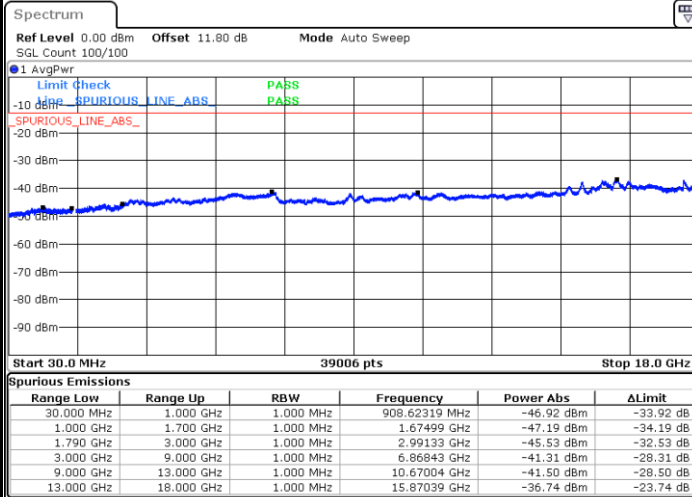




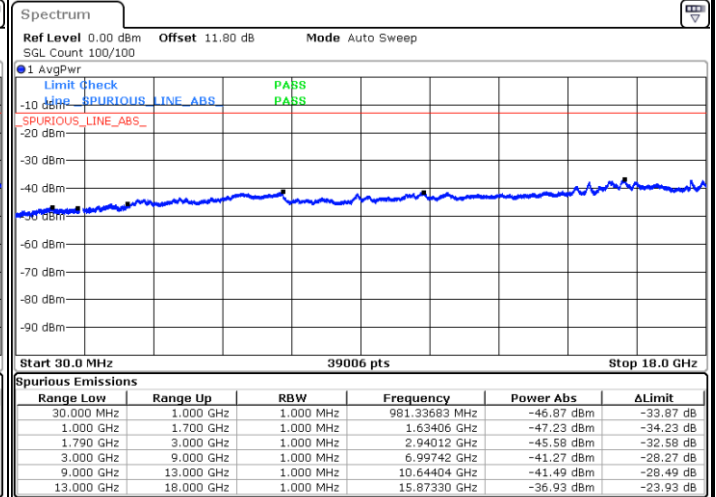
LTE Band 66 / 10MHz

Lowest Channel / QPSK



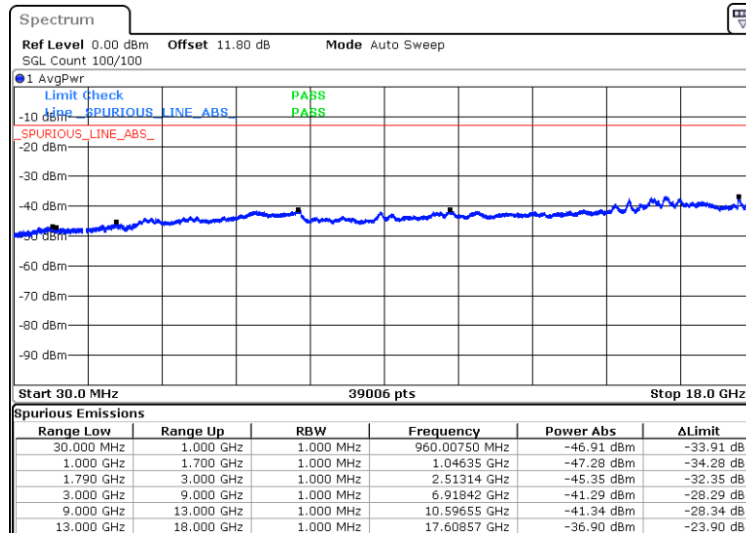
Date: 2.FEB.2021 11:05:19

Middle Channel / QPSK



Date: 2.FEB.2021 11:07:19

Highest Channel / QPSK

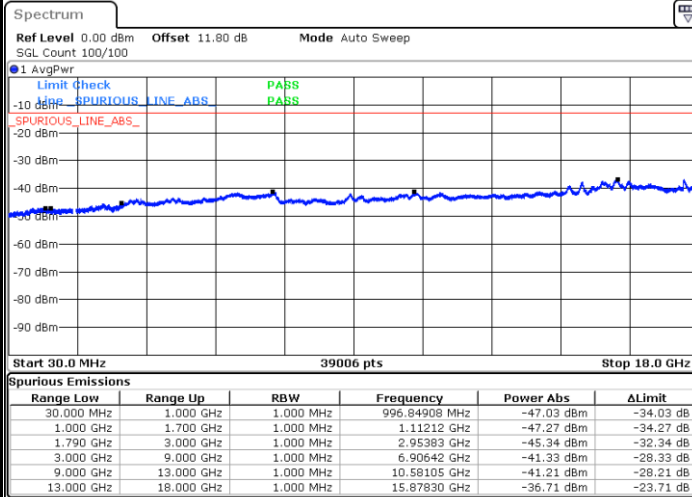


Date: 2.FEB.2021 11:10:32



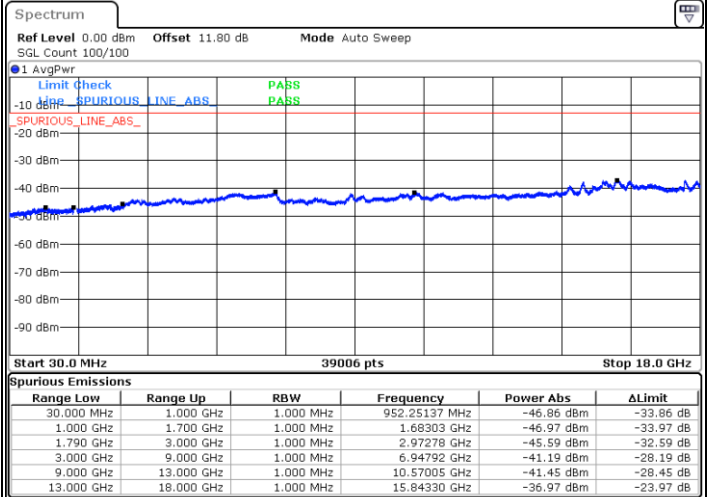
LTE Band 66 / 15MHz

Lowest Channel / QPSK



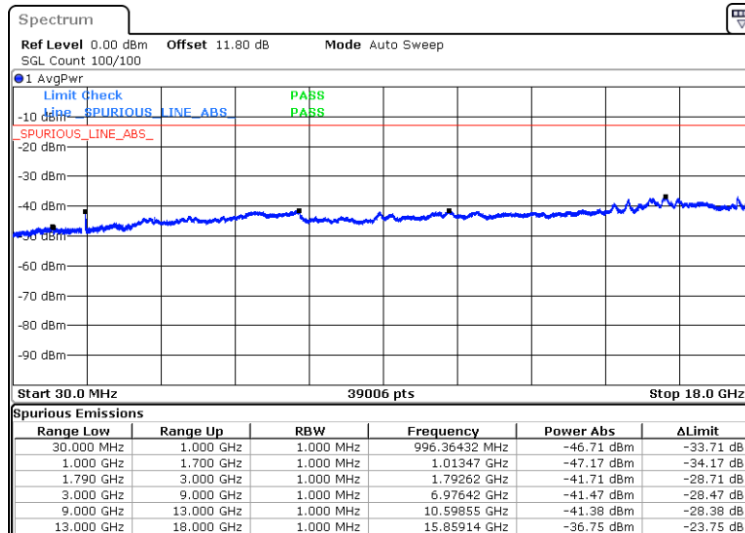
Date: 2.FEB.2021 11:19:02

Middle Channel / QPSK



Date: 2.FEB.2021 11:21:02

Highest Channel / QPSK

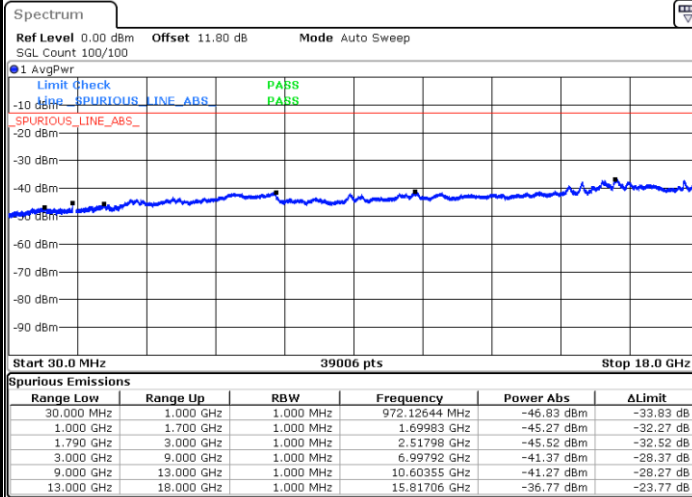


Date: 2.FEB.2021 11:24:15



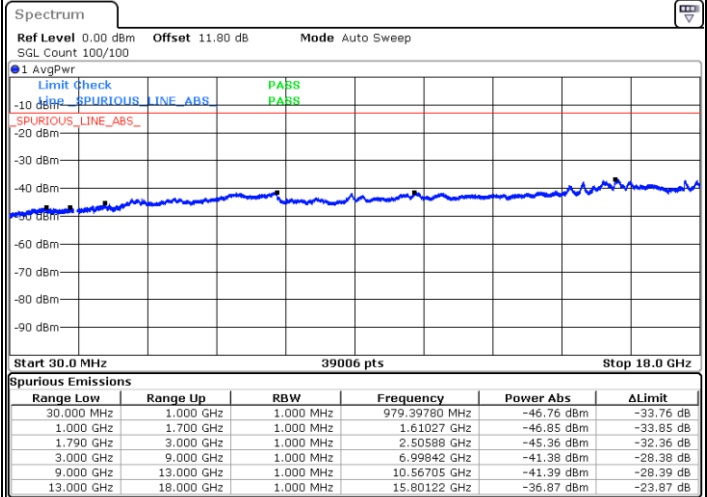
LTE Band 66 / 20MHz

Lowest Channel / QPSK



