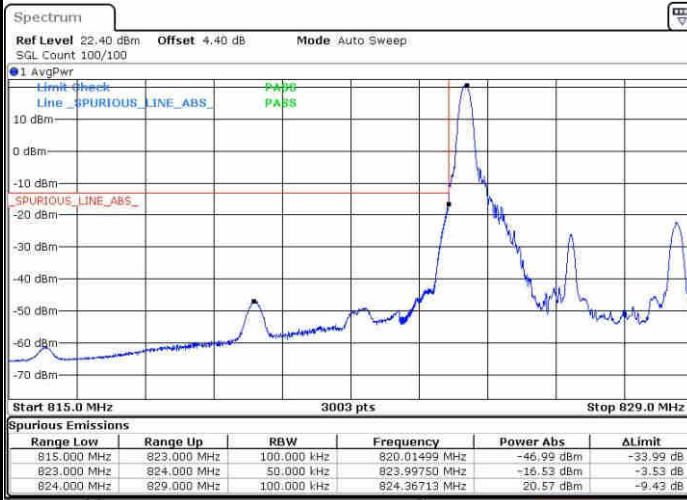




LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



Date: 2 APR 2017 01:26:37

Highest Band Edge / 1 RB



Date: 2 APR 2017 00:43:43

Lowest Band Edge / Full RB



Date: 1 APR 2017 23:37:33

Highest Band Edge / Full RB

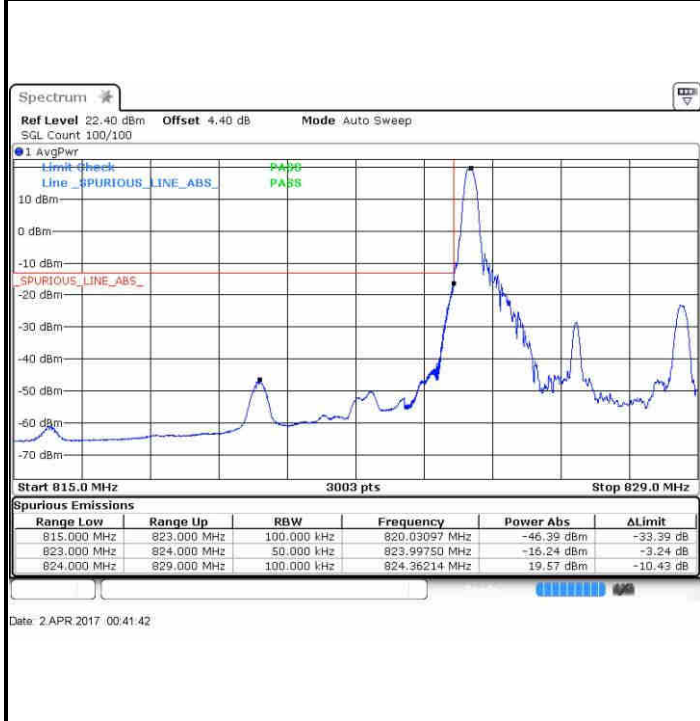


Date: 1 APR 2017 23:49:10

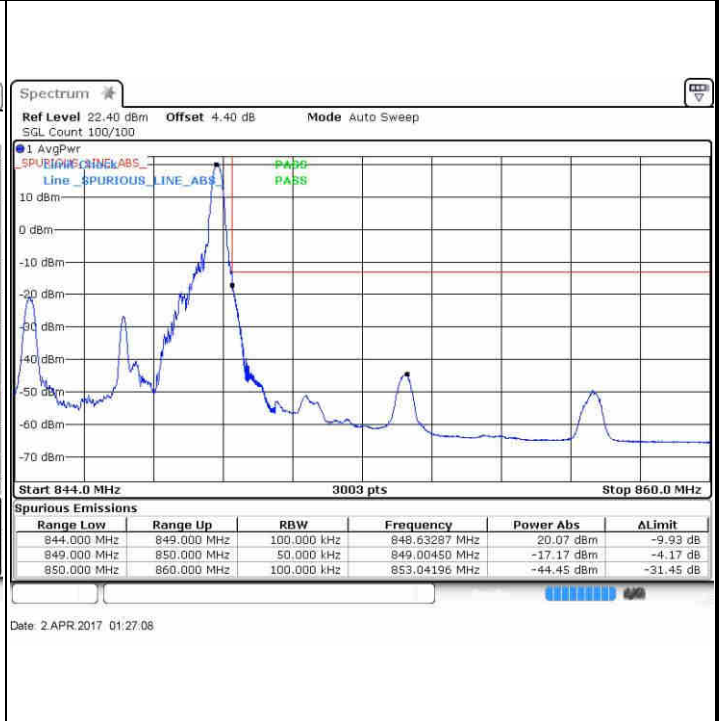


LTE Band 5 / 5MHz / 16QAM

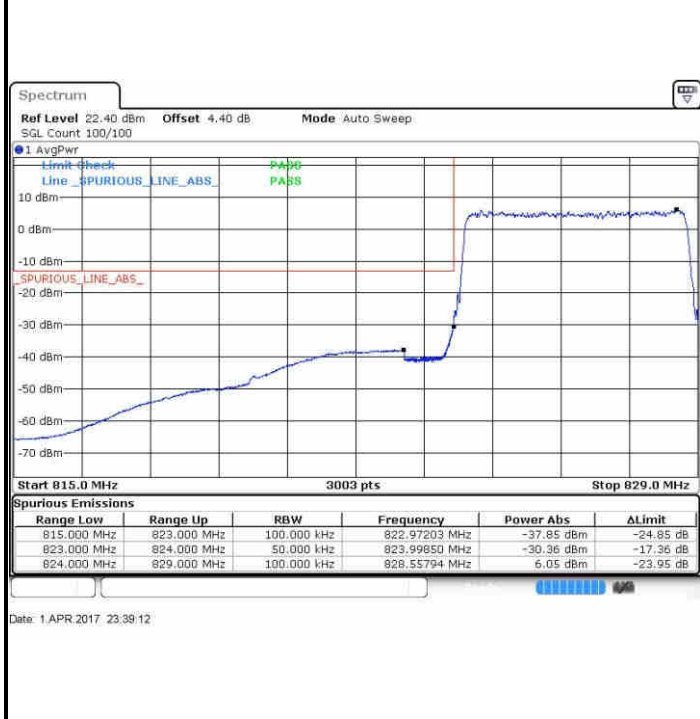
Lowest Band Edge / 1RB



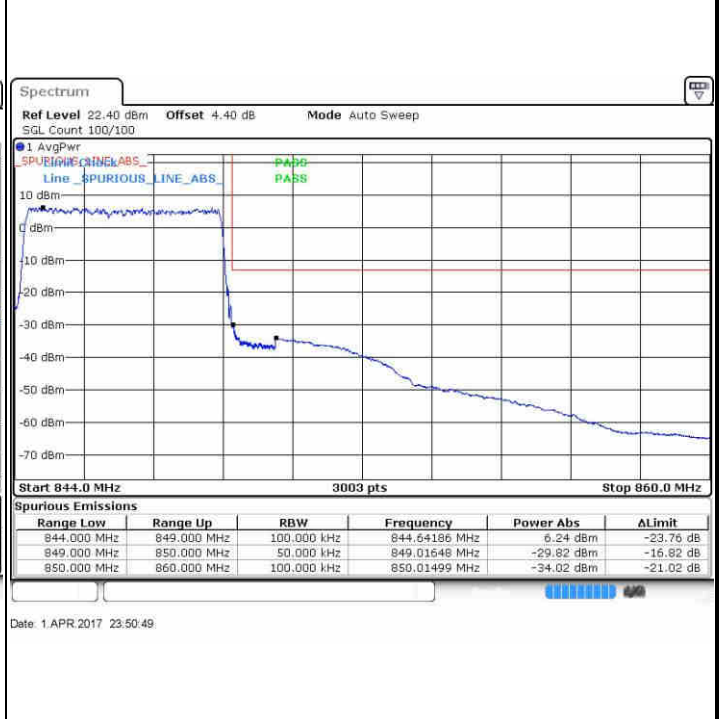
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



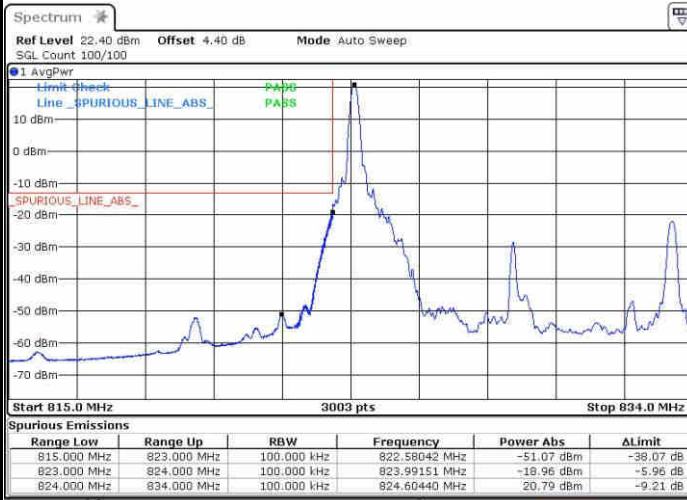
Highest Band Edge / Full RB





LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB



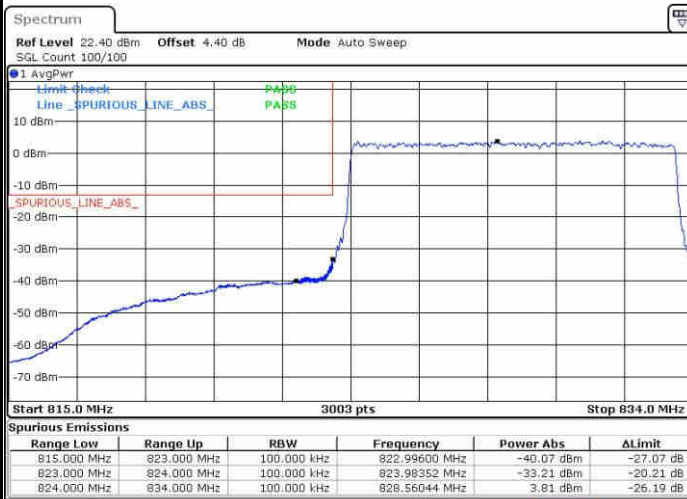
Date: 2 APR 2017 01:21:02

Highest Band Edge / 1 RB



Date: 2 APR 2017 01:22:58

Lowest Band Edge / Full RB



Date: 1 APR 2017 23:58:17

Highest Band Edge / Full RB

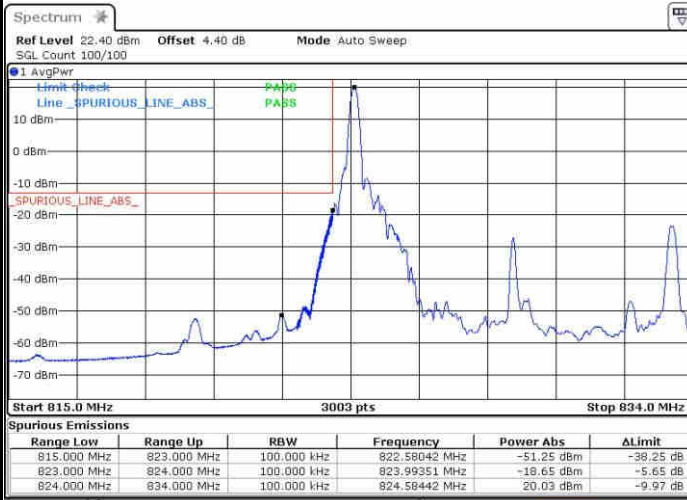


Date: 2 APR 2017 00:09:55



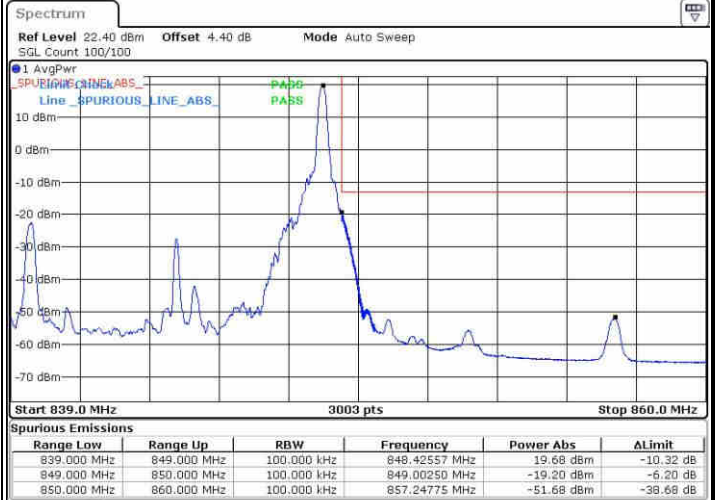
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



