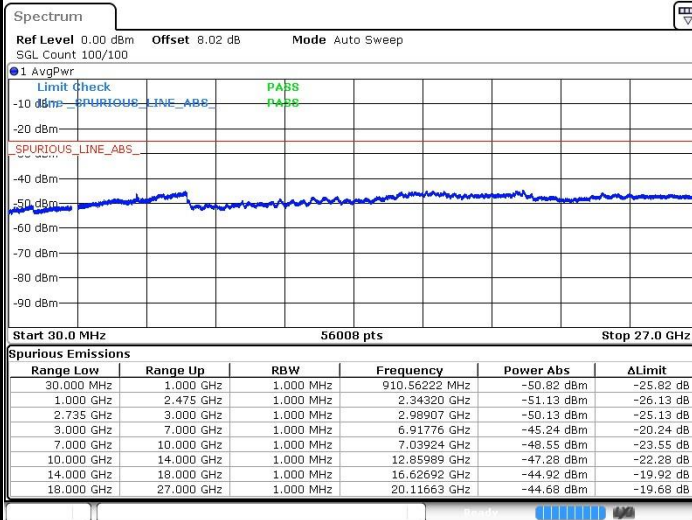




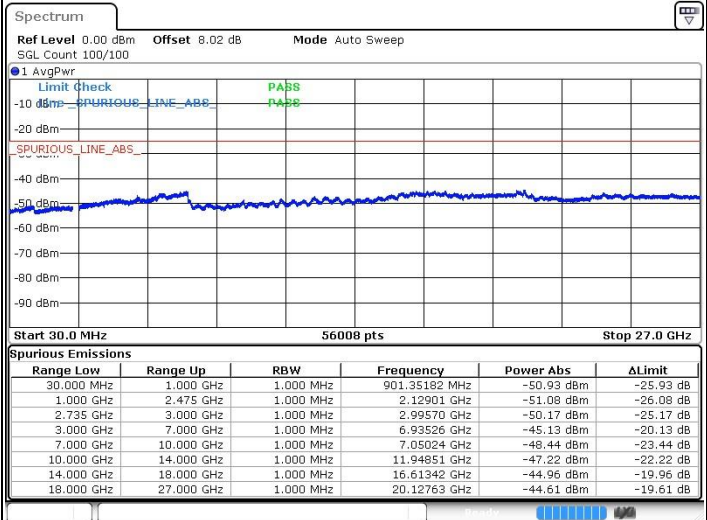
LTE Band 41 / 20MHz+15MHz

Lowest Channel / QPSK



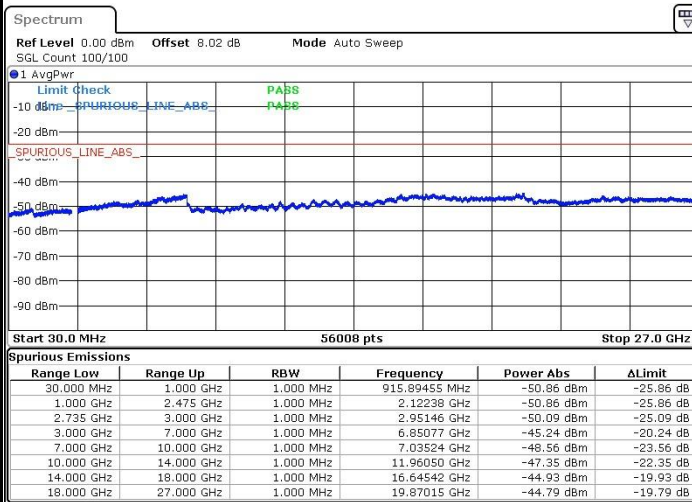
Date: 16 JAN 2019 19:03:59

Lowest Channel / 16QAM



Date: 16 JAN 2019 19:05:05

Lowest Channel / 64QAM



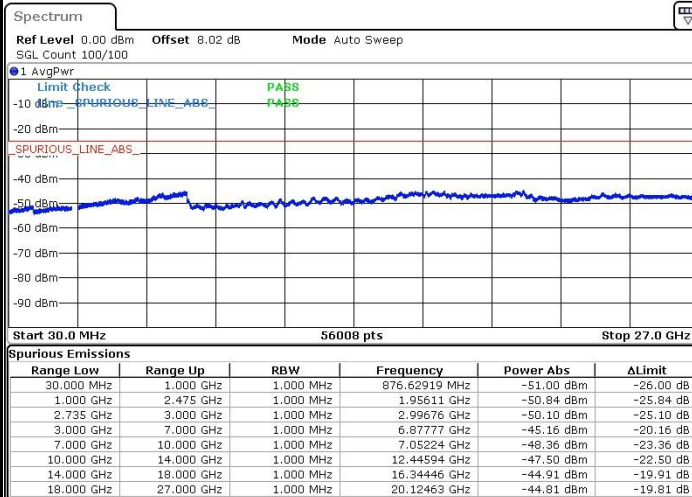
