

8 CONDUCTED RF OUPUT POWER

8.1	GSM Output Power
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8.1 GSM Output Power

GSM										
GSM850	ANT	Burst Average Power(dBm)			Tune-up Power(dBm)	Division Factors	Frame-Averaged power (dBm)			Tune-up Power(dBm)
Channel		128	190	251			128	190	251	
Voice	ANT1	30.88	30.93	30.65	31.50	9.19	21.69	21.74	21.46	22.31
GPRS 1Slots	ANT1	30.88	30.94	30.66	31.50	9.19	21.69	21.75	21.47	22.31
GPRS 2Slots	ANT1	30.56	30.64	30.34	31.50	6.13	24.43	24.51	24.21	25.37
GPRS 3Slots	ANT1	29.40	29.53	29.18	30.50	4.42	24.98	25.11	24.76	26.08
GPRS 4Slots	ANT1	28.33	28.46	28.02	29.50	3.18	25.15	25.28	24.84	26.32

GSM										
GSM1900	ANT	Burst Average Power(dBm)			Tune-up Power(dBm)	Division Factors	Frame-Averaged power (dBm)			Tune-up Power(dBm)
Channel		512	661	810			128	190	251	
Voice	ANT1	27.32	27.59	27.03	28.50	9.19	18.13	18.40	17.84	19.31
GPRS 1Slots	ANT1	27.31	27.57	27.01	28.50	9.19	18.12	18.38	17.82	19.31
GPRS 2Slots	ANT1	27.05	27.33	26.77	28.50	6.13	20.92	21.20	20.64	22.37
GPRS 3Slots	ANT1	26.70	26.98	26.39	28.00	4.42	22.28	22.56	21.97	23.58
GPRS 4Slots	ANT1	26.44	26.73	26.13	27.50	3.18	23.26	23.55	22.95	24.32

8.2 WCDMA Output Power

WCDMA					
WCDMA B2	ANT	Output power(dBm)			Tune-up Limit Power(dBm)
Channel		9262	9400	9538	
AMR	ANT0	18.56	18.65	18.54	20.00
RMC	ANT0	18.64	18.79	18.56	20.00
HSDPA Subtest-1	ANT0	18.69	18.73	18.51	19.00
HSDPA Subtest-2	ANT0	18.54	18.67	18.46	19.00
HSDPA Subtest-3	ANT0	18.58	18.68	18.48	19.00
HSDPA Subtest-4	ANT0	18.62	18.65	18.45	19.00
HSUPA Subtest-1	ANT0	17.55	17.65	17.38	18.00
HSUPA Subtest-2	ANT0	17.53	17.56	17.36	18.00
HSUPA Subtest-3	ANT0	17.57	17.54	17.34	18.00
HSUPA Subtest-4	ANT0	17.51	17.64	17.41	18.00
HSUPA Subtest-5	ANT0	18.60	18.78	18.53	20.00

WCDMA					
WCDMA B4	ANT	Output power(dBm)			Tune-up Limit Power(dBm)
Channel		1312	1412	1513	
AMR	ANT1	20.28	20.75	20.40	22.00
RMC	ANT1	20.32	20.81	20.45	22.00
HSDPA Subtest-1	ANT1	19.99	20.63	20.30	21.00
HSDPA Subtest-2	ANT1	19.80	20.54	20.25	21.00
HSDPA Subtest-3	ANT1	19.76	20.54	20.27	21.00
HSDPA Subtest-4	ANT1	19.71	20.52	20.26	21.00
HSUPA Subtest-1	ANT1	18.93	19.60	19.26	20.00
HSUPA Subtest-2	ANT1	18.74	19.47	19.20	20.00
HSUPA Subtest-3	ANT1	18.69	19.41	19.17	20.00
HSUPA Subtest-4	ANT1	18.59	19.44	19.16	20.00
HSUPA Subtest-5	ANT1	20.19	20.67	20.40	22.00

WCDMA					
WCDMA B5	ANT	Output power(dBm)			Tune-up Limit Power(dBm)
Channel		4132	4183	4233	
AMR	ANT1	21.11	21.61	21.12	23.00
RMC	ANT1	21.15	21.71	21.17	23.00
HSDPA Subtest-1	ANT1	21.47	21.71	21.13	22.00
HSDPA Subtest-2	ANT1	21.24	21.65	21.10	22.00
HSDPA Subtest-3	ANT1	21.20	21.65	21.14	22.00
HSDPA Subtest-4	ANT1	21.13	21.63	21.12	22.00
HSUPA Subtest-1	ANT1	20.33	20.56	20.02	21.00
HSUPA Subtest-2	ANT1	20.20	20.50	20.06	21.00
HSUPA Subtest-3	ANT1	20.10	20.63	20.05	21.00
HSUPA Subtest-4	ANT1	20.00	20.62	20.09	21.00
HSUPA Subtest-5	ANT1	21.05	21.58	21.09	23.00

8.3 LTE Output Power

Band				LTE Band2				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	18607	18900	19185	Tune-up power(dBm)
1.4	QPSK	1	0	ANT1	21.09	21.14	21.03	22.00
1.4	QPSK	1	2	ANT1	20.87	21.01	20.87	22.00
1.4	QPSK	1	5	ANT1	20.84	20.81	20.83	22.00
1.4	QPSK	3	0	ANT1	20.78	20.82	20.92	22.00
1.4	QPSK	3	1	ANT1	20.95	20.96	20.85	22.00
1.4	QPSK	3	3	ANT1	20.93	20.96	20.87	22.00
1.4	QPSK	6	0	ANT1	20.92	20.93	20.89	22.00
1.4	16QAM	1	0	ANT1	20.79	20.89	20.85	22.00
1.4	16QAM	1	2	ANT1	20.76	20.97	20.86	22.00
1.4	16QAM	1	5	ANT1	20.90	20.92	20.76	22.00
1.4	16QAM	3	0	ANT1	20.89	20.87	20.76	22.00
1.4	16QAM	3	1	ANT1	20.85	20.93	20.76	22.00
1.4	16QAM	3	3	ANT1	20.73	20.91	20.73	22.00
1.4	16QAM	6	0	ANT1	20.87	20.99	21.00	22.00

Band				LTE Band2				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	18615	18900	19175	Tune-up power(dBm)
3	QPSK	1	0	ANT1	21.10	21.15	20.97	22.00
3	QPSK	1	7	ANT1	20.84	20.98	20.92	22.00
3	QPSK	1	14	ANT1	20.86	20.85	20.83	22.00
3	QPSK	8	0	ANT1	20.77	20.86	20.84	22.00
3	QPSK	8	3	ANT1	20.97	20.94	20.86	22.00
3	QPSK	8	7	ANT1	20.81	20.95	20.90	22.00
3	QPSK	15	0	ANT1	20.86	20.91	20.80	22.00
3	16QAM	1	0	ANT1	20.77	20.91	20.81	22.00
3	16QAM	1	7	ANT1	20.75	20.89	20.84	22.00
3	16QAM	1	14	ANT1	21.00	20.91	20.81	22.00
3	16QAM	8	0	ANT1	20.93	20.89	20.87	22.00
3	16QAM	8	3	ANT1	20.90	20.89	20.83	22.00
3	16QAM	8	7	ANT1	20.79	20.86	20.80	22.00
3	16QAM	15	0	ANT1	20.87	20.98	20.99	22.00