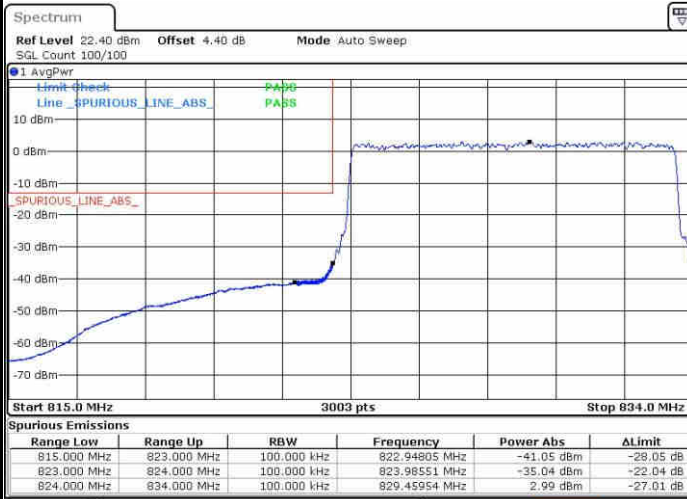
Date: 2 APR 2017 01:16:15

Highest Band Edge / 1 RB



Date: 2 APR 2017 01:23:40

Lowest Band Edge / Full RB



Date: 1 APR 2017 23:59:56

Highest Band Edge / Full RB

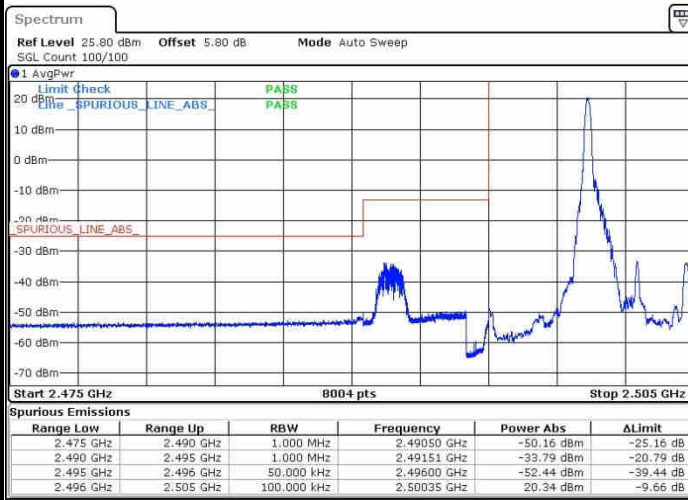


Date: 2 APR 2017 00:11:34



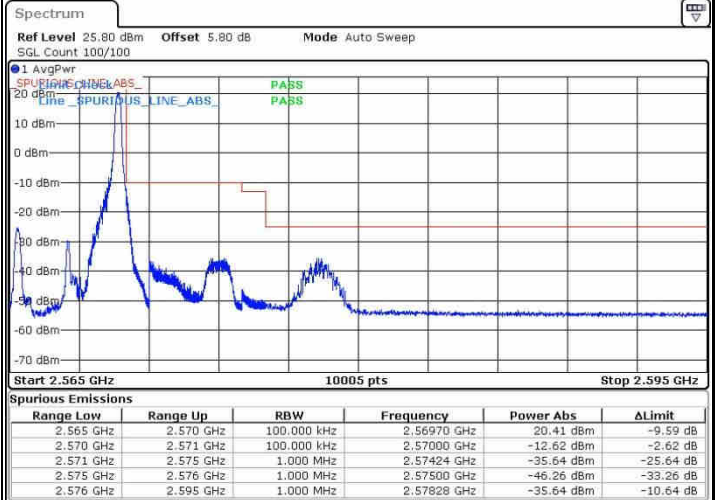
LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB



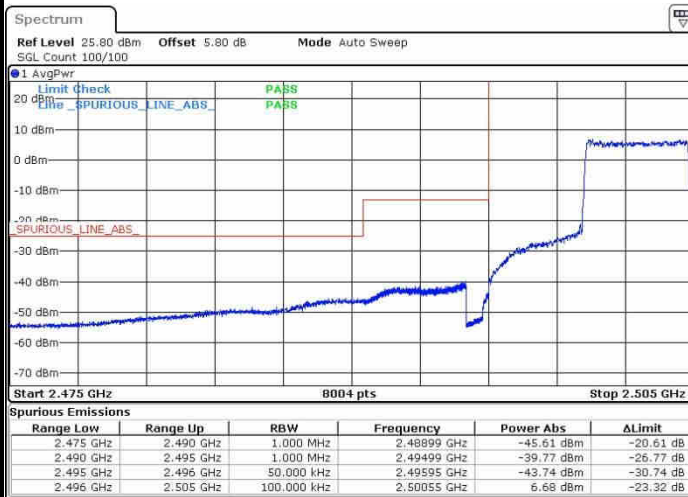
Date: 2 APR 2017 12:08:01

Highest Band Edge / 1 RB



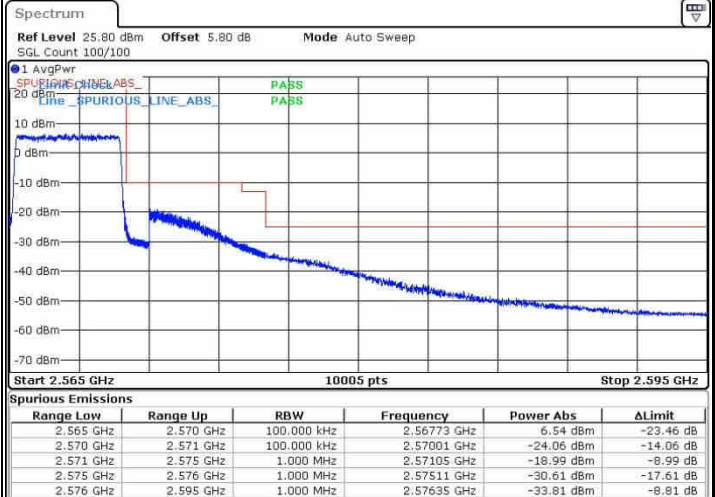
Date: 2 APR 2017 12:16:02

Lowest Band Edge / Full RB



Date: 2 APR 2017 15:24:06

Highest Band Edge / Full RB



Date: 2 APR 2017 12:12:36



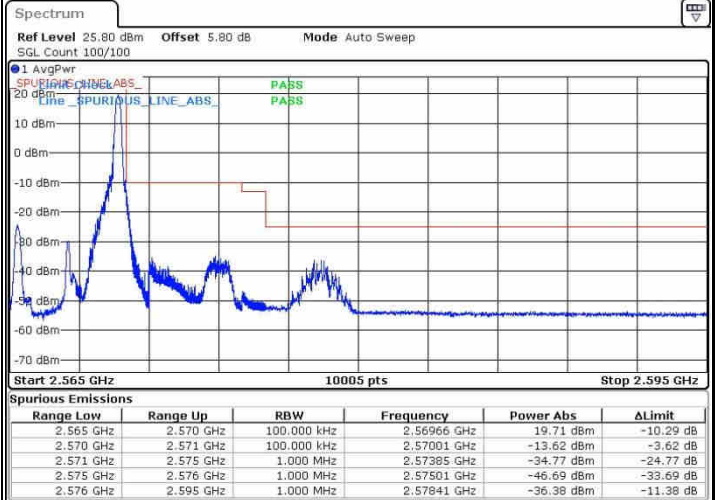
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