Date: 16 JAN 2019 19:06:13

N/A



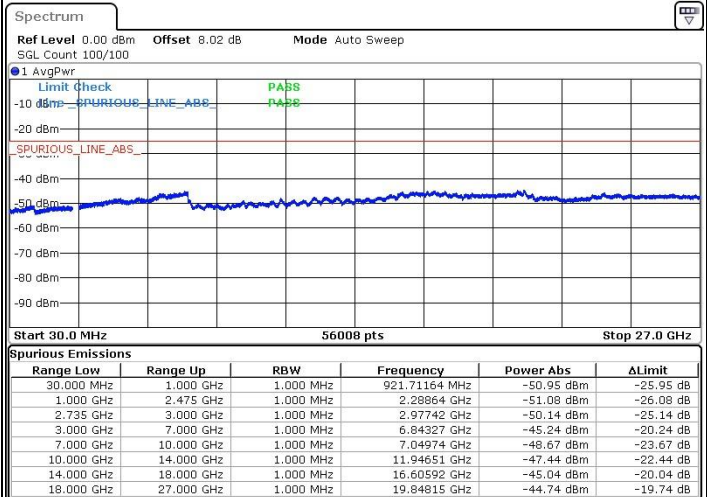
LTE Band 41 / 20MHz+15MHz

Middle Channel / QPSK



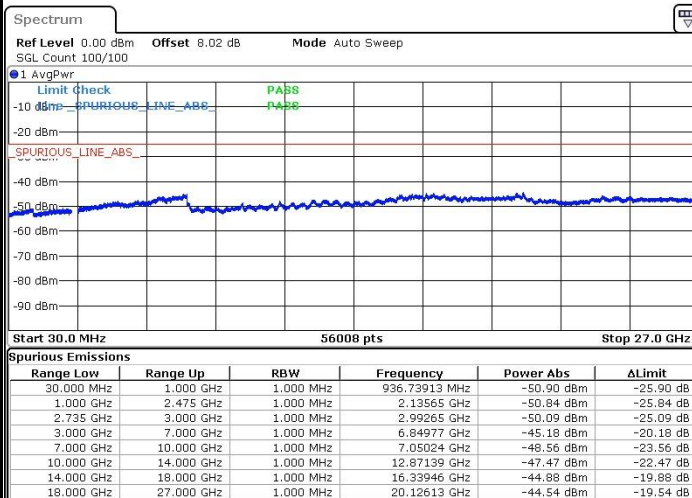
Date: 16 JAN 2019 19:09:41

Middle Channel / 16QAM



Date: 16 JAN 2019 19:08:46

Middle Channel / 64QAM



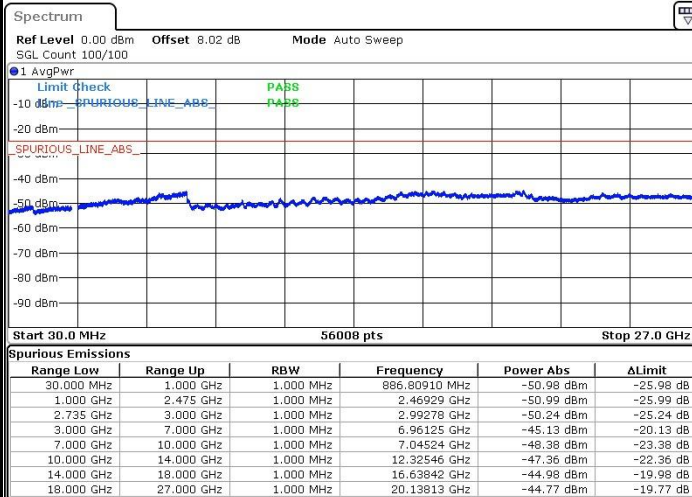
Date: 16 JAN 2019 19:07:52

