

Appendix B: Test Results of Radiated Spurious Emissions

Worst Mode 30MHz ~ 1000MHz

EDGE850												
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)	Polarization (H/V)
Mid	164.83	-79.44	-13	-66.44	300	0	23.68	19.8	0.94	26.45	-100.97	H
	286.08	-78.4	-13	-65.4	264	0	24.07	19.7	1.25	26.01	-100.32	H
	416.06	-75.44	-13	-62.44	200	0	24.68	22.6	1.5	26.81	-97.97	H
	612	-72.4	-13	-59.4	100	300	24.51	26.14	1.92	27.56	-94.76	H
	728.4	-68.6	-13	-55.6	100	6	26.7	27.47	2.1	27.46	-93.15	H
	884.57	-56.87	-13	-43.87	100	170	35.91	29.49	2.32	27.18	-90.63	H
	145.43	-79.47	-13	-66.47	100	192	24.39	19.2	0.89	26.54	-101.71	V
	285.11	-78.36	-13	-65.36	101	360	24.11	19.7	1.25	26.01	-100.32	V
	417.03	-75.83	-13	-62.83	200	360	24.3	22.6	1.5	26.82	-97.98	V
	615.88	-73.31	-13	-60.31	100	109	23.51	26.22	1.93	27.56	-94.67	V
	738.1	-69.59	-13	-56.59	300	85	25.19	27.95	2.12	27.44	-92.63	V
	954.41	-66.97	-13	-53.97	234	0	25.07	29.99	2.41	27.03	-89.89	V

Remarks:

- ERP(dBm) = Reading(dBuV) + Correction Factor(dB/m) – 2.15
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre Amp(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit
- The other ERP levels were very low against the limit.

1GHz ~ 9GHz

GSM850												
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)	Polarization (H/V)
Low	1648	-32.8	-13	-19.8	196	360	83.79	28.78	4.17	52.13	-114.44	H
	2472	-47.86	-13	-34.86	300	204	63.8	32.9	5.14	52.29	-109.51	H
	3297	-53.16	-13	-40.16	226	0	57.44	33.21	5.94	52.34	-108.45	H
	4121	-51.99	-13	-38.99	400	290	57.59	33.8	6.65	52.62	-107.43	H
	8242	-43.41	-13	-30.41	100	301	62.62	36.2	9.43	54.25	-103.88	H
	1648	-38.45	-13	-25.45	400	257	78.14	28.78	4.17	52.13	-114.44	V
	2472	-49.96	-13	-36.96	400	306	61.7	32.9	5.14	52.29	-109.51	V
	3297	-53.75	-13	-40.75	100	168	56.85	33.21	5.94	52.34	-108.45	V
	4121	-49.57	-13	-36.57	266	0	60.01	33.8	6.65	52.62	-107.43	V
	8242	-52.05	-13	-39.05	400	12	53.98	36.2	9.43	54.25	-103.88	V
Mid	1673	-32.71	-13	-19.71	228	0	83.5	29.12	4.21	52.13	-114.06	H
	2509	-42.48	-13	-29.48	293	0	69.18	32.88	5.17	52.3	-109.51	H
	3346	-46.98	-13	-33.98	200	21	63.68	33.1	5.98	52.33	-108.51	H
	4182	-45.22	-13	-32.22	400	231	64.33	33.8	6.7	52.64	-107.4	H
	5018	-50.56	-13	-37.56	247	0	57.67	34.64	7.35	52.81	-106.08	H
	5855	-51.68	-13	-38.68	200	15	55.42	35.6	7.92	53.21	-104.95	H
	8364	-45.93	-13	-32.93	100	360	59.98	36.27	9.5	54.27	-103.76	H
	1673	-38.31	-13	-25.31	300	283	77.9	29.12	4.21	52.13	-114.06	V
	2509	-48.08	-13	-35.08	300	343	63.58	32.88	5.17	52.3	-109.51	V
	3346	-44.88	-13	-31.88	200	272	65.78	33.1	5.98	52.33	-108.51	V
	4182	-44.65	-13	-31.65	400	128	64.9	33.8	6.7	52.64	-107.4	V
	5018	-57.63	-13	-44.63	400	202	50.6	34.64	7.35	52.81	-106.08	V
	5855	-51.44	-13	-38.44	232	0	55.66	35.6	7.92	53.21	-104.95	V
	8364	-48.84	-13	-35.84	100	318	57.07	36.27	9.5	54.27	-103.76	V