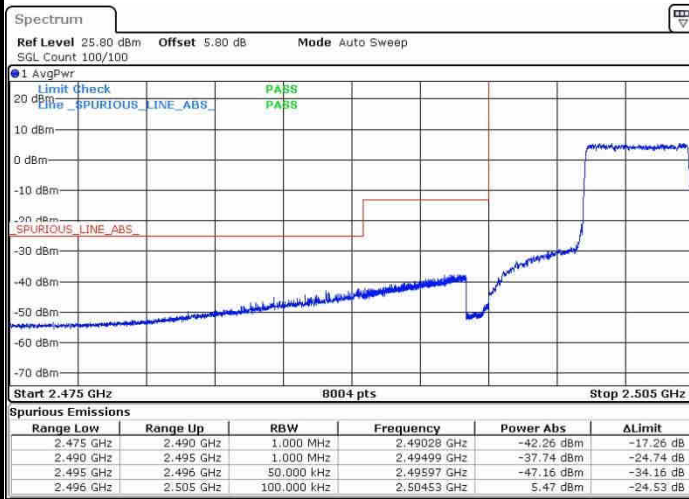
Date: 2 APR 2017 12:09:10

Highest Band Edge / 1 RB



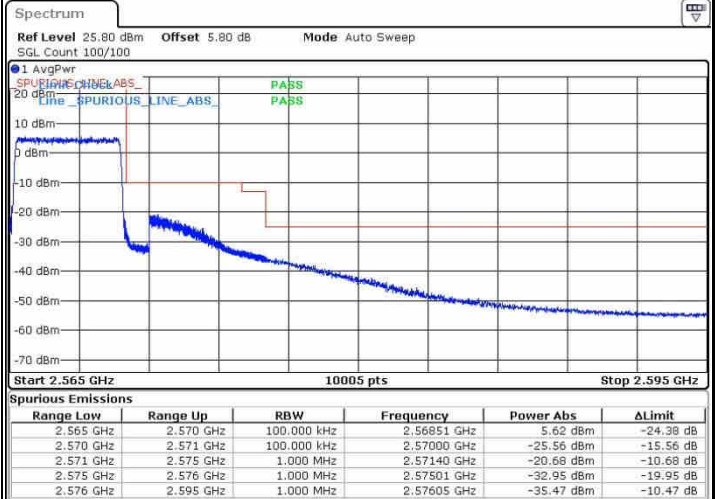
Date: 2 APR 2017 12:14:53

Lowest Band Edge / Full RB



Date: 2 APR 2017 12:10:18

Highest Band Edge / Full RB

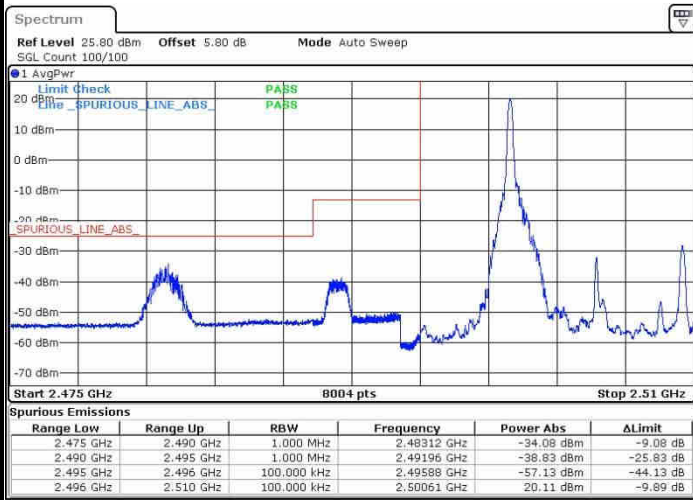


Date: 2 APR 2017 15:24:41



LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB



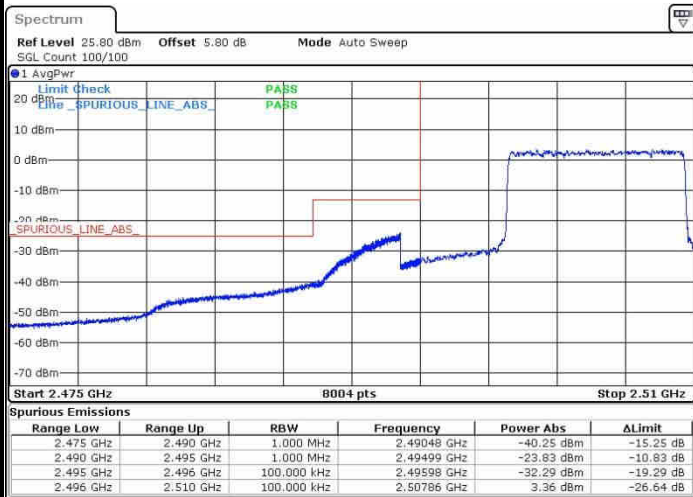
Date: 2 APR 2017 12:19:17

Highest Band Edge / 1 RB



Date: 2 APR 2017 15:25:22

Lowest Band Edge / Full RB



Date: 2 APR 2017 12:22:43

Highest Band Edge / Full RB

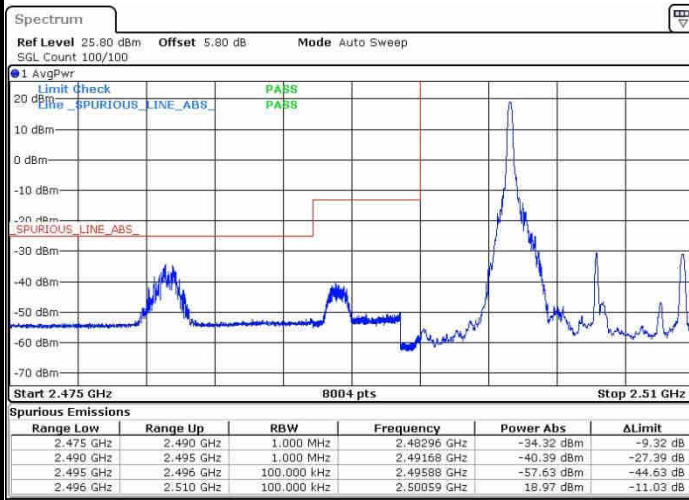


Date: 2 APR 2017 12:23:52



LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



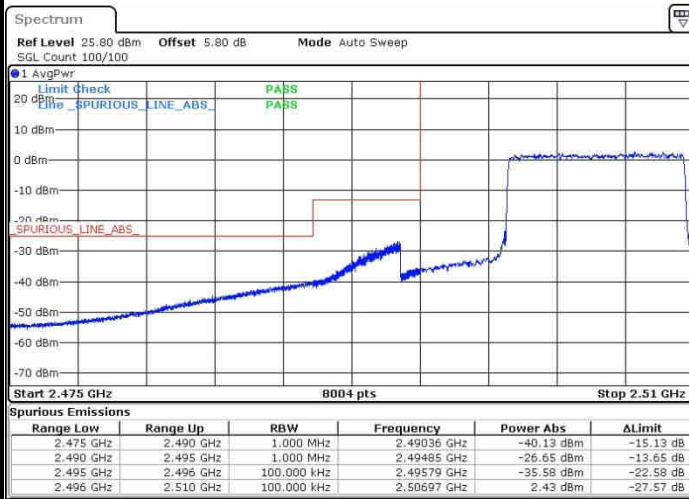
Date: 2 APR 2017 12:20:26

Highest Band Edge / 1 RB



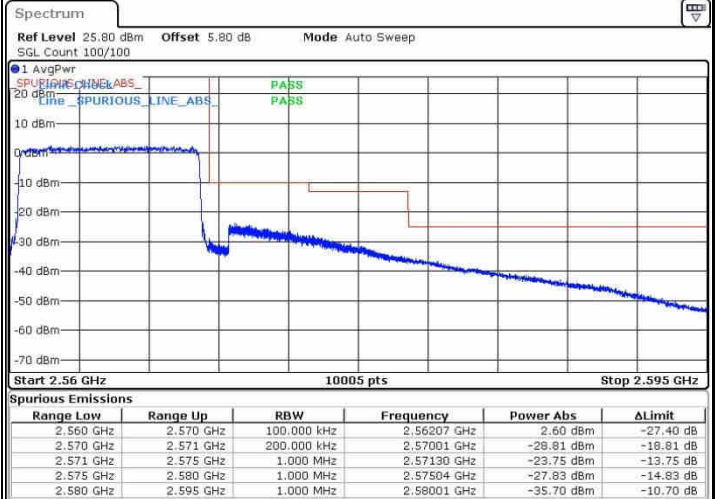
Date: 2 APR 2017 12:26:09

Lowest Band Edge / Full RB



Date: 2 APR 2017 12:21:35

Highest Band Edge / Full RB

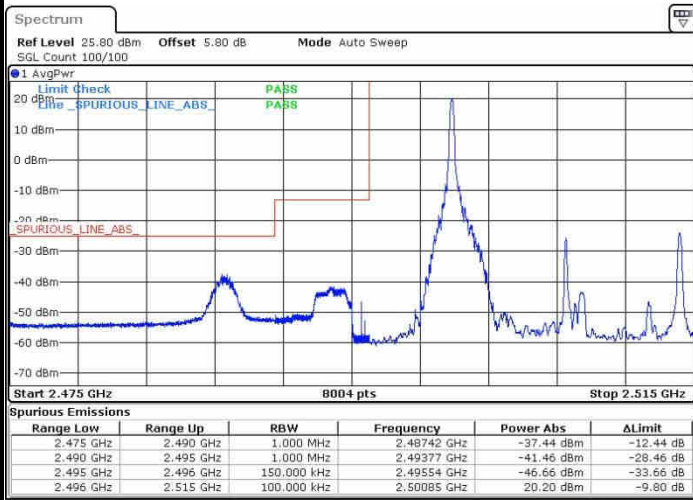


Date: 2 APR 2017 12:25:01



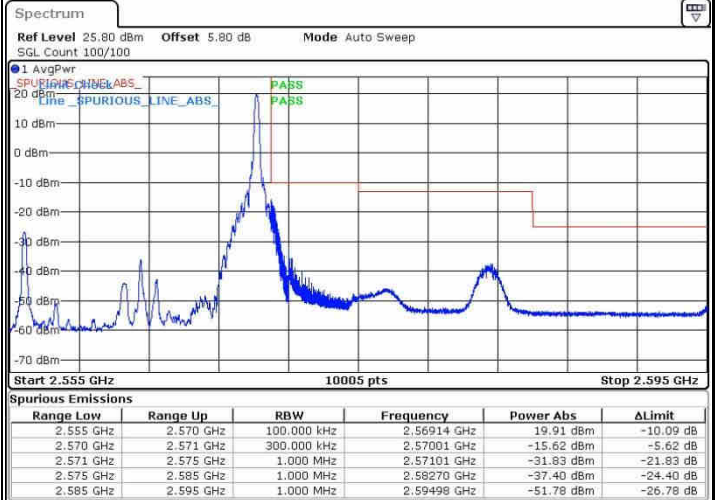
LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB



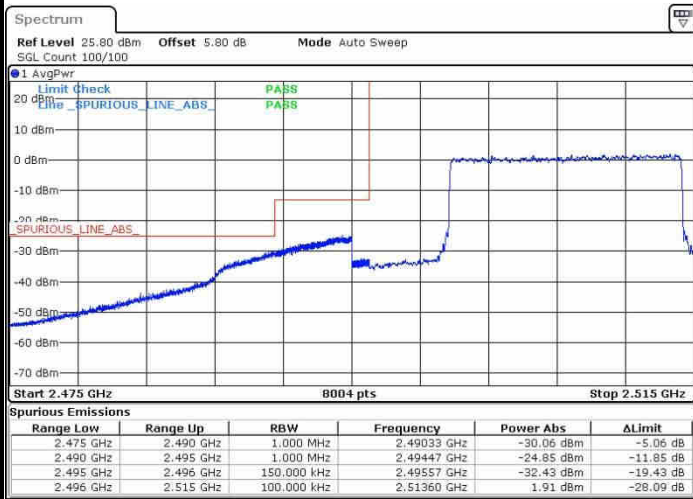
Date: 2 APR 2017 12:30:33

Highest Band Edge / 1 RB



Date: 2 APR 2017 12:38:34

Lowest Band Edge / Full RB



Date: 2 APR 2017 12:33:59

Highest Band Edge / Full RB

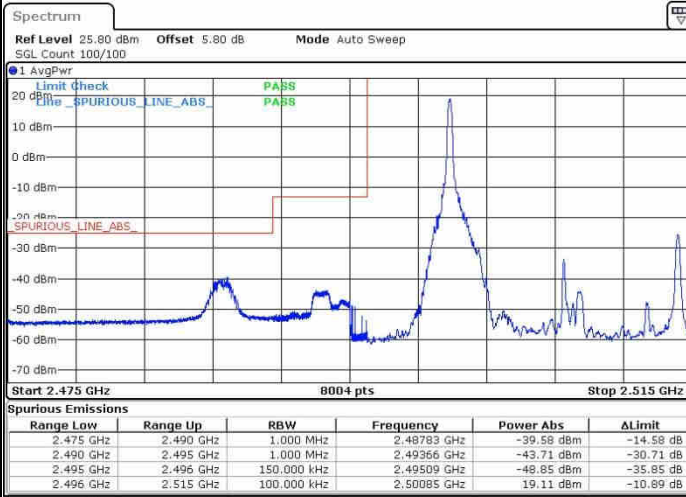


Date: 2 APR 2017 12:35:08



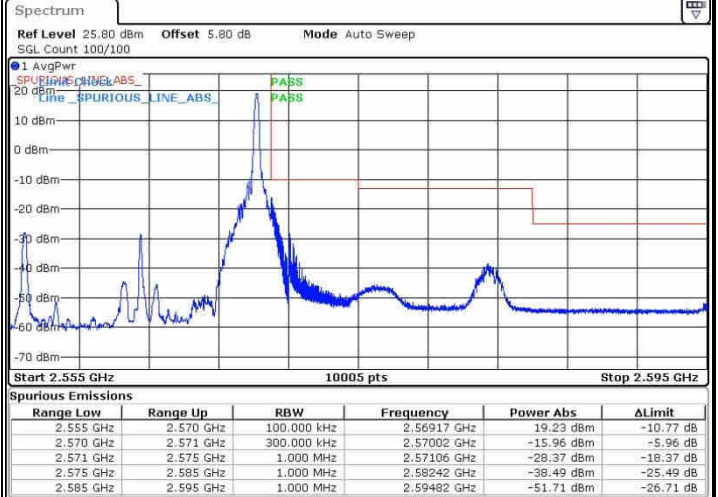
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



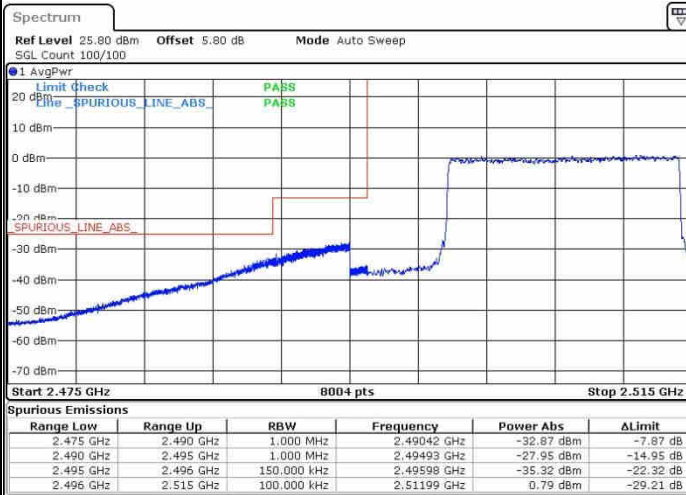
Date: 2 APR 2017 12:31:42

Highest Band Edge / 1 RB



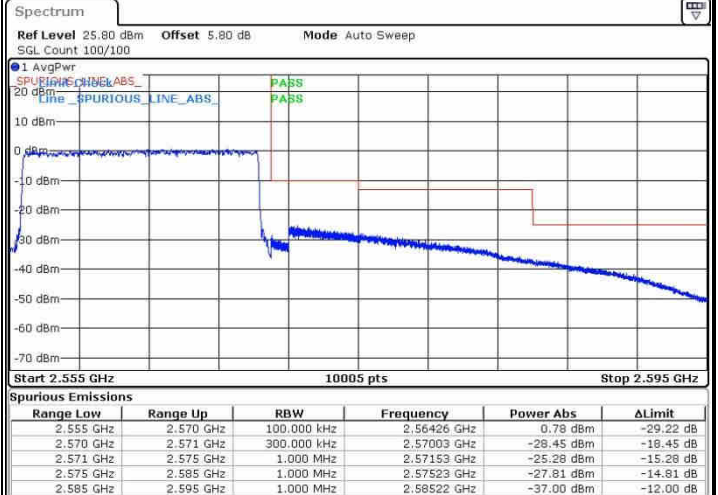
Date: 2 APR 2017 12:37:25

Lowest Band Edge / Full RB



Date: 2 APR 2017 12:32:51

Highest Band Edge / Full RB

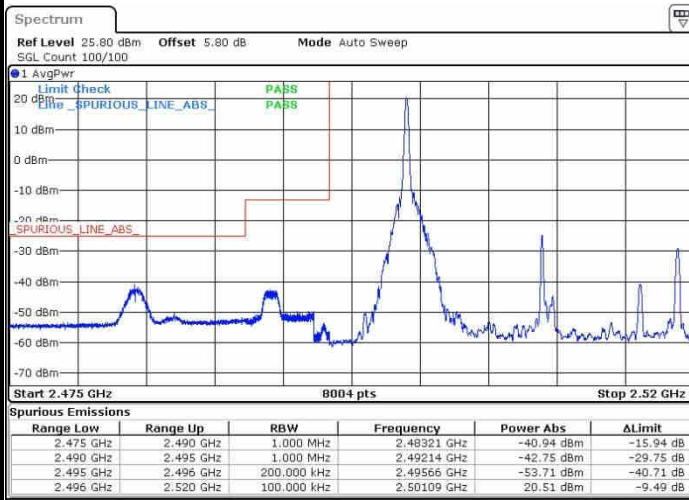


Date: 2 APR 2017 12:36:17



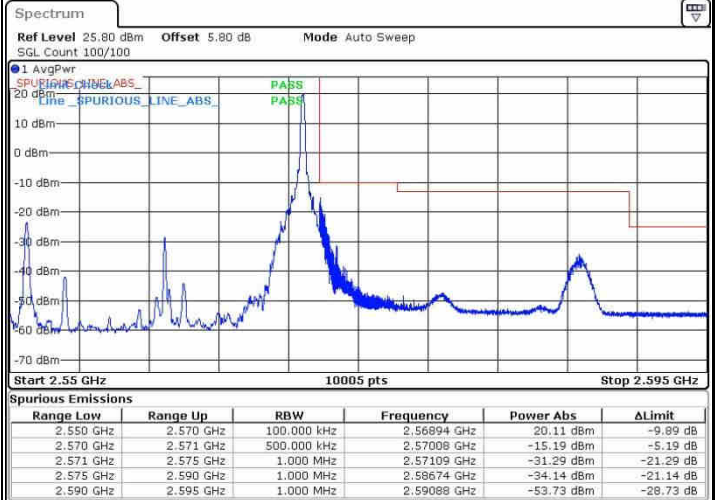
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB



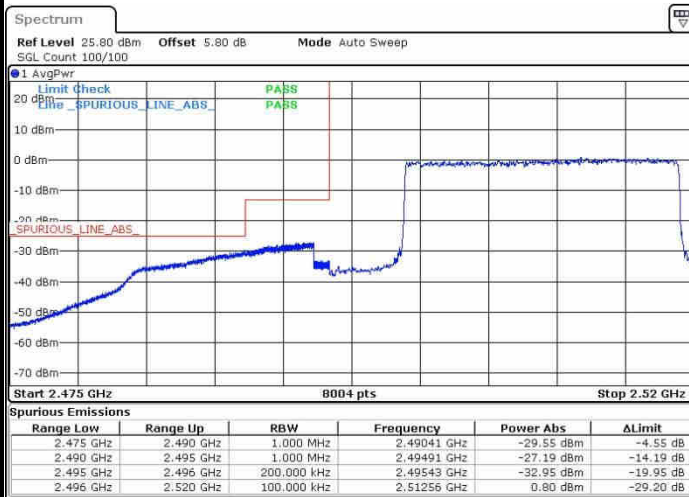
Date: 2 APR 2017 15:26:07

Highest Band Edge / 1 RB



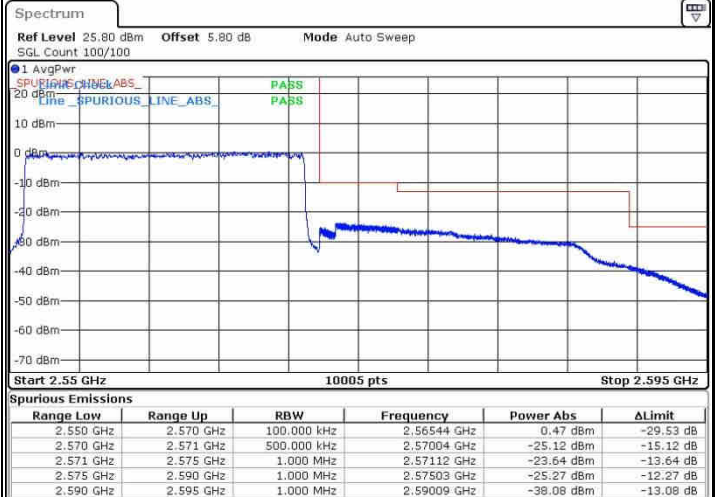
Date: 2 APR 2017 12:49:50

Lowest Band Edge / Full RB



Date: 2 APR 2017 12:45:15

Highest Band Edge / Full RB

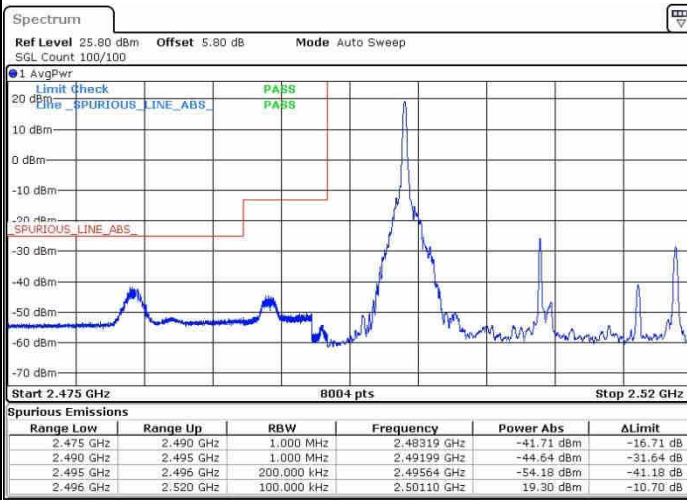


Date: 2 APR 2017 12:46:24



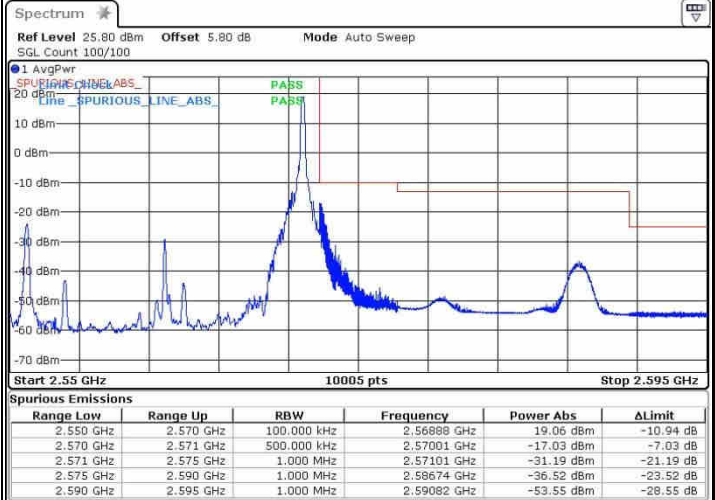
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



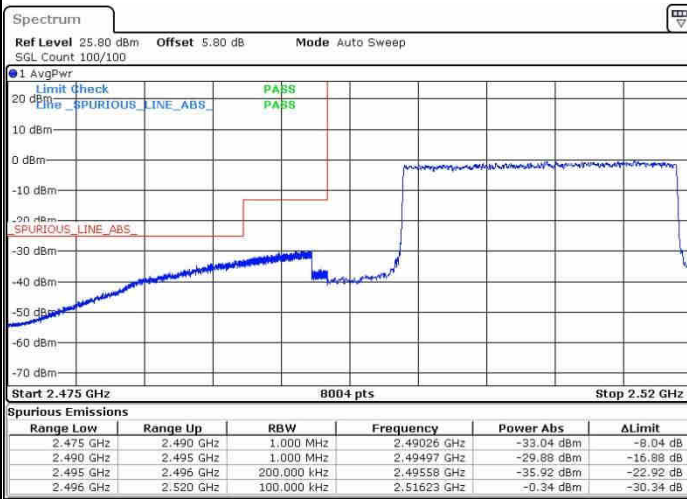
Date: 2 APR 2017 12:42:58

Highest Band Edge / 1RB



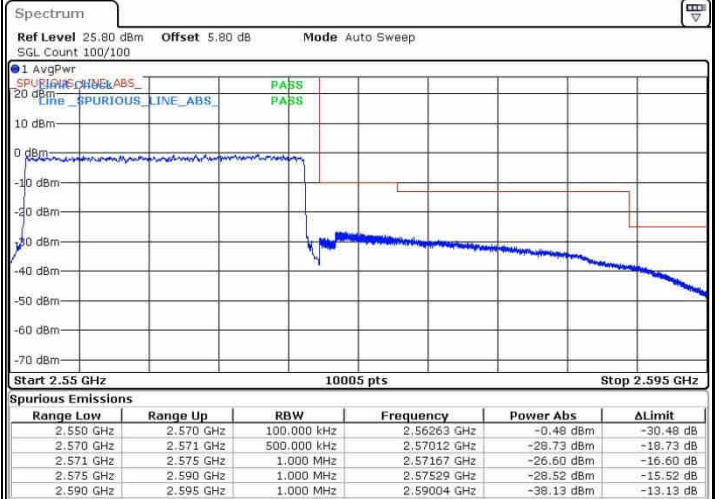
Date: 2 APR 2017 15:26:54

Lowest Band Edge / Full RB



Date: 2 APR 2017 12:44:07

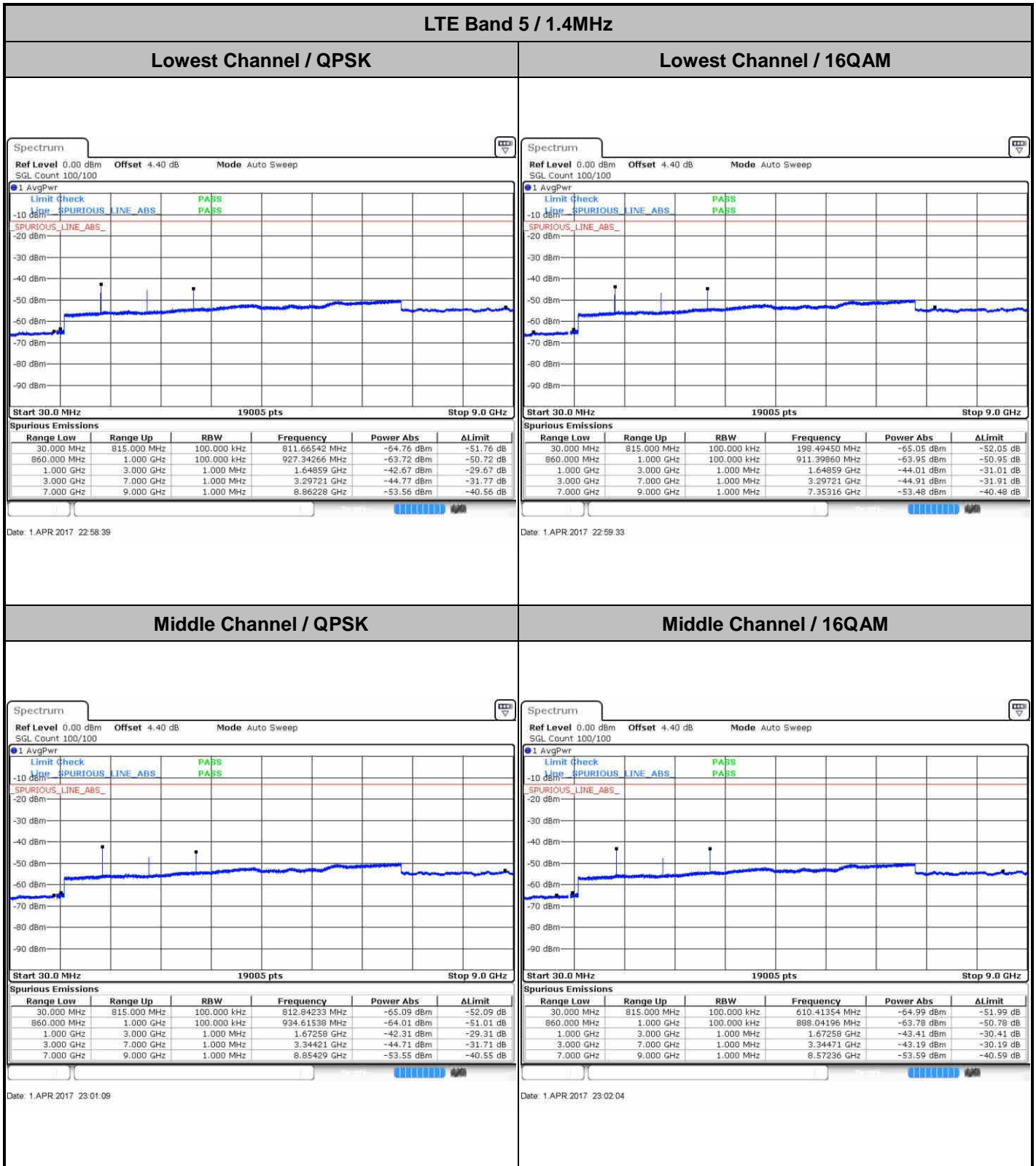
Highest Band Edge / Full RB



Date: 2 APR 2017 12:47:33



Conducted Spurious Emission

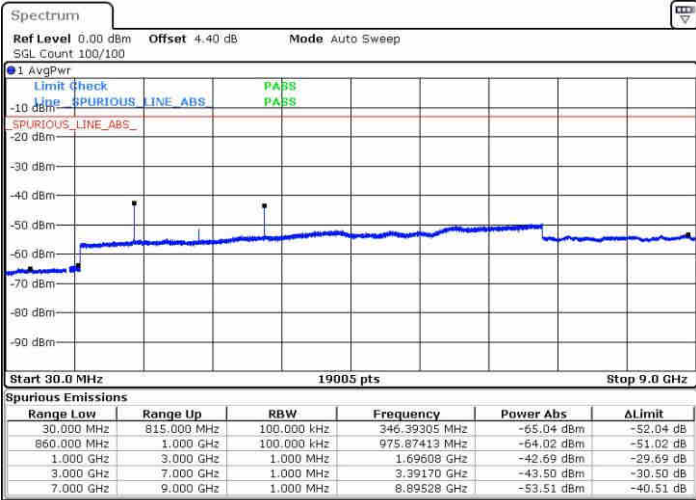




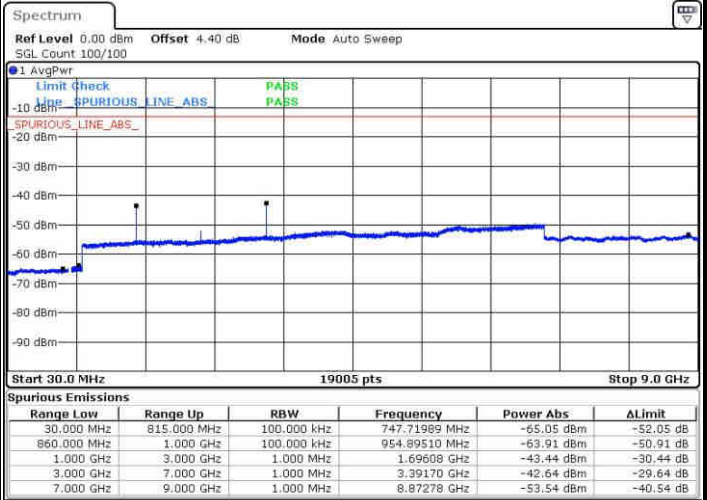
LTE Band 5 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 1.APR.2017 23:10:16

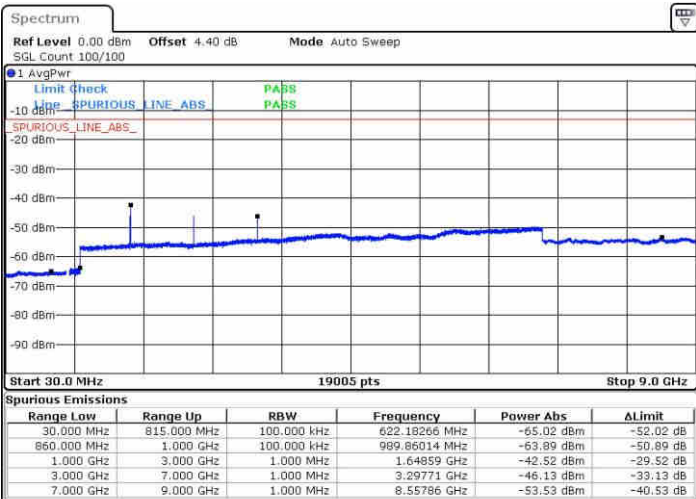


Date: 1.APR.2017 23:11:10

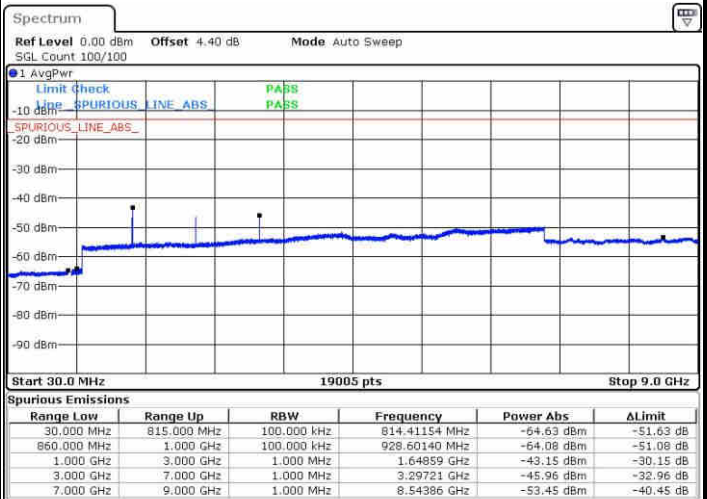
LTE Band 5 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 1.APR.2017 23:19:23



