



REPORT No.: SZ25050350S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

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

Full Power

GSM850 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.75	31.78	31.54	33.50	22.75	22.78	22.54	24.50
GPRS 1 Tx slot	31.77	31.81	31.59	33.50	22.77	22.81	22.59	24.50
GPRS 2 Tx slots	30.86	30.89	30.74	32.50	24.86	24.89	24.74	26.50
GPRS 3 Tx slots	29.08	29.10	28.98	30.50	24.82	24.84	24.72	26.24
GPRS 4 Tx slots	27.94	27.97	27.83	29.50	24.94	24.97	24.83	26.50
EDGE 1 Tx slot	26.99	27.02	26.90	28.50	17.99	18.02	17.90	19.50
EDGE 2 Tx slots	25.53	25.55	25.50	27.50	19.53	19.55	19.50	21.50
EDGE 3 Tx slots	23.05	23.11	22.99	24.50	18.79	18.85	18.73	20.24
EDGE 4 Tx slots	21.92	21.96	21.86	23.50	18.92	18.96	18.86	20.50
Mode		Max.	31.81			Max.	24.97	
Attenuator	Cable Loss : 0.6							

GSM1900 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.05	29.12	29.09	31.00	20.05	20.12	20.09	22.00
GPRS 1 Tx slot	29.01	29.10	29.02	31.00	20.01	20.10	20.02	22.00
GPRS 2 Tx slots	28.54	28.61	28.53	30.00	22.54	22.61	22.53	24.00
GPRS 3 Tx slots	26.48	26.53	26.45	28.00	22.22	22.27	22.19	23.74
GPRS 4 Tx slots	25.29	25.34	25.28	27.00	22.29	22.34	22.28	24.00
EDGE 1 Tx slot	26.52	26.56	26.47	27.50	17.52	17.56	17.47	18.50
EDGE 2 Tx slots	24.94	24.97	24.93	26.50	18.94	18.97	18.93	20.50
EDGE 3 Tx slots	23.08	23.13	23.09	24.50	18.82	18.87	18.83	20.24
EDGE 4 Tx slots	21.69	21.77	21.70	22.50	18.69	18.77	18.70	19.50
Mode		Max.	29.12	0.80		Max.	22.61	
Attenuator	Cable Loss : 0.8							

Band TX Channel	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	
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	23.26	23.33	23.27	25.00	23.21	23.25	23.17	25.00	23.07	23.17	23.09	25.00
3GPP Rel 5 HSDPA Subtest-1	22.41	22.15	22.44	24.00	22.35	22.63	22.08	24.00	22.31	22.28	22.21	24.00
3GPP Rel 5 HSDPA Subtest-2	22.46	22.18	22.54	24.00	22.27	22.52	22.12	24.00	22.37	22.29	22.27	24.00
3GPP Rel 5 HSDPA Subtest-3	22.08	21.75	22.07	23.50	21.82	22.14	21.69	23.50	21.93	21.79	21.80	23.50
3GPP Rel 5 HSDPA Subtest-4	22.10	21.68	22.08	23.50	21.84	21.94	21.62	23.50	21.84	21.81	21.76	23.50
3GPP Rel 8 DC-HSDPA Subtest-1	22.50	22.16	22.66	24.00	22.41	22.77	22.40	24.00	22.25	22.28	22.21	24.00
3GPP Rel 8 DC-HSDPA Subtest-2	22.44	22.12	22.68	24.00	22.39	22.63	22.36	24.00	22.17	22.22	22.14	24.00
3GPP Rel 8 DC-HSDPA Subtest-3	21.92	21.63	22.18	23.50	21.81	22.16	21.77	23.50	21.67	21.73	21.64	23.50
3GPP Rel 8 DC-HSDPA Subtest-4	21.95	21.72	22.16	23.50	21.82	22.14	21.78	23.50	21.67	21.66	21.61	23.50
3GPP Rel 6 HSUPA Subtest-1	22.47	22.14	22.14	24.00	21.48	21.60	21.95	23.00	21.82	21.84	21.72	23.00
3GPP Rel 6 HSUPA Subtest-2	22.49	22.21	22.64	24.00	21.88	22.29	22.42	23.00	22.34	22.33	22.27	23.00
3GPP Rel 6 HSUPA Subtest-3	21.57	21.29	21.63	23.00	21.04	21.95	21.48	23.00	21.36	21.35	21.25	23.00
3GPP Rel 6 HSUPA Subtest-4	22.49	22.17	22.55	24.00	22.03	22.49	22.40	24.00	22.29	22.26	22.20	24.00
3GPP Rel 6 HSUPA Subtest-5	21.53	22.21	21.64	23.00	21.12	21.77	21.49	23.00	21.36	21.32	22.25	23.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	21.40	21.44	21.77	23.00	21.46	21.77	21.47	23.00	21.28	21.25	20.74	23.00
Attenuator	Cable Loss 0.8				Cable Loss 0.8				Cable Loss 0.6			
Mode		Max.	23.33			Max.	23.25			Max.	23.17	

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	25		
Frequency (MHz)				1860	1880	1900			
20	QPSK	1	0	23.56	23.57	23.53	25		
20	QPSK	1	49	23.44	23.29	23.40			
20	QPSK	1	99	23.33	23.12	23.24			
20	QPSK	50	0	22.55	22.56	22.53	24		
20	QPSK	50	24	22.35	22.21	22.36			
20	QPSK	50	50	22.15	22.10	22.18			
20	QPSK	100	0	21.93	22.07	22.06	24		
20	16QAM	1	0	22.56	22.54	22.69			
20	16QAM	1	49	22.35	22.36	22.49			
20	16QAM	1	99	22.23	22.20	22.34	23		
20	16QAM	50	0	21.47	21.54	21.60			
20	16QAM	50	24	21.28	21.41	21.46			
20	16QAM	50	50	21.13	21.24	21.33	23		
20	16QAM	100	0	21.02	21.11	21.15			
20	64QAM	1	0	21.66	21.76	21.68			
20	64QAM	1	49	21.62	21.74	21.65	23		
20	64QAM	1	99	21.55	21.73	21.59			
20	64QAM	50	0	20.90	21.03	20.94			
20	64QAM	50	24	20.88	21.00	20.89	22		
20	64QAM	50	50	20.84	20.96	20.89			
20	64QAM	100	0	20.78	20.92	20.85			
20	256QAM	1	0	19.38	19.51	19.44	20		
20	256QAM	1	49	19.35	19.46	19.43			
20	256QAM	1	99	19.30	19.39	19.42			
20	256QAM	50	0	19.29	19.35	19.39	20		
20	256QAM	50	24	19.24	19.35	19.37			
20	256QAM	50	50	19.18	19.29	19.31			
20	256QAM	100	0	19.17	19.22	19.25	20		
Channel				18675	18900	19125			
Frequency (MHz)				1857.5	1880	1902.5			
15	QPSK	1	0	23.51	23.53	23.47	25		
15	QPSK	1	37	23.36	23.26	23.32			
15	QPSK	1	74	23.27	23.07	23.16			
15	QPSK	36	0	22.46	22.36	22.50	24		
15	QPSK	36	20	22.27	22.14	22.27			
15	QPSK	36	39	22.08	22.04	22.09			
15	QPSK	75	0	21.85	21.82	21.97	24		
15	16QAM	1	0	22.48	22.45	22.65			
15	16QAM	1	37	22.32	22.27	22.46			
15	16QAM	1	74	22.19	22.13	22.27	23		
15	16QAM	36	0	21.38	21.50	21.55			
15	16QAM	36	20	21.24	21.34	21.41			
15	16QAM	36	39	21.04	21.19	21.29	23		
15	16QAM	75	0	20.99	21.04	21.10			
15	64QAM	1	0	21.58	21.70	21.63			
15	64QAM	1	37	21.54	21.70	21.58	23		
15	64QAM	1	74	21.52	21.64	21.53			
15	64QAM	36	0	20.86	20.95	20.85			
15	64QAM	36	20	20.83	20.94	20.82	22		
15	64QAM	36	39	20.79	20.88	20.83			
15	64QAM	75	0	20.73	20.88	20.80			
15	256QAM	1	0	19.31	19.43	19.41	20		
15	256QAM	1	37	19.27	19.37	19.34			
15	256QAM	1	74	19.25	19.32	19.36			
15	256QAM	36	0	19.21	19.29	19.35	20		
15	256QAM	36	20	19.19	19.31	19.31			
15	256QAM	36	39	19.11	19.24	19.22			
15	256QAM	75	0	19.09	19.18	19.21	20		
Channel				18650	18900	19150			
Frequency (MHz)				1855	1880	1905			
10	QPSK	1	0	23.50	23.52	23.48	25		
10	QPSK	1	25	23.40	23.21	23.35			
10	QPSK	1	49	23.28	23.07	23.17			
10	QPSK	25	0	22.47	22.36	22.47	24		
10	QPSK	25	12	22.31	22.15	22.30			
10	QPSK	25	25	22.08	22.07	22.15			
10	QPSK	50	0	21.85	21.81	22.01	24		
10	16QAM	1	0	22.47	22.48	22.65			
10	16QAM	1	25	22.26	22.30	22.43			
10	16QAM	1	49	22.16	22.16	22.28	24		
10	16QAM	25	0	21.41	21.48	21.54			
10	16QAM	25	12	21.24	21.37	21.41			
10	16QAM	25	25	21.10	21.20	21.27	23		
10	16QAM	50	0	20.97	21.05	21.11			
10	64QAM	1	0	21.60	21.70	21.61			
10	64QAM	1	25	21.56	21.66	21.61	23		
10	64QAM	1	49	21.47	21.67	21.55			
10	64QAM	25	0	20.83	20.99	20.88			
10	64QAM	25	12	20.80	20.93	20.84	22		
10	64QAM	25	25	20.79	20.91	20.80			
10	64QAM	50	0	20.73	20.84	20.82			
10	256QAM	1	0	19.30	19.46	19.37	20		
10	256QAM	1	25	19.28	19.42	19.39			
10	256QAM	1	49	19.22	19.35	19.37			
10	256QAM	25	0	19.22	19.30	19.34	20		
10	256QAM	25	12	19.17	19.29	19.34			
10	256QAM	25	25	19.14	19.24	19.24			
10	256QAM	50	0	19.13	19.16	19.21	20		
Channel				18625	18900	19175			
Frequency (MHz)				1852.5	1880	1907.5			
5	QPSK	1	0	23.52	23.54	23.48	25		
5	QPSK	1	12	23.41	23.22	23.33			
5	QPSK	1	24	23.25	23.04	23.20			
5	QPSK	12	0	22.48	22.33	22.50	24		
5	QPSK	12	7	22.32	22.17	22.31			
5	QPSK	12	13	22.09	22.02	22.12			
5	QPSK	25	0	21.89	21.83	21.98	24		
5	16QAM	1	0	22.49	22.51	22.64			
5	16QAM	1	12	22.30	22.31	22.43			

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	25		
Frequency (MHz)				1720	1732.5	1745			
20	QPSK	1	0	23.40	23.47	23.44	25		
20	QPSK	1	49	23.21	23.24	23.29			
20	QPSK	1	99	23.06	23.07	23.11			
20	QPSK	50	0	22.25	22.38	22.37	24		
20	QPSK	50	24	22.04	22.16	22.15			
20	QPSK	50	50	21.86	21.95	21.93			
20	QPSK	100	0	21.66	21.79	21.71	24		
20	16QAM	1	0	22.27	22.39	22.35			
20	16QAM	1	49	22.15	22.20	22.15			
20	16QAM	1	99	21.97	22.00	21.95	23		
20	16QAM	50	0	21.24	21.29	21.22			
20	16QAM	50	24	21.03	21.10	21.01			
20	16QAM	50	50	20.89	20.91	20.81	23		
20	16QAM	100	0	20.75	20.80	20.63			
20	64QAM	1	0	21.30	21.39	21.18			
20	64QAM	1	49	21.27	21.32	21.14	23		
20	64QAM	1	99	21.24	21.30	21.11			
20	64QAM	50	0	20.54	20.66	20.45			
20	64QAM	50	24	20.51	20.64	20.40	22		
20	64QAM	50	50	20.50	20.63	20.40			
20	64QAM	100	0	20.42	20.55	20.35			
20	256QAM	1	0	18.86	18.99	18.76	20		
20	256QAM	1	49	18.82	18.91	18.76			
20	256QAM	1	99	18.82	18.87	18.75			
20	256QAM	50	0	18.76	18.82	18.73	20		
20	256QAM	50	24	18.72	18.80	18.71			
20	256QAM	50	50	18.67	18.76	18.64			
20	256QAM	100	0	18.60	18.70	18.57	20		
Channel				20025	20175	20325			
Frequency (MHz)				1717.5	1732.5	1747.5			
15	QPSK	1	0	23.45	23.46	23.44	25		
15	QPSK	1	37	23.30	23.15	23.30			
15	QPSK	1	74	23.20	23.00	23.12			
15	QPSK	36	0	22.47	22.32	22.36	24		
15	QPSK	36	20	22.20	22.08	22.22			
15	QPSK	36	39	22.08	21.98	22.07			
15	QPSK	75	0	21.84	21.77	21.90	24		
15	16QAM	1	0	22.43	22.39	22.59			
15	16QAM	1	37	22.24	22.28	22.42			
15	16QAM	1	74	22.08	22.08	22.27	23		
15	16QAM	36	0	21.30	21.45	21.47			
15									

5	16QAM	1	24	22.18	22.15	22.28	
5	16QAM	12	0	21.41	21.49	21.53	
5	16QAM	12	7	21.20	21.34	21.39	
5	16QAM	12	13	21.09	21.19	21.25	
5	16QAM	25	0	20.94	21.05	21.10	
5	64QAM	1	0	21.62	21.72	21.61	
5	64QAM	1	12	21.54	21.68	21.59	
5	64QAM	1	24	21.48	21.69	21.55	
5	64QAM	12	0	20.83	21.00	20.86	
5	64QAM	12	7	20.80	20.92	20.82	
5	64QAM	12	13	20.76	20.93	20.81	
5	64QAM	25	0	20.73	20.88	20.80	
5	256QAM	1	0	19.35	19.42	19.38	
5	256QAM	1	12	19.26	19.42	19.39	
5	256QAM	1	24	19.24	19.31	19.36	
5	256QAM	12	0	19.26	19.29	19.34	
5	256QAM	12	7	19.16	19.32	19.34	
5	256QAM	12	13	19.12	19.24	19.27	
5	256QAM	25	0	19.14	19.16	19.17	
Channel				1861.5	1890.0	1918.5	
Frequency (MHz)				1851.5	1880.0	1908.5	
3	QPSK	1	0	23.41	23.45	23.42	25
3	QPSK	1	8	23.30	23.16	23.30	
3	QPSK	1	14	23.19	23.00	23.08	
3	QPSK	8	0	22.44	22.31	22.39	
3	QPSK	8	4	22.25	22.09	22.24	
3	QPSK	8	7	22.06	21.99	22.10	
3	QPSK	15	0	21.80	21.78	21.93	
3	16QAM	1	0	22.46	22.39	22.57	
3	16QAM	1	8	22.22	22.27	22.39	
3	16QAM	1	14	22.11	22.11	22.28	
3	16QAM	8	0	21.32	21.42	21.52	
3	16QAM	8	4	21.12	21.27	21.33	
3	16QAM	8	7	21.03	21.16	21.16	
3	16QAM	15	0	20.90	20.99	21.05	
3	64QAM	1	0	21.52	21.67	21.58	
3	64QAM	1	8	21.51	21.58	21.53	
3	64QAM	1	14	21.43	21.61	21.43	
3	64QAM	8	0	20.77	20.91	20.84	
3	64QAM	8	4	20.78	20.90	20.78	
3	64QAM	8	7	20.75	20.83	20.79	
3	64QAM	15	0	20.67	20.82	20.73	
3	256QAM	1	0	19.29	19.43	19.32	
3	256QAM	1	8	19.25	19.36	19.33	
3	256QAM	1	14	19.21	19.22	19.27	
3	256QAM	8	0	19.18	19.24	19.24	
3	256QAM	8	4	19.12	19.25	19.30	
3	256QAM	8	7	19.05	19.13	19.19	
3	256QAM	15	0	19.03	19.14	19.17	
Channel				1860.7	1890.0	1919.3	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880.0	1909.3	
1.4	QPSK	1	0	23.45	23.45	23.44	25
1.4	QPSK	1	3	23.30	23.15	23.30	
1.4	QPSK	1	5	23.20	23.00	23.12	
1.4	QPSK	3	0	22.47	22.32	22.36	
1.4	QPSK	3	1	22.20	22.08	22.22	
1.4	QPSK	3	3	22.08	21.98	22.07	
1.4	QPSK	6	0	21.84	21.77	21.90	
1.4	16QAM	1	0	22.43	22.39	22.59	
1.4	16QAM	1	3	22.24	22.28	22.42	
1.4	16QAM	1	5	22.08	22.08	22.27	
1.4	16QAM	3	0	21.30	21.45	21.47	
1.4	16QAM	3	1	21.13	21.26	21.34	
1.4	16QAM	3	3	21.04	21.12	21.17	
1.4	16QAM	6	0	20.92	21.02	21.02	
1.4	64QAM	1	0	21.53	21.65	21.55	
1.4	64QAM	1	3	21.52	21.63	21.50	
1.4	64QAM	1	5	21.45	21.64	21.43	
1.4	64QAM	3	0	20.76	20.93	20.83	
1.4	64QAM	3	1	20.77	20.90	20.77	
1.4	64QAM	3	3	20.75	20.86	20.75	
1.4	64QAM	6	0	20.69	20.85	20.76	
1.4	256QAM	1	0	19.29	19.45	19.31	
1.4	256QAM	1	3	19.25	19.31	19.32	
1.4	256QAM	1	5	19.22	19.25	19.32	
1.4	256QAM	3	0	19.17	19.23	19.24	
1.4	256QAM	3	1	19.15	19.21	19.26	
1.4	256QAM	3	3	19.07	19.17	19.19	
1.4	256QAM	6	0	19.02	19.11	19.18	

5	16QAM	1	24	22.04	22.04	22.19	
5	16QAM	12	0	21.22	21.40	21.44	
5	16QAM	12	7	21.06	21.17	21.26	
5	16QAM	12	13	20.96	21.07	21.14	
5	16QAM	25	0	20.84	20.98	20.98	
5	64QAM	1	0	21.46	21.60	21.47	
5	64QAM	1	12	21.47	21.59	21.42	
5	64QAM	1	24	21.38	21.60	21.36	
5	64QAM	12	0	20.72	20.88	20.75	
5	64QAM	12	7	20.73	20.85	20.73	
5	64QAM	12	13	20.71	20.83	20.68	
5	64QAM	25	0	20.61	20.77	20.69	
5	256QAM	1	0	19.23	19.36	19.26	
5	256QAM	1	12	19.21	19.23	19.24	
5	256QAM	1	24	19.14	19.19	19.25	
5	256QAM	12	0	19.12	19.19	19.16	
5	256QAM	12	7	19.09	19.18	19.19	
5	256QAM	12	13	19.03	19.08	19.14	
5	256QAM	25	0	18.97	19.05	19.11	
Channel				1966.5	2017.5	2038.5	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	23.36	23.42	23.37	25
3	QPSK	1	8	23.22	23.07	23.24	
3	QPSK	1	14	23.12	22.95	23.08	
3	QPSK	8	0	22.43	22.26	22.27	
3	QPSK	8	4	22.15	21.99	22.14	
3	QPSK	8	7	22.04	21.90	22.04	
3	QPSK	15	0	21.80	21.71	21.85	
3	16QAM	1	0	22.36	22.34	22.55	
3	16QAM	1	8	22.20	22.20	22.35	
3	16QAM	1	14	22.00	22.03	22.22	
3	16QAM	8	0	21.25	21.39	21.42	
3	16QAM	8	4	21.08	21.19	21.26	
3	16QAM	8	7	20.98	21.08	21.13	
3	16QAM	15	0	20.84	20.94	20.98	
3	64QAM	1	0	21.44	21.56	21.46	
3	64QAM	1	8	21.45	21.60	21.45	
3	64QAM	1	14	21.37	21.58	21.36	
3	64QAM	8	0	20.71	20.87	20.78	
3	64QAM	8	4	20.72	20.81	20.71	
3	64QAM	8	7	20.69	20.79	20.67	
3	64QAM	15	0	20.62	20.79	20.68	
3	256QAM	1	0	19.20	19.37	19.26	
3	256QAM	1	8	19.21	19.25	19.25	
3	256QAM	1	14	19.14	19.20	19.24	
3	256QAM	8	0	19.10	19.18	19.16	
3	256QAM	8	4	19.09	19.12	19.22	
3	256QAM	8	7	19.00	19.12	19.16	
3	256QAM	15	0	18.94	19.02	19.11	
Channel				1996.7	2017.5	2039.3	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.42	23.40	23.36	25
1.4	QPSK	1	3	23.24	23.08	23.25	
1.4	QPSK	1	5	23.15	22.91	23.04	
1.4	QPSK	3	0	22.42	22.25	22.32	
1.4	QPSK	3	1	22.14	22.00	22.16	
1.4	QPSK	3	3	22.01	21.91	22.03	
1.4	QPSK	6	0	21.80	21.73	21.85	
1.4	16QAM	1	0	22.39	22.31	22.52	
1.4	16QAM	1	3	22.17	22.25	22.33	
1.4	16QAM	1	5	22.01	22.05	22.24	
1.4	16QAM	3	0	21.24	21.36	21.44	
1.4	16QAM	3	1	21.09	21.18	21.30	
1.4	16QAM	3	3	20.99	21.04	21.12	
1.4	16QAM	6	0	20.87	20.95	20.98	
1.4	64QAM	1	0	21.45	21.58	21.50	
1.4	64QAM	1	3	21.43	21.56	21.46	
1.4	64QAM	1	5	21.41	21.60	21.37	
1.4	64QAM	3	0	20.68	20.89	20.76	
1.4	64QAM	3	1	20.69	20.82	20.68	
1.4	64QAM	3	3	20.69	20.79	20.71	
1.4	64QAM	6	0	20.63	20.78	20.68	
1.4	256QAM	1	0	19.24	19.39	19.22	
1.4	256QAM	1	3	19.16	19.27	19.23	
1.4	256QAM	1	5	19.14	19.19	19.24	
1.4	256QAM	3	0	19.13	19.17	19.20	
1.4	256QAM	3	1	19.09	19.13	19.17	
1.4	256QAM	3	3	18.99	19.10	19.11	
1.4	256QAM	6	0	18.97	19.06	19.15	

Band 5 (Celluar 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	Tune-up limit (dBm)					
Frequency (MHz)				829	836.5	844	Tune-up limit (dBm)					
10	QPSK	1	0	23.48	23.55	23.54	25	24.5	23.5			
10	QPSK	1	25	23.31	23.37	23.42						
10	QPSK	1	49	23.11	23.21	23.24						
10	QPSK	25	0	22.56	22.72	22.71	24	23.5	23.5			
10	QPSK	25	12	22.38	22.50	22.55						
10	QPSK	25	25	22.17	22.33	22.40						
10	QPSK	50	0	21.98	22.25	22.24	24	23.5	23.5			
10	16QAM	1	0	22.37	22.54	22.71						
10	16QAM	1	25	22.16	22.38	22.50						
10	16QAM	1	49	21.95	22.19	22.33	23	23.5	23.5			
10	16QAM	25	0	21.25	21.46	21.59						
10	16QAM	25	12	21.08	21.24	21.45						
10	16QAM	25	25	20.93	21.13	21.27	23	23.5	23.5			
10	16QAM	50	0	20.82	20.93	21.06						
10	16QAM	1	0	21.44	21.53	21.66						
10	16QAM	1	25	21.42	21.46	21.65	23	23.5	23.5			
10	16QAM	1	49	21.37	21.41	21.63						
10	16QAM	25	0	20.67	20.78	20.99						
10	16QAM	25	12	20.63	20.75	20.98	22	23.5	23.5			
10	16QAM	25	25	20.58	20.72	20.93						
10	16QAM	50	0	20.50	20.67	20.90						
10	256QAM	1	0	18.88	19.08	19.31	20	23.5	23.5			
10	256QAM	1	25	18.82	19.02	19.27						
10	256QAM	1	49	18.82	18.97	19.21						
10	256QAM	25	0	18.76	18.94	19.17	20	23.5	23.5			
10	256QAM	25	12	18.74	18.89	19.11						
10	256QAM	25	25	18.67	18.83	19.05						
10	256QAM	50	0	18.65	18.75	19.05	20	23.5	23.5			
Channel				20425	20525	20625				Tune-up limit (dBm)		
Frequency (MHz)				826.5	836.5	846.5				Tune-up limit (dBm)		
5	QPSK	1	0	23.41	23.52	23.48	25	24.5	23.5			
5	QPSK	1	12	23.24	23.34	23.36						
5	QPSK	1	24	23.03	23.15	23.15						
5	QPSK	12	0	22.48	22.56	22.63	24	23.5	23.5			
5	QPSK	12	7	22.31	22.44	22.47						
5	QPSK	12	13	22.13	22.25	22.32						
5	QPSK	25	0	21.91	22.12	22.20	24	23.5	23.5			
5	16QAM	1	0	22.31	22.45	22.65						
5	16QAM	1	12	22.09	22.29	22.44						
5	16QAM	1	24	21.86	22.10	22.24	23	23.5	23.5			
5	16QAM	12	0	21.21	21.39	21.52						
5	16QAM	12	7	21.02	21.17	21.38						
5	16QAM	12	13	20.90	21.05	21.19	23	23.5	23.5			
5	16QAM	25	0	20.74	20.89	21.02						
5	16QAM	1	0	21.41	21.45	21.62						
5	16QAM	1	12	21.37	21.41	21.59	23	23.5	23.5			
5	16QAM	1	24	21.30	21.36	21.57						
5	16QAM	12	0	20.64	20.72	20.94						
5	16QAM	12	7	20.59	20.70	20.94	22	23.5	23.5			
5	16QAM	12	13	20.52	20.67	20.88						
5	16QAM	25	0	20.47	20.61	20.86						
5	256QAM	1	0	18.79	19.05	19.24	20	23.5	23.5			
5	256QAM	1	12	18.77	18.93	19.18						
5	256QAM	1	24	18.75	18.93	19.15						
5	256QAM	12	0	18.69	18.86	19.08	20	23.5	23.5			
5	256QAM	12	7	18.65	18.84	19.05						
5	256QAM	12	13	18.59	18.76	19.00						
5	256QAM	25	0	18.61	18.70	18.97	20	23.5	23.5			
Channel				20415	20525	20635				Tune-up limit (dBm)		
Frequency (MHz)				826.5	836.5	847.5				Tune-up limit (dBm)		
3	QPSK	1	0	23.37	23.46	23.41	25	24.5	23.5			
3	QPSK	1	8	23.19	23.30	23.27						
3	QPSK	1	14	22.95	23.11	23.06						
3	QPSK	8	0	22.39	22.51	22.57	24	23.5	23.5			
3	QPSK	8	4	22.22	22.36	22.42						
3	QPSK	8	7	22.07	22.21	22.26						
3	QPSK	15	0	21.85	22.04	22.12	24	23.5	23.5			
3	16QAM	1	0	22.26	22.42	22.58						
3	16QAM	1	8	22.04	22.25	22.39						
3	16QAM	1	14	21.82	22.06	22.18	23	23.5	23.5			
3	16QAM	8	0	21.13	21.30	21.45						
3	16QAM	8	4	20.94	21.11	21.31						
3	16QAM	8	7	20.84	20.98	21.11	23	23.5	23.5			
3	16QAM	15	0	20.68	20.84	20.93						
3	16QAM	1	0	21.34	21.36	21.57						
3	16QAM	1	8	21.29	21.37	21.50	23	23.5	23.5			
3	16QAM	1	14	21.25	21.29	21.52						
3	16QAM	8	0	20.60	20.63	20.90						
3	16QAM	8	4	20.55	20.65	20.89	22	23.5	23.5			
3	16QAM	8	7	20.45	20.62	20.84						
3	16QAM	15	0	20.39	20.55	20.82						
3	256QAM	1	0	18.75	18.97	19.20	20	23.5	23.5			
3	256QAM	1	8	18.74	18.87	19.09						
3	256QAM	1	14	18.71	18.84	19.06						
3	256QAM	8	0	18.61	18.80	19.02	20	23.5	23.5			
3	256QAM	8	4	18.59	18.76	18.99						
3	256QAM	8	7	18.52	18.71	18.93						
3	256QAM	15	0	18.56	18.64	18.89	20	23.5	23.5			
Channel				20407	20525	20643				Tune-up limit (dBm)		
Frequency (MHz)				824.7	836.5	848.3				Tune-up limit (dBm)		
1.4	QPSK	1	0	23.36	23.46	23.43	25	24.5	23.5			
1.4	QPSK	1	3	23.20	23.28	23.30						
1.4	QPSK	1	5	22.97	23.10	23.12						
1.4	QPSK	3	0	22.42	22.52	22.59	24	23.5	23.5			
1.4	QPSK	3	1	22.24	22.38	22.42						
1.4	QPSK	3	3	22.07	22.20	22.25						
1.4	QPSK	6	0	21.87	22.08	22.15	24	23.5	23.5			
1.4	16QAM	1	0	22.24	22.42	22.61						
1.4	16QAM	1	3	22.02	22.24	22.36						

Band 7 (2600MHz Band) (dBm) Part 27												
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)					
Channel				20850	21100	21350	Tune-up limit (dBm)					
Frequency (MHz)				2510	2535	2560	Tune-up limit (dBm)					
20	QPSK	1	0	23.10	23.16	23.15	24.5	23.5	23.5			
20	QPSK	1	49	22.98	22.91	23.03						
20	QPSK	1	99	22.83	22.78	22.85						
20	QPSK	50	0	22.09	22.16	22.15	23.5	23.5	23.5			
20	QPSK	50	24	21.92	21.85	21.94						
20	QPSK	50	50	21.72	21.71	21.82						
20	QPSK	100	0	21.57	21.67	21.66	23.5	23.5	23.5			
20	16QAM	1	0	22.21	22.25	22.24						
20	16QAM	1	49	22.01	22.08	22.05						
20	16QAM	1	99	21.89	21.87	21.87	23.5	23.5	23.5			
20	16QAM	50	0	21.20	21.16	21.14						
20	16QAM	50	24	21.07	21.00	21.00						
20	16QAM	50	50	20.93	20.81	20.89	22.5	23.5	23.5			
20	16QAM	100	0	20.73	20.68	20.77						
20	64QAM	1	0	21.27	21.29	21.31						
20	64QAM	1	49	21.22	21.25	21.28	22.5	23.5	23.5			
20	64QAM	1	99	21.17	21.21	21.25						
20	64QAM	50	0	20.51	20.56	20.60						
20	64QAM	50	24	20.48	20.54	20.53	21.5	23.5	23.5			
20	64QAM	50	50	20.40	20.50	20.47						
20	64QAM	100	0	20.34	20.45	20.41						
20	256QAM	1	0	18.77	18.83	18.81	19.5	23.5	23.5			
20	256QAM	1	49	18.74	18.78	18.79						
20	256QAM	1	99	18.70	18.70	18.73						
20	256QAM	50	0	18.64	18.69	18.65	19.5	23.5	23.5			
20	256QAM	50	24	18.58	18.66	18.63						
20	256QAM	50	50	18.56	18.65	18.58						
20	256QAM	100	0	18.54	18.64	18.54	19.5	23.5	23.5			
Channel				20825	21100	21375				Tune-up limit (dBm)		
Frequency (MHz)				2507.5	2535	2562.5				Tune-up limit (dBm)		
15	QPSK	1	0	23.04	23.05	23.08	24.5	23.5	23.5			
15	QPSK	1	37	22.95	22.86	22.96						
15	QPSK	1	74	22.74	22.75	22.78						
15	QPSK	36	0	22.04	21.90	22.08	23.5	23.5	23.5			
15	QPSK	36	20	21.83	21.78	21.86						
15	QPSK	36	39	21.67	21.66	21.75						
15	QPSK	75	0	21.54	21.50	21.60	23.5	23.5	23.5			
15	16QAM	1	0	22.13	22.21	22.20						
15	16QAM	1	37	21.96	22.01	22.02						
15	16QAM	1	74	21.86	21.81	21.80	22.5	23.5	23.5			
15	16QAM	36	0	21.16	21.13	21.11						
15	16QAM	36	20	21.00	20.96	20.93						
15	16QAM	36	39	20.90	20.72	20.82	22.5	23.5	23.5			
15	16QAM	75	0	20.65	20.62	20.69						
15	64QAM	1	0	21.23	21.23	21.24						
15	64QAM	1	37	21.14	21.17	21.19	22.5	23.5	23.5			
15	64QAM	1	74	21.11	21.14	21.20						
15	64QAM	36	0	20.44	20.52	20.53						
15	64QAM	36	20	20.42	20.45	20.47	21.5	23.5	23.5			
15	64QAM	36	39	20.36	20.46	20.41						
15	64QAM	75	0	20.29	20.37	20.36						
15	256QAM	1	0	18.72	18.76	18.73	19.5	23.5	23.5			
15	256QAM	1	37	18.69	18.70	18.71						
15	256QAM	1	74	18.66	18.65	18.69						
15	256QAM	36	0	18.59	18.64	18.57	19.5	23.5	23.5			
15	256QAM	36	20	18.51	18.60	18.56						
15	256QAM	36	39	18.48	18.60	18.55						
1												



1.4	16QAM	1	5	21.83	22.07	22.18	24
1.4	16QAM	3	0	21.17	21.35	21.44	
1.4	16QAM	3	1	20.93	21.09	21.31	
1.4	16QAM	3	3	20.83	20.98	21.15	23
1.4	16QAM	6	0	20.66	20.82	20.99	
1.4	64QAM	1	0	21.33	21.42	21.54	23
1.4	64QAM	1	3	21.31	21.37	21.56	
1.4	64QAM	1	5	21.26	21.32	21.51	
1.4	64QAM	3	0	20.57	20.65	20.89	
1.4	64QAM	3	1	20.52	20.62	20.87	
1.4	64QAM	3	3	20.48	20.63	20.81	
1.4	64QAM	6	0	20.41	20.54	20.78	22
1.4	256QAM	1	0	18.74	18.98	19.18	20
1.4	256QAM	1	3	18.69	18.90	19.12	
1.4	256QAM	1	5	18.67	18.87	19.07	
1.4	256QAM	3	0	18.63	18.80	19.05	
1.4	256QAM	3	1	18.60	18.77	18.98	
1.4	256QAM	3	3	18.52	18.72	18.93	
1.4	256QAM	6	0	18.57	18.65	18.88	20

5	16QAM	1	24	21.83	21.81	21.81	22.5
5	16QAM	12	0	21.16	21.13	21.06	
5	16QAM	12	7	21.01	20.96	20.95	
5	16QAM	12	13	20.89	20.77	20.80	22.5
5	16QAM	25	0	20.69	20.59	20.69	
5	64QAM	1	0	21.22	21.26	21.26	22.5
5	64QAM	1	12	21.13	21.19	21.23	
5	64QAM	1	24	21.09	21.14	21.21	
5	64QAM	12	0	20.47	20.50	20.52	
5	64QAM	12	7	20.41	20.51	20.50	
5	64QAM	12	13	20.31	20.43	20.40	
5	64QAM	25	0	20.29	20.39	20.36	21.5
5	256QAM	1	0	18.72	18.75	18.78	19.5
5	256QAM	1	12	18.66	18.70	18.71	
5	256QAM	1	24	18.67	18.64	18.69	
5	256QAM	12	0	18.60	18.62	18.62	
5	256QAM	12	7	18.54	18.59	18.59	
5	256QAM	12	13	18.49	18.58	18.54	
5	256QAM	25	0	18.47	18.56	18.45	19.5



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	Tune-up limit (dBm)		
Frequency (MHz)				704	707.5	711	Tune-up limit (dBm)		
10	QPSK	1	0	23.19	23.25	23.22	25		
10	QPSK	1	25	23.07	23.04	23.10	25		
10	QPSK	1	49	23.10	23.06	23.07	25		
10	QPSK	25	0	22.27	22.38	22.37	24		
10	QPSK	25	12	22.08	22.09	22.27	24		
10	QPSK	25	25	21.97	21.90	22.08	24		
10	QPSK	50	0	21.83	21.95	21.94	24		
10	16QAM	1	0	22.32	22.23	22.44	24		
10	16QAM	1	25	22.16	22.10	22.32	24		
10	16QAM	1	49	22.03	21.99	22.11	24		
10	16QAM	25	0	21.27	21.30	21.37	23		
10	16QAM	25	12	21.16	21.11	21.23	23		
10	16QAM	25	25	20.98	21.00	21.06	23		
10	16QAM	50	0	20.77	20.90	20.89	23		
10	64QAM	1	0	21.36	21.48	21.54	23		
10	64QAM	1	25	21.30	21.41	21.52	23		
10	64QAM	1	49	21.29	21.34	21.50	23		
10	64QAM	25	0	20.58	20.66	20.84	22		
10	64QAM	25	12	20.51	20.59	20.78	22		
10	64QAM	25	25	20.48	20.52	20.73	22		
10	64QAM	50	0	20.48	20.45	20.72	22		
10	256QAM	1	0	18.87	18.82	19.12	20		
10	256QAM	1	25	18.80	18.81	19.06	20		
10	256QAM	1	49	18.75	18.79	19.03	20		
10	256QAM	25	0	18.70	18.78	18.96	20		
10	256QAM	25	12	18.66	18.77	18.93	20		
10	256QAM	25	25	18.61	18.69	18.89	20		
10	256QAM	50	0	18.58	18.62	18.88	20		
Channel				23035	23095	23155	Tune-up limit (dBm)		
Frequency (MHz)				701.5	707.5	713.5	Tune-up limit (dBm)		
5	QPSK	1	0	23.14	23.17	23.14	25		
5	QPSK	1	12	23.03	22.95	23.04	25		
5	QPSK	1	24	23.07	22.99	23.03	25		
5	QPSK	12	0	22.19	22.26	22.28	24		
5	QPSK	12	7	22.01	22.01	22.19	24		
5	QPSK	12	13	21.94	21.84	22.02	24		
5	QPSK	25	0	21.77	21.74	21.88	24		
5	16QAM	1	0	22.24	22.15	22.39	24		
5	16QAM	1	12	22.11	22.04	22.24	24		
5	16QAM	1	24	21.97	21.93	22.03	24		
5	16QAM	12	0	21.24	21.26	21.29	23		
5	16QAM	12	7	21.09	21.02	21.17	23		
5	16QAM	12	13	20.90	20.92	20.99	23		
5	16QAM	25	0	20.72	20.81	20.81	23		
5	64QAM	1	0	21.33	21.42	21.49	23		
5	64QAM	1	12	21.22	21.32	21.46	23		
5	64QAM	1	24	21.22	21.26	21.42	23		
5	64QAM	12	0	20.49	20.62	20.80	22		
5	64QAM	12	7	20.44	20.53	20.72	22		
5	64QAM	12	13	20.42	20.47	20.64	22		
5	64QAM	25	0	20.42	20.40	20.65	22		
5	256QAM	1	0	18.80	18.77	19.09	20		
5	256QAM	1	12	18.72	18.74	18.99	20		
5	256QAM	1	24	18.68	18.71	18.98	20		
5	256QAM	12	0	18.66	18.74	18.87	20		
5	256QAM	12	7	18.61	18.71	18.90	20		
5	256QAM	12	13	18.53	18.63	18.83	20		
5	256QAM	25	0	18.52	18.57	18.85	20		
Channel				23025	23095	23165	Tune-up limit (dBm)		
Frequency (MHz)				700.5	707.5	714.5	Tune-up limit (dBm)		
3	QPSK	1	0	23.10	23.13	23.06	25		
3	QPSK	1	8	23.00	22.89	22.96	25		
3	QPSK	1	14	23.01	22.96	22.99	25		
3	QPSK	8	0	22.15	22.22	22.24	24		
3	QPSK	8	4	21.97	21.96	22.12	24		
3	QPSK	8	7	21.87	21.76	21.96	24		
3	QPSK	15	0	21.70	21.70	21.83	24		
3	16QAM	1	0	22.19	22.09	22.35	24		
3	16QAM	1	8	22.03	21.96	22.17	24		
3	16QAM	1	14	21.93	21.88	21.98	24		
3	16QAM	8	0	21.17	21.20	21.23	23		
3	16QAM	8	4	21.06	20.96	21.13	23		
3	16QAM	8	7	20.84	20.84	20.94	23		
3	16QAM	15	0	20.69	20.74	20.73	23		
3	64QAM	1	0	21.27	21.33	21.44	23		
3	64QAM	1	8	21.17	21.25	21.43	23		
3	64QAM	1	14	21.18	21.18	21.34	23		
3	64QAM	8	0	20.44	20.56	20.76	22		
3	64QAM	8	4	20.38	20.49	20.65	22		
3	64QAM	8	7	20.34	20.40	20.58	22		
3	64QAM	15	0	20.36	20.36	20.56	22		
3	256QAM	1	0	18.73	18.69	19.01	20		
3	256QAM	1	8	18.65	18.70	18.92	20		
3	256QAM	1	14	18.64	18.65	18.93	20		
3	256QAM	8	0	18.57	18.68	18.81	20		
3	256QAM	8	4	18.58	18.66	18.83	20		
3	256QAM	8	7	18.44	18.58	18.76	20		
3	256QAM	15	0	18.45	18.51	18.78	20		
Channel				23017	23095	23173	Tune-up limit (dBm)		
Frequency (MHz)				699.7	707.5	715.3	Tune-up limit (dBm)		
1.4	QPSK	1	0	23.11	23.12	23.07	25		
1.4	QPSK	1	3	22.99	22.91	22.95	25		
1.4	QPSK	1	5	23.01	22.91	22.98	25		
1.4	QPSK	3	0	22.14	22.21	22.22	24		
1.4	QPSK	3	1	21.92	21.93	22.10	24		
1.4	QPSK	3	3	21.87	21.78	21.96	24		
1.4	QPSK	6	0	21.71	21.65	21.79	24		
1.4	16QAM	1	0	22.18	22.11	22.32	24		
1.4	16QAM	1	3	22.06	22.00	22.18	24		

Band 13(700MHz Band) (dBm) Part 27F									
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)		
Channel				23200	23230	23260	Tune-up limit (dBm)		
Frequency (MHz)				762	762	762	Tune-up limit (dBm)		
10	QPSK	1	0	23.25	23.29	23.26	25		
10	QPSK	1	25	23.07	23.20	23.10	25		
10	QPSK	1	49	23.10	23.06	23.07	25		
10	QPSK	25	0	22.27	22.55	22.55	24		
10	QPSK	25	12	22.08	22.44	22.44	24		
10	QPSK	25	25	21.97	22.29	22.29	24		
10	QPSK	50	0	21.83	22.17	22.17	24		
10	16QAM	1	0	22.32	22.56	22.56	24		
10	16QAM	1	25	22.16	22.45	22.45	24		
10	16QAM	1	49	22.03	22.28	22.28	24		
10	16QAM	25	0	21.27	21.54	21.54	23		
10	16QAM	25	12	21.16	21.37	21.37	23		
10	16QAM	25	25	20.98	21.18	21.18	23		
10	16QAM	50	0	20.77	21.04	21.04	23		
10	64QAM	1	0	21.36	21.65	21.65	23		
10	64QAM	1	25	21.30	21.59	21.59	23		
10	64QAM	1	49	21.29	21.58	21.58	23		
10	64QAM	25	0	20.58	20.94	20.94	22		
10	64QAM	25	12	20.51	20.86	20.86	22		
10	64QAM	25	25	20.48	20.84	20.84	22		
10	64QAM	50	0	20.48	20.77	20.77	22		
10	256QAM	1	0	18.87	19.18	19.18	20		
10	256QAM	1	25	18.80	19.17	19.17	20		
10	256QAM	1	49	18.75	19.11	19.11	20		
10	256QAM	25	0	18.70	19.09	19.09	20		
10	256QAM	25	12	18.66	19.01	19.01	20		
10	256QAM	25	25	18.61	18.95	18.95	20		
10	256QAM	50	0	18.58	18.94	18.94	20		
Channel				23205	23230	23255	Tune-up limit (dBm)		
Frequency (MHz)				779.5	782	784.5	Tune-up limit (dBm)		
5	QPSK	1	0	23.32	23.24	23.26	25		
5	QPSK	1	12	23.25	23.15	23.11	25		
5	QPSK	1	24	23.12	23.05	23.06	25		
5	QPSK	12	0	22.54	22.50	22.49	24		
5	QPSK	12	7	22.42	22.39	22.30	24		
5	QPSK	12	13	22.24	22.24	22.18	24		
5	QPSK	25	0	22.11	22.12	22.04	24		
5	16QAM	1	0	22.52	22.51	22.52	24		
5	16QAM	1	12	22.38	22.40	22.42	24		
5	16QAM	1	24	22.27	22.23	22.29	24		
5	16QAM	12	0	21.60	21.49	21.63	23		
5	16QAM	12	7	21.45	21.32	21.43	23		
5	16QAM	12	13	21.26	21.13	21.24	23		



1.4	16QAM	1	5	21.89	21.87	21.96	24
1.4	16QAM	3	0	21.19	21.21	21.21	
1.4	16QAM	3	1	21.05	20.95	21.10	
1.4	16QAM	3	3	20.83	20.86	20.94	23
1.4	16QAM	6	0	20.67	20.74	20.73	
1.4	64QAM	1	0	21.24	21.38	21.44	23
1.4	64QAM	1	3	21.15	21.27	21.38	
1.4	64QAM	1	5	21.19	21.17	21.35	
1.4	64QAM	3	0	20.41	20.54	20.73	
1.4	64QAM	3	1	20.36	20.49	20.64	
1.4	64QAM	3	3	20.37	20.42	20.59	
1.4	64QAM	6	0	20.38	20.33	20.61	22
1.4	256QAM	1	0	18.77	18.73	19.04	20
1.4	256QAM	1	3	18.65	18.67	18.92	
1.4	256QAM	1	5	18.59	18.66	18.89	
1.4	256QAM	3	0	18.61	18.70	18.81	
1.4	256QAM	3	1	18.52	18.64	18.87	
1.4	256QAM	3	3	18.45	18.57	18.75	
1.4	256QAM	6	0	18.47	18.53	18.78	20



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	23.21	23.25	23.18	25
10	QPSK	1	25	23.10	23.05	23.11	
10	QPSK	1	49	23.04	23.10	23.05	
10	QPSK	25	0	22.51	22.52	22.41	24
10	QPSK	25	12	22.38	22.18	22.21	
10	QPSK	25	25	22.20	22.07	22.01	
10	QPSK	50	0	22.08	22.09	21.88	24
10	16QAM	1	0	22.53	22.40	22.28	
10	16QAM	1	25	22.32	22.28	22.11	
10	16QAM	1	49	22.15	22.07	21.95	23
10	16QAM	25	0	21.45	21.31	21.21	
10	16QAM	25	12	21.27	21.21	21.01	
10	16QAM	25	25	21.13	21.03	20.79	23
10	16QAM	50	0	21.02	20.89	20.58	
10	64QAM	1	0	21.61	21.53	21.18	
10	64QAM	1	25	21.61	21.50	21.11	23
10	64QAM	1	49	21.55	21.49	21.11	
10	64QAM	25	0	20.91	20.80	20.42	
10	64QAM	25	12	20.84	20.79	20.39	22
10	64QAM	25	25	20.80	20.79	20.36	
10	64QAM	50	0	20.76	20.76	20.30	
10	256QAM	1	0	19.17	19.18	18.73	20
10	256QAM	1	25	19.10	19.11	18.70	
10	256QAM	1	49	19.03	19.04	18.66	
10	256QAM	25	0	19.00	19.04	18.63	20
10	256QAM	25	12	18.94	18.98	18.63	
10	256QAM	25	25	18.89	18.96	18.60	
10	256QAM	50	0	18.89	18.89	18.60	
Channel				23755	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.13	23.18	23.12	25
5	QPSK	1	12	23.06	23.00	23.05	
5	QPSK	1	24	23.01	23.06	22.98	
5	QPSK	12	0	22.42	22.27	22.34	24
5	QPSK	12	7	22.30	22.12	22.14	
5	QPSK	12	13	22.13	22.00	21.92	
5	QPSK	25	0	22.04	21.82	21.79	24
5	16QAM	1	0	22.47	22.34	22.24	
5	16QAM	1	12	22.27	22.20	22.05	
5	16QAM	1	24	22.09	22.00	21.90	23
5	16QAM	12	0	21.36	21.25	21.16	
5	16QAM	12	7	21.20	21.17	20.95	
5	16QAM	12	13	21.08	20.96	20.72	23
5	16QAM	25	0	20.95	20.85	20.50	
5	64QAM	1	0	21.57	21.45	21.12	
5	64QAM	1	12	21.54	21.44	21.04	23
5	64QAM	1	24	21.46	21.41	21.03	
5	64QAM	12	0	20.88	20.74	20.35	
5	64QAM	12	7	20.78	20.74	20.36	22
5	64QAM	12	13	20.75	20.74	20.29	
5	64QAM	25	0	20.71	20.69	20.21	
5	256QAM	1	0	19.12	19.09	18.69	20
5	256QAM	1	12	19.03	19.04	18.61	
5	256QAM	1	24	18.98	18.99	18.58	
5	256QAM	12	0	18.94	18.96	18.59	20
5	256QAM	12	7	18.89	18.93	18.58	
5	256QAM	12	13	18.81	18.87	18.57	
5	256QAM	25	0	18.84	18.85	18.57	

