



REPORT No.: SZ23120059S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

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

Full Power

GSM850		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel		128	189	251		128	189	251	
Frequency (MHz)		824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot		32.11	32.14	31.95	33.00	23.11	23.14	22.95	24.00
GPRS 1 Tx slot		32.08	32.13	31.90	33.00	23.08	23.13	22.90	24.00
GPRS 2 Tx slots		30.01	30.06	29.88	31.00	24.01	24.06	23.88	25.00
GPRS 3 Tx slots		28.13	28.17	28.04	29.00	23.87	23.91	23.78	24.74
GPRS 4 Tx slots		26.05	26.08	25.97	27.00	23.05	23.08	22.97	24.00
EDGE 1 Tx slot		25.52	25.58	25.36	26.50	16.52	16.58	16.36	17.50
EDGE 2 Tx slots		23.48	23.52	23.39	24.50	17.48	17.52	17.39	18.50
EDGE 3 Tx slots		21.44	21.45	21.37	22.00	17.18	17.19	17.11	17.74
EDGE 4 Tx slots		18.56	18.60	18.51	19.50	15.56	15.60	15.51	16.50
Mode			Max.	32.14			Max.	24.06	
Attenuator		Cable Loss : 0.6							

GSM1900		Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel		512	661	810		512	661	810	
Frequency (MHz)		1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot		28.59	28.78	28.85	30.00	19.59	19.78	19.85	21.00
GPRS 1 Tx slot		28.58	28.75	28.84	30.00	19.58	19.75	19.84	21.00
GPRS 2 Tx slots		26.36	26.57	26.52	27.50	20.36	20.57	20.52	21.50
GPRS 3 Tx slots		24.44	24.71	24.67	25.50	20.18	20.45	20.41	21.24
GPRS 4 Tx slots		22.47	22.63	22.60	23.50	19.47	19.63	19.60	20.50
EDGE 1 Tx slot		25.19	25.32	25.27	26.00	16.19	16.32	16.27	17.00
EDGE 2 Tx slots		23.07	23.20	23.18	24.00	17.07	17.20	17.18	18.00
EDGE 3 Tx slots		20.09	20.16	20.17	21.00	15.83	15.90	15.91	16.74
EDGE 4 Tx slots		18.91	19.02	19.00	20.00	15.91	16.02	16.00	17.00
Mode			Max.	28.85			Max.	20.57	
Attenuator		Cable Loss : 0.8							

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		4132	4182	4233	
Rx Channel		9662	9800	9938		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	22.44	22.58	22.56	23.50	22.01	22.09	22.05	23.00
3GPP Rel 5	HSDPA Subtest-1	22.02	22.09	22.10	23.00	21.65	21.42	21.67	22.50
3GPP Rel 5	HSDPA Subtest-2	21.74	21.77	21.78	23.00	21.32	21.14	21.35	22.00
3GPP Rel 5	HSDPA Subtest-3	21.89	21.96	21.95	22.50	21.03	20.85	21.05	22.00
3GPP Rel 5	HSDPA Subtest-4	21.55	21.63	21.62	22.50	20.92	20.73	20.94	22.00
3GPP Rel 6	HSUPA Subtest-1	22.05	22.10	22.25	23.00	22.05	22.03	22.04	23.00
3GPP Rel 6	HSUPA Subtest-2	22.02	22.07	22.20	23.00	22.04	22.03	22.05	23.00
3GPP Rel 6	HSUPA Subtest-3	22.01	22.07	22.21	23.00	22.01	22.01	22.03	23.00
3GPP Rel 6	HSUPA Subtest-4	22.02	22.07	22.26	23.00	22.03	22.03	22.05	23.00
3GPP Rel 6	HSUPA Subtest-5	22.02	22.09	22.24	23.00	22.04	22.04	22.03	23.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	21.95	22.03	22.13	23.00	21.96	22.04	21.94	23.00
Attenuator			Cable Loss	0.8			Cable Loss	0.6	
Mode			Max.	22.58			Max.	22.09	

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	23.5
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	22.71	22.76	22.74	23.5
20	QPSK	1	49	22.60	22.68	22.67	
20	QPSK	1	99	22.55	22.59	22.63	22.5
20	QPSK	50	0	21.63	21.69	21.68	
20	QPSK	50	24	21.58	21.61	21.64	22.5
20	QPSK	50	50	21.50	21.57	21.55	
20	QPSK	100	0	21.54	21.65	21.60	22.5
20	16QAM	1	0	21.69	21.80	21.77	
20	16QAM	1	49	21.66	21.74	21.71	21.5
20	16QAM	1	99	21.57	21.60	21.63	
20	16QAM	50	0	20.65	20.75	20.70	21.5
20	16QAM	50	24	20.53	20.66	20.58	
20	16QAM	50	50	20.49	20.60	20.52	22.5
20	16QAM	100	0	20.56	20.57	20.61	
20	64QAM	1	0	21.59	21.73	21.70	22.5
20	64QAM	1	49	21.60	21.67	21.69	
20	64QAM	1	99	21.54	21.62	21.65	21.5
20	64QAM	50	0	20.57	20.69	20.65	
20	64QAM	50	24	20.55	20.63	20.66	21.5
20	64QAM	50	50	20.54	20.58	20.61	
20	64QAM	100	0	20.59	20.64	20.60	23.5
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	23.5
15	QPSK	1	0	22.67	22.74	22.80	
15	QPSK	1	37	22.48	22.61	22.54	22.5
15	QPSK	1	74	22.52	22.50	22.63	
15	QPSK	36	0	21.65	21.72	21.68	22.5
15	QPSK	36	20	21.47	21.68	21.68	
15	QPSK	36	39	21.48	21.45	21.55	22.5
15	QPSK	75	0	21.50	21.50	21.46	
15	16QAM	1	0	21.66	21.68	21.69	22.5
15	16QAM	1	37	21.51	21.82	21.76	
15	16QAM	1	74	21.48	21.49	21.63	21.5
15	16QAM	36	0	20.55	20.63	20.70	
15	16QAM	36	20	20.41	20.72	20.55	22.5
15	16QAM	36	39	20.47	20.53	20.60	
15	16QAM	75	0	20.41	20.45	20.46	21.5
15	64QAM	1	0	21.60	21.71	21.77	
15	64QAM	1	37	21.51	21.75	21.77	21.5
15	64QAM	1	74	21.44	21.47	21.62	
15	64QAM	36	0	20.47	20.54	20.54	21.5
15	64QAM	36	20	20.45	20.59	20.52	
15	64QAM	36	39	20.57	20.58	20.51	21.5
15	64QAM	75	0	20.46	20.64	20.48	
Channel				18650	18900	19150	23.5
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.66	22.71	22.68	22.5
10	QPSK	1	25	22.54	22.66	22.68	
10	QPSK	1	49	22.59	22.52	22.60	22.5
10	QPSK	25	0	21.56	21.78	21.77	
10	QPSK	25	12	21.56	21.65	21.67	22.5
10	QPSK	25	25	21.48	21.51	21.47	
10	QPSK	50	0	21.59	21.81	21.60	22.5
10	16QAM	1	0	21.57	21.88	21.83	
10	16QAM	1	25	21.65	21.82	21.76	21.5
10	16QAM	1	49	21.57	21.55	21.70	
10	16QAM	25	0	20.66	20.72	20.69	22.5
10	16QAM	25	12	20.58	20.73	20.46	
10	16QAM	25	25	20.46	20.45	20.56	21.5
10	16QAM	50	0	20.57	20.62	20.47	
10	64QAM	1	0	21.49	21.79	21.58	22.5
10	64QAM	1	25	21.65	21.54	21.55	
10	64QAM	1	49	21.46	21.56	21.58	21.5
10	64QAM	25	0	20.56	20.78	20.60	
10	64QAM	25	12	20.58	20.54	20.57	22.5
10	64QAM	25	25	20.47	20.58	20.58	
10	64QAM	50	0	20.59	20.69	20.54	21.5
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	23.5
5	QPSK	1	0	22.59	22.73	22.63	
5	QPSK	1	12	22.61	22.61	22.69	22.5
5	QPSK	1	24	22.63	22.63	22.55	
5	QPSK	12	0	21.58	21.61	21.77	22.5
5	QPSK	12	7	21.58	21.65	21.65	
5	QPSK	12	13	21.51	21.44	21.63	22.5
5	QPSK	25	0	21.47	21.51	21.47	
5	16QAM	1	0	21.68	21.83	21.63	22.5
5	16QAM	1	12	21.57	21.82	21.77	
5	16QAM	1	24	21.52	21.47	21.64	21.5
5	16QAM	12	0	20.56	20.79	20.65	
5	16QAM	12	7	20.51	20.72	20.65	22.5
5	16QAM	12	13	20.45	20.49	20.52	
5	16QAM	25	0	20.61	20.47	20.57	21.5
5	64QAM	1	0	21.64	21.75	21.58	
5	64QAM	1	12	21.54	21.65	21.61	22.5
5	64QAM	1	24	21.64	21.66	21.58	
5	64QAM	12	0	20.44	20.54	20.52	21.5
5	64QAM	12	7	20.44	20.68	20.57	
5	64QAM	12	13	20.51	20.57	20.66	22.5
5	64QAM	25	0	20.44	20.66	20.61	
Channel				18615	18900	19185	23.5
Frequency (MHz)				1851.5	1880	1909.5	
3	QPSK	1	0	22.61	22.72	22.70	22.5
3	QPSK	1	8	22.60	22.65	22.63	
3	QPSK	1	14	22.49	22.62	22.67	22.5
3	QPSK	8	0	21.57	21.62	21.68	
3	QPSK	8	4	21.58	21.63	21.74	22.5
3	QPSK	8	7	21.39	21.58	21.43	

