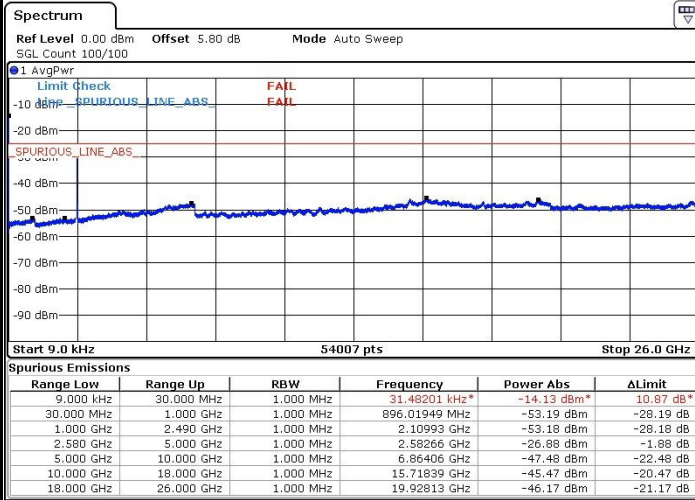




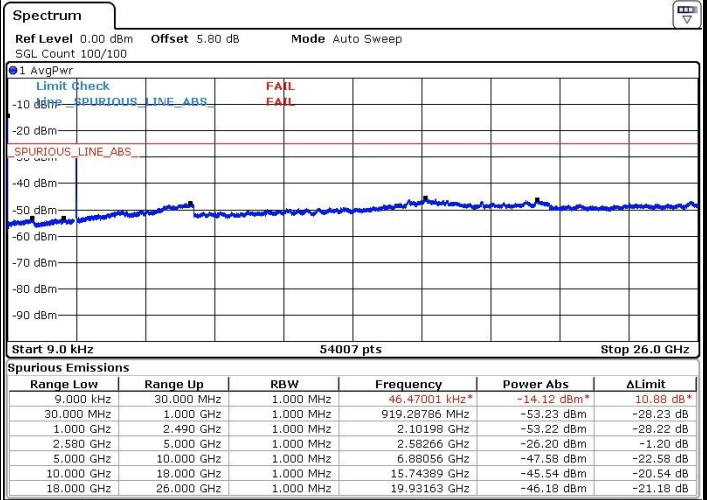
LTE Band 7 / 15MHz

Highest Channel / QPSK



Date: 2 MAR 2017 11:02:39

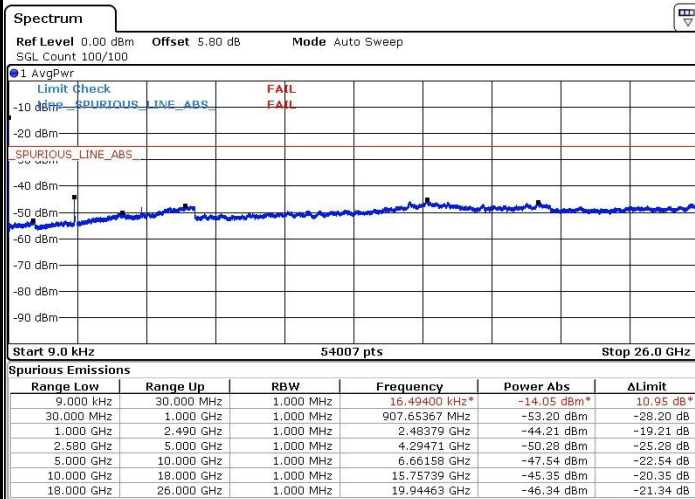
Highest Channel / 16QAM



Date: 2 MAR 2017 10:41:25

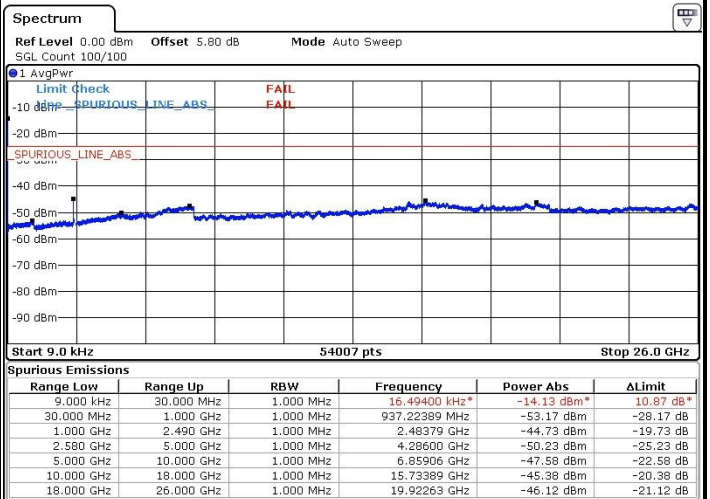
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 2 MAR 2017 10:54:40

