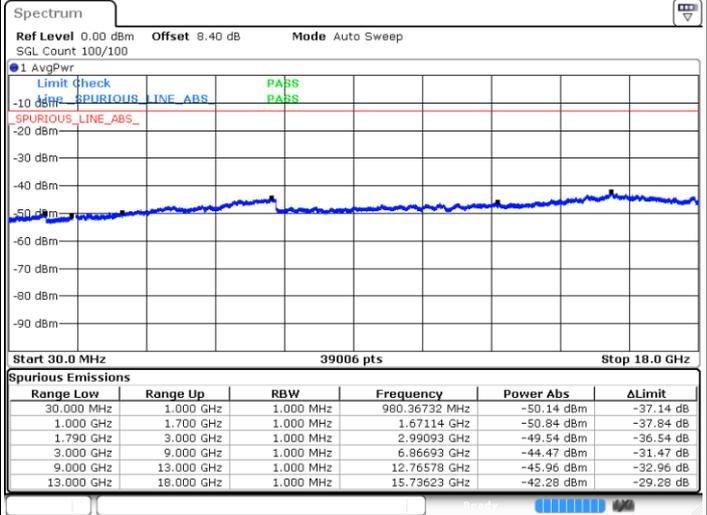
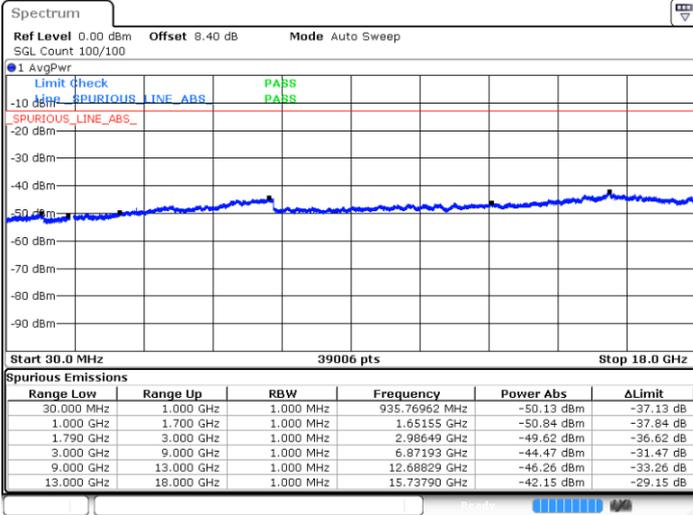




LTE Band 66 / 20MHz

Lowest Channel / 64QAM

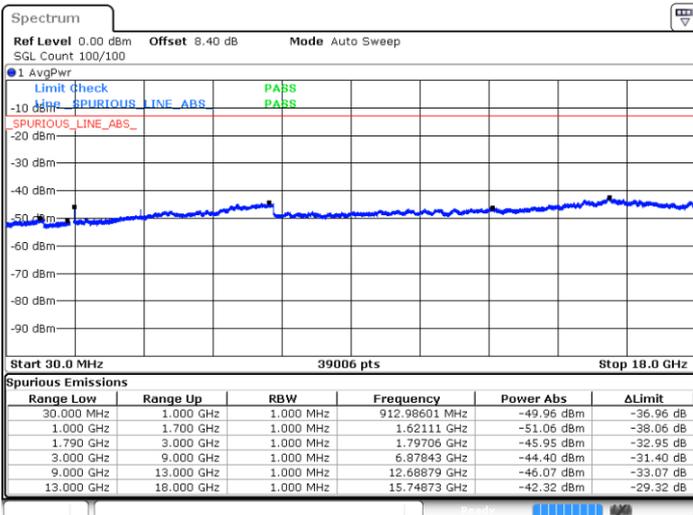
Middle Channel / 64QAM



Date: 26 SEP.2019 04:02:38

Date: 26 SEP.2019 04:01:12

Highest Channel / 64QAM



Date: 26 SEP.2019 03:55:59



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	0.0003	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0051	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0055	
0	Normal Voltage	0.0056	
-10	Normal Voltage	0.0043	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0058	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 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	0.0006	PASS
40	Normal Voltage	0.0014	
30	Normal Voltage	0.0048	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0053	
0	Normal Voltage	0.0057	
-10	Normal Voltage	0.0041	
-20	Normal Voltage	0.0028	
-30	Normal Voltage	0.0014	
20	Maximum Voltage	0.0058	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0015	

Note: Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.



Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0022	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0027	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 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	0.0011	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0078	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0102	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0029	
-20	Normal Voltage	0.0076	
-30	Normal Voltage	0.0068	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0089	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 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	0.0015	PASS
40	Normal Voltage	0.0025	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0032	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0029	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0007	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 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)
Lowest	3702	-53.45	-13	-40.45	-65.71	2.641	14.90	H
	5553.27	-52.71	-13	-39.71	-64.57	2.94	14.80	H
	7404	-49.89	-13	-36.89	-59.66	3.39	13.16	H
	3702	-55.06	-13	-42.06	-67.32	2.64	14.90	V
	5553	-53.23	-13	-40.23	-65.09	2.94	14.80	V
	7404	-49.61	-13	-36.61	-59.38	3.39	13.16	V
Middle	3741	-53.54	-13	-40.54	-65.80	2.641	14.90	H
	5613	-52.63	-13	-39.63	-64.49	2.94	14.80	H
	7488	-49.92	-13	-36.92	-59.69	3.39	13.16	H
	3741	-54.62	-13	-41.62	-66.88	2.64	14.90	V
	5613	-54.44	-13	-41.44	-66.30	2.94	14.80	V
	7488	-49.24	-13	-36.24	-59.01	3.39	13.16	V
Highest	3783	-54.93	-13	-41.93	-67.19	2.641	14.90	H
	5673	-50.70	-13	-37.70	-62.56	2.94	14.80	H
	7560	-50.49	-13	-37.49	-60.26	3.39	13.16	H
	3783	-55.49	-13	-42.49	-67.75	2.64	14.90	V
	5673	-51.57	-13	-38.57	-63.43	2.94	14.80	V
	7560	-49.78	-13	-36.78	-59.55	3.39	13.16	V

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



LTE Band 5 / 10MHz / 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	1650	-68.31	-13	-55.31	-75.28	1.58	10.70	H
	2473.77	-48.22	-13	-35.22	-56.47	2.102	12.50	H
	3300	-64.34	-13	-51.34	-73.23	2.856	13.90	H
	1649.18	-67.03	-13	-54.03	-74.00	1.58	10.70	V
	2474	-45.08	-13	-32.08	-53.33	2.10	12.50	V
	3300	-63.84	-13	-50.84	-72.73	2.86	13.90	V
Middle	1664	-65.62	-13	-52.62	-72.59	1.58	10.70	H
	2496	-46.24	-13	-33.24	-54.49	2.102	12.50	H
	3330	-64.21	-13	-51.21	-73.10	2.856	13.90	H
	1664	-64.71	-13	-51.71	-71.68	1.58	10.70	V
	2496	-43.74	-13	-30.74	-51.99	2.10	12.50	V
	3330	-63.83	-13	-50.83	-72.72	2.86	13.90	V
Highest	1680	-68.37	-13	-55.37	-75.34	1.58	10.70	H
	2518.77	-47.98	-13	-34.98	-56.23	2.102	12.50	H
	3360	-64.19	-13	-51.19	-73.08	2.856	13.90	H
	1679.18	-69.10	-13	-56.10	-76.07	1.58	10.70	V
	2518	-48.77	-13	-35.77	-57.02	2.10	12.50	V
	3360	-64.47	-13	-51.47	-73.36	2.86	13.90	V