N/A



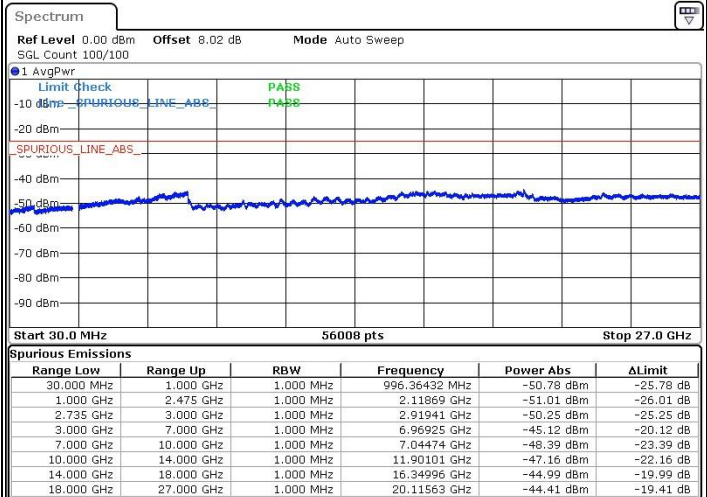
LTE Band 41 / 20MHz+15MHz

Highest Channel / QPSK



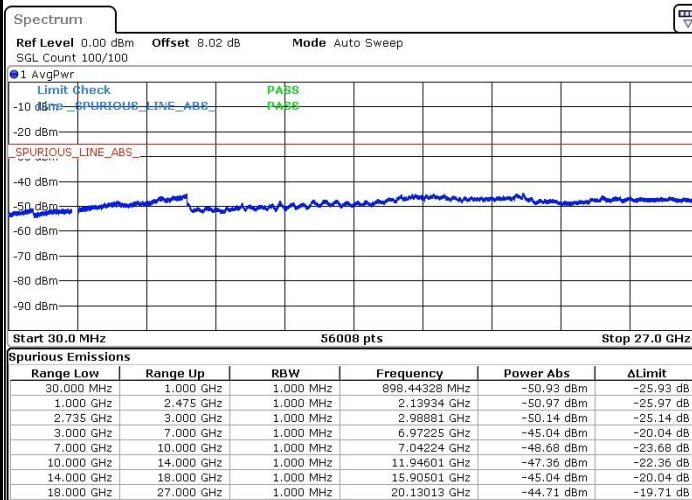
Date: 16 JAN 2019 19:23:38

Highest Channel / 16QAM



Date: 16 JAN 2019 19:24:53

Highest Channel / 64QAM



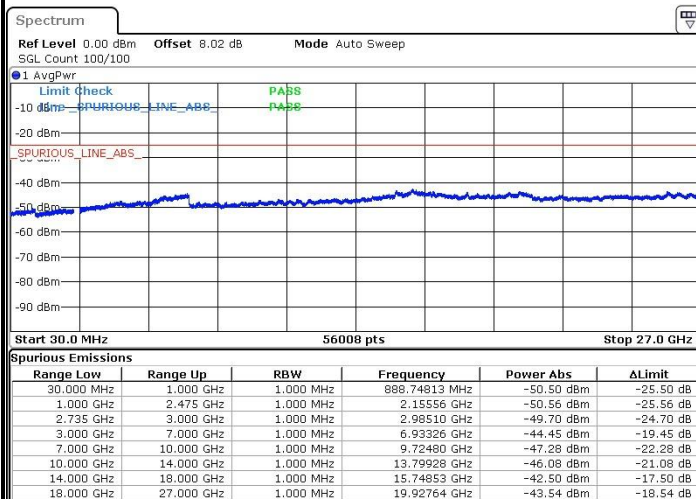
Date: 16 JAN 2019 19:26:10

