



REPORT No.: SZ24090048S01

Annex E Conducted Power

Note:

Conducted power unit: dBm.

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

Full Power

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	23.88	23.64	23.51	25.00	23.39	23.47	23.65	25.00	23.68	23.73	23.71	24.50
3GPP Rel 5	HSDPA Subtest-1	22.90	22.67	22.59	24.00	22.15	22.45	22.63	23.50	22.97	23.00	23.10	24.00
3GPP Rel 5	HSDPA Subtest-2	22.82	22.59	22.52	24.00	22.10	22.42	22.61	23.50	22.99	22.97	22.89	24.00
3GPP Rel 5	HSDPA Subtest-3	22.32	22.12	21.97	23.50	21.63	21.89	22.03	23.00	22.48	22.46	22.54	23.50
3GPP Rel 5	HSDPA Subtest-4	22.40	22.14	21.95	23.50	21.58	21.86	21.98	23.00	22.50	22.50	22.52	23.50
3GPP Rel 6	HSUPA Subtest-1	22.86	22.62	22.48	23.50	22.04	22.26	22.59	23.00	22.96	22.96	22.97	24.00
3GPP Rel 6	HSUPA Subtest-2	22.30	22.13	22.00	23.00	21.55	21.90	22.03	23.00	22.42	22.43	22.49	23.50
3GPP Rel 6	HSUPA Subtest-3	22.84	22.52	22.49	23.50	22.00	22.28	22.55	23.00	22.92	22.95	23.00	24.00
3GPP Rel 6	HSUPA Subtest-4	22.86	22.62	22.49	23.50	22.05	22.41	22.58	23.00	22.96	22.97	22.92	24.00
3GPP Rel 6	HSUPA Subtest-5	22.77	22.56	22.47	23.50	22.07	22.30	22.48	23.00	22.95	23.10	23.00	24.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	22.33	22.15	21.99	23.00	21.53	21.89	22.04	23.00	22.50	22.56	22.54	23.50
Attenuator			Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6	
Mode			Max.	23.88			Max.	23.65			Max.	23.73	

Band		WCDMA Band XIX (dBm)			Tune-up Limit (dBm)
TX Channel		387	412	437	
Rx Channel		787	812	837	
Frequency (MHz)		832.4	837.6	842.6	
3GPP Rel 99	RMC 12.2Kbps	23.70	23.65	23.59	24.50
3GPP Rel 5	HSDPA Subtest-1	23.10	22.99	22.94	24.00
3GPP Rel 5	HSDPA Subtest-2	23.20	22.98	22.90	24.00
3GPP Rel 5	HSDPA Subtest-3	22.51	22.46	22.38	23.50
3GPP Rel 5	HSDPA Subtest-4	22.52	22.49	22.39	23.50
3GPP Rel 6	HSUPA Subtest-1	23.01	22.97	22.88	24.00
3GPP Rel 6	HSUPA Subtest-2	22.50	22.46	22.37	23.50
3GPP Rel 6	HSUPA Subtest-3	23.00	22.89	22.89	24.00
3GPP Rel 6	HSUPA Subtest-4	23.02	23.01	22.88	24.00
3GPP Rel 6	HSUPA Subtest-5	23.02	22.99	22.90	24.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	22.53	22.56	22.40	23.50
Attenuator			Cable Loss	0.6	
Mode			Max.	23.70	

3	QPSK	15	0	22.54	22.61	22.54	24
3	16QAM	1	0	23.01	22.90	22.84	
3	16QAM	1	8	22.94	22.96	22.61	
3	16QAM	1	14	22.90	22.83	22.95	23
3	16QAM	8	0	21.82	21.80	21.71	
3	16QAM	8	4	21.68	21.81	21.67	
3	16QAM	8	7	21.53	21.72	21.62	24
3	16QAM	15	0	21.72	21.64	21.46	
3	64QAM	1	0	22.72	22.75	22.50	
3	64QAM	1	8	22.65	22.83	22.59	23
3	64QAM	1	14	22.47	22.68	22.65	
3	64QAM	8	0	21.78	21.85	21.62	
3	64QAM	8	4	21.79	21.80	21.76	24
3	64QAM	8	7	21.58	21.68	21.65	
3	64QAM	15	0	21.57	21.79	21.68	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	23.62	23.53	23.56	25
1.4	QPSK	1	3	23.44	23.46	23.52	
1.4	QPSK	1	5	23.45	23.50	23.50	
1.4	QPSK	3	0	22.88	22.89	22.66	24
1.4	QPSK	3	1	22.77	22.74	22.50	
1.4	QPSK	3	3	22.61	22.59	22.50	
1.4	QPSK	6	0	22.64	22.81	22.50	24
1.4	16QAM	1	0	22.92	22.89	22.98	
1.4	16QAM	1	3	23.04	22.91	22.83	
1.4	16QAM	1	5	22.95	22.91	22.68	23
1.4	16QAM	3	0	21.84	21.90	21.86	
1.4	16QAM	3	1	21.76	21.72	21.65	
1.4	16QAM	3	3	21.53	21.69	21.52	24
1.4	16QAM	6	0	21.67	21.71	21.41	
1.4	64QAM	1	0	22.79	22.73	22.65	
1.4	64QAM	1	3	22.74	22.86	22.66	23
1.4	64QAM	1	5	22.72	22.88	22.48	
1.4	64QAM	3	0	21.75	21.72	21.70	
1.4	64QAM	3	1	21.48	21.61	21.64	23
1.4	64QAM	3	3	21.60	21.76	21.55	
1.4	64QAM	6	0	21.58	21.65	21.70	

3	QPSK	15	0	22.74	22.78	22.81	24
3	16QAM	1	0	23.05	22.86	22.75	
3	16QAM	1	8	22.72	23.01	22.97	
3	16QAM	1	14	22.85	22.97	22.73	23
3	16QAM	8	0	21.62	21.68	21.90	
3	16QAM	8	4	21.65	21.50	21.46	
3	16QAM	8	7	21.55	21.60	21.71	24
3	16QAM	15	0	21.49	21.41	21.76	
3	64QAM	1	0	22.65	22.79	22.83	
3	64QAM	1	8	22.56	22.58	22.74	23
3	64QAM	1	14	22.66	22.61	22.59	
3	64QAM	8	0	21.74	21.71	21.83	
3	64QAM	8	4	21.50	21.66	21.57	24
3	64QAM	8	7	21.68	21.63	21.55	
3	64QAM	15	0	21.61	21.70	21.83	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	23.48	23.50	23.56	25
1.4	QPSK	1	3	23.29	23.46	23.43	
1.4	QPSK	1	5	23.26	23.28	23.53	
1.4	QPSK	3	0	22.86	22.85	22.79	24
1.4	QPSK	3	1	22.57	22.83	22.57	
1.4	QPSK	3	3	22.64	22.77	22.63	
1.4	QPSK	6	0	22.72	22.82	22.62	24
1.4	16QAM	1	0	22.89	22.81	22.84	
1.4	16QAM	1	3	22.73	22.87	22.68	
1.4	16QAM	1	5	22.65	22.82	22.99	23
1.4	16QAM	3	0	21.67	21.83	21.85	
1.4	16QAM	3	1	21.50	21.80	21.68	
1.4	16QAM	3	3	21.56	21.66	21.42	24
1.4	16QAM	6	0	21.51	21.39	21.76	
1.4	64QAM	1	0	22.89	22.72	22.86	
1.4	64QAM	1	3	22.70	22.73	22.68	23
1.4	64QAM	1	5	22.74	22.86	22.69	
1.4	64QAM	3	0	21.79	21.62	21.86	
1.4	64QAM	3	1	21.64	21.64	21.83	23
1.4	64QAM	3	3	21.68	21.54	21.65	
1.4	64QAM	6	0	21.55	21.52	21.53	

Band 14 (700MHz Band) (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		23.87		25
10	QPSK	1	25		23.81		
10	QPSK	1	49		23.79		
10	QPSK	25	0		23.05		24
10	QPSK	25	12		22.94		
10	QPSK	25	25		22.93		
10	QPSK	50	0		23.02		24
10	16QAM	1	0		23.27		
10	16QAM	1	25		23.23		
10	16QAM	1	49		23.24		23
10	16QAM	25	0		22.17		
10	16QAM	25	12		21.84		
10	16QAM	25	25		22.01		24
10	16QAM	50	0		21.72		
10	64QAM	1	0		23.04		
10	64QAM	1	25		22.91		23
10	64QAM	1	49		23.18		
10	64QAM	25	0		22.18		
10	64QAM	25	12		21.93		24
10	64QAM	25	25		21.84		
10	64QAM	50	0		22.04		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	23.79	23.84	23.81	25
5	QPSK	1	12	23.84	23.82	23.79	
5	QPSK	1	24	23.76	23.73	23.68	
5	QPSK	12	0	22.93	23.04	22.85	24
5	QPSK	12	7	22.91	22.92	23.02	
5	QPSK	12	13	23.06	22.91	22.75	
5	QPSK	25	0	23.12	23.04	22.99	24
5	16QAM	1	0	23.08	23.22	23.17	
5	16QAM	1	12	23.14	23.15	23.20	
5	16QAM	1	24	23.09	23.15	23.18	23
5	16QAM	12	0	22.03	21.97	21.94	
5	16QAM	12	7	21.82	22.13	21.86	
5	16QAM	12	13	21.71	22.03	21.79	24
5	16QAM	25	0	22.10	22.05	21.88	
5	64QAM	1	0	23.07	23.14	23.12	
5	64QAM	1	12	23.14	23.16	22.96	23
5	64QAM	1	24	23.00	23.01	22.75	
5	64QAM	12	0	22.12	21.92	21.92	
5	64QAM	12	7	21.84	22.13	21.99	24
5	64QAM	12	13	21.72	21.85	21.85	
5	64QAM	25	0	22.02	21.79	21.87	

Band 17 (700MHz Band) (dBm) Part 27H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	23.77	23.88	23.79	25
10	QPSK	1	25	23.61	23.86	23.65	
10	QPSK	1	49	23.65	23.67	23.70	
10	QPSK	25	0	23.10	23.15	22.94	24
10	QPSK	25	12	23.01	22.87	23.06	
10	QPSK	25	25	23.07	22.86	22.89	
10	QPSK	50	0	22.93	22.87	22.74	24
10	16QAM	1	0	23.21	23.25	23.27	
10	16QAM	1	25	23.15	23.24	22.97	
10	16QAM	1	49	23.00	23.29	23.16	23
10	16QAM	25	0	21.94	22.04	21.91	
10	16QAM	25	12	21.73	21.85	21.73	
10	16QAM	25	25	21.79	21.98	21.77	24
10	16QAM	50	0	21.73	21.96	21.82	
10	64QAM	1	0	23.06	23.11	22.90	
10	64QAM	1	25	22.95	22.94	22.85	23
10	64QAM	1	49	22.97	23.02	22.98	
10	64QAM	25	0	22.07	22.11	21.95	
10	64QAM	25	12	21.88	21.96	21.72	23
10	64QAM	25	25	21.95	22.09	21.89	
10	64QAM	50	0	21.90	21.78	21.86	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	23.83	23.86	23.72	25
5	QPSK	1	12	23.77	23.84	23.74	
5	QPSK	1	24	23.73	23.55	23.63	
5	QPSK	12	0	23.01	23.04	23.00	24
5	QPSK	12	7	22.94	22.90	22.80	
5	QPSK	12	13	22.87	22.78	22.77	
5	QPSK	25	0	22.79	22.89	22.90	24
5	16QAM	1	0	23.09	23.37	23.16	
5	16QAM	1	12	23.30	23.08	22.95	
5	16QAM	1	24	23.19	23.10	22.96	23
5	16QAM	12	0	22.03	22.09	22.04	
5	16QAM	12	7	21.90	21.80	21.75	
5	16QAM	12	13	21.86	22.00	21.72	24
5	16QAM	25	0	21.99	21.91	21.78	
5	64QAM	1	0	22.91	23.18	22.81	
5	64QAM	1	12	22.77	23.00	22.89	23
5	64QAM	1	24	23.02	23.09	22.88	
5	64QAM	12	0	22.12	21.99	21.88	
5	64QAM	12	7	21.94	21.87	21.74	23
5	64QAM	12	13	21.70	21.91	21.95	
5	64QAM	25	0	21.96	21.87	21.80	

3	QPSK	15	0	23.00	22.86	22.98	24
3	16QAM	1	0	23.28	23.25	23.06	
3	16QAM	1	8	23.08	23.19	23.08	
3	16QAM	1	14	22.94	23.29	23.13	23
3	16QAM	8	0	21.89	21.94	21.96	
3	16QAM	8	4	22.00	21.89	21.82	
3	16QAM	8	7	21.80	22.04	21.85	24
3	16QAM	15	0	21.83	21.84	21.89	
3	64QAM	1	0	23.07	22.91	23.06	
3	64QAM	1	8	22.89	22.85	22.96	23
3	64QAM	1	14	22.94	22.93	22.78	
3	64QAM	8	0	22.08	22.14	22.15	
3	64QAM	8	4	22.03	22.08	21.79	23
3	64QAM	8	7	21.69	21.99	21.88	
3	64QAM	15	0	21.82	21.89	22.07	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	23.74	23.63	23.61	25
1.4	QPSK	1	3	23.72	23.59	23.58	
1.4	QPSK	1	5	23.65	23.53	23.60	
1.4	QPSK	3	0	23.02	22.83	23.02	
1.4	QPSK	3	1	22.87	22.77	22.83	
1.4	QPSK	3	3	22.82	22.78	22.73	
1.4	QPSK	6	0	22.89	22.82	22.93	24
1.4	16QAM	1	0	23.34	23.04	23.27	23
1.4	16QAM	1	3	22.97	23.24	23.06	
1.4	16QAM	1	5	23.16	23.26	23.16	
1.4	16QAM	3	0	21.87	21.96	21.88	
1.4	16QAM	3	1	21.84	21.99	21.73	
1.4	16QAM	3	3	21.66	21.89	21.68	
1.4	16QAM	6	0	21.83	21.79	21.96	22
1.4	64QAM	1	0	22.96	23.08	22.96	24
1.4	64QAM	1	3	22.79	23.04	23.04	
1.4	64QAM	1	5	22.69	22.83	22.94	
1.4	64QAM	3	0	21.86	21.93	22.01	
1.4	64QAM	3	1	21.99	22.08	21.94	
1.4	64QAM	3	3	21.88	21.97	21.81	
1.4	64QAM	6	0	21.98	21.94	22.06	23

1.4	QPSK	6	0	23.04	22.83	22.78	24
1.4	16QAM	1	0	22.97	23.27	23.09	24
1.4	16QAM	1	3	22.96	23.03	22.94	
1.4	16QAM	1	5	23.01	22.92	22.96	
1.4	16QAM	3	0	21.81	21.98	21.83	
1.4	16QAM	3	1	21.79	21.90	21.69	
1.4	16QAM	3	3	21.75	21.69	21.73	
1.4	16QAM	6	0	21.79	21.79	21.58	23
1.4	64QAM	1	0	22.91	22.79	23.01	24
1.4	64QAM	1	3	22.91	22.89	22.82	
1.4	64QAM	1	5	22.82	22.95	22.76	
1.4	64QAM	3	0	21.92	21.81	21.97	
1.4	64QAM	3	1	21.79	22.04	21.74	
1.4	64QAM	3	3	21.75	21.90	21.86	
1.4	64QAM	6	0	21.98	21.95	21.91	23

3	QPSK	15	0	22.88	22.76	22.62	24
3	16QAM	1	0	22.84	23.08	23.05	
3	16QAM	1	8	22.86	23.03	23.00	
3	16QAM	1	14	22.92	23.06	22.78	23
3	16QAM	8	0	21.87	21.92	21.95	
3	16QAM	8	4	21.68	21.83	21.80	
3	16QAM	8	7	21.70	21.81	21.78	
3	16QAM	15	0	21.61	21.84	21.77	
3	64QAM	1	0	23.00	22.78	22.79	24
3	64QAM	1	8	22.91	22.79	22.95	
3	64QAM	1	14	22.81	22.98	22.77	
3	64QAM	8	0	21.92	21.84	21.79	23
3	64QAM	8	4	21.79	21.78	21.89	
3	64QAM	8	7	21.56	21.85	21.67	
3	64QAM	15	0	21.87	21.85	21.90	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	23.66	23.62	23.71	25
1.4	QPSK	1	3	23.66	23.66	23.53	
1.4	QPSK	1	5	23.51	23.60	23.62	
1.4	QPSK	3	0	22.97	22.84	22.69	
1.4	QPSK	3	1	22.73	22.89	22.88	
1.4	QPSK	3	3	22.72	22.85	22.85	
1.4	QPSK	6	0	22.80	22.85	22.86	24
1.4	16QAM	1	0	23.07	22.96	22.87	24
1.4	16QAM	1	3	23.10	23.14	22.86	
1.4	16QAM	1	5	22.89	22.94	23.06	
1.4	16QAM	3	0	21.90	21.85	21.96	
1.4	16QAM	3	1	21.64	21.81	21.72	
1.4	16QAM	3	3	21.70	21.68	21.79	
1.4	16QAM	6	0	21.65	21.50	21.82	23
1.4	64QAM	1	0	22.98	23.01	22.72	24
1.4	64QAM	1	3	22.71	22.70	22.64	
1.4	64QAM	1	5	22.81	22.96	22.58	
1.4	64QAM	3	0	21.81	22.02	21.90	
1.4	64QAM	3	1	21.84	21.82	21.62	
1.4	64QAM	3	3	21.78	21.92	21.89	
1.4	64QAM	6	0	21.67	21.75	21.81	23

Band 71 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	23.80	23.63	23.75	
20	QPSK	1	49	23.66	23.77	23.52	25
20	QPSK	1	99	23.63	23.55	23.65	
20	QPSK	50	0	22.90	22.94	22.89	
20	QPSK	50	24	22.66	22.82	22.72	24
20	QPSK	50	50	22.90	22.68	22.83	
20	QPSK	100	0	22.80	22.97	22.69	
20	16QAM	1	0	22.88	23.10	22.85	24
20	16QAM	1	49	22.94	23.11	22.90	
20	16QAM	1	99	23.07	22.98	22.93	
20	16QAM	50	0	21.98	21.88	21.76	23
20	16QAM	50	24	21.77	21.90	21.79	
20	16QAM	50	50	21.71	21.86	21.67	
20	16QAM	100	0	21.87	21.76	21.68	24
20	64QAM	1	0	22.99	22.94	22.69	
20	64QAM	1	49	22.88	22.90	22.71	
20	64QAM	1	99	22.65	22.94	22.59	23
20	64QAM	50	0	21.83	21.82	21.77	
20	64QAM	50	24	21.82	21.91	21.70	
20	64QAM	50	50	21.79	21.90	21.61	
20	64QAM	100	0	21.60	21.76	21.66	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	23.77	23.80	23.73	
15	QPSK	1	37	23.53	23.66	23.61	25
15	QPSK	1	74	23.64	23.74	23.45	
15	QPSK	36	0	22.71	22.75	22.84	
15	QPSK	36	20	22.83	22.74	22.58	24
15	QPSK	36	39	22.68	22.64	22.70	
15	QPSK	75	0	22.77	22.69	22.83	
15	16QAM	1	0	23.22	23.25	23.07	24
15	16QAM	1	37	23.04	23.01	22.84	
15	16QAM	1	74	22.96	22.95	23.01	
15	16QAM	36	0	21.83	21.84	21.82	23
15	16QAM	36	20	21.55	21.96	21.56	
15	16QAM	36	39	21.76	21.71	21.78	
15	16QAM	75	0	21.66	21.62	21.71	24
15	64QAM	1	0	22.80	22.86	22.92	
15	64QAM	1	37	22.66	22.76	22.79	
15	64QAM	1	74	22.82	22.84	22.65	23
15	64QAM	36	0	21.72	21.99	21.76	
15	64QAM	36	20	21.66	21.72	21.74	
15	64QAM	36	39	21.82	21.94	21.77	
15	64QAM	75	0	21.88	21.67	21.55	
Channel				133172	133272	133422	
Frequency (MHz)				668	678	693	
10	QPSK	1	0	23.69	23.78	23.67	
10	QPSK	1	25	23.62	23.56	23.61	25
10	QPSK	1	49	23.52	23.61	23.63	
10	QPSK	25	0	22.76	22.90	22.95	
10	QPSK	25	12	22.56	22.90	22.82	24
10	QPSK	25	25	22.81	22.72	22.76	
10	QPSK	50	0	22.74	22.85	22.64	
10	16QAM	1	0	23.19	23.20	22.85	24
10	16QAM	1	25	23.04	23.11	22.81	
10	16QAM	1	49	22.87	22.96	22.89	
10	16QAM	25	0	21.93	21.97	21.77	23
10	16QAM	25	12	21.62	21.75	21.72	
10	16QAM	25	25	21.71	21.72	21.60	
10	16QAM	50	0	21.62	21.65	21.73	24
10	64QAM	1	0	22.75	23.00	22.72	
10	64QAM	1	25	22.83	22.95	22.68	
10	64QAM	1	49	22.57	22.96	22.62	23
10	64QAM	25	0	21.96	21.76	21.75	
10	64QAM	25	12	21.62	21.88	21.69	
10	64QAM	25	25	21.76	21.63	21.59	
10	64QAM	50	0	21.81	21.84	21.76	
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	23.66	23.77	23.68	
5	QPSK	1	12	23.48	23.55	23.52	25
5	QPSK	1	24	23.56	23.65	23.54	
5	QPSK	12	0	22.83	22.84	22.62	
5	QPSK	12	7	22.77	22.74	22.58	24
5	QPSK	12	13	22.69	22.59	22.70	
5	QPSK	25	0	22.96	22.97	22.62	
5	16QAM	1	0	22.89	23.22	22.92	24
5	16QAM	1	12	23.00	22.94	22.83	
5	16QAM	1	24	23.11	22.92	22.78	
5	16QAM	12	0	21.70	21.71	21.74	23
5	16QAM	12	7	21.75	21.92	21.72	
5	16QAM	12	13	21.67	21.67	21.61	
5	16QAM	25	0	21.62	21.87	21.64	24
5	64QAM	1	0	22.77	23.02	22.92	
5	64QAM	1	12	22.81	22.73	22.68	
5	64QAM	1	24	22.70	22.87	22.69	23
5	64QAM	12	0	21.95	21.71	21.79	
5	64QAM	12	7	21.58	21.90	21.64	
5	64QAM	12	13	21.75	21.92	21.61	
5	64QAM	25	0	21.81	21.92	21.80	
5	64QAM	25	0	21.81	21.92	21.80	

n2 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.60	23.45	23.36	25
20		1	53	23.58	23.21	23.13	
20		1	104	23.46	23.36	23.15	
20		50	1	23.73	23.42	23.33	25
20		50	25	23.73	23.24	23.26	
20		50	50	23.62	23.20	23.32	
20		100	0	23.64	23.26	23.29	
20	DFT-s-OFDM QPSK	1	1	23.65	23.75	23.41	25
20		1	53	23.67	23.56	23.21	
20		1	104	23.19	23.38	23.28	
20		50	1	23.64	23.73	23.38	25
20		50	25	23.63	23.64	23.32	
20		50	50	23.60	23.22	23.14	
20		100	0	23.60	23.62	23.24	
20	DFT-s-OFDM 16QAM	1	1	23.20	23.05	22.94	24
20	DFT-s-OFDM 64QAM	1	1	21.94	21.82	21.62	23
20	DFT-s-OFDM 256QAM	1	1	19.86	19.67	19.49	21
20	CP-OFDM QPSK	1	1	23.02	22.80	22.65	24
20	CP-OFDM 16QAM	1	1	22.47	22.31	22.17	23
20	CP-OFDM 64QAM	1	1	20.12	20.43	20.38	21
20	CP-OFDM 256QAM	1	1	17.94	17.69	17.53	19
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	23.45	23.70	23.25	25
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	23.47	23.73	23.23	25
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	23.57	23.72	23.25	25

n5 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.65	23.67	23.63	25
20		1	53	23.53	23.45	23.47	
20		1	104	23.24	23.22	23.35	
20		50	1	23.67	23.66	23.58	25
20		50	25	23.59	23.58	23.44	
20		50	50	23.51	23.43	23.40	
20		100	0	23.61	23.61	23.49	
20	DFT-s-OFDM QPSK	1	1	23.65	23.68	23.62	25
20		1	53	23.45	23.52	23.47	
20		1	104	23.26	23.28	23.25	
20		50	1	23.60	23.62	23.54	25
20		50	25	23.61	23.60	23.54	
20		50	50	23.51	23.48	23.37	
20		100	0	23.51	23.60	23.51	
20	DFT-s-OFDM 16QAM	1	1	23.46	23.31	23.23	25
20	DFT-s-OFDM 64QAM	1	1	21.77	21.73	21.68	23
20	DFT-s-OFDM 256QAM	1	1	19.73	19.65	19.55	21
20	CP-OFDM QPSK	1	1	22.86	22.77	22.70	24
20	CP-OFDM 16QAM	1	1	22.29	22.24	22.22	23
20	CP-OFDM 64QAM	1	1	20.52	20.34	20.12	21
20	CP-OFDM 256QAM	1	1	17.67	17.73	17.68	19
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	23.44	23.45	23.27	25
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	23.36	23.38	23.22	25
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	23.42	23.44	23.09	25

n7 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.39	23.36	23.61	25
20		1	53	23.33	23.49	23.66	
20		1	104	23.37	23.50	23.56	
20		50	1	23.28	23.40	23.51	25
20		50	25	23.24	23.43	23.63	
20		50	50	23.29	23.46	23.52	
20		100	0	23.25	23.44	23.52	
20	DFT-s-OFDM QPSK	1	1	23.42	23.53	23.68	25
20		1	53	23.31	23.47	23.59	
20		1	104	23.40	23.52	23.66	
20		50	1	23.41	23.50	23.65	25
20		50	25	23.23	23.37	23.59	
20		50	50	23.30	23.39	23.58	
20		100	0	23.30	23.41	23.61	
20	DFT-s-OFDM 16QAM	1	1	22.99	23.03	23.27	24
20	DFT-s-OFDM 64QAM	1	1	21.42	21.43	21.74	23
20	DFT-s-OFDM 256QAM	1	1	19.05	19.06	19.31	20
20	CP-OFDM QPSK	1	1	22.36	22.44	22.67	25
20	CP-OFDM 16QAM	1	1	21.82	21.90	22.16	24
20	CP-OFDM 64QAM	1	1	20.17	20.15	20.43	23
20	CP-OFDM 256QAM	1	1	17.09	17.18	17.45	19
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	DFT-s-OFDM QPSK	1	1	23.24	23.28	23.52	25
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	DFT-s-OFDM QPSK	1	1	23.13	23.30	23.52	25
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	DFT-s-OFDM QPSK	1	1	23.22	23.25	23.49	25

n25 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376500	381000	Tune-up limit (dBm)
Frequency (MHz)				1860	1882.5	1905	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.67	23.68	23.42	25
20		1	53	23.78	23.50	23.33	
20		1	104	23.57	23.32	23.35	
20		50	1	23.80	23.63	23.38	25
20	DFT-s-OFDM QPSK	50	25	23.72	23.53	23.46	
20		50	50	23.67	23.46	23.46	
20		100	0	23.72	23.47	23.41	
20		1	1	23.81	23.76	23.60	25
20	DFT-s-OFDM 16QAM	1	53	23.72	23.64	23.50	
20		1	104	23.68	23.55	23.53	
20		50	1	23.78	23.69	23.55	25
20		50	25	23.68	23.57	23.47	
20	DFT-s-OFDM 64QAM	50	50	23.67	23.48	23.44	
20		100	0	23.67	23.65	23.46	
20	DFT-s-OFDM 256QAM	1	1	23.66	23.50	23.43	25
20	CP-OFDM QPSK	1	1	22.19	22.13	21.89	23
20	CP-OFDM 16QAM	1	1	19.95	19.92	19.61	21
20	CP-OFDM 64QAM	1	1	23.18	23.08	22.92	24
20	CP-OFDM 256QAM	1	1	22.33	22.16	22.12	23
20		1	1	20.94	20.89	20.58	22
20		1	1	17.94	17.83	17.67	19
Channel				371500	376500	381500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5	
15	DFT-s-OFDM QPSK	1	1	23.72	23.70	23.20	25
Channel				371000	376500	382000	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	
10	DFT-s-OFDM QPSK	1	1	23.72	23.55	22.98	25
Channel				370500	376500	382500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5	
5	DFT-s-OFDM QPSK	1	1	23.78	23.50	22.99	25

n26(814-824MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					163800		
Frequency (MHz)					819		
10	DFT-s-OFDM PI/2 BPSK	1	1		23.54		25
10		1	26		23.69		
10		1	50		23.79		
10		25	1		23.64		25
10		25	12		23.71		
10		25	25		23.79		
10		50	0		23.72		
10		1	1		23.90		25
10	DFT-s-OFDM QPSK	1	26		23.71		
10		1	50		23.81		
10		25	1		23.86		25
10		25	12		23.68		
10		25	25		23.75		
10		50	0		23.84		
10	DFT-s-OFDM 16QAM	1	1		23.17		24
10	DFT-s-OFDM 64QAM	1	1		21.95		23
10	DFT-s-OFDM 256QAM	1	1		19.83		21
10	CP-OFDM QPSK	1	1		22.87		24
10	CP-OFDM 16QAM	1	1		22.08		23
10	CP-OFDM 64QAM	1	1		20.78		22
10	CP-OFDM 256QAM	1	1		17.85		19
Channel				163300	163800	164300	Tune-up limit (dBm)
Frequency (MHz)				816.5	819	821.5	
5	DFT-s-OFDM QPSK	1	1	23.76	23.84	23.71	25

n26(824-849MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up
Channel				166800	167300	167800	limit
Frequency (MHz)				834	836.5	839	(dBm)
20	DFT-s-OFDM PI/2 BPSK	1	1	23.85	23.84	23.87	25
20		1	53	23.83	23.82	23.81	
20		1	104	23.65	23.67	23.80	
20		50	1	23.90	23.89	23.91	25
20		50	25	23.87	23.87	23.81	
20		50	50	23.80	23.81	23.80	
20		100	0	23.90	23.87	23.80	
20	DFT-s-OFDM QPSK	1	1	23.90	23.94	23.86	25
20		1	53	23.82	23.86	23.76	
20		1	104	23.69	23.70	23.87	
20		50	1	23.89	23.91	23.88	25
20		50	25	23.89	23.81	23.82	
20		50	50	23.84	23.79	23.77	
20		100	0	23.87	23.91	23.83	
20	DFT-s-OFDM 16QAM	1	1	23.80	23.81	23.76	25
20	DFT-s-OFDM 64QAM	1	1	22.30	22.32	22.29	23
20	DFT-s-OFDM 256QAM	1	1	20.23	20.35	20.31	21
20	CP-OFDM QPSK	1	1	23.28	23.29	23.25	24
20	CP-OFDM 16QAM	1	1	22.77	22.80	22.79	24
20	CP-OFDM 64QAM	1	1	21.12	21.15	21.11	22
20	CP-OFDM 256QAM	1	1	18.29	18.35	18.37	19
Channel				166300	167300	168300	Tune-up
Frequency (MHz)				831.5	836.5	841.5	limit
15	DFT-s-OFDM QPSK	1	1	23.84	23.86	23.77	25
Channel				165800	167300	168800	Tune-up
Frequency (MHz)				829	836.5	844	limit
10	DFT-s-OFDM QPSK	1	1	23.83	23.72	23.70	25
Channel				165300	167300	169300	Tune-up
Frequency (MHz)				826.5	836.5	846.5	limit
5	DFT-s-OFDM QPSK	1	1	23.79	23.75	23.54	25

n30 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					462000		
Frequency (MHz)					2310		
10	DFT-s-OFDM PI/2 BPSK	1	1		23.34		25
10		1	26		23.46		
10		1	50		23.38		
10		25	1		23.48		25
10		25	12		23.49		
10		25	25		23.43		
10		50	0		23.48		
10	DFT-s-OFDM QPSK	1	1		23.56		25
10		1	26		23.45		
10		1	50		23.36		
10		25	1		23.52		25
10		25	12		23.48		
10		25	25		23.42		
10		50	0		23.47		
10	DFT-s-OFDM 16QAM	1	1		23.27		24
10	DFT-s-OFDM 64QAM	1	1		21.87		23
10	DFT-s-OFDM 256QAM	1	1		19.53		20
10	CP-OFDM QPSK	1	1		22.77		24
10	CP-OFDM 16QAM	1	1		22.24		23
10	CP-OFDM 64QAM	1	1		19.56		21
10	CP-OFDM 256QAM	1	1		17.55		19

n41 (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	28
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	26.18	26.26	26.47	26.55	26.54	28
100		1	136	26.45	26.54	26.51	26.44	26.45	
100		1	271	26.57	26.51	26.56	26.48	26.61	
100		135	1	26.28	26.33	26.40	26.54	26.36	28
100		135	67	26.51	26.55	26.57	26.49	26.50	
100		135	136	26.41	26.43	26.36	26.47	26.29	
100	DFT-s-OFDM QPSK	270	0	26.43	26.52	26.55	26.52	26.46	28
100		1	1	26.13	26.26	26.69	26.43	26.48	
100		1	136	26.35	26.44	26.41	26.34	26.41	
100		1	271	26.42	26.50	26.46	26.44	26.43	28
100		135	1	26.29	26.36	26.44	26.54	26.46	
100		135	67	26.49	26.54	26.62	26.58	26.58	
100	DFT-s-OFDM 16QAM	135	136	26.42	26.43	26.47	26.49	26.34	28
100		270	0	26.42	26.52	26.57	26.55	26.45	
100	DFT-s-OFDM 64QAM	1	1	25.09	25.22	25.28	25.46	25.39	26
100	DFT-s-OFDM 256QAM	1	1	23.70	23.85	23.97	24.06	23.98	25
100	CP-OFDM QPSK	1	1	21.45	21.62	21.67	21.75	21.80	23
100	CP-OFDM 16QAM	1	1	24.71	24.82	24.88	25.00	24.95	26
100	CP-OFDM 64QAM	1	1	24.20	24.29	24.45	24.50	24.54	25
100	CP-OFDM 256QAM	1	1	22.31	22.36	22.42	22.61	22.41	23
100	CP-OFDM 256QAM	1	1	19.52	19.64	19.80	19.88	19.84	21
Channel				508200	513402	518598	523800	528996	28
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	26.10	26.23	26.50	26.49	26.42	28
Channel				507204	512904	518598	524298	529998	28
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	26.17	26.33	26.56	26.54	26.48	28
Channel				506202	512400	518598	524796	531000	28
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	26.17	26.41	26.60	26.58	26.48	28
Channel				505200	511902	518598	525798	531996	28
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	26.22	26.48	26.57	26.54	26.53	28
Channel				504204	511404	518598	525798	532998	28
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	26.36	26.53	26.67	26.60	26.57	28
Channel				503202	510900	518598	526296	534000	28
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	26.34	26.56	26.65	26.62	26.62	28
Channel				502200	510402	518598	526800	534996	28
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	26.25	26.49	26.65	26.47	26.49	28
Channel				501204	509904	518598	527298	535998	28
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	26.32	26.55	26.64	26.58	26.54	28

n41 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	25
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	23.72	23.78	23.82	23.84	23.95	25
100		1	136	23.87	23.89	23.83	23.79	23.78	
100		1	271	23.84	23.87	23.76	23.58	23.46	
100		135	1	23.82	23.87	23.95	23.84	23.92	25
100		135	67	23.90	23.83	23.83	23.85	23.82	
100		135	136	23.95	23.94	23.89	23.87	23.44	
100		270	0	23.87	23.89	23.91	23.89	23.87	
100	DFT-s-OFDM QPSK	1	1	23.79	23.90	23.98	23.90	23.92	25
100		1	136	23.89	23.89	23.89	23.82	23.73	
100		1	271	23.85	23.87	23.77	23.45	23.39	
100		135	1	23.84	23.87	23.84	23.94	23.90	25
100		135	67	23.88	23.96	23.97	23.85	23.83	
100		135	136	23.93	23.94	23.89	23.79	23.45	
100		270	0	23.51	23.69	23.83	23.66	23.53	
100	DFT-s-OFDM 16QAM	1	1	22.83	22.89	22.95	23.00	23.10	24
100	DFT-s-OFDM 64QAM	1	1	22.90	22.98	23.05	23.15	23.11	24
100	DFT-s-OFDM 256QAM	1	1	21.20	21.23	21.28	21.36	21.38	22
100	CP-OFDM QPSK	1	1	22.92	22.94	23.02	23.10	23.06	24
100	CP-OFDM 16QAM	1	1	22.99	22.97	23.06	23.18	23.17	24
100	CP-OFDM 64QAM	1	1	22.04	22.01	22.13	22.24	22.25	23
100	CP-OFDM 256QAM	1	1	19.34	19.28	19.36	19.47	19.41	20
Channel				508200	513402	518598	523800	528996	25
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	23.36	23.41	23.85	23.65	23.58	25
Channel				507204	512904	518598	524298	529998	25
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	23.40	23.42	23.87	23.68	23.63	25
Channel				506202	512400	518598	524796	531000	25
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	23.42	23.55	23.83	23.73	23.65	25
Channel				505200	511902	518598	525798	531996	25
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	23.52	23.62	23.82	23.68	23.64	25
Channel				504204	511404	518598	525798	532998	25
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	23.53	23.70	23.83	23.75	23.63	25
Channel				503202	510900	518598	526296	534000	25
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	23.59	23.73	23.83	23.77	23.55	25
Channel				502200	510402	518598	526800	534996	25
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	23.50	23.61	23.86	23.69	23.35	25
Channel				501204	509904	518598	527298	535998	25
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	23.49	23.60	23.84	23.66	23.25	25

n48 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				638000	639834	641666	643500	645332	
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98	
40	DFT-s-OFDM PI/2 BPSK	1	1	22.51	22.33	22.28	22.02	22.05	23.5
40		1	53	22.45	22.04	21.66	22.09	22.19	
40		1	104	22.22	21.50	21.96	22.24	22.48	
40		50	1	22.49	22.23	21.96	22.12	22.09	23.5
40		50	25	22.47	22.16	21.76	22.11	22.22	
40		50	50	22.25	21.85	21.77	22.12	22.21	
40		100	0	22.36	22.09	21.82	22.15	22.16	
40	DFT-s-OFDM QPSK	1	1	22.53	22.34	22.40	22.33	22.25	23.5
40		1	53	22.45	22.00	21.67	22.10	22.22	
40		1	104	22.22	22.15	22.32	22.21	22.10	
40		50	1	22.52	22.38	22.39	22.22	22.32	23.5
40		50	25	22.46	22.14	22.27	22.10	22.11	
40		50	50	22.31	21.88	22.26	22.10	22.23	
40		100	0	22.47	22.21	22.38	22.31	22.29	
40	DFT-s-OFDM 16QAM	1	1	22.45	22.11	22.16	22.17	21.96	22
40	DFT-s-OFDM 64QAM	1	1	20.95	20.82	20.82	20.34	20.49	22.5
40	DFT-s-OFDM 256QAM	1	1	18.79	18.55	18.58	18.15	18.27	19.5
40	CP-OFDM QPSK	1	1	22.03	21.76	21.33	21.32	21.50	22.5
40	CP-OFDM 16QAM	1	1	21.52	21.46	21.44	21.36	21.05	22.5
40	CP-OFDM 64QAM	1	1	19.60	19.40	19.51	19.53	19.12	20.5
40	CP-OFDM 256QAM	1	1	16.82	16.61	16.55	16.07	16.38	17.5
Channel				637334	639500	641666	643832	646000	
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690	
20	DFT-s-OFDM QPSK	1	1	22.43	22.23	22.20	22.17	21.97	23.5

n66 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.46	23.54	23.70	25
20		1	53	23.36	23.49	23.75	
20		1	104	23.52	23.65	23.68	
20		50	1	23.50	23.61	23.79	25
20		50	25	23.44	23.63	23.89	
20		50	50	23.38	23.59	23.82	
20		100	0	23.46	23.57	23.84	
20	DFT-s-OFDM QPSK	1	1	23.85	23.86	24.00	25
20		1	53	23.57	23.67	23.98	
20		1	104	23.54	23.75	23.93	
20		50	1	23.81	23.89	23.96	25
20		50	25	23.61	23.81	23.95	
20		50	50	23.62	23.70	23.89	
20		100	0	23.72	23.92	23.95	
20	DFT-s-OFDM 16QAM	1	1	23.25	23.33	23.42	24
20	DFT-s-OFDM 64QAM	1	1	21.79	21.82	22.09	23
20	DFT-s-OFDM 256QAM	1	1	19.51	19.58	19.82	21
20	CP-OFDM QPSK	1	1	22.74	22.82	22.95	24
20	CP-OFDM 16QAM	1	1	22.16	22.30	22.43	23
20	CP-OFDM 64QAM	1	1	20.46	20.60	20.63	21
20	CP-OFDM 256QAM	1	1	17.54	17.68	17.78	18
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	23.57	23.65	23.93	25
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	23.48	23.60	23.75	25
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	23.53	23.62	23.79	25

n71 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				134600	136100	137600	Tune-up limit (dBm)
Frequency (MHz)				673	680.5	688	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.49	23.48	23.57	25
20		1	53	23.48	23.61	23.65	
20		1	104	23.55	23.63	23.46	
20		50	1	23.58	23.58	23.61	25
20		50	25	23.51	23.62	23.57	
20		50	50	23.53	23.65	23.62	
20		100	0	23.58	23.56	23.53	
20	DFT-s-OFDM QPSK	1	1	23.75	23.73	23.79	25
20		1	53	23.43	23.54	23.60	
20		1	104	23.48	23.52	23.38	
20		50	1	23.57	23.63	23.72	25
20		50	25	23.53	23.58	23.59	
20		50	50	23.58	23.55	23.58	
20		100	0	23.56	23.52	23.67	
20	DFT-s-OFDM 16QAM	1	1	23.20	23.05	23.17	24
20	DFT-s-OFDM 64QAM	1	1	21.68	21.62	21.72	23
20	DFT-s-OFDM 256QAM	1	1	19.29	19.25	19.23	20
20	CP-OFDM QPSK	1	1	22.79	22.70	22.67	24
20	CP-OFDM 16QAM	1	1	22.19	22.05	22.07	23
20	CP-OFDM 64QAM	1	1	20.36	20.59	20.66	21
20	CP-OFDM 256QAM	1	1	17.30	17.24	17.35	18
Channel				134100	136100	138100	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	DFT-s-OFDM QPSK	1	1	23.52	23.45	23.65	25
Channel				133600	136100	138600	Tune-up limit (dBm)
Frequency (MHz)				668	680.5	693	
10	DFT-s-OFDM QPSK	1	1	23.61	23.55	23.63	25
Channel				133100	136100	139100	Tune-up limit (dBm)
Frequency (MHz)				665.5	680.5	695.5	
5	DFT-s-OFDM QPSK	1	1	23.53	23.54	23.55	25

n77(3450-3550MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			25.51			26.5
100		1	136			25.28			
100		1	271			25.16			
100		135	1			24.90			26.5
100		135	67			24.96			
100		135	136			24.71			
100		270	0			24.96			
100	DFT-s-OFDM QPSK	1	1			25.60			26.5
100		1	136			25.32			
100		1	271			24.97			
100		135	1			25.07			26.5
100		135	67			25.51			
100		135	136			25.17			
100		270	0			25.43			
100	DFT-s-OFDM 16QAM	1	1			24.08			25.5
100	DFT-s-OFDM 64QAM	1	1			22.71			23.5
100	DFT-s-OFDM 256QAM	1	1			20.51			21.5
100	CP-OFDM QPSK	1	1			23.71			24.5
100	CP-OFDM 16QAM	1	1			23.30			24.5
100	CP-OFDM 64QAM	1	1			21.14			22.5
100	CP-OFDM 256QAM	1	1			18.65			19.5
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	25.29	25.23	25.46	25.08	25.03	26.5
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	25.26	25.14	25.31	24.87	24.91	26.5
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	25.52	25.49	25.54	25.34	25.25	26.5
Channel				631000	632168	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	25.50	25.41	25.52	25.28	25.09	26.5
Channel				630668	632000	633334	634666	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	25.54	25.28	25.56	25.08	25.08	26.5

