



REPORT No.: SZ24060309S01

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)	Ch Delta > 0.5
TX Channel		128	189	251		128	189	251		
Frequency (MHz)		824.2	836.4	848.8		824.2	836.4	848.8		
GSM 1 Tx slot		33.20	33.23	33.16	34.50	24.20	24.23	24.16	25.50	0.09
GPRS 1 Tx slot		33.18	33.20	33.14	34.50	24.18	24.20	24.14	25.50	
GPRS 2 Tx slots		32.19	32.24	32.20	33.00	26.19	26.24	26.20	27.00	0.05
GPRS 3 Tx slots		30.05	30.15	30.09	31.00	25.79	25.89	25.83	26.74	0.10
GPRS 4 Tx slots		29.52	29.55	29.57	30.50	26.52	26.55	26.57	27.50	0.05
EDGE 1 Tx slot		26.58	26.71	26.63	28.00	17.58	17.71	17.63	19.00	0.13
EDGE 2 Tx slots		25.30	25.36	25.24	26.50	19.30	19.36	19.24	20.50	0.12
EDGE 3 Tx slots		23.49	23.53	23.42	25.00	19.23	19.27	19.16	20.74	0.11
EDGE 4 Tx slots		22.04	22.11	22.06	23.50	19.04	19.11	19.06	20.50	0.07
Mode			Max.	33.23			Max.	26.57		
Attenuator		Cable Loss : 0.6								

GSM1900		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
TX Channel		512	661	810		512	661	810		
Frequency (MHz)		1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot		30.38	30.42	30.36	32.00	21.38	21.42	21.36	23.00	0.12
GPRS 1 Tx slot		30.35	30.40	30.30	32.00	21.35	21.40	21.30	23.00	
GPRS 2 Tx slots		29.41	29.45	29.43	31.00	23.41	23.45	23.43	25.00	0.04
GPRS 3 Tx slots		27.32	27.40	27.37	29.00	23.06	23.14	23.11	24.74	0.08
GPRS 4 Tx slots		26.08	26.13	26.10	27.50	23.08	23.13	23.10	24.50	0.05
EDGE 1 Tx slot		25.83	25.92	25.87	27.00	16.83	16.92	16.87	18.00	0.09
EDGE 2 Tx slots		24.80	24.87	24.75	26.00	18.80	18.87	18.75	20.00	0.12
EDGE 3 Tx slots		22.41	22.45	22.38	24.00	18.15	18.19	18.12	19.74	0.07
EDGE 4 Tx slots		21.09	21.13	21.05	22.50	18.09	18.13	18.05	19.50	0.08
Mode			Max.	30.42			Max.	23.45		
Attenuator		Cable Loss : 0.8								

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99 RMC 12.2Kbps		24.29	24.32	24.31	25.50	24.48	24.53	24.50	25.50	24.10	24.15	24.09	25.50
3GPP Rel 5 HSDPA Subtest-1		22.39	22.58	22.43	23.50	22.70	22.68	22.83	24.00	22.76	22.76	22.76	23.50
3GPP Rel 5 HSDPA Subtest-2		22.45	22.60	22.46	23.50	22.75	22.74	22.86	24.00	22.82	22.80	22.79	23.50
3GPP Rel 5 HSDPA Subtest-3		22.00	22.19	22.04	23.00	22.32	22.30	22.43	23.50	22.37	22.35	22.35	23.00
3GPP Rel 5 HSDPA Subtest-4		21.94	22.15	22.01	23.00	22.28	22.25	22.41	23.50	22.34	22.32	22.30	23.00
3GPP Rel 8 DC-HSDPA Subtest-1		22.38	22.56	22.49	23.50	22.67	22.66	22.85	24.00	22.78	22.77	22.75	23.50
3GPP Rel 8 DC-HSDPA Subtest-2		22.36	22.52	22.44	23.50	22.66	22.64	22.83	24.00	22.74	22.74	22.74	23.50
3GPP Rel 8 DC-HSDPA Subtest-3		21.80	22.00	21.95	23.00	22.12	22.12	22.31	23.50	22.22	22.23	22.21	23.00
3GPP Rel 8 DC-HSDPA Subtest-4		21.81	22.00	21.93	23.00	22.11	22.10	22.28	23.50	22.22	22.21	22.22	23.00
3GPP Rel 6 HSUPA Subtest-1		22.44	22.26	22.10	23.50	22.28	22.25	22.44	23.50	22.29	22.32	22.29	23.50
3GPP Rel 6 HSUPA Subtest-2		22.43	22.75	22.58	23.50	22.78	22.73	22.90	24.00	22.79	22.77	22.78	23.50
3GPP Rel 6 HSUPA Subtest-3		21.50	21.81	21.66	22.50	21.84	21.79	21.97	23.00	21.85	21.85	21.83	23.00
3GPP Rel 6 HSUPA Subtest-4		22.41	22.71	22.57	22.50	22.73	22.71	22.89	23.00	22.75	22.75	22.76	23.00
3GPP Rel 6 HSUPA Subtest-5		21.46	21.77	21.62	22.50	21.78	21.77	21.95	23.00	21.81	21.82	21.80	23.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1		21.47	21.66	21.53	22.50	21.73	21.69	21.85	23.00	21.76	21.75	21.77	23.00
Attenuator			Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6	
Mode			Max.	24.32			Max.	24.53			Max.	24.15	

3	QPSK	15	0	22.44	22.49	22.34	24.5
3	16QAM	1	0	22.65	22.68	22.54	
3	16QAM	1	8	22.59	22.63	22.46	
3	16QAM	1	14	22.54	22.58	22.48	23.5
3	16QAM	8	0	21.81	21.86	21.72	
3	16QAM	8	4	21.75	21.82	21.67	
3	16QAM	8	7	21.68	21.73	21.59	23.5
3	16QAM	15	0	21.73	21.78	21.66	
3	64QAM	1	0	21.89	21.93	21.77	
3	64QAM	1	8	21.84	21.90	21.71	23.5
3	64QAM	1	14	21.78	21.85	21.72	
3	64QAM	8	0	20.80	20.84	20.70	
3	64QAM	8	4	20.77	20.81	20.63	22.5
3	64QAM	8	7	20.66	20.72	20.57	
3	64QAM	15	0	20.72	20.76	20.61	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.66	23.73	23.67	25.5
1.4	QPSK	1	3	23.59	23.63	23.47	
1.4	QPSK	1	5	23.54	23.60	23.41	
1.4	QPSK	3	0	22.51	22.55	22.43	24.5
1.4	QPSK	3	1	22.45	22.50	22.35	
1.4	QPSK	3	3	22.34	22.41	22.28	
1.4	QPSK	6	0	22.42	22.47	22.32	24.5
1.4	16QAM	1	0	22.63	22.66	22.52	
1.4	16QAM	1	3	22.57	22.61	22.44	
1.4	16QAM	1	5	22.52	22.56	22.46	23.5
1.4	16QAM	3	0	21.79	21.84	21.70	
1.4	16QAM	3	1	21.73	21.80	21.65	
1.4	16QAM	3	3	21.66	21.71	21.57	23.5
1.4	16QAM	6	0	21.71	21.76	21.64	
1.4	64QAM	1	0	21.87	21.91	21.75	
1.4	64QAM	1	3	21.82	21.88	21.69	22.5
1.4	64QAM	1	5	21.76	21.83	21.70	
1.4	64QAM	3	0	20.78	20.82	20.68	
1.4	64QAM	3	1	20.75	20.79	20.61	22.5
1.4	64QAM	3	3	20.64	20.70	20.55	
1.4	64QAM	6	0	20.70	20.74	20.59	

3	QPSK	15	0	22.52	22.67	22.60	24.5
3	16QAM	1	0	22.90	22.92	22.80	
3	16QAM	1	8	22.54	22.80	22.51	
3	16QAM	1	14	22.50	22.60	22.77	23.5
3	16QAM	8	0	21.80	21.79	21.66	
3	16QAM	8	4	21.58	21.62	21.72	
3	16QAM	8	7	21.60	21.72	21.72	23.5
3	16QAM	15	0	21.61	21.76	21.75	
3	64QAM	1	0	21.65	21.83	21.75	
3	64QAM	1	8	21.58	21.78	21.57	22.5
3	64QAM	1	14	21.74	21.74	21.74	
3	64QAM	8	0	20.58	20.84	20.59	
3	64QAM	8	4	20.45	20.79	20.55	22.5
3	64QAM	8	7	20.46	20.66	20.59	
3	64QAM	15	0	20.56	20.71	20.68	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.79	23.88	23.85	25.5
1.4	QPSK	1	3	23.61	23.77	23.55	
1.4	QPSK	1	5	23.66	23.71	23.58	
1.4	QPSK	3	0	22.57	22.65	22.55	24.5
1.4	QPSK	3	1	22.49	22.62	22.40	
1.4	QPSK	3	3	22.35	22.49	22.42	
1.4	QPSK	6	0	22.46	22.61	22.54	24.5
1.4	16QAM	1	0	22.84	22.86	22.74	
1.4	16QAM	1	3	22.48	22.74	22.45	
1.4	16QAM	1	5	22.44	22.54	22.71	23.5
1.4	16QAM	3	0	21.74	21.73	21.60	
1.4	16QAM	3	1	21.52	21.56	21.66	
1.4	16QAM	3	3	21.54	21.66	21.66	23.5
1.4	16QAM	6	0	21.55	21.70	21.69	
1.4	64QAM	1	0	21.59	21.77	21.69	
1.4	64QAM	1	3	21.52	21.72	21.51	22.5
1.4	64QAM	1	5	21.68	21.68	21.68	
1.4	64QAM	3	0	20.52	20.78	20.53	
1.4	64QAM	3	1	20.39	20.73	20.49	22.5
1.4	64QAM	3	3	20.40	20.60	20.53	
1.4	64QAM	6	0	20.50	20.65	20.62	

3	QPSK	15	0	22.69	22.74	22.61	24.5
3	16QAM	1	0	22.87	22.89	22.76	
3	16QAM	1	8	22.61	22.81	22.82	
3	16QAM	1	14	22.62	22.68	22.87	23.5
3	16QAM	8	0	21.62	21.83	21.74	
3	16QAM	8	4	21.55	21.66	21.78	
3	16QAM	8	7	21.59	21.76	21.65	
3	16QAM	15	0	21.64	21.79	21.87	
3	64QAM	1	0	21.82	21.95	21.89	23.5
3	64QAM	1	8	21.84	21.79	21.88	
3	64QAM	1	14	21.69	21.91	21.93	
3	64QAM	8	0	20.69	20.81	20.72	22.5
3	64QAM	8	4	20.73	20.78	20.66	
3	64QAM	8	7	20.63	20.72	20.64	
3	64QAM	15	0	20.56	20.60	20.54	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	23.90	23.91	23.82	25.5
1.4	QPSK	1	3	23.75	23.83	23.73	
1.4	QPSK	1	5	23.68	23.86	23.66	
1.4	QPSK	3	0	22.67	22.78	22.73	
1.4	QPSK	3	1	22.55	22.69	22.60	
1.4	QPSK	3	3	22.64	22.75	22.71	
1.4	QPSK	6	0	22.66	22.71	22.58	24.5
1.4	16QAM	1	0	22.84	22.86	22.73	23.5
1.4	16QAM	1	3	22.58	22.78	22.79	
1.4	16QAM	1	5	22.59	22.65	22.84	
1.4	16QAM	3	0	21.59	21.80	21.71	
1.4	16QAM	3	1	21.52	21.63	21.75	
1.4	16QAM	3	3	21.56	21.73	21.62	
1.4	16QAM	6	0	21.61	21.76	21.84	22.5
1.4	64QAM	1	0	21.79	21.92	21.86	23.5
1.4	64QAM	1	3	21.81	21.76	21.85	
1.4	64QAM	1	5	21.66	21.88	21.90	
1.4	64QAM	3	0	20.66	20.78	20.69	
1.4	64QAM	3	1	20.70	20.75	20.63	
1.4	64QAM	3	3	20.60	20.69	20.61	
1.4	64QAM	6	0	20.53	20.57	20.51	22.5

1.4	QPSK	6	0	22.26	22.33	22.23	24
1.4	16QAM	1	0	22.32	22.46	22.33	24
1.4	16QAM	1	3	22.21	22.30	22.29	
1.4	16QAM	1	5	22.39	22.39	22.27	
1.4	16QAM	3	0	21.31	21.52	21.32	
1.4	16QAM	3	1	21.16	21.48	21.44	
1.4	16QAM	3	3	21.35	21.51	21.36	23
1.4	16QAM	6	0	21.32	21.37	21.26	
1.4	64QAM	1	0	21.29	21.51	21.34	23
1.4	64QAM	1	3	21.45	21.49	21.42	
1.4	64QAM	1	5	21.21	21.41	21.28	
1.4	64QAM	3	0	20.40	20.46	20.42	
1.4	64QAM	3	1	20.37	20.43	20.39	
1.4	64QAM	3	3	20.21	20.26	20.38	
1.4	64QAM	6	0	20.28	20.39	20.35	22

3	QPSK	15	0	22.65	22.68	22.70	24.5
3	16QAM	1	0	22.67	22.89	22.72	
3	16QAM	1	8	22.80	22.65	22.70	
3	16QAM	1	14	22.71	22.74	22.77	23.5
3	16QAM	8	0	21.74	21.87	21.78	
3	16QAM	8	4	21.59	21.85	21.65	
3	16QAM	8	7	21.64	21.68	21.68	
3	16QAM	15	0	21.60	21.76	21.77	23.5
3	64QAM	1	0	21.70	21.82	21.77	
3	64QAM	1	8	21.66	21.68	21.79	
3	64QAM	1	14	21.75	21.74	21.71	22.5
3	64QAM	8	0	20.74	20.87	20.70	
3	64QAM	8	4	20.67	20.79	20.71	
3	64QAM	8	7	20.64	20.80	20.62	
3	64QAM	15	0	20.60	20.65	20.61	Tune-up limit (dBm)
Channel				131979	132322	132665	
Frequency (MHz)				1710.7	1745	1779.3	25.5
1.4	QPSK	1	0	23.91	23.95	23.86	
1.4	QPSK	1	3	23.86	23.92	23.82	
1.4	QPSK	1	5	23.79	23.78	23.73	
1.4	QPSK	3	0	22.73	22.80	22.67	
1.4	QPSK	3	1	22.67	22.73	22.58	
1.4	QPSK	3	3	22.63	22.68	22.64	24.5
1.4	QPSK	6	0	22.61	22.64	22.66	
1.4	16QAM	1	0	22.63	22.85	22.68	24.5
1.4	16QAM	1	3	22.76	22.61	22.66	
1.4	16QAM	1	5	22.67	22.70	22.73	
1.4	16QAM	3	0	21.70	21.83	21.74	
1.4	16QAM	3	1	21.55	21.81	21.61	
1.4	16QAM	3	3	21.60	21.64	21.64	
1.4	16QAM	6	0	21.56	21.72	21.73	23.5
1.4	64QAM	1	0	21.66	21.78	21.73	23.5
1.4	64QAM	1	3	21.62	21.64	21.75	
1.4	64QAM	1	5	21.71	21.70	21.67	
1.4	64QAM	3	0	20.70	20.83	20.66	
1.4	64QAM	3	1	20.63	20.75	20.67	
1.4	64QAM	3	3	20.60	20.76	20.58	
1.4	64QAM	6	0	20.56	20.61	20.57	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	23.99	24.05	23.96	25.5
20	QPSK	1	49	23.88	24.00	23.92	
20	QPSK	1	99	23.94	24.01	23.87	
20	QPSK	50	0	22.90	22.99	22.92	24.5
20	QPSK	50	24	22.86	22.92	22.91	
20	QPSK	50	50	22.91	22.89	22.83	
20	QPSK	100	0	22.83	22.87	22.86	24.5
20	16QAM	1	0	23.00	23.01	22.95	
20	16QAM	1	49	22.85	22.96	22.84	
20	16QAM	1	99	22.78	22.92	22.87	23.5
20	16QAM	50	0	21.84	21.96	21.90	
20	16QAM	50	24	21.80	21.92	21.83	
20	16QAM	50	50	21.76	21.84	21.88	23.5
20	16QAM	100	0	21.82	21.81	21.80	
20	64QAM	1	0	21.92	22.07	21.98	
20	64QAM	1	49	21.87	21.89	21.89	23.5
20	64QAM	1	99	21.79	21.93	21.85	
20	64QAM	50	0	20.83	20.94	20.81	
20	64QAM	50	24	20.87	20.88	20.77	22.5
20	64QAM	50	50	20.79	20.86	20.78	
20	64QAM	100	0	20.80	20.85	20.72	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.94	24.00	23.91	25.5
15	QPSK	1	37	23.83	23.95	23.87	
15	QPSK	1	74	23.89	23.96	23.82	
15	QPSK	36	0	22.85	22.94	22.87	24.5
15	QPSK	36	20	22.81	22.87	22.91	
15	QPSK	36	39	22.86	22.84	22.78	
15	QPSK	75	0	22.78	22.82	22.81	24.5
15	16QAM	1	0	22.95	22.96	22.90	
15	16QAM	1	37	22.80	22.91	22.79	
15	16QAM	1	74	22.73	22.87	22.82	23.5
15	16QAM	36	0	21.79	21.91	21.85	
15	16QAM	36	20	21.75	21.87	21.78	
15	16QAM	36	39	21.71	21.79	21.83	23.5
15	16QAM	75	0	21.77	21.76	21.75	
15	64QAM	1	0	21.87	22.02	21.93	
15	64QAM	1	37	21.82	21.84	21.84	22.5
15	64QAM	1	74	21.74	21.88	21.80	
15	64QAM	36	0	20.78	20.89	20.76	
15	64QAM	36	20	20.82	20.83	20.72	22.5
15	64QAM	36	39	20.74	20.81	20.73	
15	64QAM	75	0	20.75	20.80	20.67	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.88	23.94	23.85	25.5
10	QPSK	1	25	23.77	23.89	23.81	
10	QPSK	1	49	23.83	23.90	23.76	
10	QPSK	25	0	22.79	22.88	22.81	24.5
10	QPSK	25	12	22.75	22.81	22.85	
10	QPSK	25	25	22.80	22.78	22.72	
10	QPSK	50	0	22.72	22.76	22.75	24.5
10	16QAM	1	0	22.89	22.90	22.84	
10	16QAM	1	25	22.74	22.85	22.73	
10	16QAM	1	49	22.67	22.81	22.76	23.5
10	16QAM	25	0	21.73	21.85	21.79	
10	16QAM	25	12	21.69	21.81	21.72	
10	16QAM	25	25	21.65	21.73	21.77	23.5
10	16QAM	50	0	21.71	21.70	21.69	
10	64QAM	1	0	21.81	21.96	21.87	
10	64QAM	1	25	21.76	21.78	21.78	23.5
10	64QAM	1	49	21.68	21.82	21.74	
10	64QAM	25	0	20.72	20.83	20.70	
10	64QAM	25	12	20.76	20.77	20.66	22.5
10	64QAM	25	25	20.68	20.75	20.67	
10	64QAM	50	0	20.69	20.74	20.61	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.85	23.91	23.82	25.5
5	QPSK	1	12	23.74	23.86	23.78	
5	QPSK	1	24	23.80	23.87	23.73	
5	QPSK	12	0	22.76	22.85	22.78	24.5
5	QPSK	12	7	22.72	22.78	22.82	
5	QPSK	12	13	22.77	22.75	22.69	
5	QPSK	25	0	22.69	22.73	22.72	24.5
5	16QAM	1	0	22.86	22.87	22.81	
5	16QAM	1	12	22.71	22.82	22.70	
5	16QAM	1	24	22.64	22.78	22.73	23.5
5	16QAM	12	0	21.70	21.82	21.76	
5	16QAM	12	7	21.66	21.78	21.69	
5	16QAM	12	13	21.62	21.70	21.74	23.5
5	16QAM	25	0	21.68	21.67	21.66	
5	64QAM	1	0	21.78	21.93	21.84	
5	64QAM	1	12	21.73	21.75	21.75	23.5
5	64QAM	1	24	21.65	21.79	21.71	
5	64QAM	12	0	20.69	20.80	20.67	
5	64QAM	12	7	20.73	20.74	20.63	22.5
5	64QAM	12	13	20.65	20.72	20.64	
5	64QAM	25	0	20.66	20.71	20.58	

Band 41 (2496~2690MHz) (dBm) PC3									
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	24
Frequency (MHz)				2505	2549.5	2593	2638.5	2683	
20	QPSK	1	0	22.24	22.36	22.37	22.32	22.31	24
20	QPSK	1	49	22.06	22.31	22.32	22.04	22.26	
20	QPSK	1	99	22.11	22.19	22.19	22.12	22.32	
20	QPSK	50	0	21.18	21.24	21.28	21.19	21.21	
20	QPSK	50	24	21.19	21.29	21.25	21.11	21.26	
20	QPSK	50	50	21.10	21.17	21.02	21.12	21.06	23
20	QPSK	100	0	21.00	21.03	21.16	21.07	21.14	
20	16QAM	1	0	21.23	21.31	21.34	21.21	21.27	
20	16QAM	1	49	21.14	21.22	21.26	21.23	21.25	
20	16QAM	1	99	21.10	21.23	21.24	21.12	21.27	
20	16QAM	50	0	20.15	20.27	20.30	20.16	20.28	22
20	16QAM	50	24	20.20	20.24	20.19	20.10	20.24	
20	16QAM	50	50	20.07	20.10	20.16	20.12	20.13	
20	16QAM	100	0	20.21	20.12	20.05	20.16	20.29	
20	64QAM	1	0	20.15	20.37	20.38	20.17	20.26	
20	64QAM	1	49	20.14	20.36	20.26	20.18	20.26	22
20	64QAM	1	99	20.10	20.24	20.31	20.21	20.09	
20	64QAM	50	0	19.06	19.17	19.26	19.12	19.06	
20	64QAM	50	24	19.14	19.15	19.04	19.15	19.00	
20	64QAM	50	50	19.00	18.96	19.01	18.98	18.96	
20	64QAM	100	0	19.04	19.09	19.16	19.04	18.97	21
Channel				39725	40173	40620	41068	41515	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	24
15	QPSK	1	0	22.21	22.33	22.34	22.29	22.26	
15	QPSK	1	37	22.03	22.28	22.29	22.01	22.23	23
15	QPSK	1	74	22.08	22.16	22.16	22.09	22.29	
15	QPSK	38	0	21.15	21.21	21.25	21.16	21.18	
15	QPSK	38	20	21.16	21.26	21.22	21.08	21.23	
15	QPSK	38	39	21.07	21.14	20.99	21.09	21.03	
15	QPSK	75	0	20.97	21.00	21.13	21.04	21.11	23
15	16QAM	1	0	21.20	21.28	21.31	21.18	21.24	
15	16QAM	1	37	21.11	21.19	21.23	21.20	21.22	
15	16QAM	1	74	21.07	21.20	21.21	21.09	21.24	
15	16QAM	38	0	20.12	20.24	20.27	20.13	20.25	
15	16QAM	38	20	20.17	20.21	20.16	20.07	20.21	22
15	16QAM	38	39	20.04	20.07	20.13	20.09	20.10	
15	16QAM	75	0	20.18	20.09	20.02	20.13	20.26	
15	64QAM	1	0	20.12	20.34	20.35	20.14	20.23	
15	64QAM	1	37	20.11	20.33	20.23	20.15	20.23	
15	64QAM	1	74	20.07	20.21	20.28	20.18	20.06	21
15	64QAM	38	0	19.03	19.14	19.23	19.09	19.03	
15	64QAM	38	20	19.11	19.12	19.01	19.12	18.97	
15	64QAM	38	39	18.97	18.93	18.98	18.95	18.93	
15	64QAM	75	0	19.01	19.06	19.13	19.01	18.94	
Channel				39700	40160	40620	41080	41540	24
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	22.16	22.28	22.29	22.24	22.23	24
10	QPSK	1	25	21.98	22.23	22.24	21.96	22.18	
10	QPSK	1	49	22.03	22.11	22.11	22.04	22.24	
10	QPSK	25	0	21.10	21.16	21.20	21.11	21.13	
10	QPSK	25	12	21.11	21.21	21.17	21.03	21.18	
10	QPSK	25	25	21.02	21.09	20.94	21.04	20.98	23
10	QPSK	50	0	20.92	20.95	21.08	20.99	21.06	
10	16QAM	1	0	21.15	21.23	21.26	21.13	21.19	
10	16QAM	1	25	21.06	21.14	21.18	21.15	21.17	
10	16QAM	1	49	21.02	21.15	21.16	21.04	21.19	
10	16QAM	25	0	20.07	20.19	20.22	20.08	20.20	22
10	16QAM	25	12	20.12	20.16	20.11	20.02	20.16	
10	16QAM	25	25	19.99	20.02	20.08	20.04	20.05	
10	16QAM	50	0	20.13	20.04	19.97	20.08	20.21	
10	64QAM	1	0	20.07	20.29	20.30	20.09	20.18	
10	64QAM	1	25	20.06	20.28	20.18	20.10	20.18	21
10	64QAM	1	49	20.02	20.16	20.23	20.13	20.01	
10	64QAM	25	0	18.98	19.09	19.18	19.04	18.98	
10	64QAM	25	12	19.06	19.07	18.96	19.07	18.92	
10	64QAM	25	25	18.92	18.88	18.93	18.90	18.88	
10	64QAM	50	0	18.96	19.01	19.08	18.96	18.89	24
Channel				39675	40148	40620	41093	41555	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	24
5	QPSK	1	0	22.13	22.25	22.26	22.21	22.20	
5	QPSK	1	12	21.95	22.20	22.21	21.93	22.15	23
5	QPSK	1	24	22.00	22.08	22.08	22.01	22.21	
5	QPSK	12	0	21.07	21.13	21.17	21.08	21.10	
5	QPSK	12	7	21.08	21.18	21.14	21.00	21.15	
5	QPSK	12	13	20.99	21.06	20.91	21.01	20.95	
5	QPSK	25	0	20.89	20.92	21.05	20.96	21.03	23
5	16QAM	1	0	21.12	21.20	21.23	21.10	21.16	
5	16QAM	1	12	21.03	21.11	21.15	21.12	21.14	
5	16QAM	1	24	20.99	21.12	21.13	21.01	21.16	
5	16QAM	12	0	20.04	20.16	20.19	20.05	20.17	
5	16QAM	12	7	20.09	20.13	20.08	19.99	20.13	22
5	16QAM	12	13	19.96	19.99	20.05	20.01	20.02	
5	16QAM	25	0	20.10	20.01	19.94	20.05	20.18	
5	64QAM	1	0	20.04	20.26	20.27	20.06	20.15	
5	64QAM	1	12	20.03	20.25	20.15	20.07	20.15	
5	64QAM	1	24	19.99	20.13	20.20	20.10	19.98	21
5	64QAM	12	0	18.95	19.06	19.15	19.01	18.95	
5	64QAM	12	7	19.03	19.04	18.93	19.04	18.89	
5	64QAM	12	13	18.89	18.85	18.90	18.87	18.85	
5	64QAM	25	0	18.93	18.98	19.05	18.93	18.86	

n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376000	378000	Tune-up limit (dBm)
Frequency (MHz)				1870	1880	1890	
40	DFT-s-OFDM PI/2 BPSK	1	1	23.92	24.00	24.03	25.50
40		1	108	23.99	24.06	23.98	
40		1	214	23.90	23.94	23.98	
40		108	1	23.54	23.60	23.69	25.50
40		108	54	24.11	24.09	24.14	
40		108	108	23.44	23.58	23.58	
40		216	0	23.49	23.52	23.62	
40	DFT-s-OFDM QPSK	1	1	24.23	24.27	24.32	25.50
40		1	108	24.20	24.26	24.22	
40		1	214	24.14	24.23	24.27	
40		108	1	23.11	23.16	23.24	25.50
40		108	54	24.13	24.11	24.18	
40		108	108	23.00	23.10	23.10	
40		216	0	23.06	23.07	23.17	
40	DFT-s-OFDM 16QAM	1	1	23.25	23.24	23.24	24.50
40	DFT-s-OFDM 64QAM	1	1	21.31	21.39	21.39	23.00
40	DFT-s-OFDM 256QAM	1	1	19.53	19.61	19.65	20.50
40	CP-OFDM QPSK	1	1	22.62	22.64	22.73	24.50
40	CP-OFDM 16QAM	1	1	22.21	22.49	22.33	23.50
40	CP-OFDM 64QAM	1	1	20.37	20.41	20.43	22.00
40	CP-OFDM 256QAM	1	1	17.54	17.58	17.61	18.50
Channel				373000	376000	379000	Tune-up limit (dBm)
Frequency (MHz)				1865	1880	1895	
30	DFT-s-OFDM QPSK	1	1	24.20	24.15	24.18	25.50
Channel				372500	376000	379500	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1880	1897.5	
25	DFT-s-OFDM QPSK	1	1	24.11	24.19	23.92	25.50
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM QPSK	1	1	24.08	24.13	24.02	25.50
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	24.09	24.12	23.98	25.50
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	24.12	24.04	24.15	25.50
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	24.03	23.80	24.05	25.50

n5 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800	25.00
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.48	23.56	23.52	25.00
20		1	53	23.61	23.64	23.57	
20		1	104	23.53	23.57	23.52	
20		50	1	23.06	23.17	23.15	25.00
20		50	25	23.66	23.70	23.68	
20		50	50	23.13	23.17	23.14	
20		100	0	23.07	23.17	23.16	
20	DFT-s-OFDM QPSK	1	1	23.74	23.78	23.86	25.00
20		1	53	23.63	23.80	23.76	
20		1	104	23.55	23.76	23.65	
20		50	1	22.59	22.66	22.68	25.00
20		50	25	23.66	23.70	23.72	
20		50	50	22.66	22.67	22.66	
20		100	0	22.60	22.67	22.67	
20	DFT-s-OFDM 16QAM	1	1	22.63	22.75	22.73	24.00
20	DFT-s-OFDM 64QAM	1	1	20.82	20.88	20.88	23.00
20	DFT-s-OFDM 256QAM	1	1	18.99	19.05	19.07	20.50
20	CP-OFDM QPSK	1	1	22.11	22.16	22.14	23.50
20	CP-OFDM 16QAM	1	1	21.72	21.80	21.81	23.00
20	CP-OFDM 64QAM	1	1	19.95	20.02	20.05	21.50
20	CP-OFDM 256QAM	1	1	17.08	17.12	17.14	18.50
Channel				166300	167300	168300	25.00
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	23.72	23.76	23.72	25.00
Channel				165800	167300	168800	25.00
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	23.76	23.81	23.59	25.00
Channel				165300	167300	169300	25.00
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	23.75	23.72	23.56	25.00

n25 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376500	379000	25.50
Frequency (MHz)				1870	1882.5	1895	
40	DFT-s-OFDM PI/2 BPSK	1	1	23.97	24.01	24.07	25.50
40		1	108	24.02	24.04	24.03	
40		1	214	24.00	23.99	24.06	
40		108	1	23.68	23.65	23.72	25.50
40		108	54	24.17	24.12	24.21	
40		108	108	23.51	23.62	23.65	
40		216	0	23.56	23.58	23.66	
40	DFT-s-OFDM QPSK	1	1	24.25	24.26	24.39	25.50
40		1	108	24.08	24.30	24.31	
40		1	214	24.00	24.22	24.25	
40		108	1	23.19	23.21	23.29	25.50
40		108	54	24.23	24.16	24.24	
40		108	108	23.05	23.16	23.17	
40		216	0	23.14	23.15	23.22	
40	DFT-s-OFDM 16QAM	1	1	23.28	23.27	23.34	24.50
40	DFT-s-OFDM 64QAM	1	1	21.40	21.46	21.56	23.50
40	DFT-s-OFDM 256QAM	1	1	19.59	19.66	19.75	20.50
40	CP-OFDM QPSK	1	1	22.69	22.71	22.79	25.00
40	CP-OFDM 16QAM	1	1	22.27	22.29	22.36	24.00
40	CP-OFDM 64QAM	1	1	20.46	20.51	20.59	23.00
40	CP-OFDM 256QAM	1	1	17.57	17.62	17.74	19.00
Channel				373000	376500	380000	25.50
Frequency (MHz)				1865	1882.5	1900	
30	DFT-s-OFDM QPSK	1	1	24.25	23.96	24.16	25.50
Channel				372500	376500	380500	25.50
Frequency (MHz)				1862.5	1882.5	1902.5	
25	DFT-s-OFDM QPSK	1	1	24.18	23.93	24.12	25.50
Channel				372000	376500	381000	25.50
Frequency (MHz)				1860	1882.5	1905	
20	DFT-s-OFDM QPSK	1	1	24.16	23.91	24.18	25.50
Channel				371500	376500	381500	25.50
Frequency (MHz)				1857.5	1882.5	1907.5	
15	DFT-s-OFDM QPSK	1	1	24.17	23.91	24.21	25.50
Channel				371000	376500	382000	25.50
Frequency (MHz)				1855	1882.5	1910	
10	DFT-s-OFDM QPSK	1	1	24.23	23.90	24.17	25.50
Channel				370500	376500	382500	25.50
Frequency (MHz)				1852.5	1882.5	1912.5	
5	DFT-s-OFDM QPSK	1	1	24.15	24.11	23.91	25.50

n41 (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	27.00
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	25.13	25.37	25.48	25.58	25.52	27.00
100		1	136	25.83	25.85	25.69	25.61	25.74	
100		1	271	25.66	25.55	25.31	25.30	25.27	
100		135	1	24.87	24.99	25.11	25.10	25.15	27.00
100		135	67	25.40	25.50	25.59	25.60	25.38	
100		135	136	24.86	25.08	25.10	25.09	24.84	
100	DFT-s-OFDM QPSK	270	0	24.81	24.98	25.05	25.05	24.99	27.00
100		1	1	25.10	25.36	25.45	25.42	25.55	
100		1	136	25.72	25.53	25.89	25.83	25.56	
100		1	271	25.57	25.45	25.18	25.18	25.06	27.00
100		135	1	24.42	24.54	24.65	24.62	24.71	
100		135	67	25.43	25.53	25.59	25.56	25.36	
100	DFT-s-OFDM 16QAM	1	1	24.44	24.55	24.56	24.48	24.77	26.00
100		1	1	22.79	22.92	22.98	23.03	23.14	24.00
100	DFT-s-OFDM 256QAM	1	1	20.71	20.82	22.94	20.85	21.08	22.00
100	CP-OFDM QPSK	1	1	23.65	23.71	23.71	23.70	23.95	25.00
100	CP-OFDM 16QAM	1	1	23.37	23.48	23.50	23.50	23.71	24.50
100	CP-OFDM 64QAM	1	1	21.87	21.99	22.00	22.04	22.24	23.50
100	CP-OFDM 256QAM	1	1	18.98	19.08	19.08	19.09	19.29	20.50
Channel				508200	513402	518598	523800	528996	27.00
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	25.07	25.22	25.34	25.36	25.43	27.00
Channel				507204	512904	518598	524298	529998	27.00
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	25.04	25.31	25.38	25.38	25.35	27.00
Channel				506202	512400	518598	524796	531000	27.00
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	25.15	25.25	25.37	25.44	25.20	27.00
Channel				505200	511902	518598	525798	531996	27.00
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	25.15	25.24	25.40	25.37	25.31	27.00
Channel				504204	511404	518598	525798	532998	27.00
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	25.16	25.32	25.53	25.44	25.47	27.00
Channel				503202	510900	518598	526296	534000	27.00
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	25.09	25.48	25.52	25.43	25.30	27.00
Channel				502200	510402	518598	526800	534996	27.00
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	25.18	25.39	25.47	25.44	25.39	27.00
Channel				501204	509904	518598	527298	535998	27.00
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	25.00	25.31	25.45	25.17	25.20	27.00
Channel				500700	509652	518598	527550	536496	27.00
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	25.20	25.31	25.46	25.20	25.24	27.00
Channel				500202	509400	518598	527796	537000	27.00
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	25.19	25.33	25.49	25.27	25.06	27.00