N/A



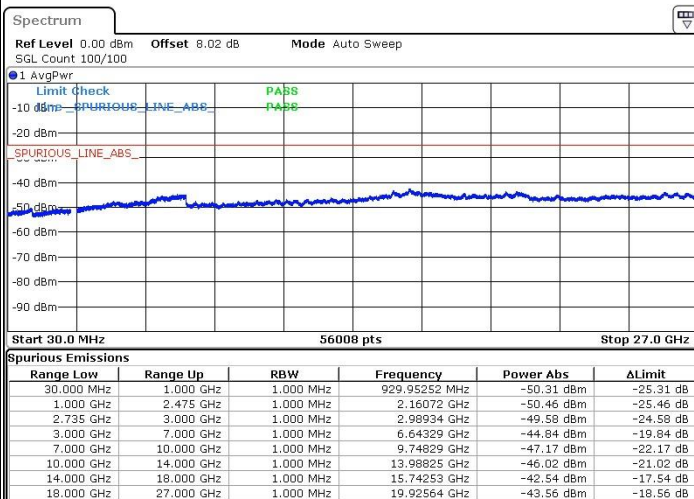
LTE Band 41 / 20MHz+20MHz

Lowest Channel / QPSK



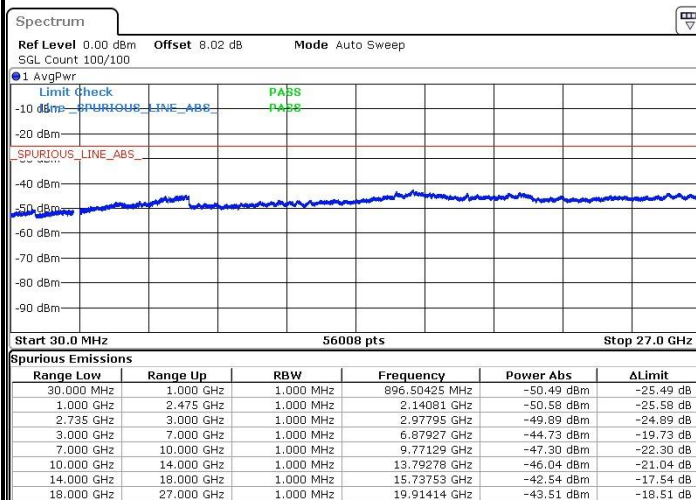
Date: 17.JAN.2019 10:05:58

Lowest Channel / 16QAM



Date: 17.JAN.2019 10:04:48

Lowest Channel / 64QAM



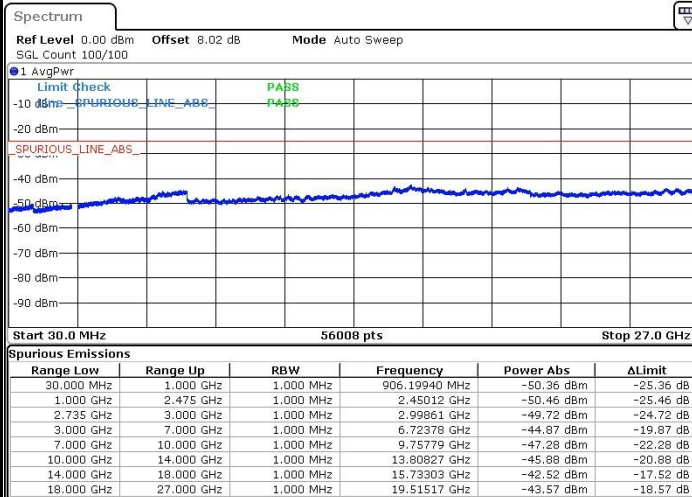
Date: 17.JAN.2019 10:03:37

N/A



