

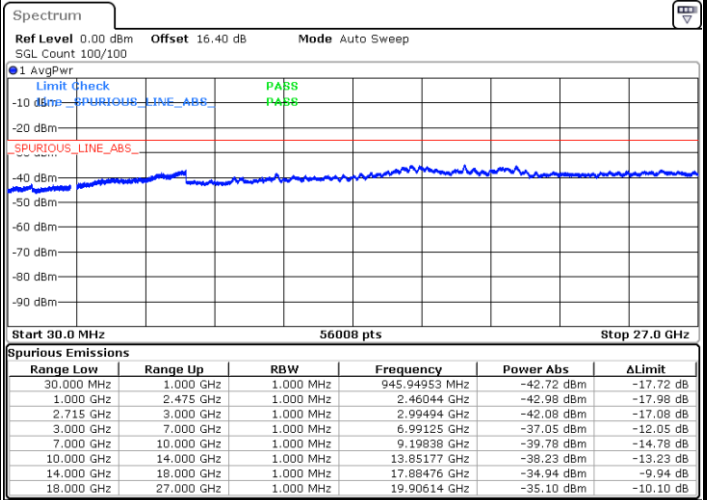
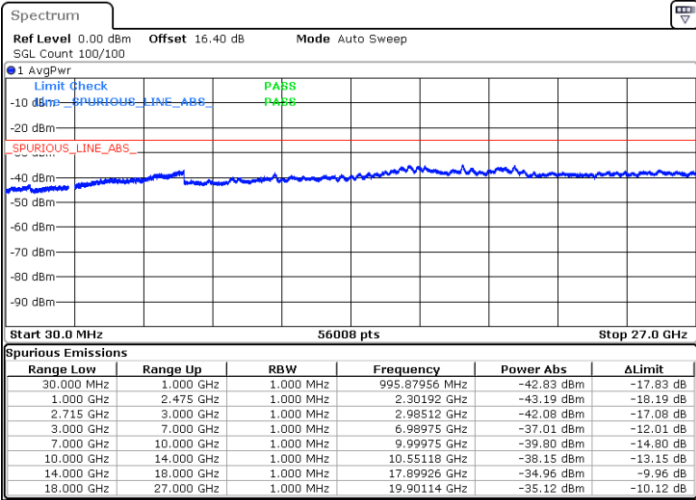