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	23.50
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	22.13	22.37	22.48	22.26	22.52	23.50
100		1	136	22.83	22.85	22.69	23.20	22.74	
100		1	271	22.66	22.55	22.31	22.30	22.27	
100		135	1	21.87	21.99	22.11	22.10	22.15	
100		135	67	22.40	22.50	22.59	22.60	22.38	
100		135	136	21.86	22.08	22.10	22.09	21.84	
100	DFT-s-OFDM QPSK	270	0	21.81	21.98	22.05	22.05	21.99	23.50
100		1	1	22.72	22.53	22.59	22.83	22.56	
100		1	136	23.20	23.30	23.36	23.24	23.25	
100		1	271	22.57	22.45	22.42	22.38	22.40	
100		135	1	21.42	21.54	21.65	21.62	21.71	
100		135	67	22.43	22.53	22.62	22.54	22.51	
100	DFT-s-OFDM 16QAM	135	136	21.41	21.58	21.65	21.65	21.36	23.50
100		270	0	21.35	21.54	21.61	21.60	21.54	
100		1	1	21.44	21.55	21.56	21.48	21.77	
100		1	1	19.79	19.92	19.98	20.03	20.14	
100		1	1	17.71	17.82	19.94	17.85	18.08	
100		1	1	20.65	20.71	20.71	20.70	20.95	
100	CP-OFDM QPSK	1	1	20.37	20.48	20.50	20.50	20.71	24.00
100	CP-OFDM 16QAM	1	1	18.87	18.99	19.00	19.04	19.24	23.00
100	CP-OFDM 64QAM	1	1	15.98	16.08	16.08	16.09	16.29	19.00
Channel				508200	513402	518598	523800	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	22.07	22.22	22.34	22.36	22.43	23.50
Channel				507204	512904	518598	524298	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	22.04	22.31	22.38	22.38	22.35	23.50
Channel				506202	512400	518598	524796	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	22.15	22.25	22.37	22.44	22.20	23.50
Channel				505200	511902	518598	525798	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	22.15	22.24	22.40	22.37	22.31	23.50
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	22.16	22.32	22.53	22.44	22.47	23.50
Channel				503202	510900	518598	526296	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	22.09	22.48	22.52	22.43	22.30	23.50
Channel				502200	510402	518598	526800	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	22.18	22.39	22.47	22.44	22.39	23.50
Channel				501204	509904	518598	527298	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	22.00	22.31	22.45	22.17	22.20	23.50
Channel				500700	509652	518598	527550	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	22.20	22.31	22.46	22.20	22.24	23.50
Channel				500202	509400	518598	527796	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	22.19	22.33	22.49	22.27	22.06	21.50

n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	23.77	23.85	23.87	26.00
40		1	108	23.85	24.12	24.15	
40		1	214	24.02	24.12	23.96	
40		108	1	23.43	23.61	23.75	25.50
40		108	54	24.01	24.18	24.25	
40		108	108	23.57	23.67	23.72	
40		216	0	23.45	23.58	23.68	
40	DFT-s-OFDM QPSK	1	1	24.26	24.38	24.43	26.00
40		1	108	23.93	24.38	24.21	
40		1	214	24.06	24.21	24.23	
40		108	1	22.98	23.14	23.15	25.50
40		108	54	24.06	24.20	24.23	
40		108	108	23.10	23.23	23.20	
40		216	0	23.00	23.14	23.16	
40	DFT-s-OFDM 16QAM	1	1	23.02	23.10	23.11	25.00
40	DFT-s-OFDM 64QAM	1	1	21.22	21.31	21.31	22.50
40	DFT-s-OFDM 256QAM	1	1	19.54	19.54	19.61	20.50
40	CP-OFDM QPSK	1	1	22.55	22.54	22.61	24.00
40	CP-OFDM 16QAM	1	1	22.09	22.16	22.15	23.50
40	CP-OFDM 64QAM	1	1	20.29	20.34	20.38	21.50
40	CP-OFDM 256QAM	1	1	17.49	17.51	17.59	18.50
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	23.82	24.11	24.28	26.00
Channel				344500	349000	353500	Tune-up limit (dBm)
Frequency (MHz)				1722.5	1745	1767.5	
25	DFT-s-OFDM QPSK	1	1	24.02	24.08	24.27	26.00
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	23.97	23.83	24.22	26.00
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	24.01	24.02	24.11	26.00
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	24.04	24.09	23.98	26.00
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	23.92	24.10	24.10	26.00

n71 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				134600	136100	137600	Tune-up limit (dBm)
Frequency (MHz)				673	680.5	688	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.59	23.87	23.86	25.00
20		1	53	23.87	23.89	23.88	
20		1	104	23.83	23.86	23.77	
20		50	1	23.22	23.51	23.51	25.00
20		50	25	23.80	23.90	23.93	
20		50	50	23.36	23.34	23.45	
20		100	0	23.29	23.31	23.46	
20	DFT-s-OFDM QPSK	1	1	23.91	23.99	24.08	25.50
20		1	53	23.83	24.07	23.89	
20		1	104	23.86	24.04	23.78	
20		50	1	22.72	22.93	22.98	25.00
20		50	25	23.93	23.88	23.98	
20		50	50	22.80	22.83	22.96	
20		100	0	22.82	22.92	22.94	
20	DFT-s-OFDM 16QAM	1	1	22.83	22.94	23.08	24.50
20	DFT-s-OFDM 64QAM	1	1	21.01	21.10	21.20	22.50
20	DFT-s-OFDM 256QAM	1	1	19.23	19.30	19.33	20.50
20	CP-OFDM QPSK	1	1	22.31	22.36	22.48	24.00
20	CP-OFDM 16QAM	1	1	21.90	22.06	22.16	24.00
20	CP-OFDM 64QAM	1	1	20.09	20.24	20.36	21.50
20	CP-OFDM 256QAM	1	1	17.32	17.42	17.52	19.00
Channel				134100	136100	138100	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	DFT-s-OFDM QPSK	1	1	23.97	23.81	23.96	25.00
Channel				133600	136100	138600	Tune-up limit (dBm)
Frequency (MHz)				668	680.5	693	
10	DFT-s-OFDM QPSK	1	1	24.04	24.15	24.19	25.00
Channel				133100	136100	139100	Tune-up limit (dBm)
Frequency (MHz)				665.5	680.5	695.5	
5	DFT-s-OFDM QPSK	1	1	24.06	24.08	24.07	25.00

n77(3450-3550MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			26.64			27.50
100		1	136			26.31			
100		1	271			26.18			
100		135	1			25.95			27.50
100		135	67			26.45			
100		135	136			25.55			
100	DFT-s-OFDM QPSK	270	0			25.91			28.00
100		1	1			27.05			
100		1	136			26.48			
100		1	271			26.20			27.50
100		135	1			25.54			
100		135	67			26.39			
100	DFT-s-OFDM 16QAM	135	136			25.10			26.50
100		270	0			25.42			
100		1	1			25.85			
100	DFT-s-OFDM 64QAM	1	1			24.33			25.50
100	DFT-s-OFDM 256QAM	1	1			22.27			23.50
100	CP-OFDM QPSK	1	1			25.07			26.50
100	CP-OFDM 16QAM	1	1			25.26			26.50
100	CP-OFDM 64QAM	1	1			22.76			24.00
100	CP-OFDM 256QAM	1	1			20.29			21.50
Channel				633000	633168	633334	633500	633666	Tune-up limit
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	(dBm)
90	DFT-s-OFDM QPSK	1	1	26.70	26.63	26.65	26.57	26.62	27.50
Channel				632668	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	(dBm)
80	DFT-s-OFDM QPSK	1	1	26.66	26.73	26.67	26.60	26.60	27.50
Channel				632334	632834	633334	633832	634332	Tune-up limit
Frequency (MHz)				3485.01	3482.51	3500.01	3507.48	3514.98	(dBm)
70	DFT-s-OFDM QPSK	1	1	26.76	26.72	26.70	26.65	26.79	27.50
Channel				632000	632668	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	(dBm)
60	DFT-s-OFDM QPSK	1	1	26.57	26.50	26.44	26.36	26.39	27.50
Channel				631668	632500	633334	634166	635000	Tune-up limit
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	(dBm)
50	DFT-s-OFDM QPSK	1	1	26.51	26.49	26.40	26.41	26.35	27.50
Channel				631334	632334	633334	634332	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	(dBm)
40	DFT-s-OFDM QPSK	1	1	26.59	26.57	26.46	26.42	26.21	27.50
Channel				631000	632168	633334	634500	635666	Tune-up limit
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	(dBm)
30	DFT-s-OFDM QPSK	1	1	26.63	26.53	26.43	26.32	26.06	27.50
Channel				630834	632084	633334	634584	635832	Tune-up limit
Frequency (MHz)				3462.51	3481.26	3500.01	3518.76	3537.48	(dBm)
25	DFT-s-OFDM QPSK	1	1	26.60	26.52	26.45	26.23	25.97	27.50
Channel				630668	632000	633334	634666	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	(dBm)
20	DFT-s-OFDM QPSK	1	1	26.70	26.52	26.44	26.23	26.03	27.50
Channel				630500	631916	633334	634750	636166	Tune-up limit
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	(dBm)
15	DFT-s-OFDM QPSK	1	1	26.69	26.53	26.41	26.19	26.07	25.50
Channel				630334	631834	633334	634834	636332	Tune-up limit
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	(dBm)
10	DFT-s-OFDM QPSK	1	1	26.67	26.56	26.44	26.15	26.13	26.50

n77(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			23.64			24.50
100		1	136			23.31			
100		1	271			23.18			
100		135	1			22.95			24.50
100		135	67			23.45			
100		135	136			22.55			
100	DFT-s-OFDM QPSK	270	0			22.91			25.50
100		1	1			24.05			
100		1	136			23.48			
100		1	271			23.20			24.50
100		135	1			22.54			
100		135	67			23.39			
100		135	136			22.50			23.50
100		270	0			22.69			
100	DFT-s-OFDM 16QAM	1	1			22.85			22.50
100	DFT-s-OFDM 64QAM	1	1			21.33			19.50
100	DFT-s-OFDM 256QAM	1	1			19.27			25.00
100	CP-OFDM QPSK	1	1			22.07			24.00
100	CP-OFDM 16QAM	1	1			22.28			23.00
100	CP-OFDM 64QAM	1	1			19.76			19.00
100	CP-OFDM 256QAM	1	1			17.29			
Channel				633000	633168	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	23.70	23.63	23.65	23.57	23.62	24.50
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	23.66	23.73	23.67	23.60	23.60	24.50
Channel				632334	632634	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	23.76	23.72	23.70	23.65	23.79	24.50
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	23.57	23.50	23.44	23.36	23.39	24.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	23.51	23.49	23.40	23.41	23.35	24.50
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	23.59	23.57	23.46	23.42	23.21	24.50
Channel				631000	632168	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	23.63	23.53	23.43	23.32	23.06	24.50
Channel				630834	632084	633334	634584	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3481.26	3500.01	3518.76	3537.48	
25	DFT-s-OFDM QPSK	1	1	23.60	23.52	23.45	23.23	22.97	24.50
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	23.70	23.52	23.44	23.23	23.03	24.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	23.69	23.53	23.41	23.19	23.07	24.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	23.67	23.56	23.44	23.15	23.13	24.50

n77(3700-3980MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	27.50
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	26.02	26.18	26.21	26.03	25.94	27.50
100		1	136	26.06	26.11	25.84	26.22	26.32	
100		1	271	26.25	26.05	26.19	26.33	26.29	
100		135	1	25.62	25.74	25.74	25.54	25.58	27.50
100		135	67	26.21	26.24	26.24	26.09	26.23	
100		135	136	25.78	25.89	25.90	25.79	25.86	
100		270	0	25.69	25.81	25.80	25.67	25.77	
100	DFT-s-OFDM QPSK	1	1	25.97	26.14	26.09	26.00	25.94	27.50
100		1	136	26.28	26.32	26.27	26.26	26.34	
100		1	271	26.19	26.09	26.13	26.03	26.12	
100		135	1	25.14	25.25	25.25	25.46	25.29	27.50
100		135	67	26.19	26.23	26.23	26.07	26.25	
100		135	136	25.33	25.38	25.41	25.33	25.37	
100		270	0	25.19	25.28	25.29	25.16	25.25	
100	DFT-s-OFDM 16QAM	1	1	25.30	25.40	25.43	25.29	25.23	26.50
100	DFT-s-OFDM 64QAM	1	1	24.08	24.28	24.09	24.00	23.67	25.50
100	DFT-s-OFDM 256QAM	1	1	21.42	21.60	21.58	21.56	21.70	22.50
100	CP-OFDM QPSK	1	1	24.39	24.81	24.56	24.48	24.34	25.50
100	CP-OFDM 16QAM	1	1	24.29	24.43	24.44	24.29	24.19	25.50
100	CP-OFDM 64QAM	1	1	22.74	22.94	22.92	22.89	22.87	24.00
100	CP-OFDM 256QAM	1	1	19.69	19.88	19.88	19.82	19.88	21.50
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	26.05	26.23	26.15	26.03	26.05	27.50
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	25.99	26.22	26.17	26.07	26.07	27.50
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	25.88	26.15	26.13	26.05	25.94	27.50
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	25.90	26.03	26.04	26.08	26.11	27.50
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	25.82	26.19	26.06	25.96	26.26	27.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	24.95	26.16	26.09	26.03	26.28	27.50
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	25.83	26.14	26.05	26.03	26.43	27.50
Channel				647500	651750	656000	660250	664500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	
25	DFT-s-OFDM QPSK	1	1	26.10	26.38	26.29	26.04	26.31	27.50
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	25.94	26.10	26.07	26.01	26.25	27.50
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	25.90	26.25	26.07	25.93	26.31	27.50
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	25.87	26.22	26.07	25.94	26.24	27.50

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
Channel				650000	653000	656000	659000	662000	limit
Frequency (MHz)				3750	3795	3840	3885	3930	(dBm)
100	DFT-s-OFDM PI/2 BPSK	1	1	23.02	23.18	23.18	23.03	22.94	24.50
100		1	136	23.06	23.29	22.84	23.22	23.32	
100		1	271	23.25	23.40	23.38	23.33	23.29	
100		135	1	22.62	22.74	22.74	22.54	22.58	24.50
100		135	67	23.21	23.24	23.24	23.09	23.23	
100		135	136	22.78	22.89	22.90	22.79	22.86	
100		270	0	22.69	22.81	22.80	22.67	22.77	
100	DFT-s-OFDM QPSK	1	1	23.57	23.64	23.72	23.70	23.68	25.00
100		1	136	23.38	23.48	23.57	23.59	23.47	
100		1	271	23.29	23.35	23.32	23.26	23.34	
100		135	1	22.14	22.25	22.25	22.38	22.09	24.50
100		135	67	23.19	23.23	23.23	23.07	23.22	
100		135	136	22.33	22.38	22.41	22.33	22.37	
100		270	0	22.19	22.28	22.29	22.16	22.25	
100	DFT-s-OFDM 16QAM	1	1	22.30	22.40	22.43	22.29	22.23	23.50
100	DFT-s-OFDM 64QAM	1	1	21.08	21.28	21.09	21.00	20.67	22.00
100	DFT-s-OFDM 256QAM	1	1	18.42	18.60	18.58	18.56	20.70	21.50
100	CP-OFDM QPSK	1	1	21.39	21.81	21.56	21.48	21.34	23.50
100	CP-OFDM 16QAM	1	1	21.29	21.43	21.44	21.29	21.19	22.50
100	CP-OFDM 64QAM	1	1	19.74	19.94	19.92	19.89	19.87	21.50
100	CP-OFDM 256QAM	1	1	16.69	16.88	16.88	16.82	16.88	17.50
Channel				649666	652834	656000	659166	662332	Tune-up
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	limit
90	DFT-s-OFDM QPSK	1	1	23.05	23.23	23.15	23.03	23.05	24.50
Channel				649334	652668	656000	659332	662666	Tune-up
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	limit
80	DFT-s-OFDM QPSK	1	1	22.99	23.22	23.17	23.07	23.07	24.50
Channel				649000	652500	656000	659500	663000	Tune-up
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	limit
70	DFT-s-OFDM QPSK	1	1	22.88	23.15	23.13	23.05	22.94	24.50
Channel				648668	652334	656000	659666	663332	Tune-up
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	limit
60	DFT-s-OFDM QPSK	1	1	22.90	23.03	23.04	23.08	23.11	24.50
Channel				648334	652168	656000	659832	663666	Tune-up
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	limit
50	DFT-s-OFDM QPSK	1	1	22.82	23.19	23.06	22.96	23.26	24.50
Channel				648000	652000	656000	660000	664000	Tune-up
Frequency (MHz)				3720	3780	3840	3900	3960	limit
40	DFT-s-OFDM QPSK	1	1	21.95	23.16	23.09	23.03	23.28	24.50
Channel				647668	651834	656000	660166	664332	Tune-up
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	limit
30	DFT-s-OFDM QPSK	1	1	22.83	23.14	23.05	23.03	23.43	24.50
Channel				647500	651750	656000	660250	664500	Tune-up
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	limit
25	DFT-s-OFDM QPSK	1	1	23.10	23.38	23.29	23.04	23.31	24.50
Channel				647334	651668	656000	660332	664666	Tune-up
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	limit
20	DFT-s-OFDM QPSK	1	1	22.94	23.10	23.07	23.01	23.25	24.50
Channel				647168	651584	656000	660416	664832	Tune-up
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	limit
15	DFT-s-OFDM QPSK	1	1	22.90	23.25	23.07	22.93	23.31	24.50
Channel				647000	651500	656000	660500	665000	Tune-up
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	limit
10	DFT-s-OFDM QPSK	1	1	22.87	23.22	23.07	22.94	23.24	22.00

2CC LTE Uplink												
Configure	CA Configuration	PCC					SCC				Power	
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation /RB/Offset)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Measured Power(dBm)	Tune-up limit(dBm)
Inter-band	CA_4A-12A	4	20	20175	1732.5	QPSK/1#0	12	10	23060	704	23.29	24.5
	CA_5A-66A	5	20	20525	836.5	QPSK/1#0	66	20	132322	1745	23.12	24.5
	CA_12A-66A	12	10	23060	704	QPSK/1#0	66	20	132322	1745	23.28	24.5

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)	Tune-up limit (dBm)	
Intra-band	Non Continuous	CA_2C	2	20	19100	1900	QPSK/1#0	2	5	1175	1987.5	23.28	24.50	
		CA_5B	5	10	20450	829	QPSK/1#0	5	5	2522	881.2	22.89	24.00	
Inter-band		CA_41C	41	20	40521	2583.1	QPSK/1#0	41	20	40719	2602.9	21.54	23.00	
	CA_66C	66	20	132323	1745.1	QPSK/1#0	66	20	132521	1764.9	23.31	24.50		
	CA_2A-4A	2	10	18900	1880	QPSK/1#0	4	10	20175	1732.5	23.26	24.50		
	CA_2A-7A	2	10	18900	1880	QPSK/1#0	7	20	21350	2560	22.42	23.50		
	CA_2A-2A	2	10	18900	1880	QPSK/1#0	2	20	19100	1900	23.55	24.50		
	CA_2A-28A	2	10	18900	1880	QPSK/1#0	28	20	27560	738	23.14	24.50		
	CA_4A-4A	4	20	20050	1720	QPSK/1#0	4	20	20300	1745	23.28	24.50		
	CA_4A-5A	4	10	20175	1732.5	QPSK/1#0	5	10	20450	829	23.06	24.00		
	CA_4A-7A	4	20	20050	1720	QPSK/1#0	7	20	21350	2560	22.27	23.50		
	CA_4A-12A	4	10	20175	1732.5	QPSK/1#0	12	10	23130	711	23.62	24.50		
	CA_5A-7A	5	10	20450	829	QPSK/1#0	7	20	21350	2560	22.76	23.50		
	CA_5A-38A	5	10	20450	829	QPSK/1#0	38	20	21350	2610	23.22	24.50		
	CA_5A-41A	5	10	20450	829	QPSK/1#0	41	20	41490	2680	22.86	24.00		
	CA_5A-66A	5	10	20525	836.5	QPSK/1#0	66	20	132422	1755	23.44	24.50		
	CA_7A-66A	7	20	20850	2510	QPSK/1#0	66	20	132422	1755	22.81	24.00		
	CA_12A-66A	12	10	23060	704	QPSK/1#0	66	10	132422	1755	23.36	24.50		
	CA_26A-38A	26	10	26765	821.5	QPSK/1#0	38	10	21350	2610	23.17	24.50		
	CA_26A-41A	26	10	26765	821.5	QPSK/1#0	41	10	41490	2680	23.31	24.50		
	CA_41A-41A	41	20	39750	2506	QPSK/1#0	41	20	41490	2680	22.02	23.50		
	CA_66A-38A	66	20	132072	1720	QPSK/1#0	38	20	21350	2610	22.87	24.00		
	CA_66A-66A	66	20	132072	1720	QPSK/1#0	66	20	132572	1770	23.27	24.50		

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)	UL Channel	UL Fre. (MHz)	CA TX (dBm)	Tune-up limit (dBm)
Intra-band & Inter-band	CA_n77(2A)	n77A	100	623334	3350.1	QPSK/1#0	n77A	100	676666	4149.99	23.31	24.50
	CA_n2A-n77A	n2A	20	396000	1980	QPSK/1#0	n77A	100	650000	3750	23.17	24.50
	CA_n5A-n77A	n5A	20	176300	881.5	QPSK/1#0	n77A	100	650000	3750	22.90	24.00

2.4GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 5	802.11b 1Mbps	CH 1	2412	18.00	19.50	default	99.67
		CH 6	2437	18.22	19.50	default	99.67
		CH 11	2462	18.96	20.50	default	99.67
	802.11g 6Mbps	CH 1	2412	14.94	16.50	15.00	97.48
		CH 6	2437	18.10	19.50	default	97.62
		CH 11	2462	15.87	17.00	15.00	97.48
	802.11n-HT20 MCS0	CH 1	2412	14.85	16.00	15.00	97.31
		CH 6	2437	17.07	18.50	default	97.45
		CH 11	2462	15.76	17.00	15.00	97.31
	802.11n-HT40 MCS0	CH 3	2422	13.04	14.50	13.00	94.74
		CH 6	2437	17.31	18.50	default	95.03
		CH 9	2452	13.95	15.50	13.00	94.74

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 5	802.11a 6Mbps	CH 36	5180	16.90	18.50	default	97.90
		CH 44	5220	17.00	18.50	default	97.20
		CH 48	5240	16.74	18.00	default	97.20
	802.11n-HT20 MCS0	CH 36	5180	15.91	17.50	default	97.01
		CH 44	5220	15.96	17.50	default	97.74
		CH 48	5240	15.65	17.00	default	97.74
	802.11n-HT40 MCS0	CH 38	5190	15.79	17.00	default	94.20
		CH 46	5230	15.79	17.00	default	95.59
		CH 36	5180	15.01	16.50	default	97.04
	802.11ac-VHT20 MCS0	CH 44	5220	14.96	16.50	default	97.76
		CH 48	5240	14.79	16.00	default	97.04
		CH 38	5190	13.93	15.50	default	94.20
	802.11ac-VHT40 MCS0	CH 46	5230	13.77	15.00	default	
		CH 42	5210	13.88	15.00	default	91.43

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 5	802.11a 6Mbps	CH 52	5260	16.78	18.00	default	97.20
		CH 60	5300	16.60	18.00	default	
		CH 64	5320	16.17	17.50	default	
	802.11n-HT20 MCS0	CH 52	5260	15.74	17.00	default	97.01
		CH 60	5300	15.63	17.00	default	97.74
		CH 64	5320	14.98	16.50	default	97.74
	802.11n-HT40 MCS0	CH 54	5270	15.36	17.00	default	94.20
		CH 62	5310	15.18	16.50	default	95.59
	802.11ac-VHT20 MCS0	CH 52	5260	14.71	16.00	default	97.04
		CH 60	5300	14.66	16.00	default	97.04
		CH 64	5320	14.04	15.50	default	97.76
	802.11ac-VHT40 MCS0	CH 54	5270	13.50	15.00	default	94.20
		CH 62	5310	13.25	15.00	default	
	802.11ac-VHT80 MCS0	CH 58	5290	13.38	15.00	default	91.67

5GHzWLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.5GHz WLAN ANT 5	802.11a 6Mbps	CH 100	5500	17.06	18.50	default	97.90
		CH 116	5580	17.35	18.50	default	97.89
		CH 144	5720	16.74	18.00	default	97.20
	802.11n-HT20 MCS0	CH 100	5500	16.13	17.50	default	97.01
		CH 120	5600	16.41	18.00	default	
		CH 144	5720	15.70	17.00	default	
	802.11n-HT40 MCS0	CH 102	5510	15.97	17.50	default	94.20
		CH 126	5630	16.13	17.50	default	95.59
		CH 142	5710	15.86	17.00	default	94.12
	802.11ac-VHT20 MCS0	CH 100	5500	15.15	16.50	default	97.78
		CH 116	5580	15.43	17.00	default	97.04
		CH 144	5720	14.77	16.00	default	97.76
	802.11ac-VHT40 MCS0	CH 102	5510	14.04	15.50	default	95.65
		CH 108	5550	14.26	15.50	default	94.20
		CH 142	5710	13.83	15.00	default	94.20
	802.11ac-VHT80 MCS0	CH 106	5530	14.17	15.50	default	88.89
		CH 122	5610	14.49	16.00	default	91.43
		CH 138	5690	13.95	15.50	default	88.89

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 5	802.11a 6Mbps	CH 149	5745	16.68	18.00	default	97.90
		CH 157	5785	16.49	18.00	default	97.20
		CH 165	5825	16.71	18.00	default	97.20
	802.11n-HT20 MCS0	CH 149	5745	15.78	17.00	default	97.01
		CH 157	5785	15.58	17.00	default	97.74
		CH 165	5825	15.76	17.00	default	97.01
	802.11n-HT40 MCS0	CH 151	5755	15.99	17.50	default	94.12
		CH 159	5795	15.62	17.00	default	95.59
		CH 149	5745	14.74	16.00	default	97.04
	802.11ac-VHT20 MCS0	CH 157	5785	14.47	16.00	default	97.78
		CH 165	5825	14.70	16.00	default	97.76
		CH 151	5755	14.02	15.50	default	94.20
	802.11ac-VHT40 MCS0	CH 159	5795	13.72	15.00	default	95.59
		CH 155	5775	13.55	15.00	default	91.67

Mode	Channel	Frequency (MHz)	1Mbps			2Mbps		
			Average power (dBm)	Tune-up Limit	Duty Cycle %	Average power (dBm)	Tune-up Limit	Duty Cycle %
BLE	CH 00	2402	-3.99	-2.00	85.20	-5.51	-3.50	57.22
	CH 39	2441	-3.22	-1.50	85.20	-5.14	-3.50	57.22
	CH 78	2480	-3.46	-1.50	85.20	-5.31	-3.50	57.22

Mode	Channel	Frequency (MHz)	1Mbps			2Mbps			3Mbps		
			Average power (dBm)	Tune-up Limit	Duty Cycle %	Average power (dBm)	Tune-up Limit	Duty Cycle %	Average power (dBm)	Tune-up Limit	Duty Cycle %
BR / EDR	CH 00	2402	10.67	12.00	76.80	6.88	8.50	76.96	6.95	8.50	77.01
	CH 39	2441	9.99	11.50	76.80	6.62	8.00	76.91	6.29	7.50	76.96
	CH 78	2480	9.81	11.50	76.85	6.64	8.00	76.91	6.80	8.00	76.96

Reduced Power Level 1 for Head

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
TX Channel	512	661	810		512	661	810		
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot	24.88	24.92	24.86	26.50	15.88	15.92	15.86	17.50	0.12
GPRS 1 Tx slot	24.85	24.90	24.80	26.50	15.85	15.90	15.80	17.50	
GPRS 2 Tx slots	23.91	23.95	23.93	25.50	17.91	17.95	17.93	19.50	0.04
GPRS 3 Tx slots	21.82	21.90	21.87	23.50	17.56	17.64	17.61	19.24	0.08
GPRS 4 Tx slots	20.58	20.63	20.60	22.00	17.58	17.63	17.60	19.00	0.05
EDGE 1 Tx slot	20.33	20.42	20.37	21.50	11.33	11.42	11.37	12.50	0.09
EDGE 2 Tx slots	19.30	19.37	19.25	20.50	13.30	13.37	13.25	14.50	0.12
EDGE 3 Tx slots	16.91	16.95	16.88	18.50	12.65	12.69	12.62	14.24	0.07
EDGE 4 Tx slots	15.59	15.63	15.55	17.00	12.59	12.63	12.55	14.00	0.08
Mode		Max.	24.92			Max.	17.95		
Attenuator	Cable Loss : 0.8								

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	17.26	17.29	17.28	18.50	18.94	18.99	18.96	20.00
3GPP Rel 5 HSDPA Subtest-1	15.36	15.55	22.43	16.50	17.16	17.14	17.29	18.50
3GPP Rel 5 HSDPA Subtest-2	15.42	15.57	15.43	9.50	17.21	17.20	17.32	13.00
3GPP Rel 5 HSDPA Subtest-3	14.97	15.16	15.01	9.00	16.78	16.76	16.89	12.50
3GPP Rel 5 HSDPA Subtest-4	14.91	15.12	14.98	9.00	16.74	16.71	16.87	12.50
3GPP Rel 8 DC-HSDPA Subtest-1	15.35	15.53	15.46	16.50	17.13	17.12	17.31	18.50
3GPP Rel 8 DC-HSDPA Subtest-2	15.33	15.49	15.41	9.50	17.12	17.10	17.29	13.00
3GPP Rel 8 DC-HSDPA Subtest-3	14.77	14.97	14.92	9.00	16.58	16.58	16.77	12.50
3GPP Rel 8 DC-HSDPA Subtest-4	14.78	14.97	14.90	9.00	16.57	16.56	16.74	12.50
3GPP Rel 6 HSUPA Subtest-1	15.41	15.23	15.07	16.50	16.74	16.71	16.90	18.00
3GPP Rel 6 HSUPA Subtest-2	15.40	15.72	15.55	16.50	17.24	17.19	17.36	18.50
3GPP Rel 6 HSUPA Subtest-3	14.47	14.78	14.63	15.50	16.30	16.25	16.43	17.50
3GPP Rel 6 HSUPA Subtest-4	15.38	15.68	15.54	15.50	17.19	17.17	17.35	17.50
3GPP Rel 6 HSUPA Subtest-5	14.43	14.74	14.59	15.50	16.24	16.23	16.41	17.50
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	14.44	14.63	14.50	15.50	16.19	16.15	16.31	17.50
Attenuator		Cable Loss	0.8			Cable Loss	0.8	
Mode		Max.	17.29			Max.	18.99	

3	QPSK	15	0	15.42	15.47	15.32	17.5
3	16QAM	1	0	15.63	15.66	15.52	
3	16QAM	1	8	15.57	15.61	15.44	
3	16QAM	1	14	15.52	15.56	15.46	16.5
3	16QAM	8	0	14.79	14.84	14.70	
3	16QAM	8	4	14.73	14.80	14.65	
3	16QAM	8	7	14.66	14.71	14.57	16.5
3	16QAM	15	0	14.71	14.76	14.64	
3	64QAM	1	0	14.87	14.91	14.75	
3	64QAM	1	8	14.82	14.88	14.69	16.5
3	64QAM	1	14	14.76	14.83	14.70	
3	64QAM	8	0	13.78	13.82	13.68	
3	64QAM	8	4	13.75	13.79	13.61	15.5
3	64QAM	8	7	13.64	13.70	13.55	
3	64QAM	15	0	13.70	13.74	13.59	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	16.64	16.71	16.65	18.5
1.4	QPSK	1	3	16.57	16.61	16.45	
1.4	QPSK	1	5	16.52	16.58	16.39	
1.4	QPSK	3	0	15.49	15.53	15.41	
1.4	QPSK	3	1	15.43	15.48	15.33	
1.4	QPSK	3	3	15.32	15.39	15.26	
1.4	QPSK	6	0	15.40	15.45	15.30	17.5
1.4	16QAM	1	0	15.61	15.64	15.50	17.5
1.4	16QAM	1	3	15.55	15.59	15.42	
1.4	16QAM	1	5	15.50	15.54	15.44	
1.4	16QAM	3	0	14.77	14.82	14.68	
1.4	16QAM	3	1	14.71	14.78	14.63	
1.4	16QAM	3	3	14.64	14.69	14.55	
1.4	16QAM	6	0	14.69	14.74	14.62	16.5
1.4	64QAM	1	0	14.85	14.89	14.73	16.5
1.4	64QAM	1	3	14.80	14.86	14.67	
1.4	64QAM	1	5	14.74	14.81	14.68	
1.4	64QAM	3	0	13.76	13.80	13.66	
1.4	64QAM	3	1	13.73	13.77	13.59	
1.4	64QAM	3	3	13.62	13.68	13.53	
1.4	64QAM	6	0	13.68	13.72	13.57	15.5

3	QPSK	15	0	16.92	17.07	17.00	19
3	16QAM	1	0	17.30	17.32	17.20	
3	16QAM	1	8	16.94	17.20	16.91	
3	16QAM	1	14	16.90	17.00	17.17	18
3	16QAM	8	0	16.20	16.19	16.06	
3	16QAM	8	4	15.98	16.02	16.12	
3	16QAM	8	7	16.00	16.12	16.12	18
3	16QAM	15	0	16.01	16.16	16.15	
3	64QAM	1	0	16.05	16.23	16.15	
3	64QAM	1	8	15.98	16.18	15.97	17
3	64QAM	1	14	16.14	16.14	16.14	
3	64QAM	8	0	14.96	15.24	14.99	
3	64QAM	8	4	14.85	15.19	14.95	20
3	64QAM	8	7	14.86	15.06	14.99	
3	64QAM	15	0	14.96	15.11	15.08	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	18.19	18.28	18.25	19
1.4	QPSK	1	3	18.01	18.17	17.95	
1.4	QPSK	1	5	18.06	18.11	17.98	
1.4	QPSK	3	0	16.97	17.05	16.95	
1.4	QPSK	3	1	16.89	17.02	16.80	
1.4	QPSK	3	3	16.75	16.89	16.82	
1.4	QPSK	6	0	16.86	17.01	16.94	18
1.4	16QAM	1	0	17.24	17.26	17.14	19
1.4	16QAM	1	3	16.88	17.14	16.85	
1.4	16QAM	1	5	16.84	16.94	17.11	
1.4	16QAM	3	0	16.14	16.13	16.00	
1.4	16QAM	3	1	15.92	15.96	16.06	
1.4	16QAM	3	3	15.94	16.06	16.06	
1.4	16QAM	6	0	15.95	16.10	16.09	18
1.4	64QAM	1	0	15.99	16.17	16.09	18
1.4	64QAM	1	3	15.92	16.12	15.91	
1.4	64QAM	1	5	16.08	16.08	16.08	
1.4	64QAM	3	0	14.92	15.18	14.93	
1.4	64QAM	3	1	14.79	15.13	14.89	
1.4	64QAM	3	3	14.80	15.00	14.93	
1.4	64QAM	6	0	14.90	15.05	15.02	17

3	QPSK	15	0	16.16	16.21	16.08	18
3	16QAM	1	0	16.34	16.36	16.23	
3	16QAM	1	8	16.08	16.28	16.29	
3	16QAM	1	14	16.09	16.15	16.34	17
3	16QAM	8	0	15.09	15.30	15.21	
3	16QAM	8	4	15.02	15.13	15.25	
3	16QAM	8	7	15.06	15.23	15.12	
3	16QAM	15	0	15.11	15.26	15.34	
3	64QAM	1	0	15.29	15.42	15.36	17
3	64QAM	1	8	15.31	15.26	15.35	
3	64QAM	1	14	15.16	15.38	15.40	
3	64QAM	8	0	14.16	14.28	14.19	16
3	64QAM	8	4	14.20	14.25	14.13	
3	64QAM	8	7	14.10	14.19	14.11	
3	64QAM	15	0	14.03	14.07	14.01	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	17.37	17.38	17.29	19
1.4	QPSK	1	3	17.22	17.30	17.20	
1.4	QPSK	1	5	17.15	17.33	17.13	
1.4	QPSK	3	0	16.14	16.25	16.20	
1.4	QPSK	3	1	16.02	16.16	16.07	
1.4	QPSK	3	3	16.11	16.22	16.18	
1.4	QPSK	6	0	16.13	16.18	16.05	18
1.4	16QAM	1	0	16.31	16.33	16.20	17
1.4	16QAM	1	3	16.05	16.25	16.26	
1.4	16QAM	1	5	16.06	16.12	16.31	
1.4	16QAM	3	0	15.06	15.27	15.18	
1.4	16QAM	3	1	14.99	15.10	15.22	
1.4	16QAM	3	3	15.03	15.20	15.09	
1.4	16QAM	6	0	15.08	15.23	15.31	16
1.4	64QAM	1	0	15.26	15.39	15.33	17
1.4	64QAM	1	3	15.28	15.23	15.32	
1.4	64QAM	1	5	15.13	15.35	15.37	
1.4	64QAM	3	0	14.13	14.25	14.16	
1.4	64QAM	3	1	14.17	14.22	14.10	
1.4	64QAM	3	3	14.07	14.16	14.08	
1.4	64QAM	6	0	14.00	14.04	13.98	16

