



REPORT No.: SZ24080224S01

Annex E Conducted Power

Note:

Conducted power unit: dBm.

The target power was recorded in the manufacture document.

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	17.39	17.34	17.41	18.5
20	QPSK	1	49	17.38	17.40	17.33	
20	QPSK	1	99	17.30	17.37	17.34	
20	QPSK	50	0	16.44	16.56	16.59	17.5
20	QPSK	50	24	16.48	16.42	16.40	
20	QPSK	50	50	16.45	16.48	16.41	
20	QPSK	100	0	16.48	16.49	16.38	17.5
20	16QAM	1	0	16.75	16.66	16.49	
20	16QAM	1	49	16.63	16.72	16.67	
20	16QAM	1	99	16.73	16.50	16.77	16.5
20	16QAM	50	0	15.44	15.39	15.43	
20	16QAM	50	24	15.65	15.50	15.49	
20	16QAM	50	50	15.52	15.55	15.57	16.5
20	16QAM	100	0	15.50	15.52	15.48	
20	64QAM	1	0	15.60	15.74	15.69	
20	64QAM	1	49	15.63	15.67	15.57	15.5
20	64QAM	1	99	15.73	15.61	15.43	
20	64QAM	50	0	15.58	15.47	15.47	
20	64QAM	50	24	15.41	15.42	15.49	13.5
20	64QAM	50	50	15.54	15.47	15.52	
20	64QAM	100	0	15.46	15.49	15.48	
20	256QAM	1	0	11.61	11.76	11.71	13.5
20	256QAM	1	49	11.64	11.69	11.59	
20	256QAM	1	99	11.74	11.63	11.45	
20	256QAM	50	0	11.59	11.49	11.49	13.5
20	256QAM	50	24	11.42	11.44	11.51	
20	256QAM	50	50	11.55	11.49	11.54	
20	256QAM	100	0	11.47	11.51	11.50	
Channel				20925	21100	21375	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	17.32	17.34	17.27	18.5
15	QPSK	1	37	17.31	17.33	17.26	
15	QPSK	1	74	17.23	17.30	17.27	
15	QPSK	36	0	16.37	16.49	16.38	17.5
15	QPSK	36	20	16.41	16.35	16.33	
15	QPSK	36	39	16.38	16.41	16.34	
15	QPSK	75	0	16.41	16.42	16.31	17.5
15	16QAM	1	0	16.68	16.59	16.42	
15	16QAM	1	37	16.56	16.65	16.60	
15	16QAM	1	74	16.66	16.43	16.70	16.5
15	16QAM	36	0	15.37	15.32	15.36	
15	16QAM	36	20	15.58	15.43	15.42	
15	16QAM	36	39	15.45	15.48	15.50	16.5
15	16QAM	75	0	15.43	15.45	15.41	
15	64QAM	1	0	15.53	15.67	15.62	
15	64QAM	1	37	15.56	15.60	15.50	15.5
15	64QAM	1	74	15.66	15.54	15.36	
15	64QAM	36	0	15.51	15.40	15.40	
15	64QAM	36	20	15.34	15.35	15.42	13.5
15	64QAM	36	39	15.47	15.40	15.45	
15	64QAM	75	0	15.39	15.42	15.41	
15	256QAM	1	0	11.54	11.69	11.64	13.5
15	256QAM	1	37	11.57	11.62	11.52	
15	256QAM	1	74	11.67	11.56	11.38	
15	256QAM	36	0	11.52	11.42	11.42	13.5
15	256QAM	36	20	11.35	11.37	11.44	
15	256QAM	36	39	11.48	11.42	11.47	
15	256QAM	75	0	11.40	11.44	11.43	
Channel				20800	21100	21400	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	17.24	17.26	17.19	18.5
10	QPSK	1	25	17.23	17.25	17.18	
10	QPSK	1	49	17.15	17.22	17.19	
10	QPSK	25	0	16.29	16.41	16.30	17.5
10	QPSK	25	12	16.33	16.27	16.25	
10	QPSK	25	25	16.30	16.33	16.26	
10	QPSK	50	0	16.33	16.34	16.23	17.5
10	16QAM	1	0	16.60	16.51	16.34	
10	16QAM	1	25	16.48	16.57	16.52	
10	16QAM	1	49	16.58	16.35	16.62	16.5
10	16QAM	25	0	15.29	15.24	15.28	
10	16QAM	25	12	15.50	15.35	15.34	
10	16QAM	25	25	15.37	15.40	15.42	16.5
10	16QAM	50	0	15.35	15.37	15.33	
10	64QAM	1	0	15.45	15.59	15.54	
10	64QAM	1	25	15.48	15.52	15.42	15.5
10	64QAM	1	49	15.58	15.46	15.28	
10	64QAM	25	0	15.43	15.32	15.32	
10	64QAM	25	12	15.26	15.27	15.34	13.5
10	64QAM	25	25	15.39	15.32	15.37	
10	64QAM	50	0	15.31	15.34	15.33	
10	256QAM	1	0	11.46	11.61	11.56	13.5
10	256QAM	1	25	11.49	11.54	11.44	

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	22.49	22.48	22.50	23.5
10	QPSK	1	25	22.43	22.33	22.48	
10	QPSK	1	49	22.28	22.31	22.42	
10	QPSK	25	0	21.90	21.89	21.95	22.5
10	QPSK	25	12	21.76	21.80	21.69	
10	QPSK	25	25	21.45	21.68	21.71	
10	QPSK	50	0	21.90	21.93	21.87	22.5
10	16QAM	1	0	22.25	21.97	21.99	
10	16QAM	1	25	22.06	22.06	22.20	
10	16QAM	1	49	22.16	22.04	21.85	21.5
10	16QAM	25	0	20.90	20.89	20.93	
10	16QAM	25	12	20.88	20.75	20.90	
10	16QAM	25	25	20.80	20.73	20.80	21.5
10	16QAM	50	0	20.87	20.88	20.91	
10	64QAM	1	0	21.11	21.04	21.25	
10	64QAM	1	25	21.07	21.00	21.30	20.5
10	64QAM	1	49	21.21	21.14	21.22	
10	64QAM	25	0	20.02	20.15	20.20	
10	64QAM	25	12	19.89	19.86	19.87	18.5
10	64QAM	25	25	19.80	19.81	19.90	
10	64QAM	50	0	20.07	20.06	20.19	
10	256QAM	1	0	17.92	18.08	18.12	18.5
10	256QAM	1	25	18.29	18.39	18.37	
10	256QAM	1	49	18.14	18.09	18.24	
10	256QAM	25	0	18.06	18.12	18.06	18.5
10	256QAM	25	12	18.11	18.05	18.11	
10	256QAM	25	25	18.09	18.06	18.15	
10	256QAM	50	0	18.16	17.94	18.06	
Channel				23035	23095	23155	Tune-up limit (dBm)
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	22.31	22.13	22.42	23.5
5	QPSK	1	12	22.49	22.32	22.50	
5	QPSK	1	24	22.26	22.26	22.41	
5	QPSK	12	0	21.86	21.79	21.82	22.5
5	QPSK	12	7	21.80	21.81	21.76	
5	QPSK	12	13	21.77	21.76	21.73	
5	QPSK	25	0	21.81	21.85	21.77	22.5
5	16QAM	1	0	22.04	22.01	22.30	
5	16QAM	1	12	22.14	22.09	22.17	
5	16QAM	1	24	22.11	22.14	22.01	21.5
5	16QAM	12	0	20.89	20.90	20.95	
5	16QAM	12	7	20.88	20.85	20.89	
5	16QAM	12	13	20.79	20.81	20.88	21.5
5	16QAM	25	0	20.82	20.85	20.81	
5	64QAM	1	0	21.10	21.16	21.35	
5	64QAM	1	12	21.23	21.17	21.01	20.5
5	64QAM	1	24	21.02	21.45	20.87	
5	64QAM	12	0	20.11	20.10	20.15	
5	64QAM	12	7	19.89	19.82	20.00	18.5
5	64QAM	12	13	19.82	19.80	19.89	
5	64QAM	25	0	20.04	19.98	20.14	
5	256QAM	1	0	17.69	18.20	18.09	18.5
5	256QAM	1	12	18.27	17.23	18.36	
5	256QAM	1	24	17.89	17.94	18.17	
5	256QAM	12	0	17.95	18.03	18.06	18.5
5	256QAM	12	7	17.90	17.95	17.99	
5	256QAM	12	13	17.85	17.88	17.90	
5	256QAM	25	0	18.01	18.02	18.02	
Channel				23025	23095	23165	Tune-up limit (dBm)
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	22.35	22.26	22.30	23.5
3	QPSK	1	8	22.32	22.39	22.49	
3	QPSK	1	14	22.24	22.33	22.25	
3	QPSK	8	0	21.91	21.84	21.78	22.5
3	QPSK	8	4	21.85	21.81	21.50	
3	QPSK	8	7	21.70	21.77	21.33	
3	QPSK	15	0	21.23	21.22	21.29	

10	256QAM	1	49	11.59	11.48	11.30	13.5
10	256QAM	25	0	11.44	11.34	11.34	
10	256QAM	25	12	11.27	11.29	11.36	
10	256QAM	25	25	11.40	11.34	11.39	
10	256QAM	50	0	11.32	11.36	11.35	
Channel				20775	21100	21425	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	17.19	17.21	17.14	18.5
5	QPSK	1	12	17.18	17.20	17.13	
5	QPSK	1	24	17.10	17.17	17.14	
5	QPSK	12	0	16.24	16.36	16.25	17.5
5	QPSK	12	7	16.28	16.22	16.20	
5	QPSK	12	13	16.25	16.28	16.21	
5	QPSK	25	0	16.28	16.29	16.18	17.5
5	16QAM	1	0	16.55	16.46	16.29	
5	16QAM	1	12	16.43	16.52	16.47	
5	16QAM	1	24	16.53	16.30	16.57	16.5
5	16QAM	12	0	15.24	15.19	15.23	
5	16QAM	12	7	15.45	15.30	15.29	
5	16QAM	12	13	15.32	15.35	15.37	16.5
5	16QAM	25	0	15.30	15.32	15.28	
5	64QAM	1	0	15.40	15.54	15.49	
5	64QAM	1	12	15.43	15.47	15.37	15.5
5	64QAM	1	24	15.53	15.41	15.23	
5	64QAM	12	0	15.38	15.27	15.27	
5	64QAM	12	7	15.21	15.22	15.29	15.5
5	64QAM	12	13	15.34	15.27	15.32	
5	64QAM	25	0	15.26	15.29	15.28	
5	256QAM	1	0	11.41	11.56	11.51	13.5
5	256QAM	1	12	11.44	11.49	11.39	
5	256QAM	1	24	11.54	11.43	11.25	
5	256QAM	12	0	11.39	11.29	11.29	13.5
5	256QAM	12	7	11.22	11.24	11.31	
5	256QAM	12	13	11.35	11.29	11.34	
5	256QAM	25	0	11.27	11.31	11.30	

