



REPORT No.: SZ23120301S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

The target power was recorded in the manufacturer's document.

Full Power

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5	
	Tx Channel	128	189		251	128	189			251
	Frequency (MHz)	824.2	836.4		848.8	824.2	836.4			848.8
GSM 1 Tx slot	32.40	32.54	32.51	33.50	23.40	23.54	23.51	24.50	0.18	
GPRS 1 Tx slot	32.41	32.58	32.55	33.50	23.41	23.58	23.55	24.50		
GPRS 2 Tx slots	31.66	31.91	31.87	32.50	25.66	25.91	25.87	26.50	0.25	
GPRS 3 Tx slots	29.65	29.95	29.90	30.50	25.39	25.69	25.64	26.24	0.30	
GPRS 4 Tx slots	28.54	28.73	28.69	29.50	25.54	25.73	25.69	26.50	0.19	
EDGE 1 Tx slot	27.53	27.76	27.74	28.50	18.53	18.76	18.74	19.50	0.23	
EDGE 2 Tx slots	26.39	26.57	26.52	27.50	20.39	20.57	20.52	21.50	0.18	
EDGE 3 Tx slots	24.15	24.34	24.29	25.00	19.89	20.08	20.03	20.74	0.19	
EDGE 4 Tx slots	22.98	23.12	23.10	24.00	19.98	20.12	20.10	21.00	0.14	
Mode		Max.	32.58			Max.	25.91			
Attenuator	Cable Loss : 0.4									

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5	
	Tx Channel	512	661		810	512	661			810
	Frequency (MHz)	1850.2	1880		1909.8	1850.2	1880			1909.8
GSM 1 Tx slot	29.58	29.56	29.45	30.50	20.58	20.56	20.45	21.50	0.16	
GPRS 1 Tx slot	29.61	29.58	29.46	30.50	20.61	20.58	20.46	21.50		
GPRS 2 Tx slots	28.76	28.61	28.52	29.50	22.76	22.61	22.52	23.50	0.24	
GPRS 3 Tx slots	26.90	26.73	26.59	27.50	22.64	22.47	22.33	23.24	0.31	
GPRS 4 Tx slots	25.69	25.72	25.66	26.50	22.69	22.72	22.66	23.50	0.06	
EDGE 1 Tx slot	26.53	26.58	26.45	27.50	17.53	17.58	17.45	18.50	0.13	
EDGE 2 Tx slots	25.40	25.36	25.23	26.00	19.40	19.36	19.23	20.00	0.17	
EDGE 3 Tx slots	23.51	23.39	23.30	24.50	19.25	19.13	19.04	20.24	0.21	
EDGE 4 Tx slots	22.32	22.28	22.17	23.00	19.32	19.28	19.17	20.00	0.15	
Mode		Max.	29.61			Max.	22.76			
Attenuator	Cable Loss : 0.8									

Band	WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			Tune-up Limit (dBm)	
	Tx Channel	9262	9400		9538	1312	1413		1513	4132	4182		4233
	Rx Channel	9662	9800		9938	1537	1638		1738	4357	4407		4458
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6	826.4	836.4	846.6			
3GPP Rel 99	RMC 12.2Kbps	22.74	22.75	22.61	23.50	22.80	22.91	22.82	23.50	23.14	23.16	23.13	24.00
3GPP Rel 5	HSDPA Subtest-1	22.04	22.02	21.99	23.00	21.81	21.92	21.88	22.50	22.12	21.11	22.17	23.00
3GPP Rel 5	HSDPA Subtest-2	21.99	22.00	21.95	23.00	21.86	21.96	21.83	22.50	22.13	21.07	22.10	23.00
3GPP Rel 5	HSDPA Subtest-3	21.53	21.50	21.48	22.50	21.28	21.42	21.40	22.50	21.70	21.59	21.52	22.50
3GPP Rel 5	HSDPA Subtest-4	21.52	21.50	21.42	22.50	21.31	21.40	21.43	22.50	21.66	21.44	21.51	22.50
3GPP Rel 6	HSUPA Subtest-1	21.34	21.40	21.41	22.50	21.29	21.43	21.97	22.50	21.51	21.47	21.54	22.50
3GPP Rel 6	HSUPA Subtest-2	21.86	21.94	21.90	22.50	21.83	21.95	22.00	22.50	22.03	21.91	22.20	23.00
3GPP Rel 6	HSUPA Subtest-3	20.99	20.95	20.84	21.50	20.73	20.99	20.93	21.50	21.08	20.94	21.00	22.50
3GPP Rel 6	HSUPA Subtest-4	21.81	21.94	21.81	22.50	21.73	21.95	21.89	22.50	22.03	21.96	22.18	22.50
3GPP Rel 6	HSUPA Subtest-5	20.96	20.93	20.78	21.50	20.67	20.93	20.93	21.50	21.02	20.99	21.06	22.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.82	20.91	20.74	21.50	20.84	20.88	20.84	21.50	20.89	20.93	21.02	22.00
Attenuator		Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6		
Mode		Max.	22.75			Max.	22.91			Max.	23.16		

Band 2 (1900MHz Band) (dBm)							
Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	22.72	22.81	22.68	
20	QPSK	1	49	22.64	22.70	22.60	23.5
20	QPSK	1	99	22.66	22.72	22.63	
20	QPSK	50	0	21.65	21.73	21.61	
20	QPSK	50	24	21.61	21.66	21.57	22.5
20	QPSK	50	50	21.54	21.62	21.50	
20	QPSK	100	0	21.57	21.60	21.54	
20	16QAM	1	0	21.93	21.99	21.89	22.5
20	16QAM	1	49	21.86	21.91	21.81	
20	16QAM	1	99	21.87	21.88	21.83	
20	16QAM	50	0	20.89	20.90	20.84	21.5
20	16QAM	50	24	20.86	20.88	20.79	
20	16QAM	50	50	20.80	20.87	20.76	
20	16QAM	100	0	20.82	20.85	20.80	21.5
20	64QAM	1	0	20.94	20.96	20.87	
20	64QAM	1	49	20.87	20.84	20.79	
20	64QAM	1	99	20.81	20.84	20.83	20.5
20	64QAM	50	0	19.87	19.89	19.82	
20	64QAM	50	24	19.80	19.85	19.73	
20	64QAM	50	50	19.82	19.79	19.70	20.5
20	64QAM	100	0	19.81	19.83	19.76	
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	22.70	22.79	22.63	
15	QPSK	1	37	22.61	22.69	22.61	
15	QPSK	1	74	22.65	22.72	22.57	
15	QPSK	36	0	21.75	21.76	21.67	
15	QPSK	36	20	21.54	21.53	21.52	22.5
15	QPSK	36	39	21.51	21.60	21.50	
15	QPSK	75	0	21.57	21.57	21.59	
15	16QAM	1	0	21.93	21.97	21.91	22.5
15	16QAM	1	37	21.72	21.94	21.83	
15	16QAM	1	74	21.92	21.81	21.90	
15	16QAM	36	0	20.81	20.87	20.84	21.5
15	16QAM	36	20	20.79	20.97	20.76	
15	16QAM	36	39	20.80	20.76	20.73	
15	16QAM	75	0	20.78	20.86	20.76	21.5
15	64QAM	1	0	20.81	20.88	20.79	
15	64QAM	1	37	20.84	20.74	20.81	
15	64QAM	1	74	20.82	20.69	20.83	20.5
15	64QAM	36	0	19.87	19.90	19.82	
15	64QAM	36	20	19.81	19.86	19.76	
15	64QAM	36	39	19.84	19.82	19.61	20.5
15	64QAM	75	0	19.82	19.80	19.67	
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.75	22.76	22.64	
10	QPSK	1	25	22.74	22.72	22.57	
10	QPSK	1	49	22.69	22.64	22.55	
10	QPSK	25	0	21.67	21.73	21.67	
10	QPSK	25	12	21.53	21.60	21.62	22.5
10	QPSK	25	25	21.64	21.62	21.60	
10	QPSK	50	0	21.62	21.54	21.49	
10	16QAM	1	0	21.89	21.92	21.89	22.5
10	16QAM	1	25	21.83	21.79	21.86	
10	16QAM	1	49	21.86	21.88	21.87	
10	16QAM	25	0	20.98	20.99	20.94	21.5
10	16QAM	25	12	20.80	20.78	20.78	
10	16QAM	25	25	20.82	20.96	20.85	
10	16QAM	50	0	20.88	20.79	20.74	21.5
10	64QAM	1	0	20.79	21.01	20.75	
10	64QAM	1	25	20.76	20.79	20.88	
10	64QAM	1	49	20.79	20.87	20.89	20.5
10	64QAM	25	0	19.77	19.91	19.86	
10	64QAM	25	12	19.67	19.89	19.80	
10	64QAM	25	25	19.85	19.87	19.69	20.5
10	64QAM	50	0	19.90	19.78	19.71	
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	22.70	22.77	22.69	
5	QPSK	1	12	22.60	22.57	22.57	
5	QPSK	1	24	22.66	22.59	22.58	
5	QPSK	12	0	21.68	21.71	21.54	
5	QPSK	12	7	21.48	21.64	21.50	22.5
5	QPSK	12	13	21.44	21.56	21.46	
5	QPSK	25	0	21.53	21.70	21.50	
5	16QAM	1	0	21.91	21.98	21.85	22.5
5	16QAM	1	12	21.95	21.93	21.83	
5	16QAM	1	24	21.79	21.79	21.83	
5	16QAM	12	0	20.77	20.82	20.72	21.5
5	16QAM	12	7	20.73	20.88	20.73	
5	16QAM	12	13	20.69	20.91	20.71	
5	16QAM	25	0	20.80	20.91	20.74	21.5
5	64QAM	1	0	21.03	20.92	20.78	
5	64QAM	1	12	20.93	20.79	20.84	
5	64QAM	1	24	20.81	20.75	20.78	20.5
5	64QAM	12	0	19.83	19.81	19.75	
5	64QAM	12	7	19.66	19.92	19.72	
5	64QAM	12	13	19.75	19.79	19.71	20.5
5	64QAM	25	0	19.77	19.91	19.66	
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	22.67	22.75	22.71	
3	QPSK	1	8	22.63	22.67	22.69	
3	QPSK	1	14	22.63	22.64	22.66	
3	QPSK	8	0	21.73	21.79	21.52	
3	QPSK	8	4	21.56	21.63	21.59	22.5
3	QPSK	8	7	21.58	21.49	21.54	

Band 4 (AWS Band) (dBm)							
Part 27L (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.70	22.77	22.69	
20	QPSK	1	49	22.68	22.69	22.55	23.5
20	QPSK	1	99	22.67	22.67	22.68	
20	QPSK	50	0	21.72	21.75	21.60	
20	QPSK	50	24	21.60	21.52	21.66	22.5
20	QPSK	50	50	21.52	21.65	21.56	
20	QPSK	100	0	21.45	21.69	21.52	
20	16QAM	1	0	21.91	21.96	21.82	22.5
20	16QAM	1	49	21.71	21.90	21.67	
20	16QAM	1	99	21.79	21.73	21.91	
20	16QAM	50	0	20.96	20.91	20.94	21.5
20	16QAM	50	24	20.84	20.83	20.76	
20	16QAM	50	50	20.75	20.87	20.81	
20	16QAM	100	0	20.92	20.81	20.82	21.5
20	64QAM	1	0	20.92	20.98	20.97	
20	64QAM	1	49	20.89	20.97	20.88	
20	64QAM	1	99	20.72	20.80	20.83	20.5
20	64QAM	50	0	19.81	19.87	19.83	
20	64QAM	50	24	19.68	19.77	19.83	
20	64QAM	50	50	19.69	19.64	19.69	20.5
20	64QAM	100	0	19.87	19.68	19.79	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.62	22.74	22.68	
15	QPSK	1	37	22.65	22.72	22.60	
15	QPSK	1	74	22.60	22.67	22.64	
15	QPSK	36	0	21.71	21.74	21.65	
15	QPSK	36	20	21.70	21.61	21.45	22.5
15	QPSK	36	39	21.49	21.71	21.55	
15	QPSK	75	0	21.65	21.45	21.50	
15	16QAM	1	0	21.94	22.00	21.98	22.5
15	16QAM	1	37	21.85	21.84	21.89	
15	16QAM	1	74	21.88	21.83	21.87	
15	16QAM	36	0	20.78	20.96	20.91	21.5
15	16QAM	36	20	20.82	20.95	20.75	
15	16QAM	36	39	20.79	20.88	20.79	
15	16QAM	75	0	20.76	20.77	20.67	21.5
15	64QAM	1	0	20.92	20.93	20.87	
15	64QAM	1	37	20.91	20.78	20.81	
15	64QAM	1	74	20.81	20.81	20.82	20.5
15	64QAM	36	0	19.95	19.98	19.87	
15	64QAM	36	20	19.69	19.72	19.79	
15	64QAM	36	39	19.74	19.86	19.68	20.5
15	64QAM	75	0	19.84	19.93	19.68	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.74	22.75	22.68	
10	QPSK	1	25	22.71	22.66	22.48	
10	QPSK	1	49	22.72	22.63	22.67	
10	QPSK	25	0	21.60	21.67	21.55	
10	QPSK	25	12	21.54	21.65	21.48	22.5
10	QPSK	25	25	21.63	21.48	21.50	
10	QPSK	50	0	21.43	21.61	21.62	
10	16QAM	1	0	21.81	21.95	21.90	22.5
10	16QAM	1	25	21.84	21.91	21.85	
10	16QAM	1	49	21.73	21.88	21.86	
10	16QAM	25	0	20.86	20.90	20.73	21.5
10	16QAM	25	12	20.83	20.81	20.	

3	QPSK	15	0	21.64	21.52	21.51	22.5
3	16QAM	1	0	21.93	22.01	21.91	
3	16QAM	1	8	21.85	21.83	21.83	
3	16QAM	1	14	21.75	21.95	21.78	
3	16QAM	8	0	20.93	20.90	20.81	
3	16QAM	8	4	20.74	20.82	20.70	
3	16QAM	8	7	20.77	20.72	20.69	
3	16QAM	15	0	20.71	20.85	20.90	
3	64QAM	1	0	20.93	20.91	20.88	
3	64QAM	1	8	20.72	20.86	20.73	
3	64QAM	1	14	20.90	20.79	20.79	
3	64QAM	8	0	19.79	19.88	19.85	
3	64QAM	8	4	19.77	19.85	19.72	
3	64QAM	8	7	19.89	19.65	19.73	
3	64QAM	15	0	19.69	19.79	19.65	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.66	22.74	22.68	23.5
1.4	QPSK	1	3	22.71	22.80	22.66	
1.4	QPSK	1	5	22.65	22.78	22.48	
1.4	QPSK	3	0	21.51	21.76	21.60	
1.4	QPSK	3	1	21.51	21.71	21.49	
1.4	QPSK	3	3	21.46	21.65	21.57	
1.4	QPSK	6	0	21.61	21.48	21.60	22.5
1.4	16QAM	1	0	21.82	22.01	21.99	22.5
1.4	16QAM	1	3	21.75	21.85	21.80	
1.4	16QAM	1	5	21.87	21.89	21.82	
1.4	16QAM	3	0	20.90	21.00	20.84	
1.4	16QAM	3	1	20.83	20.77	20.78	
1.4	16QAM	3	3	20.82	20.88	20.81	
1.4	16QAM	6	0	20.70	20.83	20.86	21.5
1.4	64QAM	1	0	20.94	20.91	20.77	21.5
1.4	64QAM	1	3	20.74	20.75	20.82	
1.4	64QAM	1	5	20.91	20.93	20.85	
1.4	64QAM	3	0	19.92	19.75	19.92	
1.4	64QAM	3	1	19.87	19.91	19.77	
1.4	64QAM	3	3	19.78	19.78	19.77	
1.4	64QAM	6	0	19.75	19.82	19.84	20.5