Band 66 (dBm) (ANT 3)							
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	18.57	18.61	18.52	20
20	QPSK	1	49	18.52	18.58	18.48	
20	QPSK	1	99	18.45	18.44	18.39	
20	QPSK	50	0	17.39	17.46	17.33	19
20	QPSK	50	24	17.33	17.39	17.24	
20	QPSK	50	50	17.29	17.34	17.30	
20	QPSK	100	0	17.27	17.30	17.32	19
20	16QAM	1	0	17.29	17.51	17.34	
20	16QAM	1	49	17.42	17.27	17.32	
20	16QAM	1	99	17.33	17.36	17.39	18
20	16QAM	50	0	16.36	16.49	16.40	
20	16QAM	50	24	16.21	16.47	16.27	
20	16QAM	50	50	16.26	16.30	16.30	18
20	16QAM	100	0	16.22	16.38	16.39	
20	64QAM	1	0	16.32	16.44	16.39	
20	64QAM	1	49	16.28	16.30	16.41	18
20	64QAM	1	99	16.37	16.36	16.33	
20	64QAM	50	0	15.36	15.49	15.32	17
20	64QAM	50	24	15.29	15.41	15.33	
20	64QAM	50	50	15.26	15.42	15.24	
20	64QAM	100	0	15.22	15.27	15.23	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	18.51	18.55	18.46	20
15	QPSK	1	37	18.46	18.52	18.42	
15	QPSK	1	74	18.39	18.38	18.33	
15	QPSK	36	0	17.33	17.40	17.27	19
15	QPSK	36	20	17.27	17.33	17.18	
15	QPSK	36	39	17.23	17.28	17.24	
15	QPSK	75	0	17.21	17.24	17.26	19
15	16QAM	1	0	17.23	17.45	17.28	
15	16QAM	1	37	17.36	17.21	17.26	
15	16QAM	1	74	17.27	17.30	17.33	18
15	16QAM	36	0	16.30	16.43	16.34	
15	16QAM	36	20	16.15	16.41	16.21	
15	16QAM	36	39	16.20	16.24	16.24	18
15	16QAM	75	0	16.16	16.32	16.33	
15	64QAM	1	0	16.26	16.38	16.33	
15	64QAM	1	37	16.22	16.24	16.35	17
15	64QAM	1	74	16.31	16.30	16.27	
15	64QAM	36	0	15.30	15.43	15.28	
15	64QAM	36	20	15.23	15.35	15.27	
15	64QAM	36	39	15.20	15.36	15.18	17
15	64QAM	75	0	15.16	15.21	15.17	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	18.46	18.50	18.41	20
10	QPSK	1	25	18.41	18.47	18.37	
10	QPSK	1	49	18.34	18.33	18.28	
10	QPSK	25	0	17.28	17.35	17.22	19
10	QPSK	25	12	17.22	17.28	17.13	
10	QPSK	25	25	17.18	17.23	17.19	
10	QPSK	50	0	17.16	17.19	17.21	19
10	16QAM	1	0	17.18	17.40	17.23	
10	16QAM	1	25	17.31	17.16	17.21	
10	16QAM	1	49	17.22	17.25	17.28	18
10	16QAM	25	0	16.25	16.38	16.29	
10	16QAM	25	12	16.10	16.36	16.16	
10	16QAM	25	25	16.15	16.19	16.19	18
10	16QAM	50	0	16.11	16.27	16.28	
10	64QAM	1	0	16.21	16.33	16.28	
10	64QAM	1	25	16.17	16.19	16.30	17
10	64QAM	1	49	16.26	16.25	16.22	
10	64QAM	25	0	15.25	15.38	15.21	
10	64QAM	25	12	15.18	15.30	15.22	17
10	64QAM	25	25	15.15	15.31	15.13	
10	64QAM	50	0	15.11	15.16	15.12	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	18.43	18.47	18.38	20
5	QPSK	1	12	18.38	18.44	18.34	
5	QPSK	1	24	18.31	18.30	18.25	
5	QPSK	12	0	17.25	17.32	17.19	19
5	QPSK	12	7	17.19	17.25	17.10	
5	QPSK	12	13	17.15	17.20	17.16	
5	QPSK	25	0	17.13	17.16	17.18	19
5	16QAM	1	0	17.15	17.37	17.20	
5	16QAM	1	12	17.28	17.13	17.18	
5	16QAM	1	24	17.19	17.22	17.25	18
5	16QAM	12	0	16.22	16.35	16.26	
5	16QAM	12	7	16.07	16.33	16.13	
5	16QAM	12	13	16.12	16.16	16.16	18
5	16QAM	25	0	16.08	16.24	16.25	
5	64QAM	1	0	16.18	16.30	16.25	
5	64QAM	1	12	16.14	16.16	16.27	18
5	64QAM	1	24	16.23	16.22	16.19	
5	64QAM	12	0	15.22	15.35	15.18	17
5	64QAM	12	7	15.15	15.27	15.19	
5	64QAM	12	13	15.12	15.28	15.10	
5	64QAM	25	0	15.08	15.13	15.09	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	18.37	18.41	18.32	20
3	QPSK	1	8	18.32	18.38	18.28	
3	QPSK	1	14	18.25	18.24	18.19	
3	QPSK	8	0	17.19	17.26	17.13	19
3	QPSK	8	4	17.13	17.19	17.04	
3	QPSK	8	7	17.09	17.14	17.10	

3	QPSK	15	0	17.07	17.10	17.12	19
3	16QAM	1	0	17.09	17.31	17.14	
3	16QAM	1	8	17.22	17.07	17.12	
3	16QAM	1	14	17.13	17.16	17.19	18
3	16QAM	8	0	16.16	16.29	16.20	
3	16QAM	8	4	16.01	16.27	16.07	
3	16QAM	8	7	16.06	16.10	16.10	18
3	16QAM	15	0	16.02	16.18	16.19	
3	64QAM	1	0	16.12	16.24	16.19	
3	64QAM	1	8	16.08	16.10	16.21	17
3	64QAM	1	14	16.17	16.16	16.13	
3	64QAM	8	0	15.16	15.29	15.12	
3	64QAM	8	4	15.09	15.21	15.13	17
3	64QAM	8	7	15.06	15.22	15.04	
3	64QAM	15	0	15.02	15.07	15.03	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	18.33	18.37	18.28	20
1.4	QPSK	1	3	18.28	18.34	18.24	
1.4	QPSK	1	5	18.21	18.20	18.15	
1.4	QPSK	3	0	17.15	17.22	17.09	
1.4	QPSK	3	1	17.09	17.15	17.00	
1.4	QPSK	3	3	17.05	17.10	17.06	
1.4	QPSK	6	0	17.03	17.06	17.08	19
1.4	16QAM	1	0	17.05	17.27	17.10	19
1.4	16QAM	1	3	17.18	17.03	17.08	
1.4	16QAM	1	5	17.09	17.12	17.15	
1.4	16QAM	3	0	16.12	16.25	16.16	
1.4	16QAM	3	1	15.97	16.23	16.03	
1.4	16QAM	3	3	16.02	16.06	16.06	
1.4	16QAM	6	0	15.98	16.14	16.15	18
1.4	64QAM	1	0	16.08	16.20	16.15	18
1.4	64QAM	1	3	16.04	16.06	16.17	
1.4	64QAM	1	5	16.13	16.12	16.09	
1.4	64QAM	3	0	15.12	15.25	15.08	
1.4	64QAM	3	1	15.05	15.17	15.09	
1.4	64QAM	3	3	15.02	15.18	15.00	
1.4	64QAM	6	0	14.98	15.03	14.99	17

Band 41 (2496~2690MHz) (dBm) PC3									
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	15.5
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	13.75	13.87	13.88	13.83	13.82	14.5
20	QPSK	1	49	13.57	13.82	13.83	13.55	13.77	
20	QPSK	1	99	13.62	13.70	13.70	13.63	13.83	
20	QPSK	50	0	12.69	12.75	12.79	12.70	12.72	
20	QPSK	50	24	12.70	12.80	12.76	12.62	12.77	14.5
20	QPSK	50	50	12.61	12.68	12.53	12.63	12.57	
20	QPSK	100	0	12.51	12.54	12.67	12.58	12.65	
20	16QAM	1	0	12.74	12.82	12.85	12.72	12.78	
20	16QAM	1	49	12.65	12.73	12.77	12.74	12.76	13.5
20	16QAM	1	99	12.61	12.74	12.75	12.63	12.78	
20	16QAM	50	0	11.66	11.78	11.81	11.67	11.79	
20	16QAM	50	24	11.71	11.75	11.70	11.61	11.75	
20	16QAM	50	50	11.58	11.61	11.67	11.63	11.64	13.5
20	16QAM	100	0	11.72	11.63	11.56	11.67	11.80	
20	64QAM	1	0	11.66	11.88	11.89	11.68	11.77	
20	64QAM	1	49	11.65	11.87	11.77	11.69	11.77	
20	64QAM	1	99	11.61	11.75	11.82	11.72	11.60	12.5
20	64QAM	50	0	10.57	10.68	10.77	10.63	10.57	
20	64QAM	50	24	10.65	10.66	10.55	10.66	10.51	
20	64QAM	50	50	10.51	10.47	10.52	10.49	10.47	
20	64QAM	100	0	10.55	10.60	10.67	10.55	10.48	15.5
Channel				39725	40173	40620	41068	41515	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	15.5
15	QPSK	1	0	13.72	13.84	13.85	13.80	13.79	
15	QPSK	1	37	13.54	13.79	13.80	13.52	13.74	14.5
15	QPSK	1	74	13.59	13.67	13.67	13.60	13.80	
15	QPSK	38	0	12.66	12.72	12.76	12.67	12.69	
15	QPSK	38	20	12.67	12.77	12.73	12.59	12.74	
15	QPSK	38	39	12.58	12.65	12.50	12.60	12.54	14.5
15	QPSK	75	0	12.48	12.51	12.64	12.55	12.62	
15	16QAM	1	0	12.71	12.79	12.82	12.69	12.75	
15	16QAM	1	37	12.62	12.70	12.74	12.71	12.73	
15	16QAM	1	74	12.58	12.71	12.72	12.60	12.75	13.5
15	16QAM	38	0	11.63	11.75	11.78	11.64	11.76	
15	16QAM	38	20	11.68	11.72	11.67	11.58	11.72	
15	16QAM	38	39	11.55	11.58	11.64	11.60	11.61	
15	16QAM	75	0	11.69	11.60	11.53	11.64	11.77	13.5
15	64QAM	1	0	11.63	11.85	11.86	11.65	11.74	
15	64QAM	1	37	11.62	11.84	11.74	11.66	11.74	
15	64QAM	1	74	11.58	11.72	11.79	11.69	11.57	
15	64QAM	38	0	10.54	10.65	10.74	10.60	10.54	12.5
15	64QAM	38	20	10.62	10.63	10.52	10.63	10.48	
15	64QAM	38	39	10.48	10.44	10.49	10.46	10.44	
15	64QAM	75	0	10.52	10.57	10.64	10.52	10.45	
Channel				39700	40160	40620	41080	41540	15.5
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	13.67	13.79	13.80	13.75	13.74	14.5
10	QPSK	1	25	13.49	13.74	13.75	13.47	13.69	
10	QPSK	1	49	13.54	13.62	13.62	13.55	13.75	
10	QPSK	25	0	12.61	12.67	12.71	12.62	12.64	
10	QPSK	25	12	12.62	12.72	12.68	12.54	12.69	14.5
10	QPSK	25	25	12.53	12.60	12.45	12.55	12.49	
10	QPSK	50	0	12.43	12.46	12.59	12.50	12.57	
10	16QAM	1	0	12.66	12.74	12.77	12.64	12.70	
10	16QAM	1	25	12.57	12.65	12.69	12.66	12.68	13.5
10	16QAM	1	49	12.53	12.66	12.67	12.55	12.70	
10	16QAM	25	0	11.58	11.70	11.73	11.59	11.71	
10	16QAM	25	12	11.63	11.67	11.62	11.53	11.67	
10	16QAM	25	25	11.50	11.53	11.59	11.55	11.56	13.5
10	16QAM	50	0	11.64	11.55	11.48	11.59	11.72	
10	64QAM	1	0	11.58	11.80	11.81	11.60	11.69	
10	64QAM	1	25	11.57	11.79	11.69	11.61	11.69	
10	64QAM	1	49	11.53	11.67	11.74	11.64	11.52	12.5
10	64QAM	25	0	10.49	10.60	10.69	10.55	10.49	
10	64QAM	25	12	10.57	10.58	10.47	10.58	10.43	
10	64QAM	25	25	10.43	10.39	10.44	10.41	10.39	
10	64QAM	50	0	10.47	10.52	10.59	10.47	10.40	15.5
Channel				39675	40148	40620	41093	41555	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	15.5
5	QPSK	1	0	13.64	13.76	13.77	13.72	13.71	
5	QPSK	1	12	13.46	13.71	13.72	13.44	13.66	14.5
5	QPSK	1	24	13.51	13.59	13.59	13.52	13.72	
5	QPSK	12	0	12.58	12.64	12.68	12.59	12.61	
5	QPSK	12	7	12.59	12.69	12.65	12.51	12.66	
5	QPSK	12	13	12.50	12.57	12.42	12.52	12.46	14.5
5	QPSK	25	0	12.40	12.43	12.56	12.47	12.54	
5	16QAM	1	0	12.63	12.71	12.74	12.61	12.67	
5	16QAM	1	12	12.54	12.62	12.66	12.63	12.65	
5	16QAM	1	24	12.50	12.63	12.64	12.52	12.67	13.5
5	16QAM	12	0	11.55	11.67	11.70	11.56	11.68	
5	16QAM	12	7	11.60	11.64	11.59	11.50	11.64	
5	16QAM	12	13	11.47	11.50	11.56	11.52	11.53	
5	16QAM	25	0	11.61	11.52	11.45	11.56	11.69	13.5
5	64QAM	1	0	11.55	11.77	11.78	11.57	11.66	
5	64QAM	1	12	11.54	11.76	11.66	11.58	11.66	
5	64QAM	1	24	11.50	11.64	11.71	11.61	11.49	
5	64QAM	12	0	10.46	10.57	10.66	10.52	10.46	12.5
5	64QAM	12	7	10.54	10.55	10.44	10.55	10.40	
5	64QAM	12	13	10.40	10.36	10.41	10.38	10.36	
5	64QAM	25	0	10.44	10.49	10.56	10.44	10.37	

n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376000	378000	Tune-up limit (dBm)
Frequency (MHz)				1870	1880	1890	
40	DFT-s-OFDM PI/2 BPSK	1	1	14.89	14.97	15.00	16.50
40		1	108	14.96	15.03	14.95	
40		1	214	14.87	14.91	14.95	
40		108	1	14.51	14.57	14.66	16.50
40		108	54	15.08	15.06	15.11	
40		108	108	14.41	14.55	14.55	
40		216	0	14.46	14.49	14.59	
40	DFT-s-OFDM QPSK	1	1	15.20	15.24	15.29	16.50
40		1	108	15.17	15.23	15.19	
40		1	214	15.11	15.20	15.24	
40		108	1	14.08	14.13	14.21	16.50
40		108	54	15.10	15.08	15.15	
40		108	108	13.97	14.07	14.07	
40		216	0	14.03	14.04	14.14	
40	DFT-s-OFDM 16QAM	1	1	14.22	14.21	14.21	15.50
40	DFT-s-OFDM 64QAM	1	1	12.28	12.36	12.36	13.50
40	DFT-s-OFDM 256QAM	1	1	10.50	10.58	10.62	11.50
40	CP-OFDM QPSK	1	1	13.59	13.61	13.70	15.00
40	CP-OFDM 16QAM	1	1	13.18	13.46	13.30	14.00
40	CP-OFDM 64QAM	1	1	11.34	11.38	11.40	13.00
40	CP-OFDM 256QAM	1	1	8.51	8.55	8.58	9.50
Channel				373000	376000	379000	Tune-up limit (dBm)
Frequency (MHz)				1865	1880	1895	
30	DFT-s-OFDM QPSK	1	1	15.17	15.12	15.15	16.50
Channel				372500	376000	379500	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1880	1897.5	
25	DFT-s-OFDM QPSK	1	1	15.08	15.16	14.89	16.50
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM QPSK	1	1	15.05	15.10	14.99	16.50
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	15.06	15.09	14.95	16.50
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	15.09	15.01	15.12	16.50
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	15.00	14.77	15.02	16.50

n25 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376500	379000	Tune-up limit (dBm)
Frequency (MHz)				1870	1882.5	1895	
40	DFT-s-OFDM PI/2 BPSK	1	1	14.94	14.98	15.04	16.50
40		1	108	14.99	15.01	15.00	
40		1	214	14.97	14.96	15.03	
40		108	1	14.65	14.62	14.69	16.50
40		108	54	15.14	15.09	15.18	
40		108	108	14.48	14.59	14.62	
40		216	0	14.53	14.55	14.63	
40	DFT-s-OFDM QPSK	1	1	15.22	15.23	15.36	16.50
40		1	108	15.05	15.27	15.28	
40		1	214	14.97	15.19	15.22	
40		108	1	14.16	14.18	14.26	16.50
40		108	54	15.20	15.13	15.21	
40		108	108	14.02	14.13	14.14	
40		216	0	14.11	14.12	14.19	
40	DFT-s-OFDM 16QAM	1	1	14.25	14.24	14.31	15.50
40	DFT-s-OFDM 64QAM	1	1	12.37	12.43	12.53	14.50
40	DFT-s-OFDM 256QAM	1	1	10.56	10.63	10.72	11.50
40	CP-OFDM QPSK	1	1	13.66	13.68	13.76	15.00
40	CP-OFDM 16QAM	1	1	13.24	13.26	13.33	14.50
40	CP-OFDM 64QAM	1	1	11.43	11.48	11.56	13.00
40	CP-OFDM 256QAM	1	1	8.54	8.59	8.71	9.50
Channel				373000	376500	380000	Tune-up limit (dBm)
Frequency (MHz)				1865	1882.5	1900	
30	DFT-s-OFDM QPSK	1	1	15.22	14.93	15.13	16.50
Channel				372500	376500	380500	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1882.5	1902.5	
25	DFT-s-OFDM QPSK	1	1	15.15	14.90	15.09	16.50
Channel				372000	376500	381000	Tune-up limit (dBm)
Frequency (MHz)				1860	1882.5	1905	
20	DFT-s-OFDM QPSK	1	1	15.13	14.88	15.15	16.50
Channel				371500	376500	381500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5	
15	DFT-s-OFDM QPSK	1	1	15.14	14.88	15.18	16.50
Channel				371000	376500	382000	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	
10	DFT-s-OFDM QPSK	1	1	15.20	14.87	15.14	16.50
Channel				370500	376500	382500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5	
5	DFT-s-OFDM QPSK	1	1	15.12	15.08	14.88	16.50

n41 (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	17.00
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	15.10	15.34	15.45	15.55	15.49	17.00
100		1	136	15.80	15.82	15.66	15.58	15.71	
100		1	271	15.63	15.52	15.28	15.27	15.24	
100		135	1	14.84	14.96	15.08	15.07	15.12	17.00
100		135	67	15.37	15.47	15.56	15.57	15.35	
100		135	136	14.83	15.05	15.07	15.06	14.81	
100	DFT-s-OFDM QPSK	270	0	14.78	14.95	15.02	15.02	14.96	17.00
100		1	1	15.07	15.33	15.42	15.39	15.52	
100		1	136	15.69	15.50	15.86	15.80	15.53	
100		1	271	15.54	15.42	15.15	15.15	15.03	17.00
100		135	1	14.39	14.51	14.62	14.59	14.68	
100		135	67	15.40	15.50	15.56	15.53	15.33	
100	DFT-s-OFDM 16QAM	1	1	14.41	14.52	14.53	14.45	14.74	16.00
100		1	1	12.76	12.89	12.95	13.00	13.11	14.50
100	DFT-s-OFDM 256QAM	1	1	10.68	10.79	12.91	10.82	11.05	14.50
100	CP-OFDM QPSK	1	1	13.62	13.68	13.68	13.67	13.92	15.00
100	CP-OFDM 16QAM	1	1	13.34	13.45	13.47	13.47	13.68	15.00
100	CP-OFDM 64QAM	1	1	11.84	11.96	11.97	12.01	12.21	13.50
100	CP-OFDM 256QAM	1	1	8.95	9.05	9.05	9.06	9.26	10.50
Channel				508200	513402	518598	523800	528996	17.00
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	15.04	15.19	15.31	15.33	15.40	17.00
Channel				507204	512904	518598	524298	529998	17.00
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	15.01	15.28	15.35	15.35	15.32	17.00
Channel				506202	512400	518598	524796	531000	17.00
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	15.12	15.22	15.34	15.41	15.17	17.00
Channel				505200	511902	518598	525798	531996	17.00
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	15.12	15.21	15.37	15.34	15.28	17.00
Channel				504204	511404	518598	525798	532998	17.00
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	15.13	15.29	15.50	15.41	15.44	17.00
Channel				503202	510900	518598	526296	534000	17.00
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	15.06	15.45	15.49	15.40	15.27	17.00
Channel				502200	510402	518598	526800	534996	17.00
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	15.15	15.36	15.44	15.41	15.36	17.00
Channel				501204	509904	518598	527298	535998	17.00
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	14.97	15.28	15.42	15.14	15.17	17.00
Channel				500700	509652	518598	527550	536496	17.00
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	15.17	15.28	15.43	15.17	15.21	17.00
Channel				500202	509400	518598	527796	537000	17.00
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	15.16	15.30	15.46	15.24	15.03	27.00

n41 (PC3)									
BW (MHz)	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	13.63	13.87	13.98	13.76	14.02	15.50
100		1	136	14.33	14.35	14.19	14.70	14.24	
100		1	271	14.16	14.05	13.81	13.80	13.77	
100		135	1	13.37	13.49	13.61	13.60	13.65	15.50
100		135	67	13.90	14.00	14.09	14.10	13.88	
100		135	136	13.36	13.58	13.60	13.59	13.34	
100		270	0	13.31	13.48	13.55	13.55	13.49	
100	DFT-s-OFDM QPSK	1	1	14.22	14.03	14.09	14.33	14.06	16.00
100		1	136	14.70	14.80	14.86	14.74	14.75	
100		1	271	14.07	13.95	13.92	13.88	13.90	
100		135	1	12.92	13.04	13.15	13.12	13.21	15.50
100		135	67	13.93	14.03	14.12	14.04	14.01	
100		135	136	12.91	13.08	13.15	13.15	12.86	
100		270	0	12.85	13.04	13.11	13.10	13.04	
100	DFT-s-OFDM 16QAM	1	1	12.94	13.05	13.06	12.98	13.27	14.50
100	DFT-s-OFDM 64QAM	1	1	11.29	11.42	11.48	11.53	11.64	13.50
100	DFT-s-OFDM 256QAM	1	1	9.21	9.32	11.44	9.35	9.58	10.50
100	CP-OFDM QPSK	1	1	12.15	12.21	12.21	12.20	12.45	13.50
100	CP-OFDM 16QAM	1	1	11.87	11.98	12.00	12.00	12.21	13.00
100	CP-OFDM 64QAM	1	1	10.37	10.49	10.50	10.54	10.74	11.50
100	CP-OFDM 256QAM	1	1	7.48	7.58	7.58	7.59	7.79	8.50
Channel				508200	513402	518598	523800	528998	Tune-up limit (dBm)
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	13.57	13.72	13.84	13.86	13.93	15.50
Channel				507204	512904	518598	524298	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	13.54	13.81	13.88	13.88	13.85	15.50
Channel				506202	512400	518598	524796	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	13.65	13.75	13.87	13.94	13.70	15.50
Channel				505200	511902	518598	525798	531998	Tune-up limit (dBm)
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	13.65	13.74	13.90	13.87	13.81	15.50
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	13.66	13.82	14.03	13.94	13.97	15.50
Channel				503202	510900	518598	526296	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	13.59	13.98	14.02	13.93	13.80	15.50
Channel				502200	510402	518598	526800	534998	Tune-up limit (dBm)
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	13.68	13.89	13.97	13.94	13.89	15.50
Channel				501204	509904	518598	527298	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	13.50	13.81	13.95	13.67	13.70	15.50
Channel				500700	509652	518598	527550	536498	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	13.70	13.81	13.96	13.70	13.74	15.50
Channel				500202	509400	518598	527796	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	13.69	13.83	13.99	13.77	13.56	15.50

n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	16.23	16.31	16.33	18.50
40		1	108	16.31	16.58	16.61	
40		1	214	16.48	16.58	16.42	
40		108	1	15.89	16.07	16.21	18.00
40		108	54	16.47	16.64	16.71	
40		108	108	16.03	16.13	16.18	
40		216	0	15.91	16.04	16.14	
40	DFT-s-OFDM QPSK	1	1	16.80	16.84	16.89	18.50
40		1	108	16.39	16.84	16.67	
40		1	214	16.52	16.67	16.69	
40		108	1	15.44	15.60	15.61	18.00
40		108	54	16.52	16.66	16.69	
40		108	108	15.56	15.69	15.66	
40		216	0	15.46	15.60	15.62	
40	DFT-s-OFDM 16QAM	1	1	15.48	15.56	15.57	17.50
40	DFT-s-OFDM 64QAM	1	1	13.68	13.77	13.77	22.50
40	DFT-s-OFDM 256QAM	1	1	12.00	12.00	12.07	13.00
40	CP-OFDM QPSK	1	1	15.01	15.00	15.07	24.00
40	CP-OFDM 16QAM	1	1	14.55	14.62	14.61	23.50
40	CP-OFDM 64QAM	1	1	12.75	12.80	12.84	21.50
40	CP-OFDM 256QAM	1	1	9.95	9.97	10.05	18.50
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	23.82	24.11	24.28	18.50
Channel				344500	349000	353500	Tune-up limit (dBm)
Frequency (MHz)				1722.5	1745	1767.5	
25	DFT-s-OFDM QPSK	1	1	24.02	24.08	24.27	18.50
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	23.97	23.83	24.22	18.50
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	24.01	24.02	24.11	18.50
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	24.04	24.09	23.98	18.50
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	23.92	24.10	24.10	18.50

n77(3450-3550MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			15.08			15.50
100		1	136			14.75			
100		1	271			14.62			
100		135	1			14.39			
100	DFT-s-OFDM QPSK	135	67			14.89			15.50
100		135	136			13.99			
100		270	0			14.35			
100		1	1			15.49			
100	DFT-s-OFDM 16QAM	1	136			14.92			16.50
100		1	271			14.64			
100		135	1			13.98			
100		135	67			14.83			
100	DFT-s-OFDM 64QAM	135	136			13.54			15.50
100		270	0			13.86			
100		1	1			14.29			
100		1	1			12.77			
100	DFT-s-OFDM 256QAM	1	1			10.71			11.50
100	CP-OFDM QPSK	1	1			13.51			15.00
100	CP-OFDM 16QAM	1	1			13.70			15.00
100	CP-OFDM 64QAM	1	1			11.20			12.50
100	CP-OFDM 256QAM	1	1			8.73			9.50
Channel				633000	633168	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	15.14	15.07	15.09	15.01	15.06	16.50
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	15.10	15.17	15.11	15.04	15.04	16.50
Channel				632334	632634	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	15.20	15.16	15.14	15.09	15.23	16.50
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	15.01	14.94	14.88	14.80	14.83	16.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	14.95	14.93	14.84	14.85	14.79	16.50
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	15.03	15.01	14.90	14.86	14.65	16.50
Channel				631000	632168	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	15.07	14.97	14.87	14.76	14.50	16.50
Channel				630834	632084	633334	634584	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3481.26	3500.01	3518.76	3537.48	
25	DFT-s-OFDM QPSK	1	1	15.04	14.96	14.89	14.67	14.41	16.50
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	15.14	14.96	14.88	14.67	14.47	16.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	15.13	14.97	14.85	14.63	14.51	16.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	15.11	15.00	14.88	14.59	14.57	16.50

n77(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			15.14			16.50
100		1	136			14.81			
100		1	271			14.68			
100		135	1			14.45			16.50
100		135	67			14.95			
100		135	136			14.05			
100		270	0			14.41			16.50
100	DFT-s-OFDM QPSK	1	1			15.55			
100		1	136			14.98			
100		1	271			14.70			
100		135	1			14.04			15.50
100		135	67			14.89			
100		135	136			14.00			
100		270	0			14.19			
100	DFT-s-OFDM 16QAM	1	1			14.35			15.50
100	DFT-s-OFDM 64QAM	1	1			12.83			14.50
100	DFT-s-OFDM 256QAM	1	1			10.77			11.50
100	CP-OFDM QPSK	1	1			13.57			14.50
100	CP-OFDM 16QAM	1	1			13.76			14.50
100	CP-OFDM 64QAM	1	1			11.26			12.50
100	CP-OFDM 256QAM	1	1			8.79			9.50
Channel				633000	633168	633334	633500	633666	Tune-up limit
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	15.20	15.13	15.15	15.07	15.12	16.50
Channel				632668	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	15.16	15.23	15.17	15.10	15.10	16.50
Channel				632334	632668	633334	633832	634332	Tune-up limit
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	15.26	15.22	15.20	15.15	15.29	16.50
Channel				632000	632668	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	15.07	15.00	14.94	14.86	14.89	16.50
Channel				631668	632500	633334	634166	635000	Tune-up limit
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	15.01	14.99	14.90	14.91	14.85	16.50
Channel				631334	632334	633334	634332	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	15.09	15.07	14.96	14.92	14.71	16.50
Channel				631000	632168	633334	634500	635666	Tune-up limit
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	15.13	15.03	14.93	14.82	14.56	16.50
Channel				630834	632084	633334	634584	635832	Tune-up limit
Frequency (MHz)				3462.51	3481.26	3500.01	3518.76	3537.48	
25	DFT-s-OFDM QPSK	1	1	15.10	15.02	14.95	14.73	14.47	16.50
Channel				630668	632000	633334	634666	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	15.20	15.02	14.94	14.73	14.53	16.50
Channel				630500	631916	633334	634750	636166	Tune-up limit
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	15.19	15.03	14.91	14.69	14.57	16.50
Channel				630334	631634	633334	634834	636332	Tune-up limit
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	15.17	15.06	14.94	14.65	14.63	16.50

n77(3700-3980MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	16.00
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	14.48	14.64	14.67	14.49	14.40	16.00
100		1	136	14.52	14.57	14.30	14.68	14.78	
100		1	271	14.71	14.51	14.65	14.79	14.75	
100		135	1	14.08	14.20	14.20	14.00	14.04	16.00
100		135	67	14.67	14.70	14.70	14.55	14.69	
100		135	136	14.24	14.35	14.36	14.25	14.32	
100		270	0	14.15	14.27	14.26	14.13	14.23	
100	DFT-s-OFDM QPSK	1	1	14.43	14.60	14.55	14.46	14.40	16.00
100		1	136	14.74	14.78	14.73	14.72	14.80	
100		1	271	14.65	14.55	14.59	14.49	14.58	
100		135	1	13.60	13.71	13.71	13.92	13.75	16.00
100		135	67	14.65	14.69	14.69	14.53	14.71	
100		135	136	13.79	13.84	13.87	13.79	13.83	
100		270	0	13.65	13.74	13.75	13.62	13.71	
100	DFT-s-OFDM 16QAM	1	1	13.76	13.86	13.89	13.75	13.69	14.50
100	DFT-s-OFDM 64QAM	1	1	12.54	12.74	12.55	12.46	12.13	14.00
100	DFT-s-OFDM 256QAM	1	1	9.88	10.06	10.04	10.02	10.16	11.00
100	CP-OFDM QPSK	1	1	12.85	13.27	13.02	12.94	12.80	13.50
100	CP-OFDM 16QAM	1	1	12.75	12.89	12.90	12.75	12.65	13.50
100	CP-OFDM 64QAM	1	1	11.20	11.40	11.38	11.35	11.33	13.00
100	CP-OFDM 256QAM	1	1	8.15	8.34	8.34	8.28	8.34	9.50
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	14.51	14.69	14.61	14.49	14.51	16.00
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	14.45	14.68	14.63	14.53	14.53	16.00
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	14.34	14.61	14.59	14.51	14.40	16.00
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	14.36	14.49	14.50	14.54	14.57	16.00
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	14.28	14.65	14.52	14.42	14.72	16.00
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	13.41	14.62	14.55	14.49	14.74	16.00
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	14.29	14.60	14.51	14.49	14.89	16.00
Channel				647500	651750	656000	660250	664500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	
25	DFT-s-OFDM QPSK	1	1	14.56	14.84	14.75	14.50	14.77	16.00
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	14.40	14.56	14.53	14.47	14.71	16.00
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	14.36	14.71	14.53	14.39	14.77	16.00
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	14.33	14.68	14.53	14.40	14.70	16.00

n77(3700-3980MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	16.00
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM Pi/2 BPSK	1	1	14.52	14.68	14.68	14.53	14.44	16.00
100		1	136	14.56	14.79	14.34	14.72	14.82	
100		1	271	14.75	14.90	14.88	14.83	14.79	
100		135	1	14.12	14.24	14.24	14.04	14.08	16.00
100		135	67	14.71	14.74	14.74	14.59	14.73	
100		135	136	14.28	14.39	14.40	14.29	14.36	
100	DFT-s-OFDM QPSK	270	0	14.19	14.31	14.30	14.17	14.27	16.50
100		1	1	15.07	15.14	15.22	15.20	15.18	
100		1	136	14.88	14.98	15.07	15.09	14.97	
100		1	271	14.79	14.85	14.82	14.76	14.84	16.00
100		135	1	13.64	13.75	13.75	13.88	13.59	
100		135	67	14.69	14.73	14.73	14.57	14.72	
100	DFT-s-OFDM 16QAM	135	136	13.83	13.88	13.91	13.83	13.87	15.00
100		270	0	13.69	13.78	13.79	13.66	13.75	
100		1	1	13.80	13.90	13.93	13.79	13.73	
100	DFT-s-OFDM 64QAM	1	1	12.58	12.78	12.59	12.50	12.17	13.50
100	DFT-s-OFDM 256QAM	1	1	9.92	10.10	10.08	10.06	12.20	13.00
100	CP-OFDM QPSK	1	1	12.89	13.31	13.06	12.98	12.84	15.00
100	CP-OFDM 16QAM	1	1	12.79	12.93	12.94	12.79	12.69	14.00
100	CP-OFDM 64QAM	1	1	11.24	11.44	11.42	11.39	11.37	13.00
100	CP-OFDM 256QAM	1	1	8.19	8.38	8.38	8.32	8.38	9.00
Channel				649666	652834	656000	659166	662332	Tune-up limit
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	(dBm)
90	DFT-s-OFDM QPSK	1	1	14.55	14.73	14.65	14.53	14.55	16.00
Channel				649334	652668	656000	659332	662666	Tune-up limit
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	(dBm)
80	DFT-s-OFDM QPSK	1	1	14.49	14.72	14.67	14.57	14.57	16.00
Channel				649000	652500	656000	659500	663000	Tune-up limit
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	(dBm)
70	DFT-s-OFDM QPSK	1	1	14.38	14.65	14.63	14.55	14.44	16.00
Channel				648668	652334	656000	659666	663332	Tune-up limit
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	(dBm)
60	DFT-s-OFDM QPSK	1	1	14.40	14.53	14.54	14.58	14.61	16.00
Channel				648334	652168	656000	659832	663666	Tune-up limit
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	(dBm)
50	DFT-s-OFDM QPSK	1	1	14.32	14.69	14.56	14.46	14.76	16.00
Channel				648000	652000	656000	660000	664000	Tune-up limit
Frequency (MHz)				3720	3780	3840	3900	3960	(dBm)
40	DFT-s-OFDM QPSK	1	1	13.45	14.66	14.59	14.53	14.78	16.00
Channel				647668	651834	656000	660166	664332	Tune-up limit
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	(dBm)
30	DFT-s-OFDM QPSK	1	1	14.33	14.64	14.55	14.53	14.93	16.00
Channel				647500	651750	656000	660250	664500	Tune-up limit
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	(dBm)
25	DFT-s-OFDM QPSK	1	1	14.60	14.88	14.79	14.54	14.81	16.00
Channel				647334	651668	656000	660332	664666	Tune-up limit
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	(dBm)
20	DFT-s-OFDM QPSK	1	1	14.44	14.60	14.57	14.51	14.75	16.00
Channel				647168	651584	656000	660416	664832	Tune-up limit
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	(dBm)
15	DFT-s-OFDM QPSK	1	1	14.40	14.75	14.57	14.43	14.81	16.00
Channel				647000	651500	656000	660500	665000	Tune-up limit
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	(dBm)
10	DFT-s-OFDM QPSK	1	1	14.37	14.72	14.57	14.44	14.74	16.00

