



REPORT No.: SZ23050281S01

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		
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	31.36	31.48	31.40	32.00	22.36	22.48	22.40	23.00	0.12
GPRS 1 Tx slot	31.36	31.47	31.41	32.00	22.36	22.47	22.41	23.00	
GPRS 2 Tx slots	29.52	29.56	29.48	30.00	23.52	23.56	23.48	24.00	
GPRS 3 Tx slots	27.32	27.44	27.41	28.00	23.06	23.18	23.15	23.74	
GPRS 4 Tx slots	26.18	26.24	26.21	27.00	23.18	23.24	23.21	24.00	0.06
EDGE 1 Tx slot	26.12	26.10	26.11	27.00	17.12	17.10	17.11	18.00	0.02
EDGE 2 Tx slots	25.47	25.55	25.49	26.00	19.47	19.55	19.49	20.00	0.08
EDGE 3 Tx slots	23.34	23.42	23.52	24.00	19.08	19.16	19.26	19.74	0.18
EDGE 4 Tx slots	20.61	20.59	20.64	21.00	17.61	17.59	17.64	18.00	0.05
Mode		Max.	31.48			Max.	23.56		
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		
TX Channel	512	661	810		512	661	810		
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot	29.45	29.52	29.45	30.00	20.45	20.52	20.45	21.00	0.08
GPRS 1 Tx slot	29.46	29.53	29.47	30.00	20.46	20.53	20.47	21.00	
GPRS 2 Tx slots	26.45	26.36	26.33	27.00	20.45	20.36	20.33	21.00	0.12
GPRS 3 Tx slots	24.50	24.55	24.43	25.00	20.24	20.29	20.17	20.74	0.12
GPRS 4 Tx slots	23.16	23.17	23.12	24.00	20.16	20.17	20.12	21.00	0.05
EDGE 1 Tx slot	25.66	25.47	25.61	26.00	16.66	16.47	16.61	17.00	0.19
EDGE 2 Tx slots	24.62	24.52	24.56	25.00	18.62	18.52	18.56	19.00	0.10
EDGE 3 Tx slots	23.26	23.20	23.18	24.00	19.00	18.94	18.92	19.74	0.08
EDGE 4 Tx slots	22.55	22.46	22.41	23.00	19.55	19.46	19.41	20.00	0.14
Mode		Max.	29.53			Max.	20.53		
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)	
	9262	9400	9538		1312	1413	1513		4132	4182	4233		
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	22.39	22.47	22.41	23.00	23.11	23.18	23.14	24.00	22.56	22.61	22.51	23.00
3GPP Rel 6	HSDPA Subtest-1	19.44	19.61	19.47	20.50	19.76	19.91	19.99	20.50	20.26	20.25	20.34	21.50
3GPP Rel 6	HSDPA Subtest-2	18.48	18.62	18.53	19.50	18.79	18.94	19.02	20.50	19.31	19.25	19.41	20.50
3GPP Rel 6	HSDPA Subtest-3	17.67	17.85	17.71	18.50	17.96	18.13	18.20	19.50	18.50	18.46	18.57	20.50
3GPP Rel 6	HSDPA Subtest-4	17.58	17.73	17.63	18.80	17.87	18.03	18.09	19.50	18.36	18.35	18.47	20.50
3GPP Rel 8	DC-HSDPA Subtest-1	19.46	19.61	19.60	20.50	19.90	20.00	20.13	20.50	20.34	20.34	20.39	21.50
3GPP Rel 8	DC-HSDPA Subtest-2	18.30	18.45	18.41	19.50	18.70	18.88	18.92	19.50	19.18	19.16	19.24	20.50
3GPP Rel 8	DC-HSDPA Subtest-3	17.43	17.52	17.60	18.50	17.79	18.00	18.00	19.50	18.31	18.27	18.30	20.50
3GPP Rel 8	DC-HSDPA Subtest-4	17.52	17.67	17.62	18.50	17.91	18.09	18.14	19.50	18.38	18.36	18.38	20.50
3GPP Rel 6	HSUPA Subtest-1	18.50	18.57	18.50	19.50	18.75	18.96	19.07	19.50	19.31	19.30	19.39	20.50
3GPP Rel 6	HSUPA Subtest-2	18.48	18.56	18.48	19.50	18.75	18.94	19.05	19.50	19.28	19.26	19.35	20.50
3GPP Rel 6	HSUPA Subtest-3	18.20	18.31	18.20	19.50	18.45	18.66	18.63	19.50	19.00	19.00	19.06	20.50
3GPP Rel 6	HSUPA Subtest-4	19.44	19.56	19.43	20.50	19.73	19.91	19.95	20.50	20.23	20.27	20.32	21.50
3GPP Rel 6	HSUPA Subtest-5	18.45	18.51	18.38	19.50	18.66	18.86	18.86	19.50	19.20	19.18	19.29	20.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	17.71	17.72	17.67	18.50	18.13	18.27	18.23	19.50	18.51	18.47	18.51	19.50
Attenuator		Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6		
Mode		Max.	22.47			Max.	23.18			Max.	22.61		