Conducted Spurious Emission

LTE Band 41 / 5MHz

Lowest Channel / QPSK

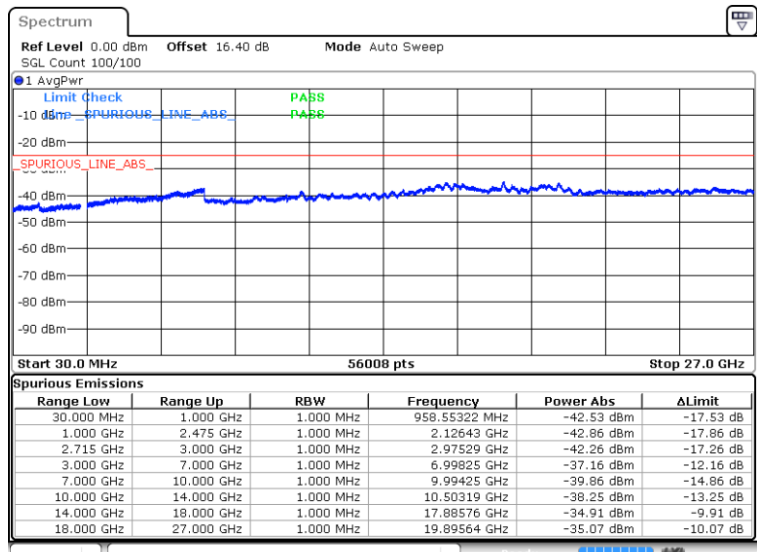
Middle Channel / QPSK



Date: 3 MAY.2021 18:30:18

Date: 3 MAY.2021 18:31:26

Highest Channel / QPSK



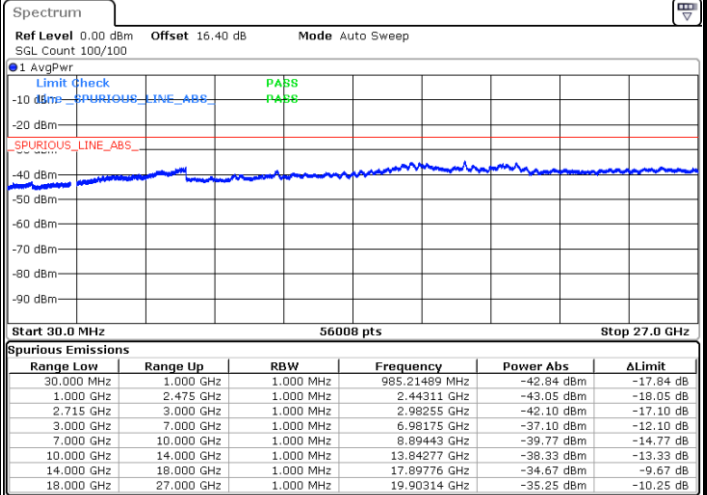
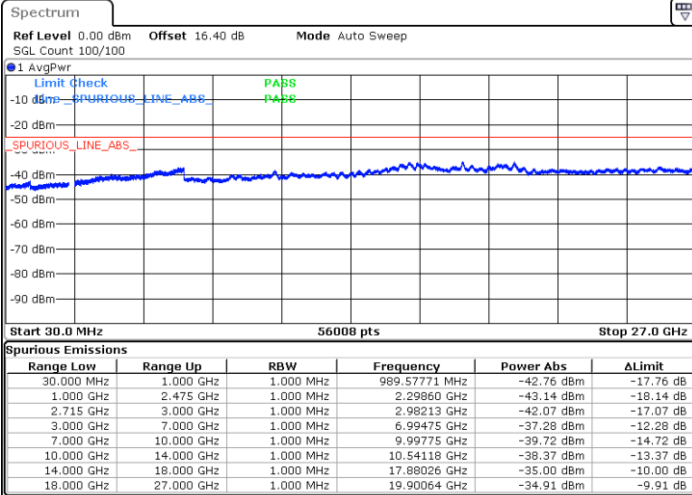
Date: 3.MAY.2021 18:32:35