2.4GHz WLAN ANT 5

2.4GHz WLAN ANT 5	Mode	Channel	Frequency (MHz)	Average power (dbm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11b 1Mbps	CH 1	2412	12.98	14.50	13.00	99.67
		CH 6	2437	13.20	14.50	13.00	99.67
		CH 11	2462	13.94	15.50	13.00	99.67
	802.11g 6Mbps	CH 1	2412	9.92	11.50	10.00	97.48
		CH 6	2437	13.08	14.50	13.00	97.62
		CH 11	2462	10.85	12.00	10.00	97.48
	802.11n-HT20 MCS0	CH 1	2412	9.83	11.00	10.00	97.31
		CH 6	2437	12.05	13.50	13.00	97.45
		CH 11	2462	10.74	12.00	10.00	97.31
	802.11n-HT40 MCS0	CH 3	2422	8.02	9.50	8.00	94.74
		CH 6	2437	12.29	13.50	10.00	95.03
CH 9		2452	8.93	10.50	8.00	94.74	

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 5	802.11a 6Mbps	CH 36	5180	11.90	13.50	13.00	97.90
		CH 44	5220	12.00	13.50	13.00	97.20
		CH 48	5240	11.74	13.00	13.00	97.20
	802.11n-HT20 MCS0	CH 36	5180	10.91	12.50	13.00	97.01
		CH 44	5220	10.96	12.50	13.00	97.74
		CH 48	5240	10.65	12.00	13.00	97.74
	802.11n-HT40 MCS0	CH 38	5190	10.79	12.00	13.00	94.20
		CH 46	5230	10.79	12.00	13.00	95.59
		CH 36	5180	10.01	11.50	13.00	97.04
	802.11ac-VHT20 MCS0	CH 44	5220	9.96	11.50	13.00	97.76
		CH 48	5240	9.79	11.00	13.00	97.04
		CH 38	5190	8.93	10.50	13.00	94.20
	802.11ac-VHT40 MCS0	CH 46	5230	8.77	10.00	13.00	
		802.11ac-VHT80 MCS0	CH 42	5210	8.88	10.00	13.00

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 5	802.11a 6Mbps	CH 52	5260	11.78	13.00	13.00	97.20
		CH 60	5300	11.60	13.00	13.00	
		CH 64	5320	11.17	12.50	13.00	
	802.11n-HT20 MCS0	CH 52	5260	10.74	12.00	13.00	97.01
		CH 60	5300	10.63	12.00	13.00	97.74
		CH 64	5320	9.98	11.50	13.00	97.74
	802.11n-HT40 MCS0	CH 54	5270	10.36	12.00	13.00	94.20
		CH 62	5310	10.18	11.50	13.00	95.59
		CH 52	5260	9.71	11.00	13.00	97.04
	802.11ac-VHT20 MCS0	CH 60	5300	9.66	11.00	13.00	97.04
		CH 64	5320	9.04	10.50	13.00	97.76
		CH 54	5270	8.50	10.00	13.00	94.20
	802.11ac-VHT40 MCS0	CH 62	5310	8.25	10.00	13.00	
	802.11ac-VHT80 MCS0	CH 58	5290	8.38	10.00	13.00	91.67

5GHzWLAN ANT 5

5.5GHz WLAN ANT 5	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 100	5500	12.06	13.50	13.00	97.90
		CH 116	5580	12.35	13.50	13.00	97.89
		CH 144	5720	11.74	13.00	13.00	97.20
	802.11n-HT20 MCS0	CH 100	5500	11.13	12.50	13.00	97.01
		CH 120	5600	11.41	13.00	13.00	
		CH 144	5720	10.70	12.00	13.00	
	802.11n-HT40 MCS0	CH 102	5510	10.97	12.50	13.00	94.20
		CH 126	5630	11.13	12.50	13.00	95.59
		CH 142	5710	10.86	12.00	13.00	94.12
	802.11ac-VHT20 MCS0	CH 100	5500	10.15	11.50	13.00	97.78
		CH 116	5580	10.43	12.00	13.00	97.04
		CH 144	5720	9.77	11.00	13.00	97.76
	802.11ac-VHT40 MCS0	CH 102	5510	9.04	10.50	13.00	95.65
		CH 108	5550	9.26	10.50	13.00	94.20
		CH 142	5710	8.83	10.00	13.00	94.20
	802.11ac-VHT80 MCS0	CH 106	5530	9.17	10.50	13.00	88.89
		CH 122	5610	9.49	11.00	13.00	91.43
CH 138		5690	8.95	10.50	13.00	88.89	

5GHz WLAN ANT 5

Mode		Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 5	802.11a 6Mbps	CH 149	5745	11.68	13.00	13.00	97.90
		CH 157	5785	11.49	13.00	13.00	97.20
		CH 165	5825	11.71	13.00	13.00	97.20
	802.11n-HT20 MCS0	CH 149	5745	10.78	12.00	13.00	97.01
		CH 157	5785	10.58	12.00	13.00	97.74
		CH 165	5825	10.76	12.00	13.00	97.01
	802.11n-HT40 MCS0	CH 151	5755	10.99	12.50	13.00	94.12
		CH 159	5795	10.62	12.00	13.00	95.59
		CH 149	5745	9.74	11.00	13.00	97.04
	802.11ac-VHT20 MCS0	CH 157	5785	9.47	11.00	13.00	97.78
		CH 165	5825	9.70	11.00	13.00	97.76
		CH 151	5755	9.02	10.50	13.00	94.20
	802.11ac-VHT40 MCS0	CH 159	5795	8.72	10.00	13.00	95.59
		CH 155	5775	8.55	10.00	13.00	91.67

Reduced Power Level 2 for Body-worn

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	25.50
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	23.63	23.87	23.98	24.08	24.02	25.50
100		1	136	24.33	24.35	24.19	24.11	24.24	
100		1	271	24.16	24.05	23.81	23.80	23.77	
100		135	1	23.37	23.49	23.61	23.60	23.65	25.50
100		135	67	23.90	24.00	24.09	24.10	23.88	
100		135	136	23.36	23.58	23.60	23.59	23.34	
100	DFT-s-OFDM QPSK	270	0	23.31	23.48	23.55	23.55	23.49	25.50
100		1	1	23.60	23.86	23.95	23.92	24.05	
100		1	136	24.22	24.19	24.39	24.33	24.26	
100		1	271	24.07	23.95	23.68	23.68	23.56	25.50
100		135	1	22.92	23.04	23.15	23.12	23.21	
100		135	67	23.93	24.03	24.09	24.06	23.96	
100	DFT-s-OFDM 16QAM	135	136	22.91	23.08	23.15	23.15	22.86	25.50
100		270	0	22.85	23.04	23.11	23.10	23.04	
100	DFT-s-OFDM 64QAM	1	1	22.94	23.05	23.06	22.98	23.27	24.50
100	DFT-s-OFDM 256QAM	1	1	21.29	21.42	21.48	21.53	21.64	22.50
100	CP-OFDM QPSK	1	1	19.21	19.32	21.44	19.35	19.58	20.50
100	CP-OFDM 16QAM	1	1	22.15	22.21	22.21	22.20	22.45	23.50
100	CP-OFDM 64QAM	1	1	21.87	21.98	22.00	22.00	22.21	23.50
100	CP-OFDM 256QAM	1	1	20.37	20.49	20.50	20.54	20.74	21.50
100	CP-OFDM 256QAM	1	1	17.48	17.58	17.58	17.59	17.79	19.00
Channel				508200	513402	518598	523800	528996	25.50
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	23.57	23.72	23.84	23.86	23.93	25.50
Channel				507204	512904	518598	524298	529998	25.50
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	23.54	23.81	23.88	23.88	23.85	25.50
Channel				506202	512400	518598	524796	531000	25.50
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	23.65	23.75	23.87	23.94	23.70	25.50
Channel				505200	511902	518598	525798	531996	25.50
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	23.65	23.74	23.90	23.87	23.81	25.50
Channel				504204	511404	518598	525798	532998	25.50
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	23.66	23.82	24.03	23.94	23.97	25.50
Channel				503202	510900	518598	526296	534000	25.50
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	23.59	23.98	24.02	23.93	23.80	25.50
Channel				502200	510402	518598	526800	534996	25.50
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	23.68	23.89	23.97	23.94	23.89	25.50
Channel				501204	509904	518598	527298	535998	25.50
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	23.50	23.81	23.95	23.67	23.70	25.50
Channel				500700	509652	518598	527550	536496	25.50
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	23.70	23.81	23.96	23.70	23.74	25.50
Channel				500202	509400	518598	527796	537000	27.00
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	23.69	23.83	23.99	23.77	23.56	27.00

n77(3450-3550MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			21.14			22.50
100		1	136			20.81			
100		1	271			20.68			
100		135	1			20.45			22.50
100		135	67			20.95			
100		135	136			20.05			
100	DFT-s-OFDM QPSK	270	0			20.41			23.00
100		1	1			21.59			
100		1	136			20.98			
100		1	271			20.70			22.50
100		135	1			20.04			
100		135	67			20.89			
100		135	136			19.60			22.50
100		270	0			19.92			
100	DFT-s-OFDM 16QAM	1	1			20.35			21.50
100	DFT-s-OFDM 64QAM	1	1			18.83			20.50
100	DFT-s-OFDM 256QAM	1	1			16.77			18.00
100	CP-OFDM QPSK	1	1			19.57			20.50
100	CP-OFDM 16QAM	1	1			19.76			20.50
100	CP-OFDM 64QAM	1	1			17.26			18.50
100	CP-OFDM 256QAM	1	1			14.79			16.00
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	26.70	26.63	26.65	26.57	26.62	22.50
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	26.66	26.73	26.67	26.60	26.60	22.50
Channel				632334	632634	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	26.76	26.72	26.70	26.65	26.79	22.50
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	26.57	26.50	26.44	26.36	26.39	22.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	26.51	26.49	26.40	26.41	26.35	22.50
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	26.59	26.57	26.46	26.42	26.21	22.50
Channel				631000	632168	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	26.63	26.53	26.43	26.32	26.06	22.50
Channel				630834	632084	633334	634584	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3481.26	3500.01	3518.76	3537.48	
25	DFT-s-OFDM QPSK	1	1	26.60	26.52	26.45	26.23	25.97	22.50
Channel				630668	632000	633334	634666	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	26.70	26.52	26.44	26.23	26.03	22.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	26.69	26.53	26.41	26.19	26.07	22.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	26.67	26.56	26.44	26.15	26.13	22.50

n77(3450-3550MHz) (PC3)										
BW [MHz]	Modulation		RB num	RB start	Low Channel	Low/Middle Channel	High Channel	High Channel	Tune-up	
Channel							633334		limit	
Frequency (MHz)							3500.01		(dBm)	
100	DFT-s-OFDM PI/2 BPSK	1	1			21.14			22.00	
100		1	136			20.81				
100		1	271			20.68				
100		135	1			20.45			22.00	
100		135	67			20.95				
100		135	136			20.05				
100	DFT-s-OFDM QPSK	270	0			20.41			23.00	
100		1	1			21.55				
100		1	136			21.30				
100		1	271			20.70			22.00	
100		135	1			20.04				
100		135	67			20.89				
100		135	136			20.00				
100		270	0			20.19				
100										
100	DFT-s-OFDM 16QAM	1	1			20.35			21.00	
100	DFT-s-OFDM 64QAM	1	1			18.83			20.00	
100	DFT-s-OFDM 256QAM	1	1			16.77			17.00	
100	CP-OFDM QPSK	1	1			19.57			22.50	
100	CP-OFDM 16QAM	1	1			19.76			21.50	
100	CP-OFDM 64QAM	1	1			17.26			20.50	
100	CP-OFDM 256QAM	1	1			14.79			16.50	
Channel					633000	633168	633334	633500	633666	Tune-up
Frequency (MHz)					3495	3497.52	3500.01	3502.5	3504.99	limit
90	DFT-s-OFDM QPSK	1	1	21.20	21.13	21.15	21.07	21.12	22.00	
Channel					632668	633000	633334	633666	634000	Tune-up
Frequency (MHz)					3490.02	3495	3500.01	3504.99	3510	limit
80	DFT-s-OFDM QPSK	1	1	21.16	21.23	21.17	21.10	21.10	22.00	
Channel					632334	632668	633334	633832	634332	Tune-up
Frequency (MHz)					3485.01	3492.51	3500.01	3507.48	3514.98	limit
70	DFT-s-OFDM QPSK	1	1	21.26	21.22	21.20	21.15	21.29	22.00	
Channel					632000	632668	633334	634000	634666	Tune-up
Frequency (MHz)					3480	3490.02	3500.01	3510	3519.99	limit
60	DFT-s-OFDM QPSK	1	1	21.07	21.00	20.94	20.86	20.89	22.00	
Channel					631668	632500	633334	634166	635000	Tune-up
Frequency (MHz)					3475.02	3487.5	3500.01	3510	3525	limit
50	DFT-s-OFDM QPSK	1	1	21.01	20.99	20.90	20.91	20.85	22.00	
Channel					631334	632334	633334	634332	635332	Tune-up
Frequency (MHz)					3470.01	3485.01	3500.01	3514.98	3529.98	limit
40	DFT-s-OFDM QPSK	1	1	21.09	21.07	20.96	20.92	20.71	22.00	
Channel					631000	632168	633334	634500	635666	Tune-up
Frequency (MHz)					3465	3482.52	3500.01	3517.5	3534.99	limit
30	DFT-s-OFDM QPSK	1	1	21.13	21.03	20.93	20.82	20.56	22.00	
Channel					630834	632084	633334	634584	635832	Tune-up
Frequency (MHz)					3462.51	3481.26	3500.01	3518.76	3537.48	limit
25	DFT-s-OFDM QPSK	1	1	21.10	21.02	20.95	20.73	20.47	22.00	
Channel					630668	632000	633334	634666	636000	Tune-up
Frequency (MHz)					3460.02	3480	3500.01	3519.99	3540	limit
20	DFT-s-OFDM QPSK	1	1	21.20	21.02	20.94	20.73	20.53	22.00	
Channel					630500	631916	633334	634750	636166	Tune-up
Frequency (MHz)					3457.5	3478.74	3500.01	3521.25	3542.49	limit
15	DFT-s-OFDM QPSK	1	1	21.19	21.03	20.91	20.69	20.57	22.00	
Channel					630334	631834	633334	634834	636332	Tune-up
Frequency (MHz)					3455.01	3477.51	3500.01	3522.51	3544.98	limit
10	DFT-s-OFDM QPSK	1	1	21.17	21.06	20.94	20.65	20.63	22.00	

n77(3700-3980MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	22.00
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	20.52	20.68	20.71	20.53	20.44	22.00
100		1	136	20.56	20.61	20.34	20.72	20.82	
100		1	271	20.75	20.55	20.69	20.83	20.79	
100		135	1	20.12	20.24	20.24	20.04	20.08	22.00
100		135	67	20.71	20.74	20.74	20.59	20.73	
100		135	136	20.28	20.39	20.40	20.29	20.36	
100		270	0	20.19	20.31	20.30	20.17	20.27	
100	DFT-s-OFDM QPSK	1	1	20.47	20.64	20.59	20.50	20.44	22.00
100		1	136	20.78	20.82	20.77	20.76	20.84	
100		1	271	20.69	20.59	20.63	20.53	20.62	
100		135	1	19.64	19.75	19.75	19.96	19.79	22.00
100		135	67	20.69	20.73	20.73	20.57	20.75	
100		135	136	19.83	19.88	19.91	19.83	19.87	
100		270	0	19.69	19.78	19.79	19.66	19.75	
100	DFT-s-OFDM 16QAM	1	1	19.80	19.90	19.93	19.79	19.73	21.00
100	DFT-s-OFDM 64QAM	1	1	18.58	18.78	18.59	18.50	18.17	19.50
100	DFT-s-OFDM 256QAM	1	1	15.92	16.10	16.08	16.06	16.20	17.50
100	CP-OFDM QPSK	1	1	18.89	19.31	19.06	18.98	18.84	20.00
100	CP-OFDM 16QAM	1	1	18.79	18.93	18.94	18.79	18.69	20.00
100	CP-OFDM 64QAM	1	1	17.24	17.44	17.42	17.39	17.37	18.50
100	CP-OFDM 256QAM	1	1	14.19	14.38	14.38	14.32	14.38	15.50
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	20.55	20.73	20.65	20.53	20.55	22.00
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	20.49	20.72	20.67	20.57	20.57	22.00
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	20.38	20.65	20.63	20.55	20.44	22.00
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	20.40	20.53	20.54	20.58	20.61	22.00
Channel				648334	652168	656000	659832	663866	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	20.32	20.69	20.56	20.46	20.76	22.00
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	19.45	20.66	20.59	20.53	20.78	22.00
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	20.33	20.64	20.55	20.53	20.93	22.00
Channel				647500	651750	656000	660250	664500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	
25	DFT-s-OFDM QPSK	1	1	20.60	20.88	20.79	20.54	20.81	22.00
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	20.44	20.60	20.57	20.51	20.75	22.00
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	20.40	20.75	20.57	20.43	20.81	22.00
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	20.37	20.72	20.57	20.44	20.74	22.00

n77(3700-3980MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up
Channel				650000	653000	656000	659000	662000	limit
Frequency (MHz)				3750	3795	3840	3885	3930	(dBm)
100	DFT-s-OFDM PI/2 BPSK	1	1	20.52	20.68	20.68	20.53	20.44	22.00
100		1	136	20.56	20.79	20.34	20.72	20.82	
100		1	271	20.75	20.90	20.88	20.83	20.79	
100		135	1	20.12	20.24	20.24	20.04	20.08	22.00
100		135	67	20.71	20.74	20.74	20.59	20.73	
100		135	136	20.28	20.39	20.40	20.29	20.36	
100		270	0	20.19	20.31	20.30	20.17	20.27	
100	DFT-s-OFDM QPSK	1	1	21.07	21.14	21.22	21.20	21.18	23.00
100		1	136	20.88	20.98	21.07	21.09	20.97	
100		1	271	20.79	20.85	20.82	20.76	20.84	
100		135	1	19.64	19.75	19.75	19.88	19.59	22.00
100		135	67	20.69	20.73	20.73	20.57	20.72	
100		135	136	19.83	19.88	19.91	19.83	19.87	
100		270	0	19.69	19.78	19.79	19.66	19.75	
100	DFT-s-OFDM 16QAM	1	1	19.80	19.90	19.93	19.79	19.73	21.00
100	DFT-s-OFDM 64QAM	1	1	18.58	18.78	18.59	18.50	18.17	19.50
100	DFT-s-OFDM 256QAM	1	1	15.92	16.10	16.08	16.06	18.20	19.00
100	CP-OFDM QPSK	1	1	18.89	19.31	19.06	18.98	18.84	18.50
100	CP-OFDM 16QAM	1	1	18.79	18.93	18.94	18.79	18.69	17.50
100	CP-OFDM 64QAM	1	1	17.24	17.44	17.42	17.39	17.37	16.50
100	CP-OFDM 256QAM	1	1	14.19	14.38	14.38	14.32	14.38	12.50
Channel				649666	652834	656000	659166	662332	Tune-up
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	limit
90	DFT-s-OFDM QPSK	1	1	20.55	20.73	20.65	20.53	20.55	22.00
Channel				649334	652668	656000	659332	662666	Tune-up
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	limit
80	DFT-s-OFDM QPSK	1	1	20.49	20.72	20.67	20.57	20.57	22.00
Channel				649000	652500	656000	659500	663000	Tune-up
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	limit
70	DFT-s-OFDM QPSK	1	1	20.38	20.65	20.63	20.55	20.44	22.00
Channel				648668	652334	656000	659666	663332	Tune-up
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	limit
60	DFT-s-OFDM QPSK	1	1	20.40	20.53	20.54	20.58	20.61	22.00
Channel				648334	652168	656000	659832	663666	Tune-up
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	limit
50	DFT-s-OFDM QPSK	1	1	20.32	20.69	20.56	20.46	20.76	22.00
Channel				648000	652000	656000	660000	664000	Tune-up
Frequency (MHz)				3720	3780	3840	3900	3960	limit
40	DFT-s-OFDM QPSK	1	1	19.45	20.66	20.59	20.53	20.78	22.00
Channel				647668	651834	656000	660166	664332	Tune-up
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	limit
30	DFT-s-OFDM QPSK	1	1	20.33	20.64	20.55	20.53	20.93	22.00
Channel				647500	651750	656000	660250	664500	Tune-up
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	limit
25	DFT-s-OFDM QPSK	1	1	20.60	20.88	20.79	20.54	20.81	22.00
Channel				647334	651668	656000	660332	664666	Tune-up
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	limit
20	DFT-s-OFDM QPSK	1	1	20.44	20.60	20.57	20.51	20.75	22.00
Channel				647168	651584	656000	660416	664832	Tune-up
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	limit
15	DFT-s-OFDM QPSK	1	1	20.40	20.75	20.57	20.43	20.81	22.00
Channel				647000	651500	656000	660500	665000	Tune-up
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	limit
10	DFT-s-OFDM QPSK	1	1	20.37	20.72	20.57	20.44	20.74	22.00

5GHz WLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 5	802.11a 6Mbps	CH 52	5260	10.75	12.00	11.00	97.20
		CH 60	5300	10.57	12.00	11.00	
		CH 64	5320	10.14	11.50	11.00	
	802.11n-HT20 MCS0	CH 52	5260	9.71	11.00	11.00	97.01
		CH 60	5300	9.60	11.00	11.00	97.74
		CH 64	5320	8.95	10.50	11.00	97.74
	802.11n-HT40 MCS0	CH 54	5270	9.33	11.00	11.00	94.20
		CH 62	5310	9.15	10.50	11.00	95.59
	802.11ac-VHT20 MCS0	CH 52	5260	8.68	10.00	11.00	97.04
		CH 60	5300	8.63	10.00	11.00	97.04
		CH 64	5320	8.01	9.50	11.00	97.76
	802.11ac-VHT40 MCS0	CH 54	5270	7.47	9.00	11.00	94.20
		CH 62	5310	7.22	9.00	11.00	
	802.11ac-VHT80 MCS0	CH 58	5290	7.35	9.00	11.00	91.67

5GHzWLAN ANT 5

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
5.5GHz WLAN ANT 5	802.11a 6Mbps	CH 100	5500	13.04	14.50	13.00	97.90
		CH 116	5580	13.33	14.50	13.00	97.89
		CH 144	5720	12.72	14.00	13.00	97.20
	802.11n-HT20 MCS0	CH 100	5500	12.11	13.50	13.00	97.01
		CH 120	5600	12.39	14.00	13.00	
		CH 144	5720	11.68	13.00	13.00	
	802.11n-HT40 MCS0	CH 102	5510	11.95	13.50	13.00	94.20
		CH 126	5630	12.11	13.50	13.00	95.59
		CH 142	5710	11.84	13.00	13.00	94.12
	802.11ac-VHT20 MCS0	CH 100	5500	11.13	12.50	13.00	97.78
		CH 116	5580	11.41	13.00	13.00	97.04
		CH 144	5720	10.75	12.00	13.00	97.76
	802.11ac-VHT40 MCS0	CH 102	5510	10.02	11.50	13.00	95.65
		CH 108	5550	10.24	11.50	13.00	94.20
		CH 142	5710	9.81	11.00	13.00	94.20
	802.11ac-VHT80 MCS0	CH 106	5530	10.15	11.50	13.00	88.89
		CH 122	5610	10.47	12.00	13.00	91.43
		CH 138	5690	9.93	11.50	13.00	88.89

Reduced Power Level 3 for Hotspot

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	27.85	27.89	27.83	29.50	18.85	18.89	18.83	20.50
GPRS 1 Tx slot	27.82	27.87	27.77	29.50	18.82	18.87	18.77	20.50
GPRS 2 Tx slots	26.88	26.92	26.90	28.50	20.88	20.92	20.90	22.50
GPRS 3 Tx slots	24.79	24.87	24.84	26.50	20.53	20.61	20.58	22.24
GPRS 4 Tx slots	23.55	23.60	23.57	25.00	20.55	20.60	20.57	22.00
EDGE 1 Tx slot	23.30	23.39	23.34	24.50	14.30	14.39	14.34	15.50
EDGE 2 Tx slots	22.27	22.34	22.22	23.50	16.27	16.34	16.22	17.50
EDGE 3 Tx slots	19.88	19.92	19.85	21.50	15.62	15.66	15.59	17.24
EDGE 4 Tx slots	18.56	18.60	18.52	20.00	15.56	15.60	15.52	17.00
Mode		Max.	27.89			Max.	20.92	
Attenuator	Cable Loss : 0.8							

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	20.77	20.80	20.79	22.00	22.95	23.00	22.97	24.00
3GPP Rel 5 HSDPA Subtest-1	18.87	19.06	22.43	20.00	21.17	21.15	21.30	22.50
3GPP Rel 5 HSDPA Subtest-2	18.93	19.08	18.94	16.50	21.22	21.21	21.33	21.00
3GPP Rel 5 HSDPA Subtest-3	18.48	18.67	18.52	16.00	20.79	20.77	20.90	20.50
3GPP Rel 5 HSDPA Subtest-4	18.42	18.63	18.49	16.00	20.75	20.72	20.88	20.50
3GPP Rel 8 DC-HSDPA Subtest-1	18.86	19.04	18.97	20.00	21.14	21.13	21.32	22.50
3GPP Rel 8 DC-HSDPA Subtest-2	18.84	19.00	18.92	16.50	21.13	21.11	21.30	21.00
3GPP Rel 8 DC-HSDPA Subtest-3	18.28	18.48	18.43	16.00	20.59	20.59	20.78	20.50
3GPP Rel 8 DC-HSDPA Subtest-4	18.29	18.48	18.41	16.00	20.58	20.57	20.75	20.50
3GPP Rel 6 HSUPA Subtest-1	18.92	18.74	18.58	20.00	20.75	20.72	20.91	22.00
3GPP Rel 6 HSUPA Subtest-2	18.91	19.23	19.06	20.00	21.25	21.20	21.37	22.50
3GPP Rel 6 HSUPA Subtest-3	17.98	18.29	18.14	19.00	20.31	20.26	20.44	21.50
3GPP Rel 6 HSUPA Subtest-4	18.89	19.19	19.05	19.00	21.20	21.18	21.36	21.50
3GPP Rel 6 HSUPA Subtest-5	17.94	18.25	18.10	19.00	20.25	20.24	20.42	21.50
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	17.95	18.14	18.01	19.00	20.20	20.16	20.32	21.50
Attenuator		Cable Loss	0.8			Cable Loss	0.8	
Mode		Max.	20.80			Max.	23.00	

3	QPSK	8	0	20.00	20.04	19.92	22
3	QPSK	8	4	19.94	19.99	19.84	
3	QPSK	8	7	19.83	19.90	19.77	
3	QPSK	15	0	19.91	19.96	19.81	
3	16QAM	1	0	20.12	20.15	20.01	22
3	16QAM	1	8	20.06	20.10	19.93	
3	16QAM	1	14	20.01	20.05	19.95	
3	16QAM	8	0	19.28	19.33	19.19	
3	16QAM	8	4	19.22	19.29	19.14	21
3	16QAM	8	7	19.15	19.20	19.06	
3	16QAM	15	0	19.20	19.25	19.13	
3	64QAM	1	0	19.36	19.40	19.24	
3	64QAM	1	8	19.31	19.37	19.18	21
3	64QAM	1	14	19.25	19.32	19.19	
3	64QAM	8	0	18.27	18.31	18.17	
3	64QAM	8	4	18.24	18.28	18.10	
3	64QAM	8	7	18.13	18.19	18.04	20
3	64QAM	15	0	18.19	18.23	18.08	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	21.13	21.20	21.14	23
1.4	QPSK	1	3	21.06	21.10	20.94	
1.4	QPSK	1	5	21.01	21.07	20.88	
1.4	QPSK	3	0	19.98	20.02	19.90	
1.4	QPSK	3	1	19.92	19.97	19.82	
1.4	QPSK	3	3	19.81	19.88	19.75	
1.4	QPSK	6	0	19.89	19.94	19.79	22
1.4	16QAM	1	0	20.10	20.13	19.99	22
1.4	16QAM	1	3	20.04	20.08	19.91	
1.4	16QAM	1	5	19.99	20.03	19.93	
1.4	16QAM	3	0	19.26	19.31	19.17	
1.4	16QAM	3	1	19.20	19.27	19.12	
1.4	16QAM	3	3	19.13	19.18	19.04	
1.4	16QAM	6	0	19.18	19.23	19.11	21
1.4	64QAM	1	0	19.34	19.38	19.22	21
1.4	64QAM	1	3	19.29	19.35	19.16	
1.4	64QAM	1	5	19.23	19.30	19.17	
1.4	64QAM	3	0	18.25	18.29	18.15	
1.4	64QAM	3	1	18.22	18.26	18.08	
1.4	64QAM	3	3	18.11	18.17	18.02	
1.4	64QAM	6	0	18.17	18.21	18.06	20

3	QPSK	8	0	20.21	20.29	20.19	22
3	QPSK	8	4	20.13	20.26	20.04	
3	QPSK	8	7	19.99	20.13	20.06	
3	QPSK	15	0	20.10	20.25	20.18	
3	16QAM	1	0	20.48	20.50	20.38	22
3	16QAM	1	8	20.12	20.38	20.09	
3	16QAM	1	14	20.08	20.18	20.35	
3	16QAM	8	0	19.38	19.37	19.24	
3	16QAM	8	4	19.16	19.20	19.30	21
3	16QAM	8	7	19.18	19.30	19.30	
3	16QAM	15	0	19.19	19.34	19.33	
3	64QAM	1	0	19.23	19.41	19.33	
3	64QAM	1	8	19.16	19.36	19.15	21
3	64QAM	1	14	19.32	19.32	19.32	
3	64QAM	8	0	18.16	18.42	18.17	
3	64QAM	8	4	18.03	18.37	18.13	
3	64QAM	8	7	18.04	18.24	18.17	20
3	64QAM	15	0	18.14	18.29	18.26	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	21.37	21.46	21.43	23
1.4	QPSK	1	3	21.19	21.35	21.13	
1.4	QPSK	1	5	21.24	21.29	21.16	
1.4	QPSK	3	0	20.15	20.23	20.13	
1.4	QPSK	3	1	20.07	20.20	19.98	
1.4	QPSK	3	3	19.93	20.07	20.00	
1.4	QPSK	6	0	20.04	20.19	20.12	22
1.4	16QAM	1	0	20.42	20.44	20.32	22
1.4	16QAM	1	3	20.06	20.32	20.03	
1.4	16QAM	1	5	20.02	20.12	20.29	
1.4	16QAM	3	0	19.32	19.31	19.18	
1.4	16QAM	3	1	19.10	19.14	19.24	
1.4	16QAM	3	3	19.12	19.24	19.24	
1.4	16QAM	6	0	19.13	19.28	19.27	21
1.4	64QAM	1	0	19.17	19.35	19.27	21
1.4	64QAM	1	3	19.10	19.30	19.09	
1.4	64QAM	1	5	19.26	19.26	19.26	
1.4	64QAM	3	0	18.10	18.36	18.11	
1.4	64QAM	3	1	17.97	18.31	18.07	
1.4	64QAM	3	3	17.98	18.18	18.11	
1.4	64QAM	6	0	18.08	18.23	18.20	20

3	QPSK	8	0	20.25	20.36	20.31	22
3	QPSK	8	4	20.13	20.27	20.18	
3	QPSK	8	7	20.22	20.33	20.29	
3	QPSK	15	0	20.24	20.29	20.16	
3	16QAM	1	0	20.42	20.44	20.31	22
3	16QAM	1	8	20.16	20.36	20.37	
3	16QAM	1	14	20.17	20.23	20.42	
3	16QAM	8	0	19.17	19.38	19.29	
3	16QAM	8	4	19.10	19.21	19.33	21
3	16QAM	8	7	19.14	19.31	19.20	
3	16QAM	15	0	19.19	19.34	19.42	
3	64QAM	1	0	19.37	19.50	19.44	
3	64QAM	1	8	19.39	19.34	19.43	21
3	64QAM	1	14	19.24	19.46	19.48	
3	64QAM	8	0	18.24	18.36	18.27	
3	64QAM	8	4	18.28	18.33	18.21	
3	64QAM	8	7	18.18	18.27	18.19	20
3	64QAM	15	0	18.11	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	21.45	21.46	21.37	23
1.4	QPSK	1	3	21.30	21.38	21.28	
1.4	QPSK	1	5	21.23	21.41	21.21	
1.4	QPSK	3	0	20.22	20.33	20.28	
1.4	QPSK	3	1	20.10	20.24	20.15	
1.4	QPSK	3	3	20.19	20.30	20.26	
1.4	QPSK	6	0	20.21	20.26	20.13	
1.4	16QAM	1	0	20.39	20.41	20.28	21
1.4	16QAM	1	3	20.13	20.33	20.34	
1.4	16QAM	1	5	20.14	20.20	20.39	
1.4	16QAM	3	0	19.14	19.35	19.26	
1.4	16QAM	3	1	19.07	19.18	19.30	
1.4	16QAM	3	3	19.11	19.28	19.17	
1.4	16QAM	6	0	19.16	19.31	19.39	
1.4	64QAM	1	0	19.34	19.47	19.41	20
1.4	64QAM	1	3	19.36	19.31	19.40	
1.4	64QAM	1	5	19.21	19.43	19.45	
1.4	64QAM	3	0	18.21	18.33	18.24	
1.4	64QAM	3	1	18.25	18.30	18.18	
1.4	64QAM	3	3	18.15	18.24	18.16	
1.4	64QAM	6	0	18.08	18.12	18.06	

