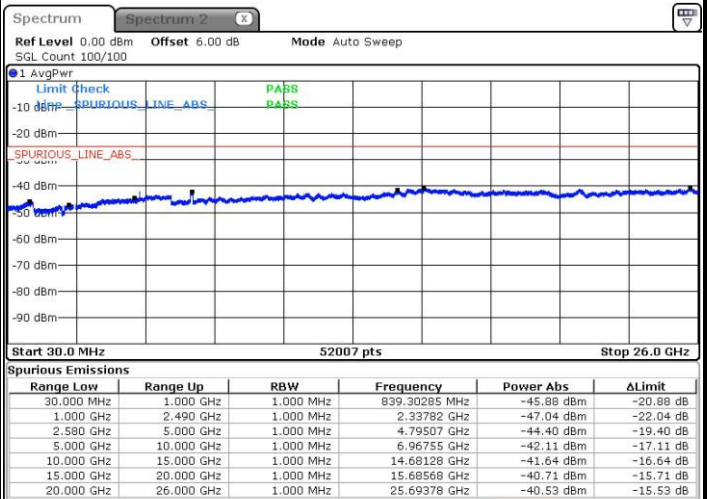
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 30 AUG.2015 22:46:15

Lowest Channel / 16QAM



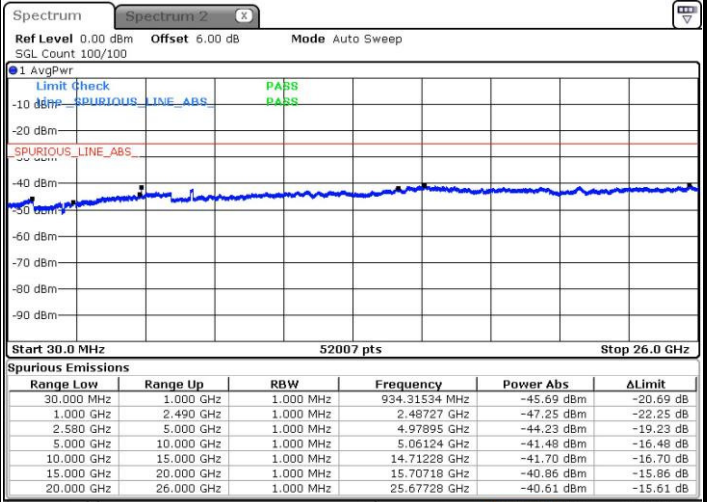
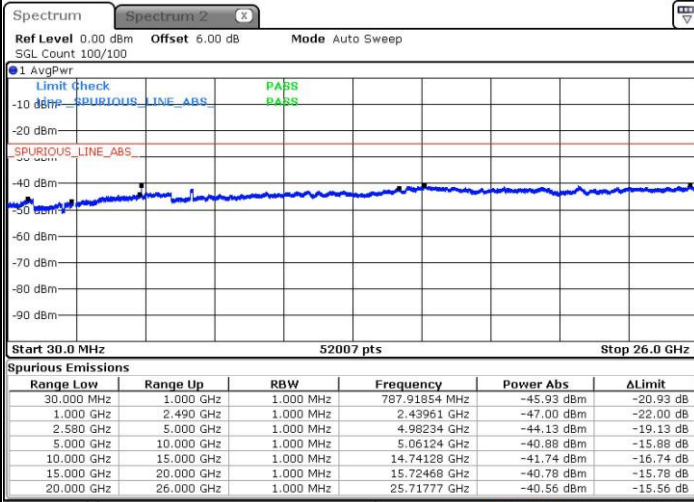
Date: 30 AUG.2015 22:47:24



