



Appendix B. Test Results of ERP/EIRP and Radiated Test

ERP/EIRP

LTE Band 4 / 1.4MHz (Average) (GT - LC = 3.22 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.78	0.1507	25.00	0.3162
Middle		1	0	21.55	0.1429	24.77	0.2999
Highest		1	0	21.45	0.1396	24.67	0.2931
Lowest	16QAM	3	1	21.48	0.1406	24.70	0.2951
Middle		3	1	21.40	0.1380	24.62	0.2897
Highest		3	1	21.24	0.1330	24.46	0.2793
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 3MHz (Average) (GT - LC = 3.22 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.75	0.1496	24.97	0.3141
Middle		1	0	21.70	0.1479	24.92	0.3105
Highest		1	0	21.20	0.1318	24.42	0.2767
Lowest	16QAM	1	14	21.15	0.1303	24.37	0.2735
Middle		1	14	20.95	0.1245	24.17	0.2612
Highest		1	14	21.46	0.1400	24.68	0.2938
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 5MHz (Average) (GT - LC = 3.22 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	12	21.44	0.1393	24.66	0.2924
Middle		1	12	21.43	0.1390	24.65	0.2917
Highest		1	12	21.51	0.1416	24.73	0.2972
Lowest	16QAM	1	24	20.81	0.1205	24.03	0.2529
Middle		1	24	20.96	0.1247	24.18	0.2618
Highest		1	24	21.47	0.1403	24.69	0.2944
Limit	EIRP < 1W			Result		PASS	



LTE Band 4 / 10MHz (Average) (GT - LC = 3.22 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	25	21.21	0.1321	24.43	0.2773
Middle		1	25	21.24	0.1330	24.46	0.2793
Highest		1	25	21.66	0.1466	24.88	0.3076
Lowest	16QAM	1	0	21.43	0.1390	24.65	0.2917
Middle		1	0	21.22	0.1324	24.44	0.2780
Highest		1	0	21.37	0.1371	24.59	0.2877
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 15MHz (Average) (GT - LC = 3.22 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.45	0.1396	24.67	0.2931
Middle		1	0	21.34	0.1361	24.56	0.2858
Highest		1	0	21.64	0.1459	24.86	0.3062
Lowest	16QAM	1	0	21.34	0.1361	24.56	0.2858
Middle		1	0	21.13	0.1297	24.35	0.2723
Highest		1	0	21.24	0.1330	24.46	0.2793
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 20MHz (Average) (GT - LC = 3.22 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.57	0.1435	24.79	0.3013
Middle		1	0	21.79	0.1510	25.01	0.3170
Highest		1	0	21.72	0.1486	24.94	0.3119
Lowest	16QAM	1	0	21.28	0.1343	24.50	0.2818
Middle		1	0	21.09	0.1285	24.31	0.2698
Highest		1	0	21.36	0.1368	24.58	0.2871
Limit	EIRP < 1W			Result		PASS	



LTE Band 13 / 5MHz (Average) (GT - LC = 0.53 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	22.58	0.1811	20.96	0.1247
Middle		1	0	22.74	0.1879	21.12	0.1294
Highest		1	0	22.29	0.1694	20.67	0.1167
Lowest	16QAM	1	0	21.40	0.1380	19.78	0.0951
Middle		1	0	21.45	0.1396	19.83	0.0962
Highest		1	0	21.23	0.1327	19.61	0.0914
Limit	ERP < 3W			Result		PASS	

LTE Band 13 / 10MHz (Average) (GT - LC = 0.53 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	-	-	-	-	-	-
Middle		1	0	22.75	0.1884	21.13	0.1297
Highest		-	-	-	-	-	-
Lowest	16QAM	-	-	-	-	-	-
Middle		1	49	21.46	0.1400	19.84	0.0964
Highest		-	-	-	-	-	-
Limit	ERP < 3W			Result		PASS	

**Radiated Spurious Emission****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	-53.08	-13	-40.08	-72.84	-59.15	1.58	7.65	H
	5136	-50.31	-13	-37.31	-73.81	-57.59	2.42	9.70	H
	6846	-54.05	-13	-41.05	-80.19	-62.03	2.64	10.62	H
									H
									H
									H
									H
	3420	-53.56	-13	-40.56	-73.3	-59.63	1.58	7.65	V
	5136	-46.99	-13	-33.99	-70.45	-54.27	2.42	9.70	V
	6846	-52.44	-13	-39.44	-78.55	-60.42	2.64	10.62	V
									V
									V
									V
									V