LTE Band 41 / 10MHz

Lowest Channel / QPSK

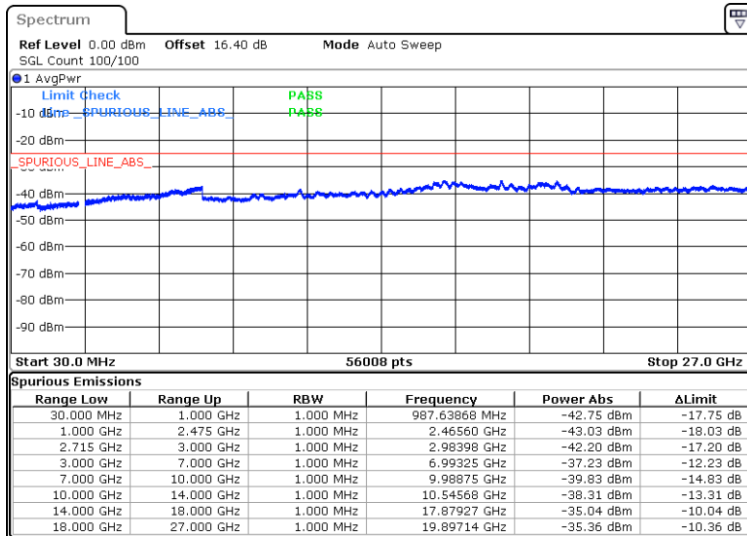
Middle Channel / QPSK



Date: 3.MAY.2021 18:33:44

Date: 3.MAY.2021 18:34:53

Highest Channel / QPSK



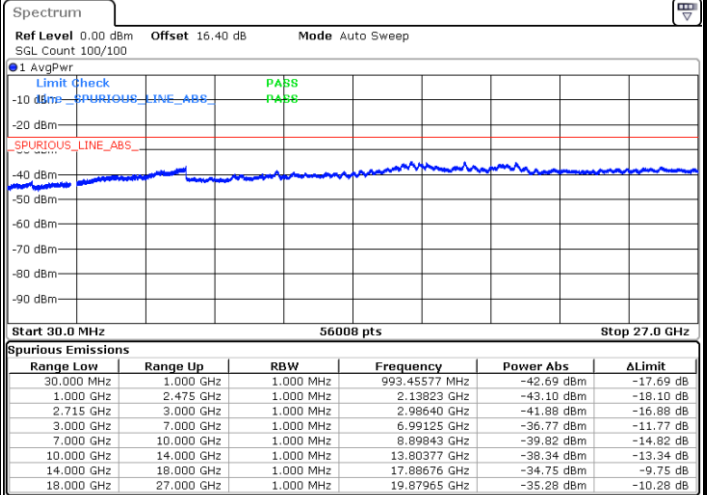
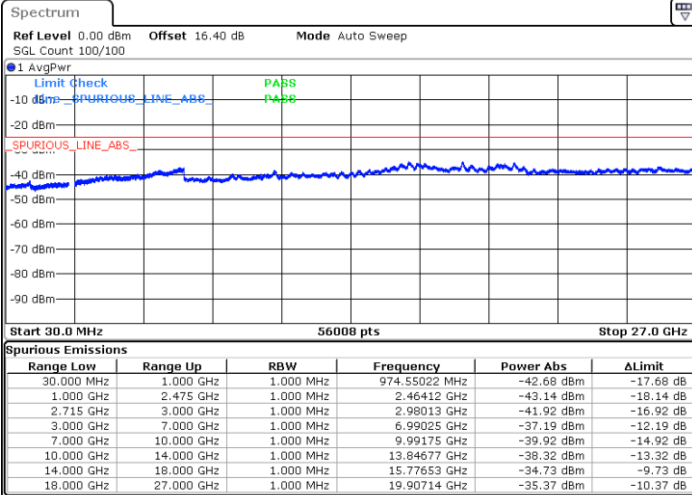
Date: 3.MAY.2021 18:36:01



