



REPORT No.: SZ23040248S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

The target power was recorded in the manufacture document.

Full Power

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
	128	189	251		128	189	251		
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8		
GSM 1 Tx slot	30.33	30.50	30.38	31.00	21.33	21.50	21.38	22.00	0.22
GPRS 1 Tx slot	30.40	30.55	30.44	31.00	21.40	21.55	21.44	22.00	
GPRS 2 Tx slots	29.45	29.63	29.53	30.00	23.45	23.63	23.53	24.00	0.18
GPRS 3 Tx slots	27.65	27.88	27.78	28.50	23.39	23.62	23.52	24.24	0.23
GPRS 4 Tx slots	26.81	26.93	26.83	27.50	23.81	23.93	23.83	24.50	0.12
EDGE 1 Tx slot	23.29	23.35	23.10	24.00	14.29	14.35	14.10	15.00	0.25
EDGE 2 Tx slots	21.94	22.12	21.97	23.00	15.94	16.12	15.97	17.00	0.18
EDGE 3 Tx slots	19.37	19.48	19.24	21.00	15.11	15.22	14.98	16.74	0.24
EDGE 4 Tx slots	18.14	18.22	18.08	19.00	15.14	15.22	15.08	16.00	0.14
Mode		Max.	30.55			Max.	23.93		
Attenuator	Cable Loss : 0.6								

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
	512	661	810		512	661	810		
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot	29.58	29.61	29.52	30.50	20.58	20.61	20.52	21.50	0.13
GPRS 1 Tx slot	29.63	29.65	29.54	30.50	20.63	20.65	20.54	21.50	
GPRS 2 Tx slots	28.77	28.82	28.77	29.50	22.77	22.82	22.77	23.50	0.05
GPRS 3 Tx slots	26.77	26.85	27.01	28.00	22.51	22.59	22.75	23.74	0.24
GPRS 4 Tx slots	25.81	25.92	25.85	27.00	22.81	22.92	22.85	24.00	0.11
EDGE 1 Tx slot	24.53	24.67	24.47	25.50	15.53	15.67	15.47	16.50	0.20
EDGE 2 Tx slots	23.26	23.51	23.35	24.50	17.26	17.51	17.35	18.50	0.25
EDGE 3 Tx slots	21.23	21.44	21.31	22.50	16.97	17.18	17.05	18.24	0.21
EDGE 4 Tx slots	19.77	19.88	19.81	21.00	16.77	16.88	16.81	18.00	0.11
Mode		Max.	29.65			Max.	22.92		
Attenuator	Cable Loss : 0.8								

Band	WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			Tune-up Limit (dBm)	
TX Channel	9262	9400	9538		1312	1413	1513		4132	4182	4233		
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458		
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6	826.4	836.4	846.6			
3GPP Rel 99	RMC 12.2Kbps	22.19	22.26	22.21	23.00	22.09	22.17	22.10	23.00	22.05	22.12	22.09	23.00
3GPP Rel 6	HSDPA Subtest-1	21.65	21.58	21.55	22.50	21.34	21.46	21.42	22.50	21.34	21.35	21.40	22.50
3GPP Rel 6	HSDPA Subtest-2	21.61	21.59	21.56	22.50	21.31	21.42	21.42	22.50	21.30	21.32	21.37	22.50
3GPP Rel 6	HSDPA Subtest-3	21.09	21.09	21.08	22.00	20.83	20.96	20.94	22.00	20.87	20.87	20.91	22.00
3GPP Rel 6	HSDPA Subtest-4	21.08	21.08	21.05	22.00	20.81	20.90	20.95	22.00	20.86	20.83	20.87	22.00
3GPP Rel 6	HSUPA Subtest-1	19.50	19.45	19.47	20.50	19.32	19.42	19.43	20.50	19.34	19.37	19.37	20.50
3GPP Rel 6	HSUPA Subtest-2	19.49	19.43	19.46	20.50	19.34	19.38	19.45	19.50	19.34	19.33	19.35	20.50
3GPP Rel 6	HSUPA Subtest-3	20.49	20.44	20.46	20.50	20.31	20.38	20.41	20.50	20.34	20.34	20.34	20.50
3GPP Rel 6	HSUPA Subtest-4	19.02	18.97	18.96	19.50	18.85	18.92	18.93	19.50	18.86	18.87	18.84	19.50
3GPP Rel 6	HSUPA Subtest-5	20.47	20.44	20.48	21.50	20.32	20.38	20.39	21.50	20.32	20.33	20.31	21.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.72	20.69	20.70	21.50	20.72	20.73	20.69	21.50	20.52	20.68	20.58	21.50
Attenuator			Cable Loss	0.8		Cable Loss		0.8		Cable Loss		0.6	
Mode			Max.	22.26		Max.		22.17		Max.		22.12	

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	22.5
Frequency (MHz)				18800	18900	19000	
20	QPSK	1	0	21.84	21.95	21.82	22.5
20	QPSK	1	49	21.85	21.90	21.87	
20	QPSK	1	99	21.73	21.69	21.70	
20	QPSK	50	0	20.83	20.92	20.85	
20	QPSK	50	24	20.77	20.90	20.73	21.5
20	QPSK	50	50	20.68	20.88	20.67	
20	QPSK	100	0	20.71	20.75	20.72	
20	16QAM	1	0	20.92	21.02	20.95	
20	16QAM	1	49	20.69	20.83	20.83	21.5
20	16QAM	1	99	20.75	20.89	20.86	
20	16QAM	50	0	20.01	20.04	20.00	
20	16QAM	50	24	19.84	19.89	19.92	
20	16QAM	50	50	19.93	19.95	19.92	20.5
20	16QAM	100	0	19.82	19.90	19.84	
20	64QAM	1	0	19.94	20.02	19.92	
20	64QAM	1	49	19.69	19.93	19.83	
20	64QAM	1	99	19.75	19.86	19.81	20.5
20	64QAM	50	0	18.95	19.06	19.01	
20	64QAM	50	24	18.83	18.84	18.79	
20	64QAM	50	50	18.68	18.90	18.83	
20	64QAM	100	0	18.70	18.88	18.74	19.5
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	18800	1902.5	22.5
15	QPSK	1	0	21.76	21.92	21.84	
15	QPSK	1	37	21.84	21.89	21.79	22.5
15	QPSK	1	74	21.83	21.84	21.61	
15	QPSK	36	0	20.89	20.92	20.84	
15	QPSK	36	20	20.84	20.77	20.85	
15	QPSK	36	39	20.66	20.94	20.61	21.5
15	QPSK	75	0	20.69	20.87	20.63	
15	16QAM	1	0	20.76	20.94	20.83	
15	16QAM	1	37	20.62	20.76	20.90	
15	16QAM	1	74	20.65	20.89	20.90	21.5
15	16QAM	36	0	19.88	19.92	19.98	
15	16QAM	36	20	19.81	19.76	20.02	
15	16QAM	36	39	19.99	19.85	19.79	
15	16QAM	75	0	19.83	19.76	19.96	20.5
15	64QAM	1	0	19.91	19.83	19.80	
15	64QAM	1	37	19.76	19.88	19.78	
15	64QAM	1	74	19.71	19.72	19.66	
15	64QAM	36	0	18.94	19.03	18.96	20.5
15	64QAM	36	20	18.63	18.89	18.72	
15	64QAM	36	39	18.63	19.03	18.97	
15	64QAM	75	0	18.60	18.72	18.80	
Channel				18650	18900	19150	22.5
Frequency (MHz)				1855	18800	1905	
10	QPSK	1	0	21.65	21.89	21.88	22.5
10	QPSK	1	25	21.65	21.75	21.67	
10	QPSK	1	49	21.69	21.80	21.53	
10	QPSK	25	0	20.69	20.79	20.75	
10	QPSK	25	12	20.83	20.83	20.87	21.5
10	QPSK	25	25	20.79	20.80	20.67	
10	QPSK	50	0	20.64	20.79	20.79	
10	16QAM	1	0	20.94	20.94	21.00	
10	16QAM	1	25	20.80	20.84	20.72	21.5
10	16QAM	1	49	20.90	20.74	20.97	
10	16QAM	25	0	20.11	19.95	19.91	
10	16QAM	25	12	19.84	19.74	19.85	
10	16QAM	25	25	20.05	19.91	19.94	20.5
10	16QAM	50	0	19.87	19.82	19.82	
10	64QAM	1	0	19.85	19.87	19.85	
10	64QAM	1	25	19.61	19.77	19.79	
10	64QAM	1	49	19.71	19.68	19.95	20.5
10	64QAM	25	0	19.00	18.90	18.97	
10	64QAM	25	12	18.93	18.65	18.65	
10	64QAM	25	25	18.72	19.01	18.78	
10	64QAM	50	0	18.80	18.87	18.71	19.5
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	18800	1907.5	22.5
5	QPSK	1	0	21.79	21.90	21.78	
5	QPSK	1	12	21.74	21.79	21.90	22.5
5	QPSK	1	24	21.63	21.82	21.77	
5	QPSK	12	0	20.98	20.74	20.95	
5	QPSK	12	7	20.77	20.83	20.56	21.5
5	QPSK	12	13	20.58	20.94	20.78	
5	QPSK	25	0	20.76	20.67	20.64	
5	16QAM	1	0	21.06	21.03	20.89	
5	16QAM	1	12	20.75	20.92	20.72	21.5
5	16QAM	1	24	20.87	20.89	20.70	
5	16QAM	12	0	19.94	19.85	19.82	
5	16QAM	12	7	19.90	20.02	20.05	
5	16QAM	12	13	19.78	19.89	19.75	20.5
5	16QAM	25	0	19.89	19.80	19.88	
5	64QAM	1	0	19.91	20.01	19.85	
5	64QAM	1	12	19.78	19.77	19.82	
5	64QAM	1	24	19.65	19.93	19.94	20.5
5	64QAM	12	0	18.95	18.97	18.97	
5	64QAM	12	7	18.76	18.90	18.88	
5	64QAM	12	13	18.83	18.98	18.97	
5	64QAM	25	0	18.79	18.99	18.69	19.5
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	18800	1908.5	22.5
3	QPSK	1	0	21.78	21.91	21.63	
3	QPSK	1	8	21.66	21.78	21.84	22.5
3	QPSK	1	14	21.54	21.67	21.66	
3	QPSK	8	0	20.69	21.00	20.97	
3	QPSK	8	4	20.67	20.92	20.68	
3	QPSK	8	7	20.81	20.91	20.79	21.5
Channel				18615	18900	19185	

