



REPORT No.: SZ26040328S01

Annex E Conducted Power

Note:

Conducted power unit: dBm.

The target power was recorded in the manufacture document.

Full Power

GSM850		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel		128	189	251		128	189	251	
Frequency (MHz)		824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot		32.32	32.35	32.42	33.50	23.32	23.35	23.42	24.50
GPRS 1 Tx slot		32.21	32.31	32.29	33.50	23.21	23.31	23.29	24.50
GPRS 2 Tx slots		31.69	31.73	31.75	32.50	25.69	25.73	25.75	26.50
GPRS 3 Tx slots		29.93	29.89	30.02	31.00	25.67	25.63	25.76	26.74
GPRS 4 Tx slots		28.77	28.75	28.85	29.50	25.77	25.75	25.85	26.50
EDGE 1 Tx slot		27.63	27.72	27.67	28.50	18.63	18.72	18.67	19.50
EDGE 2 Tx slots		26.26	26.31	26.17	27.00	20.26	20.31	20.17	21.00
EDGE 3 Tx slots		24.57	24.56	24.62	25.50	20.31	20.30	20.36	21.24
EDGE 4 Tx slots		23.58	23.51	23.61	24.50	20.58	20.51	20.61	21.50
Mode			Max.	32.42			Max.	25.85	
Attenuator		Cable Loss : 0.6							
Date		5/6							

GSM1900		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel		512	661	810		512	661	810	
Frequency (MHz)		1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot		29.32	29.39	29.34	31.00	20.32	20.39	20.34	22.00
GPRS 1 Tx slot		29.16	29.03	29.17	31.00	20.16	20.03	20.17	22.00
GPRS 2 Tx slots		27.79	27.85	27.89	28.50	21.79	21.85	21.89	22.50
GPRS 3 Tx slots		26.21	26.17	26.28	27.00	21.95	21.91	22.02	22.74
GPRS 4 Tx slots		24.79	24.75	24.68	25.50	21.79	21.75	21.68	22.50
EDGE 1 Tx slot		26.59	26.54	26.63	27.50	17.59	17.54	17.63	18.50
EDGE 2 Tx slots		25.15	25.08	25.11	26.00	19.15	19.08	19.11	20.00
EDGE 3 Tx slots		23.21	23.17	23.38	24.00	18.95	18.91	19.12	19.74
EDGE 4 Tx slots		21.66	21.63	21.75	22.50	18.66	18.63	18.75	19.50
Mode			Max.	29.39			Max.	22.02	
Attenuator		Cable Loss : 0.8							
Date		5/6							

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	23.68	23.71	23.61	24.50	23.61	23.65	23.60	24.50	23.65	23.66	23.62	24.50
3GPP Rel 5	HSDPA Subtest-1	22.69	22.68	22.66	23.50	22.65	22.72	22.71	23.50	22.77	22.64	22.62	23.50
3GPP Rel 5	HSDPA Subtest-2	22.73	22.70	22.71	23.50	22.69	22.77	22.75	23.50	22.78	22.65	22.60	23.50
3GPP Rel 5	HSDPA Subtest-3	22.29	22.24	22.24	23.00	22.24	22.27	22.34	23.00	22.33	22.28	22.13	23.00
3GPP Rel 5	HSDPA Subtest-4	22.26	22.22	22.19	23.00	22.23	22.25	22.30	23.00	22.33	22.21	22.11	23.00
3GPP Rel 8	DC-HSDPA Subtest-1	22.69	22.69	22.67	23.50	22.67	22.71	22.69	23.50	22.73	22.63	22.56	23.50
3GPP Rel 8	DC-HSDPA Subtest-2	22.64	22.71	22.64	23.50	22.65	22.66	22.62	23.50	22.70	22.58	22.57	23.50
3GPP Rel 8	DC-HSDPA Subtest-3	22.09	22.20	22.10	23.00	22.08	22.13	22.11	23.00	22.17	22.07	22.06	23.00
3GPP Rel 8	DC-HSDPA Subtest-4	22.10	22.20	22.12	23.00	22.12	22.16	22.12	23.00	22.19	22.08	22.04	23.00
3GPP Rel 6	HSUPA Subtest-1	22.24	22.21	22.16	23.00	22.21	22.28	22.26	23.00	22.32	22.17	22.17	23.00
3GPP Rel 6	HSUPA Subtest-2	22.71	22.70	22.67	23.50	22.71	22.76	22.74	23.50	22.77	22.68	22.63	23.50
3GPP Rel 6	HSUPA Subtest-3	21.78	21.75	21.72	22.50	21.75	21.78	21.83	22.50	21.81	21.71	21.65	22.50
3GPP Rel 6	HSUPA Subtest-4	22.68	22.64	22.65	23.50	22.65	22.72	22.70	23.50	22.79	22.62	22.60	23.50
3GPP Rel 6	HSUPA Subtest-5	21.73	21.71	21.68	22.50	21.72	21.80	21.80	22.50	21.80	21.69	21.67	22.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	22.22	22.19	22.16	23.00	22.17	22.23	22.19	23.00	22.28	22.20	22.13	23.00
Attenuator		Cable Loss				Cable Loss				Cable Loss			
Mode			Max.	23.71			Max.	23.65			Max.	23.66	
Date		5/6				5/6				5/6			

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	23.77	23.81	23.74	24.5
20	QPSK	1	49	23.63	23.69	23.67	
20	QPSK	1	99	23.58	23.65	23.48	
20	QPSK	50	0	22.80	22.87	22.84	
20	QPSK	50	24	22.76	22.83	22.79	23.5
20	QPSK	50	50	22.79	22.79	22.81	
20	QPSK	100	0	22.74	22.76	22.75	
20	16QAM	1	0	22.83	22.97	22.88	
20	16QAM	1	49	22.71	22.85	22.86	23.5
20	16QAM	1	99	22.74	22.82	22.78	
20	16QAM	50	0	21.85	21.92	21.90	
20	16QAM	50	24	21.79	21.75	21.78	
20	16QAM	50	50	21.84	21.87	21.89	22.5
20	16QAM	100	0	21.67	21.80	21.72	
20	64QAM	1	0	21.92	21.94	21.90	
20	64QAM	1	49	21.77	21.82	21.78	
20	64QAM	1	99	21.82	21.89	21.79	22.5
20	64QAM	50	0	20.70	20.74	20.78	
20	64QAM	50	24	20.61	20.56	20.70	
20	64QAM	50	50	20.64	20.66	20.67	
20	64QAM	100	0	20.57	20.58	20.54	21.5
20	256QAM	1	0	18.65	18.68	18.64	
20	256QAM	1	49	18.42	18.59	18.48	
20	256QAM	1	99	18.53	18.57	18.53	
20	256QAM	50	0	18.37	18.39	18.56	
20	256QAM	50	24	18.57	18.52	18.59	19.5
20	256QAM	50	50	18.48	18.54	18.60	
20	256QAM	100	0	18.49	18.49	18.45	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	23.75	23.80	23.78	24.5
15	QPSK	1	37	23.56	23.61	23.65	
15	QPSK	1	74	23.44	23.47	23.33	
15	QPSK	36	0	22.74	22.79	22.72	
15	QPSK	36	20	22.70	22.76	22.75	23.5
15	QPSK	36	39	22.76	22.75	22.72	
15	QPSK	75	0	22.70	22.71	22.75	
15	16QAM	1	0	22.76	22.93	22.73	
15	16QAM	1	37	22.73	22.81	22.73	23.5
15	16QAM	1	74	22.77	22.75	22.74	
15	16QAM	36	0	21.73	21.72	21.71	
15	16QAM	36	20	21.62	21.63	21.60	
15	16QAM	36	39	21.78	21.76	21.74	22.5
15	16QAM	75	0	21.53	21.74	21.56	
15	64QAM	1	0	21.75	21.80	21.80	
15	64QAM	1	37	21.71	21.72	21.72	
15	64QAM	1	74	21.68	21.73	21.69	22.5
15	64QAM	36	0	20.58	20.62	20.71	
15	64QAM	36	20	20.48	20.47	20.50	
15	64QAM	36	39	20.57	20.51	20.52	
15	64QAM	75	0	20.41	20.42	20.48	21.5
15	256QAM	1	0	18.61	18.64	18.61	
15	256QAM	1	37	18.34	18.48	18.46	
15	256QAM	1	74	18.44	18.40	18.42	
15	256QAM	36	0	18.32	18.30	18.42	
15	256QAM	36	20	18.48	18.38	18.42	19.5
15	256QAM	36	39	18.30	18.50	18.56	
15	256QAM	75	0	18.35	18.36	18.33	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	23.73	23.78	23.62	24.5
10	QPSK	1	25	23.47	23.65	23.55	
10	QPSK	1	49	23.42	23.61	23.40	
10	QPSK	25	0	22.57	22.68	22.60	
10	QPSK	25	12	22.36	22.63	22.60	23.5
10	QPSK	25	25	22.51	22.53	22.64	
10	QPSK	50	0	22.50	22.41	22.54	
10	16QAM	1	0	22.76	22.79	22.85	
10	16QAM	1	25	22.65	22.68	22.75	23.5
10	16QAM	1	49	22.61	22.71	22.63	
10	16QAM	25	0	21.57	21.62	21.57	
10	16QAM	25	12	21.51	21.38	21.50	
10	16QAM	25	25	21.46	21.47	21.61	22.5
10	16QAM	50	0	21.30	21.48	21.35	
10	64QAM	1	0	21.79	21.81	21.74	
10	64QAM	1	25	21.68	21.74	21.67	
10	64QAM	1	49	21.69	21.71	21.62	22.5
10	64QAM	25	0	20.60	20.61	20.71	
10	64QAM	25	12	20.44	20.46	20.57	
10	64QAM	25	25	20.48	20.53	20.50	
10	64QAM	50	0	20.37	20.47	20.39	21.5
10	256QAM	1	0	18.49	18.66	18.50	
10	256QAM	1	25	18.26	18.49	18.39	
10	256QAM	1	49	18.50	18.53	18.46	
10	256QAM	25	0	18.35	18.35	18.51	
10	256QAM	25	12	18.55	18.50	18.45	19.5
10	256QAM	25	25	18.40	18.47	18.56	
10	256QAM	50	0	18.44	18.42	18.38	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.66	23.68	23.67	24.5
5	QPSK	1	12	23.56	23.58	23.58	
5	QPSK	1	24	23.51	23.53	23.45	
5	QPSK	12	0	22.70	22.76	22.71	
5	QPSK	12	7	22.65	22.71	22.66	23.5

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	23.76	23.81	23.74	24.5
20	QPSK	1	49	23.66	23.72	23.66	
20	QPSK	1	99	23.51	23.66	23.57	
20	QPSK	50	0	22.78	22.80	22.75	
20	QPSK	50	24	22.67	22.68	22.62	23.5
20	QPSK	50	50	22.71	22.73	22.68	
20	QPSK	100	0	22.56	22.57	22.50	
20	16QAM	1	0	22.83	22.94	22.90	
20	16QAM	1	49	22.68	22.86	22.85	23.5
20	16QAM	1	99	22.87	22.91	22.88	
20	16QAM	50	0	21.75	21.77	21.76	
20	16QAM	50	24	21.61	21.64	21.66	
20	16QAM	50	50	21.69	21.74	21.70	22.5
20	16QAM	100	0	21.52	21.66	21.61	
20	64QAM	1	0	21.78	21.91	21.81	
20	64QAM	1	49	21.65	21.82	21.69	
20	64QAM	1	99	21.56	21.74	21.68	22.5
20	64QAM	50	0	20.79	20.86	20.78	
20	64QAM	50	24	20.63	20.72	20.70	
20	64QAM	50	50	20.75	20.68	20.67	
20	64QAM	100	0	20.55	20.52	20.61	21.5
20	256QAM	1	0	18.37	18.41	18.47	
20	256QAM	1	49	18.25	18.36	18.30	
20	256QAM	1	99	18.39	18.34	18.36	
20	256QAM	50	0	18.12	18.25	18.31	
20	256QAM	50	24	18.39	18.32	18.41	19.5
20	256QAM	50	50	18.33	18.31	18.42	
20	256QAM	100	0	18.32	18.26	18.22	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	23.70	23.72	23.52	24.5
15	QPSK	1	37	23.52	23.56	23.34	
15	QPSK	1	74	23.45	23.61	23.42	
15	QPSK	36	0	22.68	22.78	22.60	
15	QPSK	36	20	22.57	22.50	22.52	23.5
15	QPSK	36	39	22.67	22.63	22.51	
15	QPSK	75	0	22.47	22.45	22.43	
15	16QAM	1	0	22.66	22.83	22.76	
15	16QAM	1	37	22.63	22.82	22.74	23.5
15	16QAM	1	74	22.81	22.82	22.82	
15	16QAM	36	0	21.62	21.65	21.58	
15	16QAM	36	20	21.53	21.58	21.48	
15	16QAM	36	39	21.60	21.60	21.59	22.5
15	16QAM	75	0	21.35	21.52	21.47	
15	64QAM	1	0	21.68	21.81	21.61	
15	64QAM	1	37	21.52	21.74	21.61	
15	64QAM	1	74	21.36	21.58	21.50	22.5
15	64QAM	36	0	20.70	20.67	20.61	
15	64QAM	36	20	20.52	20.58	20.59	
15	64QAM	36	39	20.68	20.62	20.54	
15	64QAM	75	0	20.45	20.44	20.53	21.5
15	256QAM	1	0	18.22	18.35	18.42	
15	256QAM	1	37	18.19	18.30	18.16	
15	256QAM	1	74	18.27	18.24	18.25	
15	256QAM	36	0	17.99	18.14	18.17	
15	256QAM	36	20	18.24	18.21	18.30	19.5
15	256QAM	36	39	18.23	18.29	18.38	
15	256QAM	75	0	18.27	18.08	18.14	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	23.65	23.67	23.52	24.5
10	QPSK	1	25	23.56	23.63	23.29	
10	QPSK	1	49	23.34	23.48	23.45	
10	QPSK	25	0	22.68	22.62	22.62	
10	QPSK	25	12	22.59	22.54	22.58	23.5
10	QPSK	25	25	22.53	22.61	22.53	
10	QPSK	50	0	22.45	22.53	22.33	
10	16QAM	1	0	22.75	22.90	22.77	
10	16QAM	1	25	22.65	22.71	22.77	23.5
10	16QAM	1	49	22.71	22.82	22.81	
10	16QAM	25	0	21.85	21.64	21.56	
10	16QAM	25	12	21.51	21.53	21.59	
10	16QAM	25	25	21.54	21.56	21.50	22.5
10	16QAM	50	0	21.35	21.51	21.52	
10	64QAM	1	0	21.63	21.80	21.67	
10	64QAM	1	25	21.59	21.69	21.51	
10	64QAM	1	49	21.38	21.55	21.48	22.5
10	64QAM	25	0	20.68	20.70	20.71	
10	64QAM	25	12	20.54	20.56	20.59	
10	64QAM	25	25	20.61	20.54	20.50	
10	64QAM	50	0	20.42	20.34	20.43	21.5
10	256QAM	1	0	18.35	18.39	18.43	
10	256QAM	1	25	18.14	18.18	18.20	
10	256QAM	1	49	18.31	18.17	18.24	
10	256QAM	25	0	17.99	18.07	18.18	
10	256QAM	25	12	18.28	18.17	18.34	19.5
10	256QAM	25	25	18.26	18.23	18.34	
10	256QAM	50	0	18.21	18.09	18.15	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.66	23.69	23.47	24.5
5	QPSK	1	12	23.59	23.67	23.32	
5	QPSK	1	24	23.38	23.57	23.48	
5	QPSK	12	0	22.62	22.72	22.69	
5	QPSK	12	7	22.50	22.53	22.44	23.5

5	QPSK	12	13	22.61	22.66	22.63	23.5
5	QPSK	25	0	22.48	22.44	22.64	
5	16QAM	1	0	22.75	22.92	22.83	
5	16QAM	1	12	22.75	22.83	22.82	
5	16QAM	1	24	22.72	22.76	22.75	22.5
5	16QAM	12	0	21.50	21.62	21.63	
5	16QAM	12	7	21.39	21.37	21.50	
5	16QAM	12	13	21.55	21.53	21.50	
5	16QAM	25	0	21.40	21.50	21.41	22.5
5	64QAM	1	0	21.83	21.88	21.73	
5	64QAM	1	12	21.61	21.76	21.64	
5	64QAM	1	24	21.65	21.72	21.69	
5	64QAM	12	0	20.64	20.56	20.59	21.5
5	64QAM	12	7	20.41	20.46	20.53	
5	64QAM	12	13	20.54	20.57	20.50	
5	64QAM	25	0	20.41	20.41	20.48	
5	256QAM	1	0	18.59	18.64	18.57	19.5
5	256QAM	1	12	18.24	18.51	18.44	
5	256QAM	1	24	18.50	18.46	18.40	
5	256QAM	12	0	18.29	18.23	18.54	
5	256QAM	12	7	18.52	18.43	18.47	19.5
5	256QAM	12	13	18.41	18.48	18.56	
5	256QAM	25	0	18.46	18.33	18.39	
Channel				18015	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.71	23.75	23.69	24.5
3	QPSK	1	8	23.51	23.62	23.64	
3	QPSK	1	14	23.48	23.56	23.35	
3	QPSK	8	0	22.57	22.65	22.59	
3	QPSK	8	4	22.44	22.51	22.60	23.5
3	QPSK	8	7	22.51	22.59	22.58	
3	QPSK	15	0	22.51	22.44	22.59	
3	16QAM	1	0	22.76	22.84	22.70	
3	16QAM	1	8	22.55	22.78	22.84	23.5
3	16QAM	1	14	22.48	22.77	22.65	
3	16QAM	8	0	21.48	21.57	21.57	
3	16QAM	8	4	21.43	21.38	21.47	
3	16QAM	8	7	21.47	21.53	21.53	22.5
3	16QAM	15	0	21.38	21.53	21.44	
3	64QAM	1	0	21.73	21.84	21.83	
3	64QAM	1	8	21.68	21.76	21.63	
3	64QAM	1	14	21.63	21.81	21.66	21.5
3	64QAM	8	0	20.50	20.63	20.70	
3	64QAM	8	4	20.49	20.39	20.58	
3	64QAM	8	7	20.50	20.58	20.55	
3	64QAM	15	0	20.39	20.46	20.48	19.5
3	256QAM	1	0	18.59	18.61	18.59	
3	256QAM	1	8	18.24	18.44	18.46	
3	256QAM	1	14	18.44	18.41	18.47	
3	256QAM	8	0	18.22	18.32	18.38	
3	256QAM	8	4	18.52	18.41	18.44	19.5
3	256QAM	8	7	18.40	18.46	18.51	
3	256QAM	15	0	18.37	18.47	18.39	
Channel				18807	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.68	23.69	23.65	24.5
1.4	QPSK	1	3	23.58	23.64	23.61	
1.4	QPSK	1	5	23.40	23.53	23.42	
1.4	QPSK	3	0	23.54	23.66	23.58	
1.4	QPSK	3	1	23.37	23.64	23.57	23.5
1.4	QPSK	3	3	23.48	23.54	23.51	
1.4	QPSK	6	0	22.76	22.74	22.79	
1.4	16QAM	1	0	22.77	22.89	22.83	
1.4	16QAM	1	3	22.63	22.71	22.75	23.5
1.4	16QAM	1	5	22.69	22.75	22.72	
1.4	16QAM	3	0	22.69	22.63	22.62	
1.4	16QAM	3	1	22.62	22.55	22.52	
1.4	16QAM	3	3	22.62	22.58	22.69	22.5
1.4	16QAM	6	0	21.51	21.51	21.51	
1.4	64QAM	1	0	21.86	21.79	21.73	
1.4	64QAM	1	3	21.61	21.68	21.72	
1.4	64QAM	1	5	21.75	21.75	21.64	22.5
1.4	64QAM	3	0	21.53	21.68	21.65	
1.4	64QAM	3	1	21.49	21.48	21.50	
1.4	64QAM	3	3	21.54	21.47	21.51	
1.4	64QAM	6	0	20.38	20.47	20.40	21.5
1.4	256QAM	1	0	18.63	18.53	18.53	
1.4	256QAM	1	3	18.33	18.43	18.33	
1.4	256QAM	1	5	18.38	18.44	18.47	
1.4	256QAM	3	0	18.20	18.24	18.46	
1.4	256QAM	3	1	18.50	18.43	18.57	19.5
1.4	256QAM	3	3	18.45	18.38	18.57	
1.4	256QAM	6	0	18.42	18.37	18.29	

5	QPSK	12	13	22.62	22.62	22.62	23.5
5	QPSK	25	0	22.44	22.43	22.35	
5	16QAM	1	0	22.70	22.76	22.86	
5	16QAM	1	12	22.62	22.84	22.74	
5	16QAM	1	24	22.75	22.88	22.82	22.5
5	16QAM	12	0	21.57	21.61	21.68	
5	16QAM	12	7	21.54	21.53	21.47	
5	16QAM	12	13	21.58	21.59	21.57	
5	16QAM	25	0	21.39	21.51	21.53	22.5
5	64QAM	1	0	21.71	21.73	21.69	
5	64QAM	1	12	21.51	21.68	21.55	
5	64QAM	1	24	21.50	21.54	21.52	
5	64QAM	12	0	20.71	20.71	20.63	21.5
5	64QAM	12	7	20.44	20.57	20.62	
5	64QAM	12	13	20.57	20.62	20.59	
5	64QAM	25	0	20.38	20.38	20.53	
5	256QAM	1	0	18.24	18.37	18.39	19.5
5	256QAM	1	12	18.14	18.32	18.17	
5	256QAM	1	24	18.24	18.20	18.32	
5	256QAM	12	0	17.99	18.22	18.18	
5	256QAM	12	7	18.22	18.30	18.27	19.5
5	256QAM	12	13	18.17	18.29	18.30	
5	256QAM	25	0	18.22	18.14	18.10	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	23.64	23.65	23.47	24.5
3	QPSK	1	8	23.50	23.57	23.28	
3	QPSK	1	14	23.38	23.53	23.42	
3	QPSK	8	0	22.72	22.69	22.66	
3	QPSK	8	4	22.57	22.52	22.45	23.5
3	QPSK	8	7	22.63	22.59	22.55	
3	QPSK	15	0	22.53	22.52	22.38	
3	16QAM	1	0	22.77	22.77	22.76	
3	16QAM	1	8	22.64	22.70	22.80	23.5
3	16QAM	1	14	22.75	22.73	22.74	
3	16QAM	8	0	21.66	21.64	21.70	
3	16QAM	8	4	21.53	21.51	21.57	
3	16QAM	8	7	21.58	21.56	21.52	22.5
3	16QAM	15	0	21.46	21.56	21.47	
3	64QAM	1	0	21.70	21.75	21.61	
3	64QAM	1	8	21.51	21.65	21.58	
3	64QAM	1	14	21.39	21.60	21.57	21.5
3	64QAM	8	0	20.59	20.71	20.66	
3	64QAM	8	4	20.47	20.53	20.58	
3	64QAM	8	7	20.64	20.48	20.54	
3	64QAM	15	0	20.37	20.39	20.41	19.5
3	256QAM	1	0	18.19	18.39	18.30	
3	256QAM	1	8	18.18	18.32	18.24	
3	256QAM	1	14	18.30	18.24	18.34	
3	256QAM	8	0	18.04	18.07	18.19	19.5
3	256QAM	8	4	18.37	18.15	18.36	
3	256QAM	8	7	18.22	18.22	18.39	
3	256QAM	15	0	18.26	18.14	18.08	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.68	23.70	23.50	24.5
1.4	QPSK	1	3	23.54	23.65	23.38	
1.4	QPSK	1	5	23.34	23.64	23.44	
1.4	QPSK	3	0	23.63	23.62	23.60	
1.4	QPSK	3	1	23.62	23.64	23.60	23.5
1.4	QPSK	3	3	23.59	23.58	23.50	
1.4	QPSK	6	0	22.52	22.40	22.35	
1.4	16QAM	1	0	22.76	22.82	22.87	
1.4	16QAM	1	3	22.51	22.70	22.81	23.5
1.4	16QAM	1	5	22.84	22.85	22.76	
1.4	16QAM	3	0	22.67	22.58	22.68	
1.4	16QAM	3	1	22.54	22.48	22.53	
1.4	16QAM	3	3	22.50	22.59	22.58	22.5
1.4	16QAM	6	0	21.41	21.53	21.45	
1.4	64QAM	1	0	21.67	21.85	21.75	
1.4	64QAM	1	3	21.56	21.75	21.59	
1.4	64QAM	1	5	21.47	21.56	21.58	22.5
1.4	64QAM	3	0	21.64	21.65	21.60	
1.4	64QAM	3	1	21.45	21.54	21.59	
1.4	64QAM	3	3	21.61	21.48	21.55	
1.4	64QAM	6	0	20.44	20.43	20.42	21.5
1.4	256QAM	1	0	18.26	18.30	18.45	
1.4	256QAM	1	3	18.11	18.28	18.27	
1.4	256QAM	1	5	18.30	18.31	18.21	
1.4	256QAM	3	0	18.04	18.13	18.22	
1.4	256QAM	3	1	18.35	18.30	18.29	19.5
1.4	256QAM	3	3	18.31	18.22	18.37	
1.4	256QAM	6	0	18.26	18.24	18.06	

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	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	24.34	24.37	24.29	25
10	QPSK	1	25	24.21	24.35	24.20	
10	QPSK	1	49	24.30	24.22	24.33	
10	QPSK	25	0	23.34	23.43	23.32	
10	QPSK	25	12	23.18	23.37	23.30	24
10	QPSK	25	25	23.31	23.35	23.26	
10	QPSK	50	0	23.18	23.21	23.10	
10	16QAM	1	0	23.45	23.47	23.44	
10	16QAM	1	25	23.46	23.48	23.38	24
10	16QAM	1	49	23.36	23.41	23.28	
10	16QAM	25	0	22.31	22.36	22.27	
10	16QAM	25	12	22.25	22.19	22.07	
10	16QAM	25	25	22.33	22.32	22.23	23
10	16QAM	50	0	22.24	22.18	22.03	
10	64QAM	1	0	22.67	22.77	22.35	
10	64QAM	1	25	22.59	22.71	22.30	
10	64QAM	1	49	22.56	22.62	22.55	23
10	64QAM	25	0	21.27	21.30	21.25	
10	64QAM	25	12	21.11	21.12	21.09	
10	64QAM	25	25	21.24	21.28	21.21	
10	64QAM	50	0	21.18	21.18	21.15	22
10	256QAM	1	0	19.01	19.07	19.03	
10	256QAM	1	25	18.94	18.99	18.89	
10	256QAM	1	49	19.02	18.99	18.92	
10	256QAM	25	0	18.91	18.95	18.82	
10	256QAM	25	12	18.75	18.68	18.64	20
10	256QAM	25	25	18.87	18.80	18.89	
10	256QAM	50	0	18.78	18.79	18.81	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	24.29	24.35	24.23	25
5	QPSK	1	12	24.07	24.30	24.05	
5	QPSK	1	24	24.19	24.27	24.24	
5	QPSK	12	0	23.20	23.25	23.18	
5	QPSK	12	7	23.05	23.19	23.17	24
5	QPSK	12	13	23.13	23.33	23.22	
5	QPSK	25	0	23.17	23.14	23.06	
5	16QAM	1	0	23.40	23.50	23.38	
5	16QAM	1	12	23.32	23.38	23.23	24
5	16QAM	1	24	23.32	23.30	23.15	
5	16QAM	12	0	22.20	22.27	22.12	
5	16QAM	12	7	22.07	22.10	21.98	
5	16QAM	12	13	22.23	22.14	22.08	23
5	16QAM	25	0	22.06	22.09	21.93	
5	64QAM	1	0	22.49	22.61	22.30	
5	64QAM	1	12	22.49	22.54	22.24	
5	64QAM	1	24	22.42	22.51	22.39	23
5	64QAM	12	0	21.14	21.11	21.08	
5	64QAM	12	7	20.92	20.93	20.93	
5	64QAM	12	13	21.10	21.16	21.01	
5	64QAM	25	0	21.09	21.05	21.08	22
5	256QAM	1	0	18.86	18.98	18.86	
5	256QAM	1	12	18.90	18.89	18.81	
5	256QAM	1	24	18.99	18.81	18.83	
5	256QAM	12	0	18.84	18.83	18.64	
5	256QAM	12	7	18.63	18.62	18.52	20
5	256QAM	12	13	18.70	18.74	18.83	
5	256QAM	25	0	18.72	18.67	18.63	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	24.28	24.31	24.11	25
3	QPSK	1	8	24.15	24.22	24.17	
3	QPSK	1	14	24.24	24.28	24.30	
3	QPSK	8	0	23.26	23.26	23.27	
3	QPSK	8	4	23.16	23.21	23.13	24
3	QPSK	8	7	23.25	23.24	23.23	
3	QPSK	15	0	23.04	23.08	23.02	
3	16QAM	1	0	23.38	23.44	23.31	
3	16QAM	1	8	23.41	23.30	23.23	24
3	16QAM	1	14	23.26	23.24	23.26	
3	16QAM	8	0	22.24	22.22	22.12	
3	16QAM	8	4	22.05	21.99	21.95	
3	16QAM	8	7	22.14	22.24	22.04	23
3	16QAM	15	0	22.12	22.09	21.88	
3	64QAM	1	0	22.60	22.61	22.20	
3	64QAM	1	8	22.43	22.58	22.11	
3	64QAM	1	14	22.39	22.44	22.43	23
3	64QAM	8	0	21.17	21.14	21.08	
3	64QAM	8	4	21.05	21.02	20.93	
3	64QAM	8	7	21.13	21.21	21.11	
3	64QAM	15	0	21.05	21.07	21.03	22
3	256QAM	1	0	18.98	18.94	19.00	
3	256QAM	1	8	18.84	18.88	18.76	
3	256QAM	1	14	18.99	18.94	18.77	
3	256QAM	8	0	18.83	18.87	18.72	
3	256QAM	8	4	18.57	18.52	18.50	20
3	256QAM	8	7	18.70	18.71	18.62	
3	256QAM	15	0	18.72	18.77	18.71	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	24.26	24.27	24.11	25
1.4	QPSK	1	3	24.16	24.24	24.09	
1.4	QPSK	1	5	24.19	24.25	24.24	
1.4	QPSK	3	0	23.25	23.25	23.16	
1.4	QPSK	3	1	23.12	23.19	23.25	