Band				LTE Band2				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	18625	18900	19175	Tune-up power(dBm)
5	QPSK	1	0	ANT1	21.05	21.07	20.94	22.00
5	QPSK	1	12	ANT1	20.89	21.02	20.92	22.00
5	QPSK	1	24	ANT1	20.86	20.83	20.83	22.00
5	QPSK	12	0	ANT1	20.76	20.90	20.85	22.00
5	QPSK	12	6	ANT1	20.95	20.94	20.86	22.00
5	QPSK	12	13	ANT1	20.89	21.07	20.91	22.00
5	QPSK	25	0	ANT1	20.87	20.88	20.85	22.00
5	16QAM	1	0	ANT1	20.77	20.97	20.94	22.00
5	16QAM	1	12	ANT1	20.75	20.92	20.89	22.00
5	16QAM	1	24	ANT1	20.96	20.90	20.85	22.00
5	16QAM	12	0	ANT1	20.94	20.91	20.88	22.00
5	16QAM	12	6	ANT1	20.95	20.86	20.73	22.00
5	16QAM	12	13	ANT1	20.78	20.98	20.79	22.00
5	16QAM	25	0	ANT1	20.88	21.00	20.97	22.00

Band				LTE Band2				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	18650	18900	19150	Tune-up power(dBm)
10	QPSK	1	0	ANT1	21.06	21.14	20.95	22.00
10	QPSK	1	24	ANT1	20.89	20.95	20.90	22.00
10	QPSK	1	49	ANT1	20.81	20.80	20.86	22.00
10	QPSK	25	0	ANT1	20.82	20.86	20.87	22.00
10	QPSK	25	12	ANT1	20.90	20.96	20.90	22.00
10	QPSK	25	25	ANT1	20.90	20.99	20.92	22.00
10	QPSK	50	0	ANT1	20.93	20.92	20.84	22.00
10	16QAM	1	0	ANT1	20.82	20.91	20.85	22.00
10	16QAM	1	24	ANT1	20.78	20.92	20.92	22.00
10	16QAM	1	49	ANT1	20.91	20.91	20.84	22.00
10	16QAM	25	0	ANT1	20.90	20.89	20.80	22.00
10	16QAM	25	12	ANT1	20.95	20.92	20.71	22.00
10	16QAM	25	25	ANT1	20.78	20.91	20.80	22.00
10	16QAM	50	0	ANT1	20.89	20.98	20.92	22.00

Band				LTE Band2				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	18675	18900	19125	Tune-up power(dBm)
15	QPSK	1	0	ANT1	20.97	21.18	20.92	22.00
15	QPSK	1	37	ANT1	20.88	21.02	21.00	22.00
15	QPSK	1	74	ANT1	20.82	20.91	20.83	22.00
15	QPSK	36	0	ANT1	20.85	20.84	20.84	22.00
15	QPSK	36	19	ANT1	20.88	21.04	20.86	22.00
15	QPSK	36	39	ANT1	20.92	21.01	20.87	22.00
15	QPSK	75	0	ANT1	20.86	20.91	20.89	22.00
15	16QAM	1	0	ANT1	20.80	20.90	20.93	22.00
15	16QAM	1	37	ANT1	20.80	20.96	20.91	22.00
15	16QAM	1	74	ANT1	20.92	20.89	20.78	22.00
15	16QAM	36	0	ANT1	20.90	20.86	20.75	22.00
15	16QAM	36	19	ANT1	20.89	20.89	20.75	22.00
15	16QAM	36	39	ANT1	20.81	20.85	20.77	22.00
15	16QAM	75	0	ANT1	20.76	21.03	20.89	22.00

Band				LTE Band2				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	18700	18900	19100	Tune-up power(dBm)
20	QPSK	1	0	ANT1	21.12	21.19	21.05	22.00
20	QPSK	1	49	ANT1	20.92	21.05	21.01	22.00
20	QPSK	1	99	ANT1	20.90	20.92	20.88	22.00
20	QPSK	50	0	ANT1	20.86	21.09	20.94	22.00
20	QPSK	50	25	ANT1	20.98	21.05	20.93	22.00
20	QPSK	50	50	ANT1	20.94	21.01	20.98	22.00
20	QPSK	100	0	ANT1	20.97	21.01	20.94	22.00
20	16QAM	1	0	ANT1	20.89	21.03	20.95	22.00
20	16QAM	1	49	ANT1	20.90	21.04	20.96	22.00
20	16QAM	1	99	ANT1	21.02	21.03	20.90	22.00
20	16QAM	50	0	ANT1	20.95	20.99	20.90	22.00
20	16QAM	50	25	ANT1	20.97	21.01	20.86	22.00
20	16QAM	50	50	ANT1	20.87	21.00	20.87	22.00
20	16QAM	100	0	ANT1	20.90	21.05	21.04	22.00

Band	Band	Band	Band	LTE Band4				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	19957	20175	20393	Tune-up power(dBm)
1.4	QPSK	1	0	ANT1	20.75	21.39	21.13	22.00
1.4	QPSK	1	2	ANT1	21.09	21.77	21.45	22.00
1.4	QPSK	1	5	ANT1	20.60	21.34	20.98	22.00
1.4	QPSK	3	0	ANT1	20.87	21.56	21.32	22.00
1.4	QPSK	3	1	ANT1	20.99	21.69	21.44	22.00
1.4	QPSK	3	3	ANT1	20.77	21.51	21.27	22.00
1.4	QPSK	6	0	ANT1	20.79	21.51	21.30	22.00
1.4	16QAM	1	0	ANT1	20.75	21.69	21.15	22.00
1.4	16QAM	1	2	ANT1	21.13	21.58	21.43	22.00
1.4	16QAM	1	5	ANT1	20.66	21.64	21.03	22.00
1.4	16QAM	3	0	ANT1	20.84	21.68	21.44	22.00
1.4	16QAM	3	1	ANT1	20.97	21.79	21.56	22.00
1.4	16QAM	3	3	ANT1	20.75	21.62	21.39	22.00
1.4	16QAM	6	0	ANT1	20.92	21.01	21.16	21.50

Band	Band	Band	Band	LTE Band4				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	19965	20175	20385	Tune-up power(dBm)
3	QPSK	1	0	ANT1	21.22	21.37	21.13	22.00
3	QPSK	1	7	ANT1	21.18	21.18	21.15	22.00
3	QPSK	1	14	ANT1	20.96	21.06	20.99	22.00
3	QPSK	8	0	ANT1	21.24	21.26	21.29	22.00
3	QPSK	8	3	ANT1	21.06	21.28	21.12	22.00
3	QPSK	8	7	ANT1	21.15	21.15	21.18	22.00
3	QPSK	15	0	ANT1	21.01	21.11	20.99	22.00
3	16QAM	1	0	ANT1	21.07	21.15	21.00	22.00
3	16QAM	1	7	ANT1	21.06	21.22	21.20	22.00
3	16QAM	1	14	ANT1	21.04	21.10	21.14	22.00
3	16QAM	8	0	ANT1	20.66	20.78	20.78	21.50
3	16QAM	8	3	ANT1	20.81	20.73	20.67	21.50
3	16QAM	8	7	ANT1	20.72	20.85	20.64	21.50
3	16QAM	15	0	ANT1	20.60	20.69	20.69	21.50