3	256QAM	1	14	17.98	17.96	18.11	18.5
3	256QAM	8	0	18.04	17.90	17.99	
3	256QAM	8	4	17.85	17.81	17.86	
3	256QAM	8	7	17.76	17.82	17.83	
3	256QAM	15	0	17.92	18.01	17.93	
Channel				23017	23095	23173	Tune-up limit (dBm)
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	22.39	22.27	22.35	23.5
1.4	QPSK	1	3	22.30	22.49	22.49	
1.4	QPSK	1	5	22.28	22.29	22.24	
1.4	QPSK	3	0	22.19	22.13	22.11	
1.4	QPSK	3	1	22.10	21.95	22.05	
1.4	QPSK	3	3	22.05	21.89	22.00	22.5
1.4	QPSK	6	0	21.86	21.79	21.91	
1.4	16QAM	1	0	22.03	22.02	21.82	
1.4	16QAM	1	3	22.08	21.95	21.91	21.5
1.4	16QAM	1	5	21.79	21.96	22.13	
1.4	16QAM	3	0	21.68	21.78	21.62	
1.4	16QAM	3	1	21.59	21.67	21.68	
1.4	16QAM	3	3	21.62	21.71	21.66	
1.4	16QAM	6	0	20.93	20.86	20.92	21.5
1.4	64QAM	1	0	21.08	21.35	21.03	
1.4	64QAM	1	3	21.00	21.28	21.25	
1.4	64QAM	1	5	20.93	20.89	20.86	20.5
1.4	64QAM	3	0	20.81	20.71	20.82	
1.4	64QAM	3	1	20.56	20.66	20.76	
1.4	64QAM	3	3	20.66	20.70	20.64	18.5
1.4	64QAM	6	0	20.00	20.05	19.97	
1.4	256QAM	1	0	18.05	17.97	18.16	
1.4	256QAM	1	3	17.84	18.21	18.20	
1.4	256QAM	1	5	18.13	18.04	18.31	
1.4	256QAM	3	0	17.95	18.00	18.05	18.5
1.4	256QAM	3	1	17.89	17.92	17.92	
1.4	256QAM	3	3	17.90	17.86	17.88	
1.4	256QAM	6	0	17.87	17.94	18.04	18.5

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			22.5
10	QPSK	1	12		21.37		
10	QPSK	1	25		21.28		
10	QPSK	1	49		21.32		
10	QPSK	25	0		20.80		
10	QPSK	25	12		20.76		
10	QPSK	25	25		20.75		
10	QPSK	50	0		20.79		
10	16QAM	1	0		20.82		
10	16QAM	1	25		21.05		
10	16QAM	1	49		20.93		
10	16QAM	25	0		19.86		
10	16QAM	25	12		19.80		
10	16QAM	25	25		19.73		
10	16QAM	50	0		19.85		
10	64QAM	1	0		19.92		
10	64QAM	1	25		20.16		
10	64QAM	1	49		19.91		
10	64QAM	25	0		19.12		
10	64QAM	25	12		19.11		
10	64QAM	25	25		19.05		
10	64QAM	50	0		19.03		
10	256QAM	1	0		16.92		
10	256QAM	1	25		17.24		
10	256QAM	1	49		17.27		
10	256QAM	25	0		17.10		
10	256QAM	25	12		17.05		
10	256QAM	25	25		17.03		
10	256QAM	50	0		17.09		
Channel				23205	23230	23255	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	21.19	21.34	21.26	22.5
5	QPSK	1	12	21.25	21.34	21.38	
5	QPSK	1	24	21.15	21.22	21.19	21.5
5	QPSK	12	0	20.85	20.89	20.90	
5	QPSK	12	7	20.86	20.80	20.89	21.5
5	QPSK	12	13	20.80	20.82	20.75	
5	QPSK	25	0	20.89	20.68	20.86	21.5
5	16QAM	1	0	20.89	20.89	21.10	
5	16QAM	1	12	20.93	21.04	21.13	20.5
5	16QAM	1	24	21.20	20.94	21.06	
5	16QAM	12	0	19.69	19.70	19.72	20.5
5	16QAM	12	7	19.75	19.68	19.68	
5	16QAM	12	13	19.80	19.70	19.71	23
5	16QAM	25	0	19.84	19.77	19.75	
5	64QAM	1	0	19.80	20.10	20.09	19.5
5	64QAM	1	12	21.44	20.02	19.94	
5	64QAM	1	24	19.96	19.90	20.07	19.5
5	64QAM	12	0	18.91	18.92	18.95	
5	64QAM	12	7	18.86	18.88	18.89	17.5
5	64QAM	12	13	18.80	18.82	18.90	
5	64QAM	25	0	18.90	18.90	18.93	17.5
5	256QAM	1	0	16.81	17.22	16.80	
5	256QAM	1	12	17.12	16.98	17.20	17.5
5	256QAM	1	24	16.93	17.15	17.04	
5	256QAM	12	0	16.85	16.92	16.98	17.5
5	256QAM	12	7	16.83	16.90	16.89	
5	256QAM	12	13	16.89	16.86	16.88	17.5
5	256QAM	25	0	16.95	16.97	16.97	

Band 14 (700MHz Band) (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23330			
Frequency (MHz)				793			
10	QPSK	1	0		22.51		23.5
10	QPSK	1	25		22.49		
10	QPSK	1	49		22.44		
10	QPSK	25	0		21.92		22.5
10	QPSK	25	12		21.86		
10	QPSK	25	25		21.90		
10	QPSK	50	0		21.91		23
10	16QAM	1	0		21.99		
10	16QAM	1	25		22.10		
10	16QAM	1	49		22.21		21.5
10	16QAM	25	0		20.95		
10	16QAM	25	12		20.89		
10	16QAM	25	25		20.80		22
10	16QAM	50	0		20.92		
10	64QAM	1	0		21.54		
10	64QAM	1	25		21.39		20.5
10	64QAM	1	49		21.25		
10	64QAM	25	0		20.19		
10	64QAM	25	12		20.11		19
10	64QAM	25	25		20.12		
10	64QAM	50	0		20.15		
10	256QAM	1	0		17.92		18.5
10	256QAM	1	25		18.50		
10	256QAM	1	49		17.99		
10	256QAM	25	0		18.12		18.5
10	256QAM	25	12		18.06		
10	256QAM	25	25		18.03		
10	256QAM	50	0		18.11		Tune-up limit (dBm)
Channel				23305	23330	23355	
Frequency (MHz)				790.5	793	795.5	
5	QPSK	1	0	22.36	22.39	22.35	23.5
5	QPSK	1	12	22.44	22.41	22.44	
5	QPSK	1	24	22.43	22.35	22.37	
5	QPSK	12	0	22.02	22.01	22.05	22.5
5	QPSK	12	7	21.89	22.00	22.01	
5	QPSK	12	13	21.92	21.89	21.92	
5	QPSK	25	0	22.01	21.91	21.93	23
5	16QAM	1	0	22.12	22.10	22.23	
5	16QAM	1	12	22.24	22.11	22.26	
5	16QAM	1	24	22.32	22.02	22.20	21.5
5	16QAM	12	0	21.06	21.03	21.05	
5	16QAM	12	7	20.95	21.00	21.00	
5	16QAM	12	13	20.90	20.89	20.88	22
5	16QAM	25	0	21.04	20.91	20.95	
5	64QAM	1	0	21.11	21.04	21.19	
5	64QAM	1	12	21.22	21.06	21.21	20.5
5	64QAM	1	24	21.22	21.00	21.02	
5	64QAM	12	0	20.10	20.15	20.11	
5	64QAM	12	7	20.12	20.14	20.06	19
5	64QAM	12	13	20.06	20.06	20.01	
5	64QAM	25	0	20.08	20.13	20.10	
5	256QAM	1	0	17.95	18.19	18.05	18.5
5	256QAM	1	12	18.24	18.41	18.38	
5	256QAM	1	24	18.28	18.24	18.21	
5	256QAM	12	0	18.10	18.12	18.10	18.5
5	256QAM	12	7	18.05	18.10	18.06	
5	256QAM	12	13	18.06	18.09	18.07	
5	256QAM	25	0	18.11	18.03	18.11	

Band 25 (1900MHz Band) (dBm) Part 24E							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26140	26365	26590	
Frequency (MHz)				1860	1882.5	1905	23.5
20	QPSK	1	0	22.31	21.99	22.15	
20	QPSK	1	49	21.98	22.07	22.28	22.5
20	QPSK	1	99	22.27	22.45	22.41	
20	QPSK	50	0	21.65	21.70	21.68	
20	QPSK	50	24	21.61	21.67	21.67	22.5
20	QPSK	50	50	21.60	21.62	21.62	
20	QPSK	100	0	21.58	21.63	21.68	
20	16QAM	1	0	21.65	22.38	22.07	22.5
20	16QAM	1	49	21.53	21.78	21.74	
20	16QAM	1	99	21.89	21.93	21.84	
20	16QAM	50	0	20.70	20.76	20.72	21.5
20	16QAM	50	24	20.65	20.66	20.68	
20	16QAM	50	50	20.60	20.59	20.62	
20	16QAM	100	0	20.64	20.66	20.71	21.5
20	64QAM	1	0	20.60	20.67	20.66	
20	64QAM	1	49	20.85	20.58	20.59	
20	64QAM	1	99	20.55	20.68	20.58	20.5
20	64QAM	50	0	19.62	19.61	19.63	
20	64QAM	50	24	19.55	19.51	19.57	
20	64QAM	50	50	19.54	19.56	19.52	18.5
20	64QAM	100	0	19.56	19.53	19.59	
20	256QAM	1	0	17.63	17.84	17.67	
20	256QAM	1	49	17.99	17.81	17.90	18.5
20	256QAM	1	99	17.56	17.95	17.64	
20	256QAM	50	0	17.62	17.60	17.65	18.5
20	256QAM	50	24	17.59	17.61	17.62	
20	256QAM	50	50	17.60	17.57	17.57	
20	256QAM	100	0	17.54	17.54	17.61	Tune-up limit (dBm)
Channel				26115	26365	26615	
Frequency (MHz)				1857.5	1882.5	1907.5	23.5
15	QPSK	1	0	22.13	22.06	22.11	
15	QPSK	1	37	21.87	22.11	22.03	22.5
15	QPSK	1	74	22.23	22.17	22.06	
15	QPSK	36	0	21.71	21.75	21.72	
15	QPSK	36	20	21.67	21.61	21.67	22.5
15	QPSK	36	39	21.61	21.68	21.63	
15	QPSK	75	0	21.57	21.74	21.57	
15	16QAM	1	0	21.52	21.74	21.52	22.5
15	16QAM	1	37	21.72	21.68	21.68	
15	16QAM	1	74	21.72	21.97	21.83	
15	16QAM	36	0	20.70	20.72	20.70	21.5
15	16QAM	36	20	20.62	20.70	20.63	
15	16QAM	36	39	20.68	20.62	20.67	
15	16QAM	75	0	20.66	20.65	20.69	21.5
15	64QAM	1	0	20.57	20.68	20.47	
15	64QAM	1	37	20.43	20.72	20.63	
15	64QAM	1	74	20.68	20.63	20.48	20.5
15	64QAM	36	0	19.59	19.70	19.69	
15	64QAM	36	20	19.63	19.62	19.62	
15	64QAM	36	39	19.56	19.58	19.55	18.5
15	64QAM	75	0	19.44	19.66	19.51	
15	256QAM	1	0	17.58	17.77	17.74	
15	256QAM	1	37	17.48	17.84	17.65	18.5
15	256QAM	1	74	18.01	17.67	17.73	
15	256QAM	36	0	17.73	17.68	17.66	
15	256QAM	36	20	17.65	17.62	17.62	18.5
15	256QAM	36	39	17.60	17.57	17.60	
15	256QAM	75	0	17.52	17.54	17.61	
Channel				26090	26365	26640	Tune-up limit (dBm)
Frequency (MHz)				1855	1882.5	1910	
10	QPSK	1	0	22.03	21.98	22.16	23.5
10	QPSK	1	25	22.18	22.06	22.26	
10	QPSK	1	49	22.04	22.07	22.19	
10	QPSK	25	0	21.74	21.75	21.79	22.5
10	QPSK	25	12	21.68	21.73	21.71	
10	QPSK	25	25	21.72	21.65	21.68	
10	QPSK	50	0	21.67	21.70	21.78	22.5
10	16QAM	1	0	21.83	21.57	21.99	
10	16QAM	1	25	21.88	21.54	21.98	
10	16QAM	1	49	21.73	21.83	21.94	21.5
10	16QAM	25	0	20.81	20.80	20.83	
10	16QAM	25	12	20.73	20.72	20.76	
10	16QAM	25	25	20.67	20.70	20.72	21.5
10	16QAM	50	0	20.68	20.71	20.82	
10	64QAM	1	0	20.57	20.73	20.56	
10	64QAM	1	25	20.68	20.77	20.73	21.5
10	64QAM	1	49	20.56	20.72	20.79	
10	64QAM	25	0	19.59	19.75	19.68	
10	64QAM	25	12	19.62	19.70	19.72	20.5
10	64QAM	25	25	19.66	19.65	19.61	
10	64QAM	50	0	19.59	19.73	19.68	
10	256QAM	1	0	17.68	17.78	17.88	18.5
10	256QAM	1	25	17.67	17.93	17.77	