LTE Band 41 / 15MHz

Lowest Channel / QPSK

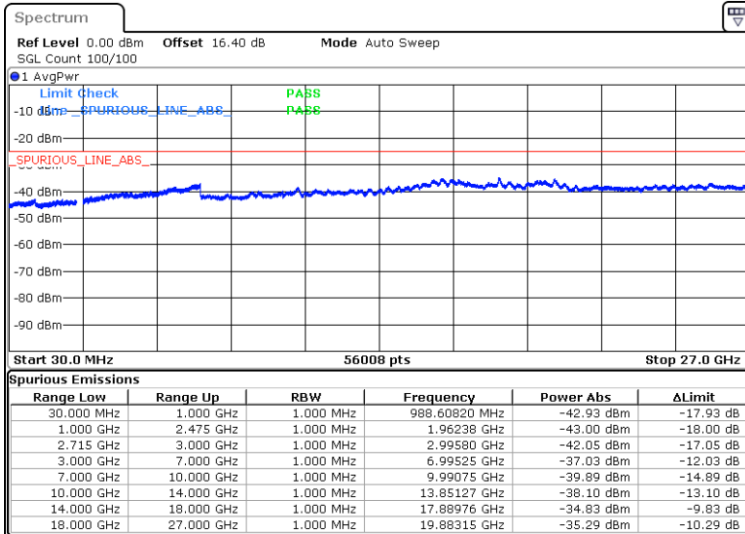
Middle Channel / QPSK



Date: 3.MAY.2021 18:37:11

Date: 3.MAY.2021 18:38:20

Highest Channel / QPSK



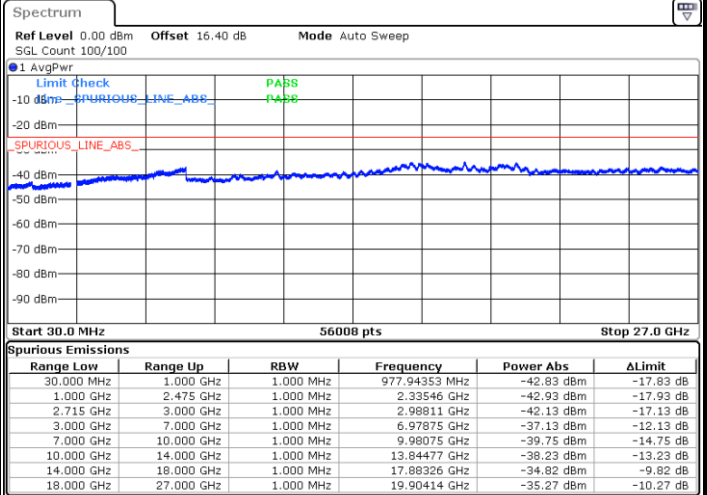
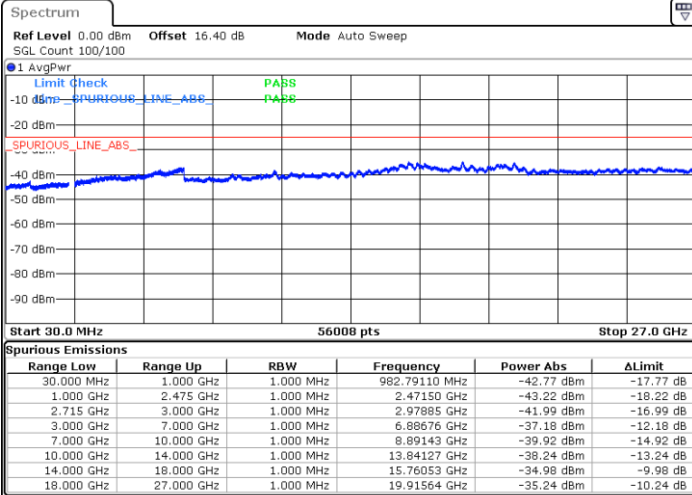
Date: 3.MAY.2021 18:39:28



LTE Band 41 / 20MHz

Lowest Channel / QPSK

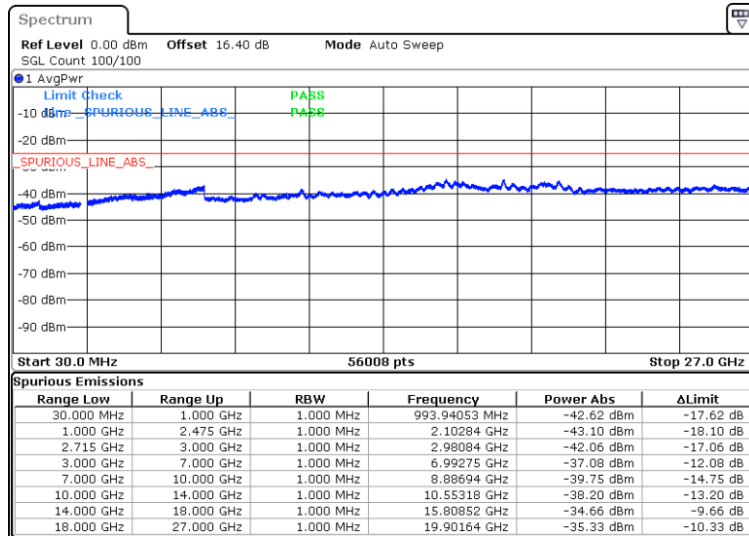
Middle Channel / QPSK



Date: 3.MAY.2021 18:40:38

Date: 3.MAY.2021 18:41:46

Highest Channel / QPSK



Date: 3.MAY.2021 18:42:55



Frequency Stability

Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0035	
30	Normal Voltage	0.0002	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0033	
-30	Normal Voltage	0.0012	
20	Maximum Voltage	0.0064	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0055	

Note:

- 1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.67 V. ; Maximum Voltage =4.26 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

