



REPORT No.: SZ23100340S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

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

Full Power for ANT 0 & ANT 1 & ANT 2 & ANT 3 & ANT 4 & WIFI 1 & WIFI 2

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	9682	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	23.04	23.11	23.05	24.00	23.06	23.12	23.03	24.00	23.01	23.07	23.04	24.00
3GPP Rel 5	HSDPA Subtest-1	22.63	22.58	22.36	23.50	22.37	22.40	22.44	23.00	22.18	22.22	22.13	23.00
3GPP Rel 5	HSDPA Subtest-2	22.60	22.53	22.48	23.50	22.26	22.38	22.49	23.00	22.20	22.07	22.11	23.00
3GPP Rel 5	HSDPA Subtest-3	22.18	22.06	21.87	23.00	21.87	21.91	21.88	22.50	21.57	21.60	21.63	22.50
3GPP Rel 5	HSDPA Subtest-4	22.18	22.06	21.83	23.00	21.51	21.86	21.95	22.50	21.71	21.61	21.46	22.50
3GPP Rel 6	HSUPA Subtest-1	22.68	22.63	22.52	23.50	22.35	22.44	22.45	23.00	22.13	22.20	22.03	23.00
3GPP Rel 6	HSUPA Subtest-2	22.22	22.07	21.96	23.00	21.83	21.93	21.93	22.50	21.60	21.67	21.70	22.50
3GPP Rel 6	HSUPA Subtest-3	22.67	22.62	22.59	23.50	22.32	22.47	22.47	23.00	22.06	22.17	22.08	23.00
3GPP Rel 6	HSUPA Subtest-4	22.70	22.62	22.47	23.50	22.30	22.48	22.50	23.00	22.18	22.13	22.01	23.00
3GPP Rel 6	HSUPA Subtest-5	22.69	22.57	22.45	23.50	22.36	22.46	22.46	23.00	22.14	22.22	22.14	23.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	22.69	22.59	22.39	23.50	22.27	22.35	22.38	23.00	22.46	22.14	21.96	23.00
Attenuator		Cable Loss	0.8			Cable Loss	0.8			Cable Loss	0.6		
Mode		Max.	23.11			Max.	23.12			Max.	23.07		

Band 2 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	22.77	22.81	22.74	24
20	QPSK	1	49	22.71	22.76	22.69	
20	QPSK	1	99	22.72	22.70	22.65	
20	QPSK	50	0	21.86	21.90	21.84	23
20	QPSK	50	24	21.75	21.82	21.77	
20	QPSK	50	50	21.70	21.79	21.68	
20	QPSK	100	0	21.74	21.76	21.71	23
20	16QAM	1	0	21.96	22.02	21.97	
20	16QAM	1	49	21.92	21.95	21.89	
20	16QAM	1	99	21.85	21.93	21.86	22
20	16QAM	50	0	20.82	20.91	20.87	
20	16QAM	50	24	20.75	20.85	20.79	
20	16QAM	50	50	20.68	20.82	20.75	22
20	16QAM	100	0	20.73	20.77	20.80	
20	64QAM	1	0	20.84	20.89	20.83	
20	64QAM	1	49	20.77	20.84	20.75	22
20	64QAM	1	99	20.71	20.73	20.70	
20	64QAM	50	0	19.77	19.85	19.79	
20	64QAM	50	24	19.68	19.70	19.82	21
20	64QAM	50	50	19.73	19.78	19.74	
20	64QAM	100	0	19.65	19.73	19.68	
20	256QAM	1	0	17.90	17.95	17.69	19
20	256QAM	1	49	17.68	17.88	17.86	
20	256QAM	1	99	17.86	17.73	17.71	
20	256QAM	50	0	16.72	16.85	16.74	18
20	256QAM	50	24	16.68	16.83	16.88	
20	256QAM	50	50	16.81	16.79	16.66	
20	256QAM	100	0	16.72	16.82	16.63	
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)
15	QPSK	1	0	22.77	22.79	22.73	24
15	QPSK	1	37	22.61	22.76	22.68	
15	QPSK	1	74	22.75	22.73	22.67	
15	QPSK	36	0	21.77	21.83	21.91	23
15	QPSK	36	20	21.72	21.75	21.70	
15	QPSK	36	39	21.68	21.76	21.72	
15	QPSK	75	0	21.69	21.67	21.71	23
15	16QAM	1	0	21.97	22.04	22.03	
15	16QAM	1	37	21.99	21.95	21.87	
15	16QAM	1	74	21.81	21.80	21.84	22
15	16QAM	36	0	20.70	20.96	20.93	
15	16QAM	36	20	20.63	20.80	20.88	
15	16QAM	36	39	20.74	20.80	20.82	22
15	16QAM	75	0	20.78	20.66	20.71	
15	64QAM	1	0	20.80	20.91	20.87	
15	64QAM	1	37	20.63	20.86	20.71	22
15	64QAM	1	74	20.71	20.64	20.63	
15	64QAM	36	0	19.62	19.83	19.85	
15	64QAM	36	20	19.68	19.79	19.79	21
15	64QAM	36	39	19.59	19.83	19.74	
15	64QAM	75	0	19.64	19.79	19.58	
15	256QAM	1	0	17.90	17.94	17.72	19
15	256QAM	1	37	17.65	17.86	17.94	
15	256QAM	1	74	17.68	17.69	17.57	
15	256QAM	36	0	16.59	16.92	16.79	18
15	256QAM	36	20	16.65	16.70	16.87	
15	256QAM	36	39	16.67	16.63	16.68	
15	256QAM	75	0	16.61	16.77	16.62	
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	Tune-up limit (dBm)
10	QPSK	1	0	22.74	22.77	22.69	24
10	QPSK	1	25	22.67	22.75	22.72	
10	QPSK	1	49	22.62	22.70	22.65	
10	QPSK	25	0	21.84	21.82	21.87	23
10	QPSK	25	12	21.66	21.79	21.82	
10	QPSK	25	25	21.79	21.69	21.64	
10	QPSK	50	0	21.65	21.85	21.75	23
10	16QAM	1	0	21.97	22.09	21.94	
10	16QAM	1	25	21.86	22.03	21.99	
10	16QAM	1	49	21.71	21.94	21.94	22
10	16QAM	25	0	20.75	20.85	20.83	
10	16QAM	25	12	20.70	20.87	20.86	
10	16QAM	25	25	20.65	20.88	20.63	22
10	16QAM	50	0	20.64	20.76	20.87	
10	64QAM	1	0	20.94	20.77	20.84	
10	64QAM	1	25	20.74	20.84	20.71	22
10	64QAM	1	49	20.67	20.74	20.76	
10	64QAM	25	0	19.68	19.83	19.67	
10	64QAM	25	12	19.70	19.75	19.71	21
10	64QAM	25	25	19.80	19.67	19.75	
10	64QAM	50	0	19.74	19.79	19.68	
10	256QAM	1	0	17.76	17.93	17.63	19
10	256QAM	1	25	17.69	17.90	17.90	
10	256QAM	1	49	17.79	17.64	17.66	
10	256QAM	25	0	16.75	16.82	16.78	18
10	256QAM	25	12	16.58	16.83	16.86	
10	256QAM	25	25	16.76	16.64	16.55	
10	256QAM	50	0	16.61	16.83	16.69	
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	Tune-up limit (dBm)
5	QPSK	1	0	22.77	22.78	22.73	24
5	QPSK	1	12	22.76	22.74	22.63	
5	QPSK	1	24	22.70	22.74	22.66	
5	QPSK	12	0	21.81	21.94	21.92	
5	QPSK	12	7	21.77	21.86	21.76	

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	22.78	22.85	22.72	24
20	QPSK	1	49	22.60	22.76	22.58	
20	QPSK	1	99	22.79	22.70	22.67	
20	QPSK	50	0	21.88	21.90	21.86	23
20	QPSK	50	24	21.65	21.82	21.71	
20	QPSK	50	50	21.74	21.89	21.73	
20	QPSK	100	0	21.65	21.81	21.79	23
20	16QAM	1	0	22.06	22.06	21.83	
20	16QAM	1	49	21.82	21.86	21.90	
20	16QAM	1	99	21.82	21.82	21.73	22
20	16QAM	50	0	20.88	20.83	20.87	
20	16QAM	50	24	20.75	20.87	20.65	
20	16QAM	50	50	20.60	20.69	20.78	22
20	16QAM	100	0	20.79	20.77	20.73	
20	64QAM	1	0	20.89	20.89	20.90	
20	64QAM	1	49	20.82	20.83	20.83	22
20	64QAM	1	99	20.57	20.75	20.65	
20	64QAM	50	0	19.80	19.76	19.77	
20	64QAM	50	24	19.54	19.67	19.85	21
20	64QAM	50	50	19.79	19.69	19.71	
20	64QAM	100	0	19.56	19.67	19.74	
20	256QAM	1	0	17.79	17.85	17.70	19
20	256QAM	1	49	17.75	17.92	17.95	
20	256QAM	1	99	17.78	17.74	17.66	
20	256QAM	50	0	16.62	16.84	16.85	18
20	256QAM	50	24	16.58	16.85	16.77	
20	256QAM	50	50	16.84	16.70	16.72	
20	256QAM	100	0	16.60	16.82	16.51	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.75	22.82	22.76	24
15	QPSK	1	37	22.58	22.72	22.74	
15	QPSK	1	74	22.76	22.67	22.62	
15	QPSK	36	0	21.73	21.78	21.88	23
15	QPSK	36	20	21.78	21.93	21.83	
15	QPSK	36	39	21.72	21.75	21.65	
15	QPSK	75	0	21.84	21.72	21.74	23
15	16QAM	1	0	22.00	22.10	21.83	
15	16QAM	1	37	21.93	21.89	21.91	
15	16QAM	1	74	21.76	21.89	21.75	22
15	16QAM	36	0	20.70	21.01	20.79	
15	16QAM	36	20	20.82	20.78	20.83	
15	16QAM	36	39	20.77	20.87	20.63	22
15	16QAM	75	0	20.72	20.83	20.66	
15	64QAM	1	0	20.79	20.99	20.94	
15	64QAM	1	37	20.70	20.70	20.76	22
15	64QAM	1	74	20.77	20.74	20.62	
15	64QAM	36	0	19.85	19.95	19.73	
15	64QAM	36	20	19.70	19.78	19.76	21
15	64QAM	36	39	19.71	19.78	19.73	
15	64QAM	75	0	19.62	19.72	19.58	
15	256QAM	1	0	17.84	17.86	17.63	19
15	256QAM	1	37	17.65	17.81	17.79	
15	256QAM	1	74	17.71	17.75	17.57	
15	256QAM	36	0	16.67	16.85	16.68	18
15	256QAM	36	20	16.72	16.88	16.65	
15	256QAM	36	39	16.69	16.76	16.56	
15	256QAM	75	0	16.68	16.87	16.62	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.75	22.80	22.77	24
10	QPSK	1	25	22.58	22.72	22.67	
10	QPSK	1	49	22.72	22.63	22.52	
10	QPSK	25	0	21.73	21.93	21.77	23
10	QPSK	25	12	21.65	21.85	21.72	
10	QPSK	25	25	21.73	21.89	21.77	
10	QPSK	50	0	21.62	21.87	21.73	23
10	16QAM	1	0	21.83	21.94	21.96	
10	16QAM	1	25	21.98	21.83	21.76	
10	16QAM	1	49	21.91	21.82	21.88	22
10	16QAM	25	0	20.69	20.92	20.76	
10	16QAM	25	12	20.78	20.77	20.78	
10	16QAM	25	25	20.78	20.87	20.86	22
10	16QAM	50	0	20.64	20.83	20.91	
10	64QAM	1	0	20.74	20.96	20.83	
10	64QAM	1	25	20.63	20.89	20.71	22
10	64QAM	1	49	20.73	20.74	20.76	
10	64QAM	25	0	19.80	19.83	19.85	
10	64QAM	25	12	19.58	19.73	19.90	21
10	64QAM	25	25	19.65	19.79	19.62	
10	64QAM	50	0	19.61	19.74	19.68	
10	256QAM	1	0	17.85	17.95	17.75	19
10	256QAM	1	25	17.69	17.81	17.80	
10	256QAM	1	49	17.79	17.69	17.77	
10	256QAM	25	0	16.89	16.88	16.76	18
10	256QAM	25	12	16.71	16.73	16.84	
10	256QAM	25	25	16.73	16.61	16.63	
10	256QAM	50	0	16.75	16.77	16.61	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	22.72	22.81	22.78	24
5	QPSK	1	12	22.72	22.68	22.67	
5	QPSK	1	24	22.64	22.68	22.72	
5	QPSK	12	0	21.75	21.92	21.75	23
5	QPSK	12	7	21.77	21.91	21.71	

5	QPSK	12	13	21.62	21.67	21.63	23
5	QPSK	25	0	21.83	21.76	21.77	
5	16QAM	1	0	22.00	21.92	22.01	22
5	16QAM	1	12	21.82	22.00	21.87	
5	16QAM	1	24	21.79	21.93	21.81	22
5	16QAM	12	0	20.70	20.93	20.97	
5	16QAM	12	7	20.82	20.74	20.88	22
5	16QAM	12	13	20.68	20.72	20.66	
5	16QAM	25	0	20.61	20.83	20.73	22
5	64QAM	1	0	20.78	20.89	20.70	
5	64QAM	1	12	20.80	20.79	20.85	21
5	64QAM	1	24	20.69	20.82	20.56	
5	64QAM	12	0	19.63	19.78	19.75	21
5	64QAM	12	7	19.75	19.66	19.74	
5	64QAM	12	13	19.81	19.73	19.62	19
5	64QAM	25	0	19.60	19.61	19.59	
5	256QAM	1	0	17.81	17.98	17.72	18
5	256QAM	1	12	17.71	17.86	17.85	
5	256QAM	1	24	17.71	17.66	17.62	18
5	256QAM	12	0	16.70	16.85	16.81	
5	256QAM	12	7	16.75	16.89	16.81	18
5	256QAM	12	13	16.80	16.68	16.58	
5	256QAM	25	0	16.71	16.86	16.59	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	22.71	22.74	22.70	24
3	QPSK	1	8	22.58	22.62	22.67	
3	QPSK	1	14	22.65	22.70	22.66	23
3	QPSK	8	0	21.84	21.75	21.70	
3	QPSK	8	4	21.72	21.76	21.68	23
3	QPSK	8	7	21.70	21.85	21.61	
3	QPSK	15	0	21.77	21.63	21.61	23
3	16QAM	1	0	21.81	22.00	21.94	
3	16QAM	1	8	21.80	21.97	21.92	22
3	16QAM	1	14	21.93	21.79	21.74	
3	16QAM	8	0	20.73	20.85	20.80	22
3	16QAM	8	4	20.82	20.94	20.77	
3	16QAM	8	7	20.70	20.91	20.63	22
3	16QAM	15	0	20.59	20.65	20.73	
3	64QAM	1	0	20.75	20.84	20.82	22
3	64QAM	1	8	20.68	20.93	20.83	
3	64QAM	1	14	20.76	20.80	20.60	21
3	64QAM	8	0	19.86	19.92	19.85	
3	64QAM	8	4	19.72	19.74	19.74	19
3	64QAM	8	7	19.61	19.77	19.75	
3	64QAM	15	0	19.75	19.81	19.69	19
3	256QAM	1	0	17.94	17.93	17.63	
3	256QAM	1	8	17.74	17.75	17.96	19
3	256QAM	1	14	17.76	17.67	17.77	
3	256QAM	8	0	16.80	16.96	16.69	19
3	256QAM	8	4	16.69	16.80	16.77	
3	256QAM	8	7	16.83	16.62	16.61	18
3	256QAM	15	0	16.72	16.81	16.61	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.71	22.78	22.70	24
1.4	QPSK	1	3	22.57	22.64	22.69	
1.4	QPSK	1	5	22.75	22.69	22.69	23
1.4	QPSK	3	0	21.90	21.94	21.69	
1.4	QPSK	3	1	21.84	21.89	21.69	23
1.4	QPSK	3	3	21.73	21.81	21.69	
1.4	QPSK	6	0	21.69	21.64	21.59	22
1.4	16QAM	1	0	22.04	21.87	22.01	
1.4	16QAM	1	3	21.83	21.90	21.74	22
1.4	16QAM	1	5	21.89	21.80	21.78	
1.4	16QAM	3	0	20.73	20.93	20.82	22
1.4	16QAM	3	1	20.79	20.72	20.79	
1.4	16QAM	3	3	20.73	20.68	20.66	22
1.4	16QAM	6	0	20.74	20.73	20.65	
1.4	64QAM	1	0	20.70	20.93	20.78	21
1.4	64QAM	1	3	20.85	20.78	20.63	
1.4	64QAM	1	5	20.72	20.80	20.60	21
1.4	64QAM	3	0	19.74	19.73	19.73	
1.4	64QAM	3	1	19.71	19.80	19.89	19
1.4	64QAM	3	3	19.70	19.79	19.82	
1.4	64QAM	6	0	19.74	19.71	19.70	19
1.4	256QAM	1	0	17.79	17.90	17.64	
1.4	256QAM	1	3	17.67	17.80	17.89	18
1.4	256QAM	1	5	17.72	17.64	17.59	
1.4	256QAM	3	0	16.75	16.85	16.70	18
1.4	256QAM	3	1	16.75	16.85	16.96	
1.4	256QAM	3	3	16.71	16.72	16.58	18
1.4	256QAM	6	0	16.73	16.76	16.62	

5	QPSK	12	13	21.81	21.65	21.62	23
5	QPSK	25	0	21.82	21.67	21.73	
5	16QAM	1	0	21.84	22.08	21.84	
5	16QAM	1	12	22.00	22.00	21.80	
5	16QAM	1	24	21.72	21.95	21.95	22
5	16QAM	12	0	20.72	21.00	20.84	
5	16QAM	12	7	20.86	20.96	20.84	
5	16QAM	12	13	20.79	20.77	20.65	
5	16QAM	25	0	20.59	20.70	20.89	22
5	64QAM	1	0	20.87	20.80	20.82	
5	64QAM	1	12	20.82	20.75	20.72	
5	64QAM	1	24	20.79	20.78	20.71	
5	64QAM	12	0	19.69	19.83	19.78	21
5	64QAM	12	7	19.62	19.71	19.79	
5	64QAM	12	13	19.75	19.77	19.64	
5	64QAM	25	0	19.75	19.69	19.56	
5	256QAM	1	0	17.82	18.03	17.66	19
5	256QAM	1	12	17.72	17.74	17.76	
5	256QAM	1	24	17.76	17.69	17.80	
5	256QAM	12	0	16.62	16.89	16.80	
5	256QAM	12	7	16.67	16.77	16.87	18
5	256QAM	12	13	16.81	16.63	16.62	
5	256QAM	25	0	16.70	16.90	16.77	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.76	22.77	22.70	24
3	QPSK	1	8	22.75	22.73	22.72	
3	QPSK	1	14	22.68	22.59	22.53	
3	QPSK	8	0	21.92	21.85	21.84	23
3	QPSK	8	4	21.62	21.70	21.83	
3	QPSK	8	7	21.75	21.66	21.56	
3	QPSK	15	0	21.80	21.83	21.67	23
3	16QAM	1	0	21.92	22.04	22.05	
3	16QAM	1	8	21.97	21.87	22.00	
3	16QAM	1	14	21.94	21.90	21.97	22
3	16QAM	8	0	20.89	20.91	20.88	
3	16QAM	8	4	20.72	20.78	20.90	
3	16QAM	8	7	20.75	20.79	20.63	22
3	16QAM	15	0	20.79	20.67	20.77	
3	64QAM	1	0	20.76	20.89	20.73	
3	64QAM	1	8	20.73	20.93	20.83	22
3	64QAM	1	14	20.71	20.68	20.57	
3	64QAM	8	0	19.71	19.81	19.85	
3	64QAM	8	4	19.64	19.76	19.83	21
3	64QAM	8	7	19.74	19.69	19.68	
3	64QAM	15	0	19.53	19.78	19.63	
3	256QAM	1	0	17.83	17.91	17.65	19
3	256QAM	1	8	17.77	17.78	17.92	
3	256QAM	1	14	17.79	17.61	17.57	
3	256QAM	8	0	16.68	16.83	16.84	18
3	256QAM	8	4	16.74	16.74	16.82	
3	256QAM	8	7	16.67	16.64	16.61	
3	256QAM	15	0	16.68	16.89	16.65	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.75	22.78	22.73	24
1.4	QPSK	1	3	22.74	22.71	22.64	
1.4	QPSK	1	5	22.65	22.75	22.67	
1.4	QPSK	3	0	21.97	21.90	21.88	
1.4	QPSK	3	1	21.67	21.83	21.82	23
1.4	QPSK	3	3	21.72	21.72	21.76	
1.4	QPSK	6	0	21.82	21.82	21.63	
1.4	16QAM	1	0	21.95	21.90	21.83	
1.4	16QAM	1	3	21.87	21.92	21.86	23
1.4	16QAM	1	5	21.96	21.96	21.81	
1.4	16QAM	3	0	20.81	20.95	20.80	
1.4	16QAM	3	1	20.74	20.71	20.87	
1.4	16QAM	3	3	20.77	20.80	20.82	22
1.4	16QAM	6	0	20.71	20.80	20.91	
1.4	64QAM	1	0	20.83	20.86	20.85	
1.4	64QAM	1	3	20.84	20.93	20.78	
1.4	64QAM	1	5	20.72	20.77	20.72	22
1.4	64QAM	3	0	19.85	19.75	19.68	
1.4	64QAM	3	1	19.70	19.72	19.71	
1.4	64QAM	3	3	19.72	19.74	19.70	
1.4	64QAM	6	0	19.72	19.74	19.55	21
1.4	256QAM	1	0	17.93	17.89	17.67	
1.4	256QAM						
1.4	256QAM						
1.4	256QAM	1	3	17.61	17.78	17.87	19
1.4	256QAM	1	5	17.74	17.69	17.65	
1.4	256QAM	3	0	16.73	16.84	16.73	
1.4	256QAM	3	1	16.61	16.70	16.90	
1.4	256QAM	3	3	16.82	16.64	16.66	18
1.4	256QAM	6	0	16.73	16.82	16.63	

Band 5 (Cellular Band) (dBm) Part 22H(only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.04	23.09	23.03	24
10	QPSK	1	25	23.05	23.02	22.95	
10	QPSK	1	49	23.01	23.06	22.93	
10	QPSK	25	0	22.04	22.10	22.00	23
10	QPSK	25	12	21.92	22.09	21.95	
10	QPSK	25	25	22.09	22.09	22.05	
10	QPSK	50	0	22.03	22.02	22.07	23
10	16QAM	1	0	22.22	22.25	22.13	
10	16QAM	1	25	22.11	22.21	22.28	
10	16QAM	1	49	22.05	22.07	22.24	22
10	16QAM	25	0	21.06	21.08	21.10	
10	16QAM	25	12	21.10	21.20	21.04	
10	16QAM	25	25	20.92	21.01	21.02	22
10	16QAM	50	0	21.09	21.03	20.97	
10	64QAM	1	0	21.19	21.15	21.10	
10	64QAM	1	25	21.10	20.98	20.93	22
10	64QAM	1	49	21.08	21.03	20.97	
10	64QAM	25	0	19.98	20.03	20.10	
10	64QAM	25	12	19.95	20.06	20.14	21
10	64QAM	25	25	20.03	20.09	19.93	
10	64QAM	50	0	19.88	20.09	20.07	
10	256QAM	1	0	17.93	17.84	17.72	19
10	256QAM	1	25	17.68	17.82	17.94	
10	256QAM	1	49	17.83	17.66	17.69	
10	256QAM	25	0	16.70	16.93	16.78	18
10	256QAM	25	12	16.62	16.71	16.86	
10	256QAM	25	25	16.81	16.69	16.62	
10	256QAM	50	0	16.72	16.81	16.57	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.03	23.07	23.01	24
5	QPSK	1	12	22.87	23.08	23.07	
5	QPSK	1	24	22.97	23.08	22.81	
5	QPSK	12	0	22.11	22.23	22.03	23
5	QPSK	12	7	21.97	22.19	22.15	
5	QPSK	12	13	21.95	21.94	22.04	
5	QPSK	25	0	21.89	22.12	21.95	23
5	16QAM	1	0	22.12	22.34	22.14	
5	16QAM	1	12	22.09	22.22	22.20	
5	16QAM	1	24	22.13	22.12	22.11	22
5	16QAM	12	0	21.07	21.06	21.03	
5	16QAM	12	7	20.98	21.23	21.12	
5	16QAM	12	13	20.95	21.16	21.04	22
5	16QAM	25	0	20.89	21.08	21.02	
5	64QAM	1	0	21.12	21.20	20.97	
5	64QAM	1	12	21.11	21.14	21.11	22
5	64QAM	1	24	20.98	20.87	21.07	
5	64QAM	12	0	20.02	20.16	20.06	
5	64QAM	12	7	20.06	19.94	19.99	21
5	64QAM	12	13	20.08	20.09	20.02	
5	64QAM	25	0	19.99	19.89	19.84	
5	256QAM	1	0	17.92	17.92	17.77	19
5	256QAM	1	12	17.77	17.85	17.82	
5	256QAM	1	24	17.70	17.73	17.65	
5	256QAM	12	0	16.69	16.86	16.80	18
5	256QAM	12	7	16.73	16.88	16.83	
5	256QAM	12	13	16.80	16.72	16.61	
5	256QAM	25	0	16.65	16.88	16.67	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	22.96	23.04	22.91	24
3	QPSK	1	8	22.94	22.96	22.89	
3	QPSK	1	14	22.92	23.00	23.03	
3	QPSK	8	0	22.96	22.12	22.17	23
3	QPSK	8	4	21.98	22.18	21.95	
3	QPSK	8	7	22.06	22.17	21.91	
3	QPSK	15	0	22.05	21.91	21.93	23
3	16QAM	1	0	22.13	22.25	22.18	
3	16QAM	1	8	22.09	22.34	22.03	
3	16QAM	1	14	22.23	22.29	22.22	22
3	16QAM	8	0	21.08	21.11	21.02	
3	16QAM	8	4	21.05	21.21	21.17	
3	16QAM	8	7	20.86	21.08	21.07	22
3	16QAM	15	0	20.90	21.03	21.11	
3	64QAM	1	0	21.20	21.19	20.98	
3	64QAM	1	8	21.08	21.21	21.00	22
3	64QAM	1	14	20.99	21.06	20.91	
3	64QAM	8	0	20.07	20.14	19.94	
3	64QAM	8	4	19.93	20.01	20.08	21
3	64QAM	8	7	19.90	20.02	20.03	
3	64QAM	15	0	19.84	20.03	20.03	
3	256QAM	1	0	17.89	17.92	17.65	19
3	256QAM	1	8	17.64	17.87	17.96	
3	256QAM	1	14	17.72	17.64	17.60	
3	256QAM	8	0	16.59	16.82	16.79	18
3	256QAM	8	4	16.62	16.70	16.81	
3	256QAM	8	7	16.83	16.70	16.64	
3	256QAM	15	0	16.70	16.84	16.58	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	22.99	23.01	22.98	24
1.4	QPSK	1	3	22.95	23.03	23.01	
1.4	QPSK	1	5	22.99	22.96	22.89	
1.4	QPSK	3	0	22.00	22.13	22.02	
1.4	QPSK	3	1	22.05	22.21	21.96	

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	23.00	23.09	23.03	24
20	QPSK	1	49	22.89	23.01	22.86	
20	QPSK	1	99	22.95	22.89	22.83	
20	QPSK	50	0	22.08	22.23	22.14	23
20	QPSK	50	24	21.86	22.13	22.03	
20	QPSK	50	50	21.85	21.90	21.91	
20	QPSK	100	0	22.06	21.91	21.88	23
20	16QAM	1	0	22.07	22.16	22.29	
20	16QAM	1	49	22.04	22.18	22.16	
20	16QAM	1	99	21.98	22.09	22.11	22
20	16QAM	50	0	20.95	21.17	21.09	
20	16QAM	50	24	21.07	20.95	20.99	
20	16QAM	50	50	20.90	21.05	20.88	22
20	16QAM	100	0	20.84	21.07	21.03	
20	64QAM	1	0	21.12	21.08	21.09	
20	64QAM	1	49	21.04	20.93	21.05	22
20	64QAM	1	99	20.96	21.04	21.04	
20	64QAM	50	0	19.88	20.15	20.02	
20	64QAM	50	24	19.94	19.95	20.04	21
20	64QAM	50	50	20.07	20.10	19.87	
20	64QAM	100	0	19.80	19.97	19.97	
20	256QAM	1	0	17.82	18.01	17.62	19
20	256QAM	1	49	17.78	17.76	17.86	
20	256QAM	1	99	17.79	17.69	17.66	
20	256QAM	50	0	16.68	16.88	16.79	18
20	256QAM	50	24	16.58	16.75	16.82	
20	256QAM	50	50	16.73	16.70	16.71	
20	256QAM	100	0	16.62	16.76	16.66	
Channel				20825	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	23.02	23.06	22.96	24
15	QPSK	1	37	22.98	22.90	23.02	
15	QPSK	1	74	22.85	22.97	22.92	
15	QPSK	36	0	22.12	22.02	22.01	23
15	QPSK	36	20	21.86	21.98	21.91	
15	QPSK	36	39	22.04	22.09	21.77	
15	QPSK	75	0	21.90	22.04	21.85	23
15	16QAM	1	0	22.30	22.22	22.13	
15	16QAM	1	37	22.08	22.25	22.10	
15	16QAM	1	74	22.16	22.07	21.95	22
15	16QAM	36	0	21.08	21.07	21.19	
15	16QAM	36	20	20.85	21.12	20.94	
15	16QAM	36	39	20.99	21.12	21.04	22
15	16QAM	75	0	20.93	20.89	21.06	
15	64QAM	1	0	21.04	21.01	21.01	
15	64QAM	1	37	21.08	20.99	21.01	22
15	64QAM	1	74	20.83	20.87	20.83	
15	64QAM	36	0	19.88	20.09	20.11	
15	64QAM	36	20	19.80	19.99	19.97	21
15	64QAM	36	39	20.07	20.00	19.84	
15	64QAM	75	0	19.87	20.07	19.95	
15	256QAM	1	0	17.85	18.00	17.62	19
15	256QAM	1	37	17.61	17.77	17.69	
15	256QAM	1	74	17.73	17.67	17.63	
15	256QAM	36	0	16.66	16.81	16.76	18
15	256QAM	36	20	16.61	16.89	16.81	
15	256QAM	36	39	16.81	16.71	16.57	
15	256QAM	75	0	16.66	16.75	16.54	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	23.00	23.04	22.97	24
10	QPSK	1	25	23.00	22.91	22.99	
10	QPSK	1	49	22.87	23.00	22.89	
10	QPSK	25	0	22.02	22.02	22.13	23
10	QPSK	25	12	21.97	21.91	22.04	
10	QPSK	25	25	21.85	22.00	21.90	
10	QPSK	50	0	22.08	21.85	21.91	23
10	16QAM	1	0	22.16	22.26	22.11	
10	16QAM	1	25	22.04	22.23	22.09	
10	16QAM	1	49	22.14	22.16	21.97	22
10	16QAM	25	0	21.16	21.17	21.03	
10	16QAM	25	12	20.86	21.01	21.01	
10	16QAM	25	25	20.83	20.91	20.92	22
10	16QAM	50	0	20.98	20.86	21.05	
10	64QAM	1	0	21.11	21.08	21.04	
10	64QAM	1	25	21.07	21.01	20.89	22
10	64QAM	1	49	21.01	21.04	20.97	
10	64QAM	25	0	19.96	20.19	20.10	
10	64QAM	25	12	19.90	20.03	20.09	21
10	64QAM	25	25	20.06	20.04	19.93	
10	64QAM	50	0	19.79	19.87	19.86	
10	256QAM	1	0	17.81	18.02	17.69	19
10	256QAM	1	25	17.69	17.74	17.78	
10	256QAM	1	49	17.84	17.65	17.66	
10	256QAM	25	0	16.59	16.88	16.82	18
10	256QAM	25	12	16.69	16.86	16.81	
10	256QAM	25	25	16.67	16.76	16.65	
10	256QAM	50	0	16.64	16.78	16.50	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	22.99	23.01	22.89	24
5	QPSK	1	12	22.98	22.99	22.88	
5	QPSK	1	24	22.95	22.94	22.85	
5	QPSK	12	0	22.15	22.16	22.09	
5	QPSK	12	7	22.00	21.99	22.04	

1.4	QPSK	3	3	21.99	22.11	22.00	23
1.4	QPSK	6	0	22.00	22.14	22.00	
1.4	16QAM	1	0	22.25	22.23	22.11	
1.4	16QAM	1	3	22.24	22.27	22.18	23
1.4	16QAM	1	5	22.23	22.15	22.01	
1.4	16QAM	3	0	21.04	21.13	21.09	
1.4	16QAM	3	1	20.97	21.15	20.93	
1.4	16QAM	3	3	20.98	21.11	21.01	
1.4	16QAM	6	0	20.89	21.10	21.06	22
1.4	64QAM	1	0	21.21	21.20	21.09	22
1.4	64QAM	1	3	21.00	21.02	21.13	
1.4	64QAM	1	5	20.87	20.88	20.94	
1.4	64QAM	3	0	20.03	20.15	20.06	
1.4	64QAM	3	1	20.02	19.96	20.19	
1.4	64QAM	3	3	19.95	19.97	20.04	
1.4	64QAM	6	0	19.85	20.11	20.04	21
1.4	256QAM	1	0	17.84	18.03	17.71	19
1.4	256QAM	1	3	17.76	17.91	17.92	
1.4	256QAM	1	5	17.80	17.68	17.82	
1.4	256QAM	3	0	16.66	16.96	16.84	
1.4	256QAM	3	1	16.75	16.77	16.91	
1.4	256QAM	3	3	16.74	16.75	16.82	
1.4	256QAM	6	0	16.63	16.75	16.54	18

