



REPORT No.: SZ23050338S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

The target power was recorded in the manufacture 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		
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8		
GSM 1 Tx slot	32.34	32.35	32.31	33.00	23.34	23.35	23.31	24.00	
GPRS 1 Tx slot	32.33	32.36	32.30	33.00	23.33	23.36	23.30	24.00	0.06
GPRS 2 Tx slots	31.58	31.66	31.67	32.50	25.58	25.66	25.67	26.50	0.09
GPRS 3 Tx slots	30.21	30.24	30.21	31.00	25.95	25.98	25.95	26.74	0.03
GPRS 4 Tx slots	29.18	29.27	29.16	30.00	26.18	26.27	26.16	27.00	0.11
EDGE 1 Tx slot	26.31	26.36	26.28	27.00	17.31	17.36	17.28	18.00	0.08
EDGE 2 Tx slots	25.21	25.28	25.37	26.00	19.21	19.28	19.37	20.00	0.16
EDGE 3 Tx slots	23.36	23.41	23.36	24.00	19.10	19.15	19.10	19.74	0.05
EDGE 4 Tx slots	22.28	22.43	22.28	23.00	19.28	19.43	19.28	20.00	0.15
Mode		Max.	32.36			Max.	26.27		
Attenuator	Cable Loss : 0.6								

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		
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot	29.61	29.66	29.53	30.50	20.61	20.66	20.53	21.50	
GPRS 1 Tx slot	29.62	29.67	29.51	30.50	20.62	20.67	20.51	21.50	0.16
GPRS 2 Tx slots	28.94	28.67	28.59	29.50	22.94	22.67	22.59	23.50	0.35
GPRS 3 Tx slots	27.11	27.26	27.24	28.00	22.85	23.00	22.98	23.74	0.15
GPRS 4 Tx slots	26.18	26.23	26.21	27.00	23.18	23.23	23.21	24.00	0.05
EDGE 1 Tx slot	26.42	26.43	26.37	27.00	17.42	17.43	17.37	18.00	0.06
EDGE 2 Tx slots	25.33	25.39	25.34	26.00	19.33	19.39	19.34	20.00	0.06
EDGE 3 Tx slots	23.22	23.20	23.18	24.00	18.96	18.94	18.92	19.74	0.04
EDGE 4 Tx slots	21.21	21.26	21.31	22.00	18.21	18.26	18.31	19.00	0.10
Mode		Max.	29.67			Max.	23.23		
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	22.56	22.59	22.48	23.50	22.48	22.57	22.46	23.50	22.56	22.59	22.43	23.50		
3GPP Rel 5	HSDPA Subtest-1	21.30	21.35	21.45	22.50	21.48	21.34	21.44	22.50	21.47	21.51	21.53	22.50		
3GPP Rel 5	HSDPA Subtest-2	21.26	21.28	21.42	22.50	21.45	21.33	21.44	22.50	21.43	21.49	21.52	22.50		
3GPP Rel 5	HSDPA Subtest-3	20.78	20.87	20.96	21.50	20.95	20.85	20.91	21.50	20.95	20.96	21.04	22.00		
3GPP Rel 5	HSDPA Subtest-4	20.74	20.83	20.94	21.50	20.94	20.85	20.89	21.50	20.93	20.98	21.00	22.00		
3GPP Rel 6	HSUPA Subtest-1	19.18	19.25	19.38	20.50	19.47	19.41	19.41	20.50	19.49	19.49	19.48	20.50		
3GPP Rel 6	HSUPA Subtest-2	19.19	19.30	19.36	20.50	19.45	19.39	19.42	20.50	19.45	19.47	19.45	20.50		
3GPP Rel 6	HSUPA Subtest-3	20.17	20.25	20.38	21.50	20.45	20.43	20.39	21.50	20.45	20.49	20.47	21.50		
3GPP Rel 6	HSUPA Subtest-4	18.71	18.80	18.91	19.50	18.99	18.91	18.95	19.50	18.97	18.98	19.01	19.50		
3GPP Rel 6	HSUPA Subtest-5	20.14	20.21	20.33	21.50	20.42	20.39	20.33	21.50	20.46	20.48	20.43	21.50		
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.61	20.54	20.67	21.50	20.85	20.94	20.78	21.50	20.86	20.87	20.95	21.50		
Attenuator		Cable Loss			0.8		Cable Loss			0.8		Cable Loss			0.6
Mode		Max.	22.59			Max.	22.57			Max.	22.59				



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	23.5
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	22.54	22.57	22.51	
20	QPSK	1	49	22.52	22.46	22.39	22.5
20	QPSK	1	99	22.46	22.42	22.40	
20	QPSK	50	0	21.37	21.46	21.39	
20	QPSK	50	24	21.38	21.43	21.43	22.5
20	QPSK	50	50	21.43	21.39	21.45	
20	QPSK	100	0	21.36	21.45	21.41	
20	16QAM	1	0	21.42	21.42	21.44	22.5
20	16QAM	1	49	21.26	21.56	21.52	
20	16QAM	1	99	21.51	21.36	21.76	
20	16QAM	50	0	21.44	21.41	21.39	22.5
20	16QAM	50	24	21.40	21.45	21.46	
20	16QAM	50	50	21.48	21.45	21.52	
20	16QAM	100	0	21.51	21.52	21.39	21.5
20	64QAM	1	0	20.46	20.65	20.39	
20	64QAM	1	49	20.41	20.59	20.50	
20	64QAM	1	99	20.36	20.69	20.69	21.5
20	64QAM	50	0	20.46	20.38	20.43	
20	64QAM	50	24	20.49	20.43	20.48	
20	64QAM	50	50	20.48	20.49	20.43	21.5
20	64QAM	100	0	20.36	20.33	20.34	
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	22.35	22.38	22.29	
15	QPSK	1	37	22.14	22.50	22.38	22.5
15	QPSK	1	74	22.51	22.43	22.51	
15	QPSK	36	0	21.23	21.32	21.31	
15	QPSK	36	20	21.22	21.41	21.38	22.5
15	QPSK	36	39	21.34	21.35	21.32	
15	QPSK	75	0	21.26	21.32	21.28	
15	16QAM	1	0	21.35	21.43	21.37	22.5
15	16QAM	1	37	21.48	21.51	21.37	
15	16QAM	1	74	21.43	21.55	21.55	
15	16QAM	36	0	21.22	21.27	21.30	22.5
15	16QAM	36	20	21.31	21.24	21.37	
15	16QAM	36	39	21.36	21.45	21.42	
15	16QAM	75	0	21.23	21.25	21.34	21.5
15	64QAM	1	0	20.43	20.19	20.25	
15	64QAM	1	37	20.42	20.23	20.65	
15	64QAM	1	74	20.31	20.35	20.50	21.5
15	64QAM	36	0	20.16	20.33	20.21	
15	64QAM	36	20	20.36	20.38	20.28	
15	64QAM	36	39	20.24	20.29	20.38	21.5
15	64QAM	75	0	20.23	20.30	20.29	
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.39	22.38	22.48	
10	QPSK	1	25	22.43	22.46	22.41	22.5
10	QPSK	1	49	22.39	22.40	22.39	
10	QPSK	25	0	21.41	21.42	21.38	
10	QPSK	25	12	21.37	21.49	21.42	22.5
10	QPSK	25	25	21.28	21.41	21.37	
10	QPSK	50	0	21.34	21.43	21.41	
10	16QAM	1	0	21.82	21.75	21.74	22.5
10	16QAM	1	25	21.51	21.47	21.54	
10	16QAM	1	49	21.46	21.54	21.33	
10	16QAM	25	0	21.36	21.35	21.32	22.5
10	16QAM	25	12	21.52	21.32	21.32	
10	16QAM	25	25	21.32	21.52	21.62	
10	16QAM	50	0	21.89	21.82	21.86	21.5
10	64QAM	1	0	20.40	20.45	20.45	
10	64QAM	1	25	20.43	20.48	20.52	
10	64QAM	1	49	20.10	20.23	20.20	21.5
10	64QAM	25	0	20.40	20.44	20.45	
10	64QAM	25	12	20.43	20.41	20.42	
10	64QAM	25	25	20.36	20.14	20.36	21.5
10	64QAM	50	0	20.37	20.37	20.34	
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	22.39	22.44	22.38	
5	QPSK	1	12	22.38	22.33	22.36	22.5
5	QPSK	1	24	22.34	22.42	22.43	
5	QPSK	12	0	21.47	21.38	21.45	
5	QPSK	12	7	21.48	21.53	21.45	22.5
5	QPSK	12	13	21.26	21.25	21.28	
5	QPSK	25	0	21.25	21.23	21.25	
5	16QAM	1	0	21.38	21.28	21.66	22.5
5	16QAM	1	12	21.36	21.29	21.66	
5	16QAM	1	24	21.39	21.26	21.65	
5	16QAM	12	0	21.48	21.62	21.48	22.5
5	16QAM	12	7	21.38	21.38	21.18	
5	16QAM	12	13	21.18	21.51	21.28	
5	16QAM	25	0	21.28	21.74	21.72	21.5
5	64QAM	1	0	20.48	20.20	20.25	
5	64QAM	1	12	20.64	20.30	20.41	
5	64QAM	1	24	20.65	20.29	20.31	21.5
5	64QAM	12	0	20.30	20.23	20.22	
5	64QAM	12	7	20.36	20.20	20.20	
5	64QAM	12	13	20.33	20.29	20.27	21.5
5	64QAM	25	0	20.40	20.20	20.27	
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	22.33	22.40	22.32	
3	QPSK	1	8	22.43	22.46	22.29	22.5
3	QPSK	1	14	22.44	22.31	22.31	
3	QPSK	8	0	21.35	21.30	21.32	
3	QPSK	8	4	21.41	21.35	21.36	22.5
3	QPSK	8	7	21.41	21.35	21.31	