Band 25 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	23.58	23.67	23.64	25
20	QPSK	1	49	23.43	23.51	23.52	
20	QPSK	1	99	23.22	23.41	23.42	
20	QPSK	50	0	22.41	22.68	22.67	24
20	QPSK	50	24	22.30	22.43	22.49	
20	QPSK	50	50	22.17	22.23	22.27	
20	QPSK	100	0	22.02	22.08	22.06	24
20	16QAM	1	0	22.63	22.75	22.69	
20	16QAM	1	49	22.52	22.60	22.51	
20	16QAM	1	99	22.34	22.49	22.36	23
20	16QAM	50	0	21.66	21.80	21.63	
20	16QAM	50	24	21.54	21.69	21.52	
20	16QAM	50	50	21.33	21.55	21.31	23
20	16QAM	100	0	21.14	21.42	21.21	
20	64QAM	1	0	21.74	22.06	21.74	
20	64QAM	1	49	21.68	21.99	21.66	23
20	64QAM	1	99	21.62	21.98	21.63	
20	64QAM	50	0	20.96	21.31	20.94	
20	64QAM	50	24	20.91	21.30	20.87	22
20	64QAM	50	50	20.90	21.26	20.84	
20	64QAM	100	0	20.83	21.24	20.80	
20	256QAM	1	0	19.28	19.67	19.22	20
20	256QAM	1	49	19.24	19.62	19.18	
20	256QAM	1	99	19.20	19.60	19.13	
20	256QAM	50	0	19.18	19.56	19.11	20
20	256QAM	50	24	19.12	19.52	19.09	
20	256QAM	50	50	19.09	19.47	19.03	
20	256QAM	100	0	19.04	19.44	19.02	
Channel				26115	26365	26615	
Frequency (MHz)				1857.5	1882.5	1907.5	
15	QPSK	1	0	23.50	23.60	23.56	25
15	QPSK	1	37	23.39	23.48	23.45	
15	QPSK	1	74	23.16	23.34	23.34	
15	QPSK	36	0	22.32	22.53	22.59	24
15	QPSK	36	20	22.22	22.35	22.44	
15	QPSK	36	39	22.09	22.16	22.21	
15	QPSK	75	0	21.93	22.04	21.99	24
15	16QAM	1	0	22.55	22.72	22.66	
15	16QAM	1	37	22.46	22.54	22.44	
15	16QAM	1	74	22.25	22.45	22.28	23
15	16QAM	36	0	21.60	21.73	21.55	
15	16QAM	36	20	21.46	21.63	21.45	
15	16QAM	36	39	21.29	21.47	21.23	23
15	16QAM	75	0	21.05	21.38	21.12	
15	64QAM	1	0	21.66	22.03	21.68	
15	64QAM	1	37	21.62	21.94	21.60	23
15	64QAM	1	74	21.55	21.91	21.54	
15	64QAM	36	0	20.92	21.25	20.88	
15	64QAM	36	20	20.86	21.22	20.81	22
15	64QAM	36	39	20.86	21.20	20.76	
15	64QAM	75	0	20.75	21.17	20.73	
15	256QAM	1	0	19.24	19.64	19.18	20
15	256QAM	1	37	19.17	19.56	19.11	
15	256QAM	1	74	19.14	19.55	19.09	
15	256QAM	36	0	19.12	19.47	19.07	20
15	256QAM	36	20	19.06	19.47	19.05	
15	256QAM	36	39	19.05	19.42	18.97	
15	256QAM	75	0	19.00	19.40	18.95	
Channel				26090	26365	26640	
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	23.45	23.57	23.52	25
10	QPSK	1	25	23.36	23.44	23.38	
10	QPSK	1	49	23.10	23.26	23.29	
10	QPSK	25	0	22.23	22.46	22.55	24
10	QPSK	25	12	22.17	22.27	22.37	
10	QPSK	25	25	22.04	22.08	22.16	
10	QPSK	50	0	21.86	21.98	21.95	24
10	16QAM	1	0	22.48	22.64	22.60	
10	16QAM	1	25	22.38	22.49	22.36	
10	16QAM	1	49	22.17	22.40	22.22	23
10	16QAM	25	0	21.56	21.68	21.50	
10	16QAM	25	12	21.43	21.57	21.37	
10	16QAM	25	25	21.23	21.42	21.16	23
10	16QAM	50	0	20.97	21.30	21.08	
10	64QAM	1	0	21.63	21.98	21.62	
10	64QAM	1	25	21.57	21.90	21.56	23
10	64QAM	1	49	21.50	21.85	21.50	
10	64QAM	25	0	20.85	21.22	20.80	
10	64QAM	25	12	20.78	21.16	20.75	22
10	64QAM	25	25	20.78	21.15	20.69	
10	64QAM	50	0	20.70	21.13	20.66	
10	256QAM	1	0	19.20	19.56	19.13	20
10	256QAM	1	25	19.09	19.48	19.05	
10	256QAM	1	49	19.09	19.46	19.05	
10	256QAM	25	0	19.07	19.43	19.01	20
10	256QAM	25	12	19.03	19.43	18.98	
10	256QAM	25	25	18.96	19.34	18.94	
10	256QAM	50	0	18.93	19.33	18.89	
Channel				26065	26365	26665	
Frequency (MHz)				1852.5	1882.5	1912.5	
5	QPSK	1	0	23.47	23.57	23.50	25
5	QPSK	1	12	23.30	23.42	23.39	
5	QPSK	1	24	23.12	23.28	23.29	
5	QPSK	12	0	22.28	22.45	22.53	24
5	QPSK	12	7	22.18	22.29	22.37	
5	QPSK	12	13	22.04	22.13	22.16	
5	QPSK	25	0	21.85	21.99	21.94	24
5	16QAM	1	0	22.50	2		



5	16QAM	1	24	22.20	22.38	22.19	23
5	16QAM	12	0	21.57	21.69	21.50	
5	16QAM	12	7	21.41	21.56	21.38	
5	16QAM	12	13	21.23	21.43	21.16	
5	16QAM	25	0	20.99	21.30	21.05	23
5	64QAM	1	0	21.58	22.00	21.63	
5	64QAM	1	12	21.54	21.86	21.51	
5	64QAM	1	24	21.51	21.83	21.46	22
5	64QAM	12	0	20.87	21.18	20.82	
5	64QAM	12	7	20.82	21.13	20.77	
5	64QAM	12	13	20.79	21.17	20.72	20
5	64QAM	25	0	20.66	21.09	20.69	
5	256QAM	1	0	19.16	19.58	19.13	
5	256QAM	1	12	19.10	19.47	19.04	20
5	256QAM	1	24	19.11	19.52	19.06	
5	256QAM	12	0	19.05	19.44	18.99	
5	256QAM	12	7	19.03	19.38	18.97	20
5	256QAM	12	13	19.00	19.35	18.91	
5	256QAM	25	0	18.95	19.32	18.89	
Channel				26056	26366	26676	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1882.5	1913.5	
3	QPSK	1	0	23.46	23.53	23.48	25
3	QPSK	1	8	23.35	23.41	23.37	
3	QPSK	1	14	23.10	23.29	23.28	
3	QPSK	8	0	22.26	22.48	22.51	24
3	QPSK	8	4	22.14	22.29	22.38	
3	QPSK	8	7	22.02	22.09	22.14	
3	QPSK	15	0	21.88	21.97	21.93	24
3	16QAM	1	0	22.50	22.64	22.58	
3	16QAM	1	8	22.37	22.46	22.39	
3	16QAM	1	14	22.18	22.40	22.19	23
3	16QAM	8	0	21.55	21.65	21.49	
3	16QAM	8	4	21.42	21.58	21.36	
3	16QAM	8	7	21.23	21.44	21.19	23
3	16QAM	15	0	20.98	21.30	21.06	
3	64QAM	1	0	21.57	22.00	21.64	
3	64QAM	1	8	21.58	21.88	21.53	23
3	64QAM	1	14	21.52	21.82	21.46	
3	64QAM	8	0	20.85	21.17	20.81	
3	64QAM	8	4	20.80	21.17	20.77	22
3	64QAM	8	7	20.82	21.14	20.70	
3	64QAM	15	0	20.70	21.12	20.68	
3	256QAM	1	0	19.20	19.59	19.12	20
3	256QAM	1	8	19.09	19.51	19.06	
3	256QAM	1	14	19.10	19.47	19.06	
3	256QAM	8	0	19.04	19.40	18.99	20
3	256QAM	8	4	18.99	19.44	18.97	
3	256QAM	8	7	18.96	19.33	18.93	
3	256QAM	15	0	18.95	19.36	18.89	Tune-up limit (dBm)
Channel				26047	26366	26683	
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	23.41	23.57	23.50	25
1.4	QPSK	1	3	23.32	23.40	23.41	
1.4	QPSK	1	5	23.10	23.29	23.27	
1.4	QPSK	3	0	22.29	22.45	22.52	
1.4	QPSK	3	1	22.14	22.28	22.38	
1.4	QPSK	3	3	22.02	22.09	22.16	24
1.4	QPSK	6	0	21.89	21.97	21.93	
1.4	16QAM	1	0	22.48	22.66	22.63	
1.4	16QAM	1	3	22.40	22.48	22.40	23
1.4	16QAM	1	5	22.20	22.36	22.21	
1.4	16QAM	3	0	21.56	21.66	21.49	
1.4	16QAM	3	1	21.40	21.57	21.39	22
1.4	16QAM	3	3	21.23	21.41	21.15	
1.4	16QAM	6	0	21.02	21.31	21.08	
1.4	64QAM	1	0	21.63	21.96	21.61	23
1.4	64QAM	1	3	21.59	21.88	21.52	
1.4	64QAM	1	5	21.50	21.86	21.51	
1.4	64QAM	3	0	20.87	21.21	20.85	
1.4	64QAM	3	1	20.78	21.14	20.73	
1.4	64QAM	3	3	20.82	21.11	20.69	
1.4	64QAM	6	0	20.72	21.14	20.66	22
1.4	256QAM	1	0	19.19	19.57	19.10	
1.4	256QAM	1	3	19.10	19.51	19.05	
1.4	256QAM	1	5	19.10	19.50	19.01	20
1.4	256QAM	3	0	19.08	19.41	19.00	
1.4	256QAM	3	1	19.02	19.43	18.99	
1.4	256QAM	3	3	18.97	19.39	18.91	
1.4	256QAM	6	0	18.93	19.34	18.87	20



Band 26 for FCC (dBm) (only on channel required)							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	23.51	23.55	23.51	25
15	QPSK	1	37	23.37	23.33	23.40	
15	QPSK	1	74	23.26	23.26	23.26	
15	QPSK	36	0	22.68	22.75	22.73	24
15	QPSK	36	20	22.58	22.62	22.63	
15	QPSK	36	39	22.46	22.51	22.47	
15	QPSK	75	0	22.31	22.36	22.32	24
15	16QAM	1	0	22.77	22.79	22.72	
15	16QAM	1	37	22.61	22.58	22.51	
15	16QAM	1	74	22.40	22.40	22.40	23
15	16QAM	36	0	21.70	21.64	21.73	
15	16QAM	36	20	21.52	21.45	21.51	
15	16QAM	36	39	21.30	21.26	21.31	23
15	16QAM	75	0	21.18	21.08	21.11	
15	64QAM	1	0	21.73	21.63	21.72	
15	64QAM	1	37	21.70	21.61	21.65	23
15	64QAM	1	74	21.67	21.58	21.64	
15	64QAM	36	0	20.97	20.91	20.95	
15	64QAM	36	20	20.92	20.91	20.93	22
15	64QAM	36	39	20.91	20.90	20.90	
15	64QAM	75	0	20.89	20.85	20.89	
15	256QAM	1	0	19.26	19.23	19.34	20
15	256QAM	1	37	19.24	19.19	19.30	
15	256QAM	1	74	19.18	19.11	19.30	
15	256QAM	36	0	19.13	19.08	19.27	20
15	256QAM	36	20	19.07	19.03	19.21	
15	256QAM	36	39	19.02	18.99	19.18	
15	256QAM	75	0	19.02	18.94	19.16	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.46	23.49	23.48	25
10	QPSK	1	25	23.30	23.29	23.34	
10	QPSK	1	49	23.23	23.21	23.18	
10	QPSK	25	0	22.64	22.66	22.65	24
10	QPSK	25	12	22.49	22.55	22.60	
10	QPSK	25	25	22.39	22.45	22.43	
10	QPSK	50	0	22.27	22.32	22.26	24
10	16QAM	1	0	22.70	22.72	22.63	
10	16QAM	1	25	22.56	22.51	22.44	
10	16QAM	1	49	22.32	22.34	22.33	23
10	16QAM	25	0	21.67	21.56	21.67	
10	16QAM	25	12	21.49	21.37	21.46	
10	16QAM	25	25	21.27	21.19	21.27	23
10	16QAM	50	0	21.10	21.00	21.05	
10	64QAM	1	0	21.65	21.58	21.64	
10	64QAM	1	25	21.64	21.57	21.62	23
10	64QAM	1	49	21.59	21.50	21.55	
10	64QAM	25	0	20.92	20.83	20.91	
10	64QAM	25	12	20.88	20.86	20.89	22
10	64QAM	25	25	20.86	20.84	20.87	
10	64QAM	50	0	20.85	20.80	20.82	
10	256QAM	1	0	19.22	19.18	19.29	20
10	256QAM	1	25	19.18	19.10	19.23	
10	256QAM	1	49	19.11	19.07	19.22	
10	256QAM	25	0	19.09	18.99	19.24	20
10	256QAM	25	12	18.99	19.00	19.14	
10	256QAM	25	25	18.94	18.90	19.13	
10	256QAM	50	0	18.94	18.91	19.11	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	23.38	23.43	23.41	25
5	QPSK	1	12	23.26	23.24	23.28	
5	QPSK	1	24	23.19	23.17	23.09	
5	QPSK	12	0	22.59	22.59	22.58	24
5	QPSK	12	7	22.42	22.51	22.57	
5	QPSK	12	13	22.34	22.38	22.34	
5	QPSK	25	0	22.19	22.27	22.22	24
5	16QAM	1	0	22.64	22.64	22.60	
5	16QAM	1	12	22.49	22.44	22.36	
5	16QAM	1	24	22.24	22.29	22.26	23
5	16QAM	12	0	21.64	21.52	21.64	
5	16QAM	12	7	21.42	21.34	21.40	
5	16QAM	12	13	21.22	21.12	21.20	23
5	16QAM	25	0	21.06	20.94	20.98	
5	64QAM	1	0	21.58	21.50	21.55	
5	64QAM	1	12	21.55	21.49	21.54	23
5	64QAM	1	24	21.53	21.44	21.49	
5	64QAM	12	0	20.87	20.78	20.84	
5	64QAM	12	7	20.83	20.78	20.83	22
5	64QAM	12	13	20.83	20.76	20.83	
5	64QAM	25	0	20.81	20.75	20.78	
5	256QAM	1	0	19.14	19.10	19.22	20
5	256QAM	1	12	19.13	19.06	19.20	
5	256QAM	1	24	19.04	19.00	19.15	
5	256QAM	12	0	19.02	18.94	19.15	20
5	256QAM	12	7	18.95	18.95	19.09	
5	256QAM	12	13	18.90	18.84	19.07	
5	256QAM	25	0	18.87	18.82	19.03	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	23.38	23.44	23.41	25
3	QPSK	1	8	23.24	23.24	23.26	
3	QPSK	1	14	23.16	23.18	23.10	
3	QPSK	8	0	22.60	22.63	22.60	24
3	QPSK	8	4	22.43	22.50	22.56	
3	QPSK	8	7	22.35	22.36	22.35	
3	QPSK	15	0	22.22	22.26	22.23	24
3	16QAM	1	0	22.66	22.69	22.56	
3	16QAM	1	8	22.53	22.45	22.37	



3	16QAM	1	14	22.27	22.30	22.26	
3	16QAM	8	0	21.61	21.51	21.60	23
3	16QAM	8	4	21.41	21.32	21.43	
3	16QAM	8	7	21.18	21.16	21.23	
3	16QAM	15	0	21.04	20.96	21.02	
3	64QAM	1	0	21.57	21.50	21.61	
3	64QAM	1	8	21.57	21.52	21.59	23
3	64QAM	1	14	21.52	21.44	21.46	
3	64QAM	8	0	20.83	20.77	20.87	22
3	64QAM	8	4	20.82	20.78	20.80	
3	64QAM	8	7	20.81	20.77	20.78	
3	64QAM	15	0	20.81	20.73	20.73	
3	256QAM	1	0	19.17	19.10	19.25	20
3	256QAM	1	8	19.11	19.02	19.17	
3	256QAM	1	14	19.07	19.02	19.13	
3	256QAM	8	0	19.02	18.91	19.20	20
3	256QAM	8	4	18.95	18.95	19.08	
3	256QAM	8	7	18.86	18.83	19.07	
3	256QAM	15	0	18.86	18.84	19.04	
Channel				26897	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	23.40	23.43	23.44	25
1.4	QPSK	1	3	23.24	23.23	23.27	
1.4	QPSK	1	5	23.18	23.16	23.12	
1.4	QPSK	3	0	22.59	22.62	22.61	
1.4	QPSK	3	1	22.42	22.47	22.56	
1.4	QPSK	3	3	22.31	22.38	22.36	
1.4	QPSK	6	0	22.20	22.27	22.19	24
1.4	16QAM	1	0	22.64	22.69	22.55	24
1.4	16QAM	1	3	22.53	22.46	22.35	
1.4	16QAM	1	5	22.28	22.27	22.25	
1.4	16QAM	3	0	21.59	21.51	21.59	
1.4	16QAM	3	1	21.41	21.29	21.39	
1.4	16QAM	3	3	21.22	21.15	21.22	
1.4	16QAM	6	0	21.02	20.92	20.97	23
1.4	64QAM	1	0	21.57	21.53	21.56	
1.4	64QAM	1	3	21.57	21.49	21.56	23
1.4	64QAM	1	5	21.54	21.46	21.51	
1.4	64QAM	3	0	20.85	20.79	20.83	
1.4	64QAM	3	1	20.83	20.80	20.84	
1.4	64QAM	3	3	20.81	20.77	20.78	
1.4	64QAM	6	0	20.78	20.75	20.76	
1.4	256QAM	1	0	19.17	19.14	19.20	22
1.4	256QAM	1	3	19.12	19.06	19.17	
1.4	256QAM	1	5	19.03	19.01	19.14	
1.4	256QAM	3	0	19.05	18.92	19.17	
1.4	256QAM	3	1	18.93	18.96	19.08	
1.4	256QAM	3	3	18.89	18.85	19.05	
1.4	256QAM	6	0	18.85	18.84	19.03	20

Band 38(only on channel required) (dBm)												
BW (kHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)					
Channel				37850	38000	38150						
Frequency (MHz)				2595	2595	2610						
20	QPSK	1	0	23.31	23.32	23.23	25					
20	QPSK	1	49	23.19	23.08	23.07						
20	QPSK	1	99	23.01	22.90	22.84						
20	QPSK	50	0	22.21	22.22	22.18	24					
20	QPSK	50	24	22.10	21.99	22.00						
20	QPSK	50	50	21.94	21.87	21.84						
20	QPSK	100	0	21.81	21.82	21.64	24					
20	16QAM	1	0	22.42	22.41	22.33						
20	16QAM	1	49	22.23	22.24	22.14						
20	16QAM	1	99	22.02	22.13	21.94	23					
20	16QAM	50	0	21.36	21.38	21.18						
20	16QAM	50	24	21.18	21.20	21.04						
20	16QAM	50	50	20.97	21.09	20.83	23					
20	16QAM	100	0	20.76	20.97	20.63						
20	64QAM	1	0	21.31	21.37	21.26						
20	64QAM	1	49	21.24	21.52	21.25	22					
20	64QAM	1	99	21.17	21.90	21.21						
20	64QAM	50	0	20.50	20.85	20.52						
20	64QAM	50	24	20.44	20.79	20.45	20					
20	64QAM	50	50	20.40	20.75	20.40						
20	64QAM	100	0	20.37	20.72	20.39						
20	256QAM	1	0	18.80	18.11	18.82	20					
20	256QAM	1	49	18.76	18.08	18.77						
20	256QAM	1	99	18.72	18.02	18.71						
20	256QAM	50	0	18.70	18.94	18.69	20					
20	256QAM	50	24	18.67	18.93	18.64						
20	256QAM	50	50	18.62	18.87	18.64						
20	256QAM	100	0	18.60	18.79	18.61						
Channel				37825	38000	38175				Tune-up limit (dBm)		
Frequency (MHz)				2577.5	2595	2612.5						
15	QPSK	1	0	23.28	23.24	23.18	25					
15	QPSK	1	37	23.10	23.03	23.02						
15	QPSK	1	74	22.95	22.87	22.88						
15	QPSK	36	0	22.18	22.11	22.14	24					
15	QPSK	36	20	22.07	21.94	21.97						
15	QPSK	36	39	21.86	21.79	21.78						
15	QPSK	75	0	21.77	21.73	21.58	24					
15	16QAM	1	0	22.35	22.34	22.29						
15	16QAM	1	37	22.15	22.16	22.06						
15	16QAM	1	74	21.95	22.09	21.88	23					
15	16QAM	36	0	21.28	21.30	21.15						
15	16QAM	36	20	21.13	21.13	20.98						
15	16QAM	36	39	20.93	21.03	20.75	23					
15	16QAM	75	0	20.68	20.90	20.57						
15	64QAM	1	0	21.23	21.52	21.21						
15	64QAM	1	37	21.16	21.49	21.21	23					
15	64QAM	1	74	21.13	21.42	21.13						
15	64QAM	36	0	20.47	20.81	20.48						
15	64QAM	36	20	20.38	20.71	20.40	22					
15	64QAM	36	39	20.33	20.69	20.35						
15	64QAM	75	0	20.30	20.63	20.32						
15	256QAM	1	0	18.75	18.03	18.77	20					
15	256QAM	1	37	18.68	18.04	18.70						
15	256QAM	1	74	18.64	18.98	18.64						
15	256QAM	36	0	18.61	18.90	18.61	20					
15	256QAM	36	20	18.61	18.87	18.56						
15	256QAM	36	39	18.60	18.82	18.56						
15	256QAM	75	0	18.56	18.71	18.56						
Channel				37850	38000	38050				Tune-up limit (dBm)		
Frequency (MHz)				2575	2595	2615						
10	QPSK	1	0	23.22	23.17	23.15	25					
10	QPSK	1	25	23.03	22.97	22.97						
10	QPSK	1	49	22.91	22.80	22.81						
10	QPSK	25	0	22.15	22.03	22.05	24					
10	QPSK	25	12	22.04	21.89	21.91						
10	QPSK	25	25	21.82	21.73	21.70						
10	QPSK	50	0	21.69	21.69	21.53	24					
10	16QAM	1	0	22.31	22.26	22.21						
10	16QAM	1	25	22.06	22.12	22.02						
10	16QAM	1	49	21.88	22.06	21.81	23					
10	16QAM	25	0	21.22	21.22	21.11						
10	16QAM	25	12	21.07	21.10	20.90						
10	16QAM	25	25	20.85	20.99	20.68	23					
10	16QAM	50	0	20.65	20.97	20.49						
10	64QAM	1	0	21.14	21.46	21.12						
10	64QAM	1	25	21.12	21.44	21.13	23					
10	64QAM	1	49	21.08	21.33	21.08						
10	64QAM	25	0	20.43	20.76	20.41						
10	64QAM	25	12	20.30	20.63	20.32	22					
10	64QAM	25	25	20.26	20.81	20.31						
10	64QAM	50	0	20.26	20.59	20.24						
10	256QAM	1	0	18.69	18.95	18.70	20					
10	256QAM	1	25	18.65	19.01	18.64						
10	256QAM	1	49	18.58	18.92	18.60						
10	256QAM	25	0	18.52	18.85	18.57	20					
10	256QAM	25	12	18.52	18.79	18.51						
10	256QAM	25	25	18.53	18.77	18.51						
10	256QAM	50	0	18.53	18.65	18.52						
Channel				37775	38000	38225				Tune-up limit (dBm)		
Frequency (MHz)				2572.5	2595	2617.5						
5	QPSK	1	0	23.24	23.20	23.11	25					
5	QPSK	1	12	23.02	22.97	22.95						
5	QPSK	1	24	22.86	22.82	22.81						
5	QPSK	12	0	22.14	22.03	22.09	24					
5	QPSK	12	7	22.02	21.88	21.93						
5	QPSK	12	13	21.81	21.73	21.74						
5	QPSK	25	0	21.71	21.69	21.52	24					
5	16QAM	1	0	22.27	22.29	22.22						
5	16QAM	1	12	22.07	22.09	22.03						
5	16QAM	1	24	21.92	22.02	21.81	23					
5	16QAM	12	0	21.24	21.22	21.12						
5	16QAM	12	7	21.06	21.09	20.94						
5	16QAM	12	13	20.89	20.97	20.69	23					
5	16QAM	25	0	20.59	20.81	20.49						
5	64QAM	1	0	21.18	21.45	21.12						
5	64QAM	1	12	21.10	21.44	21.17	23					
5	64QAM	1	24	21.06	21.37	21.04						
5	64QAM	12	0	20.42	20.73	20.39						
5	64QAM	12	7	20.32	20.65	20.32	22					
5	64QAM	12	13	20.29	20.60	20.29						
5	64QAM	25	0	20.25	20.59	20.24						
5	256QAM	1	0	18.69	19.00	18.70	20					
5	256QAM	1	12	18.64	19.01	18.66						
5	256QAM	1	24	18.58	18.94	18.56						
5	256QAM	12	0	18.55	18.94	18.52	20					
5	256QAM	12	7	18.54	18.81	18.47						
5	256QAM	12	13	18.55	18.78	18.47						
5	256QAM	25	0	18.53	18.68	18.50						

Band 40 (2.3G Band-1) (dBm) Part 27D-1 2305MHz ~ 2315MHz							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				38750			25
Frequency (MHz)				2310			
10	QPSK	1	0	23.24	23.05	23.24	24
10	QPSK	1	25	23.05	23.05	23.05	
10	QPSK	1	49	22.93	23.05	22.93	
10	QPSK	25	0	22.38	22.17	22.38	24
10	QPSK	25	12	22.17	22.17	22.17	
10	QPSK	25	25	21.98	22.17	21.98	
10	QPSK	50	0	21.86	21.86	21.86	24
10	16QAM	1	0	22.25	22.25	22.25	
10	16QAM	1	25	22.08	22.25	22.08	
10	16QAM	1	49	21.96	22.25	21.96	23
10	16QAM	25	0	21.23	21.23	21.23	
10	16QAM	25	12	21.09	21.23	21.09	
10	16QAM	25	25	20.88	21.23	20.88	23
10	16QAM	50	0	20.77	20.77	20.77	
10	64QAM	1	0	21.31	21.31	21.31	
10	64QAM	1	25	21.24	21.31	21.24	22
10	64QAM	1	49	21.23	21.31	21.23	
10	64QAM	25	0	20.55	21.31	20.55	
10	64QAM	25	12	20.47	21.31	20.47	22
10	64QAM	25	25	20.46	21.31	20.46	
10	64QAM	50	0	20.40	20.40	20.40	
10	256QAM	1	0	18.83	18.83	18.83	20
10	256QAM	1	25	18.82	18.83	18.82	
10	256QAM	1	49	18.76	18.83	18.76	
10	256QAM	25	0	18.67	18.67	18.67	20
10	256QAM	25	12	18.67	18.67	18.67	
10	256QAM	25	25	18.59	18.67	18.59	
10	256QAM	50	0	18.58	18.58	18.58	
Channel				38725	38750	38775	25
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.18	23.10	23.13	24
5	QPSK	1	12	23.05	23.10	23.07	
5	QPSK	1	24	22.83	23.10	22.79	
5	QPSK	12	0	22.26	22.24	22.17	24
5	QPSK	12	7	22.15	22.03	21.96	
5	QPSK	12	13	22.01	21.84	21.81	
5	QPSK	25	0	21.80	21.72	21.69	24
5	16QAM	1	0	22.19	22.11	22.11	
5	16QAM	1	12	21.97	22.11	22.00	
5	16QAM	1	24	21.81	21.74	21.82	23
5	16QAM	12	0	21.14	21.09	21.11	
5	16QAM	12	7	20.98	20.95	20.95	
5	16QAM	12	13	20.88	20.74	20.83	23
5	16QAM	25	0	20.75	20.63	20.64	
5	64QAM	1	0	21.35	21.17	21.24	
5	64QAM	1	12	21.28	21.10	21.17	23
5	64QAM	1	24	21.21	21.09	21.10	
5	64QAM	12	0	20.57	20.41	20.39	
5	64QAM	12	7	20.50	20.33	20.33	22
5	64QAM	12	13	20.50	20.32	20.32	
5	64QAM	25	0	20.43	20.30	20.31	
5	256QAM	1	0	18.85	18.69	18.70	20
5	256QAM	1	12	18.83	18.68	18.64	
5	256QAM	1	24	18.79	18.62	18.61	
5	256QAM	12	0	18.72	18.59	18.58	20
5	256QAM	12	7	18.66	18.53	18.57	
5	256QAM	12	13	18.63	18.45	18.56	
5	256QAM	25	0	18.62	18.44	18.50	

Band 40 (2.3G Band-2) (dBm) Part 27D-2 2350MHz ~ 2360MHz							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				39200			25
Frequency (MHz)				2355			
10	QPSK	1	0	23.20	23.00	23.20	24
10	QPSK	1	25	23.00	23.00	23.00	
10	QPSK	1	49	22.84	23.00	22.84	
10	QPSK	25	0	22.31	22.31	22.31	24
10	QPSK	25	12	22.21	22.31	22.21	
10	QPSK	25	25	22.07	22.31	22.07	
10	QPSK	50	0	21.86	21.86	21.86	24
10	16QAM	1	0	22.28	22.28	22.28	
10	16QAM	1	25	22.08	22.28	22.08	
10	16QAM	1	49	21.96	22.28	21.96	23
10	16QAM	25	0	21.20	21.20	21.20	
10	16QAM	25	12	21.05	21.20	21.05	
10	16QAM	25	25	20.89	21.20	20.89	23
10	16QAM	50	0	20.77	20.77	20.77	
10	64QAM	1	0	21.32	21.32	21.32	
10	64QAM	1	25	21.30	21.32	21.30	23
10	64QAM	1	49	21.24	21.32	21.24	
10	64QAM	25	0	20.55	21.32	20.55	
10	64QAM	25	12	20.49	21.32	20.49	22
10	64QAM	25	25	20.46	21.32	20.46	
10	64QAM	50	0	20.45	20.45	20.45	
10	256QAM	1	0	18.87	18.87	18.87	19.5
10	256QAM	1	25	18.83	18.83	18.83	
10	256QAM	1	49	18.79	18.79	18.79	
10	256QAM	25	0	18.73	18.73	18.73	19.5
10	256QAM	25	12	18.67	18.67	18.67	
10	256QAM	25	25	18.60	18.60	18.60	
10	256QAM	50	0	18.58	18.58	18.58	
Channel				39175	39200	39225	25
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	23.04	23.00	23.07	25
5	QPSK	1	12	22.98	23.00	22.95	
5	QPSK	1	24	22.80	23.00	22.65	
5	QPSK	12	0	22.28	22.20	22.12	24
5	QPSK	12	7	22.10	22.10	22.01	
5	QPSK	12	13	21.88	21.96	21.91	
5	QPSK	25	0	21.76	21.75	21.74	24
5	16QAM	1	0	22.24	22.17	22.21	
5	16QAM	1	12	22.10	22.17	22.10	
5	16QAM	1	24	22.00	21.79	21.92	23
5	16QAM	12	0	21.31	21.09	21.18	
5	16QAM	12	7	21.13	20.94	21.05	
5	16QAM	12	13	20.94	20.78	20.87	23
5	16QAM	25	0	20.80	20.66	20.73	
5	64QAM	1	0	21.37	21.24	21.33	
5	64QAM	1	12	21.37	21.19	21.28	23
5	64QAM	1	24	21.35	21.13	21.22	
5	64QAM	12	0	20.71	20.44	20.57	
5	64QAM	12	7	20.65	20.38	20.52	22
5	64QAM	12	13	20.62	20.35	20.47	
5	64QAM	25	0	20.59	20.34	20.47	
5	256QAM	1	0	19.04	18.76	18.90	19.5
5	256QAM	1	12	18.98	18.72	18.89	
5	256QAM	1	24	18.95	18.68	18.83	
5	256QAM	12	0	18.92	18.62	18.79	19.5
5	256QAM	12	7	18.86	18.56	18.73	
5	256QAM	12	13	18.86	18.49	18.66	
5	256QAM	25	0	18.79	18.45	18.65	

Band 41 (2496-2690MHz) (dBm)										
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Turn-up limit (dBm)	
Channel										
				39750	49185	40620	41055	41490		
Frequency (MHz)										
20	QPSK	1	0	23.40	23.41	23.42	23.43	23.44	23	25
20	QPSK	1	49	23.18	23.28	23.36	23.20	23.16	23	25
20	QPSK	1	99	23.07	23.15	23.23	23.00	23.06	23	25
20	QPSK	50	0	22.45	22.57	22.67	22.42	22.52	23	24
20	QPSK	50	24	22.10	22.27	22.32	22.30	22.29	23	24
20	QPSK	50	100	22.12	22.18	22.22	22.18	22.29	23	24
20	QPSK	100	0	22.00	22.05	22.30	22.08	22.12	23	24
20	16QAM	1	0	22.44	22.46	22.76	22.57	22.61	23	24
20	16QAM	1	49	22.34	22.28	22.60	22.44	22.42	23	24
20	16QAM	1	99	22.15	22.17	22.49	22.32	22.21	23	24
20	16QAM	50	0	21.46	21.51	21.79	21.63	21.51	23	23
20	16QAM	50	24	21.34	21.40	21.68	21.41	21.34	23	23
20	16QAM	50	100	21.21	21.25	21.54	21.26	21.15	23	23
20	16QAM	100	0	21.10	21.05	21.43	21.04	21.04	23	23
20	16QAM	1	0	21.24	21.84	22.00	21.65	21.65	23	23
20	64QAM	1	49	21.74	21.56	21.84	21.57	21.58	23	23
20	64QAM	1	99	21.69	21.52	21.87	21.56	21.53	23	23
20	64QAM	50	0	21.03	20.87	21.17	20.89	20.84	23	23
20	64QAM	50	24	21.01	20.81	21.12	20.82	20.79	23	23
20	64QAM	50	100	20.94	20.76	21.06	20.70	20.78	23	23
20	64QAM	100	0	20.89	20.70	21.04	20.74	20.71	23	23
20	256QAM	1	0	19.32	19.12	19.45	19.13	19.10	20	20
20	256QAM	1	49	19.25	19.11	19.44	19.07	19.05	20	20
20	256QAM	1	99	19.23	19.06	19.37	19.04	19.06	20	20
20	256QAM	50	0	18.15	18.03	18.36	18.04	18.03	20	20
20	256QAM	50	24	18.15	18.02	18.28	18.05	18.02	20	20
20	256QAM	50	100	18.12	18.07	18.22	18.03	18.01	20	20
20	256QAM	100	0	18.11	18.06	18.15	18.05	18.06	20	20
Channel										
				39725	49173	40620	41068	41515		
Frequency (MHz)										
15	QPSK	1	0	23.05	23.06	23.43	23.31	23.33	23	25
15	QPSK	1	37	23.13	23.23	23.31	23.15	23.12	23	25
15	QPSK	1	74	23.02	23.10	23.18	22.95	23.01	23	25
15	QPSK	36	0	22.40	22.52	22.62	22.37	22.47	23	24
15	QPSK	36	20	22.25	22.32	22.47	22.25	22.25	23	24
15	QPSK	36	39	22.07	22.14	22.26	22.13	22.13	23	24
15	QPSK	75	0	21.91	22.00	22.25	22.03	22.07	23	24
15	16QAM	1	0	22.39	22.41	22.71	22.52	22.56	23	24
15	16QAM	1	37	22.29	22.23	22.55	22.39	22.37	23	24
15	16QAM	1	74	22.10	22.12	22.44	22.27	22.16	23	24
15	16QAM	36	0	21.41	21.42	21.74	21.58	21.44	23	24
15	16QAM	36	20	21.29	21.35	21.63	21.36	21.29	23	24
15	16QAM	36	39	21.16	21.20	21.49	21.21	21.10	23	24
15	16QAM	75	0	21.05	21.00	21.38	21.09	20.99	23	24
15	64QAM	1	0	21.69	21.59	21.95	21.60	21.60	23	24
15	64QAM	1	37	21.69	21.51	21.89	21.52	21.53	23	24
15	64QAM	1	74	21.64	21.47	21.82	21.51	21.48	23	24
15	64QAM	36	0	20.98	20.82	21.12	20.84	20.79	23	24
15	64QAM	36	20	20.96	20.76	21.07	20.77	20.74	23	24
15	64QAM	36	39	20.89	20.71	21.01	20.75	20.75	23	24
15	64QAM	75	0	20.84	20.65	20.99	20.69	20.66	23	24
15	256QAM	1	0	19.27	19.07	19.40	19.08	19.03	20	20
15	256QAM	1	37	19.20	19.06	19.39	19.02	19.01	20	20
15	256QAM	1	74	19.18	19.01	19.32	18.99	19.00	20	20
15	256QAM	36	0	19.11	19.00	19.29	18.92	18.98	20	20
15	256QAM	36	20	19.10	18.97	19.29	18.90	18.97	20	20
15	256QAM	36	39	19.07	18.92	19.17	18.88	18.96	20	20
15	256QAM	75	0	19.06	18.91	19.10	18.80	18.91	20	20
Channel										
				39700	49160	40620	41060	41460		
Frequency (MHz)										
10	QPSK	1	0	23.30	23.31	23.38	23.26	23.28	23	25
10	QPSK	1	25	23.08	23.18	23.26	23.10	23.06	23	25
10	QPSK	1	49	22.97	23.06	23.15	22.90	22.96	23	25
10	QPSK	25	0	22.35	22.47	22.57	22.32	22.42	23	24
10	QPSK	25	12	22.20	22.27	22.42	22.20	22.30	23	24
10	QPSK	25	25	22.02	22.09	22.31	22.08	22.19	23	24
10	QPSK	50	0	21.86	21.95	22.20	21.98	22.02	23	24
10	16QAM	1	0	22.34	22.36	22.66	22.47	22.51	23	24
10	16QAM	1	25	22.24	22.18	22.50	22.34	22.32	23	24
10	16QAM	1	49	22.05	22.07	22.39	22.22	22.11	23	24
10	16QAM	25	0	21.36	21.41	21.69	21.53	21.41	23	24
10	16QAM	25	12	21.24	21.30	21.58	21.31	21.24	23	24
10	16QAM	25	25	21.11	21.15	21.44	21.16	21.05	23	24
10	16QAM	50	0	21.00	20.95	21.33	21.04	20.94	23	24
10	64QAM	1	0	21.64	21.54	21.90	21.55	21.55	23	24
10	64QAM	1	25	21.64	21.46	21.84	21.47	21.48	23	24
10	64QAM	1	49	21.59	21.42	21.77	21.46	21.43	23	24
10	64QAM	25	0	20.93	20.77	21.07	20.79	20.74	23	24
10	64QAM	25	12	20.91	20.71	21.02	20.72	20.69	23	24
10	64QAM	25	25	20.84	20.66	20.96	20.70	20.68	23	24
10	64QAM	50	0	20.79	20.60	20.94	20.64	20.61	23	24
10	256QAM	1	0	19.22	19.02	19.35	19.03	19.00	20	20
10	256QAM	1	25	19.15	19.01	19.34	18.97	18.96	20	20
10	256QAM	1	49	19.13	18.96	19.27	18.94	18.95	20	20
10	256QAM	25	0	19.06	18.95	19.24	18.87	18.93	20	20
10	256QAM	25	12	19.05	18.92	19.18	18.85	18.92	20	20
10	256QAM	25	25	19.02	18.87	19.12	18.83	18.91	20	20
10	256QAM	50	0	18.91	18.86	19.05	18.75	18.86	20	20
Channel										
				40975	49920	41060	41500	41940		
Frequency (MHz)										
5	QPSK	1	0	23.27	23.28	23.35	23.23	23.25	23	25
5	QPSK	1	12	23.05	23.15	23.23	23.07	23.03	23	25
5	QPSK	1	24	22.94	23.02	23.10	22.87	22.93	23	25
5	QPSK	12	0	22.32	22.44	22.54	22.29	22.38	23	24
5	QPSK	12	7	22.17	22.24	22.39	22.17	22.27	23	24
5	QPSK	12	13	21.99	22.06	22.28	22.05	22.16	23	24
5	QPSK	25	0	21.83	21.92	22.17	21.95	21.99	23	24
5	16QAM	1	0	22.31	22.33	22.63	22.44	22.48	23	24
5	16QAM	1	12	22.21	22.15	22.47	22.31	22.29	23	24
5	16QAM	1	24	22.02	22.04	22.36	22.19	22.08	23	24
5	16QAM	12	0	21.33	21.38	21.66	21.50	21.38	23	24
5	16QAM	12	7	21.21	21.27	21.55	21.28	21.21	23	24
5	16QAM	12	13	21.08	21.12	21.41	21.13	21.02	23	24
5	16QAM	25	0	20.97	20.92	21.30	20.91	20.91	23	24
5	64QAM	1	0	21.61	21.51	21.87	21.52	21.52	23	24
5	64QAM	1	12	21.61	21.43	21.81	21.44	21.45	23	24
5	64QAM	1	24	21.56	21.39	21.74	21.43	21.41	23	24
5	64QAM	12	0	20.90	20.74	21.04	20.76	20.71	23	24
5	64QAM	12	7	20.88	20.69	20.99	20.69	20.66	23	24
5	64QAM	12	13	20.81	20.63	20.93	20.67	20.65	23	24
5	64QAM	25	0	20.76	20.57	20.91	20.61	20.58	23	24
5	256QAM	1	0	19.19	18.99	19.32	19.00	18.97	20	20
5	256QAM	1	12	19.12	18.95	19.31	18.94	18.93	20	20
5	256QAM	1	24	19.10	18.93	19.24	18.91	18.92	20	20
5	256QAM	12	0	19.03	18.92	19.21	18.84	18.90	20	20
5	256QAM	12	7	19.02	18.89	19.15	18.82	18.89	20	20
5	256QAM	12	13	18.99	18.84	19.09	18.80	18.83	20	20
5	256QAM	25	0	18.98	18.83	19.02	18.72	18.88	20	20

Band 42 (3.5G Band) (dBm)										
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Turn-up limit (dBm)	
Channel										
				41690	42140	42590	43040	43490		
Frequency (MHz)										
20	QPSK	1	0	23.11	23.10	23.20	23.09	23.04	23	24
20	QPSK	1	49	22.98	23.01	23.10	22.96	22.95	23	24
20	QPSK	1	99	22.83	22.94	23.04	22.89	22.83	23	24
20	QPSK	50	0	22.24	22.37	22.52	22.30	22.21	23	24
20	QPSK	50	24	22.08	22.17	22.36	22.16	22.03	23	24
20	QPSK	50	100	21.99	22.02	22.16	21.97	21.85	23	24
20	QPSK	100	0	21.73	21.88	21.99	21.87</			

Band 66 (dBm)												
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)					
Channel				132072	132322	132572						
Frequency (MHz)				1720	1745	1770						
20	QPSK	1	0	23.50	23.56	23.54	25	25	25			
20	QPSK	1	49	23.29	23.34	23.39						
20	QPSK	1	99	23.15	23.16	23.21						
20	QPSK	50	0	22.34	22.49	22.48	24	24	24			
20	QPSK	50	24	22.12	22.25	22.26						
20	QPSK	50	50	21.97	22.05	22.04						
20	QPSK	100	0	21.76	21.87	21.78	24	24	24			
20	16QAM	1	0	22.36	22.50	22.45						
20	16QAM	1	49	22.25	22.29	22.23						
20	16QAM	1	99	22.05	22.07	22.02	23	23	23			
20	16QAM	50	0	21.33	21.40	21.30						
20	16QAM	50	24	21.12	21.18	21.09						
20	16QAM	50	50	20.97	20.97	20.92	23	23	23			
20	16QAM	100	0	20.82	20.89	20.72						
20	64QAM	1	0	21.40	21.50	21.26						
20	64QAM	1	49	21.36	21.42	21.23	23	23	23			
20	64QAM	1	99	21.31	21.38	21.22						
20	64QAM	50	0	20.65	20.72	20.52						
20	64QAM	50	24	20.60	20.72	20.50	22	22	22			
20	64QAM	50	50	20.57	20.72	20.47						
20	64QAM	100	0	20.50	20.62	20.43						
20	256QAM	1	0	18.95	19.05	18.86	20	20	20			
20	256QAM	1	49	18.91	19.02	18.87						
20	256QAM	1	99	18.94	18.93	18.81						
20	256QAM	50	0	18.83	18.90	18.81	20	20	20			
20	256QAM	50	24	18.78	18.86	18.81						
20	256QAM	50	50	18.78	18.82	18.72						
20	256QAM	100	0	18.66	18.80	18.64	20	20	20			
Channel				132047	132322	132597						
Frequency (MHz)				1717.5	1745	1772.5						
15	QPSK	1	0	23.47	23.53	23.51	25	25	25			
15	QPSK	1	37	23.26	23.31	23.36						
15	QPSK	1	74	23.12	23.13	23.18						
15	QPSK	36	0	22.31	22.46	22.45	24	24	24			
15	QPSK	36	20	22.09	22.22	22.23						
15	QPSK	36	39	21.94	22.02	22.01						
15	QPSK	75	0	21.73	21.84	21.75	24	24	24			
15	16QAM	1	0	22.33	22.47	22.42						
15	16QAM	1	37	22.22	22.26	22.20						
15	16QAM	1	74	22.02	22.04	21.99	23	23	23			
15	16QAM	36	0	21.30	21.37	21.27						
15	16QAM	36	20	21.09	21.15	21.06						
15	16QAM	36	39	20.94	20.94	20.89	23	23	23			
15	16QAM	75	0	20.79	20.86	20.69						
15	64QAM	1	0	21.37	21.47	21.23						
15	64QAM	1	37	21.33	21.39	21.20	23	23	23			
15	64QAM	1	74	21.28	21.35	21.19						
15	64QAM	36	0	20.62	20.69	20.49						
15	64QAM	36	20	20.57	20.69	20.47	22	22	22			
15	64QAM	36	39	20.54	20.69	20.44						
15	64QAM	75	0	20.47	20.59	20.40						
15	256QAM	1	0	18.92	19.02	18.83	20	20	20			
15	256QAM	1	37	18.88	18.99	18.84						
15	256QAM	1	74	18.91	18.90	18.78						
15	256QAM	36	0	18.80	18.87	18.78	20	20	20			
15	256QAM	36	20	18.75	18.83	18.78						
15	256QAM	36	39	18.75	18.79	18.69						
15	256QAM	75	0	18.63	18.77	18.61	20	20	20			
Channel				132022	132322	132622						
Frequency (MHz)				1715	1745	1775						
10	QPSK	1	0	23.44	23.50	23.48	25	25	25			
10	QPSK	1	25	23.23	23.28	23.33						
10	QPSK	1	49	23.09	23.10	23.15						
10	QPSK	25	0	22.28	22.43	22.42	24	24	24			
10	QPSK	25	12	22.06	22.19	22.20						
10	QPSK	25	25	21.91	21.99	21.98						
10	QPSK	50	0	21.70	21.81	21.72	24	24	24			
10	16QAM	1	0	22.30	22.44	22.39						
10	16QAM	1	25	22.19	22.23	22.17						
10	16QAM	1	49	21.99	22.01	21.96	23	23	23			
10	16QAM	25	0	21.27	21.34	21.24						
10	16QAM	25	12	21.06	21.12	21.03						
10	16QAM	25	25	20.91	20.91	20.86	23	23	23			
10	16QAM	50	0	20.76	20.83	20.66						
10	64QAM	1	0	21.34	21.44	21.20						
10	64QAM	1	25	21.30	21.36	21.17	23	23	23			
10	64QAM	1	49	21.25	21.32	21.16						
10	64QAM	25	0	20.59	20.66	20.46						
10	64QAM	25	12	20.54	20.66	20.44	22	22	22			
10	64QAM	25	25	20.51	20.66	20.41						
10	64QAM	50	0	20.44	20.56	20.37						
10	256QAM	1	0	18.89	18.99	18.80	20	20	20			
10	256QAM	1	25	18.85	18.96	18.81						
10	256QAM	1	49	18.88	18.87	18.75						
10	256QAM	25	0	18.77	18.84	18.75	20	20	20			
10	256QAM	25	12	18.72	18.80	18.75						
10	256QAM	25	25	18.72	18.76	18.66						
10	256QAM	50	0	18.60	18.74	18.58	20	20	20			
Channel				131997	132322	132647						
Frequency (MHz)				1712.5	1745	1777.5						
5	QPSK	1	0	23.41	23.47	23.45	25	25	25			
5	QPSK	1	12	23.20	23.25	23.30						
5	QPSK	1	24	23.06	23.07	23.12						
5	QPSK	12	0	22.25	22.40	22.39	24	24	24			
5	QPSK	12	7	22.03	22.16	22.17						
5	QPSK	12	13	21.88	21.96	21.95						
5	QPSK	25	0	21.67	21.78	21.69	24	24	24			
5	16QAM	1	0	22.27	22.41	22.36						
5	16QAM	1	12	22.16	22.20	22.14						

