



REPORT No.: SZ22040005S01

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	251		
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8		
GSM 1 Tx slot	28.91	29.09	28.81	30.00	19.91	20.09	19.81	21.00	0.35
GPRS 1 Tx slot	28.83	29.06	28.74	30.00	19.83	20.06	19.74	21.00	
GPRS 2 Tx slots	28.47	28.60	28.44	29.50	22.47	22.60	22.44	23.50	
GPRS 3 Tx slots	28.08	28.15	27.93	29.00	23.82	23.89	23.67	24.74	0.22
GPRS 4 Tx slots	27.73	27.81	27.68	28.50	24.73	24.81	24.68	25.50	0.13
EDGE 1 Tx slot	23.57	23.63	23.46	24.50	14.57	14.63	14.46	15.50	0.17
EDGE 2 Tx slots	23.22	23.30	23.11	24.00	17.22	17.30	17.11	18.00	0.19
EDGE 3 Tx slots	22.84	22.92	22.82	23.50	18.58	18.66	18.56	19.24	0.10
EDGE 4 Tx slots	22.50	22.54	22.43	23.00	19.50	19.54	19.43	20.00	0.11
Mode		Max.	29.09			Max.	24.81		
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	810		
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot	28.88	29.09	28.97	30.00	19.88	20.09	19.97	21.00	0.24
GPRS 1 Tx slot	28.85	29.07	28.96	30.00	19.85	20.07	19.96	21.00	
GPRS 2 Tx slots	28.53	28.86	28.79	29.50	22.53	22.86	22.79	23.50	
GPRS 3 Tx slots	28.25	28.48	28.41	29.00	23.99	24.22	24.15	24.74	0.23
GPRS 4 Tx slots	27.91	28.02	27.95	29.00	24.91	25.02	24.95	26.00	0.11
EDGE 1 Tx slot	25.35	25.56	25.42	26.50	16.35	16.56	16.42	17.50	0.21
EDGE 2 Tx slots	25.11	25.25	25.14	26.00	19.11	19.25	19.14	20.00	0.14
EDGE 3 Tx slots	24.75	24.83	24.79	25.50	20.49	20.57	20.53	21.24	0.08
EDGE 4 Tx slots	24.50	24.62	24.55	25.50	21.50	21.62	21.55	22.50	0.12
Mode		Max.	29.09			Max.	25.02		
Attenuator	Cable Loss : 0.8								

Band		WCDMA Band II			Tune-up Limit (dBm)	WCDMA Band IV			Tune-up Limit (dBm)	WCDMA Band V			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	22.53	22.61	22.55	23.50	22.87	22.94	22.90	23.50	22.55	22.59	22.56	23.50
3GPP Rel 6	HSDPA Subtest-1	19.49	19.02	18.50	20.00	21.77	21.49	21.32	22.50	21.98	22.02	22.09	23.00
3GPP Rel 6	HSDPA Subtest-2	19.55	19.04	18.65	20.00	21.82	21.47	21.38	22.50	22.18	22.10	22.15	23.00
3GPP Rel 6	HSDPA Subtest-3	18.96	18.56	18.14	19.50	21.51	20.99	20.87	22.00	21.59	21.54	21.67	22.50
3GPP Rel 6	HSDPA Subtest-4	18.97	18.56	18.00	19.50	21.52	20.98	20.87	22.00	21.60	21.54	21.68	22.50
3GPP Rel 8	DC-HSDPA Subtest-1	19.43	18.99	18.52	20.00	21.66	21.34	21.15	22.50	21.97	21.86	22.00	23.00
3GPP Rel 8	DC-HSDPA Subtest-2	19.50	19.01	18.48	20.00	21.64	21.31	21.13	22.50	21.97	21.88	22.06	23.00
3GPP Rel 8	DC-HSDPA Subtest-3	18.94	18.53	18.02	19.50	21.27	20.83	20.70	22.00	21.45	21.43	21.53	22.50
3GPP Rel 8	DC-HSDPA Subtest-4	19.02	18.47	18.02	19.50	21.17	20.83	20.62	22.00	21.46	21.36	21.52	22.50
3GPP Rel 6	HSUPA Subtest-1	19.38	19.09	18.65	20.00	21.79	21.44	21.27	22.50	22.18	22.16	22.11	23.00
3GPP Rel 6	HSUPA Subtest-2	18.91	18.64	18.20	19.50	21.21	20.87	20.67	22.00	21.58	21.54	21.72	22.50
3GPP Rel 6	HSUPA Subtest-3	19.47	18.98	18.56	20.00	22.06	21.37	21.20	23.00	22.18	22.05	22.16	23.00
3GPP Rel 6	HSUPA Subtest-4	19.42	18.96	18.59	20.00	21.64	21.28	21.13	22.50	21.98	22.03	22.07	23.00
3GPP Rel 6	HSUPA Subtest-5	19.47	18.98	18.65	20.00	21.80	21.36	21.15	22.50	22.23	22.12	22.14	23.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	19.48	19.00	18.53	20.00	21.77	21.35	21.20	22.50	22.21	22.01	22.08	23.00
Attenuator		Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6		
Mode		Max.	22.61			Max.	22.94			Max.	22.59		

Band 2 (1900MHz Band) 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	22.84	22.90	22.82	23.5
20	QPSK	1	49	22.71	22.81	22.73	
20	QPSK	1	99	22.46	22.42	22.44	
20	QPSK	50	0	21.92	22.06	22.02	
20	QPSK	50	24	22.04	22.08	22.05	22.5
20	QPSK	50	50	21.94	21.97	21.89	
20	QPSK	100	0	22.00	21.95	21.94	
20	16QAM	1	0	22.01	22.18	22.03	
20	16QAM	1	49	21.96	22.08	21.97	22.5
20	16QAM	1	99	21.81	21.76	21.79	
20	16QAM	50	0	20.98	21.18	21.05	
20	16QAM	50	24	20.89	21.05	20.93	
20	16QAM	50	50	20.85	20.93	20.87	21.5
20	16QAM	100	0	20.76	20.90	20.81	
20	64QAM	1	0	22.00	22.04	21.98	
20	64QAM	1	49	21.96	22.00	21.93	
20	64QAM	1	99	21.61	21.69	21.67	22.5
20	64QAM	50	0	20.90	21.05	20.89	
20	64QAM	50	24	20.86	21.07	20.85	
20	64QAM	50	50	20.79	20.88	20.83	
20	64QAM	100	0	20.83	20.92	20.87	21.5
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)
15	QPSK	1	0	22.78	22.84	22.77	23.5
15	QPSK	1	37	22.71	22.81	22.73	
15	QPSK	1	74	22.46	22.42	22.44	
15	QPSK	36	0	21.92	22.06	22.02	
15	QPSK	36	20	22.04	22.08	22.05	22.5
15	QPSK	36	39	21.94	21.97	21.89	
15	QPSK	75	0	22.00	21.95	21.94	
15	16QAM	1	0	21.99	22.11	22.01	
15	16QAM	1	37	21.94	21.97	21.95	22.5
15	16QAM	1	74	21.79	21.74	21.77	
15	16QAM	36	0	20.96	21.09	21.03	
15	16QAM	36	20	20.87	21.03	20.91	
15	16QAM	36	39	20.83	20.91	20.85	21.5
15	16QAM	75	0	20.74	20.88	20.79	
15	64QAM	1	0	21.97	22.03	21.95	
15	64QAM	1	37	21.93	21.97	21.90	
15	64QAM	1	74	21.58	21.66	21.64	22.5
15	64QAM	36	0	20.87	21.02	20.86	
15	64QAM	36	20	20.83	21.03	20.82	
15	64QAM	36	39	20.76	20.85	20.80	
15	64QAM	75	0	20.80	20.89	20.84	21.5
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	Tune-up limit (dBm)
10	QPSK	1	0	22.71	22.77	22.74	23.5
10	QPSK	1	25	22.67	22.75	22.69	
10	QPSK	1	49	22.42	22.39	22.44	
10	QPSK	25	0	21.88	22.03	22.02	
10	QPSK	25	12	22.00	22.05	22.05	22.5
10	QPSK	25	25	21.90	21.94	21.89	
10	QPSK	50	0	21.96	21.92	21.94	
10	16QAM	1	0	21.98	22.16	22.04	
10	16QAM	1	25	21.93	22.06	21.98	22.5
10	16QAM	1	49	21.78	21.74	21.80	
10	16QAM	25	0	20.95	21.16	21.06	
10	16QAM	25	12	20.86	21.03	20.94	
10	16QAM	25	25	20.82	20.91	20.88	21.5
10	16QAM	50	0	20.73	20.88	20.82	
10	64QAM	1	0	21.97	22.01	21.99	
10	64QAM	1	25	21.93	21.96	21.94	
10	64QAM	1	49	21.58	21.67	21.68	22.5
10	64QAM	25	0	20.87	21.03	20.90	
10	64QAM	25	12	20.83	21.05	20.86	
10	64QAM	25	25	20.76	20.86	20.84	
10	64QAM	50	0	20.80	20.90	20.88	21.5
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	Tune-up limit (dBm)
5	QPSK	1	0	22.80	22.85	22.81	23.5
5	QPSK	1	12	22.74	22.79	22.69	
5	QPSK	1	24	22.48	22.45	22.44	
5	QPSK	12	0	21.91	22.02	22.01	
5	QPSK	12	7	22.03	22.07	22.04	22.5
5	QPSK	12	13	21.93	21.96	21.88	
5	QPSK	25	0	21.99	21.94	21.93	
5	16QAM	1	0	21.96	22.13	21.98	
5	16QAM	1	12	21.91	22.03	21.92	22.5
5	16QAM	1	24	21.76	21.71	21.74	
5	16QAM	12	0	20.94	21.10	21.02	
5	16QAM	12	7	20.85	20.97	20.90	
5	16QAM	12	13	20.81	20.85	20.84	21.5
5	16QAM	25	0	20.72	20.82	20.78	
5	64QAM	1	0	21.99	21.99	21.98	
5	64QAM	1	12	21.95	21.97	21.93	
5	64QAM	1	24	21.60	21.64	21.67	22.5
5	64QAM	12	0	20.89	21.00	20.89	
5	64QAM	12	7	20.85	21.02	20.85	
5	64QAM	12	13	20.78	20.83	20.83	
5	64QAM	25	0	20.82	20.87	20.87	21.5
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	Tune-up limit (dBm)
3	QPSK	1	0	22.74	22.82	22.77	23.5
3	QPSK	1	8	22.68	22.80	22.75	
3	QPSK	1	14	22.49	22.56	22.47	
3	QPSK	8	0	21.97	22.08	22.02	
3	QPSK	8	4	21.99	22.04	22.01	22.5
3	QPSK	8	7	21.93	21.97	21.89	