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	22.5
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	21.60	21.68	21.57	22.5
20	QPSK	1	49	21.57	21.67	21.53	
20	QPSK	1	99	21.61	21.55	21.59	
20	QPSK	50	0	20.62	20.65	20.59	
20	QPSK	50	24	20.57	20.60	20.49	21.5
20	QPSK	50	50	20.52	20.66	20.53	
20	QPSK	100	0	20.46	20.40	20.37	
20	16QAM	1	0	20.62	20.88	20.52	
20	16QAM	1	49	20.52	20.48	20.60	21.5
20	16QAM	1	99	20.53	20.48	20.58	
20	16QAM	50	0	19.59	19.59	19.56	
20	16QAM	50	24	19.47	19.47	19.58	
20	16QAM	50	50	19.57	19.66	19.78	20.5
20	16QAM	100	0	19.38	19.68	19.45	
20	64QAM	1	0	19.67	19.86	19.73	
20	64QAM	1	49	19.57	19.76	19.55	
20	64QAM	1	99	19.62	19.53	19.66	20.5
20	64QAM	50	0	18.58	18.79	18.60	
20	64QAM	50	24	18.60	18.52	18.52	
20	64QAM	50	50	18.56	18.70	18.49	
20	64QAM	100	0	18.55	18.63	18.39	19.5
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	Tune-up limit (dBm)
15	QPSK	1	0	21.60	21.65	21.57	22.5
15	QPSK	1	37	21.63	21.64	21.59	
15	QPSK	1	74	21.60	21.55	21.60	
15	QPSK	36	0	20.58	20.76	20.75	21.5
15	QPSK	36	20	20.60	20.54	20.40	
15	QPSK	36	39	20.57	20.52	20.56	
15	QPSK	75	0	20.38	20.61	20.61	
15	16QAM	1	0	20.58	20.60	20.75	21.5
15	16QAM	1	37	20.54	20.54	20.45	
15	16QAM	1	74	20.52	20.71	20.43	
15	16QAM	36	0	19.76	19.83	19.70	
15	16QAM	36	20	19.51	19.49	19.81	20.5
15	16QAM	36	39	19.54	19.68	19.75	
15	16QAM	75	0	19.37	19.74	19.40	
15	64QAM	1	0	19.82	19.62	19.78	
15	64QAM	1	37	19.46	19.83	19.46	20.5
15	64QAM	1	74	19.57	19.46	19.41	
15	64QAM	36	0	18.50	18.66	18.86	
15	64QAM	36	20	18.59	18.67	18.47	
15	64QAM	36	39	18.57	18.60	18.46	19.5
15	64QAM	75	0	18.55	18.77	18.59	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	22.5
10	QPSK	1	0	21.60	21.66	21.59	
10	QPSK	1	25	21.54	21.55	21.46	22.5
10	QPSK	1	49	21.52	21.46	21.49	
10	QPSK	25	0	20.54	20.55	20.63	
10	QPSK	25	12	20.67	20.68	20.45	
10	QPSK	25	25	20.40	20.46	20.39	21.5
10	QPSK	50	0	20.53	20.57	20.52	
10	16QAM	1	0	20.60	20.84	20.75	
10	16QAM	1	25	20.58	20.67	20.45	
10	16QAM	1	49	20.51	20.52	20.43	21.5
10	16QAM	25	0	19.73	19.62	19.77	
10	16QAM	25	12	19.51	19.47	19.61	
10	16QAM	25	25	19.50	19.56	19.53	
10	16QAM	50	0	19.52	19.58	19.65	20.5
10	64QAM	1	0	19.76	19.57	19.60	
10	64QAM	1	25	19.47	19.57	19.43	
10	64QAM	1	49	19.58	19.46	19.68	
10	64QAM	25	0	18.60	18.79	18.86	19.5
10	64QAM	25	12	18.51	18.68	18.62	
10	64QAM	25	25	18.48	18.77	18.72	
10	64QAM	50	0	18.59	18.76	18.51	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	22.5
5	QPSK	1	0	21.59	21.63	21.52	
5	QPSK	1	12	21.62	21.54	21.47	22.5
5	QPSK	1	24	21.56	21.39	21.53	
5	QPSK	12	0	20.72	20.82	20.54	
5	QPSK	12	7	20.61	20.58	20.60	
5	QPSK	12	13	20.52	20.70	20.49	21.5
5	QPSK	25	0	20.34	20.54	20.48	
5	16QAM	1	0	20.66	20.80	20.78	
5	16QAM	1	12	20.50	20.72	20.43	
5	16QAM	1	24	20.44	20.74	20.58	20.5
5	16QAM	12	0	19.88	19.68	19.63	
5	16QAM	12	7	19.70	19.73	19.55	
5	16QAM	12	13	19.83	19.65	19.64	
5	16QAM	25	0	19.50	19.53	19.64	20.5
5	64QAM	1	0	19.81	19.74	19.73	
5	64QAM	1	12	19.44	19.50	19.73	
5	64QAM	1	24	19.64	19.51	19.60	
5	64QAM	12	0	18.61	18.67	18.58	19.5
5	64QAM	12	7	18.67	18.71	18.49	
5	64QAM	12	13	18.53	18.49	18.43	
5	64QAM	25	0	18.54	18.71	18.52	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	22.5
3	QPSK	1	0	21.59	21.62	21.53	
3	QPSK	1	8	21.52	21.53	21.59	22.5
3	QPSK	1	14	21.34	21.47	21.45	
3	QPSK	8	0	20.38	20.65	20.63	
3	QPSK	8	4	20.42	20.71	20.45	
3	QPSK	8	7	20.45	20.57	20.47	21.5