3	QPSK	15	0	21.65	21.51	21.42	22.5
3	16QAM	1	0	21.93	22.00	21.84	
3	16QAM	1	8	21.71	21.76	21.90	
3	16QAM	1	14	21.85	21.95	21.78	
3	16QAM	8	0	20.84	20.86	20.79	
3	16QAM	8	4	20.90	20.80	20.81	
3	16QAM	8	7	20.73	20.82	20.78	
3	16QAM	15	0	20.72	20.88	20.70	
3	64QAM	1	0	20.94	20.95	20.77	
3	64QAM	1	8	20.86	20.76	20.79	
3	64QAM	1	14	20.89	20.75	20.87	
3	64QAM	8	0	19.84	19.85	19.86	
3	64QAM	8	4	19.90	19.83	19.81	
3	64QAM	8	7	19.69	19.65	19.70	
3	64QAM	15	0	19.67	19.87	19.61	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.70	22.73	22.54	23.5
1.4	QPSK	1	3	22.52	22.62	22.63	
1.4	QPSK	1	5	22.55	22.61	22.61	
1.4	QPSK	3	0	21.72	21.76	21.59	
1.4	QPSK	3	1	21.50	21.70	21.62	
1.4	QPSK	3	3	21.61	21.50	21.48	
1.4	QPSK	6	0	21.62	21.68	21.44	22.5
1.4	16QAM	1	0	22.00	21.84	21.88	22.5
1.4	16QAM	1	3	21.71	21.99	21.83	
1.4	16QAM	1	5	21.97	21.76	21.92	
1.4	16QAM	3	0	20.83	20.92	20.77	
1.4	16QAM	3	1	20.93	20.79	20.78	
1.4	16QAM	3	3	20.67	20.95	20.68	
1.4	16QAM	6	0	20.86	20.84	20.79	21.5
1.4	64QAM	1	0	20.80	20.84	20.82	21.5
1.4	64QAM	1	3	20.88	20.81	20.67	
1.4	64QAM	1	5	20.87	20.72	20.77	
1.4	64QAM	3	0	19.81	19.86	19.79	
1.4	64QAM	3	1	19.72	19.82	19.58	
1.4	64QAM	3	3	19.82	19.64	19.64	
1.4	64QAM	6	0	19.73	19.89	19.83	20.5

Band 5 (Cellular Band) (dBm)							
Part 22H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.24	23.30	23.18	24
10	QPSK	1	25	23.11	23.22	23.07	
10	QPSK	1	49	23.18	23.19	23.11	
10	QPSK	25	0	22.14	22.19	22.11	23
10	QPSK	25	12	22.09	22.10	22.08	
10	QPSK	25	25	22.16	22.15	22.12	
10	QPSK	50	0	22.05	22.12	22.03	23
10	16QAM	1	0	22.41	22.44	22.32	
10	16QAM	1	25	22.25	22.43	22.31	
10	16QAM	1	49	22.43	22.42	22.29	22
10	16QAM	25	0	21.34	21.37	21.33	
10	16QAM	25	12	21.30	21.27	21.32	
10	16QAM	25	25	21.29	21.27	21.25	22
10	16QAM	50	0	21.35	21.36	21.27	
10	64QAM	1	0	21.38	21.41	21.35	
10	64QAM	1	25	21.33	21.33	21.29	22
10	64QAM	1	49	21.39	21.28	21.25	
10	64QAM	25	0	20.31	20.38	20.32	
10	64QAM	25	12	20.27	20.33	20.23	21
10	64QAM	25	25	20.25	20.30	20.22	
10	64QAM	50	0	20.22	20.31	20.21	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.21	23.28	23.12	24
5	QPSK	1	12	23.01	23.11	23.11	
5	QPSK	1	24	23.15	23.19	23.09	
5	QPSK	12	0	22.07	22.22	22.07	23
5	QPSK	12	7	22.08	22.02	22.09	
5	QPSK	12	13	22.00	21.98	22.01	
5	QPSK	25	0	22.01	22.12	22.06	23
5	16QAM	1	0	22.52	22.51	22.39	
5	16QAM	1	12	22.28	22.30	22.42	
5	16QAM	1	24	22.27	22.38	22.34	22
5	16QAM	12	0	21.40	21.41	21.32	
5	16QAM	12	7	21.33	21.39	21.38	
5	16QAM	12	13	21.22	21.31	21.27	22
5	16QAM	25	0	21.35	21.31	21.24	
5	64QAM	1	0	21.45	21.49	21.44	
5	64QAM	1	12	21.31	21.35	21.30	22
5	64QAM	1	24	21.33	21.31	21.28	
5	64QAM	12	0	20.35	20.41	20.37	
5	64QAM	12	7	20.31	20.28	20.18	21
5	64QAM	12	13	20.25	20.32	20.20	
5	64QAM	25	0	20.29	20.27	20.23	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.15	23.24	23.12	24
3	QPSK	1	8	23.11	23.03	23.03	
3	QPSK	1	14	23.09	23.11	23.06	
3	QPSK	8	0	22.11	22.18	22.10	23
3	QPSK	8	4	22.01	21.99	22.08	
3	QPSK	8	7	22.08	21.97	21.91	
3	QPSK	15	0	21.94	22.11	21.98	23
3	16QAM	1	0	22.31	22.43	22.29	
3	16QAM	1	8	22.23	22.34	22.30	
3	16QAM	1	14	22.32	22.35	22.35	22
3	16QAM	8	0	21.27	21.36	21.28	
3	16QAM	8	4	21.26	21.30	21.19	
3	16QAM	8	7	21.31	21.27	21.25	22
3	16QAM	15	0	21.33	21.30	21.24	
3	64QAM	1	0	21.39	21.46	21.33	
3	64QAM	1	8	21.28	21.32	21.30	22
3	64QAM	1	14	21.37	21.33	21.35	
3	64QAM	8	0	20.33	20.38	20.33	
3	64QAM	8	4	20.28	20.31	20.36	21
3	64QAM	8	7	20.30	20.34	20.23	
3	64QAM	15	0	20.27	20.27	20.24	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.18	23.25	23.12	24
1.4	QPSK	1	3	23.05	23.17	23.04	
1.4	QPSK	1	5	23.08	23.11	23.08	
1.4	QPSK	3	0	22.09	22.24	22.17	23
1.4	QPSK	3	1	22.20	22.17	22.06	
1.4	QPSK	3	3	22.04	22.16	21.93	
1.4	QPSK	6	0	22.12	22.01	22.00	23
1.4	16QAM	1	0	22.31	22.44	22.38	
1.4	16QAM	1	3	22.32	22.28	22.36	
1.4	16QAM	1	5	22.39	22.24	22.33	23
1.4	16QAM	3	0	21.47	21.25	21.34	
1.4	16QAM	3	1	21.37	21.27	21.29	
1.4	16QAM	3	3	21.32	21.41	21.29	22
1.4	16QAM	6	0	21.29	21.33	21.32	
1.4	64QAM	1	0	21.32	21.36	21.35	
1.4	64QAM	1	3	21.36	21.30	21.37	22
1.4	64QAM	1	5	21.31	21.34	21.28	
1.4	64QAM	3	0	20.26	20.43	20.29	
1.4	64QAM	3	1	20.36	20.28	20.24	21
1.4	64QAM	3	3	20.25	20.21	20.15	
1.4	64QAM	6	0	20.37	20.30	20.31	

Band 12 (700MHz Low Band) (dBm)							
Part 27F(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	22.81	22.87	22.84	23.5
10	QPSK	1	25	22.79	22.77	22.72	
10	QPSK	1	49	22.78	22.75	22.77	
10	QPSK	25	0	21.80	21.89	21.83	22.5
10	QPSK	25	12	21.76	21.63	21.81	
10	QPSK	25	25	21.59	21.82	21.74	
10	QPSK	50	0	21.80	21.71	21.73	22.5
10	16QAM	1	0	21.89	21.94	21.89	
10	16QAM	1	25	21.86	21.87	21.90	
10	16QAM	1	49	21.80	21.88	21.79	21.5
10	16QAM	25	0	20.93	20.97	20.90	
10	16QAM	25	12	20.84	20.87	20.91	
10	16QAM	25	25	20.91	20.86	20.82	21.5
10	16QAM	50	0	20.86	20.85	20.84	
10	64QAM	1	0	20.98	20.99	20.98	
10	64QAM	1	25	20.93	20.84	20.86	21.5
10	64QAM	1	49	20.88	20.88	20.90	
10	64QAM	25	0	19.86	19.94	19.93	
10	64QAM	25	12	19.92	19.81	19.84	20.5
10	64QAM	25	25	19.87	19.87	19.86	
10	64QAM	50	0	19.88	19.80	19.87	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	22.78	22.84	22.81	23.5
5	QPSK	1	12	22.70	22.83	22.64	
5	QPSK	1	24	22.81	22.78	22.75	
5	QPSK	12	0	21.88	21.85	21.86	22.5
5	QPSK	12	7	21.79	21.78	21.78	
5	QPSK	12	13	21.83	21.76	21.65	
5	QPSK	25	0	21.66	21.68	21.64	22.5
5	16QAM	1	0	21.94	22.02	21.94	
5	16QAM	1	12	21.95	22.01	21.97	
5	16QAM	1	24	21.90	21.86	21.91	21.5
5	16QAM	12	0	21.08	21.09	21.06	
5	16QAM	12	7	20.96	21.04	21.01	
5	16QAM	12	13	20.94	21.06	20.91	21.5
5	16QAM	25	0	20.87	20.85	20.97	
5	64QAM	1	0	20.93	21.03	20.98	
5	64QAM	1	12	20.98	20.87	20.95	21.5
5	64QAM	1	24	20.94	20.91	20.87	
5	64QAM	12	0	19.90	19.99	19.92	
5	64QAM	12	7	19.83	19.97	19.76	20.5
5	64QAM	12	13	19.85	19.84	19.91	
5	64QAM	25	0	19.92	19.88	19.91	
Channel				23025	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	22.77	22.83	22.81	23.5
3	QPSK	1	8	22.72	22.81	22.79	
3	QPSK	1	14	22.67	22.78	22.71	
3	QPSK	8	0	21.79	21.82	21.71	22.5
3	QPSK	8	4	21.72	21.77	21.80	
3	QPSK	8	7	21.67	21.62	21.68	
3	QPSK	15	0	21.78	21.62	21.66	22.5
3	16QAM	1	0	21.93	21.99	21.86	
3	16QAM	1	8	21.90	21.88	21.93	
3	16QAM	1	14	21.97	21.96	21.90	21.5
3	16QAM	8	0	20.85	20.95	20.84	
3	16QAM	8	4	20.87	20.89	20.85	
3	16QAM	8	7	20.85	20.86	20.84	21.5
3	16QAM	15	0	20.83	20.88	20.86	
3	64QAM	1	0	21.18	21.13	21.07	
3	64QAM	1	8	20.87	20.94	20.92	21.5
3	64QAM	1	14	20.95	20.94	21.01	
3	64QAM	8	0	19.91	19.87	19.86	
3	64QAM	8	4	19.92	19.83	19.79	20.5
3	64QAM	8	7	19.91	19.88	19.75	
3	64QAM	15	0	19.82	19.89	19.96	

Band 17 (700MHz Band) (dBm) Part 27H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	23.5
Frequency (MHz)				709	710	711	
10	QPSK	1	0	22.70	22.74	22.67	23.5
10	QPSK	1	25	22.68	22.71	22.65	
10	QPSK	1	49	22.60	22.64	22.59	
10	QPSK	25	0	21.71	21.77	21.63	22.5
10	QPSK	25	12	21.55	21.70	21.75	
10	QPSK	25	25	21.69	21.68	21.56	
10	QPSK	50	0	21.56	21.46	21.70	22.5
10	16QAM	1	0	21.88	21.95	21.90	
10	16QAM	1	25	21.83	21.87	21.91	
10	16QAM	1	49	21.78	21.80	21.92	21.5
10	16QAM	25	0	20.87	20.86	20.85	
10	16QAM	25	12	20.81	20.77	20.88	
10	16QAM	25	25	20.84	20.82	20.85	21.5
10	16QAM	50	0	20.85	20.86	20.79	
10	64QAM	1	0	20.87	20.94	20.95	
10	64QAM	1	25	20.93	20.92	20.82	21.5
10	64QAM	1	49	20.84	20.91	20.79	
10	64QAM	25	0	19.92	19.93	19.86	
10	64QAM	25	12	19.86	19.80	19.68	20.5
10	64QAM	25	25	19.77	19.80	19.79	
10	64QAM	50	0	19.92	19.81	19.91	
Channel				23755	23790	23825	23.5
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	22.66	22.71	22.68	23.5
5	QPSK	1	12	22.69	22.68	22.63	
5	QPSK	1	24	22.61	22.67	22.55	
5	QPSK	12	0	21.66	21.69	21.55	22.5
5	QPSK	12	7	21.59	21.67	21.68	
5	QPSK	12	13	21.61	21.68	21.64	
5	QPSK	25	0	21.48	21.62	21.53	22.5
5	16QAM	1	0	21.82	21.90	21.86	
5	16QAM	1	12	21.80	21.86	21.77	
5	16QAM	1	24	21.77	21.79	21.83	21.5
5	16QAM	12	0	20.83	20.87	20.86	
5	16QAM	12	7	20.75	20.79	20.81	
5	16QAM	12	13	20.81	20.81	20.85	21.5
5	16QAM	25	0	20.77	20.86	20.81	
5	64QAM	1	0	20.85	20.96	20.90	
5	64QAM	1	12	20.78	20.92	20.73	21.5
5	64QAM	1	24	20.93	20.80	20.88	
5	64QAM	12	0	19.83	19.91	19.83	
5	64QAM	12	7	19.89	19.71	19.74	20.5
5	64QAM	12	13	19.82	19.89	19.79	
5	64QAM	25	0	19.87	19.89	19.83	

Band 25 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	23.5
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	22.83	22.87	22.84	23.5
20	QPSK	1	49	22.74	22.80	22.79	
20	QPSK	1	99	22.78	22.76	22.76	
20	QPSK	50	0	21.79	21.81	21.76	22.5
20	QPSK	50	24	21.53	21.73	21.69	
20	QPSK	50	50	21.57	21.70	21.67	
20	QPSK	100	0	21.83	21.86	21.83	22.5
20	16QAM	1	0	21.83	21.88	21.86	
20	16QAM	1	49	21.81	21.88	21.65	
20	16QAM	1	99	21.87	21.76	21.76	21.5
20	16QAM	50	0	20.79	20.86	20.66	
20	16QAM	50	24	20.84	20.84	20.73	
20	16QAM	50	50	20.81	20.78	20.72	21.5
20	16QAM	100	0	20.85	20.75	20.66	
20	64QAM	1	0	20.79	20.74	20.70	
20	64QAM	1	49	20.86	20.76	20.80	21.5
20	64QAM	1	99	20.58	20.77	20.63	
20	64QAM	50	0	19.89	19.78	19.87	
20	64QAM	50	24	19.71	19.64	19.69	20.5
20	64QAM	50	50	19.61	19.66	19.69	
20	64QAM	100	0	19.60	19.77	19.71	
Channel				26115	26365	26615	23.5
Frequency (MHz)				1857.5	1882.5	1907.5	
15	QPSK	1	0	22.66	22.69	22.65	23.5
15	QPSK	1	37	22.50	22.44	22.55	
15	QPSK	1	74	22.53	22.45	22.51	
15	QPSK	36	0	21.53	21.87	21.65	22.5
15	QPSK	36	20	21.50	21.50	21.48	
15	QPSK	36	39	21.40	21.51	21.40	
15	QPSK	75	0	21.51	21.55	21.35	22.5
15	16QAM	1	0	21.73	21.84	21.69	
15	16QAM	1	37	21.78	21.88	21.72	
15	16QAM	1	74	21.65	21.74	21.84	21.5
15	16QAM	36	0	20.70	20.63	20.89	
15	16QAM	36	20	20.75	20.78	20.66	
15	16QAM	36	39	20.68	20.77	20.67	21.5
15	16QAM	75	0	20.72	20.58	20.62	
15	64QAM	1	0	20.75	20.86	20.69	
15	64QAM	1	37	20.85	20.72	20.84	21.5
15	64QAM	1	74	20.70	20.57	20.72	
15	64QAM	36	0	19.80	19.63	19.69	
15	64QAM	36	20	19.83	19.58	19.74	20.5
15	64QAM	36	39	19.65	19.63	19.65	
15	64QAM	75	0	19.72	19.72	19.56	
Channel				26090	26365	26640	23.5
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	22.81	22.88	22.85	23.5
10	QPSK	1	25	22.56	22.62	22.53	
10	QPSK	1	49	22.51	22.55	22.56	
10	QPSK	25	0	21.62	21.69	21.61	22.5
10	QPSK	25	12	21.48	21.57	21.43	
10	QPSK	25	25	21.56	21.56	21.53	
10	QPSK	50	0	21.47	21.58	21.54	22.5
10	16QAM	1	0	21.80	21.83	21.79	
10	16QAM	1	25	21.69	21.73	21.83	
10	16QAM	1	49	21.67	21.61	21.67	21.5
10	16QAM	25	0	20.77	20.82	20.85	
10	16QAM	25	12	20.65	20.76	20.70	
10	16QAM	25	25	20.58	20.75	20.67	21.5
10	16QAM	50	0	20.79	20.82	20.69	
10	64QAM	1	0	20.73	20.83	20.82	
10	64QAM	1	25	20.69	20.68	20.78	21.5
10	64QAM	1	49	20.76	20.65	20.76	
10	64QAM	25	0	19.81	19.85	19.70	
10	64QAM	25	12	19.64	19.58	19.74	20.5
10	64QAM	25	25	19.74	19.70	19.60	
10	64QAM	50	0	19.79	19.76	19.75	
Channel				26065	26365	26665	23.5
Frequency (MHz)				1852.5	1882.5	1912.5	
5	QPSK	1	0	22.63	22.66	22.61	23.5
5	QPSK	1	12	22.62	22.59	22.44	
5	QPSK	1	24	22.62	22.49	22.52	
5	QPSK	12	0	21.51	21.66	21.60	22.5
5	QPSK	12	7	21.61	21.52	21.48	
5	QPSK	12	13	21.39	21.41	21.36	
5	QPSK	25	0	21.45	21.44	21.55	22.5
5	16QAM	1	0	21.72	21.76	21.74	
5	16QAM	1	12	21.70	21.74	21.68	
5	16QAM	1	24	21.68	21.67	21.73	21.5
5	16QAM	12	0	20.72	20.79	20.86	
5	16QAM	12	7	20.75	20.66	20.65	
5	16QAM	12	13	20.84	20.70	20.80	21.5
5	16QAM	25	0	20.67	20.57	20.82	
5	64QAM	1	0	20.93	20.78	20.82	
5	64QAM	1	12	20.73	20.62	20.79	21.5
5	64QAM	1	24	20.80	20.77	20.73	
5	64QAM	12	0	19.64	19.81	19.84	
5	64QAM	12	7	19.60	19.78	19.65	20.5
5	64QAM	12	13	19.83	19.52	19.67	
5	64QAM	25	0	19.72	19.63	19.67	
Channel				26055	26365	26675	23.5
Frequency (MHz)				1851.5	1882.5	1913.5	
3	QPSK	1	0	22.64	22.67	22.59	23.5
3	QPSK	1	8	22.62	22.64	22.49	
3	QPSK	1	14	22.63	22.53	22.48	
3	QPSK	8	0	21.48	21.65	21.57	22.5
3	QPSK	8	4	21.54	21.63	21.42	
3	QPSK	8	7	21.47	21.51	21.40	

