



REPORT No.: SZ25090484S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

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

Full Power

GSM850		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
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		32.90	32.88	32.78	34.00	23.90	23.88	23.78	25.00
GPRS 1 Tx slot		32.88	32.78	32.81	34.00	23.88	23.78	23.81	25.00
GPRS 2 Tx slots		30.56	30.57	30.55	31.50	24.56	24.57	24.55	25.50
GPRS 3 Tx slots		28.67	28.67	28.75	29.50	24.41	24.41	24.49	25.24
GPRS 4 Tx slots		26.56	26.62	26.69	27.50	23.56	23.62	23.69	24.50
EDGE 1 Tx slot		25.57	25.63	25.71	26.50	16.57	16.63	16.71	17.50
EDGE 2 Tx slots		24.66	24.89	24.87	25.50	18.66	18.89	18.87	19.50
EDGE 3 Tx slots		23.39	23.49	23.42	24.00	19.13	19.23	19.16	19.74
EDGE 4 Tx slots		20.48	20.85	20.87	21.50	17.48	17.85	17.87	18.50
Mode			Max.	32.90			Max.	24.57	
Attenuator		Cable Loss : 0.6							
Date		10/15							

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		29.64	29.84	29.94	30.50	20.64	20.84	20.94	21.50
GPRS 1 Tx slot		29.66	29.79	29.93	30.50	20.66	20.79	20.93	21.50
GPRS 2 Tx slots		27.17	27.13	27.24	28.00	21.17	21.13	21.24	22.00
GPRS 3 Tx slots		25.56	25.66	25.59	26.50	21.30	21.40	21.33	22.24
GPRS 4 Tx slots		23.58	23.58	23.57	24.50	20.58	20.58	20.57	21.50
EDGE 1 Tx slot		25.35	25.45	24.98	26.00	16.35	16.45	15.98	17.00
EDGE 2 Tx slots		24.47	24.52	24.41	25.00	18.47	18.52	18.41	19.00
EDGE 3 Tx slots		23.01	23.05	22.91	23.50	18.75	18.79	18.65	19.24
EDGE 4 Tx slots		20.65	20.72	20.51	21.50	17.65	17.72	17.51	18.50
Mode			Max.	29.94			Max.	21.40	
Attenuator		Cable Loss : 0.8							
Date		10/15							

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	22.84	22.91	22.90	24.50	22.62	22.71	22.66	24.50	23.76	23.84	23.78	25.00
3GPP Rel 5	HSDPA Subtest-1	22.33	22.82	22.56	23.50	22.29	22.20	22.42	23.00	23.68	23.73	23.69	24.50
3GPP Rel 5	HSDPA Subtest-2	22.41	22.88	22.45	23.50	22.16	22.30	22.25	23.00	23.58	23.69	23.61	24.50
3GPP Rel 5	HSDPA Subtest-3	21.94	22.44	22.01	23.00	21.84	22.02	21.95	22.50	23.12	23.22	23.15	24.00
3GPP Rel 5	HSDPA Subtest-4	22.01	22.49	22.06	23.00	21.75	21.99	21.86	22.50	23.16	23.26	23.19	24.00
3GPP Rel 6	HSUPA Subtest-1	22.24	22.55	22.14	23.50	21.42	22.16	21.87	23.00	22.56	22.78	22.36	23.50
3GPP Rel 6	HSUPA Subtest-2	22.17	22.49	22.06	23.50	21.40	21.99	21.93	23.00	22.52	22.68	22.27	23.50
3GPP Rel 6	HSUPA Subtest-3	22.21	22.55	22.13	23.50	21.40	22.02	21.80	23.00	22.51	22.68	22.25	23.50
3GPP Rel 6	HSUPA Subtest-4	22.14	22.46	22.02	23.50	21.30	21.87	21.93	22.50	22.48	22.59	22.20	23.50
3GPP Rel 6	HSUPA Subtest-5	22.19	22.54	22.10	23.50	21.35	21.87	21.82	22.50	22.49	22.55	22.25	23.50
Attenuator			Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6	
Mode			Max.	22.91			Max.	22.71			Max.	23.84	
Date		10/15				10/15				10/15			

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	24.5
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	22.81	22.85	22.82	24.5
20	QPSK	1	49	22.76	22.78	22.76	
20	QPSK	1	99	22.68	22.74	22.69	
20	QPSK	50	0	21.62	21.67	21.64	
20	QPSK	50	24	21.57	21.62	21.51	23.5
20	QPSK	50	50	21.61	21.64	21.56	
20	QPSK	100	0	21.58	21.63	21.51	
20	16QAM	1	0	21.69	21.72	21.63	
20	16QAM	1	49	21.61	21.70	21.62	23.5
20	16QAM	1	99	21.62	21.68	21.64	
20	16QAM	50	0	20.71	20.78	20.69	
20	16QAM	50	24	20.69	20.71	20.64	
20	16QAM	50	50	20.71	20.75	20.70	22.5
20	16QAM	100	0	20.62	20.69	20.64	
20	64QAM	1	0	21.32	21.33	21.24	
20	64QAM	1	49	21.21	21.32	21.17	
20	64QAM	1	99	21.11	21.27	21.28	22.5
20	64QAM	50	0	20.57	20.65	20.56	
20	64QAM	50	24	20.56	20.58	20.62	
20	64QAM	50	50	20.64	20.61	20.58	
20	64QAM	100	0	20.51	20.56	20.55	21.5
20	256QAM	1	0	18.22	18.50	18.35	
20	256QAM	1	49	18.44	18.47	18.36	
20	256QAM	1	99	18.50	18.44	18.24	
20	256QAM	50	0	18.21	18.25	18.46	19.5
20	256QAM	50	24	18.22	18.44	18.31	
20	256QAM	50	50	18.36	18.51	18.38	
20	256QAM	100	0	18.57	18.50	18.27	
Channel				18675	18900	19125	24.5
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	22.71	22.77	22.68	24.5
15	QPSK	1	37	22.63	22.64	22.64	
15	QPSK	1	74	22.59	22.62	22.55	
15	QPSK	36	0	21.65	21.65	21.50	
15	QPSK	36	20	21.56	21.52	21.61	23.5
15	QPSK	36	39	21.56	21.61	21.55	
15	QPSK	75	0	21.58	21.60	21.60	
15	16QAM	1	0	21.68	21.58	21.52	
15	16QAM	1	37	21.57	21.59	21.63	23.5
15	16QAM	1	74	21.62	21.63	21.64	
15	16QAM	36	0	20.65	20.67	20.68	
15	16QAM	36	20	20.59	20.73	20.62	
15	16QAM	36	39	20.54	20.57	20.62	22.5
15	16QAM	75	0	20.57	20.67	20.58	
15	64QAM	1	0	21.22	21.25	21.11	
15	64QAM	1	37	21.09	21.32	21.01	
15	64QAM	1	74	21.11	21.13	21.18	22.5
15	64QAM	36	0	20.63	20.59	20.48	
15	64QAM	36	20	20.61	20.56	20.51	
15	64QAM	36	39	20.61	20.52	20.56	
15	64QAM	75	0	20.47	20.54	20.53	21.5
15	256QAM	1	0	18.12	18.42	18.28	
15	256QAM	1	37	18.47	18.47	18.25	
15	256QAM	1	74	18.54	18.49	18.17	
15	256QAM	36	0	18.13	18.15	18.28	19.5
15	256QAM	36	20	18.14	18.36	18.34	
15	256QAM	36	39	18.23	18.36	18.22	
15	256QAM	75	0	18.55	18.41	18.13	
Channel				18650	18900	19150	24.5
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.77	22.79	22.74	24.5
10	QPSK	1	25	22.68	22.66	22.73	
10	QPSK	1	49	22.59	22.60	22.57	
10	QPSK	25	0	21.52	21.60	21.57	
10	QPSK	25	12	21.55	21.53	21.52	23.5
10	QPSK	25	25	21.63	21.62	21.53	
10	QPSK	50	0	21.52	21.65	21.60	
10	16QAM	1	0	21.53	21.54	21.54	
10	16QAM	1	25	21.66	21.53	21.65	23.5
10	16QAM	1	49	21.64	21.55	21.61	
10	16QAM	25	0	20.65	20.74	20.69	
10	16QAM	25	12	20.70	20.70	20.64	
10	16QAM	25	25	20.81	20.70	20.64	22.5
10	16QAM	50	0	20.60	20.74	20.53	
10	64QAM	1	0	21.23	21.19	21.11	
10	64QAM	1	25	21.10	21.32	21.13	
10	64QAM	1	49	20.95	21.27	21.27	22.5
10	64QAM	25	0	20.51	20.62	20.38	
10	64QAM	25	12	20.58	20.43	20.59	
10	64QAM	25	25	20.49	20.56	20.52	
10	64QAM	50	0	20.44	20.50	20.43	21.5
10	256QAM	1	0	18.08	18.38	18.18	
10	256QAM	1	25	18.26	18.46	18.33	
10	256QAM	1	49	18.52	18.42	18.10	
10	256QAM	25	0	18.18	18.14	18.33	19.5
10	256QAM	25	12	18.28	18.43	18.25	
10	256QAM	25	25	18.38	18.33	18.40	
10	256QAM	50	0	18.39	18.35	18.32	
Channel				18625	18900	19175	24.5
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	22.68	22.82	22.70	24.5
5	QPSK	1	12	22.68	22.72	22.67	
5	QPSK	1	24	22.56	22.66	22.57	
5	QPSK	12	0	21.62	21.59	21.56	
5	QPSK	12	7	21.65	21.62	21.52	23.5
5	QPSK	12	13	21.62	21.60	21.64	
5	QPSK	25	0	21.51	21.56	21.52	
5	16QAM	1	0	21.67	21.73	21.65	
5	16QAM	1	12	21.60	21.55	21.56	23.5
5	16QAM	1	24	21.51	21.70	21.59	
5	16QAM	12	0	20.57	20.83	20.69	
5	16QAM	12	7	20.63	20.66	20.54	
5	16QAM	12	13	20.60	20.80	20.61	22.5
5	16QAM	25	0	20.66	20.65	20.67	
5	64QAM	1	0	21.26	21.32	21.14	
5	64QAM	1	12	21.08	21.26	21.05	

Band 4 (AWS Band) (dBm) Part 27L (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	24
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.22	22.31	22.25	24
20	QPSK	1	49	22.16	22.26	22.18	
20	QPSK	1	99	22.08	22.19	22.14	
20	QPSK	50	0	21.37	21.49	21.45	
20	QPSK	50	24	21.32	21.36	21.37	23
20	QPSK	50	50	21.36	21.41	21.39	
20	QPSK	100	0	21.33	21.38	21.35	
20	16QAM	1	0	21.44	21.48	21.43	
20	16QAM	1	49	21.36	21.47	21.45	23
20	16QAM	1	99	21.37	21.49	21.43	
20	16QAM	50	0	20.41	20.49	20.48	
20	16QAM	50	24	20.39	20.44	20.41	
20	16QAM	50	50	20.41	20.50	20.45	22
20	16QAM	100	0	20.32	20.44	20.39	
20	64QAM	1	0	20.92	20.94	20.93	
20	64QAM	1	49	20.81	20.87	20.92	
20	64QAM	1	99	20.71	20.98	20.87	22
20	64QAM	50	0	20.27	20.46	20.45	
20	64QAM	50	24	20.26	20.42	20.28	
20	64QAM	50	50	20.34	20.38	20.31	
20	64QAM	100	0	20.21	20.35	20.26	21
20	256QAM	1	0	18.15	18.18	18.19	
20	256QAM	1	49	18.05	18.23	18.09	
20	256QAM	1	99	18.05	18.17	18.15	
20	256QAM	50	0	18.01	18.05	17.94	
20	256QAM	50	24	18.23	18.21	18.28	19
20	256QAM	50	50	18.12	18.32	18.00	
20	256QAM	100	0	18.02	18.27	18.21	
Channel				20025	20175	20325	24
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.14	22.21	22.18	24
15	QPSK	1	37	22.12	22.15	22.12	
15	QPSK	1	74	22.05	22.11	22.04	
15	QPSK	36	0	21.27	21.40	21.40	
15	QPSK	36	20	21.32	21.33	21.31	23
15	QPSK	36	39	21.35	21.40	21.37	
15	QPSK	75	0	21.30	21.29	21.24	
15	16QAM	1	0	21.35	21.42	21.43	
15	16QAM	1	37	21.19	21.44	21.47	23
15	16QAM	1	74	21.30	21.31	21.40	
15	16QAM	36	0	20.37	20.37	20.49	
15	16QAM	36	20	20.24	20.47	20.34	
15	16QAM	36	39	20.25	20.51	20.27	22
15	16QAM	75	0	20.26	20.35	20.31	
15	64QAM	1	0	20.80	20.77	20.82	
15	64QAM	1	37	20.84	20.71	20.92	22
15	64QAM	1	74	20.80	20.90	20.74	
15	64QAM	36	0	20.17	20.28	20.27	
15	64QAM	36	20	20.28	20.42	20.21	
15	64QAM	36	39	20.40	20.44	20.18	21
15	64QAM	75	0	20.23	20.25	20.10	
15	256QAM	1	0	18.06	18.11	18.13	
15	256QAM	1	37	17.90	18.14	18.05	19
15	256QAM	1	74	17.96	18.06	18.14	
15	256QAM	36	0	18.16	18.01	18.00	
15	256QAM	36	20	18.14	18.23	18.33	
15	256QAM	36	39	18.04	18.38	18.08	19
15	256QAM	75	0	17.88	18.23	18.21	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.13	22.17	22.21	24
10	QPSK	1	25	22.05	22.14	22.09	
10	QPSK	1	49	22.06	22.13	22.06	
10	QPSK	25	0	21.30	21.41	21.48	
10	QPSK	25	12	21.34	21.39	21.24	23
10	QPSK	25	25	21.38	21.35	21.37	
10	QPSK	50	0	21.22	21.37	21.28	
10	16QAM	1	0	21.49	21.34	21.34	
10	16QAM	1	25	21.18	21.39	21.46	23
10	16QAM	1	49	21.36	21.47	21.31	
10	16QAM	25	0	20.28	20.34	20.32	
10	16QAM	25	12	20.44	20.29	20.29	
10	16QAM	25	25	20.33	20.37	20.47	22
10	16QAM	50	0	20.24	20.36	20.34	
10	64QAM	1	0	20.86	20.98	20.76	
10	64QAM	1	25	20.73	20.87	20.89	
10	64QAM	1	49	20.71	20.81	20.71	22
10	64QAM	25	0	20.09	20.29	20.47	
10	64QAM	25	12	20.31	20.29	20.20	
10	64QAM	50	0	20.30	20.25	20.22	
10	64QAM	50	0	20.20	20.24	20.13	19
10	256QAM	1	0	18.02	18.07	18.18	
10	256QAM	1	25	17.87	18.22	18.00	
10	256QAM	1	49	17.96	18.16	18.10	
10	256QAM	25	0	18.01	18.09	18.00	
10	256QAM	25	12	18.13	18.21	18.14	19
10	256QAM	25	25	18.04	18.16	17.88	
10	256QAM	50	0	17.85	18.24	18.09	
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	22.13	22.23	22.19	24
5	QPSK	1	12	22.02	22.23	22.15	
5	QPSK	1	24	22.01	22.11	22.03	
5	QPSK	12	0	21.29	21.40	21.37	
5	QPSK	12	7	21.19	21.37	21.39	23
5	QPSK	12	13	21.22	21.33	21.30	
5	QPSK	25	0	21.32	21.36	21.23	
5	16QAM	1	0	21.47	21.46	21.43	
5	16QAM	1	12	21.36	21.49	21.30	23
5	16QAM	1	24	21.29	21.35	21.44	
5	16QAM	12	0	20.45	20.49	20.37	
5	16QAM	12	7	20.22	20.32	20.44	
5	16QAM	12	13	20.36	20.53	20.36	22
5	16QAM	25	0	20.20	20.29	20.22	
5	64QAM	1	0	20.75	20.92	20.98	
5	64QAM	1	12	20.67	20.81	20.93	

5	64QAM	1	24	21.05	21.21	21.29	21.5
5	64QAM	12	0	20.62	20.60	20.44	
5	64QAM	12	7	20.46	20.62	20.50	
5	64QAM	12	13	20.56	20.53	20.45	
5	64QAM	25	0	20.56	20.54	20.53	
5	256QAM	1	0	18.14	18.55	18.18	19.5
5	256QAM	1	12	18.50	18.32	18.34	
5	256QAM	1	24	18.47	18.42	18.14	
5	256QAM	12	0	18.07	18.13	18.37	19.5
5	256QAM	12	7	18.16	18.44	18.27	
5	256QAM	12	13	18.34	18.47	18.42	
5	256QAM	25	0	18.53	18.51	18.27	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1906.5	
3	QPSK	1	0	22.67	22.72	22.77	24.5
3	QPSK	1	8	22.71	22.64	22.72	
3	QPSK	1	14	22.64	22.66	22.63	
3	QPSK	8	0	21.60	21.53	21.54	23.5
3	QPSK	8	4	21.50	21.62	21.57	
3	QPSK	8	7	21.50	21.56	21.51	
3	QPSK	15	0	21.60	21.65	21.64	
3	16QAM	1	0	21.68	21.58	21.68	23.5
3	16QAM	1	8	21.67	21.76	21.51	
3	16QAM	1	14	21.60	21.67	21.64	
3	16QAM	8	0	20.54	20.84	20.70	
3	16QAM	8	4	20.62	20.57	20.62	22.5
3	16QAM	8	7	20.77	20.64	20.73	
3	16QAM	15	0	20.57	20.65	20.50	
3	64QAM	1	0	21.37	21.15	21.18	
3	64QAM	1	8	21.07	21.34	21.08	22.5
3	64QAM	1	14	21.04	21.13	21.13	
3	64QAM	8	0	20.46	20.51	20.40	
3	64QAM	8	4	20.45	20.60	20.50	
3	64QAM	8	7	20.60	20.51	20.53	21.5
3	64QAM	15	0	20.49	20.40	20.37	
3	256QAM	1	0	18.23	18.39	18.24	
3	256QAM	1	8	18.47	18.31	18.30	
3	256QAM	1	14	18.33	18.32	18.10	19.5
3	256QAM	8	0	18.19	18.08	18.49	
3	256QAM	8	4	18.23	18.29	18.23	
3	256QAM	8	7	18.24	18.52	18.23	
3	256QAM	15	0	18.49	18.49	18.31	19.5
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	Tune-up limit (dBm)
1.4	QPSK	1	0	22.78	22.78	22.76	
1.4	QPSK	1	3	22.70	22.74	22.65	24.5
1.4	QPSK	1	5	22.55	22.67	22.60	
1.4	QPSK	3	0	22.61	22.50	22.53	
1.4	QPSK	3	1	22.62	22.64	22.58	
1.4	QPSK	3	3	22.56	22.51	22.62	23.5
1.4	QPSK	6	0	21.58	21.52	21.61	
1.4	16QAM	1	0	21.52	21.71	21.64	
1.4	16QAM	1	3	21.63	21.71	21.65	
1.4	16QAM	1	5	21.55	21.65	21.51	23.5
1.4	16QAM	3	0	21.66	21.64	21.65	
1.4	16QAM	3	1	21.59	21.62	21.58	
1.4	16QAM	3	3	21.60	21.60	21.52	
1.4	16QAM	6	0	20.52	20.53	20.68	22.5
1.4	64QAM	1	0	21.38	21.22	21.15	
1.4	64QAM	1	3	21.16	21.27	21.10	
1.4	64QAM	1	5	21.11	21.16	21.18	
1.4	64QAM	3	0	20.55	20.56	20.53	21.5
1.4	64QAM	3	1	20.62	20.62	20.67	
1.4	64QAM	3	3	20.61	20.56	20.57	
1.4	64QAM	6	0	20.50	20.41	20.39	
1.4	256QAM	1	0	18.19	18.46	18.20	19.5
1.4	256QAM	1	3	18.41	18.53	18.28	
1.4	256QAM	1	5	18.44	18.30	18.14	
1.4	256QAM	3	0	18.27	18.07	18.29	
1.4	256QAM	3	1	18.12	18.40	18.29	19.5
1.4	256QAM	3	3	18.19	18.34	18.31	
1.4	256QAM	6	0	18.48	18.38	18.15	
1.4	256QAM	6	0	18.48	18.38	18.15	

5	64QAM	1	24	20.74	20.92	20.92	21
5	64QAM	12	0	20.10	20.30	20.29	
5	64QAM	12	7	20.22	20.47	20.20	
5	64QAM	12	13	20.34	20.24	20.18	
5	64QAM	25	0	20.26	20.35	20.23	
5	256QAM	1	0	18.04	18.05	18.15	19
5	256QAM	1	12	17.97	18.17	18.08	
5	256QAM	1	24	18.03	18.16	18.11	
5	256QAM	12	0	17.91	17.88	17.85	19
5	256QAM	12	7	18.14	18.09	18.30	
5	256QAM	12	13	18.08	18.29	17.97	
5	256QAM	25	0	17.84	18.33	18.27	
Channel				19665	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.14	22.24	22.12	24
3	QPSK	1	8	22.05	22.19	22.09	
3	QPSK	1	14	22.00	22.15	22.06	
3	QPSK	8	0	21.24	21.38	21.36	23
3	QPSK	8	4	21.20	21.39	21.32	
3	QPSK	8	7	21.39	21.37	21.25	
3	QPSK	15	0	21.23	21.33	21.31	
3	16QAM	1	0	21.43	21.48	21.48	23
3	16QAM	1	8	21.20	21.32	21.28	
3	16QAM	1	14	21.24	21.37	21.30	
3	16QAM	8	0	20.43	20.40	20.33	
3	16QAM	8	4	20.31	20.27	20.32	22
3	16QAM	8	7	20.23	20.46	20.35	
3	16QAM	15	0	20.23	20.28	20.26	
3	64QAM	1	0	20.94	20.97	20.91	
3	64QAM	1	8	20.87	20.80	20.82	22
3	64QAM	1	14	20.62	20.90	20.72	
3	64QAM	8	0	20.24	20.38	20.30	
3	64QAM	8	4	20.09	20.38	20.10	
3	64QAM	8	7	20.30	20.40	20.35	21
3	64QAM	15	0	20.13	20.26	20.19	
3	256QAM	1	0	17.98	18.20	18.06	
3	256QAM	1	8	18.05	18.29	18.03	
3	256QAM	1	14	18.02	17.99	18.15	19
3	256QAM	8	0	17.84	17.93	17.92	
3	256QAM	8	4	18.19	18.04	18.25	
3	256QAM	8	7	17.98	18.26	18.03	
3	256QAM	15	0	17.91	18.15	18.24	19
Channel				19667	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	Tune-up limit (dBm)
1.4	QPSK	1	0	22.12	22.19	22.18	
1.4	QPSK	1	3	22.09	22.15	22.11	24
1.4	QPSK	1	5	22.05	22.15	22.07	
1.4	QPSK	3	0	22.18	22.21	22.14	
1.4	QPSK	3	1	22.08	22.09	22.16	
1.4	QPSK	3	3	22.11	22.15	22.16	23
1.4	QPSK	6	0	21.35	21.38	21.25	
1.4	16QAM	1	0	21.32	21.53	21.47	
1.4	16QAM	1	3	21.38	21.37	21.34	
1.4	16QAM	1	5	21.20	21.35	21.27	23
1.4	16QAM	3	0	21.38	21.26	21.43	
1.4	16QAM	3	1	21.17	21.41	21.41	
1.4	16QAM	3	3	21.29	21.33	21.41	
1.4	16QAM	6	0	20.29	20.43	20.33	22
1.4	64QAM	1	0	20.94	20.87	20.86	
1.4	64QAM	1	3	20.77	20.78	20.86	
1.4	64QAM	1	5	20.57	21.04	20.74	
1.4	64QAM	3	0	20.14	20.32	20.34	21
1.4	64QAM	3	1	20.14	20.32	20.30	
1.4	64QAM	3	3	20.22	20.25	20.26	
1.4	64QAM	6	0	20.03	20.39	20.17	
1.4	256QAM	1	0	17.97	18.18	18.21	19
1.4	256QAM	1	3	18.04	18.28	18.01	
1.4	256QAM	1	5	17.95	17.99	18.06	
1.4	256QAM	3	0	18.01	17.96	17.90	
1.4	256QAM	3	1	18.24	18.15	18.11	19
1.4	256QAM	3	3	18.07	18.14	17.98	
1.4	256QAM	6	0	17.98	18.29	18.08	
1.4	256QAM	6	0	17.98	18.29	18.08	

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	24.04	24.05	23.94	25
10	QPSK	1	25	23.85	23.98	23.95	
10	QPSK	1	49	23.77	23.90	23.88	
10	QPSK	25	0	23.11	23.28	23.23	24
10	QPSK	25	12	23.06	23.11	23.10	
10	QPSK	25	25	23.10	23.13	23.15	
10	QPSK	50	0	23.07	23.27	23.12	24
10	16QAM	1	0	23.18	23.23	23.22	
10	16QAM	1	25	23.10	23.19	23.21	
10	16QAM	1	49	23.11	23.17	23.23	23
10	16QAM	25	0	22.55	22.63	22.62	
10	16QAM	25	12	22.53	22.55	22.58	
10	16QAM	25	25	22.55	22.59	22.64	24
10	16QAM	50	0	22.46	22.50	22.58	
10	64QAM	1	0	22.53	22.54	22.55	
10	64QAM	1	25	22.42	22.53	22.48	23
10	64QAM	1	49	22.32	22.48	22.59	
10	64QAM	25	0	22.41	22.59	22.60	
10	64QAM	25	12	22.40	22.42	22.56	21
10	64QAM	25	25	22.48	22.45	22.52	
10	64QAM	50	0	22.35	22.40	22.49	
10	256QAM	1	0	20.11	20.29	20.19	21
10	256QAM	1	25	20.02	20.11	20.33	
10	256QAM	1	49	20.05	20.20	20.17	
10	256QAM	25	0	20.11	20.06	20.17	21
10	256QAM	25	12	20.07	20.27	20.16	
10	256QAM	25	25	19.97	20.10	20.02	
10	256QAM	50	0	20.05	20.14	20.16	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.98	23.98	23.81	25
5	QPSK	1	12	23.72	23.88	23.89	
5	QPSK	1	24	23.65	23.78	23.76	
5	QPSK	12	0	22.98	23.15	23.24	24
5	QPSK	12	7	23.07	22.99	22.98	
5	QPSK	12	13	23.04	23.07	23.14	
5	QPSK	25	0	23.03	23.22	23.12	24
5	16QAM	1	0	23.22	23.18	23.18	
5	16QAM	1	12	23.14	23.12	23.12	
5	16QAM	1	24	23.09	23.22	23.14	23
5	16QAM	12	0	22.48	22.64	22.64	
5	16QAM	12	7	22.35	22.41	22.47	
5	16QAM	12	13	22.52	22.48	22.46	24
5	16QAM	25	0	22.46	22.41	22.64	
5	64QAM	1	0	22.48	22.43	22.54	
5	64QAM	1	12	22.42	22.41	22.42	23
5	64QAM	1	24	22.18	22.42	22.62	
5	64QAM	12	0	22.24	22.62	22.47	
5	64QAM	12	7	22.46	22.37	22.56	21
5	64QAM	12	13	22.31	22.50	22.43	
5	64QAM	25	0	22.22	22.25	22.32	
5	256QAM	1	0	20.05	20.16	20.05	21
5	256QAM	1	12	19.96	20.13	20.39	
5	256QAM	1	24	20.01	20.26	20.09	
5	256QAM	12	0	20.09	20.11	19.99	21
5	256QAM	12	7	19.96	20.12	20.06	
5	256QAM	12	13	19.94	19.98	20.04	
5	256QAM	25	0	20.11	19.96	20.18	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.96	23.91	23.81	25
3	QPSK	1	8	23.72	23.94	23.83	
3	QPSK	1	14	23.68	23.79	23.74	
3	QPSK	8	0	22.97	23.18	23.26	24
3	QPSK	8	4	23.00	23.03	22.96	
3	QPSK	8	7	23.08	22.99	23.02	
3	QPSK	15	0	22.96	23.18	23.12	24
3	16QAM	1	0	23.22	23.24	23.09	
3	16QAM	1	8	23.03	23.24	23.17	
3	16QAM	1	14	23.09	23.23	23.10	23
3	16QAM	8	0	22.38	22.54	22.66	
3	16QAM	8	4	22.48	22.49	22.49	
3	16QAM	8	7	22.61	22.47	22.60	24
3	16QAM	15	0	22.50	22.47	22.64	
3	64QAM	1	0	22.58	22.46	22.38	
3	64QAM	1	8	22.28	22.43	22.37	23
3	64QAM	1	14	22.14	22.45	22.57	
3	64QAM	8	0	22.43	22.50	22.51	
3	64QAM	8	4	22.28	22.46	22.54	21
3	64QAM	8	7	22.30	22.37	22.43	
3	64QAM	15	0	22.40	22.46	22.31	
3	256QAM	1	0	20.13	20.17	20.04	21
3	256QAM	1	8	19.95	20.07	20.25	
3	256QAM	1	14	19.95	20.10	20.15	
3	256QAM	8	0	20.13	19.99	20.21	21
3	256QAM	8	4	19.93	20.23	20.13	
3	256QAM	8	7	19.96	19.98	19.98	
3	256QAM	15	0	20.06	20.08	20.22	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.97	23.96	23.81	25
1.4	QPSK	1	3	23.73	23.89	23.90	
1.4	QPSK	1	5	23.69	23.82	23.77	
1.4	QPSK	3	0	23.31	23.40	23.36	24
1.4	QPSK	3	1	23.12	23.30	23.26	
1.4	QPSK	3	3	23.16	23.19	23.31	
1.4	QPSK	6	0	22.97	23.25	23.07	24
1.4	16QAM	1	0	23.02	23.10	23.17	
1.4	16QAM	1	3	22.99	23.04	23.10	
1.4	16QAM	1	5	23.10	23.14	23.14	24
1.4	16QAM	3	0	22.41	22.66	22.46	
1.4	16QAM	3	1	22.56	22.50	22.41	
1.4	16QAM	3	3	22.49	22.59	22.65	23
1.4	16QAM	6	0	22.41	22.48	22.43	
1.4	64QAM	1	0	22.36	22.45	22.52	
1.4	64QAM	1	3	22.29	22.43	22.34	

Band 7 (2600MHz Band) (dBm) Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	22.86	22.89	22.82	23.5
20	QPSK	1	49	22.77	22.74	22.82	
20	QPSK	1	99	22.66	22.73	22.78	
20	QPSK	50	0	21.81	21.97	21.92	22.5
20	QPSK	50	24	21.78	21.79	21.79	
20	QPSK	50	50	21.76	21.83	21.81	
20	QPSK	100	0	21.79	21.95	21.84	23.5
20	16QAM	1	0	22.35	22.56	22.55	
20	16QAM	1	49	22.33	22.49	22.40	
20	16QAM	1	99	22.37	22.35	22.50	22.5
20	16QAM	50	0	21.04	21.09	21.08	
20	16QAM	50	24	20.98	20.95	21.17	
20	16QAM	50	50	20.90	21.10	21.08	22.5
20	16QAM	100	0	21.02	21.14	21.13	
20	64QAM	1	0	21.96	21.95	21.74	
20	64QAM	1	49	21.68	21.94	21.71	22.5
20	64QAM	1	99	21.64	21.90	21.80	
20	64QAM	50	0	21.03	21.12	21.07	
20	64QAM	50	24	20.89	20.88	21.08	22.5
20	64QAM	50	50	21.17	20.92	21.13	
20	64QAM	100	0	21.00	21.02	21.00	
20	256QAM	1	0	18.95	19.06	18.98	19.5
20	256QAM	1	49	18.70	18.77	19.04	
20	256QAM	1	99	18.97	18.86	18.95	
20	256QAM	50	0	18.89	18.87	18.87	19.5
20	256QAM	50	24	18.96	19.06	19.08	
20	256QAM	50	50	18.64	18.84	19.02	
20	256QAM	100	0	18.94	18.85	19.05	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.80	22.75	22.69	23.5
15	QPSK	1	37	22.71	22.70	22.76	
15	QPSK	1	74	22.53	22.59	22.74	
15	QPSK	36	0	21.75	21.95	21.80	22.5
15	QPSK	36	20	21.66	21.73	21.66	
15	QPSK	36	39	21.78	21.78	21.74	
15	QPSK	75	0	21.67	21.83	21.85	23.5
15	16QAM	1	0	22.40	22.58	22.44	
15	16QAM	1	37	22.37	22.36	22.26	
15	16QAM	1	74	22.21	22.20	22.36	22.5
15	16QAM	36	0	21.03	20.98	21.12	
15	16QAM	36	20	21.02	20.79	21.21	
15	16QAM	36	39	20.73	21.02	21.12	22.5
15	16QAM	75	0	20.95	21.08	21.00	
15	64QAM	1	0	21.93	21.80	21.75	
15	64QAM	1	37	21.62	21.79	21.59	22.5
15	64QAM	1	74	21.59	21.96	21.76	
15	64QAM	36	0	20.86	21.07	20.91	
15	64QAM	36	20	20.94	20.70	21.12	22.5
15	64QAM	36	39	21.10	20.78	21.17	
15	64QAM	75	0	20.85	20.95	20.96	
15	256QAM	1	0	18.78	19.00	18.95	19.5
15	256QAM	1	37	18.71	18.81	19.01	
15	256QAM	1	74	18.84	18.83	18.97	
15	256QAM	36	0	18.86	18.76	18.73	19.5
15	256QAM	36	20	18.89	18.90	18.91	
15	256QAM	36	39	18.54	18.89	18.85	
15	256QAM	75	0	18.76	18.89	19.06	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	22.75	22.77	22.73	23.5
10	QPSK	1	25	22.64	22.70	22.78	
10	QPSK	1	49	22.61	22.68	22.64	
10	QPSK	25	0	21.68	21.94	21.93	22.5
10	QPSK	25	12	21.74	21.82	21.72	
10	QPSK	25	25	21.62	21.77	21.72	
10	QPSK	50	0	21.78	21.88	21.70	23.5
10	16QAM	1	0	22.26	22.45	22.57	
10	16QAM	1	25	22.30	22.49	22.46	
10	16QAM	1	49	22.40	22.31	22.50	22.5
10	16QAM	25	0	20.88	21.03	20.96	
10	16QAM	25	12	20.87	21.00	21.00	
10	16QAM	25	25	20.80	21.00	20.96	22.5
10	16QAM	50	0	20.88	21.01	21.03	
10	64QAM	1	0	21.96	21.94	21.66	
10	64QAM	1	25	21.54	21.94	21.76	22.5
10	64QAM	1	49	21.55	21.83	21.84	
10	64QAM	25	0	20.85	21.15	20.90	
10	64QAM	25	12	20.86	20.73	21.02	22.5
10	64QAM	25	25	21.04	20.76	21.05	
10	64QAM	50	0	20.94	21.07	20.99	
10	256QAM	1	0	18.86	18.88	18.88	19.5
10	256QAM	1	25	18.63	18.62	19.09	
10	256QAM	1	49	18.79	18.83	18.93	
10	256QAM	25	0	18.82	18.77	18.79	19.5
10	256QAM	25	12	18.85	18.81	18.92	
10	256QAM	25	25	18.50	18.71	18.86	
10	256QAM	50	0	18.88	18.78	18.95	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	22.76	22.76	22.71	23.5
5	QPSK	1	12	22.69	22.68	22.75	
5	QPSK	1	24	22.52	22.59	22.75	
5	QPSK	12	0	21.81	21.91	21.93	22.5
5	QPSK	12	7	21.68	21.76	21.81	
5	QPSK	12	13	21.75	21.70	21.69	
5	QPSK	25	0	21.77	21.96	21.71	23.5
5	16QAM	1	0	22.37	22.61	22.37	
5	16QAM	1	12	22.24	22.39	22.46	
5	16QAM	1	24	22.23	22.25	22.38	22.5
5	16QAM	12	0	21.07	21.11	21.13	
5	16QAM	12	7	20.93	20.77	21.01	
5	16QAM	12	13	20.82	21.03	20.94	22.5
5	16QAM	25	0	20.89	21.02	21.00	
5	64QAM	1	0	21.91	21.89	21.66	
5	64QAM	1	12	21.70	21.86	21.61	22.5



1.4	64QAM	1	5	22.37	22.46	22.55	24
1.4	64QAM	3	0	22.27	22.61	22.45	
1.4	64QAM	3	1	22.43	22.48	22.39	
1.4	64QAM	3	3	22.53	22.43	22.56	
1.4	64QAM	6	0	22.32	22.44	22.48	23
1.4	256QAM	1	0	19.94	20.11	20.18	21
1.4	256QAM	1	3	20.05	19.99	20.17	
1.4	256QAM	1	5	19.89	20.12	20.10	
1.4	256QAM	3	0	19.93	19.99	20.13	
1.4	256QAM	3	1	19.93	20.18	19.98	
1.4	256QAM	3	3	19.93	20.08	19.90	
1.4	256QAM	6	0	20.05	20.19	20.11	21

5	64QAM	1	24	21.55	21.81	21.86	22.5
5	64QAM	12	0	21.09	21.02	21.10	
5	64QAM	12	7	20.72	20.73	20.93	
5	64QAM	12	13	21.07	20.91	21.16	
5	64QAM	25	0	20.93	20.99	20.99	19.5
5	256QAM	1	0	18.81	18.98	19.02	
5	256QAM	1	12	18.54	18.61	18.99	
5	256QAM	1	24	18.99	18.85	18.90	
5	256QAM	12	0	18.78	18.69	18.76	19.5
5	256QAM	12	7	18.96	18.69	18.83	
5	256QAM	12	13	18.49	18.80	18.90	
5	256QAM	25	0	18.88	18.70	18.97	

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	24.5
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.71	23.82	23.71	24.5
10	QPSK	1	25	23.63	23.60	23.79	
10	QPSK	1	49	23.59	23.59	23.64	23.5
10	QPSK	25	0	22.62	22.81	22.78	
10	QPSK	25	12	22.68	22.68	22.67	23.5
10	QPSK	25	25	22.69	22.70	22.72	
10	QPSK	50	0	22.70	22.77	22.61	23.5
10	16QAM	1	0	23.02	23.12	23.17	
10	16QAM	1	25	23.14	23.19	23.17	22.5
10	16QAM	1	49	23.12	23.22	23.27	
10	16QAM	25	0	21.90	21.91	21.93	22.5
10	16QAM	25	12	21.86	21.78	21.63	
10	16QAM	25	25	21.52	21.85	21.76	22.5
10	16QAM	50	0	21.67	21.87	21.75	
10	64QAM	1	0	21.75	21.64	21.55	21.5
10	64QAM	1	25	21.57	21.61	21.53	
10	64QAM	1	49	21.59	21.69	21.66	20.5
10	64QAM	25	0	20.83	20.97	20.81	
10	64QAM	25	12	20.66	20.77	20.71	20.5
10	64QAM	25	25	20.68	20.75	20.64	
10	64QAM	50	0	20.87	20.93	20.91	20.5
10	256QAM	1	0	20.16	20.30	20.25	
10	256QAM	1	25	20.18	20.11	20.13	20.5
10	256QAM	1	49	20.01	20.06	20.06	
10	256QAM	25	0	20.19	20.32	20.32	20.5
10	256QAM	25	12	20.20	20.35	20.33	
10	256QAM	25	25	20.02	20.18	20.05	20.5
10	256QAM	50	0	20.07	20.09	19.91	
Channel				23035	23095	23155	24.5
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.67	23.73	23.62	24.5
5	QPSK	1	12	23.52	23.50	23.72	
5	QPSK	1	24	23.47	23.52	23.61	23.5
5	QPSK	12	0	22.54	22.68	22.80	
5	QPSK	12	7	22.56	22.55	22.62	23.5
5	QPSK	12	13	22.72	22.60	22.58	
5	QPSK	25	0	22.60	22.72	22.50	23.5
5	16QAM	1	0	23.01	23.01	23.07	
5	16QAM	1	12	22.97	23.20	23.19	22.5
5	16QAM	1	24	22.98	23.26	23.11	
5	16QAM	12	0	21.85	21.96	21.97	22.5
5	16QAM	12	7	21.78	21.61	21.55	
5	16QAM	12	13	21.54	21.69	21.67	22.5
5	16QAM	25	0	21.50	21.88	21.63	
5	64QAM	1	0	21.80	21.53	21.39	21.5
5	64QAM	1	12	21.48	21.52	21.51	
5	64QAM	1	24	21.60	21.65	21.72	20.5
5	64QAM	12	0	20.85	20.80	20.83	
5	64QAM	12	7	20.70	20.69	20.64	20.5
5	64QAM	12	13	20.53	20.69	20.50	
5	64QAM	25	0	20.90	20.94	20.76	20.5
5	256QAM	1	0	20.10	20.29	20.13	
5	256QAM	1	12	20.08	19.98	20.08	20.5
5	256QAM	1	24	20.04	19.96	20.09	
5	256QAM	12	0	20.06	20.34	20.30	20.5
5	256QAM	12	7	20.23	20.30	20.39	
5	256QAM	12	13	20.03	20.01	20.04	20.5
5	256QAM	25	0	19.89	20.01	19.91	
Channel				23025	23095	23165	24.5
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.63	23.77	23.63	24.5
3	QPSK	1	8	23.56	23.57	23.72	
3	QPSK	1	14	23.53	23.56	23.51	23.5
3	QPSK	8	0	22.55	22.81	22.80	
3	QPSK	8	4	22.59	22.65	22.70	23.5
3	QPSK	8	7	22.70	22.64	22.67	
3	QPSK	15	0	22.72	22.77	22.53	23.5
3	16QAM	1	0	22.85	23.06	23.13	
3	16QAM	1	8	22.96	23.04	23.03	22.5
3	16QAM	1	14	22.95	23.10	23.26	
3	16QAM	8	0	21.89	21.94	21.88	22.5
3	16QAM	8	4	21.85	21.60	21.47	
3	16QAM	8	7	21.52	21.83	21.75	22.5
3	16QAM	15	0	21.68	21.75	21.67	
3	64QAM	1	0	21.76	21.59	21.40	21.5
3	64QAM	1	8	21.50	21.63	21.53	
3	64QAM	1	14	21.64	21.65	21.53	20.5
3	64QAM	8	0	20.68	20.87	20.63	
3	64QAM	8	4	20.62	20.77	20.62	20.5
3	64QAM	8	7	20.72	20.64	20.70	
3	64QAM	15	0	20.84	20.81	20.88	20.5
3	256QAM	1	0	20.22	20.31	20.07	
3	256QAM	1	8	20.04	20.13	20.04	20.5
3	256QAM	1	14	19.87	19.89	19.92	
3	256QAM	8	0	20.24	20.14	20.25	20.5
3	256QAM	8	4	20.15	20.30	20.22	
3	256QAM	8	7	19.86	20.08	20.00	20.5
3	256QAM	15	0	19.92	20.14	19.75	
Channel				23017	23095	23173	24.5
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.63	23.75	23.60	24.5
1.4	QPSK	1	3	23.53	23.53	23.75	
1.4	QPSK	1	5	23.46	23.51	23.55	23.5
1.4	QPSK	3	0	23.04	23.10	23.16	
1.4	QPSK	3	1	23.09	23.04	23.08	23.5
1.4	QPSK	3	3	23.05	23.10	23.00	
1.4	QPSK	6	0	22.66	22.64	22.63	22.5
1.4	16QAM	1	0	22.98	23.05	23.22	
1.4	16QAM	1	3	22.98	23.23	23.20	22.5
1.4	16QAM	1	5	23.05	23.10	23.17	
1.4	16QAM	3	0	21.92	21.75	21.84	22.5
1.4	16QAM	3	1	21.84	21.69	21.55	
1.4	16QAM	3	3	21.56	21.70	21.82	22.5
1.4	16QAM	6	0	21.50	21.85	21.67	
1.4	64QAM	1	0	21.60	21.54	21.54	22.5
1.4	64QAM	1	3	21.63	21.65	21.37	

Band 17 (700MHz Band) (dBm) Part 27H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	24.5
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.71	23.76	23.74	24.5
10	QPSK	1	25	23.64	23.62	23.63	
10	QPSK	1	49	23.66	23.59	23.70	23.5
10	QPSK	25	0	22.59	22.79	22.72	
10	QPSK	25	12	22.65	22.62	22.61	23.5
10	QPSK	25	25	22.61	22.63	22.64	
10	QPSK	50	0	22.77	22.81	22.62	23.5
10	16QAM	1	0	23.21	23.26	23.08	
10	16QAM	1	25	23.12	23.20	23.15	22.5
10	16QAM	1	49	23.03	23.09	23.24	
10	16QAM	25	0	22.02	21.81	21.91	22.5
10	16QAM	25	12	21.87	21.75	21.88	
10	16QAM	25	25	21.67	21.81	21.87	22.5
10	16QAM	50	0	21.82	21.82	21.83	
10	64QAM	1	0	21.85	21.76	21.51	21.5
10	64QAM	1	25	21.53	21.63	21.57	
10	64QAM	1	49	21.56	21.71	21.83	21.5
10	64QAM	25	0	20.84	20.78	20.99	
10	64QAM	25	12	20.70	20.65	20.72	20.5
10	64QAM	25	25	20.62	20.63	20.63	
10	64QAM	50	0	20.86	20.96	20.85	20.5
10	256QAM	1	0	20.23	20.12	20.34	
10	256QAM	1	25	20.09	20.01	20.13	20.5
10	256QAM	1	49	20.01	20.01	19.91	
10	256QAM	25	0	20.27	20.25	20.28	20.5
10	256QAM	25	12	20.29	20.16	20.25	
10	256QAM	25	25	20.13	20.07	20.20	20.5
10	256QAM	50	0	20.08	20.06	20.03	
Channel				23755	23790	23825	24.5
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.64	23.71	23.60	24.5
5	QPSK	1	12	23.61	23.49	23.50	
5	QPSK	1	24	23.56	23.55	23.65	23.5
5	QPSK	12	0	22.49	22.67	22.75	
5	QPSK	12	7	22.59	22.49	22.57	23.5
5	QPSK	12	13	22.54	22.61	22.59	
5	QPSK	25	0	22.70	22.83	22.65	23.5
5	16QAM	1	0	23.18	23.28	22.96	
5	16QAM	1	12	23.05	23.05	23.08	22.5
5	16QAM	1	24	23.01	23.14	23.30	
5	16QAM	12	0	21.87	21.85	21.89	22.5