LTE Band 7 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

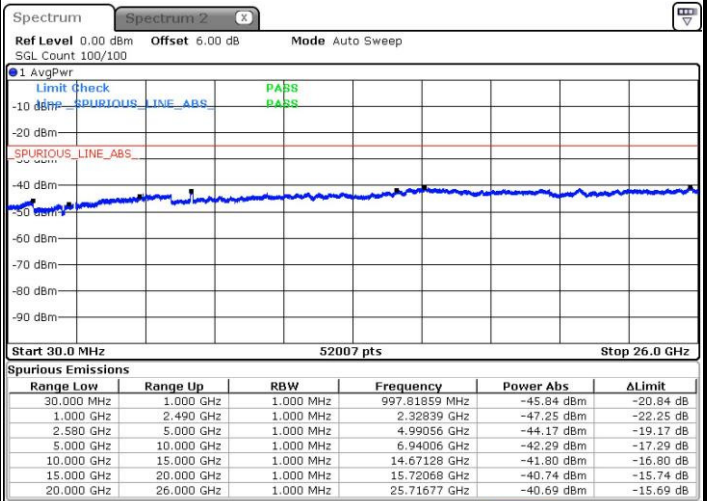
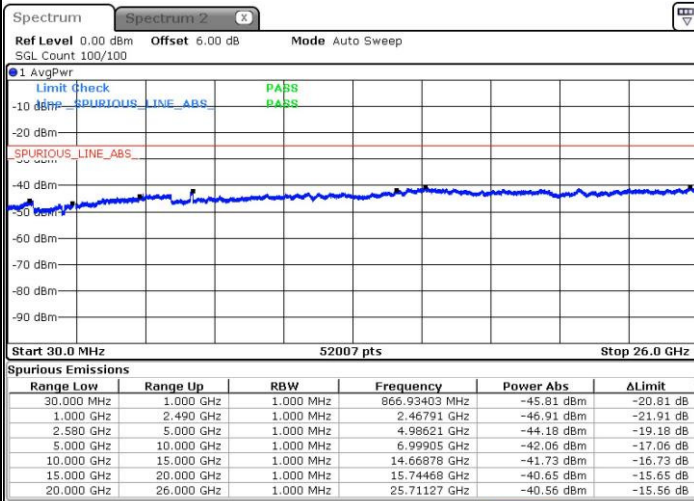


Date: 30 AUG.2015 22:49:20

Date: 30.AUG.2015 22:50:30

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 30 AUG.2015 22:57:00

Date: 30.AUG.2015 22:58:10

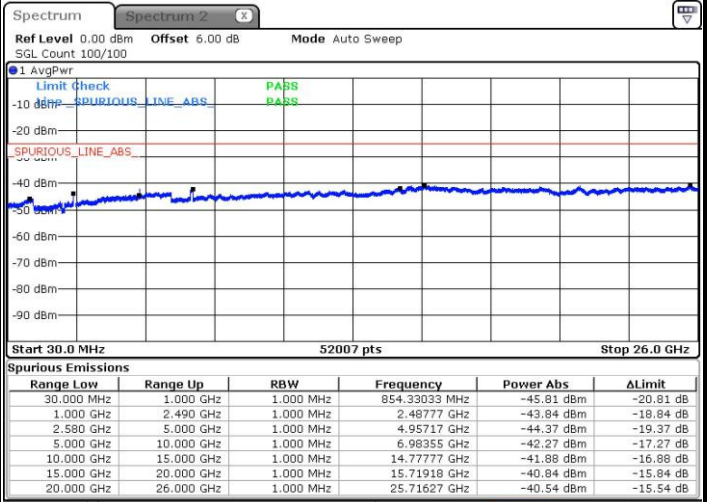
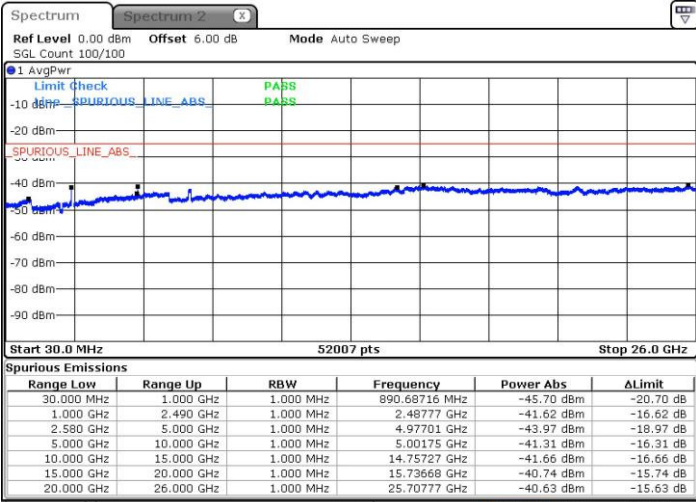