Band 12 (700MHz Low Band) (dBm) Part 27F(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	24.02	24.13	23.95	25
10	QPSK	1	25	23.98	24.03	23.79	
10	QPSK	1	49	23.92	24.10	24.05	
10	QPSK	25	0	23.16	23.17	23.06	
10	QPSK	25	12	23.13	23.15	22.90	24
10	QPSK	25	25	23.11	23.12	23.08	
10	QPSK	50	0	23.04	23.06	23.01	
10	16QAM	1	0	23.42	23.47	23.35	
10	16QAM	1	25	23.26	23.31	23.27	24
10	16QAM	1	49	23.17	23.30	23.16	
10	16QAM	25	0	22.07	22.17	22.14	
10	16QAM	25	12	21.93	22.02	22.01	23
10	16QAM	25	25	22.11	22.15	22.10	
10	16QAM	50	0	21.92	22.01	22.01	
10	64QAM	1	0	22.33	22.40	22.32	
10	64QAM	1	25	22.24	22.20	22.20	23
10	64QAM	1	49	22.15	22.23	22.04	
10	64QAM	25	0	21.08	21.19	21.14	
10	64QAM	25	12	21.06	20.97	20.95	22
10	64QAM	25	25	21.17	21.06	21.04	
10	64QAM	50	0	21.06	20.90	20.93	
10	256QAM	1	0	18.93	19.05	19.01	
10	256QAM	1	25	18.91	18.90	18.73	20
10	256QAM	1	49	18.91	18.98	18.90	
10	256QAM	25	0	18.88	18.98	18.69	
10	256QAM	25	12	18.61	18.64	18.57	
10	256QAM	25	25	18.69	18.70	18.73	20
10	256QAM	50	0	18.74	18.75	18.71	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.94	24.06	23.79	25
5	QPSK	1	12	23.81	23.97	23.67	
5	QPSK	1	24	23.85	23.96	23.97	
5	QPSK	12	0	23.06	23.09	23.05	
5	QPSK	12	7	23.03	23.13	23.07	24
5	QPSK	12	13	23.01	23.03	23.04	
5	QPSK	25	0	23.02	23.01	23.04	
5	16QAM	1	0	23.27	23.29	23.23	
5	16QAM	1	12	23.09	23.19	23.25	24
5	16QAM	1	24	23.00	23.17	23.13	
5	16QAM	12	0	21.87	22.09	21.97	
5	16QAM	12	7	21.83	21.92	21.94	
5	16QAM	12	13	22.00	21.95	21.93	23
5	16QAM	25	0	21.77	21.83	21.84	
5	64QAM	1	0	22.14	22.33	22.18	
5	64QAM	1	12	22.05	22.09	22.03	
5	64QAM	1	24	22.01	22.16	21.93	23
5	64QAM	12	0	20.90	21.09	21.03	
5	64QAM	12	7	20.99	20.84	20.82	
5	64QAM	12	13	21.09	20.96	20.96	
5	64QAM	25	0	20.96	20.70	20.86	22
5	256QAM	1	0	18.80	19.03	18.92	
5	256QAM	1	12	18.74	18.73	18.64	
5	256QAM	1	24	18.76	18.88	18.88	
5	256QAM	12	0	18.73	18.95	18.56	
5	256QAM	12	7	18.50	18.57	18.52	20
5	256QAM	12	13	18.56	18.53	18.64	
5	256QAM	25	0	18.62	18.57	18.66	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	24.00	24.03	23.82	25
3	QPSK	1	8	23.96	23.96	23.77	
3	QPSK	1	14	23.90	23.99	23.98	
3	QPSK	8	0	23.00	23.11	23.09	
3	QPSK	8	4	23.03	23.06	23.05	24
3	QPSK	8	7	23.05	23.10	23.01	
3	QPSK	15	0	23.02	23.09	23.05	
3	16QAM	1	0	23.34	23.39	23.27	
3	16QAM	1	8	23.09	23.26	23.15	24
3	16QAM	1	14	23.02	23.13	23.08	
3	16QAM	8	0	21.89	22.11	22.00	
3	16QAM	8	4	21.86	21.94	21.83	
3	16QAM	8	7	22.01	22.01	21.99	23
3	16QAM	15	0	21.85	21.94	21.83	
3	64QAM	1	0	22.18	22.22	22.24	
3	64QAM	1	8	22.15	22.12	22.08	23
3	64QAM	1	14	21.97	22.13	21.85	
3	64QAM	8	0	20.98	21.13	21.04	
3	64QAM	8	4	20.86	20.86	20.75	
3	64QAM	8	7	21.10	20.96	20.95	22
3	64QAM	15	0	20.88	20.75	20.86	
3	256QAM	1	0	18.90	19.00	18.91	
3	256QAM	1	8	18.73	18.74	18.70	20
3	256QAM	1	14	18.82	18.84	18.77	
3	256QAM	8	0	18.70	18.83	18.65	
3	256QAM	8	4	18.51	18.50	18.53	
3	256QAM	8	7	18.65	18.62	18.70	20
3	256QAM	15	0	18.68	18.68	18.58	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.87	24.00	23.85	25
1.4	QPSK	1	3	23.91	23.98	23.77	
1.4	QPSK	1	5	23.82	23.95	23.89	
1.4	QPSK	3	0	23.09	23.11	23.02	
1.4	QPSK	3	1	23.03	23.08	22.81	

1.4	QPSK	3	3	23.21	23.21	23.22	
1.4	QPSK	6	0	23.09	23.05	23.03	24
1.4	16QAM	1	0	23.41	23.42	23.28	
1.4	16QAM	1	3	23.37	23.38	23.32	
1.4	16QAM	1	5	23.24	23.26	23.26	
1.4	16QAM	3	0	22.16	22.17	22.17	24
1.4	16QAM	3	1	22.14	22.08	22.01	
1.4	16QAM	3	3	22.25	22.16	22.08	
1.4	16QAM	6	0	22.14	22.02	21.83	23
1.4	64QAM	1	0	22.59	22.59	22.25	
1.4	64QAM	1	3	22.53	22.63	22.15	
1.4	64QAM	1	5	22.38	22.47	22.38	
1.4	64QAM	3	0	21.16	21.22	21.06	23
1.4	64QAM	3	1	21.08	21.02	21.00	
1.4	64QAM	3	3	21.10	21.15	21.05	
1.4	64QAM	6	0	21.06	21.11	21.02	22
1.4	256QAM	1	0	18.89	18.98	18.91	
1.4	256QAM	1	3	18.84	18.82	18.86	
1.4	256QAM	1	5	18.86	18.88	18.79	
1.4	256QAM	3	0	18.84	18.90	18.70	20
1.4	256QAM	3	1	18.66	18.60	18.51	
1.4	256QAM	3	3	18.85	18.68	18.79	
1.4	256QAM	6	0	18.74	18.73	18.64	20

1.4	QPSK	3	3	23.09	23.04	23.01	
1.4	QPSK	6	0	22.87	22.93	22.96	24
1.4	16QAM	1	0	23.36	23.40	23.20	
1.4	16QAM	1	3	23.08	23.19	23.19	
1.4	16QAM	1	5	23.02	23.16	22.99	
1.4	16QAM	3	0	22.00	22.08	21.97	24
1.4	16QAM	3	1	21.82	21.88	21.92	
1.4	16QAM	3	3	21.91	22.08	21.97	
1.4	16QAM	6	0	21.77	21.95	21.94	23
1.4	64QAM	1	0	22.20	22.25	22.14	
1.4	64QAM	1	3	22.18	22.11	22.01	
1.4	64QAM	1	5	22.05	22.04	21.92	
1.4	64QAM	3	0	20.94	21.12	21.00	23
1.4	64QAM	3	1	20.89	20.77	20.81	
1.4	64QAM	3	3	21.07	20.88	20.84	
1.4	64QAM	6	0	20.95	20.82	20.83	22
1.4	256QAM	1	0	18.78	18.98	18.93	
1.4	256QAM	1	3	18.85	18.85	18.62	
1.4	256QAM	1	5	18.89	18.91	18.86	
1.4	256QAM	3	0	18.81	18.95	18.59	20
1.4	256QAM	3	1	18.49	18.50	18.48	
1.4	256QAM	3	3	18.64	18.61	18.61	
1.4	256QAM	6	0	18.69	18.67	18.64	20

Band 14 (700MHz Band) (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		24.40		25
10	QPSK	1	25		24.39		
10	QPSK	1	49		24.33		
10	QPSK	25	0		23.49		
10	QPSK	25	12		23.47		24
10	QPSK	25	25		23.45		
10	QPSK	50	0		23.46		
10	16QAM	1	0		23.44		
10	16QAM	1	25		23.48		24
10	16QAM	1	49		23.44		
10	16QAM	25	0		22.51		
10	16QAM	25	12		22.49		
10	16QAM	25	25		22.42		23
10	16QAM	50	0		22.46		
10	64QAM	1	0		22.69		
10	64QAM	1	25		22.49		
10	64QAM	1	49		22.54		23
10	64QAM	25	0		21.45		
10	64QAM	25	12		21.51		
10	64QAM	25	25		21.43		
10	64QAM	50	0		21.67		22
10	256QAM	1	0		19.09		
10	256QAM	1	25		18.95		
10	256QAM	1	49		19.04		
10	256QAM	25	0		19.02		20
10	256QAM	25	12		18.88		
10	256QAM	25	25		18.84		
10	256QAM	50	0		18.87		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	24.30	24.31	24.25	25
5	QPSK	1	12	24.28	24.26	24.29	
5	QPSK	1	24	24.28	24.21	24.24	
5	QPSK	12	0	23.32	23.37	23.40	
5	QPSK	12	7	23.35	23.31	23.38	24
5	QPSK	12	13	23.35	23.35	23.37	
5	QPSK	25	0	23.39	23.38	23.40	
5	16QAM	1	0	23.40	23.39	23.39	
5	16QAM	1	12	23.36	23.31	23.45	24
5	16QAM	1	24	23.31	23.36	23.40	
5	16QAM	12	0	22.36	22.39	22.41	
5	16QAM	12	7	22.38	22.41	22.39	
5	16QAM	12	13	22.25	22.22	22.36	23
5	16QAM	25	0	22.39	22.31	22.32	
5	64QAM	1	0	22.60	22.50	22.57	
5	64QAM	1	12	22.43	22.35	22.40	
5	64QAM	1	24	22.44	22.46	22.43	23
5	64QAM	12	0	21.33	21.35	21.34	
5	64QAM	12	7	21.42	21.38	21.43	
5	64QAM	12	13	21.24	21.25	21.32	
5	64QAM	25	0	21.39	21.36	21.32	22
5	256QAM	1	0	18.89	19.01	18.90	
5	256QAM	1	12	18.85	18.87	18.63	
5	256QAM	1	24	18.73	18.92	18.85	
5	256QAM	12	0	18.85	18.94	18.62	20
5	256QAM	12	7	18.43	18.62	18.49	
5	256QAM	12	13	18.52	18.66	18.55	
5	256QAM	25	0	18.72	18.72	18.58	

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	24.02	24.11	24.10	25
10	QPSK	1	25	23.88	24.08	23.98	
10	QPSK	1	49	23.89	24.07	23.92	
10	QPSK	25	0	23.13	23.17	23.14	
10	QPSK	25	12	23.04	23.05	23.11	24
10	QPSK	25	25	23.15	23.12	23.13	
10	QPSK	50	0	23.03	23.00	23.05	
10	16QAM	1	0	23.22	23.25	23.17	
10	16QAM	1	25	23.15	23.11	23.01	24
10	16QAM	1	49	23.16	23.18	23.05	
10	16QAM	25	0	22.09	22.33	22.23	
10	16QAM	25	12	21.94	22.06	22.14	
10	16QAM	25	25	22.11	22.18	22.06	23
10	16QAM	50	0	21.93	22.07	21.98	
10	64QAM	1	0	22.14	22.28	22.18	
10	64QAM	1	25	22.06	22.10	22.05	
10	64QAM	1	49	22.06	22.25	22.15	23
10	64QAM	25	0	21.11	21.15	21.14	
10	64QAM	25	12	21.00	20.99	21.03	
10	64QAM	25	25	21.03	21.08	21.09	
10	64QAM	50	0	20.97	21.02	20.98	22
10	256QAM	1	0	19.01	19.08	19.07	
10	256QAM	1	25	18.91	18.89	19.01	
10	256QAM	1	49	18.89	19.01	18.96	
10	256QAM	25	0	18.85	18.84	18.95	20
10	256QAM	25	12	19.04	18.92	19.02	
10	256QAM	25	25	18.89	18.76	18.85	
10	256QAM	50	0	18.87	18.97	18.84	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.94	24.05	24.02	25
5	QPSK	1	12	23.80	24.03	23.83	
5	QPSK	1	24	23.80	23.90	23.90	
5	QPSK	12	0	23.09	23.15	23.11	
5	QPSK	12	7	23.06	23.07	23.04	24
5	QPSK	12	13	23.13	23.02	23.03	
5	QPSK	25	0	23.00	23.05	23.01	
5	16QAM	1	0	23.05	23.12	23.01	
5	16QAM	1	12	23.05	23.03	23.02	24
5	16QAM	1	24	23.05	23.02	23.00	
5	16QAM	12	0	21.95	22.25	22.05	
5	16QAM	12	7	21.77	21.86	22.02	
5	16QAM	12	13	21.94	22.03	21.90	23
5	16QAM	25	0	21.77	21.91	21.91	
5	64QAM	1	0	21.94	22.11	21.99	
5	64QAM	1	12	21.97	21.92	21.90	
5	64QAM	1	24	21.94	22.14	21.95	23
5	64QAM	12	0	20.92	20.97	21.02	
5	64QAM	12	7	20.92	20.86	20.91	
5	64QAM	12	13	20.89	20.88	20.89	
5	64QAM	25	0	20.88	20.86	20.81	22
5	256QAM	1	0	18.88	19.01	18.99	
5	256QAM	1	12	18.82	18.85	18.90	
5	256QAM	1	24	18.81	18.95	18.90	
5	256QAM	12	0	18.78	18.69	18.85	20
5	256QAM	12	7	19.00	18.83	18.95	
5	256QAM	12	13	18.85	18.73	18.72	
5	256QAM	25	0	18.76	18.81	18.76	

Band 30 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		23.76		24.5
10	QPSK	1	25		23.72		
10	QPSK	1	49		23.71		
10	QPSK	25	0		22.73		23.5
10	QPSK	25	12		22.71		
10	QPSK	25	25		22.69		
10	QPSK	50	0		22.68		23.5
10	16QAM	1	0		22.45		
10	16QAM	1	25		22.33		
10	16QAM	1	49		22.43		22.5
10	16QAM	25	0		21.72		
10	16QAM	25	12		21.67		
10	16QAM	25	25		21.63		22.5
10	16QAM	50	0		21.60		
10	64QAM	1	0		21.68		
10	64QAM	1	25		21.52		21.5
10	64QAM	1	49		21.62		
10	64QAM	25	0		20.82		
10	64QAM	25	12		20.75		19.5
10	64QAM	25	25		20.70		
10	64QAM	50	0		20.73		
10	256QAM	1	0		18.97		19.5
10	256QAM	1	25		18.77		
10	256QAM	1	49		18.87		
10	256QAM	25	0		18.76		19.5
10	256QAM	25	12		18.83		
10	256QAM	25	25		18.63		
10	256QAM	50	0		18.84		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.61	23.74	23.69	24.5
5	QPSK	1	12	23.60	23.62	23.67	
5	QPSK	1	24	23.61	23.65	23.54	
5	QPSK	12	0	22.67	22.69	22.64	23.5
5	QPSK	12	7	22.53	22.62	22.58	
5	QPSK	12	13	22.60	22.58	22.59	
5	QPSK	25	0	22.64	22.52	22.51	23.5
5	16QAM	1	0	22.29	22.42	22.33	
5	16QAM	1	12	22.28	22.26	22.21	
5	16QAM	1	24	22.25	22.40	22.36	22.5
5	16QAM	12	0	21.65	21.56	21.58	
5	16QAM	12	7	21.53	21.49	21.48	
5	16QAM	12	13	21.53	21.53	21.45	22.5
5	16QAM	25	0	21.52	21.47	21.52	
5	64QAM	1	0	21.54	21.62	21.53	
5	64QAM	1	12	21.35	21.40	21.43	21.5
5	64QAM	1	24	21.56	21.44	21.50	
5	64QAM	12	0	20.75	20.64	20.72	
5	64QAM	12	7	20.69	20.68	20.57	21.5
5	64QAM	12	13	20.51	20.50	20.60	
5	64QAM	25	0	20.61	20.54	20.54	
5	256QAM	1	0	18.86	18.92	18.89	19.5
5	256QAM	1	12	18.81	18.80	18.94	
5	256QAM	1	24	18.75	18.92	18.84	
5	256QAM	12	0	18.78	18.68	18.88	19.5
5	256QAM	12	7	18.94	18.90	18.99	
5	256QAM	12	13	18.78	18.59	18.75	
5	256QAM	25	0	18.69	18.94	18.86	

Band 48 (3.5G Band) (dBm)									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Middle-Low Channel	Middle-Low Channel	Middle-High Channel	High Channel	Tune-up limit (dBm)
Channel				55340	55830	55990	56150	56640	Tune-up limit (dBm)
Frequency (MHz)				3560	3609	3625	3641	3690	
20	QPSK	1	0	23.74	23.85	23.87	23.81	23.81	24.5
20	QPSK	1	49	23.57	23.75	23.73	23.63	23.64	
20	QPSK	1	99	23.57	23.73	23.71	23.66	23.63	
20	QPSK	50	0	22.73	22.84	22.88	22.71	22.83	
20	QPSK	50	24	22.56	22.76	22.74	22.62	22.69	23.5
20	QPSK	50	50	22.65	22.66	22.76	22.56	22.69	
20	QPSK	100	0	22.57	22.75	22.76	22.60	22.66	
20	16QAM	1	0	23.07	23.05	23.16	23.02	23.10	
20	16QAM	1	49	22.91	22.87	23.03	22.88	22.92	23.5
20	16QAM	1	99	22.98	22.97	22.98	22.92	22.98	
20	16QAM	50	0	21.73	21.76	21.77	21.79	21.89	
20	16QAM	50	24	21.58	21.59	21.61	21.62	21.74	
20	16QAM	50	50	21.60	21.61	21.64	21.61	21.73	22.5
20	16QAM	100	0	21.58	21.63	21.61	21.63	21.76	
20	64QAM	1	0	21.78	21.89	21.91	21.81	21.92	
20	64QAM	1	49	21.65	21.74	21.74	21.64	21.78	
20	64QAM	1	99	21.61	21.76	21.77	21.64	21.76	21.5
20	64QAM	50	0	20.71	20.69	20.74	20.65	20.85	
20	64QAM	50	24	20.56	20.54	20.59	20.50	20.74	
20	64QAM	50	50	20.55	20.52	20.59	20.49	20.72	
20	64QAM	100	0	20.56	20.52	20.61	20.47	20.71	19.5
20	256QAM	1	0	18.63	18.65	18.66	18.58	18.69	
20	256QAM	1	49	18.60	18.54	18.63	18.54	18.62	
20	256QAM	1	99	18.58	18.59	18.59	18.46	18.62	
20	256QAM	50	0	18.65	18.57	18.71	18.59	18.74	19.5
20	256QAM	50	24	18.60	18.58	18.57	18.55	18.78	
20	256QAM	50	50	18.53	18.53	18.63	18.49	18.78	
20	256QAM	100	0	18.53	18.56	18.64	18.52	18.68	
Channel				55315	55820	55990	56160	56665	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3608	3625	3642	3692.5	
15	QPSK	1	0	23.62	23.74	23.79	23.69	23.65	24.5
15	QPSK	1	37	23.42	23.61	23.61	23.48	23.46	
15	QPSK	1	74	23.40	23.62	23.63	23.56	23.49	
15	QPSK	36	0	22.57	22.75	22.71	22.63	22.75	
15	QPSK	36	20	22.39	22.60	22.61	22.49	22.52	23.5
15	QPSK	36	39	22.57	22.53	22.66	22.44	22.59	
15	QPSK	75	0	22.45	22.67	22.66	22.47	22.58	
15	16QAM	1	0	22.91	22.87	23.05	22.87	23.02	
15	16QAM	1	37	22.79	22.76	22.93	22.76	22.75	23.5
15	16QAM	1	74	22.80	22.84	22.85	22.78	22.80	
15	16QAM	36	0	21.56	21.58	21.62	21.61	21.71	
15	16QAM	36	20	21.44	21.46	21.46	21.48	21.59	
15	16QAM	36	39	21.43	21.48	21.51	21.48	21.59	22.5
15	16QAM	75	0	21.44	21.47	21.48	21.49	21.59	
15	64QAM	1	0	21.62	21.73	21.74	21.66	21.75	
15	64QAM	1	37	21.50	21.61	21.60	21.46	21.63	
15	64QAM	1	74	21.47	21.58	21.59	21.48	21.61	21.5
15	64QAM	36	0	20.53	20.55	20.56	20.52	20.72	
15	64QAM	36	20	20.40	20.40	20.46	20.34	20.59	
15	64QAM	36	39	20.41	20.37	20.43	20.32	20.58	
15	64QAM	75	0	20.42	20.34	20.48	20.30	20.57	19.5
15	256QAM	1	0	18.53	18.55	18.58	18.54	18.62	
15	256QAM	1	37	18.57	18.48	18.58	18.51	18.54	
15	256QAM	1	74	18.50	18.54	18.54	18.43	18.55	
15	256QAM	36	0	18.59	18.53	18.65	18.56	18.70	19.5
15	256QAM	36	20	18.50	18.53	18.51	18.45	18.75	
15	256QAM	36	39	18.45	18.49	18.54	18.46	18.69	
15	256QAM	75	0	18.46	18.46	18.55	18.43	18.65	
Channel				55290	55815	55990	56165	56690	Tune-up limit (dBm)
Frequency (MHz)				3555	3607.5	3625	3642.5	3695	
10	QPSK	1	0	23.60	23.76	23.77	23.72	23.67	24.5
10	QPSK	1	25	23.44	23.63	23.57	23.55	23.46	
10	QPSK	1	49	23.49	23.58	23.56	23.46	23.46	
10	QPSK	25	0	22.63	22.67	22.73	22.53	22.71	
10	QPSK	25	12	22.47	22.66	22.58	22.46	22.52	23.5
10	QPSK	25	25	22.54	22.49	22.66	22.39	22.61	
10	QPSK	50	0	22.48	22.59	22.62	22.42	22.57	
10	16QAM	1	0	22.89	22.87	23.05	22.85	23.01	
10	16QAM	1	25	22.83	22.72	22.91	22.72	22.84	23.5
10	16QAM	1	49	22.82	22.82	22.81	22.81	22.87	
10	16QAM	25	0	21.57	21.60	21.59	21.66	21.74	
10	16QAM	25	12	21.43	21.42	21.47	21.46	21.57	
10	16QAM	25	25	21.43	21.48	21.50	21.46	21.58	22.5
10	16QAM	50	0	21.41	21.45	21.44	21.46	21.58	
10	64QAM	1	0	21.61	21.73	21.75	21.68	21.79	
10	64QAM	1	25	21.50	21.60	21.58	21.49	21.65	
10	64QAM	1	49	21.44	21.58	21.61	21.50	21.63	21.5
10	64QAM	25	0	20.54	20.54	20.56	20.50	20.67	
10	64QAM	25	12	20.38	20.37	20.43	20.34	20.60	
10	64QAM	25	25	20.42	20.38	20.42	20.33	20.55	
10	64QAM	50	0	20.38	20.34	20.48	20.33	20.53	19.5
10	256QAM	1	0	18.53	18.60	18.59	18.46	18.59	
10	256QAM	1	25	18.53	18.44	18.59	18.49	18.56	
10	256QAM	1	49	18.52	18.54	18.51	18.39	18.52	
10	256QAM	25	0	18.55	18.53	18.65	18.55	18.71	19.5
10	256QAM	25	12	18.50	18.53	18.54	18.46	18.71	
10	256QAM	25	25	18.50	18.48	18.55	18.45	18.73	
10	256QAM	50	0	18.48	18.46	18.58	18.46	18.63	
Channel				55265	55810	55990	56170	56175	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3607	3625	3643	3697.5	
5	QPSK	1	0	23.66	23.69	23.75	23.63	23.71	24.5
5	QPSK	1	12	23.49	23.57	23.55	23.53	23.54	
5	QPSK	1	24	23.40	23.55	23.57	23.57	23.52	
5	QPSK	12	0	22.59	22.76	22.79	22.62	22.71	
5	QPSK	12	7	22.48	22.67	22.60	22.50	22.57	23.5
5	QPSK	12	13	22.55	22.52	22.58	22.44	22.59	
5	QPSK	25	0	22.41	22.67	22.64	22.52	22.51	
5	16QAM	1	0	22.98	22.96	23.00	22.87	23.01	
5	16QAM	1	12	22.80	22.75	22.90	22.80	22.83	23.5
5	16QAM	1	24	22.88	22.82	22.80	22.80	22.90	
5	16QAM	12	0	21.58	21.58	21.59	21.65	21.74	
5	16QAM	12	7	21.40	21.45	21.45	21.48	21.58	
5	16QAM	12	13	21.43	21.45	21.49	21.47	21.60	22.5
5	16QAM	25	0	21.42	21.50	21.48	21.49	21.60	
5	64QAM	1	0	21.64	21.76	21.75	21.66	21.76	
5	64QAM	1	12	21.52	21.61	21.60	21.46	21.63	
5	64QAM	1	24	21.45	21.58	21.54	21.47	21.62	21.5
5	64QAM	12	0	20.57	20.52	20.60	20.47	20.67	
5	64QAM	12	7	20.38	20.37	20.43	20.32	20.60	
5	64QAM	12	13	20.39	20.38	20.42	20.34	20.55	
5	64QAM	25	0	20.40	20.37	20.44	20.31	20.53	19.5
5	256QAM	1	0	18.56	18.56	18.59	18.50	18.59	
5	256QAM	1	12	18.50	18.48	18.58	18.49	18.55	
5	256QAM	1	24	18.52	18.51	18.51	18.39	18.56	
5	256QAM	12	0	18.60	18.51	18.67	18.55	18.70	
5	256QAM	12	7	18.56	18.50	18.48	18.47	18.68	19.5
5	256QAM	12	13	18.50	18.47	18.59	18.42	18.72	
5	256QAM	25	0	18.48	18.49	18.61	18.44	18.62	

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	23.80	23.85	23.78	24.5
20	QPSK	1	49	23.74	23.78	23.73	
20	QPSK	1	99	23.65	23.74	23.66	
20	QPSK	50	0	22.74	22.76	22.75	
20	QPSK	50	24	22.68	22.59	22.69	23.5
20	QPSK	50	50	22.69	22.71	22.66	
20	QPSK	100	0	22.54	22.66	22.58	
20	16QAM	1	0	22.98	23.01	22.93	
20	16QAM	1	49	22.93	22.94	22.91	23.5
20	16QAM	1	99	22.82	22.96	22.81	
20	16QAM	50	0	21.82	21.83	21.77	
20	16QAM	50	24	21.64	21.77	21.59	
20	16QAM	50	50	21.71	21.66	21.73	22.5
20	16QAM	100	0	21.51	21.46	21.67	
20	64QAM	1	0	22.01	22.03	21.91	
20	64QAM	1	49	21.91	21.94	21.79	
20	64QAM	1	99	21.78	21.97	21.91	22.5
20	64QAM	50	0	20.84	20.86	20.78	
20	64QAM	50	24	20.84	20.86	20.78	
20	64QAM	50	50	20.79	20.75	20.71	
20	64QAM	100	0	20.61	20.57	20.57	21.5
20	256QAM	1	0	18.64	18.76	18.72	
20	256QAM	1	49	18.57	18.53	18.80	
20	256QAM	1	99	18.69	18.71	18.69	
20	256QAM	50	0	18.52	18.59	18.71	19.5
20	256QAM	50	24	18.70	18.60	18.63	
20	256QAM	50	50	18.52	18.44	18.55	
20	256QAM	100	0	18.54	18.63	18.73	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.67	23.71	23.67	24.5
15	QPSK	1	37	23.66	23.69	23.61	
15	QPSK	1	74	23.53	23.64	23.61	
15	QPSK	36	0	22.69	22.72	22.68	
15	QPSK	36	20	22.60	22.48	22.66	23.5
15	QPSK	36	39	22.53	22.58	22.60	
15	QPSK	75	0	22.54	22.39	22.53	
15	16QAM	1	0	22.89	22.88	22.79	
15	16QAM	1	37	22.91	22.77	22.76	23.5
15	16QAM	1	74	22.71	22.93	22.70	
15	16QAM	36	0	21.64	21.70	21.57	
15	16QAM	36	20	21.52	21.62	21.49	
15	16QAM	36	39	21.63	21.46	21.66	22.5
15	16QAM	75	0	21.34	21.33	21.51	
15	64QAM	1	0	21.92	21.90	21.72	
15	64QAM	1	37	21.71	21.81	21.70	
15	64QAM	1	74	21.68	21.81	21.73	22.5
15	64QAM	36	0	20.73	20.67	20.65	
15	64QAM	36	20	20.70	20.76	20.64	
15	64QAM	36	39	20.63	20.65	20.63	
15	64QAM	75	0	20.46	20.39	20.38	21.5
15	256QAM	1	0	18.54	18.71	18.64	
15	256QAM	1	37	18.48	18.36	18.75	
15	256QAM	1	74	18.63	18.56	18.53	
15	256QAM	36	0	18.47	18.50	18.62	19.5
15	256QAM	36	20	18.56	18.42	18.52	
15	256QAM	36	39	18.36	18.38	18.52	
15	256QAM	75	0	18.39	18.60	18.71	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.73	23.77	23.64	24.5
10	QPSK	1	25	23.67	23.65	23.56	
10	QPSK	1	49	23.63	23.63	23.57	
10	QPSK	25	0	22.62	22.71	22.60	
10	QPSK	25	12	22.55	22.52	22.56	23.5
10	QPSK	25	25	22.52	22.64	22.61	
10	QPSK	50	0	22.56	22.50	22.53	
10	16QAM	1	0	22.80	22.94	22.76	
10	16QAM	1	25	22.80	22.90	22.74	23.5
10	16QAM	1	49	22.73	22.92	22.75	
10	16QAM	25	0	21.62	21.64	21.57	
10	16QAM	25	12	21.54	21.63	21.42	
10	16QAM	25	25	21.51	21.49	21.57	22.5
10	16QAM	50	0	21.45	21.37	21.49	
10	64QAM	1	0	21.89	21.97	21.82	
10	64QAM	1	25	21.82	21.84	21.62	
10	64QAM	1	49	21.70	21.77	21.80	22.5
10	64QAM	25	0	20.65	20.66	20.69	
10	64QAM	25	12	20.69	20.78	20.62	
10	64QAM	25	25	20.63	20.61	20.64	
10	64QAM	50	0	20.41	20.50	20.40	21.5
10	256QAM	1	0	18.53	18.58	18.54	
10	256QAM	1	25	18.50	18.41	18.65	
10	256QAM	1	49	18.56	18.59	18.51	
10	256QAM	25	0	18.42	18.57	18.59	19.5
10	256QAM	25	12	18.63	18.50	18.57	
10	256QAM	25	25	18.38	18.34	18.46	
10	256QAM	50	0	18.43	18.51	18.62	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.64	23.74	23.67	24.5
5	QPSK	1	12	23.65	23.68	23.55	
5	QPSK	1	24	23.50	23.66	23.61	
5	QPSK	12	0	22.70	22.71	22.57	
5	QPSK	12	7	22.51	22.41	22.65	24.5