Band 66 (dBm) (ANT 3)							
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	21.73	21.77	21.68	23
20	QPSK	1	49	21.68	21.74	21.64	
20	QPSK	1	99	21.61	21.60	21.55	
20	QPSK	50	0	20.55	20.62	20.49	22
20	QPSK	50	24	20.49	20.55	20.40	
20	QPSK	50	50	20.45	20.50	20.46	
20	QPSK	100	0	20.43	20.46	20.48	22
20	16QAM	1	0	20.45	20.67	20.50	
20	16QAM	1	49	20.58	20.43	20.48	
20	16QAM	1	99	20.49	20.52	20.55	21
20	16QAM	50	0	19.52	19.65	19.56	
20	16QAM	50	24	19.37	19.63	19.43	
20	16QAM	50	50	19.42	19.46	19.46	21
20	16QAM	100	0	19.38	19.54	19.55	
20	64QAM	1	0	19.48	19.60	19.55	
20	64QAM	1	49	19.44	19.46	19.57	21
20	64QAM	1	99	19.53	19.52	19.49	
20	64QAM	50	0	18.52	18.65	18.48	
20	64QAM	50	24	18.45	18.57	18.49	20
20	64QAM	50	50	18.42	18.58	18.40	
20	64QAM	100	0	18.38	18.43	18.39	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	21.67	21.71	21.62	23
15	QPSK	1	37	21.62	21.68	21.58	
15	QPSK	1	74	21.55	21.54	21.49	
15	QPSK	36	0	20.49	20.56	20.43	22
15	QPSK	36	20	20.43	20.49	20.34	
15	QPSK	36	39	20.39	20.44	20.40	
15	QPSK	75	0	20.37	20.40	20.42	22
15	16QAM	1	0	20.39	20.61	20.44	
15	16QAM	1	37	20.52	20.37	20.42	
15	16QAM	1	74	20.43	20.46	20.49	21
15	16QAM	36	0	19.46	19.59	19.50	
15	16QAM	36	20	19.31	19.57	19.37	
15	16QAM	36	39	19.36	19.40	19.40	21
15	16QAM	75	0	19.32	19.48	19.49	
15	64QAM	1	0	19.42	19.54	19.49	
15	64QAM	1	37	19.38	19.40	19.51	20
15	64QAM	1	74	19.47	19.46	19.43	
15	64QAM	36	0	18.46	18.59	18.42	
15	64QAM	36	20	18.39	18.51	18.43	20
15	64QAM	36	39	18.36	18.52	18.34	
15	64QAM	75	0	18.32	18.37	18.33	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	21.62	21.66	21.57	23
10	QPSK	1	25	21.57	21.63	21.53	
10	QPSK	1	49	21.50	21.49	21.44	
10	QPSK	25	0	20.44	20.51	20.38	22
10	QPSK	25	12	20.38	20.44	20.29	
10	QPSK	25	25	20.34	20.39	20.35	
10	QPSK	50	0	20.32	20.35	20.37	22
10	16QAM	1	0	20.34	20.56	20.39	
10	16QAM	1	25	20.47	20.32	20.37	
10	16QAM	1	49	20.38	20.41	20.44	21
10	16QAM	25	0	19.41	19.54	19.45	
10	16QAM	25	12	19.26	19.52	19.32	
10	16QAM	25	25	19.31	19.35	19.35	21
10	16QAM	50	0	19.27	19.43	19.44	
10	64QAM	1	0	19.37	19.49	19.44	
10	64QAM	1	25	19.33	19.35	19.46	20
10	64QAM	1	49	19.42	19.41	19.38	
10	64QAM	25	0	18.41	18.54	18.37	
10	64QAM	25	12	18.34	18.46	18.38	20
10	64QAM	25	25	18.31	18.47	18.29	
10	64QAM	50	0	18.27	18.32	18.28	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	21.59	21.63	21.54	23
5	QPSK	1	12	21.54	21.60	21.50	
5	QPSK	1	24	21.47	21.46	21.41	
5	QPSK	12	0	20.41	20.48	20.35	22
5	QPSK	12	7	20.35	20.41	20.26	
5	QPSK	12	13	20.31	20.36	20.32	
5	QPSK	25	0	20.29	20.32	20.34	22
5	16QAM	1	0	20.31	20.53	20.36	
5	16QAM	1	12	20.44	20.29	20.34	
5	16QAM	1	24	20.35	20.38	20.41	21
5	16QAM	12	0	19.38	19.51	19.42	
5	16QAM	12	7	19.23	19.49	19.29	
5	16QAM	12	13	19.28	19.32	19.32	21
5	16QAM	25	0	19.24	19.40	19.41	
5	64QAM	1	0	19.34	19.46	19.41	
5	64QAM	1	12	19.30	19.32	19.43	21
5	64QAM	1	24	19.39	19.38	19.35	
5	64QAM	12	0	18.38	18.51	18.34	
5	64QAM	12	7	18.31	18.43	18.35	20
5	64QAM	12	13	18.28	18.44	18.26	
5	64QAM	25	0	18.24	18.29	18.25	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	21.53	21.57	21.48	23
3	QPSK	1	8	21.48	21.54	21.44	
3	QPSK	1	14	21.41	21.40	21.35	

3	QPSK	8	0	20.35	20.42	20.29	22
3	QPSK	8	4	20.29	20.35	20.20	
3	QPSK	8	7	20.25	20.30	20.26	
3	QPSK	15	0	20.23	20.26	20.28	22
3	16QAM	1	0	20.25	20.47	20.30	
3	16QAM	1	8	20.38	20.23	20.28	
3	16QAM	1	14	20.29	20.32	20.35	21
3	16QAM	8	0	19.32	19.45	19.36	
3	16QAM	8	4	19.17	19.43	19.23	
3	16QAM	8	7	19.22	19.26	19.26	21
3	16QAM	15	0	19.18	19.34	19.35	
3	64QAM	1	0	19.28	19.40	19.35	
3	64QAM	1	8	19.24	19.26	19.37	20
3	64QAM	1	14	19.33	19.32	19.29	
3	64QAM	8	0	18.32	18.45	18.28	
3	64QAM	8	4	18.25	18.37	18.29	20
3	64QAM	8	7	18.22	18.38	18.20	
3	64QAM	15	0	18.18	18.23	18.19	
Channel				131979	132322	132685	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	21.49	21.53	21.44	23
1.4	QPSK	1	3	21.44	21.50	21.40	
1.4	QPSK	1	5	21.37	21.36	21.31	
1.4	QPSK	3	0	20.31	20.38	20.25	
1.4	QPSK	3	1	20.25	20.31	20.16	
1.4	QPSK	3	3	20.21	20.26	20.22	
1.4	QPSK	6	0	20.19	20.22	20.24	22
1.4	16QAM	1	0	20.21	20.43	20.26	22
1.4	16QAM	1	3	20.34	20.19	20.24	
1.4	16QAM	1	5	20.25	20.28	20.31	
1.4	16QAM	3	0	19.28	19.41	19.32	
1.4	16QAM	3	1	19.13	19.39	19.19	
1.4	16QAM	3	3	19.18	19.22	19.22	
1.4	16QAM	6	0	19.14	19.30	19.31	21
1.4	64QAM	1	0	19.24	19.36	19.31	21
1.4	64QAM	1	3	19.20	19.22	19.33	
1.4	64QAM	1	5	19.29	19.28	19.25	
1.4	64QAM	3	0	18.28	18.41	18.24	
1.4	64QAM	3	1	18.21	18.33	18.25	
1.4	64QAM	3	3	18.18	18.34	18.16	
1.4	64QAM	6	0	18.14	18.19	18.15	20

Band 41 (2496~2690MHz) (dBm) PC3									
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)				2505	2549.5	2593	2638.5	2683	
20	QPSK	1	0	16.76	16.88	16.89	16.84	16.83	18.5
20	QPSK	1	49	16.58	16.83	16.84	16.56	16.78	
20	QPSK	1	99	16.63	16.71	16.71	16.64	16.84	
20	QPSK	50	0	15.70	15.76	15.80	15.71	15.73	17.5
20	QPSK	50	24	15.71	15.81	15.77	15.63	15.78	
20	QPSK	50	50	15.62	15.69	15.54	15.64	15.58	
20	QPSK	100	0	15.52	15.55	15.68	15.59	15.66	17.5
20	16QAM	1	0	15.75	15.83	15.86	15.73	15.79	
20	16QAM	1	49	15.66	15.74	15.78	15.75	15.77	
20	16QAM	1	99	15.62	15.75	15.76	15.64	15.79	16.5
20	16QAM	50	0	14.67	14.79	14.82	14.68	14.80	
20	16QAM	50	24	14.72	14.76	14.71	14.62	14.76	
20	16QAM	50	50	14.59	14.62	14.68	14.64	14.65	16.5
20	16QAM	100	0	14.73	14.64	14.57	14.68	14.81	
20	64QAM	1	0	14.67	14.89	14.90	14.69	14.78	
20	64QAM	1	49	14.66	14.88	14.78	14.70	14.78	16.5
20	64QAM	1	99	14.62	14.76	14.83	14.73	14.61	
20	64QAM	50	0	13.58	13.69	13.78	13.64	13.58	
20	64QAM	50	24	13.66	13.67	13.56	13.67	13.52	15.5
20	64QAM	50	50	13.52	13.48	13.53	13.50	13.48	
20	64QAM	100	0	13.56	13.61	13.68	13.56	13.49	
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	16.73	16.85	16.86	16.81	16.80	18.5
15	QPSK	1	37	16.55	16.80	16.81	16.53	16.75	
15	QPSK	1	74	16.60	16.68	16.68	16.61	16.81	
15	QPSK	38	0	15.67	15.73	15.77	15.68	15.70	17.5
15	QPSK	38	20	15.68	15.78	15.74	15.60	15.75	
15	QPSK	38	39	15.59	15.66	15.51	15.61	15.55	
15	QPSK	75	0	15.49	15.52	15.65	15.56	15.63	17.5
15	16QAM	1	0	15.72	15.80	15.83	15.70	15.76	
15	16QAM	1	37	15.63	15.71	15.75	15.72	15.74	
15	16QAM	1	74	15.59	15.72	15.73	15.61	15.76	16.5
15	16QAM	38	0	14.64	14.76	14.79	14.65	14.77	
15	16QAM	38	20	14.69	14.73	14.68	14.59	14.73	
15	16QAM	38	39	14.56	14.59	14.65	14.61	14.62	16.5
15	16QAM	75	0	14.70	14.61	14.54	14.65	14.78	
15	64QAM	1	0	14.64	14.86	14.87	14.66	14.75	
15	64QAM	1	37	14.63	14.85	14.75	14.67	14.75	16.5
15	64QAM	1	74	14.59	14.73	14.80	14.70	14.58	
15	64QAM	38	0	13.55	13.66	13.75	13.61	13.55	
15	64QAM	38	20	13.63	13.64	13.53	13.64	13.49	15.5
15	64QAM	38	39	13.49	13.45	13.50	13.47	13.45	
15	64QAM	75	0	13.53	13.58	13.65	13.53	13.46	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	16.68	16.80	16.81	16.76	16.75	18.5
10	QPSK	1	25	16.50	16.75	16.76	16.48	16.70	
10	QPSK	1	49	16.55	16.63	16.63	16.56	16.76	
10	QPSK	25	0	15.62	15.68	15.72	15.63	15.65	17.5
10	QPSK	25	12	15.63	15.73	15.69	15.55	15.70	
10	QPSK	25	25	15.54	15.61	15.46	15.56	15.50	
10	QPSK	50	0	15.44	15.47	15.60	15.51	15.58	17.5
10	16QAM	1	0	15.67	15.75	15.78	15.65	15.71	
10	16QAM	1	25	15.58	15.66	15.70	15.67	15.69	
10	16QAM	1	49	15.54	15.67	15.68	15.56	15.71	16.5
10	16QAM	25	0	14.59	14.71	14.74	14.60	14.72	
10	16QAM	25	12	14.64	14.68	14.63	14.54	14.68	
10	16QAM	25	25	14.51	14.54	14.60	14.56	14.57	16.5
10	16QAM	50	0	14.65	14.56	14.49	14.60	14.73	
10	64QAM	1	0	14.59	14.81	14.82	14.61	14.70	
10	64QAM	1	25	14.58	14.80	14.70	14.62	14.70	15.5
10	64QAM	1	49	14.54	14.68	14.75	14.65	14.53	
10	64QAM	25	0	13.50	13.61	13.70	13.56	13.50	
10	64QAM	25	12	13.58	13.59	13.48	13.59	13.44	15.5
10	64QAM	25	25	13.44	13.40	13.45	13.42	13.40	
10	64QAM	50	0	18.96	19.01	19.08	18.96	18.89	
Channel				39675	40148	40620	41093	41555	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	16.65	16.77	16.78	16.73	16.72	18.5
5	QPSK	1	12	16.47	16.72	16.73	16.45	16.67	
5	QPSK	1	24	16.52	16.60	16.60	16.53	16.73	
5	QPSK	12	0	15.59	15.65	15.69	15.60	15.62	17.5
5	QPSK	12	7	15.60	15.70	15.66	15.52	15.67	
5	QPSK	12	13	15.51	15.58	15.43	15.53	15.47	
5	QPSK	25	0	15.41	15.44	15.57	15.48	15.55	17.5
5	16QAM	1	0	15.64	15.72	15.75	15.62	15.68	
5	16QAM	1	12	15.55	15.63	15.67	15.64	15.66	
5	16QAM	1	24	15.51	15.64	15.65	15.53	15.68	16.5
5	16QAM	12	0	14.56	14.68	14.71	14.57	14.69	
5	16QAM	12	7	14.61	14.65	14.60	14.51	14.65	
5	16QAM	12	13	14.48	14.51	14.57	14.53	14.54	16.5
5	16QAM	25	0	14.62	14.53	14.46	14.57	14.70	
5	64QAM	1	0	14.56	14.78	14.79	14.58	14.67	
5	64QAM	1	12	14.55	14.77	14.67	14.59	14.67	16.5
5	64QAM	1	24	14.51	14.65	14.72	14.62	14.50	
5	64QAM	12	0	13.47	13.58	13.67	13.53	13.47	
5	64QAM	12	7	13.55	13.56	13.45	13.56	13.41	15.5
5	64QAM	12	13	13.41	13.37	13.42	13.39	13.37	
5	64QAM	25	0	13.45	13.50	13.57	13.45	13.38	

n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376000	378000	Tune-up limit (dBm)
Frequency (MHz)				1870	1880	1890	
40	DFT-s-OFDM PI/2 BPSK	1	1	19.39	19.47	19.50	21.00
40		1	108	19.46	19.53	19.45	
40		1	214	19.37	19.41	19.45	
40		108	1	19.01	19.07	19.16	21.00
40		108	54	19.58	19.56	19.61	
40		108	108	18.91	19.05	19.05	
40		216	0	18.96	18.99	19.09	
40	DFT-s-OFDM QPSK	1	1	19.70	19.74	19.79	21.00
40		1	108	19.67	19.73	19.69	
40		1	214	19.61	19.70	19.74	
40		108	1	18.58	18.63	18.71	21.00
40		108	54	19.60	19.58	19.65	
40		108	108	18.47	18.57	18.57	
40		216	0	18.53	18.54	18.64	
40	DFT-s-OFDM 16QAM	1	1	18.72	18.71	18.71	20.00
40	DFT-s-OFDM 64QAM	1	1	16.78	16.86	16.86	18.00
40	DFT-s-OFDM 256QAM	1	1	15.00	15.08	15.12	16.50
40	CP-OFDM QPSK	1	1	18.09	18.11	18.20	19.50
40	CP-OFDM 16QAM	1	1	17.68	17.96	17.80	19.00
40	CP-OFDM 64QAM	1	1	15.84	15.88	15.90	17.50
40	CP-OFDM 256QAM	1	1	13.01	13.05	13.08	14.00
Channel				373000	376000	379000	Tune-up limit (dBm)
Frequency (MHz)				1865	1880	1895	
30	DFT-s-OFDM QPSK	1	1	19.67	19.62	19.65	21.00
Channel				372500	376000	379500	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1880	1897.5	
25	DFT-s-OFDM QPSK	1	1	19.58	19.66	19.39	21.00
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM QPSK	1	1	19.55	19.60	19.49	21.00
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	19.56	19.59	19.45	21.00
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	19.59	19.51	19.62	21.00
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	19.50	19.27	19.52	21.00

n25 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376500	379000	Tune-up limit (dBm)
Frequency (MHz)				1870	1882.5	1895	
40	DFT-s-OFDM PI/2 BPSK	1	1	19.42	19.46	19.52	21.00
40		1	108	19.47	19.49	19.48	
40		1	214	19.45	19.44	19.51	
40		108	1	19.13	19.10	19.17	21.00
40		108	54	19.62	19.57	19.66	
40		108	108	18.96	19.07	19.10	
40		216	0	19.01	19.03	19.11	
40	DFT-s-OFDM QPSK	1	1	19.70	19.71	19.84	21.00
40		1	108	19.53	19.75	19.76	
40		1	214	19.45	19.67	19.70	
40		108	1	18.64	18.66	18.74	21.00
40		108	54	19.68	19.61	19.69	
40		108	108	18.50	18.61	18.62	
40		216	0	18.59	18.60	18.67	
40	DFT-s-OFDM 16QAM	1	1	18.73	18.72	18.79	20.00
40	DFT-s-OFDM 64QAM	1	1	16.85	16.91	17.01	19.00
40	DFT-s-OFDM 256QAM	1	1	15.04	15.11	15.20	16.00
40	CP-OFDM QPSK	1	1	18.14	18.16	18.24	19.50
40	CP-OFDM 16QAM	1	1	17.72	17.74	17.81	18.50
40	CP-OFDM 64QAM	1	1	15.91	15.96	16.04	17.50
40	CP-OFDM 256QAM	1	1	13.02	13.07	13.19	14.00
Channel				373000	376500	380000	Tune-up limit (dBm)
Frequency (MHz)				1865	1882.5	1900	
30	DFT-s-OFDM QPSK	1	1	19.70	19.41	19.61	21.00
Channel				372500	376500	380500	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1882.5	1902.5	
25	DFT-s-OFDM QPSK	1	1	19.63	19.38	19.57	21.00
Channel				372000	376500	381000	Tune-up limit (dBm)
Frequency (MHz)				1860	1882.5	1905	
20	DFT-s-OFDM QPSK	1	1	19.61	19.36	19.63	21.00
Channel				371500	376500	381500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5	
15	DFT-s-OFDM QPSK	1	1	19.62	19.36	19.66	21.00
Channel				371000	376500	382000	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	
10	DFT-s-OFDM QPSK	1	1	19.68	19.35	19.62	21.00
Channel				370500	376500	382500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5	
5	DFT-s-OFDM QPSK	1	1	19.60	19.56	19.36	21.00

n41 (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	Tune-up limit (dBm)
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	18.07	18.31	18.42	18.52	18.46	20.00
100		1	136	18.77	18.79	18.63	18.55	18.68	
100		1	271	18.60	18.49	18.25	18.24	18.21	
100		135	1	17.81	17.93	18.05	18.04	18.09	20.00
100		135	67	18.34	18.44	18.53	18.54	18.32	
100		135	136	17.80	18.02	18.04	18.03	17.78	
100		270	0	17.75	17.92	17.99	17.99	17.93	
100	DFT-s-OFDM QPSK	1	1	18.04	18.30	18.39	18.36	18.49	20.00
100		1	136	18.76	18.67	18.83	18.77	18.80	
100		1	271	18.51	18.39	18.12	18.12	18.00	
100		135	1	17.36	17.48	17.59	17.56	17.65	20.00
100		135	67	18.37	18.47	18.53	18.50	18.30	
100		135	136	17.35	17.52	17.59	17.59	17.30	
100		270	0	17.29	17.48	17.55	17.54	17.48	
100	DFT-s-OFDM 16QAM	1	1	17.38	17.49	17.50	17.42	17.71	19.00
100	DFT-s-OFDM 64QAM	1	1	15.73	15.86	15.92	15.97	16.08	17.50
100	DFT-s-OFDM 256QAM	1	1	13.65	13.76	15.88	13.79	14.02	15.00
100	CP-OFDM QPSK	1	1	16.59	16.65	16.65	16.64	16.89	18.00
100	CP-OFDM 16QAM	1	1	16.31	16.42	16.44	16.44	16.65	18.00
100	CP-OFDM 64QAM	1	1	14.81	14.93	14.94	14.98	15.18	16.00
100	CP-OFDM 256QAM	1	1	11.92	12.02	12.02	12.03	12.23	13.50
Channel				508200	513402	518598	523800	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	18.01	18.16	18.28	18.30	18.37	20.00
Channel				507204	512904	518598	524298	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	17.98	18.25	18.32	18.32	18.29	20.00
Channel				506202	512400	518598	524796	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	18.09	18.19	18.31	18.38	18.14	20.00
Channel				505200	511902	518598	525798	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	18.09	18.18	18.34	18.31	18.25	20.00
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	18.10	18.26	18.47	18.38	18.41	20.00
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	18.03	18.42	18.46	18.37	18.24	20.00
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	18.12	18.33	18.41	18.38	18.33	20.00
Channel				501204	509904	518598	527298	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	17.94	18.25	18.39	18.11	18.14	20.00
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	18.14	18.25	18.40	18.14	18.18	20.00
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	18.13	18.27	18.43	18.21	18.00	20.00

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	19.50
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	18.13	18.37	18.48	18.26	18.52	19.50
100		1	136	18.83	18.85	18.69	19.20	18.74	
100		1	271	18.66	18.55	18.31	18.30	18.27	
100		135	1	17.87	17.99	18.11	18.10	18.15	
100		135	67	18.40	18.50	18.59	18.60	18.38	
100		135	136	17.86	18.08	18.10	18.09	17.84	
100	DFT-s-OFDM QPSK	270	0	17.81	17.98	18.05	18.05	17.99	20.50
100		1	1	18.72	18.53	18.59	18.83	18.56	
100		1	136	19.20	19.30	19.36	19.24	19.25	
100		1	271	18.57	18.45	18.42	18.38	18.40	
100		135	1	17.42	17.54	17.65	17.62	17.71	
100		135	67	18.43	18.53	18.62	18.54	18.51	
100	DFT-s-OFDM 16QAM	135	136	17.41	17.58	17.65	17.65	17.36	19.50
100		270	0	17.35	17.54	17.61	17.60	17.54	
100		1	1	17.44	17.55	17.56	17.48	17.77	
100		1	1	15.79	15.92	15.98	16.03	16.14	
100		1	1	13.71	13.82	15.94	13.85	14.08	
100		1	1	16.65	16.71	16.71	16.70	16.95	
100	CP-OFDM QPSK	1	1	16.37	16.48	16.50	16.50	16.71	17.50
100	CP-OFDM 16QAM	1	1	14.87	14.99	15.00	15.04	15.24	16.50
100	CP-OFDM 64QAM	1	1	11.98	12.08	12.08	12.09	12.29	13.50
Channel				508200	513402	518598	523800	528998	Tune-up limit (dBm)
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	19.50
90	DFT-s-OFDM QPSK	1	1	18.07	18.22	18.34	18.36	18.43	19.50
Channel				507204	512904	518598	524298	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	19.50
80	DFT-s-OFDM QPSK	1	1	18.04	18.31	18.38	18.38	18.35	19.50
Channel				506202	512400	518598	524796	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	19.50
70	DFT-s-OFDM QPSK	1	1	18.15	18.25	18.37	18.44	18.20	19.50
Channel				505200	511902	518598	525798	531998	Tune-up limit (dBm)
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	19.50
60	DFT-s-OFDM QPSK	1	1	18.15	18.24	18.40	18.37	18.31	19.50
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	19.50
50	DFT-s-OFDM QPSK	1	1	18.16	18.32	18.53	18.44	18.47	19.50
Channel				503202	510900	518598	526296	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	19.50
40	DFT-s-OFDM QPSK	1	1	18.09	18.48	18.52	18.43	18.30	19.50
Channel				502200	510402	518598	526800	534998	Tune-up limit (dBm)
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	19.50
30	DFT-s-OFDM QPSK	1	1	18.18	18.39	18.47	18.44	18.39	19.50
Channel				501204	509904	518598	527298	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	19.50
20	DFT-s-OFDM QPSK	1	1	18.00	18.31	18.45	18.17	18.20	19.50
Channel				500700	509652	518598	527550	536498	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	19.50
15	DFT-s-OFDM QPSK	1	1	18.20	18.31	18.46	18.20	18.24	19.50
Channel				500202	509400	518598	527796	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	19.50
10	DFT-s-OFDM QPSK	1	1	18.19	18.33	18.49	18.27	18.06	19.50

n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	20.71	20.79	20.81	22.50
40		1	108	20.79	21.06	21.09	
40		1	214	20.96	21.06	20.90	
40		108	1	20.37	20.55	20.69	22.50
40		108	54	20.95	21.12	21.19	
40		108	108	20.51	20.61	20.66	
40		216	0	20.39	20.52	20.62	
40	DFT-s-OFDM QPSK	1	1	21.20	21.32	21.37	22.50
40		1	108	20.87	21.32	21.15	
40		1	214	21.00	21.15	21.17	
40		108	1	19.92	20.08	20.09	22.50
40		108	54	21.10	21.14	21.17	
40		108	108	20.04	20.17	20.14	
40		216	0	19.94	20.08	20.10	
40	DFT-s-OFDM 16QAM	1	1	19.96	20.04	20.05	21.50
40	DFT-s-OFDM 64QAM	1	1	18.16	18.25	18.25	19.50
40	DFT-s-OFDM 256QAM	1	1	16.48	16.48	16.55	18.00
40	CP-OFDM QPSK	1	1	19.49	19.48	19.55	20.50
40	CP-OFDM 16QAM	1	1	19.03	19.10	19.09	20.00
40	CP-OFDM 64QAM	1	1	17.23	17.28	17.32	19.00
40	CP-OFDM 256QAM	1	1	14.43	14.45	14.53	15.50
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	20.76	21.05	21.22	22.50
Channel				344500	349000	353500	Tune-up limit (dBm)
Frequency (MHz)				1722.5	1745	1767.5	
25	DFT-s-OFDM QPSK	1	1	20.96	21.02	21.21	22.50
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	20.91	20.77	21.16	22.50
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	20.95	20.96	21.05	22.50
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	20.98	21.03	20.92	22.50
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	20.86	21.04	21.04	22.50

n77(3450-3550MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			18.61			19.50
100		1	136			18.28			
100		1	271			18.15			
100		135	1			17.92			19.50
100		135	67			18.42			
100		135	136			17.52			
100		270	0			17.88			20.00
100	DFT-s-OFDM QPSK	1	1			19.02			
100		1	136			18.45			
100		1	271			18.17			
100		135	1			17.51			19.50
100		135	67			18.36			
100		135	136			17.07			
100		270	0			17.39			
100	DFT-s-OFDM 16QAM	1	1			17.82			18.50
100	DFT-s-OFDM 64QAM	1	1			16.30			17.50
100	DFT-s-OFDM 256QAM	1	1			14.24			15.50
100	CP-OFDM QPSK	1	1			17.04			18.50
100	CP-OFDM 16QAM	1	1			17.23			18.50
100	CP-OFDM 64QAM	1	1			14.73			15.50
100	CP-OFDM 256QAM	1	1			12.26			13.50
Channel				633000	633168	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	18.67	18.60	18.62	18.54	18.59	19.50
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	18.63	18.70	18.64	18.57	18.57	19.50
Channel				632334	632634	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	18.73	18.69	18.67	18.62	18.76	19.50
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	18.54	18.47	18.41	18.33	18.36	19.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	18.48	18.46	18.37	18.38	18.32	19.50
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	18.56	18.54	18.43	18.39	18.18	19.50
Channel				631000	632168	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	18.60	18.50	18.40	18.29	18.03	19.50
Channel				630834	632084	633334	634584	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3481.26	3500.01	3518.76	3537.48	
25	DFT-s-OFDM QPSK	1	1	18.57	18.49	18.42	18.20	17.94	19.50
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	18.67	18.49	18.41	18.20	18.00	19.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	18.66	18.50	18.38	18.16	18.04	17.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	18.64	18.53	18.41	18.12	18.10	18.50

n77(3450-3550MHz) (PC3)									
BW (MHz)	Modulation	RB num	RB start	Low Channel	in/Middle Channel	Side Channel	Side+High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM P12 BPSK	1	1			18.64			20.00
100		1	136			18.31			
100		1	271			18.18			
100		135	1			17.95			20.00
100		135	67			18.45			
100		135	136			17.55			
100		270	0			17.61			
100	DFT-s-OFDM QPSK	1	1			19.05			20.50
100		1	136			18.48			
100		1	271			18.20			
100		135	1			17.54			20.00
100		135	67			18.39			
100		135	136			17.50			
100		270	0			17.69			
100	DFT-s-OFDM 16QAM	1	1			17.85			19.00
100	DFT-s-OFDM 64QAM	1	1			16.33			16.00
100	DFT-s-OFDM 256QAM	1	1			14.27			15.50
100	CP-OFDM QPSK	1	1			17.07			16.50
100	CP-OFDM 16QAM	1	1			17.26			16.50
100	CP-OFDM 64QAM	1	1			14.76			15.50
100	CP-OFDM 256QAM	1	1			12.29			13.50
Channel				633000	633168	633334	633500	633666	Tune-up limit
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	18.70	18.63	18.65	18.57	18.62	20.00
Channel				632688	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	18.66	18.73	18.67	18.60	18.60	20.00
Channel				632334	632688	633334	633632	634332	Tune-up limit
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	18.76	18.72	18.70	18.65	18.79	20.00
Channel				632000	632688	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	18.57	18.50	18.44	18.36	18.39	20.00
Channel				631688	632000	633334	634166	635000	Tune-up limit
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	18.51	18.49	18.40	18.41	18.35	20.00
Channel				631334	632334	633334	634332	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	18.59	18.57	18.46	18.42	18.21	20.00
Channel				631000	632168	633334	634000	635666	Tune-up limit
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	18.63	18.53	18.43	18.32	18.06	20.00
Channel				630834	632084	633334	634084	635832	Tune-up limit
Frequency (MHz)				3462.51	3481.26	3500.01	3518.76	3537.48	
25	DFT-s-OFDM QPSK	1	1	18.60	18.52	18.45	18.23	17.97	20.00
Channel				630688	632000	633334	634666	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	18.70	18.52	18.44	18.23	18.03	20.00
Channel				630500	631916	633334	634750	636166	Tune-up limit
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	18.69	18.53	18.41	18.19	18.07	20.00
Channel				630334	631834	633334	634834	636332	Tune-up limit
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	18.67	18.56	18.44	18.15	18.13	20.00

n77(3700-3980MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	19.50
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	17.97	18.13	18.16	17.98	17.89	19.50
100		1	136	18.01	18.06	17.79	18.17	18.27	
100		1	271	18.20	18.00	18.14	18.28	18.24	
100		135	1	17.57	17.69	17.69	17.49	17.53	19.50
100		135	67	18.16	18.19	18.19	18.04	18.18	
100		135	136	17.73	17.84	17.85	17.74	17.81	
100		270	0	17.64	17.76	17.75	17.62	17.72	
100	DFT-s-OFDM QPSK	1	1	17.92	18.09	18.04	17.95	17.89	19.50
100		1	136	18.23	18.27	18.22	18.21	18.29	
100		1	271	18.14	18.04	18.08	17.98	18.07	
100		135	1	17.09	17.20	17.20	17.41	17.24	19.50
100		135	67	18.14	18.18	18.18	18.02	18.20	
100		135	136	17.28	17.33	17.36	17.28	17.32	
100		270	0	17.14	17.23	17.24	17.11	17.20	
100	DFT-s-OFDM 16QAM	1	1	17.25	17.35	17.38	17.24	17.18	18.50
100	DFT-s-OFDM 64QAM	1	1	16.03	16.23	16.04	15.95	15.62	17.50
100	DFT-s-OFDM 256QAM	1	1	13.37	13.55	13.53	13.51	13.65	14.50
100	CP-OFDM QPSK	1	1	16.34	16.76	16.51	16.43	16.29	17.50
100	CP-OFDM 16QAM	1	1	16.24	16.38	16.39	16.24	16.14	17.50
100	CP-OFDM 64QAM	1	1	14.69	14.89	14.87	14.84	14.82	15.50
100	CP-OFDM 256QAM	1	1	11.64	11.83	11.83	11.77	11.83	13.00
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	18.00	18.18	18.10	17.98	18.00	19.50
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	17.94	18.17	18.12	18.02	18.02	19.50
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	17.83	18.10	18.08	18.00	17.89	19.50
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	17.85	17.98	17.99	18.03	18.06	19.50
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	17.77	18.14	18.01	17.91	18.21	19.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	16.90	18.11	18.04	17.98	18.23	19.50
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	17.78	18.09	18.00	17.98	18.38	19.50
Channel				647500	651750	656000	660250	664500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	
25	DFT-s-OFDM QPSK	1	1	18.05	18.33	18.24	17.99	18.26	19.50
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	17.89	18.05	18.02	17.96	18.20	19.50
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	17.85	18.20	18.02	17.88	18.26	19.50
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	17.82	18.17	18.02	17.89	18.19	19.50

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	19.00
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM Pi/2 BPSK	1	1	17.52	17.68	17.68	17.53	17.44	19.00
100		1	136	17.56	17.79	17.34	17.72	17.82	
100		1	271	17.75	17.90	17.88	17.83	17.79	
100		135	1	17.12	17.24	17.24	17.04	17.08	19.00
100		135	67	17.71	17.74	17.74	17.59	17.73	
100		135	136	17.28	17.39	17.40	17.29	17.36	
100		270	0	17.19	17.31	17.30	17.17	17.27	
100	DFT-s-OFDM QPSK	1	1	18.07	18.14	18.22	18.20	18.18	19.50
100		1	136	17.88	17.98	18.07	18.09	17.97	
100		1	271	17.79	17.85	17.82	17.76	17.84	
100		135	1	16.64	16.75	16.75	16.88	16.59	19.00
100		135	67	17.69	17.73	17.73	17.57	17.72	
100		135	136	16.83	16.88	16.91	16.83	16.87	
100		270	0	16.69	16.78	16.79	16.66	16.75	
100	DFT-s-OFDM 16QAM	1	1	16.80	16.90	16.93	16.79	16.73	18.00
100	DFT-s-OFDM 64QAM	1	1	15.58	15.78	15.59	15.50	15.17	16.50
100	DFT-s-OFDM 256QAM	1	1	12.92	13.10	13.08	13.06	15.20	16.50
100	CP-OFDM QPSK	1	1	15.89	16.31	16.06	15.98	15.84	17.50
100	CP-OFDM 16QAM	1	1	15.79	15.93	15.94	15.79	15.69	17.50
100	CP-OFDM 64QAM	1	1	14.24	14.44	14.42	14.39	14.37	15.50
100	CP-OFDM 256QAM	1	1	11.19	11.38	11.38	11.32	11.38	12.50
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	19.00
90	DFT-s-OFDM QPSK	1	1	17.55	17.73	17.65	17.53	17.55	19.00
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	19.00
80	DFT-s-OFDM QPSK	1	1	17.49	17.72	17.67	17.57	17.57	19.00
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	19.00
70	DFT-s-OFDM QPSK	1	1	17.38	17.65	17.63	17.55	17.44	19.00
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	19.00
60	DFT-s-OFDM QPSK	1	1	17.40	17.53	17.54	17.58	17.61	19.00
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	19.00
50	DFT-s-OFDM QPSK	1	1	17.32	17.69	17.56	17.46	17.76	19.00
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	19.00
40	DFT-s-OFDM QPSK	1	1	16.45	17.66	17.59	17.53	17.78	19.00
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	19.00
30	DFT-s-OFDM QPSK	1	1	17.33	17.64	17.55	17.53	17.93	19.00
Channel				647500	651750	656000	660250	664500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	19.00
25	DFT-s-OFDM QPSK	1	1	17.60	17.88	17.79	17.54	17.81	19.00
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	19.00
20	DFT-s-OFDM QPSK	1	1	17.44	17.60	17.57	17.51	17.75	19.00
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	19.00
15	DFT-s-OFDM QPSK	1	1	17.40	17.75	17.57	17.43	17.81	19.00
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	19.00
10	DFT-s-OFDM QPSK	1	1	17.37	17.72	17.57	17.44	17.74	19.00

2.4GHz WLAN ANT 5

2.4GHz WLAN ANT 5	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11b 1Mbps	CH 1	2412	14.98	16.50	15.00	99.67
		CH 6	2437	15.20	16.50	15.00	99.67
		CH 11	2462	15.94	17.50	15.00	99.67
	802.11g 6Mbps	CH 1	2412	11.92	13.50	12.00	97.48
		CH 6	2437	15.08	16.50	15.00	97.62
		CH 11	2462	12.85	14.00	12.00	97.48
	802.11n-HT20 MCS0	CH 1	2412	11.83	13.00	12.00	97.31
		CH 6	2437	14.05	15.50	15.00	97.45
		CH 11	2462	12.74	14.00	12.00	97.31
	802.11n-HT40 MCS0	CH 3	2422	10.02	11.50	10.00	94.74
		CH 6	2437	14.29	15.50	15.00	95.03
		CH 9	2452	10.93	12.50	10.00	94.74

5GHz WLAN ANT 5

5.2GHz WLAN ANT 5	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 36	5180	10.89	12.50	11.00	97.90
		CH 44	5220	10.99	12.50	11.00	97.20
		CH 48	5240	10.73	12.00	11.00	97.20
	802.11n-HT20 MCS0	CH 36	5180	9.90	11.50	11.00	97.01
		CH 44	5220	9.95	11.50	11.00	97.74
		CH 48	5240	9.64	11.00	11.00	97.74
	802.11n-HT40 MCS0	CH 38	5190	9.78	11.00	11.00	94.20
		CH 46	5230	9.78	11.00	11.00	95.59
	802.11ac-VHT20 MCS0	CH 36	5180	9.00	10.50	11.00	97.04
		CH 44	5220	8.95	10.50	11.00	97.76
		CH 48	5240	8.78	10.00	11.00	97.04
	802.11ac-VHT40 MCS0	CH 38	5190	7.92	9.50	11.00	94.20
		CH 46	5230	7.76	9.00	11.00	
	802.11ac-VHT80 MCS0	CH 42	5210	7.87	9.00	11.00	91.43