Lowest Channel / 16QAM

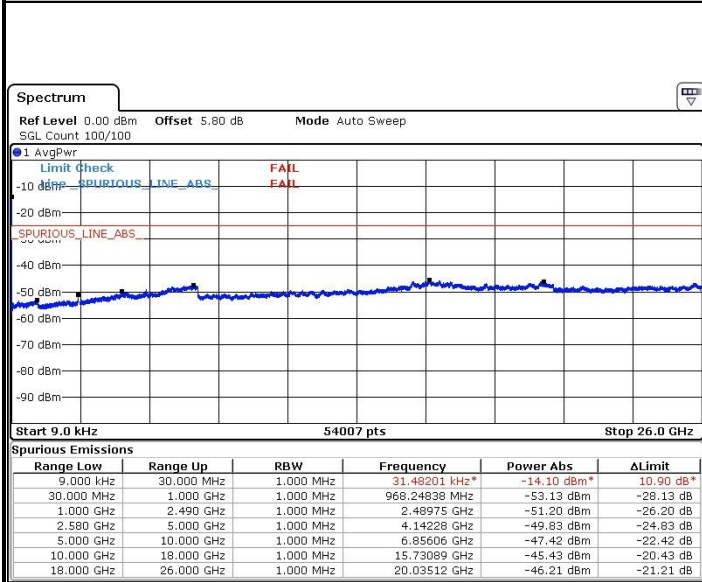


Date: 2 MAR 2017 10:53:42



LTE Band 7 / 20MHz

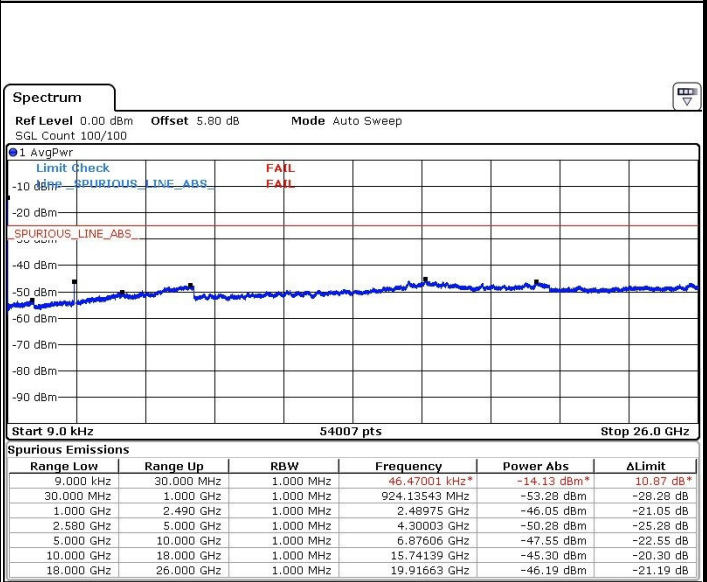
Middle Channel / QPSK



Ready ■

Date: 2 MAR 2017 10:57:22

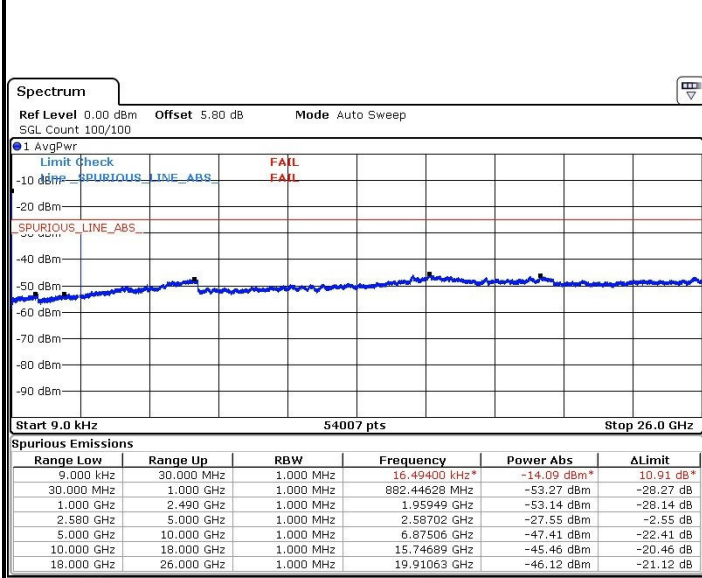
Middle Channel / 16QAM



Ready ■

Date: 2 MAR 2017 10:58:19

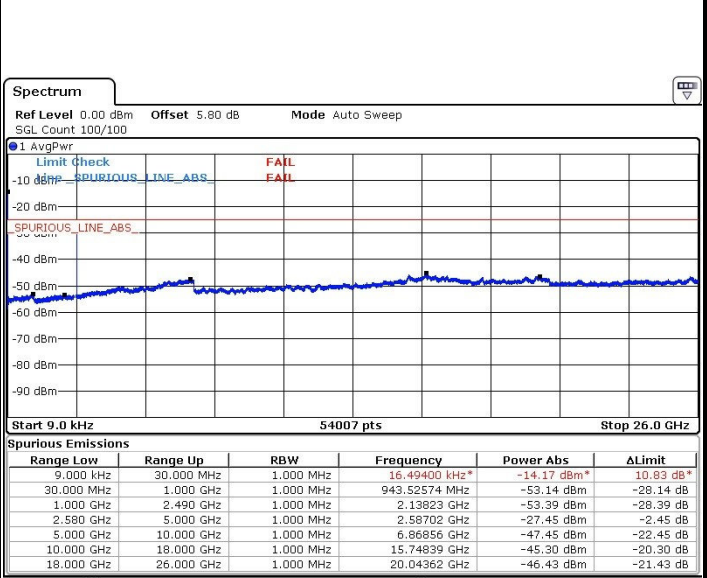
Highest Channel / QPSK



Ready ■

Date: 2 MAR 2017 11:00:59

Highest Channel / 16QAM



Ready ■

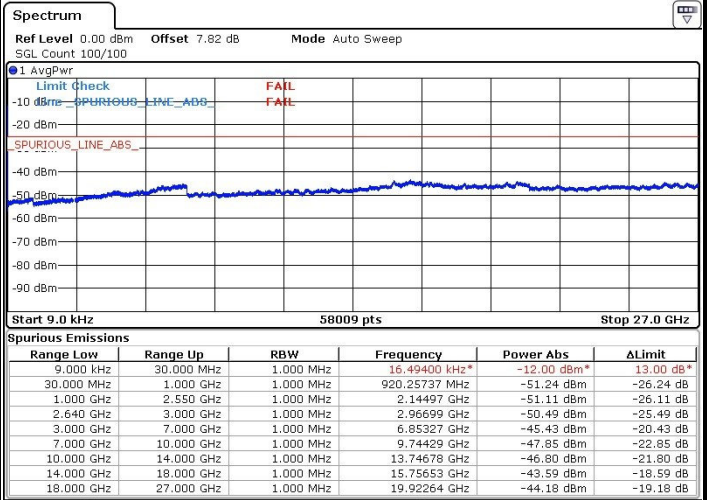
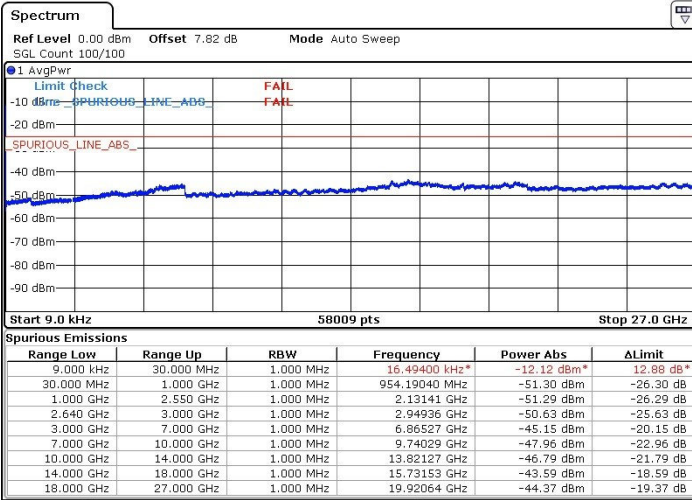
Date: 2 MAR 2017 10:59:21