Band 2 (1900MHz Band)							
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	22.61	22.64	22.58	23.5
20	QPSK	1	49	22.59	22.53	22.46	
20	QPSK	1	99	22.53	22.49	22.47	
20	QPSK	50	0	21.44	21.53	21.46	22.5
20	QPSK	50	24	21.45	21.50	21.50	
20	QPSK	50	50	21.50	21.46	21.52	
20	QPSK	100	0	21.43	21.52	21.48	22.5
20	16QAM	1	0	21.49	21.49	21.51	
20	16QAM	1	49	21.33	21.63	21.59	
20	16QAM	1	99	21.46	21.31	21.71	22.5
20	16QAM	50	0	21.39	21.36	21.34	
20	16QAM	50	24	21.35	21.40	21.41	
20	16QAM	50	50	21.43	21.40	21.47	22.5
20	16QAM	100	0	21.46	21.47	21.34	
20	64QAM	1	0	21.41	21.60	21.34	
20	64QAM	1	49	21.36	21.54	21.45	22.5
20	64QAM	1	99	21.31	21.64	21.64	
20	64QAM	50	0	21.41	21.33	21.38	
20	64QAM	50	24	21.44	21.38	21.43	22.5
20	64QAM	50	50	21.43	21.44	21.38	
20	64QAM	100	0	21.31	21.28	21.29	
Channel				18675	18900	19125	23.5
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	22.42	22.45	22.36	23.5
15	QPSK	1	37	22.21	22.57	22.45	
15	QPSK	1	74	22.58	22.50	22.58	
15	QPSK	36	0	21.18	21.27	21.26	22.5
15	QPSK	36	20	21.17	21.36	21.33	
15	QPSK	36	39	21.29	21.30	21.27	
15	QPSK	75	0	21.21	21.27	21.23	22.5
15	16QAM	1	0	21.30	21.38	21.32	
15	16QAM	1	37	21.43	21.46	21.32	
15	16QAM	1	74	21.38	21.50	21.50	22.5
15	16QAM	36	0	21.17	21.22	21.25	
15	16QAM	36	20	21.26	21.19	21.32	
15	16QAM	36	39	21.31	21.40	21.37	22.5
15	16QAM	75	0	21.18	21.20	21.29	
15	64QAM	1	0	21.38	21.14	21.20	
15	64QAM	1	37	21.37	21.18	21.60	22.5
15	64QAM	1	74	21.26	21.30	21.45	
15	64QAM	36	0	21.11	21.28	21.16	
15	64QAM	36	20	21.31	21.33	21.23	22.5
15	64QAM	36	39	21.19	21.24	21.33	
15	64QAM	75	0	21.18	21.25	21.24	
Channel				18650	18900	19150	23.5
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.39	22.38	22.48	23.5
10	QPSK	1	25	22.50	22.60	22.48	
10	QPSK	1	49	22.39	22.47	22.39	
10	QPSK	25	0	21.29	21.30	21.26	22.5
10	QPSK	25	12	21.25	21.37	21.30	
10	QPSK	25	25	21.16	21.29	21.25	
10	QPSK	50	0	21.22	21.31	21.29	22.5
10	16QAM	1	0	21.70	21.63	21.62	
10	16QAM	1	25	21.39	21.35	21.42	
10	16QAM	1	49	21.34	21.42	21.21	22.5
10	16QAM	25	0	21.24	21.23	21.20	
10	16QAM	25	12	21.40	21.20	21.20	
10	16QAM	25	25	21.20	21.40	21.50	22.5
10	16QAM	50	0	21.77	21.70	21.74	
10	64QAM	1	0	21.28	21.33	21.33	
10	64QAM	1	25	21.31	21.36	21.40	22.5
10	64QAM	1	49	20.98	21.11	21.08	
10	64QAM	25	0	21.28	21.32	21.33	
10	64QAM	25	12	21.31	21.29	21.30	22.5
10	64QAM	25	25	21.24	21.02	21.24	
10	64QAM	50	0	21.25	21.25	21.22	
Channel				18625	18900	19175	23.5
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	22.53	22.58	22.52	23.5
5	QPSK	1	12	22.52	22.47	22.50	
5	QPSK	1	24	22.48	22.56	22.57	
5	QPSK	12	0	21.28	21.19	21.26	22.5
5	QPSK	12	7	21.29	21.34	21.26	
5	QPSK	12	13	21.28	21.27	21.30	
5	QPSK	25	0	21.27	21.25	21.27	22.5
5	16QAM	1	0	21.40	21.30	21.68	
5	16QAM	1	12	21.38	21.31	21.68	
5	16QAM	1	24	21.41	21.28	21.67	22.5
5	16QAM	12	0	21.50	21.64	21.50	
5	16QAM	12	7	21.40	21.40	21.20	
5	16QAM	12	13	21.20	21.53	21.30	22.5
5	16QAM	25	0	21.30	21.76	21.74	
5	64QAM	1	0	21.50	21.22	21.27	
5	64QAM	1	12	21.66	21.32	21.43	22.5
5	64QAM	1	24	21.67	21.31	21.33	
5	64QAM	12	0	21.32	21.25	21.24	
5	64QAM	12	7	21.38	21.22	21.22	22.5
5	64QAM	12	13	21.35	21.31	21.29	
5	64QAM	25	0	21.42	21.22	21.29	
Channel				18615	18900	19185	23.5
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	22.47	22.54	22.46	23.5
3	QPSK	1	8	22.57	22.60	22.43	
3	QPSK	1	14	22.58	22.45	22.45	
3	QPSK	8	0	21.16	21.11	21.13	22.5
3	QPSK	8	4	21.22	21.16	21.17	
3	QPSK	8	7	21.22	21.16	21.12	
3	QPSK	15	0	21.14	21.22	21.15	22.5

