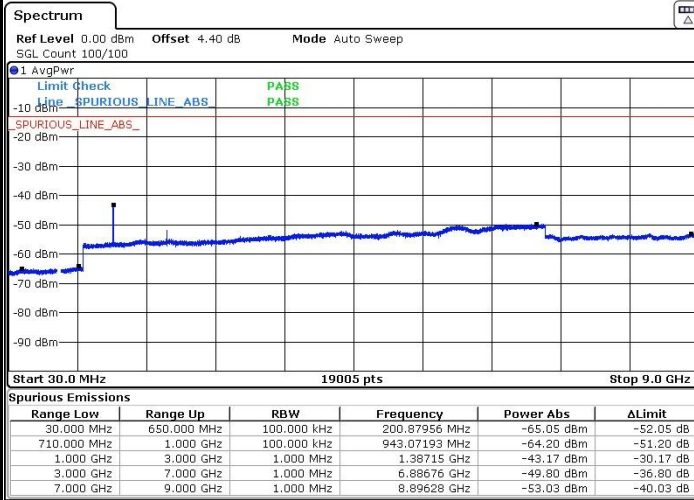




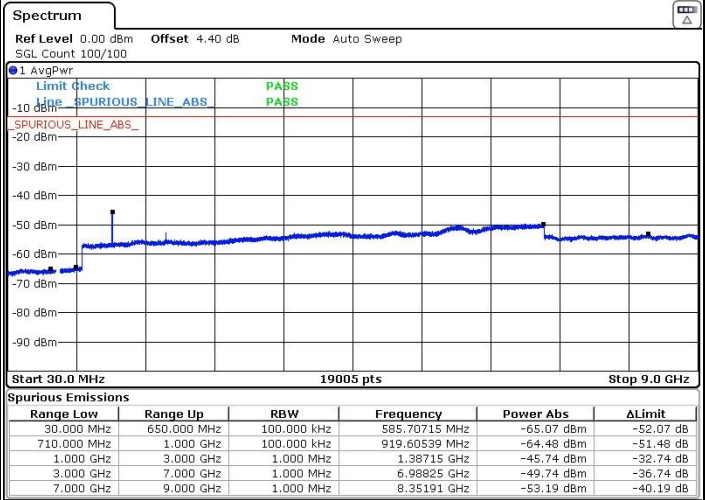
LTE Band 71 / 5MHz

Highest Channel / QPSK



Date: 10.SEP.2018 16:26:40

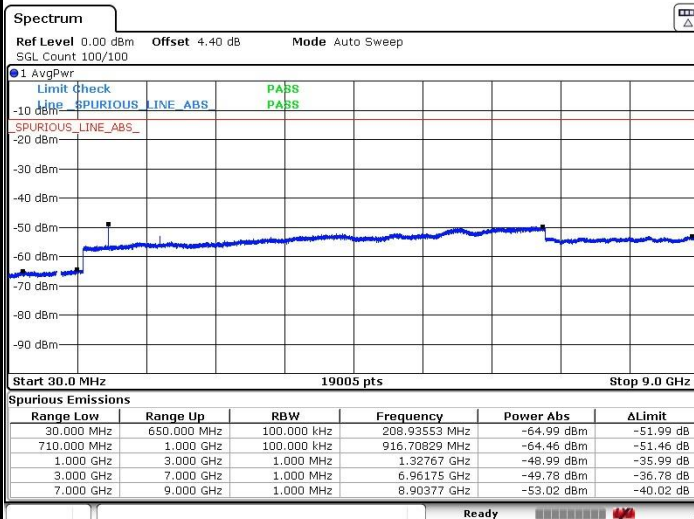
Highest Channel / 16QAM



Date: 10.SEP.2018 16:27:07

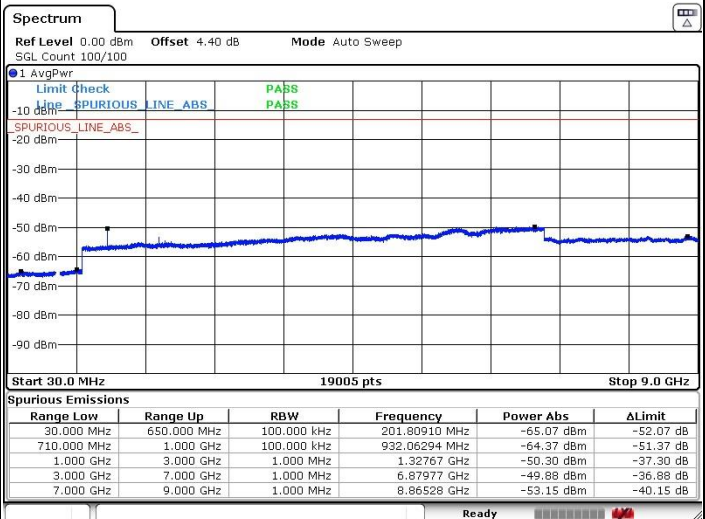
LTE Band 71 / 10MHz

Lowest Channel / QPSK



Date: 10.SEP.2018 16:30:58

Lowest Channel / 16QAM

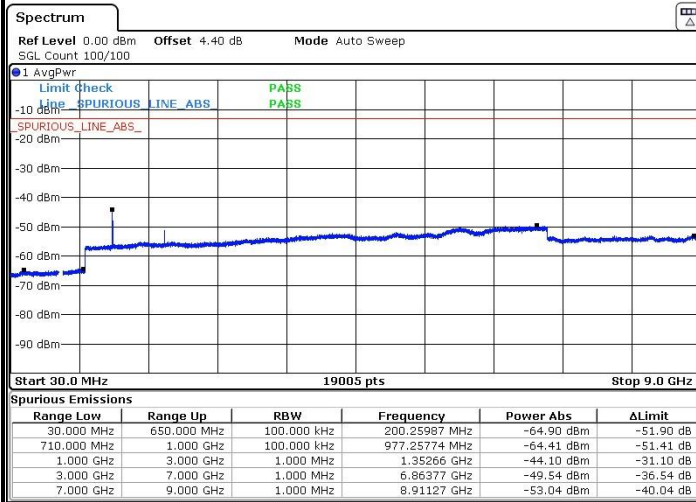


Date: 10.SEP.2018 16:30:22