1.4	64QAM	1	5	21.43	21.56	21.70	22.5
1.4	64QAM	3	0	21.20	21.32	21.10	
1.4	64QAM	3	1	21.00	21.09	21.17	
1.4	64QAM	3	3	21.04	21.17	21.01	
1.4	64QAM	6	0	20.73	20.80	20.90	21.5
1.4	256QAM	1	0	19.99	20.30	20.10	20.5
1.4	256QAM	1	3	20.20	19.97	19.97	
1.4	256QAM	1	5	20.02	19.89	20.03	
1.4	256QAM	3	0	20.21	20.37	20.18	
1.4	256QAM	3	1	20.07	20.28	20.18	
1.4	256QAM	3	3	20.06	20.09	19.87	
1.4	256QAM	6	0	19.95	19.95	19.93	20.5

Band 25 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	24.5
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	22.85	22.89	22.83	24.5
20	QPSK	1	49	22.81	22.84	22.80	
20	QPSK	1	99	22.68	22.76	22.74	23.5
20	QPSK	50	0	21.68	21.86	21.73	
20	QPSK	50	24	21.67	21.85	21.73	23.5
20	QPSK	50	50	21.73	21.81	21.77	
20	QPSK	100	0	21.73	21.88	21.69	23.5
20	16QAM	1	0	21.78	21.87	21.83	
20	16QAM	1	49	21.86	21.93	21.91	22.5
20	16QAM	1	99	21.78	21.89	21.93	
20	16QAM	50	0	21.08	20.95	20.83	22.5
20	16QAM	50	24	20.79	20.84	21.28	
20	16QAM	50	50	20.79	20.84	20.96	22.5
20	16QAM	100	0	21.01	21.04	20.97	
20	64QAM	1	0	20.81	20.91	20.68	22.5
20	64QAM	1	49	20.77	20.65	20.73	
20	64QAM	1	99	20.76	20.81	20.69	21.5
20	64QAM	50	0	20.68	20.79	20.67	
20	64QAM	50	24	20.60	20.58	20.61	21.5
20	64QAM	50	50	20.58	20.66	20.57	
20	64QAM	100	0	20.79	20.78	20.72	19.5
20	256QAM	1	0	18.17	18.28	18.11	
20	256QAM	1	49	17.99	18.07	18.17	19.5
20	256QAM	1	99	18.00	18.14	17.98	
20	256QAM	50	0	18.37	18.22	18.21	19.5
20	256QAM	50	24	18.13	18.27	18.04	
20	256QAM	50	50	17.91	18.14	18.11	24.5
20	256QAM	100	0	17.93	18.21	18.06	
Channel				26115	26365	26615	24.5
Frequency (MHz)				1857.5	1882.5	1907.5	
15	QPSK	1	0	22.76	22.75	22.68	24.5
15	QPSK	1	37	22.66	22.63	22.68	
15	QPSK	1	74	22.57	22.64	22.53	23.5
15	QPSK	36	0	21.68	21.72	21.75	
15	QPSK	36	20	21.68	21.75	21.73	23.5
15	QPSK	36	39	21.76	21.73	21.66	
15	QPSK	75	0	21.72	21.83	21.59	23.5
15	16QAM	1	0	21.80	21.72	21.75	
15	16QAM	1	37	21.88	21.81	21.87	22.5
15	16QAM	1	74	21.63	21.73	21.84	
15	16QAM	36	0	21.13	20.99	20.82	22.5
15	16QAM	36	20	20.76	20.66	21.10	
15	16QAM	36	39	20.73	20.75	20.89	22.5
15	16QAM	75	0	21.01	21.00	20.95	
15	64QAM	1	0	20.84	20.81	20.63	22.5
15	64QAM	1	37	20.65	20.68	20.63	
15	64QAM	1	74	20.71	20.83	20.60	21.5
15	64QAM	36	0	20.61	20.68	20.50	
15	64QAM	36	20	20.47	20.57	20.50	21.5
15	64QAM	36	39	20.41	20.66	20.62	
15	64QAM	75	0	20.85	20.75	20.65	19.5
15	256QAM	1	0	18.18	18.15	17.96	
15	256QAM	1	37	18.03	18.05	18.10	19.5
15	256QAM	1	74	17.91	18.00	17.88	
15	256QAM	36	0	18.26	18.25	18.25	19.5
15	256QAM	36	20	18.15	18.22	17.86	
15	256QAM	36	39	17.81	18.19	18.01	24.5
15	256QAM	75	0	17.92	18.06	17.99	
Channel				26090	26365	26640	24.5
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	22.69	22.74	22.66	24.5
10	QPSK	1	25	22.60	22.67	22.60	
10	QPSK	1	49	22.59	22.67	22.53	23.5
10	QPSK	25	0	21.55	21.78	21.75	
10	QPSK	25	12	21.54	21.79	21.74	23.5
10	QPSK	25	25	21.59	21.75	21.71	
10	QPSK	50	0	21.64	21.83	21.72	23.5
10	16QAM	1	0	21.71	21.93	21.74	
10	16QAM	1	25	21.76	21.77	21.79	22.5
10	16QAM	1	49	21.76	21.74	21.89	
10	16QAM	25	0	21.00	20.96	20.68	22.5
10	16QAM	25	12	20.84	20.69	20.93	
10	16QAM	25	25	20.81	20.78	20.96	22.5
10	16QAM	50	0	20.89	20.86	20.86	
10	64QAM	1	0	20.63	20.83	20.66	22.5
10	64QAM	1	25	20.68	20.50	20.68	
10	64QAM	1	49	20.79	20.65	20.73	21.5
10	64QAM	25	0	20.72	20.64	20.49	
10	64QAM	25	12	20.54	20.45	20.45	21.5
10	64QAM	25	25	20.48	20.65	20.53	
10	64QAM	50	0	20.65	20.81	20.64	19.5
10	256QAM	1	0	18.05	18.27	18.12	
10	256QAM	1	25	18.04	18.03	18.01	19.5
10	256QAM	1	49	17.84	18.02	17.88	
10	256QAM	25	0	18.21	18.13	18.23	19.5
10	256QAM	25	12	18.02	18.17	17.98	
10	256QAM	25	25	17.90	17.98	17.95	24.5
10	256QAM	50	0	17.88	18.26	17.91	
Channel				26065	26365	26665	24.5
Frequency (MHz)				1852.5	1882.5	1912.5	
5	QPSK	1	0	22.77	22.73	22.69	24.5
5	QPSK	1	12	22.58	22.68	22.63	
5	QPSK	1	24	22.59	22.58	22.51	23.5
5	QPSK	12	0	21.54	21.84	21.68	
5	QPSK	12	7	21.53	21.71	21.72	23.5
5	QPSK	12	13	21.73	21.77	21.73	
5	QPSK	25	0	21.64	21.75	21.71	23.5
5	16QAM	1	0	21.84	21.78	21.70	
5	16QAM	1	12	21.82	21.68	21.79	23.5
5	16QAM	1	24	21.82	21.60	21.82	
5	16QAM	12	0	20.96	21.01	20.84	22.5
5	16QAM	12	7	20.83	20.79	21.00	
5	16QAM	12	13	20.70	20.67	21.01	22.5
5	16QAM	25	0	20.93	21.06	20.93	
5	64QAM	1	0	20.85	20.90	20.54	22.5
5	64QAM	1	12	20.74	20.66	20.62	

Band 26 for FCC (dBm) (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	23.16	23.34	23.33	24.5
15	QPSK	1	37	23.23	23.30	23.32	
15	QPSK	1	74	23.24	23.29	23.19	
15	QPSK	36	0	22.24	22.34	22.33	
15	QPSK	36	20	22.12	22.27	22.28	23.5
15	QPSK	36	39	22.05	22.21	22.33	
15	QPSK	75	0	22.48	22.59	22.37	
15	16QAM	1	0	23.06	23.02	23.19	
15	16QAM	1	37	23.06	23.01	23.14	23.5
15	16QAM	1	74	23.13	23.04	23.11	
15	16QAM	36	0	21.40	21.45	21.39	
15	16QAM	36	20	21.38	21.33	21.28	
15	16QAM	36	39	21.39	21.37	21.28	22.5
15	16QAM	75	0	21.61	21.68	21.59	
15	64QAM	1	0	21.39	21.48	21.20	
15	64QAM	1	37	21.42	21.29	21.32	
15	64QAM	1	74	21.28	21.37	21.21	22.5
15	64QAM	36	0	21.36	21.37	21.38	
15	64QAM	36	20	21.18	21.26	21.28	
15	64QAM	36	39	21.19	21.23	21.18	
15	64QAM	75	0	21.47	21.43	21.33	20.5
15	256QAM	1	0	20.27	20.36	20.23	
15	256QAM	1	37	20.17	20.21	20.39	
15	256QAM	1	74	20.19	20.23	20.07	
15	256QAM	36	0	20.47	20.32	20.38	20.5
15	256QAM	36	20	20.30	20.34	20.13	
15	256QAM	36	39	20.01	20.04	20.36	
15	256QAM	75	0	20.24	20.23	20.01	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	23.11	23.24	23.19	24.5
10	QPSK	1	25	23.11	23.22	23.26	
10	QPSK	1	49	23.19	23.19	23.13	
10	QPSK	25	0	22.27	22.33	22.25	
10	QPSK	25	12	22.01	22.23	22.26	23.5
10	QPSK	25	25	22.04	22.09	22.20	
10	QPSK	50	0	22.43	22.59	22.30	
10	16QAM	1	0	23.10	22.93	23.03	
10	16QAM	1	25	23.07	23.05	23.13	23.5
10	16QAM	1	49	23.08	22.87	23.06	
10	16QAM	25	0	21.36	21.43	21.42	
10	16QAM	25	12	21.42	21.17	21.33	
10	16QAM	25	25	21.43	21.19	21.28	22.5
10	16QAM	50	0	21.58	21.53	21.52	
10	64QAM	1	0	21.36	21.36	21.24	
10	64QAM	1	25	21.40	21.13	21.19	
10	64QAM	1	49	21.21	21.38	21.05	22.5
10	64QAM	25	0	21.26	21.32	21.35	
10	64QAM	25	12	21.07	21.22	21.17	
10	64QAM	25	25	21.21	21.21	21.21	
10	64QAM	50	0	21.05	21.49	21.27	20.5
10	256QAM	1	0	20.16	20.29	20.29	
10	256QAM	1	25	20.10	20.21	20.36	
10	256QAM	1	49	20.07	20.17	20.03	
10	256QAM	25	0	20.35	20.37	20.25	20.5
10	256QAM	25	12	20.32	20.37	20.18	
10	256QAM	25	25	19.98	20.02	20.19	
10	256QAM	50	0	20.16	20.13	19.86	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	23.12	23.29	23.21	24.5
5	QPSK	1	12	23.19	23.26	23.21	
5	QPSK	1	24	23.11	23.25	23.07	
5	QPSK	12	0	22.17	22.35	22.19	
5	QPSK	12	7	22.08	22.16	22.23	23.5
5	QPSK	12	13	22.01	22.08	22.34	
5	QPSK	25	0	22.45	22.55	22.37	
5	16QAM	1	0	22.97	22.90	23.09	
5	16QAM	1	12	22.99	22.93	23.09	23.5
5	16QAM	1	24	23.06	23.06	23.12	
5	16QAM	12	0	21.35	21.49	21.43	
5	16QAM	12	7	21.21	21.22	21.23	
5	16QAM	12	13	21.21	21.41	21.25	22.5
5	16QAM	25	0	21.63	21.65	21.46	
5	64QAM	1	0	21.45	21.49	21.13	
5	64QAM	1	12	21.48	21.26	21.15	
5	64QAM	1	24	21.20	21.33	21.15	22.5
5	64QAM	12	0	21.24	21.29	21.21	
5	64QAM	12	7	21.10	21.19	21.20	
5	64QAM	12	13	21.14	21.29	21.04	
5	64QAM	25	0	21.41	21.40	21.22	20.5
5	256QAM	1	0	20.32	20.25	20.12	
5	256QAM	1	12	20.23	20.26	20.40	
5	256QAM	1	24	20.23	20.21	19.96	
5	256QAM	12	0	20.39	20.17	20.28	20.5
5	256QAM	12	7	20.22	20.39	20.10	
5	256QAM	12	13	20.07	19.90	20.18	
5	256QAM	25	0	20.18	20.12	19.90	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	23.06	23.25	23.23	24.5
3	QPSK	1	8	23.15	23.24	23.29	
3	QPSK	1	14	23.15	23.19	23.07	
3	QPSK	8	0	22.19	22.23	22.31	
3	QPSK	8	4	22.06	22.26	22.16	23.5
3	QPSK	8	7	22.03	22.15	22.19	
3	QPSK	15	0	22.39	22.57	22.38	
3	16QAM	1	0	23.05	22.95	23.25	
3	16QAM	1	8	22.91	23.07	23.16	23.5
3	16QAM	1	14	22.95	23.01	22.95	
3	16QAM	8	0	21.31	21.36	21.34	
3	16QAM	8	4	21.36	21.15	21.27	
3	16QAM	8	7	21.31	21.23	21.13	22.5
3	16QAM	15	0	21.44	21.67	21.42	
3	64QAM	1	0	21.24	21.38	21.13	
3	64QAM	1	8	21.37	21.22	21.15	

5	64QAM	1	24	20.79	20.85	20.71	21.5
5	64QAM	12	0	20.73	20.70	20.64	
5	64QAM	12	7	20.42	20.44	20.47	
5	64QAM	12	13	20.44	20.49	20.58	
5	64QAM	25	0	20.66	20.74	20.64	
5	256QAM	1	0	18.00	18.15	18.04	19.5
5	256QAM	1	12	17.91	18.04	18.10	
5	256QAM	1	24	18.05	18.10	17.82	
5	256QAM	12	0	18.34	18.04	18.07	19.5
5	256QAM	12	7	18.02	18.09	17.94	
5	256QAM	12	13	18.00	18.19	17.95	
5	256QAM	25	0	17.85	18.25	17.99	
Channel				26065	26365	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1882.5	1913.5	
3	QPSK	1	0	22.76	22.74	22.71	24.5
3	QPSK	1	8	22.60	22.70	22.62	
3	QPSK	1	14	22.63	22.63	22.52	
3	QPSK	8	0	21.63	21.78	21.73	23.5
3	QPSK	8	4	21.63	21.77	21.75	
3	QPSK	8	7	21.68	21.82	21.70	
3	QPSK	15	0	21.61	21.79	21.72	23.5
3	16QAM	1	0	21.61	21.83	21.65	
3	16QAM	1	8	21.82	21.74	21.96	
3	16QAM	1	14	21.63	21.69	21.96	22.5
3	16QAM	8	0	20.96	20.92	20.75	
3	16QAM	8	4	20.66	20.89	21.01	
3	16QAM	8	7	20.62	20.77	20.93	
3	16QAM	15	0	20.84	20.93	20.83	
3	64QAM	1	0	20.84	20.78	20.61	22.5
3	64QAM	1	8	20.66	20.52	20.78	
3	64QAM	1	14	20.61	20.70	20.53	
3	64QAM	8	0	20.68	20.62	20.65	21.5
3	64QAM	8	4	20.66	20.48	20.45	
3	64QAM	8	7	20.43	20.71	20.54	
3	64QAM	15	0	20.65	20.82	20.74	
3	256QAM	1	0	18.21	18.28	18.06	
3	256QAM	1	8	17.85	18.11	18.21	19.5
3	256QAM	1	14	17.88	18.16	17.82	
3	256QAM	8	0	18.20	18.24	18.11	
3	256QAM	8	4	17.96	18.33	18.08	19.5
3	256QAM	8	7	17.97	18.04	18.03	
3	256QAM	15	0	17.95	18.15	18.09	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	22.66	22.71	22.65	24.5
1.4	QPSK	1	3	22.68	22.67	22.60	
1.4	QPSK	1	5	22.61	22.60	22.61	
1.4	QPSK	3	0	22.56	22.66	22.54	
1.4	QPSK	3	1	22.57	22.67	22.65	
1.4	QPSK	3	3	22.57	22.59	22.65	23.5
1.4	QPSK	6	0	21.72	21.85	21.69	
1.4	16QAM	1	0	21.79	21.69	21.66	
1.4	16QAM	1	3	21.89	21.69	21.74	22.5
1.4	16QAM	1	5	21.66	21.70	21.93	
1.4	16QAM	3	0	21.82	21.68	21.68	
1.4	16QAM	3	1	21.57	21.72	21.97	
1.4	16QAM	3	3	21.53	21.72	21.86	
1.4	16QAM	6	0	21.04	21.05	20.80	21.5
1.4	64QAM	1	0	20.69	20.83	20.55	
1.4	64QAM	1	3	20.78	20.51	20.57	
1.4	64QAM	1	5	20.61	20.84	20.54	
1.4	64QAM	3	0	20.73	20.80	20.52	
1.4	64QAM	3	1	20.65	20.50	20.59	21.5
1.4	64QAM	3	3	20.64	20.58	20.55	
1.4	64QAM	6	0	20.64	20.71	20.74	
1.4	256QAM	1	0	18.15	18.12	18.05	19.5
1.4	256QAM	1	3	17.89	18.02	18.13	
1.4	256QAM	1	5	17.98	18.18	17.86	
1.4	256QAM	3	0	18.39	18.20	18.26	
1.4	256QAM	3	1	17.96	18.24	17.99	
1.4	256QAM	3	3	17.93	18.08	17.93	19.5
1.4	256QAM	6	0	17.76	18.05	17.95	

3	64QAM	1	14	21.10	21.33	21.14	22.5
3	64QAM	8	0	21.18	21.34	21.33	
3	64QAM	8	4	21.00	21.22	21.14	
3	64QAM	8	7	21.09	21.15	21.00	
3	64QAM	15	0	21.38	21.42	21.28	
3	256QAM	1	0	20.29	20.23	20.21	20.5
3	256QAM	1	8	20.13	20.19	20.44	
3	256QAM	1	14	20.20	20.07	20.13	
3	256QAM	8	0	20.29	20.16	20.23	20.5
3	256QAM	8	4	20.28	20.39	19.97	
3	256QAM	8	7	19.89	20.08	20.20	
3	256QAM	15	0	20.07	20.09	19.86	
Channel				26097	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	23.06	23.28	23.23	24.5
1.4	QPSK	1	3	23.09	23.20	23.18	
1.4	QPSK	1	5	23.13	23.25	23.15	
1.4	QPSK	3	0	22.94	23.05	23.06	
1.4	QPSK	3	1	22.85	22.99	22.99	
1.4	QPSK	3	3	22.87	22.97	23.11	23.5
1.4	QPSK	6	0	22.39	22.51	22.40	
1.4	16QAM	1	0	22.90	23.08	23.11	
1.4	16QAM	1	3	23.04	22.85	23.20	23.5
1.4	16QAM	1	5	23.09	23.03	22.94	
1.4	16QAM	3	0	22.17	22.16	22.20	
1.4	16QAM	3	1	22.15	22.01	22.07	
1.4	16QAM	3	3	22.12	22.21	22.16	
1.4	16QAM	6	0	21.49	21.59	21.42	22.5
1.4	64QAM	1	0	21.33	21.49	21.16	
1.4	64QAM	1	3	21.27	21.19	21.16	
1.4	64QAM	1	5	21.16	21.34	21.07	22.5
1.4	64QAM	3	0	21.42	21.41	21.30	
1.4	64QAM	3	1	21.08	21.32	21.22	
1.4	64QAM	3	3	21.07	21.08	21.24	
1.4	64QAM	6	0	21.53	21.30	21.27	
1.4	256QAM	1	0	20.14	20.28	20.08	20.5
1.4	256QAM	1	3	20.02	20.27	20.27	
1.4	256QAM	1	5	20.08	20.20	20.07	
1.4	256QAM	3	0	20.29	20.30	20.22	
1.4	256QAM	3	1	20.28	20.36	20.10	
1.4	256QAM	3	3	20.01	20.06	20.26	
1.4	256QAM	6	0	20.07	20.05	19.84	

Band 38(only on channel required) (dBm)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.01	23.03	23.00	24
20	QPSK	1	49	22.84	23.00	22.98	
20	QPSK	1	99	22.95	22.80	22.89	
20	QPSK	50	0	21.72	21.86	21.82	23
20	QPSK	50	24	21.69	21.78	21.80	
20	QPSK	50	50	21.80	21.83	21.75	
20	QPSK	100	0	21.74	21.85	21.72	23
20	16QAM	1	0	21.51	21.78	21.59	
20	16QAM	1	49	21.56	21.64	21.61	
20	16QAM	1	99	21.68	21.56	21.59	22
20	16QAM	50	0	20.93	20.92	20.68	
20	16QAM	50	24	20.73	20.81	20.93	
20	16QAM	50	50	20.77	20.98	20.66	22
20	16QAM	100	0	20.81	20.90	20.84	
20	64QAM	1	0	21.26	21.39	21.28	
20	64QAM	1	49	21.24	21.30	21.28	22
20	64QAM	1	99	21.27	21.22	21.17	
20	64QAM	50	0	20.83	20.96	20.85	
20	64QAM	50	24	20.86	21.01	20.92	21
20	64QAM	50	50	20.98	20.87	20.82	
20	64QAM	100	0	20.81	20.86	20.91	
20	256QAM	1	0	18.54	18.66	18.63	20
20	256QAM	1	49	18.68	18.80	18.72	
20	256QAM	1	99	18.69	18.71	18.53	
20	256QAM	50	0	18.67	18.73	18.69	20
20	256QAM	50	24	18.60	18.70	18.66	
20	256QAM	50	50	18.75	18.87	18.75	
20	256QAM	100	0	18.64	18.61	18.56	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	22.97	22.89	22.91	24
15	QPSK	1	37	22.81	22.91	22.93	
15	QPSK	1	74	22.84	22.66	22.83	
15	QPSK	36	0	21.60	21.87	21.72	23
15	QPSK	36	20	21.61	21.78	21.80	
15	QPSK	36	39	21.69	21.85	21.73	
15	QPSK	75	0	21.69	21.72	21.66	23
15	16QAM	1	0	21.60	21.64	21.63	
15	16QAM	1	37	21.58	21.50	21.53	
15	16QAM	1	74	21.57	21.51	21.56	22
15	16QAM	36	0	20.95	20.91	20.59	
15	16QAM	36	20	20.55	20.69	20.85	
15	16QAM	36	39	20.61	20.90	20.51	22
15	16QAM	75	0	20.76	20.82	20.72	
15	64QAM	1	0	21.27	21.26	21.23	
15	64QAM	1	37	21.28	21.25	21.12	22
15	64QAM	1	74	21.11	21.22	21.18	
15	64QAM	36	0	20.74	20.98	20.84	
15	64QAM	36	20	20.91	20.91	20.80	21
15	64QAM	36	39	20.86	20.85	20.78	
15	64QAM	75	0	20.63	20.86	20.90	
15	256QAM	1	0	18.45	18.70	18.61	20
15	256QAM	1	37	18.60	18.78	18.58	
15	256QAM	1	74	18.53	18.77	18.55	
15	256QAM	36	0	18.58	18.62	18.73	20
15	256QAM	36	20	18.51	18.62	18.57	
15	256QAM	36	39	18.74	18.91	18.64	
15	256QAM	75	0	18.57	18.63	18.53	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	22.96	22.96	22.93	24
10	QPSK	1	25	22.75	22.94	22.85	
10	QPSK	1	49	22.90	22.74	22.85	
10	QPSK	25	0	21.61	21.79	21.69	23
10	QPSK	25	12	21.62	21.67	21.79	
10	QPSK	25	25	21.83	21.80	21.71	
10	QPSK	50	0	21.72	21.85	21.59	23
10	16QAM	1	0	21.54	21.65	21.61	
10	16QAM	1	25	21.54	21.60	21.50	
10	16QAM	1	49	21.55	21.56	21.68	22
10	16QAM	25	0	20.85	20.81	20.64	
10	16QAM	25	12	20.58	20.66	20.97	
10	16QAM	25	25	20.83	20.90	20.62	22
10	16QAM	50	0	20.72	20.91	20.83	
10	64QAM	1	0	21.10	21.24	21.22	
10	64QAM	1	25	21.22	21.23	21.23	22
10	64QAM	1	49	21.10	21.07	21.15	
10	64QAM	25	0	20.73	21.00	20.71	
10	64QAM	25	12	20.72	20.95	20.89	21
10	64QAM	25	25	20.80	20.84	20.65	
10	64QAM	50	0	20.65	20.69	20.91	
10	256QAM	1	0	18.37	18.86	18.48	20
10	256QAM	1	25	18.74	18.85	18.70	
10	256QAM	1	49	18.54	18.58	18.39	
10	256QAM	25	0	18.73	18.75	18.58	20
10	256QAM	25	12	18.61	18.61	18.70	
10	256QAM	25	25	18.73	18.75	18.73	
10	256QAM	50	0	18.46	18.63	18.48	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	22.91	23.00	22.96	24
5	QPSK	1	12	22.80	22.93	22.88	
5	QPSK	1	24	22.85	22.71	22.77	
5	QPSK	12	0	21.62	21.84	21.73	23
5	QPSK	12	7	21.68	21.70	21.79	
5	QPSK	12	13	21.71	21.81	21.63	
5	QPSK	25	0	21.62	21.82	21.67	23
5	16QAM	1	0	21.56	21.70	21.58	
5	16QAM	1	12	21.57	21.70	21.61	
5	16QAM	1	24	21.53	21.59	21.55	22
5	16QAM	12	0	20.88	20.82	20.54	
5	16QAM	12	7	20.73	20.63	20.97	
5	16QAM	12	13	20.83	20.93	20.54	22
5	16QAM	25	0	20.63	20.81	20.87	
5	64QAM	1	0	21.27	21.27	21.33	

Band 40 (2.3G Band-1) (dBm)
Part 27D-1 2305MHz ~ 2315MHz

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				38750			
Frequency (MHz)				2310			
10	QPSK	1	0	23.23			24.5
10	QPSK	1	25	23.18			
10	QPSK	1	49	23.11			
10	QPSK	25	0	21.72			23.5
10	QPSK	25	12	21.62			
10	QPSK	25	25	21.59			
10	QPSK	50	0	21.67			23.5
10	16QAM	1	0	21.50			
10	16QAM	1	25	21.63			
10	16QAM	1	49	21.58			22.5
10	16QAM	25	0	20.75			
10	16QAM	25	12	20.71			
10	16QAM	25	25	20.69			22.5
10	16QAM	50	0	20.78			
10	64QAM	1	0	21.08			
10	64QAM	1	25	21.05			22.5
10	64QAM	1	49	21.00			
10	64QAM	25	0	20.82			
10	64QAM	25	12	20.76			21.5
10	64QAM	25	25	20.64			
10	64QAM	50	0	20.78			
10	256QAM	1	0	18.72			19.5
10	256QAM	1	25	18.70			
10	256QAM	1	49	18.61			
10	256QAM	25	0	18.72			19.5
10	256QAM	25	12	18.70			
10	256QAM	25	25	18.66			
10	256QAM	50	0	18.65			
Channel				38725	38750	38775	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	23.10	23.13	23.01	24.5
5	QPSK	1	12	23.10	23.04	22.96	
5	QPSK	1	24	22.96	23.00	22.94	
5	QPSK	12	0	21.66	21.65	21.57	23.5
5	QPSK	12	7	21.59	21.51	21.54	
5	QPSK	12	13	21.56	21.64	21.52	
5	QPSK	25	0	21.67	21.66	21.67	23.5
5	16QAM	1	0	21.55	21.53	21.51	
5	16QAM	1	12	21.50	21.76	21.63	
5	16QAM	1	24	21.54	21.71	21.58	22.5
5	16QAM	12	0	20.63	20.78	20.52	
5	16QAM	12	7	20.56	20.63	20.57	
5	16QAM	12	13	20.55	20.63	20.61	22.5
5	16QAM	25	0	20.57	20.78	20.62	
5	64QAM	1	0	20.87	20.93	21.02	
5	64QAM	1	12	20.90	20.91	21.02	22.5
5	64QAM	1	24	20.88	20.92	20.98	
5	64QAM	12	0	20.68	20.66	20.69	
5	64QAM	12	7	20.58	20.77	20.53	21.5
5	64QAM	12	13	20.48	20.62	20.44	
5	64QAM	25	0	20.62	20.70	20.68	
5	256QAM	1	0	18.52	18.58	18.59	19.5
5	256QAM	1	12	18.63	18.55	18.61	
5	256QAM	1	24	18.46	18.67	18.59	
5	256QAM	12	0	18.09	18.54	18.50	19.5
5	256QAM	12	7	18.59	18.62	18.63	
5	256QAM	12	13	18.66	18.70	18.47	
5	256QAM	25	0	18.44	18.67	18.40	



5	64QAM	1	12	21.10	21.12	21.26	22
5	64QAM	1	24	21.24	21.13	21.12	
5	64QAM	12	0	20.88	20.87	20.76	
5	64QAM	12	7	20.74	20.86	20.85	21
5	64QAM	12	13	20.99	20.79	20.73	
5	64QAM	25	0	20.73	20.73	20.82	
5	256QAM	1	0	18.37	18.81	18.68	20
5	256QAM	1	12	18.57	18.84	18.73	
5	256QAM	1	24	18.66	18.58	18.43	
5	256QAM	12	0	18.64	18.69	18.63	20
5	256QAM	12	7	18.55	18.62	18.64	
5	256QAM	12	13	18.78	18.71	18.81	
5	256QAM	25	0	18.63	18.55	18.48	

Band 40 (2.3G Band-2) (dBm) Part 27D-2 2350MHz ~ 2360MHz							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				39200			24.5
Frequency (MHz)				2355			
10	QPSK	1	0	23.01			24.5
10	QPSK	1	25	22.86			
10	QPSK	1	49	22.81			
10	QPSK	25	0	21.68			
10	QPSK	25	12	21.62			23.5
10	QPSK	25	25	21.54			
10	QPSK	50	0	21.60			
10	16QAM	1	0	21.72			
10	16QAM	1	25	21.70			23.5
10	16QAM	1	49	21.64			
10	16QAM	25	0	20.80			
10	16QAM	25	12	20.75			22.5
10	16QAM	25	25	20.71			
10	16QAM	50	0	20.63			
10	64QAM	1	0	20.95			22.5
10	64QAM	1	25	20.88			
10	64QAM	1	49	20.84			
10	64QAM	25	0	20.79			
10	64QAM	25	12	20.69			21.5
10	64QAM	25	25	20.71			
10	64QAM	50	0	20.71			
10	256QAM	1	0	18.73			19.5
10	256QAM	1	25	18.74			
10	256QAM	1	49	18.71			
10	256QAM	25	0	18.66			
10	256QAM	25	12	18.67			19.5
10	256QAM	25	25	18.82			
10	256QAM	50	0	18.77			
Channel				39175	39200	39225	Tune-up limit (dBm)
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	22.77	22.90	22.80	24.5
5	QPSK	1	12	22.65	22.76	22.72	
5	QPSK	1	24	22.59	22.74	22.62	
5	QPSK	12	0	21.50	21.67	21.60	
5	QPSK	12	7	21.55	21.71	21.61	23.5
5	QPSK	12	13	21.50	21.70	21.63	
5	QPSK	25	0	21.51	21.61	21.55	
5	16QAM	1	0	21.55	21.69	21.59	
5	16QAM	1	12	21.61	21.71	21.60	23.5
5	16QAM	1	24	21.51	21.62	21.52	
5	16QAM	12	0	20.65	20.65	20.71	
5	16QAM	12	7	20.64	20.69	20.55	
5	16QAM	12	13	20.56	20.61	20.60	22.5
5	16QAM	25	0	20.55	20.53	20.56	
5	64QAM	1	0	20.65	20.88	20.75	
5	64QAM	1	12	20.68	20.86	20.74	
5	64QAM	1	24	20.53	20.78	20.68	22.5
5	64QAM	12	0	20.53	20.66	20.64	
5	64QAM	12	7	20.46	20.70	20.67	
5	64QAM	12	13	20.55	20.65	20.64	
5	64QAM	25	0	20.64	20.74	20.58	21.5
5	256QAM	1	0	18.50	18.64	18.52	
5	256QAM	1	12	18.48	18.64	18.67	
5	256QAM	1	24	18.55	18.58	18.53	
5	256QAM	12	0	18.52	18.63	18.62	19.5
5	256QAM	12	7	18.38	18.65	18.63	
5	256QAM	12	13	18.66	18.67	18.79	
5	256QAM	25	0	18.68	18.80	18.69	

Band 41 (2496~2690MHz) (dBm) (PC 3)										
BW [MHz]	Modulation	RB Size		RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0		23.11	23.03	23.13	23.04	22.94	24.5
20	QPSK	1	49		22.79	22.86	22.99	22.96	23.00	
20	QPSK	1	99		22.95	22.97	22.74	22.84	22.93	
20	QPSK	50	0		22.01	21.84	22.14	21.89	21.98	
20	QPSK	50	24		21.87	21.81	21.93	22.01	21.94	23.5
20	QPSK	50	50		22.11	22.01	22.08	21.93	21.92	
20	QPSK	100	0		21.83	21.82	22.04	21.84	21.82	
20	16QAM	1	0		21.62	21.74	21.86	21.69	21.78	
20	16QAM	1	49		21.56	21.59	21.71	21.74	21.66	23.5
20	16QAM	1	99		21.55	21.58	21.66	21.63	21.51	
20	16QAM	50	0		20.92	20.92	21.10	20.88	20.97	
20	16QAM	50	24		20.86	20.79	20.80	20.84	20.83	
20	16QAM	50	50		20.89	20.75	20.99	20.62	20.75	22.5
20	16QAM	100	0		21.03	21.05	21.16	21.09	21.10	
20	64QAM	1	0		21.51	21.42	21.54	21.51	21.38	
20	64QAM	1	49		21.40	21.38	21.43	21.54	21.40	
20	64QAM	1	99		21.35	21.45	21.34	21.37	21.35	22.5
20	64QAM	50	0		21.10	20.96	21.13	21.11	21.07	
20	64QAM	50	24		20.99	21.03	21.13	21.17	21.07	
20	64QAM	50	50		21.11	21.16	20.93	21.02	20.97	
20	64QAM	100	0		20.91	20.87	21.13	21.03	20.99	21.5
20	256QAM	1	0		18.74	18.68	18.82	18.68	18.66	
20	256QAM	1	49		18.59	18.68	18.71	18.80	18.73	
20	256QAM	1	99		18.72	18.77	18.61	18.65	18.72	
20	256QAM	50	0		18.63	18.54	18.45	18.59	18.59	19.5
20	256QAM	50	24		18.56	18.60	18.43	18.64	18.72	
20	256QAM	50	50		18.63	18.69	18.62	18.78	18.82	
20	256QAM	100	0		18.64	18.87	18.55	18.59	18.74	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5		
15	QPSK	1	0		23.02	22.97	23.02	23.01	22.80	24.5
15	QPSK	1	37		22.71	22.82	22.94	22.90	22.92	
15	QPSK	1	74		22.83	22.88	22.63	22.72	22.86	
15	QPSK	36	0		22.03	21.82	22.07	21.83	21.87	
15	QPSK	36	20		21.79	21.69	21.86	21.90	21.86	23.5
15	QPSK	36	39		22.05	21.89	21.99	21.88	21.88	
15	QPSK	75	0		21.76	21.77	21.94	21.79	21.81	
15	16QAM	1	0		21.59	21.73	21.86	21.52	21.82	
15	16QAM	1	37		21.56	21.63	21.63	21.66	21.60	23.5
15	16QAM	1	74		21.57	21.53	21.57	21.61	21.55	
15	16QAM	36	0		20.87	20.79	20.97	20.79	20.91	
15	16QAM	36	20		20.75	20.67	20.78	20.73	20.79	
15	16QAM	36	39		20.82	20.57	20.99	20.57	20.72	22.5
15	16QAM	75	0		20.92	20.99	21.16	21.05	21.00	
15	64QAM	1	0		21.43	21.44	21.45	21.46	21.24	
15	64QAM	1	37		21.27	21.25	21.41	21.58	21.45	
15	64QAM	1	74		21.30	21.40	21.24	21.33	21.39	22.5
15	64QAM	36	0		21.08	20.98	21.03	21.10	21.12	
15	64QAM	36	20		21.00	21.03	21.06	21.19	20.90	
15	64QAM	36	39		20.96	21.04	20.87	21.08	20.85	
15	64QAM	75	0		20.95	20.73	20.95	21.04	20.83	21.5
15	256QAM	1	0		18.77	18.72	18.81	18.64	18.70	
15	256QAM	1	37		18.54	18.71	18.70	18.86	18.72	
15	256QAM	1	74		18.74	18.83	18.56	18.66	18.78	
15	256QAM	36	0		18.58	18.36	18.50	18.62	18.53	19.5
15	256QAM	36	20		18.39	18.47	18.39	18.56	18.74	
15	256QAM	36	39		18.62	18.69	18.52	18.78	18.80	
15	256QAM	75	0		18.48	18.83	18.55	18.46	18.59	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0		23.06	22.95	23.03	22.93	22.83	24.5
10	QPSK	1	25		22.70	22.82	22.88	22.89	22.97	
10	QPSK	1	49		22.86	22.90	22.63	22.78	22.89	
10	QPSK	25	0		21.99	21.83	22.11	21.86	21.88	
10	QPSK	25	12		21.73	21.83	21.87	21.99	21.91	23.5
10	QPSK	25	25		22.12	21.92	22.01	21.82	21.78	
10	QPSK	50	0		21.82	21.75	21.95	21.87	21.80	
10	16QAM	1	0		21.65	21.68	21.83	21.70	21.64	
10	16QAM	1	25		21.52	21.55	21.74	21.68	21.65	23.5
10	16QAM	1	49		21.62	21.57	21.50	21.52	21.68	
10	16QAM	25	0		20.91	20.84	21.11	20.74	20.79	
10	16QAM	25	12		20.89	20.75	20.68	20.81	20.80	
10	16QAM	25	25		20.85	20.62	21.02	20.58	20.77	22.5
10	16QAM	50	0		20.89	21.03	21.04	20.94	21.02	
10	64QAM	1	0		21.56	21.42	21.57	21.53	21.36	
10	64QAM	1	25		21.34	21.38	21.31	21.36	21.29	
10	64QAM	1	49		21.27	21.28	21.34	21.30	21.40	22.5
10	64QAM	25	0		21.03	20.94	21.16	21.03	21.04	
10	64QAM	25	12		20.93	21.08	20.99	21.09	21.08	
10	64QAM	25	25		21.16	21.11	20.96	21.00	20.91	
10	64QAM	50	0		20.97	20.81	21.01	20.93	20.85	21.5
10	256QAM	1	0		18.61	18.64	18.64	18.65	18.57	
10	256QAM	1	25		18.47	18.65	18.71	18.71	18.76	
10	256QAM	1	49		18.54	18.59	18.48	18.52	18.66	
10	256QAM	25	0		18.52	18.36	18.39	18.61	18.52	19.5
10	256QAM	25	12		18.62	18.43	18.28	18.63	18.58	
10	256QAM	25	25		18.69	18.59	18.57	18.70	18.83	
10	256QAM	50	0		18.68	18.75	18.40	18.50	18.80	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0		23.01	23.00	23.04	23.01	22.85	24.5
5	QPSK	1	12		22.70	22.83	22.85	22.86	22.92	
5	QPSK	1	24		22.83	22.88	22.70	22.80	22.88	
5	QPSK	12	0		21.94	21.76	22.13	21.75	21.90	
5	QPSK	12	7		21.77	21.71	21.79	22.02	21.92	23.5
5	QPSK	12	13		22.01	21.93	21.97	21.85	21.79	
5	QPSK	25	0		21.82	21.79	21.96	21.84	21.72	
5	16QAM	1	0		21.55	21.63	21.74	21.56	21.76	
5	16QAM	1	12		21.54	21.63	21.69	21.63	21.69	23.5
5	16QAM	1	24		21.53	21.60	21.65	21.61	21.54	
5	16QAM	12	0		20.82	20.78	20.95	20.94	20.98	
5	16QAM	12	7		20.91	20.67	20.68	20.72	20.80	
5	16QAM	12	13		20.72	20.66	21.03	20.56	20.62	22.5
5	16QAM	25	0		21.07	21.05	21.18	20.98	21.15	
5	64QAM	1	0		21.38	21.38	21.60	21.36	21.37	

5	64QAM	1	12	21.23	21.42	21.37	21.53	21.38	22.5
5	64QAM	1	24	21.32	21.44	21.32	21.27	21.31	
5	64QAM	12	0	20.95	20.93	20.95	21.14	20.94	21.5
5	64QAM	12	7	20.99	20.99	21.14	21.20	21.10	
5	64QAM	12	13	21.04	21.06	20.82	21.03	20.86	
5	64QAM	25	0	20.81	20.77	21.16	21.04	20.88	
5	256QAM	1	0	18.59	18.72	18.67	18.59	18.54	19.5
5	256QAM	1	12	18.57	18.60	18.61	18.79	18.75	
5	256QAM	1	24	18.60	18.72	18.45	18.55	18.73	19.5
5	256QAM	12	0	18.59	18.57	18.33	18.54	18.60	
5	256QAM	12	7	18.54	18.43	18.47	18.67	18.68	
5	256QAM	12	13	18.55	18.64	18.52	18.67	18.73	
5	256QAM	25	0	18.53	18.84	18.50	18.65	18.71	

Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	22.60	22.79	22.75	24.5
20	QPSK	1	49	22.70	22.67	22.69	
20	QPSK	1	99	22.63	22.71	22.62	
20	QPSK	50	0	21.70	21.77	21.66	23.5
20	QPSK	50	24	21.53	21.74	21.58	
20	QPSK	50	50	21.54	21.66	21.68	
20	QPSK	100	0	21.65	21.72	21.63	23.5
20	16QAM	1	0	21.73	22.03	21.85	
20	16QAM	1	49	21.82	21.86	21.70	
20	16QAM	1	99	21.93	21.77	21.87	22.5
20	16QAM	50	0	20.75	20.89	20.81	
20	16QAM	50	24	20.77	20.78	20.73	
20	16QAM	50	50	20.66	20.76	20.68	22.5
20	16QAM	100	0	20.76	20.92	20.83	
20	64QAM	1	0	20.95	20.84	20.54	
20	64QAM	1	49	20.98	20.72	20.66	21.5
20	64QAM	1	99	20.81	20.85	20.58	
20	64QAM	50	0	20.02	20.14	20.20	
20	64QAM	50	24	20.11	20.05	19.90	19.5
20	64QAM	50	50	20.03	19.94	19.93	
20	64QAM	100	0	20.07	20.12	20.09	
20	256QAM	1	0	18.28	18.43	18.37	19.5
20	256QAM	1	49	18.35	18.28	18.06	
20	256QAM	1	99	18.16	18.14	18.14	
20	256QAM	50	0	18.26	18.20	18.30	19.5
20	256QAM	50	24	18.32	18.18	18.45	
20	256QAM	50	50	18.27	18.22	18.15	
20	256QAM	100	0	18.09	18.10	18.18	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	Tune-up limit (dBm)
15	QPSK	1	0	22.55	22.74	22.70	24.5
15	QPSK	1	37	22.59	22.62	22.62	
15	QPSK	1	74	22.56	22.68	22.57	
15	QPSK	36	0	21.58	21.66	21.67	23.5
15	QPSK	36	20	21.58	21.67	21.50	
15	QPSK	36	39	21.56	21.55	21.64	
15	QPSK	75	0	21.58	21.61	21.57	23.5
15	16QAM	1	0	21.61	21.89	21.73	
15	16QAM	1	37	21.75	21.71	21.57	
15	16QAM	1	74	21.89	21.83	21.85	22.5
15	16QAM	36	0	20.58	20.79	20.70	
15	16QAM	36	20	20.60	20.80	20.64	
15	16QAM	36	39	20.68	20.81	20.51	22.5
15	16QAM	75	0	20.79	20.74	20.65	
15	64QAM	1	0	20.78	20.80	20.58	
15	64QAM	1	37	20.99	20.70	20.50	21.5
15	64QAM	1	74	20.68	20.86	20.58	
15	64QAM	36	0	20.06	20.10	20.02	
15	64QAM	36	20	20.12	19.97	19.87	19.5
15	64QAM	36	39	20.03	19.87	19.88	
15	64QAM	75	0	20.06	20.04	20.00	
15	256QAM	1	0	18.24	18.29	18.28	19.5
15	256QAM	1	37	18.23	18.10	18.07	
15	256QAM	1	74	17.98	18.09	18.11	
15	256QAM	36	0	18.14	18.12	18.33	19.5
15	256QAM	36	20	18.14	18.07	18.37	
15	256QAM	36	39	18.15	18.25	17.99	
15	256QAM	75	0	18.10	18.00	18.20	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	Tune-up limit (dBm)
10	QPSK	1	0	22.52	22.74	22.65	24.5
10	QPSK	1	25	22.61	22.64	22.65	
10	QPSK	1	49	22.55	22.65	22.54	
10	QPSK	25	0	21.63	21.66	21.61	23.5
10	QPSK	25	12	21.55	21.67	21.54	
10	QPSK	25	25	21.53	21.62	21.58	
10	QPSK	50	0	21.55	21.73	21.51	23.5
10	16QAM	1	0	21.67	22.02	21.88	
10	16QAM	1	25	21.82	21.88	21.61	
10	16QAM	1	49	21.81	21.66	21.90	22.5
10	16QAM	25	0	20.72	20.89	20.87	
10	16QAM	25	12	20.72	20.73	20.73	
10	16QAM	25	25	20.65	20.65	20.55	22.5
10	16QAM	50	0	20.81	20.97	20.68	
10	64QAM	1	0	20.83	20.82	20.52	
10	64QAM	1	25	20.68	20.66	20.50	21.5
10	64QAM	1	49	20.85	20.71	20.60	
10	64QAM	25	0	19.84	20.20	20.21	
10	64QAM	25	12	20.17	19.88	19.90	19.5
10	64QAM	25	25	20.09	19.84	19.90	
10	64QAM	50	0	20.13	19.94	20.03	
10	256QAM	1	0	18.10	18.35	18.35	19.5
10	256QAM	1	25	18.31	18.27	18.00	
10	256QAM	1	49	18.03	18.09	18.18	
10	256QAM	25	0	18.26	18.26	18.24	19.5
10	256QAM	25	12	18.29	18.00	18.46	
10	256QAM	25	25	18.27	18.16	18.04	
10	256QAM	50	0	18.11	18.12	18.23	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	Tune-up limit (dBm)
5	QPSK	1	0	22.51	22.72	22.67	24.5
5	QPSK	1	12	22.62	22.64	22.55	
5	QPSK	1	24	22.52	22.64	22.56	
5	QPSK	12	0	21.57	21.80	21.65	23.5
5	QPSK	12	7	21.57	21.68	21.54	
5	QPSK	12	13	21.50	21.67	21.60	
5	QPSK	25	0	21.67	21.58	21.62	23.5
5	16QAM	1	0	21.69	21.94	21.83	
5	16QAM	1	12	21.70	21.69	21.65	
5	16QAM	1	24	21.79	21.67	21.80	22.5
5	16QAM	12	0	20.70	20.95	20.70	
5	16QAM	12	7	20.82	20.75	20.67	
5	16QAM	12	13	20.58	20.82	20.74	22.5
5	16QAM	25	0	20.64	20.82	20.85	
5	64QAM	1	0	20.99	20.83	20.51	
5	64QAM	1	12	20.80	20.70	20.52	22.5