5	QPSK	12	13	21.91	22.10	21.82	23
5	QPSK	25	0	21.90	22.02	21.87	
5	16QAM	1	0	22.23	22.16	22.22	
5	16QAM	1	12	22.14	22.10	22.16	22
5	16QAM	1	24	22.11	22.15	22.08	
5	16QAM	12	0	21.09	21.24	21.02	
5	16QAM	12	7	20.97	21.10	21.09	
5	16QAM	12	13	20.88	20.95	21.01	
5	16QAM	25	0	20.94	21.11	21.04	22
5	64QAM	1	0	21.16	21.16	21.07	
5	64QAM	1	12	21.04	21.01	20.90	
5	64QAM	1	24	20.88	21.02	20.80	
5	64QAM	12	0	19.93	20.09	19.93	
5	64QAM	12	7	19.89	19.99	20.13	
5	64QAM	12	13	19.95	19.93	19.90	21
5	64QAM	25	0	19.82	19.94	20.01	
5	256QAM	1	0	17.84	17.91	17.77	
5	256QAM	1	12	17.77	17.83	17.87	19
5	256QAM	1	24	17.80	17.71	17.69	
5	256QAM	12	0	16.73	16.89	16.82	
5	256QAM	12	7	16.67	16.79	16.78	
5	256QAM	12	13	16.75	16.78	16.59	
5	256QAM	25	0	16.65	16.75	16.59	18

Band 12 (700MHz Low Band) (dBm) Part 27F(only on channel required)								
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)	
Channel				23060	23095	23130		
Frequency (MHz)				704	707.5	711		
10	QPSK	1	0	22.87	22.96	22.90	24	
10	QPSK	1	25	22.75	22.89	22.71		
10	QPSK	1	49	22.84	22.75	22.72		
10	QPSK	25	0	21.90	21.97	21.88	23	
10	QPSK	25	12	21.74	21.82	21.75		
10	QPSK	25	25	21.61	21.78	21.80		
10	QPSK	50	0	21.68	21.79	21.65	23	
10	16QAM	1	0	22.03	21.96	21.96		
10	16QAM	1	25	22.02	22.03	22.01		
10	16QAM	1	49	21.89	21.84	21.86	22	
10	16QAM	25	0	20.75	20.85	20.83		
10	16QAM	25	12	20.64	20.89	20.84		
10	16QAM	25	25	20.76	20.71	20.89	22	
10	16QAM	50	0	20.67	20.83	20.73		
10	64QAM	1	0	20.84	20.81	20.95		
10	64QAM	1	25	20.74	20.90	20.68	22	
10	64QAM	1	49	20.80	20.71	20.69		
10	64QAM	25	0	19.81	19.83	19.89		
10	64QAM	25	12	19.64	19.78	19.87	21	
10	64QAM	25	25	19.63	19.70	19.64		
10	64QAM	50	0	19.58	19.71	19.63		
10	256QAM	1	0	17.79	17.93	17.74	19	
10	256QAM	1	25	17.65	17.89	17.81		
10	256QAM	1	49	17.76	17.69	17.68		
10	256QAM	25	0	16.72	16.91	16.80	18	
10	256QAM	25	12	16.72	16.86	16.91		
10	256QAM	25	25	16.68	16.80	16.63		
10	256QAM	50	0	16.55	16.86	16.53		
Channel				23035	23095	23155	Tune-up limit (dBm)	
Frequency (MHz)				701.5	707.5	713.5		
5	QPSK	1	0	22.83	22.93	22.83	24	
5	QPSK	1	12	22.62	22.76	22.71		
5	QPSK	1	24	22.71	22.71	22.60		
5	QPSK	12	0	21.83	21.95	21.73	23	
5	QPSK	12	7	21.71	21.81	21.86		
5	QPSK	12	13	21.84	21.77	21.75		
5	QPSK	25	0	21.67	21.78	21.73	23	
5	16QAM	1	0	21.94	22.02	21.99		
5	16QAM	1	12	22.02	22.07	21.88		
5	16QAM	1	24	21.97	21.89	21.77	22	
5	16QAM	12	0	20.92	20.87	20.92		
5	16QAM	12	7	20.67	20.94	20.69		
5	16QAM	12	13	20.62	20.72	20.73	22	
5	16QAM	25	0	20.78	20.85	20.93		
5	64QAM	1	0	20.96	20.96	20.90		
5	64QAM	1	12	20.80	20.82	20.86	22	
5	64QAM	1	24	20.62	20.80	20.60		
5	64QAM	12	0	19.90	19.78	19.90		
5	64QAM	12	7	19.70	19.83	19.76	21	
5	64QAM	12	13	19.63	19.71	19.81		
5	64QAM	25	0	19.75	19.64	19.72		
5	256QAM	1	0	17.78	17.87	17.58	19	
5	256QAM	1	12	17.59	17.84	17.83		
5	256QAM	1	24	17.76	17.61	17.62		
5	256QAM	12	0	16.70	16.91	16.73	18	
5	256QAM	12	7	16.60	16.79	16.97		
5	256QAM	12	13	16.63	16.63	16.68		
5	256QAM	25	0	16.72	16.82	16.64		
Channel				23025	23095	23165	Tune-up limit (dBm)	
Frequency (MHz)				700.5	707.5	714.5		
3	QPSK	1	0	22.86	22.92	22.83	24	
3	QPSK	1	8	22.75	22.66	22.80		
3	QPSK	1	14	22.64	22.76	22.64		
3	QPSK	8	0	21.78	21.80	21.73	23	
3	QPSK	8	4	21.84	21.90	21.67		
3	QPSK	8	7	21.75	21.71	21.75		
3	QPSK	15	0	21.86	21.70	21.81	23	
3	16QAM	1	0	22.07	22.08	22.07		
3	16QAM	1	8	21.87	22.06	21.84		
3	16QAM	1	14	21.83	21.96	21.97	22	
3	16QAM	8	0	20.90	21.03	21.01		
3	16QAM	8	4	20.75	20.93	20.80		
3	16QAM	8	7	20.76	20.85	20.85	22	
3	16QAM	15	0	20.75	20.67	20.88		
3	64QAM	1	0	20.76	20.94	20.94		
3	64QAM	1	8	20.78	20.98	20.78	21	
3	64QAM	1	14	20.82	20.74	20.72		
3	64QAM	8	0	19.78	19.95	19.86		
3	64QAM	8	4	19.76	19.68	19.88	19	
3	64QAM	8	7	19.80	19.75	19.77		
3	64QAM	15	0	19.59	19.80	19.63		
3	256QAM	1	0	17.83	17.99	17.74	18	
3	256QAM	1	8	17.65	17.87	17.96		
3	256QAM	1	14	17.82	17.58	17.69		
3	256QAM	8	0	16.61	16.82	16.69	18	
3	256QAM	8	4	16.65	16.81	16.94		
3	256QAM	8	7	16.76	16.77	16.61		
3	256QAM	15	0	16.60	16.81	16.57		
Channel				23017	23095	23173	Tune-up limit (dBm)	
Frequency (MHz)				699.7	707.5	715.3		
1.4	QPSK	1	0	22.82	22.90	22.78	24	
1.4	QPSK	1	3	22.80	22.72	22.82		
1.4	QPSK	1	5	22.67	22.78	22.76		
1.4	QPSK	3	0	21.75	21.92	21.83		
1.4	QPSK	3	1	21.64	21.76	21.76		

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		23.11		24
10	QPSK	1	25		23.02		
10	QPSK	1	49		22.96		
10	QPSK	25	0		22.26		23
10	QPSK	25	12		22.02		
10	QPSK	25	25		22.13		
10	QPSK	50	0		21.97		23
10	16QAM	1	0		22.17		
10	16QAM	1	25		22.09		
10	16QAM	1	49		22.10		22
10	16QAM	25	0		21.17		
10	16QAM	25	12		21.10		
10	16QAM	25	25		21.15		22
10	16QAM	50	0		21.07		
10	64QAM	1	0		21.22		
10	64QAM	1	25		20.99		22
10	64QAM	1	49		20.95		
10	64QAM	25	0		20.15		
10	64QAM	25	12		19.91		21
10	64QAM	25	25		20.08		
10	64QAM	50	0		20.08		
10	256QAM	1	0		17.96		19
10	256QAM	1	25		17.90		
10	256QAM	1	49		17.74		
10	256QAM	25	0		16.84		18
10	256QAM	25	12		16.76		
10	256QAM	25	25		16.63		
10	256QAM	50	0		16.91		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	23.04	23.08	23.01	24
5	QPSK	1	12	22.86	22.92	23.00	
5	QPSK	1	24	23.02	23.00	23.04	
5	QPSK	12	0	22.15	22.19	22.10	23
5	QPSK	12	7	21.91	22.14	22.09	
5	QPSK	12	13	21.86	21.94	21.94	
5	QPSK	25	0	21.99	21.97	22.05	23
5	16QAM	1	0	22.24	22.40	22.25	
5	16QAM	1	12	22.23	22.10	22.06	
5	16QAM	1	24	22.23	22.10	22.25	22
5	16QAM	12	0	21.16	21.06	21.04	
5	16QAM	12	7	20.99	21.11	21.00	
5	16QAM	12	13	21.00	21.21	21.07	22
5	16QAM	25	0	21.07	21.09	21.00	
5	64QAM	1	0	21.03	21.23	21.11	
5	64QAM	1	12	20.94	21.20	21.00	22
5	64QAM	1	24	21.02	21.05	21.01	
5	64QAM	12	0	19.96	20.21	19.97	
5	64QAM	12	7	19.91	20.00	19.96	21
5	64QAM	12	13	20.04	20.11	20.00	
5	64QAM	25	0	19.95	20.07	19.89	
5	256QAM	1	0	17.87	17.88	17.61	19
5	256QAM	1	12	17.72	17.74	17.80	
5	256QAM	1	24	17.67	17.56	17.52	
5	256QAM	12	0	16.62	16.85	16.86	18
5	256QAM	12	7	16.58	16.69	16.88	
5	256QAM	12	13	16.83	16.81	16.52	
5	256QAM	25	0	16.63	16.87	16.59	

1.4	QPSK	3	3	21.83	21.78	21.79	
1.4	QPSK	6	0	21.67	21.87	21.77	23
1.4	16QAM	1	0	21.85	21.98	22.09	
1.4	16QAM	1	3	21.96	22.04	22.00	
1.4	16QAM	1	5	21.92	21.88	21.95	
1.4	16QAM	3	0	20.77	20.80	21.01	
1.4	16QAM	3	1	20.82	20.90	20.81	
1.4	16QAM	3	3	20.64	20.93	20.79	
1.4	16QAM	6	0	20.69	20.74	20.90	22
1.4	64QAM	1	0	20.73	20.92	20.92	
1.4	64QAM	1	3	20.86	20.74	20.74	
1.4	64QAM	1	5	20.73	20.63	20.62	
1.4	64QAM	3	0	19.68	19.76	19.74	
1.4	64QAM	3	1	19.60	19.81	19.74	
1.4	64QAM	3	3	19.78	19.69	19.68	
1.4	64QAM	6	0	19.59	19.78	19.72	21
1.4	256QAM	1	0	17.93	17.99	17.66	
1.4	256QAM	1	3	17.63	17.80	17.82	
1.4	256QAM	1	5	17.76	17.72	17.69	
1.4	256QAM	3	0	16.59	16.92	16.85	
1.4	256QAM	3	1	16.73	16.71	16.79	
1.4	256QAM	3	3	16.70	16.63	16.63	
1.4	256QAM	6	0	16.62	16.94	16.62	18

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	22.80	22.87	22.78	24
10	QPSK	1	25	22.66	22.56	22.54	
10	QPSK	1	49	22.60	22.64	22.63	
10	QPSK	25	0	21.81	21.86	21.82	23
10	QPSK	25	12	21.70	21.58	21.72	
10	QPSK	25	25	21.60	21.68	21.60	
10	QPSK	50	0	21.82	21.53	21.61	23
10	16QAM	1	0	21.96	22.01	21.88	
10	16QAM	1	25	21.83	21.73	21.88	
10	16QAM	1	49	21.77	21.90	21.69	22
10	16QAM	25	0	20.67	20.87	20.86	
10	16QAM	25	12	20.63	20.70	20.57	
10	16QAM	25	25	20.60	20.79	20.58	22
10	16QAM	50	0	20.58	20.71	20.58	
10	64QAM	1	0	20.74	20.81	20.73	
10	64QAM	1	25	20.63	20.79	20.64	21
10	64QAM	1	49	20.57	20.65	20.55	
10	64QAM	25	0	19.67	19.82	19.63	
10	64QAM	25	12	19.51	19.54	19.63	19
10	64QAM	25	25	19.70	19.54	19.50	
10	64QAM	50	0	19.57	19.51	19.44	
10	256QAM	1	0	17.85	17.84	17.82	18
10	256QAM	1	25	17.76	17.86	17.76	
10	256QAM	1	49	17.71	17.73	17.58	
10	256QAM	25	0	16.67	16.82	16.85	18
10	256QAM	25	12	16.61	16.84	16.84	
10	256QAM	25	25	16.80	16.66	16.65	
10	256QAM	50	0	16.68	16.87	16.63	
Channel				23755	23790	23825	Tune-up limit (dBm)
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	22.76	22.83	22.70	24
5	QPSK	1	12	22.62	22.52	22.51	
5	QPSK	1	24	22.54	22.62	22.63	
5	QPSK	12	0	21.61	21.79	21.69	23
5	QPSK	12	7	21.51	21.71	21.56	
5	QPSK	12	13	21.57	21.67	21.61	
5	QPSK	25	0	21.53	21.58	21.55	23
5	16QAM	1	0	21.95	21.82	21.80	
5	16QAM	1	12	21.84	21.92	21.85	
5	16QAM	1	24	21.64	21.76	21.68	22
5	16QAM	12	0	20.81	20.82	20.78	
5	16QAM	12	7	20.53	20.74	20.72	
5	16QAM	12	13	20.68	20.59	20.56	22
5	16QAM	25	0	20.56	20.57	20.60	
5	64QAM	1	0	20.64	20.69	20.65	
5	64QAM	1	12	20.72	20.77	20.73	21
5	64QAM	1	24	20.54	20.52	20.58	
5	64QAM	12	0	19.75	19.76	19.68	
5	64QAM	12	7	19.44	19.58	19.65	19
5	64QAM	12	13	19.68	19.76	19.65	
5	64QAM	25	0	19.55	19.59	19.57	
5	256QAM	1	0	17.88	17.89	17.72	18
5	256QAM	1	12	17.59	17.80	17.90	
5	256QAM	1	24	17.67	17.57	17.54	
5	256QAM	12	0	16.70	16.85	16.69	18
5	256QAM	12	7	16.63	16.77	16.82	
5	256QAM	12	13	16.66	16.68	16.62	
5	256QAM	25	0	16.63	16.78	16.56	

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	22.87	22.98	22.90	24
20	QPSK	1	49	22.69	22.84	22.80	
20	QPSK	1	99	22.72	22.79	22.71	
20	QPSK	50	0	21.95	21.99	21.87	23
20	QPSK	50	24	21.80	21.92	21.93	
20	QPSK	50	50	21.81	21.88	21.63	
20	QPSK	100	0	21.83	21.91	21.85	23
20	16QAM	1	0	22.06	22.03	21.97	
20	16QAM	1	49	22.11	22.06	22.17	
20	16QAM	1	99	22.07	22.24	21.97	22
20	16QAM	50	0	20.95	21.05	21.03	
20	16QAM	50	24	20.87	20.99	20.83	
20	16QAM	50	50	20.94	20.91	20.84	22
20	16QAM	100	0	20.70	20.92	20.93	
20	64QAM	1	0	20.91	21.09	20.72	
20	64QAM	1	49	20.88	20.91	20.74	21
20	64QAM	1	99	21.10	20.86	20.83	
20	64QAM	50	0	19.91	20.05	19.80	
20	64QAM	50	24	19.83	19.83	19.99	19
20	64QAM	50	50	20.01	19.79	19.82	
20	64QAM	100	0	19.92	19.93	19.66	
20	256QAM	1	0	17.79	17.94	17.82	18
20	256QAM	1	49	17.74	17.80	17.78	
20	256QAM	1	99	17.67	17.70	17.67	
20	256QAM	50	0	16.73	16.98	16.74	
20	256QAM	50	24	16.69	16.70	16.77	
20	256QAM	50	50	16.74	16.78	16.48	
20	256QAM	100	0	16.74	16.76	16.61	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.84	22.95	22.92	24
15	QPSK	1	37	22.72	22.77	22.61	
15	QPSK	1	74	22.79	22.75	22.78	
15	QPSK	36	0	21.91	22.03	21.81	23
15	QPSK	36	20	21.81	21.98	21.78	
15	QPSK	36	39	21.79	21.94	21.66	
15	QPSK	75	0	21.82	21.86	21.91	23
15	16QAM	1	0	22.11	22.12	22.11	
15	16QAM	1	37	22.12	22.04	22.16	
15	16QAM	1	74	21.93	22.08	21.93	22
15	16QAM	36	0	20.99	21.07	21.01	
15	16QAM	36	20	20.77	20.98	20.94	
15	16QAM	36	39	20.94	21.01	20.77	22
15	16QAM	75	0	20.77	20.88	20.93	
15	64QAM	1	0	20.85	21.08	20.89	
15	64QAM	1	37	20.82	20.97	20.74	21
15	64QAM	1	74	20.93	20.96	20.81	
15	64QAM	36	0	19.89	20.05	19.77	
15	64QAM	36	20	19.91	19.76	19.93	19
15	64QAM	36	39	19.95	19.89	19.74	
15	64QAM	75	0	19.86	20.02	19.69	
15	256QAM	1	0	17.81	17.94	17.62	18
15	256QAM	1	37	17.59	17.93	17.79	
15	256QAM	1	74	17.80	17.75	17.68	
15	256QAM	36	0	16.63	16.85	16.81	
15	256QAM	36	20	16.68	16.89	16.85	
15	256QAM	36	39	16.69	16.68	16.59	
15	256QAM	75	0	16.62	16.78	16.65	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.87	22.93	22.77	24
10	QPSK	1	25	22.76	22.90	22.63	
10	QPSK	1	49	22.66	22.86	22.61	
10	QPSK	25	0	22.02	22.04	21.81	23
10	QPSK	25	12	21.90	22.11	21.87	
10	QPSK	25	25	21.83	21.95	21.79	
10	QPSK	50	0	21.78	21.84	21.80	23
10	16QAM	1	0	22.03	22.04	22.11	
10	16QAM	1	25	22.13	22.18	22.13	
10	16QAM	1	49	22.07	22.09	21.99	22
10	16QAM	25	0	21.02	21.04	21.02	
10	16QAM	25	12	20.81	21.07	20.87	
10	16QAM	25	25	20.94	20.91	20.81	22
10	16QAM	50	0	20.81	20.87	20.94	
10	64QAM	1	0	20.95	20.96	20.83	
10	64QAM	1	25	20.80	20.84	20.84	21
10	64QAM	1	49	21.09	20.84	20.85	
10	64QAM	25	0	19.80	20.10	19.75	
10	64QAM	25	12	20.03	19.87	19.98	19
10	64QAM	25	25	19.91	19.79	19.73	
10	64QAM	50	0	19.80	19.93	19.68	
10	256QAM	1	0	17.78	18.01	17.69	18
10	256QAM	1	25	17.68	17.94	17.78	
10	256QAM	1	49	17.85	17.57	17.59	
10	256QAM	25	0	16.71	16.92	16.75	
10	256QAM	25	12	16.68	16.82	16.95	
10	256QAM	25	25	16.79	16.71	16.57	
10	256QAM	50	0	16.62	16.79	16.64	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	22.89	22.94	22.81	24
5	QPSK	1	12	22.75	22.88	22.74	
5	QPSK	1	24	22.64	22.78	22.63	
5	QPSK	12	0	22.03	21.98	21.96	23
5	QPSK	12	7	21.93	22.04	21.92	
5	QPSK	12	13	21.81	22.05	21.76	
5	QPSK	25	0	21.87	21.82	21.85	23
5	16QAM	1	0	22.09	22.06	22.12	
5	16QAM	1	12	22.05	22.14	22.15	

5	16QAM	1	24	21.98	22.14	21.93	22
5	16QAM	12	0	21.05	21.16	21.04	
5	16QAM	12	7	20.86	21.02	21.02	
5	16QAM	12	13	20.86	20.89	20.87	
5	16QAM	25	0	20.85	20.72	20.83	
5	64QAM	1	0	20.94	21.01	20.88	22
5	64QAM	1	12	20.75	20.87	20.74	
5	64QAM	1	24	20.99	20.79	20.75	
5	64QAM	12	0	19.74	19.95	19.79	
5	64QAM	12	7	19.84	19.77	19.85	
5	64QAM	12	13	19.86	19.85	19.71	21
5	64QAM	25	0	19.88	19.91	19.72	
5	256QAM	1	0	17.78	17.94	17.59	
5	256QAM	1	12	17.60	17.90	17.88	
5	256QAM	1	24	17.68	17.73	17.61	
5	256QAM	12	0	16.74	16.82	16.85	19
5	256QAM	12	7	16.72	16.70	16.80	
5	256QAM	12	13	16.73	16.65	16.63	
5	256QAM	25	0	16.59	16.74	16.66	
Channel				131987	132322	132857	
Frequency (MHz)				1711.5	1745	1778.5	24
3	QPSK	1	0	22.75	22.91	22.76	
3	QPSK	1	8	22.80	22.86	22.63	
3	QPSK	1	14	22.81	22.72	22.75	
3	QPSK	8	0	21.98	22.01	21.89	
3	QPSK	8	4	21.75	22.02	21.98	23
3	QPSK	8	7	21.77	21.91	21.74	
3	QPSK	15	0	21.74	21.76	21.80	
3	16QAM	1	0	22.03	22.05	22.12	
3	16QAM	1	8	21.97	22.02	22.12	
3	16QAM	1	14	22.08	22.14	21.86	23
3	16QAM	8	0	21.11	21.00	21.07	
3	16QAM	8	4	20.90	20.97	20.90	
3	16QAM	8	7	20.87	21.00	20.87	
3	16QAM	15	0	20.73	20.88	20.93	
3	64QAM	1	0	20.79	21.02	20.77	22
3	64QAM	1	8	20.74	20.91	20.91	
3	64QAM	1	14	21.05	20.81	20.87	
3	64QAM	8	0	19.79	20.04	19.78	
3	64QAM	8	4	19.95	19.78	19.89	
3	64QAM	8	7	19.90	19.96	19.78	21
3	64QAM	15	0	19.89	19.92	19.69	
3	256QAM	1	0	17.82	17.84	17.76	
3	256QAM	1	8	17.84	17.76	17.84	
3	256QAM	1	14	17.75	17.69	17.60	
3	256QAM	8	0	16.69	16.92	16.76	19
3	256QAM	8	4	16.74	16.73	16.84	
3	256QAM	8	7	16.74	16.71	16.81	
3	256QAM	15	0	16.62	16.74	16.69	
Channel				131979	132322	132865	
Frequency (MHz)				1710.7	1745	1779.3	24
1.4	QPSK	1	0	22.84	22.92	22.86	
1.4	QPSK	1	3	22.88	22.79	22.72	
1.4	QPSK	1	5	22.64	22.76	22.70	
1.4	QPSK	3	0	21.91	22.04	21.97	
1.4	QPSK	3	1	21.86	21.96	21.82	23
1.4	QPSK	3	3	21.86	21.82	21.70	
1.4	QPSK	6	0	21.82	21.79	21.94	
1.4	16QAM	1	0	22.06	22.06	21.99	
1.4	16QAM	1	3	22.14	22.18	22.08	
1.4	16QAM	1	5	21.93	22.13	21.85	23
1.4	16QAM	3	0	20.98	21.03	20.91	
1.4	16QAM	3	1	20.74	20.95	20.94	
1.4	16QAM	3	3	20.83	21.04	20.88	
1.4	16QAM	6	0	20.80	20.78	20.76	
1.4	64QAM	1	0	20.86	21.06	20.80	22
1.4	64QAM	1	3	20.89	20.79	20.74	
1.4	64QAM	1	5	21.04	20.97	20.79	
1.4	64QAM	3	0	19.75	19.93	19.73	
1.4	64QAM	3	1	19.92	19.88	19.96	
1.4	64QAM	3	3	19.88	19.79	19.84	21
1.4	64QAM	6	0	19.98	20.00	19.82	
1.4	256QAM	1	0	17.82	17.86	17.78	
1.4	256QAM	1	3	17.70	17.89	17.89	
1.4	256QAM	1	5	17.74	17.70	17.68	
1.4	256QAM	3	0	16.70	16.87	16.86	19
1.4	256QAM	3	1	16.68	16.82	16.96	
1.4	256QAM	3	3	16.65	16.63	16.60	
1.4	256QAM	6	0	16.69	16.87	16.73	
1.4	256QAM	6	0	16.69	16.87	16.73	

Band 48 (3.5G Band) (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)				3580	3609	3625	3641	3690	
20	QPSK	1	0	22.17	22.20	22.23	22.18	22.10	23
20	QPSK	1	49	21.67	21.69	21.69	21.72	21.71	
20	QPSK	1	99	21.73	21.71	21.73	21.53	21.67	
20	QPSK	50	0	21.27	21.18	21.30	21.13	21.03	22
20	QPSK	50	24	20.72	20.71	20.77	20.81	20.70	
20	QPSK	50	50	20.72	20.63	20.85	20.66	20.50	
20	QPSK	100	0	20.74	20.65	20.74	20.67	20.48	22
20	16QAM	1	0	21.00	20.95	21.05	21.00	20.85	
20	16QAM	1	49	20.90	21.02	20.87	20.80	20.71	
20	16QAM	1	99	20.88	20.80	20.93	20.89	20.74	21
20	16QAM	50	0	19.66	19.82	19.74	19.81	19.68	
20	16QAM	50	24	19.68	19.69	19.77	19.65	19.49	
20	16QAM	50	50	19.66	19.59	19.79	19.52	19.43	21
20	16QAM	100	0	19.69	19.63	19.73	19.67	19.53	
20	64QAM	1	0	19.86	19.87	19.91	19.70	19.77	
20	64QAM	1	49	19.86	19.78	19.82	19.76	19.69	21
20	64QAM	1	99	19.67	19.64	19.83	19.74	19.55	
20	64QAM	50	0	19.66	19.66	19.80	19.70	19.52	
20	64QAM	50	24	19.55	19.69	19.67	19.68	19.56	20
20	64QAM	50	50	19.71	19.56	19.66	19.57	19.47	
20	64QAM	100	0	19.66	19.56	19.74	19.60	19.42	
20	256QAM	1	0	16.67	16.61	16.68	16.55	16.40	17
20	256QAM	1	49	16.55	16.51	16.57	16.57	16.61	
20	256QAM	1	99	16.55	16.47	16.37	16.35	16.45	
20	256QAM	50	0	15.40	15.47	15.73	15.55	15.45	17
20	256QAM	50	24	15.46	15.50	15.63	15.62	15.58	
20	256QAM	50	50	15.45	15.61	15.44	15.36	15.42	
20	256QAM	100	0	15.45	15.49	15.65	15.33	15.30	
Channel				55315	55820	55990	56160.15	56665.15	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3608	3625	3642.15	3692.65	
15	QPSK	1	0	21.71	21.77	21.79	21.78	21.73	23
15	QPSK	1	37	21.65	21.68	21.68	21.72	21.71	
15	QPSK	1	74	21.67	21.73	21.73	21.73	21.63	
15	QPSK	36	0	20.77	20.88	20.83	20.87	20.77	22
15	QPSK	36	20	20.79	20.76	20.81	20.89	20.83	
15	QPSK	36	39	20.80	20.81	20.83	20.71	20.69	
15	QPSK	75	0	20.70	20.66	20.78	20.72	20.82	22
15	16QAM	1	0	21.06	20.88	21.02	21.02	21.04	
15	16QAM	1	37	21.00	20.83	20.87	20.93	20.89	
15	16QAM	1	74	20.88	20.78	20.91	21.04	20.77	21
15	16QAM	36	0	19.64	19.81	19.81	19.91	19.72	
15	16QAM	36	20	19.61	19.76	19.72	19.89	19.66	
15	16QAM	36	39	19.58	19.60	19.68	19.76	19.68	21
15	16QAM	75	0	19.60	19.54	19.64	19.89	19.72	
15	64QAM	1	0	19.81	19.85	19.83	19.86	19.93	
15	64QAM	1	37	19.82	19.83	19.75	19.76	19.79	21
15	64QAM	1	74	19.78	19.73	19.65	19.81	19.71	
15	64QAM	36	0	19.58	19.64	19.67	19.80	19.77	20
15	64QAM	36	20	19.64	19.69	19.52	19.73	19.63	
15	64QAM	36	39	19.58	19.54	19.74	19.81	19.66	
15	64QAM	75	0	19.55	19.60	19.55	19.63	19.51	17
15	256QAM	1	0	16.67	16.63	16.63	16.48	16.37	
15	256QAM	1	37	16.40	16.36	16.54	16.55	16.73	
15	256QAM	1	74	16.64	16.56	16.45	16.37	16.39	17
15	256QAM	36	0	15.42	15.35	15.70	15.54	15.49	
15	256QAM	36	20	15.55	15.39	15.65	15.59	15.61	
15	256QAM	36	39	15.46	15.63	15.45	15.40	15.35	17
15	256QAM	75	0	15.46	15.46	15.57	15.26	15.38	
Channel				55290	55815	55990	56165	56690	Tune-up limit (dBm)
Frequency (MHz)				3555	3607.5	3625	3642.5	3695	
10	QPSK	1	0	21.69	21.76	21.78	21.67	21.62	23
10	QPSK	1	25	21.73	21.64	21.79	21.69	21.45	
10	QPSK	1	49	21.64	21.74	21.76	21.61	21.60	
10	QPSK	25	0	20.86	20.83	20.95	20.84	20.65	22
10	QPSK	25	12	20.82	20.77	20.75	20.66	20.72	
10	QPSK	25	25	20.70	20.73	20.73	20.66	20.66	
10	QPSK	50	0	20.71	20.73	20.87	20.68	20.62	22
10	16QAM	1	0	21.04	21.04	20.94	20.90	20.79	
10	16QAM	1	25	20.84	20.88	20.86	20.90	20.78	
10	16QAM	1	49	20.94	20.76	20.89	20.92	20.76	21
10	16QAM	25	0	19.65	19.67	19.77	19.76	19.72	
10	16QAM	25	12	19.66	19.73	19.85	19.66	19.47	
10	16QAM	25	25	19.58	19.56	19.63	19.71	19.52	21
10	16QAM	50	0	19.59	19.63	19.78	19.73	19.61	
10	64QAM	1	0	19.85	19.84	19.83	19.86	19.74	
10	64QAM	1	25	19.74	19.75	19.92	19.64	19.58	21
10	64QAM	1	49	19.63	19.76	19.82	19.74	19.56	
10	64QAM	25	0	19.75	19.65	19.81	19.58	19.65	
10	64QAM	25	12	19.56	19.54	19.64	19.66	19.60	20
10	64QAM	25	25	19.64	19.56	19.63	19.51	19.49	
10	64QAM	50	0	19.51	19.47	19.72	19.57	19.41	
10	256QAM	1	0	16.64	16.63	16.61	16.48	16.44	16
10	256QAM	1	25	16.38	16.41	16.59	16.69	16.63	
10	256QAM	1	49	16.62	16.60	16.35	16.31	16.37	
10	256QAM	25	0	15.49	15.53	15.74	15.45	15.58	16
10	256QAM	25	12	15.53	15.52	15.64	15.71	15.63	
10	256QAM	25	25	15.63	15.45	15.52	15.40	15.34	
10	256QAM	50	0	15.41	15.41	15.71	15.37	15.38	
Channel				55265	55810	55990	56170	56175	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3607	3625	3643	3697.5	
5	QPSK	1	0	21.74	21.73	21.76	21.70	21.62	23
5	QPSK	1	12	21.65	21.71	21.70	21.61	21.53	
5	QPSK	1	24	21.63	21.63	21.64	21.62	21.53	
5	QPSK	12	0	20.93	20.94	20.84	20.79	20.80	22
5	QPSK	12	7	20.84	20.66	20.93	20.71	20.53	
5	QPSK	12	13	20.65	20.81	20.83	20.69	20.50	
5	QPSK	25	0	20.73	20.70	20.70	20.70	20.50	22
5	16QAM	1	0	20.96	21.03	20.95	20.84	20.87	
5	16QAM	1	0	20.96	21.03	20.95	20.84	20.87	