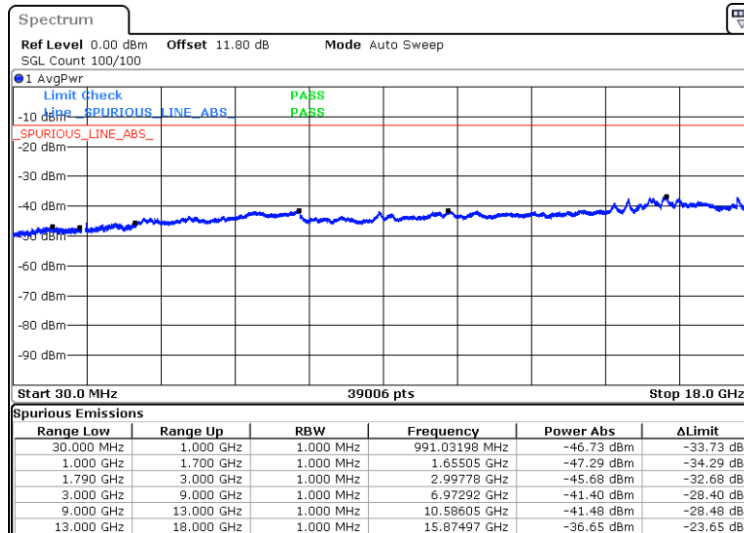
Date: 2.FEB.2021 11:27:42

Middle Channel / QPSK



Date: 2.FEB.2021 11:29:42

Highest Channel / QPSK



Date: 2.FEB.2021 11:35:33

Frequency Stability

Test Conditions		LTE Band 66 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0013	PASS
40	Normal Voltage	0.0042	
30	Normal Voltage	0.0048	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0060	
-10	Normal Voltage	0.0034	
-20	Normal Voltage	0.0029	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0040	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0033	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

LTE Band 2

LTE Band 2 / 20MHz / QPSK									
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)
Lowest	3702	-46.79	-13	-33.79	-64.06	-58.58	0.72	12.52	H
	5556	-50.17	-13	-37.17	-72.12	-62.34	1.00	13.17	H
	7404	-51.59	-13	-38.59	-76.5	-60.98	1.18	10.57	H
									H
									H
									H
	3702	-47.64	-13	-34.64	-66.11	-59.43	0.72	12.52	V
	5556	-50.16	-13	-37.16	-72.24	-62.33	1.00	13.17	V
	7404	-51.84	-13	-38.84	-76.55	-61.23	1.18	10.57	V
									V
									V
									V
Middle	3744	-45.42	-13	-32.42	-62.82	-57.22	0.70	12.50	H
	5616	-50.94	-13	-37.94	-72.83	-63.09	0.98	13.13	H
	7484	-51.63	-13	-38.63	-76.27	-60.88	1.18	10.43	H
									H
									H
									H
	3744	-48.13	-13	-35.13	-66.72	-59.93	0.70	12.50	V
	5616	-51.87	-13	-38.87	-73.93	-64.02	0.98	13.13	V
	7484	-51.73	-13	-38.73	-76.45	-60.98	1.18	10.43	V
									V
									V
									V