3	QPSK	15	0	20.70	20.67	20.78	21.5
3	16QAM	1	0	20.93	20.84	20.92	
3	16QAM	1	8	20.61	20.72	20.63	
3	16QAM	1	14	20.71	20.88	20.89	20.5
3	16QAM	8	0	20.02	20.00	19.88	
3	16QAM	8	4	19.76	19.74	20.01	
3	16QAM	8	7	19.91	19.96	19.78	20.5
3	16QAM	15	0	19.96	19.77	19.93	
3	64QAM	1	0	20.03	19.88	19.97	
3	64QAM	1	8	19.73	19.96	19.82	19.5
3	64QAM	1	14	19.77	19.89	19.61	
3	64QAM	8	0	19.08	18.84	19.00	
3	64QAM	8	4	18.72	18.88	18.89	19.5
3	64QAM	8	7	18.72	19.05	18.69	
3	64QAM	15	0	18.62	18.72	18.83	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	21.86	21.90	21.73	22.5
1.4	QPSK	1	3	21.81	21.78	21.88	
1.4	QPSK	1	5	21.85	21.72	21.55	
1.4	QPSK	3	0	20.98	20.84	20.72	
1.4	QPSK	3	1	20.76	20.89	20.78	
1.4	QPSK	3	3	20.79	21.03	20.70	
1.4	QPSK	6	0	20.55	20.70	20.58	21.5
1.4	16QAM	1	0	20.82	20.93	20.94	21.5
1.4	16QAM	1	3	20.73	20.98	20.87	
1.4	16QAM	1	5	20.83	20.78	20.68	
1.4	16QAM	3	0	19.99	19.92	19.92	
1.4	16QAM	3	1	19.96	20.02	19.96	
1.4	16QAM	3	3	19.79	19.75	20.03	
1.4	16QAM	6	0	19.62	19.92	19.97	20.5
1.4	64QAM	1	0	19.87	19.96	19.99	20.5
1.4	64QAM	1	3	19.76	19.91	19.93	
1.4	64QAM	1	5	19.86	20.00	19.68	
1.4	64QAM	3	0	19.07	19.07	18.90	
1.4	64QAM	3	1	18.75	18.74	18.69	
1.4	64QAM	3	3	18.74	18.86	18.98	
1.4	64QAM	6	0	18.56	18.75	18.73	19.5

3	QPSK	15	0	20.28	20.65	20.36	21.5
3	16QAM	1	0	20.80	20.57	20.79	
3	16QAM	1	8	20.53	20.71	20.49	
3	16QAM	1	14	20.56	20.66	20.76	20.5
3	16QAM	8	0	19.61	19.72	19.69	
3	16QAM	8	4	19.64	19.61	19.69	
3	16QAM	8	7	19.60	19.67	19.53	20.5
3	16QAM	15	0	19.54	19.80	19.48	
3	64QAM	1	0	19.78	19.73	19.70	
3	64QAM	1	8	19.53	19.81	19.47	19.5
3	64QAM	1	14	19.60	19.55	19.56	
3	64QAM	8	0	18.52	18.68	18.71	
3	64QAM	8	4	18.66	18.70	18.59	19.5
3	64QAM	8	7	18.64	18.79	18.58	
3	64QAM	15	0	18.54	18.44	18.39	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	21.59	21.64	21.55	22.5
1.4	QPSK	1	3	21.44	21.55	21.52	
1.4	QPSK	1	5	21.31	21.49	21.49	
1.4	QPSK	3	0	20.69	20.56	20.65	
1.4	QPSK	3	1	20.55	20.78	20.58	
1.4	QPSK	3	3	20.50	20.77	20.66	
1.4	QPSK	6	0	20.29	20.53	20.57	21.5
1.4	16QAM	1	0	20.63	20.64	20.76	21.5
1.4	16QAM	1	3	20.39	20.65	20.49	
1.4	16QAM	1	5	20.54	20.66	20.53	
1.4	16QAM	3	0	19.88	19.59	19.81	
1.4	16QAM	3	1	19.74	19.52	19.67	
1.4	16QAM	3	3	19.70	19.83	19.70	
1.4	16QAM	6	0	19.42	19.59	19.51	20.5
1.4	64QAM	1	0	19.79	19.79	19.64	20.5
1.4	64QAM	1	3	19.55	19.56	19.60	
1.4	64QAM	1	5	19.37	19.73	19.62	
1.4	64QAM	3	0	18.62	18.64	18.82	
1.4	64QAM	3	1	18.54	18.58	18.61	
1.4	64QAM	3	3	18.59	18.55	18.58	
1.4	64QAM	6	0	18.54	18.62	18.42	19.5