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	23.5
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.53	22.61	22.60	
20	QPSK	1	49	22.39	22.47	22.46	22.5
20	QPSK	1	99	22.31	22.44	22.56	
20	QPSK	50	0	21.61	21.65	21.62	
20	QPSK	50	24	21.52	21.60	21.60	22.5
20	QPSK	50	50	21.41	21.52	21.53	
20	QPSK	100	0	21.51	21.55	21.82	
20	16QAM	1	0	21.38	21.68	21.55	22.5
20	16QAM	1	49	21.53	21.30	21.44	
20	16QAM	1	99	21.32	21.54	21.38	
20	16QAM	50	0	21.51	21.44	21.58	22.5
20	16QAM	50	24	21.77	21.88	21.77	
20	16QAM	50	50	21.73	21.74	21.74	
20	16QAM	100	0	21.75	21.83	21.84	21.5
20	64QAM	1	0	20.49	20.60	20.82	
20	64QAM	1	49	20.53	20.46	20.34	
20	64QAM	1	99	20.80	20.37	20.84	21.5
20	64QAM	50	0	20.50	20.59	20.54	
20	64QAM	50	24	20.52	20.63	20.57	
20	64QAM	50	50	20.56	20.51	20.53	21.5
20	64QAM	100	0	20.59	20.57	20.66	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.40	22.44	22.54	
15	QPSK	1	37	22.44	22.53	22.45	22.5
15	QPSK	1	74	22.31	22.53	22.56	
15	QPSK	36	0	21.46	21.53	21.56	
15	QPSK	36	20	21.50	21.63	21.59	22.5
15	QPSK	36	39	21.55	21.54	21.63	
15	QPSK	75	0	21.50	21.52	21.53	
15	16QAM	1	0	21.44	21.66	21.38	22.5
15	16QAM	1	37	21.52	21.52	21.36	
15	16QAM	1	74	21.38	21.68	21.47	
15	16QAM	36	0	21.39	21.41	21.60	22.5
15	16QAM	36	20	21.34	21.41	21.47	
15	16QAM	36	39	21.30	21.39	21.45	
15	16QAM	75	0	21.41	21.42	21.51	21.5
15	64QAM	1	0	20.36	20.67	20.72	
15	64QAM	1	37	20.78	20.54	20.60	
15	64QAM	1	74	20.82	20.53	20.57	21.5
15	64QAM	36	0	20.47	20.54	20.58	
15	64QAM	36	20	20.53	20.55	20.57	
15	64QAM	36	39	20.56	20.52	20.54	21.5
15	64QAM	75	0	20.49	20.60	20.53	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.52	22.51	22.34	
10	QPSK	1	25	22.50	22.43	22.44	22.5
10	QPSK	1	49	22.38	22.21	22.44	
10	QPSK	25	0	21.29	21.51	21.53	
10	QPSK	25	12	21.41	21.47	21.51	22.5
10	QPSK	25	25	21.30	21.41	21.48	
10	QPSK	50	0	21.36	21.46	21.38	
10	16QAM	1	0	21.35	21.50	21.26	22.5
10	16QAM	1	25	21.62	21.36	21.68	
10	16QAM	1	49	21.69	21.59	21.58	
10	16QAM	25	0	21.35	21.34	21.33	22.5
10	16QAM	25					



3	QPSK	15	0	21.33	21.41	21.34	22.5
3	16QAM	1	0	21.49	21.40	21.34	
3	16QAM	1	8	21.53	21.47	21.43	
3	16QAM	1	14	21.25	21.22	21.10	22.5
3	16QAM	8	0	21.68	21.81	21.73	
3	16QAM	8	4	21.75	21.72	21.78	
3	16QAM	8	7	21.65	21.70	21.73	21.5
3	16QAM	15	0	21.68	21.72	21.67	
3	64QAM	1	0	20.42	20.35	20.38	
3	64QAM	1	8	20.84	20.83	20.43	21.5
3	64QAM	1	14	20.45	20.81	20.45	
3	64QAM	8	0	20.37	20.39	20.23	
3	64QAM	8	4	20.47	20.37	20.37	21.5
3	64QAM	8	7	20.57	20.46	20.32	
3	64QAM	15	0	20.42	20.42	20.40	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.39	22.42	22.37	23.5
1.4	QPSK	1	3	22.29	22.27	22.26	
1.4	QPSK	1	5	22.26	22.24	22.22	
1.4	QPSK	3	0	22.26	22.26	22.22	
1.4	QPSK	3	1	22.30	22.27	22.25	
1.4	QPSK	3	3	22.32	22.36	22.25	22.5
1.4	QPSK	6	0	21.31	21.29	21.28	
1.4	16QAM	1	0	21.34	21.34	21.28	
1.4	16QAM	1	3	21.30	21.50	21.48	22.5
1.4	16QAM	1	5	21.18	21.38	21.06	
1.4	16QAM	3	0	21.20	21.25	21.22	
1.4	16QAM	3	1	21.38	21.20	21.25	22.5
1.4	16QAM	3	3	21.40	21.37	21.11	
1.4	16QAM	6	0	21.41	21.34	21.29	
1.4	64QAM	1	0	20.29	20.21	20.24	21.5
1.4	64QAM	1	3	20.31	20.52	20.40	
1.4	64QAM	1	5	20.29	20.64	20.23	
1.4	64QAM	3	0	20.32	20.38	20.39	
1.4	64QAM	3	1	20.41	20.38	20.59	
1.4	64QAM	3	3	20.33	20.47	20.24	
1.4	64QAM	6	0	20.38	20.41	20.30	

3	QPSK	15	0	21.37	21.43	21.37	22.5
3	16QAM	1	0	21.45	21.54	21.58	
3	16QAM	1	8	21.67	21.67	21.41	
3	16QAM	1	14	21.58	21.36	21.44	22.5
3	16QAM	8	0	21.37	21.38	21.47	
3	16QAM	8	4	21.47	21.47	21.48	
3	16QAM	8	7	21.69	21.77	21.81	21.5
3	16QAM	15	0	21.69	21.67	21.74	
3	64QAM	1	0	20.36	20.45	20.43	
3	64QAM	1	8	20.55	20.43	20.59	21.5
3	64QAM	1	14	20.36	20.43	20.26	
3	64QAM	8	0	20.34	20.38	20.32	
3	64QAM	8	4	20.46	20.44	20.48	21.5
3	64QAM	8	7	20.40	20.47	20.59	
3	64QAM	15	0	20.36	20.44	20.35	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.49	22.54	22.52	23.5
1.4	QPSK	1	3	22.43	22.43	22.47	
1.4	QPSK	1	5	22.29	22.38	22.40	
1.4	QPSK	3	0	22.37	22.34	22.33	
1.4	QPSK	3	1	22.33	22.43	22.48	
1.4	QPSK	3	3	22.32	22.39	22.38	22.5
1.4	QPSK	6	0	21.40	21.42	21.38	
1.4	16QAM	1	0	21.34	21.81	21.47	
1.4	16QAM	1	3	21.47	21.55	21.59	22.5
1.4	16QAM	1	5	21.53	21.69	21.49	
1.4	16QAM	3	0	21.56	21.60	21.51	
1.4	16QAM	3	1	21.57	21.60	21.62	22.5
1.4	16QAM	3	3	21.56	21.68	21.57	
1.4	16QAM	6	0	21.47	21.48	21.39	
1.4	64QAM	1	0	20.25	20.19	20.33	21.5
1.4	64QAM	1	3	20.51	20.49	20.61	
1.4	64QAM	1	5	20.42	20.38	20.22	
1.4	64QAM	3	0	20.33	20.31	20.50	
1.4	64QAM	3	1	20.24	20.39	20.36	
1.4	64QAM	3	3	20.30	20.47	20.35	
1.4	64QAM	6	0	20.29	20.30	20.37	



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	22.57	22.58	22.50	23.5
10	QPSK	1	25	22.43	22.46	22.26	
10	QPSK	1	49	22.35	22.47	22.15	
10	QPSK	25	0	21.53	21.55	21.36	22.5
10	QPSK	25	12	21.29	21.31	21.36	
10	QPSK	25	25	21.29	21.40	21.45	
10	QPSK	50	0	21.35	21.23	21.37	22.5
10	16QAM	1	0	21.39	21.58	21.29	
10	16QAM	1	25	21.62	21.65	21.33	
10	16QAM	1	49	21.45	21.51	21.58	22.5
10	16QAM	25	0	21.54	21.55	21.37	
10	16QAM	25	12	21.48	21.56	21.34	
10	16QAM	25	25	21.51	21.44	21.47	21.5
10	16QAM	50	0	21.52	21.43	21.33	
10	64QAM	1	0	20.48	20.58	20.46	
10	64QAM	1	25	20.45	20.65	20.45	21.5
10	64QAM	1	49	20.34	20.56	20.47	
10	64QAM	25	0	20.45	20.56	20.23	
10	64QAM	25	12	20.44	20.61	20.32	21.5
10	64QAM	25	25	20.56	20.45	20.15	
10	64QAM	50	0	20.52	20.48	20.34	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	22.39	22.35	22.33	23.5
5	QPSK	1	12	22.29	22.40	22.24	
5	QPSK	1	24	22.29	22.24	22.24	
5	QPSK	12	0	21.44	21.49	21.35	22.5
5	QPSK	12	7	21.51	21.52	21.44	
5	QPSK	12	13	21.56	21.40	21.35	
5	QPSK	25	0	21.47	21.43	21.35	22.5
5	16QAM	1	0	21.76	21.69	21.45	
5	16QAM	1	12	21.46	21.68	21.44	
5	16QAM	1	24	21.33	21.68	21.51	22.5
5	16QAM	12	0	21.42	21.51	21.50	
5	16QAM	12	7	21.49	21.52	21.34	
5	16QAM	12	13	21.49	21.40	21.45	21.5
5	16QAM	25	0	21.50	21.55	21.50	
5	64QAM	1	0	20.57	20.45	20.56	
5	64QAM	1	12	20.45	20.39	20.53	21.5
5	64QAM	1	24	20.59	20.43	20.37	
5	64QAM	12	0	20.31	20.45	20.25	
5	64QAM	12	7	20.35	20.51	20.29	21.5
5	64QAM	12	13	20.53	20.48	20.05	
5	64QAM	25	0	20.41	20.48	20.09	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	22.38	22.39	22.24	23.5
3	QPSK	1	8	22.34	22.35	22.26	
3	QPSK	1	14	22.35	22.33	22.07	
3	QPSK	8	0	21.37	21.50	21.48	22.5
3	QPSK	8	4	21.51	21.57	21.54	
3	QPSK	8	7	21.46	21.48	21.35	
3	QPSK	15	0	21.44	21.50	21.49	22.5
3	16QAM	1	0	21.46	21.57	21.64	
3	16QAM	1	8	21.39	21.65	21.49	
3	16QAM	1	14	21.44	21.70	21.45	22.5
3	16QAM	8	0	21.40	21.49	21.23	
3	16QAM	8	4	21.56	21.67	21.24	
3	16QAM	8	7	21.48	21.54	21.28	21.5
3	16QAM	15	0	21.42	21.44	20.99	
3	64QAM	1	0	20.37	20.25	20.46	
3	64QAM	1	8	20.25	20.49	20.25	21.5
3	64QAM	1	14	20.27	20.45	20.26	
3	64QAM	8	0	20.37	20.47	20.45	
3	64QAM	8	4	20.59	20.43	20.37	21.5
3	64QAM	8	7	20.54	20.46	20.43	
3	64QAM	15	0	20.43	20.53	20.33	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	22.39	22.36	22.40	23.5
1.4	QPSK	1	3	22.42	22.35	22.42	
1.4	QPSK	1	5	22.31	22.25	22.26	
1.4	QPSK	3	0	22.32	22.38	22.34	22.5
1.4	QPSK	3	1	22.38	22.25	22.35	
1.4	QPSK	3	3	22.39	22.31	22.31	
1.4	QPSK	6	0	21.42	21.41	21.40	22.5
1.4	16QAM	1	0	21.55	21.36	21.53	
1.4	16QAM	1	3	21.35	21.59	21.48	
1.4	16QAM	1	5	21.74	21.42	21.48	22.5
1.4	16QAM	3	0	21.27	21.25	21.39	
1.4	16QAM	3	1	21.30	21.57	21.43	
1.4	16QAM	3	3	21.38	21.49	21.37	22.5
1.4	16QAM	6	0	21.57	21.44	21.48	
1.4	64QAM	1	0	20.10	20.27	20.29	
1.4	64QAM	1	3	20.41	20.42	20.37	21.5
1.4	64QAM	1	5	20.36	20.35	20.23	
1.4	64QAM	3	0	20.02	20.29	20.30	
1.4	64QAM	3	1	20.30	20.24	20.25	21.5
1.4	64QAM	3	3	20.20	20.37	20.41	
1.4	64QAM	6	0	20.41	20.53	20.42	