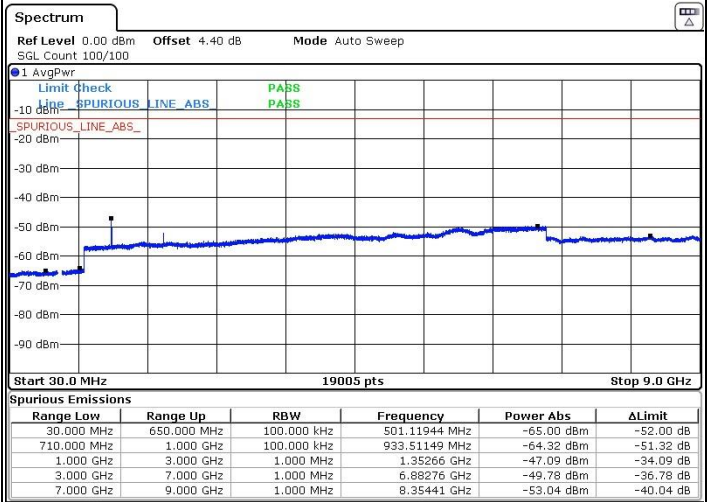
LTE Band 71 / 10MHz

Middle Channel / QPSK



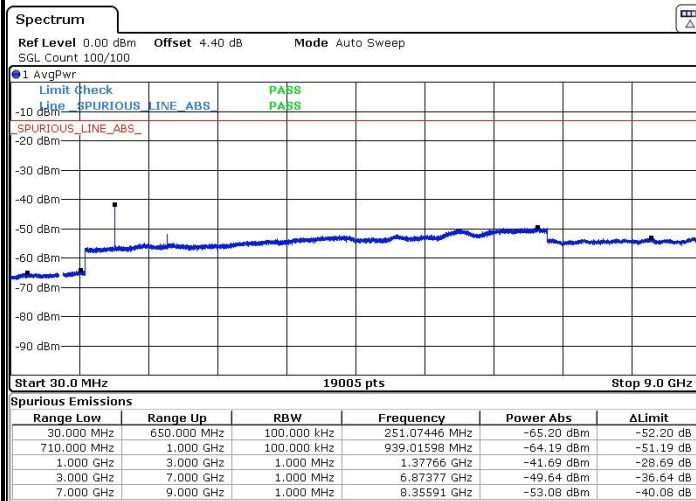
Date: 10.SEP.2018 16:31:55

Middle Channel / 16QAM



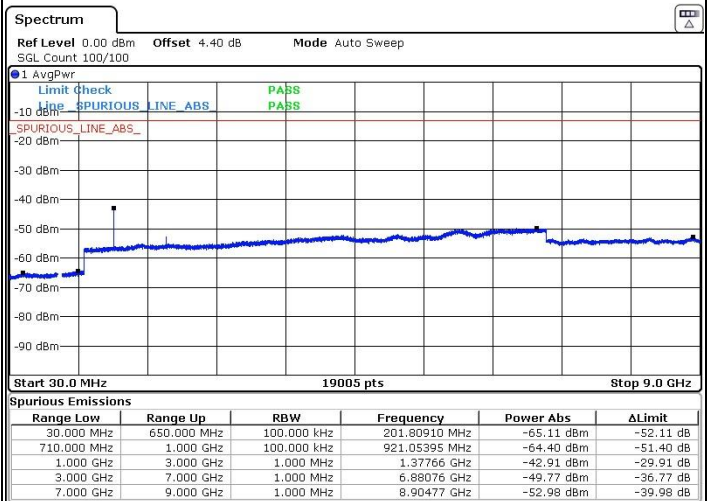
Date: 10.SEP.2018 16:32:25

Highest Channel / QPSK



Date: 10.SEP.2018 16:34:33

Highest Channel / 16QAM

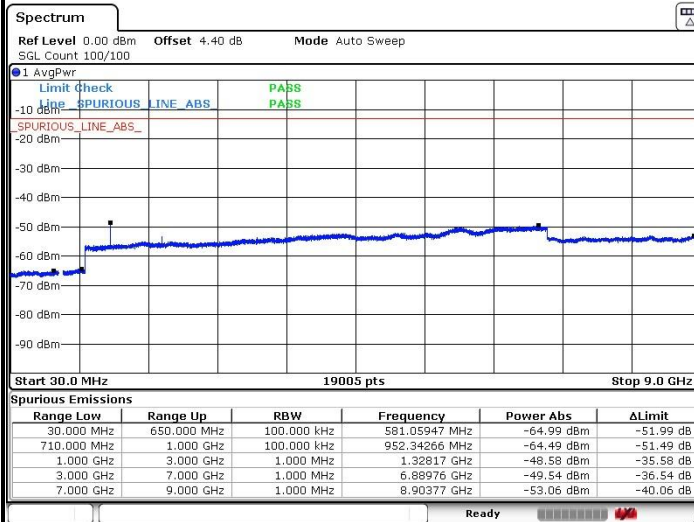


Date: 10.SEP.2018 16:34:06



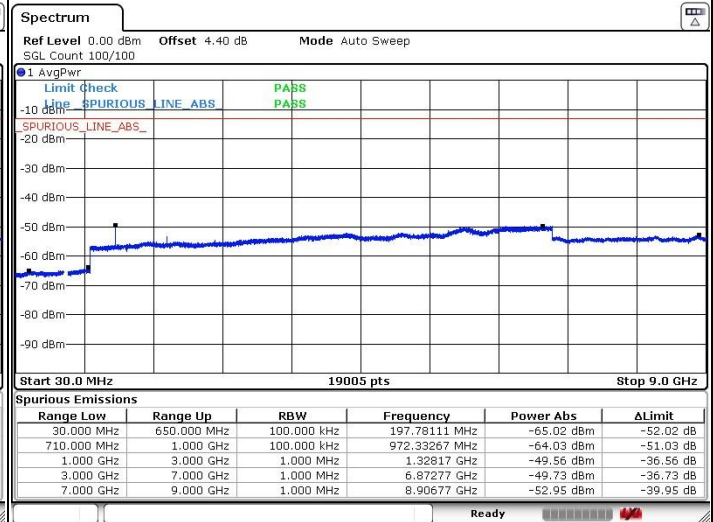