Band 71 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	23.52	23.65	23.62	24.5
20	QPSK	1	49	23.52	23.60	23.58	
20	QPSK	1	99	23.49	23.53	23.56	
20	QPSK	50	0	22.41	22.56	22.55	23.5
20	QPSK	50	24	22.36	22.52	22.47	
20	QPSK	50	50	22.51	22.50	22.48	
20	QPSK	100	0	22.30	22.46	22.39	23.5
20	16QAM	1	0	23.05	23.20	23.14	
20	16QAM	1	49	23.00	23.11	23.08	
20	16QAM	1	99	22.91	23.01	22.97	23.5
20	16QAM	50	0	21.52	21.58	21.46	
20	16QAM	50	24	21.48	21.53	21.53	
20	16QAM	50	50	21.37	21.55	21.41	22.5
20	16QAM	100	0	21.58	21.65	21.61	
20	64QAM	1	0	21.51	21.48	21.41	
20	64QAM	1	49	21.45	21.46	21.50	22.5
20	64QAM	1	99	21.46	21.34	21.22	
20	64QAM	50	0	20.55	20.65	20.54	
20	64QAM	50	24	20.58	20.57	20.51	21.5
20	64QAM	50	50	20.56	20.44	20.42	
20	64QAM	100	0	20.51	20.52	20.48	
20	256QAM	1	0	20.18	20.21	20.15	20.5
20	256QAM	1	49	20.19	20.18	20.12	
20	256QAM	1	99	20.21	20.00	20.07	
20	256QAM	50	0	20.06	20.22	20.02	20.5
20	256QAM	50	24	20.12	20.29	20.16	
20	256QAM	50	50	20.15	20.14	20.08	
20	256QAM	100	0	20.28	20.01	20.14	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.49	23.55	23.55	24.5
15	QPSK	1	37	23.46	23.50	23.49	
15	QPSK	1	74	23.35	23.44	23.43	
15	QPSK	36	0	22.32	22.53	22.51	23.5
15	QPSK	36	20	22.34	22.54	22.36	
15	QPSK	36	39	22.46	22.53	22.39	
15	QPSK	75	0	22.19	22.49	22.41	23.5
15	16QAM	1	0	23.03	23.23	23.20	
15	16QAM	1	37	22.91	23.12	23.04	
15	16QAM	1	74	22.91	22.96	22.91	22.5
15	16QAM	36	0	21.58	21.62	21.28	
15	16QAM	36	20	21.34	21.48	21.47	
15	16QAM	36	39	21.30	21.59	21.38	22.5
15	16QAM	75	0	21.48	21.62	21.55	
15	64QAM	1	0	21.48	21.53	21.41	
15	64QAM	1	37	21.46	21.38	21.37	22.5
15	64QAM	1	74	21.43	21.29	21.06	
15	64QAM	36	0	20.46	20.67	20.50	
15	64QAM	36	20	20.56	20.59	20.43	21.5
15	64QAM	36	39	20.41	20.29	20.34	
15	64QAM	75	0	20.51	20.34	20.41	
15	256QAM	1	0	20.03	20.22	20.12	20.5
15	256QAM	1	37	20.08	20.18	20.13	
15	256QAM	1	74	20.13	20.04	20.05	
15	256QAM	36	0	19.91	20.06	20.03	20.5
15	256QAM	36	20	20.00	20.12	20.06	
15	256QAM	36	39	20.17	20.05	19.93	
15	256QAM	75	0	20.23	19.86	20.00	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.49	23.55	23.54	24.5
10	QPSK	1	25	23.47	23.47	23.53	
10	QPSK	1	49	23.42	23.39	23.52	
10	QPSK	25	0	22.29	22.56	22.52	23.5
10	QPSK	25	12	22.29	22.51	22.38	
10	QPSK	25	25	22.53	22.37	22.46	
10	QPSK	50	0	22.19	22.42	22.33	23.5
10	16QAM	1	0	23.00	23.15	23.18	
10	16QAM	1	25	22.86	23.13	22.93	
10	16QAM	1	49	22.85	23.07	22.83	22.5
10	16QAM	25	0	21.58	21.51	21.29	
10	16QAM	25	12	21.44	21.54	21.35	
10	16QAM	25	25	21.42	21.57	21.29	22.5
10	16QAM	50	0	21.53	21.61	21.63	
10	64QAM	1	0	21.33	21.44	21.38	
10	64QAM	1	25	21.30	21.34	21.51	22.5
10	64QAM	1	49	21.34	21.30	21.13	
10	64QAM	25	0	20.37	20.54	20.57	
10	64QAM	25	12	20.47	20.55	20.38	21.5
10	64QAM	25	25	20.60	20.43	20.43	
10	64QAM	50	0	20.48	20.53	20.49	
10	256QAM	1	0	20.05	20.05	20.15	20.5
10	256QAM	1	25	20.07	20.12	20.08	
10	256QAM	1	49	20.11	19.86	19.90	
10	256QAM	25	0	19.90	20.13	19.89	20.5
10	256QAM	25	12	19.94	20.29	20.15	
10	256QAM	25	25	20.02	20.19	20.09	
10	256QAM	50	0	20.15	19.92	20.05	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.45	23.58	23.57	24.5
5	QPSK	1	12	23.49	23.46	23.46	
5	QPSK	1	24	23.46	23.45	23.47	
5	QPSK	12	0	22.40	22.42	22.47	23.5
5	QPSK	12	7	22.32	22.50	22.39	
5	QPSK	12	13	22.47	22.50	22.38	
5	QPSK	25	0	22.29	22.48	22.25	23.5
5	16QAM	1	0	22.93	23.10	23.04	
5	16QAM	1	12	22.83	22.94	23.03	
5	16QAM	1	24	22.92	22.88	22.85	23.5
5	16QAM	12	0	21.53	21.44	21.35	
5	16QAM	12	7	21.41	21.56	21.54	
5	16QAM	12	13	21.25	21.44	21.31	22.5
5	16QAM	25	0	21.50	21.60	21.46	
5	64QAM	1	0	21.45	21.45	21.26	
5	64QAM	1	12	21.27	21.30	21.56	22.5

5	64QAM	1	24	20.84	20.69	20.55	21.5
5	64QAM	12	0	19.85	20.08	20.17	
5	64QAM	12	7	20.06	20.08	19.87	
5	64QAM	12	13	19.87	19.84	19.94	
5	64QAM	25	0	20.05	20.01	19.96	
5	256QAM	1	0	18.26	18.43	18.38	19.5
5	256QAM	1	12	18.27	18.18	18.03	
5	256QAM	1	24	17.98	18.04	18.10	
5	256QAM	12	0	18.28	18.19	18.13	19.5
5	256QAM	12	7	18.20	18.15	18.45	
5	256QAM	12	13	18.16	18.08	18.21	
5	256QAM	25	0	18.09	17.99	18.20	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	22.56	22.76	22.64	24.5
3	QPSK	1	8	22.57	22.60	22.66	
3	QPSK	1	14	22.60	22.59	22.56	
3	QPSK	8	0	21.60	21.64	21.66	23.5
3	QPSK	8	4	21.50	21.65	21.50	
3	QPSK	8	7	21.55	21.61	21.70	
3	QPSK	15	0	21.62	21.62	21.51	
3	16QAM	1	0	21.70	21.98	21.72	23.5
3	16QAM	1	8	21.83	21.80	21.59	
3	16QAM	1	14	21.98	21.70	21.93	
3	16QAM	8	0	20.60	20.72	20.68	22.5
3	16QAM	8	4	20.80	20.64	20.60	
3	16QAM	8	7	20.72	20.62	20.67	
3	16QAM	15	0	20.79	20.87	20.88	
3	64QAM	1	0	20.82	20.77	20.56	22.5
3	64QAM	1	8	20.98	20.70	20.61	
3	64QAM	1	14	20.80	20.67	20.61	
3	64QAM	8	0	20.04	20.03	20.10	21.5
3	64QAM	8	4	19.97	19.94	19.74	
3	64QAM	8	7	20.04	19.97	19.85	
3	64QAM	15	0	19.91	20.08	19.99	
3	256QAM	1	0	18.19	18.32	18.26	19.5
3	256QAM	1	8	18.30	18.25	18.08	
3	256QAM	1	14	18.07	18.15	18.18	
3	256QAM	8	0	18.08	18.23	18.36	
3	256QAM	8	4	18.27	18.23	18.38	19.5
3	256QAM	8	7	18.17	18.20	18.12	
3	256QAM	15	0	17.94	18.06	18.00	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.54	22.65	22.65	24.5
1.4	QPSK	1	3	22.58	22.59	22.56	
1.4	QPSK	1	5	22.60	22.66	22.54	
1.4	QPSK	3	0	22.62	22.54	22.59	
1.4	QPSK	3	1	22.52	22.62	22.56	
1.4	QPSK	3	3	22.55	22.59	22.65	
1.4	QPSK	6	0	21.63	21.66	21.55	23.5
1.4	16QAM	1	0	21.66	21.93	21.80	
1.4	16QAM	1	3	21.64	21.75	21.72	
1.4	16QAM	1	5	21.88	21.78	21.80	23.5
1.4	16QAM	3	0	21.61	21.68	21.52	
1.4	16QAM	3	1	21.54	21.55	21.59	
1.4	16QAM	3	3	21.64	21.65	21.58	
1.4	16QAM	6	0	20.68	20.98	20.86	22.5
1.4	64QAM	1	0	20.88	20.90	20.59	
1.4	64QAM	1	3	21.00	20.75	20.71	
1.4	64QAM	1	5	20.72	20.79	20.58	22.5
1.4	64QAM	3	0	20.88	20.81	21.00	
1.4	64QAM	3	1	20.84	20.81	20.81	
1.4	64QAM	3	3	20.84	20.66	20.65	
1.4	64QAM	6	0	20.11	20.14	20.12	21.5
1.4	256QAM	1	0	18.21	18.49	18.36	
1.4	256QAM	1	3	18.25	18.10	18.06	
1.4	256QAM	1	5	18.08	18.04	18.13	
1.4	256QAM	3	0	18.16	18.16	18.28	
1.4	256QAM	3	1	18.26	18.10	18.35	
1.4	256QAM	3	3	18.25	18.24	18.06	
1.4	256QAM	6	0	17.93	18.04	18.02	19.5

5	64QAM	1	24	21.29	21.40	21.07	21.5
5	64QAM	12	0	20.49	20.61	20.37	
5	64QAM	12	7	20.48	20.49	20.33	
5	64QAM	12	13	20.55	20.33	20.43	
5	64QAM	25	0	20.33	20.56	20.33	
5	256QAM	1	0	20.01	20.04	20.11	20.5
5	256QAM	1	12	20.13	20.06	20.07	
5	256QAM	1	24	20.04	19.92	19.90	
5	256QAM	12	0	19.99	20.09	19.84	20.5
5	256QAM	12	7	19.99	20.21	20.19	
5	256QAM	12	13	20.09	20.20	20.04	
5	256QAM	25	0	20.11	19.91	20.17	

n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit
Channel				372000	376000	380000	(dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.98	22.83	22.58	24
20		1	53	22.92	22.81	22.34	
20		1	104	22.86	22.60	22.44	
20		50	1	22.22	22.09	21.79	23.5
20	DFT-s-OFDM QPSK	50	25	22.79	22.60	22.36	
20		50	50	22.19	22.24	21.78	
20		100	0	22.27	22.17	21.82	
20	DFT-s-OFDM 16QAM	1	1	23.21	23.27	23.25	24
20		1	53	23.11	23.05	22.28	
20		1	104	22.82	22.76	22.68	
20		50	1	22.36	22.23	21.94	23.5
20	DFT-s-OFDM 64QAM	50	25	22.74	22.80	22.72	
20		50	50	22.44	22.39	21.84	
20		100	0	22.34	22.38	22.30	
20	DFT-s-OFDM 256QAM	1	1	22.59	22.60	22.41	23
20	CP-OFDM QPSK	1	1	21.86	21.79	21.43	22.5
20	CP-OFDM 16QAM	1	1	20.51	20.27	20.21	21
20	CP-OFDM 64QAM	1	1	21.96	21.68	21.56	22.5
20	CP-OFDM 256QAM	1	1	21.95	21.51	21.28	22.5
20		1	1	21.38	20.95	20.83	22
20		1	1	18.61	18.62	18.70	19.5
Channel				371500	376000	380500	Tune-up limit
Frequency (MHz)				1857.5	1880	1902.5	(dBm)
15	DFT-s-OFDM QPSK	1	1	23.00	22.64	22.29	24
Channel				371000	376000	381000	Tune-up limit
Frequency (MHz)				1855	1880	1905	(dBm)
10	DFT-s-OFDM QPSK	1	1	22.91	22.67	22.23	24
Channel				370500	376000	381500	Tune-up limit
Frequency (MHz)				1852.5	1880	1907.5	(dBm)
5	DFT-s-OFDM QPSK	1	1	22.90	22.31	22.11	24

n5 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit
Channel				166800	167300	167800	(dBm)
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.95	22.96	23.03	24
20		1	53	23.01	22.98	23.04	
20		1	104	23.01	22.83	22.82	
20		50	1	22.31	22.32	22.45	23.5
20	DFT-s-OFDM QPSK	50	25	22.74	22.86	22.87	
20		50	50	22.35	22.37	22.39	
20		100	0	22.34	22.35	22.39	
20	DFT-s-OFDM 16QAM	1	1	22.97	23.18	23.03	24
20		1	53	23.25	23.28	23.20	
20		1	104	23.01	22.89	22.79	
20		50	1	22.41	22.42	22.50	23.5
20	DFT-s-OFDM 64QAM	50	25	22.80	22.98	22.89	
20		50	50	22.39	22.45	22.38	
20		100	0	22.38	22.49	22.37	
20	DFT-s-OFDM 256QAM	1	1	22.54	22.44	22.56	23
20	CP-OFDM QPSK	1	1	21.61	21.68	21.60	22.5
20	CP-OFDM 16QAM	1	1	20.38	20.16	20.20	21
20	CP-OFDM 64QAM	1	1	21.47	21.76	21.62	22.5
20	CP-OFDM 256QAM	1	1	21.18	21.49	21.35	22
20		1	1	21.03	21.32	21.22	22
20		1	1	18.55	18.36	18.22	19
Channel				166300	167300	168300	Tune-up limit
Frequency (MHz)				831.5	836.5	841.5	(dBm)
15	DFT-s-OFDM QPSK	1	1	23.06	23.06	22.84	24
Channel				165800	167300	168800	Tune-up limit
Frequency (MHz)				829	836.5	844	(dBm)
10	DFT-s-OFDM QPSK	1	1	22.96	22.88	23.03	24
Channel				165300	167300	169300	Tune-up limit
Frequency (MHz)				826.5	836.5	846.5	(dBm)
5	DFT-s-OFDM QPSK	1	1	22.63	22.96	22.52	24

n7 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit
Channel				502000	507000	512000	(dBm)
Frequency (MHz)				2510	2535	2560	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.55	23.69	23.83	24.5
20		1	53	23.62	23.70	23.86	
20		1	104	23.82	23.82	23.83	
20		50	1	23.09	23.17	23.19	24.5
20	DFT-s-OFDM QPSK	50	25	23.65	23.77	23.79	
20		50	50	23.28	23.28	23.30	
20		100	0	23.20	23.28	23.23	
20		1	1	23.86	23.99	23.91	24.5
20	DFT-s-OFDM 16QAM	1	53	23.80	23.76	23.94	
20		1	104	23.91	23.95	23.92	
20		50	1	23.22	23.26	23.31	24.5
20		50	25	23.81	23.85	23.83	
20	DFT-s-OFDM 64QAM	50	50	23.33	23.26	23.29	
20		100	0	23.28	23.35	23.28	
20	DFT-s-OFDM 256QAM	1	1	23.32	23.50	23.38	24
20	CP-OFDM QPSK	1	1	22.43	22.58	22.47	23
20	CP-OFDM 16QAM	1	1	21.40	21.22	21.80	22
20	CP-OFDM 64QAM	1	1	22.49	22.62	22.56	23
20	CP-OFDM 256QAM	1	1	22.27	22.41	22.43	23
20		1	1	21.79	21.83	21.96	22.5
20		1	1	19.28	19.24	19.58	20
Channel				501500	507000	512500	Tune-up limit
Frequency (MHz)				2507.5	2535	2562.5	(dBm)
15	DFT-s-OFDM QPSK	1	1	23.65	23.76	23.98	24.5
Channel				501000	507000	513000	Tune-up limit
Frequency (MHz)				2505	2535	2565	(dBm)
10	DFT-s-OFDM QPSK	1	1	23.61	23.51	23.96	24.5
Channel				500500	507000	513500	Tune-up limit
Frequency (MHz)				2502.5	2535	2567.5	(dBm)
5	DFT-s-OFDM QPSK	1	1	23.46	23.87	23.29	24.5

n25 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit
Channel				372000	376500	381000	(dBm)
Frequency (MHz)				1860	1882.5	1905	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.16	22.49	21.89	24
20		1	53	23.04	23.00	22.42	
20		1	104	22.97	22.67	22.74	
20		50	1	22.40	22.19	21.72	23.5
20		50	25	22.97	22.84	22.25	
20		50	50	22.44	22.21	21.80	
20		100	0	22.48	22.24	21.81	
20	DFT-s-OFDM QPSK	1	1	23.20	23.29	23.19	24
20		1	53	22.99	23.18	22.47	
20		1	104	23.04	22.97	22.76	
20		50	1	22.54	22.26	21.84	23.5
20		50	25	22.87	22.92	22.90	
20		50	50	22.51	22.24	21.85	
20		100	0	22.41	22.43	22.19	
20	DFT-s-OFDM 16QAM	1	1	22.83	22.54	22.18	23
20	DFT-s-OFDM 64QAM	1	1	21.90	21.78	21.56	22.5
20	DFT-s-OFDM 256QAM	1	1	19.72	19.18	19.12	20.5
20	CP-OFDM QPSK	1	1	22.03	21.86	21.76	22.5
20	CP-OFDM 16QAM	1	1	21.76	21.76	21.51	22.5
20	CP-OFDM 64QAM	1	1	21.23	21.10	20.96	22
20	CP-OFDM 256QAM	1	1	17.80	17.68	17.52	18.5
Channel				371500	376500	381500	Tune-up limit
Frequency (MHz)				1857.5	1882.5	1907.5	(dBm)
15	DFT-s-OFDM QPSK	1	1	23.25	22.78	21.92	24
Channel				371000	376500	382000	Tune-up limit
Frequency (MHz)				1855	1882.5	1910	(dBm)
10	DFT-s-OFDM QPSK	1	1	23.07	22.65	22.33	24
Channel				370500	376500	382500	Tune-up limit
Frequency (MHz)				1852.5	1882.5	1912.5	(dBm)
5	DFT-s-OFDM QPSK	1	1	22.97	22.50	22.68	24

n26(814-824MHz) (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit
Channel					163800		(dBm)
Frequency (MHz)					819		
10	DFT-s-OFDM PI/2 BPSK	1	1		22.34		23.5
10		1	26		22.86		
10		1	50		22.80		
10		25	1		22.18		23.5
10	DFT-s-OFDM QPSK	25	12		22.74		
10		25	25		22.28		
10		50	0		22.19		
10		1	1		22.83		23.5
10	DFT-s-OFDM 16QAM	1	26		22.76		
10		1	50		22.97		
10		25	1		22.27		23.5
10		25	12		22.75		
10	DFT-s-OFDM 64QAM	25	25		22.35		
10		50	0		22.21		
10	DFT-s-OFDM 256QAM	1	1		22.16		23
10	CP-OFDM QPSK	1	1		21.37		22
10	CP-OFDM 16QAM	1	1		18.88		19.5
10	CP-OFDM 64QAM	1	1		21.37		22
10	CP-OFDM 256QAM	1	1		21.36		22
10		1	1		20.78		21.5
10		1	1		17.15		18
Channel				163300	163800	164300	Tune-up limit
Frequency (MHz)				816.5	819	821.5	(dBm)
5	DFT-s-OFDM QPSK	1	1	22.89	22.83	22.29	23.5

n26(824-849MHz) (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit
Channel				166800	167300	167800	(dBm)
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.54	22.92	22.35	24
20		1	53	23.07	23.07	23.03	
20		1	104	22.85	22.90	22.85	
20		50	1	22.32	22.30	22.51	23.5
20	DFT-s-OFDM QPSK	50	25	22.76	23.00	22.92	
20		50	50	22.46	22.44	22.39	
20		100	0	22.33	22.43	22.36	
20		1	1	22.96	22.82	22.97	24
20	DFT-s-OFDM 16QAM	1	53	23.18	23.22	23.20	
20		1	104	22.87	22.83	22.81	
20		50	1	22.41	22.42	22.58	23.5
20		50	25	22.92	23.01	22.98	
20		50	50	22.47	22.43	22.41	
20		100	0	22.40	22.46	22.39	
20	DFT-s-OFDM 64QAM	1	1	22.28	22.37	22.35	23
20	DFT-s-OFDM 256QAM	1	1	21.62	21.64	21.68	22.5
20	CP-OFDM QPSK	1	1	20.41	20.18	20.01	21
20	CP-OFDM 16QAM	1	1	21.67	21.63	21.48	22.5
20	CP-OFDM 64QAM	1	1	21.42	21.59	21.26	22
20	CP-OFDM 256QAM	1	1	20.95	20.94	20.79	21.5
20	CP-OFDM 256QAM	1	1	18.76	18.48	18.44	19.5
Channel				166300	167300	168300	Tune-up limit
Frequency (MHz)				831.5	836.5	841.5	(dBm)
15	DFT-s-OFDM QPSK	1	1	23.08	22.76	22.93	24
Channel				165800	167300	168800	Tune-up limit
Frequency (MHz)				829	836.5	844	(dBm)
10	DFT-s-OFDM QPSK	1	1	22.80	22.52	23.01	24
Channel				165300	167300	169300	Tune-up limit
Frequency (MHz)				826.5	836.5	846.5	(dBm)
5	DFT-s-OFDM QPSK	1	1	22.12	23.03	22.38	24

n38 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit
Channel				516000	519000	522000	(dBm)
Frequency (MHz)				2580	2595	2610	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.18	23.35	23.36	24
20		1	25	23.22	23.17	23.40	
20		1	49	23.26	23.13	23.38	
20		25	1	22.93	22.55	22.77	24
20	DFT-s-OFDM QPSK	25	12	23.25	23.07	23.24	
20		25	25	22.90	22.53	22.72	
20		50	0	22.97	22.56	22.80	
20		1	1	23.34	23.43	23.40	24
20	DFT-s-OFDM 16QAM	1	25	23.16	23.12	23.33	
20		1	49	23.34	23.04	23.37	
20		25	1	23.01	22.65	22.81	24
20		25	12	23.26	23.30	23.23	
20	DFT-s-OFDM 64QAM	25	25	22.92	22.54	22.75	
20		50	0	22.78	22.99	22.84	
20	DFT-s-OFDM 256QAM	1	1	22.22	22.16	22.09	23
20	CP-OFDM QPSK	1	1	21.00	21.25	21.43	22
20	CP-OFDM 16QAM	1	1	21.76	21.86	21.51	22.5
20	CP-OFDM 64QAM	1	1	22.66	22.34	22.28	23
20	CP-OFDM 256QAM	1	1	21.26	21.32	21.39	22
20		1	1	20.18	20.56	20.54	21
20		1	1	19.91	20.00	19.71	20.5
Channel				515500	519000	522500	Tune-up limit
Frequency (MHz)				2577.5	2595	2612.5	(dBm)
15	DFT-s-OFDM QPSK	1	1	23.47	23.38	23.27	24
Channel				515000	519000	523000	Tune-up limit
Frequency (MHz)				2575	2595	2615	(dBm)
10	DFT-s-OFDM QPSK	1	1	23.61	23.59	23.33	24

n40(2305-2315MHz) (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					462000		
Frequency (MHz)					2310		
10	DFT-s-OFDM PI/2 BPSK	1	1		23.07		23.5
10		1	12		23.00		
10		1	22		23.07		
10		12	1		22.45		23.5
10		12	6		23.02		
10		12	12		22.50		
10		24	0		22.46		
10		1	1		23.11		23.5
10	DFT-s-OFDM QPSK	1	12		23.07		
10		1	22		23.06		
10		12	1		22.59		23.5
10		12	6		23.08		
10		12	12		22.57		
10		24	0		22.46		
10	DFT-s-OFDM 16QAM	1	1		21.70		22.5
10	DFT-s-OFDM 64QAM	1	1		21.10		21.5
10	DFT-s-OFDM 256QAM	1	1		20.12		21
10	CP-OFDM QPSK	1	1		21.71		22.5
10	CP-OFDM 16QAM	1	1		21.07		21.5
10	CP-OFDM 64QAM	1	1		20.09		20.5
10	CP-OFDM 256QAM	1	1		18.14		19

n40(2350-2360MHz) (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					471000		
Frequency (MHz)					2355		
10	DFT-s-OFDM PI/2 BPSK	1	1		22.93		23.5
10		1	12		23.00		
10		1	22		23.10		
10		12	1		22.33		23.5
10		12	6		22.86		
10		12	12		22.41		
10		24	0		22.34		
10	DFT-s-OFDM QPSK	1	1		23.13		23.5
10		1	12		23.08		
10		1	22		23.06		
10		12	1		22.44		23.5
10		12	6		23.05		
10		12	12		22.54		
10		24	0		22.45		
10	DFT-s-OFDM 16QAM	1	1		21.74		22.5
10	DFT-s-OFDM 64QAM	1	1		21.14		22
10	DFT-s-OFDM 256QAM	1	1		20.17		21
10	CP-OFDM QPSK	1	1		21.85		22.5
10	CP-OFDM 16QAM	1	1		21.20		22
10	CP-OFDM 64QAM	1	1		20.24		21
10	CP-OFDM 256QAM	1	1		18.55		19

n41 (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	27.5
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	26.56	26.19	25.99	26.25	26.70	27.5
100		1	136	26.74	26.57	26.60	26.36	26.16	
100		1	271	26.68	26.17	25.45	26.07	26.05	
100		135	1	26.25	26.14	26.16	26.02	25.82	27.5
100		135	67	26.81	26.61	26.60	26.35	26.14	
100		135	136	26.21	25.94	25.85	25.60	25.41	
100		270	0	26.25	26.05	26.05	25.91	25.74	
100	DFT-s-OFDM QPSK	1	1	26.81	26.77	26.84	26.83	26.80	27.5
100		1	136	26.81	26.82	26.63	26.36	26.20	
100		1	271	26.71	26.32	25.38	25.96	26.04	
100		135	1	25.83	25.69	25.70	25.54	25.37	27.5
100		135	67	26.72	26.75	26.80	26.73	26.78	
100		135	136	25.78	25.59	25.33	25.14	24.93	
100		270	0	25.77	25.69	25.63	25.43	25.27	
100	DFT-s-OFDM 16QAM	1	1	25.73	25.59	25.62	25.62	25.51	26.5
100	DFT-s-OFDM 64QAM	1	1	24.81	24.26	24.80	24.73	24.66	25.5
100	DFT-s-OFDM 256QAM	1	1	22.78	22.80	22.76	22.49	22.57	23.5
100	CP-OFDM QPSK	1	1	25.31	25.55	25.41	25.41	25.28	26.5
100	CP-OFDM 16QAM	1	1	24.89	24.32	24.78	24.89	24.70	25.5
100	CP-OFDM 64QAM	1	1	23.57	23.49	23.51	23.51	23.35	24
100	CP-OFDM 256QAM	1	1	19.93	19.72	19.85	19.42	19.55	20.5
Channel				508200	513402	518598	523800	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	26.76	25.12	26.81	26.83	26.49	27.5
Channel				507204	512904	518598	524298	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	26.78	25.82	26.85	26.72	26.41	27.5
Channel				505200	511902	518598	525798	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	26.73	26.74	26.81	26.57	26.25	27.5
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	26.83	26.83	26.76	26.57	26.27	27.5
Channel				503202	510900	518598	526296	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	26.82	26.81	26.86	26.42	26.14	27.5
Channel				502200	510402	518598	526800	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	26.85	26.86	26.79	26.35	26.02	27.5
Channel				501204	509904	518598	527298	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	26.77	26.82	26.72	26.36	26.04	27.5
Channel				500700	509652	518598	527550	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	26.81	26.82	26.73	26.32	26.05	27.5
Channel				500202	509400	518598	527796	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	26.75	26.80	26.75	26.28	26.11	27.5

n41 (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	24.5
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	23.60	23.66	23.74	23.65	23.50	24.5
100		1	136	23.46	23.59	23.50	23.24	23.05	
100		1	271	23.47	23.24	23.17	23.01	23.00	
100		135	1	23.48	23.52	23.60	23.40	23.21	24
100		135	67	23.48	23.50	23.47	23.23	23.02	
100		135	136	23.47	23.38	23.22	23.05	22.77	
100		270	0	23.42	23.48	23.49	23.33	23.08	
100	DFT-s-OFDM QPSK	1	1	23.76	23.80	23.81	23.78	23.75	24.5
100		1	136	23.50	23.77	23.55	23.32	23.10	
100		1	271	23.43	23.28	23.15	23.02	22.88	
100		135	1	23.62	23.64	23.66	23.65	23.61	24
100		135	67	23.54	23.61	23.50	23.47	23.44	
100		135	136	23.51	23.51	23.26	23.12	22.82	
100		270	0	23.49	23.52	23.54	23.31	23.37	
100	DFT-s-OFDM 16QAM	1	1	23.26	23.36	23.66	23.33	23.41	24.5
100	DFT-s-OFDM 64QAM	1	1	23.64	23.79	23.71	23.72	23.58	24.5
100	DFT-s-OFDM 256QAM	1	1	22.52	22.70	22.66	22.54	22.32	23.5
100	CP-OFDM QPSK	1	1	23.77	23.77	23.66	23.51	23.49	24.5
100	CP-OFDM 16QAM	1	1	23.79	23.75	23.68	23.79	23.63	24.5
100	CP-OFDM 64QAM	1	1	22.90	22.97	22.87	22.80	22.65	23.5
100	CP-OFDM 256QAM	1	1	20.26	20.11	20.29	20.22	20.37	21
Channel				508200	513402	518598	523800	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	23.57	23.61	23.51	23.58	23.22	24.5
Channel				507204	512904	518598	524298	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	23.61	23.65	23.60	23.55	23.21	24.5
Channel				505200	511902	518598	525798	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	23.57	23.73	23.64	23.40	23.14	24.5
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	23.60	23.71	23.71	23.45	23.15	24.5
Channel				503202	510900	518598	526296	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	23.66	23.75	23.66	23.25	22.95	24.5
Channel				502200	510402	518598	526800	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	23.77	23.77	23.73	23.31	22.91	24.5
Channel				501204	509904	518598	527298	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	23.78	23.76	23.68	23.24	22.87	24.5
Channel				500700	509652	518598	527550	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	23.87	23.75	23.63	23.31	23.02	24.5
Channel				500202	509400	518598	527796	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	23.74	23.90	23.66	23.35	23.13	24.5

n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit
Channel				346000	349000	352000	(dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	23.05	23.11	23.20	24
40		1	108	22.80	22.53	22.67	
40		1	214	22.54	22.65	22.82	
40		108	1	22.10	22.14	22.03	23
40		108	54	22.59	22.55	22.53	
40		108	108	22.15	21.97	22.03	
40		216	0	22.16	22.11	22.03	
40	DFT-s-OFDM QPSK	1	1	23.21	23.23	23.18	24
40		1	108	22.94	22.77	22.75	
40		1	214	22.69	22.77	22.82	
40		108	1	22.21	22.21	22.08	23
40		108	54	22.47	22.53	22.50	
40		108	108	22.20	22.04	22.07	
40		216	0	22.15	22.19	22.11	
40	DFT-s-OFDM 16QAM	1	1	22.13	22.49	22.26	23
40	DFT-s-OFDM 64QAM	1	1	21.44	21.63	21.67	22
40	DFT-s-OFDM 256QAM	1	1	20.16	20.11	20.47	21
40	CP-OFDM QPSK	1	1	21.47	21.48	21.69	22.5
40	CP-OFDM 16QAM	1	1	21.27	21.23	21.49	22
40	CP-OFDM 64QAM	1	1	20.74	20.76	20.98	21.5
40	CP-OFDM 256QAM	1	1	20.71	20.91	20.87	21.5
Channel				345000	349000	353000	Tune-up limit
Frequency (MHz)				1725	1745	1765	(dBm)
30	DFT-s-OFDM QPSK	1	1	22.80	22.96	22.67	24
Channel				344500	349000	353500	Tune-up limit
Frequency (MHz)				1722.5	1745	1767.5	(dBm)
25	DFT-s-OFDM QPSK	1	1	22.11	22.77	22.42	24
Channel				344000	349000	354000	Tune-up limit
Frequency (MHz)				1720	1745	1770	(dBm)
20	DFT-s-OFDM QPSK	1	1	22.59	23.01	22.55	24
Channel				343500	349000	354500	Tune-up limit
Frequency (MHz)				1717.5	1745	1772.5	(dBm)
15	DFT-s-OFDM QPSK	1	1	22.86	22.43	22.82	24
Channel				343000	349000	355000	Tune-up limit
Frequency (MHz)				1715	1745	1775	(dBm)
10	DFT-s-OFDM QPSK	1	1	22.60	22.55	22.80	24
Channel				342500	349000	355500	Tune-up limit
Frequency (MHz)				1712.5	1745	1777.5	(dBm)
5	DFT-s-OFDM QPSK	1	1	22.89	22.51	22.26	24

n71 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit
Channel				134600	136100	137600	(dBm)
Frequency (MHz)				673	680.5	688	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.12	22.40	22.78	23.5
20		1	53	22.66	22.65	22.84	
20		1	104	22.62	22.77	22.72	
20		50	1	21.92	22.10	22.25	23.5
20		50	25	22.44	22.62	22.63	
20		50	50	22.08	22.30	22.13	
20		100	0	22.00	22.18	22.17	
20	DFT-s-OFDM QPSK	1	1	22.58	22.87	22.83	23.5
20		1	53	22.91	22.95	22.92	
20		1	104	22.66	22.82	22.77	
20		50	1	22.06	22.17	22.33	23.5
20		50	25	22.70	22.76	22.71	
20		50	50	22.12	22.25	22.18	
20		100	0	22.10	22.22	22.24	
20	DFT-s-OFDM 16QAM	1	1	22.00	22.29	22.51	23
20	DFT-s-OFDM 64QAM	1	1	21.42	21.46	21.61	22
20	DFT-s-OFDM 256QAM	1	1	19.01	19.17	19.10	20
20	CP-OFDM QPSK	1	1	21.42	21.54	21.38	22
20	CP-OFDM 16QAM	1	1	21.23	21.36	21.38	22
20	CP-OFDM 64QAM	1	1	20.81	20.94	20.68	21.5
20	CP-OFDM 256QAM	1	1	17.33	17.55	17.30	18
Channel				134100	136100	138100	Tune-up limit
Frequency (MHz)				670.5	680.5	690.5	
15	DFT-s-OFDM QPSK	1	1	21.96	22.48	22.19	23.5
Channel				133600	136100	138600	Tune-up limit
Frequency (MHz)				668	680.5	693	
10	DFT-s-OFDM QPSK	1	1	22.05	22.09	22.50	23.5
Channel				133100	136100	139100	Tune-up limit
Frequency (MHz)				665.5	680.5	695.5	
5	DFT-s-OFDM QPSK	1	1	22.16	22.13	22.20	23.5

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			27
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			26.00			27
100		1	136			25.46			
100		1	271			24.74			
100		135	1			25.13			
100	DFT-s-OFDM QPSK	135	67			25.33			26
100		135	136			24.17			
100		270	0			24.80			
100		1	1			26.19			
100	DFT-s-OFDM 16QAM	1	1			25.56			27
100		1	136			25.03			
100		1	271			24.77			
100		135	1			25.54			
100	DFT-s-OFDM 64QAM	135	67			23.70			26
100		135	136			25.37			
100		270	0			24.89			
100		1	1			24.08			
100	DFT-s-OFDM 256QAM	1	1			22.19			23.5
100	CP-OFDM QPSK	1	1			24.78			20.5
100	CP-OFDM 16QAM	1	1			24.17			25.5
100	CP-OFDM 64QAM	1	1			22.67			24.5
100	CP-OFDM 256QAM	1	1			19.90			23
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	26.04	26.05	26.09	26.08	25.99	27
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	26.15	26.10	26.07	25.97	25.93	27
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	26.08	26.05	25.96	25.87	25.65	27
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	26.05	26.05	25.84	25.70	25.51	27
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	26.10	26.05	25.78	25.58	25.38	27
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	26.17	25.92	25.71	25.40	25.06	27
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	24.84	25.75	24.26	24.68	24.63	27
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	24.91	25.34	25.04	24.63	24.32	27
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	25.97	25.40	25.12	24.54	24.55	27

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	27.5
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	26.27	26.33	26.55	26.52	26.26	27.5
100		1	136	25.23	24.96	25.35	25.19	24.93	
100		1	271	25.10	26.78	25.07	25.16	25.97	
100		135	1	24.78	24.38	24.25	24.32	24.27	26.5
100		135	67	25.76	25.71	25.77	25.82	25.83	
100		135	136	24.37	25.80	24.34	24.30	24.88	
100		270	0	24.50	25.09	24.44	24.50	24.46	
100	DFT-s-OFDM QPSK	1	1	26.74	26.71	26.80	26.79	26.73	27.5
100		1	136	25.33	25.12	25.35	25.18	25.01	
100		1	271	26.22	26.25	26.29	26.11	26.06	
100		135	1	24.46	23.98	23.76	24.01	24.00	26.5
100		135	67	25.71	25.73	25.76	25.72	25.75	
100		135	136	25.11	25.38	23.91	24.02	24.54	
100		270	0	25.15	25.26	25.49	25.41	25.26	
100	DFT-s-OFDM 16QAM	1	1	24.07	23.92	22.40	24.02	23.90	25
100	DFT-s-OFDM 64QAM	1	1	23.32	23.16	21.66	23.30	23.20	24
100	DFT-s-OFDM 256QAM	1	1	21.45	21.16	19.80	21.35	21.16	22
100	CP-OFDM QPSK	1	1	24.08	23.75	22.07	23.95	23.84	24.5
100	CP-OFDM 16QAM	1	1	23.51	23.23	21.71	23.32	23.11	24
100	CP-OFDM 64QAM	1	1	22.20	21.91	20.33	22.09	21.86	23
100	CP-OFDM 256QAM	1	1	19.08	19.96	19.13	19.52	19.79	20.5
Channel				649666	652834	656000	659166	662332	27.5
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	25.13	25.17	23.57	25.11	24.96	27.5
Channel				649334	652668	656000	659332	662666	27.5
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	25.17	25.16	25.17	25.16	25.02	27.5
Channel				649000	652500	656000	659500	663000	27.5
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	25.16	25.14	25.20	25.08	24.98	27.5
Channel				648668	652334	656000	659666	663332	27.5
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	25.14	25.04	25.12	24.92	24.81	27.5
Channel				648334	652168	656000	659832	663666	27.5
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	25.19	25.09	25.02	25.01	25.08	27.5
Channel				648000	652000	656000	660000	664000	27.5
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	25.18	25.05	25.17	25.13	25.31	27.5
Channel				647334	651668	656000	660332	664666	27.5
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	25.20	25.02	25.22	24.91	25.61	27.5
Channel				647168	651584	656000	660416	664832	27.5
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	25.21	25.15	25.27	24.83	25.72	27.5
Channel				647000	651500	656000	660500	665000	27.5
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	25.17	24.94	25.35	25.05	25.92	27.5

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			24
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			23.13			24
100		1	136			22.75			
100		1	271			22.44			
100		135	1			22.40			23
100		135	67			22.01			
100		135	136			21.39			
100	DFT-s-OFDM QPSK	270	0			22.05			24
100		1	1			23.26			
100		1	136			22.35			
100		1	271			21.76			23
100		135	1			22.42			
100		135	67			22.27			
100	DFT-s-OFDM 16QAM	135	136			21.72			23
100		270	0			22.25			
100		1	1			22.71			
100	DFT-s-OFDM 64QAM	1	1			23.03			24
100	DFT-s-OFDM 256QAM	1	1			21.87			22.5
100	CP-OFDM QPSK	1	1			22.95			23
100	CP-OFDM 16QAM	1	1			23.06			23.5
100	CP-OFDM 64QAM	1	1			22.16			23
100	CP-OFDM 256QAM	1	1			19.87			20.5
Channel				633000	633168	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	22.85	22.95	22.92	22.80	22.71	24
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	23.04	22.85	22.96	22.77	22.66	24
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	23.09	22.99	22.92	22.81	22.63	24
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	23.13	23.03	22.85	22.61	22.65	24
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	23.04	22.97	22.61	22.37	22.40	24
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	23.05	22.80	22.49	22.25	21.94	24
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	23.13	22.83	22.54	21.94	21.50	24
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	23.14	22.88	22.45	22.00	21.55	24
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	23.18	22.85	22.49	21.75	21.57	24

