

Appendix E

Conducted RF Output Power

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Measurement of RF conducted Power

1 Conducted Power of Main Antenna (Ant1)

1.1 Conducted Power of GSM

GSM 850										
Burst Output Power(dBm)						Division Factors	Frame-Average Output Power(dBm)			
Channel		128	190	251	Tune up		128	190	251	Tune up
GSM		32.44	32.45	32.51	32.50	-9.19	23.25	23.26	23.32	23.31
GPRS (GMSK)	1 TX Slot	32.42	32.44	32.48	32.50	-9.19	23.23	23.25	23.29	23.31
	2 TX Slots	31.44	31.41	31.41	31.50	-6.18	25.26	25.23	25.23	25.32
	3 TX Slots	29.91	29.96	29.95	30.00	-4.42	25.49	25.54	25.53	25.58
	4 TX Slots	28.75	28.86	28.86	29.00	-3.17	25.58	25.69	25.69	25.83
EGPRS (GMSK)	1 TX Slot	32.49	32.45	32.46	33.50	-9.19	23.30	23.26	23.27	24.31
	2 TX Slots	31.43	31.35	31.38	32.50	-6.18	25.25	25.17	25.20	26.32
	3 TX Slots	29.94	29.96	29.92	31.00	-4.42	25.52	25.54	25.50	26.58
	4 TX Slots	28.71	28.70	28.70	30.00	-3.17	25.54	25.53	25.53	26.83
EGPRS (8PSK)	1 TX Slot	25.30	25.36	25.33	27.00	-9.19	16.11	16.17	16.14	17.81
	2 TX Slots	24.33	24.40	24.38	26.00	-6.18	18.15	18.22	18.20	19.82
	3 TX Slots	22.37	22.31	22.36	24.00	-4.42	17.95	17.89	17.94	19.58
	4 TX Slots	21.18	21.14	21.19	23.00	-3.17	18.01	17.97	18.02	19.83

GSM 1900										
Burst Output Power(dBm)						Division Factors	Frame-Average Output Power(dBm)			
Channel		512	661	810	Tune up		512	661	810	Tune up
GSM		29.25	29.31	29.28	29.50	-9.19	20.06	20.12	20.09	20.31
GPRS (GMSK)	1 TX Slot	29.26	29.30	29.27	29.50	-9.19	20.07	20.11	20.08	20.31
	2 TX Slots	28.43	28.40	28.38	28.50	-6.18	22.25	22.22	22.20	22.32
	3 TX Slots	26.87	26.88	26.93	27.00	-4.42	22.45	22.46	22.51	22.58
	4 TX Slots	25.88	25.91	25.84	26.00	-3.17	22.71	22.74	22.67	22.83
EGPRS (GMSK)	1 TX Slot	29.27	29.27	29.27	30.50	-9.19	20.08	20.08	20.08	21.31
	2 TX Slots	28.39	28.36	28.38	29.50	-6.18	22.21	22.18	22.20	23.32
	3 TX Slots	26.89	26.87	26.92	28.00	-4.42	22.47	22.45	22.50	23.58
	4 TX Slots	25.85	25.87	25.91	27.00	-3.17	22.68	22.70	22.74	23.83
EGPRS (8PSK)	1 TX Slot	25.59	25.54	25.59	27.00	-9.19	16.40	16.35	16.40	17.81
	2 TX Slots	24.67	24.70	24.68	26.00	-6.18	18.49	18.52	18.50	19.82
	3 TX Slots	22.63	22.64	22.61	24.00	-4.42	18.21	18.22	18.19	19.58
	4 TX Slots	21.53	21.52	21.49	23.00	-3.17	18.36	18.35	18.32	19.83

1.2 Conducted Power of WCDMA

WCDMA Band II					
Average Conducted Power(dBm)					
Channel		9262	9400	9538	Tune up
WCDMA	12.2kbps RMC	22.35	22.27	22.3	22.50
	12.2kbps AMR	22.34	22.19	22.15	22.50
HSDPA	Subtest 1	21.69	21.69	21.68	22.00
	Subtest 2	21.66	21.66	21.64	22.00
	Subtest 3	20.83	20.87	20.83	21.00
	Subtest 4	20.86	20.84	20.80	21.00
HSUPA	Subtest 1	19.43	19.32	19.30	19.50
	Subtest 2	19.35	19.21	19.25	19.50
	Subtest 3	20.31	20.21	20.22	20.50
	Subtest 4	18.83	18.72	18.72	19.00
	Subtest 5	20.31	20.23	20.21	20.50

WCDMA Band V					
Average Conducted Power(dBm)					
Channel		4132	4182	4233	Tune up
WCDMA	12.2kbps RMC	22.36	22.31	22.35	23.50
	12.2kbps AMR	22.25	22.29	22.31	23.50
HSDPA	Subtest 1	21.80	21.88	21.78	23.00
	Subtest 2	21.80	21.91	21.74	23.00
	Subtest 3	21.28	21.42	21.27	22.00
	Subtest 4	21.30	21.37	21.23	22.00
HSUPA	Subtest 1	20.23	19.79	19.77	20.50
	Subtest 2	19.78	19.85	19.74	20.50
	Subtest 3	20.74	20.80	20.72	21.50
	Subtest 4	19.32	19.32	19.27	20.00
	Subtest 5	20.71	20.77	20.71	21.50