5	16QAM	1	12	20.88	21.00	20.91	20.77	20.69	22
5	16QAM	1	24	20.92	20.82	20.94	20.89	20.64	
5	16QAM	12	0	19.75	19.63	19.79	19.73	19.70	21
5	16QAM	12	7	19.70	19.65	19.72	19.60	19.55	
5	16QAM	12	13	19.56	19.67	19.80	19.61	19.51	
5	16QAM	25	0	19.71	19.56	19.70	19.70	19.57	
5	64QAM	1	0	19.90	19.77	19.85	19.78	19.72	21
5	64QAM	1	12	19.76	19.74	19.80	19.72	19.57	
5	64QAM	1	24	19.71	19.67	19.78	19.74	19.64	
5	64QAM	12	0	19.67	19.73	19.73	19.59	19.50	
5	64QAM	12	7	19.52	19.53	19.55	19.60	19.67	20
5	64QAM	12	13	19.74	19.73	19.60	19.70	19.57	
5	64QAM	25	0	19.66	19.53	19.55	19.53	19.48	
5	256QAM	1	0	16.70	16.67	16.63	16.42	16.51	
5	256QAM	1	12	16.47	16.40	16.54	16.58	16.70	18
5	256QAM	1	24	16.58	16.61	16.51	16.45	16.31	
5	256QAM	12	0	15.52	15.52	15.65	15.49	15.61	
5	256QAM	12	7	15.48	15.51	15.66	15.67	15.72	
5	256QAM	12	13	15.44	15.52	15.44	15.40	15.40	17
5	256QAM	25	0	15.41	15.38	15.67	15.39	15.43	

n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	23.51	23.35	23.06	24.50
20		1	53	23.50	23.20	23.12	
20		1	104	23.41	23.11	23.05	
20		50	1	23.06	22.88	22.70	24.50
20		50	25	23.56	23.32	23.18	
20		50	50	23.02	22.75	22.62	
20	DFT-s-OFDM QPSK	100	0	23.08	22.82	22.67	24.50
20		1	1	23.47	23.57	23.09	
20		1	53	23.50	23.34	23.17	
20		1	104	23.38	23.12	23.02	23.50
20		50	1	22.33	22.57	22.16	
20		50	25	22.51	22.33	22.12	
20	DFT-s-OFDM 16QAM	50	50	22.54	22.28	22.10	23.00
20		100	0	22.58	22.35	22.14	
20	DFT-s-OFDM 16QAM	1	1	22.43	22.33	22.04	23.00
20	DFT-s-OFDM 64QAM	1	1	20.99	20.84	20.60	21.50
20	DFT-s-OFDM 256QAM	1	1	18.78	18.65	18.38	19.50
20	CP-OFDM QPSK	1	1	21.97	21.80	21.57	22.50
20	CP-OFDM 16QAM	1	1	21.45	21.30	21.05	22.00
20	CP-OFDM 64QAM	1	1	19.78	19.63	19.43	20.50
20	CP-OFDM 256QAM	1	1	16.78	16.62	16.39	17.50
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	23.51	23.36	23.15	24.50
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	23.45	23.36	23.03	24.00
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	23.50	23.34	22.96	24.50

n5							
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	22.62	22.59	22.57	23.50
20		1	53	22.59	22.56	22.55	
20		1	104	22.45	22.42	22.40	
20		50	1	22.43	22.42	22.42	23.50
20		50	25	22.64	22.67	22.66	
20		50	50	22.33	22.29	22.29	
20		100	0	22.38	22.40	22.39	
20	DFT-s-OFDM QPSK	1	1	22.56	22.69	22.61	23.50
20		1	53	22.59	22.62	22.65	
20		1	104	22.48	22.46	22.55	
20		50	1	21.91	21.94	21.90	22.50
20		50	25	21.65	21.64	21.61	
20		50	50	21.82	21.82	21.80	
20		100	0	21.88	21.91	21.86	
20	DFT-s-OFDM 16QAM	1	1	21.89	21.85	21.94	22.50
20	DFT-s-OFDM 64QAM	1	1	20.28	20.26	20.39	21.00
20	DFT-s-OFDM 256QAM	1	1	18.11	18.09	18.23	19.00
20	CP-OFDM QPSK	1	1	21.31	21.33	21.45	22.00
20	CP-OFDM 16QAM	1	1	20.83	20.78	20.88	21.50
20	CP-OFDM 64QAM	1	1	18.95	18.92	19.03	20.00
20	CP-OFDM 256QAM	1	1	16.13	16.13	16.20	17.00
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	22.60	22.54	22.61	23.50
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	22.41	22.42	22.42	23.00
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	22.45	22.45	22.47	23.00

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	24.00
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98	
40	DFT-s-OFDM PI/2 BPSK	1	1	22.97	22.96	22.97	22.85	22.66	24.00
40		1	53	22.92	22.81	22.88	22.72	22.56	
40		1	104	22.90	22.89	22.84	22.74	22.65	
40		50	1	22.45	22.47	22.43	22.37	22.17	24.00
40		50	25	22.97	22.87	22.84	22.77	22.65	
40		50	50	22.44	22.32	22.29	22.21	22.10	
40	DFT-s-OFDM QPSK	100	0	22.38	22.38	22.38	22.29	22.13	24.00
40		1	1	22.94	22.85	22.98	22.87	22.66	
40		1	53	22.91	22.77	22.80	22.70	22.58	
40		1	104	22.89	22.83	22.84	22.72	22.65	24.00
40		50	1	21.92	21.95	21.93	21.81	21.69	
40		50	25	22.92	22.85	22.84	22.76	22.64	
40	DFT-s-OFDM 16QAM	50	50	21.92	21.80	21.75	21.72	21.63	23.00
40		100	0	21.92	21.88	21.83	21.80	21.66	
40	DFT-s-OFDM 64QAM	1	1	21.84	21.77	21.91	21.79	21.62	23.00
40	DFT-s-OFDM 256QAM	1	1	20.17	20.11	20.25	20.18	19.94	22.50
40	CP-OFDM QPSK	1	1	18.33	18.27	18.33	18.25	18.07	20.00
40	CP-OFDM 16QAM	1	1	21.54	21.50	21.49	21.33	21.18	23.50
40	CP-OFDM 64QAM	1	1	20.98	20.99	20.99	20.80	20.67	23.00
40	CP-OFDM 256QAM	1	1	19.51	19.04	19.39	19.25	19.07	21.00
40	CP-OFDM 256QAM	1	1	16.40	16.32	16.40	16.26	16.12	18.00
Channel				637668	639668	641666	643666	645666	24.00
Frequency (MHz)				3565.02	3595.02	3624.99	3654.99	3684.99	
30	DFT-s-OFDM QPSK	1	1	22.70	22.97	22.76	22.32	22.78	24.00
Channel				637334	639500	641666	643832	646000	24.00
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690	
20	DFT-s-OFDM QPSK	1	1	22.94	22.88	22.85	22.62	22.60	24.00
Channel				637000	639334	641666	644000	646332	24.00
Frequency (MHz)				3555	3590.01	3624.99	3660	3694.98	
10	DFT-s-OFDM QPSK	1	1	22.30	22.54	22.39	22.58	22.32	24.00

n66							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM PI/2 BPSK	1	1	22.74	22.77	22.77	24.00
30		1	80	22.66	22.76	22.82	
30		1	158	22.72	22.74	22.76	
30		80	1	22.33	22.31	22.35	24.00
30		80	40	22.78	22.81	22.83	
30		80	80	22.32	22.40	22.40	
30		160	0	22.26	22.31	22.40	
30	DFT-s-OFDM QPSK	1	1	22.95	23.01	22.99	24.00
30		1	80	22.83	22.82	22.76	
30		1	158	22.95	22.97	22.84	
30		80	1	22.76	22.92	22.89	24.00
30		80	40	21.80	21.77	21.81	
30		80	80	21.87	21.94	21.86	
30		160	0	21.79	21.86	21.86	
30	DFT-s-OFDM 16QAM	1	1	21.94	21.90	21.96	22.50
30	DFT-s-OFDM 64QAM	1	1	20.49	20.43	20.51	21.50
30	DFT-s-OFDM 256QAM	1	1	17.98	16.54	16.61	18.50
30	CP-OFDM QPSK	1	1	21.33	21.33	21.46	22.00
30	CP-OFDM 16QAM	1	1	20.83	20.83	20.86	21.50
30	CP-OFDM 64QAM	1	1	19.35	19.37	19.49	20.00
30	CP-OFDM 256QAM	1	1	16.00	16.34	16.37	17.00
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	22.95	22.88	22.69	23.50
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	22.89	22.80	22.68	23.50
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	22.85	22.90	22.68	23.50
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	22.90	22.63	22.83	24.00

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			23.01			25.00
100		1	136			23.44			
100		1	271			23.90			
100		135	1			23.27			25.00
100		135	67			23.46			
100		135	136			23.65			
100	DFT-s-OFDM QPSK	270	0			23.43			25.00
100		1	1			23.99			
100		1	136			23.36			
100		1	271			23.81			24.50
100		135	1			23.24			
100		135	67			23.40			
100	DFT-s-OFDM 16QAM	135	136			23.61			24.00
100		270	0			23.38			
100	DFT-s-OFDM 64QAM	1	1			23.10			24.00
100	DFT-s-OFDM 256QAM	1	1			23.00			24.00
100	CP-OFDM QPSK	1	1			21.34			22.00
100	CP-OFDM 16QAM	1	1			22.96			23.50
100	CP-OFDM 64QAM	1	1			23.01			24.00
100	CP-OFDM 256QAM	1	1			22.52			23.50
100						19.40			20.00
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	22.89	22.82	23.00	23.15	23.24	24.00
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	23.56	23.30	23.40	23.39	23.58	24.50
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	23.43	23.54	23.74	23.91	23.85	25.00
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	23.38	23.63	23.84	23.86	23.80	25.00
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	23.29	23.42	23.69	23.85	23.98	24.50

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			26.02			27.50
100		1	136			26.45			
100		1	271			26.77			
100		135	1			25.78			27.00
100		135	67			26.42			
100		135	136			26.15			
100	DFT-s-OFDM QPSK	270	0			25.97			27.50
100		1	1			26.80			
100		1	136			26.40			
100		1	271			26.75			27.00
100		135	1			26.49			
100		135	67			26.47			
100		135	136			25.67			
100		270	0			25.41			
100	DFT-s-OFDM 16QAM	1	1			25.11			26.00
100	DFT-s-OFDM 64QAM	1	1			23.46			24.00
100	DFT-s-OFDM 256QAM	1	1			21.37			22.00
100	CP-OFDM QPSK	1	1			24.43			25.00
100	CP-OFDM 16QAM	1	1			24.01			25.00
100	CP-OFDM 64QAM	1	1			22.59			23.50
100	CP-OFDM 256QAM	1	1			19.44			20.00
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	25.99	25.97	26.06	26.14	26.20	27.00
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	26.15	26.26	26.28	26.41	26.57	27.50
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	26.52	26.41	26.66	26.75	26.59	28.00
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	26.33	26.62	26.58	26.59	26.71	28.00
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	26.32	26.50	26.56	26.77	26.78	27.50

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	25.00
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	23.56	23.18	23.50	23.50	23.57	25.00
100		1	136	23.72	23.61	23.72	23.63	23.87	
100		1	271	23.53	23.81	23.61	24.01	23.86	
100		135	1	23.69	23.44	23.64	23.61	23.80	25.00
100		135	67	23.76	23.55	23.63	23.62	23.87	
100		135	136	23.65	23.64	23.68	23.73	23.95	
100	DFT-s-OFDM QPSK	270	0	23.67	23.53	23.69	23.68	23.85	25.00
100		1	1	23.52	23.19	24.20	23.53	23.53	
100		1	136	23.73	23.64	23.69	23.63	23.87	
100		1	271	23.54	23.81	23.65	24.01	23.84	25.00
100		135	1	23.62	23.41	23.86	23.57	23.77	
100		135	67	23.72	23.55	23.64	23.63	23.88	
100	DFT-s-OFDM 16QAM	135	136	23.65	23.61	23.64	23.73	23.90	25.00
100		270	0	23.66	23.51	23.68	23.66	23.79	
100	DFT-s-OFDM 64QAM	1	1	23.62	23.23	23.66	23.60	23.63	24.50
100	DFT-s-OFDM 256QAM	1	1	23.60	23.21	23.52	23.52	23.60	24.50
100	DFT-s-OFDM 256QAM	1	1	21.92	21.51	21.86	21.85	21.95	22.50
100	CP-OFDM QPSK	1	1	23.50	23.16	23.52	23.49	23.59	24.50
100	CP-OFDM 16QAM	1	1	23.54	23.22	23.52	23.46	23.55	24.50
100	CP-OFDM 64QAM	1	1	23.18	22.79	23.11	23.06	23.11	24.00
100	CP-OFDM 256QAM	1	1	20.02	19.65	19.94	19.95	20.01	21.00
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	23.58	23.39	23.53	23.58	23.77	24.50
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	23.69	23.47	23.68	23.87	24.01	25.00
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	24.19	24.04	24.08	24.13	24.06	25.00
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	23.91	23.79	24.02	24.09	24.15	25.00
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	23.88	23.77	23.93	24.04	24.10	25.00

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	28.00
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	26.46	26.14	26.45	26.45	26.59	28.00
100		1	136	26.68	26.55	26.62	26.53	26.78	
100		1	271	26.58	26.75	26.55	26.93	26.77	
100		135	1	26.13	25.90	26.15	26.12	26.33	
100		135	67	26.76	26.66	26.64	26.65	26.88	
100		135	136	26.17	26.19	26.14	26.27	26.39	
100	DFT-s-OFDM QPSK	270	0	26.18	26.09	26.20	26.18	26.33	27.50
100		1	1	26.45	26.10	27.26	26.48	26.67	
100		1	136	26.68	26.59	26.63	26.55	26.93	
100		1	271	26.58	26.77	26.69	27.05	26.79	
100		135	1	25.62	25.44	25.88	25.63	25.80	
100		135	67	26.73	26.59	26.65	26.64	26.89	
100	DFT-s-OFDM 16QAM	135	136	25.65	25.69	25.66	25.73	25.85	28.00
100		270	0	25.67	25.59	25.67	25.67	25.84	
100		1	1	25.35	25.03	25.36	25.38	25.50	
100		1	1	23.79	23.44	23.80	23.71	23.72	
100	DFT-s-OFDM 64QAM	1	1	21.83	21.53	21.85	21.91	21.92	22.50
100	DFT-s-OFDM 256QAM	1	1	24.91	24.61	25.01	24.97	25.08	26.00
100	CP-OFDM QPSK	1	1	24.46	24.15	24.51	24.56	24.55	25.50
100	CP-OFDM 16QAM	1	1	22.87	22.54	22.95	22.97	23.11	24.00
100	CP-OFDM 64QAM	1	1	19.92	19.62	19.92	19.96	20.04	21.00
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	26.39	26.21	26.46	26.49	26.71	27.50
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	26.59	26.28	26.67	26.72	26.82	27.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	27.12	26.99	27.05	26.97	26.92	28.00
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	26.85	26.77	26.98	27.08	27.19	28.00
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	26.83	26.83	26.97	27.04	27.13	28.00

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			23.04			25.00
100		1	136			23.62			
100		1	271			23.85			
100		135	1			23.33			24.00
100		135	67			23.58			
100		135	136			23.65			
100	DFT-s-OFDM QPSK	270	0			23.55			25.00
100		1	1			24.12			
100		1	136			23.52			
100		1	271			23.78			24.00
100		135	1			23.29			
100		135	67			23.61			
100		135	136			23.70			
100		270	0			23.59			
100	DFT-s-OFDM 16QAM	1	1			23.06			24.00
100	DFT-s-OFDM 64QAM	1	1			23.04			24.00
100	DFT-s-OFDM 256QAM	1	1			21.44			22.00
100	CP-OFDM QPSK	1	1			22.99			23.50
100	CP-OFDM 16QAM	1	1			23.06			24.00
100	CP-OFDM 64QAM	1	1			22.65			23.50
100	CP-OFDM 256QAM	1	1			19.48			20.00
Channel				633000	633167	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.51	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	23.07	23.02	23.05	23.10	23.19	24.00
Channel				632668	633001	633334	633667	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495.01	3500.01	3505.01	3510	
80	DFT-s-OFDM QPSK	1	1	23.13	22.91	23.16	23.27	23.38	24.00
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	23.09	23.21	23.17	23.37	23.53	24.50
Channel				632000	632667	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.01	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	23.25	23.27	23.43	23.59	23.66	24.50
Channel				631668	632501	633334	634167	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.51	3500.01	3512.51	3525	
50	DFT-s-OFDM QPSK	1	1	23.09	23.19	23.49	23.62	23.66	24.50
Channel				631334	636672	633334	634333	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.99	3529.98	
40	DFT-s-OFDM QPSK	1	1	23.53	23.59	23.83	23.92	24.09	25.00
Channel				631000	632167	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.51	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	23.33	23.68	23.93	23.90	24.06	25.00
Channel				630668	632001	633334	634667	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480.01	3500.01	3520.01	3540	
20	DFT-s-OFDM QPSK	1	1	23.51	23.64	23.82	23.93	24.08	25.00

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			26.02			28.00
100		1	136			26.57			
100		1	271			26.80			
100		135	1			25.87			27.50
100		135	67			26.66			
100		135	136			26.20			
100	DFT-s-OFDM QPSK	270	0			26.07			28.00
100		1	1			27.06			
100		1	136			26.58			
100		1	271			26.83			27.50
100		135	1			26.66			
100		135	67			26.62			
100	DFT-s-OFDM 16QAM	135	136			25.72			26.00
100		270	0			25.55			
100		1	1			25.06			
100	DFT-s-OFDM 64QAM	1	1			23.55			24.50
100	DFT-s-OFDM 256QAM	1	1			21.54			22.50
100	CP-OFDM QPSK	1	1			24.60			25.50
100	CP-OFDM 16QAM	1	1			24.03			25.00
100	CP-OFDM 64QAM	1	1			22.64			23.50
100	CP-OFDM 256QAM	1	1			19.53			20.50
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	26.02	26.06	26.15	26.14	26.14	27.00
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	26.06	26.06	26.17	26.30	26.26	27.00
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	26.11	26.25	26.29	26.39	26.54	27.50
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	26.26	26.31	26.49	26.62	26.64	27.50
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	16.67	26.30	26.46	26.67	26.64	27.50
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	26.66	26.69	26.87	26.99	27.05	28.00
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	26.52	26.77	26.85	27.02	27.09	28.00
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	26.56	26.66	26.80	27.00	27.05	28.00

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			23.44			25
100		1	136			23.68			
100		1	271			23.55			
100		135	1			23.63			24.5
100		135	67			23.68			
100		135	136			23.62			
100	DFT-s-OFDM QPSK	270	0			23.65			25
100		1	1			24.40			
100		1	136			23.68			
100		1	271			23.47			24.5
100		135	1			23.60			
100		135	67			23.69			
100	DFT-s-OFDM 16QAM	135	136			23.59			24.5
100		270	0			23.65			
100		1	1			23.55			
100	DFT-s-OFDM 64QAM	1	1			23.45			24.00
100	DFT-s-OFDM 256QAM	1	1			21.76			22.50
100	CP-OFDM QPSK	1	1			23.41			24.00
100	CP-OFDM 16QAM	1	1			23.41			24.00
100	CP-OFDM 64QAM	1	1			22.98			23.50
100	CP-OFDM 256QAM	1	1			19.91			20.50
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	23.39	23.43	23.50	23.54	23.55	24.50
Channel				649334	649667	650000	650333	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3745.01	3750	3754.99	3759.99	
80	DFT-s-OFDM QPSK	1	1	23.45	23.53	23.44	23.32	23.59	24.50
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	23.37	23.60	23.42	23.51	23.54	24.50
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	23.60	23.52	23.63	23.58	23.75	24.50
Channel				648334	649167	650000	650833	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.51	3750	3762.49	3774.99	
50	DFT-s-OFDM QPSK	1	1	23.56	23.55	23.63	23.80	23.95	24.50
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	24.01	24.01	24.15	24.12	24.38	25.00
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	23.79	24.00	24.05	24.16	24.26	25.00
Channel				647334	648667	650000	651333	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3730.01	3750	3769.99	3789.99	

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			26.46			28.00
100		1	136			26.68			
100		1	271			26.56			
100		135	1			26.14			27.50
100		135	67			26.70			
100		135	136			26.18			
100	DFT-s-OFDM QPSK	270	0			26.18			28.00
100		1	1			27.40			
100		1	136			26.71			
100		1	271			26.57			27.50
100		135	1			26.60			
100		135	67			26.71			
100		135	136			25.68			
100		270	0			25.67			
100	DFT-s-OFDM 16QAM	1	1			25.27			26.00
100	DFT-s-OFDM 64QAM	1	1			23.65			24.50
100	DFT-s-OFDM 256QAM	1	1			21.77			22.50
100	CP-OFDM QPSK	1	1			25.02			26.00
100	CP-OFDM 16QAM	1	1			24.40			25.00
100	CP-OFDM 64QAM	1	1			22.83			23.50
100	CP-OFDM 256QAM	1	1			19.84			20.50
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	26.37	26.32	26.44	26.46	26.58	27.50
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	26.38	26.57	26.46	26.37	26.56	27.50
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	26.44	26.50	26.60	26.52	26.49	27.50
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	26.52	26.53	26.60	26.61	26.77	27.50
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	26.53	26.53	26.63	26.80	26.91	27.50
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	27.01	26.96	27.13	27.11	27.26	28.00
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	26.80	26.99	27.01	27.13	27.25	28.00
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	26.82	26.97	26.99	27.12	27.10	28.00

CA_48C											
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	20.33	21.00
55990	55891	56089	QPSK	1	0	0	0	1	0	20.38	21.00
56640	56442	56640	QPSK	1	0	0	0	1	0	20.29	21.00
55340	55340	55538	16QAM	1	0	0	0	1	0	20.27	21.00
55990	55891	56089	16QAM	1	0	0	0	1	0	20.33	21.00
56640	56442	56640	16QAM	1	0	0	0	1	0	20.25	21.00
55340	55340	55538	64QAM	1	0	0	0	1	0	20.21	21.00
55990	55891	56089	64QAM	1	0	0	0	1	0	20.22	21.00
56640	56442	56640	64QAM	1	0	0	0	1	0	20.19	21.00
55340	55340	55538	256QAM	1	0	0	0	1	0	19.86	20.50
55990	55891	56089	256QAM	1	0	0	0	1	0	19.84	20.50
56640	56442	56640	256QAM	1	0	0	0	1	0	19.91	20.50
55340	55340	55538	QPSK	50	0	0	0	1	0	18.86	19.50
55990	55891	56089	QPSK	50	0	0	0	1	0	18.93	19.50
56640	56442	56640	QPSK	50	0	0	0	1	0	18.88	19.50

CA_66B											
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				
132072	132022	132121	QPSK	1	0	0	0	1	0	22.11	23.00
132322	132373	132472	QPSK	1	0	0	0	1	0	22.35	23.00
132572	132523	132622	QPSK	1	0	0	0	1	0	22.20	23.00
132072	132022	132121	16QAM	1	0	0	0	1	0	21.85	22.50
132322	132373	132472	16QAM	1	0	0	0	1	0	22.09	23.00
132572	132523	132622	16QAM	1	0	0	0	1	0	21.94	22.50
132072	132022	132121	64QAM	1	0	0	0	1	0	21.69	22.50
132322	132373	132472	64QAM	1	0	0	0	1	0	21.93	22.50
132572	132523	132622	64QAM	1	0	0	0	1	0	21.78	22.50
132072	132022	132121	256QAM	1	0	0	0	1	0	21.58	22.50
132322	132373	132472	256QAM	1	0	0	0	1	0	21.82	22.50
132572	132523	132622	256QAM	1	0	0	0	1	0	21.67	22.50
132072	132022	132121	QPSK	50	0	0	0	1	0	21.19	22.00
132322	132373	132472	QPSK	50	0	0	0	1	0	21.26	22.00
132572	132523	132622	QPSK	50	0	0	0	1	0	21.20	22.00

CA_66C											
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				
132072	132072	132270	QPSK	1	0	0	0	1	0	22.18	23.00
132322	132323	132521	QPSK	1	0	0	0	1	0	22.22	23.00
132572	132374	132572	QPSK	1	0	0	0	1	0	22.27	23.00
132072	132072	132270	16QAM	1	0	0	0	1	0	22.06	23.00
132322	132323	132521	16QAM	1	0	0	0	1	0	22.09	23.00
132572	132374	132572	16QAM	1	0	0	0	1	0	22.16	23.00
132072	132072	132270	64QAM	1	0	0	0	1	0	21.97	23.00
132322	132323	132521	64QAM	1	0	0	0	1	0	22.00	23.00
132572	132374	132572	64QAM	1	0	0	0	1	0	22.07	23.00
132072	132072	132270	256QAM	1	0	0	0	1	0	21.89	23.00
132322	132323	132521	256QAM	1	0	0	0	1	0	21.92	23.00
132572	132374	132572	256QAM	1	0	0	0	1	0	21.99	23.00
132072	132072	132270	QPSK	50	0	0	0	1	0	21.14	22.00
132322	132323	132521	QPSK	50	0	0	0	1	0	21.18	22.00
132572	132374	132572	QPSK	50	0	0	0	1	0	21.26	22.00

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	22.34	23
	CA_2A-5A	2	20	18700	1860	QPSK/1#0	5	10	20600	844	21.86	22.5
	CA_2A-13A	2	20	18700	1860	QPSK/1#0	13	10	23230	782	21.87	23
	CA_2A-66A	2	20	18700	1860	QPSK/1#0	66	20	132572	1770	22.28	23
	CA_4A-5A	4	20	20050	1720	QPSK/1#0	5	10	20600	844	21.68	22.5
	CA_4A-13A	4	20	20050	1720	QPSK/1#0	13	10	23230	782	21.67	22.5
	CA_5A-66A	5	10	20450	829	QPSK/1#0	66	20	132572	1770	23.14	24
	CA_13A-66A	13	10	23230	782	QPSK/1#0	66	20	132572	1770	21.95	22.5

3CC LTE Downlink									
CA Configuration	Ant	PCC				SCC			Power
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	
CA_4A-13A		4	10	20175	1732.5	QPSK1/10	13	20	21.76
CA_4A-48A		4	20	20050	1720	QPSK1/10	48	20	21.7
CA_4A-5A		4	10	20175	1732.5	QPSK1/10	5	10	21.56
CA_66B		66	10	132373	1750.1	QPSK1/10	66	10	21.82
CA_66C		66	20	132072	1720	QPSK1/10	66	20	21.85

3CC LTE Downlink													
CA Configuration	Ant	PCC					SCC1			SCC2			Power
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Band	BW (MHz)	
CA_13A-48A-66A		13	10	23230	782	QPSK1/10	48	20	56640	3690	66	20	21.92
CA_13A-66A-66A		13	10	23230	782	QPSK1/10	66	20	56686	2155	66	20	22.2
CA_13A-66B		13	10	23230	782	QPSK1/10	66	10	57167	2185.1	66	10	22.17
CA_13A-66C		13	10	23230	782	QPSK1/10	66	20	57038	2170.2	66	20	22.11
CA_2A-13A-48A		2	20	18700	1860	QPSK1/10	13	10	23230	782	48	20	22.63
CA_2A-48A-66A		2	20	18700	1860	QPSK1/10	48	20	56089	3634.9	66	20	22.67
CA_2A-4A-13A		2	20	18700	1860	QPSK1/10	4	20	20300	2145	13	10	21.29
CA_2A-4A-5A		2	20	18700	1860	QPSK1/10	4	20	20300	2145	5	10	22.31
CA_2A-5A-48A		2	20	18700	1860	QPSK1/10	5	10	20600	844	48	20	22.53
CA_2A-66B		2	20	18700	1860	QPSK1/10	66	10	57187	2185.1	66	10	22.19
CA_48A-66A-66A		48	20	55340	3560	QPSK1/10	66	20	56886	2155	66	20	22.23
CA_48A-66B		48	20	55340	3560	QPSK1/10	66	10	57187	2185.1	66	10	22.22
CA_48A-66C		48	20	55340	3560	QPSK1/10	66	20	57038	2170.2	66	20	22.23
CA_4A-48C		4	20	20050	1720	QPSK1/10	48	20	56442	3670.2	48	20	22.56
CA_4A-4A-13A		4	20	20050	1720	QPSK1/10	4	20	20300	1745	13	10	22.09
CA_4A-4A-5A		4	20	20050	1720	QPSK1/10	4	20	20300	1745	5	10	22.39
CA_5A-66A-66A		5	10	20450	829	QPSK1/10	66	20	56886	2155	66	20	22.09
CA_5A-66B		5	10	20450	829	QPSK1/10	66	10	57187	2185.1	66	10	22.07
CA_5A-66C		5	10	20450	829	QPSK1/10	66	20	57038	2170.2	66	20	21.08
CA_66A-66A-66A		66	20	132072	1720	QPSK1/10	66	20	56886	2155	66	20	22.71
CA_13A-48C		13	10	23230	782	QPSK1/10	48	20	56442	3670.2	48	20	22.17
CA_2A-66C		2	20	18700	1860	QPSK1/10	66	20	57038	2170.2	66	20	21.93
CA_5A-48A-66A		5	10	20450	829	QPSK1/10	48	20	56089	3634.9	66	20	22.1

4CC LTE Downlink																	
CA Configuration	Ant	PCC					SCC1			SCC2			SCC3			Power	
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Band	BW (MHz)	UL Fre. (MHz)
CA_13A-48A-66B		13	10	23230	782	QPSK1/10	48	10	56640	3690	66	10	57187	2185.1	66	10	57286
CA_13A-48A-66C		13	10	23230	782	QPSK1/10	48	10	56640	3690	66	20	57038	2170.2	66	10	57236
CA_13A-48C-66A		13	10	23230	782	QPSK1/10	48	20	56442	3670.2	48	20	56640	3690	66	20	57236
CA_2A-13A-48C		2	20	18700	1860	QPSK1/10	13	10	23230	782	48	20	56442	3670.2	48	20	56640
CA_2A-13A-66A-66A		2	20	18700	1860	QPSK1/10	13	10	23230	782	66	20	56886	2155	66	20	57236
CA_2A-13A-66B		2	20	18700	1860	QPSK1/10	13	10	23230	782	66	10	57187	2185.1	66	10	57286
CA_2A-13A-66C		2	20	18700	1860	QPSK1/10	13	10	23230	782	66	20	57038	2170.2	66	20	57236
CA_2A-2A-4A-4A		2	20	18700	1860	QPSK1/10	2	20	19100	1900	4	20	20050	1720	4	20	20300
CA_2A-2A-4A-5A		2	20	18700	1860	QPSK1/10	2	20	19100	1900	4	20	20300	1745	5	10	20600
CA_2A-2A-66A-66A		2	20	18700	1860	QPSK1/10	2	20	19100	1900	66	20	56886	2155	66	20	57236
CA_2A-2A-66B		2	20	18700	1860	QPSK1/10	2	20	19100	1900	66	10	57187	2185.1	66	10	57286
CA_2A-2A-66C		2	20	18700	1860	QPSK1/10	2	20	19100	1900	66	20	57038	2170.2	66	20	57236
CA_2A-48C-66A		2	20	18700	1860	QPSK1/10	48	20	55891	3615.1	48	20	56089	3634.9	66	20	57236
CA_2A-4A-4A-5A		2	20	18700	1860	QPSK1/10	4	20	20050	1720	4	20	20300	1745	5	10	20600
CA_2A-5A-48C		2	20	18700	1860	QPSK1/10	5	10	20600	844	48	20	55891	3615.1	48	20	56089
CA_2A-5A-66A-66A		2	20	18700	1860	QPSK1/10	5	10	20600	844	66	20	56886	2155	66	20	57236
CA_2A-5A-66B		2	20	18700	1860	QPSK1/10	5	10	20600	844	66	10	57187	2185.1	66	10	57286
CA_2A-5A-66C		2	20	18700	1860	QPSK1/10	5	10	20600	844	66	20	57038	2170.2	66	20	57236
CA_2A-66A-66A-66A		2	20	18700	1860	QPSK1/10	66	20	132072	1720	66	20	56886	2155	66	20	57236
CA_48C-66A-66A		48	20	55891	3615.1	QPSK1/10	48	20	56089	3634.9	66	20	56886	2155	66	20	57236
CA_48C-66B		48	20	55891	3615.1	QPSK1/10	48	20	56089	3634.9	66	10	57187	2185.1	66	10	57286
CA_48C-66C		48	20	55891	3615.1	QPSK1/10	48	20	56089	3634.9	66	20	57038	2170.2	66	20	57236
CA_48D-66A		48	20	56244	3650.4	QPSK1/10	48	20	56442	3670.2	48	20	56640	3690	66	20	57236
CA_4A-48D		4	20	20050	1720	QPSK1/10	48	20	56244	3650.4	48	20	56442	3670.2	48	20	56640
CA_5A-48C-66A		5	10	20450	829	QPSK1/10	48	20	55891	3615.1	48	20	56089	3634.9	66	20	57236
CA_2A-2A-5A-66A		2	20	18700	1860	QPSK1/10	2	20	19100	1900	5	10	20600	844	66	20	56886

5CC LTE Downlink																	
CA Configuration	Ant	PCC					SCC1			SCC2			SCC3			Power	
		Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/RB/Offset)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Band	BW (MHz)	UL Fre. (MHz)
CA_13A-48D-66A		13	10	23230	782	QPSK1/10	48	20	55792	3605.2	48	20	55990	3625	48	20	56188
CA_13A-48E		13	10	23230	782	QPSK1/10	48	20	55340	3560	48	20	55736	3599.6	48	5	55853
CA_2A-13A-48D		2	20	18700	1860	QPSK1/10	13	10	23230	782	48	20	55792	3605.2	48	20	55990
CA_2A-2A-13A-66A-66A		2	20	18700	1860	QPSK1/10	2	20	19100	1900	13	10	23230	782	66	20	56886
CA_2A-2A-5A-66A-66B		2	20	18700	1860	QPSK1/10	2	20	19100	1900	5	10	20600	844	66	20	56886
CA_2A-2A-48D-66A		2	20	18700	1860	QPSK1/10	2	20	19100	1900	5	10	20600	844	66	10	57187
CA_2A-2A-5A-66C		2	20	18700	1860	QPSK1/10	2	20	19100	1900	5	10	20600	844	66	20	57038
CA_2A-48D-66A		2	20	18700	1860	QPSK1/10	48	20	55792	3605.2	48	20	55990	3625	48	20	56188
CA_2A-48E		2	20	18700	1860	QPSK1/10	48	20	55340	3560	48	20	55538	3579.8	48	20	55736
CA_2A-5A-48D		2	20	18700	1860	QPSK1/10	5	10	20600	844	48	20	55792	3605.2	48	20	55990
CA_48E-66A		48	20	55340	3560	QPSK1/10	48	20	55538	3579.8	48	20	55736	3599.6	48	5	55853
CA_4A-48E		4	20	20050	1720	QPSK1/10	48	20	55340	3560	48	20	55538	3579.8	48	5	55853
CA_5A-48D-66A		5	10	20450	829	QPSK1/10	48	20	55792	3605.2	48	20	55990	3625	48	20	56188

