



REPORT No.: SZ21100132S01

Annex E Conducted Power

Conducted Power for Standalone SAR

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			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	12.17	12.25	12.12	13.00	12.46	12.68	12.57	13.50	20.84	20.90	20.74	21.50
3GPP Rel 6	HSDPA Subtest-1	11.22	11.30	11.28	12.00	11.72	11.74	11.72	12.50	19.89	19.92	19.84	20.50
3GPP Rel 6	HSDPA Subtest-2	11.34	11.56	11.38	12.00	11.79	11.85	11.91	12.50	19.91	19.93	19.88	20.50
3GPP Rel 6	HSDPA Subtest-3	10.70	10.82	10.76	11.50	11.25	11.26	11.23	12.00	19.78	19.43	19.35	20.50
3GPP Rel 6	HSDPA Subtest-4	10.64	10.83	10.73	11.50	11.26	11.29	11.22	12.00	19.66	19.47	19.36	20.00
3GPP Rel 8	DC-HSDPA Subtest-1	11.43	11.35	11.37	12.00	11.73	11.81	11.70	12.50	20.01	20.03	19.93	20.50
3GPP Rel 8	DC-HSDPA Subtest-2	11.41	11.35	11.41	12.00	11.73	11.79	11.77	12.50	20.01	20.03	19.94	20.50
3GPP Rel 8	DC-HSDPA Subtest-3	10.81	10.81	10.85	11.50	11.20	11.27	11.26	12.00	19.51	19.54	19.46	20.00
3GPP Rel 8	DC-HSDPA Subtest-4	10.78	10.87	10.90	11.50	11.17	11.27	11.28	12.00	19.51	19.53	19.48	20.00
3GPP Rel 6	HSUPA Subtest-1	11.33	11.41	11.29	12.00	11.74	11.92	11.71	12.50	19.91	19.86	19.96	20.50
3GPP Rel 6	HSUPA Subtest-2	10.73	11.18	10.77	12.00	11.22	11.47	11.28	12.50	19.40	19.41	19.33	20.00
3GPP Rel 6	HSUPA Subtest-3	11.22	11.35	11.23	12.00	11.70	11.77	11.72	12.50	19.91	19.95	19.92	20.50
3GPP Rel 6	HSUPA Subtest-4	11.20	11.34	11.25	12.00	11.74	11.80	11.75	12.50	19.90	19.90	19.83	20.50
3GPP Rel 6	HSUPA Subtest-5	11.16	11.35	11.28	12.00	11.77	11.90	11.71	12.50	19.86	19.90	19.95	20.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	11.24	11.28	11.24	12.00	11.74	11.79	11.72	12.50	19.88	19.96	19.94	20.50
Attenuator		Cable Loss				Cable Loss				Cable Loss			
Mode			Max.	12.25			Max.	12.68			Max.	20.90	

Band 2 (For Standalone SAR) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	15
Frequency (MHz)				1880	1880	1900	
20	QPSK	1	0	14.06	14.10	13.99	15
20	QPSK	1	49	13.99	13.89	13.88	
20	QPSK	1	99	13.88	13.79	13.71	
20	QPSK	50	0	13.06	13.10	12.97	14
20	QPSK	50	24	12.97	13.06	12.88	
20	QPSK	50	50	12.90	12.98	12.77	
20	QPSK	100	0	12.80	12.86	12.73	14
20	16QAM	1	0	13.00	13.14	12.99	
20	16QAM	1	49	12.88	13.12	12.94	
20	16QAM	1	99	12.83	13.08	12.92	14
20	16QAM	50	0	13.01	13.03	13.05	
20	16QAM	50	24	12.95	12.97	12.98	
20	16QAM	50	50	12.86	12.84	12.93	14
20	16QAM	100	0	12.83	12.80	12.86	
20	64QAM	1	0	12.81	13.06	13.01	
20	64QAM	1	49	12.71	13.00	12.98	13.5
20	64QAM	1	99	12.66	12.89	12.85	
20	64QAM	50	0	12.78	12.81	12.72	
20	64QAM	50	24	12.75	12.78	12.64	13.5
20	64QAM	50	50	12.61	12.67	12.52	
20	64QAM	100	0	12.54	12.59	12.47	
20	256QAM	1	0	11.76	11.85	11.81	12.5
20	256QAM	1	49	11.74	11.79	11.75	
20	256QAM	1	99	11.77	11.71	11.65	
20	256QAM	50	0	11.35	11.42	11.39	11.5
20	256QAM	50	24	11.28	11.40	11.31	
20	256QAM	50	50	11.23	11.31	11.26	
20	256QAM	100	0	11.26	11.32	11.27	Tune-up limit (dBm)
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	15
15	QPSK	1	0	14.04	14.05	13.96	
15	QPSK	1	37	13.96	13.86	13.85	
15	QPSK	1	74	13.83	13.78	13.65	14
15	QPSK	36	0	13.02	13.08	12.92	
15	QPSK	36	20	12.95	13.01	12.86	
15	QPSK	36	39	12.87	12.95	12.74	14
15	QPSK	75	0	12.77	12.81	12.71	
15	16QAM	1	0	12.97	13.12	12.94	
15	16QAM	1	37	12.82	13.10	12.91	14
15	16QAM	1	74	12.81	13.03	12.87	
15	16QAM	36	0	12.96	12.98	13.00	
15	16QAM	36	20	12.93	12.93	12.93	14
15	16QAM	36	39	12.83	12.78	12.89	
15	16QAM	75	0	12.79	12.74	12.84	
15	64QAM	1	0	12.76	13.02	12.96	14
15	64QAM	1	37	12.69	12.97	12.92	
15	64QAM	1	74	12.63	12.85	12.81	
15	64QAM	36	0	12.77	12.75	12.68	13.5
15	64QAM	36	20	12.71	12.74	12.58	
15	64QAM	36	39	12.55	12.63	12.50	
15	64QAM	75	0	12.49	12.55	12.43	12.5
15	256QAM	1	0	11.71	11.83	11.76	
15	256QAM	1	37	11.70	11.73	11.72	
15	256QAM	1	74	11.72	11.69	11.63	11.5
15	256QAM	36	0	11.33	11.37	11.35	
15	256QAM	36	20	11.27	11.38	11.26	
15	256QAM	36	39	11.21	11.26	11.22	Tune-up limit (dBm)
15	256QAM	75	0	11.25	11.26	11.23	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	13.99	14.00	13.91	15
10	QPSK	1	25	13.91	13.81	13.80	
10	QPSK	1	49	13.78	13.73	13.60	
10	QPSK	25	0	12.97	13.03	12.87	14
10	QPSK	25	12	12.90	12.96	12.81	
10	QPSK	25	25	12.82	12.90	12.69	
10	QPSK	50	0	12.72	12.76	12.66	14
10	16QAM	1	0	12.92	13.07	12.89	
10	16QAM	1	25	12.77	13.05	12.86	
10	16QAM	1	49	12.76	12.98	12.62	14
10	16QAM	25	0	12.91	12.93	12.95	
10	16QAM	25	12	12.88	12.88	12.88	
10	16QAM	25	25	12.78	12.73	12.84	14
10	16QAM	50	0	12.74	12.69	12.79	
10	64QAM	1	0	12.71	12.97	12.91	
10	64QAM	1	25	12.64	12.92	12.87	13.5
10	64QAM	1	49	12.58	12.80	12.76	
10	64QAM	25	0	12.72	12.70	12.63	
10	64QAM	25	12	12.66	12.69	12.53	12.5
10	64QAM	25	25	12.50	12.58	12.45	
10	64QAM	50	0	12.44	12.50	12.38	
10	256QAM	1	0	11.66	11.78	11.71	11.5
10	256QAM	1	25	11.65	11.68	11.67	
10	256QAM	1	49	11.67	11.64	11.58	
10	256QAM	25	0	11.28	11.32	11.30	11.5
10	256QAM	25	12	11.22	11.33	11.21	
10	256QAM	25	25	11.16	11.21	11.17	
10	256QAM	50	0	11.20	11.21	11.18	Tune-up limit (dBm)
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	15
5	QPSK	1	0	13.94	13.95	13.86	
5	QPSK	1	12	13.86	13.76	13.75	
5	QPSK	1	24	13.73	13.68	13.55	14
5	QPSK	12	0	12.92	12.98	12.82	
5	QPSK	12	7	12.85	12.91	12.76	

Band 4 (For Standalone SAR) 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	13.66	13.73	13.68	14.5
20	QPSK	1	49	13.60	13.63	13.61	
20	QPSK	1	99	13.56	13.55	13.51	
20	QPSK	50	0	12.62	12.67	12.63	13.5
20	QPSK	50	24	12.61	12.59	12.60	
20	QPSK	50	50	12.56	12.53	12.50	
20	QPSK	100	0	12.48	12.50	12.46	13.5
20	16QAM	1	0	12.59	12.64	12.55	
20	16QAM	1	49	12.49	12.63	12.46	
20	16QAM	1	99	12.45	12.61	12.36	13.5
20	16QAM	50	0	12.45	12.50	12.54	
20	16QAM	50	24	12.41	12.41	12.45	
20	16QAM	50	50	12.37	12.35	12.41	13
20	16QAM	100	0	12.31	12.33	12.38	
20	64QAM	1	0	12.66	12.47	12.68	
20	64QAM	1	49	12.64	12.46	12.66	13
20	64QAM	1	99	12.58	12.42	12.62	
20	64QAM	50	0	12.55	12.22	12.25	
20	64QAM	50	24	12.17	12.20	12.17	13
20	64QAM	50	50	12.11	12.12	12.08	
20	64QAM	100	0	12.10	12.09	12.07	
20	256QAM	1	0	11.37	11.42	11.38	12
20	256QAM	1	49	11.34	11.36	11.29	
20	256QAM	1	99	11.32	11.32	11.27	
20	256QAM	50	0	10.89	10.92	10.83	11
20	256QAM	50	24	10.81	10.83	10.82	
20	256QAM	50	50	10.75	10.75	10.75	
20	256QAM	100	0	10.67	10.74	10.69	
Channel				20025	20175	20325	Tune-up limit (dbm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	13.65	13.71	13.63	14.5
15	QPSK	1	37	13.54	13.61	13.56	
15	QPSK	1	74	13.52	13.53	13.49	
15	QPSK	36	0	12.60	12.64	12.62	13.5
15	QPSK	36	20	12.57	12.54	12.58	
15	QPSK	36	39	12.54	12.51	12.48	
15	QPSK	75	0	12.46	12.44	12.44	13.5
15	16QAM	1	0	12.54	12.61	12.50	
15	16QAM	1	37	12.46	12.59	12.43	
15	16QAM	1	74	12.39	12.58	12.32	13
15	16QAM	36	0	12.44	12.47	12.48	
15	16QAM	36	20	12.36	12.36	12.41	
15	16QAM	36	39	12.35	12.31	12.39	13
15	16QAM	75	0	12.26	12.29	12.36	
15	64QAM	1	0	12.65	12.43	12.65	
15	64QAM	1	37	12.59	12.45	12.62	13
15	64QAM	1	74	12.57	12.40	12.57	
15	64QAM	36	0	12.52	12.20	12.23	
15	64QAM	36	20	12.12	12.14	12.12	13
15	64QAM	36	39	12.06	12.10	12.03	
15	64QAM	75	0	12.07	12.06	12.02	
15	256QAM	1	0	11.34	11.36	11.33	12
15	256QAM	1	37	11.30	11.31	11.27	
15	256QAM	1	74	11.28	11.29	11.25	
15	256QAM	36	0	10.85	10.90	10.81	11
15	256QAM	36	20	10.78	10.78	10.80	
15	256QAM	36	39	10.70	10.69	10.74	
15	256QAM	75	0	10.62	10.72	10.67	
Channel				20000	20175	20350	Tune-up limit (dbm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	13.63	13.67	13.62	14.5
10	QPSK	1	25	13.55	13.55	13.54	
10	QPSK	1	49	13.50	13.47	13.45	
10	QPSK	25	0	12.48	12.61	12.56	13.5
10	QPSK	25	12	12.57	12.49	12.50	
10	QPSK	25	25	12.54	12.44	12.43	
10	QPSK	50	0	12.45	12.44	12.41	13.5
10	16QAM	1	0	12.52	12.54	12.47	
10	16QAM	1	25	12.43	12.57	12.42	
10	16QAM	1	49	12.38	12.54	12.33	13
10	16QAM	25	0	12.40	12.42	12.48	
10	16QAM	25	12	12.32	12.33	12.40	
10	16QAM	25	25	12.27	12.27	12.32	13
10	16QAM	50	0	12.24	12.28	12.33	
10	64QAM	1	0	12.60	12.39	12.63	
10	64QAM	1	25	12.60	12.39	12.55	13
10	64QAM	1	49	12.48	12.37	12.55	
10	64QAM	25	0	12.46	12.18	12.16	
10	64QAM	25	12	12.11	12.12	12.07	13
10	64QAM	25	25	12.01	12.04	12.00	
10	64QAM	50	0	12.03	12.01	11.97	
10	256QAM	1	0	11.34	11.38	11.34	12
10	256QAM	1	25	11.28	11.25	11.24	
10	256QAM	1	49	11.25	11.23	11.23	
10	256QAM	25	0	10.79	10.85	10.78	11
10	256QAM	25	12	10.77	10.75	10.78	
10	256QAM	25	25	10.69	10.69	10.68	
10	256QAM	50	0	10.60	10.63	10.58	
Channel				19975	20175	20375	Tune-up limit (dbm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	13.62	13.64	13.60	14.5
5	QPSK	1	12	13.51	13.49	13.50	
5	QPSK	1	24	13.48	13.42	13.41	
5	QPSK	12	0	12.45	12.56	12.52	13.5
5	QPSK	12	7	12.43	12.43	12.45	

5	QPSK	12	13	12.77	12.85	12.64	14
5	QPSK	25	0	12.67	12.71	12.61	
5	16QAM	1	0	12.87	13.02	12.84	14
5	16QAM	1	12	12.72	13.00	12.81	
5	16QAM	1	24	12.71	12.93	12.77	14
5	16QAM	12	0	12.86	12.88	12.90	
5	16QAM	12	7	12.83	12.83	12.83	14
5	16QAM	12	13	12.73	12.68	12.79	
5	16QAM	25	0	12.69	12.64	12.74	14
5	64QAM	1	0	12.66	12.92	12.86	
5	64QAM	1	12	12.59	12.87	12.82	14
5	64QAM	1	24	12.53	12.75	12.71	
5	64QAM	12	0	12.67	12.65	12.58	13.5
5	64QAM	12	7	12.61	12.64	12.48	
5	64QAM	12	13	12.45	12.53	12.40	13.5
5	64QAM	25	0	12.39	12.45	12.33	
5	256QAM	1	0	11.61	11.73	11.66	12.5
5	256QAM	1	12	11.60	11.63	11.62	
5	256QAM	1	24	11.62	11.59	11.53	11.5
5	256QAM	12	0	11.23	11.27	11.25	
5	256QAM	12	7	11.17	11.28	11.16	11.5
5	256QAM	12	13	11.11	11.16	11.12	
5	256QAM	25	0	11.15	11.16	11.13	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	13.89	13.90	13.81	15
3	QPSK	1	8	13.81	13.71	13.70	
3	QPSK	1	14	13.68	13.63	13.50	14
3	QPSK	8	0	12.87	12.93	12.77	
3	QPSK	8	4	12.80	12.86	12.71	14
3	QPSK	8	7	12.72	12.80	12.59	
3	QPSK	15	0	12.62	12.66	12.56	14
3	16QAM	1	0	12.82	12.97	12.79	
3	16QAM	1	8	12.67	12.95	12.76	14
3	16QAM	1	14	12.66	12.88	12.72	
3	16QAM	8	0	12.81	12.83	12.85	14
3	16QAM	8	4	12.78	12.78	12.78	
3	16QAM	8	7	12.68	12.63	12.74	14
3	16QAM	15	0	12.64	12.59	12.69	
3	64QAM	1	0	12.61	12.87	12.81	14
3	64QAM	1	8	12.54	12.82	12.77	
3	64QAM	1	14	12.48	12.70	12.66	13.5
3	64QAM	8	0	12.62	12.60	12.53	
3	64QAM	8	4	12.56	12.59	12.43	12.5
3	64QAM	8	7	12.40	12.48	12.35	
3	64QAM	15	0	12.34	12.40	12.28	11.5
3	256QAM	1	0	11.56	11.68	11.61	
3	256QAM	1	8	11.55	11.58	11.57	11.5
3	256QAM	1	14	11.57	11.54	11.48	
3	256QAM	8	0	11.18	11.22	11.20	11.5
3	256QAM	8	4	11.12	11.23	11.11	
3	256QAM	8	7	11.06	11.11	11.07	11.5
3	256QAM	15	0	11.10	11.11	11.08	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	13.84	13.85	13.76	15
1.4	QPSK	1	3	13.76	13.66	13.65	
1.4	QPSK	1	5	13.63	13.58	13.45	14
1.4	QPSK	3	0	12.82	12.88	12.72	
1.4	QPSK	3	1	12.75	12.81	12.66	14
1.4	QPSK	3	3	12.67	12.75	12.54	
1.4	QPSK	6	0	12.57	12.61	12.51	14
1.4	16QAM	1	0	12.77	12.92	12.74	
1.4	16QAM	1	3	12.62	12.90	12.71	14
1.4	16QAM	1	5	12.61	12.83	12.67	
1.4	16QAM	3	0	12.76	12.78	12.80	14
1.4	16QAM	3	1	12.73	12.73	12.73	
1.4	16QAM	3	3	12.63	12.58	12.69	14
1.4	16QAM	6	0	12.59	12.54	12.64	
1.4	64QAM	1	0	12.56	12.82	12.76	14
1.4	64QAM	1	3	12.49	12.77	12.72	
1.4	64QAM	1	5	12.43	12.65	12.61	13.5
1.4	64QAM	3	0	12.57	12.55	12.48	
1.4	64QAM	3	1	12.51	12.54	12.38	13.5
1.4	64QAM	3	3	12.35	12.43	12.30	
1.4	64QAM	6	0	12.29	12.35	12.23	12.5
1.4	256QAM	1	0	11.51	11.63	11.56	
1.4	256QAM	1	3	11.50	11.53	11.52	12.5
1.4	256QAM	1	5	11.52	11.49	11.43	
1.4	256QAM	3	0	11.13	11.17	11.15	11.5
1.4	256QAM	3	1	11.07	11.18	11.06	
1.4	256QAM	3	3	11.01	11.06	11.02	11.5
1.4	256QAM	6	0	11.05	11.06	11.03	

5	QPSK	12	13	12.52	12.39	12.41	13.5
5	QPSK	25	0	12.40	12.39	12.37	
5	16QAM	1	0	12.47	12.50	12.42	13
5	16QAM	1	12	12.39	12.51	12.39	
5	16QAM	1	24	12.32	12.50	12.27	13
5	16QAM	12	0	12.38	12.41	12.45	
5	16QAM	12	7	12.27	12.30	12.38	13
5	16QAM	12	13	12.24	12.25	12.28	
5	16QAM	25	0	12.20	12.26	12.29	13
5	64QAM	1	0	12.55	12.33	12.57	
5	64QAM	1	12	12.55	12.34	12.54	13
5	64QAM	1	24	12.46	12.32	12.53	
5	64QAM	12	0	12.41	12.16	12.10	13
5	64QAM	12	7	12.07	12.08	12.05	
5	64QAM	12	13	11.99	11.99	11.98	12
5	64QAM	25	0	12.01	11.97	11.95	
5	256QAM	1	0	11.30	11.36	11.30	12
5	256QAM	1	12	11.26	11.24	11.22	
5	256QAM	1	24	11.19	11.20	11.20	11
5	256QAM	12	0	10.75	10.80	10.72	
5	256QAM	12	7	10.71	10.70	10.75	11
5	256QAM	12	13	10.64	10.67	10.67	
5	256QAM	25	0	10.54	10.61	10.56	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	13.57	13.59	13.55	14.5
3	QPSK	1	8	13.46	13.44	13.45	
3	QPSK	1	14	13.45	13.37	13.36	13.5
3	QPSK	8	0	12.40	12.51	12.47	
3	QPSK	8	4	12.37	12.38	12.40	13.5
3	QPSK	8	7	12.33	12.34	12.36	
3	QPSK	15	0	12.35	12.34	12.32	13.5
3	16QAM	1	0	12.42	12.45	12.37	
3	16QAM	1	8	12.34	12.46	12.34	13
3	16QAM	1	14	12.27	12.45	12.22	
3	16QAM	8	0	12.33	12.36	12.40	13
3	16QAM	8	4	12.22	12.25	12.33	
3	16QAM	8	7	12.19	12.20	12.23	13
3	16QAM	15	0	12.15	12.21	12.24	
3	64QAM	1	0	12.50	12.28	12.52	13
3	64QAM	1	8	12.50	12.29	12.49	
3	64QAM	1	14	12.41	12.27	12.48	13
3	64QAM	8	0	12.36	12.11	12.05	
3	64QAM	8	4	12.02	12.03	12.00	12
3	64QAM	8	7	11.94	11.94	11.93	
3	64QAM	15	0	11.96	11.92	11.90	12
3	256QAM	1	0	11.25	11.31	11.25	
3	256QAM	1	8	11.21	11.19	11.17	12
3	256QAM	1	14	11.14	11.15	11.15	
3	256QAM	8	0	10.70	10.75	10.67	11
3	256QAM	8	4	10.66	10.65	10.70	
3	256QAM	8	7	10.59	10.62	10.62	11
3	256QAM	15	0	10.49	10.56	10.51	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	13.55	13.57	13.53	14.5
1.4	QPSK	1	3	13.44	13.42	13.43	
1.4	QPSK	1	5	13.45	13.35	13.34	13.5
1.4	QPSK	3	0	12.40	12.49	12.45	
1.4	QPSK	3	1	12.38	12.36	12.38	13.5
1.4	QPSK	3	3	12.37	12.32	12.34	
1.4	QPSK	6	0	12.33	12.32	12.30	13
1.4	16QAM	1	0	12.37	12.40	12.32	
1.4	16QAM	1	3	12.29	12.41	12.29	13.5
1.4	16QAM	1	5	12.22	12.40	12.17	
1.4	16QAM	3	0	12.28	12.31	12.35	13
1.4	16QAM	3	1	12.17	12.20	12.28	
1.4	16QAM	3	3	12.14	12.15	12.18	13
1.4	16QAM	6	0	12.10	12.16	12.19	
1.4	64QAM	1	0	12.45	12.23	12.47	13
1.4	64QAM	1	3	12.45	12.24	12.44	
1.4	64QAM	1	5	12.36	12.22	12.43	13
1.4	64QAM	3	0	12.31	12.06	12.00	
1.4	64QAM	3	1	11.97	11.98	11.95	13
1.4	64QAM	3	3	11.89	11.89	11.88	
1.4	64QAM	6	0	11.91	11.87	11.85	12
1.4	256QAM	1	0	11.20	11.26	11.20	
1.4	256QAM	1	3	11.16	11.14	11.12	12
1.4	256QAM	1	5	11.09	11.10	11.10	
1.4	256QAM	3	0	10.65	10.70	10.62	12
1.4	256QAM	3	1	10.61	10.60	10.65	
1.4	256QAM	3	3	10.54	10.57	10.57	11
1.4	256QAM	6	0	10.44	10.51	10.46	

Band 5 (For Standalone SAR) 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	21
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	20.54	20.61	20.57	20
10	QPSK	1	25	20.46	20.54	20.49	
10	QPSK	1	49	20.43	20.50	20.46	
10	QPSK	25	0	19.52	19.54	19.50	
10	QPSK	25	12	19.44	19.44	19.47	20
10	QPSK	25	25	19.35	19.39	19.44	
10	QPSK	50	0	19.27	19.28	19.42	
10	16QAM	1	0	19.12	19.18	19.10	
10	16QAM	1	25	19.08	19.12	19.03	20
10	16QAM	1	49	19.05	19.09	19.02	
10	16QAM	25	0	18.94	18.90	18.86	
10	16QAM	25	12	18.92	18.83	18.80	
10	16QAM	25	25	18.82	18.76	18.77	19.5
10	16QAM	50	0	18.75	18.72	18.72	
10	64QAM	1	0	18.98	19.07	19.08	
10	64QAM	1	25	18.95	19.03	19.03	
10	64QAM	1	49	18.87	18.99	18.99	19.5
10	64QAM	25	0	18.80	18.73	18.82	
10	64QAM	25	12	18.71	18.61	18.71	
10	64QAM	25	25	18.67	18.56	18.63	
10	64QAM	50	0	18.61	18.45	18.56	17.5
10	256QAM	1	0	17.12	17.17	17.10	
10	256QAM	1	25	17.07	17.08	17.07	
10	256QAM	1	49	17.04	17.00	17.05	
10	256QAM	25	0	16.26	16.38	16.22	16.5
10	256QAM	25	12	16.20	16.33	16.14	
10	256QAM	25	25	16.15	16.23	16.05	
10	256QAM	50	0	16.12	16.21	15.96	
Channel				20425	20525	20625	21
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	20.49	20.58	20.52	20
5	QPSK	1	12	20.41	20.49	20.44	
5	QPSK	1	24	20.38	20.45	20.41	
5	QPSK	12	0	19.47	19.49	19.45	
5	QPSK	12	7	19.39	19.39	19.42	20
5	QPSK	12	13	19.30	19.34	19.39	
5	QPSK	25	0	19.22	19.23	19.37	
5	16QAM	1	0	19.07	19.13	19.05	
5	16QAM	1	12	19.03	19.07	18.98	20
5	16QAM	1	24	19.00	19.04	18.97	
5	16QAM	12	0	18.89	18.85	18.81	
5	16QAM	12	7	18.87	18.78	18.75	
5	16QAM	12	13	18.77	18.71	18.72	19.5
5	16QAM	25	0	18.70	18.67	18.67	
5	64QAM	1	0	18.93	19.02	19.03	
5	64QAM	1	12	18.90	18.98	18.98	
5	64QAM	1	24	18.82	18.94	18.94	19.5
5	64QAM	12	0	18.75	18.68	18.77	
5	64QAM	12	7	18.66	18.56	18.66	
5	64QAM	12	13	18.62	18.51	18.58	
5	64QAM	25	0	18.56	18.40	18.51	17.5
5	256QAM	1	0	17.07	17.12	17.05	
5	256QAM	1	12	17.02	17.03	17.02	
5	256QAM	1	24	16.99	16.95	17.00	
5	256QAM	12	0	16.21	16.33	16.17	16.5
5	256QAM	12	7	16.15	16.28	16.09	
5	256QAM	12	13	16.10	16.18	16.00	
5	256QAM	25	0	16.07	16.16	15.91	
Channel				20415	20525	20635	21
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	20.45	20.54	20.48	20
3	QPSK	1	8	20.37	20.45	20.40	
3	QPSK	1	14	20.34	20.41	20.37	
3	QPSK	8	0	19.43	19.45	19.41	
3	QPSK	8	4	19.35	19.35	19.38	20
3	QPSK	8	7	19.26	19.30	19.35	
3	QPSK	15	0	19.18	19.19	19.33	
3	16QAM	1	0	19.03	19.09	19.01	
3	16QAM	1	8	18.98	19.03	18.94	20
3	16QAM	1	14	18.96	19.00	18.93	
3	16QAM	8	0	18.85	18.81	18.77	
3	16QAM	8	4	18.83	18.74	18.71	
3	16QAM	8	7	18.73	18.67	18.68	19.5
3	16QAM	15	0	18.66	18.63	18.63	
3	64QAM	1	0	18.89	18.98	18.99	
3	64QAM	1	8	18.86	18.94	18.94	
3	64QAM	1	14	18.78	18.90	18.90	19.5
3	64QAM	8	0	18.71	18.64	18.73	
3	64QAM	8	4	18.62	18.52	18.62	
3	64QAM	8	7	18.58	18.47	18.54	
3	64QAM	15	0	18.52	18.36	18.47	17.5
3	256QAM	1	0	17.03	17.08	17.01	
3	256QAM	1	8	16.98	16.99	16.98	
3	256QAM	1	14	16.95	16.91	16.96	
3	256QAM	8	0	16.17	16.29	16.13	16.5
3	256QAM	8	4	16.11	16.24	16.05	
3	256QAM	8	7	16.06	16.14	15.96	
3	256QAM	15	0	16.03	16.12	15.87	
Channel				20407	20525	20643	21
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	20.42	20.51	20.45	21
1.4	QPSK	1	3	20.34	20.42	20.37	
1.4	QPSK	1	5	20.31	20.38	20.34	
1.4	QPSK	3	0	19.40	19.42	19.38	
1.4	QPSK	3	1	19.32	19.32	19.35	