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	24
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	22.15	22.16	22.38	22.25	22.39	24
100		1	136	22.06	22.05	22.27	22.12	22.27	
100		1	271	22.00	23.58	22.20	22.21	23.20	
100		135	1	22.27	21.90	21.80	21.89	22.20	
100		135	67	22.03	22.42	22.17	22.02	22.21	23
100		135	136	21.80	23.13	21.82	21.93	22.70	
100		270	0	22.04	22.55	22.09	22.20	22.35	
100	DFT-s-OFDM QPSK	1	1	23.54	23.59	23.63	23.58	23.57	24
100		1	136	22.21	22.14	22.29	22.29	22.44	
100		1	271	22.06	23.22	22.94	23.05	23.29	
100		135	1	22.45	22.42	22.48	22.44	22.43	
100		135	67	22.16	22.41	22.21	22.23	22.42	23
100		135	136	21.95	22.28	21.85	22.19	22.28	
100		270	0	22.14	22.25	22.37	22.34	22.36	
100	DFT-s-OFDM 16QAM	1	1	22.21	21.97	20.56	22.23	22.22	23
100	DFT-s-OFDM 64QAM	1	1	22.46	22.30	20.81	22.70	22.46	23
100	DFT-s-OFDM 256QAM	1	1	21.30	21.18	19.83	21.68	21.50	22.5
100	CP-OFDM QPSK	1	1	22.56	22.33	20.82	22.65	22.66	23
100	CP-OFDM 16QAM	1	1	22.45	22.10	20.71	22.50	22.48	23
100	CP-OFDM 64QAM	1	1	21.51	21.44	19.90	21.77	21.61	22
100	CP-OFDM 256QAM	1	1	18.92	19.75	18.97	20.56	20.26	21
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	22.12	22.17	20.70	22.09	22.07	24
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	22.19	22.07	22.02	22.04	21.91	24
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	22.15	22.10	22.00	21.77	21.85	24
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	22.08	22.00	21.92	21.75	21.83	24
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	22.27	22.07	22.03	21.97	22.06	24
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	22.28	21.88	21.92	22.02	22.23	24
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	22.10	21.94	22.12	21.88	22.68	24
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	22.27	21.94	22.19	21.95	22.69	24
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	22.16	22.04	22.21	21.98	22.99	24

n78(3450-3550MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			27
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			26.09			27
100		1	136			25.46			
100		1	271			24.71			
100		135	1			25.18			
100		135	67			25.39			26
100		135	136			24.19			
100		270	0			24.81			
100	DFT-s-OFDM QPSK	1	1			26.16			27
100		1	136			25.73			
100		1	271			25.09			
100		135	1			24.81			
100		135	67			25.58			26
100		135	136			23.96			
100		270	0			24.50			
100	DFT-s-OFDM 16QAM	1	1			24.94			25.5
100	DFT-s-OFDM 64QAM	1	1			24.10			25
100	DFT-s-OFDM 256QAM	1	1			22.03			23
100	CP-OFDM QPSK	1	1			24.54			25
100	CP-OFDM 16QAM	1	1			24.10			24.5
100	CP-OFDM 64QAM	1	1			22.77			23.5
100	CP-OFDM 256QAM	1	1			20.00			20.5
Channel				633000	633166	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	26.09	26.10	25.98	25.89	25.94	27
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	26.14	26.12	26.05	25.89	25.88	27
Channel				632334	632834	633334	633832	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	25.88	25.88	25.80	25.75	25.78	27
Channel				632000	632666	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	25.86	25.72	25.65	25.60	25.50	27
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	25.89	25.65	25.57	25.31	25.16	27
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	26.03	24.45	25.65	25.34	24.97	27
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	25.92	25.66	25.43	24.93	24.42	27
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	25.94	25.71	25.39	24.70	24.33	27
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	25.89	25.61	25.32	24.60	24.51	27

n78(3700-3800MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			27
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			26.08			27
100		1	136			25.90			
100		1	271			25.89			
100		135	1			25.72			
100		135	67			25.94			26
100		135	136			25.26			
100		270	0			25.43			
100	DFT-s-OFDM QPSK	1	1			26.15			27
100		1	136			26.02			
100		1	271			25.91			
100		135	1			25.28			
100		135	67			25.03			26
100		135	136			24.86			
100		270	0			25.00			
100	DFT-s-OFDM 16QAM	1	1			24.81			25.5
100	DFT-s-OFDM 64QAM	1	1			24.18			25
100	DFT-s-OFDM 256QAM	1	1			22.18			23
100	CP-OFDM QPSK	1	1			24.89			25.5
100	CP-OFDM 16QAM	1	1			24.18			25
100	CP-OFDM 64QAM	1	1			22.85			23.5
100	CP-OFDM 256QAM	1	1			19.91			20.5
Channel				649668	649834	650000	650166	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	25.51	25.50	25.70	25.60	25.57	27
Channel				649334	649666	650000	650334	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	25.57	25.73	25.64	25.80	25.73	27
Channel				649000	649500	650000	650500	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	25.59	25.73	25.74	25.77	25.84	27
Channel				648668	649334	650000	650666	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	25.56	25.65	25.65	25.72	25.52	27
Channel				648334	649166	650000	650834	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	25.58	25.71	25.76	25.58	25.48	27
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	25.46	25.62	25.74	25.57	25.46	27
Channel				647334	648666	650000	651334	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	25.60	25.74	25.54	25.43	25.43	27
Channel				647168	648584	650000	651416	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	25.56	25.75	25.56	25.31	25.34	27
Channel				647000	648500	650000	651500	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	25.54	25.82	25.62	25.43	25.40	27

n78(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			24
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			23.31			24
100		1	136			22.58			
100		1	271			22.23			
100		135	1			22.84			
100		135	67			22.53			23.5
100		135	136			21.87			
100		270	0			22.49			
100	DFT-s-OFDM QPSK	1	1			23.34			24
100		1	136			22.79			
100		1	271			22.26			
100		135	1			22.97			
100		135	67			22.78			23.5
100		135	136			22.23			
100		270	0			22.76			
100	DFT-s-OFDM 16QAM	1	1			22.89			23.5
100	DFT-s-OFDM 64QAM	1	1			23.31			24
100	DFT-s-OFDM 256QAM	1	1			22.19			23
100	CP-OFDM QPSK	1	1			23.33			24
100	CP-OFDM 16QAM	1	1			23.02			23.5
100	CP-OFDM 64QAM	1	1			22.32			23
100	CP-OFDM 256QAM	1	1			20.14			21
Channel				633000	633166	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	23.26	23.19	23.23	23.17	23.09	24
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	23.32	23.26	23.17	23.12	23.03	24
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	23.33	23.25	23.14	22.96	22.95	24
Channel				632000	632666	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	23.24	23.15	23.13	22.91	22.79	24
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	23.35	23.11	23.03	22.78	22.63	24
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	23.32	21.82	22.92	22.61	22.40	24
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	23.28	23.03	22.75	22.27	21.76	24
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	23.30	23.02	22.83	22.16	21.88	24
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	23.39	23.12	22.69	22.09	21.84	24

n78(3700-3800MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			22.77			23.5
100		1	136			22.59			
100		1	271			22.18			
100		135	1			22.39			23
100		135	67			22.09			
100		135	136			21.92			
100		270	0			22.10			
100	DFT-s-OFDM QPSK	1	1			22.85			23.5
100		1	136			22.26			
100		1	271			22.10			
100		135	1			22.51			23
100		135	67			22.23			
100		135	136			21.99			
100		270	0			22.29			
100	DFT-s-OFDM 16QAM	1	1			22.44			23
100	DFT-s-OFDM 64QAM	1	1			22.54			23
100	DFT-s-OFDM 256QAM	1	1			21.38			22
100	CP-OFDM QPSK	1	1			22.40			23
100	CP-OFDM 16QAM	1	1			22.50			23
100	CP-OFDM 64QAM	1	1			21.56			22
100	CP-OFDM 256QAM	1	1			19.06			20
Channel				649668	649834	650000	650166	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	22.30	22.23	22.39	22.27	22.36	23.5
Channel				649334	649666	650000	650334	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	22.29	22.39	22.33	22.45	22.40	23.5
Channel				649000	649500	650000	650500	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	22.29	22.34	22.38	22.42	22.38	23.5
Channel				648668	649334	650000	650666	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	22.24	22.29	22.46	22.39	22.29	23.5
Channel				648334	649166	650000	650834	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	22.35	22.47	22.43	22.22	22.12	23.5
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	22.27	22.42	22.51	22.23	22.04	23.5
Channel				647334	648666	650000	651334	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	22.23	22.52	22.38	22.06	22.00	23.5
Channel				647168	648584	650000	651416	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	22.36	22.40	22.31	22.12	22.09	23.5
Channel				647000	648500	650000	651500	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	22.25	22.59	22.26	22.12	22.07	23.5

CA_7C											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	UL Fre. (MHz)	SCC Channel	UL Fre. (MHz)	Modulation	PCC		SCC		Measured Power(dBm)	Tune-up limit(dBm)
						RB Size	RB Offset	RB Size	RB Offset		
20850	20850	2510	21048	2529.8	QPSK	1	0	0	0	22.68	23.50
21100	21001	2525.1	21199	2544.9	QPSK	1	0	0	0	22.72	23.50
21350	21152	2540.2	21350	2560	QPSK	1	0	0	0	22.75	23.50
20850	20850	2510	21048	2529.8	16QAM	1	0	0	0	22.18	23.50
21100	21001	2525.1	21199	2544.9	16QAM	1	0	0	0	22.45	23.50
21350	21152	2540.2	21350	2560	16QAM	1	0	0	0	22.41	23.50
20850	20850	2510	21048	2529.8	64QAM	1	0	0	0	21.82	22.50
21100	21001	2525.1	21199	2544.9	64QAM	1	0	0	0	21.76	22.50
21350	21152	2540.2	21350	2560	64QAM	1	0	0	0	21.58	22.50
20850	20850	2510	21048	2529.8	256QAM	1	0	0	0	18.79	19.50
21100	21001	2525.1	21199	2544.9	256QAM	1	0	0	0	18.93	19.50
21350	21152	2540.2	21350	2560	256QAM	1	0	0	0	18.83	19.50
20850	20850	2510	21048	2529.8	QPSK	50	0	0	0	21.66	22.50
21100	21001	2525.1	21199	2544.9	QPSK	50	0	0	0	21.93	22.50
21350	21152	2540.2	21350	2560	QPSK	50	0	0	0	21.83	22.50

2CC LTE Downlink												
Configure	CA Configuration	PCC					SCC				Power	
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/ RB/Offset)	Band	BW (MHz)	DL Channel	DL Fre. (MHz)	CA TX (dBm)	Rel.8 TX (dBm)
Intra-band & inter-band	CA_2A-4A	2	10	18900	1880	QPSK/1#0	4	10	20350	1750	22.67	24.5
	CA_2A-5A	2	10	18900	1880	QPSK/1#0	5	10	20600	844	22.65	24.5
	CA_2A-7A	2	10	18900	1880	QPSK/1#0	7	10	21100	2535	22.63	24.5
	CA_2A-28A	2	10	18900	1880	QPSK/1#0	28	10	27610	743	22.62	24.5
	CA_2A-38A	2	10	18900	1880	QPSK/1#0	38	10	38000	2595	22.67	24.5
	CA_2A-66A	2	10	18900	1880	QPSK/1#0	66	20	132422	1755	22.66	24.5
	CA_2C	2	20	18902	1880.2	QPSK/1#0	2	20	19100	1900	22.66	24.5
	CA_4A-5A	4	10	20175	1732.5	QPSK/1#0	5	10	20600	829	22.2	24
	CA_4A-7A	4	10	20175	1732.5	QPSK/1#0	7	10	21100	2535	22.14	24
	CA_4A-28A	4	10	20175	1732.5	QPSK/1#0	28	10	27610	743	22.08	24
	CA_5A-7A	5	10	20450	829	QPSK/1#0	7	10	21100	2535	22.76	25
	CA_5A-66A	5	10	20450	829	QPSK/1#0	66	20	132422	1755	23.94	25
	CA_7A-7A	7	20	20850	2510	QPSK/1#0	7	20	21350	2560	22.7	23.5
	CA_7A-28A	7	10	21100	2535	QPSK/1#0	28	10	27610	743	22.77	23.5
	CA_7A-66A	7	10	21100	2535	QPSK/1#0	66	20	132422	1755	22.79	23.5
	CA_7C	7	20	21152	2540.2	QPSK/1#0	7	20	21350	2560	22.71	23.5
	CA_28A-38A	28	10	27410	723	QPSK/1#0	38	10	38000	2595	23.16	24.5
	CA_40C	40	20	39352	2370.2	QPSK/1#0	40	20	39550	2390	22.97	24.5
	CA_66A-66A	66	20	132072	1720	QPSK/1#0	66	20	132572	1770	22.56	24.5

2.4GHz WLAN ANT 8

2.4GHz WLAN ANT 8	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11b 1Mbps	CH 1	2412	18.82	19.50	14.00	99.43
		CH 6	2437	18.03	19.00	14.00	99.32
		CH 11	2462	18.80	19.50	14.00	99.43
	802.11g 6Mbps	CH 1	2412	18.33	19.00	14.00	96.28
		CH 6	2437	17.65	18.50	14.00	96.28
		CH 11	2462	18.26	19.00	14.00	96.28
	802.11n-HT20 MCS0	CH 1	2412	18.67	19.50	14.00	95.79
		CH 6	2437	18.00	19.00	14.00	95.79
		CH 11	2462	18.58	19.50	14.00	95.63

5.2GHz WLAN ANT 8

5.2GHz WLAN ANT 8	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 36	5180	18.07	19.00	15.00	96.55
		CH 44	5220	18.21	19.00	15.00	96.55
		CH 48	5240	17.92	18.50	15.00	96.55
	802.11n-HT20 MCS0	CH 36	5180	18.35	19.00	15.00	95.16
		CH 44	5220	18.59	19.50	15.00	95.93
		CH 48	5240	18.39	19.00	15.00	95.93
	802.11n-HT40 MCS0	CH 38	5190	18.10	19.00	15.00	90.62
		CH 46	5230	18.28	19.00	15.00	92.19
		CH 36	5180	18.33	19.00	15.00	95.20
	802.11ac-VHT20 MCS0	CH 44	5220	18.55	19.50	15.00	95.97
		CH 48	5240	18.34	19.00	15.00	95.97
		CH 38	5190	17.91	18.50	15.00	92.31
	802.11ac-VHT40 MCS0	CH 46	5230	18.08	19.00	15.00	90.77
		CH 42	5210	18.69	19.00	15.00	85.71

5.3GHz WLAN ANT 8

5.3GHz WLAN ANT 8	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 52	5280	18.58	19.50	15.00	95.86
		CH 60	5300	18.06	19.00	15.00	95.86
		CH 64	5320	18.08	19.00	15.00	96.55
	802.11n-HT20 MCS0	CH 52	5280	19.01	19.50	15.00	95.93
		CH 60	5300	18.41	19.00	15.00	95.93
		CH 64	5320	18.41	19.00	15.00	95.93
	802.11n-HT40 MCS0	CH 54	5270	18.52	19.50	15.00	92.19
		CH 62	5310	18.50	19.50	15.00	92.19
		CH 52	5280	18.99	19.50	15.00	95.16
	802.11ac-VHT20 MCS0	CH 60	5300	18.38	19.00	15.00	95.20
		CH 64	5320	18.45	19.00	15.00	95.97
		CH 54	5270	18.26	19.00	15.00	92.31
	802.11ac-VHT40 MCS0	CH 62	5310	18.28	19.00	15.00	92.31
		CH 58	5290	18.41	19.00	15.00	82.86

5.5GHz WLAN ANT 8

5.5GHz WLAN ANT 8	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 100	5500	18.09	19.00	15.00	96.55
		CH 116	5580	18.16	19.00	15.00	96.55
		CH 140	5700	18.33	19.00	15.00	96.55
	802.11n-HT20 MCS0	CH 100	5500	18.42	19.00	15.00	95.16
		CH 116	5580	18.53	19.50	15.00	95.93
		CH 140	5700	18.65	19.50	15.00	95.93
	802.11n-HT40 MCS0	CH 102	5510	18.57	19.50	15.00	92.19
		CH 110	5550	18.68	19.50	15.00	92.19
		CH 134	5670	18.69	19.50	15.00	92.19
	802.11ac-VHT20 MCS0	CH 100	5500	18.48	19.00	15.00	95.97
		CH 116	5580	18.59	19.50	15.00	95.97
		CH 140	5700	18.73	19.50	15.00	95.97
	802.11ac-VHT40 MCS0	CH 102	5510	18.35	19.00	15.00	92.31
		CH 110	5550	18.44	19.00	15.00	90.77
		CH 134	5670	18.51	19.50	15.00	92.31
	802.11ac-VHT80 MCS0	CH 106	5530	18.90	19.50	15.00	85.71
		CH 122	5610	18.41	19.00	15.00	85.71
		CH 138	5690	18.73	19.50	15.00	85.71

5.8GHz WLAN ANT 8

5.8GHz WLAN ANT 8	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 149	5745	18.13	19.00	15.00	96.55
		CH 157	5785	18.55	19.50	15.00	95.86
		CH 165	5825	18.07	19.00	15.00	95.86
	802.11n-HT20 MCS0	CH 149	5745	18.45	19.00	15.00	95.93
		CH 157	5785	18.90	19.50	15.00	95.16
		CH 165	5825	18.43	19.00	15.00	95.93
	802.11n-HT40 MCS0	CH 151	5755	18.27	19.00	15.00	92.19
		CH 159	5795	18.56	19.50	15.00	92.19
		CH 149	5745	18.53	19.50	15.00	95.97
	802.11ac-VHT20 MCS0	CH 157	5785	18.93	19.50	15.00	95.20
		CH 165	5825	18.48	19.00	15.00	95.97
		CH 151	5755	18.34	19.00	15.00	92.31
	802.11ac-VHT40 MCS0	CH 159	5795	18.52	19.50	15.00	92.19
		CH 155	5775	18.99	19.50	15.00	85.71

Mode	Channel	Frequency (MHz)	Average power (dBm)			
			1Mbps	Duty Cycle %	2Mbps	Duty Cycle %
BR / EDR	CH 00	2402	7.19	77.60	5.00	77.78
	CH 39	2441	6.39	77.65	5.16	77.76
	CH 78	2480	6.64	77.65	5.77	77.71
Tune-up Limit			8		6.5	
Power Setting			9		9	

Mode	Channel	Frequency (MHz)	Average power (dBm)			
			1Mbps	Tune-up Limit	Duty Cycle %	2Mbps
LE	CH 00	2402	-0.51	0.00	31.91	-0.82
	CH 19	2440	-2.20	-1.50	31.91	-1.21
	CH 39	2480	-0.48	0.50	31.88	0.04
Power Setting			Default		Default	

Reduced Power Level 1

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		30.40	30.38	30.28	31.50	21.40	21.38	21.28	22.50
GPRS 1 Tx slot		30.38	30.28	30.31	31.50	21.38	21.28	21.31	22.50
GPRS 2 Tx slots		28.06	28.07	28.05	29.00	22.06	22.07	22.05	23.00
GPRS 3 Tx slots		26.17	26.17	26.25	27.00	21.91	21.91	21.99	22.74
GPRS 4 Tx slots		24.06	24.12	24.19	25.00	21.06	21.12	21.19	22.00
EDGE 1 Tx slot		23.07	23.13	23.21	24.00	14.07	14.13	14.21	15.00
EDGE 2 Tx slots		22.16	22.39	22.37	23.00	16.16	16.39	16.37	17.00
EDGE 3 Tx slots		20.89	20.99	20.92	21.50	16.63	16.73	16.66	17.24
EDGE 4 Tx slots		17.98	18.35	18.37	19.00	14.98	15.35	15.37	16.00
Mode			Max.	30.40			Max.	22.07	
Attenuator		Cable Loss : 0.6							
Date		10/15							

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		22.64	22.84	22.94	23.50	13.64	13.84	13.94	14.50
GPRS 1 Tx slot		22.66	22.79	22.93	23.50	13.66	13.79	13.93	14.50
GPRS 2 Tx slots		20.17	20.13	20.24	21.00	14.17	14.13	14.24	15.00
GPRS 3 Tx slots		18.56	18.66	18.59	19.50	14.30	14.40	14.33	15.24
GPRS 4 Tx slots		16.58	16.58	16.57	17.50	13.58	13.58	13.57	14.50
EDGE 1 Tx slot		18.35	18.45	17.98	19.00	9.35	9.45	8.98	10.00
EDGE 2 Tx slots		17.47	17.52	17.41	18.00	11.47	11.52	11.41	12.00
EDGE 3 Tx slots		16.01	16.05	15.91	16.50	11.75	11.79	11.65	12.24
EDGE 4 Tx slots		13.65	13.72	13.51	14.50	10.65	10.72	10.51	11.50
Mode			Max.	22.94			Max.	14.40	
Attenuator		Cable Loss : 0.8							
Date		10/15							

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	12.84	12.91	12.90	14.50	15.12	15.21	15.16	16.00	20.76	20.84	20.78	22.00
3GPP Rel 5	HSDPA Subtest-1	12.33	12.82	12.56	13.50	14.79	14.70	14.92	15.50	20.68	20.73	20.69	21.50
3GPP Rel 5	HSDPA Subtest-2	12.41	12.88	12.45	13.50	14.66	14.80	14.75	15.50	20.58	20.69	20.61	21.50
3GPP Rel 5	HSDPA Subtest-3	11.94	12.44	12.01	13.00	14.34	14.52	14.45	15.00	20.12	20.22	20.15	21.00
3GPP Rel 5	HSDPA Subtest-4	12.01	12.49	12.06	13.00	14.25	14.49	14.36	15.00	20.16	20.26	20.19	21.00
3GPP Rel 6	HSUPA Subtest-1	12.24	12.55	12.14	13.50	13.92	14.66	14.37	15.50	19.56	19.78	19.36	20.50
3GPP Rel 6	HSUPA Subtest-2	12.17	12.49	12.06	13.50	13.90	14.49	14.43	15.50	19.52	19.68	19.27	20.50
3GPP Rel 6	HSUPA Subtest-3	12.21	12.55	12.13	13.50	13.90	14.52	14.30	15.50	19.51	19.68	19.25	20.50
3GPP Rel 6	HSUPA Subtest-4	12.14	12.46	12.02	13.50	13.80	14.37	14.43	15.00	19.48	19.59	19.20	20.50
3GPP Rel 6	HSUPA Subtest-5	12.19	12.54	12.10	13.50	13.85	14.37	14.32	15.00	19.49	19.55	19.25	20.50
Attenuator			Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6	
Mode			Max.	12.91			Max.	15.21			Max.	20.84	
Date		10/15				10/15				10/15			

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	12.81	12.85	12.82	14.5
20	QPSK	1	49	12.76	12.78	12.76	
20	QPSK	1	99	12.68	12.74	12.69	
20	QPSK	50	0	11.62	11.67	11.64	13.5
20	QPSK	50	24	11.57	11.62	11.51	
20	QPSK	50	50	11.61	11.64	11.56	
20	QPSK	100	0	11.58	11.63	11.51	13.5
20	16QAM	1	0	11.69	11.72	11.63	
20	16QAM	1	49	11.61	11.70	11.62	
20	16QAM	1	99	11.62	11.68	11.64	12.5
20	16QAM	50	0	10.71	10.78	10.69	
20	16QAM	50	24	10.69	10.71	10.64	
20	16QAM	50	50	10.71	10.75	10.70	12.5
20	16QAM	100	0	10.62	10.69	10.64	
20	64QAM	1	0	11.32	11.33	11.24	
20	64QAM	1	49	11.21	11.32	11.17	12.5
20	64QAM	1	99	11.11	11.27	11.28	
20	64QAM	50	0	10.57	10.65	10.56	11.5
20	64QAM	50	24	10.56	10.58	10.62	
20	64QAM	50	50	10.64	10.61	10.58	
20	64QAM	100	0	10.51	10.56	10.55	9.5
20	256QAM	1	0	8.22	8.50	8.35	
20	256QAM	1	49	8.44	8.47	8.36	
20	256QAM	1	99	8.50	8.44	8.24	9.5
20	256QAM	50	0	8.21	8.25	8.46	
20	256QAM	50	24	8.22	8.44	8.31	
20	256QAM	50	50	8.36	8.51	8.38	9.5
20	256QAM	100	0	8.57	8.50	8.27	
Channel				1867.5	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	12.71	12.77	12.68	14.5
15	QPSK	1	37	12.63	12.64	12.64	
15	QPSK	1	74	12.59	12.62	12.55	
15	QPSK	36	0	11.65	11.65	11.50	13.5
15	QPSK	36	20	11.56	11.52	11.61	
15	QPSK	36	39	11.56	11.61	11.55	
15	QPSK	75	0	11.58	11.60	11.60	13.5
15	16QAM	1	0	11.68	11.58	11.52	
15	16QAM	1	37	11.57	11.59	11.63	
15	16QAM	1	74	11.62	11.63	11.64	12.5
15	16QAM	36	0	10.65	10.67	10.68	
15	16QAM	36	20	10.59	10.73	10.62	
15	16QAM	36	39	10.54	10.57	10.62	12.5
15	16QAM	75	0	10.57	10.67	10.58	
15	64QAM	1	0	11.22	11.25	11.11	
15	64QAM	1	37	11.09	11.32	11.01	12.5
15	64QAM	1	74	11.11	11.13	11.18	
15	64QAM	36	0	10.63	10.59	10.48	11.5
15	64QAM	36	20	10.61	10.56	10.51	
15	64QAM	36	39	10.61	10.52	10.56	
15	64QAM	75	0	10.47	10.54	10.53	9.5
15	256QAM	1	0	8.12	8.42	8.28	
15	256QAM	1	37	8.47	8.47	8.25	
15	256QAM	1	74	8.54	8.49	8.17	9.5
15	256QAM	36	0	8.13	8.15	8.28	
15	256QAM	36	20	8.14	8.36	8.34	
15	256QAM	36	39	8.23	8.36	8.22	9.5
15	256QAM	75	0	8.55	8.41	8.13	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	12.77	12.79	12.74	14.5
10	QPSK	1	25	12.68	12.66	12.73	
10	QPSK	1	49	12.59	12.60	12.57	
10	QPSK	25	0	11.52	11.60	11.57	13.5
10	QPSK	25	12	11.55	11.53	11.52	
10	QPSK	25	25	11.63	11.62	11.53	
10	QPSK	50	0	11.52	11.65	11.60	13.5
10	16QAM	1	0	11.53	11.54	11.54	
10	16QAM	1	25	11.66	11.53	11.65	
10	16QAM	1	49	11.64	11.55	11.61	12.5
10	16QAM	25	0	10.65	10.74	10.69	
10	16QAM	25	12	10.70	10.70	10.64	
10	16QAM	25	25	10.61	10.70	10.64	12.5
10	16QAM	50	0	10.60	10.74	10.53	
10	64QAM	1	0	11.23	11.19	11.11	
10	64QAM	1	25	11.10	11.32	11.13	12.5
10	64QAM	1	49	10.95	11.27	11.27	
10	64QAM	25	0	10.51	10.62	10.38	11.5
10	64QAM	25	12	10.58	10.43	10.59	
10	64QAM	25	25	10.49	10.56	10.52	
10	64QAM	50	0	10.44	10.50	10.43	9.5
10	256QAM	1	0	8.08	8.38	8.18	
10	256QAM	1	25	8.26	8.46	8.33	
10	256QAM	1	49	8.52	8.42	8.10	9.5
10	256QAM	25	0	8.18	8.14	8.33	
10	256QAM	25	12	8.28	8.43	8.25	
10	256QAM	25	25	8.38	8.33	8.40	9.5
10	256QAM	50	0	8.39	8.35	8.32	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	12.68	12.82	12.70	14.5
5	QPSK	1	12	12.68	12.72	12.67	
5	QPSK	1	24	12.56	12.66	12.57	
5	QPSK	12	0	11.62	11.59	11.56	13.5
5	QPSK	12	7	11.65	11.62	11.52	
5	QPSK	12	13	11.62	11.60	11.64	
5	QPSK	25	0	11.51	11.56	11.52	13.5
5	16QAM	1	0	11.67	11.73	11.65	
5	16QAM	1	12	11.60	11.55	11.56	
5	16QAM	1	24	11.51	11.70	11.59	12.5
5	16QAM	12	0	10.57	10.83	10.69	
5	16QAM	12	7	10.63	10.66	10.54	
5	16QAM	12	13	10.60	10.80	10.61	12.5
5	16QAM	25	0	10.66	10.65	10.67	
5	64QAM	1	0	11.26	11.32	11.14	
5	64QAM	1	12	11.08	11.26	11.05	12.5

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	12.72	12.81	12.75	14.5
20	QPSK	1	49	12.66	12.76	12.68	
20	QPSK	1	99	12.58	12.69	12.64	
20	QPSK	50	0	11.87	11.99	11.95	13.5
20	QPSK	50	24	11.82	11.86	11.87	
20	QPSK	50	50	11.86	11.91	11.89	
20	QPSK	100	0	11.83	11.88	11.85	13.5
20	16QAM	1	0	11.94	11.98	11.93	
20	16QAM	1	49	11.86	11.97	11.95	
20	16QAM	1	99	11.87	11.99	11.93	12.5
20	16QAM	50	0	10.91	10.99	10.98	
20	16QAM	50	24	10.89	10.94	10.91	
20	16QAM	50	50	10.91	11.00	10.95	12.5
20	16QAM	100	0	10.82	10.94	10.89	
20	64QAM	1	0	11.42	11.44	11.43	
20	64QAM	1	49	11.31	11.37	11.42	12.5
20	64QAM	1	99	11.21	11.48	11.37	
20	64QAM	50	0	10.77	10.96	10.95	11.5
20	64QAM	50	24	10.76	10.92	10.78	
20	64QAM	50	50	10.84	10.88	10.81	
20	64QAM	100	0	10.71	10.85	10.76	9.5
20	256QAM	1	0	8.65	8.68	8.69	
20	256QAM	1	49	8.55	8.73	8.59	
20	256QAM	1	99	8.55	8.67	8.65	9.5
20	256QAM	50	0	8.51	8.55	8.44	
20	256QAM	50	24	8.73	8.71	8.78	
20	256QAM	50	50	8.62	8.82	8.50	9.5
20	256QAM	100	0	8.52	8.77	8.71	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	12.64	12.71	12.68	14.5
15	QPSK	1	37	12.62	12.65	12.62	
15	QPSK	1	74	12.55	12.61	12.54	
15	QPSK	36	0	11.77	11.90	11.90	13.5
15	QPSK	36	20	11.82	11.83	11.81	
15	QPSK	36	39	11.85	11.90	11.87	
15	QPSK	75	0	11.80	11.79	11.74	13.5
15	16QAM	1	0	11.85	11.92	11.93	
15	16QAM	1	37	11.69	11.94	11.97	
15	16QAM	1	74	11.80	11.81	11.90	12.5
15	16QAM	36	0	10.87	10.87	10.99	
15	16QAM	36	20	10.74	10.97	10.84	
15	16QAM	36	39	10.75	11.01	10.77	12.5
15	16QAM	75	0	10.76	10.85	10.81	
15	64QAM	1	0	11.30	11.27	11.32	
15	64QAM	1	37	11.34	11.21	11.42	12.5
15	64QAM	1	74	11.10	11.40	11.24	
15	64QAM	36	0	10.67	10.78	10.77	11.5
15	64QAM	36	20	10.78	10.92	10.71	
15	64QAM	36	39	10.90	10.94	10.68	
15	64QAM	75	0	10.73	10.75	10.60	9.5
15	256QAM	1	0	8.56	8.61	8.63	
15	256QAM	1	37	8.40	8.64	8.55	
15	256QAM	1	74	8.46	8.56	8.64	9.5
15	256QAM	36	0	8.66	8.51	8.50	
15	256QAM	36	20	8.64	8.73	8.83	
15	256QAM	36	39	8.54	8.88	8.58	9.5
15	256QAM	75	0	8.38	8.73	8.71	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	12.63	12.67	12.71	14.5
10	QPSK	1	25	12.55	12.64	12.59	
10	QPSK	1	49	12.56	12.63	12.56	
10	QPSK	25	0	11.80	11.91	11.98	13.5
10	QPSK	25	12	11.84	11.89	11.74	
10	QPSK	25	25	11.88	11.85	11.87	
10	QPSK	50	0	11.72	11.87	11.78	13.5
10	16QAM	1	0	11.99	11.84	11.84	
10	16QAM	1	25	11.68	11.89	11.96	
10	16QAM	1	49	11.86	11.97	11.81	12.5
10	16QAM	25	0	10.78	10.84	10.82	
10	16QAM	25	12	10.94	10.79	10.79	
10	16QAM	25	25	10.83	10.87	10.97	12.5
10	16QAM	50	0	10.74	10.86	10.84	
10	64QAM	1	0	11.36	11.48	11.26	
10	64QAM	1	25	11.23	11.37	11.39	12.5
10	64QAM	1	49	11.21	11.31	11.21	
10	64QAM	25	0	10.59	10.79	10.97	11.5
10	64QAM	25	12	10.81	10.79	10.70	
10	64QAM	25	25	10.80	10.75	10.72	
10	64QAM	50	0	10.70	10.74	10.63	9.5
10	256QAM	1	0	8.52	8.57	8.68	
10	256QAM	1	25	8.37	8.72	8.50	
10	256QAM	1	49	8.46	8.66	8.60	9.5
10	256QAM	25	0	8.51	8.59	8.50	
10	256QAM	25	12	8.63	8.71	8.64	
10	256QAM	25	25	8.54	8.66	8.38	9.5
10	256QAM	50	0	8.35	8.74	8.59	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	12.63	12.73	12.69	14.5
5	QPSK	1	12	12.52	12.73	12.65	
5	QPSK	1	24	12.51	12.61	12.53	
5	QPSK	12	0	11.79	11.90	11.87	13.5
5	QPSK	12	7	11.69	11.87	11.89	
5	QPSK	12	13	11.72	11.83	11.80	
5	QPSK	25	0	11.82	11.86	11.73	13.5
5	16QAM	1	0	11.97	11.96	11.93	
5	16QAM	1	12	11.86	11.99	11.80	
5	16QAM	1	24	11.79	11.85	11.94	12.5
5	16QAM	12	0	10.95	10.99	10.87	
5	16QAM	12	7	10.72	10.82	10.94	
5	16QAM	12	13	10.86	11.03	10.86	12.5
5	16QAM	25	0	10.70	10.79	10.72	
5	64QAM	1	0	11.25	11.42	11.48	12.5
5	64QAM	1	12	11.17	11.31	11.43	

5	64QAM	1	24	11.05	11.21	11.29	11.5
5	64QAM	12	0	10.62	10.60	10.44	
5	64QAM	12	7	10.46	10.62	10.50	
5	64QAM	12	13	10.56	10.53	10.45	
5	64QAM	25	0	10.56	10.54	10.53	9.5
5	256QAM	1	0	8.14	8.55	8.18	
5	256QAM	1	12	8.50	8.32	8.34	
5	256QAM	1	24	8.47	8.42	8.14	
5	256QAM	12	0	8.07	8.13	8.37	9.5
5	256QAM	12	7	8.16	8.44	8.27	
5	256QAM	12	13	8.34	8.47	8.42	
5	256QAM	25	0	8.53	8.51	8.27	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1906.5	
3	QPSK	1	0	12.67	12.72	12.77	14.5
3	QPSK	1	8	12.71	12.64	12.72	
3	QPSK	1	14	12.64	12.66	12.63	
3	QPSK	8	0	11.60	11.53	11.54	
3	QPSK	8	4	11.50	11.62	11.57	13.5
3	QPSK	8	7	11.50	11.56	11.51	
3	QPSK	15	0	11.60	11.65	11.64	
3	16QAM	1	0	11.68	11.58	11.68	
3	16QAM	1	8	11.67	11.76	11.51	13.5
3	16QAM	1	14	11.60	11.67	11.64	
3	16QAM	8	0	10.54	10.84	10.70	
3	16QAM	8	4	10.62	10.57	10.62	
3	16QAM	8	7	10.77	10.64	10.73	12.5
3	16QAM	15	0	10.57	10.65	10.50	
3	64QAM	1	0	11.37	11.15	11.18	
3	64QAM	1	8	11.07	11.34	11.08	
3	64QAM	1	14	11.04	11.13	11.13	11.5
3	64QAM	8	0	10.46	10.51	10.40	
3	64QAM	8	4	10.45	10.60	10.50	
3	64QAM	8	7	10.60	10.51	10.53	
3	64QAM	15	0	10.49	10.40	10.37	9.5
3	256QAM	1	0	8.23	8.39	8.24	
3	256QAM	1	8	8.47	8.31	8.30	
3	256QAM	1	14	8.33	8.32	8.10	
3	256QAM	8	0	8.19	8.08	8.49	9.5
3	256QAM	8	4	8.23	8.29	8.23	
3	256QAM	8	7	8.24	8.52	8.23	
3	256QAM	15	0	8.49	8.49	8.31	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	12.78	12.78	12.76	14.5
1.4	QPSK	1	3	12.70	12.74	12.65	
1.4	QPSK	1	5	12.55	12.67	12.60	
1.4	QPSK	3	0	12.61	12.50	12.53	
1.4	QPSK	3	1	12.62	12.64	12.58	13.5
1.4	QPSK	3	3	12.56	12.51	12.62	
1.4	QPSK	6	0	11.58	11.52	11.61	
1.4	16QAM	1	0	11.52	11.71	11.64	
1.4	16QAM	1	3	11.63	11.71	11.65	13.5
1.4	16QAM	1	5	11.55	11.65	11.51	
1.4	16QAM	3	0	11.66	11.64	11.65	
1.4	16QAM	3	1	11.59	11.62	11.58	
1.4	16QAM	3	3	11.60	11.60	11.52	12.5
1.4	16QAM	6	0	10.52	10.53	10.68	
1.4	64QAM	1	0	11.38	11.22	11.15	
1.4	64QAM	1	3	11.16	11.27	11.10	
1.4	64QAM	1	5	11.11	11.16	11.18	12.5
1.4	64QAM	3	0	10.55	10.56	10.53	
1.4	64QAM	3	1	10.62	10.62	10.67	
1.4	64QAM	3	3	10.61	10.56	10.57	
1.4	64QAM	6	0	10.50	10.41	10.39	11.5
1.4	256QAM	1	0	8.19	8.46	8.20	
1.4	256QAM	1	3	8.41	8.53	8.28	
1.4	256QAM	1	5	8.44	8.30	8.14	
1.4	256QAM	3	0	8.27	8.07	8.29	9.5
1.4	256QAM	3	1	8.12	8.40	8.29	
1.4	256QAM	3	3	8.19	8.34	8.31	
1.4	256QAM	6	0	8.48	8.38	8.15	

5	64QAM	1	24	11.24	11.42	11.42	11.5
5	64QAM	12	0	10.60	10.80	10.79	
5	64QAM	12	7	10.72	10.97	10.70	
5	64QAM	12	13	10.84	10.74	10.68	
5	64QAM	25	0	10.76	10.85	10.73	9.5
5	256QAM	1	0	8.54	8.55	8.65	
5	256QAM	1	12	8.47	8.67	8.58	
5	256QAM	1	24	8.53	8.66	8.61	
5	256QAM	12	0	8.41	8.38	8.35	9.5
5	256QAM	12	7	8.64	8.59	8.80	
5	256QAM	12	13	8.58	8.79	8.47	
5	256QAM	25	0	8.34	8.83	8.77	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	12.64	12.74	12.62	14.5
3	QPSK	1	8	12.55	12.69	12.59	
3	QPSK	1	14	12.50	12.65	12.56	
3	QPSK	8	0	11.74	11.88	11.86	
3	QPSK	8	4	11.70	11.89	11.82	13.5
3	QPSK	8	7	11.89	11.67	11.75	
3	QPSK	15	0	11.73	11.83	11.81	
3	16QAM	1	0	11.93	11.96	11.98	
3	16QAM	1	8	11.70	11.82	11.78	13.5
3	16QAM	1	14	11.74	11.87	11.80	
3	16QAM	8	0	10.93	10.90	10.83	
3	16QAM	8	4	10.81	10.77	10.82	
3	16QAM	8	7	10.73	10.96	10.85	12.5
3	16QAM	15	0	10.73	10.78	10.76	
3	64QAM	1	0	11.44	11.47	11.41	
3	64QAM	1	8	11.37	11.30	11.32	
3	64QAM	1	14	11.12	11.40	11.22	12.5
3	64QAM	8	0	10.74	10.88	10.80	
3	64QAM	8	4	10.59	10.88	10.60	
3	64QAM	8	7	10.80	10.90	10.85	
3	64QAM	15	0	10.63	10.76	10.69	9.5
3	256QAM	1	0	8.48	8.70	8.56	
3	256QAM	1	8	8.55	8.79	8.53	
3	256QAM	1	14	8.52	8.49	8.65	
3	256QAM	8	0	8.34	8.43	8.42	9.5
3	256QAM	8	4	8.69	8.54	8.75	
3	256QAM	8	7	8.48	8.76	8.53	
3	256QAM	15	0	8.41	8.65	8.74	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	12.62	12.69	12.68	14.5
1.4	QPSK	1	3	12.59	12.65	12.61	
1.4	QPSK	1	5	12.55	12.65	12.57	
1.4	QPSK	3	0	12.68	12.71	12.64	
1.4	QPSK	3	1	12.58	12.59	12.66	13.5
1.4	QPSK	3	3	12.61	12.65	12.66	
1.4	QPSK	6	0	11.85	11.88	11.75	
1.4	16QAM	1	0	11.82	12.03	11.97	
1.4	16QAM	1	3	11.88	11.87	11.84	13.5
1.4	16QAM	1	5	11.70	11.85	11.77	
1.4	16QAM	3	0	11.88	11.76	11.83	
1.4	16QAM	3	1	11.67	11.91	11.91	
1.4	16QAM	3	3	11.79	11.83	11.91	12.5
1.4	16QAM	6	0	10.79	10.93	10.83	
1.4	64QAM	1	0	11.44	11.37	11.36	
1.4	64QAM	1	3	11.27	11.28	11.36	
1.4	64QAM	1	5	11.07	11.54	11.24	12.5
1.4	64QAM	3	0	10.64	10.82	10.84	
1.4	64QAM	3	1	10.64	10.82	10.80	
1.4	64QAM	3	3	10.72	10.75	10.76	
1.4	64QAM	6	0	10.53	10.89	10.67	11.5
1.4	256QAM	1	0	8.47	8.68	8.71	
1.4	256QAM	1	3	8.54	8.78	8.51	
1.4	256QAM	1	5	8.45	8.49	8.56	
1.4	256QAM	3	0	8.51	8.46	8.40	9.5
1.4	256QAM	3	1	8.74	8.65	8.61	
1.4	256QAM	3	3	8.57	8.64	8.48	
1.4	256QAM	6	0	8.48	8.79	8.58	

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	21.54	21.55	21.44	22
10	QPSK	1	25	21.35	21.48	21.45	
10	QPSK	1	49	21.27	21.40	21.38	
10	QPSK	25	0	20.61	20.78	20.73	21
10	QPSK	25	12	20.56	20.61	20.60	
10	QPSK	25	25	20.60	20.63	20.65	
10	QPSK	50	0	20.57	20.77	20.62	21
10	16QAM	1	0	20.68	20.73	20.72	
10	16QAM	1	25	20.60	20.69	20.71	
10	16QAM	1	49	20.61	20.67	20.73	20
10	16QAM	25	0	20.05	20.13	20.12	
10	16QAM	25	12	20.03	20.05	20.08	
10	16QAM	25	25	20.05	20.09	20.14	21
10	16QAM	50	0	19.96	20.00	20.08	
10	64QAM	1	0	20.03	20.04	20.05	
10	64QAM	1	25	19.92	20.03	19.98	20
10	64QAM	1	49	19.82	19.98	20.09	
10	64QAM	25	0	19.91	20.09	20.10	
10	64QAM	25	12	19.90	19.92	20.06	18
10	64QAM	25	25	19.98	19.95	20.02	
10	64QAM	50	0	19.85	19.90	19.99	
10	256QAM	1	0	17.61	17.79	17.69	18
10	256QAM	1	25	17.52	17.61	17.83	
10	256QAM	1	49	17.55	17.70	17.67	
10	256QAM	25	0	17.61	17.56	17.67	18
10	256QAM	25	12	17.57	17.77	17.66	
10	256QAM	25	25	17.47	17.60	17.52	
10	256QAM	50	0	17.55	17.64	17.66	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	21.48	21.48	21.31	22
5	QPSK	1	12	21.22	21.38	21.39	
5	QPSK	1	24	21.15	21.28	21.26	
5	QPSK	12	0	20.48	20.65	20.74	21
5	QPSK	12	7	20.57	20.49	20.48	
5	QPSK	12	13	20.54	20.57	20.64	
5	QPSK	25	0	20.53	20.72	20.62	21
5	16QAM	1	0	20.72	20.68	20.68	
5	16QAM	1	12	20.64	20.62	20.62	
5	16QAM	1	24	20.59	20.72	20.64	20
5	16QAM	12	0	19.98	20.14	20.14	
5	16QAM	12	7	19.85	19.91	19.97	
5	16QAM	12	13	20.02	19.98	19.96	21
5	16QAM	25	0	19.96	19.91	20.14	
5	64QAM	1	0	19.98	19.93	20.04	
5	64QAM	1	12	19.92	19.91	19.92	20
5	64QAM	1	24	19.68	19.92	20.12	
5	64QAM	12	0	19.74	20.12	19.97	
5	64QAM	12	7	19.96	19.87	20.06	18
5	64QAM	12	13	19.81	20.00	19.93	
5	64QAM	25	0	19.72	19.75	19.82	
5	256QAM	1	0	17.55	17.66	17.55	18
5	256QAM	1	12	17.46	17.63	17.89	
5	256QAM	1	24	17.51	17.76	17.59	
5	256QAM	12	0	17.59	17.61	17.49	18
5	256QAM	12	7	17.46	17.62	17.56	
5	256QAM	12	13	17.44	17.48	17.54	
5	256QAM	25	0	17.61	17.46	17.68	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	21.46	21.41	21.31	22
3	QPSK	1	8	21.22	21.44	21.33	
3	QPSK	1	14	21.18	21.29	21.24	
3	QPSK	8	0	20.47	20.68	20.76	21
3	QPSK	8	4	20.50	20.53	20.46	
3	QPSK	8	7	20.58	20.49	20.52	
3	QPSK	15	0	20.46	20.68	20.62	21
3	16QAM	1	0	20.72	20.74	20.59	
3	16QAM	1	8	20.53	20.74	20.67	
3	16QAM	1	14	20.59	20.73	20.60	20
3	16QAM	8	0	19.98	20.04	20.16	
3	16QAM	8	4	19.98	19.99	19.99	
3	16QAM	8	7	20.11	19.97	20.10	21
3	16QAM	15	0	20.00	19.97	20.14	
3	64QAM	1	0	20.08	19.96	19.88	
3	64QAM	1	8	19.78	19.93	19.87	20
3	64QAM	1	14	19.64	19.95	20.07	
3	64QAM	8	0	19.93	20.00	20.01	
3	64QAM	8	4	19.78	19.96	20.04	18
3	64QAM	8	7	19.80	19.87	19.93	
3	64QAM	15	0	19.90	19.96	19.81	
3	256QAM	1	0	17.63	17.67	17.54	18
3	256QAM	1	8	17.45	17.57	17.75	
3	256QAM	1	14	17.45	17.60	17.65	
3	256QAM	8	0	17.63	17.49	17.71	18
3	256QAM	8	4	17.43	17.73	17.63	
3	256QAM	8	7	17.46	17.48	17.48	
3	256QAM	15	0	17.56	17.58	17.72	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	21.47	21.46	21.31	22
1.4	QPSK	1	3	21.23	21.39	21.40	
1.4	QPSK	1	5	21.19	21.32	21.27	
1.4	QPSK	3	0	20.81	20.90	20.86	21
1.4	QPSK	3	1	20.62	20.80	20.76	
1.4	QPSK	3	3	20.66	20.69	20.81	
1.4	QPSK	6	0	20.47	20.75	20.57	21
1.4	16QAM	1	0	20.52	20.60	20.67	
1.4	16QAM	1	3	20.49	20.54	20.60	
1.4	16QAM	1	5	20.60	20.64	20.64	21
1.4	16QAM	3	0	19.91	20.16	19.96	
1.4	16QAM	3	1	20.06	20.00	19.91	
1.4	16QAM	3	3	19.99	20.09	20.15	20
1.4	16QAM	6	0	19.91	19.98	19.93	
1.4	64QAM	1	0	19.86	19.95	20.02	
1.4	64QAM	1	3	19.79	19.93	19.84	