Band 4 (AWS Band)							
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	24.5
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	23.42	23.50	23.49	24.5
20	QPSK	1	49	23.28	23.36	23.35	
20	QPSK	1	99	23.20	23.33	23.45	
20	QPSK	50	0	22.49	22.62	22.59	23.5
20	QPSK	50	24	22.49	22.57	22.57	
20	QPSK	50	50	22.38	22.49	22.50	
20	QPSK	100	0	22.48	22.52	22.58	23.5
20	16QAM	1	0	22.35	22.65	22.52	
20	16QAM	1	49	22.50	22.27	22.41	
20	16QAM	1	99	22.29	22.51	22.35	23.5
20	16QAM	50	0	22.48	22.41	22.55	
20	16QAM	50	24	22.74	22.85	22.74	
20	16QAM	50	50	22.70	22.71	22.71	23.5
20	16QAM	100	0	22.72	22.80	22.81	
20	64QAM	1	0	22.46	22.57	22.79	
20	64QAM	1	49	22.50	22.43	22.31	23.5
20	64QAM	1	99	22.77	22.34	22.81	
20	64QAM	50	0	22.47	22.56	22.51	
20	64QAM	50	24	22.49	22.60	22.54	23.5
20	64QAM	50	50	22.53	22.48	22.50	
20	64QAM	100	0	22.56	22.54	22.63	
Channel				20025	20175	20325	24.5
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	23.29	23.33	23.43	24.5
15	QPSK	1	37	23.33	23.42	23.34	
15	QPSK	1	74	23.20	23.42	23.45	
15	QPSK	36	0	22.43	22.50	22.53	23.5
15	QPSK	36	20	22.47	22.60	22.56	
15	QPSK	36	39	22.52	22.51	22.60	
15	QPSK	75	0	22.47	22.49	22.50	23.5
15	16QAM	1	0	22.41	22.63	22.35	
15	16QAM	1	37	22.49	22.49	22.33	
15	16QAM	1	74	22.35	22.65	22.44	23.5
15	16QAM	36	0	22.36	22.38	22.57	
15	16QAM	36	20	22.31	22.38	22.44	
15	16QAM	36	39	22.27	22.36	22.42	23.5
15	16QAM	75	0	22.38	22.39	22.48	
15	64QAM	1	0	22.33	22.64	22.69	
15	64QAM	1	37	22.75	22.51	22.57	23.5
15	64QAM	1	74	22.79	22.50	22.54	
15	64QAM	36	0	22.44	22.51	22.55	
15	64QAM	36	20	22.50	22.52	22.54	23.5
15	64QAM	36	39	22.53	22.49	22.51	
15	64QAM	75	0	22.46	22.57	22.50	
Channel				20000	20175	20350	24.5
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	23.21	23.40	23.23	24.5
10	QPSK	1	25	23.19	23.32	23.33	
10	QPSK	1	49	23.27	23.10	23.33	
10	QPSK	25	0	22.26	22.48	22.50	23.5
10	QPSK	25	12	22.38	22.44	22.48	
10	QPSK	25	25	22.27	22.38	22.45	
10	QPSK	50	0	22.32	22.43	22.35	23.5
10	16QAM	1	0	22.33	22.47	22.23	
10	16QAM	1	25	22.59	22.33	22.65	
10	16QAM	1	49	22.66	22.56	22.55	23.5
10	16QAM	25					



3	16QAM	1	0	21.30	21.21	21.15	22.5
3	16QAM	1	8	21.34	21.28	21.24	
3	16QAM	1	14	21.27	21.24	21.12	
3	16QAM	8	0	21.50	21.63	21.55	22.5
3	16QAM	8	4	21.57	21.54	21.60	
3	16QAM	8	7	21.47	21.52	21.55	
3	16QAM	15	0	21.50	21.54	21.49	22.5
3	64QAM	1	0	21.23	21.16	21.19	
3	64QAM	1	8	21.65	21.64	21.24	
3	64QAM	1	14	21.26	21.62	21.26	22.5
3	64QAM	8	0	21.18	21.20	21.04	
3	64QAM	8	4	21.28	21.18	21.18	
3	64QAM	8	7	21.38	21.27	21.13	22.5
3	64QAM	15	0	21.23	21.23	21.21	
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.53	22.56	22.51	23.5
1.4	QPSK	1	3	22.43	22.41	22.40	
1.4	QPSK	1	5	22.40	22.38	22.36	
1.4	QPSK	3	0	22.40	22.40	22.36	
1.4	QPSK	3	1	22.44	22.41	22.39	
1.4	QPSK	3	3	22.46	22.50	22.39	
1.4	QPSK	6	0	21.32	21.30	21.29	22.5
1.4	16QAM	1	0	21.35	21.35	21.29	22.5
1.4	16QAM	1	3	21.31	21.51	21.49	
1.4	16QAM	1	5	21.19	21.39	21.07	
1.4	16QAM	3	0	21.21	21.26	21.23	
1.4	16QAM	3	1	21.39	21.21	21.26	
1.4	16QAM	3	3	21.41	21.38	21.12	
1.4	16QAM	6	0	21.42	21.35	21.30	22.5
1.4	64QAM	1	0	21.30	21.22	21.25	22.5
1.4	64QAM	1	3	21.32	21.53	21.41	
1.4	64QAM	1	5	21.30	21.65	21.24	
1.4	64QAM	3	0	21.33	21.39	21.40	
1.4	64QAM	3	1	21.42	21.39	21.60	
1.4	64QAM	3	3	21.34	21.48	21.25	
1.4	64QAM	6	0	21.39	21.42	21.31	22.5

