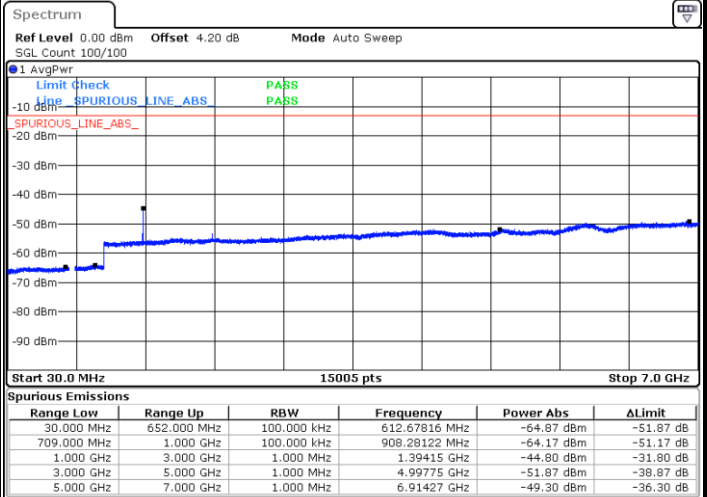
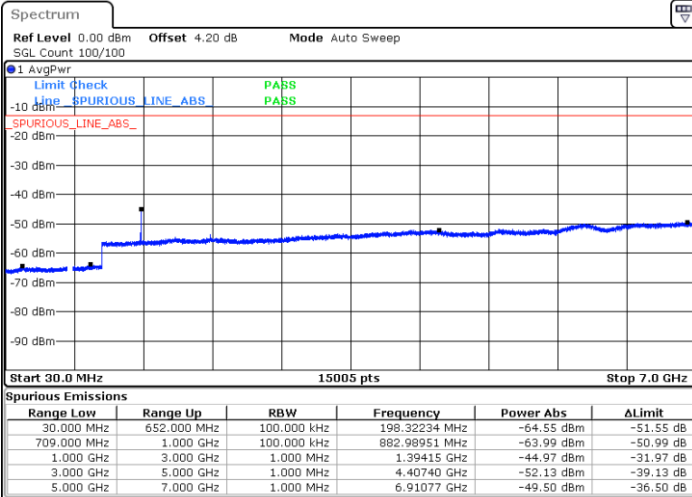