LTE Band 7 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

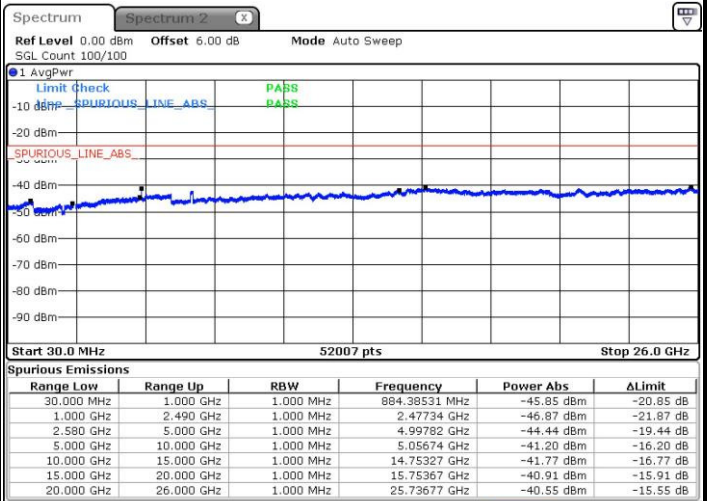
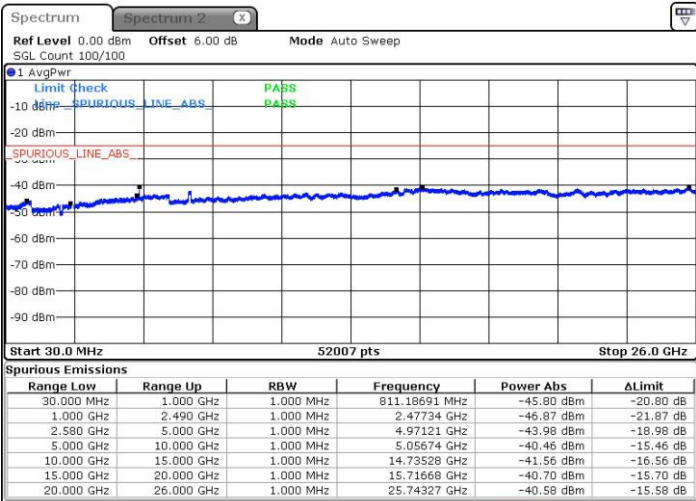


Date: 30 AUG.2015 23:04:40

Date: 30 AUG.2015 23:05:50

Middle Channel / QPSK

Middle Channel / 16QAM



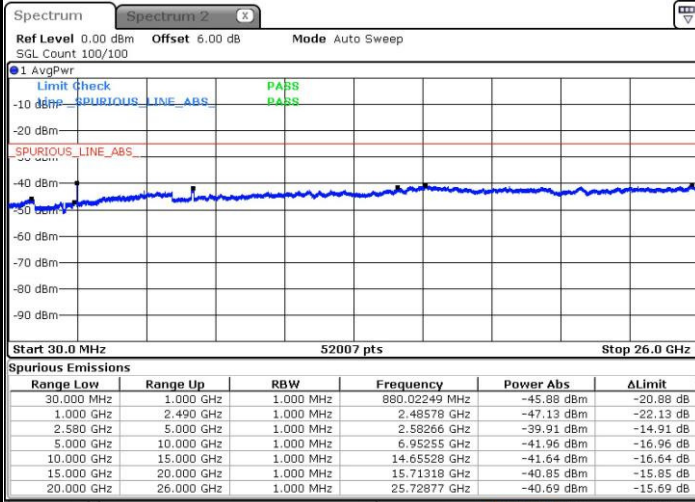
Date: 30 AUG.2015 23:07:46

Date: 30 AUG.2015 23:08:56



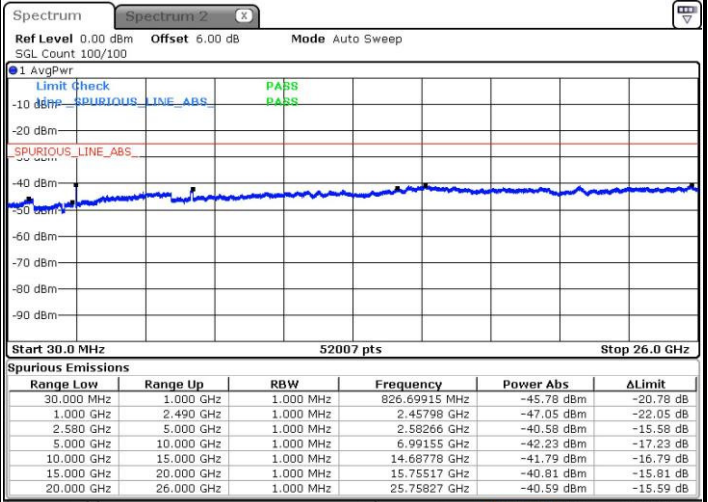
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 30 AUG.2015 23:15:26