3	16QAM	1	0	22.42	22.51	22.55	23.5
3	16QAM	1	8	22.64	22.64	22.38	
3	16QAM	1	14	22.55	22.33	22.41	
3	16QAM	8	0	22.34	22.35	22.44	23.5
3	16QAM	8	4	22.44	22.44	22.45	
3	16QAM	8	7	22.66	22.74	22.78	
3	16QAM	15	0	22.66	22.64	22.71	23.5
3	64QAM	1	0	22.33	22.42	22.40	
3	64QAM	1	8	22.52	22.40	22.56	
3	64QAM	1	14	22.33	22.40	22.23	23.5
3	64QAM	8	0	22.31	22.35	22.29	
3	64QAM	8	4	22.43	22.41	22.45	
3	64QAM	8	7	22.37	22.44	22.56	23.5
3	64QAM	15	0	22.33	22.41	22.32	
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.98	23.19	23.20	24.5
1.4	QPSK	1	3	23.32	23.32	23.36	
1.4	QPSK	1	5	23.18	23.27	23.29	
1.4	QPSK	3	0	23.26	23.23	23.22	
1.4	QPSK	3	1	23.22	23.32	23.37	
1.4	QPSK	3	3	23.21	23.28	23.27	
1.4	QPSK	6	0	22.37	22.39	22.35	23.5
1.4	16QAM	1	0	22.31	22.78	22.44	23.5
1.4	16QAM	1	3	22.44	22.52	22.56	
1.4	16QAM	1	5	22.50	22.66	22.46	
1.4	16QAM	3	0	22.53	22.57	22.48	
1.4	16QAM	3	1	22.54	22.57	22.59	
1.4	16QAM	3	3	22.53	22.65	22.54	
1.4	16QAM	6	0	22.44	22.45	22.36	23.5
1.4	64QAM	1	0	22.22	22.16	22.30	23.5
1.4	64QAM	1	3	22.48	22.46	22.58	
1.4	64QAM	1	5	22.39	22.35	22.19	
1.4	64QAM	3	0	22.30	22.28	22.47	
1.4	64QAM	3	1	22.21	22.36	22.33	
1.4	64QAM	3	3	22.27	22.44	22.32	
1.4	64QAM	6	0	22.26	22.27	22.34	23.5

Band 5 (Cellular Band)									
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	23.16	23.17	23.09	24		
10	QPSK	1	25	23.02	23.05	22.85			
10	QPSK	1	49	22.94	23.06	22.74			
10	QPSK	25	0	22.47	22.49	22.30	23		
10	QPSK	25	12	22.23	22.25	22.30			
10	QPSK	25	25	22.23	22.34	22.39			
10	QPSK	50	0	22.29	22.17	22.31	23		
10	16QAM	1	0	22.33	22.52	22.23			
10	16QAM	1	25	22.56	22.59	22.27			
10	16QAM	1	49	22.39	22.45	22.52	23		
10	16QAM	25	0	22.48	22.49	22.31			
10	16QAM	25	12	22.42	22.50	22.28			
10	16QAM	25	25	22.45	22.38	22.41	23		
10	16QAM	50	0	22.46	22.37	22.27			
10	64QAM	1	0	22.42	22.52	22.40			
10	64QAM	1	25	22.39	22.59	22.39	23		
10	64QAM	1	49	22.28	22.50	22.41			
10	64QAM	25	0	22.39	22.50	22.17			
10	64QAM	25	12	22.38	22.55	22.26	23		
10	64QAM	25	25	22.50	22.39	22.09			
10	64QAM	50	0	22.46	22.42	22.28			
Channel				20425	20525	20625	Tune-up limit (dBm)		
Frequency (MHz)				826.5	836.5	846.5			
5	QPSK	1	0	23.11	23.07	23.05	24		
5	QPSK	1	12	23.01	23.12	22.96			
5	QPSK	1	24	23.01	22.96	22.96			
5	QPSK	12	0	22.38	22.43	22.29	23		
5	QPSK	12	7	22.45	22.46	22.38			
5	QPSK	12	13	22.50	22.34	22.29			
5	QPSK	25	0	22.41	22.37	22.29	23		
5	16QAM	1	0	22.70	22.63	22.39			
5	16QAM	1	12	22.40	22.62	22.38			
5	16QAM	1	24	22.27	22.62	22.45	23		
5	16QAM	12	0	22.36	22.45	22.44			
5	16QAM	12	7	22.43	22.46	22.28			
5	16QAM	12	13	22.43	22.34	22.39	23		
5	16QAM	25	0	22.44	22.49	22.44			
5	64QAM	1	0	22.51	22.39	22.50			
5	64QAM	1	12	22.39	22.33	22.47	23		
5	64QAM	1	24	22.53	22.37	22.31			
5	64QAM	12	0	22.25	22.39	22.19			
5	64QAM	12	7	22.29	22.45	22.23	23		
5	64QAM	12	13	22.47	22.42	21.99			
5	64QAM	25	0	22.35	22.42	22.03			
Channel				20415	20525	20635	Tune-up limit (dBm)		
Frequency (MHz)				825.5	836.5	847.5			
3	QPSK	1	0	22.80	23.11	22.96	24		
3	QPSK	1	8	23.06	23.07	22.98			
3	QPSK	1	14	23.07	23.05	22.79			
3	QPSK	8	0	22.31	22.44	22.42	23		
3	QPSK	8	4	22.45	22.51	22.48			
3	QPSK	8	7	22.40	22.42	22.29			
3	QPSK	15	0	22.38	22.44	22.43	23		
3	16QAM	1	0	22.40	22.51	22.58			
3	16QAM	1	8	22.33	22.59	22.43			
3	16QAM	1	14	22.38	22.64	22.39	23		
3	16QAM	8	0	22.34	22.43	22.17			
3	16QAM	8	4	22.50	22.61	22.18			
3	16QAM	8	7	22.42	22.48	22.22	23		
3	16QAM	15	0	22.36	22.38	21.93			
3	64QAM	1	0	22.31	22.19	22.40			
3	64QAM	1	8	22.19	22.43	22.19	23		
3	64QAM	1	14	22.21	22.39	22.20			
3	64QAM	8	0	22.31	22.41	22.39			
3	64QAM	8	4	22.53	22.37	22.31	23		
3	64QAM	8	7	22.48	22.40	22.37			
3	64QAM	15	0	22.37	22.47	22.27			
Channel				20407	20525	20643	Tune-up limit (dBm)		
Frequency (MHz)				824.7	836.5	848.3			
1.4	QPSK	1	0	23.01	23.08	23.12	24		
1.4	QPSK	1	3	23.14	23.07	23.14			
1.4	QPSK	1	5	23.03	22.97	22.98			
1.4	QPSK	3	0	23.04	23.10	23.06	23		
1.4	QPSK	3	1	23.10	22.97	23.07			
1.4	QPSK	3	3	23.11	23.03	23.03			
1.4	QPSK	6	0	22.36	22.35	22.34	23		
1.4	16QAM	1	0	22.49	22.30	22.47			
1.4	16QAM	1	3	22.29	22.53	22.42			
1.4	16QAM	1	5	22.68	22.36	22.42	23		
1.4	16QAM	3	0	22.21	22.19	22.33			
1.4	16QAM	3	1	22.24	22.51	22.37			
1.4	16QAM	3	3	22.32	22.43	22.31	23		
1.4	16QAM	6	0	22.51	22.38	22.42			
1.4	64QAM	1	0	22.04	22.21	22.23			
1.4	64QAM	1	3	22.35	22.36	22.31	23		
1.4	64QAM	1	5	22.30	22.29	22.17			
1.4	64QAM	3	0	21.96	22.23	22.24			
1.4	64QAM	3	1	22.24	22.18	22.19	23		
1.4	64QAM	3	3	22.14	22.31	22.35			
1.4	64QAM	6	0	22.35	22.47	22.36			