Band	Band	Band	Band	LTE Band4				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	19975	20175	20375	Tune-up power(dBm)
5	QPSK	1	0	ANT1	21.27	21.38	21.16	22.00
5	QPSK	1	12	ANT1	21.23	21.23	21.03	22.00
5	QPSK	1	24	ANT1	21.09	21.16	20.95	22.00
5	QPSK	12	0	ANT1	21.32	21.23	21.22	22.00
5	QPSK	12	6	ANT1	21.14	21.21	21.17	22.00
5	QPSK	12	13	ANT1	21.07	21.22	21.12	22.00
5	QPSK	25	0	ANT1	21.12	21.18	20.98	22.00
5	16QAM	1	0	ANT1	21.08	21.20	21.03	22.00
5	16QAM	1	12	ANT1	21.06	21.25	21.12	22.00
5	16QAM	1	24	ANT1	21.12	21.12	21.13	22.00
5	16QAM	12	0	ANT1	20.78	20.78	20.79	21.50
5	16QAM	12	6	ANT1	20.75	20.81	20.71	21.50
5	16QAM	12	13	ANT1	20.76	20.81	20.65	21.50
5	16QAM	25	0	ANT1	20.58	20.80	20.68	21.50

Band	Band	Band	Band	LTE Band4				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	20000	20175	20350	Tune-up power(dBm)
10	QPSK	1	0	ANT1	21.16	21.37	21.24	22.00
10	QPSK	1	24	ANT1	21.13	21.22	21.15	22.00
10	QPSK	1	49	ANT1	21.06	21.09	21.03	22.00
10	QPSK	25	0	ANT1	21.28	21.34	21.24	22.00
10	QPSK	25	12	ANT1	21.15	21.24	21.22	22.00
10	QPSK	25	25	ANT1	21.10	21.15	21.13	22.00
10	QPSK	50	0	ANT1	21.02	21.13	21.05	22.00
10	16QAM	1	0	ANT1	21.03	21.16	21.07	22.00
10	16QAM	1	24	ANT1	21.04	21.22	21.11	22.00
10	16QAM	1	49	ANT1	21.03	21.14	21.04	22.00
10	16QAM	25	0	ANT1	20.67	20.85	20.74	21.50
10	16QAM	25	12	ANT1	20.78	20.73	20.72	21.50
10	16QAM	25	25	ANT1	20.72	20.82	20.68	21.50
10	16QAM	50	0	ANT1	20.69	20.75	20.59	21.50

Band	Band	Band	Band	LTE Band4				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	20025	20175	20325	Tune-up power(dBm)
15	QPSK	1	0	ANT1	21.17	21.38	21.20	22.00
15	QPSK	1	37	ANT1	21.14	21.28	21.10	22.00
15	QPSK	1	74	ANT1	21.02	21.09	21.04	22.00
15	QPSK	36	0	ANT1	21.26	21.24	21.20	22.00
15	QPSK	36	19	ANT1	21.15	21.32	21.21	22.00
15	QPSK	36	39	ANT1	21.11	21.17	21.13	22.00
15	QPSK	75	0	ANT1	21.13	21.17	21.06	22.00
15	16QAM	1	0	ANT1	21.04	21.19	21.04	22.00
15	16QAM	1	37	ANT1	21.13	21.20	21.11	22.00
15	16QAM	1	74	ANT1	21.02	21.12	21.04	22.00
15	16QAM	36	0	ANT1	20.74	20.72	20.67	21.50
15	16QAM	36	19	ANT1	20.78	20.83	20.80	21.50
15	16QAM	36	39	ANT1	20.72	20.78	20.59	21.50
15	16QAM	75	0	ANT1	20.58	20.77	20.66	21.50

Band	Band	Band	Band	LTE Band4				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	20050	20175	20300	Tune-up power(dBm)
20	QPSK	1	0	ANT1	21.30	21.39	21.27	22.00
20	QPSK	1	49	ANT1	21.27	21.29	21.16	22.00
20	QPSK	1	99	ANT1	21.10	21.21	21.10	22.00
20	QPSK	50	0	ANT1	21.34	21.35	21.31	22.00
20	QPSK	50	25	ANT1	21.19	21.33	21.26	22.00
20	QPSK	50	50	ANT1	21.19	21.29	21.27	22.00
20	QPSK	100	0	ANT1	21.16	21.23	21.08	22.00
20	16QAM	1	0	ANT1	21.16	21.25	21.11	22.00
20	16QAM	1	49	ANT1	21.17	21.32	21.21	22.00
20	16QAM	1	99	ANT1	21.13	21.25	21.16	22.00
20	16QAM	50	0	ANT1	20.81	20.86	20.82	21.50
20	16QAM	50	25	ANT1	20.83	20.85	20.81	21.50
20	16QAM	50	50	ANT1	20.87	20.89	20.74	21.50
20	16QAM	100	0	ANT1	20.72	20.82	20.74	21.50

Band				LTE Band5				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	20407	20525	20643	Tune-up power(dBm)
1.4	QPSK	1	0	ANT1	21.07	21.13	21.06	21.50
1.4	QPSK	1	2	ANT1	20.97	20.97	20.97	21.50
1.4	QPSK	1	5	ANT1	20.82	20.85	20.88	21.50
1.4	QPSK	3	0	ANT1	20.74	20.81	20.82	21.50
1.4	QPSK	3	1	ANT1	20.69	20.80	20.74	21.50
1.4	QPSK	3	3	ANT1	20.91	20.86	20.96	21.50
1.4	QPSK	6	0	ANT1	20.73	20.86	20.82	21.50
1.4	16QAM	1	0	ANT1	20.86	20.78	20.89	21.50
1.4	16QAM	1	2	ANT1	20.67	20.75	20.64	21.50
1.4	16QAM	1	5	ANT1	20.62	20.74	20.65	21.50
1.4	16QAM	3	0	ANT1	20.80	20.92	20.68	21.50
1.4	16QAM	3	1	ANT1	20.80	20.80	20.67	21.50
1.4	16QAM	3	3	ANT1	20.84	20.89	20.83	21.50
1.4	16QAM	6	0	ANT1	20.80	20.74	20.59	21.50

Band				LTE Band5				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	20415	20525	20635	Tune-up power(dBm)
3	QPSK	1	0	ANT1	21.08	21.15	21.10	21.50
3	QPSK	1	7	ANT1	20.96	21.01	21.02	21.50
3	QPSK	1	14	ANT1	20.85	20.88	20.80	21.50
3	QPSK	8	0	ANT1	20.69	20.84	20.73	21.50
3	QPSK	8	3	ANT1	20.62	20.82	20.75	21.50
3	QPSK	8	7	ANT1	20.93	20.95	20.82	21.50
3	QPSK	15	0	ANT1	20.80	20.84	20.79	21.50
3	16QAM	1	0	ANT1	20.77	20.88	20.82	21.50
3	16QAM	1	7	ANT1	20.67	20.72	20.54	21.50
3	16QAM	1	14	ANT1	20.56	20.74	20.67	21.50
3	16QAM	8	0	ANT1	20.77	20.90	20.65	21.50
3	16QAM	8	3	ANT1	20.75	20.81	20.66	21.50
3	16QAM	8	7	ANT1	20.79	20.85	20.77	21.50
3	16QAM	15	0	ANT1	20.79	20.83	20.70	21.50