n77(3450-3550MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			22.37			23.5
100		1	136			22.02			
100		1	271			22.13			
100		135	1			22.17			23.5
100	DFT-s-OFDM QPSK	135	67			22.13			
100		135	136			21.83			
100		270	0			22.19			
100		1	1			22.47			23.5
100	DFT-s-OFDM QPSK	1	136			22.08			
100		1	271			22.20			
100		135	1			22.20			23.5
100		135	67			22.38			
100		135	136			21.88			
100		270	0			22.29			
100	DFT-s-OFDM 16QAM	1	1			22.03			22.5
100	DFT-s-OFDM 64QAM	1	1			21.46			21.5
100	DFT-s-OFDM 256QAM	1	1			20.44			18.5
100	CP-OFDM QPSK	1	1			22.15			23.5
100	CP-OFDM 16QAM	1	1			22.13			22.5
100	CP-OFDM 64QAM	1	1			21.23			21.5
100	CP-OFDM 256QAM	1	1			18.44			17.5
Channel				632668	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	(dBm)
80	DFT-s-OFDM QPSK	1	1	22.16	22.11	22.35	22.13	22.09	23.5
Channel				632000	632668	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	(dBm)
60	DFT-s-OFDM QPSK	1	1	22.23	22.14	22.25	22.07	21.99	23.5
Channel				631334	632334	633334	634332	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	(dBm)
40	DFT-s-OFDM QPSK	1	1	22.29	22.17	22.32	22.29	22.18	23.5
Channel				631000	632168	633334	634500	635666	Tune-up limit
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	(dBm)
30	DFT-s-OFDM QPSK	1	1	22.28	22.25	22.37	22.31	22.07	23.5
Channel				630668	632000	633334	634666	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	(dBm)
20	DFT-s-OFDM QPSK	1	1	22.44	22.13	22.46	22.14	22.03	23.5

n77(3700-3980MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	Tune-up limit (dBm)
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	24.95	25.49	25.13	24.97	24.70	26.5
100		1	136	25.44	24.96	24.80	25.48	24.68	
100		1	271	25.41	24.60	25.40	25.53	25.49	
100		135	1	25.03	24.63	25.27	25.02	24.96	26.5
100		135	67	25.43	24.98	24.84	24.74	25.50	
100		135	136	24.85	24.99	24.75	24.98	25.39	
100		270	0	24.85	24.89	24.70	24.69	24.60	
100	DFT-s-OFDM QPSK	1	1	25.49	25.53	25.37	25.51	25.46	26.5
100		1	136	25.40	25.09	24.94	24.85	24.81	
100		1	271	24.44	24.81	24.65	25.01	24.94	
100		135	1	24.64	25.29	24.94	24.96	24.99	26.5
100		135	67	25.44	25.50	25.32	25.27	25.23	
100		135	136	24.83	25.35	24.94	25.13	25.39	
100		270	0	25.34	25.41	25.36	25.36	25.27	
100	DFT-s-OFDM 16QAM	1	1	23.54	23.72	23.68	23.39	23.12	24.5
100	DFT-s-OFDM 64QAM	1	1	22.20	22.63	22.28	22.17	21.77	23.5
100	DFT-s-OFDM 256QAM	1	1	19.92	20.24	19.96	19.83	19.57	21.5
100	CP-OFDM QPSK	1	1	23.18	23.19	23.15	23.14	22.76	24.5
100	CP-OFDM 16QAM	1	1	22.68	22.59	22.65	22.71	22.28	23.5
100	CP-OFDM 64QAM	1	1	21.55	21.58	21.50	20.75	20.86	22.5
100	CP-OFDM 256QAM	1	1	17.99	18.10	17.99	17.90	17.61	18.5
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	25.12	25.50	25.08	25.05	25.03	26.5
Channel				648666.5	652332.5	655998.5	659664.5	663330.5	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	24.99	25.35	24.94	24.99	24.95	26.5
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	25.15	25.43	24.86	24.52	24.89	26.5
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	25.00	25.40	25.04	24.44	24.99	26.5
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	24.97	25.29	25.12	25.25	25.02	26.5

n77(3700-3980MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	23.5
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	21.75	22.53	22.18	22.51	22.22	23.5
100		1	136	22.42	21.94	21.90	22.27	22.20	
100		1	271	22.22	22.01	22.00	22.19	22.10	
100		135	1	22.35	22.16	21.94	22.11	22.17	23.5
100		135	67	22.26	22.01	21.99	22.31	22.26	
100		135	136	22.15	21.81	21.68	22.10	22.27	
100		270	0	22.18	22.05	21.93	22.36	22.26	
100	DFT-s-OFDM QPSK	1	1	22.44	22.57	22.30	22.42	22.35	23.5
100		1	136	22.39	21.92	21.88	22.25	22.19	
100		1	271	22.23	21.90	22.41	22.31	22.19	
100		135	1	21.99	22.11	22.32	22.09	22.07	23.5
100		135	67	22.23	22.51	22.38	22.28	22.24	
100		135	136	22.11	21.80	22.02	22.29	22.27	
100		270	0	22.11	22.39	22.02	22.34	22.28	
100	DFT-s-OFDM 16QAM	1	1	21.56	21.70	21.55	21.48	21.40	22.5
100	DFT-s-OFDM 64QAM	1	1	21.52	21.65	21.57	21.34	21.35	22.5
100	DFT-s-OFDM 256QAM	1	1	19.97	20.62	20.41	20.16	20.06	21.5
100	CP-OFDM QPSK	1	1	21.64	21.52	21.59	21.32	21.54	22.5
100	CP-OFDM 16QAM	1	1	21.74	21.45	21.66	21.32	21.62	22.5
100	CP-OFDM 64QAM	1	1	20.77	21.06	20.75	20.50	20.80	21.5
100	CP-OFDM 256QAM	1	1	17.90	18.74	18.36	18.18	17.82	19.5
Channel				649334	652668	656000	659332	662666	23.5
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	21.98	22.41	21.90	22.06	22.07	23.5
Channel				648668	652334	656000	659666	663332	23.5
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	21.84	22.19	21.80	22.02	21.97	23.5
Channel				648000	652000	656000	660000	664000	23.5
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	22.12	22.46	21.87	22.46	22.23	23.5
Channel				647668	651834	656000	660166	664332	23.5
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	21.98	22.33	21.87	22.16	22.32	23.5
Channel				647334	651668	656000	660332	664666	23.5
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	21.92	22.24	21.94	22.14	22.16	23.5

n78(3450-3550MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			25.38			26.5
100		1	136			25.24			
100		1	271			25.21			
100		135	1			24.96			26.5
100	DFT-s-OFDM QPSK	135	67			25.13			
100		135	136			24.92			
100		270	0			25.07			26.5
100		1	1			25.51			
100	DFT-s-OFDM 16QAM	1	136			25.42			
100		1	271			25.15			26.5
100		135	1			25.02			
100		135	67			25.46			
100	DFT-s-OFDM 64QAM	135	136			25.13			26.5
100		270	0			25.43			
100		1	1			23.74			24.5
100		1	1			22.50			23.5
100	DFT-s-OFDM 256QAM	1	1			20.20			21.5
100	CP-OFDM QPSK	1	1			23.43			24.5
100	CP-OFDM 16QAM	1	1			22.91			22
100	CP-OFDM 64QAM	1	1			21.85			21
100	CP-OFDM 256QAM	1	1			18.22			19.5
Channel				633000	633166	633334	633500	633666	Tune-up limit
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	(dBm)
90	DFT-s-OFDM QPSK	1	1	25.10	25.08	25.33	25.07	25.08	26.5
Channel				632668	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	(dBm)
80	DFT-s-OFDM QPSK	1	1	25.18	25.11	25.45	25.07	25.02	26.5
Channel				632334	632634	633334	633832	634332	Tune-up limit
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	(dBm)
70	DFT-s-OFDM QPSK	1	1	24.96	25.02	25.46	25.04	25.09	26.5
Channel				632000	632666	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	(dBm)
60	DFT-s-OFDM QPSK	1	1	24.99	24.91	25.39	24.95	25.13	26.5
Channel				631668	632500	633334	634166	635000	Tune-up limit
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	(dBm)
50	DFT-s-OFDM QPSK	1	1	24.93	24.89	25.36	24.90	24.88	26.5
Channel				631334	636672	633334	634334	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	(dBm)
40	DFT-s-OFDM QPSK	1	1	25.28	25.23	25.47	25.23	25.10	26.5
Channel				631000	632166	633334	634500	635666	Tune-up limit
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	(dBm)
30	DFT-s-OFDM QPSK	1	1	25.21	25.10	25.36	25.12	25.02	26.5
Channel				630668	632000	633334	634668	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	(dBm)
20	DFT-s-OFDM QPSK	1	1	25.16	25.03	25.34	25.01	25.09	26.5

n78(3450-3550MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			22.41			23.5
100		1	136			22.34			
100		1	271			22.29			
100		135	1			22.34			23.5
100		135	67			22.39			
100		135	136			22.31			
100	DFT-s-OFDM QPSK	270	0			22.35			23.5
100		1	1			22.45			
100		1	136			22.33			
100		1	271			22.30			23.5
100		135	1			22.34			
100		135	67			22.41			
100		135	136			22.32			
100		270	0			22.32			
100	DFT-s-OFDM 16QAM	1	1			21.51			22.5
100	DFT-s-OFDM 64QAM	1	1			21.63			22.5
100	DFT-s-OFDM 256QAM	1	1			19.79			20.5
100	CP-OFDM QPSK	1	1			21.50			22.5
100	CP-OFDM 16QAM	1	1			21.61			22.5
100	CP-OFDM 64QAM	1	1			20.65			21.5
100	CP-OFDM 256QAM	1	1			17.82			18.5
Channel				633000	633166	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	22.05	22.02	22.25	21.95	22.04	23.5
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	22.12	22.06	22.36	22.05	22.01	23.5
Channel				632334	632834	633334	633832	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3505.98	3514.98	
70	DFT-s-OFDM QPSK	1	1	22.15	22.07	22.36	22.00	22.06	23.5
Channel				632000	632666	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	22.16	22.09	22.22	21.97	21.98	23.5
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	22.05	22.04	22.25	22.06	22.05	23.5
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	22.24	22.11	22.39	22.31	22.29	23.5
Channel				631000	632166	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	22.16	22.18	22.27	22.10	22.18	23.5
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	22.11	22.22	22.26	22.14	22.20	23.5

n78(3700-3800MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			25.29			26.5
100		1	136			25.13			
100		1	271			25.24			
100		135	1			25.17			26.5
100	DFT-s-OFDM QPSK	135	67			25.21			
100		135	136			25.18			
100		270	0			24.96			26.5
100		1	1			25.41			
100	DFT-s-OFDM 16QAM	1	136			25.14			
100		1	271			25.03			26.5
100		135	1			24.95			
100		135	67			25.38			
100	DFT-s-OFDM 64QAM	135	136			25.15			26.5
100		270	0			25.29			
100		1	1			23.44			24.5
100	DFT-s-OFDM 16QAM	1	1			22.30			23.5
100	DFT-s-OFDM 64QAM	1	1			19.79			20.5
100	CP-OFDM QPSK	1	1			23.35			24.5
100	CP-OFDM 16QAM	1	1			22.43			23.5
100	CP-OFDM 64QAM	1	1			20.26			21.5
100	CP-OFDM 256QAM	1	1			17.77			17
Channel				649668	649834	650000	650166	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	24.85	24.88	25.26	25.03	25.06	26.5
Channel				649334	649666	650000	650334	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	24.92	25.07	25.27	25.21	25.25	26.5
Channel				649000	649500	650000	650500	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	24.95	25.12	25.21	25.18	25.02	26.5
Channel				648668	649334	650000	650666	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	24.78	25.11	25.23	24.87	24.75	26.5
Channel				648334	649166	650000	650834	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	24.95	25.07	25.28	25.12	25.02	26.5
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	25.09	25.20	25.25	25.03	25.02	26.5
Channel				647668	648834	650000	651166	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	
30	DFT-s-OFDM QPSK	1	1	25.16	25.13	25.28	25.25	25.17	26.5
Channel				647334	648666	650000	651334	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	25.16	25.19	25.39	25.29	25.37	26.5

n78(3700-3800MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			22.28			23.5
100		1	136			22.14			
100		1	271			22.20			
100		135	1			22.20			23.5
100	DFT-s-OFDM QPSK	135	67			22.11			
100		135	136			22.08			
100		270	0			21.90			
100		1	1			22.49			23.5
100	DFT-s-OFDM 16QAM	1	136			22.18			
100		1	271			22.28			
100		135	1			22.11			23.5
100		135	67			22.40			
100		135	136			22.24			
100		270	0			22.38			
100	DFT-s-OFDM 64QAM	1	1			21.56			21
100	DFT-s-OFDM 256QAM	1	1			21.62			22.5
100	CP-OFDM QPSK	1	1			19.78			20.5
100	CP-OFDM 16QAM	1	1			21.51			22.5
100	CP-OFDM 64QAM	1	1			21.55			22.5
100	CP-OFDM 256QAM	1	1			20.53			21.5
100	CP-OFDM	1	1			17.76			18.5
Channel				649668	649834	650000	650166	650332	Tune-up limit
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	(dBm)
90	DFT-s-OFDM QPSK	1	1	22.28	22.26	22.30	22.13	22.16	23.5
Channel				649334	649666	650000	650334	650666	Tune-up limit
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	(dBm)
80	DFT-s-OFDM QPSK	1	1	22.04	22.09	22.31	22.11	22.13	23.5
Channel				649000	649500	650000	650500	651000	Tune-up limit
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	(dBm)
70	DFT-s-OFDM QPSK	1	1	21.97	21.91	22.26	22.19	22.21	23.5
Channel				648668	649334	650000	650666	651332	Tune-up limit
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	(dBm)
60	DFT-s-OFDM QPSK	1	1	21.83	21.93	22.24	22.07	21.96	23.5
Channel				648334	649166	650000	650834	651666	Tune-up limit
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	(dBm)
50	DFT-s-OFDM QPSK	1	1	21.75	22.05	22.29	22.13	22.03	23.5
Channel				648000	649000	650000	651000	652000	Tune-up limit
Frequency (MHz)				3720	3735	3750	3765	3780	(dBm)
40	DFT-s-OFDM QPSK	1	1	22.04	22.22	22.36	22.25	22.23	23.5
Channel				647668	648834	650000	651166	652332	Tune-up limit
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	(dBm)
30	DFT-s-OFDM QPSK	1	1	21.81	22.10	22.20	22.07	22.19	23.5
Channel				647334	648666	650000	651334	652666	Tune-up limit
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	(dBm)
20	DFT-s-OFDM QPSK	1	1	21.94	22.17	22.30	22.00	22.16	23.5

Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
55340	55340	55538	QPSK	1	0	0	0	1	0	23.20	24.00
55990	55891	56089	QPSK	1	0	0	0	1	0	23.17	24.00
56640	56442	56640	QPSK	1	0	0	0	1	0	22.94	24.00
55340	55340	55538	16QAM	1	0	0	0	1	0	22.29	23.00
55990	55891	56089	16QAM	1	0	0	0	1	0	22.02	23.00
56640	56442	56640	16QAM	1	0	0	0	1	0	21.92	23.00
55340	55340	55538	64QAM	1	0	0	0	1	0	21.25	22.00
55990	55891	56089	64QAM	1	0	0	0	1	0	21.27	22.00
56640	56442	56640	64QAM	1	0	0	0	1	0	21.06	22.00
55340	55340	55538	QPSK	50	0	0	0	1	0	22.25	23.00
55990	55891	56089	QPSK	50	0	0	0	1	0	22.05	23.00
56640	56442	56640	QPSK	50	0	0	0	1	0	21.95	23.00

CA_66B Ant 4											
Combination:15MHz+10MHz(75RB+25RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
132070	132047	132140	QPSK	1	0	0	0	1	0	23.04	24.00
132322	132398	132491	QPSK	1	0	0	0	1	0	22.82	24.00
132572	132549	132642	QPSK	1	0	0	0	1	0	23.16	24.00
132070	132047	132140	16QAM	1	0	0	0	1	0	21.90	23.00
132322	132398	132491	16QAM	1	0	0	0	1	0	21.95	23.00
132572	132549	132642	16QAM	1	0	0	0	1	0	22.27	23.00
132070	132047	132140	64QAM	1	0	0	0	1	0	20.88	22.00
132322	132398	132491	64QAM	1	0	0	0	1	0	21.20	22.00
132572	132549	132642	64QAM	1	0	0	0	1	0	21.22	22.00
132070	132047	132140	QPSK	36	0	0	0	1	0	20.95	23.00
132322	132398	132491	QPSK	36	0	0	0	1	0	21.04	23.00
132572	132549	132642	QPSK	36	0	0	0	1	0	21.20	23.00

CA_66C Ant 4											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
132070	132072	132270	QPSK	1	0	0	0	1	0	22.88	24.00
132322	132323	132521	QPSK	1	0	0	0	1	0	22.96	24.00
132572	132374	132572	QPSK	1	0	0	0	1	0	23.12	24.00
132070	132072	132270	16QAM	1	0	0	0	1	0	21.81	23.00
132322	132323	132521	16QAM	1	0	0	0	1	0	21.95	23.00
132572	132374	132572	16QAM	1	0	0	0	1	0	22.07	23.00
132070	132072	132270	64QAM	1	0	0	0	1	0	21.86	23.00
132322	132323	132521	64QAM	1	0	0	0	1	0	21.98	23.00
132572	132374	132572	64QAM	1	0	0	0	1	0	22.05	23.00
132070	132072	132270	QPSK	50	0	0	0	1	0	21.81	23.00
132322	132323	132521	QPSK	50	0	0	0	1	0	21.95	23.00
132572	132374	132572	QPSK	50	0	0	0	1	0	22.04	23.00

2CC LTE Uplink												
Configure	CA Configuration	PCC					SCC				Power	
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Measured Power(dBm)	Tune-up limit(dBm)
Inter-band	CA_2A-4A	2	20	18700	1860	QPSK/1#0	4	20	20300	1745	23.10	24.00
	CA_2A-5A	2	20	18700	1860	QPSK/1#0	5	10	20600	844	22.55	23.50
	CA_2A-12A	2	20	18700	1860	QPSK/1#0	12	10	23060	704	22.48	23.50
	CA_2A-13A	2	20	18700	1860	QPSK/1#0	13	10	23230	782	22.39	23.50
	CA_2A-14A	2	20	18700	1860	QPSK/1#0	14	10	23330	793	22.52	23.50
	CA_2A-26A	2	20	18700	1860	QPSK/1#0	26	15	26865	831.5	22.32	23.50
	CA_2A-66A	2	20	18700	1860	QPSK/1#0	66	20	132572	1770	23.04	24.00
	CA_2A-71A	2	20	18700	1860	QPSK/1#0	71	20	133372	688	22.62	23.50
	CA_4A-5A	4	20	20050	1720	QPSK/1#0	5	10	20600	844	22.61	23.50
	CA_4A-12A	4	20	20050	1720	QPSK/1#0	12	10	23060	704	22.58	23.50
	CA_4A-13A	4	20	20050	1720	QPSK/1#0	13	10	23230	782	22.48	23.50
	CA_4A-17A	4	10	20175	1732.5	QPSK/1#0	17	10	23790	710	22.52	23.50
	CA_4A-71A	4	20	20050	1720	QPSK/1#0	71	20	133372	688	22.64	23.50
	CA_5A-7A	5	10	20450	829	QPSK/1#0	7	20	21350	2560	22.60	23.50
	CA_5A-25A	5	10	20450	829	QPSK/1#0	25	20	26140	1860	23.08	24.00
	CA_5A-30A	5	10	20450	829	QPSK/1#0	30	10	27710	2310	22.55	23.50
	CA_5A-66A	5	10	20450	829	QPSK/1#0	66	20	132572	1770	23.25	24.00
	CA_7A-12A	7	20	20850	2510	QPSK/1#0	12	10	23060	704	22.88	23.50
	CA_7A-13A	7	20	20850	2510	QPSK/1#0	13	10	23230	782	22.81	23.50
	CA_7A-26A	7	20	20850	2510	QPSK/1#0	26	15	26865	831.5	22.75	23.50
	CA_12A-25A	12	5	23035	701.5	QPSK/1#0	25	20	26140	1860	23.29	24.00
	CA_12A-30A	12	5	23035	701.5	QPSK/1#0	30	10	27710	2310	23.35	24.00
	CA_12A-66A	12	5	23035	701.5	QPSK/1#0	66	20	132572	1770	23.25	24.00
	CA_13A-66A	13	10	23230	782	QPSK/1#0	66	20	132572	1770	23.39	24.00
	CA_14A-30A	14	10	23330	793	QPSK/1#0	30	10	27710	2310	22.62	23.50
	CA_14A-66A	14	10	23330	793	QPSK/1#0	66	20	132572	1770	23.22	24.00
	CA_25A-26A	25	20	26140	1860	QPSK/1#0	26	15	26865	831.5	22.06	23
	CA_41A-48A	41	20	39750	2506	QPSK/1#0	48	20	55340	3560	23.04	24
	CA_66A-71A	66	20	132072	1720	QPSK/1#0	71	20	133372	688	22.65	23.50

2CC 5G NR Downlink												
Configure	CA Configuration	PCC					SCC				Power	
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/Off set)	Band	BW (MHz)	DL Channel	DL Fre. (MHz)	CA TX (dBm)	Rel.8 TX (dBm)
Intra-band&Inter-band	CA_n2A-n5A	n2	20	372000	1860	QPSK/1#1	n5	20	167800	839	22.96	23.75
	CA_n2A-n66A	n2	20	372000	1860	QPSK/1#1	n66	20	349000	1745	22.88	23.75
	CA_n2A-n77A	n2	20	372000	1860	QPSK/1#1	n77	100	656000	3840	22.79	23.75
	CA_n2A-n78A	n2	20	372000	1860	QPSK/1#1	n78	100	650000	3750	22.75	23.75
	CA_n5A-n25A	n5	20	166800	834	QPSK/1#1	n25	40	379000	1895	23.01	23.68
	CA_n5A-n66A	n5	20	166800	834	QPSK/1#1	n66	20	349000	1745	22.94	23.68
	CA_n5A-n77A	n5	20	166800	834	QPSK/1#1	n77	100	656000	3840	22.97	23.68
	CA_n5A-n78A	n5	20	166800	834	QPSK/1#1	n78	100	650000	3750	22.99	23.68
	CA_n25A-n48A	n25	40	374000	1870	QPSK/1#1	n48	40	645332	3679.98	22.75	23.81
	CA_n25A-n71A	n25	40	374000	1870	QPSK/1#1	n71	20	137600	688	22.77	23.81
	CA_n25A-n77A	n25	40	374000	1870	QPSK/1#1	n77	100	656000	3840	22.83	23.81
	CA_n25A-n78A	n25	40	374000	1870	QPSK/1#1	n78	100	650000	3750	22.84	23.81
	CA_n66A-n71A	n66	40	346000	1730	QPSK/1#1	n71	20	137600	688	23.02	24.00
	CA_n66A-n77A	n66	40	346000	1730	QPSK/1#1	n77	100	656000	3840	22.98	24.00
	CA_n66A-n78A	n66	40	346000	1730	QPSK/1#1	n78	100	650000	3750	22.94	24.00
	CA_n48A-n66A	n48	40	638000	3570	QPSK/1#1	n66	20	349000	1745	21.68	22.53
	CA_n48A-n71A	n48	40	638000	3570	QPSK/1#1	n71	20	137600	688	21.74	22.53
	CA_n71A-n77A	n71	20	134600	673	QPSK/1#1	n77	100	656000	3840	23.12	23.79
	CA_n71B	n71	20	134600	673	QPSK/1#1	n71	20	137600	688	23.04	23.79

2.4GHz WLAN ANT 0

2.4GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11b 1Mbps	CH 1	2412	16.23	17.00	16.00	98.88
		CH 7	2442	14.30	15.00	16.00	
		CH 13	2472	15.81	16.50	16.00	
	802.11g 6Mbps	CH 1	2412	15.68	16.00	16.00	98.26
		CH 7	2442	13.94	14.00	16.00	
		CH 13	2472	15.41	16.50	16.00	
	802.11n-HT20 MCS0	CH 1	2412	15.53	16.50	16.00	98.05
		CH 7	2442	13.82	14.50	16.00	
		CH 13	2472	15.29	16.00	16.00	
	802.11n-HT40 MCS0	CH 3	2422	15.36	16.00	16.00	94.38
		CH 7	2442	14.87	15.50	16.00	
		CH 11	2462	15.33	16.00	16.00	

5GHz WLAN ANT 0

5.2GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 36	5180	15.63	16.50	16.00	98.54
		CH 44	5220	16.05	17.00	16.00	
		CH 48	5240	16.02	17.00	16.00	
	802.11n-HT20 MCS0	CH 36	5180	15.54	16.50	16.00	98.28
		CH 44	5220	15.92	16.00	16.00	
		CH 48	5240	15.88	16.00	16.00	
	802.11n-HT40 MCS0	CH 38	5190	15.97	16.00	16.00	96.59
		CH 46	5230	16.21	17.00	16.00	
	802.11ac-VHT20 MCS0	CH 36	5180	15.54	16.50	16.00	98.29
		CH 44	5220	15.91	17.00	16.00	
		CH 48	5240	15.88	17.00	16.00	
	802.11ac-VHT40 MCS0	CH 38	5190	15.95	17.00	16.00	96.59
		CH 46	5230	16.23	17.00	16.00	
	802.11ac-VHT80 MCS0	CH 42	5210	16.02	17.00	16.00	93.88

5GHz WLAN ANT 0

5.3GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 52	5260	16.41	17.50	16.00	98.07
		CH 60	5300	16.28	17.00	16.00	
		CH 64	5320	16.09	17.00	16.00	
	802.11n-HT20 MCS0	CH 52	5260	16.31	17.00	16.00	98.28
		CH 60	5300	16.16	17.00	16.00	
		CH 64	5320	15.94	17.00	16.00	
	802.11n-HT40 MCS0	CH 54	5270	16.50	17.50	16.00	96.59
		CH 62	5310	16.56	17.50	16.00	
	802.11ac-VHT20 MCS0	CH 52	5260	16.27	17.00	16.00	98.29
		CH 60	5300	16.17	17.00	16.00	
		CH 64	5320	15.93	17.00	16.00	
	802.11ac-VHT40 MCS0	CH 54	5270	16.49	17.50	16.00	96.59
		CH 62	5310	16.55	17.50	16.00	
	802.11ac-VHT80 MCS0	CH 58	5290	16.36	17.50	16.00	91.84

5GHzWLAN ANT 0

5.5GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 100	5500	16.99	18.00	16.00	98.54
		CH 120	5600	16.89	18.00	16.00	
		CH 144	5720	16.22	17.00	16.00	
	802.11n-HT20 MCS0	CH 100	5500	16.83	18.00	16.00	98.28
		CH 120	5600	16.72	18.00	16.00	
		CH 144	5720	16.13	17.00	16.00	
	802.11n-HT40 MCS0	CH 102	5510	17.22	18.00	16.00	96.59
		CH 126	5630	17.27	18.00	16.00	
		CH 142	5710	16.59	17.50	16.00	
	802.11ac-VHT20 MCS0	CH 100	5500	16.83	18.00	16.00	98.29
		CH 120	5600	16.76	18.00	16.00	
		CH 144	5720	16.13	17.00	16.00	
	802.11ac-VHT40 MCS0	CH 102	5510	17.23	18.00	16.00	95.51
		CH 126	5630	17.24	18.00	16.00	
		CH 142	5710	16.59	18.00	16.00	
	802.11ac-VHT80 MCS0	CH 106	5530	16.98	18.00	16.00	93.88
		CH 122	5610	17.01	18.00	16.00	
		CH 138	5690	16.59	17.50	16.00	

5GHz WLAN ANT 0

5.8GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 149	5745	15.89	16.50	16.00	98.54
		CH 157	5785	15.83	16.50	16.00	
		CH 165	5825	15.77	16.50	16.00	
	802.11n-HT20 MCS0	CH 149	5745	15.77	16.50	16.00	97.70
		CH 157	5785	15.73	16.50	16.00	
		CH 165	5825	15.66	16.50	16.00	
	802.11n-HT40 MCS0	CH 151	5755	16.31	17.00	16.00	96.59
		CH 159	5795	16.14	17.00	16.00	
	802.11ac-VHT20 MCS0	CH 149	5745	15.76	16.50	16.00	98.29
		CH 157	5785	15.73	16.50	16.00	
		CH 165	5825	15.67	16.50	16.00	
	802.11ac-VHT40 MCS0	CH 151	5755	16.24	17.00	16.00	96.59
		CH 159	5795	16.10	17.00	16.00	
	802.11ac-VHT80 MCS0	CH 155	5775	15.88	17.00	16.00	92.00

Mode	Channel	Frequency (MHz)	1Mbps		2Mbps		3Mbps	
			Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit
BR / EDR	CH 00	2402	11.33	12.00	9.86	11.00	9.60	10.50
	CH 39	2441	10.08	11.00	8.13	9.00	8.30	9.00
	CH 78	2480	11.42	12.50	9.79	10.50	9.55	10.50
Power Setting			9		9		9	
Duty Cycle %			77.01		77.23		77.12	

Mode	Channel	Frequency (MHz)	1Mbps		2Mbps	
			Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit
LE	CH 00	2402	6.40	7.50	3.61	4.50
	CH 19	2440	5.23	6.00	2.30	3.00
	CH 39	2480	7.14	8.00	4.46	5.50
Power Setting			9		9	
Duty Cycle %			62.96		33.28	

Reduced Power Level 1

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band IV (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	16.88	16.64	16.51	18.00	15.89	15.97	16.15	17.50	21.18	21.23	21.21	22.00
3GPP Rel 5	HSDPA Subtest-1	15.90	15.67	15.59	17.00	14.65	14.95	15.13	16.00	20.47	20.50	20.60	21.50
3GPP Rel 5	HSDPA Subtest-2	15.82	15.59	15.52	17.00	14.60	14.92	15.11	16.00	20.49	20.47	20.39	21.50
3GPP Rel 5	HSDPA Subtest-3	15.32	15.12	14.97	16.50	14.13	14.39	14.53	15.50	19.98	19.96	20.04	21.00
3GPP Rel 5	HSDPA Subtest-4	15.40	15.14	14.95	16.50	14.08	14.36	14.48	15.50	20.00	20.00	20.02	21.00
3GPP Rel 6	HSUPA Subtest-1	15.86	15.62	15.48	16.50	14.54	14.76	15.09	15.50	20.46	20.46	20.47	21.50
3GPP Rel 6	HSUPA Subtest-2	15.30	15.13	15.00	16.00	14.05	14.40	14.53	15.50	19.92	19.93	19.99	21.00
3GPP Rel 6	HSUPA Subtest-3	15.84	15.52	15.49	16.50	14.50	14.78	15.05	15.50	20.42	20.45	20.50	21.50
3GPP Rel 6	HSUPA Subtest-4	15.86	15.62	15.49	16.50	14.55	14.91	15.08	15.50	20.46	20.47	20.42	21.50
3GPP Rel 6	HSUPA Subtest-5	15.77	15.56	15.47	16.50	14.57	14.80	14.98	15.50	20.45	20.60	20.50	21.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	15.33	15.15	14.99	16.00	14.03	14.39	14.54	15.50	20.00	20.06	20.04	21.00
Attenuator			Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6	
Mode			Max.	16.88			Max.	16.15			Max.	21.23	

Band		WCDMA Band XIX (dBm)			Tune-up Limit (dBm)
TX Channel		387	412	437	
Rx Channel		787	812	837	
Frequency (MHz)		832.4	837.6	842.6	
3GPP Rel 99	RMC 12.2Kbps	21.20	21.15	21.09	22.00
3GPP Rel 5	HSDPA Subtest-1	20.60	20.49	20.44	21.50
3GPP Rel 5	HSDPA Subtest-2	20.70	20.48	20.40	21.50
3GPP Rel 5	HSDPA Subtest-3	20.01	19.96	19.88	21.00
3GPP Rel 5	HSDPA Subtest-4	20.02	19.99	19.89	21.00
3GPP Rel 6	HSUPA Subtest-1	20.51	20.47	20.38	21.50
3GPP Rel 6	HSUPA Subtest-2	20.00	19.96	19.87	21.00
3GPP Rel 6	HSUPA Subtest-3	20.50	20.39	20.39	21.50
3GPP Rel 6	HSUPA Subtest-4	20.52	20.51	20.38	21.50
3GPP Rel 6	HSUPA Subtest-5	20.52	20.49	20.40	21.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.03	20.06	19.90	21.00
Attenuator			Cable Loss	0.6	
Mode			Max.	21.20	

3	QPSK	15	0	16.04	16.11	16.04	17.5
3	16QAM	1	0	16.51	16.40	16.34	
3	16QAM	1	8	16.44	16.46	16.11	
3	16QAM	1	14	16.40	16.33	16.45	16.5
3	16QAM	8	0	15.32	15.30	15.21	
3	16QAM	8	4	15.18	15.31	15.17	
3	16QAM	8	7	15.03	15.22	15.12	17.5
3	16QAM	15	0	15.22	15.14	15.00	
3	64QAM	1	0	16.22	16.25	16.00	
3	64QAM	1	8	16.15	16.33	16.09	16.5
3	64QAM	1	14	15.97	16.18	16.15	
3	64QAM	8	0	15.28	15.35	15.12	
3	64QAM	8	4	15.29	15.30	15.26	16.5
3	64QAM	8	7	15.08	15.18	15.15	
3	64QAM	15	0	15.07	15.29	15.18	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	17.12	17.03	17.06	18.5
1.4	QPSK	1	3	16.94	16.96	17.02	
1.4	QPSK	1	5	16.95	17.00	17.00	
1.4	QPSK	3	0	16.38	16.39	16.16	
1.4	QPSK	3	1	16.27	16.24	16.00	
1.4	QPSK	3	3	16.11	16.09	16.00	
1.4	QPSK	6	0	16.14	16.31	16.00	17.5
1.4	16QAM	1	0	16.42	16.39	16.48	17.5
1.4	16QAM	1	3	16.54	16.41	16.33	
1.4	16QAM	1	5	16.45	16.41	16.18	
1.4	16QAM	3	0	15.34	15.40	15.36	
1.4	16QAM	3	1	15.26	15.22	15.15	
1.4	16QAM	3	3	15.03	15.19	15.02	
1.4	16QAM	6	0	15.17	15.21	15.01	16.5
1.4	64QAM	1	0	16.29	16.23	16.15	17.5
1.4	64QAM	1	3	16.24	16.36	16.16	
1.4	64QAM	1	5	16.22	16.38	15.98	
1.4	64QAM	3	0	15.25	15.22	15.20	
1.4	64QAM	3	1	14.98	15.11	15.14	
1.4	64QAM	3	3	15.10	15.26	15.05	
1.4	64QAM	6	0	15.08	15.15	15.20	16.5

3	QPSK	15	0	15.74	15.78	15.81	17
3	16QAM	1	0	16.05	15.86	15.75	
3	16QAM	1	8	15.72	16.01	15.97	
3	16QAM	1	14	15.85	15.97	15.73	16
3	16QAM	8	0	14.62	14.68	14.90	
3	16QAM	8	4	14.65	14.50	14.46	
3	16QAM	8	7	14.55	14.60	14.71	17
3	16QAM	15	0	14.49	14.41	14.76	
3	64QAM	1	0	15.65	15.79	15.83	
3	64QAM	1	8	15.56	15.58	15.74	16
3	64QAM	1	14	15.66	15.61	15.59	
3	64QAM	8	0	14.74	14.71	14.83	
3	64QAM	8	4	14.50	14.66	14.57	16
3	64QAM	8	7	14.68	14.63	14.55	
3	64QAM	15	0	14.61	14.70	14.83	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	16.48	16.50	16.56	18
1.4	QPSK	1	3	16.29	16.46	16.43	
1.4	QPSK	1	5	16.26	16.28	16.53	
1.4	QPSK	3	0	15.86	15.85	15.79	
1.4	QPSK	3	1	15.57	15.83	15.57	
1.4	QPSK	3	3	15.64	15.77	15.63	
1.4	QPSK	6	0	15.72	15.82	15.62	17
1.4	16QAM	1	0	15.89	15.81	15.84	17
1.4	16QAM	1	3	15.73	15.87	15.68	
1.4	16QAM	1	5	15.65	15.82	15.99	
1.4	16QAM	3	0	14.67	14.83	14.85	
1.4	16QAM	3	1	14.50	14.80	14.68	
1.4	16QAM	3	3	14.56	14.66	14.42	
1.4	16QAM	6	0	14.51	14.39	14.76	16
1.4	64QAM	1	0	15.89	15.72	15.86	17
1.4	64QAM	1	3	15.70	15.73	15.68	
1.4	64QAM	1	5	15.74	15.86	15.69	
1.4	64QAM	3	0	14.79	14.62	14.86	
1.4	64QAM	3	1	14.64	14.64	14.83	
1.4	64QAM	3	3	14.68	14.54	14.65	
1.4	64QAM	6	0	14.55	14.52	14.53	16

Band 14 (700MHz Band) (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23330			Tune-up limit (dBm)
Frequency (MHz)				793			
10	QPSK	1	0		21.37		22.5
10	QPSK	1	25		21.31		
10	QPSK	1	49		21.29		
10	QPSK	25	0		20.55		21.5
10	QPSK	25	12		20.44		
10	QPSK	25	25		20.43		
10	QPSK	50	0		20.52		21.5
10	16QAM	1	0		20.77		
10	16QAM	1	25		20.73		
10	16QAM	1	49		20.74		20.5
10	16QAM	25	0		19.67		
10	16QAM	25	12		19.34		
10	16QAM	25	25		19.51		21.5
10	16QAM	50	0		19.22		
10	64QAM	1	0		20.54		
10	64QAM	1	25		20.41		20.5
10	64QAM	1	49		20.68		
10	64QAM	25	0		19.68		
10	64QAM	25	12		19.43		20.5
10	64QAM	25	25		19.34		
10	64QAM	50	0		19.54		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	21.29	21.34	21.31	22.5
5	QPSK	1	12	21.34	21.32	21.29	
5	QPSK	1	24	21.26	21.23	21.18	
5	QPSK	12	0	20.43	20.54	20.35	21.5
5	QPSK	12	7	20.41	20.42	20.52	
5	QPSK	12	13	20.56	20.41	20.25	
5	QPSK	25	0	20.62	20.54	20.49	21.5
5	16QAM	1	0	20.58	20.72	20.67	
5	16QAM	1	12	20.64	20.65	20.70	
5	16QAM	1	24	20.59	20.65	20.68	20.5
5	16QAM	12	0	19.53	19.47	19.44	
5	16QAM	12	7	19.32	19.63	19.36	
5	16QAM	12	13	19.21	19.53	19.29	21.5
5	16QAM	25	0	19.60	19.55	19.38	
5	64QAM	1	0	20.57	20.64	20.62	
5	64QAM	1	12	20.64	20.66	20.46	20.5
5	64QAM	1	24	20.50	20.51	20.25	
5	64QAM	12	0	19.62	19.42	19.42	
5	64QAM	12	7	19.34	19.63	19.49	20.5
5	64QAM	12	13	19.22	19.35	19.35	
5	64QAM	25	0	19.52	19.29	19.37	

Band 17 (700MHz Band) (dBm) Part 27H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	Tune-up limit (dBm)
Frequency (MHz)				709	710	711	
10	QPSK	1	0	20.77	20.88	20.79	22
10	QPSK	1	25	20.61	20.86	20.65	
10	QPSK	1	49	20.65	20.67	20.70	
10	QPSK	25	0	20.10	20.15	19.94	21
10	QPSK	25	12	20.01	19.87	20.06	
10	QPSK	25	25	20.07	19.86	19.89	
10	QPSK	50	0	19.93	19.87	19.74	21
10	16QAM	1	0	20.21	20.25	20.27	
10	16QAM	1	25	20.15	20.24	19.97	
10	16QAM	1	49	20.00	20.29	20.16	20
10	16QAM	25	0	18.94	19.04	18.91	
10	16QAM	25	12	18.73	18.85	18.73	
10	16QAM	25	25	18.79	18.98	18.77	21
10	16QAM	50	0	18.73	18.96	18.82	
10	64QAM	1	0	20.06	20.11	19.90	
10	64QAM	1	25	19.95	19.94	19.85	20
10	64QAM	1	49	19.97	20.02	19.98	
10	64QAM	25	0	19.07	19.11	18.95	
10	64QAM	25	12	18.88	18.96	18.72	20
10	64QAM	25	25	18.95	19.09	18.89	
10	64QAM	50	0	18.90	18.78	18.86	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	20.83	20.86	20.72	22
5	QPSK	1	12	20.77	20.84	20.74	
5	QPSK	1	24	20.73	20.55	20.63	
5	QPSK	12	0	20.01	20.04	20.00	21
5	QPSK	12	7	19.94	19.90	19.80	
5	QPSK	12	13	19.87	19.78	19.77	
5	QPSK	25	0	19.79	19.89	19.90	21
5	16QAM	1	0	20.09	20.37	20.16	
5	16QAM	1	12	20.30	20.08	19.95	
5	16QAM	1	24	20.19	20.10	19.96	20
5	16QAM	12	0	19.03	19.09	19.04	
5	16QAM	12	7	18.90	18.80	18.75	
5	16QAM	12	13	18.86	19.00	18.72	21
5	16QAM	25	0	18.99	18.91	18.78	
5	64QAM	1	0	19.91	20.18	19.81	
5	64QAM	1	12	19.77	20.00	19.89	20
5	64QAM	1	24	20.02	20.09	19.88	
5	64QAM	12	0	19.12	18.99	18.88	
5	64QAM	12	7	18.94	18.87	18.74	20
5	64QAM	12	13	18.70	18.91	18.95	
5	64QAM	25	0	18.96	18.87	18.80	

3	QPSK	15	0	23.00	22.86	22.98	24
3	16QAM	1	0	23.28	23.25	23.06	
3	16QAM	1	8	23.08	23.19	23.08	
3	16QAM	1	14	22.94	23.29	23.13	23
3	16QAM	8	0	21.89	21.94	21.96	
3	16QAM	8	4	22.00	21.89	21.82	
3	16QAM	8	7	21.80	22.04	21.85	24
3	16QAM	15	0	21.83	21.84	21.89	
3	64QAM	1	0	23.07	22.91	23.06	
3	64QAM	1	8	22.89	22.85	22.96	23
3	64QAM	1	14	22.94	22.93	22.78	
3	64QAM	8	0	22.08	22.14	22.15	
3	64QAM	8	4	22.03	22.08	21.79	23
3	64QAM	8	7	21.69	21.99	21.88	
3	64QAM	15	0	21.82	21.89	22.07	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	23.74	23.63	23.61	25
1.4	QPSK	1	3	23.72	23.59	23.58	
1.4	QPSK	1	5	23.65	23.53	23.60	
1.4	QPSK	3	0	23.02	22.83	23.02	
1.4	QPSK	3	1	22.87	22.77	22.83	
1.4	QPSK	3	3	22.82	22.78	22.73	
1.4	QPSK	6	0	22.89	22.82	22.93	24
1.4	16QAM	1	0	23.34	23.04	23.27	23
1.4	16QAM	1	3	22.97	23.24	23.06	
1.4	16QAM	1	5	23.16	23.26	23.16	
1.4	16QAM	3	0	21.87	21.96	21.88	
1.4	16QAM	3	1	21.84	21.99	21.73	
1.4	16QAM	3	3	21.66	21.89	21.68	
1.4	16QAM	6	0	21.83	21.79	21.96	22
1.4	64QAM	1	0	22.96	23.08	22.96	24
1.4	64QAM	1	3	22.79	23.04	23.04	
1.4	64QAM	1	5	22.69	22.83	22.94	
1.4	64QAM	3	0	21.86	21.93	22.01	
1.4	64QAM	3	1	21.99	22.08	21.94	
1.4	64QAM	3	3	21.88	21.97	21.81	
1.4	64QAM	6	0	21.98	21.94	22.06	23

1.4	QPSK	6	0	20.04	19.83	19.78	21
1.4	16QAM	1	0	19.97	20.27	20.09	21
1.4	16QAM	1	3	19.96	20.03	19.94	
1.4	16QAM	1	5	20.01	19.92	19.96	
1.4	16QAM	3	0	18.81	18.98	18.83	
1.4	16QAM	3	1	18.79	18.90	18.69	
1.4	16QAM	3	3	18.75	18.69	18.73	
1.4	16QAM	6	0	18.79	18.79	18.58	20
1.4	64QAM	1	0	19.91	19.79	20.01	21
1.4	64QAM	1	3	19.91	19.89	19.82	
1.4	64QAM	1	5	19.82	19.95	19.76	
1.4	64QAM	3	0	18.92	18.81	18.97	
1.4	64QAM	3	1	18.79	19.04	18.74	
1.4	64QAM	3	3	18.75	18.90	18.86	
1.4	64QAM	6	0	18.98	18.95	18.91	20