Highest	3780	-45.71	-13	-32.71	-63.19	-57.52	0.68	12.49	H
	5676	-45.88	-13	-32.88	-67.82	-57.99	0.99	13.09	H
	7564	-51.53	-13	-38.53	-76.25	-60.93	1.18	10.58	H
									H
									H
									H
									H
	3780	-47.31	-13	-34.31	-66	-59.12	0.68	12.49	V
	5676	-47.57	-13	-34.57	-69.7	-59.68	0.99	13.09	V
	7564	-51.58	-13	-38.58	-76.17	-60.98	1.18	10.58	V
									V
									V
									V
									V

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

**LTE Band 4**

LTE Band 4 / 20MHz / QPSK									
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)
Lowest	3420	-48.84	-13	-35.84	-66.2	-60.43	0.77	12.36	H
	5136	-54.34	-13	-41.34	-75.37	-65.84	0.97	12.47	H
	6846	-52.61	-13	-39.61	-76.55	-63.43	0.82	11.64	H
									H
									H
									H
									H
	3420	-48.68	-13	-35.68	-65.85	-60.27	0.77	12.36	V
	5136	-52.20	-13	-39.20	-73.4	-63.7	0.97	12.47	V
	6846	-51.28	-13	-38.28	-75.71	-62.1	0.82	11.64	V
									V
									V
									V
									V
Middle	3450	-45.11	-13	-32.11	-62.5	-56.78	0.78	12.45	H
	5172	-51.98	-13	-38.98	-73.05	-63.54	0.98	12.54	H
	6894	-52.58	-13	-39.58	-76.63	-63.19	0.93	11.53	H
									H
									H
									H
									H
	3450	-47.88	-13	-34.88	-65.53	-59.55	0.78	12.45	V
	5172	-48.01	-13	-35.01	-69.25	-59.57	0.98	12.54	V
	6894	-52.02	-13	-39.02	-76.49	-62.63	0.93	11.53	V
									V
									V
									V
									V



Highest	3474	-42.27	-13	-29.27	-59.71	-54.01	0.78	12.52	H
	5208	-54.00	-13	-41.00	-75.11	-65.62	0.99	12.62	H
	6944	-51.89	-13	-38.89	-76.03	-62.27	1.04	11.42	H
									H
									H
									H
									H
	3474	-46.95	-13	-33.95	-64.97	-58.69	0.78	12.52	V
	5208	-47.82	-13	-34.82	-69.11	-59.44	0.99	12.62	V
	6944	-51.98	-13	-38.98	-76.48	-62.36	1.04	11.42	V
									V
									V
									V
									V

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

**LTE Band 5**

LTE Band 5 / 10MHz / QPSK									
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)
Lowest	1649	-62.38	-13	-49.38	-72.48	-69.33	0.53	9.63	H
	2473	-60.64	-13	-47.64	-74.33	-68.62	0.65	10.78	H
	3298	-58.63	-13	-45.63	-74.99	-67.72	0.76	11.99	H
									H
									H
									H
									H
	1649	-63.11	-13	-50.11	-72.91	-70.06	0.53	9.63	V
	2473	-60.04	-13	-47.04	-74.26	-68.02	0.65	10.78	V
	3298	-58.64	-13	-45.64	-74.97	-67.73	0.76	11.99	V
									V
									V
									V
									V
Middle	1664	-61.65	-13	-48.65	-71.89	-68.63	0.53	9.66	H
	2496	-60.35	-13	-47.35	-74	-68.34	0.65	10.80	H
	3328	-58.74	-13	-45.74	-75.19	-67.91	0.76	12.08	H
									H
									H
									H
									H
	1664	-62.84	-13	-49.84	-72.67	-69.82	0.53	9.66	V
	2496	-60.08	-13	-47.08	-74.17	-68.07	0.65	10.80	V
	3328	-58.58	-13	-45.58	-74.86	-67.75	0.76	12.08	V
									V
									V
									V
									V