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



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	-63.51	-25	-38.51	-73.72	3.03	13.24	H
	7504	-47.58	-25	-22.58	-57.03	3.56	13.01	H
	10000	-57.33	-25	-32.33	-66.85	3.92	13.44	H
	5004	-65.53	-25	-40.53	-75.74	3.03	13.24	V
	7504	-49.49	-25	-24.49	-58.94	3.56	13.01	V
	10000	-58.38	-25	-33.38	-67.90	3.92	13.44	V
Middle	5052	-65.19	-25	-40.19	-75.40	3.03	13.24	H
	7580	-44.31	-25	-19.31	-53.76	3.56	13.01	H
	10100	-57.80	-25	-32.80	-67.32	3.92	13.44	H
	5052	-65.38	-25	-40.38	-75.59	3.03	13.24	V
	7580	-51.27	-25	-26.27	-60.72	3.56	13.01	V
	10100	-58.44	-25	-33.44	-67.96	3.92	13.44	V
Highest	5104	-66.02	-25	-41.02	-76.23	3.03	13.24	H
	7652	-49.38	-25	-24.38	-58.83	3.56	13.01	H
	10200	-58.08	-25	-33.08	-67.60	3.92	13.44	H
	5104	-66.37	-25	-41.37	-76.58	3.03	13.24	V
	7652	-52.26	-25	-27.26	-61.71	3.56	13.01	V
	10200	-58.82	-25	-33.82	-68.34	3.92	13.44	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	1400	-66.11	-13	-53.11	-73.08	1.58	10.70	H
	2098	-53.47	-13	-40.47	-61.72	2.102	12.50	H
	2798	-63.06	-13	-50.06	-71.95	2.856	13.90	H
	3498	-63.80	-13	-50.80	-72.26	2.689	13.30	V
	1400	-65.90	-13	-52.90	-72.87	1.58	10.70	V
	2098	-54.54	-13	-41.54	-62.79	2.10	12.50	V
Middle	1406	-65.80	-13	-52.80	-72.77	1.58	10.70	H
	2110	-52.41	-13	-39.41	-60.66	2.102	12.50	H
	2812	-63.70	-13	-50.70	-72.59	2.856	13.90	H
	3516	-63.64	-13	-50.64	-72.10	2.689	13.30	H
	1406	-67.45	-13	-54.45	-74.42	1.58	10.70	V
	2110	-53.27	-13	-40.27	-61.52	2.10	12.50	V
	2812	-63.79	-13	-50.79	-72.68	2.86	13.90	V
	3516	-63.57	-13	-50.57	-72.03	2.69	13.30	V
Highest	1414	-66.76	-13	-53.76	-73.73	1.58	10.70	H
	2120	-50.93	-13	-37.93	-59.18	2.102	12.50	H
	2826	-63.06	-13	-50.06	-71.95	2.856	13.90	H
	3534	-63.04	-13	-50.04	-71.50	2.689	13.30	H
	1414	-67.73	-13	-54.73	-74.70	1.58	10.70	V
	2120	-52.70	-13	-39.70	-60.95	2.10	12.50	V
	2826	-63.02	-13	-50.02	-71.91	2.86	13.90	V
	3534	-63.35	-13	-50.35	-71.81	2.69	13.30	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)
Lowest	3423	-54.81	-13	-41.81	-65.55	2.604	13.34	H
	5133	-56.06	-13	-43.06	-66.57	3.011	13.52	H
	6840	-53.97	-13	-40.97	-64.17	3.271	13.47	H
	3423	-58.51	-13	-45.51	-69.25	2.604	13.34	V
	5133	-54.66	-13	-41.66	-65.17	3.011	13.52	V
	6840	-52.95	-13	-39.95	-63.15	3.271	13.47	V
Middle	3471	-54.57	-13	-41.57	-65.31	2.604	13.34	H
	5208	-55.66	-13	-42.66	-66.17	3.011	13.52	H
	6948	-52.42	-13	-39.42	-62.62	3.271	13.47	H
	3471	-58.66	-13	-45.66	-69.40	2.604	13.34	V
	5208	-55.82	-13	-42.82	-66.33	3.011	13.52	V
	6948	-51.88	-13	-38.88	-62.08	3.271	13.47	V
Highest	3522	-60.58	-13	-47.58	-71.32	2.604	13.34	H
	5283	-56.85	-13	-43.85	-67.36	3.011	13.52	H
	7044	-50.85	-13	-37.85	-61.05	3.271	13.47	H
	3522	-61.29	-13	-48.29	-72.03	2.604	13.34	V
	5283	-57.01	-13	-44.01	-67.52	3.011	13.52	V
	7044	-51.00	-13	-38.00	-61.20	3.271	13.47	V

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