Band 12 (700MHz Low Band)									
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			
10	QPSK	1	0	23.29	23.45	23.34	24		
10	QPSK	1	25	23.15	23.28	23.31			
10	QPSK	1	49	23.25	23.26	23.25			
10	QPSK	25	0	22.54	22.64	22.55	23		
10	QPSK	25	12	22.51	22.45	22.24			
10	QPSK	25	25	22.56	22.62	22.55			
10	QPSK	50	0	22.57	22.59	22.50	23		
10	16QAM	1	0	22.50	22.05	22.18			
10	16QAM	1	25	22.25	22.20	22.34			
10	16QAM	1	49	22.34	22.39	22.28	23		
10	16QAM	25	0	22.23	22.25	22.19			
10	16QAM	25	12	22.27	22.31	22.20			
10	16QAM	25	25	22.32	22.33	22.27	23		
10	16QAM	50	0	22.22	22.30	22.35			
10	64QAM	1	0	22.07	22.19	22.53			
10	64QAM	1	25	22.51	22.57	22.16	23		
10	64QAM	1	49	22.53	22.21	22.14			
10	64QAM	25	0	22.04	21.98	21.95			
10	64QAM	25	12	22.09	22.12	22.04	23		
10	64QAM	25	25	22.14	22.11	22.11			
10	64QAM	50	0	22.06	21.99	22.10			
Channel				23035	23095	23155	Tune-up limit (dBm)		
Frequency (MHz)				701.5	707.5	713.5			
5	QPSK	1	0	23.04	23.37	23.15	24		
5	QPSK	1	12	23.20	23.36	23.20			
5	QPSK	1	24	23.16	23.35	23.21			
5	QPSK	12	0	22.27	22.34	22.33	23		
5	QPSK	12	7	22.38	22.40	22.37			
5	QPSK	12	13	22.33	22.36	22.33			
5	QPSK	25	0	22.29	22.41	22.37	23		
5	16QAM	1	0	22.30	22.32	22.34			
5	16QAM	1	12	22.47	22.42	22.43			
5	16QAM	1	24	22.43	22.41	22.37	23		
5	16QAM	12	0	22.17	22.14	22.17			
5	16QAM	12	7	22.31	22.36	22.20			
5	16QAM	12	13	22.26	22.23	22.28	23		
5	16QAM	25	0	22.27	22.23	22.25			
5	64QAM	1	0	22.05	22.06	22.11			
5	64QAM	1	12	22.50	22.20	22.13	23		
5	64QAM	1	24	22.48	22.17	22.22			
5	64QAM	12	0	22.02	22.04	21.99			
5	64QAM	12	7	22.12	22.00	22.06	23		
5	64QAM	12	13	21.99	22.09	22.14			
5	64QAM	25	0	22.14	22.10	22.07			
Channel				23025	23095	23165	Tune-up limit (dBm)		
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	23.12	23.39	23.06	24		
3	QPSK	1	8	23.30	23.29	23.19			
3	QPSK	1	14	23.24	23.35	23.30			
3	QPSK	8	0	22.35	22.33	22.33	23		
3	QPSK	8	4	22.38	22.41	22.42			
3	QPSK	8	7	22.33	22.41	22.35			
3	QPSK	15	0	22.32	22.40	22.26	23		
3	16QAM	1	0	22.33	22.69	22.28			
3	16QAM	1	8	22.53	22.51	22.46			
3	16QAM	1	14	22.36	22.41	22.27	23		
3	16QAM	8	0	22.33	22.22	22.25			
3	16QAM	8	4	22.38	22.35	22.46			
3	16QAM	8	7	22.22	22.25	22.31	23		
3	16QAM	15	0	22.20	22.13	22.12			
3	64QAM	1	0	22.06	22.40	22.39			
3	64QAM	1	8	22.35	22.25	22.26	23		
3	64QAM	1	14	22.28	22.13	22.24			
3	64QAM	8	0	21.95	22.03	21.94			
3	64QAM	8	4	22.04	22.08	22.07	23		
3	64QAM	8	7	22.03	21.95	22.10			
3	64QAM	15	0	22.02	22.04	21.96			
Channel				23017	23095	23173	Tune-up limit (dBm)		
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	23.15	23.32	23.12	24		
1.4	QPSK	1	3	23.26	23.25	23.27			
1.4	QPSK	1							