2CC LTE Downlink												
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)	CA TX (dBm)	Rel.8 TX (dBm)
Intra-band & Inter-band	CA_n2(2A)	n2A	20	388000	1940	QPSK/1#0	n2A	20	396000	1980	22.39	23.57
	CA_n2A-n5A	n2A	20	396000	1980	QPSK/1#0	n5A	20	176300	881.5	21.89	23.57
	CA_n2A-n48A	n2A	20	396000	1980	QPSK/1#0	n48A	100	641666	3624.99	22.29	23.57
	CA_n2A-n66A	n2A	20	396000	1980	QPSK/1#0	n66A	30	431000	2515	22.42	23.57
	CA_n2A-n77A	n2A	20	396000	1980	QPSK/1#0	n77A	100	650000	3750	22.09	23.57
	CA_n5(2A)	n5A	20	175800	879	QPSK/1#0	n5A	20	176800	884	22.16	22.69
	CA_n5B	n5A	20	175800	879	QPSK/1#0	n5A	20	176800	884	22.29	22.69
	CA_n5A-n48A	n5A	20	176300	881.5	QPSK/1#0	n48A	100	641666	3624.99	22.18	22.69
	CA_n5A-n66A	n5A	20	176300	881.5	QPSK/1#0	n66A	30	431000	2515	21.76	22.69
	CA_n5A-n77A	n5A	20	176300	881.5	QPSK/1#0	n77A	100	650000	3750	21.91	22.69
	CA_n48(2A)	n48A	40	641666	3624.99	QPSK/1#0	n48A	40	641666	3624.99	21.26	22.98
	CA_n48A-n66A	n48A	40	641666	3624.99	QPSK/1#0	n66A	30	431000	2515	21.12	22.98
	CA_n66(2A)	n66A	20	424000	2120	QPSK/1#0	n66A	20	434000	2170	22.18	23.01
	CA_n66B	n66B	10	423000	2115	QPSK/1#0	n66B	15	435000	2175	22.03	23.01
	CA_n66A-n77A	n66A	20	424000	2120	QPSK/1#0	n77A	100	650000	3750	21.84	23.01
	CA_n77C	n78A	100	623334	3350.1	QPSK/1#0	n77A	100	676666	4149.99	22.33	23.99
	CA_n48B	n48B	100	55990	55891	QPSK/1#0	n48B	100	641666	3624.99	22.3	22.98
	CA_n48C	n48C	100	55990	55891	QPSK/1#0	n48C	100	55340	55340	22.21	22.98

2.4GHz WLAN ANT1 (WIFI1)

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-to-Lock	Power Setting	Duty Cycle %
802.11a Mbps	CH1	2412	17.40	18.00	18.00	80.17	
	CH7	2424	17.36	18.00	18.00	80.72	
	CH13	2436	16.96	18.00	18.00	80.68	
802.11g Mbps	CH1	2412	16.96	18.00	17.00	80.24	
	CH7	2424	16.92	18.00	17.00	80.27	
	CH13	2436	17.08	18.00	17.00	80.24	
802.11n HT20 MCS0	CH1	2412	14.06	15.00	15.00	80.71	
	CH7	2424	14.00	15.00	15.00	80.71	
	CH13	2436	14.42	15.00	15.00	80.74	
802.11n HT40 MCS0	CH1	2412	14.21	16.00	16.00	80.24	
	CH7	2424	14.06	16.00	16.00	80.24	
	CH13	2436	14.35	16.00	16.00	80.23	
802.11n HT20 MCS1	CH1	2412	15.03	15.00	15.00	80.71	
	CH7	2424	15.06	15.00	15.00	80.71	
	CH13	2436	15.00	15.00	15.00	80.71	
802.11n HT40 MCS1	CH1	2412	15.00	16.00	16.00	80.24	
	CH7	2424	15.06	16.00	16.00	80.24	
	CH13	2436	15.03	16.00	16.00	80.24	
802.11n HT20 MCS2	CH1	2412	15.03	15.00	15.00	80.71	
	CH7	2424	15.06	15.00	15.00	80.71	
	CH13	2436	15.00	15.00	15.00	80.71	
802.11n HT40 MCS2	CH1	2412	15.00	16.00	16.00	80.24	
	CH7	2424	15.06	16.00	16.00	80.24	
	CH13	2436	15.03	16.00	16.00	80.24	
802.11n HT20 MCS3	CH1	2412	15.03	15.00	15.00	80.71	
	CH7	2424	15.06	15.00	15.00	80.71	
	CH13	2436	15.00	15.00	15.00	80.71	
802.11n HT40 MCS3	CH1	2412	15.00	16.00	16.00	80.24	
	CH7	2424	15.06	16.00	16.00	80.24	
	CH13	2436	15.03	16.00	16.00	80.24	

2.4GHz WLAN ANT2 (WIFI2)

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-to-Lock	Power Setting	Duty Cycle %
802.11a Mbps	CH1	2412	17.76	18.00	18.00	80.16	
	CH7	2424	17.52	18.00	18.00	80.16	
	CH13	2436	16.48	18.00	18.00	80.17	
802.11g Mbps	CH1	2412	16.24	18.00	17.00	80.24	
	CH7	2424	16.20	18.00	17.00	80.24	
	CH13	2436	17.27	18.00	17.00	80.24	
802.11n HT20 MCS0	CH1	2412	14.04	15.00	15.00	80.71	
	CH7	2424	14.04	15.00	15.00	80.71	
	CH13	2436	14.27	15.00	15.00	80.71	
802.11n HT40 MCS0	CH1	2412	14.76	16.00	16.00	80.24	
	CH7	2424	14.76	16.00	16.00	80.24	
	CH13	2436	14.76	16.00	16.00	80.24	
802.11n HT20 MCS1	CH1	2412	15.06	15.00	15.00	80.71	
	CH7	2424	15.06	15.00	15.00	80.71	
	CH13	2436	15.00	15.00	15.00	80.71	
802.11n HT40 MCS1	CH1	2412	15.00	16.00	16.00	80.24	
	CH7	2424	15.06	16.00	16.00	80.24	
	CH13	2436	15.00	16.00	16.00	80.24	
802.11n HT20 MCS2	CH1	2412	15.03	15.00	15.00	80.71	
	CH7	2424	15.06	15.00	15.00	80.71	
	CH13	2436	15.00	15.00	15.00	80.71	
802.11n HT40 MCS2	CH1	2412	15.00	16.00	16.00	80.24	
	CH7	2424	15.06	16.00	16.00	80.24	
	CH13	2436	15.03	16.00	16.00	80.24	
802.11n HT20 MCS3	CH1	2412	15.03	15.00	15.00	80.71	
	CH7	2424	15.06	15.00	15.00	80.71	
	CH13	2436	15.00	15.00	15.00	80.71	
802.11n HT40 MCS3	CH1	2412	15.00	16.00	16.00	80.24	
	CH7	2424	15.06	16.00	16.00	80.24	
	CH13	2436	15.03	16.00	16.00	80.24	

2.4GHz WLAN ANT1+2 (WIFI+2)

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-to-Lock	Power Setting	Duty Cycle %
802.11a Mbps	CH1	2412	N/A	N/A	N/A	N/A	N/A
	CH7	2424	N/A	N/A	N/A	N/A	N/A
	CH13	2436	N/A	N/A	N/A	N/A	N/A
802.11g Mbps	CH1	2412	N/A	N/A	N/A	N/A	N/A
	CH7	2424	N/A	N/A	N/A	N/A	N/A
	CH13	2436	N/A	N/A	N/A	N/A	N/A
802.11n HT20 MCS0	CH1	2412	17.36	18.00	18.00	80.74	
	CH7	2424	16.96	18.00	18.00	80.71	
	CH13	2436	17.00	18.00	18.00	80.22	
802.11n HT40 MCS0	CH1	2412	17.00	18.00	18.00	80.24	
	CH7	2424	16.97	18.00	18.00	80.24	
	CH13	2436	17.07	18.00	18.00	80.24	
802.11n HT20 MCS1	CH1	2412	15.05	15.00	15.00	80.22	
	CH7	2424	15.06	15.00	15.00	80.71	
	CH13	2436	15.07	15.00	15.00	80.71	
802.11n HT40 MCS1	CH1	2412	15.07	16.00	16.00	80.24	
	CH7	2424	15.06	16.00	16.00	80.24	
	CH13	2436	15.07	16.00	16.00	80.24	
802.11n HT20 MCS2	CH1	2412	15.03	15.00	15.00	80.71	
	CH7	2424	15.06	15.00	15.00	80.71	
	CH13	2436	15.00	15.00	15.00	80.71	
802.11n HT40 MCS2	CH1	2412	15.00	16.00	16.00	80.24	
	CH7	2424	15.06	16.00	16.00	80.24	
	CH13	2436	15.03	16.00	16.00	80.24	
802.11n HT20 MCS3	CH1	2412	15.03	15.00	15.00	80.71	
	CH7	2424	15.06	15.00	15.00	80.71	
	CH13	2436	15.00	15.00	15.00	80.71	
802.11n HT40 MCS3	CH1	2412	15.00	16.00	16.00	80.24	
	CH7	2424	15.06	16.00	16.00	80.24	
	CH13	2436	15.03	16.00	16.00	80.24	

5GHz WLAN ANT1 (WIFI1)

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-to-Lock	Power Setting	Duty Cycle %
802.11a Mbps	CH36	5180	16.02	18.00	18.00	100.00	
	CH48	5200	16.60	18.00	18.00	100.00	
	CH56	5220	16.60	18.00	18.00	100.00	
802.11n HT20 MCS0	CH36	5180	14.47	15.00	14.00	100.00	
	CH48	5200	14.45	15.00	14.00	100.00	
	CH56	5220	14.68	15.00	14.00	100.00	
802.11n HT40 MCS0	CH36	5180	14.04	15.00	14.00	100.00	
	CH48	5200	14.00	15.00	14.00	100.00	
	CH56	5220	14.67	15.00	14.00	100.00	
802.11n HT20 MCS1	CH36	5180	12.86	15.00	15.00	100.00	
	CH48	5200	12.86	15.00	15.00	100.00	
	CH56	5220	12.86	15.00	15.00	100.00	
802.11n HT40 MCS1	CH36	5180	12.27	15.00	15.00	100.00	
	CH48	5200	12.42	15.00	15.00	100.00	
	CH56	5220	12.13	15.00	15.00	100.00	
802.11n HT20 MCS2	CH36	5180	12.81	15.00	15.00	100.00	
	CH48	5200	12.81	15.00	15.00	100.00	
	CH56	5220	12.81	15.00	15.00	100.00	
802.11n HT40 MCS2	CH36	5180	12.27	15.00	15.00	100.00	
	CH48	5200	12.42	15.00	15.00	100.00	
	CH56	5220	12.13	15.00	15.00	100.00	
802.11n HT20 MCS3	CH36	5180	12.86	15.00	15.00	100.00	
	CH48	5200	12.86	15.00	15.00	100.00	
	CH56	5220	12.86	15.00	15.00	100.00	
802.11n HT40 MCS3	CH36	5180	12.27	15.00	15.00	100.00	
	CH48	5200	12.42	15.00	15.00	100.00	
	CH56	5220	12.13	15.00	15.00	100.00	

5.2GHz WLAN ANT2 (WIFI2)

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-to-Lock	Power Setting	Duty Cycle %
802.11a Mbps	CH36	5180	16.60	18.00	18.00	100.00	
	CH48	5200	16.75	18.00	18.00	100.00	
	CH56	5220	16.50	18.00	18.00	100.00	
802.11n HT20 MCS0	CH36	5180	14.62	15.00	15.00	100.00	
	CH48	5200	14.68	15.00	15.00	100.00	
	CH56	5220	14.32	15.00	15.00	100.00	
802.11n HT40 MCS0	CH36	5180	14.12	15.00	15.00	100.00	
	CH48	5200	14.12	15.00	15.00	100.00	
	CH56	5220	14.75	15.00	15.00	100.00	
802.11n HT20 MCS1	CH36	5180	12.86	15.00	15.00	100.00	
	CH48	5200	12.86	15.00	15.00	100.00	
	CH56	5220	12.86	15.00	15.00	100.00	
802.11n HT40 MCS1	CH36	5180	12.27	15.00	15.00	100.00	
	CH48	5200	12.42	15.00	15.00	100.00	
	CH56	5220	12.13	15.00	15.00	100.00	
802.11n HT20 MCS2	CH36	5180	12.81	15.00	15.00	100.00	
	CH48	5200	12.81	15.00	15.00	100.00	
	CH56	5220	12.81	15.00	15.00	100.00	
802.11n HT40 MCS2	CH36	5180	12.27	15.00	15.00	100.00	
	CH48	5200	12.42	15.00	15.00	100.00	
	CH56	5220	12.13	15.00	15.00	100.00	
802.11n HT20 MCS3	CH36	5180	12.86	15.00	15.00	100.00	
	CH48	5200	12.86	15.00	15.00	100.00	
	CH56	5220	12.86	15.00	15.00	100.00	
802.11n HT40 MCS3	CH36	5180	12.27	15.00	15.00	100.00	
	CH48	5200	12.42	15.00	15.00	100.00	
	CH56	5220	12.13	15.00	15.00	100.00	

Reduced Power Level 1 for ANT 2 & WIFI 1 & WIFI 2 & MIMO

Band 48 (3.5G Band) (dBm)_ANT 2									
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	20.17	20.20	20.23	20.18	20.10	21
20	QPSK	1	49	19.67	19.69	19.69	19.72	19.71	
20	QPSK	1	99	19.73	19.71	19.73	19.53	19.67	
20	QPSK	50	0	19.27	19.18	19.30	19.13	19.03	
20	QPSK	50	24	18.72	18.71	18.77	18.81	18.70	20
20	QPSK	50	50	18.72	18.63	18.85	18.66	18.50	
20	QPSK	100	0	18.74	18.65	18.74	18.67	18.48	
20	16QAM	1	0	19.00	18.95	19.05	19.00	18.85	
20	16QAM	1	49	18.90	19.02	18.87	18.80	18.71	20
20	16QAM	1	99	18.88	18.80	18.93	18.89	18.74	
20	16QAM	50	0	17.66	17.82	17.74	17.81	17.68	
20	16QAM	50	24	17.68	17.69	17.77	17.65	17.49	
20	16QAM	50	50	17.66	17.59	17.79	17.52	17.43	19
20	16QAM	100	0	17.69	17.63	17.73	17.67	17.53	
20	64QAM	1	0	17.86	17.87	17.91	17.70	17.77	
20	64QAM	1	49	17.86	17.78	17.82	17.76	17.69	
20	64QAM	1	99	17.67	17.64	17.83	17.74	17.55	19
20	64QAM	50	0	17.66	17.66	17.80	17.70	17.52	
20	64QAM	50	24	17.55	17.69	17.67	17.68	17.56	
20	64QAM	50	50	17.71	17.56	17.66	17.57	17.47	
20	64QAM	100	0	17.66	17.56	17.74	17.60	17.42	15.5
20	256QAM	1	0	14.67	14.61	14.68	14.55	14.40	
20	256QAM	1	49	14.55	14.51	14.57	14.57	14.61	
20	256QAM	1	99	14.55	14.47	14.37	14.35	14.45	
20	256QAM	50	0	13.40	13.47	13.73	13.55	13.45	14.5
20	256QAM	50	24	13.46	13.50	13.63	13.62	13.58	
20	256QAM	50	50	13.45	13.61	13.44	13.36	13.42	
20	256QAM	100	0	13.45	13.49	13.65	13.33	13.30	
Channel				55315	55820	55990	56160.15	56665.15	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3608	3625	3642.15	3692.65	
15	QPSK	1	0	19.71	19.77	19.79	19.78	19.73	21
15	QPSK	1	37	19.65	19.68	19.68	19.72	19.71	
15	QPSK	1	74	19.67	19.73	19.73	19.73	19.63	
15	QPSK	36	0	18.77	18.88	18.83	18.87	18.77	
15	QPSK	36	20	18.79	18.76	18.81	18.89	18.83	20
15	QPSK	36	39	18.80	18.81	18.83	18.71	18.69	
15	QPSK	75	0	18.70	18.66	18.78	18.72	18.82	
15	16QAM	1	0	19.06	18.88	19.02	19.02	19.04	
15	16QAM	1	37	19.00	18.83	18.87	18.93	18.89	20
15	16QAM	1	74	18.88	18.78	18.91	19.04	18.77	
15	16QAM	36	0	17.64	17.81	17.81	17.91	17.72	
15	16QAM	36	20	17.61	17.76	17.72	17.89	17.66	
15	16QAM	36	39	17.58	17.60	17.68	17.76	17.68	19
15	16QAM	75	0	17.60	17.54	17.64	17.89	17.72	
15	64QAM	1	0	17.81	17.85	17.83	17.86	17.93	
15	64QAM	1	37	17.82	17.83	17.75	17.76	17.79	
15	64QAM	1	74	17.78	17.73	17.65	17.81	17.71	19
15	64QAM	36	0	17.58	17.64	17.67	17.80	17.77	
15	64QAM	36	20	17.64	17.69	17.52	17.73	17.63	
15	64QAM	36	39	17.58	17.54	17.74	17.81	17.66	
15	64QAM	75	0	17.55	17.60	17.55	17.63	17.51	15.5
15	256QAM	1	0	14.67	14.63	14.63	14.48	14.37	
15	256QAM	1	37	14.40	14.36	14.54	14.55	14.73	
15	256QAM	1	74	14.64	14.56	14.45	14.37	14.39	
15	256QAM	36	0	13.42	13.35	13.70	13.54	13.49	14.5
15	256QAM	36	20	13.55	13.39	13.65	13.59	13.61	
15	256QAM	36	39	13.46	13.63	13.45	13.40	13.35	
15	256QAM	75	0	13.46	13.46	13.57	13.26	13.38	
Channel				55290	55615	55990	56165	56690	Tune-up limit (dBm)
Frequency (MHz)				3555	3607.5	3625	3642.5	3695	
10	QPSK	1	0	19.69	19.76	19.78	19.67	19.62	21
10	QPSK	1	25	19.73	19.64	19.79	19.69	19.45	
10	QPSK	1	49	19.64	19.74	19.76	19.61	19.60	
10	QPSK	25	0	18.86	18.83	18.95	18.84	18.65	
10	QPSK	25	12	18.82	18.77	18.75	18.66	18.72	20
10	QPSK	25	25	18.70	18.73	18.73	18.66	18.66	
10	QPSK	50	0	18.71	18.73	18.87	18.68	18.62	
10	16QAM	1	0	19.04	19.04	18.94	18.90	18.79	
10	16QAM	1	25	18.84	18.88	18.86	18.90	18.78	20
10	16QAM	1	49	18.94	18.76	18.89	18.92	18.76	
10	16QAM	25	0	17.65	17.67	17.77	17.76	17.72	
10	16QAM	25	12	17.66	17.73	17.85	17.66	17.47	
10	16QAM	25	25	17.58	17.56	17.63	17.71	17.52	19
10	16QAM	50	0	17.59	17.63	17.78	17.73	17.61	
10	64QAM	1	0	17.85	17.84	17.83	17.86	17.74	
10	64QAM	1	25	17.74	17.75	17.92	17.64	17.58	
10	64QAM	1	49	17.63	17.76	17.82	17.74	17.56	19
10	64QAM	25	0	17.75	17.65	17.81	17.58	17.65	
10	64QAM	25	12	17.56	17.54	17.64	17.66	17.60	
10	64QAM	25	25	17.64	17.56	17.63	17.51	17.49	
10	64QAM	50	0	17.51	17.47	17.72	17.57	17.41	15.5
10	256QAM	1	0	14.64	14.63	14.61	14.48	14.44	
10	256QAM	1	25	14.38	14.41	14.59	14.69	14.63	
10	256QAM	1	49	14.62	14.60	14.35	14.31	14.37	
10	256QAM	25	0	13.49	13.53	13.74	13.45	13.58	14.5
10	256QAM	25	12	13.53	13.52	13.64	13.71	13.63	
10	256QAM	25	25	13.63	13.45	13.52	13.40	13.34	
10	256QAM	50	0	13.41	13.41	13.71	13.37	13.38	
Channel				55265	55610	55990	56170	56175	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3607	3625	3643	3697.5	
5	QPSK	1	0	19.74	19.73	19.76	19.70	19.62	21
5	QPSK	1	12	19.65	19.71	19.70	19.61	19.53	
5	QPSK	1	24	19.63	19.63	19.64	19.62	19.53	
5	QPSK	12	0	18.93	18.94	18.84	18.79	18.80	
5	QPSK	12	7	18.84	18.66	18.93	18.71	18.53	20
5	QPSK	12	13	18.65	18.81	18.83	18.69	18.50	
5	QPSK	25	0	18.73	18.70	18.70	18.70	18.50	
5	16QAM	1	0	18.96	19.03	18.95	18.84	18.87	
5	16QAM	1	12	18.88	19.00	18.91	18.77	18.69	20
5	16QAM	1	24	18.92	18.82	18.94	18.89	18.64	
5	16QAM	12	0	17.75	17.63	17.79	17.73	17.70	
5	16QAM	12	7	17.70	17.65	17.72	17.60	17.55	

5	16QAM	12	13	17.56	17.67	17.80	17.61	17.51	19
5	16QAM	25	0	17.71	17.56	17.70	17.70	17.57	
5	64QAM	1	0	17.90	17.77	17.85	17.78	17.72	
5	64QAM	1	12	17.76	17.74	17.80	17.72	17.57	19
5	64QAM	1	24	17.71	17.67	17.78	17.74	17.64	
5	64QAM	12	0	17.67	17.73	17.73	17.59	17.50	
5	64QAM	12	7	17.52	17.53	17.55	17.60	17.67	19
5	64QAM	12	13	17.74	17.73	17.60	17.70	17.57	
5	64QAM	25	0	17.66	17.53	17.55	17.53	17.48	
5	256QAM	1	0	14.70	14.67	14.63	14.42	14.51	15.5
5	256QAM	1	12	14.47	14.40	14.54	14.58	14.70	
5	256QAM	1	24	14.58	14.61	14.51	14.45	14.31	
5	256QAM	12	0	13.52	13.52	13.65	13.49	13.61	14.5
5	256QAM	12	7	13.48	13.51	13.66	13.67	13.72	
5	256QAM	12	13	13.44	13.52	13.44	13.40	13.40	
5	256QAM	25	0	13.41	13.38	13.67	13.39	13.43	

n48 (PC3)_ANT 2									
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	20.00
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98	
40	DFT-s-OFDM PI/2 BPSK	1	1	18.97	18.96	18.97	18.85	18.66	20.00
40		1	53	18.92	18.81	18.88	18.72	18.56	
40		1	104	18.90	18.89	18.84	18.74	18.65	
40		50	1	18.45	18.47	18.43	18.37	18.17	20.00
40		50	25	18.97	18.87	18.84	18.77	18.65	
40		50	50	18.44	18.32	18.29	18.21	18.10	
40	DFT-s-OFDM QPSK	100	0	18.38	18.38	18.38	18.29	18.13	20.00
40		1	1	19.28	19.14	19.29	19.17	19.18	
40		1	53	18.91	18.77	18.80	18.70	18.58	
40		1	104	18.89	18.83	18.84	18.72	18.65	20.00
40		50	1	17.91	17.97	18.02	17.98	17.86	
40		50	25	18.92	18.85	18.84	18.76	18.64	
40	DFT-s-OFDM 16QAM	50	50	17.92	17.80	17.75	17.72	17.63	15.00
40		100	0	18.42	18.38	18.43	18.30	18.16	
40	DFT-s-OFDM 64QAM	1	1	17.84	17.77	17.91	17.79	17.62	18.50
40	DFT-s-OFDM 256QAM	1	1	16.17	16.11	16.25	16.18	15.94	16.00
40	CP-OFDM QPSK	1	1	14.33	14.27	14.33	14.25	14.07	19.50
40	CP-OFDM 16QAM	1	1	17.54	17.50	17.49	17.33	17.18	19.00
40	CP-OFDM 64QAM	1	1	16.98	16.99	16.99	16.80	16.67	17.00
40	CP-OFDM 256QAM	1	1	15.51	15.04	15.39	15.25	15.07	14.00
Channel				637668	639668	641666	643666	645666	16.00
Frequency (MHz)				3565.02	3595.02	3624.99	3654.99	3684.99	
30	DFT-s-OFDM QPSK	1	1	18.70	18.97	18.76	18.32	18.78	16.00
Channel				637334	639500	641666	643832	646000	16.00
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690	
20	DFT-s-OFDM QPSK	1	1	18.94	18.88	18.85	18.62	18.60	16.00
Channel				637000	639334	641666	644000	646332	16.00
Frequency (MHz)				3555	3590.01	3624.99	3660	3694.98	
10	DFT-s-OFDM QPSK	1	1	18.30	18.54	18.39	18.58	18.32	16.00

n77(3450-3550MHz)(PC2)_ANT 2									
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			17.02			18.50
100		1	136			17.45			
100		1	271			17.77			
100		135	1			16.78			18.00
100		135	67			17.42			
100		135	136			17.15			
100	DFT-s-OFDM QPSK	270	0			16.97			18.50
100		1	1			17.80			
100		1	136			17.40			
100		1	271			17.75			18.00
100		135	1			17.49			
100		135	67			17.47			
100		135	136			16.67			18.00
100		270	0			17.11			
100	DFT-s-OFDM 16QAM	1	1			16.11			17.00
100	DFT-s-OFDM 64QAM	1	1			14.46			15.00
100	DFT-s-OFDM 256QAM	1	1			12.37			13.00
100	CP-OFDM QPSK	1	1			15.43			16.00
100	CP-OFDM 16QAM	1	1			15.01			16.00
100	CP-OFDM 64QAM	1	1			13.59			14.50
100	CP-OFDM 256QAM	1	1			10.44			11.00
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	16.99	16.97	17.06	17.14	17.20	18.00
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	17.15	17.26	17.28	17.41	17.57	18.50
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	17.52	17.41	17.66	17.75	17.59	19.00
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	17.33	17.62	17.58	17.59	17.71	19.00
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	17.32	17.50	17.56	17.77	17.78	18.50

n77(3450-3550MHz)(PC3)_ANT 2									
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			16.51			18.50
100		1	136			16.94			
100		1	271			17.40			
100		135	1			16.77			18.50
100		135	67			16.96			
100		135	136			17.15			
100	DFT-s-OFDM QPSK	270	0			16.93			18.50
100		1	1			17.69			
100		1	136			16.86			
100		1	271			17.31			18.00
100		135	1			16.94			
100		135	67			16.90			
100	DFT-s-OFDM 16QAM	135	136			17.11			18.00
100		270	0			16.88			
100	DFT-s-OFDM 64QAM	1	1			16.60			17.50
100	DFT-s-OFDM 256QAM	1	1			16.50			17.50
100	CP-OFDM QPSK	1	1			14.84			15.50
100	CP-OFDM 16QAM	1	1			16.46			17.00
100	CP-OFDM 64QAM	1	1			16.51			17.50
100	CP-OFDM 256QAM	1	1			16.02			17.00
100						12.90			13.50
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	16.39	16.32	16.50	16.30	16.30	17.50
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	165.00	16.80	16.90	16.30	16.80	18.00
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	16.93	17.04	17.24	17.41	17.35	18.50
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	16.88	17.13	17.34	17.36	17.30	18.50
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	16.79	16.92	17.19	17.35	17.48	18.00

n77(3700-3980MHz)(PC2)_ANT 2									
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	18.50
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	16.96	16.64	16.95	16.95	17.09	18.50
100		1	136	17.18	17.05	17.12	17.03	17.28	
100		1	271	17.08	17.25	17.05	17.43	17.27	
100		135	1	16.63	16.40	16.65	16.62	16.83	
100		135	67	17.26	17.16	17.14	17.15	17.38	
100		135	136	16.67	16.69	16.64	16.77	16.89	
100	DFT-s-OFDM QPSK	270	0	16.68	16.59	16.70	16.68	16.83	18.00
100		1	1	17.60	17.65	17.76	17.68	17.67	
100		1	136	17.18	17.09	17.13	17.05	17.43	
100		1	271	17.08	17.27	17.19	17.55	17.29	
100		135	1	16.52	16.54	16.61	16.58	16.55	
100		135	67	16.43	16.29	16.35	16.34	16.59	
100	DFT-s-OFDM 16QAM	135	136	16.15	16.19	16.16	16.23	16.35	18.50
100		270	0	16.17	16.09	16.37	16.17	16.34	
100		1	1	15.85	15.53	15.86	15.88	16.00	
100		1	1	14.29	13.94	14.30	14.21	14.22	
100	DFT-s-OFDM 64QAM	1	1	12.33	12.03	12.35	12.41	12.42	13.00
100	DFT-s-OFDM 256QAM	1	1	15.41	15.11	15.51	15.47	15.58	16.50
100	CP-OFDM QPSK	1	1	14.96	14.65	15.01	15.06	15.05	16.00
100	CP-OFDM 16QAM	1	1	13.37	13.04	13.45	13.47	13.61	14.50
100	CP-OFDM 64QAM	1	1	10.42	10.12	10.42	10.46	10.54	11.50
100	CP-OFDM 256QAM	1	1	649334	652668	656000	659332	662666	Tune-up limit (dBm)
Channel				3740.01	3790.02	3840	3889.98	3939.99	18.00
Frequency (MHz)				16.89	16.71	16.96	16.99	17.21	
80	DFT-s-OFDM QPSK	1	1	648668	652334	656000	659666	663332	Tune-up limit (dBm)
Channel				3730.02	3785.01	3840	3894.99	3949.98	18.00
Frequency (MHz)				17.09	16.78	17.17	17.22	17.32	
60	DFT-s-OFDM QPSK	1	1	648000	652000	656000	660000	664000	Tune-up limit (dBm)
Channel				3720	3780	3840	3900	3960	18.50
Frequency (MHz)				17.62	17.49	17.55	17.47	17.42	
40	DFT-s-OFDM QPSK	1	1	647668	651834	656000	660166	664332	Tune-up limit (dBm)
Channel				3715.02	3777.51	3840	3902.49	3964.98	18.50
Frequency (MHz)				17.35	17.27	17.48	17.58	17.69	
30	DFT-s-OFDM QPSK	1	1	647334	651668	656000	660332	664666	Tune-up limit (dBm)
Channel				3710.01	3775.02	3840	3904.98	3969.99	18.50
Frequency (MHz)				17.33	17.33	17.47	17.54	17.63	
20	DFT-s-OFDM QPSK	1	1						

n77(3700-3980MHz)(PC3)_ANT 2									
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	18.50
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	17.06	16.68	17.00	17.00	17.07	18.50
100		1	136	17.22	17.11	17.22	17.13	17.37	
100		1	271	17.03	17.31	17.11	17.51	17.36	
100		135	1	17.19	16.94	17.14	17.11	17.30	
100		135	67	17.26	17.05	17.13	17.12	17.37	
100		135	136	17.15	17.14	17.18	17.23	17.45	
100	DFT-s-OFDM QPSK	270	0	17.17	17.03	17.19	17.18	17.35	18.50
100		1	1	17.52	17.63	17.70	17.55	17.52	
100		1	136	17.23	17.14	17.19	17.13	17.37	
100		1	271	17.04	17.31	17.15	17.51	17.34	
100		135	1	17.12	16.91	17.36	17.07	17.27	
100		135	67	17.22	17.05	17.14	17.13	17.31	
100	DFT-s-OFDM 16QAM	135	136	17.15	17.11	17.14	17.23	17.35	18.00
100		270	0	17.16	17.01	17.30	17.16	17.29	
100		1	1	17.12	16.73	17.16	17.10	17.13	
100		1	1	17.10	16.71	17.02	17.02	17.10	
100	DFT-s-OFDM 64QAM	1	1	15.42	15.01	15.36	15.35	15.45	16.00
100	DFT-s-OFDM 256QAM	1	1	17.00	16.66	17.02	16.99	17.09	18.00
100	CP-OFDM QPSK	1	1	17.04	16.72	17.02	16.96	17.05	18.00
100	CP-OFDM 16QAM	1	1	16.68	16.29	16.61	16.56	16.61	17.50
100	CP-OFDM 64QAM	1	1	13.52	13.15	13.44	13.45	13.51	14.50
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	17.08	16.89	17.03	17.08	17.27	18.00
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	17.19	16.97	17.18	17.37	17.51	18.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	17.69	17.54	17.58	17.63	17.56	18.50
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	17.41	17.29	17.52	17.59	17.65	18.50
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	17.38	17.27	17.43	17.54	17.60	18.50