5	QPSK	12	13	22.55	22.62	22.51	23.5
5	QPSK	25	0	22.64	22.51	22.44	
5	16QAM	1	0	22.88	22.94	22.79	
5	16QAM	1	12	22.76	22.86	22.76	
5	16QAM	1	24	22.79	22.94	22.70	22.5
5	16QAM	12	0	21.72	21.64	21.71	
5	16QAM	12	7	21.54	21.71	21.45	
5	16QAM	12	13	21.51	21.53	21.67	
5	16QAM	25	0	21.38	21.39	21.55	22.5
5	64QAM	1	0	21.94	21.87	21.73	
5	64QAM	1	12	21.72	21.80	21.62	
5	64QAM	1	24	21.71	21.88	21.76	
5	64QAM	12	0	20.78	20.66	20.58	21.5
5	64QAM	12	7	20.72	20.76	20.71	
5	64QAM	12	13	20.73	20.66	20.65	
5	64QAM	25	0	20.53	20.37	20.39	
5	256QAM	1	0	18.48	18.72	18.68	19.5
5	256QAM	1	12	18.47	18.45	18.78	
5	256QAM	1	24	18.54	18.59	18.58	
5	256QAM	12	0	18.40	18.54	18.53	
5	256QAM	12	7	18.55	18.56	18.59	19.5
5	256QAM	12	13	18.38	18.40	18.47	
5	256QAM	25	0	18.39	18.51	18.66	
Channel				131987	132322	132697	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	23.74	23.76	23.60	24.5
3	QPSK	1	8	23.70	23.73	23.58	
3	QPSK	1	14	23.49	23.60	23.54	
3	QPSK	8	0	22.60	22.69	22.58	
3	QPSK	8	4	22.61	22.41	22.66	23.5
3	QPSK	8	7	22.67	22.67	22.51	
3	QPSK	15	0	22.60	22.48	22.51	
3	16QAM	1	0	22.80	22.83	22.76	
3	16QAM	1	8	22.91	22.80	22.76	23.5
3	16QAM	1	14	22.77	22.79	22.73	
3	16QAM	8	0	21.80	21.68	21.69	
3	16QAM	8	4	21.45	21.60	21.41	
3	16QAM	8	7	21.51	21.48	21.61	22.5
3	16QAM	15	0	21.31	21.28	21.54	
3	64QAM	1	0	21.81	21.86	21.81	
3	64QAM	1	8	21.85	21.83	21.59	
3	64QAM	1	14	21.70	21.83	21.62	21.5
3	64QAM	8	0	20.78	20.80	20.68	
3	64QAM	8	4	20.70	20.79	20.68	
3	64QAM	8	7	20.70	20.66	20.57	
3	64QAM	15	0	20.55	20.41	20.51	19.5
3	256QAM	1	0	18.52	18.60	18.55	
3	256QAM	1	8	18.54	18.50	18.62	
3	256QAM	1	14	18.57	18.64	18.56	
3	256QAM	8	0	18.50	18.49	18.56	19.5
3	256QAM	8	4	18.57	18.49	18.56	
3	256QAM	8	7	18.34	18.40	18.51	
3	256QAM	15	0	18.36	18.45	18.64	
Channel				131979	132322	132685	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	23.69	23.75	23.72	24.5
1.4	QPSK	1	3	23.62	23.71	23.60	
1.4	QPSK	1	5	23.54	23.63	23.59	
1.4	QPSK	3	0	22.70	22.71	22.70	
1.4	QPSK	3	1	22.52	22.50	22.63	23.5
1.4	QPSK	3	3	22.52	22.55	22.55	
1.4	QPSK	6	0	22.55	22.42	22.49	
1.4	16QAM	1	0	22.89	22.86	22.82	
1.4	16QAM	1	3	22.78	22.85	22.89	23.5
1.4	16QAM	1	5	22.76	22.87	22.71	
1.4	16QAM	3	0	21.69	21.68	21.59	
1.4	16QAM	3	1	21.50	21.66	21.41	
1.4	16QAM	3	3	21.55	21.52	21.58	22.5
1.4	16QAM	6	0	21.40	21.33	21.56	
1.4	64QAM	1	0	21.82	21.91	21.76	
1.4	64QAM	1	3	21.77	21.87	21.65	
1.4	64QAM	1	5	21.63	21.77	21.85	22.5
1.4	64QAM	3	0	20.73	20.72	20.62	
1.4	64QAM	3	1	20.70	20.75	20.71	
1.4	64QAM	3	3	20.59	20.63	20.56	
1.4	64QAM	6	0	20.50	20.45	20.48	21.5
1.4	256QAM	1	0	18.56	18.72	18.65	
1.4	256QAM	1	3	18.53	18.41	18.67	
1.4	256QAM	1	5	18.67	18.69	18.51	
1.4	256QAM	3	0	18.46	18.52	18.67	19.5
1.4	256QAM	3	1	18.61	18.58	18.55	
1.4	256QAM	3	3	18.40	18.36	18.50	
1.4	256QAM	6	0	18.44	18.45	18.69	

n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376000	378000	Tune-up limit (dBm)
Frequency (MHz)				1870	1880	1890	
40	DFT-s-OFDM PI/2 BPSK	1	1	24.20	24.25	24.20	25
40		1	108	24.25	24.16	23.94	
40		1	214	23.96	23.97	24.01	
40		108	1	23.79	23.82	23.67	25
40		108	54	24.32	24.25	24.08	
40		108	108	23.83	23.54	23.58	
40		216	0	23.77	23.65	23.53	
40	DFT-s-OFDM QPSK	1	1	24.32	24.36	24.30	25
40		1	108	24.30	24.27	24.08	
40		1	214	24.12	24.06	24.13	
40		108	1	23.31	23.34	23.18	24
40		108	54	24.26	24.32	24.11	25
40		108	108	23.33	23.27	23.28	24
40		216	0	23.28	23.30	23.20	24
40	DFT-s-OFDM 16QAM	1	1	23.39	23.39	23.32	24
40	DFT-s-OFDM 64QAM	1	1	21.95	21.81	21.87	23
40	DFT-s-OFDM 256QAM	1	1	19.86	19.83	19.81	21
40	CP-OFDM QPSK	1	1	22.68	22.66	22.70	24
40	CP-OFDM 16QAM	1	1	22.40	22.40	22.35	24
40	CP-OFDM 64QAM	1	1	20.54	20.50	20.52	22
40	CP-OFDM 256QAM	1	1	17.87	17.84	17.80	19
Channel				373000	376000	379000	Tune-up limit (dBm)
Frequency (MHz)				1865	1880	1895	
30	DFT-s-OFDM QPSK	1	1	24.21	24.19	24.08	25
Channel				372500	376000	379500	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1880	1897.5	
25	DFT-s-OFDM QPSK	1	1	24.20	24.18	24.00	25
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM QPSK	1	1	24.16	24.22	23.96	25
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	24.14	24.17	23.95	25
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	24.07	24.16	23.91	25
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	24.07	24.10	23.99	25

n5 (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	24.32	24.32	24.22	25
20		1	53	24.31	24.31	24.32	
20		1	104	24.24	24.16	24.05	
20		50	1	23.97	24.03	23.96	25
20		50	25	24.36	24.35	24.33	
20		50	50	23.93	23.95	23.86	
20		100	0	23.95	23.97	23.92	
20	DFT-s-OFDM QPSK	1	1	24.31	24.38	24.29	25
20		1	53	24.28	24.30	24.32	
20		1	104	24.21	24.12	24.03	
20		50	1	23.46	23.50	23.47	24
20		50	25	24.34	24.36	24.33	25
20		50	50	23.41	23.46	23.40	24
20		100	0	23.41	23.44	23.40	24
20	DFT-s-OFDM 16QAM	1	1	23.57	23.56	23.60	24
20	DFT-s-OFDM 64QAM	1	1	22.14	22.18	22.23	23
20	DFT-s-OFDM 256QAM	1	1	20.07	20.10	20.15	21
20	CP-OFDM QPSK	1	1	22.78	22.77	22.71	24
20	CP-OFDM 16QAM	1	1	22.63	22.62	22.63	24
20	CP-OFDM 64QAM	1	1	20.73	20.74	20.71	22
20	CP-OFDM 256QAM	1	1	18.12	18.15	18.18	19
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	24.29	24.15	24.22	25
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	24.27	24.23	24.28	25
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	24.27	24.23	24.13	25

n30 (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		23.78		24.5
10		1	26		23.79		
10		1	50		23.83		
10		25	1		23.37		24.5
10		25	12		23.87		
10		25	25		23.32		
10		50	0		23.38		
10	DFT-s-OFDM QPSK	1	1		23.89		24.5
10		1	26		23.86		
10		1	50		23.85		
10		25	1		22.88		23.5
10		25	12		23.85		24.5
10		25	25		22.81		23.5
10		50	0		22.86		23.5
10	DFT-s-OFDM 16QAM	1	1		23.01		23.5
10	DFT-s-OFDM 64QAM	1	1		21.45		22.5
10	DFT-s-OFDM 256QAM	1	1		19.56		20.5
10	CP-OFDM QPSK	1	1		22.37		23.5
10	CP-OFDM 16QAM	1	1		22.01		22.5
10	CP-OFDM 64QAM	1	1		20.21		21.5
10	CP-OFDM 256QAM	1	1		17.48		18.5
Channel				461500	462000	462500	Tune-up limit
Frequency (MHz)				2307.5	2310	2312.5	(dBm)
5	DFT-s-OFDM QPSK	1	1	23.79	23.89	23.88	24.5

n48 (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				638000	639834	641666	643500	645332	25.5
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98	
40	DFT-s-OFDM PI/2 BPSK	1	1	24.12	24.27	24.48	24.35	24.13	25.5
40		1	53	24.32	24.55	24.31	24.24	24.18	
40		1	104	24.41	24.32	24.36	24.18	24.21	
40		50	1	23.76	23.88	23.83	23.81	23.65	25.5
40		50	25	24.31	24.53	24.30	24.27	24.17	
40		50	50	23.80	24.01	23.82	23.66	23.67	
40		100	0	23.80	24.07	23.78	23.77	23.65	
40	DFT-s-OFDM QPSK	1	1	24.41	24.46	24.57	24.43	24.47	25.5
40		1	53	24.32	24.50	24.33	24.24	24.14	
40		1	104	24.38	24.33	24.33	24.16	24.16	
40		50	1	23.25	23.39	23.32	23.28	23.24	24.5
40		50	25	24.45	24.48	24.51	24.43	24.41	25.5
40		50	50	23.30	23.53	23.31	23.28	23.25	24.5
40		100	0	23.44	23.50	23.55	23.47	23.42	24.5
40	DFT-s-OFDM 16QAM	1	1	23.17	23.31	23.48	23.35	23.18	24.5
40	DFT-s-OFDM 64QAM	1	1	22.01	22.19	22.39	22.30	21.76	23.5
40	DFT-s-OFDM 256QAM	1	1	20.08	20.22	20.47	20.20	20.03	21.5
40	CP-OFDM QPSK	1	1	22.57	22.70	22.90	22.79	22.61	23.5
40	CP-OFDM 16QAM	1	1	22.39	22.53	22.73	22.63	22.28	23.5
40	CP-OFDM 64QAM	1	1	20.59	20.75	20.98	20.72	20.59	21.5
40	CP-OFDM 256QAM	1	1	18.00	18.12	18.36	18.09	17.89	19.5
Channel				637668	639668	641666	643666	645666	25.5
Frequency (MHz)				3565.02	3595.02	3624.99	3654.99	3684.99	
30	DFT-s-OFDM QPSK	1	1	24.10	24.27	24.36	24.30	24.12	25.5
Channel				637334	639500	641666	643832	646000	25.5
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690	
20	DFT-s-OFDM QPSK	1	1	24.14	24.36	24.35	24.31	24.18	25.5
Channel				637168	639418	641666	643916	646166	25.5
Frequency (MHz)				3557.52	3591.27	3624.99	3658.74	3692.49	
15	DFT-s-OFDM QPSK	1	1	24.09	24.34	24.32	24.23	24.16	25.5
Channel				637000	639334	641666	644000	646332	25.5
Frequency (MHz)				3555	3590.01	3624.99	3660	3694.98	
10	DFT-s-OFDM QPSK	1	1	24.13	24.39	24.28	24.16	24.10	25.5

n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	25.5
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	24.31	24.37	24.28	25.5
40		1	108	24.35	24.28	24.15	
40		1	214	24.26	24.10	24.12	
40		108	1	23.97	23.88	23.79	25.5
40		108	54	24.40	24.32	24.23	
40		108	108	23.90	23.94	23.74	
40		216	0	23.96	23.90	23.75	
40	DFT-s-OFDM QPSK	1	1	24.40	24.47	24.39	25.5
40		1	108	24.38	24.38	24.14	
40		1	214	24.30	24.21	24.13	
40		108	1	23.56	23.50	23.43	24.5
40		108	54	24.42	24.47	24.39	25.5
40		108	108	23.48	23.52	23.34	24.5
40		216	0	23.47	23.53	23.44	24.5
40	DFT-s-OFDM 16QAM	1	1	23.52	23.48	23.45	24.5
40	DFT-s-OFDM 64QAM	1	1	22.14	21.93	22.04	23.5
40	DFT-s-OFDM 256QAM	1	1	20.02	19.94	19.95	20.5
40	CP-OFDM QPSK	1	1	22.65	22.79	22.65	23.5
40	CP-OFDM 16QAM	1	1	22.44	22.52	22.43	23.5
40	CP-OFDM 64QAM	1	1	20.60	20.66	20.61	21.5
40	CP-OFDM 256QAM	1	1	18.00	17.89	17.95	18.5
Channel				345000	349000	353000	25.5
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	24.26	24.26	24.17	25.5
Channel				344500	349000	353500	25.5
Frequency (MHz)				1722.5	1745	1767.5	
25	DFT-s-OFDM QPSK	1	1	24.26	24.28	24.12	25.5
Channel				344000	349000	354000	25.5
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	24.26	24.29	24.09	25.5
Channel				343500	349000	354500	25.5
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	24.29	24.25	24.08	25.5
Channel				343000	349000	355000	25.5
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	24.26	24.27	24.17	25.5
Channel				342500	349000	355500	25.5
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	24.26	24.27	24.15	25.5

n71 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				134600	136100	137600	25.5
Frequency (MHz)				673	680.5	688	
20	DFT-s-OFDM PI/2 BPSK	1	1	24.27	24.39	24.48	25.5
20		1	53	24.47	24.49	24.38	
20		1	104	24.46	24.37	24.33	
20		50	1	23.81	24.06	23.92	25.5
20	DFT-s-OFDM QPSK	50	25	24.44	24.47	24.43	
20		50	50	24.01	23.97	23.90	
20		100	0	23.88	24.02	23.85	
20		1	1	24.48	24.51	24.47	25.5
20	DFT-s-OFDM 16QAM	1	53	24.45	24.47	24.36	
20		1	104	24.46	24.34	24.32	
20		50	1	23.52	23.54	23.43	
20	DFT-s-OFDM 64QAM	50	25	24.46	24.48	24.42	24.5
20		50	50	23.49	23.47	23.37	25.5
20		100	0	23.42	23.49	23.42	24.5
20		1	1	23.39	23.52	23.61	24.5
20	DFT-s-OFDM 256QAM	1	1	21.78	21.94	22.03	22.5
20	CP-OFDM QPSK	1	1	19.85	19.95	20.01	20.5
20	CP-OFDM 16QAM	1	1	22.73	22.82	22.95	23.5
20	CP-OFDM 64QAM	1	1	22.44	22.58	22.69	23.5
20	CP-OFDM 256QAM	1	1	20.58	20.65	20.79	21.5
20		1	1	17.85	17.90	18.02	18.5
Channel				134100	136100	138100	25.5
Frequency (MHz)				670.5	680.5	690.5	
15	DFT-s-OFDM QPSK	1	1	24.29	24.47	24.44	25.5
Channel				133600	136100	138600	25.5
Frequency (MHz)				668	680.5	693	
10	DFT-s-OFDM QPSK	1	1	24.29	24.49	24.35	25.5
Channel				133100	136100	139100	25.5
Frequency (MHz)				665.5	680.5	695.5	
5	DFT-s-OFDM QPSK	1	1	24.26	24.48	24.36	25.5

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			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			27.09			28
100		1	136			26.91			
100		1	271			26.52			
100		135	1			26.51			28
100		135	67			27.02			
100		135	136			26.05			
100		270	0			26.48			
100	DFT-s-OFDM QPSK	1	1			27.13			28
100		1	136			27.07			
100		1	271			26.53			
100		135	1			26.02			27
100		135	67			27.08			28
100		135	136			25.87			27
100		270	0			26.05			27
100	DFT-s-OFDM 16QAM	1	1			26.04			27
100	DFT-s-OFDM 64QAM	1	1			24.80			26
100	DFT-s-OFDM 256QAM	1	1			22.69			24
100	CP-OFDM QPSK	1	1			25.45			26
100	CP-OFDM 16QAM	1	1			25.22			26
100	CP-OFDM 64QAM	1	1			23.18			24
100	CP-OFDM 256QAM	1	1			20.91			22
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	27.06	27.03	27.03	27.02	25.88	28
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	27.11	27.12	27.10	27.05	27.05	28
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	27.04	27.09	26.99	26.97	26.99	28
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	27.03	27.03	27.00	26.96	27.03	28
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	27.05	27.06	27.01	27.01	26.96	28
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	27.11	27.12	27.09	27.01	26.78	28
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	27.09	27.00	27.00	26.71	26.48	28
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	27.06	26.99	26.97	26.61	26.50	28
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	27.08	26.99	26.99	26.63	26.57	28

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	28
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	26.84	27.07	26.96	27.08	26.94	28
100		1	136	27.08	26.99	27.07	26.92	26.68	
100		1	271	26.87	26.94	26.83	26.54	26.84	
100		135	1	26.73	26.52	26.40	26.38	26.43	
100		135	67	27.11	27.06	27.12	26.99	26.75	28
100		135	136	26.38	26.36	26.18	26.23	26.38	
100		270	0	26.51	26.55	26.59	26.53	26.33	
100	DFT-s-OFDM QPSK	1	1	27.12	27.10	27.17	27.09	27.08	28
100		1	136	27.10	27.07	27.08	27.11	26.74	
100		1	271	26.89	26.92	26.82	26.58	26.85	
100		135	1	26.25	26.02	25.90	25.87	25.94	27
100		135	67	27.12	27.02	27.13	26.99	27.05	28
100		135	136	25.90	25.88	25.70	25.74	25.89	27
100		270	0	26.06	26.04	26.11	26.09	26.02	27
100	DFT-s-OFDM 16QAM	1	1	25.97	26.23	26.17	26.21	25.96	27
100	DFT-s-OFDM 64QAM	1	1	24.56	24.78	24.64	24.80	24.78	26
100	DFT-s-OFDM 256QAM	1	1	22.43	22.64	22.54	22.66	22.60	24
100	CP-OFDM QPSK	1	1	25.33	25.57	25.45	25.54	25.41	27
100	CP-OFDM 16QAM	1	1	24.97	25.20	25.10	25.23	25.13	26
100	CP-OFDM 64QAM	1	1	22.96	23.18	23.11	23.20	23.12	24
100	CP-OFDM 256QAM	1	1	20.67	20.96	20.86	20.98	20.94	22
Channel				649666	652834	656000	659166	662332	28
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	26.88	27.15	27.05	27.03	26.91	28
Channel				649334	652668	656000	659332	662666	28
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	26.91	27.15	27.05	26.99	26.99	28
Channel				649000	652500	656000	659500	663000	28
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	26.86	27.12	27.00	26.87	26.80	28
Channel				648668	652334	656000	659666	663332	28
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	26.84	27.10	26.95	26.81	26.66	28
Channel				648334	652168	656000	659832	663666	28
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	26.88	27.12	26.95	26.91	26.73	28
Channel				648000	652000	656000	660000	664000	28
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	26.89	27.14	26.95	26.99	26.82	28
Channel				647334	651668	656000	660332	664666	28
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	26.93	27.01	27.04	27.01	27.02	28
Channel				647168	651584	656000	660416	664832	28
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	26.90	26.98	27.07	26.95	27.04	28
Channel				647000	651500	656000	660500	665000	28
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	26.91	27.00	27.12	26.92	27.10	28

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			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			23.51			25
100		1	136			23.95			
100		1	271			23.47			
100		135	1			23.52			25
100		135	67			24.01			
100		135	136			23.44			
100		270	0			23.46			
100	DFT-s-OFDM QPSK	1	1			24.05			25
100		1	136			23.91			
100		1	271			23.88			
100		135	1			23.02			24
100		135	67			23.97			25
100		135	136			22.91			24
100		270	0			23.01			24
100	DFT-s-OFDM 16QAM	1	1			23.09			24
100	DFT-s-OFDM 64QAM	1	1			22.05			23
100	DFT-s-OFDM 256QAM	1	1			20.04			21
100	CP-OFDM QPSK	1	1			22.48			23
100	CP-OFDM 16QAM	1	1			22.27			23
100	CP-OFDM 64QAM	1	1			20.58			22
100	CP-OFDM 256QAM	1	1			17.93			19
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	23.94	23.91	23.91	23.89	23.89	25
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	24.01	24.01	23.96	23.94	23.95	25
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	23.93	23.94	23.88	23.82	23.84	25
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	23.86	23.88	23.86	23.82	23.86	25
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	23.87	23.90	23.83	23.85	23.77	25
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	23.93	23.93	23.89	23.84	23.55	25
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	23.92	23.88	23.87	23.57	23.32	25
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	23.94	23.83	23.85	23.43	23.33	25
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	23.92	23.83	23.82	23.41	23.36	25

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	25
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	23.89	24.13	24.08	24.12	24.04	25
100		1	136	24.20	24.07	24.17	24.02	23.84	
100		1	271	23.95	24.02	23.93	23.63	23.98	
100		135	1	23.84	23.62	23.51	23.47	23.54	25
100		135	67	24.14	24.15	24.23	24.11	23.89	
100		135	136	23.53	23.46	23.32	23.34	23.50	
100		270	0	23.64	23.66	23.67	23.66	23.44	
100	DFT-s-OFDM QPSK	1	1	24.18	24.16	24.25	24.19	24.15	25
100		1	136	24.17	24.10	24.23	24.08	23.95	
100		1	271	23.95	24.00	23.94	23.69	23.99	
100		135	1	23.33	23.12	23.01	22.96	23.03	24
100		135	67	24.20	24.17	24.23	24.12	24.19	25
100		135	136	23.01	22.99	22.82	22.83	22.99	24
100		270	0	23.11	23.14	23.18	23.16	23.12	24
100	DFT-s-OFDM 16QAM	1	1	23.00	23.26	23.20	23.28	23.10	24
100	DFT-s-OFDM 64QAM	1	1	21.82	22.17	22.12	22.19	22.29	23
100	DFT-s-OFDM 256QAM	1	1	19.77	20.11	20.07	20.15	20.15	21
100	CP-OFDM QPSK	1	1	22.24	22.50	22.47	22.53	22.49	23
100	CP-OFDM 16QAM	1	1	22.18	22.43	22.33	22.46	22.30	23
100	CP-OFDM 64QAM	1	1	20.39	20.65	20.59	20.70	20.67	22
100	CP-OFDM 256QAM	1	1	17.68	17.99	18.02	18.07	18.03	19
Channel				649666	652834	656000	659166	662332	25
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	23.90	24.11	24.03	24.07	24.04	25
Channel				649334	652668	656000	659332	662666	25
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	23.92	24.16	24.07	24.01	24.03	25
Channel				649000	652500	656000	659500	663000	25
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	23.89	24.13	24.03	23.90	23.84	25
Channel				648668	652334	656000	659666	663332	25
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	23.83	24.07	23.89	23.78	23.68	25
Channel				648334	652168	656000	659832	663666	25
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	23.86	24.08	23.92	23.92	23.76	25
Channel				648000	652000	656000	660000	664000	25
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	23.89	24.08	23.91	23.96	23.84	25
Channel				647334	651668	656000	660332	664666	25
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	23.92	23.97	24.00	24.01	24.04	25
Channel				647168	651584	656000	660416	664832	25
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	23.90	23.96	24.02	23.91	24.06	25
Channel				647000	651500	656000	660500	665000	25
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	23.86	23.94	24.05	23.87	24.02	25

n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376000	378000	Tune-up limit (dBm)
Frequency (MHz)				1870	1880	1890	
40	DFT-s-OFDM PI/2 BPSK	1	1	24.20	24.25	24.20	25
40		1	108	24.25	24.16	23.94	
40		1	214	23.96	23.97	24.01	
40		108	1	23.79	23.82	23.67	25
40		108	54	24.32	24.25	24.08	
40		108	108	23.83	23.54	23.58	
40		216	0	23.77	23.65	23.53	
40	DFT-s-OFDM QPSK	1	1	24.32	24.36	24.30	25
40		1	108	24.30	24.27	24.08	
40		1	214	24.12	24.06	24.13	
40		108	1	23.31	23.34	23.18	24
40		108	54	24.26	24.32	24.11	25
40		108	108	23.33	23.27	23.28	24
40		216	0	23.28	23.30	23.20	24
40	DFT-s-OFDM 16QAM	1	1	23.39	23.39	23.32	24
40	DFT-s-OFDM 64QAM	1	1	21.95	21.81	21.87	23
40	DFT-s-OFDM 256QAM	1	1	19.86	19.83	19.81	21
40	CP-OFDM QPSK	1	1	22.68	22.66	22.70	24
40	CP-OFDM 16QAM	1	1	22.40	22.40	22.35	24
40	CP-OFDM 64QAM	1	1	20.54	20.50	20.52	22
40	CP-OFDM 256QAM	1	1	17.87	17.84	17.80	19
Channel				373000	376000	379000	Tune-up limit (dBm)
Frequency (MHz)				1865	1880	1895	
30	DFT-s-OFDM QPSK	1	1	24.21	24.19	24.08	25
Channel				372500	376000	379500	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1880	1897.5	
25	DFT-s-OFDM QPSK	1	1	24.20	24.18	24.00	25
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM QPSK	1	1	24.16	24.22	23.96	25
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	24.14	24.17	23.95	25
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	24.07	24.16	23.91	25
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	24.07	24.10	23.99	25

n5 (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	24.32	24.32	24.22	25
20		1	53	24.31	24.31	24.32	
20		1	104	24.24	24.16	24.05	
20		50	1	23.97	24.03	23.96	25
20		50	25	24.36	24.35	24.33	
20		50	50	23.93	23.95	23.86	
20		100	0	23.95	23.97	23.92	
20	DFT-s-OFDM QPSK	1	1	24.31	24.38	24.29	25
20		1	53	24.28	24.30	24.32	
20		1	104	24.21	24.12	24.03	
20		50	1	23.46	23.50	23.47	24
20		50	25	24.34	24.36	24.33	25
20		50	50	23.41	23.46	23.40	24
20		100	0	23.41	23.44	23.40	24
20	DFT-s-OFDM 16QAM	1	1	23.57	23.56	23.60	24
20	DFT-s-OFDM 64QAM	1	1	22.14	22.18	22.23	23
20	DFT-s-OFDM 256QAM	1	1	20.07	20.10	20.15	21
20	CP-OFDM QPSK	1	1	22.78	22.77	22.71	24
20	CP-OFDM 16QAM	1	1	22.63	22.62	22.63	24
20	CP-OFDM 64QAM	1	1	20.73	20.74	20.71	22
20	CP-OFDM 256QAM	1	1	18.12	18.15	18.18	19
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	24.29	24.15	24.22	25
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	24.27	24.23	24.28	25
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	24.27	24.23	24.13	25

n30 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					462000		Tune-up limit (dBm)
Frequency (MHz)					2310		
10	DFT-s-OFDM PI/2 BPSK	1	1		23.78		24.5
10		1	26		23.79		
10		1	50		23.83		
10		25	1		23.37		24.5
10		25	12		23.87		
10		25	25		23.32		
10		50	0		23.38		
10	DFT-s-OFDM QPSK	1	1		23.89		24.5
10		1	26		23.86		
10		1	50		23.85		
10		25	1		22.88		23.5
10		25	12		23.85		24.5
10		25	25		22.81		23.5
10		50	0		22.86		23.5
10	DFT-s-OFDM 16QAM	1	1		23.01		23.5
10	DFT-s-OFDM 64QAM	1	1		21.45		22.5
10	DFT-s-OFDM 256QAM	1	1		19.56		20.5
10	CP-OFDM QPSK	1	1		22.37		23.5
10	CP-OFDM 16QAM	1	1		22.01		22.5
10	CP-OFDM 64QAM	1	1		20.21		21.5
10	CP-OFDM 256QAM	1	1		17.48		18.5
Channel				461500	462000	462500	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	DFT-s-OFDM QPSK	1	1	23.79	23.89	23.88	24.5

