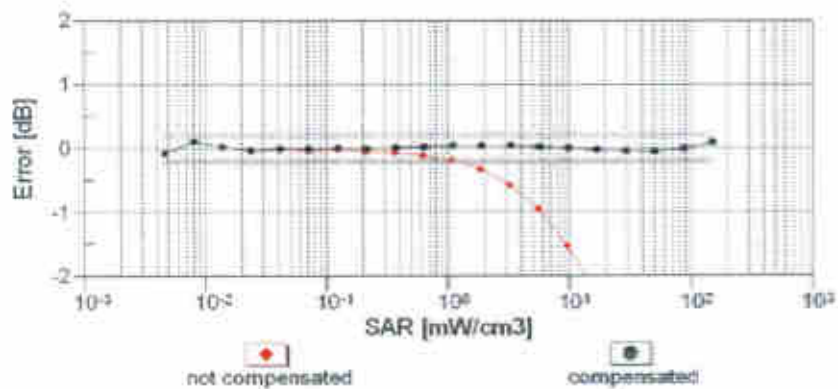
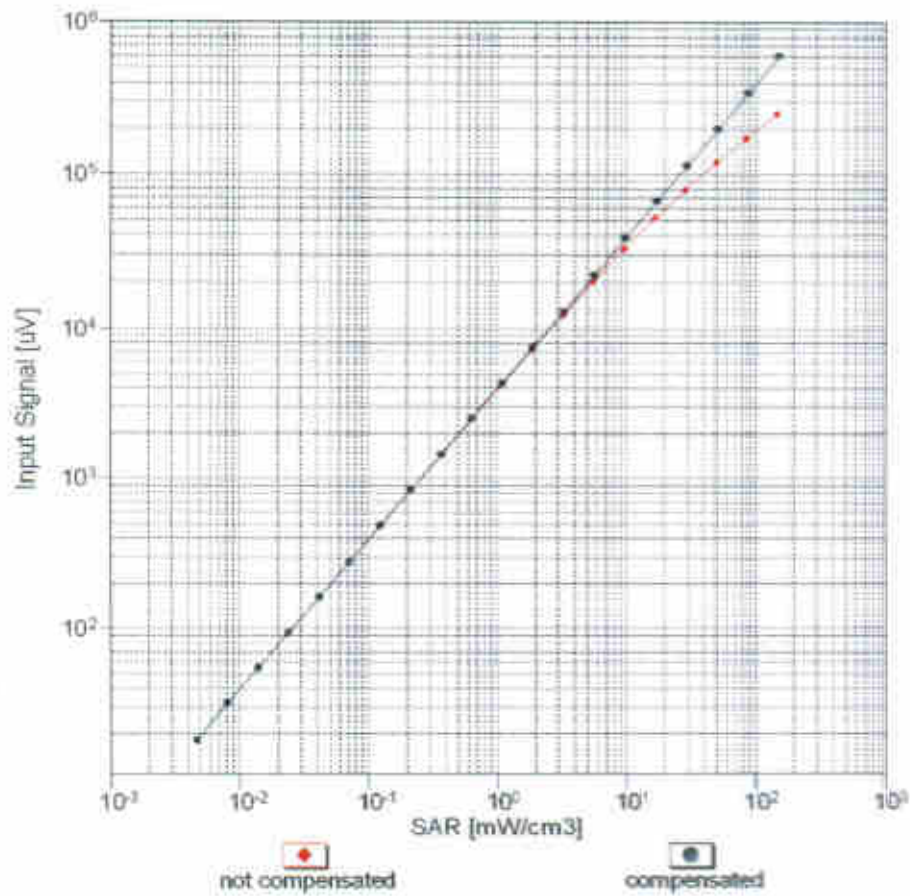
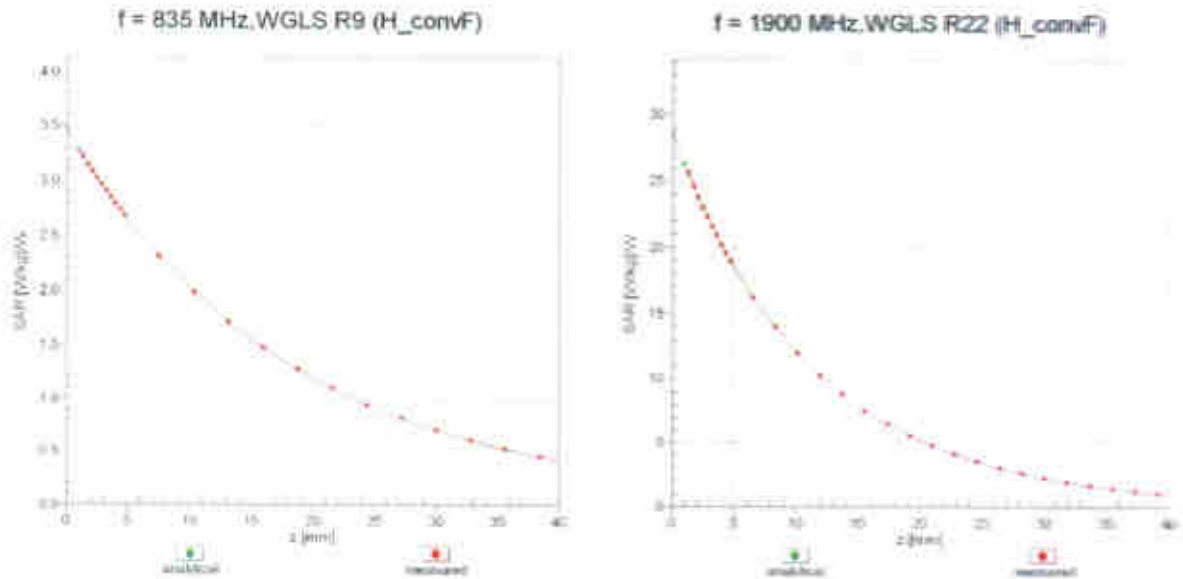


Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell, $f_{\text{eval}} = 1900 \text{ MHz}$)



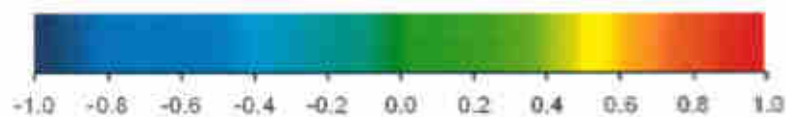
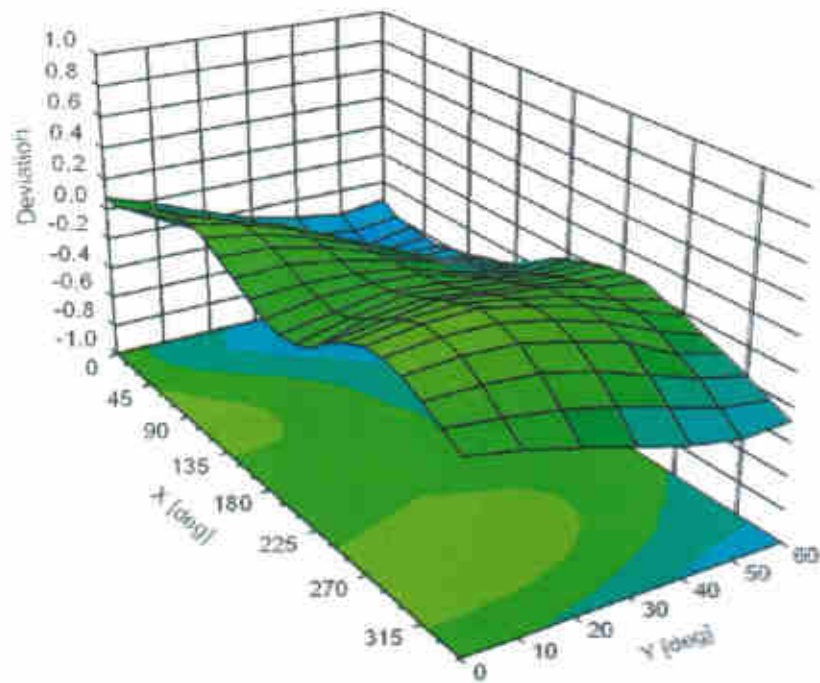
Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: $\pm 2.6\%$ (k=2)



Appendix E. Conducted RF Output Power Table

The detailed power tables are shown as follows.



Full Power for UAT

GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	125	155	251		125	155	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.75	31.64	31.58	32.50	22.75	22.64	22.58	23.50
GPRS 1 Tx slot	31.72	31.62	31.56	32.50	22.72	22.62	22.56	23.50
GPRS 2 Tx slots	30.00	30.11	29.93	31.00	24.09	24.11	23.93	25.00
GPRS 3 Tx slots	28.73	28.52	28.76	29.30	24.47	24.26	24.50	25.04
GPRS 4 Tx slots	27.69	27.75	27.67	28.30	24.99	24.75	24.67	25.30
EDGE 1 Tx slot	25.64	25.50	25.64	26.50	16.64	16.56	16.64	17.50
EDGE 2 Tx slots	24.12	23.93	24.19	25.00	18.12	17.93	18.19	19.00
EDGE 3 Tx slots	23.38	23.12	23.22	24.00	19.12	18.86	18.96	19.74
EDGE 4 Tx slots	22.76	22.37	22.63	23.50	19.76	19.37	19.63	20.50

GSM1900 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
Frequency (MHz)	1852.2	1860	1868.8		1852.2	1860	1868.8	
GSM 1 Tx slot	28.37	29.08	28.81	30.00	19.87	20.08	19.81	21.00
GPRS 1 Tx slot	28.86	29.07	28.80	30.00	19.86	20.07	19.80	21.00
GPRS 2 Tx slots	28.95	29.50	28.23	27.00	19.95	19.90	20.23	21.00
GPRS 3 Tx slots	24.87	24.41	25.01	26.00	20.61	20.28	20.78	21.74
GPRS 4 Tx slots	24.26	23.88	24.20	25.00	21.26	20.88	21.20	22.00
EDGE 1 Tx slot	24.70	24.38	24.51	25.50	15.70	15.38	15.51	16.50
EDGE 2 Tx slots	23.83	23.50	23.74	24.50	17.83	17.50	17.74	18.50
EDGE 3 Tx slots	22.68	22.36	22.70	23.50	18.42	18.10	18.44	19.24
EDGE 4 Tx slots	22.53	22.15	22.54	23.50	19.53	19.15	19.54	20.50

Band Tx Channel	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			WCDMA V			Tune-up Limit (dBm)		
	9002	9020	9038		1312	1513	1714	4132	4152	4233			
Rx Channel	9662	9800	9638		1537	1638	1738	4307	4407	4456			
Frequency (MHz)	1852.4	1860	1907.6		1712.4	1732.6	1752.6	826.4	836.4	846.6			
3GPP Rel 99	AMR 12.2Kbps	23.80	23.73	23.64	24.00	23.43	23.54	23.42	24.00	24.02	24.03	23.99	24.50
3GPP Rel 99	RMK 12.2Kbps	23.62	23.75	23.65	24.00	23.45	23.56	23.44	24.00	24.03	24.05	24.01	24.50
3GPP Rel 6	HS-DPA Subslot-1	22.61	22.81	22.85	23.00	22.42	22.57	22.48	23.00	23.02	23.03	23.07	23.50
3GPP Rel 6	HS-DPA Subslot-2	22.89	22.83	22.64	23.00	22.44	22.60	22.48	23.00	22.99	23.03	23.10	23.50
3GPP Rel 6	HS-DPA Subslot-3	22.17	22.26	22.16	22.50	21.94	22.06	21.99	22.50	22.48	22.56	22.56	23.00
3GPP Rel 6	HS-DPA Subslot-4	22.15	22.34	22.16	22.50	21.94	22.08	21.95	22.50	22.50	22.55	22.52	23.00
3GPP Rel 6	DC-HSDPA Subslot-1	22.98	22.62	22.85	23.00	22.33	22.45	22.37	23.00	22.89	22.90	22.92	23.50
3GPP Rel 6	DC-HSDPA Subslot-2	22.62	22.66	22.80	23.00	22.35	22.44	22.39	23.00	22.91	22.92	22.95	23.50
3GPP Rel 6	DC-HSDPA Subslot-3	22.08	22.12	22.10	22.50	21.98	22.12	22.06	22.50	22.36	22.41	22.47	23.00
3GPP Rel 6	DC-HSDPA Subslot-4	22.10	22.08	22.12	22.50	21.97	22.10	22.04	22.50	22.31	22.37	22.33	23.00
3GPP Rel 6	HS-LTA Subslot-1	22.65	22.81	22.71	23.00	22.44	22.61	22.47	23.00	22.98	23.06	23.06	23.50
3GPP Rel 6	HS-LTA Subslot-2	20.69	20.80	20.65	21.00	20.44	20.66	20.48	21.00	20.96	21.03	21.02	21.50
3GPP Rel 6	HS-LTA Subslot-3	20.63	20.81	20.69	21.00	20.46	20.68	20.50	21.00	20.90	21.04	21.01	21.50
3GPP Rel 6	HS-LTA Subslot-4	20.62	20.81	20.68	21.00	20.44	20.56	20.49	21.00	20.99	21.05	21.00	21.50
3GPP Rel 6	HS-LTA Subslot-5	22.60	22.80	22.70	23.00	22.50	22.70	22.50	23.00	22.50	22.90	22.90	23.50
3GPP Rel 7	HS-PA (HSGAM) Subslot-1	20.24	20.36	20.29	20.50	20.17	20.25	20.15	20.50	20.45	20.51	20.46	21.00



Reduced power level 1 for Head-UAT

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	125	155	251		125	155	251	
TX Channel	824.2	836.4	848.8	824.2	836.4	848.8		
Frequency (MHz)	824.2	836.4	848.8	824.2	836.4	848.8		
GSM 1 Tx slot	30.60	30.72	30.62	31.50	21.60	21.72	21.62	22.50
GPRS 1 Tx slot	30.64	30.75	30.64	31.50	21.64	21.75	21.64	22.50
GPRS 2 Tx slots	28.99	29.22	29.06	30.00	22.99	23.22	23.06	24.00
GPRS 3 Tx slots	27.77	27.55	27.72	28.30	23.51	23.29	23.46	24.04
GPRS 4 Tx slots	26.97	26.84	26.82	27.30	23.97	23.84	23.82	24.30
EDGE 1 Tx slot	23.83	24.25	23.82	25.50	14.83	15.26	14.82	16.50
EDGE 2 Tx slots	22.70	23.25	23.07	24.00	16.70	17.25	17.07	18.00
EDGE 3 Tx slots	21.81	21.80	21.90	23.00	17.35	17.54	17.64	18.74
EDGE 4 Tx slots	20.93	21.11	21.09	22.50	17.93	18.11	18.09	19.50

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	1607.2	1619.3	1631.3	1607.2	1619.3	1631.3		
Frequency (MHz)	1607.2	1619.3	1631.3	1607.2	1619.3	1631.3		
GSM 1 Tx slot	26.58	26.66	26.70	27.50	17.58	17.66	17.70	18.50
GPRS 1 Tx slot	26.61	26.73	26.73	27.50	17.61	17.73	17.73	18.50
GPRS 2 Tx slots	23.44	23.66	23.72	24.50	17.44	17.66	17.72	18.50
GPRS 3 Tx slots	22.74	22.44	22.62	23.50	16.48	16.18	16.36	19.24
GPRS 4 Tx slots	21.88	21.80	21.83	22.50	16.88	16.80	16.83	19.50
EDGE 1 Tx slot	22.19	22.58	22.18	23.00	13.19	13.58	13.18	14.00
EDGE 2 Tx slots	20.99	21.27	21.08	22.00	14.99	15.27	15.08	16.00
EDGE 3 Tx slots	20.25	20.30	20.23	21.00	15.99	16.04	15.97	16.74
EDGE 4 Tx slots	20.08	20.23	19.84	21.00	17.08	17.23	16.84	18.00

Band	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)	
	9002	9620	9638		1312	1413	1513		4132	4182	4233		
TX Channel	9662	9800	9638	1537	1638	1738	4307	4407	4456				
Rx Channel	1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6				
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6				
3GPP Rel 99	AMR 12.2Kbps	17.20	17.12	17.01	17.50	17.30	17.51	17.44	18.00	20.81	20.83	20.78	21.50
3GPP Rel 99	AMR 12.2Kbps	17.22	17.15	17.03	17.50	17.37	17.54	17.46	18.00	20.83	20.85	20.81	21.50
3GPP Rel 6	HSDPA Subtest-1	16.15	16.31	16.13	16.50	16.18	16.33	16.29	17.00	19.90	19.90	19.91	20.50
3GPP Rel 6	HSDPA Subtest-2	16.13	16.30	16.17	16.50	16.20	16.32	16.28	17.00	19.91	19.90	19.90	20.50
3GPP Rel 6	HSDPA Subtest-3	15.84	15.82	15.86	16.00	15.86	15.86	15.75	16.50	19.29	19.42	19.26	20.00
3GPP Rel 6	HSDPA Subtest-4	15.62	15.78	15.68	16.00	15.65	15.62	15.78	16.50	19.30	19.30	19.43	20.00
3GPP Rel 6	DC-HSDPA Subtest-1	16.10	16.15	16.08	16.50	16.10	16.18	16.18	17.00	19.78	19.80	19.80	20.50
3GPP Rel 6	DC-HSDPA Subtest-2	16.08	16.13	16.12	16.50	16.07	16.21	16.14	17.00	19.83	19.75	19.82	20.50
3GPP Rel 6	DC-HSDPA Subtest-3	15.90	15.82	15.86	16.00	15.51	15.77	15.80	16.50	19.29	19.34	19.26	20.00
3GPP Rel 6	DC-HSDPA Subtest-4	15.54	15.60	15.60	16.00	15.51	15.71	15.63	16.50	19.26	19.27	19.35	20.00
3GPP Rel 6	HSPA Subtest-1	16.12	16.21	16.11	16.50	16.22	16.35	16.18	17.00	19.86	19.89	19.88	20.50
3GPP Rel 6	HSPA Subtest-2	14.14	14.28	14.15	14.50	14.18	14.26	14.28	15.00	17.87	17.84	17.84	18.50
3GPP Rel 6	HSPA Subtest-3	14.03	14.24	14.05	14.50	14.17	14.24	14.20	15.00	18.84	18.92	18.86	19.50
3GPP Rel 6	HSPA Subtest-4	14.15	14.25	14.19	14.50	14.18	14.31	14.30	15.00	17.86	17.86	17.83	18.50
3GPP Rel 6	HSPA Subtest-5	16.10	16.30	16.10	16.50	16.20	16.30	16.20	17.00	19.90	19.90	19.90	20.50
3GPP Rel 7	HSPA+ (E-GAM) Subtest-1	13.68	13.72	13.70	14.00	13.63	13.75	13.72	14.50	17.33	17.35	17.30	18.00

Band 2 (10MHz Band)												
Part 24E (only on Channel required)												
SV (MHz)	Modulation	RB Size	RB Offset	Power Ch./Pilot	Power Ch./Pilot	Power P1/P2	Turn-up time (dB)	MPE (dB)				
Channel												
Frequency (MHz)												
20	QPSK	1	0	18.87	18.82	18.86						
20	QPSK	1	48	18.79	18.84	18.81	18	0				
20	QPSK	1	96	18.72	18.77	18.75						
20	QPSK	50	0	18.73	18.68	18.78						
20	QPSK	50	24	18.62	18.67	18.65						
20	QPSK	50	50	18.76	18.71	18.75	18	0				
20	QPSK	100	0	18.81	18.76	18.84						
20	16QAM	1	0	18.86	18.81	18.82						
20	16QAM	1	48	18.78	18.83	18.81						
20	16QAM	1	96	18.88	18.83	18.74						
20	16QAM	50	0	18.85	18.79	18.89						
20	16QAM	50	24	18.74	18.79	18.73						
20	16QAM	50	50	18.72	18.79	18.78	18	0				
20	16QAM	100	0	18.71	18.79	18.76						
20	64QAM	1	0	18.72	18.72	18.76						
20	64QAM	1	48	18.80	18.81	18.80						
20	64QAM	1	96	18.83	18.71	18.89						
20	64QAM	50	0	18.88	18.78	18.72						
20	64QAM	50	24	18.74	18.79	18.75						
20	64QAM	50	50	18.87	18.82	18.80	18	0				
20	64QAM	100	0	18.75	18.74	18.77						
Channel												
Frequency (MHz)												
18	QPSK	1	0	18.82	18.81	18.83						
18	QPSK	1	37	18.73	18.80	18.85	18	0				
18	QPSK	1	74	18.78	18.84	18.87						
18	QPSK	36	0	18.87	18.70	18.88						
18	QPSK	36	20	18.71	18.73	18.75						
18	QPSK	36	36	18.88	18.78	18.73	18	0				
18	QPSK	72	0	18.87	18.72	18.78						
18	16QAM	1	0	18.84	18.83	18.86						
18	16QAM	1	37	18.75	18.82	18.79	18	0				
18	16QAM	1	74	18.72	18.88	18.79						
18	16QAM	36	0	18.70	18.72	18.74						
18	16QAM	36	20	18.70	18.82	18.74						
18	16QAM	36	36	18.74	18.85	18.84	18	0				
18	64QAM	1	0	18.78	18.75	18.74						
18	64QAM	1	37	18.71	18.82	18.75	18	0				
18	64QAM	1	74	18.88	18.89	18.89						
18	64QAM	36	0	18.72	18.70	18.70						
18	64QAM	36	20	18.79	18.79	18.81	18	0				
18	64QAM	36	36	18.77	18.80	18.84						
18	64QAM	72	0	18.69	18.72	18.77						
Channel												
Frequency (MHz)												
10	QPSK	1	0	18.78	18.79	18.80						
10	QPSK	1	20	18.69	18.84	18.81	18	0				
10	QPSK	1	40	18.78	18.80	18.80						
10	QPSK	20	0	18.88	18.86	18.83						
10	QPSK	20	10	18.88	18.78	18.74	18	0				
10	QPSK	50	0	18.73	18.73	18.75						
10	QPSK	50	25	18.73	18.75	18.75						
10	QPSK	1	0	18.85	18.83	18.84						
10	16QAM	1	20	18.77	18.80	18.86	18	0				
10	16QAM	1	40	18.77	18.85	18.86						
10	16QAM	25	0	18.82	18.87	18.89						
10	16QAM	25	12	18.70	18.82	18.80						
10	16QAM	25	25	18.72	18.83	18.88	18	0				
10	16QAM	50	0	18.70	18.74	18.74						
10	64QAM	1	20	18.84	18.89	18.89						
10	64QAM	1	20	18.79	18.84	18.74	18	0				
10	64QAM	1	40	18.79	18.79	18.82						
10	64QAM	25	0	18.71	18.80	18.84						
10	64QAM	25	12	18.70	18.75	18.77						
10	64QAM	25	25	18.88	18.87	18.78	18	0				
10	64QAM	50	0	18.78	18.77	18.77						
Channel												
Frequency (MHz)												
5	QPSK	1	0	18.84	18.79	18.72						
5	QPSK	1	8	18.82	18.86	18.80	18	0				
5	QPSK	1	24	18.78	18.81	18.80						
5	QPSK	12	0	18.78	18.82	18.80						
5	QPSK	12	18	18.70	18.80	18.71	18	0				
5	16QAM	1	0	18.80	18.81	18.84						
5	16QAM	1	12	18.81	18.88	18.85	18	0				
5	16QAM	1	24	18.71	18.80	18.88						
5	16QAM	12	0	18.78	18.75	18.87						
5	16QAM	12	7	18.79	18.83	18.71	18	0				
5	16QAM	12	18	18.80	18.80	18.74						
5	16QAM	25	0	18.88	18.74	18.87						
5	64QAM	1	0	18.79	18.79	18.74	18	0				
5	64QAM	1	12	18.80	18.80	18.88						
5	64QAM	1	24	18.78	18.87	18.80						
5	64QAM	12	0	18.79	18.79	18.86						
5	64QAM	12	7	18.82	18.79	18.76	18	0				
5	64QAM	12	18	18.73	18.84	18.75						
5	64QAM	25	0	18.70	18.82	18.87						
Channel												
Frequency (MHz)												
1.4	QPSK	1	0	18.78	18.78	18.80						
1.4	QPSK	1	3	18.87	18.88	18.76						
1.4	QPSK	3	0	18.80	18.79	18.70						
1.4	QPSK	3	1	18.78	18.81	18.83	18	0				
1.4	QPSK	6	0	18.70	18.77	18.80						
1.4	16QAM	1	0	18.79	18.81	18.85						
1.4	16QAM	1	3	18.80	18.80	18.79						
1.4	16QAM	1	5	18.82	18.84	18.72	18	0				
1.4	16QAM	3	0	18.70	18.72	18.89						
1.4	16QAM	3	1	18.70	18.78	18.84						
1.4	16QAM	3	3	18.80	18.74	18.87	18	0				
1.4	64QAM	1	0	18.78	18.80	18.85						
1.4	64QAM	1	3	18.78	18.80	18.75						
1.4	64QAM	1	5	18.72	18.79	18.75	18	0				
1.4	64QAM	3	0	18.80	18.84	18.74						
1.4	64QAM	3	1	18.81	18.86	18.79						
1.4	64QAM	3	3	18.80	18.82	18.77	18	0				
1.4	64QAM	6	0	18.73	18.74	18.80						

Band 4 (4MHz Band)												
Part 27E (only on Channel required)												
SV (MHz)	Modulation	RB Size	RB Offset	Power Ch./Pilot	Power Ch./Pilot	Power P1/P2	Turn-up time (dB)	MPE (dB)				
Channel												
Frequency (MHz)												
20	QPSK	1	0	18.73	18.83	18.74						
20	QPSK	1	48	18.69	18.89	18.81	18	0				
20	QPSK	1	96	18.83	18.83	18.82						
20	QPSK	50	0	18.74	18.74	18.79						
20	QPSK	50	24	18.77	18.77	18.72						
20	QPSK	50	50	18.70	18.70	18.74	18	0				
20	QPSK	100	0	18.75	18.72	18.76						
20	16QAM	1	0	18.80	18.84	18.80						
20	16QAM	1	48	18.72	18.72	18.78	18	0				
20	16QAM	1	96	18.75	18.76	18.81						
20	16QAM	50	0	18.80	18.80	18.80						
20	16QAM	50	24	18.67	18.87	18.82	18	0				
20	16QAM	50	50	18.80	18.80	18.80						
20	16QAM	100	0	18.85	18.85	18.85						
20	64QAM	1	0	18.87	18.87	18.78						
20	64QAM	1	48	18.88	18.88	18.77						
20	64QAM	1	96	18.92	18.92	18.73						
20	64QAM	50	0	18.87	18.87	18.88						
20	64QAM	50	24	18.80	18.80	18.87						
20	64QAM	50	50	18.83	18.83	18.83	18	0				
20	64QAM	100	0	18.81	18.81	18.85						
Channel												
Frequency (MHz)												
18	QPSK	1	0	18.69	18.81	18.89						
18	QPSK	1	37	18.80	18.38	18.30	18	0				
18	QPSK	1	74	18.87	18.38	18.49						
18	QPSK	36	0	18.83	18.81	18.89						
18	QPSK	36	20	18.84	18.84	18.80						
18	QPSK	36	37	18.81	18.87	18.82	18	0				
18	QPSK	72	0	18.83	18.84	18.81						
18	16QAM	1	0	18.80	18.87	18.88						
18	16QAM	1	37	18.73	18.80	18.88	18	0				
18	16QAM	1	74	18.72	18.72	18.79						
18	16QAM	36	0	18.80	18.80	18.88						
18	16QAM	36	20	18.83	18.87	18.85						
18	16QAM	36	37	18.89	18.58	18.58	18	0				
18	16QAM	72	0	18.80	18.80	18.80						



Band 7 (20MHz Band) Part 2

BW (MHz)	Modulation	RB Size	RB Offset	Power Ch. 1/Freq. 21190	Power Ch. 2/Freq. 21210	Power Ch. 3/Freq. 21230	Turn-up time (min)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	14.96	14.94	14.83	16	0
20	QPSK	1	49	14.77	14.75	14.62		
20	QPSK	1	99	14.61	14.53	14.68		
20	QPSK	50	0	14.81	14.81	14.74		
20	QPSK	50	24	14.92	14.86	14.84		
20	QPSK	50	50	14.93	14.94	14.78		
20	QPSK	100	0	14.84	14.86	14.85		
20	ISDM	1	49	14.89	14.89	14.86	16	0
20	ISDM	1	49	14.94	14.89	14.93		
20	ISDM	1	99	14.82	14.86	14.88		
20	ISDM	50	24	14.72	14.79	14.84		
20	ISDM	50	24	14.82	14.89	14.75	16	0
20	ISDM	100	0	14.82	14.82	14.75		
20	ISDM	1	0	14.77	14.82	14.72		
20	ISDM	1	49	14.89	14.89	14.76		
20	ISDM	1	99	14.89	14.87	14.83	16	0
20	ISDM	50	0	14.81	14.88	14.83		
20	ISDM	50	24	14.78	14.89	14.72		
20	ISDM	50	50	14.85	14.85	14.87	16	0
20	ISDM	100	0	14.71	14.73	14.81		
Channel								
Frequency (MHz)								
2017.5 2123 2122.5								
15	QPSK	1	0	14.84	14.81	14.86		
15	QPSK	1	37	14.89	14.71	14.87	16	0
15	QPSK	1	49	14.89	14.89	14.89		
15	QPSK	36	0	14.84	14.70	14.79		
15	QPSK	36	20	14.70	14.89	14.89	16	0
15	QPSK	36	20	14.89	14.89	14.74		
15	QPSK	75	0	14.89	14.78	14.77		
15	ISDM	1	0	14.93	14.83	14.79	16	0
15	ISDM	1	74	14.87	14.84	14.84		
15	ISDM	50	0	14.72	14.89	14.76		
15	ISDM	36	20	14.70	14.81	14.71	16	0
15	ISDM	36	20	14.72	14.80	14.71		
15	ISDM	36	20	14.79	14.79	14.76		
15	ISDM	75	0	14.76	14.78	14.80		
15	ISDM	1	37	14.87	14.88	14.81	16	0
15	ISDM	1	74	14.78	14.81	14.86		
15	ISDM	36	0	14.84	14.75	14.83		
15	ISDM	36	20	14.72	14.88	14.73	16	0
15	ISDM	36	20	14.89	14.81	14.76		
15	ISDM	75	0	14.88	14.83	14.81		
Channel								
Frequency (MHz)								
2089.0 21190 2140.5								
10	QPSK	1	0	14.88	14.76	14.83		
10	QPSK	1	26	14.89	14.70	14.85	16	0
10	QPSK	1	49	14.77	14.86	14.89		
10	QPSK	12	0	14.88	14.70	14.80		
10	QPSK	25	12	14.78	14.89	14.85	16	0
10	QPSK	25	12	14.79	14.87	14.79		
10	QPSK	50	0	14.73	14.89	14.86		
10	ISDM	1	0	14.82	14.89	14.84	16	0
10	ISDM	1	26	14.81	14.89	14.86		
10	ISDM	1	49	14.80	14.82	14.81		
10	ISDM	25	0	14.68	14.82	14.89	16	0
10	ISDM	25	12	14.79	14.89	14.84		
10	ISDM	50	0	14.74	14.89	14.81	16	0
10	ISDM	50	0	14.72	14.83	14.86		
10	ISDM	1	26	14.87	14.84	14.89	16	0
10	ISDM	1	49	14.89	14.89	14.89		
10	ISDM	1	26	14.87	14.84	14.89	16	0
10	ISDM	25	0	14.89	14.88	14.89		
10	ISDM	25	12	14.85	14.87	14.81	16	0
10	ISDM	25	12	14.79	14.89	14.89		
10	ISDM	50	0	14.83	14.78	14.81	16	0
10	ISDM	50	0	14.73	14.88	14.83		
Channel								
Frequency (MHz)								
2092.5 2131 2142.5								
5	QPSK	1	0	14.89	14.78	14.83	16	0
5	QPSK	1	12	14.77	14.76	14.85		
5	QPSK	1	24	14.88	14.88	14.86		
5	QPSK	12	0	14.88	14.73	14.86		
5	QPSK	12	13	14.83	14.72	14.88	16	0
5	ISDM	1	0	14.78	14.89	14.86		
5	ISDM	1	12	14.82	14.73	14.74	16	0
5	ISDM	1	24	14.81	14.89	14.86		
5	ISDM	12	0	14.89	14.89	14.86	16	0
5	ISDM	12	7	14.81	14.75	14.86		
5	ISDM	12	13	14.88	14.78	14.86	16	0
5	ISDM	25	0	14.88	14.85	14.77		
5	ISDM	1	0	14.89	14.81	14.86	16	0
5	ISDM	1	24	14.77	14.81	14.87		
5	ISDM	12	0	14.84	14.73	14.88		
5	ISDM	12	13	14.88	14.78	14.81	16	0
5	ISDM	25	0	14.81	14.77	14.82		

Band 26 for FCC Part 2 (Only on Channel Required)

BW (MHz)	Modulation	RB Size	RB Offset	Power Ch. 1/Freq. 21150	Power Ch. 2/Freq. 21170	Power Ch. 3/Freq. 21190	Turn-up time (min)	MPR (dB)
Channel								
Frequency (MHz)								
841.5 841.5 841.5								
15	QPSK	1	0	20.08	20.12	20.19		
15	QPSK	1	37	20.08	20.14	20.14	21.5	0
15	QPSK	1	74	20.11	20.08	20.08		
15	QPSK	36	0	19.99	20.04	20.03		
15	QPSK	36	20	20.03	20.06	20.06	21.5	0
15	QPSK	36	36	20.02	20.04	20.00		
15	QPSK	75	0	20.00	20.00	20.00		
15	ISDM	1	0	20.03	20.09	20.07	21.5	0
15	ISDM	1	37	20.03	20.10	20.13		
15	ISDM	1	74	20.04	20.02	20.02		
15	ISDM	36	0	19.99	20.01	20.04		
15	ISDM	36	20	20.02	20.09	20.09	21.5	0
15	ISDM	36	20	20.02	20.09	20.01		
15	ISDM	75	0	20.03	20.02	20.11		
15	ISDM	1	0	20.03	20.04	20.08	21.5	0
15	ISDM	1	37	20.10	20.09	20.08		
15	ISDM	1	74	20.08	20.03	20.07		
15	ISDM	36	0	19.92	19.98	19.94		
15	ISDM	36	20	19.94	19.97	19.93	20.8	0.5
15	ISDM	36	36	19.98	19.98	19.83		
15	ISDM	75	0	19.95	19.92	19.86		
Channel								
Frequency (MHz)								
819 817.5 844								
10	QPSK	1	0	19.87	19.89	19.83		
10	QPSK	1	20	19.89	19.86	19.85	21.5	0
10	QPSK	1	49	19.91	19.96	19.92		
10	QPSK	26	0	19.99	20.04	20.02		
10	QPSK	26	12	20.06	20.09	20.11	21.5	0
10	QPSK	26	12	19.96	20.07	20.07		
10	QPSK	50	0	20.02	20.09	20.10		
10	ISDM	1	0	20.13	20.14	20.15	21.5	0
10	ISDM	1	26	20.10	20.15	20.15		
10	ISDM	1	49	20.10	20.10	20.14		
10	ISDM	26	0	20.00	20.09	20.08	21.5	0
10	ISDM	26	12	20.06	20.10	20.10		
10	ISDM	26	12	19.99	20.01	20.03		
10	ISDM	50	0	20.04	20.09	20.08		
10	ISDM	1	0	20.10	20.11	20.11	21.5	0
10	ISDM	1	26	20.15	20.18	20.12		
10	ISDM	1	49	20.11	20.17	20.17		
10	ISDM	26	0	19.98	19.95	19.95		
10	ISDM	26	12	19.95	19.98	19.94	20.8	0.5
10	ISDM	26	12	20.05	20.04	20.03		
10	ISDM	50	0	19.95	19.94	19.97		
Channel								
Frequency (MHz)								
2071.5 2088.5 2101.5								
5	QPSK	1	0	19.91	19.94	19.97		
5	QPSK	1	12	19.96	20.00	20.07	21.5	0
5	QPSK	1	24	19.88	19.88	19.88		
5	QPSK	12	0	19.99	20.03	20.07		
5	QPSK	12	7	20.06	20.09	20.03	21.5	0
5	QPSK	25	0	20.02	20.01	20.02		
5	QPSK	25	0	20.02	20.01	20.02		
5	ISDM	1	0	20.07	20.08	20.18	21.5	0
5	ISDM	1	12	20.04	20.16	20.14		
5	ISDM	1	24	20.04	20.16	20.14		
5	ISDM	12	0	20.04	20.06	20.06		
5	ISDM	12	7	20.03	20.08	20.08	21.5	0
5	ISDM	12	13	20.03	20.04	20.03		
5	ISDM	25	0	20.05	20.03	20.02		
5	ISDM	1	0	20.09	20.09	20.12	21.5	0
5	ISDM	1	12	20.04	20.15	20.17		
5	ISDM	1	24	20.06	20.18	20.09		
5								