LTE Band 71 / 15MHz

Lowest Channel / QPSK



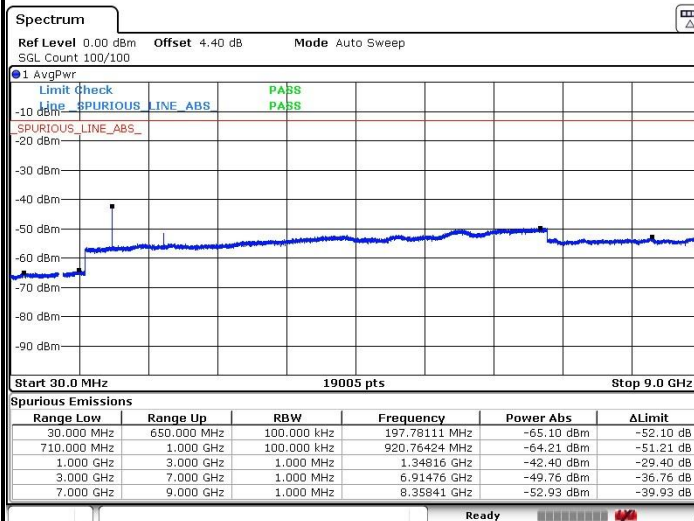
Date: 10.SEP.2018 16:36:43

Lowest Channel / 16QAM



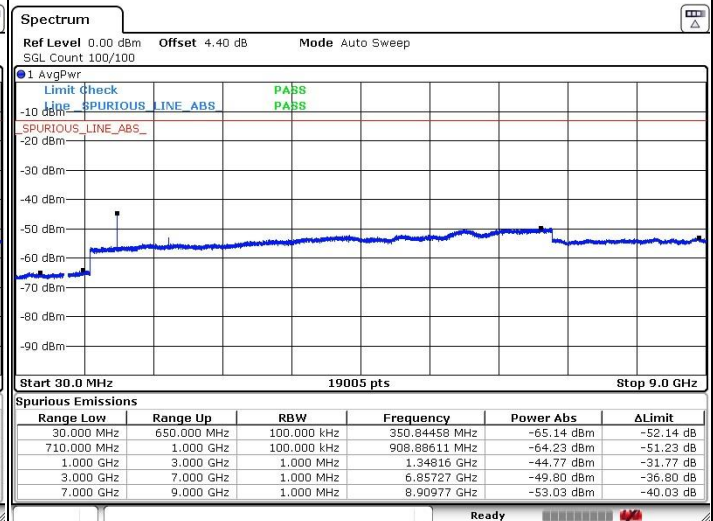
Date: 10.SEP.2018 16:37:13

Middle Channel / QPSK



Date: 10.SEP.2018 16:39:35

Middle Channel / 16QAM

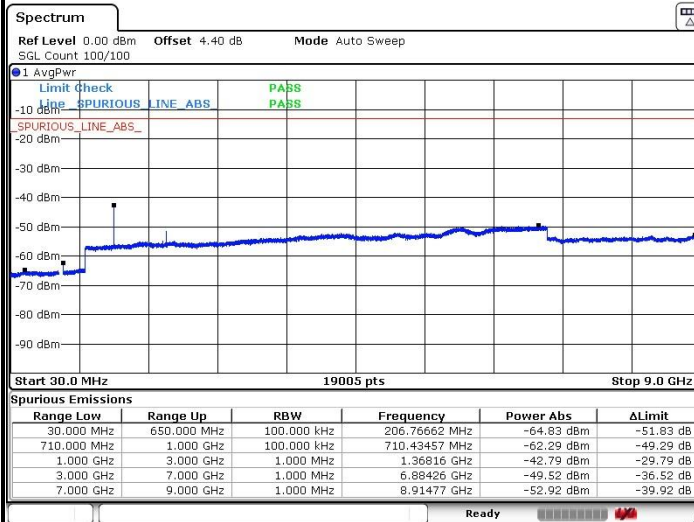


Date: 10.SEP.2018 16:39:01



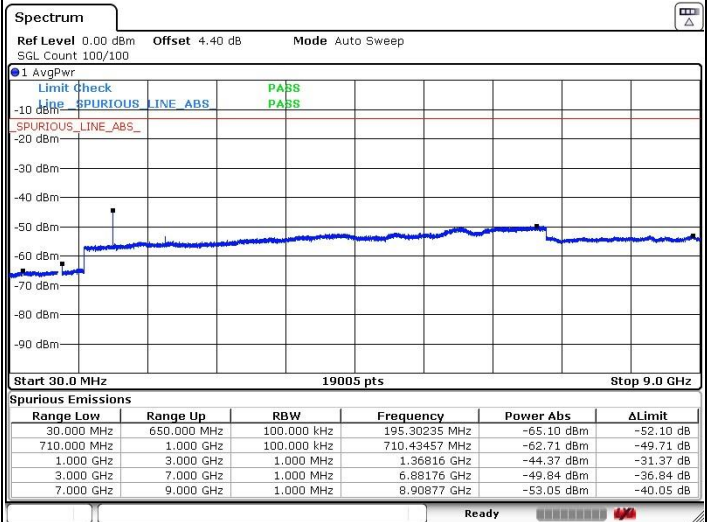
LTE Band71 / 15MHz

Highest Channel / QPSK