1.3 Conducted Power of LTE

LTE Band 2				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18607	18900	19193	
1.4MHz	QPSK	1	0	21.89	21.91	21.84	23.00
		1	2	22.21	22.22	22.21	23.00
		1	5	21.89	21.78	21.91	23.00
		3	0	21.12	21.16	21.13	23.00
		3	2	21.16	21.16	21.21	23.00
		3	3	21.13	21.14	21.14	23.00
	16QAM	6	0	21.14	21.15	21.12	22.00
		1	0	21.21	21.26	21.16	22.00
		1	2	21.52	21.60	21.57	22.00
		1	5	21.24	21.15	21.29	22.00
		3	0	20.17	20.21	20.13	22.00
		3	2	20.23	20.21	20.15	22.00
	64QAM	3	3	20.20	20.15	20.15	22.00
		6	0	20.14	20.21	20.11	21.00
		1	0	20.25	20.30	20.27	21.00
		1	2	20.26	20.17	20.24	21.00
		1	5	20.33	20.33	20.23	21.00
		3	0	19.32	19.30	19.36	21.00
		3	2	19.35	19.36	19.35	21.00
		3	3	19.34	19.40	19.34	21.00
		6	0	19.23	19.20	19.28	20.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18615	18900	19185	
3MHz	QPSK	1	0	21.95	21.93	21.77	23.00
		1	7	22.18	22.17	22.21	23.00
		1	14	21.86	21.82	21.92	23.00
		8	0	21.13	21.20	21.13	22.00
		8	4	21.17	21.19	21.16	22.00
		8	7	21.14	21.16	21.12	22.00
		15	0	21.12	21.13	21.15	22.00
	16QAM	1	0	21.28	21.25	21.19	22.00
		1	7	21.50	21.62	21.60	22.00
		1	14	21.18	21.16	21.26	22.00
		8	0	20.19	20.21	20.13	21.00
		8	4	20.24	20.21	20.18	21.00
		8	7	20.17	20.12	20.15	21.00
		15	0	20.16	20.13	20.14	21.00
	64QAM	1	0	20.20	20.24	20.27	21.00
		1	7	20.27	20.24	20.25	21.00
		1	14	20.28	20.33	20.23	21.00
		8	0	19.32	19.30	19.33	20.00
		8	4	19.38	19.35	19.36	20.00
		8	7	19.34	19.38	19.34	20.00
		15	0	19.19	19.22	19.27	20.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18625	18900	19175	
5MHz	QPSK	1	0	21.88	21.91	21.78	23.00

		1	13	22.20	22.17	22.21	23.00
		1	24	21.85	21.78	21.88	23.00
		12	0	21.16	21.13	21.07	22.00
		12	6	21.22	21.15	21.14	22.00
		12	13	21.15	21.12	21.13	22.00
		25	0	21.16	21.13	21.11	22.00
	16QAM	1	0	21.23	21.18	21.13	22.00
		1	13	21.53	21.60	21.53	22.00
		1	24	21.17	21.16	21.26	22.00
		12	0	20.19	20.17	20.09	21.00
		12	6	20.25	20.21	20.16	21.00
		12	13	20.21	20.12	20.18	21.00
	64QAM	25	0	20.18	20.19	20.17	21.00
		1	0	20.26	20.29	20.27	21.00
		1	13	20.29	20.20	20.23	21.00
		1	24	20.30	20.32	20.29	21.00
		12	0	19.31	19.31	19.39	20.00
		12	6	19.37	19.33	19.33	20.00
		12	13	19.35	19.38	19.31	20.00
		25	0	19.20	19.19	19.24	20.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18650	18900	19150	
10MHz	QPSK	1	0	21.91	21.90	21.84	23.00
		1	25	22.24	22.18	22.19	23.00
		1	49	21.90	21.80	21.85	23.00
		25	0	21.14	21.15	21.07	22.00
		25	13	21.18	21.13	21.19	22.00
		25	25	21.13	21.12	21.10	22.00
	16QAM	50	0	21.14	21.09	21.09	22.00
		1	0	21.24	21.24	21.18	22.00
		1	25	21.48	21.62	21.55	22.00
		1	49	21.24	21.17	21.30	22.00
		25	0	20.16	20.23	20.16	21.00
		25	13	20.18	20.15	20.19	21.00
	64QAM	25	25	20.18	20.16	20.14	21.00
		50	0	20.11	20.13	20.12	21.00
		1	0	20.22	20.26	20.22	21.00
		1	25	20.29	20.24	20.20	21.00
		1	49	20.31	20.27	20.29	21.00
		25	0	19.34	19.30	19.33	20.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18675	18900	19125	
15MHz	QPSK	1	0	21.88	21.85	21.82	23.00
		1	38	22.20	22.15	22.19	23.00
		1	74	21.91	21.81	21.92	23.00
		36	0	21.11	21.18	21.13	22.00
		36	18	21.14	21.12	21.21	22.00
		36	39	21.18	21.16	21.09	22.00
		75	0	21.10	21.09	21.08	22.00