n48 (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				638000	639834	641666	643500	645332	25.5
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98	
40	DFT-s-OFDM PI/2 BPSK	1	1	24.12	24.27	24.48	24.35	24.13	25.5
40		1	53	24.32	24.55	24.31	24.24	24.18	
40		1	104	24.41	24.32	24.36	24.18	24.21	
40		50	1	23.76	23.88	23.83	23.81	23.65	25.5
40		50	25	24.31	24.53	24.30	24.27	24.17	
40		50	50	23.80	24.01	23.82	23.66	23.67	
40		100	0	23.80	24.07	23.78	23.77	23.65	
40	DFT-s-OFDM QPSK	1	1	24.41	24.46	24.57	24.43	24.47	25.5
40		1	53	24.32	24.50	24.33	24.24	24.14	
40		1	104	24.38	24.33	24.33	24.16	24.16	
40		50	1	23.25	23.39	23.32	23.28	23.24	24.5
40		50	25	24.45	24.48	24.51	24.43	24.41	25.5
40		50	50	23.30	23.53	23.31	23.28	23.25	24.5
40		100	0	23.44	23.50	23.55	23.47	23.42	24.5
40	DFT-s-OFDM 16QAM	1	1	23.17	23.31	23.48	23.35	23.18	24.5
40	DFT-s-OFDM 64QAM	1	1	22.01	22.19	22.39	22.30	21.76	23.5
40	DFT-s-OFDM 256QAM	1	1	20.08	20.22	20.47	20.20	20.03	21.5
40	CP-OFDM QPSK	1	1	22.57	22.70	22.90	22.79	22.61	23.5
40	CP-OFDM 16QAM	1	1	22.39	22.53	22.73	22.63	22.28	23.5
40	CP-OFDM 64QAM	1	1	20.59	20.75	20.98	20.72	20.59	21.5
40	CP-OFDM 256QAM	1	1	18.00	18.12	18.36	18.09	17.89	19.5
Channel				637668	639668	641666	643666	645666	25.5
Frequency (MHz)				3565.02	3595.02	3624.99	3654.99	3684.99	
30	DFT-s-OFDM QPSK	1	1	24.10	24.27	24.36	24.30	24.12	25.5
Channel				637334	639500	641666	643832	646000	25.5
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690	
20	DFT-s-OFDM QPSK	1	1	24.14	24.36	24.35	24.31	24.18	25.5
Channel				637168	639418	641666	643916	646166	25.5
Frequency (MHz)				3557.52	3591.27	3624.99	3658.74	3692.49	
15	DFT-s-OFDM QPSK	1	1	24.09	24.34	24.32	24.23	24.16	25.5
Channel				637000	639334	641666	644000	646332	25.5
Frequency (MHz)				3555	3590.01	3624.99	3660	3694.98	
10	DFT-s-OFDM QPSK	1	1	24.13	24.39	24.28	24.16	24.10	25.5

n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	25.5
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	24.31	24.37	24.28	25.5
40		1	108	24.35	24.28	24.15	
40		1	214	24.26	24.10	24.12	
40		108	1	23.97	23.88	23.79	25.5
40		108	54	24.40	24.32	24.23	
40		108	108	23.90	23.94	23.74	
40		216	0	23.96	23.90	23.75	
40	DFT-s-OFDM QPSK	1	1	24.40	24.47	24.39	25.5
40		1	108	24.38	24.38	24.14	
40		1	214	24.30	24.21	24.13	
40		108	1	23.56	23.50	23.43	24.5
40		108	54	24.42	24.47	24.39	25.5
40		108	108	23.48	23.52	23.34	24.5
40		216	0	23.47	23.53	23.44	24.5
40	DFT-s-OFDM 16QAM	1	1	23.52	23.48	23.45	24.5
40	DFT-s-OFDM 64QAM	1	1	22.14	21.93	22.04	23.5
40	DFT-s-OFDM 256QAM	1	1	20.02	19.94	19.95	20.5
40	CP-OFDM QPSK	1	1	22.65	22.79	22.65	23.5
40	CP-OFDM 16QAM	1	1	22.44	22.52	22.43	23.5
40	CP-OFDM 64QAM	1	1	20.60	20.66	20.61	21.5
40	CP-OFDM 256QAM	1	1	18.00	17.89	17.95	18.5
Channel				345000	349000	353000	25.5
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	24.26	24.26	24.17	25.5
Channel				344500	349000	353500	25.5
Frequency (MHz)				1722.5	1745	1767.5	
25	DFT-s-OFDM QPSK	1	1	24.26	24.28	24.12	25.5
Channel				344000	349000	354000	25.5
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	24.26	24.29	24.09	25.5
Channel				343500	349000	354500	25.5
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	24.29	24.25	24.08	25.5
Channel				343000	349000	355000	25.5
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	24.26	24.27	24.17	25.5
Channel				342500	349000	355500	25.5
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	24.26	24.27	24.15	25.5

n71 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				134600	136100	137600	25.5
Frequency (MHz)				673	680.5	688	
20	DFT-s-OFDM PI/2 BPSK	1	1	24.27	24.39	24.48	25.5
20		1	53	24.47	24.49	24.38	
20		1	104	24.46	24.37	24.33	
20		50	1	23.81	24.06	23.92	25.5
20	DFT-s-OFDM QPSK	50	25	24.44	24.47	24.43	
20		50	50	24.01	23.97	23.90	
20		100	0	23.88	24.02	23.85	
20		1	1	24.48	24.51	24.47	25.5
20	DFT-s-OFDM 16QAM	1	53	24.45	24.47	24.36	
20		1	104	24.46	24.34	24.32	
20		50	1	23.52	23.54	23.43	
20	DFT-s-OFDM 64QAM	50	25	24.46	24.48	24.42	24.5
20		50	50	23.49	23.47	23.37	25.5
20		100	0	23.42	23.49	23.42	24.5
20		1	1	23.39	23.52	23.61	24.5
20	DFT-s-OFDM 256QAM	1	1	21.78	21.94	22.03	22.5
20	CP-OFDM QPSK	1	1	19.85	19.95	20.01	20.5
20	CP-OFDM 16QAM	1	1	22.73	22.82	22.95	23.5
20	CP-OFDM 64QAM	1	1	22.44	22.58	22.69	23.5
20	CP-OFDM 256QAM	1	1	20.58	20.65	20.79	21.5
20		1	1	17.85	17.90	18.02	18.5
Channel				134100	136100	138100	25.5
Frequency (MHz)				670.5	680.5	690.5	
15	DFT-s-OFDM QPSK	1	1	24.29	24.47	24.44	25.5
Channel				133600	136100	138600	25.5
Frequency (MHz)				668	680.5	693	
10	DFT-s-OFDM QPSK	1	1	24.29	24.49	24.35	25.5
Channel				133100	136100	139100	25.5
Frequency (MHz)				665.5	680.5	695.5	
5	DFT-s-OFDM QPSK	1	1	24.26	24.48	24.36	25.5

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			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			27.09			28
100		1	136			26.91			
100		1	271			26.52			
100		135	1			26.51			28
100		135	67			27.02			
100		135	136			26.05			
100		270	0			26.48			
100	DFT-s-OFDM QPSK	1	1			27.13			28
100		1	136			27.07			
100		1	271			26.53			
100		135	1			26.02			
100		135	67			27.08			27
100		135	136			25.87			28
100		270	0			26.05			27
100	DFT-s-OFDM 16QAM	1	1			26.04			27
100	DFT-s-OFDM 64QAM	1	1			24.80			26
100	DFT-s-OFDM 256QAM	1	1			22.69			24
100	CP-OFDM QPSK	1	1			25.45			26
100	CP-OFDM 16QAM	1	1			25.22			26
100	CP-OFDM 64QAM	1	1			23.18			24
100	CP-OFDM 256QAM	1	1			20.91			22
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	27.06	27.03	27.03	27.02	25.88	28
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	27.11	27.12	27.10	27.05	27.05	28
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	27.04	27.09	26.99	26.97	26.99	28
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	27.03	27.03	27.00	26.96	27.03	28
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	27.05	27.06	27.01	27.01	26.96	28
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	27.11	27.12	27.09	27.01	26.78	28
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	27.09	27.00	27.00	26.71	26.48	28
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	27.06	26.99	26.97	26.61	26.50	28
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	27.08	26.99	26.99	26.63	26.57	28

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	28
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	26.84	27.07	26.96	27.08	26.94	28
100		1	136	27.08	26.99	27.07	26.92	26.68	
100		1	271	26.87	26.94	26.83	26.54	26.84	
100		135	1	26.73	26.52	26.40	26.38	26.43	
100		135	67	27.11	27.06	27.12	26.99	26.75	28
100		135	136	26.38	26.36	26.18	26.23	26.38	
100		270	0	26.51	26.55	26.59	26.53	26.33	
100	DFT-s-OFDM QPSK	1	1	27.12	27.10	27.17	27.09	27.08	28
100		1	136	27.10	27.07	27.08	27.11	26.74	
100		1	271	26.89	26.92	26.82	26.58	26.85	
100		135	1	26.25	26.02	25.90	25.87	25.94	27
100		135	67	27.12	27.02	27.13	26.99	27.05	28
100		135	136	25.90	25.88	25.70	25.74	25.89	27
100		270	0	26.06	26.04	26.11	26.09	26.02	27
100	DFT-s-OFDM 16QAM	1	1	25.97	26.23	26.17	26.21	25.96	27
100	DFT-s-OFDM 64QAM	1	1	24.56	24.78	24.64	24.80	24.78	26
100	DFT-s-OFDM 256QAM	1	1	22.43	22.64	22.54	22.66	22.60	24
100	CP-OFDM QPSK	1	1	25.33	25.57	25.45	25.54	25.41	27
100	CP-OFDM 16QAM	1	1	24.97	25.20	25.10	25.23	25.13	26
100	CP-OFDM 64QAM	1	1	22.96	23.18	23.11	23.20	23.12	24
100	CP-OFDM 256QAM	1	1	20.67	20.96	20.86	20.98	20.94	22
Channel				649666	652834	656000	659166	662332	Tune-up limit
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	(dBm)
90	DFT-s-OFDM QPSK	1	1	26.88	27.15	27.05	27.03	26.91	28
Channel				649334	652668	656000	659332	662666	Tune-up limit
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	(dBm)
80	DFT-s-OFDM QPSK	1	1	26.91	27.15	27.05	26.99	26.99	28
Channel				649000	652500	656000	659500	663000	Tune-up limit
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	(dBm)
70	DFT-s-OFDM QPSK	1	1	26.86	27.12	27.00	26.87	26.80	28
Channel				648668	652334	656000	659666	663332	Tune-up limit
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	(dBm)
60	DFT-s-OFDM QPSK	1	1	26.84	27.10	26.95	26.81	26.66	28
Channel				648334	652168	656000	659832	663666	Tune-up limit
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	(dBm)
50	DFT-s-OFDM QPSK	1	1	26.88	27.12	26.95	26.91	26.73	28
Channel				648000	652000	656000	660000	664000	Tune-up limit
Frequency (MHz)				3720	3780	3840	3900	3960	(dBm)
40	DFT-s-OFDM QPSK	1	1	26.89	27.14	26.95	26.99	26.82	28
Channel				647334	651668	656000	660332	664666	Tune-up limit
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	(dBm)
20	DFT-s-OFDM QPSK	1	1	26.93	27.01	27.04	27.01	27.02	28
Channel				647168	651584	656000	660416	664832	Tune-up limit
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	(dBm)
15	DFT-s-OFDM QPSK	1	1	26.90	26.98	27.07	26.95	27.04	28
Channel				647000	651500	656000	660500	665000	Tune-up limit
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	(dBm)
10	DFT-s-OFDM QPSK	1	1	26.91	27.00	27.12	26.92	27.10	28

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			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			23.51			25
100		1	136			23.95			
100		1	271			23.47			
100		135	1			23.52			25
100		135	67			24.01			
100		135	136			23.44			
100		270	0			23.46			
100	DFT-s-OFDM QPSK	1	1			24.05			25
100		1	136			23.91			
100		1	271			23.88			
100		135	1			23.02			24
100		135	67			23.97			25
100		135	136			22.91			24
100		270	0			23.01			24
100	DFT-s-OFDM 16QAM	1	1			23.09			24
100	DFT-s-OFDM 64QAM	1	1			22.05			23
100	DFT-s-OFDM 256QAM	1	1			20.04			21
100	CP-OFDM QPSK	1	1			22.48			23
100	CP-OFDM 16QAM	1	1			22.27			23
100	CP-OFDM 64QAM	1	1			20.58			22
100	CP-OFDM 256QAM	1	1			17.93			19
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	23.94	23.91	23.91	23.89	23.89	25
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	24.01	24.01	23.96	23.94	23.95	25
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	23.93	23.94	23.88	23.82	23.84	25
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	23.86	23.88	23.86	23.82	23.86	25
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	23.87	23.90	23.83	23.85	23.77	25
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	23.93	23.93	23.89	23.84	23.55	25
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	23.92	23.88	23.87	23.57	23.32	25
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	23.94	23.83	23.85	23.43	23.33	25
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	23.92	23.83	23.82	23.41	23.36	25

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	25
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	23.89	24.13	24.08	24.12	24.04	25
100		1	136	24.20	24.07	24.17	24.02	23.84	
100		1	271	23.95	24.02	23.93	23.63	23.98	
100		135	1	23.84	23.62	23.51	23.47	23.54	25
100		135	67	24.14	24.15	24.23	24.11	23.89	
100		135	136	23.53	23.46	23.32	23.34	23.50	
100		270	0	23.64	23.66	23.67	23.66	23.44	
100	DFT-s-OFDM QPSK	1	1	24.18	24.16	24.25	24.19	24.15	25
100		1	136	24.17	24.10	24.23	24.08	23.95	
100		1	271	23.95	24.00	23.94	23.69	23.99	
100		135	1	23.33	23.12	23.01	22.96	23.03	24
100		135	67	24.20	24.17	24.23	24.12	24.19	25
100		135	136	23.01	22.99	22.82	22.83	22.99	24
100		270	0	23.11	23.14	23.18	23.16	23.12	24
100	DFT-s-OFDM 16QAM	1	1	23.00	23.26	23.20	23.28	23.10	24
100	DFT-s-OFDM 64QAM	1	1	21.82	22.17	22.12	22.19	22.29	23
100	DFT-s-OFDM 256QAM	1	1	19.77	20.11	20.07	20.15	20.15	21
100	CP-OFDM QPSK	1	1	22.24	22.50	22.47	22.53	22.49	23
100	CP-OFDM 16QAM	1	1	22.18	22.43	22.33	22.46	22.30	23
100	CP-OFDM 64QAM	1	1	20.39	20.65	20.59	20.70	20.67	22
100	CP-OFDM 256QAM	1	1	17.68	17.99	18.02	18.07	18.03	19
Channel				649666	652834	656000	659166	662332	25
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	23.90	24.11	24.03	24.07	24.04	25
Channel				649334	652668	656000	659332	662666	25
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	23.92	24.16	24.07	24.01	24.03	25
Channel				649000	652500	656000	659500	663000	25
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	23.89	24.13	24.03	23.90	23.84	25
Channel				648668	652334	656000	659666	663332	25
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	23.83	24.07	23.89	23.78	23.68	25
Channel				648334	652168	656000	659832	663666	25
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	23.86	24.08	23.92	23.92	23.76	25
Channel				648000	652000	656000	660000	664000	25
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	23.89	24.08	23.91	23.96	23.84	25
Channel				647334	651668	656000	660332	664666	25
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	23.92	23.97	24.00	24.01	24.04	25
Channel				647168	651584	656000	660416	664832	25
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	23.90	23.96	24.02	23.91	24.06	25
Channel				647000	651500	656000	660500	665000	25
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	23.86	23.94	24.05	23.87	24.02	25

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-5A	2	20	18700	1860	QPSK/1#0	5	10	20600	844	23.44	24.5
	CA_2A-12A	2	20	18700	1860	QPSK/1#0	12	10	23155	713.5	23.48	24.5
	CA_2A-14A	2	20	18700	1860	QPSK/1#0	14	10	23330	793	23.52	24.5
	CA_4A-5A	4	10	20175	1732.5	QPSK/1#0	5	10	20450	829	23.45	24.5
	CA_4A-12A	4	10	20175	1747.5	QPSK/1#0	12	10	23130	711	23.55	24.5
	CA_5A-30A	5	10	20450	829	QPSK/1#0	30	10	27710	2310	23.75	24.5
	CA_5A-66A	5	10	20450	829	QPSK/1#0	66	20	132572	1770	23.51	24.5
	CA_12A-30A	12	10	23130	711	QPSK/1#0	30	10	27710	2310	24.09	25
	CA_12A-66A	12	10	23130	711	QPSK/1#0	66	20	132572	1770	24.04	25
	CA_14A-30A	14	10	23330	793	QPSK/1#0	30	10	27710	2310	24.1	25
	CA_14A-66A	14	10	23330	793	QPSK/1#0	66	20	132572	837.5	24.08	25

2.4GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 5	802.11b 1Mbps	CH 1	2412	21.56	22.50	21.00
		CH 7	2442	21.41	22.00	21.00
		CH 13	2472	21.52	22.50	21.00
	802.11g 6Mbps	CH 1	2412	19.66	20.50	20.00
		CH 7	2442	20.07	21.00	20.00
		CH 13	2472	19.82	20.50	20.00
	802.11n-HT20 MCS0	CH 1	2412	16.96	17.50	18.00
		CH 7	2442	17.44	18.00	18.00
		CH 13	2472	17.10	18.00	18.00
	802.11n-HT40 MCS0	CH 3	2422	16.13	17.00	17.00
		CH 6	2437	16.16	17.00	17.00
		CH 9	2452	16.06	17.00	17.00
	802.11ac-VHT20 MCS0	CH 1	2412	16.86	17.50	18.00
		CH 7	2442	17.16	18.00	18.00
		CH 13	2472	16.93	17.50	18.00
	802.11ac-VHT40 MCS0	CH 3	2422	16.21	17.00	17.00
		CH 6	2437	15.98	16.50	17.00
		CH 9	2452	16.00	17.00	17.00

5.2GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 5	802.11a 6Mbps	CH 36	5180	17.29	18.00	18.00
		CH 40	5200	17.33	18.00	18.00
		CH 46	5240	17.39	18.00	18.00
	802.11n-HT20 MCS0	CH 36	5180	17.46	18.00	18.00
		CH 40	5200	17.30	18.00	18.00
		CH 46	5240	17.25	18.00	18.00
	802.11n-HT40 MCS0	CH 36	5190	16.29	17.00	17.00
		CH 46	5230	16.27	17.00	17.00
	802.11ac-VHT20 MCS0	CH 36	5180	17.44	18.00	18.00
		CH 44	5220	17.20	18.00	18.00
		CH 46	5240	17.20	18.00	18.00
	802.11ac-VHT40 MCS0	CH 36	5190	16.39	17.00	17.00
		CH 46	5230	16.54	17.50	17.00
	802.11ac-VHT80 MCS0	CH 42	5210	15.75	16.50	16.00

5.3GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 5	802.11a 6Mbps	CH 52	5260	17.27	18.00	18.00
		CH 60	5300	16.95	17.50	18.00
		CH 64	5320	20.38	21.00	18.00
	802.11n-HT20 MCS0	CH 52	5260	17.36	18.00	18.00
		CH 60	5300	16.95	17.50	18.00
		CH 64	5320	17.01	18.00	18.00
	802.11n-HT40 MCS0	CH 54	5270	16.41	17.00	17.00
		CH 62	5310	16.24	17.00	17.00
	802.11ac-VHT20 MCS0	CH 52	5260	17.22	18.00	18.00
		CH 60	5300	16.99	17.50	18.00
		CH 64	5320	16.94	17.50	18.00
	802.11ac-VHT40 MCS0	CH 54	5270	16.47	17.00	17.00
		CH 62	5310	16.10	17.00	17.00
	802.11ac-VHT80 MCS0	CH 58	5290	15.63	16.50	16.00

5.5GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.5GHz WLAN ANT 5	802.11a 6Mbps	CH 100	5600	16.62	17.50	18.00
		CH 120	5600	16.54	17.50	18.00
		CH 144	5720	17.38	18.00	18.00
	802.11n-HT20 MCS0	CH 100	5600	16.68	17.50	18.00
		CH 120	5600	16.53	17.50	18.00
		CH 144	5720	17.66	18.50	18.00
	802.11n-HT40 MCS0	CH 102	5510	15.74	16.50	17.00
		CH 126	5630	15.67	16.50	17.00
		CH 142	5710	16.49	17.00	17.00
	802.11ac-VHT20 MCS0	CH 100	5600	16.65	17.50	18.00
		CH 120	5600	16.62	17.50	18.00
		CH 144	5720	17.38	18.00	18.00
	802.11ac-VHT40 MCS0	CH 102	5510	15.79	16.50	17.00
		CH 126	5630	15.81	16.50	17.00
		CH 142	5710	16.58	17.50	17.00
	802.11ac-VHT80 MCS0	CH 106	5630	14.91	15.50	16.00
		CH 122	5610	15.02	16.00	16.00
		CH 138	5690	15.82	16.50	16.00

5.8GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 5	802.11a 6Mbps	CH 149	5745	20.47	21.00	20.00
		CH 157	5785	20.81	21.50	20.00
		CH 165	5825	20.96	21.50	20.00
	802.11n-HT20 MCS0	CH 149	5745	17.09	18.00	18.00
		CH 157	5785	17.62	18.50	18.00
		CH 165	5825	17.87	18.50	18.00
	802.11n-HT40 MCS0	CH 151	5755	16.30	17.00	17.00
		CH 159	5795	16.84	17.50	17.00
		CH 149	5745	17.30	18.00	18.00
	802.11ac-VHT20 MCS0	CH 157	5785	17.88	18.50	18.00
		CH 165	5825	17.55	18.50	18.00
	802.11ac-VHT40 MCS0	CH 151	5755	16.21	17.00	17.00
		CH 159	5795	16.80	17.50	17.00
	802.11ac-VHT80 MCS0	CH 155	5775	15.81	16.50	16.00

Mode	Channel	Frequency (MHz)	1Mbps		2Mbps		3Mbps	
			Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit
BR / EDR	CH 00	2402	9.30	10.00	5.86	6.50	5.81	6.50
	CH 39	2441	8.25	9.00	5.36	6.00	5.44	6.00
	CH 78	2480	8.79	9.50	5.76	6.50	5.56	6.50
	Duty Cycle %		76.83		76.93		76.99	

Mode	Channel	Frequency (MHz)	1Mbps		2Mbps	
			Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit
LE	CH 00	2402	-4.93	-4	-7.62	-7
	CH 19	2440	-4.34	-3.5	-7.17	-6.5
	CH 39	2480	-4.63	-4	-7.57	-7
	Duty Cycle %		61.44		32	

Reduced Power

GSM850		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel		128	189	251		128	189	251	
Frequency (MHz)		824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot		31.32	31.35	31.42	32.50	22.32	22.35	22.42	23.50
GPRS 1 Tx slot		31.21	31.31	31.29	32.50	22.21	22.31	22.29	23.50
GPRS 2 Tx slots		30.69	30.73	30.75	31.50	24.69	24.73	24.75	25.50
GPRS 3 Tx slots		28.93	28.89	29.02	30.00	24.67	24.63	24.76	25.74
GPRS 4 Tx slots		27.77	27.75	27.85	28.50	24.77	24.75	24.85	25.50
EDGE 1 Tx slot		26.63	26.72	26.67	27.50	17.63	17.72	17.67	18.50
EDGE 2 Tx slots		25.26	25.31	25.17	26.00	19.26	19.31	19.17	20.00
EDGE 3 Tx slots		23.57	23.56	23.62	24.50	19.31	19.30	19.36	20.24
EDGE 4 Tx slots		22.58	22.51	22.61	23.50	19.58	19.51	19.61	20.50
Mode			Max.	31.42			Max.	24.85	
Attenuator		Cable Loss : 0.6							
Date		5/6							

GSM1900		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel		512	661	810		512	661	810	
Frequency (MHz)		1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot		24.82	24.89	24.84	26.50	15.82	15.89	15.84	17.50
GPRS 1 Tx slot		24.66	24.53	24.67	26.50	15.66	15.53	15.67	17.50
GPRS 2 Tx slots		23.29	23.35	23.39	24.00	17.29	17.35	17.39	18.00
GPRS 3 Tx slots		21.71	21.67	21.78	22.50	17.45	17.41	17.52	18.24
GPRS 4 Tx slots		20.29	20.25	20.18	21.00	17.29	17.25	17.18	18.00
EDGE 1 Tx slot		22.09	22.04	22.13	23.00	13.09	13.04	13.13	14.00
EDGE 2 Tx slots		20.65	20.58	20.61	21.50	14.65	14.58	14.61	15.50
EDGE 3 Tx slots		18.71	18.67	18.88	19.50	14.45	14.41	14.62	15.24
EDGE 4 Tx slots		17.16	17.13	17.25	18.00	14.16	14.13	14.25	15.00
Mode			Max.	24.89			Max.	17.52	
Attenuator		Cable Loss : 0.8							
Date		5/6							

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	15.18	15.21	15.11	16.00	14.61	14.65	14.60	15.50	22.65	22.66	22.62	23.50
3GPP Rel 5	HSDPA Subtest-1	14.19	14.18	14.16	15.00	13.65	13.72	13.71	14.50	21.77	21.64	21.62	22.50
3GPP Rel 5	HSDPA Subtest-2	14.23	14.20	14.21	15.00	13.69	13.77	13.75	14.50	21.78	21.65	21.60	22.50
3GPP Rel 5	HSDPA Subtest-3	13.79	13.74	13.74	14.50	13.24	13.27	13.34	14.00	21.33	21.28	21.13	22.00
3GPP Rel 5	HSDPA Subtest-4	13.76	13.72	13.69	14.50	13.23	13.25	13.30	14.00	21.33	21.21	21.11	22.00
3GPP Rel 8	DC-HSDPA Subtest-1	14.19	14.19	14.17	15.00	13.67	13.71	13.69	14.50	21.73	21.63	21.56	22.50
3GPP Rel 8	DC-HSDPA Subtest-2	14.14	14.21	14.14	15.00	13.65	13.66	13.62	14.50	21.70	21.58	21.57	22.50
3GPP Rel 8	DC-HSDPA Subtest-3	13.59	13.70	13.60	14.50	13.08	13.13	13.11	14.00	21.17	21.07	21.06	22.00
3GPP Rel 8	DC-HSDPA Subtest-4	13.60	13.70	13.62	14.50	13.12	13.16	13.12	14.00	21.19	21.08	21.04	22.00
3GPP Rel 6	HSUPA Subtest-1	13.74	13.71	13.66	14.50	13.21	13.28	13.26	14.00	21.32	21.17	21.17	22.00
3GPP Rel 6	HSUPA Subtest-2	14.21	14.20	14.17	15.00	13.71	13.76	13.74	14.50	21.77	21.68	21.63	22.50
3GPP Rel 6	HSUPA Subtest-3	13.28	13.25	13.22	14.00	12.75	12.78	12.83	13.50	20.81	20.71	20.65	21.50
3GPP Rel 6	HSUPA Subtest-4	14.18	14.14	14.15	15.00	13.65	13.72	13.70	14.50	21.79	21.62	21.60	22.50
3GPP Rel 6	HSUPA Subtest-5	13.23	13.21	13.18	14.00	12.72	12.80	12.80	13.50	20.80	20.69	20.67	21.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	13.72	13.69	13.66	14.50	13.17	13.23	13.19	14.00	21.28	21.20	21.13	22.00
Attenuator		Cable Loss			0.8	Cable Loss			0.8	Cable Loss			0.6
Mode			Max.	15.21			Max.	14.65			Max.	22.66	
Date		5/6				5/6				5/6			

Band 2 (1900MHz Band) (dBm)_Ant 0 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	14.77	14.81	14.74	15.5	
20	QPSK	1	49	14.63	14.69	14.67		
20	QPSK	1	99	14.58	14.65	14.48		
20	QPSK	50	0	13.80	13.87	13.84		
20	QPSK	50	24	13.76	13.83	13.79	14.5	
20	QPSK	50	50	13.79	13.79	13.81		
20	QPSK	100	0	13.74	13.76	13.75		
20	16QAM	1	0	13.83	13.97	13.88		
20	16QAM	1	49	13.71	13.85	13.86	14.5	
20	16QAM	1	99	13.74	13.82	13.78		
20	16QAM	50	0	12.85	12.92	12.90		
20	16QAM	50	24	12.79	12.75	12.78		
20	16QAM	50	50	12.84	12.87	12.89	13.5	
20	16QAM	100	0	12.67	12.80	12.72		
20	64QAM	1	0	12.92	12.94	12.90		
20	64QAM	1	49	12.77	12.82	12.78		
20	64QAM	1	99	12.82	12.89	12.79	13.5	
20	64QAM	50	0	11.70	11.74	11.78		
20	64QAM	50	24	11.61	11.56	11.70		
20	64QAM	50	50	11.64	11.66	11.67		
20	64QAM	100	0	11.57	11.58	11.54	12.5	
20	256QAM	1	0	9.65	9.68	9.64		
20	256QAM	1	49	9.42	9.59	9.48		
20	256QAM	1	99	9.53	9.57	9.53		
20	256QAM	50	0	9.37	9.39	9.56	10.5	
20	256QAM	50	24	9.57	9.52	9.59		
20	256QAM	50	50	9.48	9.54	9.60		
20	256QAM	100	0	9.49	9.49	9.45		
Channel				18675	18900	19125	Tune-up limit (dBm)	
Frequency (MHz)				1857.5	1880	1902.5		
15	QPSK	1	0	14.75	14.80	14.78		
15	QPSK	1	37	14.56	14.61	14.65	15.5	
15	QPSK	1	74	14.44	14.47	14.33		
15	QPSK	36	0	13.74	13.79	13.72		
15	QPSK	36	20	13.70	13.76	13.75		
15	QPSK	36	39	13.76	13.75	13.72	14.5	
15	QPSK	75	0	13.70	13.71	13.75		
15	16QAM	1	0	13.76	13.93	13.73		
15	16QAM	1	37	13.73	13.81	13.73		
15	16QAM	1	74	13.77	13.75	13.74	14.5	
15	16QAM	36	0	12.73	12.72	12.71		
15	16QAM	36	20	12.62	12.63	12.60		
15	16QAM	36	39	12.78	12.76	12.74		
15	16QAM	75	0	12.53	12.74	12.56	13.5	
15	64QAM	1	0	12.75	12.80	12.80		
15	64QAM	1	37	12.71	12.72	12.72		
15	64QAM	1	74	12.68	12.73	12.69		
15	64QAM	36	0	11.58	11.62	11.71	12.5	
15	64QAM	36	20	11.48	11.47	11.50		
15	64QAM	36	39	11.57	11.51	11.52		
15	64QAM	75	0	11.41	11.42	11.48		
15	256QAM	1	0	9.61	9.64	9.61	10.5	
15	256QAM	1	37	9.34	9.48	9.46		
15	256QAM	1	74	9.44	9.40	9.42		
15	256QAM	36	0	9.32	9.30	9.42		
15	256QAM	36	20	9.48	9.38	9.42	10.5	
15	256QAM	36	39	9.30	9.50	9.56		
15	256QAM	75	0	9.35	9.36	9.33		
Channel				18650	18900	19150	Tune-up limit (dBm)	
Frequency (MHz)				1855	1880	1905		
10	QPSK	1	0	14.73	14.78	14.62		
10	QPSK	1	25	14.47	14.65	14.55	15.5	
10	QPSK	1	49	14.42	14.61	14.40		
10	QPSK	25	0	13.57	13.68	13.60		
10	QPSK	25	12	13.36	13.63	13.60		
10	QPSK	25	25	13.51	13.53	13.64	14.5	
10	QPSK	50	0	13.50	13.41	13.54		
10	16QAM	1	0	13.76	13.79	13.85		
10	16QAM	1	25	13.65	13.68	13.75		
10	16QAM	1	49	13.61	13.71	13.63	13.5	
10	16QAM	25	0	12.57	12.62	12.57		
10	16QAM	25	12	12.51	12.38	12.50		
10	16QAM	25	25	12.46	12.47	12.61		
10	16QAM	50	0	12.30	12.48	12.35	13.5	
10	64QAM	1	0	12.79	12.81	12.74		
10	64QAM	1	25	12.68	12.74	12.67		
10	64QAM	1	49	12.69	12.71	12.62		
10	64QAM	25	0	11.60	11.61	11.71	12.5	
10	64QAM	25	12	11.44	11.46	11.57		
10	64QAM	25	25	11.48	11.53	11.50		
10	64QAM	50	0	11.37	11.47	11.39		
10	256QAM	1	0	9.49	9.66	9.50	10.5	
10	256QAM	1	25	9.26	9.49	9.39		
10	256QAM	1	49	9.50	9.53	9.46		
10	256QAM	25	0	9.35	9.35	9.51		
10	256QAM	25	12	9.55	9.50	9.45	10.5	
10	256QAM	25	25	9.40	9.47	9.56		
10	256QAM	50	0	9.44	9.42	9.38		
Channel				18625	18900	19175	Tune-up limit (dBm)	
Frequency (MHz)				1852.5	1880	1907.5		
5	QPSK	1	0	14.66	14.68	14.67		
5	QPSK	1	12	14.56	14.58	14.58	15.5	
5	QPSK	1	24	14.51	14.53	14.45		
5	QPSK	12	0	13.70	13.76	13.71		
5	QPSK	12	7	13.65	13.71	13.66		