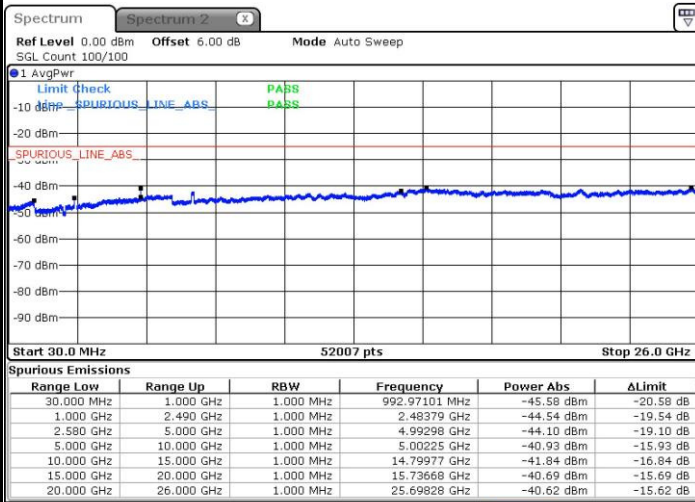
Highest Channel / 16QAM



Date: 30 AUG.2015 23:16:36

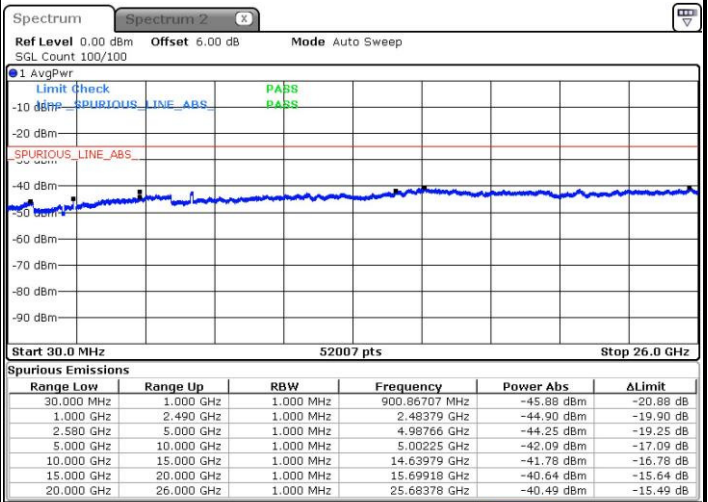
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 30 AUG.2015 23:23:06