Band 26 for FCC (dBm) (only on channel required)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				26765	26865	26965	
Frequency (MHz)				821.5	831.5	841.5	22.5
15	QPSK	1	0	21.36	21.48	21.45	
15	QPSK	1	37	21.35	21.55	21.45	21.5
15	QPSK	1	74	21.52	21.31	21.36	
15	QPSK	36	0	20.95	21.01	20.95	
15	QPSK	36	20	20.90	20.93	20.86	21.5
15	QPSK	36	39	20.82	20.90	20.90	
15	QPSK	75	0	20.91	20.95	20.99	
15	16QAM	1	0	21.10	21.08	21.17	23
15	16QAM	1	37	21.08	20.92	21.14	
15	16QAM	1	74	21.08	20.89	20.71	
15	16QAM	36	0	19.90	19.92	20.00	22
15	16QAM	36	20	19.86	19.80	19.89	
15	16QAM	36	39	19.73	19.84	19.92	
15	16QAM	75	0	19.92	19.87	19.99	22
15	64QAM	1	0	20.21	20.27	20.11	
15	64QAM	1	37	20.22	20.44	20.15	
15	64QAM	1	74	20.17	20.17	20.01	21
15	64QAM	36	0	19.15	19.18	19.16	
15	64QAM	36	20	19.14	19.10	19.12	
15	64QAM	36	39	19.08	19.05	19.07	19
15	64QAM	75	0	19.02	19.02	19.11	
15	256QAM	1	0	17.37	17.32	16.97	
15	256QAM	1	37	17.28	17.24	17.34	19
15	256QAM	1	74	17.18	17.19	17.27	
15	256QAM	36	0	17.26	17.22	17.33	
15	256QAM	36	20	17.16	17.20	17.20	19
15	256QAM	36	39	17.01	17.17	17.19	
15	256QAM	75	0	17.07	17.08	17.14	
Channel				26740	26865	26990	Tune-up limit (dBm)
Frequency (MHz)				819	831.5	844	
10	QPSK	1	0	21.61	21.68	21.78	22.5
10	QPSK	1	25	21.57	21.78	21.73	
10	QPSK	1	49	21.57	21.68	21.70	
10	QPSK	25	0	21.31	21.34	21.35	21.5
10	QPSK	25	12	21.18	21.30	21.31	
10	QPSK	25	25	21.20	21.25	21.22	
10	QPSK	50	0	21.12	21.31	21.31	23
10	16QAM	1	0	21.36	21.30	21.50	
10	16QAM	1	25	21.21	21.49	21.28	
10	16QAM	1	49	21.48	21.33	21.21	22
10	16QAM	25	0	20.31	20.38	20.32	
10	16QAM	25	12	20.26	20.25	20.20	
10	16QAM	25	25	20.22	20.33	20.22	22
10	16QAM	50	0	20.13	20.34	20.36	
10	64QAM	1	0	20.36	20.34	20.39	
10	64QAM	1	25	20.34	20.39	20.39	21
10	64QAM	1	49	20.14	20.43	20.31	
10	64QAM	25	0	19.33	19.30	19.27	
10	64QAM	25	12	19.22	19.26	19.17	19
10	64QAM	25	25	19.15	19.17	19.10	
10	64QAM	50	0	19.27	19.24	19.17	
10	256QAM	1	0	17.25	17.13	17.32	19
10	256QAM	1	25	17.38	17.39	17.33	
10	256QAM	1	49	17.30	17.28	17.32	
10	256QAM	25	0	17.30	17.40	17.33	19
10	256QAM	25	12	17.35	17.33	17.26	
10	256QAM	25	25	17.26	17.24	17.14	
10	256QAM	50	0	17.37	17.28	17.13	Tune-up limit (dBm)
Channel				26715	26865	27015	
Frequency (MHz)				816.5	831.5	846.5	22.5
5	QPSK	1	0	21.69	21.77	21.76	
5	QPSK	1	12	21.75	21.68	21.81	21.5
5	QPSK	1	24	21.64	21.79	21.81	
5	QPSK	12	0	21.30	21.32	21.34	
5	QPSK	12	7	21.25	21.27	21.30	23
5	QPSK	12	13	21.20	21.25	21.27	

10	256QAM	1	49	17.81	17.91	17.67	18.5
10	256QAM	25	0	17.72	17.73	17.70	
10	256QAM	25	12	17.69	17.66	17.65	
10	256QAM	25	25	17.62	17.63	17.60	
10	256QAM	50	0	17.69	17.69	17.65	
Channel				26065	26365	26665	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1882.5	1912.5	
5	QPSK	1	0	22.03	22.04	22.36	23.5
5	QPSK	1	12	22.10	22.19	22.27	
5	QPSK	1	24	22.12	22.09	22.16	
5	QPSK	12	0	21.72	21.75	21.76	22.5
5	QPSK	12	7	21.71	21.68	21.66	
5	QPSK	12	13	21.62	21.65	21.71	
5	QPSK	25	0	21.59	21.70	21.74	22.5
5	16QAM	1	0	21.73	22.13	21.99	
5	16QAM	1	12	21.71	22.12	22.05	
5	16QAM	1	24	21.82	21.78	22.05	21.5
5	16QAM	12	0	20.74	20.76	20.78	
5	16QAM	12	7	20.71	20.72	20.71	
5	16QAM	12	13	20.68	20.67	20.68	21.5
5	16QAM	25	0	20.67	20.65	20.76	
5	64QAM	1	0	20.53	20.91	20.65	
5	64QAM	1	12	20.55	20.96	20.68	21.5
5	64QAM	1	24	20.58	20.75	20.59	
5	64QAM	12	0	19.62	19.65	19.60	
5	64QAM	12	7	19.60	19.61	19.62	20.5
5	64QAM	12	13	19.55	19.57	19.55	
5	64QAM	25	0	19.56	19.58	19.61	
5	256QAM	1	0	17.83	17.76	17.77	18.5
5	256QAM	1	12	17.66	17.97	17.77	
5	256QAM	1	24	17.85	17.91	17.88	
5	256QAM	12	0	17.63	17.65	17.62	18.5
5	256QAM	12	7	17.61	17.62	17.67	
5	256QAM	12	13	17.60	17.60	17.60	
5	256QAM	25	0	17.58	17.63	17.62	Tune-up limit (dBm)
Channel				28055	28365	28675	
Frequency (MHz)				1851.5	1882.5	1913.5	23.5
3	QPSK	1	0	22.08	22.18	22.03	
3	QPSK	1	8	22.17	22.31	22.10	22.5
3	QPSK	1	14	22.10	22.02	22.14	
3	QPSK	8	0	21.62	21.73	21.71	
3	QPSK	8	4	21.71	21.67	21.70	22.5
3	QPSK	8	7	21.65	21.63	21.64	
3	QPSK	15	0	21.69	21.56	21.71	
3	16QAM	1	0	21.57	21.90	21.71	22.5
3	16QAM	1	8	21.67	22.13	21.96	
3	16QAM	1	14	21.63	21.45	22.05	
3	16QAM	8	0	20.65	20.62	20.73	21.5
3	16QAM	8	4	20.70	20.68	20.62	
3	16QAM	8	7	20.59	20.56	20.65	
3	16QAM	15	0	20.56	20.59	20.71	21.5
3	64QAM	1	0	20.63	20.77	20.48	
3	64QAM	1	8	20.57	20.79	20.51	
3	64QAM	1	14	20.60	20.86	20.64	20.5
3	64QAM	8	0	19.62	19.69	19.65	
3	64QAM	8	4	19.60	19.67	19.60	
3	64QAM	8	7	19.53	19.61	19.57	18.5
3	64QAM	15	0	19.58	19.66	19.62	
3	256QAM	1	0	17.60	17.95	17.49	
3	256QAM	1	8	17.75	17.81	17.80	18.5
3	256QAM	1	14	17.71	17.75	17.79	
3	256QAM	8	0	17.51	17.62	17.55	
3	256QAM	8	4	17.55	17.56	17.52	18.5
3	256QAM	8	7	17.50	17.51	17.50	
3	256QAM	15	0	17.53	17.59	17.58	
Channel				28047	28365	28683	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1882.5	1914.3	
1.4	QPSK	1	0	22.01	22.36	22.07	23.5
1.4	QPSK	1	3	21.96	22.21	22.15	
1.4	QPSK	1	5	21.96	22.26	22.10	
1.4	QPSK	3	0	21.71	21.78	21.76	
1.4	QPSK	3	1	21.68	21.72	21.65	
1.4	QPSK	3	3	21.62	21.76	21.60	22.5
1.4	QPSK	6	0	21.58	21.77	21.69	
1.4	16QAM	1	0	21.58	21.85	21.57	
1.4	16QAM	1	3	21.42	21.67	21.67	21.5
1.4	16QAM	1	5	21.45	21.76	21.63	
1.4	16QAM	3	0	20.68	20.73	20.68	
1.4	16QAM	3	1	20.60	20.69	20.66	
1.4	16QAM	3	3	20.62	20.64	20.61	
1.4	16QAM	6	0	20.54	20.71	20.56	20.5
1.4	64QAM	1	0	20.64	20.79	20.54	
1.4	64QAM	1	3	20.58	20.83	20.62	
1.4	64QAM	1	5	20.63	20.79	20.60	21.5
1.4	64QAM	3	0	19.62	19.65	19.60	
1.4	64QAM	3	1	19.58	19.62	19.58	
1.4	64QAM	3	3	19.55	19.58	20.55	
1.4	64QAM	6	0	19.52	19.63	19.53	
1.4	256QAM	1	0	17.67	17.80	17.50	18.5
1.4	256QAM	1	3	17.58	17.98	17.61	
1.4	256QAM	1	5	17.86	17.72	17.59	
1.4	256QAM	3	0	17.70	17.72	17.62	18.5
1.4	256QAM	3	0	17.70	17.72	17.62	