LTE Band 71 / 20MHz

Lowest Channel / QPSK

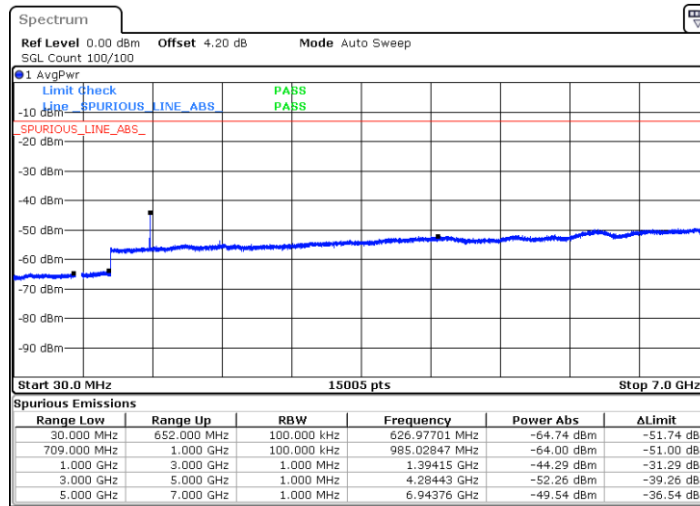
Middle Channel / QPSK



Date: 18.DEC.2020 04:06:28

Date: 18.DEC.2020 04:05:50

Highest Channel / QPSK



Date: 18.DEC.2020 04:05:18



Frequency Stability

Test Conditions		LTE Band 71 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0049	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0035	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0046	
-30	Normal Voltage	0.0019	
20	Maximum Voltage	0.0041	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =7.74 V. ; Battery End Point (BEP) =7.3 V. ; Maximum Voltage =8.7 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 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	-50.40	-13	-37.40	-57.37	1.58	10.70	H
	2098	-57.38	-13	-44.38	-65.63	2.102	12.50	H
	2798	-53.57	-13	-40.57	-62.46	2.856	13.90	H
	3498	-50.15	-13	-37.15	-58.61	2.689	13.30	H
	4200	-59.56	-13	-46.56	-67.32	3.093	13.00	H
	4896	-50.47	-13	-37.47	-59.24	3.178	14.10	H
	1400	-49.08	-13	-36.08	-56.05	1.58	10.70	V
	2098	-59.69	-13	-46.69	-67.94	2.10	12.50	V
	2798	-58.25	-13	-45.25	-67.14	2.86	13.90	V
	3498	-56.26	-13	-43.26	-64.72	2.69	13.30	V
	4200	-56.40	-13	-43.40	-64.16	3.09	13.00	V
4896	-53.85	-13	-40.85	-62.62	3.18	14.10	V	
Middle	1406	-45.46	-13	-32.46	-52.43	1.58	10.70	H
	2110	-52.88	-13	-39.88	-61.13	2.102	12.50	H
	2812	-55.46	-13	-42.46	-64.35	2.856	13.90	H
	3516	-51.25	-13	-38.25	-59.71	2.689	13.30	H
	4218	-58.77	-13	-45.77	-66.53	3.093	13.00	H
	4920	-52.07	-13	-39.07	-60.84	3.178	14.10	H
	1406	-47.05	-13	-34.05	-54.02	1.58	10.70	V
	2110	-58.06	-13	-45.06	-66.31	2.10	12.50	V
	2812	-58.79	-13	-45.79	-67.68	2.86	13.90	V
	3516	-54.78	-13	-41.78	-63.24	2.69	13.30	V
	4218	-56.23	-13	-43.23	-63.99	3.09	13.00	V
4920	-53.78	-13	-40.78	-62.55	3.18	14.10	V	
Highest	1414	-46.60	-13	-33.60	-53.57	1.58	10.70	H
	2120	-56.76	-13	-43.76	-65.01	2.102	12.50	H
	2826	-53.17	-13	-40.17	-62.06	2.856	13.90	H
	3534	-56.07	-13	-43.07	-64.53	2.689	13.30	H
	4242	-59.87	-13	-46.87	-67.63	3.093	13.00	H
	1414	-45.60	-13	-32.60	-52.57	1.58	10.70	V
	2120	-56.99	-13	-43.99	-65.24	2.10	12.50	V
	2826	-54.71	-13	-41.71	-63.60	2.86	13.90	V
	3534	-57.51	-13	-44.51	-65.97	2.69	13.30	V
4242	-57.54	-13	-44.54	-65.30	3.09	13.00	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	-53.20	-13	-40.20	-55.83	1.09	5.87	H
	2332	-58.48	-13	-45.48	-60.88	1.37	5.92	H
	3108	-44.22	-13	-31.22	-48.11	1.64	7.68	H
	3888	-50.53	-13	-37.53	-54.76	1.92	8.30	H
	4662	-38.56	-13	-25.56	-43.42	2.19	9.21	H
	5442	-54.23	-13	-41.23	-59.72	2.47	10.11	H
	6216	-55.00	-13	-42.00	-61.12	2.74	11.02	H
	6996	-52.79	-13	-39.79	-59.54	3.02	11.92	H
	1554	-47.72	-13	-34.72	-50.35	1.09	5.87	V
	2332	-57.02	-13	-44.02	-59.42	1.37	5.92	V
	3108	-51.59	-13	-38.59	-55.48	1.64	7.68	V
	3888	-57.83	-13	-44.83	-62.06	1.92	8.30	V
	4662	-45.49	-13	-32.49	-50.35	2.19	9.21	V
	5442	-57.08	-13	-44.08	-62.57	2.47	10.11	V
	6216	-55.72	-13	-42.72	-61.84	2.74	11.02	V
6996	-54.26	-13	-41.26	-61.01	3.02	11.92	V	
Middle	1560	-50.91	-42.15	-8.76	-53.54	1.09	5.87	H
	2340	-57.51	-13	-44.51	-59.91	1.37	5.92	H
	3120	-53.49	-13	-40.49	-57.38	1.64	7.68	H
	3900	-58.38	-13	-45.38	-63.76	1.91	9.44	H
	4680	-48.86	-13	-35.86	-55.73	2.18	11.20	H
	1560	-51.23	-42.15	-9.08	-53.86	1.09	5.87	V
	2340	-56.37	-13	-43.37	-58.77	1.37	5.92	V
	3120	-56.63	-13	-43.63	-60.52	1.64	7.68	V
	3900	-58.13	-13	-45.13	-63.51	1.91	9.44	V
4680	-50.22	-13	-37.22	-57.09	2.18	11.20	V	
Highest	1564	-50.75	-42.15	-8.60	-53.38	1.09	5.87	H
	2346	-58.94	-13	-45.94	-61.34	1.37	5.92	H
	3132	-46.37	-13	-33.37	-50.26	1.64	7.68	H
	3912	-51.16	-13	-38.16	-56.54	1.91	9.44	H
	4692	-37.84	-13	-24.84	-44.71	2.18	11.20	H
	5478	-54.17	-13	-41.17	-62.53	2.45	12.96	H
	1564	-50.51	-42.15	-8.36	-53.14	1.09	5.87	V
	2348	-57.12	-13	-44.12	-59.52	1.37	5.92	V
	3132	-52.91	-13	-39.91	-56.80	1.64	7.68	V
	3912	-54.28	-13	-41.28	-59.66	1.91	9.44	V
	4692	-42.12	-13	-29.12	-48.99	2.18	11.20	V
	5478	-56.32	-13	-43.32	-64.68	2.45	12.96	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	1556	-42.51	-13	-29.51	-45.14	1.09	5.87	H
	2332	-55.44	-13	-42.44	-57.84	1.37	5.92	H
	3108	-46.20	-13	-33.20	-50.09	1.64	7.68	H
	3888	-50.60	-13	-37.60	-54.83	1.92	8.30	H
	4668	-37.39	-13	-24.39	-42.25	2.19	9.21	H
	5442	-53.91	-13	-40.91	-59.40	2.47	10.11	H
	1556	-43.84	-13	-30.84	-46.47	1.09	5.87	V
	2332	-51.36	-13	-38.36	-53.76	1.37	5.92	V
	3108	-55.25	-13	-42.25	-59.14	1.64	7.68	V
	3888	-57.71	-13	-44.71	-61.94	1.92	8.30	V
	4668	-46.40	-13	-33.40	-51.26	2.19	9.21	V
	5442	-57.51	-13	-44.51	-63.00	2.47	10.11	V