n78(3450-3550MHz)(PC2)_ANT 2									
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			19.02			21.00
100		1	136			19.57			
100		1	271			19.80			
100		135	1			18.87			20.50
100		135	67			19.66			
100		135	136			19.20			
100	DFT-s-OFDM QPSK	270	0			19.07			21.00
100		1	1			20.06			
100		1	136			19.58			
100		1	271			19.83			20.00
100		135	1			19.56			
100		135	67			19.62			
100	DFT-s-OFDM 16QAM	135	136			18.72			19.00
100		270	0			18.55			
100		1	1			18.06			
100	DFT-s-OFDM 64QAM	1	1			16.55			17.50
100	DFT-s-OFDM 256QAM	1	1			14.54			15.50
100	CP-OFDM QPSK	1	1			17.60			18.50
100	CP-OFDM 16QAM	1	1			17.03			18.00
100	CP-OFDM 64QAM	1	1			15.64			16.50
100	CP-OFDM 256QAM	1	1			12.53			13.50
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	19.02	19.06	19.15	19.14	19.14	20.00
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	19.06	19.06	19.17	19.30	19.26	20.00
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	19.11	19.25	19.29	19.39	19.54	20.50
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	19.26	19.31	19.49	19.62	19.64	20.50
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	19.00	19.30	19.46	19.67	19.64	20.50
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	19.66	19.69	19.87	19.99	20.05	21.00
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	19.52	19.77	19.85	20.02	20.09	21.00
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	19.56	19.66	19.80	20.00	20.05	21.00

n78(3450-3550MHz)(PC3)_ANT 2									
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			19.04			21.00
100		1	136			19.62			
100		1	271			19.85			
100		135	1			19.33			20.00
100		135	67			19.58			
100		135	136			19.65			
100	DFT-s-OFDM QPSK	270	0			19.55			21.00
100		1	1			20.17			
100		1	136			19.52			
100		1	271			19.78			20.00
100		135	1			19.14			
100		135	67			19.61			
100	DFT-s-OFDM 16QAM	135	136			19.37			20.00
100		270	0			19.11			
100		1	1			19.06			
100	DFT-s-OFDM 64QAM	1	1			19.04			20.00
100	DFT-s-OFDM 256QAM	1	1			17.44			18.00
100	CP-OFDM QPSK	1	1			18.99			19.50
100	CP-OFDM 16QAM	1	1			19.06			20.00
100	CP-OFDM 64QAM	1	1			18.65			19.50
100	CP-OFDM 256QAM	1	1			15.48			16.00
Channel				633000	633167	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.51	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	19.07	19.02	19.05	19.10	19.19	20.00
Channel				632668	633001	633334	633667	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495.01	3500.01	3505.01	3510	
80	DFT-s-OFDM QPSK	1	1	19.13	18.91	19.16	19.27	19.38	20.00
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	19.09	19.21	19.17	19.37	19.53	20.50
Channel				632000	632667	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.01	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	19.25	19.27	19.43	19.59	19.66	20.50
Channel				631668	632501	633334	634167	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.51	3500.01	3512.51	3525	
50	DFT-s-OFDM QPSK	1	1	19.09	19.19	19.49	19.62	19.66	20.50
Channel				631334	636672	633334	634333	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.99	3529.98	
40	DFT-s-OFDM QPSK	1	1	19.53	19.59	19.83	19.92	20.09	21.00
Channel				631000	632167	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.51	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	19.33	19.68	19.93	19.90	20.06	21.00
Channel				630668	632001	633334	634667	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480.01	3500.01	3520.01	3540	
20	DFT-s-OFDM QPSK	1	1	19.51	19.64	19.82	19.93	20.08	21.00

n78(3700-3800MHz)(PC2)_ANT 2									
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			18.96			20.50
100		1	136			19.18			
100		1	271			19.06			
100		135	1			18.64			20.00
100		135	67			19.20			
100		135	136			18.68			
100	DFT-s-OFDM QPSK	270	0			18.68			20.50
100		1	1			19.90			
100		1	136			19.21			
100		1	271			19.07			20.00
100		135	1			19.20			
100		135	67			19.21			
100		135	136			18.18			
100		270	0			18.17			
100	DFT-s-OFDM 16QAM	1	1			17.77			18.50
100	DFT-s-OFDM 64QAM	1	1			16.15			17.00
100	DFT-s-OFDM 256QAM	1	1			14.27			15.00
100	CP-OFDM QPSK	1	1			17.52			18.50
100	CP-OFDM 16QAM	1	1			16.90			17.50
100	CP-OFDM 64QAM	1	1			15.33			16.00
100	CP-OFDM 256QAM	1	1			12.34			13.00
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	18.87	18.82	18.94	18.96	19.08	20.00
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	18.88	19.07	18.96	18.87	19.06	20.00
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	18.94	19.00	19.10	19.02	18.99	20.00
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	19.02	19.03	19.10	19.11	19.27	20.00
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	19.03	19.03	19.13	19.30	19.41	20.00
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	19.51	19.46	19.63	19.61	19.76	20.50
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	19.30	19.49	19.51	19.63	19.75	20.50
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	19.32	19.47	19.49	19.62	19.60	20.50

n78(3700-3800MHz)(PC3)_ANT 2									
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			18.94			20.5
100		1	136			19.18			
100		1	271			19.05			
100		135	1			19.13			20
100		135	67			19.18			
100		135	136			19.12			
100	DFT-s-OFDM QPSK	270	0			19.15			20.5
100		1	1			19.80			
100		1	136			19.18			
100		1	271			18.97			20
100		135	1			19.20			
100		135	67			19.19			
100	DFT-s-OFDM 16QAM	135	136			19.09			20.00
100		270	0			19.15			
100		1	1			19.05			
100	DFT-s-OFDM 64QAM	1	1			18.95			19.50
100	DFT-s-OFDM 256QAM	1	1			17.26			18.00
100	CP-OFDM QPSK	1	1			18.91			19.50
100	CP-OFDM 16QAM	1	1			18.91			19.50
100	CP-OFDM 64QAM	1	1			18.48			19.00
100	CP-OFDM 256QAM	1	1			15.41			16.00
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	18.89	18.93	19.00	19.04	19.05	20.00
Channel				649334	649667	650000	650333	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3745.01	3750	3754.99	3759.99	
80	DFT-s-OFDM QPSK	1	1	18.95	19.03	18.94	18.82	19.09	20.00
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	18.87	19.10	18.92	19.01	19.04	20.00
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	19.10	19.02	19.13	19.08	19.25	20.00
Channel				648334	649167	650000	650833	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.51	3750	3762.49	3774.99	
50	DFT-s-OFDM QPSK	1	1	19.06	19.05	19.13	19.30	19.45	20.00
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	19.51	19.51	19.65	19.62	19.88	20.50
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	19.29	19.50	19.55	19.66	19.76	20.50
Channel				647334	648667	650000	651333	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3730.01	3750	3769.99	3789.99	
20	DFT-s-OFDM QPSK	1	1	19.30	19.38	19.34	19.59	19.59	20.50

CA_48C											
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	18.35	19.00
55990	55891	56089	QPSK	1	0	0	0	1	0	18.40	19.00
56640	56442	56640	QPSK	1	0	0	0	1	0	18.31	19.00
55340	55340	55538	16QAM	1	0	0	0	1	0	18.29	19.00
55990	55891	56089	16QAM	1	0	0	0	1	0	18.35	19.00
56640	56442	56640	16QAM	1	0	0	0	1	0	18.27	19.00
55340	55340	55538	64QAM	1	0	0	0	1	0	18.23	19.00
55990	55891	56089	64QAM	1	0	0	0	1	0	18.24	19.00
56640	56442	56640	64QAM	1	0	0	0	1	0	18.21	19.00
55340	55340	55538	256QAM	1	0	0	0	1	0	17.88	18.50
55990	55891	56089	256QAM	1	0	0	0	1	0	17.86	18.50
56640	56442	56640	256QAM	1	0	0	0	1	0	17.93	18.50
55340	55340	55538	QPSK	50	0	0	0	1	0	16.88	17.50
55990	55891	56089	QPSK	50	0	0	0	1	0	16.95	17.50
56640	56442	56640	QPSK	50	0	0	0	1	0	16.90	17.50

Reduced Power Level 2 for ANT 0 & ANT 1 & ANT 2 & ANT 3 & ANT 4

Band		WCDMA Band V (dBm)			Tune-up Limit (dBm)
TX Channel		4132	4182	4233	
Rx Channel		4357	4407	4458	
Frequency (MHz)		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	21.31	21.37	21.34	22.00
3GPP Rel 5	HSDPA Subtest-1	20.48	20.52	20.43	21.00
3GPP Rel 5	HSDPA Subtest-2	20.50	20.37	20.41	21.00
3GPP Rel 5	HSDPA Subtest-3	19.87	19.90	19.93	20.50
3GPP Rel 5	HSDPA Subtest-4	20.01	19.91	19.76	20.50
3GPP Rel 5	DC-HSDPA Subtest-1	20.17	20.11	20.08	21.00
3GPP Rel 5	DC-HSDPA Subtest-2	20.22	20.17	20.05	21.00
3GPP Rel 5	DC-HSDPA Subtest-3	19.70	19.65	19.55	20.50
3GPP Rel 5	DC-HSDPA Subtest-4	19.60	19.53	19.43	20.50
3GPP Rel 6	HSUPA Subtest-1	20.43	20.50	20.33	21.00
3GPP Rel 6	HSUPA Subtest-2	19.90	19.97	20.00	21.00
3GPP Rel 6	HSUPA Subtest-3	20.36	20.47	20.38	21.00
3GPP Rel 6	HSUPA Subtest-4	20.48	20.43	20.31	21.00
3GPP Rel 6	HSUPA Subtest-5	20.44	20.52	20.44	21.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.76	20.44	20.26	21.00
Attenuator			Cable Loss	0.6	
Mode			Max.	21.37	

Band 2 (1900MHz Band) (dBm) Part 24E ANT 0							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	21.77	21.80	21.74	
20	QPSK	1	49	21.71	21.76	21.69	23
20	QPSK	1	99	21.72	21.70	21.65	
20	QPSK	50	0	20.86	20.90	20.84	
20	QPSK	50	24	20.75	20.82	20.77	
20	QPSK	50	50	20.70	20.79	20.68	
20	QPSK	100	0	20.74	20.76	20.71	22
20	16QAM	1	0	20.96	21.02	20.97	
20	16QAM	1	49	20.92	20.95	20.89	
20	16QAM	1	99	20.85	20.93	20.86	
20	16QAM	50	0	19.82	19.91	19.87	
20	16QAM	50	24	19.75	19.85	19.79	21
20	16QAM	50	50	19.68	19.82	19.75	
20	16QAM	100	0	19.73	19.77	19.80	
20	64QAM	1	0	19.84	19.89	19.83	
20	64QAM	1	49	19.77	19.84	19.75	
20	64QAM	1	99	19.71	19.73	19.70	20
20	64QAM	50	0	18.77	18.85	18.79	
20	64QAM	50	24	18.68	18.70	18.82	
20	64QAM	50	50	18.73	18.78	18.74	
20	64QAM	100	0	18.65	18.73	18.68	
20	256QAM	1	0	16.90	16.95	16.89	18
20	256QAM	1	49	16.68	16.88	16.86	
20	256QAM	1	99	16.86	16.73	16.71	
20	256QAM	50	0	15.72	15.85	15.74	
20	256QAM	50	24	15.68	15.83	15.88	
20	256QAM	50	50	15.81	15.79	15.66	17
20	256QAM	100	0	15.72	15.82	15.63	
Channel				18675	18900	19125	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	21.77	21.79	21.73	
15	QPSK	1	37	21.61	21.76	21.68	23
15	QPSK	1	74	21.75	21.73	21.67	
15	QPSK	36	0	20.77	20.83	20.91	
15	QPSK	36	20	20.72	20.75	20.70	
15	QPSK	36	39	20.68	20.76	20.72	22
15	QPSK	75	0	20.69	20.67	20.71	
15	16QAM	1	0	20.97	21.04	21.03	
15	16QAM	1	37	20.99	20.95	20.87	
15	16QAM	1	74	20.81	20.80	20.84	21
15	16QAM	36	0	19.70	19.96	19.93	
15	16QAM	36	20	19.63	19.80	19.88	
15	16QAM	36	39	19.74	19.80	19.82	
15	16QAM	75	0	19.78	19.66	19.71	
15	64QAM	1	0	19.80	19.91	19.87	21
15	64QAM	1	37	19.63	19.86	19.71	
15	64QAM	1	74	19.71	19.64	19.63	
15	64QAM	36	0	18.62	18.83	18.85	
15	64QAM	36	20	18.68	18.79	18.79	20
15	64QAM	36	39	18.59	18.83	18.74	
15	64QAM	75	0	18.64	18.79	18.58	
15	256QAM	1	0	16.90	16.94	16.72	
15	256QAM	1	37	16.65	16.86	16.94	18
15	256QAM	1	74	16.68	16.69	16.57	
15	256QAM	36	0	15.59	15.92	15.79	
15	256QAM	36	20	15.65	15.70	15.87	
15	256QAM	36	39	15.67	15.63	15.68	17
15	256QAM	75	0	15.61	15.77	15.62	
Channel				18650	18900	19150	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	21.74	21.77	21.69	
10	QPSK	1	25	21.67	21.75	21.72	23
10	QPSK	1	49	21.62	21.70	21.65	
10	QPSK	25	0	20.84	20.82	20.87	
10	QPSK	25	12	20.66	20.79	20.82	
10	QPSK	25	25	20.79	20.69	20.64	22
10	QPSK	50	0	20.65	20.85	20.75	
10	16QAM	1	0	20.97	21.09	20.94	
10	16QAM	1	25	20.86	21.03	20.99	
10	16QAM	1	49	20.71	20.94	20.94	21
10	16QAM	25	0	19.75	19.85	19.83	
10	16QAM	25	12	19.70	19.87	19.86	
10	16QAM	25	25	19.65	19.88	19.63	
10	16QAM	50	0	19.64	19.76	19.87	
10	64QAM	1	0	19.94	19.77	19.84	21
10	64QAM	1	25	19.74	19.84	19.71	
10	64QAM	1	49	19.67	19.74	19.76	
10	64QAM	25	0	18.68	18.83	18.67	
10	64QAM	25	12	18.70	18.75	18.71	20
10	64QAM	25	25	18.80	18.67	18.75	
10	64QAM	50	0	18.74	18.79	18.68	
10	256QAM	1	0	16.76	16.93	16.63	
10	256QAM	1	25	16.69	16.90	16.90	18
10	256QAM	1	49	16.79	16.64	16.66	
10	256QAM	25	0	15.75	15.82	15.78	
10	256QAM	25	12	15.58	15.83	15.86	
10	256QAM	25	25	15.76	15.64	15.55	17
10	256QAM	50	0	15.61	15.83	15.69	
Channel				18625	18900	19175	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	21.77	21.78	21.73	
5	QPSK	1	12	21.76	21.74	21.63	23
5	QPSK	1	24	21.70	21.74	21.66	
5	QPSK	12	0	20.81	20.94	20.92	
5	QPSK	12	7	20.77	20.86	20.76	
5	QPSK	12	13	20.62	20.67	20.63	22
5	QPSK	25	0	20.83	20.76	20.77	
5	16QAM	1	0	21.00	20.92	21.01	
5	16QAM	1	12	20.82	21.00	20.87	

Band 4 (AWS Band) (dBm)							
Part 27L (only on channel required) ANT 0							
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	21.78	21.85	21.72	23
20	QPSK	1	49	21.60	21.76	21.58	
20	QPSK	1	99	21.79	21.70	21.67	
20	QPSK	50	0	20.88	20.90	20.86	
20	QPSK	50	24	20.65	20.82	20.71	22
20	QPSK	50	50	20.74	20.89	20.73	
20	QPSK	100	0	20.65	20.81	20.79	
20	16QAM	1	0	21.06	21.06	20.83	
20	16QAM	1	49	20.82	20.86	20.90	22
20	16QAM	1	99	20.82	20.82	20.73	
20	16QAM	50	0	19.88	19.83	19.87	
20	16QAM	50	24	19.75	19.87	19.65	
20	16QAM	50	50	19.60	19.69	19.78	21
20	16QAM	100	0	19.79	19.77	19.73	
20	64QAM	1	0	19.89	19.89	19.90	
20	64QAM	1	49	19.82	19.83	19.83	
20	64QAM	1	99	19.57	19.75	19.65	21
20	64QAM	50	0	18.80	18.76	18.77	
20	64QAM	50	24	18.54	18.67	18.85	
20	64QAM	50	50	18.79	18.69	18.71	
20	64QAM	100	0	18.56	18.67	18.74	20
20	256QAM	1	0	16.79	16.85	16.70	
20	256QAM	1	49	16.75	16.92	16.95	
20	256QAM	1	99	16.78	16.74	16.66	
20	256QAM	50	0	15.62	15.84	15.85	18
20	256QAM	50	24	15.58	15.85	15.77	
20	256QAM	50	50	15.84	15.70	15.72	
20	256QAM	100	0	15.60	15.82	15.51	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	21.75	21.82	21.76	
15	QPSK	1	37	21.58	21.72	21.74	23
15	QPSK	1	74	21.76	21.67	21.62	
15	QPSK	36	0	20.73	20.78	20.88	
15	QPSK	36	20	20.78	20.93	20.83	
15	QPSK	36	39	20.72	20.75	20.65	22
15	QPSK	75	0	20.84	20.72	20.74	
15	16QAM	1	0	21.00	21.10	20.83	
15	16QAM	1	37	20.93	20.89	20.91	
15	16QAM	1	74	20.76	20.89	20.75	21
15	16QAM	36	0	19.70	20.01	19.79	
15	16QAM	36	20	19.82	19.78	19.83	
15	16QAM	36	39	19.77	19.87	19.63	
15	16QAM	75	0	19.72	19.83	19.66	
15	64QAM	1	0	19.79	19.99	19.94	21
15	64QAM	1	37	19.70	19.70	19.76	
15	64QAM	1	74	19.77	19.74	19.62	
15	64QAM	36	0	18.85	18.95	18.73	
15	64QAM	36	20	18.70	18.78	18.76	20
15	64QAM	36	39	18.71	18.78	18.73	
15	64QAM	75	0	18.62	18.72	18.58	
15	256QAM	1	0	16.84	16.86	16.63	
15	256QAM	1	37	16.65	16.81	16.79	18
15	256QAM	1	74	16.71	16.75	16.57	
15	256QAM	36	0	15.67	15.85	15.68	
15	256QAM	36	20	15.72	15.88	15.65	
15	256QAM	36	39	15.69	15.76	15.56	17
15	256QAM	75	0	15.68	15.87	15.62	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	21.75	21.80	21.77	
10	QPSK	1	25	21.58	21.72	21.67	23
10	QPSK	1	49	21.72	21.63	21.52	
10	QPSK	25	0	20.73	20.93	20.77	
10	QPSK	25	12	20.65	20.85	20.72	
10	QPSK	25	25	20.73	20.89	20.77	22
10	QPSK	50	0	20.62	20.87	20.73	
10	16QAM	1	0	20.83	20.94	20.96	
10	16QAM	1	25	20.96	20.83	20.76	
10	16QAM	1	49	20.91	20.82	20.88	21
10	16QAM	25	0	19.69	19.92	19.76	
10	16QAM	25	12	19.78	19.77	19.78	
10	16QAM	25	25	19.78	19.87	19.86	
10	16QAM	50	0	19.64	19.83	19.91	
10	64QAM	1	0	19.74	19.96	19.83	21
10	64QAM	1	25	19.63	19.89	19.71	
10	64QAM	1	49	19.73	19.74	19.76	
10	64QAM	25	0	18.80	18.83	18.85	
10	64QAM	25	12	18.58	18.73	18.90	20
10	64QAM	25	25	18.65	18.79	18.62	
10	64QAM	50	0	18.61	18.74	18.68	
10	256QAM	1	0	16.85	16.95	16.75	
10	256QAM	1	25	16.69	16.81	16.80	18
10	256QAM	1	49	16.79	16.69	16.77	
10	256QAM	25	0	15.89	15.88	15.76	
10	256QAM	25	12	15.71	15.73	15.84	
10	256QAM	25	25	15.73	15.61	15.63	17
10	256QAM	50	0	15.75	15.77	15.61	
Channel				19975	20175	20375	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	21.72	21.81	21.78	
5	QPSK	1	12	21.72	21.68	21.67	23
5	QPSK	1	24	21.64	21.68	21.72	
5	QPSK	12	0	20.75	20.92	20.75	
5	QPSK	12	7	20.77	20.91	20.71	
5	QPSK	12	13	20.81	20.65	20.62	22
5	QPSK	25	0	20.82	20.67	20.73	
5	16QAM	1	0	20.84	21.08	20.84	
5	16QAM	1	12	21.00	21.00	20.80	

5	16QAM	1	24	20.79	20.93	20.81	21
5	16QAM	12	0	19.70	19.93	19.97	
5	16QAM	12	7	19.82	19.74	19.88	
5	16QAM	12	13	19.68	19.72	19.66	
5	16QAM	25	0	19.61	19.83	19.73	
5	64QAM	1	0	19.78	19.89	19.70	21
5	64QAM	1	12	19.80	19.79	19.85	
5	64QAM	1	24	19.69	19.82	19.56	
5	64QAM	12	0	18.63	18.78	18.75	
5	64QAM	12	7	18.75	18.66	18.74	
5	64QAM	12	13	18.81	18.73	18.62	20
5	64QAM	25	0	18.60	18.61	18.59	
5	256QAM	1	0	16.81	16.98	16.72	
5	256QAM	1	12	16.71	16.86	16.85	
5	256QAM	1	24	16.71	16.66	16.62	
5	256QAM	12	0	15.70	15.85	15.81	18
5	256QAM	12	7	15.75	15.89	15.81	
5	256QAM	12	13	15.80	15.68	15.58	
5	256QAM	25	0	15.71	15.86	15.59	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	21.71	21.74	21.70	
3	QPSK	1	8	21.58	21.62	21.67	
3	QPSK	1	14	21.65	21.70	21.66	23
3	QPSK	8	0	20.84	20.75	20.70	
3	QPSK	8	4	20.72	20.76	20.68	
3	QPSK	8	7	20.70	20.85	20.61	
3	QPSK	15	0	20.77	20.63	20.61	
3	16QAM	1	0	20.81	21.00	20.94	22
3	16QAM	1	8	20.80	20.97	20.92	
3	16QAM	1	14	20.93	20.79	20.74	
3	16QAM	8	0	19.73	19.85	19.80	
3	16QAM	8	4	19.82	19.94	19.77	
3	16QAM	8	7	19.70	19.91	19.63	21
3	16QAM	15	0	19.59	19.65	19.73	
3	64QAM	1	0	19.75	19.84	19.82	
3	64QAM	1	8	19.68	19.93	19.83	
3	64QAM	1	14	19.76	19.80	19.60	
3	64QAM	8	0	18.86	18.92	18.85	20
3	64QAM	8	4	18.72	18.74	18.74	
3	64QAM	8	7	18.61	18.77	18.75	
3	64QAM	15	0	18.75	18.81	18.69	
3	256QAM	1	0	16.94	16.93	16.63	
3	256QAM	1	8	16.74	16.75	16.96	18
3	256QAM	1	14	16.76	16.67	16.77	
3	256QAM	8	0	15.80	15.96	15.69	
3	256QAM	8	4	15.69	15.80	15.77	
3	256QAM	8	7	15.83	15.62	15.61	
3	256QAM	15	0	15.72	15.81	15.61	17
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	21.71	21.78	21.70	
1.4	QPSK	1	3	21.57	21.64	21.69	
1.4	QPSK	1	5	21.75	21.69	21.69	23
1.4	QPSK	3	0	20.90	20.94	20.69	
1.4	QPSK	3	1	20.84	20.89	20.69	
1.4	QPSK	3	3	20.73	20.81	20.69	
1.4	QPSK	6	0	20.69	20.64	20.59	
1.4	16QAM	1	0	21.04	20.87	21.01	22
1.4	16QAM	1	3	20.83	20.90	20.74	
1.4	16QAM	1	5	20.89	20.80	20.78	
1.4	16QAM	3	0	19.73	19.93	19.82	
1.4	16QAM	3	1	19.79	19.72	19.79	
1.4	16QAM	3	3	19.73	19.68	19.66	21
1.4	16QAM	6	0	19.74	19.73	19.65	
1.4	64QAM	1	0	19.70	19.93	19.78	
1.4	64QAM	1	3	19.85	19.78	19.63	
1.4	64QAM	1	5	19.72	19.80	19.60	
1.4	64QAM	3	0	18.74	18.73	18.73	20
1.4	64QAM	3	1	18.71	18.80	18.89	
1.4	64QAM	3	3	18.70	18.79	18.82	
1.4	64QAM	6	0	18.74	18.71	18.70	
1.4	256QAM	1	0	16.79	16.90	16.64	
1.4	256QAM	1	3	16.67	16.80	16.89	18
1.4	256QAM	1	5	16.72	16.64	16.59	
1.4	256QAM	3	0	15.75	15.85	15.70	
1.4	256QAM	3	1	15.75	15.85	15.96	
1.4	256QAM	3	3	15.71	15.72	15.58	
1.4	256QAM	6	0	15.73	15.76	15.62	17

5	16QAM	1	24	20.72	20.95	20.95	21
5	16QAM	12	0	19.72	20.00	19.84	
5	16QAM	12	7	19.86	19.96	19.84	
5	16QAM	12	13	19.79	19.77	19.65	
5	16QAM	25	0	19.59	19.70	19.89	
5	64QAM	1	0	19.87	19.80	19.82	21
5	64QAM	1	12	19.82	19.75	19.72	
5	64QAM	1	24	19.79	19.78	19.71	
5	64QAM	12	0	18.69	18.83	18.78	
5	64QAM	12	7	18.62	18.71	18.79	
5	64QAM	12	13	18.75	18.77	18.64	20
5	64QAM	25	0	18.75	18.69	18.56	
5	256QAM	1	0	16.82	17.03	16.66	
5	256QAM	1	12	16.72	16.74	16.76	
5	256QAM	1	24	16.76	16.69	16.80	
5	256QAM	12	0	15.62	15.89	15.80	18
5	256QAM	12	7	15.67	15.77	15.87	
5	256QAM	12	13	15.81	15.63	15.62	
5	256QAM	25	0	15.70	15.90	15.77	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	21.76	21.77	21.70	
3	QPSK	1	8	21.75	21.73	21.72	
3	QPSK	1	14	21.68	21.59	21.53	23
3	QPSK	8	0	20.92	20.85	20.84	
3	QPSK	8	4	20.62	20.70	20.83	
3	QPSK	8	7	20.75	20.66	20.56	
3	QPSK	15	0	20.80	20.83	20.67	
3	16QAM	1	0	20.92	21.04	21.05	22
3	16QAM	1	8	20.97	20.87	21.00	
3	16QAM	1	14	20.94	20.90	20.97	
3	16QAM	8	0	19.89	19.91	19.88	
3	16QAM	8	4	19.72	19.78	19.90	
3	16QAM	8	7	19.75	19.79	19.63	21
3	16QAM	15	0	19.79	19.67	19.77	
3	64QAM	1	0	19.76	19.89	19.73	
3	64QAM	1	8	19.73	19.93	19.83	
3	64QAM	1	14	19.71	19.68	19.57	
3	64QAM	8	0	18.71	18.81	18.85	20
3	64QAM	8	4	18.64	18.76	18.83	
3	64QAM	8	7	18.74	18.69	18.68	
3	64QAM	15	0	18.53	18.78	18.63	
3	256QAM	1	0	16.83	16.91	16.65	
3	256QAM	1	8	16.77	16.78	16.92	18
3	256QAM	1	14	16.79	16.61	16.57	
3	256QAM	8	0	15.68	15.83	15.84	
3	256QAM	8	4	15.74	15.74	15.82	
3	256QAM	8	7	15.67	15.64	15.61	
3	256QAM	15	0	15.68	15.89	15.65	17
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	21.75	21.78	21.73	
1.4	QPSK	1	3	21.74	21.71	21.64	
1.4	QPSK	1	5	21.65	21.75	21.67	23
1.4	QPSK	3	0	20.97	20.90	20.88	
1.4	QPSK	3	1	20.67	20.83	20.82	
1.4	QPSK	3	3	20.72	20.72	20.76	
1.4	QPSK	6	0	20.82	20.82	20.63	
1.4	16QAM	1	0	20.95	20.90	20.83	22
1.4	16QAM	1	3	20.87	20.92	20.86	
1.4	16QAM	1	5	20.96	20.96	20.81	
1.4	16QAM	3	0	19.81	19.95	19.80	
1.4	16QAM	3	1	19.74	19.71	19.87	
1.4	16QAM	3	3	19.77	19.80	19.82	21
1.4	16QAM	6	0	19.71	19.80	19.91	
1.4	64QAM	1	0	19.83	19.86	19.85	
1.4	64QAM	1	3	19.84	19.93	19.78	
1.4	64QAM	1	5	19.72	19.77	19.72	
1.4	64QAM	3	0	18.85	18.75	18.66	20
1.4	64QAM	3	1	18.70	18.72	18.71	
1.4	64QAM	3	3	18.72	18.74	18.70	
1.4	64QAM	6	0	18.72	18.74	18.55	
1.4	256QAM	1	0	16.93	16.89	16.67	
1.4	256QAM	1	3	16.81	16.78	16.87	18
1.4	256QAM	1	5	16.74	16.69	16.65	
1.4	256QAM	3	0	15.73	15.84	15.73	
1.4	256QAM	3	1	15.61	15.70	15.90	
1.4	256QAM	3	3	15.82	15.64	15.66	
1.4	256QAM	6	0	15.73	15.82	15.63	17

Band 4 (AWS Band) (dBm) Part 27L (only on channel required), ANT 1							
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	20.78	20.85	20.72	22
20	QPSK	1	49	20.60	20.76	20.58	
20	QPSK	1	99	20.79	20.70	20.67	
20	QPSK	50	0	19.88	19.90	19.86	21
20	QPSK	50	24	19.65	19.82	19.71	
20	QPSK	50	50	19.74	19.89	19.73	
20	QPSK	100	0	19.65	19.81	19.79	21
20	16QAM	1	0	20.06	20.06	19.83	
20	16QAM	1	49	19.82	19.86	19.90	
20	16QAM	1	99	19.82	19.82	19.73	20
20	16QAM	50	0	18.88	18.83	18.87	
20	16QAM	50	24	18.75	18.87	18.65	
20	16QAM	50	50	18.60	18.69	18.78	20
20	16QAM	100	0	18.79	18.77	18.73	
20	64QAM	1	0	18.89	18.89	18.90	
20	64QAM	1	49	18.82	18.83	18.83	20
20	64QAM	1	99	18.57	18.75	18.65	
20	64QAM	50	0	17.80	17.76	17.77	
20	64QAM	50	24	17.54	17.67	17.85	19
20	64QAM	50	50	17.79	17.69	17.71	
20	64QAM	100	0	17.56	17.67	17.74	
20	256QAM	1	0	15.79	15.85	15.70	18
20	256QAM	1	49	15.75	15.92	15.95	
20	256QAM	1	99	15.78	15.74	15.66	
20	256QAM	50	0	14.62	14.84	14.65	17
20	256QAM	50	24	14.58	14.85	14.77	
20	256QAM	50	50	14.84	14.70	14.72	
20	256QAM	100	0	14.60	14.82	14.51	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	20.75	20.82	20.76	22
15	QPSK	1	37	20.58	20.72	20.74	
15	QPSK	1	74	20.76	20.67	20.62	
15	QPSK	36	0	19.73	19.78	19.88	21
15	QPSK	36	20	19.78	19.93	19.83	
15	QPSK	36	39	19.72	19.75	19.65	
15	QPSK	75	0	19.84	19.72	19.74	21
15	16QAM	1	0	20.00	20.10	19.83	
15	16QAM	1	37	19.93	19.89	19.91	
15	16QAM	1	74	19.76	19.89	19.75	20
15	16QAM	36	0	18.70	19.01	18.79	
15	16QAM	36	20	18.82	18.78	18.83	
15	16QAM	36	39	18.77	18.87	18.63	20
15	16QAM	75	0	18.72	18.83	18.66	
15	64QAM	1	0	18.79	18.99	18.94	
15	64QAM	1	37	18.70	18.70	18.76	20
15	64QAM	1	74	18.77	18.74	18.62	
15	64QAM	36	0	17.85	17.95	17.73	
15	64QAM	36	20	17.70	17.78	17.76	19
15	64QAM	36	39	17.71	17.78	17.73	
15	64QAM	75	0	17.62	17.72	17.58	
15	256QAM	1	0	15.84	15.86	15.63	18
15	256QAM	1	37	15.65	15.81	15.79	
15	256QAM	1	74	15.71	15.75	15.57	
15	256QAM	36	0	14.67	14.85	14.68	16
15	256QAM	36	20	14.72	14.88	14.65	
15	256QAM	36	39	14.69	14.76	14.56	
15	256QAM	75	0	14.68	14.87	14.62	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	20.75	20.80	20.77	22
10	QPSK	1	25	20.58	20.72	20.67	
10	QPSK	1	49	20.72	20.63	20.52	
10	QPSK	25	0	19.73	19.93	19.77	21
10	QPSK	25	12	19.65	19.85	19.72	
10	QPSK	25	25	19.73	19.89	19.77	
10	QPSK	50	0	19.62	19.87	19.73	21
10	16QAM	1	0	19.83	19.94	19.96	
10	16QAM	1	25	19.98	19.83	19.76	
10	16QAM	1	49	19.91	19.82	19.88	20
10	16QAM	25	0	18.69	18.92	18.76	
10	16QAM	25	12	18.78	18.77	18.78	
10	16QAM	25	25	18.78	18.87	18.86	20
10	16QAM	50	0	18.64	18.83	18.91	
10	64QAM	1	0	18.74	18.96	18.83	
10	64QAM	1	25	18.63	18.89	18.71	20
10	64QAM	1	49	18.73	18.74	18.76	
10	64QAM	25	0	17.80	17.83	17.85	
10	64QAM	25	12	17.58	17.73	17.90	19
10	64QAM	25	25	17.65	17.79	17.62	
10	64QAM	50	0	17.61	17.74	17.68	
10	256QAM	1	0	15.85	15.95	15.75	18
10	256QAM	1	25	15.69	15.81	15.80	
10	256QAM	1	49	15.79	15.69	15.77	
10	256QAM	25	0	14.69	14.88	14.76	16
10	256QAM	25	12	14.71	14.73	14.84	
10	256QAM	25	25	14.73	14.61	14.63	
10	256QAM	50	0	14.75	14.77	14.61	
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	20.72	20.81	20.78	22
5	QPSK	1	12	20.72	20.68	20.67	
5	QPSK	1	24	20.64	20.68	20.72	
5	QPSK	12	0	19.75	19.92	19.75	21
5	QPSK	12	7	19.77	19.91	19.71	
5	QPSK	12	13	19.81	19.65	19.62	
5	QPSK	25	0	19.82	19.67	19.73	21
5	16QAM	1	0	19.84	20.08	19.84	
5	16QAM	1	12	20.00	20.00	19.80	