	16QAM	1	0	21.20	21.26	21.18	22.00
		1	38	21.47	21.57	21.53	22.00
		1	74	21.19	21.16	21.25	22.00
		36	0	20.18	20.22	20.09	21.00
		36	18	20.23	20.17	20.18	21.00
		36	39	20.17	20.16	20.21	21.00
		75	0	20.11	20.14	20.18	21.00
	64QAM	1	0	20.25	20.26	20.24	21.00
		1	38	20.33	20.22	20.25	21.00
		1	74	20.33	20.34	20.24	21.00
		36	0	19.39	19.35	19.38	20.00
		36	18	19.33	19.29	19.36	20.00
		36	39	19.30	19.42	19.30	20.00
		75	0	19.20	19.19	19.22	20.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				18700	18900	19100	
20MHz	QPSK	1	0	21.96	21.94	21.86	23.00
		1	50	22.25	22.23	22.24	23.00
		1	99	21.94	21.87	21.93	23.00
		50	0	21.19	21.22	21.14	22.00
		50	25	21.23	21.20	21.22	22.00
		50	50	21.20	21.17	21.16	22.00
		100	0	21.18	21.18	21.16	22.00
	16QAM	1	0	21.29	21.27	21.21	22.00
		1	50	21.55	21.65	21.62	22.00
		1	99	21.26	21.24	21.34	22.00
		50	0	20.24	20.26	20.18	21.00
		50	25	20.27	20.22	20.23	21.00
		50	50	20.23	20.19	20.22	21.00
		100	0	20.20	20.22	20.20	21.00
	64QAM	1	0	20.28	20.31	20.29	21.00
		1	50	20.34	20.26	20.28	21.00
		1	99	20.35	20.36	20.31	21.00
		50	0	19.40	19.39	19.40	20.00
		50	25	19.39	19.38	19.38	20.00
		50	50	19.37	19.43	19.38	20.00
		100	0	19.26	19.26	19.30	20.00

LTE Band 4				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19957	20175	20393	
1.4MHz	QPSK	1	0	20.91	21.03	20.98	21.50
		1	2	21.38	21.37	21.29	21.50
		1	5	20.91	20.85	20.83	21.50
		3	0	20.40	20.40	20.26	21.50
		3	2	20.31	20.34	20.33	21.50
		3	3	20.14	20.34	20.39	21.50
		6	0	20.29	20.38	20.32	20.50
	16QAM	1	0	20.24	20.35	20.12	20.50
		1	2	20.41	20.38	20.35	20.50
		1	5	20.21	19.87	20.07	20.50
		3	0	19.44	19.46	19.13	20.50
		3	2	19.43	19.33	19.26	20.50
		3	3	19.25	19.31	19.37	20.50
		6	0	19.33	19.37	19.22	19.50
	64QAM	1	0	19.50	19.48	19.42	19.50
		1	2	19.45	19.40	19.39	19.50
		1	5	19.46	19.42	19.48	19.50
		3	0	18.58	18.48	18.53	19.50
		3	2	18.56	18.52	18.51	19.50
		3	3	18.45	18.49	18.57	19.50
		6	0	18.40	18.40	18.40	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19965	20175	20385	
3MHz	QPSK	1	0	20.89	20.91	20.90	21.50
		1	7	21.22	21.23	21.17	21.50
		1	14	20.86	20.76	20.76	21.50
		8	0	20.26	20.33	20.16	20.50
		8	4	20.23	20.22	20.29	20.50
		8	7	20.10	20.25	20.34	20.50
		15	0	20.20	20.24	20.21	20.50
	16QAM	1	0	20.14	20.20	20.01	20.50
		1	7	20.39	20.34	20.26	20.50
		1	14	20.15	19.76	19.95	20.50
		8	0	19.41	19.32	19.08	19.50
		8	4	19.34	19.25	19.18	19.50
		8	7	19.15	19.19	19.24	19.50
		15	0	19.24	19.30	19.13	19.50
	64QAM	1	0	19.38	19.30	19.33	19.50
		1	7	19.38	19.31	19.35	19.50
		1	14	19.34	19.45	19.39	19.50
		8	0	18.47	18.42	18.40	18.50
		8	4	18.45	18.37	18.48	18.50
		8	7	18.39	18.46	18.42	18.50
		15	0	18.37	18.34	18.28	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				19975	20175	20375	
5MHz	QPSK	1	0	20.84	20.93	20.94	21.50
		1	13	21.28	21.21	21.20	21.50