Band 12 (For Standalone SAR) 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	21
10	QPSK	1	0	20.49	20.53	20.51	
10	QPSK	1	25	20.40	20.54	20.46	
10	QPSK	1	49	20.36	20.52	20.41	
10	QPSK	25	0	19.36	19.43	19.38	20
10	QPSK	25	12	19.33	19.32	19.36	
10	QPSK	25	25	19.22	19.28	19.29	
10	QPSK	50	0	19.18	19.26	19.27	
10	16QAM	1	0	19.33	19.44	19.42	20
10	16QAM	1	25	19.30	19.35	19.33	
10	16QAM	1	49	19.21	19.25	19.29	
10	16QAM	25	0	19.04	19.14	19.08	
10	16QAM	25	12	18.95	19.03	19.06	20
10	16QAM	25	25	18.84	19.00	19.01	
10	16QAM	50	0	18.81	18.91	18.90	
10	64QAM	1	0	19.40	19.18	19.12	
10	64QAM	1	25	19.32	19.16	19.08	20
10	64QAM	1	49	19.29	19.12	18.99	
10	64QAM	25	0	18.93	18.96	18.90	
10	64QAM	25	12	18.85	18.85	18.84	
10	64QAM	25	25	18.78	18.75	18.78	19.5
10	64QAM	50	0	18.76	18.65	18.69	
10	256QAM	1	0	17.26	17.35	17.30	
10	256QAM	1	25	17.20	17.28	17.26	
10	256QAM	1	49	17.17	17.21	17.21	17.5
10	256QAM	25	0	16.42	16.48	16.38	
10	256QAM	25	12	16.40	16.40	16.28	
10	256QAM	25	25	16.36	16.36	16.19	
10	256QAM	50	0	16.29	16.30	16.11	16.5
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	20.44	20.51	20.47	
5	QPSK	1	12	20.35	20.49	20.41	
5	QPSK	1	24	20.31	20.47	20.36	20
5	QPSK	12	0	19.31	19.38	19.33	
5	QPSK	12	7	19.28	19.27	19.31	
5	QPSK	12	13	19.17	19.23	19.24	
5	QPSK	25	0	19.13	19.21	19.22	20
5	16QAM	1	0	19.28	19.39	19.37	
5	16QAM	1	12	19.25	19.30	19.28	
5	16QAM	1	24	19.16	19.20	19.24	
5	16QAM	12	0	18.99	19.09	19.03	20
5	16QAM	12	7	18.90	18.98	19.01	
5	16QAM	12	13	18.79	18.85	18.96	
5	16QAM	25	0	18.76	18.86	18.85	
5	64QAM	1	0	19.35	19.13	19.07	20
5	64QAM	1	12	19.27	19.11	19.03	
5	64QAM	1	24	19.24	19.07	18.94	
5	64QAM	12	0	18.88	18.91	18.85	
5	64QAM	12	7	18.80	18.80	18.79	19.5
5	64QAM	12	13	18.73	18.70	18.73	
5	64QAM	25	0	18.71	18.60	18.64	
5	256QAM	1	0	17.21	17.30	17.25	
5	256QAM	1	12	17.15	17.23	17.21	17.5
5	256QAM	1	24	17.12	17.16	17.16	
5	256QAM	12	0	16.37	16.43	16.33	
5	256QAM	12	7	16.35	16.35	16.23	
5	256QAM	12	13	16.31	16.31	16.14	16.5
5	256QAM	25	0	16.24	16.25	16.06	
Channel				23025	23095	23165	
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	20.39	20.50	20.42	21
3	QPSK	1	8	20.30	20.44	20.36	
3	QPSK	1	14	20.26	20.42	20.31	20
3	QPSK	8	0	19.26	19.33	19.28	
3	QPSK	8	4	19.23	19.22	19.26	
3	QPSK	8	7	19.12	19.18	19.19	
3	QPSK	15	0	19.08	19.16	19.17	20
3	16QAM	1	0	19.23	19.34	19.32	
3	16QAM	1	8	19.20	19.25	19.23	
3	16QAM	1	14	19.11	19.15	19.19	
3	16QAM	8	0	18.94	19.04	18.98	20
3	16QAM	8	4	18.85	18.93	18.96	
3	16QAM	8	7	18.74	18.90	18.91	
3	16QAM	15	0	18.71	18.81	18.80	
3	64QAM	1	0	19.30	19.08	19.02	20
3	64QAM	1	8	19.22	19.06	18.98	
3	64QAM	1	14	19.19	19.02	18.89	
3	64QAM	8	0	18.83	18.86	18.80	
3	64QAM	8	4	18.75	18.75	18.74	19.5
3	64QAM	8	7	18.68	18.65	18.68	
3	64QAM	15	0	18.66	18.55	18.59	
3	256QAM	1	0	17.16	17.25	17.20	
3	256QAM	1	8	17.10	17.18	17.16	17.5
3	256QAM	1	14	17.07	17.11	17.11	
3	256QAM	8	0	16.32	16.38	16.28	
3	256QAM	8	4	16.30	16.30	16.18	
3	256QAM	8	7	16.26	16.26	16.09	16.5
3	256QAM	15	0	16.19	16.20	16.01	
Channel				23017	23095	23173	
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	20.34	20.45	20.37	21
1.4	QPSK	1	3	20.25	20.39	20.31	
1.4	QPSK	1	5	20.21	20.37	20.26	
1.4	QPSK	3	0	19.21	19.28	19.23	
1.4	QPSK	3	1	19.18	19.17	19.21	17.5

1.4	QPSK	3	3	19.23	19.27	19.32	
1.4	QPSK	6	0	19.15	19.16	19.30	20
1.4	16QAM	1	0	19.00	19.06	18.98	
1.4	16QAM	1	3	18.96	19.00	18.91	
1.4	16QAM	1	5	18.93	18.97	18.90	
1.4	16QAM	3	0	18.82	18.78	18.74	
1.4	16QAM	3	1	18.80	18.71	18.68	
1.4	16QAM	3	3	18.70	18.64	18.65	
1.4	16QAM	6	0	18.63	18.60	18.60	19.5
1.4	64QAM	1	0	18.86	18.95	18.96	
1.4	64QAM	1	3	18.83	18.91	18.91	
1.4	64QAM	1	5	18.75	18.87	18.87	
1.4	64QAM	3	0	18.68	18.61	18.70	
1.4	64QAM	3	1	18.59	18.49	18.59	
1.4	64QAM	3	3	18.55	18.44	18.51	
1.4	64QAM	6	0	18.49	18.33	18.44	19.5
1.4	256QAM	1	0	17.00	17.05	16.98	
1.4	256QAM	1	3	16.95	16.96	16.95	
1.4	256QAM	1	5	16.92	16.88	16.93	
1.4	256QAM	3	0	16.14	16.26	16.10	
1.4	256QAM	3	1	16.08	16.21	16.02	
1.4	256QAM	3	3	16.03	16.11	15.93	
1.4	256QAM	6	0	16.00	16.09	15.84	16.5

1.4	QPSK	3	3	19.07	19.13	19.14	
1.4	QPSK	6	0	19.03	19.11	19.12	20
1.4	16QAM	1	0	19.18	19.29	19.27	
1.4	16QAM	1	3	19.15	19.20	19.18	
1.4	16QAM	1	5	19.06	19.10	19.14	
1.4	16QAM	3	0	18.89	18.99	18.93	
1.4	16QAM	3	1	18.80	18.88	18.91	
1.4	16QAM	3	3	18.69	18.85	18.86	
1.4	16QAM	6	0	18.66	18.76	18.75	20
1.4	64QAM	1	0	19.25	19.03	18.97	
1.4	64QAM	1	3	19.17	19.01	18.93	
1.4	64QAM	1	5	19.14	18.97	18.84	
1.4	64QAM	3	0	18.78	18.81	18.75	
1.4	64QAM	3	1	18.70	18.70	18.69	
1.4	64QAM	3	3	18.63	18.60	18.63	
1.4	64QAM	6	0	18.61	18.50	18.54	19.5
1.4	256QAM	1	0	17.11	17.20	17.15	
1.4	256QAM	1	3	17.05	17.13	17.11	
1.4	256QAM	1	5	17.02	17.06	17.06	
1.4	256QAM	3	0	16.27	16.33	16.23	
1.4	256QAM	3	1	16.25	16.25	16.13	
1.4	256QAM	3	3	16.21	16.21	16.04	
1.4	256QAM	6	0	16.14	16.15	15.96	16.5

Band 13(For Standalone SAR) Part 27F							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			23.5
10	QPSK	1	0		23.08		
10	QPSK	1	25		22.98		
10	QPSK	1	49		22.87		
10	QPSK	25	0		22.05		
10	QPSK	25	12		21.94		
10	QPSK	25	25		21.90		
10	QPSK	50	0		21.79		
10	16QAM	1	0		21.79		
10	16QAM	1	25		21.76		
10	16QAM	1	49		21.74		
10	16QAM	25	0		21.32		
10	16QAM	25	12		21.25		
10	16QAM	25	25		21.18		
10	16QAM	50	0		21.10		
10	64QAM	1	0		21.74		
10	64QAM	1	25		21.68		
10	64QAM	1	49		21.64		
10	64QAM	25	0		21.40		
10	64QAM	25	12		21.37		
10	64QAM	25	25		21.30		
10	64QAM	50	0		21.25		
10	256QAM	1	0		17.68		
10	256QAM	1	25		17.63		
10	256QAM	1	49		17.60		
10	256QAM	25	0		16.91		
10	256QAM	25	12		16.82		
10	256QAM	25	25		16.73		
10	256QAM	50	0		16.63		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	22.89	23.04	22.98	23.5
5	QPSK	1	12	22.82	22.94	22.88	
5	QPSK	1	24	22.67	22.80	22.73	22.5
5	QPSK	12	0	21.88	22.00	21.87	
5	QPSK	12	7	21.74	21.88	21.81	22.5
5	QPSK	12	13	21.72	21.86	21.81	
5	QPSK	25	0	21.59	21.73	21.65	22.5
5	16QAM	1	0	21.61	21.74	21.68	
5	16QAM	1	12	21.59	21.72	21.63	22.5
5	16QAM	1	24	21.51	21.68	21.60	
5	16QAM	12	0	21.13	21.28	21.21	22
5	16QAM	12	7	21.11	21.18	21.18	
5	16QAM	12	13	21.00	21.12	21.07	22
5	16QAM	25	0	20.92	21.05	20.96	
5	64QAM	1	0	21.64	21.70	21.62	22.5
5	64QAM	1	12	21.46	21.64	21.52	
5	64QAM	1	24	21.48	21.58	21.53	22
5	64QAM	12	0	21.24	21.35	21.28	
5	64QAM	12	7	21.19	21.33	21.24	22
5	64QAM	12	13	21.14	21.24	21.17	
5	64QAM	25	0	21.05	21.20	21.12	18.5
5	256QAM	1	0	17.5	17.64	17.56	
5	256QAM	1	12	17.45	17.58	17.54	17.5
5	256QAM	1	24	17.43	17.54	17.49	
5	256QAM	12	0	16.69	16.87	16.8	17.5
5	256QAM	12	7	16.62	16.76	16.7	
5	256QAM	12	13	16.56	16.7	16.65	17.5
5	256QAM	25	0	16.52	16.58	16.5	

Band 66(For Standalone SAR)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	14.5
20	QPSK	1	0	13.68	13.76	13.62	
20	QPSK	1	49	13.59	13.67	13.57	13.5
20	QPSK	1	99	13.51	13.60	13.51	
20	QPSK	50	0	12.63	12.73	12.60	13.5
20	QPSK	50	24	12.52	12.63	12.56	
20	QPSK	50	50	12.48	12.57	12.47	13.5
20	QPSK	100	0	12.43	12.48	12.46	
20	16QAM	1	0	12.67	12.71	12.69	13
20	16QAM	1	49	12.60	12.68	12.61	
20	16QAM	1	99	12.51	12.62	12.51	13
20	16QAM	50	0	12.48	12.50	12.48	
20	16QAM	50	24	12.45	12.49	12.44	13
20	16QAM	50	50	12.37	12.41	12.35	
20	16QAM	100	0	12.31	12.32	12.27	13
20	64QAM	1	0	12.47	12.62	12.55	
20	64QAM	1	49	12.44	12.61	12.52	11
20	64QAM	1	99	12.37	12.59	12.46	
20	64QAM	50	0	12.40	12.44	12.48	10
20	64QAM	50	24	12.38	12.39	12.45	
20	64QAM	50	50	12.33	12.33	12.42	10
20	64QAM	100	0	12.23	12.31	12.38	
20	256QAM	1	0	10.30	10.40	10.36	11
20	256QAM	1	49	10.28	10.37	10.26	
20	256QAM	1	99	10.18	10.36	10.15	10
20	256QAM	50	0	9.81	9.92	9.87	
20	256QAM	50	24	9.79	9.88	9.80	10
20	256QAM	50	50	9.76	9.78	9.78	
20	256QAM	100	0	9.72	9.69	9.74	10
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	Tune-up limit (dBm)
15	QPSK	1	0	13.64	13.72	13.59	14.5
15	QPSK	1	37	13.56	13.66	13.53	
15	QPSK	1	74	13.50	13.56	13.47	13.5
15	QPSK	36	0	12.58	12.70	12.56	
15	QPSK	36	20	12.50	12.60	12.54	13.5
15	QPSK	36	39	12.43	12.54	12.43	
15	QPSK	75	0	12.41	12.45	12.43	13.5
15	16QAM	1	0	12.63	12.68	12.65	
15	16QAM	1	37	12.58	12.67	12.59	13
15	16QAM	1	74	12.46	12.58	12.48	
15	16QAM	36	0	12.45	12.48	12.46	13
15	16QAM	36	20	12.43	12.44	12.40	
15	16QAM	36	39	12.34	12.38	12.31	11
15	16QAM	75	0	12.29	12.27	12.25	
15	64QAM	1	0	12.44	12.57	12.50	10
15	64QAM	1	37	12.39	12.59	12.50	
15	64QAM	1	74	12.35	12.57	12.43	10
15	64QAM	36	0	12.38	12.42	12.46	
15	64QAM	36	20	12.33	12.36	12.42	10
15	64QAM	36	39	12.30	12.29	12.40	
15	64QAM	75	0	12.21	12.28	12.35	11
15	256QAM	1	0	10.26	10.39	10.32	
15	256QAM	1	37	10.25	10.33	10.22	10
15	256QAM	1	74	10.15	10.31	10.12	
15	256QAM	36	0	9.79	9.88	9.82	10
15	256QAM	36	20	9.75	9.83	9.76	
15	256QAM	36	39	9.73	9.76	9.76	10
15	256QAM	75	0	9.69	9.66	9.69	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	14.5
10	QPSK	1	0	13.58	13.66	13.52	
10	QPSK	1	25	13.49	13.57	13.47	13.5
10	QPSK	1	49	13.41	13.50	13.41	
10	QPSK	25	0	12.53	12.63	12.50	13.5
10	QPSK	25	12	12.42	12.53	12.46	
10	QPSK	25	25	12.38	12.47	12.37	13.5
10	QPSK	50	0	12.33	12.38	12.36	
10	16QAM	1	0	12.57	12.61	12.59	13
10	16QAM	1	25	12.50	12.58	12.51	
10	16QAM	1	49	12.41	12.52	12.41	13
10	16QAM	25	0	12.38	12.40	12.38	
10	16QAM	25	12	12.35	12.39	12.34	13
10	16QAM	25	25	12.27	12.31	12.25	
10	16QAM	50	0	12.21	12.22	12.17	13
10	64QAM	1	0	12.37	12.52	12.45	
10	64QAM	1	25	12.34	12.51	12.42	13
10	64QAM	1	49	12.27	12.49	12.36	
10	64QAM	25	0	12.30	12.34	12.38	11
10	64QAM	25	12	12.28	12.29	12.35	
10	64QAM	25	25	12.23	12.23	12.32	11
10	64QAM	50	0	12.13	12.21	12.28	
10	256QAM	1	0	10.20	10.30	10.26	10
10	256QAM	1	25	10.18	10.27	10.16	
10	256QAM	1	49	10.08	10.26	10.05	10
10	256QAM	25	0	9.71	9.82	9.77	
10	256QAM	25	12	9.69	9.78	9.70	10
10	256QAM	25	25	9.66	9.68	9.68	
10	256QAM	50	0	9.62	9.59	9.64	10
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	Tune-up limit (dBm)
5	QPSK	1	0	13.53	13.61	13.47	14.5
5	QPSK	1	12	13.44	13.52	13.42	
5	QPSK	1	24	13.36	13.45	13.36	13.5
5	QPSK	12	0	12.48	12.58	12.45	
5	QPSK	12	7	12.37	12.48	12.41	

5	QPSK	12	13	12.33	12.42	12.32	13.5
5	QPSK	25	0	12.28	12.33	12.31	
5	16QAM	1	0	12.52	12.56	12.54	
5	16QAM	1	12	12.45	12.53	12.46	13.5
5	16QAM	1	24	12.36	12.47	12.36	
5	16QAM	12	0	12.33	12.35	12.33	
5	16QAM	12	7	12.30	12.34	12.29	13
5	16QAM	12	13	12.22	12.26	12.20	
5	16QAM	25	0	12.16	12.17	12.12	
5	64QAM	1	0	12.32	12.47	12.40	13
5	64QAM	1	12	12.29	12.46	12.37	
5	64QAM	1	24	12.22	12.44	12.31	
5	64QAM	12	0	12.25	12.29	12.33	13
5	64QAM	12	7	12.23	12.24	12.30	
5	64QAM	12	13	12.18	12.18	12.27	
5	64QAM	25	0	12.08	12.16	12.23	11
5	256QAM	1	0	10.15	10.25	10.21	
5	256QAM	1	12	10.13	10.22	10.11	
5	256QAM	1	24	10.03	10.21	10.00	10
5	256QAM	12	0	9.66	9.77	9.72	
5	256QAM	12	7	9.64	9.73	9.65	
5	256QAM	12	13	9.61	9.63	9.63	10
5	256QAM	25	0	9.57	9.54	9.59	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	13.48	13.56	13.42	14.5
3	QPSK	1	8	13.39	13.47	13.37	
3	QPSK	1	14	13.31	13.40	13.31	
3	QPSK	8	0	12.43	12.53	12.40	13.5
3	QPSK	8	4	12.32	12.43	12.36	
3	QPSK	8	7	12.28	12.37	12.27	
3	QPSK	15	0	12.23	12.28	12.26	13.5
3	16QAM	1	0	12.47	12.51	12.49	
3	16QAM	1	8	12.40	12.48	12.41	
3	16QAM	1	14	12.31	12.42	12.31	13
3	16QAM	8	0	12.28	12.30	12.28	
3	16QAM	8	4	12.25	12.29	12.24	
3	16QAM	8	7	12.17	12.21	12.15	13
3	16QAM	15	0	12.11	12.12	12.07	
3	64QAM	1	0	12.27	12.42	12.35	
3	64QAM	1	8	12.24	12.41	12.32	13
3	64QAM	1	14	12.17	12.39	12.26	
3	64QAM	8	0	12.20	12.24	12.28	
3	64QAM	8	4	12.18	12.19	12.25	13
3	64QAM	8	7	12.13	12.13	12.22	
3	64QAM	15	0	12.03	12.11	12.18	
3	256QAM	1	0	10.10	10.20	10.16	11
3	256QAM	1	8	10.08	10.17	10.06	
3	256QAM	1	14	9.98	10.16	9.95	
3	256QAM	8	0	9.61	9.72	9.67	10
3	256QAM	8	4	9.59	9.68	9.60	
3	256QAM	8	7	9.56	9.58	9.58	
3	256QAM	15	0	9.52	9.49	9.54	Tune-up limit (dBm)
Channel				131979	132322	132665	
Frequency (MHz)				1710.7	1745	1779.3	Tune-up limit (dBm)
1.4	QPSK	1	0	13.43	13.51	13.37	
1.4	QPSK	1	3	13.34	13.42	13.32	14.5
1.4	QPSK	1	5	13.26	13.35	13.26	
1.4	QPSK	3	0	12.48	12.53	12.35	
1.4	QPSK	3	1	12.37	12.38	12.31	13.5
1.4	QPSK	3	3	12.33	12.32	12.27	
1.4	QPSK	6	0	12.18	12.23	12.21	
1.4	16QAM	1	0	12.42	12.46	12.44	13.5
1.4	16QAM	1	3	12.35	12.43	12.36	
1.4	16QAM	1	5	12.26	12.37	12.26	
1.4	16QAM	3	0	12.23	12.25	12.23	13
1.4	16QAM	3	1	12.20	12.24	12.19	
1.4	16QAM	3	3	12.12	12.16	12.10	
1.4	16QAM	6	0	12.06	12.07	12.02	13
1.4	64QAM	1	0	12.22	12.37	12.30	
1.4	64QAM	1	3	12.19	12.36	12.27	
1.4	64QAM	1	5	12.12	12.34	12.21	13
1.4	64QAM	3	0	12.15	12.19	12.23	
1.4	64QAM	3	1	12.13	12.14	12.20	
1.4	64QAM	3	3	12.08	12.08	12.17	13
1.4	64QAM	6	0	11.98	12.06	12.13	
1.4	256QAM	1	0	10.05	10.15	10.11	
1.4	256QAM	1	3	10.03	10.12	10.01	11
1.4	256QAM	1	5	9.93	10.11	9.90	
1.4	256QAM	3	0	9.56	9.67	9.62	
1.4	256QAM	3	1	9.54	9.63	9.55	10
1.4	256QAM	3	3	9.51	9.53	9.53	
1.4	256QAM	6	0	9.47	9.44	9.49	

Band 2 (1900MHz Band)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	15
Frequency (MHz)				1880	1880	1900	
20	QPSK	1	0	14.47	14.52	14.40	15
20	QPSK	1	49	14.40	14.30	14.29	
20	QPSK	1	99	14.29	14.20	14.12	14
20	QPSK	50	0	13.47	13.51	13.38	
20	QPSK	50	24	13.38	13.47	13.29	14
20	QPSK	50	50	13.31	13.39	13.18	
20	QPSK	100	0	13.21	13.27	13.14	14
20	16QAM	1	0	13.41	13.55	13.40	
20	16QAM	1	49	13.29	13.53	13.35	14
20	16QAM	1	99	13.24	13.49	13.33	
20	16QAM	50	0	13.42	13.44	13.46	14
20	16QAM	50	24	13.36	13.38	13.39	
20	16QAM	50	50	13.27	13.25	13.34	14
20	16QAM	100	0	13.24	13.21	13.27	
20	64QAM	1	0	13.22	13.47	13.42	14
20	64QAM	1	49	13.12	13.41	13.39	
20	64QAM	1	99	13.07	13.30	13.26	14
20	64QAM	50	0	13.19	13.22	13.13	
20	64QAM	50	24	13.16	13.19	13.05	14
20	64QAM	50	50	13.02	13.08	12.93	
20	64QAM	100	0	12.95	13.00	12.88	13
20	256QAM	1	0	12.17	12.26	12.22	
20	256QAM	1	49	12.15	12.20	12.16	13
20	256QAM	1	99	12.18	12.12	12.06	
20	256QAM	50	0	11.76	11.83	11.80	12.5
20	256QAM	50	24	11.69	11.81	11.72	
20	256QAM	50	50	11.64	11.72	11.67	12.5
20	256QAM	100	0	11.67	11.73	11.68	
Channel				18675	18900	19125	15
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	14.45	14.46	14.37	15
15	QPSK	1	37	14.37	14.27	14.26	
15	QPSK	1	74	14.24	14.19	14.06	14
15	QPSK	36	0	13.43	13.49	13.33	
15	QPSK	36	20	13.36	13.42	13.27	14
15	QPSK	36	39	13.28	13.36	13.15	
15	QPSK	75	0	13.18	13.22	13.12	14
15	16QAM	1	0	13.38	13.53	13.35	
15	16QAM	1	37	13.23	13.51	13.32	14
15	16QAM	1	74	13.22	13.44	13.28	
15	16QAM	36	0	13.37	13.39	13.41	14
15	16QAM	36	20	13.34	13.34	13.34	
15	16QAM	36	39	13.24	13.19	13.30	14
15	16QAM	75	0	13.20	13.15	13.25	
15	64QAM	1	0	13.17	13.43	13.37	14
15	64QAM	1	37	13.10	13.38	13.33	
15	64QAM	1	74	13.04	13.26	13.22	14
15	64QAM	36	0	13.18	13.16	13.09	
15	64QAM	36	20	13.12	13.15	12.99	14
15	64QAM	36	39	12.96	13.04	12.91	
15	64QAM	75	0	12.90	12.96	12.84	13
15	256QAM	1	0	12.12	12.24	12.17	
15	256QAM	1	37	12.11	12.14	12.13	13
15	256QAM	1	74	12.13	12.10	12.04	
15	256QAM	36	0	11.74	11.78	11.76	12.5
15	256QAM	36	20	11.68	11.79	11.67	
15	256QAM	36	39	11.62	11.67	11.63	12.5
15	256QAM	75	0	11.66	11.67	11.64	
Channel				18650	18900	19150	15
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	14.40	14.41	14.32	15
10	QPSK	1	25	14.32	14.22	14.21	
10	QPSK	1	49	14.19	14.14	14.01	14
10	QPSK	25	0	13.38	13.44	13.28	
10	QPSK	25	12	13.31	13.37	13.22	14
10	QPSK	25	25	13.23	13.31	13.10	
10	QPSK	50	0	13.13	13.17	13.07	14
10	16QAM	1	0	13.33	13.48	13.30	
10	16QAM	1	25	13.18	13.46	13.27	14
10	16QAM	1	49	13.17	13.39	13.23	
10	16QAM	25	0	13.32	13.34	13.36	14
10	16QAM	25	12	13.29	13.29	13.29	
10	16QAM	25	25	13.19	13.14	13.25	14
10	16QAM	50	0	13.15	13.10	13.20	
10	64QAM	1	0	13.12	13.38	13.32	14
10	64QAM	1	25	13.05	13.33	13.28	
10	64QAM	1	49	12.99	13.21	13.17	14
10	64QAM	25	0	13.13	13.11	13.04	
10	64QAM	25	12	13.07	13.10	12.94	14
10	64QAM	25	25	12.91	12.99	12.86	
10	64QAM	50	0	12.85	12.91	12.79	13
10	256QAM	1	0	12.07	12.19	12.12	
10	256QAM	1	25	12.06	12.09	12.08	13
10	256QAM	1	49	12.08	12.05	11.99	
10	256QAM	25	0	11.69	11.73	11.71	12.5
10	256QAM	25	12	11.63	11.74	11.62	
10	256QAM	25	25	11.57	11.62	11.58	12.5
10	256QAM	50	0	11.61	11.62	11.59	
Channel				18625	18900	19175	15
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	14.35	14.36	14.27	15
5	QPSK	1	12	14.27	14.17	14.16	
5	QPSK	1	24	14.14	14.09	13.96	14
5	QPSK	12	0	13.33	13.39	13.23	
5	QPSK	12	7	13.26	13.32	13.17	14

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	15
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	14.47	14.54	14.49	15
20	QPSK	1	49	14.41	14.44	14.42	
20	QPSK	1	99	14.37	14.36	14.32	14
20	QPSK	50	0	13.43	13.48	13.44	
20	QPSK	50	24	13.42	13.40	13.41	14
20	QPSK	50	50	13.37	13.34	13.31	
20	QPSK	100	0	13.29	13.31	13.27	14
20	16QAM	1	0	13.40	13.45	13.36	
20	16QAM	1	49	13.30	13.44	13.27	14
20	16QAM	1	99	13.26	13.42	13.17	
20	16QAM	50	0	13.26	13.31	13.35	14
20	16QAM	50	24	13.22	13.22	13.26	
20	16QAM	50	50	13.18	13.16	13.22	14
20	16QAM	100	0	13.12	13.14	13.19	
20	64QAM	1	0	13.47	13.28	13.49	14
20	64QAM	1	49	13.45	13.27	13.47	
20	64QAM	1	99	13.39	13.23	13.43	14
20	64QAM	50	0	13.36	13.03	13.06	
20	64QAM	50	24	12.98	13.01	12.98	14
20	64QAM	50	50	12.92	12.93	12.89	
20	64QAM	100	0	12.91	12.90	12.88	13
20	256QAM	1	0	12.38	12.43	12.39	
20	256QAM	1	49	12.35	12.37	12.30	13
20	256QAM	1	99	12.33	12.33	12.28	
20	256QAM	50	0	11.90	11.93	11.84	12.5
20	256QAM	50	24	11.82	11.84	11.83	
20	256QAM	50	50	11.76	11.76	11.76	12.5
20	256QAM	100	0	11.68	11.75	11.70	
Channel				20025	20175	20325	15
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	14.46	14.52	14.44	15
15	QPSK	1	37	14.35	14.42	14.37	
15	QPSK	1	74	14.33	14.34	14.30	14
15	QPSK	36	0	13.41	13.45	13.43	
15	QPSK	36	20	13.38	13.35	13.39	14
15	QPSK	36	39	13.35	13.32	13.29	
15	QPSK	75	0	13.27	13.25	13.25	14
15	16QAM	1	0	13.35	13.42	13.31	
15	16QAM	1	37	13.27	13.40	13.24	14
15	16QAM	1	74	13.20	13.39	13.13	
15	16QAM	36	0	13.25	13.28	13.29	14
15	16QAM	36	20	13.17	13.17	13.22	
15	16QAM	36	39	13.16	13.12	13.20	14
15	16QAM	75	0	13.07	13.10	13.17	
15	64QAM	1	0	13.46	13.24	13.46	14
15	64QAM	1	37	13.40	13.26	13.43	
15	64QAM	1	74	13.38	13.21	13.38	14
15	64QAM	36	0	13.33	13.01	13.04	
15	64QAM	36	20	12.93	12.95	12.93	14
15	64QAM	36	39	12.87	12.91	12.84	
15	64QAM	75	0	12.88	12.87	12.83	13
15	256QAM	1	0	12.35	12.37	12.34	
15	256QAM	1	37	12.31	12.32	12.28	13
15	256QAM	1	74	12.29	12.30	12.26	
15	256QAM	36	0	11.86	11.91	11.82	12.5
15	256QAM	36	20	11.79	11.79	11.81	
15	256QAM	36	39	11.71	11.70	11.75	12.5
15	256QAM	75	0	11.63	11.73	11.68	
Channel				20000	20175	20350	15
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	14.44	14.48	14.43	15
10	QPSK	1	25	14.36	14.36	14.35	
10	QPSK	1	49	14.31	14.28	14.26	14
10	QPSK	25	0	13.29	13.42	13.37	
10	QPSK	25	12	13.38	13.30	13.31	14
10	QPSK	25	25	13.35	13.25	13.24	
10	QPSK	50	0	13.26	13.25	13.22	14
10	16QAM	1	0	13.33	13.35	13.28	
10	16QAM	1	25	13.24	13.38	13.23	14
10	16QAM	1	49	13.19	13.35	13.14	
10	16QAM	25	0	13.21	13.23	13.29	14
10	16QAM	25	12	13.13	13.14	13.21	
10	16QAM	25	25	13.08	13.08	13.13	14
10	16QAM	50	0	13.05	13.09	13.14	
10	64QAM	1	0	13.41	13.20	13.44	14
10	64QAM	1	25	13.41	13.20	13.36	
10	64QAM	1	49	13.29	13.18	13.36	14
10	64QAM	25	0	13.27	12.99	12.97	
10	64QAM	25	12	12.92	12.93	12.88	14
10	64QAM	25	25	12.82	12.85	12.81	
10	64QAM	50	0	12.84	12.82	12.78	13
10	256QAM	1	0	12.35	12.39	12.35	
10	256QAM	1	25	12.29	12.26	12.25	13
10	256QAM	1	49	12.26	12.24	12.24	
10	256QAM	25	0	11.80	11.86	11.79	12.5
10	256QAM	25	12	11.78	11.76	11.79	
10	256QAM	25	25	11.70	11.70	11.69	12.5
10	256QAM	50	0	11.61	11.64	11.59	
Channel				19975	20175	20375	15
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	14.43	14.45	14.41	15
5	QPSK	1	12	14.32	14.30	14.31	
5	QPSK	1	24	14.29	14.23	14.22	15
5	QPSK	12	0	13.26	13.37	13.33	
5	QPSK	12	7	13.24	13.24	13.26	14