5	256QAM	1	24	17.40	17.31	17.35	19
5	256QAM	12	0	17.25	17.27	17.26	
5	256QAM	12	7	17.20	17.25	17.11	
5	256QAM	12	13	17.14	17.10	17.14	
5	256QAM	25	0	17.16	17.23	17.13	
Channel				26705	26865	27025	Tune-up limit (dBm)
Frequency (MHz)				815.5	831.5	847.5	
3	QPSK	1	0	21.69	21.72	21.69	22.5
3	QPSK	1	8	21.80	21.73	21.75	
3	QPSK	1	14	21.66	21.73	21.77	
3	QPSK	8	0	21.29	21.25	21.23	21.5
3	QPSK	8	4	21.15	21.20	21.11	
3	QPSK	8	7	21.12	21.16	21.08	
3	QPSK	15	0	21.21	21.23	21.17	23
3	16QAM	1	0	21.28	21.42	21.39	
3	16QAM	1	8	21.31	21.37	21.37	
3	16QAM	1	14	21.35	21.30	21.35	22
3	16QAM	8	0	20.34	20.35	20.33	
3	16QAM	8	4	20.25	20.18	20.14	
3	16QAM	8	7	20.20	20.31	20.25	22
3	16QAM	15	0	20.21	20.30	20.22	
3	64QAM	1	0	20.27	20.36	20.38	
3	64QAM	1	8	20.44	20.33	20.34	21
3	64QAM	1	14	20.19	20.35	20.31	
3	64QAM	8	0	19.19	19.25	19.22	
3	64QAM	8	4	19.22	19.18	19.08	19
3	64QAM	8	7	19.14	19.12	19.11	
3	64QAM	15	0	19.23	19.19	19.17	
3	256QAM	1	0	17.26	17.28	17.30	19
3	256QAM	1	8	17.36	17.61	17.51	
3	256QAM	1	14	17.40	17.16	17.32	
3	256QAM	8	0	17.26	17.30	17.25	19
3	256QAM	8	4	17.20	17.25	17.14	
3	256QAM	8	7	17.11	17.14	17.06	
3	256QAM	15	0	17.25	17.17	17.18	Tune-up limit (dBm)
Channel				26697	26865	27033	
Frequency (MHz)				814.7	831.5	848.3	22.5
1.4	QPSK	1	0	21.78	21.81	21.68	
1.4	QPSK	1	3	21.80	21.74	21.64	
1.4	QPSK	1	5	21.64	21.75	21.66	
1.4	QPSK	3	0	21.21	21.25	21.22	
1.4	QPSK	3	1	21.05	21.14	21.08	22.5
1.4	QPSK	3	3	21.16	21.06	21.16	
1.4	QPSK	6	0	21.20	21.23	21.21	
1.4	16QAM	1	0	21.39	21.11	21.28	23
1.4	16QAM	1	3	21.50	21.22	21.31	
1.4	16QAM	1	5	21.23	21.48	21.35	
1.4	16QAM	3	0	20.24	20.26	20.23	
1.4	16QAM	3	1	20.20	20.25	20.20	
1.4	16QAM	3	3	20.17	20.13	20.18	22
1.4	16QAM	6	0	20.21	20.24	20.21	
1.4	64QAM	1	0	20.20	20.11	20.14	
1.4	64QAM	1	3	20.38	20.23	20.45	22
1.4	64QAM	1	5	20.18	20.28	20.02	
1.4	64QAM	3	0	19.22	19.25	19.19	
1.4	64QAM	3	1	19.07	19.11	19.14	
1.4	64QAM	3	3	19.11	19.14	19.05	
1.4	64QAM	6	0	19.17	19.20	19.11	19
1.4	256QAM	1	0	17.17	17.42	17.23	
1.4	256QAM	1	3	17.27	17.34	17.29	
1.4	256QAM	1	5	17.40	17.27	17.17	
1.4	256QAM	3	0	17.15	17.19	17.16	
1.4	256QAM	3	1	17.11	17.13	17.11	19
1.4	256QAM	3	3	17.05	17.10	17.06	
1.4	256QAM	6	0	17.11	17.17	17.14	19



1.4	256QAM	3	1	17.62	17.68	17.59	
1.4	256QAM	3	3	17.60	17.71	17.61	
1.4	256QAM	6	0	17.57	17.70	17.49	18.5

Band 30 (dBm)							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				27710			
Frequency (MHz)				2310			
10	QPSK	1	0		21.42		22.5
10	QPSK	1	25		21.19		
10	QPSK	1	49		21.12		
10	QPSK	25	0		20.39		21.5
10	QPSK	25	12		20.15		
10	QPSK	25	25		20.04		
10	QPSK	50	0		20.00		21.5
10	16QAM	1	0		20.58		
10	16QAM	1	25		20.46		
10	16QAM	1	49		20.25		20.5
10	16QAM	25	0		19.31		
10	16QAM	25	12		19.25		
10	16QAM	25	25		19.11		20.5
10	16QAM	50	0		19.25		
10	64QAM	1	0		19.37		
10	64QAM	1	25		19.09		20.5
10	64QAM	1	49		19.46		
10	64QAM	25	0		18.30		
10	64QAM	25	12		18.24		19.5
10	64QAM	25	25		18.28		
10	64QAM	50	0		18.08		
10	256QAM	1	0		16.17		17.5
10	256QAM	1	25		15.92		
10	256QAM	1	49		16.04		
10	256QAM	25	0		15.64		17.5
10	256QAM	25	12		15.77		
10	256QAM	25	25		15.73		
10	256QAM	50	0		16.29		
Channel				27685	27710	27735	Tune-up limit (dBm)
Frequency (MHz)				2307.5	2310	2312.5	
5	QPSK	1	0	21.13	20.96	20.90	0
5	QPSK	1	12	20.65	21.22	20.76	
5	QPSK	1	24	20.91	20.94	20.92	
5	QPSK	12	0	20.15	20.09	20.32	-1
5	QPSK	12	7	19.92	19.98	20.09	
5	QPSK	12	13	19.73	20.04	20.16	
5	QPSK	25	0	20.19	19.88	20.07	-1
5	16QAM	1	0	20.14	20.58	20.27	
5	16QAM	1	12	20.26	20.52	20.04	
5	16QAM	1	24	20.34	20.57	20.23	-2
5	16QAM	12	0	19.07	19.03	19.27	
5	16QAM	12	7	19.27	19.19	18.76	
5	16QAM	12	13	19.10	19.27	19.28	-2
5	16QAM	25	0	18.85	19.21	19.30	
5	64QAM	1	0	19.16	19.54	18.84	
5	64QAM	1	12	19.39	19.39	19.61	-3
5	64QAM	1	24	19.31	19.18	19.11	
5	64QAM	12	0	17.89	17.84	17.92	
5	64QAM	12	7	18.36	17.94	18.28	-5
5	64QAM	12	13	18.26	18.14	18.19	
5	64QAM	25	0	18.18	18.29	18.26	
5	256QAM	1	0	16.66	16.72	16.49	-5
5	256QAM	1	12	17.00	16.01	16.00	
5	256QAM	1	24	16.80	15.97	15.67	
5	256QAM	12	0	15.60	15.69	16.07	-5
5	256QAM	12	7	17.02	16.45	16.59	
5	256QAM	12	13	16.67	16.00	16.30	
5	256QAM	25	0	16.21	17.04	16.80	

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	20.84	20.86	20.95	22
20	QPSK	1	49	20.97	21.08	20.43	
20	QPSK	1	99	20.91	21.11	21.10	
20	QPSK	50	0	20.60	20.65	20.61	21
20	QPSK	50	24	20.61	20.61	20.57	
20	QPSK	50	50	20.47	20.57	20.23	
20	QPSK	100	0	20.46	20.63	20.36	21.5
20	16QAM	1	0	20.50	20.54	20.48	
20	16QAM	1	49	20.56	21.01	19.57	
20	16QAM	1	99	20.68	20.84	19.39	20.5
20	16QAM	50	0	19.55	19.58	19.51	
20	16QAM	50	24	19.52	19.50	19.36	
20	16QAM	50	50	19.48	19.47	19.14	20.5
20	16QAM	100	0	19.47	19.54	18.86	
20	64QAM	1	0	19.32	19.44	19.52	
20	64QAM	1	49	19.56	19.54	19.35	19
20	64QAM	1	99	19.44	19.67	19.41	
20	64QAM	50	0	18.55	18.58	18.41	
20	64QAM	50	24	18.50	18.55	18.26	19.5
20	64QAM	50	50	18.42	18.46	18.17	
20	64QAM	100	0	18.36	18.54	18.27	
20	256QAM	1	0	16.57	16.59	16.80	19.5
20	256QAM	1	49	16.57	16.74	16.54	
20	256QAM	1	99	16.64	16.67	16.58	
20	256QAM	50	0	16.52	16.55	16.56	19
20	256QAM	50	24	16.46	16.51	16.46	
20	256QAM	50	50	16.42	16.41	16.50	
20	256QAM	100	0	16.47	16.32	16.52	
Channel				132047	132322	132597	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	20.87	21.06	20.93	22
15	QPSK	1	37	20.92	21.08	20.42	
15	QPSK	1	74	20.87	21.04	20.03	
15	QPSK	36	0	20.52	20.55	20.42	21
15	QPSK	36	20	20.51	20.50	20.25	
15	QPSK	36	39	20.46	20.47	20.14	
15	QPSK	75	0	20.50	20.53	19.50	21.5
15	16QAM	1	0	20.46	20.60	20.67	
15	16QAM	1	37	20.89	20.70	19.64	
15	16QAM	1	74	20.58	20.78	19.07	20.5
15	16QAM	36	0	19.56	19.52	19.50	
15	16QAM	36	20	19.52	19.50	19.41	
15	16QAM	36	39	19.45	19.47	19.20	20.5
15	16QAM	75	0	19.52	19.54	18.50	
15	64QAM	1	0	19.39	19.54	19.19	
15	64QAM	1	37	19.64	19.72	19.15	19
15	64QAM	1	74	19.56	19.76	19.22	
15	64QAM	36	0	18.40	18.45	18.35	
15	64QAM	36	20	18.24	18.41	18.15	19.5
15	64QAM	36	39	18.36	18.35	18.02	
15	64QAM	75	0	18.30	18.37	17.41	
15	256QAM	1	0	16.49	16.50	16.56	19
15	256QAM	1	37	16.52	16.69	16.56	
15	256QAM	1	74	16.73	16.75	16.90	
15	256QAM	36	0	16.49	16.50	16.52	19
15	256QAM	36	20	16.40	16.46	16.42	
15	256QAM	36	39	16.42	16.35	16.47	
15	256QAM	75	0	16.40	16.41	16.50	
Channel				132022	132322	132622	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	20.57	20.99	21.06	22
10	QPSK	1	25	20.39	21.04	21.00	
10	QPSK	1	49	20.27	20.92	21.06	
10	QPSK	25	0	20.52	20.62	20.63	21
10	QPSK	25	12	20.47	20.52	20.57	
10	QPSK	25	25	20.43	20.47	20.50	
10	QPSK	50	0	19.39	20.58	20.61	21.5
10	16QAM	1	0	19.58	20.69	20.85	
10	16QAM	1	25	19.61	20.60	20.78	
10	16QAM	1	49	19.50	20.79	20.69	20.5
10	16QAM	25	0	19.60	19.62	19.65	
10	16QAM	25	12	19.25	19.58	19.57	
10	16QAM	25	25	19.21	19.55	19.52	20.5
10	16QAM	50	0	19.51	19.58	19.61	
10	64QAM	1	0	19.47	19.53	18.78	
10	64QAM	1	25	19.72	19.60	18.70	19
10	64QAM	1	49	19.71	19.69	18.53	
10	64QAM	25	0	18.58	18.56	18.52	
10	64QAM	25	12	18.55	18.51	18.14	19
10	64QAM	25	25	18.40	18.47	18.02	
10	64QAM	50	0	18.48	18.55	17.49	
10	256QAM	1	0	16.60	16.61	16.77	19.5
10	256QAM	1	25	16.79	16.64	16.70	