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	20.02	20.07	20.01	21
10	QPSK	1	25	20.03	20.00	19.93	
10	QPSK	1	49	19.99	20.04	19.91	
10	QPSK	25	0	19.02	19.08	18.98	20
10	QPSK	25	12	18.90	19.07	18.93	
10	QPSK	25	25	19.07	19.07	19.03	
10	QPSK	50	0	19.01	19.00	19.05	20
10	16QAM	1	0	19.20	19.23	19.11	
10	16QAM	1	25	19.09	19.19	19.26	
10	16QAM	1	49	19.03	19.05	19.22	19
10	16QAM	25	0	18.04	18.06	18.08	
10	16QAM	25	12	18.08	18.18	18.02	
10	16QAM	25	25	17.90	17.99	18.00	19
10	16QAM	50	0	18.07	18.01	17.95	
10	64QAM	1	0	18.17	18.13	18.08	
10	64QAM	1	25	18.08	17.96	17.91	19
10	64QAM	1	49	18.06	18.01	17.95	
10	64QAM	25	0	16.96	17.01	17.08	
10	64QAM	25	12	16.93	17.04	17.12	18
10	64QAM	25	25	17.01	17.07	16.91	
10	64QAM	50	0	16.86	17.07	17.05	
10	256QAM	1	0	14.91	14.82	14.70	16
10	256QAM	1	25	14.66	14.80	14.92	
10	256QAM	1	49	14.81	14.64	14.67	
10	256QAM	25	0	13.68	13.91	13.76	15
10	256QAM	25	12	13.60	13.69	13.84	
10	256QAM	25	25	13.79	13.67	13.60	
10	256QAM	50	0	13.70	13.79	13.55	
Channel				20425	20525	20625	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	20.01	20.05	19.99	21
5	QPSK	1	12	19.85	20.06	20.05	
5	QPSK	1	24	19.95	20.06	19.79	
5	QPSK	12	0	19.09	19.21	19.01	20
5	QPSK	12	7	18.95	19.17	19.13	
5	QPSK	12	13	18.93	18.92	19.02	
5	QPSK	25	0	18.87	19.10	18.93	20
5	16QAM	1	0	19.10	19.32	19.12	
5	16QAM	1	12	19.07	19.20	19.18	
5	16QAM	1	24	19.11	19.10	19.09	19
5	16QAM	12	0	18.05	18.04	18.01	
5	16QAM	12	7	17.96	18.21	18.10	
5	16QAM	12	13	17.93	18.14	18.02	19
5	16QAM	25	0	17.87	18.06	18.00	
5	64QAM	1	0	18.10	18.18	17.95	
5	64QAM	1	12	18.09	18.12	18.09	19
5	64QAM	1	24	17.96	17.85	18.05	
5	64QAM	12	0	17.00	17.14	17.04	
5	64QAM	12	7	17.04	16.92	16.97	18
5	64QAM	12	13	17.06	17.07	17.00	
5	64QAM	25	0	16.97	16.87	16.82	
5	256QAM	1	0	14.90	14.90	14.75	16
5	256QAM	1	12	14.75	14.83	14.80	
5	256QAM	1	24	14.68	14.71	14.63	
5	256QAM	12	0	13.67	13.84	13.78	15
5	256QAM	12	7	13.71	13.86	13.81	
5	256QAM	12	13	13.78	13.70	13.59	
5	256QAM	25	0	13.63	13.86	13.65	
Channel				20415	20525	20635	Tune-up limit (dBm)
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	19.94	20.02	19.89	21
3	QPSK	1	8	19.92	19.94	19.87	
3	QPSK	1	14	19.90	19.98	20.01	
3	QPSK	8	0	19.14	19.10	19.15	20
3	QPSK	8	4	18.96	19.16	18.93	
3	QPSK	8	7	19.04	19.15	18.89	
3	QPSK	15	0	19.03	18.89	18.91	20
3	16QAM	1	0	19.11	19.23	19.16	
3	16QAM	1	8	19.07	19.32	19.01	
3	16QAM	1	14	19.21	19.27	19.20	19
3	16QAM	8	0	18.06	18.09	18.00	
3	16QAM	8	4	18.03	18.19	18.15	
3	16QAM	8	7	17.84	18.06	18.05	19
3	16QAM	15	0	17.88	18.01	18.09	
3	64QAM	1	0	18.18	18.17	17.96	
3	64QAM	1	8	18.06	18.19	17.98	19
3	64QAM	1	14	17.97	18.04	17.89	
3	64QAM	8	0	17.05	17.12	16.92	
3	64QAM	8	4	16.91	16.99	17.06	18
3	64QAM	8	7	16.88	17.00	17.01	
3	64QAM	15	0	16.82	17.01	17.01	
3	256QAM	1	0	14.87	14.90	14.63	16
3	256QAM	1	8	14.62	14.85	14.94	
3	256QAM	1	14	14.70	14.62	14.58	
3	256QAM	8	0	13.57	13.80	13.77	15
3	256QAM	8	4	13.60	13.68	13.79	
3	256QAM	8	7	13.81	13.68	13.62	
3	256QAM	15	0	13.68	13.82	13.56	
Channel				20407	20525	20643	Tune-up limit (dBm)
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	19.97	19.99	19.96	21
1.4	QPSK	1	3	19.93	20.01	19.99	
1.4	QPSK	1	5	19.97	19.94	19.87	
1.4	QPSK	3	0	18.98	19.11	19.00	20
1.4	QPSK	3	1	19.03	19.19	18.94	
1.4	QPSK	3	3	18.97	19.09	18.98	
1.4	QPSK	6	0	18.98	19.12	18.98	
1.4	16QAM	1	0	19.23	19.21	19.09	20
1.4	16QAM	1	3	19.22	19.25	19.16	

5	16QAM	1	24	19.72	19.95	19.95	20
5	16QAM	12	0	18.72	19.00	18.84	
5	16QAM	12	7	18.86	18.96	18.84	
5	16QAM	12	13	18.79	18.77	18.65	
5	16QAM	25	0	18.59	18.70	18.89	20
5	64QAM	1	0	18.87	18.80	18.82	
5	64QAM	1	12	18.82	18.75	18.72	
5	64QAM	1	24	18.79	18.78	18.71	
5	64QAM	12	0	17.69	17.83	17.78	19
5	64QAM	12	7	17.62	17.71	17.79	
5	64QAM	12	13	17.75	17.77	17.64	
5	64QAM	25	0	17.75	17.69	17.56	
5	256QAM	1	0	15.82	16.03	15.66	18
5	256QAM	1	12	15.72	15.74	15.76	
5	256QAM	1	24	15.76	15.69	15.80	
5	256QAM	12	0	14.62	14.89	14.80	
5	256QAM	12	7	14.87	14.77	14.87	16
5	256QAM	12	13	14.81	14.63	14.62	
5	256QAM	25	0	14.70	14.90	14.77	
Channel				19969	20175	20365	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	20.76	20.77	20.70	22
3	QPSK	1	8	20.75	20.73	20.72	
3	QPSK	1	14	20.68	20.59	20.53	
3	QPSK	8	0	19.92	19.85	19.84	
3	QPSK	8	4	19.62	19.70	19.83	21
3	QPSK	8	7	19.75	19.66	19.56	
3	QPSK	15	0	19.80	19.83	19.67	
3	16QAM	1	0	19.92	20.04	20.05	
3	16QAM	1	8	19.97	19.87	20.00	21
3	16QAM	1	14	19.94	19.90	19.97	
3	16QAM	8	0	18.89	18.91	18.88	
3	16QAM	8	4	18.72	18.78	18.90	
3	16QAM	8	7	18.75	18.79	18.63	20
3	16QAM	15	0	18.79	18.67	18.77	
3	64QAM	1	0	18.76	18.89	18.73	
3	64QAM	1	8	18.73	18.93	18.83	
3	64QAM	1	14	18.71	18.68	18.57	19
3	64QAM	8	0	17.71	17.81	17.85	
3	64QAM	8	4	17.64	17.76	17.83	
3	64QAM	8	7	17.74	17.69	17.68	
3	64QAM	15	0	17.53	17.78	17.63	17
3	256QAM	1	0	15.83	15.91	15.65	
3	256QAM	1	8	15.77	15.78	15.92	
3	256QAM	1	14	15.79	15.61	15.57	
3	256QAM	8	0	14.68	14.83	14.84	16
3	256QAM	8	4	14.74	14.74	14.82	
3	256QAM	8	7	14.67	14.64	14.61	
3	256QAM	15	0	14.68	14.89	14.65	
Channel				19957	20175	20393	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	20.75	20.78	20.73	22
1.4	QPSK	1	3	20.74	20.71	20.64	
1.4	QPSK	1	5	20.65	20.75	20.67	
1.4	QPSK	3	0	19.97	19.90	19.88	
1.4	QPSK	3	1	19.67	19.83	19.82	21
1.4	QPSK	3	3	19.72	19.72	19.76	
1.4	QPSK	6	0	19.82	19.82	19.63	
1.4	16QAM	1	0	19.95	19.90	19.83	
1.4	16QAM	1	3	19.87	19.92	19.86	20
1.4	16QAM	1	5	19.96	19.96	19.81	
1.4	16QAM	3	0	18.81	18.95	18.80	
1.4	16QAM	3	1	18.74	18.71	18.87	
1.4	16QAM	3	3	18.77	18.80	18.82	19
1.4	16QAM	6	0	18.71	18.80	18.91	
1.4	64QAM	1	0	18.83	18.86	18.85	
1.4	64QAM	1	3	18.84	18.93	18.78	
1.4	64QAM	1	5	18.72	18.77	18.72	17
1.4	64QAM	3	0	17.85	17.75	17.68	
1.4	64QAM	3	1	17.70	17.72	17.71	
1.4	64QAM	3	3	17.72	17.74	17.70	
1.4	256QAM	1	0	15.93	15.89	15.67	16
1.4	256QAM	1	3	15.61	15.78	15.87	
1.4	256QAM	1	5	15.74	15.69	15.65	
1.4	256QAM	3	0	14.73	14.84	14.73	
1.4	256QAM	3	1	14.61	14.70	14.90	15
1.4	256QAM	3	3	14.82	14.64	14.66	
1.4	256QAM	6	0	14.73	14.82	14.63	16

1.4	16QAM	1	5	19.21	19.13	18.99	20
1.4	16QAM	3	0	18.02	18.11	18.07	
1.4	16QAM	3	1	17.95	18.13	17.91	
1.4	16QAM	3	3	17.96	18.09	17.99	
1.4	16QAM	6	0	17.87	18.08	18.04	19
1.4	64QAM	1	0	18.19	18.18	18.07	
1.4	64QAM	1	3	17.96	18.00	18.11	
1.4	64QAM	1	5	17.85	17.86	17.92	
1.4	64QAM	3	0	17.01	17.13	17.04	18
1.4	64QAM	3	1	17.00	16.94	17.17	
1.4	64QAM	3	3	16.93	16.95	17.02	
1.4	64QAM	6	0	16.83	17.09	17.02	
1.4	256QAM	1	0	14.82	15.01	14.69	16
1.4	256QAM	1	3	14.74	14.89	14.90	
1.4	256QAM	1	5	14.78	14.66	14.80	
1.4	256QAM	3	0	13.64	13.94	13.82	
1.4	256QAM	3	1	13.73	13.75	13.89	15
1.4	256QAM	3	3	13.72	13.73	13.80	
1.4	256QAM	6	0	13.61	13.73	13.52	15

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				23090	23095	23130	
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	20.85	20.94	20.88	22
10	QPSK	1	25	20.73	20.87	20.69	
10	QPSK	1	49	20.82	20.73	20.70	
10	QPSK	25	0	19.88	19.95	19.86	21
10	QPSK	25	12	19.72	19.80	19.73	
10	QPSK	25	25	19.59	19.76	19.78	
10	QPSK	50	0	19.66	19.77	19.63	21
10	16QAM	1	0	20.01	19.94	19.94	
10	16QAM	1	25	20.00	20.01	19.99	
10	16QAM	1	49	19.87	19.82	19.84	20
10	16QAM	25	0	18.73	18.83	18.81	
10	16QAM	25	12	18.62	18.87	18.82	
10	16QAM	25	25	18.74	18.69	18.87	20
10	16QAM	50	0	18.65	18.81	18.71	
10	64QAM	1	0	18.82	18.79	18.93	
10	64QAM	1	25	18.72	18.88	18.66	20
10	64QAM	1	49	18.78	18.69	18.67	
10	64QAM	25	0	17.79	17.81	17.87	
10	64QAM	25	12	17.62	17.76	17.85	19
10	64QAM	25	25	17.61	17.68	17.62	
10	64QAM	50	0	17.56	17.69	17.61	
10	256QAM	1	0	15.77	15.91	15.72	17
10	256QAM	1	25	15.63	15.87	15.79	
10	256QAM	1	49	15.74	15.67	15.66	
10	256QAM	25	0	14.70	14.89	14.78	16
10	256QAM	25	12	14.70	14.84	14.89	
10	256QAM	25	25	14.66	14.78	14.61	
10	256QAM	50	0	14.53	14.84	14.51	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	20.81	20.91	20.81	22
5	QPSK	1	12	20.60	20.74	20.69	
5	QPSK	1	24	20.69	20.69	20.58	
5	QPSK	12	0	19.81	19.93	19.71	21
5	QPSK	12	7	19.69	19.79	19.84	
5	QPSK	12	13	19.82	19.75	19.73	
5	QPSK	25	0	19.65	19.76	19.71	21
5	16QAM	1	0	19.92	20.00	19.97	
5	16QAM	1	12	20.00	20.05	19.86	
5	16QAM	1	24	19.95	19.87	19.75	20
5	16QAM	12	0	18.90	18.85	18.90	
5	16QAM	12	7	18.65	18.92	18.67	
5	16QAM	12	13	18.60	18.70	18.71	20
5	16QAM	25	0	18.76	18.83	18.91	
5	64QAM	1	0	18.94	18.94	18.88	
5	64QAM	1	12	18.78	18.80	18.84	20
5	64QAM	1	24	18.60	18.78	18.58	
5	64QAM	12	0	17.88	17.76	17.88	
5	64QAM	12	7	17.68	17.81	17.74	19
5	64QAM	12	13	17.61	17.69	17.79	
5	64QAM	25	0	17.73	17.62	17.70	
5	256QAM	1	0	15.76	15.85	15.56	17
5	256QAM	1	12	15.57	15.82	15.81	
5	256QAM	1	24	15.74	15.59	15.60	
5	256QAM	12	0	14.68	14.89	14.71	16
5	256QAM	12	7	14.58	14.77	14.95	
5	256QAM	12	13	14.81	14.61	14.66	
5	256QAM	25	0	14.70	14.80	14.62	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	20.84	20.90	20.81	22
3	QPSK	1	8	20.73	20.64	20.78	
3	QPSK	1	14	20.62	20.74	20.62	
3	QPSK	8	0	19.76	19.78	19.71	21
3	QPSK	8	4	19.82	19.88	19.65	
3	QPSK	8	7	19.73	19.69	19.73	
3	QPSK	15	0	19.84	19.68	19.79	21
3	16QAM	1	0	20.05	20.06	20.05	
3	16QAM	1	8	19.85	20.04	19.82	
3	16QAM	1	14	19.81	19.94	19.95	20
3	16QAM	8	0	18.88	19.01	18.99	
3	16QAM	8	4	18.73	18.91	18.78	
3	16QAM	8	7	18.74	18.83	18.83	20
3	16QAM	15	0	18.73	18.65	18.86	
3	64QAM	1	0	18.74	18.92	18.92	
3	64QAM	1	8	18.76	18.96	18.76	20
3	64QAM	1	14	18.80	18.72	18.70	
3	64QAM	8	0	17.76	17.93	17.84	
3	64QAM	8	4	17.74	17.66	17.86	19
3	64QAM	8	7	17.78	17.73	17.75	
3	64QAM	15	0	17.57	17.78	17.61	
3	256QAM	1	0	15.81	15.97	15.72	17
3	256QAM	1	8	15.63	15.85	15.94	
3	256QAM	1	14	15.80	15.56	15.67	
3	256QAM	8	0	14.59	14.80	14.67	16
3	256QAM	8	4	14.63	14.79	14.92	
3	256QAM	8	7	14.74	14.75	14.59	
3	256QAM	15	0	14.58	14.79	14.55	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	20.80	20.88	20.76	22
1.4	QPSK	1	3	20.78	20.70	20.80	
1.4	QPSK	1	5	20.65	20.76	20.74	
1.4	QPSK	3	0	19.73	19.90	19.81	
1.4	QPSK	3	1	19.62	19.74	19.74	
1.4	QPSK	3	3	19.81	19.76	19.77	21
1.4	QPSK	6	0	19.65	19.85	19.75	
1.4	16QAM	1	0	19.83	19.96	20.07	
1.4	16QAM	1	3	19.94	20.02	19.98	

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		21.08		22
10	QPSK	1	25		20.99		
10	QPSK	1	49		20.93		
10	QPSK	25	0		20.23		21
10	QPSK	25	12		19.99		
10	QPSK	25	25		20.10		
10	QPSK	50	0		19.94		21
10	16QAM	1	0		20.14		
10	16QAM	1	25		20.06		
10	16QAM	1	49		20.07		20
10	16QAM	25	0		19.14		
10	16QAM	25	12		19.07		
10	16QAM	25	25		19.12		20
10	16QAM	50	0		19.04		
10	64QAM	1	0		19.19		
10	64QAM	1	25		18.96		20
10	64QAM	1	49		18.92		
10	64QAM	25	0		18.12		
10	64QAM	25	12		17.88		19
10	64QAM	25	25		18.05		
10	64QAM	50	0		18.05		
10	256QAM	1	0		15.93		17
10	256QAM	1	25		15.87		
10	256QAM	1	49		15.71		
10	256QAM	25	0		14.81		16
10	256QAM	25	12		14.73		
10	256QAM	25	25		14.60		
10	256QAM	50	0		14.88		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	21.01	21.05	20.98	22
5	QPSK	1	12	20.83	20.89	20.97	
5	QPSK	1	24	20.99	20.97	21.01	
5	QPSK	12	0	20.12	20.16	20.07	21
5	QPSK	12	7	19.88	20.11	20.06	
5	QPSK	12	13	19.83	19.91	19.91	
5	QPSK	25	0	19.96	19.94	20.02	21
5	16QAM	1	0	20.21	20.37	20.22	
5	16QAM	1	12	20.20	20.07	20.03	
5	16QAM	1	24	20.20	20.07	20.22	20
5	16QAM	12	0	19.13	19.03	19.01	
5	16QAM	12	7	18.96	19.08	18.97	
5	16QAM	12	13	18.97	19.18	19.04	20
5	16QAM	25	0	19.04	19.06	18.97	
5	64QAM	1	0	19.00	19.20	19.08	
5	64QAM	1	12	18.91	19.17	18.97	20
5	64QAM	1	24	18.99	19.02	18.98	
5	64QAM	12	0	17.93	18.18	17.94	
5	64QAM	12	7	17.88	17.97	17.93	19
5	64QAM	12	13	18.01	18.08	17.97	
5	64QAM	25	0	17.92	18.04	17.86	
5	256QAM	1	0	15.84	15.85	15.58	17
5	256QAM	1	12	15.69	15.71	15.77	
5	256QAM	1	24	15.64	15.53	15.49	
5	256QAM	12	0	14.59	14.82	14.83	16
5	256QAM	12	7	14.55	14.66	14.85	
5	256QAM	12	13	14.80	14.78	14.49	
5	256QAM	25	0	14.60	14.84	14.56	

1.4	16QAM	1	5	19.90	19.86	19.93	21
1.4	16QAM	3	0	18.75	18.78	18.99	
1.4	16QAM	3	1	18.80	18.88	18.79	
1.4	16QAM	3	3	18.62	18.91	18.77	
1.4	16QAM	6	0	18.67	18.72	18.88	20
1.4	64QAM	1	0	18.71	18.90	18.90	
1.4	64QAM	1	3	18.84	18.72	18.72	20
1.4	64QAM	1	5	18.71	18.61	18.60	
1.4	64QAM	3	0	17.66	17.74	17.72	
1.4	64QAM	3	1	17.58	17.79	17.72	
1.4	64QAM	3	3	17.76	17.67	17.66	
1.4	64QAM	6	0	17.57	17.76	17.70	
1.4	256QAM	1	0	15.91	15.97	15.64	19
1.4	256QAM	1	3	15.61	15.78	15.80	
1.4	256QAM	1	5	15.74	15.70	15.67	17
1.4	256QAM	3	0	14.57	14.90	14.83	
1.4	256QAM	3	1	14.71	14.69	14.77	
1.4	256QAM	3	3	14.68	14.61	14.61	
1.4	256QAM	6	0	14.60	14.92	14.60	
							16

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	20.76	20.83	20.74	22
10	QPSK	1	25	20.82	20.52	20.50	
10	QPSK	1	49	20.56	20.60	20.59	
10	QPSK	25	0	19.77	19.82	19.78	21
10	QPSK	25	12	19.66	19.54	19.68	
10	QPSK	25	25	19.56	19.64	19.56	
10	QPSK	50	0	19.58	19.49	19.57	21
10	16QAM	1	0	19.92	19.97	19.84	
10	16QAM	1	25	19.79	19.69	19.84	
10	16QAM	1	49	19.73	19.86	19.65	20
10	16QAM	25	0	18.63	18.83	18.82	
10	16QAM	25	12	18.59	18.66	18.53	
10	16QAM	25	25	18.56	18.75	18.54	20
10	16QAM	50	0	18.54	18.67	18.54	
10	64QAM	1	0	18.70	18.77	18.69	
10	64QAM	1	25	18.59	18.75	18.60	19
10	64QAM	1	49	18.53	18.61	18.51	
10	64QAM	25	0	17.63	17.78	17.59	
10	64QAM	25	12	17.47	17.50	17.59	17
10	64QAM	25	25	17.66	17.50	17.46	
10	64QAM	50	0	17.53	17.47	17.40	
10	256QAM	1	0	15.81	15.80	15.58	16
10	256QAM	1	25	15.72	15.82	15.72	
10	256QAM	1	49	15.67	15.69	15.54	
10	256QAM	25	0	14.63	14.78	14.81	16
10	256QAM	25	12	14.57	14.80	14.80	
10	256QAM	25	25	14.76	14.62	14.61	
10	256QAM	50	0	14.64	14.83	14.59	
Channel				23755	23790	23825	
Frequency (MHz)				706.5	710	713.5	
5	QPSK	1	0	20.72	20.79	20.66	
5	QPSK	1	12	20.58	20.48	20.47	21
5	QPSK	1	24	20.50	20.58	20.59	
5	QPSK	12	0	19.57	19.75	19.65	
5	QPSK	12	7	19.47	19.67	19.52	21
5	QPSK	12	13	19.53	19.63	19.57	
5	QPSK	25	0	19.49	19.54	19.51	
5	16QAM	1	0	19.91	19.78	19.76	21
5	16QAM	1	12	19.80	19.88	19.81	
5	16QAM	1	24	19.60	19.72	19.64	
5	16QAM	12	0	18.77	18.78	18.74	20
5	16QAM	12	7	18.49	18.70	18.68	
5	16QAM	12	13	18.64	18.55	18.52	
5	16QAM	25	0	18.52	18.53	18.56	20
5	64QAM	1	0	18.60	18.65	18.61	
5	64QAM	1	12	18.68	18.73	18.69	
5	64QAM	1	24	18.50	18.48	18.54	19
5	64QAM	12	0	17.71	17.72	17.64	
5	64QAM	12	7	17.40	17.54	17.61	
5	64QAM	12	13	17.64	17.72	17.61	19
5	64QAM	25	0	17.51	17.55	17.53	
5	256QAM	1	0	15.84	15.85	15.68	
5	256QAM	1	12	15.55	15.76	15.86	16
5	256QAM	1	24	15.63	15.53	15.50	
5	256QAM	12	0	14.66	14.81	14.65	
5	256QAM	12	7	14.59	14.73	14.78	16
5	256QAM	12	13	14.62	14.64	14.58	
5	256QAM	25	0	14.59	14.74	14.52	

Band 66 (dBm)_ANT 0							
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	21.85	21.96	21.88	23
20	QPSK	1	49	21.67	21.82	21.78	
20	QPSK	1	99	21.70	21.77	21.69	
20	QPSK	50	0	20.93	20.97	20.85	22
20	QPSK	50	24	20.78	20.90	20.91	
20	QPSK	50	50	20.79	20.86	20.61	
20	QPSK	100	0	20.81	20.89	20.83	22
20	16QAM	1	0	21.04	21.01	20.95	
20	16QAM	1	49	21.09	21.04	21.15	
20	16QAM	1	99	21.05	21.22	20.95	21
20	16QAM	50	0	19.93	20.03	20.01	
20	16QAM	50	24	19.85	19.97	19.81	
20	16QAM	50	50	19.92	19.89	19.82	21
20	16QAM	100	0	19.68	19.90	19.91	
20	64QAM	1	0	19.89	20.07	19.70	
20	64QAM	1	49	19.86	19.89	19.72	21
20	64QAM	1	99	20.08	19.84	19.81	
20	64QAM	50	0	18.89	19.03	18.78	
20	64QAM	50	24	18.81	18.81	18.97	20
20	64QAM	50	50	18.99	18.77	18.80	
20	64QAM	100	0	18.90	18.91	18.64	
20	256QAM	1	0	16.77	16.92	16.60	18
20	256QAM	1	49	16.72	16.78	16.76	
20	256QAM	1	99	16.65	16.68	16.65	
20	256QAM	50	0	15.71	15.96	15.72	17
20	256QAM	50	24	15.67	15.68	15.75	
20	256QAM	50	50	15.72	15.76	15.46	
20	256QAM	100	0	16.74	16.76	16.61	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	21.82	21.93	21.90	23
15	QPSK	1	37	21.70	21.75	21.59	
15	QPSK	1	74	21.77	21.73	21.76	
15	QPSK	36	0	20.89	21.01	20.79	22
15	QPSK	36	20	20.79	20.96	20.76	
15	QPSK	36	39	20.77	20.92	20.64	
15	QPSK	75	0	20.80	20.84	20.89	22
15	16QAM	1	0	21.09	21.10	21.09	
15	16QAM	1	37	21.10	21.02	21.14	
15	16QAM	1	74	20.91	21.06	20.91	21
15	16QAM	36	0	19.97	20.05	19.99	
15	16QAM	36	20	19.75	19.96	19.92	
15	16QAM	36	39	19.92	19.99	19.75	21
15	16QAM	75	0	19.75	19.86	19.91	
15	64QAM	1	0	19.83	20.06	19.87	
15	64QAM	1	37	19.80	19.95	19.72	21
15	64QAM	1	74	19.91	19.94	19.79	
15	64QAM	36	0	18.87	19.03	18.75	
15	64QAM	36	20	18.89	18.74	18.91	20
15	64QAM	36	39	18.93	18.87	18.72	
15	64QAM	75	0	18.84	19.00	18.67	
15	256QAM	1	0	16.79	16.92	16.60	18
15	256QAM	1	37	16.57	16.91	16.77	
15	256QAM	1	74	16.78	16.73	16.66	
15	256QAM	36	0	15.61	15.83	15.79	17
15	256QAM	36	20	15.66	15.87	15.83	
15	256QAM	36	39	15.67	15.66	15.57	
15	256QAM	75	0	15.60	15.76	15.63	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	21.85	21.91	21.75	23
10	QPSK	1	25	21.74	21.88	21.61	
10	QPSK	1	49	21.64	21.84	21.59	
10	QPSK	25	0	21.00	21.02	20.79	22
10	QPSK	25	12	20.88	21.09	20.85	
10	QPSK	25	25	20.81	20.93	20.77	
10	QPSK	50	0	20.76	20.82	20.78	22
10	16QAM	1	0	21.01	21.02	21.09	
10	16QAM	1	25	21.11	21.16	21.11	
10	16QAM	1	49	21.05	21.07	20.97	21
10	16QAM	25	0	20.00	20.02	20.00	
10	16QAM	25	12	19.79	20.05	19.85	
10	16QAM	25	25	19.92	19.89	19.79	21
10	16QAM	50	0	19.79	19.85	19.92	
10	64QAM	1	0	19.93	19.94	19.81	
10	64QAM	1	25	19.78	19.82	19.82	21
10	64QAM	1	49	20.07	19.82	19.83	
10	64QAM	25	0	18.78	19.08	18.73	
10	64QAM	25	12	19.01	18.85	18.96	20
10	64QAM	25	25	18.89	18.77	18.71	
10	64QAM	50	0	18.78	18.91	18.66	
10	256QAM	1	0	16.76	16.99	16.67	18
10	256QAM	1	25	16.66	16.92	16.76	
10	256QAM	1	49	16.83	16.55	16.57	
10	256QAM	25	0	15.69	15.90	15.73	17
10	256QAM	25	12	15.66	15.80	15.93	
10	256QAM	25	25	15.77	15.69	15.55	
10	256QAM	50	0	15.60	15.77	15.62	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	21.87	21.92	21.79	23
5	QPSK	1	12	21.73	21.86	21.72	
5	QPSK	1	24	21.62	21.76	21.61	
5	QPSK	12	0	21.01	20.96	20.94	22
5	QPSK	12	7	20.91	21.02	20.90	
5	QPSK	12	13	20.79	21.03	20.74	
5	QPSK	25	0	20.85	20.80	20.83	22
5	16QAM	1	0	21.07	21.04	21.10	
5	16QAM	1	12	21.03	21.12	21.13	

5	16QAM	1	24	20.96	21.12	20.91	21
5	16QAM	12	0	20.03	20.14	20.02	
5	16QAM	12	7	19.84	20.00	20.00	
5	16QAM	12	13	19.84	19.87	19.85	
5	16QAM	25	0	19.83	19.70	19.81	21
5	64QAM	1	0	19.92	19.99	19.86	
5	64QAM	1	12	19.73	19.85	19.72	
5	64QAM	1	24	19.97	19.77	19.73	
5	64QAM	12	0	18.72	18.93	18.77	20
5	64QAM	12	7	18.82	18.75	18.83	
5	64QAM	12	13	18.84	18.83	18.69	
5	64QAM	25	0	18.86	18.89	18.70	
5	256QAM	1	0	16.76	16.92	16.57	18
5	256QAM	1	12	16.58	16.68	16.86	
5	256QAM	1	24	16.66	16.71	16.59	
5	256QAM	12	0	15.72	15.80	15.83	
5	256QAM	12	7	15.70	15.68	15.78	17
5	256QAM	12	13	15.71	15.63	15.61	
5	256QAM	25	0	15.57	15.72	15.64	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	21.73	21.89	21.74	23
3	QPSK	1	8	21.78	21.84	21.61	
3	QPSK	1	14	21.79	21.70	21.73	
3	QPSK	8	0	20.96	20.99	20.87	
3	QPSK	8	4	20.73	21.00	20.96	22
3	QPSK	8	7	20.75	20.69	20.72	
3	QPSK	15	0	20.72	20.74	20.78	
3	16QAM	1	0	21.01	21.03	21.10	
3	16QAM	1	8	20.95	21.00	21.10	22
3	16QAM	1	14	21.06	21.12	20.84	
3	16QAM	8	0	20.09	19.98	20.05	
3	16QAM	8	4	19.88	19.95	19.88	
3	16QAM	8	7	19.85	19.98	19.85	21
3	16QAM	15	0	19.71	19.86	19.91	
3	64QAM	1	0	19.77	20.00	19.75	
3	64QAM	1	8	19.72	19.89	19.89	
3	64QAM	1	14	20.03	19.79	19.85	20
3	64QAM	8	0	18.77	19.02	18.76	
3	64QAM	8	4	18.93	18.76	18.87	
3	64QAM	8	7	18.88	18.94	18.76	
3	64QAM	15	0	18.87	18.90	18.67	18
3	256QAM	1	0	16.80	16.82	16.74	
3	256QAM	1	8	16.62	16.74	16.82	
3	256QAM	1	14	16.73	16.67	16.58	
3	256QAM	8	0	15.67	15.90	15.74	17
3	256QAM	8	4	15.72	15.71	15.82	
3	256QAM	8	7	15.72	15.69	15.79	
3	256QAM	15	0	15.60	15.72	15.67	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	21.82	21.90	21.84	23
1.4	QPSK	1	3	21.86	21.77	21.70	
1.4	QPSK	1	5	21.62	21.74	21.68	
1.4	QPSK	3	0	20.89	21.02	20.95	
1.4	QPSK	3	1	20.84	20.94	20.80	
1.4	QPSK	3	3	20.84	20.90	20.68	
1.4	QPSK	6	0	20.80	20.77	20.92	23
1.4	16QAM	1	0	21.04	21.04	20.97	23
1.4	16QAM	1	3	21.12	21.16	21.06	
1.4	16QAM	1	5	20.91	21.11	20.83	
1.4	16QAM	3	0	19.96	20.01	19.89	
1.4	16QAM	3	1	19.72	19.93	19.92	
1.4	16QAM	3	3	19.81	20.02	19.86	
1.4	16QAM	6	0	19.78	19.76	19.74	22
1.4	64QAM	1	0	19.84	20.04	19.78	22
1.4	64QAM	1	3	19.87	19.77	19.72	
1.4	64QAM	1	5	20.02	19.95	19.77	
1.4	64QAM	3	0	18.73	18.91	18.71	
1.4	64QAM	3	1	18.90	18.86	18.94	
1.4	64QAM	3	3	18.86	18.77	18.82	
1.4	64QAM	6	0	18.96	18.98	18.80	21
1.4	256QAM	1	0	16.80	16.84	16.76	18
1.4	256QAM	1	3	16.68	16.87	16.87	
1.4	256QAM	1	5	16.72	16.68	16.66	
1.4	256QAM	3	0	15.68	15.85	15.84	
1.4	256QAM	3	1	15.66	15.80	15.94	
1.4	256QAM	3	3	15.63	15.61	15.58	
1.4	256QAM	6	0	15.67	15.85	15.71	17