5	QPSK	12	13	13.18	13.26	13.05	14
5	QPSK	25	0	13.08	13.12	13.02	
5	16QAM	1	0	13.28	13.43	13.25	14
5	16QAM	1	12	13.13	13.41	13.22	
5	16QAM	1	24	13.12	13.34	13.18	14
5	16QAM	12	0	13.27	13.29	13.31	
5	16QAM	12	7	13.24	13.24	13.24	14
5	16QAM	12	13	13.14	13.09	13.20	
5	16QAM	25	0	13.10	13.05	13.15	14
5	64QAM	1	0	13.07	13.33	13.27	
5	64QAM	1	12	13.00	13.28	13.23	14
5	64QAM	1	24	12.94	13.16	13.12	
5	64QAM	12	0	13.08	13.06	12.99	14
5	64QAM	12	7	13.02	13.05	12.89	
5	64QAM	12	13	12.86	12.94	12.81	14
5	64QAM	25	0	12.80	12.86	12.74	
5	256QAM	1	0	12.02	12.14	12.07	13
5	256QAM	1	12	12.01	12.04	12.03	
5	256QAM	1	24	12.03	12.00	11.94	12.5
5	256QAM	12	0	11.64	11.68	11.66	
5	256QAM	12	7	11.58	11.69	11.57	12.5
5	256QAM	12	13	11.52	11.57	11.53	
5	256QAM	25	0	11.56	11.57	11.54	Tune-up limit (dBm)
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	15
3	QPSK	1	0	14.30	14.31	14.22	
3	QPSK	1	8	14.22	14.12	14.11	14
3	QPSK	1	14	14.09	14.04	13.91	
3	QPSK	8	0	13.28	13.34	13.18	14
3	QPSK	8	4	13.21	13.27	13.12	
3	QPSK	8	7	13.13	13.21	13.00	14
3	QPSK	15	0	13.03	13.07	12.97	
3	16QAM	1	0	13.23	13.38	13.20	14
3	16QAM	1	8	13.08	13.36	13.17	
3	16QAM	1	14	13.07	13.29	13.13	14
3	16QAM	8	0	13.22	13.24	13.26	
3	16QAM	8	4	13.19	13.19	13.19	14
3	16QAM	8	7	13.09	13.04	13.15	
3	16QAM	15	0	13.05	13.00	13.10	14
3	64QAM	1	0	13.02	13.28	13.22	
3	64QAM	1	8	12.95	13.23	13.18	14
3	64QAM	1	14	12.89	13.11	13.07	
3	64QAM	8	0	13.03	13.01	12.94	14
3	64QAM	8	4	12.97	13.00	12.84	
3	64QAM	8	7	12.81	12.89	12.76	13
3	64QAM	15	0	12.75	12.81	12.69	
3	256QAM	1	0	11.97	12.09	12.02	12.5
3	256QAM	1	8	11.96	11.99	11.98	
3	256QAM	1	14	11.98	11.95	11.89	12.5
3	256QAM	8	0	11.59	11.63	11.61	
3	256QAM	8	4	11.53	11.64	11.52	12.5
3	256QAM	8	7	11.47	11.52	11.48	
3	256QAM	15	0	11.51	11.52	11.49	Tune-up limit (dBm)
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	15
1.4	QPSK	1	0	14.25	14.26	14.17	
1.4	QPSK	1	3	14.17	14.07	14.06	14
1.4	QPSK	1	5	14.04	13.99	13.86	
1.4	QPSK	3	0	13.23	13.29	13.13	14
1.4	QPSK	3	1	13.16	13.22	13.07	
1.4	QPSK	3	3	13.08	13.16	12.95	14
1.4	QPSK	6	0	12.98	13.02	12.92	
1.4	16QAM	1	0	13.18	13.33	13.15	14
1.4	16QAM	1	3	13.03	13.31	13.12	
1.4	16QAM	1	5	13.02	13.24	13.08	14
1.4	16QAM	3	0	13.17	13.19	13.21	
1.4	16QAM	3	1	13.14	13.14	13.14	14
1.4	16QAM	3	3	13.04	12.99	13.10	
1.4	16QAM	6	0	13.00	12.95	13.05	14
1.4	64QAM	1	0	12.97	13.23	13.17	
1.4	64QAM	1	3	12.90	13.18	13.13	14
1.4	64QAM	1	5	12.84	13.06	13.02	
1.4	64QAM	3	0	12.98	12.96	12.89	14
1.4	64QAM	3	1	12.92	12.95	12.79	
1.4	64QAM	3	3	12.76	12.84	12.71	14
1.4	64QAM	6	0	12.70	12.76	12.64	
1.4	256QAM	1	0	11.92	12.04	11.97	13
1.4	256QAM	1	3	11.91	11.94	11.93	
1.4	256QAM	1	5	11.93	11.90	11.84	12.5
1.4	256QAM	3	0	11.54	11.58	11.56	
1.4	256QAM	3	1	11.48	11.59	11.47	12.5
1.4	256QAM	3	3	11.42	11.47	11.43	
1.4	256QAM	6	0	11.46	11.47	11.44	12.5
Channel				18607	18900	19193	

5	QPSK	12	13	13.33	13.20	13.22	14
5	QPSK	25	0	13.21	13.20	13.18	
5	16QAM	1	0	13.28	13.31	13.23	14
5	16QAM	1	12	13.20	13.32	13.20	
5	16QAM	1	24	13.13	13.31	13.08	14
5	16QAM	12	0	13.19	13.22	13.26	
5	16QAM	12	7	13.08	13.11	13.19	14
5	16QAM	12	13	13.05	13.06	13.09	
5	16QAM	25	0	13.01	13.07	13.10	14
5	64QAM	1	0	13.36	13.14	13.38	
5	64QAM	1	12	13.36	13.15	13.35	14
5	64QAM	1	24	13.27	13.13	13.34	
5	64QAM	12	0	13.22	12.97	12.91	14
5	64QAM	12	7	12.88	12.89	12.86	
5	64QAM	12	13	12.80	12.80	12.79	14
5	64QAM	25	0	12.82	12.78	12.76	
5	256QAM	1	0	12.31	12.37	12.31	13
5	256QAM	1	12	12.27	12.25	12.23	
5	256QAM	1	24	12.20	12.21	12.21	12.5
5	256QAM	12	0	11.76	11.81	11.73	
5	256QAM	12	7	11.72	11.71	11.76	12.5
5	256QAM	12	13	11.65	11.68	11.68	
5	256QAM	25	0	11.55	11.62	11.57	Tune-up limit (dBm)
Channel				1995	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	15
3	QPSK	1	0	14.38	14.40	14.36	
3	QPSK	1	8	14.27	14.25	14.26	14
3	QPSK	1	14	14.26	14.18	14.17	
3	QPSK	8	0	13.21	13.32	13.28	14
3	QPSK	8	4	13.18	13.19	13.21	
3	QPSK	8	7	13.14	13.15	13.17	14
3	QPSK	15	0	13.16	13.15	13.13	
3	16QAM	1	0	13.23	13.26	13.18	14
3	16QAM	1	8	13.15	13.27	13.15	
3	16QAM	1	14	13.08	13.26	13.03	14
3	16QAM	8	0	13.14	13.17	13.21	
3	16QAM	8	4	13.03	13.06	13.14	14
3	16QAM	8	7	13.00	13.01	13.04	
3	16QAM	15	0	12.96	13.02	13.05	14
3	64QAM	1	0	13.31	13.09	13.33	
3	64QAM	1	8	13.31	13.10	13.30	14
3	64QAM	1	14	13.22	13.08	13.29	
3	64QAM	8	0	13.17	12.92	12.86	14
3	64QAM	8	4	12.83	12.84	12.81	
3	64QAM	8	7	12.75	12.75	12.74	13
3	64QAM	15	0	12.77	12.73	12.71	
3	256QAM	1	0	12.26	12.32	12.26	12.5
3	256QAM	1	8	12.22	12.20	12.18	
3	256QAM	1	14	12.15	12.16	12.16	12.5
3	256QAM	8	0	11.71	11.76	11.68	
3	256QAM	8	4	11.67	11.66	11.71	12.5
3	256QAM	8	7	11.60	11.63	11.63	
3	256QAM	15	0	11.50	11.57	11.52	Tune-up limit (dBm)
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	15
1.4	QPSK	1	0	14.36	14.38	14.34	
1.4	QPSK	1	3	14.25	14.23	14.24	14
1.4	QPSK	1	5	14.26	14.16	14.15	
1.4	QPSK	3	0	13.21	13.30	13.26	14
1.4	QPSK	3	1	13.19	13.17	13.19	
1.4	QPSK	3	3	13.18	13.13	13.15	14
1.4	QPSK	6	0	13.14	13.13	13.11	
1.4	16QAM	1	0	13.18	13.21	13.13	14
1.4	16QAM	1	3	13.10	13.22	13.10	
1.4	16QAM	1	5	13.03	13.21	12.98	14
1.4	16QAM	3	0	13.09	13.12	13.16	
1.4	16QAM	3	1	12.98	13.01	13.09	14
1.4	16QAM	3	3	12.95	12.96	12.99	
1.4	16QAM	6	0	12.91	12.97	13.00	14
1.4	64QAM	1	0	13.26	13.04	13.28	
1.4	64QAM	1	3	13.26	13.05	13.25	14
1.4	64QAM	1	5	13.17	13.03	13.24	
1.4	64QAM	3	0	13.12	12.87	12.81	14
1.4	64QAM	3	1	12.78	12.79	12.76	
1.4	64QAM	3	3	12.70	12.70	12.69	14
1.4	64QAM	6	0	12.72	12.68	12.66	
1.4	256QAM	1	0	12.21	12.27	12.21	13
1.4	256QAM	1	3	12.17	12.15	12.13	
1.4	256QAM	1	5	12.10	12.11	12.11	12.5
1.4	256QAM	3	0	11.66	11.71	11.63	
1.4	256QAM	3	1	11.62	11.61	11.66	12.5
1.4	256QAM	3	3	11.55	11.58	11.58	
1.4	256QAM	6	0	11.45	11.52	11.47	12.5

Band 5 (Celluar 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	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	21.06	21.15	21.09	21.5
10	QPSK	1	25	20.98	21.06	21.01	
10	QPSK	1	49	20.95	21.02	20.98	
10	QPSK	25	0	20.04	20.06	20.02	
10	QPSK	25	12	19.96	19.96	19.99	20.5
10	QPSK	25	25	19.87	19.91	19.96	
10	QPSK	50	0	19.79	19.80	19.94	
10	16QAM	1	0	19.64	19.70	19.62	
10	16QAM	1	25	19.60	19.64	19.55	20.5
10	16QAM	1	49	19.57	19.61	19.54	
10	16QAM	25	0	19.46	19.42	19.38	
10	16QAM	25	12	19.44	19.35	19.32	
10	16QAM	25	25	19.34	19.28	19.29	20.5
10	16QAM	50	0	19.27	19.24	19.24	
10	64QAM	1	0	19.50	19.59	19.60	
10	64QAM	1	25	19.47	19.55	19.55	
10	64QAM	1	49	19.39	19.51	19.51	20.5
10	64QAM	25	0	19.32	19.25	19.34	
10	64QAM	25	12	19.23	19.13	19.23	
10	64QAM	25	25	19.19	19.08	19.15	
10	64QAM	50	0	19.13	18.97	19.08	16.5
10	256QAM	1	0	15.64	15.69	15.62	
10	256QAM	1	25	15.59	15.60	15.59	
10	256QAM	1	49	15.56	15.52	15.57	
10	256QAM	25	0	14.78	14.90	14.74	16.5
10	256QAM	25	12	14.72	14.85	14.66	
10	256QAM	25	25	14.67	14.75	14.57	
10	256QAM	50	0	14.64	14.73	14.48	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	21.01	21.10	21.04	21.5
5	QPSK	1	12	20.93	21.01	20.96	
5	QPSK	1	24	20.90	20.97	20.93	
5	QPSK	12	0	19.99	20.01	19.97	
5	QPSK	12	7	19.91	19.91	19.94	20.5
5	QPSK	12	13	19.82	19.86	19.91	
5	QPSK	25	0	19.74	19.75	19.89	
5	16QAM	1	0	19.59	19.65	19.57	
5	16QAM	1	12	19.55	19.59	19.50	20.5
5	16QAM	1	24	19.52	19.56	19.49	
5	16QAM	12	0	19.41	19.37	19.33	
5	16QAM	12	7	19.39	19.30	19.27	
5	16QAM	12	13	19.29	19.23	19.24	20.5
5	16QAM	25	0	19.22	19.19	19.19	
5	64QAM	1	0	19.45	19.54	19.55	
5	64QAM	1	12	19.42	19.50	19.50	
5	64QAM	1	24	19.34	19.46	19.46	20.5
5	64QAM	12	0	19.27	19.20	19.29	
5	64QAM	12	7	19.18	19.08	19.18	
5	64QAM	12	13	19.14	19.03	19.10	
5	64QAM	25	0	19.08	18.92	19.03	16.5
5	256QAM	1	0	15.59	15.64	15.57	
5	256QAM	1	12	15.54	15.55	15.54	
5	256QAM	1	24	15.51	15.47	15.52	
5	256QAM	12	0	14.73	14.85	14.69	16.5
5	256QAM	12	7	14.67	14.80	14.61	
5	256QAM	12	13	14.62	14.70	14.52	
5	256QAM	25	0	14.59	14.68	14.43	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	20.97	21.06	21.00	21.5
3	QPSK	1	8	20.89	20.97	20.92	
3	QPSK	1	14	20.86	20.93	20.89	
3	QPSK	8	0	19.95	19.97	19.93	
3	QPSK	8	4	19.87	19.87	19.90	20.5
3	QPSK	8	7	19.78	19.82	19.87	
3	QPSK	15	0	19.70	19.71	19.85	
3	16QAM	1	0	19.55	19.61	19.53	
3	16QAM	1	8	19.51	19.55	19.46	20.5
3	16QAM	1	14	19.48	19.52	19.45	
3	16QAM	8	0	19.37	19.33	19.29	
3	16QAM	8	4	19.35	19.26	19.23	
3	16QAM	8	7	19.25	19.19	19.20	20.5
3	16QAM	15	0	19.18	19.15	19.15	
3	64QAM	1	0	19.41	19.50	19.51	
3	64QAM	1	8	19.38	19.46	19.46	
3	64QAM	1	14	19.30	19.42	19.42	20.5
3	64QAM	8	0	19.23	19.16	19.25	
3	64QAM	8	4	19.14	19.04	19.14	
3	64QAM	8	7	19.10	18.99	19.06	
3	64QAM	15	0	19.04	18.88	18.99	16.5
3	256QAM	1	0	15.55	15.60	15.53	
3	256QAM	1	8	15.50	15.51	15.50	
3	256QAM	1	14	15.47	15.43	15.48	
3	256QAM	8	0	14.69	14.61	14.65	16.5
3	256QAM	8	4	14.63	14.76	14.57	
3	256QAM	8	7	14.58	14.66	14.48	
3	256QAM	15	0	14.55	14.64	14.39	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	20.94	21.03	20.97	21.5
1.4	QPSK	1	3	20.86	20.94	20.89	
1.4	QPSK	1	5	20.83	20.90	20.86	
1.4	QPSK	3	0	19.92	19.94	19.90	
1.4	QPSK	3	1	19.84	19.84	19.87	

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			Tune-up limit (dBm)
Frequency (MHz)				782			
10	QPSK	1	0		24.11		24.5
10	QPSK	1	25		24.01		
10	QPSK	1	49		23.90		
10	QPSK	25	0		23.08		
10	QPSK	25	12		22.97		23.5
10	QPSK	25	25		22.93		
10	QPSK	50	0		22.82		
10	16QAM	1	0		22.82		
10	16QAM	1	25		22.79		23.5
10	16QAM	1	49		22.77		
10	16QAM	25	0		22.35		
10	16QAM	25	12		22.28		
10	16QAM	25	25		22.21		23.5
10	16QAM	50	0		22.13		
10	64QAM	1	0		22.77		
10	64QAM	1	25		22.71		
10	64QAM	1	49		22.67		23.5
10	64QAM	25	0		22.43		
10	64QAM	25	12		22.40		
10	64QAM	25	25		22.33		
10	64QAM	50	0		22.28		19
10	256QAM	1	0		18.71		
10	256QAM	1	25		18.66		
10	256QAM	1	49		18.63		
10	256QAM	25	0		17.94		18.5
10	256QAM	25	12		17.85		
10	256QAM	25	25		17.76		
10	256QAM	50	0		17.66		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	23.92	24.07	24.01	24.5
5	QPSK	1	12	23.85	23.97	23.91	
5	QPSK	1	24	23.70	23.83	23.76	
5	QPSK	12	0	22.91	23.03	22.90	
5	QPSK	12	7	22.77	22.91	22.84	23.5
5	QPSK	12	13	22.75	22.89	22.84	
5	QPSK	25	0	22.62	22.76	22.68	
5	16QAM	1	0	22.64	22.77	22.71	
5	16QAM	1	12	22.62	22.75	22.66	23.5
5	16QAM	1	24	22.54	22.71	22.63	
5	16QAM	12	0	22.16	22.31	22.24	
5	16QAM	12	7	22.14	22.21	22.21	
5	16QAM	12	13	22.03	22.15	22.10	23.5
5	16QAM	25	0	21.95	22.08	21.99	
5	64QAM	1	0	22.67	22.73	22.65	
5	64QAM	1	12	22.49	22.67	22.55	
5	64QAM	1	24	22.51	22.61	22.56	23.5
5	64QAM	12	0	22.27	22.38	22.31	
5	64QAM	12	7	22.22	22.36	22.27	
5	64QAM	12	13	22.17	22.27	22.20	
5	64QAM	25	0	22.08	22.23	22.15	19
5	256QAM	1	0	18.53	18.67	18.59	
5	256QAM	1	12	18.48	18.61	18.57	
5	256QAM	1	24	18.46	18.57	18.52	
5	256QAM	12	0	17.72	17.9	17.83	19
5	256QAM	12	7	17.65	17.79	17.73	
5	256QAM	12	13	17.59	17.73	17.68	
5	256QAM	25	0	17.55	17.61	17.53	

1.4	QPSK	3	3	19.75	19.79	19.84	
1.4	QPSK	6	0	19.67	19.68	19.82	20.5
1.4	16QAM	1	0	19.52	19.58	19.50	
1.4	16QAM	1	3	19.48	19.52	19.43	
1.4	16QAM	1	5	19.45	19.49	19.42	
1.4	16QAM	3	0	19.34	19.30	19.26	
1.4	16QAM	3	1	19.32	19.23	19.20	
1.4	16QAM	3	3	19.22	19.16	19.17	
1.4	16QAM	6	0	19.15	19.12	19.12	20.5
1.4	64QAM	1	0	19.38	19.47	19.48	
1.4	64QAM	1	3	19.35	19.43	19.43	
1.4	64QAM	1	5	19.27	19.39	19.39	
1.4	64QAM	3	0	19.20	19.13	19.22	
1.4	64QAM	3	1	19.11	19.01	19.11	
1.4	64QAM	3	3	19.07	18.96	19.03	
1.4	64QAM	6	0	19.01	18.85	18.96	20.5
1.4	256QAM	1	0	15.52	15.57	15.50	
1.4	256QAM	1	3	15.47	15.48	15.47	
1.4	256QAM	1	5	15.44	15.40	15.45	
1.4	256QAM	3	0	14.66	14.78	14.62	
1.4	256QAM	3	1	14.60	14.73	14.54	
1.4	256QAM	3	3	14.55	14.63	14.45	
1.4	256QAM	6	0	14.52	14.61	14.36	16.5

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	15
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	14.49	14.55	14.43	15
20	QPSK	1	49	14.40	14.48	14.38	
20	QPSK	1	99	14.32	14.41	14.32	14
20	QPSK	50	0	13.44	13.54	13.41	
20	QPSK	50	24	13.33	13.44	13.37	14
20	QPSK	50	50	13.29	13.38	13.28	
20	QPSK	100	0	13.24	13.29	13.27	14
20	16QAM	1	0	13.48	13.52	13.50	
20	16QAM	1	49	13.41	13.49	13.42	14
20	16QAM	1	99	13.32	13.43	13.32	
20	16QAM	50	0	13.29	13.31	13.29	14
20	16QAM	50	24	13.26	13.30	13.25	
20	16QAM	50	50	13.18	13.22	13.16	14
20	16QAM	100	0	13.12	13.13	13.08	
20	64QAM	1	0	13.28	13.43	13.36	14
20	64QAM	1	49	13.25	13.42	13.33	
20	64QAM	1	99	13.18	13.40	13.27	14
20	64QAM	50	0	13.21	13.25	13.29	
20	64QAM	50	24	13.19	13.20	13.26	14
20	64QAM	50	50	13.14	13.14	13.23	
20	64QAM	100	0	13.04	13.12	13.19	14
20	256QAM	1	0	12.98	13.08	13.04	
20	256QAM	1	49	12.96	13.05	12.94	13.5
20	256QAM	1	99	12.86	13.04	12.83	
20	256QAM	50	0	12.49	12.60	12.55	13.5
20	256QAM	50	24	12.47	12.56	12.48	
20	256QAM	50	50	12.44	12.46	12.46	13.5
20	256QAM	100	0	12.40	12.37	12.42	
Channel				132047	132322	132597	15
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	14.45	14.53	14.40	15
15	QPSK	1	37	14.37	14.47	14.34	
15	QPSK	1	74	14.31	14.37	14.28	14
15	QPSK	36	0	13.39	13.51	13.37	
15	QPSK	36	20	13.31	13.41	13.35	14
15	QPSK	36	39	13.24	13.35	13.24	
15	QPSK	75	0	13.22	13.26	13.24	14
15	16QAM	1	0	13.44	13.49	13.46	
15	16QAM	1	37	13.39	13.48	13.40	14
15	16QAM	1	74	13.27	13.39	13.29	
15	16QAM	36	0	13.26	13.29	13.27	14
15	16QAM	36	20	13.24	13.25	13.21	
15	16QAM	36	39	13.15	13.19	13.12	14
15	16QAM	75	0	13.10	13.08	13.06	
15	64QAM	1	0	13.25	13.38	13.31	14
15	64QAM	1	37	13.20	13.40	13.31	
15	64QAM	1	74	13.16	13.38	13.24	14
15	64QAM	36	0	13.19	13.23	13.27	
15	64QAM	36	20	13.14	13.17	13.23	14
15	64QAM	36	39	13.11	13.10	13.21	
15	64QAM	75	0	13.02	13.09	13.16	14
15	256QAM	1	0	12.89	13.02	12.95	
15	256QAM	1	37	12.88	12.96	12.85	13.5
15	256QAM	1	74	12.78	12.94	12.75	
15	256QAM	36	0	12.42	12.51	12.45	13.5
15	256QAM	36	20	12.38	12.46	12.39	
15	256QAM	36	39	12.36	12.39	12.39	13.5
15	256QAM	75	0	12.32	12.29	12.32	
Channel				132022	132322	132622	15
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	14.39	14.47	14.33	15
10	QPSK	1	25	14.30	14.38	14.28	
10	QPSK	1	49	14.22	14.31	14.22	14
10	QPSK	25	0	13.34	13.44	13.31	
10	QPSK	25	12	13.23	13.34	13.27	14
10	QPSK	25	25	13.19	13.28	13.18	
10	QPSK	50	0	13.14	13.19	13.17	14
10	16QAM	1	0	13.38	13.42	13.40	
10	16QAM	1	25	13.31	13.39	13.32	14
10	16QAM	1	49	13.22	13.33	13.22	
10	16QAM	25	0	13.19	13.21	13.19	14
10	16QAM	25	12	13.16	13.20	13.15	
10	16QAM	25	25	13.08	13.12	13.06	14
10	16QAM	50	0	13.02	13.03	12.98	
10	64QAM	1	0	13.18	13.33	13.26	14
10	64QAM	1	25	13.15	13.32	13.23	
10	64QAM	1	49	13.08	13.30	13.17	14
10	64QAM	25	0	13.11	13.15	13.19	
10	64QAM	25	12	13.09	13.10	13.16	14
10	64QAM	25	25	13.04	13.04	13.13	
10	64QAM	50	0	12.94	13.02	13.09	14
10	256QAM	1	0	12.83	12.93	12.89	
10	256QAM	1	25	12.81	12.90	12.79	13.5
10	256QAM	1	49	12.71	12.89	12.68	
10	256QAM	25	0	12.34	12.45	12.40	13.5
10	256QAM	25	12	12.32	12.41	12.33	
10	256QAM	25	25	12.29	12.31	12.31	13.5
10	256QAM	50	0	12.25	12.22	12.27	
Channel				131997	132322	132647	15
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	14.34	14.42	14.28	15
5	QPSK	1	12	14.25	14.33	14.23	
5	QPSK	1	24	14.17	14.26	14.17	14
5	QPSK	12	0	13.29	13.39	13.26	
5	QPSK	12	7	13.18	13.29	13.22	14

5	QPSK	12	13	13.14	13.23	13.13	14
5	QPSK	25	0	13.09	13.14	13.12	
5	16QAM	1	0	13.33	13.37	13.35	
5	16QAM	1	12	13.26	13.34	13.27	14
5	16QAM	1	24	13.17	13.28	13.17	
5	16QAM	12	0	13.14	13.16	13.14	
5	16QAM	12	7	13.11	13.15	13.10	14
5	16QAM	12	13	13.03	13.07	13.01	
5	16QAM	25	0	12.97	12.98	12.93	
5	64QAM	1	0	13.13	13.28	13.21	14
5	64QAM	1	12	13.10	13.27	13.18	
5	64QAM	1	24	13.03	13.25	13.12	
5	64QAM	12	0	13.06	13.10	13.14	14
5	64QAM	12	7	13.04	13.05	13.11	
5	64QAM	12	13	12.99	12.99	13.08	
5	64QAM	25	0	12.89	12.97	13.04	14
5	256QAM	1	0	12.78	12.88	12.84	
5	256QAM	1	12	12.76	12.85	12.74	
5	256QAM	1	24	12.66	12.84	12.63	13.5
5	256QAM	12	0	12.29	12.40	12.35	
5	256QAM	12	7	12.27	12.36	12.28	
5	256QAM	12	13	12.24	12.26	12.26	13.5
5	256QAM	25	0	12.20	12.17	12.22	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	14.29	14.37	14.23	15
3	QPSK	1	8	14.20	14.28	14.18	
3	QPSK	1	14	14.12	14.21	14.12	
3	QPSK	8	0	13.24	13.34	13.21	14
3	QPSK	8	4	13.13	13.24	13.17	
3	QPSK	8	7	13.09	13.18	13.08	
3	QPSK	15	0	13.04	13.09	13.07	14
3	16QAM	1	0	13.28	13.32	13.30	
3	16QAM	1	8	13.21	13.29	13.22	
3	16QAM	1	14	13.12	13.23	13.12	14
3	16QAM	8	0	13.09	13.11	13.09	
3	16QAM	8	4	13.06	13.10	13.05	
3	16QAM	8	7	12.98	13.02	12.96	14
3	16QAM	15	0	12.92	12.93	12.88	
3	64QAM	1	0	13.08	13.23	13.16	14
3	64QAM	1	8	13.05	13.22	13.13	
3	64QAM	1	14	12.98	13.20	13.07	
3	64QAM	8	0	13.01	13.05	13.09	14
3	64QAM	8	4	12.99	13.00	13.06	
3	64QAM	8	7	12.94	12.94	13.03	
3	64QAM	15	0	12.84	12.92	12.99	14
3	256QAM	1	0	12.73	12.83	12.79	
3	256QAM	1	8	12.71	12.80	12.69	
3	256QAM	1	14	12.61	12.79	12.58	13.5
3	256QAM	8	0	12.24	12.35	12.30	
3	256QAM	8	4	12.22	12.31	12.23	
3	256QAM	8	7	12.19	12.21	12.21	13.5
3	256QAM	15	0	12.15	12.12	12.17	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	14.24	14.32	14.18	15
1.4	QPSK	1	3	14.15	14.23	14.13	
1.4	QPSK	1	5	14.07	14.16	14.07	
1.4	QPSK	3	0	13.29	13.34	13.16	14
1.4	QPSK	3	1	13.18	13.19	13.12	
1.4	QPSK	3	3	13.14	13.13	13.08	
1.4	QPSK	6	0	12.99	13.04	13.02	14
1.4	16QAM	1	0	13.23	13.27	13.25	
1.4	16QAM	1	3	13.16	13.24	13.17	
1.4	16QAM	1	5	13.07	13.18	13.07	14
1.4	16QAM	3	0	13.04	13.06	13.04	
1.4	16QAM	3	1	13.01	13.05	13.00	
1.4	16QAM	3	3	12.93	12.97	12.91	14
1.4	16QAM	6	0	12.87	12.88	12.83	
1.4	64QAM	1	0	13.03	13.18	13.11	1
1.4	64QAM	1	3	13.00	13.17	13.08	
1.4	64QAM	1	5	12.93	13.15	13.02	
1.4	64QAM	3	0	12.96	13.00	13.04	14
1.4	64QAM	3	1	12.94	12.95	13.01	
1.4	64QAM	3	3	12.89	12.89	12.98	
1.4	64QAM	6	0	12.79	12.87	12.94	14
1.4	256QAM	1	0	12.68	12.78	12.74	
1.4	256QAM	1	3	12.66	12.75	12.64	
1.4	256QAM	1	5	12.56	12.74	12.53	14
1.4	256QAM	3	0	12.19	12.30	12.25	
1.4	256QAM	3	1	12.17	12.26	12.18	
1.4	256QAM	3	3	12.14	12.16	12.16	13.5
1.4	256QAM	6	0	12.10	12.07	12.12	
1.4	256QAM						