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	-62.00	-13	-49.00	-73.98	-67.31	1.83	9.29	H
	2474	-40.26	-13	-27.26	-56.85	-46.51	2.25	10.64	H
	3298	-58.65	-13	-45.65	-77.35	-66.17	2.62	12.29	H
	4123	-55.53	-13	-42.53	-77	-63.18	2.90	12.70	H
									H
									H
	1649	-61.49	-13	-48.49	-73.93	-66.80	1.83	9.29	V
	2474	-42.64	-13	-29.64	-59.45	-48.89	2.25	10.64	V
	3298	-58.09	-13	-45.09	-77.19	-65.61	2.62	12.29	V
	4123	-50.40	-13	-37.40	-72.4	-58.05	2.90	12.70	V
									V
									V
Middle	1664	-61.30	-13	-48.30	-73.39	-66.69	1.84	9.38	H
	2496	-42.21	-13	-29.21	-58.97	-48.58	2.26	10.78	H
	3328	-58.63	-13	-45.63	-77.25	-66.37	2.64	12.52	H
	4160	-56.02	-13	-43.02	-77.6	-63.65	2.92	12.70	H
									H
									H
	1664	-60.40	-13	-47.40	-72.96	-65.79	1.84	9.38	V
	2496	-47.88	-13	-34.88	-64.71	-54.25	2.26	10.78	V
	3328	-58.26	-13	-45.26	-77.28	-66.00	2.64	12.52	V
	4160	-54.89	-13	-41.89	-77.03	-62.52	2.92	12.70	V
									V
									V



Highest	1679	-61.66	-13	-48.66	-73.87	-67.13	1.85	9.47	H
	2519	-41.85	-13	-28.85	-58.55	-48.23	2.27	10.80	H
	3358	-58.36	-13	-45.36	-76.92	-66.24	2.65	12.68	H
	4198	-56.68	-13	-43.68	-78.39	-64.29	2.94	12.70	H
									H
									H
									H
	1679	-60.79	-13	-47.79	-73.47	-66.26	1.85	9.47	V
	2519	-45.89	-13	-32.89	-62.75	-52.27	2.27	10.80	V
	3358	-58.37	-13	-45.37	-77.31	-66.25	2.65	12.68	V
	4198	-56.03	-13	-43.03	-78.33	-63.64	2.94	12.70	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	3422	-58.63	-13	-45.63	-78.07	-69.53	1.23	12.13	H	
	5133	-54.49	-13	-41.49	-78.83	-65.38	1.97	12.86	H	
	6844	-51.23	-13	-38.23	-79.28	-60.19	2.34	11.30	H	
										H
										H
										H
										H
	3422	-58.37	-13	-45.37	-78.16	-69.27	1.23	12.13	V	
	5133	-54.39	-13	-41.39	-79.28	-65.28	1.97	12.86	V	
	6844	-50.78	-13	-37.78	-79.2	-59.74	2.34	11.30	V	
										V
										V
										V
										V
Middle	3447	-58.60	-13	-45.60	-78.27	-68.51	2.69	12.60	H	
	5170	-54.44	-13	-41.44	-78.92	-63.73	3.33	12.62	H	
	6894	-50.94	-13	-37.94	-79.15	-59.11	3.88	12.05	H	
										H
										H
										H
										H
	3447	-58.11	-13	-45.11	-78.15	-68.02	2.69	12.60	V	
	5170	-54.12	-13	-41.12	-79.12	-63.41	3.33	12.62	V	
	6894	-50.86	-13	-37.86	-79.27	-59.03	3.88	12.05	V	
										V
										V
										V
										V