Date: 10.SEP.2018 16:40:08

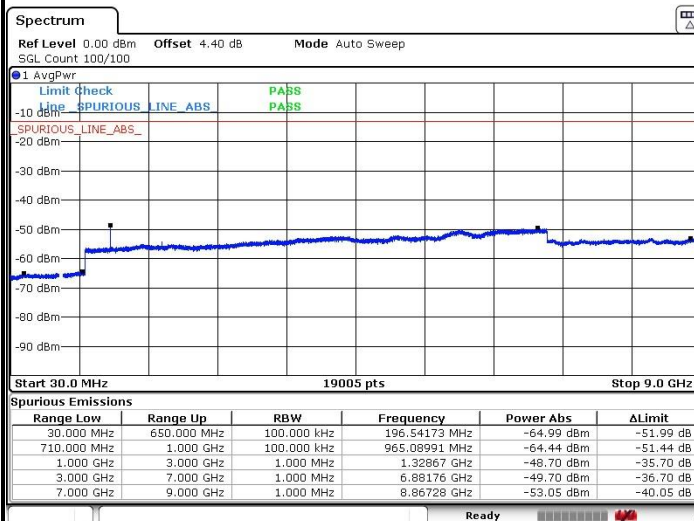
Highest Channel / 16QAM



Date: 10.SEP.2018 16:40:45

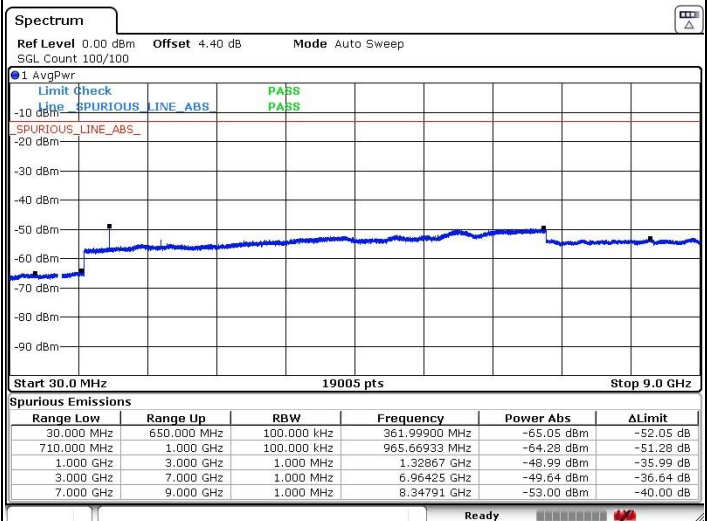
LTE Band 71 / 20MHz

Lowest Channel / QPSK



Date: 10.SEP.2018 16:44:56

Lowest Channel / 16QAM

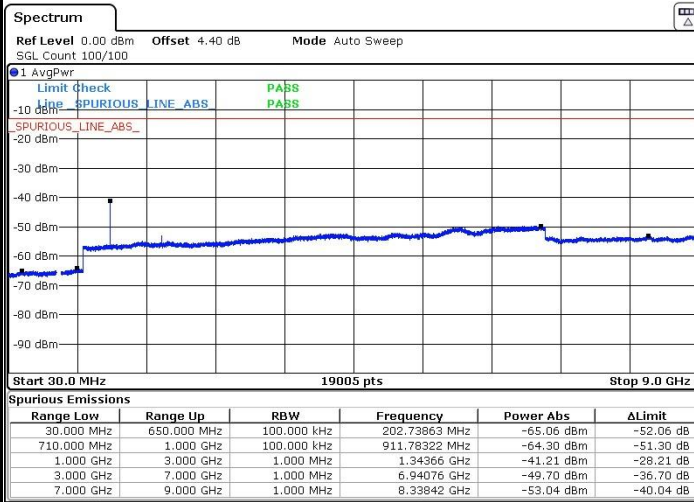


Date: 10.SEP.2018 16:44:30



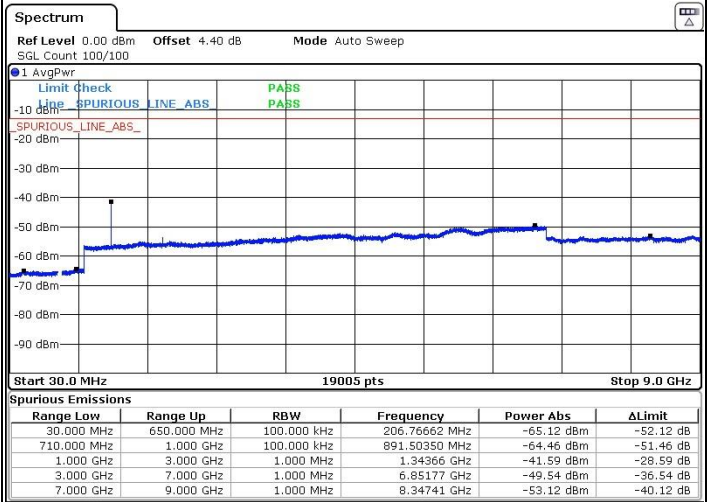
LTE Band 71 / 20MHz

Middle Channel / QPSK



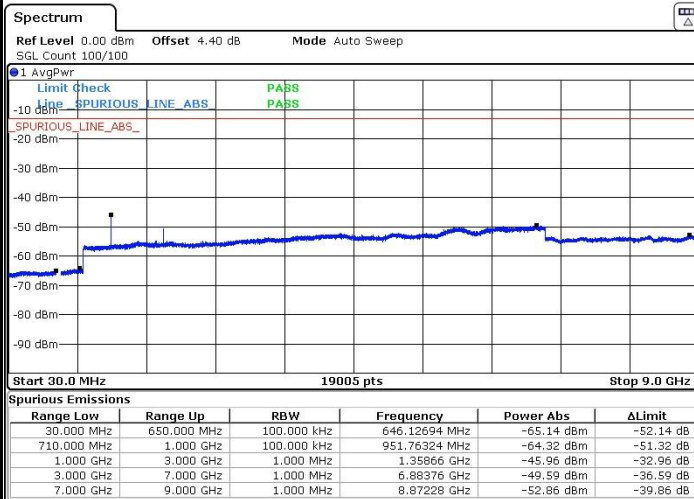