Band 48 (3.6G Band)											
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. [Freq]	Middle-Low Channel	Middle-Low Channel	Middle-High Channel	High Channel	Tune-up limit (dBm)		
Channel				553.40	558.00	559.90	561.50	565.40			
Frequency (MHz)				3593	3609	3625	3641	3659			
20	QPSK	1	0	13.78	13.74	13.88	13.81	13.78	14.5		
20	QPSK	1	49	13.60	13.62	13.68	13.63	13.55			
20	QPSK	1	99	13.57	13.53	13.47	13.65	13.66			
20	QPSK	50	0	12.67	12.68	12.78	12.73	12.66			
20	QPSK	50	24	12.57	12.62	12.62	12.63	12.64			
20	QPSK	50	50	12.63	12.59	12.73	12.53	12.60	13.5		
20	QPSK	100	0	12.60	12.63	12.59	12.68	12.50			
20	16QAM	1	0	12.78	12.66	12.68	12.58	12.73			
20	16QAM	1	49	12.65	12.53	12.53	12.73	12.64			
20	16QAM	1	99	12.67	12.68	12.57	12.54	12.56			
20	16QAM	50	0	12.62	12.66	12.60	12.47	12.37	13.5		
20	16QAM	50	24	12.56	12.57	12.52	12.45	12.40			
20	16QAM	50	50	12.48	12.50	12.65	12.64	12.53			
20	16QAM	100	0	12.59	12.68	12.70	12.65	12.50			
20	64QAM	1	0	12.87	12.82	12.75	12.82	12.88	13.5		
20	64QAM	1	49	12.84	12.71	12.92	12.68	12.67			
20	64QAM	1	99	12.77	12.97	12.86	12.77	12.65			
20	64QAM	50	0	11.81	11.93	12.08	11.97	11.91			
20	64QAM	50	24	11.83	11.65	11.69	11.69	12.01	12.5		
20	64QAM	50	50	11.89	11.80	11.67	11.53	11.80			
20	64QAM	100	0	11.69	11.59	11.80	11.81	11.68			
20	256QAM	1	0	10.02	9.80	9.79	9.88	10.09			
20	256QAM	1	49	9.83	9.68	9.87	10.15	9.77	10		
20	256QAM	1	99	9.73	10.02	9.89	9.98	9.89			
20	256QAM	50	0	9.68	9.58	9.68	9.83	9.68			
20	256QAM	50	24	9.62	9.67	9.59	9.49	9.58			
20	256QAM	50	50	9.58	9.56	9.73	9.35	9.68			
20	256QAM	100	0	9.36	9.49	9.42	9.47	9.77			
Channel				553.15	554.15	557.35	560.55	567.55			
Frequency (MHz)				3597.5	3597.5	3599.5	3621.5	3692.5			
15	QPSK	1	0	13.67	13.63	13.77	13.70	13.67	14.5		
15	QPSK	1	37	13.49	13.51	13.57	13.52	13.44			
15	QPSK	1	74	13.46	13.42	13.36	13.54	13.55			
15	QPSK	36	0	12.56	12.57	12.67	12.62	12.55			
15	QPSK	36	20	12.46	12.51	12.51	12.52	12.53	13.5		
15	QPSK	36	39	12.52	12.48	12.62	12.42	12.49			
15	QPSK	75	0	12.49	12.52	12.48	12.57	12.39			
15	16QAM	1	0	12.67	12.55	12.57	12.47	12.62			
15	16QAM	1	37	12.54	12.42	12.42	12.62	12.53	13.5		
15	16QAM	1	74	12.56	12.57	12.46	12.43	12.45			
15	16QAM	36	0	12.51	12.55	12.49	12.36	12.26			
15	16QAM	36	20	12.45	12.46	12.41	12.34	12.29			
15	16QAM	36	39	12.37	12.39	12.54	12.53	12.42	13.5		
15	16QAM	75	0	12.48	12.57	12.59	12.54	12.39			
15	64QAM	1	0	12.76	12.71	12.64	12.71	12.57			
15	64QAM	1	37	12.73	12.60	12.81	12.57	12.56			
15	64QAM	1	74	12.66	12.86	12.75	12.66	12.54	12.5		
15	64QAM	36	0	11.70	11.82	11.98	11.86	11.80			
15	64QAM	36	20	11.72	11.54	11.58	11.58	11.30			
15	64QAM	36	39	11.76	11.69	11.56	11.42	11.68			
15	64QAM	75	0	11.58	11.48	11.59	11.70	11.57	11		
15	256QAM	1	0	9.91	9.89	9.68	9.77	9.98			
15	256QAM	1	37	9.72	9.57	9.76	10.04	9.66			
15	256QAM	1	74	9.62	9.91	9.78	9.87	9.78			
15	256QAM	36	0	9.57	9.47	9.57	9.72	9.57	10		
15	256QAM	36	20	9.51	9.56	9.48	9.38	9.47			
15	256QAM	36	39	9.47	9.45	9.62	9.24	9.57			
15	256QAM	75	0	9.25	9.38	9.31	9.36	9.66			
Channel				55930	55980	55710	56030	56790	Tune-up limit (dBm)		
Frequency (MHz)				3565	3565	3587	3619	3695			
10	QPSK	1	0	13.55	13.51	13.65	13.58	13.55	14.5		
10	QPSK	1	25	13.37	13.39	13.45	13.40	13.32			
10	QPSK	1	49	13.34	13.30	13.24	13.42	13.43			
10	QPSK	25	0	12.44	12.45	12.55	12.50	12.43			
10	QPSK	25	12	12.34	12.39	12.39	12.40	12.41	13.5		
10	QPSK	25	25	12.40	12.36	12.50	12.30	12.37			
10	QPSK	50	0	12.37	12.40	12.36	12.45	12.27			
10	16QAM	1	0	12.55	12.43	12.45	12.35	12.50			
10	16QAM	1	25	12.42	12.30	12.30	12.50	12.41	13.5		
10	16QAM	1	49	12.44	12.45	12.34	12.31	12.33			
10	16QAM	25	0	12.39	12.43	12.37	12.24	12.14			
10	16QAM	25	12	12.33	12.34	12.29	12.22	12.17			
10	16QAM	25	25	12.25	12.27	12.42	12.41	12.30	13.5		
10	16QAM	50	0	12.36	12.45	12.47	12.42	12.27			
10	64QAM	1	0	12.64	12.59	12.52	12.59	12.45			
10	64QAM	1	25	12.81	12.48	12.69	12.45	12.44			
10	64QAM	1	49	12.54	12.74	12.63	12.54	12.42	12.5		
10	64QAM	25	0	11.58	11.70	11.86	11.74	11.68			
10	64QAM	25	12	11.60	11.42	11.46	11.46	11.78			
10	64QAM	25	25	11.66	11.57	11.44	11.30	11.57			
10	64QAM	50	0	11.46	11.36	11.57	11.58	11.45	11		
10	256QAM	1	0	9.79	9.57	9.56	9.65	9.86			
10	256QAM	1	25	9.60	9.45	9.64	9.92	9.54			
10	256QAM	1	49	9.50	9.79	9.66	9.75	9.66			
10	256QAM	25	0	9.45	9.35	9.45	9.60	9.45	10		
10	256QAM	25	12	9.39	9.44	9.36	9.26	9.35			
10	256QAM	25	25	9.35	9.33	9.50	9.12	9.45			
10	256QAM	50	0	9.13	9.26	9.19	9.24	9.54			
Channel				55265	55365	55685	56005	56815	Tune-up limit (dBm)		
Frequency (MHz)				3592.5	3592.5	3594.5	3616.5	3697.5			
5	QPSK	1	0	13.43	13.39	13.53	13.46	13.43	14.5		
5	QPSK	1	12	13.25	13.27	13.33	13.28	13.20			
5	QPSK	1	24	13.22	13.18	13.12	13.30	13.31			
5	QPSK	12	0	12.32	12.33	12.43	12.38	12.31			
5	QPSK	12	7	12.22	12.27	12.27	12.28	12.29	13.5		
5	QPSK	12	13	12.28	12.24	12.38	12.18	12.25			
5	QPSK	25	0	12.25	12.28	12.24	12.33	12.15			
5	16QAM	1	0	12.43	12.31	12.33	12.23	12.38			
5	16QAM	1	12	12.30	12.18	12.18	12.38	12.29	13.5		
5	16QAM	1	24	12.32	12.33	12.22	12.19	12.21			
5	16QAM	12	0	12.27	12.31	12.25	12.12	12.02			
5	16QAM	12	7	12.21	12.22	12.17	12.10	12.05			
5	16QAM	12	13	12.13	12.15	12.30	12.29	12.18	13.5		
5	16QAM	25	0	12.24	12.33	12.35	12.30	12.15			
5	64QAM	1	0	12.52	12.47	12.40	12.47	12.33			
5	64QAM	1	12	12.49	12.36	12.57	12.33	12.32			
5	64QAM	1	24	12.42	12.62	12.51	12.42	12.30	12.5		
5	64QAM	12	0	11.46	11.58	11.74	11.62	11.56			
5	64QAM	12	7	11.46	11.30	11.34	11.34	11.66			
5	64QAM	12	13	11.54	11.45	11.32	11.18	11.45			
5	64QAM	25	0	11.34	11.24	11.45	11.46	11.33	11		
5	256QAM	1	0	9.67	9.45	9.44	9.53	9.74			
5	256QAM	1	12	9.48	9.33	9.52	9.80	9.42			
5	256QAM	1	24	9.38	9.67	9.54	9.63	9.54			
5	256QAM	12	0	9.33	9.23	9.33	9.48	9.33	10		
5	256QAM	12	7	9.27	9.32	9.24	9.14	9.23			

5G NR n2(for Ant.4)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000.00	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900.00	
20	DFT-s-OFDM PI/2 BPSK	1	1	9.21	9.12	8.94	9.50
20		1	53	9.25	9.00	8.38	
20		1	104	9.28	8.85	8.93	
20		50	1	9.39	9.18	9.40	9.50
20		50	25	9.35	9.15	9.35	
20		50	50	9.33	9.35	9.45	
20		100	0	8.85	8.93	9.43	
20	DFT-s-OFDM QPSK	1	1	9.75	9.82	9.78	10.50
20		1	53	9.36	9.44	8.86	
20		1	104	9.31	9.32	9.04	
20		50	1	9.17	9.25	9.14	9.50
20		50	25	9.16	8.94	9.09	
20		50	50	8.91	8.14	9.00	
20		100	0	8.78	8.96	8.92	
20	DFT-s-OFDM 16QAM	1	1	6.72	6.64	7.33	7.50
20	DFT-s-OFDM 64QAM	1	1	5.73	5.75	6.35	6.50
20	DFT-s-OFDM 256QAM	1	1	4.72	5.56	5.34	6.50
Channel				3715000	376000	380500.00	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.50	
15	DFT-s-OFDM QPSK	1	1	9.51	9.32	9.41	10.00
Channel				371000	376000	381000.00	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905.00	
10	DFT-s-OFDM QPSK	1	1	9.29	9.17	9.07	10.00
Channel				370500	376000	381500.00	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.50	
5	DFT-s-OFDM QPSK	1	1	9.33	9.23	9.40	10.00
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000.00	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1767.50	
20	CP-OFDM QPSK	1	1	9.01	8.84	8.55	9.50
20	CP-OFDM 16QAM	1	1	8.18	8.40	8.09	9.00
20	CP-OFDM 64QAM	1	1	7.06	6.82	6.88	7.5
20	CP-OFDM 256QAM	1	1	4.31	4.27	4.36	5.00

5G NR n5(for Ant.2)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800.00	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839.00	
20	DFT-s-OFDM PI/2 BPSK	1	1	14.59	14.53	14.49	15.00
20		1	53	14.34	14.31	14.49	
20		1	104	15.16	15.15	14.60	
20		50	1	14.47	14.48	14.61	15.50
20		50	25	14.43	14.35	14.65	
20		50	50	15.32	15.25	14.82	
20		100	0	14.45	14.41	14.57	
20	DFT-s-OFDM QPSK	1	1	15.20	15.33	15.24	15.50
20		1	53	15.07	15.05	15.14	
20		1	104	15.14	14.90	14.91	
20		50	1	14.07	14.16	14.10	14.50
20		50	25	14.00	14.10	13.97	
20		50	50	13.75	13.82	13.98	
20		100	0	13.88	13.90	13.88	
20	DFT-s-OFDM 16QAM	1	1	14.45	14.12	14.55	15.00
20	DFT-s-OFDM 64QAM	1	1	13.86	13.98	13.78	14.50
20	DFT-s-OFDM 256QAM	1	1	12.11	11.94	12.01	12.50
Channel				166300	167300	168300.00	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.50	
15	DFT-s-OFDM QPSK	1	1	15.11	14.95	14.78	15.50
Channel				165800	167300	168800.00	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844.00	
10	DFT-s-OFDM QPSK	1	1	14.42	14.38	14.82	15.00
Channel				165300	167300	169300.00	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.50	
5	DFT-s-OFDM QPSK	1	1	15.09	14.97	14.63	15.50
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800.00	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839.00	
20	CP-OFDM QPSK	1	1	14.61	14.61	14.69	15.00
20	CP-OFDM 16QAM	1	1	15.07	14.84	14.73	15.50
20	CP-OFDM 64QAM	1	1	13.14	13.15	13.22	13.50
20	CP-OFDM 256QAM	1	1	10.52	10.45	10.57	11.00

5G NR n66(for Ant.4)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000.00	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770.00	
20	DFT-s-OFDM Pi/2 BPSK	1	1	14.78	14.83	14.96	15.50
20		1	53	14.75	14.95	14.90	
20		1	104	14.85	14.96	15.05	
20		50	1	14.49	14.51	14.55	15.00
20		50	25	14.54	14.54	14.50	
20		50	50	13.62	15.01	14.51	
20		100	0	14.50	14.49	14.56	
20	DFT-s-OFDM QPSK	1	1	14.99	15.17	15.14	15.50
20		1	53	14.94	14.99	15.01	
20		1	104	14.81	14.90	14.93	
20		50	1	14.10	14.13	14.09	14.50
20		50	25	13.93	14.05	14.02	
20		50	50	13.97	14.65	14.02	
20		100	0	13.85	13.97	13.83	
20	DFT-s-OFDM 16QAM	1	1	15.01	15.10	15.15	15.50
20	DFT-s-OFDM 64QAM	1	1	13.16	13.34	13.36	14.00
20	DFT-s-OFDM 256QAM	1	1	11.50	11.36	11.40	12.00
Channel				343500	349000	354500.00	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.50	
15	DFT-s-OFDM QPSK	1	1	14.61	14.71	14.66	15.00
Channel				343000	349000	355000.00	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775.00	
10	DFT-s-OFDM QPSK	1	1	14.77	14.78	14.70	15.50
Channel				3425000	349000	355500.00	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.50	
5	DFT-s-OFDM QPSK	1	1	14.66	14.73	14.73	15.00
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000.00	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1767.50	
20	CP-OFDM QPSK	1	1	14.17	14.32	14.32	14.50
20	CP-OFDM 16QAM	1	1	13.83	13.96	14.03	14.50
20	CP-OFDM 64QAM	1	1	11.99	12.07	12.11	12.50
20	CP-OFDM 256QAM	1	1	9.04	9.34	9.38	10.00

N2 (1850 ~ 1910MHz)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000.00	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900.00	
20	DFT-s-OFDM Pi/2 BPSK	1	1	12.54	12.45	12.27	13.00
20		1	53	12.58	12.33	11.71	
20		1	104	12.61	12.18	12.26	
20		50	1	12.72	12.51	11.73	13.00
20		50	25	12.68	12.48	12.68	
20		50	50	12.66	12.68	12.78	
20	DFT-s-OFDM QPSK	100	0	12.18	12.26	12.76	13.50
20		1	1	12.74	13.01	12.82	
20		1	53	12.69	12.77	12.19	
20		1	104	12.64	12.65	12.37	12.50
20		50	1	12.00	12.18	11.97	
20		50	25	11.99	11.77	11.92	
20		50	50	11.74	11.97	11.83	10.50
20		100	0	11.61	11.79	11.75	
20	DFT-s-OFDM 16QAM	1	1	9.83	9.99	10.66	10.50
20	DFT-s-OFDM 64QAM	1	1	9.06	9.08	9.68	10.50
20	DFT-s-OFDM 256QAM	1	1	8.02	8.89	8.67	9.50
Channel				3715000	376000	380500.00	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.50	
15	DFT-s-OFDM QPSK	1	1	12.51	12.53	12.59	13.00
Channel				371000	376000	381000.00	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905.00	
10	DFT-s-OFDM QPSK	1	1	12.71	12.56	12.72	13.00
Channel				370500	376000	381500.00	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.50	
5	DFT-s-OFDM QPSK	1	1	12.76	12.53	12.72	13.00
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000.00	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1767.50	
20	CP-OFDM QPSK	1	1	12.11	11.92	12.13	12.50
20	CP-OFDM 16QAM	1	1	11.94	11.69	11.83	12.50
20	CP-OFDM 64QAM	1	1	9.99	9.52	9.85	10.50
20	CP-OFDM 256QAM	1	1	7.01	6.79	6.96	7.50

N5 (824 ~ 849 MHz)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800.00	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839.00	
20	DFT-s-OFDM Pi/2 BPSK	1	1	20.79	20.73	20.69	21.50
20		1	53	20.54	20.51	20.69	
20		1	104	21.36	21.35	20.80	
20		50	1	20.67	20.68	20.81	21.50
20		50	25	20.63	20.55	20.85	
20		50	50	21.52	21.45	21.02	
20	DFT-s-OFDM QPSK	100	0	20.65	20.61	20.77	22.00
20		1	1	21.40	21.53	21.44	
20		1	53	21.27	21.25	21.34	
20		1	104	21.34	21.10	21.11	21.00
20		50	1	20.57	20.66	20.60	
20		50	25	20.50	20.60	20.47	
20		50	50	20.25	20.42	20.48	21.50
20		100	0	20.38	20.40	20.38	
20	DFT-s-OFDM 16QAM	1	1	20.95	20.62	21.05	21.50
20	DFT-s-OFDM 64QAM	1	1	20.36	20.48	20.28	21.00
20	DFT-s-OFDM 256QAM	1	1	18.61	18.44	18.51	19.00
Channel				166300	167300	168300.00	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.50	
15	DFT-s-OFDM QPSK	1	1	21.31	21.15	20.98	21.50
Channel				165800	167300	168800.00	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844.00	
10	DFT-s-OFDM QPSK	1	1	20.62	20.58	21.02	21.50
Channel				165300	167300	169300.00	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.50	
5	DFT-s-OFDM QPSK	1	1	21.29	21.17	20.83	21.50
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800.00	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839.00	
20	CP-OFDM QPSK	1	1	20.81	20.81	20.89	21.50
20	CP-OFDM 16QAM	1	1	21.27	21.04	20.93	21.50
20	CP-OFDM 64QAM	1	1	19.34	19.35	19.42	20.00
20	CP-OFDM 256QAM	1	1	16.72	16.65	16.77	17.00

N66 (1710 ~ 1780 MHz)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000.00	11.00
Frequency (MHz)				1720	1745	1770.00	
20	DFT-s-OFDM PI/2 BPSK	1	1	10.29	10.34	10.47	11.00
20		1	53	10.26	10.46	10.41	
20		1	104	10.36	10.47	10.56	
20		50	1	10.00	10.02	10.06	10.50
20		50	25	10.05	10.05	10.01	
20		50	50	9.13	10.52	10.02	
20		100	0	10.01	10.00	10.07	
20	DFT-s-OFDM QPSK	1	1	10.50	10.68	10.58	11.00
20		1	53	10.45	10.50	10.52	
20		1	104	10.32	10.41	10.44	
20		50	1	9.71	9.74	9.70	10.00
20		50	25	9.54	9.66	9.63	
20		50	50	9.58	10.26	9.63	
20		100	0	9.46	9.58	9.44	
20	DFT-s-OFDM 16QAM	1	1	10.52	10.61	10.66	11.00
20	DFT-s-OFDM 64QAM	1	1	8.67	8.85	8.87	9.50
20	DFT-s-OFDM 256QAM	1	1	8.55	6.87	6.91	7.50
Channel				343500	349000	354500.00	11.00
Frequency (MHz)				1717.5	1745	1772.50	
15	DFT-s-OFDM QPSK	1	1	10.33	10.43	10.38	11.00
Channel				343000	349000	355000.00	11.00
Frequency (MHz)				1715	1745	1775.00	
10	DFT-s-OFDM QPSK	1	1	10.49	10.50	10.42	11.00
Channel				3425000	349000	355500.00	11.00
Frequency (MHz)				1712.5	1745	1777.50	
5	DFT-s-OFDM QPSK	1	1	10.38	10.45	10.45	11.00
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000.00	11.00
Frequency (MHz)				1720	1745	1767.50	
20	CP-OFDM QPSK	1	1	9.89	10.04	10.04	11.00
20	CP-OFDM 16QAM	1	1	9.55	9.68	9.75	10.50
20	CP-OFDM 64QAM	1	1	7.71	7.79	7.83	8.50
20	CP-OFDM 256QAM	1	1	4.76	5.06	5.10	5.50

Conducted Power for Standalone SAR

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.4GHz WLAN ANT 1	802.11b-1Mbps	CH 1	2412	13.95	13.5	13.5	100.00
		CH 6	2437	11.58	12.0	13.5	
		CH 11	2462	11.39	12.0	13.5	
	802.11g-6Mbps	CH 1	2412	12.15	12.5	13	99.21
		CH 6	2437	11.22	11.5	13	
		CH 11	2462	10.23	10.5	13	
	802.11n-HT20 MCS0	CH 1	2412	11.91	12.5	13	99.59
		CH 6	2437	11.97	11.5	13	
		CH 11	2462	10.09	10.5	13	
	802.11n-HT40 MCS0	CH 3	2452	11.29	11.50	13	94.20
		CH 6	2437	11.49	12.00	13	
		CH 9	2452	11.84	12.00	13	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 1	802.11a-6Mbps	CH 36	5185	12.02	12.5	15.5	99.03
		CH 44	5220	11.85	12.0	15.5	
		CH 48	5240	11.50	12.0	15.5	
	802.11n-HT20 MCS0	CH 36	5180	10.73	12.5	15.5	99.28
		CH 44	5220	11.68	12.0	15.5	
		CH 48	5240	11.44	12.0	15.5	
	802.11n-HT40 MCS0	CH 38	5190	12.50	13.0	15.5	96.68
		CH 46	5230	12.27	13.0	15.5	
		CH 36	5180	12.00	12.5	15.5	
	802.11ac-VHT20 MCS0	CH 44	5220	11.53	12.0	15.5	98.14
		CH 48	5240	11.48	12.0	15.5	
		CH 38	5190	11.87	12.5	15.5	
	802.11ac-VHT40 MCS0	CH 46	5230	11.53	12.0	15.5	96.41
		CH 48	5230	11.53	12.0	15.5	
		CH 42	5210	11.30	12.0	15.5	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 1	802.11a-6Mbps	CH 52	5260	10.03	10.5	14	98.03
		CH 60	5300	10.46	11.0	14	
		CH 64	5320	10.69	11.0	14	
	802.11n-HT20 MCS0	CH 52	5260	9.98	10.5	14	99.28
		CH 60	5300	10.45	11.0	14	
		CH 64	5320	10.70	11.0	14	
	802.11n-HT40 MCS0	CH 54	5270	10.77	11.5	14	96.68
		CH 62	5310	11.38	12.0	14	
		CH 52	5260	9.95	10.5	14	
	802.11ac-VHT20 MCS0	CH 60	5300	10.07	10.5	14	98.14
		CH 64	5320	10.48	11.0	14	
		CH 54	5270	10.21	10.5	14	
	802.11ac-VHT40 MCS0	CH 62	5310	10.76	11.5	14	96.41
		CH 58	5290	10.18	10.5	14	
		CH 58	5290	10.18	10.5	14	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 1	802.11a-6Mbps	CH 100	5500	7.25	7.5	11	98.03
		CH 120	5580	6.42	7.0	11	
		CH 144	5720	6.63	7.0	11	
	802.11n-HT20 MCS0	CH 100	5500	7.38	7.5	11	99.28
		CH 120	5580	6.47	7.0	11	
		CH 144	5720	6.90	7.5	11	
	802.11n-HT40 MCS0	CH 102	5510	7.50	8.5	11	96.68
		CH 126	5620	6.48	7.5	11	
		CH 142	5710	7.15	7.5	11	
	802.11ac-VHT20 MCS0	CH 100	5500	6.96	7.5	10.5	98.14
		CH 120	5580	6.22	7.0	10.5	
		CH 144	5720	6.27	7.0	10.5	
	802.11ac-VHT40 MCS0	CH 102	5510	7.26	7.5	10.5	96.41
		CH 126	5630	6.55	7.0	10.5	
		CH 142	5710	6.61	7.0	10.5	
	802.11ac-VHT80 MCS0	CH 106	5530	7.04	7.5	10.5	93.54
		CH 132	5610	6.39	7.0	10.5	
		CH 138	5690	6.76	7.5	10.5	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 1	802.11a-MCS0	CH 140	5745	6.59	7.00	11	98.03
		CH 157	5785	7.10	7.50	11	
		CH 165	5820	7.27	7.50	11	
	802.11n-HT20 MCS0	CH 140	5745	6.88	7.50	11	99.28
		CH 157	5785	7.27	7.50	11	
		CH 165	5820	7.33	8.00	11	
	802.11n-HT40 MCS0	CH 151	5755	7.07	7.50	11	96.68
		CH 159	5795	7.30	7.50	11	
		CH 149	5745	6.30	7.00	11	
	802.11ac-VHT20 MCS0	CH 157	5785	6.77	7.50	11	98.14
		CH 165	5820	7.03	7.50	11	
		CH 151	5755	6.54	7.00	11	
	802.11ac-VHT40 MCS0	CH 159	5795	7.35	7.50	11	96.41
		CH 155	5775	6.64	7.00	11	
		CH 155	5775	6.64	7.00	11	

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
BR / EDR	CH 50	2602	8.47	6.66	6.63
	CH 59	2611	9.25	6.23	6.07
	CH 19	2650	9.43	7.47	7.53
Timeup Limit			10	8	8
Duty Cycle %			76.8	77.07	77.07

Mode	Channel	Frequency (MHz)	Average power (dBm)		
			1Mbps	2Mbps	3Mbps
LE	CH 50	2602	-8.34	-8.74	
	CH 59	2610	-8.67	-8.17	
	CH 19	2650	-4.77	-8.79	
Timeup Limit			7.5	9.5	
Duty Cycle %			61.54	32.54	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.4GHz WLAN ANT 2	802.11b-1Mbps	CH 1	2412	14.54	15.00	15	100.00
		CH 6	2437	16.34	16.00	15	
		CH 11	2462	14.54	15.00	15	
	802.11g-6Mbps	CH 1	2412	13.78	14.00	14.5	99.21
		CH 6	2437	14.76	15.00	14.5	
		CH 11	2462	13.94	14.50	14.5	
	802.11n-HT20 MCS0	CH 1	2412	13.66	14.00	14.5	99.59
		CH 6	2437	14.37	15.00	14.5	
		CH 11	2462	13.66	14.00	14.5	
	802.11n-HT40 MCS0	CH 3	2452	13.71	14.00	14.5	94.20
		CH 6	2437	13.97	14.50	14.5	
		CH 9	2452	14.20	15.00	14.5	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 2	802.11a-6Mbps	CH 36	5185	10.86	11.50	14	98.03
		CH 44	5220	10.30	11.00	14	
		CH 48	5240	10.02	10.50	14	
	802.11n-HT20 MCS0	CH 36	5180	10.73	11.50	14	99.28
		CH 44	5220	10.11	10.50	14	
		CH 48	5240	9.95	10.50	14	
	802.11n-HT40 MCS0	CH 38	5190	11.97	11.50	14	96.68
		CH 46	5230	10.47	11.00	14	
		CH 36	5180	10.39	11.00	14	
	802.11ac-VHT20 MCS0	CH 44	5220	9.92	10.50	14	98.14
		CH 48	5240	9.78	10.50	14	
		CH 38	5190	10.87	11.00	14	
	802.11ac-VHT40 MCS0	CH 46	5230	10.04	10.50	14	96.41
		CH 46	5230	10.04	10.50	14	
		CH 42	5210	10.45	11.00	14	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 2	802.11a-6Mbps	CH 52	5260	10.15	10.50	14	98.03
		CH 60	5300	10.41	11.00	14	
		CH 64	5320	10.78	11.50	14	
	802.11n-HT20 MCS0	CH 52	5260	10.11	10.50	14	99.28
		CH 60	5300	10.36	11.00	14	
		CH 64	5320	10.75	11.50	14	
	802.11n-HT40 MCS0	CH 54	5270	10.36	11.00	14	96.68
		CH 62	5310	10.96	11.50	14	
		CH 52	5260	9.97	10.50	14	
	802.11ac-VHT20 MCS0	CH 60	5300	9.78	10.50	14	98.14
		CH 64	5320	10.19	10.50	14	
		CH 54	5270	10.13	10.50	14	
	802.11ac-VHT40 MCS0	CH 62	5310	10.55	11.00	14	96.41
		CH 58	5290	9.95	10.50	14	
		CH 58	5290	9.95	10.50	14	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.85GHz WLAN ANT 2	802.11a-6Mbps	CH 100	5500	13.10	13.50	16	98.03
		CH 116	5580	12.19	12.50	16	
		CH 144	5720	11.92	12.50	16	
	802.11n-HT20 MCS0	CH 100	5500	12.76	13.50	16	98.28
		CH 116	5580	12.21	12.50	16	
		CH 144	5720	11.61	12.00	16	
	802.11n-HT40 MCS0	CH 102	5515	13.29	13.50	16	96.68
		CH 126	5630	12.18	12.50	16	
		CH 142	5710	12.36	13.00	16	
	802.11n-VHT20 MCS0	CH 100	5500	12.19	12.50	15.5	98.14
		CH 116	5580	11.95	12.00	15.5	
		CH 144	5720	11.05	11.50	15.5	
	802.11n-VHT40 MCS0	CH 102	5510	13.02	13.50	15.5	96.41
		CH 126	5630	11.86	12.00	15.5	
		CH 142	5710	11.90	12.50	15.5	
802.11n-VHT80 MCS0	CH 100	5530	12.78	13.50	15.5	93.54	
	CH 122	5610	12.20	12.50	15.5		
	CH 138	5690	12.16	12.50	15.5		

Conducted Power for Simultaneous SAR													
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			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	12.17	12.25	12.12	13.00	12.46	12.68	12.57	13.50	20.84	20.90	20.74	21.50
3GPP Rel 6	HSDPA Subtest-1	11.22	11.30	11.28	12.00	11.72	11.74	11.72	12.50	19.89	19.92	19.84	20.50
3GPP Rel 6	HSDPA Subtest-2	11.34	11.56	11.38	12.00	11.79	11.85	11.91	12.50	19.91	19.93	19.88	20.50
3GPP Rel 6	HSDPA Subtest-3	10.70	10.82	10.76	11.50	11.25	11.26	11.23	12.00	19.78	19.43	19.35	20.50
3GPP Rel 6	HSDPA Subtest-4	10.64	10.83	10.73	11.50	11.26	11.29	11.22	12.00	19.66	19.47	19.36	20.00
3GPP Rel 8	DC-HSDPA Subtest-1	11.43	11.35	11.37	12.00	11.73	11.81	11.70	12.50	20.01	20.03	19.93	20.50
3GPP Rel 8	DC-HSDPA Subtest-2	11.41	11.35	11.41	12.00	11.73	11.79	11.77	12.50	20.01	20.03	19.94	20.50
3GPP Rel 8	DC-HSDPA Subtest-3	10.81	10.81	10.85	11.50	11.20	11.27	11.26	12.00	19.51	19.54	19.46	20.00
3GPP Rel 8	DC-HSDPA Subtest-4	10.78	10.87	10.90	11.50	11.17	11.27	11.28	12.00	19.51	19.53	19.48	20.00
3GPP Rel 6	HSUPA Subtest-1	11.33	11.41	11.29	12.00	11.74	11.92	11.71	12.50	19.91	19.86	19.96	20.50
3GPP Rel 6	HSUPA Subtest-2	10.73	11.18	10.77	12.00	11.22	11.47	11.28	12.50	19.40	19.41	19.33	20.00
3GPP Rel 6	HSUPA Subtest-3	11.22	11.35	11.23	12.00	11.70	11.77	11.72	12.50	19.91	19.95	19.92	20.50
3GPP Rel 6	HSUPA Subtest-4	11.20	11.34	11.25	12.00	11.74	11.80	11.75	12.50	19.90	19.90	19.83	20.50
3GPP Rel 6	HSUPA Subtest-5	11.16	11.35	11.28	12.00	11.77	11.90	11.71	12.50	19.86	19.90	19.95	20.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	11.24	11.28	11.24	12.00	11.74	11.79	11.72	12.50	19.88	19.96	19.94	20.50
Attenuator		Cable Loss			0.8	Cable Loss			0.8	Cable Loss			0.6
Mode		Max.			12.25	Max.			12.68	Max.			20.90