Band 7 (2600MHz Band) (dBm)_ANT 7 Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	16.86	16.89	16.82	17.5
20	QPSK	1	49	16.77	16.74	16.82	
20	QPSK	1	99	16.66	16.73	16.78	
20	QPSK	50	0	15.81	15.97	15.92	16.5
20	QPSK	50	24	15.78	15.79	15.79	
20	QPSK	50	50	15.76	15.83	15.81	
20	QPSK	100	0	15.79	15.95	15.84	17.5
20	16QAM	1	0	16.35	16.56	16.55	
20	16QAM	1	49	16.33	16.49	16.40	
20	16QAM	1	99	16.37	16.35	16.50	16.5
20	16QAM	50	0	15.04	15.09	15.08	
20	16QAM	50	24	14.98	14.95	15.17	
20	16QAM	50	50	14.90	15.10	15.08	16.5
20	16QAM	100	0	15.02	15.14	15.13	
20	64QAM	1	0	15.96	15.95	15.74	
20	64QAM	1	49	15.68	15.94	15.71	16.5
20	64QAM	1	99	15.64	15.90	15.80	
20	64QAM	50	0	15.03	15.12	15.07	
20	64QAM	50	24	14.89	14.88	15.08	16.5
20	64QAM	50	50	15.17	14.92	15.13	
20	64QAM	100	0	15.00	15.02	15.00	
20	256QAM	1	0	12.95	13.06	12.98	13.5
20	256QAM	1	49	12.70	12.77	13.04	
20	256QAM	1	99	12.97	12.86	12.95	
20	256QAM	50	0	12.89	12.87	12.87	13.5
20	256QAM	50	24	12.96	13.06	13.08	
20	256QAM	50	50	12.64	12.84	13.02	
20	256QAM	100	0	12.94	12.85	13.05	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	16.80	16.75	16.69	15.08
15	QPSK	1	37	16.71	16.70	16.76	
15	QPSK	1	74	16.53	16.59	16.74	
15	QPSK	36	0	15.75	15.95	15.80	14.08
15	QPSK	36	20	15.66	15.73	15.66	
15	QPSK	36	39	15.78	15.78	15.74	
15	QPSK	75	0	15.67	15.83	15.85	17.5
15	16QAM	1	0	16.40	16.58	16.44	
15	16QAM	1	37	16.37	16.36	16.26	
15	16QAM	1	74	16.21	16.20	16.36	16.5
15	16QAM	36	0	15.03	14.98	15.12	
15	16QAM	36	20	15.02	14.79	15.21	
15	16QAM	36	39	14.73	15.02	15.12	16.5
15	16QAM	75	0	14.95	15.08	15.00	
15	64QAM	1	0	15.93	15.80	15.75	
15	64QAM	1	37	15.62	15.79	15.59	16.5
15	64QAM	1	74	15.59	15.96	15.76	
15	64QAM	36	0	14.86	15.07	14.91	
15	64QAM	36	20	14.94	14.70	15.12	16.5
15	64QAM	36	39	15.10	14.78	15.17	
15	64QAM	75	0	14.85	14.95	14.96	
15	256QAM	1	0	12.78	13.00	12.95	13.5
15	256QAM	1	37	12.71	12.81	13.01	
15	256QAM	1	74	12.84	12.83	12.97	
15	256QAM	36	0	12.86	12.76	12.73	13.5
15	256QAM	36	20	12.89	12.90	12.91	
15	256QAM	36	39	12.54	12.89	12.91	
15	256QAM	75	0	12.76	12.89	13.06	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	16.75	16.77	16.73	15.12
10	QPSK	1	25	16.64	16.70	16.78	
10	QPSK	1	49	16.81	16.68	16.64	
10	QPSK	25	0	15.68	15.94	15.93	14.12
10	QPSK	25	12	15.74	15.82	15.72	
10	QPSK	25	25	15.62	15.77	15.72	
10	QPSK	50	0	15.78	15.88	15.70	17.5
10	16QAM	1	0	16.26	16.45	16.57	
10	16QAM	1	25	16.30	16.49	16.46	
10	16QAM	1	49	16.40	16.31	16.50	16.5
10	16QAM	25	0	14.88	15.03	14.96	
10	16QAM	25	12	14.87	15.00	15.00	
10	16QAM	25	25	14.80	15.00	14.96	16.5
10	16QAM	50	0	14.88	15.01	15.03	
10	64QAM	1	0	15.96	15.94	15.66	
10	64QAM	1	25	15.54	15.94	15.76	16.5
10	64QAM	1	49	15.55	15.83	15.84	
10	64QAM	25	0	14.85	15.15	14.90	
10	64QAM	25	12	14.86	14.73	15.02	16.5
10	64QAM	25	25	15.04	14.76	15.05	
10	64QAM	50	0	14.94	15.07	14.99	
10	256QAM	1	0	12.86	12.88	12.88	13.5
10	256QAM	1	25	12.63	12.62	13.09	
10	256QAM	1	49	12.79	12.83	12.93	
10	256QAM	25	0	12.82	12.77	12.79	13.5
10	256QAM	25	12	12.85	12.81	12.92	
10	256QAM	25	25	12.50	12.71	12.86	
10	256QAM	50	0	12.88	12.78	12.95	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	16.76	16.76	16.71	15.02
5	QPSK	1	12	16.69	16.68	16.75	
5	QPSK	1	24	16.52	16.59	16.75	
5	QPSK	12	0	15.81	15.91	15.93	14.02
5	QPSK	12	7	15.68	15.76	15.81	
5	QPSK	12	13	15.75	15.70	15.69	
5	QPSK	25	0	15.77	15.96	15.71	17.5
5	16QAM	1	0	16.37	16.61	16.37	
5	16QAM	1	12	16.24	16.39	16.46	
5	16QAM	1	24	16.23	16.25	16.38	16.5
5	16QAM	12	0	15.07	15.11	15.13	
5	16QAM	12	7	14.93	14.77	15.01	
5	16QAM	12	13	14.82	15.03	14.94	16.5
5	16QAM	25	0	14.89	15.02	15.00	
5	64QAM	1	0	15.91	15.89	15.66	
5	64QAM	1	12	15.70	15.86	15.61	16.5



1.4	64QAM	1	5	19.87	19.96	20.05	21
1.4	64QAM	3	0	19.77	20.11	19.95	
1.4	64QAM	3	1	19.93	19.98	19.89	
1.4	64QAM	3	3	20.03	19.93	20.06	
1.4	64QAM	6	0	19.82	19.94	19.98	20
1.4	256QAM	1	0	17.44	17.61	17.68	18
1.4	256QAM	1	3	17.55	17.49	17.67	
1.4	256QAM	1	5	17.39	17.62	17.60	
1.4	256QAM	3	0	17.43	17.49	17.63	
1.4	256QAM	3	1	17.43	17.68	17.48	
1.4	256QAM	3	3	17.43	17.58	17.40	
1.4	256QAM	6	0	17.55	17.69	17.61	18

5	64QAM	1	24	15.55	15.81	15.86	16.5
5	64QAM	12	0	15.09	15.02	15.10	
5	64QAM	12	7	14.72	14.73	14.93	
5	64QAM	12	13	15.07	14.91	15.16	
5	64QAM	25	0	14.93	14.99	14.99	13.5
5	256QAM	1	0	12.81	12.98	13.02	
5	256QAM	1	12	12.54	12.61	12.99	
5	256QAM	1	24	12.99	12.85	12.90	
5	256QAM	12	0	12.78	12.69	12.76	13.5
5	256QAM	12	7	12.96	12.69	12.83	
5	256QAM	12	13	12.49	12.80	12.90	
5	256QAM	25	0	12.88	12.70	12.97	

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	23.5
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	22.71	22.82	22.71	23.5
10	QPSK	1	25	22.63	22.60	22.79	
10	QPSK	1	49	22.59	22.59	22.64	
10	QPSK	25	0	21.62	21.81	21.78	22.5
10	QPSK	25	12	21.68	21.68	21.67	
10	QPSK	25	25	21.69	21.70	21.72	
10	QPSK	50	0	21.70	21.77	21.61	22.5
10	16QAM	1	0	22.02	22.12	22.17	
10	16QAM	1	25	22.14	22.19	22.17	
10	16QAM	1	49	22.12	22.22	22.27	21.5
10	16QAM	25	0	20.90	20.91	20.93	
10	16QAM	25	12	20.86	20.78	20.63	
10	16QAM	25	25	20.52	20.85	20.76	21.5
10	16QAM	50	0	20.67	20.87	20.75	
10	64QAM	1	0	20.75	20.64	20.55	
10	64QAM	1	25	20.57	20.61	20.53	21.5
10	64QAM	1	49	20.59	20.69	20.66	
10	64QAM	25	0	19.83	19.97	19.81	
10	64QAM	25	12	19.66	19.77	19.71	20.5
10	64QAM	25	25	19.68	19.75	19.64	
10	64QAM	50	0	19.87	19.93	19.91	
10	256QAM	1	0	19.16	19.30	19.25	19.5
10	256QAM	1	25	19.18	19.11	19.13	
10	256QAM	1	49	19.01	19.06	19.06	
10	256QAM	25	0	19.19	19.32	19.32	19.5
10	256QAM	25	12	19.20	19.35	19.33	
10	256QAM	25	25	19.02	19.19	19.05	
10	256QAM	50	0	19.07	19.09	18.91	23.5
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	23.5
5	QPSK	1	0	22.67	22.73	22.62	
5	QPSK	1	12	22.52	22.50	22.72	22.5
5	QPSK	1	24	22.47	22.52	22.61	
5	QPSK	12	0	21.54	21.68	21.80	
5	QPSK	12	7	21.56	21.55	21.62	22.5
5	QPSK	12	13	21.72	21.60	21.58	
5	QPSK	25	0	21.60	21.72	21.50	
5	16QAM	1	0	22.01	22.01	22.07	22.5
5	16QAM	1	12	21.97	22.20	22.19	
5	16QAM	1	24	21.98	22.26	22.11	
5	16QAM	12	0	20.85	20.96	20.97	21.5
5	16QAM	12	7	20.78	20.61	20.55	
5	16QAM	12	13	20.54	20.69	20.67	
5	16QAM	25	0	20.50	20.88	20.63	21.5
5	64QAM	1	0	20.80	20.53	20.39	
5	64QAM	1	12	20.48	20.52	20.51	
5	64QAM	1	24	20.60	20.65	20.72	20.5
5	64QAM	12	0	19.85	19.80	19.83	
5	64QAM	12	7	19.70	19.69	19.64	
5	64QAM	12	13	19.53	19.69	19.50	19.5
5	64QAM	25	0	19.90	19.94	19.76	
5	256QAM	1	0	19.10	19.29	19.13	
5	256QAM	1	12	19.08	18.98	19.08	19.5
5	256QAM	1	24	19.04	18.96	19.09	
5	256QAM	12	0	19.06	19.34	19.30	
5	256QAM	12	7	19.23	19.30	19.39	19.5
5	256QAM	12	13	19.03	19.01	19.04	
5	256QAM	25	0	18.89	19.01	18.91	
Channel				23035	23095	23165	23.5
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	22.63	22.77	22.63	23.5
3	QPSK	1	8	22.56	22.57	22.72	
3	QPSK	1	14	22.53	22.56	22.51	
3	QPSK	8	0	21.55	21.81	21.80	22.5
3	QPSK	8	4	21.59	21.65	21.70	
3	QPSK	8	7	21.70	21.64	21.67	
3	QPSK	15	0	21.72	21.77	21.53	22.5
3	16QAM	1	0	21.85	22.06	22.13	
3	16QAM	1	8	21.96	22.04	22.03	
3	16QAM	1	14	21.95	22.10	22.26	21.5
3	16QAM	8	0	20.89	20.94	20.88	
3	16QAM	8	4	20.85	20.60	20.47	
3	16QAM	8	7	20.52	20.83	20.75	21.5
3	16QAM	15	0	20.68	20.75	20.67	
3	64QAM	1	0	20.76	20.59	20.40	
3	64QAM	1	8	20.50	20.63	20.53	20.5
3	64QAM	1	14	20.64	20.65	20.53	
3	64QAM	8	0	19.68	19.87	19.63	
3	64QAM	8	4	19.62	19.77	19.62	19.5
3	64QAM	8	7	19.72	19.64	19.70	
3	64QAM	15	0	19.84	19.81	19.88	
3	256QAM	1	0	19.22	19.31	19.07	19.5
3	256QAM	1	8	19.04	19.13	19.04	
3	256QAM	1	14	18.87	18.89	18.92	
3	256QAM	8	0	19.24	19.14	19.25	19.5
3	256QAM	8	4	19.15	19.30	19.22	
3	256QAM	8	7	18.86	19.08	19.00	
3	256QAM	15	0	18.92	19.14	18.75	23.5
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	23.5
1.4	QPSK	1	0	22.63	22.75	22.60	
1.4	QPSK	1	3	22.53	22.53	22.75	22.5
1.4	QPSK	1	5	22.46	22.51	22.55	
1.4	QPSK	3	0	22.04	22.10	22.16	
1.4	QPSK	3	1	22.09	22.04	22.08	22.5
1.4	QPSK	3	3	22.05	22.10	22.00	
1.4	QPSK	6	0	21.66	21.64	21.63	
1.4	16QAM	1	0	21.98	22.05	22.22	21.5
1.4	16QAM	1	3	21.98	22.23	22.20	
1.4	16QAM	1	5	22.05	22.10	22.17	
1.4	16QAM	3	0	20.92	20.75	20.84	21.5
1.4	16QAM	3	1	20.84	20.69	20.55	
1.4	16QAM	3	3	20.56	20.70	20.82	
1.4	16QAM	6	0	20.50	20.85	20.67	21.5
1.4	64QAM	1	0	20.60	20.54	20.54	
1.4	64QAM	1	3	20.63	20.65	20.37	

Band 17 (700MHz Band) (dBm) Part 27H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	23.5
Frequency (MHz)				709	710	711	
10	QPSK	1	0	22.71	22.76	22.74	23.5
10	QPSK	1	25	22.64	22.62	22.63	
10	QPSK	1	49	22.66	22.59	22.70	
10	QPSK	25	0	21.59	21.79	21.72	22.5
10	QPSK	25	12	21.65	21.62	21.61	
10	QPSK	25	25	21.61	21.63	21.64	
10	QPSK	50	0	21.77	21.81	21.62	22.5
10	16QAM	1	0	22.21	22.26	22.08	
10	16QAM	1	25	22.12	22.20	22.15	
10	16QAM	1	49	22.03	22.09	22.24	22.5
10	16QAM	25	0	21.02	20.81	20.91	
10	16QAM	25	12	20.87	20.75	20.88	
10	16QAM	25	25	20.67	20.81	20.87	21.5
10	16QAM	50	0	20.82	20.82	20.83	
10	64QAM	1	0	20.85	20.76	20.51	
10	64QAM	1	25	20.53	20.63	20.57	21.5
10	64QAM	1	49	20.56	20.71	20.83	
10	64QAM	25	0	19.84	19.78	19.99	
10	64QAM	25	12	19.70	19.65	19.72	20.5
10	64QAM	25	25	19.62	19.63	19.63	
10	64QAM	50	0	19.86	19.96	19.85	
10	256QAM	1	0	19.23	19.12	19.34	19.5
10	256QAM	1	25	19.09	19.01	19.13	
10	256QAM	1	49	19.01	19.01	18.91	
10	256QAM	25	0	19.27	19.25	19.28	19.5
10	256QAM	25	12	19.29	19.16	19.25	
10	256QAM	25	25	19.13	19.07	19.20	
10	256QAM	50	0	19.09	19.06	19.03	23.5
Channel				23755	23790	23825	
Frequency (MHz)				706.5	710	713.5	Tune-up limit (dBm)
5	QPSK	1	0	22.64	22.71	22.60	23.5
5	QPSK	1	12	22.61	22.49	22.50	
5	QPSK	1	24	22.56	22.55	22.65	
5	QPSK	12	0	21.49	21.67	21.75	22.5
5	QPSK	12	7	21.59	21.49	21.57	
5	QPSK	12	13	21.54	21.61	21.59	
5	QPSK	25	0	21.70	21.83	21.65	22.5
5	16QAM	1	0	22.18	22.28	21.96	
5	16QAM	1	12	22.05	22.05	22.08	
5	16QAM	1	24	22.01	22.14	22.30	22.5
5	16QAM	12	0	20.87	20.85	20.89	
5	16QAM	12	7	20.84	20.63	20.70	
5	16QAM	12	13	20.49	20.72	20.83	21.5
5	16QAM	25	0	20.64	20.87	20.67	
5	64QAM	1	0	20.69	20.59	20.56	
5	64QAM	1	12	20.58	20.61	20.54	21.5
5	64QAM	1	24	20.53	20.67	20.89	
5	64QAM	12	0	19.85	19.60	20.02	
5	64QAM	12	7	19.71	19.59	19.60	20.5
5	64QAM	12	13	19.62	19.62	19.52	
5	64QAM	25	0	19.85	19.84	19.85	
5	256QAM	1	0	19.06	18.99	19.17	19.5
5	256QAM	1	12	19.09	18.89	19.15	
5	256QAM	1	24	19.07	18.99	18.87	
5	256QAM	12	0	19.17	19.29	19.16	19.5
5	256QAM	12	7	19.16	19.17	19.27	
5	256QAM	12	13	18.95	18.96	19.21	
5	256QAM	25	0	19.03	18.98	19.01	



1.4	64QAM	1	5	20.43	20.56	20.70	21.5
1.4	64QAM	3	0	20.20	20.32	20.10	
1.4	64QAM	3	1	20.00	20.09	20.17	
1.4	64QAM	3	3	20.04	20.17	20.01	
1.4	64QAM	6	0	19.73	19.80	19.90	20.5
1.4	256QAM	1	0	18.99	19.30	19.10	19.5
1.4	256QAM	1	3	19.20	18.97	18.97	
1.4	256QAM	1	5	19.02	18.89	19.03	
1.4	256QAM	3	0	19.21	19.37	19.18	
1.4	256QAM	3	1	19.07	19.28	19.18	
1.4	256QAM	3	3	19.06	19.09	18.87	
1.4	256QAM	6	0	18.95	18.95	18.93	19.5

Band 25 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	13.5
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	12.85	12.99	12.83	12.5
20	QPSK	1	49	12.81	12.84	12.80	
20	QPSK	1	99	12.68	12.76	12.74	
20	QPSK	50	0	11.68	11.86	11.73	12.5
20	QPSK	50	24	11.67	11.85	11.73	
20	QPSK	50	50	11.73	11.81	11.77	
20	QPSK	100	0	11.73	11.88	11.69	12.5
20	16QAM	1	0	11.78	11.87	11.83	
20	16QAM	1	49	11.86	11.83	11.91	
20	16QAM	1	99	11.78	11.89	11.93	11.5
20	16QAM	50	0	11.08	10.95	10.83	
20	16QAM	50	24	10.79	10.84	11.28	
20	16QAM	50	50	10.79	10.84	10.96	11.5
20	16QAM	100	0	11.01	11.04	10.97	
20	64QAM	1	0	10.81	10.91	10.68	
20	64QAM	1	49	10.77	10.65	10.73	10.5
20	64QAM	1	99	10.76	10.81	10.69	
20	64QAM	50	0	10.68	10.79	10.67	
20	64QAM	50	24	10.60	10.58	10.61	8.5
20	64QAM	50	50	10.58	10.66	10.57	
20	64QAM	100	0	10.79	10.78	10.72	
20	256QAM	1	0	8.17	8.28	8.11	8.5
20	256QAM	1	49	7.99	8.07	8.17	
20	256QAM	1	99	8.00	8.14	7.98	
20	256QAM	50	0	8.37	8.22	8.21	8.5
20	256QAM	50	24	8.13	8.27	8.04	
20	256QAM	50	50	7.91	8.14	8.11	
20	256QAM	100	0	7.93	8.21	8.06	13.5
Channel				26115	26365	26615	
Frequency (MHz)				1857.5	1882.5	1907.5	12.5
15	QPSK	1	0	12.76	12.75	12.68	
15	QPSK	1	37	12.66	12.63	12.68	12.5
15	QPSK	1	74	12.57	12.64	12.53	
15	QPSK	36	0	11.68	11.72	11.75	12.5
15	QPSK	36	20	11.68	11.75	11.73	
15	QPSK	36	39	11.76	11.73	11.66	
15	QPSK	75	0	11.72	11.83	11.59	12.5
15	16QAM	1	0	11.80	11.72	11.75	
15	16QAM	1	37	11.88	11.81	11.87	
15	16QAM	1	74	11.63	11.73	11.84	11.5
15	16QAM	36	0	11.13	10.99	10.82	
15	16QAM	36	20	10.78	10.66	11.10	
15	16QAM	36	39	10.73	10.75	10.89	11.5
15	16QAM	75	0	11.01	11.00	10.95	
15	64QAM	1	0	10.84	10.81	10.63	
15	64QAM	1	37	10.65	10.68	10.63	10.5
15	64QAM	1	74	10.71	10.83	10.60	
15	64QAM	36	0	10.61	10.68	10.50	
15	64QAM	36	20	10.47	10.57	10.50	8.5
15	64QAM	36	39	10.41	10.66	10.62	
15	64QAM	75	0	10.85	10.75	10.65	
15	256QAM	1	0	8.18	8.15	7.96	8.5
15	256QAM	1	37	8.03	8.05	8.10	
15	256QAM	1	74	7.91	8.00	7.88	
15	256QAM	36	0	8.26	8.25	8.25	8.5
15	256QAM	36	20	8.15	8.22	7.86	
15	256QAM	36	39	7.81	8.18	8.01	
15	256QAM	75	0	7.92	8.06	7.99	13.5
Channel				26090	26365	26640	
Frequency (MHz)				1855	1882.5	1910	12.5
10	QPSK	1	0	12.69	12.74	12.66	
10	QPSK	1	25	12.60	12.67	12.60	12.5
10	QPSK	1	49	12.59	12.67	12.53	
10	QPSK	25	0	11.55	11.78	11.75	12.5
10	QPSK	25	12	11.54	11.79	11.74	
10	QPSK	25	25	11.59	11.75	11.71	
10	QPSK	50	0	11.64	11.83	11.72	12.5
10	16QAM	1	0	11.71	11.93	11.74	
10	16QAM	1	25	11.76	11.77	11.79	
10	16QAM	1	49	11.76	11.74	11.89	11.5
10	16QAM	25	0	11.00	10.96	10.68	
10	16QAM	25	12	10.84	10.69	10.93	
10	16QAM	25	25	10.81	10.78	10.96	11.5
10	16QAM	50	0	10.89	10.86	10.86	
10	64QAM	1	0	10.63	10.83	10.66	
10	64QAM	1	25	10.68	10.50	10.68	10.5
10	64QAM	1	49	10.79	10.65	10.73	
10	64QAM	25	0	10.72	10.64	10.49	
10	64QAM	25	12	10.54	10.45	10.45	8.5
10	64QAM	25	25	10.48	10.65	10.53	
10	64QAM	50	0	10.65	10.81	10.64	
10	256QAM	1	0	8.05	8.27	8.12	8.5
10	256QAM	1	25	8.04	8.03	8.01	
10	256QAM	1	49	7.84	8.02	7.88	
10	256QAM	25	0	8.21	8.13	8.23	8.5
10	256QAM	25	12	8.02	8.17	7.98	
10	256QAM	25	25	7.90	7.98	7.95	
10	256QAM	50	0	7.88	8.26	7.91	13.5
Channel				26065	26365	26665	
Frequency (MHz)				1852.5	1882.5	1912.5	12.5
5	QPSK	1	0	12.77	12.73	12.69	
5	QPSK	1	12	12.58	12.68	12.63	12.5
5	QPSK	1	24	12.59	12.58	12.51	
5	QPSK	12	0	11.54	11.84	11.68	12.5
5	QPSK	12	7	11.53	11.71	11.72	
5	QPSK	12	13	11.73	11.77	11.73	
5	QPSK	25	0	11.64	11.75	11.71	12.5
5	16QAM	1	0	11.84	11.78	11.70	
5	16QAM	1	12	11.82	11.68	11.79	
5	16QAM	1	24	11.82	11.60	11.82	11.5
5	16QAM	12	0	10.96	11.01	10.84	
5	16QAM	12	7	10.83	10.79	11.00	
5	16QAM	12	13	10.70	10.67	11.01	11.5
5	16QAM	25	0	10.93	11.06	10.93	
5	64QAM	1	0	10.85	10.90	10.54	
5	64QAM	1	12	10.74	10.66	10.62	11.5

Band 26 for FCC (dBm) (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	
15	QPSK	1	0	20.66	20.84	20.83	21.5
15	QPSK	1	37	20.73	20.80	20.82	
15	QPSK	1	74	20.74	20.79	20.69	
15	QPSK	36	0	19.74	19.84	19.83	20.5
15	QPSK	36	20	19.62	19.77	19.78	
15	QPSK	36	39	19.55	19.71	19.83	
15	QPSK	75	0	19.98	20.09	19.87	20.5
15	16QAM	1	0	20.56	20.52	20.69	
15	16QAM	1	37	20.56	20.51	20.64	
15	16QAM	1	74	20.63	20.54	20.61	19.5
15	16QAM	36	0	18.90	18.95	18.89	
15	16QAM	36	20	18.88	18.83	18.78	
15	16QAM	36	39	18.89	18.87	18.78	19.5
15	16QAM	75	0	19.11	19.18	19.09	
15	64QAM	1	0	18.89	18.98	18.70	
15	64QAM	1	37	18.92	18.79	18.82	19.5
15	64QAM	1	74	18.78	18.87	18.71	
15	64QAM	36	0	18.86	18.87	18.88	
15	64QAM	36	20	18.68	18.76	18.78	19.5
15	64QAM	36	39	18.69	18.73	18.68	
15	64QAM	75	0	18.97	18.93	18.83	
15	256QAM	1	0	17.77	17.86	17.73	17.5
15	256QAM	1	37	17.67	17.71	17.89	
15	256QAM	1	74	17.69	17.73	17.57	
15	256QAM	36	0	17.97	17.82	17.88	17.5
15	256QAM	36	20	17.80	17.84	17.63	
15	256QAM	36	39	17.51	17.54	17.86	
15	256QAM	75	0	17.74	17.73	17.51	
Channel				26740	26865	26990	
Frequency (MHz)				819	831.5	844	Tune-up limit (dBm)
10	QPSK	1	0	20.61	20.74	20.69	21.5
10	QPSK	1	25	20.61	20.72	20.76	
10	QPSK	1	49	20.69	20.69	20.63	
10	QPSK	25	0	19.77	19.83	19.75	20.5
10	QPSK	25	12	19.51	19.73	19.76	
10	QPSK	25	25	19.54	19.59	19.70	
10	QPSK	50	0	19.93	20.09	19.80	20.5
10	16QAM	1	0	20.60	20.43	20.53	
10	16QAM	1	25	20.57	20.55	20.63	
10	16QAM	1	49	20.58	20.37	20.56	19.5
10	16QAM	25	0	18.86	18.93	18.92	
10	16QAM	25	12	18.92	18.67	18.83	
10	16QAM	25	25	18.93	18.69	18.78	19.5
10	16QAM	50	0	19.08	19.03	19.02	
10	64QAM	1	0	18.86	18.86	18.74	
10	64QAM	1	25	18.90	18.63	18.69	19.5
10	64QAM	1	49	18.71	18.88	18.55	
10	64QAM	25	0	18.76	18.82	18.85	
10	64QAM	25	12	18.57	18.72	18.67	19.5
10	64QAM	25	25	18.71	18.71	18.71	
10	64QAM	50	0	18.55	18.99	18.77	
10	256QAM	1	0	17.66	17.79	17.79	17.5
10	256QAM	1	25	17.60	17.71	17.86	
10	256QAM	1	49	17.57	17.67	17.53	
10	256QAM	25	0	17.85	17.87	17.75	17.5
10	256QAM	25	12	17.82	17.87	17.68	
10	256QAM	25	25	17.48	17.52	17.69	
10	256QAM	50	0	17.66	17.63	17.36	
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	Tune-up limit (dBm)
5	QPSK	1	0	20.62	20.79	20.71	21.5
5	QPSK	1	12	20.69	20.76	20.71	
5	QPSK	1	24	20.61	20.75	20.57	
5	QPSK	12	0	19.67	19.85	19.69	20.5
5	QPSK	12	7	19.58	19.66	19.73	
5	QPSK	12	13	19.51	19.58	19.84	
5	QPSK	25	0	19.95	20.05	19.87	20.5
5	16QAM	1	0	20.47	20.40	20.59	
5	16QAM	1	12	20.49	20.43	20.59	
5	16QAM	1	24	20.56	20.56	20.62	19.5
5	16QAM	12	0	18.85	18.99	18.93	
5	16QAM	12	7	18.71	18.72	18.73	
5	16QAM	12	13	18.71	18.91	18.75	19.5
5	16QAM	25	0	19.13	19.15	18.96	
5	64QAM	1	0	18.95	18.99	18.63	
5	64QAM	1	12	18.98	18.76	18.65	19.5
5	64QAM	1	24	18.70	18.83	18.65	
5	64QAM	12	0	18.74	18.79	18.71	
5	64QAM	12	7	18.60	18.69	18.70	19.5
5	64QAM	12	13	18.64	18.79	18.54	
5	64QAM	25	0	18.91	18.90	18.72	
5	256QAM	1	0	17.82	17.75	17.62	17.5
5	256QAM	1	12	17.73	17.76	17.90	
5	256QAM	1	24	17.73	17.71	17.46	
5	256QAM	12	0	17.89	17.67	17.78	17.5
5	256QAM	12	7	17.72	17.89	17.60	
5	256QAM	12	13	17.57	17.40	17.68	
5	256QAM	25	0	17.68	17.62	17.40	
Channel				26705	26865	27025	
Frequency (MHz)				815.5	831.5	847.5	Tune-up limit (dBm)
3	QPSK	1	0	20.56	20.75	20.73	21.5
3	QPSK	1	8	20.65	20.74	20.79	
3	QPSK	1	14	20.65	20.69	20.57	
3	QPSK	8	0	19.69	19.73	19.81	20.5
3	QPSK	8	4	19.56	19.76	19.66	
3	QPSK	8	7	19.53	19.65	19.69	
3	QPSK	15	0	19.89	20.07	19.88	20.5
3	16QAM	1	0	20.55	20.45	20.75	
3	16QAM	1	8	20.41	20.57	20.66	
3	16QAM	1	14	20.45	20.51	20.45	19.5
3	16QAM	8	0	18.81	18.86	18.84	
3	16QAM	8	4	18.86	18.65	18.77	
3	16QAM	8	7	18.81	18.73	18.63	19.5
3	16QAM	15	0	18.94	19.17	18.92	
3	64QAM	1	0	18.74	18.88	18.63	
3	64QAM	1	8	18.87	18.72	18.65	19.5

5	64QAM	1	24	10.79	10.85	10.71	10.5
5	64QAM	12	0	10.73	10.70	10.64	
5	64QAM	12	7	10.42	10.44	10.47	
5	64QAM	12	13	10.44	10.49	10.58	
5	64QAM	25	0	10.66	10.74	10.64	8.5
5	256QAM	1	0	8.00	8.15	8.04	
5	256QAM	1	12	7.91	8.04	8.10	
5	256QAM	1	24	8.05	8.10	7.82	
5	256QAM	12	0	8.34	8.04	8.07	8.5
5	256QAM	12	7	8.02	8.09	7.94	
5	256QAM	12	13	8.00	8.19	7.95	
5	256QAM	25	0	7.85	8.25	7.99	
Channel				26065	26365	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1882.5	1913.5	
3	QPSK	1	0	12.76	12.74	12.71	13.5
3	QPSK	1	8	12.60	12.70	12.62	
3	QPSK	1	14	12.63	12.63	12.52	
3	QPSK	8	0	11.63	11.78	11.73	
3	QPSK	8	4	11.63	11.77	11.75	12.5
3	QPSK	8	7	11.68	11.82	11.70	
3	QPSK	15	0	11.61	11.79	11.72	
3	16QAM	1	0	11.61	11.83	11.65	
3	16QAM	1	8	11.82	11.74	11.96	12.5
3	16QAM	1	14	11.63	11.69	11.96	
3	16QAM	8	0	10.96	10.92	10.75	
3	16QAM	8	4	10.66	10.89	11.01	
3	16QAM	8	7	10.62	10.77	10.93	11.5
3	16QAM	15	0	10.84	10.93	10.83	
3	64QAM	1	0	10.84	10.78	10.61	
3	64QAM	1	8	10.66	10.52	10.78	
3	64QAM	1	14	10.61	10.70	10.53	10.5
3	64QAM	8	0	10.68	10.62	10.65	
3	64QAM	8	4	10.66	10.48	10.45	
3	64QAM	8	7	10.43	10.71	10.54	
3	64QAM	15	0	10.65	10.82	10.74	8.5
3	256QAM	1	0	8.21	8.28	8.06	
3	256QAM	1	8	7.85	8.11	8.21	
3	256QAM	1	14	7.88	8.16	7.82	
3	256QAM	8	0	8.20	8.24	8.11	8.5
3	256QAM	8	4	7.96	8.33	8.08	
3	256QAM	8	7	7.97	8.04	8.03	
3	256QAM	15	0	7.95	8.15	8.09	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	12.66	12.71	12.65	13.5
1.4	QPSK	1	3	12.68	12.67	12.60	
1.4	QPSK	1	5	12.61	12.60	12.61	
1.4	QPSK	3	0	12.56	12.66	12.54	
1.4	QPSK	3	1	12.57	12.67	12.65	12.5
1.4	QPSK	3	3	12.57	12.59	12.65	
1.4	QPSK	6	0	11.72	11.85	11.69	
1.4	16QAM	1	0	11.79	11.69	11.66	
1.4	16QAM	1	3	11.89	11.69	11.74	11.5
1.4	16QAM	1	5	11.66	11.70	11.93	
1.4	16QAM	3	0	11.82	11.68	11.68	
1.4	16QAM	3	1	11.57	11.72	11.97	
1.4	16QAM	3	3	11.53	11.72	11.86	10.5
1.4	16QAM	6	0	11.04	11.05	10.80	
1.4	64QAM	1	0	10.69	10.83	10.55	
1.4	64QAM	1	3	10.78	10.51	10.57	
1.4	64QAM	1	5	10.61	10.84	10.54	11.5
1.4	64QAM	3	0	10.73	10.80	10.52	
1.4	64QAM	3	1	10.65	10.50	10.59	
1.4	64QAM	3	3	10.64	10.58	10.55	
1.4	64QAM	6	0	10.64	10.71	10.74	10.5
1.4	256QAM	1	0	8.15	8.12	8.05	
1.4	256QAM	1	3	7.89	8.02	8.13	
1.4	256QAM	1	5	7.98	8.18	7.86	
1.4	256QAM	3	0	8.39	8.20	8.26	8.5
1.4	256QAM	3	1	7.96	8.24	7.99	
1.4	256QAM	3	3	7.93	8.08	7.93	
1.4	256QAM	6	0	7.76	8.05	7.95	

3	64QAM	1	14	18.60	18.83	18.64	19.5
3	64QAM	8	0	18.68	18.84	18.83	
3	64QAM	8	4	18.50	18.72	18.64	
3	64QAM	8	7	18.59	18.65	18.50	
3	64QAM	15	0	18.88	18.92	18.78	17.5
3	256QAM	1	0	17.79	17.73	17.71	
3	256QAM	1	8	17.63	17.69	17.94	
3	256QAM	1	14	17.70	17.57	17.63	
3	256QAM	8	0	17.79	17.66	17.73	17.5
3	256QAM	8	4	17.78	17.89	17.47	
3	256QAM	8	7	17.39	17.58	17.70	
3	256QAM	15	0	17.57	17.59	17.36	
Channel				26097	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	20.56	20.78	20.73	21.5
1.4	QPSK	1	3	20.59	20.70	20.68	
1.4	QPSK	1	5	20.63	20.75	20.65	
1.4	QPSK	3	0	20.44	20.55	20.56	
1.4	QPSK	3	1	20.35	20.49	20.49	20.5
1.4	QPSK	3	3	20.37	20.47	20.61	
1.4	QPSK	6	0	19.89	20.01	19.90	
1.4	16QAM	1	0	20.40	20.58	20.61	
1.4	16QAM	1	3	20.54	20.35	20.70	20.5
1.4	16QAM	1	5	20.59	20.53	20.44	
1.4	16QAM	3	0	19.67	19.66	19.70	
1.4	16QAM	3	1	19.65	19.51	19.57	
1.4	16QAM	3	3	19.62	19.71	19.66	19.5
1.4	16QAM	6	0	18.99	19.09	18.92	
1.4	64QAM	1	0	18.83	18.99	18.66	
1.4	64QAM	1	3	18.77	18.69	18.66	
1.4	64QAM	1	5	18.66	18.84	18.57	19.5
1.4	64QAM	3	0	18.92	18.91	18.80	
1.4	64QAM	3	1	18.58	18.82	18.72	
1.4	64QAM	3	3	18.57	18.58	18.74	
1.4	64QAM	6	0	19.03	18.80	18.77	19.5
1.4	256QAM	1	0	17.64	17.78	17.58	
1.4	256QAM	1	3	17.52	17.77	17.77	
1.4	256QAM	1	5	17.58	17.70	17.57	
1.4	256QAM	3	0	17.79	17.80	17.72	17.5
1.4	256QAM	3	1	17.78	17.86	17.60	
1.4	256QAM	3	3	17.51	17.56	17.76	
1.4	256QAM	6	0	17.57	17.55	17.34	

Band 38(only on channel required) (dBm)_ANT 1							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	19
20	QPSK	1	0	18.01	18.03	18.00	
20	QPSK	1	49	17.84	18.00	17.96	18
20	QPSK	1	99	17.95	17.80	17.89	
20	QPSK	50	0	16.72	16.86	16.82	
20	QPSK	50	24	16.69	16.78	16.80	
20	QPSK	50	50	16.80	16.83	16.75	17
20	QPSK	100	0	16.74	16.85	16.72	
20	16QAM	1	0	16.61	16.78	16.59	
20	16QAM	1	49	16.56	16.64	16.61	
20	16QAM	1	99	16.68	16.56	16.59	16
20	16QAM	50	0	15.93	15.92	15.68	
20	16QAM	50	24	15.73	15.81	15.93	
20	16QAM	50	50	15.77	15.98	15.66	
20	16QAM	100	0	15.81	15.90	15.84	15
20	64QAM	1	0	16.26	16.39	16.28	
20	64QAM	1	49	16.24	16.30	16.28	
20	64QAM	1	99	16.27	16.22	16.17	
20	64QAM	50	0	15.83	15.96	15.85	14
20	64QAM	50	24	15.86	16.01	15.92	
20	64QAM	50	50	15.98	15.87	15.82	
20	64QAM	100	0	15.81	15.86	15.91	
20	256QAM	1	0	13.54	13.86	13.63	13
20	256QAM	1	49	13.68	13.80	13.72	
20	256QAM	1	99	13.69	13.71	13.53	
20	256QAM	50	0	13.67	13.73	13.69	
20	256QAM	50	24	13.60	13.70	13.66	12
20	256QAM	50	50	13.75	13.87	13.75	
20	256QAM	100	0	13.64	13.61	13.56	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	17.97	17.89	17.91	19
15	QPSK	1	37	17.81	17.91	17.93	
15	QPSK	1	74	17.84	17.86	17.83	
15	QPSK	36	0	16.60	16.87	16.72	
15	QPSK	36	20	16.61	16.78	16.80	18
15	QPSK	36	39	16.69	16.85	16.73	
15	QPSK	75	0	16.69	16.72	16.66	
15	16QAM	1	0	16.60	16.64	16.63	
15	16QAM	1	37	16.58	16.50	16.53	17
15	16QAM	1	74	16.57	16.51	16.56	
15	16QAM	36	0	15.95	15.91	15.59	
15	16QAM	36	20	15.55	15.69	15.85	
15	16QAM	36	39	15.61	15.90	15.51	16
15	16QAM	75	0	15.76	15.82	15.72	
15	64QAM	1	0	16.27	16.26	16.23	
15	64QAM	1	37	16.28	16.25	16.12	
15	64QAM	1	74	16.11	16.22	16.18	15
15	64QAM	36	0	15.74	15.98	15.84	
15	64QAM	36	20	15.91	15.91	15.80	
15	64QAM	36	39	15.86	15.85	15.78	
15	256QAM	1	0	13.45	13.70	13.61	14
15	256QAM	1	37	13.60	13.78	13.58	
15	256QAM	1	74	13.53	13.77	13.55	
15	256QAM	36	0	13.58	13.62	13.73	
15	256QAM	36	20	13.51	13.62	13.57	13
15	256QAM	36	39	13.74	13.91	13.64	
15	256QAM	75	0	13.57	13.63	13.53	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	17.96	17.96	17.93	19
10	QPSK	1	25	17.75	17.94	17.85	
10	QPSK	1	49	17.90	17.74	17.85	
10	QPSK	25	0	16.61	16.79	16.69	
10	QPSK	25	12	16.62	16.67	16.79	18
10	QPSK	25	25	16.83	16.80	16.71	
10	QPSK	50	0	16.72	16.85	16.59	
10	16QAM	1	0	16.54	16.65	16.61	
10	16QAM	1	25	16.54	16.60	16.50	17
10	16QAM	1	49	16.55	16.56	16.68	
10	16QAM	25	0	15.85	15.81	15.64	
10	16QAM	25	12	15.58	15.66	15.97	
10	16QAM	25	25	15.83	15.90	15.62	16
10	16QAM	50	0	15.72	15.91	15.83	
10	64QAM	1	0	16.10	16.24	16.22	
10	64QAM	1	25	16.22	16.23	16.23	
10	64QAM	1	49	16.10	16.07	16.15	15
10	64QAM	25	0	15.73	16.00	15.71	
10	64QAM	25	12	15.72	15.95	15.89	
10	64QAM	25	25	15.80	15.84	15.65	
10	256QAM	1	0	13.37	13.86	13.48	14
10	256QAM	1	25	13.74	13.85	13.70	
10	256QAM	1	49	13.54	13.58	13.39	
10	256QAM	25	0	13.73	13.75	13.58	
10	256QAM	25	12	13.61	13.61	13.70	13
10	256QAM	25	25	13.73	13.75	13.73	
10	256QAM	50	0	13.46	13.63	13.48	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	17.91	18.00	17.96	19
5	QPSK	1	12	17.80	17.93	17.88	
5	QPSK	1	24	17.85	17.71	17.77	
5	QPSK	12	0	16.62	16.84	16.73	

5	QPSK	12	7	16.68	16.70	16.79	18
5	QPSK	12	13	16.71	16.81	16.63	
5	QPSK	25	0	16.62	16.82	16.67	
5	16QAM	1	0	16.56	16.70	16.58	18
5	16QAM	1	12	16.57	16.70	16.61	
5	16QAM	1	24	16.53	16.59	16.55	
5	16QAM	12	0	15.88	15.82	15.54	17
5	16QAM	12	7	15.73	15.63	15.97	
5	16QAM	12	13	15.83	15.93	15.54	
5	16QAM	25	0	15.63	15.81	15.87	17
5	64QAM	1	0	16.27	16.27	16.33	
5	64QAM	1	12	16.10	16.12	16.26	
5	64QAM	1	24	16.24	16.13	16.12	16
5	64QAM	12	0	15.68	15.87	15.76	
5	64QAM	12	7	15.74	15.86	15.85	
5	64QAM	12	13	15.99	15.79	15.73	15
5	64QAM	25	0	15.73	15.73	15.82	
5	256QAM	1	0	13.37	13.81	13.68	
5	256QAM	1	12	13.57	13.84	13.73	15
5	256QAM	1	24	13.66	13.58	13.43	
5	256QAM	12	0	13.64	13.69	13.63	
5	256QAM	12	7	13.55	13.62	13.64	15
5	256QAM	12	13	13.78	13.71	13.81	
5	256QAM	25	0	13.63	13.55	13.48	