Band 4 (AWS Band) (dBm) Part 27L (only on channel required)							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	24
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	23.22	23.27	23.24	23
20	QPSK	1	49	22.96	23.16	23.12	
20	QPSK	1	99	23.05	23.11	23.08	
20	QPSK	50	0	22.23	22.31	22.21	
20	QPSK	50	24	22.04	22.19	22.16	23
20	QPSK	50	50	21.94	22.16	22.13	
20	QPSK	100	0	22.03	22.10	22.14	
20	16QAM	1	0	22.04	22.22	22.30	
20	16QAM	1	49	22.20	22.10	22.18	23
20	16QAM	1	99	21.94	22.17	22.12	
20	16QAM	50	0	21.12	21.21	21.15	
20	16QAM	50	24	21.11	21.15	21.07	
20	16QAM	50	50	20.96	21.01	21.01	22
20	16QAM	100	0	21.09	20.98	21.10	
20	64QAM	1	0	22.11	22.08	22.10	
20	64QAM	1	49	22.05	22.14	22.10	
20	64QAM	1	99	22.14	21.99	22.08	23
20	64QAM	50	0	21.02	21.22	21.19	
20	64QAM	50	24	21.15	20.98	21.16	
20	64QAM	50	50	21.07	21.11	21.15	
20	64QAM	100	0	20.96	21.07	21.12	22
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	23.19	23.24	23.18	
15	QPSK	1	37	23.19	23.23	23.15	
15	QPSK	1	74	22.91	22.95	23.02	
15	QPSK	36	0	22.15	22.26	22.07	
15	QPSK	36	20	21.95	21.97	22.03	23
15	QPSK	36	39	21.99	22.03	21.98	
15	QPSK	75	0	21.99	22.16	22.03	
15	16QAM	1	0	22.10	22.33	22.21	
15	16QAM	1	37	22.19	22.24	22.28	23
15	16QAM	1	74	22.06	22.12	22.13	
15	16QAM	36	0	21.17	21.21	21.19	
15	16QAM	36	20	20.89	21.02	21.07	
15	16QAM	36	39	20.87	21.15	20.95	22
15	16QAM	75	0	21.11	21.16	21.05	
15	64QAM	1	0	22.08	22.21	22.16	
15	64QAM	1	37	22.11	22.24	22.19	
15	64QAM	1	74	21.96	22.03	22.01	23
15	64QAM	36	0	21.06	21.15	21.17	
15	64QAM	36	20	21.04	21.02	21.12	
15	64QAM	36	39	20.91	21.08	21.04	
15	64QAM	75	0	21.12	21.20	21.02	22
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	23.15	23.20	23.13	
10	QPSK	1	25	22.99	23.13	23.09	
10	QPSK	1	49	23.03	22.99	23.17	
10	QPSK	25	0	22.10	22.25	22.18	
10	QPSK	25	12	22.10	22.16	22.12	23
10	QPSK	25	25	21.87	21.97	22.11	
10	QPSK	50	0	22.11	22.11	22.09	
10	16QAM	1	0	22.20	22.26	22.23	
10	16QAM	1	25	22.20	22.13	22.14	23
10	16QAM	1	49	22.12	22.10	22.17	
10	16QAM	25	0	21.19	21.13	21.13	
10	16QAM	25	12	21.09	21.08	21.11	
10	16QAM	25	25	21.00	20.95	21.03	22
10	16QAM	50	0	21.06	21.13	21.16	
10	64QAM	1	0	22.02	22.16	22.18	
10	64QAM	1	25	21.95	22.20	22.09	
10	64QAM	1	49	21.92	22.12	22.11	23
10	64QAM	25	0	21.05	21.09	21.13	
10	64QAM	25	12	21.08	21.18	21.05	
10	64QAM	25	25	21.06	21.16	21.21	
10	64QAM	50	0	21.12	21.01	21.04	22
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	23.18	23.23	23.20	
5	QPSK	1	12	23.08	23.06	23.15	
5	QPSK	1	24	23.08	23.09	23.13	
5	QPSK	12	0	22.09	22.28	22.20	
5	QPSK	12	7	22.17	22.12	22.15	23
5	QPSK	12	13	21.99	22.07	21.98	
5	QPSK	25	0	22.05	22.11	21.97	
5	16QAM	1	0	22.19	22.28	22.21	
5	16QAM	1	12	22.03	22.24	22.21	23
5	16QAM	1	24	21.93	22.04	22.16	
5	16QAM	12	0	21.20	21.15	21.11	
5	16QAM	12	7	21.05	21.05	20.95	
5	16QAM	12	13	20.90	21.19	21.09	22
5	16QAM	25	0	21.15	21.07	20.98	
5	64QAM	1	0	22.09	22.12	22.24	
5	64QAM	1	12	21.96	22.13	22.05	
5	64QAM	1	24	21.99	22.12	22.14	23
5	64QAM	12	0	21.09	21.29	21.12	
5	64QAM	12	7	20.99	21.22	21.08	
5	64QAM	12	13	21.07	21.07	21.04	
5	64QAM	25	0	20.95	21.17	21.07	22
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	23.16	23.21	23.20	
3	QPSK	1	8	23.13	23.20	23.15	
3	QPSK	1	14	23.14	23.13	23.13	
3	QPSK	8	0	22.05	22.25	22.07	
3	QPSK	8	4	22.16	21.96	22.23	23
3	QPSK	8	7	21.95	22.15	22.10	