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	10.5
Frequency (MHz)				1880	1880	1900	
20	QPSK	1	0	10.11	10.15	10.09	10.5
20	QPSK	1	49	10.00	10.05	10.03	
20	QPSK	1	99	10.02	9.88	9.96	9.5
20	QPSK	50	0	9.03	9.07	8.94	
20	QPSK	50	24	8.94	9.03	8.85	9.5
20	QPSK	50	50	8.87	8.95	8.74	
20	QPSK	100	0	8.77	8.83	8.70	9.5
20	16QAM	1	0	8.97	9.11	8.96	
20	16QAM	1	49	8.85	9.09	8.91	10
20	16QAM	1	99	8.80	9.05	8.89	
20	16QAM	50	0	8.98	9.00	9.02	9.5
20	16QAM	50	24	8.92	8.94	8.95	
20	16QAM	50	50	8.83	8.81	8.90	9
20	16QAM	100	0	8.80	8.77	8.83	
20	64QAM	1	0	8.78	9.03	8.98	9.5
20	64QAM	1	49	8.68	8.97	8.95	
20	64QAM	1	99	8.63	8.86	8.82	9
20	64QAM	50	0	8.75	8.78	8.69	
20	64QAM	50	24	8.72	8.75	8.61	9
20	64QAM	50	50	8.58	8.64	8.49	
20	64QAM	100	0	8.51	8.56	8.44	9
20	256QAM	1	0	8.53	8.62	8.58	
20	256QAM	1	49	8.51	8.56	8.52	9
20	256QAM	1	99	8.54	8.48	8.42	
20	256QAM	50	0	8.12	8.19	8.16	9
20	256QAM	50	24	8.05	8.17	8.08	
20	256QAM	50	50	8.00	8.08	8.03	10.5
20	256QAM	100	0	8.03	8.09	8.04	
Channel				18675	18900	19125	10.5
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	10.01	10.02	9.93	9.5
15	QPSK	1	37	9.93	9.83	9.82	
15	QPSK	1	74	9.80	9.75	9.62	9.5
15	QPSK	36	0	8.99	9.05	8.89	
15	QPSK	36	20	8.92	8.98	8.83	9.5
15	QPSK	36	39	8.84	8.92	8.71	
15	QPSK	75	0	8.74	8.78	8.68	9.5
15	16QAM	1	0	8.94	9.09	8.91	
15	16QAM	1	37	8.79	9.07	8.88	9.5
15	16QAM	1	74	8.78	9.00	8.84	
15	16QAM	36	0	8.93	8.95	8.97	9.5
15	16QAM	36	20	8.90	8.90	8.90	
15	16QAM	36	39	8.80	8.75	8.86	9.5
15	16QAM	75	0	8.76	8.71	8.81	
15	64QAM	1	0	8.73	8.99	8.93	9.5
15	64QAM	1	37	8.66	8.94	8.89	
15	64QAM	1	74	8.60	8.82	8.78	9
15	64QAM	36	0	8.74	8.72	8.65	
15	64QAM	36	20	8.68	8.71	8.55	9
15	64QAM	36	39	8.52	8.60	8.47	
15	64QAM	75	0	8.46	8.52	8.40	9
15	256QAM	1	0	8.48	8.60	8.53	
15	256QAM	1	37	8.47	8.50	8.49	9
15	256QAM	1	74	8.49	8.46	8.40	
15	256QAM	36	0	8.10	8.14	8.12	9
15	256QAM	36	20	8.04	8.15	8.03	
15	256QAM	36	39	7.98	8.03	7.99	10.5
15	256QAM	75	0	8.02	8.03	8.00	
Channel				18650	18900	19150	10.5
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	9.96	9.97	9.88	9.5
10	QPSK	1	25	9.88	9.78	9.77	
10	QPSK	1	49	9.75	9.70	9.57	9.5
10	QPSK	25	0	8.94	9.00	8.84	
10	QPSK	25	12	8.87	8.93	8.78	9.5
10	QPSK	25	25	8.79	8.87	8.66	
10	QPSK	50	0	8.69	8.73	8.63	9.5
10	16QAM	1	0	8.89	9.04	8.86	
10	16QAM	1	25	8.74	9.02	8.83	9.5
10	16QAM	1	49	8.73	8.95	8.79	
10	16QAM	25	0	8.88	8.90	8.92	9.5
10	16QAM	25	12	8.85	8.85	8.85	
10	16QAM	25	25	8.75	8.70	8.81	9.5
10	16QAM	50	0	8.71	8.66	8.76	
10	64QAM	1	0	8.68	8.94	8.88	9.5
10	64QAM	1	25	8.61	8.89	8.84	
10	64QAM	1	49	8.55	8.77	8.73	9.5
10	64QAM	25	0	8.69	8.67	8.60	
10	64QAM	25	12	8.63	8.66	8.50	9.5
10	64QAM	25	25	8.47	8.55	8.42	
10	64QAM	50	0	8.41	8.47	8.35	9.5
10	256QAM	1	0	8.43	8.55	8.48	
10	256QAM	1	25	8.42	8.45	8.44	9
10	256QAM	1	49	8.44	8.41	8.35	
10	256QAM	25	0	8.05	8.09	8.07	9
10	256QAM	25	12	7.99	8.10	7.98	
10	256QAM	25	25	7.93	7.98	7.94	10.5
10	256QAM	50	0	7.97	7.98	7.95	
Channel				18625	18900	19175	10.5
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	9.91	9.92	9.83	10.5
5	QPSK	1	12	9.83	9.73	9.72	
5	QPSK	1	24	9.70	9.65	9.52	9.5
5	QPSK	12	0	8.89	8.95	8.79	
5	QPSK	12	7	8.82	8.88	8.73	9.5

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	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	9.65	9.72	9.67	10.5
20	QPSK	1	49	9.59	9.62	9.60	
20	QPSK	1	99	9.55	9.54	9.50	
20	QPSK	50	0	8.61	8.66	8.62	
20	QPSK	50	24	8.60	8.58	8.59	9.5
20	QPSK	50	50	8.55	8.52	8.49	
20	QPSK	100	0	8.47	8.49	8.45	
20	16QAM	1	0	8.58	8.63	8.54	
20	16QAM	1	49	8.48	8.62	8.45	9.5
20	16QAM	1	99	8.44	8.60	8.35	
20	16QAM	50	0	8.44	8.49	8.53	
20	16QAM	50	24	8.40	8.40	8.44	
20	16QAM	50	50	8.36	8.34	8.40	9
20	16QAM	100	0	8.30	8.32	8.37	
20	64QAM	1	0	8.65	8.46	8.67	
20	64QAM	1	49	8.63	8.45	8.65	
20	64QAM	1	99	8.57	8.41	8.61	9
20	64QAM	50	0	8.54	8.21	8.24	
20	64QAM	50	24	8.16	8.19	8.16	
20	64QAM	50	50	8.10	8.11	8.07	
20	64QAM	100	0	8.09	8.08	8.06	9
20	256QAM	1	0	8.16	8.21	8.17	
20	256QAM	1	49	8.13	8.15	8.08	
20	256QAM	1	99	8.11	8.11	8.06	
20	256QAM	50	0	7.68	7.71	7.62	8.5
20	256QAM	50	24	7.60	7.62	7.61	
20	256QAM	50	50	7.54	7.54	7.54	
20	256QAM	100	0	7.46	7.53	7.48	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	9.64	9.70	9.62	10.5
15	QPSK	1	37	9.53	9.60	9.55	
15	QPSK	1	74	9.51	9.52	9.48	
15	QPSK	36	0	8.59	8.63	8.61	
15	QPSK	36	20	8.56	8.53	8.57	9.5
15	QPSK	36	39	8.53	8.50	8.47	
15	QPSK	75	0	8.45	8.43	8.43	
15	16QAM	1	0	8.53	8.60	8.49	
15	16QAM	1	37	8.45	8.58	8.42	9.5
15	16QAM	1	74	8.38	8.57	8.31	
15	16QAM	36	0	8.43	8.46	8.47	
15	16QAM	36	20	8.35	8.35	8.40	
15	16QAM	36	39	8.34	8.30	8.38	9
15	16QAM	75	0	8.25	8.28	8.35	
15	64QAM	1	0	8.64	8.42	8.64	
15	64QAM	1	37	8.58	8.44	8.61	
15	64QAM	1	74	8.56	8.39	8.56	9
15	64QAM	36	0	8.51	8.19	8.22	
15	64QAM	36	20	8.11	8.13	8.11	
15	64QAM	36	39	8.05	8.09	8.02	
15	64QAM	75	0	8.06	8.05	8.01	9
15	256QAM	1	0	8.13	8.15	8.12	
15	256QAM	1	37	8.09	8.10	8.06	
15	256QAM	1	74	8.07	8.08	8.04	
15	256QAM	36	0	7.64	7.69	7.60	8.5
15	256QAM	36	20	7.57	7.57	7.59	
15	256QAM	36	39	7.49	7.48	7.53	
15	256QAM	75	0	7.41	7.51	7.46	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	9.62	9.66	9.61	10.5
10	QPSK	1	25	9.54	9.54	9.53	
10	QPSK	1	49	9.49	9.46	9.44	
10	QPSK	25	0	8.47	8.60	8.55	
10	QPSK	25	12	8.56	8.48	8.49	9.5
10	QPSK	25	25	8.53	8.43	8.42	
10	QPSK	50	0	8.44	8.43	8.40	
10	16QAM	1	0	8.51	8.53	8.46	
10	16QAM	1	25	8.42	8.56	8.41	9.5
10	16QAM	1	49	8.37	8.53	8.32	
10	16QAM	25	0	8.39	8.41	8.47	
10	16QAM	25	12	8.31	8.32	8.39	
10	16QAM	25	25	8.26	8.26	8.31	9
10	16QAM	50	0	8.23	8.27	8.32	
10	64QAM	1	0	8.59	8.38	8.62	
10	64QAM	1	25	8.59	8.38	8.54	
10	64QAM	1	49	8.47	8.36	8.54	9
10	64QAM	25	0	8.45	8.17	8.15	
10	64QAM	25	12	8.10	8.11	8.06	
10	64QAM	25	25	8.00	8.03	7.99	
10	64QAM	50	0	8.02	8.00	7.96	9
10	256QAM	1	0	8.13	8.17	8.13	
10	256QAM	1	25	8.07	8.04	8.03	
10	256QAM	1	49	8.04	8.02	8.02	
10	256QAM	25	0	7.58	7.64	7.57	8.5
10	256QAM	25	12	7.56	7.54	7.57	
10	256QAM	25	25	7.48	7.48	7.47	
10	256QAM	50	0	7.39	7.42	7.37	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	9.61	9.63	9.59	10.5
5	QPSK	1	12	9.50	9.48	9.49	
5	QPSK	1	24	9.47	9.41	9.40	
5	QPSK	12	0	8.44	8.55	8.51	
5	QPSK	12	7	8.42	8.42	8.44	9.5

5	QPSK	12	13	8.74	8.82	8.61	9.5
5	QPSK	25	0	8.64	8.68	8.58	
5	16QAM	1	0	8.84	8.99	8.81	
5	16QAM	1	12	8.69	8.97	8.78	
5	16QAM	1	24	8.68	8.90	8.74	9.5
5	16QAM	12	0	8.83	8.85	8.87	
5	16QAM	12	7	8.80	8.80	8.80	
5	16QAM	12	13	8.70	8.65	8.76	
5	16QAM	25	0	8.66	8.61	8.71	9.5
5	64QAM	1	0	8.63	8.89	8.83	
5	64QAM	1	12	8.56	8.84	8.79	
5	64QAM	1	24	8.50	8.72	8.68	
5	64QAM	12	0	8.64	8.62	8.55	9
5	64QAM	12	7	8.58	8.61	8.45	
5	64QAM	12	13	8.42	8.50	8.37	
5	64QAM	25	0	8.36	8.42	8.30	
5	256QAM	1	0	8.38	8.50	8.43	9
5	256QAM	1	12	8.37	8.40	8.39	
5	256QAM	1	24	8.39	8.36	8.30	
5	256QAM	12	0	8.00	8.04	8.02	
5	256QAM	12	7	7.94	8.05	7.93	9
5	256QAM	12	13	7.88	7.93	7.89	
5	256QAM	25	0	7.92	7.93	7.90	
Channel				18615	18900	19185	
Frequency (MHz)				1851.5	1880	1908.5	Tune-up limit (dBm)
3	QPSK	1	0	9.86	9.87	9.78	10.5
3	QPSK	1	8	9.78	9.68	9.67	
3	QPSK	1	14	9.65	9.60	9.47	
3	QPSK	8	0	8.84	8.90	8.74	
3	QPSK	8	4	8.77	8.83	8.68	9.5
3	QPSK	8	7	8.69	8.77	8.56	
3	QPSK	15	0	8.59	8.63	8.53	
3	16QAM	1	0	8.79	8.94	8.76	
3	16QAM	1	8	8.64	8.92	8.73	9.5
3	16QAM	1	14	8.63	8.85	8.69	
3	16QAM	8	0	8.78	8.80	8.82	
3	16QAM	8	4	8.75	8.75	8.75	
3	16QAM	8	7	8.65	8.60	8.71	9
3	16QAM	15	0	8.61	8.56	8.66	
3	64QAM	1	0	8.58	8.84	8.78	
3	64QAM	1	8	8.51	8.79	8.74	
3	64QAM	1	14	8.45	8.67	8.63	9
3	64QAM	8	0	8.59	8.57	8.50	
3	64QAM	8	4	8.53	8.56	8.40	
3	64QAM	8	7	8.37	8.45	8.32	
3	64QAM	15	0	8.31	8.37	8.25	9
3	256QAM	1	0	8.33	8.45	8.38	
3	256QAM	1	8	8.32	8.35	8.34	
3	256QAM	1	14	8.34	8.31	8.25	
3	256QAM	8	0	7.95	7.99	7.97	9
3	256QAM	8	4	7.89	8.00	7.88	
3	256QAM	8	7	7.83	7.88	7.84	
3	256QAM	15	0	7.87	7.88	7.85	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	10.5
1.4	QPSK	1	0	9.81	9.82	9.73	
1.4	QPSK	1	3	9.73	9.63	9.62	
1.4	QPSK	1	5	9.60	9.55	9.42	
1.4	QPSK	3	0	8.79	8.85	8.69	9
1.4	QPSK	3	1	8.72	8.78	8.63	
1.4	QPSK	3	3	8.64	8.72	8.51	
1.4	QPSK	6	0	8.54	8.58	8.48	
1.4	16QAM	1	0	8.74	8.89	8.71	9
1.4	16QAM	1	3	8.59	8.87	8.68	
1.4	16QAM	1	5	8.58	8.80	8.64	
1.4	16QAM	3	0	8.73	8.75	8.77	
1.4	16QAM	3	1	8.70	8.70	8.70	9
1.4	16QAM	3	3	8.60	8.55	8.66	
1.4	16QAM	6	0	8.56	8.51	8.61	
1.4	64QAM	1	0	8.53	8.79	8.73	
1.4	64QAM	1	3	8.46	8.74	8.69	9.5
1.4	64QAM	1	5	8.40	8.62	8.58	
1.4	64QAM	3	0	8.54	8.52	8.45	
1.4	64QAM	3	1	8.48	8.51	8.35	
1.4	64QAM	3	3	8.32	8.40	8.27	9.5
1.4	64QAM	6	0	8.26	8.32	8.20	
1.4	256QAM	1	0	8.28	8.40	8.33	
1.4	256QAM	1	3	8.27	8.30	8.29	
1.4	256QAM	1	5	8.29	8.26	8.20	9.5
1.4	256QAM	3	0	7.90	7.94	7.92	
1.4	256QAM	3	1	7.84	7.95	7.83	
1.4	256QAM	3	3	7.78	7.83	7.79	
1.4	256QAM	6	0	7.82	7.83	7.80	9

5	QPSK	12	13	8.51	8.38	8.40	9.5
5	QPSK	25	0	8.39	8.38	8.36	
5	16QAM	1	0	8.46	8.49	8.41	
5	16QAM	1	12	8.38	8.50	8.38	
5	16QAM	1	24	8.31	8.49	8.26	9
5	16QAM	12	0	8.37	8.40	8.44	
5	16QAM	12	7	8.26	8.29	8.37	
5	16QAM	12	13	8.23	8.24	8.27	
5	16QAM	25	0	8.19	8.25	8.28	9
5	64QAM	1	0	8.54	8.32	8.56	
5	64QAM	1	12	8.54	8.33	8.53	
5	64QAM	1	24	8.45	8.31	8.52	
5	64QAM	12	0	8.40	8.15	8.09	9
5	64QAM	12	7	8.06	8.07	8.04	
5	64QAM	12	13	7.98	7.98	7.97	
5	64QAM	25	0	8.00	7.96	7.94	
5	256QAM	1	0	8.09	8.15	8.09	9
5	256QAM	1	12	8.05	8.03	8.01	
5	256QAM	1	24	7.98	7.99	7.99	
5	256QAM	12	0	7.54	7.59	7.51	
5	256QAM	12	7	7.50	7.49	7.54	8.5
5	256QAM	12	13	7.43	7.46	7.46	
5	256QAM	25	0	7.33	7.40	7.35	
Channel				19965	20175	20385	
Frequency (MHz)				1711.5	1732.5	1753.5	Tune-up limit (dBm)
3	QPSK	1	0	9.56	9.58	9.54	10.5
3	QPSK	1	8	9.45	9.43	9.44	
3	QPSK	1	14	9.44	9.36	9.35	
3	QPSK	8	0	8.39	8.50	8.46	
3	QPSK	8	4	8.36	8.37	8.39	9.5
3	QPSK	8	7	8.32	8.33	8.35	
3	QPSK	15	0	8.34	8.33	8.31	
3	16QAM	1	0	8.41	8.44	8.36	
3	16QAM	1	8	8.33	8.45	8.33	9.5
3	16QAM	1	14	8.26	8.44	8.21	
3	16QAM	8	0	8.32	8.35	8.39	
3	16QAM	8	4	8.21	8.24	8.32	
3	16QAM	8	7	8.18	8.19	8.22	9
3	16QAM	15	0	8.14	8.20	8.23	
3	64QAM	1	0	8.49	8.27	8.51	
3	64QAM	1	8	8.49	8.28	8.48	
3	64QAM	1	14	8.40	8.26	8.47	9
3	64QAM	8	0	8.35	8.10	8.04	
3	64QAM	8	4	8.01	8.02	7.99	
3	64QAM	8	7	7.93	7.93	7.92	
3	64QAM	15	0	7.95	7.91	7.89	9
3	256QAM	1	0	8.04	8.10	8.04	
3	256QAM	1	8	8.00	7.98	7.96	
3	256QAM	1	14	7.93	7.94	7.94	
3	256QAM	8	0	7.49	7.54	7.46	8.5
3	256QAM	8	4	7.45	7.44	7.49	
3	256QAM	8	7	7.38	7.41	7.41	
3	256QAM	15	0	7.28	7.35	7.30	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	10.5
1.4	QPSK	1	0	9.54	9.56	9.52	
1.4	QPSK	1	3	9.43	9.41	9.42	
1.4	QPSK	1	5	9.44	9.34	9.33	
1.4	QPSK	3	0	8.39	8.48	8.44	9.5
1.4	QPSK	3	1	8.37	8.35	8.37	
1.4	QPSK	3	3	8.36	8.31	8.33	
1.4	QPSK	6	0	8.32	8.31	8.29	
1.4	16QAM	1	0	8.36	8.39	8.31	9.5
1.4	16QAM	1	3	8.28	8.40	8.28	
1.4	16QAM	1	5	8.21	8.39	8.16	
1.4	16QAM	3	0	8.27	8.30	8.34	
1.4	16QAM	3	1	8.16	8.19	8.27	9
1.4	16QAM	3	3	8.13	8.14	8.17	
1.4	16QAM	6	0	8.09	8.15	8.18	
1.4	64QAM	1	0	8.44	8.22	8.46	
1.4	64QAM	1	3	8.44	8.23	8.43	9
1.4	64QAM	1	5	8.35	8.21	8.42	
1.4	64QAM	3	0	8.30	8.05	7.99	
1.4	64QAM	3	1	7.96	7.97	7.94	
1.4	64QAM	3	3	7.88	7.88	7.87	9
1.4	64QAM	6	0	7.90	7.86	7.84	
1.4	256QAM	1	0	7.99	8.05	7.99	
1.4	256QAM	1	3	7.95	7.93	7.91	
1.4	256QAM	1	5	7.88	7.89	7.89	9
1.4	256QAM	3	0	7.44	7.49	7.41	
1.4	256QAM	3	1	7.40	7.39	7.44	
1.4	256QAM	3	3	7.33	7.36	7.36	
1.4	256QAM	6	0	7.23	7.30	7.25	8.5

Band 5 (Celluar 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	17
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	16.56	16.60	16.54	16
10	QPSK	1	25	16.46	16.54	16.47	
10	QPSK	1	49	16.43	16.50	16.46	
10	QPSK	25	0	15.52	15.55	15.50	
10	QPSK	25	12	15.44	15.44	15.47	16
10	QPSK	25	25	15.35	15.39	15.44	
10	QPSK	50	0	15.27	15.28	15.42	
10	16QAM	1	0	15.12	15.18	15.10	
10	16QAM	1	25	15.08	15.12	15.03	16
10	16QAM	1	49	15.05	15.09	15.02	
10	16QAM	25	0	14.94	14.90	14.86	
10	16QAM	25	12	14.92	14.83	14.80	
10	16QAM	25	25	14.82	14.76	14.77	15.5
10	16QAM	50	0	14.75	14.72	14.72	
10	64QAM	1	0	14.98	15.07	15.08	
10	64QAM	1	25	14.95	15.03	15.03	
10	64QAM	1	49	14.87	14.99	14.99	15.5
10	64QAM	25	0	14.80	14.73	14.82	
10	64QAM	25	12	14.71	14.61	14.71	
10	64QAM	25	25	14.67	14.56	14.63	
10	64QAM	50	0	14.61	14.45	14.56	15.5
10	256QAM	1	0	14.62	14.67	14.60	
10	256QAM	1	25	14.57	14.58	14.57	
10	256QAM	1	49	14.54	14.50	14.55	
10	256QAM	25	0	14.26	14.38	14.22	15
10	256QAM	25	12	14.20	14.33	14.14	
10	256QAM	25	25	14.15	14.23	14.05	
10	256QAM	50	0	14.12	14.21	13.96	
Channel				20425	20525	20625	17
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	16.49	16.58	16.52	16
5	QPSK	1	12	16.41	16.49	16.44	
5	QPSK	1	24	16.38	16.45	16.41	
5	QPSK	12	0	15.47	15.49	15.45	
5	QPSK	12	7	15.39	15.39	15.42	16
5	QPSK	12	13	15.30	15.34	15.39	
5	QPSK	25	0	15.22	15.23	15.37	
5	16QAM	1	0	15.07	15.13	15.05	
5	16QAM	1	12	15.03	15.07	14.98	16
5	16QAM	1	24	15.00	15.04	14.97	
5	16QAM	12	0	14.89	14.85	14.81	
5	16QAM	12	7	14.87	14.78	14.75	
5	16QAM	12	13	14.77	14.71	14.72	15.5
5	16QAM	25	0	14.70	14.67	14.67	
5	64QAM	1	0	14.93	15.02	15.03	
5	64QAM	1	12	14.90	14.98	14.98	
5	64QAM	1	24	14.82	14.94	14.94	15.5
5	64QAM	12	0	14.75	14.68	14.77	
5	64QAM	12	7	14.66	14.56	14.66	
5	64QAM	12	13	14.62	14.51	14.58	
5	64QAM	25	0	14.56	14.40	14.51	15.5
5	256QAM	1	0	14.57	14.62	14.55	
5	256QAM	1	12	14.52	14.53	14.52	
5	256QAM	1	24	14.49	14.45	14.50	
5	256QAM	12	0	14.21	14.33	14.17	15
5	256QAM	12	7	14.15	14.28	14.09	
5	256QAM	12	13	14.10	14.18	14.00	
5	256QAM	25	0	14.07	14.16	13.91	
Channel				20415	20525	20635	17
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	16.45	16.54	16.48	16
3	QPSK	1	8	16.37	16.45	16.40	
3	QPSK	1	14	16.34	16.41	16.37	
3	QPSK	8	0	15.43	15.45	15.41	
3	QPSK	8	4	15.35	15.35	15.38	16
3	QPSK	8	7	15.26	15.30	15.35	
3	QPSK	15	0	15.18	15.19	15.33	
3	16QAM	1	0	15.03	15.09	15.01	
3	16QAM	1	8	14.99	15.03	14.94	16
3	16QAM	1	14	14.96	15.00	14.93	
3	16QAM	8	0	14.85	14.81	14.77	
3	16QAM	8	4	14.83	14.74	14.71	
3	16QAM	8	7	14.73	14.67	14.68	15.5
3	16QAM	15	0	14.66	14.63	14.63	
3	64QAM	1	0	14.89	14.98	14.99	
3	64QAM	1	8	14.86	14.94	14.94	
3	64QAM	1	14	14.78	14.90	14.90	15.5
3	64QAM	8	0	14.71	14.64	14.73	
3	64QAM	8	4	14.62	14.52	14.62	
3	64QAM	8	7	14.58	14.47	14.54	
3	64QAM	15	0	14.52	14.36	14.47	15.5
3	256QAM	1	0	14.53	14.58	14.51	
3	256QAM	1	8	14.48	14.49	14.48	
3	256QAM	1	14	14.45	14.41	14.46	
3	256QAM	8	0	14.17	14.29	14.13	15
3	256QAM	8	4	14.11	14.24	14.05	
3	256QAM	8	7	14.06	14.14	13.96	
3	256QAM	15	0	14.03	14.12	13.87	
Channel				20407	20525	20643	17
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	16.42	16.51	16.45	17
1.4	QPSK	1	3	16.34	16.42	16.37	
1.4	QPSK	1	5	16.31	16.38	16.34	
1.4	QPSK	3	0	15.40	15.42	15.38	
1.4	QPSK	3	1	15.32	15.32	15.35	

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	21
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	20.49	20.53	20.51	20
10	QPSK	1	25	20.40	20.54	20.46	
10	QPSK	1	49	20.36	20.52	20.41	
10	QPSK	25	0	19.36	19.43	19.38	
10	QPSK	25	12	19.33	19.32	19.36	20
10	QPSK	25	25	19.22	19.28	19.29	
10	QPSK	50	0	19.18	19.26	19.27	
10	16QAM	1	0	19.33	19.44	19.42	
10	16QAM	1	25	19.30	19.35	19.33	20
10	16QAM	1	49	19.21	19.25	19.29	
10	16QAM	25	0	19.04	19.14	19.08	
10	16QAM	25	12	18.95	19.03	19.06	
10	16QAM	25	25	18.84	19.00	19.01	20
10	16QAM	50	0	18.81	18.91	18.90	
10	64QAM	1	0	19.40	19.18	19.12	
10	64QAM	1	25	19.32	19.16	19.08	
10	64QAM	1	49	19.29	19.12	18.99	19.5
10	64QAM	25	0	18.93	18.96	18.90	
10	64QAM	25	12	18.85	18.85	18.84	
10	64QAM	25	25	18.78	18.75	18.78	
10	64QAM	50	0	18.76	18.65	18.69	17.5
10	256QAM	1	0	17.26	17.35	17.30	
10	256QAM	1	25	17.20	17.28	17.26	
10	256QAM	1	49	17.17	17.21	17.21	
10	256QAM	25	0	16.42	16.48	16.38	16.5
10	256QAM	25	12	16.40	16.40	16.28	
10	256QAM	25	25	16.36	16.36	16.19	
10	256QAM	50	0	16.29	16.30	16.11	
Channel				23035	23095	23155	21
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	20.44	20.51	20.47	20
5	QPSK	1	12	20.35	20.49	20.41	
5	QPSK	1	24	20.31	20.47	20.36	
5	QPSK	12	0	19.31	19.38	19.33	
5	QPSK	12	7	19.28	19.27	19.31	20
5	QPSK	12	13	19.17	19.23	19.24	
5	QPSK	25	0	19.13	19.21	19.22	
5	16QAM	1	0	19.28	19.39	19.37	
5	16QAM	1	12	19.25	19.30	19.28	20
5	16QAM	1	24	19.16	19.20	19.24	
5	16QAM	12	0	18.99	19.09	19.03	
5	16QAM	12	7	18.90	18.98	19.01	
5	16QAM	12	13	18.79	18.95	18.96	19.5
5	16QAM	25	0	18.76	18.86	18.85	
5	64QAM	1	0	19.35	19.13	19.07	
5	64QAM	1	12	19.27	19.11	19.03	
5	64QAM	1	24	19.24	19.07	18.94	19.5
5	64QAM	12	0	18.88	18.91	18.85	
5	64QAM	12	7	18.80	18.80	18.79	
5	64QAM	12	13	18.73	18.70	18.73	
5	64QAM	25	0	18.71	18.60	18.64	17.5
5	256QAM	1	0	17.21	17.30	17.25	
5	256QAM	1	12	17.15	17.23	17.21	
5	256QAM	1	24	17.12	17.16	17.16	
5	256QAM	12	0	16.37	16.43	16.33	16.5
5	256QAM	12	7	16.35	16.35	16.23	
5	256QAM	12	13	16.31	16.31	16.14	
5	256QAM	25	0	16.24	16.25	16.06	
Channel				23025	23095	23165	