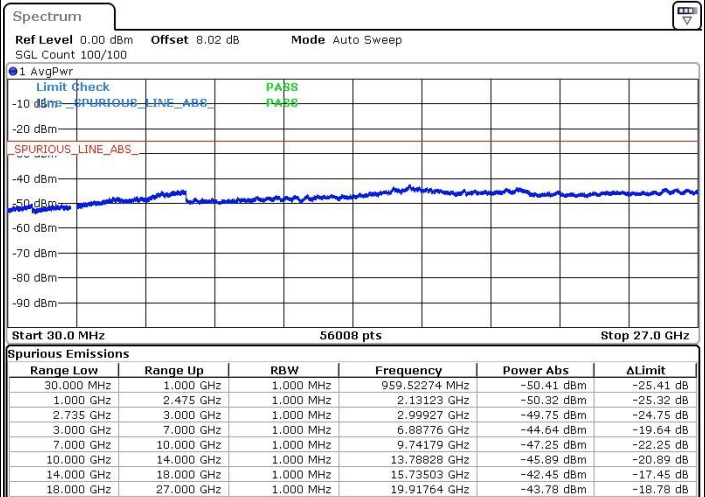
LTE Band 41 / 20MHz+20MHz

MiddleChannel / QPSK



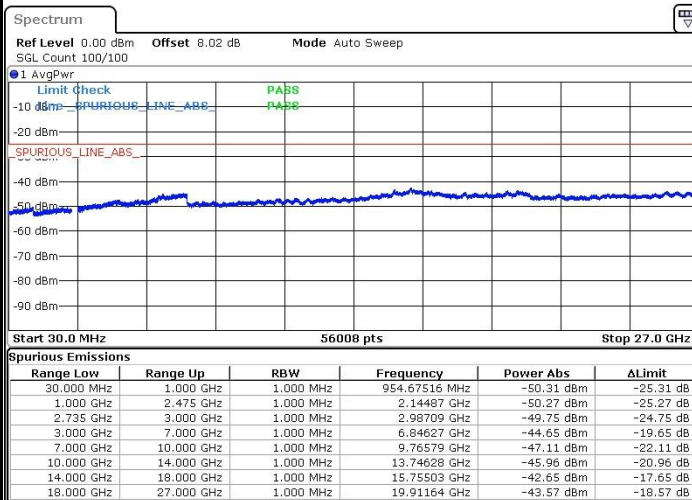
Date: 17.JAN.2019 09:56:38

Middle Channel / 16QAM



Date: 17.JAN.2019 09:57:37

Middle Channel / 64QAM



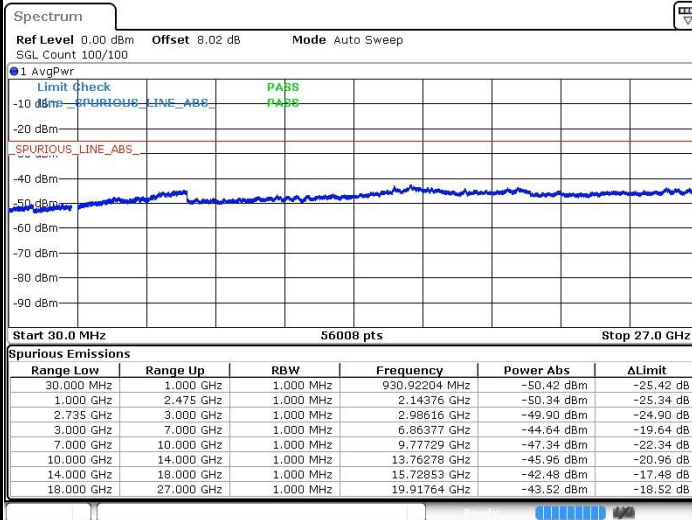
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N/A