LTE Band 38 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

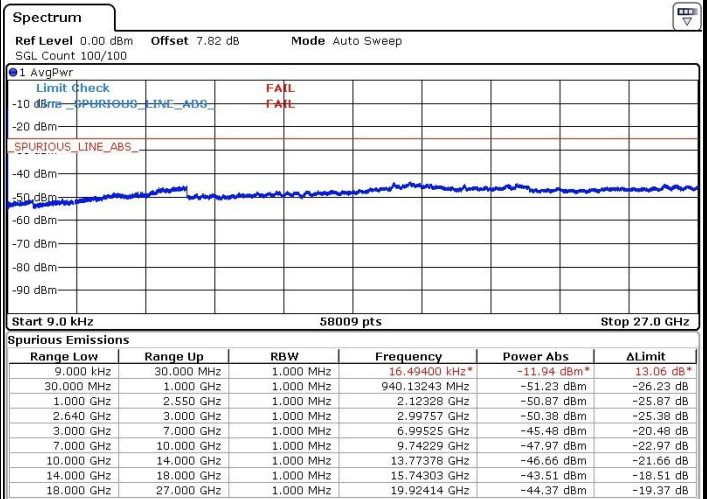
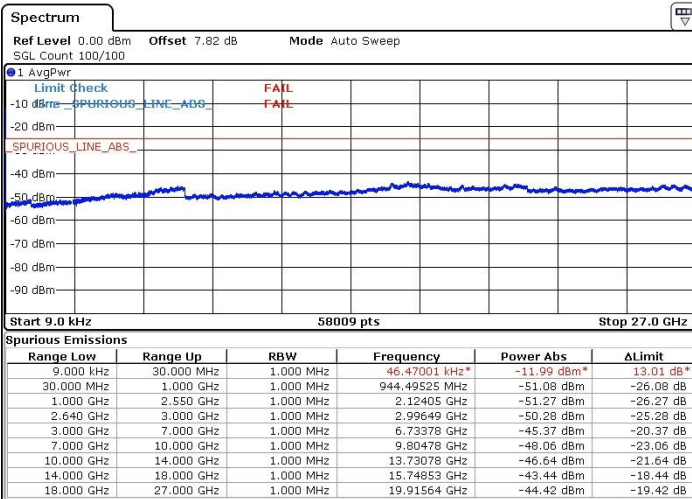


Date: 2 MAR 2017 14:23:00

Date: 2 MAR 2017 14:23:59

Middle Channel / QPSK

Middle Channel / 16QAM



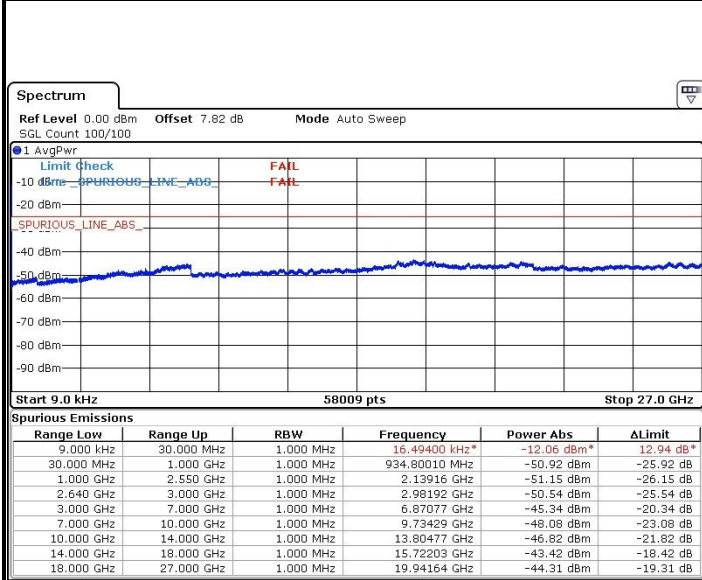
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Date: 2 MAR 2017 14:25:12