1.4	QPSK	3	3	15.23	15.27	15.32	
1.4	QPSK	6	0	15.15	15.16	15.30	16
1.4	16QAM	1	0	15.00	15.06	14.98	
1.4	16QAM	1	3	14.96	15.00	14.91	
1.4	16QAM	1	5	14.93	14.97	14.90	
1.4	16QAM	3	0	14.82	14.78	14.74	
1.4	16QAM	3	1	14.80	14.71	14.68	
1.4	16QAM	3	3	14.70	14.64	14.65	
1.4	16QAM	6	0	14.63	14.60	14.60	15.5
1.4	64QAM	1	0	14.86	14.95	14.96	
1.4	64QAM	1	3	14.83	14.91	14.91	
1.4	64QAM	1	5	14.75	14.87	14.87	
1.4	64QAM	3	0	14.68	14.61	14.70	
1.4	64QAM	3	1	14.59	14.49	14.59	
1.4	64QAM	3	3	14.55	14.44	14.51	
1.4	64QAM	6	0	14.49	14.33	14.44	15.5
1.4	256QAM	1	0	14.50	14.55	14.48	
1.4	256QAM	1	3	14.45	14.46	14.45	
1.4	256QAM	1	5	14.42	14.38	14.43	
1.4	256QAM	3	0	14.14	14.26	14.10	
1.4	256QAM	3	1	14.08	14.21	14.02	
1.4	256QAM	3	3	14.03	14.11	13.93	
1.4	256QAM	6	0	14.00	14.09	13.84	15

1.4	QPSK	3	3	19.07	19.13	19.14	
1.4	QPSK	6	0	19.03	19.11	19.12	20
1.4	16QAM	1	0	19.18	19.29	19.27	
1.4	16QAM	1	3	19.15	19.20	19.18	
1.4	16QAM	1	5	19.06	19.10	19.14	
1.4	16QAM	3	0	18.89	18.99	18.93	
1.4	16QAM	3	1	18.80	18.88	18.91	
1.4	16QAM	3	3	18.69	18.85	18.86	
1.4	16QAM	6	0	18.66	18.76	18.75	20
1.4	64QAM	1	0	19.25	19.03	18.97	
1.4	64QAM	1	3	19.17	19.01	18.93	
1.4	64QAM	1	5	19.14	18.97	18.84	
1.4	64QAM	3	0	18.78	18.81	18.75	
1.4	64QAM	3	1	18.70	18.70	18.69	
1.4	64QAM	3	3	18.63	18.60	18.63	
1.4	64QAM	6	0	18.61	18.50	18.54	19.5
1.4	256QAM	1	0	17.11	17.20	17.15	
1.4	256QAM	1	3	17.05	17.13	17.11	
1.4	256QAM	1	5	17.02	17.06	17.06	
1.4	256QAM	3	0	16.27	16.33	16.23	
1.4	256QAM	3	1	16.25	16.25	16.13	
1.4	256QAM	3	3	16.21	16.21	16.04	
1.4	256QAM	6	0	16.14	16.15	15.96	16.5

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			20.5
10	QPSK	1	0		20.06		
10	QPSK	1	25		19.96		
10	QPSK	1	49		19.85		
10	QPSK	25	0		19.03		
10	QPSK	25	12		18.92		
10	QPSK	25	25		18.88		
10	QPSK	50	0		18.77		
10	16QAM	1	0		18.77		
10	16QAM	1	25		18.74		
10	16QAM	1	49		18.72		
10	16QAM	25	0		18.30		
10	16QAM	25	12		18.23		
10	16QAM	25	25		18.16		
10	16QAM	50	0		18.08		
10	64QAM	1	0		18.72		
10	64QAM	1	25		18.66		
10	64QAM	1	49		18.62		
10	64QAM	25	0		18.38		
10	64QAM	25	12		18.35		
10	64QAM	25	25		18.28		
10	64QAM	50	0		18.23		
10	256QAM	1	0		18.56		
10	256QAM	1	25		18.51		
10	256QAM	1	49		18.48		
10	256QAM	25	0		18.11		
10	256QAM	25	12		18.02		
10	256QAM	25	25		18.16		
10	256QAM	50	0		18.10		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	19.87	20.02	19.96	20.5
5	QPSK	1	12	19.80	19.92	19.86	
5	QPSK	1	24	19.65	19.78	19.71	19.5
5	QPSK	12	0	18.86	18.98	18.85	
5	QPSK	12	7	18.72	18.86	18.79	19.5
5	QPSK	12	13	18.70	18.84	18.79	
5	QPSK	25	0	18.57	18.71	18.63	19.5
5	16QAM	1	0	18.59	18.72	18.66	
5	16QAM	1	12	18.57	18.70	18.61	19.5
5	16QAM	1	24	18.49	18.66	18.58	
5	16QAM	12	0	18.11	18.26	18.19	19
5	16QAM	12	7	18.09	18.16	18.16	
5	16QAM	12	13	17.98	18.10	18.05	19
5	16QAM	25	0	17.90	18.03	17.94	
5	64QAM	1	0	18.62	18.68	18.60	19.5
5	64QAM	1	12	18.44	18.62	18.50	
5	64QAM	1	24	18.46	18.56	18.51	19
5	64QAM	12	0	18.22	18.33	18.26	
5	64QAM	12	7	18.17	18.31	18.22	19
5	64QAM	12	13	18.12	18.22	18.15	
5	64QAM	25	0	18.03	18.18	18.10	19
5	256QAM	1	0	18.48	18.62	18.54	
5	256QAM	1	12	18.43	18.56	18.52	19
5	256QAM	1	24	18.41	18.52	18.47	
5	256QAM	12	0	17.67	17.85	17.78	18.5
5	256QAM	12	7	17.6	17.74	17.68	
5	256QAM	12	13	17.54	17.68	17.63	18.5
5	256QAM	25	0	17.5	17.56	17.48	

5	QPSK	12	13	8.31	8.40	8.30	9.5
5	QPSK	25	0	8.26	8.31	8.29	
5	16QAM	1	0	8.50	8.54	8.52	
5	16QAM	1	12	8.43	8.51	8.44	9
5	16QAM	1	24	8.34	8.45	8.34	
5	16QAM	12	0	8.31	8.33	8.31	
5	16QAM	12	7	8.28	8.32	8.27	9
5	16QAM	12	13	8.20	8.24	8.18	
5	16QAM	25	0	8.14	8.15	8.10	
5	64QAM	1	0	8.30	8.45	8.38	9
5	64QAM	1	12	8.27	8.44	8.35	
5	64QAM	1	24	8.20	8.42	8.29	
5	64QAM	12	0	8.23	8.27	8.31	9
5	64QAM	12	7	8.21	8.22	8.28	
5	64QAM	12	13	8.16	8.16	8.25	
5	64QAM	25	0	8.06	8.14	8.21	9
5	256QAM	1	0	8.13	8.23	8.19	
5	256QAM	1	12	8.11	8.20	8.09	
5	256QAM	1	24	8.01	8.19	7.98	8.5
5	256QAM	12	0	7.64	7.75	7.70	
5	256QAM	12	7	7.62	7.71	7.63	
5	256QAM	12	13	7.59	7.61	7.61	Tune-up limit (dBm)
5	256QAM	25	0	7.55	7.52	7.57	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	10.5
3	QPSK	1	0	9.46	9.54	9.40	
3	QPSK	1	8	9.37	9.45	9.35	
3	QPSK	1	14	9.29	9.38	9.29	9.5
3	QPSK	8	0	8.41	8.51	8.38	
3	QPSK	8	4	8.30	8.41	8.34	
3	QPSK	8	7	8.28	8.35	8.25	9.5
3	QPSK	15	0	8.21	8.26	8.24	
3	16QAM	1	0	8.45	8.49	8.47	
3	16QAM	1	8	8.38	8.46	8.39	9
3	16QAM	1	14	8.29	8.40	8.29	
3	16QAM	8	0	8.26	8.28	8.26	
3	16QAM	8	4	8.23	8.27	8.22	9
3	16QAM	8	7	8.15	8.19	8.13	
3	16QAM	15	0	8.09	8.10	8.05	
3	64QAM	1	0	8.25	8.40	8.33	9
3	64QAM	1	8	8.22	8.39	8.30	
3	64QAM	1	14	8.15	8.37	8.24	
3	64QAM	8	0	8.18	8.22	8.26	9
3	64QAM	8	4	8.16	8.17	8.23	
3	64QAM	8	7	8.11	8.11	8.20	
3	64QAM	15	0	8.01	8.09	8.16	9
3	256QAM	1	0	8.08	8.18	8.14	
3	256QAM	1	8	8.06	8.15	8.04	
3	256QAM	1	14	7.96	8.14	7.93	8.5
3	256QAM	8	0	7.59	7.70	7.65	
3	256QAM	8	4	7.57	7.66	7.58	
3	256QAM	8	7	7.54	7.56	7.56	Tune-up limit (dBm)
3	256QAM	15	0	7.50	7.47	7.52	
Channel				131979	132322	132665	
Frequency (MHz)				1710.7	1745	1779.3	10.5
1.4	QPSK	1	0	9.41	9.49	9.35	
1.4	QPSK	1	3	9.32	9.40	9.30	
1.4	QPSK	1	5	9.24	9.33	9.24	9.5
1.4	QPSK	3	0	8.46	8.51	8.33	
1.4	QPSK	3	1	8.35	8.36	8.29	
1.4	QPSK	3	3	8.31	8.30	8.25	9
1.4	QPSK	6	0	8.16	8.21	8.19	
1.4	16QAM	1	0	8.40	8.44	8.42	
1.4	16QAM	1	3	8.33	8.41	8.34	9
1.4	16QAM	1	5	8.24	8.35	8.24	
1.4	16QAM	3	0	8.21	8.23	8.21	
1.4	16QAM	3	1	8.18	8.22	8.17	9
1.4	16QAM	3	3	8.10	8.14	8.08	
1.4	16QAM	6	0	8.04	8.05	8.00	
1.4	64QAM	1	0	8.20	8.35	8.28	9
1.4	64QAM	1	3	8.17	8.34	8.25	
1.4	64QAM	1	5	8.10	8.32	8.19	
1.4	64QAM	3	0	8.13	8.17	8.21	9
1.4	64QAM	3	1	8.11	8.12	8.18	
1.4	64QAM	3	3	8.06	8.06	8.15	
1.4	64QAM	6	0	7.96	8.04	8.11	9
1.4	256QAM	1	0	8.03	8.13	8.09	
1.4	256QAM	1	3	8.01	8.10	7.99	
1.4	256QAM	1	5	7.91	8.09	7.88	9
1.4	256QAM	3	0	7.54	7.65	7.60	
1.4	256QAM	3	1	7.52	7.61	7.53	
1.4	256QAM	3	3	7.49	7.51	7.51	8.5
1.4	256QAM	6	0	7.45	7.42	7.47	

Band 48 (3.6G Band)										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Middle-Low Channel	Middle-Low Channel	Middle-High Channel	High Channel	Tune-up limit (dBm)	
Channel				55340	55630	55990	56100	56640		
Frequency (MHz)				35540	35900	36250	36410	36950		
20	QPSK	1	0	7.95	7.91	8.05	7.98	7.95	8.5	
20	QPSK	1	49	7.77	7.79	7.85	7.80	7.72		
20	QPSK	1	99	7.74	7.70	7.64	7.82	7.83		
20	QPSK	50	0	6.84	6.85	6.95	6.90	6.83		
20	QPSK	50	24	6.74	6.79	6.79	6.80	6.81	7.5	
20	QPSK	50	50	6.80	6.76	6.90	6.70	6.77		
20	QPSK	100	0	6.77	6.80	6.76	6.85	6.67		
20	16QAM	1	0	6.95	6.83	6.85	6.75	6.90		
20	16QAM	1	49	6.82	6.70	6.70	6.90	6.81	7.5	
20	16QAM	1	99	6.84	6.85	6.74	6.71	6.73		
20	16QAM	50	0	6.79	6.83	6.77	6.64	6.54		
20	16QAM	50	24	6.73	6.74	6.69	6.62	6.57		
20	16QAM	50	50	6.65	6.67	6.82	6.81	6.70	7.5	
20	16QAM	100	0	6.76	6.85	6.87	6.82	6.67		
20	64QAM	1	0	7.04	6.99	6.92	6.99	6.85		
20	64QAM	1	49	7.01	6.88	7.09	6.85	6.84		
20	64QAM	1	99	6.94	7.14	7.03	6.94	6.82	7.5	
20	64QAM	50	0	5.98	6.10	6.26	6.14	6.08		
20	64QAM	50	24	6.50	6.32	6.36	6.36	6.68		
20	64QAM	50	50	6.56	6.47	6.34	6.20	6.47		
20	64QAM	100	0	6.36	6.26	6.47	6.48	6.35	7.5	
20	256QAM	1	0	6.95	6.73	6.72	6.81	7.02		
20	256QAM	1	49	6.76	6.61	6.80	7.08	6.70		
20	256QAM	1	99	6.66	6.95	6.82	6.91	6.82		
20	256QAM	50	0	6.61	6.51	6.61	6.76	6.61	7.5	
20	256QAM	50	24	6.55	6.60	6.52	6.42	6.51		
20	256QAM	50	50	6.51	6.49	6.66	6.28	6.61		
20	256QAM	100	0	6.29	6.42	6.35	6.40	6.70		
Channel				55315	55415	55735	56055	56765	Tune-up limit (dBm)	
Frequency (MHz)				3557.5	3557.5	3589.5	3621.5	3692.5		
15	QPSK	1	0	7.84	7.80	7.94	7.87	7.84	8.5	
15	QPSK	1	37	7.66	7.68	7.74	7.69	7.61		
15	QPSK	1	74	7.63	7.59	7.53	7.71	7.72		
15	QPSK	36	0	6.73	6.74	6.84	6.79	6.72		
15	QPSK	36	20	6.63	6.68	6.68	6.69	6.70	7.5	
15	QPSK	36	39	6.69	6.65	6.79	6.59	6.66		
15	QPSK	75	0	6.66	6.69	6.65	6.74	6.56		
15	16QAM	1	0	6.84	6.72	6.74	6.64	6.79		
15	16QAM	1	37	6.71	6.69	6.69	6.79	6.70	7.5	
15	16QAM	1	74	6.73	6.74	6.63	6.60	6.62		
15	16QAM	36	0	6.68	6.72	6.66	6.53	6.43		
15	16QAM	36	20	6.62	6.63	6.58	6.51	6.46		
15	16QAM	36	39	6.54	6.56	6.71	6.70	6.59	7.5	
15	16QAM	75	0	6.65	6.74	6.76	6.71	6.56		
15	64QAM	1	0	6.93	6.88	6.81	6.88	6.74		
15	64QAM	1	37	6.90	6.77	6.98	6.74	6.73		
15	64QAM	1	74	6.83	7.03	6.92	6.83	6.71	7.5	
15	64QAM	36	0	6.30	6.42	6.58	6.46	6.40		
15	64QAM	36	20	6.32	6.14	6.18	6.18	6.50		
15	64QAM	36	39	6.36	6.29	6.16	6.02	6.29		
15	64QAM	75	0	6.18	6.08	6.29	6.30	6.17	7.5	
15	256QAM	1	0	6.58	6.36	6.35	6.44	6.65		
15	256QAM	1	37	6.39	6.24	6.43	6.71	6.33		
15	256QAM	1	74	6.29	6.58	6.45	6.54	6.45		
15	256QAM	36	0	6.54	6.44	6.54	6.69	6.54	7.5	
15	256QAM	36	20	6.48	6.53	6.45	6.35	6.44		
15	256QAM	36	39	6.44	6.42	6.59	6.21	6.54		
15	256QAM	75	0	6.22	6.35	6.28	6.33	6.63		
Channel				55290	55390	55710	56030	56790	Tune-up limit (dBm)	
Frequency (MHz)				3555	3555	3587	3619	3695		
10	QPSK	1	0	7.72	7.68	7.82	7.75	7.72	8.5	
10	QPSK	1	25	7.54	7.56	7.62	7.57	7.49		
10	QPSK	1	49	7.51	7.47	7.41	7.59	7.60		
10	QPSK	25	0	6.61	6.62	6.72	6.67	6.60		
10	QPSK	25	12	6.51	6.56	6.56	6.57	6.58	7.5	
10	QPSK	25	25	6.57	6.53	6.67	6.47	6.54		
10	QPSK	50	0	6.54	6.57	6.53	6.62	6.44		
10	16QAM	1	0	6.72	6.60	6.62	6.52	6.67		
10	16QAM	1	25	6.59	6.47	6.47	6.67	6.58	7.5	
10	16QAM	1	49	6.61	6.62	6.51	6.48	6.50		
10	16QAM	25	0	6.56	6.60	6.54	6.41	6.31		
10	16QAM	25	12	6.50	6.51	6.46	6.39	6.34		
10	16QAM	25	25	6.42	6.44	6.59	6.56	6.47	7.5	
10	16QAM	50	0	6.53	6.62	6.64	6.59	6.44		
10	64QAM	1	0	6.81	6.76	6.69	6.76	6.62		
10	64QAM	1	25	6.78	6.65	6.86	6.62	6.61		
10	64QAM	1	49	6.71	6.91	6.80	6.71	6.59	7.5	
10	64QAM	25	0	6.35	6.47	6.63	6.51	6.45		
10	64QAM	25	12	6.37	6.19	6.23	6.23	6.55		
10	64QAM	25	25	6.43	6.34	6.21	6.07	6.34		
10	64QAM	50	0	6.23	6.13	6.34	6.35	6.22	7.5	
10	256QAM	1	0	6.76	6.54	6.53	6.62	6.83		
10	256QAM	1	25	6.57	6.42	6.61	6.89	6.51		
10	256QAM	1	49	6.47	6.76	6.63	6.72	6.63		
10	256QAM	25	0	6.62	6.52	6.62	6.77	6.62	7.5	
10	256QAM	25	12	6.56	6.61	6.53	6.43	6.52		
10	256QAM	25	25	6.52	6.50	6.67	6.29	6.62		
10	256QAM	50	0	6.30	6.43	6.36	6.41	6.51		
Channel				55265	55365	55685	56005	56815	Tune-up limit (dBm)	
Frequency (MHz)				3552.5	3552.5	3584.5	3616.5	3697.5		
5	QPSK	1	0	7.60	7.56	7.70	7.63	7.60	8.5	
5	QPSK	1	12	7.42	7.44	7.50	7.45	7.37		
5	QPSK	1	24	7.39	7.35	7.29	7.47	7.48		
5	QPSK	12	0	6.49	6.50	6.60	6.55	6.48		
5	QPSK	12	7	6.39	6.44	6.44	6.45	6.46	7.5	
5	QPSK	12	13	6.45	6.41	6.55	6.35	6.42		
5	QPSK	25	0	6.42	6.45	6.41	6.50	6.32		
5	16QAM	1	0	6.60	6.48	6.50	6.40	6.55		
5	16QAM	1	12	6.47	6.35	6.35	6.55	6.46	7.5	
5	16QAM	1	24	6.49	6.50	6.39	6.36	6.38		
5	16QAM	12	0	6.44	6.48	6.42	6.29	6.19		
5	16QAM	12	7	6.38	6.39	6.34	6.27	6.22		
5	16QAM	12	13	6.30	6.32	6.47	6.46	6.35	7.5	
5	16QAM	25	0	6.41	6.50	6.52	6.47	6.32		
5	64QAM	1	0	6.69	6.64	6.57	6.64	6.50		
5	64QAM	1	12	6.66	6.53	6.74	6.50	6.49		
5	64QAM	1	24	6.59	6.79	6.68	6.59	6.47	7.5	
5	64QAM	12	0	6.43	6.55	6.71	6.59	6.53		
5	64QAM	12	7	6.45	6.27	6.31	6.31	6.63		
5	64QAM	12	13	6.51	6.42	6.29	6.15	6.43		
5	64QAM	25	0	6.31	6.21	6.42	6.43	6.30	7.5	
5	256QAM	1	0	6.64	6.42	6.41	6.50	6.71		
5	256QAM	1	12	6.45	6.30	6.49	6.77	6.39		
5	256QAM	1	24	6.35	6.64	6.51	6.60	6.51		
5	256QAM	12	0	6.50	6.40	6.50	6.65	6.50	7.5	
5	256QAM	12	7	6.44	6.49	6.41	6.31	6.40		
5	256QAM	12	13	6.40	6.38	6.55	6.17	6.50		
5	256QAM	25	0	6.18	6.31	6.24	6.29	6.59		

Band 48 (For EN-DC)													
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Middle-Low Channel	Middle-Low Channel	Middle-High Channel	High Channel	Tune-up limit (dbm)	Ch Delta > 0.5			
Channel				55340	55830	55990	56150	56640					
Frequency (MHz)				3560	3609	3625	3641	3690					
20	QPSK	1	0	13.86	13.82	13.96	13.89	13.86	14.5	0.41			
20	QPSK	1	49	13.68	13.70	13.76	13.71	13.63					
20	QPSK	1	99	13.65	13.61	13.55	13.73	13.74					
20	QPSK	50	0	12.75	12.76	12.86	12.81	12.74					
20	QPSK	50	24	12.65	12.70	12.70	12.71	12.72					
20	QPSK	50	50	12.71	12.67	12.81	12.61	12.68	13.5	0.25			
20	QPSK	100	0	12.68	12.71	12.67	12.76	12.58					
20	16QAM	1	0	12.86	12.74	12.76	12.66	12.81					
20	16QAM	1	49	12.73	12.61	12.61	12.81	12.72					
20	16QAM	1	99	12.75	12.76	12.65	12.62	12.64					
20	16QAM	50	0	12.70	12.74	12.68	12.55	12.45	13.5	0.20			
20	16QAM	50	24	12.64	12.65	12.60	12.53	12.48					
20	16QAM	50	50	12.56	12.58	12.73	12.72	12.61					
20	16QAM	100	0	12.67	12.76	12.78	12.73	12.58					
20	64QAM	1	0	12.95	12.90	12.83	12.90	12.76					
20	64QAM	1	49	12.92	12.79	13.00	12.76	12.75	13.5	0.32			
20	64QAM	1	99	12.85	13.05	12.94	12.85	12.73					
20	64QAM	50	0	11.89	12.01	12.17	12.05	11.99					
20	64QAM	50	24	11.91	11.73	11.77	11.77	12.09					
20	64QAM	50	50	11.97	11.88	11.75	11.61	11.88					
20	64QAM	100	0	11.77	11.67	11.88	11.89	11.76	12.5	0.56			
20	256QAM	1	0	8.10	7.88	7.87	7.96	8.17					
20	256QAM	1	49	7.91	7.76	7.95	8.23	7.85					
20	256QAM	1	99	7.81	8.10	7.97	8.06	7.97					
20	256QAM	50	0	7.76	7.66	7.76	7.91	7.76					
20	256QAM	50	24	7.70	7.75	7.67	7.57	7.66	9.5	0.48			
20	256QAM	50	50	7.66	7.64	7.81	7.43	7.76					
20	256QAM	100	0	7.44	7.57	7.50	7.55	7.85					
Channel				55315	55415	55735	56055	56755			Tune-up limit (dbm)	Ch Delta > 0.5	
Frequency (MHz)				3557.5	3557.5	3589.5	3621.5	3692.5					
15	QPSK	1	0	13.75	13.71	13.85	13.78	13.75	14.5	0.41			
15	QPSK	1	37	13.57	13.59	13.65	13.60	13.52					
15	QPSK	1	74	13.54	13.50	13.44	13.62	13.63					
15	QPSK	36	0	12.64	12.65	12.75	12.70	12.63					
15	QPSK	36	20	12.54	12.59	12.59	12.60	12.61					
15	QPSK	36	39	12.60	12.56	12.70	12.50	12.57	13.5	0.25			
15	QPSK	75	0	12.57	12.60	12.56	12.65	12.47					
15	16QAM	1	0	12.75	12.63	12.65	12.55	12.70					
15	16QAM	1	37	12.62	12.50	12.50	12.70	12.61					
15	16QAM	1	74	12.64	12.65	12.54	12.51	12.53					
15	16QAM	36	0	12.59	12.63	12.57	12.44	12.34	13.5	0.29			
15	16QAM	36	20	12.53	12.54	12.49	12.42	12.37					
15	16QAM	36	39	12.45	12.47	12.62	12.61	12.50					
15	16QAM	75	0	12.56	12.65	12.67	12.62	12.47					
15	64QAM	1	0	12.84	12.79	12.72	12.79	12.65					
15	64QAM	1	37	12.81	12.68	12.89	12.65	12.64	13.5	0.32			
15	64QAM	1	74	12.74	12.94	12.83	12.74	12.62					
15	64QAM	36	0	11.78	11.90	12.06	11.94	11.88					
15	64QAM	36	20	11.80	11.62	11.66	11.66	11.98					
15	64QAM	36	39	11.86	11.77	11.64	11.50	11.77					
15	64QAM	75	0	11.66	11.56	11.77	11.78	11.65	12.5	0.56			
15	256QAM	1	0	7.99	7.77	7.76	7.85	8.06					
15	256QAM	1	37	7.80	7.65	7.84	8.12	7.74					
15	256QAM	1	74	7.70	7.99	7.86	7.95	7.86					
15	256QAM	36	0	7.65	7.55	7.65	7.80	7.65					
15	256QAM	36	20	7.59	7.64	7.56	7.46	7.55	9.5	0.48			
15	256QAM	36	39	7.55	7.53	7.70	7.32	7.65					
15	256QAM	75	0	7.33	7.46	7.39	7.44	7.74					
Channel				55290	55390	55710	56030	56790			Tune-up limit (dbm)	Ch Delta > 0.5	
Frequency (MHz)				3555	3555	3587	3619	3695					
10	QPSK	1	0	13.63	13.59	13.73	13.66	13.63	14.5	0.41			
10	QPSK	1	25	13.45	13.47	13.53	13.48	13.40					
10	QPSK	1	49	13.42	13.38	13.32	13.50	13.51					
10	QPSK	25	0	12.52	12.53	12.63	12.58	12.51					
10	QPSK	25	12	12.42	12.47	12.47	12.48	12.49					
10	QPSK	25	25	12.48	12.44	12.58	12.38	12.45	13.5	0.25			
10	QPSK	50	0	12.45	12.48	12.44	12.53	12.35					
10	16QAM	1	0	12.63	12.51	12.53	12.43	12.58					
10	16QAM	1	25	12.50	12.38	12.38	12.58	12.49					
10	16QAM	1	49	12.52	12.53	12.42	12.39	12.41					
10	16QAM	25	0	12.47	12.51	12.45	12.32	12.22	13.5	0.20			
10	16QAM	25	12	12.41	12.42	12.37	12.30	12.25					
10	16QAM	25	25	12.33	12.35	12.50	12.49	12.38					
10	16QAM	50	0	12.44	12.53	12.55	12.50	12.35					
10	64QAM	1	0	12.72	12.67	12.60	12.67	12.53					
10	64QAM	1	25	12.69	12.56	12.77	12.53	12.52	13.5	0.32			
10	64QAM	1	49	12.62	12.82	12.71	12.62	12.50					
10	64QAM	25	0	11.66	11.78	11.94	11.82	11.76					
10	64QAM	25	12	11.68	11.50	11.54	11.54	11.86					
10	64QAM	25	25	11.74	11.65	11.52	11.38	11.65					
10	64QAM	50	0	11.54	11.44	11.65	11.66	11.53	12.5	0.56			
10	256QAM	1	0	7.87	7.65	7.64	7.73	7.94					
10	256QAM	1	25	7.68	7.53	7.72	8.00	7.62					
10	256QAM	1	49	7.58	7.87	7.74	7.83	7.74					
10	256QAM	25	0	7.53	7.43	7.53	7.68	7.53					
10	256QAM	25	12	7.47	7.52	7.44	7.34	7.43	9.5	0.48			
10	256QAM	25	25	7.43	7.41	7.58	7.20	7.53					
10	256QAM	50	0	7.21	7.34	7.27	7.32	7.62					
Channel				55265	55365	55685	56005	56815			Tune-up limit (dbm)	Ch Delta > 0.5	
Frequency (MHz)				3552.5	3552.5	3584.5	3616.5	3697.5					
5	QPSK	1	0	13.51	13.47	13.61	13.54	13.51	14.5	0.41			
5	QPSK	1	12	13.33	13.35	13.41	13.36	13.28					
5	QPSK	1	24	13.30	13.26	13.20	13.38	13.39					
5	QPSK	12	0	12.40	12.41	12.51	12.46	12.39					
5	QPSK	12	7	12.30	12.35	12.35	12.36	12.37					
5	QPSK	12	13	12.36	12.32	12.46	12.26	12.33	13.5	0.25			
5	QPSK	25	0	12.33	12.36	12.32	12.41	12.23					
5	16QAM	1	0	12.51	12.39	12.41	12.31	12.46					
5	16QAM	1	12	12.38	12.26	12.26	12.46	12.37					
5	16QAM	1	24	12.40	12.41	12.30	12.27	12.29					
5	16QAM	12	0	12.35	12.39	12.33	12.20	12.10	13.5	0.20			
5	16QAM	12	7	12.29	12.30	12.25	12.18	12.13					
5	16QAM	12	13	12.21	12.23	12.38	12.37	12.26					
5	16QAM	25	0	12.32	12.41	12.43	12.36	12.23					
5	64QAM	1	0	12.60	12.55	12.48	12.55	12.41					
5	64QAM	1	12	12.57	12.44	12.65	12.41	12.40	13.5	0.32			
5	64QAM	1	24	12.50	12.70	12.59	12.50	12.38					
5	64QAM	12	0	11.54	11.66	11.82	11.70	11.64					
5	64QAM	12	7	11.56	11.38	11.42	11.42	11.74					
5	64QAM	12	13	11.62	11.53	11.40	11.26	11.53					
5	64QAM	25	0	11.42	11.32	11.53	11.54	11.41	12.5	0.56			
5	256QAM	1	0	7.75	7.53	7.52	7.61	7.82					
5	256QAM	1	12	7.56	7.41	7.60	7.88	7.50					
5	256QAM	1	24	7.46	7.75	7.62	7.71	7.62					
5	256QAM	12	0	7.41	7.31	7.41	7.56	7.41					
5	256QAM	12	7	7.35	7.40	7.32	7.22	7.31	9.5	0.48			
5	256QAM	12	13	7.31	7.29	7.46	7.08	7.41					
5	256QAM	25	0	7.09	7.22	7.15	7.20	7.50					
Channel				55205	55305	55625	55945	56705			Tune-up limit (dbm)	Ch Delta > 0.5	
Frequency (MHz)				3547.5	3547.5	3579.5	3611.5	3687.5					