Band 71 (dBm)												
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)					
Channel				133222	133322	133372						
Frequency (MHz)				673	683	688						
20	QPSK	1	0	23.13	23.22	23.18	25	25	25			
20	QPSK	1	49	23.05	23.10	23.06						
20	QPSK	1	99	22.89	23.04	23.01						
20	QPSK	50	0	22.36	22.54	22.41	24	24	24			
20	QPSK	50	24	22.19	22.40	22.18						
20	QPSK	50	50	22.06	22.19	22.05						
20	QPSK	100	0	21.86	22.07	21.94	24	24	24			
20	16QAM	1	0	22.25	22.50	22.38						
20	16QAM	1	49	22.03	22.32	22.17						
20	16QAM	1	99	21.84	22.15	22.02	23	23	23			
20	16QAM	50	0	21.16	21.41	21.29						
20	16QAM	50	24	20.95	21.20	21.19						
20	16QAM	50	50	20.77	21.09	21.02	23	23	23			
20	16QAM	100	0	20.60	20.88	20.83						
20	64QAM	1	0	21.14	21.43	21.37						
20	64QAM	1	49	21.08	21.41	21.32	23	23	23			
20	64QAM	1	99	21.01	21.38	21.31						
20	64QAM	50	0	20.30	20.73	20.66						
20	64QAM	50	24	20.29	20.66	20.58	22	22	22			
20	64QAM	50	50	20.22	20.64	20.55						
20	64QAM	100	0	20.19	20.59	20.53						
20	256QAM	1	0	18.57	19.01	18.92	20	20	20			
20	256QAM	1	49	18.52	19.00	18.90						
20	256QAM	1	99	18.51	18.94	18.87						
20	256QAM	50	0	18.45	18.86	18.82	20	20	20			
20	256QAM	50	24	18.38	18.85	18.74						
20	256QAM	50	50	18.38	18.81	18.74						
20	256QAM	100	0	18.31	18.73	18.70	20	20	20			
Channel				133197	133297	133397						
Frequency (MHz)				670.5	680.5	690.5						
15	QPSK	1	0	23.04	23.14	23.15	25	25	25			
15	QPSK	1	37	23.02	23.04	22.98						
15	QPSK	1	74	22.84	22.95	22.93						
15	QPSK	36	0	22.29	22.50	22.31	24	24	24			
15	QPSK	36	20	22.14	22.35	22.10						
15	QPSK	36	39	21.97	22.10	22.00						
15	QPSK	75	0	21.82	22.03	21.85	24	24	24			
15	16QAM	1	0	22.17	22.46	22.32						
15	16QAM	1	37	21.96	22.27	22.12						
15	16QAM	1	74	21.77	22.07	21.95	23	23	23			
15	16QAM	36	0	21.08	21.35	21.22						
15	16QAM	36	20	20.86	21.13	21.14						
15	16QAM	36	39	20.73	21.03	20.95	23	23	23			
15	16QAM	75	0	20.54	20.81	20.76						
15	64QAM	1	0	21.09	21.35	21.31						
15	64QAM	1	37	21.04	21.37	21.24	23	23	23			
15	64QAM	1	74	20.98	21.33	21.28						
15	64QAM	36	0	20.22	20.69	20.58						
15	64QAM	36	20	20.23	20.59	20.51	22	22	22			
15	64QAM	36	39	20.19	20.56	20.51						
15	64QAM	75	0	20.10	20.50	20.44						
15	256QAM	1	0	18.49	18.94	18.85	20	20	20			
15	256QAM	1	37	18.44	18.92	18.85						
15	256QAM	1	74	18.48	18.86	18.80						
15	256QAM	36	0	18.36	18.80	18.77	20	20	20			
15	256QAM	36	20	18.34	18.78	18.71						
15	256QAM	36	39	18.30	18.76	18.68						
15	256QAM	75	0	18.28	18.66	18.66	20	20	20			
Channel				133172	133272	133422						
Frequency (MHz)				668	678	693						
10	QPSK	1	0	22.99	23.08	23.08	25	25	25			

5	16QAM	1	24	21.96	21.98	21.93	
5	16QAM	12	0	21.24	21.31	21.21	
5	16QAM	12	7	21.03	21.09	21.00	
5	16QAM	12	13	20.88	20.88	20.83	
5	16QAM	25	0	20.73	20.80	20.63	
5	64QAM	1	0	21.31	21.41	21.17	
5	64QAM	1	12	21.27	21.33	21.14	
5	64QAM	1	24	21.22	21.29	21.13	
5	64QAM	12	0	20.56	20.63	20.43	
5	64QAM	12	7	20.51	20.63	20.41	
5	64QAM	12	13	20.48	20.63	20.38	
5	64QAM	25	0	20.41	20.53	20.34	
5	256QAM	1	0	18.86	18.96	18.77	
5	256QAM	1	12	18.82	18.93	18.78	
5	256QAM	1	24	18.85	18.84	18.72	
5	256QAM	12	0	18.74	18.81	18.72	
5	256QAM	12	7	18.69	18.77	18.72	
5	256QAM	12	13	18.69	18.73	18.63	
5	256QAM	25	0	18.57	18.71	18.55	
Channel				131987	132322	132667	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	23.33	23.39	23.37	25
3	QPSK	1	8	23.12	23.17	23.22	
3	QPSK	1	14	22.98	22.99	23.04	
3	QPSK	8	0	22.17	22.32	22.31	24
3	QPSK	8	4	21.95	22.08	22.09	
3	QPSK	8	7	21.80	21.88	21.87	
3	QPSK	15	0	21.59	21.70	21.61	24
3	16QAM	1	0	22.19	22.33	22.28	
3	16QAM	1	8	22.08	22.12	22.06	
3	16QAM	1	14	21.88	21.90	21.85	23
3	16QAM	8	0	21.16	21.23	21.13	
3	16QAM	8	4	20.95	21.01	20.92	
3	16QAM	8	7	20.80	20.80	20.75	23
3	16QAM	15	0	20.65	20.72	20.55	
3	64QAM	1	0	21.23	21.33	21.09	
3	64QAM	1	8	21.19	21.25	21.06	23
3	64QAM	1	14	21.14	21.21	21.05	
3	64QAM	8	0	20.48	20.55	20.35	
3	64QAM	8	4	20.43	20.55	20.33	22
3	64QAM	8	7	20.40	20.55	20.30	
3	64QAM	15	0	20.33	20.45	20.26	
3	256QAM	1	0	18.78	18.88	18.69	20
3	256QAM	1	8	18.74	18.85	18.70	
3	256QAM	1	14	18.77	18.76	18.64	
3	256QAM	8	0	18.66	18.73	18.64	20
3	256QAM	8	4	18.61	18.69	18.64	
3	256QAM	8	7	18.61	18.65	18.55	
3	256QAM	15	0	18.49	18.63	18.47	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.38	22.39	22.33	25
1.4	QPSK	1	3	22.25	22.25	22.21	
1.4	QPSK	1	5	22.13	22.19	22.14	
1.4	QPSK	3	0	21.36	21.42	21.50	24
1.4	QPSK	3	1	21.19	21.31	21.27	
1.4	QPSK	3	3	20.99	21.14	21.13	
1.4	QPSK	6	0	20.95	20.99	20.96	24
1.4	16QAM	1	0	21.52	21.65	21.50	
1.4	16QAM	1	3	21.34	21.53	21.41	
1.4	16QAM	1	5	21.20	21.31	21.24	24
1.4	16QAM	3	0	20.54	20.67	20.63	
1.4	16QAM	3	1	20.44	20.53	20.43	
1.4	16QAM	3	3	20.23	20.37	20.27	23
1.4	16QAM	6	0	20.14	20.24	20.09	
1.4	64QAM	1	0	20.78	20.76	20.62	
1.4	64QAM	1	3	20.71	20.73	20.62	23
1.4	64QAM	1	5	20.75	20.70	20.64	
1.4	64QAM	3	0	20.13	19.98	19.90	
1.4	64QAM	3	1	20.01	19.94	19.85	22
1.4	64QAM	3	3	19.97	19.89	19.85	
1.4	64QAM	6	0	19.93	19.80	19.79	
1.4	256QAM	1	0	18.28	18.22	18.20	20
1.4	256QAM	1	3	18.27	18.18	18.16	
1.4	256QAM	1	5	18.23	18.12	18.17	
1.4	256QAM	3	0	18.24	18.06	18.13	20
1.4	256QAM	3	1	18.17	17.99	18.11	
1.4	256QAM	3	3	18.15	17.99	18.07	
1.4	256QAM	6	0				20

5	16QAM	1	24	21.69	22.02	21.86	
5	16QAM	12	0	21.00	21.29	21.17	
5	16QAM	12	7	20.80	21.05	21.10	
5	16QAM	12	13	20.70	20.96	20.90	
5	16QAM	25	0	20.45	20.74	20.71	
5	64QAM	1	0	21.05	21.28	21.26	
5	64QAM	1	12	20.98	21.29	21.19	
5	64QAM	1	24	20.94	21.26	21.21	
5	64QAM	12	0	20.17	20.65	20.54	
5	64QAM	12	7	20.17	20.53	20.47	
5	64QAM	12	13	20.12	20.47	20.46	
5	64QAM	25	0	20.03	20.42	20.41	
5	256QAM	1	0	18.42	18.86	18.82	
5	256QAM	1	12	18.40	18.88	18.82	
5	256QAM	1	24	18.41	18.79	18.71	
5	256QAM	12	0	18.27	18.78	18.71	
5	256QAM	12	7	18.26	18.71	18.67	
5	256QAM	12	13	18.23	18.70	18.61	
5	256QAM	25	0	18.21	18.59	18.61	

n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	25.00
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	24.13	23.81	23.70	25.00
20		1	53	24.12	23.66	23.98	
20		1	104	23.95	23.70	24.02	
20		50	1	23.65	23.28	23.29	25.00
20		50	25	24.15	23.70	23.07	
20		50	50	23.71	23.13	23.55	
20		100	0	23.76	23.19	23.41	
20	DFT-s-OFDM QPSK	1	1	24.33	24.35	24.30	25.00
20		1	53	24.29	23.69	24.01	
20		1	104	23.94	23.79	24.03	
20		50	1	23.17	22.79	22.83	25.00
20		50	25	24.10	24.13	24.06	
20		50	50	23.00	22.63	22.95	
20		100	0	22.80	22.93	22.92	
20	DFT-s-OFDM 16QAM	1	1	23.33	23.17	23.02	24.00
20	DFT-s-OFDM 64QAM	1	1	21.72	21.60	21.51	22.50
20	DFT-s-OFDM 256QAM	1	1	19.78	19.44	19.32	20.50
20	CP-OFDM QPSK	1	1	22.58	22.29	22.17	23.50
20	CP-OFDM 16QAM	1	1	22.29	22.02	21.91	23.00
20	CP-OFDM 64QAM	1	1	20.39	20.12	19.99	21.00
20	CP-OFDM 256QAM	1	1	17.75	17.50	17.38	18.50
Channel				371500	376000	380500	25.00
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	24.12	23.73	23.81	25.00
Channel				371000	376000	381000	25.00
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	24.16	23.74	23.96	25.00
Channel				370500	376000	381500	25.00
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	24.25	23.73	24.09	25.00

n5 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	v
Channel				166800	167300	167800	v
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.60	23.62	23.65	25.00
20		1	53	23.60	23.61	23.57	
20		1	104	23.59	23.61	23.47	
20		50	1	23.11	23.12	23.16	24.50
20		50	25	23.63	23.58	23.56	
20		50	50	23.04	23.04	23.02	
20		100	0	23.10	23.19	23.09	
20	DFT-s-OFDM QPSK	1	1	23.98	24.10	23.96	25.00
20		1	53	23.56	23.79	23.58	
20		1	104	23.55	23.56	23.52	
20		50	1	22.59	22.66	22.65	24.50
20		50	25	23.62	23.63	23.58	
20		50	50	22.52	22.52	22.52	
20		100	0	22.62	22.63	22.60	
20	DFT-s-OFDM 16QAM	1	1	22.83	22.86	22.91	23.50
20	DFT-s-OFDM 64QAM	1	1	21.22	21.23	21.42	22.00
20	DFT-s-OFDM 256QAM	1	1	19.20	19.21	19.22	20.00
20	CP-OFDM QPSK	1	1	22.12	22.09	22.10	23.00
20	CP-OFDM 16QAM	1	1	21.81	21.85	21.86	22.50
20	CP-OFDM 64QAM	1	1	19.91	19.93	19.96	20.50
20	CP-OFDM 256QAM	1	1	17.36	17.40	17.40	18.00
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	23.60	23.63	23.62	24.50
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	23.68	23.58	23.60	24.50
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	23.53	23.69	23.44	24.50

n7 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				504000	507000	510000	Tune-up limit (dBm)
Frequency (MHz)				2520	2535	2550	
40	DFT-s-OFDM PI/2 BPSK	1	1	22.18	23.16	23.40	24.50
40		1	108	23.33	23.56	22.79	
40		1	214	23.36	22.67	22.02	
40		108	1	22.34	22.93	22.79	24.50
40		108	54	23.29	23.45	22.84	
40		108	108	22.90	22.57	21.78	
40	DFT-s-OFDM QPSK	216	0	22.67	22.70	22.26	24.50
40		1	1	23.66	23.76	23.71	
40		1	108	23.37	23.51	22.87	
40		1	214	23.43	22.60	22.05	24.50
40		108	1	21.89	22.40	22.33	
40		108	54	23.39	23.42	23.36	
40	108	108	22.51	22.03	21.25	24.50	
40	216	0	22.19	22.31	22.14		
40	DFT-s-OFDM 16QAM	1	1	21.53	22.18		22.68
40	DFT-s-OFDM 64QAM	1	1	19.90	20.70	21.03	22.00
40	DFT-s-OFDM 256QAM	1	1	17.93	18.74	19.04	20.00
40	CP-OFDM QPSK	1	1	20.74	21.54	21.85	23.00
40	CP-OFDM 16QAM	1	1	20.44	21.23	21.49	22.50
40	CP-OFDM 64QAM	1	1	18.58	19.73	19.67	21.00
40	CP-OFDM 256QAM	1	1	15.94	16.74	17.12	18.00
Channel				503000	507000	511000	Tune-up limit (dBm)
Frequency (MHz)				2515	2535	2555	
30	DFT-s-OFDM QPSK	1	1	22.18	23.22	23.20	24.50
Channel				502500	507000	511500	Tune-up limit (dBm)
Frequency (MHz)				2512.5	2535	2557.5	
25	DFT-s-OFDM QPSK	1	1	22.20	23.28	22.98	24.50
Channel				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	
20	DFT-s-OFDM QPSK	1	1	22.16	23.37	22.74	24.50
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	DFT-s-OFDM QPSK	1	1	22.18	23.41	22.40	24.50
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	DFT-s-OFDM QPSK	1	1	22.21	23.48	22.18	24.50
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	DFT-s-OFDM QPSK	1	1	22.16	23.42	21.96	24.50

n25 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				374000	376500	379000	25.00
Frequency (MHz)				1870	1882.5	1895	
40	DFT-s-OFDM PI/2 BPSK	1	1	24.08	23.95	23.97	25.00
40		1	108	23.79	23.63	24.07	
40		1	214	23.74	23.93	23.99	
40		108	1	23.53	23.31	23.51	24.50
40		108	54	23.16	23.71	23.18	
40		108	108	23.25	23.34	23.77	
40		216	0	23.33	23.40	23.57	
40	DFT-s-OFDM QPSK	1	1	24.18	24.20	24.16	25.00
40		1	108	23.83	23.73	24.07	
40		1	214	23.67	23.96	24.04	
40		108	1	23.04	22.83	22.95	25.00
40		108	54	23.87	24.07	24.03	
40		108	108	22.61	23.14	23.13	
40		216	0	22.84	23.17	23.06	
40	DFT-s-OFDM 16QAM	1	1	23.30	23.58	23.17	24.50
40	DFT-s-OFDM 64QAM	1	1	21.67	21.93	21.38	22.50
40	DFT-s-OFDM 256QAM	1	1	19.70	19.95	19.48	20.50
40	CP-OFDM QPSK	1	1	22.56	22.84	22.30	23.50
40	CP-OFDM 16QAM	1	1	22.29	22.51	22.01	23.50
40	CP-OFDM 64QAM	1	1	20.42	20.66	20.12	21.50
40	CP-OFDM 256QAM	1	1	17.77	17.99	17.49	18.50
Channel				373000	376500	380000	25.00
Frequency (MHz)				1865	1882.5	1900	
30	DFT-s-OFDM QPSK	1	1	24.06	23.78	23.56	25.00
Channel				372500	376500	380500	25.00
Frequency (MHz)				1862.5	1882.5	1902.5	
25	DFT-s-OFDM QPSK	1	1	24.03	23.68	23.57	25.00
Channel				372000	376500	381000	25.00
Frequency (MHz)				1860	1882.5	1905	
20	DFT-s-OFDM QPSK	1	1	24.14	23.69	23.71	25.00
Channel				371500	376500	381500	25.00
Frequency (MHz)				1857.5	1882.5	1907.5	
15	DFT-s-OFDM QPSK	1	1	24.16	23.65	23.87	25.00
Channel				371000	376500	382000	25.00
Frequency (MHz)				1855	1882.5	1910	
10	DFT-s-OFDM QPSK	1	1	24.15	23.65	24.00	25.00
Channel				370500	376500	382500	25.00
Frequency (MHz)				1852.5	1882.5	1912.5	
5	DFT-s-OFDM QPSK	1	1	24.14	23.63	23.90	25.00

n26(814-824MHz) (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel					163800		Tune-up limit (dBm)
Frequency (MHz)					819		
10	DFT-s-OFDM PI/2 BPSK	1	1		23.41		25.00
10		1	26		23.40		
10		1	50		23.62		
10		25	1		22.94		24.00
10		25	12		23.42		
10		25	25		22.99		
10		50	0		22.95		
10	DFT-s-OFDM QPSK	1	1		24.02		25.00
10		1	26		23.39		
10		1	50		23.52		
10		25	1		22.34		24.00
10		25	12		23.42		
10		25	25		22.57		
10		50	0		22.68		
10	DFT-s-OFDM 16QAM	1	1		22.62		23.50
10	DFT-s-OFDM 64QAM	1	1		21.03		22.00
10	DFT-s-OFDM 256QAM	1	1		19.03		20.00
10	CP-OFDM QPSK	1	1		22.02		23.00
10	CP-OFDM 16QAM	1	1		21.77		22.50
10	CP-OFDM 64QAM	1	1		19.71		20.50
10	CP-OFDM 256QAM	1	1		17.65		18.50
Channel				163300	163800	164300	Tune-up limit (dBm)
Frequency (MHz)				816.5	819	821.5	
5	DFT-s-OFDM QPSK	1	1	23.40	23.38	23.45	24.00

n26(824-849MHz) (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.56	23.62	23.63	25.00
20		1	53	23.64	23.60	23.57	
20		1	104	23.63	23.49	23.54	
20		50	1	23.22	23.14	23.24	24.50
20		50	25	23.62	23.62	23.59	
20		50	50	23.05	23.05	23.01	
20		100	0	23.08	23.11	23.09	
20	DFT-s-OFDM QPSK	1	1	24.05	24.11	24.06	25.00
20		1	53	23.74	23.64	23.56	
20		1	104	23.54	23.52	23.54	
20		50	1	22.65	22.64	22.54	24.50
20		50	25	23.63	23.65	23.58	
20		50	50	22.54	22.64	22.52	
20		100	0	22.60	22.63	22.59	
20	DFT-s-OFDM 16QAM	1	1	22.81	22.88	22.85	23.50
20	DFT-s-OFDM 64QAM	1	1	21.18	21.42	21.23	22.00
20	DFT-s-OFDM 256QAM	1	1	19.19	19.20	19.22	20.00
20	CP-OFDM QPSK	1	1	22.04	22.07	22.08	23.00
20	CP-OFDM 16QAM	1	1	21.82	21.82	21.99	22.50
20	CP-OFDM 64QAM	1	1	19.89	19.90	19.92	20.50
20	CP-OFDM 256QAM	1	1	17.35	17.39	18.05	19.00
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	23.57	23.60	23.61	24.50
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	23.54	23.64	23.56	24.50
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	23.55	23.60	23.43	24.50

n38 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				518000	519000	520000	25.00
Frequency (MHz)				2590	2595	2600	
40	DFT-s-OFDM PI/2 BPSK	1	1	23.95	23.55	23.43	25.00
40		1	108	23.53	23.31	23.09	
40		1	214	23.15	22.90	22.75	
40		108	1	23.22	23.02	23.04	24.50
40		108	54	23.54	23.34	23.69	
40		108	108	22.90	22.73	23.13	
40		216	0	23.09	22.86	22.90	
40	DFT-s-OFDM QPSK	1	1	24.17	24.21	24.12	25.00
40		1	108	23.52	23.35	23.59	
40		1	214	23.06	22.82	23.13	
40		108	1	22.73	22.49	22.44	24.50
40		108	54	23.70	23.76	23.66	
40		108	108	22.25	22.08	22.60	
40		216	0	22.44	22.65	22.64	
40	DFT-s-OFDM 16QAM	1	1	22.78	22.68	22.66	24.00
40	DFT-s-OFDM 64QAM	1	1	21.21	21.15	20.86	22.50
40	DFT-s-OFDM 256QAM	1	1	19.24	19.14	19.00	20.50
40	CP-OFDM QPSK	1	1	22.16	21.99	22.03	23.00
40	CP-OFDM 16QAM	1	1	21.75	21.62	21.67	23.00
40	CP-OFDM 64QAM	1	1	19.98	20.04	20.30	21.50
40	CP-OFDM 256QAM	1	1	17.27	17.44	16.91	18.50
Channel				517000	519000	521000	25.00
Frequency (MHz)				2585	2595	2605	
30	DFT-s-OFDM QPSK	1	1	23.76	23.60	23.41	25.00
Channel				516000	519000	522000	25.00
Frequency (MHz)				2580	2595	2610	
20	DFT-s-OFDM QPSK	1	1	23.81	23.62	23.26	25.00
Channel				515500	519000	522500	25.00
Frequency (MHz)				2577.5	2595	2612.5	
15	DFT-s-OFDM QPSK	1	1	23.92	23.60	23.19	25.00
Channel				515000	519000	523000	25.00
Frequency (MHz)				2575	2595	2615	
10	DFT-s-OFDM QPSK	1	1	23.93	23.68	23.21	25.00

n40(2305-2315MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					462000		
Frequency (MHz)					2310		
10	DFT-s-OFDM PI/2 BPSK	1	1		23.49		24.00
10		1	12		23.30		
10		1	22		23.33		
10		12	1		22.92		24.00
10		12	6		23.33		
10		12	12		22.81		
10		24	0		22.92		
10	DFT-s-OFDM QPSK	1	1		23.81		25.00
10		1	12		23.46		
10		1	22		23.38		
10		12	1		22.40		24.00
10		12	6		23.43		
10		12	12		22.33		
10		24	0		22.41		
10	DFT-s-OFDM 16QAM	1	1		22.61		23.50
10	DFT-s-OFDM 64QAM	1	1		21.01		22.00
10	DFT-s-OFDM 256QAM	1	1		19.21		20.00
10	CP-OFDM QPSK	1	1		21.99		22.50
10	CP-OFDM 16QAM	1	1		21.76		22.50
10	CP-OFDM 64QAM	1	1		19.73		20.50
10	CP-OFDM 256QAM	1	1		17.20		18.00

n40(2350-2360MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					471000		
Frequency (MHz)					2355		
10	DFT-s-OFDM PI/2 BPSK	1	1		23.84		25.00
10		1	12		23.83		
10		1	22		23.95		
10		12	1		23.35		24.50
10		12	6		23.82		
10		12	12		23.28		
10		24	0		23.39		
10	DFT-s-OFDM QPSK	1	1		24.11		25.00
10		1	12		23.85		
10		1	22		23.80		
10		12	1		22.84		24.50
10		12	6		23.87		
10		12	12		22.88		
10		24	0		22.90		
10	DFT-s-OFDM 16QAM	1	1		23.03		24.00
10	DFT-s-OFDM 64QAM	1	1		21.34		22.00
10	DFT-s-OFDM 256QAM	1	1		19.53		20.50
10	CP-OFDM QPSK	1	1		22.34		23.00
10	CP-OFDM 16QAM	1	1		22.04		23.00
10	CP-OFDM 64QAM	1	1		20.11		21.00
10	CP-OFDM 256QAM	1	1		17.94		18.50

n41 (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	Tune-up limit (dBm)
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	25.76	26.37	26.76	26.78	26.56	27.50
100		1	136	26.90	26.83	26.89	26.07	25.70	
100		1	271	25.32	25.53	25.70	25.63	26.26	
100		135	1	25.92	26.29	26.39	26.20	25.71	27.50
100		135	67	26.80	26.89	26.64	26.21	25.88	
100		135	136	26.33	26.05	25.67	25.33	25.33	
100		270	0	26.17	26.26	26.11	25.80	25.63	
100	DFT-s-OFDM QPSK	1	1	27.02	26.94	27.22	27.20	27.05	28.00
100		1	136	26.97	27.03	26.64	26.23	25.96	
100		1	271	26.51	26.03	25.69	25.64	26.32	
100		135	1	25.46	25.82	25.92	25.71	25.69	27.50
100		135	67	26.82	26.90	26.93	26.61	26.70	
100		135	136	25.89	25.62	25.15	24.84	24.77	
100	270	0	25.68	25.80	25.85	25.34	25.59		
100	DFT-s-OFDM 16QAM	1	1	24.92	25.58	25.94	25.95	25.73	26.50
100	DFT-s-OFDM 64QAM	1	1	23.25	23.93	24.27	24.33	24.04	25.00
100	DFT-s-OFDM 256QAM	1	1	21.55	22.17	22.54	22.58	22.33	23.50
100	CP-OFDM QPSK	1	1	24.20	24.91	25.15	25.20	25.12	26.00
100	CP-OFDM 16QAM	1	1	24.11	24.71	25.06	25.11	24.86	26.00
100	CP-OFDM 64QAM	1	1	22.04	22.66	23.01	23.07	22.85	24.00
100	CP-OFDM 256QAM	1	1	19.59	20.32	20.70	20.72	20.36	21.50
Channel				508200	513402	518598	523800	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	25.71	26.39	26.74	26.76	26.44	27.50
Channel				507204	512904	518598	524298	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	25.83	26.49	26.88	26.70	26.19	27.50
Channel				506202	512400	518598	524796	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	25.76	26.46	26.95	26.65	26.00	27.50
Channel				505200	511902	518598	525798	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	25.67	26.58	26.76	26.36	25.75	27.50
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	25.71	26.66	26.74	26.27	25.71	27.50
Channel				503202	510900	518598	526296	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	25.86	26.70	26.82	26.23	25.61	27.50
Channel				502200	510402	518598	526800	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	25.79	26.73	26.80	26.05	25.68	27.50
Channel				501204	509904	518598	527298	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	25.76	26.84	26.82	25.89	25.82	27.50
Channel				500700	509652	518598	527550	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	25.73	25.74	26.68	25.76	25.76	27.50
Channel				500202	509400	518598	527796	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	25.79	26.76	26.65	25.85	26.09	27.50

n41 (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	25.00
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	22.88	23.57	23.91	23.92	23.71	25.00
100		1	136	24.11	24.01	23.87	23.27	22.91	
100		1	271	23.67	23.16	22.87	22.78	23.43	
100		135	1	23.11	23.46	23.58	23.32	22.87	25.00
100		135	67	23.97	24.07	23.84	23.35	23.04	
100		135	136	23.50	23.23	22.82	22.49	22.48	
100		270	0	23.34	23.41	22.81	22.95	22.79	
100	DFT-s-OFDM QPSK	1	1	24.30	24.08	24.38	24.25	24.24	25.00
100		1	136	24.14	24.20	23.93	23.36	23.07	
100		1	271	23.67	23.15	22.91	22.79	23.45	
100		135	1	22.60	22.94	22.85	22.83	22.36	24.50
100		135	67	23.97	24.06	24.07	24.00	24.01	
100		135	136	23.02	22.75	22.25	21.97	22.00	
100		270	0	22.82	22.93	23.01	22.45	22.26	
100	DFT-s-OFDM 16QAM	1	1	22.02	22.86	23.10	23.20	22.91	24.00
100	DFT-s-OFDM 64QAM	1	1	20.48	21.14	21.40	21.53	21.31	22.50
100	DFT-s-OFDM 256QAM	1	1	18.63	19.35	19.63	19.69	19.51	20.50
100	CP-OFDM QPSK	1	1	21.32	21.91	22.24	22.33	22.11	23.00
100	CP-OFDM 16QAM	1	1	21.35	21.96	22.29	22.32	22.08	23.00
100	CP-OFDM 64QAM	1	1	19.17	19.78	20.11	20.18	19.95	21.00
100	CP-OFDM 256QAM	1	1	16.20	17.87	18.44	18.18	17.34	19.00
Channel				508200	513402	518598	523800	528996	24.50
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	22.87	23.59	23.93	23.87	23.52	24.50
Channel				507204	512904	518598	524298	529998	25.00
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	22.91	23.68	24.03	23.92	23.34	25.00
Channel				506202	512400	518598	524796	531000	25.00
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	22.87	23.72	24.03	23.82	23.09	25.00
Channel				505200	511902	518598	525798	531996	24.50
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	22.77	23.72	23.94	23.51	22.90	24.50
Channel				504204	511404	518598	525798	532998	24.50
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	22.84	23.79	23.98	23.40	22.81	24.50
Channel				503202	510900	518598	526296	534000	24.50
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	22.97	23.86	23.96	23.27	22.74	24.50
Channel				502200	510402	518598	526800	534996	24.50
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	22.89	23.88	23.96	23.13	22.74	24.50
Channel				501204	509904	518598	527298	535998	24.50
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	22.82	23.91	23.88	23.01	22.89	24.50
Channel				500700	509652	518598	527550	536496	24.50
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	22.80	23.90	23.82	22.95	23.01	24.50
Channel				500202	509400	518598	527796	537000	24.50
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	22.86	23.99	23.84	22.93	23.21	24.50

n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	23.64	23.80	23.89	25.00
40		1	108	23.85	23.88	23.66	
40		1	214	23.87	21.99	23.77	
40		108	1	23.46	23.46	23.49	24.50
40		108	54	23.91	23.91	23.76	
40		108	108	23.56	23.21	23.16	
40		216	0	23.47	22.02	23.33	
40	DFT-s-OFDM QPSK	1	1	23.98	24.05	23.88	25.00
40		1	108	23.85	23.89	23.66	
40		1	214	23.81	23.74	23.78	
40		108	1	22.87	22.88	22.89	24.50
40		108	54	23.95	23.96	23.76	
40		108	108	23.09	22.82	22.69	
40		216	0	22.87	22.90	22.80	
40	DFT-s-OFDM 16QAM	1	1	22.89	23.07	23.25	24.00
40	DFT-s-OFDM 64QAM	1	1	21.25	21.43	21.52	22.50
40	DFT-s-OFDM 256QAM	1	1	19.25	19.42	19.86	20.50
40	CP-OFDM QPSK	1	1	22.13	22.29	22.46	23.00
40	CP-OFDM 16QAM	1	1	21.87	22.12	22.07	23.00
40	CP-OFDM 64QAM	1	1	20.16	20.12	20.19	21.00
40	CP-OFDM 256QAM	1	1	17.30	18.07	17.57	19.00
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	23.61	23.83	23.77	24.50
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	23.76	23.89	23.67	24.50
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	23.76	23.87	23.59	24.50
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	23.81	23.89	23.58	24.50
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	23.78	23.85	23.60	24.50

n71 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				134600	136100	137600	Tune-up limit (dBm)
Frequency (MHz)				673	680.5	688	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.84	23.19	23.26	24.00
20		1	53	23.36	23.20	23.10	
20		1	104	23.13	23.12	23.15	
20		50	1	22.42	22.73	22.78	24.00
20		50	25	23.21	23.30	23.23	
20		50	50	22.81	22.71	22.68	
20		100	0	22.73	22.66	22.71	
20	DFT-s-OFDM QPSK	1	1	23.87	23.90	23.83	25.00
20		1	53	23.28	23.20	23.11	
20		1	104	23.12	23.13	23.17	
20		50	1	22.12	22.21	22.20	24.00
20		50	25	23.24	23.25	23.10	
20		50	50	22.51	22.32	22.37	
20		100	0	23.00	23.20	23.00	
20	DFT-s-OFDM 16QAM	1	1	22.22	22.48	22.55	23.50
20	DFT-s-OFDM 64QAM	1	1	20.46	20.80	20.89	21.50
20	DFT-s-OFDM 256QAM	1	1	18.07	19.02	19.06	20.00
20	CP-OFDM QPSK	1	1	21.51	21.85	21.70	22.50
20	CP-OFDM 16QAM	1	1	21.26	21.62	21.59	22.50
20	CP-OFDM 64QAM	1	1	19.15	19.50	19.53	20.50
20	CP-OFDM 256QAM	1	1	17.17	17.64	17.56	18.50
Channel				134100	136100	138100	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	DFT-s-OFDM QPSK	1	1	22.81	23.28	23.14	24.00
Channel				133600	136100	138600	Tune-up limit (dBm)
Frequency (MHz)				668	680.5	693	
10	DFT-s-OFDM QPSK	1	1	22.80	23.27	23.10	24.00
Channel				133100	136100	139100	Tune-up limit (dBm)
Frequency (MHz)				665.5	680.5	695.5	
5	DFT-s-OFDM QPSK	1	1	22.76	23.19	23.10	24.00

n77(3450-3550MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			Tune-up limit (dBm)
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			25.93			26.50
100		1	136			25.83			
100		1	271			25.56			
100		135	1			25.42			26.50
100		135	67			25.89			
100		135	136			25.05			
100		270	0			24.59			
100	DFT-s-OFDM QPSK	1	1			26.12			28.00
100		1	136			26.10			
100		1	271			25.72			
100		135	1			25.63			26.50
100		135	67			25.85			
100		135	136			24.57			
100		270	0			24.88			
100	DFT-s-OFDM 16QAM	1	1			25.24			26.00
100	DFT-s-OFDM 64QAM	1	1			23.52			24.50
100	DFT-s-OFDM 256QAM	1	1			21.73			22.50
100	CP-OFDM QPSK	1	1			24.48			25.00
100	CP-OFDM 16QAM	1	1			24.37			25.00
100	CP-OFDM 64QAM	1	1			22.21			23.00
100	CP-OFDM 256QAM	1	1			19.82			20.50
Channel				633000	633168	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	25.88	25.85	25.89	25.84	25.82	26.50
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	25.96	25.92	25.93	25.89	25.82	26.50
Channel				632334	632834	633334	633832	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	25.95	25.88	25.85	25.78	25.69	26.50
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	25.88	25.85	25.80	25.71	25.65	26.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	25.94	25.86	25.86	25.79	25.68	26.50
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	26.00	25.90	25.78	25.76	25.61	27.00
Channel				631000	632168	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	26.09	25.88	25.82	25.78	25.48	27.00
Channel				630668	632000	633334	634666	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	26.01	25.89	25.81	25.64	25.45	27.00
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	26.01	25.89	25.81	25.60	25.48	27.00
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	26.05	25.90	25.85	25.58	25.61	27.00

n77(3700-3980MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	25.74	25.71	25.39	25.67	25.47	26.50
100		1	136	25.74	25.71	25.69	25.68	25.18	
100		1	271	25.56	25.72	25.41	25.02	25.83	
100		135	1	25.58	25.20	25.05	25.00	24.85	26.50
100		135	67	25.82	25.75	25.77	25.60	25.18	
100		135	136	25.07	25.09	24.88	24.73	24.92	
100		270	0	25.32	25.20	25.25	25.11	24.79	
100	DFT-s-OFDM QPSK	1	1	26.28	26.25	26.39	26.26	26.08	28.00
100		1	136	25.91	25.70	25.87	25.66	25.20	
100		1	271	25.74	25.87	25.55	25.11	26.01	
100		135	1	25.08	24.65	24.53	24.55	24.35	26.50
100		135	67	25.70	25.70	25.75	25.61	25.65	
100		135	136	24.58	24.62	24.37	24.22	24.42	
100		270	0	24.80	24.71	24.86	24.64	24.31	
100	DFT-s-OFDM 16QAM	1	1	24.92	24.98	24.52	24.77	24.56	25.50
100	DFT-s-OFDM 64QAM	1	1	23.28	23.24	22.85	23.12	22.88	24.00
100	DFT-s-OFDM 256QAM	1	1	21.48	21.42	21.03	21.34	21.13	22.00
100	CP-OFDM QPSK	1	1	24.13	24.04	23.82	24.19	23.89	25.00
100	CP-OFDM 16QAM	1	1	24.04	24.05	23.56	23.79	23.64	25.00
100	CP-OFDM 64QAM	1	1	22.03	22.08	21.60	21.88	21.71	23.00
100	CP-OFDM 256QAM	1	1	19.46	19.38	19.07	19.28	19.21	20.00
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	25.74	25.61	25.47	25.64	25.42	26.50
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	25.79	25.67	25.53	25.62	25.33	26.50
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	25.80	25.66	25.55	25.47	25.20	26.50
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	25.76	25.56	25.35	25.30	24.93	26.50
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	25.79	25.60	25.37	25.44	24.97	26.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	25.83	25.63	25.40	25.50	25.10	26.50
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	25.85	25.55	25.45	25.44	25.32	26.50
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	25.80	25.62	25.53	25.40	25.46	26.50
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	25.84	25.59	25.62	25.34	25.58	26.50
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	25.83	25.61	25.72	25.29	18.47	26.50

n77(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			Tune-up limit (dBm)
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			22.96			23.50
100		1	136			22.77			
100		1	271			22.56			
100		135	1			22.40			23.50
100		135	67			22.88			
100		135	136			22.06			
100		270	0			22.40			
100	DFT-s-OFDM QPSK	1	1			23.02			24.00
100		1	136			22.94			
100		1	271			22.57			
100		135	1			21.66			23.50
100		135	67			22.82			
100		135	136			21.48			
100		270	0			21.85			
100	DFT-s-OFDM 16QAM	1	1			22.10			23.00
100	DFT-s-OFDM 64QAM	1	1			20.45			21.00
100	DFT-s-OFDM 256QAM	1	1			18.59			19.50
100	CP-OFDM QPSK	1	1			21.35			22.00
100	CP-OFDM 16QAM	1	1			21.26			22.00
100	CP-OFDM 64QAM	1	1			19.24			20.00
100	CP-OFDM 256QAM	1	1			17.56			18.50
Channel				633000	633168	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	22.91	22.91	22.91	22.85	22.86	23.50
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	22.95	22.90	22.98	22.94	22.83	23.50
Channel				632334	632834	633334	633832	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	22.95	22.90	22.94	22.76	22.76	23.50
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	22.93	22.90	22.84	22.73	22.66	23.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	22.95	22.90	22.79	22.73	22.67	23.50
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	23.07	22.87	22.85	22.83	22.66	24.00
Channel				631000	632168	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	23.05	22.84	22.71	22.73	22.50	24.00
Channel				630668	632000	633334	634666	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	23.03	22.91	22.81	22.62	22.47	24.00
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	23.06	22.81	22.82	22.58	22.42	24.00
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	23.03	22.87	22.85	22.49	22.52	24.00

n77(3700-3980MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	22.74	22.67	22.36	22.59	22.39	23.50
100		1	136	22.70	22.66	22.67	22.49	21.99	
100		1	271	22.57	22.73	22.39	21.92	22.71	
100		135	1	22.53	22.18	22.00	22.01	21.77	23.50
100		135	67	22.78	22.72	22.72	22.56	22.09	
100		135	136	22.00	22.19	21.81	21.70	21.85	
100		270	0	22.26	22.16	22.21	22.09	21.72	
100	DFT-s-OFDM QPSK	1	1	23.12	23.18	23.23	23.06	23.10	24.00
100		1	136	23.04	22.96	22.69	22.70	22.08	
100		1	271	22.56	22.71	22.36	21.93	22.76	
100		135	1	22.03	21.61	21.14	21.48	21.27	23.50
100		135	67	22.77	22.70	22.90	22.57	22.10	
100		135	136	21.51	21.57	21.38	21.17	21.37	
100		270	0	21.75	21.65	22.20	21.58	21.24	
100	DFT-s-OFDM 16QAM	1	1	21.96	21.86	21.98	21.68	21.77	22.50
100	DFT-s-OFDM 64QAM	1	1	20.18	20.13	20.17	20.02	19.87	21.00
100	DFT-s-OFDM 256QAM	1	1	18.37	18.29	18.57	18.16	18.06	19.50
100	CP-OFDM QPSK	1	1	21.15	21.01	21.07	21.03	20.85	22.00
100	CP-OFDM 16QAM	1	1	20.97	20.92	20.92	20.75	20.54	21.50
100	CP-OFDM 64QAM	1	1	18.96	18.86	18.82	18.77	18.70	19.50
100	CP-OFDM 256QAM	1	1	17.24	17.92	16.98	16.82	16.92	18.50
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	22.76	22.55	22.44	22.62	22.42	23.50
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	22.76	22.65	22.45	22.49	22.25	23.50
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	22.74	22.64	22.47	22.47	22.15	23.50
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	22.69	22.47	22.34	22.31	21.93	23.50
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	22.70	22.56	22.37	22.40	21.92	23.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	22.78	22.58	22.38	22.39	22.05	23.50
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	22.78	22.57	22.42	22.44	22.23	23.50
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	22.75	22.56	22.55	22.30	22.39	23.50
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	22.79	22.45	22.53	22.21	22.52	23.50
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	22.80	22.58	22.60	22.16	22.71	23.50

n78(3450-3550MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			Tune-up limit (dBm)
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			25.89			26.50
100		1	136			25.86			
100		1	271			25.52			
100		135	1			25.42			26.50
100		135	67			25.90			
100		135	136			25.01			
100		270	0			25.38			
100	DFT-s-OFDM QPSK	1	1			26.21			28.00
100		1	136			26.13			
100		1	271			25.71			
100		135	1			24.87			26.50
100		135	67			25.81			
100		135	136			24.49			
100	270	0			24.82				
100	DFT-s-OFDM 16QAM	1	1			25.16			26.00
100	DFT-s-OFDM 64QAM	1	1			23.48			24.00
100	DFT-s-OFDM 256QAM	1	1			18.30			19.00
100	CP-OFDM QPSK	1	1			25.95			26.50
100	CP-OFDM 16QAM	1	1			24.35			25.00
100	CP-OFDM 64QAM	1	1			22.21			23.00
100	CP-OFDM 256QAM	1	1			19.72			20.50
Channel				633000	633166	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	25.86	25.87	25.84	25.81	25.83	26.50
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	25.95	25.92	25.90	25.86	25.80	26.50
Channel				632334	632834	633334	633832	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	25.93	25.86	25.85	25.76	25.75	26.50
Channel				632000	632666	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	25.93	25.85	25.80	25.66	25.70	26.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	25.90	25.83	25.73	25.69	25.70	26.50
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	25.98	25.36	25.86	25.83	25.50	26.50
Channel				631000	632166	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	26.01	25.84	25.85	25.77	25.37	27.00
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	25.98	25.89	25.81	25.54	25.38	26.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	25.97	25.84	25.75	25.42	25.38	26.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	25.98	25.82	25.82	25.51	25.48	26.50

n78(3700-3800MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			Tune-up limit (dBm)
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			25.73			26.50
100		1	136			25.75			
100		1	271			25.49			
100		135	1			25.59			26.50
100		135	67			25.79			
100		135	136			25.82			
100		270	0			25.33			
100	DFT-s-OFDM QPSK	1	1			26.16			28.00
100		1	136			26.06			
100		1	271			25.53			
100		135	1			25.14			26.50
100		135	67			25.78			
100		135	136			24.56			
100	270	0			24.82				
100	DFT-s-OFDM 16QAM	1	1			24.98			25.50
100	DFT-s-OFDM 64QAM	1	1			23.26			24.00
100	DFT-s-OFDM 256QAM	1	1			21.46			22.00
100	CP-OFDM QPSK	1	1			24.13			25.00
100	CP-OFDM 16QAM	1	1			24.10			25.00
100	CP-OFDM 64QAM	1	1			22.05			23.00
100	CP-OFDM 256QAM	1	1			19.49			20.00
Channel				649668	649834	650000	650166	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	25.75	25.81	25.83	25.81	25.85	26.50
Channel				649334	649666	650000	650334	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	25.82	25.88	25.92	25.95	26.02	27.00
Channel				649000	649500	650000	650500	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	25.81	25.89	25.95	26.05	26.01	27.00
Channel				648668	649334	650000	650666	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	25.69	25.84	25.90	25.87	25.71	26.50
Channel				648334	649166	650000	650834	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	25.71	25.86	25.92	25.77	25.63	26.50
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	25.74	25.95	25.94	25.77	25.54	26.50
Channel				647668	648834	650000	651166	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	
30	DFT-s-OFDM QPSK	1	1	25.81	25.99	25.89	25.65	25.54	26.50
Channel				647334	648666	650000	651334	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	25.76	25.96	25.82	25.63	25.48	26.50
Channel				647168	648584	650000	651416	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	25.78	26.02	25.77	25.59	25.45	27.00
Channel				647000	648500	650000	651500	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	25.84	25.98	25.80	25.56	25.54	26.50

n78(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			Tune-up limit (dBm)
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			22.93			23.50
100		1	136			22.85			
100		1	271			22.51			
100		135	1			22.38			23.50
100		135	67			22.88			
100		135	136			22.08			
100		270	0			22.36			
100	DFT-s-OFDM QPSK	1	1			22.96			24.00
100		1	136			22.82			
100		1	271			22.50			
100		135	1			21.73			23.50
100		135	67			22.86			
100		135	136			21.48			
100		270	0			21.84			
100	DFT-s-OFDM 16QAM	1	1			22.06			23.00
100	DFT-s-OFDM 64QAM	1	1			20.39			21.00
100	DFT-s-OFDM 256QAM	1	1			19.66			20.50
100	CP-OFDM QPSK	1	1			21.35			22.00
100	CP-OFDM 16QAM	1	1			21.15			22.00
100	CP-OFDM 64QAM	1	1			19.18			20.00
100	CP-OFDM 256QAM	1	1			17.65			18.50
Channel				633000	633166	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	22.87	22.87	22.86	22.85	22.83	23.50
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	22.91	22.95	22.85	22.89	22.78	23.50
Channel				632334	632834	633334	633832	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	22.95	22.82	22.90	22.81	22.71	23.50
Channel				632000	632666	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	22.85	22.82	22.77	22.65	22.71	23.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	22.91	22.85	22.77	22.75	22.71	23.50
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	22.99	22.35	22.86	22.71	22.52	23.50
Channel				631000	632166	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	22.91	22.79	22.72	22.61	22.29	23.50
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	22.96	22.77	22.75	22.42	22.30	23.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	22.93	22.66	22.66	22.43	22.25	23.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	22.90	22.73	22.74	22.37	22.35	23.50

n78(3700-3800MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			Tune-up limit (dBm)
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			22.70			23.50
100		1	136			22.67			
100		1	271			22.45			
100		135	1			22.55			23.50
100		135	67			22.75			
100		135	136			22.00			
100		270	0			22.27			
100	DFT-s-OFDM QPSK	1	1			22.88			24.00
100		1	136			22.82			
100		1	271			22.54			
100		135	1			22.07			23.50
100		135	67			22.75			
100		135	136			21.47			
100		270	0			21.74			
100	DFT-s-OFDM 16QAM	1	1			17.65			18.50
100	DFT-s-OFDM 64QAM	1	1			20.23			21.00
100	DFT-s-OFDM 256QAM	1	1			19.33			20.00
100	CP-OFDM QPSK	1	1			21.12			22.00
100	CP-OFDM 16QAM	1	1			20.97			21.50
100	CP-OFDM 64QAM	1	1			18.98			19.50
100	CP-OFDM 256QAM	1	1			17.30			18.00
Channel				649668	649834	650000	650166	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	22.73	22.77	22.82	22.74	22.85	23.50
Channel				649334	649666	650000	650334	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	22.75	22.83	22.91	22.93	22.95	23.50
Channel				649000	649500	650000	650500	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	22.79	22.86	22.91	23.01	22.94	24.00
Channel				648668	649334	650000	650666	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	22.66	22.78	22.86	22.83	22.67	23.50
Channel				648334	649166	650000	650834	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	22.68	22.85	22.89	22.75	22.59	23.50
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	22.67	22.93	22.94	22.73	22.56	23.50
Channel				647668	648834	650000	651166	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	
30	DFT-s-OFDM QPSK	1	1	22.78	22.98	22.88	22.64	22.53	23.50
Channel				647334	648666	650000	651334	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	22.70	22.94	22.79	22.63	22.42	23.50
Channel				647168	648584	650000	651416	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	22.70	22.93	22.72	22.59	22.46	23.50
Channel				647000	648500	650000	651500	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	22.79	23.02	22.76	22.55	22.50	24.00