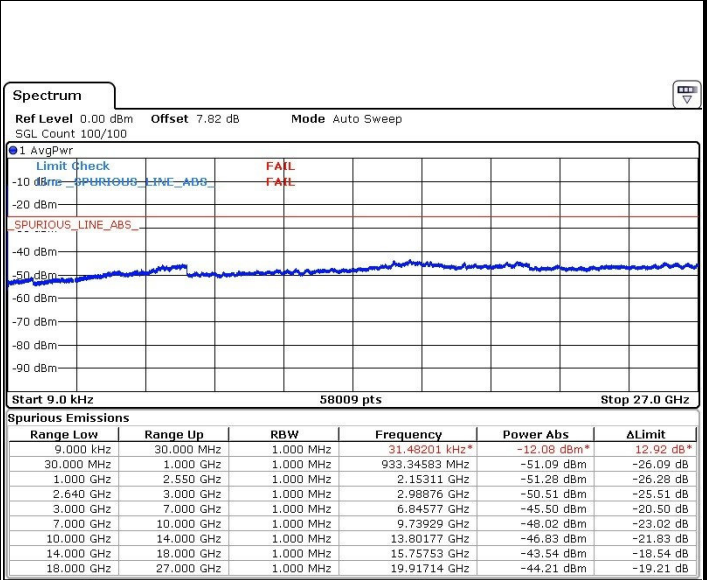
LTE Band 38 / 5MHz

Highest Channel / QPSK



Date: 2 MAR 2017 14:47:27

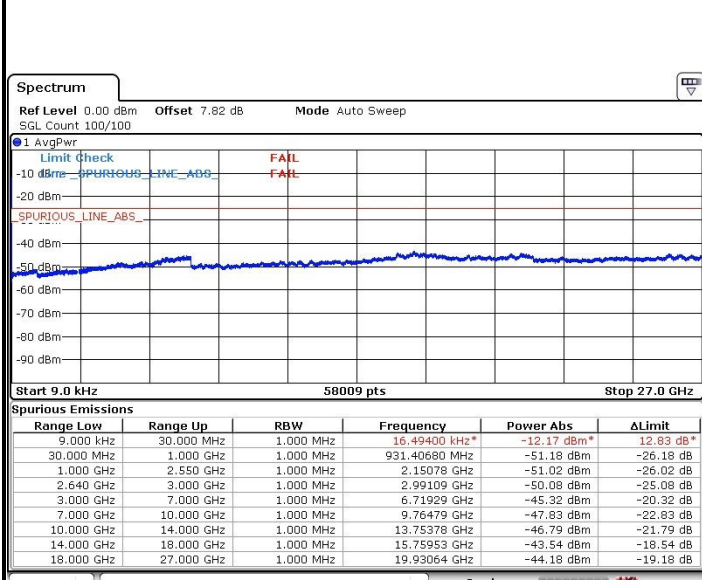
Highest Channel / 16QAM



Date: 2 MAR 2017 14:48:34

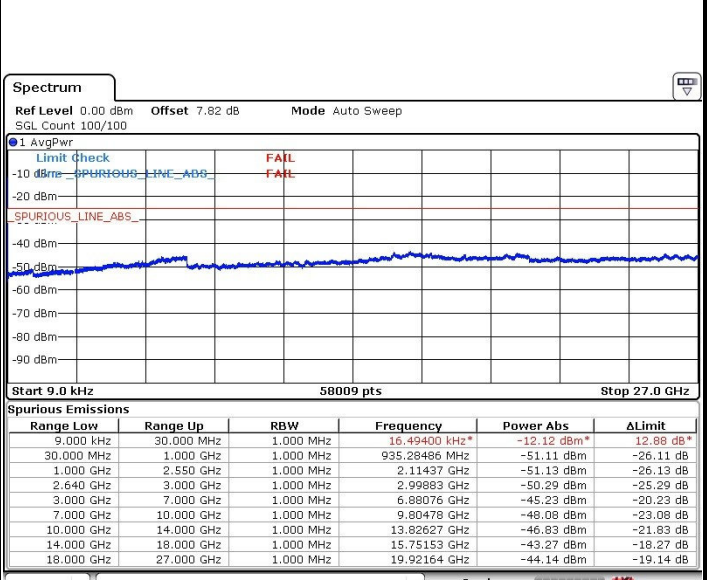
LTE Band 38 / 10MHz

Lowest Channel / QPSK



Date: 2 MAR 2017 14:49:08

Lowest Channel / 16QAM



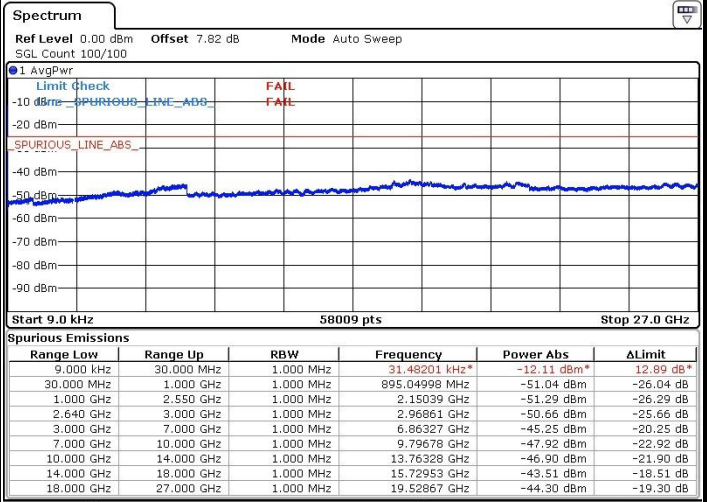
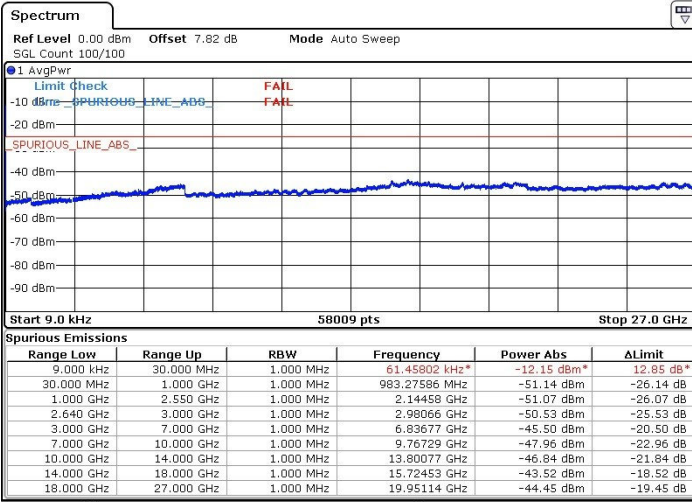
Date: 2 MAR 2017 14:50:06



LTE Band 38 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

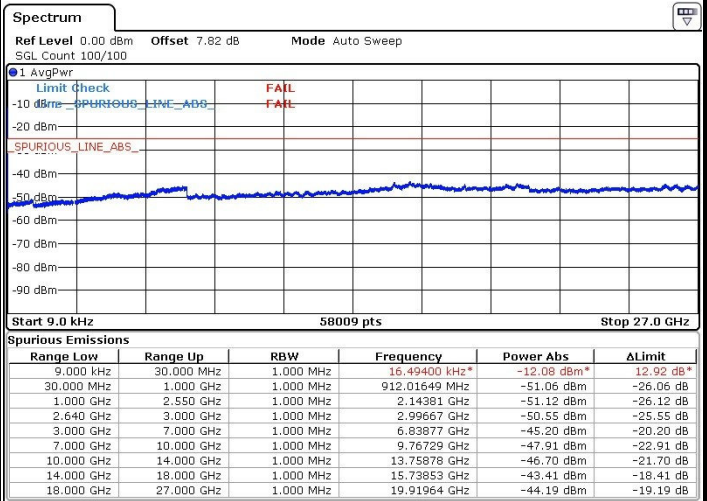
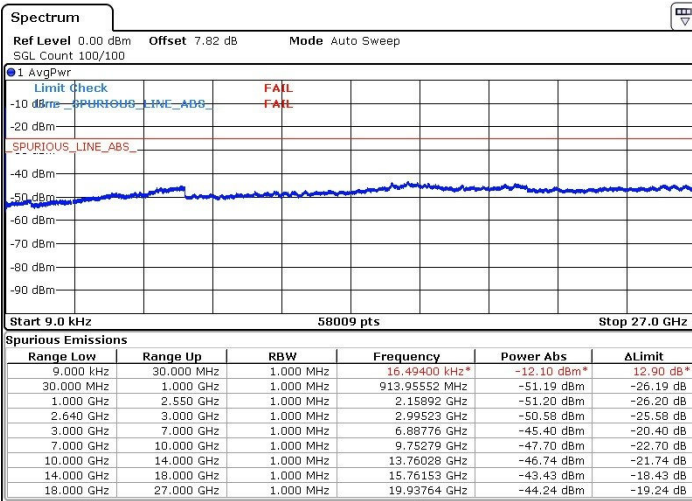