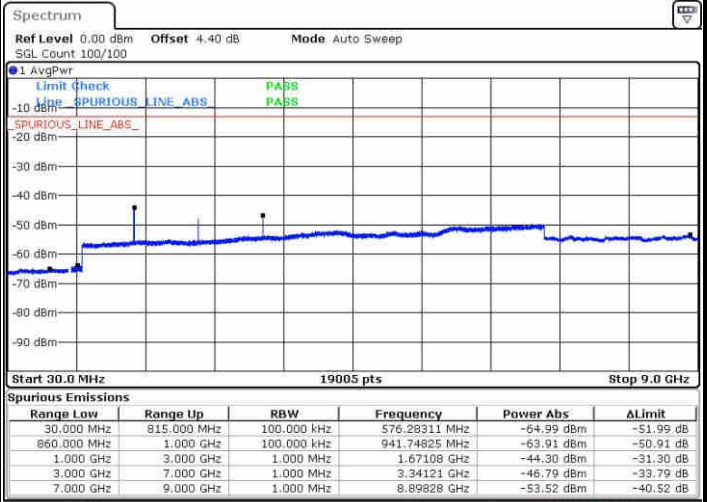
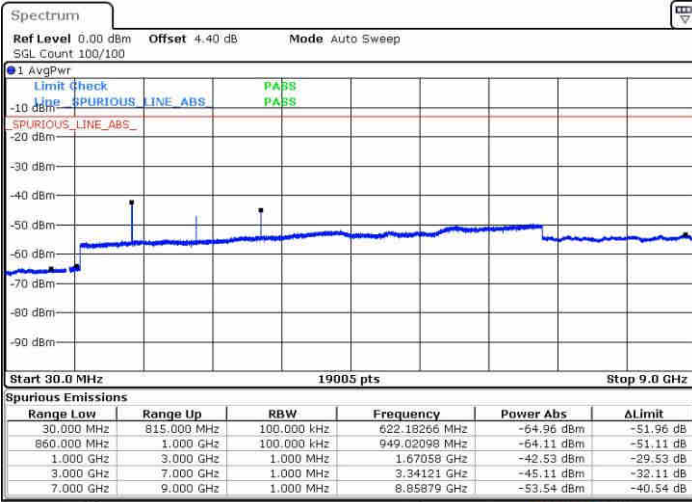
Date: 1.APR.2017 23:20:17



LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

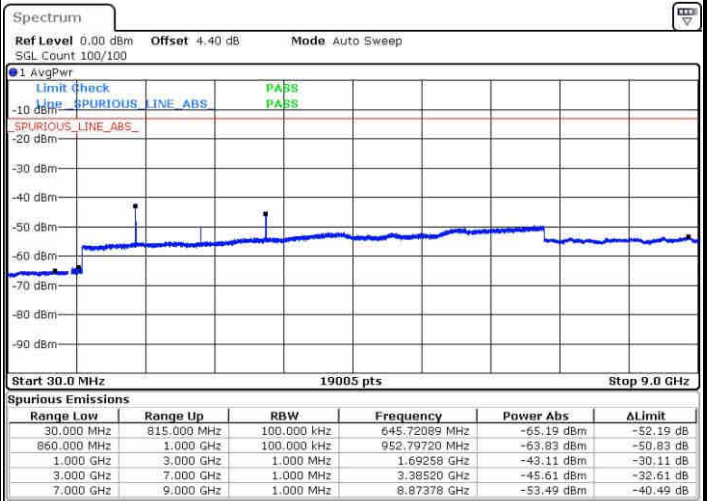
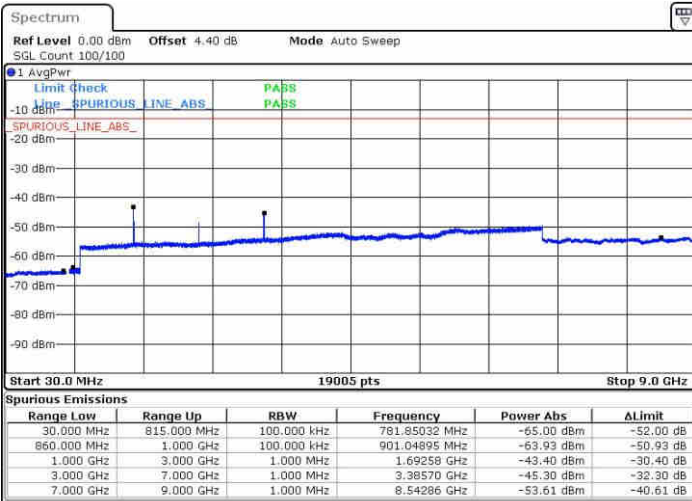


Date: 1.APR.2017 23:21:53

Date: 1.APR.2017 23:22:48

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 1.APR.2017 23:31:00

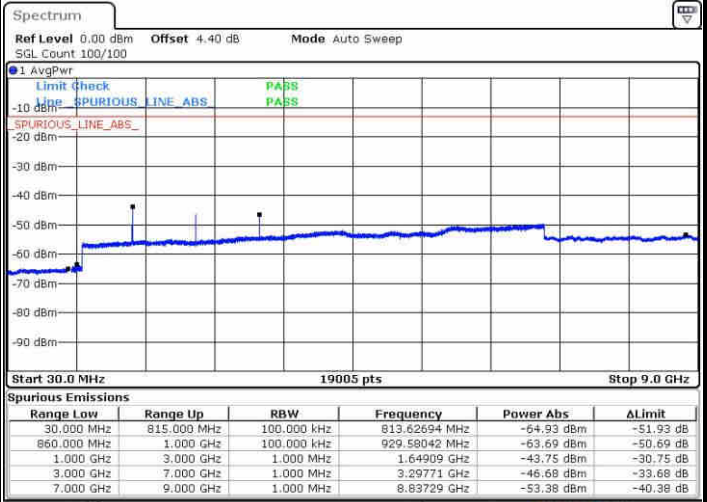
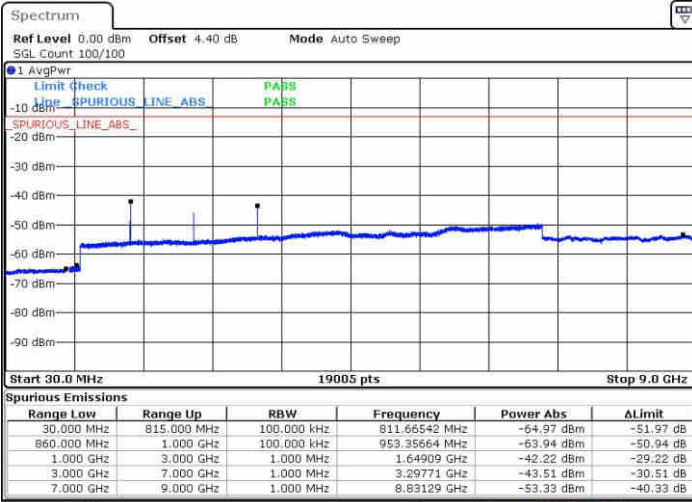
Date: 1.APR.2017 23:31:54



LTE Band 5 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

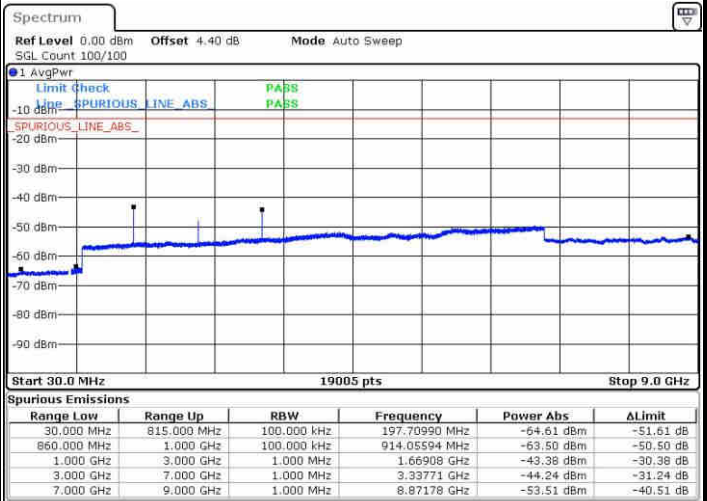
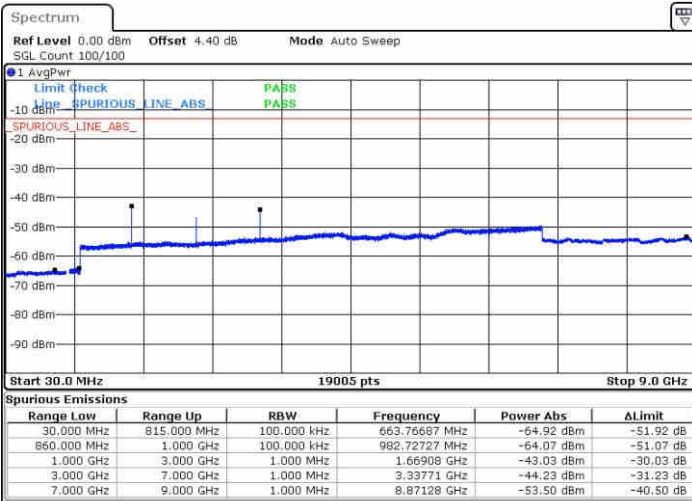


Date: 1.APR.2017 23:40:07

Date: 1.APR.2017 23:41:01

Middle Channel / QPSK

Middle Channel / 16QAM



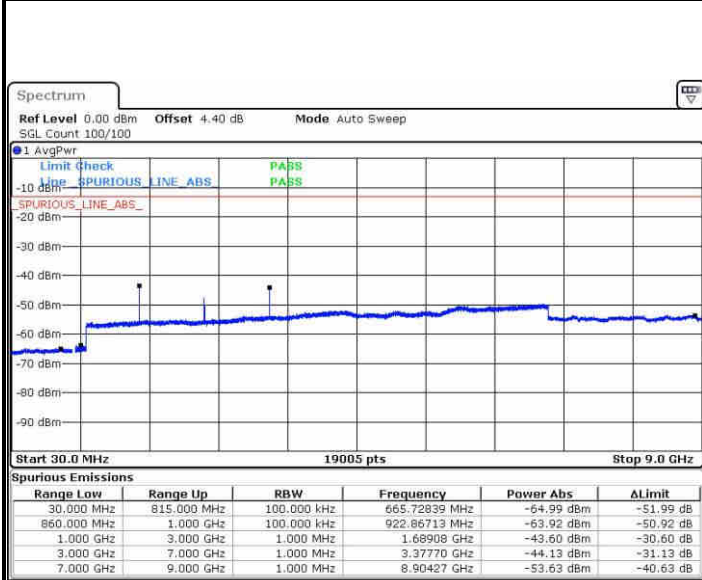
Date: 1.APR.2017 23:42:38

Date: 1.APR.2017 23:43:32



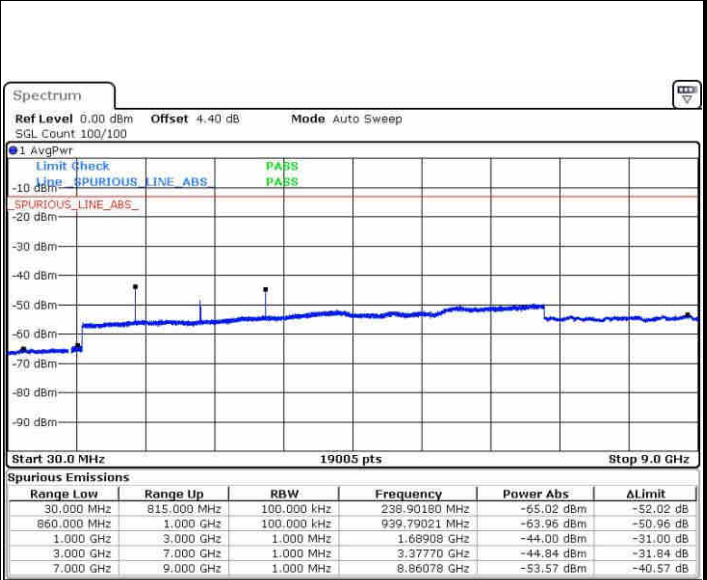
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 1.APR.2017 23:51:44

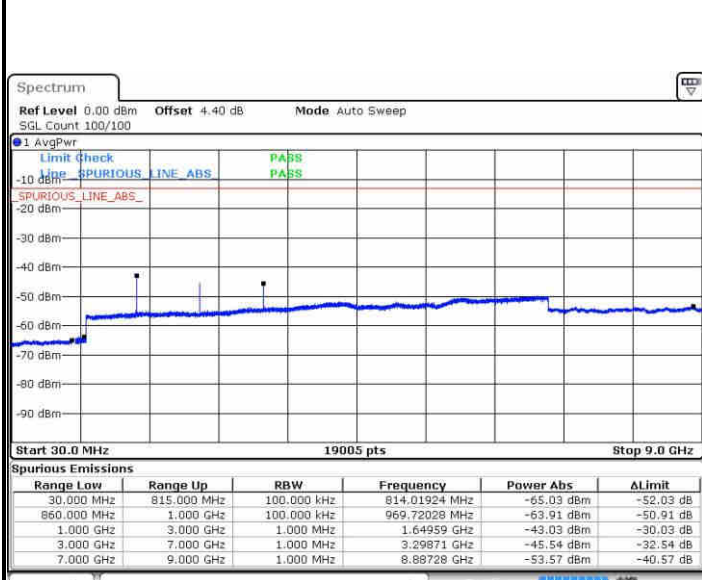
Highest Channel / 16QAM



Date: 1.APR.2017 23:52:38

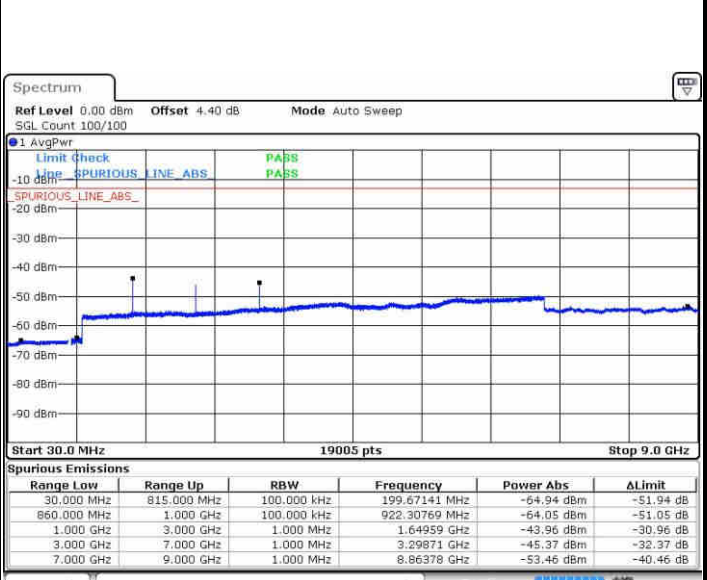
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 2.APR.2017 00:00:51