Band				LTE Band5				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	20425	20525	20625	Tune-up power(dBm)
5	QPSK	1	0	ANT1	21.03	21.21	20.99	21.50
5	QPSK	1	12	ANT1	21.02	21.01	20.92	21.50
5	QPSK	1	24	ANT1	20.88	20.97	20.79	21.50
5	QPSK	12	0	ANT1	20.75	20.71	20.78	21.50
5	QPSK	12	6	ANT1	20.69	20.75	20.80	21.50
5	QPSK	12	13	ANT1	20.83	20.96	20.94	21.50
5	QPSK	25	0	ANT1	20.74	20.78	20.85	21.50
5	16QAM	1	0	ANT1	20.90	20.87	20.79	21.50
5	16QAM	1	12	ANT1	20.71	20.80	20.55	21.50
5	16QAM	1	24	ANT1	20.62	20.80	20.70	21.50
5	16QAM	12	0	ANT1	20.81	20.93	20.73	21.50
5	16QAM	12	6	ANT1	20.85	20.80	20.72	21.50
5	16QAM	12	13	ANT1	20.85	20.79	20.88	21.50
5	16QAM	25	0	ANT1	20.78	20.75	20.59	21.50

Band				LTE Band5				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	20450	20525	20600	Tune-up power(dBm)
10	QPSK	1	0	ANT1	21.16	21.22	21.14	21.50
10	QPSK	1	24	ANT1	21.07	21.10	21.07	21.50
10	QPSK	1	49	ANT1	20.90	20.98	20.92	21.50
10	QPSK	25	0	ANT1	20.98	20.99	20.97	21.50
10	QPSK	25	12	ANT1	20.74	20.86	20.83	21.50
10	QPSK	25	25	ANT1	20.76	20.85	20.84	21.50
10	QPSK	50	0	ANT1	20.88	20.93	20.92	21.50
10	16QAM	1	0	ANT1	20.91	20.93	20.92	21.50
10	16QAM	1	24	ANT1	20.82	20.83	20.68	21.50
10	16QAM	1	49	ANT1	20.70	20.83	20.79	21.50
10	16QAM	25	0	ANT1	20.90	20.94	20.79	21.50
10	16QAM	25	12	ANT1	20.87	20.89	20.75	21.50
10	16QAM	25	25	ANT1	20.92	20.94	20.89	21.50
10	16QAM	50	0	ANT1	20.85	20.87	20.72	21.50

Band				LTE Band7				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	20775	21100	21425	Tune-up power(dBm)
5	QPSK	1	0	ANT1	20.69	20.79	20.75	21.50
5	QPSK	1	12	ANT1	20.61	20.62	20.53	21.50
5	QPSK	1	24	ANT1	20.51	20.51	20.48	21.50
5	QPSK	12	0	ANT1	20.33	20.41	20.26	21.50
5	QPSK	12	6	ANT1	20.42	20.53	20.57	21.50
5	QPSK	12	13	ANT1	20.64	20.73	20.62	21.50
5	QPSK	25	0	ANT1	20.58	20.70	20.62	21.50
5	16QAM	1	0	ANT1	20.44	20.49	20.42	21.50
5	16QAM	1	12	ANT1	20.47	20.67	20.52	21.50
5	16QAM	1	24	ANT1	20.55	20.61	20.54	21.50
5	16QAM	12	0	ANT1	20.43	20.37	20.36	21.50
5	16QAM	12	6	ANT1	20.60	20.50	20.43	21.50
5	16QAM	12	13	ANT1	20.42	20.66	20.52	21.50
5	16QAM	25	0	ANT1	20.36	20.56	20.40	21.50

Band				LTE Band7				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	20800	21100	21400	Tune-up power(dBm)
10	QPSK	1	0	ANT1	20.61	20.80	20.73	21.50
10	QPSK	1	24	ANT1	20.64	20.72	20.54	21.50
10	QPSK	1	49	ANT1	20.44	20.61	20.52	21.50
10	QPSK	25	0	ANT1	20.36	20.48	20.29	21.50
10	QPSK	25	12	ANT1	20.41	20.54	20.45	21.50
10	QPSK	25	25	ANT1	20.63	20.72	20.58	21.50
10	QPSK	50	0	ANT1	20.49	20.62	20.69	21.50
10	16QAM	1	0	ANT1	20.42	20.43	20.35	21.50
10	16QAM	1	24	ANT1	20.43	20.64	20.54	21.50
10	16QAM	1	49	ANT1	20.63	20.69	20.58	21.50
10	16QAM	25	0	ANT1	20.33	20.38	20.29	21.50
10	16QAM	25	12	ANT1	20.48	20.49	20.35	21.50
10	16QAM	25	25	ANT1	20.46	20.65	20.46	21.50
10	16QAM	50	0	ANT1	20.40	20.46	20.42	21.50

Band				LTE Band7				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	20825	21100	21375	Tune-up power(dBm)
15	QPSK	1	0	ANT1	20.64	20.74	20.72	21.50
15	QPSK	1	37	ANT1	20.58	20.62	20.56	21.50
15	QPSK	1	74	ANT1	20.42	20.62	20.51	21.50
15	QPSK	36	0	ANT1	20.31	20.44	20.23	21.50
15	QPSK	36	19	ANT1	20.41	20.52	20.44	21.50
15	QPSK	36	39	ANT1	20.66	20.66	20.67	21.50
15	QPSK	75	0	ANT1	20.48	20.74	20.64	21.50
15	16QAM	1	0	ANT1	20.42	20.56	20.33	21.50
15	16QAM	1	37	ANT1	20.47	20.67	20.60	21.50
15	16QAM	1	74	ANT1	20.56	20.69	20.61	21.50
15	16QAM	36	0	ANT1	20.34	20.40	20.37	21.50
15	16QAM	36	19	ANT1	20.51	20.57	20.36	21.50
15	16QAM	36	39	ANT1	20.54	20.58	20.48	21.50
15	16QAM	75	0	ANT1	20.39	20.45	20.35	21.50

Band				LTE Band7				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	20850	21100	21350	Tune-up power(dBm)
20	QPSK	1	0	ANT1	20.75	20.86	20.81	21.50
20	QPSK	1	49	ANT1	20.66	20.75	20.60	21.50
20	QPSK	1	99	ANT1	20.53	20.66	20.61	21.50
20	QPSK	50	0	ANT1	20.72	20.74	20.70	21.50
20	QPSK	50	25	ANT1	20.45	20.60	20.59	21.50
20	QPSK	50	50	ANT1	20.47	20.51	20.38	21.50
20	QPSK	100	0	ANT1	20.61	20.76	20.70	21.50
20	16QAM	1	0	ANT1	20.46	20.57	20.45	21.50
20	16QAM	1	49	ANT1	20.56	20.70	20.64	21.50
20	16QAM	1	99	ANT1	20.64	20.72	20.67	21.50
20	16QAM	50	0	ANT1	20.46	20.51	20.44	21.50
20	16QAM	50	25	ANT1	20.61	20.63	20.49	21.50
20	16QAM	50	50	ANT1	20.56	20.68	20.58	21.50
20	16QAM	100	0	ANT1	20.46	20.60	20.47	21.50