Band 4 (AWS Band) 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	23.66	23.76	23.58	24.5
20	QPSK	1	49	23.42	23.45	23.36	
20	QPSK	1	99	23.37	23.49	23.39	
20	QPSK	50	0	22.56	22.72	22.53	
20	QPSK	50	24	22.65	22.61	22.49	23.5
20	QPSK	50	50	22.59	22.64	22.57	
20	QPSK	100	0	22.68	22.71	22.59	
20	16QAM	1	0	22.72	22.76	22.65	
20	16QAM	1	49	22.70	22.69	22.60	23.5
20	16QAM	1	99	22.65	22.62	22.56	
20	16QAM	50	0	21.77	21.74	21.71	
20	16QAM	50	24	21.68	21.69	21.62	
20	16QAM	50	50	21.59	21.65	21.54	22.5
20	16QAM	100	0	21.60	21.64	21.56	
20	64QAM	1	0	22.68	22.72	22.63	
20	64QAM	1	49	22.64	22.68	22.59	
20	64QAM	1	99	22.58	22.63	22.52	23.5
20	64QAM	50	0	21.71	21.68	21.66	
20	64QAM	50	24	21.63	21.66	21.58	
20	64QAM	50	50	21.53	21.59	21.51	
20	64QAM	100	0	21.60	21.56	21.53	22.5
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	Tune-up limit (dBm)
15	QPSK	1	0	23.63	23.72	23.62	24.5
15	QPSK	1	37	23.39	23.43	23.40	
15	QPSK	1	74	23.65	23.47	23.43	
15	QPSK	36	0	22.53	22.70	22.57	
15	QPSK	36	20	22.62	22.59	22.53	23.5
15	QPSK	36	39	22.56	22.62	22.61	
15	QPSK	75	0	22.65	22.69	22.63	
15	16QAM	1	0	22.71	22.76	22.71	
15	16QAM	1	37	22.69	22.69	22.66	23.5
15	16QAM	1	74	22.64	22.62	22.62	
15	16QAM	36	0	21.76	21.74	21.77	
15	16QAM	36	20	21.67	21.69	21.68	
15	16QAM	36	39	21.58	21.65	21.60	22.5
15	16QAM	75	0	21.59	21.64	21.62	
15	64QAM	1	0	22.75	22.79	22.70	
15	64QAM	1	37	22.71	22.75	22.66	
15	64QAM	1	74	22.65	22.70	22.59	23.5
15	64QAM	36	0	21.78	21.75	21.73	
15	64QAM	36	20	21.70	21.73	21.65	
15	64QAM	36	39	21.60	21.66	21.58	
15	64QAM	75	0	21.67	21.63	21.60	22.5
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	Tune-up limit (dBm)
10	QPSK	1	0	23.61	23.66	23.57	24.5
10	QPSK	1	25	23.37	23.42	23.35	
10	QPSK	1	49	23.32	23.46	23.38	
10	QPSK	25	0	22.51	22.69	22.52	
10	QPSK	25	12	22.60	22.58	22.48	23.5
10	QPSK	25	25	22.54	22.61	22.56	
10	QPSK	50	0	22.63	22.68	22.58	
10	16QAM	1	0	22.72	22.76	22.64	
10	16QAM	1	25	22.70	22.69	22.59	23.5
10	16QAM	1	49	22.65	22.62	22.55	
10	16QAM	25	0	21.72	21.69	21.66	
10	16QAM	25	12	21.63	21.64	21.57	
10	16QAM	25	25	21.54	21.60	21.49	22.5
10	16QAM	50	0	21.55	21.59	21.51	
10	64QAM	1	0	22.73	22.77	22.68	
10	64QAM	1	25	22.69	22.73	22.64	
10	64QAM	1	49	22.63	22.68	22.57	23.5
10	64QAM	25	0	21.78	21.75	21.73	
10	64QAM	25	12	21.70	21.73	21.65	
10	64QAM	25	25	21.60	21.66	21.58	
10	64QAM	50	0	21.67	21.63	21.60	22.5
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	Tune-up limit (dBm)
5	QPSK	1	0	23.59	23.70	23.53	24.5
5	QPSK	1	12	23.35	23.37	23.31	
5	QPSK	1	24	23.30	23.40	23.34	
5	QPSK	12	0	22.49	22.62	22.48	
5	QPSK	12	7	22.58	22.51	22.44	23.5
5	QPSK	12	13	22.52	22.54	22.52	
5	QPSK	25	0	22.61	22.61	22.54	
5	16QAM	1	0	22.79	22.83	22.72	
5	16QAM	1	12	22.77	22.76	22.67	23.5
5	16QAM	1	24	22.72	22.69	22.63	
5	16QAM	12	0	21.84	21.81	21.78	
5	16QAM	12	7	21.75	21.76	21.69	
5	16QAM	12	13	21.66	21.72	21.61	22.5
5	16QAM	25	0	21.67	21.71	21.63	
5	64QAM	1	0	22.73	22.77	22.68	
5	64QAM	1	12	22.69	22.73	22.64	
5	64QAM	1	24	22.63	22.68	22.57	23.5
5	64QAM	12	0	21.76	21.73	21.71	
5	64QAM	12	7	21.68	21.71	21.63	
5	64QAM	12	13	21.58	21.64	21.56	
5	64QAM	25	0	21.65	21.61	21.58	22.5
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	Tune-up limit (dBm)
3	QPSK	1	0	23.60	23.68	23.55	24.5
3	QPSK	1	8	23.36	23.37	23.33	
3	QPSK	1	14	23.31	23.38	23.36	
3	QPSK	8	0	22.52	22.72	22.56	
3	QPSK	8	4	22.61	22.61	22.52	23.5
3	QPSK	8	7	22.55	22.64	22.60	

3	QPSK	15	0	22.00	21.95	21.94	22.5
3	16QAM	1	0	21.99	22.16	22.01	
3	16QAM	1	8	21.94	22.06	21.95	
3	16QAM	1	14	21.79	21.74	21.77	21.5
3	16QAM	8	0	20.96	21.09	21.03	
3	16QAM	8	4	20.87	21.01	20.91	
3	16QAM	8	7	20.83	20.89	20.85	22.5
3	16QAM	15	0	20.74	20.88	20.79	
3	64QAM	1	0	22.00	22.04	21.97	
3	64QAM	1	8	21.89	22.00	21.93	21.5
3	64QAM	1	14	21.61	21.69	21.67	
3	64QAM	8	0	20.90	21.05	20.89	
3	64QAM	8	4	20.85	20.99	20.84	21.5
3	64QAM	8	7	20.80	20.87	20.83	
3	64QAM	15	0	20.84	20.93	20.89	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.59	22.74	22.62	23.5
1.4	QPSK	1	3	22.74	22.78	22.76	
1.4	QPSK	1	5	22.55	22.53	22.49	
1.4	QPSK	3	0	22.09	22.10	22.05	22.5
1.4	QPSK	3	1	22.02	22.04	22.01	
1.4	QPSK	3	3	21.95	21.98	21.91	
1.4	QPSK	6	0	21.98	21.97	21.96	22.5
1.4	16QAM	1	0	22.01	22.09	22.03	
1.4	16QAM	1	3	21.96	22.04	21.97	
1.4	16QAM	1	5	21.80	21.83	21.77	21.5
1.4	16QAM	3	0	20.94	21.09	20.99	
1.4	16QAM	3	1	20.87	21.03	20.85	
1.4	16QAM	3	3	20.86	20.91	20.83	21.5
1.4	16QAM	6	0	20.81	20.88	20.87	
1.4	64QAM	1	0	21.96	22.01	21.98	
1.4	64QAM	1	3	21.93	22.09	21.94	22.5
1.4	64QAM	1	5	21.79	21.85	21.71	
1.4	64QAM	3	0	20.93	21.06	20.92	
1.4	64QAM	3	1	20.87	21.01	20.93	21.5
1.4	64QAM	3	3	20.91	20.91	20.85	
1.4	64QAM	6	0	20.82	20.89	20.84	

3	QPSK	15	0	22.64	22.71	22.62	23.5
3	16QAM	1	0	22.74	22.76	22.71	
3	16QAM	1	8	22.72	22.69	22.66	
3	16QAM	1	14	22.67	22.62	22.62	22.5
3	16QAM	8	0	21.79	21.72	21.69	
3	16QAM	8	4	21.70	21.67	21.60	
3	16QAM	8	7	21.61	21.63	21.52	23.5
3	16QAM	15	0	21.62	21.62	21.54	
3	64QAM	1	0	22.70	22.70	22.61	
3	64QAM	1	8	22.66	22.66	22.57	22.5
3	64QAM	1	14	22.60	22.61	22.50	
3	64QAM	8	0	21.73	21.66	21.64	
3	64QAM	8	4	21.65	21.64	21.56	21.5
3	64QAM	8	7	21.55	21.57	21.49	
3	64QAM	15	0	21.62	21.54	21.51	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.58	23.64	23.58	24.5
1.4	QPSK	1	3	23.35	23.36	23.30	
1.4	QPSK	1	5	23.29	23.43	23.39	
1.4	QPSK	3	0	22.48	22.66	22.53	23.5
1.4	QPSK	3	1	22.57	22.55	22.49	
1.4	QPSK	3	3	22.51	22.58	22.57	
1.4	QPSK	6	0	22.60	22.73	22.59	22.5
1.4	16QAM	1	0	22.64	22.78	22.68	
1.4	16QAM	1	3	22.62	22.71	22.63	
1.4	16QAM	1	5	22.57	22.64	22.59	23.5
1.4	16QAM	3	0	21.69	21.76	21.74	
1.4	16QAM	3	1	21.60	21.71	21.65	
1.4	16QAM	3	3	21.51	21.67	21.57	22.5
1.4	16QAM	6	0	21.52	21.66	21.59	
1.4	64QAM	1	0	22.70	22.75	22.66	
1.4	64QAM	1	3	22.67	22.71	22.62	23.5
1.4	64QAM	1	5	22.61	22.66	22.55	
1.4	64QAM	3	0	21.74	21.71	21.69	
1.4	64QAM	3	1	21.66	21.69	21.61	22.5
1.4	64QAM	3	3	21.56	21.62	21.54	
1.4	64QAM	6	0	21.63	21.59	21.56	