Band 204 (on channel required)									
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch (F/Freq)	Peak Ch (F/Freq)	Power High Ch (F/Freq)	Turnup time (min)	MFR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	0	17.00	17.20	17.10			
5	QPSK	1	50	17.43	17.24	17.23	18	0	
5	QPSK	30	0	17.15	17.26	17.26			
5	QPSK	30	50	17.42	17.25	17.42	18	0	
5	QPSK	50	0	17.13	17.29	17.40			
5	QPSK	100	0	17.18	17.33	17.33			
5	16QAM	1	0	17.44	17.43	17.36			
5	16QAM	1	49	17.44	17.23	17.37	18	0	
5	16QAM	1	99	17.36	17.27	17.46			
5	16QAM	50	0	17.45	17.33	17.38			
5	16QAM	50	24	17.46	17.21	17.41	18	0	
5	16QAM	50	50	17.32	17.29	17.44			
5	16QAM	100	0	17.44	17.29	17.41			
5	16QAM	1	0	17.67	16.67	17.00			
5	16QAM	1	49	17.10	16.59	17.25	18	0	
5	16QAM	1	99	17.07	17.08	17.09			
5	16QAM	50	24	17.32	17.25	17.32	18	0	
5	16QAM	50	50	17.37	17.41	17.41			
5	16QAM	100	0	17.48	17.23	17.46			
Channel									
Frequency (MHz)									
15	QPSK	1	0	17.16	17.16	17.12			
15	QPSK	1	37	17.31	17.10	17.27	18	0	
15	QPSK	1	74	17.44	17.26	17.29			
15	QPSK	30	0	17.40	17.29	17.36			
15	QPSK	30	20	17.37	17.25	17.38	18	0	
15	QPSK	30	39	17.48	17.23	17.44			
15	QPSK	75	0	17.45	17.30	17.35			
15	16QAM	1	0	17.33	17.27	17.37			
15	16QAM	1	37	17.46	17.29	17.38	18	0	
15	16QAM	1	74	17.40	17.29	17.47			
15	16QAM	30	0	17.40	17.29	17.31			
15	16QAM	30	20	17.40	17.29	17.39	18	0	
15	16QAM	30	39	17.49	17.26	17.39			
15	16QAM	75	0	17.21	17.26	17.35			
15	16QAM	75	37	17.46	17.25	17.35	18	0	
15	16QAM	75	74	17.59	17.29	17.36			
15	16QAM	36	0	17.37	17.31	17.36			
15	16QAM	36	20	17.57	17.27	17.41	18	0	
15	16QAM	36	39	17.45	17.42	17.41			
15	16QAM	75	0	17.43	17.28	17.46			
Channel									
Frequency (MHz)									
10	QPSK	1	0	17.38	17.09	17.17			
10	QPSK	1	25	17.57	17.09	17.36	18	0	
10	QPSK	1	49	17.44	17.16	17.49			
10	QPSK	25	0	17.34	17.18	17.37			
10	QPSK	25	12	17.44	17.19	17.27	18	0	
10	QPSK	25	25	17.43	17.41	17.45			
10	QPSK	50	0	17.31	17.36	17.36			
10	16QAM	1	0	17.42	17.45	17.47	18	0	
10	16QAM	1	49	17.43	17.32	17.31			
10	16QAM	1	99	17.27	17.28	17.37			
10	16QAM	25	12	17.83	17.27	17.43	18	0	
10	16QAM	25	25	17.31	17.25	17.47			
10	16QAM	50	0	17.42	17.28	17.37			
10	16QAM	50	0	16.89	16.96	17.46			
10	16QAM	1	0	17.14	17.29	16.97	18	0	
10	16QAM	1	49	17.02	17.14	17.02			
10	16QAM	25	0	17.35	17.40	17.32			
10	16QAM	25	12	17.40	17.48	17.41	18	0	
10	16QAM	25	25	17.40	17.33	17.31			
10	16QAM	50	0	17.47	17.27	17.39			

Band 41 (2.6G Band)-Class 3									
BW (MHz)	Modulation	RB Size	RB Offset	Low Ch (F/Freq)	Peak Ch (F/Freq)	Power High Ch (F/Freq)	Turnup time (min)	MFR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	16.80	16.78	17.04	17.11	16.90	
20	QPSK	1	49	16.92	17.04	17.07	17.10	16.88	18.5
20	QPSK	1	99	16.74	16.86	17.14	17.13	17.02	
20	QPSK	20	0	16.79	16.97	17.10	17.09	16.99	
20	QPSK	20	24	16.75	17.10	17.15	17.08	17.03	18.5
20	QPSK	50	0	16.68	17.08	17.11	17.08	17.07	
20	QPSK	100	0	16.66	17.06	17.09	17.09	17.01	
20	16QAM	1	0	16.96	16.82	16.96	17.04	17.08	
20	16QAM	1	49	16.90	16.75	17.06	16.92	16.79	18.5
20	16QAM	1	99	16.74	16.87	17.06	17.02	16.93	
20	16QAM	50	0	16.84	16.85	17.02	17.07	16.81	
20	16QAM	50	24	16.98	16.99	17.08	16.94	16.87	18.5
20	16QAM	50	50	16.80	16.86	17.12	17.11	16.99	
20	16QAM	100	0	16.81	17.06	17.02	16.96	16.85	
20	16QAM	1	0	16.18	16.22	16.26	16.26	16.24	
20	16QAM	1	49	16.20	16.37	16.34	16.35	16.25	18.5
20	16QAM	1	99	16.12	16.22	16.26	16.21	16.29	
20	16QAM	50	24	16.81	16.93	17.13	16.94	16.97	18.5
20	16QAM	50	50	16.83	16.93	17.13	17.09	17.04	
20	16QAM	100	0	16.80	16.93	17.09	17.07	17.07	
Channel									
Frequency (MHz)									
15	QPSK	1	0	16.94	16.71	17.01	16.80	16.87	
15	QPSK	1	37	16.87	16.72	16.88	16.85	16.80	18.5
15	QPSK	1	74	16.94	16.81	16.87	16.94	16.78	
15	QPSK	30	0	16.95	16.97	17.00	16.95	16.78	
15	QPSK	30	20	16.78	16.80	16.96	17.02	16.86	18.5
15	QPSK	30	39	16.78	16.96	16.93	17.05	16.91	
15	QPSK	75	0	16.73	16.99	16.99	17.00	16.89	
15	16QAM	1	0	16.84	16.70	17.08	17.00	16.98	18.5
15	16QAM	1	37	16.87	16.72	16.94	16.86	16.81	
15	16QAM	1	74	16.82	16.88	17.02	17.00	16.92	
15	16QAM	30	0	16.75	16.70	16.90	16.85	16.82	18.5
15	16QAM	30	20	16.85	16.85	17.05	17.03	16.92	
15	16QAM	30	39	16.94	16.89	17.00	17.00	16.91	
15	16QAM	75	0	16.83	16.99	17.00	17.02	16.91	
15	16QAM	75	37	16.85	16.85	16.89	16.88	16.80	18.5
15	16QAM	75	74	16.89	16.93	16.96	16.91	16.85	
15	16QAM	36	0	16.75	16.92	16.98	17.05	16.87	18.5
15	16QAM	36	20	16.79	16.83	17.05	17.01	16.98	
15	16QAM	36	39	16.72	16.93	16.95	17.00	16.91	
15	16QAM	75	0	16.73	16.87	17.05	16.99	16.93	18.5
Channel									
Frequency (MHz)									
10	QPSK	1	0	16.85	16.88	17.01	16.84	16.83	
10	QPSK	1	25	16.90	16.90	17.05	16.86	16.78	18.5
10	QPSK	1	49	16.83	16.97	17.04	16.85	16.83	
10	QPSK	25	0	16.82	16.84	17.00	16.89	16.86	
10	QPSK	25	12	16.98	16.85	17.11	17.00	16.99	18.5
10	QPSK	50	0	16.89	16.88	16.97	17.11	16.90	
10	16QAM	1	0	16.78	16.87	17.00	16.88	16.91	18.5
10	16QAM	1	25	16.72	16.99	17.03	16.98	16.85	
10	16QAM	1	49	16.74	16.91	17.12	16.96	16.89	
10	16QAM	25	0	16.78	16.74	17.00	16.83	16.87	18.5
10	16QAM	25	12	16.78	16.81	17.11	17.10	16.96	
10	16QAM	25	25	16.90	16.86	17.08	17.05	16.92	18.5
10	16QAM	50	0	17.00	16.95	17.09	17.01	17.00	
10	16QAM	50	24	16.98	16.99	16.97	16.92	16.88	18.5
10	16QAM	1	0	16.58	16.59	16.67	16.62	16.68	
10	16QAM	1	25	16.59	16.67	16.62	16.77	16.67	18.5
10	16QAM	1	49	16.57	16.82	16.96	17.02	16.93	
10	16QAM	25	0	16.79	16.90	17.01	16.92	16.93	18.5
10	16QAM	25	12	17.00	17.04	17.01	17.10	17.07	
10	16QAM	25	25	16.99	16.99	17.03	17.00	16.99	18.5
10	16QAM	50	0	16.72	16.88	16.96	17.01	16.97	
Channel									
Frequency (MHz)									
5	QPSK	1	0	16.94	16.84	17.03	16.97	16.97	
5	QPSK	1	12	16.79	16.82	16.90	16.84	16.78	18.5
5	QPSK	1	24	16.84	16.73	17.			



Reduced power level 2/3/4 for Head-UAT

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	128	168	251		128	168	251	
TX Channel	128	168	251	128	168	251	128	168
Frequency (MHz)	824.2	836.4	848.6	824.2	836.4	848.6	824.2	836.4
GSM 1 Tx slot	28.94	28.48	28.73	30.00	19.94	18.48	19.73	21.00
GPRS 1 Tx slot	28.92	28.46	28.72	30.00	19.92	18.46	19.72	21.00
GPRS 2 Tx slots	27.44	27.59	27.48	28.50	21.44	21.59	21.48	22.50
GPRS 3 Tx slots	25.91	26.08	25.62	26.80	21.65	21.82	21.38	22.94
GPRS 4 Tx slots	25.06	24.65	24.81	25.80	22.06	21.65	21.81	22.80
EDGE 1 Tx slot	22.85	22.64	22.98	24.00	13.35	13.64	13.38	15.00
EDGE 2 Tx slots	21.38	21.63	21.51	22.50	15.38	15.63	15.51	16.50
EDGE 3 Tx slots	20.21	20.31	20.25	21.50	15.95	16.05	15.99	17.24
EDGE 4 Tx slots	19.45	19.67	19.45	21.00	16.40	16.67	16.40	18.00

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	512	661	810	512	661	810	512	661
Frequency (MHz)	1852.2	1868	1883.8	1852.2	1868	1883.8	1852.2	1868
GSM 1 Tx slot	25.54	25.85	26.01	26.50	16.64	16.85	17.01	17.50
GPRS 1 Tx slot	25.62	25.75	25.75	26.50	16.62	16.75	16.75	17.50
GPRS 2 Tx slots	22.60	22.82	22.77	23.50	16.60	16.92	16.77	17.50
GPRS 3 Tx slots	21.69	21.77	21.79	22.50	17.43	17.51	17.53	18.24
GPRS 4 Tx slots	20.83	20.80	20.79	21.00	17.83	17.80	17.79	18.50
EDGE 1 Tx slot	21.38	21.51	21.23	22.00	12.38	12.51	12.23	13.00
EDGE 2 Tx slots	20.11	20.41	20.28	21.00	14.11	14.41	14.28	15.00
EDGE 3 Tx slots	19.25	19.44	19.15	20.00	14.99	15.18	14.89	15.74
EDGE 4 Tx slots	19.02	19.32	19.03	20.00	16.02	16.32	16.03	17.00

Band	TX Channel	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
		9002	9020	9038		1312	1413	1513		4132	4182	4233	
Rx Channel	9662	9800	9938	1537	1638	1738	4307	4407	4456				
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6				
3GPP Rel 99	AMR 12.2Kbps	17.00	17.12	17.01	17.30	17.51	17.44	18.00	18.79	19.86	19.78	20.50	
3GPP Rel 99	RMCS 12.2Kbps	17.02	17.16	17.03	17.50	17.54	17.46	18.00	19.81	19.87	19.81	20.50	
3GPP Rel 6	HSDPA Subclass-1	16.15	16.31	16.13	16.50	16.18	16.33	16.29	17.00	18.83	18.88	18.85	
3GPP Rel 6	HSDPA Subclass-2	16.13	16.30	16.17	16.50	16.20	16.32	16.28	17.00	18.52	18.87	18.89	
3GPP Rel 6	HSDPA Subclass-3	15.84	15.82	15.86	16.00	15.86	15.75	16.50	18.30	18.02	18.36	19.00	
3GPP Rel 6	HSDPA Subclass-4	15.62	15.78	15.68	16.00	15.65	15.82	15.78	16.50	18.38	18.30	19.00	
3GPP Rel 6	DC-HSDPA Subclass-1	16.10	16.15	16.08	16.50	16.10	16.18	16.18	17.00	18.73	18.70	19.50	
3GPP Rel 6	DC-HSDPA Subclass-2	16.08	16.13	16.12	16.50	16.07	16.21	16.14	17.00	18.40	18.75	18.74	
3GPP Rel 6	DC-HSDPA Subclass-3	15.90	15.82	15.88	16.00	15.51	15.77	15.80	16.50	18.23	17.92	18.22	
3GPP Rel 6	DC-HSDPA Subclass-4	15.54	15.60	15.60	16.00	15.51	15.71	15.63	16.50	18.27	18.30	18.20	
3GPP Rel 6	HSUPA Subclass-1	16.12	16.21	16.11	16.50	16.22	16.35	16.18	17.00	18.84	18.91	18.84	
3GPP Rel 6	HSUPA Subclass-2	14.14	14.28	14.15	14.50	14.18	14.26	14.28	15.00	16.83	16.86	16.86	
3GPP Rel 6	HSUPA Subclass-3	14.03	14.24	14.05	14.50	14.17	14.24	14.20	15.00	17.86	17.90	17.84	
3GPP Rel 6	HSUPA Subclass-4	14.15	14.25	14.19	14.50	14.18	14.31	14.30	15.00	16.85	16.89	16.84	
3GPP Rel 6	HSUPA Subclass-5	16.10	16.30	16.10	16.50	16.20	16.30	16.20	17.00	18.80	18.90	18.90	
3GPP Rel 7	HSUPA+ (HIGAM) Subclass-1	13.68	13.72	13.70	14.00	13.63	13.75	13.72	14.00	16.33	16.37	16.34	



Reduced power level 2 for Head-UAT

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power High Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Band 2 (1900MHz Band) Part 24E and Band 4 (450MHz Band) Part 22L.

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power High Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Band 4 (450MHz Band) Part 22L (only on channel required) and Band 5 (900MHz Band) Part 22M (only on channel required).

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch./Freq., Power High Ch./Freq., Power High Ch./Freq., Tune-up limit (dBm), MPR (dB). Includes sub-headers for Band 5 (900MHz Band) Part 22M (only on channel required) and Band 6 (Cakun Band) Part 22N (only on channel required).



Band 7 (700MHz Band) Part 27										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	14.86	14.84	14.83				
20	QPSK	1	49	14.83	14.77	14.62	16	0		
20	QPSK	1	99	14.81	14.83	14.68				
20	QPSK	50	0	14.83	14.81	14.74				
20	QPSK	50	24	14.86	14.83	14.83	16	0		
20	QPSK	50	25	14.83	14.84	14.78				
20	QPSK	100	0	14.84	14.81	14.85				
20	16QAM	1	0	14.86	14.89	14.86				
20	16QAM	1	49	14.84	14.88	14.93	16	0		
20	16QAM	1	99	14.83	14.88	14.88				
20	16QAM	50	0	14.72	14.79	14.81				
20	16QAM	50	24	14.85	14.88	14.75	16	0		
20	16QAM	50	50	14.82	14.84	14.75				
20	16QAM	100	0	14.82	14.87	14.73				
20	16QAM	1	0	14.77	14.92	14.72				
20	16QAM	1	49	14.86	14.88	14.78	16	0		
20	16QAM	1	99	14.88	14.87	14.83				
20	64QAM	50	0	14.81	14.88	14.83				
20	64QAM	50	24	14.78	14.80	14.73	16	0		
20	64QAM	50	50	14.85	14.85	14.87				
20	64QAM	100	0	14.71	14.79	14.81				
Channel										
Frequency (MHz)										
15	QPSK	1	0	14.64	14.81	14.80				
15	QPSK	1	37	14.69	14.71	14.87	16	0		
15	QPSK	1	74	14.65	14.83	14.80				
15	QPSK	38	0	14.64	14.70	14.79				
15	QPSK	38	12	14.70	14.80	14.88	16	0		
15	QPSK	38	39	14.75	14.81	14.74				
15	QPSK	75	0	14.69	14.76	14.77				
15	16QAM	1	0	14.90	14.87	14.84				
15	16QAM	1	37	14.83	14.91	14.79	16	0		
15	16QAM	1	74	14.87	14.84	14.84				
15	16QAM	38	0	14.86	14.71	14.79				
15	16QAM	38	20	14.70	14.81	14.71	16	0		
15	16QAM	38	39	14.75	14.80	14.71				
15	16QAM	75	0	14.72	14.76	14.79				
15	64QAM	1	0	14.78	14.76	14.80	16	0		
15	64QAM	1	37	14.87	14.88	14.80				
15	64QAM	1	74	14.74	14.81	14.85				
15	64QAM	38	0	14.64	14.78	14.83				
15	64QAM	38	20	14.72	14.86	14.73	16	0		
15	64QAM	38	39	14.74	14.82	14.80				
15	64QAM	75	0	14.68	14.83	14.81				
Channel										
Frequency (MHz)										
5	QPSK	1	0	14.68	14.78	14.83	16	0		
5	QPSK	1	25	14.69	14.70	14.85				
5	QPSK	1	49	14.77	14.88	14.89				
5	QPSK	25	0	14.66	14.78	14.90	16	0		
5	QPSK	12	7	14.80	14.73	14.88				
5	QPSK	25	25	14.79	14.92	14.91	16	0		
5	QPSK	50	0	14.73	14.88	14.90				
5	16QAM	1	0	14.82	14.90	14.94				
5	16QAM	1	25	14.81	14.90	14.94	16	0		
5	16QAM	1	49	14.80	14.92	14.91				
5	16QAM	25	0	14.66	14.82	14.89	16	0		
5	16QAM	25	12	14.79	14.90	14.94				
5	16QAM	25	25	14.74	14.90	14.91	16	0		
5	16QAM	50	0	14.72	14.83	14.86				
5	64QAM	1	0	14.80	14.84	14.91				
5	64QAM	1	25	14.87	14.88	14.80	16	0		
5	64QAM	1	49	14.80	14.90	14.92				
5	64QAM	25	0	14.69	14.81	14.90				
5	64QAM	25	12	14.83	14.87	14.91	16	0		
5	64QAM	25	25	14.79	14.91	14.92				
5	64QAM	50	0	14.73	14.88	14.83				
Channel										
Frequency (MHz)										
5	QPSK	1	0	14.63	14.76	14.83	16	0		
5	QPSK	1	12	14.77	14.78	14.95				
5	QPSK	1	24	14.68	14.86	14.86				
5	QPSK	12	0	14.68	14.70	14.79				
5	QPSK	12	7	14.80	14.73	14.88	16	0		
5	QPSK	12	13	14.83	14.72	14.88				
5	QPSK	25	0	14.61	14.73	14.84				
5	16QAM	1	0	14.78	14.95	14.81				
5	16QAM	1	12	14.82	14.73	14.74	16	0		
5	16QAM	1	24	14.81	14.80	14.80				
5	16QAM	12	0	14.66	14.89	14.81	16	0		
5	16QAM	12	7	14.81	14.79	14.88				
5	16QAM	12	13	14.86	14.76	14.86				
5	16QAM	25	0	14.63	14.75	14.89	16	0		
5	64QAM	1	0	14.88	14.85	14.77				
5	64QAM	1	12	14.79	14.89	14.88	16	0		
5	64QAM	1	24	14.77	14.91	14.87				
5	64QAM	12	0	14.64	14.73	14.85				
5	64QAM	12	7	14.84	14.76	14.81	16	0		
5	64QAM	12	13	14.86	14.76	14.81				
5	64QAM	25	0	14.61	14.77	14.82				

Band 12 (700MHz Low Band) Part 27(only on channel required)										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	21.87	21.89	21.88				
10	QPSK	1	25	21.65	21.69	21.76	22.5	0		
10	QPSK	1	49	21.80	21.75	21.82				
10	QPSK	25	0	21.84	21.88	21.88				
10	QPSK	25	12	21.78	21.89	21.77	22.5	0		
10	QPSK	25	25	21.70	21.80	21.85				
10	QPSK	50	0	21.73	21.70	21.75				
10	16QAM	1	0	21.84	21.73	21.77				
10	16QAM	1	25	21.88	21.75	21.77	22.5	0		
10	16QAM	1	49	21.78	21.75	21.72				
10	16QAM	25	0	20.57	20.61	20.58				
10	16QAM	25	12	20.63	20.58	20.66	21.5	1		
10	16QAM	25	25	20.58	20.59	20.62				
10	16QAM	50	0	20.62	20.59	20.66				
10	64QAM	1	0	20.64	20.62	20.71	21.5	1		
10	64QAM	1	25	20.76	20.73	20.84				
10	64QAM	1	49	20.84	20.74	20.85				
10	64QAM	25	0	19.87	19.84	19.80				
10	64QAM	25	12	19.86	19.85	19.71	20.5	2		
10	64QAM	25	25	19.85	19.88	19.88				
10	64QAM	50	0	19.82	19.80	19.73				
Channel										
Frequency (MHz)										
5	QPSK	1	0	21.43	21.52	21.45				
5	QPSK	1	12	21.46	21.53	21.52	22.5	0		
5	QPSK	1	24	21.47	21.52	21.55				
5	QPSK	12	0	21.51	21.60	21.58				
5	QPSK	12	7	21.59	21.56	21.83	22.5	0		
5	QPSK	12	13	21.54	21.61	21.59				
5	QPSK	25	0	21.57	21.66	21.60				
5	16QAM	1	0	21.67	21.68	21.64				
5	16QAM	1	12	21.69	21.69	21.70	22.5	0		
5	16QAM	1	24	21.69	21.74	21.79				
5	16QAM	12	0	20.59	20.62	20.61	21.5	1		
5	16QAM	12	7	20.62	20.59	20.65				
5	16QAM	12	13	20.59	20.60	20.64				
5	16QAM	25	0	20.60	20.59	20.64				
5	64QAM	1	0	20.72	20.73	20.71	21.5	1		
5	64QAM	1	12	20.86	20.86	20.77				
5	64QAM	1	24	20.74	20.84	20.85				
5	64QAM	12	0	19.88	19.85	19.86				
5	64QAM	12	7	19.88	19.84	19.70	20.5	2		
5	64QAM	12	13	19.84	19.88					

Band 26 for FCC (only on channel required)										
BW (MHz)	Modulation	RB Size	RB Offset	Power			Tune-up Int (dft)	MPR (dB)		
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.				
Channel										
Frequency (MHz)				26765	26865	26965				
				313.5	313.5	313.5				
15	QPSK	1	0	19.07	19.08	19.11				
15	QPSK	1	37	18.91	18.97	19.00	20.3		0	
15	QPSK	1	74	18.96	18.95	18.95				
15	QPSK	35	0	18.86	18.96	19.00				
15	QPSK	35	20	19.02	19.04	19.03	20.3		0	
15	QPSK	35	39	18.91	18.97	18.92				
15	QPSK	75	0	18.82	18.86	19.06				
15	16QAM	1	0	18.96	19.01	19.02				
15	16QAM	1	37	18.91	18.98	18.96	20.3		0	
15	16QAM	1	74	18.98	18.88	19.05				
15	16QAM	35	0	19.01	18.97	19.07				
15	16QAM	35	20	19.01	19.01	18.97	20.3		0	
15	16QAM	35	39	19.02	18.89	18.85				
15	16QAM	75	0	18.94	18.85	18.94				
15	16QAM	1	0	19.02	19.07	18.92	20.3		0	
15	16QAM	1	37	18.95	18.99	19.03				
15	16QAM	1	74	18.95	18.96	19.00				
15	16QAM	35	0	18.95	18.82	18.95				
15	16QAM	35	20	18.42	18.56	18.40	19.8		0.5	
15	16QAM	35	39	18.41	18.56	18.51				
15	16QAM	75	0	18.50	18.54	18.61				
Channel										
Frequency (MHz)				26765	26965	27065				
				313.5	313.5	313.5				
10	QPSK	1	0	18.71	18.77	18.84				
10	QPSK	1	25	18.71	18.74	18.84	20.3		0	
10	QPSK	1	49	18.75	18.89	18.77				
10	QPSK	25	0	18.76	18.83	18.96				
10	QPSK	12	7	18.86	18.91	18.84	20.3		0	
10	QPSK	25	23	18.87	18.90	18.95				
10	QPSK	50	0	18.94	18.89	18.94				
10	16QAM	1	0	18.90	19.01	19.06				
10	16QAM	1	25	19.09	19.00	19.10	20.3		0	
10	16QAM	1	49	18.89	19.08	18.90				
10	16QAM	25	0	18.95	18.94	18.89				
10	16QAM	25	12	18.86	18.82	18.95				
10	16QAM	25	25	18.72	18.88	18.92	20.3		0	
10	16QAM	50	0	18.85	18.82	18.84				
10	16QAM	1	0	19.04	18.90	18.90				
10	16QAM	1	25	18.97	18.96	18.98	20.3		0	
10	16QAM	1	49	19.03	19.01	19.07				
10	16QAM	25	0	18.94	18.93	18.93				
10	16QAM	25	12	18.44	18.46	18.56	19.8		0.5	
10	16QAM	25	25	18.42	18.48	18.37				
10	16QAM	50	0	18.47	18.34	18.38				
Channel										
Frequency (MHz)				26765	26965	27065				
				313.5	313.5	313.5				
5	QPSK	1	0	18.86	18.73	18.75				
5	QPSK	1	12	18.81	18.82	18.95	20.3		0	
5	QPSK	1	24	18.86	18.91	18.92				
5	QPSK	12	0	18.90	18.83	19.00				
5	QPSK	12	7	18.86	18.91	18.84	20.3		0	
5	QPSK	12	13	18.75	18.81	18.93				
5	QPSK	25	0	18.90	18.90	18.99				
5	16QAM	1	0	18.97	19.05	19.01				
5	16QAM	1	12	18.99	19.00	19.05	20.3		0	
5	16QAM	1	24	18.85	19.05	18.99				
5	16QAM	12	0	18.95	18.94	19.03				
5	16QAM	12	7	18.99	18.97	18.94	20.3		0	
5	16QAM	12	13	18.91	18.85	18.84				
5	16QAM	25	0	19.03	18.90	18.81				
5	16QAM	1	0	18.91	18.86	18.92	20.3		0	
5	16QAM	1	12	18.98	19.01	18.99				
5	16QAM	1	24	18.92	19.03	19.08				
5	16QAM	12	0	18.47	18.41	18.45	19.8		0.5	
5	16QAM	12	7	18.54	18.39	18.46				
5	16QAM	12	13	18.39	18.56	18.55				
5	16QAM	25	0	18.52	18.52	18.37				
Channel										
Frequency (MHz)				26765	26965	27065				
				313.5	313.5	313.5				
3	QPSK	1	0	18.77	18.78	18.87				
3	QPSK	1	8	18.87	18.80	18.79	20.3		0	
3	QPSK	1	14	18.86	18.81	18.85				
3	QPSK	8	0	18.76	18.89	18.80				
3	QPSK	8	4	18.76	18.89	18.80	20.3		0	
3	QPSK	8	7	18.81	18.75	18.71				
3	QPSK	15	0	18.73	18.71	18.88				
3	16QAM	1	0	18.90	18.82	18.95				
3	16QAM	1	8	18.84	18.90	18.96	20.3		0	
3	16QAM	1	14	18.96	19.00	18.95				
3	16QAM	8	0	18.81	18.90	18.82				
3	16QAM	8	4	18.91	18.78	18.87	20.3		0	
3	16QAM	8	7	18.69	18.75	18.86				
3	16QAM	15	0	18.72	18.72	18.93				
3	16QAM	1	0	18.95	18.83	18.96	20.3		0	
3	16QAM	1	8	18.90	18.90	18.98				
3	16QAM	1	14	18.83	18.90	18.81				
3	16QAM	8	0	18.36	18.34	18.40	19.8		0.5	
3	16QAM	8	4	18.43	18.39	18.40				
3	16QAM	8	7	18.36	18.39	18.34				
3	16QAM	15	0	18.30	18.32	18.33				
Channel										
Frequency (MHz)				26765	26965	27065				
				313.5	313.5	313.5				
14	QPSK	1	0	18.77	18.70	18.63				
14	QPSK	1	3	18.59	18.64	18.59	20.3		0	
14	QPSK	1	5	18.59	18.62	18.58				
14	QPSK	3	0	18.72	18.71	18.73				
14	QPSK	3	1	18.64	18.70	18.71	20.3		0	
14	QPSK	3	3	18.53	18.65	18.57				
14	QPSK	6	0	18.63	18.78	18.62				
14	16QAM	1	0	18.65	18.88	18.71	20.3		0	
14	16QAM	1	3	18.80	18.96	18.93				
14	16QAM	1	5	18.86	18.79	18.88	20.3		0	
14	16QAM	3	0	18.90	18.76	18.79				
14	16QAM	3	1	18.75	18.82	18.65				
14	16QAM	3	3	18.70	18.83	18.79	20.3		0	
14	16QAM	6	0	18.81	18.69	18.67				
14	16QAM	1	0	18.88	18.79	18.74	20.3		0	
14	16QAM	1	3	18.74	18.89	18.79				
14	16QAM	1	5	18.76	18.75	18.69	20.3		0	
14	16QAM	3	0	18.90	18.83	18.87				
14	16QAM	3	1	18.80	18.99	18.93				
14	16QAM	3	3	18.81	18.87	18.82	20.3		0	
14	16QAM	6	0	18.34	18.37	18.34	19.8		0.5	

Band 66										
BW (MHz)	Modulation	RB Size	RB Offset	Power			Tune-up Int (dft)	MPR (dB)		
				Power Low Ch. / Freq.	Middle Ch. / Freq.	Power High Ch. / Freq.				
Channel										
Frequency (MHz)				13072	13072	13072				
				1772	1745	1772				
20	QPSK	1	0	16.99	16.87	16.86				
20	QPSK	1	49	16.42	16.57	16.47	18		0	
20	QPSK	1	99	16.40	16.44	16.42				
20	QPSK	50	0	16.42	16.51	16.44				
20	QPSK	50	24	16.57	16.63	16.61	18		0	
20	QPSK	50	50	16.39	16.49	16.42				
20	QPSK	100	0	16.50	16.58	16.55				
20	16QAM	1	0	16.52	16.63	16.65				
20	16QAM	1	49	16.60	16.60	16.54	18		0	
20	16QAM	1	99	16.56	16.52	16.48				
20	16QAM	50	0	16.41	16.54	16.45				
20	16									



Band 20 (5.00 Bands) - Class 1										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-up limit (min)	MFR (dB)		
Channel										
20	QPSK	1	0	17.45	17.27	17.37				
20	QPSK	1	48	17.43	17.29	17.38	18	0		
20	QPSK	50	0	17.33	17.26	17.36				
20	QPSK	50	24	17.40	17.28	17.46				
20	QPSK	50	50	17.33	17.29	17.40				
20	QPSK	100	0	17.40	17.28	17.38				
20	15GAM	1	0	17.44	17.43	17.38				
20	15GAM	1	48	17.44	17.35	17.37	18	0		
20	15GAM	50	0	17.35	17.27	17.46				
20	15GAM	50	24	17.48	17.21	17.41				
20	15GAM	50	50	17.33	17.26	17.38				
20	15GAM	100	0	17.44	17.29	17.41				
20	8QAM	1	0	17.37	16.91	17.10				
20	8QAM	1	48	17.38	16.99	17.22	18	0		
20	8QAM	1	96	17.37	17.08	17.09				
20	8QAM	50	0	17.37	17.26	17.38				
20	8QAM	50	24	17.40	17.28	17.46				
20	8QAM	50	50	17.37	17.41	17.41				
20	8QAM	100	0	17.46	17.27	17.45				
Channel										
15	QPSK	1	0	17.62	16.99	16.99				
15	QPSK	1	37	17.31	17.03	17.13	18	0		
15	QPSK	1	74	17.44	17.25	17.26				
15	QPSK	38	0	17.44	17.26	17.27				
15	QPSK	38	20	17.37	17.28	17.36				
15	QPSK	38	38	17.48	17.23	17.44				
15	QPSK	38	57	17.44	17.26	17.27				
15	QPSK	38	76	17.32	17.37	17.37				
15	15GAM	1	0	17.48	17.29	17.41				
15	15GAM	1	37	17.48	17.29	17.31	18	0		
15	15GAM	1	74	17.40	17.29	17.47				
15	15GAM	38	0	17.40	17.29	17.31				
15	15GAM	38	20	17.48	17.26	17.48				
15	15GAM	38	38	17.40	17.26	17.38				
15	15GAM	38	57	17.48	17.26	17.37				
15	15GAM	38	76	17.40	17.26	17.41				
15	8QAM	1	0	17.39	16.99	17.18				
15	8QAM	1	37	17.39	17.11	17.18	18	0		
15	8QAM	1	74	17.38	17.08	17.09				
15	8QAM	38	0	17.37	17.27	17.31				
15	8QAM	38	20	17.45	17.25	17.42				
15	8QAM	38	38	17.43	17.25	17.48				
15	8QAM	76	0	17.43	17.25	17.48				
Channel										
10	QPSK	1	0	17.68	17.29	17.29				
10	QPSK	1	25	17.37	17.09	17.36	18	0		
10	QPSK	1	49	17.38	17.18	17.45				
10	QPSK	25	0	17.42	17.19	17.37				
10	QPSK	25	25	17.43	17.41	17.48				
10	QPSK	50	0	17.31	17.30	17.38				
10	15GAM	1	0	17.40	17.26	17.41				
10	15GAM	1	25	17.42	17.45	17.41	18	0		
10	15GAM	1	49	17.43	17.32	17.31				
10	15GAM	25	0	17.41	17.28	17.31				
10	15GAM	25	12	17.33	17.27	17.43				
10	15GAM	25	25	17.31	17.36	17.47				
10	15GAM	50	0	17.42	17.28	17.39				
10	8QAM	1	0	17.39	16.99	17.44				
10	8QAM	1	25	17.14	17.25	16.97	18	0		
10	8QAM	1	49	17.32	17.14	17.60				
10	8QAM	25	0	17.35	17.40	17.31				
10	8QAM	25	12	17.42	17.48	17.41				
10	8QAM	25	25	17.40	17.35	17.31				
10	8QAM	50	0	17.47	17.27	17.39				
Channel										
5	QPSK	1	0	17.30	17.26	17.41				
5	QPSK	1	12	17.48	17.20	17.48	18	0		
5	QPSK	1	24	17.44	17.30	17.41				
5	QPSK	12	0	17.45	17.28	17.42				
5	QPSK	12	7	17.32	17.32	17.44				
5	QPSK	12	13	17.42	17.38	17.45	18	0		
5	QPSK	25	0	17.46	17.26	17.40				
5	15GAM	1	0	17.32	17.29	17.46				
5	15GAM	1	12	17.38	17.28	17.32				
5	15GAM	12	0	17.38	17.25	17.37				
5	15GAM	12	7	17.45	17.25	17.33	18	0		
5	15GAM	12	13	17.35	17.28	17.41				
5	8QAM	1	0	17.41	17.21	17.41				
5	8QAM	1	12	17.31	17.28	17.47				
5	8QAM	12	0	17.43	17.28	17.46				
5	8QAM	25	0	17.44	17.28	17.46				