		1	24	20.85	20.79	20.76	21.50
		12	0	20.24	20.34	20.14	20.50
		12	6	20.25	20.24	20.26	20.50
		12	13	20.03	20.25	20.33	20.50
		25	0	20.15	20.28	20.20	20.50
	16QAM	1	0	20.16	20.19	19.97	20.50
		1	13	20.44	20.32	20.24	20.50
		1	24	20.15	19.79	19.95	20.50
		12	0	19.35	19.36	19.03	19.50
		12	6	19.28	19.25	19.20	19.50
		12	13	19.11	19.22	19.29	19.50
		25	0	19.30	19.25	19.12	19.50
	64QAM	1	0	19.33	19.31	19.31	19.50
		1	13	19.38	19.28	19.28	19.50
		1	24	19.34	19.44	19.33	19.50
		12	0	18.49	18.40	18.38	18.50
		12	6	18.44	18.39	18.45	18.50
		12	13	18.36	18.40	18.46	18.50
		25	0	18.38	18.33	18.32	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20000	20175	20350	
10MHz	QPSK	1	0	20.82	20.94	20.91	21.50
		1	25	21.22	21.24	21.17	21.50
		1	49	20.88	20.79	20.76	21.50
		25	0	20.25	20.28	20.12	20.50
		25	13	20.23	20.22	20.29	20.50
		25	25	20.09	20.25	20.35	20.50
		50	0	20.21	20.30	20.23	20.50
	16QAM	1	0	20.14	20.25	19.97	20.50
		1	25	20.38	20.30	20.24	20.50
		1	49	20.13	19.80	19.98	20.50
		25	0	19.37	19.30	19.02	19.50
		25	13	19.31	19.27	19.17	19.50
		25	25	19.18	19.23	19.27	19.50
		50	0	19.28	19.24	19.15	19.50
	64QAM	1	0	19.36	19.35	19.30	19.50
		1	25	19.39	19.33	19.31	19.50
		1	49	19.38	19.40	19.35	19.50
		25	0	18.47	18.41	18.44	18.50
		25	13	18.45	18.40	18.42	18.50
		25	25	18.39	18.43	18.43	18.50
		50	0	18.33	18.31	18.29	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20025	20175	20325	
15MHz	QPSK	1	0	20.86	20.91	20.94	21.50
		1	38	21.26	21.22	21.20	21.50
		1	74	20.83	20.78	20.79	21.50
		36	0	20.32	20.34	20.20	20.50
		36	18	20.23	20.25	20.27	20.50
		36	39	20.09	20.21	20.27	20.50
		75	0	20.22	20.24	20.23	20.50
	16QAM	1	0	20.12	20.21	19.99	20.50

		1	38	20.36	20.30	20.29	20.50
		1	74	20.07	19.82	19.92	20.50
		36	0	19.36	19.32	19.09	19.50
		36	18	19.27	19.24	19.20	19.50
		36	39	19.15	19.16	19.21	19.50
		75	0	19.24	19.26	19.17	19.50
	64QAM	1	0	19.32	19.34	19.36	19.50
		1	38	19.43	19.32	19.32	19.50
		1	74	19.40	19.37	19.34	19.50
		36	0	18.47	18.39	18.36	18.50
		36	18	18.43	18.41	18.43	18.50
		36	39	18.36	18.41	18.47	18.50
		75	0	18.32	18.34	18.33	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20050	20175	20300	
20MHz	QPSK	1	0	20.90	20.98	20.95	21.50
		1	50	21.29	21.28	21.24	21.50
		1	99	20.89	20.83	20.82	21.50
		50	0	20.33	20.36	20.21	20.50
		50	25	20.28	20.31	20.32	20.50
		50	50	20.11	20.30	20.36	20.50
		100	0	20.24	20.31	20.26	20.50
	16QAM	1	0	20.20	20.26	20.04	20.50
		1	50	20.38	20.36	20.30	20.50
		1	99	20.16	19.85	20.01	20.50
		50	0	19.43	19.38	19.11	19.50
		50	25	19.36	19.32	19.24	19.50
		50	50	19.19	19.25	19.30	19.50
		100	0	19.31	19.33	19.19	19.50
	64QAM	1	0	19.41	19.39	19.37	19.50
		1	50	19.44	19.36	19.36	19.50
		1	99	19.43	19.46	19.42	19.50
		50	0	18.43	18.46	18.45	18.50
		50	25	18.48	18.43	18.49	18.50
		50	50	18.44	18.48	18.48	18.50
		100	0	18.39	18.39	18.36	18.50

