



REPORT No.: SZ25040226S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

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



Full Power

REPORT No.: SZ25040226S01

GSM850		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel		128	189	251		128	189	251	
Frequency (MHz)		824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot		33.05	33.03	33.04	34.00	24.05	24.03	24.04	25.00
GPRS 1 Tx slot		33.02	33.01	33.00	34.00	24.02	24.01	24.00	25.00
GPRS 2 Tx slots		32.20	32.27	32.25	33.00	26.20	26.27	26.25	27.00
GPRS 3 Tx slots		30.41	30.46	30.44	31.50	26.15	26.20	26.18	27.24
GPRS 4 Tx slots		29.20	29.24	29.22	30.00	26.20	26.24	26.22	27.00
EDGE 1 Tx slot		27.88	27.89	27.86	28.50	18.88	18.89	18.86	19.50
EDGE 2 Tx slots		26.60	26.62	26.61	27.50	20.60	20.62	20.61	21.50
EDGE 3 Tx slots		25.24	25.30	25.33	26.00	20.98	21.04	21.07	21.74
EDGE 4 Tx slots		24.13	24.11	24.16	25.00	21.13	21.11	21.16	22.00
Mode			Max.	33.05			Max.	26.27	
Attenuator		Cable Loss : 0.6							
Date		2025.4.28							

GSM1900		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel		512	661	810		512	661	810	
Frequency (MHz)		1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot		29.93	29.95	29.92	31.00	20.93	20.95	20.92	22.00
GPRS 1 Tx slot		29.90	29.96	29.95	31.00	20.90	20.96	20.95	22.00
GPRS 2 Tx slots		29.02	29.05	29.01	30.00	23.02	23.05	23.01	24.00
GPRS 3 Tx slots		27.30	27.36	27.33	28.00	23.04	23.10	23.07	23.74
GPRS 4 Tx slots		26.34	26.35	26.31	27.00	23.34	23.35	23.31	24.00
EDGE 1 Tx slot		25.60	25.63	25.58	26.50	16.60	16.63	16.58	17.50
EDGE 2 Tx slots		24.45	24.46	24.41	25.50	18.45	18.46	18.41	19.50
EDGE 3 Tx slots		22.62	22.65	22.63	23.50	18.36	18.39	18.37	19.24
EDGE 4 Tx slots		21.50	21.57	21.55	22.50	18.50	18.57	18.55	19.50
Mode			Max.	29.96			Max.	23.35	
Attenuator		Cable Loss : 0.8							
Date		2025.4.28							

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	23.35	23.38	23.31	24.00	23.21	23.28	23.20	24.00	23.48	23.55	23.52	24.50
3GPP Rel 5	HSDPA Subtest-1	22.29	22.17	22.12	23.00	22.54	22.60	22.64	23.50	22.25	22.11	22.24	23.00
3GPP Rel 5	HSDPA Subtest-2	22.30	22.19	22.06	23.00	22.64	22.57	22.68	23.50	22.29	22.18	22.19	23.00
3GPP Rel 5	HSDPA Subtest-3	21.82	21.64	21.54	22.50	22.21	21.99	22.14	23.00	21.72	21.61	21.66	22.50
3GPP Rel 5	HSDPA Subtest-4	21.82	21.68	21.51	22.50	22.24	21.94	22.13	23.00	21.73	21.58	21.69	22.50
3GPP Rel 6	HSUPA Subtest-1	21.18	21.08	21.01	22.00	22.27	22.64	22.77	23.50	22.26	22.17	22.14	23.00
3GPP Rel 6	HSUPA Subtest-2	21.18	21.07	21.03	22.00	22.15	22.14	22.21	23.00	21.75	21.70	21.68	22.50
3GPP Rel 6	HSUPA Subtest-3	20.89	20.76	20.69	21.50	22.26	22.60	22.65	23.50	22.22	22.13	22.10	23.00
3GPP Rel 6	HSUPA Subtest-4	22.18	22.08	22.04	23.00	22.54	22.63	22.68	23.50	22.24	22.14	22.32	23.00
3GPP Rel 6	HSUPA Subtest-5	21.08	20.95	20.89	22.00	22.25	22.22	22.37	23.00	22.23	22.15	22.31	23.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.82	20.70	20.64	21.50	21.18	21.13	21.19	22.00	20.71	20.72	20.76	21.50
Attenuator		Cable Loss				Cable Loss				Cable Loss			
Mode			Max.	23.38				23.28			Max.	23.55	
Date													

Band 2 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	23.36	23.43	23.30	24.5
20	QPSK	1	49	23.34	23.38	23.31	
20	QPSK	1	99	23.28	23.35	23.32	
20	QPSK	50	0	22.91	22.84	22.87	
20	QPSK	50	24	22.86	22.80	22.78	23.5
20	QPSK	50	50	22.83	22.86	22.79	
20	QPSK	100	0	22.86	22.87	22.76	
20	16QAM	1	0	22.53	22.44	22.27	
20	16QAM	1	49	22.41	22.50	22.45	23.5
20	16QAM	1	99	22.51	22.28	22.55	
20	16QAM	50	0	20.82	20.77	20.81	
20	16QAM	50	24	21.03	20.88	20.87	
20	16QAM	50	50	20.90	20.93	20.95	21.5
20	16QAM	100	0	20.88	20.90	20.86	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	23.28	23.35	23.22	24.5
15	QPSK	1	37	23.26	23.30	23.23	
15	QPSK	1	74	23.20	23.27	23.24	
15	QPSK	36	0	22.83	22.76	22.79	
15	QPSK	36	20	22.78	22.72	22.70	23.5
15	QPSK	36	39	22.75	22.78	22.71	
15	QPSK	75	0	22.78	22.79	22.68	
15	16QAM	1	0	22.45	22.36	22.19	
15	16QAM	1	37	22.33	22.42	22.37	23.5
15	16QAM	1	74	22.43	22.20	22.47	
15	16QAM	36	0	20.74	20.69	20.73	
15	16QAM	36	20	20.95	20.80	20.79	
15	16QAM	36	39	20.82	20.85	20.87	21.5
15	16QAM	75	0	20.80	20.82	20.78	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	23.26	23.33	23.20	24.5
10	QPSK	1	25	23.24	23.28	23.21	
10	QPSK	1	49	23.18	23.25	23.22	
10	QPSK	25	0	22.81	22.74	22.77	
10	QPSK	25	12	22.76	22.70	22.68	23.5
10	QPSK	25	25	22.73	22.76	22.69	
10	QPSK	50	0	22.76	22.77	22.66	
10	16QAM	1	0	22.43	22.34	22.17	
10	16QAM	1	25	22.31	22.40	22.35	23.5
10	16QAM	1	49	22.41	22.18	22.45	
10	16QAM	25	0	20.72	20.67	20.71	
10	16QAM	25	12	20.93	20.78	20.77	
10	16QAM	25	25	20.80	20.83	20.85	21.5
10	16QAM	50	0	20.78	20.80	20.76	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	23.22	23.29	23.16	24.5
5	QPSK	1	12	23.20	23.24	23.17	
5	QPSK	1	24	23.14	23.21	23.18	
5	QPSK	12	0	22.77	22.70	22.73	
5	QPSK	12	7	22.72	22.66	22.64	23.5
5	QPSK	12	13	22.69	22.72	22.65	
5	QPSK	25	0	22.72	22.73	22.62	
5	16QAM	1	0	22.39	22.30	22.13	
5	16QAM	1	12	22.27	22.36	22.31	23.5
5	16QAM	1	24	22.37	22.14	22.41	
5	16QAM	12	0	20.68	20.63	20.67	
5	16QAM	12	7	20.89	20.74	20.73	
5	16QAM	12	13	20.76	20.79	20.81	21.5
5	16QAM	25	0	20.74	20.76	20.72	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	23.16	23.23	23.10	24.5
3	QPSK	1	8	23.14	23.18	23.11	
3	QPSK	1	14	23.08	23.15	23.12	
3	QPSK	8	0	22.71	22.64	22.67	
3	QPSK	8	4	22.66	22.60	22.58	23.5
3	QPSK	8	7	22.63	22.66	22.59	
3	QPSK	15	0	22.66	22.67	22.56	
3	16QAM	1	0	22.33	22.24	22.07	
3	16QAM	1	8	22.21	22.30	22.25	23.5
3	16QAM	1	14	22.31	22.08	22.35	
3	16QAM	8	0	20.62	20.57	20.61	
3	16QAM	8	4	20.83	20.68	20.67	
3	16QAM	8	7	20.70	20.73	20.75	21.5
3	16QAM	15	0	20.68	20.70	20.66	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.15	23.22	23.09	24.5
1.4	QPSK	1	3	23.13	23.17	23.10	
1.4	QPSK	1	5	23.07	23.14	23.11	
1.4	QPSK	3	0	22.70	22.63	22.66	
1.4	QPSK	3	1	22.65	22.59	22.57	23.5
1.4	QPSK	3	3	22.62	22.65	22.58	
1.4	QPSK	6	0	22.65	22.66	22.55	
1.4	16QAM	1	0	22.32	22.23	22.06	
1.4	16QAM	1	3	22.20	22.29	22.24	23.5
1.4	16QAM	1	5	22.30	22.07	22.34	
1.4	16QAM	3	0	20.61	20.56	20.60	
1.4	16QAM	3	1	20.82	20.67	20.66	
1.4	16QAM	3	3	20.69	20.72	20.74	21.5
1.4	16QAM	6	0	20.67	20.69	20.65	