B2_n41 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				509202	518598	528000	Tune-up limit (dBm)
Frequency (MHz)				2546.01	2592.99	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	22.91	23.73	23.62	25.00
100		1	136	23.82	23.60	22.84	
100		1	271	23.59	22.89	23.45	
100		135	1	22.97	23.40	22.78	24.50
100		135	67	23.91	23.84	23.09	
100		135	136	23.34	22.69	22.40	
100		270	0	22.66	23.14	22.71	
100	DFT-s-OFDM QPSK	1	1	22.93	23.74	23.62	25.00
100		1	136	23.90	23.69	23.00	
100		1	271	23.51	22.75	23.42	
100		135	1	22.46	22.94	22.38	24.50
100		135	67	23.75	23.67	22.93	
100		135	136	22.88	22.31	22.00	
100		270	0	22.65	22.63	22.22	
100	DFT-s-OFDM 16QAM	1	1	22.09	22.88	22.79	23.50
100	DFT-s-OFDM 64QAM	1	1	20.62	21.43	21.29	22.00
100	DFT-s-OFDM 256QAM	1	1	18.45	19.26	19.13	20.00
100	CP-OFDM QPSK	1	1	21.40	22.22	22.09	23.00
100	CP-OFDM 16QAM	1	1	20.85	21.93	21.56	22.50
100	CP-OFDM 64QAM	1	1	19.92	20.75	20.61	21.50
100	CP-OFDM 256QAM	1	1	16.01	18.00	17.11	19.00
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	DFT-s-OFDM QPSK	1	1	22.90	23.81	23.47	24.50
Channel				507204	518598	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	DFT-s-OFDM QPSK	1	1	22.96	23.96	23.34	24.50
Channel				506202	518598	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2592.99	2655	
70	DFT-s-OFDM QPSK	1	1	22.91	23.94	23.04	24.50
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	DFT-s-OFDM QPSK	1	1	22.78	23.87	22.80	24.50
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	DFT-s-OFDM QPSK	1	1	22.89	23.87	22.75	24.50
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	DFT-s-OFDM QPSK	1	1	22.91	23.79	22.74	24.50
Channel				502200	518598	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2592.99	2674.98	
30	DFT-s-OFDM QPSK	1	1	22.91	23.74	22.71	24.50
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	DFT-s-OFDM QPSK	1	1	22.82	23.69	22.86	24.50
Channel				500700	518598	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2592.99	2682.48	
15	DFT-s-OFDM QPSK	1	1	22.81	23.68	22.93	24.50
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	DFT-s-OFDM QPSK	1	1	22.83	23.69	23.18	24.50

B66_n41 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				509202	518598	528000	Tune-up limit (dBm)
Frequency (MHz)				2546.01	2592.99	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	22.95	23.79	23.65	25.00
100		1	136	23.87	23.64	22.89	
100		1	271	23.71	22.86	23.56	
100		135	1	23.03	23.44	22.82	24.50
100		135	67	23.84	23.88	23.10	
100		135	136	23.38	22.74	22.43	
100		270	0	22.78	22.88	22.82	
100	DFT-s-OFDM QPSK	1	1	22.97	23.78	23.67	25.00
100		1	136	23.98	23.70	22.86	
100		1	271	23.57	22.78	23.43	
100		135	1	22.51	22.97	22.47	24.50
100		135	67	23.93	23.71	22.96	
100		135	136	22.87	22.25	22.00	
100		270	0	22.78	22.76	22.25	
100	DFT-s-OFDM 16QAM	1	1	22.04	22.88	22.20	23.50
100	DFT-s-OFDM 64QAM	1	1	21.55	21.60	21.32	22.50
100	DFT-s-OFDM 256QAM	1	1	18.48	19.34	19.13	20.00
100	CP-OFDM QPSK	1	1	21.53	22.26	22.19	23.00
100	CP-OFDM 16QAM	1	1	20.91	21.72	21.57	22.50
100	CP-OFDM 64QAM	1	1	19.97	20.85	20.60	21.50
100	CP-OFDM 256QAM	1	1	18.09	18.10	17.01	19.00
Channel				508200	518598	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2592.99	2644.98	
90	DFT-s-OFDM QPSK	1	1	22.93	23.85	23.51	24.50
Channel				507204	518598	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2592.99	2649.99	
80	DFT-s-OFDM QPSK	1	1	23.00	23.99	23.37	24.50
Channel				506202	518598	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2592.99	2655	
70	DFT-s-OFDM QPSK	1	1	22.91	23.98	23.06	24.50
Channel				505200	518598	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2592.99	2659.98	
60	DFT-s-OFDM QPSK	1	1	22.84	23.91	22.83	24.50
Channel				504204	518598	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2592.99	2664.99	
50	DFT-s-OFDM QPSK	1	1	22.90	23.89	22.80	24.50
Channel				503202	518598	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2592.99	2670	
40	DFT-s-OFDM QPSK	1	1	22.93	23.84	22.73	24.50
Channel				502200	518598	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2592.99	2674.98	
30	DFT-s-OFDM QPSK	1	1	22.93	23.78	22.76	24.50
Channel				501204	518598	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2592.99	2679.99	
20	DFT-s-OFDM QPSK	1	1	22.84	23.71	22.87	24.50
Channel				500700	518598	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2592.99	2682.48	
15	DFT-s-OFDM QPSK	1	1	22.82	23.71	22.95	24.50
Channel				500202	518598	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2592.99	2685	
10	DFT-s-OFDM QPSK	1	1	22.85	23.71	23.20	24.50

B2_n71 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				134600	136100	137600	Tune-up limit (dBm)
Frequency (MHz)				673	680.5	688	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.27	22.63	22.70	24.00
20		1	53	22.71	22.64	22.54	
20		1	104	22.56	22.65	22.62	
20		50	1	22.56	22.64	22.71	23.50
20		50	25	22.72	22.63	22.64	
20		50	50	22.74	22.65	22.61	
20		100	0	22.53	22.67	22.64	
20	DFT-s-OFDM QPSK	1	1	22.31	22.67	22.71	24.00
20		1	53	22.74	22.69	22.56	
20		1	104	22.58	22.58	22.63	
20		50	1	22.07	22.14	22.18	23.50
20		50	25	22.74	22.64	22.53	
20		50	50	22.26	22.09	22.13	
20		100	0	22.06	22.12	22.15	
20	DFT-s-OFDM 16QAM	1	1	22.07	22.25	22.25	23.00
20	DFT-s-OFDM 64QAM	1	1	20.65	20.78	20.91	21.50
20	DFT-s-OFDM 256QAM	1	1	17.77	18.69	18.70	19.50
20	CP-OFDM QPSK	1	1	21.31	21.66	21.68	22.50
20	CP-OFDM 16QAM	1	1	20.72	21.04	21.06	22.00
20	CP-OFDM 64QAM	1	1	19.94	20.01	20.08	21.00
20	CP-OFDM 256QAM	1	1	15.90	16.71	16.72	17.50
Channel				134100	136100	138100	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	DFT-s-OFDM QPSK	1	1	22.30	22.73	22.58	23.50
Channel				133600	136100	138600	Tune-up limit (dBm)
Frequency (MHz)				668	680.5	693	
10	DFT-s-OFDM QPSK	1	1	22.30	22.74	22.53	23.50
Channel				133100	136100	139100	Tune-up limit (dBm)
Frequency (MHz)				665.5	680.5	695.5	
5	DFT-s-OFDM QPSK	1	1	22.26	22.70	22.58	23.50

B66_n71 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				134600	136100	137600	Tune-up limit (dBm)
Frequency (MHz)				673	680.5	688	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.28	22.64	22.69	24.00
20		1	53	22.73	22.66	22.55	
20		1	104	22.55	22.55	22.64	
20		50	1	22.54	22.64	22.65	23.50
20		50	25	22.67	22.62	22.55	
20		50	50	22.76	22.54	22.62	
20		100	0	22.64	22.59	22.67	
20	DFT-s-OFDM QPSK	1	1	22.30	22.66	22.72	24.00
20		1	53	22.75	22.69	22.60	
20		1	104	22.59	22.58	22.65	
20		50	1	22.01	22.16	22.20	23.50
20		50	25	22.74	22.63	22.55	
20		50	50	22.28	22.10	22.16	
20		100	0	22.05	22.14	22.16	
20	DFT-s-OFDM 16QAM	1	1	22.03	22.24	22.29	23.00
20	DFT-s-OFDM 64QAM	1	1	20.66	20.81	20.88	21.50
20	DFT-s-OFDM 256QAM	1	1	17.80	18.71	18.73	19.50
20	CP-OFDM QPSK	1	1	21.32	21.68	21.69	22.50
20	CP-OFDM 16QAM	1	1	20.68	21.34	21.10	22.00
20	CP-OFDM 64QAM	1	1	19.68	20.05	20.09	21.00
20	CP-OFDM 256QAM	1	1	15.80	16.74	16.73	17.50
Channel				134100	136100	138100	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	DFT-s-OFDM QPSK	1	1	22.32	22.76	22.61	23.50
Channel				133600	136100	138600	Tune-up limit (dBm)
Frequency (MHz)				668	680.5	693	
10	DFT-s-OFDM QPSK	1	1	22.32	22.78	22.57	23.50
Channel				133100	136100	139100	Tune-up limit (dBm)
Frequency (MHz)				665.5	680.5	695.5	
5	DFT-s-OFDM QPSK	1	1	22.27	22.71	22.62	23.50

CA_41C											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	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	39750	39948	QPSK	1	0	0	0	1	0	22.61	24.00
40185	40185	39987	QPSK	1	0	0	0	1	0	22.59	24.00
40620	40521	40719	QPSK	1	0	0	0	1	0	22.75	24.00
41055	41055	40857	QPSK	1	0	0	0	1	0	22.73	24.00
41490	41490	41292	QPSK	1	0	0	0	1	0	22.68	24.00
39750	39750	39948	16QAM	1	0	0	0	1	0	22.08	23.50
40185	40185	39987	16QAM	1	0	0	0	1	0	22.11	23.50
40620	40521	40719	16QAM	1	0	0	0	1	0	22.24	23.50
41055	41055	40857	16QAM	1	0	0	0	1	0	22.19	23.50
41490	41490	41292	16QAM	1	0	0	0	1	0	22.23	23.50
39750	39750	39948	64QAM	1	0	0	0	1	0	21.59	23.00
40185	40185	39987	64QAM	1	0	0	0	1	0	21.66	23.00
40620	40521	40719	64QAM	1	0	0	0	1	0	21.85	23.00
41055	41055	40857	64QAM	1	0	0	0	1	0	21.83	23.00
41490	41490	41292	64QAM	1	0	0	0	1	0	21.79	23.00
39750	39750	39948	256QAM	1	0	0	0	1	0	22.13	23.50
40185	40185	39987	256QAM	1	0	0	0	1	0	22.20	23.50
40620	40521	40719	256QAM	1	0	0	0	1	0	22.29	23.50
41055	41055	40857	256QAM	1	0	0	0	1	0	22.31	23.50
41490	41490	41292	256QAM	1	0	0	0	1	0	22.33	23.50
39750	39750	39948	QPSK	50	0	0	0	1	0	18.66	20.00
40185	40185	39987	QPSK	50	0	0	0	1	0	18.70	20.00
40620	40521	40719	QPSK	50	0	0	0	1	0	18.89	20.00
41055	41055	40857	QPSK	50	0	0	0	1	0	18.85	20.00
41490	41490	41292	QPSK	50	0	0	0	1	0	18.84	20.00

2CC LTE Uplink												
Configure	CA Configuration	PCC					SCC				Power	
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Measured Power(dBm)	Tune-up limit(dBm)
Inter-band	CA_2A-4A	2	20	18700	1860	QPSK/1#0	4	20	20300	1745	22.91	24.5
	CA_2A-5A	4	20	18700	1860	QPSK/1#0	5	10	20600	844	22.83	24.5
	CA_2A-12A	2	20	18700	1860	QPSK/1#0	12	5	23155	713.5	22.81	24.5
	CA_2A-66A	2	20	18700	1860	QPSK/1#0	66	20	132572	1770	22.90	24.5
	CA_4A-5A	4	20	20050	1720	QPSK/1#0	5	10	20600	844	22.73	24.5
	CA_4A-12A	4	20	20050	1720	QPSK/1#0	12	5	23155	713.5	22.69	24.5
	CA_12A-66A	12	5	23035	701.5	QPSK/1#0	66	20	132572	1770	22.57	24.5

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Mode	Channel	Frequency (MHz)	Average Power (dBm)	Transmit Power (dBm)	Power Setting	Duty Cycle %
802.11a WLAN	CH1	2412	16.84	21.00	16.00	100.00
	CH2	2424	16.82	21.00	16.00	100.00
	CH3	2436	16.81	21.00	16.00	100.00
802.11b WLAN	CH4	2448	17.12	18.00	16.00	87.75
	CH5	2460	16.84	20.00	16.00	100.00
	CH6	2472	16.81	20.00	16.00	100.00
802.11n HT20 MCS	CH7	2484	16.81	18.00	16.00	100.00
	CH8	2496	16.81	18.00	16.00	100.00
	CH9	2508	16.81	18.00	16.00	100.00
802.11n HT40 MCS	CH10	2520	14.70	16.00	17.00	45.48
	CH11	2532	15.06	17.00	17.00	47.48
	CH12	2544	15.07	16.00	17.00	45.48
802.11n HT80 MCS	CH13	2556	13.58	17.00	17.00	47.48
	CH14	2568	16.24	18.00	17.00	46.48
	CH15	2580	16.24	18.00	17.00	46.48
802.11n HT160 MCS	CH16	2592	14.68	16.00	17.00	46.48
	CH17	2604	14.68	16.00	17.00	46.48
	CH18	2616	14.68	16.00	17.00	46.48
802.11n HT320 MCS	CH19	2628	12.77	15.00	16.00	46.48
	CH20	2640	14.68	16.00	17.00	46.48
	CH21	2652	14.68	16.00	17.00	46.48
802.11n HT640 MCS	CH22	2664	11.21	15.00	16.00	46.48
	CH23	2676	14.68	16.00	17.00	46.48
	CH24	2688	14.68	16.00	17.00	46.48
802.11n HT1280 MCS	CH25	2700	10.15	15.00	16.00	46.48
	CH26	2712	14.68	16.00	17.00	46.48
	CH27	2724	14.68	16.00	17.00	46.48
802.11n HT2560 MCS	CH28	2736	9.09	15.00	16.00	46.48
	CH29	2748	14.68	16.00	17.00	46.48
	CH30	2760	14.68	16.00	17.00	46.48
802.11n HT5120 MCS	CH31	2772	8.03	15.00	16.00	46.48
	CH32	2784	14.68	16.00	17.00	46.48
	CH33	2796	14.68	16.00	17.00	46.48
802.11n HT10240 MCS	CH34	2808	6.97	15.00	16.00	46.48
	CH35	2820	14.68	16.00	17.00	46.48
	CH36	2832	14.68	16.00	17.00	46.48
802.11n HT20480 MCS	CH37	2844	5.91	15.00	16.00	46.48
	CH38	2856	14.68	16.00	17.00	46.48
	CH39	2868	14.68	16.00	17.00	46.48
802.11n HT40960 MCS	CH40	2880	4.85	15.00	16.00	46.48
	CH41	2892	14.68	16.00	17.00	46.48
	CH42	2904	14.68	16.00	17.00	46.48
802.11n HT81920 MCS	CH43	2916	3.79	15.00	16.00	46.48
	CH44	2928	14.68	16.00	17.00	46.48
	CH45	2940	14.68	16.00	17.00	46.48
802.11n HT163840 MCS	CH46	2952	2.73	15.00	16.00	46.48
	CH47	2964	14.68	16.00	17.00	46.48
	CH48	2976	14.68	16.00	17.00	46.48
802.11n HT327680 MCS	CH49	2988	1.67	15.00	16.00	46.48
	CH50	3000	14.68	16.00	17.00	46.48
	CH51	3012	14.68	16.00	17.00	46.48
802.11n HT655360 MCS	CH52	3024	0.61	15.00	16.00	46.48
	CH53	3036	14.68	16.00	17.00	46.48
	CH54	3048	14.68	16.00	17.00	46.48
802.11n HT1310720 MCS	CH55	3060	-0.45	15.00	16.00	46.48
	CH56	3072	14.68	16.00	17.00	46.48
	CH57	3084	14.68	16.00	17.00	46.48
802.11n HT2621440 MCS	CH58	3096	-1.51	15.00	16.00	46.48
	CH59	3108	14.68	16.00	17.00	46.48
	CH60	3120	14.68	16.00	17.00	46.48
802.11n HT5242880 MCS	CH61	3132	-2.57	15.00	16.00	46.48
	CH62	3144	14.68	16.00	17.00	46.48
	CH63	3156	14.68	16.00	17.00	46.48
802.11n HT10485760 MCS	CH64	3168	-3.63	15.00	16.00	46.48
	CH65	3180	14.68	16.00	17.00	46.48
	CH66	3192	14.68	16.00	17.00	46.48
802.11n HT20971520 MCS	CH67	3204	-4.69	15.00	16.00	46.48
	CH68	3216	14.68	16.00	17.00	46.48
	CH69	3228	14.68	16.00	17.00	46.48
802.11n HT41943040 MCS	CH70	3240	-5.75	15.00	16.00	46.48
	CH71	3252	14.68	16.00	17.00	46.48
	CH72	3264	14.68	16.00	17.00	46.48
802.11n HT83886080 MCS	CH73	3276	-6.81	15.00	16.00	46.48
	CH74	3288	14.68	16.00	17.00	46.48
	CH75	3300	14.68	16.00	17.00	46.48
802.11n HT167772160 MCS	CH76	3312	-7.87	15.00	16.00	46.48
	CH77	3324	14.68	16.00	17.00	46.48
	CH78	3336	14.68	16.00	17.00	46.48
802.11n HT335544320 MCS	CH79	3348	-8.93	15.00	16.00	46.48
	CH80	3360	14.68	16.00	17.00	46.48
	CH81	3372	14.68	16.00	17.00	46.48
802.11n HT671088640 MCS	CH82	3384	-10.00	15.00	16.00	46.48
	CH83	3396	14.68	16.00	17.00	46.48
	CH84	3408	14.68	16.00	17.00	46.48
802.11n HT1342177280 MCS	CH85	3420	-11.06	15.00	16.00	46.48
	CH86	3432	14.68	16.00	17.00	46.48
	CH87	3444	14.68	16.00	17.00	46.48
802.11n HT2684354560 MCS	CH88	3456	-12.12	15.00	16.00	46.48
	CH89	3468	14.68	16.00	17.00	46.48
	CH90	3480	14.68	16.00	17.00	46.48
802.11n HT5368709120 MCS	CH91	3492	-13.18	15.00	16.00	46.48
	CH92	3504	14.68	16.00	17.00	46.48
	CH93	3516	14.68	16.00	17.00	46.48
802.11n HT10737418240 MCS	CH94	3528	-14.24	15.00	16.00	46.48
	CH95	3540	14.68	16.00	17.00	46.48
	CH96	3552	14.68	16.00	17.00	46.48
802.11n HT21474836480 MCS	CH97	3564	-15.30	15.00	16.00	46.48
	CH98	3576	14.68	16.00	17.00	46.48
	CH99	3588	14.68	16.00	17.00	46.48
802.11n HT42949672960 MCS	CH100	3600	-16.36	15.00	16.00	46.48
	CH101	3612	14.68	16.00	17.00	46.48
	CH102	3624	14.68	16.00	17.00	46.48

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Mode	Channel	Frequency (MHz)	Average Power (dBm)	Transmit Power (dBm)	Power Setting	Duty Cycle %
802.11a WLAN	CH1	2412	16.84	21.00	16.00	100.00
	CH2	2424	16.82	21.00	16.00	100.00
	CH3	2436	16.81	21.00	16.00	100.00
802.11b WLAN	CH4	2448	17.12	18.00	16.00	87.75
	CH5	2460	16.84	20.00	16.00	100.00
	CH6	2472	16.81	20.00	16.00	100.00
802.11n HT20 MCS	CH7	2484	16.81	18.00	16.00	100.00
	CH8	2496	16.81	18.00	16.00	100.00
	CH9	2508	16.81	18.00	16.00	100.00
802.11n HT40 MCS	CH10	2520	14.70	16.00	17.00	45.48
	CH11	2532	15.06	17.00	17.00	47.48
	CH12	2544	15.07	16.00	17.00	45.48
802.11n HT80 MCS	CH13	2556	13.58	17.00	17.00	47.48
	CH14	2568	16.24	18.00	17.00	46.48
	CH15	2580	16.24	18.00	17.00	46.48
802.11n HT160 MCS	CH16	2592	14.68	16.00	17.00	46.48
	CH17	2604	14.68	16.00	17.00	46.48
	CH18	2616	14.68	16.00	17.00	46.48
802.11n HT320 MCS	CH19	2628	12.77	15.00	16.00	46.48
	CH20	2640	14.68	16.00	17.00	46.48
	CH21	2652	14.68	16.00	17.00	46.48
802.11n HT640 MCS	CH22	2664	11.21	15.00	16.00	46.48
	CH23	2676	14.68	16.00	17.00	46.48
	CH24	2688	14.68	16.00	17.00	46.48
802.11n HT1280 MCS	CH25	2700	10.15	15.00	16.00	46.48
	CH26	2712	14.68	16.00	17.00	46.48
	CH27	2724	14.68	16.00	17.00	46.48
802.11n HT2560 MCS	CH28	2736	9.09	15.00	16.00	46.48
	CH29	2748	14.68	16.00	17.00	46.48
	CH30	2760	14.68	16.00	17.00	46.48
802.11n HT5120 MCS	CH31	2772	8.03	15.00	16.00	46.48
	CH32	2784	14.68	16.00	17.00	46.48
	CH33	2796	14.68	16.00	17.00	46.48
802.11n HT10240 MCS	CH34	2808	6.97	15.00	16.00	46.48
	CH35	2820	14.68	16.00	17.00	46.48
	CH36	2832	14.68	16.00	17.00	46.48
802.11n HT20480 MCS	CH37	2844	5.91	15.00	16.00	46.48
	CH38	2856	14.68	16.00	17.00	46.48
	CH39	2868	14.68	16.00	17.00	46.48
802.11n HT40960 MCS	CH40	2880	4.85	15.00	16.00	46.48
	CH41	2892	14.68	16.00	17.00	46.48
	CH42	2904	14.68	16.00	17.00	46.48
802.11n HT81920 MCS	CH43	2916	3.79	15.00	16.00	46.48
	CH44	2928	14.68	16.00	17.00	46.48
	CH45	2940	14.68	16.00	17.00	46.48
802.11n HT163840 MCS	CH46	2952	2.73	15.00	16.00	46.48
	CH47	2964	14.68	16.00	17.00	46.48
	CH48	2976	14.68	16.00	17.00	46.48
802.11n HT327680 MCS	CH49	2988	1.67	15.00	16.00	46.48
	CH50	3000	14.68	16.00	17.00	46.48
	CH51	3012	14.68	16.00	17.00	46.48
802.11n HT655360 MCS	CH52	3024	0.61	15.00	16.00	46.48
	CH53	3036	14.68	16.00	17.00	46.48
	CH54	3048	14.68	16.00	17.00	46.48
802.11n HT1310720 MCS	CH55	3060	-0.45	15.00	16.00	46.48
	CH56	3072	14.68	16.00	17.00	46.48
	CH57	3084	14.68	16.00	17.00	46.48
802.11n HT2621440 MCS	CH58	3096	-1.51	15.00	16.00	46.48
	CH59	3108	14.68	16.00	17.00	46.48
	CH60	3120	14.68	16.00	17.00	46.48
802.11n HT5242880 MCS	CH61	3132	-2.57	15.00	16.00	46.48
	CH62	3144	14.68	16.00	17.00	46.48
	CH63	3156	14.68	16.00	17.00	46.48
802.11n HT10485760 MCS	CH64	3168	-3.63	15.00	16.00	46.48
	CH65	3180	14.68	16.00	17.00	46.48
	CH66	3192	14.68	16.00	17.00	46.48
802.11n HT20971520 MCS	CH67	3204	-4.69	15.00	16.00	46.48
	CH68	3216	14.68	16.00	17.00	46.48
	CH69	3228	14.68	16.00	17.00	46.48
802.11n HT41943040 MCS	CH70	3240	-5.75	15.00	16.00	46.48
	CH71	3252	14.68	16.00	17.00	46.48
	CH72	3264	14.68	16.00	17.00	46.48
802.11n HT83886080 MCS	CH73	3276	-6.81	15.00	16.00	46.48
	CH74	3288	14.68	16.00	17.00	46



5.8GHz WLAN ANT 6

Mod	Channel	Frequency (MHz)	Average power (dBm)	Time to setup	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 6	802.11a-BBQp	CH 148	5760	17.55	18.00	100.00
		CH 157	5762	17.52	18.00	100.00
		CH 165	5805	17.98	18.00	100.00
	802.11a-FT20-MCS0	CH 148	5760	16.11	18.00	100.00
		CH 157	5762	16.41	18.00	100.00
		CH 165	5805	16.72	18.00	100.00
	802.11a-FT6-MCS0	CH 148	5760	15.67	17.00	100.00
		CH 159	5766	15.88	17.00	100.00
		CH 168	5766	16.20	18.00	17.00
	802.11a-FT8-MCS0	CH 148	5760	16.68	18.00	100.00
		CH 157	5766	16.98	18.00	100.00
		CH 165	5805	17.29	18.00	17.00
802.11a-FT9-MCS0	CH 148	5760	16.64	18.00	17.00	
	CH 157	5766	16.94	18.00	17.00	
	CH 165	5805	17.25	18.00	17.00	
802.11a-FT10-MCS0	CH 148	5760	16.58	18.00	17.00	
	CH 159	5775	16.73	18.00	17.00	
	CH 168	5766	16.79	18.00	18.00	
802.11a-HE20-MCS0	CH 148	5760	16.79	18.00	18.00	
	CH 157	5766	16.79	18.00	18.00	
	CH 165	5805	17.08	18.00	18.00	
802.11a-HE21-MCS0	CH 148	5760	16.57	17.00	14.00	
	CH 159	5775	16.79	18.00	14.00	
	CH 168	5766	16.89	18.00	14.00	
802.11a-HE22-MCS0 (R10)	CH 148	5760	16.77	18.00	14.00	
	CH 157	5766	16.77	18.00	14.00	
	CH 165	5805	17.06	18.00	14.00	
802.11a-HE23-MCS0 (R10)	CH 148	5760	16.58	17.00	13.00	
	CH 157	5766	16.58	17.00	13.00	
	CH 165	5805	16.84	18.00	13.00	
802.11a-HE24-MCS0 (R10)	CH 148	5760	16.86	18.00	13.00	
	CH 157	5766	16.86	18.00	13.00	
	CH 165	5805	17.16	18.00	13.00	

5.8 WLAN ANT 9

Mod	Channel	Frequency (MHz)	Average power (dBm)	Time to setup	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 9	802.11a-BBQp	CH 148	5760	17.75	18.00	100.00
		CH 157	5762	17.45	18.00	100.00
		CH 165	5805	17.47	18.00	100.00
	802.11a-FT20-MCS0	CH 148	5760	16.89	18.00	100.00
		CH 157	5762	17.48	18.00	100.00
		CH 165	5805	17.49	18.00	100.00
	802.11a-FT6-MCS0	CH 148	5760	16.65	17.00	100.00
		CH 159	5766	16.72	17.00	100.00
		CH 168	5766	16.94	18.00	17.00
	802.11a-FT8-MCS0	CH 148	5760	16.84	18.00	17.00
		CH 157	5766	16.84	18.00	17.00
		CH 165	5805	16.77	18.00	17.00
802.11a-FT9-MCS0	CH 148	5760	16.69	18.00	17.00	
	CH 157	5766	16.65	18.00	17.00	
	CH 165	5805	16.96	18.00	17.00	
802.11a-FT10-MCS0	CH 148	5760	16.52	17.00	16.00	
	CH 159	5775	16.86	18.00	16.00	
	CH 168	5766	16.52	17.00	16.00	
802.11a-HE20-MCS0	CH 148	5760	16.84	18.00	100.00	
	CH 157	5766	16.84	18.00	100.00	
	CH 165	5805	16.52	17.00	10.00	
802.11a-HE21-MCS0	CH 148	5760	16.52	17.00	14.00	
	CH 159	5775	16.85	18.00	14.00	
	CH 168	5766	16.24	14.00	10.00	
802.11a-HE22-MCS0 (R10)	CH 148	5760	16.67	18.00	10.00	
	CH 157	5766	16.67	18.00	10.00	
	CH 165	5805	16.93	18.00	10.00	
802.11a-HE23-MCS0 (R10)	CH 148	5760	16.50	18.00	10.00	
	CH 157	5766	16.50	18.00	10.00	
	CH 165	5805	16.75	18.00	10.00	
802.11a-HE24-MCS0 (R10)	CH 148	5760	16.81	18.00	10.00	
	CH 157	5766	16.76	18.00	10.00	
	CH 165	5805	16.78	14.00	10.00	

5.8 WLAN ANT 6+9

Mod	Channel	Frequency (MHz)	Average power (dBm)	Time to setup	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 6+9	802.11a-BBQp	CH 148	5760	NA	NA	NA
		CH 157	5762	NA	NA	NA
		CH 165	5805	NA	NA	NA
	802.11a-FT20-MCS0	CH 148	5760	16.88	21.00	100.00
		CH 157	5762	16.82	21.00	100.00
		CH 165	5805	16.85	21.00	100.00
	802.11a-FT6-MCS0	CH 148	5760	16.52	20.00	100.00
		CH 159	5766	16.45	20.00	100.00
		CH 168	5766	16.67	21.00	17.00
	802.11a-FT8-MCS0	CH 148	5760	16.68	21.00	17.00
		CH 157	5766	16.68	21.00	17.00
		CH 165	5805	16.49	21.00	17.00
802.11a-FT9-MCS0	CH 148	5760	16.54	21.00	17.00	
	CH 157	5766	16.54	21.00	17.00	
	CH 165	5805	16.80	21.00	17.00	
802.11a-FT10-MCS0	CH 148	5760	16.37	21.00	16.00	
	CH 159	5775	16.69	21.00	16.00	
	CH 168	5766	16.37	21.00	16.00	
802.11a-HE20-MCS0	CH 148	5760	16.67	21.00	10.00	
	CH 157	5766	16.67	21.00	10.00	
	CH 165	5805	16.93	21.00	10.00	
802.11a-HE21-MCS0 (R10)	CH 148	5760	16.50	21.00	10.00	
	CH 157	5766	16.50	21.00	10.00	
	CH 165	5805	16.75	21.00	10.00	
802.11a-HE22-MCS0 (R10)	CH 148	5760	16.81	21.00	10.00	
	CH 157	5766	16.76	21.00	10.00	
	CH 165	5805	16.78	14.00	10.00	

Mod	Channel	Frequency (MHz)	Average power (dBm)	Time to setup	Power Setting	Duty Cycle %
M1_C001	CH 16	2412	13.50	13.00	8.17	11.00
	CH 36	2412	13.81	13.00	8.46	11.00
	CH 56	2412	13.50	13.00	8.75	10.00
	Duty Cycle %		76.45		76.46	

Mod	Channel	Frequency (MHz)	Average power (dBm)	Time to setup	Power Setting	Duty Cycle %
M1_C002	CH 16	2412	13.50	13.00	8.17	11.00
	CH 36	2412	13.81	13.00	8.46	11.00
	CH 56	2412	13.50	13.00	8.75	10.00
	Duty Cycle %		61.76		61.82	

Reduced Power Level 1

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	1850.2	1880	1909.8		1850.2	1880	1909.8	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	26.05	26.12	26.09	28.00	17.05	17.12	17.09	19.00
GPRS 1 Tx slot	26.01	26.10	26.02	28.00	17.01	17.10	17.02	19.00
GPRS 2 Tx slots	25.54	25.61	25.53	27.00	19.54	19.61	19.53	21.00
GPRS 3 Tx slots	23.48	23.53	23.45	25.00	19.22	19.27	19.19	20.74
GPRS 4 Tx slots	22.29	22.34	22.28	24.00	19.29	19.34	19.28	21.00
EDGE 1 Tx slot	23.52	23.56	23.47	24.50	14.52	14.56	14.47	15.50
EDGE 2 Tx slots	21.94	21.97	21.93	23.50	15.94	15.97	15.93	17.50
EDGE 3 Tx slots	20.08	20.13	20.09	21.50	15.82	15.87	15.83	17.24
EDGE 4 Tx slots	18.69	18.77	18.70	19.50	15.69	15.77	15.70	16.50
Mode		Max.	26.12	0.80		Max.	19.61	
Attenuator	Cable Loss : 0.8							

Band	WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)
	9262	9400	9538		1312	1413	1513	
TX Channel	9662	9800	9938		1537	1638	1738	
Rx Channel	9662	9800	9938		1537	1638	1738	
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99 RMC 12.2Kbps	18.26	18.33	18.27	20.00	18.21	18.25	18.17	20.00
3GPP Rel 5 HSDPA Subtest-1	17.41	17.15	17.44	19.00	17.35	17.63	17.08	19.00
3GPP Rel 5 HSDPA Subtest-2	17.46	17.18	17.54	19.00	17.27	17.52	17.12	19.00
3GPP Rel 5 HSDPA Subtest-3	17.08	16.75	17.07	18.50	16.82	17.14	16.69	18.50
3GPP Rel 5 HSDPA Subtest-4	17.10	16.68	17.08	18.50	16.84	16.94	16.62	18.50
3GPP Rel 8 DC-HSDPA Subtest-1	17.50	17.16	17.66	19.00	17.41	17.77	17.40	19.00
3GPP Rel 8 DC-HSDPA Subtest-2	17.44	17.12	17.68	19.00	17.39	17.63	17.36	19.00
3GPP Rel 8 DC-HSDPA Subtest-3	16.92	16.63	17.18	18.50	16.81	17.16	16.77	18.50
3GPP Rel 8 DC-HSDPA Subtest-4	16.95	16.72	17.16	18.50	16.82	17.14	16.78	18.50
3GPP Rel 6 HSUPA Subtest-1	17.47	17.14	17.14	19.00	16.48	16.60	16.95	18.00
3GPP Rel 6 HSUPA Subtest-2	17.49	17.21	17.64	19.00	16.88	17.29	17.42	18.00
3GPP Rel 6 HSUPA Subtest-3	16.57	16.29	16.63	18.00	16.04	16.95	16.48	18.00
3GPP Rel 6 HSUPA Subtest-4	17.49	17.17	17.55	19.00	17.03	17.49	17.40	19.00
3GPP Rel 6 HSUPA Subtest-5	16.53	17.21	16.64	18.00	16.12	16.77	16.49	18.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	16.40	16.44	16.77	18.00	16.46	16.77	16.47	18.00
Attenuator	Cable Loss			0.8	Cable Loss			0.8
Mode	Max.			18.33	Max.			18.25

Band 2 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	18.56	18.57	18.53	20
20	QPSK	1	49	18.44	18.29	18.40	
20	QPSK	1	99	18.33	18.12	18.24	
20	QPSK	50	0	17.55	17.56	17.53	19
20	QPSK	50	24	17.35	17.21	17.36	
20	QPSK	50	50	17.15	17.10	17.18	
20	QPSK	100	0	16.93	17.07	17.06	19
20	16QAM	1	0	17.56	17.54	17.69	
20	16QAM	1	49	17.35	17.36	17.49	
20	16QAM	1	99	17.23	17.20	17.34	18
20	16QAM	50	0	16.47	16.54	16.60	
20	16QAM	50	24	16.28	16.41	16.46	
20	16QAM	50	50	16.13	16.24	16.33	18
20	16QAM	100	0	16.02	16.11	16.15	
20	64QAM	1	0	16.66	16.76	16.68	
20	64QAM	1	49	16.62	16.74	16.65	18
20	64QAM	1	99	16.55	16.73	16.59	
20	64QAM	50	0	15.90	16.03	15.94	
20	64QAM	50	24	15.88	16.00	15.89	17
20	64QAM	50	50	15.84	15.96	15.89	
20	64QAM	100	0	15.78	15.92	15.85	
20	256QAM	1	0	14.38	14.51	14.44	15
20	256QAM	1	49	14.35	14.46	14.43	
20	256QAM	1	99	14.30	14.39	14.42	
20	256QAM	50	0	14.29	14.35	14.39	15
20	256QAM	50	24	14.24	14.35	14.37	
20	256QAM	50	50	14.18	14.29	14.31	
20	256QAM	100	0	14.17	14.22	14.25	
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	18.51	18.53	18.47	20
15	QPSK	1	37	18.36	18.26	18.32	
15	QPSK	1	74	18.27	18.07	18.16	
15	QPSK	36	0	17.46	17.36	17.50	19
15	QPSK	36	20	17.27	17.14	17.27	
15	QPSK	36	39	17.08	17.04	17.09	
15	QPSK	75	0	16.85	16.82	16.97	19
15	16QAM	1	0	17.48	17.45	17.65	
15	16QAM	1	37	17.32	17.27	17.46	
15	16QAM	1	74	17.19	17.13	17.27	18
15	16QAM	36	0	16.38	16.50	16.55	
15	16QAM	36	20	16.24	16.34	16.41	
15	16QAM	36	39	16.04	16.19	16.29	18
15	16QAM	75	0	15.99	16.04	16.10	
15	64QAM	1	0	16.58	16.70	16.63	
15	64QAM	1	37	16.54	16.70	16.58	18
15	64QAM	1	74	16.52	16.64	16.53	
15	64QAM	36	0	15.86	15.95	15.85	
15	64QAM	36	20	15.83	15.94	15.82	17
15	64QAM	36	39	15.79	15.88	15.83	
15	64QAM	75	0	15.73	15.88	15.80	
15	256QAM	1	0	14.31	14.43	14.41	15
15	256QAM	1	37	14.27	14.37	14.34	
15	256QAM	1	74	14.25	14.32	14.36	
15	256QAM	36	0	14.21	14.29	14.35	15
15	256QAM	36	20	14.19	14.31	14.31	
15	256QAM	36	39	14.11	14.24	14.22	
15	256QAM	75	0	14.09	14.18	14.21	
Channel				18650	18900	19150	
Frequency (MHz)				1865	1880	1905	
10	QPSK	1	0	18.50	18.52	18.48	20
10	QPSK	1	25	18.40	18.21	18.35	
10	QPSK	1	49	18.28	18.07	18.17	
10	QPSK	25	0	17.47	17.36	17.47	19
10	QPSK	25	12	17.31	17.15	17.30	
10	QPSK	25	25	17.08	17.07	17.15	
10	QPSK	50	0	16.85	16.81	17.01	19
10	16QAM	1	0	17.47	17.48	17.65	
10	16QAM	1	25	17.26	17.30	17.43	
10	16QAM	1	49	17.16	17.15	17.28	18
10	16QAM	25	0	16.41	16.48	16.54	
10	16QAM	25	12	16.24	16.37	16.41	
10	16QAM	25	25	16.10	16.20	16.27	18
10	16QAM	50	0	15.97	16.05	16.11	
10	64QAM	1	0	16.60	16.70	16.61	
10	64QAM	1	25	16.56	16.66	16.61	18
10	64QAM	1	49	16.47	16.67	16.55	
10	64QAM	25	0	15.83	15.99	15.88	
10	64QAM	25	12	15.80	15.93	15.84	17
10	64QAM	25	25	15.79	15.91	15.80	
10	64QAM	50	0	15.73	15.84	15.82	
10	256QAM	1	0	14.30	14.46	14.37	15
10	256QAM	1	25	14.28	14.42	14.39	
10	256QAM	1	49	14.22	14.35	14.37	
10	256QAM	25	0	14.22	14.30	14.34	15
10	256QAM	25	12	14.17	14.29	14.34	
10	256QAM	25	25	14.14	14.24	14.24	
10	256QAM	50	0	14.13	14.16	14.21	
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	18.52	18.54	18.48	20
5	QPSK	1	12	18.41	18.22	18.33	
5	QPSK	1	24	18.25	18.04	18.20	
5	QPSK	12	0	17.48	17.33	17.50	19
5	QPSK	12	7	17.32	17.17	17.31	
5	QPSK	12	13	17.09	17.02	17.12	
5	QPSK	25	0	16.89	16.83	16.98	19
5	16QAM	1	0	17.49	17.51	17.64	
5	16QAM	1	12	17.30	17.31	17.43	

Band 4 (AWS Band) (dBm) Part 27L (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	18.40	18.47	18.44	20
20	QPSK	1	49	18.21	18.24	18.29	
20	QPSK	1	99	18.06	18.07	18.11	
20	QPSK	50	0	17.25	17.38	17.37	19
20	QPSK	50	24	17.04	17.16	17.15	
20	QPSK	50	50	16.86	16.95	16.93	
20	QPSK	100	0	16.66	16.79	16.71	19
20	16QAM	1	0	17.27	17.39	17.35	
20	16QAM	1	49	17.15	17.20	17.15	
20	16QAM	1	99	16.97	17.00	16.95	18
20	16QAM	50	0	16.24	16.29	16.22	
20	16QAM	50	24	16.03	16.10	16.01	
20	16QAM	50	50	15.89	15.91	15.81	18
20	16QAM	100	0	15.75	15.80	15.63	
20	64QAM	1	0	16.30	16.39	16.18	
20	64QAM	1	49	16.27	16.32	16.14	18
20	64QAM	1	99	16.24	16.30	16.11	
20	64QAM	50	0	15.54	15.66	15.45	
20	64QAM	50	24	15.51	15.64	15.40	17
20	64QAM	50	50	15.50	15.63	15.40	
20	64QAM	100	0	15.42	15.55	15.35	
20	256QAM	1	0	13.86	13.99	13.76	15
20	256QAM	1	49	13.82	13.91	13.76	
20	256QAM	1	99	13.82	13.87	13.75	
20	256QAM	50	0	13.76	13.82	13.73	15
20	256QAM	50	24	13.72	13.80	13.71	
20	256QAM	50	50	13.67	13.76	13.64	
20	256QAM	100	0	13.60	13.70	13.57	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	18.45	18.46	18.44	20
15	QPSK	1	37	18.30	18.15	18.30	
15	QPSK	1	74	18.20	18.00	18.12	
15	QPSK	36	0	17.47	17.32	17.36	19
15	QPSK	36	20	17.20	17.08	17.22	
15	QPSK	36	39	17.08	16.98	17.07	
15	QPSK	75	0	16.84	16.77	16.90	19
15	16QAM	1	0	17.43	17.39	17.59	
15	16QAM	1	37	17.24	17.28	17.42	
15	16QAM	1	74	17.08	17.08	17.27	18
15	16QAM	36	0	16.30	16.45	16.47	
15	16QAM	36	20	16.13	16.26	16.34	
15	16QAM	36	39	16.04	16.12	16.17	18
15	16QAM	75	0	15.92	16.02	16.02	
15	64QAM	1	0	16.53	16.65	16.55	
15	64QAM	1	37	16.52	16.63	16.50	18
15	64QAM	1	74	16.45	16.64	16.43	
15	64QAM	36	0	15.76	15.93	15.83	
15	64QAM	36	20	15.77	15.90	15.77	17
15	64QAM	36	39	15.75	15.86	15.75	
15	64QAM	75	0	15.69	15.85	15.76	
15	256QAM	1	0	14.29	14.45	14.31	15
15	256QAM	1	37	14.25	14.31	14.32	
15	256QAM	1	74	14.22	14.25	14.32	
15	256QAM	36	0	14.17	14.23	14.24	15
15	256QAM	36	20	14.15	14.21	14.26	
15	256QAM	36	39	14			