Band 2 (1900MHz Band) (dBm)_Ant 4 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)				18600	18880	19000	
20	QPSK	1	0	12.77	12.81	12.74	13.5
20	QPSK	1	49	12.63	12.69	12.67	
20	QPSK	1	99	12.58	12.65	12.48	
20	QPSK	50	0	11.80	11.87	11.84	
20	QPSK	50	24	11.76	11.83	11.79	12.5
20	QPSK	50	50	11.79	11.79	11.81	
20	QPSK	100	0	11.74	11.76	11.75	
20	16QAM	1	0	11.83	11.97	11.88	
20	16QAM	1	49	11.71	11.85	11.86	12.5
20	16QAM	1	99	11.74	11.82	11.78	
20	16QAM	50	0	10.85	10.92	10.90	
20	16QAM	50	24	10.79	10.75	10.78	
20	16QAM	50	50	10.84	10.87	10.89	11.5
20	16QAM	100	0	10.67	10.80	10.72	
20	64QAM	1	0	10.92	10.94	10.90	
20	64QAM	1	49	10.77	10.82	10.78	
20	64QAM	1	99	10.82	10.89	10.79	11.5
20	64QAM	50	0	9.70	9.74	9.78	
20	64QAM	50	24	9.61	9.56	9.70	
20	64QAM	50	50	9.64	9.66	9.67	
20	64QAM	100	0	9.57	9.58	9.54	10.5
20	256QAM	1	0	7.65	7.68	7.64	
20	256QAM	1	49	7.42	7.59	7.48	
20	256QAM	1	99	7.53	7.57	7.53	
20	256QAM	50	0	7.37	7.39	7.56	8.5
20	256QAM	50	24	7.57	7.52	7.59	
20	256QAM	50	50	7.48	7.54	7.60	
20	256QAM	100	0	7.49	7.49	7.45	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	12.75	12.80	12.78	
15	QPSK	1	37	12.56	12.61	12.65	
15	QPSK	1	74	12.44	12.47	12.33	
15	QPSK	36	0	11.74	11.79	11.72	
15	QPSK	36	20	11.70	11.76	11.75	12.5
15	QPSK	36	39	11.76	11.75	11.72	
15	QPSK	75	0	11.70	11.71	11.75	
15	16QAM	1	0	11.76	11.93	11.73	
15	16QAM	1	37	11.73	11.81	11.73	12.5
15	16QAM	1	74	11.77	11.75	11.74	
15	16QAM	36	0	10.73	10.72	10.71	
15	16QAM	36	20	10.62	10.63	10.60	
15	16QAM	36	39	10.78	10.76	10.74	11.5
15	16QAM	36	20	10.62	10.63	10.60	
15	16QAM	75	0	10.53	10.74	10.56	
15	64QAM	1	0	10.75	10.80	10.80	
15	64QAM	1	37	10.71	10.72	10.72	11.5
15	64QAM	1	74	10.68	10.73	10.69	
15	64QAM	36	0	9.58	9.62	9.71	
15	64QAM	36	20	9.48	9.47	9.50	
15	64QAM	36	39	9.57	9.51	9.52	10.5
15	64QAM	75	0	9.41	9.42	9.48	
15	256QAM	1	0	7.61	7.64	7.61	
15	256QAM	1	37	7.34	7.48	7.46	
15	256QAM	1	74	7.44	7.40	7.42	8.5
15	256QAM	36	0	7.32	7.30	7.42	
15	256QAM	36	20	7.48	7.38	7.42	
15	256QAM	36	39	7.30	7.50	7.56	
15	256QAM	75	0	7.35	7.36	7.33	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	12.73	12.78	12.62	
10	QPSK	1	25	12.47	12.65	12.55	
10	QPSK	1	49	12.42	12.61	12.40	
10	QPSK	25	0	11.57	11.68	11.60	
10	QPSK	25	12	11.36	11.63	11.60	12.5
10	QPSK	25	25	11.51	11.53	11.64	
10	QPSK	50	0	11.50	11.41	11.54	
10	16QAM	1	0	11.76	11.79	11.85	
10	16QAM	1	25	11.65	11.68	11.75	12.5
10	16QAM	1	49	11.61	11.71	11.63	
10	16QAM	25	0	10.57	10.62	10.57	
10	16QAM	25	12	10.51	10.38	10.50	
10	16QAM	25	25	10.46	10.47	10.61	11.5
10	16QAM	50	0	10.30	10.48	10.35	
10	64QAM	1	0	10.79	10.81	10.74	
10	64QAM	1	25	10.68	10.74	10.67	
10	64QAM	1	49	10.69	10.71	10.62	11.5
10	64QAM	25	0	9.60	9.61	9.71	
10	64QAM	25	12	9.44	9.46	9.57	
10	64QAM	25	25	9.48	9.53	9.50	
10	64QAM	50	0	9.37	9.47	9.39	8.5
10	256QAM	1	0	7.49	7.66	7.50	
10	256QAM	1	25	7.26	7.49	7.39	
10	256QAM	1	49	7.50	7.53	7.46	
10	256QAM	25	0	7.35	7.35	7.51	8.5
10	256QAM	25	12	7.55	7.50	7.45	
10	256QAM	25	25	7.40	7.47	7.56	
10	256QAM	50	0	7.44	7.42	7.38	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	12.66	12.68	12.67	
5	QPSK	1	12	12.56	12.58	12.58	
5	QPSK	1	24	12.51	12.53	12.45	
5	QPSK	12	0	11.70	11.76	11.71	
5	QPSK	12	7	11.65	11.71	11.66	

5	QPSK	12	13	13.61	13.66	13.63	14.5
5	QPSK	25	0	13.48	13.44	13.64	
5	16QAM	1	0	13.75	13.92	13.83	
5	16QAM	1	12	13.75	13.83	13.82	
5	16QAM	1	24	13.72	13.76	13.75	13.5
5	16QAM	12	0	12.50	12.62	12.63	
5	16QAM	12	7	12.39	12.37	12.50	
5	16QAM	12	13	12.55	12.53	12.50	
5	16QAM	25	0	12.40	12.50	12.41	13.5
5	64QAM	1	0	12.83	12.88	12.73	
5	64QAM	1	12	12.61	12.76	12.64	
5	64QAM	1	24	12.65	12.72	12.69	
5	64QAM	12	0	11.64	11.56	11.59	12.5
5	64QAM	12	7	11.41	11.46	11.53	
5	64QAM	12	13	11.54	11.57	11.50	
5	64QAM	25	0	11.41	11.41	11.48	
5	256QAM	1	0	9.59	9.64	9.57	10.5
5	256QAM	1	12	9.24	9.51	9.44	
5	256QAM	1	24	9.50	9.46	9.40	
5	256QAM	12	0	9.29	9.23	9.54	
5	256QAM	12	7	9.52	9.43	9.47	10.5
5	256QAM	12	13	9.41	9.48	9.56	
5	256QAM	25	0	9.46	9.33	9.39	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	14.71	14.75	14.69	15.5
3	QPSK	1	8	14.51	14.62	14.64	
3	QPSK	1	14	14.48	14.56	14.35	
3	QPSK	8	0	13.57	13.65	13.59	
3	QPSK	8	4	13.44	13.51	13.60	14.5
3	QPSK	8	7	13.51	13.59	13.58	
3	QPSK	15	0	13.51	13.44	13.59	
3	16QAM	1	0	13.76	13.84	13.70	
3	16QAM	1	8	13.55	13.78	13.84	14.5
3	16QAM	1	14	13.48	13.77	13.65	
3	16QAM	8	0	12.48	12.57	12.57	
3	16QAM	8	4	12.43	12.38	12.47	
3	16QAM	8	7	12.47	12.53	12.53	13.5
3	16QAM	15	0	12.38	12.53	12.44	
3	64QAM	1	0	12.73	12.84	12.83	
3	64QAM	1	8	12.68	12.76	12.63	
3	64QAM	1	14	12.63	12.81	12.66	13.5
3	64QAM	8	0	11.50	11.63	11.70	
3	64QAM	8	4	11.49	11.39	11.58	
3	64QAM	8	7	11.50	11.58	11.55	
3	64QAM	15	0	11.39	11.46	11.48	12.5
3	256QAM	1	0	9.59	9.61	9.59	
3	256QAM	1	8	9.24	9.44	9.46	
3	256QAM	1	14	9.44	9.41	9.47	
3	256QAM	8	0	9.22	9.32	9.38	10.5
3	256QAM	8	4	9.52	9.41	9.44	
3	256QAM	8	7	9.40	9.46	9.51	
3	256QAM	15	0	9.37	9.47	9.39	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	14.68	14.69	14.65	15.5
1.4	QPSK	1	3	14.58	14.64	14.61	
1.4	QPSK	1	5	14.40	14.53	14.42	
1.4	QPSK	3	0	14.54	14.66	14.58	
1.4	QPSK	3	1	14.37	14.64	14.57	14.5
1.4	QPSK	3	3	14.48	14.54	14.51	
1.4	QPSK	6	0	13.76	13.74	13.79	
1.4	16QAM	1	0	13.77	13.89	13.83	
1.4	16QAM	1	3	13.63	13.71	13.75	14.5
1.4	16QAM	1	5	13.69	13.75	13.72	
1.4	16QAM	3	0	13.69	13.63	13.62	
1.4	16QAM	3	1	13.62	13.55	13.52	
1.4	16QAM	3	3	13.62	13.58	13.69	13.5
1.4	16QAM	6	0	12.51	12.51	12.51	
1.4	64QAM	1	0	12.86	12.79	12.73	
1.4	64QAM	1	3	12.61	12.68	12.72	
1.4	64QAM	1	5	12.75	12.75	12.64	13.5
1.4	64QAM	3	0	12.53	12.68	12.65	
1.4	64QAM	3	1	12.49	12.48	12.50	
1.4	64QAM	3	3	12.54	12.47	12.51	
1.4	64QAM	6	0	11.38	11.47	11.40	12.5
1.4	256QAM	1	0	9.63	9.53	9.53	
1.4	256QAM	1	3	9.33	9.43	9.33	
1.4	256QAM	1	5	9.38	9.44	9.47	
1.4	256QAM	3	0	9.20	9.24	9.46	10.5
1.4	256QAM	3	1	9.50	9.43	9.57	
1.4	256QAM	3	3	9.45	9.38	9.57	
1.4	256QAM	6	0	9.42	9.37	9.29	

5	QPSK	12	13	11.61	11.66	11.63	12.5
5	QPSK	25	0	11.48	11.44	11.64	
5	16QAM	1	0	11.75	11.92	11.83	
5	16QAM	1	12	11.75	11.83	11.82	
5	16QAM	1	24	11.72	11.76	11.75	11.5
5	16QAM	12	0	10.50	10.62	10.63	
5	16QAM	12	7	10.39	10.37	10.50	
5	16QAM	12	13	10.55	10.53	10.50	
5	16QAM	25	0	10.40	10.50	10.41	11.5
5	64QAM	1	0	10.83	10.88	10.73	
5	64QAM	1	12	10.61	10.76	10.64	
5	64QAM	1	24	10.65	10.72	10.69	
5	64QAM	12	0	9.64	9.56	9.59	10.5
5	64QAM	12	7	9.41	9.46	9.53	
5	64QAM	12	13	9.54	9.57	9.50	
5	64QAM	25	0	9.41	9.41	9.48	
5	256QAM	1	0	7.59	7.64	7.57	8.5
5	256QAM	1	12	7.24	7.51	7.44	
5	256QAM	1	24	7.50	7.46	7.40	
5	256QAM	12	0	7.29	7.23	7.54	
5	256QAM	12	7	7.52	7.43	7.47	8.5
5	256QAM	12	13	7.41	7.48	7.56	
5	256QAM	25	0	7.46	7.33	7.39	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	12.71	12.75	12.69	13.5
3	QPSK	1	8	12.51	12.62	12.64	
3	QPSK	1	14	12.48	12.56	12.35	
3	QPSK	8	0	11.57	11.65	11.59	
3	QPSK	8	4	11.44	11.51	11.60	12.5
3	QPSK	8	7	11.51	11.59	11.58	
3	QPSK	15	0	11.51	11.44	11.59	
3	16QAM	1	0	11.76	11.84	11.70	
3	16QAM	1	8	11.55	11.78	11.84	12.5
3	16QAM	1	14	11.48	11.77	11.65	
3	16QAM	8	0	10.48	10.57	10.57	
3	16QAM	8	4	10.43	10.38	10.47	
3	16QAM	8	7	10.47	10.53	10.53	11.5
3	16QAM	15	0	10.38	10.53	10.44	
3	64QAM	1	0	10.73	10.84	10.83	
3	64QAM	1	8	10.68	10.76	10.63	
3	64QAM	1	14	10.63	10.81	10.66	11.5
3	64QAM	8	0	9.50	9.63	9.70	
3	64QAM	8	4	9.49	9.39	9.58	
3	64QAM	8	7	9.50	9.58	9.55	
3	64QAM	15	0	9.39	9.46	9.48	10.5
3	256QAM	1	0	7.59	7.61	7.59	
3	256QAM	1	8	7.24	7.44	7.46	
3	256QAM	1	14	7.44	7.41	7.47	
3	256QAM	8	0	7.22	7.32	7.38	8.5
3	256QAM	8	4	7.52	7.41	7.44	
3	256QAM	8	7	7.40	7.46	7.51	
3	256QAM	15	0	7.37	7.47	7.39	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	12.68	12.69	12.65	13.5
1.4	QPSK	1	3	12.58	12.64	12.61	
1.4	QPSK	1	5	12.40	12.53	12.42	
1.4	QPSK	3	0	12.54	12.66	12.58	
1.4	QPSK	3	1	12.37	12.64	12.57	12.5
1.4	QPSK	3	3	12.48	12.54	12.51	
1.4	QPSK	6	0	11.76	11.74	11.79	
1.4	16QAM	1	0	11.77	11.89	11.83	
1.4	16QAM	1	3	11.63	11.71	11.75	12.5
1.4	16QAM	1	5	11.69	11.75	11.72	
1.4	16QAM	3	0	11.69	11.63	11.62	
1.4	16QAM	3	1	11.62	11.55	11.52	
1.4	16QAM	3	3	11.62	11.58	11.69	11.5
1.4	16QAM	6	0	10.51	10.51	10.51	
1.4	64QAM	1	0	10.86	10.79	10.73	
1.4	64QAM	1	3	10.61	10.68	10.72	
1.4	64QAM	1	5	10.75	10.75	10.64	11.5
1.4	64QAM	3	0	10.53	10.68	10.65	
1.4	64QAM	3	1	10.49	10.48	10.50	
1.4	64QAM	3	3	10.54	10.47	10.51	
1.4	64QAM	6	0	9.38	9.47	9.40	10.5
1.4	256QAM	1	0	7.63	7.53	7.53	
1.4	256QAM	1	3	7.33	7.43	7.33	
1.4	256QAM	1	5	7.38	7.44	7.47	
1.4	256QAM	3	0	7.20	7.24	7.46	8.5
1.4	256QAM	3	1	7.50	7.43	7.57	
1.4	256QAM	3	3	7.45	7.38	7.57	
1.4	256QAM	6	0	7.42	7.37	7.29	8.5

Band 4 (AWS Band) (dBm)_Ant 0 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	14.26	14.31	14.24	15
20	QPSK	1	49	14.16	14.22	14.18	
20	QPSK	1	99	14.01	14.16	14.07	
20	QPSK	50	0	13.28	13.30	13.25	14
20	QPSK	50	24	13.17	13.18	13.12	
20	QPSK	50	50	13.21	13.23	13.18	
20	QPSK	100	0	13.06	13.07	13.00	14
20	16QAM	1	0	13.33	13.44	13.40	
20	16QAM	1	49	13.18	13.36	13.35	
20	16QAM	1	99	13.37	13.41	13.38	13
20	16QAM	50	0	12.25	12.27	12.26	
20	16QAM	50	24	12.11	12.14	12.16	
20	16QAM	50	50	12.19	12.24	12.20	13
20	16QAM	100	0	12.02	12.16	12.11	
20	64QAM	1	0	12.28	12.41	12.31	13
20	64QAM	1	49	12.15	12.32	12.19	
20	64QAM	1	99	12.06	12.24	12.18	
20	64QAM	50	0	11.29	11.36	11.28	12
20	64QAM	50	24	11.13	11.22	11.20	
20	64QAM	50	50	11.25	11.18	11.17	
20	64QAM	100	0	11.05	11.02	11.11	10
20	256QAM	1	0	8.87	8.91	8.97	
20	256QAM	1	49	8.75	8.86	8.80	
20	256QAM	1	99	8.89	8.84	8.86	10
20	256QAM	50	0	8.62	8.75	8.81	
20	256QAM	50	24	8.89	8.82	8.91	
20	256QAM	50	50	8.83	8.81	8.92	10
20	256QAM	100	0	8.82	8.76	8.72	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	14.20	14.22	14.02	15
15	QPSK	1	37	14.02	14.06	13.84	
15	QPSK	1	74	13.95	14.11	13.92	
15	QPSK	36	0	13.18	13.28	13.10	14
15	QPSK	36	20	13.07	13.00	13.02	
15	QPSK	36	39	13.17	13.13	13.01	
15	QPSK	75	0	12.97	12.95	12.93	14
15	16QAM	1	0	13.16	13.33	13.26	
15	16QAM	1	37	13.13	13.32	13.24	
15	16QAM	1	74	13.31	13.32	13.32	13
15	16QAM	36	0	12.12	12.15	12.08	
15	16QAM	36	20	12.03	12.08	11.98	
15	16QAM	36	39	12.10	12.10	12.09	13
15	16QAM	75	0	11.85	12.02	11.97	
15	64QAM	1	0	12.18	12.31	12.11	13
15	64QAM	1	37	12.02	12.24	12.11	
15	64QAM	1	74	11.86	12.08	12.00	
15	64QAM	36	0	11.20	11.17	11.11	12
15	64QAM	36	20	11.02	11.08	11.09	
15	64QAM	36	39	11.18	11.12	11.04	
15	64QAM	75	0	10.95	10.94	11.03	10
15	256QAM	1	0	8.72	8.85	8.92	
15	256QAM	1	37	8.69	8.80	8.86	
15	256QAM	1	74	8.77	8.74	8.75	10
15	256QAM	36	0	8.49	8.64	8.67	
15	256QAM	36	20	8.74	8.71	8.80	
15	256QAM	36	39	8.73	8.79	8.88	10
15	256QAM	75	0	8.77	8.58	8.64	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	14.15	14.17	14.02	15
10	QPSK	1	25	14.06	14.13	13.79	
10	QPSK	1	49	13.84	13.98	13.95	
10	QPSK	25	0	13.18	13.12	13.12	14
10	QPSK	25	12	13.09	13.04	13.08	
10	QPSK	25	25	13.03	13.11	13.03	
10	QPSK	50	0	12.95	13.03	12.83	14
10	16QAM	1	0	13.25	13.40	13.27	
10	16QAM	1	25	13.15	13.21	13.27	
10	16QAM	1	49	13.21	13.32	13.31	13
10	16QAM	25	0	12.15	12.14	12.06	
10	16QAM	25	12	12.01	12.03	12.09	
10	16QAM	25	25	12.04	12.06	12.00	13
10	16QAM	50	0	11.85	12.01	12.02	
10	64QAM	1	0	12.13	12.30	12.17	13
10	64QAM	1	25	12.09	12.19	12.01	
10	64QAM	1	49	11.88	12.05	11.98	
10	64QAM	25	0	11.18	11.20	11.21	12
10	64QAM	25	12	11.04	11.06	11.09	
10	64QAM	25	25	11.11	11.04	11.00	
10	64QAM	50	0	10.92	10.84	10.93	10
10	256QAM	1	0	8.85	8.89	8.93	
10	256QAM	1	25	8.64	8.68	8.70	
10	256QAM	1	49	8.81	8.67	8.74	10
10	256QAM	25	0	8.49	8.57	8.68	
10	256QAM	25	12	8.78	8.67	8.84	
10	256QAM	25	25	8.76	8.73	8.84	10
10	256QAM	50	0	8.71	8.59	8.65	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	14.16	14.19	13.97	15
5	QPSK	1	12	14.09	14.17	13.82	
5	QPSK	1	24	13.88	14.07	13.98	
5	QPSK	12	0	13.12	13.22	13.19	14
5	QPSK	12	7	13.00	13.03	12.94	

Band 4 (AWS Band) (dBm)_Ant 4 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	14.76	14.81	14.74	15.5
20	QPSK	1	49	14.66	14.72	14.66	
20	QPSK	1	99	14.51	14.66	14.57	
20	QPSK	50	0	13.78	13.80	13.75	14.5
20	QPSK	50	24	13.67	13.68	13.62	
20	QPSK	50	50	13.71	13.73	13.68	
20	QPSK	100	0	13.56	13.57	13.50	14.5
20	16QAM	1	0	13.83	13.94	13.90	
20	16QAM	1	49	13.68	13.86	13.85	
20	16QAM	1	99	13.87	13.91	13.88	13.5
20	16QAM	50	0	12.75	12.77	12.76	
20	16QAM	50	24	12.61	12.64	12.66	
20	16QAM	50	50	12.69	12.74	12.70	13.5
20	16QAM	100	0	12.52	12.66	12.61	
20	64QAM	1	0	12.78	12.91	12.81	13.5
20	64QAM	1	49	12.65	12.82	12.69	
20	64QAM	1	99	12.56	12.74	12.68	
20	64QAM	50	0	11.79	11.86	11.78	12.5
20	64QAM	50	24	11.63	11.72	11.70	
20	64QAM	50	50	11.75	11.68	11.67	
20	64QAM	100	0	11.55	11.52	11.61	10.5
20	256QAM	1	0	9.37	9.41	9.47	
20	256QAM	1	49	9.25	9.36	9.30	
20	256QAM	1	99	9.39	9.34	9.36	10.5
20	256QAM	50	0	9.12	9.25	9.31	
20	256QAM	50	24	9.39	9.32	9.41	
20	256QAM	50	50	9.33	9.31	9.42	10.5
20	256QAM	100	0	9.32	9.26	9.22	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	14.70	14.72	14.52	15.5
15	QPSK	1	37	14.52	14.56	14.34	
15	QPSK	1	74	14.45	14.61	14.42	
15	QPSK	36	0	13.68	13.78	13.60	14.5
15	QPSK	36	20	13.57	13.50	13.52	
15	QPSK	36	39	13.67	13.63	13.51	
15	QPSK	75	0	13.47	13.45	13.43	14.5
15	16QAM	1	0	13.66	13.83	13.76	
15	16QAM	1	37	13.63	13.82	13.74	
15	16QAM	1	74	13.81	13.82	13.82	13.5
15	16QAM	36	0	12.62	12.65	12.58	
15	16QAM	36	20	12.53	12.58	12.48	
15	16QAM	36	39	12.60	12.60	12.59	13.5
15	16QAM	75	0	12.35	12.52	12.47	
15	64QAM	1	0	12.68	12.81	12.61	13.5
15	64QAM	1	37	12.52	12.74	12.61	
15	64QAM	1	74	12.36	12.58	12.50	
15	64QAM	36	0	11.70	11.67	11.61	12.5
15	64QAM	36	20	11.52	11.58	11.59	
15	64QAM	36	39	11.68	11.62	11.54	
15	64QAM	75	0	11.45	11.44	11.53	10.5
15	256QAM	1	0	9.22	9.35	9.42	
15	256QAM	1	37	9.19	9.30	9.16	
15	256QAM	1	74	9.27	9.24	9.25	10.5
15	256QAM	36	0	8.99	9.14	9.17	
15	256QAM	36	20	9.24	9.21	9.30	
15	256QAM	36	39	9.23	9.29	9.38	10.5
15	256QAM	75	0	9.27	9.08	9.14	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	14.65	14.67	14.52	15.5
10	QPSK	1	25	14.56	14.63	14.29	
10	QPSK	1	49	14.34	14.48	14.45	
10	QPSK	25	0	13.68	13.62	13.62	14.5
10	QPSK	25	12	13.59	13.54	13.58	
10	QPSK	25	25	13.53	13.61	13.53	
10	QPSK	50	0	13.45	13.53	13.33	14.5
10	16QAM	1	0	13.75	13.90	13.77	
10	16QAM	1	25	13.65	13.71	13.77	
10	16QAM	1	49	13.71	13.82	13.81	13.5
10	16QAM	25	0	12.65	12.64	12.56	
10	16QAM	25	12	12.51	12.53	12.59	
10	16QAM	25	25	12.54	12.56	12.50	13.5
10	16QAM	50	0	12.35	12.51	12.52	
10	64QAM	1	0	12.63	12.80	12.67	13.5
10	64QAM	1	25	12.59	12.69	12.51	
10	64QAM	1	49	12.38	12.55	12.48	
10	64QAM	25	0	11.68	11.70	11.71	12.5
10	64QAM	25	12	11.54	11.56	11.59	
10	64QAM	25	25	11.61	11.54	11.50	
10	64QAM	50	0	11.42	11.34	11.43	10.5
10	256QAM	1	0	9.35	9.39	9.43	
10	256QAM	1	25	9.14	9.18	9.20	
10	256QAM	1	49	9.31	9.17	9.24	10.5
10	256QAM	25	0	8.99	9.07	9.18	
10	256QAM	25	12	9.28	9.17	9.34	
10	256QAM	25	25	9.26	9.23	9.34	10.5
10	256QAM	50	0	9.21	9.09	9.15	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	14.66	14.69	14.47	15.5
5	QPSK	1	12	14.59	14.67	14.32	
5	QPSK	1	24	14.38	14.57	14.48	
5	QPSK	12	0	13.62	13.72	13.69	15.5
5	QPSK	12	7	13.50	13.53	13.44	

5	QPSK	12	13	13.12	13.12	13.12	14
5	QPSK	25	0	12.94	12.93	12.85	
5	16QAM	1	0	13.20	13.26	13.36	
5	16QAM	1	12	13.12	13.34	13.24	13
5	16QAM	1	24	13.25	13.38	13.32	
5	16QAM	12	0	12.07	12.11	12.18	
5	16QAM	12	7	12.04	12.03	11.97	13
5	16QAM	12	13	12.08	12.09	12.07	
5	16QAM	25	0	11.89	12.01	12.03	
5	64QAM	1	0	12.21	12.23	12.19	13
5	64QAM	1	12	12.01	12.18	12.05	
5	64QAM	1	24	12.00	12.04	12.02	
5	64QAM	12	0	11.21	11.21	11.13	12
5	64QAM	12	7	10.94	11.07	11.12	
5	64QAM	12	13	11.07	11.12	11.09	
5	64QAM	25	0	10.88	10.88	11.03	10
5	256QAM	1	0	8.74	8.87	8.89	
5	256QAM	1	12	8.64	8.82	8.67	
5	256QAM	1	24	8.74	8.70	8.82	10
5	256QAM	12	0	8.49	8.72	8.68	
5	256QAM	12	7	8.72	8.80	8.77	
5	256QAM	12	13	8.67	8.79	8.80	10
5	256QAM	25	0	8.72	8.64	8.60	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	14.14	14.15	13.97	15
3	QPSK	1	8	14.00	14.07	13.78	
3	QPSK	1	14	13.88	14.03	13.92	
3	QPSK	8	0	13.22	13.19	13.16	14
3	QPSK	8	4	13.07	13.02	12.95	
3	QPSK	8	7	13.13	13.09	13.05	
3	QPSK	15	0	13.03	13.02	12.88	14
3	16QAM	1	0	13.27	13.27	13.26	
3	16QAM	1	8	13.14	13.20	13.30	
3	16QAM	1	14	13.25	13.23	13.24	13
3	16QAM	8	0	12.16	12.14	12.20	
3	16QAM	8	4	12.03	12.01	12.07	
3	16QAM	8	7	12.08	12.06	12.02	13
3	16QAM	15	0	11.96	12.06	11.97	
3	64QAM	1	0	12.20	12.25	12.11	
3	64QAM	1	8	12.01	12.15	12.08	13
3	64QAM	1	14	11.89	12.10	12.07	
3	64QAM	8	0	11.09	11.21	11.16	
3	64QAM	8	4	10.97	11.03	11.08	12
3	64QAM	8	7	11.14	10.98	11.04	
3	64QAM	15	0	10.87	10.89	10.91	
3	256QAM	1	0	8.69	8.89	8.80	10
3	256QAM	1	8	8.68	8.82	8.74	
3	256QAM	1	14	8.80	8.74	8.84	
3	256QAM	8	0	8.54	8.57	8.69	10
3	256QAM	8	4	8.87	8.65	8.86	
3	256QAM	8	7	8.72	8.72	8.89	
3	256QAM	15	0	8.76	8.64	8.58	10
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	Tune-up limit (dBm)
1.4	QPSK	1	0	14.18	14.20	14.00	
1.4	QPSK	1	3	14.04	14.15	13.88	15
1.4	QPSK	1	5	13.84	14.14	13.94	
1.4	QPSK	3	0	14.13	14.12	14.10	
1.4	QPSK	3	1	14.12	14.14	14.10	14
1.4	QPSK	3	3	14.09	14.08	14.00	
1.4	QPSK	6	0	13.02	12.90	12.85	
1.4	16QAM	1	0	13.26	13.32	13.37	14
1.4	16QAM	1	3	13.01	13.20	13.31	
1.4	16QAM	1	5	13.34	13.35	13.26	
1.4	16QAM	3	0	13.17	13.08	13.18	13
1.4	16QAM	3	1	13.04	12.98	13.03	
1.4	16QAM	3	3	13.00	13.09	13.08	
1.4	16QAM	6	0	11.91	12.03	11.95	13
1.4	64QAM	1	0	12.17	12.35	12.25	
1.4	64QAM	1	3	12.06	12.25	12.09	
1.4	64QAM	1	5	11.97	12.06	12.08	13
1.4	64QAM	3	0	12.14	12.15	12.10	
1.4	64QAM	3	1	11.95	12.04	12.09	
1.4	64QAM	3	3	12.11	11.98	12.05	12
1.4	64QAM	6	0	10.94	10.93	10.92	
1.4	256QAM	1	0	8.76	8.80	8.95	
1.4	256QAM	1	3	8.61	8.78	8.77	10
1.4	256QAM	1	5	8.80	8.61	8.71	
1.4	256QAM	3	0	8.54	8.63	8.72	
1.4	256QAM	3	1	8.85	8.80	8.79	10
1.4	256QAM	3	3	8.81	8.72	8.87	
1.4	256QAM	6	0	8.76	8.74	8.56	