3	QPSK	15	0	21.51	21.73	21.57	22.5
3	16QAM	1	0	21.79	21.68	21.62	
3	16QAM	1	8	21.59	21.75	21.70	
3	16QAM	1	14	21.65	21.50	21.66	21.5
3	16QAM	8	0	20.51	20.77	20.75	
3	16QAM	8	4	20.47	20.58	20.67	
3	16QAM	8	7	20.39	20.51	20.56	22.5
3	16QAM	15	0	20.65	20.45	20.49	
3	64QAM	1	0	21.51	21.72	21.71	
3	64QAM	1	8	21.50	21.52	21.56	21.5
3	64QAM	1	14	21.50	21.53	21.65	
3	64QAM	8	0	20.48	20.74	20.57	
3	64QAM	8	4	20.42	20.53	20.52	21.5
3	64QAM	8	7	20.61	20.67	20.58	
3	64QAM	15	0	20.51	20.69	20.53	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.66	22.70	22.67	23.5
1.4	QPSK	1	3	22.56	22.63	22.59	
1.4	QPSK	1	5	22.48	22.56	22.52	
1.4	QPSK	3	0	21.52	21.76	21.75	
1.4	QPSK	3	1	21.56	21.60	21.57	
1.4	QPSK	3	3	21.52	21.54	21.50	
1.4	QPSK	6	0	21.48	21.51	21.58	22.5
1.4	16QAM	1	0	21.70	21.84	21.77	22.5
1.4	16QAM	1	3	21.65	21.76	21.58	
1.4	16QAM	1	5	21.62	21.49	21.48	
1.4	16QAM	3	0	20.68	20.78	20.63	
1.4	16QAM	3	1	20.50	20.65	20.58	
1.4	16QAM	3	3	20.52	20.56	20.54	
1.4	16QAM	6	0	20.54	20.51	20.64	21.5
1.4	64QAM	1	0	21.53	21.79	21.64	22.5
1.4	64QAM	1	3	21.64	21.64	21.75	
1.4	64QAM	1	5	21.44	21.48	21.66	
1.4	64QAM	3	0	20.53	20.57	20.67	
1.4	64QAM	3	1	20.51	20.55	20.75	
1.4	64QAM	3	3	20.55	20.67	20.52	
1.4	64QAM	6	0	20.50	20.60	20.55	21.5

3	QPSK	15	0	22.08	22.25	22.13	23
3	16QAM	1	0	22.18	22.34	22.34	
3	16QAM	1	8	22.20	22.34	22.30	
3	16QAM	1	14	22.17	22.02	22.18	22
3	16QAM	8	0	21.16	21.20	21.19	
3	16QAM	8	4	21.02	21.05	21.00	
3	16QAM	8	7	21.02	21.20	20.99	23
3	16QAM	15	0	20.91	21.10	21.12	
3	64QAM	1	0	22.03	22.30	22.15	
3	64QAM	1	8	22.15	22.07	22.19	22
3	64QAM	1	14	21.97	22.06	22.25	
3	64QAM	8	0	21.10	21.20	21.19	
3	64QAM	8	4	20.90	21.02	21.01	24
3	64QAM	8	7	20.91	21.02	20.96	
3	64QAM	15	0	21.02	21.07	20.96	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.13	23.20	23.15	24
1.4	QPSK	1	3	23.07	23.18	23.05	
1.4	QPSK	1	5	22.99	23.15	23.11	
1.4	QPSK	3	0	22.17	22.28	22.27	
1.4	QPSK	3	1	22.05	22.06	22.18	
1.4	QPSK	3	3	22.06	22.03	22.09	
1.4	QPSK	6	0	22.08	22.22	21.95	23
1.4	16QAM	1	0	22.27	22.32	22.14	23
1.4	16QAM	1	3	22.16	22.16	22.31	
1.4	16QAM	1	5	22.06	22.15	22.19	
1.4	16QAM	3	0	21.17	21.24	21.16	
1.4	16QAM	3	1	21.01	21.16	21.07	
1.4	16QAM	3	3	21.06	21.18	21.04	
1.4	16QAM	6	0	20.98	21.00	21.05	22
1.4	64QAM	1	0	22.16	22.30	22.17	23
1.4	64QAM	1	3	22.06	22.12	22.20	
1.4	64QAM	1	5	22.10	22.20	22.16	
1.4	64QAM	3	0	21.04	21.21	21.01	
1.4	64QAM	3	1	21.06	21.20	21.06	
1.4	64QAM	3	3	21.03	21.07	21.05	
1.4	64QAM	6	0	21.09	21.18	21.16	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	
10	QPSK	1	0	23.35	23.43	23.41	24
10	QPSK	1	25	23.22	23.27	23.29	
10	QPSK	1	49	23.18	23.24	23.29	
10	QPSK	25	0	22.33	22.38	22.30	23
10	QPSK	25	12	22.10	22.15	22.20	
10	QPSK	25	25	22.10	22.14	22.26	
10	QPSK	50	0	22.28	22.26	22.22	23
10	16QAM	1	0	22.24	22.42	22.38	
10	16QAM	1	25	22.25	22.41	22.39	
10	16QAM	1	49	22.17	22.35	22.24	22
10	16QAM	25	0	21.37	21.36	21.41	
10	16QAM	25	12	21.07	21.17	21.20	
10	16QAM	25	25	21.01	21.23	21.17	23
10	16QAM	50	0	21.08	21.24	21.13	
10	64QAM	1	0	22.26	22.31	22.36	
10	64QAM	1	25	22.19	22.42	22.31	22
10	64QAM	1	49	22.12	22.21	22.24	
10	64QAM	25	0	21.08	21.40	21.24	
10	64QAM	25	12	21.11	21.17	21.37	23
10	64QAM	25	25	21.15	21.26	21.36	
10	64QAM	50	0	21.13	21.17	21.24	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.31	23.40	23.38	24
5	QPSK	1	12	23.25	23.35	23.25	
5	QPSK	1	24	23.13	23.20	23.34	
5	QPSK	12	0	22.37	22.38	22.37	23
5	QPSK	12	7	22.22	22.34	22.21	
5	QPSK	12	13	22.00	22.21	22.19	
5	QPSK	25	0	22.11	22.20	22.15	23
5	16QAM	1	0	22.30	22.41	22.37	
5	16QAM	1	12	22.16	22.40	22.36	
5	16QAM	1	24	22.26	22.33	22.34	22
5	16QAM	12	0	21.29	21.49	21.34	
5	16QAM	12	7	21.28	21.18	21.20	
5	16QAM	12	13	21.22	21.17	21.27	23
5	16QAM	25	0	21.07	21.22	21.11	
5	64QAM	1	0	22.31	22.30	22.22	
5	64QAM	1	12	22.13	22.25	22.27	22
5	64QAM	1	24	22.05	22.24	22.30	
5	64QAM	12	0	21.29	21.25	21.29	
5	64QAM	12	7	21.28	21.25	21.32	23
5	64QAM	12	13	21.13	21.29	21.25	
5	64QAM	25	0	21.17	21.36	21.15	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.31	23.38	23.35	24
3	QPSK	1	8	23.27	23.30	23.18	
3	QPSK	1	14	23.08	23.28	23.24	
3	QPSK	8	0	22.13	22.31	22.19	23
3	QPSK	8	4	22.17	22.21	22.37	
3	QPSK	8	7	22.09	22.29	22.18	
3	QPSK	15	0	22.06	22.35	22.27	23
3	16QAM	1	0	22.28	22.33	22.31	
3	16QAM	1	8	22.25	22.29	22.30	
3	16QAM	1	14	22.08	22.26	22.35	22
3	16QAM	8	0	21.29	21.37	21.41	
3	16QAM	8	4	21.09	21.31	21.21	
3	16QAM	8	7	21.16	21.17	21.18	23
3	16QAM	15	0	21.13	21.20	21.36	
3	64QAM	1	0	22.31	22.31	22.36	
3	64QAM	1	8	22.21	22.41	22.22	22
3	64QAM	1	14	22.10	22.22	22.39	
3	64QAM	8	0	21.27	21.24	21.31	
3	64QAM	8	4	21.13	21.33	21.41	23
3	64QAM	8	7	21.13	21.29	21.36	
3	64QAM	15	0	21.24	21.33	21.32	
Channel				20407	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.31	23.39	23.34	24
1.4	QPSK	1	3	23.20	23.25	23.17	
1.4	QPSK	1	5	23.16	23.33	23.15	
1.4	QPSK	3	0	22.29	22.32	22.29	23
1.4	QPSK	3	1	22.10	22.20	22.14	
1.4	QPSK	3	3	22.16	22.13	22.17	
1.4	QPSK	6	0	22.26	22.17	22.11	23
1.4	16QAM	1	0	22.33	22.38	22.43	
1.4	16QAM	1	3	22.28	22.38	22.27	
1.4	16QAM	1	5	22.32	22.18	22.15	23
1.4	16QAM	3	0	21.24	21.37	21.27	
1.4	16QAM	3	1	21.19	21.18	21.22	
1.4	16QAM	3	3	21.11	21.27	21.21	22
1.4	16QAM	6	0	21.09	21.30	21.34	
1.4	64QAM	1	0	22.18	22.26	22.45	
1.4	64QAM	1	3	22.32	22.30	22.20	23
1.4	64QAM	1	5	22.16	22.27	22.35	
1.4	64QAM	3	0	21.19	21.21	21.23	
1.4	64QAM	3	1	21.05	21.30	21.20	22
1.4	64QAM	3	3	21.11	21.08	21.16	
1.4	64QAM	6	0	21.26	21.30	21.22	