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	22.38	22.54	22.43	23.5
10	QPSK	1	25	22.24	22.37	22.40	
10	QPSK	1	49	22.34	22.35	22.34	
10	QPSK	25	0	21.63	21.73	21.64	22.5
10	QPSK	25	12	21.60	21.54	21.33	
10	QPSK	25	25	21.65	21.71	21.64	
10	QPSK	50	0	21.66	21.68	21.59	22.5
10	16QAM	1	0	21.59	21.14	21.27	
10	16QAM	1	25	21.34	21.29	21.43	
10	16QAM	1	49	21.43	21.48	21.37	22.5
10	16QAM	25	0	21.32	21.34	21.28	
10	16QAM	25	12	21.36	21.40	21.29	
10	16QAM	25	25	21.41	21.42	21.36	21.5
10	16QAM	50	0	21.31	21.39	21.44	
10	64QAM	1	0	20.34	20.46	20.80	
10	64QAM	1	25	20.78	20.84	20.43	21.5
10	64QAM	1	49	20.80	20.48	20.41	
10	64QAM	25	0	20.31	20.25	20.22	
10	64QAM	25	12	20.36	20.39	20.31	21.5
10	64QAM	25	25	20.41	20.38	20.38	
10	64QAM	50	0	20.33	20.26	20.37	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	22.13	22.46	22.24	23.5
5	QPSK	1	12	22.29	22.45	22.29	
5	QPSK	1	24	22.25	22.44	22.30	
5	QPSK	12	0	21.36	21.43	21.42	22.5
5	QPSK	12	7	21.47	21.49	21.46	
5	QPSK	12	13	21.42	21.45	21.42	
5	QPSK	25	0	21.38	21.50	21.46	22.5
5	16QAM	1	0	21.39	21.41	21.43	
5	16QAM	1	12	21.56	21.51	21.52	
5	16QAM	1	24	21.52	21.50	21.46	22.5
5	16QAM	12	0	21.26	21.23	21.26	
5	16QAM	12	7	21.40	21.45	21.29	
5	16QAM	12	13	21.35	21.32	21.37	21.5
5	16QAM	25	0	21.36	21.32	21.34	
5	64QAM	1	0	20.32	20.33	20.38	
5	64QAM	1	12	20.77	20.47	20.40	21.5
5	64QAM	1	24	20.75	20.44	20.49	
5	64QAM	12	0	20.29	20.31	20.26	
5	64QAM	12	7	20.39	20.27	20.33	21.5
5	64QAM	12	13	20.26	20.36	20.41	
5	64QAM	25	0	20.41	20.37	20.34	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	22.21	22.48	22.15	23.5
3	QPSK	1	8	22.39	22.38	22.28	
3	QPSK	1	14	22.33	22.44	22.39	
3	QPSK	8	0	21.44	21.42	21.42	22.5
3	QPSK	8	4	21.47	21.50	21.51	
3	QPSK	8	7	21.42	21.50	21.44	
3	QPSK	15	0	21.41	21.49	21.35	22.5
3	16QAM	1	0	21.42	21.78	21.37	
3	16QAM	1	8	21.62	21.60	21.55	
3	16QAM	1	14	21.45	21.50	21.36	22.5
3	16QAM	8	0	21.42	21.31	21.34	
3	16QAM	8	4	21.47	21.44	21.55	
3	16QAM	8	7	21.31	21.34	21.40	21.5
3	16QAM	15	0	21.29	21.22	21.21	
3	64QAM	1	0	20.33	20.67	20.66	
3	64QAM	1	8	20.62	20.52	20.53	21.5
3	64QAM	1	14	20.55	20.40	20.51	
3	64QAM	8	0	20.22	20.30	20.21	
3	64QAM	8	4	20.31	20.35	20.34	21.5
3	64QAM	8	7	20.30	20.22	20.37	
3	64QAM</						



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	22.43	22.46	22.43	
10	QPSK	1	25	22.31	22.27	22.33	
10	QPSK	1	49	22.24	22.27	22.22	
10	QPSK	25	0	21.54	21.60	21.52	22.5
10	QPSK	25	12	21.39	21.33	21.47	
10	QPSK	25	25	21.37	21.37	21.46	
10	QPSK	50	0	21.50	21.37	21.38	22.5
10	16QAM	1	0	21.23	21.42	21.56	
10	16QAM	1	25	21.44	21.73	21.57	
10	16QAM	1	49	21.40	21.65	21.70	22.5
10	16QAM	25	0	21.34	21.58	21.57	
10	16QAM	25	12	21.40	21.55	21.53	
10	16QAM	25	25	21.23	21.49	21.54	22.5
10	16QAM	50	0	21.27	21.56	21.53	
10	64QAM	1	0	20.24	20.57	20.25	
10	64QAM	1	25	20.47	20.37	20.27	21.5
10	64QAM	1	49	20.21	20.24	20.24	
10	64QAM	25	0	20.39	20.56	20.54	
10	64QAM	25	12	20.31	20.39	20.56	21.5
10	64QAM	25	25	20.25	20.46	20.62	
10	64QAM	50	0	20.32	20.55	20.56	
Channel				23755	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	22.37	22.33	22.29	
5	QPSK	1	12	22.36	22.32	22.31	
5	QPSK	1	24	22.28	22.34	22.33	
5	QPSK	12	0	21.44	21.62	21.78	22.5
5	QPSK	12	7	21.56	21.65	21.73	
5	QPSK	12	13	21.39	21.67	21.73	
5	QPSK	25	0	21.42	21.59	21.72	22.5
5	16QAM	1	0	21.90	21.95	21.67	
5	16QAM	1	12	22.07	21.63	22.00	
5	16QAM	1	24	21.91	21.96	22.12	22.5
5	16QAM	12	0	21.35	21.38	21.59	
5	16QAM	12	7	21.35	21.42	21.54	
5	16QAM	12	13	21.26	21.51	21.54	22.5
5	16QAM	25	0	21.36	21.48	21.52	
5	64QAM	1	0	20.16	20.17	20.17	
5	64QAM	1	12	20.20	20.17	20.25	21.5
5	64QAM	1	24	20.25	20.25	20.17	
5	64QAM	12	0	20.31	20.36	20.60	
5	64QAM	12	7	20.44	20.52	20.46	21.5
5	64QAM	12	13	20.29	20.47	20.49	
5	64QAM	25	0	20.26	20.45	20.61	

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	22.50	22.56	22.54	
20	QPSK	1	49	22.35	22.34	22.30	
20	QPSK	1	99	22.28	22.27	22.30	
20	QPSK	50	0	21.61	21.68	21.64	22.5
20	QPSK	50	24	21.42	21.44	21.57	
20	QPSK	50	50	21.46	21.54	21.42	
20	QPSK	100	0	21.44	21.44	21.36	22.5
20	16QAM	1	0	21.49	21.25	21.53	
20	16QAM	1	49	21.54	21.28	21.34	
20	16QAM	1	99	21.54	21.72	21.51	22.5
20	16QAM	50	0	21.66	21.63	21.60	
20	16QAM	50	24	21.55	21.55	21.56	
20	16QAM	50	50	21.52	21.44	21.40	22.5
20	16QAM	100	0	21.48	21.51	21.57	
20	64QAM	1	0	20.81	20.58	20.91	
20	64QAM	1	49	20.58	20.91	20.90	21.5
20	64QAM	1	99	20.81	20.93	21.01	
20	64QAM	50	0	20.77	20.67	20.80	
20	64QAM	50	24	20.71	20.65	20.77	21.5
20	64QAM	50	50	20.73	20.61	20.67	
20	64QAM	100	0	20.72	20.72	20.70	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.48	22.52	22.50	
15	QPSK	1	37	22.52	22.48	22.46	
15	QPSK	1	74	22.46	22.42	22.40	
15	QPSK	36	0	21.55	21.52	21.56	22.5
15	QPSK	36	20	21.55	21.47	21.57	
15	QPSK	36	39	21.41	21.46	21.43	
15	QPSK	75	0	21.50	21.54	21.47	22.5
15	16QAM	1	0	21.49	21.36	21.66	
15	16QAM	1	37	21.36	21.66	21.59	
15	16QAM	1	74	21.46	21.36	21.36	22.5
15	16QAM	36	0	21.67	21.67	21.58	
15	16QAM	36	20	21.70	21.69	21.75	
15	16QAM	36	39	21.62	21.77	21.71	22.5
15	16QAM	75	0	21.72	21.70	21.66	
15	64QAM	1	0	21.03	20.93	21.03	
15	64QAM	1	37	21.05	20.83	20.93	21.5
15	64QAM	1	74	20.70	20.96	21.03	
15	64QAM	36	0	20.82	20.81	20.94	
15	64QAM	36	20	20.92	20.88	20.89	21.5
15	64QAM	36	39	20.81	20.75	20.79	
15	64QAM	75	0	20.83	20.85	20.82	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.51	22.51	22.52	
10	QPSK	1	25	22.41	22.39	22.47	
10	QPSK	1	49	22.55	22.43	22.33	
10	QPSK	25	0	21.86	21.79	21.86	22.5
10	QPSK	25	12	21.83	22.02	21.80	
10	QPSK	25	25	21.79	21.75	21.67	
10	QPSK	50	0	21.87	21.72	21.91	22.5
10	16QAM	1	0	21.79	21.79	21.99	
10	16QAM	1	25	21.79	21.88	22.00	
10	16QAM	1	49	21.62	21.82	21.70	22.5
10	16QAM	25	0	21.63	21.80	21.68	
10	16QAM	25	12	21.62	21.82	21.73	
10	16QAM	25	25	21.53	21.58	21.58	22.5
10	16QAM	50	0	21.69	21.73	21.74	
10	64QAM	1	0	20.86	20.86	20.53	
10	64QAM	1	25	20.53	20.66	20.56	21.5
10	64QAM	1	49	20.53	20.53	20.53	
10	64QAM	25	0	20.86	20.84	20.86	
10	64QAM	25	12	20.85	20.89	20.93	21.5
10	64QAM	25	25	20.85	20.78	20.80	
10	64QAM	50	0	20.75	20.85	20.86	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	22.40	22.43	22.48	
5	QPSK	1	12	22.43	22.43	22.42	
5	QPSK	1	24	22.51	22.41	22.47	
5	QPSK	12	0	21.55	21.57	21.53	22.5
5	QPSK	12	7	21.57	21.65	21.58	
5	QPSK	12	13	21.43	21.49	21.50	
5	QPSK	25	0	21.53	21.54	21.53	22.5
5	16QAM	1	0	22.02	21.71	21.72	
5	16QAM	1	12	21.65	21.94	21.89	
5	16QAM	1	24	21.77	21.66	22.01	22.5
5	16QAM	12	0	21.66	21.77	21.73	
5	16QAM	12	7	21.83	21.75	21.87	
5	16QAM	12	13	21.74	21.68	21.75	22.5
5	16QAM	25	0	21.75	21.77	21.69	
5	64QAM	1	0	20.53	20.93	20.73	
5	64QAM	1	12	20.83	20.83	20.83	21.5
5	64QAM	1	24	20.66	20.70	20.66	
5	64QAM	12	0	20.90	20.65	20.86	
5	64QAM	12	7	20.98	20.57	20.88	21.5
5	64QAM	12	13	20.81	20.93	20.88	
5	64QAM	25	0	20.88	20.96	20.83	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	22.47	22.38	22.37	
3	QPSK	1	8	22.34	22.35	22.43	
3	QPSK	1	14	22.25	22.06	22.36	
3	QPSK	8	0	21.81	21.78	21.82	22.5
3	QPSK	8	4	21.76	21.68	21.78	
3	QPSK	8	7	21.62	21.67	21.64	