5	QPSK	12	13	13.62	13.62	13.62	14.5
5	QPSK	25	0	13.44	13.43	13.35	
5	16QAM	1	0	13.70	13.76	13.86	
5	16QAM	1	12	13.62	13.84	13.74	13.5
5	16QAM	1	24	13.75	13.88	13.82	
5	16QAM	12	0	12.57	12.61	12.68	
5	16QAM	12	7	12.54	12.53	12.47	13.5
5	16QAM	12	13	12.58	12.59	12.57	
5	16QAM	25	0	12.39	12.51	12.53	
5	64QAM	1	0	12.71	12.73	12.69	13.5
5	64QAM	1	12	12.51	12.68	12.55	
5	64QAM	1	24	12.50	12.54	12.52	
5	64QAM	12	0	11.71	11.71	11.63	12.5
5	64QAM	12	7	11.44	11.57	11.62	
5	64QAM	12	13	11.57	11.62	11.59	
5	64QAM	25	0	11.38	11.38	11.53	10.5
5	256QAM	1	0	9.24	9.37	9.39	
5	256QAM	1	12	9.14	9.32	9.17	
5	256QAM	1	24	9.24	9.20	9.32	10.5
5	256QAM	12	0	8.99	9.22	9.18	
5	256QAM	12	7	9.22	9.30	9.27	
5	256QAM	12	13	9.17	9.29	9.30	10.5
5	256QAM	25	0	9.22	9.14	9.10	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	14.64	14.65	14.47	15.5
3	QPSK	1	8	14.50	14.57	14.28	
3	QPSK	1	14	14.38	14.53	14.42	
3	QPSK	8	0	13.72	13.69	13.66	14.5
3	QPSK	8	4	13.57	13.52	13.45	
3	QPSK	8	7	13.63	13.59	13.55	
3	QPSK	15	0	13.53	13.52	13.38	14.5
3	16QAM	1	0	13.77	13.77	13.76	
3	16QAM	1	8	13.64	13.70	13.80	
3	16QAM	1	14	13.75	13.73	13.74	13.5
3	16QAM	8	0	12.66	12.64	12.70	
3	16QAM	8	4	12.53	12.51	12.57	
3	16QAM	8	7	12.58	12.56	12.52	13.5
3	16QAM	15	0	12.46	12.56	12.47	
3	64QAM	1	0	12.70	12.75	12.61	
3	64QAM	1	8	12.51	12.65	12.58	13.5
3	64QAM	1	14	12.39	12.60	12.57	
3	64QAM	8	0	11.59	11.71	11.66	
3	64QAM	8	4	11.47	11.53	11.58	12.5
3	64QAM	8	7	11.64	11.48	11.54	
3	64QAM	15	0	11.37	11.39	11.41	
3	256QAM	1	0	9.19	9.39	9.30	10.5
3	256QAM	1	8	9.18	9.32	9.24	
3	256QAM	1	14	9.30	9.24	9.34	
3	256QAM	8	0	9.04	9.07	9.19	10.5
3	256QAM	8	4	9.37	9.15	9.36	
3	256QAM	8	7	9.22	9.22	9.39	
3	256QAM	15	0	9.26	9.14	9.08	10.5
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	Tune-up limit (dBm)
1.4	QPSK	1	0	14.68	14.70	14.50	
1.4	QPSK	1	3	14.54	14.65	14.38	15.5
1.4	QPSK	1	5	14.34	14.64	14.44	
1.4	QPSK	3	0	14.63	14.62	14.60	
1.4	QPSK	3	1	14.62	14.64	14.60	14.5
1.4	QPSK	3	3	14.59	14.58	14.50	
1.4	QPSK	6	0	13.52	13.40	13.35	
1.4	16QAM	1	0	13.76	13.82	13.87	14.5
1.4	16QAM	1	3	13.51	13.70	13.81	
1.4	16QAM	1	5	13.84	13.85	13.76	
1.4	16QAM	3	0	13.67	13.58	13.68	13.5
1.4	16QAM	3	1	13.54	13.48	13.53	
1.4	16QAM	3	3	13.50	13.59	13.58	
1.4	16QAM	6	0	12.41	12.53	12.45	13.5
1.4	64QAM	1	0	12.67	12.85	12.75	
1.4	64QAM	1	3	12.56	12.75	12.59	
1.4	64QAM	1	5	12.47	12.56	12.58	13.5
1.4	64QAM	3	0	12.64	12.65	12.60	
1.4	64QAM	3	1	12.45	12.54	12.59	
1.4	64QAM	3	3	12.61	12.48	12.55	12.5
1.4	64QAM	6	0	11.44	11.43	11.42	
1.4	256QAM	1	0	9.26	9.30	9.45	
1.4	256QAM	1	3	9.11	9.28	9.27	10.5
1.4	256QAM	1	5	9.30	9.31	9.21	
1.4	256QAM	3	0	9.04	9.13	9.22	
1.4	256QAM	3	1	9.35	9.30	9.29	10.5
1.4	256QAM	3	3	9.31	9.22	9.37	
1.4	256QAM	6	0	9.26	9.24	9.06	10.5

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	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	21.34	21.37	21.29	22
10	QPSK	1	25	21.21	21.35	21.20	
10	QPSK	1	49	21.30	21.22	21.33	
10	QPSK	25	0	20.34	20.43	20.32	
10	QPSK	25	12	20.18	20.37	20.30	21
10	QPSK	25	25	20.31	20.35	20.26	
10	QPSK	50	0	20.18	20.21	20.10	
10	16QAM	1	0	20.45	20.47	20.44	
10	16QAM	1	25	20.46	20.48	20.38	21
10	16QAM	1	49	20.36	20.41	20.28	
10	16QAM	25	0	19.31	19.36	19.27	
10	16QAM	25	12	19.25	19.19	19.07	
10	16QAM	25	25	19.33	19.32	19.23	20
10	16QAM	50	0	19.24	19.18	19.03	
10	64QAM	1	0	19.67	19.77	19.35	
10	64QAM	1	25	19.59	19.71	19.30	
10	64QAM	1	49	19.56	19.62	19.55	20
10	64QAM	25	0	18.27	18.30	18.25	
10	64QAM	25	12	18.11	18.12	18.09	
10	64QAM	25	25	18.24	18.28	18.21	
10	64QAM	50	0	18.18	18.18	18.15	19
10	256QAM	1	0	16.01	16.07	16.03	
10	256QAM	1	25	15.94	15.99	15.89	
10	256QAM	1	49	16.02	15.99	15.92	
10	256QAM	25	0	15.91	15.95	15.82	
10	256QAM	25	12	15.75	15.68	15.64	17
10	256QAM	25	25	15.87	15.80	15.89	
10	256QAM	50	0	15.78	15.79	15.81	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	21.29	21.35	21.23	22
5	QPSK	1	12	21.07	21.30	21.05	
5	QPSK	1	24	21.19	21.27	21.24	
5	QPSK	12	0	20.20	20.25	20.18	
5	QPSK	12	7	20.05	20.19	20.17	21
5	QPSK	12	13	20.13	20.33	20.22	
5	QPSK	25	0	20.17	20.14	20.06	
5	16QAM	1	0	20.40	20.50	20.38	
5	16QAM	1	12	20.32	20.38	20.23	21
5	16QAM	1	24	20.32	20.30	20.15	
5	16QAM	12	0	19.20	19.27	19.12	
5	16QAM	12	7	19.07	19.10	18.98	
5	16QAM	12	13	19.23	19.14	19.08	20
5	16QAM	25	0	19.06	19.09	18.93	
5	64QAM	1	0	19.49	19.61	19.30	
5	64QAM	1	12	19.49	19.54	19.24	
5	64QAM	1	24	19.42	19.51	19.39	20
5	64QAM	12	0	18.14	18.11	18.08	
5	64QAM	12	7	17.92	17.93	17.93	
5	64QAM	12	13	18.10	18.16	18.01	
5	64QAM	25	0	18.09	18.05	18.08	19
5	256QAM	1	0	15.86	15.98	15.86	
5	256QAM	1	12	15.90	15.89	15.81	
5	256QAM	1	24	15.99	15.81	15.83	
5	256QAM	12	0	15.84	15.83	15.64	
5	256QAM	12	7	15.63	15.62	15.52	17
5	256QAM	12	13	15.70	15.74	15.83	
5	256QAM	25	0	15.72	15.67	15.63	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	21.28	21.31	21.11	22
3	QPSK	1	8	21.15	21.22	21.17	
3	QPSK	1	14	21.24	21.28	21.30	
3	QPSK	8	0	20.26	20.26	20.27	
3	QPSK	8	4	20.16	20.21	20.13	21
3	QPSK	8	7	20.25	20.24	20.23	
3	QPSK	15	0	20.04	20.08	20.02	
3	16QAM	1	0	20.38	20.44	20.31	
3	16QAM	1	8	20.41	20.30	20.23	21
3	16QAM	1	14	20.26	20.24	20.26	
3	16QAM	8	0	19.24	19.22	19.12	
3	16QAM	8	4	19.05	18.99	18.95	
3	16QAM	8	7	19.14	19.24	19.04	20
3	16QAM	15	0	19.12	19.09	18.88	
3	64QAM	1	0	19.60	19.61	19.20	
3	64QAM	1	8	19.43	19.58	19.11	
3	64QAM	1	14	19.39	19.44	19.43	20
3	64QAM	8	0	18.17	18.14	18.08	
3	64QAM	8	4	18.05	18.02	17.93	
3	64QAM	8	7	18.13	18.21	18.11	
3	64QAM	15	0	18.05	18.07	18.03	19
3	256QAM	1	0	15.98	15.94	16.00	
3	256QAM	1	8	15.84	15.88	15.76	
3	256QAM	1	14	15.99	15.94	15.77	
3	256QAM	8	0	15.83	15.87	15.72	
3	256QAM	8	4	15.57	15.52	15.50	17
3	256QAM	8	7	15.70	15.71	15.82	
3	256QAM	15	0	15.72	15.77	15.71	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	21.26	21.27	21.11	22
1.4	QPSK	1	3	21.16	21.24	21.09	
1.4	QPSK	1	5	21.19	21.25	21.24	
1.4	QPSK	3	0	20.25	20.25	20.16	
1.4	QPSK	3	1	20.12	20.19	20.25	

Band 12 (700MHz Low Band) (dBm) Part 27F(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23060	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	18.02	18.13	17.95	19
10	QPSK	1	25	17.98	18.03	17.79	
10	QPSK	1	49	17.92	18.10	18.05	
10	QPSK	25	0	17.16	17.17	17.06	
10	QPSK	25	12	17.13	17.15	16.90	18
10	QPSK	25	25	17.11	17.12	17.08	
10	QPSK	50	0	17.04	17.06	17.01	
10	16QAM	1	0	17.42	17.47	17.35	
10	16QAM	1	25	17.26	17.31	17.27	18
10	16QAM	1	49	17.17	17.30	17.16	
10	16QAM	25	0	16.07	16.17	16.14	
10	16QAM	25	12	15.93	16.02	16.01	17
10	16QAM	25	25	16.11	16.15	16.10	
10	16QAM	50	0	15.92	16.01	16.01	
10	64QAM	1	0	16.33	16.40	16.32	
10	64QAM	1	25	16.24	16.20	16.20	17
10	64QAM	1	49	16.15	16.23	16.04	
10	64QAM	25	0	15.08	15.19	15.14	
10	64QAM	25	12	15.06	14.97	14.95	16
10	64QAM	25	25	15.17	15.06	15.04	
10	64QAM	50	0	15.06	14.90	14.93	
10	256QAM	1	0	12.93	13.05	13.01	
10	256QAM	1	25	12.91	12.90	12.73	14
10	256QAM	1	49	12.91	12.98	12.90	
10	256QAM	25	0	12.88	12.98	12.69	
10	256QAM	25	12	12.61	12.64	12.57	14
10	256QAM	25	25	12.69	12.70	12.73	
10	256QAM	50	0	12.74	12.75	12.71	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	17.94	18.06	17.79	19
5	QPSK	1	12	17.81	17.97	17.67	
5	QPSK	1	24	17.85	17.96	17.97	
5	QPSK	12	0	17.06	17.09	17.05	
5	QPSK	12	7	17.03	17.13	17.07	18
5	QPSK	12	13	17.01	17.03	17.04	
5	QPSK	25	0	17.02	17.01	17.04	
5	16QAM	1	0	17.27	17.29	17.23	
5	16QAM	1	12	17.09	17.19	17.25	18
5	16QAM	1	24	17.00	17.17	17.13	
5	16QAM	12	0	15.87	16.09	15.97	
5	16QAM	12	7	15.83	15.92	15.94	
5	16QAM	12	13	16.00	15.95	15.93	17
5	16QAM	25	0	15.77	15.83	15.84	
5	64QAM	1	0	16.14	16.33	16.18	
5	64QAM	1	12	16.05	16.09	16.03	
5	64QAM	1	24	16.01	16.16	15.93	17
5	64QAM	12	0	14.90	15.09	15.03	
5	64QAM	12	7	14.99	14.84	14.82	
5	64QAM	12	13	15.09	14.96	14.96	
5	64QAM	25	0	14.96	14.70	14.86	16
5	256QAM	1	0	12.80	13.03	12.92	
5	256QAM	1	12	12.74	12.73	12.64	
5	256QAM	1	24	12.76	12.88	12.88	
5	256QAM	12	0	12.73	12.95	12.56	14
5	256QAM	12	7	12.50	12.57	12.52	
5	256QAM	12	13	12.56	12.53	12.64	
5	256QAM	25	0	12.62	12.57	12.66	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	18.00	18.03	17.82	19
3	QPSK	1	8	17.96	17.96	17.77	
3	QPSK	1	14	17.90	17.99	17.98	
3	QPSK	8	0	17.00	17.11	17.09	
3	QPSK	8	4	17.03	17.06	17.05	18
3	QPSK	8	7	17.05	17.10	17.01	
3	QPSK	15	0	17.02	17.09	17.05	
3	16QAM	1	0	17.34	17.39	17.27	
3	16QAM	1	8	17.09	17.26	17.15	18
3	16QAM	1	14	17.02	17.13	17.08	
3	16QAM	8	0	15.89	16.11	16.00	
3	16QAM	8	4	15.86	15.94	15.83	
3	16QAM	8	7	16.01	16.01	15.99	17
3	16QAM	15	0	15.85	15.94	15.83	
3	64QAM	1	0	16.18	16.22	16.24	
3	64QAM	1	8	16.15	16.12	16.08	
3	64QAM	1	14	15.97	16.13	15.85	17
3	64QAM	8	0	14.98	15.13	15.04	
3	64QAM	8	4	14.86	14.86	14.75	
3	64QAM	8	7	15.10	14.96	14.95	
3	64QAM	15	0	14.88	14.75	14.86	16
3	256QAM	1	0	12.90	13.00	12.91	
3	256QAM	1	8	12.73	12.74	12.70	
3	256QAM	1	14	12.82	12.84	12.77	
3	256QAM	8	0	12.70	12.83	12.65	14
3	256QAM	8	4	12.51	12.50	12.53	
3	256QAM	8	7	12.65	12.62	12.70	
3	256QAM	15	0	12.68	12.68	12.58	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	17.87	18.00	17.85	19
1.4	QPSK	1	3	17.91	17.98	17.77	
1.4	QPSK	1	5	17.82	17.95	17.89	
1.4	QPSK	3	0	17.09	17.11	17.02	
1.4	QPSK	3	1	17.03	17.08	16.81	

1.4	QPSK	3	3	20.21	20.21	20.22	
1.4	QPSK	6	0	20.09	20.05	20.03	21
1.4	16QAM	1	0	20.41	20.42	20.28	
1.4	16QAM	1	3	20.37	20.38	20.32	
1.4	16QAM	1	5	20.24	20.26	20.26	
1.4	16QAM	3	0	19.16	19.17	19.17	21
1.4	16QAM	3	1	19.14	19.08	19.01	
1.4	16QAM	3	3	19.25	19.16	19.08	
1.4	16QAM	6	0	19.14	19.02	18.83	20
1.4	64QAM	1	0	19.59	19.59	19.25	
1.4	64QAM	1	3	19.53	19.63	19.15	
1.4	64QAM	1	5	19.38	19.47	19.38	
1.4	64QAM	3	0	18.16	18.22	18.06	20
1.4	64QAM	3	1	18.08	18.02	18.00	
1.4	64QAM	3	3	18.10	18.15	18.05	
1.4	64QAM	6	0	18.06	18.11	18.02	19
1.4	256QAM	1	0	15.89	15.96	15.91	
1.4	256QAM	1	3	15.84	15.82	15.86	
1.4	256QAM	1	5	15.86	15.88	15.79	
1.4	256QAM	3	0	15.84	15.90	15.70	17
1.4	256QAM	3	1	15.66	15.60	15.51	
1.4	256QAM	3	3	15.85	15.68	15.79	
1.4	256QAM	6	0	15.74	15.73	15.64	17

1.4	QPSK	3	3	17.09	17.04	17.01	
1.4	QPSK	6	0	16.87	16.93	16.96	18
1.4	16QAM	1	0	17.36	17.40	17.20	
1.4	16QAM	1	3	17.08	17.19	17.19	
1.4	16QAM	1	5	17.02	17.16	16.99	
1.4	16QAM	3	0	16.00	16.08	15.97	18
1.4	16QAM	3	1	15.82	15.88	15.92	
1.4	16QAM	3	3	15.91	16.08	15.97	
1.4	16QAM	6	0	15.77	15.95	15.94	17
1.4	64QAM	1	0	16.20	16.25	16.14	
1.4	64QAM	1	3	16.18	16.11	16.01	
1.4	64QAM	1	5	16.05	16.04	15.92	
1.4	64QAM	3	0	14.94	15.12	15.00	17
1.4	64QAM	3	1	14.89	14.77	14.81	
1.4	64QAM	3	3	15.07	14.88	14.84	
1.4	64QAM	6	0	14.95	14.82	14.83	16
1.4	256QAM	1	0	12.78	12.98	12.93	
1.4	256QAM	1	3	12.85	12.85	12.62	
1.4	256QAM	1	5	12.89	12.91	12.86	
1.4	256QAM	3	0	12.81	12.95	12.59	14
1.4	256QAM	3	1	12.49	12.50	12.48	
1.4	256QAM	3	3	12.64	12.61	12.61	
1.4	256QAM	6	0	12.69	12.67	12.64	14

Band 14 (700MHz Band) (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		20.90		21.5
10	QPSK	1	25		20.89		
10	QPSK	1	49		20.83		
10	QPSK	25	0		19.99		
10	QPSK	25	12		19.97		20.5
10	QPSK	25	25		19.95		
10	QPSK	50	0		19.96		
10	16QAM	1	0		19.94		
10	16QAM	1	25		19.98		20.5
10	16QAM	1	49		19.94		
10	16QAM	25	0		19.01		
10	16QAM	25	12		18.99		
10	16QAM	25	25		18.92		19.5
10	16QAM	50	0		18.96		
10	64QAM	1	0		19.19		
10	64QAM	1	25		18.99		
10	64QAM	1	49		19.04		19.5
10	64QAM	25	0		17.95		
10	64QAM	25	12		18.01		
10	64QAM	25	25		17.93		
10	64QAM	50	0		18.17		18.5
10	256QAM	1	0		15.59		
10	256QAM	1	25		15.45		
10	256QAM	1	49		15.54		
10	256QAM	25	0		15.52		16.5
10	256QAM	25	12		15.38		
10	256QAM	25	25		15.34		
10	256QAM	50	0		15.37		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	20.80	20.81	20.75	21.5
5	QPSK	1	12	20.78	20.76	20.79	
5	QPSK	1	24	20.78	20.71	20.74	
5	QPSK	12	0	19.82	19.87	19.90	
5	QPSK	12	7	19.85	19.81	19.88	20.5
5	QPSK	12	13	19.85	19.85	19.87	
5	QPSK	25	0	19.89	19.88	19.90	
5	16QAM	1	0	19.90	19.89	19.89	
5	16QAM	1	12	19.86	19.81	19.95	20.5
5	16QAM	1	24	19.81	19.86	19.90	
5	16QAM	12	0	18.86	18.89	18.91	
5	16QAM	12	7	18.88	18.91	18.89	
5	16QAM	12	13	18.75	18.72	18.86	19.5
5	16QAM	25	0	18.89	18.81	18.82	
5	64QAM	1	0	19.10	19.00	19.07	
5	64QAM	1	12	18.93	18.85	18.90	
5	64QAM	1	24	18.94	18.96	18.93	19.5
5	64QAM	12	0	17.83	17.85	17.84	
5	64QAM	12	7	17.92	17.88	17.93	
5	64QAM	12	13	17.74	17.75	17.82	
5	64QAM	25	0	17.89	17.86	17.82	18.5
5	256QAM	1	0	15.39	15.51	15.40	
5	256QAM	1	12	15.35	15.37	15.13	
5	256QAM	1	24	15.23	15.42	15.35	
5	256QAM	12	0	15.35	15.44	15.12	16.5
5	256QAM	12	7	14.93	15.12	14.99	
5	256QAM	12	13	15.02	15.16	15.05	
5	256QAM	25	0	15.22	15.22	15.08	

Band 17 (700MHz Band) (dBm) Part 27H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	18.02	18.11	18.10	19
10	QPSK	1	25	17.88	18.08	17.98	
10	QPSK	1	49	17.89	18.07	17.92	
10	QPSK	25	0	17.13	17.17	17.14	
10	QPSK	25	12	17.04	17.05	17.11	18
10	QPSK	25	25	17.15	17.12	17.13	
10	QPSK	50	0	17.03	17.00	17.05	
10	16QAM	1	0	17.22	17.25	17.17	
10	16QAM	1	25	17.15	17.11	17.01	18
10	16QAM	1	49	17.16	17.18	17.05	
10	16QAM	25	0	16.09	16.33	16.23	
10	16QAM	25	12	15.94	16.06	16.14	
10	16QAM	25	25	16.11	16.18	16.06	17
10	16QAM	50	0	15.93	16.07	15.98	
10	64QAM	1	0	16.14	16.28	16.18	
10	64QAM	1	25	16.06	16.10	16.05	
10	64QAM	1	49	16.06	16.25	16.15	17
10	64QAM	25	0	15.11	15.15	15.14	
10	64QAM	25	12	15.00	14.99	15.03	
10	64QAM	25	25	15.03	15.08	15.09	
10	64QAM	50	0	14.97	15.02	14.98	16
10	256QAM	1	0	13.01	13.08	13.07	
10	256QAM	1	25	12.91	12.89	13.01	
10	256QAM	1	49	12.89	13.01	12.96	
10	256QAM	25	0	12.85	12.84	12.95	14
10	256QAM	25	12	13.04	12.92	13.02	
10	256QAM	25	25	12.89	12.76	12.85	
10	256QAM	50	0	12.87	12.97	12.94	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	17.94	18.05	18.02	19
5	QPSK	1	12	17.80	18.03	17.83	
5	QPSK	1	24	17.80	17.90	17.90	
5	QPSK	12	0	17.09	17.15	17.11	
5	QPSK	12	7	17.06	17.07	17.04	18
5	QPSK	12	13	17.13	17.02	17.03	
5	QPSK	25	0	17.00	17.05	17.01	
5	16QAM	1	0	17.05	17.12	17.01	
5	16QAM	1	12	17.05	17.03	17.02	18
5	16QAM	1	24	17.05	17.02	17.00	
5	16QAM	12	0	15.95	16.25	16.05	
5	16QAM	12	7	15.77	15.86	16.02	
5	16QAM	12	13	15.94	16.03	15.90	17
5	16QAM	25	0	15.77	15.91	15.91	
5	64QAM	1	0	15.94	16.11	15.99	
5	64QAM	1	12	15.97	15.92	15.90	
5	64QAM	1	24	15.94	16.14	15.95	16
5	64QAM	12	0	14.92	14.97	15.02	
5	64QAM	12	7	14.92	14.86	14.91	
5	64QAM	12	13	14.89	14.88	14.89	
5	64QAM	25	0	14.88	14.86	14.81	14
5	256QAM	1	0	12.88	13.01	12.99	
5	256QAM	1	12	12.82	12.85	12.90	
5	256QAM	1	24	12.81	12.95	12.90	
5	256QAM	12	0	12.78	12.69	12.85	14
5	256QAM	12	7	13.00	12.83	12.95	
5	256QAM	12	13	12.85	12.73	12.72	
5	256QAM	25	0	12.76	12.81	12.76	

Band 30 (dBm)_Ant0							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		12.76		13.5
10	QPSK	1	25		12.72		
10	QPSK	1	49		12.71		
10	QPSK	25	0		11.73		12.5
10	QPSK	25	12		11.71		
10	QPSK	25	25		11.69		
10	QPSK	50	0		11.68		12.5
10	16QAM	1	0		11.45		
10	16QAM	1	25		11.33		
10	16QAM	1	49		11.43		11.5
10	16QAM	25	0		10.72		
10	16QAM	25	12		10.67		
10	16QAM	25	25		10.63		11.5
10	16QAM	50	0		10.60		
10	64QAM	1	0		10.68		
10	64QAM	1	25		10.52		11.5
10	64QAM	1	49		10.62		
10	64QAM	25	0		9.82		
10	64QAM	25	12		9.75		10.5
10	64QAM	25	25		9.70		
10	64QAM	50	0		9.73		
10	256QAM	1	0		7.97		8.5
10	256QAM	1	25		7.77		
10	256QAM	1	49		7.87		
10	256QAM	25	0		7.76		8.5
10	256QAM	25	12		7.83		
10	256QAM	25	25		7.63		
10	256QAM	50	0		7.84		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	12.61	12.74	12.69	13.5
5	QPSK	1	12	12.60	12.62	12.67	
5	QPSK	1	24	12.61	12.65	12.54	
5	QPSK	12	0	11.67	11.69	11.64	12.5
5	QPSK	12	7	11.53	11.62	11.58	
5	QPSK	12	13	11.60	11.58	11.59	
5	QPSK	25	0	11.64	11.52	11.51	12.5
5	16QAM	1	0	11.29	11.42	11.33	
5	16QAM	1	12	11.28	11.26	11.21	
5	16QAM	1	24	11.25	11.40	11.36	11.5
5	16QAM	12	0	10.65	10.56	10.58	
5	16QAM	12	7	10.53	10.49	10.48	
5	16QAM	12	13	10.53	10.53	10.45	11.5
5	16QAM	25	0	10.52	10.47	10.52	
5	64QAM	1	0	10.54	10.62	10.53	
5	64QAM	1	12	10.35	10.40	10.43	11.5
5	64QAM	1	24	10.56	10.44	10.50	
5	64QAM	12	0	9.75	9.64	9.72	
5	64QAM	12	7	9.69	9.68	9.57	10.5
5	64QAM	12	13	9.51	9.50	9.60	
5	64QAM	25	0	9.61	9.54	9.54	
5	256QAM	1	0	7.86	7.92	7.89	8.5
5	256QAM	1	12	7.81	7.80	7.94	
5	256QAM	1	24	7.75	7.92	7.84	
5	256QAM	12	0	7.78	7.68	7.88	8.5
5	256QAM	12	7	7.94	7.90	7.99	
5	256QAM	12	13	7.78	7.59	7.75	
5	256QAM	25	0	7.69	7.94	7.86	

Band 30 (dBm)_Ant6							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				27710			Tune-up limit (dBm)
Frequency (MHz)				2310			
10	QPSK	1	0		11.76		12.5
10	QPSK	1	25		11.72		
10	QPSK	1	49		11.71		
10	QPSK	25	0		10.73		11.5
10	QPSK	25	12		10.71		
10	QPSK	25	25		10.69		
10	QPSK	50	0		10.68		11.5
10	16QAM	1	0		10.45		
10	16QAM	1	25		10.33		
10	16QAM	1	49		10.43		10.5
10	16QAM	25	0		9.72		
10	16QAM	25	12		9.67		
10	16QAM	25	25		9.63		10.5
10	16QAM	50	0		9.60		
10	64QAM	1	0		9.68		
10	64QAM	1	25		9.52		10.5
10	64QAM	1	49		9.62		
10	64QAM	25	0		8.82		
10	64QAM	25	12		8.75		9.5
10	64QAM	25	25		8.70		
10	64QAM	50	0		8.73		
10	256QAM	1	0		6.97		7.5
10	256QAM	1	25		6.77		
10	256QAM	1	49		6.87		
10	256QAM	25	0		6.76		7.5
10	256QAM	25	12		6.83		
10	256QAM	25	25		6.63		
10	256QAM	50	0		6.84		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	11.61	11.74	11.69	12.5
5	QPSK	1	12	11.60	11.62	11.67	
5	QPSK	1	24	11.61	11.65	11.54	
5	QPSK	12	0	10.67	10.69	10.64	11.5
5	QPSK	12	7	10.53	10.62	10.58	
5	QPSK	12	13	10.60	10.58	10.59	
5	QPSK	25	0	10.64	10.52	10.51	11.5
5	16QAM	1	0	10.29	10.42	10.33	
5	16QAM	1	12	10.28	10.26	10.21	
5	16QAM	1	24	10.25	10.40	10.36	10.5
5	16QAM	12	0	9.65	9.56	9.58	
5	16QAM	12	7	9.53	9.49	9.48	
5	16QAM	12	13	9.53	9.53	9.45	10.5
5	16QAM	25	0	9.52	9.47	9.52	
5	64QAM	1	0	9.54	9.62	9.53	
5	64QAM	1	12	9.35	9.40	9.43	10.5
5	64QAM	1	24	9.56	9.44	9.50	
5	64QAM	12	0	8.75	8.64	8.72	
5	64QAM	12	7	8.69	8.68	8.57	9.5
5	64QAM	12	13	8.51	8.50	8.60	
5	64QAM	25	0	8.61	8.54	8.54	
5	256QAM	1	0	6.86	6.92	6.89	7.5
5	256QAM	1	12	6.81	6.80	6.94	
5	256QAM	1	24	6.75	6.92	6.84	
5	256QAM	12	0	6.78	6.68	6.88	7.5
5	256QAM	12	7	6.94	6.90	6.99	
5	256QAM	12	13	6.78	6.59	6.75	
5	256QAM	25	0	6.69	6.94	6.86	