Band 5 (Celluar Band) 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	22.55	22.72	22.57	23.5
10	QPSK	1	25	22.53	22.64	22.48	
10	QPSK	1	49	22.58	22.69	22.43	
10	QPSK	25	0	21.66	21.71	21.53	
10	QPSK	25	12	21.61	21.68	21.47	22.5
10	QPSK	25	25	21.67	21.69	21.39	
10	QPSK	50	0	21.63	21.64	21.46	
10	16QAM	1	0	22.05	22.15	21.91	
10	16QAM	1	25	21.97	21.86	21.83	22.5
10	16QAM	1	49	21.86	21.77	21.75	
10	16QAM	25	0	20.70	20.62	20.53	
10	16QAM	25	12	20.68	20.59	20.49	
10	16QAM	25	25	20.59	20.53	20.43	21.5
10	16QAM	50	0	20.54	20.63	20.38	
10	64QAM	1	0	21.71	21.87	21.66	
10	64QAM	1	25	21.64	21.67	21.59	
10	64QAM	1	49	21.57	21.77	21.48	22.5
10	64QAM	25	0	20.77	20.61	20.63	
10	64QAM	25	12	20.69	20.58	20.56	
10	64QAM	25	25	20.61	20.49	20.43	
10	64QAM	50	0	20.56	20.67	20.41	21.5
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	Tune-up limit (dBm)
5	QPSK	1	0	22.62	22.66	22.54	23.5
5	QPSK	1	12	22.55	22.49	22.53	
5	QPSK	1	24	22.58	22.57	22.39	
5	QPSK	12	0	21.61	21.55	21.51	
5	QPSK	12	7	21.56	21.55	21.45	22.5
5	QPSK	12	13	21.62	21.56	21.37	
5	QPSK	25	0	21.58	21.58	21.44	
5	16QAM	1	0	21.94	21.96	21.83	
5	16QAM	1	12	21.86	21.67	21.75	22.5
5	16QAM	1	24	21.75	21.58	21.67	
5	16QAM	12	0	20.67	20.51	20.53	
5	16QAM	12	7	20.65	20.48	20.49	
5	16QAM	12	13	20.56	20.42	20.43	21.5
5	16QAM	25	0	20.51	20.52	20.38	
5	64QAM	1	0	21.62	21.70	21.60	
5	64QAM	1	12	21.55	21.50	21.53	
5	64QAM	1	24	21.48	21.60	21.42	22.5
5	64QAM	12	0	20.72	20.48	20.61	
5	64QAM	12	7	20.64	20.45	20.54	
5	64QAM	12	13	20.56	20.36	20.41	
5	64QAM	25	0	20.51	20.54	20.39	21.5
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	Tune-up limit (dBm)
3	QPSK	1	0	22.57	22.59	22.50	23.5
3	QPSK	1	8	22.53	22.45	22.40	
3	QPSK	1	14	22.57	22.53	22.35	
3	QPSK	8	0	21.58	21.53	21.45	
3	QPSK	8	4	21.53	21.57	21.39	22.5
3	QPSK	8	7	21.59	21.58	21.31	
3	QPSK	15	0	21.55	21.60	21.38	
3	16QAM	1	0	21.86	21.96	21.83	
3	16QAM	1	8	21.78	21.67	21.75	22.5
3	16QAM	1	14	21.67	21.58	21.67	
3	16QAM	8	0	20.56	20.48	20.53	
3	16QAM	8	4	20.73	20.64	20.49	
3	16QAM	8	7	20.64	20.58	20.43	21.5
3	16QAM	15	0	20.59	20.68	20.38	
3	64QAM	1	0	21.74	21.90	21.69	
3	64QAM	1	8	21.67	21.70	21.62	
3	64QAM	1	14	21.60	21.80	21.51	22.5
3	64QAM	8	0	20.80	20.64	20.66	
3	64QAM	8	4	20.72	20.61	20.59	
3	64QAM	8	7	20.64	20.52	20.46	
3	64QAM	15	0	20.59	20.70	20.44	21.5
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	Tune-up limit (dBm)
1.4	QPSK	1	0	22.66	22.70	22.49	23.5
1.4	QPSK	1	3	22.58	22.56	22.39	
1.4	QPSK	1	5	22.57	22.59	22.34	
1.4	QPSK	3	0	21.63	21.56	21.44	
1.4	QPSK	3	1	21.58	21.60	21.38	22.5
1.4	QPSK	3	3	21.64	21.61	21.30	
1.4	QPSK	6	0	21.60	21.63	21.37	
1.4	16QAM	1	0	21.95	21.98	21.82	
1.4	16QAM	1	3	21.94	21.78	21.74	22.5
1.4	16QAM	1	5	21.83	21.69	21.66	
1.4	16QAM	3	0	20.70	20.54	20.53	
1.4	16QAM	3	1	20.68	20.51	20.49	
1.4	16QAM	3	3	20.59	20.45	20.43	21.5
1.4	16QAM	6	0	20.54	20.63	20.38	
1.4	64QAM	1	0	21.67	21.79	21.62	
1.4	64QAM	1	3	21.60	21.64	21.55	
1.4	64QAM	1	5	21.53	21.73	21.44	22.5
1.4	64QAM	3	0	20.73	20.57	20.59	
1.4	64QAM	3	1	20.66	20.53	20.52	
1.4	64QAM	3	3	20.57	20.45	20.40	
1.4	64QAM	6	0	20.52	20.59	20.37	21.5

Band 12 (700MHz Low Band) 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	22.64	22.83	22.71	23.5
10	QPSK	1	25	22.67	22.73	22.62	
10	QPSK	1	49	22.57	22.65	22.55	
10	QPSK	25	0	21.45	21.59	21.39	
10	QPSK	25	12	21.32	21.51	21.30	22.5
10	QPSK	25	25	21.29	21.43	21.23	
10	QPSK	50	0	21.23	21.60	21.25	
10	16QAM	1	0	21.71	21.85	21.67	
10	16QAM	1	25	21.62	21.73	21.58	22.5
10	16QAM	1	49	21.50	21.67	21.46	
10	16QAM	25	0	20.48	20.59	20.41	
10	16QAM	25	12	20.42	20.50	20.35	
10	16QAM	25	25	20.33	20.43	20.19	21.5
10	16QAM	50	0	20.35	20.54	20.23	
10	64QAM	1	0	21.68	21.81	21.61	
10	64QAM	1	25	21.57	21.70	21.39	
10	64QAM	1	49	21.51	21.62	21.45	22.5
10	64QAM	25	0	20.59	20.66	20.36	
10	64QAM	25	12	20.47	20.55	20.30	
10	64QAM	25	25	20.55	20.47	20.24	
10	64QAM	50	0	20.49	20.54	20.23	21.5
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	Tune-up limit (dbm)
5	QPSK	1	0	22.50	22.68	22.51	23.5
5	QPSK	1	12	22.53	22.58	22.42	
5	QPSK	1	24	22.43	22.50	22.35	
5	QPSK	12	0	21.31	21.44	21.19	
5	QPSK	12	7	21.18	21.36	21.10	22.5
5	QPSK	12	13	21.15	21.28	21.03	
5	QPSK	25	0	21.09	21.45	21.05	
5	16QAM	1	0	21.57	21.70	21.47	
5	16QAM	1	12	21.48	21.58	21.38	22.5
5	16QAM	1	24	21.36	21.52	21.26	
5	16QAM	12	0	20.43	20.54	20.36	
5	16QAM	12	7	20.37	20.45	20.30	
5	16QAM	12	13	20.28	20.38	20.14	21.5
5	16QAM	25	0	20.30	20.49	20.18	
5	64QAM	1	0	21.63	21.76	21.56	
5	64QAM	1	12	21.52	21.65	21.34	
5	64QAM	1	24	21.46	21.57	21.40	22.5
5	64QAM	12	0	20.60	20.67	20.37	
5	64QAM	12	7	20.48	20.56	20.31	
5	64QAM	12	13	20.56	20.48	20.25	
5	64QAM	25	0	20.50	20.55	20.24	21.5
Channel				23025	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	Tune-up limit (dbm)
3	QPSK	1	0	22.51	22.73	22.54	23.5
3	QPSK	1	8	22.49	22.61	22.45	
3	QPSK	1	14	22.44	22.55	22.33	
3	QPSK	8	0	21.32	21.49	21.22	
3	QPSK	8	4	21.19	21.41	21.13	22.5
3	QPSK	8	7	21.16	21.33	21.06	
3	QPSK	15	0	21.10	21.50	21.08	
3	16QAM	1	0	21.58	21.75	21.50	
3	16QAM	1	8	21.49	21.63	21.41	22.5
3	16QAM	1	14	21.37	21.57	21.29	
3	16QAM	8	0	20.45	20.57	20.33	
3	16QAM	8	4	20.39	20.47	20.32	
3	16QAM	8	7	20.30	20.40	20.16	21.5
3	16QAM	15	0	20.32	20.51	20.20	
3	64QAM	1	0	21.65	21.69	21.58	
3	64QAM	1	8	21.54	21.67	21.36	
3	64QAM	1	14	21.48	21.59	21.42	22.5
3	64QAM	8	0	20.56	20.62	20.33	
3	64QAM	8	4	20.44	20.52	20.27	
3	64QAM	8	7	20.52	20.44	20.21	
3	64QAM	15	0	20.46	20.51	20.20	21.5
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	Tune-up limit (dbm)
1.4	QPSK	1	0	22.56	22.75	22.63	23.5
1.4	QPSK	1	3	22.51	22.62	22.53	
1.4	QPSK	1	5	22.49	22.57	22.47	
1.4	QPSK	3	0	21.37	21.51	21.31	
1.4	QPSK	3	1	21.24	21.43	21.22	22.5
1.4	QPSK	3	3	21.21	21.35	21.15	
1.4	QPSK	6	0	21.15	21.52	21.17	
1.4	16QAM	1	0	21.63	21.77	21.59	
1.4	16QAM	1	3	21.54	21.65	21.50	22.5
1.4	16QAM	1	5	21.42	21.59	21.38	
1.4	16QAM	3	0	20.40	20.51	20.33	
1.4	16QAM	3	1	20.34	20.42	20.27	
1.4	16QAM	3	3	20.25	20.35	20.11	21.5
1.4	16QAM	6	0	20.37	20.57	20.26	
1.4	64QAM	1	0	21.71	21.70	21.63	
1.4	64QAM	1	3	21.60	21.73	21.42	
1.4	64QAM	1	5	21.51	21.63	21.48	22.5
1.4	64QAM	3	0	20.62	20.69	20.39	
1.4	64QAM	3	1	20.50	20.56	20.33	
1.4	64QAM	3	3	20.49	20.50	20.29	
1.4	64QAM	6	0	20.52	20.55	20.26	21.5