3	QPSK	15	0	15.88	15.76	15.62	17
3	16QAM	1	0	15.84	16.08	16.05	
3	16QAM	1	8	15.86	16.03	16.00	
3	16QAM	1	14	15.92	16.06	15.78	16
3	16QAM	8	0	14.87	14.92	14.95	
3	16QAM	8	4	14.68	14.83	14.80	
3	16QAM	8	7	14.70	14.81	14.78	
3	16QAM	15	0	14.61	14.84	14.77	
3	64QAM	1	0	16.00	15.78	15.79	17
3	64QAM	1	8	15.91	15.79	15.95	
3	64QAM	1	14	15.61	15.98	15.77	
3	64QAM	8	0	14.92	14.84	14.79	16
3	64QAM	8	4	14.79	14.78	14.89	
3	64QAM	8	7	14.56	14.85	14.67	
3	64QAM	15	0	14.87	14.85	14.90	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	16.66	16.62	16.71	18
1.4	QPSK	1	3	16.66	16.66	16.53	
1.4	QPSK	1	5	16.51	16.60	16.62	
1.4	QPSK	3	0	15.97	15.84	15.69	
1.4	QPSK	3	1	15.73	15.89	15.88	
1.4	QPSK	3	3	15.72	15.85	15.85	
1.4	QPSK	6	0	15.80	15.85	15.86	17
1.4	16QAM	1	0	16.07	15.96	15.87	17
1.4	16QAM	1	3	16.10	16.14	15.86	
1.4	16QAM	1	5	15.89	15.94	16.06	
1.4	16QAM	3	0	14.90	14.85	14.96	
1.4	16QAM	3	1	14.64	14.81	14.72	
1.4	16QAM	3	3	14.70	14.68	14.79	
1.4	16QAM	6	0	14.65	14.50	14.82	16
1.4	64QAM	1	0	15.98	16.01	15.72	17
1.4	64QAM	1	3	15.71	15.70	15.64	
1.4	64QAM	1	5	15.81	15.96	15.58	
1.4	64QAM	3	0	14.81	15.02	14.90	
1.4	64QAM	3	1	14.84	14.82	14.62	
1.4	64QAM	3	3	14.78	14.92	14.89	
1.4	64QAM	6	0	14.67	14.75	14.81	16

Band 71 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	22.30	22.33	22.25	23.5
20	QPSK	1	49	22.16	22.27	22.02	
20	QPSK	1	99	22.13	22.05	22.15	
20	QPSK	50	0	21.40	21.44	21.39	22.5
20	QPSK	50	24	21.16	21.32	21.22	
20	QPSK	50	50	21.40	21.18	21.33	
20	QPSK	100	0	21.30	21.47	21.19	22.5
20	16QAM	1	0	21.38	21.60	21.35	
20	16QAM	1	49	21.44	21.61	21.40	
20	16QAM	1	99	21.57	21.48	21.43	21.5
20	16QAM	50	0	20.48	20.38	20.26	
20	16QAM	50	24	20.27	20.40	20.29	
20	16QAM	50	50	20.21	20.36	20.17	22.5
20	16QAM	100	0	20.37	20.26	20.18	
20	64QAM	1	0	21.49	21.44	21.19	
20	64QAM	1	49	21.38	21.40	21.21	21.5
20	64QAM	1	99	21.15	21.44	21.09	
20	64QAM	50	0	20.33	20.32	20.27	
20	64QAM	50	24	20.32	20.41	20.20	21.5
20	64QAM	50	50	20.29	20.40	20.11	
20	64QAM	100	0	20.10	20.28	20.16	
Channel				133197	133297	133397	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	QPSK	1	0	22.27	22.30	22.23	23.5
15	QPSK	1	37	22.03	22.16	22.11	
15	QPSK	1	74	22.14	22.24	21.95	
15	QPSK	36	0	21.21	21.25	21.34	22.5
15	QPSK	36	20	21.33	21.24	21.08	
15	QPSK	36	39	21.18	21.14	21.20	
15	QPSK	75	0	21.27	21.19	21.33	22.5
15	16QAM	1	0	21.72	21.75	21.57	
15	16QAM	1	37	21.54	21.51	21.34	
15	16QAM	1	74	21.46	21.45	21.51	21.5
15	16QAM	36	0	20.33	20.34	20.32	
15	16QAM	36	20	20.05	20.46	20.06	
15	16QAM	36	39	20.26	20.21	20.28	22.5
15	16QAM	75	0	20.16	20.12	20.21	
15	64QAM	1	0	21.30	21.36	21.42	
15	64QAM	1	37	21.16	21.26	21.29	21.5
15	64QAM	1	74	21.32	21.34	21.15	
15	64QAM	36	0	20.22	20.49	20.28	
15	64QAM	36	20	20.16	20.22	20.24	21.5
15	64QAM	36	39	20.32	20.44	20.27	
15	64QAM	75	0	20.38	20.17	20.05	
Channel				133172	133272	133422	Tune-up limit (dBm)
Frequency (MHz)				668	678	693	
10	QPSK	1	0	22.19	22.28	22.17	23.5
10	QPSK	1	25	22.12	22.06	22.11	
10	QPSK	1	49	22.02	22.11	22.13	
10	QPSK	25	0	21.26	21.40	21.45	22.5
10	QPSK	25	12	21.06	21.40	21.32	
10	QPSK	25	25	21.31	21.22	21.26	
10	QPSK	50	0	21.24	21.35	21.14	22.5
10	16QAM	1	0	21.69	21.70	21.35	
10	16QAM	1	25	21.54	21.61	21.31	
10	16QAM	1	49	21.37	21.46	21.39	21.5
10	16QAM	25	0	20.43	20.47	20.27	
10	16QAM	25	12	20.12	20.25	20.22	
10	16QAM	25	25	20.21	20.22	20.10	22.5
10	16QAM	50	0	20.12	20.15	20.23	
10	64QAM	1	0	21.25	21.50	21.22	
10	64QAM	1	25	21.33	21.45	21.18	21.5
10	64QAM	1	49	21.07	21.46	21.12	
10	64QAM	25	0	20.46	20.26	20.25	
10	64QAM	25	12	20.12	20.38	20.19	21.5
10	64QAM	25	25	20.26	20.13	20.09	
10	64QAM	50	0	20.31	20.34	20.26	
Channel				133147	133247	133447	Tune-up limit (dBm)
Frequency (MHz)				665.5	675.5	695.5	
5	QPSK	1	0	22.16	22.27	22.18	23.5
5	QPSK	1	12	21.98	22.05	22.02	
5	QPSK	1	24	22.06	22.15	22.04	
5	QPSK	12	0	21.33	21.34	21.12	22.5
5	QPSK	12	7	21.27	21.24	21.08	
5	QPSK	12	13	21.19	21.09	21.20	
5	QPSK	25	0	21.46	21.47	21.12	22.5
5	16QAM	1	0	21.39	21.72	21.42	
5	16QAM	1	12	21.50	21.44	21.33	
5	16QAM	1	24	21.61	21.42	21.28	21.5
5	16QAM	12	0	20.20	20.21	20.24	
5	16QAM	12	7	20.25	20.42	20.22	
5	16QAM	12	13	20.17	20.17	20.11	22.5
5	16QAM	25	0	20.12	20.37	20.14	
5	64QAM	1	0	21.27	21.52	21.42	
5	64QAM	1	12	21.31	21.23	21.18	21.5
5	64QAM	1	24	21.20	21.37	21.19	
5	64QAM	12	0	20.45	20.21	20.29	
5	64QAM	12	7	20.08	20.40	20.14	21.5
5	64QAM	12	13	20.25	20.42	20.11	
5	64QAM	25	0	20.31	20.42	20.30	

n2 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	15.60	15.45	15.36	17
20		1	53	15.58	15.21	15.13	
20		1	104	15.46	15.36	15.15	
20		50	1	15.73	15.42	15.33	17
20	DFT-s-OFDM QPSK	50	25	15.73	15.24	15.26	
20		50	50	15.62	15.20	15.32	
20		100	0	15.64	15.26	15.29	
20		1	1	15.65	15.75	15.41	17
20	DFT-s-OFDM 16QAM	1	53	15.67	15.56	15.21	
20		1	104	15.19	15.38	15.28	
20		50	1	15.64	15.73	15.38	17
20		50	25	15.63	15.64	15.32	
20	DFT-s-OFDM 64QAM	50	50	15.60	15.22	15.14	
20		100	0	15.60	15.62	15.24	
20	DFT-s-OFDM 256QAM	1	1	15.20	15.05	14.94	16
20	CP-OFDM QPSK	1	1	13.94	13.82	13.62	15
20	CP-OFDM 16QAM	1	1	11.86	11.67	11.49	13
20	CP-OFDM 64QAM	1	1	15.02	14.80	14.65	16
20	CP-OFDM 256QAM	1	1	14.47	14.31	14.17	15
20		1	1	12.12	12.43	12.38	13
20		1	1	9.94	9.69	9.53	11
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	15.45	15.70	15.25	17
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	15.47	15.73	15.23	17
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	15.57	15.72	15.25	17

n5 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	18.65	18.67	18.63	20
20		1	53	18.53	18.45	18.47	
20		1	104	18.24	18.22	18.35	
20		50	1	18.67	18.66	18.58	20
20		50	25	18.59	18.58	18.44	
20		50	50	18.51	18.43	18.40	
20		100	0	18.61	18.61	18.49	
20	DFT-s-OFDM QPSK	1	1	18.65	18.68	18.62	20
20		1	53	18.45	18.52	18.47	
20		1	104	18.26	18.28	18.25	
20		50	1	18.60	18.62	18.54	20
20		50	25	18.61	18.60	18.54	
20		50	50	18.51	18.48	18.37	
20		100	0	18.51	18.60	18.51	
20	DFT-s-OFDM 16QAM	1	1	18.46	18.31	18.23	20
20	DFT-s-OFDM 64QAM	1	1	16.77	16.73	16.68	18
20	DFT-s-OFDM 256QAM	1	1	14.73	14.65	14.55	16
20	CP-OFDM QPSK	1	1	17.86	17.77	17.70	19
20	CP-OFDM 16QAM	1	1	17.29	17.24	17.22	18
20	CP-OFDM 64QAM	1	1	15.52	15.34	15.12	16
20	CP-OFDM 256QAM	1	1	12.67	12.73	12.68	14
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	18.44	18.45	18.27	20
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	18.36	18.38	18.22	20
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	18.42	18.44	18.09	20

n7 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	
20	DFT-s-OFDM PI/2 BPSK	1	1	11.39	11.36	11.61	13
20		1	53	11.33	11.49	11.66	
20		1	104	11.37	11.50	11.56	
20		50	1	11.28	11.40	11.51	13
20		50	25	11.24	11.43	11.63	
20		50	50	11.29	11.46	11.52	
20		100	0	11.25	11.44	11.52	
20	DFT-s-OFDM QPSK	1	1	11.42	11.53	11.68	13
20		1	53	11.31	11.47	11.59	
20		1	104	11.40	11.52	11.66	
20		50	1	11.41	11.50	11.65	13
20		50	25	11.23	11.37	11.59	
20		50	50	11.30	11.39	11.58	
20		100	0	11.30	11.41	11.61	
20	DFT-s-OFDM 16QAM	1	1	10.99	11.03	11.27	12
20	DFT-s-OFDM 64QAM	1	1	9.42	9.43	9.74	11
20	DFT-s-OFDM 256QAM	1	1	7.05	7.06	7.31	8
20	CP-OFDM QPSK	1	1	10.36	10.44	10.67	11
20	CP-OFDM 16QAM	1	1	9.82	9.90	10.16	11
20	CP-OFDM 64QAM	1	1	8.17	8.15	8.43	9
20	CP-OFDM 256QAM	1	1	5.09	5.18	5.45	6
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	DFT-s-OFDM QPSK	1	1	11.24	11.28	11.52	13
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	DFT-s-OFDM QPSK	1	1	11.13	11.30	11.52	13
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	DFT-s-OFDM QPSK	1	1	11.22	11.25	11.49	13

n25 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376500	381000	Tune-up limit (dBm)
Frequency (MHz)				1860	1882.5	1905	
20	DFT-s-OFDM PI/2 BPSK	1	1	14.67	14.68	14.42	16
20		1	53	14.78	14.50	14.33	
20		1	104	14.57	14.32	14.35	
20		50	1	14.80	14.63	14.38	16
20	DFT-s-OFDM QPSK	50	25	14.72	14.53	14.46	
20		50	50	14.67	14.46	14.46	
20		100	0	14.72	14.47	14.41	
20		1	1	14.81	14.76	14.60	16
20	DFT-s-OFDM 16QAM	1	53	14.72	14.64	14.50	
20		1	104	14.68	14.55	14.53	
20		50	1	14.78	14.69	14.55	16
20		50	25	14.68	14.57	14.47	
20	DFT-s-OFDM 64QAM	50	50	14.67	14.48	14.44	
20		100	0	14.67	14.65	14.46	
20	DFT-s-OFDM 256QAM	1	1	14.66	14.50	14.43	16
20	CP-OFDM QPSK	1	1	13.19	13.13	12.89	14
20	CP-OFDM 16QAM	1	1	10.95	10.92	10.61	12
20	CP-OFDM 64QAM	1	1	14.18	14.08	13.92	15
20	CP-OFDM 256QAM	1	1	13.33	13.16	13.12	14
20		1	1	11.94	11.89	11.58	13
20		1	1	8.94	8.83	8.67	10
Channel				371500	376500	381500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5	
15	DFT-s-OFDM QPSK	1	1	14.72	14.70	14.20	16
Channel				371000	376500	382000	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	
10	DFT-s-OFDM QPSK	1	1	14.72	14.55	13.98	16
Channel				370500	376500	382500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5	
5	DFT-s-OFDM QPSK	1	1	14.78	14.50	13.99	16

n26(814-824MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					163800		
Frequency (MHz)					819		
10	DFT-s-OFDM PI/2 BPSK	1	1		19.54		21
10		1	26		19.69		
10		1	50		19.79		
10		25	1		19.64		21
10	DFT-s-OFDM QPSK	25	12		19.71		
10		25	25		19.79		
10		50	0		19.72		
10		1	1		19.90		21
10	DFT-s-OFDM 16QAM	1	26		19.71		
10		1	50		19.81		
10		25	1		19.86		21
10		25	12		19.68		
10	DFT-s-OFDM 64QAM	25	25		19.75		
10		50	0		19.84		
10	DFT-s-OFDM 256QAM	1	1		19.17		20
10	DFT-s-OFDM 64QAM	1	1		17.95		19
10	DFT-s-OFDM 256QAM	1	1		15.83		17
10	CP-OFDM QPSK	1	1		18.87		20
10	CP-OFDM 16QAM	1	1		18.08		19
10	CP-OFDM 64QAM	1	1		16.78		18
10	CP-OFDM 256QAM	1	1		13.85		15
Channel				163300	163800	164300	Tune-up limit
Frequency (MHz)				816.5	819	821.5	
5	DFT-s-OFDM QPSK	1	1	19.76	19.84	19.71	21

n26(824-849MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up
Channel				166800	167300	167800	limit
Frequency (MHz)				834	836.5	839	(dBm)
20	DFT-s-OFDM PI/2 BPSK	1	1	19.85	19.84	19.87	21
20		1	53	19.83	19.82	19.81	
20		1	104	19.65	19.67	19.80	
20		50	1	19.90	19.89	19.91	21
20		50	25	19.87	19.87	19.81	
20		50	50	19.80	19.81	19.80	
20		100	0	19.90	19.87	19.80	
20	DFT-s-OFDM QPSK	1	1	19.90	19.94	19.86	21
20		1	53	19.82	19.86	19.76	
20		1	104	19.69	19.70	19.87	
20		50	1	19.89	19.91	19.88	21
20		50	25	19.89	19.81	19.82	
20		50	50	19.84	19.79	19.77	
20		100	0	19.87	19.91	19.83	
20	DFT-s-OFDM 16QAM	1	1	19.80	19.81	19.76	21
20	DFT-s-OFDM 64QAM	1	1	18.30	18.32	18.29	19
20	DFT-s-OFDM 256QAM	1	1	16.23	16.35	16.31	17
20	CP-OFDM QPSK	1	1	19.28	19.29	19.25	20
20	CP-OFDM 16QAM	1	1	18.77	18.80	18.79	20
20	CP-OFDM 64QAM	1	1	17.12	17.15	17.11	18
20	CP-OFDM 256QAM	1	1	14.29	14.35	14.37	15
Channel				166300	167300	168300	Tune-up
Frequency (MHz)				831.5	836.5	841.5	limit
15	DFT-s-OFDM QPSK	1	1	19.84	19.86	19.77	21
Channel				165800	167300	168800	Tune-up
Frequency (MHz)				829	836.5	844	limit
10	DFT-s-OFDM QPSK	1	1	19.83	19.72	19.70	21
Channel				165300	167300	169300	Tune-up
Frequency (MHz)				826.5	836.5	846.5	limit
5	DFT-s-OFDM QPSK	1	1	19.79	19.75	19.54	21

n30 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					462000		
Frequency (MHz)					2310		
10	DFT-s-OFDM PI/2 BPSK	1	1		13.34		15
10		1	26		13.46		
10		1	50		13.38		
10		25	1		13.48		15
10		25	12		13.49		
10		25	25		13.43		
10		50	0		13.48		
10	DFT-s-OFDM QPSK	1	1		13.56		15
10		1	26		13.45		
10		1	50		13.36		
10		25	1		13.52		15
10		25	12		13.48		
10		25	25		13.42		
10		50	0		13.47		
10	DFT-s-OFDM 16QAM	1	1		13.27		14
10	DFT-s-OFDM 64QAM	1	1		11.87		13
10	DFT-s-OFDM 256QAM	1	1		9.53		10
10	CP-OFDM QPSK	1	1		12.77		14
10	CP-OFDM 16QAM	1	1		12.24		13
10	CP-OFDM 64QAM	1	1		9.56		11
10	CP-OFDM 256QAM	1	1		7.55		9

n41 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	12.5
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	11.22	11.28	11.32	11.34	11.45	12.5
100		1	136	11.37	11.39	11.33	11.29	11.28	
100		1	271	11.34	11.37	11.26	11.08	10.96	
100		135	1	11.32	11.37	11.45	11.34	11.42	12.5
100		135	67	11.40	11.33	11.33	11.35	11.32	
100		135	136	11.45	11.44	11.39	11.37	10.94	
100		270	0	11.37	11.39	11.41	11.39	11.37	
100	DFT-s-OFDM QPSK	1	1	11.29	11.40	11.48	11.40	11.42	12.5
100		1	136	11.39	11.39	11.39	11.32	11.23	
100		1	271	11.35	11.37	11.27	10.95	10.89	
100		135	1	11.34	11.37	11.34	11.44	11.40	12.5
100		135	67	11.38	11.46	11.47	11.35	11.33	
100		135	136	11.43	11.44	11.39	11.29	10.95	
100		270	0	11.01	11.19	11.33	11.16	11.03	
100	DFT-s-OFDM 16QAM	1	1	10.33	10.39	10.45	10.50	10.60	11.5
100	DFT-s-OFDM 64QAM	1	1	10.40	10.48	10.55	10.65	10.61	11.5
100	DFT-s-OFDM 256QAM	1	1	8.70	8.73	8.78	8.86	8.88	9.5
100	CP-OFDM QPSK	1	1	10.42	10.44	10.52	10.60	10.56	11.5
100	CP-OFDM 16QAM	1	1	10.49	10.47	10.56	10.68	10.67	11.5
100	CP-OFDM 64QAM	1	1	9.54	9.51	9.63	9.74	9.75	10.5
100	CP-OFDM 256QAM	1	1	6.84	6.78	6.86	6.97	6.91	7.5
Channel				508200	513402	518598	523800	528996	12.5
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	10.86	10.91	11.35	11.15	11.08	12.5
Channel				507204	512904	518598	524298	529998	12.5
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	10.90	10.92	11.37	11.18	11.13	12.5
Channel				506202	512400	518598	524796	531000	12.5
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	10.92	11.05	11.33	11.23	11.15	12.5
Channel				505200	511902	518598	525798	531996	12.5
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	11.02	11.12	11.32	11.18	11.14	12.5
Channel				504204	511404	518598	525798	532998	12.5
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	11.03	11.20	11.33	11.25	11.13	12.5
Channel				503202	510900	518598	526296	534000	12.5
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	11.09	11.23	11.33	11.27	11.05	12.5
Channel				502200	510402	518598	526800	534996	12.5
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	11.00	11.11	11.36	11.19	10.85	12.5
Channel				501204	509904	518598	527298	535998	12.5
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	10.99	11.10	11.34	11.16	10.75	12.5

n48 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				638000	639834	641666	643500	645332	8.5
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98	
40	DFT-s-OFDM PI/2 BPSK	1	1	7.51	7.33	7.28	7.02	7.05	8.5
40		1	53	7.45	7.04	6.66	7.09	7.19	
40		1	104	7.22	6.50	6.96	7.24	7.48	
40		50	1	7.49	7.23	6.96	7.12	7.09	8.5
40		50	25	7.47	7.16	6.76	7.11	7.22	
40		50	50	7.25	6.85	6.77	7.12	7.21	
40		100	0	7.36	7.09	6.82	7.15	7.16	
40		1	1	7.53	7.34	7.40	7.33	7.25	8.5
40	DFT-s-OFDM QPSK	1	53	7.45	7.00	6.67	7.10	7.22	
40		1	104	7.22	7.15	7.32	7.21	7.10	
40		50	1	7.52	7.38	7.39	7.22	7.32	8.5
40		50	25	7.46	7.14	7.27	7.10	7.11	
40		50	50	7.31	6.88	7.26	7.10	7.23	
40		100	0	7.47	7.21	7.38	7.31	7.29	
40	DFT-s-OFDM 16QAM	1	1	7.45	7.11	7.16	7.17	6.96	8.5
40	DFT-s-OFDM 64QAM	1	1	5.95	5.82	5.82	5.34	5.49	7.5
40	DFT-s-OFDM 256QAM	1	1	3.79	3.55	3.58	3.15	3.27	4.5
40	CP-OFDM QPSK	1	1	7.03	6.76	6.33	6.32	6.50	7.5
40	CP-OFDM 16QAM	1	1	6.52	6.46	6.44	6.36	6.05	7.5
40	CP-OFDM 64QAM	1	1	4.60	4.40	4.51	4.53	4.12	5.5
40	CP-OFDM 256QAM	1	1	1.82	1.61	1.55	1.07	1.38	2.5
Channel				637334	639500	641666	643832	646000	8.5
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690	
20	DFT-s-OFDM QPSK	1	1	7.43	7.23	7.20	7.17	6.97	8.5

n66 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM PI/2 BPSK	1	1	14.96	15.04	15.20	16.5
20		1	53	14.86	14.99	15.25	
20		1	104	15.02	15.15	15.18	
20		50	1	15.00	15.11	15.29	16.5
20		50	25	14.94	15.13	15.39	
20		50	50	14.88	15.09	15.32	
20		100	0	14.96	15.07	15.34	
20	DFT-s-OFDM QPSK	1	1	15.35	15.36	15.50	16.5
20		1	53	15.07	15.17	15.48	
20		1	104	15.04	15.25	15.43	
20		50	1	15.31	15.39	15.46	16.5
20		50	25	15.11	15.31	15.45	
20		50	50	15.12	15.20	15.39	
20		100	0	15.22	15.42	15.45	
20	DFT-s-OFDM 16QAM	1	1	14.75	14.83	14.92	15.5
20	DFT-s-OFDM 64QAM	1	1	13.29	13.32	13.59	14.5
20	DFT-s-OFDM 256QAM	1	1	11.01	11.08	11.32	12.5
20	CP-OFDM QPSK	1	1	14.24	14.32	14.45	15.5
20	CP-OFDM 16QAM	1	1	13.66	13.80	13.93	14.5
20	CP-OFDM 64QAM	1	1	11.96	12.10	12.13	12.5
20	CP-OFDM 256QAM	1	1	9.04	9.18	9.28	9.5
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	15.07	15.15	15.43	16.5
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	14.98	15.10	15.25	16.5
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	15.03	15.12	15.29	16.5

n71 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				134600	136100	137600	Tune-up limit (dBm)
Frequency (MHz)				673	680.5	688	
20	DFT-s-OFDM PI/2 BPSK	1	1	19.49	19.48	19.57	21
20		1	53	19.48	19.61	19.65	
20		1	104	19.55	19.63	19.46	
20		50	1	19.58	19.58	19.61	21
20		50	25	19.51	19.62	19.57	
20		50	50	19.53	19.65	19.62	
20		100	0	19.58	19.56	19.53	
20	DFT-s-OFDM QPSK	1	1	19.75	19.73	19.79	21
20		1	53	19.43	19.54	19.60	
20		1	104	19.48	19.52	19.38	
20		50	1	19.57	19.63	19.72	21
20		50	25	19.53	19.58	19.59	
20		50	50	19.58	19.55	19.58	
20		100	0	19.56	19.52	19.67	
20	DFT-s-OFDM 16QAM	1	1	19.20	19.05	19.17	16
20	DFT-s-OFDM 64QAM	1	1	17.68	17.62	17.72	15
20	DFT-s-OFDM 256QAM	1	1	15.29	15.25	15.23	16
20	CP-OFDM QPSK	1	1	18.79	18.70	18.67	20
20	CP-OFDM 16QAM	1	1	18.19	18.05	18.07	19
20	CP-OFDM 64QAM	1	1	16.36	16.59	16.66	17
20	CP-OFDM 256QAM	1	1	13.30	13.24	13.35	14
Channel				134100	136100	138100	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	DFT-s-OFDM QPSK	1	1	19.52	19.45	19.65	21
Channel				133600	136100	138600	Tune-up limit (dBm)
Frequency (MHz)				668	680.5	693	
10	DFT-s-OFDM QPSK	1	1	19.61	19.55	19.63	21
Channel				133100	136100	139100	Tune-up limit (dBm)
Frequency (MHz)				665.5	680.5	695.5	
5	DFT-s-OFDM QPSK	1	1	19.53	19.54	19.55	21

n77(3450-3550MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			7.5
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			6.51			7.5
100		1	136			6.28			
100		1	271			6.16			
100		135	1			5.90			
100		135	67			5.96			7.5
100		135	136			5.71			
100		270	0			5.96			
100		1	1			6.60			
100	DFT-s-OFDM QPSK	1	136			6.32			7.5
100		1	271			5.97			
100		135	1			6.07			
100		135	67			6.51			
100		135	136			6.17			7.5
100		270	0			6.43			
100	DFT-s-OFDM 16QAM	1	1			5.08			6.5
100	DFT-s-OFDM 64QAM	1	1			3.71			4.5
100	DFT-s-OFDM 256QAM	1	1			1.51			2.5
100	CP-OFDM QPSK	1	1			4.71			5.5
100	CP-OFDM 16QAM	1	1			4.30			5.5
100	CP-OFDM 64QAM	1	1			2.14			3.5
100	CP-OFDM 256QAM	1	1			1.15			2
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	6.29	6.23	6.46	6.08	6.03	7.5
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	6.26	6.14	6.31	5.87	5.91	7.5
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	6.52	6.49	6.54	6.34	6.25	7.5
Channel				631000	632168	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	6.50	6.41	6.52	6.28	6.09	7.5
Channel				630668	632000	633334	634666	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	6.54	6.28	6.56	6.08	6.08	7.5

n77(3450-3550MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			6.37			7.5
100		1	136			6.02			
100		1	271			6.13			
100		135	1			6.17			
100	DFT-s-OFDM PI/2 BPSK	135	67			6.13			7.5
100		135	136			5.83			
100		270	0			6.19			
100		1	1			6.47			
100	DFT-s-OFDM QPSK	1	136			6.08			7.5
100		1	271			6.20			
100		135	1			6.20			
100		135	67			6.38			
100	DFT-s-OFDM QPSK	135	136			5.88			7.5
100		270	0			6.29			
100	DFT-s-OFDM 16QAM	1	1			6.03			7.5
100	DFT-s-OFDM 64QAM	1	1			5.46			6.5
100	DFT-s-OFDM 256QAM	1	1			4.44			5.5
100	CP-OFDM QPSK	1	1			6.15			7.5
100	CP-OFDM 16QAM	1	1			6.13			7.5
100	CP-OFDM 64QAM	1	1			5.23			6.5
100	CP-OFDM 256QAM	1	1			2.44			3.5
Channel				632668	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	(dBm)
80	DFT-s-OFDM QPSK	1	1	6.16	6.11	6.35	6.13	6.09	7.5
Channel				632000	632668	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	(dBm)
60	DFT-s-OFDM QPSK	1	1	6.23	6.14	6.25	6.07	5.99	7.5
Channel				631334	632334	633334	634332	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	(dBm)
40	DFT-s-OFDM QPSK	1	1	6.29	6.17	6.32	6.29	6.18	7.5
Channel				631000	632168	633334	634500	635666	Tune-up limit
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	(dBm)
30	DFT-s-OFDM QPSK	1	1	6.28	6.25	6.37	6.31	6.07	7.5
Channel				630668	632000	633334	634666	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	(dBm)
20	DFT-s-OFDM QPSK	1	1	6.44	6.13	6.46	6.14	6.03	7.5

n77(3700-3980MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	7.5
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	5.95	6.49	6.13	5.97	5.70	7.5
100		1	136	6.44	5.96	5.80	6.48	5.68	
100		1	271	6.41	5.60	6.40	6.53	6.49	
100		135	1	6.03	5.63	6.27	6.02	5.96	7.5
100		135	67	6.43	5.98	5.84	5.74	6.50	
100		135	136	5.85	5.99	5.75	5.98	6.39	
100		270	0	5.85	5.89	5.70	5.69	5.60	
100		1	1	6.49	6.53	6.37	6.51	6.46	7.5
100	DFT-s-OFDM QPSK	1	136	6.40	6.09	5.94	5.85	5.81	
100		1	271	5.44	5.81	5.65	6.01	5.94	
100		135	1	5.64	6.29	5.94	5.96	5.99	7.5
100		135	67	6.44	6.50	6.32	6.27	6.23	
100		135	136	5.83	6.35	5.94	6.13	6.39	
100		270	0	6.34	6.41	6.36	6.36	6.27	
100	DFT-s-OFDM 16QAM	1	1	4.54	4.72	4.68	4.39	4.12	5.5
100	DFT-s-OFDM 64QAM	1	1	3.20	3.63	3.28	3.17	2.77	4.5
100	DFT-s-OFDM 256QAM	1	1	0.92	1.24	0.96	0.83	0.57	2.5
100	CP-OFDM QPSK	1	1	4.18	4.19	4.15	4.14	3.76	5.5
100	CP-OFDM 16QAM	1	1	3.68	3.59	3.65	3.71	3.28	4.5
100	CP-OFDM 64QAM	1	1	2.55	2.58	2.50	1.75	1.86	3.5
100	CP-OFDM 256QAM	1	1	0.99	1.10	0.99	0.90	0.61	2
Channel				649334	652668	656000	659332	662666	7.5
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	6.12	6.49	6.08	6.05	6.03	7.5
Channel				648668	652334	656000	659666	663332	7.5
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	5.99	6.35	5.94	5.99	5.95	7.5
Channel				648000	652000	656000	660000	664000	7.5
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	6.15	6.43	5.86	5.52	5.89	7.5
Channel				647668	651834	656000	660166	664332	7.5
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	6.00	6.40	6.04	5.44	5.99	7.5
Channel				647334	651668	656000	660332	664666	7.5
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	5.97	6.29	6.12	6.25	6.02	7.5

n77(3700-3980MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	7.5
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	5.75	6.53	6.18	6.51	6.22	7.5
100		1	136	6.42	5.94	5.90	6.27	6.20	
100		1	271	6.22	6.01	6.00	6.19	6.10	
100		135	1	6.35	6.16	5.94	6.11	6.17	7.5
100		135	67	6.26	6.01	5.99	6.31	6.26	
100		135	136	6.15	5.81	5.68	6.10	6.27	
100		270	0	6.18	6.05	5.93	6.36	6.26	
100	DFT-s-OFDM QPSK	1	1	6.44	6.57	6.30	6.42	6.35	7.5
100		1	136	6.39	5.92	5.88	6.25	6.19	
100		1	271	6.23	5.90	6.41	6.31	6.19	
100		135	1	5.99	6.11	6.32	6.09	6.07	7.5
100		135	67	6.23	6.51	6.38	6.28	6.24	
100		135	136	6.11	5.80	6.02	6.29	6.27	
100		270	0	6.11	6.39	6.02	6.34	6.28	
100	DFT-s-OFDM 16QAM	1	1	5.56	5.70	5.55	5.48	5.40	6.5
100	DFT-s-OFDM 64QAM	1	1	5.52	5.65	5.57	5.34	5.35	6.5
100	DFT-s-OFDM 256QAM	1	1	3.97	4.62	4.41	4.16	4.06	5.5
100	CP-OFDM QPSK	1	1	5.64	5.52	5.59	5.32	5.54	6.5
100	CP-OFDM 16QAM	1	1	5.74	5.45	5.66	5.32	5.62	6.5
100	CP-OFDM 64QAM	1	1	4.77	5.06	4.75	4.50	4.80	5.5
100	CP-OFDM 256QAM	1	1	1.90	2.74	2.36	2.18	1.82	3.5
Channel				649334	652668	656000	659332	662666	7.5
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	5.98	6.41	5.90	6.06	6.07	7.5
Channel				648668	652334	656000	659666	663332	7.5
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	5.84	6.19	5.80	6.02	5.97	7.5
Channel				648000	652000	656000	660000	664000	7.5
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	6.12	6.46	5.87	6.46	6.23	7.5
Channel				647668	651834	656000	660166	664332	7.5
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	5.98	6.33	5.87	6.16	6.32	7.5
Channel				647334	651668	656000	660332	664666	7.5
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	5.92	6.24	5.94	6.14	6.16	7.5

n78(3450-3550MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			6.38			7.5
100		1	136			6.24			
100		1	271			6.21			
100		135	1			5.96			
100	DFT-s-OFDM PI/2 BPSK	135	67			6.13			7.5
100		135	136			5.92			
100		270	0			6.07			
100		1	1			6.51			
100	DFT-s-OFDM QPSK	1	136			6.42			7.5
100		1	271			6.15			
100		135	1			6.02			
100		135	67			6.46			
100	DFT-s-OFDM QPSK	135	136			6.13			7.5
100		270	0			6.43			
100	DFT-s-OFDM 16QAM	1	1			4.74			5.5
100	DFT-s-OFDM 64QAM	1	1			3.50			4.5
100	DFT-s-OFDM 256QAM	1	1			1.20			2.5
100	CP-OFDM QPSK	1	1			4.43			5.5
100	CP-OFDM 16QAM	1	1			3.91			4.5
100	CP-OFDM 64QAM	1	1			2.85			3.5
100	CP-OFDM 256QAM	1	1			0.78			2
Channel				633000	633166	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	6.10	6.08	6.33	6.07	6.08	7.5
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	6.18	6.11	6.45	6.07	6.02	7.5
Channel				632334	632834	633334	633832	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	5.96	6.02	6.46	6.04	6.09	7.5
Channel				632000	632666	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	5.99	5.91	6.39	5.95	6.13	7.5
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	5.93	5.89	6.36	5.90	5.88	7.5
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	6.28	6.23	6.47	6.23	6.10	7.5
Channel				631000	632166	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	6.21	6.10	6.36	6.12	6.02	7.5
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	6.16	6.03	6.34	6.01	6.09	7.5

n78(3450-3550MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			6.41			7.5
100		1	136			6.34			
100		1	271			6.29			
100		135	1			6.34			7.5
100	DFT-s-OFDM QPSK	135	67			6.39			
100		135	136			6.31			
100		270	0			6.35			7.5
100		1	1			6.45			
100	DFT-s-OFDM 16QAM	1	136			6.33			
100		1	271			6.30			7.5
100		135	1			6.34			
100		135	67			6.41			
100	DFT-s-OFDM 64QAM	135	136			6.32			7.5
100		270	0			6.32			
100		1	1			5.51			6.5
100	DFT-s-OFDM 16QAM	1	1			5.63			6.5
100	DFT-s-OFDM 64QAM	1	1			3.79			4.5
100	CP-OFDM QPSK	1	1			5.50			6.5
100	CP-OFDM 16QAM	1	1			5.61			6.5
100	CP-OFDM 64QAM	1	1			4.65			5.5
100	CP-OFDM 256QAM	1	1			1.82			2.5
Channel				633000	633166	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	6.05	6.02	6.25	5.95	6.04	7.5
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	6.12	6.06	6.36	6.05	6.01	7.5
Channel				632334	632834	633334	633832	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	6.15	6.07	6.36	6.00	6.06	7.5
Channel				632000	632666	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	6.16	6.09	6.22	5.97	5.98	7.5
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	6.05	6.04	6.25	6.06	6.05	7.5
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	6.24	6.11	6.39	6.31	6.29	7.5
Channel				631000	632166	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	6.16	6.18	6.27	6.10	6.18	7.5
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	6.11	6.22	6.26	6.14	6.20	7.5

n78(3700-3800MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			6.29			7.5
100		1	136			6.13			
100		1	271			6.24			
100		135	1			6.17			
100	DFT-s-OFDM PI/2 BPSK	135	67			6.21			7.5
100		135	136			6.18			
100		270	0			5.96			
100		1	1			6.41			
100	DFT-s-OFDM QPSK	1	136			6.14			7.5
100		1	271			6.03			
100		135	1			5.95			
100		135	67			6.38			
100	DFT-s-OFDM QPSK	135	136			6.15			7.5
100		270	0			6.29			
100	DFT-s-OFDM 16QAM	1	1			4.44			5.5
100	DFT-s-OFDM 64QAM	1	1			3.30			4.5
100	DFT-s-OFDM 256QAM	1	1			0.79			1.5
100	CP-OFDM QPSK	1	1			4.35			5.5
100	CP-OFDM 16QAM	1	1			3.43			4.5
100	CP-OFDM 64QAM	1	1			1.26			2.5
100	CP-OFDM 256QAM	1	1			0.75			2
Channel				649668	649834	650000	650166	650332	Tune-up limit
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	(dBm)
90	DFT-s-OFDM QPSK	1	1	5.85	5.88	6.26	6.03	6.06	7.5
Channel				649334	649666	650000	650334	650666	Tune-up limit
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	(dBm)
80	DFT-s-OFDM QPSK	1	1	5.92	6.07	6.27	6.21	6.25	7.5
Channel				649000	649500	650000	650500	651000	Tune-up limit
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	(dBm)
70	DFT-s-OFDM QPSK	1	1	5.95	6.12	6.21	6.18	6.02	7.5
Channel				648668	649334	650000	650666	651332	Tune-up limit
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	(dBm)
60	DFT-s-OFDM QPSK	1	1	5.78	6.11	6.23	5.87	5.75	7.5
Channel				648334	649166	650000	650834	651666	Tune-up limit
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	(dBm)
50	DFT-s-OFDM QPSK	1	1	5.95	6.07	6.28	6.12	6.02	7.5
Channel				648000	649000	650000	651000	652000	Tune-up limit
Frequency (MHz)				3720	3735	3750	3765	3780	(dBm)
40	DFT-s-OFDM QPSK	1	1	6.09	6.20	6.25	6.03	6.02	7.5
Channel				647668	648834	650000	651166	652332	Tune-up limit
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	(dBm)
30	DFT-s-OFDM QPSK	1	1	6.16	6.13	6.28	6.25	6.17	7.5
Channel				647334	648666	650000	651334	652666	Tune-up limit
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	(dBm)
20	DFT-s-OFDM QPSK	1	1	6.16	6.19	6.39	6.29	6.37	7.5

n78(3700-3800MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			6.28			7.5
100		1	136			6.14			
100		1	271			6.20			
100		135	1			6.20			7.5
100	DFT-s-OFDM QPSK	135	67			6.11			
100		135	136			6.08			
100		270	0			5.90			7.5
100		1	1			6.49			
100	DFT-s-OFDM 16QAM	1	136			6.18			7.5
100		1	271			6.28			
100		135	1			6.11			
100		135	67			6.40			7.5
100	DFT-s-OFDM 64QAM	135	136			6.24			
100		270	0			6.38			
100	DFT-s-OFDM 256QAM	1	1			5.56			6.5
100	DFT-s-OFDM 64QAM	1	1			5.62			6.5
100	DFT-s-OFDM 256QAM	1	1			3.78			4.5
100	CP-OFDM QPSK	1	1			5.51			6.5
100	CP-OFDM 16QAM	1	1			5.55			6.5
100	CP-OFDM 64QAM	1	1			4.53			5.5
100	CP-OFDM 256QAM	1	1			1.76			2.5
Channel				649668	649834	650000	650166	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	6.28	6.26	6.30	6.13	6.16	7.5
Channel				649334	649666	650000	650334	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	6.04	6.09	6.31	6.11	6.13	7.5
Channel				649000	649500	650000	650500	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	5.97	5.91	6.26	6.19	6.21	7.5
Channel				648668	649334	650000	650666	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	5.83	5.93	6.24	6.07	5.96	7.5
Channel				648334	649166	650000	650834	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	5.75	6.05	6.29	6.13	6.03	7.5
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	6.04	6.22	6.36	6.25	6.23	7.5
Channel				647668	648834	650000	651166	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	
30	DFT-s-OFDM QPSK	1	1	5.81	6.10	6.20	6.07	6.19	7.5
Channel				647334	648666	650000	651334	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	5.94	6.17	6.30	6.00	6.16	7.5

Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
55340	55340	55538	QPSK	1	0	0	0	1	0	12.20	13.00
55990	55891	56089	QPSK	1	0	0	0	1	0	12.17	13.00
56640	56442	56640	QPSK	1	0	0	0	1	0	11.94	13.00
55340	55340	55538	16QAM	1	0	0	0	1	0	11.29	12.00
55990	55891	56089	16QAM	1	0	0	0	1	0	11.02	12.00
56640	56442	56640	16QAM	1	0	0	0	1	0	10.92	12.00
55340	55340	55538	64QAM	1	0	0	0	1	0	10.25	11.00
55990	55891	56089	64QAM	1	0	0	0	1	0	10.27	11.00
56640	56442	56640	64QAM	1	0	0	0	1	0	10.06	11.00
55340	55340	55538	QPSK	50	0	0	0	1	0	11.25	12.00
55990	55891	56089	QPSK	50	0	0	0	1	0	11.05	12.00
56640	56442	56640	QPSK	50	0	0	0	1	0	10.95	12.00

CA_66B Ant 4											
Combination:15MHz+10MHz(75RB+25RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
132070	132047	132140	QPSK	1	0	0	0	1	0	16.04	17.00
132322	132398	132491	QPSK	1	0	0	0	1	0	15.82	17.00
132572	132549	132642	QPSK	1	0	0	0	1	0	16.16	17.00
132070	132047	132140	16QAM	1	0	0	0	1	0	14.90	16.00
132322	132398	132491	16QAM	1	0	0	0	1	0	14.95	16.00
132572	132549	132642	16QAM	1	0	0	0	1	0	15.27	16.00
132070	132047	132140	64QAM	1	0	0	0	1	0	13.88	15.00
132322	132398	132491	64QAM	1	0	0	0	1	0	14.20	15.00
132572	132549	132642	64QAM	1	0	0	0	1	0	14.22	15.00
132070	132047	132140	QPSK	36	0	0	0	1	0	13.95	16.00
132322	132398	132491	QPSK	36	0	0	0	1	0	14.04	16.00
132572	132549	132642	QPSK	36	0	0	0	1	0	14.20	16.00

CA_66C Ant 4											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
132070	132072	132270	QPSK	1	0	0	0	1	0	15.88	17.00
132322	132323	132521	QPSK	1	0	0	0	1	0	15.96	17.00
132572	132374	132572	QPSK	1	0	0	0	1	0	16.12	17.00
132070	132072	132270	16QAM	1	0	0	0	1	0	14.81	16.00
132322	132323	132521	16QAM	1	0	0	0	1	0	14.95	16.00
132572	132374	132572	16QAM	1	0	0	0	1	0	15.07	16.00
132070	132072	132270	64QAM	1	0	0	0	1	0	14.86	16.00
132322	132323	132521	64QAM	1	0	0	0	1	0	14.98	16.00
132572	132374	132572	64QAM	1	0	0	0	1	0	15.05	16.00
132070	132072	132270	QPSK	50	0	0	0	1	0	14.81	16.00
132322	132323	132521	QPSK	50	0	0	0	1	0	14.95	16.00
132572	132374	132572	QPSK	50	0	0	0	1	0	15.04	16.00