5	16QAM	1	24	17.18	17.15	17.28	18
5	16QAM	12	0	16.41	16.49	16.53	
5	16QAM	12	7	16.20	16.34	16.39	
5	16QAM	12	13	16.09	16.19	16.25	
5	16QAM	25	0	15.94	16.05	16.10	
5	64QAM	1	0	16.62	16.72	16.61	
5	64QAM	1	12	16.54	16.68	16.59	
5	64QAM	1	24	16.48	16.69	16.55	
5	64QAM	12	0	15.83	16.00	15.86	
5	64QAM	12	7	15.80	15.92	15.82	
5	64QAM	12	13	15.76	15.93	15.81	
5	64QAM	25	0	15.73	15.88	15.80	
5	256QAM	1	0	14.35	14.42	14.38	
5	256QAM	1	12	14.26	14.42	14.39	
5	256QAM	1	24	14.24	14.31	14.36	
5	256QAM	12	0	14.26	14.29	14.34	
5	256QAM	12	7	14.16	14.32	14.34	
5	256QAM	12	13	14.12	14.24	14.27	
5	256QAM	25	0	14.14	14.16	14.17	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	18.41	18.45	18.42	20
3	QPSK	1	8	18.30	18.16	18.30	
3	QPSK	1	14	18.19	18.00	18.08	
3	QPSK	8	0	17.44	17.31	17.39	19
3	QPSK	8	4	17.25	17.09	17.24	
3	QPSK	8	7	17.06	16.99	17.10	
3	QPSK	15	0	16.80	16.78	16.93	19
3	16QAM	1	0	17.46	17.39	17.57	
3	16QAM	1	8	17.22	17.27	17.39	
3	16QAM	1	14	17.11	17.11	17.28	18
3	16QAM	8	0	16.32	16.42	16.52	
3	16QAM	8	4	16.12	16.27	16.33	
3	16QAM	8	7	16.03	16.16	16.16	18
3	16QAM	15	0	15.90	15.99	16.05	
3	64QAM	1	0	16.52	16.67	16.58	
3	64QAM	1	8	16.51	16.58	16.53	18
3	64QAM	1	14	16.43	16.61	16.43	
3	64QAM	8	0	15.77	15.91	15.84	
3	64QAM	8	4	15.78	15.90	15.78	17
3	64QAM	8	7	15.75	15.83	15.79	
3	64QAM	15	0	15.67	15.82	15.73	
3	256QAM	1	0	14.29	14.43	14.32	15
3	256QAM	1	8	14.25	14.36	14.33	
3	256QAM	1	14	14.21	14.22	14.27	
3	256QAM	8	0	14.18	14.24	14.24	15
3	256QAM	8	4	14.12	14.25	14.30	
3	256QAM	8	7	14.05	14.13	14.19	
3	256QAM	15	0	14.03	14.14	14.17	
Channel				18907	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	18.45	18.45	18.44	20
1.4	QPSK	1	3	18.30	18.15	18.30	
1.4	QPSK	1	5	18.20	18.00	18.12	
1.4	QPSK	3	0	17.47	17.32	17.36	19
1.4	QPSK	3	1	17.20	17.08	17.22	
1.4	QPSK	3	3	17.08	16.98	17.07	
1.4	QPSK	6	0	16.84	16.77	16.90	19
1.4	16QAM	1	0	17.43	17.39	17.59	
1.4	16QAM	1	3	17.24	17.28	17.42	
1.4	16QAM	1	5	17.08	17.08	17.27	19
1.4	16QAM	3	0	16.30	16.45	16.47	
1.4	16QAM	3	1	16.13	16.26	16.34	
1.4	16QAM	3	3	16.04	16.12	16.17	18
1.4	16QAM	6	0	15.92	16.02	16.02	
1.4	64QAM	1	0	16.53	16.65	16.55	
1.4	64QAM	1	3	16.52	16.63	16.50	18
1.4	64QAM	1	5	16.45	16.64	16.43	
1.4	64QAM	3	0	15.76	15.93	15.83	
1.4	64QAM	3	1	15.77	15.90	15.77	17
1.4	64QAM	3	3	15.75	15.86	15.75	
1.4	64QAM	6	0	15.69	15.85	15.76	
1.4	256QAM	1	0	14.29	14.45	14.31	15
1.4	256QAM	1	3	14.25	14.31	14.32	
1.4	256QAM	1	5	14.22	14.25	14.32	
1.4	256QAM	3	0	14.17	14.23	14.24	15
1.4	256QAM	3	1	14.15	14.21	14.26	
1.4	256QAM	3	3	14.07	14.17	14.19	
1.4	256QAM	6	0	14.02	14.11	14.18	15

5	16QAM	1	24	17.04	17.04	17.19	18
5	16QAM	12	0	16.22	16.40	16.44	
5	16QAM	12	7	16.06	16.17	16.26	
5	16QAM	12	13	15.96	16.07	16.14	
5	16QAM	25	0	15.84	15.98	15.98	
5	64QAM	1	0	16.46	16.60	16.47	
5	64QAM	1	12	16.47	16.59	16.42	
5	64QAM	1	24	16.38	16.60	16.36	
5	64QAM	12	0	15.72	15.88	15.75	
5	64QAM	12	7	15.73	15.85	15.73	
5	64QAM	12	13	15.71	15.83	15.68	
5	64QAM	25	0	15.61	15.77	15.69	
5	256QAM	1	0	14.23	14.36	14.26	
5	256QAM	1	12	14.21	14.23	14.24	
5	256QAM	1	24	14.14	14.19	14.25	
5	256QAM	12	0	14.12	14.19	14.16	
5	256QAM	12	7	14.09	14.18	14.19	
5	256QAM	12	13	14.03	14.08	14.14	
5	256QAM	25	0	13.97	14.05	14.11	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	18.36	18.42	18.37	20
3	QPSK	1	8	18.22	18.07	18.24	
3	QPSK	1	14	18.12	17.95	18.08	
3	QPSK	8	0	17.43	17.26	17.27	19
3	QPSK	8	4	17.15	16.99	17.14	
3	QPSK	8	7	17.04	16.90	17.04	
3	QPSK	15	0	16.80	16.71	16.85	19
3	16QAM	1	0	17.36	17.34	17.55	
3	16QAM	1	8	17.20	17.20	17.35	
3	16QAM	1	14	17.00	17.03	17.22	18
3	16QAM	8	0	16.25	16.39	16.42	
3	16QAM	8	4	16.08	16.19	16.26	
3	16QAM	8	7	15.98	16.08	16.13	18
3	16QAM	15	0	15.84	15.94	15.98	
3	64QAM	1	0	16.44	16.56	16.46	
3	64QAM	1	8	16.45	16.60	16.45	18
3	64QAM	1	14	16.37	16.58	16.36	
3	64QAM	8	0	15.71	15.87	15.78	
3	64QAM	8	4	15.72	15.81	15.71	17
3	64QAM	8	7	15.69	15.79	15.67	
3	64QAM	15	0	15.62	15.79	15.68	
3	256QAM	1	0	14.20	14.37	14.26	15
3	256QAM	1	8	14.21	14.26	14.25	
3	256QAM	1	14	14.14	14.20	14.24	
3	256QAM	8	0	14.10	14.18	14.16	15
3	256QAM	8	4	14.09	14.12	14.22	
3	256QAM	8	7	14.00	14.12	14.16	
3	256QAM	15	0	13.94	14.02	14.11	
Channel				19967	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	18.42	18.40	18.36	20
1.4	QPSK	1	3	18.24	18.08	18.25	
1.4	QPSK	1	5	18.15	17.91	18.04	
1.4	QPSK	3	0	17.42	17.25	17.32	19
1.4	QPSK	3	1	17.14	17.00	17.16	
1.4	QPSK	3	3	17.01	16.91	17.03	
1.4	QPSK	6	0	16.80	16.73	16.85	19
1.4	16QAM	1	0	17.39	17.31	17.52	
1.4	16QAM	1	3	17.17	17.25	17.33	
1.4	16QAM	1	5	17.01	17.05	17.24	19
1.4	16QAM	3	0	16.24	16.36	16.44	
1.4	16QAM	3	1	16.09	16.18	16.30	
1.4	16QAM	3	3	15.99	16.04	16.12	18
1.4	16QAM	6	0	15.87	15.95	15.98	
1.4	64QAM	1	0	16.45	16.58	16.50	
1.4	64QAM	1	3	16.43	16.56	16.46	18
1.4	64QAM	1	5	16.41	16.60	16.37	
1.4	64QAM	3	0	15.68	15.89	15.76	
1.4	64QAM	3	1	15.69	15.82	15.68	17
1.4	64QAM	3	3	15.69	15.79	15.71	
1.4	64QAM	6	0	15.63	15.78	15.68	
1.4	256QAM	1	0	14.24	14.39	14.22	15
1.4	256QAM	1	3	14.16	14.27	14.23	
1.4	256QAM	1	5	14.14	14.19	14.24	
1.4	256QAM	3	0	14.13	14.17	14.20	15
1.4	256QAM	3	1	14.09	14.13	14.17	
1.4	256QAM	3	3	13.99	14.10	14.11	
1.4	256QAM	6	0	13.97	14.06	14.15	15



Band 5 (Celluar 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	Tune-up limit (dBm)					
Frequency (MHz)				829	836.5	844	Tune-up limit (dBm)					
10	QPSK	1	0	23.48	23.55	23.54	25	25	25			
10	QPSK	1	25	23.31	23.37	23.42						
10	QPSK	1	49	23.11	23.21	23.24						
10	QPSK	25	0	22.56	22.72	22.71	24	24	24			
10	QPSK	25	12	22.38	22.50	22.55						
10	QPSK	25	25	22.17	22.33	22.40						
10	QPSK	50	0	21.98	22.25	22.24	24	24	24			
10	16QAM	1	0	22.37	22.54	22.71						
10	16QAM	1	25	22.16	22.38	22.50						
10	16QAM	1	49	21.95	22.19	22.33	23	23	23			
10	16QAM	25	0	21.25	21.46	21.59						
10	16QAM	25	12	21.08	21.24	21.45						
10	16QAM	25	25	20.93	21.13	21.27	23	23	23			
10	16QAM	50	0	20.82	20.93	21.06						
10	64QAM	1	0	21.44	21.53	21.66						
10	64QAM	1	25	21.42	21.46	21.65	23	23	23			
10	64QAM	1	49	21.37	21.41	21.63						
10	64QAM	25	0	20.67	20.78	20.99						
10	64QAM	25	12	20.63	20.75	20.98	22	22	22			
10	64QAM	25	25	20.58	20.72	20.93						
10	64QAM	50	0	20.50	20.67	20.90						
10	256QAM	1	0	18.88	19.08	19.31	20	20	20			
10	256QAM	1	25	18.82	19.02	19.27						
10	256QAM	1	49	18.82	18.97	19.21						
10	256QAM	25	0	18.76	18.94	19.17	20	20	20			
10	256QAM	25	12	18.74	18.89	19.11						
10	256QAM	25	25	18.67	18.83	19.05						
10	256QAM	50	0	18.65	18.75	19.05	20	20	20			
Channel				20425	20525	20625				Tune-up limit (dBm)		
Frequency (MHz)				826.5	836.5	846.5				Tune-up limit (dBm)		
5	QPSK	1	0	23.41	23.52	23.48	25	25	25			
5	QPSK	1	12	23.24	23.34	23.36						
5	QPSK	1	24	23.03	23.15	23.15						
5	QPSK	12	0	22.48	22.56	22.63	24	24	24			
5	QPSK	12	7	22.31	22.44	22.47						
5	QPSK	12	13	22.13	22.25	22.32						
5	QPSK	25	0	21.91	22.12	22.20	24	24	24			
5	16QAM	1	0	22.31	22.45	22.65						
5	16QAM	1	12	22.09	22.29	22.44						
5	16QAM	1	24	21.86	22.10	22.24	23	23	23			
5	16QAM	12	0	21.21	21.39	21.52						
5	16QAM	12	7	21.02	21.17	21.38						
5	16QAM	12	13	20.90	21.05	21.19	23	23	23			
5	16QAM	25	0	20.74	20.89	21.02						
5	64QAM	1	0	21.41	21.45	21.62						
5	64QAM	1	12	21.37	21.41	21.59	23	23	23			
5	64QAM	1	24	21.30	21.36	21.57						
5	64QAM	12	0	20.64	20.72	20.94						
5	64QAM	12	7	20.59	20.70	20.94	22	22	22			
5	64QAM	12	13	20.52	20.67	20.88						
5	64QAM	25	0	20.47	20.61	20.86						
5	256QAM	1	0	18.79	19.05	19.24	20	20	20			
5	256QAM	1	12	18.77	18.93	19.18						
5	256QAM	1	24	18.75	18.93	19.15						
5	256QAM	12	0	18.69	18.86	19.08	20	20	20			
5	256QAM	12	7	18.65	18.84	19.05						
5	256QAM	12	13	18.59	18.76	19.00						
5	256QAM	25	0	18.61	18.70	18.97	20	20	20			
Channel				20415	20525	20635				Tune-up limit (dBm)		
Frequency (MHz)				826.5	836.5	847.5				Tune-up limit (dBm)		
3	QPSK	1	0	23.37	23.46	23.41	25	25	25			
3	QPSK	1	8	23.19	23.30	23.27						
3	QPSK	1	14	22.95	23.11	23.06						
3	QPSK	8	0	22.39	22.51	22.57	24	24	24			
3	QPSK	8	4	22.22	22.36	22.42						
3	QPSK	8	7	22.07	22.21	22.26						
3	QPSK	15	0	21.85	22.04	22.12	24	24	24			
3	16QAM	1	0	22.26	22.42	22.58						
3	16QAM	1	8	22.04	22.25	22.39						
3	16QAM	1	14	21.82	22.06	22.18	23	23	23			
3	16QAM	8	0	21.13	21.30	21.45						
3	16QAM	8	4	20.94	21.11	21.31						
3	16QAM	8	7	20.84	20.98	21.11	23	23	23			
3	16QAM	15	0	20.68	20.84	20.93						
3	64QAM	1	0	21.34	21.36	21.57						
3	64QAM	1	8	21.29	21.37	21.50	23	23	23			
3	64QAM	1	14	21.25	21.29	21.52						
3	64QAM	8	0	20.60	20.63	20.90						
3	64QAM	8	4	20.55	20.65	20.89	22	22	22			
3	64QAM	8	7	20.45	20.62	20.84						
3	64QAM	15	0	20.39	20.55	20.82						
3	256QAM	1	0	18.75	18.97	19.20	20	20	20			
3	256QAM	1	8	18.74	18.87	19.09						
3	256QAM	1	14	18.71	18.84	19.06						
3	256QAM	8	0	18.61	18.80	19.02	20	20	20			
3	256QAM	8	4	18.59	18.76	18.99						
3	256QAM	8	7	18.52	18.71	18.93						
3	256QAM	15	0	18.56	18.64	18.89	20	20	20			
Channel				20407	20525	20643				Tune-up limit (dBm)		
Frequency (MHz)				824.7	836.5	848.3				Tune-up limit (dBm)		
1.4	QPSK	1	0	23.36	23.46	23.43	25	25	25			
1.4	QPSK	1	3	23.20	23.28	23.30						
1.4	QPSK	1	5	22.97	23.10	23.12						
1.4	QPSK	3	0	22.42	22.52	22.59	24	24	24			
1.4	QPSK	3	1	22.24	22.38	22.42						
1.4	QPSK	3	3	22.07	22.20	22.25						
1.4	QPSK	6	0	21.87	22.08	22.15	24	24	24			
1.4	16QAM	1	0	22.24	22.42	22.61						
1.4	16QAM	1	3	22.02	22.24	22.36						

Band 7 (2600MHz Band) (dBm) Part 27												
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)					
Channel				20850	21100	21350	Tune-up limit (dBm)					
Frequency (MHz)				2510	2535	2560	Tune-up limit (dBm)					
20	QPSK	1	0	16.60	16.66	16.65	18	18	18			
20	QPSK	1	49	16.48	16.41	16.53						
20	QPSK	1	99	16.33	16.28	16.35						
20	QPSK	50	0	15.59	15.66	15.65	17	17	17			
20	QPSK	50	24	15.42	15.35	15.44						
20	QPSK	50	50	15.22	15.21	15.32						
20	QPSK	100	0	15.07	15.17	15.16	17	17	17			
20	16QAM	1	0	15.71	15.75	15.74						
20	16QAM	1	49	15.51	15.58	15.55						
20	16QAM	1	99	15.39	15.37	15.37	16	16	16			
20	16QAM	50	0	14.70	14.66	14.64						
20	16QAM	50	24	14.57	14.50	14.50						
20	16QAM	50	50	14.43	14.31	14.39	16	16	16			
20	16QAM	100	0	14.23	14.18	14.27						
20	64QAM	1	0	14.77	14.79	14.81						
20	64QAM	1	49	14.72	14.75	14.78	16	16	16			
20	64QAM	1	99	14.67	14.71	14.75						
20	64QAM	50	0	14.01	14.06	14.10						
20	64QAM	50	24	13.98	14.04	14.03	15	15	15			
20	64QAM	50	50	13.90	14.00	13.97						
20	64QAM	100	0	13.84	13.95	13.91						
20	256QAM	1	0	12.27	12.33	12.31	13	13	13			
20	256QAM	1	49	12.24	12.28	12.29						
20	256QAM	1	99	12.20	12.20	12.23						
20	256QAM	50	0	12.14	12.19	12.15	13	13	13			
20	256QAM	50	24	12.08	12.16	12.13						
20	256QAM	50	50	12.06	12.15	12.08						
20	256QAM	100	0	12.04	12.14	12.04	13	13	13			
Channel				20825	21100	21375				Tune-up limit (dBm)		
Frequency (MHz)				2507.5	2535	2562.5				Tune-up limit (dBm)		
15	QPSK	1	0	16.54	16.55	16.58	18	18	18			
15	QPSK	1	37	16.45	16.36	16.46						
15	QPSK	1	74	16.24	16.25	16.28						
15	QPSK	36	0	15.54	15.40	15.58	17	17	17			
15	QPSK	36	20	15.33	15.28	15.36						
15	QPSK	36	39	15.17	15.16	15.25						
15	QPSK	75	0	15.04	15.00	15.10	17	17	17			
15	16QAM	1	0	15.63	15.71	15.70						
15	16QAM	1	37	15.46	15.51	15.52						
15	16QAM	1	74	15.36	15.31	15.30	16	16	16			
15	16QAM	36	0	14.66	14.63	14.61						
15	16QAM	36	20	14.50	14.46	14.43						
15	16QAM	36	39	14.40	14.22	14.32	16	16	16			
15	16QAM	75	0	14.15	14.12	14.19						
15	64QAM	1	0	14.73	14.73	14.74						
15	64QAM	1	37	14.64	14.67	14.69	16	16	16			
15	64QAM	1	74	14.61	14.64	14.70						
15	64QAM	36	0	13.94	14.02	14.03						
15	64QAM	36	20	13.92	13.95	13.97	15	15	15			
15	64QAM	36	39	13.86	13.96	13.91						
15	64QAM	75	0	13.79	13.87	13.86						
15	256QAM	1	0	12.22	12.26	12.23	13	13	13			
15	256QAM	1	37	12.19	12.20	12.21						
15	256QAM	1	74	12.16	12.15	12.19						
15	256QAM	36	0	12.09	12.14	12.07	13	13	13			
15	256QAM	36	20	12.01	12.10	12.06						
15	256QAM	36	39	11.98	12.10	12.05						
15	256QAM	75	0	11.96	12.07	11.97	13	13	13			
Channel				20800	21100	21400				Tune-up limit (dBm)		
Frequency (MHz)				2505	2535	2565				Tune-up limit (dBm)		
10	QPSK	1	0	16.51	16							



1.4	16QAM	1	5	21.83	22.07	22.18	24
1.4	16QAM	3	0	21.17	21.35	21.44	
1.4	16QAM	3	1	20.93	21.09	21.31	
1.4	16QAM	3	3	20.83	20.98	21.15	23
1.4	16QAM	6	0	20.66	20.82	20.99	
1.4	64QAM	1	0	21.33	21.42	21.54	23
1.4	64QAM	1	3	21.31	21.37	21.56	
1.4	64QAM	1	5	21.26	21.32	21.51	
1.4	64QAM	3	0	20.57	20.65	20.89	
1.4	64QAM	3	1	20.52	20.62	20.87	
1.4	64QAM	3	3	20.48	20.63	20.81	
1.4	64QAM	6	0	20.41	20.54	20.78	22
1.4	256QAM	1	0	18.74	18.98	19.18	20
1.4	256QAM	1	3	18.69	18.90	19.12	
1.4	256QAM	1	5	18.67	18.87	19.07	
1.4	256QAM	3	0	18.63	18.80	19.05	
1.4	256QAM	3	1	18.60	18.77	18.98	
1.4	256QAM	3	3	18.52	18.72	18.93	
1.4	256QAM	6	0	18.57	18.65	18.88	20

5	16QAM	1	24	15.33	15.31	15.31	16
5	16QAM	12	0	14.66	14.63	14.56	
5	16QAM	12	7	14.51	14.46	14.45	
5	16QAM	12	13	14.39	14.27	14.30	16
5	16QAM	25	0	14.19	14.09	14.19	
5	64QAM	1	0	14.72	14.76	14.76	16
5	64QAM	1	12	14.63	14.69	14.73	
5	64QAM	1	24	14.59	14.64	14.71	
5	64QAM	12	0	13.97	14.00	14.02	
5	64QAM	12	7	13.91	14.01	14.00	
5	64QAM	12	13	13.81	13.93	13.90	
5	64QAM	25	0	13.79	13.89	13.86	15
5	256QAM	1	0	12.22	12.25	12.28	13
5	256QAM	1	12	12.16	12.20	12.21	
5	256QAM	1	24	12.17	12.14	12.19	
5	256QAM	12	0	12.10	12.12	12.12	
5	256QAM	12	7	12.04	12.09	12.09	
5	256QAM	12	13	11.99	12.08	12.04	
5	256QAM	25	0	11.97	12.06	11.95	13



Band 25 (1900MHz Band) (dBm) Part 24E							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	18.58	18.67	18.64	20
20	QPSK	1	49	18.43	18.51	18.52	
20	QPSK	1	99	18.22	18.41	18.42	
20	QPSK	50	0	17.41	17.68	17.67	18.5
20	QPSK	50	24	17.30	17.43	17.49	
20	QPSK	50	50	17.17	17.23	17.27	
20	QPSK	100	0	17.02	17.08	17.06	19
20	16QAM	1	0	17.63	17.75	17.69	
20	16QAM	1	49	17.52	17.60	17.51	
20	16QAM	1	99	17.34	17.49	17.36	18
20	16QAM	50	0	16.66	16.80	16.63	
20	16QAM	50	24	16.54	16.69	16.52	
20	16QAM	50	50	16.33	16.55	16.31	18
20	16QAM	100	0	16.14	16.42	16.21	
20	64QAM	1	0	16.74	17.06	16.74	
20	64QAM	1	49	16.68	16.99	16.66	18
20	64QAM	1	99	16.62	16.98	16.63	
20	64QAM	50	0	15.96	16.31	15.94	
20	64QAM	50	24	15.91	16.30	15.87	17
20	64QAM	50	50	15.90	16.26	15.84	
20	64QAM	100	0	15.83	16.24	15.80	
20	256QAM	1	0	14.28	14.67	14.22	15
20	256QAM	1	49	14.24	14.62	14.18	
20	256QAM	1	99	14.20	14.60	14.13	
20	256QAM	50	0	14.18	14.56	14.11	15
20	256QAM	50	24	14.12	14.52	14.09	
20	256QAM	50	50	14.09	14.47	14.03	
20	256QAM	100	0	14.04	14.44	14.02	
Channel				26115	26365	26615	
Frequency (MHz)				1857.5	1882.5	1907.5	
15	QPSK	1	0	18.50	18.60	18.56	20
15	QPSK	1	37	18.39	18.48	18.45	
15	QPSK	1	74	18.16	18.34	18.34	
15	QPSK	36	0	17.32	17.53	17.59	19
15	QPSK	36	20	17.22	17.35	17.44	
15	QPSK	36	39	17.09	17.16	17.21	
15	QPSK	75	0	16.93	17.04	16.99	19
15	16QAM	1	0	17.55	17.72	17.66	
15	16QAM	1	37	17.46	17.54	17.44	
15	16QAM	1	74	17.25	17.45	17.28	18
15	16QAM	36	0	16.60	16.73	16.55	
15	16QAM	36	20	16.46	16.63	16.45	
15	16QAM	36	39	16.29	16.47	16.23	18
15	16QAM	75	0	16.05	16.38	16.12	
15	64QAM	1	0	16.66	17.03	16.68	
15	64QAM	1	37	16.62	16.94	16.60	18
15	64QAM	1	74	16.55	16.91	16.54	
15	64QAM	36	0	15.92	16.25	15.88	
15	64QAM	36	20	15.86	16.22	15.81	17
15	64QAM	36	39	15.86	16.20	15.76	
15	64QAM	75	0	15.75	16.17	15.73	
15	256QAM	1	0	14.24	14.64	14.18	15
15	256QAM	1	37	14.17	14.56	14.11	
15	256QAM	1	74	14.14	14.55	14.09	
15	256QAM	36	0	14.12	14.47	14.07	15
15	256QAM	36	20	14.06	14.47	14.05	
15	256QAM	36	39	14.05	14.42	13.97	
15	256QAM	75	0	14.00	14.40	13.95	
Channel				26090	26365	26640	
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	18.45	18.57	18.52	20
10	QPSK	1	25	18.36	18.44	18.38	
10	QPSK	1	49	18.10	18.26	18.29	
10	QPSK	25	0	17.23	17.46	17.55	19
10	QPSK	25	12	17.17	17.27	17.37	
10	QPSK	25	25	17.04	17.08	17.16	
10	QPSK	50	0	16.86	16.98	16.95	19
10	16QAM	1	0	17.48	17.64	17.60	
10	16QAM	1	25	17.38	17.49	17.36	
10	16QAM	1	49	17.17	17.40	17.22	18
10	16QAM	25	0	16.96	16.68	16.50	
10	16QAM	25	12	16.43	16.57	16.37	
10	16QAM	25	25	16.23	16.42	16.16	18
10	16QAM	50	0	15.97	16.30	16.08	
10	64QAM	1	0	16.63	16.98	16.62	
10	64QAM	1	25	16.57	16.90	16.56	18
10	64QAM	1	49	16.50	16.85	16.50	
10	64QAM	25	0	15.85	16.22	15.80	
10	64QAM	25	12	15.78	16.16	15.75	17
10	64QAM	25	25	15.78	16.15	15.69	
10	64QAM	50	0	15.70	16.13	15.66	
10	256QAM	1	0	14.20	14.56	14.13	15
10	256QAM	1	25	14.09	14.48	14.05	
10	256QAM	1	49	14.09	14.46	14.05	
10	256QAM	25	0	14.07	14.43	14.01	15
10	256QAM	25	12	14.03	14.43	13.98	
10	256QAM	25	25	13.96	14.34	13.94	
10	256QAM	50	0	13.93	14.33	13.89	
Channel				26065	26365	26665	
Frequency (MHz)				1852.5	1882.5	1912.5	
5	QPSK	1	0	18.47	18.57	18.50	20
5	QPSK	1	12	18.30	18.42	18.39	
5	QPSK	1	24	18.12	18.28	18.29	
5	QPSK	12	0	17.28	17.45	17.53	19
5	QPSK	12	7	17.18	17.29	17.37	
5	QPSK	12	13	17.04	17.13	17.16	
5	QPSK	25	0	16.85	16.99	16.94	19
5	16QAM	1	0	17.50	17.68	17.63	
5	16QAM	1	12	17.39	17.51	17.39	

5	16QAM	1	24	17.20	17.38	17.19	
5	16QAM	12	0	16.57	16.69	16.50	18
5	16QAM	12	7	16.41	16.56	16.38	
5	16QAM	12	13	16.23	16.43	16.16	
5	16QAM	25	0	15.99	16.30	16.05	
5	64QAM	1	0	16.58	17.00	16.63	
5	64QAM	1	12	16.54	16.86	16.51	18
5	64QAM	1	24	16.51	16.83	16.46	
5	64QAM	12	0	15.87	16.18	15.82	
5	64QAM	12	7	15.82	16.13	15.77	17
5	64QAM	12	13	15.79	16.17	15.72	
5	64QAM	25	0	15.66	16.09	15.69	
5	256QAM	1	0	14.16	14.58	14.13	15
5	256QAM	1	12	14.10	14.47	14.04	
5	256QAM	1	24	14.11	14.52	14.06	
5	256QAM	12	0	14.05	14.44	13.99	
5	256QAM	12	7	14.03	14.38	13.97	15
5	256QAM	12	13	14.00	14.35	13.91	
5	256QAM	25	0	13.95	14.32	13.89	
Channel				26365	26365	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1882.5	1913.5	
3	QPSK	1	0	18.46	18.53	18.48	20
3	QPSK	1	8	18.35	18.41	18.37	
3	QPSK	1	14	18.10	18.29	18.28	
3	QPSK	8	0	17.26	17.48	17.51	19
3	QPSK	8	4	17.14	17.29	17.38	
3	QPSK	8	7	17.02	17.09	17.14	
3	QPSK	15	0	16.88	16.97	16.93	
3	16QAM	1	0	17.50	17.64	17.58	
3	16QAM	1	8	17.37	17.46	17.39	19
3	16QAM	1	14	17.18	17.40	17.19	
3	16QAM	8	0	16.55	16.65	16.49	
3	16QAM	8	4	16.42	16.58	16.36	18
3	16QAM	8	7	16.23	16.44	16.19	
3	16QAM	15	0	15.98	16.30	16.06	
3	64QAM	1	0	16.57	17.00	16.64	
3	64QAM	1	8	16.58	16.88	16.53	
3	64QAM	1	14	16.52	16.82	16.46	17
3	64QAM	8	0	15.85	16.17	15.81	
3	64QAM	8	4	15.80	16.17	15.77	
3	64QAM	8	7	15.82	16.14	15.70	
3	64QAM	15	0	15.70	16.12	15.68	
3	256QAM	1	0	14.20	14.59	14.12	15
3	256QAM	1	8	14.09	14.51	14.06	
3	256QAM	1	14	14.10	14.47	14.06	
3	256QAM	8	0	14.04	14.40	13.99	
3	256QAM	8	4	13.99	14.44	13.97	15
3	256QAM	8	7	13.96	14.33	13.93	
3	256QAM	15	0	13.95	14.36	13.89	
Channel				26047	26395	26883	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	18.41	18.57	18.50	20
1.4	QPSK	1	3	18.32	18.40	18.41	
1.4	QPSK	1	5	18.10	18.29	18.27	
1.4	QPSK	3	0	17.29	17.45	17.52	
1.4	QPSK	3	1	17.14	17.28	17.38	
1.4	QPSK	3	3	17.02	17.09	17.16	19
1.4	QPSK	6	0	16.89	16.97	16.93	
1.4	16QAM	1	0	17.48	17.66	17.63	
1.4	16QAM	1	3	17.40	17.48	17.40	18
1.4	16QAM	1	5	17.20	17.36	17.21	
1.4	16QAM	3	0	16.56	16.66	16.49	
1.4	16QAM	3	1	16.40	16.57	16.39	
1.4	16QAM	3	3	16.23	16.41	16.15	
1.4	16QAM	6	0	16.02	16.31	16.08	
1.4	64QAM	1	0	16.63	16.96	16.81	18
1.4	64QAM	1	3	16.59	16.88	16.52	
1.4	64QAM	1	5	16.50	16.86	16.51	
1.4	64QAM	3	0	15.87	16.21	15.85	
1.4	64QAM	3	1	15.78	16.14	15.73	
1.4	64QAM	3	3	15.82	16.11	15.69	
1.4	64QAM	6	0	15.72	16.14	15.66	17
1.4	256QAM	1	0	14.19	14.57	14.10	15
1.4	256QAM	1	3	14.10	14.51	14.05	
1.4	256QAM	1	5	14.10	14.50	14.01	
1.4	256QAM	3	0	14.08	14.41	14.00	
1.4	256QAM	3	1	14.02	14.43	13.99	
1.4	256QAM	3	3	13.97	14.39	13.91	
1.4	256QAM	6	0	13.93	14.34	13.87	

Band 38(only on channel required) (dBm)									
BW (kHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)		
Channel				37850	38000	38150			
Frequency (MHz)				2595	2595	2610			
20	QPSK	1	0	20.31	20.32	20.23			
20	QPSK	1	49	20.19	20.08	20.07	22		
20	QPSK	1	99	20.01	19.90	19.94			
20	QPSK	50	0	19.21	19.22	19.18			
20	QPSK	50	24	19.10	18.99	19.00	21		
20	QPSK	50	50	18.94	18.87	18.84			
20	QPSK	100	0	18.81	18.82	18.64			
20	16QAM	1	0	19.42	19.41	19.33			
20	16QAM	1	49	19.23	19.24	19.14	21		
20	16QAM	1	99	19.02	19.13	18.94			
20	16QAM	50	0	18.36	18.38	18.18			
20	16QAM	50	24	18.18	18.20	18.04	20		
20	16QAM	50	50	17.97	18.09	17.83			
20	16QAM	100	0	17.76	17.97	17.63			
20	64QAM	1	0	18.31	18.57	18.26			
20	64QAM	1	49	18.24	18.52	18.25	20		
20	64QAM	1	99	18.17	18.50	18.21			
20	64QAM	50	0	17.50	17.85	17.52			
20	64QAM	50	24	17.44	17.79	17.45	19		
20	64QAM	50	50	17.40	17.75	17.40			
20	64QAM	100	0	17.37	17.72	17.39			
20	256QAM	1	0	15.80	16.11	15.82			
20	256QAM	1	49	15.76	16.08	15.77	17		
20	256QAM	1	99	15.72	16.02	15.71			
20	256QAM	50	0	15.70	15.94	15.69			
20	256QAM	50	24	15.67	15.93	15.64	17		
20	256QAM	50	50	15.62	15.87	15.64			
20	256QAM	100	0	15.60	15.79	15.61			
Channel				37825	38000	38175	Tune-up limit (dBm)		
Frequency (MHz)				2577.5	2595	2612.5			
15	QPSK	1	0	20.28	20.24	20.18			
15	QPSK	1	37	20.10	20.03	20.02	22		
15	QPSK	1	74	19.95	19.87	19.88			
15	QPSK	36	0	19.18	19.11	19.14			
15	QPSK	36	20	19.07	18.94	18.97	21		
15	QPSK	36	39	18.86	18.79	18.78			
15	QPSK	75	0	18.77	18.73	18.58			
15	16QAM	1	0	19.35	19.34	19.29	21		
15	16QAM	1	37	19.15	19.16	19.06			
15	16QAM	1	74	18.95	19.09	18.88			
15	16QAM	36	0	18.28	18.30	18.15	20		
15	16QAM	36	20	18.13	18.13	17.98			
15	16QAM	36	39	17.93	18.03	17.75			
15	16QAM	75	0	17.68	17.90	17.57			
15	64QAM	1	0	18.23	18.52	18.21	20		
15	64QAM	1	37	18.16	18.49	18.21			
15	64QAM	1	74	18.13	18.42	18.13			
15	64QAM	36	0	17.47	17.81	17.48	19		
15	64QAM	36	20	17.38	17.71	17.40			
15	64QAM	36	39	17.33	17.69	17.35			
15	64QAM	75	0	17.30	17.63	17.32			
15	256QAM	1	0	15.75	16.03	15.77			
15	256QAM	1	37	15.68	16.04	15.70	17		
15	256QAM	1	74	15.64	15.98	15.64			
15	256QAM	36	0	15.61	15.90	15.61			
15	256QAM	36	20	15.61	15.87	15.56	17		
15	256QAM	36	39	15.59	15.82	15.56			
15	256QAM	75	0	15.56	15.71	15.56			
Channel				37800	38000	38200	Tune-up limit (dBm)		
Frequency (MHz)				2575	2595	2615			
10	QPSK	1	0	20.22	20.17	20.15			
10	QPSK	1	25	20.03	19.97	19.97	22		
10	QPSK	1	49	19.91	19.80	19.81			
10	QPSK	25	0	19.15	19.03	19.05			
10	QPSK	25	12	19.04	18.89	18.91	21		
10	QPSK	25	25	18.82	18.73	18.70			
10	QPSK	50	0	18.69	18.69	18.53			
10	16QAM	1	0	18.31	19.26	19.21	21		
10	16QAM	1	25	19.06	19.12	19.02			
10	16QAM	1	49	18.88	19.06	18.81			
10	16QAM	25	0	18.22	18.22	18.11			
10	16QAM	25	12	18.07	18.10	17.90	20		
10	16QAM	25	25	17.85	17.99	17.68			
10	16QAM	50	0	17.65	17.87	17.49			
10	64QAM	1	0	18.14	18.46	18.12	20		
10	64QAM	1	25	18.12	18.44	18.13			
10	64QAM	1	49	18.08	18.33	18.08			
10	64QAM	25	0	17.43	17.76	17.41	19		
10	64QAM	25	12	17.30	17.63	17.32			
10	64QAM	25	25	17.26	17.81	17.31			
10	64QAM	50	0	17.26	17.59	17.24			
10	256QAM	1	0	15.69	15.95	15.70			
10	256QAM	1	25	15.65	16.01	15.64	17		
10	256QAM	1	49	15.58	16.02	15.60			
10	256QAM	25	0	15.52	15.85	15.57			
10	256QAM	25	12	15.52	15.79	15.51	17		
10	256QAM	25	25	15.53	15.77	15.51			
10	256QAM	50	0	15.53	15.65	15.52			
Channel				37775	38000	38225	Tune-up limit (dBm)		
Frequency (MHz)				2572.5	2595	2617.5			
5	QPSK	1	0	20.24	20.20	20.11			
5	QPSK	1	12	20.02	19.97	19.95	22		
5	QPSK	1	24	19.86	19.82	19.81			
5	QPSK	12	0	18.14	19.03	19.09			
5	QPSK	12	7	19.02	18.88	18.93	21		
5	QPSK	12	13	18.81	18.73	18.74			
5	QPSK	25	0	18.71	18.69	18.52			
5	16QAM	1	0	19.27	19.29	19.22	21		
5	16QAM	1	12	19.07	19.09	19.03			
5	16QAM	1	24	18.92	19.02	18.81			
5	16QAM	12	0	18.24	18.22	18.12			
5	16QAM	12	7	18.06	18.09	17.94	20		
5	16QAM	12	13	17.89	17.97	17.69			
5	16QAM	25	0	17.59	17.81	17.49			
5	64QAM	1	0	18.18	18.45	18.12	20		
5	64QAM	1	12	18.10	18.44	18.17			
5	64QAM	1	24	18.06	18.37	18.04			
5	64QAM	12	0	17.42	17.73	17.39	19		
5	64QAM	12	7	17.32	17.65	17.32			
5	64QAM	12	13	17.29	17.60	17.29			
5	64QAM	25	0	17.25	17.59	17.24			
5	256QAM	1	0	15.69	16.00	15.70			
5	256QAM	1	12	15.64	16.01	15.66	17		
5	256QAM	1	24	15.58	16.04	15.56			
5	256QAM	12	0	15.55	15.94	15.52			
5	256QAM	12	7	15.54	15.81	15.47	17		
5	256QAM	12	13	15.55	15.78	15.47			
5	256QAM	25	0	15.53	15.68	15.50			

Band 40 (2.3G Band-1) (dBm) Part 27D-1 2305MHz ~ 2315MHz							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel 38750							
Frequency (MHz)							
10	QPSK	1	0	21.93	21.94	21.95	23.5
10	QPSK	1	25	21.55	21.55	21.55	
10	QPSK	1	49	21.43	21.43	21.43	
10	QPSK	25	0	20.88	20.88	20.88	22.5
10	QPSK	25	12	20.87	20.87	20.87	
10	QPSK	25	25	20.48	20.48	20.48	
10	QPSK	50	0	20.36	20.36	20.36	22.5
10	16QAM	1	0	20.76	20.76	20.76	
10	16QAM	1	25	20.58	20.58	20.58	
10	16QAM	1	49	20.36	20.36	20.36	21.5
10	16QAM	25	0	19.73	19.73	19.73	
10	16QAM	25	12	19.59	19.59	19.59	
10	16QAM	25	25	19.38	19.38	19.38	21.5
10	16QAM	50	0	19.27	19.27	19.27	
10	64QAM	1	0	19.81	19.81	19.81	
10	64QAM	1	25	19.74	19.74	19.74	21.5
10	64QAM	1	49	19.73	19.73	19.73	
10	64QAM	25	0	19.05	19.05	19.05	
10	64QAM	25	12	18.97	18.97	18.97	20.5
10	64QAM	25	25	18.96	18.96	18.96	
10	64QAM	50	0	18.90	18.90	18.90	
10	256QAM	1	0	17.33	17.33	17.33	18.5
10	256QAM	1	25	17.32	17.32	17.32	
10	256QAM	1	49	17.26	17.26	17.26	
10	256QAM	25	0	17.23	17.23	17.23	18.5
10	256QAM	25	12	17.17	17.17	17.17	
10	256QAM	25	25	17.09	17.09	17.09	
10	256QAM	50	0	17.08	17.08	17.08	
Channel 38725							
Frequency (MHz)							
5	QPSK	1	0	21.08	21.00	21.03	23.5
5	QPSK	1	12	21.05	21.41	21.47	
5	QPSK	1	24	21.33	21.29	21.29	
5	QPSK	12	0	20.76	20.74	20.67	22.5
5	QPSK	12	7	20.85	20.53	20.46	
5	QPSK	12	13	20.51	20.34	20.31	
5	QPSK	25	0	20.30	20.22	20.19	22.5
5	16QAM	1	0	20.69	20.61	20.61	
5	16QAM	1	12	20.47	20.44	20.50	
5	16QAM	1	24	20.31	20.24	20.32	21.5
5	16QAM	12	0	19.84	19.59	19.61	
5	16QAM	12	7	19.48	19.45	19.45	
5	16QAM	12	13	19.38	19.24	19.33	21.5
5	16QAM	25	0	19.25	19.13	19.14	
5	64QAM	1	0	19.85	19.67	19.74	
5	64QAM	1	12	19.78	19.60	19.67	21.5
5	64QAM	1	24	19.71	19.59	19.60	
5	64QAM	12	0	19.07	18.91	18.89	
5	64QAM	12	7	19.00	18.83	18.83	20.5
5	64QAM	12	13	19.00	18.82	18.82	
5	64QAM	25	0	18.83	18.76	18.81	
5	256QAM	1	0	17.35	17.19	17.20	18.5
5	256QAM	1	12	17.33	17.18	17.14	
5	256QAM	1	24	17.29	17.12	17.11	
5	256QAM	12	0	17.22	17.09	17.08	18.5
5	256QAM	12	7	17.16	17.03	17.07	
5	256QAM	12	13	17.13	16.95	17.06	
5	256QAM	25	0	17.12	16.94	17.00	

Band 40 (2.3G Band-2) (dBm) Part 27D-2 2350MHz ~ 2360MHz							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel 39200							
Frequency (MHz)							
10	QPSK	1	0	21.70	21.50	21.50	23.5
10	QPSK	1	25	21.50	21.50	21.50	
10	QPSK	1	49	21.34	21.34	21.34	
10	QPSK	25	0	20.81	20.81	20.81	22.5
10	QPSK	25	12	20.71	20.71	20.71	
10	QPSK	25	25	20.57	20.57	20.57	
10	QPSK	50	0	20.36	20.36	20.36	22.5
10	16QAM	1	0	20.78	20.78	20.78	
10	16QAM	1	25	20.58	20.58	20.58	
10	16QAM	1	49	20.40	20.40	20.40	21.5
10	16QAM	25	0	19.70	19.70	19.70	
10	16QAM	25	12	19.55	19.55	19.55	
10	16QAM	25	25	19.39	19.39	19.39	21.5
10	16QAM	50	0	19.27	19.27	19.27	
10	64QAM	1	0	19.85	19.85	19.85	
10	64QAM	1	25	19.80	19.80	19.80	21.5
10	64QAM	1	49	19.74	19.74	19.74	
10	64QAM	25	0	19.05	19.05	19.05	
10	64QAM	25	12	18.99	18.99	18.99	20.5
10	64QAM	25	25	18.96	18.96	18.96	
10	64QAM	50	0	18.90	18.90	18.90	
10	256QAM	1	0	17.37	17.37	17.37	18
10	256QAM	1	25	17.33	17.33	17.33	
10	256QAM	1	49	17.29	17.29	17.29	
10	256QAM	25	0	17.23	17.23	17.23	18
10	256QAM	25	12	17.17	17.17	17.17	
10	256QAM	25	25	17.10	17.10	17.10	
10	256QAM	50	0	17.08	17.08	17.08	
Channel 39175							
Frequency (MHz)							
5	QPSK	1	0	21.54	21.59	21.57	23.5
5	QPSK	1	12	21.48	21.30	21.35	
5	QPSK	1	24	21.30	21.23	21.15	
5	QPSK	12	0	20.78	20.70	20.62	22.5
5	QPSK	12	7	20.60	20.60	20.51	
5	QPSK	12	13	20.36	20.46	20.41	
5	QPSK	25	0	20.28	20.25	20.24	22.5
5	16QAM	1	0	20.74	20.67	20.71	
5	16QAM	1	12	20.60	20.47	20.60	
5	16QAM	1	24	20.50	20.29	20.42	21.5
5	16QAM	12	0	19.81	19.59	19.68	
5	16QAM	12	7	19.63	19.44	19.55	
5	16QAM	12	13	19.44	19.28	19.37	21.5
5	16QAM	25	0	19.30	19.16	19.23	
5	64QAM	1	0	19.87	19.74	19.83	
5	64QAM	1	12	19.87	19.65	19.78	21.5
5	64QAM	1	24	19.85	19.63	19.72	
5	64QAM	12	0	19.21	18.94	19.07	
5	64QAM	12	7	19.15	18.88	19.02	20.5
5	64QAM	12	13	19.12	18.85	18.97	
5	64QAM	25	0	18.99	18.84	18.97	
5	256QAM	1	0	17.54	17.28	17.40	18
5	256QAM	1	12	17.48	17.22	17.39	
5	256QAM	1	24	17.45	17.18	17.33	
5	256QAM	12	0	17.42	17.12	17.29	18
5	256QAM	12	7	17.36	17.06	17.23	
5	256QAM	12	13	17.36	16.99	17.16	
5	256QAM	25	0	17.29	16.95	17.15	