Date: 2 MAR 2017 14:52:09

Date: 2 MAR 2017 14:51:16

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2 MAR 2017 14:53:19

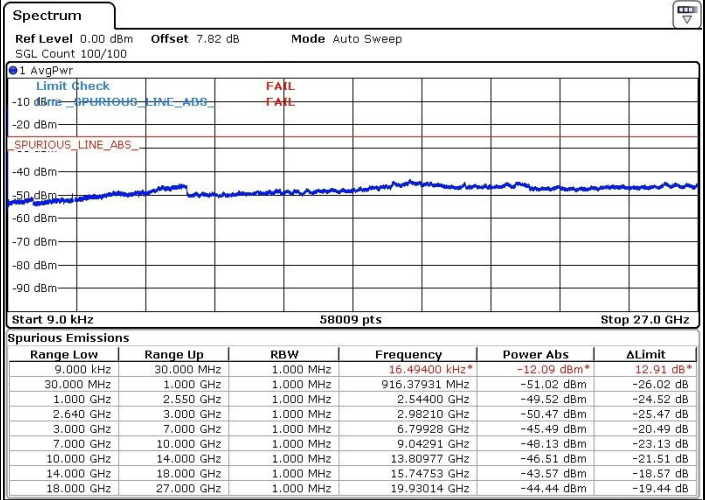
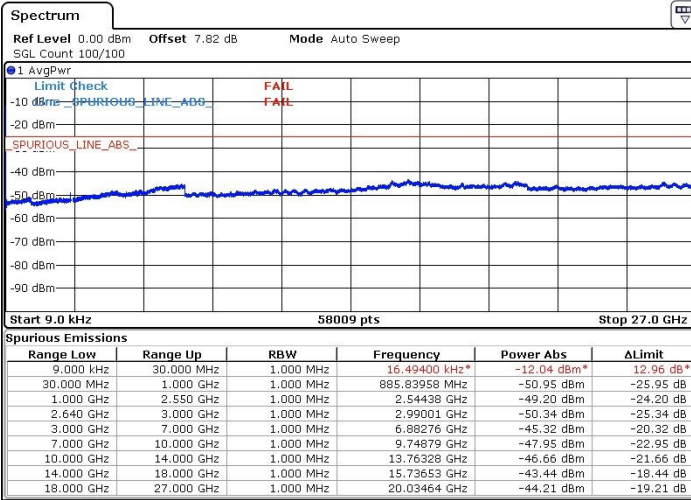
Date: 2 MAR 2017 14:54:15



LTE Band 38 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

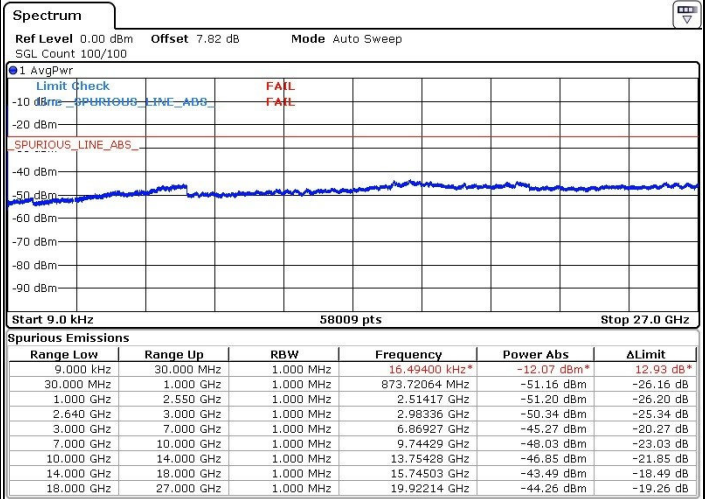
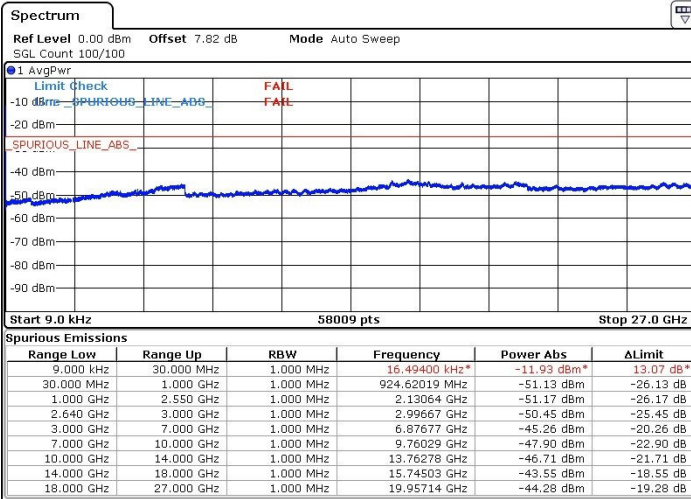