Band 13(700MHz Band) 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		22.35		23
10	QPSK	1	25		22.18		
10	QPSK	1	49		22.16		
10	QPSK	25	0		21.54		22
10	QPSK	25	12		21.35		
10	QPSK	25	25		21.52		
10	QPSK	50	0		21.49		22
10	16QAM	1	0		20.95		
10	16QAM	1	25		21.10		
10	16QAM	1	49		21.29		22
10	16QAM	25	0		21.15		
10	16QAM	25	12		21.21		
10	16QAM	25	25		21.23		22
10	16QAM	50	0		21.20		
10	64QAM	1	0		21.23		
10	64QAM	1	25		21.61		22
10	64QAM	1	49		21.25		
10	64QAM	25	0		21.02		
10	64QAM	25	12		21.16		22
10	64QAM	25	25		21.15		
10	64QAM	50	0		21.03		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	21.94	22.27	22.05	23
5	QPSK	1	12	22.10	22.26	22.10	
5	QPSK	1	24	22.06	22.25	22.11	
5	QPSK	12	0	21.17	21.24	21.23	22
5	QPSK	12	7	21.28	21.30	21.27	
5	QPSK	12	13	21.23	21.26	21.23	
5	QPSK	25	0	21.19	21.31	21.27	22
5	16QAM	1	0	21.20	21.22	21.24	
5	16QAM	1	12	21.37	21.32	21.33	
5	16QAM	1	24	21.33	21.31	21.27	22
5	16QAM	12	0	21.07	21.04	21.07	
5	16QAM	12	7	21.35	21.40	21.24	
5	16QAM	12	13	21.30	21.27	21.32	22
5	16QAM	25	0	21.31	21.27	21.29	
5	64QAM	1	0	21.09	21.10	21.15	
5	64QAM	1	12	21.54	21.24	21.17	22
5	64QAM	1	24	21.52	21.21	21.26	
5	64QAM	12	0	21.06	21.08	21.03	
5	64QAM	12	7	21.16	21.04	21.10	22
5	64QAM	12	13	21.03	21.13	21.18	
5	64QAM	25	0	21.18	21.14	21.11	