N2 (1850 ~ 1910MHz)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000.00	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900.00	
20	DFT-s-OFDM PI/2 BPSK	1	1	8.54	8.45	8.27	9.00
20		1	53	8.58	8.33	7.71	
20		1	104	8.61	8.18	8.26	
20		50	1	8.72	8.51	7.73	9.00
20		50	25	8.68	8.48	8.68	
20		50	50	8.66	8.68	8.78	
20	DFT-s-OFDM QPSK	100	0	8.18	8.26	8.76	9.50
20		1	1	8.74	9.01	8.82	
20		1	53	8.69	8.77	8.19	
20		1	104	8.64	8.65	8.37	8.50
20		50	1	8.00	8.18	7.97	
20		50	25	7.99	7.77	7.92	
20	DFT-s-OFDM 16QAM	50	50	7.74	7.97	7.83	7.00
20		100	0	7.61	7.79	7.75	
20	DFT-s-OFDM 64QAM	1	1	5.83	5.99	6.66	6.00
20	DFT-s-OFDM 256QAM	1	1	4.02	4.89	4.67	5.50
Channel				3715000	376000	380500.00	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.50	
15	DFT-s-OFDM QPSK	1	1	8.51	8.53	8.59	9.00
Channel				371000	376000	381000.00	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905.00	
10	DFT-s-OFDM QPSK	1	1	8.71	8.56	8.72	9.00
Channel				370500	376000	381500.00	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.50	
5	DFT-s-OFDM QPSK	1	1	8.76	8.53	8.72	9.00
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000.00	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1767.50	
20	CP-OFDM QPSK	1	1	8.11	7.92	8.13	8.50
20	CP-OFDM 16QAM	1	1	7.94	7.69	7.83	8.50
20	CP-OFDM 64QAM	1	1	5.99	5.52	5.85	6.50
20	CP-OFDM 256QAM	1	1	3.51	3.29	3.46	4.00

N5 (824 ~ 849 MHz)								
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)	
Channel				166800	167300	167800.00		
Frequency (MHz)				834	836.5	839.00	15.00	
20	DFT-s-OFDM PI/2 BPSK	1	1	14.04	13.98	13.94		
20		1	53	13.79	13.76	13.94		
20		1	104	14.61	14.60	14.05		
20		50	1	13.92	13.93	14.06		
20		50	25	13.88	13.80	14.10		
20		50	50	14.77	14.70	14.27		
20	DFT-s-OFDM QPSK	100	0	13.90	13.86	14.02	15.00	
20		1	1	14.65	14.78	14.69		
20		1	53	14.52	14.50	14.59		
20		1	104	14.59	14.35	14.36		
20		50	1	13.82	13.91	13.85		
20		50	25	13.75	13.85	13.72		
20	DFT-s-OFDM 16QAM	50	50	13.50	13.67	13.73	14.50	
20		100	0	13.63	13.65	13.63		
20		DFT-s-OFDM 64QAM	1	1	14.20	13.87		14.30
20		DFT-s-OFDM 256QAM	1	1	13.61	13.73		13.53
20	DFT-s-OFDM 256QAM	1	1	11.86	11.69	11.76	12.50	
Channel				166300	167300	168300.00	Tune-up limit (dBm)	
Frequency (MHz)				831.5	836.5	841.50		
15	DFT-s-OFDM QPSK	1	1	14.56	14.40	14.23	15.00	
Channel				165800	167300	168800.00	Tune-up limit (dBm)	
Frequency (MHz)				829	836.5	844.00		
10	DFT-s-OFDM QPSK	1	1	13.87	13.83	14.27	14.50	
Channel				165300	167300	169300.00	Tune-up limit (dBm)	
Frequency (MHz)				826.5	836.5	846.50		
5	DFT-s-OFDM QPSK	1	1	14.54	14.42	14.08	15.00	
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)	
Channel				166800	167300	167800.00		
Frequency (MHz)				834	836.5	839.00		
20	CP-OFDM QPSK	1	1	14.06	14.06	14.14	14.50	
20	CP-OFDM 16QAM	1	1	14.52	14.29	14.18	15.00	
20	CP-OFDM 64QAM	1	1	12.59	12.60	12.67	13.00	
20	CP-OFDM 256QAM	1	1	9.97	9.90	10.02	10.50	

N66 (1710 ~ 1780 MHz)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000.00	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770.00	
20	DFT-s-OFDM PI/2 BPSK	1	1	7.29	7.34	7.47	8.00
20		1	53	7.26	7.46	7.41	
20		1	104	7.36	7.47	7.56	
20		50	1	7.00	7.02	7.06	7.50
20		50	25	7.05	7.05	7.01	
20		50	50	6.13	7.52	7.02	
20	DFT-s-OFDM QPSK	100	0	7.01	7.00	7.07	8.00
20		1	1	7.50	7.68	7.58	
20		1	53	7.45	7.50	7.52	
20		1	104	7.32	7.41	7.44	7.50
20		50	1	6.71	6.74	6.70	
20		50	25	6.54	6.66	6.63	
20	DFT-s-OFDM 16QAM	50	50	6.58	7.26	6.63	7.50
20		100	0	6.46	6.58	6.44	
20	DFT-s-OFDM 64QAM	1	1	7.52	7.61	7.66	8.00
20	DFT-s-OFDM 256QAM	1	1	5.67	5.85	5.87	6.50
20	DFT-s-OFDM 256QAM	1	1	5.55	5.37	5.41	6.00
Channel				343500	349000	354500.00	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.50	
15	DFT-s-OFDM QPSK	1	1	7.33	7.43	7.38	7.50
Channel				343000	349000	355000.00	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775.00	
10	DFT-s-OFDM QPSK	1	1	7.49	7.50	7.42	8.00
Channel				3425000	349000	355500.00	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.50	
5	DFT-s-OFDM QPSK	1	1	7.38	7.45	7.45	8.00
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000.00	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1767.50	
20	CP-OFDM QPSK	1	1	6.89	7.04	7.04	7.50
20	CP-OFDM 16QAM	1	1	6.55	6.68	6.75	7.00
20	CP-OFDM 64QAM	1	1	4.71	4.79	4.83	5.00
20	CP-OFDM 256QAM	1	1	3.26	3.56	3.60	4.50

5G NR n2(for Ant.4)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000.00	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900.00	
20	DFT-s-OFDM Pi/2 BPSK	1	1	7.41	7.32	7.14	8.00
20		1	53	7.45	7.20	6.58	
20		1	104	7.48	7.05	7.13	
20		50	1	7.59	7.38	7.60	8.00
20		50	25	7.55	7.35	7.55	
20		50	50	7.53	7.55	7.65	
20	DFT-s-OFDM QPSK	100	0	7.05	7.13	7.63	9.00
20		1	1	7.95	8.02	7.98	
20		1	53	7.56	7.64	7.06	
20		1	104	7.51	7.52	7.24	8.00
20		50	1	7.37	7.45	7.34	
20		50	25	7.36	7.14	7.29	
20	DFT-s-OFDM 16QAM	50	50	7.11	7.34	7.20	8.00
20		100	0	6.98	7.16	7.12	
20		1	1	4.92	4.84	5.53	6.00
20	DFT-s-OFDM 64QAM	1	1	3.93	3.95	4.55	4.50
20	DFT-s-OFDM 256QAM	1	1	3.12	3.96	3.74	4.00
Channel				3715000	376000	380500.00	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.50	
15	DFT-s-OFDM QPSK	1	1	7.71	7.52	7.61	8.00
Channel				371000	376000	381000.00	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905.00	
10	DFT-s-OFDM QPSK	1	1	7.49	7.37	7.27	8.00
Channel				370500	376000	381500.00	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.50	
5	DFT-s-OFDM QPSK	1	1	7.53	7.43	7.60	8.00
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000.00	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1767.50	
20	CP-OFDM QPSK	1	1	7.21	7.04	6.75	7.50
20	CP-OFDM 16QAM	1	1	6.38	6.60	6.29	7.50
20	CP-OFDM 64QAM	1	1	5.26	5.02	5.08	5.50
20	CP-OFDM 256QAM	1	1	3.71	3.67	3.76	4.50

5G NR n5(for Ant.2)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800.00	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839.00	
20	DFT-s-OFDM Pi/2 BPSK	1	1	10.59	10.53	10.49	11.50
20		1	53	10.34	10.31	10.49	
20		1	104	11.16	11.15	10.60	
20		50	1	10.47	10.48	10.61	11.50
20		50	25	10.43	10.35	10.65	
20		50	50	11.32	11.25	10.82	
20	DFT-s-OFDM QPSK	100	0	10.45	10.41	10.57	12.00
20		1	1	11.20	11.33	11.24	
20		1	53	11.07	11.05	11.14	
20		1	104	11.14	10.90	10.91	11.00
20		50	1	10.07	10.16	10.10	
20		50	25	10.00	10.10	9.97	
20	DFT-s-OFDM 16QAM	50	50	9.75	9.92	9.98	11.00
20		100	0	9.88	9.90	9.88	
20		1	1	10.45	10.12	10.55	11.00
20	DFT-s-OFDM 64QAM	1	1	9.86	9.98	9.78	10.50
20	DFT-s-OFDM 256QAM	1	1	8.11	7.94	8.01	8.50
Channel				166300	167300	168300.00	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.50	
15	DFT-s-OFDM QPSK	1	1	11.11	10.95	10.78	11.50
Channel				165800	167300	168800.00	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844.00	
10	DFT-s-OFDM QPSK	1	1	10.42	10.38	10.82	11.00
Channel				165300	167300	169300.00	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.50	
5	DFT-s-OFDM QPSK	1	1	11.09	10.97	10.63	11.50
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800.00	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839.00	
20	CP-OFDM QPSK	1	1	10.61	10.61	10.69	11.00
20	CP-OFDM 16QAM	1	1	11.07	10.84	10.73	11.50
20	CP-OFDM 64QAM	1	1	9.14	9.15	9.22	9.50
20	CP-OFDM 256QAM	1	1	6.52	6.45	6.57	7.00

5G NR n66(for Ant.4)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000.00	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770.00	
20	DFT-s-OFDM Pi/2 BPSK	1	1	11.03	11.08	11.21	11.50
20		1	53	11.00	11.20	11.15	
20		1	104	11.10	11.21	11.30	
20		50	1	10.74	10.76	10.80	11.50
20		50	25	10.79	10.79	10.75	
20		50	50	9.87	11.26	10.76	
20		100	0	10.75	10.74	10.81	
20	DFT-s-OFDM QPSK	1	1	11.24	11.42	11.39	12.00
20		1	53	11.19	11.24	11.26	
20		1	104	11.06	11.15	11.18	
20		50	1	10.35	10.38	10.34	11.00
20		50	25	10.18	10.30	10.27	
20		50	50	10.22	10.90	10.27	
20		100	0	10.10	10.22	10.08	
20	DFT-s-OFDM 16QAM	1	1	11.26	11.35	11.40	12.00
20	DFT-s-OFDM 64QAM	1	1	9.41	9.59	9.61	10.00
20	DFT-s-OFDM 256QAM	1	1	7.75	7.61	7.65	8.00
Channel				343500	349000	354500.00	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.50	
15	DFT-s-OFDM QPSK	1	1	10.86	10.96	10.91	11.50
Channel				343000	349000	355000.00	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775.00	
10	DFT-s-OFDM QPSK	1	1	11.02	11.03	10.95	11.50
Channel				3425000	349000	355500.00	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.50	
5	DFT-s-OFDM QPSK	1	1	10.91	10.98	10.98	11.50
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000.00	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1767.50	
20	CP-OFDM QPSK	1	1	10.42	10.57	10.57	11.00
20	CP-OFDM 16QAM	1	1	10.08	10.21	10.28	11.00
20	CP-OFDM 64QAM	1	1	8.24	8.32	8.36	9.00
20	CP-OFDM 256QAM	1	1	5.29	5.59	5.63	6.00

Band 2 (For EN-DC/Simultaneous) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	Tune-up limit (dBm)
Frequency (MHz)				1880	1880	1900	
20	QPSK	1	0	8.99	9.03	8.92	10
20	QPSK	1	49	8.92	8.82	8.81	
20	QPSK	1	99	8.81	8.72	8.64	
20	QPSK	50	0	7.99	8.03	7.90	
20	QPSK	50	24	7.90	7.99	7.81	9
20	QPSK	50	50	7.83	7.91	7.70	
20	QPSK	100	0	7.73	7.79	7.66	
20	16QAM	1	0	7.93	8.07	7.92	
20	16QAM	1	49	7.81	8.05	7.87	8.5
20	16QAM	1	99	7.76	8.01	7.85	
20	16QAM	50	0	7.94	7.96	7.98	
20	16QAM	50	24	7.88	7.90	7.91	
20	16QAM	50	50	7.79	7.77	7.86	8.5
20	16QAM	100	0	7.76	7.73	7.79	
20	64QAM	1	0	7.74	7.99	7.94	
20	64QAM	1	49	7.64	7.93	7.91	
20	64QAM	1	99	7.59	7.82	7.78	8.5
20	64QAM	50	0	7.71	7.74	7.65	
20	64QAM	50	24	7.68	7.71	7.57	
20	64QAM	50	50	7.54	7.60	7.45	
20	64QAM	100	0	7.47	7.52	7.40	8.5
20	256QAM	1	0	7.69	7.78	7.74	
20	256QAM	1	49	7.67	7.72	7.68	
20	256QAM	1	99	7.70	7.64	7.58	
20	256QAM	50	0	7.28	7.35	7.32	8
20	256QAM	50	24	7.21	7.33	7.24	
20	256QAM	50	50	7.16	7.24	7.19	
20	256QAM	100	0	7.19	7.25	7.20	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	8.97	8.98	8.89	10
15	QPSK	1	37	8.89	8.79	8.78	
15	QPSK	1	74	8.76	8.71	8.58	
15	QPSK	36	0	7.95	8.01	7.85	9
15	QPSK	36	20	7.88	7.94	7.79	
15	QPSK	36	39	7.80	7.88	7.67	
15	QPSK	75	0	7.70	7.74	7.64	
15	16QAM	1	0	7.90	8.05	7.87	8.5
15	16QAM	1	37	7.75	8.03	7.84	
15	16QAM	1	74	7.74	7.96	7.80	
15	16QAM	36	0	7.89	7.91	7.93	
15	16QAM	36	20	7.86	7.86	7.86	8.5
15	16QAM	36	39	7.76	7.71	7.82	
15	16QAM	75	0	7.72	7.67	7.77	
15	64QAM	1	0	7.69	7.95	7.89	
15	64QAM	1	37	7.62	7.90	7.85	8.5
15	64QAM	1	74	7.56	7.78	7.74	
15	64QAM	36	0	7.70	7.68	7.61	
15	64QAM	36	20	7.64	7.67	7.51	
15	64QAM	36	39	7.48	7.56	7.43	8.5
15	64QAM	75	0	7.42	7.48	7.36	
15	256QAM	1	0	7.64	7.76	7.69	
15	256QAM	1	37	7.63	7.66	7.65	8.5
15	256QAM	1	74	7.65	7.62	7.56	
15	256QAM	36	0	7.26	7.30	7.28	
15	256QAM	36	20	7.20	7.31	7.19	8
15	256QAM	36	39	7.14	7.19	7.15	
15	256QAM	75	0	7.18	7.19	7.16	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	8.92	8.93	8.84	10
10	QPSK	1	25	8.84	8.74	8.73	
10	QPSK	1	49	8.71	8.66	8.53	
10	QPSK	25	0	7.90	7.96	7.80	9
10	QPSK	25	12	7.83	7.89	7.74	
10	QPSK	25	25	7.75	7.83	7.62	
10	QPSK	50	0	7.65	7.69	7.59	
10	16QAM	1	0	7.85	8.00	7.82	8.5
10	16QAM	1	25	7.70	7.98	7.79	
10	16QAM	1	49	7.69	7.91	7.75	
10	16QAM	25	0	7.84	7.86	7.88	
10	16QAM	25	12	7.81	7.81	7.81	8.5
10	16QAM	25	25	7.71	7.66	7.77	
10	16QAM	50	0	7.67	7.62	7.72	
10	64QAM	1	0	7.64	7.90	7.84	
10	64QAM	1	25	7.57	7.85	7.80	8.5
10	64QAM	1	49	7.51	7.73	7.69	
10	64QAM	25	0	7.65	7.63	7.56	
10	64QAM	25	12	7.59	7.62	7.46	
10	64QAM	25	25	7.43	7.51	7.38	8.5
10	64QAM	50	0	7.37	7.43	7.31	
10	256QAM	1	0	7.59	7.71	7.64	
10	256QAM	1	25	7.58	7.61	7.60	8.5
10	256QAM	1	49	7.60	7.57	7.51	
10	256QAM	25	0	7.21	7.25	7.23	
10	256QAM	25	12	7.15	7.26	7.14	8
10	256QAM	25	25	7.09	7.14	7.10	
10	256QAM	50	0	7.13	7.14	7.11	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	8.87	8.88	8.79	10
5	QPSK	1	12	8.79	8.69	8.68	
5	QPSK	1	24	8.66	8.61	8.48	
5	QPSK	12	0	7.85	7.91	7.75	
5	QPSK	12	7	7.78	7.84	7.69	9

Band 4 (For EN-DC/Simultaneous) 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	Tune-up limit (dBm)
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	8.98	9.05	9.00	9.5
20	QPSK	1	49	8.92	8.95	8.93	
20	QPSK	1	99	8.88	8.87	8.83	
20	QPSK	50	0	7.94	7.99	7.95	
20	QPSK	50	24	7.93	7.91	7.92	8.5
20	QPSK	50	50	7.88	7.85	7.82	
20	QPSK	100	0	7.80	7.82	7.78	
20	16QAM	1	0	7.91	7.96	7.87	
20	16QAM	1	49	7.81	7.95	7.78	8.5
20	16QAM	1	99	7.77	7.93	7.68	
20	16QAM	50	0	7.77	7.82	7.86	
20	16QAM	50	24	7.73	7.73	7.77	
20	16QAM	50	50	7.69	7.67	7.73	8.5
20	16QAM	100	0	7.63	7.65	7.70	
20	64QAM	1	0	7.98	7.79	8.00	
20	64QAM	1	49	7.96	7.78	7.98	
20	64QAM	1	99	7.90	7.74	7.94	8.5
20	64QAM	50	0	7.87	7.54	7.57	
20	64QAM	50	24	7.49	7.52	7.49	
20	64QAM	50	50	7.43	7.44	7.40	
20	64QAM	100	0	7.42	7.41	7.39	7.5
20	256QAM	1	0	6.69	6.74	6.70	
20	256QAM	1	49	6.66	6.68	6.61	
20	256QAM	1	99	6.64	6.64	6.59	
20	256QAM	50	0	6.21	6.24	6.15	7
20	256QAM	50	24	6.13	6.15	6.14	
20	256QAM	50	50	6.07	6.07	6.07	
20	256QAM	100	0	5.99	6.06	6.01	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	8.97	9.03	8.95	9.5
15	QPSK	1	37	8.86	8.93	8.88	
15	QPSK	1	74	8.84	8.85	8.81	
15	QPSK	36	0	7.92	7.96	7.94	
15	QPSK	36	20	7.89	7.86	7.90	8.5
15	QPSK	36	39	7.86	7.83	7.80	
15	QPSK	75	0	7.78	7.76	7.76	
15	16QAM	1	0	7.86	7.93	7.82	
15	16QAM	1	37	7.78	7.91	7.75	8.5
15	16QAM	1	74	7.71	7.90	7.64	
15	16QAM	36	0	7.76	7.79	7.80	
15	16QAM	36	20	7.68	7.68	7.73	
15	16QAM	36	39	7.67	7.63	7.71	8.5
15	16QAM	75	0	7.58	7.61	7.68	
15	64QAM	1	0	7.97	7.75	7.97	
15	64QAM	1	37	7.91	7.77	7.94	
15	64QAM	1	74	7.89	7.72	7.89	8.5
15	64QAM	36	0	7.84	7.52	7.55	
15	64QAM	36	20	7.44	7.46	7.44	
15	64QAM	36	39	7.38	7.42	7.35	
15	64QAM	75	0	7.39	7.38	7.34	7.5
15	256QAM	1	0	6.66	6.68	6.65	
15	256QAM	1	37	6.62	6.63	6.59	
15	256QAM	1	74	6.60	6.61	6.57	
15	256QAM	36	0	6.17	6.22	6.13	7
15	256QAM	36	20	6.10	6.10	6.12	
15	256QAM	36	39	6.02	6.01	6.06	
15	256QAM	75	0	5.94	6.04	5.99	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	8.95	8.99	8.94	9.5
10	QPSK	1	25	8.87	8.87	8.86	
10	QPSK	1	49	8.82	8.79	8.77	
10	QPSK	25	0	7.80	7.93	7.88	
10	QPSK	25	12	7.89	7.81	7.82	8.5
10	QPSK	25	25	7.86	7.76	7.75	
10	QPSK	50	0	7.77	7.76	7.73	
10	16QAM	1	0	7.84	7.86	7.79	
10	16QAM	1	25	7.75	7.89	7.74	8.5
10	16QAM	1	49	7.70	7.86	7.65	
10	16QAM	25	0	7.72	7.74	7.80	
10	16QAM	25	12	7.64	7.65	7.72	
10	16QAM	25	25	7.59	7.59	7.64	8.5
10	16QAM	50	0	7.56	7.60	7.65	
10	64QAM	1	0	7.92	7.71	7.95	
10	64QAM	1	25	7.92	7.71	7.87	
10	64QAM	1	49	7.80	7.69	7.87	8.5
10	64QAM	25	0	7.78	7.50	7.48	
10	64QAM	25	12	7.43	7.44	7.39	
10	64QAM	25	25	7.33	7.36	7.32	
10	64QAM	50	0	7.35	7.33	7.29	7.5
10	256QAM	1	0	6.66	6.70	6.66	
10	256QAM	1	25	6.60	6.57	6.56	
10	256QAM	1	49	6.57	6.55	6.55	
10	256QAM	25	0	6.11	6.17	6.10	7
10	256QAM	25	12	6.09	6.07	6.10	
10	256QAM	25	25	6.01	6.01	6.00	
10	256QAM	50	0	5.92	5.95	5.90	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	8.94	8.96	8.92	9.5
5	QPSK	1	12	8.83	8.81	8.82	
5	QPSK	1	24	8.80	8.74	8.73	
5	QPSK	12	0	7.77	7.88	7.84	
5	QPSK	12	7	7.75	7.75	7.77	8.5

5	QPSK	12	13	7.70	7.78	7.57	8.5
5	QPSK	25	0	7.60	7.64	7.54	
5	16QAM	1	0	7.80	7.95	7.77	
5	16QAM	1	12	7.65	7.93	7.74	8.5
5	16QAM	1	24	7.64	7.86	7.70	
5	16QAM	12	0	7.79	7.81	7.83	
5	16QAM	12	7	7.76	7.76	7.76	8.5
5	16QAM	12	13	7.66	7.61	7.72	
5	16QAM	25	0	7.62	7.57	7.67	
5	64QAM	1	0	7.59	7.85	7.79	8.5
5	64QAM	1	12	7.52	7.80	7.75	
5	64QAM	1	24	7.46	7.68	7.64	
5	64QAM	12	0	7.60	7.58	7.51	8.5
5	64QAM	12	7	7.54	7.57	7.41	
5	64QAM	12	13	7.38	7.46	7.33	
5	64QAM	25	0	7.32	7.38	7.26	8.5
5	256QAM	1	0	7.54	7.66	7.59	
5	256QAM	1	12	7.53	7.56	7.55	
5	256QAM	1	24	7.55	7.52	7.46	8
5	256QAM	12	0	7.16	7.20	7.18	
5	256QAM	12	7	7.10	7.21	7.09	
5	256QAM	12	13	7.04	7.09	7.05	8
5	256QAM	25	0	7.08	7.09	7.06	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	8.82	8.83	8.74	10
3	QPSK	1	8	8.74	8.64	8.63	
3	QPSK	1	14	8.61	8.56	8.43	
3	QPSK	8	0	7.80	7.86	7.70	9
3	QPSK	8	4	7.73	7.79	7.64	
3	QPSK	8	7	7.65	7.73	7.52	
3	QPSK	15	0	7.55	7.59	7.49	8.5
3	16QAM	1	0	7.75	7.90	7.72	
3	16QAM	1	8	7.60	7.88	7.69	
3	16QAM	1	14	7.59	7.81	7.65	8.5
3	16QAM	8	0	7.74	7.76	7.78	
3	16QAM	8	4	7.71	7.71	7.71	
3	16QAM	8	7	7.61	7.56	7.67	8.5
3	16QAM	15	0	7.57	7.52	7.62	
3	64QAM	1	0	7.54	7.80	7.74	
3	64QAM	1	8	7.47	7.75	7.70	8.5
3	64QAM	1	14	7.41	7.63	7.59	
3	64QAM	8	0	7.55	7.53	7.46	
3	64QAM	8	4	7.49	7.52	7.36	8.5
3	64QAM	8	7	7.33	7.41	7.28	
3	64QAM	15	0	7.27	7.33	7.21	
3	256QAM	1	0	7.49	7.61	7.54	8.5
3	256QAM	1	8	7.48	7.51	7.50	
3	256QAM	1	14	7.50	7.47	7.41	
3	256QAM	8	0	7.11	7.15	7.13	8
3	256QAM	8	4	7.05	7.16	7.04	
3	256QAM	8	7	6.99	7.04	7.00	
3	256QAM	15	0	7.03	7.04	7.01	Tune-up limit (dBm)
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	Tune-up limit (dBm)
1.4	QPSK	1	0	8.77	8.78	8.69	
1.4	QPSK	1	3	8.69	8.59	8.58	10
1.4	QPSK	1	5	8.56	8.51	8.38	
1.4	QPSK	3	0	7.75	7.81	7.65	
1.4	QPSK	3	1	7.68	7.74	7.59	9
1.4	QPSK	3	3	7.60	7.68	7.47	
1.4	QPSK	6	0	7.50	7.54	7.44	
1.4	16QAM	1	0	7.70	7.85	7.67	9
1.4	16QAM	1	3	7.55	7.83	7.64	
1.4	16QAM	1	5	7.54	7.76	7.60	
1.4	16QAM	3	0	7.69	7.71	7.73	8.5
1.4	16QAM	3	1	7.66	7.66	7.66	
1.4	16QAM	3	3	7.56	7.51	7.62	
1.4	16QAM	6	0	7.52	7.47	7.57	8.5
1.4	64QAM	1	0	7.49	7.75	7.69	
1.4	64QAM	1	3	7.42	7.70	7.65	
1.4	64QAM	1	5	7.36	7.58	7.54	8.5
1.4	64QAM	3	0	7.50	7.48	7.41	
1.4	64QAM	3	1	7.44	7.47	7.31	
1.4	64QAM	3	3	7.28	7.36	7.23	8.5
1.4	64QAM	6	0	7.22	7.28	7.16	
1.4	256QAM	1	0	7.44	7.56	7.49	
1.4	256QAM	1	3	7.43	7.46	7.45	8.5
1.4	256QAM	1	5	7.45	7.42	7.36	
1.4	256QAM	3	0	7.06	7.10	7.08	
1.4	256QAM	3	1	7.00	7.11	6.99	8
1.4	256QAM	3	3	6.94	6.99	6.95	
1.4	256QAM	6	0	6.98	6.99	6.96	

5	QPSK	12	13	7.84	7.71	7.73	8.5
5	QPSK	25	0	7.72	7.71	7.69	
5	16QAM	1	0	7.79	7.82	7.74	
5	16QAM	1	12	7.71	7.83	7.71	8.5
5	16QAM	1	24	7.64	7.82	7.59	
5	16QAM	12	0	7.70	7.73	7.77	
5	16QAM	12	7	7.59	7.62	7.70	8.5
5	16QAM	12	13	7.56	7.57	7.60	
5	16QAM	25	0	7.52	7.58	7.61	
5	64QAM	1	0	7.87	7.65	7.89	8.5
5	64QAM	1	12	7.87	7.66	7.86	
5	64QAM	1	24	7.78	7.64	7.85	
5	64QAM	12	0	7.73	7.48	7.42	8.5
5	64QAM	12	7	7.39	7.40	7.37	
5	64QAM	12	13	7.31	7.31	7.30	
5	64QAM	25	0	7.33	7.29	7.27	7.5
5	256QAM	1	0	6.62	6.68	6.62	
5	256QAM	1	12	6.58	6.56	6.54	
5	256QAM	1	24	6.51	6.52	6.52	7
5	256QAM	12	0	6.07	6.12	6.04	
5	256QAM	12	7	6.03	6.02	6.07	
5	256QAM	12	13	5.96	5.99	5.99	7
5	256QAM	25	0	5.86	5.93	5.88	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	8.89	8.91	8.87	9.5
3	QPSK	1	8	8.78	8.76	8.77	
3	QPSK	1	14	8.77	8.69	8.68	
3	QPSK	8	0	7.72	7.83	7.79	8.5
3	QPSK	8	4	7.69	7.70	7.72	
3	QPSK	8	7	7.65	7.66	7.68	
3	QPSK	15	0	7.67	7.66	7.64	8.5
3	16QAM	1	0	7.74	7.77	7.69	
3	16QAM	1	8	7.66	7.78	7.66	
3	16QAM	1	14	7.59	7.77	7.54	8.5
3	16QAM	8	0	7.65	7.68	7.72	
3	16QAM	8	4	7.54	7.57	7.65	
3	16QAM	8	7	7.51	7.52	7.55	8.5
3	16QAM	15	0	7.47	7.53	7.56	
3	64QAM	1	0	7.82	7.60	7.84	
3	64QAM	1	8	7.82	7.61	7.81	8.5
3	64QAM	1	14	7.73	7.59	7.80	
3	64QAM	8	0	7.68	7.43	7.37	
3	64QAM	8	4	7.34	7.35	7.32	8.5
3	64QAM	8	7	7.26	7.26	7.25	
3	64QAM	15	0	7.28	7.24	7.22	
3	256QAM	1	0	6.57	6.63	6.57	7.5
3	256QAM	1	8	6.53	6.51	6.49	
3	256QAM	1	14	6.46	6.47	6.47	
3	256QAM	8	0	6.02	6.07	5.99	7
3	256QAM	8	4	5.98	5.97	6.02	
3	256QAM	8	7	5.91	5.94	5.94	
3	256QAM	15	0	5.81	5.88	5.83	Tune-up limit (dBm)
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	Tune-up limit (dBm)
1.4	QPSK	1	0	8.87	8.89	8.85	
1.4	QPSK	1	3	8.76	8.74	8.75	9.5
1.4	QPSK	1	5	8.77	8.67	8.66	
1.4	QPSK	3	0	7.72	7.81	7.77	
1.4	QPSK	3	1	7.70	7.68	7.70	8.5
1.4	QPSK	3	3	7.69	7.64	7.66	
1.4	QPSK	6	0	7.65	7.64	7.62	
1.4	16QAM	1	0	7.69	7.72	7.64	8.5
1.4	16QAM	1	3	7.61	7.73	7.61	
1.4	16QAM	1	5	7.54	7.72	7.49	
1.4	16QAM	3	0	7.60	7.63	7.67	8.5
1.4	16QAM	3	1	7.49	7.52	7.60	
1.4	16QAM	3	3	7.46	7.47	7.50	
1.4	16QAM	6	0	7.42	7.48	7.51	8.5
1.4	64QAM	1	0	7.77	7.55	7.79	
1.4	64QAM	1	3	7.77	7.56	7.78	
1.4	64QAM	1	5	7.68	7.54	7.75	8.5
1.4	64QAM	3	0	7.63	7.38	7.32	
1.4	64QAM	3	1	7.29	7.30	7.27	
1.4	64QAM	3	3	7.21	7.21	7.20	8.5
1.4	64QAM	6	0	7.23	7.19	7.17	
1.4	256QAM	1	0	6.52	6.58	6.52	
1.4	256QAM	1	3	6.48	6.46	6.44	7.5
1.4	256QAM	1	5	6.41	6.42	6.42	
1.4	256QAM	3	0	5.97	6.02	5.94	
1.4	256QAM	3	1	5.93	5.92	5.97	7
1.4	256QAM	3	3	5.86	5.89	5.89	
1.4	256QAM	6	0	5.76	5.83	5.78	