Highest	1679	-60.87	-13	-47.87	-71.25	-67.88	0.53	9.69	H
	2518	-60.49	-13	-47.49	-74.16	-68.49	0.66	10.81	H
	3358	-58.45	-13	-45.45	-74.93	-67.71	0.77	12.17	H
									H
									H
									H
									H
	1679	-63.10	-13	-50.10	-72.96	-70.11	0.53	9.69	V
	2518	-60.21	-13	-47.21	-74.29	-68.21	0.66	10.81	V
	3358	-58.13	-13	-45.13	-74.33	-67.39	0.77	12.17	V
									V
									V
									V
									V

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

**LTE Band 7**

LTE Band 7 / 20MHz / QPSK									
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)
Lowest	5002	-54.02	-25	-29.02	-74.9	-65.29	0.94	12.20	H
	7503	-43.50	-25	-18.50	-68.09	-52.73	1.18	10.41	H
	10004	-47.37	-25	-22.37	-78.7	-58.1	1.37	12.09	H
									H
									H
									H
									H
	5002	-55.56	-25	-30.56	-76.62	-66.83	0.94	12.20	V
	7503	-41.47	-25	-16.47	-66.19	-50.7	1.18	10.41	V
	10004	-45.68	-25	-20.68	-78.68	-56.41	1.37	12.09	V
									V
									V
									V
									V
Middle	5052	-53.97	-25	-28.97	-74.88	-65.32	0.95	12.30	H
	7578	-46.32	-25	-21.32	-71.08	-55.76	1.18	10.62	H
	10104	-46.64	-25	-21.64	-77.83	-57.17	1.38	11.90	H
									H
									H
									H
									H
	5052	-57.12	-25	-32.12	-77.24	-68.47	0.95	12.30	V
	7578	-45.54	-25	-20.54	-70.09	-54.98	1.18	10.62	V
	10104	-45.35	-25	-20.35	-78.26	-55.88	1.38	11.90	V
									V
									V
									V
									V



Highest	5102	-54.52	-25	-29.52	-75.5	-65.96	0.96	12.40	H
	7653	-44.33	-25	-19.33	-69.25	-53.97	1.18	10.83	H
	10204	-46.63	-25	-21.63	-77.7	-56.96	1.39	11.71	H
									H
									H
									H
									H
	5102	-56.32	-25	-31.32	-77.49	-67.76	0.96	12.40	V
	7653	-42.46	-25	-17.46	-67.16	-52.1	1.18	10.83	V
	10204	-45.24	-25	-20.24	-78.06	-55.57	1.39	11.71	V
									V
									V
									V
									V

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

**LTE Band 12**

LTE Band 12 / 10MHz / QPSK									
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)
Lowest	1399	-60.58	-13.00	-47.58	-72.05	-66.62	0.50	8.69	H
	2098	-61.20	-13.00	-48.20	-74.71	-68.94	0.59	10.48	H
	2798	-60.41	-13.00	-47.41	-75.12	-68.54	0.70	10.98	H
									H
									H
									H
									H
	1399	-60.97	-13.00	-47.97	-72.49	-67.01	0.50	8.69	V
	2098	-61.26	-13.00	-48.26	-74.68	-69.00	0.59	10.48	V
	2798	-59.87	-13.00	-46.87	-74.99	-68.00	0.70	10.98	V
									V
									V
									V
									V
Middle	1406	-60.73	-13.00	-47.73	-72.31	-66.82	0.50	8.74	H
	2109	-60.75	-13.00	-47.75	-74.55	-68.50	0.59	10.49	H
	2812	-59.67	-13.00	-46.67	-74.43	-67.80	0.70	10.99	H
									H
									H
									H
									H
	1406	-60.67	-13.00	-47.67	-72.15	-66.76	0.50	8.74	V
	2109	-61.02	-13.00	-48.02	-74.64	-68.77	0.59	10.49	V
	2812	-59.74	-13.00	-46.74	-74.87	-67.87	0.70	10.99	V
									V
									V
									V
									V



Highest	1391	-60.82	-13.00	-47.82	-72.30	-66.82	0.50	8.65	H
	2086	-61.14	-13.00	-48.14	-74.36	-68.87	0.59	10.47	H
	2782	-60.00	-13.00	-47.00	-74.62	-68.12	0.70	10.97	H
									H
									H
									H
									H
	1391	-61.14	-13.00	-48.14	-72.58	-67.14	0.50	8.65	V
	2086	-61.81	-13.00	-48.81	-74.99	-69.54	0.59	10.47	V
	2782	-59.63	-13.00	-46.63	-74.66	-67.75	0.70	10.97	V
									V
									V
									V
									V