EDGE850												
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)	Polarization (H/V)
Low	1648	-22.03	-13	-9.03	234	0	94.56	28.78	4.17	52.13	-114.44	H
	2472	-45.59	-13	-32.59	100	301	66.07	32.9	5.14	52.29	-109.51	H
	3296	-47.49	-13	-34.49	100	328	63.1	33.22	5.94	52.34	-108.44	H
	4121	-45.55	-13	-32.55	400	34	64.03	33.8	6.65	52.62	-107.43	H
	5770	-51.47	-13	-38.47	400	360	55.6	35.64	7.86	53.16	-104.92	H
	7419	-51.12	-13	-38.12	300	360	55.37	36.04	8.92	54.04	-104.34	H
	8243	-44.76	-13	-31.76	200	293	61.27	36.2	9.43	54.25	-103.88	H
	1648	-26.25	-13	-13.25	300	246	90.34	28.78	4.17	52.13	-114.44	V
	2472	-47.33	-13	-34.33	100	294	64.33	32.9	5.14	52.29	-109.51	V
	3296	-48.55	-13	-35.55	348	360	62.04	33.22	5.94	52.34	-108.44	V
	4121	-44.38	-13	-31.38	200	323	65.2	33.8	6.65	52.62	-107.43	V
	5770	-47.17	-13	-34.17	198	360	59.9	35.64	7.86	53.16	-104.92	V
	7419	-51.52	-13	-38.52	348	360	54.97	36.04	8.92	54.04	-104.34	V
	8243	-49.39	-13	-36.39	300	208	56.64	36.2	9.43	54.25	-103.88	V
Mid	1672	-20.79	-13	-7.79	259	0	95.43	29.11	4.21	52.13	-114.07	H
	2509	-39.02	-13	-26.02	200	345	72.64	32.88	5.17	52.3	-109.51	H
	3345	-40.83	-13	-27.83	300	335	69.82	33.11	5.98	52.33	-108.5	H
	4182	-35.55	-13	-22.55	400	191	74	33.8	6.7	52.64	-107.4	H
	5018	-48.31	-13	-35.31	186	360	59.92	34.64	7.35	52.81	-106.08	H
	5854	-49.9	-13	-36.9	400	308	57.2	35.6	7.92	53.21	-104.95	H
	8364	-46.19	-13	-33.19	200	302	59.72	36.27	9.5	54.27	-103.76	H
	1672	-26.34	-13	-13.34	300	257	89.88	29.11	4.21	52.13	-114.07	V
	2509	-46.84	-13	-33.84	300	331	64.82	32.88	5.17	52.3	-109.51	V
	3345	-38.79	-13	-25.79	400	284	71.86	33.11	5.98	52.33	-108.5	V
	4182	-35.12	-13	-22.12	100	100	74.43	33.8	6.7	52.64	-107.4	V
	5018	-56.12	-13	-43.12	100	0	52.11	34.64	7.35	52.81	-106.08	V
	5854	-46.73	-13	-33.73	242	0	60.37	35.6	7.92	53.21	-104.95	V
	8364	-51.92	-13	-38.92	400	36	53.99	36.27	9.5	54.27	-103.76	V

EDGE850												
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)	Polarization (H/V)
High	1697	-24.94	-13	-11.94	195	359	90.91	29.46	4.24	52.14	-113.7	H
	2546	-35.45	-13	-22.45	391	360	76.25	32.81	5.21	52.31	-109.55	H
	3395	-40.14	-13	-27.14	354	360	70.55	33.01	6.03	52.32	-108.54	H
	4244	-37.01	-13	-24.01	400	254	72.41	33.89	6.75	52.65	-107.27	H
	5092	-50.73	-13	-37.73	237	0	57.42	34.7	7.4	52.84	-106	H
	5941	-52.52	-13	-39.52	200	0	54.41	35.76	7.98	53.26	-104.78	H
	7639	-50.44	-13	-37.44	300	285	55.84	36.2	9.06	54.13	-104.13	H
	8488	-46.48	-13	-33.48	100	299	59.36	36.3	9.57	54.3	-103.69	H
	1697	-27.32	-13	-14.32	300	249	88.53	29.46	4.24	52.14	-113.7	V
	2546	-42.9	-13	-29.9	300	272	68.8	32.81	5.21	52.31	-109.55	V
	3395	-37.83	-13	-24.83	100	96	72.86	33.01	6.03	52.32	-108.54	V
	4244	-31.84	-13	-18.84	400	146	77.58	33.89	6.75	52.65	-107.27	V
	5092	-56.64	-13	-43.64	400	120	51.51	34.7	7.4	52.84	-106	V
	5941	-50.52	-13	-37.52	200	0	56.41	35.76	7.98	53.26	-104.78	V
	7639	-54.93	-13	-41.93	400	296	51.35	36.2	9.06	54.13	-104.13	V
	8488	-51.31	-13	-38.31	100	307	54.53	36.3	9.57	54.3	-103.69	V

Remarks:

1. $ERP(dBm) = Reading(dBuV) + Correction\ Factor(dB/m) - 2.15$
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 ERP levels were very low against the limit.