Date: 10.SEP.2018 16:46:00

Middle Channel / 16QAM



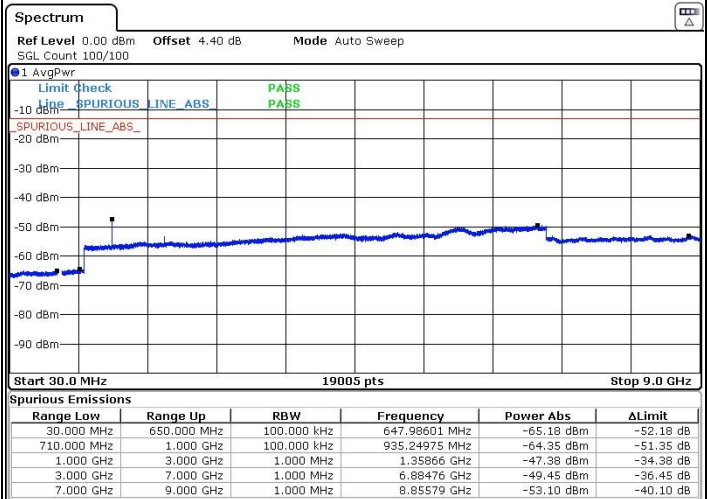
Date: 10.SEP.2018 16:46:35

Highest Channel / QPSK



Date: 10.SEP.2018 16:48:35

Highest Channel / 16QAM



Date: 10.SEP.2018 16:48:07

Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0028	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0026	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0024	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0015	
20	Battery End Point	0.0014	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0022	PASS
40	Normal Voltage	0.0036	
30	Normal Voltage	0.0051	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0042	
-10	Normal Voltage	0.0049	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0054	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0002	
20	Battery End Point	0.0027	

Note: Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.



Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0011	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0090	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0102	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0076	
-30	Normal Voltage	0.0068	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0106	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0014	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0047	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0054	
0	Normal Voltage	0.0063	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0058	
-30	Normal Voltage	0.0066	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0009	
20	Battery End Point	0.0046	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 66 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0009	PASS
40	Normal Voltage	0.0025	
30	Normal Voltage	0.0002	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0033	
0	Normal Voltage	0.0009	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0029	
20	Normal Voltage	0.0005	
20	Battery End Point	0.0007	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 71 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0050	PASS
40	Normal Voltage	0.0029	
30	Normal Voltage	0.0009	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0031	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0043	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0038	
20	Normal Voltage	0.0018	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 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 2 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3741	-53.28	-13	-40.28	-55.00	5.08	6.80	H
	5613	-55.64	-13	-42.64	-57.31	8.03	9.70	H
	7485	-50.51	-13	-37.51	-52.89	9.43	11.81	H
	3741	-52.17	-13	-39.17	-53.89	5.08	6.80	V
	5613	-55.44	-13	-42.44	-57.11	8.03	9.70	V
	7485	-50.63	-13	-37.63	-53.01	9.43	11.81	V

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

LTE Band 5 / 10MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1664	-61.34	-13	-48.34	-63.25	1.14	5.20	H
	2496	-60.30	-13	-47.30	-62.93	1.12	5.90	H
	3327	-59.28	-13	-46.28	-62.49	1.34	6.70	H
	1664	-61.71	-13	-48.71	-63.62	1.14	5.20	V
	2496	-59.88	-13	-46.88	-62.51	1.12	5.90	V
	3327	-59.29	-13	-46.29	-62.50	1.34	6.70	V

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

LTE Band 12 / 10MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1406	-66.02	-13	-53.02	-68.00	1.00	5.12	H
	2109	-60.69	-13	-47.69	-63.92	1.24	6.62	H
	2812	-59.65	-13	-46.65	-63.54	1.42	7.46	H
	1406	-65.50	-13	-52.50	-67.48	1.00	5.12	V
	2108	-57.75	-13	-44.75	-60.98	1.24	6.62	V
	2812	-58.86	-13	-45.86	-62.75	1.42	7.46	V

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



LTE Band 13 / 5MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1560	-62.30	-40	-22.30	-66.43	1.00	5.12	H
	2340	-60.36	-13	-47.36	-63.59	1.24	6.62	H
	3120	-58.80	-13	-45.80	-62.69	1.42	7.46	H
	1560	-61.46	-40	-21.46	-65.59	1.00	5.12	V
	2340	-59.98	-13	-46.98	-63.21	1.24	6.62	V
	3120	-56.58	-13	-43.58	-60.47	1.42	7.46	V

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

LTE Band 13 / 10MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1555	-64.57	-13	-51.57	-66.55	1.00	5.12	H
	2332	-60.61	-13	-47.61	-63.84	1.24	6.62	H
	3111	-58.95	-13	-45.95	-62.84	1.42	7.46	H
	1556	-63.93	-13	-50.93	-65.91	1.00	5.12	V
	2332	-60.21	-13	-47.21	-63.44	1.24	6.62	V
	3111	-56.92	-13	-43.92	-60.81	1.42	7.46	V

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



LTE Band 66 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3471	-38.37	-13	-25.37	-42.34	4.87	8.84	H
	5208	-55.29	-13	-42.29	-56.73	7.70	9.14	H
	6945	-51.62	-13	-38.62	-53.31	8.98	10.66	H
	3471	-44.75	-13	-31.75	-48.72	4.87	8.84	V
	5208	-54.17	-13	-41.17	-55.61	7.70	9.14	V
	6945	-51.17	-13	-38.17	-52.86	8.98	10.66	V

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

LTE Band 71 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1348	-67.63	-13	-54.63	-68.56	2.06	5.14	H
	2022	-67.46	-13	-54.46	-67.68	2.57	4.94	H
	2696	-65.39	-13	-52.39	-66.47	3.04	6.27	H
	1348	-67.73	-13	-54.73	-68.66	2.06	5.14	V
	2022	-67.68	-13	-54.68	-67.90	2.57	4.94	V
	2696	-65.61	-13	-52.61	-66.69	3.04	6.27	V

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