Band				LTE Band12				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	23017	23095	23173	Tune-up power(dBm)
1.4	QPSK	1	0	ANT0	20.87	21.07	20.90	21.50
1.4	QPSK	1	2	ANT0	20.56	20.79	20.76	21.50
1.4	QPSK	1	5	ANT0	20.68	20.64	20.63	21.50
1.4	QPSK	3	0	ANT0	20.62	20.72	20.69	21.50
1.4	QPSK	3	1	ANT0	20.63	20.73	20.56	21.50
1.4	QPSK	3	3	ANT0	20.51	20.61	20.45	21.50
1.4	QPSK	6	0	ANT0	20.62	20.57	20.53	21.50
1.4	16QAM	1	0	ANT0	20.65	20.67	20.52	21.50
1.4	16QAM	1	2	ANT0	20.63	20.66	20.55	21.50
1.4	16QAM	1	5	ANT0	20.58	20.72	20.60	21.50
1.4	16QAM	3	0	ANT0	20.76	20.90	20.83	21.50
1.4	16QAM	3	1	ANT0	20.78	20.79	20.65	21.50
1.4	16QAM	3	3	ANT0	20.45	20.59	20.62	21.50
1.4	16QAM	6	0	ANT0	20.62	20.65	20.64	21.50

Band				LTE Band12				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	23025	23095	23165	Tune-up power(dBm)
3	QPSK	1	0	ANT0	20.79	21.09	20.86	21.50
3	QPSK	1	7	ANT0	20.70	20.71	20.72	21.50
3	QPSK	1	14	ANT0	20.61	20.74	20.68	21.50
3	QPSK	8	0	ANT0	20.67	20.72	20.66	21.50
3	QPSK	8	3	ANT0	20.53	20.60	20.58	21.50
3	QPSK	8	7	ANT0	20.54	20.55	20.54	21.50
3	QPSK	15	0	ANT0	20.58	20.59	20.47	21.50
3	16QAM	1	0	ANT0	20.54	20.55	20.54	21.50
3	16QAM	1	7	ANT0	20.54	20.67	20.53	21.50
3	16QAM	1	14	ANT0	20.60	20.74	20.61	21.50
3	16QAM	8	0	ANT0	20.74	20.91	20.81	21.50
3	16QAM	8	3	ANT0	20.74	20.80	20.60	21.50
3	16QAM	8	7	ANT0	20.50	20.65	20.56	21.50
3	16QAM	15	0	ANT0	20.61	20.72	20.69	21.50

Band				LTE Band12				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	23035	23095	23155	Tune-up power(dBm)
5	QPSK	1	0	ANT0	20.90	21.09	20.96	21.50
5	QPSK	1	12	ANT0	20.61	20.78	20.67	21.50
5	QPSK	1	24	ANT0	20.59	20.67	20.68	21.50
5	QPSK	12	0	ANT0	20.65	20.75	20.58	21.50
5	QPSK	12	6	ANT0	20.66	20.67	20.57	21.50
5	QPSK	12	13	ANT0	20.50	20.57	20.42	21.50
5	QPSK	25	0	ANT0	20.57	20.57	20.53	21.50
5	16QAM	1	0	ANT0	20.55	20.61	20.47	21.50
5	16QAM	1	12	ANT0	20.64	20.55	20.53	21.50
5	16QAM	1	24	ANT0	20.63	20.72	20.59	21.50
5	16QAM	12	0	ANT0	20.71	20.86	20.78	21.50
5	16QAM	12	6	ANT0	20.70	20.70	20.62	21.50
5	16QAM	12	13	ANT0	20.54	20.64	20.64	21.50
5	16QAM	25	0	ANT0	20.71	20.76	20.57	21.50

Band				LTE Band12				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	23060	23095	23130	Tune-up power(dBm)
10	QPSK	1	0	ANT0	20.93	21.14	20.99	21.50
10	QPSK	1	24	ANT0	20.71	20.82	20.80	21.50
10	QPSK	1	49	ANT0	20.72	20.78	20.71	21.50
10	QPSK	25	0	ANT0	20.76	20.85	20.72	21.50
10	QPSK	25	12	ANT0	20.68	20.75	20.61	21.50
10	QPSK	25	25	ANT0	20.60	20.64	20.55	21.50
10	QPSK	50	0	ANT0	20.70	20.72	20.61	21.50
10	16QAM	1	0	ANT0	20.66	20.70	20.55	21.50
10	16QAM	1	24	ANT0	20.66	20.69	20.59	21.50
10	16QAM	1	49	ANT0	20.71	20.79	20.64	21.50
10	16QAM	25	0	ANT0	20.85	20.93	20.89	21.50
10	16QAM	25	12	ANT0	20.84	20.85	20.75	21.50
10	16QAM	25	25	ANT0	20.57	20.71	20.69	21.50
10	16QAM	50	0	ANT0	20.76	20.80	20.71	21.50

Band				LTE Band17				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	23755	23790	23825	Tune-up power(dBm)
5	QPSK	1	0	ANT1	20.06	20.23	20.12	21.50
5	QPSK	1	12	ANT1	19.87	19.87	19.83	21.50
5	QPSK	1	24	ANT1	19.72	19.80	19.70	21.50
5	QPSK	12	0	ANT1	19.76	19.86	19.76	21.50
5	QPSK	12	6	ANT1	19.58	19.53	19.52	21.50
5	QPSK	12	13	ANT1	19.63	19.75	19.66	21.50
5	QPSK	25	0	ANT1	19.54	19.51	19.63	21.50
5	16QAM	1	0	ANT1	20.07	20.12	20.09	21.50
5	16QAM	1	12	ANT1	20.06	20.02	20.05	21.50
5	16QAM	1	24	ANT1	19.52	19.62	19.50	21.50
5	16QAM	12	0	ANT1	19.86	19.88	19.66	21.50
5	16QAM	12	6	ANT1	19.64	19.74	19.57	21.50
5	16QAM	12	13	ANT1	19.55	19.73	19.56	21.50
5	16QAM	25	0	ANT1	19.61	19.71	19.73	21.50

Band				LTE Band17				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	23780	23790	23800	Tune-up power(dBm)
10	QPSK	1	0	ANT1	20.14	20.28	20.20	21.50
10	QPSK	1	24	ANT1	19.96	19.98	19.93	21.50
10	QPSK	1	49	ANT1	19.75	19.85	19.80	21.50
10	QPSK	25	0	ANT1	19.88	19.89	19.84	21.50
10	QPSK	25	12	ANT1	19.54	19.68	19.54	21.50
10	QPSK	25	25	ANT1	19.76	19.84	19.70	21.50
10	QPSK	50	0	ANT1	19.61	19.62	19.77	21.50
10	16QAM	1	0	ANT1	20.11	20.19	20.14	21.50
10	16QAM	1	24	ANT1	20.11	20.12	20.11	21.50
10	16QAM	1	49	ANT1	19.66	19.67	19.52	21.50
10	16QAM	25	0	ANT1	19.90	19.92	19.79	21.50
10	16QAM	25	12	ANT1	19.69	19.75	19.68	21.50
10	16QAM	25	25	ANT1	19.70	19.83	19.71	21.50
10	16QAM	50	0	ANT1	19.72	19.83	19.74	21.50