Band 5 (Celluar Band) (dBm) Part 22H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (Mhz)				829	836.5	844	22.5
10	QPSK	1	0	21.89	21.90	21.85	
10	QPSK	1	25	21.71	21.89	21.75	
10	QPSK	1	49	21.55	21.72	21.65	21.5
10	QPSK	25	0	20.83	20.92	20.85	
10	QPSK	25	12	20.78	20.65	20.61	
10	QPSK	25	25	20.66	20.84	20.74	21.5
10	QPSK	50	0	20.67	20.85	20.67	
10	16QAM	1	0	20.83	20.79	20.94	
10	16QAM	1	25	20.72	20.75	20.75	20.5
10	16QAM	1	49	20.74	20.84	20.73	
10	16QAM	25	0	19.79	20.00	19.82	
10	16QAM	25	12	19.74	19.84	19.71	20.5
10	16QAM	25	25	19.81	19.82	19.78	
10	16QAM	50	0	19.66	19.86	19.75	
10	64QAM	1	0	19.82	19.89	19.68	20.5
10	64QAM	1	25	19.62	19.98	19.86	
10	64QAM	1	49	19.84	19.80	19.60	
10	64QAM	25	0	18.93	18.96	18.91	19.5
10	64QAM	25	12	18.59	18.61	18.89	
10	64QAM	25	25	18.69	18.83	18.69	
10	64QAM	50	0	18.55	18.75	18.62	Tune-up limit (dBm)
Channel				20425	20525	20625	
Frequency (Mhz)				826.5	836.5	846.5	22.5
5	QPSK	1	0	21.72	21.87	21.72	
5	QPSK	1	12	21.77	21.78	21.69	
5	QPSK	1	24	21.51	21.50	21.49	21.5
5	QPSK	12	0	20.84	20.88	20.78	
5	QPSK	12	7	20.85	20.66	20.56	
5	QPSK	12	13	20.56	20.95	20.53	21.5
5	QPSK	25	0	20.69	20.55	20.59	
5	16QAM	1	0	20.75	20.85	20.78	
5	16QAM	1	12	20.55	20.79	20.67	20.5
5	16QAM	1	24	20.77	20.68	20.66	
5	16QAM	12	0	19.92	19.90	19.85	
5	16QAM	12	7	19.69	19.83	19.81	20.5
5	16QAM	12	13	19.87	19.83	19.76	
5	16QAM	25	0	19.67	19.79	19.89	
5	64QAM	1	0	19.74	19.93	19.72	20.5
5	64QAM	1	12	19.68	19.91	19.61	
5	64QAM	1	24	19.81	19.67	19.70	
5	64QAM	12	0	18.93	18.95	18.83	19.5
5	64QAM	12	7	18.81	18.91	18.63	
5	64QAM	12	13	18.56	18.79	18.60	
5	64QAM	25	0	18.59	18.80	18.60	Tune-up limit (dBm)
Channel				20415	20525	20635	
Frequency (Mhz)				825.5	836.5	847.5	22.5
3	QPSK	1	0	21.75	21.86	21.60	
3	QPSK	1	8	21.82	21.77	21.75	
3	QPSK	1	14	21.56	21.64	21.68	21.5
3	QPSK	8	0	20.77	20.86	20.68	
3	QPSK	8	4	20.73	20.77	20.74	
3	QPSK	8	7	20.69	20.95	20.58	21.5
3	QPSK	15	0	20.68	20.62	20.58	
3	16QAM	1	0	20.81	20.78	20.85	
3	16QAM	1	8	20.65	20.76	20.89	20.5
3	16QAM	1	14	20.62	20.91	20.76	
3	16QAM	8	0	19.80	20.01	19.98	
3	16QAM	8	4	19.62	19.98	19.73	20.5
3	16QAM	8	7	19.86	19.80	19.90	
3	16QAM	15	0	19.87	19.98	19.77	
3	64QAM	1	0	19.77	19.95	19.75	20.5
3	64QAM	1	8	19.61	19.91	19.79	
3	64QAM	1	14	19.83	19.95	19.65	
3	64QAM	8	0	18.94	18.85	18.98	19.5
3	64QAM	8	4	18.93	18.69	18.67	
3	64QAM	8	7	18.59	18.73	18.79	
3	64QAM	15	0	18.52	18.72	18.66	Tune-up limit (dBm)
Channel				20407	20525	20643	
Frequency (Mhz)				824.7	836.5	848.3	22.5
1.4	QPSK	1	0	21.61	21.85	21.73	
1.4	QPSK	1	3	21.81	21.78	21.65	
1.4	QPSK	1	5	21.53	21.56	21.48	21.5
1.4	QPSK	3	0	20.77	20.70	20.69	
1.4	QPSK	3	1	20.62	20.87	20.54	
1.4	QPSK	3	3	20.58	20.70	20.54	21.5
1.4	QPSK	6	0	20.63	20.82	20.47	
1.4	16QAM	1	0	20.94	20.88	20.87	
1.4	16QAM	1	3	20.69	20.86	20.87	21.5
1.4	16QAM	1	5	20.74	20.94	20.63	
1.4	16QAM	3	0	19.96	20.01	19.90	
1.4	16QAM	3	1	19.85	19.86	19.76	20.5
1.4	16QAM	3	3	19.75	20.02	19.86	
1.4	16QAM	6	0	19.84	19.93	19.61	
1.4	64QAM	1	0	19.72	19.87	19.90	20.5
1.4	64QAM	1	3	19.53	19.79	19.91	
1.4	64QAM	1	5	19.71	19.66	19.61	
1.4	64QAM	3	0	18.90	18.81	18.90	19.5
1.4	64QAM	3	1	18.88	18.75	18.73	
1.4	64QAM	3	3	18.68	18.94	18.61	
1.4	64QAM	6	0	18.75	18.86	18.79	19.5

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	19.49	19.55	19.54	20
20	QPSK	1	49	19.35	19.47	19.41	
20	QPSK	1	99	19.29	19.38	19.43	
20	QPSK	50	0	18.45	18.54	18.49	19
20	QPSK	50	24	18.30	18.37	18.27	
20	QPSK	50	50	18.27	18.28	18.42	
20	QPSK	100	0	18.44	18.49	18.46	19
20	16QAM	1	0	18.65	18.58	18.56	
20	16QAM	1	49	18.28	18.57	18.39	
20	16QAM	1	99	18.44	18.29	18.44	18
20	16QAM	50	0	17.72	17.61	17.70	
20	16QAM	50	24	17.40	17.47	17.45	
20	16QAM	50	50	17.44	17.58	17.43	18
20	16QAM	100	0	17.39	17.30	17.57	
20	64QAM	1	0	17.47	17.63	17.63	
20	64QAM	1	49	17.30	17.54	17.47	18
20	64QAM	1	99	17.38	17.55	17.30	
20	64QAM	50	0	16.63	16.69	16.62	
20	64QAM	50	24	16.46	16.34	16.42	17
20	64QAM	50	50	16.41	16.42	16.33	
20	64QAM	100	0	16.40	16.61	16.41	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	19.45	19.52	19.44	20
15	QPSK	1	37	19.46	19.46	19.46	
15	QPSK	1	74	19.38	19.34	19.32	
15	QPSK	36	0	18.46	18.61	18.52	19
15	QPSK	36	20	18.40	18.61	18.42	
15	QPSK	36	39	18.33	18.40	18.54	
15	QPSK	75	0	18.36	18.44	18.42	19
15	16QAM	1	0	18.65	18.55	18.59	
15	16QAM	1	37	18.33	18.50	18.52	
15	16QAM	1	74	18.41	18.62	18.60	18
15	16QAM	36	0	17.67	17.60	17.72	
15	16QAM	36	20	17.49	17.58	17.40	
15	16QAM	36	39	17.52	17.42	17.33	18
15	16QAM	75	0	17.42	17.58	17.38	
15	64QAM	1	0	17.57	17.72	17.46	
15	64QAM	1	37	17.44	17.35	17.35	18
15	64QAM	1	74	17.31	17.53	17.28	
15	64QAM	36	0	16.51	16.60	16.44	
15	64QAM	36	20	16.45	16.42	16.34	17
15	64QAM	36	39	16.32	16.44	16.32	
15	64QAM	75	0	16.39	16.61	16.32	
Channel				20900	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	19.45	19.51	19.49	20
10	QPSK	1	25	19.42	19.40	19.43	
10	QPSK	1	49	19.49	19.46	19.41	
10	QPSK	25	0	18.45	18.56	18.35	19
10	QPSK	25	12	18.33	18.44	18.40	
10	QPSK	25	25	18.39	18.48	18.36	
10	QPSK	50	0	18.38	18.49	18.50	19
10	16QAM	1	0	18.48	18.45	18.58	
10	16QAM	1	25	18.31	18.52	18.46	
10	16QAM	1	49	18.48	18.55	18.52	18
10	16QAM	25	0	17.68	17.55	17.65	
10	16QAM	25	12	17.50	17.51	17.40	
10	16QAM	25	25	17.42	17.54	17.62	18
10	16QAM	50	0	17.56	17.47	17.54	
10	64QAM	1	0	17.53	17.57	17.43	
10	64QAM	1	25	17.24	17.54	17.37	17
10	64QAM	1	49	17.33	17.40	17.45	
10	64QAM	25	0	16.36	16.66	16.49	
10	64QAM	25	12	16.57	16.32	16.46	17
10	64QAM	25	25	16.37	16.51	16.34	
10	64QAM	50	0	16.40	16.36	16.44	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	19.36	19.49	19.43	20
5	QPSK	1	12	19.47	19.42	19.27	
5	QPSK	1	24	19.30	19.31	19.25	
5	QPSK	12	0	18.39	18.49	18.34	19
5	QPSK	12	7	18.22	18.63	18.34	
5	QPSK	12	13	18.28	18.53	18.32	
5	QPSK	25	0	18.44	18.18	18.26	19
5	16QAM	1	0	18.58	18.60	18.50	
5	16QAM	1	12	18.36	18.29	18.43	
5	16QAM	1	24	18.47	18.56	18.26	18
5	16QAM	12	0	17.63	17.51	17.43	
5	16QAM	12	7	17.27	17.47	17.47	
5	16QAM	12	13	17.35	17.55	17.47	17
5	16QAM	25	0	17.38	17.60	17.57	
5	64QAM	1	0	17.35	17.42	17.58	
5	64QAM	1	12	17.37	17.41	17.34	18
5	64QAM	1	24	17.34	17.39	17.36	
5	64QAM	12	0	16.40	16.52	16.63	
5	64QAM	12	7	16.25	16.34	16.34	17
5	64QAM	12	13	16.27	16.33	16.46	
5	64QAM	25	0	16.50	16.43	16.39	