Band 4 (AWS Band) (dBm) Part 27L (only on channel required)								
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)	
Channel				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745	24	
20	QPSK	1	0	23.23	23.25	23.20		
20	QPSK	1	49	23.15	23.16	23.17		
20	QPSK	1	99	23.07	23.09	23.12		
20	QPSK	50	0	22.63	22.66	22.58	23	
20	QPSK	50	24	22.59	22.62	22.61		
20	QPSK	50	50	22.56	22.59	22.65		
20	QPSK	100	0	22.53	22.62	22.57		
20	16QAM	1	0	22.26	22.51	22.57	23	
20	16QAM	1	49	22.51	22.57	22.42		
20	16QAM	1	99	22.58	22.57	22.68		
20	16QAM	50	0	21.04	21.00	21.05		
20	16QAM	50	24	21.07	20.96	21.00	22	
20	16QAM	50	50	21.12	20.98	20.99		
20	16QAM	100	0	21.04	21.03	21.01		
Channel				20025	20175	20325		Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5		
15	QPSK	1	0	23.20	23.22	23.17	24	
15	QPSK	1	37	23.12	23.13	23.14		
15	QPSK	1	74	23.04	23.06	23.09		
15	QPSK	36	0	22.60	22.63	22.55		
15	QPSK	36	20	22.56	22.59	22.58	23	
15	QPSK	36	39	22.53	22.56	22.62		
15	QPSK	75	0	22.50	22.59	22.54		
15	16QAM	1	0	22.23	22.48	22.54		
15	16QAM	1	37	22.48	22.54	22.39	23	
15	16QAM	1	74	22.55	22.54	22.65		
15	16QAM	36	0	21.01	20.97	21.02		
15	16QAM	36	20	21.04	20.93	20.97		
15	16QAM	36	39	21.09	20.95	20.96	22	
15	16QAM	75	0	21.01	21.00	20.98		
Channel				20000	20175	20350	Tune-up limit (dBm)	
Frequency (MHz)				1715	1732.5	1750		
10	QPSK	1	0	23.15	23.17	23.12	24	
10	QPSK	1	25	23.07	23.08	23.09		
10	QPSK	1	49	22.99	23.01	23.04		
10	QPSK	25	0	22.55	22.58	22.50		
10	QPSK	25	12	22.51	22.54	22.53	23	
10	QPSK	25	25	22.48	22.51	22.57		
10	QPSK	50	0	22.45	22.54	22.49		
10	16QAM	1	0	22.18	22.43	22.49		
10	16QAM	1	25	22.43	22.49	22.34	23	
10	16QAM	1	49	22.50	22.49	22.60		
10	16QAM	25	0	20.96	20.92	20.97		
10	16QAM	25	12	20.99	20.88	20.92		
10	16QAM	25	25	21.04	20.90	20.91	22	
10	16QAM	50	0	20.96	20.95	20.93		
Channel				19975	20175	20375	Tune-up limit (dBm)	
Frequency (MHz)				1712.5	1732.5	1752.5		
5	QPSK	1	0	23.12	23.14	23.09	24	
5	QPSK	1	12	23.04	23.05	23.06		
5	QPSK	1	24	22.96	22.98	23.01		
5	QPSK	12	0	22.52	22.55	22.47		
5	QPSK	12	7	22.48	22.51	22.50	23	
5	QPSK	12	13	22.45	22.48	22.54		
5	QPSK	25	0	22.42	22.51	22.46		
5	16QAM	1	0	22.15	22.40	22.46		
5	16QAM	1	12	22.40	22.46	22.31	23	
5	16QAM	1	24	22.47	22.46	22.57		
5	16QAM	12	0	20.93	20.89	20.94		
5	16QAM	12	7	20.96	20.85	20.89		
5	16QAM	12	13	21.01	20.87	20.88	22	
5	16QAM	25	0	20.93	20.92	20.90		
Channel				19950	20175	20385		Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5		
3	QPSK	1	0	23.09	23.11	23.06	24	
3	QPSK	1	8	23.01	23.02	23.03		
3	QPSK	1	14	22.93	22.95	22.98		
3	QPSK	8	0	22.49	22.52	22.44		
3	QPSK	8	4	22.45	22.48	22.47	23	
3	QPSK	8	7	22.42	22.45	22.51		
3	QPSK	15	0	22.39	22.48	22.43		
3	16QAM	1	0	22.12	22.37	22.43		
3	16QAM	1	8	22.37	22.43	22.28	23	
3	16QAM	1	14	22.44	22.43	22.54		
3	16QAM	8	0	20.90	20.86	20.91		
3	16QAM	8	4	20.93	20.82	20.86		
3	16QAM	8	7	20.98	20.84	20.85	22	
3	16QAM	15	0	20.90	20.89	20.87		
Channel				19957	20175	20393	Tune-up limit (dBm)	
Frequency (MHz)				1710.7	1732.5	1754.3		
1.4	QPSK	1	0	23.07	23.09	23.04	24	
1.4	QPSK	1	3	22.99	23.00	23.01		
1.4	QPSK	1	5	22.91	22.93	22.96		
1.4	QPSK	3	0	22.47	22.50	22.42		
1.4	QPSK	3	1	22.43	22.46	22.45	23	
1.4	QPSK	3	3	22.40	22.43	22.49		
1.4	16QAM	1	0	22.10	22.35	22.41		
1.4	16QAM	1	3	22.35	22.41	22.28		
1.4	16QAM	1	5	22.42	22.41	22.52	23	
1.4	16QAM	3	0	20.88	20.84	20.89		
1.4	16QAM	3	1	20.91	20.80	20.84		
1.4	16QAM	3	3	20.96	20.82	20.83		
1.4	16QAM	6	0	20.88	20.87	20.85	22	

Band 5 (Celluar Band) (dBm) Part 22H(only on channel required)								
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)	
Channel				20450	20525	20600		
Frequency (MHz)				829	836.5	844	24	
10	QPSK	1	0	23.24	23.34	23.27		
10	QPSK	1	25	23.21	23.24	23.13		
10	QPSK	1	49	23.11	23.17	23.05		
10	QPSK	25	0	22.83	22.90	22.88	23	
10	QPSK	25	12	22.84	22.81	22.76		
10	QPSK	25	25	22.76	22.72	22.75		
10	QPSK	50	0	22.65	22.67	22.64		
10	16QAM	1	0	22.74	22.64	22.60	23	
10	16QAM	1	25	22.73	22.91	22.77		
10	16QAM	1	49	22.70	22.71	22.63		
10	16QAM	25	0	20.99	20.90	20.87		
10	16QAM	25	12	20.91	20.87	20.84	22	
10	16QAM	25	25	20.99	20.95	20.90		
10	16QAM	50	0	21.03	20.89	20.86		
Channel				20425	20525	20625		Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	0	23.20	23.30	23.23	24	
5	QPSK	1	12	23.17	23.20	23.09		
5	QPSK	1	24	23.07	23.13	23.01		
5	QPSK	12	0	22.79	22.86	22.84		
5	QPSK	12	7	22.80	22.77	22.72	23	
5	QPSK	12	13	22.72	22.68	22.71		
5	QPSK	25	0	22.61	22.63	22.60		
5	16QAM	1	0	22.70	22.60	22.56		
5	16QAM	1	12	22.69	22.87	22.73	23	
5	16QAM	1	24	22.66	22.67	22.59		
5	16QAM	12	0	20.95	20.86	20.83		
5	16QAM	12	7	20.87	20.83	20.80		
5	16QAM	12	13	20.95	20.91	20.86	22	
5	16QAM	25	0	20.99	20.85	20.82		
Channel				20415	20525	20635		Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5		
3	QPSK	1	0	23.15	23.25	23.18	24	
3	QPSK	1	8	23.12	23.15	23.04		
3	QPSK	1	14	23.02	23.08	22.96		
3	QPSK	8	0	22.74	22.81	22.79		
3	QPSK	8	4	22.75	22.72	22.67	23	
3	QPSK	8	7	22.67	22.63	22.66		
3	QPSK	15	0	22.56	22.58	22.55		
3	16QAM	1	0	22.65	22.55	22.51		
3	16QAM	1	8	22.64	22.82	22.68	23	
3	16QAM	1	14	22.61	22.62	22.54		
3	16QAM	8	0	20.90	20.81	20.78		
3	16QAM	8	4	20.82	20.78	20.75		
3	16QAM	8	7	20.90	20.86	20.81	22	
3	16QAM	15	0	20.94	20.80	20.77		
Channel				20407	20525	20643		Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3		
1.4	QPSK	1	0	23.12	23.22	23.15	24	
1.4	QPSK	1	3	23.09	23.12	23.01		
1.4	QPSK	1	5	22.99	23.05	22.93		
1.4	QPSK	3	0	22.71	22.78	22.76		
1.4	QPSK	3	1	22.72	22.69	22.64	23	
1.4	QPSK	3	3	22.64	22.60	22.63		
1.4	QPSK	6	0	22.53	22.55	22.52		
1.4	16QAM	1	0	22.62	22.52	22.48		
1.4	16QAM	1	3	22.61	22.79	22.65	23	
1.4	16QAM	1	5	22.58	22.59	22.51		
1.4	16QAM	3	0	20.87	20.78	20.75		
1.4	16QAM	3	1	20.79	20.75	20.72		
1.4	16QAM	3	3	20.87	20.83	20.78	22	
1.4	16QAM	6	0	20.91	20.77	20.74		

Band 7 (2600MHz Band) (dBm)								
Part 27								
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)	
Channel				20850	21100	21350		
Frequency (MHz)				2510	2535	2560	22.5	
20	QPSK	1	0	21.50	21.56	21.49		
20	QPSK	1	49	21.45	21.53	21.47		
20	QPSK	1	99	21.39	21.48	21.46		
20	QPSK	50	0	20.40	20.44	20.38	21.5	
20	QPSK	50	24	20.31	20.40	20.32		
20	QPSK	50	50	20.31	20.41	20.31		
20	QPSK	100	0	20.37	20.38	20.28		
20	16QAM	1	0	20.66	20.73	20.67	21.5	
20	16QAM	1	49	20.61	20.65	20.64		
20	16QAM	1	99	20.58	20.63	20.58		
20	16QAM	50	0	19.50	19.52	19.47		
20	16QAM	50	24	19.38	19.48	19.45	20.5	
20	16QAM	50	50	19.39	19.44	19.43		
20	16QAM	100	0	19.34	19.43	19.34		
Channel				20825	21100	21375		Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	21.48	21.54	21.47	22.5	
15	QPSK	1	37	21.43	21.51	21.45		
15	QPSK	1	74	21.37	21.46	21.44		
15	QPSK	36	0	20.38	20.42	20.36		
15	QPSK	36	20	20.29	20.38	20.30	21.5	
15	QPSK	36	39	20.29	20.39	20.29		
15	QPSK	75	0	20.35	20.36	20.26		
15	16QAM	1	0	20.64	20.71	20.65		
15	16QAM	1	37	20.59	20.63	20.62	21.5	
15	16QAM	1	74	20.56	20.61	20.56		
15	16QAM	36	0	19.48	19.50	19.45		
15	16QAM	36	20	19.36	19.46	19.43		
15	16QAM	36	39	19.37	19.42	19.41	20.5	
15	16QAM	75	0	19.32	19.41	19.32		
Channel				20800	21100	21400		Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	21.44	21.50	21.43	22.5	
10	QPSK	1	25	21.39	21.47	21.41		
10	QPSK	1	49	21.33	21.42	21.40		
10	QPSK	25	0	20.34	20.38	20.32		
10	QPSK	25	12	20.25	20.34	20.26	21.5	
10	QPSK	25	25	20.25	20.35	20.25		
10	QPSK	50	0	20.31	20.32	20.22		
10	16QAM	1	0	20.60	20.67	20.61		
10	16QAM	1	25	20.55	20.59	20.58	21.5	
10	16QAM	1	49	20.52	20.57	20.52		
10	16QAM	25	0	19.44	19.46	19.41		
10	16QAM	25	12	19.32	19.42	19.39		
10	16QAM	25	25	19.33	19.38	19.37	20.5	
10	16QAM	50	0	19.28	19.37	19.28		
Channel				20775	21100	21425		Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	21.39	21.45	21.38	22.5	
5	QPSK	1	12	21.34	21.42	21.36		
5	QPSK	1	24	21.28	21.37	21.35		
5	QPSK	12	0	20.29	20.33	20.27		
5	QPSK	12	7	20.20	20.29	20.21	21.5	
5	QPSK	12	13	20.20	20.30	20.20		
5	QPSK	25	0	20.26	20.27	20.17		
5	16QAM	1	0	20.55	20.62	20.56		
5	16QAM	1	12	20.50	20.54	20.53	21.5	
5	16QAM	1	24	20.47	20.52	20.47		
5	16QAM	12	0	19.39	19.41	19.36		
5	16QAM	12	7	19.27	19.37	19.34		
5	16QAM	12	13	19.28	19.33	19.32	20.5	
5	16QAM	25	0	19.23	19.32	19.23		