Band				LTE Band66				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	131979	132322	132665	Tune-up power(dBm)
1.4	QPSK	1	0	ANT1	20.78	20.97	20.87	22.00
1.4	QPSK	1	2	ANT1	20.73	20.73	20.58	22.00
1.4	QPSK	1	5	ANT1	20.60	20.74	20.66	22.00
1.4	QPSK	3	0	ANT1	20.62	20.68	20.57	22.00
1.4	QPSK	3	1	ANT1	20.81	20.69	20.66	22.00
1.4	QPSK	3	3	ANT1	20.53	20.66	20.64	22.00
1.4	QPSK	6	0	ANT1	20.60	20.71	20.76	22.00
1.4	16QAM	1	0	ANT1	20.79	20.70	20.61	22.00
1.4	16QAM	1	2	ANT1	20.59	20.71	20.66	22.00
1.4	16QAM	1	5	ANT1	20.56	20.71	20.65	22.00
1.4	16QAM	3	0	ANT1	20.21	20.33	20.15	22.00
1.4	16QAM	3	1	ANT1	20.25	20.36	20.22	22.00
1.4	16QAM	3	3	ANT1	20.32	20.44	20.40	22.00
1.4	16QAM	6	0	ANT1	20.36	20.44	20.28	21.50

Band				LTE Band66				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	131987	132322	132657	Tune-up power(dBm)
3	QPSK	1	0	ANT1	20.80	20.87	20.81	22.00
3	QPSK	1	7	ANT1	20.77	20.78	20.69	22.00
3	QPSK	1	14	ANT1	20.63	20.77	20.73	22.00
3	QPSK	8	0	ANT1	20.62	20.70	20.57	22.00
3	QPSK	8	3	ANT1	20.73	20.74	20.68	22.00
3	QPSK	8	7	ANT1	20.58	20.64	20.67	22.00
3	QPSK	15	0	ANT1	20.73	20.74	20.72	22.00
3	16QAM	1	0	ANT1	20.75	20.78	20.67	22.00
3	16QAM	1	7	ANT1	20.65	20.68	20.75	22.00
3	16QAM	1	14	ANT1	20.58	20.67	20.70	22.00
3	16QAM	8	0	ANT1	20.33	20.36	20.11	21.50
3	16QAM	8	3	ANT1	20.30	20.31	20.32	21.50
3	16QAM	8	7	ANT1	20.32	20.43	20.35	21.50
3	16QAM	15	0	ANT1	20.30	20.46	20.33	21.50

Band				LTE Band66				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	131997	132322	132647	Tune-up power(dBm)
5	QPSK	1	0	ANT1	20.73	20.99	20.90	22.00
5	QPSK	1	12	ANT1	20.75	20.73	20.67	22.00
5	QPSK	1	24	ANT1	20.61	20.67	20.70	22.00
5	QPSK	12	0	ANT1	20.61	20.67	20.54	22.00
5	QPSK	12	6	ANT1	20.79	20.73	20.73	22.00
5	QPSK	12	13	ANT1	20.63	20.67	20.67	22.00
5	QPSK	25	0	ANT1	20.64	20.83	20.72	22.00
5	16QAM	1	0	ANT1	20.71	20.74	20.68	22.00
5	16QAM	1	12	ANT1	20.62	20.71	20.71	22.00
5	16QAM	1	24	ANT1	20.63	20.68	20.65	22.00
5	16QAM	12	0	ANT1	20.33	20.28	20.13	21.50
5	16QAM	12	6	ANT1	20.29	20.43	20.31	21.50
5	16QAM	12	13	ANT1	20.33	20.49	20.33	21.50
5	16QAM	25	0	ANT1	20.37	20.44	20.29	21.50

Band				LTE Band66				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	132022	132322	132622	Tune-up power(dBm)
10	QPSK	1	0	ANT1	20.85	20.89	20.85	22.00
10	QPSK	1	24	ANT1	20.76	20.75	20.71	22.00
10	QPSK	1	49	ANT1	20.61	20.72	20.75	22.00
10	QPSK	25	0	ANT1	20.70	20.60	20.49	22.00
10	QPSK	25	12	ANT1	20.72	20.79	20.68	22.00
10	QPSK	25	25	ANT1	20.57	20.68	20.55	22.00
10	QPSK	50	0	ANT1	20.68	20.70	20.63	22.00
10	16QAM	1	0	ANT1	20.73	20.68	20.61	22.00
10	16QAM	1	24	ANT1	20.59	20.70	20.71	22.00
10	16QAM	1	49	ANT1	20.64	20.70	20.69	22.00
10	16QAM	25	0	ANT1	20.23	20.33	20.15	21.50
10	16QAM	25	12	ANT1	20.29	20.36	20.32	21.50
10	16QAM	25	25	ANT1	20.31	20.44	20.41	21.50
10	16QAM	50	0	ANT1	20.34	20.45	20.25	21.50

Band				LTE Band66				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	132047	132322	132597	Tune-up power(dBm)
15	QPSK	1	0	ANT1	20.74	20.91	20.83	22.00
15	QPSK	1	37	ANT1	20.78	20.77	20.59	22.00
15	QPSK	1	74	ANT1	20.71	20.72	20.71	22.00
15	QPSK	36	0	ANT1	20.62	20.70	20.48	22.00
15	QPSK	36	19	ANT1	20.71	20.70	20.73	22.00
15	QPSK	36	39	ANT1	20.60	20.76	20.55	22.00
15	QPSK	75	0	ANT1	20.69	20.80	20.73	22.00
15	16QAM	1	0	ANT1	20.75	20.79	20.66	22.00
15	16QAM	1	37	ANT1	20.67	20.77	20.74	22.00
15	16QAM	1	74	ANT1	20.62	20.70	20.70	22.00
15	16QAM	36	0	ANT1	20.20	20.23	20.15	21.50
15	16QAM	36	19	ANT1	20.25	20.40	20.23	21.50
15	16QAM	36	39	ANT1	20.28	20.47	20.43	21.50
15	16QAM	75	0	ANT1	20.34	20.41	20.36	21.50

Band				LTE Band66				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	132072	132322	132572	Tune-up power(dBm)
20	QPSK	1	0	ANT1	20.87	21.02	20.96	22.00
20	QPSK	1	49	ANT1	20.83	20.86	20.73	22.00
20	QPSK	1	99	ANT1	20.75	20.79	20.78	22.00
20	QPSK	50	0	ANT1	20.82	20.84	20.79	22.00
20	QPSK	50	25	ANT1	20.72	20.75	20.60	22.00
20	QPSK	50	50	ANT1	20.66	20.79	20.68	22.00
20	QPSK	100	0	ANT1	20.74	20.85	20.77	22.00
20	16QAM	1	0	ANT1	20.81	20.82	20.69	22.00
20	16QAM	1	49	ANT1	20.68	20.79	20.77	22.00
20	16QAM	1	99	ANT1	20.67	20.80	20.79	22.00
20	16QAM	50	0	ANT1	20.35	20.37	20.26	21.50
20	16QAM	50	25	ANT1	20.32	20.45	20.37	21.50
20	16QAM	50	50	ANT1	20.41	20.51	20.47	21.50
20	16QAM	100	0	ANT1	20.45	20.49	20.40	21.50

