Appendix B: Test Results of Radiated Spurious Emissions

Worst Mode 30MHz ~ 1000MHz

LTE Band 5											
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor	Cable Factor	Pre-Amplifier	Correction Factor (dB/m)
High	Horizontal										
	100	-69.12	-13	-56.12	215	360	38.95	15.34	0.77	26.77	-105.92
	287	-73.56	-13	-60.56	158	360	28.86	19.7	1.3	26.01	-100.27
	418	-71.53	-13	-58.53	100	230	28.51	22.6	1.59	26.82	-97.89
	589	-68.64	-13	-55.64	300	13	28.51	25.89	1.92	27.55	-95
	729	-65.3	-13	-52.3	132	360	29.97	27.49	2.11	27.46	-93.12
	919	-63.96	-13	-50.96	100	336	28.3	29.89	2.37	27.11	-90.11
	Vertical										
	101	-66.42	-13	-53.42	300	248	41.49	15.48	0.78	26.76	-105.76
	222	-72.61	-13	-59.61	100	360	32.88	16.98	1.14	26.2	-103.34
	379	-72.61	-13	-59.61	100	360	28.07	21.78	1.5	26.55	-98.53
	547	-68.73	-13	-55.73	100	158	29.13	25.18	1.84	27.47	-95.71
	745	-65.5	-13	-52.5	300	359	28.97	28.23	2.14	27.43	-92.32
	911	-63.44	-13	-50.44	200	360	29	29.73	2.36	27.12	-90.29

Remarks:

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m) – 2.15
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre Amp(dB) + 20log(D) – 104.8
3. Margin value = ERP – Limit
4. The other ERP levels were very low against the limit.

1GHz ~ 9GHz

LTE Band 5											
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor	Cable Factor	Pre-Amplifier	Correction Factor (dB/m)
Low	Horizontal										
	1657	-46.54	-13	-33.54	300	268	67.82	29	4.95	50.9	-112.21
	2486	-53.75	-13	-40.75	200	226	55.82	32.8	6.15	51.11	-107.42
	3315	-58.19	-13	-45.19	400	338	50.05	33.17	7.15	51.15	-106.09
	4144	-57.59	-13	-44.59	400	66	49.35	33.71	8.03	51.27	-104.79
	Vertical										
	1657	-51.22	-13	-38.22	300	180	63.14	29	4.95	50.9	-112.21
	2486	-58.13	-13	-45.13	400	125	51.44	32.8	6.15	51.11	-107.42
	3315	-57.39	-13	-44.39	300	7	50.85	33.17	7.15	51.15	-106.09
	4144	-55.21	-13	-42.21	400	328	51.73	33.71	8.03	51.27	-104.79
Mid	Horizontal										
	1672	-44.7	-13	-31.7	400	308	69.46	29.22	4.98	50.95	-112.01
	2509	-52.66	-13	-39.66	200	210	56.92	32.76	6.18	51.11	-107.43
	3345	-57.83	-13	-44.83	100	116	50.44	33.11	7.18	51.15	-106.12
	Vertical										
	1672	-53.81	-13	-40.81	400	221	60.35	29.22	4.98	50.95	-112.01
	2509	-58.74	-13	-45.74	362	360	50.84	32.76	6.18	51.11	-107.43
	3345	-56.54	-13	-43.54	100	360	51.73	33.11	7.18	51.15	-106.12
High	Horizontal										
	1687	-42.01	-13	-29.01	400	250	71.93	29.42	5	50.95	-111.79
	2531	-49.93	-13	-36.93	300	87	59.71	32.68	6.2	51.11	-107.49
	3375	-58.32	-13	-45.32	200	224	49.97	33.05	7.22	51.15	-106.14
	4219	-53.37	-13	-40.37	100	280	53.31	33.94	8.1	51.31	-104.53
	Vertical										
	1687	-45.68	-13	-32.68	400	217	68.26	29.42	5	50.95	-111.79
	2531	-56.32	-13	-43.32	308	360	53.32	32.68	6.2	51.11	-107.49
	3375	-55.48	-13	-42.48	304	360	52.81	33.05	7.22	51.15	-106.14
	4219	-54.94	-13	-41.94	272	360	51.74	33.94	8.1	51.31	-104.53

Remarks:

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m) – 2.15
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre Amp(dB) + 20log(D) – 104.8
3. Margin value = ERP – Limit
4. The other ERP levels were very low against the limit.