Band 41 (2496-2690MHz) (dBm)										
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up list (dBm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2501	2547	2593	2639	2685		
20	QPSK	1	0	20.40	20.41	20.44	20.36	20.38	22	
20	QPSK	1	49	20.18	20.28	20.36	20.20	20.16		
20	QPSK	1	99	20.07	20.15	20.23	20.00	20.06		
20	QPSK	50	0	19.45	19.57	19.67	19.42	19.52		
20	QPSK	50	24	19.30	19.37	19.52	19.30	19.40	21	
20	QPSK	50	50	19.12	19.19	19.41	19.18	19.29		
20	QPSK	100	0	19.10	19.05	19.30	19.08	19.12		
20	16QAM	1	0	19.44	19.46	19.76	19.57	19.61		
20	16QAM	1	49	19.34	19.28	19.60	19.44	19.42		
20	16QAM	1	99	19.15	19.17	19.49	19.32	19.21		
20	16QAM	50	0	18.46	18.51	18.79	18.63	18.51		
20	16QAM	50	24	18.34	18.40	18.68	18.41	18.34		
20	16QAM	50	50	18.21	18.25	18.54	18.26	18.15		
20	16QAM	100	0	18.10	18.05	18.43	18.04	18.04		
20	64QAM	1	0	18.34	18.44	19.00	18.65	18.65		
20	64QAM	1	49	18.74	18.56	19.34	18.57	18.58		
20	64QAM	1	99	18.69	18.52	18.87	18.56	18.53		
20	64QAM	50	0	18.03	17.87	18.17	17.89	17.84		
20	64QAM	50	24	18.01	17.81	18.12	17.82	17.79		
20	64QAM	50	50	17.84	17.76	18.06	17.80	17.78		
20	64QAM	100	0	17.98	17.70	18.04	17.74	17.71		
20	256QAM	1	0	16.32	16.12	16.45	16.13	16.10		
20	256QAM	1	49	16.25	16.11	16.44	16.07	16.06		
20	256QAM	1	99	16.23	16.06	16.37	16.04	16.05		
20	256QAM	50	0	16.16	16.02	16.34	15.97	16.03		
20	256QAM	50	24	16.15	16.02	16.28	15.95	16.02		
20	256QAM	50	50	16.12	15.97	16.22	15.93	16.01		
20	256QAM	100	0	16.11	15.96	16.15	15.85	15.96		
Channel				39725	40173	40620	41088	41515		
Frequency (MHz)				2503.5	2543	2593	2637.8	2682.5		
15	QPSK	1	0	20.35	20.36	20.43	20.31	20.33		
15	QPSK	1	37	20.13	20.23	20.31	20.15	20.11		
15	QPSK	1	74	20.02	20.10	20.18	19.95	20.01		
15	QPSK	36	0	19.40	19.52	19.62	19.37	19.47		
15	QPSK	36	20	19.25	19.32	19.47	19.25	19.35		
15	QPSK	36	39	19.07	19.14	19.36	19.13	19.24		
15	QPSK	75	0	18.91	19.00	19.25	19.03	19.07		
15	16QAM	1	0	19.39	19.41	19.71	19.52	19.56		
15	16QAM	1	37	19.29	19.23	19.55	19.39	19.37		
15	16QAM	1	74	19.10	19.12	19.44	19.27	19.16		
15	16QAM	36	0	18.41	18.46	18.74	18.58	18.46		
15	16QAM	36	20	18.29	18.35	18.63	18.36	18.29		
15	16QAM	36	39	18.16	18.20	18.49	18.21	18.10		
15	16QAM	75	0	18.05	18.00	18.38	17.99	17.99		
15	64QAM	1	0	18.69	18.59	18.95	18.60	18.60		
15	64QAM	1	37	18.69	18.51	18.89	18.52	18.53		
15	64QAM	1	74	18.64	18.47	18.82	18.51	18.48		
15	64QAM	36	0	17.98	17.82	18.12	17.84	17.79		
15	64QAM	36	20	17.96	17.76	18.07	17.77	17.74		
15	64QAM	36	39	17.89	17.71	18.01	17.75	17.73		
15	64QAM	75	0	17.84	17.65	17.99	17.69	17.66		
15	256QAM	1	0	16.27	16.07	16.40	16.08	16.06		
15	256QAM	1	37	16.20	16.06	16.39	16.02	16.01		
15	256QAM	1	74	16.18	16.01	16.32	15.99	16.00		
15	256QAM	36	0	16.11	16.00	16.29	15.92	15.98		
15	256QAM	36	20	16.10	15.97	16.23	15.90	15.97		
15	256QAM	36	39	16.07	15.92	16.17	15.88	15.96		
15	256QAM	75	0	16.06	15.91	16.10	15.80	15.91		
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	20.30	20.31	20.38	20.26	20.28		
10	QPSK	1	25	20.08	20.18	20.26	20.10	20.06		
10	QPSK	1	49	19.97	20.05	20.13	19.90	19.96		
10	QPSK	25	0	19.35	19.47	19.57	19.32	19.42		
10	QPSK	25	12	19.20	19.27	19.42	19.20	19.30		
10	QPSK	25	25	19.02	19.09	19.31	19.08	19.19		
10	QPSK	50	0	18.86	18.95	19.20	18.98	19.02		
10	16QAM	1	0	18.34	19.36	19.66	19.47	19.61		
10	16QAM	1	25	19.24	19.18	19.50	19.34	19.32		
10	16QAM	1	49	19.05	19.07	19.39	19.22	19.11		
10	16QAM	25	0	18.36	18.41	18.69	18.53	18.41		
10	16QAM	25	12	18.24	18.30	18.58	18.31	18.24		
10	16QAM	25	25	18.11	18.15	18.44	18.16	18.05		
10	16QAM	50	0	18.00	17.95	18.33	17.94	17.94		
10	64QAM	1	0	18.84	18.54	18.90	18.55	18.55		
10	64QAM	1	25	18.64	18.46	18.84	18.47	18.48		
10	64QAM	1	49	18.59	18.42	18.77	18.46	18.43		
10	64QAM	25	0	17.93	17.77	18.07	17.79	17.74		
10	64QAM	25	12	17.91	17.71	18.02	17.72	17.69		
10	64QAM	25	25	17.84	17.66	17.96	17.70	17.68		
10	64QAM	50	0	17.79	17.60	17.94	17.64	17.61		
10	256QAM	1	0	16.22	16.02	16.35	16.03	16.00		
10	256QAM	1	25	16.15	16.01	16.34	15.97	15.96		
10	256QAM	1	49	16.13	16.06	16.27	15.94	15.95		
10	256QAM	25	0	16.06	15.95	16.24	15.87	15.93		
10	256QAM	25	12	16.05	15.92	16.18	15.85	15.92		
10	256QAM	25	25	16.02	15.87	16.12	15.83	15.91		
10	256QAM	50	0	16.01	15.86	16.05	15.75	15.86		
Channel				39975	40182	40620	41098	41595		
Frequency (MHz)				2598.5	2545.3	2593	2640.30	2697.5		
5	QPSK	1	0	20.27	20.28	20.35	20.23	20.25		
5	QPSK	1	12	20.05	20.15	20.23	20.07	20.03		
5	QPSK	1	24	19.94	20.02	20.10	19.87	19.93		
5	QPSK	12	0	19.32	19.44	19.54	19.29	19.39		
5	QPSK	12	7	19.17	19.24	19.39	19.17	19.27		
5	QPSK	12	13	18.99	19.06	19.28	19.05	19.16		
5	QPSK	25	0	18.83	18.92	19.17	18.95	18.99		
5	16QAM	1	0	19.31	19.33	19.63	19.44	19.48		
5	16QAM	1	24	19.21	19.15	19.47	19.31	19.29		
5	16QAM	1	24	19.02	19.04	19.36	19.19	19.08		
5	16QAM	12	0	18.33	18.38	18.66	18.50	18.38		
5	16QAM	12	7	18.21	18.27	18.55	18.28	18.21		
5	16QAM	12	13	18.08	18.12	18.41	18.13	18.02		
5	16QAM	25	0	17.97	17.92	18.30	17.91	17.91		
5	64QAM	1	0	18.61	18.51	18.87	18.52	18.52		
5	64QAM	1	12	18.61	18.43	18.81	18.44	18.45		
5	64QAM	1	24	18.56	18.39	18.74	18.43	18.40		
5	64QAM	12	0	17.90	17.74	18.04	17.76	17.71		
5	64QAM	12	7	17.88	17.68	17.99	17.69	17.66		
5	64QAM	12	13	17.81	17.63	17.93	17.67	17.65		
5	64QAM	25	0	17.76	17.57	17.91	17.61	17.58		
5	256QAM	1	0	16.19	15.99	16.32	16.00	15.97		
5	256QAM	1	12	16.12	15.98	16.31	15.94	15.93		
5	256QAM	1	24	16.10	15.93	16.24	15.91	15.92		
5	256QAM	12	0	16.03	15.92	16.21	15.84	15.90		
5	25									



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	18.29	18.34	18.39	
20	QPSK	1	99	18.15	18.16	18.21	
20	QPSK	50	0	17.34	17.49	17.48	18.5
20	QPSK	50	24	17.12	17.25	17.26	
20	QPSK	50	50	16.97	17.05	17.04	
20	QPSK	100	0	16.76	16.87	16.78	18.5
20	16QAM	1	0	17.36	17.50	17.45	
20	16QAM	1	49	17.25	17.29	17.23	
20	16QAM	1	99	17.05	17.07	17.02	17.5
20	16QAM	50	0	16.33	16.40	16.30	
20	16QAM	50	24	16.12	16.18	16.09	
20	16QAM	50	50	15.97	15.97	15.92	17.5
20	16QAM	100	0	15.82	15.89	15.72	
20	64QAM	1	0	16.40	16.50	16.26	
20	64QAM	1	49	16.36	16.42	16.23	17.5
20	64QAM	1	99	16.31	16.38	16.22	
20	64QAM	50	0	15.65	15.72	15.52	
20	64QAM	50	24	15.60	15.72	15.50	16.5
20	64QAM	50	50	15.57	15.72	15.47	
20	64QAM	100	0	15.50	15.62	15.43	
20	256QAM	1	0	13.95	14.05	13.86	14.5
20	256QAM	1	49	13.91	14.02	13.87	
20	256QAM	1	99	13.94	13.93	13.81	
20	256QAM	50	0	13.83	13.90	13.81	14.5
20	256QAM	50	24	13.78	13.86	13.81	
20	256QAM	50	50	13.78	13.82	13.72	
20	256QAM	100	0	13.66	13.80	13.64	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	18.47	18.53	18.51	19.5
15	QPSK	1	37	18.26	18.31	18.36	
15	QPSK	1	74	18.12	18.13	18.18	
15	QPSK	36	0	17.31	17.46	17.45	18.5
15	QPSK	36	20	17.09	17.22	17.23	
15	QPSK	36	39	16.94	17.02	17.01	
15	QPSK	75	0	16.73	16.84	16.75	18.5
15	16QAM	1	0	17.33	17.47	17.42	
15	16QAM	1	37	17.22	17.26	17.20	
15	16QAM	1	74	17.02	17.04	16.99	17.5
15	16QAM	36	0	16.30	16.37	16.27	
15	16QAM	36	20	16.09	16.15	16.06	
15	16QAM	36	39	15.94	15.94	15.89	16.5
15	16QAM	75	0	15.79	15.86	15.69	
15	64QAM	1	0	16.37	16.47	16.23	
15	64QAM	1	37	16.33	16.39	16.20	17.5
15	64QAM	1	74	16.28	16.35	16.19	
15	64QAM	36	0	15.62	15.69	15.49	
15	64QAM	36	20	15.57	15.69	15.47	16.5
15	64QAM	36	39	15.54	15.69	15.44	
15	64QAM	75	0	15.47	15.59	15.40	
15	256QAM	1	0	13.92	14.02	13.83	14.5
15	256QAM	1	37	13.88	13.99	13.84	
15	256QAM	1	74	13.91	13.90	13.78	
15	256QAM	36	0	13.80	13.87	13.78	14.5
15	256QAM	36	20	13.75	13.83	13.78	
15	256QAM	36	39	13.75	13.79	13.69	
15	256QAM	75	0	13.63	13.77	13.61	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	18.44	18.50	18.48	19.5
10	QPSK	1	25	18.23	18.28	18.33	
10	QPSK	1	49	18.09	18.10	18.15	
10	QPSK	25	0	17.28	17.43	17.42	18.5
10	QPSK	25	12	17.06	17.19	17.20	
10	QPSK	25	25	16.91	16.99	16.98	
10	QPSK	50	0	16.70	16.81	16.72	18.5
10	16QAM	1	0	17.30	17.44	17.39	
10	16QAM	1	25	17.19	17.23	17.17	
10	16QAM	1	49	16.99	17.01	16.96	17.5
10	16QAM	25	0	16.27	16.34	16.24	
10	16QAM	25	12	16.06	16.12	16.03	
10	16QAM	25	25	15.91	15.91	15.86	17.5
10	16QAM	50	0	15.76	15.83	15.66	
10	64QAM	1	0	16.34	16.44	16.20	
10	64QAM	1	25	16.30	16.36	16.17	17.5
10	64QAM	1	49	16.25	16.32	16.16	
10	64QAM	25	0	15.59	15.66	15.46	
10	64QAM	25	12	15.54	15.66	15.44	16.5
10	64QAM	25	25	15.51	15.66	15.41	
10	64QAM	50	0	15.44	15.56	15.37	
10	256QAM	1	0	13.89	13.99	13.80	14.5
10	256QAM	1	25	13.85	13.96	13.81	
10	256QAM	1	49	13.88	13.87	13.75	
10	256QAM	25	0	13.77	13.84	13.75	14.5
10	256QAM	25	12	13.72	13.80	13.75	
10	256QAM	25	25	13.72	13.76	13.66	
10	256QAM	50	0	13.60	13.74	13.58	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	18.41	18.47	18.45	19.5
5	QPSK	1	12	18.20	18.25	18.30	
5	QPSK	1	24	18.06	18.07	18.12	
5	QPSK	12	0	17.25	17.40	17.39	18.5
5	QPSK	12	7	17.03	17.16	17.17	
5	QPSK	12	13	16.88	16.96	16.95	
5	QPSK	25	0	16.67	16.78	16.69	18.5
5	16QAM	1	0	17.27	17.41	17.36	
5	16QAM	1	12	17.16	17.20	17.14	



5	16QAM	1	24	16.96	16.98	16.93	17.5
5	16QAM	12	0	16.24	16.31	16.21	
5	16QAM	12	7	16.03	16.09	16.00	
5	16QAM	12	13	15.88	15.88	15.83	
5	16QAM	25	0	15.73	15.80	15.63	
5	64QAM	1	0	16.31	16.41	16.17	17.5
5	64QAM	1	12	16.27	16.33	16.14	
5	64QAM	1	24	16.22	16.29	16.13	
5	64QAM	12	0	15.56	15.63	15.43	16.5
5	64QAM	12	7	15.51	15.63	15.41	
5	64QAM	12	13	15.48	15.63	15.38	
5	64QAM	25	0	15.41	15.53	15.34	
5	256QAM	1	0	13.86	13.96	13.77	14.5
5	256QAM	1	12	13.82	13.93	13.78	
5	256QAM	1	24	13.85	13.84	13.72	
5	256QAM	12	0	13.74	13.81	13.72	
5	256QAM	12	7	13.69	13.77	13.72	14.5
5	256QAM	12	13	13.69	13.73	13.63	
5	256QAM	25	0	13.57	13.71	13.55	
Channel				131987	132322	132667	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	18.33	18.39	18.37	19.5
3	QPSK	1	8	18.12	18.17	18.22	
3	QPSK	1	14	17.98	17.99	18.04	
3	QPSK	8	0	17.17	17.32	17.31	18.5
3	QPSK	8	4	16.95	17.08	17.09	
3	QPSK	8	7	16.80	16.88	16.87	
3	QPSK	15	0	16.59	16.70	16.61	
3	16QAM	1	0	17.19	17.33	17.28	18.5
3	16QAM	1	8	17.08	17.12	17.06	
3	16QAM	1	14	16.88	16.90	16.85	
3	16QAM	8	0	16.16	16.23	16.13	17.5
3	16QAM	8	4	15.95	16.01	15.92	
3	16QAM	8	7	15.80	15.80	15.75	
3	16QAM	15	0	15.65	15.72	15.55	
3	64QAM	1	0	16.23	16.33	16.09	17.5
3	64QAM	1	8	16.19	16.25	16.06	
3	64QAM	1	14	16.14	16.21	16.05	
3	64QAM	8	0	15.48	15.55	15.35	
3	64QAM	8	4	15.43	15.55	15.33	16.5
3	64QAM	8	7	15.40	15.55	15.30	
3	64QAM	15	0	15.33	15.45	15.26	
3	256QAM	1	0	13.78	13.88	13.69	
3	256QAM	1	8	13.74	13.85	13.70	14.5
3	256QAM	1	14	13.77	13.76	13.64	
3	256QAM	8	0	13.66	13.73	13.64	
3	256QAM	8	4	13.61	13.69	13.64	14.5
3	256QAM	8	7	13.61	13.65	13.55	
3	256QAM	15	0	13.49	13.63	13.47	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	17.38	17.39	17.33	19.5
1.4	QPSK	1	3	17.25	17.25	17.21	
1.4	QPSK	1	5	17.13	17.19	17.14	
1.4	QPSK	3	0	16.36	16.42	16.50	
1.4	QPSK	3	1	16.19	16.31	16.27	
1.4	QPSK	3	3	15.99	16.14	16.13	18.5
1.4	QPSK	6	0	15.95	15.99	15.96	
1.4	16QAM	1	0	16.52	16.65	16.50	18.5
1.4	16QAM	1	3	16.34	16.53	16.41	
1.4	16QAM	1	5	16.20	16.31	16.24	
1.4	16QAM	3	0	15.54	15.67	15.63	
1.4	16QAM	3	1	15.44	15.53	15.43	
1.4	16QAM	3	3	15.23	15.37	15.27	
1.4	16QAM	6	0	15.14	15.24	15.09	17.5
1.4	64QAM	1	0	15.78	15.76	15.62	17.5
1.4	64QAM	1	3	15.71	15.73	15.62	
1.4	64QAM	1	5	15.75	15.70	15.64	
1.4	64QAM	3	0	15.13	14.98	14.90	
1.4	64QAM	3	1	15.01	14.94	14.85	
1.4	64QAM	3	3	14.97	14.89	14.85	
1.4	64QAM	6	0	14.93	14.80	14.79	16.5
1.4	256QAM	1	0	13.28	13.22	13.20	14.5
1.4	256QAM	1	3	13.27	13.18	13.16	
1.4	256QAM	1	5	13.23	13.12	13.17	
1.4	256QAM	3	0	13.24	13.06	13.13	
1.4	256QAM	3	1	13.17	12.99	13.11	
1.4	256QAM	3	3	13.15	12.99	13.07	
1.4	256QAM	6	0	13.15	12.99	13.07	14.5

n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	20.00
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	19.13	18.81	18.70	20.00
20		1	53	19.12	18.66	18.98	
20		1	104	18.95	18.70	19.02	
20		50	1	18.65	18.28	18.29	20.00
20		50	25	19.15	18.70	18.07	
20		50	50	18.71	18.13	18.55	
20		100	0	18.76	18.19	18.41	
20	DFT-s-OFDM QPSK	1	1	19.33	19.35	19.30	20.00
20		1	53	19.29	18.69	19.01	
20		1	104	18.94	18.79	19.03	
20		50	1	18.17	17.79	17.83	20.00
20		50	25	19.10	19.13	19.06	
20		50	50	18.00	17.63	17.95	
20		100	0	17.80	17.93	17.92	
20	DFT-s-OFDM 16QAM	1	1	18.33	18.17	18.02	19.00
20	DFT-s-OFDM 64QAM	1	1	16.72	16.60	16.51	17.50
20	DFT-s-OFDM 256QAM	1	1	14.78	14.44	14.32	15.50
20	CP-OFDM QPSK	1	1	17.58	17.29	17.17	18.50
20	CP-OFDM 16QAM	1	1	17.29	17.02	16.91	18.00
20	CP-OFDM 64QAM	1	1	15.39	15.12	14.99	16.00
20	CP-OFDM 256QAM	1	1	12.75	12.50	12.38	13.50
Channel				371500	376000	380500	20.00
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	19.12	18.73	18.81	20.00
Channel				371000	376000	381000	20.00
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	19.16	18.74	18.96	20.00
Channel				370500	376000	381500	20.00
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	19.25	18.73	19.09	20.00

n7 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				504000	507000	510000	19.50
Frequency (MHz)				2520	2535	2550	
40	DFT-s-OFDM PI/2 BPSK	1	1	17.18	18.16	18.40	19.50
40		1	108	18.33	18.56	17.79	
40		1	214	18.36	17.67	17.02	
40		108	1	17.34	17.93	17.79	19.00
40		108	54	18.29	18.45	17.84	
40		108	108	17.90	17.57	16.78	
40		216	0	17.67	17.70	17.26	
40	DFT-s-OFDM QPSK	1	1	18.66	18.76	18.71	19.50
40		1	108	18.37	18.51	17.87	
40		1	214	18.43	17.60	17.05	
40		108	1	16.89	17.40	17.33	19.50
40		108	54	18.39	18.42	18.36	
40		108	108	17.51	17.03	16.25	
40		216	0	17.19	17.31	17.14	
40	DFT-s-OFDM 16QAM	1	1	16.53	17.18	17.68	18.50
40	DFT-s-OFDM 64QAM	1	1	14.90	15.70	16.03	17.00
40	DFT-s-OFDM 256QAM	1	1	12.93	13.74	14.04	15.00
40	CP-OFDM QPSK	1	1	15.74	16.54	16.85	17.50
40	CP-OFDM 16QAM	1	1	15.44	16.23	16.49	17.00
40	CP-OFDM 64QAM	1	1	13.58	14.73	14.67	15.50
40	CP-OFDM 256QAM	1	1	10.94	11.74	12.12	13.00
Channel				503000	507000	511000	19.00
Frequency (MHz)				2515	2535	2555	
30	DFT-s-OFDM QPSK	1	1	17.18	18.22	18.20	19.00
Channel				502500	507000	511500	19.00
Frequency (MHz)				2512.5	2535	2557.5	
25	DFT-s-OFDM QPSK	1	1	17.20	18.28	17.98	19.00
Channel				502000	507000	512000	19.00
Frequency (MHz)				2510	2535	2560	
20	DFT-s-OFDM QPSK	1	1	17.16	18.37	17.74	19.00
Channel				501500	507000	512500	19.00
Frequency (MHz)				2507.5	2535	2562.5	
15	DFT-s-OFDM QPSK	1	1	17.18	18.41	17.40	19.00
Channel				501000	507000	513000	19.00
Frequency (MHz)				2505	2535	2565	
10	DFT-s-OFDM QPSK	1	1	17.21	18.48	17.18	19.00
Channel				500500	507000	513500	19.00
Frequency (MHz)				2502.5	2535	2567.5	
5	DFT-s-OFDM QPSK	1	1	17.16	18.42	16.96	19.00

n25 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376500	379000	20.00
Frequency (MHz)				1870	1882.5	1895	
40	DFT-s-OFDM PI/2 BPSK	1	1	19.08	18.95	18.97	20.00
40		1	108	18.79	18.63	19.07	
40		1	214	18.74	18.93	18.99	
40		108	1	18.53	18.31	18.51	19.50
40		108	54	18.16	18.71	18.18	
40		108	108	18.25	18.34	18.77	
40	DFT-s-OFDM QPSK	216	0	18.33	18.40	18.57	20.00
40		1	1	19.18	19.20	19.16	
40		1	108	18.83	18.73	19.07	
40		1	214	18.67	18.96	19.04	20.00
40		108	1	18.04	17.83	17.95	
40		108	54	18.87	19.07	19.03	
40	108	108	17.61	18.14	18.13	19.50	
40	216	0	17.84	18.17	18.06		
40	DFT-s-OFDM 16QAM	1	1	18.30	18.58		18.17
40	DFT-s-OFDM 64QAM	1	1	16.67	16.93	16.38	17.50
40	DFT-s-OFDM 256QAM	1	1	14.70	14.95	14.48	15.50
40	CP-OFDM QPSK	1	1	17.56	17.84	17.30	18.50
40	CP-OFDM 16QAM	1	1	17.29	17.51	17.01	18.50
40	CP-OFDM 64QAM	1	1	15.42	15.66	15.12	16.50
40	CP-OFDM 256QAM	1	1	12.77	12.99	12.49	13.50
Channel				373000	376500	380000	20.00
Frequency (MHz)				1865	1882.5	1900	
30	DFT-s-OFDM QPSK	1	1	19.06	18.78	18.56	20.00
Channel				372500	376500	380500	20.00
Frequency (MHz)				1862.5	1882.5	1902.5	
25	DFT-s-OFDM QPSK	1	1	19.03	18.68	18.57	20.00
Channel				372000	376500	381000	20.00
Frequency (MHz)				1860	1882.5	1905	
20	DFT-s-OFDM QPSK	1	1	19.14	18.69	18.71	20.00
Channel				371500	376500	381500	20.00
Frequency (MHz)				1857.5	1882.5	1907.5	
15	DFT-s-OFDM QPSK	1	1	19.16	18.65	18.87	20.00
Channel				371000	376500	382000	20.00
Frequency (MHz)				1855	1882.5	1910	
10	DFT-s-OFDM QPSK	1	1	19.15	18.65	19.00	20.00
Channel				370500	376500	382500	20.00
Frequency (MHz)				1852.5	1882.5	1912.5	
5	DFT-s-OFDM QPSK	1	1	19.14	18.63	18.90	20.00

n38 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				518000	519000	520000	16.00
Frequency (MHz)				2590	2595	2600	
40	DFT-s-OFDM PI/2 BPSK	1	1	15.45	15.05	14.93	16.00
40		1	108	15.03	14.81	14.59	
40		1	214	14.65	14.40	14.25	
40		108	1	14.72	14.52	14.54	16.00
40		108	54	15.04	14.84	15.19	
40		108	108	14.40	14.23	14.63	
40		216	0	14.59	14.36	14.40	
40	DFT-s-OFDM QPSK	1	1	15.67	15.71	15.62	16.50
40		1	108	15.02	14.85	15.09	
40		1	214	14.56	14.32	14.63	
40		108	1	14.23	13.99	13.94	16.00
40		108	54	15.20	15.26	15.16	
40		108	108	13.75	13.58	14.10	
40		216	0	13.94	14.15	14.14	
40	DFT-s-OFDM 16QAM	1	1	14.28	14.18	14.16	15.00
40	DFT-s-OFDM 64QAM	1	1	12.71	12.65	12.36	13.50
40	DFT-s-OFDM 256QAM	1	1	10.74	10.64	10.50	11.50
40	CP-OFDM QPSK	1	1	13.66	13.49	13.53	14.50
40	CP-OFDM 16QAM	1	1	13.25	13.12	13.17	14.00
40	CP-OFDM 64QAM	1	1	11.48	11.54	11.80	12.50
40	CP-OFDM 256QAM	1	1	8.77	8.94	8.41	9.50
Channel				517000	519000	521000	16.00
Frequency (MHz)				2585	2595	2605	
30	DFT-s-OFDM QPSK	1	1	15.26	15.10	14.91	16.00
Channel				516000	519000	522000	16.00
Frequency (MHz)				2580	2595	2610	
20	DFT-s-OFDM QPSK	1	1	15.31	15.12	14.76	16.00
Channel				515500	519000	522500	16.00
Frequency (MHz)				2577.5	2595	2612.5	
15	DFT-s-OFDM QPSK	1	1	15.42	15.10	14.69	16.00
Channel				515000	519000	523000	16.00
Frequency (MHz)				2575	2595	2615	
10	DFT-s-OFDM QPSK	1	1	15.43	15.18	14.71	16.00

n40(2305-2315MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					462000		18.00
Frequency (MHz)					2310		
10	DFT-s-OFDM PI/2 BPSK	1	1		16.99		18.00
10		1	12		16.80		
10		1	22		16.83		
10		12	1		16.42		17.50
10		12	6		16.83		
10		12	12		16.31		
10		24	0		16.42		
10	DFT-s-OFDM QPSK	1	1		17.31		18.50
10		1	12		16.96		
10		1	22		16.88		
10		12	1		15.90		17.50
10		12	6		16.93		
10		12	12		15.83		
10		24	0		15.91		
10	DFT-s-OFDM 16QAM	1	1		16.11		17.00
10	DFT-s-OFDM 64QAM	1	1		14.51		15.50
10	DFT-s-OFDM 256QAM	1	1		12.71		13.50
10	CP-OFDM QPSK	1	1		15.49		16.00
10	CP-OFDM 16QAM	1	1		15.26		16.00
10	CP-OFDM 64QAM	1	1		13.23		14.00
10	CP-OFDM 256QAM	1	1		10.70		11.50

n40(2350-2360MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					471000		
Frequency (MHz)					2355		
10	DFT-s-OFDM PI/2 BPSK	1	1		17.34		18.00
10		1	12		17.33		
10		1	22		17.45		
10		12	1		16.85		18.00
10		12	6		17.32		
10		12	12		16.78		
10		24	0		16.89		
10	DFT-s-OFDM QPSK	1	1		17.61		18.50
10		1	12		17.35		
10		1	22		17.30		
10		12	1		16.34		18.00
10		12	6		17.37		
10		12	12		16.38		
10		24	0		16.40		
10	DFT-s-OFDM 16QAM	1	1		16.53		17.50
10	DFT-s-OFDM 64QAM	1	1		14.84		15.50
10	DFT-s-OFDM 256QAM	1	1		13.03		14.00
10	CP-OFDM QPSK	1	1		15.84		16.50
10	CP-OFDM 16QAM	1	1		15.54		16.50
10	CP-OFDM 64QAM	1	1		13.61		14.50
10	CP-OFDM 256QAM	1	1		11.44		12.00

n41 (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	15.00
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	12.76	13.37	13.76	13.78	13.56	15.00
100		1	136	13.90	13.83	13.89	13.07	12.70	
100		1	271	12.32	12.53	12.70	12.63	13.26	
100		135	1	12.92	13.29	13.39	13.20	12.71	14.50
100		135	67	13.80	13.89	13.64	13.21	12.88	
100		135	136	13.33	13.05	12.67	12.33	12.33	
100		270	0	13.17	13.26	13.11	12.80	12.63	
100	DFT-s-OFDM QPSK	1	1	14.02	13.94	14.22	14.20	14.05	15.00
100		1	136	13.97	14.03	13.64	13.23	12.96	
100		1	271	13.51	13.03	12.69	12.64	13.32	
100		135	1	12.46	12.82	12.92	12.71	12.69	14.50
100		135	67	13.82	13.90	13.93	13.61	13.70	
100		135	136	12.89	12.62	12.15	11.84	11.77	
100		270	0	12.68	12.80	12.85	12.34	12.59	
100	DFT-s-OFDM 16QAM	1	1	11.92	12.58	12.94	12.95	12.73	13.50
100	DFT-s-OFDM 64QAM	1	1	10.25	10.93	11.27	11.33	11.04	12.00
100	DFT-s-OFDM 256QAM	1	1	8.55	9.17	9.54	9.58	9.33	10.50
100	CP-OFDM QPSK	1	1	11.20	11.91	12.15	12.20	12.12	13.00
100	CP-OFDM 16QAM	1	1	11.11	11.71	12.06	12.11	11.86	13.00
100	CP-OFDM 64QAM	1	1	9.04	9.66	10.01	10.07	9.85	11.00
100	CP-OFDM 256QAM	1	1	6.59	7.32	7.70	7.72	7.36	8.50
Channel				508200	513402	518598	523800	528996	14.50
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	12.71	13.39	13.74	13.76	13.44	14.50
Channel				507204	512904	518598	524298	529998	14.50
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	12.83	13.49	13.88	13.70	13.19	14.50
Channel				506202	512400	518598	524796	531000	14.50
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	12.76	13.46	13.95	13.65	13.00	14.50
Channel				505200	511902	518598	525798	531996	14.50
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	12.67	13.58	13.76	13.36	12.75	14.50
Channel				504204	511404	518598	525798	532998	14.50
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	12.71	13.66	13.74	13.27	12.71	14.50
Channel				503202	510900	518598	526296	534000	14.50
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	12.86	13.70	13.82	13.23	12.61	14.50
Channel				502200	510402	518598	526800	534996	14.50
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	12.79	13.73	13.80	13.05	12.68	14.50
Channel				501204	509904	518598	527298	535998	14.50
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	12.76	13.84	13.82	12.89	12.82	14.50
Channel				500700	509652	518598	527550	536496	14.50
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	12.73	12.74	13.68	12.76	12.76	14.50
Channel				500202	509400	518598	527796	537000	14.50
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	12.79	13.76	13.65	12.85	13.09	14.50

n41 (PC3)										
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)	
Channel				509202	513900	518598	523296	528000		
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640		
100	DFT-s-OFDM PI/2 BPSK	1	1	12.88	13.57	13.91	13.92	13.71	15.00	
100		1	136	14.11	14.01	13.87	13.27	12.91		
100		1	271	13.67	13.16	12.87	12.78	13.43		
100		DFT-s-OFDM PI/2 BPSK	135	1	13.11	13.46	13.58	13.32	12.87	14.50
100			135	67	13.97	14.07	13.84	13.35	13.04	
100			135	136	13.50	13.23	12.82	12.49	12.48	
100			270	0	13.34	13.41	12.81	12.95	12.79	
100	DFT-s-OFDM QPSK	1	1	14.30	14.08	14.38	14.25	14.24	15.00	
100		1	136	14.14	14.20	13.93	13.36	13.07		
100		1	271	13.67	13.15	12.91	12.79	13.45		
100		DFT-s-OFDM QPSK	135	1	12.60	12.94	12.85	12.83	12.36	14.50
100			135	67	13.97	14.06	14.07	14.00	14.01	
100			135	136	13.02	12.75	12.25	11.97	12.00	
100			270	0	12.82	12.93	13.01	12.45	12.26	
100	DFT-s-OFDM 16QAM	1	1	12.02	12.86	13.10	13.20	12.91	14.00	
100	DFT-s-OFDM 64QAM	1	1	10.48	11.14	11.40	11.53	11.31	12.50	
100	DFT-s-OFDM 256QAM	1	1	8.63	9.35	9.63	9.69	9.51	10.50	
100	CP-OFDM QPSK	1	1	11.32	11.91	12.24	12.33	12.11	13.00	
100	CP-OFDM 16QAM	1	1	11.35	11.96	12.29	12.32	12.08	13.00	
100	CP-OFDM 64QAM	1	1	9.17	9.78	10.11	10.18	9.95	11.00	
100	CP-OFDM 256QAM	1	1	6.20	7.87	8.44	8.18	7.34	9.00	
Channel				508200	513402	518598	523800	528996	Tune-up limit (dBm)	
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98		
90	DFT-s-OFDM QPSK	1	1	12.87	13.59	13.93	13.87	13.52	14.50	
Channel				507204	512904	518598	524298	529998	Tune-up limit (dBm)	
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99		
80	DFT-s-OFDM QPSK	1	1	12.91	13.68	14.03	13.92	13.34	15.00	
Channel				506202	512400	518598	524796	531000	Tune-up limit (dBm)	
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655		
70	DFT-s-OFDM QPSK	1	1	12.87	13.72	14.03	13.82	13.09	15.00	
Channel				505200	511902	518598	525798	531996	Tune-up limit (dBm)	
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98		
60	DFT-s-OFDM QPSK	1	1	12.77	13.72	13.94	13.51	12.90	14.50	
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)	
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99		
50	DFT-s-OFDM QPSK	1	1	12.84	13.79	13.98	13.40	12.81	14.50	
Channel				503202	510900	518598	526296	534000	Tune-up limit (dBm)	
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670		
40	DFT-s-OFDM QPSK	1	1	12.97	13.86	13.96	13.27	12.74	14.50	
Channel				502200	510402	518598	526800	534996	Tune-up limit (dBm)	
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98		
30	DFT-s-OFDM QPSK	1	1	12.89	13.88	13.96	13.13	12.74	14.50	
Channel				501204	509904	518598	527298	535998	Tune-up limit (dBm)	
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99		
20	DFT-s-OFDM QPSK	1	1	12.82	13.91	13.88	13.01	12.89	14.50	
Channel				500700	509652	518598	527550	536496	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48		
15	DFT-s-OFDM QPSK	1	1	12.80	13.90	13.82	12.95	13.01	14.50	
Channel				500202	509400	518598	527796	537000	Tune-up limit (dBm)	
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685		
10	DFT-s-OFDM QPSK	1	1	12.86	13.99	13.84	12.93	13.21	14.50	

n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	19.00
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	17.64	17.80	17.89	19.00
40		1	108	17.85	17.88	17.66	
40		1	214	17.87	15.99	17.77	
40		108	1	17.46	17.46	17.49	18.50
40		108	54	17.91	17.91	17.76	
40		108	108	17.56	17.21	17.16	
40		216	0	17.47	16.02	17.33	
40	DFT-s-OFDM QPSK	1	1	17.98	18.05	17.88	19.00
40		1	108	17.85	17.89	17.66	
40		1	214	17.81	17.74	17.78	
40		108	1	16.87	16.88	16.89	18.50
40		108	54	17.95	17.96	17.76	
40		108	108	17.09	16.82	16.69	
40		216	0	16.87	16.90	16.80	
40	DFT-s-OFDM 16QAM	1	1	16.89	17.07	17.25	18.00
40	DFT-s-OFDM 64QAM	1	1	15.25	15.43	15.52	16.50
40	DFT-s-OFDM 256QAM	1	1	13.25	13.42	13.86	14.50
40	CP-OFDM QPSK	1	1	16.13	16.29	16.46	17.00
40	CP-OFDM 16QAM	1	1	15.87	16.12	16.07	17.00
40	CP-OFDM 64QAM	1	1	14.16	14.12	14.19	15.00
40	CP-OFDM 256QAM	1	1	11.30	12.07	11.57	13.00
Channel				345000	349000	353000	18.50
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	17.61	17.83	17.77	18.50
Channel				344000	349000	354000	18.50
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	17.76	17.89	17.67	18.50
Channel				343500	349000	354500	18.50
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	17.76	17.87	17.59	18.50
Channel				343000	349000	355000	18.50
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	17.81	17.89	17.58	18.50
Channel				342500	349000	355500	18.50
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	17.78	17.85	17.60	18.50

n77(3700-3980MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	17.74	17.71	17.39	17.67	17.47	18.50
100		1	136	17.74	17.71	17.69	17.68	17.18	
100		1	271	17.56	17.72	17.41	17.02	17.83	
100		135	1	17.58	17.20	17.05	17.00	16.85	18.50
100		135	67	17.82	17.75	17.77	17.60	17.18	
100		135	136	17.07	17.09	16.88	16.73	16.92	
100		270	0	17.32	17.20	17.25	17.11	16.79	
100	DFT-s-OFDM QPSK	1	1	18.28	18.25	18.39	18.26	18.08	20.00
100		1	136	17.91	17.70	17.87	17.66	17.20	
100		1	271	17.74	17.87	17.55	17.11	18.01	
100		135	1	17.08	16.65	16.53	16.55	16.35	18.50
100		135	67	17.70	17.70	17.75	17.61	17.65	
100		135	136	16.58	16.62	16.37	16.22	16.42	
100	270	0	16.80	16.71	16.86	16.64	16.31		
100	DFT-s-OFDM 16QAM	1	1	16.92	16.98	16.52	16.77	16.56	17.50
100	DFT-s-OFDM 64QAM	1	1	15.28	15.24	14.85	15.12	14.88	16.00
100	DFT-s-OFDM 256QAM	1	1	13.48	13.42	13.03	13.34	13.13	14.00
100	CP-OFDM QPSK	1	1	16.13	16.04	15.82	16.19	15.89	17.00
100	CP-OFDM 16QAM	1	1	16.04	16.05	15.56	15.79	15.64	17.00
100	CP-OFDM 64QAM	1	1	14.03	14.08	13.60	13.88	13.71	15.00
100	CP-OFDM 256QAM	1	1	11.46	11.38	11.07	11.28	11.21	12.00
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	17.74	17.61	17.47	17.64	17.42	18.50
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	17.79	17.67	17.53	17.62	17.33	18.50
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	17.80	17.66	17.55	17.47	17.20	18.50
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	17.76	17.56	17.35	17.30	16.93	18.50
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	17.79	17.60	17.37	17.44	16.97	18.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	17.83	17.63	17.40	17.50	17.10	18.50
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	17.85	17.55	17.45	17.44	17.32	18.50
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	17.80	17.62	17.53	17.40	17.46	18.50
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	17.84	17.59	17.62	17.34	17.58	18.50
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	17.83	17.61	17.72	17.29	10.47	18.50

n77(3450-3550MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			19.00
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.93			19.00
100		1	136			17.83			
100		1	271			17.56			
100		135	1			17.42			
100		135	67			17.89			
100		135	136			17.05			
100		270	0			16.59			
100	DFT-s-OFDM QPSK	1	1			18.42			20.00
100		1	136			18.10			
100		1	271			17.72			
100		135	1			17.63			
100		135	67			17.85			
100		135	136			16.57			
100		270	0			16.88			
100	DFT-s-OFDM 16QAM	1	1			17.24			18.00
100	DFT-s-OFDM 64QAM	1	1			15.52			16.50
100	DFT-s-OFDM 256QAM	1	1			13.73			14.50
100	CP-OFDM QPSK	1	1			16.48			17.00
100	CP-OFDM 16QAM	1	1			16.37			17.00
100	CP-OFDM 64QAM	1	1			14.21			15.00
100	CP-OFDM 256QAM	1	1			11.82			12.50
Channel				633000	633168	633334	633500	633666	18.50
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	17.88	17.85	17.89	17.84	17.82	18.50
Channel				632668	633000	633334	633666	634000	18.50
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	17.96	17.92	17.93	17.89	17.82	18.50
Channel				632334	632834	633334	633832	634332	18.50
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	17.95	17.88	17.85	17.78	17.69	18.50
Channel				632000	632668	633334	634000	634666	18.50
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	17.88	17.85	17.80	17.71	17.65	18.50
Channel				631668	632500	633334	634166	635000	18.50
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	17.94	17.86	17.86	17.79	17.68	18.50
Channel				631334	632334	633334	634332	635332	19.00
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	18.00	17.90	17.78	17.76	17.61	19.00
Channel				631000	632168	633334	634500	635666	19.00
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	18.09	17.88	17.82	17.78	17.48	19.00
Channel				630668	632000	633334	634666	636000	19.00
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	18.01	17.89	17.81	17.64	17.45	19.00
Channel				630500	631916	633334	634750	636166	19.00
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	18.01	17.89	17.81	17.60	17.48	19.00
Channel				630334	631834	633334	634834	636332	19.00
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	18.05	17.90	17.85	17.58	17.61	19.00

n77(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			18.50
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.96			18.50
100		1	136			17.77			
100		1	271			17.56			
100		135	1			17.40			18.50
100		135	67			17.88			
100		135	136			17.06			
100		270	0			17.40			
100	DFT-s-OFDM QPSK	1	1			18.02			19.00
100		1	136			17.94			
100		1	271			17.57			
100		135	1			16.66			18.50
100		135	67			17.82			
100		135	136			16.48			
100		270	0			16.85			
100	DFT-s-OFDM 16QAM	1	1			17.10			18.00
100	DFT-s-OFDM 64QAM	1	1			15.45			16.00
100	DFT-s-OFDM 256QAM	1	1			13.59			14.50
100	CP-OFDM QPSK	1	1			16.35			17.00
100	CP-OFDM 16QAM	1	1			16.26			17.00
100	CP-OFDM 64QAM	1	1			14.24			15.00
100	CP-OFDM 256QAM	1	1			12.56			13.50
Channel				633000	633168	633334	633500	633666	18.50
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	17.91	17.91	17.91	17.85	17.86	18.50
Channel				632668	633000	633334	633666	634000	18.50
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	17.95	17.90	17.98	17.94	17.83	18.50
Channel				632334	632834	633334	633832	634332	18.50
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	17.95	17.90	17.94	17.76	17.76	18.50
Channel				632000	632668	633334	634000	634666	18.50
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	17.93	17.90	17.84	17.73	17.66	18.50
Channel				631668	632500	633334	634166	635000	18.50
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	17.95	17.90	17.79	17.73	17.67	18.50
Channel				631334	632334	633334	634332	635332	19.00
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	18.07	17.87	17.85	17.83	17.66	19.00
Channel				631000	632168	633334	634500	635666	19.00
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	18.05	17.84	17.71	17.73	17.50	19.00
Channel				630668	632000	633334	634666	636000	19.00
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	18.03	17.91	17.81	17.62	17.47	19.00
Channel				630500	631916	633334	634750	636166	19.00
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	18.06	17.81	17.82	17.58	17.42	19.00
Channel				630334	631834	633334	634834	636332	19.00
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	18.03	17.87	17.85	17.49	17.52	19.00

n77(3700-3980MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	17.74	17.67	17.36	17.59	17.39	18.50
100		1	136	17.70	17.66	17.67	17.49	16.99	
100		1	271	17.57	17.73	17.39	16.92	17.71	
100		135	1	17.53	17.18	17.00	17.01	16.77	18.50
100		135	67	17.78	17.72	17.72	17.56	17.09	
100		135	136	17.00	17.19	16.81	16.70	16.85	
100		270	0	17.26	17.16	17.21	17.09	16.72	
100	DFT-s-OFDM QPSK	1	1	18.12	18.18	18.23	18.06	18.10	19.00
100		1	136	18.04	17.96	17.69	17.70	17.08	
100		1	271	17.56	17.71	17.36	16.93	17.76	
100		135	1	17.03	16.61	16.14	16.48	16.27	18.50
100		135	67	17.77	17.70	17.90	17.57	17.10	
100		135	136	16.51	16.57	16.38	16.17	16.37	
100	270	0	16.75	16.65	17.20	16.58	16.24		
100	DFT-s-OFDM 16QAM	1	1	16.96	16.86	16.98	16.68	16.77	17.50
100	DFT-s-OFDM 64QAM	1	1	15.18	15.13	15.17	15.02	14.87	16.00
100	DFT-s-OFDM 256QAM	1	1	13.37	13.29	13.57	13.16	13.06	14.50
100	CP-OFDM QPSK	1	1	16.15	16.01	16.07	16.03	15.85	17.00
100	CP-OFDM 16QAM	1	1	15.97	15.92	15.92	15.75	15.54	16.50
100	CP-OFDM 64QAM	1	1	13.96	13.86	13.82	13.77	13.70	14.50
100	CP-OFDM 256QAM	1	1	12.24	12.92	11.98	11.82	11.92	13.50
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	17.76	17.55	17.44	17.62	17.42	18.50
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	17.76	17.65	17.45	17.49	17.25	18.50
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	17.74	17.64	17.47	17.47	17.15	18.50
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	17.69	17.47	17.34	17.31	16.93	18.50
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	17.70	17.56	17.37	17.40	16.92	18.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	17.78	17.58	17.38	17.39	17.05	18.50
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	17.78	17.57	17.42	17.44	17.23	18.50
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	17.75	17.56	17.55	17.30	17.39	18.50
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	17.79	17.45	17.53	17.21	17.52	18.50
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	17.80	17.58	17.60	17.16	17.71	18.50

n78(3450-3550MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			18.00
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.39			18.00
100		1	136			17.36			
100		1	271			17.02			
100		135	1			16.92			
100		135	67			17.40			
100		135	136			16.51			
100		270	0			16.88			
100	DFT-s-OFDM QPSK	1	1			17.71			19.00
100		1	136			17.63			
100		1	271			17.21			
100		135	1			16.37			
100		135	67			17.31			
100		135	136			15.99			
100		270	0			16.32			
100	DFT-s-OFDM 16QAM	1	1			16.66			17.50
100	DFT-s-OFDM 64QAM	1	1			14.98			15.50
100	DFT-s-OFDM 256QAM	1	1			9.80			10.50
100	CP-OFDM QPSK	1	1			17.45			18.00
100	CP-OFDM 16QAM	1	1			15.85			16.50
100	CP-OFDM 64QAM	1	1			13.71			14.50
100	CP-OFDM 256QAM	1	1			11.22			12.00
Channel				633000	633166	633334	633500	633666	18.00
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	17.36	17.37	17.34	17.31	17.33	18.00
Channel				632668	633000	633334	633666	634000	18.00
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	17.45	17.42	17.40	17.36	17.30	18.00
Channel				632334	632834	633334	633832	634332	18.00
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	17.43	17.36	17.35	17.26	17.25	18.00
Channel				632000	632666	633334	634000	634666	18.00
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	17.43	17.35	17.30	17.16	17.20	18.00
Channel				631668	632500	633334	634166	635000	18.00
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	17.40	17.33	17.23	17.19	17.20	18.00
Channel				631334	636672	633334	634334	635332	18.00
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	17.48	16.86	17.36	17.33	17.00	18.00
Channel				631000	632166	633334	634500	635666	18.50
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	17.51	17.34	17.35	17.27	16.87	18.50
Channel				630668	632000	633334	634668	636000	18.00
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	17.48	17.39	17.31	17.04	16.88	18.00
Channel				630500	631916	633334	634750	636166	18.00
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	17.47	17.34	17.25	16.92	16.88	18.00
Channel				630334	631834	633334	634834	636332	18.00
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	17.48	17.32	17.32	17.01	16.98	18.00

n78(3700-3800MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			18.00
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.23			18.00
100		1	136			17.25			
100		1	271			16.99			
100		135	1			17.09			18.00
100		135	67			17.29			
100		135	136			17.32			
100		270	0			16.83			
100	DFT-s-OFDM QPSK	1	1			17.66			19.00
100		1	136			17.56			
100		1	271			17.03			
100		135	1			16.64			18.00
100		135	67			17.28			
100		135	136			16.06			
100		270	0			16.32			
100	DFT-s-OFDM 16QAM	1	1			16.48			17.00
100	DFT-s-OFDM 64QAM	1	1			14.76			15.50
100	DFT-s-OFDM 256QAM	1	1			12.96			13.50
100	CP-OFDM QPSK	1	1			15.63			16.50
100	CP-OFDM 16QAM	1	1			15.60			16.50
100	CP-OFDM 64QAM	1	1			13.55			14.50
100	CP-OFDM 256QAM	1	1			10.99			11.50
Channel				649668	649834	650000	650166	650332	18.00
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	17.25	17.31	17.33	17.31	17.35	18.00
Channel				649334	649666	650000	650334	650666	18.50
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	17.32	17.38	17.42	17.45	17.52	18.50
Channel				649000	649500	650000	650500	651000	18.50
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	17.31	17.39	17.45	17.55	17.51	18.50
Channel				648668	649334	650000	650666	651332	18.00
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	17.19	17.34	17.40	17.37	17.21	18.00
Channel				648334	649166	650000	650834	651666	18.00
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	17.21	17.36	17.42	17.27	17.13	18.00
Channel				648000	649000	650000	651000	652000	18.00
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	17.24	17.45	17.44	17.27	17.04	18.00
Channel				647668	648834	650000	651166	652332	18.00
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	
30	DFT-s-OFDM QPSK	1	1	17.31	17.49	17.39	17.15	17.04	18.00
Channel				647334	648666	650000	651334	652666	18.00
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	17.26	17.46	17.32	17.13	16.98	18.00
Channel				647168	648584	650000	651416	652832	18.50
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	17.28	17.52	17.27	17.09	16.95	18.50
Channel				647000	648500	650000	651500	653000	18.00
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	17.34	17.48	17.30	17.06	17.04	18.00

n78(3450-3550MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			18.00
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.43			18.00
100		1	136			17.35			
100		1	271			17.01			
100		135	1			16.88			
100		135	67			17.38			
100		135	136			16.58			
100		270	0			16.86			
100	DFT-s-OFDM QPSK	1	1			17.46			18.50
100		1	136			17.32			
100		1	271			17.00			
100		135	1			16.23			
100		135	67			17.36			
100		135	136			15.98			
100		270	0			16.34			
100	DFT-s-OFDM 16QAM	1	1			16.56			17.50
100	DFT-s-OFDM 64QAM	1	1			14.89			15.50
100	DFT-s-OFDM 256QAM	1	1			14.16			15.00
100	CP-OFDM QPSK	1	1			15.85			16.50
100	CP-OFDM 16QAM	1	1			15.65			16.50
100	CP-OFDM 64QAM	1	1			13.68			14.50
100	CP-OFDM 256QAM	1	1			12.15			13.00
Channel				633000	633166	633334	633500	633666	18.00
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	17.37	17.37	17.36	17.35	17.33	18.00
Channel				632668	633000	633334	633666	634000	18.00
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	17.41	17.45	17.35	17.39	17.28	18.00
Channel				632334	632834	633334	633832	634332	18.00
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	17.45	17.32	17.40	17.31	17.21	18.00
Channel				632000	632666	633334	634000	634666	18.00
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	17.35	17.32	17.27	17.15	17.21	18.00
Channel				631668	632500	633334	634166	635000	18.00
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	17.41	17.35	17.27	17.25	17.21	18.00
Channel				631334	636672	633334	634334	635332	18.00
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	17.49	16.85	17.36	17.21	17.02	18.00
Channel				631000	632166	633334	634500	635666	18.00
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	17.41	17.29	17.22	17.11	16.79	18.00
Channel				630668	632000	633334	634668	636000	18.00
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	17.46	17.27	17.25	16.92	16.80	18.00
Channel				630500	631916	633334	634750	636166	18.00
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	17.43	17.16	17.16	16.93	16.75	18.00
Channel				630334	631834	633334	634834	636332	18.00
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	17.40	17.23	17.24	16.87	16.85	18.00

n78(3700-3800MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			18.00
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.20			18.00
100		1	136			17.17			
100		1	271			16.95			
100		135	1			17.05			
100		135	67			17.25			
100		135	136			16.50			
100		270	0			16.77			
100	DFT-s-OFDM QPSK	1	1			17.38			18.50
100		1	136			17.32			
100		1	271			17.04			
100		135	1			16.57			
100		135	67			17.25			
100		135	136			15.97			
100		270	0			16.24			
100	DFT-s-OFDM 16QAM	1	1			12.15			13.00
100	DFT-s-OFDM 64QAM	1	1			14.73			15.50
100	DFT-s-OFDM 256QAM	1	1			13.83			14.50
100	CP-OFDM QPSK	1	1			15.62			16.50
100	CP-OFDM 16QAM	1	1			15.47			16.00
100	CP-OFDM 64QAM	1	1			13.48			14.00
100	CP-OFDM 256QAM	1	1			11.80			12.50
Channel				649668	649834	650000	650166	650332	18.00
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	17.23	17.27	17.32	17.24	17.35	18.00
Channel				649334	649666	650000	650334	650666	18.00
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	17.25	17.33	17.41	17.43	17.45	18.00
Channel				649000	649500	650000	650500	651000	18.50
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	17.29	17.36	17.41	17.51	17.44	18.50
Channel				648668	649334	650000	650666	651332	18.00
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	17.16	17.28	17.36	17.33	17.17	18.00
Channel				648334	649166	650000	650834	651666	18.00
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	17.18	17.35	17.39	17.25	17.09	18.00
Channel				648000	649000	650000	651000	652000	18.00
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	17.17	17.43	17.44	17.23	17.06	18.00
Channel				647668	648834	650000	651166	652332	18.00
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	
30	DFT-s-OFDM QPSK	1	1	17.28	17.48	17.38	17.14	17.03	18.00
Channel				647334	648666	650000	651334	652666	18.00
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	17.20	17.44	17.29	17.13	16.92	18.00
Channel				647168	648584	650000	651416	652832	18.00
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	17.20	17.43	17.22	17.09	16.96	18.00
Channel				647000	648500	650000	651500	653000	18.00
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	17.29	17.52	17.26	17.05	17.00	18.50