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	13.10	13.29	13.25	14
20	QPSK	1	49	13.20	13.17	13.19	
20	QPSK	1	99	13.13	13.21	13.12	
20	QPSK	50	0	12.20	12.27	12.16	13
20	QPSK	50	24	12.03	12.24	12.08	
20	QPSK	50	50	12.04	12.16	12.18	
20	QPSK	100	0	12.15	12.22	12.13	13
20	16QAM	1	0	12.23	12.53	12.35	
20	16QAM	1	49	12.32	12.36	12.20	
20	16QAM	1	99	12.43	12.27	12.37	12
20	16QAM	50	0	11.25	11.39	11.31	
20	16QAM	50	24	11.27	11.28	11.23	
20	16QAM	50	50	11.16	11.26	11.18	12
20	16QAM	100	0	11.26	11.42	11.33	
20	64QAM	1	0	11.45	11.34	11.04	
20	64QAM	1	49	11.48	11.22	11.16	12
20	64QAM	1	99	11.31	11.35	11.08	
20	64QAM	50	0	10.52	10.64	10.70	
20	64QAM	50	24	10.61	10.55	10.40	11
20	64QAM	50	50	10.53	10.44	10.43	
20	64QAM	100	0	10.57	10.62	10.59	
20	256QAM	1	0	8.78	8.93	8.87	9
20	256QAM	1	49	8.85	8.78	8.56	
20	256QAM	1	99	8.66	8.64	8.64	
20	256QAM	50	0	8.76	8.70	8.80	9
20	256QAM	50	24	8.82	8.68	8.95	
20	256QAM	50	50	8.77	8.72	8.65	
20	256QAM	100	0	8.59	8.60	8.68	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	Tune-up limit (dBm)
15	QPSK	1	0	13.05	13.24	13.20	14
15	QPSK	1	37	13.09	13.12	13.12	
15	QPSK	1	74	13.06	13.18	13.07	
15	QPSK	36	0	12.08	12.16	12.17	13
15	QPSK	36	20	12.08	12.17	12.00	
15	QPSK	36	39	12.06	12.05	12.14	
15	QPSK	75	0	12.08	12.11	12.07	13
15	16QAM	1	0	12.11	12.39	12.23	
15	16QAM	1	37	12.25	12.21	12.07	
15	16QAM	1	74	12.39	12.33	12.35	12
15	16QAM	36	0	11.08	11.29	11.20	
15	16QAM	36	20	11.10	11.30	11.14	
15	16QAM	36	39	11.18	11.31	11.01	12
15	16QAM	75	0	11.29	11.24	11.15	
15	64QAM	1	0	11.28	11.30	11.08	
15	64QAM	1	37	11.49	11.20	11.00	12
15	64QAM	1	74	11.18	11.36	11.08	
15	64QAM	36	0	10.56	10.60	10.52	
15	64QAM	36	20	10.62	10.47	10.37	11
15	64QAM	36	39	10.53	10.37	10.38	
15	64QAM	75	0	10.56	10.54	10.50	
15	256QAM	1	0	8.74	8.79	8.78	9
15	256QAM	1	37	8.73	8.60	8.57	
15	256QAM	1	74	8.48	8.59	8.61	
15	256QAM	36	0	8.64	8.62	8.83	9
15	256QAM	36	20	8.64	8.57	8.87	
15	256QAM	36	39	8.65	8.75	8.49	
15	256QAM	75	0	8.60	8.50	8.70	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	Tune-up limit (dBm)
10	QPSK	1	0	13.02	13.24	13.15	14
10	QPSK	1	25	13.11	13.14	13.15	
10	QPSK	1	49	13.05	13.15	13.04	
10	QPSK	25	0	12.13	12.16	12.11	13
10	QPSK	25	12	12.05	12.17	12.04	
10	QPSK	25	25	12.03	12.12	12.08	
10	QPSK	50	0	12.05	12.23	12.01	13
10	16QAM	1	0	12.17	12.52	12.38	
10	16QAM	1	25	12.32	12.38	12.11	
10	16QAM	1	49	12.31	12.16	12.40	12
10	16QAM	25	0	11.22	11.39	11.37	
10	16QAM	25	12	11.22	11.23	11.23	
10	16QAM	25	25	11.15	11.15	11.05	12
10	16QAM	50	0	11.31	11.47	11.18	
10	64QAM	1	0	11.33	11.32	11.02	
10	64QAM	1	25	11.18	11.16	11.00	12
10	64QAM	1	49	11.35	11.21	11.10	
10	64QAM	25	0	10.34	10.70	10.71	
10	64QAM	25	12	10.67	10.38	10.40	11
10	64QAM	25	25	10.59	10.34	10.40	
10	64QAM	50	0	10.63	10.44	10.53	
10	256QAM	1	0	8.60	8.85	8.85	9
10	256QAM	1	25	8.81	8.77	8.50	
10	256QAM	1	49	8.53	8.59	8.68	
10	256QAM	25	0	8.76	8.76	8.74	9
10	256QAM	25	12	8.79	8.50	8.96	
10	256QAM	25	25	8.77	8.66	8.54	
10	256QAM	50	0	8.61	8.62	8.73	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	Tune-up limit (dBm)
5	QPSK	1	0	13.01	13.22	13.17	14
5	QPSK	1	12	13.12	13.14	13.05	
5	QPSK	1	24	13.02	13.14	13.06	
5	QPSK	12	0	12.07	12.30	12.15	13
5	QPSK	12	7	12.07	12.18	12.04	
5	QPSK	12	13	12.00	12.17	12.10	
5	QPSK	25	0	12.17	12.08	12.12	13
5	16QAM	1	0	12.19	12.44	12.33	
5	16QAM	1	12	12.20	12.19	12.15	
5	16QAM	1	24	12.29	12.17	12.30	12
5	16QAM	12	0	11.20	11.45	11.20	
5	16QAM	12	7	11.32	11.25	11.17	
5	16QAM	12	13	11.08	11.32	11.24	12
5	16QAM	25	0	11.14	11.32	11.35	
5	64QAM	1	0	11.49	11.33	11.01	
5	64QAM	1	12	11.30	11.20	11.02	12

Band 71 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	22.52	22.65	22.62	23.5
20	QPSK	1	49	22.52	22.60	22.58	
20	QPSK	1	99	22.49	22.53	22.56	
20	QPSK	50	0	21.41	21.56	21.55	22.5
20	QPSK	50	24	21.36	21.52	21.47	
20	QPSK	50	50	21.51	21.50	21.48	
20	QPSK	100	0	21.30	21.46	21.39	22.5
20	16QAM	1	0	22.05	22.20	22.14	
20	16QAM	1	49	22.00	22.11	22.08	
20	16QAM	1	99	21.91	22.01	21.97	21.5
20	16QAM	50	0	20.52	20.58	20.46	
20	16QAM	50	24	20.48	20.53	20.53	
20	16QAM	50	50	20.37	20.55	20.41	21.5
20	16QAM	100	0	20.58	20.65	20.61	
20	64QAM	1	0	20.51	20.48	20.41	
20	64QAM	1	49	20.45	20.46	20.50	21.5
20	64QAM	1	99	20.46	20.34	20.22	
20	64QAM	50	0	19.55	19.65	19.54	
20	64QAM	50	24	19.58	19.57	19.51	20.5
20	64QAM	50	50	19.56	19.44	19.42	
20	64QAM	100	0	19.51	19.52	19.48	
20	256QAM	1	0	19.18	19.21	19.15	19.5
20	256QAM	1	49	19.19	19.18	19.12	
20	256QAM	1	99	19.21	19.00	19.07	
20	256QAM	50	0	19.06	19.22	19.02	19.5
20	256QAM	50	24	19.12	19.29	19.16	
20	256QAM	50	50	19.15	19.14	19.08	
20	256QAM	100	0	19.28	19.01	19.14	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	22.49	22.55	22.55	23.5
15	QPSK	1	37	22.46	22.50	22.49	
15	QPSK	1	74	22.35	22.44	22.43	
15	QPSK	36	0	21.32	21.53	21.51	22.5
15	QPSK	36	20	21.34	21.54	21.36	
15	QPSK	36	39	21.46	21.53	21.39	
15	QPSK	75	0	21.19	21.49	21.41	22.5
15	16QAM	1	0	22.03	22.23	22.20	
15	16QAM	1	37	21.91	22.12	22.04	
15	16QAM	1	74	21.91	21.96	21.91	21.5
15	16QAM	36	0	20.58	20.62	20.28	
15	16QAM	36	20	20.34	20.48	20.47	
15	16QAM	36	39	20.30	20.59	20.38	21.5
15	16QAM	75	0	20.48	20.62	20.55	
15	64QAM	1	0	20.48	20.53	20.41	
15	64QAM	1	37	20.46	20.38	20.37	21.5
15	64QAM	1	74	20.43	20.29	20.06	
15	64QAM	36	0	19.46	19.67	19.50	
15	64QAM	36	20	19.56	19.59	19.43	20.5
15	64QAM	36	39	19.41	19.29	19.24	
15	64QAM	75	0	19.51	19.34	19.41	
15	256QAM	1	0	19.03	19.22	19.12	19.5
15	256QAM	1	37	19.08	19.18	19.13	
15	256QAM	1	74	19.13	19.04	19.05	
15	256QAM	36	0	18.91	19.06	19.03	19.5
15	256QAM	36	20	19.00	19.12	19.06	
15	256QAM	36	39	19.17	19.05	18.93	
15	256QAM	75	0	19.23	18.86	19.00	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	22.49	22.55	22.54	23.5
10	QPSK	1	25	22.47	22.47	22.63	
10	QPSK	1	49	22.42	22.39	22.52	
10	QPSK	25	0	21.29	21.56	21.52	22.5
10	QPSK	25	12	21.29	21.51	21.38	
10	QPSK	25	25	21.53	21.37	21.46	
10	QPSK	50	0	21.19	21.42	21.33	22.5
10	16QAM	1	0	22.00	22.15	22.18	
10	16QAM	1	25	21.86	22.13	21.93	
10	16QAM	1	49	21.85	22.07	21.83	21.5
10	16QAM	25	0	20.58	20.51	20.29	
10	16QAM	25	12	20.44	20.54	20.35	
10	16QAM	25	25	20.42	20.57	20.29	21.5
10	16QAM	50	0	20.53	20.61	20.63	
10	64QAM	1	0	20.33	20.44	20.38	
10	64QAM	1	25	20.30	20.34	20.51	21.5
10	64QAM	1	49	20.34	20.30	20.13	
10	64QAM	25	0	19.37	19.54	19.57	
10	64QAM	25	12	19.47	19.55	19.38	20.5
10	64QAM	25	25	19.60	19.43	19.43	
10	64QAM	50	0	19.48	19.53	19.49	
10	256QAM	1	0	19.05	19.05	19.15	19.5
10	256QAM	1	25	19.07	19.12	19.08	
10	256QAM	1	49	19.11	18.86	18.90	
10	256QAM	25	0	18.90	19.13	18.89	19.5
10	256QAM	25	12	18.94	19.29	19.15	
10	256QAM	25	25	19.02	19.19	19.09	
10	256QAM	50	0	19.15	18.92	19.05	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	22.45	22.58	22.57	23.5
5	QPSK	1	12	22.49	22.46	22.46	
5	QPSK	1	24	22.46	22.45	22.47	
5	QPSK	12	0	21.40	21.42	21.47	22.5
5	QPSK	12	7	21.32	21.50	21.39	
5	QPSK	12	13	21.47	21.50	21.38	
5	QPSK	25	0	21.29	21.48	21.25	22.5
5	16QAM	1	0	21.93	22.10	22.04	
5	16QAM	1	12	21.83	21.94	22.03	
5	16QAM	1	24	21.92	21.88	21.85	21.5
5	16QAM	12	0	20.53	20.44	20.35	
5	16QAM	12	7	20.41	20.56	20.54	
5	16QAM	12	13	20.25	20.44	20.31	21.5
5	16QAM	25	0	20.50	20.60	20.46	
5	64QAM	1	0	20.45	20.45	20.26	
5	64QAM	1	12	20.27	20.30	20.56	21.5

5	64QAM	1	24	11.34	11.19	11.05	11
5	64QAM	12	0	10.35	10.58	10.67	
5	64QAM	12	7	10.56	10.58	10.37	
5	64QAM	12	13	10.37	10.34	10.44	
5	64QAM	25	0	10.55	10.51	10.46	
5	256QAM	1	0	8.76	8.93	8.88	9
5	256QAM	1	12	8.77	8.68	8.53	
5	256QAM	1	24	8.48	8.54	8.60	
5	256QAM	12	0	8.78	8.69	8.63	9
5	256QAM	12	7	8.70	8.65	8.95	
5	256QAM	12	13	8.66	8.58	8.71	
5	256QAM	25	0	8.59	8.49	8.70	
Channel				131987	132322	132657	Tune-up limit
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	13.06	13.26	13.14	14
3	QPSK	1	8	13.07	13.10	13.16	
3	QPSK	1	14	13.10	13.09	13.06	
3	QPSK	8	0	12.10	12.14	12.16	13
3	QPSK	8	4	12.00	12.15	12.00	
3	QPSK	8	7	12.05	12.11	12.20	
3	QPSK	15	0	12.12	12.12	12.01	
3	16QAM	1	0	12.20	12.48	12.22	
3	16QAM	1	8	12.33	12.30	12.09	13
3	16QAM	1	14	12.48	12.20	12.43	
3	16QAM	8	0	11.10	11.22	11.18	
3	16QAM	8	4	11.30	11.14	11.10	12
3	16QAM	8	7	11.22	11.12	11.17	
3	16QAM	15	0	11.29	11.37	11.38	
3	64QAM	1	0	11.32	11.27	11.06	12
3	64QAM	1	8	11.48	11.20	11.11	
3	64QAM	1	14	11.30	11.17	11.11	
3	64QAM	8	0	10.54	10.53	10.60	11
3	64QAM	8	4	10.47	10.44	10.24	
3	64QAM	8	7	10.54	10.47	10.35	
3	64QAM	15	0	10.41	10.58	10.49	
3	256QAM	1	0	8.69	8.82	8.76	
3	256QAM	1	8	8.80	8.75	8.58	9
3	256QAM	1	14	8.57	8.65	8.68	
3	256QAM	8	0	8.58	8.73	8.86	
3	256QAM	8	4	8.77	8.73	8.88	9
3	256QAM	8	7	8.67	8.70	8.62	
3	256QAM	15	0	8.44	8.56	8.50	
Channel				131979	132322	132665	Tune-up limit
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	13.04	13.15	13.15	14
1.4	QPSK	1	3	13.08	13.09	13.06	
1.4	QPSK	1	5	13.10	13.16	13.04	
1.4	QPSK	3	0	13.12	13.04	13.09	
1.4	QPSK	3	1	13.02	13.12	13.06	
1.4	QPSK	3	3	13.05	13.09	13.15	13
1.4	QPSK	6	0	12.13	12.16	12.05	
1.4	16QAM	1	0	12.16	12.43	12.30	
1.4	16QAM	1	3	12.14	12.25	12.22	13
1.4	16QAM	1	5	12.38	12.28	12.30	
1.4	16QAM	3	0	12.11	12.18	12.02	
1.4	16QAM	3	1	12.04	12.05	12.09	
1.4	16QAM	3	3	12.14	12.15	12.08	
1.4	16QAM	6	0	11.18	11.48	11.36	12
1.4	64QAM	1	0	11.38	11.40	11.09	
1.4	64QAM	1	3	11.50	11.25	11.21	
1.4	64QAM	1	5	11.22	11.29	11.08	12
1.4	64QAM	3	0	11.38	11.31	11.50	
1.4	64QAM	3	1	11.34	11.31	11.31	
1.4	64QAM	3	3	11.34	11.16	11.15	
1.4	64QAM	6	0	10.61	10.64	10.62	
1.4	256QAM	1	0	8.71	8.99	8.86	9
1.4	256QAM	1	3	8.75	8.60	8.56	
1.4	256QAM	1	5	8.58	8.54	8.63	
1.4	256QAM	3	0	8.66	8.66	8.78	
1.4	256QAM	3	1	8.76	8.60	8.85	
1.4	256QAM	3	3	8.75	8.74	8.56	
1.4	256QAM	6	0	8.43	8.54	8.52	

5	64QAM	1	24	20.29	20.40	20.07	20.5
5	64QAM	12	0	19.49	19.61	19.37	
5	64QAM	12	7	19.48	19.49	19.33	
5	64QAM	12	13	19.55	19.33	19.43	
5	64QAM	25	0	19.33	19.56	19.33	
5	256QAM	1	0	19.01	19.04	19.11	19.5
5	256QAM	1	12	19.13	19.06	19.07	
5	256QAM	1	24	19.04	18.92	18.90	
5	256QAM	12	0	18.99	19.09	18.84	19.5
5	256QAM	12	7	18.99	19.21	19.19	
5	256QAM	12	13	19.09	19.20	19.04	
5	256QAM	25	0	19.11	18.91	19.17	

n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	11.98	11.83	11.58	13
20		1	53	11.92	11.81	11.34	
20		1	104	11.86	11.60	11.44	
20		50	1	11.22	11.09	10.79	12.5
20	DFT-s-OFDM QPSK	50	25	11.79	11.60	11.36	
20		50	50	11.19	11.24	10.78	
20		100	0	11.27	11.17	10.82	
20		1	1	12.21	12.27	12.25	13
20	DFT-s-OFDM 16QAM	1	53	12.11	12.05	11.28	
20		1	104	11.82	11.76	11.68	
20		50	1	11.36	11.23	10.94	12.5
20		50	25	11.74	11.80	11.72	
20	DFT-s-OFDM 64QAM	50	50	11.44	11.39	10.84	
20		100	0	11.34	11.38	11.30	
20	DFT-s-OFDM 256QAM	1	1	11.59	11.60	11.41	12
20	DFT-s-OFDM 16QAM	1	1	10.86	10.79	10.43	11.5
20	DFT-s-OFDM 64QAM	1	1	9.51	9.27	9.21	10
20	CP-OFDM QPSK	1	1	10.96	10.68	10.56	11.5
20	CP-OFDM 16QAM	1	1	10.95	10.51	10.28	11.5
20	CP-OFDM 64QAM	1	1	10.38	9.95	9.83	11
20	CP-OFDM 256QAM	1	1	7.61	7.62	7.70	8.5
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	12.00	11.64	11.29	13
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	11.91	11.67	11.23	13
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	11.90	11.31	11.11	13

n5 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800	19.5
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	18.45	18.46	18.53	19.5
20		1	53	18.51	18.48	18.54	
20		1	104	18.51	18.33	18.32	
20		50	1	17.81	17.82	17.95	19
20	DFT-s-OFDM QPSK	50	25	18.24	18.36	18.37	
20		50	50	17.85	17.87	17.89	
20		100	0	17.84	17.85	17.89	
20	DFT-s-OFDM 16QAM	1	1	18.47	18.68	18.53	19.5
20		1	53	18.75	18.78	18.70	
20		1	104	18.51	18.39	18.29	
20		50	1	17.91	17.92	18.00	19
20	DFT-s-OFDM 64QAM	50	25	18.30	18.48	18.39	
20		50	50	17.89	17.95	17.88	
20		100	0	17.88	17.99	17.87	
20	DFT-s-OFDM 256QAM	1	1	18.04	17.94	18.06	18.5
20	DFT-s-OFDM 64QAM	1	1	17.11	17.18	17.10	18
20	DFT-s-OFDM 256QAM	1	1	15.88	15.66	15.70	16.5
20	CP-OFDM QPSK	1	1	16.97	17.26	17.12	18
20	CP-OFDM 16QAM	1	1	16.68	16.99	16.85	18
20	CP-OFDM 64QAM	1	1	16.53	16.82	16.72	17.5
20	CP-OFDM 256QAM	1	1	14.05	13.86	13.72	14.5
Channel				166300	167300	168300	19.5
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	18.56	18.56	18.34	19.5
Channel				165800	167300	168800	19.5
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	18.46	18.38	18.53	19.5
Channel				165300	167300	169300	19.5
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	18.13	18.46	18.02	19.5

n7 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				502000	507000	512000	22.5
Frequency (MHz)				2510	2535	2560	
20	DFT-s-OFDM PI/2 BPSK	1	1	21.55	21.69	21.83	22.5
20		1	53	21.62	21.70	21.86	
20		1	104	21.82	21.82	21.83	
20		50	1	21.09	21.17	21.19	22.5
20		50	25	21.65	21.77	21.79	
20		50	50	21.28	21.28	21.30	
20	DFT-s-OFDM QPSK	100	0	21.20	21.28	21.23	22.5
20		1	1	21.86	21.99	21.91	
20		1	53	21.80	21.76	21.94	
20		1	104	21.91	21.95	21.92	22.5
20		50	1	21.22	21.26	21.31	
20		50	25	21.81	21.85	21.83	
20	DFT-s-OFDM 16QAM	50	50	21.33	21.26	21.29	22.5
20		100	0	21.28	21.35	21.28	
20		1	1	21.32	21.50	21.38	
20		1	1	20.43	20.58	20.47	21
20		1	1	19.40	19.22	19.80	20
20	CP-OFDM QPSK	1	1	20.49	20.62	20.56	21
20	CP-OFDM 16QAM	1	1	20.27	20.41	20.43	21
20	CP-OFDM 64QAM	1	1	19.79	19.83	19.96	20.5
20	CP-OFDM 256QAM	1	1	17.28	17.24	17.58	18
Channel				501500	507000	512500	22.5
Frequency (MHz)				2507.5	2535	2562.5	
15	DFT-s-OFDM QPSK	1	1	21.65	21.76	21.98	22.5
Channel				501000	507000	513000	22.5
Frequency (MHz)				2505	2535	2565	
10	DFT-s-OFDM QPSK	1	1	21.61	21.51	21.96	22.5
Channel				500500	507000	513500	22.5
Frequency (MHz)				2502.5	2535	2567.5	
5	DFT-s-OFDM QPSK	1	1	21.46	21.87	21.29	22.5

n25 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376500	381000	12
Frequency (MHz)				1860	1882.5	1905	
20	DFT-s-OFDM PI/2 BPSK	1	1	11.16	10.49	9.89	12
20		1	53	11.04	11.00	10.42	
20		1	104	10.97	10.67	10.74	
20		50	1	10.40	10.19	9.72	11.5
20		50	25	10.97	10.84	10.25	
20		50	50	10.44	10.21	9.80	
20	DFT-s-OFDM QPSK	100	0	10.48	10.24	9.81	12
20		1	1	11.20	11.29	11.19	
20		1	53	10.99	11.18	10.47	
20		1	104	11.04	10.97	10.76	11.5
20		50	1	10.54	10.26	9.84	
20		50	25	10.87	10.92	10.90	
20	DFT-s-OFDM 16QAM	50	50	10.51	10.24	9.85	11.5
20		100	0	10.41	10.43	10.19	
20		1	1	10.83	10.54	10.18	
20	DFT-s-OFDM 64QAM	1	1	9.90	9.78	9.56	10.5
20	DFT-s-OFDM 256QAM	1	1	7.72	7.18	7.12	8
20	CP-OFDM QPSK	1	1	10.03	9.86	9.76	10.5
20	CP-OFDM 16QAM	1	1	9.76	9.76	9.51	10.5
20	CP-OFDM 64QAM	1	1	9.23	9.10	8.96	10
20	CP-OFDM 256QAM	1	1	5.80	5.68	5.52	6.5
Channel				371500	376500	381500	12
Frequency (MHz)				1857.5	1882.5	1907.5	
15	DFT-s-OFDM QPSK	1	1	11.25	10.78	9.92	12
Channel				371000	376500	382000	12
Frequency (MHz)				1855	1882.5	1910	
10	DFT-s-OFDM QPSK	1	1	11.07	10.65	10.33	12
Channel				370500	376500	382500	12
Frequency (MHz)				1852.5	1882.5	1912.5	
5	DFT-s-OFDM QPSK	1	1	10.97	10.50	10.68	12

n26(814-824MHz) (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					163800		
Frequency (MHz)					819		
10	DFT-s-OFDM PI/2 BPSK	1	1		18.34		19.5
10		1	26		18.86		
10		1	50		18.80		
10		25	1		18.18		19.5
10	DFT-s-OFDM QPSK	25	12		18.74		
10		25	25		18.28		
10		50	0		18.19		
10		1	1		18.83		19.5
10	DFT-s-OFDM 16QAM	1	26		18.76		
10		1	50		18.97		
10		25	1		18.27		19.5
10		25	12		18.75		
10	DFT-s-OFDM 64QAM	25	25		18.35		
10		50	0		18.21		
10	DFT-s-OFDM 256QAM	1	1		18.16		19
10	DFT-s-OFDM 64QAM	1	1		17.37		18
10	DFT-s-OFDM 256QAM	1	1		14.88		15.5
10	CP-OFDM QPSK	1	1		17.37		18
10	CP-OFDM 16QAM	1	1		17.36		18
10	CP-OFDM 64QAM	1	1		16.78		17.5
10	CP-OFDM 256QAM	1	1		13.15		14
Channel				163300	163800	164300	Tune-up limit
Frequency (MHz)				816.5	819	821.5	(dBm)
5	DFT-s-OFDM QPSK	1	1	18.89	18.83	18.29	19.5

n26(824-849MHz) (PC3)								
BW [MHz]	Modulation		RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800		
Frequency (MHz)				834	836.5	839		
20	DFT-s-OFDM PI/2 BPSK		1	1	18.54	18.92	18.35	20
20			1	53	19.07	19.07	19.03	
20			1	104	18.85	18.90	18.85	
20			50	1	18.32	18.30	18.51	19.5
20			50	25	18.76	19.00	18.92	
20			50	50	18.46	18.44	18.39	
20	100	0	18.33	18.43	18.36			
20	DFT-s-OFDM QPSK		1	1	18.96	18.82	18.97	20
20			1	53	19.18	19.22	19.20	
20			1	104	18.87	18.83	18.81	
20			50	1	18.41	18.42	18.58	19.5
20			50	25	18.92	19.01	18.98	
20			50	50	18.47	18.43	18.41	
20			100	0	18.40	18.46	18.39	
20	DFT-s-OFDM 16QAM		1	1	18.28	18.37	18.35	19
20	DFT-s-OFDM 64QAM		1	1	17.62	17.64	17.68	18.5
20	DFT-s-OFDM 256QAM		1	1	16.41	16.18	16.01	17
20	CP-OFDM QPSK		1	1	17.67	17.63	17.48	18
20	CP-OFDM 16QAM		1	1	17.42	17.59	17.26	18
20	CP-OFDM 64QAM		1	1	16.95	16.94	16.79	17.5
20	CP-OFDM 256QAM		1	1	14.76	14.48	14.44	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	19.08	18.76	18.93	20
Channel				165800	167300	168800	Tune-up limit (dBm)	
Frequency (MHz)				829	836.5	844		
10	DFT-s-OFDM QPSK		1	1	18.80	18.52	19.01	20
Channel				165300	167300	169300	Tune-up limit (dBm)	
Frequency (MHz)				826.5	836.5	846.5		
5	DFT-s-OFDM QPSK		1	1	18.12	19.03	18.38	20

n66 (PC3)_ANT 1							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	15
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	14.05	14.11	14.20	15
40		1	108	13.80	13.53	13.67	
40		1	214	13.54	13.65	13.82	
40		108	1	13.10	13.14	13.03	14
40		108	54	13.59	13.55	13.53	
40		108	108	13.15	12.97	13.03	
40		216	0	13.16	13.11	13.03	
40	DFT-s-OFDM QPSK	1	1	14.21	14.23	14.18	15
40		1	108	13.94	13.77	13.75	
40		1	214	13.69	13.77	13.82	
40		108	1	13.21	13.21	13.08	14
40		108	54	13.47	13.53	13.50	
40		108	108	13.20	13.04	13.07	
40		216	0	13.15	13.19	13.11	
40	DFT-s-OFDM 16QAM	1	1	13.13	13.49	13.26	14
40	DFT-s-OFDM 64QAM	1	1	12.44	12.63	12.67	13
40	DFT-s-OFDM 256QAM	1	1	11.16	11.11	11.47	12
40	CP-OFDM QPSK	1	1	12.47	12.48	12.69	13
40	CP-OFDM 16QAM	1	1	12.27	12.23	12.49	13
40	CP-OFDM 64QAM	1	1	11.74	11.76	11.98	12.5
40	CP-OFDM 256QAM	1	1	11.71	11.91	11.87	12.5
Channel				345000	349000	353000	15
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	13.80	13.96	13.67	15
Channel				344500	349000	353500	15
Frequency (MHz)				1722.5	1745	1767.5	
25	DFT-s-OFDM QPSK	1	1	13.11	13.77	13.42	15
Channel				344000	349000	354000	15
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	13.59	14.01	13.55	15
Channel				343500	349000	354500	15
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	13.86	13.43	13.82	15
Channel				343000	349000	355000	15
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	13.60	13.55	13.80	15
Channel				342500	349000	355500	15
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	13.89	13.51	13.26	15

n66 (PC3)_ANT 5							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	21.5
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	20.55	20.61	20.70	21.5
40		1	108	20.30	20.03	20.17	
40		1	214	20.04	20.15	20.32	
40		108	1	19.60	19.64	19.53	20.5
40		108	54	20.09	20.05	20.03	
40		108	108	19.65	19.47	19.53	
40		216	0	19.66	19.61	19.53	
40	DFT-s-OFDM QPSK	1	1	20.71	20.73	20.68	21.5
40		1	108	20.44	20.27	20.25	
40		1	214	20.19	20.27	20.32	
40		108	1	19.71	19.71	19.58	20.5
40		108	54	19.97	20.03	20.00	
40		108	108	19.70	19.54	19.57	
40		216	0	19.65	19.69	19.61	
40	DFT-s-OFDM 16QAM	1	1	19.63	19.99	19.76	20.5
40	DFT-s-OFDM 64QAM	1	1	18.94	19.13	19.17	20
40	DFT-s-OFDM 256QAM	1	1	17.66	17.61	17.97	18.5
40	CP-OFDM QPSK	1	1	18.97	18.98	19.19	20
40	CP-OFDM 16QAM	1	1	18.77	18.73	18.99	19.5
40	CP-OFDM 64QAM	1	1	18.24	18.26	18.48	19
40	CP-OFDM 256QAM	1	1	18.21	18.41	18.37	19
Channel				345000	349000	353000	21.5
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	20.30	20.46	20.17	21.5
Channel				344500	349000	353500	21.5
Frequency (MHz)				1722.5	1745	1767.5	
25	DFT-s-OFDM QPSK	1	1	19.61	20.27	19.92	21.5
Channel				344000	349000	354000	21.5
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	20.09	20.51	20.05	21.5
Channel				343500	349000	354500	21.5
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	20.36	19.93	20.32	21.5
Channel				343000	349000	355000	21.5
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	20.10	20.05	20.30	21.5
Channel				342500	349000	355500	21.5
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	20.39	20.01	19.76	21.5

n71 (PC3)										
BW [MHz]	Modulation		RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)		
Channel				134600	136100	137600				
Frequency (MHz)				673	680.5	688				
20	DFT-s-OFDM PI/2 BPSK		1	1	21.12	21.40	21.78	22.5		
20			1	53	21.66	21.65	21.84			
20			1	104	21.62	21.77	21.72			
20			50	1	20.92	21.10	21.25	22.5		
20			50	25	21.44	21.62	21.63			
20			50	50	21.08	21.30	21.13			
20	DFT-s-OFDM QPSK		100	0	21.00	21.18	21.17	22.5		
20			1	1	21.58	21.87	21.83			
20			1	53	21.91	21.95	21.92			
20			1	104	21.66	21.82	21.77	22.5		
20			50	1	21.06	21.17	21.33			
20			50	25	21.70	21.76	21.71			
20	DFT-s-OFDM 16QAM		50	50	21.12	21.25	21.18	22.5		
20			100	0	21.10	21.22	21.24			
20			1	1	21.00	21.29	21.51		22	
20			DFT-s-OFDM 64QAM		1	1	20.42	20.46	20.61	21
20			DFT-s-OFDM 256QAM		1	1	18.01	18.17	18.10	19
20			CP-OFDM QPSK		1	1	20.42	20.54	20.38	21
20	CP-OFDM 16QAM		1	1	20.23	20.36	20.38	21		
20	CP-OFDM 64QAM		1	1	19.81	19.94	19.68	20.5		
20	CP-OFDM 256QAM		1	1	16.33	16.55	16.30	17		
Channel				134100	136100	138100	Tune-up limit (dBm)			
Frequency (MHz)				670.5	680.5	690.5				
15	DFT-s-OFDM QPSK		1	1	20.96	21.48	21.19	22.5		
Channel				133600	136100	138600	Tune-up limit (dBm)			
Frequency (MHz)				668	680.5	693				
10	DFT-s-OFDM QPSK		1	1	21.05	21.09	21.50	22.5		
Channel				133100	136100	139100	Tune-up limit (dBm)			
Frequency (MHz)				665.5	680.5	695.5				
5	DFT-s-OFDM QPSK		1	1	21.16	21.13	21.20	22.5		

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			25
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			24.00			25
100		1	136			23.46			
100		1	271			22.74			
100		135	1			23.13			
100		135	67			23.33			
100	DFT-s-OFDM QPSK	135	136			22.17			24
100		270	0			22.80			
100		1	1			24.19			
100		1	136			23.56			
100		1	271			23.03			
100	DFT-s-OFDM 16QAM	135	1			22.77			25
100		135	67			23.54			
100		135	136			21.70			
100		270	0			23.37			
100		270	0			23.37			
100	DFT-s-OFDM 64QAM	1	1			22.89			23.5
100	DFT-s-OFDM 256QAM	1	1			22.08			22.5
100	CP-OFDM QPSK	1	1			20.19			21
100	CP-OFDM 16QAM	1	1			22.78			23.5
100	CP-OFDM 64QAM	1	1			22.17			23
100	CP-OFDM 256QAM	1	1			20.67			21.5
100	CP-OFDM 256QAM	1	1			17.90			18.5
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	24.04	24.05	24.09	24.08	23.99	25
Channel				632688	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	24.15	24.10	24.07	23.97	23.93	25
Channel				632334	632834	633334	633834	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	24.08	24.05	23.96	23.87	23.65	25
Channel				632000	632688	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	24.05	24.05	23.84	23.70	23.51	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	24.10	24.05	23.78	23.58	23.38	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	24.17	23.92	23.71	23.40	23.06	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	22.84	23.75	22.26	22.68	22.63	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	22.91	23.34	23.04	22.63	22.32	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	23.97	23.40	23.12	22.54	22.55	25

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	25.5
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	24.27	24.33	24.55	24.52	24.26	25.5
100		1	136	23.23	22.96	23.35	23.19	22.93	
100		1	271	23.10	24.78	23.07	23.16	23.97	
100		135	1	22.78	22.38	22.25	22.32	22.27	
100		135	67	23.76	23.71	23.77	23.82	23.83	
100		135	136	22.37	23.80	22.34	22.30	22.88	
100	DFT-s-OFDM QPSK	270	0	22.50	23.09	22.44	22.50	22.46	24.5
100		1	1	24.74	24.71	24.80	24.79	24.73	
100		1	136	23.33	23.12	23.35	23.18	23.01	
100		1	271	24.22	24.25	24.29	24.11	24.06	
100		135	1	22.46	21.98	21.76	22.01	22.00	
100		135	67	23.71	23.73	23.76	23.72	23.75	
100	DFT-s-OFDM 16QAM	135	136	23.11	23.38	21.91	22.02	22.54	25.5
100		270	0	23.15	23.26	23.49	23.41	23.26	
100		1	1	22.07	21.92	20.40	22.02	21.90	
100		1	1	21.32	21.16	19.66	21.30	21.20	
100	DFT-s-OFDM 64QAM	1	1	19.45	19.16	17.80	19.35	19.16	20
100	DFT-s-OFDM 256QAM	1	1	22.08	21.75	20.07	21.95	21.84	22.5
100	CP-OFDM QPSK	1	1	21.51	21.23	19.71	21.32	21.11	22
100	CP-OFDM 16QAM	1	1	20.20	19.91	18.33	20.09	19.86	21
100	CP-OFDM 64QAM	1	1	17.08	17.96	17.13	17.52	17.79	18.5
100	CP-OFDM 256QAM	1	1	649666	652834	656000	659166	662332	25.5
Channel				3744.99	3792.51	3840	3887.49	3934.98	
Frequency (MHz)				23.13	23.17	21.57	23.11	22.96	25.5
90	DFT-s-OFDM QPSK	1	1	23.13	23.17	21.57	23.11	22.96	
Channel				649334	652688	656000	659332	662686	25.5
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	23.17	23.16	23.17	23.16	23.02	25.5
Channel				649000	652500	656000	659500	663000	
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	25.5
70	DFT-s-OFDM QPSK	1	1	23.16	23.14	23.20	23.08	22.98	
Channel				648668	652334	656000	659666	663332	25.5
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	23.14	23.04	23.12	22.92	22.81	25.5
Channel				648334	652168	656000	659832	663666	
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	25.5
50	DFT-s-OFDM QPSK	1	1	23.19	23.09	23.02	23.01	23.08	
Channel				648000	652000	656000	660000	664000	25.5
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	23.18	23.05	23.17	23.13	23.31	25.5
Channel				647334	651668	656000	660332	664666	
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	25.5
20	DFT-s-OFDM QPSK	1	1	23.20	23.02	23.22	22.91	23.61	
Channel				647168	651584	656000	660416	664832	25.5
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	23.21	23.15	23.27	22.83	23.72	25.5
Channel				647000	651500	656000	660500	665000	
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	25.5
10	DFT-s-OFDM QPSK	1	1	23.17	22.94	23.35	23.05	23.92	

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			22
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			21.13			21
100		1	136			20.75			
100		1	271			20.44			
100		135	1			20.40			
100		135	67			20.01			
100		135	136			19.39			
100	DFT-s-OFDM QPSK	270	0			20.05			22
100		1	1			21.26			
100		1	136			20.35			
100		1	271			19.76			
100		135	1			20.42			
100		135	67			20.27			
100	DFT-s-OFDM 16QAM	135	136			19.72			21
100		270	0			20.25			
100		1	1			20.71			
100		1	1			21.03			
100		1	1			19.87			
100		1	1			20.95			
100	CP-OFDM QPSK	1	1			21.06			21.5
100	CP-OFDM 16QAM	1	1			20.16			21
100	CP-OFDM 64QAM	1	1			17.87			18.5
100	CP-OFDM 256QAM	1	1						
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	20.85	20.95	20.92	20.80	20.71	22
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	21.04	20.85	20.96	20.77	20.66	22
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	21.09	20.99	20.92	20.81	20.63	22
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	21.13	21.03	20.85	20.61	20.65	22
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	21.04	20.97	20.61	20.37	20.40	22
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	21.05	20.80	20.49	20.25	19.94	22
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	21.13	20.83	20.54	19.94	19.50	22
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	21.14	20.68	20.45	20.00	19.55	22
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	21.16	20.85	20.49	19.75	19.57	22

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	22
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	20.15	20.16	20.38	20.25	20.39	22
100		1	136	20.06	20.05	20.27	20.12	20.27	
100		1	271	20.00	21.58	20.20	20.21	21.20	
100		135	1	20.27	19.90	19.80	19.89	20.20	
100		135	67	20.03	20.42	20.17	20.02	20.21	
100		135	136	19.80	21.13	19.82	19.93	20.70	
100	DFT-s-OFDM QPSK	270	0	20.04	20.55	20.09	20.20	20.35	21
100		1	1	21.54	21.59	21.63	21.58	21.57	
100		1	136	20.21	20.14	20.29	20.29	20.44	
100		1	271	20.06	21.22	20.94	21.05	21.29	
100		135	1	20.45	20.42	20.48	20.44	20.43	
100		135	67	20.16	20.41	20.21	20.23	20.42	
100	DFT-s-OFDM 16QAM	135	136	19.95	20.28	19.85	20.19	20.28	21
100		270	0	20.14	20.25	20.37	20.34	20.36	
100		1	1	20.21	19.97	18.56	20.23	20.22	
100		1	1	20.46	20.30	18.81	20.70	20.46	
100		1	1	19.30	19.18	17.83	19.68	19.50	
100		1	1	20.56	20.33	18.82	20.65	20.66	
100	DFT-s-OFDM 64QAM	1	1	20.45	20.10	18.71	20.50	20.48	21
100	DFT-s-OFDM 256QAM	1	1	19.51	19.44	17.90	19.77	19.61	20
100	CP-OFDM QPSK	1	1	16.92	17.75	16.97	18.56	18.26	19
100	CP-OFDM 16QAM	1	1	20.12	20.17	18.70	20.09	20.07	22
100	CP-OFDM 64QAM	1	1	20.45	20.10	18.71	20.50	20.48	21
100	CP-OFDM 256QAM	1	1	19.51	19.44	17.90	19.77	19.61	20
100	CP-OFDM QPSK	1	1	16.92	17.75	16.97	18.56	18.26	19
Channel				649666	652834	656000	659166	662332	22
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	20.12	20.17	18.70	20.09	20.07	22
Channel				649334	652688	656000	659332	662686	22
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	20.19	20.07	20.02	20.04	19.91	22
Channel				649000	652500	656000	659500	663000	22
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	20.15	20.10	20.00	19.77	19.85	22
Channel				648668	652334	656000	659666	663332	22
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	20.08	20.00	19.92	19.75	19.83	22
Channel				648334	652168	656000	659832	663666	22
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	20.27	20.07	20.03	19.97	20.06	22
Channel				648000	652000	656000	660000	664000	22
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	20.28	19.88	19.92	20.02	20.23	22
Channel				647334	651668	656000	660332	664666	22
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	20.10	19.94	20.12	19.88	20.68	22
Channel				647168	651584	656000	660416	664832	22
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	20.27	19.94	20.19	19.95	20.69	22
Channel				647000	651500	656000	660500	665000	22
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	20.16	20.04	20.21	19.98	20.99	22

n78(3450-3550MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			24
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			23.09			24
100		1	136			22.46			
100		1	271			21.71			
100		135	1			22.18			
100	DFT-s-OFDM QPSK	135	67			22.39			23
100		135	136			21.19			
100		270	0			21.81			
100		1	1			23.16			
100	DFT-s-OFDM 16QAM	1	136			22.73			24
100		1	271			22.09			
100		135	1			21.81			
100		135	67			22.58			
100	DFT-s-OFDM 64QAM	135	136			20.96			23
100		270	0			21.50			
100		1	1			21.94			
100		1	1			21.10			
100	DFT-s-OFDM 256QAM	1	1			19.03			20
100	CP-OFDM QPSK	1	1			21.54			22
100	CP-OFDM 16QAM	1	1			21.10			21.5
100	CP-OFDM 64QAM	1	1			19.77			20.5
100	CP-OFDM 256QAM	1	1			17.00			18
Channel				633000	633166	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	23.09	23.10	22.98	22.69	22.94	24
Channel				632688	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	23.14	23.12	23.05	22.69	22.88	24
Channel				632334	632834	633334	633832	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	22.88	22.88	22.80	22.75	22.78	24
Channel				632000	632686	633334	634000	634686	Tune-up limit (dBm)
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	22.86	22.72	22.65	22.60	22.50	24
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	22.89	22.65	22.57	22.31	22.16	24
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	23.03	21.45	22.65	22.34	21.97	24
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	22.92	22.66	22.43	21.93	21.42	24
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	22.94	22.71	22.39	21.70	21.33	24
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	22.89	22.61	22.32	21.60	21.51	24

n78(3700-3800MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			24
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			23.08			24
100		1	136			22.90			
100		1	271			22.69			
100		135	1			22.72			
100		135	67			22.94			
100		135	136			22.26			
100	DFT-s-OFDM QPSK	270	0			22.43			23
100		1	1			23.15			
100		1	136			23.02			
100		1	271			22.91			
100		135	1			22.28			
100		135	67			22.03			
100	DFT-s-OFDM 16QAM	135	136			21.86			24
100		270	0			22.00			
100		1	1			21.81			
100		1	1			21.18			
100		1	1			19.18			
100		1	1			21.69			
100	DFT-s-OFDM 64QAM	1	1			21.18			22.5
100	DFT-s-OFDM 256QAM	1	1			19.18			20
100	CP-OFDM QPSK	1	1			21.69			22.5
100	CP-OFDM 16QAM	1	1			21.18			22
100	CP-OFDM 64QAM	1	1			19.85			20.5
100	CP-OFDM 256QAM	1	1			16.91			17.5
Channel				649688	649834	650000	650166	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	23.51	23.50	23.70	23.60	23.57	24
Channel				649334	649686	650000	650334	650686	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	23.57	23.73	23.64	23.80	23.73	24
Channel				649000	649500	650000	650500	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	23.59	23.73	23.74	23.77	23.84	24
Channel				648688	649334	650000	650686	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	23.56	23.65	23.65	23.72	23.52	24
Channel				648334	649166	650000	650834	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	23.58	23.71	23.76	23.58	23.48	24
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	23.46	23.62	23.74	23.57	23.46	24
Channel				647334	648686	650000	651334	652686	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	23.60	23.74	23.54	23.43	23.43	24
Channel				647168	648584	650000	651416	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	23.56	23.75	23.56	23.31	23.34	24
Channel				647000	648500	650000	651500	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	23.54	23.82	23.62	23.43	23.40	24

n78(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			21
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			20.31			20.5
100		1	136			19.58			
100		1	271			19.23			
100		135	1			19.84			
100		135	67			19.53			
100		135	136			18.87			
100	DFT-s-OFDM QPSK	270	0			19.49			21
100		1	1			20.34			
100		1	136			19.79			
100		1	271			19.26			
100		135	1			19.97			
100		135	67			19.78			
100	DFT-s-OFDM 16QAM	135	136			19.23			20.5
100		270	0			19.76			
100		1	1			19.89			
100		1	1			20.31			
100		1	1			19.19			
100		1	1			20.33			
100	DFT-s-OFDM 64QAM	1	1			20.02			20.5
100	DFT-s-OFDM 256QAM	1	1			19.32			20
100	CP-OFDM QPSK	1	1			17.14			18
Channel				633000	633166	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	20.26	20.19	20.23	20.17	20.09	21
Channel				632688	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	20.32	20.26	20.17	20.12	20.03	21
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	20.33	20.25	20.14	19.96	19.95	21
Channel				632000	632666	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	20.24	20.15	20.13	19.91	19.79	21
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	20.35	20.11	20.03	19.78	19.63	21
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	20.32	18.82	19.92	19.61	19.40	21
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	20.28	20.03	19.75	19.27	18.76	21
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	20.60	20.52	20.33	19.66	19.38	21
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	20.39	20.12	19.69	19.09	18.84	21

n78(3700-3800MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			20.5
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			19.77			20
100		1	136			19.59			
100		1	271			19.18			
100		135	1			19.39			
100		135	67			19.09			
100		135	136			18.92			
100	DFT-s-OFDM QPSK	270	0			19.10			20.5
100		1	1			19.85			
100		1	136			19.26			
100		1	271			19.10			
100		135	1			19.51			
100		135	67			19.23			
100	DFT-s-OFDM 16QAM	135	136			18.99			20
100		270	0			19.29			
100		1	1			19.44			
100		1	1			19.54			
100		1	1			18.38			
100		1	1			19.40			
100	DFT-s-OFDM 64QAM	1	1			19.50			20
100	DFT-s-OFDM 256QAM	1	1			18.56			19
100	CP-OFDM QPSK	1	1			16.06			17
Channel				649688	649834	650000	650166	650332	20.5
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	19.30	19.23	19.39	19.27	19.36	20.5
Channel				649334	649686	650000	650334	650686	20.5
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	19.29	19.39	19.33	19.45	19.40	20.5
Channel				649000	649500	650000	650500	651000	20.5
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	19.29	19.34	19.38	19.42	19.38	20.5
Channel				648688	649334	650000	650686	651332	20.5
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	19.24	19.29	19.46	19.39	19.29	20.5
Channel				648334	649166	650000	650834	651666	20.5
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	19.35	19.47	19.43	19.22	19.12	20.5
Channel				648000	649000	650000	651000	652000	20.5
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	19.27	19.42	19.51	19.23	19.04	20.5
Channel				647334	648686	650000	651334	652686	20.5
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	19.23	19.52	19.38	19.06	19.00	20.5
Channel				647168	648584	650000	651416	652832	20.5
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	19.36	19.40	19.31	19.12	19.09	20.5
Channel				647000	648500	650000	651500	653000	20.5
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	19.25	19.59	19.26	19.12	19.07	20.5