Band 7 (2600MHz Band) (dBm) Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	22.57	22.61	22.55	23.5
20	QPSK	1	49	22.52	22.55	22.47	
20	QPSK	1	99	22.49	22.48	22.45	
20	QPSK	50	0	21.60	21.64	21.58	22.5
20	QPSK	50	24	21.55	21.60	21.55	
20	QPSK	50	50	21.53	21.48	21.54	
20	QPSK	100	0	21.49	21.51	21.53	22.5
20	16QAM	1	0	21.62	21.67	21.66	
20	16QAM	1	49	21.51	21.54	21.57	
20	16QAM	1	99	21.54	21.43	21.46	21.5
20	16QAM	50	0	20.64	20.65	20.52	
20	16QAM	50	24	20.49	20.66	20.53	
20	16QAM	50	50	20.43	20.35	20.37	22.5
20	16QAM	100	0	20.47	20.48	20.43	
20	64QAM	1	0	21.35	21.56	21.56	
20	64QAM	1	49	21.35	21.59	21.49	21.5
20	64QAM	1	99	21.42	21.53	21.56	
20	64QAM	50	0	20.54	20.63	20.53	
20	64QAM	50	24	20.47	20.51	20.63	22.5
20	64QAM	50	50	20.32	20.42	20.45	
20	64QAM	100	0	20.38	20.51	20.51	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.55	22.58	22.53	23.5
15	QPSK	1	37	22.51	22.46	22.50	
15	QPSK	1	74	22.52	22.49	22.46	
15	QPSK	36	0	21.54	21.65	21.52	22.5
15	QPSK	36	20	21.47	21.39	21.46	
15	QPSK	36	39	21.45	21.47	21.36	
15	QPSK	75	0	21.48	21.50	21.46	22.5
15	16QAM	1	0	21.69	21.71	21.68	
15	16QAM	1	37	21.58	21.61	21.60	
15	16QAM	1	74	21.52	21.58	21.55	21.5
15	16QAM	36	0	20.47	20.63	20.46	
15	16QAM	36	20	20.49	20.41	20.49	
15	16QAM	36	39	20.43	20.56	20.28	22.5
15	16QAM	75	0	20.45	20.46	20.53	
15	64QAM	1	0	21.40	21.58	21.50	
15	64QAM	1	37	21.43	21.43	21.45	21.5
15	64QAM	1	74	21.55	21.55	21.52	
15	64QAM	36	0	20.49	20.55	20.51	
15	64QAM	36	20	20.45	20.49	20.49	22.5
15	64QAM	36	39	20.41	20.45	20.44	
15	64QAM	75	0	20.45	20.51	20.52	
Channel				20900	21100	21400	
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	22.54	22.56	22.51	23.5
10	QPSK	1	25	22.47	22.48	22.44	
10	QPSK	1	49	22.49	22.46	22.48	
10	QPSK	25	0	21.54	21.59	21.53	22.5
10	QPSK	25	12	21.49	21.53	21.57	
10	QPSK	25	25	21.42	21.50	21.38	
10	QPSK	50	0	21.46	21.64	21.54	22.5
10	16QAM	1	0	21.65	21.71	21.55	
10	16QAM	1	25	21.44	21.72	21.69	
10	16QAM	1	49	21.45	21.47	21.43	21.5
10	16QAM	25	0	20.50	20.73	20.45	
10	16QAM	25	12	20.49	20.64	20.46	
10	16QAM	25	25	20.39	20.46	20.43	22.5
10	16QAM	50	0	20.42	20.40	20.41	
10	64QAM	1	0	21.55	21.67	21.54	
10	64QAM	1	25	21.49	21.42	21.46	21.5
10	64QAM	1	49	21.44	21.57	21.60	
10	64QAM	25	0	20.42	20.60	20.44	
10	64QAM	25	12	20.55	20.47	20.64	22.5
10	64QAM	25	25	20.47	20.47	20.61	
10	64QAM	50	0	20.50	20.51	20.59	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	22.53	22.54	22.52	23.5
5	QPSK	1	12	22.41	22.53	22.47	
5	QPSK	1	24	22.50	22.41	22.38	
5	QPSK	12	0	21.45	21.56	21.54	22.5
5	QPSK	12	7	21.45	21.48	21.56	
5	QPSK	12	13	21.48	21.49	21.53	
5	QPSK	25	0	21.45	21.53	21.40	21.5
5	16QAM	1	0	21.66	21.73	21.70	
5	16QAM	1	12	21.47	21.53	21.60	
5	16QAM	1	24	21.39	21.44	21.61	22.5
5	16QAM	12	0	20.56	20.56	20.54	
5	16QAM	12	7	20.45	20.42	20.40	
5	16QAM	12	13	20.44	20.58	20.39	21.5
5	16QAM	25	0	20.54	20.53	20.37	
5	64QAM	1	0	21.40	21.60	21.46	
5	64QAM	1	12	21.41	21.49	21.45	22.5
5	64QAM	1	24	21.40	21.38	21.47	
5	64QAM	12	0	20.44	20.48	20.46	
5	64QAM	12	7	20.47	20.61	20.44	21.5
5	64QAM	12	13	20.43	20.48	20.39	
5	64QAM	25	0	20.49	20.63	20.59	