Band 25 (1900MHz Band) 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	22.58	22.64	22.57	23.5
20	QPSK	1	49	22.54	22.61	22.53	
20	QPSK	1	99	22.38	22.22	22.27	
20	QPSK	50	0	21.81	21.86	21.80	22.5
20	QPSK	50	24	21.83	21.80	21.76	
20	QPSK	50	50	21.75	21.77	21.77	
20	QPSK	100	0	21.72	21.75	21.68	22.5
20	16QAM	1	0	21.94	21.98	21.89	
20	16QAM	1	49	21.89	21.88	21.84	
20	16QAM	1	99	21.69	21.56	21.61	21.5
20	16QAM	50	0	20.97	20.98	20.94	
20	16QAM	50	24	20.86	20.85	20.83	
20	16QAM	50	50	20.79	20.73	20.76	22
20	16QAM	100	0	20.76	20.70	20.69	
20	64QAM	1	0	21.87	21.84	21.79	
20	64QAM	1	49	21.76	21.80	21.71	21
20	64QAM	1	99	21.69	21.55	21.58	
20	64QAM	50	0	20.86	20.85	20.75	
20	64QAM	50	24	20.83	20.87	20.69	
20	64QAM	50	50	20.71	20.68	20.72	
20	64QAM	100	0	20.69	20.67	20.66	
Channel				26115	26365	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5	
15	QPSK	1	0	22.55	22.59	22.51	23.5
15	QPSK	1	37	22.49	22.57	22.47	
15	QPSK	1	74	22.29	22.36	22.26	
15	QPSK	36	0	22.11	21.96	22.09	22.5
15	QPSK	36	20	21.95	21.85	21.96	
15	QPSK	36	39	21.82	21.74	21.91	
15	QPSK	75	0	21.77	21.76	21.75	22.5
15	16QAM	1	0	21.91	21.93	21.88	
15	16QAM	1	37	21.83	21.87	21.85	
15	16QAM	1	74	21.74	21.66	21.75	21.5
15	16QAM	36	0	20.94	20.97	20.89	
15	16QAM	36	20	20.85	20.89	20.81	
15	16QAM	36	39	20.77	20.78	20.76	22.5
15	16QAM	75	0	20.76	20.74	20.78	
15	64QAM	1	0	21.91	21.89	21.85	
15	64QAM	1	37	21.85	21.83	21.79	21.5
15	64QAM	1	74	21.74	21.69	21.70	
15	64QAM	36	0	20.91	20.90	20.87	
15	64QAM	36	20	20.86	20.87	20.83	
15	64QAM	36	39	20.72	20.68	20.75	
15	64QAM	75	0	20.69	20.73	20.70	
Channel				26090	26365	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	22.49	22.54	22.50	23.5
10	QPSK	1	25	22.45	22.51	22.46	
10	QPSK	1	49	22.29	22.12	22.20	
10	QPSK	25	0	22.08	21.76	21.88	22.5
10	QPSK	25	12	21.84	21.78	21.79	
10	QPSK	25	25	21.66	21.67	21.72	
10	QPSK	50	0	21.63	21.65	21.61	22.5
10	16QAM	1	0	21.85	21.88	21.83	
10	16QAM	1	25	21.80	21.78	21.78	
10	16QAM	1	49	21.60	21.46	21.55	21.5
10	16QAM	25	0	20.88	20.88	20.88	
10	16QAM	25	12	20.77	20.75	20.77	
10	16QAM	25	25	20.70	20.63	20.70	22.5
10	16QAM	50	0	20.67	20.60	20.63	
10	64QAM	1	0	21.82	21.79	21.75	
10	64QAM	1	25	21.71	21.75	21.67	21.5
10	64QAM	1	49	21.64	21.50	21.54	
10	64QAM	25	0	20.81	20.80	20.71	
10	64QAM	25	12	20.78	20.82	20.65	
10	64QAM	25	25	20.66	20.63	20.68	
10	64QAM	50	0	20.64	20.62	20.62	
Channel				26065	26365	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5	
5	QPSK	1	0	22.53	22.56	22.47	23.5
5	QPSK	1	12	22.49	22.53	22.43	
5	QPSK	1	24	22.33	22.14	22.17	
5	QPSK	12	0	22.12	21.78	21.85	22.5
5	QPSK	12	7	21.88	21.80	21.76	
5	QPSK	12	13	21.70	21.69	21.69	
5	QPSK	25	0	21.67	21.67	21.58	22.5
5	16QAM	1	0	21.92	21.96	21.87	
5	16QAM	1	12	21.87	21.86	21.82	
5	16QAM	1	24	21.67	21.54	21.59	21.5
5	16QAM	12	0	20.95	20.96	20.92	
5	16QAM	12	7	20.84	20.83	20.81	
5	16QAM	12	13	20.77	20.71	20.74	22.5
5	16QAM	25	0	20.74	20.68	20.67	
5	64QAM	1	0	21.89	21.86	21.81	
5	64QAM	1	12	21.78	21.82	21.73	21.5
5	64QAM	1	24	21.71	21.57	21.60	
5	64QAM	12	0	20.88	20.87	20.77	
5	64QAM	12	7	20.85	20.89	20.71	
5	64QAM	12	13	20.73	20.70	20.74	
5	64QAM	25	0	20.71	20.69	20.68	
Channel				26055	26365	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1882.5	1913.5	
3	QPSK	1	0	22.56	22.61	22.49	23.5
3	QPSK	1	8	22.52	22.58	22.45	
3	QPSK	1	14	22.36	22.19	22.21	
3	QPSK	8	0	22.15	21.83	21.87	22.5
3	QPSK	8	4	21.91	21.85	21.79	
3	QPSK	8	7	21.73	21.74	21.72	