Band 12 (700MHz Low Band) (dBm) Part 27F(only on channel required)								
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)	
Channel				23060	23095	23130		
Frequency (MHz)				704	707.5	711	22.5	
10	QPSK	1	0	21.75	21.83	21.77		
10	QPSK	1	25	21.72	21.61	21.66		
10	QPSK	1	49	21.68	21.65	21.53		
10	QPSK	25	0	20.66	20.89	20.84	21.5	
10	QPSK	25	12	20.71	20.84	20.58		
10	QPSK	25	25	20.67	20.88	20.46		
10	QPSK	50	0	20.56	20.54	20.49		
10	16QAM	1	0	20.85	20.85	20.78	21.5	
10	16QAM	1	25	20.60	20.62	20.48		
10	16QAM	1	49	20.60	20.68	20.73		
10	16QAM	25	0	19.84	19.80	19.82		
10	16QAM	25	12	19.59	19.66	19.83	20.5	
10	16QAM	25	25	19.70	19.75	19.64		
10	16QAM	50	0	19.49	19.87	19.52		
10	64QAM	1	0	19.77	19.92	19.76		
10	64QAM	1	25	19.59	19.61	19.61	20.5	
10	64QAM	1	49	19.69	19.79	19.63		
10	64QAM	25	0	18.66	18.76	18.76		
10	64QAM	25	12	18.59	18.67	18.63		
10	64QAM	25	25	18.52	18.63	18.77	19.5	
10	64QAM	50	0	18.54	18.76	18.52		
Channel				23035	23095	23155		Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5		
5	QPSK	1	0	21.72	21.80	21.70	22.5	
5	QPSK	1	12	21.67	21.76	21.77		
5	QPSK	1	24	21.57	21.64	21.62		
5	QPSK	12	0	20.71	20.70	20.65		
5	QPSK	12	7	20.57	20.64	20.52	21.5	
5	QPSK	12	13	20.59	20.79	20.50		
5	QPSK	25	0	20.67	20.63	20.69		
5	16QAM	1	0	20.77	20.70	20.69		
5	16QAM	1	12	20.58	20.53	20.76	21.5	
5	16QAM	1	24	20.59	20.54	20.56		
5	16QAM	12	0	19.76	19.72	19.79		
5	16QAM	12	7	19.79	19.57	19.71		
5	16QAM	12	13	19.88	19.75	19.69	20.5	
5	16QAM	25	0	19.47	19.76	19.68		
5	64QAM	1	0	19.70	19.71	19.73		
5	64QAM	1	12	19.45	19.72	19.66		
5	64QAM	1	24	19.71	19.85	19.49	20.5	
5	64QAM	12	0	18.70	18.72	18.81		
5	64QAM	12	7	18.80	18.71	18.54		
5	64QAM	12	13	18.55	18.59	18.49		
5	64QAM	25	0	18.66	18.62	18.45	19.5	
Channel				23025	23095	23165		Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5		
3	QPSK	1	0	21.57	21.79	21.68		22.5
3	QPSK	1	8	21.62	21.80	21.67		
3	QPSK	1	14	21.63	21.69	21.64		
3	QPSK	8	0	20.66	20.77	20.74		
3	QPSK	8	4	20.75	20.71	20.58	21.5	
3	QPSK	8	7	20.61	20.67	20.54		
3	QPSK	15	0	20.37	20.46	20.57		
3	16QAM	1	0	20.59	20.79	20.79		
3	16QAM	1	8	20.63	20.50	20.66	21.5	
3	16QAM	1	14	20.62	20.86	20.60		
3	16QAM	8	0	19.68	19.79	19.80		
3	16QAM	8	4	19.51	19.83	19.72		
3	16QAM	8	7	19.69	19.86	19.64	20.5	
3	16QAM	15	0	19.73	19.65	19.58		
3	64QAM	1	0	19.64	19.72	19.71		
3	64QAM	1	8	19.48	19.80	19.62		
3	64QAM	1	14	19.68	19.76	19.76	19.5	
3	64QAM	8	0	18.66	18.78	18.84		
3	64QAM	8	4	18.74	18.76	18.71		
3	64QAM	8	7	18.62	18.60	18.80		
3	64QAM	15	0	18.67	18.85	18.71	20.5	
Channel				23017	23095	23173		Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3		
1.4	QPSK	1	0	21.71	21.76	21.75		22.5
1.4	QPSK	1	3	21.64	21.59	21.54		
1.4	QPSK	1	5	21.64	21.69	21.63		
1.4	QPSK	3	0	20.58	20.64	20.58		
1.4	QPSK	3	1	20.62	20.59	20.57	21.5	
1.4	QPSK	3	3	20.59	20.62	20.62		
1.4	QPSK	6	0	20.64	20.64	20.38		
1.4	16QAM	1	0	20.58	20.88	20.66		
1.4	16QAM	1	3	20.67	20.48	20.77	21.5	
1.4	16QAM	1	5	20.67	20.54	20.63		
1.4	16QAM	3	0	19.68	19.77	19.65		
1.4	16QAM	3	1	19.54	19.63	19.75		
1.4	16QAM	3	3	19.68	19.70	19.64	20.5	
1.4	16QAM	6	0	19.73	19.65	19.83		
1.4	64QAM	1	0	19.73	19.72	19.78		
1.4	64QAM	1	3	19.58	19.64	19.69		
1.4	64QAM	1	5	19.67	19.62	19.53	20.5	
1.4	64QAM	3	0	18.67	18.79	18.80		
1.4	64QAM	3	1	18.64	18.65	18.66		
1.4	64QAM	3	3	18.58	18.65	18.69		
1.4	64QAM	6	0	18.59	18.57	18.55	19.5	

Band 17 (700MHz Band) (dBm) Part 27H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	22.5
10	QPSK	1	0	21.67	21.75	21.67	
10	QPSK	1	25	21.70	21.68	21.48	
10	QPSK	1	49	21.62	21.61	21.50	21.5
10	QPSK	25	0	20.71	20.78	20.53	
10	QPSK	25	12	20.65	20.69	20.56	
10	QPSK	25	25	20.46	20.48	20.54	21.5
10	QPSK	50	0	20.58	20.66	20.58	
10	16QAM	1	0	20.60	20.71	20.60	
10	16QAM	1	25	20.59	20.44	20.54	20.5
10	16QAM	1	49	20.61	20.58	20.48	
10	16QAM	25	0	19.76	19.65	19.60	
10	16QAM	25	12	19.50	19.66	19.56	20.5
10	16QAM	25	25	19.71	19.61	19.85	
10	16QAM	50	0	19.59	19.62	19.49	
10	64QAM	1	0	19.78	19.84	19.73	20.5
10	64QAM	1	25	19.59	19.77	19.53	
10	64QAM	1	49	19.40	19.53	19.54	
10	64QAM	25	0	18.82	18.73	18.85	19.5
10	64QAM	25	12	18.59	18.57	18.55	
10	64QAM	25	25	18.48	18.76	18.58	
10	64QAM	50	0	18.67	18.80	18.63	Tune-up limit (dBm)
Channel				23755	23790	23825	
Frequency (MHz)				706.5	710	713.5	22.5
5	QPSK	1	0	21.65	21.73	21.69	
5	QPSK	1	12	21.53	21.63	21.62	21.5
5	QPSK	1	24	21.44	21.53	21.60	
5	QPSK	12	0	20.64	20.64	20.80	
5	QPSK	12	7	20.64	20.80	20.54	21.5
5	QPSK	12	13	20.46	20.63	20.63	
5	QPSK	25	0	20.43	20.51	20.62	
5	16QAM	1	0	20.61	20.75	20.65	20.5
5	16QAM	1	12	20.58	20.70	20.67	
5	16QAM	1	24	20.67	20.81	20.67	
5	16QAM	12	0	19.73	19.72	19.75	20.5
5	16QAM	12	7	19.58	19.56	19.72	
5	16QAM	12	13	19.63	19.69	19.81	
5	16QAM	25	0	19.65	19.80	19.52	20.5
5	64QAM	1	0	19.59	19.80	19.86	
5	64QAM	1	12	19.55	19.72	19.63	
5	64QAM	1	24	19.70	19.64	19.76	19.5
5	64QAM	12	0	18.82	18.84	18.76	
5	64QAM	12	7	18.60	18.64	18.50	
5	64QAM	12	13	18.40	18.59	18.47	
5	64QAM	25	0	18.61	18.51	18.56	