Band 66 (dBm)_ANT 1							
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	20.85	20.96	20.88	
20	QPSK	1	49	20.67	20.82	20.78	22
20	QPSK	1	99	20.70	20.77	20.69	
20	QPSK	50	0	19.93	19.97	19.85	
20	QPSK	50	24	19.78	19.90	19.91	21
20	QPSK	50	50	19.79	19.86	19.61	
20	QPSK	100	0	19.81	19.89	19.83	
20	16QAM	1	0	20.04	20.01	19.95	21
20	16QAM	1	49	20.09	20.04	20.15	
20	16QAM	1	99	20.05	20.22	19.95	
20	16QAM	50	0	18.93	19.03	19.01	20
20	16QAM	50	24	18.85	18.97	18.81	
20	16QAM	50	50	18.92	18.89	18.82	
20	16QAM	100	0	18.68	18.90	18.91	20
20	64QAM	1	0	18.89	19.07	18.70	
20	64QAM	1	49	18.86	18.89	18.72	
20	64QAM	1	99	19.08	18.84	18.81	19
20	64QAM	50	0	17.89	18.03	17.78	
20	64QAM	50	24	17.81	17.81	17.97	
20	64QAM	50	50	17.99	17.77	17.80	18
20	64QAM	100	0	17.90	17.91	17.64	
20	256QAM	1	0	15.77	15.92	15.80	
20	256QAM	1	49	15.72	15.78	15.76	17
20	256QAM	1	99	15.65	15.68	15.65	
20	256QAM	50	0	14.71	14.96	14.72	
20	256QAM	50	24	14.67	14.68	14.75	17
20	256QAM	50	50	14.72	14.76	14.46	
20	256QAM	100	0	15.74	15.76	15.61	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	20.82	20.93	20.90	
15	QPSK	1	37	20.70	20.75	20.59	22
15	QPSK	1	74	20.77	20.73	20.76	
15	QPSK	36	0	19.89	20.01	19.79	
15	QPSK	36	20	19.79	19.96	19.76	21
15	QPSK	36	39	19.77	19.92	19.64	
15	QPSK	75	0	19.80	19.84	19.89	
15	16QAM	1	0	20.09	20.10	20.09	21
15	16QAM	1	37	20.10	20.02	20.14	
15	16QAM	1	74	19.91	20.06	19.91	
15	16QAM	36	0	18.97	19.05	18.99	20
15	16QAM	36	20	18.75	18.96	18.92	
15	16QAM	36	39	18.92	18.99	18.75	
15	16QAM	75	0	18.75	18.86	18.91	20
15	64QAM	1	0	18.83	19.06	18.87	
15	64QAM	1	37	18.80	18.95	18.72	
15	64QAM	1	74	18.91	18.94	18.79	19
15	64QAM	36	0	17.87	18.03	17.75	
15	64QAM	36	20	17.89	17.74	17.91	
15	64QAM	36	39	17.93	17.87	17.72	17
15	64QAM	75	0	17.84	18.00	17.67	
15	256QAM	1	0	15.79	15.92	15.60	
15	256QAM	1	37	15.57	15.91	15.77	16
15	256QAM	1	74	15.78	15.73	15.66	
15	256QAM	36	0	14.61	14.83	14.79	
15	256QAM	36	20	14.66	14.87	14.83	16
15	256QAM	36	39	14.67	14.66	14.57	
15	256QAM	75	0	14.60	14.76	14.63	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	20.85	20.91	20.75	
10	QPSK	1	25	20.74	20.88	20.61	22
10	QPSK	1	49	20.64	20.84	20.59	
10	QPSK	25	0	20.00	20.02	19.79	
10	QPSK	25	12	19.88	20.09	19.85	21
10	QPSK	25	25	19.81	19.93	19.77	
10	QPSK	50	0	19.76	19.82	19.78	
10	16QAM	1	0	20.01	20.02	20.09	21
10	16QAM	1	25	20.11	20.16	20.11	
10	16QAM	1	49	20.05	20.07	19.97	
10	16QAM	25	0	19.00	19.02	19.00	20
10	16QAM	25	12	18.79	19.05	18.85	
10	16QAM	25	25	18.92	18.89	18.79	
10	16QAM	50	0	18.79	18.85	18.92	20
10	64QAM	1	0	18.93	18.94	18.81	
10	64QAM	1	25	18.78	18.82	18.82	
10	64QAM	1	49	19.07	18.82	18.83	19
10	64QAM	25	0	17.78	18.08	17.73	
10	64QAM	25	12	18.01	17.85	17.96	
10	64QAM	25	25	17.89	17.77	17.71	17
10	64QAM	50	0	17.78	17.91	17.66	
10	256QAM	1	0	15.76	15.99	15.67	
10	256QAM	1	25	15.66	15.92	15.76	16
10	256QAM	1	49	15.83	15.55	15.57	
10	256QAM	25	0	14.69	14.90	14.73	
10	256QAM	25	12	14.66	14.80	14.93	16
10	256QAM	25	25	14.77	14.69	14.55	
10	256QAM	50	0	14.60	14.77	14.62	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	20.87	20.92	20.79	
5	QPSK	1	12	20.73	20.86	20.72	22
5	QPSK	1	24	20.62	20.76	20.61	
5	QPSK	12	0	20.01	19.96	19.94	
5	QPSK	12	7	19.91	20.02	19.90	21
5	QPSK	12	13	19.79	20.03	19.74	
5	QPSK	25	0	19.85	19.80	19.83	
5	16QAM	1	0	20.07	20.04	20.10	21
5	16QAM	1	12	20.03	20.12	20.13	

5	16QAM	1	24	19.96	20.12	19.91	20
5	16QAM	12	0	19.03	19.14	19.02	
5	16QAM	12	7	18.84	19.00	19.00	
5	16QAM	12	13	18.84	18.87	18.85	
5	16QAM	25	0	18.83	18.70	18.81	20
5	64QAM	1	0	18.92	18.99	18.86	
5	64QAM	1	12	18.73	18.85	18.72	
5	64QAM	1	24	18.97	18.77	18.73	
5	64QAM	12	0	17.72	17.93	17.77	19
5	64QAM	12	7	17.82	17.75	17.83	
5	64QAM	12	13	17.84	17.83	17.69	
5	64QAM	25	0	17.86	17.89	17.70	
5	256QAM	1	0	15.76	15.92	15.57	17
5	256QAM	1	12	15.58	15.88	15.86	
5	256QAM	1	24	15.66	15.71	15.59	
5	256QAM	12	0	14.72	14.80	14.83	
5	256QAM	12	7	14.70	14.68	14.78	16
5	256QAM	12	13	14.71	14.63	14.61	
5	256QAM	25	0	14.57	14.72	14.64	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	20.73	20.89	20.74	22
3	QPSK	1	8	20.78	20.84	20.61	
3	QPSK	1	14	20.79	20.70	20.73	
3	QPSK	8	0	19.96	19.99	19.87	
3	QPSK	8	4	19.73	20.00	19.96	21
3	QPSK	8	7	19.75	19.89	19.72	
3	QPSK	15	0	19.72	19.74	19.78	
3	16QAM	1	0	20.01	20.03	20.10	
3	16QAM	1	8	19.95	20.00	20.10	21
3	16QAM	1	14	20.06	20.12	19.84	
3	16QAM	8	0	19.09	18.98	19.05	
3	16QAM	8	4	18.88	18.95	18.88	
3	16QAM	8	7	18.85	18.98	18.85	20
3	16QAM	15	0	18.71	18.86	18.91	
3	64QAM	1	0	18.77	19.00	18.75	
3	64QAM	1	8	18.72	18.89	18.89	
3	64QAM	1	14	19.03	18.79	18.85	19
3	64QAM	8	0	17.77	18.02	17.76	
3	64QAM	8	4	17.93	17.76	17.87	
3	64QAM	8	7	17.88	17.94	17.76	
3	64QAM	15	0	17.87	17.90	17.67	17
3	256QAM	1	0	15.80	15.82	15.74	
3	256QAM	1	8	15.62	15.74	15.82	
3	256QAM	1	14	15.73	15.67	15.58	
3	256QAM	8	0	14.67	14.90	14.74	16
3	256QAM	8	4	14.72	14.71	14.82	
3	256QAM	8	7	14.72	14.69	14.79	
3	256QAM	15	0	14.60	14.72	14.67	
Channel				131979	132322	132665	Tune-up limit (dBm)
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	20.82	20.90	20.84	22
1.4	QPSK	1	3	20.86	20.77	20.70	
1.4	QPSK	1	5	20.62	20.74	20.68	
1.4	QPSK	3	0	19.89	20.02	19.95	
1.4	QPSK	3	1	19.84	19.94	19.80	
1.4	QPSK	3	3	19.84	19.90	19.68	
1.4	QPSK	6	0	19.80	19.77	19.92	22
1.4	16QAM	1	0	20.04	20.04	19.97	22
1.4	16QAM	1	3	20.12	20.16	20.06	
1.4	16QAM	1	5	19.91	20.11	19.83	
1.4	16QAM	3	0	18.96	19.01	18.89	
1.4	16QAM	3	1	18.72	18.93	18.92	
1.4	16QAM	3	3	18.81	19.02	18.86	
1.4	16QAM	6	0	18.78	18.76	18.74	20
1.4	64QAM	1	0	18.84	19.04	18.78	20
1.4	64QAM	1	3	18.87	18.77	18.72	
1.4	64QAM	1	5	19.02	18.95	18.77	
1.4	64QAM	3	0	17.73	17.91	17.71	
1.4	64QAM	3	1	17.90	17.86	17.94	
1.4	64QAM	3	3	17.86	17.77	17.82	
1.4	64QAM	6	0	17.96	17.98	17.80	19
1.4	256QAM	1	0	15.80	15.84	15.76	17
1.4	256QAM	1	3	15.68	15.67	15.67	
1.4	256QAM	1	5	15.72	15.68	15.66	
1.4	256QAM	3	0	14.68	14.85	14.84	
1.4	256QAM	3	1	14.66	14.80	14.94	
1.4	256QAM	3	3	14.63	14.61	14.58	
1.4	256QAM	6	0	14.67	14.85	14.71	16

Band 48 (3.5G Band) (dBm)_ANT 2											
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	Tune-up limit (dBm)		
Frequency (MHz)				3560	3609	3625	3641	3690			
20	QPSK	1	0	15.14	15.17	15.20	15.15	15.07	16		
20	QPSK	1	49	14.64	14.66	14.66	14.69	14.68			
20	QPSK	1	99	14.70	14.68	14.70	14.50	14.64			
20	QPSK	50	0	14.24	14.15	14.27	14.10	14.00	15		
20	QPSK	50	24	13.69	13.68	13.74	13.78	13.67			
20	QPSK	50	50	13.69	13.80	13.82	13.63	13.47			
20	QPSK	100	0	13.71	13.62	13.71	13.64	13.45	15		
20	16QAM	1	0	13.97	13.92	14.02	13.97	13.82			
20	16QAM	1	49	13.87	13.99	13.84	13.77	13.68			
20	16QAM	1	99	13.85	13.77	13.90	13.86	13.71	15		
20	16QAM	50	0	12.63	12.79	12.71	12.78	12.65			
20	16QAM	50	24	12.65	12.66	12.74	12.62	12.46			
20	16QAM	50	50	12.63	12.56	12.76	12.49	12.40	14		
20	16QAM	100	0	12.66	12.60	12.70	12.64	12.50			
20	64QAM	1	0	12.83	12.84	12.88	12.67	12.74			
20	64QAM	1	49	12.83	12.75	12.79	12.73	12.66	14		
20	64QAM	1	99	12.64	12.61	12.80	12.71	12.52			
20	64QAM	50	0	12.63	12.63	12.77	12.67	12.49			
20	64QAM	50	24	12.52	12.66	12.64	12.65	12.53	13		
20	64QAM	50	50	12.68	12.53	12.63	12.54	12.44			
20	64QAM	100	0	12.63	12.53	12.71	12.57	12.39			
20	256QAM	1	0	9.64	9.58	9.65	9.52	9.37	10		
20	256QAM	1	49	9.52	9.48	9.54	9.54	9.58			
20	256QAM	1	99	9.52	9.44	9.34	9.32	9.42			
20	256QAM	50	0	8.37	8.44	8.70	8.52	8.42	10		
20	256QAM	50	24	8.43	8.47	8.60	8.59	8.55			
20	256QAM	50	50	8.42	8.58	8.41	8.33	8.39			
20	256QAM	100	0	8.42	8.46	8.62	8.30	8.27			
Channel				55315	55820	55990	56160.15	56665.15	Tune-up limit (dBm)		
Frequency (MHz)				3557.5	3608	3625	3642.15	3692.65			
15	QPSK	1	0	14.68	14.74	14.76	14.75	14.70	16		
15	QPSK	1	37	14.62	14.65	14.65	14.69	14.68			
15	QPSK	1	74	14.64	14.70	14.70	14.70	14.60			
15	QPSK	36	0	13.74	13.85	13.80	13.84	13.74	15		
15	QPSK	36	20	13.76	13.73	13.78	13.86	13.80			
15	QPSK	36	39	13.77	13.78	13.80	13.68	13.66			
15	QPSK	75	0	13.67	13.63	13.75	13.69	13.79	15		
15	16QAM	1	0	14.03	13.85	13.99	13.99	14.01			
15	16QAM	1	37	13.97	13.80	13.84	13.90	13.86			
15	16QAM	1	74	13.85	13.75	13.88	14.01	13.74	15		
15	16QAM	36	0	12.61	12.78	12.78	12.88	12.69			
15	16QAM	36	20	12.58	12.73	12.69	12.86	12.63			
15	16QAM	36	39	12.55	12.57	12.65	12.73	12.65	14		
15	16QAM	75	0	12.57	12.51	12.61	12.86	12.69			
15	64QAM	1	0	12.78	12.82	12.80	12.83	12.90			
15	64QAM	1	37	12.79	12.80	12.72	12.73	12.76	14		
15	64QAM	1	74	12.75	12.70	12.62	12.78	12.68			
15	64QAM	36	0	12.55	12.61	12.64	12.77	12.74			
15	64QAM	36	20	12.61	12.66	12.49	12.70	12.60	13		
15	64QAM	36	39	12.55	12.51	12.71	12.78	12.63			
15	64QAM	75	0	12.52	12.57	12.52	12.60	12.48			
15	256QAM	1	0	9.64	9.60	9.60	9.45	9.34	10		
15	256QAM	1	37	9.37	9.33	9.51	9.52	9.70			
15	256QAM	1	74	9.61	9.53	9.42	9.34	9.36			
15	256QAM	36	0	8.39	8.32	8.67	8.51	8.46	10		
15	256QAM	36	20	8.52	8.36	8.62	8.56	8.58			
15	256QAM	36	39	8.43	8.60	8.42	8.37	8.32			
15	256QAM	75	0	8.43	8.43	8.54	8.23	8.35			
Channel				55290	55815	55990	56165	56690	Tune-up limit (dBm)		
Frequency (MHz)				3555	3607.5	3625	3642.5	3695			
10	QPSK	1	0	14.66	14.73	14.75	14.64	14.59	16		
10	QPSK	1	25	14.70	14.61	14.76	14.66	14.42			
10	QPSK	1	49	14.61	14.71	14.73	14.58	14.57			
10	QPSK	25	0	13.83	13.80	13.92	13.81	13.62	15		
10	QPSK	25	12	13.79	13.74	13.72	13.63	13.69			
10	QPSK	25	25	13.67	13.70	13.70	13.63	13.63			
10	QPSK	50	0	13.68	13.70	13.84	13.65	13.59	15		
10	16QAM	1	0	14.01	14.01	13.91	13.87	13.76			
10	16QAM	1	25	13.81	13.85	13.83	13.87	13.75			
10	16QAM	1	49	13.91	13.73	13.86	13.89	13.73	14		
10	16QAM	25	0	12.62	12.64	12.74	12.73	12.69			
10	16QAM	25	12	12.63	12.70	12.82	12.63	12.44			
10	16QAM	25	25	12.55	12.53	12.60	12.68	12.49	14		
10	16QAM	50	0	12.56	12.60	12.75	12.70	12.58			
10	64QAM	1	0	12.82	12.81	12.80	12.83	12.71			
10	64QAM	1	25	12.71	12.72	12.89	12.61	12.55	14		
10	64QAM	1	49	12.60	12.73	12.79	12.71	12.53			
10	64QAM	25	0	12.72	12.62	12.78	12.55	12.62			
10	64QAM	25	12	12.53	12.51	12.61	12.63	12.57	13		
10	64QAM	25	25	12.61	12.53	12.60	12.48	12.46			
10	64QAM	50	0	12.48	12.44	12.69	12.54	12.38			
10	256QAM	1	0	9.61	9.60	9.58	9.45	9.41	9		
10	256QAM	1	25	9.35	9.36	9.56	9.66	9.60			
10	256QAM	1	49	9.59	9.57	9.32	9.28	9.34			
10	256QAM	25	0	8.46	8.50	8.71	8.42	8.55	9		
10	256QAM	25	12	8.50	8.49	8.61	8.68	8.60			
10	256QAM	25	25	8.60	8.42	8.49	8.37	8.31			
10	256QAM	50	0	8.38	8.38	8.68	8.34	8.35			
Channel				55265	55810	55990	56170	56175	Tune-up limit (dBm)		
Frequency (MHz)				3552.5	3607	3625	3643	3697.5			
5	QPSK	1	0	14.71	14.70	14.73	14.67	14.59	16		
5	QPSK	1	12	14.62	14.68	14.67	14.58	14.50			
5	QPSK	1	24	14.60	14.60	14.61	14.59	14.50			
5	QPSK	12	0	13.90	13.91	13.81	13.76	13.77	15		
5	QPSK	12	7	13.81	13.63	13.90	13.68	13.50			
5	QPSK	12	13	13.62	13.78	13.80	13.66	13.47			
5	QPSK	25	0	13.70	13.67	13.67	13.67	13.47	15		
5	16QAM	1	0	13.93	14.00	13.92	13.81	13.84			

5	16QAM	1	12	13.85	13.97	13.88	13.74	13.66	15
5	16QAM	1	24	13.89	13.79	13.91	13.86	13.61	
5	16QAM	12	0	12.72	12.60	12.76	12.70	12.67	
5	16QAM	12	7	12.67	12.62	12.89	12.57	12.52	14
5	16QAM	12	13	12.53	12.64	12.77	12.58	12.48	
5	16QAM	25	0	12.68	12.53	12.67	12.67	12.54	
5	64QAM	1	0	12.87	12.74	12.82	12.75	12.69	
5	64QAM	1	12	12.73	12.71	12.77	12.69	12.54	14
5	64QAM	1	24	12.68	12.64	12.75	12.71	12.61	
5	64QAM	12	0	12.64	12.70	12.70	12.58	12.47	
5	64QAM	12	7	12.49	12.50	12.52	12.57	12.64	13
5	64QAM	12	13	12.71	12.70	12.57	12.67	12.54	
5	64QAM	25	0	12.63	12.50	12.52	12.50	12.45	
5	256QAM	1	0	9.67	9.64	9.60	9.39	9.48	
5	256QAM	1	12	9.44	9.37	9.51	9.55	9.67	18
5	256QAM	1	24	9.55	9.58	9.48	9.42	9.28	
5	256QAM	12	0	8.49	8.49	8.62	8.46	8.58	
5	256QAM	12	7	8.45	8.48	8.63	8.64	8.69	10
5	256QAM	12	13	8.41	8.49	8.41	8.37	8.37	
5	256QAM	25	0	8.38	8.35	8.64	8.36	8.40	

Band 48 (3.5G Band) (dBm)_ANT 3										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Middle-Low Channel	Middle-Low Channel	Middle-High Channel	High Channel	Tune-up limit (dBm)	
Channel				55340	55630	55960	56150	56640		
Frequency (MHz)				55630	55960	56150	56640	56970		
20	QPSK	1	0	13.17	13.20	13.23	13.18	13.10	14	
20	QPSK	1	49	12.59	12.61	12.61	12.64	12.63		
20	QPSK	1	99	12.65	12.63	12.65	12.45	12.59		
20	QPSK	50	0	12.27	12.18	12.30	12.13	12.03		
20	QPSK	50	24	11.64	11.63	11.69	11.73	11.62		
20	QPSK	50	50	11.64	11.55	11.77	11.58	11.42	13	
20	QPSK	100	0	11.66	11.57	11.66	11.59	11.40		
20	16QAM	1	0	11.82	11.87	11.87	11.92	11.77		
20	16QAM	1	49	11.82	11.94	11.79	11.72	11.63		
20	16QAM	1	99	11.80	11.72	11.85	11.81	11.66		
20	16QAM	50	0	10.58	10.74	10.66	10.73	10.60	12	
20	16QAM	50	24	10.60	10.61	10.69	10.57	10.41		
20	16QAM	50	50	10.58	10.51	10.71	10.44	10.35		
20	16QAM	100	0	10.61	10.55	10.65	10.59	10.45		
20	64QAM	1	0	10.78	10.79	10.83	10.62	10.69		
20	64QAM	1	49	10.78	10.70	10.74	10.68	10.61	12	
20	64QAM	1	99	10.59	10.56	10.75	10.66	10.47		
20	64QAM	50	0	10.58	10.58	10.72	10.62	10.44		
20	64QAM	50	24	10.47	10.61	10.59	10.60	10.48		
20	64QAM	50	50	10.63	10.48	10.58	10.49	10.39		
20	64QAM	100	0	10.58	10.48	10.66	10.52	10.34	11	
20	256QAM	1	0	7.59	7.53	7.60	7.47	7.32		
20	256QAM	1	49	7.47	7.43	7.49	7.49	7.53		
20	256QAM	1	99	7.47	7.39	7.29	7.27	7.37		
20	256QAM	50	0	6.32	6.36	6.65	6.47	6.37		
20	256QAM	50	24	6.38	6.42	6.55	6.54	6.50	8	
20	256QAM	50	50	6.37	6.53	6.38	6.28	6.34		
20	256QAM	100	0	6.37	6.41	6.57	6.25	6.22		
Channel				55915	56200	56590	56169.15	56965.15	Tune-up limit (dBm)	
Frequency (MHz)				3557.5	3608	3625	3642.15	3692.65		
15	QPSK	1	0	12.63	12.69	12.71	12.70	12.65	14	
15	QPSK	1	37	12.57	12.60	12.60	12.64	12.63		
15	QPSK	1	74	12.59	12.65	12.65	12.65	12.55		
15	QPSK	36	0	11.69	11.80	11.75	11.79	11.69		
15	QPSK	36	20	11.71	11.68	11.73	11.81	11.75		
15	QPSK	36	39	11.72	11.73	11.75	11.83	11.61	13	
15	QPSK	75	0	11.62	11.58	11.70	11.64	11.74		
15	16QAM	1	0	11.98	11.80	11.94	11.94	11.96		
15	16QAM	1	37	11.92	11.75	11.79	11.85	11.81		
15	16QAM	1	74	11.80	11.70	11.83	11.96	11.69		
15	16QAM	36	0	10.56	10.73	10.73	10.83	10.64	12	
15	16QAM	36	20	10.53	10.68	10.64	10.81	10.58		
15	16QAM	36	39	10.50	10.52	10.60	10.68	10.60		
15	16QAM	75	0	10.52	10.48	10.56	10.81	10.64		
15	64QAM	1	0	10.73	10.77	10.75	10.78	10.85		
15	64QAM	1	37	10.74	10.75	10.67	10.68	10.71	12	
15	64QAM	1	74	10.70	10.65	10.57	10.73	10.63		
15	64QAM	36	0	10.50	10.56	10.59	10.72	10.69		
15	64QAM	36	20	10.56	10.61	10.44	10.65	10.55		
15	64QAM	36	39	10.50	10.46	10.66	10.73	10.58		
15	64QAM	75	0	10.47	10.52	10.47	10.55	10.43	11	
15	256QAM	1	0	7.59	7.55	7.55	7.40	7.29		
15	256QAM	1	37	7.32	7.28	7.46	7.47	7.65		
15	256QAM	1	74	7.56	7.48	7.37	7.29	7.31		
15	256QAM	36	0	6.34	6.27	6.62	6.46	6.41		
15	256QAM	36	20	6.47	6.31	6.57	6.51	6.53	8	
15	256QAM	36	39	6.38	6.55	6.37	6.32	6.27		
15	256QAM	75	0	6.38	6.38	6.49	6.18	6.30		
Channel				55290	55815	55990	56165	56690	Tune-up limit (dBm)	
Frequency (MHz)				3555	3607.5	3625	3642.5	3695		
10	QPSK	1	0	12.61	12.68	12.70	12.59	12.54	14	
10	QPSK	1	25	12.65	12.56	12.71	12.61	12.37		
10	QPSK	1	49	12.56	12.66	12.68	12.53	12.52		
10	QPSK	25	0	11.76	11.75	11.67	11.76	11.57		
10	QPSK	25	12	11.74	11.69	11.67	11.58	11.64		
10	QPSK	25	25	11.62	11.65	11.65	11.58	11.58	13	
10	QPSK	50	0	11.63	11.65	11.79	11.60	11.54		
10	16QAM	1	0	11.96	11.96	11.86	11.82	11.71		
10	16QAM	1	25	11.76	11.80	11.78	11.82	11.70		
10	16QAM	1	49	11.86	11.68	11.81	11.84	11.68		
10	16QAM	25	0	10.57	10.59	10.69	10.68	10.64	12	
10	16QAM	25	12	10.58	10.65	10.77	10.58	10.39		
10	16QAM	25	25	10.50	10.48	10.55	10.63	10.44		
10	16QAM	50	0	10.51	10.55	10.70	10.65	10.53		
10	64QAM	1	0	10.77	10.76	10.75	10.78	10.66		
10	64QAM	1	25	10.66	10.67	10.84	10.56	10.50	12	
10	64QAM	1	49	10.55	10.68	10.74	10.66	10.48		
10	64QAM	25	0	10.67	10.57	10.73	10.50	10.57		
10	64QAM	25	12	10.48	10.46	10.56	10.58	10.52		
10	64QAM	25	25	10.56	10.48	10.55	10.43	10.41		
10	64QAM	50	0	10.43	10.39	10.64	10.49	10.33	11	
10	256QAM	1	0	7.56	7.55	7.53	7.40	7.36		
10	256QAM	1	25	7.30	7.33	7.51	7.61	7.55		
10	256QAM	1	49	7.54	7.52	7.27	7.23	7.29		
10	256QAM	25	0	6.41	6.45	6.66	6.37	6.50		
10	256QAM	25	12	6.45	6.44	6.56	6.63	6.55	8	
10	256QAM	25	25	6.55	6.37	6.44	6.32	6.26		
10	256QAM	50	0	6.33	6.33	6.63	6.29	6.30		
Channel				55255	55910	55995	56170	56113	Tune-up limit (dBm)	
Frequency (MHz)				3553.5	3607	3625	3643	3697.5		
5	QPSK	1	0	12.66	12.65	12.68	12.62	12.54	14	
5	QPSK	1	12	12.57	12.63	12.62	12.53	12.45		
5	QPSK	1	24	12.55	12.55	12.56	12.54	12.45		
5	QPSK	12	0	11.85	11.86	11.76	11.71	11.72		
5	QPSK	12	7	11.76	11.58	11.85	11.63	11.45		
5	QPSK	12	13	11.57	11.73	11.75	11.61	11.42	13	
5	QPSK	25	0	11.65	11.62	11.62	11.62	11.42		
5	16QAM	1	0	11.88	11.95	11.67	11.76	11.78		
5	16QAM	1	12	11.80	11.92	11.83	11.69	11.61		
5	16QAM	1	24	11.84	11.74	11.86	11.81	11.56		
5	16QAM	12	0	10.67	10.55	10.71	10.65	10.62	12	
5	16QAM	12	7	10.62	10.57	10.64	10.52	10.47		
5	16QAM	12	13	10.48	10.59	10.72	10.53	10.43		
5	16QAM	25	0	10.63	10.48	10.62	10.62	10.49		
5	64QAM	1	0	10.62	10.69	10.77	10.70	10.64		
5	64QAM	1	12	10.68	10.66	10.72	10.64	10.49	12	
5	64QAM	1	24	10.63	10.59	10.70	10.66	10.56		
5	64QAM	12	0	10.59	10.65	10.65	10.51	10.42		
5	64QAM	12	7	10.44	10.45	10.47	10.52	10.59		
5	64QAM	12	13	10.66	10.65	10.52	10.62	10.49		
5	64QAM	25	0	10.58	10.45	10.47	10.45	10.40	11	
5	256QAM	1	0	7.62	7.59	7.55	7.34	7.43		
5	256QAM	1	12	7.39	7.32	7.46	7.50	7.62		
5	256QAM	1	24	7.50	7.53	7.43	7.37	7.23		
5	256QAM	12	0	6.44	6.44	6.57	6.41	6.53		
5	256QAM	12	7	6.40	6.43	6.58	6.59	6.64	8	
5	256QAM	12	13	6.36	6.44	6.36	6.32	6.32		
5	256QAM	25	0	6.33	6.30	6.59	6.31	6.35		

CA_48C_ANT 2											
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	13.31	14.00
55990	55891	56089	QPSK	1	0	0	0	1	0	13.36	14.00
56640	56442	56640	QPSK	1	0	0	0	1	0	13.27	14.00
55340	55340	55538	16QAM	1	0	0	0	1	0	13.25	14.00
55990	55891	56089	16QAM	1	0	0	0	1	0	13.31	14.00
56640	56442	56640	16QAM	1	0	0	0	1	0	13.23	14.00
55340	55340	55538	64QAM	1	0	0	0	1	0	13.19	14.00
55990	55891	56089	64QAM	1	0	0	0	1	0	13.20	14.00
56640	56442	56640	64QAM	1	0	0	0	1	0	13.17	14.00
55340	55340	55538	256QAM	1	0	0	0	1	0	12.84	13.50
55990	55891	56089	256QAM	1	0	0	0	1	0	12.82	13.50
56640	56442	56640	256QAM	1	0	0	0	1	0	12.89	13.50
55340	55340	55538	QPSK	50	0	0	0	1	0	11.84	12.50
55990	55891	56089	QPSK	50	0	0	0	1	0	11.91	12.50
56640	56442	56640	QPSK	50	0	0	0	1	0	11.86	12.50

CA_66B_ANT 0											
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				
132072	132022	132121	QPSK	1	0	0	0	1	0	21.09	22.00
132322	132373	132472	QPSK	1	0	0	0	1	0	21.33	22.00
132572	132523	132622	QPSK	1	0	0	0	1	0	21.18	22.00
132072	132022	132121	16QAM	1	0	0	0	1	0	20.83	21.50
132322	132373	132472	16QAM	1	0	0	0	1	0	21.07	22.00
132572	132523	132622	16QAM	1	0	0	0	1	0	20.92	21.50
132072	132022	132121	64QAM	1	0	0	0	1	0	20.67	21.50
132322	132373	132472	64QAM	1	0	0	0	1	0	20.91	21.50
132572	132523	132622	64QAM	1	0	0	0	1	0	20.76	21.50
132072	132022	132121	256QAM	1	0	0	0	1	0	20.56	21.50
132322	132373	132472	256QAM	1	0	0	0	1	0	20.80	21.50
132572	132523	132622	256QAM	1	0	0	0	1	0	20.65	21.50
132072	132022	132121	QPSK	50	0	0	0	1	0	20.17	21.00
132322	132373	132472	QPSK	50	0	0	0	1	0	20.24	21.00
132572	132523	132622	QPSK	50	0	0	0	1	0	20.18	21.00