Band 48 (3.5G Band) (dBm)									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Middle-Low Channel	Middle-Low Channel	Middle-High Channel	High Channel	Tune-up limit (dBm)
Channel				55340	55830	55990	56150	56640	
Frequency (MHz)				3560	3609	3625	3641	3690	
20	QPSK	1	0	14.24	14.35	14.37	14.31	14.31	15
20	QPSK	1	49	14.07	14.25	14.23	14.13	14.14	
20	QPSK	1	99	14.07	14.23	14.21	14.16	14.13	14
20	QPSK	50	0	13.23	13.34	13.38	13.21	13.33	
20	QPSK	50	24	13.06	13.26	13.24	13.12	13.19	
20	QPSK	50	50	13.15	13.16	13.26	13.06	13.19	
20	QPSK	100	0	13.07	13.25	13.28	13.10	13.16	14
20	16QAM	1	0	13.57	13.55	13.66	13.52	13.60	
20	16QAM	1	49	13.41	13.37	13.53	13.38	13.42	
20	16QAM	1	99	13.48	13.47	13.48	13.42	13.48	
20	16QAM	50	0	12.23	12.26	12.27	12.29	12.39	13
20	16QAM	50	24	12.08	12.09	12.11	12.12	12.24	
20	16QAM	50	50	12.10	12.11	12.14	12.11	12.23	
20	16QAM	100	0	12.08	12.13	12.11	12.13	12.26	
20	64QAM	1	0	12.28	12.39	12.41	12.31	12.42	13
20	64QAM	1	49	12.15	12.24	12.24	12.14	12.28	
20	64QAM	1	99	12.11	12.26	12.27	12.14	12.26	
20	64QAM	50	0	11.21	11.19	11.24	11.15	11.35	
20	64QAM	50	24	11.06	11.04	11.09	11.00	11.24	12
20	64QAM	50	50	11.05	11.02	11.09	10.99	11.22	
20	64QAM	100	0	11.06	11.02	11.11	10.97	11.21	
20	256QAM	1	0	9.13	9.15	9.16	9.08	9.19	
20	256QAM	1	49	9.10	9.04	9.13	9.04	9.12	10
20	256QAM	1	99	9.08	9.09	9.09	8.96	9.12	
20	256QAM	50	0	9.15	9.07	9.21	9.09	9.24	
20	256QAM	50	24	9.10	9.08	9.07	9.05	9.28	
20	256QAM	50	50	9.03	9.03	9.13	8.99	9.28	10
20	256QAM	100	0	9.03	9.06	9.14	9.02	9.18	
Channel				55315	55820	55990	56160	56665	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3608	3625	3642	3692.5	
15	QPSK	1	0	14.12	14.24	14.29	14.19	14.15	15
15	QPSK	1	37	13.92	14.11	14.11	13.98	13.96	
15	QPSK	1	74	13.90	14.12	14.13	14.06	13.99	14
15	QPSK	36	0	13.07	13.25	13.21	13.13	13.25	
15	QPSK	36	20	12.89	13.10	13.11	12.99	13.02	
15	QPSK	36	39	13.07	13.03	13.16	12.94	13.09	
15	QPSK	75	0	12.95	13.17	13.16	12.97	13.08	14
15	16QAM	1	0	13.41	13.37	13.55	13.37	13.52	
15	16QAM	1	37	13.29	13.26	13.43	13.26	13.25	
15	16QAM	1	74	13.30	13.34	13.35	13.28	13.30	
15	16QAM	36	0	12.06	12.08	12.12	12.11	12.21	13
15	16QAM	36	20	11.94	11.96	11.96	11.98	12.09	
15	16QAM	36	39	11.93	11.98	12.01	11.98	12.09	
15	16QAM	75	0	11.94	11.97	11.98	11.99	12.09	
15	64QAM	1	0	12.12	12.23	12.24	12.16	12.25	13
15	64QAM	1	37	12.00	12.11	12.10	11.96	12.13	
15	64QAM	1	74	11.97	12.08	12.09	11.98	12.11	
15	64QAM	36	0	11.03	11.05	11.06	11.02	11.22	
15	64QAM	36	20	10.90	10.90	10.96	10.84	11.09	12
15	64QAM	36	39	10.91	10.87	10.93	10.82	11.08	
15	64QAM	75	0	10.92	10.84	10.98	10.80	11.07	
15	256QAM	1	0	9.03	9.05	9.08	9.04	9.12	
15	256QAM	1	37	9.07	8.98	9.08	9.01	9.04	10
15	256QAM	1	74	9.00	9.04	9.04	8.93	9.05	
15	256QAM	36	0	9.09	9.03	9.15	9.06	9.20	
15	256QAM	36	20	9.00	8.99	9.01	8.95	9.25	
15	256QAM	36	39	8.95	8.99	9.04	8.96	9.19	10
15	256QAM	75	0	8.96	8.96	9.05	8.93	9.15	
Channel				55290	55815	55990	56165	56690	Tune-up limit (dBm)
Frequency (MHz)				3555	3607.5	3625	3642.5	3695	
10	QPSK	1	0	14.10	14.26	14.27	14.22	14.17	15
10	QPSK	1	25	13.94	14.13	14.07	14.05	13.96	
10	QPSK	1	49	13.98	14.08	14.06	13.98	13.96	14
10	QPSK	25	0	13.13	13.17	13.23	13.03	13.21	
10	QPSK	25	12	12.97	13.16	13.08	12.96	13.02	
10	QPSK	25	25	13.04	12.99	13.16	12.89	13.11	
10	QPSK	50	0	12.98	13.09	13.12	12.92	13.07	14
10	16QAM	1	0	13.39	13.37	13.55	13.35	13.51	
10	16QAM	1	25	13.33	13.22	13.41	13.22	13.34	
10	16QAM	1	49	13.32	13.32	13.31	13.31	13.37	
10	16QAM	25	0	12.07	12.10	12.09	12.16	12.24	13
10	16QAM	25	12	11.93	11.92	11.97	11.96	12.07	
10	16QAM	25	25	11.93	11.98	12.00	11.96	12.08	
10	16QAM	50	0	11.91	11.95	11.94	11.96	12.08	
10	64QAM	1	0	12.11	12.23	12.25	12.18	12.29	13
10	64QAM	1	25	12.00	12.10	12.08	11.99	12.15	
10	64QAM	1	49	11.94	12.08	12.11	12.00	12.13	
10	64QAM	25	0	11.04	11.04	11.06	11.00	11.17	
10	64QAM	25	12	10.88	10.87	10.93	10.84	11.10	12
10	64QAM	25	25	10.92	10.88	10.92	10.83	11.05	
10	64QAM	50	0	10.88	10.84	10.96	10.83	11.03	
10	256QAM	1	0	9.03	9.10	9.09	8.98	9.09	
10	256QAM	1	25	9.03	8.94	9.09	8.99	9.06	10
10	256QAM	1	49	9.02	9.04	9.01	8.89	9.02	
10	256QAM	25	0	9.05	9.03	9.15	9.05	9.21	
10	256QAM	25	12	9.00	9.03	9.04	8.96	9.21	
10	256QAM	25	25	9.00	8.98	9.05	8.95	9.23	10
10	256QAM	50	0	8.98	8.96	9.08	8.96	9.13	
Channel				55265	55810	55990	56170	56175	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3607	3625	3643	3697.5	
5	QPSK	1	0	14.16	14.19	14.25	14.13	14.21	15
5	QPSK	1	12	13.99	14.07	14.05	14.03	14.04	
5	QPSK	1	24	13.90	14.05	14.07	14.07	14.02	14
5	QPSK	12	0	13.09	13.26	13.29	13.12	13.21	
5	QPSK	12	7	12.98	13.17	13.10	13.00	13.07	
5	QPSK	12	13	13.05	13.02	13.08	12.94	13.09	
5	QPSK	25	0	12.91	13.17	13.14	13.02	13.01	14
5	16QAM	1	0	13.48	13.45	13.50	13.37	13.51	
5	16QAM	1	12	13.30	13.25	13.40	13.30	13.33	
5	16QAM	1	24	13.38	13.32	13.30	13.30	13.40	
5	16QAM	12	0	12.08	12.08	12.09	12.15	12.24	13
5	16QAM	12	7	11.90	11.95	11.95	11.98	12.08	
5	16QAM	12	13	11.93	11.95	11.99	11.97	12.10	
5	16QAM	25	0	11.92	12.00	11.98	11.99	12.10	
5	64QAM	1	0	12.14	12.26	12.25	12.16	12.26	13
5	64QAM	1	12	12.02	12.11	12.10	11.96	12.13	
5	64QAM	1	24	11.95	12.08	12.14	11.97	12.12	
5	64QAM	12	0	11.07	11.02	11.10	10.97	11.17	
5	64QAM	12	7	10.88	10.87	10.93	10.82	11.10	12
5	64QAM	12	13	10.89	10.88	10.92	10.84	11.05	
5	64QAM	25	0	10.90	10.87	10.94	10.81	11.03	
5	256QAM	1	0	9.06	9.06	9.09	9.00	9.09	
5	256QAM	1	12	9.00	8.98	9.08	8.99	9.05	10
5	256QAM	1	24	9.02	9.01	9.01	8.89	9.06	
5	256QAM	12	0	9.10	9.01	9.17	9.05	9.20	
5	256QAM	12	7	9.06	9.00	8.98	8.97	9.18	
5	256QAM	12	13	9.00	8.97	9.09	8.92	9.22	10
5	256QAM	25	0	8.98	8.99	9.11	8.94	9.12	

Band 66 (dBm)_Ant0							
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	14.30	14.35	14.28	15
20	QPSK	1	49	14.24	14.28	14.23	
20	QPSK	1	99	14.15	14.24	14.16	
20	QPSK	50	0	13.24	13.26	13.25	14
20	QPSK	50	24	13.18	13.09	13.19	
20	QPSK	50	50	13.19	13.21	13.16	
20	QPSK	100	0	13.04	13.16	13.08	14
20	16QAM	1	0	13.48	13.51	13.43	
20	16QAM	1	49	13.43	13.44	13.41	
20	16QAM	1	99	13.32	13.46	13.31	13
20	16QAM	50	0	12.32	12.33	12.27	
20	16QAM	50	24	12.14	12.27	12.09	
20	16QAM	50	50	12.21	12.16	12.23	13
20	16QAM	100	0	12.01	11.96	12.17	
20	64QAM	1	0	12.51	12.53	12.41	
20	64QAM	1	49	12.41	12.44	12.29	13
20	64QAM	1	99	12.28	12.47	12.41	
20	64QAM	50	0	11.34	11.36	11.28	
20	64QAM	50	24	11.34	11.36	11.28	12
20	64QAM	50	50	11.29	11.25	11.21	
20	64QAM	100	0	11.11	11.07	11.07	
20	256QAM	1	0	9.14	9.26	9.22	10
20	256QAM	1	49	9.07	9.03	9.30	
20	256QAM	1	99	9.19	9.21	9.19	
20	256QAM	50	0	9.02	9.09	9.21	10
20	256QAM	50	24	9.20	9.10	9.13	
20	256QAM	50	50	9.02	8.94	9.05	
20	256QAM	100	0	9.04	9.13	9.23	Tune-up limit (dBm)
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	14.17	14.21	14.17	15
15	QPSK	1	37	14.16	14.19	14.11	
15	QPSK	1	74	14.03	14.14	14.11	
15	QPSK	36	0	13.19	13.22	13.18	14
15	QPSK	36	20	13.10	12.98	13.16	
15	QPSK	36	39	13.03	13.08	13.10	
15	QPSK	75	0	13.04	12.89	13.03	14
15	16QAM	1	0	13.39	13.38	13.29	
15	16QAM	1	37	13.41	13.27	13.28	
15	16QAM	1	74	13.21	13.43	13.20	13
15	16QAM	36	0	12.14	12.20	12.07	
15	16QAM	36	20	12.02	12.12	11.99	
15	16QAM	36	39	12.13	11.96	12.16	13
15	16QAM	75	0	11.84	11.83	12.01	
15	64QAM	1	0	12.42	12.40	12.22	
15	64QAM	1	37	12.21	12.31	12.20	13
15	64QAM	1	74	12.18	12.31	12.23	
15	64QAM	36	0	11.23	11.17	11.15	
15	64QAM	36	20	11.20	11.26	11.14	12
15	64QAM	36	39	11.13	11.15	11.13	
15	64QAM	75	0	10.96	10.89	10.88	
15	256QAM	1	0	9.04	9.21	9.14	10
15	256QAM	1	37	8.98	8.86	9.25	
15	256QAM	1	74	9.13	9.06	9.03	
15	256QAM	36	0	8.97	9.00	9.12	10
15	256QAM	36	20	9.06	8.92	9.02	
15	256QAM	36	39	8.86	8.88	9.02	
15	256QAM	75	0	8.89	9.10	9.21	Tune-up limit (dBm)
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	14.23	14.27	14.14	15
10	QPSK	1	25	14.17	14.15	14.06	
10	QPSK	1	49	14.13	14.13	14.07	
10	QPSK	25	0	13.12	13.21	13.10	14
10	QPSK	25	12	13.05	13.02	13.06	
10	QPSK	25	25	13.02	13.14	13.11	
10	QPSK	50	0	13.06	13.00	13.03	14
10	16QAM	1	0	13.30	13.44	13.26	
10	16QAM	1	25	13.30	13.40	13.24	
10	16QAM	1	49	13.23	13.42	13.25	13
10	16QAM	25	0	12.12	12.14	12.07	
10	16QAM	25	12	12.04	12.13	11.92	
10	16QAM	25	25	12.01	11.99	12.07	13
10	16QAM	50	0	11.95	11.87	11.99	
10	64QAM	1	0	12.39	12.47	12.32	
10	64QAM	1	25	12.32	12.34	12.12	13
10	64QAM	1	49	12.20	12.27	12.30	
10	64QAM	25	0	11.15	11.16	11.19	
10	64QAM	25	12	11.19	11.28	11.12	12
10	64QAM	25	25	11.13	11.11	11.14	
10	64QAM	50	0	10.91	11.00	10.90	
10	256QAM	1	0	9.03	9.08	9.04	10
10	256QAM	1	25	9.00	8.91	9.15	
10	256QAM	1	49	9.06	9.09	9.01	
10	256QAM	25	0	8.92	9.07	9.09	10
10	256QAM	25	12	9.13	9.00	9.07	
10	256QAM	25	25	8.88	8.84	8.96	
10	256QAM	50	0	8.93	9.01	9.12	Tune-up limit (dBm)
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	14.14	14.24	14.17	15
5	QPSK	1	12	14.15	14.18	14.05	
5	QPSK	1	24	14.00	14.16	14.11	
5	QPSK	12	0	13.20	13.21	13.07	14
5	QPSK	12	7	13.01	12.91	13.15	

Band 66 (dBm)_Ant4							
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	14.80	14.85	14.78	15.5
20	QPSK	1	49	14.74	14.78	14.73	
20	QPSK	1	99	14.65	14.74	14.66	
20	QPSK	50	0	13.74	13.76	13.75	14.5
20	QPSK	50	24	13.68	13.59	13.69	
20	QPSK	50	50	13.69	13.71	13.66	
20	QPSK	100	0	13.54	13.66	13.58	14.5
20	16QAM	1	0	13.98	14.01	13.93	
20	16QAM	1	49	13.93	13.94	13.91	
20	16QAM	1	99	13.82	13.96	13.81	14.5
20	16QAM	50	0	12.82	12.83	12.77	
20	16QAM	50	24	12.64	12.77	12.59	
20	16QAM	50	50	12.71	12.66	12.73	13.5
20	16QAM	100	0	12.51	12.46	12.67	
20	64QAM	1	0	13.01	13.03	12.91	
20	64QAM	1	49	12.91	12.94	12.79	13.5
20	64QAM	1	99	12.78	12.97	12.91	
20	64QAM	50	0	11.84	11.86	11.78	
20	64QAM	50	24	11.84	11.86	11.78	12.5
20	64QAM	50	50	11.79	11.75	11.71	
20	64QAM	100	0	11.61	11.57	11.57	
20	256QAM	1	0	9.64	9.76	9.72	10.5
20	256QAM	1	49	9.57	9.53	9.80	
20	256QAM	1	99	9.69	9.71	9.69	
20	256QAM	50	0	9.52	9.59	9.71	10.5
20	256QAM	50	24	9.70	9.60	9.63	
20	256QAM	50	50	9.52	9.44	9.55	
20	256QAM	100	0	9.54	9.63	9.73	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	14.67	14.71	14.67	15.5
15	QPSK	1	37	14.66	14.69	14.61	
15	QPSK	1	74	14.53	14.64	14.61	
15	QPSK	36	0	13.69	13.72	13.68	14.5
15	QPSK	36	20	13.60	13.48	13.66	
15	QPSK	36	39	13.53	13.58	13.60	
15	QPSK	75	0	13.54	13.39	13.53	14.5
15	16QAM	1	0	13.89	13.88	13.79	
15	16QAM	1	37	13.91	13.77	13.76	
15	16QAM	1	74	13.71	13.93	13.70	13.5
15	16QAM	36	0	12.64	12.70	12.57	
15	16QAM	36	20	12.52	12.62	12.49	
15	16QAM	36	39	12.63	12.46	12.66	13.5
15	16QAM	75	0	12.34	12.33	12.51	
15	64QAM	1	0	12.92	12.90	12.72	
15	64QAM	1	37	12.71	12.81	12.70	13.5
15	64QAM	1	74	12.68	12.81	12.73	
15	64QAM	36	0	11.73	11.67	11.65	
15	64QAM	36	20	11.70	11.76	11.64	12.5
15	64QAM	36	39	11.63	11.65	11.63	
15	64QAM	75	0	11.46	11.39	11.38	
15	256QAM	1	0	9.54	9.71	9.64	10.5
15	256QAM	1	37	9.48	9.36	9.75	
15	256QAM	1	74	9.63	9.56	9.53	
15	256QAM	36	0	9.47	9.50	9.62	10.5
15	256QAM	36	20	9.56	9.42	9.52	
15	256QAM	36	39	9.36	9.38	9.52	
15	256QAM	75	0	9.39	9.60	9.71	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	14.73	14.77	14.64	15.5
10	QPSK	1	25	14.67	14.65	14.56	
10	QPSK	1	49	14.63	14.63	14.57	
10	QPSK	25	0	13.62	13.71	13.60	14.5
10	QPSK	25	12	13.55	13.52	13.56	
10	QPSK	25	25	13.52	13.64	13.61	
10	QPSK	50	0	13.56	13.50	13.53	14.5
10	16QAM	1	0	13.80	13.94	13.76	
10	16QAM	1	25	13.80	13.90	13.74	
10	16QAM	1	49	13.73	13.92	13.75	13.5
10	16QAM	25	0	12.62	12.64	12.57	
10	16QAM	25	12	12.54	12.63	12.42	
10	16QAM	25	25	12.51	12.49	12.57	13.5
10	16QAM	50	0	12.45	12.37	12.49	
10	64QAM	1	0	12.89	12.97	12.82	
10	64QAM	1	25	12.82	12.84	12.62	13.5
10	64QAM	1	49	12.70	12.77	12.80	
10	64QAM	25	0	11.65	11.66	11.69	
10	64QAM	25	12	11.69	11.78	11.62	12.5
10	64QAM	25	25	11.63	11.61	11.64	
10	64QAM	50	0	11.41	11.50	11.40	
10	256QAM	1	0	9.53	9.58	9.54	10.5
10	256QAM	1	25	9.50	9.41	9.65	
10	256QAM	1	49	9.56	9.59	9.51	
10	256QAM	25	0	9.42	9.57	9.59	10.5
10	256QAM	25	12	9.63	9.50	9.57	
10	256QAM	25	25	9.38	9.34	9.46	
10	256QAM	50	0	9.43	9.51	9.62	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	14.64	14.74	14.67	15.5
5	QPSK	1	12	14.65	14.68	14.55	
5	QPSK	1	24	14.50	14.66	14.61	
5	QPSK	12	0	13.70	13.71	13.57	14.5
5	QPSK	12	7	13.51	13.41	13.65	

5	QPSK	12	13	13.05	13.12	13.01	14
5	QPSK	25	0	13.14	13.01	12.94	
5	16QAM	1	0	13.38	13.44	13.29	14
5	16QAM	1	12	13.26	13.36	13.26	
5	16QAM	1	24	13.29	13.44	13.20	13
5	16QAM	12	0	12.22	12.14	12.21	
5	16QAM	12	7	12.04	12.21	11.95	13
5	16QAM	12	13	12.01	12.03	12.17	
5	16QAM	25	0	11.88	11.89	12.05	13
5	64QAM	1	0	12.44	12.37	12.23	
5	64QAM	1	12	12.22	12.30	12.12	12
5	64QAM	1	24	12.21	12.38	12.26	
5	64QAM	12	0	11.28	11.16	11.08	12
5	64QAM	12	7	11.22	11.26	11.21	
5	64QAM	12	13	11.23	11.16	11.15	10
5	64QAM	25	0	11.03	10.87	10.89	
5	256QAM	1	0	8.98	9.22	9.18	10
5	256QAM	1	12	8.97	8.95	9.28	
5	256QAM	1	24	9.04	9.09	9.08	10
5	256QAM	12	0	8.90	9.04	9.03	
5	256QAM	12	7	9.05	9.06	9.09	10
5	256QAM	12	13	8.88	8.90	8.97	
5	256QAM	25	0	8.89	9.01	9.16	15
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	15
3	QPSK	1	0	14.24	14.26	14.10	
3	QPSK	1	8	14.20	14.23	14.08	14
3	QPSK	1	14	13.99	14.10	14.04	
3	QPSK	8	0	13.10	13.19	13.08	14
3	QPSK	8	4	13.11	12.91	13.16	
3	QPSK	8	7	13.17	13.17	13.01	14
3	QPSK	15	0	13.10	12.98	13.01	
3	16QAM	1	0	13.30	13.33	13.26	14
3	16QAM	1	8	13.41	13.30	13.26	
3	16QAM	1	14	13.27	13.29	13.23	13
3	16QAM	8	0	12.30	12.18	12.19	
3	16QAM	8	4	11.95	12.10	11.91	13
3	16QAM	8	7	12.01	11.98	12.11	
3	16QAM	15	0	11.81	11.78	12.04	13
3	64QAM	1	0	12.31	12.36	12.31	
3	64QAM	1	8	12.35	12.33	12.09	12
3	64QAM	1	14	12.20	12.33	12.32	
3	64QAM	8	0	11.28	11.30	11.18	12
3	64QAM	8	4	11.20	11.29	11.18	
3	64QAM	8	7	11.20	11.16	11.07	10
3	64QAM	15	0	11.05	10.91	11.01	
3	256QAM	1	0	9.02	9.10	9.05	10
3	256QAM	1	8	9.04	9.00	9.12	
3	256QAM	1	14	9.07	9.14	9.06	10
3	256QAM	8	0	9.00	8.99	9.06	
3	256QAM	8	4	9.07	8.99	9.06	10
3	256QAM	8	7	8.84	8.90	9.01	
3	256QAM	15	0	8.86	8.95	9.14	15
Channel				131979	132322	132685	
Frequency (MHz)				1710.7	1745	1779.3	15
1.4	QPSK	1	0	14.19	14.25	14.22	
1.4	QPSK	1	3	14.12	14.21	14.10	14
1.4	QPSK	1	5	14.04	14.13	14.09	
1.4	QPSK	3	0	13.20	13.21	13.20	14
1.4	QPSK	3	1	13.02	13.00	13.13	
1.4	QPSK	3	3	13.02	13.05	13.05	14
1.4	QPSK	6	0	13.05	12.92	12.99	
1.4	16QAM	1	0	13.39	13.36	13.32	14
1.4	16QAM	1	3	13.28	13.35	13.39	
1.4	16QAM	1	5	13.26	13.37	13.21	13
1.4	16QAM	3	0	12.19	12.18	12.09	
1.4	16QAM	3	1	12.00	12.16	11.91	13
1.4	16QAM	3	3	12.05	12.02	12.08	
1.4	16QAM	6	0	11.90	11.83	12.06	13
1.4	64QAM	1	0	12.32	12.41	12.26	
1.4	64QAM	1	3	12.27	12.37	12.15	13
1.4	64QAM	1	5	12.13	12.27	12.35	
1.4	64QAM	3	0	11.23	11.22	11.12	12
1.4	64QAM	3	1	11.20	11.25	11.21	
1.4	64QAM	3	3	11.09	11.13	11.06	10
1.4	64QAM	6	0	11.00	10.95	10.98	
1.4	256QAM	1	0	9.06	9.22	9.15	10
1.4	256QAM	1	3	9.03	8.91	9.17	
1.4	256QAM	1	5	9.17	9.19	9.01	10
1.4	256QAM	3	0	8.96	9.02	9.17	
1.4	256QAM	3	1	9.11	9.08	9.05	10
1.4	256QAM	3	3	8.90	8.86	9.00	
1.4	256QAM	6	0	8.94	8.95	9.19	10

5	QPSK	12	13	13.55	13.62	13.51	14.5
5	QPSK	25	0	13.64	13.51	13.44	
5	16QAM	1	0	13.88	13.94	13.79	
5	16QAM	1	12	13.76	13.86	13.76	
5	16QAM	1	24	13.79	13.94	13.70	13.5
5	16QAM	12	0	12.72	12.64	12.71	
5	16QAM	12	7	12.54	12.71	12.45	
5	16QAM	12	13	12.51	12.53	12.67	
5	16QAM	25	0	12.38	12.39	12.55	13.5
5	64QAM	1	0	12.94	12.87	12.73	
5	64QAM	1	12	12.72	12.80	12.62	
5	64QAM	1	24	12.71	12.88	12.76	
5	64QAM	12	0	11.78	11.66	11.58	12.5
5	64QAM	12	7	11.72	11.76	11.71	
5	64QAM	12	13	11.73	11.66	11.65	
5	64QAM	25	0	11.53	11.37	11.39	
5	256QAM	1	0	9.48	9.72	9.68	10.5
5	256QAM	1	12	9.47	9.45	9.78	
5	256QAM	1	24	9.54	9.59	9.58	
5	256QAM	12	0	9.40	9.54	9.53	
5	256QAM	12	7	9.55	9.56	9.59	10.5
5	256QAM	12	13	9.38	9.40	9.47	
5	256QAM	25	0	9.39	9.51	9.66	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	Tune-up limit (dBm)
3	QPSK	1	0	14.74	14.76	14.60	15.5
3	QPSK	1	8	14.70	14.73	14.58	
3	QPSK	1	14	14.49	14.60	14.54	
3	QPSK	8	0	13.60	13.69	13.58	
3	QPSK	8	4	13.61	13.41	13.66	14.5
3	QPSK	8	7	13.67	13.67	13.51	
3	QPSK	15	0	13.60	13.48	13.51	
3	16QAM	1	0	13.80	13.83	13.76	
3	16QAM	1	8	13.91	13.80	13.76	14.5
3	16QAM	1	14	13.77	13.79	13.73	
3	16QAM	8	0	12.80	12.68	12.69	
3	16QAM	8	4	12.45	12.60	12.41	
3	16QAM	8	7	12.51	12.48	12.61	13.5
3	16QAM	15	0	12.31	12.28	12.54	
3	64QAM	1	0	12.81	12.86	12.81	
3	64QAM	1	8	12.85	12.83	12.59	
3	64QAM	1	14	12.70	12.83	12.82	13.5
3	64QAM	8	0	11.78	11.80	11.68	
3	64QAM	8	4	11.70	11.79	11.68	
3	64QAM	8	7	11.70	11.66	11.57	
3	64QAM	15	0	11.55	11.41	11.51	12.5
3	256QAM	1	0	9.52	9.60	9.55	
3	256QAM	1	8	9.54	9.50	9.62	
3	256QAM	1	14	9.57	9.64	9.56	
3	256QAM	8	0	9.50	9.49	9.56	10.5
3	256QAM	8	4	9.57	9.49	9.56	
3	256QAM	8	7	9.34	9.40	9.51	
3	256QAM	15	0	9.36	9.45	9.64	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	14.69	14.75	14.72	15.5
1.4	QPSK	1	3	14.62	14.71	14.60	
1.4	QPSK	1	5	14.54	14.63	14.59	
1.4	QPSK	3	0	13.70	13.71	13.70	
1.4	QPSK	3	1	13.52	13.50	13.63	14.5
1.4	QPSK	3	3	13.52	13.55	13.55	
1.4	QPSK	6	0	13.55	13.42	13.49	
1.4	16QAM	1	0	13.89	13.86	13.82	
1.4	16QAM	1	3	13.78	13.85	13.89	14.5
1.4	16QAM	1	5	13.76	13.87	13.71	
1.4	16QAM	3	0	12.69	12.68	12.59	
1.4	16QAM	3	1	12.50	12.66	12.41	
1.4	16QAM	3	3	12.55	12.52	12.58	13.5
1.4	16QAM	6	0	12.40	12.33	12.56	
1.4	64QAM	1	0	12.82	12.91	12.76	
1.4	64QAM	1	3	12.77	12.87	12.65	
1.4	64QAM	1	5	12.63	12.77	12.85	13.5
1.4	64QAM	3	0	11.73	11.72	11.62	
1.4	64QAM	3	1	11.70	11.75	11.71	
1.4	64QAM	3	3	11.59	11.63	11.56	
1.4	64QAM	6	0	11.50	11.45	11.48	12.5
1.4	256QAM	1	0	9.56	9.72	9.65	
1.4	256QAM	1	3	9.53	9.41	9.67	
1.4	256QAM	1	5	9.67	9.69	9.51	
1.4	256QAM	3	0	9.46	9.52	9.67	10.5
1.4	256QAM	3	1	9.61	9.58	9.55	
1.4	256QAM	3	3	9.40	9.36	9.50	
1.4	256QAM	6	0	9.44	9.45	9.69	