Band 12 (700MHz Low Band) (dBm) Part 27F(only on channel required)							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23060	23095	23130	24.5
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.48	23.52	23.45	24.5
10	QPSK	1	25	23.47	23.49	23.44	
10	QPSK	1	49	23.44	23.47	23.43	
10	QPSK	25	0	22.46	22.47	22.43	23.5
10	QPSK	25	12	22.40	22.45	22.41	
10	QPSK	25	25	22.43	22.44	22.43	
10	QPSK	50	0	22.34	22.39	22.34	23.5
10	16QAM	1	0	22.58	22.62	22.52	
10	16QAM	1	25	22.60	22.61	22.53	
10	16QAM	1	49	22.58	22.59	22.51	22.5
10	16QAM	25	0	21.43	21.49	21.42	
10	16QAM	25	12	21.39	21.46	21.38	
10	16QAM	25	25	21.37	21.44	21.38	22.5
10	16QAM	50	0	21.41	21.42	21.41	
Channel				23035	23095	23155	24.5
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.42	23.46	23.39	24.5
5	QPSK	1	12	23.41	23.43	23.38	
5	QPSK	1	24	23.38	23.41	23.37	
5	QPSK	12	0	22.40	22.41	22.37	23.5
5	QPSK	12	7	22.34	22.39	22.35	
5	QPSK	12	13	22.37	22.38	22.37	
5	QPSK	25	0	22.28	22.33	22.28	23.5
5	16QAM	1	0	22.52	22.56	22.46	
5	16QAM	1	12	22.54	22.55	22.47	
5	16QAM	1	24	22.52	22.53	22.45	22.5
5	16QAM	12	0	21.37	21.43	21.36	
5	16QAM	12	7	21.33	21.40	21.32	
5	16QAM	12	13	21.31	21.38	21.32	22.5
5	16QAM	25	0	21.35	21.36	21.35	
Channel				23025	23095	23165	24.5
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.40	23.44	23.37	24.5
3	QPSK	1	8	23.39	23.41	23.36	
3	QPSK	1	14	23.36	23.39	23.35	
3	QPSK	8	0	22.38	22.39	22.35	23.5
3	QPSK	8	4	22.32	22.37	22.33	
3	QPSK	8	7	22.35	22.36	22.35	
3	QPSK	15	0	22.26	22.31	22.26	23.5
3	16QAM	1	0	22.50	22.54	22.44	
3	16QAM	1	8	22.52	22.53	22.45	
3	16QAM	1	14	22.50	22.51	22.43	22.5
3	16QAM	8	0	21.35	21.41	21.34	
3	16QAM	8	4	21.31	21.38	21.30	
3	16QAM	8	7	21.29	21.36	21.30	22.5
3	16QAM	15	0	21.33	21.34	21.33	
Channel				23017	23095	23173	24.5
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.38	23.42	23.35	24.5
1.4	QPSK	1	3	23.37	23.39	23.34	
1.4	QPSK	1	5	23.34	23.37	23.33	
1.4	QPSK	3	0	22.36	22.37	22.33	23.5
1.4	QPSK	3	1	22.30	22.35	22.31	
1.4	QPSK	3	3	22.33	22.34	22.33	
1.4	QPSK	6	0	22.24	22.29	22.24	23.5
1.4	16QAM	1	0	22.48	22.52	22.42	
1.4	16QAM	1	3	22.50	22.51	22.43	
1.4	16QAM	1	5	22.48	22.49	22.41	23.5
1.4	16QAM	3	0	21.33	21.39	21.32	
1.4	16QAM	3	1	21.29	21.36	21.28	
1.4	16QAM	3	3	21.27	21.34	21.28	22.5
1.4	16QAM	6	0	21.31	21.32	21.31	

Band 13(700MHz Band) (dBm) Part 27F							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		23.10		24
10	QPSK	1	25		23.09		
10	QPSK	1	49		23.05		
10	QPSK	25	0		22.07		23
10	QPSK	25	12		22.05		
10	QPSK	25	25		22.03		
10	QPSK	50	0		22.06		23
10	16QAM	1	0		22.18		
10	16QAM	1	25		22.16		
10	16QAM	1	49		22.12		22
10	16QAM	25	0		21.06		
10	16QAM	25	12		21.04		
10	16QAM	25	25		21.03		22
10	16QAM	50	0		21.01		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	22.97	22.99	22.90	24
5	QPSK	1	12	22.95	22.97	22.81	
5	QPSK	1	24	22.88	22.91	22.95	
5	QPSK	12	0	21.95	21.94	21.93	23
5	QPSK	12	7	21.95	21.94	21.90	
5	QPSK	12	13	21.92	21.96	21.78	
5	QPSK	25	0	21.88	21.92	21.87	23
5	16QAM	1	0	22.04	22.05	21.97	
5	16QAM	1	12	22.03	22.08	21.94	
5	16QAM	1	24	21.94	22.05	21.96	22
5	16QAM	12	0	20.89	20.91	20.91	
5	16QAM	12	7	20.94	20.93	20.78	
5	16QAM	12	13	20.88	20.88	20.84	22
5	16QAM	25	0	20.83	20.94	20.77	

Band 25 (1900MHz Band) (dBm) Part 24E								
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)	
Channel				26140	26365	26590		
Frequency (MHz)				1860	1882.5	1905	23	
20	QPSK	1	0	22.49	22.55	22.53		
20	QPSK	1	49	22.48	22.52	22.51		
20	QPSK	1	99	22.39	22.49	22.46		
20	QPSK	50	0	21.41	21.49	21.41		
Frequency (MHz)				21.42	21.47	21.41	22	
20	QPSK	50	24	21.42	21.47	21.41		
20	QPSK	50	50	21.38	21.45	21.42		
20	QPSK	100	0	21.41	21.44	21.36		
20	16QAM	1	0	21.72	21.74	21.71		
Frequency (MHz)				21.71	21.71	21.69	22	
20	16QAM	1	49	21.63	21.71	21.69		
20	16QAM	1	99	21.62	21.69	21.59		
20	16QAM	50	0	20.43	20.51	20.46		
20	16QAM	50	24	20.45	20.48	20.41		
Frequency (MHz)				20.41	20.46	20.42	21	
20	16QAM	50	50	20.41	20.46	20.42		
20	16QAM	100	0	20.40	20.45	20.42		
Channel				26115	26365	26615		Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5		
Frequency (MHz)				22.44	22.50	22.48	23	
15	QPSK	1	0	22.44	22.50	22.48		
15	QPSK	1	37	22.43	22.47	22.46		
15	QPSK	1	74	22.34	22.44	22.41		
15	QPSK	36	0	21.36	21.44	21.36		
Frequency (MHz)				21.37	21.42	21.36	22	
15	QPSK	36	20	21.37	21.42	21.36		
15	QPSK	36	39	21.33	21.40	21.37		
15	QPSK	75	0	21.36	21.39	21.31		
15	16QAM	1	0	21.67	21.69	21.66		
Frequency (MHz)				21.58	21.66	21.64	22	
15	16QAM	1	37	21.58	21.66	21.64		
15	16QAM	1	74	21.57	21.64	21.54		
15	16QAM	36	0	20.38	20.46	20.41		
15	16QAM	36	20	20.40	20.43	20.36		
Frequency (MHz)				20.36	20.41	20.37	21	
15	16QAM	36	39	20.36	20.41	20.37		
15	16QAM	75	0	20.35	20.40	20.37		
Channel				26090	26365	26640		Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910		
Frequency (MHz)				22.40	22.46	22.44	23	
10	QPSK	1	0	22.40	22.46	22.44		
10	QPSK	1	25	22.39	22.43	22.42		
10	QPSK	1	49	22.30	22.40	22.37		
10	QPSK	25	0	21.32	21.40	21.32		
Frequency (MHz)				21.33	21.38	21.32	22	
10	QPSK	25	12	21.33	21.38	21.32		
10	QPSK	25	25	21.29	21.36	21.33		
10	QPSK	50	0	21.32	21.35	21.27		
10	16QAM	1	0	21.63	21.65	21.62		
Frequency (MHz)				21.54	21.62	21.60	22	
10	16QAM	1	25	21.54	21.62	21.60		
10	16QAM	1	49	21.53	21.60	21.50		
10	16QAM	25	0	20.34	20.42	20.37		
10	16QAM	25	12	20.36	20.39	20.32		
Frequency (MHz)				20.32	20.37	20.33	21	
10	16QAM	25	25	20.32	20.37	20.33		
10	16QAM	50	0	20.31	20.36	20.33		
Channel				26065	26365	26665		Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5		
Frequency (MHz)				22.37	22.43	22.41	23	
5	QPSK	1	0	22.37	22.43	22.41		
5	QPSK	1	12	22.36	22.40	22.39		
5	QPSK	1	24	22.27	22.37	22.34		
5	QPSK	12	0	21.29	21.37	21.29		
Frequency (MHz)				21.30	21.35	21.29	22	
5	QPSK	12	7	21.30	21.35	21.29		
5	QPSK	12	13	21.26	21.33	21.30		
5	QPSK	25	0	21.29	21.32	21.24		
5	16QAM	1	0	21.60	21.62	21.59		
Frequency (MHz)				21.51	21.59	21.57	22	
5	16QAM	1	12	21.51	21.59	21.57		
5	16QAM	1	24	21.50	21.57	21.47		
5	16QAM	12	0	20.31	20.39	20.34		
5	16QAM	12	7	20.33	20.36	20.29		
Frequency (MHz)				20.29	20.34	20.30	21	
5	16QAM	12	13	20.29	20.34	20.30		
5	16QAM	25	0	20.28	20.33	20.30		
Channel				26055	26365	26675		Tune-up limit (dBm)
Frequency (MHz)				1851.5	1882.5	1913.5		
Frequency (MHz)				22.34	22.40	22.38	23	
3	QPSK	1	0	22.34	22.40	22.38		
3	QPSK	1	8	22.33	22.37	22.36		
3	QPSK	1	14	22.24	22.34	22.31		
3	QPSK	8	0	21.26	21.34	21.26		
Frequency (MHz)				21.27	21.32	21.26	22	
3	QPSK	8	4	21.27	21.32	21.26		
3	QPSK	8	7	21.23	21.30	21.27		
3	QPSK	15	0	21.26	21.29	21.21		
3	16QAM	1	0	21.57	21.59	21.56		
Frequency (MHz)				21.48	21.56	21.54	22	
3	16QAM	1	8	21.48	21.56	21.54		
3	16QAM	1	14	21.47	21.54	21.44		
3	16QAM	8	0	20.28	20.36	20.31		
3	16QAM	8	4	20.30	20.33	20.26		
Frequency (MHz)				20.26	20.31	20.27	21	
3	16QAM	8	7	20.26	20.31	20.27		
3	16QAM	15	0	20.25	20.30	20.27		
Channel				26047	26365	26683		Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3		
Frequency (MHz)				22.29	22.35	22.33	23	
1.4	QPSK	1	0	22.29	22.35	22.33		
1.4	QPSK	1	3	22.28	22.32	22.31		
1.4	QPSK	1	5	22.19	22.29	22.26		
1.4	QPSK	3	0	21.21	21.29	21.21		
Frequency (MHz)				21.22	21.27	21.21	22	
1.4	QPSK	3	1	21.22	21.27	21.21		
1.4	QPSK	3	3	21.18	21.25	21.22		
1.4	QPSK	6	0	21.21	21.24	21.16		
1.4	16QAM	1	0	21.52	21.54	21.51		
Frequency (MHz)				21.43	21.51	21.49	21	
1.4	16QAM	1	3	21.43	21.51	21.49		
1.4	16QAM	1	5	21.42	21.49	21.39		
1.4	16QAM	3	0	20.23	20.31	20.26		
1.4	16QAM	3	1	20.25	20.28	20.21		
Frequency (MHz)				20.21	20.26	20.22	20	
1.4	16QAM	3	3	20.21	20.26	20.22		
1.4	16QAM	6	0	20.20	20.25	20.22		