Highest	3472	-58.08	-13	-45.08	-77.94	-69.08	1.24	12.24	H
	5208	-54.52	-13	-41.52	-79.11	-65.49	1.97	12.95	H
	6944	-50.76	-13	-37.76	-79.12	-60.02	2.36	11.62	H
									H
									H
									H
									H
	3472	-57.83	-13	-44.83	-78.1	-68.83	1.24	12.24	V
	5208	-54.42	-13	-41.42	-79.49	-65.39	1.97	12.95	V
	6944	-50.42	-13	-37.42	-78.82	-59.68	2.36	11.62	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	-63.73	-13	-50.73	-75.02	-66.79	1.69	6.89	H
	2099	-62.09	-13	-49.09	-76.70	-67.37	2.08	9.51	H
	2798	-60.07	-13	-47.07	-77.64	-66.72	2.39	11.19	H
									H
									H
									H
									H
	1399	-63.50	-13	-50.50	-74.98	-66.56	1.69	6.89	V
	2099	-61.55	-13	-48.55	-76.63	-66.83	2.08	9.51	V
	2798	-59.53	-13	-46.53	-77.36	-66.18	2.39	11.19	V
									V
									V
									V
									V
Middle	1406	-63.84	-13	-50.84	-75.20	-66.95	1.69	6.95	H
	2109	-61.91	-13	-48.91	-76.64	-67.09	2.08	9.41	H
	2812	-59.99	-13	-46.99	-77.57	-66.64	2.40	11.20	H
									H
									H
									H
									H
	1406	-63.47	-13	-50.47	-74.99	-66.58	1.69	6.95	V
	2109	-61.54	-13	-48.54	-76.76	-66.72	2.08	9.41	V
	2812	-59.62	-13	-46.62	-77.49	-66.27	2.40	11.20	V
									V
									V
									V
									V



Highest	1413	-63.49	-13	-50.49	-74.93	-66.65	1.69	7.00	H
	2120	-62.11	-13	-49.11	-76.96	-67.17	2.09	9.30	H
	2826	-59.79	-13	-46.79	-77.37	-66.44	2.40	11.20	H
									H
									H
									H
									H
	1413	-62.84	-13	-49.84	-74.41	-66.00	1.69	7.00	V
	2120	-60.79	-13	-47.79	-76.15	-65.85	2.09	9.30	V
	2826	-59.49	-13	-46.49	-77.38	-66.14	2.40	11.20	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	1555	-55.40	-13	-42.40	-67.39	-60.10	1.78	8.63	H	
	2332	-46.54	-13	-33.54	-62.46	-51.90	2.18	9.69	H	
	3109	-58.32	-13	-45.32	-76.64	-64.96	2.53	11.32	H	
										H
										H
										H
										H
	1555	-57.33	-13.00	-44.33	-69.43	-62.03	1.78	8.63	V	
	2332	-46.05	-13	-33.05	-62.68	-51.41	2.18	9.69	V	
	3109	-57.59	-13	-44.59	-76.46	-64.23	2.53	11.32	V	
										V
										V
										V
										V
Middle	1560	-53.50	-42.15	-11.35	-65.45	-58.23	1.78	8.66	H	
	2340	-45.15	-13	-32.15	-61.08	-50.55	2.19	9.74	H	
	3119	-58.55	-13	-45.55	-76.93	-65.20	2.54	11.34	H	
										H
										H
										H
										H
	1560	-54.79	-42.15	-12.64	-66.88	-59.52	1.78	8.66	V	
	2340	-45.55	-13	-32.55	-62.19	-50.95	2.19	9.74	V	
	3119	-57.99	-13	-44.99	-76.91	-64.64	2.54	11.34	V	
										V
										V
										V
										V