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	23.26	23.30	23.25	24
20	QPSK	1	49	23.22	23.23	23.15	
20	QPSK	1	99	23.05	23.10	23.03	
20	QPSK	50	0	22.22	22.29	22.25	23
20	QPSK	50	24	22.08	22.18	22.22	
20	QPSK	50	50	22.00	22.22	22.17	
20	QPSK	100	0	22.12	22.08	22.00	23
20	16QAM	1	0	22.21	22.29	22.39	
20	16QAM	1	49	22.22	22.31	22.26	
20	16QAM	1	99	22.12	22.16	22.26	22
20	16QAM	50	0	21.16	21.23	21.28	
20	16QAM	50	24	21.04	21.06	21.20	
20	16QAM	50	50	21.12	21.18	21.06	23
20	16QAM	100	0	21.21	21.01	21.14	
20	64QAM	1	0	22.24	22.20	22.16	
20	64QAM	1	49	22.03	22.28	22.24	22
20	64QAM	1	99	22.10	22.24	22.22	
20	64QAM	50	0	21.07	21.26	21.07	
20	64QAM	50	24	21.13	21.09	21.27	22
20	64QAM	50	50	21.03	21.18	21.03	
20	64QAM	100	0	21.06	21.11	21.19	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	23.12	23.25	23.17	24
15	QPSK	1	37	23.23	23.18	23.22	
15	QPSK	1	74	22.99	23.18	23.07	
15	QPSK	36	0	22.20	22.29	22.25	23
15	QPSK	36	20	22.10	22.16	22.28	
15	QPSK	36	39	22.09	22.00	21.99	
15	QPSK	75	0	22.06	22.18	22.20	23
15	16QAM	1	0	22.28	22.37	22.33	
15	16QAM	1	37	22.23	22.21	22.25	
15	16QAM	1	74	22.16	22.20	22.24	22
15	16QAM	36	0	21.30	21.35	21.11	
15	16QAM	36	20	21.03	21.12	21.11	
15	16QAM	36	39	21.05	21.14	21.03	23
15	16QAM	75	0	20.96	20.97	21.19	
15	64QAM	1	0	22.07	22.33	22.31	
15	64QAM	1	37	22.01	22.31	22.34	22
15	64QAM	1	74	22.15	22.26	22.06	
15	64QAM	36	0	21.21	21.14	21.25	
15	64QAM	36	20	21.18	21.18	21.11	23
15	64QAM	36	39	21.06	21.14	21.05	
15	64QAM	75	0	21.05	21.13	21.04	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	23.19	23.27	23.22	24
10	QPSK	1	25	23.07	23.22	23.18	
10	QPSK	1	49	23.07	23.06	23.04	
10	QPSK	25	0	22.17	22.29	22.23	23
10	QPSK	25	12	22.20	22.26	22.07	
10	QPSK	25	25	22.05	22.12	21.99	
10	QPSK	50	0	22.11	22.14	22.01	23
10	16QAM	1	0	22.24	22.28	22.23	
10	16QAM	1	25	22.20	22.14	22.25	
10	16QAM	1	49	22.02	22.20	22.22	22
10	16QAM	25	0	21.09	21.26	21.22	
10	16QAM	25	12	21.14	21.19	21.10	
10	16QAM	25	25	20.93	21.16	20.93	23
10	16QAM	50	0	20.96	21.15	21.02	
10	64QAM	1	0	22.15	22.30	22.29	
10	64QAM	1	25	22.19	22.11	22.10	22
10	64QAM	1	49	22.03	22.21	22.13	
10	64QAM	25	0	21.21	21.30	21.08	
10	64QAM	25	12	21.11	21.18	21.06	23
10	64QAM	25	25	21.11	21.16	21.09	
10	64QAM	50	0	21.19	21.26	21.04	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	23.15	23.24	23.22	24
5	QPSK	1	12	23.05	23.20	23.20	
5	QPSK	1	24	23.01	23.13	23.18	
5	QPSK	12	0	22.21	22.26	22.13	23
5	QPSK	12	7	22.00	22.13	22.25	
5	QPSK	12	13	21.93	22.19	22.00	
5	QPSK	25	0	22.15	22.11	22.09	23
5	16QAM	1	0	22.33	22.22	22.33	
5	16QAM	1	12	22.29	22.27	22.26	
5	16QAM	1	24	22.19	22.22	22.07	22
5	16QAM	12	0	21.28	21.21	21.15	
5	16QAM	12	7	21.09	21.11	21.09	
5	16QAM	12	13	20.99	21.01	21.09	23
5	16QAM	25	0	21.07	21.16	21.03	
5	64QAM	1	0	22.24	22.22	22.23	
5	64QAM	1	12	22.22	22.15	22.20	22
5	64QAM	1	24	22.03	22.10	22.19	
5	64QAM	12	0	21.09	21.19	21.24	
5	64QAM	12	7	21.18	21.15	21.06	23
5	64QAM	12	13	21.18	21.08	21.21	
5	64QAM	25	0	21.06	21.07	21.01	

2.4GHz WLAN ANT 1

2.4GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11b 1Mbps	CH 1	2412	15.39	16.00	15.00	99.69
		CH 7	2442	14.00	15.00	12.00	
		CH 13	2472	9.74	10.00	10.00	
	802.11g 6Mbps	CH 1	2412	13.91	14.50	15.00	98.48
		CH 7	2442	13.84	14.50	15.00	
		CH 13	2472	9.30	10.00	12.00	
	802.11n-HT20 MCS0	CH 1	2412	11.31	11.50	13.00	98.27
		CH 7	2442	11.81	12.50	13.00	
		CH 13	2472	9.19	10.00	11.00	

Mode	Channel	Frequency (MHz)	1Mbps		2Mbps		3Mbps	
			Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit
BR / EDR	CH 00	2402	6.96	7.50	4.83	5.50	4.78	5.50
	CH 39	2441	7.51	8.00	5.56	6.00	5.57	6.00
	CH 78	2480	5.15	5.50	2.84	3.50	2.78	3.50
Duty Cycle %			77.25		76.91		76.91	

Mode	Channel	Frequency (MHz)	Average power (dBm)
			GFSK
LE	CH 00	2402	-2.30
	CH 19	2440	1.04
	CH 39	2480	-1.83
Tune-up Limit			1.5
Duty Cycle %			63.49

Reudced Power

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	24.09	24.28	24.35	25.50	15.09	15.28	15.35	16.50
GPRS 1 Tx slot	24.08	24.25	24.34	25.50	15.08	15.25	15.34	16.50
GPRS 2 Tx slots	22.86	23.07	23.02	24.00	16.86	17.07	17.02	18.00
GPRS 3 Tx slots	20.94	21.21	21.17	22.00	16.68	16.95	16.91	17.74
GPRS 4 Tx slots	18.97	19.13	19.10	20.00	15.97	16.13	16.10	17.00
EDGE 1 Tx slot	21.69	21.82	21.77	22.50	12.69	12.82	12.77	13.50
EDGE 2 Tx slots	19.57	19.70	19.68	20.50	13.57	13.70	13.68	14.50
EDGE 3 Tx slots	16.59	16.66	16.67	17.50	12.33	12.40	12.41	13.24
EDGE 4 Tx slots	15.41	15.52	15.50	16.50	12.41	12.52	12.50	13.50
Mode		Max.	24.35			Max.	17.07	
Attenuator	Cable Loss : 0.8							

Band	WCDMA Band II (dBm)			Tune-up Limit (dBm)
TX Channel	9262	9400	9538	
Rx Channel	9662	9800	9938	
Frequency (MHz)	1852.4	1880	1907.6	
3GPP Rel 99	RMC 12.2Kbps	16.44	16.58	16.56
3GPP Rel 5	HSDPA Subtest-1	16.02	16.09	16.10
3GPP Rel 5	HSDPA Subtest-2	15.74	15.77	15.78
3GPP Rel 5	HSDPA Subtest-3	15.89	15.96	15.95
3GPP Rel 5	HSDPA Subtest-4	15.55	15.63	15.62
3GPP Rel 6	HSUPA Subtest-1	16.05	16.10	16.25
3GPP Rel 6	HSUPA Subtest-2	16.02	16.07	16.20
3GPP Rel 6	HSUPA Subtest-3	16.01	16.07	16.21
3GPP Rel 6	HSUPA Subtest-4	16.02	16.07	16.26
3GPP Rel 6	HSUPA Subtest-5	16.02	16.09	16.24
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	15.95	16.03	16.13
Attenuator		Cable Loss	0.8	
Mode		Max.	16.58	