3	QPSK	15	0	21.71	21.75	21.68	22.5
3	16QAM	1	0	21.40	21.81	21.57	
3	16QAM	1	8	21.73	21.67	21.66	
3	16QAM	1	14	21.77	21.66	21.36	22.5
3	16QAM	8	0	21.58	21.58	21.49	
3	16QAM	8	4	21.61	21.60	21.66	
3	16QAM	8	7	21.53	21.68	21.62	21.5
3	16QAM	15	0	21.63	21.61	21.57	
3	64QAM	1	0	20.94	20.84	20.94	
3	64QAM	1	8	20.96	20.74	20.84	21.5
3	64QAM	1	14	20.81	20.87	20.94	
3	64QAM	8	0	20.73	20.72	20.85	
3	64QAM	8	4	20.83	20.79	20.80	21.5
3	64QAM	8	7	20.72	20.66	20.70	
3	64QAM	15	0	20.74	20.76	20.73	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.41	22.32	22.33	23.5
1.4	QPSK	1	3	22.47	22.49	22.49	
1.4	QPSK	1	5	22.39	22.27	22.43	
1.4	QPSK	3	0	22.38	22.31	22.38	
1.4	QPSK	3	1	22.35	22.41	22.32	
1.4	QPSK	3	3	22.36	22.32	22.24	
1.4	QPSK	6	0	21.84	21.69	21.88	22.5
1.4	16QAM	1	0	21.71	21.71	21.91	22.5
1.4	16QAM	1	3	21.71	21.80	21.92	
1.4	16QAM	1	5	21.54	21.74	21.62	
1.4	16QAM	3	0	21.49	21.46	21.72	
1.4	16QAM	3	1	21.58	21.48	21.60	
1.4	16QAM	3	3	21.59	21.60	21.54	
1.4	16QAM	6	0	21.48	21.39	21.40	22.5
1.4	64QAM	1	0	20.99	20.84	21.00	21.5
1.4	64QAM	1	3	20.72	20.81	20.81	
1.4	64QAM	1	5	20.69	20.69	20.80	
1.4	64QAM	3	0	20.78	20.76	20.78	
1.4	64QAM	3	1	20.77	20.81	20.85	
1.4	64QAM	3	3	20.77	20.70	20.72	
1.4	64QAM	6	0	20.67	20.77	20.78	21.5



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	22.44	22.48	22.45	23.5
20	QPSK	1	49	22.42	22.39	22.45	
20	QPSK	1	99	22.40	22.38	22.40	
20	QPSK	50	0	21.58	21.66	21.54	22.5
20	QPSK	50	24	21.47	21.41	21.26	
20	QPSK	50	50	21.49	21.28	21.34	
20	QPSK	100	0	21.55	21.29	21.36	22.5
20	16QAM	1	0	21.27	21.42	21.70	
20	16QAM	1	49	21.23	21.34	21.48	
20	16QAM	1	99	21.38	21.27	21.28	22.5
20	16QAM	50	0	21.38	21.24	21.27	
20	16QAM	50	24	21.33	21.13	21.28	
20	16QAM	50	50	21.40	21.20	21.28	21.5
20	16QAM	100	0	21.28	21.30	21.30	
20	64QAM	1	0	20.70	20.57	20.39	
20	64QAM	1	49	20.35	20.39	20.49	21.5
20	64QAM	1	99	20.39	20.35	20.67	
20	64QAM	50	0	20.75	20.56	20.55	
20	64QAM	50	24	20.84	20.56	20.47	21.5
20	64QAM	50	50	20.82	20.62	20.38	
20	64QAM	100	0	20.76	20.59	20.52	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	22.36	22.40	22.37	23.5
15	QPSK	1	37	22.39	22.38	22.31	
15	QPSK	1	74	22.25	22.38	22.30	
15	QPSK	36	0	21.60	21.41	21.27	22.5
15	QPSK	36	20	21.56	21.38	21.17	
15	QPSK	36	39	21.55	21.39	21.24	
15	QPSK	75	0	21.56	21.44	21.26	22.5
15	16QAM	1	0	21.28	21.60	21.37	
15	16QAM	1	37	21.37	21.46	21.51	
15	16QAM	1	74	21.31	21.30	21.28	22.5
15	16QAM	36	0	21.32	21.46	21.75	
15	16QAM	36	20	21.33	21.49	21.57	
15	16QAM	36	39	21.50	21.38	21.44	21.5
15	16QAM	75	0	21.67	21.54	21.56	
15	64QAM	1	0	20.65	20.65	20.47	
15	64QAM	1	37	20.75	20.47	20.49	21.5
15	64QAM	1	74	20.47	20.46	20.46	
15	64QAM	36	0	20.82	20.59	20.54	
15	64QAM	36	20	20.58	20.60	20.53	21.5
15	64QAM	36	39	20.48	20.61	20.36	
15	64QAM	75	0	20.78	20.57	20.50	
Channel				133172	133272	133422	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	22.35	22.40	22.36	23.5
10	QPSK	1	25	22.30	22.34	22.36	
10	QPSK	1	49	22.26	22.38	22.38	
10	QPSK	25	0	21.54	21.36	21.25	22.5
10	QPSK	25	12	21.64	21.35	21.35	
10	QPSK	25	25	21.53	21.30	21.24	
10	QPSK	50	0	21.57	21.38	21.43	22.5
10	16QAM	1	0	21.28	21.28	21.29	
10	16QAM	1	25	21.32	21.22	21.19	
10	16QAM	1	49	21.37	21.37	21.42	22.5
10	16QAM	25	0	21.65	21.47	21.45	
10	16QAM	25	12	21.50	21.52	21.21	
10	16QAM	25	25	21.62	21.47	21.26	21.5
10	16QAM	50	0	21.17	21.31	21.28	
10	64QAM	1	0	20.66	20.48	20.46	
10	64QAM	1	25	20.55	20.66	20.47	21.5
10	64QAM	1	49	20.49	20.46	20.46	
10	64QAM	25	0	20.76	20.54	20.37	
10	64QAM	25	12	20.35	20.67	20.38	21.5
10	64QAM	25	25	20.75	20.64	20.30	
10	64QAM	50	0	20.75	20.54	20.36	
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	22.39	22.36	22.41	23.5
5	QPSK	1	12	22.30	22.38	22.30	
5	QPSK	1	24	22.35	22.31	22.37	
5	QPSK	12	0	21.44	21.28	21.47	22.5
5	QPSK	12	7	21.61	21.35	21.24	
5	QPSK	12	13	21.61	21.34	21.45	
5	QPSK	25	0	21.46	21.26	21.36	22.5
5	16QAM	1	0	21.57	21.51	21.52	
5	16QAM	1	12	21.56	21.45	21.48	
5	16QAM	1	24	21.54	21.39	21.39	22.5
5	16QAM	12	0	21.63	21.26	21.33	
5	16QAM	12	7	21.57	21.24	21.28	
5	16QAM	12	13	21.33	21.30	21.24	21.5
5	16QAM	25	0	21.40	21.27	21.37	
5	64QAM	1	0	20.35	20.79	20.58	
5	64QAM	1	12	20.65	20.75	20.49	21.5
5	64QAM	1	24	20.59	20.75	20.65	
5	64QAM	12	0	20.48	20.53	20.43	
5	64QAM	12	7	20.48	20.57	20.43	21.5
5	64QAM	12	13	20.75	20.63	20.42	
5	64QAM	25	0	20.75	20.61	20.40	



2.4GHz WLAN ANT 1

Mode	Channel	Frequency (MHz)	Average power (dBm)			Power Setting	Duty Cycle %
			1Mbps	2Mbps	3Mbps		
802.11b 1Mbps	CH 1	2412	18.14	19.00	19.50	99.95	
	CH 7	2442	18.11	19.00	19.50		
	CH 13	2472	8.94	9.50	10.50		
802.11g 6Mbps	CH 1	2412	15.63	16.50	17.50	96.94	
	CH 7	2442	16.02	17.00	17.50		
	CH 13	2472	7.09	8.00	9.00		
802.11n-HT20 MCS0	CH 1	2412	15.61	16.50	17.50	96.88	
	CH 7	2442	15.92	16.50	17.50		
	CH 13	2472	6.95	7.00	8.00		
802.11n-HT40 MCS0	CH 3	2422	14.90	15.50	16.50	93.93	
	CH 7	2442	14.95	15.50	16.50		
	CH 11	2462	4.02	5.00	6.00		

5GHz WLAN ANT 1

Mode	Channel	Frequency (MHz)	Average power (dBm)			Power Setting	Duty Cycle %
			1Mbps	2Mbps	3Mbps		
802.11a 6Mbps	CH 36	5180	14.72	15.50	16.00	96.94	
	CH 44	5220	14.83	15.50	16.00		
	CH 48	5240	15.30	16.00	16.00		
802.11n-HT20 MCS0	CH 36	5180	14.68	15.50	16.00	96.73	
	CH 44	5220	14.86	15.50	16.00		
	CH 48	5240	14.74	15.50	16.00		
802.11n-HT40 MCS0	CH 38	5190	13.97	14.50	15.00	93.64	
	CH 46	5230	14.64	15.50	16.00		
	CH 36	5180	14.62	15.50	16.00		
802.11ac-VHT20 MCS0	CH 44	5220	14.85	15.50	16.00	96.76	
	CH 48	5240	14.73	15.50	16.00		
	CH 38	5190	14.46	15.20	16.00		
802.11ac-VHT40 MCS0	CH 46	5230	14.73	15.50	16.00	93.68	
	CH 42	5210	13.22	14.00	14.00		

5GHz WLAN ANT 1

Mode	Channel	Frequency (MHz)	Average power (dBm)			Power Setting	Duty Cycle %
			1Mbps	2Mbps	3Mbps		
802.11a 6Mbps	CH 52	5260	15.60	16.50	16.00	96.94	
	CH 60	5300	15.56	16.50	16.00		
	CH 64	5320	14.48	15.50	16.00		
802.11n-HT20 MCS0	CH 52	5260	14.85	15.50	16.00	96.73	
	CH 60	5300	14.77	15.50	16.00		
	CH 64	5320	14.51	15.50	16.00		
802.11n-HT40 MCS0	CH 54	5270	14.73	15.50	16.00	93.64	
	CH 62	5310	14.63	15.50	15.50		
	CH 52	5260	14.83	15.50	16.00		
802.11ac-VHT20 MCS0	CH 60	5300	14.83	15.50	16.00	96.76	
	CH 64	5320	14.48	15.50	16.00		
	CH 54	5270	14.55	15.50	16.00		
802.11ac-VHT40 MCS0	CH 62	5310	14.55	15.50	16.00	93.68	
	CH 58	5290	13.19	14.00	14.00		