Lowest Channel / 16QAM



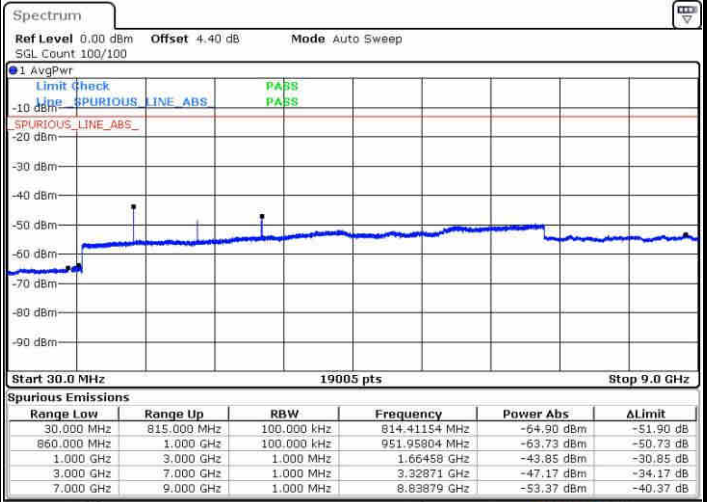
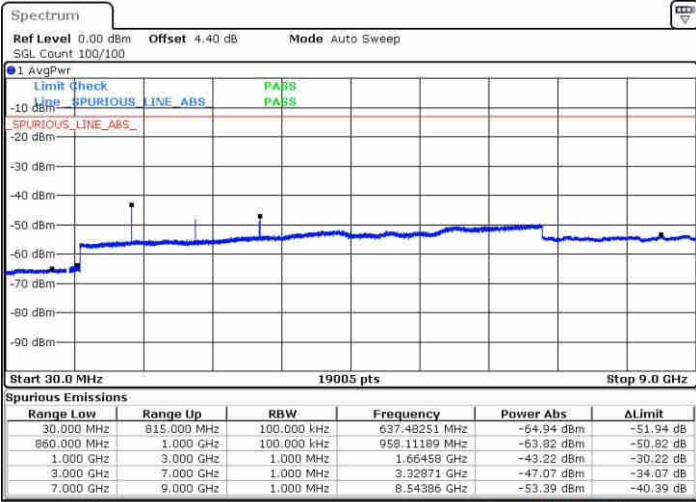
Date: 2.APR.2017 00:01:45



LTE Band 5 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

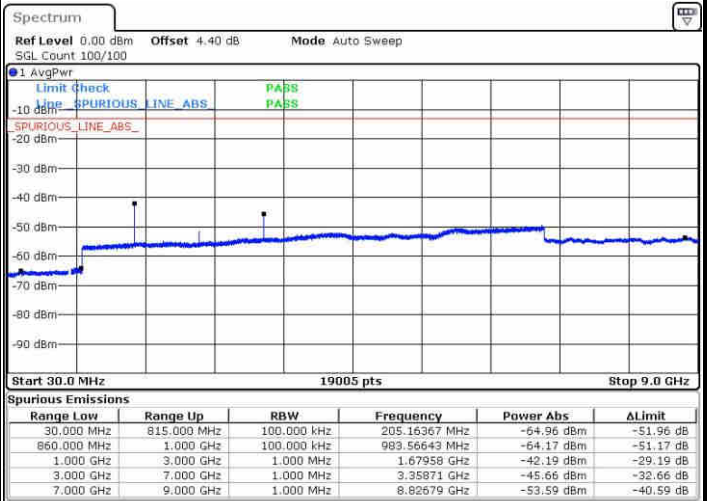
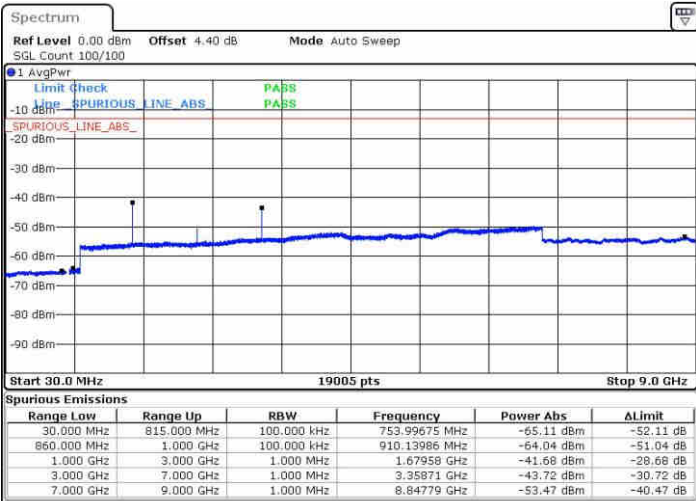


Date: 2 APR 2017 00:03:22

Date: 2 APR 2017 00:04:16

Highest Channel / QPSK

Highest Channel / 16QAM



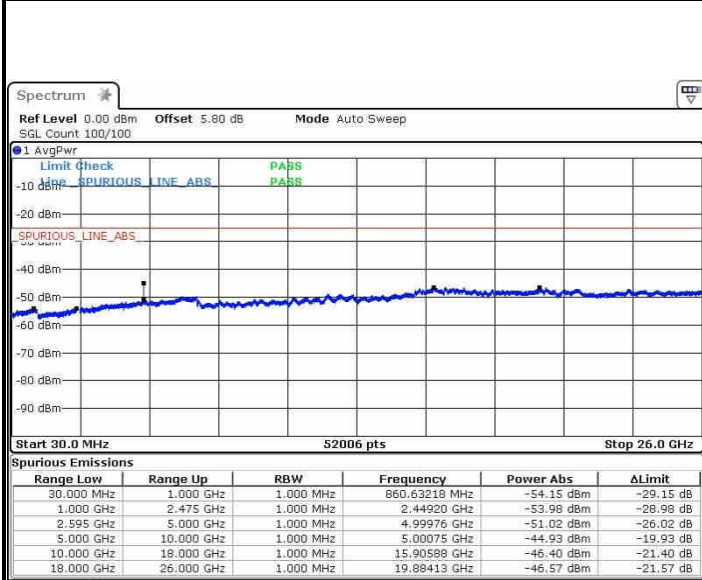
Date: 2 APR 2017 00:12:28

Date: 2 APR 2017 00:13:23



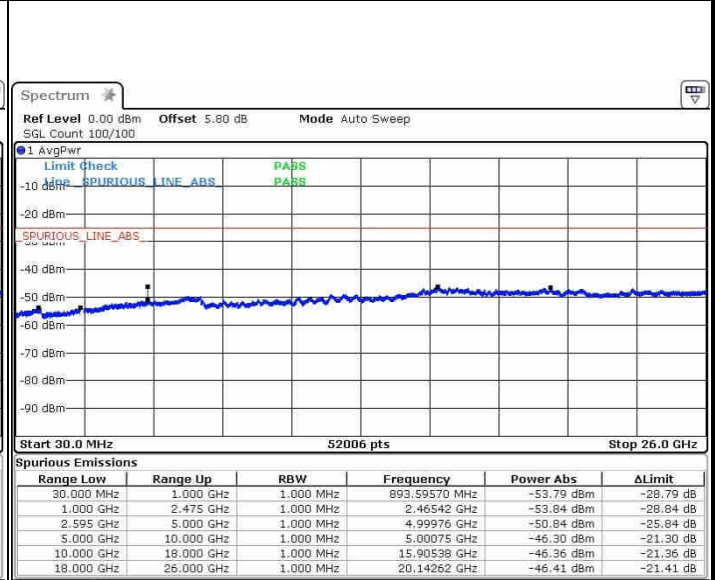
LTE Band 7 / 5MHz

Lowest Channel / QPSK



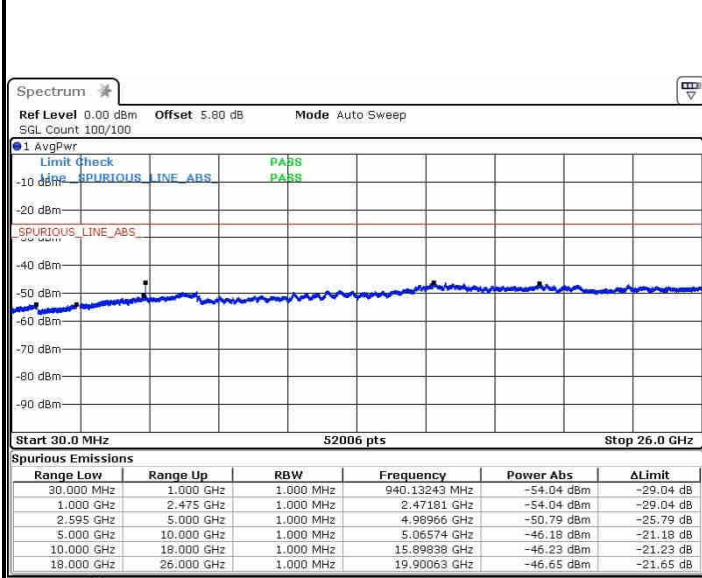
Date: 2 APR.2017 14:51:32

Lowest Channel / 16QAM



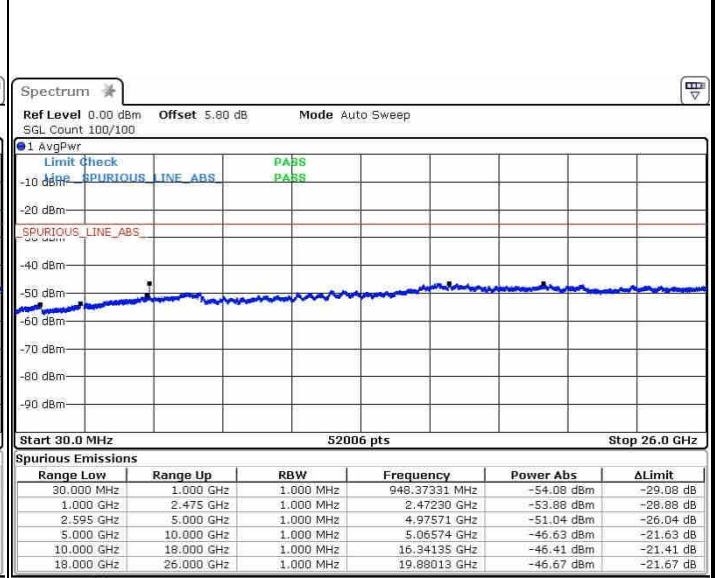
Date: 2 APR.2017 14:59:04

Middle Channel / QPSK



Date: 2 APR.2017 15:01:58

Middle Channel / 16QAM

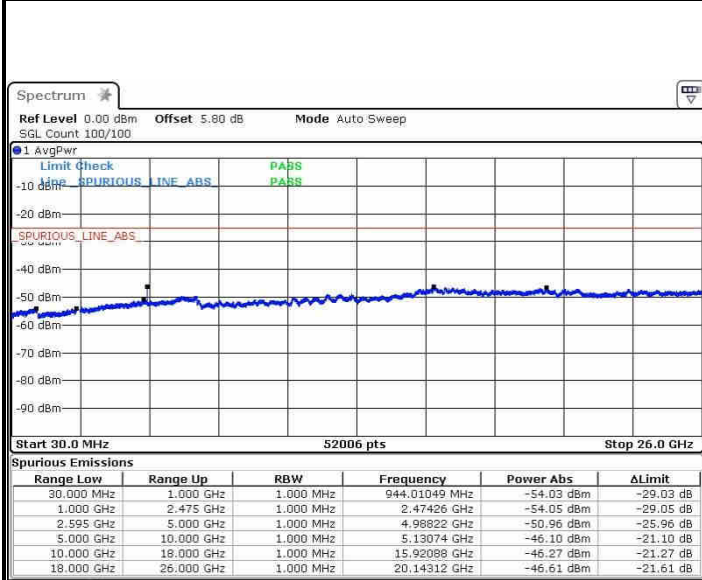


Date: 2 APR.2017 15:00:58



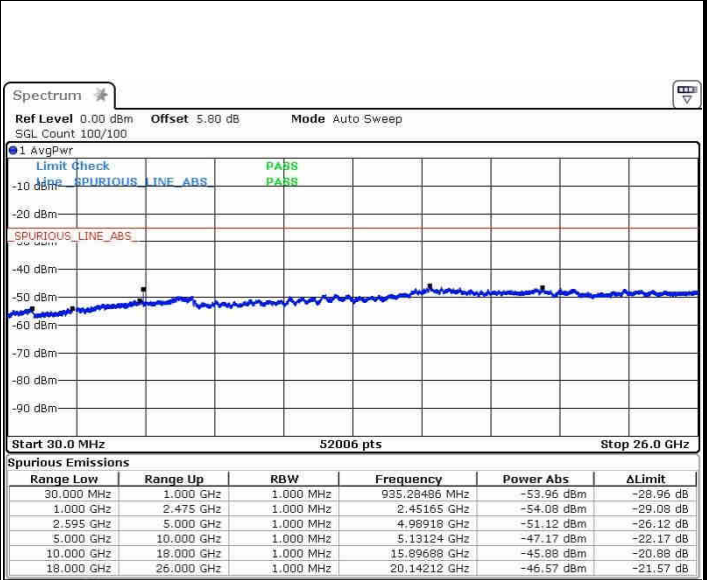
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 2 APR.2017 15:02:57