5GHz WLAN ANT 5

5.8GHz WLAN ANT 5	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 149	5745	14.66	16.00	15.00	97.90
		CH 157	5785	14.47	16.00	15.00	97.20
		CH 165	5825	14.69	16.00	15.00	97.20
	802.11n-HT20 MCS0	CH 149	5745	13.76	15.00	15.00	97.01
		CH 157	5785	13.56	15.00	15.00	97.74
		CH 165	5825	13.74	15.00	15.00	97.01
	802.11n-HT40 MCS0	CH 151	5755	13.97	15.50	15.00	94.12
		CH 159	5795	13.60	15.00	15.00	95.59
	802.11ac-VHT20 MCS0	CH 149	5745	12.72	14.00	15.00	97.04
		CH 157	5785	12.45	14.00	15.00	97.78
		CH 165	5825	12.68	14.00	15.00	97.76
	802.11ac-VHT40 MCS0	CH 151	5755	12.00	13.50	15.00	94.20
		CH 159	5795	11.70	13.00	15.00	95.59
	802.11ac-VHT80 MCS0	CH 155	5775	11.53	13.00	15.00	91.67

3	16QAM	1	8	14.57	14.61	14.44	16.5
3	16QAM	1	14	14.52	14.56	14.46	
3	16QAM	8	0	13.79	13.84	13.70	
3	16QAM	8	4	13.73	13.80	13.65	
3	16QAM	8	7	13.66	13.71	13.57	15.5
3	16QAM	15	0	13.71	13.76	13.64	
3	64QAM	1	0	13.87	13.91	13.75	
3	64QAM	1	8	13.82	13.88	13.69	15.5
3	64QAM	1	14	13.76	13.83	13.70	
3	64QAM	8	0	12.78	12.82	12.68	
3	64QAM	8	4	12.75	12.79	12.61	14.5
3	64QAM	8	7	12.64	12.70	12.55	
3	64QAM	15	0	11.20	11.24	11.09	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	15.64	15.71	15.65	17.5
1.4	QPSK	1	3	15.57	15.61	15.45	
1.4	QPSK	1	5	15.52	15.58	15.39	
1.4	QPSK	3	0	14.49	14.53	14.41	
1.4	QPSK	3	1	14.43	14.48	14.33	
1.4	QPSK	3	3	14.32	14.39	14.26	
1.4	QPSK	6	0	14.40	14.45	14.30	16.5
1.4	16QAM	1	0	14.61	14.64	14.50	16.5
1.4	16QAM	1	3	14.55	14.59	14.42	
1.4	16QAM	1	5	14.50	14.54	14.44	
1.4	16QAM	3	0	13.77	13.82	13.68	
1.4	16QAM	3	1	13.71	13.78	13.63	
1.4	16QAM	3	3	13.64	13.69	13.55	
1.4	16QAM	6	0	13.69	13.74	13.62	15.5
1.4	64QAM	1	0	13.85	13.89	13.73	15.5
1.4	64QAM	1	3	13.80	13.86	13.67	
1.4	64QAM	1	5	13.74	13.81	13.68	
1.4	64QAM	3	0	12.76	12.80	12.66	
1.4	64QAM	3	1	12.73	12.77	12.59	
1.4	64QAM	3	3	12.62	12.68	12.53	
1.4	64QAM	6	0	11.18	11.22	11.07	14.5

3	16QAM	1	8	17.15	17.41	17.12	19
3	16QAM	1	14	17.11	17.21	17.38	
3	16QAM	8	0	16.41	16.40	16.27	
3	16QAM	8	4	16.19	16.23	16.33	
3	16QAM	8	7	16.21	16.33	16.33	18
3	16QAM	15	0	16.22	16.37	16.36	
3	64QAM	1	0	16.26	16.44	16.36	
3	64QAM	1	8	16.19	16.39	16.18	18
3	64QAM	1	14	16.35	16.35	16.35	
3	64QAM	8	0	15.19	15.45	15.20	
3	64QAM	8	4	15.06	15.40	15.16	17
3	64QAM	8	7	15.07	15.27	15.20	
3	64QAM	15	0	15.17	15.32	15.29	
Channel				19957	24250	28543	Tune-up limit (dBm)
Frequency (MHz)				1710.7	2140	2569.3	
1.4	QPSK	1	0	18.40	18.49	18.46	20
1.4	QPSK	1	3	18.22	18.38	18.16	
1.4	QPSK	1	5	18.27	18.32	18.19	
1.4	QPSK	3	0	17.18	17.26	17.16	
1.4	QPSK	3	1	17.10	17.23	17.01	
1.4	QPSK	3	3	16.96	17.10	17.03	
1.4	QPSK	6	0	17.07	17.22	17.15	20
1.4	16QAM	1	0	17.45	17.47	17.35	20
1.4	16QAM	1	3	17.09	17.35	17.06	
1.4	16QAM	1	5	17.05	17.15	17.32	
1.4	16QAM	3	0	16.35	16.34	16.21	
1.4	16QAM	3	1	16.13	16.17	16.27	
1.4	16QAM	3	3	16.15	16.27	16.27	
1.4	16QAM	6	0	16.16	16.31	16.30	20
1.4	64QAM	1	0	16.20	16.38	16.30	20
1.4	64QAM	1	3	16.13	16.33	16.12	
1.4	64QAM	1	5	16.29	16.29	16.29	
1.4	64QAM	3	0	15.13	15.39	15.14	
1.4	64QAM	3	1	15.00	15.34	15.10	
1.4	64QAM	3	3	15.01	15.21	15.14	
1.4	64QAM	6	0	15.11	15.26	15.23	20

Band 66 (dBm) (ANT 2)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	#REF!	#REF!	
Frequency (MHz)				1720	#REF!	#REF!	
20	QPSK	1	0	18.74	18.78	18.69	20
20	QPSK	1	49	18.69	18.75	18.65	
20	QPSK	1	99	18.62	18.61	18.56	
20	QPSK	50	0	17.56	17.63	17.50	
20	QPSK	50	24	17.50	17.56	17.41	19
20	QPSK	50	50	17.46	17.51	17.47	
20	QPSK	100	0	17.44	17.47	17.49	
20	16QAM	1	0	17.46	17.68	17.51	
20	16QAM	1	49	17.59	17.44	17.49	19
20	16QAM	1	99	17.50	17.53	17.56	
20	16QAM	50	0	16.53	16.66	16.57	
20	16QAM	50	24	16.38	16.64	16.44	
20	16QAM	50	50	16.43	16.47	16.47	18
20	16QAM	100	0	16.39	16.55	16.56	
20	64QAM	1	0	16.49	16.61	16.56	
20	64QAM	1	49	16.45	16.47	16.58	
20	64QAM	1	99	16.54	16.53	16.50	18
20	64QAM	50	0	15.53	15.66	15.49	
20	64QAM	50	24	15.46	15.58	15.50	
20	64QAM	50	50	15.43	15.59	15.41	
20	64QAM	100	0	15.39	15.44	15.40	17
Channel				132047	#REF!	#REF!	
Frequency (MHz)				1717.5	#REF!	#REF!	
15	QPSK	1	0	18.68	18.72	18.63	
15	QPSK	1	37	18.63	18.69	18.59	20
15	QPSK	1	74	18.56	18.55	18.50	
15	QPSK	36	0	17.50	17.57	17.44	
15	QPSK	36	20	17.44	17.50	17.35	
15	QPSK	36	39	17.40	17.45	17.41	19
15	QPSK	75	0	17.38	17.41	17.43	
15	16QAM	1	0	17.40	17.62	17.45	
15	16QAM	1	37	17.53	17.38	17.43	
15	16QAM	1	74	17.44	17.47	17.50	19
15	16QAM	36	0	16.47	16.60	16.51	
15	16QAM	36	20	16.32	16.58	16.38	
15	16QAM	36	39	16.37	16.41	16.41	
15	16QAM	75	0	16.33	16.49	16.50	18
15	64QAM	1	0	16.43	16.55	16.50	
15	64QAM	1	37	16.39	16.41	16.52	
15	64QAM	1	74	16.48	16.47	16.44	
15	64QAM	36	0	15.47	15.60	15.43	17
15	64QAM	36	20	15.40	15.52	15.44	
15	64QAM	36	39	15.37	15.53	15.35	
15	64QAM	75	0	15.33	15.38	15.34	
Channel				132022	#REF!	#REF!	
Frequency (MHz)				1715	#REF!	#REF!	
10	QPSK	1	0	18.63	18.67	18.58	20
10	QPSK	1	25	18.58	18.64	18.54	
10	QPSK	1	49	18.51	18.50	18.45	
10	QPSK	25	0	17.45	17.52	17.39	
10	QPSK	25	12	17.39	17.45	17.30	19
10	QPSK	25	25	17.35	17.40	17.36	
10	QPSK	50	0	17.33	17.36	17.38	
10	16QAM	1	0	17.35	17.57	17.40	
10	16QAM	1	25	17.48	17.33	17.38	19
10	16QAM	1	49	17.39	17.42	17.45	
10	16QAM	25	0	16.42	16.55	16.46	
10	16QAM	25	12	16.27	16.53	16.33	
10	16QAM	25	25	16.32	16.36	16.36	18
10	16QAM	50	0	16.28	16.44	16.45	
10	64QAM	1	0	16.38	16.50	16.45	
10	64QAM	1	25	16.34	16.36	16.47	
10	64QAM	1	49	16.43	16.42	16.39	18
10	64QAM	25	0	15.42	15.55	15.38	
10	64QAM	25	12	15.35	15.47	15.39	
10	64QAM	25	25	15.32	15.48	15.30	
10	64QAM	50	0	15.28	15.33	15.29	17
Channel				131997	#REF!	#REF!	
Frequency (MHz)				1712.5	#REF!	#REF!	
5	QPSK	1	0	18.60	18.64	18.55	
5	QPSK	1	12	18.55	18.61	18.51	20
5	QPSK	1	24	18.48	18.47	18.42	
5	QPSK	12	0	17.42	17.49	17.36	
5	QPSK	12	7	17.36	17.42	17.27	
5	QPSK	12	13	17.32	17.37	17.33	19
5	QPSK	25	0	17.30	17.33	17.35	
5	16QAM	1	0	17.32	17.54	17.37	
5	16QAM	1	12	17.45	17.30	17.35	
5	16QAM	1	24	17.36	17.39	17.42	19
5	16QAM	12	0	16.39	16.52	16.43	
5	16QAM	12	7	16.24	16.50	16.30	
5	16QAM	12	13	16.29	16.33	16.33	
5	16QAM	25	0	16.25	16.41	16.42	18
5	64QAM	1	0	16.35	16.47	16.42	
5	64QAM	1	12	16.31	16.33	16.44	
5	64QAM	1	24	16.40	16.39	16.36	
5	64QAM	12	0	15.39	15.52	15.35	17
5	64QAM	12	7	15.32	15.44	15.36	
5	64QAM	12	13	15.29	15.45	15.27	
5	64QAM	25	0	15.25	15.30	15.26	
Channel				131987	#REF!	#REF!	
Frequency (MHz)				1711.5	#REF!	#REF!	
3	QPSK	1	0	18.54	18.58	18.49	20
3	QPSK	1	8	18.49	18.55	18.45	
3	QPSK	1	14	18.42	18.41	18.36	
3	QPSK	8	0	17.36	17.43	17.30	
3	QPSK	8	4	17.30	17.36	17.21	19
3	QPSK	8	7	17.26	17.31	17.27	
3	QPSK	15	0	17.24	17.27	17.29	
3	16QAM	1	0	17.26	17.48	17.31	

3	16QAM	1	8	17.39	17.24	17.29	19
3	16QAM	1	14	17.30	17.33	17.36	
3	16QAM	8	0	16.33	16.46	16.37	
3	16QAM	8	4	16.18	16.44	16.24	18
3	16QAM	8	7	16.23	16.27	16.27	
3	16QAM	15	0	16.19	16.35	16.36	
3	64QAM	1	0	16.29	16.41	16.36	
3	64QAM	1	8	16.25	16.27	16.38	18
3	64QAM	1	14	16.34	16.33	16.30	
3	64QAM	8	0	15.33	15.46	15.29	
3	64QAM	8	4	15.26	15.38	15.30	17
3	64QAM	8	7	15.23	15.39	15.21	
3	64QAM	15	0	15.19	15.24	15.20	
Channel				131979	#REF!	#REF!	Tune-up limit (dBm)
Frequency (MHz)				1710.7	#REF!	#REF!	
1.4	QPSK	1	0	18.50	18.54	18.45	20
1.4	QPSK	1	3	18.45	18.51	18.41	
1.4	QPSK	1	5	18.38	18.37	18.32	
1.4	QPSK	3	0	17.32	17.39	17.26	
1.4	QPSK	3	1	17.26	17.32	17.17	
1.4	QPSK	3	3	17.22	17.27	17.23	
1.4	QPSK	6	0	17.20	17.23	17.25	19
1.4	16QAM	1	0	17.22	17.44	17.27	19
1.4	16QAM	1	3	17.35	17.20	17.25	
1.4	16QAM	1	5	17.26	17.29	17.32	
1.4	16QAM	3	0	16.29	16.42	16.33	
1.4	16QAM	3	1	16.14	16.40	16.20	
1.4	16QAM	3	3	16.19	16.23	16.23	
1.4	16QAM	6	0	16.15	16.31	16.32	18
1.4	64QAM	1	0	16.25	16.37	16.32	18
1.4	64QAM	1	3	16.21	16.23	16.34	
1.4	64QAM	1	5	16.30	16.29	16.26	
1.4	64QAM	3	0	15.29	15.42	15.25	
1.4	64QAM	3	1	15.22	15.34	15.26	
1.4	64QAM	3	3	15.19	15.35	15.17	
1.4	64QAM	6	0	15.15	15.20	15.16	17

Band 4 (dBm) (ANT3)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	14.93	15.02	14.99	16.5
20	QPSK	1	49	14.75	14.91	14.69	
20	QPSK	1	99	14.80	14.85	14.72	
20	QPSK	50	0	13.75	13.79	13.72	16.5
20	QPSK	50	24	13.63	13.76	13.54	
20	QPSK	50	50	13.49	13.63	13.56	
20	QPSK	100	0	13.60	13.75	13.68	16.5
20	16QAM	1	0	13.98	14.00	13.88	
20	16QAM	1	49	13.62	13.88	13.59	
20	16QAM	1	99	13.58	13.68	13.85	16.5
20	16QAM	50	0	12.88	12.87	12.74	
20	16QAM	50	24	12.66	12.70	12.80	
20	16QAM	50	50	12.68	12.80	12.80	16.5
20	16QAM	100	0	12.69	12.84	12.83	
20	64QAM	1	0	12.73	12.91	12.83	
20	64QAM	1	49	12.66	12.86	12.65	16.5
20	64QAM	1	99	12.82	12.82	12.82	
20	64QAM	50	0	11.66	11.92	11.67	
20	64QAM	50	24	11.53	11.87	11.63	16.5
20	64QAM	50	50	11.54	11.74	11.67	
20	64QAM	100	0	11.64	11.79	11.76	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	14.87	14.96	14.93	16.5
15	QPSK	1	37	14.69	14.85	14.63	
15	QPSK	1	74	14.74	14.79	14.66	
15	QPSK	36	0	13.65	13.73	13.63	16.5
15	QPSK	36	20	13.57	13.70	13.48	
15	QPSK	36	39	13.43	13.57	13.50	
15	QPSK	75	0	13.54	13.69	13.62	16.5
15	16QAM	1	0	13.92	13.94	13.82	
15	16QAM	1	37	13.56	13.82	13.53	
15	16QAM	1	74	13.52	13.62	13.79	16.5
15	16QAM	36	0	12.82	12.81	12.68	
15	16QAM	36	20	12.60	12.64	12.74	
15	16QAM	36	39	12.62	12.74	12.74	16.5
15	16QAM	75	0	12.63	12.78	12.77	
15	64QAM	1	0	12.67	12.85	12.77	
15	64QAM	1	37	12.60	12.80	12.59	16.5
15	64QAM	1	74	12.76	12.76	12.76	
15	64QAM	36	0	11.60	11.86	11.61	
15	64QAM	36	20	11.47	11.81	11.57	16.5
15	64QAM	36	39	11.48	11.68	11.61	
15	64QAM	75	0	11.58	11.73	11.70	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	14.82	14.91	14.88	16.5
10	QPSK	1	25	14.64	14.80	14.58	
10	QPSK	1	49	14.69	14.74	14.61	
10	QPSK	25	0	13.60	13.68	13.58	16.5
10	QPSK	25	12	13.52	13.65	13.43	
10	QPSK	25	25	13.43	13.52	13.45	
10	QPSK	50	0	13.49	13.64	13.57	16.5
10	16QAM	1	0	13.87	13.89	13.77	
10	16QAM	1	25	13.51	13.77	13.48	
10	16QAM	1	49	13.47	13.57	13.74	16.5
10	16QAM	25	0	12.77	12.76	12.63	
10	16QAM	25	12	12.55	12.59	12.69	
10	16QAM	25	25	12.57	12.69	12.69	16.5
10	16QAM	50	0	12.58	12.73	12.72	
10	64QAM	1	0	12.62	12.80	12.72	
10	64QAM	1	25	12.55	12.75	12.54	16.5
10	64QAM	1	49	12.71	12.71	12.71	
10	64QAM	25	0	11.55	11.81	11.56	
10	64QAM	25	12	11.42	11.76	11.52	16.5
10	64QAM	25	25	11.43	11.63	11.56	
10	64QAM	50	0	11.53	11.68	11.65	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	14.80	14.89	14.86	16.5
5	QPSK	1	12	14.62	14.78	14.56	
5	QPSK	1	24	14.67	14.72	14.59	
5	QPSK	12	0	13.58	13.66	13.56	16.5
5	QPSK	12	7	13.50	13.63	13.41	
5	QPSK	12	13	13.36	13.50	13.43	
5	QPSK	25	0	13.47	13.62	13.55	16.5
5	16QAM	1	0	13.85	13.87	13.75	
5	16QAM	1	12	13.49	13.75	13.46	
5	16QAM	1	24	13.45	13.55	13.72	16.5
5	16QAM	12	0	12.75	12.74	12.61	
5	16QAM	12	7	12.53	12.57	12.67	
5	16QAM	12	13	12.55	12.67	12.67	16.5
5	16QAM	25	0	12.56	12.71	12.70	
5	64QAM	1	0	12.60	12.78	12.70	
5	64QAM	1	12	12.53	12.73	12.52	16.5
5	64QAM	1	24	12.69	12.69	12.69	
5	64QAM	12	0	11.53	11.79	11.54	
5	64QAM	12	7	11.40	11.74	11.50	16.5
5	64QAM	12	13	11.41	11.61	11.54	
5	64QAM	25	0	11.51	11.66	11.63	
Channel				19855	20065	20275	Tune-up limit (dBm)
Frequency (MHz)				1701.5	1722.5	1743.5	
3	QPSK	1	0	14.77	14.86	14.83	16.5
3	QPSK	1	8	14.59	14.75	14.53	
3	QPSK	1	14	14.64	14.69	14.56	
3	QPSK	8	0	13.55	13.63	13.53	16.5
3	QPSK	8	4	13.47	13.60	13.38	
3	QPSK	8	7	13.33	13.47	13.40	

3	QPSK	15	0	13.44	13.59	13.52	16.5
3	16QAM	1	0	13.82	13.84	13.72	
3	16QAM	1	8	13.46	13.72	13.43	
3	16QAM	1	14	13.42	13.52	13.69	16.5
3	16QAM	8	0	12.72	12.71	12.58	
3	16QAM	8	4	12.50	12.54	12.64	
3	16QAM	8	7	12.52	12.64	12.64	16.5
3	16QAM	15	0	12.53	12.68	12.67	
3	64QAM	1	0	12.57	12.75	12.67	
3	64QAM	1	8	12.50	12.70	12.49	16.5
3	64QAM	1	14	12.66	12.66	12.66	
3	64QAM	8	0	11.50	11.76	11.51	
3	64QAM	8	4	11.37	11.71	11.47	16.5
3	64QAM	8	7	11.38	11.58	11.51	
3	64QAM	15	0	11.48	11.63	11.60	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	14.71	14.80	14.77	16.5
1.4	QPSK	1	3	14.53	14.69	14.47	
1.4	QPSK	1	5	14.58	14.63	14.50	
1.4	QPSK	3	0	13.49	13.57	13.47	
1.4	QPSK	3	1	13.41	13.54	13.32	
1.4	QPSK	3	3	13.27	13.41	13.34	
1.4	QPSK	6	0	13.38	13.53	13.46	16.5
1.4	16QAM	1	0	13.76	13.78	13.66	16.5
1.4	16QAM	1	3	13.40	13.66	13.37	
1.4	16QAM	1	5	13.36	13.46	13.63	
1.4	16QAM	3	0	12.66	12.65	12.52	
1.4	16QAM	3	1	12.44	12.48	12.58	
1.4	16QAM	3	3	12.46	12.58	12.58	
1.4	16QAM	6	0	12.47	12.62	12.61	16.5
1.4	64QAM	1	0	12.51	12.69	12.61	16.5
1.4	64QAM	1	3	12.44	12.64	12.43	
1.4	64QAM	1	5	12.60	12.60	12.60	
1.4	64QAM	3	0	11.44	11.70	11.45	
1.4	64QAM	3	1	11.31	11.65	11.41	
1.4	64QAM	3	3	11.32	11.52	11.45	
1.4	64QAM	6	0	11.42	11.57	11.54	16.5

Band 66 (dBm) (ANT 3)							
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	15.07	15.11	15.02	16.5
20	QPSK	1	49	15.02	15.08	14.98	
20	QPSK	1	99	15.03	15.02	14.97	
20	QPSK	50	0	14.09	14.16	14.03	15.5
20	QPSK	50	24	14.03	14.09	13.94	
20	QPSK	50	50	13.99	14.04	14.00	
20	QPSK	100	0	13.97	14.00	14.02	15.5
20	16QAM	1	0	13.99	14.21	14.04	
20	16QAM	1	49	14.12	13.97	14.02	
20	16QAM	1	99	14.03	14.06	14.09	14.5
20	16QAM	50	0	13.06	13.19	13.10	
20	16QAM	50	24	12.91	13.17	12.97	
20	16QAM	50	50	12.96	13.00	13.00	14.5
20	16QAM	100	0	12.92	13.08	13.09	
20	64QAM	1	0	13.02	13.14	13.09	
20	64QAM	1	49	12.98	13.00	13.11	14.5
20	64QAM	1	99	13.07	13.06	13.03	
20	64QAM	50	0	12.06	12.19	12.02	
20	64QAM	50	24	11.99	12.11	12.03	13.5
20	64QAM	50	50	11.96	12.12	11.94	
20	64QAM	100	0	11.92	11.97	11.93	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	15.02	15.06	14.97	16.5
15	QPSK	1	37	14.97	15.03	14.93	
15	QPSK	1	74	14.98	14.97	14.92	
15	QPSK	36	0	14.04	14.11	13.98	15.5
15	QPSK	36	20	13.98	14.04	13.89	
15	QPSK	36	39	13.94	13.99	13.95	
15	QPSK	75	0	13.92	13.95	13.97	15.5
15	16QAM	1	0	13.94	14.16	13.99	
15	16QAM	1	37	14.07	13.92	13.97	
15	16QAM	1	74	13.98	14.01	14.04	14.5
15	16QAM	36	0	13.01	13.14	13.05	
15	16QAM	36	20	12.86	13.12	12.92	
15	16QAM	36	39	12.91	12.95	12.95	14.5
15	16QAM	75	0	12.87	13.03	13.04	
15	64QAM	1	0	12.97	13.09	13.04	
15	64QAM	1	37	12.93	12.95	13.06	14.5
15	64QAM	1	74	13.02	13.01	12.98	
15	64QAM	36	0	12.01	12.14	11.97	
15	64QAM	36	20	11.94	12.06	11.98	13.5
15	64QAM	36	39	11.91	12.07	11.89	
15	64QAM	75	0	11.87	11.92	11.88	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	14.98	15.02	14.93	16.5
10	QPSK	1	25	14.93	14.99	14.89	
10	QPSK	1	49	14.94	14.93	14.88	
10	QPSK	25	0	14.00	14.07	13.94	15.5
10	QPSK	25	12	13.94	14.00	13.85	
10	QPSK	25	25	13.90	13.95	13.91	
10	QPSK	50	0	13.88	13.91	13.93	15.5
10	16QAM	1	0	13.90	14.12	13.95	
10	16QAM	1	25	14.03	13.88	13.93	
10	16QAM	1	49	13.94	13.97	14.00	14.5
10	16QAM	25	0	12.97	13.10	13.01	
10	16QAM	25	12	12.82	13.08	12.88	
10	16QAM	25	25	12.87	12.91	12.91	14.5
10	16QAM	50	0	12.83	12.99	13.00	
10	64QAM	1	0	12.93	13.05	13.00	
10	64QAM	1	25	12.89	12.91	13.02	13.5
10	64QAM	1	49	12.98	12.97	12.94	
10	64QAM	25	0	11.97	12.10	11.93	
10	64QAM	25	12	11.90	12.02	11.94	13.5
10	64QAM	25	25	11.87	12.03	11.85	
10	64QAM	50	0	11.83	11.88	11.84	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	14.92	14.96	14.87	15.5
5	QPSK	1	12	14.87	14.93	14.83	
5	QPSK	1	24	14.88	14.87	14.82	
5	QPSK	12	0	13.94	14.01	13.88	14.5
5	QPSK	12	7	13.88	13.94	13.79	
5	QPSK	12	13	13.84	13.89	13.85	
5	QPSK	25	0	13.82	13.85	13.87	14.5
5	16QAM	1	0	13.84	14.06	13.89	
5	16QAM	1	12	13.97	13.82	13.87	
5	16QAM	1	24	13.88	13.91	13.94	13.5
5	16QAM	12	0	12.91	13.04	12.95	
5	16QAM	12	7	12.76	13.02	12.82	
5	16QAM	12	13	12.81	12.85	12.85	13.5
5	16QAM	25	0	12.77	12.93	12.94	
5	64QAM	1	0	12.87	12.99	12.94	
5	64QAM	1	12	12.83	12.85	12.96	13.5
5	64QAM	1	24	12.92	12.91	12.88	
5	64QAM	12	0	11.91	12.04	11.87	
5	64QAM	12	7	11.84	11.96	11.88	12.5
5	64QAM	12	13	11.81	11.97	11.79	
5	64QAM	25	0	11.77	11.82	11.78	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	14.89	14.93	14.84	16.5
3	QPSK	1	8	14.84	14.90	14.80	
3	QPSK	1	14	14.85	14.84	14.79	
3	QPSK	8	0	13.91	13.98	13.85	15.5
3	QPSK	8	4	13.85	13.91	13.76	
3	QPSK	8	7	13.81	13.86	13.82	

3	QPSK	15	0	13.79	13.82	13.84	15.5
3	16QAM	1	0	13.81	14.03	13.86	
3	16QAM	1	8	13.94	13.79	13.84	
3	16QAM	1	14	13.85	13.88	13.91	14.5
3	16QAM	8	0	12.88	13.01	12.92	
3	16QAM	8	4	12.73	12.99	12.79	
3	16QAM	8	7	12.78	12.82	12.82	14.5
3	16QAM	15	0	12.74	12.90	12.91	
3	64QAM	1	0	12.84	12.96	12.91	
3	64QAM	1	8	12.80	12.82	12.93	13.5
3	64QAM	1	14	12.89	12.88	12.85	
3	64QAM	8	0	11.88	12.01	11.84	
3	64QAM	8	4	11.81	11.93	11.85	13.5
3	64QAM	8	7	11.78	11.94	11.76	
3	64QAM	15	0	11.74	11.79	11.75	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	14.87	14.91	14.82	16.5
1.4	QPSK	1	3	14.82	14.88	14.78	
1.4	QPSK	1	5	14.83	14.82	14.77	
1.4	QPSK	3	0	13.89	13.96	13.83	
1.4	QPSK	3	1	13.83	13.89	13.74	
1.4	QPSK	3	3	13.79	13.84	13.80	15.5
1.4	QPSK	6	0	13.77	13.80	13.82	
1.4	16QAM	1	0	13.79	14.01	13.84	15.5
1.4	16QAM	1	3	13.92	13.77	13.82	
1.4	16QAM	1	5	13.83	13.86	13.89	
1.4	16QAM	3	0	12.86	12.99	12.90	
1.4	16QAM	3	1	12.71	12.97	12.77	
1.4	16QAM	3	3	12.76	12.80	12.80	14.5
1.4	16QAM	6	0	12.72	12.88	12.89	
1.4	64QAM	1	0	12.82	12.94	12.89	14.5
1.4	64QAM	1	3	12.78	12.80	12.91	
1.4	64QAM	1	5	12.87	12.86	12.83	
1.4	64QAM	3	0	11.86	11.99	11.82	
1.4	64QAM	3	1	11.79	11.91	11.83	
1.4	64QAM	3	3	11.76	11.92	11.74	13.5
1.4	64QAM	6	0	11.72	11.77	11.73	

n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376000	378000	Tune-up limit (dBm)
Frequency (MHz)				1870	1880	1890	
40	DFT-s-OFDM PI/2 BPSK	1	1	12.92	13.00	13.03	15.00
40		1	108	12.99	13.06	12.98	
40		1	214	12.90	12.94	12.98	
40		108	1	12.54	12.60	12.69	15.00
40		108	54	13.11	13.09	13.14	
40		108	108	12.44	12.58	12.58	
40		216	0	12.49	12.52	12.62	
40	DFT-s-OFDM QPSK	1	1	13.23	13.27	13.32	15.00
40		1	108	13.20	13.26	13.22	
40		1	214	13.14	13.23	13.27	
40		108	1	12.11	12.16	12.24	14.50
40		108	54	13.13	13.11	13.18	
40		108	108	12.00	12.10	12.10	
40		216	0	12.06	12.07	12.17	
40	DFT-s-OFDM 16QAM	1	1	12.25	12.24	12.24	13.50
40	DFT-s-OFDM 64QAM	1	1	10.31	10.39	10.39	11.50
40	DFT-s-OFDM 256QAM	1	1	8.53	8.61	8.65	10.00
40	CP-OFDM QPSK	1	1	11.62	11.64	11.73	12.50
40	CP-OFDM 16QAM	1	1	11.21	11.49	11.33	12.50
40	CP-OFDM 64QAM	1	1	9.37	9.41	9.43	10.50
40	CP-OFDM 256QAM	1	1	6.54	6.58	6.61	7.50
Channel				373000	376000	379000	Tune-up limit (dBm)
Frequency (MHz)				1865	1880	1895	
30	DFT-s-OFDM QPSK	1	1	13.20	13.15	13.18	15.00
Channel				372500	376000	379500	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1880	1897.5	
25	DFT-s-OFDM QPSK	1	1	13.11	13.19	12.92	15.00
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM QPSK	1	1	13.08	13.13	13.02	15.00
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	13.09	13.12	12.98	15.00
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	13.12	13.04	13.15	15.00
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	13.03	12.80	13.05	15.00

n41 (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	12.00
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	10.13	10.37	10.48	10.58	10.52	12.00
100		1	136	10.83	10.85	10.69	10.61	10.74	
100		1	271	10.66	10.55	10.31	10.30	10.27	
100		135	1	9.87	9.99	10.11	10.10	10.15	12.00
100		135	67	10.40	10.50	10.59	10.60	10.38	
100		135	136	9.86	10.08	10.10	10.09	9.84	
100	DFT-s-OFDM QPSK	270	0	9.81	9.98	10.05	10.05	9.99	12.00
100		1	1	10.10	10.36	10.45	10.42	10.55	
100		1	136	10.72	10.53	10.89	10.83	10.56	
100		1	271	10.57	10.45	10.18	10.18	10.06	12.00
100		135	1	9.42	9.54	9.65	9.62	9.71	
100		135	67	10.43	10.53	10.59	10.56	10.36	
100	DFT-s-OFDM 16QAM	135	136	9.41	9.58	9.65	9.65	9.36	12.00
100		270	0	9.35	9.54	9.61	9.60	9.54	
100	DFT-s-OFDM 64QAM	1	1	9.44	9.55	9.56	9.48	9.77	11.00
100	DFT-s-OFDM 256QAM	1	1	7.79	7.92	7.98	8.03	8.14	9.50
100	CP-OFDM QPSK	1	1	5.71	5.82	7.94	5.85	6.08	9.00
100	CP-OFDM 16QAM	1	1	8.65	8.71	8.71	8.70	8.95	10.50
100	CP-OFDM 64QAM	1	1	8.37	8.48	8.50	8.50	8.71	9.50
100	CP-OFDM 256QAM	1	1	6.87	6.99	7.00	7.04	7.24	8.00
100	CP-OFDM 1024QAM	1	1	3.98	4.08	4.08	4.09	4.29	5.50
Channel				508200	513402	518598	523800	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	10.07	10.22	10.34	10.36	10.43	12.00
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	10.04	10.31	10.38	10.38	10.35	12.00
Channel				506202	512400	518598	524796	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	10.15	10.25	10.37	10.44	10.20	12.00
Channel				505200	511902	518598	525798	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	10.15	10.24	10.40	10.37	10.31	12.00
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	10.16	10.32	10.53	10.44	10.47	12.00
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	10.09	10.48	10.52	10.43	10.30	12.00
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	10.18	10.39	10.47	10.44	10.39	12.00
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	10.00	10.31	10.45	10.17	10.20	12.00
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	10.20	10.31	10.46	10.20	10.24	12.00
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	10.19	10.33	10.49	10.27	10.06	12.00