Date: 2 MAR 2017 14:56:39

Date: 2 MAR 2017 14:55:38

Middle Channel / QPSK

Middle Channel / 16QAM



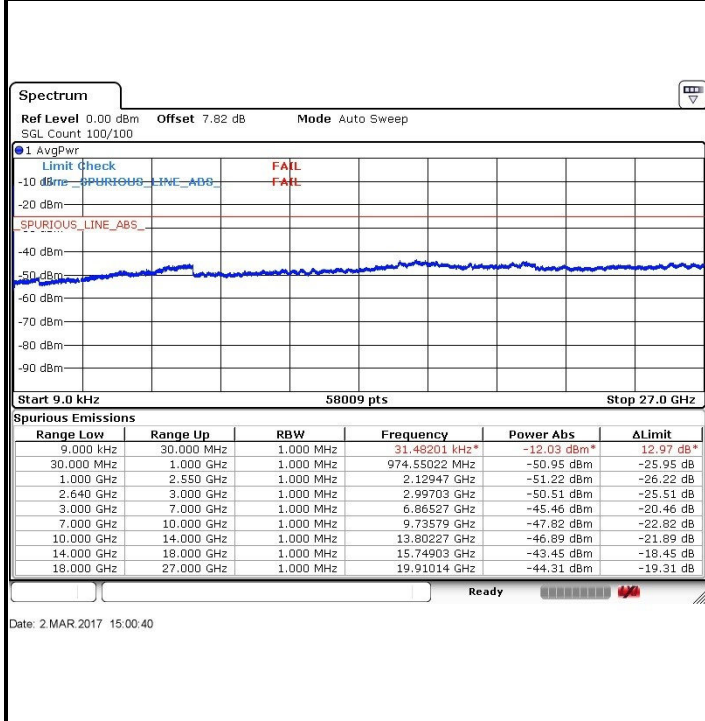
Date: 2 MAR 2017 14:57:50

Date: 2 MAR 2017 14:58:42

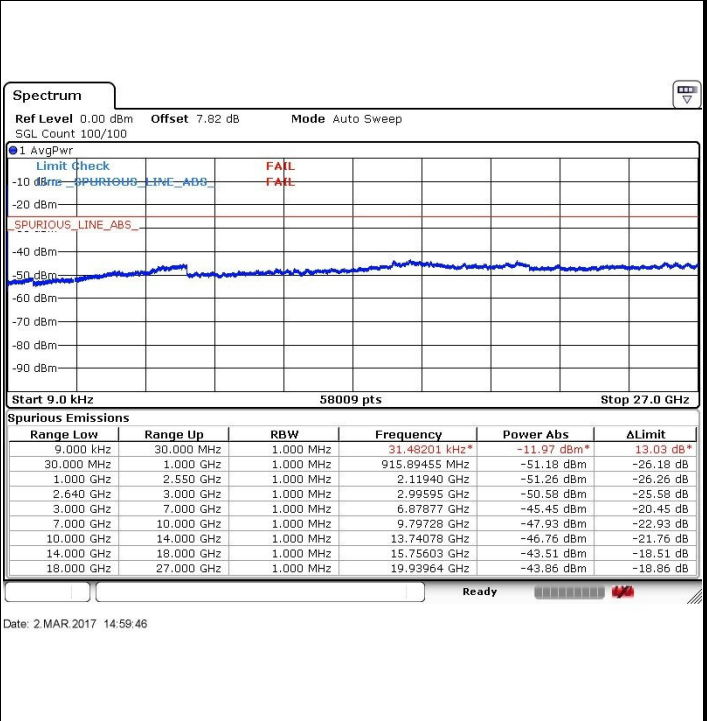


LTE Band 38 / 15MHz

Highest Channel / QPSK

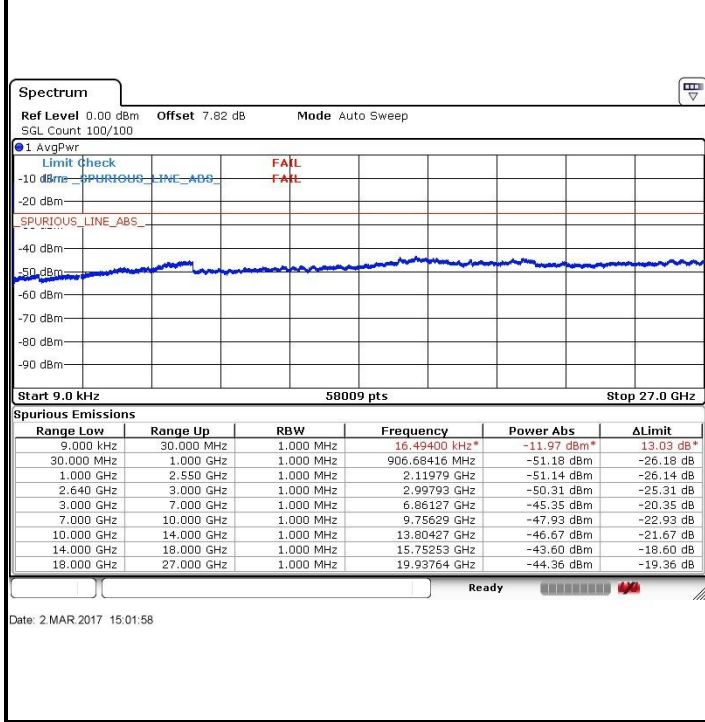


Highest Channel / 16QAM

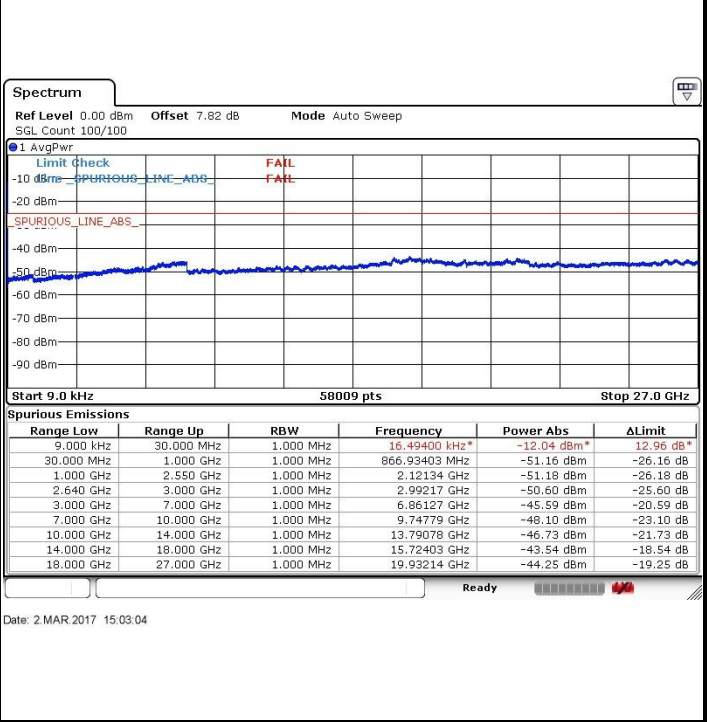


LTE Band 38 / 20MHz

Lowest Channel / QPSK



Lowest Channel / 16QAM

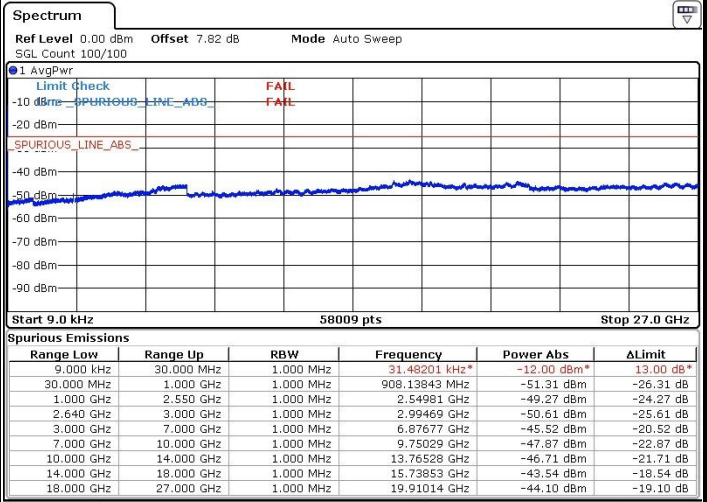
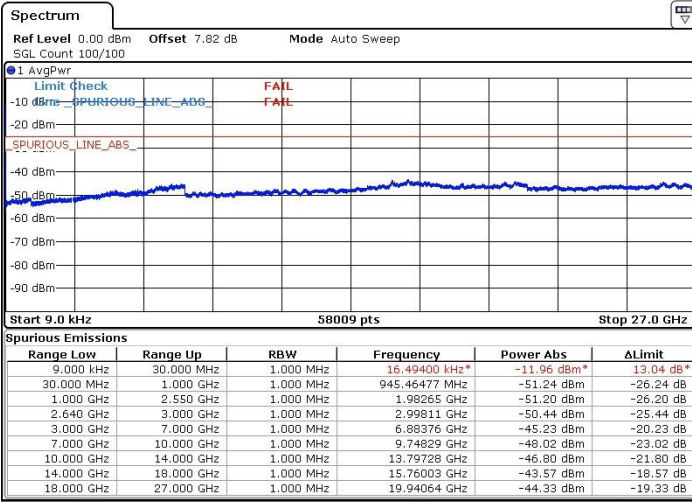




LTE Band 38 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

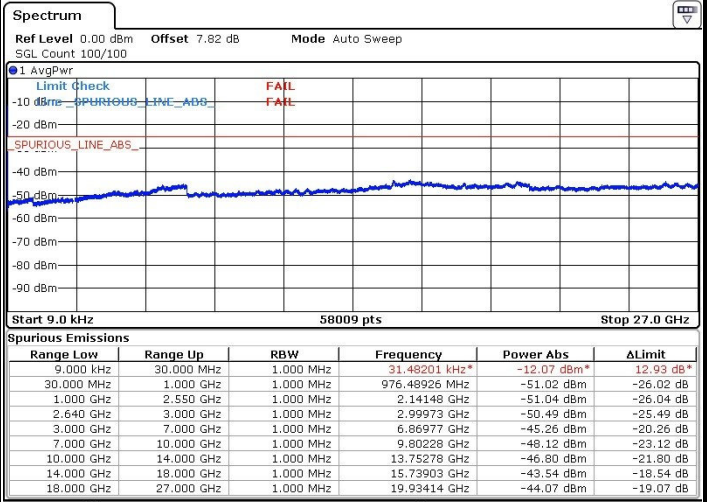
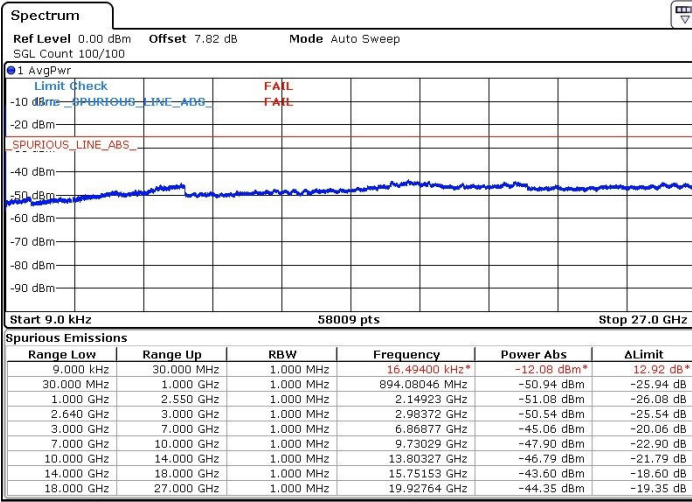


Date: 2 MAR 2017 15:07:11

Date: 2 MAR 2017 15:06:01

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 2 MAR 2017 15:09:34

Date: 2 MAR 2017 15:10:37



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	0.0020	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0022	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0022	
0	Normal Voltage	0.0030	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0023	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0004	
20	Battery End Point	0.0023	

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	0.0013	PASS
40	Normal Voltage	0.0022	
30	Normal Voltage	0.0026	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0027	
20	Normal Voltage	0.0018	
20	Battery End Point	0.0002	

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.