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	17.21	17.26	17.24	18
20	QPSK	1	49	17.10	17.18	17.17	
20	QPSK	1	99	17.05	17.09	17.13	
20	QPSK	50	0	16.13	16.19	16.18	17
20	QPSK	50	24	16.08	16.11	16.14	
20	QPSK	50	50	16.00	16.07	16.05	
20	QPSK	100	0	16.04	16.15	16.10	17
20	16QAM	1	0	16.19	16.30	16.27	
20	16QAM	1	49	16.16	16.24	16.21	
20	16QAM	1	99	16.07	16.10	16.13	16
20	16QAM	50	0	15.15	15.25	15.20	
20	16QAM	50	24	15.03	15.16	15.08	
20	16QAM	50	50	15.01	15.10	15.02	17
20	16QAM	100	0	15.06	15.07	15.11	
20	64QAM	1	0	16.09	16.23	16.20	
20	64QAM	1	49	16.10	16.17	16.19	16
20	64QAM	1	99	16.04	16.12	16.15	
20	64QAM	50	0	15.07	15.19	15.15	
20	64QAM	50	24	15.05	15.13	15.16	17
20	64QAM	50	50	15.04	15.08	15.11	
20	64QAM	100	0	15.09	15.14	15.10	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	17.17	17.24	17.10	18
15	QPSK	1	37	16.98	17.11	17.04	
15	QPSK	1	74	17.02	17.00	17.13	
15	QPSK	36	0	16.15	16.22	16.18	17
15	QPSK	36	20	15.97	16.18	16.18	
15	QPSK	36	39	15.98	15.95	16.05	
15	QPSK	75	0	16.00	16.00	15.96	17
15	16QAM	1	0	16.16	16.18	16.19	
15	16QAM	1	37	16.01	16.32	16.26	
15	16QAM	1	74	15.98	15.99	16.13	16
15	16QAM	36	0	15.05	15.13	15.20	
15	16QAM	36	20	14.91	15.22	15.05	
15	16QAM	36	39	14.97	15.03	15.10	17
15	16QAM	75	0	14.91	14.95	14.96	
15	64QAM	1	0	16.10	16.21	16.27	
15	64QAM	1	37	16.01	16.25	16.27	16
15	64QAM	1	74	15.94	15.97	16.12	
15	64QAM	36	0	14.97	15.04	15.04	
15	64QAM	36	20	14.95	15.09	15.02	17
15	64QAM	36	39	15.07	15.08	15.01	
15	64QAM	75	0	14.96	15.14	14.98	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	17.16	17.21	17.18	18
10	QPSK	1	25	17.04	17.16	17.18	
10	QPSK	1	49	17.09	17.02	17.10	
10	QPSK	25	0	16.06	16.28	16.27	17
10	QPSK	25	12	16.06	16.15	16.17	
10	QPSK	25	25	15.98	16.01	15.97	
10	QPSK	50	0	16.09	16.31	16.10	17
10	16QAM	1	0	16.07	16.38	16.33	
10	16QAM	1	25	16.15	16.32	16.26	
10	16QAM	1	49	16.07	16.05	16.20	16
10	16QAM	25	0	15.16	15.22	15.19	
10	16QAM	25	12	15.08	15.23	14.96	
10	16QAM	25	25	14.96	14.95	15.06	17
10	16QAM	50	0	15.07	15.12	14.97	
10	64QAM	1	0	15.99	16.29	16.08	
10	64QAM	1	25	16.15	16.04	16.05	16
10	64QAM	1	49	15.96	16.06	16.08	
10	64QAM	25	0	15.06	15.28	15.10	
10	64QAM	25	12	15.08	15.04	15.07	17
10	64QAM	25	25	14.97	15.08	15.08	
10	64QAM	50	0	15.09	15.19	15.04	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	17.09	17.23	17.13	18
5	QPSK	1	12	17.11	17.11	17.19	
5	QPSK	1	24	17.13	17.13	17.05	
5	QPSK	12	0	16.08	16.11	16.27	17
5	QPSK	12	7	16.08	16.15	16.15	
5	QPSK	12	13	16.01	15.94	16.13	
5	QPSK	25	0	15.97	16.01	15.97	17
5	16QAM	1	0	16.18	16.33	16.13	
5	16QAM	1	12	16.07	16.32	16.27	
5	16QAM	1	24	16.02	15.97	16.14	16
5	16QAM	12	0	15.06	15.29	15.15	
5	16QAM	12	7	15.01	15.22	15.15	
5	16QAM	12	13	14.95	14.99	15.02	17
5	16QAM	25	0	15.11	14.97	15.07	
5	64QAM	1	0	16.14	16.25	16.08	
5	64QAM	1	12	16.04	16.15	16.11	16
5	64QAM	1	24	16.14	16.16	16.08	
5	64QAM	12	0	14.94	15.04	15.02	
5	64QAM	12	7	14.94	15.18	15.07	17
5	64QAM	12	13	15.01	15.07	15.16	
5	64QAM	25	0	14.94	15.16	15.11	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1909.5	
3	QPSK	1	0	17.11	17.22	17.20	18
3	QPSK	1	8	17.10	17.15	17.13	
3	QPSK	1	14	16.99	17.12	17.17	
3	QPSK	8	0	16.07	16.12	16.18	17
3	QPSK	8	4	16.08	16.13	16.24	
3	QPSK	8	7	15.89	16.08	15.93	

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	15.72	15.77	15.74	16.5
20	QPSK	1	49	15.46	15.66	15.62	
20	QPSK	1	99	15.55	15.61	15.58	
20	QPSK	50	0	14.73	14.81	14.71	15.5
20	QPSK	50	24	14.54	14.69	14.66	
20	QPSK	50	50	14.44	14.66	14.63	
20	QPSK	100	0	14.53	14.60	14.64	15.5
20	16QAM	1	0	14.54	14.72	14.80	
20	16QAM	1	49	14.70	14.60	14.68	
20	16QAM	1	99	14.44	14.67	14.62	14.5
20	16QAM	50	0	13.62	13.71	13.65	
20	16QAM	50	24	13.61	13.65	13.57	
20	16QAM	50	50	13.46	13.51	13.51	15.5
20	16QAM	100	0	13.59	13.48	13.60	
20	64QAM	1	0	14.61	14.58	14.60	
20	64QAM	1	49	14.55	14.64	14.60	14.5
20	64QAM	1	99	14.64	14.49	14.58	
20	64QAM	50	0	13.52	13.72	13.69	
20	64QAM	50	24	13.65	13.48	13.66	15.5
20	64QAM	50	50	13.57	13.61	13.65	
20	64QAM	100	0	13.46	13.57	13.62	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	15.69	15.74	15.68	16.5
15	QPSK	1	37	15.69	15.73	15.65	
15	QPSK	1	74	15.41	15.45	15.52	
15	QPSK	36	0	14.65	14.76	14.57	15.5
15	QPSK	36	20	14.45	14.47	14.53	
15	QPSK	36	39	14.49	14.53	14.48	
15	QPSK	75	0	14.49	14.66	14.53	15.5
15	16QAM	1	0	14.60	14.83	14.71	
15	16QAM	1	37	14.69	14.74	14.78	
15	16QAM	1	74	14.56	14.62	14.63	14.5
15	16QAM	36	0	13.67	13.71	13.69	
15	16QAM	36	20	13.39	13.52	13.57	
15	16QAM	36	39	13.37	13.65	13.45	15.5
15	16QAM	75	0	13.61	13.66	13.55	
15	64QAM	1	0	14.58	14.71	14.66	
15	64QAM	1	37	14.61	14.74	14.69	14.5
15	64QAM	1	74	14.46	14.53	14.51	
15	64QAM	36	0	13.56	13.65	13.67	
15	64QAM	36	20	13.54	13.52	13.62	15.5
15	64QAM	36	39	13.41	13.58	13.54	
15	64QAM	75	0	13.62	13.70	13.52	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	15.65	15.70	15.63	16.5
10	QPSK	1	25	15.49	15.63	15.59	
10	QPSK	1	49	15.53	15.49	15.67	
10	QPSK	25	0	14.60	14.75	14.68	15.5
10	QPSK	25	12	14.60	14.66	14.62	
10	QPSK	25	25	14.37	14.47	14.61	
10	QPSK	50	0	14.61	14.61	14.59	15.5
10	16QAM	1	0	14.70	14.76	14.73	
10	16QAM	1	25	14.70	14.63	14.64	
10	16QAM	1	49	14.62	14.60	14.67	14.5
10	16QAM	25	0	13.69	13.63	13.63	
10	16QAM	25	12	13.59	13.58	13.61	
10	16QAM	25	25	13.50	13.45	13.53	15.5
10	16QAM	50	0	13.56	13.63	13.66	
10	64QAM	1	0	14.52	14.66	14.68	
10	64QAM	1	25	14.45	14.70	14.59	14.5
10	64QAM	1	49	14.42	14.62	14.61	
10	64QAM	25	0	13.55	13.59	13.63	
10	64QAM	25	12	13.58	13.68	13.55	15.5
10	64QAM	25	25	13.56	13.66	13.71	
10	64QAM	50	0	13.62	13.51	13.54	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	15.68	15.73	15.70	16.5
5	QPSK	1	12	15.58	15.56	15.65	
5	QPSK	1	24	15.58	15.59	15.63	
5	QPSK	12	0	14.59	14.78	14.70	15.5
5	QPSK	12	7	14.67	14.62	14.65	
5	QPSK	12	13	14.49	14.57	14.48	
5	QPSK	25	0	14.55	14.61	14.47	15.5
5	16QAM	1	0	14.69	14.78	14.71	
5	16QAM	1	12	14.53	14.74	14.71	
5	16QAM	1	24	14.43	14.54	14.66	14.5
5	16QAM	12	0	13.70	13.65	13.61	
5	16QAM	12	7	13.55	13.55	13.45	
5	16QAM	12	13	13.40	13.69	13.59	15.5
5	16QAM	25	0	13.65	13.57	13.48	
5	64QAM	1	0	14.59	14.62	14.74	
5	64QAM	1	12	14.46	14.63	14.55	14.5
5	64QAM	1	24	14.49	14.62	14.64	
5	64QAM	12	0	13.59	13.79	13.62	
5	64QAM	12	7	13.49	13.72	13.58	15.5
5	64QAM	12	13	13.57	13.57	13.54	
5	64QAM	25	0	13.45	13.67	13.57	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	15.66	15.71	15.70	16.5
3	QPSK	1	8	15.63	15.70	15.65	
3	QPSK	1	14	15.64	15.63	15.63	
3	QPSK	8	0	14.55	14.75	14.57	15.5
3	QPSK	8	4	14.66	14.46	14.73	
3	QPSK	8	7	14.45	14.65	14.60	