Band 41 (2.60 Bands) - Class 2										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-up limit (min)	MFR (dB)
Channel										
20	QPSK	1	0	16.50	16.78	17.04	17.11	16.90		
20	QPSK	1	48	16.52	17.04	17.07	17.10	16.98	18.5	0
20	QPSK	1	96	16.74	16.96	17.14	17.13	17.02		
20	QPSK	50	0	16.72	16.97	17.10	17.05	17.07		
20	QPSK	50	24	16.76	17.00	17.12	17.09	16.99		
20	QPSK	50	50	16.88	17.08	17.11	17.08	17.07	18.5	0
20	QPSK	100	0	16.99	17.08	17.10	17.08	17.09		
20	15GAM	1	0	16.56	16.92	17.06	17.08	17.08		
20	15GAM	1	48	16.50	16.73	17.06	16.92	16.75	18.5	0
20	15GAM	1	96	16.54	16.87	17.09	17.09	16.99		
20	15GAM	50	0	16.84	16.80	17.02	17.07	16.91		
20	15GAM	50	24	16.58	16.99	17.08	16.96	16.87	18.5	0
20	15GAM	50	50	16.61	16.90	17.11	17.11	16.98		
20	15GAM	100	0	16.51	17.00	17.02	16.96	16.93		
20	8QAM	1	0	16.16	16.22	16.76	16.85	16.87		
20	8QAM	1	48	16.20	16.37	16.74	16.93	16.92	18.5	0
20	8QAM	1	96	16.12	16.32	16.78	16.81	16.92		
20	8QAM	50	0	16.25	17.07	17.09	16.97	16.98		
20	8QAM	50	24	16.61	16.93	17.13	16.94	16.97	18.5	0
20	8QAM	50	50	16.53	16.93	17.13	17.09	17.04		
20	8QAM	100	0	16.59	16.93	17.09	17.07	17.07		
Channel										
15	QPSK	1	0	16.74	16.71	17.01	16.92	16.72		
15	QPSK	1	37	16.57	16.12	16.98	16.85	16.80	18.5	0
15	QPSK	1	74	16.56	16.91	16.97	16.94	16.78		
15	QPSK	38	0	16.79	16.97	17.00	16.99	16.97		
15	QPSK	38	20	16.78	16.82	16.98	17.02	16.84	18.5	0
15	QPSK	38	38	16.70	16.98	17.10	17.04	16.91		
15	QPSK	38	57	16.79	16.99	17.00	16.99	16.98		
15	15GAM	1	0	16.84	16.70	17.09	17.10	16.98		
15	15GAM	1	37	16.82	16.88	17.02	17.02	16.97	18.5	0
15	15GAM	1	74	16.82	16.88	17.02	17.02	16.97		
15	15GAM	38	0	16.79	16.70	16.99	16.85	16.82		
15	15GAM	38	20	16.86	16.91	17.06	17.06	16.97	18.5	0
15	15GAM	38	38	16.73	16.95	17.05	17.05	16.92		
15	15GAM	38	57	16.84	16.95	17.05	17.05	16.91		
15	15GAM	76	0	16.82	16.92	17.06	17.06	16.91		
15	8QAM	1	0	16.50	16.55	16.89	16.80	16.80	18.5	0
15	8QAM	1	37	16.55	16.85	16.99	16.99	16.84		
15	8QAM	1	74	16.50	16.90	17.06	17.00	16.84		
15	8QAM	38	0	16.59	16.82	16.98	17.02	16.87	18.5	0
15	8QAM	38	20	16.70	16.83	17.09	17.01	16.86		
15	8QAM	38	38	16.72	16.89	16.95	17.00	16.91		
15	8QAM	76	0	16.73	16.87	17.05	17.00	16.87	18.5	0



Band 2 (190MHz Band)										
Part 24E										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. (Freq.)	Power Middle Ch. (Freq.)	Power High Ch. (Freq.)	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	16.87	16.82	16.86	18	0		
20	QPSK	1	49	16.73	16.84	16.81				
20	QPSK	1	99	16.70	16.77	16.73				
20	QPSK	50	0	16.73	16.86	16.79				
20	QPSK	50	24	16.82	16.86	16.80				
20	QPSK	50	50	16.76	16.87	16.75				
20	QPSK	100	0	16.81	16.85	16.84				
20	16QAM	1	0	16.86	16.84	16.82				
20	16QAM	1	49	16.76	16.82	16.81				
20	16QAM	1	99	16.76	16.86	16.74				
20	16QAM	50	0	16.85	16.74	16.69				
20	16QAM	50	24	16.74	16.77	16.73				
20	16QAM	50	50	16.72	16.79	16.77				
20	16QAM	100	0	16.71	16.72	16.76				
20	16QAM	1	0	16.72	16.72	16.70				
20	64QAM	1	49	16.69	16.76	16.73				
20	64QAM	1	99	16.53	16.71	16.59				
20	64QAM	50	0	16.68	16.75	16.72				
20	64QAM	50	24	16.74	16.79	16.75				
20	64QAM	50	50	16.67	16.82	16.80				
20	64QAM	100	0	16.75	16.74	16.77				
Channel										
Frequency (MHz)										
15	QPSK	1	0	16.82	16.80	16.85	18	0		
15	QPSK	1	37	16.73	16.85	16.85				
15	QPSK	1	74	16.76	16.83	16.79				
15	QPSK	36	0	16.87	16.70	16.88				
15	QPSK	36	20	16.71	16.73	16.75				
15	QPSK	36	39	16.69	16.76	16.73				
15	QPSK	75	0	16.87	16.72	16.78				
15	16QAM	1	0	16.84	16.83	16.84				
15	16QAM	1	37	16.75	16.82	16.79				
15	16QAM	1	74	16.72	16.88	16.79				
15	16QAM	36	0	16.70	16.72	16.66				
15	16QAM	36	20	16.70	16.72	16.76				
15	16QAM	36	39	16.70	16.82	16.74				
15	16QAM	75	0	16.70	16.74	16.74				
15	64QAM	1	0	16.75	16.79	16.74				
15	64QAM	1	37	16.71	16.82	16.75				
15	64QAM	1	74	16.68	16.74	16.69				
15	64QAM	36	0	16.72	16.76	16.70				
15	64QAM	36	20	16.76	16.76	16.81				
15	64QAM	36	39	16.69	16.87	16.76				
15	64QAM	75	0	16.69	16.72	16.77				
Channel										
Frequency (MHz)										
10	QPSK	1	0	16.78	16.79	16.80	18	0		
10	QPSK	1	25	16.69	16.84	16.81				
10	QPSK	1	49	16.76	16.85	16.80				
10	QPSK	25	0	16.66	16.66	16.63				
10	QPSK	25	12	16.68	16.76	16.74				
10	QPSK	25	25	16.71	16.80	16.78				
10	QPSK	50	0	16.73	16.73	16.75				
10	16QAM	1	0	16.85	16.83	16.84				
10	16QAM	1	25	16.73	16.85	16.86				
10	16QAM	1	49	16.77	16.85	16.86				
10	16QAM	25	0	16.62	16.67	16.59				
10	16QAM	25	12	16.69	16.75	16.77				
10	16QAM	25	25	16.72	16.83	16.88				
10	16QAM	50	0	16.70	16.74	16.74				
10	64QAM	1	0	16.84	16.84	16.74				
10	64QAM	1	49	16.73	16.75	16.82				
10	64QAM	25	0	16.71	16.69	16.64				
10	64QAM	25	12	16.70	16.75	16.77				
10	64QAM	25	25	16.66	16.87	16.78				
10	64QAM	50	0	16.75	16.71	16.77				
Channel										
Frequency (MHz)										
5	QPSK	1	0	16.84	16.79	16.70	18	0		
5	QPSK	1	12	16.85	16.80	16.80				
5	QPSK	1	24	16.76	16.91	16.80				
5	QPSK	12	0	16.72	16.68	16.64				
5	QPSK	12	7	16.78	16.82	16.69				
5	QPSK	12	13	16.70	16.87	16.75				
5	QPSK	25	0	16.70	16.72	16.65				
5	16QAM	1	0	16.88	16.85	16.81				
5	16QAM	1	12	16.81	16.86	16.85				
5	16QAM	1	24	16.81	16.85	16.88				
5	16QAM	12	0	16.76	16.73	16.79				
5	16QAM	12	13	16.79	16.83	16.71				
5	16QAM	12	13	16.69	16.83	16.74				
5	16QAM	25	0	16.66	16.74	16.67				
5	64QAM	1	0	16.79	16.79	16.74				
5	64QAM	1	12	16.80	16.83	16.86				
5	64QAM	1	24	16.78	16.87	16.80				
5	64QAM	12	0	16.79	16.76	16.86				
5	64QAM	12	13	16.82	16.85	16.70				
5	64QAM	12	13	16.73	16.84	16.75				
5	64QAM	25	0	16.70	16.72	16.67				
Channel										
Frequency (MHz)										
3	QPSK	1	0	16.78	16.73	16.68	18	0		
3	QPSK	1	8	16.82	16.84	16.76				
3	QPSK	1	14	16.71	16.80	16.71				
3	QPSK	8	0	16.76	16.71	16.66				
3	QPSK	8	4	16.80	16.77	16.74				
3	QPSK	8	7	16.77	16.81	16.69				
3	QPSK	15	0	16.73	16.72	16.71				
3	16QAM	1	0	16.83	16.87	16.84				
3	16QAM	1	8	16.80	16.84	16.87				
3	16QAM	1	14	16.82	16.85	16.85				
3	16QAM	8	0	16.82	16.79	16.75				
3	16QAM	8	4	16.81	16.81	16.83				
3	16QAM	8	7	16.82	16.83	16.77				
3	16QAM	15	0	16.80	16.75	16.73				
3	64QAM	1	0	16.76	16.77	16.79				
3	64QAM	1	8	16.84	16.88	16.84				
3	64QAM	1	14	16.74	16.88	16.88				
3	64QAM	8	0	16.79	16.77	16.70				
3	64QAM	8	4	16.81	16.88	16.73				
3	64QAM	8	7	16.79	16.83	16.74				
3	64QAM	15	0	16.80	16.74	16.76				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	16.87	16.78	16.68	18	0		
1.4	QPSK	1	3	16.87	16.86	16.76				
1.4	QPSK	1	5	16.80	16.78	16.72				
1.4	QPSK	3	0	16.58	16.66	16.53				
1.4	QPSK	3	1	16.64	16.69	16.59				
1.4	QPSK	3	1	16.66	16.63	16.53				
1.4	QPSK	6	0	16.70	16.67	16.58				
1.4	16QAM	1	0	16.78	16.81	16.65				
1.4	16QAM	1	3	16.83	16.80	16.79				
1.4	16QAM	1	5	16.82	16.84	16.72				
1.4	16QAM	3	0	16.70	16.72	16.59				
1.4	16QAM	3	1	16.76	16.78	16.64				
1.4	16QAM	3	1	16.66	16.63	16.54				
1.4	16QAM	6	0	16.69	16.74	16.57				
1.4	64QAM	1	0	16.79	16.80	16.65				
1.4	64QAM	1	3	16.78	16.86	16.83				
1.4	64QAM	1	5	16.72	16.79	16.75				
1.4	64QAM	3	0	16.86	16.84	16.74				
1.4	64QAM	3	1	16.81	16.86	16.79				
1.4	64QAM	3	1	16.80	16.83	16.77				
1.4	64QAM	6	0	16.73	16.74	16.65				

Band 4 (AWS Bands)										
Part 27L (only on channel required)										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. (Freq.)	Power Middle Ch. (Freq.)	Power High Ch. (Freq.)	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	17.20	17.32	17.45	18	0		
20	QPSK	1	49	16.99	16.89	16.81				
20	QPSK	1	99	16.93	16.83	16.82				
20	QPSK	50	0	16.74	16.73	16.73				
20	QPSK	50	24	16.77	16.78	16.77				
20	QPSK	50	50	16.70	16.70	16.74				
20	QPSK	100	0	16.75	16.77	16.76				
20	16QAM	1	0	16.70	16.80	16.73				
20	16QAM	1	49	16.72	16.72	16.78				
20	16QAM	1	99	16.75	16.75	16.81				
20	16QAM	50	0	16.86	16.86	16.85				
20	16QAM	50	24	16.87	16.87	16.82				
20	16QAM	50	50	16.80	16.80	16.82				
20	16QAM	100	0	16.85	16.85	16.88				
20	64QAM	1	0	16.87	16.87	16.74				
20	64QAM	1	49	16.81	16.87	16.82				
20	64QAM	1	99	16.82	16.82	16.73				
20	64QAM	50	0	16.87	16.87	16.66				
20	64QAM	50	24	16.89	16.89	16.87				
20	64QAM	50	50	16.83	16.83	16.83				
20	64QAM	100	0	16.81	16.81	16.65				
Channel										
Frequency (MHz)										
15	QPSK	1	0	17.15	17.32	17.47	18	0		
15	QPSK	1	37	16.49	16.61	16.59				
15	QPSK	1	74	16.36	16.39	16.39				
15	QPSK	1	107	16.37	16.38	16.39				
15	QPSK	36	0	16.83	16.81	16.59				
15	QPSK	36	20	16.84	16.84	16.50				
15	QPSK	36	39	16.81	16.87	16.82				
15	QPSK	75	0	16.83	16.84	16.76				
15	16QAM	1	0	16.89	16.87	16.89				
15	16QAM	1	37	16.73	16.80	16.88				



Band 7 (200MHz Band) Part 27										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 20050	Power Middle Ch. Freq. 21100	Power High Ch. Freq. 21350	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)				2050	2035	2050				
20	QPSK	1	0	12.55	12.75	12.77				
20	QPSK	1	49	12.73	12.73	12.50	14	0		
20	QPSK	1	99	12.77	12.75	12.55				
20	QPSK	50	0	12.75	12.75	12.50				
20	QPSK	50	24	12.85	12.75	12.72				
20	QPSK	50	50	12.82	12.75	12.67	14	0		
20	QPSK	100	0	12.85	12.82	12.69				
20	16QAM	1	0	12.78	12.83	12.82				
20	16QAM	1	49	12.75	12.85	12.87	14	0		
20	16QAM	1	99	12.91	12.67	12.82				
20	16QAM	50	0	12.69	12.59	12.52				
20	16QAM	50	24	12.77	12.71	12.63				
20	16QAM	50	50	12.85	12.73	12.64	14	0		
20	16QAM	100	0	12.63	12.70	12.69				
20	64QAM	1	0	12.60	12.63	12.73				
20	64QAM	1	49	12.74	12.80	12.75	14	0		
20	64QAM	1	99	12.83	12.67	12.75				
20	64QAM	50	0	12.80	12.83	12.56				
20	64QAM	50	24	12.68	12.81	12.64	14	0		
20	64QAM	50	50	12.70	12.83	12.90				
20	64QAM	100	0	12.65	12.74	12.40				
Channel										
Frequency (MHz)				20075	2035	20025	Tune-up limit (dBm)	MPR (dB)		
15	QPSK	1	0	12.40	12.65	12.67				
15	QPSK	1	37	12.44	12.53	12.59	14	0		
15	QPSK	1	74	12.46	12.65	12.56				
15	QPSK	36	0	12.32	12.39	12.49				
15	QPSK	36	20	12.45	12.67	12.57	14	0		
15	QPSK	36	39	12.85	12.85	12.47				
15	QPSK	75	0	12.41	12.57	12.53				
15	16QAM	1	0	12.75	12.77	12.57				
15	16QAM	1	37	12.81	12.72	12.62	14	0		
15	16QAM	1	74	12.55	12.52	12.54				
15	16QAM	36	0	12.33	12.57	12.48				
15	16QAM	36	20	12.47	12.75	12.48	14	0		
15	16QAM	36	39	12.51	12.52	12.41				
15	16QAM	75	0	12.59	12.61	12.63				
15	64QAM	1	0	12.68	12.55	12.53				
15	64QAM	1	37	12.55	12.69	12.67	14	0		
15	64QAM	1	74	12.61	12.71	12.45				
15	64QAM	36	0	12.50	12.66	12.51				
15	64QAM	36	20	12.65	12.66	12.45	14	0		
15	64QAM	36	39	12.60	12.70	12.59				
15	64QAM	75	0	12.58	12.72	12.67				
Channel										
Frequency (MHz)				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)		
10	QPSK	1	0	12.46	12.40	12.43				
10	QPSK	1	25	12.45	12.47	12.51	14	0		
10	QPSK	1	49	12.38	12.62	12.61				
10	QPSK	25	0	12.28	12.47	12.57				
10	QPSK	25	12	12.34	12.50	12.62	14	0		
10	QPSK	25	25	12.47	12.58	12.68				
10	QPSK	50	0	12.42	12.56	12.63				
10	16QAM	1	0	12.58	12.55	12.54				
10	16QAM	1	25	12.45	12.62	12.52	14	0		
10	16QAM	1	49	12.47	12.61	12.67				
10	16QAM	25	0	12.33	12.46	12.48				
10	16QAM	25	12	12.45	12.53	12.61	14	0		
10	16QAM	25	25	12.51	12.65	12.57				
10	16QAM	50	0	12.47	12.57	12.64				
10	64QAM	1	0	12.41	12.48	12.54				
10	64QAM	1	25	12.61	12.53	12.53	14	0		
10	64QAM	1	49	12.55	12.47	12.58				
10	64QAM	25	0	12.33	12.47	12.57				
10	64QAM	25	12	12.53	12.53	12.63	14	0		
10	64QAM	25	25	12.52	12.69	12.49				
10	64QAM	50	0	12.37	12.45	12.53				
Channel										
Frequency (MHz)				20025	2035	20075	Tune-up limit (dBm)	MPR (dB)		
5	QPSK	1	0	12.35	12.47	12.43				
5	QPSK	1	12	12.48	12.52	12.52	14	0		
5	QPSK	1	24	12.26	12.47	12.43				
5	QPSK	12	0	12.14	12.37	12.53				
5	QPSK	12	7	12.23	12.46	12.50	14	0		
5	QPSK	12	13	12.25	12.32	12.45				
5	QPSK	25	0	12.20	12.31	12.40				
5	16QAM	1	0	12.55	12.68	12.48				
5	16QAM	1	12	12.48	12.44	12.32	14	0		
5	16QAM	1	24	12.57	12.42	12.37				
5	16QAM	12	0	12.29	12.41	12.52				
5	16QAM	12	7	12.17	12.42	12.66	14	0		
5	16QAM	12	13	12.43	12.33	12.57				
5	16QAM	25	0	12.31	12.35	12.17				
5	64QAM	1	0	12.29	12.46	12.52				
5	64QAM	1	12	12.48	12.65	12.54	14	0		
5	64QAM	1	24	12.38	12.46	12.43				
5	64QAM	12	0	12.31	12.48	12.48				
5	64QAM	12	7	12.25	12.45	12.37	14	0		
5	64QAM	12	13	12.33	12.54	12.24				
5	64QAM	25	0	12.19	12.41	12.50				

Band 12 (700MHz Low Band) Part 27(Only on channel required)										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 20900	Power Middle Ch. Freq. 20950	Power High Ch. Freq. 21030	Tune-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)				704	707.5	711				
10	QPSK	1	0	21.57	21.59	21.65				
10	QPSK	1	25	21.65	21.69	21.75	22.5	0		
10	QPSK	1	49	21.80	21.75	21.62				
10	QPSK	25	0	21.64	21.68	21.68				
10	QPSK	25	12	21.73	21.69	21.77	22.5	0		
10	QPSK	25	25	21.70	21.66	21.75				
10	QPSK	50	0	21.73	21.70	21.75				
10	16QAM	1	0	21.64	21.73	21.77				
10	16QAM	1	25	21.68	21.75	21.77	22.5	0		
10	16QAM	1	49	21.78	21.75	21.72				
10	16QAM	25	0	20.57	20.61	20.58				
10	16QAM	25	12	20.63	20.58	20.65	21.5	1		
10	16QAM	25	25	20.58	20.59	20.62				
10	16QAM	50	0	20.62	20.59	20.65				
10	64QAM	1	0	20.64	20.62	20.71				
10	64QAM	1	25	20.76	20.73	20.84	21.5	1		
10	64QAM	1	49	20.84	20.74	20.85				
10	64QAM	25	0	19.57	19.64	19.60				
10	64QAM	25	12	19.66	19.65	19.71	20.5	2		
10	64QAM	25	25	19.65	19.68	19.68				
10	64QAM	50	0	19.62	19.60	19.73				
Channel										
Frequency (MHz)				701.5	707.5	713.5	Tune-up limit (dBm)	MPR (dB)		
5	QPSK	1	0	21.43	21.52	21.45				
5	QPSK	1	12	21.46	21.53	21.52	22.5	0		
5	QPSK	1	24	21.47	21.52	21.55				
5	QPSK	12	0	21.51	21.60	21.58				
5	QPSK	12	7	21.59	21.58	21.63	22.5	0		
5	QPSK	12	13	21.54	21.53	21.59				
5	QPSK	25	0	21.57	21.56	21.60				
5	16QAM	1	0	21.67	21.68	21.64				
5	16QAM	1	12	21.69	21.69	21.70	22.5	0		
5	16QAM	1	24	21.69	21.74	21.79				
5	16QAM	12	0	20.59	20.62	20.61				
5	16QAM	12	7	20.62	20.59	20.65	21.5	1		
5	16QAM	12	13	20.59	20.60	20.64				
5	16QAM	25	0	20.60	20.59	20.64				
5	64QAM	1	0	20.72	20.73	20.73				
5	64QAM	1	12	20.69	20.65	20.77	21.5	1		
5	64QAM	1	24	20.74	20.65	20.85				
5	64QAM	12	0	19.65	19.65	19.65	</			



Band 26 for FCC (only one channel required)										
BW (MHz)	Modulation	RB Size	RB Offset	Power			Tune-up limit (dBm)	MPR (dB)		
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			Tune-up limit (dBm)	MPR (dB)
Channel										
Frequency (MHz)				821.5	831.5	841.5				
15	QPSK	1	0	19.07	19.06	19.11	20.3	0		
15	QPSK	1	37	18.91	18.97	19.00				
15	QPSK	1	74	18.96	18.96	18.96				
15	QPSK	36	0	18.95	18.95	19.00				
15	QPSK	36	20	19.02	18.94	19.03				
15	QPSK	36	39	18.91	18.97	18.82	20.3	0		
15	QPSK	75	0	18.82	18.86	19.06				
15	16QAM	1	0	18.96	19.01	19.02				
15	16QAM	1	37	18.91	18.96	18.96	20.3	0		
15	16QAM	1	74	19.08	18.88	19.00				
15	16QAM	36	0	19.01	18.87	19.07				
15	16QAM	36	20	19.01	19.01	18.97	20.3	0		
15	16QAM	36	39	19.02	18.89	18.88				
15	16QAM	75	0	18.94	18.85	18.94				
15	64QAM	1	0	19.02	19.07	18.92				
15	64QAM	1	37	19.06	18.96	19.00	20.3	0		
15	64QAM	1	74	18.95	18.96	19.00				
15	64QAM	36	0	18.95	18.42	18.55				
15	64QAM	36	20	18.42	18.56	18.40	19.8	0.5		
15	64QAM	36	39	18.41	18.56	18.51				
15	64QAM	75	0	18.50	18.54	18.61				
Channel										
Frequency (MHz)				819	831.5	844				
10	QPSK	1	0	18.71	18.77	18.84	20.3	0		
10	QPSK	1	25	18.71	18.74	18.84				
10	QPSK	1	49	18.75	18.89	18.77				
10	QPSK	25	0	18.76	18.93	18.96				
10	QPSK	25	12	18.85	18.90	19.04	20.3	0		
10	QPSK	25	25	18.87	18.85	18.85				
10	QPSK	50	0	18.94	18.95	18.94				
10	16QAM	1	0	18.90	18.93	19.06				
10	16QAM	1	25	19.09	19.00	19.10	20.3	0		
10	16QAM	1	49	18.89	19.08	18.90				
10	16QAM	25	0	18.88	18.96	18.90				
10	16QAM	25	12	18.95	18.92	18.95	20.3	0		
10	16QAM	25	25	18.72	18.92	18.92				
10	16QAM	50	0	18.95	18.92	18.84				
10	64QAM	1	0	19.04	18.90	18.90				
10	64QAM	1	25	18.97	19.05	18.95	20.3	0		
10	64QAM	1	49	19.03	19.01	19.07				
10	64QAM	25	0	18.34	18.33	18.33				
10	64QAM	25	12	18.44	18.46	18.56				
10	64QAM	25	25	18.32	18.48	18.37	19.8	0.5		
10	64QAM	50	0	18.47	18.34	18.38				
Channel										
Frequency (MHz)				2671.5	2686.5	2701.5				
5	QPSK	1	0	18.86	18.73	18.75	20.3	0		
5	QPSK	1	12	18.81	18.82	18.95				
5	QPSK	1	24	18.95	18.97	18.92				
5	QPSK	12	0	18.90	18.83	19.00				
5	QPSK	12	7	18.88	19.01	18.84	20.3	0		
5	QPSK	12	13	18.75	18.81	18.93				
5	QPSK	25	0	18.90	18.90	18.99				
5	16QAM	1	0	18.97	19.05	19.01				
5	16QAM	1	12	18.99	19.03	18.95	20.3	0		
5	16QAM	1	24	18.95	19.05	19.09				
5	16QAM	12	0	18.85	18.94	19.03				
5	16QAM	12	7	18.99	18.97	18.84	20.3	0		
5	16QAM	12	13	18.91	18.85	18.84				
5	16QAM	25	0	19.03	18.90	18.81				
5	64QAM	1	0	18.91	18.88	18.92				
5	64QAM	1	12	18.88	19.01	18.98	20.3	0		
5	64QAM	1	24	18.92	18.93	18.98				
5	64QAM	12	0	18.47	18.41	18.45				
5	64QAM	12	7	18.54	18.39	18.46	19.8	0.5		
5	64QAM	12	13	18.39	18.56	18.55				
5	64QAM	25	0	18.62	18.62	18.67				
Channel										
Frequency (MHz)				815.5	831.5	847.5				
3	QPSK	1	0	18.77	18.78	18.67	20.3	0		
3	QPSK	1	8	18.87	18.80	18.79				
3	QPSK	1	14	18.66	18.61	18.65				
3	QPSK	8	0	18.78	18.68	18.84				
3	QPSK	8	4	18.76	18.89	18.90	20.3	0		
3	QPSK	8	7	18.81	18.75	18.71				
3	QPSK	15	0	18.73	18.71	18.88				
3	16QAM	1	0	18.90	18.82	18.95				
3	16QAM	1	8	18.84	18.90	18.96	20.3	0		
3	16QAM	1	14	18.96	19.00	18.95				
3	16QAM	8	0	18.81	18.93	18.82				
3	16QAM	8	4	18.91	18.78	18.97	20.3	0		
3	16QAM	8	7	18.69	18.75	18.86				
3	16QAM	15	0	18.72	18.72	18.93				
3	64QAM	1	0	18.95	18.83	18.95				
3	64QAM	1	8	18.88	18.93	18.96	20.3	0		
3	64QAM	1	14	18.83	18.90	18.81				
3	64QAM	8	0	18.36	18.34	18.40				
3	64QAM	8	4	18.43	18.35	18.40	19.8	0.5		
3	64QAM	8	7	18.38	18.39	18.34				
3	64QAM	15	0	18.30	18.32	18.33				
Channel										
Frequency (MHz)				2697	2695	2703				
1.4	QPSK	1	0	18.77	18.70	18.63	20.3	0		
1.4	QPSK	1	3	18.69	18.64	18.69				
1.4	QPSK	1	6	18.99	18.60	18.58				
1.4	QPSK	3	0	18.72	18.71	18.73				
1.4	QPSK	3	1	18.64	18.70	18.71				
1.4	QPSK	3	3	18.53	18.65	18.67	20.3	0		
1.4	QPSK	6	0	18.63	18.78	18.62				
1.4	16QAM	1	0	18.65	18.88	18.71				
1.4	16QAM	1	3	18.80	18.96	18.91	20.3	0		
1.4	16QAM	1	5	18.86	18.79	18.88				
1.4	16QAM	3	0	18.80	18.78	18.79				
1.4	16QAM	3	1	18.75	18.82	18.65				
1.4	16QAM	3	3	18.70	18.83	18.79				
1.4	16QAM	6	0	18.81	18.69	18.67	20.3	0		
1.4	64QAM	1	0	18.98	18.79	18.74				
1.4	64QAM	1	3	18.74	18.89	18.79				
1.4	64QAM	1	5	18.76	18.75	18.69				
1.4	64QAM	3	0	18.90	18.83	18.87	20.3	0		
1.4	64QAM	3	1	18.80	18.89	18.93				
1.4	64QAM	3	3	18.81	18.87	18.82				
1.4	64QAM	6	0	18.34	18.37	18.34	19.8	0.5		

Band 66										
BW (MHz)	Modulation	RB Size	RB Offset	Power			Tune-up limit (dBm)	MPR (dB)		
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.			Tune-up limit (dBm)	MPR (dB)
Channel										
Frequency (MHz)				1720	1745	1770				
20	QPSK	1	0	18.59	18.67	18.62				
20	QPSK	1	49	18.42	18.57	18.47	18	0		
20	QPSK	1	99	18.40	18.44	18.42				
20	QPSK	50	0	18.42	18.51	18.44				
20	QPSK	50	24	18.57	18.63	18.61				
20	QPSK	50	50	18.39	18.49	18.42	18	0		
20	QPSK	100	0	18.50	18.58	18.55				
20	16QAM	1	0	18.52	18.53	18.55				
20	16QAM	1	49	18.60	18.60	18.54	18	0		
20	16QAM	1	99	18.56	18.52	18.48				
20	16QAM	50	0	18.41	18.54	18.45				
20	16QAM	50	24	18.48	18.51	18.43	18	0		
20	16QAM	50	50	18.44	18.52	18.41				
20	16QAM	100	0	18.41	18.56	18.40				
20	64QAM	1	0	18.62	18.62	18.62				
20	64QAM	1	49							



Band 20 (4.80 Band) - Class 2										
BW (MHz)	Modulation	RS Size	RS Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-up time (min)	MFR (dB)
Channel										
Frequency (MHz)										
20	QPSK	1	0	18.24	18.24	18.44				
20	QPSK	1	48	18.24	18.24	18.44			17	0
20	QPSK	1	96	18.24	18.24	18.44				
20	QPSK	1	144	18.24	18.24	18.44				
20	QPSK	50	24	18.24	18.24	18.44				
20	QPSK	50	72	18.24	18.24	18.44				
20	QPSK	50	120	18.24	18.24	18.44				
20	QPSK	50	168	18.24	18.24	18.44				
20	QPSK	100	0	18.24	18.24	18.44				
20	QPSK	100	48	18.24	18.24	18.44				
20	QPSK	100	96	18.24	18.24	18.44				
20	QPSK	100	144	18.24	18.24	18.44				
20	QPSK	100	192	18.24	18.24	18.44				
20	QPSK	100	240	18.24	18.24	18.44				
20	QPSK	100	288	18.24	18.24	18.44				
20	QPSK	100	336	18.24	18.24	18.44				
20	QPSK	100	384	18.24	18.24	18.44				
20	QPSK	100	432	18.24	18.24	18.44				
20	QPSK	100	480	18.24	18.24	18.44				
20	QPSK	100	528	18.24	18.24	18.44				
20	QPSK	100	576	18.24	18.24	18.44				
20	QPSK	100	624	18.24	18.24	18.44				
20	QPSK	100	672	18.24	18.24	18.44				
20	QPSK	100	720	18.24	18.24	18.44				
20	QPSK	100	768	18.24	18.24	18.44				
20	QPSK	100	816	18.24	18.24	18.44				
20	QPSK	100	864	18.24	18.24	18.44				
20	QPSK	100	912	18.24	18.24	18.44				
20	QPSK	100	960	18.24	18.24	18.44				
20	QPSK	100	1008	18.24	18.24	18.44				
20	QPSK	100	1056	18.24	18.24	18.44				
20	QPSK	100	1104	18.24	18.24	18.44				
20	QPSK	100	1152	18.24	18.24	18.44				
20	QPSK	100	1200	18.24	18.24	18.44				
20	QPSK	100	1248	18.24	18.24	18.44				
20	QPSK	100	1296	18.24	18.24	18.44				
20	QPSK	100	1344	18.24	18.24	18.44				
20	QPSK	100	1392	18.24	18.24	18.44				
20	QPSK	100	1440	18.24	18.24	18.44				
20	QPSK	100	1488	18.24	18.24	18.44				
20	QPSK	100	1536	18.24	18.24	18.44				
20	QPSK	100	1584	18.24	18.24	18.44				
20	QPSK	100	1632	18.24	18.24	18.44				
20	QPSK	100	1680	18.24	18.24	18.44				
20	QPSK	100	1728	18.24	18.24	18.44				
20	QPSK	100	1776	18.24	18.24	18.44				
20	QPSK	100	1824	18.24	18.24	18.44				
20	QPSK	100	1872	18.24	18.24	18.44				
20	QPSK	100	1920	18.24	18.24	18.44				
20	QPSK	100	1968	18.24	18.24	18.44				
20	QPSK	100	2016	18.24	18.24	18.44				
20	QPSK	100	2064	18.24	18.24	18.44				
20	QPSK	100	2112	18.24	18.24	18.44				
20	QPSK	100	2160	18.24	18.24	18.44				
20	QPSK	100	2208	18.24	18.24	18.44				
20	QPSK	100	2256	18.24	18.24	18.44				
20	QPSK	100	2304	18.24	18.24	18.44				
20	QPSK	100	2352	18.24	18.24	18.44				
20	QPSK	100	2400	18.24	18.24	18.44				
20	QPSK	100	2448	18.24	18.24	18.44				
20	QPSK	100	2496	18.24	18.24	18.44				
20	QPSK	100	2544	18.24	18.24	18.44				
20	QPSK	100	2592	18.24	18.24	18.44				
20	QPSK	100	2640	18.24	18.24	18.44				
20	QPSK	100	2688	18.24	18.24	18.44				
20	QPSK	100	2736	18.24	18.24	18.44				
20	QPSK	100	2784	18.24	18.24	18.44				
20	QPSK	100	2832	18.24	18.24	18.44				
20	QPSK	100	2880	18.24	18.24	18.44				
20	QPSK	100	2928	18.24	18.24	18.44				
20	QPSK	100	2976	18.24	18.24	18.44				
20	QPSK	100	3024	18.24	18.24	18.44				
20	QPSK	100	3072	18.24	18.24	18.44				
20	QPSK	100	3120	18.24	18.24	18.44				
20	QPSK	100	3168	18.24	18.24	18.44				
20	QPSK	100	3216	18.24	18.24	18.44				
20	QPSK	100	3264	18.24	18.24	18.44				
20	QPSK	100	3312	18.24	18.24	18.44				
20	QPSK	100	3360	18.24	18.24	18.44				
20	QPSK	100	3408	18.24	18.24	18.44				
20	QPSK	100	3456	18.24	18.24	18.44				
20	QPSK	100	3504	18.24	18.24	18.44				
20	QPSK	100	3552	18.24	18.24	18.44				
20	QPSK	100	3600	18.24	18.24	18.44				
20	QPSK	100	3648	18.24	18.24	18.44				
20	QPSK	100	3696	18.24	18.24	18.44				
20	QPSK	100	3744	18.24	18.24	18.44				
20	QPSK	100	3792	18.24	18.24	18.44				
20	QPSK	100	3840	18.24	18.24	18.44				
20	QPSK	100	3888	18.24	18.24	18.44				
20	QPSK	100	3936	18.24	18.24	18.44				
20	QPSK	100	3984	18.24	18.24	18.44				
20	QPSK	100	4032	18.24	18.24	18.44				
20	QPSK	100	4080	18.24	18.24	18.44				
20	QPSK	100	4128	18.24	18.24	18.44				
20	QPSK	100	4176	18.24	18.24	18.44				
20	QPSK	100	4224	18.24	18.24	18.44				
20	QPSK	100	4272	18.24	18.24	18.44				
20	QPSK	100	4320	18.24	18.24	18.44				
20	QPSK	100	4368	18.24	18.24	18.44				
20	QPSK	100	4416	18.24	18.24	18.44				
20	QPSK	100	4464	18.24	18.24	18.44				
20	QPSK	100	4512	18.24	18.24	18.44				
20	QPSK	100	4560	18.24	18.24	18.44				
20	QPSK	100	4608	18.24	18.24	18.44				
20	QPSK	100	4656	18.24	18.24	18.44				
20	QPSK	100	4704	18.24	18.24	18.44				
20	QPSK	100	4752	18.24	18.24	18.44				
20	QPSK	100	4800	18.24	18.24	18.44				
20	QPSK	100	4848	18.24	18.24	18.44				
20	QPSK	100	4896	18.24	18.24	18.44				
20	QPSK	100	4944	18.24	18.24	18.44				
20	QPSK	100	4992	18.24	18.24	18.44				
20	QPSK	100	5040	18.24	18.24	18.44				
20	QPSK	100	5088	18.24	18.24	18.44				
20	QPSK	100	5136	18.24	18.24	18.44				
20	QPSK	100	5184	18.24	18.24	18.44				
20	QPSK	100	5232	18.24	18.24	18.44				
20	QPSK	100	5280	18.24	18.24	18.44				
20	QPSK	100	5328	18.24	18.24	18.44				
20	QPSK	100	5376	18.24	18.24	18.44				
20	QPSK	100	5424	18.24	18.24	18.44				
20	QPSK	100	5472	18.24	18.24	18.44				
20	QPSK	100	5520	18.24	18.24	18.44				
20	QPSK	100	5568	18.24	18.24	18.44				
20	QPSK	100	5616	18.24	18.24	18.44				
20	QPSK	100	5664	18.24	18.24					