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	22.82	22.84	22.81	23.5	
15	QPSK	1	37	22.81	22.82	22.78		
15	QPSK	1	74	22.75	22.81	22.75		
15	QPSK	36	0	21.75	21.80	21.76	22.5	
15	QPSK	36	20	21.74	21.75	21.73		
15	QPSK	36	39	21.66	21.73	21.66		
15	QPSK	75	0	21.66	21.76	21.66	22.5	
15	16QAM	1	0	21.84	21.88	21.83		
15	16QAM	1	37	21.80	21.85	21.82		
15	16QAM	1	74	21.73	21.82	21.77	21.5	
15	16QAM	36	0	20.80	20.84	20.78		
15	16QAM	36	20	20.73	20.80	20.79		
15	16QAM	36	39	20.69	20.78	20.72	21.5	
15	16QAM	75	0	20.71	20.79	20.77		
Channel				26740	26865	26990	Tune-up limit (dBm)	
Frequency (MHz)				819	831.5	844		
10	QPSK	1	0	22.76	22.78	22.75	23.5	
10	QPSK	1	25	22.75	22.76	22.72		
10	QPSK	1	49	22.69	22.75	22.69		
10	QPSK	25	0	21.69	21.74	21.70	22.5	
10	QPSK	25	12	21.68	21.69	21.67		
10	QPSK	25	25	21.60	21.67	21.60	22.5	
10	QPSK	50	0	21.60	21.70	21.60		
10	16QAM	1	0	21.78	21.82	21.77		
10	16QAM	1	25	21.74	21.79	21.76	22.5	
10	16QAM	1	49	21.67	21.76	21.71		
10	16QAM	25	0	20.74	20.78	20.72		
10	16QAM	25	12	20.67	20.74	20.73	21.5	
10	16QAM	25	25	20.63	20.72	20.66		
10	16QAM	50	0	20.65	20.73	20.71		
Channel				26715	26865	27015	Tune-up limit (dBm)	
Frequency (MHz)				816.5	831.5	846.5		
5	QPSK	1	0	22.73	22.75	22.72	23.5	
5	QPSK	1	12	22.72	22.73	22.69		
5	QPSK	1	24	22.66	22.72	22.66		
5	QPSK	12	0	21.66	21.71	21.67	22.5	
5	QPSK	12	7	21.65	21.66	21.64		
5	QPSK	12	13	21.57	21.64	21.57		
5	QPSK	25	0	21.57	21.67	21.57	22.5	
5	16QAM	1	0	21.75	21.79	21.74		
5	16QAM	1	12	21.71	21.76	21.73		
5	16QAM	1	24	21.64	21.73	21.68	21.5	
5	16QAM	12	0	20.71	20.75	20.69		
5	16QAM	12	7	20.64	20.71	20.70		
5	16QAM	12	13	20.60	20.69	20.63	21.5	
5	16QAM	25	0	20.62	20.70	20.68		
Channel				26705	26865	27025	Tune-up limit (dBm)	
Frequency (MHz)				815.5	831.5	847.5		
3	QPSK	1	0	22.69	22.71	22.68	23.5	
3	QPSK	1	8	22.68	22.69	22.65		
3	QPSK	1	14	22.62	22.68	22.62		
3	QPSK	8	0	21.62	21.67	21.63	22.5	
3	QPSK	8	4	21.61	21.62	21.60		
3	QPSK	8	7	21.53	21.60	21.53		
3	QPSK	15	0	21.53	21.63	21.53	22.5	
3	16QAM	1	0	21.71	21.75	21.70		
3	16QAM	1	8	21.67	21.72	21.69		
3	16QAM	1	14	21.60	21.69	21.64	21.5	
3	16QAM	8	0	20.67	20.71	20.65		
3	16QAM	8	4	20.60	20.67	20.66		
3	16QAM	8	7	20.56	20.65	20.59	21.5	
3	16QAM	15	0	20.58	20.66	20.64		
Channel				26697	26865	27033	Tune-up limit (dBm)	
Frequency (MHz)				814.7	831.5	848.3		
1.4	QPSK	1	0	22.66	22.68	22.65	23.5	
1.4	QPSK	1	3	22.65	22.66	22.62		
1.4	QPSK	1	5	22.59	22.65	22.59		
1.4	QPSK	3	0	21.59	21.64	21.60	22.5	
1.4	QPSK	3	1	21.58	21.59	21.57		
1.4	QPSK	3	3	21.50	21.57	21.50		
1.4	QPSK	6	0	21.50	21.60	21.50	22.5	
1.4	16QAM	1	0	21.68	21.72	21.67		
1.4	16QAM	1	3	21.64	21.69	21.66		
1.4	16QAM	1	5	21.57	21.66	21.61	22.5	
1.4	16QAM	3	0	20.64	20.68	20.62		
1.4	16QAM	3	1	20.57	20.64	20.63		
1.4	16QAM	3	3	20.53	20.62	20.56	21.5	
1.4	16QAM	6	0	20.55	20.63	20.61		

Band 38(only on channel required) (dBm)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	23.00	23.05	22.97	
20	QPSK	1	49	22.97	23.03	22.95	24
20	QPSK	1	99	22.96	23.00	22.94	
20	QPSK	50	0	21.95	21.98	21.94	
20	QPSK	50	24	21.91	21.96	21.92	23
20	QPSK	50	50	21.86	21.93	21.85	
20	QPSK	100	0	21.85	21.95	21.92	
20	16QAM	1	0	22.35	22.39	22.34	23
20	16QAM	1	49	22.32	22.33	22.25	
20	16QAM	1	99	22.24	22.29	22.28	
20	16QAM	50	0	20.99	21.08	21.04	22
20	16QAM	50	24	21.02	21.05	20.95	
20	16QAM	50	50	20.94	21.03	20.96	
20	16QAM	100	0	20.98	21.00	20.92	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	22.95	23.00	22.92	24
15	QPSK	1	37	22.92	22.98	22.90	
15	QPSK	1	74	22.91	22.95	22.89	
15	QPSK	36	0	21.90	21.93	21.89	23
15	QPSK	36	20	21.86	21.91	21.87	
15	QPSK	36	39	21.81	21.88	21.80	
15	QPSK	75	0	21.80	21.90	21.87	23
15	16QAM	1	0	22.30	22.34	22.29	
15	16QAM	1	37	22.27	22.28	22.20	
15	16QAM	1	74	22.19	22.24	22.23	22
15	16QAM	36	0	20.94	21.03	20.99	
15	16QAM	36	20	20.97	21.00	20.90	
15	16QAM	36	39	20.89	20.98	20.91	22
15	16QAM	75	0	20.93	20.95	20.87	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	22.89	22.94	22.86	
10	QPSK	1	25	22.86	22.92	22.84	24
10	QPSK	1	49	22.85	22.89	22.83	
10	QPSK	25	0	21.84	21.87	21.83	23
10	QPSK	25	12	21.80	21.85	21.81	
10	QPSK	25	25	21.75	21.82	21.74	
10	QPSK	50	0	21.74	21.84	21.81	23
10	16QAM	1	0	22.24	22.28	22.23	
10	16QAM	1	25	22.21	22.22	22.14	
10	16QAM	1	49	22.13	22.18	22.17	22
10	16QAM	25	0	20.88	20.97	20.93	
10	16QAM	25	12	20.91	20.94	20.84	
10	16QAM	25	25	20.83	20.92	20.85	22
10	16QAM	50	0	20.87	20.89	20.81	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	22.83	22.88	22.80	
5	QPSK	1	12	22.80	22.86	22.78	24
5	QPSK	1	24	22.79	22.83	22.77	
5	QPSK	12	0	21.78	21.81	21.77	23
5	QPSK	12	7	21.74	21.79	21.75	
5	QPSK	12	13	21.69	21.76	21.68	
5	QPSK	25	0	21.68	21.78	21.75	23
5	16QAM	1	0	22.18	22.22	22.17	
5	16QAM	1	12	22.15	22.16	22.08	
5	16QAM	1	24	22.07	22.12	22.11	22
5	16QAM	12	0	20.82	20.91	20.87	
5	16QAM	12	7	20.85	20.88	20.78	
5	16QAM	12	13	20.77	20.86	20.79	22
5	16QAM	25	0	20.81	20.83	20.75	

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

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				38750			
Frequency (MHz)				2310			
10	QPSK	1	0	23.04			24
10	QPSK	1	25	23.00			
10	QPSK	1	49	22.82			
10	QPSK	25	0	22.11			23
10	QPSK	25	12	22.03			
10	QPSK	25	25	22.00			
10	QPSK	50	0	22.01			23
10	16QAM	1	0	22.21			
10	16QAM	1	25	22.01			
10	16QAM	1	49	22.05			22
10	16QAM	25	0	21.09			
10	16QAM	25	12	21.06			
10	16QAM	25	25	21.15			22
10	16QAM	50	0	21.03			
Channel				38725	38750	38775	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	22.87	22.96	22.94	24
5	QPSK	1	12	22.86	22.95	22.94	
5	QPSK	1	24	22.83	22.80	22.84	
5	QPSK	12	0	21.94	22.03	21.88	23
5	QPSK	12	7	22.01	21.96	22.02	
5	QPSK	12	13	21.88	21.89	21.94	
5	QPSK	25	0	21.90	21.86	21.97	23
5	16QAM	1	0	22.08	22.10	22.05	
5	16QAM	1	12	21.93	21.90	21.93	
5	16QAM	1	24	21.91	21.94	21.94	22
5	16QAM	12	0	20.91	20.98	20.92	
5	16QAM	12	7	20.99	20.96	21.00	
5	16QAM	12	13	21.01	21.02	21.08	22
5	16QAM	25	0	20.98	20.93	20.94	

Band 40 (2.3G Band-2) (dBm) Part 27D-2 2350MHz ~ 2360MHz							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				39200			
Frequency (MHz)				2355			
10	QPSK	1	0	23.15			24
10	QPSK	1	25	23.12			
10	QPSK	1	49	23.10			
10	QPSK	25	0	22.19			23
10	QPSK	25	12	22.14			
10	QPSK	25	25	22.10			
10	QPSK	50	0	22.12			23
10	16QAM	1	0	21.92			
10	16QAM	1	25	22.29			
10	16QAM	1	49	22.24			22
10	16QAM	25	0	21.18			
10	16QAM	25	12	21.25			
10	16QAM	25	25	21.20			
10	16QAM	50	0	21.16			
Channel				39175	39200	39225	Tune-up limit (dBm)
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	22.91	23.03	22.84	24
5	QPSK	1	12	22.85	22.92	22.86	
5	QPSK	1	24	22.97	22.94	22.99	
5	QPSK	12	0	21.97	21.87	22.07	23
5	QPSK	12	7	22.00	22.01	21.98	
5	QPSK	12	13	22.02	22.07	22.01	
5	QPSK	25	0	21.86	21.99	21.99	23
5	16QAM	1	0	21.99	21.78	22.01	
5	16QAM	1	12	22.06	22.19	21.98	
5	16QAM	1	24	22.11	22.06	21.95	22
5	16QAM	12	0	21.09	21.05	21.12	
5	16QAM	12	7	20.97	21.10	21.13	
5	16QAM	12	13	21.05	21.10	21.08	22
5	16QAM	25	0	20.94	20.97	20.98	