2.4GHz WLAN ANT 8

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 8	802.11b 1Mbps	CH 1	2412	17.82	18.50	13.00	99.43
		CH 6	2437	17.03	18.00	13.00	99.32
		CH 11	2462	17.80	18.50	13.00	99.43
	802.11g 6Mbps	CH 1	2412	17.33	18.00	13.00	96.28
		CH 6	2437	16.65	17.50	13.00	96.28
		CH 11	2462	17.26	18.00	13.00	96.28
	802.11n-HT20 MCS0	CH 1	2412	17.67	18.50	13.00	95.79
		CH 6	2437	17.00	18.00	13.00	95.79
		CH 11	2462	17.58	18.50	13.00	95.63

5.2GHz WLAN ANT 8

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 8	802.11a 6Mbps	CH 36	5180	11.07	12.00	8.00	96.55
		CH 44	5220	11.21	12.00	8.00	96.55
		CH 48	5240	10.92	11.50	8.00	96.55
	802.11n-HT20 MCS0	CH 36	5180	11.35	12.00	8.00	95.16
		CH 44	5220	11.59	12.50	8.00	95.93
		CH 48	5240	11.39	12.00	8.00	95.93
	802.11n-HT40 MCS0	CH 38	5190	11.10	12.00	8.00	90.62
		CH 46	5230	11.28	12.00	8.00	92.19
		CH 36	5180	11.33	12.00	8.00	95.20
	802.11ac-VHT20 MCS0	CH 44	5220	11.55	12.50	8.00	95.97
		CH 48	5240	11.34	12.00	8.00	95.97
		CH 38	5190	10.91	11.50	8.00	92.31
	802.11ac-VHT40 MCS0	CH 46	5230	11.08	12.00	8.00	90.77
		CH 42	5210	11.60	12.00	8.00	85.71

5.3GHz WLAN ANT 8

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 8	802.11a 6Mbps	CH 52	5260	12.58	13.50	9.00	95.86
		CH 60	5300	12.06	13.00	9.00	95.86
		CH 64	5320	12.08	13.00	9.00	96.55
	802.11n-HT20 MCS0	CH 52	5260	13.01	13.50	9.00	95.93
		CH 60	5300	12.41	13.00	9.00	95.93
		CH 64	5320	12.41	13.00	9.00	95.93
	802.11n-HT40 MCS0	CH 54	5270	12.52	13.50	9.00	92.19
		CH 62	5310	12.50	13.50	9.00	92.19
		CH 52	5260	12.99	13.50	9.00	95.16
	802.11ac-VHT20 MCS0	CH 60	5300	12.38	13.00	9.00	95.20
		CH 64	5320	12.45	13.00	9.00	95.97
		CH 54	5270	12.26	13.00	9.00	92.31
	802.11ac-VHT40 MCS0	CH 62	5310	12.28	13.00	9.00	92.31
		CH 58	5290	12.41	13.00	9.00	82.86

5.5GHz WLAN ANT 8

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.5GHz WLAN ANT 8	802.11a 6Mbps	CH 100	5500	15.09	16.00	12.00	96.55
		CH 116	5580	15.16	16.00	12.00	96.55
		CH 140	5700	15.33	16.00	12.00	96.55
	802.11n-HT20 MCS0	CH 100	5500	15.42	16.00	12.00	95.16
		CH 116	5580	15.53	16.50	12.00	95.93
		CH 140	5700	15.65	16.50	12.00	95.93
	802.11n-HT40 MCS0	CH 102	5510	15.57	16.50	12.00	92.19
		CH 110	5550	15.68	16.50	12.00	92.19
		CH 134	5670	15.69	16.50	12.00	92.19
	802.11ac-VHT20 MCS0	CH 100	5500	15.48	16.00	12.00	95.97
		CH 116	5580	15.59	16.50	12.00	95.97
		CH 140	5700	15.73	16.50	12.00	95.97
	802.11ac-VHT40 MCS0	CH 102	5510	15.35	16.00	12.00	92.31
		CH 110	5550	15.44	16.00	12.00	90.77
		CH 134	5670	15.51	16.50	12.00	92.31
	802.11ac-VHT80 MCS0	CH 106	5530	15.90	16.50	12.00	85.71
		CH 122	5610	15.41	16.00	12.00	85.71
		CH 138	5690	15.73	16.50	12.00	85.71

5.8GHz WLAN ANT 8

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 8	802.11a 6Mbps	CH 149	5745	14.13	15.00	11.00	96.55
		CH 157	5785	14.55	15.50	11.00	95.86
		CH 165	5825	14.07	15.00	11.00	95.86
	802.11n-HT20 MCS0	CH 149	5745	14.45	15.00	11.00	95.93
		CH 157	5785	14.90	15.50	11.00	95.16
		CH 165	5825	14.43	15.00	11.00	95.93
	802.11n-HT40 MCS0	CH 151	5755	14.27	15.00	11.00	92.19
		CH 159	5795	14.56	15.50	11.00	92.19
		CH 149	5745	14.53	15.50	11.00	95.97
	802.11ac-VHT20 MCS0	CH 157	5785	14.93	15.50	11.00	95.20
		CH 165	5825	14.48	15.00	11.00	95.97
		CH 151	5755	14.34	15.00	11.00	92.31
	802.11ac-VHT40 MCS0	CH 159	5795	14.52	15.50	11.00	92.19
		CH 155	5775	14.99	15.50	11.00	85.71

Reduced Power Level 2

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		26.64	26.84	26.94	27.50	17.64	17.84	17.94	18.50
GPRS 1 Tx slot		26.66	26.79	26.93	27.50	17.66	17.79	17.93	18.50
GPRS 2 Tx slots		24.17	24.13	24.24	24.50	18.17	18.13	18.24	18.50
GPRS 3 Tx slots		22.56	22.66	22.59	23.00	18.30	18.40	18.33	18.74
GPRS 4 Tx slots		20.58	20.58	20.57	21.50	17.58	17.58	17.57	18.50
EDGE 1 Tx slot		22.35	22.45	21.98	23.00	13.35	13.45	12.98	14.00
EDGE 2 Tx slots		21.47	21.52	21.41	22.00	15.47	15.52	15.41	16.00
EDGE 3 Tx slots		20.01	20.05	19.91	20.50	15.75	15.79	15.65	16.24
EDGE 4 Tx slots		17.65	17.72	17.51	18.50	14.65	14.72	14.51	15.50
Mode			Max.	26.94			Max.	18.40	
Attenuator		Cable Loss : 0.8							
Date		10/15							

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	RMC 12.2Kbps	16.84	16.91	16.90	18.50	20.12	20.21	20.16	22.00
3GPP Rel 5	HSDPA Subtest-1	16.33	16.82	16.56	17.50	19.79	19.70	19.92	20.50
3GPP Rel 5	HSDPA Subtest-2	16.41	16.88	16.45	17.50	19.66	19.80	19.75	20.50
3GPP Rel 5	HSDPA Subtest-3	15.94	16.44	16.01	17.00	19.34	19.52	19.45	20.00
3GPP Rel 5	HSDPA Subtest-4	16.01	16.49	16.06	17.00	19.25	19.49	19.36	20.00
3GPP Rel 6	HSUPA Subtest-1	16.24	16.55	16.14	17.50	18.92	19.66	19.37	20.50
3GPP Rel 6	HSUPA Subtest-2	16.17	16.49	16.06	17.50	18.90	19.49	19.43	20.50
3GPP Rel 6	HSUPA Subtest-3	16.21	16.55	16.13	17.50	18.90	19.52	19.30	20.50
3GPP Rel 6	HSUPA Subtest-4	16.14	16.46	16.02	17.50	18.80	19.37	19.43	20.00
3GPP Rel 6	HSUPA Subtest-5	16.19	16.54	16.10	17.50	18.85	19.37	19.32	20.00
Attenuator			Cable Loss	0.8			Cable Loss	0.8	
Mode			Max.	16.91			Max.	20.21	
Date		10/15				10/15			

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	16.31	16.35	16.32	18
20	QPSK	1	49	16.26	16.28	16.26	
20	QPSK	1	99	16.18	16.24	16.19	
20	QPSK	50	0	15.12	15.17	15.14	17
20	QPSK	50	24	15.07	15.12	15.01	
20	QPSK	50	50	15.11	15.14	15.06	
20	QPSK	100	0	15.08	15.13	15.01	17
20	16QAM	1	0	15.19	15.22	15.13	
20	16QAM	1	49	15.11	15.20	15.12	
20	16QAM	1	99	15.12	15.18	15.14	16
20	16QAM	50	0	14.21	14.28	14.19	
20	16QAM	50	24	14.19	14.21	14.14	
20	16QAM	50	50	14.21	14.25	14.20	16
20	16QAM	100	0	14.12	14.19	14.14	
20	64QAM	1	0	14.82	14.83	14.74	
20	64QAM	1	49	14.71	14.82	14.67	16
20	64QAM	1	99	14.61	14.77	14.78	
20	64QAM	50	0	14.07	14.15	14.06	
20	64QAM	50	24	14.06	14.08	14.12	15
20	64QAM	50	50	14.14	14.11	14.08	
20	64QAM	100	0	14.01	14.06	14.05	
20	256QAM	1	0	11.72	12.00	11.85	13
20	256QAM	1	49	11.94	11.97	11.86	
20	256QAM	1	99	12.00	11.94	11.74	
20	256QAM	50	0	11.71	11.75	11.96	13
20	256QAM	50	24	11.72	11.94	11.81	
20	256QAM	50	50	11.86	12.01	11.88	
20	256QAM	100	0	12.07	12.00	11.77	
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)
15	QPSK	1	0	16.21	16.27	16.18	18
15	QPSK	1	37	16.13	16.14	16.14	
15	QPSK	1	74	16.09	16.12	16.05	
15	QPSK	36	0	15.15	15.15	15.00	17
15	QPSK	36	20	15.06	15.02	15.11	
15	QPSK	36	39	15.06	15.11	15.05	
15	QPSK	75	0	15.08	15.10	15.10	17
15	16QAM	1	0	15.18	15.08	15.02	
15	16QAM	1	37	15.07	15.09	15.13	
15	16QAM	1	74	15.12	15.13	15.14	16
15	16QAM	36	0	14.15	14.17	14.18	
15	16QAM	36	20	14.09	14.23	14.12	
15	16QAM	36	39	14.04	14.07	14.12	16
15	16QAM	75	0	14.07	14.17	14.08	
15	64QAM	1	0	14.72	14.75	14.61	
15	64QAM	1	37	14.59	14.82	14.51	16
15	64QAM	1	74	14.61	14.63	14.68	
15	64QAM	36	0	14.13	14.09	13.98	
15	64QAM	36	20	14.11	14.06	14.01	15
15	64QAM	36	39	14.11	14.02	14.06	
15	64QAM	75	0	13.97	14.04	14.03	
15	256QAM	1	0	11.62	11.92	11.78	13
15	256QAM	1	37	11.97	11.97	11.75	
15	256QAM	1	74	12.04	11.99	11.67	
15	256QAM	36	0	11.63	11.65	11.78	13
15	256QAM	36	20	11.64	11.86	11.84	
15	256QAM	36	39	11.73	11.86	11.72	
15	256QAM	75	0	12.05	11.91	11.63	
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	Tune-up limit (dBm)
10	QPSK	1	0	16.27	16.29	16.24	18
10	QPSK	1	25	16.18	16.16	16.23	
10	QPSK	1	49	16.09	16.10	16.07	
10	QPSK	25	0	15.02	15.10	15.07	17
10	QPSK	25	12	15.05	15.03	15.02	
10	QPSK	25	25	15.13	15.12	15.03	
10	QPSK	50	0	15.02	15.15	15.10	17
10	16QAM	1	0	15.03	15.04	15.04	
10	16QAM	1	25	15.16	15.03	15.15	
10	16QAM	1	49	15.14	15.05	15.11	16
10	16QAM	25	0	14.15	14.24	14.19	
10	16QAM	25	12	14.20	14.20	14.14	
10	16QAM	25	25	14.11	14.20	14.14	16
10	16QAM	50	0	14.10	14.24	14.03	
10	64QAM	1	0	14.73	14.69	14.61	
10	64QAM	1	25	14.60	14.82	14.63	16
10	64QAM	1	49	14.45	14.77	14.77	
10	64QAM	25	0	14.01	14.12	13.88	
10	64QAM	25	12	14.08	13.93	14.09	15
10	64QAM	25	25	13.99	14.06	14.02	
10	64QAM	50	0	13.94	14.00	13.93	
10	256QAM	1	0	11.58	11.88	11.68	13
10	256QAM	1	25	11.76	11.96	11.83	
10	256QAM	1	49	12.02	11.92	11.60	
10	256QAM	25	0	11.68	11.64	11.83	13
10	256QAM	25	12	11.78	11.93	11.75	
10	256QAM	25	25	11.88	11.83	11.90	
10	256QAM	50	0	11.89	11.85	11.82	
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	Tune-up limit (dBm)
5	QPSK	1	0	16.18	16.32	16.20	18
5	QPSK	1	12	16.18	16.22	16.17	
5	QPSK	1	24	16.06	16.16	16.07	
5	QPSK	12	0	15.12	15.09	15.06	17
5	QPSK	12	7	15.15	15.12	15.02	
5	QPSK	12	13	15.12	15.10	15.14	
5	QPSK	25	0	15.01	15.06	15.02	17
5	16QAM	1	0	15.17	15.23	15.15	
5	16QAM	1	12	15.10	15.05	15.06	
5	16QAM	1	24	15.01	15.20	15.09	16
5	16QAM	12	0	14.07	14.33	14.19	
5	16QAM	12	7	14.13	14.16	14.04	
5	16QAM	12	13	14.10	14.30	14.11	16
5	16QAM	25	0	14.16	14.15	14.17	
5	64QAM	1	0	14.76	14.82	14.64	
5	64QAM	1	12	14.58	14.76	14.55	16

Band 4 (AWS Band) (dBm) Part 27L (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	18.22	18.31	18.25	20
20	QPSK	1	49	18.16	18.26	18.18	
20	QPSK	1	99	18.08	18.19	18.14	
20	QPSK	50	0	17.37	17.49	17.45	19
20	QPSK	50	24	17.32	17.36	17.37	
20	QPSK	50	50	17.36	17.41	17.39	
20	QPSK	100	0	17.33	17.38	17.35	19
20	16QAM	1	0	17.44	17.48	17.43	
20	16QAM	1	49	17.36	17.47	17.45	
20	16QAM	1	99	17.37	17.49	17.43	18
20	16QAM	50	0	16.41	16.49	16.48	
20	16QAM	50	24	16.39	16.44	16.41	
20	16QAM	50	50	16.41	16.50	16.45	18
20	16QAM	100	0	16.32	16.44	16.39	
20	64QAM	1	0	16.92	16.94	16.93	
20	64QAM	1	49	16.81	16.87	16.92	18
20	64QAM	1	99	16.71	16.98	16.87	
20	64QAM	50	0	16.27	16.46	16.45	
20	64QAM	50	24	16.26	16.42	16.28	17
20	64QAM	50	50	16.34	16.38	16.31	
20	64QAM	100	0	16.21	16.35	16.26	
20	256QAM	1	0	14.15	14.18	14.19	15
20	256QAM	1	49	14.05	14.23	14.09	
20	256QAM	1	99	14.05	14.17	14.15	
20	256QAM	50	0	14.01	14.05	13.94	15
20	256QAM	50	24	14.23	14.21	14.28	
20	256QAM	50	50	14.12	14.32	14.00	
20	256QAM	100	0	14.02	14.27	14.21	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	Tune-up limit (dBm)
15	QPSK	1	0	18.14	18.21	18.18	20
15	QPSK	1	37	18.12	18.15	18.12	
15	QPSK	1	74	18.05	18.11	18.04	
15	QPSK	36	0	17.27	17.40	17.40	19
15	QPSK	36	20	17.32	17.33	17.31	
15	QPSK	36	39	17.35	17.40	17.37	
15	QPSK	75	0	17.30	17.29	17.24	19
15	16QAM	1	0	17.35	17.42	17.43	
15	16QAM	1	37	17.19	17.44	17.47	
15	16QAM	1	74	17.30	17.31	17.40	18
15	16QAM	36	0	16.37	16.37	16.40	
15	16QAM	36	20	16.24	16.47	16.34	
15	16QAM	36	39	16.25	16.51	16.27	18
15	16QAM	75	0	16.26	16.35	16.31	
15	64QAM	1	0	16.80	16.77	16.82	

5	64QAM	1	24	14.55	14.71	14.79	15
5	64QAM	12	0	14.12	14.10	13.94	
5	64QAM	12	7	13.96	14.12	14.00	
5	64QAM	12	13	14.06	14.03	13.95	
5	64QAM	25	0	14.06	14.04	14.03	13
5	256QAM	1	0	11.64	12.05	11.68	
5	256QAM	1	12	12.00	11.82	11.84	
5	256QAM	1	24	11.97	11.92	11.64	
5	256QAM	12	0	11.57	11.63	11.87	13
5	256QAM	12	7	11.66	11.94	11.77	
5	256QAM	12	13	11.84	11.97	11.92	
5	256QAM	25	0	12.03	12.01	11.77	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	16.17	16.22	16.27	18
3	QPSK	1	8	16.21	16.14	16.22	
3	QPSK	1	14	16.14	16.16	16.13	
3	QPSK	8	0	15.10	15.03	15.04	
3	QPSK	8	4	15.00	15.12	15.07	17
3	QPSK	8	7	15.00	15.06	15.01	
3	QPSK	15	0	15.10	15.15	15.14	
3	16QAM	1	0	15.18	15.08	15.18	
3	16QAM	1	8	15.17	15.26	15.01	17
3	16QAM	1	14	15.10	15.17	15.14	
3	16QAM	8	0	14.04	14.34	14.20	
3	16QAM	8	4	14.12	14.07	14.12	
3	16QAM	8	7	14.27	14.14	14.23	16
3	16QAM	15	0	14.07	14.15	14.00	
3	64QAM	1	0	14.87	14.65	14.68	
3	64QAM	1	8	14.57	14.84	14.58	
3	64QAM	1	14	14.54	14.63	14.63	15
3	64QAM	8	0	13.96	14.01	13.90	
3	64QAM	8	4	13.95	14.10	14.00	
3	64QAM	8	7	14.10	14.01	14.03	
3	64QAM	15	0	13.99	13.90	13.87	13
3	256QAM	1	0	11.73	11.89	11.74	
3	256QAM	1	8	11.97	11.81	11.80	
3	256QAM	1	14	11.83	11.82	11.60	
3	256QAM	8	0	11.69	11.58	11.99	13
3	256QAM	8	4	11.73	11.79	11.73	
3	256QAM	8	7	11.74	12.02	11.73	
3	256QAM	15	0	11.99	11.99	11.81	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	16.28	16.28	16.26	18
1.4	QPSK	1	3	16.20	16.24	16.15	
1.4	QPSK	1	5	16.05	16.17	16.10	
1.4	QPSK	3	0	16.11	16.00	16.03	
1.4	QPSK	3	1	16.12	16.14	16.08	17
1.4	QPSK	3	3	16.06	16.01	16.12	
1.4	QPSK	6	0	15.08	15.02	15.11	
1.4	16QAM	1	0	15.02	15.21	15.14	
1.4	16QAM	1	3	15.13	15.21	15.15	17
1.4	16QAM	1	5	15.05	15.15	15.01	
1.4	16QAM	3	0	15.16	15.14	15.15	
1.4	16QAM	3	1	15.09	15.12	15.08	
1.4	16QAM	3	3	15.10	15.10	15.02	16
1.4	16QAM	6	0	14.02	14.03	14.18	
1.4	64QAM	1	0	14.88	14.72	14.65	
1.4	64QAM	1	3	14.66	14.77	14.60	
1.4	64QAM	1	5	14.61	14.66	14.68	16
1.4	64QAM	3	0	14.05	14.06	14.03	
1.4	64QAM	3	1	14.12	14.12	14.17	
1.4	64QAM	3	3	14.11	14.06	14.07	
1.4	64QAM	6	0	14.00	13.91	13.89	15
1.4	256QAM	1	0	11.69	11.96	11.70	
1.4	256QAM	1	3	11.91	12.03	11.78	
1.4	256QAM	1	5	11.94	11.80	11.64	
1.4	256QAM	3	0	11.77	11.57	11.79	13
1.4	256QAM	3	1	11.62	11.90	11.79	
1.4	256QAM	3	3	11.69	11.84	11.81	
1.4	256QAM	6	0	11.98	11.88	11.65	

5	64QAM	1	24	16.74	16.92	16.92	17
5	64QAM	12	0	16.10	16.30	16.29	
5	64QAM	12	7	16.22	16.47	16.20	
5	64QAM	12	13	16.34	16.24	16.18	
5	64QAM	25	0	16.26	16.35	16.23	15
5	256QAM	1	0	14.04	14.05	14.15	
5	256QAM	1	12	13.97	14.17	14.08	
5	256QAM	1	24	14.03	14.16	14.11	
5	256QAM	12	0	13.91	13.88	13.85	15
5	256QAM	12	7	14.14	14.09	14.30	
5	256QAM	12	13	14.08	14.29	13.97	
5	256QAM	25	0	13.84	14.33	14.27	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	18.14	18.24	18.12	20
3	QPSK	1	8	18.05	18.19	18.09	
3	QPSK	1	14	18.00	18.15	18.06	
3	QPSK	8	0	17.24	17.38	17.36	
3	QPSK	8	4	17.20	17.39	17.32	19
3	QPSK	8	7	17.39	17.37	17.25	
3	QPSK	15	0	17.23	17.33	17.31	
3	16QAM	1	0	17.43	17.48	17.48	
3	16QAM	1	8	17.20	17.32	17.28	19
3	16QAM	1	14	17.24	17.37	17.30	
3	16QAM	8	0	16.43	16.40	16.33	
3	16QAM	8	4	16.31	16.27	16.32	
3	16QAM	8	7	16.23	16.46	16.35	18
3	16QAM	15	0	16.23	16.28	16.26	
3	64QAM	1	0	16.94	16.97	16.91	
3	64QAM	1	8	16.87	16.80	16.82	
3	64QAM	1	14	16.62	16.90	16.72	17
3	64QAM	8	0	16.24	16.38	16.30	
3	64QAM	8	4	16.09	16.38	16.10	
3	64QAM	8	7	16.30	16.40	16.35	
3	64QAM	15	0	16.13	16.26	16.19	15
3	256QAM	1	0	13.98	14.20	14.06	
3	256QAM	1	8	14.05	14.29	14.03	
3	256QAM	1	14	14.02	13.99	14.15	
3	256QAM	8	0	13.84	13.93	13.92	15
3	256QAM	8	4	14.19	14.04	14.25	
3	256QAM	8	7	13.98	14.26	14.03	
3	256QAM	15	0	13.91	14.15	14.24	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	18.12	18.19	18.18	20
1.4	QPSK	1	3	18.09	18.15	18.11	
1.4	QPSK	1	5	18.05	18.15	18.07	
1.4	QPSK	3	0	18.18	18.21	18.14	
1.4	QPSK	3	1	18.08	18.09	18.16	19
1.4	QPSK	3	3	18.11	18.15	18.16	
1.4	QPSK	6	0	17.35	17.38	17.25	
1.4	16QAM	1	0	17.32	17.53	17.47	
1.4	16QAM	1	3	17.38	17.37	17.34	19
1.4	16QAM	1	5	17.20	17.35	17.27	
1.4	16QAM	3	0	17.38	17.26	17.43	
1.4	16QAM	3	1	17.17	17.41	17.41	
1.4	16QAM	3	3	17.29	17.33	17.41	18
1.4	16QAM	6	0	16.29	16.43	16.33	
1.4	64QAM	1	0	16.94	16.87	16.86	
1.4	64QAM	1	3	16.77	16.78	16.86	
1.4	64QAM	1	5	16.57	17.04	16.74	18
1.4	64QAM	3	0	16.14	16.32	16.34	
1.4	64QAM	3	1	16.14	16.32	16.30	
1.4	64QAM	3	3	16.22	16.25	16.26	
1.4	64QAM	6	0	16.03	16.39	16.17	17
1.4	256QAM	1	0	13.97	14.18	14.21	
1.4	256QAM	1	3	14.04	14.28	14.01	
1.4	256QAM	1	5	13.95	13.99	14.06	
1.4	256QAM	3	0	14.01	13.96	13.90	15
1.4	256QAM	3	1	14.24	14.15	14.11	
1.4	256QAM	3	3	14.07	14.14	13.98	
1.4	256QAM	6	0	13.98	14.29	14.08	

Band 7 (2600MHz Band) (dBm)_ANT 1 Part 27								
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)	
Channel				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	18.86	18.89	18.82	19.5	
20	QPSK	1	49	18.77	18.74	18.82		
20	QPSK	1	99	18.66	18.73	18.78		
20	QPSK	50	0	17.81	17.97	17.92	18.5	
20	QPSK	50	24	17.78	17.79	17.79		
20	QPSK	50	50	17.76	17.83	17.81		
20	QPSK	100	0	17.79	17.95	17.84	23.5	
20	16QAM	1	0	18.35	18.56	18.55		
20	16QAM	1	49	18.33	18.49	18.40		
20	16QAM	1	99	18.37	18.35	18.50	22.5	
20	16QAM	50	0	17.04	17.09	17.08		
20	16QAM	50	24	16.98	16.95	17.17		
20	16QAM	50	50	16.90	17.10	17.08	22.5	
20	16QAM	100	0	17.02	17.14	17.13		
20	64QAM	1	0	17.96	17.95	17.74		
20	64QAM	1	49	17.68	17.94	17.71	22.5	
20	64QAM	1	99	17.64	17.90	17.80		
20	64QAM	50	0	17.03	17.12	17.07		
20	64QAM	50	24	16.89	16.88	17.08	22.5	
20	64QAM	50	50	17.17	16.92	17.13		
20	64QAM	100	0	17.00	17.02	17.00		
20	256QAM	1	0	14.95	15.06	14.98	19.5	
20	256QAM	1	49	14.70	14.77	15.04		
20	256QAM	1	99	14.97	14.86	14.95		
20	256QAM	50	0	14.89	14.87	14.87	19.5	
20	256QAM	50	24	14.96	15.06	15.08		
20	256QAM	50	50	14.64	14.94	15.02		
20	256QAM	100	0	14.94	14.85	15.05		
Channel				20825	21100	21375	Tune-up limit (dBm)	
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	18.80	18.75	18.69	19.5	
15	QPSK	1	37	18.71	18.70	18.76		
15	QPSK	1	74	18.53	18.59	18.74		
15	QPSK	36	0	17.75	17.95	17.80	18.5	
15	QPSK	36	20	17.66	17.73	17.66		
15	QPSK	36	39	17.78	17.78	17.74		
15	QPSK	75	0	17.67	17.83	17.85	23.5	
15	16QAM	1	0	18.40	18.58	18.44		
15	16QAM	1	37	18.37	18.36	18.26		
15	16QAM	1	74	18.21	18.20	18.36	22.5	
15	16QAM	36	0	17.03	16.98	17.12		
15	16QAM	36	20	17.02	16.79	17.21		
15	16QAM	36	39	16.73	17.02	17.12	22.5	
15	16QAM	75	0	16.95	17.08	17.00		
15	64QAM	1	0	17.93	17.80	17.75		
15	64QAM	1	37	17.62	17.79	17.59	22.5	
15	64QAM	1	74	17.59	17.96	17.76		
15	64QAM	36	0	16.86	17.07	16.91	22.5	
15	64QAM	36	20	16.94	16.70	17.12		
15	64QAM	36	39	17.10	16.78	17.17		
15	64QAM	75	0	16.85	16.95	16.96	19.5	
15	256QAM	1	0	14.78	15.00	14.95		
15	256QAM	1	37	14.71	14.81	15.01		
15	256QAM	1	74	14.84	14.83	14.97	19.5	
15	256QAM	36	0	14.86	14.76	14.73		
15	256QAM	36	20	14.89	14.90	14.91		
15	256QAM	36	39	14.54	14.89	14.85	19.5	
15	256QAM	75	0	14.76	14.89	15.06		
Channel				20800	21100	21400	Tune-up limit (dBm)	
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	18.75	18.77	18.73	19.5	
10	QPSK	1	25	18.64	18.70	18.78		
10	QPSK	1	49	18.61	18.68	18.64		
10	QPSK	25	0	17.68	17.94	17.93	18.5	
10	QPSK	25	12	17.74	17.82	17.72		
10	QPSK	25	25	17.62	17.77	17.72		
10	QPSK	50	0	17.78	17.88	17.70	23.5	
10	16QAM	1	0	18.26	18.45	18.57		
10	16QAM	1	25	18.30	18.49	18.46		
10	16QAM	1	49	18.40	18.31	18.50	22.5	
10	16QAM	25	0	16.88	17.03	16.96		
10	16QAM	25	12	16.87	17.00	17.00		
10	16QAM	25	25	16.80	17.00	16.96	22.5	
10	16QAM	50	0	16.88	17.01	17.03		
10	64QAM	1	0	17.96	17.94	17.66		
10	64QAM	1	25	17.54	17.94	17.76	22.5	
10	64QAM	1	49	17.55	17.83	17.84		
10	64QAM	25	0	16.85	17.15	16.90		
10	64QAM	25	12	16.86	16.73	17.02	22.5	
10	64QAM	25	25	17.04	16.76	17.05		
10	64QAM	50	0	16.94	17.07	16.99		
10	256QAM	1	0	14.86	14.88	14.88	19.5	
10	256QAM	1	25	14.63	14.62	15.09		
10	256QAM	1	49	14.79	14.83	14.93		
10	256QAM	25	0	14.82	14.77	14.79	19.5	
10	256QAM	25	12	14.85	14.81	14.92		
10	256QAM	25	25	14.50	14.71	14.86		
10	256QAM	50	0	14.88	14.78	14.95		
Channel				20775	21100	21425	Tune-up limit (dBm)	
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	18.76	18.76	18.71	19.5	
5	QPSK	1	12	18.69	18.68	18.75		
5	QPSK	1	24	18.52	18.59	18.75		
5	QPSK	12	0	17.81	17.91	17.93	18.5	
5	QPSK	12	7	17.68	17.76	17.81		
5	QPSK	12	13	17.75	17.70	17.69		
5	QPSK	25	0	17.77	17.96	17.71	23.5	
5	16QAM	1	0	18.37	18.61	18.37		
5	16QAM	1	12	18.24	18.39	18.46		
5	16QAM	1	24	18.23	18.25	18.38	22.5	
5	16QAM	12	0	17.07	17.11	17.13		
5	16QAM	12	7	16.93	16.77	17.01		
5	16QAM	12	13	16.82	17.03	16.94	22.5	
5	16QAM	25	0	16.89	17.02	17.00		
5	64QAM	1	0	17.91	17.89	17.66		
5	64QAM	1	12	17.70	17.86	17.61		

Band 7 (2600MHz Band) (dBm)_ANT 3 Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	20.86	20.89	20.82	21.5
20	QPSK	1	49	20.77	20.74	20.82	
20	QPSK	1	99	20.66	20.73	20.78	
20	QPSK	50	0	19.81	19.97	19.92	20.5
20	QPSK	50	24	19.78	19.79	19.79	
20	QPSK	50	50	19.76	19.83	19.81	
20	QPSK	100	0	19.79	19.95	19.84	21.5
20	16QAM	1	0	20.35	20.56	20.55	
20	16QAM	1	49	20.33	20.49	20.40	
20	16QAM	1	99	20.37	20.35	20.50	20.5
20	16QAM	50	0	19.04	19.09	19.08	
20	16QAM	50	24	18.98	18.95	19.17	
20	16QAM	50	50	18.90	19.10	19.08	21.5
20	16QAM	100	0	19.02	19.14	19.13	
20	64QAM	1	0	19.96	19.95	19.74	
20	64QAM	1	49	19.68	19.94	19.71	20.5
20	64QAM	1	99	19.64	19.90	19.80	
20	64QAM	50	0	19.03	19.12	19.07	
20	64QAM	50	24	18.89	18.88	19.08	17.5
20	64QAM	50	50	19.17	18.92	19.13	
20	64QAM	100	0	19.00	19.02	19.00	
20	256QAM	1	0	16.95	17.06	16.98	17.5
20	256QAM	1	49	16.70	16.77	17.04	
20	256QAM	1	99	16.97	16.86	16.95	
20	256QAM	50	0	16.89	16.87	16.87	17.5
20	256QAM	50	24	16.96	17.06	17.08	
20	256QAM	50	50	16.64	16.84	17.02	
20	256QAM	100	0	16.94	16.85	17.05	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	20.80	20.75	20.69	21.5
15	QPSK	1	37	20.71	20.70	20.76	
15	QPSK	1	74	20.53	20.59	20.74	
15	QPSK	36	0	19.75	19.95	19.80	20.5
15	QPSK	36	20	19.66	19.73	19.66	
15	QPSK	36	39	19.78	19.78	19.74	
15	QPSK	75	0	19.67	19.83	19.85	21.5
15	16QAM	1	0	20.40	20.58	20.44	
15	16QAM	1	37	20.37	20.36	20.26	
15	16QAM	1	74	20.21	20.20	20.36	20.5
15	16QAM	36	0	19.03	18.98	19.12	
15	16QAM	36	20	19.02	18.79	19.21	
15	16QAM	36	39	18.73	19.02	19.12	21.5
15	16QAM	75	0	18.95	19.08	19.00	
15	64QAM	1	0	19.93	19.80	19.75	
15	64QAM	1	37	19.62	19.79	19.59	20.5
15	64QAM	1	74	19.59	19.96	19.76	
15	64QAM	36	0	18.86	19.07	18.91	
15	64QAM	36	20	18.94	18.70	19.12	17.5
15	64QAM	36	39	19.10	18.78	19.17	
15	64QAM	75	0	18.85	18.95	18.96	
15	256QAM	1	0	16.78	17.00	16.95	17.5
15	256QAM	1	37	16.71	16.81	17.01	
15	256QAM	1	74	16.84	16.83	16.97	
15	256QAM	36	0	16.86	16.76	16.73	17.5
15	256QAM	36	20	16.89	16.90	16.91	
15	256QAM	36	39	16.54	16.89	16.85	
15	256QAM	75	0	16.76	16.89	17.06	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	20.75	20.77	20.73	21.5
10	QPSK	1	25	20.64	20.70	20.78	
10	QPSK	1	49	20.61	20.68	20.64	
10	QPSK	25	0	19.68	19.94	19.93	20.5
10	QPSK	25	12	19.74	19.82	19.72	
10	QPSK	25	25	19.62	19.77	19.72	
10	QPSK	50	0	19.78	19.88	19.70	21.5
10	16QAM	1	0	20.26	20.45	20.57	
10	16QAM	1	25	20.30	20.49	20.46	
10	16QAM	1	49	20.40	20.31	20.50	20.5
10	16QAM	25	0	18.88	19.03	18.96	
10	16QAM	25	12	18.87	19.00	19.00	
10	16QAM	25	25	18.80	19.00	18.96	21.5
10	16QAM	50	0	18.88	19.01	19.03	
10	64QAM	1	0	19.96	19.94	19.66	
10	64QAM	1	25	19.54	19.94	19.76	20.5
10	64QAM	1	49	19.55	19.83	19.84	
10	64QAM	25	0	18.85	19.15	18.90	
10	64QAM	25	12	18.86	18.73	19.02	17.5
10	64QAM	25	25	19.04	18.76	19.05	
10	64QAM	50	0	18.94	19.07	18.99	
10	256QAM	1	0	16.86	16.88	16.88	17.5
10	256QAM	1	25	16.63	16.62	17.09	
10	256QAM	1	49	16.79	16.83	16.93	
10	256QAM	25	0	16.82	16.77	16.79	17.5
10	256QAM	25	12	16.85	16.81	16.92	
10	256QAM	25	25	16.50	16.71	16.86	
10	256QAM	50	0	16.88	16.78	16.95	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	20.76	20.76	20.71	21.5
5	QPSK	1	12	20.69	20.68	20.75	
5	QPSK	1	24	20.52	20.59	20.75	
5	QPSK	12	0	19.81	19.91	19.93	20.5
5	QPSK	12	7	19.68	19.76	19.81	
5	QPSK	12	13	19.75	19.70	19.69	
5	QPSK	25	0	19.77	19.96	19.71	21.5
5	16QAM	1	0	20.37	20.61	20.37	
5	16QAM	1	12	20.24	20.39	20.46	
5	16QAM	1	24	20.23	20.25	20.38	20.5
5	16QAM	12	0	19.07	19.11	19.13	
5	16QAM	12	7	18.93	18.77	19.01	
5	16QAM	12	13	18.82	19.03	18.94	21.5
5	16QAM	25	0	18.89	19.02	19.00	
5	64QAM	1	0	19.91	19.89	19.66	
5	64QAM	1	12	19.70	19.86	19.61	



5	64QAM	1	24	17.55	17.81	17.86	22.5
5	64QAM	12	0	17.09	17.02	17.10	
5	64QAM	12	7	16.72	16.73	16.93	
5	64QAM	12	13	17.07	16.91	17.16	
5	64QAM	25	0	16.93	16.99	16.99	19.5
5	256QAM	1	0	14.81	14.98	15.02	
5	256QAM	1	12	14.54	14.61	14.99	
5	256QAM	1	24	14.99	14.85	14.90	
5	256QAM	12	0	14.78	14.69	14.76	19.5
5	256QAM	12	7	14.86	14.69	14.83	
5	256QAM	12	13	14.49	14.80	14.90	
5	256QAM	25	0	14.88	14.70	14.97	

5	64QAM	1	24	19.55	19.81	19.86	20.5
5	64QAM	12	0	19.09	19.02	19.10	
5	64QAM	12	7	18.72	18.73	18.93	
5	64QAM	12	13	19.07	18.91	19.16	
5	64QAM	25	0	18.93	18.99	18.99	17.5
5	256QAM	1	0	16.81	16.98	17.02	
5	256QAM	1	12	16.54	16.61	16.99	
5	256QAM	1	24	16.99	16.85	16.90	
5	256QAM	12	0	16.78	16.69	16.76	17.5
5	256QAM	12	7	16.86	16.69	16.83	
5	256QAM	12	13	16.49	16.80	16.90	
5	256QAM	25	0	16.88	16.70	16.97	

Band 25 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	18
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	16.35	16.39	16.33	17
20	QPSK	1	49	16.31	16.34	16.30	
20	QPSK	1	99	16.18	16.26	16.24	
20	QPSK	50	0	15.18	15.36	15.23	17
20	QPSK	50	24	15.17	15.35	15.23	
20	QPSK	50	50	15.23	15.31	15.27	
20	QPSK	100	0	15.23	15.38	15.19	17
20	16QAM	1	0	15.28	15.37	15.33	
20	16QAM	1	49	15.36	15.33	15.41	
20	16QAM	1	99	15.28	15.19	15.43	16
20	16QAM	50	0	14.58	14.45	14.33	
20	16QAM	50	24	14.29	14.34	14.78	
20	16QAM	50	50	14.29	14.34	14.46	16
20	16QAM	100	0	14.51	14.54	14.47	
20	64QAM	1	0	14.31	14.41	14.18	
20	64QAM	1	49	14.27	14.15	14.23	16
20	64QAM	1	99	14.26	14.31	14.19	
20	64QAM	50	0	14.18	14.29	14.17	
20	64QAM	50	24	14.10	14.08	14.11	15
20	64QAM	50	50	14.08	14.16	14.07	
20	64QAM	100	0	14.29	14.28	14.22	
20	256QAM	1	0	11.67	11.78	11.61	13
20	256QAM	1	49	11.49	11.57	11.67	
20	256QAM	1	99	11.50	11.64	11.48	
20	256QAM	50	0	11.67	11.72	11.71	13
20	256QAM	50	24	11.63	11.77	11.54	
20	256QAM	50	50	11.41	11.64	11.61	
20	256QAM	100	0	11.43	11.71	11.56	18
Channel				26115	26365	26615	
Frequency (MHz)				1857.5	1882.5	1907.5	18
15	QPSK	1	0	16.26	16.25	16.18	
15	QPSK	1	37	16.16	16.13	16.18	17
15	QPSK	1	74	16.07	16.14	16.03	
15	QPSK	36	0	15.18	15.22	15.25	
15	QPSK	36	20	15.18	15.25	15.23	17
15	QPSK	36	39	15.26	15.23	15.16	
15	QPSK	75	0	15.22	15.33	15.09	
15	16QAM	1	0	15.30	15.22	15.25	17
15	16QAM	1	37	15.38	15.31	15.37	
15	16QAM	1	74	15.13	15.23	15.34	
15	16QAM	36	0	14.63	14.49	14.32	16
15	16QAM	36	20	14.26	14.16	14.60	
15	16QAM	36	39	14.23	14.25	14.39	
15	16QAM	75	0	14.51	14.50	14.45	16
15	64QAM	1	0	14.34	14.31	14.13	
15	64QAM	1	37	14.15	14.18	14.13	
15	64QAM	1	74	14.21	14.33	14.10	15
15	64QAM	36	0	14.11	14.18	14.00	
15	64QAM	36	20	13.97	14.07	14.00	
15	64QAM	36	39	13.91	14.16	14.12	13
15	64QAM	75	0	14.35	14.25	14.15	
15	256QAM	1	0	11.68	11.65	11.46	
15	256QAM	1	37	11.53	11.55	11.60	13
15	256QAM	1	74	11.41	11.50	11.38	
15	256QAM	36	0	11.76	11.75	11.75	
15	256QAM	36	20	11.65	11.72	11.36	13
15	256QAM	36	39	11.31	11.68	11.51	
15	256QAM	75	0	11.42	11.56	11.49	
Channel				26090	26365	26640	18
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	16.19	16.24	16.16	17
10	QPSK	1	25	16.10	16.17	16.10	
10	QPSK	1	49	16.09	16.17	16.03	
10	QPSK	25	0	15.05	15.28	15.25	17
10	QPSK	25	12	15.04	15.29	15.24	
10	QPSK	25	25	15.09	15.25	15.21	
10	QPSK	50	0	15.14	15.33	15.22	17
10	16QAM	1	0	15.21	15.43	15.24	
10	16QAM	1	25	15.26	15.27	15.29	
10	16QAM	1	49	15.26	15.24	15.39	16
10	16QAM	25	0	14.50	14.46	14.18	
10	16QAM	25	12	14.34	14.19	14.43	
10	16QAM	25	25	14.31	14.28	14.46	16
10	16QAM	50	0	14.39	14.36	14.36	
10	64QAM	1	0	14.13	14.33	14.16	
10	64QAM	1	25	14.18	14.00	14.18	15
10	64QAM	1	49	14.29	14.15	14.23	
10	64QAM	25	0	14.22	14.14	13.99	
10	64QAM	25	12	14.04	13.95	13.95	13
10	64QAM	25	25	13.98	14.15	14.03	
10	64QAM	50	0	14.15	14.31	14.14	
10	256QAM	1	0	11.55	11.77	11.62	13
10	256QAM	1	25	11.54	11.53	11.51	
10	256QAM	1	49	11.34	11.52	11.38	
10	256QAM	25	0	11.71	11.63	11.73	13
10	256QAM	25	12	11.52	11.67	11.48	
10	256QAM	25	25	11.40	11.48	11.45	
10	256QAM	50	0	11.38	11.76	11.41	18
Channel				26065	26365	26665	
Frequency (MHz)				1852.5	1882.5	1912.5	18
5	QPSK	1	0	16.27	16.23	16.19	
5	QPSK	1	12	16.08	16.18	16.13	17
5	QPSK	1	24	16.09	16.08	16.01	
5	QPSK	12	0	15.04	15.34	15.18	
5	QPSK	12	7	15.03	15.21	15.22	17
5	QPSK	12	13	15.23	15.27	15.23	
5	QPSK	25	0	15.14	15.25	15.21	
5	16QAM	1	0	15.34	15.28	15.20	17
5	16QAM	1	12	15.32	15.18	15.29	
5	16QAM	1	24	15.32	15.10	15.32	
5	16QAM	12	0	14.46	14.51	14.34	16
5	16QAM	12	7	14.33	14.29	14.50	
5	16QAM	12	13	14.20	14.17	14.51	
5	64QAM	1	0	14.43	14.56	14.43	16
5	64QAM	1	12	14.35	14.40	14.04	
5	64QAM	1	12	14.24	14.16	14.12	16
Channel				26065	26365	26665	
Frequency (MHz)				1852.5	1882.5	1912.5	

Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	18.60	18.79	18.75	20.5
20	QPSK	1	49	18.70	18.67	18.69	
20	QPSK	1	99	18.63	18.71	18.62	
20	QPSK	50	0	17.70	17.77	17.66	19.5
20	QPSK	50	24	17.53	17.74	17.58	
20	QPSK	50	50	17.54	17.66	17.68	
20	QPSK	100	0	17.65	17.72	17.63	19.5
20	16QAM	1	0	17.73	18.03	17.85	
20	16QAM	1	49	17.82	17.86	17.70	
20	16QAM	1	99	17.93	17.77	17.87	18.5
20	16QAM	50	0	16.75	16.89	16.81	
20	16QAM	50	24	16.77	16.78	16.73	
20	16QAM	50	50	16.66	16.76	16.68	18.5
20	16QAM	100	0	16.76	16.92	16.83	
20	64QAM	1	0	16.95	16.84	16.54	
20	64QAM	1	49	16.98	16.72	16.66	17.5
20	64QAM	1	99	16.81	16.85	16.58	
20	64QAM	50	0	16.02	16.14	16.20	
20	64QAM	50	24	16.11	16.05	15.90	15.5
20	64QAM	50	50	16.03	15.94	15.93	
20	64QAM	100	0	16.07	16.12	16.09	
20	256QAM	1	0	14.28	14.43	14.37	15.5
20	256QAM	1	49	14.35	14.28	14.06	
20	256QAM	1	99	14.16	14.14	14.14	
20	256QAM	50	0	14.26	14.20	14.30	15.5
20	256QAM	50	24	14.32	14.18	14.45	
20	256QAM	50	50	14.27	14.22	14.15	
20	256QAM	100	0	14.09	14.10	14.18	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	18.55	18.74	18.70	20.5
15	QPSK	1	37	18.59	18.62	18.62	
15	QPSK	1	74	18.56	18.68	18.57	
15	QPSK	36	0	17.58	17.66	17.67	19.5
15	QPSK	36	20	17.58	17.67	17.50	
15	QPSK	36	39	17.56	17.55	17.64	
15	QPSK	75	0	17.58	17.61	17.57	19.5
15	16QAM	1	0	17.61	17.89	17.73	
15	16QAM	1	37	17.75	17.71	17.57	
15	16QAM	1	74	17.89	17.83	17.85	18.5
15	16QAM	36	0	16.58	16.79	16.70	
15	16QAM	36	20	16.60	16.80	16.64	
15	16QAM	36	39	16.68	16.81	16.51	18.5
15	16QAM	75	0	16.79	16.74	16.65	
15	64QAM	1	0	16.78	16.80	16.58	
15	64QAM	1	37	16.99	16.70	16.50	18.5
15	64QAM	1	74	16.68	16.86	16.58	
15	64QAM	36	0	16.06	16.10	16.02	
15	64QAM	36	20	16.12	15.97	15.87	17.5
15	64QAM	36	39	16.03	15.87	15.88	
15	64QAM	75	0	16.06	16.04	16.00	
15	256QAM	1	0	14.24	14.29	14.28	15.5
15	256QAM	1	37	14.23	14.10	14.07	
15	256QAM	1	74	13.98	14.09	14.11	
15	256QAM	36	0	14.14	14.12	14.33	15.5
15	256QAM	36	20	14.14	14.07	14.37	
15	256QAM	36	39	14.15	14.25	13.99	
15	256QAM	75	0	14.10	14.00	14.20	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	18.52	18.74	18.65	20.5
10	QPSK	1	25	18.61	18.64	18.65	
10	QPSK	1	49	18.55	18.65	18.54	
10	QPSK	25	0	17.63	17.66	17.61	19.5
10	QPSK	25	12	17.55	17.67	17.54	
10	QPSK	25	25	17.53	17.62	17.58	
10	QPSK	50	0	17.55	17.73	17.51	19.5
10	16QAM	1	0	17.67	18.02	17.88	
10	16QAM	1	25	17.82	17.88	17.61	
10	16QAM	1	49	17.81	17.66	17.90	18.5
10	16QAM	25	0	16.72	16.89	16.87	
10	16QAM	25	12	16.72	16.73	16.73	
10	16QAM	25	25	16.65	16.65	16.55	18.5
10	16QAM	50	0	16.81	16.97	16.68	
10	64QAM	1	0	16.83	16.82	16.52	
10	64QAM	1	25	16.68	16.66	16.50	18.5
10	64QAM	1	49	16.85	16.71	16.60	
10	64QAM	25	0	15.84	16.20	16.21	
10	64QAM	25	12	16.17	15.88	15.90	17.5
10	64QAM	25	25	16.09	15.84	15.90	
10	64QAM	50	0	16.13	15.94	16.03	
10	256QAM	1	0	14.10	14.35	14.35	15.5
10	256QAM	1	25	14.31	14.27	14.00	
10	256QAM	1	49	14.03	14.09	14.18	
10	256QAM	25	0	14.26	14.26	14.24	15.5
10	256QAM	25	12	14.29	14.00	14.46	
10	256QAM	25	25	14.27	14.16	14.04	
10	256QAM	50	0	14.11	14.12	14.23	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	18.51	18.72	18.67	20.5
5	QPSK	1	12	18.62	18.64	18.55	
5	QPSK	1	24	18.52	18.64	18.56	
5	QPSK	12	0	17.57	17.80	17.65	19.5
5	QPSK	12	7	17.57	17.68	17.54	
5	QPSK	12	13	17.50	17.67	17.60	
5	QPSK	25	0	17.67	17.58	17.62	19.5
5	16QAM	1	0	17.69	17.94	17.83	
5	16QAM	1	12	17.70	17.69	17.65	
5	16QAM	1	24	17.79	17.67	17.80	18.5
5	16QAM	12	0	16.70	16.95	16.70	
5	16QAM	12	7	16.82	16.75	16.67	
5	16QAM	12	13	16.58	16.82	16.74	18.5
5	16QAM	25	0	16.64	16.82	16.85	
5	64QAM	1	0	16.99	16.83	16.51	
5	64QAM	1	12	16.80	16.70	16.52	18.5

5	64QAM	1	24	14.29	14.35	14.21	15
5	64QAM	12	0	14.23	14.20	14.14	
5	64QAM	12	7	13.92	13.94	13.97	
5	64QAM	12	13	13.94	13.99	14.08	
5	64QAM	25	0	14.16	14.24	14.14	13
5	256QAM	1	0	11.50	11.65	11.54	
5	256QAM	1	12	11.41	11.54	11.60	
5	256QAM	1	24	11.55	11.60	11.32	
5	256QAM	12	0	11.84	11.54	11.57	13
5	256QAM	12	7	11.52	11.59	11.44	
5	256QAM	12	13	11.50	11.69	11.45	
5	256QAM	25	0	11.35	11.75	11.49	
Channel				26065	26365	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1882.5	1913.5	
3	QPSK	1	0	16.26	16.24	16.21	18
3	QPSK	1	8	16.10	16.20	16.12	
3	QPSK	1	14	16.13	16.13	16.02	
3	QPSK	8	0	15.13	15.28	15.23	
3	QPSK	8	4	15.13	15.27	15.25	17
3	QPSK	8	7	15.18	15.32	15.20	
3	QPSK	15	0	15.11	15.29	15.22	
3	16QAM	1	0	15.11	15.33	15.15	
3	16QAM	1	8	15.32	15.24	15.46	17
3	16QAM	1	14	15.13	15.19	15.46	
3	16QAM	8	0	14.46	14.42	14.25	
3	16QAM	8	4	14.16	14.39	14.51	
3	16QAM	8	7	14.12	14.27	14.43	16
3	16QAM	15	0	14.34	14.43	14.33	
3	64QAM	1	0	14.34	14.28	14.11	
3	64QAM	1	8	14.16	14.02	14.28	
3	64QAM	1	14	14.11	14.20	14.03	15
3	64QAM	8	0	14.18	14.12	14.15	
3	64QAM	8	4	14.16	13.98	13.95	
3	64QAM	8	7	13.93	14.21	14.04	
3	64QAM	15	0	14.15	14.32	14.24	13
3	256QAM	1	0	11.71	11.78	11.56	
3	256QAM	1	8	11.35	11.61	11.71	
3	256QAM	1	14	11.38	11.66	11.32	
3	256QAM	8	0	11.70	11.74	11.61	13
3	256QAM	8	4	11.46	11.83	11.58	
3	256QAM	8	7	11.47	11.54	11.53	
3	256QAM	15	0	11.45	11.65	11.59	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	16.16	16.21	16.15	18
1.4	QPSK	1	3	16.18	16.17	16.10	
1.4	QPSK	1	5	16.11	16.10	16.11	
1.4	QPSK	3	0	16.06	16.16	16.04	
1.4	QPSK	3	1	16.07	16.17	16.15	17
1.4	QPSK	3	3	16.07	16.09	16.15	
1.4	QPSK	6	0	15.22	15.35	15.19	
1.4	16QAM	1	0	15.29	15.19	15.16	
1.4	16QAM	1	3	15.39	15.19	15.24	16
1.4	16QAM	1	5	15.16	15.20	15.43	
1.4	16QAM	3	0	15.32	15.18	15.18	
1.4	16QAM	3	1	15.07	15.22	15.47	
1.4	16QAM	3	3	15.03	15.22	15.36	15
1.4	16QAM	6	0	14.54	14.55	14.30	
1.4	64QAM	1	0	14.19	14.33	14.05	
1.4	64QAM	1	3	14.28	14.01	14.07	
1.4	64QAM	1	5	14.11	14.34	14.04	16
1.4	64QAM	3	0	14.23	14.30	14.02	
1.4	64QAM	3	1	14.15	14.00	14.09	
1.4	64QAM	3	3	14.14	14.08	14.05	
1.4	64QAM	6	0	14.14	14.21	14.24	15
1.4	256QAM	1	0	11.65	11.62	11.55	
1.4	256QAM	1	3	11.39	11.52	11.63	
1.4	256QAM	1	5	11.48	11.68	11.36	
1.4	256QAM	3	0	11.89	11.70	11.76	13
1.4	256QAM	3	1	11.46	11.74	11.49	
1.4	256QAM	3	3	11.43	11.58	11.43	
1.4	256QAM	6	0	11.26	11.55	11.45	

5	64QAM	1	24	16.84	16.69	16.55	17.5
5	64QAM	12	0	15.85	16.08	16.17	
5	64QAM	12	7	16.06	16.08	15.87	
5	64QAM	12	13	15.87	15.84	15.94	
5	64QAM	25	0	16.05	16.01	15.96	15.5
5	256QAM	1	0	14.26	14.43	14.38	
5	256QAM	1	12	14.27	14.18	14.03	
5	256QAM	1	24	13.98	14.04	14.10	
5	256QAM	12	0	14.28	14.19	14.13	15.5
5	256QAM	12	7	14.20	14.15	14.45	
5	256QAM	12	13	14.16	14.08	14.21	
5	256QAM	25	0	14.09	13.99	14.20	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	18.56	18.76	18.64	20.5
3	QPSK	1	8	18.57	18.60	18.66	
3	QPSK	1	14	18.60	18.59	18.56	
3	QPSK	8	0	17.60	17.64	17.66	
3	QPSK	8	4	17.50	17.65	17.50	19.5
3	QPSK	8	7	17.55	17.61	17.70	
3	QPSK	15	0	17.62	17.62	17.51	
3	16QAM	1	0	17.70	17.98	17.72	
3	16QAM	1	8	17.83	17.80	17.59	19.5
3	16QAM	1	14	17.98	17.70	17.93	
3	16QAM	8	0	16.60	16.72	16.68	
3	16QAM	8	4	16.80	16.64	16.60	
3	16QAM	8	7	16.72	16.62	16.67	18.5
3	16QAM	15	0	16.79	16.87	16.88	
3	64QAM	1	0	16.82	16.77	16.56	
3	64QAM	1	8	16.98	16.70	16.61	
3	64QAM	1	14	16.80	16.67	16.61	17.5
3	64QAM	8	0	16.04	16.03	16.10	
3	64QAM	8	4	15.97	15.94	15.74	
3	64QAM	8	7	16.04	15.97	15.85	
3	64QAM	15	0	15.91	16.08	15.99	15.5
3	256QAM	1	0	14.19	14.32	14.26	
3	256QAM	1	8	14.30	14.25	14.08	
3	256QAM	1	14	14.07	14.15	14.18	
3	256QAM	8	0	14.08	14.23	14.36	15.5
3	256QAM	8	4	14.27	14.23	14.38	
3	256QAM	8	7	14.17	14.20	14.12	
3	256QAM	15	0	13.94	14.06	14.00	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	18.54	18.65	18.65	20.5
1.4	QPSK	1	3	18.58	18.59	18.56	
1.4	QPSK	1	5	18.60	18.66	18.54	
1.4	QPSK	3	0	18.62	18.54	18.59	
1.4	QPSK	3	1	18.52	18.62	18.56	19.5
1.4	QPSK	3	3	18.55	18.59	18.65	
1.4	QPSK	6	0	17.63	17.66	17.55	
1.4	16QAM	1	0	17.66	17.93	17.80	
1.4	16QAM	1	3	17.64	17.75	17.72	19.5
1.4	16QAM	1	5	17.88	17.78	17.80	
1.4	16QAM	3	0	17.61	17.68	17.52	
1.4	16QAM	3	1	17.54	17.55	17.59	
1.4	16QAM	3	3	17.64	17.65	17.58	18.5
1.4	16QAM	6	0	16.68	16.98	16.86	
1.4	64QAM	1	0	16.88	16.90	16.59	
1.4	64QAM	1	3	17.00	16.75	16.71	
1.4	64QAM	1	5	16.72	16.79	16.58	18.5
1.4	64QAM	3	0	16.88	16.81	17.00	
1.4	64QAM	3	1	16.84	16.81	16.81	
1.4	64QAM	3	3	16.84	16.66	16.65	
1.4	64QAM	6	0	16.11	16.14	16.12	17.5
1.4	256QAM	1	0	14.21	14.49	14.36	
1.4	256QAM	1	3	14.25	14.10	14.06	
1.4	256QAM	1	5	14.08	14.04	14.13	
1.4	256QAM	3	0	14.16	14.16	14.28	15.5
1.4	256QAM	3	1	14.26	14.10	14.35	
1.4	256QAM	3	3	14.25	14.24	14.06	
1.4	256QAM	6	0	13.93	14.04	14.02	

Band 38(only on channel required) (dBm)_ANT 1							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	18.01	18.03	18.00	19
20	QPSK	1	49	17.84	18.00	17.96	
20	QPSK	1	99	17.95	17.80	17.89	
20	QPSK	50	0	16.72	16.86	16.82	18
20	QPSK	50	24	16.69	16.78	16.80	
20	QPSK	50	50	16.80	16.83	16.75	
20	QPSK	100	0	16.74	16.85	16.72	18
20	16QAM	1	0	16.61	16.78	16.59	
20	16QAM	1	49	16.56	16.64	16.61	
20	16QAM	1	99	16.68	16.56	16.59	17
20	16QAM	50	0	15.93	15.92	15.68	
20	16QAM	50	24	15.73	15.81	15.93	
20	16QAM	50	50	15.77	15.98	15.66	17
20	16QAM	100	0	15.81	15.90	15.84	
20	64QAM	1	0	16.26	16.39	16.28	
20	64QAM	1	49	16.24	16.30	16.28	17
20	64QAM	1	99	16.27	16.22	16.17	
20	64QAM	50	0	15.83	15.96	15.85	
20	64QAM	50	24	15.86	16.01	15.92	16
20	64QAM	50	50	15.98	15.87	15.82	
20	64QAM	100	0	15.81	15.86	15.91	
20	256QAM	1	0	13.54	13.86	13.63	15
20	256QAM	1	49	13.68	13.80	13.72	
20	256QAM	1	99	13.69	13.71	13.53	
20	256QAM	50	0	13.67	13.73	13.69	15
20	256QAM	50	24	13.60	13.70	13.66	
20	256QAM	50	50	13.75	13.87	13.75	
20	256QAM	100	0	13.64	13.61	13.56	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	17.97	17.89	17.91	19
15	QPSK	1	37	17.81	17.91	17.93	
15	QPSK	1	74	17.84	17.66	17.83	
15	QPSK	36	0	16.60	16.87	16.72	18
15	QPSK	36	20	16.61	16.78	16.80	
15	QPSK	36	39	16.69	16.85	16.73	
15	QPSK	75	0	16.69	16.72	16.66	18
15	16QAM	1	0	16.60	16.64	16.63	
15	16QAM	1	37	16.58	16.50	16.53	
15	16QAM	1	74	16.57	16.51	16.56	17
15	16QAM	36	0	15.95	15.91	15.59	
15	16QAM	36	20	15.55	15.69	15.85	
15	16QAM	36	39	15.61	15.90	15.51	17
15	16QAM	75	0	15.76	15.82	15.72	
15	64QAM	1	0	16.27	16.26	16.23	
15	64QAM	1	37	16.28	16.25	16.12	17
15	64QAM	1	74	16.11	16.22	16.18	
15	64QAM	36	0	15.74	15.98	15.84	
15	64QAM	36	20	15.91	15.91	15.80	16
15	64QAM	36	39	15.86	15.85	15.78	
15	64QAM	75	0	15.63	15.86	15.90	
15	256QAM	1	0	13.45	13.70	13.61	15
15	256QAM	1	37	13.60	13.78	13.58	
15	256QAM	1	74	13.53	13.77	13.55	
15	256QAM	36	0	13.58	13.62	13.73	15
15	256QAM	36	20	13.51	13.62	13.57	
15	256QAM	36	39	13.74	13.91	13.64	
15	256QAM	75	0	13.57	13.63	13.53	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	17.96	17.96	17.93	19
10	QPSK	1	25	17.75	17.94	17.85	
10	QPSK	1	49	17.90	17.74	17.85	
10	QPSK	25	0	16.61	16.79	16.69	18
10	QPSK	25	12	16.62	16.67	16.79	
10	QPSK	25	25	16.83	16.80	16.71	
10	QPSK	50	0	16.72	16.85	16.59	18
10	16QAM	1	0	16.54	16.65	16.61	
10	16QAM	1	25	16.54	16.60	16.50	
10	16QAM	1	49	16.55	16.56	16.68	17
10	16QAM	25	0	15.85	15.81	15.64	
10	16QAM	25	12	15.58	15.66	15.97	
10	16QAM	25	25	15.83	15.90	15.62	17
10	16QAM	50	0	15.72	15.91	15.83	
10	64QAM	1	0	16.10	16.24	16.22	
10	64QAM	1	25	16.22	16.23	16.23	17
10	64QAM	1	49	16.10	16.07	16.15	
10	64QAM	25	0	15.73	16.00	15.71	
10	64QAM	25	12	15.72	15.95	15.89	16
10	64QAM	25	25	15.80	15.84	15.65	
10	64QAM	50	0	15.65	15.69	15.91	
10	256QAM	1	0	13.37	13.86	13.48	15
10	256QAM	1	25	13.74	13.85	13.70	
10	256QAM	1	49	13.54	13.58	13.39	
10	256QAM	25	0	13.73	13.75	13.58	15
10	256QAM	25	12	13.61	13.61	13.70	
10	256QAM	25	25	13.73	13.75	13.73	
10	256QAM	50	0	13.46	13.63	13.48	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	17.91	18.00	17.96	19
5	QPSK	1	12	17.80	17.93	17.88	
5	QPSK	1	24	17.85	17.71	17.77	
5	QPSK	12	0	16.62	16.84	16.73	

5	QPSK	12	7	16.68	16.70	16.79	18
5	QPSK	12	13	16.71	16.81	16.63	
5	QPSK	25	0	16.62	16.82	16.67	
5	16QAM	1	0	16.56	16.70	16.58	18
5	16QAM	1	12	16.57	16.70	16.61	
5	16QAM	1	24	16.53	16.59	16.55	
5	16QAM	12	0	15.88	15.82	15.54	17
5	16QAM	12	7	15.73	15.63	15.97	
5	16QAM	12	13	15.83	15.93	15.54	
5	16QAM	25	0	15.63	15.81	15.87	17
5	64QAM	1	0	16.27	16.27	16.33	
5	64QAM	1	12	16.10	16.12	16.26	
5	64QAM	1	24	16.24	16.13	16.12	16
5	64QAM	12	0	15.68	15.87	15.76	
5	64QAM	12	7	15.74	15.86	15.85	
5	64QAM	12	13	15.99	15.79	15.73	15
5	64QAM	25	0	15.73	15.73	15.82	
5	256QAM	1	0	13.37	13.81	13.68	
5	256QAM	1	12	13.57	13.84	13.73	15
5	256QAM	1	24	13.66	13.58	13.43	
5	256QAM	12	0	13.64	13.69	13.63	
5	256QAM	12	7	13.55	13.62	13.64	15
5	256QAM	12	13	13.78	13.71	13.81	
5	256QAM	25	0	13.63	13.55	13.48	

n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	16.5
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	15.48	15.33	15.08	16.5
20		1	53	15.42	15.31	14.84	
20		1	104	15.36	15.10	14.94	
20		50	1	14.72	14.59	14.29	16
20	DFT-s-OFDM QPSK	50	25	15.29	15.10	14.86	
20		50	50	14.69	14.74	14.28	
20		100	0	14.77	14.67	14.32	
20		1	1	15.71	15.77	15.75	16.5
20	DFT-s-OFDM 16QAM	1	53	15.61	15.55	14.78	
20		1	104	15.32	15.26	15.18	
20		50	1	14.86	14.73	14.44	16
20		50	25	15.24	15.30	15.22	
20	DFT-s-OFDM 64QAM	50	50	14.94	14.89	14.34	
20		100	0	14.84	14.88	14.80	
20	DFT-s-OFDM 256QAM	1	1	15.09	15.10	14.91	15.5
20	DFT-s-OFDM 16QAM	1	1	14.36	14.29	13.93	15
20	DFT-s-OFDM 64QAM	1	1	13.01	12.77	12.71	13.5
20	CP-OFDM QPSK	1	1	14.46	14.18	14.06	15
20	CP-OFDM 16QAM	1	1	14.45	14.01	13.78	15
20	CP-OFDM 64QAM	1	1	13.88	13.45	13.33	14.5
20	CP-OFDM 256QAM	1	1	11.11	11.12	11.20	12
Channel				371500	376000	380500	16.5
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	15.50	15.14	14.79	16.5
Channel				371000	376000	381000	16.5
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	15.41	15.17	14.73	16.5
Channel				370500	376000	381500	16.5
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	15.40	14.81	14.61	16.5

n7 (PC3)								
BW [MHz]	Modulation		RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				502000	507000	512000		
Frequency (MHz)				2510	2535	2560		
20	DFT-s-OFDM PI/2 BPSK		1	1	17.55	17.69	17.83	18.5
20			1	53	17.62	17.70	17.86	
20			1	104	17.82	17.82	17.83	
20			50	1	17.09	17.17	17.19	18.5
20			50	25	17.65	17.77	17.79	
20			50	50	17.28	17.28	17.30	
20	DFT-s-OFDM QPSK		100	0	17.20	17.28	17.23	18.5
20			1	1	17.86	17.99	17.91	
20			1	53	17.80	17.76	17.94	
20			1	104	17.91	17.95	17.92	18.5
20			50	1	17.22	17.26	17.31	
20			50	25	17.81	17.85	17.83	
20			50	50	17.33	17.26	17.29	18.5
20			100	0	17.28	17.35	17.28	
20	DFT-s-OFDM 16QAM		1	1	17.32	17.50	17.38	18
20	DFT-s-OFDM 64QAM		1	1	16.43	16.58	16.47	17
20	DFT-s-OFDM 256QAM		1	1	15.40	15.22	15.80	16
20	CP-OFDM QPSK		1	1	16.49	16.62	16.56	17
20	CP-OFDM 16QAM		1	1	16.27	16.41	16.43	17
20	CP-OFDM 64QAM		1	1	15.79	15.83	15.96	16.5
20	CP-OFDM 256QAM		1	1	13.28	13.24	13.58	14
Channel					501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)					2507.5	2535	2562.5	
15	DFT-s-OFDM QPSK		1	1	17.65	17.76	17.98	18.5
Channel					501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)					2505	2535	2565	
10	DFT-s-OFDM QPSK		1	1	17.61	17.51	17.96	18.5
Channel					500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)					2502.5	2535	2567.5	
5	DFT-s-OFDM QPSK		1	1	17.46	17.87	17.29	18.5

n25 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376500	381000	16
Frequency (MHz)				1860	1882.5	1905	
20	DFT-s-OFDM PI/2 BPSK	1	1	15.16	14.49	13.89	16
20		1	53	15.04	15.00	14.42	
20		1	104	14.97	14.67	14.74	
20		50	1	14.40	14.19	13.72	15.5
20		50	25	14.97	14.84	14.25	
20		50	50	14.44	14.21	13.80	
20	DFT-s-OFDM QPSK	100	0	14.48	14.24	13.81	16
20		1	1	15.20	15.29	15.19	
20		1	53	14.99	15.18	14.47	
20		1	104	15.04	14.97	14.76	15.5
20		50	1	14.54	14.26	13.84	
20		50	25	14.87	14.92	14.90	
20	DFT-s-OFDM 16QAM	50	50	14.51	14.24	13.85	15.5
20		100	0	14.41	14.43	14.19	
20		1	1	14.83	14.54	14.18	
20	DFT-s-OFDM 64QAM	1	1	13.90	13.78	13.56	14.5
20	DFT-s-OFDM 256QAM	1	1	11.72	11.18	11.12	12.5
20	CP-OFDM QPSK	1	1	14.03	13.86	13.76	14.5
20	CP-OFDM 16QAM	1	1	13.76	13.76	13.51	14.5
20	CP-OFDM 64QAM	1	1	13.23	13.10	12.96	14
20	CP-OFDM 256QAM	1	1	9.80	9.68	9.52	10.5
Channel				371500	376500	381500	16
Frequency (MHz)				1857.5	1882.5	1907.5	
15	DFT-s-OFDM QPSK	1	1	15.25	14.78	13.92	16
Channel				371000	376500	382000	16
Frequency (MHz)				1855	1882.5	1910	
10	DFT-s-OFDM QPSK	1	1	15.07	14.65	14.33	16
Channel				370500	376500	382500	16
Frequency (MHz)				1852.5	1882.5	1912.5	
5	DFT-s-OFDM QPSK	1	1	14.97	14.50	14.68	16

n38 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				516000	519000	522000	20.5
Frequency (MHz)				2580	2595	2610	
20	DFT-s-OFDM PI/2 BPSK	1	1	19.68	19.85	19.86	20.5
20		1	25	19.72	19.67	19.90	
20		1	49	19.76	19.63	19.88	
20		25	1	19.43	19.05	19.27	20.5
20	DFT-s-OFDM QPSK	25	12	19.75	19.57	19.74	
20		25	25	19.40	19.03	19.22	
20		50	0	19.47	19.06	19.30	
20		1	1	19.84	19.93	19.90	20.5
20	DFT-s-OFDM QPSK	1	25	19.66	19.62	19.83	
20		1	49	19.84	19.54	19.87	
20		25	1	19.51	19.15	19.31	20.5
20		25	12	19.76	19.80	19.73	
20		25	25	19.42	19.04	19.25	
20		50	0	19.28	19.49	19.34	
20	DFT-s-OFDM 16QAM	1	1	18.72	18.66	18.59	19.5
20	DFT-s-OFDM 64QAM	1	1	17.50	17.75	17.93	18.5
20	DFT-s-OFDM 256QAM	1	1	18.26	18.36	18.01	19
20	CP-OFDM QPSK	1	1	19.16	18.84	18.78	19.5
20	CP-OFDM 16QAM	1	1	17.76	17.82	17.89	15
20	CP-OFDM 64QAM	1	1	16.68	17.06	17.04	14
20	CP-OFDM 256QAM	1	1	16.41	16.50	16.21	17
Channel				515500	519000	522500	20.5
Frequency (MHz)				2577.5	2595	2612.5	
15	DFT-s-OFDM QPSK	1	1	19.97	19.88	19.77	20.5
Channel				515000	519000	523000	20.5
Frequency (MHz)				2575	2595	2615	
10	DFT-s-OFDM QPSK	1	1	20.11	20.09	19.83	20.5

n40(2305-2315MHz) (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					462000		
Frequency (MHz)					2310		
10	DFT-s-OFDM PI/2 BPSK	1	1		22.07		22.5
10		1	12		22.00		
10		1	22		22.07		
10		12	1		21.45		22.5
10	DFT-s-OFDM QPSK	12	6		22.02		
10		12	12		21.50		
10		24	0		21.46		
10		1	1		22.11		22.5
10	DFT-s-OFDM 16QAM	1	12		22.07		
10		1	22		22.06		
10		12	1		21.59		22.5
10		12	6		22.08		
10	DFT-s-OFDM 64QAM	12	12		21.57		
10		24	0		21.46		21.5
10		1	1		20.70		
10		1	1		20.10		20.5
10	DFT-s-OFDM 256QAM	1	1		19.12		20
10	CP-OFDM QPSK	1	1		20.71		21.5
10	CP-OFDM 16QAM	1	1		20.07		20.5
10	CP-OFDM 64QAM	1	1		19.09		19.5
10	CP-OFDM 256QAM	1	1		17.14		18

n40(2350-2360MHz) (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					471000		
Frequency (MHz)					2355		
10	DFT-s-OFDM PI/2 BPSK	1	1		21.93		22.5
10		1	12		22.00		
10		1	22		22.10		
10		12	1		21.33		22.5
10	DFT-s-OFDM QPSK	12	6		21.86		
10		12	12		21.41		
10		24	0		21.34		
10		1	1		22.13		22.5
10	DFT-s-OFDM 16QAM	1	12		22.08		
10		1	22		22.06		
10		12	1		21.44		22.5
10		12	6		22.05		
10	DFT-s-OFDM 64QAM	12	12		21.54		
10		24	0		21.45		21.5
10		1	1		20.74		
10		1	1		20.14		21
10	DFT-s-OFDM 256QAM	1	1		19.17		20
10	CP-OFDM QPSK	1	1		20.85		21.5
10	CP-OFDM 16QAM	1	1		20.20		21
10	CP-OFDM 64QAM	1	1		19.24		20
10	CP-OFDM 256QAM	1	1		17.55		18

n41 (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	23.5
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	22.56	22.19	21.99	22.25	22.70	23.5
100		1	136	22.74	22.57	22.60	22.36	22.16	
100		1	271	22.68	22.17	21.45	22.07	22.05	
100		135	1	22.25	22.14	22.16	22.02	21.82	
100		135	67	22.81	22.61	22.60	22.35	22.14	
100		135	136	22.21	21.94	21.85	21.60	21.41	
100	DFT-s-OFDM QPSK	270	0	22.25	22.05	22.05	21.91	21.74	23.5
100		1	1	22.81	22.77	22.84	22.83	22.80	
100		1	136	22.81	22.82	22.63	22.36	22.20	
100		1	271	22.71	22.32	21.38	21.96	22.04	
100		135	1	21.83	21.69	21.70	21.54	21.37	
100		135	67	22.72	22.75	22.80	22.73	22.78	
100	DFT-s-OFDM 16QAM	135	136	21.78	21.59	21.33	21.14	20.93	23.5
100		270	0	21.77	21.69	21.63	21.43	21.27	
100		1	1	21.73	21.59	21.62	21.62	21.51	
100		1	1	20.81	20.26	20.80	20.73	20.66	
100	DFT-s-OFDM 64QAM	1	1	18.78	18.80	18.76	18.49	18.57	19.5
100	DFT-s-OFDM 256QAM	1	1	18.78	18.80	18.76	18.49	18.57	19.5
100	CP-OFDM QPSK	1	1	21.31	21.55	21.41	21.41	21.28	22.5
100	CP-OFDM 16QAM	1	1	20.89	20.32	20.78	20.89	20.70	21.5
100	CP-OFDM 64QAM	1	1	19.57	19.49	19.51	19.51	19.35	20
100	CP-OFDM 256QAM	1	1	15.93	15.72	15.85	15.42	15.55	16.5
Channel				508200	513402	518598	523800	528996	23.5
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	22.76	21.12	22.81	22.63	22.49	23.5
Channel				507204	512904	518598	524298	529998	23.5
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	22.78	21.82	22.85	22.72	22.41	23.5
Channel				505200	511902	518598	525798	531996	23.5
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	22.73	22.74	22.81	22.57	22.25	23.5
Channel				504204	511404	518598	525798	532998	23.5
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	22.83	22.83	22.76	22.57	22.27	23.5
Channel				503202	510900	518598	526296	534000	23.5
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	22.82	22.81	22.86	22.42	22.14	23.5
Channel				502200	510402	518598	526800	534996	23.5
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	22.85	22.86	22.79	22.35	22.02	23.5
Channel				501204	509904	518598	527298	535998	23.5
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	22.77	22.82	22.72	22.36	22.04	23.5
Channel				500700	509652	518598	527550	536496	23.5
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	22.81	22.82	22.73	22.32	22.05	23.5
Channel				500202	509400	518598	527796	537000	23.5
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	22.75	22.80	22.75	22.28	22.11	23.5

n41 (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	20.5
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	19.60	19.66	19.74	19.65	19.50	20.5
100		1	136	19.46	19.59	19.50	19.24	19.05	
100		1	271	19.47	19.24	19.17	19.01	19.00	
100		135	1	19.48	19.52	19.60	19.40	19.21	20
100		135	67	19.48	19.50	19.47	19.23	19.02	
100		135	136	19.47	19.38	19.22	19.05	18.77	
100	DFT-s-OFDM QPSK	270	0	19.42	19.48	19.49	19.33	19.08	20.5
100		1	1	19.76	19.80	19.81	19.78	19.75	
100		1	136	19.50	19.77	19.55	19.32	19.10	
100		1	271	19.43	19.28	19.15	19.02	18.88	20
100		135	1	19.62	19.64	19.66	19.65	19.61	
100		135	67	19.54	19.61	19.50	19.47	19.44	
100	DFT-s-OFDM 16QAM	135	136	19.51	19.51	19.26	19.12	18.82	20.5
100		270	0	19.49	19.52	19.54	19.31	19.37	
100		1	1	19.26	19.36	19.66	19.33	19.41	
100	DFT-s-OFDM 64QAM	1	1	19.64	19.79	19.71	19.72	19.58	20.5
100	DFT-s-OFDM 256QAM	1	1	18.52	18.70	18.66	18.54	18.32	19.5
100	CP-OFDM QPSK	1	1	19.77	19.77	19.66	19.51	19.49	20.5
100	CP-OFDM 16QAM	1	1	19.79	19.75	19.68	19.79	19.63	20.5
100	CP-OFDM 64QAM	1	1	18.90	18.97	18.87	18.80	18.65	19.5
100	CP-OFDM 256QAM	1	1	16.26	16.11	16.29	16.22	16.37	17
Channel				508200	513402	518598	523800	528996	20.5
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	19.57	19.61	19.51	19.58	19.22	20.5
Channel				507204	512904	518598	524298	529998	20.5
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	19.61	19.65	19.60	19.55	19.21	20.5
Channel				505200	511902	518598	525798	531996	20.5
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	19.57	19.73	19.64	19.40	19.14	20.5
Channel				504204	511404	518598	525798	532998	20.5
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	19.60	19.71	19.71	19.45	19.15	20.5
Channel				503202	510900	518598	526296	534000	20.5
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	19.66	19.75	19.66	19.25	18.95	20.5
Channel				502200	510402	518598	526800	534996	20.5
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	19.77	19.77	19.73	19.31	18.91	20.5
Channel				501204	509904	518598	527298	535998	20.5
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	19.78	19.76	19.68	19.24	18.87	20.5
Channel				500700	509652	518598	527550	536496	20.5
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	19.87	19.75	19.63	19.31	19.02	20.5
Channel				500202	509400	518598	527796	537000	20.5
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	19.74	19.90	19.66	19.35	19.13	20.5

n66 (PC3)_ANT 1							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	19
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	18.05	18.11	18.20	19
40		1	108	17.80	17.53	17.67	
40		1	214	17.54	17.65	17.82	
40		108	1	17.10	17.14	17.03	
40	DFT-s-OFDM QPSK	108	54	17.59	17.55	17.53	18
40		108	108	17.15	16.97	17.03	
40		216	0	17.16	17.11	17.03	
40		1	1	18.21	18.23	18.18	
40	DFT-s-OFDM 16QAM	1	108	17.94	17.77	17.75	19
40		1	214	17.69	17.77	17.82	
40		108	1	17.21	17.21	17.08	
40		108	54	17.47	17.53	17.50	
40	DFT-s-OFDM 64QAM	108	108	17.20	17.04	17.07	18
40		216	0	17.15	17.19	17.11	
40		1	1	17.13	17.49	17.26	
40		1	1	16.44	16.63	16.67	
40	DFT-s-OFDM 256QAM	1	1	15.16	15.11	15.47	16
40	CP-OFDM QPSK	1	1	16.47	16.48	16.69	17.5
40	CP-OFDM 16QAM	1	1	16.27	16.23	16.49	17
40	CP-OFDM 64QAM	1	1	15.74	15.76	15.98	16.5
40	CP-OFDM 256QAM	1	1	15.71	15.91	15.87	16.5
Channel				345000	349000	353000	18
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	17.80	17.96	17.67	18
Channel				344500	349000	353500	18
Frequency (MHz)				1722.5	1745	1767.5	
25	DFT-s-OFDM QPSK	1	1	17.11	17.77	17.42	18
Channel				344000	349000	354000	18
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	17.59	18.01	17.55	18
Channel				343500	349000	354500	18
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	17.86	17.43	17.82	18
Channel				343000	349000	355000	18
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	17.60	17.55	17.80	18
Channel				342500	349000	355500	18
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	17.89	17.51	17.26	18

n78(3450-3550MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			26
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			25.09			26
100		1	136			24.46			
100		1	271			23.71			
100		135	1			24.18			
100	DFT-s-OFDM QPSK	135	67			24.39			25
100		135	136			23.19			
100		270	0			23.81			
100		1	1			25.16			
100	DFT-s-OFDM 16QAM	1	136			24.73			26
100		1	271			24.09			
100		135	1			23.81			
100		135	67			24.58			
100	DFT-s-OFDM 64QAM	135	136			22.96			25
100		270	0			23.50			
100		1	1			23.94			
100		1	1			23.10			
100	DFT-s-OFDM 256QAM	1	1			21.03			22
100	CP-OFDM QPSK	1	1			23.54			24
100	CP-OFDM 16QAM	1	1			23.10			23.5
100	CP-OFDM 64QAM	1	1			21.77			22.5
100	CP-OFDM 256QAM	1	1			19.00			19.5
Channel				633000	633166	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	25.09	25.10	24.98	24.69	24.94	26
Channel				632688	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	25.14	25.12	25.05	24.69	24.88	26
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	24.88	24.88	24.80	24.75	24.78	26
Channel				632000	632666	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	24.86	24.72	24.65	24.60	24.50	26
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	24.89	24.65	24.57	24.31	24.16	26
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	25.03	23.45	24.65	24.34	23.97	26
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	24.92	24.66	24.43	23.93	23.42	26
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	24.94	24.71	24.39	23.70	23.33	26
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	24.89	24.61	24.32	23.60	23.51	26

n78(3700-3800MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			26
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			25.08			26
100		1	136			24.90			
100		1	271			24.89			
100		135	1			24.72			
100		135	67			24.94			
100	DFT-s-OFDM QPSK	135	136			24.26			25
100		270	0			24.43			
100		1	1			25.15			
100		1	136			25.02			
100		1	271			24.91			
100	DFT-s-OFDM 16QAM	135	1			23.81			26
100		135	67			24.58			
100		135	136			22.96			
100		270	0			23.50			
100		1	1			23.81			
100	DFT-s-OFDM 64QAM	1	1			23.18			24
100	DFT-s-OFDM 256QAM	1	1			21.18			22
100	CP-OFDM QPSK	1	1			23.89			24.5
100	CP-OFDM 16QAM	1	1			23.18			24
100	CP-OFDM 64QAM	1	1			21.85			22.5
100	CP-OFDM 256QAM	1	1			18.91			19.5
Channel				649688	649834	650000	650166	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	24.51	24.50	24.70	24.60	24.57	26
Channel				649334	649686	650000	650334	650686	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	24.57	24.73	24.64	24.80	24.73	26
Channel				649000	649500	650000	650500	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	24.59	24.73	24.74	24.77	24.84	26
Channel				648688	649334	650000	650686	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	24.56	24.65	24.65	24.72	24.52	26
Channel				648334	649166	650000	650834	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	24.58	24.71	24.76	24.58	24.48	26
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	24.46	24.62	24.74	24.57	24.46	26
Channel				647334	648686	650000	651334	652686	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	24.60	24.74	24.54	24.43	24.43	26
Channel				647168	648584	650000	651416	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	24.56	24.75	24.56	24.31	24.34	26
Channel				647000	648500	650000	651500	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	24.54	24.82	24.62	24.43	24.40	26

n78(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			23
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			22.31			22.5
100		1	136			21.58			
100		1	271			21.23			
100		135	1			21.84			
100		135	67			21.53			
100		135	136			20.87			
100	DFT-s-OFDM QPSK	270	0			21.49			23
100		1	1			22.34			
100		1	136			21.79			
100		1	271			21.26			
100		135	1			21.97			
100		135	67			21.78			
100	DFT-s-OFDM 16QAM	135	136			21.23			22.5
100		270	0			21.76			
100		1	1			21.69			
100		1	1			22.31			
100		1	1			21.19			
100		1	1			22.33			
100	DFT-s-OFDM 64QAM	1	1			22.02			22.5
100	DFT-s-OFDM 256QAM	1	1			21.32			22
100	CP-OFDM QPSK	1	1			19.14			20
Channel				633000	633166	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	22.26	22.19	22.23	22.17	22.09	23
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	22.32	22.26	22.17	22.12	22.03	23
Channel				632334	632834	633334	633832	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	22.33	22.25	22.14	21.96	21.95	23
Channel				632000	632666	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	22.24	22.15	22.13	21.91	21.79	23
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	22.35	22.11	22.03	21.78	21.63	23
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	22.32	20.82	21.92	21.61	21.40	23
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	22.28	22.03	21.75	21.27	20.76	23
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	22.30	22.02	21.63	21.16	20.68	23
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	22.39	22.12	21.69	21.09	20.84	23

n78(3700-3800MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			22.5
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			21.77			22
100		1	136			21.59			
100		1	271			21.18			
100		135	1			21.39			22
100		135	67			21.09			
100		135	136			20.92			
100	DFT-s-OFDM QPSK	270	0			21.10			22.5
100		1	1			21.85			
100		1	136			21.26			
100		1	271			21.10			22
100		135	1			21.51			
100		135	67			21.23			
100	DFT-s-OFDM 16QAM	135	136			20.99			22
100		270	0			21.29			
100		1	1			21.44			
100	DFT-s-OFDM 64QAM	1	1			21.54			22
100	DFT-s-OFDM 256QAM	1	1			20.38			21
100	CP-OFDM QPSK	1	1			21.40			22
100	CP-OFDM 16QAM	1	1			21.50			22
100	CP-OFDM 64QAM	1	1			20.56			21
100	CP-OFDM 256QAM	1	1			18.06			19
Channel				649688	649834	650000	650166	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	21.30	21.23	21.39	21.27	21.36	22.5
Channel				649334	649686	650000	650334	650686	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	21.29	21.39	21.33	21.45	21.40	22.5
Channel				649000	649500	650000	650500	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	21.29	21.34	21.38	21.42	21.38	22.5
Channel				648688	649334	650000	650686	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	21.24	21.29	21.46	21.39	21.29	22.5
Channel				648334	649166	650000	650834	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	21.35	21.47	21.43	21.22	21.12	22.5
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	21.27	21.42	21.51	21.23	21.04	22.5
Channel				647334	648686	650000	651334	652686	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	21.23	21.52	21.38	21.06	21.00	22.5
Channel				647168	648584	650000	651416	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	21.36	21.40	21.31	21.12	21.09	22.5
Channel				647000	648500	650000	651500	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	21.25	21.59	21.26	21.12	21.07	22.5

CA_7C											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	UL Fre. (MHz)	SCC Channel	UL Fre. (MHz)	Modulation	PCC		SCC		Measured Power(dBm)	Tune-up limit(dBm)
						RB Size	RB Offset	RB Size	RB Offset		
20850	20850	2510	21048	2529.8	QPSK	1	0	0	0	20.68	21.50
21100	21001	2525.1	21199	2544.9	QPSK	1	0	0	0	20.72	21.50
21350	21152	2540.2	21350	2560	QPSK	1	0	0	0	20.75	21.50
20850	20850	2510	21048	2529.8	16QAM	1	0	0	0	20.18	21.50
21100	21001	2525.1	21199	2544.9	16QAM	1	0	0	0	20.45	21.50
21350	21152	2540.2	21350	2560	16QAM	1	0	0	0	20.41	21.50
20850	20850	2510	21048	2529.8	64QAM	1	0	0	0	19.82	20.50
21100	21001	2525.1	21199	2544.9	64QAM	1	0	0	0	19.76	20.50
21350	21152	2540.2	21350	2560	64QAM	1	0	0	0	19.58	20.50
20850	20850	2510	21048	2529.8	256QAM	1	0	0	0	16.79	17.50
21100	21001	2525.1	21199	2544.9	256QAM	1	0	0	0	16.93	17.50
21350	21152	2540.2	21350	2560	256QAM	1	0	0	0	16.83	17.50
20850	20850	2510	21048	2529.8	QPSK	50	0	0	0	19.66	20.50
21100	21001	2525.1	21199	2544.9	QPSK	50	0	0	0	19.93	20.50
21350	21152	2540.2	21350	2560	QPSK	50	0	0	0	19.83	20.50

5.8GHz WLAN ANT 8

5.8GHz WLAN ANT 8	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 149	5745	15.13	16.00	12.00	96.55
		CH 157	5785	15.55	16.50	12.00	95.86
		CH 165	5825	15.07	16.00	12.00	95.86
	802.11n-HT20 MCS0	CH 149	5745	15.45	16.00	12.00	95.93
		CH 157	5785	15.90	16.50	12.00	95.16
		CH 165	5825	15.43	16.00	12.00	95.93
	802.11n-HT40 MCS0	CH 151	5755	15.27	16.00	12.00	92.19
		CH 159	5795	15.56	16.50	12.00	92.19
	802.11ac-VHT20 MCS0	CH 149	5745	15.53	16.50	12.00	95.97
		CH 157	5785	15.93	16.50	12.00	95.20
		CH 165	5825	15.48	16.00	12.00	95.97
	802.11ac-VHT40 MCS0	CH 151	5755	15.34	16.00	12.00	92.31
		CH 159	5795	15.52	16.50	12.00	92.19
	802.11ac-VHT80 MCS0	CH 155	5775	15.99	16.50	12.00	85.71