Reduced power for Hotspot on-UAT

Band	WCDMA			Tune-up Limit (dBm)	WCDMA W			Tune-up Limit (dBm)	
	5962	5900	6038		1312	1413	1513		
Tx Channel	5962	5900	6038	1312	1413	1513			
Rx Channel	5962	5900	6038	1312	1413	1513			
Frequency (MHz)	1924	1910	1937	1924	1924	1924			
SCPP Rel 99	AMR 12.2kops	20.02	20.77	20.68	21.00	20.28	20.75	20.68	21.50
SCPP Rel 99	RM-C 12.2kops	20.84	20.79	20.70	21.00	20.61	20.75	20.70	21.50
SCPP Rel 6	HSDPA Subtest-1	19.66	19.83	19.66	20.00	19.62	19.75	19.74	20.50
SCPP Rel 6	HSDPA Subtest-2	19.63	19.84	19.69	20.00	19.69	19.79	19.76	20.50
SCPP Rel 6	HSDPA Subtest-3	19.13	19.34	19.20	19.50	19.17	19.27	19.22	20.00
SCPP Rel 6	HSDPA Subtest-4	19.15	19.34	19.20	19.50	19.79	19.25	19.23	20.00
SCPP Rel 6	DC-HSDPA Subtest-1	19.58	19.72	19.67	20.00	19.47	19.62	19.62	20.50
SCPP Rel 8	DC-HSDPA Subtest-2	19.50	19.69	19.58	20.00	19.59	19.71	19.66	20.50
SCPP Rel 8	DC-HSDPA Subtest-3	19.01	19.26	19.09	19.50	19.06	19.19	19.13	20.00
SCPP Rel 8	DC-HSDPA Subtest-4	19.01	19.20	19.11	19.50	18.66	19.15	19.14	20.00
SCPP Rel 6	HSPA Subtest-1	19.67	19.83	19.72	20.00	19.62	19.78	19.71	20.50
SCPP Rel 6	HSPA Subtest-2	17.67	17.86	17.69	18.00	17.67	17.78	17.76	18.50
SCPP Rel 6	HSPA Subtest-3	17.68	17.82	17.70	18.00	17.66	17.80	17.73	18.50
SCPP Rel 6	HSPA Subtest-4	17.67	17.82	17.75	18.00	17.62	17.74	17.72	18.50
SCPP Rel 6	HSPA Subtest-5	19.60	19.80	19.70	20.00	19.70	19.80	19.70	20.50
SCPP Rel 7	HSPA+ (E-UTRA) Subtest-1	17.13	17.27	17.21	17.50	17.08	17.16	17.13	18.00



Band 2 (160MHz Band) Part 24E											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)			
20	QPSK	1	0	20.30	20.39	20.31	21.5	0			
20	QPSK	1	49	20.14	20.29	20.21					
20	QPSK	1	99	20.10	20.26	20.15					
20	QPSK	50	0	20.25	20.35	20.33					
20	QPSK	50	24	20.36	20.37	20.35	21.5	0			
20	QPSK	50	50	20.34	20.24	20.32					
20	QPSK	100	0	20.32	20.39	20.32					
20	16QAM	1	0	20.31	20.31	20.31					
20	16QAM	1	49	20.19	20.36	20.32	21.5	0			
20	16QAM	1	99	20.13	20.35	20.22					
20	16QAM	50	0	20.00	20.17	20.09					
20	16QAM	50	24	20.10	20.16	20.11					
20	16QAM	50	50	20.10	20.23	20.14	21.5	0			
20	16QAM	100	0	20.10	20.16	20.16					
20	64QAM	1	0	20.30	20.29	20.29					
20	64QAM	1	49	20.20	20.25	20.28					
20	64QAM	1	99	20.16	20.24	20.13	21.5	0			
20	64QAM	50	0	19.29	19.39	19.30					
20	64QAM	50	24	19.36	19.39	19.34					
20	64QAM	50	50	19.35	19.46	19.40					
20	64QAM	100	0	19.31	19.38	19.38	20.5	1			
20	64QAM	100	0	19.31	19.38	19.38					
20	64QAM	100	0	19.31	19.38	19.38					
20	64QAM	100	0	19.31	19.38	19.38					
Channel				1897.5	1890	1912.5	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)				1897.5	1890	1912.5					
15	QPSK	1	0	20.25	20.36	20.30	21.5	0			
15	QPSK	1	37	20.15	20.34	20.24					
15	QPSK	1	74	20.22	20.30	20.21					
15	QPSK	36	0	20.10	20.15	20.12					
15	QPSK	36	39	20.12	20.16	20.26	21.5	0			
15	QPSK	36	78	20.08	20.25	20.19					
15	QPSK	75	0	20.09	20.21	20.22					
15	16QAM	1	0	20.37	20.34	20.36					
15	16QAM	1	37	20.25	20.20	20.28	21.5	0			
15	16QAM	1	74	20.28	20.36	20.28					
15	16QAM	36	0	20.08	20.16	20.16					
15	16QAM	36	39	20.10	20.16	20.18					
15	16QAM	36	78	20.11	20.20	20.14	21.5	0			
15	16QAM	75	0	20.08	20.13	20.16					
15	64QAM	1	0	20.33	20.31	20.32					
15	64QAM	1	37	20.37	20.34	20.31					
15	64QAM	1	74	20.15	20.23	20.31	21.5	0			
15	64QAM	36	0	20.12	20.16	20.26					
15	64QAM	36	39	20.13	20.16	20.25					
15	64QAM	75	0	19.33	19.36	19.25					
15	64QAM	36	78	19.36	19.38	19.36	20.5	1			
15	64QAM	36	39	19.38	19.49	19.35					
15	64QAM	75	0	19.32	19.35	19.40					
15	64QAM	75	0	19.32	19.35	19.40					
Channel				1860	1890	1910	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)				1860	1890	1910					
10	QPSK	1	0	20.23	20.20	20.19	21.5	0			
10	QPSK	1	25	20.11	20.29	20.25					
10	QPSK	1	49	20.15	20.25	20.12					
10	QPSK	25	0	20.10	20.13	20.05					
10	QPSK	25	12	20.14	20.16	20.16	21.5	0			
10	QPSK	25	25	20.14	20.26	20.18					
10	QPSK	50	0	20.13	20.16	20.16					
10	16QAM	1	0	20.37	20.30	20.34					
10	16QAM	1	25	20.32	20.36	20.30	21.5	0			
10	16QAM	1	49	20.37	20.36	20.38					
10	16QAM	25	0	20.04	20.12	20.04					
10	16QAM	25	12	20.12	20.13	20.11					
10	16QAM	25	25	20.09	20.16	20.15	21.5	0			
10	16QAM	50	0	20.10	20.14	20.14					
10	64QAM	1	0	20.25	20.31	20.36					
10	64QAM	1	25	20.14	20.36	20.19					
10	64QAM	1	49	20.16	20.32	20.24	21.5	0			
10	64QAM	25	0	19.10	19.16	19.04					
10	64QAM	25	12	19.12	19.20	19.18					
10	64QAM	25	25	19.15	19.26	19.14					
10	64QAM	50	0	19.11	19.17	19.18	20.5	1			
10	64QAM	50	0	19.11	19.17	19.18					
10	64QAM	50	0	19.11	19.17	19.18					
10	64QAM	50	0	19.11	19.17	19.18					
Channel				1862.5	1890	1917.5	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)				1862.5	1890	1917.5					
5	QPSK	1	0	20.24	20.21	20.16	21.5	0			
5	QPSK	1	12	20.28	20.31	20.22					
5	QPSK	1	24	20.18	20.36	20.26					
5	QPSK	12	0	20.19	20.14	20.07					
5	QPSK	12	13	20.17	20.23	20.08	21.5	0			
5	QPSK	12	26	20.16	20.24	20.16					
5	QPSK	25	0	20.12	20.14	20.11					
5	16QAM	1	0	20.35	20.38	20.29					
5	16QAM	1	12	20.38	20.38	20.31	21.5	0			
5	16QAM	1	24	20.30	20.33	20.31					
5	16QAM	12	0	20.19	20.15	20.07					
5	16QAM	12	7	20.21	20.24	20.12					
5	16QAM	12	13	20.12	20.24	20.13	21.5	0			
5	16QAM	12	26	20.12	20.15	20.06					
5	64QAM	1	0	20.36	20.31	20.31					
5	64QAM	1	12	20.34	20.36	20.30					
5	64QAM	1	24	20.29	20.33	20.32	21.5	0			
5	64QAM	12	0	19.41	19.41	19.27					
5	64QAM	12	7	19.41	19.49	19.31					
5	64QAM	12	13	19.31	19.43	19.36					
5	64QAM	25	0	19.33	19.37	19.30	20.5	1			
5	64QAM	25	0	19.33	19.37	19.30					
5	64QAM	25	0	19.33	19.37	19.30					
5	64QAM	25	0	19.33	19.37	19.30					
Channel				1861.5	1890	1918.5	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)				1861.5	1890	1918.5					
1.4	QPSK	1	0	20.20	20.22	20.10	21.5	0			
1.4	QPSK	1	3	20.25	20.30	20.14					
1.4	QPSK	1	6	20.24	20.22	20.12					
1.4	QPSK	3	0	20.05	20.07	19.96					
1.4	QPSK	3	3	20.08	20.01	20.01	21.5	0			
1.4	QPSK	3	6	20.04	20.04	19.93					
1.4	QPSK	6	0	20.08	20.11	20.02					
1.4	16QAM	1	0	20.38	20.31	20.19					
1.4	16QAM	1	3	20.31	20.30	20.26	21.5	0			
1.4	16QAM	1	6	20.32	20.30	20.19					
1.4	16QAM	3	0	20.15	20.12	20.06					
1.4	16QAM	3	3	20.15	20.12	20.06					
1.4	16QAM	3	6	20.15	20.16	20.02	21.5	0			
1.4	16QAM	6	0	20.15	20.16	20.02					
1.4	64QAM	1	0	20.32	20.30	20.24					
1.4	64QAM	1	3	20.38	20.35	20.37					
1.4	64QAM	1	6	20.29	20.33	20.21	21.5	0			
1.4	64QAM	3	0	20.22	20.26	20.13					
1.4	64QAM	3	3	20.25	20.29	20.20					
1.4	64QAM	3	6	20.22	20.28	20.17					
1.4	64QAM	6	0	19.34	19.38	19.26	20.5	1			
1.4	64QAM	6	0	19.34	19.38	19.26					
1.4	64QAM	6	0	19.34	19.38	19.26					
1.4	64QAM	6	0	19.34	19.38	19.26					

Band 4 (AWG Band) Part 27L Only on channel required										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)		
20	QPSK	1	0	21.19	21.24	21.22	22.5	0		
20	QPSK	1	49	21.04	21.21	21.24				
20	QPSK	1	99	20.92	21.03	21.01				
20	QPSK	50	0	21.11	21.14	21.17				
20	QPSK	50	24	21.10	21.16	21.14	22.5	0		
20	QPSK	50	50	21.11	21.16	21.15				
20	QPSK	100	0	21.12	21.16	21.15				
20	16QAM	1	0	21.21	21.20	21.21				
20	16QAM	1	49	21.12	21.22	21.23	22.5	0		
20	16QAM	1	99	21.15	21.11	21.19				
20	16QAM	50	0	19.98	20.07	20.07				
20	16QAM	50	24	20.01	20.00	20.07				
20	16QAM	50	50	19.93	19.98	19.97	21.5	1		
20	16QAM	100	0	19.98	19.97	19.99				
20	64QAM	1	0	20.11	20.28	20.31				
20	64QAM	1	49	20.01	20.14	20.11				
20	64QAM	1	99	19.91	20.08	20.11	21.5	1		
20</										



Band 66									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power High Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				132072	132322	132572			
Frequency (MHz)				1720	1745	1770			
20	QPSK	1	0	21.09	21.26	21.13			
20	QPSK	1	49	20.97	21.07	21.02	22.5	0	
20	QPSK	1	99	20.87	20.92	20.84			
20	QPSK	50	0	21.09	21.12	21.03			
20	QPSK	50	24	21.13	21.14	21.13			
20	QPSK	50	50	21.06	21.13	21.05	22.5	0	
20	QPSK	100	0	21.09	21.11	21.07			
20	16QAM	1	0	21.14	21.22	21.16			
20	16QAM	1	49	21.18	21.23	21.03	22.5	0	
20	16QAM	1	99	21.08	21.02	20.93			
20	16QAM	50	0	19.97	20.07	19.91			
20	16QAM	50	24	19.99	20.04	19.91			
20	16QAM	50	50	19.97	20.03	19.91	21.5	1	
20	16QAM	100	0	19.98	20.09	19.89			
20	64QAM	1	0	20.11	20.24	20.16			
20	64QAM	1	49	20.07	20.13	20.01	21.5	1	
20	64QAM	1	99	20.05	20.22	19.97			
20	64QAM	50	0	19.03	19.08	18.93			
20	64QAM	50	24	19.06	19.06	18.91			
20	64QAM	50	50	19.06	19.07	18.88	20.5	2	
20	64QAM	100	0	19.03	19.12	18.95			
Channel				132047	132322	132597	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	QPSK	1	0	20.86	21.04	20.93			
15	QPSK	1	37	20.81	20.95	20.81	22.5	0	
15	QPSK	1	74	20.83	20.87	20.79			
15	QPSK	36	0	20.94	21.03	20.90			
15	QPSK	36	39	21.01	21.12	20.97	22.5	0	
15	QPSK	36	39	20.93	21.04	20.90			
15	QPSK	75	0	20.97	21.10	20.96			
15	16QAM	1	0	21.05	21.20	21.16			
15	16QAM	1	37	21.09	21.21	21.07	22.5	0	
15	16QAM	1	74	20.94	21.07	21.07			
15	16QAM	36	0	19.93	20.02	19.92			
15	16QAM	36	20	20.03	20.14	19.93	21.5	1	
15	16QAM	36	39	19.93	20.08	19.89			
15	16QAM	75	0	19.97	20.12	19.94			
15	64QAM	1	0	20.05	20.24	20.01			
15	64QAM	1	37	20.08	20.24	19.97	21.5	1	
15	64QAM	1	74	19.99	20.10	19.95			
15	64QAM	36	0	19.97	19.08	18.96			
15	64QAM	36	20	19.04	19.15	19.01	20.5	2	
15	64QAM	36	39	18.99	19.10	18.93			
15	64QAM	75	0	19.00	19.11	18.94			
Channel				132022	132322	132622	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	20.78	21.03	20.78			
10	QPSK	1	25	20.81	20.94	20.82	22.5	0	
10	QPSK	1	49	20.82	20.92	20.72			
10	QPSK	25	0	20.91	21.01	20.84			
10	QPSK	25	12	20.96	20.99	20.86	22.5	0	
10	QPSK	25	25	20.93	21.04	20.88			
10	QPSK	50	0	21.01	21.08	20.85			
10	16QAM	1	0	21.16	21.23	21.08			
10	16QAM	1	25	21.14	21.13	21.11	22.5	0	
10	16QAM	1	49	21.09	21.19	21.00			
10	16QAM	25	0	19.88	20.02	19.87			
10	16QAM	25	12	19.98	20.03	19.88	21.5	1	
10	16QAM	25	25	19.95	20.05	19.89			
10	16QAM	50	0	19.96	20.07	19.85			
10	64QAM	1	0	20.06	20.27	20.00			
10	64QAM	1	25	20.13	20.18	20.03	21.5	1	
10	64QAM	1	49	20.11	20.16	19.94			
10	64QAM	25	0	18.94	19.03	18.89			
10	64QAM	25	12	19.02	19.05	18.87	20.5	2	
10	64QAM	25	25	18.99	19.06	18.91			
10	64QAM	50	0	18.97	19.06	18.96			
Channel				131997	132322	132647	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	QPSK	1	0	20.78	20.94	20.73			
5	QPSK	1	12	20.92	21.00	20.82	22.5	0	
5	QPSK	1	24	20.82	20.94	20.78			
5	QPSK	12	0	20.95	21.01	20.82			
5	QPSK	12	7	20.98	21.11	20.91	22.5	0	
5	QPSK	12	13	20.94	21.07	20.86			
5	QPSK	25	0	20.94	21.04	20.90			
5	16QAM	1	0	20.97	21.18	21.00			
5	16QAM	1	12	20.91	21.06	21.03	22.5	0	
5	16QAM	1	24	21.03	21.12	21.01			
5	16QAM	12	0	19.98	20.03	19.90			
5	16QAM	12	7	20.02	20.12	19.94	21.5	1	
5	16QAM	12	13	19.94	20.05	19.89			
5	16QAM	25	0	19.98	20.08	19.91			
5	64QAM	1	0	20.04	20.17	20.08			
5	64QAM	1	12	20.07	20.11	20.04	21.5	1	
5	64QAM	1	24	20.02	20.01	19.96			
5	64QAM	12	0	19.02	19.10	18.91			
5	64QAM	12	7	19.03	19.16	19.00	20.5	2	
5	64QAM	12	13	19.02	19.14	18.95			
5	64QAM	25	0	18.95	19.09	18.91			
Channel				131987	132322	132657	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1711.5	1745	1773.5			
3	QPSK	1	0	20.82	20.95	20.76			
3	QPSK	1	8	20.91	21.03	20.84	22.5	0	
3	QPSK	1	14	20.86	20.99	20.82			
3	QPSK	8	0	20.94	21.01	20.84			
3	QPSK	8	4	20.99	21.12	20.87	22.5	0	
3	QPSK	8	7	20.99	21.09	20.89			
3	QPSK	15	0	20.95	21.07	20.85			
3	16QAM	1	0	20.98	21.14	21.02			
3	16QAM	1	8	21.09	21.18	21.09	22.5	0	
3	16QAM	1	14	21.05	21.23	21.03			
3	16QAM	8	0	20.00	20.04	19.86			
3	16QAM	8	4	20.00	20.11	19.89	21.5	1	
3	16QAM	8	7	20.00	20.09	19.94			
3	16QAM	15	0	19.97	20.09	19.90			
3	64QAM	1	0	20.09	20.11	19.96			
3	64QAM	1	8	20.20	20.22	20.11	21.5	1	
3	64QAM	1	14	20.13	20.07	19.99			
3	64QAM	8	0	19.00	19.08	18.90			
3	64QAM	8	4	19.03	19.15	18.96	20.5	2	
3	64QAM	8	7	19.02	19.13	18.93			
3	64QAM	15	0	18.99	19.10	18.88			
Channel				131978	132322	132665	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1710.7	1745	1779.3			
1.4	QPSK	1	0	20.66	20.89	20.68			
1.4	QPSK	1	3	20.76	20.94	20.77	22.5	0	
1.4	QPSK	1	5	20.73	20.88	20.72			
1.4	QPSK	3	0	20.78	20.92	20.76			
1.4	QPSK	3	1	20.96	20.94	20.76			
1.4	QPSK	3	3	20.77	20.93	20.76	22.5	0	
1.4	QPSK	6	0	20.86	20.96	20.79			
1.4	16QAM	1	0	20.94	21.18	21.05			
1.4	16QAM	1	3	21.05	21.23	21.12			
1.4	16QAM	1	5	21.05	21.15	21.01	22.5	0	
1.4	16QAM	3	0	20.86	20.96	20.85			
1.4	16QAM	3	1	20.93	21.00	20.88			
1.4	16QAM	3	3	20.88	20.92	20.82			
1.4	16QAM	6	0	19.94	20.07	19.91	21.5	1	
1.4	64QAM	1	0	19.95	20.07	20.03			
1.4	64QAM	1	3	20.03	20.11	20.07			
1.4	64QAM	1	5	20.00	20.10	19.98			
1.4	64QAM	3	0	19.93	20.14	19.98	21.5	1	
1.4	64QAM	3	1	20.01	20.14	20.01			
1.4	64QAM	3	3	19.94	20.10	19.96			
1.4	64QAM	6	0	18.88	19.00	18.81	20.5	2	



Band 3 (2.60 Band)-Class 1											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power Max Ch./Freq.	Power Min Ch./Freq.	Power High Ch./Freq.	Power Max Ch./Freq.	Turn-up time (min)	MFR (dB)
Channel											
Frequency (MHz)											
5	QPSK	1	0	21.68	21.73	21.75				22.5	0
5	QPSK	1	48	21.68	21.73	21.75				22.5	0
5	QPSK	1	96	21.67	21.73	21.74				22.5	0
5	QPSK	50	0	21.67	21.73	21.74				22.5	0
5	QPSK	50	24	21.68	21.73	21.74				22.5	0
5	QPSK	50	48	21.68	21.73	21.74				22.5	0
5	QPSK	100	0	21.68	21.73	21.74				22.5	0
5	QPSK	100	24	21.68	21.73	21.74				22.5	0
5	QPSK	100	48	21.74	21.75	21.76				22.5	0
5	QPSK	1	96	21.67	21.73	21.74				22.5	0
5	QPSK	50	0	20.72	20.78	20.79				22.5	0
5	QPSK	50	24	20.72	20.78	20.79				22.5	0
5	QPSK	50	48	20.72	20.78	20.79				22.5	0
5	QPSK	100	0	20.72	20.78	20.79				22.5	0
5	QPSK	100	24	20.72	20.78	20.79				22.5	0
5	QPSK	100	48	20.72	20.78	20.79				22.5	0
5	QPSK	1	96	20.72	20.78	20.79				22.5	0
5	QPSK	50	0	19.84	19.75	19.86				20.5	2
5	QPSK	50	24	19.84	19.81	19.83				20.5	2
5	QPSK	50	48	19.84	19.79	19.82				20.5	2
5	QPSK	100	0	19.84	19.74	19.74				20.5	2
Channel											
Frequency (MHz)											
15	QPSK	1	0	21.77	21.80	21.82				22.5	0
15	QPSK	1	36	21.77	21.80	21.82				22.5	0
15	QPSK	1	74	21.88	21.87	21.87				22.5	0
15	QPSK	36	0	21.72	21.80	21.86				22.5	0
15	QPSK	36	36	21.72	21.80	21.86				22.5	0
15	QPSK	36	72	21.72	21.80	21.86				22.5	0
15	QPSK	1	74	21.88	21.87	21.87				22.5	0
15	QPSK	36	0	21.72	21.80	21.86				22.5	0
15	QPSK	36	36	21.72	21.80	21.86				22.5	0
15	QPSK	36	72	21.72	21.80	21.86				22.5	0
15	QPSK	72	0	20.91	20.76	20.81				21.5	1
15	QPSK	72	36	20.91	20.76	20.81				21.5	1
15	QPSK	72	72	20.91	20.76	20.81				21.5	1
15	QPSK	144	0	20.91	20.76	20.81				21.5	1
15	QPSK	144	36	20.91	20.76	20.81				21.5	1
15	QPSK	144	72	20.91	20.76	20.81				21.5	1
15	QPSK	144	108	20.91	20.76	20.81				21.5	1
15	QPSK	144	144	20.91	20.76	20.81				21.5	1
15	QPSK	36	108	20.91	20.76	20.81				20.5	2
15	QPSK	36	144	20.91	20.76	20.81				20.5	2
15	QPSK	72	108	20.91	20.76	20.81				20.5	2
15	QPSK	72	144	20.91	20.76	20.81				20.5	2
15	QPSK	144	108	20.91	20.76	20.81				20.5	2
15	QPSK	144	144	20.91	20.76	20.81				20.5	2
Channel											
Frequency (MHz)											
30	QPSK	1	0	21.68	21.68	21.68				22.5	0
30	QPSK	1	25	21.67	21.68	21.70				22.5	0
30	QPSK	1	49	21.74	21.74	21.74				22.5	0
30	QPSK	25	0	21.68	21.68	21.68				22.5	0
30	QPSK	25	12	21.67	21.67	21.69				22.5	0
30	QPSK	25	25	21.74	21.74	21.74				22.5	0
30	QPSK	50	0	21.68	21.68	21.68				22.5	0
30	QPSK	50	12	21.67	21.68	21.70				22.5	0
30	QPSK	50	25	21.74	21.74	21.74				22.5	0
30	QPSK	100	0	21.68	21.68	21.68				22.5	0
30	QPSK	100	12	21.67	21.68	21.70				22.5	0
30	QPSK	100	25	21.74	21.74	21.74				22.5	0
30	QPSK	100	37	21.72	21.72	21.72				22.5	0
30	QPSK	1	96	21.68	21.68	21.68				22.5	0
30	QPSK	50	0	20.91	20.85	20.92				21.5	1
30	QPSK	50	12	20.91	20.85	20.92				21.5	1
30	QPSK	50	25	20.91	20.85	20.92				21.5	1
30	QPSK	100	0	20.91	20.85	20.92				21.5	1
30	QPSK	100	12	20.91	20.85	20.92				21.5	1
30	QPSK	100	25	20.91	20.85	20.92				21.5	1
30	QPSK	100	37	20.91	20.85	20.92				21.5	1
30	QPSK	1	96	20.91	20.85	20.92				21.5	1
30	QPSK	50	0	19.84	19.84	19.84				20.5	2
30	QPSK	50	12	19.84	19.84	19.84				20.5	2
30	QPSK	50	25	19.84	19.84	19.84				20.5	2
30	QPSK	100	0	19.84	19.84	19.84				20.5	2
30	QPSK	100	12	19.84	19.84	19.84				20.5	2
30	QPSK	100	25	19.84	19.84	19.84				20.5	2
30	QPSK	100	37	19.84	19.84	19.84				20.5	2
30	QPSK	1	96	19.84	19.84	19.84				20.5	2
Channel											
Frequency (MHz)											
45	QPSK	1	0	21.68	21.68	21.68				22.5	0
45	QPSK	1	12	21.67	21.68	21.69				22.5	0
45	QPSK	1	24	21.74	21.74	21.74				22.5	0
45	QPSK	12	0	21.68	21.68	21.68				22.5	0
45	QPSK	12	6	21.67	21.67	21.69				22.5	0
45	QPSK	12	12	21.74	21.74	21.74				22.5	0
45	QPSK	24	0	21.68	21.68	21.68				22.5	0
45	QPSK	24	6	21.67	21.68	21.70				22.5	0
45	QPSK	24	12	21.74	21.74	21.74				22.5	0
45	QPSK	48	0	21.68	21.68	21.68				22.5	0
45	QPSK	48	6	21.67	21.68	21.70				22.5	0
45	QPSK	48	12	21.74	21.74	21.74				22.5	0
45	QPSK	100	0	21.68	21.68	21.68				22.5	0
45	QPSK	100	6	21.67	21.68	21.70				22.5	0
45	QPSK	100	12	21.74	21.74	21.74				22.5	0
45	QPSK	100	18	21.72	21.72	21.72				22.5	0
45	QPSK	1	96	21.68	21.68	21.68				22.5	0
45	QPSK	48	0	20.91	20.85	20.92				21.5	1
45	QPSK	48	6	20.91	20.85	20.92				21.5	1
45	QPSK	48	12	20.91	20.85	20.92				21.5	1
45	QPSK	100	0	20.91	20.85	20.92				21.5	1
45	QPSK	100	6	20.91	20.85	20.92				21.5	1
45	QPSK	100	12	20.91	20.85	20.92				21.5	1
45	QPSK	100	18	20.91	20.85	20.92				21.5	1
45	QPSK	1	96	20.91	20.85	20.92				21.5	1
45	QPSK	48	0	19.84	19.84	19.84				20.5	2
45	QPSK	48	6	19.84	19.84	19.84				20.5	2
45	QPSK	48	12	19.84	19.84	19.84				20.5	2
45	QPSK	100	0	19.84	19.84	19.84				20.5	2
45	QPSK	100	6	19.84	19.84	19.84				20.5	2
45	QPSK	100	12	19.84	19.84	19.84				20.5	2
45	QPSK	100	18	19.84	19.84	19.84				20.5	2
45	QPSK	1	96	19.84	19.84	19.84				20.5	2
Channel											
Frequency (MHz)											
60	QPSK	1	0	21.68	21.68	21.68				22.5	0
60	QPSK	1	15	21.67	21.68	21.69				22.5	0
60	QPSK	1	30	21.74	21.74	21.74				22.5	0
60	QPSK	15	0	21.68	21.68	21.68				22.5	0
60	QPSK	15	7	21.67	21.67	21.69				22.5	0
60	QPSK	15	15	21.74	21.74	21.74				22.5	0
60	QPSK	30	0	21.68	21.68	21.68				22.5	0
60	QPSK	30	7	21.67	21.68	21.70				22.5	0
60	QPSK	30	15	21.74	21.74	21.74				22.5	0
60	QPSK	60	0	21.68	21.68	21.68				22.5	0
60	QPSK	60	7	21.67	21.68	21.70				22.5	0
60	QPSK	60	15	21.74	21.74	21.74				22.5	0
60	QPSK	60	21	21.72	21.72	21.72				22.5	0
60	QPSK	1	96	21.68	21.68	21.68				22.5	0
60	QPSK	30	0	20.91	20.85	20.92				21.5	1
60	QPSK	30	7	20.91	20.85	20.92				21.5	1
60	QPSK	30	15	20.91	20.85	20.92				21.5	1
60	QPSK	60	0	20.91	20.85	20.92				21.5	1
60	QPSK	60	7	20.91	20.85	20.92				21.5	1
60	QPSK	60	15	20.91	20.85	20.92				21.5	1
60	QPSK	60	21	20.91	20.85	20.92				21.5	1
60	QPSK	1	96	20.91	20.85	20.92				21.5	1
60	QPSK	30	0	19.84	19.84	19.84				20.5	2
60	QPSK	30	7	19.84	19.84	19.84				20.5	2
60	QPSK	30	15	19.84	19.84	19.84				20.5	2
60	QPSK	60	0	19.84	19.84	19.84				20.5	2
60	QPSK										



Reduced power for Handheld on-UAT

Band	WCDMA			Tune-up Limit (dBm)	WCDMA W			Tune-up Limit (dBm)
	5962	9800	9938		1312	1413	1513	
Tx Channel	5962	9800	9938		1312	1413	1513	
Rx Channel	5962	9800	9938		1312	1413	1513	
Frequency (MHz)	152.4	1710	1707.6	21.50	172.4	172.6	172.6	
SCPP Rel 98	AMR 12.2kops	20.97	21.15	21.04	21.50	19.67	19.71	19.55
SCPP Rel 99	RM-C 12.2kops	21.01	21.17	21.07	21.50	19.70	19.74	19.60
SCPP Rel 6	HSDPA Subtest-1	20.15	20.38	20.31	20.50	18.79	18.88	18.93
SCPP Rel 6	HSDPA Subtest-2	20.27	20.33	20.22	20.50	18.67	18.85	18.86
SCPP Rel 6	HSDPA Subtest-3	19.78	19.86	19.89	20.00	18.22	18.32	18.34
SCPP Rel 6	HSDPA Subtest-4	19.76	19.89	19.80	20.00	18.33	18.26	18.23
SCPP Rel 6	DC-HSDPA Subtest-1	20.00	20.29	20.20	20.50	18.69	18.73	18.82
SCPP Rel 8	DC-HSDPA Subtest-2	20.17	20.19	20.14	20.50	18.78	18.70	18.76
SCPP Rel 8	DC-HSDPA Subtest-3	19.66	19.74	19.77	20.00	18.07	18.19	18.19
SCPP Rel 8	DC-HSDPA Subtest-4	19.64	19.76	19.70	20.00	18.23	18.15	18.09
SCPP Rel 6	HSPA Subtest-1	20.19	20.22	20.12	20.50	18.89	18.83	18.81
SCPP Rel 6	HSPA Subtest-2	17.96	18.22	18.20	18.50	16.83	16.82	16.81
SCPP Rel 6	HSPA Subtest-3	18.18	18.04	18.20	18.50	16.86	16.82	16.78
SCPP Rel 6	HSPA Subtest-4	18.17	18.33	18.09	18.50	16.75	16.88	16.82
SCPP Rel 6	HSPA Subtest-5	20.09	20.27	20.23	20.50	18.63	18.74	18.89
SCPP Rel 7	HSPA+ (E-UMTS) Subtest-1	17.65	17.77	17.60	18.00	16.20	16.33	16.30