Band 41 (2496~2690MHz) (dBm) (FCC)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)
Channel				39790	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	22.73	22.66	22.77	22.60	22.57	23.5
20	QPSK	1	49	22.65	22.64	22.73	22.56	22.56	
20	QPSK	1	99	22.66	22.62	22.70	22.52	22.49	
20	QPSK	50	0	21.67	21.65	21.74	21.62	21.69	22.5
20	QPSK	50	24	21.62	21.59	21.71	21.60	21.56	
20	QPSK	50	50	21.65	21.57	21.69	21.49	21.47	
20	QPSK	100	0	21.65	21.59	21.72	21.52	21.51	22.5
20	16QAM	1	0	21.77	21.73	21.79	21.64	21.66	
20	16QAM	1	49	21.71	21.67	21.75	21.63	21.57	
20	16QAM	1	99	21.65	21.62	21.72	21.56	21.57	21.5
20	16QAM	50	0	20.70	20.76	20.78	20.65	20.58	
20	16QAM	50	24	20.69	20.67	20.75	20.64	20.60	
20	16QAM	50	50	20.65	20.62	20.71	20.52	20.50	
20	16QAM	100	0	20.64	20.63	20.69	20.56	20.56	
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	22.68	22.61	22.72	22.55	22.52	23.5
15	QPSK	1	37	22.60	22.59	22.68	22.53	22.51	
15	QPSK	1	74	22.61	22.57	22.65	22.47	22.44	
15	QPSK	36	0	21.62	21.60	21.69	21.52	21.54	22.5
15	QPSK	36	20	21.57	21.54	21.66	21.55	21.51	
15	QPSK	36	39	21.60	21.52	21.64	21.44	21.42	
15	QPSK	75	0	21.60	21.54	21.67	21.47	21.46	22.5
15	16QAM	1	0	21.72	21.68	21.74	21.59	21.61	
15	16QAM	1	37	21.66	21.62	21.70	21.58	21.52	
15	16QAM	1	74	21.60	21.57	21.67	21.51	21.52	
15	16QAM	36	0	20.65	20.71	20.73	20.60	20.53	
15	16QAM	36	20	20.64	20.62	20.70	20.59	20.55	21.5
15	16QAM	36	39	20.60	20.57	20.66	20.47	20.45	
15	16QAM	75	0	20.59	20.58	20.64	20.51	20.51	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	22.64	22.57	22.68	22.51	22.48	23.5
10	QPSK	1	25	22.56	22.55	22.64	22.49	22.47	
10	QPSK	1	49	22.57	22.53	22.61	22.43	22.40	
10	QPSK	25	0	21.58	21.56	21.65	21.48	21.50	22.5
10	QPSK	25	12	21.53	21.50	21.62	21.51	21.47	
10	QPSK	25	25	21.56	21.48	21.60	21.40	21.38	
10	QPSK	50	0	21.56	21.50	21.63	21.43	21.42	22.5
10	16QAM	1	0	21.68	21.64	21.70	21.55	21.57	
10	16QAM	1	25	21.62	21.58	21.66	21.54	21.48	
10	16QAM	1	49	21.56	21.53	21.63	21.47	21.48	21.5
10	16QAM	25	0	20.61	20.67	20.69	20.56	20.49	
10	16QAM	25	12	20.60	20.58	20.66	20.55	20.51	
10	16QAM	25	25	20.56	20.53	20.62	20.43	20.41	
10	16QAM	50	0	20.55	20.54	20.60	20.47	20.47	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	22.61	22.54	22.65	22.48	22.45	23.5
5	QPSK	1	12	22.53	22.52	22.61	22.46	22.44	
5	QPSK	1	24	22.54	22.50	22.58	22.40	22.37	
5	QPSK	12	0	21.55	21.53	21.62	21.45	21.47	22.5
5	QPSK	12	7	21.50	21.47	21.59	21.48	21.44	
5	QPSK	12	13	21.53	21.45	21.57	21.37	21.35	
5	QPSK	25	0	21.53	21.47	21.60	21.40	21.39	22.5
5	16QAM	1	0	21.65	21.61	21.67	21.52	21.54	
5	16QAM	1	12	21.59	21.55	21.63	21.51	21.45	
5	16QAM	1	24	21.53	21.50	21.60	21.44	21.45	21.5
5	16QAM	12	0	20.58	20.64	20.66	20.53	20.46	
5	16QAM	12	7	20.57	20.55	20.63	20.52	20.48	
5	16QAM	12	13	20.53	20.50	20.59	20.40	20.38	
5	16QAM	25	0	20.52	20.51	20.57	20.44	20.44	

Band 48 (3.5G Band) (dBm)										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Middle-Low Channel	Middle-Low Channel	Middle-High Channel	High Channel	Tune-up limit (dBm)	
Channel				55340	55830	55990	56150	56640	Tune-up limit (dBm)	
Frequency (MHz)				3560	3609	3625	3641	3690	Tune-up limit (dBm)	
20	QPSK	1	0	22.71	22.84	22.87	22.83	22.82	23.5	
20	QPSK	1	49	22.71	22.56	22.53	22.49	22.44		
20	QPSK	1	99	22.69	22.63	22.50	22.52	22.46		
20	QPSK	50	0	21.90	21.88	21.99	21.89	21.92	22.5	
20	QPSK	50	24	21.81	21.98	21.90	21.97	21.81		
20	QPSK	50	50	21.80	22.05	21.80	21.79	21.67		
20	QPSK	100	0	21.78	21.75	21.90	21.77	21.80	22.5	
20	16QAM	1	0	22.01	21.93	21.86	21.77	21.80		
20	16QAM	1	49	22.06	21.98	21.79	21.78	21.81		
20	16QAM	1	99	22.21	21.86	21.74	21.77	21.75	21.5	
20	16QAM	50	0	21.22	21.11	20.98	20.90	20.93		
20	16QAM	50	24	20.98	21.01	20.94	20.87	20.89		
20	16QAM	50	50	21.01	21.02	20.74	20.91	20.90	21.5	
20	16QAM	100	0	21.07	21.07	20.92	20.92	20.84		
Channel				55315	55820	55990	56160	56665	Tune-up limit (dBm)	
Frequency (MHz)				3557.5	3608	3625	3642	3692.5	Tune-up limit (dBm)	
15	QPSK	1	0	22.66	22.79	22.82	22.78	22.77	23.5	
15	QPSK	1	37	22.66	22.51	22.48	22.44	22.39		
15	QPSK	1	74	22.64	22.58	22.45	22.47	22.41		
15	QPSK	36	0	21.85	21.83	21.94	21.84	21.87	22.5	
15	QPSK	36	20	21.76	21.93	21.85	21.92	21.76		
15	QPSK	36	39	21.75	22.00	21.75	21.74	21.62		
15	QPSK	75	0	21.73	21.70	21.85	21.72	21.75	22.5	
15	16QAM	1	0	21.96	21.88	21.81	21.72	21.75		
15	16QAM	1	37	22.01	21.93	21.74	21.73	21.76		
15	16QAM	1	74	22.16	21.81	21.69	21.72	21.70	21.5	
15	16QAM	36	0	21.17	21.06	20.93	20.85	20.88		
15	16QAM	36	20	20.93	20.96	20.89	20.82	20.84		
15	16QAM	36	39	20.96	20.97	20.69	20.86	20.85	21.5	
15	16QAM	75	0	21.02	21.02	20.87	20.87	20.79		
Channel				55290	55815	55990	56165	56690	Tune-up limit (dBm)	
Frequency (MHz)				3555	3607.5	3625	3642.5	3695	Tune-up limit (dBm)	
10	QPSK	1	0	22.60	22.73	22.76	22.72	22.71	23.5	
10	QPSK	1	25	22.60	22.45	22.42	22.38	22.33		
10	QPSK	1	49	22.58	22.52	22.39	22.41	22.35		
10	QPSK	25	0	21.79	21.77	21.88	21.78	21.81	22.5	
10	QPSK	25	12	21.70	21.87	21.79	21.86	21.70		
10	QPSK	25	25	21.69	21.94	21.69	21.68	21.56		
10	QPSK	50	0	21.67	21.64	21.79	21.66	21.69	22.5	
10	16QAM	1	0	21.90	21.82	21.75	21.66	21.69		
10	16QAM	1	25	21.95	21.87	21.68	21.67	21.70		
10	16QAM	1	49	22.10	21.75	21.63	21.66	21.64	21.5	
10	16QAM	25	0	21.11	21.00	20.87	20.79	20.82		
10	16QAM	25	12	20.87	20.90	20.83	20.76	20.78		
10	16QAM	25	25	20.90	20.91	20.63	20.80	20.79	21.5	
10	16QAM	50	0	20.96	20.96	20.81	20.81	20.73		
Channel				55265	55810	55990	56170	56175	Tune-up limit (dBm)	
Frequency (MHz)				3552.5	3607	3625	3643	3697.5	Tune-up limit (dBm)	
5	QPSK	1	0	22.55	22.68	22.71	22.67	22.66	23.5	
5	QPSK	1	12	22.55	22.40	22.37	22.33	22.28		
5	QPSK	1	24	22.53	22.47	22.34	22.36	22.30		
5	QPSK	12	0	21.74	21.72	21.83	21.73	21.76	22.5	
5	QPSK	12	7	21.65	21.82	21.74	21.81	21.65		
5	QPSK	12	13	21.64	21.89	21.64	21.63	21.51		
5	QPSK	25	0	21.62	21.59	21.74	21.61	21.64	22.5	
5	16QAM	1	0	21.85	21.77	21.70	21.61	21.64		
5	16QAM	1	12	21.90	21.82	21.63	21.62	21.65		
5	16QAM	1	24	22.05	21.70	21.58	21.61	21.59	21.5	
5	16QAM	12	0	21.06	20.95	20.82	20.74	20.77		
5	16QAM	12	7	20.82	20.85	20.78	20.71	20.73		
5	16QAM	12	13	20.85	20.86	20.58	20.75	20.74	21.5	
5	16QAM	25	0	20.91	20.91	20.76	20.76	20.68		

Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	23.34	23.38	23.36	24
20	QPSK	1	49	23.29	23.33	23.30	
20	QPSK	1	99	23.26	23.30	23.25	
20	QPSK	50	0	22.31	22.32	22.28	
20	QPSK	50	24	22.21	22.28	22.25	23
20	QPSK	50	50	22.21	22.30	22.27	
20	QPSK	100	0	22.29	22.30	22.23	
20	16QAM	1	0	22.40	22.44	22.34	
20	16QAM	1	49	22.40	22.42	22.33	23
20	16QAM	1	99	22.38	22.39	22.29	
20	16QAM	50	0	21.13	21.22	21.20	
20	16QAM	50	24	21.15	21.20	21.12	
20	16QAM	50	50	21.16	21.18	21.16	22
20	16QAM	100	0	21.08	21.16	21.11	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.29	23.33	23.31	24
15	QPSK	1	37	23.24	23.28	23.25	
15	QPSK	1	74	23.21	23.25	23.20	
15	QPSK	36	0	22.26	22.27	22.23	
15	QPSK	36	20	22.16	22.23	22.20	23
15	QPSK	36	39	22.16	22.25	22.22	
15	QPSK	75	0	22.24	22.25	22.18	
15	16QAM	1	0	22.35	22.39	22.29	
15	16QAM	1	37	22.35	22.37	22.28	23
15	16QAM	1	74	22.33	22.34	22.24	
15	16QAM	36	0	21.08	21.17	21.15	
15	16QAM	36	20	21.10	21.15	21.07	
15	16QAM	36	39	21.11	21.13	21.11	22
15	16QAM	75	0	21.03	21.11	21.06	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.26	23.30	23.28	24
10	QPSK	1	25	23.21	23.25	23.22	
10	QPSK	1	49	23.18	23.22	23.17	
10	QPSK	25	0	22.23	22.24	22.20	
10	QPSK	25	12	22.13	22.20	22.17	23
10	QPSK	25	25	22.13	22.22	22.19	
10	QPSK	50	0	22.21	22.22	22.15	
10	16QAM	1	0	22.32	22.36	22.26	
10	16QAM	1	25	22.32	22.34	22.25	23
10	16QAM	1	49	22.30	22.31	22.21	
10	16QAM	25	0	21.05	21.14	21.12	
10	16QAM	25	12	21.07	21.12	21.04	
10	16QAM	25	25	21.08	21.10	21.08	22
10	16QAM	50	0	21.00	21.08	21.03	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.18	23.22	23.20	24
5	QPSK	1	12	23.13	23.17	23.14	
5	QPSK	1	24	23.10	23.14	23.09	
5	QPSK	12	0	22.15	22.16	22.12	
5	QPSK	12	7	22.05	22.12	22.09	23
5	QPSK	12	13	22.05	22.14	22.11	
5	QPSK	25	0	22.13	22.14	22.07	
5	16QAM	1	0	22.24	22.28	22.18	
5	16QAM	1	12	22.24	22.26	22.17	23
5	16QAM	1	24	22.22	22.23	22.13	
5	16QAM	12	0	20.97	21.06	21.04	
5	16QAM	12	7	20.99	21.04	20.96	
5	16QAM	12	13	21.00	21.02	21.00	22
5	16QAM	25	0	20.92	21.00	20.95	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	23.11	23.15	23.13	24
3	QPSK	1	8	23.06	23.10	23.07	
3	QPSK	1	14	23.03	23.07	23.02	
3	QPSK	8	0	22.08	22.09	22.05	
3	QPSK	8	4	21.98	22.05	22.02	23
3	QPSK	8	7	21.98	22.07	22.04	
3	QPSK	15	0	22.06	22.07	22.00	
3	16QAM	1	0	22.17	22.21	22.11	
3	16QAM	1	8	22.17	22.19	22.10	23
3	16QAM	1	14	22.15	22.16	22.06	
3	16QAM	8	0	20.90	20.99	20.97	
3	16QAM	8	4	20.92	20.97	20.89	
3	16QAM	8	7	20.93	20.95	20.93	22
3	16QAM	15	0	20.85	20.93	20.88	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	23.05	23.09	23.07	24
1.4	QPSK	1	3	23.00	23.04	23.01	
1.4	QPSK	1	5	22.97	23.01	22.96	
1.4	QPSK	3	0	22.02	22.03	21.99	
1.4	QPSK	3	1	21.92	21.99	21.96	23
1.4	QPSK	3	3	21.92	22.01	21.98	
1.4	QPSK	6	0	22.00	22.01	21.94	
1.4	16QAM	1	0	22.11	22.15	22.05	
1.4	16QAM	1	3	22.11	22.13	22.04	23
1.4	16QAM	1	5	22.09	22.10	22.00	
1.4	16QAM	3	0	20.84	20.93	20.91	
1.4	16QAM	3	1	20.86	20.91	20.83	
1.4	16QAM	3	3	20.87	20.89	20.87	22
1.4	16QAM	6	0	20.79	20.87	20.82	

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	24
20	QPSK	1	0	23.22	23.27	23.21	
20	QPSK	1	49	23.16	23.24	23.18	
20	QPSK	1	99	23.21	23.22	23.19	
20	QPSK	50	0	22.25	22.30	22.28	
20	QPSK	50	24	22.24	22.27	22.26	23
	QPSK	50	50	22.22	22.23	22.17	
	QPSK	100	0	22.27	22.28	22.27	
20	16QAM	1	0	22.32	22.35	22.27	23
	16QAM	1	49	22.23	22.32	22.25	
	16QAM	1	99	22.25	22.30	22.29	
20	16QAM	50	0	21.12	21.22	21.13	22
	16QAM	50	24	21.17	21.20	21.18	
	16QAM	50	50	21.13	21.21	21.14	
	16QAM	100	0	21.17	21.19	21.10	
	Channel				133197	133297	
Frequency (MHz)				670.5	680.5	690.5	24
15	QPSK	1	0	23.17	23.22	23.16	
15	QPSK	1	37	23.11	23.19	23.13	
15	QPSK	1	74	23.16	23.17	23.14	
15	QPSK	36	0	22.20	22.25	22.23	
15	QPSK	36	20	22.19	22.22	22.21	23
	QPSK	36	39	22.17	22.18	22.12	
	QPSK	75	0	22.22	22.23	22.22	
15	16QAM	1	0	22.27	22.30	22.22	23
	16QAM	1	37	22.18	22.27	22.20	
	16QAM	1	74	22.20	22.25	22.24	
15	16QAM	36	0	21.07	21.17	21.08	22
	16QAM	36	20	21.12	21.15	21.13	
	16QAM	36	39	21.08	21.16	21.09	
	16QAM	75	0	21.12	21.14	21.05	
	Channel				133172	133272	
Frequency (MHz)				668	678	693	24
10	QPSK	1	0	23.14	23.19	23.13	
10	QPSK	1	25	23.08	23.16	23.10	
10	QPSK	1	49	23.13	23.14	23.11	
10	QPSK	25	0	22.17	22.22	22.20	
10	QPSK	25	12	22.16	22.19	22.18	23
	QPSK	25	25	22.14	22.15	22.09	
	QPSK	50	0	22.19	22.20	22.19	
10	16QAM	1	0	22.24	22.27	22.19	23
	16QAM	1	25	22.15	22.24	22.17	
	16QAM	1	49	22.17	22.22	22.21	
10	16QAM	25	0	21.04	21.14	21.05	22
	16QAM	25	12	21.09	21.12	21.10	
	16QAM	25	25	21.05	21.13	21.06	
	16QAM	50	0	21.09	21.11	21.02	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	24
5	QPSK	1	0	23.09	23.14	23.08	
5	QPSK	1	12	23.03	23.11	23.05	
5	QPSK	1	24	23.08	23.09	23.06	
5	QPSK	12	0	22.12	22.17	22.15	
5	QPSK	12	7	22.11	22.14	22.13	23
	QPSK	12	13	22.09	22.10	22.04	
	QPSK	25	0	22.14	22.15	22.14	
5	16QAM	1	0	22.19	22.22	22.14	23
	16QAM	1	12	22.10	22.19	22.12	
	16QAM	1	24	22.12	22.17	22.16	
5	16QAM	12	0	20.99	21.09	21.00	22
	16QAM	12	7	21.04	21.07	21.05	
	16QAM	12	13	21.00	21.08	21.01	
	16QAM	25	0	21.04	21.06	20.97	



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	21.93	21.95	21.92	23.00	12.93	12.95	12.92	14.00
GPRS 1 Tx slot	21.90	21.96	21.95	23.00	12.90	12.96	12.95	14.00
GPRS 2 Tx slots	21.02	21.05	21.01	22.00	15.02	15.05	15.01	16.00
GPRS 3 Tx slots	19.30	19.36	19.33	20.00	15.04	15.10	15.07	15.74
GPRS 4 Tx slots	18.34	18.35	18.31	19.00	15.34	15.35	15.31	16.00
EDGE 1 Tx slot	17.60	17.63	17.58	18.50	8.60	8.63	8.58	9.50
EDGE 2 Tx slots	16.45	16.46	16.41	17.50	10.45	10.46	10.41	11.50
EDGE 3 Tx slots	14.62	14.65	14.63	15.50	10.36	10.39	10.37	11.24
EDGE 4 Tx slots	13.50	13.57	13.55	14.50	10.50	10.57	10.55	11.50
Mode		Max.	21.96			Max.	15.35	
Attenuator	Cable Loss :0.8							
Date	6/4							

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	15.35	15.38	15.31	16.00	17.21	17.28	17.20	18.00
3GPP Rel 5 HSDPA Subtest-1	14.29	14.17	14.12	15.00	16.54	16.60	16.64	17.50
3GPP Rel 5 HSDPA Subtest-2	14.30	14.19	14.06	7.00	16.64	16.57	16.68	11.50
3GPP Rel 5 HSDPA Subtest-3	13.82	13.64	13.54	6.50	16.21	15.99	16.14	11.00
3GPP Rel 5 HSDPA Subtest-4	13.82	13.68	13.51	6.50	16.24	15.94	16.13	11.00
3GPP Rel 6 HSUPA Subtest-1	13.18	13.08	13.01	14.00	16.27	16.64	16.77	17.50
3GPP Rel 6 HSUPA Subtest-2	13.18	13.07	13.03	14.00	16.15	16.14	16.21	17.00
3GPP Rel 6 HSUPA Subtest-3	12.89	12.76	12.69	13.50	16.26	16.60	16.65	17.50
3GPP Rel 6 HSUPA Subtest-4	14.18	14.08	14.04	15.00	16.54	16.63	16.68	17.50
3GPP Rel 6 HSUPA Subtest-5	13.08	12.95	12.89	14.00	16.25	16.22	16.37	17.00
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	12.82	12.70	12.64	13.50	15.18	15.13	15.19	16.00
Attenuator		Cable Loss				Cable Loss		
Mode		Max.	15.38			Max.	17.28	
Date								