LTE Band 5				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20407	20525	20643	
1.4MHz	QPSK	1	0	22.17	22.17	22.15	23.00
		1	2	22.30	22.28	22.17	23.00
		1	5	22.22	22.13	22.21	23.00
		3	0	21.27	21.30	21.07	23.00
		3	2	21.25	21.23	21.25	23.00
		3	3	21.21	21.29	21.17	23.00
		6	0	21.17	21.27	21.19	22.00
	16QAM	1	0	21.57	21.51	21.53	22.00
		1	2	21.62	21.59	21.50	22.00
		1	5	21.60	21.48	21.52	22.00
		3	0	20.28	20.36	20.14	22.00
		3	2	20.28	20.25	20.26	22.00
		3	3	20.18	20.32	20.20	22.00
		6	0	20.25	20.41	20.22	21.00
	64QAM	1	0	20.40	20.29	20.31	21.00
		1	2	20.43	20.29	20.34	21.00
		1	5	20.40	20.41	20.37	21.00
		3	0	19.54	19.44	19.39	21.00
		3	2	19.41	19.42	19.44	21.00
		3	3	19.41	19.39	19.42	21.00
		6	0	19.30	19.34	19.30	20.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20415	20525	20635	
3MHz	QPSK	1	0	22.22	22.15	22.12	23.00
		1	7	22.36	22.29	22.17	23.00
		1	14	22.17	22.11	22.15	23.00
		8	0	21.22	21.30	21.11	22.00
		8	4	21.25	21.21	21.21	22.00
		8	7	21.15	21.31	21.23	22.00
		15	0	21.25	21.32	21.20	22.00
	16QAM	1	0	21.50	21.58	21.48	22.00
		1	7	21.64	21.56	21.50	22.00
		1	14	21.55	21.45	21.55	22.00
		8	0	20.25	20.36	20.10	21.00
		8	4	20.22	20.28	20.19	21.00
		8	7	20.19	20.38	20.17	21.00
		15	0	20.22	20.35	20.19	21.00
	64QAM	1	0	20.43	20.34	20.30	21.00
		1	7	20.44	20.29	20.31	21.00
		1	14	20.33	20.44	20.43	21.00
		8	0	19.54	19.44	19.37	20.00
		8	4	19.49	19.42	19.51	20.00
		8	7	19.45	19.41	19.41	20.00
		15	0	19.30	19.37	19.30	20.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20425	20525	20625	
5MHz	QPSK	1	0	22.22	22.16	22.10	23.00
		1	13	22.32	22.22	22.21	23.00

		1	24	22.22	22.14	22.21	23.00
		12	0	21.30	21.26	21.13	22.00
		12	6	21.25	21.24	21.17	22.00
		12	13	21.23	21.29	21.21	22.00
		25	0	21.17	21.28	21.19	22.00
	16QAM	1	0	21.55	21.51	21.47	22.00
		1	13	21.62	21.60	21.52	22.00
		1	24	21.60	21.46	21.53	22.00
		12	0	20.25	20.35	20.11	21.00
		12	6	20.30	20.29	20.21	21.00
		12	13	20.26	20.35	20.19	21.00
		25	0	20.21	20.33	20.22	21.00
	64QAM	1	0	20.41	20.35	20.36	21.00
		1	13	20.44	20.29	20.32	21.00
		1	24	20.35	20.39	20.42	21.00
		12	0	19.49	19.46	19.36	20.00
		12	6	19.47	19.44	19.49	20.00
		12	13	19.39	19.44	19.46	20.00
		25	0	19.37	19.30	19.37	20.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				20450	20525	20600	
10MHz	QPSK	1	0	22.24	22.24	22.17	23.00
		1	25	22.38	22.30	22.25	23.00
		1	49	22.26	22.19	22.23	23.00
		25	0	21.31	21.35	21.16	22.00
		25	13	21.27	21.30	21.26	22.00
		25	25	21.24	21.35	21.24	22.00
		50	0	21.26	21.35	21.21	22.00
	16QAM	1	0	21.58	21.59	21.55	22.00
		1	25	21.69	21.64	21.55	22.00
		1	49	21.62	21.54	21.58	22.00
		25	0	20.30	20.39	20.18	21.00
		25	13	20.31	20.34	20.28	21.00
		25	25	20.27	20.41	20.25	21.00
		50	0	20.28	20.42	20.24	21.00
	64QAM	1	0	20.46	20.38	20.37	21.00
		1	25	20.47	20.36	20.36	21.00
		1	49	20.42	20.48	20.46	21.00
		25	0	19.57	19.47	19.43	20.00
		25	13	19.50	19.47	19.53	20.00
		25	25	19.48	19.48	19.49	20.00
		50	0	19.39	19.38	19.39	20.00

LTE FDD Band 12				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				23017	23095	23173	
1.4MHz	QPSK	1	0	22.19	22.17	22.20	23.00
		1	2	22.42	22.39	22.31	23.00
		1	5	22.32	22.27	22.34	23.00
		3	0	21.52	21.44	21.12	23.00
		3	2	21.43	21.37	21.32	23.00
		3	3	21.37	21.64	21.16	23.00
		6	0	21.46	21.56	21.19	22.00
	16QAM	1	0	21.52	21.55	21.54	22.00
		1	2	21.77	21.78	21.67	22.00
		1	5	21.68	21.62	21.61	22.00
		3	0	20.48	20.48	20.11	22.00
		3	2	20.46	20.36	20.37	22.00
		3	3	20.40	20.68	20.23	22.00
		6	0	20.50	20.57	20.15	21.00
	64QAM	1	0	20.33	20.30	20.22	21.00
		1	2	20.35	20.33	20.28	21.00
		1	5	20.26	20.38	20.33	21.00
		3	0	19.42	19.39	19.33	21.00
		3	2	19.39	19.32	19.39	21.00
		3	3	19.37	19.38	19.42	21.00
		6	0	19.24	19.30	19.27	20.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				23025	23095	23165	
3MHz	QPSK	1	0	22.21	22.22	22.19	23.00
		1	7	22.46	22.35	22.36	23.00
		1	14	22.34	22.35	22.29	23.00
		8	0	21.47	21.43	21.17	22.00
		8	4	21.41	21.39	21.36	22.00
		8	7	21.38	21.63	21.20	22.00
		15	0	21.46	21.60	21.17	22.00
	16QAM	1	0	21.45	21.54	21.50	22.00
		1	7	21.78	21.73	21.70	22.00
		1	14	21.63	21.67	21.62	22.00
		8	0	20.48	20.42	20.14	21.00
		8	4	20.42	20.37	20.36	21.00
		8	7	20.44	20.70	20.25	21.00
		15	0	20.52	20.55	20.15	21.00
	64QAM	1	0	20.37	20.31	20.22	21.00
		1	7	20.38	20.31	20.31	21.00
		1	14	20.33	20.43	20.31	21.00
		8	0	19.46	19.41	19.37	20.00
		8	4	19.39	19.35	19.40	20.00
		8	7	19.40	19.45	19.40	20.00
		15	0	19.26	19.28	19.33	20.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				23035	23095	23155	
5MHz	QPSK	1	0	22.22	22.16	22.23	23.00
		1	13	22.45	22.39	22.33	23.00