WCDMA Band V												
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)	Polarization (H/V)
Low	1652	-42.45	-13	-29.45	237	0	74.08	28.83	4.18	52.13	-114.38	H
	2479	-60.65	-13	-47.65	300	44	51.02	32.9	5.14	52.3	-109.52	H
	3305	-59.79	-13	-46.79	200	0	50.82	33.19	5.95	52.34	-108.46	H
	1652	-47.15	-13	-34.15	300	285	69.38	28.83	4.18	52.13	-114.38	V
	2479	-59.49	-13	-46.49	300	226	52.18	32.9	5.14	52.3	-109.52	V
	3305	-59.62	-13	-46.62	100	195	50.99	33.19	5.95	52.34	-108.46	V
Mid	1672	-42.78	-13	-29.78	322	360	73.44	29.11	4.21	52.13	-114.07	H
	2509	-61.11	-13	-48.11	200	83	50.55	32.88	5.17	52.3	-109.51	H
	3345	-57.85	-13	-44.85	200	0	52.8	33.11	5.98	52.33	-108.5	H
	1672	-45.89	-13	-32.89	200	278	70.33	29.11	4.21	52.13	-114.07	V
	2509	-60.71	-13	-47.71	200	340	50.95	32.88	5.17	52.3	-109.51	V
	3345	-59.92	-13	-46.92	100	95	50.73	33.11	5.98	52.33	-108.5	V
High	1693	-44.76	-13	-31.76	265	0	71.15	29.4	4.24	52.14	-113.76	H
	2539	-60.32	-13	-47.32	200	168	51.37	32.82	5.21	52.31	-109.54	H
	3386	-59.57	-13	-46.57	101	360	51.11	33.03	6.02	52.32	-108.53	H
	1693	-48.59	-13	-35.59	300	278	67.32	29.4	4.24	52.14	-113.76	V
	2539	-59.56	-13	-46.56	205	360	52.13	32.82	5.21	52.31	-109.54	V
	3386	-59.98	-13	-46.98	300	12	50.7	33.03	6.02	52.32	-108.53	V

Remarks:

- ERP(dBm) = Reading(dBuV) + Correction Factor(dB/m) – 2.15
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre Amp(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit
- The other ERP levels were very low against the limit.

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)	Polarization (H/V)
Low	1666	-39.66	-13	-26.66	200	108	76.66	29.02	4.2	52.13	-114.17	H
	2500	-59.83	-13	-46.83	200	2	51.82	32.9	5.16	52.3	-109.5	H
	3333	-60.25	-13	-47.25	200	254	50.39	33.13	5.97	52.33	-108.49	H
	1666	-44.9	-13	-31.9	238	0	71.42	29.02	4.2	52.13	-114.17	V
	2500	-60.03	-13	-47.03	100	322	51.62	32.9	5.16	52.3	-109.5	V
	3333	-58.29	-13	-45.29	200	232	52.35	33.13	5.97	52.33	-108.49	V
Mid	1681	-48.13	-13	-35.13	400	130	67.97	29.23	4.22	52.14	-113.95	H
	2522	-58.34	-13	-45.34	400	268	53.32	32.86	5.19	52.3	-109.51	H
	3363	-58.9	-13	-45.9	200	346	51.77	33.07	6	52.33	-108.52	H
	1681	-37.19	-13	-24.19	100	79	78.91	29.23	4.22	52.14	-113.95	V
	2522	-60.21	-13	-47.21	259	0	51.45	32.86	5.19	52.3	-109.51	V
	3363	-57.2	-13	-44.2	399	360	53.47	33.07	6	52.33	-108.52	V
High	1696	-52.79	-13	-39.79	181	360	63.08	29.44	4.24	52.14	-113.72	H
	2545	-59.91	-13	-46.91	400	70	51.79	32.81	5.21	52.31	-109.55	H
	3393	-59.57	-13	-46.57	300	6	51.12	33.01	6.03	52.32	-108.54	H
	1696	-42.95	-13	-29.95	178	360	72.92	29.44	4.24	52.14	-113.72	V
	2545	-59.44	-13	-46.44	400	136	52.26	32.81	5.21	52.31	-109.55	V
	3393	-59.04	-13	-46.04	120	360	51.65	33.01	6.03	52.32	-108.54	V

Remarks:

- ERP(dBm) = Reading(dBuV) + Correction Factor(dB/m) – 2.15
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre Amp(dB) + 20log(D) – 104.8
- Margin value = EIRP – Limit
- The other ERP levels were very low against the limit.