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	11.50
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	9.63	9.87	9.98	9.76	10.02	11.50
100		1	136	10.33	10.35	10.19	10.70	10.24	
100		1	271	10.16	10.05	9.81	9.80	9.77	
100		135	1	9.37	9.49	9.61	9.60	9.65	
100		135	67	9.90	10.00	10.09	10.10	9.88	
100		135	136	9.36	9.58	9.60	9.59	9.34	
100	DFT-s-OFDM QPSK	270	0	9.31	9.48	9.55	9.55	9.49	11.50
100		1	1	10.22	10.03	10.09	10.33	10.06	
100		1	136	10.70	10.80	10.86	10.74	10.75	
100		1	271	10.07	9.95	9.92	9.88	9.90	
100		135	1	8.92	9.04	9.15	9.12	9.21	
100		135	67	9.93	10.03	10.12	10.04	10.01	
100	DFT-s-OFDM 16QAM	135	136	8.91	9.08	9.15	9.15	8.86	11.50
100		270	0	8.85	9.04	9.11	9.10	9.04	
100		1	1	8.94	9.05	9.06	8.98	9.27	
100		1	1	7.29	7.42	7.48	7.53	7.64	
100		1	1	5.21	5.32	7.44	5.35	5.58	
100		1	1	8.15	8.21	8.21	8.20	8.45	
100	CP-OFDM QPSK	1	1	7.87	7.98	8.00	8.00	8.21	9.50
100	CP-OFDM 16QAM	1	1	7.87	7.98	8.00	8.00	8.21	9.50
100	CP-OFDM 64QAM	1	1	6.37	6.49	6.50	6.54	6.74	7.50
100	CP-OFDM 256QAM	1	1	3.48	3.58	3.58	3.59	3.79	4.50
Channel				508200	513402	518598	523800	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	9.57	9.72	9.84	9.86	9.93	11.50
Channel				507204	512904	518598	524298	529998	Tune-up limit (dBm)
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	9.54	9.81	9.88	9.88	9.85	11.50
Channel				506202	512400	518598	524796	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	9.65	9.75	9.87	9.94	9.70	11.50
Channel				505200	511902	518598	525798	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	9.65	9.74	9.90	9.87	9.81	11.50
Channel				504204	511404	518598	525798	532998	Tune-up limit (dBm)
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	9.66	9.82	10.03	9.94	9.97	11.50
Channel				503202	510900	518598	526296	534000	Tune-up limit (dBm)
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	9.59	9.98	10.02	9.93	9.80	11.50
Channel				502200	510402	518598	526800	534996	Tune-up limit (dBm)
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	9.68	9.89	9.97	9.94	9.89	11.50
Channel				501204	509904	518598	527298	535998	Tune-up limit (dBm)
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	9.50	9.81	9.95	9.67	9.70	11.50
Channel				500700	509652	518598	527550	536496	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	9.70	9.81	9.96	9.70	9.74	11.50
Channel				500202	509400	518598	527796	537000	Tune-up limit (dBm)
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	9.69	9.83	9.99	9.77	9.56	11.50

n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	13.27	13.35	13.37	15.50
40		1	108	13.35	13.62	13.65	
40		1	214	13.52	13.62	13.46	
40		108	1	12.93	13.11	13.25	15.50
40		108	54	13.51	13.68	13.75	
40		108	108	13.07	13.17	13.22	
40		216	0	12.95	13.08	13.18	
40	DFT-s-OFDM QPSK	1	1	13.76	13.88	13.93	15.50
40		1	108	13.43	13.88	13.71	
40		1	214	13.56	13.71	13.73	
40		108	1	12.48	12.64	12.65	15.00
40		108	54	13.56	13.70	13.73	
40		108	108	12.60	12.73	12.70	
40		216	0	12.50	12.64	12.66	
40	DFT-s-OFDM 16QAM	1	1	12.52	12.60	12.61	14.50
40	DFT-s-OFDM 64QAM	1	1	10.72	10.81	10.81	12.50
40	DFT-s-OFDM 256QAM	1	1	9.04	9.04	9.11	10.50
40	CP-OFDM QPSK	1	1	12.05	12.04	12.11	13.50
40	CP-OFDM 16QAM	1	1	11.59	11.66	11.65	13.00
40	CP-OFDM 64QAM	1	1	9.79	9.84	9.88	11.00
40	CP-OFDM 256QAM	1	1	6.99	7.01	7.09	8.50
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	13.32	13.61	13.78	15.50
Channel				344500	349000	353500	Tune-up limit (dBm)
Frequency (MHz)				1722.5	1745	1767.5	
25	DFT-s-OFDM QPSK	1	1	13.52	13.58	13.77	15.50
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	13.47	13.33	13.72	15.50
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	13.51	13.52	13.61	15.50
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	13.54	13.59	13.48	15.50
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	13.42	13.60	13.60	15.50

n77(3450-3550MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			11.64			12.50
100		1	136			11.31			
100		1	271			11.18			
100		135	1			10.95			12.50
100	DFT-s-OFDM QPSK	135	67			11.45			
100		135	136			10.55			
100		270	0			10.91			13.00
100		1	1			12.05			
100	DFT-s-OFDM 16QAM	1	136			11.48			
100		1	271			11.20			12.50
100		135	1			10.54			
100		135	67			11.39			12.50
100	DFT-s-OFDM 64QAM	135	136			10.10			
100		270	0			10.42			
100	DFT-s-OFDM 16QAM	1	1			10.85			11.50
100	DFT-s-OFDM 64QAM	1	1			9.33			10.50
100	DFT-s-OFDM 256QAM	1	1			7.27			8.50
100	CP-OFDM QPSK	1	1			10.07			11.50
100	CP-OFDM 16QAM	1	1			10.26			11.50
100	CP-OFDM 64QAM	1	1			7.76			9.00
100	CP-OFDM 256QAM	1	1			5.29			6.50
Channel				633000	633168	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	11.70	11.63	11.65	11.57	11.62	12.50
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	11.66	11.73	11.67	11.60	11.60	12.50
Channel				632334	632634	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	11.76	11.72	11.70	11.65	11.79	12.50
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	11.57	11.50	11.44	11.36	11.39	12.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	11.51	11.49	11.40	11.41	11.35	12.50
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	11.59	11.57	11.46	11.42	11.21	12.50
Channel				631000	632168	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	11.63	11.53	11.43	11.32	11.06	12.50
Channel				630834	632084	633334	634584	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3481.26	3500.01	3518.76	3537.48	
25	DFT-s-OFDM QPSK	1	1	11.60	11.52	11.45	11.23	10.97	12.50
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	11.70	11.52	11.44	11.23	11.03	12.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	11.69	11.53	11.41	11.19	11.07	12.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	11.67	11.56	11.44	11.15	11.13	12.50

n77(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			11.64			13.00
100		1	136			11.31			
100		1	271			11.18			
100		135	1			10.95			13.00
100		135	67			11.45			
100		135	136			10.55			
100	DFT-s-OFDM QPSK	270	0			10.91			13.50
100		1	1			12.05			
100		1	136			11.48			
100		1	271			11.20			13.00
100		135	1			10.54			
100		135	67			11.39			
100	DFT-s-OFDM 16QAM	135	136			10.50			12.00
100		270	0			10.69			
100		1	1			10.85			
100		1	1			9.33			
100	DFT-s-OFDM 64QAM	1	1			7.27			11.00
100	DFT-s-OFDM 256QAM	1	1			7.27			8.00
100	CP-OFDM QPSK	1	1			10.07			25.00
100	CP-OFDM 16QAM	1	1			10.26			24.00
100	CP-OFDM 64QAM	1	1			7.76			23.00
100	CP-OFDM 256QAM	1	1			5.29			19.00
Channel				633000	633168	633334	633500	633666	Tune-up limit
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	11.78	11.71	11.73	11.65	11.70	13.00
Channel				632668	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	11.74	11.81	11.75	11.68	11.68	13.00
Channel				632334	632684	633334	633832	634332	Tune-up limit
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	11.84	11.80	11.78	11.73	11.87	13.00
Channel				632000	632668	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	11.65	11.58	11.52	11.44	11.47	13.00
Channel				631668	632500	633334	634166	635000	Tune-up limit
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	11.59	11.57	11.48	11.49	11.43	13.00
Channel				631334	632334	633334	634332	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	11.67	11.65	11.54	11.50	11.29	13.00
Channel				631000	632168	633334	634500	635666	Tune-up limit
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	11.71	11.61	11.51	11.40	11.14	13.00
Channel				630834	632084	633334	634584	635832	Tune-up limit
Frequency (MHz)				3462.51	3481.26	3500.01	3518.76	3537.48	
25	DFT-s-OFDM QPSK	1	1	11.68	11.60	11.53	11.31	11.05	13.00
Channel				630668	632000	633334	634666	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	11.78	11.60	11.52	11.31	11.11	13.00
Channel				630500	631916	633334	634750	636166	Tune-up limit
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	11.77	11.61	11.49	11.27	11.15	24.50
Channel				630334	631834	633334	634834	636332	Tune-up limit
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	11.75	11.64	11.52	11.23	11.21	24.50

n77(3700-3980MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	12.50
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	11.02	11.18	11.21	11.03	10.94	12.50
100		1	136	11.06	11.11	10.84	11.22	11.32	
100		1	271	11.25	11.05	11.19	11.33	11.29	
100		135	1	10.62	10.74	10.74	10.54	10.58	12.50
100		135	67	11.21	11.24	11.24	11.09	11.23	
100		135	136	10.78	10.89	10.90	10.79	10.86	
100		270	0	10.69	10.81	10.80	10.67	10.77	
100	DFT-s-OFDM QPSK	1	1	10.97	11.14	11.09	11.00	10.94	12.50
100		1	136	11.28	11.32	11.27	11.26	11.34	
100		1	271	11.19	11.09	11.13	11.03	11.12	
100		135	1	10.14	10.25	10.25	10.46	10.29	12.50
100		135	67	11.19	11.23	11.23	11.07	11.25	
100		135	136	10.33	10.38	10.41	10.33	10.37	
100		270	0	10.19	10.28	10.29	10.16	10.25	
100	DFT-s-OFDM 16QAM	1	1	10.30	10.40	10.43	10.29	10.23	11.50
100	DFT-s-OFDM 64QAM	1	1	9.08	9.28	9.09	9.00	8.67	10.00
100	DFT-s-OFDM 256QAM	1	1	6.42	6.60	6.58	6.56	6.70	7.50
100	CP-OFDM QPSK	1	1	9.39	9.81	9.56	9.48	9.34	10.50
100	CP-OFDM 16QAM	1	1	9.29	9.43	9.44	9.29	9.19	10.50
100	CP-OFDM 64QAM	1	1	7.74	7.94	7.92	7.89	7.87	9.00
100	CP-OFDM 256QAM	1	1	4.69	4.88	4.88	4.82	4.88	6.00
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	11.05	11.23	11.15	11.03	11.05	12.50
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	10.99	11.22	11.17	11.07	11.07	12.50
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	10.88	11.15	11.13	11.05	10.94	12.50
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	10.90	11.03	11.04	11.08	11.11	12.50
Channel				648334	652168	656000	659832	663866	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	10.82	11.19	11.06	10.96	11.26	12.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	9.95	11.16	11.09	11.03	11.28	12.50
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	10.83	11.14	11.05	11.03	11.43	12.50
Channel				647500	651750	656000	660250	664500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	
25	DFT-s-OFDM QPSK	1	1	11.10	11.38	11.29	11.04	11.31	12.50
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	10.94	11.10	11.07	11.01	11.25	12.50
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	10.90	11.25	11.07	10.93	11.31	12.50
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	10.87	11.22	11.07	10.94	11.24	12.50

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
Channel				650000	653000	656000	659000	662000	limit
Frequency (MHz)				3750	3795	3840	3885	3930	(dBm)
100	DFT-s-OFDM PI/2 BPSK	1	1	10.52	10.68	10.68	10.53	10.44	12.00
100		1	136	10.56	10.79	10.34	10.72	10.82	
100		1	271	10.75	10.90	10.88	10.83	10.79	
100		135	1	10.12	10.24	10.24	10.04	10.08	12.00
100		135	67	10.71	10.74	10.74	10.59	10.73	
100		135	136	10.28	10.39	10.40	10.29	10.36	
100		270	0	10.19	10.31	10.30	10.17	10.27	12.50
100	DFT-s-OFDM QPSK	1	1	11.07	11.14	11.22	11.20	11.18	
100		1	136	10.88	10.98	11.07	11.09	10.97	
100		1	271	10.79	10.85	10.82	10.76	10.84	
100		135	1	9.64	9.75	9.75	9.88	9.59	12.00
100		135	67	10.69	10.73	10.73	10.57	10.72	
100		135	136	9.83	9.88	9.91	9.83	9.87	
100		270	0	9.69	9.78	9.79	9.66	9.75	11.00
100	DFT-s-OFDM 16QAM	1	1	9.80	9.90	9.93	9.79	9.73	
100	DFT-s-OFDM 64QAM	1	1	8.58	8.78	8.59	8.50	8.17	9.50
100	DFT-s-OFDM 256QAM	1	1	5.92	6.10	6.08	6.06	8.20	9.00
100	CP-OFDM QPSK	1	1	8.89	9.31	9.06	8.98	8.84	11.00
100	CP-OFDM 16QAM	1	1	8.79	8.93	8.94	8.79	8.69	10.00
100	CP-OFDM 64QAM	1	1	7.24	7.44	7.42	7.39	7.37	9.00
100	CP-OFDM 256QAM	1	1	4.19	4.38	4.38	4.32	4.38	5.00
Channel				649666	652834	656000	659166	662332	Tune-up
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	limit
90	DFT-s-OFDM QPSK	1	1	10.55	10.73	10.65	10.53	10.55	12.00
Channel				649334	652668	656000	659332	662666	Tune-up
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	limit
80	DFT-s-OFDM QPSK	1	1	10.49	10.72	10.67	10.57	10.57	12.00
Channel				649000	652500	656000	659500	663000	Tune-up
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	limit
70	DFT-s-OFDM QPSK	1	1	10.38	10.65	10.63	10.55	10.44	12.00
Channel				648668	652334	656000	659666	663332	Tune-up
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	limit
60	DFT-s-OFDM QPSK	1	1	10.40	10.53	10.54	10.58	10.61	12.00
Channel				648334	652168	656000	659832	663666	Tune-up
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	limit
50	DFT-s-OFDM QPSK	1	1	10.32	10.69	10.56	10.46	10.76	12.00
Channel				648000	652000	656000	660000	664000	Tune-up
Frequency (MHz)				3720	3780	3840	3900	3960	limit
40	DFT-s-OFDM QPSK	1	1	9.45	10.66	10.59	10.53	10.78	12.00
Channel				647668	651834	656000	660166	664332	Tune-up
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	limit
30	DFT-s-OFDM QPSK	1	1	10.33	10.64	10.55	10.53	10.93	12.00
Channel				647500	651750	656000	660250	664500	Tune-up
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	limit
25	DFT-s-OFDM QPSK	1	1	10.60	10.88	10.79	10.54	10.81	12.00
Channel				647334	651668	656000	660332	664666	Tune-up
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	limit
20	DFT-s-OFDM QPSK	1	1	10.44	10.60	10.57	10.51	10.75	12.00
Channel				647168	651584	656000	660416	664832	Tune-up
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	limit
15	DFT-s-OFDM QPSK	1	1	10.40	10.75	10.57	10.43	10.81	12.00
Channel				647000	651500	656000	660500	665000	Tune-up
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	limit
10	DFT-s-OFDM QPSK	1	1	10.37	10.72	10.57	10.44	10.74	12.00

3	QPSK	15	0	20.44	20.49	20.34	22.5
3	16QAM	1	0	20.65	20.68	20.54	
3	16QAM	1	8	20.59	20.63	20.46	
3	16QAM	1	14	20.54	20.58	20.48	21.5
3	16QAM	8	0	19.81	19.86	19.72	
3	16QAM	8	4	19.75	19.82	19.67	
3	16QAM	8	7	19.68	19.73	19.59	21.5
3	16QAM	15	0	19.73	19.78	19.66	
3	64QAM	1	0	19.89	19.93	19.77	
3	64QAM	1	8	19.84	19.90	19.71	21.5
3	64QAM	1	14	19.78	19.85	19.72	
3	64QAM	8	0	18.80	18.84	18.70	
3	64QAM	8	4	18.77	18.81	18.63	20.5
3	64QAM	8	7	18.66	18.72	18.57	
3	64QAM	15	0	18.72	18.76	18.61	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	21.66	21.73	21.67	23.5
1.4	QPSK	1	3	21.59	21.63	21.47	
1.4	QPSK	1	5	21.54	21.60	21.41	
1.4	QPSK	3	0	20.51	20.55	20.43	
1.4	QPSK	3	1	20.45	20.50	20.35	
1.4	QPSK	3	3	20.34	20.41	20.28	
1.4	QPSK	6	0	20.42	20.47	20.32	22.5
1.4	16QAM	1	0	20.63	20.66	20.52	
1.4	16QAM	1	3	20.57	20.61	20.44	
1.4	16QAM	1	5	20.52	20.56	20.46	
1.4	16QAM	3	0	19.79	19.84	19.70	
1.4	16QAM	3	1	19.73	19.80	19.65	
1.4	16QAM	3	3	19.66	19.71	19.57	21.5
1.4	16QAM	6	0	19.71	19.76	19.64	
1.4	64QAM	1	0	19.87	19.91	19.75	
1.4	64QAM	1	3	19.82	19.88	19.69	
1.4	64QAM	1	5	19.76	19.83	19.70	
1.4	64QAM	3	0	18.78	18.82	18.68	
1.4	64QAM	3	1	18.75	18.79	18.61	20.5
1.4	64QAM	3	3	18.64	18.70	18.55	
1.4	64QAM	6	0	18.70	18.74	18.59	

n2 (PC3)-ENDC							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376000	378000	Tune-up limit (dBm)
Frequency (MHz)				1870	1880	1890	
40	DFT-s-OFDM PI/2 BPSK	1	1	20.42	20.50	20.53	22.00
40		1	108	20.49	20.56	20.48	
40		1	214	20.40	20.44	20.48	
40		108	1	20.04	20.10	20.19	22.00
40		108	54	20.61	20.59	20.64	
40		108	108	19.94	20.08	20.08	
40		216	0	19.99	20.02	20.12	
40	DFT-s-OFDM QPSK	1	1	20.73	20.77	20.82	22.00
40		1	108	20.70	20.76	20.72	
40		1	214	20.64	20.73	20.77	
40		108	1	19.61	19.66	19.74	22.00
40		108	54	20.63	20.61	20.68	
40		108	108	19.50	19.60	19.60	
40		216	0	19.56	19.57	19.67	
40	DFT-s-OFDM 16QAM	1	1	19.75	19.74	19.74	21.00
40	DFT-s-OFDM 64QAM	1	1	17.81	17.89	17.89	19.00
40	DFT-s-OFDM 256QAM	1	1	16.03	16.11	16.15	17.50
40	CP-OFDM QPSK	1	1	19.12	19.14	19.23	20.50
40	CP-OFDM 16QAM	1	1	18.71	18.99	18.83	20.00
40	CP-OFDM 64QAM	1	1	16.87	16.91	16.93	18.50
40	CP-OFDM 256QAM	1	1	14.04	14.08	14.11	15.50
Channel				373000	376000	379000	Tune-up limit (dBm)
Frequency (MHz)				1865	1880	1895	
30	DFT-s-OFDM QPSK	1	1	20.70	20.65	20.68	22.00
Channel				372500	376000	379500	Tune-up limit (dBm)
Frequency (MHz)				1862.5	1880	1897.5	
25	DFT-s-OFDM QPSK	1	1	20.61	20.69	20.42	22.00
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM QPSK	1	1	20.58	20.63	20.52	22.00
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	20.59	20.62	20.48	22.00
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	20.62	20.54	20.65	22.00
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	20.53	20.30	20.55	22.00

n41 (PC2)-ENDC									
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	22.00
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	20.13	20.37	20.48	20.58	20.52	22.00
100		1	136	20.83	20.85	20.69	20.61	20.74	
100		1	271	20.66	20.55	20.31	20.30	20.27	
100		135	1	19.87	19.99	20.11	20.10	20.15	22.00
100		135	67	20.40	20.50	20.59	20.60	20.38	
100		135	136	19.86	20.08	20.10	20.09	19.84	
100		270	0	19.81	19.98	20.05	20.05	19.99	
100	DFT-s-OFDM QPSK	1	1	20.10	20.36	20.45	20.42	20.55	22.00
100		1	136	20.72	20.53	20.89	20.83	20.56	
100		1	271	20.57	20.45	20.18	20.18	20.06	
100		135	1	19.42	19.54	19.65	19.62	19.71	22.00
100		135	67	20.43	20.53	20.59	20.56	20.36	
100		135	136	19.41	19.58	19.65	19.65	19.36	
100		270	0	19.35	19.54	19.61	19.60	19.54	
100	DFT-s-OFDM 16QAM	1	1	19.44	19.55	19.56	19.48	19.77	21.00
100	DFT-s-OFDM 64QAM	1	1	17.79	17.92	17.98	18.03	18.14	19.50
100	DFT-s-OFDM 256QAM	1	1	15.71	15.82	17.94	15.85	16.08	17.50
100	CP-OFDM QPSK	1	1	18.65	18.71	18.71	18.70	18.95	20.00
100	CP-OFDM 16QAM	1	1	18.37	18.48	18.50	18.50	18.71	20.00
100	CP-OFDM 64QAM	1	1	16.87	16.99	17.00	17.04	17.24	18.50
100	CP-OFDM 256QAM	1	1	13.98	14.08	14.08	14.09	14.29	15.50
Channel				508200	513402	518598	523800	528996	22.00
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	20.07	20.22	20.34	20.36	20.43	22.00
Channel				507204	512904	518598	524298	529998	22.00
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	20.04	20.31	20.38	20.38	20.35	22.00
Channel				506202	512400	518598	524796	531000	22.00
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	20.15	20.25	20.37	20.44	20.20	22.00
Channel				505200	511902	518598	525798	531996	22.00
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	20.15	20.24	20.40	20.37	20.31	22.00
Channel				504204	511404	518598	525798	532998	22.00
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	20.16	20.32	20.53	20.44	20.47	22.00
Channel				503202	510900	518598	526296	534000	22.00
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	20.09	20.48	20.52	20.43	20.30	22.00
Channel				502200	510402	518598	526800	534996	22.00
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	20.18	20.39	20.47	20.44	20.39	22.00
Channel				501204	509904	518598	527298	535998	22.00
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	20.00	20.31	20.45	20.17	20.20	22.00
Channel				500700	509652	518598	527550	536496	22.00
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	20.20	20.31	20.46	20.20	20.24	22.00
Channel				500202	509400	518598	527796	537000	22.00
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	20.19	20.33	20.49	20.27	20.06	22.00

n66 (PC3)-ENDC							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	21.27	21.35	21.37	23.50
40		1	108	21.35	21.62	21.65	
40		1	214	21.52	21.62	21.46	
40		108	1	20.93	21.11	21.25	23.00
40		108	54	21.51	21.68	21.75	
40		108	108	21.07	21.17	21.22	
40		216	0	20.95	21.08	21.18	
40	DFT-s-OFDM QPSK	1	1	21.76	21.88	21.93	23.50
40		1	108	21.43	21.88	21.71	
40		1	214	21.56	21.71	21.73	
40		108	1	20.48	20.64	20.65	23.00
40		108	54	21.56	21.70	21.73	
40		108	108	20.60	20.73	20.70	
40		216	0	20.50	20.64	20.66	
40	DFT-s-OFDM 16QAM	1	1	20.52	20.60	20.61	22.00
40	DFT-s-OFDM 64QAM	1	1	18.72	18.81	18.81	19.50
40	DFT-s-OFDM 256QAM	1	1	17.04	17.04	17.11	18.50
40	CP-OFDM QPSK	1	1	20.05	20.04	20.11	21.50
40	CP-OFDM 16QAM	1	1	19.59	19.66	19.65	21.00
40	CP-OFDM 64QAM	1	1	17.79	17.84	17.88	18.50
40	CP-OFDM 256QAM	1	1	14.99	15.01	15.09	16.50
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	21.32	21.61	21.78	23.50
Channel				344500	349000	353500	Tune-up limit (dBm)
Frequency (MHz)				1722.5	1745	1767.5	
25	DFT-s-OFDM QPSK	1	1	21.52	21.58	21.77	23.50
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	21.47	21.33	21.72	23.50
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	21.51	21.52	21.61	23.50
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	21.54	21.59	21.48	23.50
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	21.42	21.60	21.60	23.50

n77(3450-3550MHz) (PC2)-ENDC									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			18.64			19.50
100		1	136			18.31			
100		1	271			18.18			
100		135	1			17.95			19.50
100		135	67			18.45			
100		135	136			17.55			
100	DFT-s-OFDM QPSK	270	0			17.91			20.00
100		1	1			19.05			
100		1	136			18.48			
100		1	271			18.20			19.50
100		135	1			17.54			
100		135	67			18.39			
100		135	136			17.10			19.50
100		270	0			17.42			
100	DFT-s-OFDM 16QAM	1	1			17.85			18.50
100	DFT-s-OFDM 64QAM	1	1			16.33			17.50
100	DFT-s-OFDM 256QAM	1	1			14.27			15.50
100	CP-OFDM QPSK	1	1			17.07			18.50
100	CP-OFDM 16QAM	1	1			17.26			18.50
100	CP-OFDM 64QAM	1	1			14.76			16.00
100	CP-OFDM 256QAM	1	1			12.29			13.50
Channel				633000	633168	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	18.70	18.63	18.65	18.57	18.62	19.50
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	18.66	18.73	18.67	18.60	18.60	19.50
Channel				632334	632634	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	18.76	18.72	18.70	18.65	18.79	19.50
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	18.57	18.50	18.44	18.36	18.39	19.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	18.51	18.49	18.40	18.41	18.35	19.50
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	18.59	18.57	18.46	18.42	18.21	19.50
Channel				631000	632168	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	18.63	18.53	18.43	18.32	18.06	19.50
Channel				630834	632084	633334	634584	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3481.26	3500.01	3518.76	3537.48	
25	DFT-s-OFDM QPSK	1	1	18.60	18.52	18.45	18.23	17.97	19.50
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	18.70	18.52	18.44	18.23	18.03	19.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	18.69	18.53	18.41	18.19	18.07	19.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	18.67	18.56	18.44	18.15	18.13	19.50

n77(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Low Channel	Low/Middle Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			18.64			19.50
100		1	136			18.31			
100		1	271			18.18			
100		135	1			17.95			19.50
100		135	67			18.45			
100		135	136			17.55			
100	DFT-s-OFDM QPSK	270	0			17.91			20.50
100		1	1			19.05			
100		1	136			18.48			
100		1	271			18.20			19.50
100		135	1			17.54			
100		135	67			18.39			
100	DFT-s-OFDM 16QAM	135	136			17.50			19.50
100		270	0			17.69			
100		1	1			17.85			18.50
100	DFT-s-OFDM 64QAM	1	1			16.33			17.50
100	DFT-s-OFDM 256QAM	1	1			14.27			14.50
100	CP-OFDM QPSK	1	1			17.07			20.00
100	CP-OFDM 16QAM	1	1			17.26			19.00
100	CP-OFDM 64QAM	1	1			14.76			18.00
100	CP-OFDM 256QAM	1	1			12.29			14.00
Channel				633000	633168	633334	633500	633666	Tune-up limit
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	18.70	18.63	18.65	18.57	18.62	19.50
Channel				632668	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	18.66	18.73	18.67	18.60	18.60	19.50
Channel				632334	632668	633334	633832	634332	Tune-up limit
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	18.76	18.72	18.70	18.65	18.79	19.50
Channel				632000	632668	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	18.57	18.50	18.44	18.36	18.39	19.50
Channel				631668	632500	633334	634166	635000	Tune-up limit
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	18.51	18.49	18.40	18.41	18.35	19.50
Channel				631334	632334	633334	634332	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	18.59	18.57	18.46	18.42	18.21	19.50
Channel				631000	632168	633334	634500	635666	Tune-up limit
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	18.63	18.53	18.43	18.32	18.06	19.50
Channel				630834	632084	633334	634584	635832	Tune-up limit
Frequency (MHz)				3462.51	3481.26	3500.01	3518.76	3537.48	
25	DFT-s-OFDM QPSK	1	1	18.60	18.52	18.45	18.23	17.97	19.50
Channel				630668	632000	633334	634666	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	18.70	18.52	18.44	18.23	18.03	19.50
Channel				630500	631916	633334	634750	636166	Tune-up limit
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	18.69	18.53	18.41	18.19	18.07	19.50
Channel				630334	631834	633334	634834	636332	Tune-up limit
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	18.67	18.56	18.44	18.15	18.13	19.50

n77(3700-3980MHz) (PC2)-ENDC									
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	20.00
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	18.52	18.68	18.71	18.53	18.44	20.00
100		1	136	18.56	18.61	18.34	18.72	18.82	
100		1	271	18.75	18.55	18.69	18.83	18.79	
100		135	1	18.12	18.24	18.24	18.04	18.08	20.00
100		135	67	18.71	18.74	18.74	18.59	18.73	
100		135	136	18.28	18.39	18.40	18.29	18.36	
100		270	0	18.19	18.31	18.30	18.17	18.27	
100	DFT-s-OFDM QPSK	1	1	18.47	18.64	18.59	18.50	18.44	20.00
100		1	136	18.78	18.82	18.77	18.76	18.84	
100		1	271	18.69	18.59	18.63	18.53	18.62	
100		135	1	17.64	17.75	17.75	17.96	17.79	20.00
100		135	67	18.69	18.73	18.73	18.57	18.75	
100		135	136	17.83	17.88	17.91	17.83	17.87	
100		270	0	17.69	17.78	17.79	17.66	17.75	
100	DFT-s-OFDM 16QAM	1	1	17.80	17.90	17.93	17.79	17.73	19.00
100	DFT-s-OFDM 64QAM	1	1	16.58	16.78	16.59	16.50	16.17	17.50
100	DFT-s-OFDM 256QAM	1	1	13.92	14.10	14.08	14.06	14.20	15.50
100	CP-OFDM QPSK	1	1	16.89	17.31	17.06	16.98	16.84	18.00
100	CP-OFDM 16QAM	1	1	16.79	16.93	16.94	16.79	16.69	18.00
100	CP-OFDM 64QAM	1	1	15.24	15.44	15.42	15.39	15.37	16.50
100	CP-OFDM 256QAM	1	1	12.19	12.38	12.38	12.32	12.38	13.50
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	18.55	18.73	18.65	18.53	18.55	20.00
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	18.49	18.72	18.67	18.57	18.57	20.00
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	18.38	18.65	18.63	18.55	18.44	20.00
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	18.40	18.53	18.54	18.58	18.61	20.00
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	18.32	18.69	18.56	18.46	18.76	20.00
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	17.45	18.66	18.59	18.53	18.78	20.00
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	18.33	18.64	18.55	18.53	18.93	20.00
Channel				647500	651750	656000	660250	664500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	
25	DFT-s-OFDM QPSK	1	1	18.60	18.88	18.79	18.54	18.81	20.00
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	18.44	18.60	18.57	18.51	18.75	20.00
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	18.40	18.75	18.57	18.43	18.81	20.00
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	18.37	18.72	18.57	18.44	18.74	20.00

n77(3700-3980MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up
Channel				650000	653000	656000	659000	662000	limit
Frequency (MHz)				3750	3795	3840	3885	3930	(dBm)
100	DFT-s-OFDM PI/2 BPSK	1	1	18.02	18.18	18.18	18.03	17.94	19.50
100		1	136	18.06	18.29	17.84	18.22	18.32	
100		1	271	18.25	18.40	18.38	18.33	18.29	
100		135	1	17.62	17.74	17.74	17.54	17.58	19.50
100		135	67	18.21	18.24	18.24	18.09	18.23	
100		135	136	17.78	17.89	17.90	17.79	17.86	
100		270	0	17.69	17.81	17.80	17.67	17.77	
100	DFT-s-OFDM QPSK	1	1	18.57	18.64	18.72	18.70	18.68	20.00
100		1	136	18.38	18.48	18.57	18.59	18.47	
100		1	271	18.29	18.35	18.32	18.26	18.34	
100		135	1	17.14	17.25	17.25	17.38	17.09	19.50
100		135	67	18.19	18.23	18.23	18.07	18.22	
100		135	136	17.33	17.38	17.41	17.33	17.37	
100		270	0	17.19	17.28	17.29	17.16	17.25	
100	DFT-s-OFDM 16QAM	1	1	17.30	17.40	17.43	17.29	17.23	18.50
100	DFT-s-OFDM 64QAM	1	1	16.08	16.28	16.09	16.00	15.67	17.00
100	DFT-s-OFDM 256QAM	1	1	13.42	13.60	13.58	13.56	15.70	16.50
100	CP-OFDM QPSK	1	1	16.39	16.81	16.56	16.48	16.34	18.50
100	CP-OFDM 16QAM	1	1	16.29	16.43	16.44	16.29	16.19	17.50
100	CP-OFDM 64QAM	1	1	14.74	14.94	14.92	14.89	14.87	16.50
100	CP-OFDM 256QAM	1	1	11.69	11.88	11.88	11.82	11.88	12.50
Channel				649666	652834	656000	659166	662332	Tune-up
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	limit
90	DFT-s-OFDM QPSK	1	1	18.05	18.23	18.15	18.03	18.05	19.50
Channel				649334	652668	656000	659332	662666	Tune-up
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	limit
80	DFT-s-OFDM QPSK	1	1	17.99	18.22	18.17	18.07	18.07	19.50
Channel				649000	652500	656000	659500	663000	Tune-up
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	limit
70	DFT-s-OFDM QPSK	1	1	17.88	18.15	18.13	18.05	17.94	19.50
Channel				648668	652334	656000	659666	663332	Tune-up
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	limit
60	DFT-s-OFDM QPSK	1	1	17.90	18.03	18.04	18.08	18.11	19.50
Channel				648334	652168	656000	659832	663666	Tune-up
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	limit
50	DFT-s-OFDM QPSK	1	1	17.82	18.19	18.06	17.96	18.26	19.50
Channel				648000	652000	656000	660000	664000	Tune-up
Frequency (MHz)				3720	3780	3840	3900	3960	limit
40	DFT-s-OFDM QPSK	1	1	16.95	18.16	18.09	18.03	18.28	19.50
Channel				647668	651834	656000	660166	664332	Tune-up
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	limit
30	DFT-s-OFDM QPSK	1	1	17.83	18.14	18.05	18.03	18.43	19.50
Channel				647500	651750	656000	660250	664500	Tune-up
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	limit
25	DFT-s-OFDM QPSK	1	1	18.10	18.38	18.29	18.04	18.31	19.50
Channel				647334	651668	656000	660332	664666	Tune-up
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	limit
20	DFT-s-OFDM QPSK	1	1	17.94	18.10	18.07	18.01	18.25	19.50
Channel				647168	651584	656000	660416	664832	Tune-up
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	limit
15	DFT-s-OFDM QPSK	1	1	17.90	18.25	18.07	17.93	18.31	19.50
Channel				647000	651500	656000	660500	665000	Tune-up
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	limit
10	DFT-s-OFDM QPSK	1	1	17.87	18.22	18.07	17.94	18.24	19.50

3	QPSK	15	0	18.44	18.49	18.34	20.5
3	16QAM	1	0	18.65	18.68	18.54	
3	16QAM	1	8	18.59	18.63	18.46	
3	16QAM	1	14	18.54	18.58	18.48	19.5
3	16QAM	8	0	17.81	17.86	17.72	
3	16QAM	8	4	17.75	17.82	17.67	
3	16QAM	8	7	17.68	17.73	17.59	19.5
3	16QAM	15	0	17.73	17.78	17.66	
3	64QAM	1	0	17.89	17.93	17.77	
3	64QAM	1	8	17.84	17.90	17.71	18.5
3	64QAM	1	14	17.78	17.85	17.72	
3	64QAM	8	0	16.80	16.84	16.70	
3	64QAM	8	4	16.77	16.81	16.63	18.5
3	64QAM	8	7	16.66	16.72	16.57	
3	64QAM	15	0	16.72	16.76	16.61	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	19.66	19.73	19.67	21.5
1.4	QPSK	1	3	19.59	19.63	19.47	
1.4	QPSK	1	5	19.54	19.60	19.41	
1.4	QPSK	3	0	18.51	18.55	18.43	
1.4	QPSK	3	1	18.45	18.50	18.35	
1.4	QPSK	3	3	18.34	18.41	18.28	
1.4	QPSK	6	0	18.42	18.47	18.32	20.5
1.4	16QAM	1	0	18.63	18.66	18.52	20.5
1.4	16QAM	1	3	18.57	18.61	18.44	
1.4	16QAM	1	5	18.52	18.56	18.46	
1.4	16QAM	3	0	17.79	17.84	17.70	
1.4	16QAM	3	1	17.73	17.80	17.65	
1.4	16QAM	3	3	17.66	17.71	17.57	
1.4	16QAM	6	0	17.71	17.76	17.64	19.5
1.4	64QAM	1	0	17.87	17.91	17.75	19.5
1.4	64QAM	1	3	17.82	17.88	17.69	
1.4	64QAM	1	5	17.76	17.83	17.70	
1.4	64QAM	3	0	16.78	16.82	16.68	
1.4	64QAM	3	1	16.75	16.79	16.61	
1.4	64QAM	3	3	16.64	16.70	16.55	
1.4	64QAM	6	0	16.70	16.74	16.59	18.5