10	256QAM	1	49	16.62	16.76	16.43	19
10	256QAM	25	0	16.55	16.54	16.47	
10	256QAM	25	12	16.52	16.50	16.42	
10	256QAM	25	25	16.47	16.43	16.46	
10	256QAM	50	0	16.44	16.52	16.63	
Channel				131997	132322	132647	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	20.39	20.91	21.06	22
5	QPSK	1	12	20.28	21.06	21.02	
5	QPSK	1	24	20.16	21.03	21.05	
5	QPSK	12	0	20.35	20.62	20.63	21
5	QPSK	12	7	20.28	20.57	20.60	
5	QPSK	12	13	20.21	20.54	20.58	
5	QPSK	25	0	19.29	20.61	20.62	21.5
5	16QAM	1	0	19.58	20.83	20.80	
5	16QAM	1	12	19.47	20.87	20.98	
5	16QAM	1	24	19.45	20.67	20.78	20.5
5	16QAM	12	0	19.55	19.65	19.69	
5	16QAM	12	7	19.47	19.62	19.60	
5	16QAM	12	13	19.03	19.58	19.57	20.5
5	16QAM	25	0	19.31	19.63	19.66	
5	64QAM	1	0	19.58	19.55	18.82	
5	64QAM	1	12	19.50	19.76	18.56	19
5	64QAM	1	24	19.63	19.80	18.58	
5	64QAM	12	0	18.56	18.58	18.52	
5	64QAM	12	7	18.52	18.55	18.14	19.5
5	64QAM	12	13	18.47	18.41	18.05	
5	64QAM	25	0	18.55	18.47	17.28	
5	256QAM	1	0	16.58	16.86	16.68	19
5	256QAM	1	12	16.61	16.54	16.52	
5	256QAM	1	24	16.65	16.63	16.50	
5	256QAM	12	0	16.60	16.61	16.59	19
5	256QAM	12	7	16.54	16.57	16.58	
5	256QAM	12	13	16.50	16.52	16.53	
5	256QAM	25	0	16.49	16.56	16.55	Tune-up limit (dBm)
Channel				131987	132322	132657	
Frequency (MHz)				1711.5	1745	1778.5	22
3	QPSK	1	0	20.93	20.99	20.39	
3	QPSK	1	8	20.98	21.01	20.28	
3	QPSK	1	14	20.16	20.92	21.07	21
3	QPSK	8	0	20.60	20.63	20.60	
3	QPSK	8	4	20.25	20.52	20.57	
3	QPSK	8	7	20.20	20.57	20.54	21.5
3	QPSK	15	0	19.18	20.59	20.61	
3	16QAM	1	0	19.35	20.55	20.80	
3	16QAM	1	8	19.29	20.69	21.05	20.5
3	16QAM	1	14	19.23	20.47	20.67	
3	16QAM	8	0	19.58	19.65	19.64	
3	16QAM	8	4	19.58	19.37	19.47	20.5
3	16QAM	8	7	19.26	19.55	19.52	
3	16QAM	15	0	19.61	19.62	19.63	
3	64QAM	1	0	19.50	19.67	18.59	20.5
3	64QAM	1	8	19.65	19.50	19.43	
3	64QAM	1	14	19.33	19.65	19.33	
3	64QAM	8	0	18.52	18.68	18.61	19
3	64QAM	8	4	18.55	18.29	18.26	
3	64QAM	8	7	18.42	18.54	18.15	
3	64QAM	15	0	18.47	18.60	17.24	19.5
3	256QAM	1	0	16.48	16.84	16.47	
3	256QAM	1	8	16.78	16.71	16.45	
3	256QAM	1	14	16.51	16.51	16.17	19
3	256QAM	8	0	16.60	16.61	16.58	
3	256QAM	8	4	16.54	16.57	16.42	
3	256QAM	8	7	16.50	16.52	16.40	Tune-up limit (dBm)
3	256QAM	15	0	16.48	16.57	16.27	
Channel				131979	132322	132665	
Frequency (MHz)				1710.7	1745	1779.3	22
1.4	QPSK	1	0	21.08	20.99	20.24	
1.4	QPSK	1	3	20.99	21.06	20.16	
1.4	QPSK	1	5	21.00	21.05	20.16	
1.4	QPSK	3	0	20.59	20.66	20.26	
1.4	QPSK	3	1	20.48	20.56	20.24	
1.4	QPSK	3	3	20.55	20.60	19.15	21
1.4	QPSK	6	0	20.58	20.65	19.18	
1.4	16QAM	1	0	20.54	20.56	19.35	
1.4	16QAM	1	3	20.69	20.68	19.29	21.5
1.4	16QAM	1	5	20.60	20.75	19.23	
1.4	16QAM	3	0	19.62	19.68	19.49	
1.4	16QAM	3	1	19.52	19.69	19.26	20.5
1.4	16QAM	3	3	19.40	19.06	19.03	
1.4	16QAM	6	0	19.45	19.65	19.11	
1.4	64QAM	1	0	19.48	19.58	18.52	19.5
1.4	64QAM	1	3	19.41	19.74	19.26	
1.4	64QAM	1	5	19.52	19.67	19.15	
1.4	64QAM	3	0	18.62	18.65	18.61	19.5
1.4	64QAM	3	1	18.55	18.60	18.61	
1.4	64QAM	3	3	18.55	18.54	18.56	
1.4	64QAM	6	0	18.50	18.61	17.07	19.5
1.4	256QAM	1	0	16.69	16.75	16.35	
1.4	256QAM	1	3	16.63	16.83	16.28	
1.4	256QAM	1	5	16.47	16.85	16.15	19.5
1.4	256QAM	3	0	16.52	16.55	16.51	

1.4	256QAM	3	1	16.47	16.52	16.46	
1.4	256QAM	3	3	16.40	16.48	16.42	
1.4	256QAM	6	0	16.48	16.51	16.17	19

Band 38(only on channel required) (dBm)_PC2							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	21.74	21.78	21.76	22.5
20	QPSK	1	49	21.81	21.74	21.58	
20	QPSK	1	99	21.73	21.70	21.52	
20	QPSK	50	0	20.73	20.80	20.75	21.5
20	QPSK	50	24	20.76	20.77	20.63	
20	QPSK	50	50	20.73	20.66	20.59	
20	QPSK	100	0	20.78	20.79	20.66	21.5
20	16QAM	1	0	20.86	20.87	20.75	
20	16QAM	1	49	20.76	20.79	20.83	
20	16QAM	1	99	20.68	20.72	20.69	20.5
20	16QAM	50	0	19.73	19.80	19.61	
20	16QAM	50	24	19.81	19.76	19.78	
20	16QAM	50	50	19.63	19.68	19.61	20.5
20	16QAM	100	0	19.72	19.73	19.67	
20	64QAM	1	0	19.77	19.84	19.75	
20	64QAM	1	49	19.59	19.67	19.70	20.5
20	64QAM	1	99	19.66	19.68	19.69	
20	64QAM	50	0	19.65	19.70	19.65	
20	64QAM	50	24	19.69	19.65	19.61	20.5
20	64QAM	50	50	19.56	19.63	19.50	
20	64QAM	100	0	19.48	19.66	19.52	
20	256QAM	1	0	15.80	15.87	15.78	16.5
20	256QAM	1	49	15.62	15.70	15.73	
20	256QAM	1	99	15.69	15.71	15.72	
20	256QAM	50	0	15.68	15.73	15.68	16.5
20	256QAM	50	24	15.72	15.68	15.64	
20	256QAM	50	50	15.59	15.66	15.53	
20	256QAM	100	0	15.51	15.69	15.55	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	21.68	21.72	21.70	22.5
15	QPSK	1	37	21.55	21.68	21.52	
15	QPSK	1	74	21.67	21.64	21.46	
15	QPSK	36	0	20.67	20.74	20.69	21.5
15	QPSK	36	20	20.70	20.71	20.57	
15	QPSK	36	39	20.67	20.60	20.53	
15	QPSK	75	0	20.70	20.73	20.60	21.5
15	16QAM	1	0	20.80	20.81	20.69	
15	16QAM	1	37	20.70	20.73	20.77	
15	16QAM	1	74	20.62	20.66	20.63	20.5
15	16QAM	36	0	19.67	19.74	19.55	
15	16QAM	36	20	19.75	19.70	19.72	
15	16QAM	36	39	19.57	19.62	19.55	20.5
15	16QAM	75	0	19.66	19.67	19.61	
15	64QAM	1	0	19.71	19.78	19.69	
15	64QAM	1	37	19.53	19.61	19.64	20.5
15	64QAM	1	74	19.60	19.62	19.63	
15	64QAM	36	0	19.59	19.64	19.59	
15	64QAM	36	20	19.63	19.59	19.55	20.5
15	64QAM	36	39	19.50	19.57	19.44	
15	64QAM	75	0	19.42	19.60	19.46	
15	256QAM	1	0	15.74	15.81	15.72	16.5
15	256QAM	1	37	15.56	15.64	15.67	
15	256QAM	1	74	15.63	15.65	15.66	
15	256QAM	36	0	15.62	15.67	15.62	16.5
15	256QAM	36	20	15.66	15.62	15.58	
15	256QAM	36	39	15.53	15.60	15.47	
15	256QAM	75	0	15.45	15.63	15.49	
Channel				37800	38000	38200	
Frequency (MHz)				2575	2595	2615	
10	QPSK	1	0	21.61	21.65	21.63	22.5
10	QPSK	1	25	21.48	21.61	21.45	
10	QPSK	1	49	21.60	21.57	21.39	
10	QPSK	25	0	20.60	20.67	20.62	21.5
10	QPSK	25	12	20.63	20.64	20.50	
10	QPSK	25	25	20.60	20.53	20.46	
10	QPSK	50	0	20.63	20.66	20.53	21.5
10	16QAM	1	0	20.73	20.74	20.62	
10	16QAM	1	25	20.63	20.66	20.70	
10	16QAM	1	49	20.55	20.59	20.56	20.5
10	16QAM	25	0	19.60	19.67	19.48	
10	16QAM	25	12	19.68	19.63	19.65	
10	16QAM	25	25	19.50	19.55	19.48	20.5
10	16QAM	50	0	19.59	19.60	19.54	
10	64QAM	1	0	19.64	19.71	19.62	
10	64QAM	1	25	19.46	19.54	19.57	20.5
10	64QAM	1	49	19.53	19.55	19.56	
10	64QAM	25	0	19.52	19.57	19.52	
10	64QAM	25	12	19.56	19.52	19.48	20.5
10	64QAM	25	25	19.43	19.50	19.37	
10	64QAM	50	0	19.35	19.53	19.39	
10	256QAM	1	0	15.67	15.74	15.65	16.5
10	256QAM	1	25	15.49	15.57	15.60	
10	256QAM	1	49	15.56	15.58	15.59	
10	256QAM	25	0	15.55	15.60	15.55	16.5
10	256QAM	25	12	15.59	15.55	15.51	
10	256QAM	25	25	15.46	15.53	15.40	
10	256QAM	50	0	15.38	15.56	15.42	
Channel				37775	38000	38225	
Frequency (MHz)				2572.5	2595	2617.5	
5	QPSK	1	0	21.56	21.60	21.58	22.5
5	QPSK	1	12	21.43	21.56	21.40	
5	QPSK	1	24	21.55	21.52	21.34	
5	QPSK	12	0	20.55	20.62	20.57	21.5
5	QPSK	12	7	20.58	20.59	20.45	
5	QPSK	12	13	20.55	20.48	20.41	
5	QPSK	25	0	20.58	20.61	20.48	
5	16QAM	1	0	20.68	20.69	20.57	