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

**LTE Band 13**

LTE Band 13 / 5MHz / QPSK									
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)
Lowest	1559	-62.71	-42.15	-20.56	-73.38	-69.48	0.51	9.43	H
	2328	-60.94	-13	-47.94	-75.31	-68.83	0.62	10.66	H
	3118	-59.68	-13	-46.68	-75.52	-68.24	0.74	11.45	H
									H
									H
									H
									H
	1559	-63.78	-42.15	-21.63	-73.89	-70.55	0.51	9.43	V
	2328	-60.12	-13	-47.12	-74.97	-68.01	0.62	10.66	V
	3118	-59.73	-13	-46.73	-75.74	-68.29	0.74	11.45	V
									V
									V
									V
									V
Middle	1564	-63.34	-42.15	-21.19	-74.00	-70.12	0.52	9.44	H
	2346	-60.53	-13	-47.53	-74.77	-68.43	0.62	10.68	H
	3128	-60.07	-13	-47.07	-75.91	-68.66	0.74	11.48	H
									H
									H
									H
									H
	1564	-63.91	-42.15	-21.76	-73.97	-70.69	0.52	9.44	V
	2346	-60.63	-13	-47.63	-75.45	-68.53	0.62	10.68	V
	3128	-59.94	-13	-46.94	-76.02	-68.53	0.74	11.48	V
									V
									V
									V
									V



Highest	1569	-62.94	-42.15	-20.79	-73.14	-69.73	0.52	9.45	H
	2353	-60.97	-13	-47.97	-75.21	-68.88	0.63	10.68	H
	3138	-59.59	-13	-46.59	-75.51	-68.21	0.74	11.51	H
									H
									H
									H
									H
	1569	-64.04	-42.15	-21.89	-74.05	-70.83	0.52	9.45	V
	2353	-60.28	-13	-47.28	-75.07	-68.19	0.63	10.68	V
	3138	-59.60	-13	-46.60	-75.75	-68.22	0.74	11.51	V
									V
									V
									V
									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)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1564	-62.76	-42.15	-20.61	-73.41	-69.54	0.52	9.44	H
	2346	-60.66	-13	-47.66	-74.9	-68.56	0.62	10.68	H
	3128	-58.74	-13	-45.74	-74.58	-67.33	0.74	11.48	H
									H
									H
									H
									H
	1564	-63.42	-42.15	-21.27	-73.47	-70.2	0.52	9.44	V
	2346	-59.72	-13	-46.72	-74.54	-67.62	0.62	10.68	V
	3128	-59.35	-13	-46.35	-75.43	-67.94	0.74	11.48	V
									V
									V
									V
									V

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

**LTE Band 17**

LTE Band 17 / 10MHz / QPSK									
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)
Lowest	1409	-60.92	-13	-47.92	-72.50	-67.02	0.50	8.75	H
	2113	-60.92	-13	-47.92	-74.73	-68.67	0.59	10.49	H
	2818	-60.31	-13	-47.31	-75.06	-68.44	0.71	10.99	H
									H
									H
									H
									H
	1409	-61.00	-13	-48.00	-72.45	-67.10	0.50	8.75	V
	2113	-61.24	-13	-48.24	-74.96	-68.99	0.59	10.49	V
	2818	-59.64	-13	-46.64	-74.77	-67.77	0.71	10.99	V
									V
									V
									V
									V
Middle	1411	-60.52	-13	-47.52	-72.10	-66.63	0.50	8.77	H
	2116	-61.00	-13	-48.00	-74.81	-68.75	0.59	10.49	H
	2822	-60.07	-13	-47.07	-74.82	-68.21	0.71	10.99	H
									H
									H
									H
									H
	1411	-60.87	-13	-47.87	-72.30	-66.98	0.50	8.77	V
	2116	-60.72	-13	-47.72	-74.50	-68.47	0.59	10.49	V
	2822	-60.02	-13	-47.02	-75.15	-68.16	0.71	10.99	V
									V
									V
									V
									V