Band 26 for FCC (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dbm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	22.81	22.89	22.75	23.5
15	QPSK	1	37	22.74	22.79	22.71	
15	QPSK	1	74	22.79	22.85	22.78	
15	QPSK	36	0	21.92	21.97	21.91	22.5
15	QPSK	36	20	21.86	21.79	21.80	
15	QPSK	36	39	21.77	21.65	21.66	
15	QPSK	75	0	21.76	21.75	21.69	22.5
15	16QAM	1	0	22.09	22.15	21.99	
15	16QAM	1	37	21.96	22.06	21.88	
15	16QAM	1	74	21.81	21.93	21.79	21.5
15	16QAM	36	0	21.11	21.02	20.98	
15	16QAM	36	20	21.02	20.96	20.94	
15	16QAM	36	39	20.84	20.81	20.83	22.5
15	16QAM	75	0	20.76	20.74	20.76	
15	64QAM	1	0	21.84	21.89	21.83	
15	64QAM	1	37	21.73	21.78	21.69	21.5
15	64QAM	1	74	21.65	21.70	21.60	
15	64QAM	36	0	20.89	20.87	20.79	
15	64QAM	36	20	20.80	20.78	20.75	
15	64QAM	36	39	20.69	20.70	20.66	
15	64QAM	75	0	20.62	20.59	20.60	
Channel				26740	26865	26990	Tune-up limit (dbm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	22.69	22.85	22.63	23.5
10	QPSK	1	25	22.62	22.69	22.59	
10	QPSK	1	49	22.67	22.73	22.66	
10	QPSK	25	0	21.90	21.85	21.79	22.5
10	QPSK	25	12	21.74	21.67	21.68	
10	QPSK	25	25	21.65	21.53	21.54	
10	QPSK	50	0	21.64	21.63	21.57	22.5
10	16QAM	1	0	21.92	21.98	21.82	
10	16QAM	1	25	21.79	21.89	21.71	
10	16QAM	1	49	21.64	21.76	21.62	21.5
10	16QAM	25	0	20.99	20.90	20.86	
10	16QAM	25	12	20.90	20.84	20.82	
10	16QAM	25	25	20.72	20.69	20.71	22.5
10	16QAM	50	0	20.64	20.62	20.64	
10	64QAM	1	0	21.77	21.82	21.76	
10	64QAM	1	25	21.66	21.71	21.62	21.5
10	64QAM	1	49	21.58	21.63	21.53	
10	64QAM	25	0	20.84	20.82	20.74	
10	64QAM	25	12	20.75	20.73	20.70	
10	64QAM	25	25	20.64	20.65	20.61	
10	64QAM	50	0	20.57	20.54	20.55	
Channel				26715	26865	27015	Tune-up limit (dbm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	22.76	22.82	22.71	23.5
5	QPSK	1	12	22.67	22.71	22.64	
5	QPSK	1	24	22.72	22.79	22.71	
5	QPSK	12	0	21.95	21.90	21.84	22.5
5	QPSK	12	7	21.79	21.72	21.73	
5	QPSK	12	13	21.70	21.58	21.59	
5	QPSK	25	0	21.69	21.68	21.62	22.5
5	16QAM	1	0	22.04	22.10	21.94	
5	16QAM	1	12	21.91	22.01	21.83	
5	16QAM	1	24	21.76	21.88	21.74	21.5
5	16QAM	12	0	21.15	21.06	21.02	
5	16QAM	12	7	21.06	21.00	20.98	
5	16QAM	12	13	20.88	20.85	20.87	22.5
5	16QAM	25	0	20.80	20.78	20.80	
5	64QAM	1	0	21.87	21.92	21.86	
5	64QAM	1	12	21.76	21.81	21.72	21.5
5	64QAM	1	24	21.68	21.73	21.63	
5	64QAM	12	0	20.92	20.90	20.82	
5	64QAM	12	7	20.83	20.81	20.78	
5	64QAM	12	13	20.72	20.73	20.69	
5	64QAM	25	0	20.65	20.62	20.63	
Channel				26705	26865	27025	Tune-up limit (dbm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	22.75	22.80	22.69	23.5
3	QPSK	1	8	22.65	22.71	22.62	
3	QPSK	1	14	22.70	22.75	22.69	
3	QPSK	8	0	21.93	21.88	21.82	22.5
3	QPSK	8	4	21.77	21.70	21.71	
3	QPSK	8	7	21.68	21.56	21.57	
3	QPSK	15	0	21.67	21.66	21.60	22.5
3	16QAM	1	0	22.03	22.09	21.93	
3	16QAM	1	8	21.90	22.00	21.82	
3	16QAM	1	14	21.75	21.87	21.73	21.5
3	16QAM	8	0	21.05	20.96	20.92	
3	16QAM	8	4	20.96	20.90	20.88	
3	16QAM	8	7	20.78	20.75	20.77	22.5
3	16QAM	15	0	20.70	20.68	20.70	
3	64QAM	1	0	21.87	21.92	21.86	
3	64QAM	1	8	21.76	21.81	21.72	21.5
3	64QAM	1	14	21.68	21.73	21.63	
3	64QAM	8	0	20.91	20.89	20.81	
3	64QAM	8	4	20.82	20.80	20.77	
3	64QAM	8	7	20.71	20.72	20.68	
3	64QAM	15	0	20.64	20.61	20.62	
Channel				26697	26865	27033	Tune-up limit (dbm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	22.77	22.86	22.79	23.5
1.4	QPSK	1	3	22.70	22.77	22.75	
1.4	QPSK	1	5	22.75	22.79	22.82	
1.4	QPSK	3	0	21.98	21.96	21.95	
1.4	QPSK	3	1	21.82	21.76	21.84	
1.4	QPSK	3	3	21.73	21.62	21.70	

3	QPSK	15	0	21.70	21.72	21.65	22.5
3	16QAM	1	0	21.92	21.95	21.81	
3	16QAM	1	8	21.87	21.85	21.76	
3	16QAM	1	14	21.67	21.53	21.53	21.5
3	16QAM	8	0	20.95	20.95	20.86	
3	16QAM	8	4	20.84	20.82	20.75	
3	16QAM	8	7	20.77	20.70	20.68	22.5
3	16QAM	15	0	20.74	20.67	20.61	
3	64QAM	1	0	21.89	21.85	21.75	
3	64QAM	1	8	21.78	21.81	21.67	21.5
3	64QAM	1	14	21.71	21.56	21.54	
3	64QAM	8	0	20.88	20.86	20.71	
3	64QAM	8	4	20.85	20.88	20.65	21.5
3	64QAM	8	7	20.73	20.69	20.68	
3	64QAM	15	0	20.71	20.68	20.62	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	22.46	22.52	22.45	23.5
1.4	QPSK	1	3	22.42	22.49	22.41	
1.4	QPSK	1	5	22.26	22.10	22.15	
1.4	QPSK	3	0	22.05	21.74	21.83	
1.4	QPSK	3	1	21.81	21.76	21.74	
1.4	QPSK	3	3	21.63	21.65	21.67	22.5
1.4	QPSK	6	0	21.60	21.63	21.56	
1.4	16QAM	1	0	21.86	21.90	21.81	22
1.4	16QAM	1	3	21.81	21.80	21.76	
1.4	16QAM	1	5	21.61	21.48	21.53	
1.4	16QAM	3	0	20.89	20.90	20.86	
1.4	16QAM	3	1	20.78	20.77	20.75	
1.4	16QAM	3	3	20.71	20.65	20.68	21
1.4	16QAM	6	0	20.81	20.75	20.74	
1.4	64QAM	1	0	21.92	21.89	21.84	22.5
1.4	64QAM	1	3	21.81	21.85	21.76	
1.4	64QAM	1	5	21.74	21.60	21.63	
1.4	64QAM	3	0	20.91	20.90	20.80	
1.4	64QAM	3	1	20.88	20.92	20.75	
1.4	64QAM	3	3	20.80	20.81	20.77	21
1.4	64QAM	6	0	20.70	20.75	20.71	

1.4	QPSK	6	0	21.72	21.72	21.73	22.5
1.4	16QAM	1	0	22.05	22.12	22.03	22.5
1.4	16QAM	1	3	21.92	22.03	21.92	
1.4	16QAM	1	5	21.77	21.90	21.83	
1.4	16QAM	3	0	21.07	20.99	21.02	
1.4	16QAM	3	1	20.98	20.93	20.98	
1.4	16QAM	3	3	20.80	20.78	20.87	21.5
1.4	16QAM	6	0	20.81	20.76	20.81	
1.4	64QAM	1	0	21.89	21.91	21.88	22.5
1.4	64QAM	1	3	21.78	21.80	21.74	
1.4	64QAM	1	5	21.70	21.72	21.65	
1.4	64QAM	3	0	20.94	20.89	20.84	
1.4	64QAM	3	1	20.85	20.80	20.80	
1.4	64QAM	3	3	20.74	20.72	20.71	21.5
1.4	64QAM	6	0	20.67	20.61	20.65	

Band 66							
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	23.55	23.62	23.51	24.5
20	QPSK	1	49	23.43	23.51	23.44	
20	QPSK	1	99	23.35	23.27	23.31	
20	QPSK	50	0	22.77	22.86	22.65	23.5
20	QPSK	50	24	22.71	22.63	22.60	
20	QPSK	50	50	22.62	22.59	22.53	
20	QPSK	100	0	22.51	22.47	22.44	23.5
20	16QAM	1	0	22.69	22.76	22.59	
20	16QAM	1	49	22.60	22.61	22.48	
20	16QAM	1	99	22.51	22.49	22.40	22.5
20	16QAM	50	0	21.66	21.60	21.49	
20	16QAM	50	24	21.58	21.54	21.43	
20	16QAM	50	50	21.51	21.48	21.38	23.5
20	16QAM	100	0	21.47	21.41	21.37	
20	64QAM	1	0	22.54	22.59	22.49	
20	64QAM	1	49	22.47	22.50	22.42	22.5
20	64QAM	1	99	22.46	22.42	22.37	
20	64QAM	50	0	21.48	21.55	21.42	
20	64QAM	50	24	21.44	21.50	21.31	22.5
20	64QAM	50	50	21.39	21.38	21.26	
20	64QAM	100	0	21.45	21.35	21.33	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.50	23.53	23.45	24.5
15	QPSK	1	37	23.39	23.42	23.38	
15	QPSK	1	74	23.30	23.18	23.25	
15	QPSK	36	0	22.72	22.77	22.57	23.5
15	QPSK	36	20	22.66	22.54	22.54	
15	QPSK	36	39	22.57	22.50	22.47	
15	QPSK	75	0	22.46	22.38	22.38	23.5
15	16QAM	1	0	22.64	22.67	22.53	
15	16QAM	1	37	22.55	22.52	22.42	
15	16QAM	1	74	22.46	22.40	22.34	22.5
15	16QAM	36	0	21.69	21.54	21.52	
15	16QAM	36	20	21.61	21.48	21.46	
15	16QAM	36	39	21.54	21.42	21.41	23.5
15	16QAM	75	0	21.50	21.35	21.40	
15	64QAM	1	0	22.59	22.55	22.54	
15	64QAM	1	37	22.52	22.46	22.47	22.5
15	64QAM	1	74	22.51	22.38	22.42	
15	64QAM	36	0	21.53	21.51	21.47	
15	64QAM	36	20	21.49	21.46	21.36	22.5
15	64QAM	36	39	21.44	21.34	21.31	
15	64QAM	75	0	21.50	21.31	21.38	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.46	23.52	23.44	24.5
10	QPSK	1	25	23.34	23.41	23.37	
10	QPSK	1	49	23.26	23.17	23.24	
10	QPSK	25	0	22.68	22.76	22.58	23.5
10	QPSK	25	12	22.62	22.53	22.53	
10	QPSK	25	25	22.53	22.49	22.46	
10	QPSK	50	0	22.42	22.37	22.37	23.5
10	16QAM	1	0	22.60	22.66	22.52	
10	16QAM	1	25	22.51	22.51	22.41	
10	16QAM	1	49	22.42	22.39	22.33	22.5
10	16QAM	25	0	21.69	21.53	21.52	
10	16QAM	25	12	21.61	21.47	21.46	
10	16QAM	25	25	21.54	21.41	21.41	23.5
10	16QAM	50	0	21.50	21.34	21.40	
10	64QAM	1	0	22.57	22.52	22.52	
10	64QAM	1	25	22.50	22.43	22.45	22.5
10	64QAM	1	49	22.49	22.35	22.40	
10	64QAM	25	0	21.51	21.48	21.45	
10	64QAM	25	12	21.47	21.43	21.34	22.5
10	64QAM	25	25	21.42	21.31	21.29	
10	64QAM	50	0	21.48	21.28	21.36	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.49	23.57	23.42	24.5
5	QPSK	1	12	23.38	23.47	23.34	
5	QPSK	1	24	23.30	23.22	23.22	
5	QPSK	12	0	22.72	22.81	22.56	23.5
5	QPSK	12	7	22.66	22.58	22.51	
5	QPSK	12	13	22.57	22.54	22.44	
5	QPSK	25	0	22.46	22.42	22.35	23.5
5	16QAM	1	0	22.64	22.71	22.50	
5	16QAM	1	12	22.55	22.56	22.39	
5	16QAM	1	24	22.46	22.44	22.31	22.5
5	16QAM	12	0	21.62	21.56	21.45	
5	16QAM	12	7	21.54	21.50	21.39	
5	16QAM	12	13	21.47	21.44	21.34	23.5
5	16QAM	25	0	21.43	21.37	21.33	
5	64QAM	1	0	22.50	22.55	22.45	
5	64QAM	1	12	22.43	22.46	22.38	22.5
5	64QAM	1	24	22.42	22.38	22.33	
5	64QAM	12	0	21.50	21.57	21.44	
5	64QAM	12	7	21.46	21.52	21.33	23.5
5	64QAM	12	13	21.41	21.40	21.28	
5	64QAM	25	0	21.47	21.37	21.35	
Channel				131987	132322	132697	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	23.51	23.60	23.48	24.5
3	QPSK	1	8	23.45	23.49	23.45	
3	QPSK	1	14	23.36	23.31	23.36	
3	QPSK	8	0	22.80	22.74	22.58	23.5
3	QPSK	8	4	22.74	22.58	22.53	
3	QPSK	8	7	22.65	22.54	22.46	