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



LTE Band 71 / 20MHz / 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	1328	-57.95	-13	-44.95	-59.70	1.02	4.92	H
	1992	-62.70	-13	-49.70	-64.67	1.27	5.39	H
	2656	-57.25	-13	-44.25	-60.18	1.49	6.57	H
	3318	-56.50	-13	-43.50	-59.90	1.73	7.28	H
	3984	-58.43	-13	-45.43	-62.42	1.97	8.10	H
	4650	-49.11	-13	-36.11	-53.69	2.20	8.93	H
	1328	-52.46	-13	-39.46	-54.21	1.02	4.92	V
	1992	-62.12	-13	-49.12	-64.09	1.27	5.39	V
	2656	-58.72	-13	-45.72	-61.65	1.49	6.57	V
	3318	-60.00	-13	-47.00	-63.40	1.73	7.28	V
3984	-59.65	-13	-46.65	-63.64	1.97	8.10	V	
4650	-54.94	-13	-41.94	-59.52	2.20	8.93	V	
Middle	1348	-47.78	-13	-34.78	-49.53	1.02	4.92	H
	2022	-61.48	-13	-48.48	-63.45	1.27	5.39	H
	2696	-56.51	-13	-43.51	-59.44	1.49	6.57	H
	3372	-57.69	-13	-44.69	-61.09	1.73	7.28	H
	4044	-59.50	-13	-46.50	-63.49	1.97	8.10	H
	4716	-50.69	-13	-37.69	-55.27	2.20	8.93	H
	1348	-46.74	-13	-33.74	-48.49	1.02	4.92	V
	2022	-60.41	-13	-47.41	-62.38	1.27	5.39	V
	2696	-58.47	-13	-45.47	-61.40	1.49	6.57	V
	3372	-59.82	-13	-46.82	-63.22	1.73	7.28	V
4044	-59.36	-13	-46.36	-63.35	1.97	8.10	V	
4716	-55.06	-13	-42.06	-59.64	2.20	8.93	V	
Highest	1358	-46.36	-13	-33.36	-48.11	1.02	4.92	H
	2038	-60.83	-13	-47.83	-62.80	1.27	5.39	H
	2716	-57.41	-13	-44.41	-60.34	1.49	6.57	H
	3396	-57.99	-13	-44.99	-61.39	1.73	7.28	H
	4074	-60.60	-13	-47.60	-64.59	1.97	8.10	H
	4752	-51.65	-13	-38.65	-56.23	2.20	8.93	H
	1358	-45.19	-13	-32.19	-46.94	1.02	4.92	V
	2036	-60.05	-13	-47.05	-62.02	1.27	5.39	V
	2716	-59.17	-13	-46.17	-62.10	1.49	6.57	V
	3396	-60.41	-13	-47.41	-63.81	1.73	7.28	V
4074	-60.25	-13	-47.25	-64.24	1.97	8.10	V	
4752	-56.83	-13	-43.83	-61.41	2.20	8.93	V	

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