2.4GHz WLAN ANT 0

2.4GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11b 1Mbps	CH 1	2412	11.73	12.50	11.50	98.88
		CH 7	2442	9.80	10.50	11.50	
		CH 13	2472	11.31	12.00	11.50	
	802.11g 6Mbps	CH 1	2412	11.18	11.50	11.50	98.26
		CH 7	2442	9.44	9.50	11.50	
		CH 13	2472	10.91	12.00	11.50	
	802.11n-HT20 MCS0	CH 1	2412	11.03	12.00	11.50	98.05
		CH 7	2442	9.32	10.00	11.50	
		CH 13	2472	10.79	11.50	11.50	
	802.11n-HT40 MCS0	CH 3	2422	10.86	11.50	11.50	94.38
		CH 7	2442	10.37	11.00	11.50	
		CH 11	2462	10.83	11.50	11.50	

5GHz WLAN ANT 0

5.2GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 36	5180	6.63	7.50	7.00	98.54
		CH 44	5220	7.05	8.00	7.00	
		CH 48	5240	7.02	8.00	7.00	
	802.11n-HT20 MCS0	CH 36	5180	6.54	7.50	7.00	98.28
		CH 44	5220	6.92	7.00	7.00	
		CH 48	5240	6.88	7.00	7.00	
	802.11n-HT40 MCS0	CH 38	5190	6.97	7.00	7.00	96.59
		CH 46	5230	7.21	8.00	7.00	
	802.11ac-VHT20 MCS0	CH 36	5180	6.54	7.50	7.00	98.29
		CH 44	5220	6.91	8.00	7.00	
		CH 48	5240	6.88	8.00	7.00	
	802.11ac-VHT40 MCS0	CH 38	5190	6.95	8.00	7.00	96.59
		CH 46	5230	7.23	8.00	7.00	
	802.11ac-VHT80 MCS0	CH 42	5210	7.02	8.00	7.00	93.88

5GHz WLAN ANT 0

5.3GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 52	5260	7.41	8.50	7.00	98.07
		CH 60	5300	7.28	8.00	7.00	
		CH 64	5320	7.09	8.00	7.00	
	802.11n-HT20 MCS0	CH 52	5260	7.31	8.00	7.00	98.28
		CH 60	5300	7.16	8.00	7.00	
		CH 64	5320	6.94	8.00	7.00	
	802.11n-HT40 MCS0	CH 54	5270	7.50	8.50	7.00	96.59
		CH 62	5310	7.56	8.50	7.00	
	802.11ac-VHT20 MCS0	CH 52	5260	7.27	8.00	7.00	98.29
		CH 60	5300	7.17	8.00	7.00	
		CH 64	5320	6.93	8.00	7.00	
	802.11ac-VHT40 MCS0	CH 54	5270	7.49	8.50	7.00	96.59
		CH 62	5310	7.55	8.50	7.00	
	802.11ac-VHT80 MCS0	CH 58	5290	7.36	8.50	7.00	91.84

5GHzWLAN ANT 0

5.5GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 100	5500	8.99	10.00	8.00	98.54
		CH 120	5600	8.89	10.00	8.00	
		CH 144	5720	8.22	9.00	8.00	
	802.11n-HT20 MCS0	CH 100	5500	8.83	10.00	8.00	98.28
		CH 120	5600	8.72	10.00	8.00	
		CH 144	5720	8.13	9.00	8.00	
	802.11n-HT40 MCS0	CH 102	5510	9.22	10.00	8.00	96.59
		CH 126	5630	9.27	10.00	8.00	
		CH 142	5710	8.59	9.50	8.00	
	802.11ac-VHT20 MCS0	CH 100	5500	8.83	10.00	8.00	98.29
		CH 120	5600	8.76	10.00	8.00	
		CH 144	5720	8.13	9.00	8.00	
	802.11ac-VHT40 MCS0	CH 102	5510	9.23	10.00	8.00	95.51
		CH 126	5630	9.24	10.00	8.00	
		CH 142	5710	8.59	10.00	8.00	
	802.11ac-VHT80 MCS0	CH 106	5530	8.98	10.00	8.00	93.88
		CH 122	5610	9.01	10.00	8.00	
		CH 138	5690	8.59	9.50	8.00	

5GHz WLAN ANT 0

5.8GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 149	5745	11.39	12.00	11.50	98.54
		CH 157	5785	11.33	12.00	11.50	
		CH 165	5825	11.27	12.00	11.50	
	802.11n-HT20 MCS0	CH 149	5745	11.27	12.00	11.50	97.70
		CH 157	5785	11.23	12.00	11.50	
		CH 165	5825	11.16	12.00	11.50	
	802.11n-HT40 MCS0	CH 151	5755	11.81	12.50	11.50	96.59
		CH 159	5795	11.64	12.50	11.50	
	802.11ac-VHT20 MCS0	CH 149	5745	11.26	12.00	11.50	98.29
		CH 157	5785	11.23	12.00	11.50	
		CH 165	5825	11.17	12.00	11.50	
	802.11ac-VHT40 MCS0	CH 151	5755	11.74	12.50	11.50	96.59
		CH 159	5795	11.60	12.50	11.50	
	802.11ac-VHT80 MCS0	CH 155	5775	11.38	12.50	11.50	92.00

3	QPSK	8	7	7.55	7.57	7.68	°	
3	QPSK	15	0	7.54	7.61	7.54		
3	16QAM	1	0	8.01	7.90	7.84	9	
3	16QAM	1	8	7.94	7.96	7.61		
3	16QAM	1	14	7.90	7.83	7.95	8	
3	16QAM	8	0	6.82	6.80	6.71		
3	16QAM	8	4	6.68	6.81	6.67	9	
3	16QAM	8	7	6.53	6.72	6.62		
3	16QAM	15	0	6.72	6.64	6.46	8	
3	64QAM	1	0	7.72	7.75	7.50		
3	64QAM	1	8	7.65	7.83	7.59	9	
3	64QAM	1	14	7.47	7.68	7.65		
3	64QAM	8	0	6.78	6.85	6.62	8	
3	64QAM	8	4	6.79	6.80	6.76		
3	64QAM	8	7	6.58	6.68	6.65	9	
3	64QAM	15	0	6.57	6.79	6.68		
Channel				18607	18900	19193	Tune-up limit (dBm)	
Frequency (MHz)				1850.7	1880	1909.3		
1.4	QPSK	1	0	8.62	8.53	8.56	10	
1.4	QPSK	1	3	8.44	8.46	8.52		
1.4	QPSK	1	5	8.45	8.50	8.50	9	
1.4	QPSK	3	0	7.88	7.89	7.66		
1.4	QPSK	3	1	7.77	7.74	7.50	8	
1.4	QPSK	3	3	7.61	7.59	7.50		
1.4	QPSK	6	0	7.64	7.81	7.50	9	
1.4	16QAM	1	0	7.92	7.89	7.98		
1.4	16QAM	1	3	8.04	7.91	7.83	8	
1.4	16QAM	1	5	7.95	7.91	7.68		
1.4	16QAM	3	0	6.84	6.90	6.86	9	
1.4	16QAM	3	1	6.76	6.72	6.65		
1.4	16QAM	3	3	6.53	6.69	6.52	8	
1.4	16QAM	6	0	6.67	6.71	6.41		
1.4	64QAM	1	0	7.79	7.73	7.65	9	
1.4	64QAM	1	3	7.74	7.86	7.66		
1.4	64QAM	1	5	7.72	7.88	7.48	8	
1.4	64QAM	3	0	6.75	6.72	6.70		
1.4	64QAM	3	1	6.48	6.61	6.64	9	
1.4	64QAM	3	3	6.60	6.76	6.55		
1.4	64QAM	6	0	6.58	6.65	6.70	8	

3	QPSK	8	7	7.62	7.59	7.71	°	
3	QPSK	15	0	7.74	7.78	7.81		
3	16QAM	1	0	8.05	7.86	7.75	9	
3	16QAM	1	8	7.72	8.01	7.97		
3	16QAM	1	14	7.85	7.97	7.73	8	
3	16QAM	8	0	6.62	6.68	6.90		
3	16QAM	8	4	6.65	6.50	6.46	9	
3	16QAM	8	7	6.55	6.60	6.71		
3	16QAM	15	0	6.49	6.41	6.76	8	
3	64QAM	1	0	7.65	7.79	7.83		
3	64QAM	1	8	7.56	7.58	7.74	9	
3	64QAM	1	14	7.66	7.61	7.59		
3	64QAM	8	0	6.74	6.71	6.83	8	
3	64QAM	8	4	6.50	6.66	6.57		
3	64QAM	8	7	6.68	6.63	6.55	9	
3	64QAM	15	0	6.61	6.70	6.83		
Channel				19957	20175	20393	Tune-up limit (dBm)	
Frequency (MHz)				1710.7	1732.5	1754.3		
1.4	QPSK	1	0	8.48	8.50	8.56	10	
1.4	QPSK	1	3	8.29	8.46	8.43		
1.4	QPSK	1	5	8.26	8.28	8.53	9	
1.4	QPSK	3	0	7.86	7.85	7.79		
1.4	QPSK	3	1	7.57	7.83	7.57	8	
1.4	QPSK	3	3	7.64	7.77	7.63		
1.4	QPSK	6	0	7.72	7.82	7.62	9	
1.4	16QAM	1	0	7.89	7.81	7.84		
1.4	16QAM	1	3	7.73	7.87	7.68	8	
1.4	16QAM	1	5	7.65	7.82	7.99		
1.4	16QAM	3	0	6.67	6.83	6.85	9	
1.4	16QAM	3	1	6.50	6.80	6.68		
1.4	16QAM	3	3	6.56	6.66	6.42	8	
1.4	16QAM	6	0	6.51	6.39	6.76		
1.4	64QAM	1	0	7.89	7.72	7.86	9	
1.4	64QAM	1	3	7.70	7.73	7.68		
1.4	64QAM	1	5	7.74	7.86	7.69	8	
1.4	64QAM	3	0	6.79	6.62	6.86		
1.4	64QAM	3	1	6.64	6.64	6.83	9	
1.4	64QAM	3	3	6.68	6.54	6.65		
1.4	64QAM	6	0	6.55	6.52	6.53	8	

Band 7 (2600MHz Band) (dBm)(ANT 3) Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	7
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	5.71	5.74	5.86	
20	QPSK	1	49	5.62	5.64	5.82	6
20	QPSK	1	99	5.76	5.52	5.68	
20	QPSK	50	0	4.94	4.96	5.04	
20	QPSK	50	24	4.82	4.83	4.87	6
20	QPSK	50	50	4.83	4.69	4.92	
20	QPSK	100	0	4.94	4.90	4.99	
20	16QAM	1	0	5.32	5.13	5.21	5
20	16QAM	1	49	5.10	5.05	5.14	
20	16QAM	1	99	5.03	4.98	5.08	
20	16QAM	50	0	3.81	4.07	4.09	5
20	16QAM	50	24	3.74	4.02	3.77	
20	16QAM	50	50	3.82	3.99	3.86	
20	16QAM	100	0	3.88	3.92	3.99	6
20	64QAM	1	0	5.09	4.85	4.81	
20	64QAM	1	49	5.02	4.82	5.07	
20	64QAM	1	99	4.90	5.10	4.89	5
20	64QAM	50	0	4.03	3.96	3.98	
20	64QAM	50	24	3.71	3.88	4.07	
20	64QAM	50	50	3.72	3.93	3.75	5
20	64QAM	100	0	3.78	4.01	4.08	
Channel				20825	21100	21375	7
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	5.54	5.63	5.68	
15	QPSK	1	37	5.45	5.51	5.65	6
15	QPSK	1	74	5.46	5.39	5.58	
15	QPSK	36	0	4.74	4.83	4.76	
15	QPSK	36	20	4.55	4.70	4.69	6
15	QPSK	36	39	4.63	4.64	4.81	
15	QPSK	75	0	4.71	4.85	4.71	
15	16QAM	1	0	5.12	4.97	5.12	6
15	16QAM	1	37	4.83	5.11	4.86	
15	16QAM	1	74	4.89	4.82	4.77	
15	16QAM	36	0	3.92	3.84	3.69	5
15	16QAM	36	20	3.73	3.92	3.67	
15	16QAM	36	39	3.55	3.64	3.80	
15	16QAM	75	0	3.83	3.51	3.65	6
15	64QAM	1	0	4.79	4.96	4.66	
15	64QAM	1	37	4.90	4.62	4.75	
15	64QAM	1	74	4.80	4.85	4.84	5
15	64QAM	36	0	3.76	3.96	3.92	
15	64QAM	36	20	3.72	3.82	3.84	
15	64QAM	36	39	3.60	3.83	3.72	5
15	64QAM	75	0	3.56	3.68	3.64	
Channel				20800	21100	21400	7
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	5.54	5.61	5.69	
10	QPSK	1	25	5.46	5.58	5.65	6
10	QPSK	1	49	5.51	5.42	5.63	
10	QPSK	25	0	4.86	4.71	4.88	
10	QPSK	25	12	4.65	4.73	4.69	6
10	QPSK	25	25	4.72	4.66	4.89	
10	QPSK	50	0	4.80	4.67	4.59	
10	16QAM	1	0	5.05	5.06	5.11	6
10	16QAM	1	25	4.98	4.92	4.74	
10	16QAM	1	49	5.08	4.85	4.88	
10	16QAM	25	0	3.73	3.90	3.98	5
10	16QAM	25	12	3.73	3.67	3.60	
10	16QAM	25	25	3.74	3.81	3.79	
10	16QAM	50	0	3.68	3.66	3.79	6
10	64QAM	1	0	4.78	4.83	4.89	
10	64QAM	1	25	4.81	4.69	4.82	
10	64QAM	1	49	4.53	4.78	4.75	5
10	64QAM	25	0	3.95	3.87	3.86	
10	64QAM	25	12	3.85	3.87	3.71	
10	64QAM	25	25	3.63	3.72	3.61	5
10	64QAM	50	0	3.70	3.78	3.82	
Channel				20775	21100	21425	7
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	5.51	5.59	5.67	
5	QPSK	1	12	5.47	5.57	5.56	6
5	QPSK	1	24	5.40	5.52	5.59	
5	QPSK	12	0	4.75	4.82	4.90	
5	QPSK	12	7	4.68	4.68	4.89	6
5	QPSK	12	13	4.90	4.75	4.68	
5	QPSK	25	0	4.79	4.88	4.85	
5	16QAM	1	0	4.98	5.22	4.90	6
5	16QAM	1	12	4.93	5.15	4.86	
5	16QAM	1	24	4.97	5.07	4.92	
5	16QAM	12	0	3.74	3.91	3.87	5
5	16QAM	12	7	3.79	3.61	3.81	
5	16QAM	12	13	3.63	3.80	3.81	
5	16QAM	25	0	3.64	3.60	3.53	6
5	64QAM	1	0	4.74	4.99	4.80	
5	64QAM	1	12	4.78	4.90	4.91	
5	64QAM	1	24	4.57	4.98	4.86	5
5	64QAM	12	0	3.90	3.87	3.76	
5	64QAM	12	7	3.72	3.63	3.68	
5	64QAM	12	13	3.69	3.82	3.82	5
5	64QAM	25	0	3.85	3.89	3.81	

Band 25 (1900MHz Band) (dBm) (ANT 3)							
Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	10
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	8.80	8.78	8.71	9
20	QPSK	1	49	8.72	8.73	8.69	
20	QPSK	1	99	8.66	8.74	8.58	
20	QPSK	50	0	7.95	7.88	7.79	9
20	QPSK	50	24	7.66	7.89	7.82	
20	QPSK	50	50	7.87	7.75	7.89	
20	QPSK	100	0	7.89	7.77	7.78	9
20	16QAM	1	0	8.15	8.14	8.05	
20	16QAM	1	49	8.06	8.05	7.92	
20	16QAM	1	99	8.06	8.09	8.01	8
20	16QAM	50	0	7.07	6.90	6.91	
20	16QAM	50	24	6.70	6.85	6.81	
20	16QAM	50	50	6.71	7.06	6.97	9
20	16QAM	100	0	7.03	6.92	7.00	
20	64QAM	1	0	8.10	8.16	8.12	
20	64QAM	1	49	8.06	8.01	7.77	8
20	64QAM	1	99	7.91	7.89	7.79	
20	64QAM	50	0	7.03	7.18	6.87	
20	64QAM	50	24	7.02	6.92	6.98	9
20	64QAM	50	50	6.86	6.89	7.03	
20	64QAM	100	0	6.94	6.96	6.97	
Channel				26115	26365	26615	10
Frequency (MHz)				1857.5	1882.5	1907.5	
15	QPSK	1	0	8.76	8.72	8.57	9
15	QPSK	1	37	8.62	8.68	8.58	
15	QPSK	1	74	8.60	8.57	8.56	
15	QPSK	36	0	7.96	7.89	7.96	9
15	QPSK	36	20	7.84	7.86	7.86	
15	QPSK	36	39	7.96	7.79	7.93	
15	QPSK	75	0	7.88	7.88	7.76	9
15	16QAM	1	0	8.09	8.05	8.02	
15	16QAM	1	37	7.98	8.06	7.97	
15	16QAM	1	74	7.91	7.98	7.96	8
15	16QAM	36	0	7.07	6.84	6.96	
15	16QAM	36	20	6.75	6.98	6.87	
15	16QAM	36	39	6.84	7.05	6.76	9
15	16QAM	75	0	7.03	6.84	6.75	
15	64QAM	1	0	7.98	8.08	7.89	
15	64QAM	1	37	7.93	7.79	8.11	8
15	64QAM	1	74	7.86	8.00	7.86	
15	64QAM	36	0	7.04	6.87	6.83	
15	64QAM	36	20	6.91	7.01	6.91	8
15	64QAM	36	39	6.92	6.96	6.99	
15	64QAM	75	0	6.83	6.78	6.78	
Channel				26090	26365	26640	10
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	8.77	8.63	8.56	9
10	QPSK	1	25	8.68	8.71	8.51	
10	QPSK	1	49	8.57	8.53	8.58	
10	QPSK	25	0	7.88	7.87	8.03	9
10	QPSK	25	12	7.88	8.04	7.81	
10	QPSK	25	25	7.91	7.87	7.76	
10	QPSK	50	0	7.79	7.87	7.81	9
10	16QAM	1	0	8.19	8.21	8.07	
10	16QAM	1	25	8.10	8.04	7.93	
10	16QAM	1	49	8.09	8.14	7.96	8
10	16QAM	25	0	6.88	7.10	7.01	
10	16QAM	25	12	6.93	6.73	6.71	
10	16QAM	25	25	6.89	7.06	6.76	9
10	16QAM	50	0	7.02	6.77	6.89	
10	64QAM	1	0	7.91	8.13	8.04	
10	64QAM	1	25	7.99	7.89	8.06	8
10	64QAM	1	49	7.78	7.92	8.01	
10	64QAM	25	0	7.06	7.05	7.06	
10	64QAM	25	12	6.82	7.02	6.88	8
10	64QAM	25	25	6.71	7.06	6.76	
10	64QAM	50	0	6.97	6.74	7.09	
Channel				26065	26365	26665	10
Frequency (MHz)				1852.5	1882.5	1912.5	
5	QPSK	1	0	8.78	8.66	8.64	9
5	QPSK	1	12	8.71	8.55	8.67	
5	QPSK	1	24	8.75	8.64	8.62	
5	QPSK	12	0	8.12	7.93	8.03	9
5	QPSK	12	7	7.73	7.91	8.06	
5	QPSK	12	13	7.93	7.88	7.84	
5	QPSK	25	0	7.77	8.03	7.85	9
5	16QAM	1	0	8.20	8.11	8.12	
5	16QAM	1	12	8.02	8.17	7.90	
5	16QAM	1	24	8.15	8.09	8.02	8
5	16QAM	12	0	6.96	7.16	6.89	
5	16QAM	12	7	6.90	7.01	6.84	
5	16QAM	12	13	6.78	6.87	6.99	9
5	16QAM	25	0	7.01	6.75	6.96	
5	64QAM	1	0	8.00	7.89	8.04	
5	64QAM	1	12	7.73	7.99	7.91	8
5	64QAM	1	24	8.02	8.02	7.98	
5	64QAM	12	0	6.79	6.87	7.01	
5	64QAM	12	7	6.94	7.01	6.86	8
5	64QAM	12	13	6.66	6.90	6.88	
5	64QAM	25	0	6.86	6.77	6.95	
Channel				26055	26365	26675	10
Frequency (MHz)				1851.5	1882.5	1913.5	
3	QPSK	1	0	8.76	8.70	8.63	10
3	QPSK	1	8	8.60	8.60	8.59	
3	QPSK	1	14	8.54	8.53	8.56	
3	QPSK	8	0	8.07	7.95	8.07	9
3	QPSK	8	4	7.84	7.88	8.10	

3	QPSK	8	7	7.96	7.80	8.07	9
3	QPSK	15	0	8.00	7.86	7.98	
3	16QAM	1	0	8.28	8.25	8.06	
3	16QAM	1	8	8.08	8.19	8.08	8
3	16QAM	1	14	7.94	8.29	8.13	
3	16QAM	8	0	6.89	6.94	6.96	
3	16QAM	8	4	7.00	6.89	6.82	9
3	16QAM	8	7	6.80	7.04	6.85	
3	16QAM	15	0	6.83	6.84	6.89	
3	64QAM	1	0	8.07	7.91	8.06	8
3	64QAM	1	8	7.89	7.85	7.96	
3	64QAM	1	14	7.94	7.93	7.76	
3	64QAM	8	0	7.08	7.14	7.15	9
3	64QAM	8	4	7.03	7.08	6.79	
3	64QAM	8	7	6.69	6.99	6.88	
3	64QAM	15	0	6.82	6.89	7.07	8
Channel				28047	28365	28683	
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	8.74	8.63	8.61	10
1.4	QPSK	1	3	8.72	8.59	8.58	
1.4	QPSK	1	5	8.65	8.53	8.60	
1.4	QPSK	3	0	8.02	7.83	8.02	9
1.4	QPSK	3	1	7.87	7.77	7.83	
1.4	QPSK	3	3	7.82	7.78	7.73	
1.4	QPSK	6	0	7.89	7.82	7.93	8
1.4	16QAM	1	0	8.34	8.04	8.27	
1.4	16QAM	1	3	7.97	8.24	8.06	
1.4	16QAM	1	5	8.16	8.26	8.16	7
1.4	16QAM	3	0	6.87	6.96	6.88	
1.4	16QAM	3	1	6.84	6.99	6.73	
1.4	16QAM	3	3	6.66	6.89	6.68	9
1.4	16QAM	6	0	6.83	6.79	6.96	
1.4	64QAM	1	0	7.96	8.08	7.96	
1.4	64QAM	1	3	7.79	8.04	8.04	8
1.4	64QAM	1	5	7.69	7.83	7.94	
1.4	64QAM	3	0	6.86	6.93	7.01	
1.4	64QAM	3	1	6.99	7.08	6.94	9
1.4	64QAM	3	3	6.88	6.97	6.81	
1.4	64QAM	6	0	6.98	6.94	7.06	

Band 30 (dBm) (ANT 3)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			8
10	QPSK	1	0		6.61		
10	QPSK	1	25		6.57		
10	QPSK	1	49		6.52		
10	QPSK	25	0		5.67		7
10	QPSK	25	12		5.71		
10	QPSK	25	25		5.65		
10	QPSK	50	0		5.66		
10	16QAM	1	0		5.92		7
10	16QAM	1	25		5.74		
10	16QAM	1	49		5.71		
10	16QAM	25	0		4.68		6
10	16QAM	25	12		4.64		
10	16QAM	25	25		4.74		
10	16QAM	50	0		4.62		
10	64QAM	1	0		5.76		7
10	64QAM	1	25		5.68		
10	64QAM	1	49		5.60		
10	64QAM	25	0		4.62		
10	64QAM	25	12		4.59		6
10	64QAM	25	25		4.55		
10	64QAM	50	0		4.68		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	6.48	6.59	6.56	8
5	QPSK	1	12	6.36	6.50	6.50	
5	QPSK	1	24	6.42	6.47	6.42	
5	QPSK	12	0	5.63	5.79	5.73	
5	QPSK	12	7	5.50	5.61	5.59	7
5	QPSK	12	13	5.72	5.63	5.61	
5	QPSK	25	0	5.74	5.60	5.48	
5	16QAM	1	0	5.85	5.90	5.70	
5	16QAM	1	12	5.99	5.71	5.63	7
5	16QAM	1	24	5.75	5.92	5.76	
5	16QAM	12	0	4.57	4.83	4.68	
5	16QAM	12	7	4.61	4.60	4.69	6
5	16QAM	12	13	4.50	4.57	4.50	
5	16QAM	25	0	4.75	4.44	4.59	
5	64QAM	1	0	5.63	5.68	5.58	
5	64QAM	1	12	5.45	5.58	5.58	7
5	64QAM	1	24	5.61	5.61	5.65	
5	64QAM	12	0	4.54	4.78	4.71	
5	64QAM	12	7	4.48	4.53	4.74	
5	64QAM	12	13	4.62	4.57	4.74	6
5	64QAM	25	0	4.52	4.75	4.69	

Band 66 (dBm) (ANT 3)							
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	10
20	QPSK	1	0	8.71	8.76	8.94	
20	QPSK	1	49	8.61	8.68	8.81	
20	QPSK	1	99	8.68	8.73	8.83	
20	QPSK	50	0	7.79	7.84	7.90	9
20	QPSK	50	24	7.71	7.71	7.86	
20	QPSK	50	50	7.75	7.73	7.63	
20	QPSK	100	0	7.74	7.64	7.81	
20	16QAM	1	0	8.10	8.14	7.88	9
20	16QAM	1	49	8.14	8.01	8.02	
20	16QAM	1	99	7.78	7.91	7.91	
20	16QAM	50	0	6.79	6.86	6.86	
20	16QAM	50	24	6.52	6.64	6.74	8
20	16QAM	50	50	6.71	6.65	6.74	
20	16QAM	100	0	6.73	6.74	6.65	
20	64QAM	1	0	7.68	7.85	7.95	
20	64QAM	1	49	7.60	7.94	7.63	9
20	64QAM	1	99	7.76	7.71	7.87	
20	64QAM	50	0	6.84	6.93	6.72	
20	64QAM	50	24	6.80	6.64	6.76	
20	64QAM	50	50	6.81	6.79	6.61	8
20	64QAM	100	0	6.76	6.73	6.72	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	8.60	8.58	8.78	10
15	QPSK	1	37	8.44	8.62	8.63	
15	QPSK	1	74	8.53	8.55	8.74	
15	QPSK	36	0	7.75	7.79	7.77	
15	QPSK	36	20	7.73	7.67	7.67	9
15	QPSK	36	39	7.80	7.72	7.57	
15	QPSK	75	0	7.65	7.92	7.94	
15	16QAM	1	0	7.98	7.96	7.96	
15	16QAM	1	37	8.12	7.96	8.08	9
15	16QAM	1	74	7.98	8.01	8.08	
15	16QAM	36	0	6.75	6.71	6.92	
15	16QAM	36	20	6.60	6.68	6.58	
15	16QAM	36	39	6.69	6.77	6.78	8
15	16QAM	75	0	6.73	6.62	6.65	
15	64QAM	1	0	7.94	7.87	7.71	
15	64QAM	1	37	7.83	7.92	7.92	
15	64QAM	1	74	7.85	7.85	7.62	9
15	64QAM	36	0	6.86	6.85	6.79	
15	64QAM	36	20	6.59	6.89	6.65	
15	64QAM	36	39	6.52	6.88	6.74	
15	64QAM	75	0	6.76	6.71	6.77	8
15	64QAM	75	0	6.76	6.71	6.77	
15	64QAM	75	0	6.76	6.71	6.77	
15	64QAM	75	0	6.76	6.71	6.77	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	8.57	8.66	8.75	10
10	QPSK	1	25	8.43	8.65	8.62	
10	QPSK	1	49	8.48	8.46	8.64	
10	QPSK	25	0	7.94	7.78	7.74	
10	QPSK	25	12	7.63	7.75	7.74	9
10	QPSK	25	25	7.82	7.82	7.74	
10	QPSK	50	0	7.95	7.73	7.72	
10	16QAM	1	0	8.17	8.08	8.01	
10	16QAM	1	25	7.90	7.94	8.06	9
10	16QAM	1	49	8.04	7.90	7.80	
10	16QAM	25	0	6.81	6.68	6.72	
10	16QAM	25	12	6.69	6.70	6.64	
10	16QAM	25	25	6.72	6.87	6.54	8
10	16QAM	50	0	6.58	6.72	6.81	
10	64QAM	1	0	7.97	7.79	7.77	
10	64QAM	1	25	7.59	7.86	7.96	
10	64QAM	1	49	7.66	7.90	7.63	9
10	64QAM	25	0	6.82	6.68	6.74	
10	64QAM	25	12	6.70	6.66	6.61	
10	64QAM	25	25	6.70	6.90	6.65	
10	64QAM	50	0	6.76	6.90	6.69	8
10	64QAM	50	0	6.76	6.90	6.69	
10	64QAM	50	0	6.76	6.90	6.69	
10	64QAM	50	0	6.76	6.90	6.69	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	8.57	8.56	8.74	10
5	QPSK	1	12	8.38	8.49	8.61	
5	QPSK	1	24	8.38	8.45	8.48	
5	QPSK	12	0	7.87	7.83	7.78	
5	QPSK	12	7	7.56	7.87	7.75	9
5	QPSK	12	13	7.89	7.62	7.64	
5	QPSK	25	0	7.83	7.65	7.90	
5	16QAM	1	0	7.94	7.92	7.98	
5	16QAM	1	12	7.92	7.90	7.76	9
5	16QAM	1	24	7.95	7.88	7.86	
5	16QAM	12	0	6.87	6.83	6.79	
5	16QAM	12	7	6.82	6.77	6.63	
5	16QAM	12	13	6.65	6.73	6.73	8
5	16QAM	25	0	6.85	6.64	6.56	
5	64QAM	1	0	7.83	7.79	7.98	
5	64QAM	1	12	7.86	7.76	7.97	
5	64QAM	1	24	7.76	7.94	7.79	9
5	64QAM	12	0	6.65	6.92	6.91	
5	64QAM	12	7	6.58	6.64	6.60	
5	64QAM	12	13	6.73	6.69	6.58	
5	64QAM	25	0	6.90	6.79	6.80	8
5	64QAM	25	0	6.90	6.79	6.80	
5	64QAM	25	0	6.90	6.79	6.80	
5	64QAM	25	0	6.90	6.79	6.80	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	8.59	8.60	8.72	10
3	QPSK	1	8	8.50	8.48	8.67	
3	QPSK	1	14	8.48	8.53	8.65	
3	QPSK	8	0	7.82	7.91	7.95	
3	QPSK	8	4	7.76	7.86	7.72	9
3	QPSK	8	4	7.76	7.86	7.72	
3	QPSK	8	4	7.76	7.86	7.72	
3	QPSK	8	4	7.76	7.86	7.72	

3	QPSK	8	7	7.87	7.73	7.88	9
3	QPSK	15	0	7.88	7.76	7.62	
3	16QAM	1	0	7.84	8.08	8.05	
3	16QAM	1	8	7.86	8.03	8.00	8
3	16QAM	1	14	7.92	8.06	7.78	
3	16QAM	8	0	6.87	6.92	6.95	
3	16QAM	8	4	6.68	6.83	6.80	9
3	16QAM	8	7	6.70	6.81	6.78	
3	16QAM	15	0	6.61	6.84	6.77	
3	64QAM	1	0	8.00	7.78	7.79	8
3	64QAM	1	8	7.91	7.79	7.95	
3	64QAM	1	14	7.61	7.98	7.77	
3	64QAM	8	0	6.82	6.84	6.79	9
3	64QAM	8	4	6.79	6.78	6.89	
3	64QAM	8	7	6.56	6.85	6.67	
3	64QAM	15	0	6.87	6.85	6.90	8
Channel				131979	132322	132695	
Frequency (MHz)				1710.7	1745	1779.3	Tune-up limit (dBm)
1.4	QPSK	1	0	8.66	8.62	8.71	10
1.4	QPSK	1	3	8.66	8.66	8.53	
1.4	QPSK	1	5	8.51	8.60	8.62	
1.4	QPSK	3	0	7.97	7.84	7.69	9
1.4	QPSK	3	1	7.73	7.89	7.88	
1.4	QPSK	3	3	7.72	7.85	7.85	
1.4	QPSK	6	0	7.80	7.85	7.86	8
1.4	16QAM	1	0	8.07	7.96	7.87	
1.4	16QAM	1	3	8.10	8.14	7.86	
1.4	16QAM	1	5	7.89	7.94	8.06	9
1.4	16QAM	3	0	6.90	6.85	6.96	
1.4	16QAM	3	1	6.64	6.81	6.72	
1.4	16QAM	3	3	6.70	6.68	6.79	8
1.4	16QAM	6	0	6.65	6.50	6.82	
1.4	64QAM	1	0	7.98	8.01	7.72	
1.4	64QAM	1	3	7.71	7.70	7.64	9
1.4	64QAM	1	5	7.81	7.96	7.58	
1.4	64QAM	3	0	6.81	7.02	6.90	
1.4	64QAM	3	1	6.84	6.82	6.62	8
1.4	64QAM	3	3	6.78	6.92	6.89	
1.4	64QAM	6	0	6.67	6.75	6.81	

Band 38(only on channel required) (dBm) (ANT 3)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	5.80	5.82	5.77	7
20	QPSK	1	49	5.79	5.71	5.70	
20	QPSK	1	99	5.68	5.64	5.72	
20	QPSK	50	0	4.98	5.04	5.03	6
20	QPSK	50	24	4.76	4.98	5.02	
20	QPSK	50	50	4.99	4.77	4.73	
20	QPSK	100	0	4.79	4.85	4.78	6
20	16QAM	1	0	5.29	5.36	5.01	
20	16QAM	1	49	5.02	5.02	5.12	
20	16QAM	1	99	5.09	5.14	5.16	5
20	16QAM	50	0	4.05	4.04	3.87	
20	16QAM	50	24	3.76	4.04	3.83	
20	16QAM	50	50	3.80	3.74	3.85	6
20	16QAM	100	0	3.83	3.72	3.68	
20	64QAM	1	0	4.97	4.98	5.02	
20	64QAM	1	49	4.87	4.89	4.97	5
20	64QAM	1	99	4.97	5.02	4.71	
20	64QAM	50	0	3.94	4.16	4.10	
20	64QAM	50	24	3.96	4.12	3.86	5
20	64QAM	50	50	3.82	3.98	4.04	
20	64QAM	100	0	3.71	3.97	3.88	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	5.69	5.80	5.73	7
15	QPSK	1	37	5.71	5.74	5.62	
15	QPSK	1	74	5.72	5.56	5.56	
15	QPSK	36	0	4.84	5.06	5.05	6
15	QPSK	36	20	4.97	4.79	4.94	
15	QPSK	36	39	4.77	5.00	4.99	
15	QPSK	75	0	4.99	5.12	5.00	6
15	16QAM	1	0	5.00	5.08	5.16	
15	16QAM	1	37	4.98	5.12	4.96	
15	16QAM	1	74	4.91	5.17	5.24	5
15	16QAM	36	0	4.01	4.00	3.85	
15	16QAM	36	20	3.69	4.02	3.97	
15	16QAM	36	39	3.75	3.85	3.94	6
15	16QAM	75	0	3.97	3.80	3.70	
15	64QAM	1	0	4.81	4.93	4.90	
15	64QAM	1	37	4.90	5.09	5.11	5
15	64QAM	1	74	4.81	4.98	4.90	
15	64QAM	36	0	3.86	3.83	3.92	
15	64QAM	36	20	3.92	3.93	4.02	6
15	64QAM	36	39	3.66	3.85	3.75	
15	64QAM	75	0	4.01	3.89	3.77	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	5.73	5.77	5.67	7
10	QPSK	1	25	5.62	5.68	5.72	
10	QPSK	1	49	5.69	5.74	5.74	
10	QPSK	25	0	5.04	5.04	4.83	6
10	QPSK	25	12	4.75	4.77	4.87	
10	QPSK	25	25	4.76	5.03	4.72	
10	QPSK	50	0	4.78	4.88	5.04	6
10	16QAM	1	0	5.25	5.14	5.16	
10	16QAM	1	25	4.99	5.16	5.07	
10	16QAM	1	49	5.25	5.27	5.10	5
10	16QAM	25	0	3.94	4.07	4.05	
10	16QAM	25	12	3.96	3.87	3.73	
10	16QAM	25	25	3.77	3.75	3.97	24
10	16QAM	50	0	3.75	3.85	3.85	
10	64QAM	1	0	4.90	5.03	5.02	
10	64QAM	1	25	4.73	4.82	5.06	23
10	64QAM	1	49	4.97	5.09	4.81	
10	64QAM	25	0	4.13	3.94	4.12	
10	64QAM	25	12	3.99	3.79	3.84	5
10	64QAM	25	25	3.81	3.79	4.06	
10	64QAM	50	0	3.99	3.86	3.99	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	5.76	5.79	5.77	7
5	QPSK	1	12	5.75	5.76	5.75	
5	QPSK	1	24	5.60	5.73	5.65	
5	QPSK	12	0	4.97	4.97	4.89	6
5	QPSK	12	7	4.95	5.07	5.09	
5	QPSK	12	13	5.07	4.95	4.98	
5	QPSK	25	0	4.91	4.89	4.99	6
5	16QAM	1	0	5.17	5.32	5.19	
5	16QAM	1	12	5.09	5.13	5.12	
5	16QAM	1	24	5.19	5.20	5.04	5
5	16QAM	12	0	4.08	3.86	4.09	
5	16QAM	12	7	3.96	3.99	3.78	
5	16QAM	12	13	3.80	3.77	3.81	6
5	16QAM	25	0	3.99	3.71	3.84	
5	64QAM	1	0	4.89	5.11	4.88	
5	64QAM	1	12	4.85	5.10	5.02	5
5	64QAM	1	24	4.79	4.82	4.92	
5	64QAM	12	0	3.96	4.04	4.09	
5	64QAM	12	7	3.87	4.09	3.97	5
5	64QAM	12	13	3.86	3.76	3.87	
5	64QAM	25	0	3.72	3.76	4.03	

Band 41 For FCC (2496~2690MHz) (dBm) (ANT 3)									
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	Tune-up limit (dBm)
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	5.59	5.76	5.88	5.85	5.70	7
20	QPSK	1	49	5.54	5.76	5.85	5.81	5.60	
20	QPSK	1	99	5.51	5.59	5.84	5.73	5.55	
20	QPSK	50	0	4.82	5.02	5.13	5.10	5.00	6
20	QPSK	50	24	4.73	4.77	4.86	5.07	4.85	
20	QPSK	50	50	4.71	4.88	4.95	4.85	4.93	
20	QPSK	100	0	4.75	4.85	5.00	4.93	4.87	6
20	16QAM	1	0	5.06	5.11	5.17	5.28	5.22	
20	16QAM	1	49	4.93	4.91	5.31	5.16	4.90	
20	16QAM	1	99	4.88	5.13	5.19	5.10	4.90	5
20	16QAM	50	0	3.88	3.79	4.15	4.10	3.90	
20	16QAM	50	24	3.75	3.76	4.09	4.02	3.90	
20	16QAM	50	50	3.82	3.73	4.08	3.84	3.76	6
20	16QAM	100	0	3.82	3.81	3.95	4.01	3.83	
20	64QAM	1	0	4.63	4.96	5.05	4.98	4.78	
20	64QAM	1	49	4.71	4.67	4.94	4.90	4.94	5
20	64QAM	1	99	4.63	4.88	4.89	4.82	4.66	
20	64QAM	50	0	3.72	3.69	4.14	4.04	3.90	
20	64QAM	50	24	3.70	3.88	4.00	3.91	3.81	5
20	64QAM	50	50	3.75	3.75	3.84	3.82	3.77	
20	64QAM	100	0	3.77	3.78	4.08	4.00	3.88	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	5.54	5.72	5.86	5.84	5.58	7
15	QPSK	1	37	5.46	5.58	5.82	5.78	5.55	
15	QPSK	1	74	5.51	5.39	5.79	5.73	5.48	
15	QPSK	36	0	4.83	4.76	5.00	5.15	4.77	6
15	QPSK	36	20	4.81	4.83	4.87	5.08	4.80	
15	QPSK	36	39	4.69	4.67	5.00	5.06	4.67	
15	QPSK	75	0	4.87	4.86	5.14	5.06	4.71	6
15	16QAM	1	0	4.92	5.05	5.29	5.25	4.92	
15	16QAM	1	37	4.97	5.02	5.19	5.15	5.05	5
15	16QAM	1	74	4.91	5.08	5.17	5.07	5.02	
15	16QAM	36	0	3.84	4.00	4.20	4.19	4.04	
15	16QAM	36	20	3.78	3.88	3.89	3.99	3.88	6
15	16QAM	36	39	3.72	3.84	4.11	3.78	3.79	
15	16QAM	75	0	3.66	3.86	3.77	3.87	3.90	
15	64QAM	1	0	4.76	5.00	5.11	5.03	5.05	5
15	64QAM	1	37	4.82	4.94	5.07	4.99	4.94	
15	64QAM	1	74	4.69	4.86	4.99	4.76	4.68	
15	64QAM	36	0	3.87	3.97	4.07	4.08	3.70	6
15	64QAM	36	20	3.84	3.93	3.94	4.01	3.75	
15	64QAM	36	39	3.71	3.73	4.01	3.94	3.63	
15	64QAM	75	0	3.84	3.72	3.89	4.13	3.66	5
Channel				39700	40160	40620	41080	41540	
Frequency (MHz)				2501	2547	2593	2639	2685	Tune-up limit (dBm)
10	QPSK	1	0	5.67	5.76	5.85	5.84	5.60	7
10	QPSK	1	25	5.36	5.73	5.76	5.64	5.44	
10	QPSK	1	49	5.51	5.36	5.79	5.80	5.70	
10	QPSK	25	0	4.72	5.00	5.19	5.18	4.93	6
10	QPSK	25	12	4.72	4.71	4.90	5.12	4.83	
10	QPSK	25	25	4.71	4.91	4.92	4.87	4.75	
10	QPSK	50	0	4.85	4.90	5.03	5.01	4.83	6
10	16QAM	1	0	5.04	5.13	5.26	5.18	4.96	
10	16QAM	1	25	5.10	5.10	5.21	5.08	4.86	
10	16QAM	1	49	4.93	5.03	5.09	5.00	4.98	5
10	16QAM	25	0	3.95	4.01	4.13	4.04	3.86	
10	16QAM	25	12	3.71	3.72	4.10	3.89	3.71	
10	16QAM	25	25	3.74	3.66	3.80	3.89	3.72	6
10	16QAM	50	0	3.85	3.80	3.99	3.89	3.83	
10	64QAM	1	0	4.80	4.81	5.19	5.18	4.80	
10	64QAM	1	25	4.83	4.74	5.09	5.11	4.77	5
10	64QAM	1	49	4.70	4.80	5.02	4.88	4.72	
10	64QAM	25	0	3.75	4.00	4.06	4.08	3.84	
10	64QAM	25	12	3.81	3.80	4.18	3.91	3.76	6
10	64QAM	25	25	3.69	3.71	4.03	3.88	3.77	
10	64QAM	50	0	3.65	3.69	3.89	4.05	3.65	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	5.53	5.75	5.83	5.81	5.69	7
5	QPSK	1	12	5.52	5.50	5.68	5.77	5.63	
5	QPSK	1	24	5.50	5.47	5.64	5.65	5.43	
5	QPSK	12	0	4.93	4.93	5.11	5.13	5.01	6
5	QPSK	12	7	4.66	4.89	4.99	5.15	4.87	
5	QPSK	12	13	4.71	4.72	5.04	5.10	4.79	
5	QPSK	25	0	4.61	4.88	4.94	5.06	4.84	5
5	16QAM	1	0	4.81	5.09	5.20	5.14	4.89	
5	16QAM	1	12	4.79	5.18	5.12	5.05	4.90	
5	16QAM	1	24	4.84	5.14	5.15	4.99	4.82	6
5	16QAM	12	7	3.93	4.02	4.16	4.08	3.74	
5	16QAM	12	7	3.81	3.95	3.90	4.04	3.74	
5	16QAM	12	13	3.75	3.79	3.94	3.77	3.80	5
5	16QAM	25	0	3.74	3.65	4.07	3.94	3.85	
5	64QAM	1	0	4.82	4.90	5.10	4.96	4.96	
5	64QAM	1	12	4.62	4.81	5.05	5.04	4.78	6
5	64QAM	1	24	4.83	4.77	5.09	4.95	4.79	
5	64QAM	12	0	3.60	3.91	4.01	3.62	3.78	
5	64QAM	12	7	3.57	3.72	4.02	3.93	3.63	5
5	64QAM	12	13	3.69	3.74	3.94	3.92	3.62	
5	64QAM	25	0	3.55	3.92	3.89	3.90	3.95	

