

Appendix B: Test Results of Radiated Spurious Emissions

Worst Mode 30MHz ~ 1000MHz

EDGE1900												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor	Cable Factor	Pre- Amplifier	Correction Factor (dB/m)	Polarization (H/V)
Mid	49.4	-78.53	-13	-65.53	100	161	22.37	20.76	0.54	26.94	-100.9	H
	165.8	-77.04	-13	-64.04	300	327	23.91	19.8	0.95	26.44	-100.95	H
	305.48	-75.67	-13	-62.67	300	276	24.2	20.11	1.29	26.01	-99.87	H
	494.63	-72.13	-13	-59.13	200	260	24.93	23.89	1.65	27.34	-97.06	H
	709	-67.05	-13	-54.05	254	0	26.01	27.62	2.07	27.49	-93.06	H
	845.77	-64.86	-13	-51.86	300	159	26.31	29.08	2.27	27.26	-91.17	H
	154	-77.34	-13	-64.34	200	266	23.89	19.62	0.91	26.5	-101.23	V
	327.79	-75.17	-13	-62.17	100	195	24.12	20.81	1.33	26.17	-99.29	V
	519.85	-72.47	-13	-59.47	300	189	23.91	24.59	1.71	27.42	-96.38	V
	666.32	-69.66	-13	-56.66	282	0	24.28	26.83	2.01	27.52	-93.94	V
	728.4	-66.73	-13	-53.73	200	329	26.42	27.47	2.1	27.46	-93.15	V
	845.77	-64.41	-13	-51.41	300	301	26.76	29.08	2.27	27.26	-91.17	V

Remarks:

- EIRP(dBm) = Reading(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre Amp(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit
- The other EIRP levels were very low against the limit.

1GHz ~ 18GHz

GSM1900												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor	Cable Factor	Pre- Amplifier	Correction Factor (dB/m)	Polarization (H/V)
Low	3700	-36.27	-13	-23.27	300	166	71.61	33.5	6.3	52.42	-107.88	H
	5550	-14.76	-13	-1.76	400	132	90.42	35.4	7.71	53.03	-105.18	H
	7401	-44.59	-13	-31.59	108	360	59.78	36	8.91	54.02	-104.37	H
	9251	-36.15	-13	-23.15	100	94	66.14	37.1	10.02	54.15	-102.29	H
	11101	-47.14	-13	-34.14	100	159	52.01	38.6	11.05	53.54	-99.15	H
	12951	-41.21	-13	-28.21	100	174	55.78	39.35	12.03	53.11	-96.99	H
	14802	-34.15	-13	-21.15	200	27	60.84	39.9	12.87	52.5	-94.99	H
	3700	-37.85	-13	-24.85	100	78	70.03	33.5	6.3	52.42	-107.88	V
	5550	-14.28	-13	-1.28	200	104	90.9	35.4	7.71	53.03	-105.18	V
	7401	-44.26	-13	-31.26	100	84	60.11	36	8.91	54.02	-104.37	V
	9251	-28.44	-13	-15.44	100	333	73.85	37.1	10.02	54.15	-102.29	V
	11101	-44.74	-13	-31.74	369	360	54.41	38.6	11.05	53.54	-99.15	V
	12951	-38.05	-13	-25.05	100	17	58.94	39.35	12.03	53.11	-96.99	V
	14802	-39.23	-13	-26.23	100	352	55.76	39.9	12.87	52.5	-94.99	V
Mid	3760	-42.83	-13	-29.83	100	298	64.84	33.7	6.35	52.46	-107.67	H
	5640	-13.88	-13	-0.88	100	298	91.22	35.46	7.78	53.08	-105.1	H
	7520	-48.32	-13	-35.32	300	0	56.02	36.04	8.98	54.1	-104.34	H
	9400	-30.1	-13	-17.1	200	59	71.84	37.4	10.1	54.18	-101.94	H
	11281	-45.51	-13	-32.51	100	311	53.35	38.68	11.15	53.43	-98.86	H
	13161	-47.61	-13	-34.61	115	360	49.46	39.16	12.13	53.1	-97.07	H
	15041	-37.84	-13	-24.84	200	62	57.1	39.84	12.97	52.49	-94.94	H
	3760	-44.48	-13	-31.48	300	138	63.19	33.7	6.35	52.46	-107.67	V
	5640	-13.91	-13	-0.91	300	218	91.19	35.46	7.78	53.08	-105.1	V
	7520	-49.09	-13	-36.09	100	131	55.25	36.04	8.98	54.1	-104.34	V
	9400	-27.41	-13	-14.41	100	330	74.53	37.4	10.1	54.18	-101.94	V
	11281	-46.03	-13	-33.03	300	154	52.83	38.68	11.15	53.43	-98.86	V
	13161	-42.4	-13	-29.4	116	360	54.67	39.16	12.13	53.1	-97.07	V
	15041	-40.74	-13	-27.74	100	95	54.2	39.84	12.97	52.49	-94.94	V