Lowest Channel / 16QAM



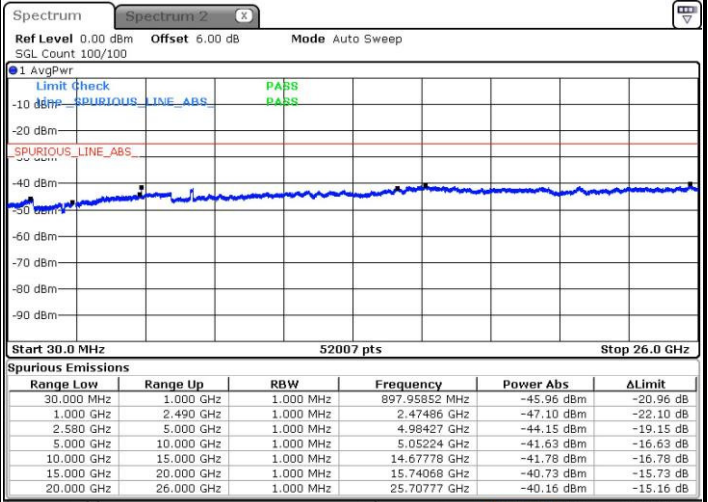
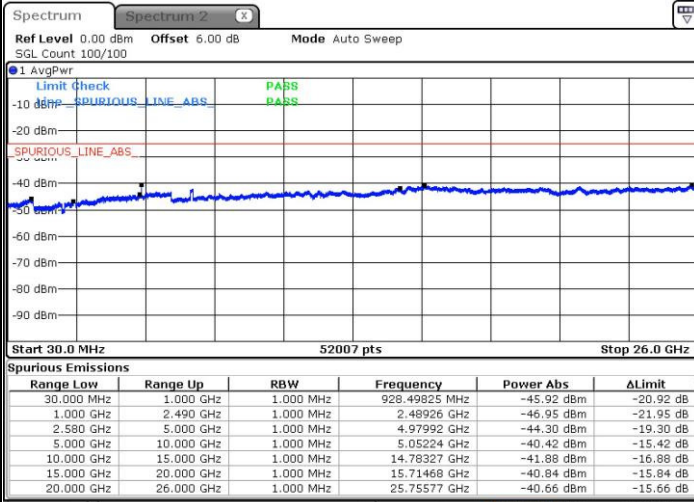
Date: 30 AUG.2015 23:24:16



LTE Band 7 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

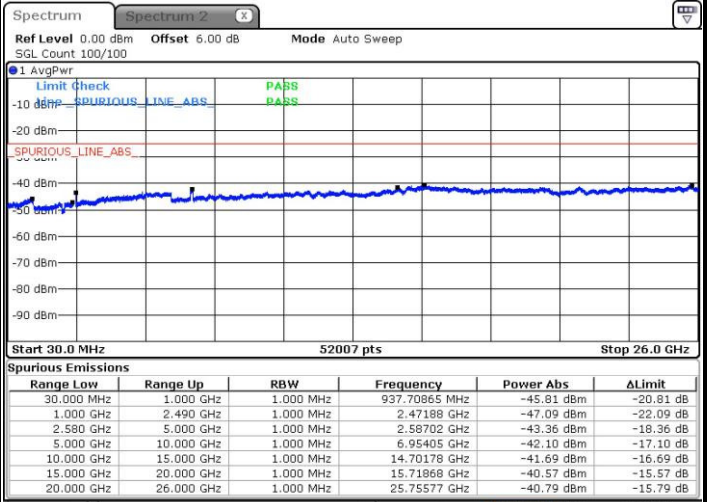
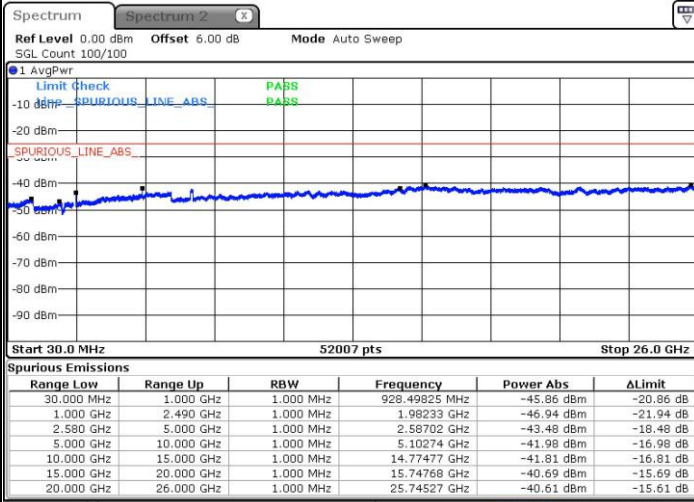


Date: 30 AUG.2015 23:26:12

Date: 30 AUG.2015 23:27:22

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 30 AUG.2015 23:33:52

Date: 30 AUG.2015 23:35:02



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	0.0013	PASS
40	Normal Voltage	0.0000	
30	Normal Voltage	0.0022	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0009	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0014	
20	Maximum Voltage	0.0021	
20	Normal Voltage	0.0017	
20	Battery End Point	0.0013	

Note:

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.2 V
2. 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 7 / 5MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	12	25.59	0.3622	25.42	0.3483
Middle		1	12	24.67	0.2931	24.37	0.2735
Highest		1	12	26.12	0.4093	25.56	0.3597
Lowest	16QAM	1	0	24.86	0.3062	24.68	0.2938
Middle		1	0	25.65	0.3673	24.96	0.3133
Highest		1	0	24.55	0.2851	24.15	0.2600
Limit	EIRP < 2W			Result		PASS	