Band 38(only on channel required) (dBm)_PC3							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				37850	38000	38150	
Frequency (MHz)				2580	2595	2610	
20	QPSK	1	0	19.33	19.37	19.35	20.5
20	QPSK	1	49	19.20	19.33	19.17	
20	QPSK	1	99	19.32	19.29	19.11	
20	QPSK	50	0	18.32	18.39	18.34	19.5
20	QPSK	50	24	18.35	18.36	18.22	
20	QPSK	50	50	18.32	18.25	18.18	
20	QPSK	100	0	18.35	18.38	18.25	19.5
20	16QAM	1	0	18.45	18.46	18.34	
20	16QAM	1	49	18.35	18.38	18.42	
20	16QAM	1	99	18.27	18.31	18.28	18.5
20	16QAM	50	0	17.32	17.39	17.20	
20	16QAM	50	24	17.40	17.35	17.37	
20	16QAM	50	50	17.22	17.27	17.20	18.5
20	16QAM	100	0	17.31	17.32	17.26	
20	64QAM	1	0	17.36	17.43	17.34	
20	64QAM	1	49	17.18	17.26	17.29	18.5
20	64QAM	1	99	17.25	17.27	17.28	
20	64QAM	50	0	17.24	17.29	17.24	
20	64QAM	50	24	17.28	17.24	17.20	18.5
20	64QAM	50	50	17.15	17.22	17.09	
20	64QAM	100	0	17.07	17.25	17.11	
20	256QAM	1	0	13.39	13.46	13.37	14.5
20	256QAM	1	49	13.21	13.29	13.32	
20	256QAM	1	99	13.28	13.30	13.31	
20	256QAM	50	0	13.27	13.32	13.27	14.5
20	256QAM	50	24	13.31	13.27	13.23	
20	256QAM	50	50	13.18	13.25	13.12	
20	256QAM	100	0	13.10	13.28	13.14	
Channel				37825	38000	38175	
Frequency (MHz)				2577.5	2595	2612.5	
15	QPSK	1	0	19.27	19.31	19.29	20.5
15	QPSK	1	37	19.14	19.27	19.11	
15	QPSK	1	74	19.26	19.23	19.05	
15	QPSK	36	0	18.26	18.33	18.28	19.5
15	QPSK	36	20	18.29	18.30	18.16	
15	QPSK	36	39	18.26	18.19	18.12	
15	QPSK	75	0	18.29	18.32	18.19	19.5
15	16QAM	1	0	18.39	18.40	18.28	
15	16QAM	1	37	18.29	18.32	18.36	
15	16QAM	1	74	18.21	18.25	18.22	18.5
15	16QAM	36	0	17.26	17.33	17.14	
15	16QAM	36	20	17.34	17.29	17.31	
15	16QAM	36	39	17.16	17.21	17.14	18.5
15	16QAM	75	0	17.25	17.26	17.20	
15	64QAM	1	0	17.30	17.37	17.28	
15	64QAM	1	37	17.12	17.20	17.23	18.5
15	64QAM	1	74	17.19	17.21	17.22	
15	64QAM	36	0	17.18	17.23	17.18	
15	64QAM	36	20	17.22	17.18	17.14	18.5
15	64QAM	36	39	17.09	17.16	17.03	
15	64QAM	75	0	17.01	17.19	17.05	
15	256QAM	1	0	13.33	13.40	13.31	14.5
15	256QAM	1	37	13.15	13.23	13.26	
15	256QAM	1	74	13.22	13.24	13.25	
15	256QAM	36	0	13.21	13.26	13.21	14.5
15	256QAM	36	20	13.25	13.21	13.17	
15	256QAM	36	39	13.12			



5	16QAM	1	12	20.58	20.61	20.65	21.5
5	16QAM	1	24	20.50	20.54	20.51	
5	16QAM	12	0	19.55	19.62	19.43	
5	16QAM	12	7	19.63	19.58	19.60	20.5
5	16QAM	12	13	19.45	19.50	19.43	
5	16QAM	25	0	19.54	19.55	19.49	
5	64QAM	1	0	19.59	19.66	19.57	20.5
5	64QAM	1	12	19.41	19.49	19.52	
5	64QAM	1	24	19.48	19.50	19.51	
5	64QAM	12	0	19.47	19.52	19.47	20.5
5	64QAM	12	7	19.51	19.47	19.43	
5	64QAM	12	13	19.38	19.45	19.32	
5	64QAM	25	0	19.30	19.48	19.34	16.5
5	256QAM	1	0	15.62	15.69	15.60	
5	256QAM	1	12	15.44	15.52	15.55	
5	256QAM	1	24	15.51	15.53	15.54	16.5
5	256QAM	12	0	15.50	15.55	15.50	
5	256QAM	12	7	15.54	15.50	15.46	
5	256QAM	12	13	15.41	15.48	15.35	16.5
5	256QAM	25	0	15.33	15.51	15.37	

5	16QAM	1	12	18.16	18.19	18.23	19.5
5	16QAM	1	24	18.08	18.12	18.09	
5	16QAM	12	0	17.13	17.20	17.01	
5	16QAM	12	7	17.21	17.16	17.18	18.5
5	16QAM	12	13	17.03	17.08	17.01	
5	16QAM	25	0	17.12	17.13	17.07	
5	64QAM	1	0	17.17	17.24	17.15	18.5
5	64QAM	1	12	16.99	17.07	17.10	
5	64QAM	1	24	17.06	17.08	17.09	
5	64QAM	12	0	17.05	17.10	17.05	18.5
5	64QAM	12	7	17.09	17.05	17.01	
5	64QAM	12	13	16.96	17.03	16.90	
5	64QAM	25	0	16.88	17.06	16.92	14.5
5	256QAM	1	0	13.20	13.27	13.18	
5	256QAM	1	12	13.02	13.10	13.13	
5	256QAM	1	24	13.09	13.11	13.12	14.5
5	256QAM	12	0	13.08	13.13	13.08	
5	256QAM	12	7	13.12	13.08	13.04	
5	256QAM	12	13	12.99	13.06	12.93	14.5
5	256QAM	25	0	12.91	13.09	12.95	

Band 41 (2496~2690MHz) (dBm)_PC2									
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)
Channel				39750	40165	40620	41055	41690	(dBm)
Frequency (MHz)				2503.5	2543.5	2593	2643.5	2693	
20	QPSK	1	0	22.06	21.97	22.12	21.96	21.95	23
20	QPSK	1	49	21.97	22.04	21.87	21.89	21.85	
20	QPSK	1	99	22.06	21.91	22.02	21.92	21.84	
20	QPSK	50	0	21.29	21.24	21.30	21.15	21.03	
20	QPSK	50	24	21.25	21.22	21.16	21.01	20.98	22
20	QPSK	50	50	21.27	21.16	21.12	20.95	20.85	
20	QPSK	100	0	21.26	21.22	21.17	21.07	20.95	
20	16QAM	1	0	21.34	21.36	21.30	21.24	21.25	
20	16QAM	1	49	21.27	21.14	21.24	21.17	21.20	22
20	16QAM	1	99	21.20	21.06	21.29	21.15	21.17	
20	16QAM	50	0	20.35	20.31	20.17	20.11	20.02	
20	16QAM	50	24	20.29	20.14	20.20	20.08	20.05	
20	16QAM	50	50	20.26	20.02	20.05	19.97	20.01	21
20	16QAM	100	0	20.17	20.14	20.20	20.14	20.15	
20	64QAM	1	0	20.25	20.32	20.23	20.13	20.17	
20	64QAM	1	49	20.24	19.96	20.14	20.05	20.07	
20	64QAM	1	99	20.18	20.09	20.18	20.09	20.12	21
20	64QAM	50	0	20.30	20.24	20.11	20.04	19.88	
20	64QAM	50	24	20.20	20.15	20.14	20.02	20.06	
20	64QAM	50	50	20.07	20.08	20.09	19.98	20.00	
20	256QAM	100	0	20.26	20.21	20.25	20.16	20.15	21
20	256QAM	1	0	16.01	16.08	15.99	15.89	15.93	
20	256QAM	1	49	16.00	15.72	15.90	15.81	15.83	
20	256QAM	1	99	15.94	15.85	15.94	15.85	15.88	
20	256QAM	50	0	16.06	16.00	15.87	15.80	15.64	17
20	256QAM	50	24	15.96	15.91	15.90	15.78	15.82	
20	256QAM	50	50	15.83	15.84	15.85	15.74	15.76	
20	256QAM	100	0	16.02	15.97	16.01	15.92	15.91	
Channel				39725	40173	40620	41058	41515	Tune-up limit (dBm)
Frequency (MHz)				2503.5	2543.5	2593	2637.4	2692.5	
15	QPSK	1	0	22.00	21.91	22.06	21.90	21.89	23
15	QPSK	1	7	21.91	21.98	21.81	21.83	21.79	
15	QPSK	1	74	22.00	21.85	21.96	21.86	21.75	
15	QPSK	36	0	21.23	21.18	21.24	21.09	20.97	
15	QPSK	36	20	21.19	21.16	21.10	20.95	20.92	22
15	QPSK	36	39	21.21	21.10	21.06	20.89	20.79	
15	QPSK	75	0	21.20	21.16	21.11	21.01	20.89	
15	16QAM	1	0	21.28	21.30	21.24	21.18	21.19	
15	16QAM	1	37	21.21	21.08	21.18	21.11	21.14	22
15	16QAM	1	74	21.14	21.00	21.23	21.09	21.11	
15	16QAM	36	0	20.29	20.25	20.11	20.05	19.96	
15	16QAM	36	20	20.23	20.08	20.14	20.02	19.99	
15	16QAM	36	39	20.20	19.96	19.99	19.91	19.95	21
15	16QAM	75	0	20.11	20.08	20.14	20.08	20.09	
15	64QAM	1	0	20.19	20.26	20.17	20.07	20.11	
15	64QAM	1	37	20.18	19.90	20.08	19.99	20.01	
15	64QAM	1	74	20.12	20.03	20.12	20.03	20.06	21
15	64QAM	36	0	20.24	20.18	20.05	19.98	19.82	
15	64QAM	36	20	20.14	20.09	20.08	19.96	20.00	
15	64QAM	36	39	20.01	20.02	20.03	19.92	19.94	
15	64QAM	75	0	20.20	20.15	20.10	20.00	20.00	17
15	256QAM	1	0	15.95	16.02	15.93	15.83	15.87	
15	256QAM	1	37	15.94	15.66	15.84	15.75	15.77	
15	256QAM	1	74	15.88	15.79	15.88	15.79	15.82	
15	256QAM	36	0	16.00	15.94	15.81	15.74	15.58	17
15	256QAM	36	20	15.90	15.85	15.84	15.72	15.76	
15	256QAM	36	39	15.77	15.78	15.79	15.68	15.70	
15	256QAM	75	0	15.96	15.91	15.95	15.86	15.85	
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)
Frequency (MHz)				2501 <td>2547</td> <td>2593</td> <td>2639</td> <td>2685</td> <th data-kind="ghost"></th>	2547	2593	2639	2685	
10	QPSK	1	0	21.98	21.89	22.04	21.88	21.87	23
10	QPSK	1	25	21.89	21.96	21.79	21.81	21.77	
10	QPSK	1	49	21.98	21.83	21.94	21.84	21.76	
10	QPSK	25	0	21.21	21.16	21.22	21.07	20.95	
10	QPSK	25	12	21.17	21.14	21.08	20.93	20.90	22
10	QPSK	25	25	21.10	21.08	21.04	20.87	20.77	
10	QPSK	50	0	21.18	21.14	21.09	20.99	20.87	
10	16QAM	1	0	21.26	21.28	21.22	21.16	21.17	
10	16QAM	1	25	21.19	21.06	21.16	21.09	21.12	22
10	16QAM	1	49	21.12	20.98	21.21	21.07	21.09	
10	16QAM	25	0	20.27	20.23	20.09	20.03	19.94	
10	16QAM	25	12	20.21	20.06	20.12	20.00	19.97	
10	16QAM	25	25	20.16	19.94	19.97	19.89	19.93	21
10	16QAM	50	0	20.09	20.06	20.12	20.06	20.07	
10	64QAM	1	0	20.17	20.24	20.15	20.05	20.00	
10	64QAM	1	25	20.16	19.88	20.06	19.97	19.99	
10	64QAM	1	49	20.10	20.01	20.10	20.01	20.04	21
10	64QAM	25	0	20.22	20.16	20.03	19.96	19.80	
10	64QAM	25	12	20.12	20.07	20.06	19.94	19.98	
10	64QAM	25	25	19.99	20.00	20.01	19.90	19.92	
10	64QAM	50	0	20.18	20.13	20.17	20.08	20.07	17
10	256QAM	1	0	15.93	16.00	15.91	15.81	15.85	
10	256QAM	1	25	15.92	15.84	15.82	15.73	15.75	
10	256QAM	1	49	15.86	15.77	15.86	15.77	15.80	
10	256QAM	25	0	15.98	15.92	15.79	15.72	15.56	17
10	256QAM	25	12	15.98	15.93	15.82	15.70	15.74	
10	256QAM	25	25	15.75	15.76	15.77	15.66	15.68	
10	256QAM	50	0	15.94	15.89	15.93	15.84	15.83	
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5	
5	QPSK	1	0	21.91	21.82	21.97	21.81	21.80	23
5	QPSK	1	12	21.82	21.89	21.72	21.74	21.70	
5	QPSK	1	24	21.91	21.76	21.87	21.77	21.69	
5	QPSK	12	0	21.14	21.09	21.15	21.00	20.88	
5	QPSK	12	7	21.10	21.07	21.01	20.86	20.83	22
5	QPSK	12	15	21.12	21.01	20.97	20.80	20.70	
5	QPSK	25	0	21.11	21.07	21.02	20.82	20.80	
5	16QAM	1	0	21.19	21.21	21.15	21.09	21.10	
5	16QAM	1	12	21.12	20.99	21.09	21.02	21.05	22
5	16QAM	1	24	21.05	20.91	21.14	21.00	21.02	
5	16QAM	12	0	20.20	20.16	20.02	19.96	19.87	
5	16QAM	12	7	20.14	19.99	20.05	19.93	19.90	
5	16QAM	12	13	20.11	19.87	19.90	19.82	19.86	21
5	16QAM	25	0	20.02	19.99	20.05	19.99	20.00	
5	64QAM	1	0	20.16	20.17	20.08	19.98	20.02	
5	64QAM	1	12	20.09	19.81	19.99	19.90	19.92	
5	64QAM	1	24	20.03	19.94	20.03	19.94	19.97	21
5	64QAM	12	0	20.15	20.09	19.96	19.89	19.73	
5	64QAM	12	7	20.08	20.00	19.90	19.87	19.91	
5	64QAM	12	13	19.92	19.93	19.94	19.83	19.85	
5	64QAM	25	0	20.11	20.06	20.10	20.01	20.00	17
5	256QAM	1	0	15.86	15.93	15.84	15.74	15.78	
5	256QAM	1	12	15.85	15.87	15.75	15.66	15.68	
5	256QAM	1	24	15.79	15.70	15.79	15.70	15.73	
5	256QAM	12	0	15.91	15.85	15.72	15.65	15.49	17
5	256QAM	12	7	15.81	15.76	15.75	15.63	15.67	
5	256QAM	12	13	15.60	15.69	15.70	15.59	15.61	
5	256QAM	25	0	15.87	15.82	15.86	15.77	15.76	