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	20.68	20.79	20.76	22
15	QPSK	1	37	20.63	20.66	20.69	
15	QPSK	1	74	20.56	20.68	20.67	
15	QPSK	36	0	19.57	19.70	19.66	21
15	QPSK	36	20	19.52	19.62	19.44	
15	QPSK	36	39	19.41	19.44	19.59	
15	QPSK	75	0	19.46	19.53	19.43	21
15	16QAM	1	0	19.52	19.66	19.53	
15	16QAM	1	37	19.41	19.50	19.49	
15	16QAM	1	74	19.59	19.59	19.47	20
15	16QAM	36	0	18.51	18.72	18.52	
15	16QAM	36	20	18.36	18.68	18.64	
15	16QAM	36	39	18.55	18.71	18.56	20
15	16QAM	75	0	18.52	18.57	18.46	
15	64QAM	1	0	18.49	18.71	18.54	
15	64QAM	1	37	18.65	18.69	18.62	19
15	64QAM	1	74	18.41	18.61	18.48	
15	64QAM	36	0	17.60	17.66	17.62	
15	64QAM	36	20	17.57	17.63	17.59	19
15	64QAM	36	39	17.41	17.46	17.58	
15	64QAM	75	0	17.48	17.59	17.55	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	20.62	20.73	20.70	22
10	QPSK	1	25	20.57	20.60	20.63	
10	QPSK	1	49	20.50	20.62	20.61	
10	QPSK	25	0	19.51	19.64	19.60	21
10	QPSK	25	12	19.46	19.56	19.38	
10	QPSK	25	25	19.35	19.38	19.53	
10	QPSK	50	0	19.40	19.47	19.37	21
10	16QAM	1	0	19.46	19.60	19.47	
10	16QAM	1	25	19.35	19.44	19.43	
10	16QAM	1	49	19.53	19.53	19.41	20
10	16QAM	25	0	18.45	18.66	18.46	
10	16QAM	25	12	18.30	18.62	18.58	
10	16QAM	25	25	18.49	18.65	18.50	20
10	16QAM	50	0	18.46	18.51	18.40	
10	64QAM	1	0	18.43	18.65	18.48	
10	64QAM	1	25	18.59	18.63	18.56	19
10	64QAM	1	49	18.35	18.55	18.42	
10	64QAM	25	0	17.54	17.60	17.56	
10	64QAM	25	12	17.51	17.57	17.53	19
10	64QAM	25	25	17.35	17.40	17.52	
10	64QAM	50	0	17.42	17.53	17.49	
Channel				26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)				816.5	831.5	846.5	
5	QPSK	1	0	20.57	20.68	20.65	22
5	QPSK	1	12	20.52	20.55	20.58	
5	QPSK	1	24	20.45	20.57	20.56	
5	QPSK	12	0	19.46	19.59	19.55	21
5	QPSK	12	7	19.41	19.51	19.33	
5	QPSK	12	13	19.30	19.33	19.48	
5	QPSK	25	0	19.35	19.42	19.32	21
5	16QAM	1	0	19.41	19.55	19.42	
5	16QAM	1	12	19.30	19.39	19.38	
5	16QAM	1	24	19.48	19.48	19.36	20
5	16QAM	12	0	18.40	18.61	18.41	
5	16QAM	12	7	18.25	18.57	18.53	
5	16QAM	12	13	18.44	18.60	18.45	20
5	16QAM	25	0	18.41	18.46	18.35	
5	64QAM	1	0	18.38	18.60	18.43	
5	64QAM	1	12	18.54	18.58	18.51	19
5	64QAM	1	24	18.30	18.50	18.37	
5	64QAM	12	0	17.49	17.55	17.51	
5	64QAM	12	7	17.46	17.52	17.48	19
5	64QAM	12	13	17.30	17.35	17.47	
5	64QAM	25	0	17.37	17.48	17.44	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	20.51	20.62	20.59	22
3	QPSK	1	8	20.46	20.49	20.52	
3	QPSK	1	14	20.39	20.51	20.50	
3	QPSK	8	0	19.40	19.53	19.49	21
3	QPSK	8	4	19.35	19.45	19.27	
3	QPSK	8	7	19.24	19.27	19.42	
3	QPSK	15	0	19.29	19.36	19.26	21
3	16QAM	1	0	19.35	19.49	19.36	
3	16QAM	1	8	19.24	19.33	19.32	
3	16QAM	1	14	19.42	19.42	19.30	20
3	16QAM	8	0	18.34	18.55	18.35	
3	16QAM	8	4	18.19	18.51	18.47	
3	16QAM	8	7	18.38	18.54	18.39	20
3	16QAM	15	0	18.35	18.40	18.29	
3	64QAM	1	0	18.32	18.54	18.37	
3	64QAM	1	8	18.48	18.52	18.45	19
3	64QAM	1	14	18.24	18.44	18.31	
3	64QAM	8	0	17.43	17.49	17.45	
3	64QAM	8	4	17.40	17.46	17.42	19
3	64QAM	8	7	17.24	17.29	17.41	
3	64QAM	15	0	17.31	17.42	17.38	
Channel				26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)				814.7	831.5	848.3	
1.4	QPSK	1	0	20.48	20.59	20.56	22
1.4	QPSK	1	3	20.43	20.46	20.49	
1.4	QPSK	1	5	20.36	20.48	20.47	
1.4	QPSK	3	0	19.37	19.50	19.46	
1.4	QPSK	3	1	19.32	19.42	19.24	
1.4	QPSK	3	3	19.21	19.24	19.39	

1.4	QPSK	6	0	19.26	19.33	19.23	21
1.4	16QAM	1	0	19.32	19.46	19.33	21
1.4	16QAM	1	3	19.21	19.30	19.29	
1.4	16QAM	1	5	19.39	19.39	19.27	
1.4	16QAM	3	0	18.31	18.52	18.32	
1.4	16QAM	3	1	18.16	18.48	18.44	
1.4	16QAM	3	3	18.35	18.51	18.36	
1.4	16QAM	6	0	18.32	18.37	18.26	20
1.4	64QAM	1	0	18.29	18.51	18.34	20
1.4	64QAM	1	3	18.45	18.49	18.42	
1.4	64QAM	1	5	18.21	18.41	18.28	
1.4	64QAM	3	0	17.40	17.46	17.42	
1.4	64QAM	3	1	17.37	17.43	17.39	
1.4	64QAM	3	3	17.21	17.26	17.38	
1.4	64QAM	6	0	17.28	17.39	17.35	19

3	16QAM	1	0	17.90	17.92	17.80	25.5
3	16QAM	1	8	17.54	17.80	17.51	
3	16QAM	1	14	17.50	17.60	17.77	
3	16QAM	8	0	16.80	16.79	16.66	25.5
3	16QAM	8	4	16.58	16.62	16.72	
3	16QAM	8	7	16.60	16.72	16.72	
3	16QAM	15	0	16.61	16.76	16.75	25.5
3	64QAM	1	0	16.65	16.83	16.75	
3	64QAM	1	8	16.58	16.78	16.57	
3	64QAM	1	14	16.74	16.74	16.74	25.5
3	64QAM	8	0	15.58	15.84	15.59	
3	64QAM	8	4	15.45	15.79	15.55	
3	64QAM	8	7	15.46	15.66	15.59	Tune-up limit
3	64QAM	15	0	15.56	15.71	15.68	
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	(dBm)
1.4	QPSK	1	0	18.79	18.88	18.85	25.5
1.4	QPSK	1	3	18.61	18.77	18.55	
1.4	QPSK	1	5	18.66	18.71	18.58	
1.4	QPSK	3	0	17.57	17.65	17.55	
1.4	QPSK	3	1	17.49	17.62	17.40	
1.4	QPSK	3	3	17.35	17.49	17.42	
1.4	QPSK	6	0	17.46	17.61	17.54	25.5
1.4	16QAM	1	0	17.84	17.86	17.74	25.5
1.4	16QAM	1	3	17.48	17.74	17.45	
1.4	16QAM	1	5	17.44	17.54	17.71	
1.4	16QAM	3	0	16.74	16.73	16.60	
1.4	16QAM	3	1	16.52	16.56	16.66	
1.4	16QAM	3	3	16.54	16.66	16.66	
1.4	16QAM	6	0	16.55	16.70	16.69	25.5
1.4	64QAM	1	0	16.59	16.77	16.69	25.5
1.4	64QAM	1	3	16.52	16.72	16.51	
1.4	64QAM	1	5	16.68	16.68	16.68	
1.4	64QAM	3	0	15.52	15.78	15.53	
1.4	64QAM	3	1	15.39	15.73	15.49	
1.4	64QAM	3	3	15.40	15.60	15.53	
1.4	64QAM	6	0	15.50	15.65	15.62	25.5

Band 66 (dBm) (ANT 3)							
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	19.15	19.19	19.10	20.5
20	QPSK	1	49	19.10	19.16	19.06	
20	QPSK	1	99	19.03	19.02	18.97	
20	QPSK	50	0	18.10	18.15	18.06	19.5
20	QPSK	50	24	17.91	17.97	17.82	
20	QPSK	50	50	17.87	17.92	17.88	
20	QPSK	100	0	17.85	17.88	17.90	19.5
20	16QAM	1	0	17.87	18.09	17.92	
20	16QAM	1	49	18.00	17.85	17.90	
20	16QAM	1	99	17.91	17.94	17.97	18.5
20	16QAM	50	0	16.94	17.07	16.98	
20	16QAM	50	24	16.79	17.05	16.85	
20	16QAM	50	50	16.84	16.88	16.88	18.5
20	16QAM	100	0	16.80	16.96	16.97	
20	64QAM	1	0	16.90	17.02	16.97	
20	64QAM	1	49	16.86	16.88	16.99	18.5
20	64QAM	1	99	16.95	16.94	16.91	
20	64QAM	50	0	15.94	16.07	15.90	
20	64QAM	50	24	15.87	15.99	15.91	17.5
20	64QAM	50	50	15.84	16.00	15.82	
20	64QAM	100	0	15.80	15.85	15.81	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	18.96	19.00	18.91	20.5
15	QPSK	1	37	18.91	18.97	18.87	
15	QPSK	1	74	18.84	18.83	18.78	
15	QPSK	36	0	17.78	17.85	17.72	19.5
15	QPSK	36	20	17.72	17.78	17.63	
15	QPSK	36	39	17.68	17.73	17.69	
15	QPSK	75	0	17.66	17.69	17.71	19.5
15	16QAM	1	0	17.68	17.90	17.73	
15	16QAM	1	37	17.81	17.66	17.71	
15	16QAM	1	74	17.72	17.75	17.78	18.5
15	16QAM	36	0	16.75	16.88	16.79	
15	16QAM	36	20	16.60	16.86	16.66	
15	16QAM	36	39	16.65	16.69	16.69	18.5
15	16QAM	75	0	16.61	16.77	16.78	
15	64QAM	1	0	16.71	16.83	16.78	
15	64QAM	1	37	16.67	16.69	16.80	18.5
15	64QAM	1	74	16.76	16.75	16.72	
15	64QAM	36	0	15.75	15.88	15.71	
15	64QAM	36	20	15.68	15.80	15.72	17.5
15	64QAM	36	39	15.65	15.61	15.63	
15	64QAM	75	0	15.61	15.66	15.62	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	18.91	18.95	18.86	20.5
10	QPSK	1	25	18.86	18.92	18.82	
10	QPSK	1	49	18.79	18.78	18.73	
10	QPSK	25	0	17.73	17.80	17.67	19.5
10	QPSK	25	12	17.67	17.73	17.58	
10	QPSK	25	25	17.63	17.68	17.64	
10	QPSK	50	0	17.61	17.64	17.66	19.5
10	16QAM	1	0	17.63	17.85	17.68	
10	16QAM	1	25	17.76	17.61	17.66	
10	16QAM	1	49	17.67	17.70	17.73	18.5
10	16QAM	25	0	16.70	16.83	16.74	
10	16QAM	25	12	16.55	16.81	16.61	
10	16QAM	25	25	16.60	16.64	16.64	18.5
10	16QAM	50	0	16.56	16.72	16.73	
10	64QAM	1	0	16.66	16.78	16.73	
10	64QAM	1	25	16.82	16.64	16.75	18.5
10	64QAM	1	49	16.71	16.70	16.67	
10	64QAM	25	0	15.70	15.83	15.66	
10	64QAM	25	12	15.63	15.75	15.67	17.5
10	64QAM	25	25	15.60	15.76	15.58	
10	64QAM	50	0	15.56	15.61	15.57	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	18.88	18.92	18.83	20.5
5	QPSK	1	12	18.83	18.89	18.79	
5	QPSK	1	24	18.76	18.75	18.70	
5	QPSK	12	0	17.70	17.77	17.64	19.5
5	QPSK	12	7	17.64	17.70	17.55	
5	QPSK	12	13	17.60	17.65	17.61	
5	QPSK	25	0	17.58	17.61	17.63	19.5
5	16QAM	1	0	17.60	17.82	17.65	
5	16QAM	1	12	17.73	17.58	17.63	
5	16QAM	1	24	17.64	17.67	17.70	18.5
5	16QAM	12	0	16.67	16.80	16.71	
5	16QAM	12	7	16.52	16.78	16.58	
5	16QAM	12	13	16.57	16.61	16.61	18.5
5	16QAM	25	0	16.53	16.69	16.70	
5	64QAM	1	0	16.63	16.75	16.70	
5	64QAM	1	12	16.59	16.61	16.72	18.5
5	64QAM	1	24	16.68	16.67	16.64	
5	64QAM	12	0	15.67	15.80	15.63	
5	64QAM	12	7	15.60	15.72	15.64	17.5
5	64QAM	12	13	15.57	15.73	15.55	
5	64QAM	25	0	15.53	15.58	15.54	
Channel				131987	132322	132697	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	18.82	18.86	18.77	20.5
3	QPSK	1	8	18.77	18.83	18.73	
3	QPSK	1	14	18.70	18.69	18.64	
3	QPSK	8	0	17.64	17.71	17.58	19.5
3	QPSK	8	4	17.58	17.64	17.59	
3	QPSK	8	7	17.54	17.59	17.55	

3	QPSK	15	0	17.52	17.55	17.57	19.5
3	16QAM	1	0	17.54	17.76	17.59	
3	16QAM	1	8	17.67	17.52	17.57	
3	16QAM	1	14	17.58	17.61	17.64	18.5
3	16QAM	8	0	16.61	16.74	16.65	
3	16QAM	8	4	16.56	16.72	16.52	
3	16QAM	8	7	16.51	16.55	16.55	18.5
3	16QAM	15	0	16.57	16.63	16.64	
3	64QAM	1	0	16.57	16.69	16.64	
3	64QAM	1	8	16.53	16.55	16.66	17.5
3	64QAM	1	14	16.62	16.61	16.58	
3	64QAM	8	0	15.61	15.74	15.57	
3	64QAM	8	4	15.54	15.66	15.58	17.5
3	64QAM	8	7	15.51	15.67	15.49	
3	64QAM	15	0	15.47	15.52	15.48	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	18.78	18.82	18.73	20.5
1.4	QPSK	1	3	18.73	18.79	18.69	
1.4	QPSK	1	5	18.66	18.65	18.60	
1.4	QPSK	3	0	17.60	17.67	17.54	
1.4	QPSK	3	1	17.54	17.60	17.45	
1.4	QPSK	3	3	17.50	17.55	17.51	19.5
1.4	QPSK	6	0	17.48	17.51	17.53	
1.4	16QAM	1	0	17.50	17.72	17.55	19.5
1.4	16QAM	1	3	17.63	17.48	17.53	
1.4	16QAM	1	5	17.54	17.57	17.60	
1.4	16QAM	3	0	16.57	16.70	16.61	
1.4	16QAM	3	1	16.42	16.68	16.48	
1.4	16QAM	3	3	16.47	16.51	16.51	18.5
1.4	16QAM	6	0	16.43	16.59	16.60	
1.4	64QAM	1	0	16.53	16.65	16.60	18.5
1.4	64QAM	1	3	16.49	16.51	16.62	
1.4	64QAM	1	5	16.58	16.57	16.54	
1.4	64QAM	3	0	15.57	15.70	15.53	
1.4	64QAM	3	1	15.50	15.62	15.54	
1.4	64QAM	3	3	15.47	15.63	15.45	17.5
1.4	64QAM	6	0	15.43	15.48	15.44	

n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				374000	376000	378000	19.00
Frequency (MHz)				1870	1880	1890	
40	DFT-s-OFDM PI/2 BPSK	1	1	17.42	17.50	17.53	19.00
40		1	108	17.49	17.56	17.48	
40		1	214	17.40	17.44	17.48	
40		108	1	17.04	17.10	17.19	19.00
40		108	54	17.61	17.59	17.64	
40		108	108	16.94	17.08	17.08	
40		216	0	16.99	17.02	17.12	
40	DFT-s-OFDM QPSK	1	1	17.73	17.77	17.82	19.00
40		1	108	17.70	17.76	17.72	
40		1	214	17.64	17.73	17.77	
40		108	1	16.61	16.66	16.74	19.00
40		108	54	17.63	17.61	17.68	
40		108	108	16.50	16.60	16.60	
40		216	0	16.56	16.57	16.67	
40	DFT-s-OFDM 16QAM	1	1	16.75	16.74	16.74	18.00
40	DFT-s-OFDM 64QAM	1	1	14.81	14.89	14.89	16.00
40	DFT-s-OFDM 256QAM	1	1	13.03	13.11	13.15	14.50
40	CP-OFDM QPSK	1	1	16.12	16.14	16.23	17.50
40	CP-OFDM 16QAM	1	1	15.71	15.99	15.83	17.50
40	CP-OFDM 64QAM	1	1	13.87	13.91	13.93	15.50
40	CP-OFDM 256QAM	1	1	11.04	11.08	11.11	12.50
Channel				373000	376000	379000	19.00
Frequency (MHz)				1865	1880	1895	
30	DFT-s-OFDM QPSK	1	1	17.70	17.65	17.68	19.00
Channel				372500	376000	379500	19.00
Frequency (MHz)				1862.5	1880	1897.5	
25	DFT-s-OFDM QPSK	1	1	17.61	17.69	17.42	19.00
Channel				372000	376000	380000	19.00
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM QPSK	1	1	17.58	17.63	17.52	19.00
Channel				371500	376000	380500	19.00
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	17.59	17.62	17.48	19.00
Channel				371000	376000	381000	19.00
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	17.62	17.54	17.65	19.00
Channel				370500	376000	381500	19.00
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	17.53	17.30	17.55	19.00

n5 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	20.48	20.56	20.52	22.00
20		1	53	20.61	20.64	20.57	
20		1	104	20.53	20.57	20.52	
20		50	1	20.06	20.17	20.15	22.00
20		50	25	20.66	20.70	20.68	
20		50	50	20.13	20.17	20.14	
20		100	0	20.07	20.17	20.16	
20	DFT-s-OFDM QPSK	1	1	20.74	20.78	20.86	22.00
20		1	53	20.63	20.80	20.76	
20		1	104	20.55	20.76	20.65	
20		50	1	19.59	19.66	19.68	22.00
20		50	25	20.66	20.70	20.72	
20		50	50	19.66	19.67	19.66	
20		100	0	19.60	19.67	19.67	
20	DFT-s-OFDM 16QAM	1	1	19.63	19.75	19.73	21.00
20	DFT-s-OFDM 64QAM	1	1	17.82	17.88	17.88	19.50
20	DFT-s-OFDM 256QAM	1	1	15.99	16.05	16.07	17.50
20	CP-OFDM QPSK	1	1	19.11	19.16	19.14	20.50
20	CP-OFDM 16QAM	1	1	18.72	18.80	18.81	20.00
20	CP-OFDM 64QAM	1	1	16.95	17.02	17.05	18.50
20	CP-OFDM 256QAM	1	1	14.08	14.12	14.14	15.50
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	20.72	20.76	20.72	22.00
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	20.76	20.81	20.59	22.00
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	20.75	20.72	20.56	22.00

n41 (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	18.00
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	16.13	16.37	16.48	16.58	16.52	18.00
100		1	136	16.83	16.85	16.69	16.61	16.74	
100		1	271	16.66	16.55	16.31	16.30	16.27	
100		135	1	15.87	15.99	16.11	16.10	16.15	18.00
100		135	67	16.40	16.50	16.59	16.60	16.38	
100		135	136	15.86	16.08	16.10	16.09	15.84	
100	DFT-s-OFDM QPSK	270	0	15.81	15.98	16.05	16.05	15.99	18.00
100		1	1	16.10	16.36	16.45	16.42	16.55	
100		1	136	16.72	16.53	16.89	16.83	16.56	
100		1	271	16.57	16.45	16.18	16.18	16.06	18.00
100		135	1	15.42	15.54	15.65	15.62	15.71	
100		135	67	16.43	16.53	16.59	16.56	16.36	
100	DFT-s-OFDM 16QAM	135	136	15.41	15.58	15.65	15.65	15.36	18.00
100		270	0	15.35	15.54	15.61	15.60	15.54	
100	DFT-s-OFDM 64QAM	1	1	15.44	15.55	15.56	15.48	15.77	17.00
100	DFT-s-OFDM 256QAM	1	1	13.79	13.92	13.98	14.03	14.14	15.50
100	CP-OFDM QPSK	1	1	11.71	11.82	13.94	11.85	12.08	13.50
100	CP-OFDM 16QAM	1	1	14.65	14.71	14.71	14.70	14.95	16.00
100	CP-OFDM 64QAM	1	1	14.37	14.48	14.50	14.50	14.71	16.00
100	CP-OFDM 256QAM	1	1	12.87	12.99	13.00	13.04	13.24	14.50
100	CP-OFDM 256QAM	1	1	9.98	10.08	10.08	10.09	10.29	11.50
Channel				508200	513402	518598	523800	528996	18.00
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	16.07	16.22	16.34	16.36	16.43	18.00
Channel				507204	512904	518598	524298	529998	18.00
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	16.04	16.31	16.38	16.38	16.35	18.00
Channel				506202	512400	518598	524796	531000	18.00
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	16.15	16.25	16.37	16.44	16.20	18.00
Channel				505200	511902	518598	525798	531996	18.00
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	16.15	16.24	16.40	16.37	16.31	18.00
Channel				504204	511404	518598	525798	532998	18.00
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	16.16	16.32	16.53	16.44	16.47	18.00
Channel				503202	510900	518598	526296	534000	18.00
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	16.09	16.48	16.52	16.43	16.30	18.00
Channel				502200	510402	518598	526800	534996	18.00
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	16.18	16.39	16.47	16.44	16.39	18.00
Channel				501204	509904	518598	527298	535998	18.00
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	16.00	16.31	16.45	16.17	16.20	18.00
Channel				500700	509652	518598	527550	536496	18.00
Frequency (MHz)				2503.5	2548.26	2592.99	2637.75	2682.48	
15	DFT-s-OFDM QPSK	1	1	16.20	16.31	16.46	16.20	16.24	18.00
Channel				500202	509400	518598	527796	537000	18.00
Frequency (MHz)				2501.01	2547	2592.99	2638.98	2685	
10	DFT-s-OFDM QPSK	1	1	16.19	16.33	16.49	16.27	16.06	18.00

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	17.00
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	15.63	15.87	15.98	15.76	16.02	17.00
100		1	136	16.33	16.35	16.19	16.70	16.24	
100		1	271	16.16	16.05	15.81	15.80	15.77	
100		135	1	15.37	15.49	15.61	15.60	15.65	
100		135	67	15.90	16.00	16.09	16.10	15.88	
100		135	136	15.36	15.58	15.60	15.59	15.34	
100	DFT-s-OFDM QPSK	270	0	15.31	15.48	15.55	15.55	15.49	17.00
100		1	1	16.22	16.03	16.09	16.33	16.06	
100		1	136	16.70	16.80	16.86	16.74	16.75	
100		1	271	16.07	15.95	15.92	15.88	15.90	
100		135	1	14.92	15.04	15.15	15.12	15.21	
100		135	67	15.93	16.03	16.12	16.04	16.01	
100	DFT-s-OFDM 16QAM	135	136	14.91	15.08	15.15	15.15	14.86	17.00
100		270	0	14.85	15.04	15.11	15.10	15.04	
100		1	1	14.94	15.05	15.06	14.98	15.27	
100	DFT-s-OFDM 64QAM	1	1	13.29	13.42	13.48	13.53	13.64	15.00
100	DFT-s-OFDM 256QAM	1	1	11.21	11.32	13.44	11.35	11.58	12.00
100	CP-OFDM QPSK	1	1	14.15	14.21	14.21	14.20	14.45	18.50
100	CP-OFDM 16QAM	1	1	13.87	13.98	14.00	14.00	14.21	17.50
100	CP-OFDM 64QAM	1	1	12.37	12.49	12.50	12.54	12.74	16.50
100	CP-OFDM 256QAM	1	1	9.48	9.58	9.58	9.59	9.79	12.50
Channel				508200	513402	518598	523800	528996	Tune-up limit (dBm)
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	15.57	15.72	15.84	15.86	15.93	17.00
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	15.54	15.81	15.88	15.88	15.85	17.00
Channel				506202	512400	518598	524796	531000	Tune-up limit (dBm)
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	15.65	15.75	15.87	15.94	15.70	17.00
Channel				505200	511902	518598	525798	531996	Tune-up limit (dBm)
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	15.65	15.74	15.90	15.87	15.81	17.00
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	15.66	15.82	16.03	15.94	15.97	17.00
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	15.59	15.98	16.02	15.93	15.80	17.00
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	15.68	15.89	15.97	15.94	15.89	17.00
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	15.50	15.81	15.95	15.67	15.70	17.00
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	15.70	15.81	15.96	15.70	15.74	17.00
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	15.69	15.83	15.99	15.77	15.56	17.00

n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	17.27	17.35	17.37	19.50
40		1	108	17.35	17.62	17.65	
40		1	214	17.52	17.62	17.46	
40		108	1	16.93	17.11	17.25	19.00
40		108	54	17.51	17.68	17.75	
40		108	108	17.07	17.17	17.22	
40		216	0	16.95	17.08	17.18	
40	DFT-s-OFDM QPSK	1	1	17.76	17.88	17.93	19.50
40		1	108	17.43	17.88	17.71	
40		1	214	17.56	17.71	17.73	
40		108	1	16.48	16.64	16.65	19.00
40		108	54	17.56	17.70	17.73	
40		108	108	16.60	16.73	16.70	
40		216	0	16.50	16.64	16.66	
40	DFT-s-OFDM 16QAM	1	1	16.52	16.60	16.61	18.50
40	DFT-s-OFDM 64QAM	1	1	14.72	14.81	14.81	16.00
40	DFT-s-OFDM 256QAM	1	1	13.04	13.04	13.11	14.50
40	CP-OFDM QPSK	1	1	16.05	16.04	16.11	17.50
40	CP-OFDM 16QAM	1	1	15.59	15.66	15.65	17.00
40	CP-OFDM 64QAM	1	1	13.79	13.84	13.88	15.00
40	CP-OFDM 256QAM	1	1	10.99	11.01	11.09	12.50
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	17.32	17.61	17.78	19.50
Channel				344500	349000	353500	Tune-up limit (dBm)
Frequency (MHz)				1722.5	1745	1767.5	
25	DFT-s-OFDM QPSK	1	1	17.52	17.58	17.77	19.50
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	17.47	17.33	17.72	19.50
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	17.51	17.52	17.61	19.50
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	17.54	17.59	17.48	19.50
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	17.42	17.60	17.60	19.50

n77(3450-3550MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			15.64			16.50
100		1	136			15.31			
100		1	271			15.18			
100		135	1			14.95			16.50
100		135	67			15.45			
100	DFT-s-OFDM QPSK	135	136			14.55			
100		270	0			14.91			
100		1	1			16.05			17.00
100		1	136			15.48			
100		1	271			15.20			
100	DFT-s-OFDM 16QAM	135	1			14.54			16.50
100		135	67			15.39			
100		135	136			14.10			
100		270	0			14.42			
100		1	1			14.85			15.50
100	DFT-s-OFDM 64QAM	1	1			13.33			14.50
100	DFT-s-OFDM 256QAM	1	1			11.27			12.50
100	CP-OFDM QPSK	1	1			14.07			15.50
100	CP-OFDM 16QAM	1	1			14.26			15.50
100	CP-OFDM 64QAM	1	1			11.76			13.00
100	CP-OFDM 256QAM	1	1			9.29			10.50
Channel				633000	633168	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	15.70	15.63	15.65	15.57	15.62	16.50
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	15.66	15.73	15.67	15.60	15.60	16.50
Channel				632334	632634	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	15.76	15.72	15.70	15.65	15.79	16.50
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	15.57	15.50	15.44	15.36	15.39	16.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	15.51	15.49	15.40	15.41	15.35	16.50
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	15.59	15.57	15.46	15.42	15.21	16.50
Channel				631000	632168	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	15.63	15.53	15.43	15.32	15.06	16.50
Channel				630834	632084	633334	634584	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3481.26	3500.01	3518.76	3537.48	
25	DFT-s-OFDM QPSK	1	1	15.60	15.52	15.45	15.23	14.97	16.50
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	15.70	15.52	15.44	15.23	15.03	16.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	15.69	15.53	15.41	15.19	15.07	16.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	15.67	15.56	15.44	15.15	15.13	16.50

n77(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			15.64			16.50
100		1	136			15.31			
100		1	271			15.18			
100		135	1			14.95			16.50
100		135	67			15.45			
100		135	136			14.55			
100	DFT-s-OFDM QPSK	270	0			14.91			17.50
100		1	1			16.05			
100		1	136			15.48			
100		1	271			15.20			16.50
100		135	1			14.54			
100		135	67			15.39			
100	DFT-s-OFDM 16QAM	135	136			14.50			15.50
100		270	0			14.69			
100		1	1			14.85			
100		1	1			13.33			14.50
100		1	1			11.27			11.50
100	CP-OFDM QPSK	1	1			14.07			17.00
100	CP-OFDM 16QAM	1	1			14.28			16.00
100	CP-OFDM 64QAM	1	1			11.76			15.00
100	CP-OFDM 256QAM	1	1			9.29			11.00
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	15.70	15.63	15.65	15.57	15.62	16.50
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	15.66	15.73	15.67	15.60	15.60	16.50
Channel				632334	632634	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	15.76	15.72	15.70	15.65	15.79	16.50
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	15.57	15.50	15.44	15.36	15.39	16.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	15.51	15.49	15.40	15.41	15.35	16.50
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	15.59	15.57	15.46	15.42	15.21	16.50
Channel				631000	632168	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	15.63	15.53	15.43	15.32	15.06	16.50
Channel				630834	632084	633334	634584	635832	Tune-up limit (dBm)
Frequency (MHz)				3462.51	3481.26	3500.01	3518.76	3537.48	
25	DFT-s-OFDM QPSK	1	1	15.60	15.52	15.45	15.23	14.97	16.50
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	15.70	15.52	15.44	15.23	15.03	16.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	15.69	15.53	15.41	15.19	15.07	16.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	15.67	15.56	15.44	15.15	15.13	16.50

n77(3700-3980MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	16.50
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	15.44	15.60	15.63	15.45	15.36	16.50
100		1	136	15.48	15.53	15.26	15.64	15.74	
100		1	271	15.67	15.47	15.61	15.75	15.71	
100		135	1	15.04	15.16	15.16	14.96	15.00	16.50
100		135	67	15.63	15.66	15.66	15.51	15.65	
100		135	136	15.20	15.31	15.32	15.21	15.28	
100		270	0	15.11	15.23	15.22	15.09	15.19	
100	DFT-s-OFDM QPSK	1	1	15.39	15.56	15.51	15.42	15.36	16.50
100		1	136	15.70	15.74	15.69	15.68	15.76	
100		1	271	15.61	15.51	15.55	15.45	15.54	
100		135	1	14.56	14.67	14.67	14.88	14.71	16.50
100		135	67	15.61	15.65	15.65	15.49	15.67	
100		135	136	14.75	14.80	14.83	14.75	14.79	
100		270	0	14.61	14.70	14.71	14.58	14.67	
100	DFT-s-OFDM 16QAM	1	1	14.72	14.82	14.85	14.71	14.65	15.50
100	DFT-s-OFDM 64QAM	1	1	13.50	13.70	13.51	13.42	13.09	14.50
100	DFT-s-OFDM 256QAM	1	1	10.84	11.02	11.00	10.98	11.12	11.50
100	CP-OFDM QPSK	1	1	13.81	14.23	13.98	13.90	13.76	15.00
100	CP-OFDM 16QAM	1	1	13.71	13.85	13.86	13.71	13.61	14.00
100	CP-OFDM 64QAM	1	1	12.16	12.36	12.34	12.31	12.29	13.50
100	CP-OFDM 256QAM	1	1	9.11	9.30	9.30	9.24	9.30	10.50
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	15.29	15.47	15.39	15.27	15.29	16.50
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	15.23	15.46	15.41	15.31	15.31	16.50
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	15.12	15.39	15.37	15.29	15.18	16.50
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	15.14	15.27	15.28	15.32	15.35	16.50
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	15.06	15.43	15.30	15.20	15.50	16.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	14.19	15.40	15.33	15.27	15.52	16.50
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	15.07	15.38	15.29	15.27	15.67	16.50
Channel				647500	651750	656000	660250	664500	Tune-up limit (dBm)
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	
25	DFT-s-OFDM QPSK	1	1	15.34	15.62	15.53	15.28	15.55	16.50
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	15.18	15.34	15.31	15.25	15.49	16.50
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	15.14	15.49	15.31	15.17	15.55	16.50
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	15.11	15.46	15.31	15.18	15.48	16.50

n77(3700-3980MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	High Channel	High Channel	Tune-up
Channel				650000	653000	656000	659000	662000	limit
Frequency (MHz)				3750	3795	3840	3885	3930	(dBm)
100	DFT-s-OFDM PI/2 BPSK	1	1	16.02	16.18	16.18	16.03	15.94	18.00
100		1	136	16.06	16.29	15.84	16.22	16.32	
100		1	271	16.25	16.40	16.38	16.33	16.29	
100		135	1	15.62	15.74	15.74	15.54	15.58	18.00
100		135	67	16.21	16.24	16.24	16.09	16.23	
100		135	136	15.78	15.89	15.90	15.79	15.86	
100		270	0	15.69	15.81	15.80	15.67	15.77	
100	DFT-s-OFDM QPSK	1	1	16.57	16.64	16.72	16.70	16.68	18.00
100		1	136	16.38	16.48	16.57	16.59	16.47	
100		1	271	16.29	16.35	16.32	16.26	16.34	
100		135	1	15.14	15.25	15.25	15.38	15.09	18.00
100		135	67	16.19	16.23	16.23	16.07	16.22	
100		135	136	15.33	15.38	15.41	15.33	15.37	
100		270	0	15.19	15.28	15.29	15.16	15.25	
100	DFT-s-OFDM 16QAM	1	1	15.30	15.40	15.43	15.29	15.23	17.00
100	DFT-s-OFDM 64QAM	1	1	14.08	14.28	14.09	14.00	13.67	15.50
100	DFT-s-OFDM 256QAM	1	1	11.42	11.60	11.58	11.56	13.70	15.00
100	CP-OFDM QPSK	1	1	14.39	14.81	14.56	14.48	14.34	17.00
100	CP-OFDM 16QAM	1	1	14.29	14.43	14.44	14.29	14.19	16.00
100	CP-OFDM 64QAM	1	1	12.74	12.94	12.92	12.89	12.87	15.00
100	CP-OFDM 256QAM	1	1	9.69	9.88	9.88	9.82	9.88	11.00
Channel				649666	652834	656000	659166	662332	Tune-up
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	limit
90	DFT-s-OFDM QPSK	1	1	16.05	16.23	16.15	16.03	16.05	18.00
Channel				649334	652668	656000	659332	662666	Tune-up
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	limit
80	DFT-s-OFDM QPSK	1	1	15.99	16.22	16.17	16.07	16.07	18.00
Channel				649000	652500	656000	659500	663000	Tune-up
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	limit
70	DFT-s-OFDM QPSK	1	1	15.88	16.15	16.13	16.05	15.94	18.00
Channel				648668	652334	656000	659666	663332	Tune-up
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	limit
60	DFT-s-OFDM QPSK	1	1	15.90	16.03	16.04	16.08	16.11	18.00
Channel				648334	652168	656000	659832	663666	Tune-up
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	limit
50	DFT-s-OFDM QPSK	1	1	15.82	16.19	16.06	15.96	16.26	18.00
Channel				648000	652000	656000	660000	664000	Tune-up
Frequency (MHz)				3720	3780	3840	3900	3960	limit
40	DFT-s-OFDM QPSK	1	1	14.95	16.16	16.09	16.03	16.28	18.00
Channel				647668	651834	656000	660166	664332	Tune-up
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	limit
30	DFT-s-OFDM QPSK	1	1	15.83	16.14	16.05	16.03	16.43	18.00
Channel				647500	651750	656000	660250	664500	Tune-up
Frequency (MHz)				3712.5	3776.25	3840	3903.75	3967.5	limit
25	DFT-s-OFDM QPSK	1	1	16.10	16.38	16.29	16.04	16.31	18.00
Channel				647334	651668	656000	660332	664666	Tune-up
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	limit
20	DFT-s-OFDM QPSK	1	1	15.94	16.10	16.07	16.01	16.25	18.00
Channel				647168	651584	656000	660416	664832	Tune-up
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	limit
15	DFT-s-OFDM QPSK	1	1	15.90	16.25	16.07	15.93	16.31	18.00
Channel				647000	651500	656000	660500	665000	Tune-up
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	limit
10	DFT-s-OFDM QPSK	1	1	15.87	16.22	16.07	15.94	16.24	18.00