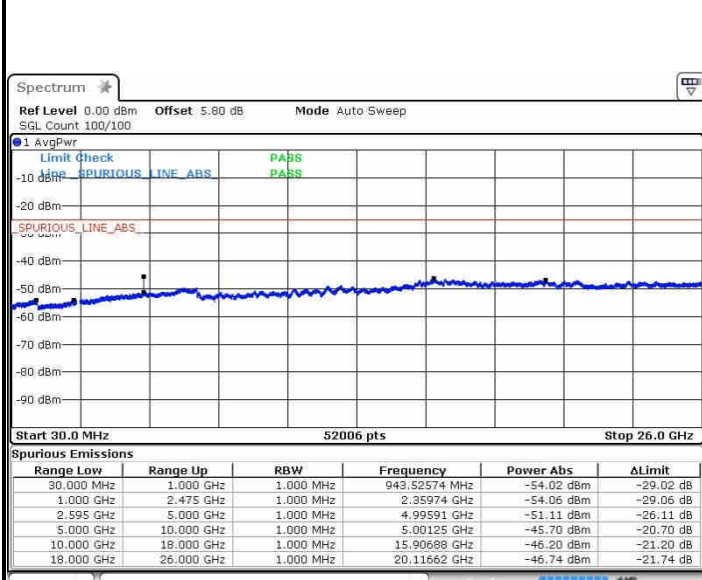
Highest Channel / 16QAM



Date: 2 APR.2017 15:03:54

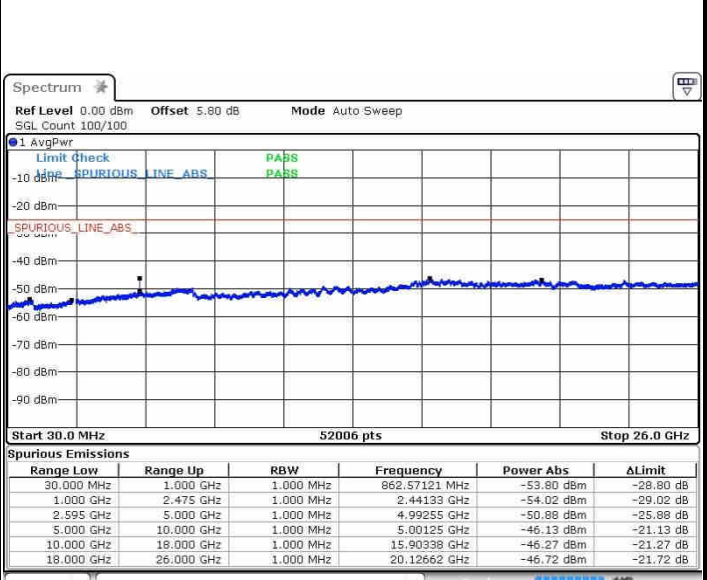
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 2 APR.2017 15:06:07

Lowest Channel / 16QAM

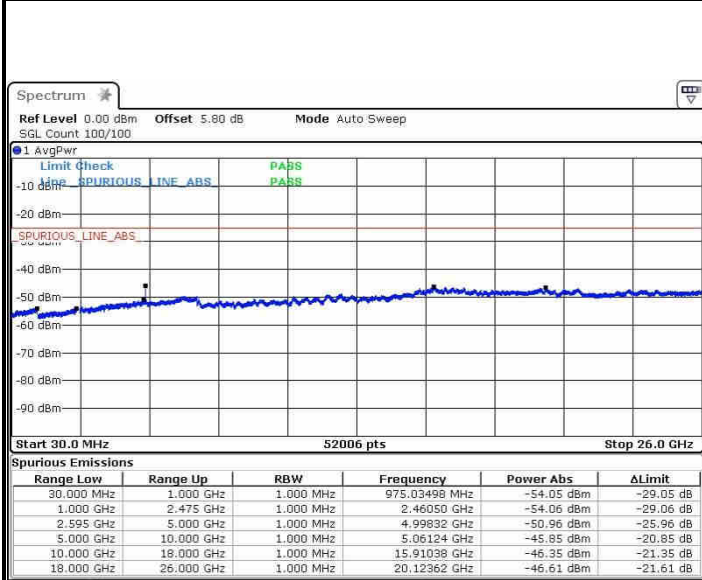


Date: 2 APR.2017 15:05:01



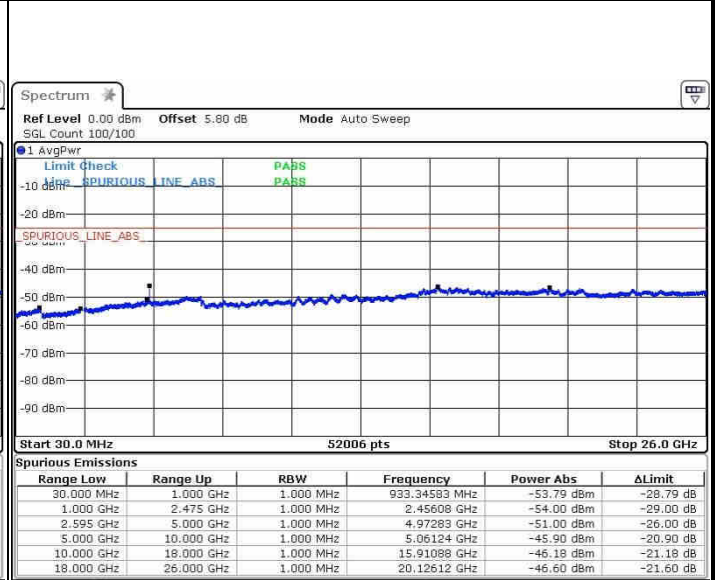
LTE Band 7 / 10MHz

Middle Channel / QPSK



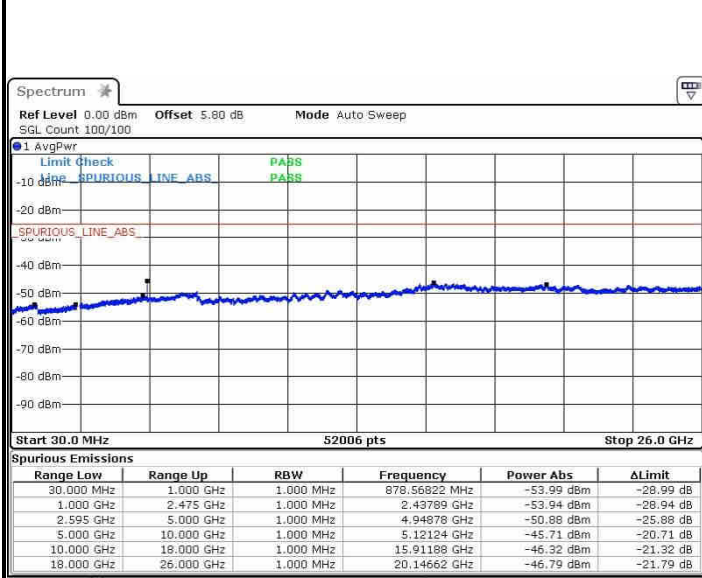
Date: 2 APR.2017 15:07:04

Middle Channel / 16QAM



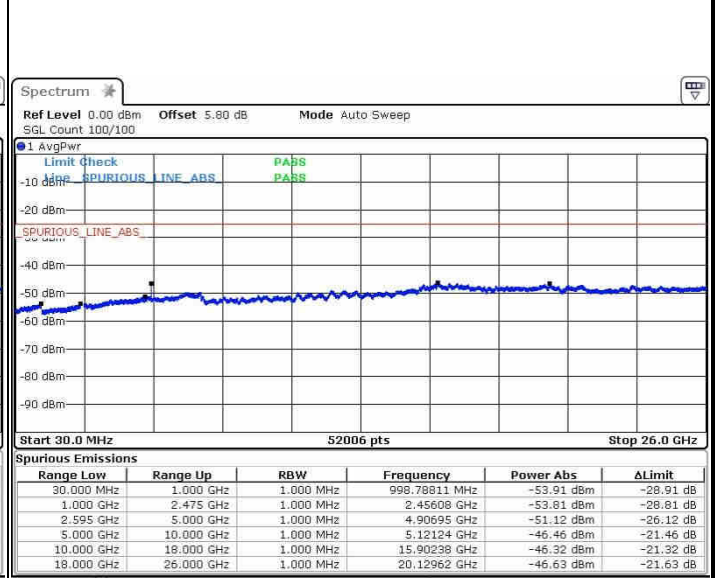
Date: 2 APR.2017 15:08:04

Highest Channel / QPSK



Date: 2 APR.2017 15:10:01

Highest Channel / 16QAM



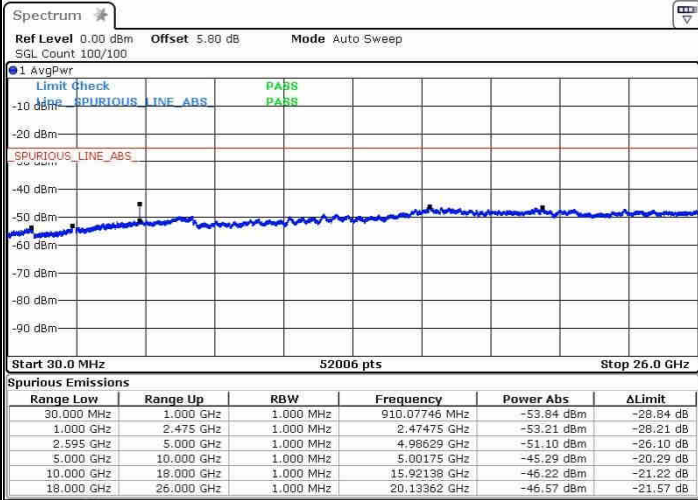
Date: 2 APR.2017 15:09:03



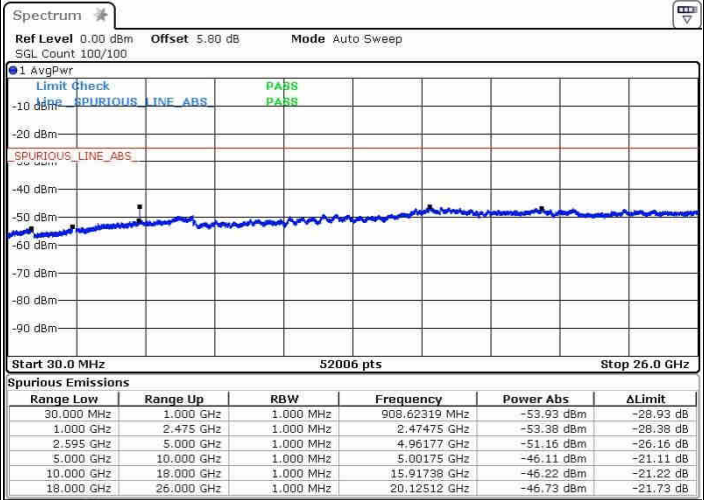
LTE Band 7 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



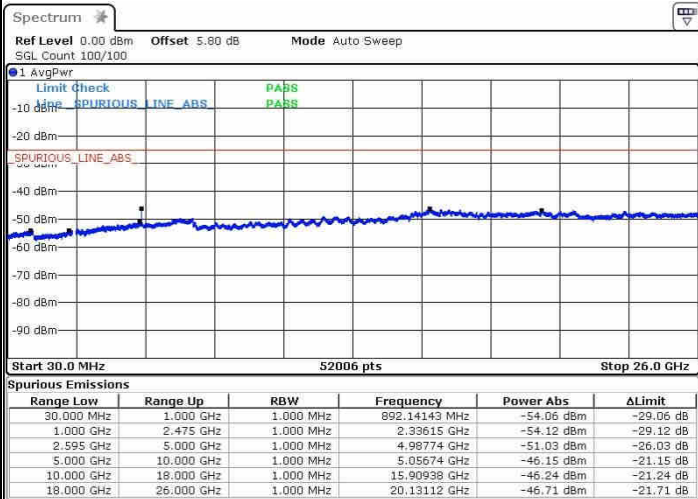
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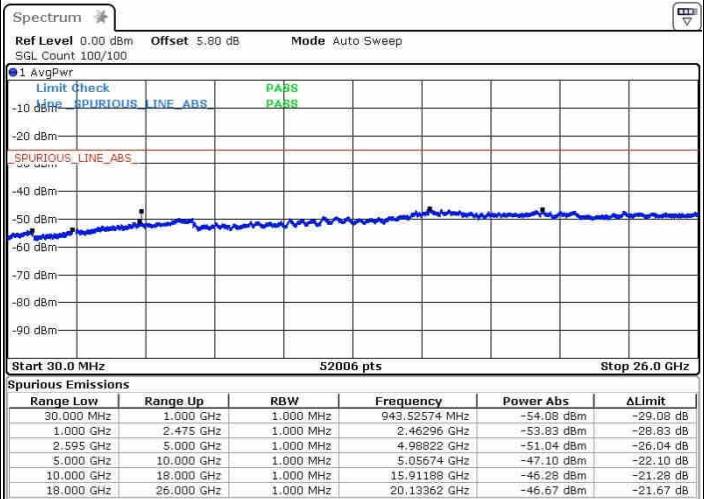
Date: 2 APR.2017 15:12:24

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 2 APR.2017 15:14:30

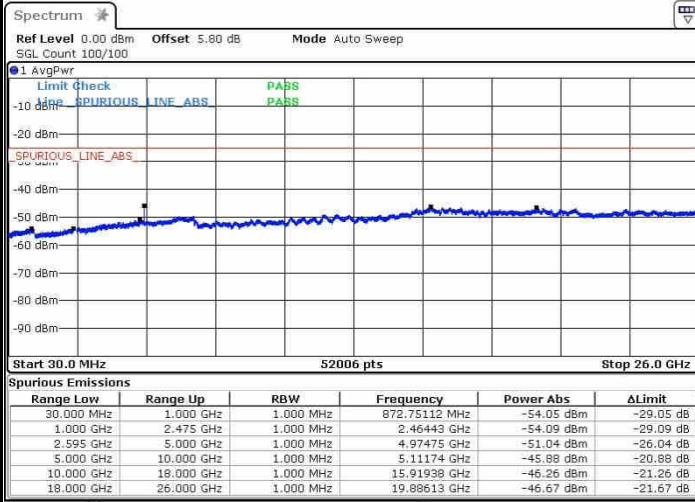


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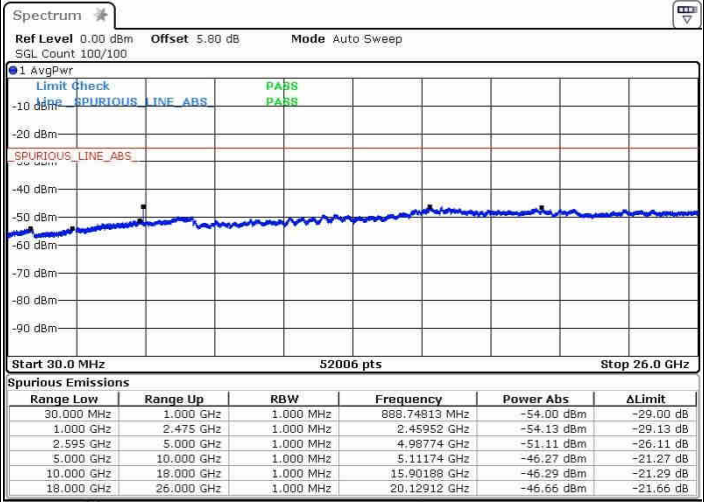
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 2 APR.2017 15:15:40