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	Tune-up limit (dBm)
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	21.64	21.70	21.62	22.5
20	QPSK	1	49	21.55	21.61	21.60	
20	QPSK	1	99	21.57	21.58	21.55	
20	QPSK	50	0	20.77	20.84	20.56	21.5
20	QPSK	50	24	20.59	20.60	20.64	
20	QPSK	50	50	20.52	20.53	20.52	
20	QPSK	100	0	20.64	20.56	20.80	21.5
20	16QAM	1	0	20.82	20.81	20.70	
20	16QAM	1	49	20.59	20.62	20.69	
20	16QAM	1	99	20.57	20.69	20.73	20.5
20	16QAM	50	0	19.74	19.75	19.81	
20	16QAM	50	24	19.65	19.72	19.52	
20	16QAM	50	50	19.56	19.78	19.61	20.5
20	16QAM	100	0	19.59	19.69	19.58	
20	64QAM	1	0	19.60	19.70	19.61	
20	64QAM	1	49	19.62	19.63	19.59	20.5
20	64QAM	1	99	19.58	19.80	19.66	
20	64QAM	50	0	18.74	18.81	18.80	
20	64QAM	50	24	18.52	18.61	18.47	19.5
20	64QAM	50	50	18.61	18.72	18.55	
20	64QAM	100	0	18.58	18.75	18.50	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	21.58	21.59	21.65	22.5
15	QPSK	1	37	21.56	21.56	21.53	
15	QPSK	1	74	21.66	21.60	21.64	
15	QPSK	36	0	20.77	20.61	20.86	21.5
15	QPSK	36	20	20.65	20.73	20.57	
15	QPSK	36	39	20.60	20.65	20.59	
15	QPSK	75	0	20.58	20.69	20.54	21.5
15	16QAM	1	0	20.76	20.93	20.78	
15	16QAM	1	37	20.35	20.59	20.55	
15	16QAM	1	74	20.61	20.66	20.60	20.5
15	16QAM	36	0	19.66	19.88	19.81	
15	16QAM	36	20	19.72	19.77	19.76	
15	16QAM	36	39	19.64	19.75	19.72	20.5
15	16QAM	75	0	19.59	19.50	19.57	
15	64QAM	1	0	19.80	19.79	19.62	
15	64QAM	1	37	19.35	19.77	19.73	20.5
15	64QAM	1	74	19.63	19.50	19.58	
15	64QAM	36	0	18.68	18.68	18.61	
15	64QAM	36	20	18.47	18.70	18.74	19.5
15	64QAM	36	39	18.53	18.71	18.57	
15	64QAM	75	0	18.46	18.78	18.51	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	21.56	21.60	21.57	22.5
10	QPSK	1	25	21.59	21.62	21.63	
10	QPSK	1	49	21.63	21.60	21.64	
10	QPSK	25	0	20.70	20.61	20.55	21.5
10	QPSK	25	12	20.57	20.77	20.56	
10	QPSK	25	25	20.52	20.48	20.43	
10	QPSK	50	0	20.42	20.42	20.58	21.5
10	16QAM	1	0	20.78	20.87	20.71	
10	16QAM	1	25	20.54	20.59	20.54	
10	16QAM	1	49	20.63	20.55	20.66	20.5
10	16QAM	25	0	19.75	19.72	19.82	
10	16QAM	25	12	19.59	19.73	19.64	
10	16QAM	25	25	19.86	19.58	19.57	20.5
10	16QAM	50	0	19.68	19.76	19.71	
10	64QAM	1	0	19.89	19.70	19.53	
10	64QAM	1	25	19.56	19.73	19.72	20.5
10	64QAM	1	49	19.60	19.73	19.76	
10	64QAM	25	0	18.68	18.82	18.81	
10	64QAM	25	12	18.70	18.77	18.46	19.5
10	64QAM	25	25	18.55	18.85	18.57	
10	64QAM	50	0	18.63	18.77	18.46	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	21.57	21.62	21.62	22.5
5	QPSK	1	12	21.55	21.61	21.65	
5	QPSK	1	24	21.60	21.57	21.63	
5	QPSK	12	0	20.64	20.79	20.76	21.5
5	QPSK	12	7	20.70	20.71	20.54	
5	QPSK	12	13	20.50	20.52	20.53	
5	QPSK	25	0	20.61	20.67	20.50	21.5
5	16QAM	1	0	20.75	20.80	20.87	
5	16QAM	1	12	20.52	20.72	20.63	
5	16QAM	1	24	20.63	20.76	20.78	20.5
5	16QAM	12	0	19.76	19.67	19.60	
5	16QAM	12	7	19.66	19.82	19.62	
5	16QAM	12	13	19.87	19.62	19.79	20.5
5	16QAM	25	0	19.64	19.57	19.78	
5	64QAM	1	0	19.75	19.80	19.55	
5	64QAM	1	12	19.60	19.62	19.59	20.5
5	64QAM	1	24	19.56	19.50	19.72	
5	64QAM	12	0	18.81	18.84	18.70	
5	64QAM	12	7	18.61	18.67	18.73	19.5
5	64QAM	12	13	18.55	18.81	18.68	
5	64QAM	25	0	18.53	18.68	18.50	

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		Tune-up limit (dBm)
Frequency (MHz)					2310		
10	QPSK	1	0		14.48		15.5
10	QPSK	1	25		14.45		
10	QPSK	1	49		14.38		
10	QPSK	25	0		13.42		14.5
10	QPSK	25	12		13.40		
10	QPSK	25	25		13.38		
10	QPSK	50	0		13.41		14.5
10	16QAM	1	0		13.38		
10	16QAM	1	25		13.36		
10	16QAM	1	49		13.34		13.5
10	16QAM	25	0		12.44		
10	16QAM	25	12		12.42		
10	16QAM	25	25		12.40		13.5
10	16QAM	50	0		12.45		
10	64QAM	1	0		12.46		
10	64QAM	1	25		12.45		13.5
10	64QAM	1	49		12.41		
10	64QAM	25	0		11.47		
10	64QAM	25	12		11.43		12.5
10	64QAM	25	25		11.45		
10	64QAM	50	0		11.44		
Channel				38725	38750	38775	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0		14.38	14.42	15.5
5	QPSK	1	12		14.33	14.38	
5	QPSK	1	24		14.35	14.41	
5	QPSK	12	0		13.22	13.35	14.5
5	QPSK	12	7		13.34	13.39	
5	QPSK	12	13		13.40	13.43	
5	QPSK	25	0		13.38	13.21	14.5
5	16QAM	1	0		13.43	13.18	
5	16QAM	1	12		13.39	13.37	
5	16QAM	1	24		13.43	13.22	13.5
5	16QAM	12	0		12.52	12.43	
5	16QAM	12	7		12.25	12.52	
5	16QAM	12	13		12.28	12.28	13.5
5	16QAM	25	0		12.26	12.43	
5	64QAM	1	0		12.42	12.30	
5	64QAM	1	12		12.53	12.26	13.5
5	64QAM	1	24		12.52	12.29	
5	64QAM	12	0		11.50	11.39	
5	64QAM	12	7		11.25	11.24	12.5
5	64QAM	12	13		11.28	11.45	
5	64QAM	25	0		11.44	11.39	