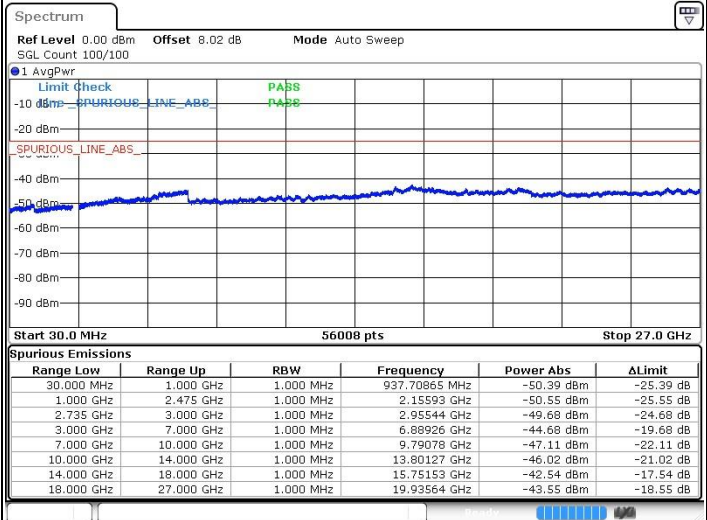
LTE Band 41 / 20MHz+20MHz

Highest Channel / QPSK



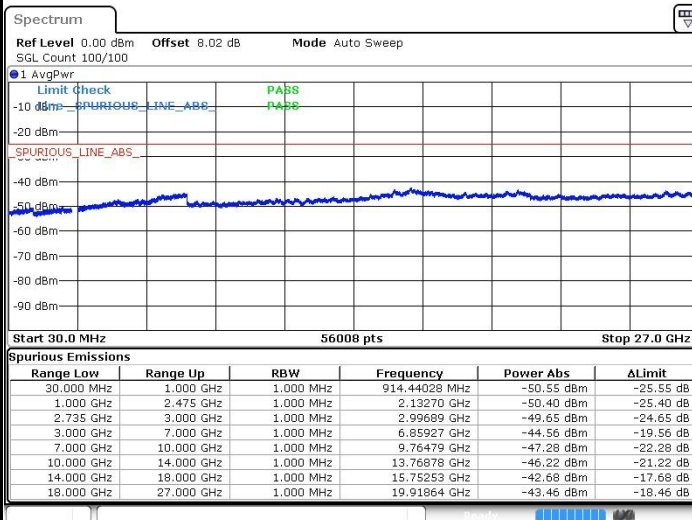
Date: 17.JAN.2019 09:54:40

Highest Channel / 16QAM



Date: 17.JAN.2019 09:53:22

Highest Channel / 64QAM



Date: 17.JAN.2019 09:52:06

N/A

**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	0.0001	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0009	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0026	
-10	Normal Voltage	0.0014	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0021	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0020	

Note:

1. Normal Voltage =3.7 V. ; Battery End Point (BEP) =3.1 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0014	PASS
40	Normal Voltage	0.0102	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0088	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0075	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0096	
20	Maximum Voltage	0.0020	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0066	

Note:

1. Normal Voltage =3.7 V. ; Battery End Point (BEP) =3.1 V. ; Maximum Voltage =4.4 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	0.0060	PASS
40	Normal Voltage	0.0022	
30	Normal Voltage	0.0054	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0055	
0	Normal Voltage	0.0074	
-10	Normal Voltage	0.0059	
-20	Normal Voltage	0.0014	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0088	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0017	

Note:

1. Normal Voltage =3.7 V. ; Battery End Point (BEP) =3.1 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 25 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0019	PASS
40	Normal Voltage	0.0020	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0015	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0016	
20	Battery End Point	0.0005	

Note:

1. Normal Voltage =3.7 V. ; Battery End Point (BEP) =3.1 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Test Conditions		LTE Band 26 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0075	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0067	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0063	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0030	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0066	
20	Maximum Voltage	0.0020	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0078	

Note: Normal Voltage =3.7 V. ; Battery End Point (BEP) =3.1 V. ; Maximum Voltage =4.4 V.



Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0002	PASS
40	Normal Voltage	0.0020	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0010	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0018	

Note:

1. Normal Voltage =3.7 V. ; Battery End Point (BEP) =3.1 V. ; Maximum Voltage =4.4V.
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	0.0001	PASS
40	Normal Voltage	0.0023	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0023	
20	Maximum Voltage	0.0013	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage =3.7V. ; Battery End Point (BEP) =3.1V. ; Maximum Voltage =4.4V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

LTE Band 7 / 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)
Lowest	5000	-59.77	-25	-34.77	-65.78	4.20	10.21	H
	7504	-46.63	-25	-21.63	-53.49	5.12	11.98	H
	10008	-54.63	-25	-29.63	-61.67	5.86	12.90	H
	12505	-57.61	-25	-32.61	-65.28	6.72	14.39	H
	15003	-48.86	-25	-23.86	-57.04	7.55	15.73	H
	17507	-54.79	-25	-29.79	-63.49	8.38	17.08	H
	5000	-54.57	-25	-29.57	-60.58	4.20	10.21	V
	7504	-39.06	-25	-14.06	-45.92	5.12	11.98	V
	10008	-50.78	-25	-25.78	-57.82	5.86	12.90	V
	12501	-55.40	-25	-30.40	-63.07	6.72	14.39	V
	15003	-46.95	-25	-21.95	-55.13	7.55	15.73	V
	17505	-51.50	-25	-26.50	-60.20	8.38	17.08	V
Middle	5052	-65.69	-25	-40.69	-71.70	4.20	10.21	H
	7580	-39.13	-25	-14.13	-45.99	5.12	11.98	H
	10107	-50.56	-25	-25.56	-57.60	5.86	12.90	H
	12627	-49.16	-25	-24.16	-56.83	6.72	14.39	H
	15156	-41.93	-25	-16.93	-50.11	7.55	15.73	H
	17685	-51.12	-25	-26.12	-59.82	8.38	17.08	H
	5052	-61.66	-25	-36.66	-67.67	4.20	10.21	V
	7576	-32.89	-25	-7.89	-39.75	5.12	11.98	V
	10107	-45.79	-25	-20.79	-52.83	5.86	12.90	V
	12627	-45.88	-25	-20.88	-53.55	6.72	14.39	V
	15156	-40.49	-25	-15.49	-48.67	7.55	15.73	V
	17685	-43.74	-25	-18.74	-52.44	8.38	17.08	V