Band 41 (2496~2690MHz) (dBm)_PC3									
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Low Channel	Middle Channel	Middle High Channel	High Channel	Tune-up limit (dBm)
Channel				39750	40165	40620	41055	41690	(dBm)
Frequency (MHz)				2503.5	2543.5	2593	2643.5	2693	
20	QPSK	1	0	19.35	19.26	19.41	19.25	19.24	20.5
20	QPSK	1	49	19.26	19.33	19.16	19.18	19.14	
20	QPSK	1	99	19.35	19.20	19.31	19.21	19.13	
20	QPSK	50	0	18.58	18.53	18.			

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	55630	55990	56160	56640	
Frequency (MHz)				3555	3600	3625	3643	3695	
20	QPSK	1	0	18.42	18.55	18.58	18.54	18.53	19.5
20	QPSK	1	49	18.42	18.27	18.24	18.20	18.15	
20	QPSK	1	99	18.40	18.34	18.21	18.23	18.17	
20	QPSK	50	0	17.61	17.59	17.70	17.60	17.63	
20	QPSK	50	24	17.52	17.69	17.61	17.68	17.52	18.5
20	QPSK	50	50	17.51	17.76	17.51	17.50	17.38	
20	QPSK	100	0	17.49	17.46	17.61	17.48	17.51	
20	16QAM	1	0	17.72	17.64	17.57	17.48	17.51	
20	16QAM	1	49	17.77	17.69	17.50	17.49	17.52	18.5
20	16QAM	1	99	17.52	17.57	17.45	17.48	17.46	
20	16QAM	50	0	16.93	16.82	16.69	16.61	16.64	
20	16QAM	50	24	16.89	16.72	16.65	16.58	16.60	
20	16QAM	50	50	16.72	16.73	16.45	16.62	16.61	17.5
20	16QAM	100	0	16.78	16.78	16.63	16.63	16.55	
20	64QAM	1	0	16.83	16.93	16.69	16.80	16.74	
20	64QAM	1	49	16.49	16.72	16.61	16.79	16.72	
20	64QAM	1	99	16.62	16.63	16.64	16.70	16.73	17.5
20	64QAM	50	0	16.77	16.72	16.61	16.65	16.47	
20	64QAM	50	24	16.94	16.74	16.37	16.62	16.57	
20	64QAM	50	50	16.78	16.52	16.35	16.68	16.64	
20	64QAM	100	0	16.68	16.70	16.75	16.55	16.52	13.5
20	256QAM	1	0	12.51	12.61	12.37	12.48	12.42	
20	256QAM	1	49	12.17	12.40	12.29	12.47	12.40	
20	256QAM	1	99	12.30	12.31	12.32	12.38	12.41	
20	256QAM	50	0	12.44	12.39	12.28	12.32	12.14	13.5
20	256QAM	50	24	12.51	12.41	12.24	12.29	12.24	
20	256QAM	50	50	12.45	12.19	12.02	12.35	12.31	
20	256QAM	100	0	12.35	12.37	12.42	12.22	12.19	
Channel				55315	55620	55990	56160	56695	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3600	3625	3642	3692.5	
15	QPSK	1	0	18.34	18.47	18.30	18.46	18.45	19.5
15	QPSK	1	37	18.34	18.19	18.16	18.12	18.07	
15	QPSK	1	74	18.32	18.26	18.13	18.15	18.06	
15	QPSK	36	0	17.53	17.51	17.62	17.52	17.55	
15	QPSK	36	20	17.44	17.61	17.53	17.60	17.44	18.5
15	QPSK	36	39	17.43	17.68	17.43	17.42	17.30	
15	QPSK	75	0	17.41	17.38	17.53	17.40	17.43	
15	16QAM	1	0	17.64	17.56	17.49	17.40	17.43	
15	16QAM	1	37	17.69	17.61	17.42	17.41	17.44	18.5
15	16QAM	1	74	17.84	17.49	17.37	17.40	17.38	
15	16QAM	36	0	16.85	16.74	16.81	16.53	16.56	
15	16QAM	36	20	16.61	16.64	16.57	16.50	16.52	
15	16QAM	36	39	16.64	16.65	16.37	16.54	16.53	17.5
15	16QAM	75	0	16.70	16.70	16.55	16.55	16.47	
15	64QAM	1	0	16.75	16.85	16.61	16.72	16.66	
15	64QAM	1	37	16.41	16.64	16.53	16.71	16.64	
15	64QAM	1	74	16.54	16.55	16.56	16.62	16.65	17.5
15	64QAM	36	0	16.69	16.64	16.53	16.57	16.39	
15	64QAM	36	20	16.76	16.66	16.49	16.54	16.49	
15	64QAM	36	39	16.70	16.44	16.27	16.60	16.56	
15	64QAM	75	0	16.60	16.62	16.67	16.47	16.44	13.5
15	256QAM	1	0	12.43	12.53	12.29	12.40	12.34	
15	256QAM	1	37	12.09	12.32	12.21	12.39	12.32	
15	256QAM	1	74	12.22	12.23	12.24	12.30	12.33	
15	256QAM	36	0	12.36	12.31	12.20	12.24	12.06	13.5
15	256QAM	36	20	12.43	12.33	12.16	12.21	12.16	
15	256QAM	36	39	12.37	12.11	11.94	12.27	12.23	
15	256QAM	75	0	12.27	12.29	12.34	12.14	12.11	
Channel				55290	55815	55990	56165	56690	Tune-up limit (dBm)
Frequency (MHz)				3555	3607.5	3625	3642.5	3695	
10	QPSK	1	0	18.28	18.41	18.44	18.40	18.39	19.5
10	QPSK	1	25	18.28	18.13	18.10	18.06	18.01	
10	QPSK	1	49	18.26	18.20	18.07	18.09	18.03	
10	QPSK	25	0	17.47	17.45	17.56	17.46	17.49	
10	QPSK	25	12	17.38	17.55	17.47	17.54	17.38	18.5
10	QPSK	25	25	17.37	17.62	17.37	17.36	17.24	
10	QPSK	50	0	17.35	17.32	17.47	17.34	17.37	
10	16QAM	1	0	17.58	17.50	17.43	17.34	17.37	
10	16QAM	1	25	17.63	17.55	17.36	17.35	17.38	18.5
10	16QAM	1	49	17.78	17.43	17.31	17.34	17.32	
10	16QAM	25	0	16.79	16.68	16.55	16.47	16.50	
10	16QAM	25	12	16.55	16.58	16.51	16.44	16.46	
10	16QAM	25	25	16.58	16.59	16.31	16.48	16.47	17.5
10	16QAM	50	0	16.64	16.64	16.49	16.49	16.41	
10	64QAM	1	0	16.69	16.79	16.55	16.66	16.60	
10	64QAM	1	25	16.35	16.58	16.47	16.65	16.58	
10	64QAM	1	49	16.48	16.40	16.50	16.56	16.59	17.5
10	64QAM	25	0	16.63	16.58	16.47	16.51	16.33	
10	64QAM	25	12	16.70	16.60	16.43	16.48	16.43	
10	64QAM	25	25	16.64	16.38	16.21	16.54	16.50	
10	64QAM	50	0	16.54	16.56	16.61	16.41	16.38	13.5
10	256QAM	1	0	12.37	12.47	12.23	12.34	12.28	
10	256QAM	1	25	12.03	12.26	12.15	12.33	12.26	
10	256QAM	1	49	12.16	12.17	12.18	12.24	12.27	
10	256QAM	25	0	12.30	12.25	12.14	12.18	12.00	13.5
10	256QAM	25	12	12.37	12.27	12.10	12.15	12.10	
10	256QAM	25	25	12.31	12.05	11.88	12.21	12.17	
10	256QAM	50	0	12.21	12.23	12.28	12.08	12.05	
Channel				55265	55810	55990	56170	56175	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3607	3625	3643	3697.5	
5	QPSK	1	0	18.24	18.37	18.40	18.36	18.35	19.5
5	QPSK	1	12	18.24	18.09	18.06	18.02	17.97	
5	QPSK	1	24	18.22	18.16	18.03	18.05	17.99	
5	QPSK	12	0	17.43	17.41	17.52	17.42	17.45	
5	QPSK	12	7	17.34	17.51	17.43	17.59	17.34	18.5
5	QPSK	12	13	17.33	17.56	17.33	17.32	17.20	
5	QPSK	25	0	17.31	17.28	17.43	17.30	17.20	
5	16QAM	1	0	17.54	17.46	17.39	17.30	17.33	
5	16QAM	1	12	17.59	17.51	17.32	17.31	17.34	18.5
5	16QAM	1	24	17.74	17.39	17.27	17.30	17.28	
5	16QAM	12	0	16.75	16.64	16.51	16.43	16.46	
5	16QAM	12	7	16.51	16.54	16.47	16.40	16.42	
5	16QAM	12	13	16.54	16.55	16.27	16.44	16.43	17.5
5	16QAM	25	0	16.60	16.60	16.45	16.45	16.37	
5	64QAM	1	0	16.65	16.75	16.51	16.62	16.56	
5	64QAM	1	12	16.31	16.54	16.43	16.61	16.54	
5	64QAM	1	24	16.44	16.45	16.46	16.52	16.55	17.5
5	64QAM	12	0	16.59	16.54	16.43	16.47	16.29	
5	64QAM	12	7	16.66	16.56	16.39	16.44	16.38	
5	64QAM	12	13	16.60	16.34	16.17	16.50	16.46	
5	64QAM	25	0	16.50	16.52	16.57	16.37	16.34	13.5
5	256QAM	1	0	12.33	12.43	12.19	12.30	12.24	
5	256QAM	1	12	11.98	12.22	12.11	12.29	12.22	
5	256QAM	1	24	12.12	12.13	12.14	12.20	12.23	
5	256QAM	12	0	12.26	12.21	12.10	12.14	11.96	13.5
5	256QAM	12	7	12.33	12.23	12.06	12.11	12.06	
5	256QAM	12	13	12.27	12.01	11.84	12.17	12.13	
5	256QAM	25	0	12.17	12.19	12.24	12.04	12.01	