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			15.5
10	QPSK	1	0		14.46		
10	QPSK	1	25		14.41		
10	QPSK	1	49		14.38		
10	QPSK	25	0		13.40		
10	QPSK	25	12		13.41		14.5
10	QPSK	25	25		13.38		
10	QPSK	50	0		13.46		
10	16QAM	1	0		13.55		14.5
10	16QAM	1	25		13.54		
10	16QAM	1	49		13.51		
10	16QAM	25	0		12.48		13.5
10	16QAM	25	12		12.43		
10	16QAM	25	25		12.47		
10	16QAM	50	0		12.42		13.5
10	64QAM	1	0		12.46		
10	64QAM	1	25		12.45		
10	64QAM	1	49		12.41		
10	64QAM	25	0		11.45		
10	64QAM	25	12		11.42		12.5
10	64QAM	25	25		11.44		
10	64QAM	50	0		11.48		
Channel				39175	39200	39225	Tune-up limit (dBm)
Frequency (MHz)				2352.5	2355	2357.5	
5	QPSK	1	0	14.40	14.42	14.33	15.5
5	QPSK	1	12	14.25	14.32	14.32	
5	QPSK	1	24	14.40	14.43	14.24	
5	QPSK	12	0	13.36	13.47	13.40	14.5
5	QPSK	12	7	13.45	13.51	13.53	
5	QPSK	12	13	13.27	13.31	13.28	
5	QPSK	25	0	13.38	13.48	13.31	14.5
5	16QAM	1	0	13.34	13.30	13.32	
5	16QAM	1	12	13.40	13.26	13.20	
5	16QAM	1	24	13.19	13.42	13.39	13.5
5	16QAM	12	0	12.36	12.52	12.39	
5	16QAM	12	7	12.33	12.46	12.56	
5	16QAM	12	13	12.38	12.23	12.36	13.5
5	16QAM	25	0	12.44	12.53	12.51	
5	64QAM	1	0	12.44	12.45	12.44	
5	64QAM	1	12	12.56	12.36	12.38	13.5
5	64QAM	1	24	12.29	12.45	12.25	
5	64QAM	12	0	11.30	11.39	11.58	
5	64QAM	12	7	11.37	11.44	11.34	12.5
5	64QAM	12	13	11.36	11.60	11.50	
5	64QAM	25	0	11.57	11.28	11.29	



Band 41 (2496~2690MHz) (dBm)									
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	21.70	21.77	21.79	21.63	21.64	22.5
20	QPSK	1	49	21.54	21.70	21.76	21.66	21.62	
20	QPSK	1	99	21.66	21.62	21.69	21.51	21.53	
20	QPSK	50	0	20.66	20.73	20.79	20.62	20.65	
20	QPSK	50	24	20.39	20.42	20.66	20.43	20.68	21.5
20	QPSK	50	50	20.52	20.50	20.64	20.42	20.56	
20	QPSK	100	0	20.49	20.56	20.55	20.53	20.61	
20	16QAM	1	0	20.57	20.55	20.87	20.86	20.64	
20	16QAM	1	49	20.53	20.48	20.75	20.63	20.73	21.5
20	16QAM	1	99	20.49	20.55	20.83	20.51	20.64	
20	16QAM	50	0	19.88	19.95	19.71	19.77	19.65	
20	16QAM	50	24	19.78	19.77	19.62	19.83	19.82	
20	16QAM	50	50	19.60	19.87	19.83	19.82	19.80	20.5
20	16QAM	100	0	19.58	19.54	19.62	19.77	19.44	
20	64QAM	1	0	19.63	19.89	19.64	19.77	19.59	
20	64QAM	1	49	19.50	19.37	19.60	19.57	19.67	
20	64QAM	1	99	19.38	19.60	19.50	19.44	19.46	20.5
20	64QAM	50	0	18.90	18.69	18.88	18.83	18.79	
20	64QAM	50	24	18.71	18.59	18.69	18.73	18.69	
20	64QAM	50	50	18.55	18.62	18.71	18.54	18.61	
20	64QAM	100	0	18.63	18.40	18.73	18.60	18.69	19.5
Channel				39725	40173	40620	41068	41515	
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	Tune-up limit (dBm)
15	QPSK	1	0	21.65	21.71	21.77	21.60	21.62	22.5
15	QPSK	1	37	21.46	21.63	21.60	21.52	21.53	
15	QPSK	1	74	21.53	21.59	21.66	21.48	21.51	
15	QPSK	36	0	20.54	20.65	20.76	20.59	20.54	
15	QPSK	36	20	20.42	20.46	20.73	20.46	20.47	21.5
15	QPSK	36	39	20.51	20.58	20.54	20.50	20.42	
15	QPSK	75	0	20.58	20.49	20.65	20.41	20.54	
15	16QAM	1	0	20.59	20.83	20.74	20.75	20.69	
15	16QAM	1	37	20.47	20.55	20.60	20.71	20.57	21.5
15	16QAM	1	74	20.61	20.58	20.50	20.48	20.48	
15	16QAM	36	0	19.96	19.70	19.88	19.83	19.69	
15	16QAM	36	20	19.55	19.76	19.70	19.74	19.80	
15	16QAM	36	39	19.75	19.72	19.84	19.60	19.73	20.5
15	16QAM	75	0	19.61	19.72	19.69	19.77	19.61	
15	64QAM	1	0	19.56	19.72	19.62	19.85	19.85	
15	64QAM	1	37	19.60	19.63	19.53	19.53	19.78	
15	64QAM	1	74	19.48	19.54	19.78	19.65	19.74	19.5
15	64QAM	36	0	18.72	18.83	18.85	18.89	18.70	
15	64QAM	36	20	18.52	18.60	18.67	18.65	18.50	
15	64QAM	36	39	18.52	18.57	18.60	18.54	18.54	
15	64QAM	75	0	18.42	18.61	18.63	18.49	18.52	19.5
Channel				39700	40160	40620	41080	41540	
Frequency (MHz)				2501	2547	2593	2639	2685	Tune-up limit (dBm)
10	QPSK	1	0	21.64	21.62	21.75	21.70	21.65	22.5
10	QPSK	1	25	21.64	21.55	21.74	21.64	21.76	
10	QPSK	1	49	21.50	21.54	21.60	21.38	21.51	
10	QPSK	25	0	20.73	20.43	20.76	20.51	20.55	
10	QPSK	25	12	20.68	20.39	20.51	20.42	20.60	21.5
10	QPSK	25	25	20.55	20.53	20.72	20.61	20.56	
10	QPSK	50	0	20.49	20.38	20.66	20.55	20.35	
10	16QAM	1	0	20.52	20.67	20.84	20.79	20.63	
10	16QAM	1	25	20.56	20.50	20.49	20.50	20.48	21.5
10	16QAM	1	49	20.57	20.50	20.57	20.56	20.80	
10	16QAM	25	0	19.65	19.67	19.81	19.84	19.71	
10	16QAM	25	12	19.50	19.56	19.60	19.82	19.58	
10	16QAM	25	25	19.78	19.76	19.65	19.76	19.57	20.5
10	16QAM	50	0	19.57	19.55	19.80	19.77	19.79	
10	64QAM	1	0	19.74	19.57	19.70	19.59	19.87	
10	64QAM	1	25	19.57	19.62	19.56	19.64	19.77	
10	64QAM	1	49	19.61	19.61	19.62	19.50	19.71	19.5
10	64QAM	25	0	18.63	18.60	18.88	18.70	18.70	
10	64QAM	25	12	18.62	18.74	18.72	18.56	18.59	
10	64QAM	25	25	18.62	18.60	18.62	18.71	18.68	
10	64QAM	50	0	18.41	18.30	18.54	18.59	18.34	19.5
Channel				39675	40148	40620	41093	41595	
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	Tune-up limit (dBm)
5	QPSK	1	0	21.62	21.70	21.72	21.67	21.64	22.5
5	QPSK	1	12	21.58	21.64	21.69	21.55	21.60	
5	QPSK	1	24	21.63	21.42	21.53	21.61	21.60	
5	QPSK	12	0	20.58	20.61	20.75	20.71	20.66	
5	QPSK	12	7	20.41	20.43	20.68	20.36	20.46	21.5
5	QPSK	12	13	20.46	20.47	20.74	20.50	20.50	
5	QPSK	25	0	20.37	20.54	20.53	20.65	20.35	
5	16QAM	1	0	20.84	20.77	20.81	20.82	20.71	
5	16QAM	1	12	20.59	20.48	20.75	20.53	20.59	21.5
5	16QAM	1	24	20.67	20.48	20.76	20.52	20.59	
5	16QAM	12	0	19.88	19.84	19.84	19.62	19.86	
5	16QAM	12	7	19.65	19.53	19.73	19.81	19.57	
5	16QAM	12	13	19.53	19.54	19.82	19.75	19.72	20.5
5	16QAM	25	0	19.57	19.76	19.79	19.64	19.67	
5	64QAM	1	0	19.58	19.69	19.91	19.65	19.83	
5	64QAM	1	12	19.58	19.59	19.54	19.66	19.56	
5	64QAM	1	24	19.51	19.67	19.80	19.67	19.54	19.5
5	64QAM	12	0	18.80	18.79	18.76	18.85	18.70	
5	64QAM	12	7	18.66	18.61	18.55	18.53	18.48	
5	64QAM	12	13	18.62	18.56	18.76	18.54	18.66	
5	64QAM	25	0	18.59	18.50	18.60	18.42	18.40	