5GHz WLAN ANT 1

Mode	Channel	Frequency (MHz)	Average power (dBm)			Power Setting	Duty Cycle %
			1Mbps	2Mbps	3Mbps		
802.11a 6Mbps	CH 100	5930	15.74	16.50	16.00	96.94	
	CH 120	5950	15.33	16.00	16.00		
	CH 144	5730	15.31	16.00	16.00		
802.11n-HT20 MCS0	CH 100	5930	15.03	16.00	16.00	96.73	
	CH 120	5950	15.32	16.00	16.00		
	CH 144	5730	14.99	15.50	16.00		
802.11n-HT40 MCS0	CH 102	5910	14.95	15.50	16.00	93.64	
	CH 126	5930	15.24	16.00	16.00		
	CH 142	5710	14.97	15.50	16.00		
802.11ac-VHT20 MCS0	CH 100	5930	15.22	16.00	16.00	96.76	
	CH 120	5950	15.24	16.00	16.00		
	CH 144	5730	15.10	16.00	16.00		
802.11ac-VHT40 MCS0	CH 102	5910	14.94	15.50	16.00	93.68	
	CH 126	5930	15.20	16.00	16.00		
	CH 142	5710	14.97	15.50	16.00		
802.11ac-VHT80 MCS0	CH 106	5930	15.06	16.00	16.00	88.06	
	CH 122	5910	15.19	16.00	16.00		
	CH 138	5990	15.07	16.00	16.00		

5GHz WLAN ANT 1

Mode	Channel	Frequency (MHz)	Average power (dBm)			Power Setting	Duty Cycle %
			1Mbps	2Mbps	3Mbps		
802.11a 6Mbps	CH 149	5745	14.97	15.50	16.00	96.94	
	CH 157	5785	14.90	15.50	16.00		
	CH 165	5825	15.04	16.00	16.00		
802.11n-HT20 MCS0	CH 149	5745	14.89	15.50	16.00	96.73	
	CH 157	5785	14.86	15.50	16.00		
	CH 165	5825	14.89	15.50	16.00		
802.11n-HT40 MCS0	CH 151	5755	14.95	15.50	16.00	93.64	
	CH 159	5795	14.85	15.50	16.00		
	CH 149	5745	14.92	15.50	16.00		
802.11ac-VHT20 MCS0	CH 157	5785	14.85	15.50	16.00	96.76	
	CH 165	5825	14.90	15.50	16.00		
	CH 151	5755	14.94	15.50	16.00		
802.11ac-VHT40 MCS0	CH 159	5795	14.87	15.50	16.00	93.68	
	CH 155	5775	14.88	15.50	16.00		

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	7.04	4.53	4.87
	CH 05	2441	11.16	9.26	9.22
	CH 78	2480	7.95	4.89	5.01
Tune-up Limit			12	10	10
Duty Cycle %			77.07	77.19	77.13

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 00	2402	-9.91	-9.71	
	CH 10	2440	-4.55	-7.41	
	CH 30	2480	-4.47	-7.34	
Tune-up Limit			0.5	0.5	
Duty Cycle %			61.9	32.26	

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		
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8		
GSM 1 Tx slot	31.66	31.76	31.58	32.00	22.66	22.76	22.58	23.00	0.19
GPRS 1 Tx slot	31.67	31.77	31.59	32.00	22.67	22.77	22.59	23.00	
GPRS 2 Tx slots	29.11	29.19	29.12	30.00	23.11	23.19	23.12	24.00	0.08
GPRS 3 Tx slots	27.41	27.46	27.32	28.00	23.45	23.20	23.06	23.74	0.14
GPRS 4 Tx slots	26.18	26.22	26.17	27.00	23.18	23.22	23.17	24.00	0.05
EDGE 1 Tx slot	25.10	25.12	25.11	26.00	16.10	16.12	16.11	17.00	0.02
EDGE 2 Tx slots	23.40	23.44	23.39	24.00	17.40	17.44	17.39	18.00	0.05
EDGE 3 Tx slots	21.22	21.25	21.23	22.00	16.96	16.99	16.97	17.74	0.03
EDGE 4 Tx slots	19.31	19.34	19.36	20.00	16.31	16.34	16.36	17.00	0.05
Mode		Max.	31.77			Max.	23.22		
Attenuator	Cable Loss : 0.6								

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		
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot	28.14	28.18	28.22	29.00	19.14	19.18	19.22	20.00	
GPRS 1 Tx slot	28.15	28.19	28.23	29.00	19.15	19.19	19.23	20.00	0.09
GPRS 2 Tx slots	25.11	25.13	25.15	26.00	19.11	19.13	19.15	20.00	0.04
GPRS 3 Tx slots	23.12	23.14	23.10	24.00	18.86	18.88	18.84	19.74	0.04
GPRS 4 Tx slots	22.48	22.53	22.44	23.00	19.48	19.53	19.44	20.00	0.09
EDGE 1 Tx slot	24.42	24.66	24.45	25.00	15.42	15.66	15.45	16.00	0.24
EDGE 2 Tx slots	21.37	21.48	21.47	22.00	15.37	15.48	15.47	16.00	0.11
EDGE 3 Tx slots	19.48	19.51	19.42	20.00	15.22	15.25	15.16	15.74	0.09
EDGE 4 Tx slots	18.22	18.28	18.21	19.00	15.22	15.28	15.21	16.00	0.07
Mode		Max.	28.23			Max.	19.53		
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	1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6		
Frequency (MHz)													
3GPP Rel 99	RMC 12.2Kbps	18.56	18.59	18.48	19.50	18.48	18.57	18.46	19.50	18.56	18.59	18.43	19.50
3GPP Rel 5	HSDPA Subtest-1	17.30	17.35	17.45	18.50	17.48	17.34	17.44	18.50	17.47	17.51	17.53	18.50
3GPP Rel 5	HSDPA Subtest-2	17.26	17.28	17.42	18.50	17.45	17.33	17.44	18.50	17.43	17.49	17.52	18.50
3GPP Rel 5	HSDPA Subtest-3	16.78	16.87	16.96	17.50	16.95	16.85	16.91	17.50	16.95	16.96	17.04	18.00
3GPP Rel 5	HSDPA Subtest-4	16.74	16.83	16.94	17.50	16.94	16.85	16.89	17.50	16.93	16.98	17.00	18.00
3GPP Rel 6	HSUPA Subtest-1	15.18	15.25	15.38	16.50	15.47	15.41	15.41	16.50	15.49	15.49	15.48	16.50
3GPP Rel 6	HSUPA Subtest-2	15.19	15.30	15.36	16.50	15.45	15.39	15.42	16.50	15.45	15.47	15.45	16.50
3GPP Rel 6	HSUPA Subtest-3	16.17	16.25	16.38	17.50	16.45	16.43	16.39	17.50	16.45	16.49	16.47	17.50
3GPP Rel 6	HSUPA Subtest-4	14.71	14.80	14.91	15.50	14.99	14.91	14.95	15.50	14.97	14.98	15.01	15.50
3GPP Rel 6	HSUPA Subtest-5	16.14	16.21	16.33	17.50	16.42	16.39	16.33	17.50	16.46	16.48	16.43	17.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	16.61	16.54	16.67	17.50	16.85	16.94	16.78	17.50	16.86	16.87	16.95	17.50
Attenuator		Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6		
Mode		Max.	18.59			Max.	18.57			Max.	18.59		



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	19.5
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	18.54	18.57	18.51	
20	QPSK	1	49	18.52	18.46	18.39	19.5
20	QPSK	1	99	18.46	18.42	18.40	
20	QPSK	50	0	17.37	17.46	17.39	
20	QPSK	50	24	17.38	17.43	17.43	18.5
20	QPSK	50	50	17.43	17.39	17.45	
20	QPSK	100	0	17.36	17.45	17.41	
20	16QAM	1	0	17.42	17.42	17.44	18.5
20	16QAM	1	49	17.26	17.56	17.52	
20	16QAM	1	99	17.51	17.36	17.76	
20	16QAM	50	0	17.44	17.41	17.39	18.5
20	16QAM	50	24	17.40	17.45	17.46	
20	16QAM	50	50	17.48	17.45	17.52	
20	16QAM	100	0	17.51	17.52	17.39	17.5
20	64QAM	1	0	16.46	16.65	16.39	
20	64QAM	1	49	16.41	16.59	16.50	
20	64QAM	1	99	16.36	16.69	16.69	17.5
20	64QAM	50	0	16.46	16.38	16.43	
20	64QAM	50	24	16.49	16.43	16.48	
20	64QAM	50	50	16.48	16.49	16.43	17.5
20	64QAM	100	0	16.36	16.33	16.34	
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	18.35	18.38	18.29	
15	QPSK	1	37	18.14	18.50	18.38	18.5
15	QPSK	1	74	18.51	18.43	18.51	
15	QPSK	36	0	17.23	17.32	17.31	
15	QPSK	36	20	17.22	17.41	17.38	18.5
15	QPSK	36	39	17.34	17.35	17.32	
15	QPSK	75	0	17.26	17.32	17.28	
15	16QAM	1	0	17.35	17.43	17.37	18.5
15	16QAM	1	37	17.48	17.51	17.37	
15	16QAM	1	74	17.43	17.55	17.55	
15	16QAM	36	0	17.22	17.27	17.30	18.5
15	16QAM	36	20	17.31	17.24	17.37	
15	16QAM	36	39	17.36	17.45	17.42	
15	16QAM	75	0	17.23	17.25	17.34	17.5
15	64QAM	1	0	16.43	16.19	16.25	
15	64QAM	1	37	16.42	16.23	16.65	
15	64QAM	1	74	16.31	16.35	16.50	17.5
15	64QAM	36	0	16.16	16.33	16.21	
15	64QAM	36	20	16.36	16.38	16.28	
15	64QAM	36	39	16.24	16.29	16.38	17.5
15	64QAM	75	0	16.23	16.30	16.29	
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	18.39	18.38	18.48	
10	QPSK	1	25	18.43	18.46	18.41	18.5
10	QPSK	1	49	18.39	18.40	18.39	
10	QPSK	25	0	17.41	17.42	17.38	
10	QPSK	25	12	17.37	17.49	17.42	18.5
10	QPSK	25	25	17.28	17.41	17.37	
10	QPSK	50	0	17.34	17.43	17.41	
10	16QAM	1	0	17.82	17.75	17.74	18.5
10	16QAM	1	25	17.51	17.47	17.54	
10	16QAM	1	49	17.46	17.54	17.33	
10	16QAM	25	0	17.36	17.35	17.32	18.5
10	16QAM	25	12	17.52	17.32	17.32	
10	16QAM	25	25	17.32	17.52	17.62	
10	16QAM	50	0	17.89	17.82	17.86	17.5
10	64QAM	1	0	16.40	16.45	16.45	
10	64QAM	1	25	16.43	16.48	16.52	
10	64QAM	1	49	16.10	16.23	16.20	17.5
10	64QAM	25	0	16.40	16.44	16.45	
10	64QAM	25	12	16.43	16.41	16.42	
10	64QAM	25	25	16.36	16.14	16.36	17.5
10	64QAM	50	0	16.37	16.37	16.34	
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	18.39	18.44	18.38	
5	QPSK	1	12	18.38	18.33	18.36	18.5
5	QPSK	1	24	18.34	18.42	18.43	
5	QPSK	12	0	17.47	17.38	17.45	
5	QPSK	12	7	17.48	17.53	17.45	18.5
5	QPSK	12	13	17.26	17.25	17.28	
5	QPSK	25	0	17.25	17.23	17.25	
5	16QAM	1	0	17.38	17.28	17.66	18.5
5	16QAM	1	12	17.36	17.29	17.66	
5	16QAM	1	24	17.39	17.26	17.65	
5	16QAM	12	0	17.48	17.62	17.48	18.5
5	16QAM	12	7	17.38	17.38	17.18	
5	16QAM	12	13	17.18	17.51	17.28	
5	16QAM	25	0	17.28	17.74	17.72	17.5
5	64QAM	1	0	16.48	16.20	16.25	
5	64QAM	1	12	16.64	16.30	16.41	
5	64QAM	1	24	16.65	16.29	16.31	17.5
5	64QAM	12	0	16.30	16.23	16.22	
5	64QAM	12	7	16.36	16.20	16.20	
5	64QAM	12	13	16.33	16.29	16.27	17.5
5	64QAM	25	0	16.40	16.20	16.27	
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	18.33	18.40	18.32	
3	QPSK	1	8	18.43	18.46	18.29	18.5
3	QPSK	1	14	18.44	18.31	18.31	
3	QPSK	8	0	17.35	17.30	17.32	
3	QPSK	8	4	17.41	17.35	17.36	18.5
3	QPSK	8	7	17.41	17.35	17.31	