GSM1900												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor	Cable Factor	Pre- Amplifier	Correction Factor (dB/m)	Polarization (H/V)
High	3819	-44.53	-13	-31.53	100	268	63.16	33.66	6.4	52.49	-107.69	H
	5730	-13.86	-13	-0.86	300	304	91.18	35.52	7.84	53.14	-105.04	H
	7639	-49.98	-13	-36.98	400	39	54.15	36.2	9.06	54.13	-104.13	H
	9549	-28.26	-13	-15.26	226	0	73.62	37.4	10.18	54.2	-101.88	H
	11458	-47.72	-13	-34.72	200	251	50.86	38.76	11.25	53.33	-98.58	H
	13369	-43.05	-13	-30.05	100	10	53.92	39.16	12.23	53.1	-96.97	H
	15279	-38.96	-13	-25.96	400	76	55.68	39.98	13.08	52.44	-94.64	H
	3819	-44.61	-13	-31.61	100	53	63.08	33.66	6.4	52.49	-107.69	V
	5730	-13.7	-13	-0.7	200	74	91.34	35.52	7.84	53.14	-105.04	V
	7639	-48.6	-13	-35.6	300	153	55.53	36.2	9.06	54.13	-104.13	V
	9549	-23.99	-13	-10.99	100	329	77.89	37.4	10.18	54.2	-101.88	V
	11458	-48.39	-13	-35.39	200	192	50.19	38.76	11.25	53.33	-98.58	V
	13369	-40.14	-13	-27.14	100	360	56.83	39.16	12.23	53.1	-96.97	V
	15279	-40.37	-13	-27.37	200	339	54.27	39.98	13.08	52.44	-94.64	V

Remarks:

1. $EIRP(dBm) = Reading(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre\ Amp(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit$
4. The other EIRP levels were very low against the limit.

EDGE1900												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor	Cable Factor	Pre- Amplifier	Correction Factor (dB/m)	Polarization (H/V)
Low	3700	-37.09	-13	-24.09	300	239	70.79	33.5	6.3	52.42	-107.88	H
	5551	-15.24	-13	-2.24	300	318	89.94	35.4	7.71	53.03	-105.18	H
	7401	-43.85	-13	-30.85	200	353	60.52	36	8.91	54.02	-104.37	H
	9251	-32.88	-13	-19.88	100	49	69.41	37.1	10.02	54.15	-102.29	H
	11102	-47.45	-13	-34.45	200	300	51.7	38.6	11.05	53.54	-99.15	H
	12951	-42.14	-13	-29.14	132	360	54.85	39.35	12.03	53.11	-96.99	H
	14803	-33.67	-13	-20.67	100	62	61.32	39.9	12.87	52.5	-94.99	H
	3700	-35.27	-13	-22.27	300	158	72.61	33.5	6.3	52.42	-107.88	V
	5551	-14.18	-13	-1.18	100	272	91	35.4	7.71	53.03	-105.18	V
	7401	-43.56	-13	-30.56	371	360	60.81	36	8.91	54.02	-104.37	V
	9251	-28.66	-13	-15.66	201	0	73.63	37.1	10.02	54.15	-102.29	V
	11102	-42.95	-13	-29.95	100	56	56.2	38.6	11.05	53.54	-99.15	V
	12951	-40.57	-13	-27.57	100	115	56.42	39.35	12.03	53.11	-96.99	V
	14803	-37.51	-13	-24.51	300	57	57.48	39.9	12.87	52.5	-94.99	V
Mid	3760	-42.88	-13	-29.88	100	321	64.79	33.7	6.35	52.46	-107.67	H
	5640	-13.48	-13	-0.48	200	294	91.62	35.46	7.78	53.08	-105.1	H
	7520	-48.96	-13	-35.96	109	360	55.38	36.04	8.98	54.1	-104.34	H
	9400	-31.09	-13	-18.09	300	353	70.85	37.4	10.1	54.18	-101.94	H
	11280	-43.79	-13	-30.79	200	300	55.07	38.68	11.15	53.43	-98.86	H
	13160	-45.26	-13	-32.26	100	359	51.81	39.16	12.13	53.1	-97.07	H
	15040	-37.97	-13	-24.97	100	66	56.97	39.84	12.97	52.49	-94.94	H
	3760	-43.64	-13	-30.64	394	360	64.03	33.7	6.35	52.46	-107.67	V
	5640	-13.64	-13	-0.64	100	180	91.46	35.46	7.78	53.08	-105.1	V
	7520	-47.6	-13	-34.6	300	21	56.74	36.04	8.98	54.1	-104.34	V
	9400	-26.49	-13	-13.49	200	346	75.45	37.4	10.1	54.18	-101.94	V
	11280	-45.09	-13	-32.09	100	202	53.77	38.68	11.15	53.43	-98.86	V
	13160	-43.01	-13	-30.01	116	360	54.06	39.16	12.13	53.1	-97.07	V
	15040	-39.63	-13	-26.63	200	29	55.31	39.84	12.97	52.49	-94.94	V