Band 7 (2400MHz Band)										
Part 27										
BW (MHz)	Modulation	RB Size	RB Offset	Power			Tune-up limit (dBm)	MPR (dB)		
				Low Ch. Freq	Mid Ch. Freq	High Ch. Freq				
Channel				20850	21100	21350				
Frequency (MHz)				2510	2535	2560				
20	QPSK	1	0	17.19	17.02	17.11	18	0		
20	QPSK	1	49	17.11	16.95	17.04				
20	QPSK	1	99	17.03	16.96	17.10				
20	QPSK	50	0	16.86	16.75	16.87	18	0		
20	QPSK	50	24	17.10	16.95	17.07				
20	QPSK	50	50	16.93	16.80	17.00				
20	QPSK	100	0	17.06	16.91	17.00	18	0		
20	16QAM	1	0	16.88	16.83	17.03				
20	16QAM	1	49	16.99	16.84	16.99				
20	16QAM	1	99	16.96	16.96	17.02	18	0		
20	16QAM	50	0	16.86	16.73	16.87				
20	16QAM	50	24	16.97	16.78	17.01				
20	16QAM	50	50	16.98	16.84	17.02	18	0		
20	16QAM	100	0	16.85	16.83	16.99				
20	64QAM	1	0	16.92	16.86	17.00				
20	64QAM	1	49	17.01	16.92	17.04	18	0		
20	64QAM	1	99	16.97	16.97	17.10				
20	64QAM	50	0	16.91	16.79	16.92				
20	64QAM	50	24	17.02	16.81	17.04	18	0		
20	64QAM	50	50	16.97	16.86	17.05				
20	64QAM	100	0	16.96	16.86	16.91				
Channel				20925	21100	21375				
Frequency (MHz)				2507.5	2535	2562.5				
15	QPSK	1	0	16.74	16.73	16.79	18	0		
15	QPSK	1	37	16.77	16.69	16.85				
15	QPSK	1	74	16.76	16.83	16.88				
15	QPSK	36	0	16.79	16.81	16.88	18	0		
15	QPSK	36	20	16.83	16.80	17.01				
15	QPSK	36	39	16.83	16.90	17.00				
15	QPSK	75	0	16.88	16.89	16.89	18	0		
15	16QAM	1	0	17.08	17.08	17.07				
15	16QAM	1	37	17.04	17.12	17.11				
15	16QAM	1	74	17.11	17.09	17.09	18	0		
15	16QAM	36	0	16.82	16.83	16.82				
15	16QAM	36	20	16.89	16.83	16.96				
15	16QAM	36	39	16.89	16.92	17.02	18	0		
15	16QAM	75	0	16.91	16.93	16.94				
15	64QAM	1	0	16.90	16.89	16.98				
15	64QAM	1	37	16.97	16.96	17.05	18	0		
15	64QAM	1	74	16.93	17.02	17.12				
15	64QAM	36	0	16.88	16.90	16.96				
15	64QAM	36	20	16.98	16.97	17.03	18	0		
15	64QAM	36	39	16.94	16.97	17.07				
15	64QAM	75	0	16.92	16.84	16.96				
Channel				20800	21100	21400				
Frequency (MHz)				2505	2535	2565				
10	QPSK	1	0	16.81	16.77	16.84	18	0		
10	QPSK	1	25	16.74	16.78	16.85				
10	QPSK	1	49	16.76	16.81	16.87				
10	QPSK	25	0	16.92	16.87	17.00	18	0		
10	QPSK	25	12	17.02	16.97	17.13				
10	QPSK	25	25	16.99	16.96	17.09				
10	QPSK	50	0	16.98	16.98	17.02	18	0		
10	16QAM	1	0	17.14	17.17	17.17				
10	16QAM	1	25	17.03	17.09	17.18				
10	16QAM	1	49	17.16	17.17	17.10	18	0		
10	16QAM	25	0	16.90	16.89	17.01				
10	16QAM	25	12	17.05	16.99	17.10				
10	16QAM	25	25	16.96	16.99	17.05	18	0		
10	16QAM	50	0	16.99	17.00	16.97				
10	64QAM	1	0	17.09	17.00	17.12				
10	64QAM	1	25	17.07	17.09	17.11	18	0		
10	64QAM	1	49	17.17	17.08	17.18				
10	64QAM	25	0	16.94	16.91	17.01				
10	64QAM	25	12	17.06	17.05	17.16	18	0		
10	64QAM	25	25	17.02	17.01	17.12				
10	64QAM	50	0	17.06	16.99	17.07				
Channel				20775	21100	21425				
Frequency (MHz)				2502.5	2535	2567.5				
5	QPSK	1	0	16.79	16.73	16.88	18	0		
5	QPSK	1	12	16.86	16.85	17.01				
5	QPSK	1	24	16.88	16.83	16.98				
5	QPSK	12	0	16.83	16.91	17.01	18	0		
5	QPSK	12	7	16.88	16.88	17.09				
5	QPSK	12	13	16.97	16.97	17.06				
5	QPSK	25	0	16.93	16.94	17.01	18	0		
5	16QAM	1	0	17.14	17.06	17.15				
5	16QAM	1	12	17.17	17.12	17.16				
5	16QAM	1	24	17.17	17.13	17.11	18	0		
5	16QAM	12	0	16.94	16.96	17.04				
5	16QAM	12	7	17.01	17.01	17.07				
5	16QAM	12	13	16.99	17.00	17.08	18	0		
5	16QAM	25	0	17.00	16.99	17.01				
5	64QAM	1	0	17.10	17.03	17.14				
5	64QAM	1	12	17.12	17.13	17.13	18	0		
5	64QAM	1	24	17.17	17.14	17.18				
5	64QAM	12	0	17.03	17.00	17.11				
5	64QAM	12	7	17.06	17.05	17.16	18	0		
5	64QAM	12	13	17.04	17.00	17.12				
5	64QAM	25	0	17.02	16.99	17.09				



Full Power for LAT

GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	128	160	201		128	160	201	
Frequency (MHz)	824.2	836.4	848.6	824.2	836.4	848.6		
GSM 1 Tx slot	31.47	31.49	31.52	32.80	22.47	22.40	22.52	23.80
GPRS 1 Tx slots	31.45	31.37	31.50	32.80	22.45	22.37	22.50	23.80
GPRS 2 Tx slots	29.91	30.05	29.71	31.30	23.91	24.05	23.71	25.30
GPRS 3 Tx slots	28.44	28.43	28.33	29.30	24.18	24.17	24.07	25.04
GPRS 4 Tx slots	27.81	27.55	27.48	28.30	24.81	24.55	24.48	25.30
EDGE 1 Tx slot	25.42	25.56	25.33	26.80	16.42	16.56	16.33	17.80
EDGE 2 Tx slots	23.84	23.91	23.78	25.30	17.84	17.91	17.78	19.30
EDGE 3 Tx slots	22.85	22.75	22.96	24.30	16.60	16.49	16.70	20.04
EDGE 4 Tx slots	22.15	22.04	22.17	23.80	19.15	19.04	19.17	20.80

GSM1900 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	512	651	810		512	651	810	
Frequency (MHz)	1850.2	1860	1909.8	1850.2	1860	1909.8		
GSM 1 Tx slot	29.16	29.10	29.31	30.80	20.16	20.10	20.31	21.80
GPRS 1 Tx slot	29.16	29.08	29.29	30.80	20.16	20.08	20.29	21.80
GPRS 2 Tx slots	26.10	26.09	26.58	27.80	20.10	20.09	20.58	21.80
GPRS 3 Tx slots	25.01	24.80	24.97	26.50	20.75	20.54	20.71	22.24
GPRS 4 Tx slots	24.51	24.30	24.46	26.50	21.51	21.30	21.46	22.00
EDGE 1 Tx slot	24.67	24.58	24.69	26.30	15.67	15.58	15.69	17.30
EDGE 2 Tx slots	23.76	23.56	23.84	25.30	17.76	17.56	17.84	19.30
EDGE 3 Tx slots	22.69	22.46	22.75	24.30	16.43	16.20	16.49	20.04
EDGE 4 Tx slots	22.69	22.30	22.64	24.30	19.58	19.30	19.64	21.30

Band	TX Channel	WCDMA R			Tune-up Limit (dBm)	WCDMA H			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
		1002	8400	9638		1312	1412	1913		4132	4182	4233	
RA Channel		1662	1690	1698	1537	1538	1728	4357	4407	4458			
Frequency (MHz)		1852.4	1860	1907.6	1712.4	1732.6	1752.6	536.4	536.4	546.6			
3GPP Rel 99	AMR 12.2kops	23.91	24.00	23.95	24.80	23.58	23.63	23.60	24.80	23.80	23.83	23.78	24.80
3GPP Rel 99	RMCE 12.2kops	23.95	24.01	23.97	24.80	23.60	23.65	23.63	24.80	23.82	23.86	23.80	24.80
3GPP Rel 6	HSDPA Subslot-1	23.12	23.25	23.19	23.80	22.50	22.63	22.63	23.80	22.90	23.02	22.95	23.80
3GPP Rel 6	HSDPA Subslot-2	23.15	23.27	23.20	23.80	22.52	22.61	22.62	23.80	22.91	23.00	22.97	23.80
3GPP Rel 6	HSDPA Subslot-3	22.82	22.79	22.71	23.30	22.00	22.16	22.16	23.30	22.46	22.49	22.46	23.30
3GPP Rel 6	HSDPA Subslot-4	22.84	22.73	22.69	23.30	22.02	22.11	22.14	23.30	22.46	22.48	22.44	23.30
3GPP Rel 6	DC-HSDPA Subslot-1	22.99	23.03	22.93	23.80	22.32	22.42	22.41	23.80	22.63	22.74	22.66	23.80
3GPP Rel 6	DC-HSDPA Subslot-2	22.94	23.06	22.96	23.80	22.35	22.44	22.42	23.80	22.66	22.73	22.68	23.80
3GPP Rel 6	DC-HSDPA Subslot-3	22.43	22.63	22.56	23.30	21.80	21.89	21.89	23.30	22.19	22.24	22.23	23.30
3GPP Rel 6	DC-HSDPA Subslot-4	22.46	22.66	22.60	23.30	21.83	21.83	21.87	23.30	22.20	22.22	22.26	23.30
3GPP Rel 6	HSUPA Subslot-1	21.10	21.22	21.12	21.80	20.54	20.66	20.70	21.80	20.89	20.97	20.96	21.80
3GPP Rel 6	HSUPA Subslot-2	21.13	21.20	21.15	21.80	20.55	20.67	20.62	21.80	20.90	20.96	20.94	21.80
3GPP Rel 6	HSUPA Subslot-3	21.12	21.22	21.13	21.80	20.54	20.63	20.60	21.80	21.90	21.95	21.94	22.80
3GPP Rel 6	HSUPA Subslot-4	21.10	21.19	21.11	21.80	20.56	20.64	20.64	21.80	20.90	20.90	20.92	21.80
3GPP Rel 6	HSUPA Subslot-5	23.10	23.20	23.10	23.80	22.50	22.70	22.70	23.80	22.90	22.90	23.00	23.80
3GPP Rel 7	HSPA+ (HQAAM) Subslot-1	20.70	20.76	20.72	21.30	21.17	21.22	21.26	21.30	20.55	20.57	20.61	21.30



Band 2 (190MHz Band) Part 24E														
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Turn-up time (dBm)	MPR (dB)						
Channel														
Frequency (MHz)														
20	QPSK	1	0	22.56	22.65	22.64	23.8	0						
20	QPSK	1	49	22.55	22.60	22.63								
20	QPSK	1	99	22.49	22.61	22.54								
20	QPSK	50	0	21.63	21.66	21.68								
20	QPSK	50	24	21.73	21.77	21.75								
20	QPSK	50	50	21.67	21.70	21.72								
20	QPSK	100	0	21.67	21.70	21.68								
20	16QAM	1	0	21.91	22.02	21.99								
20	16QAM	1	49	21.92	21.97	21.96								
20	16QAM	1	99	21.87	21.88	21.88								
20	16QAM	50	0	20.61	20.69	20.71	21.8	2						
20	16QAM	50	24	20.70	20.70	20.73								
20	16QAM	50	50	20.50	20.59	20.62								
20	16QAM	100	0	20.68	20.65	20.69								
20	64QAM	1	0	20.94	20.94	20.94								
20	64QAM	1	49	20.94	20.94	20.94								
20	64QAM	1	99	20.44	20.54	20.53								
20	64QAM	50	0	19.36	19.46	19.45								
20	64QAM	50	24	19.44	19.46	19.50								
20	64QAM	50	50	19.45	19.54	19.57								
20	64QAM	100	0	19.43	19.43	19.48								
Channel														
Frequency (MHz)														
15	QPSK	1	0	22.49	22.57	22.57	23.8	0						
15	QPSK	1	37	22.47	22.50	22.57								
15	QPSK	1	74	22.45	22.49	22.58								
15	QPSK	36	0	21.61	21.65	21.71								
15	QPSK	36	20	21.71	21.75	21.80								
15	QPSK	36	40	21.67	21.74	21.80								
15	QPSK	75	0	21.68	21.63	21.71								
15	16QAM	1	0	21.86	21.99	22.05								
15	16QAM	1	37	21.90	21.98	22.01								
15	16QAM	1	74	21.88	21.88	21.94								
15	16QAM	36	0	20.61	20.69	20.72	21.8	2						
15	16QAM	36	20	20.71	20.77	20.81								
15	16QAM	36	40	20.67	20.76	20.80								
15	16QAM	75	0	20.69	20.68	20.72								
15	64QAM	1	0	20.42	20.46	20.51								
15	64QAM	1	37	20.48	20.53	20.49								
15	64QAM	1	74	20.42	20.45	20.52								
15	64QAM	36	0	19.36	19.44	19.41								
15	64QAM	36	20	19.38	19.32	19.34								
15	64QAM	36	40	19.40	19.50	19.50								
15	64QAM	75	0	19.34	19.38	19.40								
Channel														
Frequency (MHz)														
10	QPSK	1	0	22.46	22.49	22.58	23.8	0						
10	QPSK	1	25	22.42	22.50	22.54								
10	QPSK	1	50	22.42	22.48	22.53								
10	QPSK	25	0	21.58	21.65	21.72								
10	QPSK	25	12	21.62	21.69	21.73								
10	QPSK	25	25	21.69	21.77	21.83								
10	QPSK	50	0	21.61	21.65	21.73								
10	16QAM	1	0	21.96	21.94	22.07								
10	16QAM	1	25	21.90	21.97	22.02								
10	16QAM	1	50	21.90	21.97	21.99								
10	16QAM	25	0	20.55	20.65	20.71								
10	16QAM	25	12	20.64	20.69	20.74								
10	16QAM	25	25	20.65	20.72	20.76								
10	16QAM	50	0	20.58	20.68	20.73								
10	64QAM	1	0	20.39	20.52	20.55	21.8	2						
10	64QAM	1	25	20.51	20.54	20.55								
10	64QAM	1	50	20.51	20.58	20.54								
10	64QAM	25	0	19.27	19.36	19.37								
10	64QAM	25	12	19.29	19.41	19.42								
10	64QAM	25	25	19.39	19.45	19.48								
10	64QAM	50	0	19.36	19.38	19.40								
Channel														
Frequency (MHz)														
5	QPSK	1	0	22.44	22.48	22.55			23.8	0				
5	QPSK	1	12	22.46	22.58	22.52								
5	QPSK	1	24	22.50	22.58	22.51								
5	QPSK	12	0	21.65	21.69	21.75								
5	QPSK	12	6	21.65	21.76	21.78								
5	QPSK	12	13	21.65	21.74	21.80								
5	QPSK	25	0	21.65	21.67	21.75								
5	16QAM	1	0	21.90	21.93	21.99								
5	16QAM	1	12	21.87	21.97	22.04								
5	16QAM	1	24	21.92	22.04	22.05								
5	16QAM	12	0	20.64	20.68	20.72								
5	16QAM	12	6	20.67	20.81	20.84								
5	16QAM	12	13	20.66	20.76	20.81								
5	16QAM	25	0	20.66	20.68	20.74								
5	64QAM	1	0	20.67	20.35	20.29	21.8	2						
5	64QAM	1	12	20.32	20.39	20.37								
5	64QAM	1	24	20.41	20.48	20.62								
5	64QAM	12	0	19.26	19.36	19.37								
5	64QAM	12	6	19.32	19.39	19.38								
5	64QAM	12	13	19.43	19.32	19.45								
5	64QAM	25	0	19.37	19.47	19.47								
5	64QAM	25	0	19.30	19.40	19.42								
Channel														
Frequency (MHz)														
186.5	QPSK	1	0	22.44	22.48	22.55	23.8	0						
186.5	QPSK	1	25	22.46	22.57	22.52								
186.5	QPSK	1	50	22.42	22.54	22.53								
186.5	QPSK	25	0	21.61	21.61	21.73								
186.5	QPSK	25	12	21.62	21.70	21.74								
186.5	QPSK	25	25	21.60	21.71	21.80								
186.5	16QAM	1	0	21.79	21.89	22.04								
186.5	16QAM	1	25	21.80	22.00	22.12								
186.5	16QAM	1	50	21.89	21.99	22.02								
186.5	16QAM	25	0	20.62	20.72	20.80								
186.5	16QAM	25	12	20.71	20.75	20.88								
186.5	16QAM	25	25	20.65	20.72	20.85								
186.5	64QAM	1	0	20.64	20.71	20.80	21.8	2						
186.5	64QAM	1	25	20.61	20.93	20.92								
186.5	64QAM	1	50	20.15	20.53	20.32								
186.5	64QAM	1	14	20.18	20.45	20.52								
186.5	64QAM	1	24	19.44	19.48	19.50								
186.5	64QAM	1	49	19.44	19.51	19.58								
186.5	64QAM	1	74	19.44	19.42	19.46								
186.5	64QAM	15	0	19.39	19.42	19.46								
Channel														
Frequency (MHz)														
180.7	QPSK	1	0	22.35	22.45	22.47	23.8	0						
180.7	QPSK	1	3	22.44	22.50	22.54								
180.7	QPSK	1	5	22.37	22.44	22.48								
180.7	QPSK	3	0	22.36	22.51	22.55								
180.7	QPSK	3	3	22.42	22.49	22.54								
180.7	QPSK	3	3	22.38	22.45	22.51								
180.7	QPSK	6	0	21.58	21.63	21.70								
180.7	16QAM	1	0	21.77	21.86	21.94								
180.7	16QAM	1	3	21.84	21.85	22.00								
180.7	16QAM	1	5	21.77	21.87	21.94								
180.7	16QAM	3	0	21.65	21.69	21.85								
180.7	16QAM	3	3	21.67	21.68	21.71								
180.7	16QAM	6	0	20.63	20.73	20.74								
180.7	64QAM	1	0	20.34	20.43	20.31	21.8	2						
180.7	64QAM	1	3	20.41	20.76	20.55								
180.7	64QAM	1	5	20.34	20.34	20.52								
180.7	64QAM	3	0	20.11	20.22	20.90								
180.7	64QAM	3	1	20.49	20.22	20.48								
180.7	64QAM	3	3	20.10	20.59	20.57								
180.7	64QAM	6	0	19.30	19.33	19.32								

Band 4 (AWS Band) Part 27E (only on channel required)												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Turn-up time (dBm)	MPR (dB)				
Channel												
Frequency (MHz)												
20	QPSK	1	0	22.41	22.53	22.50	23.8	0				
20	QPSK	1	49	22.17	22.32	22.31						
20	QPSK	1	99	22.12	22.30	22.30						
20	QPSK	50	0	21.41	21.52	21.47						
20	QPSK	50	24	21.43	21.53	21.50						
20	QPSK	50	50	21.35	21.42	21.43						
20	QPSK	100	0	21.41	21.49	21.46						
20	16QAM	1	0	21.79	21.86	21.89						
20	16QAM	1	49	21.41	21.74	21.67						
20	16QAM	1	99	21.34	21.63	21.73						
20	16QAM	50	0	20.40	20.51	20.53	21.8	2				
20	16QAM	50	24	20.41	20.45	20.54						
20	16QAM	50	50	20.35	20.44	20.48						
20	16QAM	100	0	20.39	20.42	20.50						

Band 28 for FCC (only on channel required)										
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)		
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.				
Channel										
Frequency (MHz)				821.5	831.5	841.5				
15	QPSK	1	0	22.53	22.51	22.56	23.8	0		
15	QPSK	1	37	22.51	22.57	22.52				
15	QPSK	1	74	22.53	22.54	22.47				
15	QPSK	36	0	21.57	21.63	21.62				
15	QPSK	36	20	21.62	21.64	21.65				
15	QPSK	36	39	21.60	21.62	21.64	22.8	1		
15	QPSK	75	0	21.61	21.60	21.67				
15	16QAM	1	0	21.77	21.76	21.85				
15	16QAM	1	37	21.75	21.77	21.76				
15	16QAM	1	74	21.77	21.71	21.72				
15	16QAM	36	0	20.53	20.56	20.58	21.8	2		
15	16QAM	36	20	20.61	20.52	20.56				
15	16QAM	36	39	20.54	20.57	20.59				
15	16QAM	75	0	20.59	20.54	20.65				
15	16QAM	1	0	20.59	20.64	20.67				
15	64QAM	1	37	20.67	20.68	20.68	21.8	2		
15	64QAM	1	74	20.63	20.63	20.67				
15	64QAM	36	0	19.56	19.62	19.61				
15	64QAM	36	20	19.62	19.58	19.59				
15	64QAM	36	39	19.61	19.62	19.62				
15	64QAM	75	0	19.59	19.55	19.65	20.8	3		
Channel										
Frequency (MHz)				819	831.5	844			Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	0	22.39	22.44	22.45			23.8	0
10	QPSK	1	25	22.38	22.46	22.46				
10	QPSK	1	49	22.43	22.44	22.40				
10	QPSK	25	0	21.48	21.53	21.51				
10	QPSK	25	12	21.59	21.58	21.63				
10	QPSK	25	25	21.51	21.55	21.53	22.8	1		
10	QPSK	50	0	21.53	21.52	21.55				
10	16QAM	1	0	21.80	21.81	21.85				
10	16QAM	1	25	21.78	21.85	21.81				
10	16QAM	1	49	21.86	21.84	21.77				
10	16QAM	25	0	20.52	20.53	20.51	21.8	2		
10	16QAM	25	12	20.58	20.58	20.60				
10	16QAM	25	25	20.55	20.54	20.52				
10	16QAM	50	0	20.55	20.53	20.58				
10	16QAM	1	0	20.74	20.68	20.75				
10	64QAM	1	25	20.73	20.72	20.79	21.8	2		
10	64QAM	1	49	20.72	20.70	20.73				
10	64QAM	25	0	19.62	19.56	19.65				
10	64QAM	25	12	19.60	19.58	19.63				
10	64QAM	25	25	19.54	19.58	19.56				
10	64QAM	50	0	19.61	19.53	19.58	20.8	3		
Channel										
Frequency (MHz)				867.5	888.5	910.5			Tune-up limit (dBm)	MPR (dB)
5	QPSK	1	0	22.41	22.42	22.41			23.8	0
5	QPSK	1	12	22.46	22.46	22.39				
5	QPSK	1	24	22.37	22.44	22.40				
5	QPSK	12	0	21.47	21.53	21.47				
5	QPSK	12	7	21.54	21.48	21.49				
5	QPSK	12	13	21.47	21.48	21.45	22.8	1		
5	QPSK	25	0	21.51	21.46	21.43				
5	16QAM	1	0	21.74	21.72	21.78				
5	16QAM	1	12	21.78	21.79	21.71				
5	16QAM	1	24	21.70	21.76	21.75				
5	16QAM	12	0	20.48	20.56	20.52	21.8	2		
5	16QAM	12	7	20.55	20.54	20.48				
5	16QAM	12	13	20.49	20.50	20.50				
5	16QAM	25	0	20.53	20.51	20.48				
5	64QAM	1	0	20.70	20.66	20.62				
5	64QAM	1	12	20.68	20.67	20.68	21.8	2		
5	64QAM	1	24	20.66	20.69	20.62				
5	64QAM	12	0	19.54	19.59	19.57				
5	64QAM	12	7	19.61	19.59	19.50				
5	64QAM	12	13	19.54	19.55	19.53				
5	64QAM	25	0	19.53	19.49	19.46	20.8	3		
Channel										
Frequency (MHz)				927.5	958.5	970.5			Tune-up limit (dBm)	MPR (dB)
3	QPSK	1	0	22.39	22.37	22.45			23.8	0
3	QPSK	1	8	22.48	22.51	22.45				
3	QPSK	1	14	22.43	22.45	22.36				
3	QPSK	8	0	21.43	21.47	21.52				
3	QPSK	8	4	21.53	21.49	21.54				
3	QPSK	8	7	21.48	21.46	21.46	22.8	1		
3	QPSK	15	0	21.51	21.45	21.48				
3	16QAM	1	0	21.66	21.68	21.79				
3	16QAM	1	8	21.81	21.78	21.79				
3	16QAM	1	14	21.71	21.76	21.70				
3	16QAM	8	0	20.55	20.56	20.55	21.8	2		
3	16QAM	8	4	20.59	20.57	20.59				
3	16QAM	8	7	20.54	20.54	20.50				
3	16QAM	15	0	20.50	20.50	20.48				
3	64QAM	1	0	20.59	20.63	20.71				
3	64QAM	1	8	20.73	20.77	20.74	21.8	2		
3	64QAM	1	14	20.67	20.69	20.62				
3	64QAM	8	0	19.53	19.55	19.57				
3	64QAM	8	4	19.57	19.56	19.57				
3	64QAM	8	7	19.54	19.54	19.51				
3	64QAM	15	0	19.51	19.48	19.42	20.8	3		
Channel										
Frequency (MHz)				969.7	988.5	1003.3			Tune-up limit (dBm)	MPR (dB)
1.4	QPSK	1	0	22.32	22.30	22.32			23.8	0
1.4	QPSK	1	3	22.41	22.41	22.39				
1.4	QPSK	1	5	22.30	22.28	22.25				
1.4	QPSK	3	0	22.39	22.33	22.33				
1.4	QPSK	3	1	22.42	22.35	22.39				
1.4	QPSK	3	3	22.35	22.39	22.32	22.8	1		
1.4	QPSK	6	0	21.43	21.38	21.38				
1.4	16QAM	1	0	21.66	21.66	21.63				
1.4	16QAM	1	3	21.71	21.75	21.68				
1.4	16QAM	1	5	21.64	21.62	21.56				
1.4	16QAM	3	0	21.48	21.43	21.43	22.8	1		
1.4	16QAM	3	1	21.48	21.48	21.47				
1.4	16QAM	3	3	21.45	21.48	21.36				
1.4	16QAM	6	0	20.52	20.45	20.47				
1.4	64QAM	1	0	20.58	20.54	20.58				
1.4	64QAM	1	3	20.62	20.65	20.60	21.8	2		
1.4	64QAM	1	5	20.55	20.52	20.50				
1.4	64QAM	3	0	20.56	20.52	20.53				
1.4	64QAM	3	1	20.60	20.55	20.60				
1.4	64QAM	3	3	20.56	20.58	20.49				
1.4	64QAM	6	0	19.43	19.39	19.40	20.8	3		

Band 66										
BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)		
				Low Ch. Freq.	Middle Ch. Freq.	High Ch. Freq.				
Channel										
Frequency (MHz)				1720	1745	1770				
20	QPSK	1	0	22.42	22.54	22.40	23.8	0		
20	QPSK	1	49	22.23	22.40	22.27				
20	QPSK	1	99	22.19	22.32	22.16				
20	QPSK	50	0	21.38	21.41	21.39				
20	QPSK	50	24	21.45	21.51	21.42				
20	QPSK	50	60	21.35	21.48	21.35	22.8	1		
20	QPSK	100	0	21.42	21.50	21.39				
20	16QAM	1	0	21.63	21.61	21.68				
20	16QAM	1	49	21.62	21.74	21.58				
20	16QAM	1	99	21.61	21.66	21.50				
20	16QAM	50	0	20.37	20.48	20.37	21.8	2		
20	16QAM	50	24	20.45	20.46	20.35				
20	16QAM	50	60	20.38	20.49	20.39				
20	16QAM	100	0	20.39	20.49	20.36				
20	16QAM	1	0	20.50	20.70	20.58				
20	64QAM	1	49	20.47	20.56	20.46	21.8	2		
20	64QAM	1	99	20.46	20.51	20.42				
20	64QAM	50	0	19.39	19.50	19.39				
20	64QAM	50	24	19.47	19.47	19.36				
20	64QAM	50	60	19.39	19.49	19.40				
20	64QAM	100	0	19.44	19.53	19.32	20.8	3		
Channel										
Frequency (MHz)				13047	13232	13297			Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	0	22.18	22.38	22.33			23.8	0
15	QPSK	1	37	22.16	22.31	22.22				
15	QPSK	1	74	22.12	22.26	22.16				
15	QPSK	36	0	21.23	21.39	21.31				
15	QPSK	36	20	21.32	21.47	21.40				
15	QPSK	36	39	21.29	21.44	21.32	22.8	1		
15	QPSK	75	0	21.30	21.42	21.35				
15	16QAM	1	0	21.49	21.70	21.62				
15	16QAM	1	37	21.56	21.66	21.57				
15	16QAM	1	74	21.46	21.56	21.53				
15	16QAM	36	0	20.34	20.40	20.31	21.8	2		
15	16QAM	36	20	20.34	20.48	20.40				
15	16QAM	36	39	20.29	20.42	20.34				
15	16QAM	75	0	20.31	20.48	20.38				
15	16QAM	1	0	20.39	20.68	20.65				
15	64QAM	1	37	20.44	20.61	20.49	21.8	2		
15	64QAM	1	74	20.32	20.51	20.34				
15	64QAM	36	0	19.26	19.47	19.37				
15	64QAM	36	20	19.37	19.56	19.44				
15	64QAM	36								



Band 3(Band on channel required)										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-up limit (min)	MFR (dB)
Channel										
Frequency (MHz)										
50	QPSK	1	0	22.68	22.61	22.71				
20	QPSK	1	0	22.74	22.67	22.81				
20	QPSK	1	0	22.74	22.67	22.81				
20	QPSK	1	0	22.74	22.67	22.81				
20	QPSK	50	0	21.82	21.63	21.88			22.8	0
20	QPSK	50	24	22.81	21.79	21.86				
20	QPSK	50	50	21.74	21.70	21.80			22.8	1
20	QPSK	100	0	21.86	21.66	21.95				
20	ISBAM	1	0	22.04	22.00	22.08			22.8	1
20	ISBAM	1	49	22.04	21.85	22.28				
20	ISBAM	1	98	21.86	21.84	21.86				
20	ISBAM	50	0	20.77	20.72	20.85				
20	ISBAM	50	24	20.67	20.76	20.87			21.8	2
20	ISBAM	50	50	21.00	20.82	20.87				
20	ISBAM	100	0	20.84	20.72	20.98				
20	ISBAM	1	0	20.76	20.64	20.92			21.8	2
20	ISBAM	1	49	20.58	20.78	21.11				
20	ISBAM	1	98	21.05	20.75	20.77				
20	ISBAM	50	0	19.85	19.86	19.87			20.8	3
20	ISBAM	50	24	19.84	19.85	19.86				
20	ISBAM	50	50	19.93	19.82	19.81				
20	ISBAM	100	0	19.87	19.83	19.82				
Channel										
Frequency (MHz)										
15	QPSK	1	0	22.62	22.60	22.64				
15	QPSK	1	37	22.74	22.65	22.75			22.8	0
15	QPSK	1	74	22.75	22.67	22.85				
15	QPSK	38	0	21.82	21.67	21.86				
15	QPSK	38	20	21.88	21.78	21.83			22.8	1
15	QPSK	38	38	21.50	21.79	21.82				
15	ISBAM	1	0	21.84	21.80	22.00			22.8	1
15	ISBAM	1	37	21.84	21.80	22.00				
15	ISBAM	1	74	22.04	21.80	21.87				
15	ISBAM	38	0	20.90	20.89	20.88			21.8	2
15	ISBAM	38	20	20.90	20.89	20.88				
15	ISBAM	38	38	20.83	20.79	20.89				
15	ISBAM	75	0	20.92	20.66	20.79				
15	ISBAM	1	0	20.88	20.83	20.96			21.8	2
15	ISBAM	1	37	20.88	20.78	20.87				
15	ISBAM	1	74	20.83	20.78	20.87				
15	ISBAM	38	0	19.82	19.86	19.88			20.8	3
15	ISBAM	38	20	19.91	19.71	19.82				
15	ISBAM	38	38	19.87	19.77	19.86				
15	ISBAM	75	0	19.81	19.73	19.85				
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.71	22.69	22.73				
10	QPSK	1	25	22.67	22.66	22.69			22.8	0
10	QPSK	1	49	22.68	22.66	22.70				
10	QPSK	25	0	21.87	21.68	21.86				
10	QPSK	25	12	21.85	21.79	21.82			22.8	1
10	QPSK	25	25	21.85	21.84	21.85				
10	QPSK	50	0	21.99	21.79	21.98				
10	ISBAM	1	0	22.05	21.87	22.09			22.8	1
10	ISBAM	1	49	22.06	21.87	22.12				
10	ISBAM	25	0	20.85	20.84	20.86			21.8	2
10	ISBAM	25	12	21.00	20.75	20.86				
10	ISBAM	50	0	21.04	20.73	20.86				
10	ISBAM	1	0	21.21	21.05	21.25			21.8	2
10	ISBAM	1	25	21.24	21.08	21.27				
10	ISBAM	1	49	21.43	20.90	21.44				
10	ISBAM	25	0	19.85	19.72	19.87			20.8	3
10	ISBAM	25	12	20.80	19.71	19.82				
10	ISBAM	25	25	19.92	19.72	19.85				
10	ISBAM	50	0	19.84	19.78	19.86				
Channel										
Frequency (MHz)										
5	QPSK	1	0	22.71	22.69	22.73				
5	QPSK	1	12	22.71	22.69	22.73			22.8	0
5	QPSK	1	24	22.71	22.69	22.73				
5	QPSK	12	0	21.83	21.75	21.85				
5	QPSK	12	13	21.86	21.83	22.00			22.8	1
5	QPSK	25	0	21.98	21.70	21.92				
5	ISBAM	1	0	22.12	21.87	22.21			22.8	1
5	ISBAM	1	12	22.11	21.86	22.10				
5	ISBAM	12	0	20.92	20.72	20.95			21.8	2
5	ISBAM	12	7	21.02	20.79	21.02				
5	ISBAM	12	13	20.94	20.83	21.06				
5	ISBAM	25	0	20.84	20.73	20.89			21.8	2
5	ISBAM	1	0	20.59	20.64	20.64				
5	ISBAM	1	12	20.61	20.62	20.66				
5	ISBAM	1	24	21.09	20.62	21.08			20.8	3
5	ISBAM	12	0	19.87	19.72	19.87				
5	ISBAM	12	7	19.90	19.80	19.86				
5	ISBAM	12	13	19.90	19.77	19.86				
5	ISBAM	25	0	19.92	19.80	19.89				

Band 4 (2.6G Band)-Class 3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-up limit (min)	MFR (dB)
Channel										
Frequency (MHz)										
20	QPSK	1	0	22.44	22.28	22.46	22.22	22.30		
20	QPSK	1	49	22.43	22.32	22.41	22.32	22.39		
20	QPSK	1	98	22.45	22.36	22.51	22.40	22.37	23.8	0
20	QPSK	50	0	21.55	21.45	21.47	21.32	21.40		
20	QPSK	50	24	21.57	21.51	21.66	21.41	21.45		
20	QPSK	50	50	21.54	21.46	21.59	21.38	21.43	22.8	1
20	ISBAM	100	0	21.54	21.51	21.66	21.46	21.41		
20	ISBAM	1	0	21.53	21.30	21.54	21.28	21.49		
20	ISBAM	1	49	21.48	21.35	21.59	21.31	21.24	22.8	1
20	ISBAM	1	98	21.46	21.42	21.42	21.42	21.39		
20	ISBAM	50	0	20.57	20.33	20.40	20.28	20.35		
20	ISBAM	50	24	20.60	20.44	20.49	20.28	20.35	21.8	2
20	ISBAM	50	50	20.55	20.40	20.51	20.35	20.42		
20	ISBAM	100	0	20.50	20.43	20.45	20.38	20.34		
20	ISBAM	1	0	20.37	20.19	20.39	20.14	20.32		
20	ISBAM	1	49	20.29	20.12	20.28	20.20	20.28	21.8	2
20	ISBAM	1	98	20.35	20.40	20.40	20.31	20.38		
20	ISBAM	50	0	19.85	19.80	19.86	19.46	19.51		
20	ISBAM	50	24	19.84	19.86	19.84	19.49	19.53	20.8	3
20	ISBAM	50	50	19.85	19.78	19.83	19.54	19.62		
20	ISBAM	100	0	19.85	19.86	19.83	19.49	19.58		
Channel										
Frequency (MHz)										
15	QPSK	1	0	22.42	22.23	22.11	22.13	22.14		
15	QPSK	1	37	22.38	22.21	22.15	22.15	22.20	22.8	0
15	QPSK	1	74	22.34	22.31	22.27	22.27	22.33		
15	QPSK	38	0	21.53	21.30	21.52	21.29	21.39		
15	QPSK	38	20	21.58	21.41	21.41	21.31	21.38	22.8	1
15	QPSK	38	38	21.52	21.37	21.33	21.32	21.38		
15	ISBAM	1	0	21.57	21.40	21.52	21.31	21.39	22.8	1
15	ISBAM	1	37	21.50	21.37	21.29	21.24	21.47		
15	ISBAM	1	74	21.46	21.52	21.47	21.48	21.37		
15	ISBAM	38	0	20.56	20.30	20.18	20.19	20.28		
15	ISBAM	38	20	20.50	20.36	20.32	20.18	20.28	21.8	2
15	ISBAM	38	38	20.50	20.33	20.28	20.33	20.33		
15	ISBAM	75	0	20.57	20.42	20.25	20.23	20.31		
15	ISBAM	1	0	20.20	20.31	20.11	20.20	20.18	21.8	2
15	ISBAM	1	37	20.37	20.27	20.12	20.19	20.18		
15	ISBAM	1	74	20.33	20.45	20.22	20.20	20.28		
15	ISBAM	38	0	19.85	19.90	19.82	19.41	19.39	20.8	3
15	ISBAM	38	20	19.83	19.83	19.79	19.46	19.50		
15	ISBAM	38	38	19.84	19.89	19.89	19.44	19.53		
15	ISBAM	75	0	19.85	19.80	19.87	19.46	19.50	20.8	3
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.42	22.23	22.11	22.13	22.14		
10	QPSK	1	25	22.42	22.24	22.18	22.18	22.25	22.8	0
10	QPSK	1	49	22.36	22.30	22.15	22.30	22.18		
10	QPSK	25	0	21.58	21.28	21.24	21.25	21.41		
10	QPSK	25	13	21.57	21.44	21.28	21.25	21.41	22.8	1
10	QPSK	25	25	21.58	21.40	21.33	21.37	21.39		
10	QPSK	50	0	21.57	21.42	21.22	21.28	21.38		
10	ISBAM	1	0	21.63	21.46	21.53	21.33	21.46		
10	ISBAM	1	25	21.57	21.45	21.35	21.35	21.38	22.8	1
10	ISBAM	1	49	21.60	21.30	21.32	21.30	21.40		
10	ISBAM	25	0	20.56	20.31	20.21	20.25	20.30		
10	ISBAM	25	13	20.53	20.43	20.29	20.35	20.43	21.8	2
10	ISBAM	25	25	20.55	20.38	20.32	20.38	20.38		
10	ISBAM	50	0	20.60	20.43	20.26	20.33	20.43		
10	ISBAM	1	0	20.42	20.43	20.25	20.27	20.45	21.8	2
10	ISBAM	1</								