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	19.5
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	18.53	18.61	18.60	
20	QPSK	1	49	18.39	18.47	18.46	18.5
20	QPSK	1	99	18.31	18.44	18.56	
20	QPSK	50	0	17.61	17.65	17.62	
20	QPSK	50	24	17.52	17.60	17.60	18.5
20	QPSK	50	50	17.41	17.52	17.53	
20	QPSK	100	0	17.51	17.55	17.62	
20	16QAM	1	0	17.38	17.68	17.55	18.5
20	16QAM	1	49	17.53	17.30	17.44	
20	16QAM	1	99	17.32	17.54	17.38	
20	16QAM	50	0	17.51	17.44	17.58	18.5
20	16QAM	50	24	17.77	17.88	17.77	
20	16QAM	50	50	17.73	17.74	17.74	
20	16QAM	100	0	17.75	17.83	17.84	17.5
20	64QAM	1	0	16.49	16.60	16.82	
20	64QAM	1	49	16.53	16.46	16.34	
20	64QAM	1	99	16.80	16.37	16.84	17.5
20	64QAM	50	0	16.50	16.59	16.54	
20	64QAM	50	24	16.52	16.63	16.57	
20	64QAM	50	50	16.56	16.51	16.53	17.5
20	64QAM	100	0	16.59	16.57	16.66	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	18.40	18.44	18.54	
15	QPSK	1	37	18.44	18.53	18.45	18.5
15	QPSK	1	74	18.31	18.53	18.56	
15	QPSK	36	0	17.46	17.53	17.56	
15	QPSK	36	20	17.50	17.63	17.59	18.5
15	QPSK	36	39	17.55	17.54	17.63	
15	QPSK	75	0	17.50	17.52	17.53	
15	16QAM	1	0	17.44	17.66	17.38	18.5
15	16QAM	1	37	17.52	17.52	17.36	
15	16QAM	1	74	17.38	17.68	17.47	
15	16QAM	36	0	17.39	17.41	17.60	18.5
15	16QAM	36	20	17.34	17.41	17.47	
15	16QAM	36	39	17.30	17.39	17.45	
15	16QAM	75	0	17.41	17.42	17.51	17.5
15	64QAM	1	0	16.36	16.67	16.72	
15	64QAM	1	37	16.78	16.54	16.60	
15	64QAM	1	74	16.82	16.53	16.57	17.5
15	64QAM	36	0	16.47	16.54	16.58	
15	64QAM	36	20	16.53	16.55	16.57	
15	64QAM	36	39	16.56	16.52	16.54	17.5
15	64QAM	75	0	16.49	16.60	16.53	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	18.52	18.51	18.34	
10	QPSK	1	25	18.50	18.43	18.44	18.5
10	QPSK	1	49	18.38	18.21	18.44	
10	QPSK	25	0	17.29	17.51	17.53	
10	QPSK	25	12	17.41	17.47	17.51	18.5
10	QPSK	25	25	17.30	17.41	17.48	
10	QPSK	50	0	17.36	17.46	17.38	
10	16QAM	1	0	17.35	17.50	17.26	18.5
10	16QAM	1	25	17.62	17.36	17.68	
10	16QAM	1	49	17.69	17.59	17.58	
10	16QAM	25	0	17.35	17.34	17.33	18.5
10	16QAM	25	12				



3	QPSK	15	0	17.33	17.41	17.34	18.5
3	16QAM	1	0	17.49	17.40	17.34	
3	16QAM	1	8	17.53	17.47	17.43	
3	16QAM	1	14	17.25	17.22	17.10	18.5
3	16QAM	8	0	17.68	17.81	17.73	
3	16QAM	8	4	17.75	17.72	17.78	
3	16QAM	8	7	17.65	17.70	17.73	17.5
3	16QAM	15	0	17.68	17.72	17.67	
3	64QAM	1	0	16.42	16.35	16.38	
3	64QAM	1	8	16.84	16.83	16.43	17.5
3	64QAM	1	14	16.45	16.81	16.45	
3	64QAM	8	0	16.37	16.39	16.23	
3	64QAM	8	4	16.47	16.37	16.37	17.5
3	64QAM	8	7	16.57	16.46	16.32	
3	64QAM	15	0	16.42	16.42	16.40	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	18.39	18.42	18.37	19.5
1.4	QPSK	1	3	18.29	18.27	18.26	
1.4	QPSK	1	5	18.26	18.24	18.22	
1.4	QPSK	3	0	18.26	18.26	18.22	
1.4	QPSK	3	1	18.30	18.27	18.25	
1.4	QPSK	3	3	18.32	18.36	18.25	
1.4	QPSK	6	0	17.31	17.29	17.25	18.5
1.4	16QAM	1	0	17.34	17.34	17.28	18.5
1.4	16QAM	1	3	17.30	17.50	17.48	
1.4	16QAM	1	5	17.18	17.38	17.06	
1.4	16QAM	3	0	17.20	17.25	17.22	
1.4	16QAM	3	1	17.38	17.20	17.25	
1.4	16QAM	3	3	17.40	17.37	17.11	
1.4	16QAM	6	0	17.41	17.34	17.29	18.5
1.4	64QAM	1	0	16.29	16.21	16.24	17.5
1.4	64QAM	1	3	16.31	16.52	16.40	
1.4	64QAM	1	5	16.29	16.64	16.23	
1.4	64QAM	3	0	16.32	16.38	16.39	
1.4	64QAM	3	1	16.41	16.38	16.59	
1.4	64QAM	3	3	16.33	16.47	16.24	
1.4	64QAM	6	0	16.38	16.41	16.30	17.5

3	QPSK	15	0	17.37	17.43	17.37	18.5
3	16QAM	1	0	17.45	17.54	17.58	
3	16QAM	1	8	17.67	17.67	17.41	
3	16QAM	1	14	17.58	17.36	17.44	18.5
3	16QAM	8	0	17.37	17.38	17.47	
3	16QAM	8	4	17.47	17.47	17.48	
3	16QAM	8	7	17.69	17.77	17.81	17.5
3	16QAM	15	0	17.69	17.67	17.74	
3	64QAM	1	0	16.36	16.45	16.43	
3	64QAM	1	8	16.55	16.43	16.59	17.5
3	64QAM	1	14	16.36	16.43	16.26	
3	64QAM	8	0	16.34	16.38	16.32	
3	64QAM	8	4	16.46	16.44	16.48	17.5
3	64QAM	8	7	16.40	16.47	16.59	
3	64QAM	15	0	16.36	16.44	16.35	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	18.49	18.54	18.52	19.5
1.4	QPSK	1	3	18.43	18.43	18.47	
1.4	QPSK	1	5	18.29	18.38	18.40	
1.4	QPSK	3	0	18.37	18.34	18.33	
1.4	QPSK	3	1	18.33	18.43	18.48	
1.4	QPSK	3	3	18.32	18.39	18.38	
1.4	QPSK	6	0	17.40	17.42	17.38	18.5
1.4	16QAM	1	0	17.34	17.81	17.47	18.5
1.4	16QAM	1	3	17.47	17.55	17.59	
1.4	16QAM	1	5	17.53	17.69	17.49	
1.4	16QAM	3	0	17.56	17.60	17.51	
1.4	16QAM	3	1	17.57	17.60	17.62	
1.4	16QAM	3	3	17.56	17.68	17.57	
1.4	16QAM	6	0	17.47	17.48	17.39	18.5
1.4	64QAM	1	0	16.25	16.19	16.33	17.5
1.4	64QAM	1	3	16.51	16.49	16.61	
1.4	64QAM	1	5	16.42	16.38	16.22	
1.4	64QAM	3	0	16.33	16.31	16.50	
1.4	64QAM	3	1	16.24	16.39	16.36	
1.4	64QAM	3	3	16.30	16.47	16.35	
1.4	64QAM	6	0	16.29	16.30	16.37	17.5