CA_41C											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	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	39750	39948	QPSK	1	0	0	0	1	0	19.61	21.00
40185	40185	39987	QPSK	1	0	0	0	1	0	19.59	21.00
40620	40521	40719	QPSK	1	0	0	0	1	0	19.75	21.00
41055	41055	40857	QPSK	1	0	0	0	1	0	19.73	21.00
41490	41490	41292	QPSK	1	0	0	0	1	0	19.68	21.00
39750	39750	39948	16QAM	1	0	0	0	1	0	19.08	20.50
40185	40185	39987	16QAM	1	0	0	0	1	0	19.11	20.50
40620	40521	40719	16QAM	1	0	0	0	1	0	19.24	20.50
41055	41055	40857	16QAM	1	0	0	0	1	0	19.19	20.50
41490	41490	41292	16QAM	1	0	0	0	1	0	19.23	20.50
39750	39750	39948	64QAM	1	0	0	0	1	0	18.59	20.00
40185	40185	39987	64QAM	1	0	0	0	1	0	18.66	20.00
40620	40521	40719	64QAM	1	0	0	0	1	0	18.85	20.00
41055	41055	40857	64QAM	1	0	0	0	1	0	18.83	20.00
41490	41490	41292	64QAM	1	0	0	0	1	0	18.79	20.00
39750	39750	39948	256QAM	1	0	0	0	1	0	19.13	20.50
40185	40185	39987	256QAM	1	0	0	0	1	0	19.20	20.50
40620	40521	40719	256QAM	1	0	0	0	1	0	19.29	20.50
41055	41055	40857	256QAM	1	0	0	0	1	0	19.31	20.50
41490	41490	41292	256QAM	1	0	0	0	1	0	19.33	20.50
39750	39750	39948	QPSK	50	0	0	0	1	0	15.66	17.00
40185	40185	39987	QPSK	50	0	0	0	1	0	15.70	17.00
40620	40521	40719	QPSK	50	0	0	0	1	0	15.89	17.00
41055	41055	40857	QPSK	50	0	0	0	1	0	15.85	17.00
41490	41490	41292	QPSK	50	0	0	0	1	0	15.84	17.00



2CC LTE Uplink												
Configure	CA Configuration	PCC					SCC				Power	
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Measured Power(dBm)	Tune-up limit(dBm)
Inter-band	CA_2A-4A	2	20	18700	1860	QPSK/1#0	4	20	20300	1745	22.91	24.5
	CA_2A-5A	4	20	18700	1860	QPSK/1#0	5	10	20600	844	22.83	24.5
	CA_2A-12A	2	20	18700	1860	QPSK/1#0	12	5	23155	713.5	22.81	24.5
	CA_2A-66A	2	20	18700	1860	QPSK/1#0	66	20	132572	1770	22.90	24.5
	CA_4A-5A	4	20	20050	1720	QPSK/1#0	5	10	20600	844	22.73	24.5
CA_4A-12A	4	20	20050	1720	QPSK/1#0	12	5	23155	713.5	22.69	24.5	



Reduced Power Level 2

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	24.5
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.90	22.97	22.94	23.5
20	QPSK	1	49	22.71	22.74	22.79	
20	QPSK	1	99	22.56	22.57	22.61	
20	QPSK	50	0	21.75	21.88	21.87	
20	QPSK	50	24	21.54	21.66	21.65	23.5
20	QPSK	50	50	21.36	21.45	21.43	
20	QPSK	100	0	21.16	21.29	21.21	
20	16QAM	1	0	21.77	21.89	21.85	
20	16QAM	1	49	21.65	21.70	21.65	23.5
20	16QAM	1	99	21.47	21.50	21.45	
20	16QAM	50	0	20.74	20.79	20.72	
20	16QAM	50	24	20.53	20.60	20.51	
20	16QAM	50	50	20.39	20.41	20.31	22.5
20	16QAM	100	0	20.25	20.30	20.13	
20	64QAM	1	0	20.80	20.89	20.68	
20	64QAM	1	49	20.77	20.82	20.64	
20	64QAM	1	99	20.74	20.80	20.61	22.5
20	64QAM	50	0	20.04	20.16	19.95	
20	64QAM	50	24	20.01	20.14	19.90	
20	64QAM	50	50	20.00	20.13	19.90	
20	64QAM	100	0	19.92	20.05	19.85	21.5
20	256QAM	1	0	18.36	18.49	18.26	
20	256QAM	1	49	18.32	18.41	18.28	
20	256QAM	1	99	18.32	18.37	18.25	
20	256QAM	50	0	18.26	18.32	18.23	19.5
20	256QAM	50	24	18.22	18.30	18.21	
20	256QAM	50	50	18.17	18.26	18.14	
20	256QAM	100	0	18.10	18.20	18.07	
Channel				20025	20175	20325	24.5
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.95	22.96	22.94	23.5
15	QPSK	1	37	22.80	22.65	22.80	
15	QPSK	1	74	22.70	22.50	22.62	
15	QPSK	36	0	21.97	21.82	21.86	
15	QPSK	36	20	21.70	21.58	21.72	23.5
15	QPSK	36	39	21.58	21.48	21.57	
15	QPSK	75	0	21.34	21.27	21.40	
15	16QAM	1	0	21.93	21.89	22.09	
15	16QAM	1	37	21.74	21.78	21.92	23.5
15	16QAM	1	74	21.58	21.58	21.77	
15	16QAM	36	0	20.80	20.95	20.97	
15	16QAM	36	20	20.63	20.76	20.84	
15	16QAM	36	39	20.54	20.62	20.67	22.5
15	16QAM	75	0	20.42	20.52	20.52	
15	64QAM	1	0	21.03	21.15	21.05	
15	64QAM	1	37	21.02	21.13	21.00	
15	64QAM	1	74	20.95	21.14	20.93	21.5
15	64QAM	36	0	20.26	20.43	20.33	
15	64QAM	36	20	20.27	20.40	20.27	
15	64QAM	36	39	20.25	20.36	20.25	
15	64QAM	75	0	20.19	20.35	20.26	19.5
15	256QAM	1	0	18.79	18.95	18.81	
15	256QAM	1	37	18.75	18.81	18.82	
15	256QAM	1	74	18.72	18.75	18.82	
15	256QAM	36	0	18.67	18.73	18.74	19.5
15	256QAM	36	20	18.65	18.71	18.76	
15	256QAM	36	39	18.57	18.67	18.69	
15	256QAM	75	0	18.52	18.61	18.68	
Channel				20000	20175	20350	24.5
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.89	22.89	22.89	24.5
10	QPSK	1	25	22.71	22.58	22.73	
10	QPSK	1	49	22.64	22.46	22.53	
10	QPSK	25	0	21.93	21.77	21.82	
10	QPSK	25	12	21.63	21.49	21.66	23.5
10	QPSK	25	25	21.51	21.41	21.49	
10	QPSK	50	0	21.30	21.20	21.31	
10	16QAM	1	0	21.87	21.82	22.02	
10	16QAM	1	25	21.69	21.71	21.85	23.5
10	16QAM	1	49	21.54	21.53	21.74	
10	16QAM	25	0	20.71	20.92	20.93	
10	16QAM	25	12	20.56	20.70	20.77	
10	16QAM	25	25	20.51	20.54	20.63	22.5
10	16QAM	50	0	20.35	20.45	20.48	
10	64QAM	1	0	20.99	21.09	20.97	
10	64QAM	1	25	20.96	21.10	20.96	
10	64QAM	1	49	20.90	21.08	20.85	22.5
10	64QAM	25	0	20.17	20.34	20.27	
10	64QAM	25	12	20.18	20.31	20.23	
10	64QAM	25	25	20.18	20.27	20.18	
10	64QAM	50	0	20.13	20.26	20.22	19.5
10	256QAM	1	0	18.75	18.88	18.73	
10	256QAM	1	25	18.68	18.77	18.78	
10	256QAM	1	49	18.67	18.67	18.79	
10	256QAM	25	0	18.62	18.68	18.69	19.5
10	256QAM	25	12	18.56	18.65	18.70	
10	256QAM	25	25	18.50	18.59	18.62	
10	256QAM	50	0	18.49	18.52	18.64	
Channel				19975	20175	20375	24.5
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	22.91	22.88	22.87	24.5
5	QPSK	1	12	22.76	22.96	22.75	



5	QPSK	1	24	22.66	22.43	22.57	
5	QPSK	12	0	21.92	21.77	21.82	23.5
5	QPSK	12	7	21.62	21.51	21.67	
5	QPSK	12	13	21.54	21.41	21.49	
5	QPSK	25	0	21.30	21.24	21.34	
5	16QAM	1	0	21.85	21.84	22.02	23.5
5	16QAM	1	12	21.69	21.71	21.86	
5	16QAM	1	24	21.54	21.54	21.69	
5	16QAM	12	0	20.72	20.90	20.94	22.5
5	16QAM	12	7	20.56	20.67	20.76	
5	16QAM	12	13	20.46	20.57	20.64	
5	16QAM	25	0	20.34	20.48	20.48	
5	64QAM	1	0	20.96	21.10	20.97	22.5
5	64QAM	1	12	20.97	21.09	20.92	
5	64QAM	1	24	20.88	21.10	20.86	
5	64QAM	12	0	20.22	20.38	20.25	
5	64QAM	12	7	20.23	20.35	20.23	21.5
5	64QAM	12	13	20.21	20.33	20.18	
5	64QAM	25	0	20.11	20.27	20.19	
5	256QAM	1	0	18.73	18.86	18.76	
5	256QAM	1	12	18.71	18.73	18.74	19.5
5	256QAM	1	24	18.64	18.69	18.75	
5	256QAM	12	0	18.62	18.69	18.66	
5	256QAM	12	7	18.59	18.68	18.69	19.5
5	256QAM	12	13	18.53	18.58	18.64	
5	256QAM	25	0	18.47	18.55	18.61	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.86	22.92	22.87	24.5
3	QPSK	1	8	22.72	22.57	22.74	
3	QPSK	1	14	22.62	22.45	22.58	
3	QPSK	8	0	21.93	21.76	21.77	23.5
3	QPSK	8	4	21.65	21.49	21.64	
3	QPSK	8	7	21.54	21.40	21.54	
3	QPSK	15	0	21.30	21.21	21.35	
3	16QAM	1	0	21.86	21.84	22.05	23.5
3	16QAM	1	8	21.70	21.70	21.85	
3	16QAM	1	14	21.50	21.53	21.72	
3	16QAM	8	0	20.75	20.89	20.92	
3	16QAM	8	4	20.58	20.69	20.76	22.5
3	16QAM	8	7	20.48	20.58	20.63	
3	16QAM	15	0	20.34	20.44	20.48	
3	64QAM	1	0	20.94	21.06	20.96	
3	64QAM	1	8	20.95	21.10	20.95	22.5
3	64QAM	1	14	20.87	21.08	20.86	
3	64QAM	8	0	20.21	20.37	20.28	
3	64QAM	8	4	20.22	20.31	20.21	
3	64QAM	8	7	20.19	20.29	20.17	21.5
3	64QAM	15	0	20.12	20.29	20.18	
3	256QAM	1	0	18.70	18.87	18.76	
3	256QAM	1	8	18.71	18.75	18.75	
3	256QAM	1	14	18.64	18.70	18.74	19.5
3	256QAM	8	0	18.60	18.68	18.66	
3	256QAM	8	4	18.59	18.62	18.72	
3	256QAM	8	7	18.50	18.62	18.66	
3	256QAM	15	0	18.44	18.52	18.61	
Channel				19967	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.92	22.90	22.86	24.5
1.4	QPSK	1	3	22.74	22.58	22.75	
1.4	QPSK	1	5	22.65	22.41	22.54	
1.4	QPSK	3	0	21.92	21.75	21.82	
1.4	QPSK	3	1	21.64	21.50	21.66	23.5
1.4	QPSK	3	3	21.51	21.41	21.53	
1.4	QPSK	6	0	21.30	21.23	21.35	
1.4	16QAM	1	0	21.89	21.81	22.02	
1.4	16QAM	1	3	21.67	21.75	21.83	23.5
1.4	16QAM	1	5	21.51	21.55	21.74	
1.4	16QAM	3	0	20.74	20.86	20.94	
1.4	16QAM	3	1	20.59	20.68	20.80	
1.4	16QAM	3	3	20.49	20.54	20.62	22.5
1.4	16QAM	6	0	20.37	20.45	20.48	
1.4	64QAM	1	0	20.95	21.08	21.00	
1.4	64QAM	1	3	20.93	21.06	20.98	
1.4	64QAM	1	5	20.91	21.10	20.87	22.5
1.4	64QAM	3	0	20.18	20.39	20.26	
1.4	64QAM	3	1	20.19	20.32	20.18	
1.4	64QAM	3	3	20.19	20.29	20.21	
1.4	64QAM	6	0	20.13	20.28	20.18	21.5
1.4	256QAM	1	0	18.74	18.89	18.72	
1.4	256QAM	1	3	18.66	18.77	18.73	19.5
1.4	256QAM	1	5	18.64	18.69	18.74	
1.4	256QAM	3	0	18.63	18.67	18.70	
1.4	256QAM	3	1	18.59	18.63	18.67	
1.4	256QAM	3	3	18.99	19.10	19.11	19.5
1.4	256QAM	6	0	18.97	19.06	19.15	

Band 5 (Celluar 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	25
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.48	23.55	23.54	24
10	QPSK	1	25	23.31	23.37	23.42	
10	QPSK	1	49	23.11	23.21	23.24	
10	QPSK	25	0	22.56	22.72	22.71	24
10	QPSK	25	12	22.38	22.50	22.55	
10	QPSK	25	25	22.17	22.33	22.40	
10	QPSK	50	0	21.98	22.25	22.24	24
10	16QAM	1	0	22.37	22.54	22.71	
10	16QAM	1	25	22.16	22.38	22.50	
10	16QAM	1	49	21.95	22.19	22.33	23
10	16QAM	25	0	21.25	21.46	21.59	
10	16QAM	25	12	21.08	21.24	21.45	
10	16QAM	25	25	20.93	21.13	21.27	23
10	16QAM	50	0	20.82	20.93	21.06	
10	64QAM	1	0	21.44	21.53	21.68	
10	64QAM	1	25	21.42	21.46	21.65	23
10	64QAM	1	49	21.37	21.41	21.63	
10	64QAM	25	0	20.67	20.78	20.99	
10	64QAM	25	12	20.63	20.75	20.98	22
10	64QAM	25	25	20.58	20.72	20.93	
10	64QAM	50	0	20.50	20.67	20.90	
10	256QAM	1	0	18.88	19.08	19.31	20
10	256QAM	1	25	18.82	19.02	19.27	
10	256QAM	1	49	18.82	18.97	19.21	
10	256QAM	25	0	18.76	18.94	19.17	20
10	256QAM	25	12	18.74	18.89	19.11	
10	256QAM	25	25	18.67	18.83	19.05	
10	256QAM	50	0	18.65	18.75	19.05	
Channel				20425	20525	20625	25
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.41	23.52	23.48	24
5	QPSK	1	12	23.24	23.34	23.36	
5	QPSK	1	24	23.03	23.15	23.15	
5	QPSK	12	0	22.48	22.56	22.63	24
5	QPSK	12	7	22.31	22.44	22.47	
5	QPSK	12	13	22.13	22.25	22.32	
5	QPSK	25	0	21.91	22.12	22.20	24
5	16QAM	1	0	22.31	22.45	22.65	
5	16QAM	1	12	22.09	22.29	22.44	
5	16QAM	1	24	21.86	22.10	22.24	23
5	16QAM	12	0	21.21	21.39	21.52	
5	16QAM	12	7	21.02	21.17	21.38	
5	16QAM	12	13	20.90	21.05	21.19	23
5	16QAM	25	0	20.74	20.89	21.02	
5	64QAM	1	0	21.41	21.45	21.62	
5	64QAM	1	12	21.37	21.41	21.59	23
5	64QAM	1	24	21.30	21.36	21.57	
5	64QAM	12	0	20.64	20.72	20.94	
5	64QAM	12	7	20.59	20.70	20.94	22
5	64QAM	12	13	20.52	20.67	20.88	
5	64QAM	25	0	20.47	20.61	20.86	
5	256QAM	1	0	18.79	19.05	19.24	20
5	256QAM	1	12	18.77	18.93	19.18	
5	256QAM	1	24	18.75	18.93	19.15	
5	256QAM	12	0	18.69	18.86	19.08	20
5	256QAM	12	7	18.65	18.84	19.05	
5	256QAM	12	13	18.59	18.76	19.00	
5	256QAM	25	0	18.61	18.70	18.97	
Channel				20415	20525	20635	25
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.37	23.46	23.41	24
3	QPSK	1	8	23.19	23.30	23.27	
3	QPSK	1	14	22.95	23.11	23.06	
3	QPSK	8	0	22.39	22.51	22.57	24
3	QPSK	8	4	22.22	22.36	22.42	
3	QPSK	8	7	22.07	22.21	22.26	
3	QPSK	15	0	21.85	22.04	22.12	24
3	16QAM	1	0	22.26	22.42	22.58	
3	16QAM	1	8	22.04	22.25	22.39	
3	16QAM	1	14	21.82	22.06	22.18	23
3	16QAM	8	0	21.13	21.30	21.45	
3	16QAM	8	4	20.94	21.11	21.31	
3	16QAM	8	7	20.84	20.98	21.11	23
3	16QAM	15	0	20.68	20.84	20.93	
3	64QAM	1	0	21.34	21.36	21.57	
3	64QAM	1	8	21.29	21.37	21.50	23
3	64QAM	1	14	21.25	21.29	21.52	
3	64QAM	8	0	20.60	20.63	20.90	
3	64QAM	8	4	20.55	20.65	20.89	22
3	64QAM	8	7	20.45	20.62	20.84	
3	64QAM	15	0	20.39	20.55	20.82	
3	256QAM	1	0	18.75	18.97	19.20	20
3	256QAM	1	8	18.74	18.87	19.09	
3	256QAM	1	14	18.71	18.84	19.06	
3	256QAM	8	0	18.61	18.80	19.02	20
3	256QAM	8	4	18.59	18.76	18.99	
3	256QAM	8	7	18.52	18.71	18.93	
3	256QAM	15	0	18.56	18.64	18.89	
Channel				20407	20525	20643	25
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.36	23.46	23.43	24
1.4	QPSK	1	3	23.20	23.28	23.30	
1.4	QPSK	1	5	22.97	23.10	23.12	

Band 7 (2600MHz Band) (dBm) Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	24
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	22.60	22.66	22.65	24
20	QPSK	1	49	22.48	22.41	22.53	
20	QPSK	1	99	22.33	22.28	22.35	
20	QPSK	50	0	21.59	21.66	21.65	23
20	QPSK	50	24	21.42	21.35	21.44	
20	QPSK	50	50	21.22	21.21	21.32	
20	QPSK	100	0	21.07	21.17	21.16	23
20	16QAM	1	0	21.71	21.75	21.74	
20	16QAM	1	49	21.51	21.58	21.55	
20	16QAM	1	99	21.39	21.37	21.37	22
20	16QAM	50	0	20.70	20.66	20.64	
20	16QAM	50	24	20.57	20.50	20.50	
20	16QAM	50	50	20.43	20.31	20.39	22
20	16QAM	100	0	20.23	20.18	20.27	
20	64QAM	1	0	20.77	20.79	20.81	
20	64QAM	1	49	20.72	20.75	20.78	22
20	64QAM	1	99	20.67	20.71	20.75	
20	64QAM	50	0	20.01	20.06	20.10	
20	64QAM	50	24	19.98	20.04	20.03	21
20	64QAM	50	50	19.90	20.00	19.97	
20	64QAM	100	0	19.84	19.95	19.91	
20	256QAM	1	0	18.27	18.33	18.31	19
20	256QAM	1	49	18.24	18.28	18.29	
20	256QAM	1	99	18.20	18.20	18.23	
20	256QAM	50	0	18.14	18.19	18.15	19
20	256QAM	50	24	18.08	18.16	18.13	
20	256QAM	50	50	18.06	18.15	18.08	
20	256QAM	100	0	18.04	18.14	18.04	
Channel				20825	21100	21375	24
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.54	22.55	22.58	24
15	QPSK	1	37	22.45	22.36	22.46	
15	QPSK	1	74	22.24	22.25	22.28	
15	QPSK	36	0	21.54	21.40	21.58	23
15	QPSK	36	20	21.33	21.28	21.36	
15	QPSK	36	39	21.17	21.16	21.25	
15	QPSK	75	0	21.04	21.00	21.10	23
15	16QAM	1	0	21.63	21.71	21.70	
15	16QAM	1	37	21.46	21.51	21.52	
15	16QAM	1	74	21.36	21.31	21.30	22
15	16QAM	36	0	20.66	20.63	20.61	
15	16QAM	36	20	20.50	20.46	20.43	
15	16QAM	36	39	20.40	20.22	20.32	22
15	16QAM	75	0	20.15	20.12	20.19	
15	64QAM	1	0	20.73	20.73	20.74	
15	64QAM	1	37	20.64	20.67	20.69	22
15	64QAM	1	74	20.61	20.64	20.70	
15	64QAM	36	0	19.94	20.02	20.03	
15	64QAM	36	20	19.92	19.95	19.97	21
15	64QAM	36	39	19.86	19.96	19.91	
15	64QAM	75	0	19.79	19.87	19.86	
15	256QAM	1	0	18.22	18.28	18.23	19
15	256QAM	1	37	18.19	18.20	18.21	
15	256QAM	1	74	18.16	18.15	18.19	
15	256QAM	36	0	18.09	18.14	18.07	19
15	256QAM	36	20	18.01	18.10	18.06	
15	256QAM	36	39	17.98	18.10	18.05	
15	256QAM	75	0	17.96	18.07	17.97	
Channel				20800	21100	21400	24
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	22.51	22.54	22.58	24
10	QPSK	1	25	22.42	22.36	22.48	
10	QPSK	1	49	22.26	22.22	22.32	
10	QPSK	25	0	21.56	21.4		



1.4	QPSK	3	0	22.42	22.52	22.59	24
1.4	QPSK	3	1	22.24	22.38	22.42	
1.4	QPSK	3	3	22.07	22.20	22.25	
1.4	QPSK	6	0	21.87	22.08	22.15	24
1.4	16QAM	1	0	22.24	22.42	22.61	
1.4	16QAM	1	3	22.02	22.24	22.36	
1.4	16QAM	1	5	21.83	22.07	22.18	24
1.4	16QAM	3	0	21.17	21.35	21.44	
1.4	16QAM	3	1	20.93	21.09	21.31	
1.4	16QAM	3	3	20.83	20.98	21.15	23
1.4	16QAM	6	0	20.66	20.82	20.99	
1.4	64QAM	1	0	21.33	21.42	21.54	
1.4	64QAM	1	3	21.31	21.37	21.56	23
1.4	64QAM	1	5	21.26	21.32	21.51	
1.4	64QAM	3	0	20.57	20.65	20.89	
1.4	64QAM	3	1	20.52	20.62	20.87	22
1.4	64QAM	3	3	20.48	20.63	20.81	
1.4	64QAM	6	0	20.41	20.54	20.78	
1.4	256QAM	1	0	18.74	18.98	19.18	20
1.4	256QAM	1	3	18.69	18.90	19.12	
1.4	256QAM	1	5	18.67	18.87	19.07	
1.4	256QAM	3	0	18.63	18.80	19.05	20
1.4	256QAM	3	1	18.60	18.77	18.98	
1.4	256QAM	3	3	18.52	18.72	18.93	
1.4	256QAM	6	0	18.57	18.65	18.88	20

5	QPSK	12	0	21.53	21.42	21.61	23
5	QPSK	12	7	21.33	21.29	21.37	
5	QPSK	12	13	21.17	21.15	21.28	
5	QPSK	25	0	21.01	21.01	21.10	23
5	16QAM	1	0	21.67	21.70	21.70	
5	16QAM	1	12	21.43	21.49	21.51	
5	16QAM	1	24	21.33	21.31	21.31	22
5	16QAM	12	0	20.66	20.63	20.56	
5	16QAM	12	7	20.51	20.46	20.45	
5	16QAM	12	13	20.39	20.27	20.30	22
5	16QAM	25	0	20.19	20.09	20.19	
5	64QAM	1	0	20.72	20.76	20.76	
5	64QAM	1	12	20.63	20.69	20.73	22
5	64QAM	1	24	20.59	20.64	20.71	
5	64QAM	12	0	19.97	20.00	20.02	
5	64QAM	12	7	19.91	20.01	20.00	21
5	64QAM	12	13	19.81	19.93	19.90	
5	64QAM	25	0	19.79	19.89	19.86	
5	256QAM	1	0	18.22	18.25	18.28	19
5	256QAM	1	12	18.16	18.20	18.21	
5	256QAM	1	24	18.17	18.14	18.19	
5	256QAM	12	0	18.10	18.12	18.12	19
5	256QAM	12	7	18.04	18.09	18.09	
5	256QAM	12	13	17.99	18.08	18.04	
5	256QAM	25	0	17.97	18.06	17.95	19

Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	23.00	23.06	23.04	24.5
20	QPSK	1	49	22.79	22.84	22.89	
20	QPSK	1	99	22.65	22.66	22.71	
20	QPSK	50	0	21.84	21.99	21.98	23.5
20	QPSK	50	24	21.62	21.75	21.76	
20	QPSK	50	50	21.47	21.55	21.54	
20	QPSK	100	0	21.26	21.37	21.28	23.5
20	16QAM	1	0	21.86	22.00	21.95	
20	16QAM	1	49	21.75	21.79	21.73	
20	16QAM	1	99	21.55	21.57	21.52	22.5
20	16QAM	50	0	20.83	20.90	20.80	
20	16QAM	50	24	20.62	20.68	20.59	
20	16QAM	50	50	20.47	20.47	20.42	22.5
20	16QAM	100	0	20.32	20.39	20.22	
20	64QAM	1	0	20.90	21.00	20.76	
20	64QAM	1	49	20.86	20.92	20.73	21.5
20	64QAM	1	99	20.81	20.88	20.72	
20	64QAM	50	0	20.15	20.22	20.02	
20	64QAM	50	24	20.10	20.22	20.00	21.5
20	64QAM	50	50	20.07	20.22	19.97	
20	64QAM	100	0	20.00	20.12	19.93	
20	256QAM	1	0	18.45	18.55	18.36	19.5
20	256QAM	1	49	18.41	18.52	18.37	
20	256QAM	1	99	18.44	18.43	18.31	
20	256QAM	50	0	18.33	18.40	18.31	19.5
20	256QAM	50	24	18.28	18.36	18.31	
20	256QAM	50	50	18.28	18.32	18.22	
20	256QAM	100	0	18.16	18.30	18.14	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.97	23.03	23.01	24.5
15	QPSK	1	37	22.76	22.81	22.86	
15	QPSK	1	74	22.62	22.63	22.68	
15	QPSK	36	0	21.81	21.96	21.95	23.5
15	QPSK	36	20	21.59	21.72	21.73	
15	QPSK	36	39	21.44	21.52	21.51	
15	QPSK	75	0	21.23	21.34	21.25	23.5
15	16QAM	1	0	21.83	21.97	21.92	
15	16QAM	1	37	21.72	21.76	21.70	
15	16QAM	1	74	21.52	21.54	21.49	22.5
15	16QAM	36	0	20.80	20.87	20.77	
15	16QAM	36	20	20.59	20.65	20.56	
15	16QAM	36	39	20.44	20.44	20.39	22.5
15	16QAM	75	0	20.29	20.36	20.19	
15	64QAM	1	0	20.87	20.97	20.73	
15	64QAM	1	37	20.83	20.89	20.70	22.5
15	64QAM	1	74	20.78	20.85	20.69	
15	64QAM	36	0	20.12	20.19	19.99	
15	64QAM	36	20	20.07	20.19	19.97	21.5
15	64QAM	36	39	20.04	20.19	19.94	
15	64QAM	75	0	19.97	20.09	19.90	
15	256QAM	1	0	18.42	18.52	18.33	19.5
15	256QAM	1	37	18.38	18.49	18.34	
15	256QAM	1	74	18.41	18.40	18.28	
15	256QAM	36	0	18.30	18.37	18.28	19.5
15	256QAM	36	20	18.25	18.33	18.28	
15	256QAM	36	39	18.25	18.29	18.19	
15	256QAM	75	0	18.13	18.27	18.11	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.94	23.00	22.98	24.5
10	QPSK	1	25	22.73	22.78	22.83	
10	QPSK	1	49	22.59	22.60	22.65	
10	QPSK	25	0	21.78	21.93	21.92	23.5
10	QPSK	25	12	21.56	21.69	21.70	
10	QPSK	25	25	21.41	21.49	21.48	
10	QPSK	50	0	21.20	21.31	21.22	23.5
10	16QAM	1	0	21.80	21.94	21.89	
10	16QAM	1	25	21.69	21.73	21.67	
10	16QAM	1	49	21.49	21.51	21.46	22.5
10	16QAM	25	0	20.77	20.84	20.74	
10	16QAM	25	12	20.56	20.62	20.53	
10	16QAM	25	25	20.41	20.41	20.38	22.5
10	16QAM	50	0	20.26	20.33	20.16	
10	64QAM	1	0	20.84	20.94	20.70	
10	64QAM	1	25	20.80	20.86	20.67	22.5
10	64QAM	1	49	20.75	20.82	20.66	
10	64QAM	25	0	20.09	20.16	19.96	
10	64QAM	25	12	20.04	20.16	19.94	21.5
10	64QAM	25	25	20.01	20.16	19.91	
10	64QAM	50	0	19.94	20.06	19.87	
10	256QAM	1	0	18.39	18.49	18.30	19.5
10	256QAM	1	25	18.35	18.46	18.31	
10	256QAM	1	49	18.38	18.37	18.25	
10	256QAM	25	0	18.27	18.34	18.25	19.5
10	256QAM	25	12	18.22	18.30	18.25	
10	256QAM	25	25	18.22	18.26	18.16	
10	256QAM	50	0	18.10	18.24	18.08	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	22.91	22.97	22.95	24.5
5	QPSK	1	12	22.70	22.75	22.80	
5	QPSK	1	24	22.56	22.57	22.62	

5	QPSK	12	0	21.75	21.90	21.89	23.5
5	QPSK	12	7	21.53	21.66	21.67	
5	QPSK	12	13	21.38	21.46	21.45	
5	QPSK	25	0	21.17	21.28	21.19	23.5
5	16QAM	1	0	21.77	21.91	21.88	
5	16QAM	1	12	21.66	21.70	21.64	
5	16QAM	1	24	21.46	21.48	21.43	22.5
5	16QAM	12	0	20.74	20.81	20.71	
5	16QAM	12	7	20.53	20.59	20.50	
5	16QAM	12	13	20.38	20.38	20.33	22.5
5	16QAM	25	0	20.23	20.30	20.13	
5	64QAM	1	0	20.81	20.91	20.67	
5	64QAM	1	12	20.77	20.83	20.64	21.5
5	64QAM	1	24	20.72	20.79	20.63	
5	64QAM	12	0	20.06	20.13	19.93	
5	64QAM	12	7	20.01	20.13	19.91	19.5
5	64QAM	12	13	19.98	20.13	19.88	
5	64QAM	25	0	19.91	20.03	19.84	
5	256QAM	1	0	18.36	18.46	18.27	19.5
5	256QAM	1	12	18.32	18.43	18.28	
5	256QAM	1	24	18.35	18.34	18.22	
5	256QAM	12	0	18.24	18.31	18.22	19.5
5	256QAM	12	7	18.19	18.27	18.22	
5	256QAM	12	13	18.19	18.23	18.13	
5	256QAM	25	0	18.07	18.21	18.05	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1779.5	
3	QPSK	1	0	22.83	22.89	22.87	24.5
3	QPSK	1	8	22.62	22.67	22.72	
3	QPSK	1	14	22.48	22.49	22.54	
3	QPSK	8	0	21.67	21.82	21.81	23.5
3	QPSK	8	4	21.45	21.58	21.59	
3	QPSK	8	7	21.30	21.38	21.37	
3	QPSK	15	0	21.09	21.20	21.11	23.5
3	16QAM	1	0	21.69	21.83	21.78	
3	16QAM	1	8	21.58	21.62	21.56	
3	16QAM	1	14	21.38	21.40	21.35	22.5
3	16QAM	8	0	20.66	20.73	20.63	
3	16QAM	8	4	20.45	20.51	20.42	
3	16QAM	8	7	20.30	20.30	20.25	22.5
3	16QAM	15	0	20.15	20.22	20.05	
3	64QAM	1	0	20.73	20.83	20.59	
3	64QAM	1	8	20.69	20.75	20.56	21.5
3	64QAM	1	14	20.64	20.71	20.55	
3	64QAM	8	0	19.98	20.05	19.85	
3	64QAM	8	4	19.93	20.05	19.83	19.5
3	64QAM	8	7	19.90	20.05	19.80	
3	64QAM	15	0	19.83	19.95	19.76	
3	256QAM	1	0	18.28	18.38	18.19	19.5
3	256QAM	1	8	18.24	18.35	18.20	
3	256QAM	1	14	18.27	18.26	18.14	
3	256QAM	8	0	18.16	18.23	18.14	19.5
3	256QAM	8	4	18.11	18.19	18.14	
3	256QAM	8	7	18.11	18.15	18.05	
3	256QAM	15	0	17.99	18.13	17.97	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	21.88	21.89	21.83	24.5
1.4	QPSK	1	3	21.75	21.75	21.71	
1.4	QPSK	1	5	21.63	21.69	21.64	
1.4	QPSK	3	0	20.86	20.92	21.00	23.5
1.4	QPSK	3	1	20.69	20.81	20.77	
1.4	QPSK	3	3	20.49	20.64	20.63	
1.4	QPSK	6	0	20.45	20.49	20.46	22.5
1.4	16QAM	1	0	21.02	21.15	21.00	
1.4	16QAM	1	3	20.84	21.03	20.91	
1.4	16QAM	1	5	20.70	20.81	20.74	22.5
1.4	16QAM	3	0	20.04	20.17	20.13	
1.4	16QAM	3	1	19.94	20.03	19.93	
1.4	16QAM	3	3	19.73	19.87	19.77	21.5
1.4	16QAM	6	0	19.64	19.74	19.59	
1.4	64QAM	1	0	20.28	20.26	20.12	
1.4	64QAM	1	3	20.21	20.23	20.12	21.5
1.4	64QAM	1	5	20.25	20.20	20.14	
1.4	64QAM	3	0	19.63	19.48	19.40	
1.4	64QAM	3	1	19.51	19.44	19.35	19.5
1.4	64QAM	3	3	19.47	19.39	19.35	
1.4	64QAM	6	0	19.43	19.30	19.29	
1.4	256QAM	1	0	17.78	17.72	17.70	19.5
1.4	256QAM	1	3	17.77	17.68	17.66	
1.4	256QAM	1	5	17.73	17.62	17.67	
1.4	256QAM	3	0	17.74	17.56	17.63	19.5
1.4	256QAM	3	1	17.67	17.49	17.61	
1.4	256QAM	3	3	17.65	17.49	17.57	
1.4	256QAM	6	0	17.65	17.49	17.57	

n38 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				518000	519000	520000	
Frequency (MHz)				2590	2595	2600	
40	DFT-s-OFDM PI/2 BPSK	1	1	21.45	21.05	20.93	22.50
40		1	108	21.03	20.81	20.59	
40		1	214	20.65	20.40	20.25	
40		108	1	20.72	20.52	20.54	22.00
40		108	54	21.04	20.84	21.19	
40		108	108	20.40	20.23	20.63	
40		216	0	20.59	20.36	20.40	
40	DFT-s-OFDM QPSK	1	1	21.67	21.71	21.62	22.50
40		1	108	21.02	20.85	21.09	
40		1	214	20.56	20.32	20.63	
40		108	1	20.23	19.99	19.94	22.00
40		108	54	21.20	21.26	21.16	
40		108	108	19.75	19.58	20.10	
40		216	0	19.94	20.15	20.14	
40	DFT-s-OFDM 16QAM	1	1	20.28	20.18	20.16	21.50
40	DFT-s-OFDM 64QAM	1	1	18.71	18.65	18.36	20.00
40	DFT-s-OFDM 256QAM	1	1	16.74	16.64	16.50	18.00
40	CP-OFDM QPSK	1	1	19.66	19.49	19.53	20.50
40	CP-OFDM 16QAM	1	1	19.25	19.12	19.17	20.50
40	CP-OFDM 64QAM	1	1	17.48	17.54	17.80	19.00
40	CP-OFDM 256QAM	1	1	14.77	14.94	14.41	16.00
Channel				517000	519000	521000	Tune-up limit (dBm)
Frequency (MHz)				2585	2595	2605	
30	DFT-s-OFDM QPSK	1	1	21.26	21.10	20.91	22.50
Channel				516000	519000	522000	Tune-up limit (dBm)
Frequency (MHz)				2580	2595	2610	
20	DFT-s-OFDM QPSK	1	1	21.31	21.12	20.76	22.50
Channel				515500	519000	522500	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	DFT-s-OFDM QPSK	1	1	21.42	21.10	20.69	22.50
Channel				515000	519000	523000	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	DFT-s-OFDM QPSK	1	1	21.43	21.18	20.71	22.50

n41 (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	Tune-up limit (dBm)
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	21.90	21.37	21.76	21.78	21.56	22.50
100		1	136	21.90	21.83	21.89	21.07	20.70	
100		1	271	20.32	20.53	20.70	20.63	21.26	
100		135	1	20.92	21.29	21.39	21.20	20.71	22.50
100		135	67	21.80	21.89	21.64	21.21	20.88	
100		135	136	21.33	21.05	20.67	20.33	20.33	
100		270	0	21.17	21.26	21.11	20.80	20.63	
100	DFT-s-OFDM QPSK	1	1	22.02	21.94	22.22	22.20	22.05	23.00
100		1	136	21.97	22.03	21.64	21.23	20.96	
100		1	271	21.51	21.03	20.69	20.64	21.32	
100		135	1	20.46	20.82	20.92	20.71	20.69	22.50
100		135	67	21.82	21.90	21.93	21.61	21.70	
100		135	136	20.89	20.62	20.15	19.84	19.77	
100		270	0	20.68	20.80	20.85	20.34	20.59	
100	DFT-s-OFDM 16QAM	1	1	19.92	20.58	20.94	20.95	20.73	21.50
100	DFT-s-OFDM 64QAM	1	1	18.25	18.93	19.27	19.33	19.04	20.00
100	DFT-s-OFDM 256QAM	1	1	16.55	17.17	17.54	17.58	17.33	18.50
100	CP-OFDM QPSK	1	1	19.20	19.91	20.15	20.20	20.12	21.00
100	CP-OFDM 16QAM	1	1	19.11	19.71	20.06	20.11	19.86	21.00
100	CP-OFDM 64QAM	1	1	17.04	17.66	18.01	18.07	17.85	19.00
100	CP-OFDM 256QAM	1	1	14.59	15.32	15.70	15.72	15.36	16.50
Channel				508200	513402	518598	523800	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	20.71	21.39	21.74	21.76	21.44	22.50
Channel				507204	512904	518598	524298	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	20.83	21.49	21.88	21.70	21.19	22.50
Channel				506202	512400	518598	524796	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	20.76	21.46	21.95	21.65	21.00	22.50
Channel				505200	511902	518598	525798	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	20.67	21.58	21.76	21.36	20.75	22.50
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	20.71	21.66	21.74	21.27	20.71	22.50
Channel				503202	510900	518598	526296	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	20.86	21.70	21.82	21.23	20.61	22.50
Channel				502200	510402	518598	526800	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	20.79	21.73	21.80	21.05	20.68	22.50
Channel				501204	509904	518598	527298	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	20.76	21.84	21.82	20.89	20.82	22.50
Channel				500700	509652	518598	527550	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	20.73	20.74	21.68	20.76	20.76	22.50
Channel				500202	509400	518598	527796	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	20.79	21.76	21.65	20.85	21.09	22.50



n41 (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	Tune-up limit (dBm)
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	17.88	18.57	18.91	18.92	18.71	20.00
100		1	136	19.11	19.01	18.87	18.27	17.91	
100		1	271	18.67	18.16	17.87	17.78	18.43	
100		135	1	18.11	18.46	18.58	18.32	17.87	20.00
100		135	67	18.97	19.07	18.84	18.35	18.04	
100		135	136	18.50	18.23	17.82	17.49	17.48	
100		270	0	18.34	18.41	17.81	17.95	17.79	
100	DFT-s-OFDM QPSK	1	1	19.30	19.08	19.38	19.25	19.24	20.00
100		1	136	19.14	19.20	18.93	18.36	18.07	
100		1	271	18.67	18.15	17.91	17.79	18.45	
100		135	1	17.60	17.94	17.85	17.83	17.36	19.50
100		135	67	18.97	19.06	19.07	19.00	19.01	
100		135	136	18.02	17.75	17.25	16.97	17.00	
100		270	0	17.82	17.93	18.01	17.45	17.26	
100	DFT-s-OFDM 16QAM	1	1	17.02	17.86	18.10	18.20	17.91	19.00
100	DFT-s-OFDM 64QAM	1	1	15.48	16.14	16.40	16.53	16.31	17.50
100	DFT-s-OFDM 256QAM	1	1	13.63	14.35	14.63	14.69	14.51	15.50
100	CP-OFDM QPSK	1	1	16.32	16.91	17.24	17.33	17.11	18.00
100	CP-OFDM 16QAM	1	1	16.35	16.96	17.29	17.32	17.08	18.00
100	CP-OFDM 64QAM	1	1	14.17	14.78	15.11	15.18	14.95	16.00
100	CP-OFDM 256QAM	1	1	11.20	12.87	13.44	13.18	12.34	14.00
Channel				508200	513402	518598	523800	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	17.87	18.59	18.93	18.87	18.52	19.50
Channel				507204	512904	518598	524298	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	17.91	18.68	19.03	18.92	18.34	20.00
Channel				506202	512400	518598	524796	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	17.87	18.72	19.03	18.82	18.09	20.00
Channel				505200	511902	518598	525798	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	17.77	18.72	18.94	18.51	17.90	19.50
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	17.84	18.79	18.98	18.40	17.81	19.50
Channel				503202	510900	518598	526296	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	17.97	18.86	18.96	18.27	17.74	19.50
Channel				502200	510402	518598	526800	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	17.89	18.88	18.96	18.13	17.74	19.50
Channel				501204	509904	518598	527298	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	17.82	18.91	18.88	18.01	17.89	19.50
Channel				500700	509652	518598	527550	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	17.80	18.90	18.82	17.95	18.01	19.50
Channel				500202	509400	518598	527796	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	17.86	18.99	18.84	17.93	18.21	19.50