		1	24	22.28	22.30	22.35	23.00
		12	0	21.47	21.46	21.12	22.00
		12	6	21.44	21.35	21.37	22.00
		12	13	21.38	21.61	21.19	22.00
		25	0	21.51	21.62	21.12	22.00
	16QAM	1	0	21.45	21.51	21.50	22.00
		1	13	21.77	21.74	21.65	22.00
		1	24	21.60	21.62	21.66	22.00
		12	0	20.50	20.42	20.18	21.00
		12	6	20.42	20.35	20.36	21.00
		12	13	20.42	20.66	20.21	21.00
		25	0	20.51	20.62	20.19	21.00
	64QAM	1	0	20.31	20.31	20.25	21.00
		1	13	20.37	20.33	20.25	21.00
		1	24	20.28	20.42	20.36	21.00
		12	0	19.41	19.41	19.32	20.00
		12	6	19.42	19.30	19.37	20.00
		12	13	19.43	19.45	19.41	20.00
		25	0	19.25	19.30	19.28	20.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				23060	23095	23130	
10MHz	QPSK	1	0	22.26	22.25	22.24	23.00
		1	25	22.48	22.40	22.39	23.00
		1	49	22.35	22.36	22.37	23.00
		25	0	21.55	21.48	21.18	22.00
		25	13	21.45	21.40	21.38	22.00
		25	25	21.46	21.68	21.24	22.00
		50	0	21.53	21.63	21.21	22.00
	16QAM	1	0	21.53	21.60	21.58	22.00
		1	25	21.85	21.79	21.74	22.00
		1	49	21.69	21.70	21.67	22.00
		25	0	20.57	20.49	20.19	21.00
		25	13	20.47	20.42	20.42	21.00
		25	25	20.49	20.71	20.29	21.00
		50	0	20.54	20.63	20.21	21.00
	64QAM	1	0	20.40	20.32	20.28	21.00
		1	25	20.43	20.34	20.32	21.00
		1	49	20.34	20.46	20.40	21.00
		25	0	19.49	19.43	19.41	20.00
		25	13	19.48	19.39	19.45	20.00
		25	25	19.46	19.46	19.46	20.00
		50	0	19.30	19.34	19.34	20.00

LTE FDD Band 13				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				23205	23230	23255	
5MHz	QPSK	1	0	22.13	22.19	22.16	23.00
		1	13	22.28	22.29	22.33	23.00
		1	24	22.15	22.14	22.13	23.00
		12	0	21.28	21.26	21.26	22.00
		12	6	21.29	21.31	21.28	22.00
		12	13	21.39	21.36	21.42	22.00
		25	0	21.31	21.33	21.36	22.00
	16QAM	1	0	21.54	21.55	21.54	22.00
		1	13	21.71	21.70	21.65	22.00
		1	24	21.48	21.52	21.49	22.00
		12	0	20.30	20.35	20.30	21.00
		12	6	20.40	20.38	20.36	21.00
		12	13	20.43	20.49	20.48	21.00
		25	0	20.38	20.36	20.37	21.00
	64QAM	1	0	20.29	20.24	20.32	21.00
		1	13	20.34	20.30	20.28	21.00
		1	24	20.45	20.49	20.47	21.00
		12	0	19.43	19.45	19.45	20.00
		12	6	19.39	19.39	19.37	20.00
		12	13	19.40	19.42	19.48	20.00
		25	0	19.32	19.30	19.36	20.00
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
10MHz	QPSK	1	0	/	23230	/	23.00
		1	25	/	22.34	/	23.00
		1	49	/	22.19	/	23.00
		25	0	/	21.33	/	22.00
		25	13	/	21.36	/	22.00
		25	25	/	21.43	/	22.00
		50	0	/	21.4	/	22.00
	16QAM	1	0	/	21.57	/	22.00
		1	25	/	21.73	/	22.00
		1	49	/	21.53	/	22.00
		25	0	/	20.37	/	21.00
		25	13	/	20.41	/	21.00
		25	25	/	20.5	/	21.00
		50	0	/	20.43	/	21.00
	64QAM	1	0	/	20.33	/	21.00
		1	25	/	20.37	/	21.00
		1	49	/	20.53	/	21.00
		25	0	/	19.48	/	20.00
		25	13	/	19.46	/	20.00
		25	25	/	19.49	/	20.00
		50	0	/	19.38	/	20.00