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	16.86	17.50	18.00	99.80
		CH 7	2442	16.73	17.50	18.00	99.70
		CH 13	2472	16.80	17.50	18.00	99.80
	802.11g 6Mbps	CH 1	2412	14.32	15.00	16.00	96.53
		CH 7	2442	14.48	15.00	16.00	97.20
		CH 13	2472	14.33	15.00	16.00	96.53
	802.11n-HT20 MCS0	CH 1	2412	14.33	15.00	16.00	97.04
		CH 7	2442	14.26	15.00	16.00	97.01
		CH 13	2472	14.04	14.50	16.00	96.30
	802.11n-HT40 MCS0	CH 3	2422	13.74	14.50	15.00	94.20
		CH 7	2442	13.84	14.50	15.00	92.86
		CH 11	2462	13.61	14.50	15.00	94.20

5GHz WLAN ANT 1

5 GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 36	5180	15.92	16.50	17.00	97.20
		CH 44	5220	16.96	16.50	17.00	
		CH 48	5240	15.65	16.50	17.00	
	802.11n-HT20 MCS0	CH 36	5180	15.41	16.00	16.00	96.30
		CH 44	5220	15.44	16.00	16.00	
		CH 48	5240	15.19	16.00	16.00	
	802.11n-HT40 MCS0	CH 38	5190	15.28	16.00	16.00	94.20
		CH 46	5230	15.19	16.00	16.00	
		CH 50	5260	15.58	16.00	16.00	
	802.11ac-VHT20 MCS0	CH 44	5220	15.41	16.00	16.00	97.06
		CH 48	5240	15.17	16.00	16.00	
		CH 52	5260	14.88	15.50	15.50	
	802.11ac-VHT40 MCS0	CH 46	5230	14.64	15.50	15.50	94.20
		CH 50	5260	14.52	15.00	15.00	
		CH 54	5280	13.58	14.00	15.00	

5GHz WLAN ANT 1

5 GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 52	5260	15.95	16.50	17.00	97.20
		CH 60	5300	15.40	16.00	17.00	
		CH 64	5320	15.77	16.50	17.00	
	802.11n-HT20 MCS0	CH 52	5260	14.83	15.50	16.00	96.30
		CH 60	5300	14.83	15.50	16.00	
		CH 64	5320	14.44	15.00	16.00	
	802.11n-HT40 MCS0	CH 54	5270	14.52	15.00	16.00	94.20
		CH 62	5310	14.53	15.00	16.00	
		CH 66	5340	14.75	15.50	16.00	
	802.11ac-VHT20 MCS0	CH 60	5300	14.71	15.50	16.00	97.06
		CH 64	5320	14.39	15.00	16.00	
		CH 68	5350	13.96	14.50	15.50	
	802.11ac-VHT40 MCS0	CH 62	5310	13.96	14.50	15.50	94.20
		CH 66	5340	13.58	14.00	15.00	
		CH 70	5370	13.58	14.00	15.00	

5GHz WLAN ANT 1

5 GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 100	5500	15.27	16.00	16.00	97.20
		CH 120	5600	16.86	16.50	16.00	
		CH 144	5720	15.46	16.00	16.00	
	802.11n-HT20 MCS0	CH 100	5500	14.70	15.50	15.00	96.30
		CH 120	5600	15.56	16.50	15.00	
		CH 144	5720	14.83	15.50	15.00	
	802.11n-HT40 MCS0	CH 102	5510	14.65	15.50	15.00	94.20
		CH 126	5630	15.63	16.50	15.00	
		CH 142	5710	14.91	15.50	15.00	
	802.11ac-VHT20 MCS0	CH 100	5500	14.84	15.50	15.00	97.06
		CH 120	5600	15.45	16.00	15.00	
		CH 144	5720	14.76	15.50	15.00	
	802.11ac-VHT40 MCS0	CH 102	5510	14.02	14.50	14.50	94.20
		CH 126	5630	15.06	15.50	14.50	
		CH 142	5710	14.30	15.00	14.50	
	802.11ac-VHT80 MCS0	CH 106	5530	13.87	14.50	14.00	86.49
		CH 122	5610	14.76	15.50	14.00	
		CH 138	5690	14.26	15.00	14.00	

5GHz WLAN ANT 1

5 GHz WLAN ANT 1	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 149	5745	14.71	15.50	15.00	97.20
		CH 157	5785	14.22	15.00	15.00	
		CH 165	5825	13.82	14.50	15.00	
	802.11n-HT20 MCS0	CH 149	5745	13.76	14.50	14.00	96.30
		CH 157	5785	13.32	14.00	14.00	
		CH 165	5825	12.96	13.50	14.00	
	802.11n-HT40 MCS0	CH 151	5755	13.85	14.50	14.00	94.20
		CH 159	5795	13.27	14.00	14.00	
		CH 149	5745	13.71	14.50	14.00	
	802.11ac-VHT20 MCS0	CH 157	5785	13.58	14.50	14.00	97.06
		CH 165	5825	13.13	14.00	14.00	
		CH 151	5755	13.33	14.00	13.50	
	802.11ac-VHT40 MCS0	CH 159	5795	12.83	13.50	13.50	94.20
		CH 155	5775	12.75	13.50	13.00	
		CH 165	5825	12.75	13.50	13.00	

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	5.42	2.42	2.54
	CH 39	2441	5.84	2.99	2.87
	CH 76	2480	5.89	2.97	3.07
	Tune-up Limit		6.5	3.5	3.5
Duty Cycle %			76.88	76.96	77.04

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 00	2402	-4.17	-6.71	
	CH 19	2440	-3.39	-6.30	
	CH 39	2480	-3.49	-6.13	
	Tune-up Limit		1	1	
Duty Cycle %			61.9	52.26	