Band 41 HPUE For FCC (2496~2690MHz) (dBm) (ANT 3)

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	7
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	5.86	5.94	5.98	5.93	5.81	7
20	QPSK	1	49	5.73	5.82	5.76	5.80	5.54	
20	QPSK	1	99	5.77	5.78	5.63	5.85	5.73	
20	QPSK	50	0	4.95	5.01	5.05	5.01	4.99	6
20	QPSK	50	24	4.79	4.88	4.89	4.96	4.88	
20	QPSK	50	50	4.87	4.88	4.83	4.85	4.81	
20	QPSK	100	0	4.90	4.99	5.04	4.93	4.85	6
20	16QAM	1	0	5.12	5.27	5.32	5.14	5.07	
20	16QAM	1	49	5.13	5.15	5.23	5.19	5.06	
20	16QAM	1	99	5.01	5.08	5.27	5.16	4.89	5
20	16QAM	50	0	4.14	4.17	4.20	3.95	4.06	
20	16QAM	50	24	3.91	4.02	4.07	3.80	3.74	
20	16QAM	50	50	3.73	3.87	3.85	4.03	3.80	6
20	16QAM	100	0	3.96	3.98	4.01	4.11	3.84	
20	64QAM	1	0	5.08	5.11	5.05	5.09	4.90	
20	64QAM	1	49	5.07	5.05	5.15	4.90	4.75	5
20	64QAM	1	99	4.87	4.95	5.07	4.87	4.75	
20	64QAM	50	0	4.06	4.04	4.00	3.95	3.85	
20	64QAM	50	24	3.99	3.93	3.98	3.93	3.75	6
20	64QAM	50	50	4.00	3.90	3.91	3.82	3.87	
20	64QAM	100	0	4.01	3.80	4.04	4.03	3.98	
Channel				39725	40173	40620	41068	41515	7
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	
15	QPSK	1	0	5.84	5.91	5.95	5.83	5.75	7
15	QPSK	1	37	5.80	5.66	5.70	5.80	5.68	
15	QPSK	1	74	5.69	5.60	5.84	5.72	5.61	
15	QPSK	36	0	5.06	4.96	5.11	5.04	4.90	6
15	QPSK	36	20	4.98	4.78	4.96	4.97	4.69	
15	QPSK	36	39	4.80	4.85	4.92	5.01	4.83	
15	QPSK	75	0	4.90	4.79	4.96	5.01	4.81	6
15	16QAM	1	0	5.34	5.09	5.38	5.09	5.06	
15	16QAM	1	37	5.06	5.29	5.33	5.19	4.99	
15	16QAM	1	74	5.03	4.94	5.19	5.30	5.00	5
15	16QAM	36	0	3.93	3.98	4.17	4.01	3.91	
15	16QAM	36	20	4.03	3.81	4.14	3.80	3.90	
15	16QAM	36	39	3.84	3.78	4.16	3.75	3.72	6
15	16QAM	75	0	4.09	3.91	4.02	3.92	3.98	
15	64QAM	1	0	4.95	5.05	5.12	5.13	4.76	
15	64QAM	1	37	5.01	4.96	4.94	5.09	4.88	5
15	64QAM	1	74	4.95	4.72	5.07	4.86	4.70	
15	64QAM	36	0	4.05	4.06	4.14	3.96	3.92	
15	64QAM	36	20	3.97	3.74	4.08	4.08	3.71	6
15	64QAM	36	39	3.97	3.72	4.05	4.10	3.88	
15	64QAM	75	0	4.06	4.08	4.03	3.96	3.96	
Channel				39700	40160	40620	41080	41540	7
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	5.73	5.94	5.96	5.87	5.86	7
10	QPSK	1	25	5.85	5.71	5.70	5.80	5.58	
10	QPSK	1	49	5.61	5.76	5.75	5.69	5.62	
10	QPSK	25	0	5.16	5.00	5.04	5.01	4.99	6
10	QPSK	25	12	4.83	4.99	4.97	5.15	4.94	
10	QPSK	25	25	5.06	4.80	5.04	4.93	4.77	
10	QPSK	50	0	4.85	4.98	4.88	4.88	4.78	6
10	16QAM	1	0	5.29	5.26	5.26	5.13	5.15	
10	16QAM	1	25	5.31	5.23	5.15	5.09	5.22	
10	16QAM	1	49	5.13	5.11	5.28	5.10	4.93	5
10	16QAM	25	0	3.99	3.91	4.18	4.07	3.86	
10	16QAM	25	12	3.69	3.90	3.97	3.80	3.78	
10	16QAM	25	25	3.74	3.91	4.01	3.90	3.83	6
10	16QAM	50	0	3.95	4.07	3.80	4.09	3.82	
10	64QAM	1	0	5.17	4.88	5.18	4.96	5.06	
10	64QAM	1	25	4.94	4.77	4.88	4.89	4.95	5
10	64QAM	1	49	4.92	4.94	4.93	4.97	4.85	
10	64QAM	25	0	3.87	4.14	4.15	4.03	3.84	
10	64QAM	25	12	4.06	3.97	4.15	4.10	3.76	6
10	64QAM	25	25	3.76	3.77	4.14	4.13	3.84	
10	64QAM	50	0	3.81	3.74	3.90	4.00	3.90	
Channel				39675	40148	40620	41093	41565	7
Frequency (MHz)				2498.5	2543.8	2593	2640.39	2687.5	
5	QPSK	1	0	5.89	5.81	5.93	5.86	5.79	7
5	QPSK	1	12	5.59	5.60	5.82	5.79	5.69	
5	QPSK	1	24	5.53	5.71	5.80	5.78	5.62	
5	QPSK	12	0	5.10	4.85	5.08	5.01	4.77	6
5	QPSK	12	7	4.73	5.02	4.97	5.03	4.63	
5	QPSK	12	13	4.97	4.77	5.07	5.00	4.74	
5	QPSK	25	0	4.85	4.85	4.98	4.84	4.84	6
5	16QAM	1	0	5.11	5.03	5.40	5.23	5.08	
5	16QAM	1	12	5.22	5.29	5.21	4.99	5.23	
5	16QAM	1	24	5.23	4.99	5.13	5.32	5.16	5
5	16QAM	12	0	3.85	3.89	4.18	3.96	3.96	
5	16QAM	12	7	3.98	3.99	4.11	3.83	3.82	
5	16QAM	12	13	3.84	3.75	4.00	4.00	3.72	6
5	16QAM	25	0	3.95	3.73	3.83	4.07	3.87	
5	64QAM	1	0	4.93	5.13	5.09	5.16	4.87	
5	64QAM	1	12	4.95	5.01	4.89	4.96	4.85	5
5	64QAM	1	24	4.95	4.86	5.03	4.83	4.72	
5	64QAM	12	0	4.07	4.08	4.18	4.05	3.98	
5	64QAM	12	7	4.03	3.78	4.17	3.96	3.89	6
5	64QAM	12	13	3.94	3.70	4.11	3.85	3.68	
5	64QAM	25	0	3.98	3.92	4.10	3.92	3.76	

n2 (PC3) (ANT 3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	6.60	6.45	6.36	8
20		1	53	6.58	6.21	6.13	
20		1	104	6.46	6.36	6.15	
20		50	1	6.73	6.42	6.33	8
20	DFT-s-OFDM QPSK	50	25	6.73	6.24	6.26	
20		50	50	6.62	6.20	6.32	
20		100	0	6.64	6.26	6.29	
20	DFT-s-OFDM 16QAM	1	1	6.65	6.75	6.41	8
20		1	53	6.67	6.56	6.21	
20		1	104	6.19	6.38	6.28	
20		50	1	6.64	6.73	6.38	8
20	DFT-s-OFDM 64QAM	50	25	6.63	6.64	6.32	
20		50	50	6.60	6.22	6.14	
20		100	0	6.60	6.62	6.24	
20	DFT-s-OFDM 256QAM	1	1	6.20	6.05	5.94	7
20	CP-OFDM QPSK	1	1	4.94	4.82	4.62	6
20	CP-OFDM 16QAM	1	1	2.86	2.67	2.49	4
20	CP-OFDM 64QAM	1	1	6.02	5.80	5.65	7
20	CP-OFDM 256QAM	1	1	5.47	5.31	5.17	6
20		1	1	3.12	3.43	3.38	4
20		1	1	0.94	0.69	0.53	2
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	6.45	6.70	6.25	8
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	6.47	6.73	6.23	8
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	6.57	6.72	6.25	8

n7 (PC3) (ANT 3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	
20	DFT-s-OFDM PI/2 BPSK	1	1	6.39	6.36	6.61	8
20		1	53	6.33	6.49	6.66	
20		1	104	6.37	6.50	6.56	
20		50	1	6.28	6.40	6.51	8
20	DFT-s-OFDM PI/2 BPSK	50	25	6.24	6.43	6.63	
20		50	50	6.29	6.46	6.52	
20		100	0	6.25	6.44	6.52	
20	DFT-s-OFDM QPSK	1	1	6.42	6.53	6.68	8
20		1	53	6.31	6.47	6.59	
20		1	104	6.40	6.52	6.66	
20		50	1	6.41	6.50	6.65	8
20	DFT-s-OFDM QPSK	50	25	6.23	6.37	6.59	
20		50	50	6.30	6.39	6.58	
20		100	0	6.30	6.41	6.61	
20	DFT-s-OFDM 16QAM	1	1	5.99	6.03	6.27	7
20	DFT-s-OFDM 64QAM	1	1	4.42	4.43	4.74	6
20	DFT-s-OFDM 256QAM	1	1	2.05	2.06	2.31	3
20	CP-OFDM QPSK	1	1	5.36	5.44	5.67	8
20	CP-OFDM 16QAM	1	1	4.82	4.90	5.16	7
20	CP-OFDM 64QAM	1	1	3.17	3.15	3.43	6
20	CP-OFDM 256QAM	1	1	0.09	0.18	0.45	2
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	DFT-s-OFDM QPSK	1	1	6.24	6.28	6.52	8
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	DFT-s-OFDM QPSK	1	1	6.13	6.30	6.52	8
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	DFT-s-OFDM QPSK	1	1	6.22	6.25	6.49	8

n25 (PC3) (ANT 3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376500	381000	Tune-up limit (dBm)
Frequency (MHz)				1860	1882.5	1905	
20	DFT-s-OFDM PI/2 BPSK	1	1	7.67	7.68	7.42	9
20		1	53	7.78	7.50	7.33	
20		1	104	7.57	7.32	7.35	
20		50	1	7.80	7.63	7.38	9
20		50	25	7.72	7.53	7.46	
20		50	50	7.67	7.46	7.46	
20		100	0	7.72	7.47	7.41	
20	DFT-s-OFDM QPSK	1	1	7.81	7.76	7.60	9
20		1	53	7.72	7.64	7.50	
20		1	104	7.68	7.55	7.53	
20		50	1	7.78	7.69	7.55	9
20		50	25	7.68	7.57	7.47	
20		50	50	7.67	7.48	7.44	
20		100	0	7.67	7.65	7.46	
20	DFT-s-OFDM 16QAM	1	1	7.66	7.50	7.43	9
20	DFT-s-OFDM 64QAM	1	1	6.19	6.13	5.89	7
20	DFT-s-OFDM 256QAM	1	1	3.95	3.92	3.61	5
20	CP-OFDM QPSK	1	1	7.18	7.08	6.92	8
20	CP-OFDM 16QAM	1	1	6.33	6.16	6.12	7
20	CP-OFDM 64QAM	1	1	4.94	4.89	4.58	6
20	CP-OFDM 256QAM	1	1	1.94	1.83	1.67	3
Channel				371500	376500	381500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5	
15	DFT-s-OFDM QPSK	1	1	7.72	7.70	7.20	9
Channel				371000	376500	382000	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	
10	DFT-s-OFDM QPSK	1	1	7.72	7.55	6.98	9
Channel				370500	376500	382500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5	
5	DFT-s-OFDM QPSK	1	1	7.78	7.50	6.99	9

n30 (PC3) (ANT 3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					462000		
Frequency (MHz)					2310		
10	DFT-s-OFDM PI/2 BPSK	1	1		6.34		8
10		1	26		6.46		
10		1	50		6.38		
10		25	1		6.48		8
10		25	12		6.49		
10		25	25		6.43		
10		50	0		6.48		
10		1	1		6.56		8
10	DFT-s-OFDM QPSK	1	26		6.45		
10		1	50		6.36		
10		25	1		6.52		8
10		25	12		6.48		
10		25	25		6.42		
10		50	0		6.47		
10	DFT-s-OFDM 16QAM	1	1		6.27		7
10	DFT-s-OFDM 64QAM	1	1		4.87		6
10	DFT-s-OFDM 256QAM	1	1		2.53		3
10	CP-OFDM QPSK	1	1		5.77		7
10	CP-OFDM 16QAM	1	1		5.24		6
10	CP-OFDM 64QAM	1	1		2.56		4
10	CP-OFDM 256QAM	1	1		0.55		2

n41 (PC2) (ANT 3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	8
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	6.18	6.26	6.47	6.55	6.54	8
100		1	136	6.45	6.54	6.51	6.44	6.45	
100		1	271	6.57	6.51	6.56	6.48	6.61	
100		135	1	6.28	6.33	6.40	6.54	6.36	
100	DFT-s-OFDM QPSK	135	67	6.51	6.55	6.57	6.49	6.50	8
100		135	136	6.41	6.43	6.36	6.47	6.29	
100		270	0	6.43	6.52	6.55	6.52	6.46	
100		1	1	6.13	6.26	6.69	6.43	6.48	
100	DFT-s-OFDM QPSK	1	136	6.35	6.44	6.41	6.34	6.41	8
100		1	271	6.42	6.50	6.46	6.44	6.43	
100		135	1	6.29	6.36	6.44	6.54	6.46	
100		135	67	6.49	6.54	6.62	6.58	6.58	
100	DFT-s-OFDM 16QAM	135	136	6.42	6.43	6.47	6.49	6.34	8
100		270	0	6.42	6.52	6.57	6.55	6.45	
100		1	1	5.09	5.22	5.28	5.46	5.39	
100		1	1	3.70	3.85	3.97	4.06	3.98	
100	DFT-s-OFDM 64QAM	1	1	1.45	1.62	1.67	1.75	1.80	3
100	CP-OFDM QPSK	1	1	4.71	4.82	4.88	5.00	4.95	6
100	CP-OFDM 16QAM	1	1	4.20	4.29	4.45	4.50	4.54	5
100	CP-OFDM 64QAM	1	1	2.31	2.36	2.42	2.61	2.41	3
100	CP-OFDM 256QAM	1	1	0.52	0.64	0.80	0.88	0.84	2
Channel				508200	513402	518598	523800	528996	8
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	6.10	6.23	6.50	6.49	6.42	8
Channel				507204	512904	518598	524298	529998	8
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	6.17	6.33	6.56	6.54	6.48	8
Channel				506202	512400	518598	524796	531000	8
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	6.17	6.41	6.60	6.58	6.48	8
Channel				505200	511902	518598	525798	531996	8
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	6.22	6.48	6.57	6.54	6.53	8
Channel				504204	511404	518598	525798	532998	8
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	6.36	6.53	6.67	6.60	6.57	8
Channel				503202	510900	518598	526296	534000	8
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	6.34	6.56	6.65	6.62	6.62	8
Channel				502200	510402	518598	526800	534996	8
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	6.25	6.49	6.65	6.47	6.49	8
Channel				501204	509904	518598	527298	535998	8
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	6.32	6.55	6.64	6.58	6.54	8

n41 (PC3) (ANT 3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	8
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	6.72	6.78	6.82	6.84	6.95	8
100		1	136	6.87	6.89	6.83	6.79	6.78	
100		1	271	6.84	6.87	6.76	6.58	6.46	
100		135	1	6.82	6.87	6.95	6.84	6.92	8
100		135	67	6.90	6.83	6.83	6.85	6.82	
100		135	136	6.95	6.94	6.89	6.87	6.44	
100	DFT-s-OFDM QPSK	270	0	6.87	6.89	6.91	6.89	6.87	8
100		1	1	6.79	6.90	6.98	6.90	6.92	
100		1	136	6.89	6.89	6.89	6.82	6.73	
100		1	271	6.85	6.87	6.77	6.45	6.39	8
100		135	1	6.84	6.87	6.84	6.94	6.90	
100		135	67	6.88	6.96	6.97	6.85	6.83	
100	DFT-s-OFDM 16QAM	135	136	6.93	6.94	6.89	6.79	6.45	8
100		270	0	6.51	6.69	6.83	6.66	6.53	
100	DFT-s-OFDM 64QAM	1	1	5.83	5.89	5.95	6.00	6.10	7
100	DFT-s-OFDM 256QAM	1	1	5.90	5.98	6.05	6.15	6.11	7
100	CP-OFDM QPSK	1	1	4.20	4.23	4.28	4.36	4.38	5
100	CP-OFDM 16QAM	1	1	5.92	5.94	6.02	6.10	6.06	7
100	CP-OFDM 64QAM	1	1	5.99	5.97	6.06	6.18	6.17	7
100	CP-OFDM 256QAM	1	1	5.04	5.01	5.13	5.24	5.25	6
100	CP-OFDM 256QAM	1	1	2.34	2.28	2.36	2.47	2.41	3
Channel				508200	513402	518598	523800	528996	8
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	6.36	6.41	6.85	6.65	6.58	8
Channel				507204	512904	518598	524298	529998	8
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	6.40	6.42	6.87	6.68	6.63	8
Channel				506202	512400	518598	524796	531000	8
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	6.42	6.55	6.83	6.73	6.65	8
Channel				505200	511902	518598	525798	531996	8
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	6.52	6.62	6.82	6.68	6.64	8
Channel				504204	511404	518598	525798	532998	8
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	6.53	6.70	6.83	6.75	6.63	8
Channel				503202	510900	518598	526296	534000	8
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	6.59	6.73	6.83	6.77	6.55	8
Channel				502200	510402	518598	526800	534996	8
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	6.50	6.61	6.86	6.69	6.35	8
Channel				501204	509904	518598	527298	535998	8
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	6.49	6.60	6.84	6.66	6.25	8

n66 (PC3) (ANT 3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM PI/2 BPSK	1	1	6.46	6.54	6.70	8
20		1	53	6.36	6.49	6.75	
20		1	104	6.52	6.65	6.68	
20		50	1	6.50	6.61	6.79	8
20		50	25	6.44	6.63	6.89	
20		50	50	6.38	6.59	6.82	
20		100	0	6.46	6.57	6.84	
20	DFT-s-OFDM QPSK	1	1	6.85	6.86	7.00	8
20		1	53	6.57	6.67	6.98	
20		1	104	6.54	6.75	6.93	
20		50	1	6.81	6.89	6.96	8
20		50	25	6.61	6.81	6.95	
20		50	50	6.62	6.70	6.89	
20		100	0	6.72	6.92	6.95	
20	DFT-s-OFDM 16QAM	1	1	6.25	6.33	6.42	7
20	DFT-s-OFDM 64QAM	1	1	4.79	4.82	5.09	6
20	DFT-s-OFDM 256QAM	1	1	2.51	2.58	2.82	4
20	CP-OFDM QPSK	1	1	5.74	5.82	5.95	7
20	CP-OFDM 16QAM	1	1	5.16	5.30	5.43	6
20	CP-OFDM 64QAM	1	1	3.46	3.60	3.63	5
20	CP-OFDM 256QAM	1	1	0.54	0.68	0.78	2
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	6.57	6.65	6.93	8
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	6.48	6.60	6.75	8
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	6.53	6.62	6.79	8

CA_2C (ANT 3)											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
18700	18700	18898	QPSK	1	0	0	0	1	0	8.06	9.00
18900	18801	18999	QPSK	1	0	0	0	1	0	7.91	9.00
19100	18902	19100	QPSK	1	0	0	0	1	0	7.87	9.00
18700	18700	18898	16QAM	1	0	0	0	1	0	7.10	8.00
18900	18801	18999	16QAM	1	0	0	0	1	0	6.96	8.00
19100	18902	19100	16QAM	1	0	0	0	1	0	6.74	8.00
18700	18700	18898	64QAM	1	0	0	0	1	0	7.06	8.00
18900	18801	18999	64QAM	1	0	0	0	1	0	6.90	8.00
19100	18902	19100	64QAM	1	0	0	0	1	0	6.75	8.00
18700	18700	18898	QPSK	50	0	0	0	1	0	7.06	8.00
18900	18801	18999	QPSK	50	0	0	0	1	0	6.76	8.00
19100	18902	19100	QPSK	50	0	0	0	1	0	6.77	8.00

CA_41C (PC3) (ANT 3)											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	0	0	1	0	4.77	6
40620	40521	40719	QPSK	1	0	0	0	1	0	5.19	6
41490	41292	41490	QPSK	1	0	0	0	1	0	4.90	6
39750	39750	39948	16QAM	1	0	0	0	1	0	3.91	5
40620	40521	40719	16QAM	1	0	0	0	1	0	4.11	5
41490	41292	41490	16QAM	1	0	0	0	1	0	3.98	5
39750	39750	39948	64QAM	1	0	0	0	1	0	2.85	4
40620	40521	40719	64QAM	1	0	0	0	1	0	3.13	4
41490	41292	41490	64QAM	1	0	0	0	1	0	2.92	4
39750	39750	39948	QPSK	50	0	0	0	1	0	3.90	5
40620	40521	40719	QPSK	50	0	0	0	1	0	4.25	5
41490	41292	41490	QPSK	50	0	0	0	1	0	3.95	5

CA_41C(PC2) (ANT 3)											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	0	0	1	0	4.69	6
40620	40521	40719	QPSK	1	0	0	0	1	0	5.14	6
41490	41292	41490	QPSK	1	0	0	0	1	0	4.94	6
39750	39750	39948	16QAM	1	0	0	0	1	0	3.88	5
40620	40521	40719	16QAM	1	0	0	0	1	0	4.06	5
41490	41292	41490	16QAM	1	0	0	0	1	0	3.80	5
39750	39750	39948	64QAM	1	0	0	0	1	0	2.86	4
40620	40521	40719	64QAM	1	0	0	0	1	0	3.12	4
41490	41292	41490	64QAM	1	0	0	0	1	0	2.85	4
39750	39750	39948	QPSK	50	0	0	0	1	0	3.74	5
40620	40521	40719	QPSK	50	0	0	0	1	0	4.12	5
41490	41292	41490	QPSK	50	0	0	0	1	0	3.78	5

CA_66B Ant 4 (ANT 3)											
Combination:15MHz+10MHz(75RB+25RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
132070	132047	132140	QPSK	1	0	0	0	1	0	8.04	9.00
132322	132398	132491	QPSK	1	0	0	0	1	0	7.82	9.00
132572	132549	132642	QPSK	1	0	0	0	1	0	8.16	9.00
132070	132047	132140	16QAM	1	0	0	0	1	0	6.90	8.00
132322	132398	132491	16QAM	1	0	0	0	1	0	6.95	8.00
132572	132549	132642	16QAM	1	0	0	0	1	0	7.27	8.00
132070	132047	132140	64QAM	1	0	0	0	1	0	5.88	7.00
132322	132398	132491	64QAM	1	0	0	0	1	0	6.20	7.00
132572	132549	132642	64QAM	1	0	0	0	1	0	6.22	7.00
132070	132047	132140	QPSK	36	0	0	0	1	0	5.95	8.00
132322	132398	132491	QPSK	36	0	0	0	1	0	6.04	8.00
132572	132549	132642	QPSK	36	0	0	0	1	0	6.20	8.00

CA_66C Ant 4 (ANT 3)											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
132070	132072	132270	QPSK	1	0	0	0	1	0	7.88	9.00
132322	132323	132521	QPSK	1	0	0	0	1	0	7.96	9.00
132572	132374	132572	QPSK	1	0	0	0	1	0	8.12	9.00
132070	132072	132270	16QAM	1	0	0	0	1	0	6.81	8.00
132322	132323	132521	16QAM	1	0	0	0	1	0	6.95	8.00
132572	132374	132572	16QAM	1	0	0	0	1	0	7.07	8.00
132070	132072	132270	64QAM	1	0	0	0	1	0	6.86	8.00
132322	132323	132521	64QAM	1	0	0	0	1	0	6.98	8.00
132572	132374	132572	64QAM	1	0	0	0	1	0	7.05	8.00
132070	132072	132270	QPSK	50	0	0	0	1	0	6.81	8.00
132322	132323	132521	QPSK	50	0	0	0	1	0	6.95	8.00
132572	132374	132572	QPSK	50	0	0	0	1	0	7.04	8.00

Reduced Power Level 2 (except ANT 3)

Band 2 (1900MHz Band) (dBm)							
Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1890	1900	
20	QPSK	1	0	14.17	14.08	14.04	
20	QPSK	1	49	14.12	14.00	14.01	15.5
20	QPSK	1	99	14.06	14.04	13.95	
20	QPSK	50	0	13.39	13.36	13.25	
20	QPSK	50	24	13.36	13.19	13.21	14.5
20	QPSK	50	50	13.31	13.11	13.12	
20	QPSK	100	0	13.32	13.24	13.24	
20	16QAM	1	0	13.69	13.51	13.57	14.5
20	16QAM	1	49	13.33	13.69	13.42	
20	16QAM	1	99	13.28	13.33	13.33	
20	16QAM	50	0	12.35	12.35	12.41	13.5
20	16QAM	50	24	12.15	12.30	12.23	
20	16QAM	50	50	12.11	12.30	12.12	
20	16QAM	100	0	12.25	12.21	12.03	14.5
20	64QAM	1	0	13.49	13.49	13.27	
20	64QAM	1	49	13.17	13.27	13.24	
20	64QAM	1	99	13.39	13.34	13.17	13.5
20	64QAM	50	0	12.33	12.25	12.29	
20	64QAM	50	24	12.25	12.27	12.22	
20	64QAM	50	50	12.20	12.28	11.99	13.5
20	64QAM	100	0	12.19	12.30	12.05	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	14.14	14.10	14.06	
15	QPSK	1	37	14.11	14.06	14.03	15.5
15	QPSK	1	74	14.05	14.03	14.02	
15	QPSK	36	0	13.42	13.39	13.32	
15	QPSK	36	20	13.27	13.13	13.23	14.5
15	QPSK	36	39	13.26	13.34	13.12	
15	QPSK	75	0	13.35	13.24	13.11	
15	16QAM	1	0	13.62	13.62	13.59	14.5
15	16QAM	1	37	13.64	13.53	13.47	
15	16QAM	1	74	13.49	13.46	13.30	
15	16QAM	36	0	12.17	12.31	12.20	13.5
15	16QAM	36	20	12.14	12.23	12.23	
15	16QAM	36	39	12.16	12.08	12.09	
15	16QAM	75	0	12.07	12.23	12.11	14.5
15	64QAM	1	0	13.37	13.40	13.36	
15	64QAM	1	37	13.37	13.39	13.17	
15	64QAM	1	74	13.32	13.50	13.25	13.5
15	64QAM	36	0	12.34	12.28	12.21	
15	64QAM	36	20	12.08	12.14	12.24	
15	64QAM	36	39	12.35	12.37	12.09	13.5
15	64QAM	75	0	12.20	12.31	12.30	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	14.16	14.11	14.07	
10	QPSK	1	25	14.03	14.04	14.11	15.5
10	QPSK	1	49	14.11	13.97	13.98	
10	QPSK	25	0	13.35	13.21	13.23	
10	QPSK	25	12	13.13	13.24	13.34	14.5
10	QPSK	25	25	13.34	13.17	13.11	
10	QPSK	50	0	13.29	13.22	13.19	
10	16QAM	1	0	13.59	13.49	13.57	14.5
10	16QAM	1	25	13.52	13.51	13.47	
10	16QAM	1	49	13.46	13.45	13.20	
10	16QAM	25	0	12.31	12.25	12.39	13.5
10	16QAM	25	12	12.14	12.43	12.28	
10	16QAM	25	25	12.15	12.21	12.10	
10	16QAM	50	0	12.16	12.20	12.25	14.5
10	64QAM	1	0	13.49	13.25	13.43	
10	64QAM	1	25	13.11	13.35	13.32	
10	64QAM	1	49	13.24	13.16	13.19	13.5
10	64QAM	25	0	12.40	12.36	12.35	
10	64QAM	25	12	12.14	12.27	12.29	
10	64QAM	25	25	12.01	12.43	12.19	13.5
10	64QAM	50	0	12.37	12.09	12.24	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	14.13	14.10	14.12	
5	QPSK	1	12	14.07	14.03	13.95	15.5
5	QPSK	1	24	13.96	13.88	13.97	
5	QPSK	12	0	13.41	13.44	13.11	
5	QPSK	12	7	13.32	13.25	13.10	14.5
5	QPSK	12	13	13.27	13.13	13.19	
5	QPSK	25	0	13.47	13.36	13.36	
5	16QAM	1	0	13.67	13.60	13.41	14.5
5	16QAM	1	12	13.35	13.64	13.50	
5	16QAM	1	24	13.40	13.49	13.31	
5	16QAM	12	0	12.24	12.43	12.31	13.5
5	16QAM	12	7	12.27	12.14	12.21	
5	16QAM	12	13	12.18	12.37	12.23	
5	16QAM	25	0	12.09	12.33	12.00	14.5
5	64QAM	1	0	13.37	13.27	13.32	
5	64QAM	1	12	13.39	13.33	13.33	
5	64QAM	1	24	13.19	13.16	12.99	13.5
5	64QAM	12	0	12.19	12.25	12.37	
5	64QAM	12	7	12.39	12.48	12.35	
5	64QAM	12	13	12.07	12.33	12.28	14.5
5	64QAM	25	0	12.08	12.38	12.13	
Channel				18615	18900	19165	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	14.14	14.05	14.01	
3	QPSK	1	8	14.07	14.01	14.08	15.5
3	QPSK	1	14	14.00	13.93	14.06	
3	QPSK	8	0	13.20	13.15	13.32	
3	QPSK	8	4	13.07	13.22	13.01	14.5

Band 4 (AWS Band) (dBm)							
Part 27L (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	12.47	12.55	12.60	
20	QPSK	1	49	12.39	12.53	12.53	14
20	QPSK	1	99	12.36	12.39	12.50	
20	QPSK	50	0	11.88	11.89	11.91	
20	QPSK	50	24	11.66	11.77	11.73	13
20	QPSK	50	50	11.63	11.67	11.80	
20	QPSK	100	0	11.55	11.56	11.61	
20	16QAM	1	0	11.91	11.93	11.95	13
20	16QAM	1	49	11.83	11.92	11.93	
20	16QAM	1	99	11.88	11.96	11.71	
20	16QAM	50	0	10.57	10.64	10.90	12
20	16QAM	50	24	10.69	10.63	10.69	
20	16QAM	50	50	10.51	10.78	10.68	
20	16QAM	100	0	10.62	10.66	10.69	13
20	64QAM	1	0	11.68	11.91	11.89	
20	64QAM	1	49	11.75	11.75	11.60	
20	64QAM	1	99	11.54	11.85	11.86	12
20	64QAM	50	0	10.65	10.84	10.85	
20	64QAM	50	24	10.69	10.69	10.64	
20	64QAM	50	50	10.57	10.84	10.59	12
20	64QAM	100	0	10.74	10.71	10.64	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	12.51	12.48	12.57	
15	QPSK	1	37	12.50	12.45	12.55	14
15	QPSK	1	74	12.47	12.42	12.51	
15	QPSK	36	0	11.63	11.58	11.68	
15	QPSK	36	20	11.54	11.66	11.57	13
15	QPSK	36	39	11.69	11.54	11.69	
15	QPSK	75	0	11.81	11.61	11.67	
15	16QAM	1	0	11.92	11.88	12.03	13
15	16QAM	1	37	11.95	11.95	11.96	
15	16QAM	1	74	11.85	12.05	11.74	
15	16QAM	36	0	10.75	10.77	10.86	12
15	16QAM	36	20	10.74	10.75	10.75	
15	16QAM	36	39	10.61	10.72	10.70	
15	16QAM	75	0	10.46	10.52	10.65	13
15	64QAM	1	0	11.73	11.79	11.64	
15	64QAM	1	37	11.71	11.64	11.79	
15	64QAM	1	74	11.68	11.64	11.55	12
15	64QAM	36	0	10.71	10.63	10.72	
15	64QAM	36	20	10.63	10.64	10.78	
15	64QAM	36	39	10.39	10.55	10.47	12
15	64QAM	75	0	10.69	10.69	10.51	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	12.47	12.54	12.56	
10	QPSK	1	25	12.41	12.49	12.52	14
10	QPSK	1	49	12.49	12.35	12.51	
10	QPSK	25	0	11.78	11.58	11.73	
10	QPSK	25	12	11.56	11.70	11.76	13
10	QPSK	25	25	11.81	11.61	11.66	
10	QPSK	50	0	11.51	11.83	11.51	
10	16QAM	1	0	11.78	12.04	11.92	13
10	16QAM	1	25	11.97	12.04	11.72	
10	16QAM	1	49	11.82	11.83	11.72	
10	16QAM	25	0	10.81	10.77	10.76	12
10	16QAM	25	12	10.62	10.79	10.57	
10	16QAM	25	25	10.64	10.61	10.71	
10	16QAM	50	0	10.48	10.72	10.63	13
10	64QAM	1	0	11.66	11.69	11.91	
10	64QAM	1	25	11.56	11.80	11.58	
10	64QAM	1	49	11.57	11.71	11.46	12
10	64QAM	25	0	10.70	10.83	10.86	
10	64QAM	25	12	10.48	10.71	10.50	
10	64QAM	25	25	10.73	10.53	10.64	12
10	64QAM	50	0	10.46	10.47	10.63	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5		
5	QPSK	1	0	12.53	12.50	12.58	
5	QPSK	1	12	12.48	12.33	12.47	14
5	QPSK	1	24	12.51	12.30	12.42	
5	QPSK	12	0	11.64	11.74	11.80	
5	QPSK	12	7	11.49	11.55	11.65	13
5	QPSK	12	13	11.73	11.45	11.75	
5	QPSK	25	0	11.69	11.71	11.85	
5	16QAM	1	0	12.01	11.85	11.95	13
5	16QAM	1	12	11.78	12.05	11.96	
5	16QAM	1	24	11.85	11.95	11.99	
5	16QAM	12	0	10.63	10.69	10.80	12
5	16QAM	12	7	10.51	10.61	10.69	
5	16QAM	12	13	10.55	10.75	10.58	
5	16QAM	25	0	10.70	10.65	10.69	13
5	64QAM	1	0	11.72	11.74	11.60	
5	64QAM	1	12	11.72	11.57	11.80	
5	64QAM	1	24	11.54	11.83	11.73	12
5	64QAM	12	0	10.85	10.83	10.62	
5	64QAM	12	7	10.78	10.76	10.69	
5	64QAM	12	13	10.61	10.81	10.66	12
5	64QAM	25	0	10.77	10.64	10.73	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	12.42	12.41	12.55	
3	QPSK	1	8	12.34	12.38	12.48	14
3	QPSK	1	14	12.32	12.30	12.52	
3	QPSK	8	0	11.67	11.91	11.92	
3	QPSK	8	4	11.57	11.70	11.71	

3	QPSK	8	7	13.05	13.07	13.18	14.5
3	QPSK	15	0	13.04	13.11	13.04	
3	16QAM	1	0	13.51	13.40	13.34	14.5
3	16QAM	1	8	13.44	13.46	13.11	
3	16QAM	1	14	13.40	13.33	13.45	13.5
3	16QAM	8	0	12.32	12.30	12.21	
3	16QAM	8	4	12.18	12.31	12.17	13.5
3	16QAM	8	7	12.03	12.22	12.12	
3	16QAM	15	0	12.22	12.14	11.96	14.5
3	64QAM	1	0	13.22	13.25	13.00	
3	64QAM	1	8	13.15	13.33	13.09	13.5
3	64QAM	1	14	12.97	13.18	13.15	
3	64QAM	8	0	12.28	12.35	12.12	13.5
3	64QAM	8	4	12.29	12.30	12.26	
3	64QAM	8	7	12.08	12.18	12.15	13.5
3	64QAM	15	0	12.07	12.29	12.18	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	14.12	14.03	14.06	15.5
1.4	QPSK	1	3	13.94	13.96	14.02	
1.4	QPSK	1	5	13.95	14.00	14.00	14.5
1.4	QPSK	3	0	13.38	13.39	13.16	
1.4	QPSK	3	1	13.27	13.24	13.00	14.5
1.4	QPSK	3	3	13.11	13.09	13.00	
1.4	QPSK	6	0	13.14	13.31	13.00	14.5
1.4	16QAM	1	0	13.42	13.39	13.48	
1.4	16QAM	1	3	13.54	13.41	13.33	14.5
1.4	16QAM	1	5	13.45	13.41	13.18	
1.4	16QAM	3	0	12.34	12.40	12.36	13.5
1.4	16QAM	3	1	12.26	12.22	12.15	
1.4	16QAM	3	3	12.03	12.19	12.02	14.5
1.4	16QAM	6	0	12.17	12.21	11.91	
1.4	64QAM	1	0	13.29	13.23	13.15	14.5
1.4	64QAM	1	3	13.24	13.36	13.16	
1.4	64QAM	1	5	13.22	13.38	12.98	13.5
1.4	64QAM	3	0	12.25	12.22	12.20	
1.4	64QAM	3	1	11.98	12.11	12.14	13.5
1.4	64QAM	3	3	12.10	12.26	12.05	
1.4	64QAM	6	0	12.08	12.15	12.20	

3	QPSK	8	7	11.62	11.59	11.71	13
3	QPSK	15	0	11.74	11.78	11.81	
3	16QAM	1	0	12.05	11.86	11.75	12
3	16QAM	1	8	11.72	12.01	11.97	
3	16QAM	1	14	11.85	11.97	11.73	13
3	16QAM	8	0	10.62	10.68	10.90	
3	16QAM	8	4	10.65	10.50	10.46	12
3	16QAM	8	7	10.55	10.60	10.71	
3	16QAM	15	0	10.49	10.41	10.76	13
3	64QAM	1	0	11.65	11.79	11.83	
3	64QAM	1	8	11.56	11.58	11.74	12
3	64QAM	1	14	11.66	11.61	11.59	
3	64QAM	8	0	10.74	10.71	10.83	13
3	64QAM	8	4	10.50	10.66	10.57	
3	64QAM	8	7	10.68	10.63	10.55	12
3	64QAM	15	0	10.61	10.70	10.83	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	12.48	12.50	12.56	14
1.4	QPSK	1	3	12.29	12.46	12.43	
1.4	QPSK	1	5	12.26	12.28	12.53	13
1.4	QPSK	3	0	11.86	11.85	11.79	
1.4	QPSK	3	1	11.57	11.83	11.57	12
1.4	QPSK	3	3	11.64	11.77	11.63	
1.4	QPSK	6	0	11.72	11.82	11.62	13
1.4	16QAM	1	0	11.89	11.81	11.84	
1.4	16QAM	1	3	11.73	11.67	11.68	12
1.4	16QAM	1	5	11.65	11.82	11.99	
1.4	16QAM	3	0	10.67	10.83	10.85	13
1.4	16QAM	3	1	10.50	10.80	10.68	
1.4	16QAM	3	3	10.56	10.66	10.42	12
1.4	16QAM	6	0	10.51	10.39	10.76	
1.4	64QAM	1	0	11.89	11.72	11.86	13
1.4	64QAM	1	3	11.70	11.73	11.68	
1.4	64QAM	1	5	11.74	11.86	11.69	12
1.4	64QAM	3	0	10.79	10.62	10.86	
1.4	64QAM	3	1	10.64	10.64	10.83	13
1.4	64QAM	3	3	10.68	10.54	10.65	
1.4	64QAM	6	0	10.55	10.52	10.53	

Band 5 (Celluar Band) (dBm) Part 22H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	17.73	17.76	17.88	19
10	QPSK	1	25	17.66	17.68	17.62	
10	QPSK	1	49	17.59	17.64	17.60	
10	QPSK	25	0	16.95	16.96	16.87	18
10	QPSK	25	12	16.79	16.89	16.83	
10	QPSK	25	25	16.87	16.83	16.77	
10	QPSK	50	0	16.89	16.90	16.80	18
10	16QAM	1	0	17.12	17.16	17.02	
10	16QAM	1	25	17.08	17.13	16.94	
10	16QAM	1	49	17.03	17.10	16.97	17
10	16QAM	25	0	15.94	15.96	15.88	
10	16QAM	25	12	15.78	15.86	15.70	
10	16QAM	25	25	15.67	15.85	15.69	18
10	16QAM	50	0	15.83	15.77	15.72	
10	64QAM	1	0	16.94	16.98	16.87	
10	64QAM	1	25	16.85	16.88	16.82	17
10	64QAM	1	49	16.81	16.93	16.74	
10	64QAM	25	0	15.92	15.96	15.85	
10	64QAM	25	12	15.83	15.90	15.80	17
10	64QAM	25	25	15.77	15.88	15.76	
10	64QAM	50	0	15.84	15.84	15.79	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	17.70	17.72	17.60	19
5	QPSK	1	12	17.65	17.63	17.64	
5	QPSK	1	24	17.62	17.68	17.58	
5	QPSK	12	0	16.90	17.02	16.80	18
5	QPSK	12	7	16.81	16.84	16.83	
5	QPSK	12	13	16.98	16.88	16.89	
5	QPSK	25	0	16.71	16.98	16.67	18
5	16QAM	1	0	17.02	17.26	17.04	
5	16QAM	1	12	17.01	17.22	16.96	
5	16QAM	1	24	16.85	17.22	16.92	17
5	16QAM	12	0	15.87	15.89	15.87	
5	16QAM	12	7	15.93	15.79	15.59	
5	16QAM	12	13	15.49	15.87	15.71	18
5	16QAM	25	0	15.64	15.76	15.57	
5	64QAM	1	0	16.88	16.96	16.84	
5	64QAM	1	12	16.83	16.83	16.78	17
5	64QAM	1	24	16.86	16.92	16.59	
5	64QAM	12	0	15.95	15.92	15.89	
5	64QAM	12	7	15.70	15.83	15.74	17
5	64QAM	12	13	15.72	15.78	15.64	
5	64QAM	25	0	15.85	15.98	15.59	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	17.68	17.70	17.60	19
3	QPSK	1	8	17.50	17.53	17.55	
3	QPSK	1	14	17.58	17.66	17.51	
3	QPSK	8	0	16.94	17.02	16.94	18
3	QPSK	8	4	16.86	16.95	16.71	
3	QPSK	8	7	16.81	16.68	16.81	
3	QPSK	15	0	16.69	16.83	16.95	18
3	16QAM	1	0	17.18	16.99	16.95	
3	16QAM	1	8	16.88	17.17	16.74	
3	16QAM	1	14	17.00	16.98	16.81	17
3	16QAM	8	0	15.81	15.99	15.81	
3	16QAM	8	4	15.86	15.74	15.79	
3	16QAM	8	7	15.56	15.68	15.81	18
3	16QAM	15	0	15.94	15.86	15.76	
3	64QAM	1	0	16.82	16.90	16.72	
3	64QAM	1	8	16.84	16.76	16.65	17
3	64QAM	1	14	16.79	16.81	16.56	
3	64QAM	8	0	15.73	15.93	15.74	
3	64QAM	8	4	15.84	15.91	15.85	17
3	64QAM	8	7	15.88	15.68	15.58	
3	64QAM	15	0	15.68	15.82	15.59	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	17.74	17.73	17.62	19
1.4	QPSK	1	3	17.71	17.67	17.45	
1.4	QPSK	1	5	17.52	17.45	17.55	
1.4	QPSK	3	0	16.77	16.80	16.74	18
1.4	QPSK	3	1	16.66	16.95	16.66	
1.4	QPSK	3	3	16.71	16.92	16.86	
1.4	QPSK	6	0	16.76	16.78	16.73	18
1.4	16QAM	1	0	16.96	17.14	16.84	
1.4	16QAM	1	3	17.02	17.17	17.01	
1.4	16QAM	1	5	17.11	16.93	17.05	18
1.4	16QAM	3	0	15.75	15.89	15.77	
1.4	16QAM	3	1	15.84	15.79	15.52	
1.4	16QAM	3	3	15.70	15.77	15.78	17
1.4	16QAM	6	0	15.64	15.59	15.86	
1.4	64QAM	1	0	16.77	17.03	16.98	
1.4	64QAM	1	3	16.81	16.82	16.89	18
1.4	64QAM	1	5	16.62	16.90	16.77	
1.4	64QAM	3	0	16.02	15.81	15.99	
1.4	64QAM	3	1	15.71	15.88	15.80	17
1.4	64QAM	3	3	15.82	15.80	15.71	
1.4	64QAM	6	0	15.99	15.82	15.77	