Band 66							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	24.5
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	23.59	23.65	23.63	24.5
20	QPSK	1	49	23.44	23.43	23.39	
20	QPSK	1	99	23.37	23.36	23.39	
20	QPSK	50	0	22.51	22.58	22.54	23.5
20	QPSK	50	24	22.32	22.34	22.47	
20	QPSK	50	50	22.36	22.44	22.32	
20	QPSK	100	0	22.34	22.34	22.26	23.5
20	16QAM	1	0	22.39	22.15	22.43	
20	16QAM	1	49	22.44	22.18	22.24	
20	16QAM	1	99	22.44	22.62	22.41	23.5
20	16QAM	50	0	22.56	22.53	22.50	
20	16QAM	50	24	22.45	22.45	22.46	
20	16QAM	50	50	22.42	22.34	22.30	23.5
20	16QAM	100	0	22.38	22.41	22.47	
20	64QAM	1	0	22.54	22.31	22.64	
20	64QAM	1	49	22.31	22.64	22.63	23.5
20	64QAM	1	99	22.54	22.66	22.74	
20	64QAM	50	0	22.50	22.40	22.53	
20	64QAM	50	24	22.44	22.38	22.50	23.5
20	64QAM	50	50	22.46	22.34	22.40	
20	64QAM	100	0	22.45	22.45	22.43	
Channel				132047	132322	132597	24.5
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	23.38	23.42	23.40	24.5
15	QPSK	1	37	23.52	23.38	23.36	
15	QPSK	1	74	23.36	23.32	23.30	
15	QPSK	36	0	22.33	22.30	22.34	23.5
15	QPSK	36	20	22.33	22.25	22.35	
15	QPSK	36	39	22.19	22.24	22.21	
15	QPSK	75	0	22.28	22.32	22.25	23.5
15	16QAM	1	0	22.27	22.14	22.44	
15	16QAM	1	37	22.14	22.44	22.37	
15	16QAM	1	74	22.24	22.14	22.14	23.5
15	16QAM	36	0	22.45	22.45	22.36	
15	16QAM	36	20	22.48	22.47	22.53	
15	16QAM	36	39	22.40	22.55	22.49	23.5
15	16QAM	75	0	22.50	22.48	22.44	
15	64QAM	1	0	22.64	22.54	22.64	
15	64QAM	1	37	22.66	22.44	22.54	23.5
15	64QAM	1	74	22.31	22.57	22.64	
15	64QAM	36	0	22.43	22.42	22.55	
15	64QAM	36	20	22.53	22.49	22.50	23.5
15	64QAM	36	39	22.42	22.36	22.40	
15	64QAM	75	0	22.44	22.46	22.43	
Channel				132022	132322	132622	24.5
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	23.36	23.36	23.37	24.5
10	QPSK	1	25	23.26	23.24	23.32	
10	QPSK	1	49	23.40	23.28	23.18	
10	QPSK	25	0	22.59	22.52	22.59	23.5
10	QPSK	25	12	22.56	22.75	22.53	
10	QPSK	25	25	22.57	22.53	22.45	
10	QPSK	50	0	22.65	22.50	22.69	23.5
10	16QAM	1	0	22.57	22.57	22.77	
10	16QAM	1	25	22.57	22.66	22.78	
10	16QAM	1	49	22.40	22.60	22.48	23.5
10	16QAM	25	0	22.41	22.58	22.46	
10	16QAM	25	12	22.40	22.60	22.51	
10	16QAM	25	25	22.31	22.36	22.36	23.5
10	16QAM	50	0	22.47	22.51	22.52	
10	64QAM	1	0	22.47	22.47	22.14	
10	64QAM	1	25	22.14	22.27	22.17	23.5
10	64QAM	1	49	22.14	22.14	22.14	
10	64QAM	25	0	22.47	22.45	22.47	
10	64QAM	25	12	22.46	22.50	22.54	23.5
10	64QAM	25	25	22.46	22.39	22.41	
10	64QAM	50	0	22.36	22.46	22.47	
Channel				131997	132322	132647	24.5
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	23.25	23.28	23.33	24.5
5	QPSK	1	12	23.28	23.28	23.27	
5	QPSK	1	24	23.36	23.26	23.32	
5	QPSK	12	0	22.28	22.30	22.26	23.5
5	QPSK	12	7	22.30	22.38	22.31	
5	QPSK	12	13	22.21	22.27	22.28	
5	QPSK	25	0	22.31	22.32	22.31	23.5
5	16QAM	1	0	22.80	22.49	22.50	
5	16QAM	1	12	22.43	22.72	22.67	
5	16QAM	1	24	22.55	22.44	22.79	23.5
5	16QAM	12	0	22.44	22.55	22.51	
5	16QAM	12	7	22.61	22.53	22.65	
5	16QAM	12	13	22.52	22.46	22.53	23.5
5	16QAM	25	0	22.53	22.55	22.47	
5	64QAM	1	0	22.14	22.54	22.34	
5	64QAM	1	12	22.44	22.44	22.44	23.5
5	64QAM	1	24	22.27	22.31	22.27	
5	64QAM	12	0	22.51	22.26	22.47	
5	64QAM	12	7	22.59	22.18	22.49	23.5
5	64QAM	12	13	22.42	22.54	22.49	
5	64QAM	25	0	22.49	22.57	22.44	
Channel				131987	132322	132657	24.5
Frequency (MHz)				1711.5	1745	1776.5	
3	QPSK	1	0	23.32	23.23	23.22	24.5
3	QPSK	1	8	23.19	23.20	23.28	
3	QPSK	1	14	23.10	22.91	23.21	
3	QPSK	8	0	22.54	22.51	22.55	23.5
3	QPSK	8	4	22.54	22.46	22.56	
3	QPSK	8	7	22.40	22.45	22.42	
3	QPSK	15	0	22.49	22.53	22.46	



3	16QAM	1	0	22.18	22.59	22.35	23.5
3	16QAM	1	8	22.51	22.45	22.44	
3	16QAM	1	14	22.55	22.44	22.14	
3	16QAM	8	0	22.36	22.36	22.27	23.5
3	16QAM	8	4	22.39	22.38	22.44	
3	16QAM	8	7	22.31	22.46	22.40	
3	16QAM	15	0	22.41	22.39	22.35	23.5
3	64QAM	1	0	22.55	22.45	22.55	
3	64QAM	1	8	22.57	22.35	22.45	
3	64QAM	1	14	22.22	22.48	22.55	23.5
3	64QAM	8	0	22.34	22.33	22.46	
3	64QAM	8	4	22.44	22.40	22.41	
3	64QAM	8	7	22.33	22.27	22.31	
3	64QAM	15	0	22.35	22.37	22.34	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	23.26	23.17	23.18	24.5
1.4	QPSK	1	3	23.32	23.34	23.34	
1.4	QPSK	1	5	23.24	23.12	23.28	
1.4	QPSK	3	0	23.23	23.16	23.23	
1.4	QPSK	3	1	23.20	23.26	23.17	
1.4	QPSK	3	3	23.21	23.17	23.09	
1.4	QPSK	6	0	22.57	22.42	22.61	23.5
1.4	16QAM	1	0	22.49	22.49	22.69	23.5
1.4	16QAM	1	3	22.49	22.58	22.70	
1.4	16QAM	1	5	22.32	22.52	22.40	
1.4	16QAM	3	0	22.03	22.00	22.26	
1.4	16QAM	3	1	22.12	22.02	22.14	
1.4	16QAM	3	3	22.13	22.14	22.08	
1.4	16QAM	6	0	22.02	21.93	21.94	23.5
1.4	64QAM	1	0	22.36	22.21	22.37	23.5
1.4	64QAM	1	3	22.09	22.18	22.18	
1.4	64QAM	1	5	22.06	22.06	22.17	
1.4	64QAM	3	0	22.39	22.37	22.39	
1.4	64QAM	3	1	22.38	22.42	22.46	
1.4	64QAM	3	3	22.38	22.31	22.33	
1.4	64QAM	6	0	22.28	22.38	22.39	23.5