Band 5 (For EN-DC/Simultaneous) 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	14
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	13.03	13.12	13.06	13
10	QPSK	1	25	12.95	13.03	12.98	
10	QPSK	1	49	12.92	12.99	12.95	
10	QPSK	25	0	12.01	12.03	11.99	
10	QPSK	25	12	11.93	11.93	11.96	12
10	QPSK	25	25	11.84	11.88	11.93	
10	QPSK	50	0	11.76	11.77	11.91	
10	16QAM	1	0	11.61	11.67	11.59	
10	16QAM	1	25	11.57	11.61	11.52	12
10	16QAM	1	49	11.54	11.58	11.51	
10	16QAM	25	0	11.43	11.39	11.35	
10	16QAM	25	12	11.41	11.32	11.29	
10	16QAM	25	25	11.31	11.25	11.26	12
10	16QAM	50	0	11.24	11.21	11.21	
10	64QAM	1	0	11.47	11.56	11.57	
10	64QAM	1	25	11.44	11.52	11.52	
10	64QAM	1	49	11.36	11.48	11.48	12
10	64QAM	25	0	11.29	11.22	11.31	
10	64QAM	25	12	11.20	11.10	11.20	
10	64QAM	25	25	11.16	11.05	11.12	
10	64QAM	50	0	11.10	10.94	11.05	12
10	256QAM	1	0	11.61	11.66	11.59	
10	256QAM	1	25	11.56	11.57	11.56	
10	256QAM	1	49	11.53	11.49	11.54	
10	256QAM	25	0	10.75	10.87	10.71	11.5
10	256QAM	25	12	10.69	10.82	10.63	
10	256QAM	25	25	10.64	10.72	10.54	
10	256QAM	50	0	10.61	10.70	10.45	
Channel				20425	20525	20625	14
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	12.98	13.07	13.01	13
5	QPSK	1	12	12.90	12.98	12.93	
5	QPSK	1	24	12.87	12.94	12.90	
5	QPSK	12	0	11.96	11.98	11.94	
5	QPSK	12	7	11.88	11.88	11.91	12
5	QPSK	12	13	11.79	11.83	11.88	
5	QPSK	25	0	11.71	11.72	11.86	
5	16QAM	1	0	11.56	11.62	11.54	
5	16QAM	1	12	11.52	11.56	11.47	12
5	16QAM	1	24	11.49	11.53	11.46	
5	16QAM	12	0	11.38	11.34	11.30	
5	16QAM	12	7	11.36	11.27	11.24	
5	16QAM	12	13	11.26	11.20	11.21	12
5	16QAM	25	0	11.19	11.16	11.16	
5	64QAM	1	0	11.42	11.51	11.52	
5	64QAM	1	12	11.39	11.47	11.47	
5	64QAM	1	24	11.31	11.43	11.43	12
5	64QAM	12	0	11.24	11.17	11.26	
5	64QAM	12	7	11.15	11.05	11.15	
5	64QAM	12	13	11.11	11.00	11.07	
5	64QAM	25	0	11.05	10.89	11.00	12
5	256QAM	1	0	11.56	11.61	11.54	
5	256QAM	1	12	11.51	11.52	11.51	
5	256QAM	1	24	11.48	11.44	11.49	
5	256QAM	12	0	10.70	10.82	10.66	11.5
5	256QAM	12	7	10.64	10.77	10.58	
5	256QAM	12	13	10.59	10.67	10.49	
5	256QAM	25	0	10.56	10.65	10.40	
Channel				20415	20525	20635	14
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	12.94	13.03	12.97	13
3	QPSK	1	8	12.86	12.94	12.89	
3	QPSK	1	14	12.83	12.90	12.86	
3	QPSK	8	0	11.92	11.94	11.90	
3	QPSK	8	4	11.84	11.84	11.87	12
3	QPSK	8	7	11.75	11.79	11.84	
3	QPSK	15	0	11.67	11.68	11.82	
3	16QAM	1	0	11.52	11.58	11.50	
3	16QAM	1	8	11.48	11.52	11.43	12
3	16QAM	1	14	11.45	11.49	11.42	
3	16QAM	8	0	11.34	11.30	11.26	
3	16QAM	8	4	11.32	11.23	11.20	
3	16QAM	8	7	11.22	11.16	11.17	12
3	16QAM	15	0	11.15	11.12	11.12	
3	64QAM	1	0	11.38	11.47	11.48	
3	64QAM	1	8	11.35	11.43	11.43	
3	64QAM	1	14	11.27	11.39	11.39	12
3	64QAM	8	0	11.20	11.13	11.22	
3	64QAM	8	4	11.11	11.01	11.11	
3	64QAM	8	7	11.07	10.96	11.03	
3	64QAM	15	0	11.01	10.85	10.96	12
3	256QAM	1	0	11.52	11.57	11.50	
3	256QAM	1	8	11.47	11.48	11.47	
3	256QAM	1	14	11.44	11.40	11.45	
3	256QAM	8	0	10.66	10.78	10.62	11.5
3	256QAM	8	4	10.60	10.73	10.54	
3	256QAM	8	7	10.55	10.63	10.45	
3	256QAM	15	0	10.52	10.61	10.36	
Channel				20407	20525	20643	14
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	12.91	13.00	12.94	14
1.4	QPSK	1	3	12.83	12.91	12.86	
1.4	QPSK	1	5	12.80	12.87	12.83	
1.4	QPSK	3	0	11.89	11.91	11.87	
1.4	QPSK	3	1	11.81	11.81	11.84	

Band 13(For EN-DC/Simultaneous) Part 27F							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dbm)
Channel				23230			16
Frequency (MHz)				782			
10	QPSK	1	0		15.11		15
10	QPSK	1	25		15.01		
10	QPSK	1	49		14.90		
10	QPSK	25	0		14.08		
10	QPSK	25	12		13.97		14.5
10	QPSK	25	25		13.93		
10	QPSK	50	0		13.82		
10	16QAM	1	0		13.82		
10	16QAM	1	25		13.79		14
10	16QAM	1	49		13.77		
10	16QAM	25	0		13.35		
10	16QAM	25	12		13.28		
10	16QAM	25	25		13.21		14.5
10	16QAM	50	0		13.13		
10	64QAM	1	0		13.77		
10	64QAM	1	25		13.71		
10	64QAM	1	49		13.67		14
10	64QAM	25	0		13.43		
10	64QAM	25	12		13.40		
10	64QAM	25	25		13.33		
10	64QAM	50	0		13.28		14
10	256QAM	1	0		13.21		
10	256QAM	1	25		13.16		
10	256QAM	1	49		13.13		
10	256QAM	25	0		12.94		14
10	256QAM	25	12		12.85		
10	256QAM	25	25		12.76		
10	256QAM	50	0		12.66		
Channel				23205	23230	23255	16
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	14.92	15.07	15.01	15
5	QPSK	1	12	14.85	14.97	14.91	
5	QPSK	1	24	14.70	14.83	14.76	
5	QPSK	12	0	13.91	14.03	13.90	
5	QPSK	12	7	13.77	13.91	13.84	14.5
5	QPSK	12	13	13.75	13.89	13.84	
5	QPSK	25	0	13.62	13.76	13.68	
5	16QAM	1	0	13.64	13.77	13.71	
5	16QAM	1	12	13.62	13.75	13.66	14
5	16QAM	1	24	13.54	13.71	13.63	
5	16QAM	12	0	13.16	13.31	13.24	
5	16QAM	12	7	13.14	13.21	13.21	
5	16QAM	12	13	13.03	13.15	13.10	14.5
5	16QAM	25	0	12.95	13.08	12.99	
5	64QAM	1	0	13.67	13.73	13.65	
5	64QAM	1	12	13.49	13.67	13.55	
5	64QAM	1	24	13.51	13.61	13.56	14
5	64QAM	12	0	13.27	13.38	13.31	
5	64QAM	12	7	13.22	13.36	13.27	
5	64QAM	12	13	13.17	13.27	13.20	
5	64QAM	25	0	13.08	13.23	13.15	14
5	256QAM	1	0	13.03	13.17	13.09	
5	256QAM	1	12	12.98	13.11	13.07	
5	256QAM	1	24	12.96	13.07	13.02	
5	256QAM	12	0	12.72	12.90	12.83	14
5	256QAM	12	7	12.65	12.79	12.73	
5	256QAM	12	13	12.59	12.73	12.68	
5	256QAM	25	0	12.55	12.61	12.53	

1.4	QPSK	3	3	11.72	11.76	11.81	13
1.4	QPSK	6	0	11.64	11.65	11.79	
1.4	16QAM	1	0	11.49	11.55	11.47	12
1.4	16QAM	1	3	11.45	11.49	11.40	
1.4	16QAM	1	5	11.42	11.46	11.39	
1.4	16QAM	3	0	11.31	11.27	11.23	
1.4	16QAM	3	1	11.29	11.20	11.17	
1.4	16QAM	3	3	11.19	11.13	11.14	
1.4	16QAM	6	0	11.12	11.09	11.09	12
1.4	64QAM	1	0	11.35	11.44	11.45	12
1.4	64QAM	1	3	11.32	11.40	11.40	
1.4	64QAM	1	5	11.24	11.36	11.36	
1.4	64QAM	3	0	11.17	11.10	11.19	
1.4	64QAM	3	1	11.08	10.98	11.08	
1.4	64QAM	3	3	11.04	10.93	11.00	
1.4	64QAM	6	0	10.98	10.82	10.93	12
1.4	256QAM	1	0	11.49	11.54	11.47	12
1.4	256QAM	1	3	11.44	11.45	11.44	
1.4	256QAM	1	5	11.41	11.37	11.42	
1.4	256QAM	3	0	10.63	10.75	10.59	
1.4	256QAM	3	1	10.57	10.70	10.51	
1.4	256QAM	3	3	10.52	10.60	10.42	
1.4	256QAM	6	0	10.49	10.58	10.33	11.5

Band 66(For EN-DC/Simultaneous)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	8.98	9.06	8.92	9.5
20	QPSK	1	49	8.89	8.97	8.87	
20	QPSK	1	99	8.81	8.90	8.81	
20	QPSK	50	0	7.93	8.03	7.90	8.5
20	QPSK	50	24	7.82	7.93	7.86	
20	QPSK	50	50	7.78	7.87	7.77	
20	QPSK	100	0	7.73	7.78	7.76	8.5
20	16QAM	1	0	7.97	8.01	7.99	
20	16QAM	1	49	7.90	7.98	7.91	
20	16QAM	1	99	7.81	7.92	7.81	8.5
20	16QAM	50	0	7.78	7.80	7.78	
20	16QAM	50	24	7.75	7.79	7.74	
20	16QAM	50	50	7.67	7.71	7.65	8.5
20	16QAM	100	0	7.61	7.62	7.57	
20	64QAM	1	0	7.77	7.92	7.85	
20	64QAM	1	49	7.74	7.91	7.82	8.5
20	64QAM	1	99	7.67	7.89	7.76	
20	64QAM	50	0	7.70	7.74	7.78	
20	64QAM	50	24	7.68	7.69	7.75	8.5
20	64QAM	50	50	7.63	7.63	7.72	
20	64QAM	100	0	7.53	7.61	7.68	
20	256QAM	1	0	7.60	7.70	7.66	8.5
20	256QAM	1	49	7.58	7.67	7.56	
20	256QAM	1	99	7.48	7.66	7.45	
20	256QAM	50	0	7.61	7.72	7.67	8.5
20	256QAM	50	24	7.59	7.68	7.60	
20	256QAM	50	50	7.56	7.58	7.58	
20	256QAM	100	0	7.52	7.49	7.54	Tune-up limit (dBm)
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	Tune-up limit (dBm)
15	QPSK	1	0	8.94	9.02	8.89	
15	QPSK	1	37	8.86	8.96	8.83	9.5
15	QPSK	1	74	8.80	8.86	8.77	
15	QPSK	36	0	7.88	8.00	7.86	8.5
15	QPSK	36	20	7.80	7.90	7.84	
15	QPSK	36	39	7.73	7.84	7.73	
15	QPSK	75	0	7.71	7.75	7.73	8.5
15	16QAM	1	0	7.93	7.98	7.95	
15	16QAM	1	37	7.88	7.97	7.89	
15	16QAM	1	74	7.76	7.88	7.78	8.5
15	16QAM	36	0	7.75	7.78	7.76	
15	16QAM	36	20	7.73	7.74	7.70	
15	16QAM	36	39	7.64	7.68	7.61	8.5
15	16QAM	75	0	7.59	7.57	7.55	
15	64QAM	1	0	7.74	7.87	7.80	
15	64QAM	1	37	7.69	7.89	7.80	8.5
15	64QAM	1	74	7.65	7.87	7.73	
15	64QAM	36	0	7.68	7.72	7.76	
15	64QAM	36	20	7.63	7.66	7.72	8.5
15	64QAM	36	39	7.60	7.59	7.70	
15	64QAM	75	0	7.51	7.58	7.65	
15	256QAM	1	0	7.56	7.69	7.62	8.5
15	256QAM	1	37	7.55	7.63	7.52	
15	256QAM	1	74	7.45	7.61	7.42	
15	256QAM	36	0	7.59	7.68	7.62	8.5
15	256QAM	36	20	7.55	7.63	7.56	
15	256QAM	36	39	7.53	7.56	7.56	
15	256QAM	75	0	7.49	7.46	7.49	Tune-up limit (dBm)
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	Tune-up limit (dBm)
10	QPSK	1	0	8.88	8.96	8.82	
10	QPSK	1	25	8.79	8.87	8.77	9.5
10	QPSK	1	49	8.71	8.80	8.71	
10	QPSK	25	0	7.83	7.93	7.80	8.5
10	QPSK	25	12	7.72	7.83	7.76	
10	QPSK	25	25	7.68	7.77	7.67	
10	QPSK	50	0	7.63	7.68	7.66	8.5
10	16QAM	1	0	7.87	7.91	7.89	
10	16QAM	1	25	7.80	7.88	7.81	
10	16QAM	1	49	7.71	7.82	7.71	8.5
10	16QAM	25	0	7.68	7.70	7.68	
10	16QAM	25	12	7.65	7.69	7.64	
10	16QAM	25	25	7.57	7.61	7.55	8.5
10	16QAM	50	0	7.51	7.52	7.47	
10	64QAM	1	0	7.67	7.82	7.75	
10	64QAM	1	25	7.64	7.81	7.72	8.5
10	64QAM	1	49	7.57	7.79	7.66	
10	64QAM	25	0	7.60	7.64	7.68	
10	64QAM	25	12	7.58	7.59	7.65	8.5
10	64QAM	25	25	7.53	7.53	7.62	
10	64QAM	50	0	7.43	7.51	7.58	
10	256QAM	1	0	7.50	7.60	7.56	8.5
10	256QAM	1	25	7.48	7.57	7.46	
10	256QAM	1	49	7.38	7.56	7.35	
10	256QAM	25	0	7.51	7.62	7.57	8.5
10	256QAM	25	12	7.49	7.58	7.50	
10	256QAM	25	25	7.46	7.48	7.48	
10	256QAM	50	0	7.42	7.39	7.44	Tune-up limit (dBm)
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	Tune-up limit (dBm)
5	QPSK	1	0	8.83	8.91	8.77	
5	QPSK	1	12	8.74	8.82	8.72	9.5
5	QPSK	1	24	8.66	8.75	8.66	
5	QPSK	12	0	7.78	7.88	7.75	8.5
5	QPSK	12	7	7.67	7.78	7.71	

5	QPSK	12	13	7.63	7.72	7.62	8.5
5	QPSK	25	0	7.58	7.63	7.61	
5	16QAM	1	0	7.82	7.86	7.84	
5	16QAM	1	12	7.75	7.83	7.76	
5	16QAM	1	24	7.66	7.77	7.66	
5	16QAM	12	0	7.63	7.65	7.63	
5	16QAM	12	7	7.60	7.64	7.59	
5	16QAM	12	13	7.52	7.56	7.50	
5	16QAM	25	0	7.46	7.47	7.42	
5	64QAM	1	0	7.62	7.77	7.70	
5	64QAM	1	12	7.59	7.76	7.67	
5	64QAM	1	24	7.52	7.74	7.61	
5	64QAM	12	0	7.55	7.59	7.63	
5	64QAM	12	7	7.53	7.54	7.60	
5	64QAM	12	13	7.48	7.48	7.57	
5	64QAM	25	0	7.38	7.46	7.53	
5	256QAM	1	0	7.45	7.55	7.51	
5	256QAM	1	12	7.43	7.52	7.41	
5	256QAM	1	24	7.33	7.51	7.30	
5	256QAM	12	0	7.46	7.57	7.52	
5	256QAM	12	7	7.44	7.53	7.45	
5	256QAM	12	13	7.41	7.43	7.43	
5	256QAM	25	0	7.37	7.34	7.39	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	Tune-up limit (dBm)
3	QPSK	1	0	8.78	8.86	8.72	
3	QPSK	1	8	8.69	8.77	8.67	9.5
3	QPSK	1	14	8.61	8.70	8.61	
3	QPSK	8	0	7.73	7.83	7.70	8.5
3	QPSK	8	4	7.62	7.73	7.66	
3	QPSK	8	7	7.58	7.67	7.57	
3	QPSK	15	0	7.53	7.58	7.56	
3	16QAM	1	0	7.77	7.81	7.79	8.5
3	16QAM	1	8	7.70	7.78	7.71	
3	16QAM	1	14	7.61	7.72	7.61	
3	16QAM	8	0	7.58	7.60	7.58	
3	16QAM	8	4	7.55	7.59	7.54	8.5
3	16QAM	8	7	7.47	7.51	7.45	
3	16QAM	15	0	7.41	7.42	7.37	
3	64QAM	1	0	7.57	7.72	7.65	8.5
3	64QAM	1	8	7.54	7.71	7.62	
3	64QAM	1	14	7.47	7.69	7.56	
3	64QAM	8	0	7.50	7.54	7.58	
3	64QAM	8	4	7.48	7.49	7.55	8.5
3	64QAM	8	7	7.43	7.43	7.52	
3	64QAM	15	0	7.33	7.41	7.48	
3	256QAM	1	0	7.40	7.50	7.46	
3	256QAM	1	8	7.38	7.47	7.36	8.5
3	256QAM	1	14	7.28	7.46	7.25	
3	256QAM	8	0	7.41	7.52	7.47	
3	256QAM	8	4	7.39	7.48	7.40	
3	256QAM	8	7	7.36	7.38	7.38	8.5
3	256QAM	15	0	7.32	7.29	7.34	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	8.73	8.81	8.67	9.5
1.4	QPSK	1	3	8.64	8.72	8.62	
1.4	QPSK	1	5	8.56	8.65	8.56	
1.4	QPSK	3	0	7.78	7.83	7.65	
1.4	QPSK	3	1	7.67	7.68	7.61	
1.4	QPSK	3	3	7.63	7.62	7.57	
1.4	QPSK	6	0	7.48	7.53	7.51	8.5
1.4	16QAM	1	0	7.72	7.76	7.74	8.5
1.4	16QAM	1	3	7.65	7.73	7.66	
1.4	16QAM	1	5	7.56	7.67	7.56	
1.4	16QAM	3	0	7.53	7.55	7.53	
1.4	16QAM	3	1	7.50	7.54	7.49	
1.4	16QAM	3	3	7.42	7.46	7.40	
1.4	16QAM	6	0	7.36	7.37	7.32	8.5
1.4	64QAM	1	0	7.52	7.67	7.60	8.5
1.4	64QAM	1	3	7.49	7.66	7.57	
1.4	64QAM	1	5	7.42	7.64	7.51	
1.4	64QAM	3	0	7.45	7.49	7.53	
1.4	64QAM	3	1	7.43	7.44	7.50	
1.4	64QAM	3	3	7.38	7.38	7.47	
1.4	64QAM	6	0	7.28	7.36	7.43	8.5
1.4	256QAM	1	0	7.35	7.45	7.41	8.5
1.4	256QAM	1	3	7.33	7.42	7.31	
1.4	256QAM	1	5	7.23	7.41	7.20	
1.4	256QAM	3	0	7.36	7.47	7.42	
1.4	256QAM	3	1	7.34	7.43	7.35	
1.4	256QAM	3	3	7.31	7.33	7.33	
1.4	256QAM	6	0	7.27	7.24	7.29	8.5

Conducted Power for Simultaneous SAR

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.4GHz WLAN ANT 1	802.11b-1Mbps	CH 1	2412	9.05	9.5	9.5	100.00
		CH 6	2437	7.58	8.0	9.5	
		CH 11	2462	7.39	8.0	9.5	
	802.11g-6Mbps	CH 1	2412	8.15	8.5	9	98.21
		CH 6	2437	7.22	7.5	9	
		CH 11	2462	6.23	6.5	9	
	802.11n-HT20 MCS0	CH 1	2412	7.91	8.5	9	98.59
		CH 6	2437	7.07	7.5	9	
		CH 11	2462	6.09	6.5	9	
	802.11n-HT40 MCS0	CH 3	2452	7.29	7.50	9	94.20
		CH 6	2437	7.49	8.00	9	
		CH 9	2452	7.64	8.00	9	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 1	802.11a-6Mbps	CH 36	5180	8.02	8.5	11.5	98.03
		CH 44	5220	7.85	8.0	11.5	
		CH 48	5240	7.50	8.0	11.5	
	802.11n-HT20 MCS0	CH 36	5180	8.12	8.5	11.5	98.28
		CH 44	5220	7.68	8.0	11.5	
		CH 48	5240	7.44	8.0	11.5	
	802.11n-HT40 MCS0	CH 38	5190	8.90	9.0	11.5	96.68
		CH 46	5230	8.27	9.0	11.5	
		CH 36	5180	8.00	8.5	11.5	
	802.11ac-VHT20 MCS0	CH 44	5220	7.93	8.0	11.5	98.14
		CH 48	5240	7.48	8.0	11.5	
		CH 38	5190	7.87	8.5	11.5	
	802.11ac-VHT40 MCS0	CH 46	5230	7.93	8.0	11.5	96.41
		CH 48	5240	7.53	8.0	11.5	
		CH 42	5210	7.50	8.0	11.5	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 1	802.11a-6Mbps	CH 52	5260	6.03	6.5	10	98.03
		CH 60	5300	6.46	7.0	10	
		CH 64	5320	6.69	7.0	10	
	802.11n-HT20 MCS0	CH 52	5260	5.98	6.5	10	98.28
		CH 60	5300	6.45	7.0	10	
		CH 64	5320	6.70	7.0	10	
	802.11n-HT40 MCS0	CH 54	5270	6.77	7.5	10	96.68
		CH 62	5310	7.39	8.0	10	
		CH 52	5260	5.96	6.5	10	
	802.11ac-VHT20 MCS0	CH 60	5300	6.07	6.5	10	98.14
		CH 64	5320	6.48	7.0	10	
		CH 54	5270	6.21	6.5	10	
	802.11ac-VHT40 MCS0	CH 62	5310	6.76	7.5	10	96.41
		CH 58	5290	6.18	6.5	10	
		CH 58	5290	6.18	6.5	10	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.5GHz WLAN ANT 1	802.11a-6Mbps	CH 100	5500	5.95	6.5	8	98.03
		CH 120	5600	5.12	6.0	8	
		CH 144	5720	5.33	6.0	8	
	802.11n-HT20 MCS0	CH 100	5500	6.08	6.5	8	98.28
		CH 120	5600	5.17	6.0	8	
		CH 144	5720	5.60	6.0	8	
	802.11n-HT40 MCS0	CH 102	5510	6.60	7.5	8	96.68
		CH 126	5620	5.18	6.0	8	
		CH 142	5710	5.83	6.5	8	
	802.11ac-VHT20 MCS0	CH 100	5500	5.96	6.5	7.5	98.14
		CH 120	5600	4.92	5.5	7.5	
		CH 144	5720	4.97	5.5	7.5	
	802.11ac-VHT40 MCS0	CH 102	5510	5.96	6.5	7.5	96.41
		CH 126	5630	5.25	6.0	7.5	
		CH 142	5710	5.51	6.0	7.5	
	802.11ac-VHT80 MCS0	CH 106	5630	5.74	6.5	7.5	93.54
		CH 132	5610	5.39	6.0	7.5	
		CH 138	5690	5.46	6.0	7.5	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.8GHz WLAN ANT 1	802.11a-MCS0	CH 140	5745	4.03	4.50	6	98.03
		CH 157	5785	4.34	5.00	6	
		CH 165	5820	4.71	5.00	6	
	802.11n-HT20 MCS0	CH 140	5745	4.32	5.00	6	98.28
		CH 157	5785	4.71	5.00	6	
		CH 165	5820	4.77	5.00	6	
	802.11n-HT40 MCS0	CH 151	5755	4.51	5.00	6	96.68
		CH 159	5795	4.74	5.00	6	
		CH 149	5745	3.74	4.50	6	
	802.11ac-VHT20 MCS0	CH 157	5785	4.21	5.00	8	98.14
		CH 165	5820	4.47	5.00	6	
		CH 151	5755	4.06	4.50	6	
	802.11ac-VHT40 MCS0	CH 159	5795	4.59	5.00	6	96.41
		CH 155	5775	4.08	4.50	6	
		CH 155	5775	4.08	4.50	6	

Mode	Channel	Frequency (MHz)	Average power (dBm)		
BR / EDR	CH 50	2602	8.47	8.68	6.63
	CH 59	2641	9.25	9.23	6.07
	CH 19	2660	9.43	7.47	7.53
	Timeup Limit	10	6	8	8
Duty Cycle %			78.8	77.07	77.07

Mode	Channel	Frequency (MHz)	Average power (dBm)		
LE	CH 50	2602	-8.34	-8.74	
	CH 59	2640	-4.60	-6.17	
	CH 19	2660	-4.77	-6.79	
	Timeup Limit		7.5	9.5	
Duty Cycle %			61.54	32.54	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.4GHz WLAN ANT 2	802.11b-1Mbps	CH 1	2412	9.84	10.00	10	100.00
		CH 6	2437	10.34	11.00	10	
		CH 11	2462	9.54	10.00	10	
	802.11g-6Mbps	CH 1	2412	8.78	9.00	9.5	98.21
		CH 6	2437	9.76	10.00	9.5	
		CH 11	2462	8.84	9.50	9.5	
	802.11n-HT20 MCS0	CH 1	2412	8.66	9.00	9.5	98.59
		CH 6	2437	9.57	10.00	9.5	
		CH 11	2462	8.86	9.00	9.5	
	802.11n-HT40 MCS0	CH 3	2452	8.71	9.00	9.5	94.20
		CH 6	2437	8.97	9.50	9.5	
		CH 9	2452	9.20	10.00	9.5	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 2	802.11a-6Mbps	CH 36	5180	5.96	6.50	9	98.03
		CH 44	5220	5.30	6.00	9	
		CH 48	5240	5.02	5.50	9	
	802.11n-HT20 MCS0	CH 36	5180	5.73	6.50	9	98.28
		CH 44	5220	5.11	5.50	9	
		CH 48	5240	4.95	5.50	9	
	802.11n-HT40 MCS0	CH 38	5190	6.07	7.00	9	96.68
		CH 46	5230	5.47	6.00	9	
		CH 36	5180	5.39	6.00	9	
	802.11ac-VHT20 MCS0	CH 44	5220	4.92	5.50	9	98.14
		CH 48	5240	4.78	5.50	9	
		CH 38	5190	5.87	6.00	9	
	802.11ac-VHT40 MCS0	CH 46	5230	5.04	5.50	9	96.41
		CH 48	5240	4.78	5.50	9	
		CH 42	5210	5.45	6.00	9	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 2	802.11a-6Mbps	CH 52	5260	6.15	6.50	10	98.03
		CH 60	5300	6.41	7.00	10	
		CH 64	5320	6.78	7.50	10	
	802.11n-HT20 MCS0	CH 52	5260	6.11	6.50	10	98.28
		CH 60	5300	6.36	7.00	10	
		CH 64	5320	6.73	7.50	10	
	802.11n-HT40 MCS0	CH 54	5270	6.36	7.00	10	96.68
		CH 62	5310	6.95	7.50	10	
		CH 52	5260	5.97	6.50	10	
	802.11ac-VHT20 MCS0	CH 60	5300	5.79	6.50	10	98.14
		CH 64	5320	6.19	6.50	10	
		CH 54	5270	6.13	6.50	10	
	802.11ac-VHT40 MCS0	CH 62	5310	6.85	7.00	10	96.41
		CH 58	5290	5.95	6.50	10	
		CH 58	5290	5.95	6.50	10	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.5GHz WLAN ANT 2	802.11a-6Mbps	CH 100	5500	9.10	9.50	12	98.03
		CH 116	5580	8.19	8.50	12	
		CH 144	5720	7.82	8.50	12	
	802.11n-HT20 MCS0	CH 100	5500	8.76	9.50	12	98.28
		CH 116	5580	8.21	8.50	12	
		CH 144	5720	7.81	8.00	12	
	802.11n-HT40 MCS0	CH 102	5510	8.29	9.50	12	96.68
		CH 126	5630	8.16	8.50	12	
		CH 142	5710	8.36	8.50	12	
	802.11ac-VHT20 MCS0	CH 100	5500	8.19	9.50	11.5	98.14
		CH 116	5580	7.58	8.00	11.5	
		CH 144	5720	7.05	7.50	11.5	
802.11ac-VHT40 MCS0	CH 102	5510	9.02	9.50	11.5	96.41	
	CH 126	5630	7.68	8.00	11.5		
	CH 142	5710	7.90	8.50	11.5		
802.11ac-VHT80 MCS0	CH 106	5630	8.78	9.50	11.5	93.54	
	CH 122	5610	8.20	8.50	11.5		
	CH 138	5660	8.16	8.50	11.5		