Band 7 (2600MHz Band) (dBm)							
Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	9.71	9.74	9.86	11
20	QPSK	1	49	9.62	9.64	9.82	
20	QPSK	1	99	9.76	9.52	9.68	
20	QPSK	50	0	8.94	8.96	9.04	10
20	QPSK	50	24	8.82	8.83	8.87	
20	QPSK	50	50	8.83	8.69	8.92	
20	QPSK	100	0	8.94	8.90	8.99	10
20	16QAM	1	0	9.32	9.13	9.21	
20	16QAM	1	49	9.10	9.05	9.14	
20	16QAM	1	99	9.03	8.98	9.08	9
20	16QAM	50	0	7.81	8.07	8.09	
20	16QAM	50	24	7.74	8.02	7.77	
20	16QAM	50	50	7.82	7.99	7.86	10
20	16QAM	100	0	7.88	7.92	7.99	
20	64QAM	1	0	9.09	8.85	8.81	
20	64QAM	1	49	9.02	8.82	9.07	9
20	64QAM	1	99	8.90	9.10	8.89	
20	64QAM	50	0	8.03	7.96	7.98	
20	64QAM	50	24	7.71	7.88	8.07	10
20	64QAM	50	50	7.72	7.93	7.75	
20	64QAM	100	0	7.78	8.01	8.08	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	9.54	9.63	9.68	11
15	QPSK	1	37	9.45	9.51	9.65	
15	QPSK	1	74	9.46	9.39	9.58	
15	QPSK	36	0	8.74	8.83	8.76	10
15	QPSK	36	20	8.55	8.70	8.69	
15	QPSK	36	39	8.63	8.64	8.81	
15	QPSK	75	0	8.71	8.85	8.71	10
15	16QAM	1	0	9.12	8.97	9.12	
15	16QAM	1	37	8.83	9.11	8.86	
15	16QAM	1	74	8.89	8.82	8.77	9
15	16QAM	36	0	7.92	7.84	7.69	
15	16QAM	36	20	7.73	7.92	7.67	
15	16QAM	36	39	7.55	7.64	7.80	10
15	16QAM	75	0	7.83	7.51	7.65	
15	64QAM	1	0	8.79	8.96	8.66	
15	64QAM	1	37	8.90	8.62	8.75	9
15	64QAM	1	74	8.80	8.85	8.84	
15	64QAM	36	0	7.76	7.96	7.92	
15	64QAM	36	20	7.72	7.82	7.84	10
15	64QAM	36	39	7.60	7.83	7.72	
15	64QAM	75	0	7.56	7.68	7.64	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	9.54	9.61	9.69	11
10	QPSK	1	25	9.46	9.58	9.65	
10	QPSK	1	49	9.51	9.42	9.63	
10	QPSK	25	0	8.86	8.71	8.88	10
10	QPSK	25	12	8.65	8.73	8.69	
10	QPSK	25	25	8.72	8.66	8.89	
10	QPSK	50	0	8.80	8.67	8.59	10
10	16QAM	1	0	9.05	9.06	9.11	
10	16QAM	1	25	8.98	8.92	8.74	
10	16QAM	1	49	9.08	8.85	8.88	9
10	16QAM	25	0	7.73	7.90	7.98	
10	16QAM	25	12	7.73	7.67	7.60	
10	16QAM	25	25	7.74	7.81	7.79	10
10	16QAM	50	0	7.68	7.66	7.79	
10	64QAM	1	0	8.78	8.83	8.89	
10	64QAM	1	25	8.81	8.69	8.82	9
10	64QAM	1	49	8.53	8.78	8.75	
10	64QAM	25	0	7.95	7.87	7.86	
10	64QAM	25	12	7.85	7.87	7.71	10
10	64QAM	25	25	7.83	7.72	7.61	
10	64QAM	50	0	7.70	7.78	7.82	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	9.51	9.59	9.67	11
5	QPSK	1	12	9.47	9.57	9.56	
5	QPSK	12	0	8.75	8.82	8.90	
5	QPSK	12	7	8.68	8.68	8.89	10
5	QPSK	12	13	8.90	8.75	8.68	
5	QPSK	25	0	8.79	8.88	8.85	
5	16QAM	1	0	8.98	9.22	8.90	10
5	16QAM	1	12	8.93	9.15	8.86	
5	16QAM	1	24	8.97	9.07	8.92	
5	16QAM	12	0	7.74	7.91	7.87	9
5	16QAM	12	7	7.79	7.61	7.81	
5	16QAM	12	13	7.63	7.80	7.81	
5	16QAM	25	0	7.64	7.60	7.53	10
5	64QAM	1	0	8.74	8.99	8.80	
5	64QAM	1	12	8.78	8.90	8.91	
5	64QAM	1	24	8.57	8.98	8.86	9
5	64QAM	12	0	7.90	7.87	7.76	
5	64QAM	12	7	7.72	7.63	7.68	
5	64QAM	12	13	7.69	7.82	7.82	10
5	64QAM	25	0	7.85	7.89	7.81	

Band 12 (700MHz Low Band) (dBm) Part 27F(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23060	23095	23130	18
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	16.85	16.92	16.80	18
10	QPSK	1	25	16.67	16.84	16.65	
10	QPSK	1	49	16.82	16.70	16.71	
10	QPSK	25	0	16.08	16.13	15.99	17
10	QPSK	25	12	16.02	16.08	16.08	
10	QPSK	25	25	16.02	15.98	16.07	
10	QPSK	50	0	15.98	16.04	15.98	17
10	16QAM	1	0	16.19	16.22	16.02	
10	16QAM	1	25	16.13	16.20	15.90	
10	16QAM	1	49	16.19	16.20	16.07	16
10	16QAM	25	0	14.99	15.13	15.09	
10	16QAM	25	12	14.77	15.06	14.95	
10	16QAM	25	25	14.87	15.04	14.88	17
10	16QAM	50	0	14.95	14.79	14.83	
10	64QAM	1	0	16.19	16.20	15.94	
10	64QAM	1	25	15.83	16.17	15.92	16
10	64QAM	1	49	15.99	15.88	15.86	
10	64QAM	25	0	15.05	15.15	15.02	
10	64QAM	25	12	14.96	14.90	14.96	16
10	64QAM	25	25	14.82	15.15	14.99	
10	64QAM	50	0	14.95	14.95	14.75	
Channel				23035	23095	23155	18
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	16.81	16.87	16.78	18
5	QPSK	1	12	16.79	16.76	16.66	
5	QPSK	1	24	16.64	16.71	16.77	
5	QPSK	12	0	16.06	16.08	15.85	17
5	QPSK	12	7	16.01	16.07	16.02	
5	QPSK	12	13	16.02	15.91	16.02	
5	QPSK	25	0	15.86	15.88	15.87	17
5	16QAM	1	0	16.09	16.29	16.05	
5	16QAM	1	12	16.10	16.26	16.00	
5	16QAM	1	24	16.14	16.16	16.08	16
5	16QAM	12	0	14.92	15.07	14.83	
5	16QAM	12	7	14.81	15.08	14.81	
5	16QAM	12	13	14.78	14.83	14.88	17
5	16QAM	25	0	14.96	15.07	14.83	
5	64QAM	1	0	15.94	16.27	15.90	
5	64QAM	1	12	15.87	16.02	15.95	16
5	64QAM	1	24	15.81	15.89	15.86	
5	64QAM	12	0	14.95	15.18	14.98	
5	64QAM	12	7	14.81	15.00	14.76	16
5	64QAM	12	13	14.72	15.07	14.73	
5	64QAM	25	0	14.90	14.98	15.01	
Channel				23025	23095	23165	18
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	16.80	16.82	16.73	18
3	QPSK	1	8	16.76	16.78	16.68	
3	QPSK	1	14	16.68	16.72	16.70	
3	QPSK	8	0	16.11	16.14	15.82	17
3	QPSK	8	4	16.04	15.89	15.81	
3	QPSK	8	7	16.07	15.89	15.97	
3	QPSK	15	0	15.89	16.16	15.93	17
3	16QAM	1	0	16.26	16.13	16.27	
3	16QAM	1	8	16.31	16.37	16.02	
3	16QAM	1	14	16.33	16.31	16.17	16
3	16QAM	8	0	15.13	15.11	14.87	
3	16QAM	8	4	14.75	15.10	14.76	
3	16QAM	8	7	14.83	14.84	14.85	17
3	16QAM	15	0	14.79	15.03	14.77	
3	64QAM	1	0	16.08	16.12	16.06	
3	64QAM	1	8	15.98	15.93	16.05	16
3	64QAM	1	14	15.90	16.21	15.96	
3	64QAM	8	0	15.16	15.17	14.81	
3	64QAM	8	4	14.92	15.20	14.85	16
3	64QAM	8	7	14.82	14.84	14.87	
3	64QAM	15	0	14.90	14.91	14.91	
Channel				23017	23095	23173	18
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	16.75	16.80	16.73	18
1.4	QPSK	1	3	16.78	16.77	16.71	
1.4	QPSK	1	5	16.56	16.94	16.65	
1.4	QPSK	3	0	16.08	16.14	15.94	17
1.4	QPSK	3	1	15.74	15.92	15.84	
1.4	QPSK	3	3	16.04	15.92	16.04	
1.4	QPSK	6	0	15.94	15.99	15.94	17
1.4	16QAM	1	0	16.15	16.42	16.17	
1.4	16QAM	1	3	16.12	16.29	16.01	
1.4	16QAM	1	5	16.03	16.10	16.17	16
1.4	16QAM	3	0	14.94	15.07	14.92	
1.4	16QAM	3	1	14.99	14.97	14.91	
1.4	16QAM	3	3	14.79	14.89	14.73	17
1.4	16QAM	6	0	15.11	14.82	14.83	
1.4	64QAM	1	0	16.22	15.97	16.04	
1.4	64QAM	1	3	15.81	16.05	16.03	16
1.4	64QAM	1	5	15.92	16.16	15.77	
1.4	64QAM	3	0	15.01	15.12	14.87	
1.4	64QAM	3	1	15.11	15.03	14.89	16
1.4	64QAM	3	3	14.98	15.11	14.75	
1.4	64QAM	6	0	14.94	14.86	14.86	

Band 13(700MHz Band) (dBm) Part 27F							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23230			
Frequency (MHz)				782			
10	QPSK	1	0		17.91		19
10	QPSK	1	25		17.84		
10	QPSK	1	49		17.75		
10	QPSK	25	0		17.04		18
10	QPSK	25	12		16.90		
10	QPSK	25	25		16.95		
10	QPSK	50	0		17.02		18
10	16QAM	1	0		17.31		
10	16QAM	1	25		17.27		
10	16QAM	1	49		17.20		17
10	16QAM	25	0		15.99		
10	16QAM	25	12		15.94		
10	16QAM	25	25		15.89		18
10	16QAM	50	0		15.96		
10	64QAM	1	0		17.14		
10	64QAM	1	25		17.12		17
10	64QAM	1	49		16.99		
10	64QAM	25	0		16.26		
10	64QAM	25	12		16.16		17
10	64QAM	25	25		16.06		
10	64QAM	50	0		16.10		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	17.85	17.87	17.86	19
5	QPSK	1	12	17.82	17.82	17.84	
5	QPSK	1	24	17.86	17.66	17.72	
5	QPSK	12	0	16.93	16.92	16.86	18
5	QPSK	12	7	16.93	17.05	16.89	
5	QPSK	12	13	17.05	16.84	16.80	
5	QPSK	25	0	16.92	17.00	17.01	18
5	16QAM	1	0	17.11	17.40	17.04	
5	16QAM	1	12	17.11	17.40	16.97	
5	16QAM	1	24	17.23	17.35	17.16	17
5	16QAM	12	0	16.04	16.01	15.96	
5	16QAM	12	7	15.78	15.81	15.87	
5	16QAM	12	13	15.73	15.81	15.70	18
5	16QAM	25	0	15.93	15.85	15.86	
5	64QAM	1	0	16.91	17.06	16.95	
5	64QAM	1	12	17.13	17.08	17.10	17
5	64QAM	1	24	16.96	16.98	16.97	
5	64QAM	12	0	15.87	16.21	16.10	
5	64QAM	12	7	15.87	15.92	15.92	17
5	64QAM	12	13	16.03	16.14	15.76	
5	64QAM	25	0	15.82	15.87	15.96	

Band 14 (700MHz Band) (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		17.87		
10	QPSK	1	25		17.81		19
10	QPSK	1	49		17.79		
10	QPSK	25	0		17.05		
10	QPSK	25	12		16.94		18
10	QPSK	25	25		16.93		
10	QPSK	50	0		17.02		
10	16QAM	1	0		17.27		18
10	16QAM	1	25		17.23		
10	16QAM	1	49		17.24		
10	16QAM	25	0		16.17		17
10	16QAM	25	12		15.84		
10	16QAM	25	25		16.01		
10	16QAM	50	0		15.72		18
10	64QAM	1	0		17.04		
10	64QAM	1	25		16.91		
10	64QAM	1	49		17.18		17
10	64QAM	25	0		16.18		
10	64QAM	25	12		15.93		
10	64QAM	25	25		15.84		
10	64QAM	50	0		16.04		
Channel				23305	23330	23355	Tune-up limit (dBm)
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	17.79	17.84	17.81	
5	QPSK	1	12	17.84	17.82	17.79	19
5	QPSK	1	24	17.76	17.73	17.68	
5	QPSK	12	0	16.93	17.04	16.85	
5	QPSK	12	7	16.91	16.92	17.02	18
5	QPSK	12	13	17.06	16.91	16.75	
5	QPSK	25	0	17.12	17.04	16.99	
5	16QAM	1	0	17.08	17.22	17.17	18
5	16QAM	1	12	17.14	17.15	17.20	
5	16QAM	1	24	17.09	17.15	17.18	
5	16QAM	12	0	16.03	15.97	15.94	17
5	16QAM	12	7	15.82	16.13	15.86	
5	16QAM	12	13	15.71	16.03	15.79	
5	16QAM	25	0	16.10	16.05	15.88	18
5	64QAM	1	0	17.07	17.14	17.12	
5	64QAM	1	12	17.14	17.16	16.96	
5	64QAM	1	24	17.00	17.01	16.75	17
5	64QAM	12	0	16.12	15.92	15.92	
5	64QAM	12	7	15.84	16.13	15.99	
5	64QAM	12	13	15.72	15.85	15.85	
5	64QAM	25	0	16.02	15.79	15.87	

Band 17 (700MHz Band) (dBm) Part 27H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23780	23790	23800	
Frequency (MHz)				709	710	711	
10	QPSK	1	0	16.77	16.88	16.79	18
10	QPSK	1	25	16.61	16.86	16.65	
10	QPSK	1	49	16.65	16.67	16.70	
10	QPSK	25	0	16.10	16.15	15.94	17
10	QPSK	25	12	16.01	15.87	16.06	
10	QPSK	25	25	16.07	15.86	15.89	
10	QPSK	50	0	15.93	15.87	15.74	17
10	16QAM	1	0	16.21	16.25	16.27	
10	16QAM	1	25	16.15	16.24	15.97	
10	16QAM	1	49	16.00	16.29	16.16	16
10	16QAM	25	0	14.94	15.04	14.91	
10	16QAM	25	12	14.73	14.85	14.73	
10	16QAM	25	25	14.79	14.98	14.77	17
10	16QAM	50	0	14.73	14.96	14.82	
10	64QAM	1	0	16.06	16.11	15.90	
10	64QAM	1	25	15.95	15.94	15.85	16
10	64QAM	1	49	15.97	16.02	15.98	
10	64QAM	25	0	15.07	15.11	14.95	
10	64QAM	25	12	14.88	14.96	14.72	16
10	64QAM	25	25	14.95	15.09	14.89	
10	64QAM	50	0	14.90	14.78	14.86	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	16.63	16.66	16.72	
5	QPSK	1	12	16.77	16.84	16.74	18
5	QPSK	1	24	16.73	16.55	16.63	
5	QPSK	12	0	16.01	16.04	16.00	
5	QPSK	12	7	15.94	15.90	15.80	17
5	QPSK	12	13	15.87	15.78	15.77	
5	QPSK	25	0	15.79	15.89	15.90	
5	16QAM	1	0	16.09	16.37	16.16	17
5	16QAM	1	12	16.30	16.08	15.95	
5	16QAM	1	24	16.19	16.10	15.96	
5	16QAM	12	0	15.03	15.09	15.04	16
5	16QAM	12	7	14.90	14.80	14.75	
5	16QAM	12	13	14.86	15.00	14.72	
5	16QAM	25	0	14.99	14.91	14.78	17
5	64QAM	1	0	15.91	16.18	15.81	
5	64QAM	1	12	15.77	16.00	15.89	
5	64QAM	1	24	16.02	16.09	15.88	16
5	64QAM	12	0	15.12	14.99	14.88	
5	64QAM	12	7	14.94	14.87	14.74	
5	64QAM	12	13	14.70	14.91	14.95	16
5	64QAM	25	0	14.96	14.87	14.80	

Band 18 (835MHz Band) (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					23925		
Frequency (MHz)					822.5		
15	QPSK	1	0		17.79		19
15	QPSK	1	37		17.56		
15	QPSK	1	74		17.69		
15	QPSK	36	0		16.92		18
15	QPSK	36	20		16.88		
15	QPSK	36	39		16.73		
15	QPSK	75	0		16.83		18
15	16QAM	1	0		17.12		
15	16QAM	1	37		16.97		
15	16QAM	1	74		16.97		17
15	16QAM	36	0		15.78		
15	16QAM	36	20		16.01		
15	16QAM	36	39		15.73		18
15	16QAM	75	0		15.92		
15	64QAM	1	0		16.97		
15	64QAM	1	25		16.96		17
15	64QAM	1	49		16.91		
15	64QAM	25	0		15.95		
15	64QAM	25	12		15.87		17
15	64QAM	25	25		15.93		
15	64QAM	50	0		15.65		
Channel				23900	23925	23950	Tune-up limit (dBm)
Frequency (MHz)				820	822.5	825	
10	QPSK	1	0	17.75	17.76	17.61	19
10	QPSK	1	25	17.49	17.57	17.67	
10	QPSK	1	49	17.48	17.47	17.74	
10	QPSK	25	0	16.95	16.91	16.94	18
10	QPSK	25	12	16.90	16.81	16.75	
10	QPSK	25	25	17.02	16.83	16.82	
10	QPSK	50	0	16.88	16.96	16.78	18
10	16QAM	1	0	16.95	17.02	16.89	
10	16QAM	1	25	17.01	17.00	16.95	
10	16QAM	1	49	17.12	17.23	16.79	17
10	16QAM	25	0	15.89	15.88	15.98	
10	16QAM	25	12	15.68	16.01	15.77	
10	16QAM	25	25	15.63	15.76	15.82	18
10	16QAM	50	0	15.73	15.89	15.63	
10	64QAM	1	0	16.74	17.03	16.91	
10	64QAM	1	25	16.87	16.73	16.75	17
10	64QAM	1	49	16.75	16.77	16.60	
10	64QAM	25	0	15.88	15.88	15.93	
10	64QAM	25	12	15.90	16.05	15.78	17
10	64QAM	25	25	15.62	15.75	15.69	
10	64QAM	50	0	15.75	15.83	15.71	
Channel				23875	23925	23975	Tune-up limit (dBm)
Frequency (MHz)				817.5	822.5	827.5	
5	QPSK	1	0	17.72	17.74	17.70	19
5	QPSK	1	12	17.64	17.65	17.42	
5	QPSK	1	24	17.63	17.71	17.43	
5	QPSK	12	0	16.76	16.76	17.00	18
5	QPSK	12	7	16.84	16.79	16.84	
5	QPSK	12	13	16.68	16.90	16.64	
5	QPSK	25	0	16.76	16.89	16.90	18
5	16QAM	1	0	17.07	16.98	16.87	
5	16QAM	1	12	16.93	17.25	17.05	
5	16QAM	1	24	16.94	17.17	16.95	17
5	16QAM	12	0	16.02	16.08	15.72	
5	16QAM	12	7	15.87	15.94	15.84	
5	16QAM	12	13	15.80	15.97	15.74	18
5	16QAM	25	0	15.90	15.58	15.63	
5	64QAM	1	0	16.84	16.93	16.75	
5	64QAM	1	12	16.69	16.81	16.87	17
5	64QAM	1	24	16.69	16.87	16.86	
5	64QAM	12	0	15.89	15.93	15.69	
5	64QAM	12	7	15.74	15.98	15.94	17
5	64QAM	12	13	15.89	15.85	15.78	
5	64QAM	25	0	15.78	15.64	15.62	

Band 19 (835MHz Band) (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					24075		
Frequency (MHz)					837.5		
15	QPSK	1	0		17.81		19
15	QPSK	1	37		17.84		
15	QPSK	1	74		17.60		
15	QPSK	36	0		16.92		18
15	QPSK	36	20		16.90		
15	QPSK	36	39		16.75		
15	QPSK	75	0		16.84		18
15	16QAM	1	0		17.10		
15	16QAM	1	37		17.08		
15	16QAM	1	74		16.97		17
15	16QAM	36	0		15.91		
15	16QAM	36	20		15.66		
15	16QAM	36	39		15.95		18
15	16QAM	75	0		15.64		
15	64QAM	1	0		17.10		
15	64QAM	1	25		16.82		17
15	64QAM	1	49		17.03		
15	64QAM	25	0		15.83		
15	64QAM	25	12		15.72		17
15	64QAM	25	25		16.03		
15	64QAM	50	0		15.75		
Channel				24050	24075	24100	Tune-up limit (dBm)
Frequency (MHz)				835	837.5	840	
10	QPSK	1	0	17.75	17.77	17.71	19
10	QPSK	1	25	17.72	17.73	17.59	
10	QPSK	1	49	17.53	17.52	17.52	
10	QPSK	25	0	16.97	16.82	16.73	18
10	QPSK	25	12	16.76	16.97	16.97	
10	QPSK	25	25	16.87	16.85	16.68	
10	QPSK	50	0	16.98	16.96	16.95	18
10	16QAM	1	0	17.08	17.05	17.00	
10	16QAM	1	25	17.10	17.19	16.80	
10	16QAM	1	49	16.86	17.21	16.78	17
10	16QAM	25	0	15.95	15.90	15.84	
10	16QAM	25	12	15.78	15.69	15.76	
10	16QAM	25	25	15.55	15.67	15.71	18
10	16QAM	50	0	15.92	15.71	15.68	
10	64QAM	1	0	17.02	16.95	16.88	
10	64QAM	1	25	16.93	16.96	16.79	17
10	64QAM	1	49	16.79	16.82	16.72	
10	64QAM	25	0	15.92	15.79	15.75	
10	64QAM	25	12	15.77	15.78	15.70	17
10	64QAM	25	25	15.61	15.76	15.70	
10	64QAM	50	0	15.74	15.79	15.67	
Channel				24025	24075	24125	Tune-up limit (dBm)
Frequency (MHz)				832.5	837.5	842.5	
5	QPSK	1	0	17.63	17.76	17.67	19
5	QPSK	1	12	17.53	17.75	17.63	
5	QPSK	1	24	17.67	17.58	17.49	
5	QPSK	12	0	16.97	16.76	17.02	18
5	QPSK	12	7	16.77	16.78	16.76	
5	QPSK	12	13	16.98	16.66	16.75	
5	QPSK	25	0	16.91	16.97	16.75	18
5	16QAM	1	0	17.10	17.11	16.97	
5	16QAM	1	12	16.99	17.05	16.80	
5	16QAM	1	24	17.01	16.94	16.77	17
5	16QAM	12	0	15.98	16.04	15.82	
5	16QAM	12	7	15.82	15.98	15.73	
5	16QAM	12	13	15.82	15.76	15.79	18
5	16QAM	25	0	15.74	15.74	15.58	
5	64QAM	1	0	16.90	16.91	16.73	
5	64QAM	1	12	16.71	16.87	16.64	17
5	64QAM	1	24	16.90	16.90	16.74	
5	64QAM	12	0	15.82	15.87	15.92	
5	64QAM	12	7	15.82	15.99	15.92	17
5	64QAM	12	13	15.60	15.91	15.71	
5	64QAM	25	0	15.82	15.86	15.91	

Band 25 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	
Frequency (MHz)				1860	1882.5	1905	
20	QPSK	1	0	14.30	14.28	14.21	15.5
20	QPSK	1	49	14.22	14.23	14.19	
20	QPSK	1	99	14.16	14.24	14.08	
20	QPSK	50	0	13.45	13.38	13.29	14.5
20	QPSK	50	24	13.16	13.39	13.32	
20	QPSK	50	50	13.37	13.25	13.39	
20	QPSK	100	0	13.39	13.27	13.28	14.5
20	16QAM	1	0	13.65	13.64	13.55	
20	16QAM	1	49	13.56	13.55	13.42	
20	16QAM	1	99	13.56	13.59	13.51	13.5
20	16QAM	50	0	12.57	12.40	12.41	
20	16QAM	50	24	12.20	12.35	12.31	
20	16QAM	50	50	12.21	12.56	12.47	14.5
20	16QAM	100	0	12.53	12.42	12.50	
20	64QAM	1	0	13.60	13.66	13.62	
20	64QAM	1	49	13.56	13.51	13.27	13.5
20	64QAM	1	99	13.41	13.39	13.29	
20	64QAM	50	0	12.53	12.68	12.37	
20	64QAM	50	24	12.52	12.42	12.48	14.5
20	64QAM	50	50	12.36	12.39	12.53	
20	64QAM	100	0	12.44	12.46	12.47	
Channel				26115	26365	26615	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5	
15	QPSK	1	0	14.26	14.22	14.07	15.5
15	QPSK	1	37	14.12	14.18	14.08	
15	QPSK	1	74	14.10	14.07	14.06	
15	QPSK	36	0	13.46	13.39	13.46	14.5
15	QPSK	36	20	13.34	13.36	13.36	
15	QPSK	36	39	13.46	13.29	13.43	
15	QPSK	75	0	13.38	13.38	13.26	14.5
15	16QAM	1	0	13.59	13.55	13.52	
15	16QAM	1	37	13.48	13.56	13.47	
15	16QAM	1	74	13.41	13.48	13.46	13.5
15	16QAM	36	0	12.57	12.34	12.46	
15	16QAM	36	20	12.25	12.48	12.37	
15	16QAM	36	39	12.34	12.55	12.26	14.5
15	16QAM	75	0	12.53	12.34	12.25	
15	64QAM	1	0	13.48	13.58	13.39	
15	64QAM	1	37	13.43	13.29	13.61	13.5
15	64QAM	1	74	13.36	13.50	13.36	
15	64QAM	36	0	12.54	12.37	12.33	
15	64QAM	36	20	12.41	12.51	12.41	14.5
15	64QAM	36	39	12.42	12.48	12.49	
15	64QAM	75	0	12.33	12.28	12.28	
Channel				26090	26365	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	14.27	14.13	14.06	15.5
10	QPSK	1	25	14.18	14.21	14.01	
10	QPSK	1	49	14.07	14.03	14.08	
10	QPSK	25	0	13.38	13.37	13.53	14.5
10	QPSK	25	12	13.38	13.54	13.31	
10	QPSK	25	25	13.41	13.37	13.26	
10	QPSK	50	0	13.29	13.37	13.31	14.5
10	16QAM	1	0	13.69	13.71	13.57	
10	16QAM	1	25	13.60	13.54	13.43	
10	16QAM	1	49	13.59	13.64	13.46	13.5
10	16QAM	25	0	12.38	12.60	12.51	
10	16QAM	25	12	12.43	12.23	12.21	
10	16QAM	25	25	12.39	12.56	12.26	14.5
10	16QAM	50	0	12.52	12.27	12.39	
10	64QAM	1	0	13.41	13.63	13.54	
10	64QAM	1	25	13.49	13.39	13.56	13.5
10	64QAM	1	49	13.28	13.42	13.51	
10	64QAM	25	0	12.56	12.55	12.56	
10	64QAM	25	12	12.32	12.52	12.38	14.5
10	64QAM	25	25	12.21	12.56	12.26	
10	64QAM	50	0	12.47	12.24	12.59	
Channel				26065	26365	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5	
5	QPSK	1	0	14.28	14.16	14.14	15.5
5	QPSK	1	12	14.21	14.05	14.17	
5	QPSK	1	24	14.25	14.14	14.12	
5	QPSK	12	0	13.62	13.43	13.53	14.5
5	QPSK	12	7	13.23	13.41	13.56	
5	QPSK	12	13	13.43	13.38	13.34	
5	QPSK	25	0	13.27	13.53	13.35	14.5
5	16QAM	1	0	13.70	13.61	13.62	
5	16QAM	1	12	13.52	13.67	13.40	
5	16QAM	1	24	13.65	13.59	13.52	13.5
5	16QAM	12	0	12.46	12.66	12.39	
5	16QAM	12	7	12.40	12.51	12.34	
5	16QAM	12	13	12.28	12.37	12.49	14.5
5	16QAM	25	0	12.51	12.25	12.46	
5	64QAM	1	0	13.50	13.39	13.54	
5	64QAM	1	12	13.23	13.49	13.41	13.5
5	64QAM	1	24	13.52	13.52	13.48	
5	64QAM	12	0	12.29	12.37	12.51	
5	64QAM	12	7	12.44	12.51	12.36	14.5
5	64QAM	12	13	12.16	12.40	12.38	
5	64QAM	25	0	12.36	12.27	12.45	
Channel				26055	26365	26675	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1882.5	1913.5	
3	QPSK	1	0	14.26	14.20	14.13	15.5
3	QPSK	1	8	14.10	14.10	14.09	
3	QPSK	1	14	14.04	14.03	14.06	
3	QPSK	8	0	13.57	13.45	13.57	14.5
3	QPSK	8	4	13.34	13.38	13.60	

Band 26 for FCC (dBm) (only on channel required)								
BW [MHz]	Modulation	RB Size		RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					26765	26865	26965	
Frequency (MHz)					821.5	831.5	841.5	
15	QPSK	1		0	17.75	17.82	17.73	19
15	QPSK	1		37	17.65	17.68	17.64	
15	QPSK	1		74	17.56	17.61	17.60	
15	QPSK	36		0	16.89	17.01	16.87	18
15	QPSK	36		20	16.73	16.96	16.95	
15	QPSK	36		39	16.92	16.71	16.79	
15	QPSK	75		0	16.82	17.03	16.70	18
15	16QAM	1		0	17.12	17.12	17.14	
15	16QAM	1		37	17.23	17.25	17.06	
15	16QAM	1		74	16.89	17.15	16.99	17
15	16QAM	36		0	15.81	15.83	15.79	
15	16QAM	36		20	15.83	15.80	15.66	
15	16QAM	36		39	15.62	15.95	15.61	18
15	16QAM	75		0	15.83	15.65	15.58	
15	64QAM	1		0	17.06	16.79	16.75	
15	64QAM	1		37	16.74	16.83	16.73	17
15	64QAM	1		74	16.67	16.97	16.65	
15	64QAM	36		0	15.80	15.92	15.81	
15	64QAM	36		20	15.93	15.91	15.71	17
15	64QAM	36		39	15.57	15.89	15.76	
15	64QAM	75		0	15.90	15.71	15.94	
Channel					26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)					819	831.5	844	
10	QPSK	1		0	17.77	17.78	17.72	19
10	QPSK	1		25	17.57	17.62	17.71	
10	QPSK	1		49	17.62	17.61	17.53	
10	QPSK	25		0	17.10	17.11	16.85	18
10	QPSK	25		12	16.88	17.01	16.77	
10	QPSK	25		25	16.74	16.79	16.80	
10	QPSK	50		0	16.77	17.01	16.82	18
10	16QAM	1		0	17.27	17.19	17.16	
10	16QAM	1		25	17.15	17.25	17.00	
10	16QAM	1		49	16.98	16.97	16.98	17
10	16QAM	25		0	16.05	15.99	15.70	
10	16QAM	25		12	15.89	15.69	15.73	
10	16QAM	25		25	15.63	15.79	15.65	18
10	16QAM	50		0	15.85	15.69	15.68	
10	64QAM	1		0	16.75	16.79	16.77	
10	64QAM	1		25	16.99	16.69	16.75	17
10	64QAM	1		49	16.94	16.79	16.73	
10	64QAM	25		0	16.07	15.85	15.71	
10	64QAM	25		12	15.71	15.74	15.86	18
10	64QAM	25		25	15.85	15.95	15.84	
10	64QAM	50		0	15.75	15.94	15.81	
Channel					26715	26865	27015	Tune-up limit (dBm)
Frequency (MHz)					816.5	831.5	846.5	
5	QPSK	1		0	17.67	17.76	17.70	19
5	QPSK	1		12	17.64	17.66	17.52	
5	QPSK	1		24	17.55	17.54	17.55	
5	QPSK	12		0	16.99	16.83	16.71	18
5	QPSK	12		7	16.69	16.79	16.98	
5	QPSK	12		13	16.85	16.77	16.70	
5	QPSK	25		0	16.95	17.03	16.84	18
5	16QAM	1		0	17.04	17.31	17.17	
5	16QAM	1		12	17.21	17.12	17.07	
5	16QAM	1		24	17.01	17.23	17.01	17
5	16QAM	12		0	15.92	15.90	15.84	
5	16QAM	12		7	15.84	15.88	15.72	
5	16QAM	12		13	15.58	15.94	15.55	18
5	16QAM	25		0	15.88	15.81	15.56	
5	64QAM	1		0	16.75	16.86	16.84	
5	64QAM	1		12	17.00	16.73	16.74	17
5	64QAM	1		24	16.73	16.74	16.61	
5	64QAM	12		0	15.99	15.92	15.99	
5	64QAM	12		7	15.79	15.76	15.87	17
5	64QAM	12		13	15.83	15.79	15.66	
5	64QAM	25		0	15.91	15.85	15.82	
Channel					26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)					815.5	831.5	847.5	
3	QPSK	1		0	17.72	17.79	17.60	19
3	QPSK	1		8	17.68	17.70	17.53	
3	QPSK	1		14	17.59	17.58	17.46	
3	QPSK	8		0	16.79	16.82	16.96	18
3	QPSK	8		4	16.87	16.85	16.76	
3	QPSK	8		7	16.76	16.88	16.85	
3	QPSK	15		0	16.77	16.85	16.86	18
3	16QAM	1		0	17.04	17.06	17.10	
3	16QAM	1		8	17.18	17.19	17.08	
3	16QAM	1		14	17.11	16.93	17.12	17
3	16QAM	8		0	15.80	15.95	15.89	
3	16QAM	8		4	15.79	15.92	15.65	
3	16QAM	8		7	15.68	15.76	15.55	18
3	16QAM	15		0	15.94	15.58	15.66	
3	64QAM	1		0	16.97	17.12	16.82	
3	64QAM	1		8	16.72	16.78	16.91	17
3	64QAM	1		14	16.92	17.06	16.73	
3	64QAM	8		0	16.02	15.99	15.87	
3	64QAM	8		4	15.81	15.89	15.70	17
3	64QAM	8		7	15.85	15.76	15.69	
3	64QAM	15		0	15.82	15.96	15.94	
Channel					26697	26865	27033	Tune-up limit (dBm)
Frequency (MHz)					814.7	831.5	848.3	
1.4	QPSK	1		0	17.67	17.75	17.66	19
1.4	QPSK	1		3	17.49	17.72	17.60	
1.4	QPSK	1		5	17.60	17.61	17.59	
1.4	QPSK	3		0	16.83	17.02	17.02	
1.4	QPSK	3		1	16.78	16.77	16.89	

3	QPSK	8	7	13.46	13.30	13.57	14.5
3	QPSK	15	0	13.50	13.36	13.48	
3	16QAM	1	0	13.78	13.75	13.56	14.5
3	16QAM	1	8	13.58	13.69	13.58	
3	16QAM	1	14	13.44	13.79	13.63	13.5
3	16QAM	8	0	12.39	12.44	12.46	
3	16QAM	8	4	12.50	12.39	12.32	13.5
3	16QAM	8	7	12.30	12.54	12.35	
3	16QAM	15	0	12.33	12.34	12.39	14.5
3	64QAM	1	0	13.57	13.41	13.56	
3	64QAM	1	8	13.39	13.35	13.46	14.5
3	64QAM	1	14	13.44	13.43	13.28	
3	64QAM	8	0	12.58	12.64	12.65	13.5
3	64QAM	8	4	12.53	12.58	12.29	
3	64QAM	8	7	12.19	12.49	12.38	13.5
3	64QAM	15	0	12.32	12.39	12.57	
Channel				26047	26365	26683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	14.24	14.13	14.11	15.5
1.4	QPSK	1	3	14.22	14.09	14.08	
1.4	QPSK	1	5	14.15	14.03	14.10	15.5
1.4	QPSK	3	0	13.52	13.33	13.52	
1.4	QPSK	3	1	13.37	13.27	13.33	14.5
1.4	QPSK	3	3	13.32	13.28	13.23	
1.4	QPSK	6	0	13.39	13.32	13.43	14.5
1.4	16QAM	1	0	13.84	13.54	13.77	
1.4	16QAM	1	3	13.47	13.74	13.56	14.5
1.4	16QAM	1	5	13.66	13.76	13.66	
1.4	16QAM	3	0	12.37	12.46	12.38	13.5
1.4	16QAM	3	1	12.34	12.49	12.23	
1.4	16QAM	3	3	12.16	12.39	12.18	14.5
1.4	16QAM	6	0	12.33	12.29	12.46	
1.4	64QAM	1	0	13.46	13.58	13.46	14.5
1.4	64QAM	1	3	13.29	13.54	13.54	
1.4	64QAM	1	5	13.19	13.33	13.44	13.5
1.4	64QAM	3	0	12.36	12.43	12.51	
1.4	64QAM	3	1	12.49	12.58	12.44	13.5
1.4	64QAM	3	3	12.38	12.47	12.31	
1.4	64QAM	6	0	12.48	12.44	12.56	13.5

1.4	QPSK	3	3	17.00	16.78	16.72	18
1.4	QPSK	6	0	17.04	16.83	16.78	
1.4	16QAM	1	0	16.97	17.27	17.09	18
1.4	16QAM	1	3	16.96	17.03	16.94	
1.4	16QAM	1	5	17.01	16.92	16.96	18
1.4	16QAM	3	0	15.81	15.98	15.83	
1.4	16QAM	3	1	15.79	15.90	15.69	17
1.4	16QAM	3	3	15.75	15.69	15.73	
1.4	16QAM	6	0	15.79	15.79	15.58	18
1.4	64QAM	1	0	16.91	16.79	17.01	
1.4	64QAM	1	3	16.91	16.89	16.82	18
1.4	64QAM	1	5	16.82	16.95	16.76	
1.4	64QAM	3	0	15.92	15.81	15.97	17
1.4	64QAM	3	1	15.79	16.04	15.74	
1.4	64QAM	3	3	15.75	15.90	15.86	17
1.4	64QAM	6	0	15.98	15.95	15.91	

Band 30 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				27710			12
Frequency (MHz)				2310			
10	QPSK	1	0		10.61		12
10	QPSK	1	25		10.57		
10	QPSK	1	49		10.52		
10	QPSK	25	0		9.67		11
10	QPSK	25	12		9.71		
10	QPSK	25	25		9.65		
10	QPSK	50	0		9.66		11
10	16QAM	1	0		9.92		
10	16QAM	1	25		9.74		
10	16QAM	1	49		9.71		10
10	16QAM	25	0		8.68		
10	16QAM	25	12		8.64		
10	16QAM	25	25		8.74		11
10	16QAM	50	0		8.62		
10	64QAM	1	0		9.76		
10	64QAM	1	25		9.68		10
10	64QAM	1	49		9.60		
10	64QAM	25	0		8.62		
10	64QAM	25	12		8.59		10
10	64QAM	25	25		8.55		
10	64QAM	50	0		8.68		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	10.48	10.59	10.56	12
5	QPSK	1	12	10.36	10.50	10.50	
5	QPSK	1	24	10.42	10.47	10.42	
5	QPSK	12	0	9.63	9.79	9.73	11
5	QPSK	12	7	9.50	9.61	9.59	
5	QPSK	12	13	9.72	9.63	9.61	
5	QPSK	25	0	9.74	9.60	9.48	11
5	16QAM	1	0	9.85	9.90	9.70	
5	16QAM	1	12	9.99	9.71	9.63	
5	16QAM	1	24	9.75	9.92	9.76	10
5	16QAM	12	0	8.57	8.83	8.68	
5	16QAM	12	7	8.61	8.60	8.69	
5	16QAM	12	13	8.50	8.57	8.50	11
5	16QAM	25	0	8.75	8.44	8.59	
5	64QAM	1	0	9.63	9.68	9.58	
5	64QAM	1	12	9.45	9.58	9.58	10
5	64QAM	1	24	9.61	9.61	9.65	
5	64QAM	12	0	8.54	8.78	8.71	
5	64QAM	12	7	8.48	8.53	8.74	10
5	64QAM	12	13	8.62	8.57	8.74	
5	64QAM	25	0	8.52	8.75	8.69	