2.4GHz WLAN

Mode	Channel	Frequency (MHz)	Average power (dBm)		Tune-Up Limit	Power Setting	Duty Cycle %
			1Mbps	2Mbps			
802.11b 1Mbps	CH 1	2412	12.52	13.00	14	98.79	
	CH 7	2442	14.70	15.50	14		
	CH 13	2472	13.43	14.00	14		
802.11g 6Mbps	CH 1	2412	9.75	10.50	12	98.31	
	CH 7	2442	11.76	12.50	12		
	CH 13	2472	6.41	11.00	8		
802.11n-HT20 MCS0	CH 1	2412	9.63	10.00	12	98.18	
	CH 7	2442	11.66	12.50	12		
	CH 13	2472	5.64	11.00	7		
802.11n-HT40 MCS0	CH 1	2412	10.81	11.50	12	94.87	
	CH 7	2442	12.32	13.00	12		
	CH 13	2472	10.33	11.00	12		

5GHz WLAN

Mode	Channel	Frequency (MHz)	Average power (dBm)		Tune-Up Limit	Power Setting	Duty Cycle %
			1Mbps	2Mbps			
802.11a 6Mbps	CH 36	5180	10.20	11.00	12	98.31	
	CH 44	5220	11.28	12.00	12		
	CH 48	5240	11.63	12.00	12		
802.11n-HT20 MCS0	CH 36	5180	10.13	11.00	12	98.18	
	CH 44	5220	11.17	12.00	12		
	CH 48	5240	11.57	12.00	12		
802.11n-HT40 MCS0	CH 38	5190	11.27	12.00	12	96.37	
	CH 46	5230	12.19	13.00	12		
	CH 48	5240	8.47	9.00	10		
802.11ac-VHT20 MCS0	CH 36	5180	8.47	9.00	10	98.20	
	CH 44	5220	9.47	10.00	10		
	CH 48	5240	9.84	10.00	10		
802.11ac-VHT40 MCS0	CH 38	5190	9.55	10.00	10	96.41	
	CH 46	5230	10.48	11.00	10		
	CH 48	5240	9.78	10.00	10		
802.11ac-VHT80 MCS0	CH 42	5210	9.78	10.00	10	92.68	

5GHz WLAN

Mode	Channel	Frequency (MHz)	Average power (dBm)		Tune-Up Limit	Power Setting	Duty Cycle %
			1Mbps	2Mbps			
802.11a MCS0	CH 149	5745	12.63	13.00	12	98.31	
	CH 157	5785	10.53	11.00	12		
	CH 165	5825	8.94	9.50	12		
802.11n-HT20 MCS0	CH 149	5745	12.43	13.00	12	98.18	
	CH 157	5785	10.43	11.00	12		
	CH 165	5825	8.85	9.50	12		
802.11n-HT40 MCS0	CH 151	5755	12.97	13.50	12	96.37	
	CH 159	5795	11.04	12.00	12		
	CH 165	5825	6.25	7.00	10		
802.11ac-VHT20 MCS0	CH 149	5745	10.63	11.00	10	98.20	
	CH 157	5785	8.94	9.50	10		
	CH 165	5825	6.25	7.00	10		
802.11ac-VHT40 MCS0	CH 151	5755	11.14	12.00	10	96.41	
	CH 159	5795	9.19	10.00	10		
	CH 165	5825	10.04	11.00	10		
802.11ac-VHT80 MCS0	CH 155	5775	10.04	11.00	10	92.68	

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 00	2402	8.81	5.67	6.64
	CH 39	2441	7.71	6.79	7.68
	CH 78	2480	7.79	5.01	5.07
Tune-up Limit			9.5	7	8
Duty Cycle %			77.2	77.6	77.6

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			GFSK	Other
LE	CH 00	2402	2.22	
	CH 19	2440	4.09	
	CH 39	2480	0.86	
Tune-up Limit			4.5	
Duty Cycle %			66.03	



Configure	CA Configuration	PCC					SCC				Power	
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation /RB/Offset)	Band	BW (MHz)	DL Channel	DL Fre. (MHz)	CA TX (dBm)	Rel.8 TX (dBm)
Intra-band	CA_2A-13A	2	20	18700	1860	QPSK/1#0	13	10	23230	782	21.61	22.64
	CA_2A-2A	2	20	18700	1860	QPSK/1#0	2	20	19100	1900	21.44	22.64
	CA_2A-4A	2	20	18700	1860	QPSK/1#0	4	20	20300	1745	21.43	22.64
	CA_2A-66A	2	20	18700	1860	QPSK/1#0	66	20	67236	2190	21.64	22.64
	CA_2A-5A	2	20	18700	1860	QPSK/1#0	5	10	20450	829	21.53	22.64
	CA_4A-13A	4	20	20050	1720	QPSK/1#0	13	10	23230	782	18.68	23.50
	CA_4A-5A	4	20	20050	1720	QPSK/1#0	5	10	20450	829	18.31	23.50
	CA_4A-4A	4	20	20050	1720	QPSK/1#0	4	20	20300	1745	18.21	23.50
	CA_5A-66A	5	10	20450	829	QPSK/1#0	66	20	67236	2190	21.68	23.17
	CA_5B	5	10	20501	834.1	QPSK/1#0	5	10	20600	844	22.33	23.17
	CA_5A-5A	5	10	20450	829	QPSK/1#0	5	10	20600	844	22.41	23.17
	CA_13A-66A	13	10	23230	782	QPSK/1#0	66	20	67236	2190	21.61	22.35
	CA_66A-66A	66	20	132072	1720	QPSK/1#0	66	20	132572	1770	18.23	23.65
	CA_66B	66	10	132523	1765.1	QPSK/1#0	66	10	132622	1775	17.15	23.65
	CA_66C	66	20	132572	1770	QPSK/1#0	66	20	67234	2189.8	18.77	23.65