3	QPSK	15	0	21.58	21.56	21.54	22.5
3	16QAM	1	0	21.81	21.84	21.81	
3	16QAM	1	8	21.76	21.64	21.62	
3	16QAM	1	14	21.77	21.80	21.68	21.5
3	16QAM	8	0	20.80	20.80	20.76	
3	16QAM	8	4	20.68	20.78	20.82	
3	16QAM	8	7	20.78	20.70	20.81	
3	16QAM	15	0	20.74	20.59	20.76	
3	64QAM	1	0	20.80	20.70	20.84	21.5
3	64QAM	1	8	20.73	20.79	20.74	
3	64QAM	1	14	20.65	20.69	20.65	
3	64QAM	8	0	19.79	19.72	19.65	
3	64QAM	8	4	19.61	19.76	19.76	
3	64QAM	8	7	19.75	19.57	19.70	20.5
3	64QAM	15	0	19.70	19.75	19.75	
Channel				26047	26365	26683	
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	22.56	22.65	22.61	23.5
1.4	QPSK	1	3	22.62	22.45	22.57	
1.4	QPSK	1	5	22.54	22.58	22.61	
1.4	QPSK	3	0	21.65	21.49	21.61	
1.4	QPSK	3	1	21.49	21.38	21.47	
1.4	QPSK	3	3	21.43	21.59	21.44	
1.4	QPSK	6	0	21.47	21.54	21.42	22.5
1.4	16QAM	1	0	21.93	21.86	21.80	21.5
1.4	16QAM	1	3	21.74	21.84	21.81	
1.4	16QAM	1	5	21.89	21.71	21.81	
1.4	16QAM	3	0	20.84	20.85	20.78	
1.4	16QAM	3	1	20.75	20.70	20.66	
1.4	16QAM	3	3	20.63	20.83	20.56	
1.4	16QAM	6	0	20.64	20.72	20.75	20.5
1.4	64QAM	1	0	20.82	20.79	20.72	21.5
1.4	64QAM	1	3	20.65	20.68	20.60	
1.4	64QAM	1	5	20.78	20.56	20.77	
1.4	64QAM	3	0	19.87	19.73	19.68	
1.4	64QAM	3	1	19.76	19.61	19.70	
1.4	64QAM	3	3	19.60	19.73	19.74	
1.4	64QAM	6	0	19.58	19.80	19.80	20.5

Band 26 for FCC (dBm) (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				28765	28865	28965	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	22.67	22.70	22.62	23.5
15	QPSK	1	37	22.61	22.56	22.47	
15	QPSK	1	74	22.50	22.47	22.56	
15	QPSK	36	0	21.65	21.66	21.58	22.5
15	QPSK	36	20	21.57	21.49	21.52	
15	QPSK	36	39	21.55	21.45	21.42	
15	QPSK	75	0	21.53	21.56	21.57	22.5
15	16QAM	1	0	21.70	21.83	21.71	
15	16QAM	1	37	21.72	21.65	21.80	
15	16QAM	1	74	21.74	21.67	21.78	21.5
15	16QAM	36	0	20.79	20.83	20.82	
15	16QAM	36	20	20.66	20.65	20.62	
15	16QAM	36	39	20.79	20.63	20.60	21.5
15	16QAM	75	0	20.72	20.75	20.71	
15	64QAM	1	0	20.77	20.80	20.73	
15	64QAM	1	37	20.79	20.65	20.79	21.5
15	64QAM	1	74	20.67	20.65	20.75	
15	64QAM	36	0	19.71	19.84	19.75	
15	64QAM	36	20	19.79	19.74	19.61	20.5
15	64QAM	36	39	19.66	19.64	19.63	
15	64QAM	75	0	19.58	19.65	19.73	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	22.57	22.68	22.66	23.5
10	QPSK	1	25	22.54	22.53	22.56	
10	QPSK	1	49	22.48	22.57	22.58	
10	QPSK	25	0	21.49	21.64	21.48	22.5
10	QPSK	25	12	21.54	21.45	21.59	
10	QPSK	25	25	21.51	21.45	21.44	
10	QPSK	50	0	21.48	21.51	21.44	22.5
10	16QAM	1	0	21.58	21.80	21.94	
10	16QAM	1	25	21.68	21.71	21.73	
10	16QAM	1	49	21.73	21.69	21.73	21.5
10	16QAM	25	0	20.68	20.78	20.68	
10	16QAM	25	12	20.70	20.72	20.71	
10	16QAM	25	25	20.58	20.69	20.69	21.5
10	16QAM	50	0	20.70	20.67	20.74	
10	64QAM	1	0	20.74	20.77	20.76	
10	64QAM	1	25	20.74	20.70	20.73	21.5
10	64QAM	1	49	20.64	20.64	20.76	
10	64QAM	25	0	19.77	19.83	19.80	
10	64QAM	25	12	19.58	19.74	19.73	20.5
10	64QAM	25	25	19.61	19.71	19.56	
10	64QAM	50	0	19.69	19.59	19.66	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	22.49	22.67	22.54	23.5
5	QPSK	1	12	22.48	22.61	22.50	
5	QPSK	1	24	22.58	22.53	22.45	
5	QPSK	12	0	21.51	21.65	21.46	22.5
5	QPSK	12	7	21.61	21.56	21.47	
5	QPSK	12	13	21.53	21.43	21.41	
5	QPSK	25	0	21.40	21.51	21.40	22.5
5	16QAM	1	0	21.73	21.86	21.84	
5	16QAM	1	12	21.65	21.77	21.73	
5	16QAM	1	24	21.77	21.78	21.63	21.5
5	16QAM	12	0	20.83	20.86	20.74	
5	16QAM	12	7	20.76	20.70	20.61	
5	16QAM	12	13	20.58	20.79	20.77	21.5
5	16QAM	25	0	20.71	20.57	20.76	
5	64QAM	1	0	20.72	20.79	20.71	
5	64QAM	1	12	20.75	20.72	20.62	21.5
5	64QAM	1	24	20.69	20.58	20.68	
5	64QAM	12	0	19.66	19.80	19.69	
5	64QAM	12	7	19.68	19.67	19.58	20.5
5	64QAM	12	13	19.63	19.55	19.62	
5	64QAM	25	0	19.62	19.60	19.64	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	22.59	22.64	22.62	23.5
3	QPSK	1	8	22.55	22.52	22.57	
3	QPSK	1	14	22.51	22.55	22.58	
3	QPSK	8	0	21.43	21.63	21.55	22.5
3	QPSK	8	4	21.61	21.40	21.50	
3	QPSK	8	7	21.51	21.49	21.46	
3	QPSK	15	0	21.55	21.49	21.49	22.5
3	16QAM	1	0	21.89	21.95	21.72	
3	16QAM	1	8	21.70	21.87	21.82	
3	16QAM	1	14	21.67	21.68	21.76	21.5
3	16QAM	8	0	20.73	20.83	20.73	
3	16QAM	8	4	20.63	20.79	20.66	
3	16QAM	8	7	20.81	20.73	20.72	21.5
3	16QAM	15	0	20.60	20.61	20.63	
3	64QAM	1	0	20.82	20.93	20.79	
3	64QAM	1	8	20.83	20.81	20.60	21.5
3	64QAM	1	14	20.62	20.80	20.72	
3	64QAM	8	0	19.64	19.66	19.83	
3	64QAM	8	4	19.69	19.72	19.53	20.5
3	64QAM	8	7	19.62	19.74	19.61	
3	64QAM	15	0	19.74	19.61	19.56	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	22.58	22.66	22.61	23.5
1.4	QPSK	1	3	22.45	22.54	22.43	
1.4	QPSK	1	5	22.55	22.46	22.56	
1.4	QPSK	3	0	21.44	21.53	21.62	
1.4	QPSK	3	1	21.45	21.48	21.53	
1.4	QPSK	3	3	21.38	21.48	21.42	

Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	23.23	23.28	23.22	24
20	QPSK	1	49	23.07	23.14	22.99	
20	QPSK	1	99	23.08	23.19	23.17	
20	QPSK	50	0	22.19	22.24	22.15	23
20	QPSK	50	24	22.07	22.15	22.09	
20	QPSK	50	50	21.98	22.12	22.01	
20	QPSK	100	0	22.10	21.97	22.12	23
20	16QAM	1	0	22.16	22.24	22.16	
20	16QAM	1	49	22.17	22.22	22.12	
20	16QAM	1	99	22.10	22.09	22.23	22
20	16QAM	50	0	21.20	21.29	21.26	
20	16QAM	50	24	21.13	21.25	21.08	
20	16QAM	50	50	21.22	21.24	21.12	22
20	16QAM	100	0	21.12	21.14	21.13	
20	64QAM	1	0	21.18	21.34	21.25	
20	64QAM	1	49	21.20	21.14	21.14	22
20	64QAM	1	99	21.15	21.09	21.05	
20	64QAM	50	0	20.25	20.18	20.14	
20	64QAM	50	24	20.16	20.20	20.00	21
20	64QAM	50	50	20.24	20.05	20.01	
20	64QAM	100	0	20.17	20.16	20.08	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.07	23.14	23.04	24
15	QPSK	1	37	22.86	22.97	22.86	
15	QPSK	1	74	22.94	23.09	22.85	
15	QPSK	36	0	21.92	22.03	21.92	23
15	QPSK	36	20	21.94	22.02	21.97	
15	QPSK	36	39	21.95	21.87	21.80	
15	QPSK	75	0	21.80	21.82	21.90	23
15	16QAM	1	0	22.25	22.29	22.20	
15	16QAM	1	37	22.25	22.25	22.17	
15	16QAM	1	74	22.15	22.27	22.10	22
15	16QAM	36	0	21.16	21.15	21.18	
15	16QAM	36	20	21.13	21.12	21.23	
15	16QAM	36	39	21.22	21.14	21.15	22
15	16QAM	75	0	21.24	21.23	21.26	
15	64QAM	1	0	21.22	21.28	21.20	
15	64QAM	1	37	21.12	21.16	21.03	22
15	64QAM	1	74	21.25	21.11	21.21	
15	64QAM	36	0	20.06	20.23	20.14	
15	64QAM	36	20	20.17	20.02	20.04	21
15	64QAM	36	39	20.01	20.16	20.15	
15	64QAM	75	0	20.13	20.04	20.21	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.05	23.11	23.04	24
10	QPSK	1	25	22.84	23.08	23.00	
10	QPSK	1	49	22.95	23.00	23.05	
10	QPSK	25	0	22.00	22.09	21.93	23
10	QPSK	25	12	21.97	21.91	21.85	
10	QPSK	25	25	21.91	21.94	21.86	
10	QPSK	50	0	21.97	21.91	21.90	23
10	16QAM	1	0	22.12	22.29	22.20	
10	16QAM	1	25	22.20	22.06	22.26	
10	16QAM	1	49	22.14	22.21	22.24	22
10	16QAM	25	0	21.20	21.29	21.24	
10	16QAM	25	12	21.12	21.23	21.21	
10	16QAM	25	25	21.07	21.03	21.10	22
10	16QAM	50	0				

1.4	QPSK	6	0	21.48	21.50	21.39	22.5
1.4	16QAM	1	0	21.90	21.89	21.72	22.5
1.4	16QAM	1	3	21.82	21.78	21.74	
1.4	16QAM	1	5	21.70	21.71	21.70	
1.4	16QAM	3	0	20.67	20.72	20.84	
1.4	16QAM	3	1	20.72	20.84	20.72	
1.4	16QAM	3	3	20.73	20.79	20.69	
1.4	16QAM	6	0	20.78	20.66	20.79	21.5
1.4	64QAM	1	0	20.88	20.78	20.87	21.5
1.4	64QAM	1	3	20.72	20.66	20.70	
1.4	64QAM	1	5	20.81	20.81	20.86	
1.4	64QAM	3	0	19.67	19.77	19.73	
1.4	64QAM	3	1	19.78	19.81	19.77	
1.4	64QAM	3	3	19.73	19.63	19.54	
1.4	64QAM	6	0	19.82	19.78	19.58	

3	QPSK	15	0	21.90	21.91	22.00	23	
3	16QAM	1	0	22.16	22.19	22.24		
3	16QAM	1	8	22.20	22.19	22.20		
3	16QAM	1	14	22.15	22.23	22.26	22	
3	16QAM	8	0	21.10	21.10	21.22		
3	16QAM	8	4	21.13	21.22	21.07		
3	16QAM	8	7	21.05	21.12	21.22		
3	16QAM	15	0	21.18	21.24	21.22		
3	64QAM	1	0	21.21	21.32	21.22	22	
3	64QAM	1	8	21.17	21.13	21.23		
3	64QAM	1	14	21.21	21.02	21.08		
3	64QAM	8	0	20.10	20.14	20.20	21	
3	64QAM	8	4	20.04	20.15	20.09		
3	64QAM	8	7	20.26	20.13	20.01		
3	64QAM	15	0	20.25	20.13	20.15		
3	64QAM	15	0	20.25	20.13	20.15		
Channel				131979	132922	132665	Tune-up limit (dBm)	
Frequency (MHz)				1710.7	1745	1779.3		
1.4	QPSK	1	0	23.00	23.10	22.90	24	
1.4	QPSK	1	3	23.01	22.88	22.99		
1.4	QPSK	1	5	22.96	22.88	23.02		
1.4	QPSK	3	0	21.90	22.09	21.98		
1.4	QPSK	3	1	21.92	21.91	21.84		
1.4	QPSK	3	3	21.84	21.88	21.89		
1.4	QPSK	6	0	21.84	21.87	21.94	23	
1.4	16QAM	1	0	22.26	22.27	22.22	23	
1.4	16QAM	1	3	22.05	22.23	22.09		
1.4	16QAM	1	5	22.13	22.25	22.16		
1.4	16QAM	3	0	21.16	21.25	21.23		
1.4	16QAM	3	1	21.07	21.15	21.22		
1.4	16QAM	3	3	21.16	21.14	21.07		
1.4	16QAM	6	0	21.01	21.05	21.03	22	
1.4	64QAM	1	0	21.16	21.14	21.19		
1.4	64QAM	1	3	21.08	21.21	21.17	22	
1.4	64QAM	1	5	21.07	21.10	21.22		
1.4	64QAM	3	0	20.16	20.05	20.11		
1.4	64QAM	3	1	20.03	20.09	20.09		
1.4	64QAM	3	3	20.04	19.99	19.96		
1.4	64QAM	6	0	20.07	20.02	20.01		21