3	QPSK	15	0	16.01	16.23	16.07	17
3	16QAM	1	0	16.29	16.18	16.12	
3	16QAM	1	8	16.09	16.25	16.20	
3	16QAM	1	14	16.15	16.00	16.16	16
3	16QAM	8	0	15.01	15.27	15.25	
3	16QAM	8	4	14.97	15.08	15.17	
3	16QAM	8	7	14.89	15.01	15.06	17
3	16QAM	15	0	15.15	14.95	14.99	
3	64QAM	1	0	16.01	16.22	16.21	
3	64QAM	1	8	16.00	16.02	16.06	16
3	64QAM	1	14	16.00	16.03	16.15	
3	64QAM	8	0	14.96	15.24	15.07	
3	64QAM	8	4	14.92	15.03	15.02	16
3	64QAM	8	7	15.11	15.17	15.08	
3	64QAM	15	0	15.01	15.19	15.03	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	17.16	17.20	17.17	18
1.4	QPSK	1	3	17.06	17.13	17.09	
1.4	QPSK	1	5	16.98	17.06	17.02	
1.4	QPSK	3	0	16.02	16.26	16.25	17
1.4	QPSK	3	1	16.06	16.10	16.07	
1.4	QPSK	3	3	16.02	16.04	16.00	
1.4	QPSK	6	0	15.98	16.01	16.08	17
1.4	16QAM	1	0	16.20	16.34	16.27	
1.4	16QAM	1	3	16.15	16.26	16.08	
1.4	16QAM	1	5	16.12	15.99	15.98	16
1.4	16QAM	3	0	15.18	15.28	15.13	
1.4	16QAM	3	1	15.00	15.15	15.08	
1.4	16QAM	3	3	15.02	15.06	15.04	16
1.4	16QAM	6	0	15.04	15.01	15.14	
1.4	64QAM	1	0	16.03	16.29	16.14	
1.4	64QAM	1	3	16.14	16.14	16.25	17
1.4	64QAM	1	5	15.94	15.98	16.16	
1.4	64QAM	3	0	15.03	15.07	15.17	
1.4	64QAM	3	1	15.01	15.05	15.25	16
1.4	64QAM	3	3	15.05	15.17	15.02	
1.4	64QAM	6	0	15.00	15.10	15.05	

3	QPSK	15	0	14.58	14.75	14.63	15.5
3	16QAM	1	0	14.68	14.84	14.84	
3	16QAM	1	8	14.70	14.84	14.80	
3	16QAM	1	14	14.67	14.52	14.68	14.5
3	16QAM	8	0	13.66	13.70	13.69	
3	16QAM	8	4	13.52	13.55	13.50	
3	16QAM	8	7	13.52	13.70	13.49	15.5
3	16QAM	15	0	13.41	13.60	13.62	
3	64QAM	1	0	14.53	14.80	14.65	
3	64QAM	1	8	14.65	14.57	14.69	14.5
3	64QAM	1	14	14.47	14.56	14.75	
3	64QAM	8	0	13.60	13.70	13.69	
3	64QAM	8	4	13.40	13.52	13.51	14.5
3	64QAM	8	7	13.41	13.52	13.46	
3	64QAM	15	0	13.52	13.57	13.46	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	15.63	15.70	15.65	16.5
1.4	QPSK	1	3	15.57	15.68	15.55	
1.4	QPSK	1	5	15.49	15.65	15.61	
1.4	QPSK	3	0	14.67	14.78	14.77	15.5
1.4	QPSK	3	1	14.55	14.56	14.68	
1.4	QPSK	3	3	14.56	14.53	14.59	
1.4	QPSK	6	0	14.58	14.72	14.45	14.5
1.4	16QAM	1	0	14.77	14.82	14.64	
1.4	16QAM	1	3	14.66	14.66	14.81	
1.4	16QAM	1	5	14.56	14.65	14.69	15.5
1.4	16QAM	3	0	13.67	13.74	13.66	
1.4	16QAM	3	1	13.51	13.66	13.57	
1.4	16QAM	3	3	13.56	13.68	13.54	14.5
1.4	16QAM	6	0	13.48	13.50	13.55	
1.4	64QAM	1	0	14.66	14.80	14.67	
1.4	64QAM	1	3	14.56	14.62	14.70	15.5
1.4	64QAM	1	5	14.60	14.70	14.66	
1.4	64QAM	3	0	13.54	13.71	13.51	
1.4	64QAM	3	1	13.56	13.70	13.56	14.5
1.4	64QAM	3	3	13.53	13.57	13.55	
1.4	64QAM	6	0	13.59	13.68	13.66	