n2 (PC3)_Ant0

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376000	378000	Tune-up limit (dBm)
Frequency (MHz)				1870	1880	1890	
40	DFT-s-OFDM PI/2 BPSK	1	1	15.70	15.75	15.70	16.5
40		1	108	15.75	15.66	15.44	
40		1	214	15.46	15.47	15.51	
40		108	1	15.29	15.32	15.17	16.5
40		108	54	15.82	15.75	15.58	
40		108	108	15.33	15.04	15.08	
40		216	0	15.27	15.15	15.03	
40	DFT-s-OFDM QPSK	1	1	15.82	15.86	15.80	16.5
40		1	108	15.80	15.77	15.58	
40		1	214	15.62	15.56	15.63	
40		108	1	14.81	14.84	14.68	15.5
40		108	54	15.76	15.82	15.61	16.5
40		108	108	14.83	14.77	14.78	15.5
40		216	0	14.78	14.80	14.70	15.5
40	DFT-s-OFDM 16QAM	1	1	14.89	14.89	14.82	15.5
40	DFT-s-OFDM 64QAM	1	1	13.45	13.31	13.37	14.5
40	DFT-s-OFDM 256QAM	1	1	11.36	11.33	11.31	12.5
40	CP-OFDM QPSK	1	1	14.18	14.16	14.20	15.5
40	CP-OFDM 16QAM	1	1	13.90	13.90	13.85	15.5
40	CP-OFDM 64QAM	1	1	12.04	12.00	12.02	13.5
40	CP-OFDM 256QAM	1	1	9.37	9.34	9.30	10.5
Channel				373000	376000	379000	Tune-up limit (dBm)
Frequency (MHz)				1865	1880	1895	
30	DFT-s-OFDM QPSK	1	1	15.71	15.69	15.58	16.5
Channel				372500	376000	379500	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1880	1897.5	
25	DFT-s-OFDM QPSK	1	1	15.70	15.68	15.50	16.5
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM QPSK	1	1	15.66	15.72	15.46	16.5
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	15.64	15.67	15.45	16.5
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	15.57	15.66	15.41	16.5
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	15.57	15.60	15.49	16.5

n2 (PC3)_Ant4

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376000	378000	14
Frequency (MHz)				1870	1880	1890	
40	DFT-s-OFDM PI/2 BPSK	1	1	13.20	13.25	13.20	14
40		1	108	13.25	13.16	12.94	
40		1	214	12.96	12.97	13.01	
40		108	1	12.79	12.82	12.67	14
40		108	54	13.32	13.25	13.08	
40		108	108	12.83	12.54	12.58	
40		216	0	12.77	12.65	12.53	
40	DFT-s-OFDM QPSK	1	1	13.32	13.36	13.30	14
40		1	108	13.30	13.27	13.08	
40		1	214	13.12	13.06	13.13	
40		108	1	12.31	12.34	12.18	13
40		108	54	13.26	13.32	13.11	14
40		108	108	12.33	12.27	12.28	13
40		216	0	12.28	12.30	12.20	13
40	DFT-s-OFDM 16QAM	1	1	12.39	12.39	12.32	13
40	DFT-s-OFDM 64QAM	1	1	10.95	10.81	10.87	12
40	DFT-s-OFDM 256QAM	1	1	8.86	8.83	8.81	10
40	CP-OFDM QPSK	1	1	11.68	11.66	11.70	13
40	CP-OFDM 16QAM	1	1	11.40	11.40	11.35	13
40	CP-OFDM 64QAM	1	1	9.54	9.50	9.52	11
40	CP-OFDM 256QAM	1	1	6.87	6.84	6.80	8
Channel				373000	376000	379000	14
Frequency (MHz)				1865	1880	1895	
30	DFT-s-OFDM QPSK	1	1	13.21	13.19	13.08	14
Channel				372500	376000	379500	14
Frequency (MHz)				1862.5	1880	1897.5	
25	DFT-s-OFDM QPSK	1	1	13.20	13.18	13.00	14
Channel				372000	376000	380000	14
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM QPSK	1	1	13.16	13.22	12.96	14
Channel				371500	376000	380500	14
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	13.14	13.17	12.95	14
Channel				371000	376000	381000	14
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	13.07	13.16	12.91	14
Channel				370500	376000	381500	14
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	13.07	13.10	12.99	14

n5 (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	20.82	20.82	20.72	21.5
20		1	53	20.81	20.81	20.82	
20		1	104	20.74	20.66	20.55	
20		50	1	20.47	20.53	20.46	21.5
20		50	25	20.86	20.85	20.83	
20		50	50	20.43	20.45	20.36	
20		100	0	20.45	20.47	20.42	
20	DFT-s-OFDM QPSK	1	1	20.81	20.88	20.79	21.5
20		1	53	20.78	20.80	20.82	
20		1	104	20.71	20.62	20.53	
20		50	1	19.96	20.00	19.97	20.5
20		50	25	20.84	20.86	20.83	21.5
20		50	50	19.91	19.96	19.90	20.5
20		100	0	19.91	19.94	19.90	20.5
20	DFT-s-OFDM 16QAM	1	1	20.07	20.06	20.10	20.5
20	DFT-s-OFDM 64QAM	1	1	18.64	18.68	18.73	19.5
20	DFT-s-OFDM 256QAM	1	1	16.57	16.60	16.65	17.5
20	CP-OFDM QPSK	1	1	19.28	19.27	19.21	20.5
20	CP-OFDM 16QAM	1	1	19.13	19.12	19.13	20.5
20	CP-OFDM 64QAM	1	1	17.23	17.24	17.21	18.5
20	CP-OFDM 256QAM	1	1	14.62	14.65	14.68	15.5
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	20.79	20.65	20.72	21.5
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	20.77	20.73	20.78	21.5
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	20.77	20.73	20.63	21.5

n30 (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		11.78		12.5
10		1	26		11.79		
10		1	50		11.83		
10		25	1		11.37		12.5
10		25	12		11.87		
10		25	25		11.32		
10		50	0		11.38		
10	DFT-s-OFDM QPSK	1	1		11.89		12.5
10		1	26		11.86		
10		1	50		11.85		
10		25	1		10.88		11.5
10		25	12		11.85		12.5
10		25	25		10.81		11.5
10		50	0		10.86		11.5
10	DFT-s-OFDM 16QAM	1	1		11.01		11.5
10	DFT-s-OFDM 64QAM	1	1		9.45		10.5
10	DFT-s-OFDM 256QAM	1	1		7.56		8.5
10	CP-OFDM QPSK	1	1		10.37		11.5
10	CP-OFDM 16QAM	1	1		10.01		10.5
10	CP-OFDM 64QAM	1	1		8.21		9.5
10	CP-OFDM 256QAM	1	1		5.48		6.5
Channel				461500	462000	462500	Tune-up limit
Frequency (MHz)				2307.5	2310	2312.5	(dBm)
5	DFT-s-OFDM QPSK	1	1	11.79	11.89	11.88	12.5

n48 (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				638000	639834	641666	643500	645332	10
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98	
40	DFT-s-OFDM PI/2 BPSK	1	1	8.62	8.77	8.98	8.85	8.63	10
40		1	108	8.82	9.05	8.81	8.74	8.68	
40		1	214	8.91	8.82	8.86	8.68	8.71	
40		108	1	8.26	8.38	8.33	8.31	8.15	10
40		108	54	8.81	9.03	8.80	8.77	8.67	
40		108	108	8.30	8.51	8.32	8.16	8.17	
40		216	0	8.30	8.57	8.28	8.27	8.15	
40	DFT-s-OFDM QPSK	1	1	8.91	8.96	9.07	8.93	8.97	10
40		1	108	8.82	9.00	8.83	8.74	8.64	
40		1	214	8.88	8.83	8.83	8.66	8.66	
40		108	1	7.75	7.89	7.82	7.78	7.74	9
40		108	54	8.95	8.98	9.01	8.93	8.91	10
40		108	108	7.80	8.03	7.81	7.78	7.75	9
40		216	0	7.94	8.00	8.05	7.97	7.92	9
40	DFT-s-OFDM 16QAM	1	1	7.67	7.81	7.98	7.85	7.68	9
40	DFT-s-OFDM 64QAM	1	1	6.51	6.69	6.89	6.80	6.26	8
40	DFT-s-OFDM 256QAM	1	1	4.58	4.72	4.97	4.70	4.53	6
40	CP-OFDM QPSK	1	1	7.07	7.20	7.40	7.29	7.11	8
40	CP-OFDM 16QAM	1	1	6.89	7.03	7.23	7.13	6.78	8
40	CP-OFDM 64QAM	1	1	5.09	5.25	5.48	5.22	5.09	6
40	CP-OFDM 256QAM	1	1	2.50	2.62	2.86	2.59	2.39	4
Channel				637668	639668	641666	643666	645666	10
Frequency (MHz)				3565.02	3595.02	3624.99	3654.99	3684.99	
30	DFT-s-OFDM QPSK	1	1	8.60	8.77	8.86	8.80	8.62	10
Channel				637334	639500	641666	643832	646000	10
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690	
20	DFT-s-OFDM QPSK	1	1	8.64	8.86	8.85	8.81	8.68	10
Channel				637168	639418	641666	643916	646166	10
Frequency (MHz)				3557.52	3591.27	3624.99	3658.74	3692.49	
15	DFT-s-OFDM QPSK	1	1	8.59	8.84	8.82	8.73	8.66	10
Channel				637000	639334	641666	644000	646332	10
Frequency (MHz)				3555	3590.01	3624.99	3660	3694.98	
10	DFT-s-OFDM QPSK	1	1	8.63	8.89	8.78	8.66	8.60	10

n66 (PC3)_Ant0

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	14.31	14.37	14.28	15.5
40		1	108	14.35	14.28	14.15	
40		1	214	14.26	14.10	14.12	
40		108	1	13.97	13.88	13.79	15.5
40		108	54	14.40	14.32	14.23	
40		108	108	13.90	13.94	13.74	
40		216	0	13.96	13.90	13.75	
40	DFT-s-OFDM QPSK	1	1	14.40	14.47	14.39	15.5
40		1	108	14.38	14.38	14.14	
40		1	214	14.30	14.21	14.13	
40		108	1	13.56	13.50	13.43	14.5
40		108	54	14.42	14.47	14.39	15.5
40		108	108	13.48	13.52	13.34	14.5
40		216	0	13.47	13.53	13.44	14.5
40	DFT-s-OFDM 16QAM	1	1	13.52	13.48	13.45	14.5
40	DFT-s-OFDM 64QAM	1	1	12.14	11.93	12.04	13.5
40	DFT-s-OFDM 256QAM	1	1	10.02	9.94	9.95	10.5
40	CP-OFDM QPSK	1	1	12.65	12.79	12.65	13.5
40	CP-OFDM 16QAM	1	1	12.44	12.52	12.43	13.5
40	CP-OFDM 64QAM	1	1	10.60	10.66	10.61	11.5
40	CP-OFDM 256QAM	1	1	8.00	7.89	7.95	8.5
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	14.26	14.26	14.17	15.5
Channel				344500	349000	353500	Tune-up limit (dBm)
Frequency (MHz)				1722.5	1745	1767.5	
25	DFT-s-OFDM QPSK	1	1	14.26	14.28	14.12	15.5
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	14.26	14.29	14.09	15.5
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	14.29	14.25	14.08	15.5
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	14.26	14.27	14.17	15.5
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	14.26	14.27	14.15	15.5

n66 (PC3)_Ant4

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	15.31	15.37	15.28	16.5
40		1	108	15.35	15.28	15.15	
40		1	214	15.26	15.10	15.12	
40		108	1	14.97	14.88	14.79	16.5
40		108	54	15.40	15.32	15.23	
40		108	108	14.90	14.94	14.74	
40		216	0	14.96	14.90	14.75	
40	DFT-s-OFDM QPSK	1	1	15.40	15.47	15.39	16.5
40		1	108	15.38	15.38	15.14	
40		1	214	15.30	15.21	15.13	
40		108	1	14.56	14.50	14.43	15.5
40		108	54	15.42	15.47	15.39	16.5
40		108	108	14.48	14.52	14.34	15.5
40		216	0	14.47	14.53	14.44	15.5
40	DFT-s-OFDM 16QAM	1	1	14.52	14.48	14.45	15.5
40	DFT-s-OFDM 64QAM	1	1	13.14	12.93	13.04	14.5
40	DFT-s-OFDM 256QAM	1	1	11.02	10.94	10.95	11.5
40	CP-OFDM QPSK	1	1	13.65	13.79	13.65	14.5
40	CP-OFDM 16QAM	1	1	13.44	13.52	13.43	14.5
40	CP-OFDM 64QAM	1	1	11.60	11.66	11.61	12.5
40	CP-OFDM 256QAM	1	1	9.00	8.89	8.95	9.5
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	15.26	15.26	15.17	16.5
Channel				344500	349000	353500	Tune-up limit (dBm)
Frequency (MHz)				1722.5	1745	1767.5	
25	DFT-s-OFDM QPSK	1	1	15.26	15.28	15.12	16.5
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	15.26	15.29	15.09	16.5
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	15.29	15.25	15.08	16.5
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	15.26	15.27	15.17	16.5
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	15.26	15.27	15.15	16.5

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	17.77	17.89	17.98	19
20		1	53	17.97	17.99	17.88	
20		1	104	17.96	17.87	17.83	
20		50	1	17.31	17.56	17.42	19
20		50	25	17.94	17.97	17.93	
20		50	50	17.51	17.47	17.40	
20		100	0	17.38	17.52	17.35	
20	DFT-s-OFDM QPSK	1	1	17.98	18.01	17.97	19
20		1	53	17.95	17.97	17.86	
20		1	104	17.96	17.84	17.82	
20		50	1	17.02	17.04	16.93	18
20		50	25	17.96	17.98	17.92	19
20		50	50	16.99	16.97	16.87	18
20		100	0	16.92	16.99	16.92	18
20	DFT-s-OFDM 16QAM	1	1	16.89	17.02	17.11	18
20	DFT-s-OFDM 64QAM	1	1	15.28	15.44	15.53	16
20	DFT-s-OFDM 256QAM	1	1	13.35	13.45	13.51	14
20	CP-OFDM QPSK	1	1	16.23	16.32	16.45	17
20	CP-OFDM 16QAM	1	1	15.94	16.08	16.19	17
20	CP-OFDM 64QAM	1	1	14.08	14.15	14.29	15
20	CP-OFDM 256QAM	1	1	11.35	11.40	11.52	12
Channel				134100	136100	138100	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	DFT-s-OFDM QPSK	1	1	17.79	17.97	17.94	19
Channel				133600	136100	138600	Tune-up limit (dBm)
Frequency (MHz)				668	680.5	693	
10	DFT-s-OFDM QPSK	1	1	17.79	17.99	17.85	19
Channel				133100	136100	139100	Tune-up limit (dBm)
Frequency (MHz)				665.5	680.5	695.5	
5	DFT-s-OFDM QPSK	1	1	17.76	17.98	17.86	19

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			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			9.59			10.5
100		1	136			9.41			
100		1	271			9.02			
100		135	1			9.01			10.5
100		135	67			9.52			
100		135	136			8.55			
100		270	0			8.98			
100	DFT-s-OFDM QPSK	1	1			9.63			10.5
100		1	136			9.57			
100		1	271			9.03			
100		135	1			8.52			
100		135	67			9.58			10.5
100		135	136			8.37			9.5
100		270	0			8.55			9.5
100	DFT-s-OFDM 16QAM	1	1			8.54			9.5
100	DFT-s-OFDM 64QAM	1	1			7.30			8.5
100	DFT-s-OFDM 256QAM	1	1			5.19			6.5
100	CP-OFDM QPSK	1	1			7.95			8.5
100	CP-OFDM 16QAM	1	1			7.72			8.5
100	CP-OFDM 64QAM	1	1			5.68			6.5
100	CP-OFDM 256QAM	1	1			3.41			4.5
Channel				633000	633168	633334	633500	633666	Tune-up limit
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	(dBm)
90	DFT-s-OFDM QPSK	1	1	9.56	9.53	9.53	9.52	8.38	10.5
Channel				632668	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	(dBm)
80	DFT-s-OFDM QPSK	1	1	9.61	9.62	9.60	9.55	9.55	10.5
Channel				632334	632834	633334	633832	634332	Tune-up limit
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	(dBm)
70	DFT-s-OFDM QPSK	1	1	9.54	9.59	9.49	9.47	9.49	10.5
Channel				632000	632668	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	(dBm)
60	DFT-s-OFDM QPSK	1	1	9.53	9.53	9.50	9.46	9.53	10.5
Channel				631668	632500	633334	634166	635000	Tune-up limit
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	(dBm)
50	DFT-s-OFDM QPSK	1	1	9.55	9.56	9.51	9.51	9.46	10.5
Channel				631334	632334	633334	634332	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	(dBm)
40	DFT-s-OFDM QPSK	1	1	9.61	9.62	9.59	9.51	9.28	10.5
Channel				630668	632000	633334	634666	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	(dBm)
20	DFT-s-OFDM QPSK	1	1	9.59	9.50	9.50	9.21	8.98	10.5
Channel				630500	631916	633334	634750	636166	Tune-up limit
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	(dBm)
15	DFT-s-OFDM QPSK	1	1	9.56	9.49	9.47	9.11	9.00	10.5
Channel				630334	631834	633334	634834	636332	Tune-up limit
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	(dBm)
10	DFT-s-OFDM QPSK	1	1	9.58	9.49	9.49	9.13	9.07	10.5

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	10.5
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	9.34	9.57	9.46	9.58	9.44	10.5
100		1	136	9.58	9.49	9.57	9.42	9.18	
100		1	271	9.37	9.44	9.33	9.04	9.34	
100		135	1	9.23	9.02	8.90	8.88	8.93	10.5
100		135	67	9.61	9.56	9.62	9.49	9.25	
100		135	136	8.88	8.86	8.68	8.73	8.88	
100		270	0	9.01	9.05	9.09	9.03	8.83	
100	DFT-s-OFDM QPSK	1	1	9.62	9.60	9.67	9.59	9.58	10.5
100		1	136	9.60	9.57	9.58	9.61	9.24	
100		1	271	9.39	9.42	9.32	9.08	9.35	
100		135	1	8.75	8.52	8.40	8.37	8.44	
100		135	67	9.62	9.52	9.63	9.49	9.55	10.5
100		135	136	8.40	8.38	8.20	8.24	8.39	9.5
100		270	0	8.56	8.54	8.61	8.59	8.52	9.5
100	DFT-s-OFDM 16QAM	1	1	8.47	8.73	8.67	8.71	8.46	9.5
100	DFT-s-OFDM 64QAM	1	1	7.06	7.28	7.14	7.30	7.28	8.5
100	DFT-s-OFDM 256QAM	1	1	4.93	5.14	5.04	5.16	5.10	6.5
100	CP-OFDM QPSK	1	1	7.83	8.07	7.95	8.04	7.91	9.5
100	CP-OFDM 16QAM	1	1	7.47	7.70	7.60	7.73	7.63	8.5
100	CP-OFDM 64QAM	1	1	5.46	5.68	5.61	5.70	5.62	6.5
100	CP-OFDM 256QAM	1	1	3.17	3.46	3.36	3.48	3.44	4.5
Channel				649666	652834	656000	659166	662332	10.5
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	9.38	9.65	9.55	9.53	9.41	10.5
Channel				649334	652668	656000	659332	662666	10.5
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	9.41	9.65	9.55	9.49	9.49	10.5
Channel				649000	652500	656000	659500	663000	10.5
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	9.36	9.62	9.50	9.37	9.30	10.5
Channel				648668	652334	656000	659666	663332	10.5
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	9.34	9.60	9.45	9.31	9.16	10.5
Channel				648334	652168	656000	659832	663666	10.5
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	9.38	9.62	9.45	9.41	9.23	10.5
Channel				648000	652000	656000	660000	664000	10.5
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	9.39	9.64	9.45	9.49	9.32	10.5
Channel				647334	651668	656000	660332	664666	10.5
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	9.43	9.51	9.54	9.51	9.52	10.5
Channel				647168	651584	656000	660416	664832	10.5
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	9.40	9.48	9.57	9.45	9.54	10.5
Channel				647000	651500	656000	660500	665000	10.5
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	9.41	9.50	9.62	9.42	9.60	10.5

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			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			6.01			7.5
100		1	136			6.45			
100		1	271			5.97			
100		135	1			6.02			7.5
100		135	67			6.51			
100		135	136			5.94			
100		270	0			5.96			
100	DFT-s-OFDM QPSK	1	1			6.55			7.5
100		1	136			6.41			
100		1	271			6.38			
100		135	1			5.52			6.5
100		135	67			6.47			7.5
100		135	136			5.41			6.5
100		270	0			5.51			6.5
100	DFT-s-OFDM 16QAM	1	1			5.59			6.5
100	DFT-s-OFDM 64QAM	1	1			4.55			5.5
100	DFT-s-OFDM 256QAM	1	1			2.54			3.5
100	CP-OFDM QPSK	1	1			4.98			5.5
100	CP-OFDM 16QAM	1	1			4.77			5.5
100	CP-OFDM 64QAM	1	1			3.08			4.5
100	CP-OFDM 256QAM	1	1			0.43			1.5
Channel				633000	633168	633334	633500	633666	Tune-up limit
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	(dBm)
90	DFT-s-OFDM QPSK	1	1	6.44	6.41	6.41	6.39	6.39	7.5
Channel				632668	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	(dBm)
80	DFT-s-OFDM QPSK	1	1	6.51	6.51	6.46	6.44	6.45	7.5
Channel				632334	632834	633334	633832	634332	Tune-up limit
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	(dBm)
70	DFT-s-OFDM QPSK	1	1	6.43	6.44	6.38	6.32	6.34	7.5
Channel				632000	632668	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	(dBm)
60	DFT-s-OFDM QPSK	1	1	6.36	6.38	6.36	6.32	6.36	7.5
Channel				631668	632500	633334	634166	635000	Tune-up limit
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	(dBm)
50	DFT-s-OFDM QPSK	1	1	6.37	6.40	6.33	6.35	6.27	7.5
Channel				631334	632334	633334	634332	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	(dBm)
40	DFT-s-OFDM QPSK	1	1	6.43	6.43	6.39	6.34	6.05	7.5
Channel				630668	632000	633334	634666	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	(dBm)
20	DFT-s-OFDM QPSK	1	1	6.42	6.38	6.37	6.07	5.82	7.5
Channel				630500	631916	633334	634750	636166	Tune-up limit
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	(dBm)
15	DFT-s-OFDM QPSK	1	1	6.44	6.33	6.35	5.93	5.83	7.5
Channel				630334	631834	633334	634834	636332	Tune-up limit
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	(dBm)
10	DFT-s-OFDM QPSK	1	1	6.42	6.33	6.32	5.91	5.86	7.5

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	7.5
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	6.39	6.63	6.58	6.62	6.54	7.5
100		1	136	6.70	6.57	6.67	6.52	6.34	
100		1	271	6.45	6.52	6.43	6.13	6.48	
100		135	1	6.34	6.12	6.01	5.97	6.04	7.5
100		135	67	6.64	6.65	6.73	6.61	6.39	
100		135	136	6.03	5.96	5.82	5.84	6.00	
100		270	0	6.14	6.16	6.17	6.16	5.94	
100	DFT-s-OFDM QPSK	1	1	6.68	6.66	6.75	6.69	6.65	7.5
100		1	136	6.67	6.60	6.73	6.58	6.45	
100		1	271	6.45	6.50	6.44	6.19	6.49	
100		135	1	5.83	5.62	5.51	5.46	5.53	6.5
100		135	67	6.70	6.67	6.73	6.62	6.69	7.5
100		135	136	5.51	5.49	5.32	5.33	5.49	6.5
100		270	0	5.61	5.64	5.68	5.66	5.62	6.5
100	DFT-s-OFDM 16QAM	1	1	5.50	5.76	5.70	5.78	5.60	6.5
100	DFT-s-OFDM 64QAM	1	1	4.32	4.67	4.62	4.69	4.79	5.5
100	DFT-s-OFDM 256QAM	1	1	2.27	2.61	2.57	2.65	2.65	3.5
100	CP-OFDM QPSK	1	1	4.74	5.00	4.97	5.03	4.99	5.5
100	CP-OFDM 16QAM	1	1	4.68	4.93	4.83	4.96	4.80	5.5
100	CP-OFDM 64QAM	1	1	2.89	3.15	3.09	3.20	3.17	4.5
100	CP-OFDM 256QAM	1	1	0.18	0.49	0.52	0.57	0.53	1.5
Channel				649666	652834	656000	659166	662332	7.5
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	6.40	6.61	6.53	6.57	6.54	7.5
Channel				649334	652668	656000	659332	662666	7.5
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	6.42	6.66	6.57	6.51	6.53	7.5
Channel				649000	652500	656000	659500	663000	7.5
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	6.39	6.63	6.53	6.40	6.34	7.5
Channel				648668	652334	656000	659666	663332	7.5
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	6.33	6.57	6.39	6.28	6.18	7.5
Channel				648334	652168	656000	659832	663666	7.5
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	6.36	6.58	6.42	6.42	6.26	7.5
Channel				648000	652000	656000	660000	664000	7.5
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	6.39	6.58	6.41	6.46	6.34	7.5
Channel				647334	651668	656000	660332	664666	7.5
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	6.42	6.47	6.50	6.51	6.54	7.5
Channel				647168	651584	656000	660416	664832	7.5
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	6.40	6.46	6.52	6.41	6.56	7.5
Channel				647000	651500	656000	660500	665000	7.5
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	6.36	6.44	6.55	6.37	6.52	7.5

2.4GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 5	802.11b 1Mbps	CH 1	2412	15.56	16.50	15.00
		CH 7	2442	15.41	16.00	15.00
		CH 13	2472	15.52	16.50	15.00
	802.11g 6Mbps	CH 1	2412	13.66	14.50	14.00
		CH 7	2442	14.07	15.00	14.00
		CH 13	2472	13.82	14.50	14.00
	802.11n-HT20 MCS0	CH 1	2412	10.96	11.50	12.00
		CH 7	2442	11.44	12.00	12.00
		CH 13	2472	11.10	12.00	12.00
	802.11n-HT40 MCS0	CH 3	2422	10.13	11.00	11.00
		CH 6	2437	10.16	11.00	11.00
		CH 9	2452	10.06	11.00	11.00
	802.11ac-VHT20 MCS0	CH 1	2412	10.86	11.50	12.00
		CH 7	2442	11.16	12.00	12.00
		CH 13	2472	10.93	11.50	12.00
	802.11ac-VHT40 MCS0	CH 3	2422	10.21	11.00	11.00
		CH 6	2437	9.99	10.50	11.00
		CH 9	2452	10.00	11.00	11.00

5.2GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 5	802.11a 6Mbps	CH 36	5180	6.29	7.00	7.00
		CH 40	5200	6.33	7.00	7.00
		CH 48	5240	6.39	7.00	7.00
	802.11n-HT20 MCS0	CH 36	5180	6.45	7.00	7.00
		CH 40	5200	6.30	7.00	7.00
		CH 48	5240	6.25	7.00	7.00
	802.11n-HT40 MCS0	CH 38	5190	5.29	6.00	6.00
		CH 46	5230	5.27	6.00	6.00
		CH 48	5240	5.22	6.00	6.00
	802.11ac-VHT20 MCS0	CH 36	5180	6.44	7.00	7.00
		CH 44	5220	6.20	7.00	7.00
		CH 48	5240	6.20	7.00	7.00
	802.11ac-VHT40 MCS0	CH 38	5190	5.39	6.00	6.00
		CH 46	5230	5.54	6.50	6.00
		CH 42	5210	4.75	5.50	5.00

5.3GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 5	802.11a 6Mbps	CH 52	5260	5.27	6.00	6.00
		CH 60	5300	4.95	5.50	6.00
		CH 64	5320	8.36	9.00	6.00
	802.11n-HT20 MCS0	CH 52	5260	5.36	6.00	6.00
		CH 60	5300	4.95	5.50	6.00
		CH 64	5320	5.01	6.00	6.00
	802.11n-HT40 MCS0	CH 54	5270	4.41	5.00	5.00
		CH 62	5310	4.24	5.00	5.00
		CH 52	5260	5.22	6.00	6.00
	802.11ac-VHT20 MCS0	CH 60	5300	4.99	5.50	6.00
		CH 64	5320	4.94	5.50	6.00
		CH 54	5270	4.47	5.00	5.00
	802.11ac-VHT40 MCS0	CH 62	5310	4.10	5.00	5.00
		CH 58	5290	3.63	4.50	4.00

5.5GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.5GHz WLAN ANT 5	802.11a 6Mbps	CH 100	5500	10.62	11.50	12.00
		CH 120	5600	10.54	11.50	12.00
		CH 144	5720	11.38	12.00	12.00
	802.11n-HT20 MCS0	CH 100	5500	10.68	11.50	12.00
		CH 120	5600	10.53	11.50	12.00
		CH 144	5720	11.55	12.50	12.00
	802.11n-HT40 MCS0	CH 102	5510	9.74	10.50	11.00
		CH 126	5630	9.67	10.50	11.00
		CH 142	5710	10.49	11.00	11.00
	802.11ac-VHT20 MCS0	CH 100	5500	10.65	11.50	12.00
		CH 120	5600	10.62	11.50	12.00
		CH 144	5720	11.38	12.00	12.00
	802.11ac-VHT40 MCS0	CH 102	5510	9.79	10.50	11.00
		CH 126	5630	9.81	10.50	11.00
		CH 142	5710	10.58	11.50	11.00
	802.11ac-VHT80 MCS0	CH 106	5530	8.91	9.50	10.00
		CH 122	5610	9.02	10.00	10.00
		CH 138	5690	9.82	10.50	10.00

5.8GHz WLAN ANT 5

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 5	802.11a 6Mbps	CH 149	5745	12.47	13.00	12.00
		CH 157	5785	12.81	13.50	12.00
		CH 165	5825	12.96	13.50	12.00
	802.11n-HT20 MCS0	CH 149	5745	9.09	10.00	10.00
		CH 157	5785	9.62	10.50	10.00
		CH 165	5825	9.87	10.50	10.00
	802.11n-HT40 MCS0	CH 151	5755	8.30	9.00	9.00
		CH 159	5795	8.84	9.50	9.00
		CH 149	5745	9.30	10.00	10.00
	802.11ac-VHT20 MCS0	CH 157	5785	9.88	10.50	10.00
		CH 165	5825	9.55	10.50	10.00
		CH 151	5755	8.21	9.00	9.00
	802.11ac-VHT40 MCS0	CH 159	5795	8.80	9.50	9.00
		CH 155	5775	7.81	8.50	8.00