Highest	1413	-60.59	-13	-47.59	-72.18	-66.72	0.50	8.78	H
	2119	-60.88	-13	-47.88	-74.69	-68.63	0.59	10.50	H
	2826	-60.06	-13	-47.06	-74.87	-68.20	0.71	11.00	H
									H
									H
									H
									H
	1413	-60.86	-13	-47.86	-72.28	-66.99	0.50	8.78	V
	2119	-61.06	-13	-48.06	-74.90	-68.81	0.59	10.50	V
	2826	-59.89	-13	-46.89	-75.02	-68.03	0.71	11.00	V
									V
									V
									V
									V

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

**LTE Band 26**

LTE Band 26 / 15MHz / QPSK									
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)
Lowest	1649	-61.72	-13	-48.72	-71.82	-68.67	0.53	9.63	H
	2474	-60.42	-13	-47.42	-74.11	-68.4	0.65	10.78	H
	3299	-58.78	-13	-45.78	-75.14	-67.87	0.76	12.00	H
									H
									H
									H
									H
	1649	-62.93	-13	-49.93	-72.73	-69.88	0.53	9.63	V
	2474	-59.94	-13	-46.94	-74.15	-67.92	0.65	10.78	V
	3299	-58.40	-13	-45.40	-74.73	-67.49	0.76	12.00	V
									V
									V
									V
									V
Middle	1656	-60.52	-13	-47.52	-70.62	-67.49	0.53	9.64	H
	2489	-60.59	-13	-47.59	-74.23	-68.58	0.65	10.79	H
	3319	-58.53	-13	-45.53	-74.94	-67.68	0.76	12.06	H
									H
									H
									H
									H
	1656	-62.58	-13	-49.58	-72.39	-69.55	0.53	9.64	V
	2489	-60.12	-13	-47.12	-74.24	-68.11	0.65	10.79	V
	3319	-58.86	-13	-45.86	-75.16	-68.01	0.76	12.06	V
									V
									V
									V
									V



Highest	1669	-61.49	-13	-48.49	-71.73	-68.48	0.53	9.67	H
	2504	-60.87	-13	-47.87	-74.54	-68.87	0.66	10.80	H
	3339	-58.63	-13	-45.63	-75.08	-67.83	0.76	12.12	H
									H
									H
									H
									H
	1669	-63.41	-13	-50.41	-73.24	-70.4	0.53	9.67	V
	2504	-59.73	-13	-46.73	-73.8	-67.73	0.66	10.80	V
	3339	-58.54	-13	-45.54	-74.79	-67.74	0.76	12.12	V
									V
									V
									V
									V

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

**LTE Band 66**

LTE Band 66 / 20MHz / QPSK									
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)
Lowest	3420	-52.73	-13	-39.73	-70.09	-64.32	0.77	12.36	H
	5130	-56.90	-13	-43.90	-77.92	-68.39	0.97	12.46	H
	6840	-54.76	-13	-41.76	-78.72	-65.61	0.81	11.65	H
									H
									H
									H
									H
	3420	-52.73	-13	-39.73	-70.09	-64.32	0.77	12.36	V
	5130	-56.90	-13	-43.90	-77.92	-68.39	0.97	12.46	V
	6840	-54.76	-13	-41.76	-78.72	-65.61	0.81	11.65	V
									V
									V
									V
									V
Middle	3474	-46.24	-13	-33.24	-63.68	-57.98	0.78	12.52	H
	5211	-57.21	-13	-44.21	-78.32	-68.84	0.99	12.62	H
	6948	-54.04	-13	-41.04	-78.18	-64.41	1.05	11.41	H
									H
									H
									H
									H
	3474	-42.92	-13	-29.92	-60.94	-54.66	0.78	12.52	V
	5211	-56.92	-13	-43.92	-78.22	-68.55	0.99	12.62	V
	6948	-53.33	-13	-40.33	-77.83	-63.70	1.05	11.41	V
									V
									V
									V
									V



Highest	3522	-44.55	-13	-31.55	-61.93	-56.36	0.78	12.59	H
	5283	-57.46	-13	-44.46	-78.73	-69.20	1.02	12.77	H
	7044	-53.04	-13	-40.04	-77.36	-63.09	1.17	11.22	H
									H
									H
									H
									H
	3522	-40.40	-13	-27.40	-58.76	-52.21	0.78	12.59	V
	5283	-57.12	-13	-44.12	-78.55	-68.86	1.02	12.77	V
	7044	-52.86	-13	-39.86	-77.51	-62.91	1.17	11.22	V
									V
									V
									V
									V

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