Reduced power for Hotspot on-LAT

Band	WCDMA			Tune-up Limit (dBm)	WCDMA W			Tune-up Limit (dBm)	
	5962	5900	6038		1312	1413	1513		
Tx Channel	5962	5900	6038	1312	1413	1513			
Rx Channel	5962	5900	6038	1312	1413	1513			
Frequency (MHz)	152.4	148.0	160.6	172.4	172.6	172.6			
SCPP Rel 99	AMR 12.2kops	22.81	22.97	22.93	23.80	21.85	22.03	21.96	23.30
SCPP Rel 99	RM-C 12.2kops	22.85	23.00	22.93	23.80	21.88	22.05	21.98	23.30
SCPP Rel 6	HSDPA Subtest-1	21.87	22.02	21.94	22.80	21.02	21.19	21.13	22.30
SCPP Rel 6	HSDPA Subtest-2	21.84	22.02	21.96	22.80	21.01	21.19	21.15	22.30
SCPP Rel 6	HSDPA Subtest-3	21.94	21.80	21.90	22.30	20.49	20.67	20.64	21.80
SCPP Rel 6	HSDPA Subtest-4	21.39	21.50	21.51	22.30	20.48	20.65	20.66	21.80
SCPP Rel 6	DC-HSDPA Subtest-1	21.74	21.91	21.85	22.80	20.82	21.06	21.03	22.30
SCPP Rel 8	DC-HSDPA Subtest-2	21.74	21.87	21.88	22.30	20.82	21.07	21.04	22.30
SCPP Rel 8	DC-HSDPA Subtest-3	21.19	21.38	21.40	22.30	20.36	20.54	20.56	21.80
SCPP Rel 8	DC-HSDPA Subtest-4	21.27	21.35	21.36	22.30	20.34	20.55	20.52	21.80
SCPP Rel 6	HSPA Subtest-1	21.80	21.92	21.83	22.80	20.99	21.15	21.10	22.30
SCPP Rel 6	HSPA Subtest-2	19.78	19.97	19.86	20.80	18.88	19.14	19.11	20.30
SCPP Rel 6	HSPA Subtest-3	19.76	19.88	19.83	20.80	18.84	19.11	19.32	20.30
SCPP Rel 6	HSPA Subtest-4	19.77	19.93	19.84	20.80	18.97	19.14	19.10	20.30
SCPP Rel 6	HSPA Subtest-5	21.78	21.88	21.88	22.80	21.00	21.20	21.10	22.30
SCPP Rel 7	HSPA+ (E-UMTS) Subtest-1	19.23	19.41	19.35	20.30	18.44	18.62	18.57	19.80



Band 4 (AWS Band)													
Part 27 (only on channel required)													
BW (MHz)	Modulation	Channel	RB Size	RB Offset	Power Low Co. Freq.	Power Middle Co. Freq.	Power High Co. Freq.	Tune-up Int (dBm)	MPR (dB)				
Channel													
Frequency (MHz)													
20	QPSK	1	0	0	2145	2149	2147	22.8	0				
20	QPSK	1	49	0	2131	2132	2134						
20	QPSK	1	99	0	2117	2118	2120						
20	QPSK	50	0	0	2142	2142	2140						
20	QPSK	50	24	0	2144	2145	2141						
20	QPSK	50	50	0	2137	2133	2136	22.8	0				
20	QPSK	100	0	0	2138	2142	2140						
20	QPSK	1	0	0	2144	2134	2139						
20	16QAM	1	49	0	2144	2144	2139						
20	16QAM	1	99	0	2136	2138	2143						
20	16QAM	50	0	0	2037	2035	2035	21.8	1				
20	16QAM	50	24	0	2037	2026	2026						
20	16QAM	50	50	0	2027	2025	2025						
20	16QAM	100	0	0	2034	2031	2030						
20	16QAM	1	0	0	2037	2036	2035						
20	64QAM	1	49	0	2040	2032	2045	21.8	1				
20	64QAM	1	99	0	2031	2022	2028						
20	64QAM	50	0	0	1938	1935	1935						
20	64QAM	50	24	0	1940	1929	1926						
20	64QAM	50	50	0	1928	1926	1923						
20	64QAM	100	0	0	1937	1932	1932	20.8	2				
Channel													
Frequency (MHz)													
15	QPSK	1	0	0	2127	2130	2135				22.8	0	
15	QPSK	1	37	0	2112	2111	2112						
15	QPSK	1	74	0	2109	2107	2113						
15	QPSK	36	0	0	2130	2130	2128						
15	QPSK	36	20	0	2132	2127	2131						
15	QPSK	36	39	0	2133	2129	2133	22.8	0				
15	QPSK	75	0	0	2133	2129	2133						
15	16QAM	1	0	0	2148	2145	2141						
15	16QAM	1	37	0	2138	2124	2125						
15	16QAM	1	74	0	2129	2117	2135						
15	16QAM	36	0	0	2034	2033	2031	21.8	1				
15	16QAM	36	20	0	2032	2030	2030						
15	16QAM	36	39	0	2026	2025	2026						
15	16QAM	75	0	0	2033	2031	2030						
15	16QAM	1	0	0	2038	2050	2051						
15	64QAM	1	37	0	2047	2036	2029	21.8	1				
15	64QAM	1	74	0	2035	2028	2035						
15	64QAM	36	0	0	1938	1935	1935						
15	64QAM	36	20	0	1935	1934	1934						
15	64QAM	36	39	0	1931	1929	1926						
15	64QAM	75	0	0	1936	1933	1931	20.8	2				
Channel													
Frequency (MHz)													
10	QPSK	1	0	0	2116	2118	2113				22.8	0	
10	QPSK	1	25	0	2119	2119	2116						
10	QPSK	1	49	0	2113	2117	2124						
10	QPSK	25	0	0	2120	2120	2124						
10	QPSK	25	12	0	2133	2124	2129						
10	QPSK	25	25	0	2133	2131	2133	22.8	0				
10	QPSK	50	0	0	2137	2134	2132						
10	16QAM	1	0	0	2143	2141	2144						
10	16QAM	1	25	0	2132	2134	2144						
10	16QAM	1	49	0	2144	2134	2147						
10	16QAM	25	0	0	2021	2023	2026	21.8	1				
10	16QAM	25	12	0	2034	2023	2027						
10	16QAM	25	25	0	2031	2028	2030						
10	16QAM	50	0	0	2033	2032	2034						
10	16QAM	50	11	0	2042	2038	2038						
10	64QAM	1	25	0	2053	2047	2045	21.8	1				
10	64QAM	1	49	0	2049	2044	2046						
10	64QAM	25	0	0	1929	1925	1928						
10	64QAM	25	12	0	1937	1926	1930						
10	64QAM	25	25	0	1936	1930	1935						
10	64QAM	50	0	0	1931	1927	1934	20.8	2				
Channel													
Frequency (MHz)													
5	QPSK	1	0	0	2123	2123	2126				22.8	0	
5	QPSK	1	12	0	2129	2132	2136						
5	QPSK	1	24	0	2135	2133	2139						
5	QPSK	12	0	0	2121	2115	2110						
5	QPSK	12	12	0	2121	2121	2124						
5	QPSK	12	13	0	2122	2121	2124	22.8	0				
5	QPSK	25	0	0	2121	2118	2121						
5	16QAM	1	0	0	2140	2137	2140						
5	16QAM	1	12	0	2134	2139	2146						
5	16QAM	1	24	0	2143	2148	2144						
5	16QAM	12	0	0	2041	2035	2033	21.8	1				
5	16QAM	12	7	0	2045	2044	2045						
5	16QAM	12	13	0	2043	2038	2048						
5	16QAM	25	0	0	2043	2040	2046						
5	16QAM	1	0	0	2057	2049	2056						
5	64QAM	1	12	0	2049	2055	2058	21.8	1				
5	64QAM	1	24	0	2053	2058	2063						
5	64QAM	12	0	0	1948	1940	1939						
5	64QAM	12	7	0	1948	1947	1952						
5	64QAM	12	13	0	1950	1947	1949						
5	64QAM	25	0	0	1943	1943	1943	20.8	2				
Channel													
Frequency (MHz)													
3	QPSK	1	0	0	2124	2123	2122				22.8	0	
3	QPSK	1	8	0	2138	2133	2139						
3	QPSK	1	14	0	2131	2130	2137						
3	QPSK	8	0	0	2139	2128	2126						
3	QPSK	8	4	0	2137	2141	2144						
3	QPSK	8	7	0	2135	2134	2142	22.8	0				
3	QPSK	15	0	0	2136	2133	2130						
3	16QAM	1	0	0	2139	2132	2144						
3	16QAM	1	8	0	2142	2148	2140						
3	16QAM	1	14	0	2143	2148	2145						
3	16QAM	8	0	0	2030	2023	2028	21.8	1				
3	16QAM	8	4	0	2034	2034	2041						
3	16QAM	8	7	0	2032	2031	2035						
3	16QAM	15	0	0	2030	2026	2023						
3	16QAM	1	0	0	2039	2039	2035						
3	64QAM	1	8	0	2051	2049	2053	21.8	1				
3	64QAM	1	14	0	2039	2046	2046						
3	64QAM	8	0	0	1932	1927	1926						
3	64QAM	8	4	0	1941	1934	1938						
3	64QAM	8	7	0	1936	1932	1936						
3	64QAM	15	0	0	1931	1928	1925	20.8	2				
Channel													
Frequency (MHz)													
1.4	QPSK	1	0	0	2132	2132	2127				22.8	0	
1.4	QPSK	1	3	0	2137	2141	2141						
1.4	QPSK	1	5	0	2133	2131	2139						
1.4	QPSK	3	0	0	2134	2132	2133						
1.4	QPSK	3	1	0	2137	2137	2146						
1.4	QPSK	3	3	0	2135	2133	2144	22.8	0				
1.4	QPSK	6	0	0	2141	2141	2147						
1.4	16QAM	1	0	0	2133	2130	2129						
1.4	16QAM	1	3	0	2140	2146	2140						
1.4	16QAM	1	5	0	2132	2135	2135						
1.4	16QAM	3	0	0	2111	2116	2116	22.8	0				
1.4	16QAM	3	1	0	2114	2116	2130						
1.4	16QAM	3	3	0	2107	2108	2128						
1.4	16QAM	6	0	0	2053	2051	2060						
1.4	16QAM	1	0	0	2057	2059	2065						
1.4	64QAM	1	3	0	2064	2065	2078	21.8	1				
1.4	64QAM	1	5	0	2058	2059	2073						
1.4	64QAM	3	0	0	2054	2056	2056						
1.4	64QAM	3	1	0	2060	2061	2062						
1.4	64QAM	3	3	0	2055	2060	2060						
1.4	64QAM	6	0	0	1941	1945	1950	20.8	2				

Band 7 (200MHz Band)										
Part 27										
BW (MHz)	Modulation	Channel	RB Size	RB Offset	Power Low Co. Freq.	Power Middle Co. Freq.	Power High Co. Freq.	Tune-up Int (dBm)	MPR (dB)	
Channel										
Frequency (MHz)										
20	QPSK	1	0	0	2510	2535	2560	22.8	0	
20	QPSK	1	49	0	2482	2483	2488			
20	QPSK	1	99	0	2468	2466	2464			
20	QPSK	50	0	0	2491	2491	2444			
20	QPSK	50	24	0	2484	2488	2460			
20	QPSK	50	50	0	2480	2487	2496	22.8	0	
20	QPSK	100	0	0	2481	2480	2482			
20	16QAM	1	0	0	2481	2489	2484			
20	16QAM	1	49	0	2464	2464	2462			
20	16QAM	1	99	0	2487	2485	2488			
20	16QAM	50	0	0	2087	2089	2085	21.8	1	
20	16QAM	50	24	0	2079	2073	2075			
20	16QAM	50	50	0	2078	2082	2075			
20	16QAM	100								



Reduced power for Handheld on-LAT

Band	TX Channel	WCDMA IV			Tune-up Limit (dBm)
		1312	1413	1513	
	Rx Channel	1637	1638	1738	
	Frequency (MHz)	192.4	192.4	192.6	
3GPP Rel 99	AMC 12.2kQps	21.39	21.45	21.44	22.80
3GPP Rel 99	RMC 12.2kQps	21.40	21.49	21.48	22.80
3GPP Rel 6	HSDPA Subtest-1	20.52	20.80	20.57	21.80
3GPP Rel 6	HSDPA Subtest-2	20.53	20.61	20.61	21.80
3GPP Rel 6	HSDPA Subtest-3	20.03	20.08	20.05	21.30
3GPP Rel 6	HSDPA Subtest-4	20.03	20.12	20.10	21.30
3GPP Rel 6	DC-HSDPA Subtest-1	20.40	20.48	20.48	21.80
3GPP Rel 6	DC-HSDPA Subtest-2	20.42	20.51	20.51	21.80
3GPP Rel 6	DC-HSDPA Subtest-3	19.90	19.95	19.95	21.30
3GPP Rel 6	DC-HSDPA Subtest-4	19.90	20.03	20.01	21.30
3GPP Rel 6	HSPA Subtest-1	20.69	20.69	20.52	21.80
3GPP Rel 6	HSPA Subtest-2	18.57	18.66	18.41	19.80
3GPP Rel 6	HSPA Subtest-3	18.61	18.65	18.58	19.80
3GPP Rel 6	HSPA Subtest-4	18.67	18.71	18.61	19.80
3GPP Rel 6	HSPA Subtest-5	20.20	20.70	20.70	21.80
3GPP Rel 7	HSPA+ (E-UMTS) Subtest-1	18.12	18.25	18.08	19.30



Band 7 (200MHz Band)									
Part 27									
BW (MHz)	Modulation	RB Size	RB Offset	Power			Tune-up Inst (dBm)	MPR (dB)	
				Low Ch. Freq	Mid Ch. Freq	High Ch. Freq			
Channel				20850	21100	21300			
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	0	18.74	18.69	18.71	19.8	0	
20	QPSK	1	49	18.59	18.68	18.58			
20	QPSK	1	99	18.44	18.43	18.68			
20	QPSK	50	0	18.48	18.59	18.45	19.8	0	
20	QPSK	50	24	18.71	18.65	18.69			
20	QPSK	50	50	18.59	18.58	18.67			
20	QPSK	100	0	18.68	18.62	18.66	19.8	0	
20	16QAM	1	0	18.20	18.48	18.53			
20	16QAM	1	49	18.21	18.40	18.28			
20	16QAM	1	99	18.56	18.38	18.63	19.8	0	
20	16QAM	50	0	18.36	18.62	18.43			
20	16QAM	50	24	18.36	18.62	18.40			
20	16QAM	50	50	18.37	18.59	18.35	19.8	0	
20	16QAM	100	0	18.51	18.60	18.48			
20	64QAM	1	0	18.50	18.41	18.31			
20	64QAM	1	49	18.59	18.44	18.63	19.8	0	
20	64QAM	1	99	18.47	18.62	18.49			
20	64QAM	50	0	18.25	18.49	18.38			
20	64QAM	50	24	18.39	18.42	18.55	19.8	0	
20	64QAM	50	50	18.61	18.52	18.53			
20	64QAM	100	0	18.40	18.28	18.49			
Channel				2292.5	21100	21370	Tune-up Inst (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	0	18.40	18.57	18.53	19.8	0	
15	QPSK	1	37	18.49	18.34	18.33			
15	QPSK	1	74	18.48	18.41	18.47			
15	QPSK	36	0	18.54	18.36	18.35	19.8	0	
15	QPSK	36	20	18.64	18.49	18.67			
15	QPSK	36	39	18.61	18.43	18.51			
15	QPSK	75	0	18.52	18.59	18.32	19.8	0	
15	16QAM	1	0	18.70	18.51	18.49			
15	16QAM	1	37	18.72	18.51	18.40			
15	16QAM	1	74	18.53	18.70	18.56	19.8	0	
15	16QAM	36	0	18.54	18.39	18.54			
15	16QAM	36	20	18.56	18.64	18.45			
15	16QAM	36	39	18.67	18.48	18.53	19.8	0	
15	16QAM	75	0	18.65	18.72	18.33			
15	64QAM	1	0	18.47	18.51	18.67			
15	64QAM	1	37	18.53	18.65	18.59	19.8	0	
15	64QAM	1	74	18.61	18.69	18.72			
15	64QAM	36	0	18.70	18.60	18.36			
15	64QAM	36	20	18.60	18.59	18.71	19.8	0	
15	64QAM	36	39	18.47	18.55	18.43			
15	64QAM	75	0	18.46	18.58	18.64			
Channel				20800	21100	21400	Tune-up Inst (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	0	18.47	18.23	18.34	19.8	0	
10	QPSK	1	25	18.48	18.53	18.46			
10	QPSK	1	49	18.26	18.57	18.35			
10	QPSK	25	0	18.37	18.50	18.54	19.8	0	
10	QPSK	25	12	18.71	18.46	18.52			
10	QPSK	25	25	18.69	18.73	18.55			
10	QPSK	50	0	18.48	18.69	18.61	19.8	0	
10	16QAM	1	0	18.62	18.66	18.37			
10	16QAM	1	25	18.65	18.38	18.31			
10	16QAM	1	49	18.48	18.33	18.57	19.8	0	
10	16QAM	25	0	18.66	18.65	18.49			
10	16QAM	25	12	18.67	18.36	18.39			
10	16QAM	25	25	18.61	18.47	18.51	19.8	0	
10	16QAM	50	0	18.68	18.72	18.46			
10	64QAM	1	0	18.66	18.37	18.60			
10	64QAM	1	25	18.65	18.57	18.70	19.8	0	
10	64QAM	1	49	18.50	18.67	18.50			
10	64QAM	25	0	18.68	18.37	18.31			
10	64QAM	25	12	18.69	18.40	18.49	19.8	0	
10	64QAM	25	25	18.63	18.72	18.43			
10	64QAM	50	0	18.47	18.48	18.53			
Channel				20775	21100	21425	Tune-up Inst (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	18.06	18.19	18.39	19.8	0	
5	QPSK	1	12	18.22	18.26	18.34			
5	QPSK	1	24	18.36	18.18	18.45			
5	QPSK	12	0	18.14	18.20	18.50	19.8	0	
5	QPSK	12	7	18.21	18.40	18.22			
5	QPSK	12	13	18.44	18.37	18.34			
5	QPSK	25	0	18.51	18.31	18.48	19.8	0	
5	16QAM	1	0	18.43	18.34	18.26			
5	16QAM	1	12	18.24	18.45	18.55			
5	16QAM	1	24	18.55	18.47	18.28	19.8	0	
5	16QAM	12	0	18.20	18.22	18.50			
5	16QAM	12	7	18.37	18.52	18.28			
5	16QAM	12	13	18.51	18.42	18.38	19.8	0	
5	16QAM	25	0	18.50	18.42	18.31			
5	64QAM	1	0	18.71	18.39	18.50			
5	64QAM	1	12	18.42	18.70	18.28	19.8	0	
5	64QAM	1	24	18.57	18.56	18.28			
5	64QAM	12	0	18.43	18.43	18.28			
5	64QAM	12	7	18.57	18.58	18.45	19.8	0	
5	64QAM	12	13	18.50	18.39	18.60			
5	64QAM	25	0	18.49	18.59	18.49			



Uplink CA power - UAT

CA_7C												
Combination 20MHz+20MHz (100RB+100RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset						
20850	21048	QPSK	1	0	0	0	1	0	Full	22.41	23.50	
21100	20902	QPSK	1	0	0	0	1	0	Full	22.50	23.50	
21350	21152	QPSK	1	0	0	0	1	0	Full	22.45	23.50	
20850	21048	16QAM	1	0	0	0	1	0	Full	21.80	22.50	
21100	20902	16QAM	1	0	0	0	1	0	Full	21.90	22.50	
21350	21152	16QAM	1	0	0	0	1	0	Full	21.88	22.50	
20850	21048	64QAM	1	0	0	0	1	0	Full	20.98	21.50	
21100	20902	64QAM	1	0	0	0	1	0	Full	20.85	21.50	
21350	21152	64QAM	1	0	0	0	1	0	Full	20.92	21.50	
20850	21048	QPSK	50	24	0	0	1	0	Reducd Power 1	15.03	16.00	
21100	20902	QPSK	50	24	0	0	1	0	Reducd Power 1	15.12	16.00	
21350	21152	QPSK	50	24	0	0	1	0	Reducd Power 1	15.11	16.00	
20850	21048	QPSK	50	24	0	0	1	0	Reducd Power 2	13.05	14.00	
21100	20902	QPSK	50	24	0	0	1	0	Reducd Power 2	13.11	14.00	
21350	21152	QPSK	50	24	0	0	1	0	Reducd Power 2	13.10	14.00	
20850	21048	QPSK	50	24	0	0	1	0	Hotspot on	19.45	20.50	
21100	20902	QPSK	50	24	0	0	1	0	Hotspot on	19.48	20.50	
21350	21152	QPSK	50	24	0	0	1	0	Hotspot on	19.57	20.50	
20850	21048	QPSK	50	24	0	0	1	0	Sensor on	17.16	18.00	
21100	20902	QPSK	50	24	0	0	1	0	Sensor on	17.01	18.00	
21350	21152	QPSK	50	24	0	0	1	0	Sensor on	17.10	18.00	



CA_38C											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
37850	38048	QPSK	1	99	0	0	1	0	Full	22.84	23.50
37901	38099	QPSK	1	99	0	0	1	0	Full	22.83	23.50
38150	37952	QPSK	1	99	0	0	1	0	Full	22.90	23.50
37850	38048	16QAM	1	99	0	0	1	0	Full	22.22	22.50
37901	38099	16QAM	1	99	0	0	1	0	Full	22.24	22.50
38150	37952	16QAM	1	99	0	0	1	0	Full	22.26	22.50
37850	38048	64QAM	1	99	0	0	1	0	Full	20.87	21.50
37901	38099	64QAM	1	99	0	0	1	0	Full	20.92	21.50
38150	37952	64QAM	1	99	0	0	1	0	Full	21.09	21.50
37850	38048	QPSK	50	24	0	0	1	0	Reduced Power 1	17.58	18.00
37901	38099	QPSK	50	24	0	0	1	0	Reduced Power 1	17.61	18.00
38150	37952	QPSK	50	24	0	0	1	0	Reduced Power 1	17.65	18.00
37850	38048	QPSK	50	24	0	0	1	0	Reduced Power 2	16.62	17.00
37901	38099	QPSK	50	24	0	0	1	0	Reduced Power 2	16.71	17.00
38150	37952	QPSK	50	24	0	0	1	0	Reduced Power 2	16.73	17.00
37850	38048	QPSK	50	24	0	0	1	0	Hotspot on	21.92	22.50
37901	38099	QPSK	50	24	0	0	1	0	Hotspot on	21.94	22.50
38150	37952	QPSK	50	24	0	0	1	0	Hotspot on	22.00	22.50



CA_11C-Class 3											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
39790	39988	QPSK	1	99	0	0	1	0	Full	22.42	24.00
39750	39948	QPSK	1	99	0	0	1	0	Full	22.39	24.00
40185	39987	QPSK	1	99	0	0	1	0	Full	22.61	24.00
40620	40422	QPSK	1	99	0	0	1	0	Full	22.74	24.00
41055	40857	QPSK	1	99	0	0	1	0	Full	22.72	24.00
41490	41292	QPSK	1	99	0	0	1	0	Full	22.63	24.00
39790	39988	16QAM	1	99	0	0	1	0	Full	21.22	23.00
39750	39948	16QAM	1	99	0	0	1	0	Full	21.23	23.00
40185	39987	16QAM	1	99	0	0	1	0	Full	21.47	23.00
40620	40422	16QAM	1	99	0	0	1	0	Full	21.70	23.00
41055	40857	16QAM	1	99	0	0	1	0	Full	21.67	23.00
41490	41292	16QAM	1	99	0	0	1	0	Full	21.46	23.00
39790	39988	64QAM	1	99	0	0	1	0	Full	20.65	22.00
39750	39948	64QAM	1	99	0	0	1	0	Full	20.71	22.00
40185	39987	64QAM	1	99	0	0	1	0	Full	20.93	22.00
40620	40422	64QAM	1	99	0	0	1	0	Full	20.95	22.00
41055	40857	64QAM	1	99	0	0	1	0	Full	20.88	22.00
41490	41292	64QAM	1	99	0	0	1	0	Full	20.75	22.00
39790	39988	QPSK	50	24	0	0	1	0	Reducd Power 1	17.11	18.50
39750	39948	QPSK	50	24	0	0	1	0	Reducd Power 1	16.93	18.50
40185	39987	QPSK	50	24	0	0	1	0	Reducd Power 1	17.29	18.50
40620	40422	QPSK	50	24	0	0	1	0	Reducd Power 1	17.35	18.50
41055	40857	QPSK	50	24	0	0	1	0	Reducd Power 1	17.27	18.50
41490	41292	QPSK	50	24	0	0	1	0	Reducd Power 1	17.34	18.50
39790	39988	QPSK	50	24	0	0	1	0	Reducd Power 2	16.45	17.50
39750	39948	QPSK	50	24	0	0	1	0	Reducd Power 2	16.37	17.50
40185	39987	QPSK	50	24	0	0	1	0	Reducd Power 2	16.59	17.50
40620	40422	QPSK	50	24	0	0	1	0	Reducd Power 2	16.61	17.50
41055	40857	QPSK	50	24	0	0	1	0	Reducd Power 2	16.39	17.50
41490	41292	QPSK	50	24	0	0	1	0	Reducd Power 2	16.44	17.50
39790	39988	QPSK	50	24	0	0	1	0	Hotspot on	21.52	23.00
39750	39948	QPSK	50	24	0	0	1	0	Hotspot on	21.49	23.00
40185	39987	QPSK	50	24	0	0	1	0	Hotspot on	21.87	23.00
40620	40422	QPSK	50	24	0	0	1	0	Hotspot on	21.93	23.00
41055	40857	QPSK	50	24	0	0	1	0	Hotspot on	21.77	23.00
41490	41292	QPSK	50	24	0	0	1	0	Hotspot on	21.66	23.00



Uplink CA power - UAT

CA_7C											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
20850	21048	QPSK	1	0	0	0	1	0	Full	22.58	23.80
21100	20902	QPSK	1	0	0	0	1	0	Full	22.47	23.80
21350	21152	QPSK	1	0	0	0	1	0	Full	22.53	23.80
20850	21048	16QAM	1	0	0	0	1	0	Full	21.94	22.80
21100	20902	16QAM	1	0	0	0	1	0	Full	21.85	22.80
21350	21152	16QAM	1	0	0	0	1	0	Full	21.90	22.80
20850	21048	64QAM	1	0	0	0	1	0	Full	20.92	21.80
21100	20902	64QAM	1	0	0	0	1	0	Full	20.95	21.80
21350	21152	64QAM	1	0	0	0	1	0	Full	20.91	21.80
20850	21048	QPSK	1	0	0	0	1	0	Hotspot	21.55	22.80
21100	20902	QPSK	1	0	0	0	1	0	Hotspot	21.63	22.80
21350	21152	QPSK	1	0	0	0	1	0	Hotspot	21.79	22.80
20850	21048	QPSK	50	24	0	0	1	0	Sensor	18.68	19.80
21100	20902	QPSK	50	24	0	0	1	0	Sensor	18.74	19.80
21350	21152	QPSK	50	24	0	0	1	0	Sensor	18.82	19.80



CA_38C											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
37850	38048	QPSK	1	99	0	0	1	0	Full	22.72	23.80
37901	38099	QPSK	1	99	0	0	1	0	Full	22.70	23.80
38150	37952	QPSK	1	99	0	0	1	0	Full	22.75	23.80
37850	38048	16QAM	1	99	0	0	1	0	Full	22.18	22.80
37901	38099	16QAM	1	99	0	0	1	0	Full	22.13	22.80
38150	37952	16QAM	1	99	0	0	1	0	Full	22.07	22.80
37850	38048	64QAM	1	99	0	0	1	0	Full	20.85	21.80
37901	38099	64QAM	1	99	0	0	1	0	Full	20.91	21.80
38150	37952	64QAM	1	99	0	0	1	0	Full	20.99	21.80

CA_11C-Class 3											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
39790	39988	QPSK	1	99	0	0	1	0	Full	22.16	23.80
39750	39948	QPSK	1	99	0	0	1	0	Full	22.10	23.80
40185	39987	QPSK	1	99	0	0	1	0	Full	22.39	23.80
40620	40422	QPSK	1	99	0	0	1	0	Full	22.50	23.80
41055	40857	QPSK	1	99	0	0	1	0	Full	22.23	23.80
41490	41292	QPSK	1	99	0	0	1	0	Full	22.47	23.80
39790	39988	16QAM	1	99	0	0	1	0	Full	20.93	22.80
39750	39948	16QAM	1	99	0	0	1	0	Full	21.01	22.80
40185	39987	16QAM	1	99	0	0	1	0	Full	21.13	22.80
40620	40422	16QAM	1	99	0	0	1	0	Full	21.49	22.80
41055	40857	16QAM	1	99	0	0	1	0	Full	21.38	22.80
41490	41292	16QAM	1	99	0	0	1	0	Full	21.40	22.80
39790	39988	64QAM	1	99	0	0	1	0	Full	20.44	21.80
39750	39948	64QAM	1	99	0	0	1	0	Full	20.40	21.80
40185	39987	64QAM	1	99	0	0	1	0	Full	20.62	21.80
40620	40422	64QAM	1	99	0	0	1	0	Full	20.61	21.80
41055	40857	64QAM	1	99	0	0	1	0	Full	20.57	21.80
41490	41292	64QAM	1	99	0	0	1	0	Full	20.54	21.80



Downlink CA Full Power-UAT

2CC		CA Configuration (BCS)	PCC						SCC				Power		
Configure	LTE Band		BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx Power (dBm)	W/O CA Tx Power (dBm)	
Inter-Band	2A-4A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	22.31	22.37	
		7	20	2510	20850	QPSK	1	0	12	10	737.5	5095	22.50	22.51	
	CA_7A-12A	7(4*4MIMO)	20	2510	20850	QPSK	1	0	12	10	737.5	5095	22.48	22.51	
		12	10	711	23130	QPSK	1	49	7	20	2655	3100	22.62	22.81	
	CA_7A-32A	7	20	2510	20850	QPSK	1	0	32	20	1474	10140	22.35	22.51	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	32	20	1474	10140	22.24	22.51	
	CA_26A-41A	Band 26	15	841.5	26965	QPSK	1	0	41	20	2593	40620	22.56	22.72	
		41	20	2593	40620	QPSK	1	99	26	15	876.5	8865	22.62	22.77	
			41(4*4MIMO)	20	2593	40620	QPSK	1	99	26	15	876.5	8865	22.58	22.77
	Intra-Band	Non-Contiguous	CA_5A-5A	5	10	829	20450	QPSK	1	0	5	5	891.5	2625	22.81
CA_7A-7A			7	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	22.48	22.51
			7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	22.41	22.51
CA_41A-41A			41	20	2593	40620	QPSK	1	99	41	5	2687.5	41565	22.73	22.77
			41(4*4MIMO)	20	2593	40620	QPSK	1	99	41	5	2687.5	41565	22.65	22.77
CA_2C			2	20	1880	18900	QPSK	1	0	2	20	1979.80	1098	22.36	22.37
Contiguous		CA_5B	5	10	829	20450	QPSK	1	0	5	10	883.90	2549	22.86	22.87
		CA_7C	7	20	2510	20850	QPSK	1	0	7	20	2660.20	3152	22.46	22.51
			7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	20	2660.20	3152	22.39	22.51
		CA_38C	38	20	2580	37850	QPSK	1	99	38	20	2599.80	38048	22.84	22.92
		38(4*4MIMO)	20	2580	37850	QPSK	1	99	38	20	2599.80	38048	22.70	22.92	
CA_66B	66	15	1745	132322	QPSK	1	0	66	5	2164.30	66979	22.25	22.36		

3CC		CA Configuration (BCS)	PCC						SCC1				SCC2				Power		
Configure	LTE Band		BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx Power (dBm)	W/O CA Tx Power (dBm)	
Inter-Band	CA_2A-2A-5A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	5	10	881.5	2525	22.36	22.37	
		5	10	829	20450	QPSK	1	0	2	20	1960	900	2	5	1987.5	1175	22.81	22.87	
	CA_2A-2A-12A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	12	10	737.5	5095	22.34	22.37	
		12	10	711	23130	QPSK	1	49	2	20	1960	900	2	5	1987.5	1175	22.63	22.81	
	CA_4A-4A-5A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	22.33	22.36	
		4(4*4MIMO)	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	22.30	22.36	
		5	10	829	20450	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	22.85	22.87	
		4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	7	20	2655	3100	22.31	22.36	
	CA_4A-4A-7A	7	20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	22.35	22.51	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	22.27	22.51	
	CA_4A-4A-12A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	22.35	22.36	
		4(4*4MIMO)	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	22.27	22.36	
		12	10	711	23130	QPSK	1	49	4	20	2132.5	2175	4	5	2152.5	2375	22.46	22.81	
		4	20	1732.5	20175	QPSK	1	0	7	20	2655	3100	7	5	2687.5	3425	22.34	22.36	
	CA_4A-7A-7A	7	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	22.42	22.51	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	22.38	22.51	
	CA_4A-7A-12A	4	20	1732.5	20175	QPSK	1	0	7	20	2655	3100	12	10	737.5	5095	22.26	22.36	
		7	20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	22.45	22.51	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	22.38	22.51	
		12	10	711	23130	QPSK	1	49	4	20	2132.5	2175	7	20	2655	3100	22.78	22.81	
	CA_5A-7A-7A	5	10	829	20450	QPSK	1	0	7	20	2680	3350	7	20	2630	2850	22.79	22.87	
		7	20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	22.45	22.51	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	22.37	22.51	
		CA_5A-66A-66A	5	10	829	20450	QPSK	1	0	66	20	2155	66886	66	5	2197.5	67311	22.74	22.87
		66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	5	10	881.5	2525	22.25	22.36	
		CA_5A-66C	5	10	829	20450	QPSK	1	0	66	20	2155	66886	66	20	2174.8	67084	22.68	22.87
		66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	5	10	881.5	2525	22.30	22.36	
		CA_12A-66A-66A	12	10	711	23130	QPSK	1	49	66	20	2155	66886	66	5	2197.5	67311	22.68	22.81
		66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	12	10	737.5	5095	22.12	22.36	
		CA_12A-66C	12	10	711	23130	QPSK	1	49	66	20	2155	66886	66	20	2174.8	67084	22.71	22.81
	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	12	10	737.5	5095	22.21	22.36		
	Intra-Band	Contiguous	CA_41A-41C	41	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	5M	2687.5	41565	22.75
			41(4*4MIMO)	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	5M	2687.5	41565	22.68	22.77
CA_66A-66C		66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	66	20	2185.8	67194	22.28	22.36	
CA_41D		41	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	20	2632.6	41016	22.71	22.77	
		41(4*4MIMO)	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	20	2632.6	41016	22.66	22.77	



Reduced power level 1 for Head-UAT

2CC		PCC														SCC				Power	
Configure	CA Configuration (BCS)	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)							
		Inter-Band	2A-4A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	16.83	16.92					
CA_7A-12A	7		20	2510	20850	QPSK	1	0	12	10	737.5	5095	14.81	14.96							
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	12	10	737.5	5095	14.75	14.96							
CA_7A-32A	7		20	2510	20850	QPSK	1	0	32	20	1474	10140	14.85	14.96							
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	32	20	1474	10140	14.78	14.96							
CA_26A-41A	Band 26		15	841.5	26965	QPSK	1	0	41	20	2593	40620	20.05	20.19							
	41	20	2593	40620	QPSK	1	99	26	15	876.5	8865	17.10	17.14								
	41(4*4MIMO)	20	2593	40620	QPSK	1	99	26	15	876.5	8865	17.04	17.14								