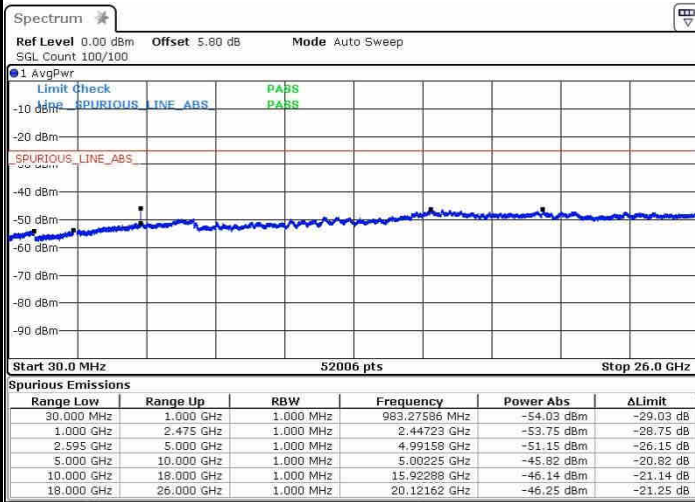
Highest Channel / 16QAM



Date: 2 APR.2017 15:16:39

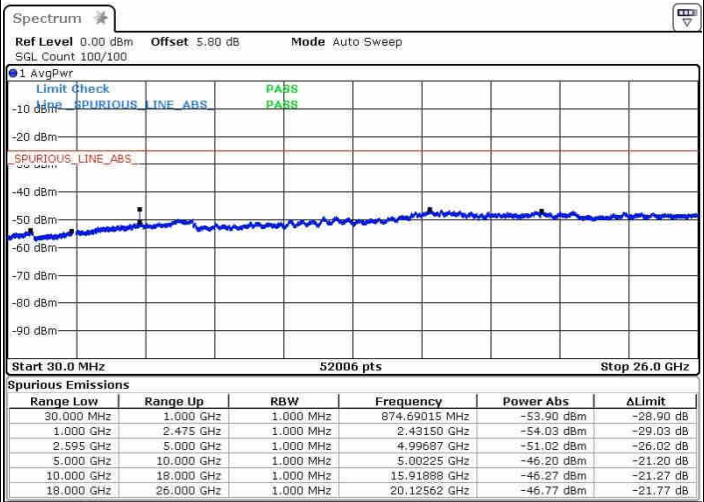
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 2 APR.2017 15:19:01

Lowest Channel / 16QAM



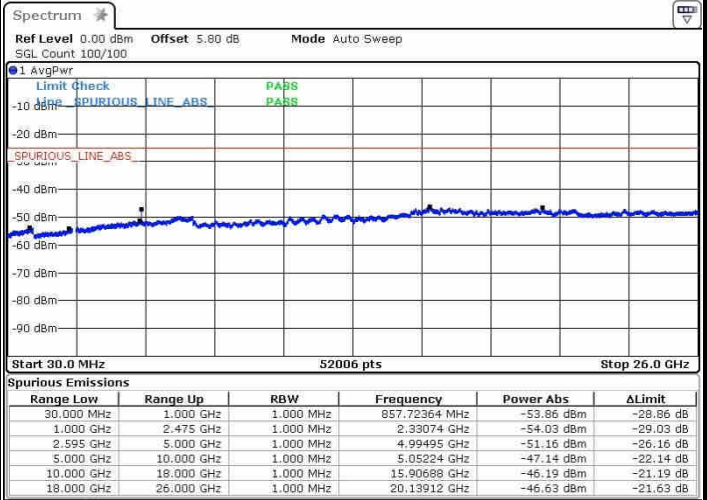
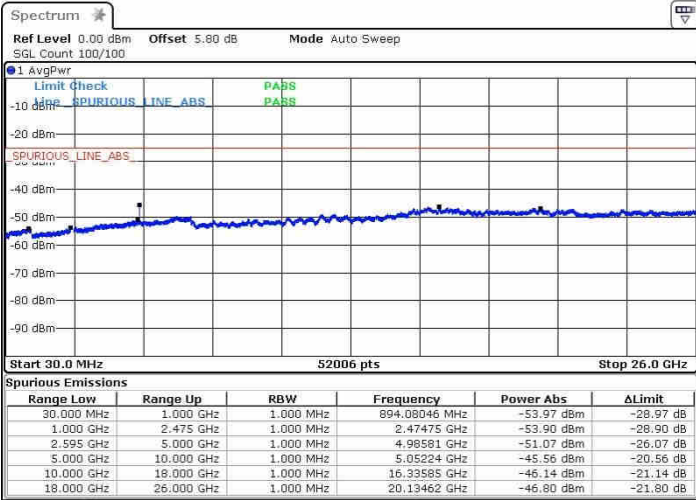
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LTE Band 7 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

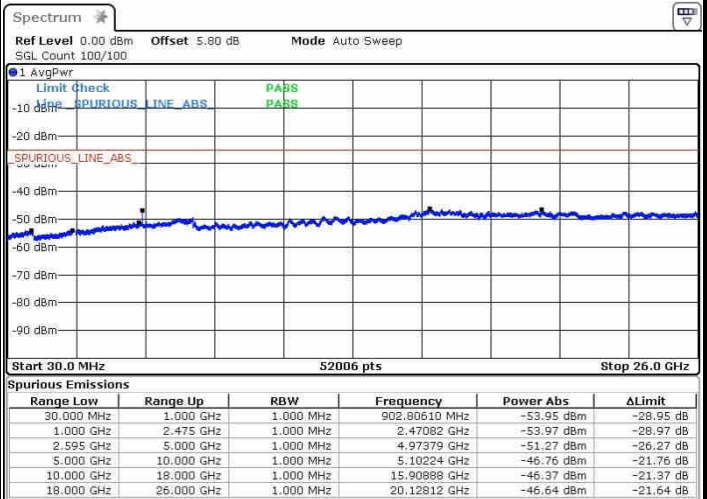
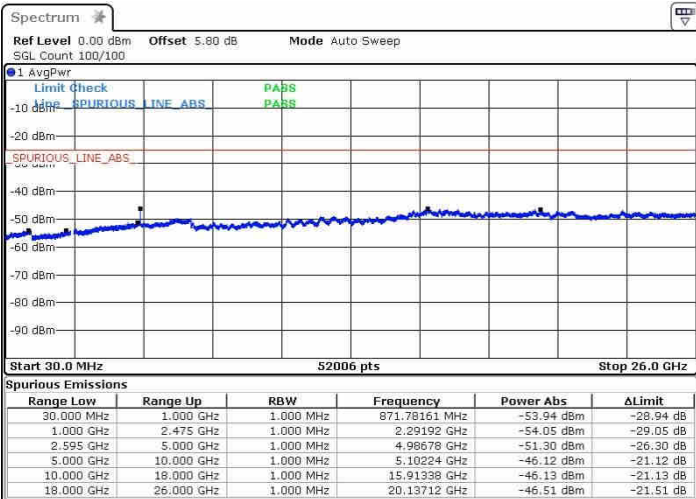


Date: 2 APR 2017 15:19:58

Date: 2 APR 2017 15:20:56

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2 APR 2017 15:23:33

Date: 2 APR 2017 15:22:12



Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0060	PASS
40	Normal Voltage	0.0056	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0053	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0047	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0032	
20	Battery End Point	0.0008	

Note: Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.



Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0029	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0030	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0001	
20	Battery End Point	0.0026	

Note:

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



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

LTE Band 5 / 1.4MHz / 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	1672	-66.73	-13	-53.73	-65.36	-68.59	1.19	5.20	H
	2508	-49.87	-13	-36.87	-53.92	-52.09	1.53	5.90	H
	3345	-58.71	-13	-45.71	-62.66	-61.50	1.76	6.70	H
	1672	-66.08	-13	-53.08	-64.04	-67.94	1.19	5.20	V
	2508	-54.73	-13	-41.73	-56.71	-56.95	1.53	5.90	V
	3345	-58.12	-13	-45.12	-61.44	-60.91	1.76	6.70	V

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

LTE Band 5 / 3MHz / 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	1670	-66.72	-13	-53.72	-65.35	-68.58	1.19	5.20	H
	2506	-51.48	-13	-38.48	-55.00	-53.70	1.53	5.90	H
	3342	-59.80	-13	-46.80	-63.75	-62.59	1.76	6.70	H
	1670	-65.84	-13	-52.84	-63.8	-67.70	1.19	5.20	V
	2506	-54.81	-13	-41.81	-56.79	-57.03	1.53	5.90	V
	3342	-61.92	-13	-48.92	-65.24	-64.71	1.76	6.70	V

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



LTE Band 5 / 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	1668	-67.21	-13	-54.21	-65.84	-69.07	1.19	5.20	H
	2502	-48.79	-13	-35.79	-52.97	-51.01	1.53	5.90	H
	3336	-57.86	-13	-44.86	-61.81	-60.65	1.76	6.70	H
	1668	-66.66	-13	-53.66	-64.62	-68.52	1.19	5.20	V
	2502	-52.82	-13	-39.82	-55.11	-55.04	1.53	5.90	V
	3336	-58.22	-13	-45.22	-61.54	-61.01	1.76	6.70	V

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

LTE Band 5 / 10MHz / 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	1664	-67.12	-13	-54.12	-65.75	-68.98	1.19	5.20	H
	2496	-50.46	-13	-37.46	-54.23	-52.68	1.53	5.90	H
	3327	-58.76	-13	-45.76	-62.71	-61.55	1.76	6.70	H
	1664	-65.46	-13	-52.46	-63.42	-67.32	1.19	5.20	V
	2496	-55.14	-13	-42.14	-57.12	-57.36	1.53	5.90	V
	3327	-59.22	-13	-46.22	-62.54	-62.01	1.76	6.70	V

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

LTE Band 5 / 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	1668	-68.24	-13	-55.24	-66.87	-70.10	1.19	5.20	H
	2502	-50.34	-13	-37.34	-54.18	-52.56	1.53	5.90	H
	3336	-57.70	-13	-44.70	-61.65	-60.49	1.76	6.70	H
	1668	-66.28	-13	-53.28	-64.24	-68.14	1.19	5.20	V
	2502	-54.07	-13	-41.07	-56.05	-56.29	1.53	5.90	V
	3336	-57.85	-13	-44.85	-61.17	-60.64	1.76	6.70	V

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



LTE Band 7 / 5MHz / 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	5064	-33.81	-25	-8.81	-47.63	-40.37	2.41	8.97	H
	7600	-55.44	-25	-30.44	-69.14	-64.44	2.86	11.86	H
	10134	-57.81	-25	-32.81	-76.16	-66.71	3.21	12.11	H
	5064	-35.90	-25	-10.90	-49.89	-42.46	2.41	8.97	V
	7596	-53.95	-25	-28.95	-68.58	-62.95	2.86	11.86	V
	10134	-56.74	-25	-31.74	-76.14	-65.64	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	-34.20	-25	-9.20	-47.98	-40.76	2.41	8.97	H
	7592	-54.66	-25	-29.66	-68.36	-63.66	2.86	11.86	H
	10125	-58.25	-25	-33.25	-76.60	-67.15	3.21	12.11	H
	5060	-33.80	-25	-8.80	-48.22	-40.36	2.41	8.97	V
	7592	-51.45	-25	-26.45	-66.08	-60.45	2.86	11.86	V
	10125	-57.10	-25	-32.10	-76.5	-66.00	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	5056	-37.42	-25	-12.42	-50.70	-43.98	2.41	8.97	H
	7584	-56.32	-25	-31.32	-70.02	-65.32	2.86	11.86	H
	10116	-57.98	-25	-32.98	-76.33	-66.88	3.21	12.11	H
	5056	-37.76	-25	-12.76	-51.22	-44.32	2.41	8.97	V
	7584	-51.47	-25	-26.47	-66.1	-60.47	2.86	11.86	V
	10116	-56.66	-25	-31.66	-76.06	-65.56	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	5052	-40.71	-25	-15.71	-53.16	-47.27	2.41	8.97	H
	7576	-57.52	-25	-32.52	-71.22	-66.52	2.86	11.86	H
	10107	-57.96	-25	-32.96	-76.31	-66.86	3.21	12.11	H
	5052	-39.03	-25	-14.03	-52.39	-45.59	2.41	8.97	V
	7576	-52.93	-25	-27.93	-67.56	-61.93	2.86	11.86	V
	10107	-56.71	-25	-31.71	-76.11	-65.61	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	-45.50	-25	-20.50	-55.94	-52.06	2.41	8.97	H
	7592	-53.32	-25	-28.32	-67.02	-62.32	2.86	11.86	H
	10125	-55.09	-25	-30.09	-73.44	-63.99	3.21	12.11	H
	5060	-37.35	-25	-12.35	-50.96	-43.91	2.41	8.97	V
	7592	-49.37	-25	-24.37	-64	-58.37	2.86	11.86	V
	10125	-53.72	-25	-28.72	-73.12	-62.62	3.21	12.11	V

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