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)
Middle	3450	-52.76	-13	-39.76	-72.7	-58.95	1.59	7.78	H
	5172	-44.46	-13	-31.46	-68.08	-51.72	2.44	9.70	H
	6894	-52.93	-13	-39.93	-79.09	-60.98	2.62	10.67	H
									H
									H
									H
									H
	3450	-53.94	-13	-40.94	-73.83	-60.13	1.59	7.78	V
	5172	-44.07	-13	-31.07	-67.57	-51.33	2.44	9.70	V
	6894	-53.54	-13	-40.54	-79.7	-61.59	2.62	10.67	V
									V
									V
									V
									V
Highest	3474	-50.57	-13	-37.57	-70.64	-56.86	1.60	7.89	H
	5208	-48.68	-13	-35.68	-72.48	-55.92	2.46	9.70	H
	6942	-52.85	-13	-39.85	-79.08	-60.97	2.61	10.73	H
									H
									H
									H
									H
	3474	-53.77	-13	-40.77	-73.71	-60.06	1.60	7.89	V
	5208	-43.78	-13	-30.78	-67.4	-51.02	2.46	9.70	V
	6942	-51.71	-13	-38.71	-77.93	-59.83	2.61	10.73	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	1552	-55.46	-13	-42.46	-66.69	-57.53	0.94	5.15	H
	2328	-60.27	-13	-47.27	-76.94	-61.77	1.24	4.88	H
	3104	-58.84	-13	-45.84	-77.20	-61.47	1.48	6.26	H
	3888	-56.22	-13	-43.22	-76.41	-60.81	1.73	8.47	H
	4664	-54.34	-13	-41.34	-76.68	-59.07	2.14	9.03	H
									H
									H
	1552	-54.57	-13	-41.57	-66.34	-56.64	0.94	5.15	V
	2328	-60.06	-13	-47.06	-77.06	-61.56	1.24	4.88	V
	3104	-58.54	-13	-45.54	-77.65	-61.17	1.48	6.26	V
	3888	-56.36	-13	-43.36	-76.74	-60.95	1.73	8.47	V
	4664	-55.69	-13	-42.69	-77.97	-60.42	2.14	9.03	V
									V
									V
Middle	1560	-56.93	-42.15	-14.78	-68.34	-58.97	0.94	5.13	H
	2338	-60.26	-13	-47.26	-76.96	-61.78	1.24	4.91	H
	3118	-58.98	-13	-45.98	-77.48	-61.66	1.48	6.32	H
	3896	-56.33	-13	-43.33	-76.59	-60.93	1.73	8.48	H
	4680	-55.21	-13	-42.21	-77.52	-59.97	2.15	9.06	H
									H
									H
	1560	-57.54	-42.15	-15.39	-69.46	-59.58	0.94	5.13	V
	2338	-59.66	-13	-46.66	-76.75	-61.18	1.24	4.91	V
	3118	-58.47	-13	-45.47	-77.63	-61.15	1.48	6.32	V
	3896	-56.44	-13	-43.44	-76.83	-61.04	1.73	8.48	V
	4680	-56.63	-13	-43.63	-78.95	-61.39	2.15	9.06	V
									V
									V



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)
Highest	1568	-62.70	-42.15	-20.55	-74.07	-64.72	0.94	5.11	H
	2344	-60.06	-13	-47.06	-76.74	-61.60	1.24	4.93	H
	3138	-59.22	-13	-46.22	-77.74	-61.99	1.49	6.41	H
	3912	-55.34	-13	-42.34	-75.58	-59.95	1.73	8.49	H
	4696	-51.96	-13	-38.96	-74.39	-56.74	2.16	9.09	H
									H
									H
	1568	-62.26	-42.15	-20.11	-74.14	-64.28	0.94	5.11	V
	2344	-58.05	-13	-45.05	-75.16	-59.59	1.24	4.93	V
	3138	-58.49	-13	-45.49	-77.72	-61.26	1.49	6.41	V
	3912	-55.87	-13	-42.87	-76.28	-60.48	1.73	8.49	V
	4696	-54.16	-13	-41.16	-76.57	-58.94	2.16	9.09	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	1552	-53.67	-13	-40.67	-64.84	-55.74	0.94	5.15	H
	2331	-60.24	-13	-47.24	-76.78	-61.75	1.24	4.89	H
	3108	-59.11	-13	-46.11	-77.45	-61.75	1.48	6.28	H
	3885	-56.32	-13	-43.32	-76.55	-60.91	1.72	8.46	H
	4662	-55.18	-13	-42.18	-77.42	-59.91	2.14	9.02	H
									H
									H
	1552	-53.28	-13	-40.28	-65.04	-55.35	0.94	5.15	V
	2331	-59.97	-13	-46.97	-77	-61.48	1.24	4.89	V
	3108	-58.28	-13	-45.28	-77.39	-60.92	1.48	6.28	V
	3885	-56.37	-13	-43.37	-76.76	-60.96	1.72	8.46	V
	4662	-56.66	-13	-43.66	-78.89	-61.39	2.14	9.02	V
									V
									V

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