3CC		PCC								SCC1				SCC2				Power	
Configure	CA Configuration (BCS)	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)	
		Inter-Band	CA_2A-2A-5A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	5	10	881.5	2525	16.87
5	10			829	20450	QPSK	1	0	2	20	1960	900	2	5	1987.5	1175	21.14	21.22	
CA_2A-2A-12A	2		20	1880	18900	QPSK	1	0	2	5	1987.5	1175	12	10	737.5	5095	16.85	16.92	
CA_4A-4A-5A	4		20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	16.75	16.83	
	4(4*4MIMO)		20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	16.69	16.83	
CA_4A-4A-7A	5		10	829	20450	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	21.12	21.22	
	4		20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	7	20	2655	3100	16.74	16.83	
CA_4A-4A-12A	7		20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	14.85	14.96	
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	14.79	14.96	
CA_4A-7A-7A	4		20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	16.72	16.83	
	4(4*4MIMO)		20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	16.66	16.83	
CA_4A-7A-12A	4		20	1732.5	20175	QPSK	1	0	7	20	2655	3100	7	5	2687.5	3425	16.75	16.83	
	7		20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	14.85	14.96	
CA_4A-7A-12A	7(4*4MIMO)		20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	14.80	14.96	
	4		20	1732.5	20175	QPSK	1	0	7	20	2655	3100	12	10	737.5	5095	16.68	16.83	
CA_5A-7A-7A	7		20	2510	20850	QPSK	1	0	7	20	2660.20	3152	7	20	2630	2850	21.09	21.22	
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	14.86	14.96	
CA_5A-66A-66A	5		10	829	20450	QPSK	1	0	66	20	2155	66886	66	5	2197.5	67311	21.15	21.22	
	66		20	1745	132322	QPSK	1	0	66	5	2197.5	67311	5	10	881.5	2525	16.58	16.67	
CA_5A-66C	5		10	829	20450	QPSK	1	0	66	20	2155	66886	66	20	2174.8	67084	21.10	21.22	
	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	5	10	881.5	2525	16.55	16.67		
CA_12A-66A-66A	66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	12	10	737.5	5095	16.60	16.67		
CA_12A-66C	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	12	10	737.5	5095	16.52	16.67		
Intra-Band	Contiguous	CA_41A-41C	41	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	5M	2687.5	41565	17.02	17.14
			41(4*4MIMO)	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	5M	2687.5	41565	16.98	17.14
	CA_66A-66C	66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	66	20	2185.8	67194	16.58	16.67	
	CA_41D	41	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	20	2632.6	41016	17.09	17.14	
41(4*4MIMO)		20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	20	2632.6	41016	17.03	17.14		



Reduced power level 2 for Head-UAT

2CC		PCC																	SCC				Power	
Configure	CA Configuration (BCS)	PCC							SCC				Power											
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL#RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)										
Inter-Band	2A-4A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	16.83	16.92										
	CA_7A-12A	7	20	2510	20850	QPSK	1	0	12	10	737.5	5095	14.81	14.96										
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	12	10	737.5	5095	14.75	14.96										
		12	10	711	23130	QPSK	1	49	7	20	2655	3100	21.75	21.82										
	CA_7A-32A	7	20	2510	20850	QPSK	1	0	32	20	1474	10140	14.85	14.96										
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	32	20	1474	10140	14.78	14.96										
Band 26		15	841.5	26965	QPSK	1	0	41	20	2593	40620	19.07	19.11											
CA_26A-41A	41	20	2593	40620	QPSK	1	99	26	15	876.5	8865	17.10	17.14											
	41(4*4MIMO)	20	2593	40620	QPSK	1	99	26	15	876.5	8865	17.04	17.14											

3CC		PCC							SCC1				SCC2				Power	
Configure	CA Configuration (BCS)	PCC							SCC1				SCC2				Power	
		LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL#RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	CA_2A-2A-5A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	5	10	881.5	2525	16.87	16.92
		5	10	829	20450	QPSK	1	0	2	20	1960	900	2	5	1987.5	1175	20.37	20.43
	CA_2A-2A-12A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	12	10	737.5	5095	16.85	16.92
		12	10	711	23130	QPSK	1	49	2	20	1960	900	2	5	1987.5	1175	21.80	21.82
	CA_4A-4A-5A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	16.75	16.83
		4(4*4MIMO)	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	16.69	16.83
	CA_4A-4A-7A	5	10	829	20450	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	20.35	20.43
		4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	7	20	2655	3100	16.74	16.83
	CA_4A-4A-12A	7	20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	14.79	14.96
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	14.79	14.96
		4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	16.72	16.83
	CA_4A-7A-7A	4(4*4MIMO)	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	16.66	16.83
		12	10	711	23130	QPSK	1	49	4	20	2132.5	2175	4	5	2152.5	2375	21.75	21.82
		4	20	1732.5	20175	QPSK	1	0	7	20	2655	3100	7	5	2687.5	3425	16.75	16.83
	CA_4A-7A-12A	7	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	14.85	14.96
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	14.80	14.96
		4	20	1732.5	20175	QPSK	1	0	7	20	2655	3100	12	10	737.5	5095	16.68	16.83
	CA_5A-7A-7A	7	20	2510	20850	QPSK	1	0	7	20	2655	3100	12	10	737.5	5095	14.78	14.96
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	14.75	14.96
		12	10	711	23130	QPSK	1	49	4	20	2132.5	2175	7	20	2655	3100	21.79	21.82
	CA_5A-66A-66A	5	10	829	20450	QPSK	1	0	7	20	2680	3350	7	20	2630	2850	20.38	20.43
		7	20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	14.86	14.96
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	14.81	14.96
	CA_5A-66C	5	10	829	20450	QPSK	1	0	66	20	2155	66886	66	5	2197.5	67311	20.36	20.43
66		20	1745	132322	QPSK	1	0	66	5	2197.5	67311	5	10	881.5	2525	16.58	16.67	
66		20	1745	132322	QPSK	1	0	66	20	2174.8	67084	66	20	2174.8	67084	20.33	20.43	
CA_12A-66A-66A	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	5	10	881.5	2525	16.55	16.67	
	12	10	711	23130	QPSK	1	49	66	20	2155	66886	66	5	2197.5	67311	21.74	21.82	
	66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	12	10	737.5	5095	16.60	16.67	
CA_12A-66C	12	10	711	23130	QPSK	1	49	66	20	2155	66886	66	20	2174.8	67084	21.76	21.82	
	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	12	10	737.5	5095	16.52	16.67	
	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	12	10	737.5	5095	16.52	16.67	
Intra-Band Contiguous	CA_41A-41C	41	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	5M	2687.5	41565	17.02	17.14
		41(4*4MIMO)	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	5M	2687.5	41565	16.98	17.14
	CA_66A-66C	66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	66	20	2185.8	67194	16.58	16.67
		41	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	20	2632.6	41016	17.09	17.14
CA_41D	41(4*4MIMO)	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	20	2632.6	41016	17.03	17.14	



Reduced power level 3/4 for Head-UAT

2CC		PCC							SCC				Power	
Configure	CA Configuration (BCS)	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
		Inter-Band	2A-4A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175
CA_7A-12A	7		20	2510	20850	QPSK	1	0	12	10	737.5	5095	12.93	12.95
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	12	10	737.5	5095	12.85	12.95
	12		10	711	23130	QPSK	1	49	7	20	2655	3100	21.75	21.82
CA_7A-32A	7		20	2510	20850	QPSK	1	0	32	20	1474	10140	12.89	12.95
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	32	20	1474	10140	12.83	12.95
	Band 26		15	841.5	26965	QPSK	1	0	41	20	2593	40620	19.07	19.11
CA_26A-41A	41		20	2593	40620	QPSK	1	99	26	15	876.5	8865	16.47	16.50
	41(4*4MIMO)		20	2593	40620	QPSK	1	99	26	15	876.5	8865	16.41	16.50

3CC		PCC							SCC1				SCC2				Power	
Configure	CA Configuration (BCS)	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
		Inter-Band	CA_2A-2A-5A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	5	10	881.5	2525
5	10			829	20450	QPSK	1	0	2	20	1960	900	2	5	1987.5	1175	20.37	20.43
CA_2A-2A-12A	2		20	1880	18900	QPSK	1	0	2	5	1987.5	1175	12	10	737.5	5095	16.85	16.92
	12		10	711	23130	QPSK	1	49	2	20	1960	900	2	5	1987.5	1175	21.80	21.82
CA_4A-4A-5A	4		20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	16.75	16.83
	4(4*4MIMO)		20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	16.69	16.83
	5		10	829	20450	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	20.35	20.43
CA_4A-4A-7A	4		20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	7	20	2655	3100	16.74	16.83
	7		20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	12.85	12.95
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	12.79	12.95
CA_4A-4A-12A	4		20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	16.72	16.83
	4(4*4MIMO)		20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	16.66	16.83
	12		10	711	23130	QPSK	1	49	4	20	2132.5	2175	4	5	2152.5	2375	21.75	21.82
CA_4A-7A-7A	4		20	1732.5	20175	QPSK	1	0	7	20	2655	3100	7	5	2687.5	3425	16.75	16.83
	7		20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	12.88	12.95
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	12.84	12.95
CA_4A-7A-12A	4		20	1732.5	20175	QPSK	1	0	7	20	2655	3100	12	10	737.5	5095	16.68	16.83
	7		20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	12.82	12.95
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	12.76	12.95
CA_5A-7A-7A	12		10	711	23130	QPSK	1	49	4	20	2132.5	2175	7	20	2655	3100	21.79	21.82
	5		10	829	20450	QPSK	1	0	7	20	2680	3350	7	20	2630	2850	20.38	20.43
	7		20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	12.87	12.95
CA_5A-66A-66A	7(4*4MIMO)		20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	12.81	12.95
	5		10	829	20450	QPSK	1	0	66	20	2155	66886	66	5	2197.5	67311	20.36	20.43
	66		20	1745	132322	QPSK	1	0	66	5	2197.5	67311	5	10	881.5	2525	16.58	16.67
CA_5A-66C	5		10	829	20450	QPSK	1	0	66	20	2155	66886	66	20	2174.8	67084	20.33	20.43
	66		20	1745	132322	QPSK	1	0	66	20	2174.8	67084	5	10	881.5	2525	16.55	16.67
	12		10	711	23130	QPSK	1	49	66	20	2155	66886	66	5	2197.5	67311	21.74	21.82
CA_12A-66A-66A	66		20	1745	132322	QPSK	1	0	66	5	2197.5	67311	12	10	737.5	5095	16.60	16.67
	12		10	711	23130	QPSK	1	49	66	20	2155	66886	66	20	2174.8	67084	21.76	21.82
	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	12	10	737.5	5095	16.52	16.67	
CA_12A-66C	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	12	10	737.5	5095	16.52	16.67	
	12	10	711	23130	QPSK	1	49	66	20	2155	66886	66	20	2174.8	67084	21.76	21.82	
	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	12	10	737.5	5095	16.52	16.67	
Intra-Band Contiguous	CA_41A-41C	41	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	5M	2687.5	41565	16.32	16.50
		41(4*4MIMO)	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	5M	2687.5	41565	16.29	16.50
	CA_66A-66C	66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	66	20	2185.8	67194	16.58	16.67
CA_41D	41	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	20	2632.6	41016	16.43	16.50	
	41(4*4MIMO)	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	20	2632.6	41016	16.35	16.50	



Reduced power for Hotspot on-UAT

2CC		PCC							SCC				Power		
Configure	CA Configuration (BCS)	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)	
Inter-Band	2A-4A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	20.35	20.39	
	CA_7A-12A	7	20	2510	20850	QPSK	1	0	12	10	737.5	5095	19.36	19.49	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	12	10	737.5	5095	19.30	19.49	
	CA_7A-32A	7	20	2510	20850	QPSK	1	0	32	20	1474	10140	19.42	19.49	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	32	20	1474	10140	19.36	19.49	
CA_26A-41A	41	20	2593	40620	QPSK	1	99	26	15	876.5	8865	21.66	21.74		
	41(4*4MIMO)	20	2593	40620	QPSK	1	99	26	15	876.5	8865	21.61	21.74		
Intra-Band	Non-Contiguous	CA_7A-7A	7	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	19.45	19.49
			7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	19.42	19.49
		CA_41A-41A	41	20	2593	40620	QPSK	1	99	41	5	2687.5	41565	21.70	21.74
			41(4*4MIMO)	20	2593	40620	QPSK	1	99	41	5	2687.5	41565	21.65	21.74
			CA_2C	2	20	1880	18900	QPSK	1	0	2	20	1979.80	1098	20.33
	Contiguous	CA_7C	7	20	2510	20850	QPSK	1	0	7	20	2660.20	3152	19.40	19.49
			7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	20	2660.20	3152	19.35	19.49
		CA_38C	38	20	2580	37850	QPSK	1	99	38	20	2599.80	38048	21.85	21.91
			38(4*4MIMO)	20	2580	37850	QPSK	1	99	38	20	2599.80	38048	21.82	21.91
		CA_66B	66	15	1745	132322	QPSK	1	0	66	5	2164.30	66979	21.16	21.26

3CC		PCC							SCC1				SCC2				Power		
Configure	CA Configuration (BCS)	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)	
Inter-Band	CA_2A-2A-5A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	5	10	881.5	2525	20.35	20.39	
	CA_2A-2A-12A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	12	10	737.5	5095	20.32	20.39	
		4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	21.15	21.24	
	CA_4A-4A-5A	4(4*4MIMO)	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	21.10	21.24	
		4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	7	20	2655	3100	21.20	21.24	
	CA_4A-4A-7A	7	20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	19.42	19.49	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	19.35	19.49	
	CA_4A-4A-12A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	21.19	21.24	
		4(4*4MIMO)	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	21.15	21.24	
	CA_4A-7A-7A	4	20	1732.5	20175	QPSK	1	0	7	20	2655	3100	7	5	2687.5	3425	21.16	21.24	
		7	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	19.38	19.49	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	19.33	19.49	
	CA_4A-7A-12A	4	20	1732.5	20175	QPSK	1	0	7	20	2655	3100	12	10	737.5	5095	21.12	21.24	
		7	20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	19.42	19.49	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	19.35	19.49	
	CA_5A-7A-7A	7	20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	19.45	19.49	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	19.38	19.49	
	CA_5A-66A-66A	66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	5	10	881.5	2525	21.09	21.26	
CA_5A-66C	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	5	10	881.5	2525	21.18	21.26		
CA_12A-66A-66A	66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	12	10	737.5	5095	21.22	21.26		
CA_12A-66C	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	12	10	737.5	5095	21.15	21.26		
Intra-Band	Contiguous	CA_41A-41C	41	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	5M	2687.5	41565	21.68	21.74
			41(4*4MIMO)	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	5M	2687.5	41565	21.63	21.74
	CA_66A-66C	66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	66	20	2185.8	67194	21.20	21.26	
		41	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	20	2632.6	41016	21.64	21.74	
CA_41D	41(4*4MIMO)	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	20	2632.6	41016	21.62	21.74		

Reduced power for Handheld on-UAT

2CC		PCC							SCC				Power	
Configure	CA Configuration (BCS)	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	CA_7A-12A	7	20	2510	20850	QPSK	1	0	12	10	737.5	5095	17.15	17.19
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	12	10	737.5	5095	17.09	17.19
Intra-Band	CA_7A-32A	7	20	2510	20850	QPSK	1	0	32	20	1474	10140	17.13	17.19
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	32	20	1474	10140	17.10	17.19
	CA_7A-7A	7	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	17.16	17.19
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	17.12	17.19
CA_7C	7	20	2510	20850	QPSK	1	0	7	20	2660.20	3152	17.11	17.19	
	7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	20	2660.20	3152	17.06	17.19	

3CC		PCC							SCC1				SCC2			Power		
Configure	CA Configuration (BCS)	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
Inter-Band	CA_4A-4A-7A	7	20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	17.08	17.19
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	17.05	17.19
	CA_4A-7A-7A	7	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	17.10	17.19
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	17.06	17.19
	CA_4A-7A-12A	7	20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	17.05	17.19
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	17.01	17.19
	CA_5A-7A-7A	7	20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	17.12	17.19
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	17.08	17.19



Full Power for LAT

2CC		CA Configuration (BCS)	PCC						SCC				Power		
Configure	LTE Band		BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)	
Inter-Band	2A-4A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	22.42	22.65	
		7	20	2510	20850	QPSK	1	0	12	10	737.5	5095	22.43	22.60	
	CA_7A-12A	7(4*4MIMO)	20	2510	20850	QPSK	1	0	12	10	737.5	5095	22.38	22.60	
		12	10	711	23130	QPSK	1	49	7	20	2655	3100	22.39	22.59	
	CA_7A-32A	7	20	2510	20850	QPSK	1	0	32	20	1474	10140	22.50	22.60	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	32	20	1474	10140	22.43	22.60	
CA_26A-41A	Band 26	15	841.5	26965	QPSK	1	0	41	20	2593	40620	22.47	22.58		
	41	20	2593	40620	QPSK	1	99	26	15	876.5	8865	22.42	22.51		
	41(4*4MIMO)	20	2593	40620	QPSK	1	99	26	15	876.5	8865	22.37	22.51		
Intra-Band	Non-Contiguous	CA_5A-5A	5	10	829	20450	QPSK	1	0	5	5	891.5	2625	22.45	22.59
		CA_7A-7A	7	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	22.42	22.60
			7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	22.37	22.60
		CA_41A-41A	41	20	2593	40620	QPSK	1	99	41	5	2687.5	41565	22.50	22.51
	41(4*4MIMO)		20	2593	40620	QPSK	1	99	41	5	2687.5	41565	22.45	22.51	
	Contiguous	CA_2C	2	20	1880	18900	QPSK	1	0	2	20	1979.80	1098	22.54	22.65
		CA_5B	5	10	829	20450	QPSK	1	0	5	10	883.90	2549	22.50	22.59
		CA_7C	7	20	2510	20850	QPSK	1	0	7	20	2660.20	3152	22.48	22.60
			7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	20	2660.20	3152	22.41	22.60
		CA_38C	38	20	2580	37850	QPSK	1	99	38	20	2599.80	38048	22.67	22.79
			38(4*4MIMO)	20	2580	37850	QPSK	1	99	38	20	2599.80	38048	22.58	22.79
		CA_66B	66	15	1745	132322	QPSK	1	0	66	5	2164.30	66979	22.44	22.54

3CC		CA Configuration (BCS)	PCC						SCC1				SCC2				Power		
Configure	LTE Band		BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)	
Inter-Band	CA_2A-2A-5A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	5	10	881.5	2525	22.44	22.65	
		5	10	829	20450	QPSK	1	0	2	20	1960	900	2	5	1987.5	1175	22.56	22.59	
	CA_2A-2A-12A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	12	10	737.5	5095	22.52	22.65	
		12	10	711	23130	QPSK	1	49	2	20	1960	900	2	5	1987.5	1175	22.46	22.59	
	CA_4A-4A-5A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	22.42	22.53	
		4(4*4MIMO)	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	22.37	22.53	
	CA_4A-4A-7A	5	10	829	20450	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	22.56	22.59	
		4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	7	20	2655	3100	22.41	22.53	
	CA_4A-4A-7A	7	20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	22.47	22.60	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	22.40	22.60	
	CA_4A-4A-12A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	22.38	22.53	
		4(4*4MIMO)	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	22.33	22.53	
	CA_4A-4A-12A	12	10	711	23130	QPSK	1	49	4	20	2132.5	2175	4	5	2152.5	2375	22.56	22.59	
		4	20	1732.5	20175	QPSK	1	0	7	20	2655	3100	7	5	2687.5	3425	22.39	22.53	
	CA_4A-7A-7A	7	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	22.45	22.60	
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	22.40	22.60	
	CA_4A-7A-12A	4	20	1732.5	20175	QPSK	1	0	7	20	2655	3100	12	10	737.5	5095	22.33	22.53	
		7	20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	22.52	22.60	
	CA_4A-7A-12A	7(4*4MIMO)	20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	22.44	22.60	
		12	10	711	23130	QPSK	1	49	4	20	2132.5	2175	7	20	2655	3100	22.57	22.59	
	CA_5A-7A-7A	5	10	829	20450	QPSK	1	0	7	20	2680	3350	7	20	2630	2850	22.47	22.59	
		7	20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	22.51	22.60	
	CA_5A-7A-7A	7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	22.45	22.60	
		5	10	829	20450	QPSK	1	0	66	20	2155	66886	66	5	2197.5	67311	22.52	22.59	
	CA_5A-66A-66A	66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	5	10	881.5	2525	22.47	22.54	
		5	10	829	20450	QPSK	1	0	66	20	2155	66886	66	20	2174.8	67084	22.50	22.59	
	CA_5A-66C	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	5	10	881.5	2525	22.48	22.54	
		12	10	711	23130	QPSK	1	49	66	20	2155	66886	66	5	2197.5	67311	22.52	22.59	
	CA_12A-66A-66A	66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	12	10	737.5	5095	22.41	22.54	
		12	10	711	23130	QPSK	1	49	66	20	2155	66886	66	20	2174.8	67084	22.49	22.59	
CA_12A-66C	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	12	10	737.5	5095	22.39	22.54		
	12	10	711	23130	QPSK	1	49	66	20	2155	66886	66	20	2174.8	67084	22.49	22.59		
Intra-Band	Contiguous	CA_41A-41C	41	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	5M	2687.5	41565	22.50	22.51
		41(4*4MIMO)	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	5M	2687.5	41565	22.44	22.51	
	CA_66A-66C	66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	66	20	2185.8	67194	22.42	22.54	
CA_41D	41	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	20	2632.6	41016	22.47	22.51		
	41(4*4MIMO)	20	2593	40620	QPSK	1	99	41	20	2612.8	40818	41	20	2632.6	41016	22.38	22.51		

Reduced power for Hotspot on-LAT

2CC		PCC							SCC				Power	
Configure	CA Configuration (BCS)	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
		Inter-Band	CA_7A-12A	7	20	2510	20850	QPSK	1	0	12	10	737.5	5095
7(4*4MIMO)	20			2510	20850	QPSK	1	0	12	10	737.5	5095	21.60	21.67
CA_7A-32A	7		20	2510	20850	QPSK	1	0	32	20	1474	10140	21.60	21.67
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	32	20	1474	10140	21.57	21.67
Intra-Band	CA_7A-7A	7	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	21.61	21.67
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	21.55	21.67
	CA_7C	7	20	2510	20850	QPSK	1	0	7	20	2660.20	3152	21.58	21.67
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	20	2660.20	3152	21.53	21.67
CA_66B	66	15	1745	132322	QPSK	1	0	66	5	2164.30	66979	21.40	21.48	

3CC		PCC							SCC1				SCC2				Power	
Configure	CA Configuration (BCS)	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
		Inter-Band	CA_4A-4A-5A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525
4(4*4MIMO)	20			1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	21.38	21.49
CA_4A-4A-7A	4		20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	7	20	2655	3100	21.44	21.49
	7		20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	21.58	21.67
CA_4A-4A-12A	7(4*4MIMO)		20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	21.52	21.67
	4		20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	21.39	21.49
CA_4A-7A-7A	4(4*4MIMO)		20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	21.35	21.49
	4		20	1732.5	20175	QPSK	1	0	7	20	2655	3100	7	5	2687.5	3425	21.43	21.49
	7		20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	21.57	21.67
CA_4A-7A-12A	7(4*4MIMO)		20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	21.52	21.67
	4		20	1732.5	20175	QPSK	1	0	7	20	2655	3100	12	10	737.5	5095	21.46	21.49
	7		20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	21.62	21.67
CA_5A-7A-7A	7(4*4MIMO)		20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	21.56	21.67
	7		20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	21.60	21.67
CA_5A-66A-66A	7(4*4MIMO)		20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	21.55	21.67
	66		20	1745	132322	QPSK	1	0	66	5	2197.5	67311	5	10	881.5	2525	21.44	21.48
CA_5A-66C	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	5	10	881.5	2525	21.40	21.48	
CA_12A-66A-66A	66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	12	10	737.5	5095	21.41	21.48	
CA_12A-66C	66	20	1745	132322	QPSK	1	0	66	20	2174.8	67084	12	10	737.5	5095	21.45	21.48	
Intra-Band Contiguous	CA_66A-66C	66	20	1745	132322	QPSK	1	0	66	5	2197.5	67311	66	20	2185.8	67194	21.38	21.48



Reduced power for Handheld on-LAT

2CC		PCC							SCC				Power	
Configure	CA Configuration (BCS)	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
		Inter-Band	CA_7A-12A	7	20	2510	20850	QPSK	1	0	12	10	737.5	5095
7(4*4MIMO)	20			2510	20850	QPSK	1	0	12	10	737.5	5095	18.65	18.74
CA_7A-32A	7		20	2510	20850	QPSK	1	0	32	20	1474	10140	18.70	18.74
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	32	20	1474	10140	18.67	18.74
Intra-Band	CA_7A-7A	7	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	18.65	18.74
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	5	2687.5	3425	18.62	18.74
	CA_7C	7	20	2510	20850	QPSK	1	0	7	20	2660.20	3152	18.69	18.74
		7(4*4MIMO)	20	2510	20850	QPSK	1	0	7	20	2660.20	3152	18.65	18.74

3CC		PCC							SCC1				SCC2				Power	
Configure	CA Configuration (BCS)	LTE Band	BW (MHz)	UL Freq. (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq. (MHz)	DL Channel	With CA Tx.Power (dBm)	W/O CA Tx.Power (dBm)
		Inter-Band	CA_4A-4A-7A	7	20	2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375
7(4*4MIMO)	20			2510	20850	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	18.58	18.74
CA_4A-7A-7A	7		20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	18.65	18.74
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	7	5	2687.5	3425	4	20	2132.5	2175	18.59	18.74
CA_4A-7A-12A	7		20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	18.63	18.74
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	12	10	737.5	5095	4	20	2132.5	2175	18.57	18.74
CA_5A-7A-7A	7		20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	18.72	18.74
	7(4*4MIMO)		20	2510	20850	QPSK	1	0	7	10	2645	3000	5	10	881.5	2525	18.67	18.74



Bluetooth Full Power

Bluetooth BR/EDR

Mode	Channel	Frequency (MHz)	Average power (dBm)										Tune-up Limit		
			Packet Type												
			DH1	DH3	DH5	2DH1	2DH3	2DH5	3DH1	3DH3	3DH5	DH5	2DH5	3DH5	
Bluetooth	CH 0	2402	13.10	12.70	12.80	11.00	10.50	10.30	10.90	10.50	10.40	14.6	12.3	12.4	
	CH 39	2441	14.00	13.60	13.50	11.30	10.50	10.80	11.20	10.90	10.70	15.5	12.8	12.7	
	CH 78	2480	12.40	12.20	12.00	9.70	9.40	9.20	9.70	9.40	9.20	14	11.2	11.2	

Bluetooth LE v4.0

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			GFSK	Tune-up Limit
LE	CH 00	2402	12.70	14.70
	CH 19	2440	13.60	15.60
	CH 39	2480	12.20	14.20

Bluetooth LE v5.0

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			2Mbps	Tune-up Limit
LE	CH 00	2402	13.00	15.00
	CH 19	2440	14.00	16.00
	CH 39	2480	12.50	14.50

Bluetooth Reduced Power for Head

Bluetooth BR/EDR

Mode	Channel	Frequency (MHz)	Average power (dBm)										Tune-up Limit		
			Packet Type												
			DH1	DH3	DH5	2DH1	2DH3	2DH5	3DH1	3DH3	3DH5	DH5	2DH5	3DH5	
Bluetooth	CH 0	2402	9.80	9.70	9.80	7.10	7.00	7.00	7.10	7.00	7.00	11.5	9.8	9.8	
	CH 39	2441	10.60	10.50	10.50	8.10	8.00	8.00	8.10	8.00	8.00	12.5	10.0	10.0	
	CH 78	2480	9.60	9.50	9.50	7.00	6.90	6.80	7.00	6.90	6.90	11.5	8.8	8.9	

Bluetooth LE v4.0

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			GFSK	Tune-up Limit
LE	CH 00	2402	9.30	11.30
	CH 19	2440	10.10	12.10
	CH 39	2480	9.20	11.20

Bluetooth LE v5.0

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			2Mbps	Tune-up Limit
LE	CH 00	2402	9.30	11.30
	CH 19	2440	10.10	12.10
	CH 39	2480	9.20	11.20



Full Power

2.4GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11b 1Mbps	1	2412	21.77	23.77	99.31	
	6	2437	21.81	23.81		
	11	2462	21.91	23.91		
802.11g 6Mbps	1	2412	20.32	22.32	98.31	
	6	2437	20.32	22.32		
	11	2462	20.46	22.46		
802.11n-HT20 MCS0	1	2412	20.36	22.36	96.52	
	6	2437	20.37	22.37		
	11	2462	20.46	22.46		
802.11n-HT40 MCS0	3	2422	19.01	21.01	92.29	
	6	2437	18.97	20.97		
	9	2452	18.87	20.87		

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	36	5180	19.93	21.93	97.59	
	40	5200	19.91	21.91		
	44	5220	19.84	21.84		
	48	5240	19.87	21.87		
802.11n-HT20 MCS0	36	5180	19.75	21.75	96.03	
	40	5200	19.72	21.72		
	44	5220	19.69	21.69		
802.11n-HT40 MCS0	46	5230	19.59	21.59	93.41	
	38	5190	18.58	20.58		
802.11ac-VHT20 MCS0	46	5230	19.63	21.63	92.54	
	36	5180	19.69	21.69		
	40	5200	19.65	21.65		
802.11ac-VHT40 MCS0	44	5220	19.63	21.63	87.23	
	48	5240	19.53	21.53		
	38	5190	18.57	20.57		
802.11ac-VHT80 MCS0	46	5230	19.58	21.58	80.82	
	42	5210	17.70	19.70		

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	52	5260	19.95	21.95	97.59	
	56	5280	19.69	21.69		
	60	5300	19.64	21.64		
	64	5320	19.70	21.70		
802.11n-HT20 MCS0	52	5260	19.61	21.61	96.03	
	56	5280	19.55	21.55		
	60	5300	19.41	21.41		
802.11n-HT40 MCS0	64	5320	19.49	21.49	93.41	
	54	5270	19.57	21.57		
802.11ac-VHT20 MCS0	62	5310	16.13	18.13	92.54	
	52	5260	19.55	21.55		
	56	5280	19.49	21.49		
802.11ac-VHT40 MCS0	60	5300	19.35	21.35	87.23	
	64	5320	19.43	21.43		
	54	5270	19.52	21.52		
802.11ac-VHT80 MCS0	62	5310	16.12	18.12	80.82	
	58	5290	15.62	17.62		

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	100	5590	20.28	22.28	97.59	
	116	5580	20.32	22.32		
	124	5620	20.31	22.31		
	132	5660	20.29	22.29		
	140	5700	20.27	22.27		
	144	5720	20.16	22.16		
802.11n-HT20 MCS0	100	5590	20.03	22.03	96.03	
	116	5580	20.10	22.10		
	124	5620	20.06	22.06		
	132	5660	20.13	22.13		
	140	5700	20.11	22.11		
	144	5720	20.08	22.08		
802.11n-HT40 MCS0	102	5510	20.09	22.09	93.41	
	110	5550	20.16	22.16		
	126	5630	20.19	22.19		
	134	5670	20.28	22.28		
	142	5710	20.05	22.05		
	100	5590	19.97	21.97		
802.11ac-VHT20 MCS0	116	5580	20.04	22.04	92.54	
	124	5620	20.13	22.13		
	132	5660	20.11	22.11		
	140	5700	20.05	22.05		
	144	5720	20.02	22.02		
	102	5510	20.04	22.04		
802.11ac-VHT40 MCS0	110	5550	20.11	22.11	87.23	
	126	5630	20.18	22.18		
	134	5670	20.23	22.23		
	142	5710	20.01	22.01		
	106	5530	15.81	17.81		
	122	5610	19.20	21.20		
802.11ac-VHT80 MCS0	138	5690	19.22	21.22	80.82	

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	149	5745	20.22	22.22	97.59	
	157	5785	20.33	22.33		
	165	5825	20.20	22.20		
802.11n-HT20 MCS0	149	5745	20.15	22.15	96.03	
	157	5785	20.24	22.24		
	165	5825	20.06	22.06		
802.11n-HT40 MCS0	151	5755	20.13	22.13	93.41	
	159	5795	20.18	22.18		
802.11ac-VHT20 MCS0	149	5745	20.09	22.09	92.54	
	157	5785	20.18	22.18		
	165	5825	20.00	22.00		
802.11ac-VHT40 MCS0	151	5755	20.09	22.09	87.23	
	159	5795	20.13	22.13		
802.11ac-VHT80 MCS0	155	5775	19.05	21.05	80.82	



Reduced Power Level 1 for Head

4GHz WLA		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
2.4GHz WLAN	802.11b 1Mbps	1	2412	16.82	18.82	99.31
		6	2437	16.81	18.81	
		11	2462	17.01	19.01	
	802.11g 6Mbps	1	2412	15.42	17.42	98.31
		6	2437	15.32	17.32	
		11	2462	15.51	17.51	
	802.11n-HT20 MCS0	1	2412	15.36	17.36	96.52
		6	2437	15.37	17.37	
		11	2462	15.48	17.48	
802.11n-HT40 MCS0	3	2422	14.02	16.02	92.29	
	6	2437	14.01	16.01		
	9	2452	13.92	15.92		

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.2GHz WLAN	802.11a 6Mbps	36	5180	15.91	17.91	97.59
		40	5200	15.88	17.88	
		44	5220	15.82	17.82	
		48	5240	15.85	17.85	
	802.11n-HT20 MCS0	36	5180	15.73	17.73	96.03
		40	5200	15.70	17.70	
		44	5220	15.71	17.71	
		48	5240	15.57	17.57	
	802.11n-HT40 MCS0	38	5190	14.63	15.63	93.41
		46	5230	15.60	17.60	
	802.11ac-VHT20 MCS0	36	5180	15.65	17.65	92.54
		40	5200	15.62	17.62	
		44	5220	15.61	17.61	
		48	5240	15.54	17.54	
	802.11ac-VHT40 MCS0	38	5190	14.60	16.60	87.23
		46	5230	15.57	17.57	
	802.11ac-VHT80 MCS0	42	5210	13.74	15.74	80.82

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.3GHz WLAN	802.11a 6Mbps	52	5260	15.94	17.94	97.59
		56	5280	15.69	17.69	
		60	5300	15.60	17.60	
		64	5320	15.66	17.66	
	802.11n-HT20 MCS0	52	5260	15.59	17.59	96.03
		56	5280	15.54	17.54	
		60	5300	15.41	17.41	
		64	5320	15.46	17.46	
	802.11n-HT40 MCS0	54	5270	15.56	17.56	93.41
		62	5310	12.31	14.31	
	802.11ac-VHT20 MCS0	52	5260	15.53	17.53	92.54
		56	5280	15.49	17.49	
		60	5300	15.33	17.33	
		64	5320	15.40	17.40	
	802.11ac-VHT40 MCS0	54	5270	15.53	17.53	87.23
		62	5310	12.23	14.23	
	802.11ac-VHT80 MCS0	58	5290	11.48	13.48	80.82

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.5GHz WLAN	802.11a 6Mbps	100	5500	14.22	16.22	97.59
		116	5580	14.32	16.32	
		124	5620	14.30	16.30	
		132	5660	14.27	16.27	
		140	5700	14.26	16.26	
		144	5720	14.14	16.14	
	802.11n-HT20 MCS0	100	5500	14.02	16.02	96.03
		116	5580	14.08	16.08	
		124	5620	14.03	16.03	
		132	5660	14.04	16.04	
		140	5700	14.09	16.09	
		144	5720	14.07	16.07	
	802.11n-HT40 MCS0	102	5510	14.09	16.09	93.41
		110	5550	14.13	16.13	
		126	5630	14.17	16.17	
		134	5670	14.27	16.27	
		142	5710	14.02	16.02	
		142	5710	14.02	16.02	
802.11ac-VHT20 MCS0	100	5500	13.96	15.96	92.54	
	116	5580	14.02	16.02		
	124	5620	14.07	16.07		
	132	5660	14.06	16.06		
	140	5700	14.02	16.02		
	144	5720	14.01	16.01		
802.11ac-VHT40 MCS0	102	5510	14.04	16.04	87.23	
	110	5550	14.13	16.13		
	126	5630	14.11	16.11		
	134	5670	14.23	16.23		
	142	5710	14.02	16.02		
	142	5710	14.02	16.02		
802.11ac-VHT80 MCS0	106	5530	9.96	11.96	80.82	
	122	5610	13.19	15.19		
	138	5690	13.20	15.20		
	138	5690	13.20	15.20		