Band 71 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	23.10	23.21	23.19	24
20	QPSK	1	49	23.02	23.18	23.09	
20	QPSK	1	99	23.07	23.10	23.03	
20	QPSK	50	0	22.16	22.18	22.08	23
20	QPSK	50	24	21.94	21.94	21.98	
20	QPSK	50	50	22.03	21.95	22.02	
20	QPSK	100	0	22.07	21.92	21.92	23
20	16QAM	1	0	22.28	22.41	22.33	
20	16QAM	1	49	22.30	22.38	22.37	
20	16QAM	1	99	22.32	22.29	22.32	22
20	16QAM	50	0	21.24	21.27	21.25	
20	16QAM	50	24	21.19	21.31	21.28	
20	16QAM	50	50	21.22	21.26	21.18	22
20	16QAM	100	0	21.18	21.31	21.31	
20	64QAM	1	0	21.31	21.39	21.23	
20	64QAM	1	49	21.35	21.29	21.17	22
20	64QAM	1	99	21.15	21.25	21.28	
20	64QAM	50	0	20.30	20.37	20.29	
20	64QAM	50	24	20.36	20.28	20.09	21
20	64QAM	50	50	20.22	20.07	20.17	
20	64QAM	100	0	20.34	20.34	20.12	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.13	23.18	23.08	24
15	QPSK	1	37	23.12	23.12	23.00	
15	QPSK	1	74	23.05	23.10	23.03	
15	QPSK	36	0	22.09	22.17	22.13	23
15	QPSK	36	20	22.03	22.13	22.05	
15	QPSK	36	39	21.97	22.04	21.95	
15	QPSK	75	0	22.03	21.98	22.01	23
15	16QAM	1	0	22.30	22.37	22.25	
15	16QAM	1	37	22.19	22.31	22.33	
15	16QAM	1	74	22.31	22.33	22.20	22
15	16QAM	36	0	21.32	21.34	21.24	
15	16QAM	36	20	21.27	21.28	21.20	
15	16QAM	36	39	21.22	21.22	21.20	22
15	16QAM	75	0	21.38	21.36	21.29	
15	64QAM	1	0	21.37	21.41	21.31	
15	64QAM	1	37	21.33	21.40	21.30	22
15	64QAM	1	74	21.36	21.22	21.30	
15	64QAM	36	0	20.31	20.35	20.25	
15	64QAM	36	20	20.21	20.33	20.23	21
15	64QAM	36	39	20.25	20.25	20.11	
15	64QAM	75	0	20.28	20.34	20.13	
Channel				133172	133272	133422	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.15	23.19	23.12	24
10	QPSK	1	25	23.03	23.10	23.08	
10	QPSK	1	49	23.04	23.11	23.06	
10	QPSK	25	0	22.15	22.17	22.05	23
10	QPSK	25	12	22.09	22.09	22.05	
10	QPSK	25	25	22.04	22.09	21.88	
10	QPSK	50	0	22.09	21.93	21.93	23
10	16QAM	1	0	22.27	22.42	22.36	
10	16QAM	1	25	22.28	22.31	22.30	
10	16QAM	1	49	22.24	22.31	22.24	22
10	16QAM	25	0	21.23	21.37	21.32	
10	16QAM	25	12	21.28	21.35	21.30	
10	16QAM	25	25	21.33	21.27	21.32	22
10	16QAM	50	0	21.23	21.22	21.18	
10	64QAM	1	0	21.29	21.43	21.39	
10	64QAM	1	25	21.34	21.28	21.40	22
10	64QAM	1	49	21.29	21.13	21.26	
10	64QAM	25	0	20.27	20.38	20.29	
10	64QAM	25	12	20.33	20.33	20.17	21
10	64QAM	25	25	20.20	20.25	20.31	
10	64QAM	50	0	20.19	20.24	20.16	
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.13	23.17	23.12	24
5	QPSK	1	12	23.12	23.16	23.04	
5	QPSK	1	24	23.02	23.04	23.09	
5	QPSK	12	0	22.08	22.10	22.05	23
5	QPSK	12	7	22.00	22.04	22.08	
5	QPSK	12	13	22.03	22.02	21.87	
5	QPSK	25	0	22.01	21.90	22.09	23
5	16QAM	1	0	22.41	22.47	22.26	
5	16QAM	1	12	22.27	22.37	22.38	
5	16QAM	1	24	22.31	22.21	22.31	22
5	16QAM	12	0	21.26	21.32	21.31	
5	16QAM	12	7	21.22	21.30	21.30	
5	16QAM	12	13	21.27	21.27	21.21	22
5	16QAM	25	0	21.22	21.38	21.26	
5	64QAM	1	0	21.31	21.35	21.28	
5	64QAM	1	12	21.23	21.36	21.30	22
5	64QAM	1	24	21.28	21.31	21.33	
5	64QAM	12	0	20.25	20.39	20.18	
5	64QAM	12	7	20.36	20.19	20.16	21
5	64QAM	12	13	20.37	20.10	20.26	
5	64QAM	25	0	20.22	20.33	20.22	

Band 41 PC3 (2496~2690MHz) (dBm)										
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	22.14	22.12	22.18	22.08	22.13		
20	QPSK	1	49	21.97	22.06	22.01	22.03	22.09		23
20	QPSK	1	99	21.98	22.09	22.05	22.11	22.01		
20	QPSK	50	0	21.07	21.06	21.13	21.10	21.08		
20	QPSK	50	24	20.89	20.91	20.97	20.88	20.90		
20	QPSK	50	50	20.91	20.87	20.84	20.98	20.95		22
20	QPSK	100	0	21.03	20.98	20.96	20.90	21.00		
20	16QAM	1	0	21.20	21.18	21.22	21.15	21.17		
20	16QAM	1	49	21.15	21.17	21.10	21.11	21.17		22
20	16QAM	1	99	21.18	21.13	21.20	21.17	21.13		
20	16QAM	50	0	20.21	20.22	20.28	20.17	20.21		
20	16QAM	50	24	20.11	20.17	20.25	20.05	20.22		
20	16QAM	50	50	20.18	20.23	20.22	20.19	20.12		21
20	16QAM	100	0	20.15	20.08	20.08	20.15	20.16		
20	64QAM	1	0	20.19	20.28	20.32	20.21	20.29		
20	64QAM	1	49	20.23	20.27	20.15	20.13	20.27		21
20	64QAM	1	99	20.28	20.08	20.11	20.17	20.18		
20	64QAM	50	0	19.19	19.16	19.28	19.09	19.16		
20	64QAM	50	24	19.18	19.11	19.11	19.00	19.11		20
20	64QAM	50	50	19.16	19.21	18.98	19.99	19.18		
20	64QAM	100	0	19.11	19.07	19.03	19.12	19.15		
Channel				39725	40173	40620	41058	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	22.08	22.00	22.14	22.05	22.12		
15	QPSK	1	37	22.10	22.10	22.06	22.06	22.07		23
15	QPSK	1	74	22.03	22.10	22.04	22.11	21.96		
15	QPSK	36	0	20.99	21.07	21.08	21.01	21.03		
15	QPSK	36	20	21.04	20.90	20.99	20.88	21.03		22
15	QPSK	36	39	20.86	20.86	21.05	21.02	20.85		
15	QPSK	75	0	20.96	21.05	21.02	20.91	20.89		
15	16QAM	1	0	21.17	21.25	21.27	21.24	21.26		
15	16QAM	1	37	21.22	21.19	21.14	21.15	21.12		22
15	16QAM	1	74	21.11	21.12	21.14	21.14	21.16		
15	16QAM	36	0	20.18	20.21	20.21	20.14	20.16		
15	16QAM	36	20	20.17	20.19	20.10	20.13	20.15		21
15	16QAM	36	39	20.12	20.10	20.16	20.19	20.17		
15	16QAM	75	0	20.23	20.23	20.27	20.07	20.18		
15	64QAM	1	0	20.27	20.19	20.24	20.16	20.17		
15	64QAM	1	37	20.21	20.25	20.23	20.20	20.19		21
15	64QAM	1	74	20.16	20.12	20.18	20.22	20.13		
15	64QAM	36	0	19.16	19.17	19.27	19.22	19.21		
15	64QAM	36	20	19.19	19.18	19.19	19.17	19.13		20
15	64QAM	36	39	19.21	19.25	19.22	19.20	19.02		
15	64QAM	75	0	19.10	19.17	19.11	19.03	19.15		
Channel				39700	40160	40620	41069	41540		
Frequency (MHz)				2501	2547	2593	2637	2685		
10	QPSK	1	0	22.08	22.02	22.12	22.09	22.05		
10	QPSK	1	25	21.94	21.99	21.80	22.06	21.91		23
10	QPSK	1	49	22.01	22.05	22.08	22.02	22.10		
10	QPSK	25	0	20.95	21.11	21.14	21.07	21.12		
10	QPSK	25	12	20.89	20.89	20.99	21.08	20.88		
10	QPSK	25	25	20.91	20.92	21.02	20.84	20.89		22
10	QPSK	50	0	20.90	20.95	20.91	21.01	20.91		
10	16QAM	1	0	21.19	21.32	21.37	21.23	21.33		
10	16QAM	1	25	21.24	21.13	21.32	21.27	21.09		22
10	16QAM	1	49	21.13	21.28	21.10	21.26	21.14		
10	16QAM	25	0	20.18	20.13	20.19	20.25	20.19		
10	16QAM	25	12	20.13	20.17	20.23	20.11	20.16		21
10	16QAM	25	25	20.18	20.13	20.29	20.25	20.26		
10	16QAM	50	0	20.13	20.18	20.07	20.08	20.16		
10	64QAM	1	0	20.22	20.26	20.16	20.26	20.26		
10	64QAM	1	25	20.15	20.20	20.10	20.18	20.07		21
10	64QAM	1	49	20.13	20.05	20.09	20.18	20.14		
10	64QAM	25	0	19.13	19.22	19.23	19.18	19.21		
10	64QAM	25	12	19.08	19.24	19.08	19.15	19.25		
10	64QAM	25	25	19.14	19.30	19.01	19.11	19.22		20
10	64QAM	50	0	19.12	19.23	19.03	19.22	19.25		
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.3	2687.5		
5	QPSK	1	0	22.10	22.03	22.11	22.05	21.95		
5	QPSK	1	12	22.02	22.05	21.95	22.11	21.90		23
5	QPSK	1	24	22.03	21.90	22.05	21.98	21.90		
5	QPSK	12	0	20.96	20.95	21.04	20.88	22.03		
5	QPSK	12	7	20.95	20.87	21.01	20.96	20.92		22
5	QPSK	12	13	20.99	20.91	20.92	20.99	21.02		
5	QPSK	25	0	20.87	20.84	20.86	20.89	20.90		
5	16QAM	1	0	21.40	21.37	21.23	21.29	21.30		
5	16QAM	1	12	21.28	21.30	21.31	21.28	21.15		22
5	16QAM	1	24	21.23	21.35	21.11	21.35	21.14		
5	16QAM	12	0	20.35	20.21	20.22	20.34	20.35		
5	16QAM	12	7	20.13	20.22	20.16	20.14	20.25		21
5	16QAM	12	13	20.06	20.21	20.11	20.27	20.16		
5	16QAM	25	0	20.13	20.26	20.12	20.08	20.13		
5	64QAM	1	0	20.27	20.29	20.24	20.23	20.26		
5	64QAM	1	12	20.13	20.36	20.29	20.07	20.29		21
5	64QAM	1	24	20.07	20.20	20.11	20.22	20.32		
5	64QAM	12	0	19.22	19.22	19.26	19.26	19.19		
5	64QAM	12	7	19.09	19.08	19.09	19.23	19.22		
5	64QAM	12	13	19.21	19.27	19.20	19.09	19.15		20
5	64QAM	25	0	19.30	19.20	19.23	19.22	19.28		

Band 41 PC2 (2496~2690MHz) (dBm)										
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	25.24	25.22	25.27	25.18	25.23		
20	QPSK	1	49	25.07	25.16	25.11	25.13	25.19		26
20	QPSK	1	99	25.08	25.10	25.16	25.15	25.21		
20	QPSK	50	0	24.17	24.16	24.23	24.20	24.18		
20	QPSK	50	24	23.99	24.01	24.07	23.98	24.00		
20	QPSK	50	50	24.01	23.97	24.04	24.08	24.05		25
20	QPSK	100	0	24.13	24.08	24.06	24.00	24.10		
20	16QAM	1	0	24.30	24.28	24.32	24.25	24.27		
20	16QAM	1	49	24.25	24.27	24.20	24.21	24.27		25
20	16QAM	1	99	24.28	24.23	24.30	24.27	24.23		
20	16QAM	50	0	23.31	23.32	23.38	23.27	23.31		
20	16QAM	50	24	23.21	23.27	23.35	23.19	23.32		24
20	16QAM	50	50	23.28	23.33	23.32	23.29	23.22		
20	16QAM	100	0	23.25	23.18	23.18	23.25	23.26		
20	64QAM	1	0	23.29	23.38	23.42	23.31	23.39		
20	64QAM	1	49	23.33	23.37	23.25	23.23	23.37		24
20	64QAM	1	99	23.38	23.18	23.21	23.27	23.28		
20	64QAM	50	0	22.29	22.28	22.38	22.19	22.28		
20	64QAM	50	24	22.28	22.21	22.21	22.10	22.21		23
20	64QAM	50	50	22.28	22.31	22.08	22.09	22.28		
20	64QAM	100	0	22.21	22.17	22.13	22.22	22.25		
Channel				39725	40173	40620	41069	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0	25.18	25.10	25.24	25.15	25.22		
15	QPSK	1	37	25.20	25.20	25.16	25.16	25.17		26
15	QPSK	1	74	25.13	25.20	25.14	25.21	25.06		
15	QPSK	36	0	24.09	24.17	24.18	24.11	24.13		
15	QPSK	36	20	24.14	24.00	24.09	23.98	24.13		25
15	QPSK	36	39	23.96	23.96	24.15	24.12	23.95		
15	QPSK	75	0	24.06	24.15	24.12	24.01	23.99		
15	16QAM	1	0	24.27	24.35	24.37	24.34	24.36		
15	16QAM	1	37	24.32	24.29	24.24	24.25	24.22		25
15	16QAM	1	74	24.21	24.22	24.24	24.24	24.26		
15	16QAM	36	0	23.28	23.31	23.31	23.24	23.26		
15	16QAM	36	20	23.27	23.29	23.20	23.23	23.25		24
15	16QAM	36	39	23.22	23.20	23.26	23.29	23.28		
15	16QAM	75	0							

2.4GHz WLAN ANT 1

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11b 1Mbps	CH 1	2412	17.70	18.50	19.5	99.57
	CH 7	2442	17.94	18.50	19.5	
	CH 13	2472	14.34	15.00	16.5	
802.11g 6Mbps	CH 1	2412	15.63	16.50	17.5	97.08
	CH 7	2442	15.67	16.50	17.5	
	CH 13	2472	8.81	9.50	11.0	
802.11n-HT20 MCS0	CH 1	2412	15.52	16.50	17.5	96.88
	CH 7	2442	15.50	16.50	17.5	
	CH 13	2472	7.20	8.00	9.5	
802.11n-HT40 MCS0	CH 3	2422	14.69	15.50	16.5	93.93
	CH 7	2442	14.95	15.50	16.5	
	CH 11	2462	7.18	8.00	9.0	

5GHz WLAN ANT 1

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 36	5180	14.66	15.50	16.0	97.22
	CH 44	5220	14.77	15.50	16.0	
	CH 48	5240	14.38	15.00	16.0	
802.11n-HT20 MCS0	CH 36	5180	14.98	15.50	16.0	97.01
	CH 44	5220	15.20	15.50	16.0	
	CH 48	5240	14.79	15.50	16.0	
802.11n-HT40 MCS0	CH 38	5190	12.43	13.00	14.0	94.20
	CH 46	5230	14.25	15.00	16.0	
	CH 36	5180	14.68	15.50	16.0	
802.11ac-VHT20 MCS0	CH 44	5220	14.64	15.50	16.0	97.04
	CH 48	5240	14.24	15.00	16.0	
	CH 38	5190	14.40	15.00	16.0	
802.11ac-VHT40 MCS0	CH 46	5230	14.33	15.00	16.0	94.29
	CH 42	5210	11.41	12.00	13.0	

5GHz WLAN ANT 1

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 52	5260	14.66	15.50	16.0	97.22
	CH 60	5300	14.28	15.00	16.0	
	CH 64	5320	13.71	14.50	16.0	
802.11n-HT20 MCS0	CH 52	5260	15.00	15.50	16.0	97.01
	CH 60	5300	14.06	15.00	16.0	
	CH 64	5320	13.74	14.50	16.0	
802.11n-HT40 MCS0	CH 54	5270	14.01	15.00	16.0	94.20
	CH 62	5310	11.75	12.50	14.0	
	CH 52	5260	14.28	15.00	16.0	
802.11ac-VHT20 MCS0	CH 60	5300	14.09	15.00	16.0	97.06
	CH 64	5320	13.78	14.50	16.0	
	CH 54	5270	14.01	15.00	16.0	
802.11ac-VHT40 MCS0	CH 62	5310	13.91	14.50	16.0	94.29
	CH 58	5290	10.98	11.50	13.0	