Band 2 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1880	1880	1900	
20	QPSK	1	0	16.86	16.93	16.80	18
20	QPSK	1	49	16.84	16.88	16.81	
20	QPSK	1	99	16.78	16.85	16.82	
20	QPSK	50	0	16.41	16.34	16.37	
20	QPSK	50	24	16.36	16.30	16.28	17
20	QPSK	50	50	16.33	16.36	16.29	
20	QPSK	100	0	16.36	16.37	16.26	
20	16QAM	1	0	16.03	15.94	15.77	
20	16QAM	1	49	15.91	16.00	15.95	17
20	16QAM	1	99	16.01	15.78	16.05	
20	16QAM	50	0	14.32	14.27	14.31	
20	16QAM	50	24	14.53	14.38	14.37	
20	16QAM	50	50	14.40	14.43	14.45	15
20	16QAM	100	0	14.36	14.40	14.36	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	16.78	16.85	16.72	18
15	QPSK	1	37	16.76	16.80	16.73	
15	QPSK	1	74	16.70	16.77	16.74	
15	QPSK	36	0	16.33	16.26	16.29	
15	QPSK	36	20	16.28	16.22	16.20	17
15	QPSK	36	39	16.25	16.28	16.21	
15	QPSK	75	0	16.28	16.29	16.18	
15	16QAM	1	0	15.95	15.86	15.69	
15	16QAM	1	37	15.83	15.92	15.87	17
15	16QAM	1	74	15.93	15.70	15.97	
15	16QAM	36	0	14.24	14.19	14.23	
15	16QAM	36	20	14.45	14.30	14.29	
15	16QAM	36	39	14.32	14.35	14.37	15
15	16QAM	75	0	14.30	14.32	14.28	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	16.76	16.83	16.70	18
10	QPSK	1	25	16.74	16.78	16.71	
10	QPSK	1	49	16.68	16.75	16.72	
10	QPSK	25	0	16.31	16.24	16.27	
10	QPSK	25	12	16.26	16.20	16.18	17
10	QPSK	25	25	16.23	16.26	16.19	
10	QPSK	50	0	16.26	16.27	16.16	
10	16QAM	1	0	15.93	15.84	15.67	
10	16QAM	1	25	15.81	15.90	15.85	17
10	16QAM	1	49	15.91	15.68	15.95	
10	16QAM	25	0	14.22	14.17	14.21	
10	16QAM	25	12	14.43	14.28	14.27	
10	16QAM	25	25	14.30	14.33	14.35	15
10	16QAM	50	0	14.28	14.30	14.26	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	16.72	16.79	16.66	18
5	QPSK	1	12	16.70	16.74	16.67	
5	QPSK	1	24	16.64	16.71	16.68	
5	QPSK	12	0	16.27	16.20	16.23	
5	QPSK	12	7	16.22	16.16	16.14	17
5	QPSK	12	13	16.19	16.22	16.15	
5	QPSK	25	0	16.22	16.23	16.12	
5	16QAM	1	0	15.89	15.80	15.63	
5	16QAM	1	12	15.77	15.86	15.81	17
5	16QAM	1	24	15.87	15.64	15.91	
5	16QAM	12	0	14.18	14.13	14.17	
5	16QAM	12	7	14.39	14.24	14.23	
5	16QAM	12	13	14.26	14.29	14.31	15
5	16QAM	25	0	14.24	14.26	14.22	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	16.66	16.73	16.60	18
3	QPSK	1	8	16.64	16.68	16.61	
3	QPSK	1	14	16.58	16.65	16.62	
3	QPSK	8	0	16.21	16.14	16.17	
3	QPSK	8	4	16.16	16.10	16.08	17
3	QPSK	8	7	16.13	16.16	16.09	
3	QPSK	15	0	16.16	16.17	16.06	
3	16QAM	1	0	15.83	15.74	15.57	
3	16QAM	1	8	15.71	15.80	15.75	17
3	16QAM	1	14	15.81	15.58	15.85	
3	16QAM	8	0	14.12	14.07	14.11	
3	16QAM	8	4	14.33	14.18	14.17	
3	16QAM	8	7	14.20	14.23	14.25	15
3	16QAM	15	0	14.18	14.20	14.16	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	16.65	16.72	16.59	18
1.4	QPSK	1	3	16.63	16.67	16.60	
1.4	QPSK	1	5	16.57	16.64	16.61	
1.4	QPSK	3	0	16.20	16.13	16.16	
1.4	QPSK	3	1	16.15	16.09	16.07	17
1.4	QPSK	3	3	16.12	16.15	16.08	
1.4	QPSK	6	0	16.15	16.16	16.05	
1.4	16QAM	1	0	15.82	15.73	15.56	
1.4	16QAM	1	3	15.70	15.79	15.74	17
1.4	16QAM	1	5	15.80	15.57	15.84	
1.4	16QAM	3	0	14.11	14.06	14.10	
1.4	16QAM	3	1	14.32	14.17	14.16	
1.4	16QAM	3	3	14.19	14.22	14.24	15
1.4	16QAM	6	0	14.17	14.19	14.15	

Band 4 (AWS Band) (dBm) Part 27L (only on channel required)							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	20.23	20.25	20.20	21
20	QPSK	1	49	20.15	20.16	20.17	
20	QPSK	1	99	20.07	20.09	20.12	
20	QPSK	50	0	19.63	19.66	19.58	
20	QPSK	50	24	19.59	19.62	19.61	20
20	QPSK	50	50	19.56	19.59	19.65	
20	QPSK	100	0	19.53	19.62	19.57	
20	16QAM	1	0	19.26	19.51	19.57	
20	16QAM	1	49	19.51	19.57	19.42	20
20	16QAM	1	99	19.58	19.57	19.68	
20	16QAM	50	0	18.04	18.00	18.05	
20	16QAM	50	24	18.07	17.96	18.00	
20	16QAM	50	50	18.12	17.98	17.99	19
20	16QAM	100	0	18.04	18.03	18.01	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	20.20	20.22	20.17	21
15	QPSK	1	37	20.12	20.13	20.14	
15	QPSK	1	74	20.04	20.06	20.09	
15	QPSK	36	0	19.60	19.63	19.55	
15	QPSK	36	20	19.56	19.59	19.58	20
15	QPSK	36	39	19.53	19.56	19.62	
15	QPSK	75	0	19.50	19.59	19.54	
15	16QAM	1	0	19.23	19.48	19.54	
15	16QAM	1	37	19.48	19.54	19.39	20
15	16QAM	1	74	19.55	19.54	19.65	
15	16QAM	36	0	18.01	17.97	18.02	
15	16QAM	36	20	18.04	17.93	17.97	
15	16QAM	36	39	18.09	17.95	17.96	19
15	16QAM	75	0	18.01	18.00	17.98	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	20.15	20.17	20.12	21
10	QPSK	1	25	20.07	20.08	20.09	
10	QPSK	1	49	19.99	20.01	20.04	
10	QPSK	25	0	19.55	19.58	19.50	
10	QPSK	25	12	19.51	19.54	19.53	20
10	QPSK	25	25	19.48	19.51	19.57	
10	QPSK	50	0	19.45	19.54	19.49	
10	16QAM	1	0	19.18	19.43	19.49	
10	16QAM	1	25	19.43	19.49	19.34	20
10	16QAM	1	49	19.50	19.49	19.60	
10	16QAM	25	0	17.96	17.92	17.97	
10	16QAM	25	12	17.99	17.88	17.92	
10	16QAM	25	25	18.04	17.90	17.91	19
10	16QAM	50	0	17.96	17.95	17.93	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	20.12	20.14	20.09	21
5	QPSK	1	12	20.04	20.05	20.06	
5	QPSK	1	24	19.96	19.98	20.01	
5	QPSK	12	0	19.52	19.55	19.47	
5	QPSK	12	7	19.48	19.51	19.50	20
5	QPSK	12	13	19.45	19.48	19.54	
5	QPSK	25	0	19.42	19.51	19.46	
5	16QAM	1	0	19.15	19.40	19.46	
5	16QAM	1	12	19.40	19.46	19.31	20
5	16QAM	1	24	19.47	19.46	19.57	
5	16QAM	12	0	17.93	17.89	17.94	
5	16QAM	12	7	17.96	17.85	17.89	
5	16QAM	12	13	18.01	17.87	17.88	19
5	16QAM	25	0	17.93	17.92	17.90	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	20.09	20.11	20.06	21
3	QPSK	1	8	20.01	20.02	20.03	
3	QPSK	1	14	19.93	19.95	19.98	
3	QPSK	8	0	19.49	19.52	19.44	
3	QPSK	8	4	19.45	19.48	19.47	20
3	QPSK	8	7	19.42	19.45	19.51	
3	QPSK	15	0	19.39	19.48	19.43	
3	16QAM	1	0	19.12	19.37	19.43	
3	16QAM	1	8	19.37	19.43	19.28	20
3	16QAM	1	14	19.44	19.43	19.54	
3	16QAM	8	0	17.90	17.86	17.91	
3	16QAM	8	4	17.93	17.82	17.86	
3	16QAM	8	7	17.98	17.84	17.85	19
3	16QAM	15	0	17.90	17.89	17.87	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	20.07	20.09	20.04	21
1.4	QPSK	1	3	19.99	20.00	20.01	
1.4	QPSK	1	5	19.91	19.93	19.96	
1.4	QPSK	3	0	19.47	19.50	19.42	
1.4	QPSK	3	1	19.43	19.46	19.45	20
1.4	QPSK	3	3	19.40	19.43	19.49	
1.4	16QAM	1	0	19.37	19.46	19.41	
1.4	16QAM	1	3	19.35	19.41	19.26	
1.4	16QAM	1	5	19.42	19.41	19.52	20
1.4	16QAM	3	0	17.88	17.84	17.89	
1.4	16QAM	3	1	17.91	17.80	17.84	
1.4	16QAM	3	3	17.96	17.82	17.83	
1.4	16QAM	6	0	17.88	17.87	17.85	19

Band 7 (2600MHz Band) (dBm) Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	17.00	17.06	16.99	18
20	QPSK	1	49	16.95	17.03	16.97	
20	QPSK	1	99	16.89	16.98	16.96	
20	QPSK	50	0	15.90	15.94	15.88	17
20	QPSK	50	24	15.81	15.90	15.82	
20	QPSK	50	50	15.81	15.91	15.81	
20	QPSK	100	0	15.87	15.88	15.78	17
20	16QAM	1	0	16.16	16.23	16.17	
20	16QAM	1	49	16.11	16.15	16.14	
20	16QAM	1	99	16.08	16.13	16.08	16
20	16QAM	50	0	15.00	15.02	15.02	
20	16QAM	50	24	15.03	15.13	15.10	
20	16QAM	50	50	15.04	15.09	15.08	
20	16QAM	100	0	14.99	15.08	14.99	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	16.98	17.04	16.97	18
15	QPSK	1	37	16.93	17.01	16.95	
15	QPSK	1	74	16.87	16.96	16.94	
15	QPSK	36	0	15.88	15.92	15.86	17
15	QPSK	36	20	15.79	15.88	15.80	
15	QPSK	36	39	15.79	15.89	15.79	
15	QPSK	75	0	15.85	15.86	15.76	17
15	16QAM	1	0	16.14	16.21	16.15	
15	16QAM	1	37	16.09	16.13	16.12	
15	16QAM	1	74	16.06	16.11	16.06	16
15	16QAM	36	0	15.09	15.11	15.06	
15	16QAM	36	20	14.97	15.07	15.04	
15	16QAM	36	39	14.98	15.03	15.02	
15	16QAM	75	0	14.93	15.02	15.01	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	16.94	17.00	16.93	18
10	QPSK	1	25	16.89	16.97	16.91	
10	QPSK	1	49	16.83	16.92	16.90	
10	QPSK	25	0	15.84	15.88	15.82	17
10	QPSK	25	12	15.75	15.84	15.76	
10	QPSK	25	25	15.75	15.85	15.75	
10	QPSK	50	0	15.81	15.82	15.72	17
10	16QAM	1	0	16.10	16.17	16.11	
10	16QAM	1	25	16.05	16.09	16.08	
10	16QAM	1	49	16.02	16.07	16.02	16
10	16QAM	25	0	15.04	15.06	15.01	
10	16QAM	25	12	14.92	15.02	14.99	
10	16QAM	25	25	14.93	14.98	14.97	
10	16QAM	50	0	14.88	14.97	14.88	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	16.89	16.95	16.88	18
5	QPSK	1	12	16.84	16.92	16.86	
5	QPSK	1	24	16.78	16.87	16.85	
5	QPSK	12	0	15.79	15.83	15.77	17
5	QPSK	12	7	15.70	15.79	15.71	
5	QPSK	12	13	15.70	15.80	15.70	
5	QPSK	25	0	15.76	15.77	15.67	17
5	16QAM	1	0	16.05	16.12	16.06	
5	16QAM	1	12	16.00	16.04	16.03	
5	16QAM	1	24	15.97	16.02	15.97	16
5	16QAM	12	0	14.99	15.01	14.96	
5	16QAM	12	7	14.87	14.97	14.94	
5	16QAM	12	13	14.88	14.93	14.92	
5	16QAM	25	0	14.83	14.92	14.83	