CA_66C_ANT 0											
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				
132072	132072	132270	QPSK	1	0	0	0	1	0	21.16	22.00
132322	132323	132521	QPSK	1	0	0	0	1	0	21.20	22.00
132572	132374	132572	QPSK	1	0	0	0	1	0	21.25	22.00
132072	132072	132270	16QAM	1	0	0	0	1	0	21.04	22.00
132322	132323	132521	16QAM	1	0	0	0	1	0	21.07	22.00
132572	132374	132572	16QAM	1	0	0	0	1	0	21.14	22.00
132072	132072	132270	64QAM	1	0	0	0	1	0	20.95	22.00
132322	132323	132521	64QAM	1	0	0	0	1	0	20.98	22.00
132572	132374	132572	64QAM	1	0	0	0	1	0	21.05	22.00
132072	132072	132270	256QAM	1	0	0	0	1	0	20.87	22.00
132322	132323	132521	256QAM	1	0	0	0	1	0	20.90	22.00
132572	132374	132572	256QAM	1	0	0	0	1	0	20.97	22.00
132072	132072	132270	QPSK	50	0	0	0	1	0	20.12	21.00
132322	132323	132521	QPSK	50	0	0	0	1	0	20.16	21.00
132572	132374	132572	QPSK	50	0	0	0	1	0	20.24	21.00

n2_ANT 0							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.49	22.33	22.04	23.50
20		1	53	22.48	22.18	22.10	
20		1	104	22.39	22.09	22.03	
20		50	1	22.04	21.86	21.68	23.50
20		50	25	22.54	22.30	22.16	
20		50	50	22.00	21.73	21.60	
20	DFT-s-OFDM QPSK	100	0	22.06	21.80	21.65	23.50
20		1	1	22.45	22.55	22.07	
20		1	53	22.48	22.32	22.15	
20		1	104	22.36	22.10	22.00	22.50
20		50	1	21.31	21.55	21.14	
20		50	25	21.49	21.31	21.10	
20	DFT-s-OFDM 16QAM	50	50	21.52	21.26	21.08	23.00
20		100	0	21.56	21.33	21.12	
20		1	1	21.41	21.31	21.02	
20		1	1	19.97	19.82	19.58	21.50
20		1	1	17.76	17.63	17.36	19.50
20		1	1	20.95	20.78	20.55	22.50
20	CP-OFDM QPSK	1	1	20.43	20.28	20.03	22.00
20	CP-OFDM 16QAM	1	1	18.76	18.61	18.41	20.50
20	CP-OFDM 64QAM	1	1	15.76	15.60	15.37	17.50
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	22.49	22.34	22.13	24.50
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	22.43	22.34	22.01	24.00
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	22.48	22.32	21.94	24.50

n2_ANT 1							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	20.99	20.83	20.54	22.00
20		1	53	20.98	20.68	20.60	
20		1	104	20.89	20.59	20.53	
20		50	1	20.54	20.36	20.18	22.00
20		50	25	21.04	20.80	20.66	
20		50	50	20.50	20.23	20.10	
20	DFT-s-OFDM QPSK	100	0	20.56	20.30	20.15	22.00
20		1	1	20.95	21.05	20.97	
20		1	53	20.98	20.82	20.65	
20		1	104	20.86	20.60	20.50	21.00
20		50	1	19.81	20.05	19.84	
20		50	25	19.99	19.81	19.60	
20	DFT-s-OFDM 16QAM	50	50	20.02	19.76	19.58	21.00
20		100	0	20.06	19.83	19.62	
20		1	1	19.91	19.81	19.52	
20	DFT-s-OFDM 64QAM	1	1	18.47	18.32	18.08	19.00
20	DFT-s-OFDM 256QAM	1	1	16.26	16.13	15.86	17.00
20	CP-OFDM QPSK	1	1	19.45	19.28	19.05	20.00
20	CP-OFDM 16QAM	1	1	18.93	18.78	18.53	19.50
20	CP-OFDM 64QAM	1	1	17.26	17.11	16.91	18.00
20	CP-OFDM 256QAM	1	1	14.26	14.10	13.87	15.00
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	20.99	20.84	20.63	22.00
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	20.93	20.84	20.51	22.00
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	20.98	20.82	20.44	22.00

n5_ANT 4							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800	20.00
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	19.10	19.07	19.05	20.00
20		1	53	19.07	19.04	19.03	
20		1	104	18.93	18.90	18.88	
20		50	1	18.91	18.90	18.90	20.00
20		50	25	19.12	19.15	19.14	
20		50	50	18.81	18.77	18.77	
20		100	0	18.86	18.88	18.87	
20	DFT-s-OFDM QPSK	1	1	19.04	19.17	19.09	20.00
20		1	53	19.07	19.10	19.13	
20		1	104	18.96	18.94	19.03	
20		50	1	18.39	18.42	18.38	19.00
20		50	25	18.13	18.12	18.09	
20		50	50	18.30	18.30	18.28	
20		100	0	18.36	18.39	18.34	
20	DFT-s-OFDM 16QAM	1	1	18.37	18.33	18.42	19.00
20	DFT-s-OFDM 64QAM	1	1	16.76	16.74	16.87	17.50
20	DFT-s-OFDM 256QAM	1	1	14.59	14.57	14.71	15.50
20	CP-OFDM QPSK	1	1	17.79	17.81	17.93	19.00
20	CP-OFDM 16QAM	1	1	17.31	17.26	17.36	18.00
20	CP-OFDM 64QAM	1	1	15.43	15.40	15.51	16.00
20	CP-OFDM 256QAM	1	1	12.61	12.61	12.68	13.50
Channel				166300	167300	168300	20.00
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	19.08	19.02	19.09	20.00
Channel				165800	167300	168800	20.00
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	18.89	18.90	18.90	20.00
Channel				165300	167300	169300	20.00
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	18.93	18.93	18.95	20.00

n48 (PC3)_ANT 2									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channe	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				638000	639834	641666	643500	645332	14.00
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98	
40	DFT-s-OFDM PI/2 BPSK	1	1	12.94	12.93	12.94	12.82	12.63	14.00
40		1	53	12.89	12.78	12.85	12.69	12.53	
40		1	104	12.87	12.86	12.81	12.71	12.62	
40		50	1	12.42	12.44	12.40	12.34	12.14	14.00
40		50	25	12.94	12.84	12.81	12.74	12.62	
40		50	50	12.41	12.29	12.26	12.18	12.07	
40	DFT-s-OFDM QPSK	100	0	12.35	12.35	12.35	12.26	12.10	14.00
40		1	1	12.91	12.82	12.95	12.84	12.63	
40		1	53	12.88	12.74	12.77	12.67	12.55	
40		1	104	12.86	12.80	12.81	12.69	12.62	14.00
40		50	1	11.89	11.92	11.90	11.78	11.66	
40		50	25	12.79	12.80	12.81	12.73	12.61	
40	DFT-s-OFDM 16QAM	50	50	11.89	11.77	11.72	11.69	11.60	13.00
40		100	0	11.89	11.85	11.80	11.77	11.63	
40	DFT-s-OFDM 64QAM	1	1	11.81	11.74	11.88	11.76	11.59	11.00
40	DFT-s-OFDM 256QAM	1	1	10.14	10.08	10.22	10.15	9.91	20.00
40	CP-OFDM QPSK	1	1	8.30	8.24	8.30	8.22	8.04	23.50
40	CP-OFDM 16QAM	1	1	11.51	11.47	11.46	11.30	11.15	23.00
40	CP-OFDM 64QAM	1	1	10.95	10.96	10.96	10.77	10.64	21.00
40	CP-OFDM 256QAM	1	1	9.48	9.01	9.36	9.22	9.04	18.00
Channel				637668	639668	641666	643666	645666	14.00
Frequency (MHz)				3565.02	3595.02	3624.99	3654.99	3684.99	
30	DFT-s-OFDM QPSK	1	1	12.67	12.94	12.73	12.29	12.75	14.00
Channel				637334	639500	641666	643832	646000	14.00
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690	
20	DFT-s-OFDM QPSK	1	1	12.91	12.85	12.82	12.59	12.57	14.00
Channel				637000	639334	641666	644000	646332	14.00
Frequency (MHz)				3555	3590.01	3624.99	3660	3694.98	
10	DFT-s-OFDM QPSK	1	1	12.27	12.51	12.36	12.55	12.29	14.00

n66_ANT 0							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM PI/2 BPSK	1	1	21.72	21.75	21.75	23.00
30		1	80	21.64	21.74	21.80	
30		1	158	21.70	21.72	21.74	
30		80	1	21.31	21.29	21.33	23.00
30		80	40	21.76	21.79	21.81	
30		80	80	21.30	21.38	21.38	
30		160	0	21.24	21.29	21.38	
30	DFT-s-OFDM QPSK	1	1	21.93	21.99	21.97	23.00
30		1	80	21.81	21.80	21.74	
30		1	158	21.93	21.95	21.82	
30		80	1	21.74	21.90	21.87	23.00
30		80	40	20.78	20.75	20.79	
30		80	80	20.85	20.92	20.84	
30		160	0	20.77	20.84	20.84	
30	DFT-s-OFDM 16QAM	1	1	20.92	20.88	20.94	22.50
30	DFT-s-OFDM 64QAM	1	1	19.47	19.41	19.49	21.50
30	DFT-s-OFDM 256QAM	1	1	16.96	15.52	15.59	18.50
30	CP-OFDM QPSK	1	1	20.31	20.31	20.44	22.00
30	CP-OFDM 16QAM	1	1	19.81	19.81	19.84	21.50
30	CP-OFDM 64QAM	1	1	18.33	18.35	18.47	20.00
30	CP-OFDM 256QAM	1	1	14.98	15.32	15.35	17.00
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	22.95	22.88	22.69	23.50
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	22.89	22.80	22.68	23.50
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	22.85	22.90	22.68	23.50
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	22.90	22.63	22.83	24.00

n66_ANT 1							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM PI/2 BPSK	1	1	21.22	21.25	21.25	22.00
30		1	80	21.14	21.24	21.30	
30		1	158	21.20	21.22	21.24	
30		80	1	20.81	20.79	20.83	22.50
30		80	40	21.26	21.29	21.31	
30		80	80	20.80	20.88	20.88	
30		160	0	20.74	20.79	20.88	
30	DFT-s-OFDM QPSK	1	1	21.43	21.49	21.47	22.50
30		1	80	21.31	21.30	21.24	
30		1	158	21.43	21.45	21.32	
30		80	1	21.24	21.40	21.37	22.50
30		80	40	20.28	20.25	20.29	
30		80	80	20.35	20.42	20.34	
30		160	0	20.27	20.34	20.34	
30	DFT-s-OFDM 16QAM	1	1	20.42	20.38	20.44	21.00
30	DFT-s-OFDM 64QAM	1	1	18.97	18.91	18.99	20.00
30	DFT-s-OFDM 256QAM	1	1	16.46	15.02	15.09	17.00
30	CP-OFDM QPSK	1	1	19.81	19.81	19.94	21.00
30	CP-OFDM 16QAM	1	1	19.31	19.31	19.34	20.00
30	CP-OFDM 64QAM	1	1	17.83	17.85	17.97	19.00
30	CP-OFDM 256QAM	1	1	14.48	14.82	14.85	16.00
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	21.43	21.36	21.17	22.00
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	21.37	21.28	21.16	22.00
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	21.33	21.38	21.16	22.00
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	21.38	21.11	21.31	22.00

n77(3450-3550MHz)(PC2)_ANT 2									
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			11.00			12.50
100		1	136			11.43			
100		1	271			11.75			
100		135	1			10.76			12.00
100		135	67			11.40			
100		135	136			11.13			
100	DFT-s-OFDM QPSK	270	0			10.95			12.50
100		1	1			11.78			
100		1	136			11.38			
100		1	271			11.73			12.00
100		135	1			11.47			
100		135	67			11.45			
100	DFT-s-OFDM 16QAM	1	1			10.09			11.00
100	DFT-s-OFDM 64QAM	1	1			8.44			9.00
100	DFT-s-OFDM 256QAM	1	1			6.35			7.00
100	CP-OFDM QPSK	1	1			9.41			10.00
100	CP-OFDM 16QAM	1	1			8.99			10.00
100	CP-OFDM 64QAM	1	1			7.57			8.50
100	CP-OFDM 256QAM	1	1			4.42			5.50
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	10.97	10.95	11.04	11.12	11.18	27.00
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	11.13	11.24	11.26	11.39	11.55	27.50
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	11.50	11.39	11.64	11.73	11.57	28.00
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	11.31	11.60	11.56	11.57	11.69	28.00
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	11.30	11.48	11.54	11.75	11.76	27.50

n77(3450-3550MHz)(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						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			18.02			19.50
100		1	136			18.45			
100		1	271			18.77			
100		135	1			17.78			19.00
100		135	67			18.42			
100		135	136			18.15			
100	DFT-s-OFDM QPSK	270	0			17.97			19.50
100		1	1			18.80			
100		1	136			18.40			
100		1	271			18.75			19.00
100		135	1			18.49			
100		135	67			18.47			
100		135	136			17.67			
100		270	0			17.41			
100	DFT-s-OFDM 16QAM	1	1			17.11			18.00
100	DFT-s-OFDM 64QAM	1	1			15.46			16.00
100	DFT-s-OFDM 256QAM	1	1			13.37			14.00
100	CP-OFDM QPSK	1	1			16.43			17.00
100	CP-OFDM 16QAM	1	1			16.01			17.00
100	CP-OFDM 64QAM	1	1			14.59			15.50
100	CP-OFDM 256QAM	1	1			11.44			12.00
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	17.99	17.97	18.06	18.14	18.20	19.00
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	18.15	18.26	18.28	18.41	18.57	19.50
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	18.52	18.41	18.66	18.75	18.59	20.00
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	18.33	18.62	18.58	18.59	18.71	20.00
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	18.32	18.50	18.56	18.77	18.78	19.50

n77(3450-3550MHz)(PC3)_ANT 2									
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			10.49			12.50
100		1	136			10.92			
100		1	271			11.38			
100		135	1			10.75			12.50
100		135	67			10.94			
100		135	136			11.13			
100	DFT-s-OFDM QPSK	270	0			10.91			12.50
100		1	1			11.57			
100		1	136			10.84			
100		1	271			11.29			12.00
100		135	1			10.92			
100		135	67			10.88			
100	DFT-s-OFDM 16QAM	135	136			10.80			11.50
100		270	0			10.86			
100	DFT-s-OFDM 64QAM	1	1			10.58			11.50
100	DFT-s-OFDM 256QAM	1	1			10.48			11.50
100	CP-OFDM QPSK	1	1			8.82			9.50
100	CP-OFDM 16QAM	1	1			10.44			11.00
100	CP-OFDM 64QAM	1	1			10.49			11.00
100	CP-OFDM 256QAM	1	1			10.00			11.00
100						6.88			8.00
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	10.36	10.29	10.47	10.62	10.71	11.50
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	11.03	10.77	10.87	10.86	11.05	11.50
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	10.90	11.01	11.21	11.38	11.32	12.00
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	10.85	11.10	11.31	11.33	11.27	12.00
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	10.76	10.89	11.16	11.32	11.45	12.50

n77(3450-3550MHz)(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						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			16.51			19.50
100		1	136			16.94			
100		1	271			17.40			
100		135	1			16.77			19.00
100		135	67			16.96			
100		135	136			17.15			
100	DFT-s-OFDM QPSK	270	0			16.93			19.50
100		1	1			18.80			
100		1	136			18.40			
100		1	271			18.75			19.00
100		135	1			18.49			
100		135	67			18.47			
100	DFT-s-OFDM 16QAM	135	136			17.67			19.00
100		270	0			17.11			
100		1	1			16.88			
100	DFT-s-OFDM 64QAM	1	1			16.60			16.00
100	DFT-s-OFDM 256QAM	1	1			16.50			14.00
100	CP-OFDM QPSK	1	1			14.84			17.00
100	CP-OFDM 16QAM	1	1			16.46			17.00
100	CP-OFDM 64QAM	1	1			14.59			15.50
100	CP-OFDM 256QAM	1	1			11.44			12.00
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	17.99	17.97	18.06	18.14	18.20	19.00
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	18.15	18.26	18.28	18.41	18.57	19.50
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	18.52	18.41	18.66	18.75	18.59	20.00
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	18.33	18.62	18.58	18.59	18.71	20.00
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	18.32	18.50	18.56	18.77	18.78	19.50

n77(3700-3980MHz)(PC2)_ANT 2									
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	9.96	9.64	9.95	9.95	10.09	11.50
100		1	136	10.18	10.05	10.12	10.03	10.28	
100		1	271	10.08	10.25	10.05	10.43	10.27	
100		135	1	9.63	9.40	9.65	9.62	9.83	11.00
100		135	67	10.26	10.16	10.14	10.15	10.38	
100		135	136	9.67	9.69	9.64	9.77	9.89	
100	DFT-s-OFDM QPSK	270	0	9.68	9.59	9.70	9.68	9.83	
100		1	1	9.95	9.60	10.76	9.98	10.17	11.50
100		1	136	10.18	10.09	10.13	10.05	10.43	
100		1	271	10.08	10.27	10.19	10.55	10.29	
100		135	1	9.62	9.49	9.61	9.53	9.58	10.50
100		135	67	9.02	9.09	9.15	9.14	9.09	
100		135	136	9.15	9.19	9.16	9.23	9.35	
100		270	0	9.17	9.09	9.17	9.17	9.34	
100	DFT-s-OFDM 16QAM	1	1	8.85	8.53	8.86	8.88	9.00	26.50
100	DFT-s-OFDM 64QAM	1	1	7.29	6.94	7.30	7.21	7.22	24.50
100	DFT-s-OFDM 256QAM	1	1	5.33	5.03	5.35	5.41	5.42	22.50
100	CP-OFDM QPSK	1	1	8.41	8.11	8.51	8.47	8.58	26.00
100	CP-OFDM 16QAM	1	1	7.96	7.65	8.01	8.06	8.05	25.50
100	CP-OFDM 64QAM	1	1	6.37	6.04	6.45	6.47	6.61	24.00
100	CP-OFDM 256QAM	1	1	3.42	3.12	3.42	3.46	3.54	21.00
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	9.89	9.71	9.96	9.99	10.21	27.50
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	10.09	9.78	10.17	10.22	10.32	27.50
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	10.62	10.49	10.55	10.47	10.42	28.00
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	10.35	10.27	10.48	10.58	10.69	28.00
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	10.33	10.33	10.47	10.54	10.63	28.00

n77(3700-3980MHz)(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				650000	653000	656000	659000	662000	18.00
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	16.46	16.14	16.45	16.45	16.59	18.00
100		1	136	16.68	16.55	16.62	16.53	16.78	
100		1	271	16.58	16.75	16.55	16.93	16.77	
100		135	1	16.13	15.90	16.15	16.12	16.33	
100		135	67	16.76	16.66	16.64	16.65	16.88	
100		135	136	16.17	16.19	16.14	16.27	16.39	
100	DFT-s-OFDM QPSK	270	0	16.18	16.09	16.20	16.18	16.33	17.50
100		1	1	17.02	17.13	17.20	17.18	16.97	
100		1	136	16.68	16.59	16.63	16.55	16.93	
100		1	271	16.58	16.77	16.69	17.05	16.79	
100		135	1	16.52	16.54	16.61	16.58	16.55	
100		135	67	16.53	16.39	16.45	16.44	16.69	
100	DFT-s-OFDM 16QAM	135	136	15.45	15.49	15.46	15.53	15.65	18.00
100		270	0	16.17	16.09	16.47	16.17	16.34	
100		1	1	15.85	15.53	15.86	15.88	16.00	
100		1	1	14.29	13.94	14.30	14.21	14.22	
100	DFT-s-OFDM 64QAM	1	1	12.33	12.03	12.35	12.41	12.42	13.00
100	DFT-s-OFDM 256QAM	1	1	15.41	15.11	15.51	15.47	15.58	16.50
100	CP-OFDM QPSK	1	1	14.96	14.65	15.01	15.06	15.05	15.50
100	CP-OFDM 16QAM	1	1	13.37	13.04	13.45	13.47	13.61	14.00
100	CP-OFDM 64QAM	1	1	10.42	10.12	10.42	10.46	10.54	11.00
100	CP-OFDM 256QAM	1	1	649334	652668	656000	659332	662666	Tune-up limit (dBm)
Channel				3740.01	3790.02	3840	3889.98	3939.99	17.50
Frequency (MHz)				16.39	16.21	16.46	16.49	16.71	
80	DFT-s-OFDM QPSK	1	1	648668	652334	656000	659666	663332	Tune-up limit (dBm)
Channel				3730.02	3785.01	3840	3894.99	3949.98	17.50
Frequency (MHz)				16.59	16.28	16.67	16.72	16.82	
60	DFT-s-OFDM QPSK	1	1	648000	652000	656000	660000	664000	Tune-up limit (dBm)
Channel				3720	3780	3840	3900	3960	18.00
Frequency (MHz)				17.12	16.99	17.05	16.97	16.92	
40	DFT-s-OFDM QPSK	1	1	647668	651834	656000	660166	664332	Tune-up limit (dBm)
Channel				3715.02	3777.51	3840	3902.49	3964.98	18.00
Frequency (MHz)				16.85	16.77	16.98	17.08	17.19	
30	DFT-s-OFDM QPSK	1	1	647334	651668	656000	660332	664666	Tune-up limit (dBm)
Channel				3710.01	3775.02	3840	3904.98	3969.99	18.00
Frequency (MHz)				16.83	16.83	16.97	17.04	17.13	
20	DFT-s-OFDM QPSK	1	1						

n77(3700-3980MHz)(PC3)_ANT 2									
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	11.50
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	10.06	9.68	10.00	10.00	10.07	11.50
100		1	136	10.22	10.11	10.22	10.13	10.37	
100		1	271	10.03	10.31	10.11	10.51	10.36	
100		135	1	10.19	9.94	10.14	10.11	10.30	
100		135	67	10.26	10.05	10.13	10.12	10.37	
100		135	136	10.15	10.14	10.18	10.23	10.45	
100	DFT-s-OFDM QPSK	270	0	10.17	10.03	10.19	10.18	10.35	11.50
100		1	1	10.02	10.52	10.70	10.33	10.42	
100		1	136	10.23	10.14	10.19	10.13	10.37	
100		1	271	10.04	10.31	10.15	10.51	10.34	
100		135	1	10.12	10.19	10.36	10.07	10.27	
100		135	67	10.22	10.05	10.14	10.13	10.18	
100	DFT-s-OFDM 16QAM	135	136	10.15	10.11	10.14	10.23	10.25	11.00
100		270	0	10.16	10.01	10.18	10.16	10.29	
100		1	1	10.12	9.73	10.16	10.10	10.13	
100		1	1	10.10	9.71	10.02	10.02	10.10	
100	DFT-s-OFDM 64QAM	1	1	8.42	8.01	8.36	8.35	8.45	9.50
100	DFT-s-OFDM 256QAM	1	1	10.00	9.66	10.02	9.99	10.09	11.00
100	CP-OFDM QPSK	1	1	10.04	9.72	10.02	9.96	10.05	11.00
100	CP-OFDM 16QAM	1	1	9.68	9.29	9.61	9.56	9.61	10.50
100	CP-OFDM 64QAM	1	1	6.52	6.15	6.44	6.45	6.51	7.50
100	CP-OFDM 256QAM	1	1	649334	652668	656000	659332	662666	Tune-up limit (dBm)
Channel				3740.01	3790.02	3840	3889.98	3939.99	11.50
Frequency (MHz)				10.08	9.89	10.03	10.08	10.27	
80	DFT-s-OFDM QPSK	1	1	648668	652334	656000	659666	663332	Tune-up limit (dBm)
Channel				3730.02	3785.01	3840	3894.99	3949.98	11.50
Frequency (MHz)				10.19	9.97	10.18	10.37	10.51	
60	DFT-s-OFDM QPSK	1	1	648000	652000	656000	660000	664000	Tune-up limit (dBm)
Channel				3720	3780	3840	3900	3960	11.50
Frequency (MHz)				10.69	10.54	10.58	10.63	10.56	
40	DFT-s-OFDM QPSK	1	1	647668	651834	656000	660166	664332	Tune-up limit (dBm)
Channel				3715.02	3777.51	3840	3902.49	3964.98	11.50
Frequency (MHz)				10.41	10.29	10.52	10.59	10.65	
30	DFT-s-OFDM QPSK	1	1	647334	651668	656000	660332	664666	Tune-up limit (dBm)
Channel				3710.01	3775.02	3840	3904.98	3969.99	11.50
Frequency (MHz)				10.38	10.27	10.43	10.54	10.60	
20	DFT-s-OFDM QPSK	1	1						

n77(3700-3980MHz)(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				650000	653000	656000	659000	662000	18.00
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	16.56	16.18	16.50	16.50	16.57	18.00
100		1	136	16.72	16.61	16.72	16.63	16.87	
100		1	271	16.53	16.81	16.61	17.01	16.86	
100		135	1	16.69	16.44	16.64	16.61	16.80	
100		135	67	16.76	16.55	16.63	16.62	16.87	
100		135	136	16.65	16.64	16.68	16.73	16.95	
100	DFT-s-OFDM QPSK	270	0	16.67	16.53	16.69	16.68	16.85	17.50
100		1	1	17.02	17.13	17.20	17.05	17.02	
100		1	136	16.73	16.64	16.69	16.63	16.87	
100		1	271	16.54	16.81	16.65	17.01	16.84	
100		135	1	16.62	16.41	16.66	16.57	16.77	
100		135	67	16.72	16.55	16.64	16.63	16.81	
100	DFT-s-OFDM QPSK	135	136	16.65	16.61	16.64	16.73	16.85	17.50
100		270	0	16.66	16.51	16.80	16.66	16.79	
100	DFT-s-OFDM 16QAM	1	1	16.62	16.23	16.66	16.60	16.63	17.50
100	DFT-s-OFDM 64QAM	1	1	16.60	16.21	16.52	16.52	16.60	17.50
100	DFT-s-OFDM 256QAM	1	1	14.92	14.51	14.86	14.85	14.95	15.50
100	CP-OFDM QPSK	1	1	16.50	16.16	16.52	16.49	16.59	17.50
100	CP-OFDM 16QAM	1	1	16.54	16.22	16.52	16.46	16.55	17.50
100	CP-OFDM 64QAM	1	1	16.18	15.79	16.11	16.06	16.11	17.00
100	CP-OFDM 256QAM	1	1	13.02	12.65	12.94	12.95	13.01	14.00
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	16.58	16.39	16.53	16.58	16.77	17.50
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	16.69	16.47	16.68	16.87	17.01	18.00
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	17.19	17.04	17.08	17.13	17.06	18.00
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	16.91	16.79	17.02	17.09	17.15	18.00
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	16.88	16.77	16.93	17.04	17.10	18.00

n78(3450-3550MHz)(PC2)_ANT 2									
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			10.02			12.00
100		1	136			10.57			
100		1	271			10.80			
100		135	1			9.87			11.50
100		135	67			10.66			
100		135	136			10.20			
100	DFT-s-OFDM QPSK	270	0			10.07			12.00
100		1	1			11.06			
100		1	136			10.58			
100		1	271			10.83			11.50
100		135	1			10.66			
100		135	67			10.62			
100	DFT-s-OFDM 16QAM	135	136			9.72			11.50
100		270	0			9.55			
100		1	1			9.06			
100	DFT-s-OFDM 64QAM	1	1			7.55			8.50
100	DFT-s-OFDM 256QAM	1	1			5.54			6.50
100	CP-OFDM QPSK	1	1			8.60			9.50
100	CP-OFDM 16QAM	1	1			8.03			9.00
100	CP-OFDM 64QAM	1	1			6.64			7.50
100	CP-OFDM 256QAM	1	1			3.53			4.50
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	10.02	10.06	10.15	10.14	10.14	11.00
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	10.06	10.06	10.17	10.30	10.26	11.00
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	10.11	10.25	10.29	10.39	10.54	11.00
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	10.26	10.31	10.49	10.62	10.64	11.50
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	10.67	10.30	10.46	10.67	10.64	11.50
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	10.66	10.69	10.87	10.99	11.05	11.50
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	10.52	10.77	10.85	11.02	11.09	12.00
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	10.56	10.66	10.80	11.00	11.05	12.00

n78(3450-3550MHz)(PC3)_ANT 2									
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			10.04			11.50
100		1	136			10.62			
100		1	271			10.85			
100		135	1			10.33			11.50
100		135	67			10.58			
100		135	136			10.65			
100	DFT-s-OFDM QPSK	270	0			10.55			12.00
100		1	1			11.12			
100		1	136			10.52			
100		1	271			10.78			11.50
100		135	1			10.29			
100		135	67			10.61			
100		135	136			10.50			
100		270	0			10.59			
100	DFT-s-OFDM 16QAM	1	1			10.06			11.00
100	DFT-s-OFDM 64QAM	1	1			10.04			11.00
100	DFT-s-OFDM 256QAM	1	1			8.44			9.50
100	CP-OFDM QPSK	1	1			9.99			11.00
100	CP-OFDM 16QAM	1	1			10.06			11.00
100	CP-OFDM 64QAM	1	1			9.65			10.50
100	CP-OFDM 256QAM	1	1			6.48			7.50
Channel				633000	633167	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.51	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	10.07	10.02	10.05	10.10	10.19	11.00
Channel				632668	633001	633334	633667	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3495.01	3500.01	3505.01	3510	
80	DFT-s-OFDM QPSK	1	1	10.13	9.91	10.16	10.27	10.38	11.00
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	10.09	10.21	10.17	10.37	10.53	11.50
Channel				632000	632667	633334	634000	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3490.01	3500.01	3510	3519.99	
60	DFT-s-OFDM QPSK	1	1	10.25	10.27	10.43	10.59	10.66	11.50
Channel				631668	632501	633334	634167	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.51	3500.01	3512.51	3525	
50	DFT-s-OFDM QPSK	1	1	10.09	10.19	10.49	10.62	10.66	11.50
Channel				631334	636672	633334	634333	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3485.01	3500.01	3514.99	3529.98	
40	DFT-s-OFDM QPSK	1	1	10.53	10.59	10.83	10.92	11.09	11.50
Channel				631000	632167	633334	634500	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3482.51	3500.01	3517.5	3534.99	
30	DFT-s-OFDM QPSK	1	1	10.33	10.68	10.93	10.90	11.06	11.50
Channel				630668	632001	633334	634667	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480.01	3500.01	3520.01	3540	
20	DFT-s-OFDM QPSK	1	1	10.51	10.64	10.82	10.93	11.08	11.50

n78(3700-3800MHz)(PC2)_ANT 2									
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			9.96			11.00
100		1	136			10.18			
100		1	271			10.06			
100		135	1			9.64			11.00
100		135	67			10.20			
100		135	136			9.68			
100	DFT-s-OFDM QPSK	270	0			9.68			12.00
100		1	1			10.90			
100		1	136			10.21			
100		1	271			10.07			11.00
100		135	1			10.10			
100		135	67			10.21			
100		135	136			9.18			
100		270	0			9.17			
100	DFT-s-OFDM 16QAM	1	1			8.77			10.00
100	DFT-s-OFDM 64QAM	1	1			7.15			8.00
100	DFT-s-OFDM 256QAM	1	1			5.27			6.00
100	CP-OFDM QPSK	1	1			8.52			9.50
100	CP-OFDM 16QAM	1	1			7.90			9.00
100	CP-OFDM 64QAM	1	1			6.33			7.00
100	CP-OFDM 256QAM	1	1			3.34			4.00
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	9.87	9.82	9.94	9.96	10.08	11.00
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	9.88	10.07	9.96	9.87	10.06	11.00
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	9.94	10.00	10.10	10.02	9.99	11.00
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	10.02	10.03	10.10	10.11	10.27	11.00
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	10.03	10.03	10.13	10.30	10.41	11.00
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	10.51	10.46	10.63	10.61	10.76	11.50
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	10.30	10.49	10.51	10.63	10.75	11.50
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	10.32	10.47	10.49	10.62	10.60	11.50

n78(3700-3800MHz)(PC3)_ANT 2									
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			9.94			11
100		1	136			10.18			
100		1	271			10.05			
100		135	1			10.13			11
100		135	67			10.18			
100		135	136			10.12			
100	DFT-s-OFDM QPSK	270	0			10.15			12
100		1	1			10.90			
100		1	136			10.18			
100		1	271			9.97			11
100		135	1			10.19			
100		135	67			10.10			
100		135	136			10.09			
100		270	0			10.15			
100	DFT-s-OFDM 16QAM	1	1			10.05			11.00
100	DFT-s-OFDM 64QAM	1	1			9.95			11.00
100	DFT-s-OFDM 256QAM	1	1			8.26			9.00
100	CP-OFDM QPSK	1	1			9.91			11.00
100	CP-OFDM 16QAM	1	1			9.91			11.00
100	CP-OFDM 64QAM	1	1			9.48			10.50
100	CP-OFDM 256QAM	1	1			6.41			7.00
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	9.89	9.93	10.00	10.04	10.05	11.00
Channel				649334	649667	650000	650333	650666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3745.01	3750	3754.99	3759.99	
80	DFT-s-OFDM QPSK	1	1	9.95	10.03	9.94	9.82	10.09	11.00
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	9.87	10.10	9.92	10.01	10.04	11.00
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	10.10	10.02	10.13	10.08	10.25	11.00
Channel				648334	649167	650000	650833	651666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3737.51	3750	3762.49	3774.99	
50	DFT-s-OFDM QPSK	1	1	10.06	10.05	10.13	10.30	10.45	11.00
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	10.51	10.51	10.65	10.62	10.88	11.50
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	10.29	10.50	10.55	10.66	10.76	11.50
Channel				647334	648667	650000	651333	652666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3730.01	3750	3769.99	3789.99	
20	DFT-s-OFDM QPSK	1	1	10.30	10.38	10.34	10.59	10.59	11.50