LTE Band 66				Conducted Power(dBm)			
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				131979	132322	132665	
1.4MHz	QPSK	1	0	20.89	20.86	20.88	21.50
		1	2	21.20	21.24	21.15	21.50
		1	5	20.72	20.75	20.71	21.50
		3	0	20.15	20.12	20.17	21.50
		3	1	20.21	20.26	20.27	21.50
		3	3	20.30	20.31	20.30	21.50
		6	0	20.23	20.21	20.16	20.50
	16QAM	1	0	19.96	20.01	19.93	20.50
		1	2	20.14	20.25	20.29	20.50
		1	5	20.01	20.02	19.98	20.50
		3	0	19.06	19.09	19.04	20.50
		3	1	19.19	19.12	19.16	20.50
		3	3	19.27	19.24	19.23	20.50
		6	0	19.08	19.10	19.11	19.50
	64QAM	1	0	19.24	19.17	19.24	19.50
		1	2	19.34	19.26	19.25	19.50
		1	5	19.39	19.42	19.35	19.50
		3	0	18.31	18.42	18.40	19.50
		3	1	18.34	18.39	18.35	19.50
		3	3	18.28	18.33	18.46	19.50
		6	0	18.22	18.23	18.27	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				131987	132322	132657	
3MHz	QPSK	1	0	20.85	20.89	20.86	21.50
		1	7	21.23	21.16	21.13	21.50
		1	14	20.79	20.76	20.73	21.50
		8	0	20.17	20.08	20.17	20.50
		8	4	20.24	20.29	20.22	20.50
		8	7	20.29	20.25	20.33	20.50
		15	0	20.16	20.27	20.22	20.50
	16QAM	1	0	19.97	20.02	19.92	20.50
		1	7	20.17	20.24	20.29	20.50
		1	14	19.99	20.00	19.94	20.50
		8	0	19.05	19.09	19.06	19.50
		8	4	19.16	19.14	19.15	19.50
		8	7	19.20	19.19	19.21	19.50
		15	0	19.11	19.11	19.15	19.50
	64QAM	1	0	19.23	19.12	19.21	19.50
		1	7	19.33	19.29	19.27	19.50
		1	14	19.45	19.37	19.37	19.50
		8	0	18.29	18.36	18.40	18.50
		8	4	18.27	18.33	18.32	18.50
		8	7	18.28	18.31	18.41	18.50
		15	0	18.24	18.17	18.29	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				131997	132322	132647	
5MHz	QPSK	1	0	20.84	20.88	20.81	21.50
		1	13	21.22	21.19	21.19	21.50

		1	24	20.77	20.73	20.78	21.50
		12	0	20.11	20.15	20.11	20.50
		12	6	20.25	20.30	20.23	20.50
		12	13	20.32	20.26	20.32	20.50
		25	0	20.18	20.21	20.23	20.50
	16QAM	1	0	19.98	20.03	19.96	20.50
		1	13	20.16	20.22	20.28	20.50
		1	24	19.95	20.03	19.98	20.50
		12	0	19.04	19.05	19.08	19.50
		12	6	19.13	19.18	19.19	19.50
		12	13	19.21	19.25	19.25	19.50
		25	0	19.09	19.12	19.17	19.50
	64QAM	1	0	19.21	19.16	19.20	19.50
		1	13	19.32	19.22	19.21	19.50
		1	24	19.44	19.34	19.33	19.50
		12	0	18.34	18.38	18.36	18.50
		12	6	18.27	18.32	18.37	18.50
		12	13	18.29	18.30	18.42	18.50
		25	0	18.29	18.18	18.25	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				132022	132322	132622	
10MHz	QPSK	1	0	20.86	20.88	20.82	21.50
		1	25	21.23	21.22	21.15	21.50
		1	49	20.78	20.78	20.78	21.50
		25	0	20.17	20.13	20.14	20.50
		25	13	20.20	20.23	20.23	20.50
		25	25	20.34	20.27	20.29	20.50
		50	0	20.16	20.20	20.19	20.50
	16QAM	1	0	19.96	20.04	19.91	20.50
		1	25	20.12	20.26	20.27	20.50
		1	49	19.98	20.03	19.96	20.50
		25	0	19.07	19.03	19.07	19.50
		25	13	19.15	19.16	19.15	19.50
		25	25	19.22	19.22	19.26	19.50
		50	0	19.12	19.13	19.18	19.50
	64QAM	1	0	19.24	19.14	19.20	19.50
		1	25	19.34	19.30	19.27	19.50
		1	49	19.44	19.35	19.37	19.50
		25	0	18.36	18.39	18.40	18.50
		25	13	18.29	18.39	18.38	18.50
		25	25	18.31	18.30	18.40	18.50
		50	0	18.25	18.15	18.29	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				132047	132322	132597	
15MHz	QPSK	1	0	20.89	20.87	20.85	21.50
		1	38	21.22	21.18	21.19	21.50
		1	74	20.74	20.74	20.71	21.50
		36	0	20.16	20.08	20.10	20.50
		36	18	20.24	20.28	20.19	20.50
		36	39	20.34	20.25	20.27	20.50
		75	0	20.21	20.26	20.20	20.50
	16QAM	1	0	19.94	19.96	19.92	20.50