Band 71							
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	23.71	23.81	23.69	24.5
20	QPSK	1	49	23.60	23.52	23.56	
20	QPSK	1	99	23.55	23.61	23.48	
20	QPSK	50	0	22.71	22.78	22.59	23.5
20	QPSK	50	24	22.60	22.69	22.52	
20	QPSK	50	50	22.53	22.51	22.46	
20	QPSK	100	0	22.47	22.55	22.41	23.5
20	16QAM	1	0	22.72	22.70	22.58	
20	16QAM	1	49	22.63	22.56	22.50	
20	16QAM	1	99	22.50	22.47	22.42	22.5
20	16QAM	50	0	21.85	21.88	21.69	
20	16QAM	50	24	21.72	21.68	21.50	
20	16QAM	50	50	21.61	21.57	21.53	23.5
20	16QAM	100	0	21.46	21.50	21.51	
20	64QAM	1	0	22.53	22.57	22.48	
20	64QAM	1	49	22.43	22.49	22.44	23.5
20	64QAM	1	99	22.36	22.41	22.35	
20	64QAM	50	0	21.52	21.62	21.47	
20	64QAM	50	24	21.48	21.54	21.43	22.5
20	64QAM	50	50	21.40	21.46	21.38	
20	64QAM	100	0	21.44	21.39	21.42	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.68	23.69	23.69	24.5
15	QPSK	1	37	23.57	23.40	23.56	
15	QPSK	1	74	23.52	23.49	23.48	
15	QPSK	36	0	22.68	22.66	22.59	23.5
15	QPSK	36	20	22.57	22.57	22.52	
15	QPSK	36	39	22.50	22.39	22.46	
15	QPSK	75	0	22.44	22.43	22.41	23.5
15	16QAM	1	0	22.64	22.50	22.50	
15	16QAM	1	37	22.55	22.36	22.42	
15	16QAM	1	74	22.42	22.27	22.34	22.5
15	16QAM	36	0	21.80	21.76	21.72	
15	16QAM	36	20	21.67	21.56	21.53	
15	16QAM	36	39	21.56	21.45	21.56	23.5
15	16QAM	75	0	21.41	21.38	21.54	
15	64QAM	1	0	22.48	22.45	22.51	
15	64QAM	1	37	22.38	22.37	22.47	23.5
15	64QAM	1	74	22.31	22.29	22.38	
15	64QAM	36	0	21.47	21.50	21.50	
15	64QAM	36	20	21.43	21.42	21.46	22.5
15	64QAM	36	39	21.35	21.34	21.41	
15	64QAM	75	0	21.40	21.26	21.45	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.66	23.71	23.63	24.5
10	QPSK	1	25	23.55	23.42	23.50	
10	QPSK	1	49	23.47	23.51	23.42	
10	QPSK	25	0	22.66	22.68	22.53	23.5
10	QPSK	25	12	22.55	22.59	22.46	
10	QPSK	25	25	22.48	22.41	22.40	
10	QPSK	50	0	22.42	22.45	22.35	23.5
10	16QAM	1	0	22.67	22.60	22.52	
10	16QAM	1	25	22.58	22.46	22.44	
10	16QAM	1	49	22.45	22.37	22.36	22.5
10	16QAM	25	0	21.81	21.78	21.63	
10	16QAM	25	12	21.67	21.58	21.44	
10	16QAM	25	25	21.56	21.47	21.47	23.5
10	16QAM	50	0	21.41	21.40	21.45	
10	64QAM	1	0	22.55	22.51	22.46	
10	64QAM	1	25	22.38	22.39	22.38	22.5
10	64QAM	1	49	22.31	22.31	22.29	
10	64QAM	25	0	21.47	21.52	21.41	
10	64QAM	25	12	21.43	21.44	21.37	22.5
10	64QAM	25	25	21.35	21.38	21.32	
10	64QAM	50	0	21.39	21.29	21.36	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.65	23.76	23.57	24.5
5	QPSK	1	12	23.54	23.47	23.44	
5	QPSK	1	24	23.49	23.56	23.36	
5	QPSK	12	0	22.65	22.73	22.47	23.5
5	QPSK	12	7	22.54	22.64	22.40	
5	QPSK	12	13	22.47	22.46	22.34	
5	QPSK	25	0	22.41	22.50	22.29	23.5
5	16QAM	1	0	22.66	22.65	22.46	
5	16QAM	1	12	22.57	22.51	22.38	
5	16QAM	1	24	22.44	22.42	22.30	22.5
5	16QAM	12	0	21.76	21.80	21.54	
5	16QAM	12	7	21.63	21.60	21.35	
5	16QAM	12	13	21.52	21.49	21.38	23.5
5	16QAM	25	0	21.37	21.42	21.36	
5	64QAM	1	0	22.59	22.63	22.54	
5	64QAM	1	12	22.49	22.55	22.50	22.5
5	64QAM	1	24	22.42	22.47	22.41	
5	64QAM	12	0	21.58	21.68	21.53	
5	64QAM	12	7	21.54	21.60	21.49	22.5
5	64QAM	12	13	21.46	21.52	21.44	
5	64QAM	25	0	21.50	21.45	21.48	

3	QPSK	15	0	22.54	22.42	22.37	23.5
3	16QAM	1	0	22.72	22.71	22.52	
3	16QAM	1	8	22.63	22.56	22.41	
3	16QAM	1	14	22.54	22.44	22.33	22.5
3	16QAM	8	0	21.73	21.67	21.56	
3	16QAM	8	4	21.65	21.61	21.50	
3	16QAM	8	7	21.58	21.55	21.45	23.5
3	16QAM	15	0	21.54	21.48	21.44	
3	64QAM	1	0	22.54	22.59	22.49	
3	64QAM	1	8	22.47	22.50	22.42	22.5
3	64QAM	1	14	22.49	22.45	22.40	
3	64QAM	8	0	21.51	21.58	21.45	
3	64QAM	8	4	21.47	21.53	21.34	22.5
3	64QAM	8	7	21.42	21.41	21.29	
3	64QAM	15	0	21.48	21.38	21.36	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	23.48	23.53	23.45	24.5
1.4	QPSK	1	3	23.40	23.42	23.49	
1.4	QPSK	1	5	23.39	23.18	23.36	
1.4	QPSK	3	0	22.71	22.77	22.70	
1.4	QPSK	3	1	22.63	22.54	22.65	
1.4	QPSK	3	3	22.57	22.50	22.58	
1.4	QPSK	6	0	22.44	22.38	22.49	23.5
1.4	16QAM	1	0	22.56	22.70	22.58	23.5
1.4	16QAM	1	3	22.47	22.55	22.47	
1.4	16QAM	1	5	22.38	22.43	22.39	
1.4	16QAM	3	0	21.53	21.54	21.48	
1.4	16QAM	3	1	21.45	21.48	21.42	
1.4	16QAM	3	3	21.38	21.42	21.37	
1.4	16QAM	6	0	21.41	21.35	21.31	22.5
1.4	64QAM	1	0	22.56	22.61	22.51	23.5
1.4	64QAM	1	3	22.49	22.52	22.44	
1.4	64QAM	1	5	22.46	22.44	22.39	
1.4	64QAM	3	0	21.50	21.57	21.44	
1.4	64QAM	3	1	21.46	21.51	21.33	
1.4	64QAM	3	3	21.40	21.44	21.31	
1.4	64QAM	6	0	21.44	21.37	21.35	22.5