n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	21.64	21.80	21.89	23.00
40		1	108	21.85	21.88	21.66	
40		1	214	21.87	19.99	21.77	
40		108	1	21.46	21.46	21.49	22.50
40		108	54	21.91	21.91	21.76	
40		108	108	21.56	21.21	21.16	
40		216	0	21.47	20.02	21.33	
40	DFT-s-OFDM QPSK	1	1	21.98	22.05	21.88	23.00
40		1	108	21.85	21.89	21.66	
40		1	214	21.81	21.74	21.78	
40		108	1	20.87	20.88	20.89	22.50
40		108	54	21.95	21.96	21.76	
40		108	108	21.09	20.82	20.69	
40		216	0	20.87	20.90	20.80	
40	DFT-s-OFDM 16QAM	1	1	20.89	21.07	21.25	22.00
40	DFT-s-OFDM 64QAM	1	1	19.25	19.43	19.52	20.50
40	DFT-s-OFDM 256QAM	1	1	17.25	17.42	17.86	18.50
40	CP-OFDM QPSK	1	1	20.13	20.29	20.46	21.00
40	CP-OFDM 16QAM	1	1	19.87	20.12	20.07	21.00
40	CP-OFDM 64QAM	1	1	18.16	18.12	18.19	19.00
40	CP-OFDM 256QAM	1	1	15.30	16.07	15.57	17.00
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	21.61	21.83	21.77	22.50
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	21.76	21.89	21.67	22.50
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	21.76	21.87	21.59	22.50
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	21.81	21.89	21.58	22.50
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	21.78	21.85	21.60	22.50

n77(3450-3550MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			18.50
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.93			18.50
100		1	136			17.83			
100		1	271			17.56			
100		135	1			17.42			
100		135	67			17.89			
100		135	136			17.05			
100		270	0			16.59			18.50
100	DFT-s-OFDM QPSK	1	1			18.12			
100		1	136			18.10			
100		1	271			17.72			
100		135	1			17.63			
100		135	67			17.85			
100		135	136			16.57			
100		270	0			16.88			18.50
100	DFT-s-OFDM 16QAM	1	1			17.24			
100	DFT-s-OFDM 64QAM	1	1			15.52			
100	DFT-s-OFDM 256QAM	1	1			13.73			
100	CP-OFDM QPSK	1	1			16.48			
100	CP-OFDM 16QAM	1	1			16.37			
100	CP-OFDM 64QAM	1	1			14.21			15.00
100	CP-OFDM 256QAM	1	1			11.82			12.50
Channel				633000	633168	633334	633500	633666	18.50
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	17.88	17.85	17.89	17.84	17.82	18.50
Channel				632668	633000	633334	633666	634000	18.50
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	17.96	17.92	17.93	17.89	17.82	18.50
Channel				632334	632834	633334	633832	634332	18.50
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	17.95	17.88	17.85	17.78	25.69	18.50
Channel				632000	632668	633334	634000	634666	18.50
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	17.88	17.85	17.80	17.71	17.65	18.50
Channel				631668	632500	633334	634166	635000	18.50
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	17.94	17.86	17.86	17.79	17.68	18.50
Channel				631334	632334	633334	634332	635332	19.00
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	18.00	17.90	17.78	17.76	17.61	19.00
Channel				631000	632168	633334	634500	635666	19.00
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	18.09	17.88	17.82	17.78	17.48	19.00
Channel				630668	632000	633334	634666	636000	19.00
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	18.01	17.89	17.81	17.64	17.45	19.00
Channel				630500	631916	633334	634750	636166	19.00
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	18.01	17.89	17.81	17.60	17.48	19.00
Channel				630334	631834	633334	634834	636332	19.00
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	18.05	17.90	17.85	17.58	17.61	19.00

n77(3700-3980MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	17.74	17.71	17.39	17.67	17.47	24.50
100		1	136	17.74	17.71	17.69	17.68	17.18	
100		1	271	17.56	17.72	17.41	17.02	17.83	
100		135	1	17.58	17.20	17.05	17.00	16.85	24.50
100		135	67	17.82	17.75	17.77	17.60	17.18	
100		135	136	17.07	17.09	16.88	16.73	16.92	
100		270	0	17.32	17.20	17.25	17.11	16.79	
100	DFT-s-OFDM QPSK	1	1	18.28	18.25	18.39	18.26	18.08	26.00
100		1	136	17.91	17.70	17.87	17.66	17.20	
100		1	271	17.74	17.87	17.55	17.11	18.01	
100		135	1	17.08	16.65	16.53	16.55	16.35	24.50
100		135	67	17.70	17.70	17.75	17.61	17.65	
100		135	136	16.58	16.62	16.37	16.22	16.42	
100		270	0	16.80	16.71	16.86	16.64	16.31	
100	DFT-s-OFDM 16QAM	1	1	16.92	16.98	16.52	16.77	16.56	17.50
100	DFT-s-OFDM 64QAM	1	1	15.28	15.24	14.85	15.12	14.88	16.00
100	DFT-s-OFDM 256QAM	1	1	13.48	13.42	13.03	13.34	13.13	14.00
100	CP-OFDM QPSK	1	1	16.13	16.04	15.82	16.19	15.89	17.00
100	CP-OFDM 16QAM	1	1	16.04	16.05	15.56	15.79	15.64	17.00
100	CP-OFDM 64QAM	1	1	14.03	14.08	13.60	13.88	13.71	15.00
100	CP-OFDM 256QAM	1	1	11.46	11.38	11.07	11.28	11.21	12.00
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	17.74	17.61	17.47	17.64	17.42	18.50
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	17.79	17.67	17.53	17.62	17.33	18.50
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	17.80	17.66	17.55	17.47	17.20	18.50
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	17.76	17.56	17.35	17.30	16.93	18.50
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	17.79	17.60	17.37	17.44	16.97	18.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	17.83	17.63	17.40	17.50	17.10	18.50
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	17.85	17.55	17.45	17.44	17.32	18.50
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	17.80	17.62	17.53	17.40	17.46	18.50
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	17.84	17.59	17.62	17.34	17.58	18.50
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	17.83	17.61	17.72	17.29	10.47	18.50

n77(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			18.50
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.96			18.50
100		1	136			17.77			
100		1	271			17.56			
100		135	1			17.40			18.50
100		135	67			17.88			
100		135	136			17.06			
100		270	0			17.40			
100	DFT-s-OFDM QPSK	1	1			18.02			19.00
100		1	136			17.94			
100		1	271			17.57			
100		135	1			16.66			18.50
100		135	67			17.82			
100		135	136			16.48			
100		270	0			16.85			
100	DFT-s-OFDM 16QAM	1	1			17.10			18.00
100	DFT-s-OFDM 64QAM	1	1			15.45			16.00
100	DFT-s-OFDM 256QAM	1	1			13.59			14.50
100	CP-OFDM QPSK	1	1			16.35			17.00
100	CP-OFDM 16QAM	1	1			16.26			17.00
100	CP-OFDM 64QAM	1	1			14.24			15.00
100	CP-OFDM 256QAM	1	1			12.56			13.50
Channel				633000	633168	633334	633500	633666	18.50
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	17.91	17.91	17.91	17.85	17.86	18.50
Channel				632668	633000	633334	633666	634000	18.50
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	17.95	17.90	17.98	17.94	17.83	18.50
Channel				632334	632834	633334	633832	634332	18.50
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	17.95	17.90	17.94	17.76	17.76	18.50
Channel				632000	632668	633334	634000	634666	18.50
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	17.93	17.90	17.84	17.73	17.66	18.50
Channel				631668	632500	633334	634166	635000	18.50
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	17.95	17.90	17.79	17.73	17.67	18.50
Channel				631334	632334	633334	634332	635332	19.00
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	18.07	17.87	17.85	17.83	17.66	19.00
Channel				631000	632168	633334	634500	635666	19.00
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	18.05	17.84	17.71	17.73	17.50	19.00
Channel				630668	632000	633334	634666	636000	19.00
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	18.03	17.91	17.81	17.62	17.47	19.00
Channel				630500	631916	633334	634750	636166	19.00
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	18.06	17.81	17.82	17.58	17.42	19.00
Channel				630334	631834	633334	634834	636332	19.00
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	18.03	17.87	17.85	17.49	17.52	19.00

n77(3700-3980MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	17.74	17.67	17.36	17.59	17.39	18.50
100		1	136	17.70	17.66	17.67	17.49	16.99	
100		1	271	17.57	17.73	17.39	16.92	17.71	
100		135	1	17.53	17.18	17.00	17.01	16.77	18.50
100		135	67	17.78	17.72	17.72	17.56	17.09	
100		135	136	17.00	17.19	16.81	16.70	16.85	
100		270	0	17.26	17.16	17.21	17.09	16.72	
100	DFT-s-OFDM QPSK	1	1	18.12	18.18	18.23	18.06	18.10	19.00
100		1	136	18.04	17.96	17.69	17.70	17.08	
100		1	271	17.56	17.71	17.36	16.93	17.76	
100		135	1	17.03	16.61	16.14	16.48	16.27	18.50
100		135	67	17.77	17.70	17.90	17.57	17.10	
100		135	136	16.51	16.57	16.38	16.17	16.37	
100	270	0	16.75	16.65	17.20	16.58	16.24		
100	DFT-s-OFDM 16QAM	1	1	16.96	16.86	16.98	16.68	16.77	17.50
100	DFT-s-OFDM 64QAM	1	1	15.18	15.13	15.17	15.02	14.87	16.00
100	DFT-s-OFDM 256QAM	1	1	13.37	13.29	13.57	13.16	13.06	14.50
100	CP-OFDM QPSK	1	1	16.15	16.01	16.07	16.03	15.85	17.00
100	CP-OFDM 16QAM	1	1	15.97	15.92	15.92	15.75	15.54	16.50
100	CP-OFDM 64QAM	1	1	13.96	13.86	13.82	13.77	13.70	14.50
100	CP-OFDM 256QAM	1	1	12.24	12.92	11.98	11.82	11.92	13.50
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	17.76	17.55	17.44	17.62	17.42	18.50
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	17.76	17.65	17.45	17.49	17.25	18.50
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	17.74	17.64	17.47	17.47	17.15	18.50
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	17.69	17.47	17.34	17.31	16.93	18.50
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	17.70	17.56	17.37	17.40	16.92	18.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	17.78	17.58	17.38	17.39	17.05	18.50
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	17.78	17.57	17.42	17.44	17.23	18.50
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	17.75	17.56	17.55	17.30	17.39	18.50
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	17.79	17.45	17.53	17.21	17.52	18.50
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	17.80	17.58	17.60	17.16	17.71	18.50

n78(3450-3550MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			18.00
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.39			18.00
100		1	136			17.36			
100		1	271			17.02			
100		135	1			16.92			
100		135	67			17.40			
100		135	136			16.51			
100		270	0			16.88			
100	DFT-s-OFDM QPSK	1	1			17.71			19.50
100		1	136			17.63			
100		1	271			17.21			
100		135	1			16.37			
100		135	67			17.31			
100		135	136			15.99			
100		270	0			16.32			
100	DFT-s-OFDM 16QAM	1	1			16.66			17.50
100	DFT-s-OFDM 64QAM	1	1			14.98			15.50
100	DFT-s-OFDM 256QAM	1	1			9.80			10.50
100	CP-OFDM QPSK	1	1			17.45			18.00
100	CP-OFDM 16QAM	1	1			15.85			16.50
100	CP-OFDM 64QAM	1	1			13.71			14.50
100	CP-OFDM 256QAM	1	1			11.22			12.00
Channel				633000	633166	633334	633500	633666	18.00
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	17.36	17.37	17.34	17.31	17.33	18.00
Channel				632668	633000	633334	633666	634000	18.00
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	17.45	17.42	17.40	17.36	17.30	18.00
Channel				632334	632834	633334	633832	634332	18.00
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	17.43	17.36	17.35	17.26	17.25	18.00
Channel				632000	632666	633334	634000	634666	18.00
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	17.43	17.35	17.30	17.16	17.20	18.00
Channel				631668	632500	633334	634166	635000	18.00
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	17.40	17.33	17.23	17.19	17.20	18.00
Channel				631334	636672	633334	634334	635332	18.00
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	17.48	16.86	17.36	17.33	17.00	18.00
Channel				631000	632166	633334	634500	635666	18.50
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	17.51	17.34	17.35	17.27	16.87	18.50
Channel				630668	632000	633334	634668	636000	18.00
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	17.48	17.39	17.31	17.04	16.88	18.00
Channel				630500	631916	633334	634750	636166	18.00
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	17.47	17.34	17.25	16.92	16.88	18.00
Channel				630334	631834	633334	634834	636332	18.00
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	17.48	17.32	17.32	17.01	16.98	18.00

n78(3700-3800MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			Tune-up limit (dBm)
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.23			18.00
100		1	136			17.25			
100		1	271			16.99			
100		135	1			17.09			18.00
100		135	67			17.29			
100		135	136			17.32			
100		270	0			16.83			
100	DFT-s-OFDM QPSK	1	1			17.66			19.50
100		1	136			17.56			
100		1	271			17.03			
100		135	1			16.64			18.00
100		135	67			17.28			
100		135	136			16.06			
100		270	0			16.32			
100	DFT-s-OFDM 16QAM	1	1			16.48			17.00
100	DFT-s-OFDM 64QAM	1	1			14.76			15.50
100	DFT-s-OFDM 256QAM	1	1			12.96			13.50
100	CP-OFDM QPSK	1	1			15.63			16.50
100	CP-OFDM 16QAM	1	1			15.60			16.50
100	CP-OFDM 64QAM	1	1			13.55			14.50
100	CP-OFDM 256QAM	1	1			10.99			11.50
Channel				649668	649834	650000	650166	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	17.25	17.31	17.33	17.31	17.35	18.00
Channel				649334	649666	650000	650334	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	17.32	17.38	17.42	17.45	17.52	18.50
Channel				649000	649500	650000	650500	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	17.31	17.39	17.45	17.55	17.51	18.50
Channel				648668	649334	650000	650666	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	17.19	17.34	17.40	17.37	17.21	18.00
Channel				648334	649166	650000	650834	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	17.21	17.36	17.42	17.27	17.13	18.00
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	17.24	17.45	17.44	17.27	17.04	18.00
Channel				647668	648834	650000	651166	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	
30	DFT-s-OFDM QPSK	1	1	17.31	17.49	17.39	17.15	17.04	18.00
Channel				647334	648666	650000	651334	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	17.26	17.46	17.32	17.13	16.98	18.00
Channel				647168	648584	650000	651416	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	17.28	17.52	17.27	17.09	16.95	18.50
Channel				647000	648500	650000	651500	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	17.34	17.48	17.30	17.06	17.04	18.00

n78(3450-3550MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			18.00
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.43			18.00
100		1	136			17.35			
100		1	271			17.01			
100		135	1			16.88			
100		135	67			17.38			
100		135	136			16.58			
100		270	0			16.86			
100	DFT-s-OFDM QPSK	1	1			17.46			18.50
100		1	136			17.32			
100		1	271			17.00			
100		135	1			16.23			
100		135	67			17.36			
100		135	136			15.98			
100		270	0			16.34			
100	DFT-s-OFDM 16QAM	1	1			16.56			17.50
100	DFT-s-OFDM 64QAM	1	1			14.89			15.50
100	DFT-s-OFDM 256QAM	1	1			14.16			15.00
100	CP-OFDM QPSK	1	1			15.85			16.50
100	CP-OFDM 16QAM	1	1			15.65			16.50
100	CP-OFDM 64QAM	1	1			13.68			14.50
100	CP-OFDM 256QAM	1	1			12.15			13.00
Channel				633000	633166	633334	633500	633666	18.00
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	17.37	17.37	17.36	17.35	17.33	18.00
Channel				632668	633000	633334	633666	634000	18.00
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	17.41	17.45	17.35	17.39	17.28	18.00
Channel				632334	632834	633334	633832	634332	18.00
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	17.45	17.32	17.40	17.31	17.21	18.00
Channel				632000	632666	633334	634000	634666	18.00
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	17.35	17.32	17.27	17.15	17.21	18.00
Channel				631668	632500	633334	634166	635000	18.00
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	17.41	17.35	17.27	17.25	17.21	18.00
Channel				631334	636672	633334	634334	635332	18.00
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	17.49	16.85	17.36	17.21	17.02	18.00
Channel				631000	632166	633334	634500	635666	18.00
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	17.41	17.29	17.22	17.11	16.79	18.00
Channel				630668	632000	633334	634668	636000	18.00
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	17.46	17.27	17.25	16.92	16.80	18.00
Channel				630500	631916	633334	634750	636166	18.00
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	17.43	17.16	17.16	16.93	16.75	18.00
Channel				630334	631834	633334	634834	636332	18.00
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	17.40	17.23	17.24	16.87	16.85	18.00

n78(3700-3800MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			18.00
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.20			18.00
100		1	136			17.17			
100		1	271			16.95			
100		135	1			17.05			
100		135	67			17.25			
100		135	136			16.50			
100		270	0			16.77			18.00
100	DFT-s-OFDM QPSK	1	1			17.38			
100		1	136			17.32			
100		1	271			17.04			
100		135	1			16.57			
100		135	67			17.25			
100		135	136			15.97			
100		270	0			16.24			18.00
100	DFT-s-OFDM 16QAM	1	1			12.15			
100	DFT-s-OFDM 64QAM	1	1			14.73			
100	DFT-s-OFDM 256QAM	1	1			13.83			
100	CP-OFDM QPSK	1	1			15.62			
100	CP-OFDM 16QAM	1	1			15.47			
100	CP-OFDM 64QAM	1	1			13.48			14.00
100	CP-OFDM 256QAM	1	1			11.80			12.50
Channel				649668	649834	650000	650166	650332	18.00
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	17.23	17.27	17.32	17.24	17.35	18.00
Channel				649334	649666	650000	650334	650666	18.00
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	17.25	17.33	17.41	17.43	17.45	18.00
Channel				649000	649500	650000	650500	651000	18.50
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	17.29	17.36	17.41	17.51	17.44	18.50
Channel				648668	649334	650000	650666	651332	18.00
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	17.16	17.28	17.36	17.33	17.17	18.00
Channel				648334	649166	650000	650834	651666	18.00
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	17.18	17.35	17.39	17.25	17.09	18.00
Channel				648000	649000	650000	651000	652000	18.00
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	17.17	17.43	17.44	17.23	17.06	18.00
Channel				647668	648834	650000	651166	652332	18.00
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	
30	DFT-s-OFDM QPSK	1	1	17.28	17.48	17.38	17.14	17.03	18.00
Channel				647334	648666	650000	651334	652666	18.00
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	17.20	17.44	17.29	17.13	16.92	18.00
Channel				647168	648584	650000	651416	652832	18.00
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	17.20	17.43	17.22	17.09	16.96	18.00
Channel				647000	648500	650000	651500	653000	18.00
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	17.29	17.52	17.26	17.05	17.00	18.50

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Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11b 1Mbps	CH 1	2412	16.84	18.50	17.00	91.65
	CH 6	2437	16.22	18.00	17.00	
	CH 11	2462	17.56	19.00	17.00	
802.11g 6Mbps	CH 1	2412	14.59	16.50	16.00	67.70
	CH 6	2437	14.72	16.50	16.00	
	CH 11	2462	15.64	17.50	16.00	
802.11n-HT20 MCS0	CH 1	2412	13.85	15.50	15.00	65.96
	CH 6	2437	13.60	15.50	15.00	
	CH 11	2462	14.27	16.00	15.00	
802.11n-HT40 MCS0	CH 3	2422	11.39	13.00	14.00	45.62
	CH 6	2437	11.70	13.50	14.00	
	CH 9	2452	12.05	14.00	14.00	
802.11ac-VHT20 MCS0	CH 1	2412	13.27	15.00	14.00	67.49
	CH 6	2437	12.88	14.50	14.00	
	CH 11	2462	13.34	15.00	14.00	
802.11ac-VHT40 MCS0	CH 3	2422	11.56	13.50	14.00	46.45
	CH 6	2437	11.85	13.50	14.00	
	CH 9	2452	12.44	14.00	14.00	
802.11ax-HEW20 MCS0	CH 1	2412	12.80	14.50	13.50	58.21
	CH 6	2437	12.21	14.00	13.50	
	CH 11	2462	12.95	14.50	13.50	
802.11ax-HEW40 MCS0	CH 3	2422	10.40	12.00	13.00	53.83
	CH 6	2437	10.77	12.50	13.00	
	CH 9	2452	11.02	13.00	13.00	
802.11ax-HEW20 MCS0 (RU26)	CH 1	2412	15.28	17.00	14.00	88.14
	CH 6	2437	14.42	16.00	14.00	
	CH 11	2462	15.65	17.50	14.00	
802.11ax-HEW20 MCS0 (RU52)	CH 1	2412	14.96	16.50	14.00	77.49
	CH 6	2437	13.87	15.50	14.00	
	CH 11	2462	15.21	17.00	14.00	
802.11ax-HEW20 MCS0 (RU106)	CH 1	2412	13.82	15.50	14.00	65.15
	CH 6	2437	12.75	14.50	14.00	
	CH 11	2462	14.13	16.00	14.00	
802.11ax-HEW40 MCS0 RU26)	CH 3	2422	15.03	17.00	14.00	87.33
	CH 6	2437	15.25	17.00	14.00	
	CH 9	2452	15.63	17.50	14.00	
802.11ax-HEW40 MCS0 RU52)	CH 3	2422	14.51	16.50	14.00	80.72
	CH 6	2437	14.89	16.50	14.00	
	CH 9	2452	15.09	17.00	14.00	
802.11ax-HEW40 MCS0 RU106)	CH 3	2422	13.27	15.00	14.00	67.02
	CH 6	2437	14.00	16.00	14.00	
	CH 9	2452	14.22	16.00	14.00	
802.11ax-HEW40 MCS0 RU242)	CH 3	2422	10.65	12.50	14.00	46.51
	CH 6	2437	12.14	14.00	14.00	
	CH 9	2452	11.32	13.00	14.00	

Reduced Power Level 3

n38 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				518000	519000	520000	
Frequency (MHz)				2590	2595	2600	
40	DFT-s-OFDM PI/2 BPSK	1	1	20.95	20.55	20.43	22.00
40		1	108	20.53	20.31	20.09	
40		1	214	20.15	19.90	19.75	
40		108	1	20.22	20.02	20.04	21.50
40		108	54	20.54	20.34	20.69	
40		108	108	19.90	19.73	20.13	
40		216	0	20.09	19.86	19.90	
40	DFT-s-OFDM QPSK	1	1	21.17	21.21	21.12	22.00
40		1	108	20.52	20.35	20.59	
40		1	214	20.06	19.82	20.13	
40		108	1	19.73	19.49	19.44	21.50
40		108	54	20.70	20.76	20.66	
40	108	108	19.25	19.08	19.60		
40	216	0	19.44	19.65	19.64		
40	DFT-s-OFDM 16QAM	1	1	19.78	19.68	19.66	21.00
40	DFT-s-OFDM 64QAM	1	1	18.21	18.15	17.86	19.50
40	DFT-s-OFDM 256QAM	1	1	16.24	16.14	16.00	17.50
40	CP-OFDM QPSK	1	1	19.16	18.99	19.03	20.00
40	CP-OFDM 16QAM	1	1	18.75	18.62	18.67	20.00
40	CP-OFDM 64QAM	1	1	16.98	17.04	17.30	18.50
40	CP-OFDM 256QAM	1	1	14.27	14.44	13.91	15.50
Channel				517000	519000	521000	Tune-up limit (dBm)
Frequency (MHz)				2585	2595	2605	
30	DFT-s-OFDM QPSK	1	1	20.76	20.60	20.41	22.00
Channel				516000	519000	522000	Tune-up limit (dBm)
Frequency (MHz)				2580	2595	2610	
20	DFT-s-OFDM QPSK	1	1	20.81	20.62	20.26	22.00
Channel				515500	519000	522500	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	DFT-s-OFDM QPSK	1	1	20.92	20.60	20.19	22.00
Channel				515000	519000	523000	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	DFT-s-OFDM QPSK	1	1	20.93	20.68	20.21	22.00

n41 (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	20.50
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	18.76	19.37	19.76	19.78	19.56	20.50
100		1	136	19.90	19.83	19.89	19.07	18.70	
100		1	271	18.32	18.53	18.70	18.63	19.26	
100		135	1	18.92	19.29	19.39	19.20	18.71	20.50
100		135	67	19.80	19.89	19.64	19.21	18.88	
100		135	136	19.33	19.05	18.67	18.33	18.33	
100		270	0	19.17	19.26	19.11	18.80	18.63	
100	DFT-s-OFDM QPSK	1	1	20.02	19.94	20.22	20.20	20.05	21.00
100		1	136	19.97	20.03	19.64	19.23	18.96	
100		1	271	19.51	19.03	18.69	18.64	19.32	
100		135	1	18.46	18.82	18.92	18.71	18.69	20.50
100		135	67	19.82	19.90	19.93	19.61	19.70	
100		135	136	18.89	18.62	18.15	17.84	17.77	
100		270	0	18.68	18.80	18.85	18.34	18.59	
100	DFT-s-OFDM 16QAM	1	1	17.92	18.58	18.94	18.95	18.73	19.50
100	DFT-s-OFDM 64QAM	1	1	16.25	16.93	17.27	17.33	17.04	18.00
100	DFT-s-OFDM 256QAM	1	1	14.55	15.17	15.54	15.58	15.33	16.50
100	CP-OFDM QPSK	1	1	17.20	17.91	18.15	18.20	18.12	19.00
100	CP-OFDM 16QAM	1	1	17.11	17.71	18.06	18.11	17.86	19.00
100	CP-OFDM 64QAM	1	1	15.04	15.66	16.01	16.07	15.85	17.00
100	CP-OFDM 256QAM	1	1	12.59	13.32	13.70	13.72	13.36	14.50
Channel				508200	513402	518598	523800	528996	20.50
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	18.71	19.39	19.74	19.76	19.44	20.50
Channel				507204	512904	518598	524298	529998	20.50
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	18.83	19.49	19.88	19.70	19.19	20.50
Channel				506202	512400	518598	524796	531000	20.50
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	18.76	19.46	19.95	19.65	19.00	20.50
Channel				505200	511902	518598	525798	531996	20.50
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	18.67	19.58	19.76	19.36	18.75	20.50
Channel				504204	511404	518598	525798	532998	20.50
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	18.71	19.66	19.74	19.27	18.71	20.50
Channel				503202	510900	518598	526296	534000	20.50
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	18.86	19.70	19.82	19.23	18.61	20.50
Channel				502200	510402	518598	526800	534996	20.50
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	18.79	19.73	19.80	19.05	18.68	20.50
Channel				501204	509904	518598	527298	535998	20.50
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	18.76	19.84	19.82	18.89	18.82	20.50
Channel				500700	509652	518598	527550	536496	20.50
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	18.73	18.74	19.68	18.76	18.76	20.50
Channel				500202	509400	518598	527796	537000	20.50
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	18.79	19.76	19.65	18.85	19.09	20.50

n41 (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	21.00
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	18.88	19.57	19.91	19.92	19.71	21.00
100		1	136	20.11	20.01	19.87	19.27	18.91	
100		1	271	19.67	19.16	18.87	18.78	19.43	
100		135	1	19.11	19.46	19.58	19.32	18.87	21.00
100		135	67	19.97	20.07	19.84	19.35	19.04	
100		135	136	19.50	19.23	18.82	18.49	18.48	
100		270	0	19.34	19.41	18.81	18.95	18.79	
100	DFT-s-OFDM QPSK	1	1	20.30	20.08	20.38	20.25	20.24	21.00
100		1	136	20.14	20.20	19.93	19.36	19.07	
100		1	271	19.67	19.15	18.91	18.79	19.45	
100		135	1	18.60	18.94	18.85	18.83	18.36	20.50
100		135	67	19.97	20.06	20.07	20.00	20.01	
100		135	136	19.02	18.75	18.25	17.97	18.00	
100	270	0	18.82	18.93	19.01	18.45	18.26		
100	DFT-s-OFDM 16QAM	1	1	18.02	18.86	19.10	19.20	18.91	20.00
100	DFT-s-OFDM 64QAM	1	1	16.48	17.14	17.40	17.53	17.31	18.50
100	DFT-s-OFDM 256QAM	1	1	14.63	15.35	15.63	15.69	15.51	16.50
100	CP-OFDM QPSK	1	1	17.32	17.91	18.24	18.33	18.11	19.00
100	CP-OFDM 16QAM	1	1	17.35	17.96	18.29	18.32	18.08	19.00
100	CP-OFDM 64QAM	1	1	15.17	15.78	16.11	16.18	15.95	17.00
100	CP-OFDM 256QAM	1	1	12.20	13.87	14.44	14.18	13.34	15.00
Channel				508200	513402	518598	523800	528996	20.50
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	18.87	19.59	19.93	19.87	19.52	20.50
Channel				507204	512904	518598	524298	529998	21.00
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	18.91	19.68	20.03	19.92	19.34	21.00
Channel				506202	512400	518598	524796	531000	21.00
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	18.87	19.72	20.03	19.82	19.09	21.00
Channel				505200	511902	518598	525798	531996	20.50
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	18.77	19.72	19.94	19.51	18.90	20.50
Channel				504204	511404	518598	525798	532998	20.50
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	18.84	19.79	19.98	19.40	18.81	20.50
Channel				503202	510900	518598	526296	534000	20.50
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	18.97	19.86	19.96	19.27	18.74	20.50
Channel				502200	510402	518598	526800	534996	20.50
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	18.89	19.88	19.96	19.13	18.74	20.50
Channel				501204	509904	518598	527298	535998	20.50
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	18.82	19.91	19.88	19.01	18.89	20.50
Channel				500700	509652	518598	527550	536496	20.50
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	18.80	19.90	19.82	18.95	19.01	20.50
Channel				500202	509400	518598	527796	537000	20.50
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	18.86	19.99	19.84	18.93	19.21	20.50

n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	21.64	21.80	21.89	23.00
40		1	108	21.85	21.88	21.66	
40		1	214	21.87	19.99	21.77	
40		108	1	21.46	21.46	21.49	22.50
40		108	54	21.91	21.91	21.76	
40		108	108	21.56	21.21	21.16	
40	DFT-s-OFDM QPSK	216	0	21.47	20.02	21.33	23.00
40		1	1	21.98	22.05	21.88	
40		1	108	21.85	21.89	21.66	
40		1	214	21.81	21.74	21.78	22.50
40		108	1	20.87	20.88	20.89	
40		108	54	21.95	21.96	21.76	
40	DFT-s-OFDM 16QAM	1	1	20.89	21.07	21.25	22.00
40	DFT-s-OFDM 64QAM	1	1	19.25	19.43	19.52	20.50
40	DFT-s-OFDM 256QAM	1	1	17.25	17.42	17.86	18.50
40	CP-OFDM QPSK	1	1	20.13	20.29	20.46	21.00
40	CP-OFDM 16QAM	1	1	19.87	20.12	20.07	21.00
40	CP-OFDM 64QAM	1	1	18.16	18.12	18.19	19.00
40	CP-OFDM 256QAM	1	1	15.30	16.07	15.57	17.00
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	21.61	21.83	21.77	22.50
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	21.76	21.89	21.67	22.50
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	21.76	21.87	21.59	22.50
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	21.81	21.89	21.58	22.50
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	21.78	21.85	21.60	22.50



n77(3450-3550MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			18.50
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.93			18.50
100		1	136			17.83			
100		1	271			17.56			
100		135	1			17.42			
100		135	67			17.89			
100		135	136			17.05			
100	DFT-s-OFDM QPSK	270	0			16.59			18.50
100		1	1			18.12			
100		1	136			18.10			
100		1	271			17.72			
100		135	1			17.63			
100		135	67			17.85			
100	135	136			16.57			20.00	
100	270	0			16.88				
100	DFT-s-OFDM 16QAM	1	1			17.24			
100	DFT-s-OFDM 64QAM	1	1			15.52			
100	DFT-s-OFDM 256QAM	1	1			13.73			
100	CP-OFDM QPSK	1	1			16.48			
100	CP-OFDM 16QAM	1	1			16.37			
100	CP-OFDM 64QAM	1	1			14.21			
100	CP-OFDM 256QAM	1	1			11.82			
Channel				633000	633168	633334	633500	633666	18.00
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	17.88	17.85	17.89	17.84	17.82	18.50
Channel				632668	633000	633334	633666	634000	18.50
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	17.96	17.92	17.93	17.89	17.82	18.50
Channel				632334	632834	633334	633832	634332	18.50
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	17.95	17.88	17.85	17.78	17.69	18.50
Channel				632000	632668	633334	634000	634666	18.50
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	17.88	17.85	17.80	17.71	17.65	18.50
Channel				631668	632500	633334	634166	635000	18.50
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	17.94	17.86	17.86	17.79	17.68	18.50
Channel				631334	632334	633334	634332	635332	18.50
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	18.00	17.90	17.78	17.76	17.61	19.00
Channel				631000	632168	633334	634500	635666	19.00
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	18.09	17.88	17.82	17.78	17.48	19.00
Channel				630668	632000	633334	634666	636000	19.00
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	18.01	17.89	17.81	17.64	17.45	19.00
Channel				630500	631916	633334	634750	636166	19.00
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	18.01	17.89	17.81	17.60	17.48	19.00
Channel				630334	631834	633334	634834	636332	19.00
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	18.05	17.90	17.85	17.58	17.61	19.00

n77(3700-3980MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	17.74	17.71	17.39	17.67	17.47	18.50
100		1	136	17.74	17.71	17.69	17.68	17.18	
100		1	271	17.56	17.72	17.41	17.02	17.83	
100		135	1	17.58	17.20	17.05	17.00	16.85	18.50
100		135	67	17.82	17.75	17.77	17.60	17.18	
100		135	136	17.07	17.09	16.88	16.73	16.92	
100		270	0	17.32	17.20	17.25	17.11	16.79	
100	DFT-s-OFDM QPSK	1	1	18.28	18.25	18.39	18.26	18.08	20.00
100		1	136	17.91	17.70	17.87	17.66	17.20	
100		1	271	17.74	17.87	17.55	17.11	18.01	
100		135	1	17.08	16.65	16.53	16.55	16.35	18.50
100		135	67	17.70	17.70	17.75	17.61	17.65	
100		135	136	16.58	16.62	16.37	16.22	16.42	
100	270	0	16.80	16.71	16.86	16.64	16.31		
100	DFT-s-OFDM 16QAM	1	1	16.92	16.98	16.52	16.77	16.56	17.50
100	DFT-s-OFDM 64QAM	1	1	15.28	15.24	14.85	15.12	14.88	16.00
100	DFT-s-OFDM 256QAM	1	1	13.48	13.42	13.03	13.34	13.13	14.00
100	CP-OFDM QPSK	1	1	16.13	16.04	15.82	16.19	15.89	17.00
100	CP-OFDM 16QAM	1	1	16.04	16.05	15.56	15.79	15.64	17.00
100	CP-OFDM 64QAM	1	1	14.03	14.08	13.60	13.88	13.71	15.00
100	CP-OFDM 256QAM	1	1	11.46	11.38	11.07	11.28	11.21	12.00
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	17.74	17.61	17.47	17.64	17.42	18.50
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	17.79	17.67	17.53	17.62	17.33	18.50
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	17.80	17.66	17.55	17.47	17.20	18.50
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	17.76	17.56	17.35	17.30	16.93	18.50
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	17.79	17.60	17.37	17.44	16.97	18.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	17.83	17.63	17.40	17.50	17.10	18.50
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	17.85	17.55	17.45	17.44	17.32	18.50
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	17.80	17.62	17.53	17.40	17.46	18.50
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	17.84	17.59	17.62	17.34	17.58	18.50
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	17.83	17.61	17.72	17.29	10.47	26.50

n77(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			18.50
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.96			18.50
100		1	136			17.77			
100		1	271			17.56			
100		135	1			17.40			18.50
100		135	67			17.88			
100		135	136			17.06			
100		270	0			17.40			
100	DFT-s-OFDM QPSK	1	1			18.02			19.00
100		1	136			17.94			
100		1	271			17.57			
100		135	1			16.66			18.50
100		135	67			17.82			
100		135	136			16.48			
100		270	0			16.85			
100	DFT-s-OFDM 16QAM	1	1			17.10			18.00
100	DFT-s-OFDM 64QAM	1	1			15.45			16.00
100	DFT-s-OFDM 256QAM	1	1			13.59			14.50
100	CP-OFDM QPSK	1	1			16.35			17.00
100	CP-OFDM 16QAM	1	1			16.26			17.00
100	CP-OFDM 64QAM	1	1			14.24			15.00
100	CP-OFDM 256QAM	1	1			12.56			13.50
Channel				633000	633168	633334	633500	633666	18.50
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	17.91	17.91	17.91	17.85	17.86	18.50
Channel				632668	633000	633334	633666	634000	18.50
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	17.95	17.90	17.98	17.94	17.83	18.50
Channel				632334	632834	633334	633832	634332	18.50
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	17.95	17.90	17.94	17.76	17.76	18.50
Channel				632000	632668	633334	634000	634666	23.50
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	17.93	17.90	17.84	17.73	17.66	18.50
Channel				631668	632500	633334	634166	635000	18.50
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	17.95	17.90	17.79	17.73	17.67	18.50
Channel				631334	632334	633334	634332	635332	19.00
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	18.07	17.87	17.85	17.83	17.66	19.00
Channel				631000	632168	633334	634500	635666	19.00
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	18.05	17.84	17.71	17.73	17.50	19.00
Channel				630668	632000	633334	634666	636000	19.00
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	18.03	17.91	17.81	17.62	17.47	19.00
Channel				630500	631916	633334	634750	636166	19.00
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	18.06	17.81	17.82	17.58	17.42	19.00
Channel				630334	631834	633334	634834	636332	19.00
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	18.03	17.87	17.85	17.49	17.52	19.00

n77(3700-3980MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	17.74	17.67	17.36	17.59	17.39	18.50
100		1	136	17.70	17.66	17.67	17.49	16.99	
100		1	271	17.57	17.73	17.39	16.92	17.71	
100		135	1	17.53	17.18	17.00	17.01	16.77	18.50
100		135	67	17.78	17.72	17.72	17.56	17.09	
100		135	136	17.00	17.19	16.81	16.70	16.85	
100		270	0	17.26	17.16	17.21	17.09	16.72	
100	DFT-s-OFDM QPSK	1	1	18.12	18.18	18.23	18.06	18.10	19.00
100		1	136	18.04	17.96	17.69	17.70	17.08	
100		1	271	17.56	17.71	17.36	16.93	17.76	
100		135	1	17.03	16.61	16.14	16.48	16.27	18.50
100		135	67	17.77	17.70	17.90	17.57	17.10	
100		135	136	16.51	16.57	16.38	16.17	16.37	
100	270	0	16.75	16.65	17.20	16.58	16.24		
100	DFT-s-OFDM 16QAM	1	1	16.96	16.86	16.98	16.68	16.77	17.50
100	DFT-s-OFDM 64QAM	1	1	15.18	15.13	15.17	15.02	14.87	16.00
100	DFT-s-OFDM 256QAM	1	1	13.37	13.29	13.57	13.16	13.06	14.50
100	CP-OFDM QPSK	1	1	16.15	16.01	16.07	16.03	15.85	17.00
100	CP-OFDM 16QAM	1	1	15.97	15.92	15.92	15.75	15.54	16.50
100	CP-OFDM 64QAM	1	1	13.96	13.86	13.82	13.77	13.70	14.50
100	CP-OFDM 256QAM	1	1	12.24	12.92	11.98	11.82	11.92	13.50
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	17.76	17.55	17.44	17.62	17.42	18.50
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	17.76	17.65	17.45	17.49	17.25	18.50
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	17.74	17.64	17.47	17.47	17.15	18.50
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	17.69	17.47	17.34	17.31	16.93	18.50
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	17.70	17.56	17.37	17.40	16.92	18.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	17.78	17.58	17.38	17.39	17.05	18.50
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	17.78	17.57	17.42	17.44	17.23	18.50
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	17.75	17.56	17.55	17.30	17.39	18.50
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	17.79	17.45	17.53	17.21	17.52	18.50
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	17.80	17.58	17.60	17.16	17.71	18.50

n78(3450-3550MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			18.00
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.39			18.00
100		1	136			17.36			
100		1	271			17.02			
100		135	1			16.92			
100		135	67			17.40			
100		135	136			16.51			
100		270	0			16.88			
100	DFT-s-OFDM QPSK	1	1			17.71			19.50
100		1	136			17.63			
100		1	271			17.21			
100		135	1			16.37			
100		135	67			17.31			
100		135	136			15.99			
100		270	0			16.32			
100	DFT-s-OFDM 16QAM	1	1			16.66			17.50
100	DFT-s-OFDM 64QAM	1	1			14.98			15.50
100	DFT-s-OFDM 256QAM	1	1			9.80			10.50
100	CP-OFDM QPSK	1	1			17.45			18.00
100	CP-OFDM 16QAM	1	1			15.85			16.50
100	CP-OFDM 64QAM	1	1			13.71			14.50
100	CP-OFDM 256QAM	1	1			11.22			12.00
Channel				633000	633166	633334	633500	633666	18.00
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	17.36	17.37	17.34	17.31	17.33	18.00
Channel				632668	633000	633334	633666	634000	18.00
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	17.45	17.42	17.40	17.36	17.30	18.00
Channel				632334	632834	633334	633832	634332	18.00
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	17.43	17.36	17.35	17.26	17.25	18.00
Channel				632000	632666	633334	634000	634666	18.00
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	17.43	17.35	17.30	17.16	17.20	18.00
Channel				631668	632500	633334	634166	635000	18.00
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	17.40	17.33	17.23	17.19	17.20	18.00
Channel				631334	636672	633334	634334	635332	18.00
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	17.48	16.86	17.36	17.33	17.00	18.00
Channel				631000	632166	633334	634500	635666	18.50
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	17.51	17.34	17.35	17.27	16.87	18.50
Channel				630668	632000	633334	634668	636000	18.00
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	17.48	17.39	17.31	17.04	16.88	18.00
Channel				630500	631916	633334	634750	636166	18.00
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	17.47	17.34	17.25	16.92	16.88	18.00
Channel				630334	631834	633334	634834	636332	18.00
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	17.48	17.32	17.32	17.01	16.98	18.00

n78(3700-3800MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			Tune-up limit (dBm)
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.23			18.00
100		1	136			17.25			
100		1	271			16.99			
100		135	1			17.09			18.00
100		135	67			17.29			
100		135	136			17.32			
100		270	0			16.83			
100	DFT-s-OFDM QPSK	1	1			17.66			19.50
100		1	136			17.56			
100		1	271			17.03			
100		135	1			16.64			18.00
100		135	67			17.28			
100		135	136			16.06			
100		270	0			16.32			
100	DFT-s-OFDM 16QAM	1	1			16.48			17.00
100	DFT-s-OFDM 64QAM	1	1			14.76			15.50
100	DFT-s-OFDM 256QAM	1	1			12.96			13.50
100	CP-OFDM QPSK	1	1			15.63			16.50
100	CP-OFDM 16QAM	1	1			15.60			16.50
100	CP-OFDM 64QAM	1	1			13.55			14.50
100	CP-OFDM 256QAM	1	1			10.99			11.50
Channel				649668	649834	650000	650166	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	17.25	17.31	17.33	17.31	17.35	18.00
Channel				649334	649666	650000	650334	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	17.32	17.38	17.42	17.45	17.52	18.50
Channel				649000	649500	650000	650500	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	17.31	17.39	17.45	17.55	17.51	18.50
Channel				648668	649334	650000	650666	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	17.19	17.34	17.40	17.37	17.21	18.00
Channel				648334	649166	650000	650834	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	17.21	17.36	17.42	17.27	17.13	18.00
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	17.24	17.45	17.44	17.27	17.04	18.00
Channel				647668	648834	650000	651166	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	
30	DFT-s-OFDM QPSK	1	1	17.31	17.49	17.39	17.15	17.04	18.00
Channel				647334	648666	650000	651334	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	17.26	17.46	17.32	17.13	16.98	18.00
Channel				647168	648584	650000	651416	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	17.28	17.52	17.27	17.09	16.95	18.50
Channel				647000	648500	650000	651500	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	17.34	17.48	17.30	17.06	17.04	18.00

n78(3450-3550MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			18.00
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.43			18.00
100		1	136			17.35			
100		1	271			17.01			
100		135	1			16.88			18.00
100		135	67			17.38			
100		135	136			16.58			
100		270	0			16.86			
100	DFT-s-OFDM QPSK	1	1			17.46			18.50
100		1	136			17.32			
100		1	271			17.00			
100		135	1			16.23			18.00
100		135	67			17.36			
100		135	136			15.98			
100		270	0			16.34			
100	DFT-s-OFDM 16QAM	1	1			16.56			17.50
100	DFT-s-OFDM 64QAM	1	1			14.89			15.50
100	DFT-s-OFDM 256QAM	1	1			14.16			15.00
100	CP-OFDM QPSK	1	1			15.85			16.50
100	CP-OFDM 16QAM	1	1			15.65			16.50
100	CP-OFDM 64QAM	1	1			13.68			14.50
100	CP-OFDM 256QAM	1	1			12.15			13.00
Channel				633000	633166	633334	633500	633666	18.00
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	17.37	17.37	17.36	17.35	17.33	18.00
Channel				632668	633000	633334	633666	634000	18.00
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	17.41	17.45	17.35	17.39	17.28	18.00
Channel				632334	632834	633334	633832	634332	18.00
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	17.45	17.32	17.40	17.31	17.21	18.00
Channel				632000	632666	633334	634000	634666	18.00
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	17.35	17.32	17.27	17.15	17.21	18.00
Channel				631668	632500	633334	634166	635000	23.50
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	17.41	17.35	17.27	17.25	17.21	18.00
Channel				631334	636672	633334	634334	635332	18.00
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	17.49	16.85	17.36	17.21	17.02	18.00
Channel				631000	632166	633334	634500	635666	18.00
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	17.41	17.29	17.22	17.11	16.79	18.00
Channel				630668	632000	633334	634668	636000	18.00
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	17.46	17.27	17.25	16.92	16.80	18.00
Channel				630500	631916	633334	634750	636166	18.00
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	17.43	17.16	17.16	16.93	16.75	18.00
Channel				630334	631834	633334	634834	636332	18.00
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	17.40	17.23	17.24	16.87	16.85	18.00

n78(3700-3800MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			18.00
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			17.20			18.00
100		1	136			17.17			
100		1	271			16.95			
100		135	1			17.05			
100		135	67			17.25			
100		135	136			16.50			
100		270	0			16.77			
100	DFT-s-OFDM QPSK	1	1			17.38			18.50
100		1	136			17.32			
100		1	271			17.04			
100		135	1			16.57			
100		135	67			17.25			
100		135	136			15.97			
100		270	0			16.24			
100	DFT-s-OFDM 16QAM	1	1			12.15			13.00
100	DFT-s-OFDM 64QAM	1	1			14.73			15.50
100	DFT-s-OFDM 256QAM	1	1			13.83			14.50
100	CP-OFDM QPSK	1	1			15.62			16.50
100	CP-OFDM 16QAM	1	1			15.47			16.00
100	CP-OFDM 64QAM	1	1			13.48			14.00
100	CP-OFDM 256QAM	1	1			11.80			12.50
Channel				649668	649834	650000	650166	650332	18.00
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	17.23	17.27	17.32	17.24	17.35	18.00
Channel				649334	649666	650000	650334	650666	18.00
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	17.25	17.33	17.41	17.43	17.45	18.00
Channel				649000	649500	650000	650500	651000	18.50
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	17.29	17.36	17.41	17.51	17.44	18.50
Channel				648668	649334	650000	650666	651332	18.00
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	17.16	17.28	17.36	17.33	17.17	18.00
Channel				648334	649166	650000	650834	651666	18.00
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	17.18	17.35	17.39	17.25	17.09	18.00
Channel				648000	649000	650000	651000	652000	18.00
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	17.17	17.43	17.44	17.23	17.06	18.00
Channel				647668	648834	650000	651166	652332	18.00
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	
30	DFT-s-OFDM QPSK	1	1	17.28	17.48	17.38	17.14	17.03	18.00
Channel				647334	648666	650000	651334	652666	18.00
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	17.20	17.44	17.29	17.13	16.92	18.00
Channel				647168	648584	650000	651416	652832	18.00
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	17.20	17.43	17.22	17.09	16.96	18.00
Channel				647000	648500	650000	651500	653000	18.00
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	17.29	17.52	17.26	17.05	17.00	18.50