Band 66 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	12.71	12.76	12.94	14
20	QPSK	1	49	12.61	12.68	12.81	
20	QPSK	1	99	12.68	12.73	12.83	
20	QPSK	50	0	11.79	11.84	11.90	13
20	QPSK	50	24	11.71	11.71	11.86	
20	QPSK	50	50	11.75	11.73	11.63	
20	QPSK	100	0	11.74	11.64	11.81	13
20	16QAM	1	0	12.10	12.14	11.88	
20	16QAM	1	49	12.14	12.01	12.02	
20	16QAM	1	99	11.78	11.91	11.91	12
20	16QAM	50	0	10.79	10.86	10.86	
20	16QAM	50	24	10.52	10.64	10.74	
20	16QAM	50	50	10.71	10.75	10.74	13
20	16QAM	100	0	10.73	10.74	10.65	
20	64QAM	1	0	11.68	11.85	11.95	
20	64QAM	1	49	11.60	11.94	11.63	12
20	64QAM	1	99	11.76	11.71	11.87	
20	64QAM	50	0	10.84	10.93	10.72	
20	64QAM	50	24	10.80	10.64	10.76	12
20	64QAM	50	50	10.81	10.79	10.61	
20	64QAM	100	0	10.76	10.73	10.72	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	12.60	12.58	12.78	14
15	QPSK	1	37	12.44	12.62	12.63	
15	QPSK	1	74	12.53	12.55	12.74	
15	QPSK	36	0	11.75	11.79	11.77	13
15	QPSK	36	20	11.73	11.67	11.67	
15	QPSK	36	39	11.80	11.72	11.57	
15	QPSK	75	0	11.65	11.92	11.94	13
15	16QAM	1	0	11.98	11.96	11.96	
15	16QAM	1	37	12.12	11.96	12.08	
15	16QAM	1	74	11.98	12.01	12.08	12
15	16QAM	36	0	10.75	10.71	10.92	
15	16QAM	36	20	10.60	10.68	10.58	
15	16QAM	36	39	10.69	10.77	10.78	13
15	16QAM	75	0	10.73	10.62	10.85	
15	64QAM	1	0	11.94	11.87	11.71	
15	64QAM	1	37	11.83	11.92	11.92	12
15	64QAM	1	74	11.85	11.85	11.62	
15	64QAM	36	0	10.86	10.85	10.79	
15	64QAM	36	20	10.59	10.89	10.65	12
15	64QAM	36	39	10.52	10.88	10.74	
15	64QAM	75	0	10.76	10.71	10.77	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	12.57	12.66	12.75	14
10	QPSK	1	25	12.43	12.65	12.62	
10	QPSK	1	49	12.48	12.46	12.64	
10	QPSK	25	0	11.94	11.78	11.74	13
10	QPSK	25	12	11.63	11.75	11.74	
10	QPSK	25	25	11.82	11.82	11.74	
10	QPSK	50	0	11.95	11.73	11.72	13
10	16QAM	1	0	12.17	12.08	12.01	
10	16QAM	1	25	11.90	11.94	12.06	
10	16QAM	1	49	12.04	11.90	11.80	12
10	16QAM	25	0	10.81	10.68	10.72	
10	16QAM	25	12	10.69	10.70	10.64	
10	16QAM	25	25	10.72	10.67	10.54	13
10	16QAM	50	0	10.58	10.72	10.81	
10	64QAM	1	0	11.97	11.79	11.77	
10	64QAM	1	25	11.59	11.86	11.96	12
10	64QAM	1	49	11.66	11.90	11.63	
10	64QAM	25	0	10.82	10.68	10.74	
10	64QAM	25	12	10.70	10.66	10.61	12
10	64QAM	25	25	10.70	10.90	10.65	
10	64QAM	50	0	10.76	10.90	10.69	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	12.57	12.56	12.74	14
5	QPSK	1	12	12.38	12.49	12.61	
5	QPSK	1	24	12.38	12.45	12.48	
5	QPSK	12	0	11.87	11.83	11.78	13
5	QPSK	12	7	11.56	11.87	11.75	
5	QPSK	12	13	11.89	11.62	11.64	
5	QPSK	25	0	11.83	11.65	11.90	13
5	16QAM	1	0	11.94	11.92	11.98	
5	16QAM	1	12	11.92	11.90	11.76	
5	16QAM	1	24	11.95	11.88	11.86	12
5	16QAM	12	0	10.87	10.83	10.79	
5	16QAM	12	7	10.82	10.77	10.63	
5	16QAM	12	13	10.65	10.73	10.73	13
5	16QAM	25	0	10.85	10.64	10.56	
5	64QAM	1	0	11.83	11.79	11.98	
5	64QAM	1	12	11.86	11.76	11.97	12
5	64QAM	1	24	11.76	11.94	11.79	
5	64QAM	12	0	10.65	10.92	10.91	
5	64QAM	12	7	10.58	10.64	10.60	14
5	64QAM	12	13	10.73	10.69	10.58	
5	64QAM	25	0	10.90	10.79	10.80	
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	12.59	12.60	12.72	14
3	QPSK	1	8	12.50	12.48	12.67	
3	QPSK	1	14	12.48	12.53	12.65	
3	QPSK	8	0	11.82	11.91	11.95	14
3	QPSK	8	4	11.76	11.86	11.72	

3	QPSK	8	7	11.87	11.73	11.88	13
3	QPSK	15	0	11.88	11.76	11.62	
3	16QAM	1	0	11.84	12.08	12.05	
3	16QAM	1	8	11.86	12.03	12.00	12
3	16QAM	1	14	11.92	12.06	11.78	
3	16QAM	8	0	10.87	10.92	10.95	
3	16QAM	8	4	10.68	10.83	10.80	13
3	16QAM	8	7	10.70	10.81	10.78	
3	16QAM	15	0	10.61	10.84	10.77	
3	64QAM	1	0	12.00	11.78	11.79	12
3	64QAM	1	8	11.91	11.79	11.95	
3	64QAM	1	14	11.61	11.98	11.77	
3	64QAM	8	0	10.92	10.84	10.79	13
3	64QAM	8	4	10.79	10.78	10.89	
3	64QAM	8	7	10.56	10.85	10.67	
3	64QAM	15	0	10.87	10.85	10.90	14
Channel				131979	132322	132665	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	12.66	12.62	12.71	13
1.4	QPSK	1	3	12.66	12.66	12.53	
1.4	QPSK	1	5	12.51	12.60	12.62	
1.4	QPSK	3	0	11.97	11.84	11.69	12
1.4	QPSK	3	1	11.73	11.89	11.88	
1.4	QPSK	3	3	11.72	11.85	11.85	
1.4	QPSK	6	0	11.80	11.85	11.86	13
1.4	16QAM	1	0	12.07	11.96	11.87	
1.4	16QAM	1	3	12.10	12.14	11.86	
1.4	16QAM	1	5	11.89	11.94	12.06	12
1.4	16QAM	3	0	10.90	10.85	10.96	
1.4	16QAM	3	1	10.64	10.81	10.72	
1.4	16QAM	3	3	10.70	10.68	10.79	13
1.4	16QAM	6	0	10.65	10.50	10.82	
1.4	64QAM	1	0	11.98	12.01	11.72	
1.4	64QAM	1	3	11.71	11.70	11.64	12
1.4	64QAM	1	5	11.81	11.96	11.58	
1.4	64QAM	3	0	10.81	11.02	10.90	
1.4	64QAM	3	1	10.84	10.82	10.62	13
1.4	64QAM	3	3	10.78	10.92	10.89	
1.4	64QAM	6	0	10.67	10.75	10.81	

Band 71 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				133222	133322	133372	
Frequency (MHz)				673	683	688	
20	QPSK	1	0	18.80	18.83	18.75	
20	QPSK	1	49	18.66	18.77	18.52	20
20	QPSK	1	99	18.63	18.55	18.65	
20	QPSK	50	0	17.90	17.94	17.89	
20	QPSK	50	24	17.66	17.82	17.72	19
20	QPSK	50	50	17.90	17.68	17.83	
20	QPSK	100	0	17.80	17.97	17.69	
20	16QAM	1	0	17.88	18.10	17.85	19
20	16QAM	1	49	17.94	18.11	17.90	
20	16QAM	1	99	18.07	17.98	17.93	
20	16QAM	50	0	16.98	16.88	16.76	18
20	16QAM	50	24	16.77	16.90	16.79	
20	16QAM	50	50	16.71	16.86	16.67	
20	16QAM	100	0	16.87	16.76	16.68	19
20	64QAM	1	0	17.99	17.94	17.69	
20	64QAM	1	49	17.88	17.90	17.71	
20	64QAM	1	99	17.65	17.94	17.59	18
20	64QAM	50	0	16.83	16.82	16.77	
20	64QAM	50	24	16.82	16.91	16.70	
20	64QAM	50	50	16.79	16.90	16.61	
20	64QAM	100	0	16.60	16.76	16.66	
Channel				133197	133297	133397	
Frequency (MHz)				670.5	680.5	680.5	20
15	QPSK	1	0	18.77	18.80	18.73	
15	QPSK	1	37	18.53	18.66	18.61	
15	QPSK	1	74	18.64	18.74	18.45	19
15	QPSK	36	0	17.71	17.75	17.84	
15	QPSK	36	20	17.83	17.74	17.58	
15	QPSK	36	39	17.68	17.64	17.70	19
15	QPSK	75	0	17.77	17.69	17.83	
15	16QAM	1	0	18.22	18.25	18.07	
15	16QAM	1	37	18.04	18.01	17.84	18
15	16QAM	1	74	17.96	17.95	18.01	
15	16QAM	36	0	16.83	16.84	16.82	
15	16QAM	36	20	16.55	16.96	16.56	19
15	16QAM	36	39	16.76	16.71	16.78	
15	16QAM	75	0	16.66	16.62	16.71	
15	64QAM	1	0	17.80	17.86	17.92	18
15	64QAM	1	37	17.66	17.76	17.79	
15	64QAM	1	74	17.82	17.84	17.65	
15	64QAM	36	0	16.72	16.99	16.76	19
15	64QAM	36	20	16.66	16.72	16.74	
15	64QAM	36	39	16.82	16.94	16.77	
15	64QAM	75	0	16.88	16.67	16.55	
Channel				133172	133272	133422	
Frequency (MHz)				668	678	693	20
10	QPSK	1	0	18.69	18.78	18.67	
10	QPSK	1	25	18.62	18.56	18.61	
10	QPSK	1	49	18.52	18.61	18.63	19
10	QPSK	25	0	17.76	17.90	17.95	
10	QPSK	25	12	17.56	17.90	17.82	
10	QPSK	25	25	17.81	17.72	17.76	19
10	QPSK	50	0	17.74	17.85	17.64	
10	16QAM	1	0	18.19	18.20	17.85	
10	16QAM	1	25	18.04	18.11	17.81	18
10	16QAM	1	49	17.87	17.96	17.89	
10	16QAM	25	0	16.93	16.97	16.77	
10	16QAM	25	12	16.62	16.75	16.72	19
10	16QAM	25	25	16.71	16.72	16.60	
10	16QAM	50	0	16.62	16.65	16.73	
10	64QAM	1	0	17.75	18.00	17.72	18
10	64QAM	1	25	17.83	17.95	17.68	
10	64QAM	1	49	17.57	17.96	17.82	
10	64QAM	25	0	16.96	16.76	16.75	19
10	64QAM	25	12	16.62	16.88	16.69	
10	64QAM	25	25	16.76	16.63	16.59	
10	64QAM	50	0	16.81	16.84	16.76	
Channel				133147	133247	133447	
Frequency (MHz)				665.5	675.5	695.5	20
5	QPSK	1	0	18.66	18.77	18.68	
5	QPSK	1	12	18.48	18.55	18.52	
5	QPSK	1	24	18.56	18.65	18.54	19
5	QPSK	12	0	17.83	17.84	17.62	
5	QPSK	12	7	17.77	17.74	17.58	
5	QPSK	12	13	17.69	17.59	17.70	19
5	QPSK	25	0	17.96	17.97	17.82	
5	16QAM	1	0	17.89	18.22	17.92	
5	16QAM	1	12	18.00	17.94	17.83	18
5	16QAM	1	24	18.11	17.92	17.78	
5	16QAM	12	0	16.70	16.71	16.74	
5	16QAM	12	7	16.75	16.92	16.72	19
5	16QAM	12	13	16.67	16.67	16.61	
5	16QAM	25	0	16.62	16.87	16.84	
5	64QAM	1	0	17.77	18.02	17.92	18
5	64QAM	1	12	17.81	17.73	17.68	
5	64QAM	1	24	17.70	17.87	17.69	
5	64QAM	12	0	16.95	16.71	16.79	19
5	64QAM	12	7	16.58	16.90	16.64	
5	64QAM	12	13	16.75	16.92	16.61	
5	64QAM	25	0	16.81	16.92	16.80	

Band 38(only on channel required) (dBm)							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	11.30	11.32	11.27	12.5
20	QPSK	1	49	11.29	11.21	11.20	
20	QPSK	1	99	11.18	11.14	11.22	
20	QPSK	50	0	10.48	10.54	10.53	11.5
20	QPSK	50	24	10.26	10.48	10.52	
20	QPSK	50	50	10.49	10.27	10.23	
20	QPSK	100	0	10.29	10.35	10.28	11.5
20	16QAM	1	0	10.79	10.86	10.51	
20	16QAM	1	49	10.52	10.52	10.62	
20	16QAM	1	99	10.59	10.64	10.66	10.5
20	16QAM	50	0	9.55	9.54	9.37	
20	16QAM	50	24	9.26	9.54	9.33	
20	16QAM	50	50	9.30	9.24	9.35	11.5
20	16QAM	100	0	9.33	9.22	9.18	
20	64QAM	1	0	10.47	10.48	10.52	
20	64QAM	1	49	10.37	10.39	10.47	10.5
20	64QAM	1	99	10.47	10.52	10.21	
20	64QAM	50	0	9.44	9.66	9.60	
20	64QAM	50	24	9.46	9.62	9.36	10.5
20	64QAM	50	50	9.32	9.48	9.54	
20	64QAM	100	0	9.21	9.47	9.38	
Channel				37825	38000	38175	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	11.19	11.30	11.23	12.5
15	QPSK	1	37	11.21	11.24	11.12	
15	QPSK	1	74	11.22	11.06	11.06	
15	QPSK	36	0	10.34	10.56	10.55	11.5
15	QPSK	36	20	10.47	10.29	10.44	
15	QPSK	36	39	10.27	10.50	10.49	
15	QPSK	75	0	10.49	10.62	10.50	11.5
15	16QAM	1	0	10.50	10.58	10.66	
15	16QAM	1	37	10.48	10.62	10.46	
15	16QAM	1	74	10.41	10.67	10.74	10.5
15	16QAM	36	0	9.51	9.50	9.35	
15	16QAM	36	20	9.19	9.52	9.47	
15	16QAM	36	39	9.25	9.35	9.44	11.5
15	16QAM	75	0	9.47	9.30	9.20	
15	64QAM	1	0	10.31	10.43	10.40	
15	64QAM	1	37	10.40	10.59	10.61	10.5
15	64QAM	1	74	10.31	10.48	10.40	
15	64QAM	36	0	9.36	9.33	9.42	
15	64QAM	36	20	9.42	9.43	9.52	10.5
15	64QAM	36	39	9.16	9.35	9.25	
15	64QAM	75	0	9.51	9.39	9.27	
Channel				37800	38000	38200	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	11.23	11.27	11.17	12.5
10	QPSK	1	25	11.12	11.18	11.22	
10	QPSK	1	49	11.19	11.24	11.24	
10	QPSK	25	0	10.54	10.54	10.33	11.5
10	QPSK	25	12	10.25	10.27	10.37	
10	QPSK	25	25	10.26	10.53	10.22	
10	QPSK	50	0	10.28	10.38	10.54	11.5
10	16QAM	1	0	10.75	10.64	10.66	
10	16QAM	1	25	10.49	10.66	10.57	
10	16QAM	1	49	10.75	10.77	10.60	10.5
10	16QAM	25	0	9.44	9.57	9.55	
10	16QAM	25	12	9.46	9.37	9.23	
10	16QAM	25	25	9.27	9.25	9.47	24
10	16QAM	50	0	9.25	9.35	9.35	
10	64QAM	1	0	10.40	10.53	10.52	
10	64QAM	1	25	10.23	10.32	10.56	23
10	64QAM	1	49	10.47	10.59	10.31	
10	64QAM	25	0	9.63	9.44	9.62	
10	64QAM	25	12	9.49	9.29	9.34	10.5
10	64QAM	25	25	9.31	9.29	9.56	
10	64QAM	50	0	9.49	9.36	9.49	
Channel				37775	38000	38225	Tune-up limit (dBm)
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	11.26	11.29	11.27	12.5
5	QPSK	1	12	11.25	11.26	11.25	
5	QPSK	1	24	11.10	11.23	11.15	
5	QPSK	12	0	10.47	10.47	10.39	11.5
5	QPSK	12	7	10.45	10.57	10.59	
5	QPSK	12	13	10.57	10.45	10.48	
5	QPSK	25	0	10.41	10.39	10.49	11.5
5	16QAM	1	0	10.67	10.62	10.69	
5	16QAM	1	12	10.59	10.63	10.62	
5	16QAM	1	24	10.69	10.70	10.54	10.5
5	16QAM	12	0	9.58	9.36	9.59	
5	16QAM	12	7	9.46	9.49	9.28	
5	16QAM	12	13	9.30	9.27	9.31	11.5
5	16QAM	25	0	9.49	9.21	9.34	
5	64QAM	1	0	10.39	10.61	10.38	
5	64QAM	1	12	10.35	10.60	10.52	11.5
5	64QAM	1	24	10.29	10.32	10.42	
5	64QAM	12	0	9.46	9.54	9.59	
5	64QAM	12	7	9.37	9.59	9.47	10.5
5	64QAM	12	13	9.36	9.26	9.37	
5	64QAM	25	0	9.22	9.26	9.53	

Band 41 For FCC (2496~2690MHz) (dBm)									
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)
Channel				39750	40185	40620	41055	41490	Tune-up limit (dBm)
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	11.09	11.26	11.38	11.35	11.20	12.5
20	QPSK	1	49	11.04	11.26	11.35	11.31	11.10	
20	QPSK	1	99	11.01	11.09	11.34	11.23	11.05	
20	QPSK	50	0	10.32	10.52	10.63	10.60	10.50	11.5
20	QPSK	50	24	10.23	10.27	10.36	10.57	10.35	
20	QPSK	50	50	10.21	10.38	10.45	10.35	10.43	
20	QPSK	100	0	10.25	10.35	10.50	10.43	10.37	11.5
20	16QAM	1	0	10.56	10.61	10.67	10.78	10.72	
20	16QAM	1	49	10.43	10.41	10.81	10.66	10.40	
20	16QAM	1	99	10.48	10.63	10.69	10.60	10.40	11.5
20	16QAM	50	0	9.38	9.29	9.65	9.60	9.40	
20	16QAM	50	24	9.25	9.26	9.59	9.52	9.40	
20	16QAM	50	50	9.32	9.23	9.58	9.34	9.26	10.5
20	16QAM	100	0	9.32	9.31	9.45	9.51	9.33	
20	64QAM	1	0	10.13	10.46	10.55	10.48	10.28	
20	64QAM	1	49	10.21	10.17	10.44	10.40	10.44	11.5
20	64QAM	1	99	10.13	10.38	10.39	10.32	10.16	
20	64QAM	50	0	9.22	9.19	9.64	9.54	9.40	
20	64QAM	50	24	9.20	9.38	9.50	9.41	9.31	10.5
20	64QAM	50	50	9.25	9.25	9.34	9.32	9.27	
20	64QAM	100	0	9.27	9.28	9.58	9.50	9.38	
Channel				39725	40173	40620	41068	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5	
15	QPSK	1	0	11.04	11.22	11.36	11.34	11.08	12.5
15	QPSK	1	37	10.96	11.08	11.32	11.28	11.05	
15	QPSK	1	74	11.01	10.89	11.29	11.23	10.98	
15	QPSK	36	0	10.33	10.26	10.50	10.65	10.27	11.5
15	QPSK	36	20	10.31	10.33	10.37	10.58	10.30	
15	QPSK	36	39	10.19	10.17	10.50	10.56	10.17	
15	QPSK	75	0	10.37	10.36	10.64	10.56	10.21	11.5
15	16QAM	1	0	10.42	10.55	10.79	10.75	10.42	
15	16QAM	1	37	10.47	10.52	10.69	10.65	10.55	
15	16QAM	1	74	10.41	10.58	10.67	10.57	10.52	10.5
15	16QAM	36	0	9.34	9.50	9.70	9.69	9.54	
15	16QAM	36	20	9.28	9.38	9.39	9.49	9.38	
15	16QAM	36	39	9.22	9.34	9.61	9.28	9.29	11.5
15	16QAM	75	0	9.16	9.36	9.27	9.37	9.40	
15	64QAM	1	0	10.26	10.50	10.61	10.53	10.55	
15	64QAM	1	37	10.32	10.44	10.57	10.49	10.34	10.5
15	64QAM	1	74	10.19	10.36	10.49	10.26	10.18	
15	64QAM	36	0	9.37	9.47	9.57	9.58	9.20	
15	64QAM	36	20	9.34	9.43	9.44	9.51	9.25	11.5
15	64QAM	36	39	9.21	9.23	9.51	9.44	9.13	
15	64QAM	75	0	9.34	9.22	9.39	9.63	9.16	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501	2547	2593	2639	2685	
10	QPSK	1	0	11.17	11.26	11.35	11.34	11.10	12.5
10	QPSK	1	25	10.86	11.23	11.26	11.14	10.94	
10	QPSK	1	49	11.01	10.86	11.29	11.30	11.20	
10	QPSK	25	0	10.22	10.50	10.69	10.68	10.43	11.5
10	QPSK	25	12	10.22	10.21	10.40	10.62	10.33	
10	QPSK	25	25	10.21	10.41	10.42	10.37	10.25	
10	QPSK	50	0	10.36	10.40	10.53	10.51	10.33	11.5
10	16QAM	1	0	10.54	10.63	10.76	10.68	10.46	
10	16QAM	1	25	10.60	10.60	10.71	10.58	10.38	
10	16QAM	1	49	10.43	10.53	10.59	10.50	10.48	10.5
10	16QAM	25	0	9.45	9.51	9.63	9.54	9.36	
10	16QAM	25	12	9.21	9.22	9.60	9.39	9.21	
10	16QAM	25	25	9.24	9.16	9.30	9.39	9.22	11.5
10	16QAM	50	0	9.35	9.30	9.49	9.49	9.43	
10	64QAM	1	0	10.30	10.31	10.69	10.68	10.30	
10	64QAM	1	25	10.33	10.24	10.59	10.61	10.27	10.5
10	64QAM	1	49	10.20	10.33	10.52	10.38	10.22	
10	64QAM	25	0	9.25	9.50	9.56	9.56	9.34	
10	64QAM	25	12	9.31	9.32	9.68	9.41	9.26	11.5
10	64QAM	25	25	9.19	9.21	9.53	9.38	9.27	
10	64QAM	50	0	9.15	9.19	9.39	9.55	9.15	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	11.03	11.25	11.33	11.31	11.19	12.5
5	QPSK	1	12	11.02	11.00	11.18	11.27	11.13	
5	QPSK	1	24	11.00	10.97	11.14	11.15	10.93	
5	QPSK	12	0	10.43	10.43	10.61	10.63	10.51	11.5
5	QPSK	12	7	10.16	10.39	10.49	10.65	10.37	
5	QPSK	12	13	10.21	10.22	10.54	10.60	10.29	
5	QPSK	25	0	10.11	10.38	10.44	10.56	10.34	11.5
5	16QAM	1	0	10.31	10.59	10.70	10.64	10.39	
5	16QAM	1	12	10.29	10.68	10.62	10.55	10.40	
5	16QAM	1	24	10.34	10.64	10.65	10.49	10.32	10.5
5	16QAM	12	0	9.43	9.52	9.66	9.58	9.24	
5	16QAM	12	7	9.31	9.35	9.50	9.44	9.24	
5	16QAM	12	13	9.25	9.29	9.44	9.27	9.20	11.5
5	16QAM	25	0	9.24	9.15	9.57	9.44	9.35	
5	64QAM	1	0	10.32	10.40	10.60	10.46	10.46	
5	64QAM	1	12	10.12	10.31	10.55	10.54	10.28	10.5
5	64QAM	1	24	10.33	10.27	10.59	10.45	10.29	
5	64QAM	12	0	9.10	9.41	9.51	9.43	9.13	
5	64QAM	12	7	9.07	9.22	9.52	9.42	9.13	11.5
5	64QAM	12	13	9.19	9.24	9.44	9.42	9.12	
5	64QAM	25	0	9.05	9.42	9.39	9.40	9.45	

Band 41 HPUE For FCC (2496~2690MHz) (dBm)										
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dbm)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	13.36	13.44	13.48	13.43	13.31	14.5	
20	QPSK	1	49	13.23	13.12	13.26	13.30	13.04		
20	QPSK	1	99	13.27	13.28	13.13	13.35	13.23		
20	QPSK	50	0	12.45	12.51	12.55	12.51	12.49		
20	QPSK	50	24	12.29	12.38	12.39	12.46	12.38	13.5	
20	QPSK	50	50	12.37	12.39	12.33	12.35	12.31		
20	QPSK	100	0	12.40	12.49	12.54	12.43	12.35		
20	16QAM	1	0	12.62	12.77	12.82	12.64	12.57		
20	16QAM	1	49	12.63	12.65	12.73	12.69	12.56	13.5	
20	16QAM	1	99	12.51	12.58	12.77	12.66	12.39		
20	16QAM	50	0	11.64	11.67	11.70	11.45	11.56		
20	16QAM	50	24	11.41	11.52	11.57	11.30	11.24		
20	16QAM	50	50	11.23	11.37	11.35	11.53	11.30	12.5	
20	16QAM	100	0	11.46	11.48	11.51	11.61	11.34		
20	64QAM	1	0	12.58	12.61	12.55	12.59	12.40		
20	64QAM	1	49	12.57	12.55	12.65	12.40	12.25		
20	64QAM	1	99	12.37	12.45	12.57	12.37	12.25	13.5	
20	64QAM	50	0	11.56	11.54	11.50	11.45	11.35		
20	64QAM	50	24	11.49	11.43	11.48	11.43	11.25		
20	64QAM	50	50	11.50	11.40	11.41	11.32	11.37		
20	64QAM	100	0	11.51	11.30	11.54	11.53	11.48	12.5	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	Tune-up limit (dbm)	
15	QPSK	1	0	13.34	13.41	13.45	13.33	13.25	14.5	
15	QPSK	1	37	13.30	13.16	13.20	13.30	13.18		
15	QPSK	1	74	13.19	13.10	13.34	13.22	13.11		
15	QPSK	36	0	12.58	12.48	12.61	12.54	12.40		
15	QPSK	36	20	12.36	12.28	12.46	12.47	12.18	13.5	
15	QPSK	36	39	12.30	12.35	12.42	12.51	12.33		
15	QPSK	75	0	12.40	12.29	12.46	12.51	12.31		
15	16QAM	1	0	12.84	12.59	12.88	12.59	12.56		
15	16QAM	1	37	12.56	12.79	12.83	12.69	12.49	13.5	
15	16QAM	1	74	12.53	12.44	12.69	12.80	12.50		
15	16QAM	36	0	11.43	11.48	11.67	11.51	11.41		
15	16QAM	36	20	11.53	11.31	11.64	11.30	11.40		
15	16QAM	36	39	11.34	11.28	11.66	11.25	11.22	12.5	
15	16QAM	75	0	11.59	11.41	11.52	11.42	11.48		
15	64QAM	1	0	12.45	12.55	12.62	12.63	12.26		
15	64QAM	1	37	12.51	12.46	12.44	12.59	12.38		
15	64QAM	1	74	12.45	12.22	12.57	12.36	12.20	13.5	
15	64QAM	36	0	11.55	11.56	11.64	11.46	11.42		
15	64QAM	36	20	11.47	11.24	11.58	11.58	11.21		
15	64QAM	36	39	11.47	11.22	11.55	11.60	11.38		
15	64QAM	75	0	11.58	11.58	11.53	11.46	11.36	12.5	
Channel				39700	40160	40620	41080	41540		
Frequency (MHz)				2501	2547	2593	2639	2685	Tune-up limit (dbm)	
10	QPSK	1	0	13.23	13.44	13.46	13.37	13.36	14.5	
10	QPSK	1	25	13.35	13.21	13.20	13.30	13.08		
10	QPSK	1	49	13.11	13.26	13.25	13.19	13.12		
10	QPSK	25	0	12.66	12.50	12.54	12.51	12.49		
10	QPSK	25	12	12.33	12.49	12.47	12.65	12.44	13.5	
10	QPSK	25	25	12.56	12.30	12.54	12.43	12.27		
10	QPSK	50	0	12.35	12.49	12.39	12.38	12.28		
10	16QAM	1	0	12.79	12.76	12.76	12.63	12.65		
10	16QAM	1	25	12.81	12.73	12.65	12.59	12.72	13.5	
10	16QAM	1	49	12.63	12.61	12.78	12.60	12.43		
10	16QAM	25	0	11.49	11.41	11.68	11.57	11.36		
10	16QAM	25	12	11.19	11.40	11.47	11.30	11.28		
10	16QAM	25	25	11.24	11.41	11.51	11.40	11.33	12.5	
10	16QAM	50	0	11.45	11.57	11.30	11.59	11.32		
10	64QAM	1	0	12.67	12.38	12.68	12.46	12.56		
10	64QAM	1	25	12.44	12.27	12.38	12.39	12.45		
10	64QAM	1	49	12.42	12.44	12.43	12.47	12.35	13.5	
10	64QAM	25	0	11.37	11.64	11.65	11.53	11.34		
10	64QAM	25	12	11.56	11.47	11.65	11.60	11.26		
10	64QAM	25	25	11.26	11.27	11.64	11.63	11.34		
10	64QAM	50	0	11.31	11.24	11.40	11.50	11.40	12.5	
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.39	2687.5	Tune-up limit (dbm)	
5	QPSK	1	0	13.39	13.31	13.43	13.36	13.29	14.5	
5	QPSK	1	12	13.09	13.10	13.32	13.29	13.19		
5	QPSK	1	24	13.03	13.21	13.30	13.28	13.12		
5	QPSK	12	0	12.60	12.35	12.58	12.51	12.27		
5	QPSK	12	7	12.23	12.52	12.47	12.53	12.13	13.5	
5	QPSK	12	13	12.47	12.27	12.57	12.50	12.24		
5	QPSK	25	0	12.35	12.35	12.48	12.34	12.34		
5	16QAM	1	0	12.61	12.53	12.90	12.73	12.58		
5	16QAM	1	12	12.72	12.79	12.71	12.49	12.73	13.5	
5	16QAM	1	24	12.73	12.49	12.63	12.82	12.66		
5	16QAM	12	0	11.35	11.39	11.68	11.46	11.46		
5	16QAM	12	7	11.48	11.49	11.61	11.33	11.32		
5	16QAM	12	13	11.34	11.25	11.50	11.50	11.22	12.5	
5	16QAM	25	0	11.45	11.23	11.33	11.57	11.37		
5	64QAM	1	0	12.43	12.63	12.59	12.68	12.37		
5	64QAM	1	12	12.45	12.51	12.39	12.46	12.35		
5	64QAM	1	24	12.45	12.36	12.53	12.33	12.22	13.5	
5	64QAM	12	0	11.57	11.58	11.68	11.55	11.48		
5	64QAM	12	7	11.53	11.28	11.67	11.46	11.39		
5	64QAM	12	13	11.44	11.20	11.61	11.36	11.18		
5	64QAM	25	0	11.48	11.42	11.60	11.42	11.26	12.5	
Channel				39725	40173	40620	41068	41515		
Frequency (MHz)				2503.5	2548.3	2593	2637.8	2682.5	Tune-up limit (dbm)	

Band 48 (dBm)										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Middle-Low Channel	Middle-Low Channel	Middle-High Channel	High Channel	Tune-up limit (dbm)	
Channel				55340	55830	55990	56150	56640		
Frequency (MHz)				3560	3609	3625	3641	3690		
20	QPSK	1	0	8.89	8.91	8.94	8.79	8.92	10	
20	QPSK	1	49	8.70	8.86	8.90	8.73	8.76		
20	QPSK	1	99	8.82	8.70	8.78	8.68	8.64		
20	QPSK	50	0	8.01	8.07	8.18	7.94	7.95		
20	QPSK	50	24	8.05	7.92	8.10	7.99	7.87	9	
20	QPSK	50	50	8.08	7.82	8.06	7.85	7.89		
20	QPSK	100	0	7.87	7.93	8.11	8.05	8.02		
20	16QAM	1	0	8.26	8.31	8.32	8.10	8.19		
20	16QAM	1	49	8.10	8.07	8.20	8.20	8.08	9	
20	16QAM	1	99	8.02	8.02	8.29	8.25	8.00		
20	16QAM	50	0	7.13	6.83	7.22	7.24	6.79		
20	16QAM	50	24	6.87	6.86	6.87	7.08	6.74		
20	16QAM	50	50	6.89	6.85	7.10	6.98	6.82	8	
20	16QAM	100	0	6.95	6.95	6.94	6.82	6.80		
20	64QAM	1	0	7.91	7.85	8.00	8.16	7.79		
20	64QAM	1	49	7.81	7.93	7.99	8.09	7.71		
20	64QAM	1	99	7.83	7.87	8.18	8.07	7.95	9	
20	64QAM	50	0	7.08	6.93	7.22	7.01	7.06		
20	64QAM	50	24	6.84	6.80	7.20	7.06	6.88		
20	64QAM	50	50	6.85	6.84	7.12	6.81	6.76		
20	64QAM	100	0	6.87	7.02	6.83	6.95	6.73	8	
Channel				55315	55820	55990	56160	56665		
Frequency (MHz)				3557.5	3608	3625	3642	3692.5		
15	QPSK	1	0	8.83	8.84	8.91	8.82	8.78		
15	QPSK	1	37	8.89	8.63	8.73	8.79	8.67		
15	QPSK	1	74	8.73	8.68	8.66	8.85	8.71		
15	QPSK	36	0	8.14	7.85	8.05	8.06	7.98		
15	QPSK	36	20	7.84	8.00	8.07	8.15	7.66	9	
15	QPSK	36	39	7.88	7.84	7.94	7.84	7.68		
15	QPSK	75	0	7.99	7.82	8.09	8.07	7.94		
15	16QAM	1	0	8.06	8.21	8.41	8.19	7.93		
15	16QAM	1	37	8.28	8.09	8.22	8.28	8.13	9	
15	16QAM	1	74	8.18	8.22	8.26	8.12	8.12		
15	16QAM	36	0	7.18	7.07	7.08	7.05	6.80		
15	16QAM	36	20	6.87	6.82	7.08	6.99	6.73		
15	16QAM	36	39	6.90	6.75	6.86	6.96	6.72	8	
15	16QAM	75	0	6.88	6.78	6.94	6.96	6.65		
15	64QAM	1	0	8.00	7.87	8.23	7.91	7.84		
15	64QAM	1	37	8.09	7.75	8.03	8.20	7.85		
15	64QAM	1	74	8.07	7.96	8.18	7.97	7.88	9	
15	64QAM	36	0	7.11	6.91	7.16	7.13	7.03		
15	64QAM	36	20	6.78	6.90	6.91	7.07	6.86		
15	64QAM	36	39	6.71	6.80	7.16	7.03	6.68		
15	64QAM	75	0	6.98	7.00	7.05	6.95	6.65	8	
Channel				55290	55815	55990	56165	56690		
Frequency (MHz)				3555	3607.5	3625	3642.5	3695		
10	QPSK	1	0	8.84	8.89	8.92	8.91	8.87		
10	QPSK	1	25	8.82	8.79	8.79	8.68	8.65		
10	QPSK	1	49	8.52	8.67	8.67	8.85	8.55		
10	QPSK	25	0	8.12	7.95	8.16	7.91	7.96		
10	QPSK	25	12	8.00	7.95	7.91	7.95	7.85	9	
10	QPSK	25	25	8.11	8.08	8.17	8.14	8.02		
10	QPSK	50	0	8.00	7.90	8.05	7.90	7.82		
10	16QAM	1	0	8.06	8.15	8.16	8.12	8.12		
10	16QAM	1	25	8.05	8.13	8.14	8.09	8.20	9	
10	16QAM	1	49	8.04	7.94	8.12	8.14	8.05		
10	16QAM	25	0	7.13	6.83	7.11	7.03	6.79		
10	16QAM	25	12	6.80	6.78	7.10	6.91	6.53		
10	16QAM	25	25	6.86	6.90	7.05	7.04	6.83	8	
10	16QAM	50	0	7.07	7.03	6.80	6.96	6.75		
10	64QAM	1	0	8.17	8.16	8.19	8.14	7.91		
10	64QAM	1	25	7.97	7.95	8.11	7.95	7.78		
10	64QAM	1	49	7.90	7.95	8.10	7.92	7.79	9	
10	64QAM	25	0	6.99	6.97	7.20	7.04	7.05		
10	64QAM	25	12	6.88	6.79	6.92	7.18	6.92		
10	64QAM	25	25	6.89	6.89	6.95	6.91	6.91		
10	64QAM	50	0	6.95	6.75	6.98	7.03	6.91	8	
Channel				55265	55810	55990	56170	56175		
Frequency (MHz)				3552.5	3607	3625	3643	3697.5		
5	QPSK	1	0	8.86	8.81	8.90	8.74	8.69		
5	QPSK	1	12	8.67	8.61	8.70	8.73	8.64		
5	QPSK	1	24	8.80	8.68	8.85	8.66	8.63		
5	QPSK	12	0	8.15	8.05	8.05	7.91	7.88		
5	QPSK	12	7	7.83	7.79	8.03	8.03	7.79	9	
5	QPSK	12	13	7.86	7.96	7.93	7.84	7.84		
5	QPSK	25	0	8.12	7.90	8.09	7.91	7.83		
5	16QAM	1	0	8.27	8.31	8.40	8.39	8.15		
5	16QAM	1	12	8.18	8.16	8.34	8.06	8.20	9	
5	16QAM	1	24	8.27	7.95	8.30	8.23	8.18		
5	16QAM	12	0	6.94	7.05	7.08	7.07	6.80		
5	16QAM	12	7	6.94	6.72	6.86	6.81	6.71		
5	16QAM	12	13	6.60	6.73	6.53	6.77	6.75	8	
5	16QAM	25	0	6.74	7.01	6.91	6.85	6.95		
5	64QAM	1	0	7.98	8.08	8.23	8.20	7.85		
5	64QAM	1	12	8.09	7.92	8.21	8.19	7.91		
5	64QAM	1	24	7.79	7.94	8.14	8.11	7.83	9	
5	64QAM	12	0	7.05	6.85	7.09	6.98	6.99		
5	64QAM	12	7	7.04	6.87	7.03	7.15	6.71		
5	64QAM	12	13	6.96	6.81	6.97	6.89	6.83		
5	64QAM	25	0	6.84	6.74	6.86	7.14	6.74	8	

n2 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	11.60	11.45	11.36	13
20		1	53	11.58	11.21	11.13	
20		1	104	11.46	11.36	11.15	
20		50	1	11.73	11.42	11.33	13
20		50	25	11.73	11.24	11.26	
20		50	50	11.62	11.20	11.32	
20		100	0	11.64	11.26	11.29	
20	DFT-s-OFDM QPSK	1	1	11.65	11.75	11.41	13
20		1	53	11.67	11.56	11.21	
20		1	104	11.19	11.38	11.28	
20		50	1	11.64	11.73	11.38	13
20		50	25	11.63	11.64	11.32	
20		50	50	11.60	11.22	11.14	
20		100	0	11.60	11.62	11.24	
20	DFT-s-OFDM 16QAM	1	1	11.20	11.05	10.94	12
20	DFT-s-OFDM 64QAM	1	1	9.94	9.82	9.62	11
20	DFT-s-OFDM 256QAM	1	1	7.86	7.67	7.49	9
20	CP-OFDM QPSK	1	1	11.02	10.80	10.65	12
20	CP-OFDM 16QAM	1	1	10.47	10.31	10.17	11
20	CP-OFDM 64QAM	1	1	8.12	8.43	8.38	9
20	CP-OFDM 256QAM	1	1	5.94	5.69	5.53	7
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	11.45	11.70	11.25	13
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	11.47	11.73	11.23	13
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	11.57	11.72	11.25	13

n5 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	15.65	15.67	15.63	17
20		1	53	15.53	15.45	15.47	
20		1	104	15.24	15.22	15.35	
20		50	1	15.67	15.66	15.58	17
20	DFT-s-OFDM QPSK	50	25	15.59	15.58	15.44	
20		50	50	15.51	15.43	15.40	
20		100	0	15.61	15.61	15.49	
20		1	1	15.65	15.68	15.62	17
20	DFT-s-OFDM 16QAM	1	53	15.45	15.52	15.47	
20		1	104	15.26	15.28	15.25	
20		50	1	15.60	15.62	15.54	17
20		50	25	15.61	15.60	15.54	
20	DFT-s-OFDM 64QAM	50	50	15.51	15.48	15.37	
20		100	0	15.51	15.60	15.51	
20	DFT-s-OFDM 256QAM	1	1	15.46	15.31	15.23	17
20	CP-OFDM QPSK	1	1	13.77	13.73	13.68	15
20	CP-OFDM 16QAM	1	1	11.73	11.65	11.55	13
20	CP-OFDM 64QAM	1	1	14.86	14.77	14.70	16
20	CP-OFDM 256QAM	1	1	14.29	14.24	14.22	15
20		1	1	12.52	12.34	12.12	13
20		1	1	9.67	9.73	9.68	11
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	15.44	15.45	15.27	17
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	15.36	15.38	15.22	17
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	15.42	15.44	15.09	17

n7 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	
20	DFT-s-OFDM PI/2 BPSK	1	1	8.39	8.36	8.61	10
20		1	53	8.33	8.49	8.66	
20		1	104	8.37	8.50	8.56	
20		50	1	8.28	8.40	8.51	10
20		50	25	8.24	8.43	8.63	
20		50	50	8.29	8.46	8.52	
20		100	0	8.25	8.44	8.52	
20	DFT-s-OFDM QPSK	1	1	8.42	8.53	8.68	10
20		1	53	8.31	8.47	8.59	
20		1	104	8.40	8.52	8.66	
20		50	1	8.41	8.50	8.65	10
20		50	25	8.23	8.37	8.59	
20		50	50	8.30	8.39	8.58	
20		100	0	8.30	8.41	8.61	
20	DFT-s-OFDM 16QAM	1	1	7.99	8.03	8.27	9
20	DFT-s-OFDM 64QAM	1	1	6.42	6.43	6.74	8
20	DFT-s-OFDM 256QAM	1	1	4.05	4.06	4.31	5
20	CP-OFDM QPSK	1	1	7.36	7.44	7.67	8
20	CP-OFDM 16QAM	1	1	6.82	6.90	7.16	8
20	CP-OFDM 64QAM	1	1	5.17	5.15	5.43	6
20	CP-OFDM 256QAM	1	1	2.09	2.18	2.45	3
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	DFT-s-OFDM QPSK	1	1	8.24	8.28	8.52	10
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	DFT-s-OFDM QPSK	1	1	8.13	8.30	8.52	10
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	DFT-s-OFDM QPSK	1	1	8.22	8.25	8.49	10

n25 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376500	381000	Tune-up limit (dBm)
Frequency (MHz)				1860	1882.5	1905	
20	DFT-s-OFDM PI/2 BPSK	1	1	10.67	10.68	10.42	12
20		1	53	10.78	10.50	10.33	
20		1	104	10.57	10.32	10.35	
20		50	1	10.80	10.63	10.38	12
20	DFT-s-OFDM QPSK	50	25	10.72	10.53	10.46	
20		50	50	10.67	10.46	10.46	
20		100	0	10.72	10.47	10.41	
20		1	1	10.81	10.76	10.60	12
20	DFT-s-OFDM 16QAM	1	53	10.72	10.64	10.50	
20		1	104	10.68	10.55	10.53	
20		50	1	10.78	10.69	10.55	12
20		50	25	10.68	10.57	10.47	
20	DFT-s-OFDM 64QAM	50	50	10.67	10.48	10.44	
20		100	0	10.67	10.65	10.46	
20	DFT-s-OFDM 256QAM	1	1	10.66	10.50	10.43	12
20	CP-OFDM QPSK	1	1	9.19	9.13	8.89	10
20	CP-OFDM 16QAM	1	1	6.95	6.92	6.61	8
20	CP-OFDM 64QAM	1	1	10.18	10.08	9.92	11
20	CP-OFDM 256QAM	1	1	9.33	9.16	9.12	10
20		1	1	7.94	7.89	7.58	9
20		1	1	4.94	4.83	4.67	6
Channel				371500	376500	381500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1882.5	1907.5	
15	DFT-s-OFDM QPSK	1	1	10.72	10.70	10.20	12
Channel				371000	376500	382000	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	
10	DFT-s-OFDM QPSK	1	1	10.72	10.55	9.98	12
Channel				370500	376500	382500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5	
5	DFT-s-OFDM QPSK	1	1	10.78	10.50	9.99	12

n26(814-824MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					163800		
Frequency (MHz)					819		
10	DFT-s-OFDM PI/2 BPSK	1	1		15.54		17
10		1	26		15.69		
10		1	50		15.79		
10		25	1		15.64		17
10	DFT-s-OFDM QPSK	25	12		15.71		
10		25	25		15.79		
10		50	0		15.72		
10		1	1		15.90		17
10	DFT-s-OFDM 16QAM	1	26		15.71		
10		1	50		15.81		
10		25	1		15.86		17
10		25	12		15.68		
10	DFT-s-OFDM 64QAM	25	25		15.75		
10		50	0		15.84		16
10		1	1		15.17		
10		1	1		13.95		15
10	DFT-s-OFDM 256QAM	1	1		11.83		13
10	CP-OFDM QPSK	1	1		14.87		16
10	CP-OFDM 16QAM	1	1		14.08		15
10	CP-OFDM 64QAM	1	1		12.78		14
10	CP-OFDM 256QAM	1	1		9.85		11
Channel				163300	163800	164300	Tune-up limit
Frequency (MHz)				816.5	819	821.5	
5	DFT-s-OFDM QPSK	1	1	15.76	15.84	15.71	17