5GHz WLAN ANT 1

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 100	5500	13.51	14.00	15.5	97.20
	CH 120	5600	14.12	15.00	16.0	
	CH 144	5720	13.49	15.00	15.5	
802.11n-HT20 MCS0	CH 100	5500	14.11	15.00	16.0	97.01
	CH 120	5600	14.15	15.00	16.0	
	CH 144	5720	14.04	15.00	16.0	
802.11n-HT40 MCS0	CH 102	5510	9.96	10.50	12.0	92.86
	CH 126	5630	14.08	14.50	16.0	
	CH 142	5710	13.95	14.50	16.0	
802.11ac-VHT20 MCS0	CH 100	5500	13.96	14.50	16.0	97.06
	CH 120	5600	14.01	15.00	16.0	
	CH 144	5720	13.89	14.50	16.0	
802.11ac-VHT40 MCS0	CH 102	5510	13.84	14.50	16.0	94.29
	CH 126	5630	14.10	15.00	16.0	
	CH 142	5710	13.99	14.50	16.0	
802.11ac-VHT80 MCS0	CH 106	5530	12.82	14.50	15.0	89.19
	CH 122	5610	14.06	15.00	16.0	
	CH 138	5690	13.81	14.50	16.0	

5GHz WLAN ANT 1

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	CH 149	5745	14.49	15.00	16.0	97.22
	CH 157	5785	14.53	15.00	16.0	
	CH 165	5825	14.54	15.00	16.0	
802.11n-HT20 MCS0	CH 149	5745	14.17	15.00	16.0	97.01
	CH 157	5785	14.39	15.00	16.0	
	CH 165	5825	14.23	15.00	16.0	
802.11n-HT40 MCS0	CH 151	5755	14.40	15.00	16.0	94.20
	CH 159	5795	13.47	15.00	16.0	
	CH 149	5745	14.16	15.00	16.0	
802.11ac-VHT20 MCS0	CH 157	5785	14.31	15.00	16.0	97.06
	CH 165	5825	14.20	15.00	16.0	
	CH 151	5755	14.42	15.00	16.0	
802.11ac-VHT40 MCS0	CH 159	5795	14.03	15.00	16.0	92.86
	CH 155	5775	14.37	15.00	16.0	

Mode	Channel	Frequency (MHz)	1Mbps		2Mbps		3Mbps	
			Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit
BR / EDR	CH 00	2402	5.54	6.00	3.45	4.00	3.60	4.00
	CH 59	2441	8.81	9.50	6.17	7.00	6.11	7.00
	CH 75	2480	9.76	10.50	6.96	7.50	6.89	7.50
Duty Cycle %			76.81		76.99		77.04	

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 00	2402	-7.39	-10.22	N/A
	CH 19	2440	-5.06	-7.78	N/A
	CH 39	2480	-4.81	-7.68	N/A
Tune-up Limit			0.5	0.5	N/A
Duty Cycle %			61.9	32.26	N/A

Reduced Power

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
	128	189	251		128	189	251		
TX Channel	824.2	836.4	848.8		824.2	836.4	848.8		
Frequency (MHz)	824.2	836.4	848.8	32.00	22.40	22.54	22.51	23.00	
GSM 1 Tx slot	31.40	31.54	31.51	32.00	22.41	22.58	22.55	23.00	0.18
GPRS 1 Tx slot	31.41	31.58	31.55	32.00	22.41	22.58	22.55	23.00	
GPRS 2 Tx slots	28.16	28.41	28.37	29.00	22.16	22.41	22.37	23.00	0.25
GPRS 3 Tx slots	26.15	26.45	26.40	27.00	21.89	22.19	22.14	22.74	0.30
GPRS 4 Tx slots	25.04	25.23	25.19	26.50	22.04	22.23	22.19	23.50	0.19
EDGE 1 Tx slot	24.03	24.26	24.24	25.00	15.03	15.26	15.24	16.00	0.23
EDGE 2 Tx slots	22.89	23.07	23.02	24.00	16.89	17.07	17.02	18.00	0.18
EDGE 3 Tx slots	20.65	20.84	20.79	21.50	16.39	16.58	16.53	17.24	0.19
EDGE 4 Tx slots	19.48	19.62	19.60	20.50	16.48	16.62	16.60	17.50	0.14
Mode		Max.	31.58			Max.	22.58		
Attenuator	Cable Loss : 0.4								

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
	512	661	810		512	661	810		
TX Channel	1850.2	1880	1909.8		1850.2	1880	1909.8		
Frequency (MHz)	1850.2	1880	1909.8	27.50	18.08	18.08	17.95	18.50	
GSM 1 Tx slot	27.08	27.08	26.95	27.50	18.11	18.08	17.96	18.50	0.16
GPRS 1 Tx slot	27.11	27.08	26.96	27.50	18.11	18.08	17.96	18.50	
GPRS 2 Tx slots	24.26	24.11	24.02	25.00	18.26	18.11	18.02	19.00	0.24
GPRS 3 Tx slots	22.40	22.23	22.09	23.00	18.14	17.97	17.83	18.74	0.31
GPRS 4 Tx slots	21.19	21.22	21.16	22.00	18.19	18.22	18.16	19.00	0.06
EDGE 1 Tx slot	22.03	22.08	21.95	23.00	13.03	13.08	12.95	14.00	0.13
EDGE 2 Tx slots	20.90	20.86	20.73	21.50	14.90	14.86	14.73	15.50	0.17
EDGE 3 Tx slots	19.01	18.89	18.80	20.00	14.75	14.63	14.54	15.74	0.21
EDGE 4 Tx slots	17.82	17.78	17.67	18.50	14.82	14.78	14.67	15.50	0.15
Mode		Max.	27.11			Max.	18.26		
Attenuator	Cable Loss : 0.8								

Band	WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			Tune-up Limit (dBm)	
	9262	9400	9538		1312	1413	1513		4132	4182	4233		
TX Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458		
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458		
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6		
3GPP Rel 99	RMC 12.2Kbps	18.24	18.25	18.11	19.00	18.30	18.41	18.32	19.00	19.14	19.16	19.13	20.00
3GPP Rel 5	HSDPA Subtest-1	17.54	17.52	17.49	18.50	17.31	17.42	17.38	18.00	18.12	17.11	18.17	19.00
3GPP Rel 5	HSDPA Subtest-2	17.49	17.50	17.45	18.50	17.36	17.46	17.33	18.00	18.13	17.07	18.10	19.00
3GPP Rel 5	HSDPA Subtest-3	17.03	17.00	16.98	18.00	16.78	16.92	16.90	18.00	17.70	17.59	17.52	18.50
3GPP Rel 5	HSDPA Subtest-4	17.02	17.00	16.92	18.00	16.81	16.90	16.93	18.00	17.66	17.44	17.51	18.50
3GPP Rel 6	HSUPA Subtest-1	16.84	16.90	16.91	18.00	16.79	16.93	17.47	18.00	17.51	17.47	17.54	18.50
3GPP Rel 6	HSUPA Subtest-2	17.36	17.44	17.40	18.00	17.33	17.45	17.50	18.00	18.03	17.91	18.20	19.00
3GPP Rel 6	HSUPA Subtest-3	16.49	16.45	16.34	17.00	16.23	16.49	16.43	17.00	17.08	16.94	17.00	18.50
3GPP Rel 6	HSUPA Subtest-4	17.31	17.44	17.31	18.00	17.23	17.45	17.39	18.00	18.03	17.96	18.18	18.50
3GPP Rel 6	HSUPA Subtest-5	16.46	16.43	16.28	17.00	16.17	16.43	16.43	17.00	17.02	16.99	17.06	18.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	16.32	16.41	16.24	17.00	16.34	16.38	16.34	17.00	16.89	16.93	17.02	18.00
Attenuator		Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6		
Mode		Max.	18.25			Max.	18.41			Max.	19.16		

Band 2 (1900MHz Band) (dBm)							
Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	18.72	18.81	18.68	
20	QPSK	1	49	18.64	18.70	18.60	19.5
20	QPSK	1	99	18.66	18.72	18.63	
20	QPSK	50	0	17.65	17.73	17.61	
20	QPSK	50	24	17.61	17.66	17.57	18.5
20	QPSK	50	50	17.54	17.62	17.50	
20	QPSK	100	0	17.57	17.60	17.54	
20	16QAM	1	0	17.93	17.99	17.89	18.5
20	16QAM	1	49	17.86	17.91	17.81	
20	16QAM	1	99	17.87	17.88	17.83	
20	16QAM	50	0	16.89	16.90	16.84	17.5
20	16QAM	50	24	16.86	16.88	16.79	
20	16QAM	50	50	16.80	16.87	16.76	
20	16QAM	100	0	16.82	16.85	16.80	17.5
20	64QAM	1	0	16.94	16.96	16.87	
20	64QAM	1	49	16.87	16.84	16.79	
20	64QAM	1	99	16.81	16.84	16.83	16.5
20	64QAM	50	0	15.87	15.89	15.82	
20	64QAM	50	24	15.80	15.85	15.73	
20	64QAM	50	50	15.82	15.79	15.70	16.5
20	64QAM	100	0	15.81	15.83	15.76	
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	18.70	18.79	18.63	
15	QPSK	1	37	18.61	18.69	18.61	
15	QPSK	1	74	18.65	18.72	18.57	
15	QPSK	36	0	17.75	17.76	17.67	
15	QPSK	36	20	17.54	17.53	17.52	18.5
15	QPSK	36	39	17.51	17.60	17.50	
15	QPSK	75	0	17.57	17.57	17.59	
15	16QAM	1	0	17.93	17.97	17.91	18.5
15	16QAM	1	37	17.72	17.94	17.83	
15	16QAM	1	74	17.92	17.81	17.90	
15	16QAM	36	0	16.81	16.87	16.84	17.5
15	16QAM	36	20	16.79	16.97	16.76	
15	16QAM	36	39	16.80	16.76	16.73	
15	16QAM	75	0	16.78	16.86	16.76	17.5
15	64QAM	1	0	16.81	16.88	16.79	
15	64QAM	1	37	16.84	16.74	16.81	
15	64QAM	1	74	16.82	16.69	16.83	16.5
15	64QAM	36	0	15.87	15.90	15.82	
15	64QAM	36	20	15.81	15.86	15.76	
15	64QAM	36	39	15.84	15.82	15.61	16.5
15	64QAM	75	0	15.82	15.80	15.67	
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	18.75	18.76	18.64	
10	QPSK	1	25	18.74	18.72	18.57	
10	QPSK	1	49	18.69	18.64	18.55	
10	QPSK	25	0	17.67	17.73	17.67	
10	QPSK	25	12	17.53	17.60	17.62	18.5
10	QPSK	25	25	17.64	17.62	17.60	
10	QPSK	50	0	17.62	17.54	17.49	
10	16QAM	1	0	17.89	17.92	17.89	18.5
10	16QAM	1	25	17.83	17.79	17.86	
10	16QAM	1	49	17.86	17.88	17.87	
10	16QAM	25	0	16.98	16.99	16.94	17.5
10	16QAM	25	12	16.80	16.78	16.78	
10	16QAM	25	25	16.82	16.96	16.85	
10	16QAM	50	0	16.88	16.79	16.74	17.5
10	64QAM	1	0	16.79	17.01	16.75	
10	64QAM	1	25	16.76	16.79	16.88	
10	64QAM	1	49	16.79	16.87	16.89	16.5
10	64QAM	25	0	15.77	15.91	15.86	
10	64QAM	25	12	15.67	15.89	15.80	
10	64QAM	25	25	15.85	15.87	15.69	16.5
10	64QAM	50	0	15.90	15.78	15.71	
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	18.70	18.77	18.69	
5	QPSK	1	12	18.60	18.57	18.57	
5	QPSK	1	24	18.66	18.59	18.58	
5	QPSK	12	0	17.68	17.71	17.54	
5	QPSK	12	7	17.48	17.64	17.50	18.5
5	QPSK	12	13	17.44	17.56	17.46	
5	QPSK	25	0	17.53	17.70	17.50	
5	16QAM	1	0	17.91	17.98	17.85	18.5
5	16QAM	1	12	17.95	17.93	17.83	
5	16QAM	1	24	17.79	17.79	17.83	
5	16QAM	12	0	16.77	16.82	16.72	17.5
5	16QAM	12	7	16.73	16.88	16.73	
5	16QAM	12	13	16.69	16.91	16.71	
5	16QAM	25	0	16.80	16.91	16.74	17.5
5	64QAM	1	0	17.03	16.92	16.78	
5	64QAM	1	12	16.93	16.79	16.84	
5	64QAM	1	24	16.81	16.75	16.78	16.5
5	64QAM	12	0	15.83	15.81	15.75	
5	64QAM	12	7	15.66	15.92	15.72	
5	64QAM	12	13	15.75	15.79	15.71	16.5
5	64QAM	25	0	15.77	15.91	15.66	
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	18.67	18.75	18.71	
3	QPSK	1	8	18.63	18.67	18.69	
3	QPSK	1	14	18.63	18.64	18.66	
3	QPSK	8	0	17.73	17.79	17.62	
3	QPSK	8	4	17.56	17.63	17.59	18.5
3	QPSK	8	7	17.58	17.49	17.54	

Band 4 (AWS Band) (dBm)							
Part 27L (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	18.70	18.77	18.69	
20	QPSK	1	49	18.68	18.69	18.55	
20	QPSK	1	99	18.67	18.67	18.68	
20	QPSK	50	0	17.72	17.75	17.60	18.5
20	QPSK	50	24	17.60	17.52	17.66	
20	QPSK	50	50	17.52	17.65	17.56	
20	QPSK	100	0	17.45	17.69	17.52	18.5
20	16QAM	1	0	17.91	17.96	17.82	
20	16QAM	1	49	17.71	17.90	17.67	
20	16QAM	1	99	17.79	17.73	17.91	17.5
20	16QAM	50	0	16.96	16.91	16.94	
20	16QAM	50	24	16.84	16.83	16.76	
20	16QAM	50	50	16.75	16.87	16.81	17.5
20	16QAM	100	0	16.92	16.81	16.82	
20	64QAM	1	0	16.92	16.98	16.97	
20	64QAM	1	49	16.89	16.97	16.88	17.5
20	64QAM	1	99	16.72	16.80	16.83	
20	64QAM	50	0	15.81	15.87	15.83	
20	64QAM	50	24	15.68	15.77	15.83	16.5
20	64QAM	50	50	15.69	15.64	15.69	
20	64QAM	100	0	15.87	15.68	15.79	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	18.62	18.74	18.68	
15	QPSK	1	37	18.65	18.72	18.60	
15	QPSK	1	74	18.60	18.67	18.64	
15	QPSK	36	0	17.71	17.74	17.65	
15	QPSK	36	20	17.70	17.61	17.45	18.5
15	QPSK	36	39	17.49	17.71	17.55	
15	QPSK	75	0	17.65	17.45	17.50	
15	16QAM	1	0	17.94	18.00	17.98	18.5
15	16QAM	1	37	17.85	17.84	17.89	
15	16QAM	1	74	17.88	17.83	17.87	
15	16QAM	36	0	16.78	16.96	16.91	17.5
15	16QAM	36	20	16.82	16.95	16.75	
15	16QAM	36	39	16.79	16.88	16.79	
15	16QAM	75	0	16.76	16.77	16.67	17.5
15	64QAM	1	0	16.92	16.93	16.87	
15	64QAM	1	37	16.91	16.78	16.81	
15	64QAM	1	74	16.81	16.81	16.82	16.5
15	64QAM	36	0	15.95	15.98	15.87	
15	64QAM	36	20	15.89	15.72	15.79	
15	64QAM	36	39	15.74	15.86	15.68	16.5
15	64QAM	75	0	15.84	15.93	15.68	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	18.74	18.75	18.68	
10	QPSK	1	25	18.71	18.66	18.48	
10	QPSK	1	49	18.72	18.63	18.67	
10	QPSK	25	0	17.60	17.67	17.55	
10	QPSK	25	12	17.54	17.65	17.48	18.5
10	QPSK	25	25	17.63	17.48	17.50	
10	QPSK	50	0	17.43	17.61	17.62	
10	16QAM	1	0	17.81	17.95	17.90	18.5
10	16QAM	1	25	17.84	17.91	17.85	
10	16QAM	1	49	17.73	17.88	17.86	
10	16QAM	25	0	16.86	16.90	16.73	17.5