Test Conditions		LTE Band 38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0008	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0010	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0009	
20	Normal Voltage	0.0003	
20	Battery End Point	0.0002	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5V. ; 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	-64.92	-13	-51.92	-63.12	-66.74	1.23	5.20	H
	2508	-60.59	-13	-47.59	-65.44	-62.82	1.52	5.90	H
	3344	-66.95	-13	-53.95	-74.51	-69.73	1.77	6.70	H
	1672	-65.52	-13	-52.52	-63.47	-67.34	1.23	5.20	V
	2508	-50.10	-13	-37.10	-62.65	-52.33	1.52	5.90	V
	3344	-63.90	-13	-50.90	-75.00	-66.68	1.77	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	-64.42	-13	-51.42	-62.62	-66.24	1.23	5.20	H
	2505	-61.34	-13	-48.34	-66.19	-63.57	1.52	5.90	H
	3340	-67.27	-13	-54.27	-74.83	-70.05	1.77	6.70	H
	1670	-65.04	-13	-52.04	-62.99	-66.86	1.23	5.20	V
	2505	-51.01	-13	-38.01	-62.80	-53.24	1.52	5.90	V
	3340	-63.75	-13	-50.75	-74.85	-66.53	1.77	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	-64.89	-13	-51.89	-63.09	-66.71	1.23	5.20	H
	2503	-58.87	-13	-45.87	-63.72	-61.10	1.52	5.90	H
	3337	-66.33	-13	-53.33	-73.89	-69.11	1.77	6.70	H
	1668	-64.65	-13	-51.65	-62.60	-66.47	1.23	5.20	V
	2503	-44.99	-13	-31.99	-58.91	-47.22	1.52	5.90	V
	3337	-62.51	-13	-49.51	-73.61	-65.29	1.77	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	-65.57	-13	-52.57	-63.77	-67.39	1.23	5.20	H
	2496	-59.36	-13	-46.36	-64.21	-61.59	1.52	5.90	H
	3328	-66.47	-13	-53.47	-74.03	-69.25	1.77	6.70	H
	1664	-65.43	-13	-52.43	-63.38	-67.25	1.23	5.20	V
	2496	-47.18	-13	-34.18	-60.67	-49.41	1.52	5.90	V
	3328	-62.02	-13	-49.02	-73.12	-64.80	1.77	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	5065.68	-53.69	-25	-28.69	-62.91	-60.25	2.41	8.97	H
	7600	-55.33	-25	-30.33	-69.03	-64.33	2.86	11.86	H
	10134	-58.64	-25	-33.64	-76.99	-67.54	3.21	12.11	H
	5064	-57.50	-25	-32.50	-66.21	-64.06	2.41	8.97	V
	7600	-60.67	-25	-35.67	-75.3	-69.67	2.86	11.86	V
	10134	-57.79	-25	-32.79	-77.19	-66.69	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	-53.64	-25	-28.64	-62.86	-60.20	2.41	8.97	H
	7592	-51.83	-25	-26.83	-65.53	-60.83	2.86	11.86	H
	10125	-58.83	-25	-33.83	-77.18	-67.73	3.21	12.11	H
	5060	-57.05	-25	-32.05	-65.76	-63.61	2.41	8.97	V
	7592	-59.24	-25	-34.24	-73.87	-68.24	2.86	11.86	V
	10125	-57.83	-25	-32.83	-77.23	-66.73	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	-54.78	-25	-29.78	-64.00	-61.34	2.41	8.97	H
	7584	-54.60	-25	-29.60	-68.30	-63.60	2.86	11.86	H
	10116	-58.75	-25	-33.75	-77.10	-67.65	3.21	12.11	H
	5056	-56.41	-25	-31.41	-65.12	-62.97	2.41	8.97	V
	7584	-58.99	-25	-33.99	-73.62	-67.99	2.86	11.86	V
	10116	-57.79	-25	-32.79	-77.19	-66.69	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	-54.10	-25	-29.10	-63.32	-60.66	2.41	8.97	H
	7580	-54.27	-25	-29.27	-67.97	-63.27	2.86	11.86	H
	10107	-58.81	-25	-33.81	-77.16	-67.71	3.21	12.11	H
	5052	-53.56	-25	-28.56	-62.27	-60.12	2.41	8.97	V
	7580	-60.56	-25	-35.56	-75.19	-69.56	2.86	11.86	V
	10107	-57.75	-25	-32.75	-77.15	-66.65	3.21	12.11	V

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



LTE Band 38 / 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	5184	-58.91	-25	-33.91	-68.13	-65.47	2.41	8.97	H
	7778.52	-61.60	-25	-36.60	-75.30	-70.60	2.86	11.86	H
	10371	-58.20	-25	-33.20	-76.55	-67.10	3.21	12.11	H
	5184	-61.15	-25	-36.15	-69.86	-67.71	2.41	8.97	V
	7778	-60.35	-25	-35.35	-74.98	-69.35	2.86	11.86	V
	10371	-56.69	-25	-31.69	-76.09	-65.59	3.21	12.11	V

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

LTE Band 38 / 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	5180	-57.00	-25	-32.00	-66.22	-63.56	2.41	8.97	H
	7772	-56.54	-25	-31.54	-70.24	-65.54	2.86	11.86	H
	10362	-59.10	-25	-34.10	-77.45	-68.00	3.21	12.11	H
	5180	-61.00	-25	-36.00	-69.71	-67.56	2.41	8.97	V
	7772	-55.88	-25	-30.88	-70.51	-64.88	2.86	11.86	V
	10362	-57.60	-25	-32.60	-77	-66.50	3.21	12.11	V

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



LTE Band 38 / 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	5176	-60.00	-25	-35.00	-69.22	-66.56	2.41	8.97	H
	7765.02	-61.02	-25	-36.02	-74.72	-70.02	2.86	11.86	H
	10353	-58.47	-25	-33.47	-76.82	-67.37	3.21	12.11	H
	5176	-60.91	-25	-35.91	-69.62	-67.47	2.41	8.97	V
	7764	-60.57	-25	-35.57	-75.2	-69.57	2.86	11.86	V
	10353	-57.67	-25	-32.67	-77.07	-66.57	3.21	12.11	V

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

LTE Band 38 / 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	5172	-58.84	-25	-33.84	-68.06	-65.40	2.41	8.97	H
	7760	-61.15	-25	-36.15	-74.85	-70.15	2.86	11.86	H
	10344	-58.63	-25	-33.63	-76.98	-67.53	3.21	12.11	H
	5172	-58.53	-25	-33.53	-67.24	-65.09	2.41	8.97	V
	7760	-60.72	-25	-35.72	-75.35	-69.72	2.86	11.86	V
	10344	-57.14	-25	-32.14	-76.54	-66.04	3.21	12.11	V

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