Band 41 (2496~2690MHz) Class3										
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	20.06	20.17	20.29	20.16	20.23	21	
20	QPSK	1	49	19.99	20.08	20.21	20.11	20.12		
20	QPSK	1	99	19.91	19.95	20.09	20.00	20.05		
20	QPSK	50	0	19.09	19.13	19.27	19.19	19.12		
20	QPSK	50	24	19.02	19.06	19.14	19.05	19.00	20	
20	QPSK	50	50	18.95	18.93	19.07	18.98	18.91		
20	QPSK	100	0	18.90	19.01	19.08	18.96	18.92		
20	16QAM	1	0	19.10	19.16	19.34	19.49	19.46		
20	16QAM	1	49	19.01	19.13	19.27	19.33	19.20	20	
20	16QAM	1	99	18.86	19.00	19.04	19.21	19.03		
20	16QAM	50	0	18.15	18.23	18.32	18.36	18.40		
20	16QAM	50	24	18.03	18.17	18.14	18.27	18.29		
20	16QAM	50	50	17.97	18.06	18.08	18.12	18.13	19	
20	16QAM	100	0	18.08	18.02	18.24	18.07	18.05		
20	64QAM	1	0	19.00	19.27	19.31	19.32	18.91		
20	64QAM	1	49	18.71	18.88	19.00	19.03	18.81		
20	64QAM	1	99	18.56	18.71	18.80	18.87	18.65	20	
20	64QAM	50	0	18.23	18.32	18.37	18.44	18.34		
20	64QAM	50	24	18.19	18.23	18.28	18.37	18.21		
20	64QAM	50	50	18.10	18.14	18.16	18.28	18.26		
20	64QAM	100	0	18.12	18.11	18.19	18.22	18.19	19	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	Tuneup limit (dBm)	
15	QPSK	1	0	19.97	20.08	20.20	20.07	20.14	21	
15	QPSK	1	37	19.90	19.99	20.11	20.02	20.03		
15	QPSK	1	74	19.82	19.86	20.00	19.91	19.96		
15	QPSK	36	0	19.00	19.04	19.18	19.10	19.03		
15	QPSK	36	20	18.93	18.97	19.05	18.96	18.91	20	
15	QPSK	36	39	18.86	18.84	18.98	18.89	18.82		
15	QPSK	75	0	18.81	18.92	18.99	18.87	18.83		
15	16QAM	1	0	19.15	19.21	19.39	19.54	19.51		
15	16QAM	1	37	19.06	19.16	19.32	19.38	19.25	20	
15	16QAM	1	74	18.91	19.05	19.24	19.26	19.86		
15	16QAM	36	0	18.20	18.28	18.37	18.41	18.45		
15	16QAM	36	20	18.08	18.22	18.19	18.32	18.34		
15	16QAM	36	39	18.02	18.11	18.13	18.17	18.18	19	
15	16QAM	75	0	18.13	18.07	18.29	18.12	18.10		
15	64QAM	1	0	19.05	19.32	19.36	19.37	18.96		
15	64QAM	1	37	18.76	18.93	19.05	19.08	18.86		
15	64QAM	1	74	18.61	18.76	18.85	18.92	18.70	20	
15	64QAM	36	0	18.20	18.29	18.34	18.41	18.31		
15	64QAM	36	20	18.16	18.20	18.25	18.34	18.18		
15	64QAM	36	39	18.07	18.11	18.13	18.25	18.23		
15	64QAM	75	0	18.09	18.08	18.16	18.19	18.16	19	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685	Tune-up limit (dBm)	
10	QPSK	1	0	19.99	20.07	20.22	20.11	20.16	21	
10	QPSK	1	25	19.92	20.01	20.12	20.04	20.05		
10	QPSK	1	49	19.84	19.88	20.01	19.93	19.98		
10	QPSK	25	0	19.02	19.06	19.20	19.12	19.05		
10	QPSK	25	12	18.95	18.99	19.07	18.98	18.93	20	
10	QPSK	25	25	18.88	18.86	19.00	18.91	18.84		
10	QPSK	50	0	18.83	18.94	19.01	18.89	18.85		
10	16QAM	1	0	19.03	19.09	19.27	19.42	19.39		
10	16QAM	1	25	18.94	19.06	19.20	19.26	19.13	20	
10	16QAM	1	49	18.79	18.93	18.97	19.14	18.96		
10	16QAM	25	0	18.08	18.16	18.25	18.29	18.33		
10	16QAM	25	12	17.96	18.10	18.07	18.20	18.22		
10	16QAM	25	25	17.90	17.99	18.01	18.05	18.06	19	
10	16QAM	50	0	18.01	17.95	18.17	18.00	17.88		
10	64QAM	1	0	18.93	19.20	19.24	19.25	18.84		
10	64QAM	1	25	18.64	18.81	18.93	18.96	18.74		
10	64QAM	1	49	18.49	18.64	18.73	18.80	18.58	20	
10	64QAM	25	0	18.16	18.25	18.30	18.37	18.27		
10	64QAM	25	12	18.12	18.16	18.21	18.30	18.14		
10	64QAM	25	25	18.03	18.07	18.09	18.21	18.19		
10	64QAM	50	0	18.06	18.04	18.12	18.15	18.12	19	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.3	2593	2640.30	2687.5	Tune-up limit (dBm)	
5	QPSK	1	0	19.95	20.06	20.17	20.05	20.12	21	
5	QPSK	1	12	19.88	19.97	20.11	20.00	20.01		
5	QPSK	1	24	19.80	19.84	19.98	19.89	19.94		
5	QPSK	12	0	16.98	19.02	19.16	19.08	19.01		
5	QPSK	12	7	18.91	18.95	19.03	18.94	18.89	20	
5	QPSK	12	13	18.84	18.82	18.96	18.87	18.80		
5	QPSK	25	0	18.79	18.90	18.97	18.85	18.81		
5	16QAM	1	0	18.99	19.05	19.23	19.36	19.35		
5	16QAM	1	12	18.90	19.02	19.16	19.22	19.09	20	
5	16QAM	1	24	18.75	18.89	18.93	19.10	18.92		
5	16QAM	12	0	18.04	18.12	18.21	18.25	18.29		
5	16QAM	12	7	17.92	18.03	18.05	18.16	18.18		
5	16QAM	12	13	17.86	17.95	17.97	18.01	18.02	19	
5	16QAM	25	0	17.97	17.91	18.13	17.96	17.94		
5	64QAM	1	0	18.89	19.16	19.20	19.21	18.80		
5	64QAM	1	12	18.60	18.77	18.89	18.92	18.70		
5	64QAM	1	24	18.45	18.60	18.69	18.76	18.54	20	
5	64QAM	12	0	18.12	18.21	18.26	18.33	18.23		
5	64QAM	12	7	18.08	18.12	18.17	18.26	18.10		
5	64QAM	12	13	17.99	18.03	18.05	18.17	18.15		
5	64QAM	25	0	18.01	18.00	18.08	18.11	18.08	19	

Band 41 (2496~2690MHz) Class2										
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	23.15	23.13	23.40	23.20	23.39	24	
20	QPSK	1	49	23.06	23.07	23.22	23.10	23.03		
20	QPSK	1	99	22.93	22.94	23.05	22.97	22.91		
20	QPSK	50	0	22.40	22.50	22.61	22.46	22.43		
20	QPSK	50	24	22.33	22.43	22.53	22.44	22.37	23	
20	QPSK	50	50	22.14	22.29	22.49	22.31	22.29		
20	QPSK	100	0	22.26	22.24	22.41	22.22	22.23		
20	16QAM	1	0	22.23	22.27	22.37	22.24	22.08		
20	16QAM	1	49	22.15	22.20	22.32	22.23	22.03	23	
20	16QAM	1	99	22.07	22.10	22.23	22.15	21.99		
20	16QAM	50	0	21.37	21.43	21.62	21.50	21.34		
20	16QAM	50	24	21.29	21.28	21.49	21.37	21.25		
20	16QAM	50	50	21.14	21.18	21.40	21.24	21.17	22	
20	16QAM	100	0	21.17	21.21	21.28	21.15	21.14		
20	64QAM	1	0	22.07	22.03	22.23	22.12	22.14		
20	64QAM	1	49	22.00	21.94	22.14	22.04	21.99		
20	64QAM	1	99	21.92	21.86	22.06	21.95	21.90	23	
20	64QAM	50	0	21.30	21.34	21.45	21.31	21.23		
20	64QAM	50	24	21.21	21.19	21.34	21.15	21.14		
20	64QAM	50	50	21.08	21.12	21.25	21.23	21.20		
20	64QAM	100	0	21.08	21.14	21.13	21.10	21.12	22	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
15	QPSK	1	0	23.09	23.10	23.33	23.14	23.05	24	
15	QPSK	1	37	23.00	23.01	23.16	23.04	22.97		
15	QPSK	1	74	22.87	22.88	22.96	22.91	22.85		
15	QPSK	36	0	22.31	22.41	22.52	22.37	22.34		
15	QPSK	36	20	22.24	22.34	22.44	22.35	22.28	23	
15	QPSK	36	28	22.05	22.20	22.30	22.22	22.20		
15	QPSK	75	0	22.17	22.15	22.32	22.13	22.14		
15	16QAM	1	0	22.20	22.24	22.34	22.21	22.06		
15	16QAM	1	37	22.12	22.17	22.29	22.20	22.09	23	
15	16QAM	1	74	22.04	22.07	22.20	22.12	21.96		
15	16QAM	36	0	21.28	21.34	21.53	21.41	21.25		
15	16QAM	36	20	21.20	21.19	21.40	21.28	21.16		
15	16QAM	36	28	21.05	21.09	21.21	21.15	21.08	22	
15	16QAM	75	0	21.08	21.12	21.19	21.08	21.05		
15	16QAM	75	10	20.95	21.00	21.10	21.00	20.92		
15	16QAM	1	37	21.08	21.92	22.12	22.02	21.10		
15	64QAM	1	74	21.90	21.84	22.04	21.93	21.88	23	
15	64QAM	36	0	21.28	21.32	21.43	21.29	21.21		
15	64QAM	36	20	21.19	21.17	21.32	21.13	21.12		
15	64QAM	36	28	21.07	21.10	21.23	21.21	21.18		
15	64QAM	75	0	21.04	21.12	21.11	21.08	21.10	22	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
10	QPSK	1	0	23.00	23.02	23.25	23.08	22.96	24	
10	QPSK	1	25	22.91	22.92	23.10	22.96	22.88		
10	QPSK	1	49	22.78	22.79	22.90	22.82	22.76		
10	QPSK	25	0	22.25	22.35	22.46	22.31	22.28		
10	QPSK	25	10	22.18	22.28	22.38	22.29	22.22	23	
10	QPSK	25	26	21.99	22.14	22.34	22.16	22.14		
10	QPSK	50	0	22.11	22.09	22.26	22.07	22.08		
10	16QAM	1	0	22.05	22.09	22.19	22.06	21.91		
10	16QAM	1	25	21.97	22.02	22.14	22.05	21.85	23	
10	16QAM	1	49	21.89	21.92	22.05	21.97	21.81		
10	16QAM	25	0	21.17	21.23	21.42	21.30	21.14		
10	16QAM	25	12	21.09	21.08	21.29	21.17	21.05		
10	16QAM	25	25	20.94	20.96	21.20	21.04	20.92	22	
10	16QAM	50	0	20.97	21.01	21.08	20.95	20.84		
10	16QAM	1	0	21.95	21.91	22.11	22.00	22.07		
10	64QAM	1	25	21.88	21.82	22.02	21.92	21.87		
10	64QAM	1	49	21.80	21.74	21.94	21.83	21.78	23.5	
10	64QAM	25	0	21.18	21.22	21.33	21.19	21.11		
10	64QAM	25	12	21.09	21.07	21.22	21.03	21.02		
10	64QAM	25	25	20.97	21.00	21.13	21.11	21.08		
10	64QAM	50	0	20.94	21.02	21.01	20.98	21.00	22.5	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
5	QPSK	1	0	23.12	23.16	23.35	23.15	23.13	24	
5	QPSK	1	12	23.03	23.10	23.17	23.05	23.05		
5	QPSK	1	24	22.90	22.97	23.00	22.92	22.93		
5	QPSK	12	0	22.33	22.49	22.54	22.37	22.41		
5	QPSK	12	7	22.26	22.48	22.62	22.35	22.35	23	
5	QPSK	12	13	22.07	22.28	22.40	22.22	22.27		
5	QPSK	25	0	22.19	22.23	22.32	22.13	22.21		
5	16QAM	1	0	22.20	22.30	22.33	22.19	22.11		
5	16QAM	1	12	22.12	22.23	22.27	22.18	22.05	23	
5	16QAM	1	24	22.04	22.13	22.18	22.10	22.01		
5	16QAM	12	0	21.32	21.44	21.55	21.43	21.34		
5	16QAM	12	7	21.24	21.29	21.42	21.30	21.25		
5	16QAM	12	13	21.09	21.19	21.33	21.17	21.17	22	
5	16QAM	25	0	21.12	21.22	21.21	21.08	21.14		
5	64QAM	1	0	22.04	22.08	22.18	22.07	22.16		
5	64QAM	1	12	21.97	21.97	22.10	21.99	22.01		
5	64QAM	1	24	21.89	21.89	22.01	21.90	21.92	22	
5	64QAM	12	0	21.27	21.37	21.40	21.26	21.25		
5	64QAM	12	7	21.18	21.22	21.29	21.10	21.16		
5	64QAM	12	13	21.08	21.15	21.15	21.12	21.22		
5	64QAM	25	0	21.03	21.17	21.08	21.05	21.14		