Band				LTE Band38				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	37775	38000	38225	Tune-up power(dBm)
5	QPSK	1	0	ANT1	20.13	20.23	20.13	21.00
5	QPSK	1	12	ANT1	19.54	19.61	19.60	21.00
5	QPSK	1	24	ANT1	19.21	19.40	19.28	21.00
5	QPSK	12	0	ANT1	19.82	20.01	19.82	21.00
5	QPSK	12	6	ANT1	19.50	19.70	19.58	21.00
5	QPSK	12	13	ANT1	19.44	19.52	19.47	21.00
5	QPSK	25	0	ANT1	19.60	19.74	19.67	21.00
5	16QAM	1	0	ANT1	19.73	19.88	19.80	21.00
5	16QAM	1	12	ANT1	19.79	19.81	19.79	21.00
5	16QAM	1	24	ANT1	19.59	19.65	19.55	21.00
5	16QAM	12	0	ANT1	19.73	19.99	19.94	21.00
5	16QAM	12	6	ANT1	19.65	19.65	19.61	21.00
5	16QAM	12	13	ANT1	19.31	19.55	19.45	21.00
5	16QAM	25	0	ANT1	19.74	19.73	19.79	21.00

Band				LTE Band38				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	37800	38000	38200	Tune-up power(dBm)
10	QPSK	1	0	ANT1	20.13	20.21	20.08	21.00
10	QPSK	1	24	ANT1	19.51	19.63	19.68	21.00
10	QPSK	1	49	ANT1	19.18	19.34	19.31	21.00
10	QPSK	25	0	ANT1	19.84	19.90	19.74	21.00
10	QPSK	25	12	ANT1	19.55	19.70	19.55	21.00
10	QPSK	25	25	ANT1	19.46	19.53	19.38	21.00
10	QPSK	50	0	ANT1	19.61	19.79	19.59	21.00
10	16QAM	1	0	ANT1	19.71	19.80	19.82	21.00
10	16QAM	1	24	ANT1	19.79	19.82	19.79	21.00
10	16QAM	1	49	ANT1	19.56	19.64	19.52	21.00
10	16QAM	25	0	ANT1	19.74	19.88	19.86	21.00
10	16QAM	25	12	ANT1	19.60	19.68	19.61	21.00
10	16QAM	25	25	ANT1	19.39	19.44	19.40	21.00
10	16QAM	50	0	ANT1	19.79	19.71	19.72	21.00

Band				LTE Band38				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	37825	38000	38175	Tune-up power(dBm)
15	QPSK	1	0	ANT1	20.20	20.29	20.14	21.00
15	QPSK	1	37	ANT1	19.58	19.63	19.64	21.00
15	QPSK	1	74	ANT1	19.17	19.35	19.18	21.00
15	QPSK	36	0	ANT1	19.82	19.90	19.73	21.00
15	QPSK	36	19	ANT1	19.45	19.70	19.51	21.00
15	QPSK	36	39	ANT1	19.47	19.43	19.45	21.00
15	QPSK	75	0	ANT1	19.54	19.69	19.63	21.00
15	16QAM	1	0	ANT1	19.68	19.78	19.82	21.00
15	16QAM	1	37	ANT1	19.69	19.76	19.70	21.00
15	16QAM	1	74	ANT1	19.57	19.73	19.51	21.00
15	16QAM	36	0	ANT1	19.85	19.92	19.83	21.00
15	16QAM	36	19	ANT1	19.62	19.70	19.69	21.00
15	16QAM	36	39	ANT1	19.29	19.47	19.50	21.00
15	16QAM	75	0	ANT1	19.71	19.80	19.74	21.00

Band				LTE Band38				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	37850	38000	38150	Tune-up power(dBm)
20	QPSK	1	0	ANT1	20.28	20.35	20.22	21.00
20	QPSK	1	49	ANT1	19.64	19.76	19.69	21.00
20	QPSK	1	99	ANT1	19.31	19.44	19.33	21.00
20	QPSK	50	0	ANT1	19.92	20.02	19.88	21.00
20	QPSK	50	25	ANT1	19.60	19.74	19.59	21.00
20	QPSK	50	50	ANT1	19.51	19.54	19.48	21.00
20	QPSK	100	0	ANT1	19.69	19.83	19.68	21.00
20	16QAM	1	0	ANT1	19.80	19.92	19.86	21.00
20	16QAM	1	49	ANT1	19.81	19.91	19.81	21.00
20	16QAM	1	99	ANT1	19.68	19.79	19.64	21.00
20	16QAM	50	0	ANT1	19.88	20.01	19.97	21.00
20	16QAM	50	25	ANT1	19.68	19.76	19.73	21.00
20	16QAM	50	50	ANT1	19.41	19.56	19.55	21.00
20	16QAM	100	0	ANT1	19.80	19.83	19.82	21.00

Band				LTE Band41				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	40065	40640	41215	Tune-up power(dBm)
5	QPSK	1	0	ANT1	19.99	20.28	20.09	21.00
5	QPSK	1	12	ANT1	19.61	19.75	19.62	21.00
5	QPSK	1	24	ANT1	19.26	19.45	19.30	21.00
5	QPSK	12	0	ANT1	19.93	20.03	19.82	21.00
5	QPSK	12	6	ANT1	19.65	19.60	19.57	21.00
5	QPSK	12	13	ANT1	19.32	19.47	19.44	21.00
5	QPSK	25	0	ANT1	19.80	19.69	19.75	21.00
5	16QAM	1	0	ANT1	19.97	20.04	19.96	21.00
5	16QAM	1	12	ANT1	19.86	19.83	19.72	21.00
5	16QAM	1	24	ANT1	19.58	19.60	19.55	21.00
5	16QAM	12	0	ANT1	19.98	19.99	19.97	21.00
5	16QAM	12	6	ANT1	19.65	19.65	19.66	21.00
5	16QAM	12	13	ANT1	19.37	19.45	19.38	21.00
5	16QAM	25	0	ANT1	19.68	19.75	19.71	21.00

Band				LTE Band41				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	40090	40640	41190	Tune-up power(dBm)
10	QPSK	1	0	ANT1	20.02	20.14	20.04	21.00
10	QPSK	1	24	ANT1	19.64	19.67	19.67	21.00
10	QPSK	1	49	ANT1	19.20	19.32	19.38	21.00
10	QPSK	25	0	ANT1	19.85	19.99	19.81	21.00
10	QPSK	25	12	ANT1	19.69	19.61	19.61	21.00
10	QPSK	25	25	ANT1	19.30	19.49	19.39	21.00
10	QPSK	50	0	ANT1	19.73	19.76	19.75	21.00
10	16QAM	1	0	ANT1	19.99	19.97	19.92	21.00
10	16QAM	1	24	ANT1	19.87	19.89	19.75	21.00
10	16QAM	1	49	ANT1	19.56	19.64	19.52	21.00
10	16QAM	25	0	ANT1	19.96	19.98	20.01	21.00
10	16QAM	25	12	ANT1	19.66	19.63	19.73	21.00
10	16QAM	25	25	ANT1	19.47	19.54	19.31	21.00
10	16QAM	50	0	ANT1	19.69	19.71	19.72	21.00