		1	38	20.18	20.26	20.26	20.50
		1	74	19.96	19.99	19.99	20.50
		36	0	19.04	19.02	19.08	19.50
		36	18	19.16	19.20	19.12	19.50
		36	39	19.22	19.22	19.22	19.50
		75	0	19.16	19.11	19.12	19.50
	64QAM	1	0	19.22	19.13	19.27	19.50
		1	38	19.34	19.26	19.23	19.50
		1	74	19.38	19.39	19.35	19.50
		36	0	18.35	18.40	18.39	18.50
		36	18	18.32	18.34	18.35	18.50
		36	39	18.33	18.35	18.45	18.50
		75	0	18.21	18.21	18.29	18.50
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel	Tune up
				132072	132322	132572	
20MHz	QPSK	1	0	20.92	20.92	20.89	21.50
		1	50	21.24	21.30	21.29	21.50
		1	99	20.80	20.81	20.80	21.50
		50	0	20.18	20.16	20.19	20.50
		50	25	20.28	20.32	20.28	20.50
		50	50	20.35	20.32	20.34	20.50
		100	0	20.25	20.28	20.25	20.50
	16QAM	1	0	20.00	20.05	19.97	20.50
		1	50	20.21	20.27	20.30	20.50
		1	99	20.04	20.05	20.01	20.50
		50	0	19.10	19.10	19.10	19.50
		50	25	19.21	19.21	19.21	19.50
		50	50	19.29	19.27	19.28	19.50
		100	0	19.17	19.18	19.19	19.50
	64QAM	1	0	19.25	19.19	19.28	19.50
		1	50	19.35	19.31	19.28	19.50
		1	99	19.47	19.43	19.41	19.50
		50	0	18.37	18.43	18.45	18.50
		50	25	18.36	18.41	18.39	18.50
		50	50	18.35	18.39	18.48	18.50
		100	0	18.30	18.24	18.33	18.50

2 Conducted Power of WIFI and Bluetooth

2.1 Conducted Power of 2.4G WIFI

WIFI 2.4G					
Mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11b	1	2412	1	11.24	13.00
	6	2437		12.32	13.00
	11	2462		11.90	13.00
802.11g	1	2412	6	10.55	12.50
	6	2437		11.51	12.50
	11	2462		11.06	12.50
802.11n HT20	1	2412	6.5	10.82	12.50
	6	2437		11.97	12.50
	11	2462		11.56	12.50
802.11n HT40	3	2422	13.5	8.61	10.50
	6	2437		9.90	10.50
	9	2452		10.04	10.50

2.2 Conducted Power of 5G WIFI

WIFI 5G						
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11a	U-NII-1	36	5180	6	6.03	7.00
		40	5200		6.27	7.00
		44	5220		6.11	7.00
		48	5240		6.25	7.00
	U-NII-3	149	5745		9.49	9.50
		153	5765		9.22	9.50
		157	5785		9.32	9.50
		161	5805		9.19	9.50
		165	5825		9.26	9.50
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11n-HT20	U-NII-1	36	5180	MCS0	4.63	6.00
		40	5200		4.97	6.00
		44	5220		5.09	6.00
		48	5240		5.25	6.00
	U-NII-3	149	5745		8.05	9.00
		153	5765		8.15	9.00
		157	5785		8.23	9.00
		161	5805		8.11	9.00
		165	5825		8.05	9.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11n-HT40	U-NII-1	38	5190	MCS0	4.80	6.00
		46	5230		5.02	6.00
	U-NII-3	151	5755		8.21	9.00
		159	5795		8.10	9.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
	U-NII-1	36	5180	MCS0	4.26	6.00

802.11ac 20M		40	5200		4.32	6.00
		44	5220		4.42	6.00
		48	5240		4.76	6.00
	U-NII-3	149	5745		7.54	9.00
		153	5765		7.58	9.00
		157	5785		7.48	9.00
		161	5805		7.50	9.00
		165	5825		7.53	9.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac 40M	U-NII-1	38	5190	MCS0	3.53	4.50
		46	5230		3.95	4.50
	U-NII-3	151	5755		7.15	8.00
		159	5795		7.06	8.00
5GHz	mode	Channel	Frequency(MHz)	Data Rate(Mbps)	Average Power (dBm)	Tune up
802.11ac 80M	U-NII-1	42	5210	MCS0	3.70	4.50
	U-NII-3	155	5775		7.08	8.00

2.3 Conducted Power of Bluetooth

BT		Average Conducted Power(dBm)			Tune up
Band	Channel	0	39	78	
BT	GFSK	7.29	8.24	8.19	8.5
	$\pi/4$ DQPSK	4.85	5.68	5.77	6
	8DPSK	4.82	5.17	6.20	6
Band	Channel	0	19	39	Tune up
BLE 1M	GFSK	-6.12	-5.15	-6.70	-4
BLE 2M	GFSK	-6.38	-5.39	-6.95	-4