Highest	1565	-54.00	-42.15	-11.85	-65.90	-58.75	1.79	8.69	H
	2347	-45.50	-13	-32.50	-61.45	-50.94	2.19	9.78	H
	3129	-58.09	-13	-45.09	-76.55	-64.76	2.54	11.36	H
									H
									H
									H
									H
	1565	-54.71	-42.15	-12.56	-66.79	-59.46	1.79	8.69	V
	2347	-45.27	-13	-32.27	-61.93	-50.71	2.19	9.78	V
	3129	-57.55	-13	-44.55	-76.53	-64.22	2.54	11.36	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	1555	-56.43	-13	-43.43	-68.42	-61.13	1.78	8.63	H
	2334	-45.37	-13	-32.37	-61.29	-50.74	2.18	9.70	H
	3110	-58.49	-13	-45.49	-76.82	-65.13	2.53	11.32	H
									H
									H
									H
									H
	1555	-57.34	-13	-44.34	-69.44	-62.04	1.78	8.63	V
	2334	-44.48	-13	-31.48	-61.11	-49.85	2.18	9.70	V
	3110	-58.13	-13	-45.13	-77.01	-64.77	2.53	11.32	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	-55.29	-25	-30.29	-79.14	-64.61	3.27	12.59	H
	7503	-49.08	-25	-24.08	-78.58	-56.28	4.00	11.20	H
	10004	-46.21	-25	-21.21	-79.58	-52.75	4.67	11.21	H
									H
									H
									H
									H
	5002	-54.47	-25	-29.47	-79	-63.79	3.27	12.59	V
	7503	-49.19	-25	-24.19	-79.04	-56.39	4.00	11.20	V
	10004	-46.62	-25	-21.62	-79.75	-53.16	4.67	11.21	V
									V
									V
									V
									V
Middle	5052	-55.22	-25	-30.22	-79.25	-64.33	3.29	12.40	H
	7578	-49.67	-25	-24.67	-78.82	-56.95	4.03	11.31	H
	10107	-46.09	-25	-21.09	-79.71	-52.78	4.70	11.39	H
									H
									H
									H
									H
	5052	-54.75	-25	-29.75	-79.41	-63.86	3.29	12.40	V
	7578	-48.96	-25	-23.96	-78.61	-56.24	4.03	11.31	V
	10107	-46.76	-25	-21.76	-79.95	-53.45	4.70	11.39	V
									V
									V
									V
									V



Highest	5100	-54.71	-25	-29.71	-78.93	-63.70	3.31	12.30	H
	7653	-49.41	-25	-24.41	-78.5	-56.86	4.06	11.51	H
	10206	-46.29	-25	-21.29	-80.14	-52.85	4.73	11.29	H
									H
									H
									H
									H
	5100	-54.05	-25	-29.05	-78.85	-63.04	3.31	12.30	V
	7653	-49.03	-25	-24.03	-78.65	-56.48	4.06	11.51	V
	10206	-46.87	-25	-21.87	-80.12	-53.43	4.73	11.29	V
									V
									V
									V
									V

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



LTE Band 41

LTE Band 41 / 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	4992	-54.94	-25	-29.94	-78.77	-64.29	3.27	12.62	H
	7491	-49.51	-25	-24.51	-79.02	-56.69	4.00	11.18	H
	9990	-46.36	-25	-21.36	-79.72	-52.87	4.67	11.18	H
									H
									H
									H
									H
	4992	-54.58	-25	-29.58	-79.08	-63.93	3.27	12.62	V
	7491	-48.79	-25	-23.79	-78.67	-55.97	4.00	11.18	V
	9990	-46.29	-25	-21.29	-79.4	-52.80	4.67	11.18	V
									V
									V
									V
									V
Middle	5166	-54.55	-25	-29.55	-79.02	-63.82	3.33	12.60	H
	7752	-49.47	-25	-24.47	-78.66	-57.27	4.09	11.89	H
	10332	-45.66	-25	-20.66	-79.82	-51.83	4.77	10.94	H
									H
									H
									H
									H
	5166	-54.07	-25	-29.07	-79.06	-63.34	3.33	12.60	V
	7752	-48.70	-25	-23.70	-78.39	-56.50	4.09	11.89	V
	10332	-46.32	-25	-21.32	-79.65	-52.49	4.77	10.94	V
									V
									V
									V
									V
								V	



Highest	5340	-54.72	-25	-29.72	-79.36	-64.81	3.39	13.48	H
	8013	-47.93	-25	-22.93	-77.89	-54.60	4.18	10.85	H
	10683	-44.78	-25	-19.78	-79.35	-50.99	4.86	11.07	H
									H
									H
									H
									H
	5340	-54.48	-25	-29.48	-79.38	-64.57	3.39	13.48	V
	8013	-48.31	-25	-23.31	-78.4	-54.98	4.18	10.85	V
	10683	-45.77	-25	-20.77	-79.42	-51.98	4.86	11.07	V
									V
									V
									V
									V

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

————THE END————