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	18.07	18.11	18.05	19
20	QPSK	1	49	18.02	18.05	17.97	
20	QPSK	1	99	17.99	17.98	17.95	
20	QPSK	50	0	17.10	17.14	17.08	18
20	QPSK	50	24	17.05	17.10	17.05	
20	QPSK	50	50	17.03	16.98	17.04	
20	QPSK	100	0	16.99	17.01	17.03	18
20	16QAM	1	0	17.12	17.17	17.16	
20	16QAM	1	49	17.01	17.04	17.07	
20	16QAM	1	99	17.04	16.93	16.96	17
20	16QAM	50	0	16.14	16.15	16.02	
20	16QAM	50	24	15.99	16.16	16.03	
20	16QAM	50	50	15.93	15.85	15.87	18
20	16QAM	100	0	15.97	15.98	15.93	
20	64QAM	1	0	16.85	17.06	17.06	
20	64QAM	1	49	16.85	17.09	16.99	17
20	64QAM	1	99	16.92	17.03	17.06	
20	64QAM	50	0	16.04	16.13	16.03	
20	64QAM	50	24	15.97	16.01	16.13	17
20	64QAM	50	50	15.82	15.92	15.95	
20	64QAM	100	0	15.88	16.01	16.01	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	18.05	18.08	18.03	19
15	QPSK	1	37	18.01	17.96	18.00	
15	QPSK	1	74	18.02	17.99	17.96	
15	QPSK	36	0	17.04	17.15	17.02	18
15	QPSK	36	20	16.97	16.89	16.96	
15	QPSK	36	39	16.95	16.97	16.86	
15	QPSK	75	0	16.98	17.00	16.96	18
15	16QAM	1	0	17.19	17.21	17.18	
15	16QAM	1	37	17.08	17.11	17.10	
15	16QAM	1	74	17.02	17.08	17.05	17
15	16QAM	36	0	15.97	16.13	15.96	
15	16QAM	36	20	15.99	15.91	15.99	
15	16QAM	36	39	15.93	16.06	15.78	18
15	16QAM	75	0	15.95	15.96	16.03	
15	64QAM	1	0	16.90	17.08	17.00	
15	64QAM	1	37	16.93	16.93	16.95	17
15	64QAM	1	74	17.05	17.05	17.02	
15	64QAM	36	0	15.99	16.05	16.01	
15	64QAM	36	20	15.95	15.99	15.99	17
15	64QAM	36	39	15.91	15.95	15.94	
15	64QAM	75	0	15.95	16.01	16.02	
Channel				20800	21100	21400	
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	18.04	18.06	18.01	19
10	QPSK	1	25	17.97	17.98	17.94	
10	QPSK	1	49	17.99	17.96	17.98	
10	QPSK	25	0	17.04	17.09	17.03	18
10	QPSK	25	12	16.99	17.03	17.07	
10	QPSK	25	25	16.92	17.00	16.88	
10	QPSK	50	0	16.96	17.14	17.04	18
10	16QAM	1	0	17.15	17.21	17.05	
10	16QAM	1	25	16.94	17.22	17.19	
10	16QAM	1	49	16.95	16.97	16.93	17
10	16QAM	25	0	16.00	16.23	15.95	
10	16QAM	25	12	15.99	16.14	15.96	
10	16QAM	25	25	15.89	15.96	15.93	18
10	16QAM	50	0	15.92	15.90	15.91	
10	64QAM	1	0	17.05	17.17	17.04	
10	64QAM	1	25	16.99	16.92	16.96	17
10	64QAM	1	49	16.94	17.07	17.10	
10	64QAM	25	0	15.92	16.10	15.94	
10	64QAM	25	12	16.05	15.97	16.14	18
10	64QAM	25	25	15.97	15.97	16.11	
10	64QAM	50	0	16.00	16.01	16.09	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	18.03	18.04	18.02	19
5	QPSK	1	12	17.91	18.03	17.97	
5	QPSK	1	24	18.00	17.91	17.88	
5	QPSK	12	0	16.95	17.06	17.04	18
5	QPSK	12	7	16.95	16.98	17.06	
5	QPSK	12	13	16.98	16.99	17.03	
5	QPSK	25	0	16.95	17.03	16.90	18
5	16QAM	1	0	17.16	17.23	17.20	
5	16QAM	1	12	16.97	17.03	17.10	
5	16QAM	1	24	16.89	16.94	17.11	17
5	16QAM	12	0	16.06	16.06	16.04	
5	16QAM	12	7	15.95	15.92	15.90	
5	16QAM	12	13	15.94	16.08	15.89	18
5	16QAM	25	0	16.04	16.03	15.87	
5	64QAM	1	0	16.90	17.10	16.96	
5	64QAM	1	12	16.91	16.99	16.95	17
5	64QAM	1	24	16.90	16.88	16.97	
5	64QAM	12	0	15.94	15.98	15.96	
5	64QAM	12	7	15.97	16.11	15.94	17
5	64QAM	12	13	15.93	15.98	15.89	
5	64QAM	25	0	15.99	16.13	16.09	

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	17.28	17.30	17.25	18
20	QPSK	1	49	17.22	17.23	17.15	
20	QPSK	1	99	17.05	17.10	17.03	
20	QPSK	50	0	16.22	16.29	16.25	17
20	QPSK	50	24	16.08	16.18	16.22	
20	QPSK	50	50	16.00	16.22	16.17	
20	QPSK	100	0	16.12	16.08	16.00	17
20	16QAM	1	0	16.21	16.29	16.39	
20	16QAM	1	49	16.22	16.31	16.26	
20	16QAM	1	99	16.12	16.16	16.26	16
20	16QAM	50	0	15.16	15.23	15.28	
20	16QAM	50	24	15.04	15.06	15.20	
20	16QAM	50	50	15.12	15.18	15.06	17
20	16QAM	100	0	15.21	15.01	15.14	
20	64QAM	1	0	16.24	16.20	16.16	
20	64QAM	1	49	16.03	16.28	16.24	16
20	64QAM	1	99	16.10	16.24	16.22	
20	64QAM	50	0	15.07	15.26	15.07	
20	64QAM	50	24	15.13	15.09	15.27	16
20	64QAM	50	50	15.03	15.18	15.03	
20	64QAM	100	0	15.06	15.11	15.19	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	17.12	17.25	17.17	18
15	QPSK	1	37	17.23	17.18	17.22	
15	QPSK	1	74	16.99	17.18	17.07	
15	QPSK	36	0	16.20	16.29	16.25	17
15	QPSK	36	20	16.10	16.16	16.28	
15	QPSK	36	39	16.09	16.00	15.99	
15	QPSK	75	0	16.06	16.18	16.20	17
15	16QAM	1	0	16.28	16.37	16.33	
15	16QAM	1	37	16.23	16.21	16.25	
15	16QAM	1	74	16.16	16.20	16.24	16
15	16QAM	36	0	15.30	15.35	15.11	
15	16QAM	36	20	15.03	15.12	15.11	
15	16QAM	36	39	15.05	15.14	15.03	17
15	16QAM	75	0	15.06	15.07	15.19	
15	64QAM	1	0	16.07	16.33	16.31	
15	64QAM	1	37	16.01	16.31	16.34	16
15	64QAM	1	74	16.15	16.26	16.06	
15	64QAM	36	0	15.21	15.14	15.25	
15	64QAM	36	20	15.18	15.18	15.11	16
15	64QAM	36	39	15.06	15.14	15.05	
15	64QAM	75	0	15.05	15.13	15.04	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	17.19	17.27	17.22	18
10	QPSK	1	25	17.07	17.22	17.18	
10	QPSK	1	49	17.07	17.06	17.04	
10	QPSK	25	0	16.17	16.29	16.23	17
10	QPSK	25	12	16.20	16.26	16.07	
10	QPSK	25	25	16.05	16.12	15.99	
10	QPSK	50	0	16.11	16.14	16.01	17
10	16QAM	1	0	16.24	16.28	16.23	
10	16QAM	1	25	16.20	16.14	16.25	
10	16QAM	1	49	16.02	16.20	16.22	16
10	16QAM	25	0	15.09	15.26	15.22	
10	16QAM	25	12	15.14	15.19	15.10	
10	16QAM	25	25	15.03	15.16	15.01	17
10	16QAM	50	0	15.06	15.15	15.02	
10	64QAM	1	0	16.15	16.30	16.29	
10	64QAM	1	25	16.19	16.11	16.10	16
10	64QAM	1	49	16.03	16.21	16.13	
10	64QAM	25	0	15.21	15.30	15.08	
10	64QAM	25	12	15.11	15.18	15.06	16
10	64QAM	25	25	15.11	15.16	15.09	
10	64QAM	50	0	15.19	15.26	15.04	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	17.15	17.24	17.22	18
5	QPSK	1	12	17.05	17.20	17.20	
5	QPSK	1	24	17.01	17.13	17.18	
5	QPSK	12	0	16.21	16.26	16.13	17
5	QPSK	12	7	16.00	16.13	16.25	
5	QPSK	12	13	15.93	16.19	16.00	
5	QPSK	25	0	16.15	16.11	16.09	17
5	16QAM	1	0	16.33	16.22	16.33	
5	16QAM	1	12	16.29	16.27	16.26	
5	16QAM	1	24	16.19	16.22	16.07	16
5	16QAM	12	0	15.28	15.21	15.15	
5	16QAM	12	7	15.09	15.11	15.09	
5	16QAM	12	13	15.00	15.01	15.09	17
5	16QAM	25	0	15.07	15.16	15.03	
5	64QAM	1	0	16.24	16.22	16.23	
5	64QAM	1	12	16.22	16.15	16.20	16
5	64QAM	1	24	16.03	16.10	16.19	
5	64QAM	12	0	15.09	15.19	15.24	
5	64QAM	12	7	15.18	15.15	15.06	16
5	64QAM	12	13	15.18	15.08	15.21	
5	64QAM	25	0	15.06	15.07	15.01	