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	19.5
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	18.57	18.58	18.50	19.5
10	QPSK	1	25	18.43	18.46	18.26	
10	QPSK	1	49	18.35	18.47	18.15	
10	QPSK	25	0	17.53	17.55	17.36	18.5
10	QPSK	25	12	17.29	17.31	17.36	
10	QPSK	25	25	17.29	17.40	17.45	
10	QPSK	50	0	17.35	17.23	17.37	18.5
10	16QAM	1	0	17.39	17.58	17.29	
10	16QAM	1	25	17.62	17.65	17.33	
10	16QAM	1	49	17.45	17.51	17.58	18.5
10	16QAM	25	0	17.54	17.55	17.37	
10	16QAM	25	12	17.48	17.56	17.34	
10	16QAM	25	25	17.51	17.44	17.47	18.5
10	16QAM	50	0	17.52	17.43	17.33	
10	64QAM	1	0	16.48	16.58	16.46	
10	64QAM	1	25	16.45	16.65	16.45	17.5
10	64QAM	1	49	16.34	16.56	16.47	
10	64QAM	25	0	16.45	16.56	16.23	
10	64QAM	25	12	16.44	16.61	16.32	17.5
10	64QAM	25	25	16.56	16.45	16.15	
10	64QAM	50	0	16.52	16.48	16.34	
Channel				20425	20525	20625	19.5
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	18.39	18.35	18.33	19.5
5	QPSK	1	12	18.29	18.40	18.24	
5	QPSK	1	24	18.29	18.24	18.24	
5	QPSK	12	0	17.44	17.49	17.35	18.5
5	QPSK	12	7	17.51	17.52	17.44	
5	QPSK	12	13	17.56	17.40	17.35	
5	QPSK	25	0	17.47	17.43	17.35	18.5
5	16QAM	1	0	17.76	17.69	17.45	
5	16QAM	1	12	17.46	17.68	17.44	
5	16QAM	1	24	17.33	17.68	17.51	18.5
5	16QAM	12	0	17.42	17.51	17.50	
5	16QAM	12	7	17.49	17.52	17.34	
5	16QAM	12	13	17.49	17.40	17.45	18.5
5	16QAM	25	0	17.50	17.55	17.50	
5	64QAM	1	0	16.57	16.45	16.56	
5	64QAM	1	12	16.45	16.39	16.53	17.5
5	64QAM	1	24	16.59	16.43	16.37	
5	64QAM	12	0	16.31	16.45	16.25	
5	64QAM	12	7	16.35	16.51	16.29	17.5
5	64QAM	12	13	16.53	16.48	16.05	
5	64QAM	25	0	16.41	16.48	16.09	
Channel				20415	20525	20635	19.5
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	18.38	18.39	18.24	19.5
3	QPSK	1	8	18.34	18.35	18.26	
3	QPSK	1	14	18.35	18.33	18.07	
3	QPSK	8	0	17.37	17.50	17.48	18.5
3	QPSK	8	4	17.51	17.57	17.54	
3	QPSK	8	7	17.46	17.48	17.35	
3	QPSK	15	0	17.44	17.50	17.49	18.5
3	16QAM	1	0	17.46	17.57	17.64	
3	16QAM	1	8	17.39	17.65	17.49	
3	16QAM	1	14	17.44	17.70	17.45	18.5
3	16QAM	8	0	17.40	17.49	17.23	
3	16QAM	8	4	17.56	17.67	17.24	
3	16QAM	8	7	17.48	17.54	17.28	18.5
3	16QAM	15	0	17.42	17.44	16.99	
3	64QAM	1	0	16.37	16.25	16.46	
3	64QAM	1	8	16.25	16.49	16.25	17.5
3	64QAM	1	14	16.27	16.45	16.26	
3	64QAM	8	0	16.37	16.47	16.45	
3	64QAM	8	4	16.59	16.43	16.37	17.5
3	64QAM	8	7	16.54	16.46	16.43	
3	64QAM	15	0	16.43	16.53	16.33	
Channel				20407	20525	20643	19.5
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	18.39	18.36	18.40	19.5
1.4	QPSK	1	3	18.42	18.35	18.42	
1.4	QPSK	1	5	18.31	18.25	18.26	
1.4	QPSK	3	0	18.32	18.38	18.34	18.5
1.4	QPSK	3	1	18.38	18.25	18.35	
1.4	QPSK	3	3	18.39	18.31	18.31	
1.4	QPSK	6	0	17.42	17.41	17.40	18.5
1.4	16QAM	1	0	17.55	17.36	17.53	
1.4	16QAM	1	3	17.35	17.59	17.48	
1.4	16QAM	1	5	17.74	17.42	17.48	18.5
1.4	16QAM	3	0	17.27	17.25	17.39	
1.4	16QAM	3	1	17.30	17.57	17.43	
1.4	16QAM	3	3	17.38	17.49	17.37	18.5
1.4	16QAM	6	0	17.57	17.44	17.48	
1.4	64QAM	1	0	16.10	16.27	16.29	
1.4	64QAM	1	3	16.41	16.42	16.37	17.5
1.4	64QAM	1	5	16.36	16.35	16.23	
1.4	64QAM	3	0	16.02	16.29	16.30	
1.4	64QAM	3	1	16.30	16.24	16.25	17.5
1.4	64QAM	3	3	16.20	16.37	16.41	
1.4	64QAM	6	0	16.41	16.53	16.42	

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	19.5
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	18.38	18.54	18.43	19.5
10	QPSK	1	25	18.24	18.37	18.40	
10	QPSK	1	49	18.34	18.35	18.34	
10	QPSK	25	0	17.63	17.73	17.64	18.5
10	QPSK	25	12	17.60	17.54	17.33	
10	QPSK	25	25	17.65	17.71	17.64	
10	QPSK	50	0	17.66	17.68	17.59	18.5
10	16QAM	1	0	17.59	17.14	17.27	
10	16QAM	1	25	17.34	17.29	17.43	
10	16QAM	1	49	17.43	17.48	17.37	18.5
10	16QAM	25	0	17.32	17.34	17.28	
10	16QAM	25	12	17.36	17.40	17.29	
10	16QAM	25	25	17.41	17.42	17.36	18.5
10	16QAM	50	0	17.31	17.39	17.44	
10	64QAM	1	0	16.34	16.46	16.80	
10	64QAM	1	25	16.78	16.84	16.43	17.5
10	64QAM	1	49	16.80	16.48	16.41	
10	64QAM	25	0	16.31	16.25	16.22	
10	64QAM	25	12	16.36	16.39	16.31	17.5
10	64QAM	25	25	16.41	16.38	16.38	
10	64QAM	50	0	16.33	16.26	16.37	
Channel				23035	23095	23155	19.5
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	18.13	18.46	18.24	19.5
5	QPSK	1	12	18.29	18.45	18.29	
5	QPSK	1	24	18.25	18.44	18.30	
5	QPSK	12	0	17.36	17.43	17.42	18.5
5	QPSK	12	7	17.47	17.49	17.46	
5	QPSK	12	13	17.42	17.45	17.42	
5	QPSK	25	0	17.38	17.50	17.46	18.5
5	16QAM	1	0	17.39	17.41	17.43	
5	16QAM	1	12	17.56	17.51	17.52	
5	16QAM	1	24	17.52	17.50	17.46	18.5
5	16QAM	12	0	17.26	17.23	17.26	
5	16QAM	12	7	17.40	17.45	17.29	
5	16QAM	12	13	17.35	17.32	17.37	18.5
5	16QAM	25	0	17.36	17.32	17.34	
5	64QAM	1	0	16.32	16.33	16.38	
5	64QAM	1	12	16.77	16.47	16.40	17.5
5	64QAM	1	24	16.75	16.44	16.49	
5	64QAM	12	0	16.29	16.31	16.26	
5	64QAM	12	7	16.39	16.27	16.33	17.5
5	64QAM	12	13	16.26	16.36	16.41	
5	64QAM	25	0	16.41	16.37	16.34	
Channel				23025	23095	23165	19.5
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	18.21	18.48	18.15	19.5
3	QPSK	1	8	18.39	18.38	18.28	
3	QPSK	1	14	18.33	18.44	18.39	
3	QPSK	8	0	17.44	17.42	17.42	18.5
3	QPSK	8	4	17.47	17.50	17.51	
3	QPSK	8	7	17.42	17.50	17.44	
3	QPSK	15	0	17.41	17.49	17.35	18.5
3	16QAM	1	0	17.42	17.78	17.37	
3	16QAM	1	8	17.62	17.60	17.55	
3	16QAM	1	14	17.45	17.50	17.36	18.5
3	16QAM	8	0	17.42	17.31	17.34	
3	16QAM	8	4	17.47	17.44	17.55	
3	16QAM	8	7	17.31	17.34	17.40	18.5
3	16QAM	15	0	17.29	17.22	17.21	
3	64QAM	1	0	16.33	16.67	16.66	
3	64QAM	1	8	16.62	16.52	16.53	17.5
3	64QAM	1	14	16.55	16.40	16.51	
3	64QAM	8	0	16.22	16.30	16.21	
3	64QAM	8	4	16.31	16.35	16.34	17.5
3	64QAM	8	7	16.30	16.22	16.37	



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	18.43	18.46	18.43	19.5
10	QPSK	1	25	18.31	18.27	18.33	
10	QPSK	1	49	18.24	18.27	18.22	
10	QPSK	25	0	17.54	17.60	17.52	18.5
10	QPSK	25	12	17.39	17.33	17.47	
10	QPSK	25	25	17.37	17.37	17.46	
10	QPSK	50	0	17.50	17.37	17.38	18.5
10	16QAM	1	0	17.23	17.42	17.56	
10	16QAM	1	25	17.44	17.73	17.57	
10	16QAM	1	49	17.40	17.65	17.70	18.5
10	16QAM	25	0	17.34	17.58	17.57	
10	16QAM	25	12	17.40	17.55	17.53	
10	16QAM	25	25	17.23	17.49	17.54	18.5
10	16QAM	50	0	17.27	17.56	17.53	
10	64QAM	1	0	16.24	16.57	16.25	
10	64QAM	1	25	16.47	16.37	16.27	17.5
10	64QAM	1	49	16.21	16.24	16.24	
10	64QAM	25	0	16.39	16.56	16.54	
10	64QAM	25	12	16.31	16.39	16.56	17.5
10	64QAM	25	25	16.25	16.46	16.62	
10	64QAM	50	0	16.32	16.55	16.56	
Channel				23755	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	18.37	18.33	18.29	19.5
5	QPSK	1	12	18.36	18.32	18.31	
5	QPSK	1	24	18.28	18.34	18.33	
5	QPSK	12	0	17.44	17.62	17.78	18.5
5	QPSK	12	7	17.56	17.65	17.73	
5	QPSK	12	13	17.39	17.67	17.73	
5	QPSK	25	0	17.42	17.59	17.72	18.5
5	16QAM	1	0	17.90	17.95	17.67	
5	16QAM	1	12	18.07	17.63	18.00	
5	16QAM	1	24	17.91	17.96	18.12	18.5
5	16QAM	12	0	17.35	17.38	17.59	
5	16QAM	12	7	17.35	17.42	17.54	
5	16QAM	12	13	17.26	17.51	17.54	18.5
5	16QAM	25	0	17.36	17.48	17.52	
5	64QAM	1	0	16.16	16.17	16.17	
5	64QAM	1	12	16.20	16.17	16.25	17.5
5	64QAM	1	24	16.25	16.25	16.17	
5	64QAM	12	0	16.31	16.36	16.60	
5	64QAM	12	7	16.44	16.52	16.46	17.5
5	64QAM	12	13	16.29	16.47	16.49	
5	64QAM	25	0	16.26	16.45	16.61	