n26(824-849MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up
Channel				166800	167300	167800	limit
Frequency (MHz)				834	836.5	839	(dBm)
20	DFT-s-OFDM PI/2 BPSK	1	1	15.85	15.84	15.87	17
20		1	53	15.83	15.82	15.81	
20		1	104	15.65	15.67	15.80	
20		50	1	15.90	15.89	15.91	17
20		50	25	15.87	15.87	15.81	
20		50	50	15.80	15.81	15.80	
20	DFT-s-OFDM QPSK	100	0	15.90	15.87	15.80	17
20		1	1	15.90	15.94	15.86	
20		1	53	15.82	15.86	15.76	
20		1	104	15.69	15.70	15.87	17
20		50	1	15.89	15.91	15.88	
20		50	25	15.89	15.81	15.82	
20	DFT-s-OFDM 16QAM	50	50	15.84	15.79	15.77	17
20		100	0	15.87	15.91	15.83	
20	DFT-s-OFDM 16QAM	1	1	15.80	15.81	15.76	17
20	DFT-s-OFDM 64QAM	1	1	14.30	14.32	14.29	15
20	DFT-s-OFDM 256QAM	1	1	12.23	12.35	12.31	13
20	CP-OFDM QPSK	1	1	15.28	15.29	15.25	16
20	CP-OFDM 16QAM	1	1	14.77	14.80	14.79	16
20	CP-OFDM 64QAM	1	1	13.12	13.15	13.11	14
20	CP-OFDM 256QAM	1	1	10.29	10.35	10.37	11
Channel				166300	167300	168300	Tune-up
Frequency (MHz)				831.5	836.5	841.5	limit
15	DFT-s-OFDM QPSK	1	1	15.84	15.86	15.77	17
Channel				165800	167300	168800	Tune-up
Frequency (MHz)				829	836.5	844	limit
10	DFT-s-OFDM QPSK	1	1	15.83	15.72	15.70	17
Channel				165300	167300	169300	Tune-up
Frequency (MHz)				826.5	836.5	846.5	limit
5	DFT-s-OFDM QPSK	1	1	15.79	15.75	15.54	17

n30 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					462000		
Frequency (MHz)					2310		
10	DFT-s-OFDM PI/2 BPSK	1	1		9.34		11
10		1	26		9.46		
10		1	50		9.38		
10		25	1		9.48		11
10		25	12		9.49		
10		25	25		9.43		
10		50	0		9.48		
10	DFT-s-OFDM QPSK	1	1		9.56		11
10		1	26		9.45		
10		1	50		9.36		
10		25	1		9.52		11
10		25	12		9.48		
10		25	25		9.42		
10		50	0		9.47		
10	DFT-s-OFDM 16QAM	1	1		9.27		10
10	DFT-s-OFDM 64QAM	1	1		7.87		9
10	DFT-s-OFDM 256QAM	1	1		5.53		6
10	CP-OFDM QPSK	1	1		8.77		10
10	CP-OFDM 16QAM	1	1		8.24		9
10	CP-OFDM 64QAM	1	1		5.56		7
10	CP-OFDM 256QAM	1	1		3.55		5

n41 (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	8.5
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	6.68	6.76	6.97	7.05	7.04	8.5
100		1	136	6.95	7.04	7.01	6.94	6.95	
100		1	271	7.07	7.01	7.06	6.98	7.11	
100		135	1	6.78	6.83	6.90	7.04	6.86	8.5
100		135	67	7.01	7.05	7.07	6.99	7.00	
100		135	136	6.91	6.93	6.86	6.97	6.79	
100	DFT-s-OFDM QPSK	270	0	6.93	7.02	7.05	7.02	6.96	8.5
100		1	1	6.63	6.76	7.19	6.93	6.98	
100		1	136	6.85	6.94	6.91	6.84	6.91	
100		1	271	6.92	7.00	6.96	6.94	6.93	8.5
100		135	1	6.79	6.86	6.94	7.04	6.96	
100		135	67	6.99	7.04	7.12	7.08	7.08	
100	DFT-s-OFDM 16QAM	135	136	6.92	6.93	6.97	6.99	6.84	8.5
100		270	0	6.92	7.02	7.07	7.05	6.95	
100	DFT-s-OFDM 64QAM	1	1	5.59	5.72	5.78	5.96	5.89	7.5
100	DFT-s-OFDM 256QAM	1	1	4.20	4.35	4.47	4.56	4.48	6.5
100	CP-OFDM QPSK	1	1	1.95	2.12	2.17	2.25	2.30	4.5
100	CP-OFDM 16QAM	1	1	5.21	5.32	5.38	5.50	5.45	7.5
100	CP-OFDM 64QAM	1	1	4.70	4.79	4.95	5.00	5.04	6.5
100	CP-OFDM 256QAM	1	1	2.81	2.86	2.92	3.11	2.91	4.5
100	CP-OFDM 256QAM	1	1	0.02	0.14	0.30	0.38	0.34	2.5
Channel				508200	513402	518598	523800	528996	8.5
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	6.60	6.73	7.00	6.99	6.92	8.5
Channel				507204	512904	518598	524298	529998	8.5
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	6.67	6.83	7.06	7.04	6.98	8.5
Channel				506202	512400	518598	524796	531000	8.5
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	6.67	6.91	7.10	7.08	6.98	8.5
Channel				505200	511902	518598	525798	531996	8.5
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	6.72	6.98	7.07	7.04	7.03	8.5
Channel				504204	511404	518598	525798	532998	8.5
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	6.86	7.03	7.17	7.10	7.07	8.5
Channel				503202	510900	518598	526296	534000	8.5
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	6.84	7.06	7.15	7.12	7.12	8.5
Channel				502200	510402	518598	526800	534996	8.5
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	6.75	6.99	7.15	6.97	6.99	8.5
Channel				501204	509904	518598	527298	535998	8.5
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	6.82	7.05	7.14	7.08	7.04	8.5

n41 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	8.5
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	7.22	7.28	7.32	7.34	7.45	8.5
100		1	136	7.37	7.39	7.33	7.29	7.28	
100		1	271	7.34	7.37	7.26	7.08	6.96	
100		135	1	7.32	7.37	7.45	7.34	7.42	8.5
100		135	67	7.40	7.33	7.33	7.35	7.32	
100		135	136	7.45	7.44	7.39	7.37	6.94	
100	DFT-s-OFDM QPSK	270	0	7.37	7.39	7.41	7.39	7.37	8.5
100		1	1	7.29	7.40	7.48	7.40	7.42	
100		1	136	7.39	7.39	7.39	7.32	7.23	
100		1	271	7.35	7.37	7.27	6.95	6.89	8.5
100		135	1	7.34	7.37	7.34	7.44	7.40	
100		135	67	7.38	7.46	7.47	7.35	7.33	
100	DFT-s-OFDM 16QAM	135	136	7.43	7.44	7.39	7.29	6.95	8.5
100		270	0	7.01	7.19	7.33	7.16	7.03	
100	DFT-s-OFDM 64QAM	1	1	6.33	6.39	6.45	6.50	6.60	7.5
100	DFT-s-OFDM 256QAM	1	1	6.40	6.48	6.55	6.65	6.61	7.5
100	CP-OFDM QPSK	1	1	4.70	4.73	4.78	4.86	4.88	5.5
100	CP-OFDM 16QAM	1	1	6.42	6.44	6.52	6.60	6.56	7.5
100	CP-OFDM 64QAM	1	1	6.49	6.47	6.56	6.68	6.67	7.5
100	CP-OFDM 256QAM	1	1	5.54	5.51	5.63	5.74	5.75	6.5
100	CP-OFDM 256QAM	1	1	2.84	2.78	2.86	2.97	2.91	3.5
Channel				508200	513402	518598	523800	528996	8.5
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	6.86	6.91	7.35	7.15	7.08	8.5
Channel				507204	512904	518598	524298	529998	8.5
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	6.90	6.92	7.37	7.18	7.13	8.5
Channel				506202	512400	518598	524796	531000	8.5
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	6.92	7.05	7.33	7.23	7.15	8.5
Channel				505200	511902	518598	525798	531996	8.5
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	7.02	7.12	7.32	7.18	7.14	8.5
Channel				504204	511404	518598	525798	532998	8.5
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	7.03	7.20	7.33	7.25	7.13	8.5
Channel				503202	510900	518598	526296	534000	8.5
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	7.09	7.23	7.33	7.27	7.05	8.5
Channel				502200	510402	518598	526800	534996	8.5
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	7.00	7.11	7.36	7.19	6.85	8.5
Channel				501204	509904	518598	527298	535998	8.5
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	6.99	7.10	7.34	7.16	6.75	8.5

n48 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				638000	639834	641666	643500	645332	4.5
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98	
40	DFT-s-OFDM PI/2 BPSK	1	1	3.51	3.33	3.28	3.02	3.05	4.5
40		1	53	3.45	3.04	2.66	3.09	3.19	
40		1	104	3.22	2.50	2.96	3.24	3.48	
40		50	1	3.49	3.23	2.96	3.12	3.09	
40	DFT-s-OFDM QPSK	50	25	3.47	3.16	2.76	3.11	3.22	4.5
40		50	50	3.25	2.85	2.77	3.12	3.21	
40		100	0	3.36	3.09	2.82	3.15	3.16	
40		1	1	3.53	3.34	3.40	3.33	3.25	
40	DFT-s-OFDM 16QAM	1	53	3.45	3.00	2.67	3.10	3.22	4.5
40		1	104	3.22	3.15	3.32	3.21	3.10	
40		50	1	3.52	3.38	3.39	3.22	3.32	
40		50	25	3.46	3.14	3.27	3.10	3.11	
40	DFT-s-OFDM 64QAM	50	50	3.31	2.88	3.26	3.10	3.23	4.5
40		100	0	3.47	3.21	3.38	3.31	3.29	
40		1	1	3.45	3.11	3.16	3.17	2.96	
40		1	1	1.95	1.82	1.82	1.34	1.49	
40	DFT-s-OFDM 256QAM	1	1	-0.21	-0.45	-0.42	-0.85	-0.73	0.5
40	CP-OFDM QPSK	1	1	3.03	2.76	2.33	2.32	2.50	3.5
40	CP-OFDM 16QAM	1	1	2.52	2.46	2.44	2.36	2.05	3.5
40	CP-OFDM 64QAM	1	1	0.60	0.40	0.51	0.53	0.12	1.5
40	CP-OFDM 256QAM	1	1	-2.18	-2.39	-2.45	-2.93	-2.62	-1.5
Channel				637334	639500	641666	643832	646000	4.5
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690	
20	DFT-s-OFDM QPSK	1	1	3.43	3.23	3.20	3.17	2.97	4.5

n66 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM PI/2 BPSK	1	1	10.96	11.04	11.20	12.5
20		1	53	10.86	10.99	11.25	
20		1	104	11.02	11.15	11.18	
20		50	1	11.00	11.11	11.29	12.5
20		50	25	10.94	11.13	11.39	
20		50	50	10.88	11.09	11.32	
20		100	0	10.96	11.07	11.34	
20	DFT-s-OFDM QPSK	1	1	11.35	11.36	11.50	12.5
20		1	53	11.07	11.17	11.48	
20		1	104	11.04	11.25	11.43	
20		50	1	11.31	11.39	11.46	12.5
20		50	25	11.11	11.31	11.45	
20		50	50	11.12	11.20	11.39	
20		100	0	11.22	11.42	11.45	
20	DFT-s-OFDM 16QAM	1	1	10.75	10.83	10.92	11.5
20	DFT-s-OFDM 64QAM	1	1	9.29	9.32	9.59	10.5
20	DFT-s-OFDM 256QAM	1	1	7.01	7.08	7.32	8.5
20	CP-OFDM QPSK	1	1	10.24	10.32	10.45	11.5
20	CP-OFDM 16QAM	1	1	9.66	9.80	9.93	10.5
20	CP-OFDM 64QAM	1	1	7.96	8.10	8.13	9.5
20	CP-OFDM 256QAM	1	1	5.04	5.18	5.28	6.5
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	11.07	11.15	11.43	12.5
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	10.98	11.10	11.25	12.5
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	11.03	11.12	11.29	12.5

n71 (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				134600	136100	137600	Tune-up limit (dBm)
Frequency (MHz)				673	680.5	688	
20	DFT-s-OFDM PI/2 BPSK	1	1	15.49	15.48	15.57	17
20		1	53	15.48	15.61	15.65	
20		1	104	15.55	15.63	15.46	
20		50	1	15.58	15.58	15.61	17
20		50	25	15.51	15.62	15.57	
20		50	50	15.53	15.65	15.62	
20		100	0	15.58	15.56	15.53	
20	DFT-s-OFDM QPSK	1	1	15.75	15.73	15.79	17
20		1	53	15.43	15.54	15.60	
20		1	104	15.48	15.52	15.38	
20		50	1	15.57	15.63	15.72	17
20		50	25	15.53	15.58	15.59	
20		50	50	15.58	15.55	15.58	
20		100	0	15.56	15.52	15.67	
20	DFT-s-OFDM 16QAM	1	1	15.20	15.05	15.17	8
20	DFT-s-OFDM 64QAM	1	1	13.68	13.62	13.72	7
20	DFT-s-OFDM 256QAM	1	1	11.29	11.25	11.23	12
20	CP-OFDM QPSK	1	1	14.79	14.70	14.67	16
20	CP-OFDM 16QAM	1	1	14.19	14.05	14.07	15
20	CP-OFDM 64QAM	1	1	12.36	12.59	12.66	13
20	CP-OFDM 256QAM	1	1	9.30	9.24	9.35	10
Channel				134100	136100	138100	Tune-up limit (dBm)
Frequency (MHz)				670.5	680.5	690.5	
15	DFT-s-OFDM QPSK	1	1	15.52	15.45	15.65	17
Channel				133600	136100	138600	Tune-up limit (dBm)
Frequency (MHz)				668	680.5	693	
10	DFT-s-OFDM QPSK	1	1	15.61	15.55	15.63	17
Channel				133100	136100	139100	Tune-up limit (dBm)
Frequency (MHz)				665.5	680.5	695.5	
5	DFT-s-OFDM QPSK	1	1	15.53	15.54	15.55	17

n77(3450-3550MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			2.51			3.5
100		1	136			2.28			
100		1	271			2.16			
100		135	1			1.90			3.5
100		135	67			1.96			
100		135	136			1.71			
100		270	0			1.96			
100		1	1			2.60			3.5
100	DFT-s-OFDM QPSK	1	136			2.32			
100		1	271			1.97			
100		135	1			2.07			3.5
100		135	67			2.51			
100		135	136			2.17			
100		270	0			2.43			
100	DFT-s-OFDM 16QAM	1	1			1.08			2.5
100	DFT-s-OFDM 64QAM	1	1			-0.29			0.5
100	DFT-s-OFDM 256QAM	1	1			-2.49			-1.5
100	CP-OFDM QPSK	1	1			0.71			1.5
100	CP-OFDM 16QAM	1	1			0.30			1.5
100	CP-OFDM 64QAM	1	1			-1.86			-0.5
100	CP-OFDM 256QAM	1	1			-2.85			-2
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	2.29	2.23	2.46	2.08	2.03	3.5
Channel				632000	632668	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	2.26	2.14	2.31	1.87	1.91	3.5
Channel				631334	632334	633334	634332	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	
40	DFT-s-OFDM QPSK	1	1	2.52	2.49	2.54	2.34	2.25	3.5
Channel				631000	632168	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	2.50	2.41	2.52	2.28	2.09	3.5
Channel				630668	632000	633334	634666	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	
20	DFT-s-OFDM QPSK	1	1	2.54	2.28	2.56	2.08	2.08	3.5

n77(3450-3550MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			2.37			3.5
100		1	136			2.02			
100		1	271			2.13			
100		135	1			2.17			3.5
100	DFT-s-OFDM QPSK	135	67			2.13			
100		135	136			1.83			
100		270	0			2.19			3.5
100		1	1			2.47			
100	DFT-s-OFDM 16QAM	1	136			2.08			
100		1	271			2.20			3.5
100		135	1			2.20			
100		135	67			2.38			
100	DFT-s-OFDM 64QAM	135	136			1.88			3.5
100		270	0			2.29			
100		1	1			2.03			
100	DFT-s-OFDM 256QAM	1	1			1.46			2.5
100	CP-OFDM QPSK	1	1			0.44			1.5
100	CP-OFDM 16QAM	1	1			2.15			3.5
100	CP-OFDM 64QAM	1	1			2.13			3.5
100	CP-OFDM 256QAM	1	1			1.23			2.5
100	CP-OFDM 256QAM	1	1			-1.56			-0.5
Channel				632668	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3495	3500.01	3504.99	3510	(dBm)
80	DFT-s-OFDM QPSK	1	1	2.16	2.11	2.35	2.13	2.09	3.5
Channel				632000	632668	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3490.02	3500.01	3510	3519.99	(dBm)
60	DFT-s-OFDM QPSK	1	1	2.23	2.14	2.25	2.07	1.99	3.5
Channel				631334	632334	633334	634332	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3514.98	3529.98	(dBm)
40	DFT-s-OFDM QPSK	1	1	2.29	2.17	2.32	2.29	2.18	3.5
Channel				631000	632168	633334	634500	635666	Tune-up limit
Frequency (MHz)				3465	3482.52	3500.01	3517.5	3534.99	(dBm)
30	DFT-s-OFDM QPSK	1	1	2.28	2.25	2.37	2.31	2.07	3.5
Channel				630668	632000	633334	634666	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3519.99	3540	(dBm)
20	DFT-s-OFDM QPSK	1	1	2.44	2.13	2.46	2.14	2.03	3.5

n77(3700-3980MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	3.5
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	1.95	2.49	2.13	1.97	1.70	3.5
100		1	136	2.44	1.96	1.80	2.48	1.68	
100		1	271	2.41	1.60	2.40	2.53	2.49	
100		135	1	2.03	1.63	2.27	2.02	1.96	3.5
100		135	67	2.43	1.98	1.84	1.74	2.50	
100		135	136	1.85	1.99	1.75	1.98	2.39	
100	DFT-s-OFDM QPSK	270	0	1.85	1.89	1.70	1.69	1.60	3.5
100		1	1	2.49	2.53	2.37	2.51	2.46	
100		1	136	2.40	2.09	1.94	1.85	1.81	
100		1	271	1.44	1.81	1.65	2.01	1.94	3.5
100		135	1	1.64	2.29	1.94	1.96	1.99	
100		135	67	2.44	2.50	2.32	2.27	2.23	
100	DFT-s-OFDM 16QAM	135	136	1.83	2.35	1.94	2.13	2.39	3.5
100		270	0	2.34	2.41	2.36	2.36	2.27	
100	DFT-s-OFDM 64QAM	1	1	0.54	0.72	0.68	0.39	0.12	1.5
100	DFT-s-OFDM 256QAM	1	1	-0.80	-0.37	-0.72	-0.83	-1.23	0.5
100	CP-OFDM QPSK	1	1	-3.08	-2.76	-3.04	-3.17	-3.43	-1.5
100	CP-OFDM 16QAM	1	1	0.18	0.19	0.15	0.14	-0.24	1.5
100	CP-OFDM 64QAM	1	1	-0.32	-0.41	-0.35	-0.29	-0.72	0.5
100	CP-OFDM 256QAM	1	1	-1.45	-1.42	-1.50	-2.25	-2.14	-0.5
100	CP-OFDM 256QAM	1	1	-3.01	-2.90	-3.01	-3.10	-3.39	-2
Channel				649334	652668	656000	659332	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	2.12	2.51	2.08	2.05	2.03	3.5
Channel				648668	652334	656000	659666	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	1.99	2.35	1.94	1.99	1.95	3.5
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	2.15	2.43	1.86	1.52	1.89	3.5
Channel				647668	651834	656000	660166	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	2.00	2.40	2.04	1.44	1.99	3.5
Channel				647334	651668	656000	660332	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	1.97	2.29	2.12	2.25	2.02	3.5

n77(3700-3980MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				650000	653000	656000	659000	662000	3.5
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	1.75	2.53	2.18	2.51	2.22	3.5
100		1	136	2.42	1.94	1.90	2.27	2.20	
100		1	271	2.22	2.01	2.00	2.19	2.10	
100		135	1	2.35	2.16	1.94	2.11	2.17	3.5
100		135	67	2.26	2.01	1.99	2.31	2.26	
100		135	136	2.15	1.81	1.68	2.10	2.27	
100		270	0	2.18	2.05	1.93	2.36	2.26	
100	DFT-s-OFDM QPSK	1	1	2.44	2.57	2.30	2.42	2.35	3.5
100		1	136	2.39	1.92	1.88	2.25	2.19	
100		1	271	2.23	1.90	2.41	2.31	2.19	
100		135	1	1.99	2.11	2.32	2.09	2.07	3.5
100		135	67	2.23	2.51	2.38	2.28	2.24	
100		135	136	2.11	1.80	2.02	2.29	2.27	
100		270	0	2.11	2.39	2.02	2.34	2.28	
100	DFT-s-OFDM 16QAM	1	1	1.56	1.70	1.55	1.48	1.40	2.5
100	DFT-s-OFDM 64QAM	1	1	1.52	1.65	1.57	1.34	1.35	2.5
100	DFT-s-OFDM 256QAM	1	1	-0.03	0.62	0.41	0.16	0.06	1.5
100	CP-OFDM QPSK	1	1	1.64	1.52	1.59	1.32	1.54	2.5
100	CP-OFDM 16QAM	1	1	1.74	1.45	1.66	1.32	1.62	2.5
100	CP-OFDM 64QAM	1	1	0.77	1.06	0.75	0.50	0.80	1.5
100	CP-OFDM 256QAM	1	1	-2.10	-1.26	-1.64	-1.82	-2.18	-0.5
Channel				649334	652668	656000	659332	662666	3.5
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	1.98	2.41	1.90	2.06	2.07	3.5
Channel				648668	652334	656000	659666	663332	3.5
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	1.84	2.19	1.80	2.02	1.97	3.5
Channel				648000	652000	656000	660000	664000	3.5
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	2.12	2.46	1.87	2.46	2.23	3.5
Channel				647668	651834	656000	660166	664332	3.5
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	1.98	2.33	1.87	2.16	2.32	3.5
Channel				647334	651668	656000	660332	664666	3.5
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	1.92	2.24	1.94	2.14	2.16	3.5

n78(3450-3550MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			2.38			3.5
100		1	136			2.24			
100		1	271			2.21			
100		135	1			1.96			3.5
100		135	67			2.13			
100		135	136			1.92			
100	DFT-s-OFDM QPSK	270	0			2.07			3.5
100		1	1			2.51			
100		1	136			2.42			
100		1	271			2.15			3.5
100		135	1			2.02			
100		135	67			2.46			
100		135	136			2.13			3.5
100		270	0			2.43			
100	DFT-s-OFDM 16QAM	1	1			0.74			1.5
100	DFT-s-OFDM 64QAM	1	1			-0.50			0.5
100	DFT-s-OFDM 256QAM	1	1			-2.80			-1.5
100	CP-OFDM QPSK	1	1			0.43			1.5
100	CP-OFDM 16QAM	1	1			-0.09			0.5
100	CP-OFDM 64QAM	1	1			-1.15			-0.5
100	CP-OFDM 256QAM	1	1			-3.22			-2
Channel				633000	633166	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	2.10	2.08	2.33	2.07	2.08	3.5
Channel				632668	633000	633334	633666	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	
80	DFT-s-OFDM QPSK	1	1	2.18	2.11	2.45	2.07	2.02	3.5
Channel				632334	632834	633334	633832	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	
70	DFT-s-OFDM QPSK	1	1	1.96	2.02	2.46	2.04	2.09	3.5
Channel				632000	632666	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	1.99	1.91	2.39	1.95	2.13	3.5
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	
50	DFT-s-OFDM QPSK	1	1	1.93	1.89	2.36	1.90	1.88	3.5
Channel				631334	636672	633334	634334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	2.28	2.23	2.47	2.23	2.10	3.5
Channel				631000	632166	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	2.21	2.10	2.36	2.12	2.02	3.5
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	2.16	2.03	2.34	2.01	2.09	3.5

n78(3450-3550MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			2.41			3.5
100		1	136			2.34			
100		1	271			2.29			
100		135	1			2.34			3.5
100	DFT-s-OFDM QPSK	135	67			2.39			
100		135	136			2.31			
100		270	0			2.35			3.5
100		1	1			2.45			
100	DFT-s-OFDM 16QAM	1	136			2.33			
100		1	271			2.30			3.5
100		135	1			2.34			
100		135	67			2.41			
100	DFT-s-OFDM 64QAM	135	136			2.32			3.5
100		270	0			2.32			
100		1	1			1.51			2.5
100	DFT-s-OFDM 16QAM	1	1			1.63			2.5
100	DFT-s-OFDM 64QAM	1	1			-0.21			0.5
100	CP-OFDM QPSK	1	1			1.50			2.5
100	CP-OFDM 16QAM	1	1			1.61			2.5
100	CP-OFDM 64QAM	1	1			0.65			1.5
100	CP-OFDM 256QAM	1	1			-2.18			-1.5
Channel				633000	633166	633334	633500	633666	Tune-up limit
Frequency (MHz)				3495	3497.49	3500.01	3502.5	3504.99	(dBm)
90	DFT-s-OFDM QPSK	1	1	2.05	2.02	2.25	1.95	2.04	3.5
Channel				632668	633000	633334	633666	634000	Tune-up limit
Frequency (MHz)				3490.02	3450	3500.01	3504.99	3510	(dBm)
80	DFT-s-OFDM QPSK	1	1	2.12	2.06	2.36	2.05	2.01	3.5
Channel				632334	632834	633334	633832	634332	Tune-up limit
Frequency (MHz)				3485.01	3492.51	3500.01	3507.48	3514.98	(dBm)
70	DFT-s-OFDM QPSK	1	1	2.15	2.07	2.36	2.00	2.06	3.5
Channel				632000	632666	633334	634000	634666	Tune-up limit
Frequency (MHz)				3480	3489.99	3500.01	3510	3519.99	(dBm)
60	DFT-s-OFDM QPSK	1	1	2.16	2.09	2.22	1.97	1.98	3.5
Channel				631668	632500	633334	634166	635000	Tune-up limit
Frequency (MHz)				3475.02	3487.5	3500.01	3512.49	3525	(dBm)
50	DFT-s-OFDM QPSK	1	1	2.05	2.04	2.25	2.06	2.05	3.5
Channel				631334	636672	633334	634334	635332	Tune-up limit
Frequency (MHz)				3470.01	3485.01	3500.01	3515.01	3529.98	(dBm)
40	DFT-s-OFDM QPSK	1	1	2.24	2.11	2.39	2.31	2.29	3.5
Channel				631000	632166	633334	634500	635666	Tune-up limit
Frequency (MHz)				3465	3482.49	3500.01	3517.5	3534.99	(dBm)
30	DFT-s-OFDM QPSK	1	1	2.16	2.18	2.27	2.10	2.18	3.5
Channel				630668	632000	633334	634668	636000	Tune-up limit
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	(dBm)
20	DFT-s-OFDM QPSK	1	1	2.11	2.22	2.26	2.14	2.20	3.5

n78(3700-3800MHz) (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			2.29			3.5
100		1	136			2.13			
100		1	271			2.24			
100		135	1			2.17			3.5
100	DFT-s-OFDM QPSK	135	67			2.21			
100		135	136			2.18			
100		270	0			1.96			3.5
100		1	1			2.41			
100	DFT-s-OFDM 16QAM	1	136			2.14			
100		1	271			2.03			3.5
100		135	1			1.95			
100		135	67			2.38			
100	DFT-s-OFDM 64QAM	135	136			2.15			3.5
100		270	0			2.29			
100		1	1			0.44			1.5
100	DFT-s-OFDM 256QAM	1	1			-0.70			0.5
100	CP-OFDM QPSK	1	1			-3.21			-2.5
100	CP-OFDM 16QAM	1	1			0.35			1.5
100	CP-OFDM 64QAM	1	1			-0.57			0.5
100	CP-OFDM 256QAM	1	1			-2.74			-1.5
100	CP-OFDM 256QAM	1	1			-3.25			-2
Channel				649668	649834	650000	650166	650332	Tune-up limit
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	(dBm)
90	DFT-s-OFDM QPSK	1	1	1.85	1.88	2.26	2.03	2.06	3.5
Channel				649334	649666	650000	650334	650666	Tune-up limit
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	(dBm)
80	DFT-s-OFDM QPSK	1	1	1.92	2.07	2.27	2.21	2.25	3.5
Channel				649000	649500	650000	650500	651000	Tune-up limit
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	(dBm)
70	DFT-s-OFDM QPSK	1	1	1.95	2.12	2.21	2.18	2.02	3.5
Channel				648668	649334	650000	650666	651332	Tune-up limit
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	(dBm)
60	DFT-s-OFDM QPSK	1	1	1.78	2.11	2.23	1.87	1.75	3.5
Channel				648334	649166	650000	650834	651666	Tune-up limit
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	(dBm)
50	DFT-s-OFDM QPSK	1	1	1.95	2.07	2.28	2.12	2.02	3.5
Channel				648000	649000	650000	651000	652000	Tune-up limit
Frequency (MHz)				3720	3735	3750	3765	3780	(dBm)
40	DFT-s-OFDM QPSK	1	1	2.09	2.20	2.25	2.03	2.02	3.5
Channel				647668	648834	650000	651166	652332	Tune-up limit
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	(dBm)
30	DFT-s-OFDM QPSK	1	1	2.16	2.13	2.28	2.25	2.17	3.5
Channel				647334	648666	650000	651334	652666	Tune-up limit
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	(dBm)
20	DFT-s-OFDM QPSK	1	1	2.16	2.19	2.39	2.29	2.37	3.5

n78(3700-3800MHz) (PC3)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						650000			
Frequency (MHz)						3750			
100	DFT-s-OFDM PI/2 BPSK	1	1			2.28			3.5
100		1	136			2.14			
100		1	271			2.20			
100		135	1			2.20			3.5
100	DFT-s-OFDM QPSK	135	67			2.11			
100		135	136			2.08			
100		270	0			1.90			3.5
100		1	1			2.49			
100	DFT-s-OFDM 16QAM	1	136			2.18			
100		1	271			2.28			3.5
100		135	1			2.11			
100		135	67			2.40			
100	DFT-s-OFDM 64QAM	135	136			2.24			3.5
100		270	0			2.38			
100		1	1			1.56			2.5
100	DFT-s-OFDM 16QAM	1	1			1.62			2.5
100	DFT-s-OFDM 64QAM	1	1			-0.22			0.5
100	CP-OFDM QPSK	1	1			1.51			2.5
100	CP-OFDM 16QAM	1	1			1.55			2.5
100	CP-OFDM 64QAM	1	1			0.53			1.5
100	CP-OFDM 256QAM	1	1			-2.24			-1.5
Channel				649668	649834	650000	650166	650332	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3747.51	3750	3752.49	3754.98	
90	DFT-s-OFDM QPSK	1	1	2.28	2.26	2.30	2.13	2.16	3.5
Channel				649334	649666	650000	650334	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3744.99	3750	3755.01	3759.99	
80	DFT-s-OFDM QPSK	1	1	2.04	2.09	2.31	2.11	2.13	3.5
Channel				649000	649500	650000	650500	651000	Tune-up limit (dBm)
Frequency (MHz)				3735	3742.5	3750	3757.5	3765	
70	DFT-s-OFDM QPSK	1	1	1.97	1.91	2.26	2.19	2.21	3.5
Channel				648668	649334	650000	650666	651332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3740.01	3750	3759.99	3769.98	
60	DFT-s-OFDM QPSK	1	1	1.83	1.93	2.24	2.07	1.96	3.5
Channel				648334	649166	650000	650834	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.49	3750	3762.51	3774.99	
50	DFT-s-OFDM QPSK	1	1	1.75	2.05	2.29	2.13	2.03	3.5
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	2.04	2.22	2.36	2.25	2.23	3.5
Channel				647668	648834	650000	651166	652332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3732.51	3750	3767.49	3784.98	
30	DFT-s-OFDM QPSK	1	1	1.81	2.10	2.20	2.07	2.19	3.5
Channel				647334	648666	650000	651334	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3729.99	3750	3770.01	3789.99	
20	DFT-s-OFDM QPSK	1	1	1.94	2.17	2.30	2.00	2.16	3.5

CA_2C											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
18700	18700	18898	QPSK	1	0	0	0	1	0	13.56	14.50
18900	18801	18999	QPSK	1	0	0	0	1	0	13.41	14.50
19100	18902	19100	QPSK	1	0	0	0	1	0	13.37	14.50
18700	18700	18898	16QAM	1	0	0	0	1	0	12.60	13.50
18900	18801	18999	16QAM	1	0	0	0	1	0	12.46	13.50
19100	18902	19100	16QAM	1	0	0	0	1	0	12.24	13.50
18700	18700	18898	64QAM	1	0	0	0	1	0	12.56	13.50
18900	18801	18999	64QAM	1	0	0	0	1	0	12.40	13.50
19100	18902	19100	64QAM	1	0	0	0	1	0	12.25	13.50
18700	18700	18898	QPSK	50	0	0	0	1	0	12.56	13.50
18900	18801	18999	QPSK	50	0	0	0	1	0	12.26	13.50
19100	18902	19100	QPSK	50	0	0	0	1	0	12.27	13.50

CA_5B											
Combination:10MHz+10MHz(50RB+50RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
20450	20450	20549	QPSK	1	0	0	0	1	0	16.78	18
20525	20476	20575	QPSK	1	0	0	0	1	0	16.66	18
20600	20501	20600	QPSK	1	0	0	0	1	0	16.66	17
20450	20450	20549	16QAM	1	0	0	0	1	0	15.9	17
20525	20476	20575	16QAM	1	0	0	0	1	0	15.85	17
20600	20501	20600	16QAM	1	0	0	0	1	0	15.8	17
20450	20450	20549	64QAM	1	0	0	0	1	0	16.1	17
20525	20476	20575	64QAM	1	0	0	0	1	0	16.08	17
20600	20501	20600	64QAM	1	0	0	0	1	0	15.96	17
20450	20450	20549	QPSK	25	0	0	0	1	0	14.82	16
20525	20476	20575	QPSK	25	0	0	0	1	0	14.77	16
20600	20501	20600	QPSK	25	0	0	0	1	0	14.83	16

CA_41C (PC3)											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	0	0	1	0	10.27	11.5
40620	40521	40719	QPSK	1	0	0	0	1	0	10.69	11.5
41490	41292	41490	QPSK	1	0	0	0	1	0	10.40	11.5
39750	39750	39948	16QAM	1	0	0	0	1	0	9.41	10.5
40620	40521	40719	16QAM	1	0	0	0	1	0	9.61	10.5
41490	41292	41490	16QAM	1	0	0	0	1	0	9.48	10.5
39750	39750	39948	64QAM	1	0	0	0	1	0	8.35	9.5
40620	40521	40719	64QAM	1	0	0	0	1	0	8.63	9.5
41490	41292	41490	64QAM	1	0	0	0	1	0	8.42	9.5
39750	39750	39948	QPSK	50	0	0	0	1	0	9.40	10.5
40620	40521	40719	QPSK	50	0	0	0	1	0	9.75	10.5
41490	41292	41490	QPSK	50	0	0	0	1	0	9.45	10.5

CA_41C(PC2)											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	0	0	1	0	12.19	13.5
40620	40521	40719	QPSK	1	0	0	0	1	0	12.64	13.5
41490	41292	41490	QPSK	1	0	0	0	1	0	12.44	13.5
39750	39750	39948	16QAM	1	0	0	0	1	0	11.38	12.5
40620	40521	40719	16QAM	1	0	0	0	1	0	11.56	12.5
41490	41292	41490	16QAM	1	0	0	0	1	0	11.30	12.5
39750	39750	39948	64QAM	1	0	0	0	1	0	10.36	11.5
40620	40521	40719	64QAM	1	0	0	0	1	0	10.62	11.5
41490	41292	41490	64QAM	1	0	0	0	1	0	10.35	11.5
39750	39750	39948	QPSK	50	0	0	0	1	0	11.24	12.5
40620	40521	40719	QPSK	50	0	0	0	1	0	11.62	12.5
41490	41292	41490	QPSK	50	0	0	0	1	0	11.28	12.5

CA_48C Ant 6											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
55340	55340	55538	QPSK	1	0	0	0	1	0	8.20	9.00
55990	55891	56089	QPSK	1	0	0	0	1	0	8.17	9.00
56640	56442	56640	QPSK	1	0	0	0	1	0	7.94	9.00
55340	55340	55538	16QAM	1	0	0	0	1	0	7.29	8.00
55990	55891	56089	16QAM	1	0	0	0	1	0	7.02	8.00
56640	56442	56640	16QAM	1	0	0	0	1	0	6.92	8.00
55340	55340	55538	64QAM	1	0	0	0	1	0	6.25	7.00
55990	55891	56089	64QAM	1	0	0	0	1	0	6.27	7.00
56640	56442	56640	64QAM	1	0	0	0	1	0	6.06	7.00
55340	55340	55538	QPSK	50	0	0	0	1	0	7.25	8.00
55990	55891	56089	QPSK	50	0	0	0	1	0	7.05	8.00
56640	56442	56640	QPSK	50	0	0	0	1	0	6.95	8.00

CA_66B Ant 4											
Combination:15MHz+10MHz(75RB+25RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
132070	132047	132140	QPSK	1	0	0	0	1	0	12.04	13.00
132322	132398	132491	QPSK	1	0	0	0	1	0	11.82	13.00
132572	132549	132642	QPSK	1	0	0	0	1	0	12.16	13.00
132070	132047	132140	16QAM	1	0	0	0	1	0	10.90	12.00
132322	132398	132491	16QAM	1	0	0	0	1	0	10.95	12.00
132572	132549	132642	16QAM	1	0	0	0	1	0	11.27	12.00
132070	132047	132140	64QAM	1	0	0	0	1	0	9.88	11.00
132322	132398	132491	64QAM	1	0	0	0	1	0	10.20	11.00
132572	132549	132642	64QAM	1	0	0	0	1	0	10.22	11.00
132070	132047	132140	QPSK	36	0	0	0	1	0	9.95	12.00
132322	132398	132491	QPSK	36	0	0	0	1	0	10.04	12.00
132572	132549	132642	QPSK	36	0	0	0	1	0	10.20	12.00

CA_66C Ant 4											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
132070	132072	132270	QPSK	1	0	0	0	1	0	11.88	13.00
132322	132323	132521	QPSK	1	0	0	0	1	0	11.96	13.00
132572	132374	132572	QPSK	1	0	0	0	1	0	12.12	13.00
132070	132072	132270	16QAM	1	0	0	0	1	0	10.81	12.00
132322	132323	132521	16QAM	1	0	0	0	1	0	10.95	12.00
132572	132374	132572	16QAM	1	0	0	0	1	0	11.07	12.00
132070	132072	132270	64QAM	1	0	0	0	1	0	10.86	12.00
132322	132323	132521	64QAM	1	0	0	0	1	0	10.98	12.00
132572	132374	132572	64QAM	1	0	0	0	1	0	11.05	12.00
132070	132072	132270	QPSK	50	0	0	0	1	0	10.81	12.00
132322	132323	132521	QPSK	50	0	0	0	1	0	10.95	12.00
132572	132374	132572	QPSK	50	0	0	0	1	0	11.04	12.00

2.4GHz WLAN ANT 0

2.4GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11b 1Mbps	CH 1	2412	6.73	7.50	6.50	98.88
		CH 7	2442	4.80	5.50	6.50	
		CH 13	2472	6.31	7.00	6.50	
	802.11g 6Mbps	CH 1	2412	6.18	6.50	6.50	98.26
		CH 7	2442	4.44	4.50	6.50	
		CH 13	2472	5.91	7.00	6.50	
	802.11n-HT20 MCS0	CH 1	2412	6.03	7.00	6.50	98.05
		CH 7	2442	4.32	5.00	6.50	
		CH 13	2472	5.79	6.50	6.50	
	802.11n-HT40 MCS0	CH 3	2422	5.86	6.50	6.50	94.38
		CH 7	2442	5.37	6.00	6.50	
		CH 11	2462	5.83	6.50	6.50	

5GHz WLAN ANT 0

5.2GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 36	5180	3.63	4.50	4.00	98.54
		CH 44	5220	4.05	5.00	4.00	
		CH 48	5240	4.02	5.00	4.00	
	802.11n-HT20 MCS0	CH 36	5180	3.54	4.50	4.00	98.28
		CH 44	5220	3.92	4.00	4.00	
		CH 48	5240	3.88	4.00	4.00	
	802.11n-HT40 MCS0	CH 38	5190	3.97	4.00	4.00	96.59
		CH 46	5230	4.21	5.00	4.00	
	802.11ac-VHT20 MCS0	CH 36	5180	3.54	4.50	4.00	98.29
		CH 44	5220	3.91	5.00	4.00	
		CH 48	5240	3.88	5.00	4.00	
	802.11ac-VHT40 MCS0	CH 38	5190	3.95	5.00	4.00	96.59
		CH 46	5230	4.23	5.00	4.00	
	802.11ac-VHT80 MCS0	CH 42	5210	4.02	5.00	4.00	93.88

5GHz WLAN ANT 0

5.3GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 52	5260	4.41	5.50	4.00	98.07
		CH 60	5300	4.28	5.00	4.00	
		CH 64	5320	4.09	5.00	4.00	
	802.11n-HT20 MCS0	CH 52	5260	4.31	5.00	4.00	98.28
		CH 60	5300	4.16	5.00	4.00	
		CH 64	5320	3.94	5.00	4.00	
	802.11n-HT40 MCS0	CH 54	5270	4.50	5.50	4.00	96.59
		CH 62	5310	4.56	5.50	4.00	
	802.11ac-VHT20 MCS0	CH 52	5260	4.27	5.00	4.00	98.29
		CH 60	5300	4.17	5.00	4.00	
		CH 64	5320	3.93	5.00	4.00	
	802.11ac-VHT40 MCS0	CH 54	5270	4.49	5.50	4.00	96.59
		CH 62	5310	4.55	5.50	4.00	
	802.11ac-VHT80 MCS0	CH 58	5290	4.36	5.50	4.00	91.84

5GHzWLAN ANT 0

5.5GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 100	5500	4.99	6.00	4.00	98.54
		CH 120	5600	4.89	6.00	4.00	
		CH 144	5720	4.22	5.00	4.00	
	802.11n-HT20 MCS0	CH 100	5500	4.83	6.00	4.00	98.28
		CH 120	5600	4.72	6.00	4.00	
		CH 144	5720	4.13	5.00	4.00	
	802.11n-HT40 MCS0	CH 102	5510	5.22	6.00	4.00	96.59
		CH 126	5630	5.27	6.00	4.00	
		CH 142	5710	4.59	5.50	4.00	
	802.11ac-VHT20 MCS0	CH 100	5500	4.83	6.00	4.00	98.29
		CH 120	5600	4.76	6.00	4.00	
		CH 144	5720	4.13	5.00	4.00	
	802.11ac-VHT40 MCS0	CH 102	5510	5.23	6.00	4.00	95.51
		CH 126	5630	5.24	6.00	4.00	
		CH 142	5710	4.59	6.00	4.00	
	802.11ac-VHT80 MCS0	CH 106	5530	4.98	6.00	4.00	93.88
		CH 122	5610	5.01	6.00	4.00	
		CH 138	5690	4.59	5.50	4.00	

5GHz WLAN ANT 0

5.8GHz WLAN ANT 0	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
	802.11a 6Mbps	CH 149	5745	6.39	7.00	6.50	98.54
		CH 157	5785	6.33	7.00	6.50	
		CH 165	5825	6.27	7.00	6.50	
	802.11n-HT20 MCS0	CH 149	5745	6.27	7.00	6.50	97.70
		CH 157	5785	6.23	7.00	6.50	
		CH 165	5825	6.16	7.00	6.50	
	802.11n-HT40 MCS0	CH 151	5755	6.81	7.50	6.50	96.59
		CH 159	5795	6.64	7.50	6.50	
	802.11ac-VHT20 MCS0	CH 149	5745	6.26	7.00	6.50	98.29
		CH 157	5785	6.23	7.00	6.50	
		CH 165	5825	6.17	7.00	6.50	
	802.11ac-VHT40 MCS0	CH 151	5755	6.74	7.50	6.50	96.59
		CH 159	5795	6.60	7.50	6.50	
	802.11ac-VHT80 MCS0	CH 155	5775	6.38	7.50	6.50	92.00

Mode	Channel	Frequency (MHz)	1Mbps		2Mbps		3Mbps	
			Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit	Average power (dBm)	Tune-up Limit
BR / EDR	CH 00	2402	6.33	7.00	4.86	6.00	4.60	5.50
	CH 39	2441	5.08	6.00	3.13	4.00	3.30	4.00
	CH 78	2480	6.42	7.50	4.79	5.50	4.55	5.50
Duty Cycle %			77.01		77.23		77.12	