3	QPSK	15	0	17.64	17.52	17.51	18.5
3	16QAM	1	0	17.93	18.01	17.91	
3	16QAM	1	8	17.85	17.83	17.83	
3	16QAM	1	14	17.75	17.95	17.78	17.5
3	16QAM	8	0	16.93	16.90	16.81	
3	16QAM	8	4	16.74	16.82	16.70	
3	16QAM	8	7	16.77	16.72	16.69	17.5
3	16QAM	15	0	16.71	16.85	16.90	
3	64QAM	1	0	16.93	16.91	16.88	
3	64QAM	1	8	16.72	16.86	16.73	16.5
3	64QAM	1	14	16.90	16.79	16.79	
3	64QAM	8	0	15.79	15.88	15.85	
3	64QAM	8	4	15.77	15.85	15.72	16.5
3	64QAM	8	7	15.89	15.65	15.73	
3	64QAM	15	0	15.69	15.79	15.65	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	18.66	18.74	18.66	19.5
1.4	QPSK	1	3	18.71	18.80	18.66	
1.4	QPSK	1	5	18.65	18.78	18.48	
1.4	QPSK	3	0	17.51	17.76	17.60	
1.4	QPSK	3	1	17.51	17.71	17.49	
1.4	QPSK	3	3	17.46	17.65	17.57	
1.4	QPSK	6	0	17.61	17.48	17.60	18.5
1.4	16QAM	1	0	17.82	18.01	17.99	
1.4	16QAM	1	3	17.75	17.85	17.80	18.5
1.4	16QAM	1	5	17.87	17.89	17.82	
1.4	16QAM	3	0	16.90	17.00	16.84	
1.4	16QAM	3	1	16.83	16.77	16.78	
1.4	16QAM	3	3	16.82	16.88	16.81	
1.4	16QAM	6	0	16.70	16.83	16.86	
1.4	64QAM	1	0	16.94	16.91	16.77	17.5
1.4	64QAM	1	3	16.74	16.75	16.82	
1.4	64QAM	1	5	16.91	16.93	16.85	
1.4	64QAM	3	0	15.92	15.75	15.92	
1.4	64QAM	3	1	15.87	15.91	15.77	
1.4	64QAM	3	3	15.78	15.78	15.77	
1.4	64QAM	6	0	15.75	15.82	15.84	16.5

3	QPSK	15	0	17.65	17.51	17.42	18.5
3	16QAM	1	0	17.93	18.00	17.84	
3	16QAM	1	8	17.71	17.76	17.90	
3	16QAM	1	14	17.85	17.95	17.78	17.5
3	16QAM	8	0	16.84	16.86	16.79	
3	16QAM	8	4	16.90	16.80	16.81	
3	16QAM	8	7	16.73	16.82	16.78	17.5
3	16QAM	15	0	16.72	16.88	16.70	
3	64QAM	1	0	16.94	16.95	16.77	
3	64QAM	1	8	16.86	16.76	16.79	17.5
3	64QAM	1	14	16.89	16.75	16.87	
3	64QAM	8	0	15.84	15.85	15.86	
3	64QAM	8	4	15.90	15.83	15.81	16.5
3	64QAM	8	7	15.69	15.65	15.70	
3	64QAM	15	0	15.67	15.87	15.61	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	18.70	18.73	18.54	19.5
1.4	QPSK	1	3	18.52	18.62	18.63	
1.4	QPSK	1	5	18.55	18.61	18.61	
1.4	QPSK	3	0	17.72	17.76	17.59	
1.4	QPSK	3	1	17.50	17.70	17.62	
1.4	QPSK	3	3	17.61	17.50	17.48	
1.4	QPSK	6	0	17.62	17.68	17.44	18.5
1.4	16QAM	1	0	18.00	17.84	17.88	
1.4	16QAM	1	3	17.71	17.99	17.83	18.5
1.4	16QAM	1	5	17.97	17.76	17.92	
1.4	16QAM	3	0	16.83	16.92	16.77	
1.4	16QAM	3	1	16.93	16.79	16.78	
1.4	16QAM	3	3	16.67	16.95	16.68	
1.4	16QAM	6	0	16.86	16.84	16.79	
1.4	64QAM	1	0	16.80	16.84	16.82	17.5
1.4	64QAM	1	3	16.88	16.81	16.67	
1.4	64QAM	1	5	16.87	16.72	16.77	
1.4	64QAM	3	0	15.81	15.86	15.79	
1.4	64QAM	3	1	15.72	15.82	15.58	
1.4	64QAM	3	3	15.82	15.64	15.64	
1.4	64QAM	6	0	15.73	15.89	15.83	16.5

Band 5 (Cellular Band) (dBm)							
Part 22H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	19.24	19.30	19.18	20
10	QPSK	1	25	19.11	19.22	19.07	
10	QPSK	1	49	19.18	19.19	19.11	
10	QPSK	25	0	18.14	18.19	18.11	19
10	QPSK	25	12	18.09	18.10	18.08	
10	QPSK	25	25	18.16	18.15	18.12	
10	QPSK	50	0	18.05	18.12	18.03	19
10	16QAM	1	0	18.41	18.44	18.32	
10	16QAM	1	25	18.25	18.43	18.31	
10	16QAM	1	49	18.43	18.42	18.29	18
10	16QAM	25	0	17.34	17.37	17.33	
10	16QAM	25	12	17.30	17.27	17.32	
10	16QAM	25	25	17.29	17.27	17.25	18
10	16QAM	50	0	17.35	17.36	17.27	
10	64QAM	1	0	17.38	17.41	17.35	
10	64QAM	1	25	17.33	17.33	17.29	18
10	64QAM	1	49	17.39	17.28	17.25	
10	64QAM	25	0	16.31	16.38	16.32	
10	64QAM	25	12	16.27	16.33	16.23	17
10	64QAM	25	25	16.25	16.30	16.22	
10	64QAM	50	0	16.22	16.31	16.21	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	19.21	19.28	19.12	20
5	QPSK	1	12	19.01	19.11	19.11	
5	QPSK	1	24	19.15	19.19	19.09	
5	QPSK	12	0	18.07	18.22	18.07	19
5	QPSK	12	7	18.08	18.02	18.09	
5	QPSK	12	13	18.00	17.98	18.01	
5	QPSK	25	0	18.01	18.12	18.06	19
5	16QAM	1	0	18.52	18.51	18.39	
5	16QAM	1	12	18.28	18.30	18.42	
5	16QAM	1	24	18.27	18.38	18.34	18
5	16QAM	12	0	17.40	17.41	17.32	
5	16QAM	12	7	17.33	17.39	17.38	
5	16QAM	12	13	17.22	17.31	17.27	18
5	16QAM	25	0	17.35	17.31	17.24	
5	64QAM	1	0	17.45	17.49	17.44	
5	64QAM	1	12	17.31	17.35	17.30	18
5	64QAM	1	24	17.33	17.31	17.28	
5	64QAM	12	0	16.35	16.41	16.37	
5	64QAM	12	7	16.31	16.28	16.18	17
5	64QAM	12	13	16.25	16.32	16.20	
5	64QAM	25	0	16.29	16.27	16.23	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	19.15	19.24	19.12	20
3	QPSK	1	8	19.11	19.03	19.03	
3	QPSK	1	14	19.09	19.11	19.06	
3	QPSK	8	0	18.11	18.18	18.10	19
3	QPSK	8	4	18.01	17.99	18.08	
3	QPSK	8	7	18.08	17.97	17.91	
3	QPSK	15	0	17.94	18.11	17.98	19
3	16QAM	1	0	18.31	18.43	18.29	
3	16QAM	1	8	18.23	18.34	18.30	
3	16QAM	1	14	18.32	18.35	18.35	18
3	16QAM	8	0	17.27	17.36	17.28	
3	16QAM	8	4	17.26	17.30	17.19	
3	16QAM	8	7	17.31	17.27	17.25	18
3	16QAM	15	0	17.33	17.30	17.24	
3	64QAM	1	0	17.39	17.46	17.33	
3	64QAM	1	8	17.28	17.32	17.30	18
3	64QAM	1	14	17.37	17.33	17.35	
3	64QAM	8	0	16.33	16.38	16.33	
3	64QAM	8	4	16.28	16.31	16.36	17
3	64QAM	8	7	16.30	16.34	16.23	
3	64QAM	15	0	16.27	16.27	16.24	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	19.18	19.25	19.12	20
1.4	QPSK	1	3	19.05	19.17	19.04	
1.4	QPSK	1	5	19.08	19.11	19.08	
1.4	QPSK	3	0	18.09	18.24	18.17	19
1.4	QPSK	3	1	18.20	18.17	18.06	
1.4	QPSK	3	3	18.04	18.16	17.93	
1.4	QPSK	6	0	18.12	18.01	18.00	19
1.4	16QAM	1	0	18.31	18.44	18.38	
1.4	16QAM	1	3	18.32	18.28	18.36	
1.4	16QAM	1	5	18.39	18.24	18.33	19
1.4	16QAM	3	0	17.47	17.25	17.34	
1.4	16QAM	3	1	17.37	17.27	17.29	
1.4	16QAM	3	3	17.32	17.41	17.29	18
1.4	16QAM	6	0	17.29	17.33	17.32	
1.4	64QAM	1	0	17.32	17.36	17.35	
1.4	64QAM	1	3	17.36	17.30	17.37	18
1.4	64QAM	1	5	17.31	17.34	17.28	
1.4	64QAM	3	0	16.26	16.43	16.29	
1.4	64QAM	3	1	16.36	16.28	16.24	18
1.4	64QAM	3	3	16.25	16.21	16.15	
1.4	64QAM	6	0	16.37	16.30	16.31	

Band 12 (700MHz Low Band) (dBm)							
Part 27F(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	18.81	18.87	18.84	19.5
10	QPSK	1	25	18.79	18.77	18.72	
10	QPSK	1	49	18.78	18.75	18.77	
10	QPSK	25	0	17.80	17.89	17.83	18.5
10	QPSK	25	12	17.76	17.63	17.81	
10	QPSK	25	25	17.59	17.82	17.74	
10	QPSK	50	0	17.80	17.71	17.73	18.5
10	16QAM	1	0	17.89	17.94	17.89	
10	16QAM	1	25	17.86	17.87	17.90	
10	16QAM	1	49	17.80	17.88	17.79	17.5
10	16QAM	25	0	16.93	16.97	16.90	
10	16QAM	25	12	16.84	16.87	16.91	
10	16QAM	25	25	16.91	16.86	16.82	17.5
10	16QAM	50	0	16.86	16.85	16.84	
10	64QAM	1	0	16.98	16.99	16.98	
10	64QAM	1	25	16.93	16.84	16.86	17.5
10	64QAM	1	49	16.88	16.88	16.90	
10	64QAM	25	0	15.86	15.94	15.93	
10	64QAM	25	12	15.92	15.81	15.84	16.5
10	64QAM	25	25	15.87	15.87	15.86	
10	64QAM	50	0	15.88	15.80	15.87	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	18.78	18.84	18.81	19.5
5	QPSK	1	12	18.70	18.83	18.64	
5	QPSK	1	24	18.81	18.78	18.75	
5	QPSK	12	0	17.88	17.85	17.66	18.5
5	QPSK	12	7	17.79	17.78	17.78	
5	QPSK	12	13	17.83	17.76	17.65	
5	QPSK	25	0	17.66	17.68	17.64	18.5
5	16QAM	1	0	17.94	18.02	17.94	
5	16QAM	1	12	17.95	18.01	17.97	
5	16QAM	1	24	17.90	17.86	17.91	17.5
5	16QAM	12	0	17.08	17.09	17.06	
5	16QAM	12	7	16.96	17.04	17.01	
5	16QAM	12	13	16.94	17.06	16.91	17.5
5	16QAM	25	0	16.87	16.85	16.97	
5	64QAM	1	0	16.93	17.03	16.98	
5	64QAM	1	12	16.98	16.87	16.95	17.5
5	64QAM	1	24	16.94	16.91	16.87	
5	64QAM	12	0	15.90	15.99	15.92	
5	64QAM	12	7	15.83	15.97	15.76	16.5
5	64QAM	12	13	15.85	15.84	15.91	
5	64QAM	25	0	15.92	15.88	15.91	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	18.77	18.83	18.81	19.5
3	QPSK	1	8	18.72	18.81	18.79	
3	QPSK	1	14	18.67	18.78	18.71	
3	QPSK	8	0	17.79	17.82	17.71	18.5
3	QPSK	8	4	17.72	17.77	17.80	
3	QPSK	8	7	17.67	17.62	17.68	
3	QPSK	15	0	17.78	17.62	17.66	18.5
3	16QAM	1	0	17.93	17.99	17.86	
3	16QAM	1	8	17.90	17.88	17.93	
3	16QAM	1	14	17.97	17.96	17.90	17.5
3	16QAM	8	0	16.85	16.95	16.84	
3	16QAM	8	4	16.87	16.89	16.85	
3	16QAM	8	7	16.85	16.86	16.84	17.5
3	16QAM	15	0	16.83	16.88	16.86	
3	64QAM	1	0	17.18	17.13	17.07	
3	64QAM	1	8	16.87	16.94	16.92	17.5
3	64QAM	1	14	16.95	16.94	17.01	
3	64QAM	8	0	15.91	15.87	15.86	
3	64QAM	8	4	15.92	15.83	15.79	16.5
3	64QAM	8	7	15.91	15.88	15.75	
3	64QAM	15	0	15.82			

Band 17 (700MHz Band) (dBm) Part 27H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	18.70	18.74	18.67	19.5
10	QPSK	1	25	18.68	18.71	18.65	
10	QPSK	1	49	18.60	18.64	18.59	
10	QPSK	25	0	17.71	17.77	17.63	18.5
10	QPSK	25	12	17.55	17.70	17.75	
10	QPSK	25	25	17.69	17.68	17.56	
10	QPSK	50	0	17.56	17.46	17.70	18.5
10	16QAM	1	0	17.88	17.95	17.90	
10	16QAM	1	25	17.83	17.87	17.91	
10	16QAM	1	49	17.78	17.80	17.92	17.5
10	16QAM	25	0	16.87	16.86	16.85	
10	16QAM	25	12	16.81	16.77	16.88	
10	16QAM	25	25	16.84	16.82	16.85	17.5
10	16QAM	50	0	16.85	16.86	16.79	
10	64QAM	1	0	16.87	16.94	16.95	
10	64QAM	1	25	16.93	16.92	16.82	17.5
10	64QAM	1	49	16.84	16.91	16.79	
10	64QAM	25	0	15.92	15.93	15.86	
10	64QAM	25	12	15.86	15.80	15.68	16.5
10	64QAM	25	25	15.77	15.80	15.79	
10	64QAM	50	0	15.92	15.81	15.91	
Channel				23755	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	18.66	18.71	18.68	19.5
5	QPSK	1	12	18.69	18.68	18.63	
5	QPSK	1	24	18.61	18.67	18.55	
5	QPSK	12	0	17.66	17.69	17.55	18.5
5	QPSK	12	7	17.59	17.67	17.68	
5	QPSK	12	13	17.61	17.68	17.64	
5	QPSK	25	0	17.48	17.62	17.53	18.5
5	16QAM	1	0	17.82	17.90	17.86	
5	16QAM	1	12	17.80	17.86	17.77	
5	16QAM	1	24	17.77	17.79	17.83	17.5
5	16QAM	12	0	16.83	16.87	16.86	
5	16QAM	12	7	16.75	16.79	16.81	
5	16QAM	12	13	16.81	16.81	16.85	17.5
5	16QAM	25	0	16.77	16.86	16.81	
5	64QAM	1	0	16.85	16.96	16.90	
5	64QAM	1	12	16.78	16.92	16.73	17.5
5	64QAM	1	24	16.93	16.80	16.88	
5	64QAM	12	0	15.83	15.91	15.83	
5	64QAM	12	7	15.89	15.71	15.74	16.5
5	64QAM	12	13	15.82	15.89	15.79	
5	64QAM	25	0	15.87	15.89	15.83	