2.4GHz WLAN ANT 1

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	15.51	16.00	16.00	97.76
		CH 6	2437	15.41	16.00	16.00	
		CH 11	2462	14.54	15.00	16.00	
	802.11g 6Mbps	CH 1	2412	12.28	13.00	14.00	98.06
		CH 6	2437	12.16	13.00	14.00	
		CH 11	2462	11.49	12.00	14.00	
	802.11n-HT20 MCS0	CH 1	2412	12.12	13.00	14.00	97.92
		CH 6	2437	12.21	13.00	14.00	
		CH 11	2462	11.65	12.00	14.00	
	802.11n-HT40 MCS0	CH 3	2422	11.59	12.00	13.00	94.90
		CH 6	2437	12.66	13.00	13.00	
		CH 9	2452	12.14	13.00	13.00	

5GHz WLAN ANT 1

5.2GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 36	5180	10.25	11.00	9.00	98.54
		CH 44	5220	10.65	11.50	9.00	
		CH 48	5240	10.39	11.00	9.00	
	802.11n-HT20 MCS0	CH 36	5180	10.10	10.50	9.00	97.92
		CH 44	5220	10.47	11.00	9.00	
		CH 48	5240	10.61	11.00	9.00	
	802.11n-HT40 MCS0	CH 38	5190	10.22	11.00	8.00	96.37
		CH 46	5230	10.45	11.00	8.00	
		CH 36	5180	7.81	8.50	7.00	98.19
	802.11ac-VHT20 MCS0	CH 44	5220	7.76	8.50	7.00	
		CH 48	5240	7.77	8.50	7.00	
	802.11ac-VHT40 MCS0	CH 38	5190	7.50	8.00	7.00	95.90
		CH 46	5230	7.67	8.50	7.00	
		CH 42	5210	7.31	8.00	7.00	92.07

5GHz WLAN ANT 1

5.8GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a MCS0	CH 149	5745	12.64	13.50	11.00	98.54
		CH 157	5785	11.11	12.00	11.00	
		CH 165	5825	11.06	11.50	11.00	
	802.11n-HT20 MCS0	CH 149	5745	12.49	13.00	11.00	97.92
		CH 157	5785	11.92	12.50	11.00	
		CH 165	5825	11.02	11.50	11.00	
	802.11n-HT40 MCS0	CH 151	5755	12.47	13.00	10.00	96.37
		CH 159	5795	11.69	12.50	10.00	
	802.11ac-VHT20 MCS0	CH 149	5745	10.45	11.00	9.00	98.19
		CH 157	5785	9.49	10.00	9.00	
		CH 165	5825	7.69	8.50	9.00	
	802.11ac-VHT40 MCS0	CH 151	5755	10.03	10.50	9.00	95.90
		CH 159	5795	8.83	9.50	9.00	
	802.11ac-VHT80 MCS0	CH 155	5775	9.35	10.00	9.00	92.07

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	10.34	7.70	7.76
	CH 39	2441	10.36	8.34	7.67
	CH 78	2480	10.74	9.06	8.50
Tune-up Limit			11	10	9
Duty Cycle %			76.8	76.8	77.01

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			GFSK	
LE	CH 00	2402	4.82	
	CH 19	2440	4.92	
	CH 39	2480	6.02	
Tune-up Limit			6.5	
Duty Cycle %			62.5	

CA_41C (Class3)										
Combination:20MHz+20MHz(100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
			RB Size	RB Offset	RB Size	RB Offset				
39750	39948	QPSK	1	0	0	0	1	0	22.35	23.5
40185	39987	QPSK	1	0	0	0	1	0	22.89	23.5
40620	40422	QPSK	1	0	0	0	1	0	22.95	23.5
41055	40857	QPSK	1	0	0	0	1	0	22.78	23.5
41490	41292	QPSK	1	0	0	0	1	0	22.59	23.5
39750	39948	16QAM	1	0	0	0	1	0	21.92	23
40185	39987	16QAM	1	0	0	0	1	0	22.13	23
40620	40422	16QAM	1	0	0	0	1	0	22.26	23
41055	40857	16QAM	1	0	0	0	1	0	22.09	23
41490	41292	16QAM	1	0	0	0	1	0	22.06	23
39750	39948	64QAM	1	0	0	0	1	0	21.72	23
40185	39987	64QAM	1	0	0	0	1	0	21.85	23
40620	40422	64QAM	1	0	0	0	1	0	22.03	23
41055	40857	64QAM	1	0	0	0	1	0	21.88	23
41490	41292	64QAM	1	0	0	0	1	0	21.55	23
39750	39948	QPSK	50	0	0	0	1	0	21.86	23
40185	39987	QPSK	50	0	0	0	1	0	21.88	23
40620	40422	QPSK	50	0	0	0	1	0	22	23
41055	40857	QPSK	50	0	0	0	1	0	22.02	23
41490	41292	QPSK	50	0	0	0	1	0	21.84	23

Configure	CA Configuration	PCC					SCC				Power	
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/ RB/Offset)	Band	BW (MHz)	DL Channel	DL Fre. (MHz)	CA TX (dBm)	Rel.8 TX (dBm)
Intra-band	CA_2C	2	20	18801	1870.1	QPSK/1#0	2	20	18999	1889.9	22.57	22.90
	CA_2A-12A	2	20	18700	1860	QPSK/1#0	12	5	23035	701.5	22.35	22.90
	CA_2A-71A	2	20	18700	1860	QPSK/1#0	71	20	68786	637	22.51	22.90
	CA_2A-2A	2	20	18700	1860	QPSK/1#0	2	20	19100	1900	22.47	22.90
	CA_2A-4A	2	20	18700	1860	QPSK/1#0	4	20	20300	1745	22.21	22.90
	CA_2A-66A	2	20	18700	1860	QPSK/1#0	66	20	67236	2190	22.38	22.90
	CA_2A-5A	2	20	18700	1860	QPSK/1#0	5	10	20450	829	22.20	22.90
	CA_4A-12A	4	20	20050	1720	QPSK/1#0	12	5	23035	701.5	22.66	23.76
	CA_4A-71A	4	20	20050	1720	QPSK/1#0	71	20	68786	782	22.59	23.76
	CA_4A-5A	4	20	20050	1720	QPSK/1#0	5	10	20450	829	22.51	23.76
	CA_4A-4A	4	20	20050	1720	QPSK/1#0	4	20	20300	1745	22.82	23.76
	CA_5A-66A	5	10	20450	829	QPSK/1#0	66	20	67236	2190	22.45	22.72
	CA_5B	5	10	20501	834.1	QPSK/1#0	5	10	20600	838.9	22.35	22.72
	CA_5A-5A	5	10	20450	829	QPSK/1#0	5	10	20600	844	22.33	22.72
	CA_12A-66A	12	5	23035	701.5	QPSK/1#0	66	20	67236	2190	22.39	22.72
	CA_25A-25A	25	20	26140	1860	QPSK/1#0	25	20	26590	1905	21.98	22.64
	CA_26A-41A	26	15	26865	831.5	QPSK/1#0	41	20	41490	2680	22.13	22.89
	CA_41A-41A	41	20	39750	2506	QPSK/1#0	41	20	41490	2680	24.80	25.41
	CA_66A-71A	66	20	132072	1720	QPSK/1#0	71	20	68786	782	21.34	23.62
	CA_66A-66A	66	20	132072	1720	QPSK/1#0	66	20	132572	1770	21.08	23.62
	CA_66B	66	10	132523	1765.1	QPSK/1#0	66	10	132622	1775	21.06	23.62
	CA_66C	66	20	132572	1770	QPSK/1#0	66	20	67234	2189.8	21.12	23.62