WCDMA Band II												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor	Cable Factor	Pre- Amplifier	Correction Factor (dB/m)	Polarization (H/V)
Low	3704	-46.78	-13	-33.78	100	115	61.08	33.52	6.3	52.42	-107.86	H
	5557	-33.63	-13	-20.63	300	142	71.55	35.39	7.72	53.03	-105.18	H
	7409	-53.78	-13	-40.78	400	360	50.58	36.02	8.91	54.03	-104.36	H
	3704	-45.31	-13	-32.31	302	360	62.55	33.52	6.3	52.42	-107.86	V
	5557	-30.28	-13	-17.28	100	182	74.9	35.39	7.72	53.03	-105.18	V
	7409	-54.5	-13	-41.5	200	296	49.86	36.02	8.91	54.03	-104.36	V
Mid	3763	-39.27	-13	-26.27	200	177	68.4	33.7	6.35	52.46	-107.67	H
	5643	-30.25	-13	-17.25	300	163	74.85	35.47	7.78	53.09	-105.1	H
	7526	-49.26	-13	-36.26	400	360	55.07	36.05	8.99	54.11	-104.33	H
	9395	-47.93	-13	-34.93	100	59	54.03	37.38	10.1	54.18	-101.96	H
	3763	-37.17	-13	-24.17	100	121	70.5	33.7	6.35	52.46	-107.67	V
	5643	-25.33	-13	-12.33	200	177	79.77	35.47	7.78	53.09	-105.1	V
	7526	-46.13	-13	-33.13	100	115	58.2	36.05	8.99	54.11	-104.33	V
	9395	-49.45	-13	-36.45	100	0	52.51	37.38	10.1	54.18	-101.96	V
High	3813	-46.29	-13	-33.29	400	182	61.39	33.67	6.4	52.49	-107.68	H
	5719	-31	-13	-18	200	136	74.08	35.48	7.83	53.13	-105.08	H
	7630	-53.57	-13	-40.57	300	186	50.57	36.2	9.05	54.13	-104.14	H
	3813	-48.04	-13	-35.04	100	55	59.64	33.67	6.4	52.49	-107.68	V
	5719	-26.34	-13	-13.34	200	194	78.74	35.48	7.83	53.13	-105.08	V
	7630	-53.97	-13	-40.97	200	142	50.17	36.2	9.05	54.13	-104.14	V

Remarks:

1. $EIRP(dBm) = Reading(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre\ Amp(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit$
4. The other EIRP levels were very low against the limit.

LTE Band 2												
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor	Cable Factor	Pre- Amplifier	Correction Factor (dB/m)	Polarization (H/V)
Low	3720	-30.88	-13	-17.88	300	171	76.92	33.58	6.31	52.43	-107.8	H
	5580	-26.95	-13	-13.95	300	95	78.29	35.34	7.73	53.05	-105.24	H
	7440	-42.02	-13	-29.02	200	116	62.28	36.08	8.93	54.05	-104.3	H
	9300	-47.15	-13	-34.15	100	360	55.02	37.2	10.05	54.16	-102.17	H
	3720	-34.47	-13	-21.47	300	178	73.33	33.58	6.31	52.43	-107.8	V
	5580	-27.08	-13	-14.08	400	184	78.16	35.34	7.73	53.05	-105.24	V
	7440	-42.17	-13	-29.17	100	128	62.13	36.08	8.93	54.05	-104.3	V
	9300	-44.85	-13	-31.85	100	102	57.32	37.2	10.05	54.16	-102.17	V
Mid	3760	-29.1	-13	-16.1	300	101	78.57	33.7	6.35	52.46	-107.67	H
	5640	-17.35	-13	-4.35	300	132	87.75	35.46	7.78	53.08	-105.1	H
	7520	-41.21	-13	-28.21	200	63	63.13	36.04	8.98	54.1	-104.34	H
	9400	-43.05	-13	-30.05	100	129	58.89	37.4	10.1	54.18	-101.94	H
	3760	-30.92	-13	-17.92	400	166	76.75	33.7	6.35	52.46	-107.67	V
	5640	-22.87	-13	-9.87	400	185	82.23	35.46	7.78	53.08	-105.1	V
	7520	-40.12	-13	-27.12	100	360	64.22	36.04	8.98	54.1	-104.34	V
	9400	-42	-13	-29	100	73	59.94	37.4	10.1	54.18	-101.94	V
High	3800	-30.68	-13	-17.68	200	168	76.98	33.7	6.38	52.48	-107.66	H
	5700	-27.15	-13	-14.15	300	214	78.01	35.4	7.82	53.12	-105.16	H
	7600	-39.36	-13	-26.36	200	89	64.79	36.2	9.03	54.12	-104.15	H
	9500	-47.02	-13	-34.02	100	360	54.98	37.3	10.16	54.2	-102	H
	3800	-33.15	-13	-20.15	400	44	74.51	33.7	6.38	52.48	-107.66	V
	5700	-23.77	-13	-10.77	300	342	81.39	35.4	7.82	53.12	-105.16	V
	7600	-44.62	-13	-31.62	287	0	59.53	36.2	9.03	54.12	-104.15	V
	9500	-43.38	-13	-30.38	100	74	58.62	37.3	10.16	54.2	-102	V

Remarks:

1. $EIRP(dBm) = Reading(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre\ Amp(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit$
4. The other EIRP levels were very low against the limit.