Highest	5102	-66.22	-25	-41.22	-72.23	4.20	10.21	H
	7652	-37.84	-25	-12.84	-44.70	5.12	11.98	H
	10206	-51.43	-25	-26.43	-58.47	5.86	12.90	H
	12753	-49.79	-25	-24.79	-57.46	6.72	14.39	H
	15309	-40.77	-25	-15.77	-48.95	7.55	15.73	H
	17856	-51.15	-25	-26.15	-59.85	8.38	17.08	H
	5104	-63.75	-25	-38.75	-69.76	4.20	10.21	V
	7652	-30.64	-25	-5.64	-37.50	5.12	11.98	V
	10206	-45.74	-25	-20.74	-52.78	5.86	12.90	V
	12753	-46.22	-25	-21.22	-53.89	6.72	14.39	V
	15309	-38.47	-25	-13.47	-46.65	7.55	15.73	V
	17856	-42.35	-25	-17.35	-51.05	8.38	17.08	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)
Lowest	1398	-53.62	-13	-40.62	-54.83	2.319	5.68	H
	2098	-67.88	-13	-54.88	-68.51	3.02	5.80	H
	2798	-66.86	-13	-53.86	-69.32	3.27	7.88	H
	1400	-53.38	-13	-40.38	-54.59	2.32	5.68	V
	2098	-67.73	-13	-54.73	-68.36	3.02	5.80	V
	2798	-66.96	-13	-53.96	-69.42	3.27	7.88	V
Middle	1406	-51.10	-13	-38.10	-52.31	2.319	5.68	H
	2110	-67.83	-13	-54.83	-68.46	3.02	5.80	H
	2812	-66.29	-13	-53.29	-68.75	3.27	7.88	H
	1406	-52.78	-13	-39.78	-53.99	2.32	5.68	V
	2110	-67.63	-13	-54.63	-68.26	3.02	5.80	V
	2812	-66.85	-13	-53.85	-69.31	3.27	7.88	V
Highest	1414	-50.96	-13	-37.96	-52.17	2.319	5.68	H
	2120	-68.58	-13	-55.58	-69.21	3.02	5.80	H
	2826	-66.74	-13	-53.74	-69.20	3.27	7.88	H
	1414	-53.09	-13	-40.09	-54.30	2.32	5.68	V
	2120	-67.36	-13	-54.36	-67.99	3.02	5.80	V
	2826	-66.81	-13	-53.81	-69.27	3.27	7.88	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)
Lowest	1554	-65.28	-13	-52.28	-66.99	2.23	6.09	H
	2332	-66.96	-13	-53.96	-67.49	2.83	5.51	H
	3108	-66.12	-13	-53.12	-68.06	3.21	7.30	H
	1554	-64.50	-13	-51.50	-66.21	2.23	6.09	V
	2332	-66.57	-13	-53.57	-67.1	2.83	5.51	V
	3108	-65.53	-13	-52.53	-67.47	3.21	7.30	V
Middle	1560	-62.05	-40	-22.05	-65.91	2.23	6.09	H
	2340	-64.38	-13	-51.38	-64.91	2.83	5.51	H
	3120	-66.27	-13	-53.27	-68.21	3.21	7.30	H
	1560	-60.66	-40	-20.66	-64.52	2.23	6.09	V
	2340	-65.62	-13	-52.62	-66.15	2.83	5.51	V
	3120	-66.03	-13	-53.03	-67.97	3.21	7.30	V
Highest	1564	-65.15	-40	-25.15	-69.01	2.23	6.09	H
	2346	-66.45	-13	-53.45	-66.98	2.83	5.51	H
	3129	-66.85	-13	-53.85	-68.79	3.21	7.30	H
	1564	-63.15	-40	-23.15	-67.01	2.23	6.09	V
	2346	-66.44	-13	-53.44	-66.97	2.83	5.51	V
	3129	-66.85	-13	-53.85	-68.79	3.21	7.30	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	1554	-64.68	-13	-51.68	-66.39	2.23	6.09	H
	2332	-66.45	-13	-53.45	-66.98	2.83	5.51	H
	3111	-65.76	-13	-52.76	-67.7	3.21	7.30	H
	1556	-62.65	-13	-49.65	-64.36	2.23	6.09	V
	2332	-66.54	-13	-53.54	-67.07	2.83	5.51	V
	3111	-65.48	-13	-52.48	-67.42	3.21	7.30	V

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



LTE Band 25 / 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)
Lowest	3702	-61.48	-13	-48.48	-66.35	3.55	8.42	H
	5553	-59.25	-13	-46.25	-65.59	4.34	10.68	H
	7404	-48.97	-13	-35.97	-55.77	5.14	11.94	H
	9252	-46.14	-13	-33.14	-53.15	5.69	12.70	H
	11100	-38.35	-13	-25.35	-45.17	6.37	13.18	H
	12960	-34.02	-13	-21.02	-40.90	6.98	13.86	H
	14808	-43.50	-13	-30.50	-49.95	7.49	13.94	H
	16656	-45.39	-13	-32.39	-50.38	7.93	12.92	H
	3702	-60.41	-13	-47.41	-65.28	3.55	8.42	V
	5553	-57.15	-13	-44.15	-63.49	4.34	10.68	V
	7404	-44.74	-13	-31.74	-51.54	5.14	11.94	V
	9252	-42.21	-13	-29.21	-49.22	5.69	12.70	V
	11100	-32.04	-13	-19.04	-38.86	6.37	13.18	V
	12960	-29.83	-13	-16.83	-36.71	6.98	13.86	V
	14808	-36.36	-13	-23.36	-42.81	7.49	13.94	V
	16656	-43.77	-13	-30.77	-48.76	7.93	12.92	V