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.8GHz WLAN	802.11a 6Mbps	149	5745	15.19	17.19	97.59
		157	5785	15.30	17.30	
		165	5825	15.19	17.19	
	802.11n-HT20 MCS0	149	5745	15.11	17.11	96.03
		157	5785	15.22	17.22	
		165	5825	15.03	17.03	
	802.11n-HT40 MCS0	151	5755	15.10	17.10	93.41
		159	5795	15.15	17.15	
	802.11ac-VHT20 MCS0	149	5745	15.06	17.06	92.54
		157	5785	15.16	17.16	
		165	5825	14.99	16.99	
	802.11ac-VHT40 MCS0	151	5755	15.08	17.08	87.23
		159	5795	15.10	17.10	
	802.11ac-VHT80 MCS0	155	5775	14.01	16.01	80.82



Reduced Power Level 2 for Head

2.4GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11b 1Mbps	1	2412	14.87	16.87	99.31	
	6	2437	14.91	16.91		
	11	2462	15.01	17.01		
802.11g 6Mbps	1	2412	13.42	15.42	98.31	
	6	2437	13.42	15.42		
	11	2462	13.56	15.56		
802.11n-HT20 MCS0	1	2412	13.46	15.46	96.52	
	6	2437	13.47	15.47		
	11	2462	13.56	15.56		
802.11n-HT40 MCS0	3	2422	12.11	14.11	92.29	
	6	2437	12.07	14.07		
	9	2452	11.97	13.97		

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	36	5180	14.86	16.86	97.59	
	40	5200	14.78	16.78		
	44	5220	14.83	16.83		
	48	5240	14.85	16.85		
802.11n-HT20 MCS0	36	5180	14.73	16.73	96.03	
	40	5200	14.79	16.79		
	44	5220	14.68	16.68		
	48	5240	14.58	16.58		
802.11n-HT40 MCS0	38	5190	13.56	15.56	93.41	
	46	5230	14.62	16.62		
802.11ac-VHT20 MCS0	36	5180	14.67	16.67	92.54	
	40	5200	14.72	16.72		
	44	5220	14.62	16.62		
802.11ac-VHT40 MCS0	38	5190	13.55	15.55	87.23	
	46	5230	14.57	16.57		
802.11ac-VHT80 MCS0	42	5210	12.69	14.69	80.82	

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	52	5260	14.87	16.87	97.59	
	56	5280	14.59	16.59		
	60	5300	14.62	16.62		
	64	5320	14.69	16.69		
802.11n-HT20 MCS0	52	5260	14.60	16.60	96.03	
	56	5280	14.45	16.45		
	60	5300	14.40	16.40		
	64	5320	14.48	16.48		
802.11n-HT40 MCS0	54	5270	14.56	16.56	93.41	
	62	5310	11.12	13.12		
802.11ac-VHT20 MCS0	52	5260	14.54	16.54	92.54	
	56	5280	14.39	16.39		
	60	5300	14.34	16.34		
	64	5320	14.42	16.42		
802.11ac-VHT40 MCS0	54	5270	14.51	16.51	87.23	
	62	5310	11.11	13.11		
802.11ac-VHT80 MCS0	58	5290	10.52	12.52	80.82	

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	100	5500	13.28	15.28	97.59	
	116	5580	13.33	15.33		
	124	5620	13.21	15.21		
	132	5660	13.19	15.19		
	140	5700	13.27	15.27		
	144	5720	13.16	15.16		
802.11n-HT20 MCS0	100	5500	13.05	15.05	96.03	
	116	5580	13.10	15.10		
	124	5620	12.96	14.96		
	132	5660	13.03	15.03		
	140	5700	13.11	15.11		
	144	5720	13.09	15.09		
802.11n-HT40 MCS0	102	5510	13.11	15.11	93.41	
	110	5550	13.17	15.17		
	126	5630	13.09	15.09		
	134	5670	13.27	15.27		
	142	5710	13.06	15.06		
	144	5720	13.06	15.06		
802.11ac-VHT20 MCS0	100	5500	12.99	14.99	92.54	
	116	5580	13.04	15.04		
	124	5620	13.03	15.03		
	132	5660	13.01	15.01		
	140	5700	13.05	15.05		
	144	5720	13.03	15.03		
802.11ac-VHT40 MCS0	102	5510	13.06	15.06	87.23	
	110	5550	13.12	15.12		
	126	5630	13.08	15.08		
	134	5670	13.22	15.22		
	142	5710	13.01	15.01		
	144	5720	13.01	15.01		
802.11ac-VHT80 MCS0	106	5530	8.82	10.82	80.82	
	122	5610	12.20	14.20		
	138	5690	12.22	14.22		

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	149	5745	14.54	16.54	97.59	
	157	5785	14.65	16.65		
	165	5825	14.51	16.51		
802.11n-HT20 MCS0	149	5745	14.47	16.47	96.03	
	157	5785	14.55	16.55		
	165	5825	12.69	14.69		
802.11n-HT40 MCS0	151	5755	14.45	16.45	93.41	
	159	5795	14.49	16.49		
802.11ac-VHT20 MCS0	149	5745	14.41	16.41	92.54	
	157	5785	14.49	16.49		
	165	5825	14.31	16.31		
802.11ac-VHT40 MCS0	151	5755	14.41	16.41	87.23	
	159	5795	14.44	16.44		
802.11ac-VHT80 MCS0	155	5775	13.36	15.36	80.82	



Reduced Power Level 3 for Head

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.2GHz WLAN	802.11a 6Mbps	36	5180	13.86	15.86	97.59
		40	5200	13.80	15.80	
		44	5220	13.83	15.83	
		48	5240	13.85	15.85	
	802.11n-HT20 MCS0	36	5180	13.73	15.73	96.03
		40	5200	13.71	15.71	
		44	5220	13.68	15.68	
	802.11n-HT40 MCS0	48	5240	13.58	15.58	93.41
		38	5190	12.56	14.56	
		46	5230	13.82	15.82	
	802.11ac- VHT20 MCS0	36	5180	13.67	15.67	92.54
		40	5200	13.64	15.64	
44		5220	13.62	15.62		
802.11ac- VHT40 MCS0	48	5240	13.52	15.52	87.23	
	38	5190	12.55	14.55		
802.11ac- VHT80 MCS0	42	5210	11.69	13.69	80.82	

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.3GHz WLAN	802.11a 6Mbps	52	5280	13.67	15.67	97.59
		56	5280	13.68	15.68	
		60	5300	13.62	15.62	
		64	5320	13.69	15.69	
	802.11n-HT20 MCS0	52	5280	13.60	15.60	96.03
		56	5280	13.54	15.54	
		60	5300	13.40	15.40	
	802.11n-HT40 MCS0	64	5320	13.48	15.48	93.41
		54	5270	13.56	15.56	
		62	5310	10.12	12.12	
	802.11ac- VHT20 MCS0	52	5280	13.54	15.54	92.54
		56	5280	13.48	15.48	
60		5300	13.34	15.34		
802.11ac- VHT40 MCS0	64	5320	13.42	15.42	87.23	
	54	5270	13.51	15.51		
802.11ac- VHT80 MCS0	62	5310	10.11	12.11	80.82	

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.5GHz WLAN	802.11a 6Mbps	100	5500	12.28	14.28	97.59
		116	5580	12.33	14.33	
		124	5620	12.30	14.30	
		132	5660	12.28	14.28	
		140	5700	12.27	14.27	
		144	5720	12.16	14.16	
	802.11n-HT20 MCS0	100	5500	12.05	14.05	96.03
		116	5580	12.10	14.10	
		124	5620	12.05	14.05	
		132	5660	12.12	14.12	
		140	5700	12.11	14.11	
		144	5720	12.09	14.09	
802.11n-HT40 MCS0	102	5510	12.11	14.11	93.41	
	110	5550	12.17	14.17		
	126	5630	12.18	14.18		
	134	5670	12.27	14.27		
	142	5710	12.06	14.06		
	100	5500	11.99	13.99		
802.11ac- VHT20 MCS0	116	5580	12.04	14.04	92.54	
	124	5620	12.12	14.12		
	132	5660	12.10	14.10		
	140	5700	12.05	14.05		
	144	5720	12.03	14.03		
	102	5510	12.06	14.06		
802.11ac- VHT40 MCS0	110	5550	12.12	14.12	87.23	
	126	5630	12.17	14.17		
	134	5670	12.23	14.23		
	142	5710	12.01	14.01		
802.11ac- VHT80 MCS0	106	5530	7.82	9.82	80.82	
	122	5610	11.20	13.20		
138	5690	11.22	13.22			

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.8GHz WLAN	802.11a 6Mbps	149	5745	13.14	15.14	97.59
		157	5785	13.26	15.26	
		165	5825	13.14	15.14	
	802.11n-HT20 MCS0	149	5745	13.07	15.07	96.03
		157	5785	13.16	15.16	
		165	5825	12.99	14.99	
	802.11n-HT40 MCS0	151	5755	13.06	15.06	93.41
		159	5795	13.10	15.10	
	802.11ac- VHT20 MCS0	149	5745	13.01	15.01	92.54
		157	5785	13.10	15.10	
		165	5825	12.93	14.93	
	802.11ac- VHT40 MCS0	151	5755	13.01	15.01	87.23
159		5795	13.05	15.05		
802.11ac- VHT80 MCS0	155	5775	11.98	13.98	80.82	



Reduced Power Level 1 for Hotspot

2.4GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
2.4GHz WLAN	802.11b 1Mbps	1	2412	20.77	22.77	99.31
		6	2437	20.76	22.76	
		11	2462	20.86	22.86	
	802.11g 6Mbps	1	2412	19.37	21.37	98.31
		6	2437	19.47	21.47	
		11	2462	19.46	21.46	
	802.11n-HT20 MCS0	1	2412	19.31	21.31	96.52
		6	2437	19.31	21.31	
		11	2462	19.41	21.41	
802.11n-HT40 MCS0	3	2422	17.97	19.97	92.29	
	6	2437	18.02	20.02		
	9	2452	17.91	19.91		

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.2GHz WLAN	802.11a 6Mbps	36	5180	19.93	21.93	97.59
		40	5200	19.91	21.91	
		44	5220	19.84	21.84	
		48	5240	19.87	21.87	
	802.11n-HT20 MCS0	36	5180	19.75	21.75	96.03
		40	5200	19.72	21.72	
		44	5220	19.69	21.69	
		48	5240	19.59	21.59	
	802.11n-HT40 MCS0	38	5190	18.58	20.58	93.41
		46	5230	19.63	21.63	
	802.11ac-VHT20 MCS0	36	5180	19.69	21.69	92.54
		40	5200	19.65	21.65	
		44	5220	19.63	21.63	
		48	5240	19.53	21.53	
	802.11ac-VHT40 MCS0	38	5190	18.57	20.57	87.23
		46	5230	19.58	21.58	
	802.11ac-VHT80 MCS0	42	5210	17.70	19.70	80.82

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.8GHz WLAN	802.11a 6Mbps	149	5745	18.17	20.17	97.59
		157	5785	18.33	20.33	
		165	5825	18.18	20.18	
	802.11n-HT20 MCS0	149	5745	18.15	20.15	96.03
		157	5785	18.21	20.21	
		165	5825	18.03	20.03	
	802.11n-HT40 MCS0	151	5755	18.14	20.14	93.41
		159	5795	18.22	20.22	
	802.11ac-VHT20 MCS0	149	5745	18.08	20.08	92.54
		157	5785	18.16	20.16	
		165	5825	17.98	19.98	
	802.11ac-VHT40 MCS0	151	5755	18.07	20.07	87.23
		159	5795	18.10	20.10	
	802.11ac-VHT80 MCS0	155	5775	17.08	19.08	80.82



Reduced Power Level 2 for Hotspot

2.4GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dbm)	Tune-Up Limit	Duty Cycle %	
2.4GHz WLAN	802.11b 1Mbps	1	2412	18.72	20.72	99.31
		6	2437	18.76	20.76	
		11	2462	18.86	20.86	
	802.11g 6Mbps	1	2412	17.27	19.27	98.31
		6	2437	17.27	19.27	
		11	2462	17.41	19.41	
	802.11n-HT20 MCS0	1	2412	17.31	19.31	96.52
		6	2437	17.32	19.32	
		11	2462	17.41	19.41	
802.11n-HT40 MCS0	3	2422	15.96	17.96	92.29	
	6	2437	15.92	17.92		
	9	2452	15.92	17.82		

Reduced Power Level 2/3 for Hotspot

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dbm)	Tune-Up Limit	Duty Cycle %	
5.2GHz WLAN	802.11a 6Mbps	36	5180	16.91	18.91	97.59
		40	5200	16.90	18.90	
		44	5220	16.83	18.83	
		48	5240	16.85	18.85	
	802.11n-HT20 MCS0	36	5180	16.73	18.73	96.03
		40	5200	16.71	18.71	
		44	5220	16.68	18.68	
		48	5240	16.58	18.58	
	802.11n-HT40 MCS0	38	5190	15.56	17.56	93.41
		46	5230	16.62	18.62	
	802.11ac-VHT20 MCS0	36	5180	16.67	18.67	92.54
		40	5200	16.64	18.64	
		44	5220	16.62	18.62	
		48	5240	16.52	18.52	
	802.11ac-VHT40 MCS0	38	5190	15.55	17.55	87.23
		46	5230	16.57	18.57	
	802.11ac-VHT80 MCS0	42	5210	14.69	16.69	80.82

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dbm)	Tune-Up Limit	Duty Cycle %	
5.8GHz WLAN	802.11a 6Mbps	149	5745	14.54	16.54	97.59
		157	5785	14.65	16.65	
		165	5825	14.51	16.51	
	802.11n-HT20 MCS0	149	5745	14.47	16.47	96.03
		157	5785	14.55	16.55	
		165	5825	12.69	14.69	
	802.11n-HT40 MCS0	151	5755	14.45	16.45	93.41
		159	5795	14.49	16.49	
	802.11ac-VHT20 MCS0	149	5745	14.41	16.41	92.54
		157	5785	14.49	16.49	
		165	5825	14.31	16.31	
	802.11ac-VHT40 MCS0	151	5755	14.41	16.41	87.23
		159	5795	14.44	16.44	
	802.11ac-VHT80 MCS0	155	5775	13.36	15.36	80.82



Reduced Power Level 2 for Handheld

2.4GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
2.4GHz WLAN	802.11b 1Mbps	1	2412	20.77	22.77	99.31
		6	2437	20.76	22.76	
		11	2462	20.86	22.86	
	802.11g 6Mbps	1	2412	19.37	21.37	98.31
		6	2437	19.47	21.47	
		11	2462	19.46	21.46	
	802.11n-HT20 MCS0	1	2412	19.31	21.31	96.52
		6	2437	19.31	21.31	
		11	2462	19.41	21.41	
802.11n-HT40 MCS0	3	2422	17.07	19.07	92.29	
	6	2437	18.02	20.02		
	9	2452	17.91	19.91		

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.2GHz WLAN	802.11a 6Mbps	36	5180	17.81	19.81	97.59
		40	5200	17.74	19.74	
		44	5220	17.78	19.78	
		48	5240	17.80	19.80	
	802.11n-HT20 MCS0	36	5180	17.68	19.68	96.03
		40	5200	17.65	19.65	
		44	5220	17.62	19.62	
		48	5240	17.52	19.52	
	802.11n-HT40 MCS0	38	5190	16.51	18.51	93.41
		46	5230	17.56	19.56	
	802.11ac-VHT20 MCS0	36	5180	17.62	19.62	92.54
		40	5200	17.58	19.58	
		44	5220	17.56	19.56	
		48	5240	17.46	19.46	
	802.11ac-VHT40 MCS0	38	5190	16.50	18.50	87.23
		46	5230	17.52	19.52	
	802.11ac-VHT80 MCS0	42	5210	15.64	17.64	80.82

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.3GHz WLAN	802.11a 6Mbps	52	5260	17.82	19.82	97.59
		56	5280	17.62	19.62	
		60	5300	17.57	19.57	
		64	5320	17.64	19.64	
	802.11n-HT20 MCS0	52	5260	17.54	19.54	96.03
		56	5280	17.48	19.48	
		60	5300	17.35	19.35	
		64	5320	17.43	19.43	
	802.11n-HT40 MCS0	54	5270	17.50	19.50	93.41
		62	5310	14.07	16.07	
	802.11ac-VHT20 MCS0	52	5260	17.48	19.48	92.54
		56	5280	17.42	19.42	
		60	5300	17.29	19.29	
		64	5320	17.37	19.37	
	802.11ac-VHT40 MCS0	54	5270	17.46	19.46	87.23
		62	5310	14.06	16.06	
	802.11ac-VHT80 MCS0	58	5290	13.46	15.46	80.82

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
802.11a 6Mbps	100	5500	16.29	18.29	97.59	
	116	5580	16.35	18.35		
	124	5620	16.31	18.31		
	132	5660	16.30	18.30		
	140	5700	16.29	18.29		
	144	5720	16.18	18.18		
	100	5500	16.06	18.06		96.03
	116	5580	16.12	18.12		
	124	5620	16.06	18.06		
	132	5660	16.10	18.10		
	140	5700	16.13	18.13		
	144	5720	16.11	18.11		
802.11n-HT40 MCS0	102	5510	16.12	18.12	93.41	
	110	5550	16.19	18.19		
	126	5630	16.21	18.21		
	134	5670	16.30	18.30		
	142	5710	16.08	18.08		
	100	5500	16.00	18.00		92.54
116	5580	16.06	18.06			
124	5620	16.13	18.13			
132	5660	16.11	18.11			
140	5700	16.07	18.07			
144	5720	16.05	18.05			
802.11ac-VHT40 MCS0	102	5510	16.07	18.07	87.23	
	110	5550	16.14	18.14		
	126	5630	16.18	18.18		
	134	5670	16.25	18.25		
	142	5710	16.03	18.03		
	106	5530	11.83	13.83		80.82
122	5610	15.22	17.22			
802.11ac-VHT80 MCS0	138	5690	15.24	17.24		

5GHz WLAN		Ant 1+2				
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
5.8GHz WLAN	802.11a 6Mbps	149	5745	17.20	19.20	97.59
		157	5785	17.32	19.32	
		165	5825	17.19	19.19	
	802.11n-HT20 MCS0	149	5745	17.14	19.14	96.03
		157	5785	17.23	19.23	
		165	5825	17.05	19.05	
	802.11n-HT40 MCS0	151	5755	17.12	19.12	93.41
		159	5795	17.16	19.16	
	802.11ac-VHT20 MCS0	149	5745	17.08	19.08	92.54
		157	5785	17.16	19.16	
		165	5825	16.98	18.98	
	802.11ac-VHT40 MCS0	151	5755	17.08	19.08	87.23
		159	5795	17.11	19.11	
	802.11ac-VHT80 MCS0	155	5775	16.03	18.03	80.82



Appendix F. Supplemental Tuner Head & Body SAR Results

The results are shown as follows.

RF exposure position										Aperture 00																		
										Average Value of This Group (dBm)																		
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RF Slew	RF Offset	Tot Position	Spacing	Measurement ID (MHz)	0	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128		
WLAN_Ant1 Head	WCDMA_V_LAT	WCDMA_V_LAT	Full Power	4102	WCDMA	N/A	N/A	L8 Channel	Down	0.000	0	0	0.001	0.008	0.016	0	0.064	0	0	0	0.128	0.192	0.256	0.320	0	0.512	0	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RF Slew	RF Offset	Tot Position	Spacing	Measurement ID (MHz)	0	8	17	25	33	41	49	57	65	73	81	89	97	105	113	121	129	
	LTE Band 12, L4T	UM-QPSK	Full Power	3340	LTE-L	1	40	L8 Channel	Down	0.714	0.112	0.112	0	0.040	0	0	0	0	0	0	0.008	0	0	0	0	0	0	0
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RF Slew	RF Offset	Tot Position	Spacing	Measurement ID (MHz)	0	10	18	26	34	42	50	58	66	74	82	90	98	106	114	122	130	
	LTE Band 5, L4T	UM-QPSK	Full Power	3300	WCDMA	1	0	L8 Channel	Down	0.740	0	0.008	0	0.127	0.142	0	0.06	0	0.001	0	0.008	0	0.142	0.156	0	0	0	0
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RF Slew	RF Offset	Tot Position	Spacing	Measurement ID (MHz)	0	11	19	27	35	43	51	59	67	75	83	91	99	107	115	123	131	139
	LTE Band 26, L4T	UM-QPSK	Full Power	3680	LTE-L	1	0	L8 Channel	Down	0.740	0	0.140	0	0	0.142	0.008	0	0.001	0	0.112	0	0	0.008	0.040	0.040	0	0.040	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RF Slew	RF Offset	Tot Position	Spacing	Measurement ID (MHz)	0	13	20	28	36	44	52	60	68	76	84	92	100	108	116	124	132	140
	WCDMA_V_LAT	WCDMA_V_LAT	Full Power	4202	WCDMA	N/A	N/A	Band	Down	0.000	0.007	0.170	0.070	0.177	0	0.2	0.040	0.008	0.148	0.070	0.167	0.008	0.007	0	0.001	0.116	0	0.008
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RF Slew	RF Offset	Tot Position	Spacing	Measurement ID (MHz)	0	13	21	29	37	45	53	61	69	77	85	93	101	109	117	125	133	141
LTE Band 12, L4T	UM-QPSK	Full Power	3340	LTE-L	1	40	Band	Down	0.221	0.211	0	0	0	0	0	0	0	0	0.008	0	0	0	0	0	0	0	0	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RF Slew	RF Offset	Tot Position	Spacing	Measurement ID (MHz)	0	14	22	30	38	46	54	62	70	78	86	94	102	110	118	126	134	142	
LTE Band 5, L4T	UM-QPSK	Full Power	3300	WCDMA	1	0	Band	Down	0.000	0.001	0.007	0.000	0.104	0	0	0	0	0.040	0.112	0.001	0.040	0.117	0.117	0	0	0	0.001	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RF Slew	RF Offset	Tot Position	Spacing	Measurement ID (MHz)	0	15	23	31	39	47	55	63	71	79	87	95	103	111	119	127	135	143	
LTE Band 26, L4T	UM-QPSK	Full Power	3680	WCDMA	1	0	Band	Down	0.000	0.141	0.04	0.114	0.104	0	0.008	0	0	0.001	0.108	0.008	0.114	0.008	0	0	0	0	0.001	

Aperture 03														Aperture 04																						
Average Value of Thin Resin (Wt%)														Average Value of Thin Resin (Wt%)																						
0	5	10	15	20	25	30	35	40	45	50	55	60	65	0	5	10	15	20	25	30	35	40	45	50	55	60	65									
0.125	0.098	0	0.047	0	0.044	0	0	0	0.143	0.050	0	0.042	0	0.048	0	0	0	0.048	0.076	0	0	0	0.130	0	0	0	0.040	0.040	0	0.040	0	0	0			
1	5	17	25	33	41	49	57	65	73	81	89	97	105	113	121	129	137	1	5	17	25	33	41	49	57	65	73	81	89	97	105	113	121	129	137	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	10	18	26	34	42	50	58	66	74	82	90	98	106	114	122	130	138	2	10	18	26	34	42	50	58	66	74	82	90	98	106	114	122	130	138	
0.16	0	0	0	0	0	0	0	0	0.148	0	0	0	0	0	0	0	0	0.150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
140	171	178	187	195	203	211	218	227	235	243	251	259	267	275	283	291	299	310	328	330	339	347	355	363	371	379	387	395	403	411	419	427	435	443	451	
0.147	0	0	0	0	0	0	0	0.050	0	0.042	0	0	0	0	0	0	0	0.142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	12	20	28	36	44	52	60	68	76	84	92	100	108	116	124	132	140	4	12	20	28	36	44	52	60	68	76	84	92	100	108	116	124	132	140	
0.099	0	0.057	0	0.039	0.075	0	0.211	0	0.039	0	0.030	0	0.045	0	0	0.140	0	0.040	0	0.040	0	0.02	0	0.17	0	0.04	0	0	0.04	0	0	0.04	0	0	0.04	0
5	13	21	29	37	45	53	61	69	77	85	93	101	109	117	125	133	141	5	13	21	29	37	45	53	61	69	77	85	93	101	109	117	125	133	141	
0	0	0	0	0	0	0	0	0	0.045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	14	22	30	38	46	54	62	70	78	86	94	102	110	118	126	134	142	6	14	22	30	38	46	54	62	70	78	86	94	102	110	118	126	134	142	
0.039	0	0.030	0	0.11	0	0	0	0.148	0	0.040	0	0.075	0	0	0	0	0.141	0	0	0	0	0	0	0	0	0	0	0	0	0	0.142	0	0	0	0	0
7	15	23	31	39	47	55	63	71	79	87	95	103	111	119	127	135	143	7	15	23	31	39	47	55	63	71	79	87	95	103	111	119	127	135	143	
0.176	0	0.030	0	0.049	0	0	0	0.172	0	0.040	0	0.040	0	0	0	0	0.141	0	0	0	0	0	0	0	0	0	0	0	0	0	0.040	0	0.040	0	0	0

Aperture 11														Aperture 12																					
Average Value of Thin Runway (MHz)														Average Value of Thin Runway (MHz)																					
0	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	0	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136
0.06	0.06	0	0	0	0.06	0	0	0	0.07	0	0	0.06	0	0.06	0	0	0	0	0.02	0	0	0	0.10	0	0	0	0	0	0	0.04	0	0	0		
1	9	17	25	33	41	49	57	65	73	81	89	97	105	113	121	129	137	1	9	17	25	33	41	49	57	65	73	81	89	97	105	113	121	129	137
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	10	18	26	34	42	50	58	66	74	82	90	98	106	114	122	130	138	2	10	18	26	34	42	50	58	66	74	82	90	98	106	114	122	130	138
0.12	0	0	0	0	0.04	0	0	0	0.15	0	0	0	0	0	0	0	0	0.02	0	0	0	0	0.02	0	0	0	0.11	0	0	0	0.04	0	0	0	
3	11	19	27	35	43	51	59	67	75	83	91	99	107	115	123	131	139	3	11	19	27	35	43	51	59	67	75	83	91	99	107	115	123	131	139
0.15	0	0	0	0	0	0	0	0	0.15	0	0	0	0	0	0	0	0	0.12	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	
4	12	20	28	36	44	52	60	68	76	84	92	100	108	116	124	132	140	4	12	20	28	36	44	52	60	68	76	84	92	100	108	116	124	132	140
0.20	0	0.04	0	0.10	0	0.16	0	0.22	0	0.28	0	0.34	0	0.40	0	0.46	0	0.20	0	0	0	0	0.10	0	0.17	0	0.24	0	0.31	0	0	0	0	0.37	0
5	13	21	29	37	45	53	61	69	77	85	93	101	109	117	125	133	141	5	13	21	29	37	45	53	61	69	77	85	93	101	109	117	125	133	141
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	14	22	30	38	46	54	62	70	78	86	94	102	110	118	126	134	142	6	14	22	30	38	46	54	62	70	78	86	94	102	110	118	126	134	142
0.26	0	0	0	0.10	0	0	0	0.16	0	0.22	0	0.28	0	0.34	0	0.40	0	0.26	0	0	0	0	0.10	0	0.17	0	0.24	0	0	0.31	0	0	0.38	0	0
7	15	23	31	39	47	55	63	71	79	87	95	103	111	119	127	135	143	7	15	23	31	39	47	55	63	71	79	87	95	103	111	119	127	135	143
0.31	0	0	0	0.13	0	0	0	0.19	0	0	0	0.25	0	0	0	0	0	0.31	0	0	0	0	0.13	0	0.2	0	0.27	0	0	0.34	0	0	0.41	0	0

RF exposure position											Aperture 00										
											Average Value of Time Sweep (W/kg)										
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	0	14	28	42	56	70	84	98	112	126	140	
WWAN_Ant 2 Head	WCDMA IV_UAT	RMC 12.2Kbps	Standalone&Simul	1413	1732.6	N/A	N/A	Right Tilted	0mm	0.709	0.166	0.134	0.096	0.208	0.356	0.042	0.187	0.092	0.307	0.1	0.13
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	1	15	29	43	57	71	85	99	113	127	141
	WCDMA II_UAT	RMC 12.2Kbps	Standalone&Simul	9538	1907.6	N/A	N/A	Right Cheek	0mm	0.656	0.144	0.11	0.05	0.213	0.137	0	0.113	0.073	0.261	0.363	0.071
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	2	16	30	44	58	72	86	100	114	128	142
	LTE Band 66_UAT	20M-QPSK	Standalone&Simul	132572	1770	50	24	Right Tilted	0mm	0.572	0.162	0.097	0.068	0.132	0.159	0.516	0.117	0.123	0.16	0.336	0.059
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	3	17	31	45	59	73	87	101	115	129	143
	LTE Band 2_UAT	20M-QPSK	Standalone&Simul	18900	1880	50	24	Right Tilted	0mm	0.591	0.188	0.131	0.051	0.429	0.143	0.352	0.106	0.073	0.179	0.21	0.076
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	4	18	32	46	60	74	88	102	116	130	0
	LTE Band 7_UAT	20M-QPSK	Standalone&Simul	21100	2535	50	24	Right Tilted	0mm	0.758	0.249	0.119	0.335	0.265	0.52	0.196	0.589	0.274	0.499	0.43	0.096
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	5	19	33	47	61	75	89	103	117	131	1
	LTE Band 41_UAT	20M-QPSK	Standalone&Simul	40620	2593	50	24	Right Tilted	0mm	0.662	0.228	0.154	0.39	0.262	0.465	0.195	0.476	0.244	0.194	0.361	0.085
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	6	20	34	48	62	76	90	104	118	132	2
	LTE Band 41(HPUe)	20M-QPSK	Standalone&Simul	41490	2680	50	24	Right Tilted	0mm	0.763	0.376	0.304	0.606	0.44	0.63	0.289	0.389	0.435	0.304	0.61	0.584
	WWAN_Ant 2 Body	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	7	21	35	49	63	77	91	105	119	133
WCDMA IV_UAT		RMC 12.2Kbps	Hotspot	1513	1752.6	N/A	N/A	Top Side	10mm	0.591	0.187	0.136	0.052	0.171	0.304	0.279	0.281	0.055	0.365	0.065	0.179
Band		Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	8	22	36	50	64	78	92	106	120	134	4
WCDMA II_UAT		RMC 12.2Kbps	Hotspot	9538	1907.6	N/A	N/A	Top Side	10mm	0.577	0.051	0.063	0.066	0.051	0.059	0.042	0.046	0.044	0.058	0.043	0
Band		Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	9	23	37	51	65	79	93	107	121	135	5
LTE Band 66_UAT		20M-QPSK	Hotspot	132572	1770	1	0	Top Side	10mm	0.611	0.138	0.133	0.601	0.125	0.244	0.246	0.206	0.053	0.26	0.07	0.242
Band		Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	10	24	38	52	66	80	94	108	122	136	6
LTE Band 2_UAT		20M-QPSK	Hotspot	19100	1900	50	24	Top Side	10mm	0.58	0.148	0.19	0.511	0.079	0.097	0.252	0.129	0.321	0.124	0.371	0.241
Band		Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	11	25	39	53	67	81	95	109	123	137	7
LTE Band 7_UAT		20M-QPSK	Hotspot	21350	2560	50	24	Top Side	10mm	0.665	0.256	0.554	0.31	0.624	0.321	0.184	0.377	0.263	0.555	0.265	0.409
Band		Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	12	26	40	54	68	82	96	110	124	138	8
LTE Band 41_UAT		20M-QPSK	Hotspot	41490	2680	50	24	Top Side	10mm	0.569	0.28	0.136	0.274	0.126	0.276	0.181	0.413	0.223	0.495	0.222	0.314
Band		Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	13	27	41	55	69	83	97	111	125	139	9
LTE Band 41(HPUe)		20M-QPSK	Hotspot	41490	2680	1	99	Top Side	10mm	0.695	0.328	0.077	0.303	0.207	0.448	0.248	0.467	0.283	0.538	0.26	0.332

RF exposure position										Aperture 00											
										Average Value of Time Sweep (W/kg)											
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	0	14	28	42	56	70	84	98	112	126	140	
WCDMA IV_LAT	RMC 12.2Kbps	Full Power	1413	1732.6	N/A	N/A	Left Cheek	0mm	0.17	0	0.09	0	0	0.068	0	0.042	0.064	0	0	0	140
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	1	15	29	43	57	71	85	99	113	127	141	
WCDMA II_LAT	RMC 12.2Kbps	Full Power	9538	1907.6	N/A	N/A	Left Cheek	0mm	0.138	0	0.075	0.096	0.048	0.05	0	0.046	0.074	0	0.046	0	142
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	2	16	30	44	58	72	86	100	114	128	142	
LTE Band 66_LAT	20M-QPSK	Full Power	132572	1745	1	0	Left Cheek	0mm	0.119	0	0.041	0	0	0.011	0	0	0	0	0	0	143
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	3	17	31	45	59	73	87	101	115	129	143	
LTE Band 2_LAT	20M-QPSK	Full Power	19100	1900	1	0	Left Cheek	0mm	0.111	0	0.057	0.077	0	0	0	0	0.07	0	0	0	144
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	4	18	32	46	60	74	88	102	116	130	0	
LTE Band 7_LAT	20M-QPSK	Full Power	21100	2535	1	0	Right Cheek	0mm	0.394	0.118	0.065	0.212	0.149	0.317	0.139	0.339	0.246	0.371	0.276	0.044	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	5	19	33	47	61	75	89	103	117	131	1	
LTE Band 41_LAT	20M-QPSK	Full Power	40620	2593	1	99	Right Cheek	0mm	0.183	0.075	0.048	0.112	0.091	0.173	0.083	0.167	0.122	0	0.139	0	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	6	20	34	48	62	76	90	104	118	132	2	
LTE Band 41(HPU)	20M-QPSK	Full Power	40620	2593	1	99	Right Cheek	0mm	0.236	0.197	0.156	0.225	0.226	0.187	0.217	0.081	0.234	0.093	0.202	0.137	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	7	21	35	49	63	77	91	105	119	133	3	
WCDMA IV_LAT	RMC 12.2Kbps	Hotspot	1513	1752.6	N/A	N/A	Bottom Side	10mm	0.798	0.286	0.484	0.209	0.167	0.099	0.165	0.536	0.178	0.107	0	0.255	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	8	22	36	50	64	78	92	106	120	134	4	
WCDMA II_LAT	RMC 12.2Kbps	Hotspot	9538	1907.6	N/A	N/A	Bottom Side	10mm	0.695	0.322	0.627	0.125	0.216	0.563	0.232	0.432	0.138	0.099	0.066	0.244	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	9	23	37	51	65	79	93	107	121	135	5	
LTE Band 66_LAT	20M-QPSK	Hotspot	132572	1770	50	24	Bottom Side	10mm	0.661	0.656	0.416	0.102	0.12	0.321	0.152	0.279	0.063	0.06	0	0.216	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	10	24	38	52	66	80	94	108	122	136	6	
LTE Band 2_LAT	20M-QPSK	Full Power	18900	1880	1	0	Bottom Side	10mm	0.749	0.573	0.585	0.17	0.179	0.321	0.304	0.329	0.05	0.091	0.412	0.286	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	11	25	39	53	67	81	95	109	123	137	7	
LTE Band 7_LAT	20M-QPSK	Hotspot	21100	2535	1	0	Back	10mm	0.827	0.212	0.569	0.426	0.748	0.674	0.188	0.558	0.258	0.652	0.485	0.467	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	12	26	40	54	68	82	96	110	124	138	8	
LTE Band 41_LAT	20M-QPSK	Full Power	41490	2680	1	99	Back	10mm	0.493	0.306	0.407	0.398	0.186	0.403	0.26	0.414	0.262	0.284	0.346	0.389	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	13	27	41	55	69	83	97	111	125	139	9	
LTE Band 41(HPU)	20M-QPSK	Full Power	41490	2680	1	99	Back	10mm	0.636	0.402	0.189	0.495	0.329	0.483	0.381	0.453	0.406	0.373	0.457	0.16	