Band 25 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	18.83	18.87	18.84	19.5
20	QPSK	1	49	18.74	18.80	18.79	
20	QPSK	1	99	18.78	18.76	18.76	
20	QPSK	50	0	17.79	17.81	17.76	18.5
20	QPSK	50	24	17.53	17.73	17.69	
20	QPSK	50	50	17.57	17.70	17.67	
20	QPSK	100	0	17.83	17.86	17.83	18.5
20	16QAM	1	0	17.83	17.88	17.86	
20	16QAM	1	49	17.81	17.68	17.65	
20	16QAM	1	99	17.87	17.76	17.76	17.5
20	16QAM	50	0	16.79	16.86	16.66	
20	16QAM	50	24	16.84	16.84	16.73	
20	16QAM	50	50	16.81	16.78	16.72	17.5
20	16QAM	100	0	16.85	16.75	16.66	
20	64QAM	1	0	16.79	16.74	16.70	
20	64QAM	1	49	16.66	16.76	16.80	17.5
20	64QAM	1	99	16.58	16.77	16.63	
20	64QAM	50	0	15.89	15.78	15.87	
20	64QAM	50	24	15.71	15.64	15.69	16.5
20	64QAM	50	50	15.61	15.66	15.69	
20	64QAM	100	0	15.60	15.77	15.71	
Channel				26115	26365	26615	
Frequency (MHz)				1857.5	1882.5	1907.5	
15	QPSK	1	0	18.66	18.69	18.65	19.5
15	QPSK	1	37	18.50	18.44	18.55	
15	QPSK	1	74	18.53	18.45	18.51	
15	QPSK	36	0	17.53	17.67	17.65	18.5
15	QPSK	36	20	17.50	17.50	17.48	
15	QPSK	36	39	17.40	17.51	17.40	
15	QPSK	75	0	17.51	17.55	17.35	18.5
15	16QAM	1	0	17.73	17.84	17.69	
15	16QAM	1	37	17.78	17.88	17.72	
15	16QAM	1	74	17.65	17.74	17.84	17.5
15	16QAM	36	0	16.70	16.63	16.89	
15	16QAM	36	20	16.75	16.78	16.66	
15	16QAM	36	39	16.68	16.77	16.67	17.5
15	16QAM	75	0	16.72	16.58	16.62	
15	64QAM	1	0	16.75	16.86	16.69	
15	64QAM	1	37	16.85	16.72	16.84	17.5
15	64QAM	1	74	16.70	16.57	16.72	
15	64QAM	36	0	15.80	15.63	15.69	
15	64QAM	36	20	15.83	15.58	15.74	16.5
15	64QAM	36	39	15.65	15.63	15.65	
15	64QAM	75	0	15.72	15.72	15.56	
Channel				26090	26365	26640	
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	18.81	18.68	18.65	19.5
10	QPSK	1	25	18.56	18.62	18.53	
10	QPSK	1	49	18.51	18.55	18.56	
10	QPSK	25	0	17.62	17.69	17.61	18.5
10	QPSK	25	12	17.48	17.57	17.43	
10	QPSK	25	25	17.56	17.56	17.53	
10	QPSK	50	0	17.47	17.58	17.54	18.5
10	16QAM	1	0	17.80	17.83	17.79	
10	16QAM	1	25	17.69	17.73	17.83	
10	16QAM	1	49	17.67	17.61	17.67	17.5
10	16QAM	25	0	16.77	16.82	16.85	
10	16QAM	25	12	16.65	16.76	16.70	
10	16QAM	25	25	16.58	16.75	16.67	17.5
10	16QAM	50	0	16.79	16.82	16.69	
10	64QAM	1	0	16.73	16.83	16.82	
10	64QAM	1	25	16.69	16.68	16.78	17.5
10	64QAM	1	49	16.76	16.65	16.76	
10	64QAM	25	0	15.81	15.85	15.70	
10	64QAM	25	12	15.64	15.58	15.74	16.5
10	64QAM	25	25	15.74	15.70	15.60	
10	64QAM	50	0	15.79	15.76	15.75	
Channel				26065	26365	26665	
Frequency (MHz)				1852.5	1882.5	1912.5	
5	QPSK	1	0	18.63	18.66	18.61	19.5
5	QPSK	1	12	18.62	18.59	18.44	
5	QPSK	1	24	18.62	18.49	18.52	
5	QPSK	12	0	17.51	17.66	17.60	18.5
5	QPSK	12	7	17.61	17.52	17.48	
5	QPSK	12	13	17.39	17.41	17.36	
5	QPSK	25	0	17.45	17.44	17.55	18.5
5	16QAM	1	0	17.72	17.76	17.74	
5	16QAM	1	12	17.70	17.74	17.68	
5	16QAM	1	24	17.68	17.67	17.73	17.5
5	16QAM	12	0	16.72	16.79	16.86	
5	16QAM	12	7	16.75	16.66	16.65	
5	16QAM	12	13	16.84	16.70	16.80	17.5
5	16QAM	25	0	16.67	16.57	16.82	
5	64QAM	1	0	16.93	16.78	16.82	
5	64QAM	1	12	16.73	16.62	16.79	17.5
5	64QAM	1	24	16.80	16.77	16.73	
5	64QAM	12	0	15.64	15.81	15.84	
5	64QAM	12	7	15.60	15.78	15.65	16.5
5	64QAM	12	13	15.83	15.52	15.67	
5	64QAM	25	0	15.72	15.63	15.67	
Channel				26055	26365	26675	
Frequency (MHz)				1851.5	1882.5	1913.5	
3	QPSK	1	0	18.64	18.67	18.59	19.5
3	QPSK	1	8	18.62	18.64	18.49	
3	QPSK	1	14	18.63	18.53	18.48	
3	QPSK	8	0	17.48	17.65	17.57	18.5
3	QPSK	8	4	17.54	17.63	17.42	
3	QPSK	8	7	17.47	17.51	17.40	

3	QPSK	15	0	17.58	17.56	17.54	18.5
3	16QAM	1	0	17.81	17.84	17.81	
3	16QAM	1	8	17.76	17.64	17.62	
3	16QAM	1	14	17.77	17.80	17.68	17.5
3	16QAM	8	0	16.80	16.80	16.76	
3	16QAM	8	4	16.68	16.78	16.82	
3	16QAM	8	7	16.78	16.70	16.81	17.5
3	16QAM	15	0	16.74	16.59	16.76	
3	64QAM	1	0	16.80	16.70	16.84	
3	64QAM	1	8	16.73	16.79	16.74	17.5
3	64QAM	1	14	16.65	16.69	16.65	
3	64QAM	8	0	15.79	15.72	15.65	
3	64QAM	8	4	15.61	15.76	15.76	16.5
3	64QAM	8	7	15.75	15.57	15.70	
3	64QAM	15	0	15.70	15.75	15.75	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	18.56	18.65	18.61	19.5
1.4	QPSK	1	3	18.62	18.45	18.57	
1.4	QPSK	1	5	18.54	18.58	18.61	
1.4	QPSK	3	0	17.65	17.49	17.61	
1.4	QPSK	3	1	17.49	17.38	17.47	
1.4	QPSK	3	3	17.43	17.59	17.44	
1.4	QPSK	6	0	17.47	17.54	17.42	18.5
1.4	16QAM	1	0	17.93	17.86	17.80	17.5
1.4	16QAM	1	3	17.74	17.84	17.81	
1.4	16QAM	1	5	17.89	17.71	17.81	
1.4	16QAM	3	0	16.84	16.85	16.78	
1.4	16QAM	3	1	16.75	16.70	16.66	
1.4	16QAM	3	3	16.63	16.83	16.56	
1.4	16QAM	6	0	16.84	16.72	16.75	16.5
1.4	64QAM	1	0	16.82	16.79	16.72	17.5
1.4	64QAM	1	3	16.65	16.68	16.60	
1.4	64QAM	1	5	16.78	16.56	16.77	
1.4	64QAM	3	0	15.87	15.73	15.68	
1.4	64QAM	3	1	15.76	15.61	15.70	
1.4	64QAM	3	3	15.60	15.73	15.74	
1.4	64QAM	6	0	15.58	15.80	15.80	16.5

Band 26 for FCC (dBm) (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				28765	28865	28965	
Frequency (MHz)				831.5	831.5	841.5	
15	QPSK	1	0	18.67	18.70	18.62	19.5
15	QPSK	1	37	18.61	18.56	18.47	
15	QPSK	1	74	18.50	18.47	18.56	
15	QPSK	36	0	17.65	17.66	17.58	18.5
15	QPSK	36	20	17.57	17.49	17.52	
15	QPSK	36	39	17.55	17.45	17.42	
15	QPSK	75	0	17.53	17.56	17.57	18.5
15	16QAM	1	0	17.70	17.83	17.71	
15	16QAM	1	37	17.72	17.65	17.80	
15	16QAM	1	74	17.74	17.67	17.78	17.5
15	16QAM	36	0	16.79	16.83	16.82	
15	16QAM	36	20	16.66	16.65	16.62	
15	16QAM	36	39	16.79	16.63	16.60	17.5
15	16QAM	75	0	16.72	16.75	16.71	
15	64QAM	1	0	16.77	16.80	16.73	
15	64QAM	1	37	16.79	16.65	16.79	17.5
15	64QAM	1	74	16.67	16.65	16.75	
15	64QAM	36	0	15.71	15.84	15.75	
15	64QAM	36	20	15.79	15.74	15.61	16.5
15	64QAM	36	39	15.66	15.64	15.63	
15	64QAM	75	0	15.58	15.65	15.73	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	18.57	18.68	18.66	19.5
10	QPSK	1	25	18.54	18.53	18.56	
10	QPSK	1	49	18.48	18.57	18.58	
10	QPSK	25	0	17.49	17.64	17.48	18.5
10	QPSK	25	12	17.54	17.45	17.59	
10	QPSK	25	25	17.51	17.45	17.44	
10	QPSK	50	0	17.48	17.51	17.44	18.5
10	16QAM	1	0	17.58	17.80	17.94	
10	16QAM	1	25	17.68	17.71	17.73	
10	16QAM	1	49	17.73	17.69	17.73	17.5
10	16QAM	25	0	16.68	16.78	16.68	
10	16QAM	25	12	16.70	16.72	16.71	
10	16QAM	25	25	16.58	16.69	16.69	17.5
10	16QAM	50	0	16.70	16.67	16.74	
10	64QAM	1	0	16.74	16.77	16.76	
10	64QAM	1	25	16.74	16.70	16.73	17.5
10	64QAM	1	49	16.64	16.64	16.76	
10	64QAM	25	0	15.77	15.83	15.80	
10	64QAM	25	12	15.58	15.74	15.73	16.5
10	64QAM	25	25	15.61	15.71	15.56	
10	64QAM	50	0	15.69	15.59	15.66	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	18.49	18.67	18.54	19.5
5	QPSK	1	12	18.48	18.61	18.50	
5	QPSK	1	24	18.58	18.53	18.45	
5	QPSK	12	0	17.51	17.65	17.46	18.5
5	QPSK	12	7	17.61	17.56	17.47	
5	QPSK	12	13	17.53	17.43	17.41	
5	QPSK	25	0	17.40	17.51	17.40	18.5
5	16QAM	1	0	17.73	17.86	17.84	
5	16QAM	1	12	17.65	17.77	17.73	
5	16QAM	1	24	17.77	17.78	17.63	17.5
5	16QAM	12	0	16.83	16.86	16.74	
5	16QAM	12	7	16.76	16.70	16.61	
5	16QAM	12	13	16.58	16.79	16.77	17.5
5	16QAM	25	0	16.71	16.57	16.76	
5	64QAM	1	0	16.72	16.79	16.71	
5	64QAM	1	12	16.75	16.72	16.62	17.5
5	64QAM	1	24	16.69	16.58	16.68	
5	64QAM	12	0	15.66	15.80	15.69	
5	64QAM	12	7	15.68	15.67	15.58	16.5
5	64QAM	12	13	15.63	15.55	15.62	
5	64QAM	25	0	15.62	15.60	15.64	
Channel				28705	28865	29025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	18.59	18.64	18.62	19.5
3	QPSK	1	8	18.55	18.52	18.57	
3	QPSK	1	14	18.51	18.55	18.58	
3	QPSK	8	0	17.43	17.63	17.55	18.5
3	QPSK	8	4	17.61	17.40	17.50	
3	QPSK	8	7	17.51	17.49	17.46	
3	QPSK	15	0	17.55	17.49	17.49	18.5
3	16QAM	1	0	17.89	17.95	17.72	
3	16QAM	1	8	17.70	17.87	17.82	
3	16QAM	1	14	17.67	17.68	17.76	17.5
3	16QAM	8	0	16.73	16.83	16.73	
3	16QAM	8	4	16.63	16.79	16.66	
3	16QAM	8	7	16.81	16.73	16.72	17.5
3	16QAM	15	0	16.60	16.61	16.63	
3	64QAM	1	0	16.82	16.93	16.79	
3	64QAM	1	8	16.83	16.81	16.60	17.5
3	64QAM	1	14	16.62	16.80	16.72	
3	64QAM	8	0	15.64	15.66	15.83	
3	64QAM	8	4	15.69	15.72	15.53	16.5
3	64QAM	8	7	15.62	15.74	15.61	
3	64QAM	15	0	15.74	15.61	15.56	
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	18.58	18.66	18.61	19.5
1.4	QPSK	1	3	18.45	18.54	18.43	
1.4	QPSK	1	5	18.55	18.46	18.56	
1.4	QPSK	3	0	17.44	17.53	17.62	
1.4	QPSK	3	1	17.45	17.48	17.53	
1.4	QPSK	3	3	17.38	17.48	17.42	

Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	19.23	19.28	19.22	20
20	QPSK	1	49	19.07	19.14	18.99	
20	QPSK	1	99	19.08	19.19	19.17	
20	QPSK	50	0	18.19	18.24	18.15	19
20	QPSK	50	24	18.07	18.15	18.09	
20	QPSK	50	50	17.98	18.12	18.01	
20	QPSK	100	0	18.10	17.97	18.12	19
20	16QAM	1	0	18.16	18.24	18.16	
20	16QAM	1	49	18.17	18.22	18.12	
20	16QAM	1	99	18.10	18.09	18.23	18
20	16QAM	50	0	17.20	17.29	17.26	
20	16QAM	50	24	17.13	17.25	17.08	
20	16QAM	50	50	17.22	17.24	17.12	18
20	16QAM	100	0	17.12	17.14	17.13	
20	64QAM	1	0	17.18	17.34	17.25	
20	64QAM	1	49	17.20	17.14	17.14	18
20	64QAM	1	99	17.15	17.09	17.05	
20	64QAM	50	0	16.25	16.18	16.14	
20	64QAM	50	24	16.16	16.20	16.00	17
20	64QAM	50	50	16.24	16.05	16.01	
20	64QAM	100	0	16.17	16.16	16.08	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	19.07	19.14	19.04	20
15	QPSK	1	37	18.86	18.97	18.86	
15	QPSK	1	74	18.94	19.09	18.85	
15	QPSK	36	0	17.92	18.03	17.92	19
15	QPSK	36	20	17.94	18.02	17.97	
15	QPSK	36	39	17.95	17.87	17.80	
15	QPSK	75	0	17.80	17.82	17.90	19
15	16QAM	1	0	18.25	18.29	18.20	
15	16QAM	1	37	18.25	18.25	18.17	
15	16QAM	1	74	18.15	18.27	18.10	18
15	16QAM	36	0	17.16	17.15	17.18	
15	16QAM	36	20	17.13	17.12	17.23	
15	16QAM	36	39	17.22	17.14	17.15	18
15	16QAM	75	0	17.24	17.23	17.26	
15	64QAM	1	0	17.22	17.28	17.20	
15	64QAM	1	37	17.12	17.16	17.03	18
15	64QAM	1	74	17.25	17.11	17.21	
15	64QAM	36	0	16.06	16.23	16.14	
15	64QAM	36	20	16.17	16.02	16.04	17
15	64QAM	36	39	16.01	16.16	16.15	
15	64QAM	75	0	16.13	16.04	16.21	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	19.05	19.11	19.04	20
10	QPSK	1	25	18.84	19.08	19.00	
10	QPSK	1	49	18.95	19.00	19.05	
10	QPSK	25	0	18.00	18.09	17.93	19
10	QPSK	25	12	17.97	17.91	17.85	
10	QPSK	25	25	17.91	17.94	17.86	
10	QPSK	50	0	17.97	17.91	17.90	19
10	16QAM	1	0	18.12	18.29	18.20	
10	16QAM	1	25	18.20	18.06	18.26	
10	16QAM	1	49	18.14	18.21	18.24	18
10	16QAM	25	0	17.20	17.29	17.24	
10	16QAM	25	12	17.12	17.23	17.21	
10	16QAM	25	25	17.07	17.03	17.10	18
10	16QAM	50	0				

1.4	QPSK	6	0	17.48	17.50	17.39	18.5
1.4	16QAM	1	0	17.90	17.89	17.72	18.5
1.4	16QAM	1	3	17.82	17.78	17.74	
1.4	16QAM	1	5	17.70	17.71	17.70	
1.4	16QAM	3	0	16.67	16.72	16.84	
1.4	16QAM	3	1	16.72	16.84	16.72	
1.4	16QAM	3	3	16.73	16.79	16.69	17.5
1.4	16QAM	6	0	16.78	16.66	16.79	
1.4	64QAM	1	0	16.88	16.78	16.87	17.5
1.4	64QAM	1	3	16.72	16.66	16.70	
1.4	64QAM	1	5	16.81	16.81	16.86	
1.4	64QAM	3	0	15.67	15.77	15.73	
1.4	64QAM	3	1	15.78	15.81	15.77	
1.4	64QAM	3	3	15.73	15.63	15.54	
1.4	64QAM	6	0	15.82	15.78	15.58	16.5