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	18.50	18.56	18.54	19.5
20	QPSK	1	49	18.35	18.34	18.30	
20	QPSK	1	99	18.28	18.27	18.30	
20	QPSK	50	0	17.61	17.68	17.64	18.5
20	QPSK	50	24	17.42	17.44	17.57	
20	QPSK	50	50	17.46	17.54	17.42	
20	QPSK	100	0	17.44	17.44	17.36	18.5
20	16QAM	1	0	17.49	17.25	17.53	
20	16QAM	1	49	17.54	17.28	17.34	
20	16QAM	1	99	17.54	17.72	17.51	18.5
20	16QAM	50	0	17.66	17.63	17.60	
20	16QAM	50	24	17.55	17.55	17.56	
20	16QAM	50	50	17.52	17.44	17.40	18.5
20	16QAM	100	0	17.48	17.51	17.57	
20	64QAM	1	0	16.81	16.58	16.91	
20	64QAM	1	49	16.58	16.91	16.90	17.5
20	64QAM	1	99	16.81	16.93	17.01	
20	64QAM	50	0	16.77	16.67	16.80	
20	64QAM	50	24	16.71	16.65	16.77	17.5
20	64QAM	50	50	16.73	16.61	16.67	
20	64QAM	100	0	16.72	16.72	16.70	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	18.48	18.52	18.50	19.5
15	QPSK	1	37	18.52	18.48	18.46	
15	QPSK	1	74	18.46	18.42	18.40	
15	QPSK	36	0	17.55	17.52	17.56	18.5
15	QPSK	36	20	17.55	17.47	17.57	
15	QPSK	36	39	17.41	17.46	17.43	
15	QPSK	75	0	17.50	17.54	17.47	18.5
15	16QAM	1	0	17.49	17.36	17.66	
15	16QAM	1	37	17.36	17.66	17.59	
15	16QAM	1	74	17.46	17.36	17.36	18.5
15	16QAM	36	0	17.67	17.67	17.58	
15	16QAM	36	20	17.70	17.69	17.75	
15	16QAM	36	39	17.62	17.77	17.71	18.5
15	16QAM	75	0	17.72	17.70	17.66	
15	64QAM	1	0	17.03	16.93	17.03	
15	64QAM	1	37	17.05	16.83	16.93	17.5
15	64QAM	1	74	16.70	16.96	17.03	
15	64QAM	36	0	16.82	16.81	16.94	
15	64QAM	36	20	16.92	16.88	16.89	17.5
15	64QAM	36	39	16.81	16.75	16.79	
15	64QAM	75	0	16.83	16.85	16.82	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	18.51	18.51	18.52	19.5
10	QPSK	1	25	18.41	18.39	18.47	
10	QPSK	1	49	18.55	18.43	18.33	
10	QPSK	25	0	17.86	17.79	17.86	18.5
10	QPSK	25	12	17.83	18.02	17.80	
10	QPSK	25	25	17.79	17.75	17.67	
10	QPSK	50	0	17.87	17.72	17.91	18.5
10	16QAM	1	0	17.79	17.79	17.99	
10	16QAM	1	25	17.79	17.88	18.00	
10	16QAM	1	49	17.62	17.82	17.70	18.5
10	16QAM	25	0	17.63	17.80	17.68	
10	16QAM	25	12	17.62	17.82	17.73	
10	16QAM	25	25	17.53	17.58	17.58	18.5
10	16QAM	50	0	17.69	17.73	17.74	
10	64QAM	1	0	16.86	16.86	16.53	
10	64QAM	1	25	16.53	16.66	16.56	17.5
10	64QAM	1	49	16.53	16.53	16.53	
10	64QAM	25	0	16.86	16.84	16.86	
10	64QAM	25	12	16.85	16.89	16.93	17.5
10	64QAM	25	25	16.85	16.78	16.80	
10	64QAM	50	0	16.75	16.85	16.86	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	18.40	18.43	18.48	19.5
5	QPSK	1	12	18.43	18.43	18.42	
5	QPSK	1	24	18.51	18.41	18.47	
5	QPSK	12	0	17.55	17.57	17.53	18.5
5	QPSK	12	7	17.57	17.65	17.58	
5	QPSK	12	13	17.43	17.49	17.50	
5	QPSK	25	0	17.53	17.54	17.53	18.5
5	16QAM	1	0	18.02	17.71	17.72	
5	16QAM	1	12	17.65	17.94	17.89	
5	16QAM	1	24	17.77	17.66	18.01	18.5
5	16QAM	12	0	17.66	17.77	17.73	
5	16QAM	12	7	17.83	17.75	17.87	
5	16QAM	12	13	17.74	17.68	17.75	18.5
5	16QAM	25	0	17.75	17.77	17.69	
5	64QAM	1	0	16.53	16.93	16.73	
5	64QAM	1	12	16.83	16.83	16.83	17.5
5	64QAM	1	24	16.66	16.70	16.66	
5	64QAM	12	0	16.90	16.65	16.86	
5	64QAM	12	7	16.98	16.57	16.88	17.5
5	64QAM	12	13	16.81	16.93	16.88	
5	64QAM	25	0	16.88	16.96	16.83	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	18.47	18.38	18.37	19.5
3	QPSK	1	8	18.34	18.35	18.43	
3	QPSK	1	14	18.25	18.06	18.36	
3	QPSK	8	0	17.81	17.78	17.82	18.5
3	QPSK	8	4	17.76	17.68	17.78	
3	QPSK	8	7	17.62	17.67	17.64	



3	QPSK	15	0	17.71	17.75	17.68	18.5
3	16QAM	1	0	17.40	17.81	17.57	
3	16QAM	1	8	17.73	17.67	17.66	
3	16QAM	1	14	17.77	17.66	17.36	18.5
3	16QAM	8	0	17.58	17.58	17.49	
3	16QAM	8	4	17.61	17.60	17.66	
3	16QAM	8	7	17.53	17.68	17.62	17.5
3	16QAM	15	0	17.63	17.61	17.57	
3	64QAM	1	0	16.94	16.84	16.94	
3	64QAM	1	8	16.96	16.74	16.84	17.5
3	64QAM	1	14	16.81	16.87	16.94	
3	64QAM	8	0	16.73	16.72	16.85	
3	64QAM	8	4	16.83	16.79	16.80	17.5
3	64QAM	8	7	16.72	16.66	16.70	
3	64QAM	15	0	16.74	16.76	16.73	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	18.41	18.32	18.33	19.5
1.4	QPSK	1	3	18.47	18.49	18.49	
1.4	QPSK	1	5	18.39	18.27	18.43	
1.4	QPSK	3	0	18.38	18.31	18.38	
1.4	QPSK	3	1	18.35	18.41	18.32	
1.4	QPSK	3	3	18.36	18.32	18.24	
1.4	QPSK	6	0	17.84	17.69	17.88	18.5
1.4	16QAM	1	0	17.71	17.71	17.91	18.5
1.4	16QAM	1	3	17.71	17.80	17.92	
1.4	16QAM	1	5	17.54	17.74	17.62	
1.4	16QAM	3	0	17.49	17.46	17.72	
1.4	16QAM	3	1	17.58	17.48	17.60	
1.4	16QAM	3	3	17.59	17.60	17.54	
1.4	16QAM	6	0	17.48	17.39	17.40	18.5
1.4	64QAM	1	0	16.99	16.84	17.00	17.5
1.4	64QAM	1	3	16.72	16.81	16.81	
1.4	64QAM	1	5	16.69	16.69	16.80	
1.4	64QAM	3	0	16.78	16.76	16.78	
1.4	64QAM	3	1	16.77	16.81	16.85	
1.4	64QAM	3	3	16.77	16.70	16.72	
1.4	64QAM	6	0	16.67	16.77	16.78	17.5



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	18.44	18.48	18.45	19.5
20	QPSK	1	49	18.42	18.39	18.45	
20	QPSK	1	99	18.40	18.38	18.40	
20	QPSK	50	0	17.58	17.66	17.54	18.5
20	QPSK	50	24	17.47	17.41	17.26	
20	QPSK	50	50	17.49	17.28	17.34	
20	QPSK	100	0	17.55	17.29	17.36	18.5
20	16QAM	1	0	17.27	17.42	17.70	
20	16QAM	1	49	17.23	17.34	17.48	
20	16QAM	1	99	17.38	17.27	17.28	18.5
20	16QAM	50	0	17.38	17.24	17.27	
20	16QAM	50	24	17.33	17.13	17.28	
20	16QAM	50	50	17.40	17.20	17.28	17.5
20	16QAM	100	0	17.28	17.30	17.30	
20	64QAM	1	0	16.70	16.57	16.39	
20	64QAM	1	49	16.35	16.39	16.49	17.5
20	64QAM	1	99	16.39	16.35	16.67	
20	64QAM	50	0	16.75	16.56	16.55	
20	64QAM	50	24	16.84	16.56	16.47	17.5
20	64QAM	50	50	16.82	16.62	16.38	
20	64QAM	100	0	16.76	16.59	16.52	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	18.36	18.40	18.37	19.5
15	QPSK	1	37	18.39	18.38	18.31	
15	QPSK	1	74	18.25	18.38	18.30	
15	QPSK	36	0	17.60	17.41	17.27	18.5
15	QPSK	36	20	17.56	17.38	17.17	
15	QPSK	36	39	17.55	17.39	17.24	
15	QPSK	75	0	17.56	17.44	17.26	18.5
15	16QAM	1	0	17.28	17.60	17.37	
15	16QAM	1	37	17.37	17.46	17.51	
15	16QAM	1	74	17.31	17.30	17.28	18.5
15	16QAM	36	0	17.32	17.46	17.75	
15	16QAM	36	20	17.33	17.49	17.57	
15	16QAM	36	39	17.50	17.38	17.44	17.5
15	16QAM	75	0	17.67	17.54	17.56	
15	64QAM	1	0	16.65	16.65	16.47	
15	64QAM	1	37	16.75	16.47	16.49	17.5
15	64QAM	1	74	16.47	16.46	16.46	
15	64QAM	36	0	16.82	16.59	16.54	
15	64QAM	36	20	16.58	16.60	16.53	17.5
15	64QAM	36	39	16.48	16.61	16.36	
15	64QAM	75	0	16.78	16.57	16.50	
Channel				133172	133272	133422	
Frequency (MHz)				688	678	693	
10	QPSK	1	0	18.35	18.40	18.36	19.5
10	QPSK	1	25	18.30	18.34	18.36	
10	QPSK	1	49	18.26	18.38	18.38	
10	QPSK	25	0	17.54	17.36	17.25	18.5
10	QPSK	25	12	17.64	17.35	17.35	
10	QPSK	25	25	17.53	17.30	17.24	
10	QPSK	50	0	17.57	17.38	17.43	18.5
10	16QAM	1	0	17.28	17.28	17.29	
10	16QAM	1	25	17.32	17.22	17.19	
10	16QAM	1	49	17.37	17.37	17.42	18.5
10	16QAM	25	0	17.65	17.47	17.45	
10	16QAM	25	12	17.50	17.52	17.21	
10	16QAM	25	25	17.62	17.47	17.26	17.5
10	16QAM	50	0	17.17	17.31	17.28	
10	64QAM	1	0	16.66	16.48	16.46	
10	64QAM	1	25	16.55	16.66	16.47	17.5
10	64QAM	1	49	16.49	16.46	16.46	
10	64QAM	25	0	16.76	16.54	16.37	
10	64QAM	25	12	16.35	16.67	16.38	17.5
10	64QAM	25	25	16.75	16.64	16.30	
10	64QAM	50	0	16.75	16.54	16.36	
Channel				133147	133247	133447	
Frequency (MHz)				685.5	675.5	695.5	
5	QPSK	1	0	18.39	18.36	18.41	19.5
5	QPSK	1	12	18.30	18.38	18.30	
5	QPSK	1	24	18.35	18.31	18.37	
5	QPSK	12	0	17.44	17.28	17.47	18.5
5	QPSK	12	7	17.61	17.35	17.24	
5	QPSK	12	13	17.61	17.34	17.45	
5	QPSK	25	0	17.46	17.26	17.36	18.5
5	16QAM	1	0	17.57	17.51	17.52	
5	16QAM	1	12	17.56	17.45	17.48	
5	16QAM	1	24	17.54	17.39	17.39	18.5
5	16QAM	12	0	17.63	17.26	17.33	
5	16QAM	12	7	17.57	17.24	17.28	
5	16QAM	12	13	17.33	17.30	17.24	17.5
5	16QAM	25	0	17.40	17.27	17.37	
5	64QAM	1	0	16.35	16.79	16.58	
5	64QAM	1	12	16.65	16.75	16.49	17.5
5	64QAM	1	24	16.59	16.75	16.65	
5	64QAM	12	0	16.48	16.53	16.43	
5	64QAM	12	7	16.48	16.57	16.43	17.5
5	64QAM	12	13	16.75	16.63	16.42	
5	64QAM	25	0	16.75	16.61	16.40	