LTE Band 7 / 10MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	25.58	0.3614	25.38	0.3451
Middle		1	25	24.72	0.2965	24.36	0.2729
Highest		1	25	26.41	0.4375	25.81	0.3811
Lowest	16QAM	1	0	25.00	0.3162	24.69	0.2944
Middle		1	25	26.26	0.4227	25.67	0.3690
Highest		1	25	25.26	0.3357	24.62	0.2897
Limit	EIRP < 2W			Result		PASS	



LTE Band 7 / 15MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	25.66	0.3681	25.35	0.3428
Middle		1	37	24.92	0.3105	24.60	0.2884
Highest		1	0	25.99	0.3972	25.67	0.3690
Lowest	16QAM	1	0	25.51	0.3556	25.30	0.3388
Middle		1	0	26.23	0.4198	25.55	0.3589
Highest		1	0	25.54	0.3581	24.87	0.3069
Limit	EIRP < 2W			Result		PASS	

LTE Band 7 / 20MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	25.56	0.3597	25.35	0.3428
Middle		1	0	24.91	0.3097	24.65	0.2917
Highest		1	0	25.92	0.3908	25.70	0.3715
Lowest	16QAM	1	0	24.93	0.3112	25.20	0.3311
Middle		1	0	26.34	0.4305	25.47	0.3524
Highest		1	49	25.02	0.3177	24.40	0.2754
Limit	EIRP < 2W			Result		PASS	



## Radiated Spurious Emission

LTE Band 7 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5066	-48.50	-25	-23.50	-35.12	-55.06	2.41	8.97	H
	7598	-42.54	-25	-17.54	-37.86	-51.54	2.86	11.86	H
	10130	-56.61	-25	-31.61	-52.00	-65.51	3.21	12.11	H
	5066	-52.83	-25	-27.83	-39.43	-59.39	2.41	8.97	V
	7598	-50.61	-25	-25.61	-43.45	-59.61	2.86	11.86	V
	10130	-57.72	-25	-32.72	-53.24	-66.62	3.21	12.11	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 7 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	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)
Middle	5060	-46.30	-25	-21.30	-33.55	-52.86	2.41	8.97	H
	7592	-40.76	-25	-15.76	-36.46	-49.76	2.86	11.86	H
	10124	-57.84	-25	-32.84	-53.23	-66.74	3.21	12.11	H
	5060	-50.31	-25	-25.31	-37.81	-56.87	2.41	8.97	V
	7592	-47.80	-25	-22.80	-41.99	-56.80	2.86	11.86	V
	10124	-56.02	-25	-31.02	-51.54	-64.92	3.21	12.11	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 7 / 15MHz / QPSK / RB Size 1 Offset 0									
Channel	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)
Middle	5054	-46.89	-25	-21.89	-33.98	-53.45	2.41	8.97	H
	7586	-41.03	-25	-16.03	-36.69	-50.03	2.86	11.86	H
	10112	-57.96	-25	-32.96	-53.35	-66.86	3.21	12.11	H
	5054	-49.11	-25	-24.11	-36.83	-55.67	2.41	8.97	V
	7586	-47.33	-25	-22.33	-41.57	-56.33	2.86	11.86	V
	10112	-56.37	-25	-31.37	-51.89	-65.27	3.21	12.11	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 7 / 20MHz / QPSK / RB Size 1 Offset 0									
Channel	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)
Middle	5054	-44.29	-25	-19.29	-32.00	-50.85	2.41	8.97	H
	7580	-39.35	-25	-14.35	-35.19	-48.35	2.86	11.86	H
	10106	-58.54	-25	-33.54	-53.93	-67.44	3.21	12.11	H
	5054	-48.92	-25	-23.92	-36.66	-55.48	2.41	8.97	V
	7580	-47.18	-25	-22.18	-41.44	-56.18	2.86	11.86	V
	10106	-57.09	-25	-32.09	-52.61	-65.99	3.21	12.11	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.





## **Appendix D. Photographs of EUT**

Please refer to Sporton report number EP570906-04 which is issued separately.