3	QPSK	15	0	17.90	17.91	18.00	19	
3	16QAM	1	0	18.16	18.19	18.24		
3	16QAM	1	8	18.20	18.19	18.20		
3	16QAM	1	14	18.15	18.23	18.26	18	
3	16QAM	8	0	17.10	17.10	17.22		
3	16QAM	8	4	17.13	17.22	17.07		
3	16QAM	8	7	17.05	17.12	17.22		
3	16QAM	15	0	17.18	17.24	17.22	18	
3	64QAM	1	0	17.21	17.32	17.22		
3	64QAM	1	8	17.17	17.13	17.23		
3	64QAM	1	14	17.21	17.02	17.08	17	
3	64QAM	8	0	16.10	16.14	16.20		
3	64QAM	8	4	16.04	16.15	16.09		
3	64QAM	8	7	16.26	16.13	16.01		
3	64QAM	15	0	16.25	16.13	16.15	17	
Channel				131979	132922	132965		Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	20	
1.4	QPSK	1	0	19.00	19.10	18.90		
1.4	QPSK	1	3	19.01	18.88	18.99		
1.4	QPSK	1	5	18.96	18.88	19.02		
1.4	QPSK	3	0	17.90	18.09	17.98		
1.4	QPSK	3	1	17.92	17.91	17.84		
1.4	QPSK	3	3	17.84	17.88	17.89		
1.4	QPSK	6	0	17.84	17.87	17.94		19
1.4	16QAM	1	0	18.26	18.27	18.22		19
1.4	16QAM	1	3	18.05	18.23	18.09		
1.4	16QAM	1	5	18.13	18.25	18.16		
1.4	16QAM	3	0	17.16	17.25	17.23		
1.4	16QAM	3	1	17.07	17.15	17.22		
1.4	16QAM	3	3	17.16	17.14	17.07	18	
1.4	16QAM	6	0	17.01	17.05	17.03		
1.4	64QAM	1	0	17.16	17.14	17.19	18	
1.4	64QAM	1	3	17.08	17.21	17.17		
1.4	64QAM	1	5	17.07	17.10	17.22		
1.4	64QAM	3	0	16.16	16.05	16.11		
1.4	64QAM	3	1	16.03	16.09	16.09		
1.4	64QAM	3	3	16.04	15.99	15.96		
1.4	64QAM	6	0	16.07	16.02	16.01	17	

Band 71 (dBm)							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				573	583	588	
20	QPSK	1	0	19.10	19.21	19.19	20
20	QPSK	1	49	19.02	19.18	19.09	
20	QPSK	1	99	19.07	19.10	19.03	
20	QPSK	50	0	18.16	18.18	18.08	19
20	QPSK	50	24	17.94	17.94	17.98	
20	QPSK	50	50	18.03	17.95	18.02	
20	QPSK	100	0	18.07	17.92	17.92	19
20	16QAM	1	0	18.28	18.41	18.33	
20	16QAM	1	49	18.30	18.38	18.37	
20	16QAM	1	99	18.32	18.29	18.32	18
20	16QAM	50	0	17.24	17.27	17.25	
20	16QAM	50	24	17.19	17.31	17.28	
20	16QAM	50	50	17.22	17.26	17.18	18
20	16QAM	100	0	17.18	17.31	17.31	
20	64QAM	1	0	17.31	17.39	17.23	
20	64QAM	1	49	17.35	17.29	17.17	18
20	64QAM	1	99	17.15	17.25	17.28	
20	64QAM	50	0	16.30	16.37	16.29	
20	64QAM	50	24	16.36	16.28	16.09	17
20	64QAM	50	50	16.22	16.07	16.17	
20	64QAM	100	0	16.34	16.34	16.12	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	19.13	19.18	19.08	20
15	QPSK	1	37	19.12	19.12	19.00	
15	QPSK	1	74	19.05	19.10	19.03	
15	QPSK	36	0	18.09	18.17	18.13	19
15	QPSK	36	20	18.03	18.13	18.05	
15	QPSK	36	39	17.97	18.04	17.95	
15	QPSK	75	0	18.03	17.98	18.01	19
15	16QAM	1	0	18.30	18.37	18.25	
15	16QAM	1	37	18.19	18.31	18.33	
15	16QAM	1	74	18.31	18.33	18.20	18
15	16QAM	36	0	17.32	17.34	17.24	
15	16QAM	36	20	17.27	17.28	17.20	
15	16QAM	36	39	17.22	17.22	17.20	18
15	16QAM	75	0	17.38	17.36	17.29	
15	64QAM	1	0	17.37	17.41	17.31	
15	64QAM	1	37	17.33	17.40	17.30	18
15	64QAM	1	74	17.36	17.22	17.30	
15	64QAM	36	0	16.31	16.35	16.25	
15	64QAM	36	20	16.21	16.33	16.23	17
15	64QAM	36	39	16.25	16.25	16.11	
15	64QAM	75	0	16.28	16.34	16.13	
Channel				133172	133272	133422	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	19.15	19.19	19.12	20
10	QPSK	1	25	19.03	19.10	19.08	
10	QPSK	1	49	19.04	19.11	19.06	
10	QPSK	25	0	18.15	18.17	18.05	19
10	QPSK	25	12	18.09	18.09	18.05	
10	QPSK	25	25	18.04	18.09	17.88	
10	QPSK	50	0	18.09	17.93	17.93	19
10	16QAM	1	0	18.27	18.42	18.36	
10	16QAM	1	25	18.28	18.31	18.30	
10	16QAM	1	49	18.24	18.31	18.24	18
10	16QAM	25	0	17.23	17.37	17.32	
10	16QAM	25	12	17.28	17.35	17.30	
10	16QAM	25	25	17.33	17.27	17.32	18
10	16QAM	50	0	17.23	17.22	17.18	
10	64QAM	1	0	17.29	17.43	17.39	
10	64QAM	1	25	17.34	17.28	17.40	18
10	64QAM	1	49	17.29	17.13	17.26	
10	64QAM	25	0	16.27	16.38	16.29	
10	64QAM	25	12	16.33	16.33	16.17	17
10	64QAM	25	25	16.20	16.25	16.31	
10	64QAM	50	0	16.19	16.24	16.16	
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	19.13	19.17	19.12	20
5	QPSK	1	12	19.12	19.16	19.04	
5	QPSK	1	24	19.02	19.04	19.09	
5	QPSK	12	0	18.08	18.10	18.05	19
5	QPSK	12	7	18.00	18.04	18.08	
5	QPSK	12	13	18.03	18.02	17.87	
5	QPSK	25	0	18.01	17.90	18.09	19
5	16QAM	1	0	18.41	18.47	18.26	
5	16QAM	1	12	18.27	18.37	18.38	
5	16QAM	1	24	18.31	18.21	18.31	18
5	16QAM	12	0	17.26	17.32	17.31	
5	16QAM	12	7	17.22	17.30	17.30	
5	16QAM	12	13	17.27	17.27	17.21	18
5	16QAM	25	0	17.22	17.38	17.26	
5	64QAM	1	0	17.31	17.35	17.28	
5	64QAM	1	12	17.23	17.36	17.30	18
5	64QAM	1	24	17.28	17.31	17.33	
5	64QAM	12	0	16.25	16.39	16.18	
5	64QAM	12	7	16.36	16.19	16.16	17
5	64QAM	12	13	16.37	16.10	16.26	
5	64QAM	25	0	16.22	16.33	16.22	

Band 41 PC3 (2496~2690MHz) (dBm)												
BW (MHz)	Modulation	RB Size	RB Offset	Channel					Tune-up limit (dBm)			
				Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel				
				39750	40185	40620	41055	41490				
				2506	2549.5	2593	2636.5	2680				
20	QPSK	1	0	18.14	18.12	18.18	18.08	18.13	19			
20	QPSK	1	49	17.97	18.06	18.01	18.03	18.09				
20	QPSK	1	99	17.89	18.00	18.05	18.11	18.01				
20	QPSK	50	0	17.07	17.06	17.13	17.10	17.08				
20	QPSK	50	24	16.89	16.91	16.97	16.88	16.90				
20	QPSK	50	50	16.91	16.87	16.94	16.98	16.95	18			
20	QPSK	100	0	17.03	16.98	16.96	16.90	17.00				
20	16QAM	1	0	17.20	17.18	17.22	17.15	17.17				
20	16QAM	1	49	17.15	17.17	17.10	17.11	17.17				
20	16QAM	1	99	17.18	17.13	17.20	17.17	17.13				
20	16QAM	50	0	16.21	16.22	16.28	16.17	16.21	17			
20	16QAM	50	24	16.11	16.17	16.25	16.09	16.22				
20	16QAM	50	50	16.18	16.23	16.22	16.19	16.12				
20	16QAM	100	0	16.15	16.08	16.08	16.15	16.16				
20	16QAM	1	0	16.19	16.28	16.32	16.21	16.29				
20	64QAM	1	49	16.23	16.27	16.15	16.13	16.27	17			
20	64QAM	1	99	16.28	16.08	16.11	16.17	16.18				
20	64QAM	50	0	15.19	15.16	15.28	15.09	15.16				
20	64QAM	50	24	15.18	15.11	15.11	15.00	15.11				
20	64QAM	50	50	15.16	15.21	14.98	14.99	15.18				
20	64QAM	100	0	15.11	15.07	15.03	15.12	15.15	16			
				39725	40173	40620	41058	41515				
				2503.5	2548.3	2593	2637.8	2682.5				
15	QPSK	1	0	18.08	18.00	18.14	18.05	18.12			19	
15	QPSK	1	37	18.10	18.10	18.06	18.06	18.07				
15	QPSK	1	74	18.03	18.10	18.04	18.11	17.96				
15	QPSK	36	0	16.99	17.07	17.08	17.01	17.03				
15	QPSK	36	20	17.04	16.90	16.99	16.88	17.03				
15	QPSK	36	39	16.86	16.86	17.05	17.02	16.85	18			
15	QPSK	75	0	16.96	17.05	17.02	16.91	16.89				
15	QPSK	75	0	17.17	17.25	17.27	17.24	17.26				
15	16QAM	1	37	17.22	17.19	17.14	17.15	17.12				
15	16QAM	1	74	17.11	17.12	17.14	17.14	17.16				
15	16QAM	36	0	16.18	16.21	16.21	16.14	16.16	17			
15	16QAM	36	20	16.17	16.19	16.10	16.13	16.15				
15	16QAM	36	39	16.12	16.10	16.16	16.19	16.18				
15	16QAM	75	0	16.19	16.23	16.22	16.16	16.18				
15	64QAM	1	0	16.27	16.19	16.24	16.16	16.17				
15	64QAM	1	37	16.21	16.25	16.23	16.20	16.19	17			
15	64QAM	1	74	16.16	16.12	16.18	16.22	16.13				
15	64QAM	36	0	15.18	15.17	15.27	15.22	15.21				
15	64QAM	36	20	15.19	15.18	15.19	15.17	15.13				
15	64QAM	36	39	15.21	15.25	15.22	15.20	15.02				
15	64QAM	75	0	15.10	15.17	15.11	15.03	15.15	16			
				39700	40180	40620	41069	41540				
				2501	2547	2593	2637	2685				
10	QPSK	1	0	18.08	18.02	18.12	18.09	18.05			19	
10	QPSK	1	25	17.94	17.99	17.90	18.06	17.91				
10	QPSK	1	49	18.01	18.05	18.08	18.02	18.10				
10	QPSK	25	0	16.95	17.11	17.14	17.07	17.12				
10	QPSK	25	12	16.89	16.89	16.99	17.08	16.88				
10	QPSK	25	25	16.91	16.92	17.02	16.84	16.89	18			
10	QPSK	50	0	16.90	16.95	16.91	17.01	16.91				
10	16QAM	1	0	17.19	17.32	17.37	17.23	17.33				
10	16QAM	1	25	17.24	17.13	17.32	17.27	17.09				
10	16QAM	1	49	17.13	17.28	17.10	17.28	17.14				
10	16QAM	25	0	16.18	16.13	16.19	16.25	16.19	17			
10	16QAM	25	12	16.13	16.17	16.23	16.11	16.16				
10	16QAM	25	25	16.18	16.13	16.29	16.25	16.26				
10	16QAM	50	0	16.13	16.18	16.07	16.08	16.16				
10	64QAM	1	0	16.22	16.26	16.16	16.26	16.26				
10	64QAM	1	25	16.15	16.20	16.10	16.18	16.07	17			
10	64QAM	1	49	16.13	16.05	16.09	16.18	16.14				
10	64QAM	25	0	15.13	15.22	15.23	15.18	15.21				
10	64QAM	25	12	15.08	15.24	15.08	15.15	15.25				
10	64QAM	25	25	15.14	15.30	15.01	15.11	15.22				
10	64QAM	50	0	15.12	15.23	15.02	15.22	15.25	16			
				39875	40148	40620	41093	41565				
				2498.5	2545.8	2593	2640.30	2687.5				
5	QPSK	1	0	18.10	18.03	18.11	18.05	17.95			19	
5	QPSK	1	12	18.02	18.05	17.95	18.11	17.90				
5	QPSK	1	24	18.03	17.90	18.05	17.98	17.90				
5	QPSK	12	0	16.96	16.95	17.04	16.88	18.03				
5	QPSK	12	7	16.95	16.87	17.01	16.98	16.92				
5	QPSK	12	13	16.99	16.91	16.92	16.99	17.02	18			
5	QPSK	25	0	16.87	16.84	16.88	16.89	16.90				
5	16QAM	1	0	17.40	17.37	17.23	17.29	17.30				
5	16QAM	1	12	17.28	17.30	17.31	17.28	17.15				
5	16QAM	1	24	17.23	17.35	17.11	17.35	17.14				
5	16QAM	12	0	16.35	16.21	16.22	16.34	16.35	17			
5	16QAM	12	7	16.13	16.22	16.16	16.14	16.25				
5	16QAM	12	13	16.06	16.21	16.11	16.27	16.16				
5	16QAM	25	0	16.13	16.26	16.12	16.09	16.13				
5	64QAM	1	0	16.27	16.29	16.24	16.23	16.28				
5	64QAM	1	12	16.13	16.36	16.29	16.07	16.29	17			
5	64QAM	1	24	16.07	16.20	16.11	16.22	16.32				
5	64QAM	12	0	15.22	15.22	15.28	15.28	15.31				
5	64QAM	12	7	15.09	15.08	15.09	15.23	15.22				
5	64QAM	12	13	15.21	15.27	15.20	15.09	15.15				
5	64QAM	25	0	15.30	15.20	15.23	15.22	15.28	16			

Band 41 PC2 (2496~2690MHz) (dBm)												
BW (MHz)	Modulation	RB Size	RB Offset	Channel					Tune-up limit (dBm)			
				Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel				
				39750	40185	40620	41055	41490				
				2506	2549.5	2593	2636.5	2680				
20	QPSK	1	0	21.24	21.22	21.27	21.18	21.23	22			
20	QPSK	1	49	21.07	21.16	21.11	21.13	21.19				
20	QPSK	1	99	21.08	21.10	21.15	21.21	21.11				
20	QPSK	50	0	20.17	20.16	20.23	20.20	20.18				
20	QPSK	50	24	19.99	20.01	20.07	19.98	20.00				
20	QPSK	50	50	20.01	19.97	20.04	20.08	20.05	21			
20	QPSK	100	0	20.13	20.08	20.06	20.00	20.10				
20	16QAM	1	0	20.30	20.28	20.32	20.25	20.27				
20	16QAM	1	49	20.25	20.27	20.20	20.21	20.27				
20	16QAM	1	99	20.28	20.23	20.30	20.27	20.23				
20	16QAM	50	0	19.31	19.32	19.38	19.27	19.31	20			
20	16QAM	50	24	19.21	19.27	19.35	19.19	19.32				
20	16QAM	50	50	19.28	19.33	19.32	19.29	19.22				
20	16QAM	100	0	19.25	19.18	19.18	19.25	19.26				
20	64QAM	1	0	19.29	19.38	19.42	19.31	19.39				
20	64QAM	1	49	19.33	19.37	19.25	19.23	19.37	20			
20	64QAM	1	99	19.38	19.18	19.21	19.27	19.28				
20	64QAM	50	0	18.29	18.28	18.38	18.19	18.28				
20	64QAM	50	24	18.28	18.21	18.21	18.10	18.21				
20	64QAM	50	50	18.26	18.31	18.08	18.09	18.28				
20	64QAM	100	0	18.21	18.17	18.13	18.22	18.25	19			
				39725	40173	40620	41069	41515				
				2503.5	2548.3	2593	2637.8	2682.5				
15	QPSK	1	0	21.18	21.10	21.24	21.15	21.22			22	
15	QPSK	1	37	21.20	21.20	21.16	21.16	21.17				
15	QPSK	1	74	21.13	21.20	21.14	21.21	21.08				
15	QPSK	36	0	20.09	20.17	20.18	20.11	20.13				
15	QPSK	36	20	20.14	20.00	20.09	19.98	20.13				
15	QPSK	36	39	19.96	19.90	20.15	20.12	19.95</				