Band 25 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	15.99	16.05	16.03	16.5
20	QPSK	1	49	15.98	16.02	16.01	
20	QPSK	1	99	15.89	15.99	15.96	
20	QPSK	50	0	14.91	14.99	14.91	15.5
20	QPSK	50	24	14.92	14.97	14.91	
20	QPSK	50	50	14.88	14.95	14.92	
20	QPSK	100	0	14.91	14.94	14.86	15.5
20	16QAM	1	0	15.22	15.24	15.21	
20	16QAM	1	49	15.13	15.21	15.19	
20	16QAM	1	99	15.12	15.19	15.09	14.5
20	16QAM	50	0	13.93	14.01	13.96	
20	16QAM	50	24	13.95	13.98	13.91	
20	16QAM	50	50	13.91	13.96	13.92	
20	16QAM	100	0	13.90	13.95	13.92	
Channel				26115	26365	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5	
15	QPSK	1	0	15.94	16.00	15.98	16.5
15	QPSK	1	37	15.93	15.97	15.96	
15	QPSK	1	74	15.84	15.94	15.91	
15	QPSK	36	0	14.86	14.94	14.86	15.5
15	QPSK	36	20	14.87	14.92	14.86	
15	QPSK	36	39	14.83	14.90	14.87	
15	QPSK	75	0	14.86	14.89	14.81	15.5
15	16QAM	1	0	15.17	15.19	15.16	
15	16QAM	1	37	15.08	15.16	15.14	
15	16QAM	1	74	15.07	15.14	15.04	14.5
15	16QAM	36	0	13.88	13.96	13.91	
15	16QAM	36	20	13.90	13.93	13.86	
15	16QAM	36	39	13.86	13.91	13.87	
15	16QAM	75	0	13.85	13.90	13.87	
Channel				26090	26365	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	15.90	15.96	15.94	16.5
10	QPSK	1	25	15.89	15.93	15.92	
10	QPSK	1	49	15.80	15.90	15.87	
10	QPSK	25	0	14.82	14.90	14.82	15.5
10	QPSK	25	12	14.83	14.88	14.82	
10	QPSK	25	25	14.79	14.86	14.83	
10	QPSK	50	0	14.82	14.85	14.77	15.5
10	16QAM	1	0	15.13	15.15	15.12	
10	16QAM	1	25	15.04	15.12	15.10	
10	16QAM	1	49	15.03	15.10	15.00	14.5
10	16QAM	25	0	13.84	13.92	13.87	
10	16QAM	25	12	13.86	13.89	13.82	
10	16QAM	25	25	13.82	13.87	13.83	
10	16QAM	50	0	13.81	13.86	13.83	
Channel				26065	26365	26605	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5	
5	QPSK	1	0	15.87	15.93	15.91	16.5
5	QPSK	1	12	15.86	15.90	15.89	
5	QPSK	1	24	15.77	15.87	15.84	
5	QPSK	12	0	14.79	14.87	14.79	15.5
5	QPSK	12	7	14.80	14.85	14.79	
5	QPSK	12	13	14.76	14.83	14.80	
5	QPSK	25	0	14.79	14.82	14.74	15.5
5	16QAM	1	0	15.10	15.12	15.09	
5	16QAM	1	12	15.01	15.09	15.07	
5	16QAM	1	24	15.00	15.07	14.97	14.5
5	16QAM	12	0	13.81	13.89	13.84	
5	16QAM	12	7	13.83	13.86	13.79	
5	16QAM	12	13	13.79	13.84	13.80	
5	16QAM	25	0	13.78	13.83	13.80	
Channel				26055	26365	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1882.5	1913.5	
3	QPSK	1	0	15.84	15.90	15.88	16.5
3	QPSK	1	8	15.83	15.87	15.86	
3	QPSK	1	14	15.74	15.84	15.81	
3	QPSK	8	0	14.76	14.84	14.76	15.5
3	QPSK	8	4	14.77	14.82	14.76	
3	QPSK	8	7	14.73	14.80	14.77	
3	QPSK	15	0	14.76	14.79	14.71	15.5
3	16QAM	1	0	15.07	15.09	15.06	
3	16QAM	1	8	14.98	15.06	15.04	
3	16QAM	1	14	14.97	15.04	14.94	14.5
3	16QAM	8	0	13.78	13.86	13.81	
3	16QAM	8	4	13.80	13.83	13.76	
3	16QAM	8	7	13.76	13.81	13.77	
3	16QAM	15	0	13.75	13.80	13.77	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	15.79	15.85	15.83	16.5
1.4	QPSK	1	3	15.78	15.82	15.81	
1.4	QPSK	1	5	15.69	15.79	15.76	
1.4	QPSK	3	0	14.71	14.79	14.71	15.5
1.4	QPSK	3	1	14.72	14.77	14.71	
1.4	QPSK	3	3	14.68	14.75	14.72	
1.4	QPSK	6	0	14.71	14.74	14.66	14.5
1.4	16QAM	1	0	15.02	15.04	15.01	
1.4	16QAM	1	3	14.93	15.01	14.99	14.5
1.4	16QAM	1	5	14.92	14.99	14.89	
1.4	16QAM	3	0	13.73	13.81	13.76	
1.4	16QAM	3	1	13.75	13.78	13.71	
1.4	16QAM	3	3	13.71	13.76	13.72	
1.4	16QAM	6	0	13.70	13.75	13.72	13.5

Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	20.34	20.38	20.36	21
20	QPSK	1	49	20.29	20.33	20.30	
20	QPSK	1	99	20.26	20.30	20.25	
20	QPSK	50	0	19.31	19.32	19.28	
20	QPSK	50	24	19.21	19.28	19.25	20
20	QPSK	50	50	19.21	19.30	19.27	
20	QPSK	100	0	19.29	19.30	19.23	
20	16QAM	1	0	19.40	19.44	19.34	
20	16QAM	1	49	19.40	19.42	19.33	20
20	16QAM	1	99	19.38	19.39	19.29	
20	16QAM	50	0	18.13	18.22	18.20	
20	16QAM	50	24	18.15	18.20	18.12	
20	16QAM	50	50	18.16	18.18	18.16	19
20	16QAM	100	0	18.08	18.16	18.11	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	20.29	20.33	20.31	21
15	QPSK	1	37	20.24	20.28	20.25	
15	QPSK	1	74	20.21	20.25	20.20	
15	QPSK	36	0	19.26	19.27	19.23	
15	QPSK	36	20	19.16	19.23	19.20	20
15	QPSK	36	39	19.16	19.25	19.22	
15	QPSK	75	0	19.24	19.25	19.18	
15	16QAM	1	0	19.35	19.39	19.29	
15	16QAM	1	37	19.35	19.37	19.28	20
15	16QAM	1	74	19.33	19.34	19.24	
15	16QAM	36	0	18.08	18.17	18.15	
15	16QAM	36	20	18.10	18.15	18.07	
15	16QAM	36	39	18.11	18.13	18.11	19
15	16QAM	75	0	18.03	18.11	18.06	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	20.26	20.30	20.28	21
10	QPSK	1	25	20.21	20.25	20.22	
10	QPSK	1	49	20.18	20.22	20.17	
10	QPSK	25	0	19.23	19.24	19.20	
10	QPSK	25	12	19.13	19.20	19.17	20
10	QPSK	25	25	19.13	19.22	19.19	
10	QPSK	50	0	19.21	19.22	19.15	
10	16QAM	1	0	19.32	19.36	19.26	
10	16QAM	1	25	19.32	19.34	19.25	20
10	16QAM	1	49	19.30	19.31	19.21	
10	16QAM	25	0	18.05	18.14	18.12	
10	16QAM	25	12	18.07	18.12	18.04	
10	16QAM	25	25	18.08	18.10	18.08	19
10	16QAM	50	0	18.00	18.08	18.03	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	20.18	20.22	20.20	21
5	QPSK	1	12	20.13	20.17	20.14	
5	QPSK	1	24	20.10	20.14	20.09	
5	QPSK	12	0	19.15	19.16	19.12	
5	QPSK	12	7	19.05	19.12	19.09	20
5	QPSK	12	13	19.05	19.14	19.11	
5	QPSK	25	0	19.13	19.14	19.07	
5	16QAM	1	0	19.24	19.28	19.18	
5	16QAM	1	12	19.24	19.26	19.17	20
5	16QAM	1	24	19.22	19.23	19.13	
5	16QAM	12	0	17.97	18.06	18.04	
5	16QAM	12	7	17.99	18.04	17.96	
5	16QAM	12	13	18.00	18.02	18.00	19
5	16QAM	25	0	17.92	18.00	17.95	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	20.11	20.15	20.13	21
3	QPSK	1	8	20.06	20.10	20.07	
3	QPSK	1	14	20.03	20.07	20.02	
3	QPSK	8	0	19.08	19.09	19.05	
3	QPSK	8	4	18.98	19.05	19.02	20
3	QPSK	8	7	18.98	19.07	19.04	
3	QPSK	15	0	19.06	19.07	19.00	
3	16QAM	1	0	19.17	19.21	19.11	
3	16QAM	1	8	19.17	19.19	19.10	20
3	16QAM	1	14	19.15	19.16	19.06	
3	16QAM	8	0	17.90	17.99	17.97	
3	16QAM	8	4	17.92	17.97	17.89	
3	16QAM	8	7	17.93	17.95	17.93	19
3	16QAM	15	0	17.85	17.93	17.88	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	20.05	20.09	20.07	21
1.4	QPSK	1	3	20.00	20.04	20.01	
1.4	QPSK	1	5	19.97	20.01	19.96	
1.4	QPSK	3	0	19.02	19.03	18.99	
1.4	QPSK	3	1	18.92	18.99	18.96	20
1.4	QPSK	3	3	18.92	19.01	18.98	
1.4	QPSK	6	0	19.00	19.01	18.94	
1.4	16QAM	1	0	19.11	19.15	19.05	
1.4	16QAM	1	3	19.11	19.13	19.04	20
1.4	16QAM	1	5	19.09	19.10	19.00	
1.4	16QAM	3	0	17.84	17.93	17.91	
1.4	16QAM	3	1	17.86	17.91	17.83	
1.4	16QAM	3	3	17.87	17.89	17.87	19
1.4	16QAM	6	0	17.79	17.87	17.82	