Band				LTE Band41				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	40115	40640	41165	Tune-up power(dBm)
15	QPSK	1	0	ANT1	20.02	20.20	20.07	21.00
15	QPSK	1	37	ANT1	19.60	19.74	19.62	21.00
15	QPSK	1	74	ANT1	19.25	19.34	19.30	21.00
15	QPSK	36	0	ANT1	19.82	19.95	19.83	21.00
15	QPSK	36	19	ANT1	19.69	19.63	19.58	21.00
15	QPSK	36	39	ANT1	19.42	19.46	19.40	21.00
15	QPSK	75	0	ANT1	19.75	19.82	19.67	21.00
15	16QAM	1	0	ANT1	20.02	19.92	19.85	21.00
15	16QAM	1	37	ANT1	19.87	19.85	19.66	21.00
15	16QAM	1	74	ANT1	19.61	19.60	19.57	21.00
15	16QAM	36	0	ANT1	19.87	19.99	19.94	21.00
15	16QAM	36	19	ANT1	19.65	19.66	19.64	21.00
15	16QAM	36	39	ANT1	19.40	19.54	19.37	21.00
15	16QAM	75	0	ANT1	19.79	19.77	19.68	21.00

Band				LTE Band41				
Bandwidth (MHz)	Modulation	RB Size	RB offset	ANT	40140	40640	41140	Tune-up power(dBm)
20	QPSK	1	0	ANT1	20.14	20.29	20.17	21.00
20	QPSK	1	49	ANT1	19.66	19.76	19.75	21.00
20	QPSK	1	99	ANT1	19.34	19.46	19.43	21.00
20	QPSK	50	0	ANT1	19.94	20.04	19.94	21.00
20	QPSK	50	25	ANT1	19.70	19.72	19.67	21.00
20	QPSK	50	50	ANT1	19.44	19.56	19.47	21.00
20	QPSK	100	0	ANT1	19.82	19.83	19.78	21.00
20	16QAM	1	0	ANT1	20.03	20.06	19.98	21.00
20	16QAM	1	49	ANT1	19.89	19.92	19.80	21.00
20	16QAM	1	99	ANT1	19.69	19.73	19.65	21.00
20	16QAM	50	0	ANT1	20.02	20.03	20.02	21.00
20	16QAM	50	25	ANT1	19.73	19.75	19.74	21.00
20	16QAM	50	50	ANT1	19.49	19.55	19.46	21.00
20	16QAM	100	0	ANT1	19.80	19.83	19.76	21.00

8.4 WIFI Output Power

8.4.1 WIFI2.4G Output Power

WIFI2.4G-ANT7-Full Power						
2.4G	Mode	Channal	Frequency (MHz)	AV power (dBm)	Tune up (dBm)	SAR Test
	11b	1	2412	16.02	17.00	No
		6	2437	16.06	17.00	No
		11	2462	16.37	17.00	Yes
	11g	1	2412	14.61	15.50	No
		6	2437	14.69	15.50	No
		11	2462	14.95	15.50	No
	11n-HT20	1	2412	15.37	16.50	No
		6	2437	15.61	16.50	No
		11	2462	14.66	15.50	No

Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially.

1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.

2) When multiple transmission modes (802.11b/g/n) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.

3) According KDB 247228, when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, OFDM SAR test is not required.

Adjusted SAR = 0.408 * (50.12mW/44.67mW) = 0.364 W/Kg, so 2.4G OFDM SAR test is not required.

8.4.2 WIFI5G Output Power

WIFI5G-ANT7-Full Power						
5.2G	Mode	Channel	Frequency (MHz)	AV power (dBm)	Tune up (dBm)	SAR Test
	11a	36	5180	13.99	14.50	No
		44	5220	13.76	14.50	No
		48	5240	13.82	14.50	No
	11n20	36	5180	15.39	15.50	No
		44	5220	15.30	15.50	No
		48	5240	15.17	15.50	No
	11n40	38	5190	15.21	15.50	Yes
		46	5230	15.28	15.50	No
	11ac20	36	5180	15.30	15.50	No
		44	5220	14.69	15.00	No
		48	5240	14.30	15.00	No
	11ac40	38	5190	14.70	15.00	No
46		5230	14.82	15.00	No	
11ac80	42	5210	14.61	15.00	No	
5.3G	11a	52	5260	14.01	14.50	No
		60	5300	13.54	14.00	No
		64	5320	13.45	14.00	No
	11n20	52	5260	14.37	15.00	No
		60	5300	14.22	14.50	No
		64	5320	14.18	14.50	No
	11n40	54	5270	14.27	14.50	No
		62	5310	14.73	15.00	No
	11ac20	52	5260	14.79	15.00	No
		60	5300	14.23	14.50	No
		64	5320	14.34	15.00	No
	11ac40	54	5270	14.38	15.00	No
		62	5310	14.25	14.50	No
11ac80	58	5290	14.46	15.00	Yes	
5.6G	11a	100	5500	13.44	14.00	No
		116	5580	13.48	14.00	No
		140	5700	13.32	14.00	No
	11n20	100	5500	14.80	15.50	Yes
		116	5580	14.44	15.00	No
		140	5700	14.13	15.00	No
	11n40	102	5510	12.29	13.00	No
		118	5590	13.94	14.50	No
		134	5670	13.76	14.50	No
	11ac20	100	5500	13.75	14.50	No
		116	5580	13.89	14.50	No
		140	5700	14.29	15.00	No
	11ac40	102	5510	12.54	13.50	No
118		5590	14.21	15.00	No	
134		5670	14.08	15.00	No	
11ac80	106	5530	14.20	15.00	No	
	122	5610	14.28	15.00	No	
5.8G	11a	149	5745	14.20	15.00	No
		157	5785	14.63	15.00	No
		165	5825	14.55	15.00	No
	11n20	149	5745	15.25	15.50	No
		157	5785	15.38	15.50	No
		165	5825	15.33	15.50	No
	11n40	151	5755	15.19	15.50	No
		159	5795	15.23	15.50	No
	11ac20	149	5745	15.27	15.50	No
		157	5785	15.27	15.50	No
		165	5825	15.14	15.50	No
	11ac40	151	5755	15.16	15.50	No
		159	5795	15.19	15.50	No
11ac80	155	5775	15.21	15.50	Yes	
Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially. 1) The largest channel bandwidth configuration is selected among the multiple configurations in a frequency band with the same maximum tune-up output power. 2) When multiple transmission modes (802.11a/g/n/ac/ax) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11a is chosen over 802.11n then 802.11ac/ax.						

8.5 Bluetooth

8.5.1 Bluetooth Output Power

Bluetooth-Full Power						
Test Mode	Modulation	Channel number	Frequency(MHz)	Meas. power (dBm)	Tune up (dBm)	SAR Test
BT	DH5	0	2402	11.55	12.50	No
		39	2441	12.02	13.00	No
		78	2480	12.45	13.00	Yes
	2DH5	0	2402	10.89	12.00	No
		39	2441	11.27	12.00	No
		78	2480	12.38	13.00	No
	3DH5	0	2402	10.98	12.00	No
		39	2441	11.34	12.00	No
		78	2480	12.36	13.00	No
	BLE-1M	0	2402	4.78	6.00	No
		19	2440	6.43	7.50	No
		39	2480	5.62	6.50	No
	BLE-2M	1	2404	5.06	6.00	No
		19	2440	6.47	7.50	No
		38	2478	5.62	6.50	No

8.5.2 Bluetooth Duty Cycle

The Bluetooth duty cycle is 76.94% as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation.

Duty Cycle