n7 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				504000	507000	510000	
Frequency (MHz)				2520	2535	2550	
40	DFT-s-OFDM PI/2 BPSK	1	1	18.73	18.79	18.71	19.5
40		1	108	18.71	18.69	18.63	
40		1	214	18.74	18.69	18.59	
40		108	1	18.78	18.74	18.63	19.5
40		108	54	18.78	18.84	18.55	
40		108	108	18.76	18.69	18.63	
40		216	0	18.84	18.83	18.76	
40	DFT-s-OFDM QPSK	1	1	18.91	18.98	18.96	20
40		1	108	18.83	18.57	18.88	
40		1	214	18.95	19.01	18.87	
40		108	1	18.90	18.70	18.72	19.5
40		108	54	18.81	18.81	18.77	
40		108	108	18.57	18.67	18.65	
40		216	0	18.37	18.54	18.81	
40	DFT-s-OFDM 16QAM	1	1	18.19	18.38	18.31	19
40	DFT-s-OFDM 64QAM	1	1	17.04	17.19	17.36	18
40	DFT-s-OFDM 256QAM	1	1	15.10	15.21	15.17	16
40	CP-OFDM QPSK	1	1	17.71	17.94	18.03	19
40	CP-OFDM 16QAM	1	1	17.02	17.13	17.51	18.5
40	CP-OFDM 64QAM	1	1	16.04	16.23	16.51	17
40	CP-OFDM 256QAM	1	1	13.26	13.40	13.17	14
Channel				503000	507000	511000	Tune-up limit (dBm)
Frequency (MHz)				2515	2535	2555	
30	DFT-s-OFDM QPSK	1	1	18.90	18.95	18.95	20
Channel				502500	507000	511500	Tune-up limit (dBm)
Frequency (MHz)				2512.5	2535	2557.5	
25	DFT-s-OFDM QPSK	1	1	18.74	19.19	18.89	20
Channel				502000	507000	512000	Tune-up limit (dBm)
Frequency (MHz)				2510	2535	2560	
20	DFT-s-OFDM QPSK	1	1	19.04	18.89	18.80	20
Channel				501500	507000	512500	Tune-up limit (dBm)
Frequency (MHz)				2507.5	2535	2562.5	
15	DFT-s-OFDM QPSK	1	1	18.96	19.08	19.13	20
Channel				501000	507000	513000	Tune-up limit (dBm)
Frequency (MHz)				2505	2535	2565	
10	DFT-s-OFDM QPSK	1	1	18.88	18.99	18.80	20
Channel				500500	507000	513500	Tune-up limit (dBm)
Frequency (MHz)				2502.5	2535	2567.5	
5	DFT-s-OFDM QPSK	1	1	18.73	19.03	18.94	20

n13							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					156400		
Frequency (MHz)					782		
10	DFT-s-OFDM PI/2 BPSK	1	1		22.54		23.50
10		1	26		22.50		
10		1	50		22.52		
10		25	1		22.41		23.00
10		25	12		22.53		
10		25	25		22.56		
10		50	0		22.54		
10	DFT-s-OFDM QPSK	1	1		22.51		23.50
10		1	26		22.45		
10		1	50		22.49		
10		25	1		22.11		23.50
10		25	12		22.62		
10		25	25		22.52		
10		50	0		22.60		
10	DFT-s-OFDM 16QAM	1	1		22.76		23.50
10	DFT-s-OFDM 64QAM	1	1		21.34		22.00
10	DFT-s-OFDM 256QAM	1	1		18.72		19.50
10	CP-OFDM QPSK	1	1		21.86		22.50
10	CP-OFDM 16QAM	1	1		21.48		22.50
10	CP-OFDM 64QAM	1	1		20.05		21.00
10	CP-OFDM 256QAM	1	1		16.89		17.50
Channel				155900	156400	156900	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	DFT-s-OFDM QPSK	1	1	22.47	22.49	22.63	23.50

N26							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					164800		Tune-up limit (dBm)
Frequency (MHz)					824		
20	DFT-s-OFDM PI/2 BPSK	1	1		21.87		22.50
20		1	53		21.63		
20		1	104		21.53		
20		50	1		21.43		23.00
20		50	25		22.01		
20		50	50		21.38		
20		100	0		21.93		
20	DFT-s-OFDM QPSK	1	1		22.02		23.00
20		1	53		21.73		
20		1	104		21.82		
20		50	1		21.62		22.50
20		50	25		21.43		
20		50	50		21.11		
20		100	0		21.32		
20	DFT-s-OFDM 16QAM	1	1		21.34		22.00
20	DFT-s-OFDM 64QAM	1	1		20.33		21.00
20	DFT-s-OFDM 256QAM	1	1		17.65		18.50
20	CP-OFDM QPSK	1	1		20.79		21.50
20	CP-OFDM 16QAM	1	1		20.29		21.00
20	CP-OFDM 64QAM	1	1		19.02		20.00
20	CP-OFDM 256QAM	1	1		16.14		17.00
Channel					163800		Tune-up limit (dBm)
Frequency (MHz)					819		
15	DFT-s-OFDM QPSK	1	1		21.90		23.00
Channel					163800		Tune-up limit (dBm)
Frequency (MHz)					819		
10	DFT-s-OFDM QPSK	1	1		21.76		23.00
Channel				163300	163800	164300	Tune-up limit (dBm)
Frequency (MHz)				816.5	819	821.5	
5	DFT-s-OFDM QPSK	1	1	21.98	22.00	21.75	23.00

n30 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					462000		
Frequency (MHz)					2310		
10	DFT-s-OFDM PI/2 BPSK	1	1		21.69		22.50
10		1	26		21.69		
10		1	50		21.58		
10		25	1		21.20		22.50
10		25	12		21.71		
10		25	25		21.05		
10		50	0		21.19		
10	DFT-s-OFDM QPSK	1	1		21.80		22.50
10		1	26		21.72		
10		1	50		21.64		
10		25	1		20.73		22.50
10		25	12		21.71		
10		25	25		20.58		
10		50	0		20.73		
10	DFT-s-OFDM 16QAM	1	1		20.72		21.50
10	DFT-s-OFDM 64QAM	1	1		19.08		20.00
10	DFT-s-OFDM 256QAM	1	1		16.89		17.50
10	CP-OFDM QPSK	1	1		20.06		21.00
10	CP-OFDM 16QAM	1	1		19.57		20.50
10	CP-OFDM 64QAM	1	1		17.74		18.50
10	CP-OFDM 256QAM	1	1		14.84		15.50
Channel				461500	462000	462500	Tune-up limit
Frequency (MHz)				2307.5	2310	2312.5	
5	DFT-s-OFDM QPSK	1	1	21.56	21.69	21.56	22.50

n38 (PC3)(ANT0)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				518000	519000	520000	
Frequency (MHz)				2590	2595	2600	
40	DFT-s-OFDM PI/2 BPSK	1	1	19.02	19.17	19.18	20
40		1	53	19.00	19.02	18.87	
40		1	104	19.10	19.08	18.99	
40		50	1	19.03	18.99	19.03	20
40	DFT-s-OFDM QPSK	50	25	19.11	19.22	19.30	
40		50	50	18.92	19.00	19.05	
40		100	0	19.24	19.30	19.25	
40		1	1	19.19	19.20	19.31	20
40	DFT-s-OFDM 16QAM	1	53	19.04	19.08	19.19	
40		1	104	19.19	19.16	19.13	
40		50	1	19.11	19.10	19.04	20
40		50	25	19.14	19.14	19.24	
40	DFT-s-OFDM 64QAM	50	50	19.06	19.05	19.11	
40		100	0	19.15	19.16	19.24	
40	DFT-s-OFDM 256QAM	1	1	19.22	18.93	19.08	20
40	DFT-s-OFDM 64QAM	1	1	17.74	17.92	17.97	19
40	DFT-s-OFDM 256QAM	1	1	15.70	15.66	15.79	16.5
40	CP-OFDM QPSK	1	1	18.63	18.71	18.67	19.5
40	CP-OFDM 16QAM	1	1	18.23	18.29	17.92	19
40	CP-OFDM 64QAM	1	1	16.42	16.57	16.48	17.5
40	CP-OFDM 256QAM	1	1	14.03	14.13	14.22	15
Channel				517000	519000	521000	Tune-up limit (dBm)
Frequency (MHz)				2585	2595	2605	
30	DFT-s-OFDM QPSK	1	1	19.11	19.05	19.22	20
Channel				516000	519000	522000	Tune-up limit (dBm)
Frequency (MHz)				2580	2595	2610	
20	DFT-s-OFDM QPSK	1	1	18.89	19.05	19.01	20
Channel				515500	519000	522500	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	DFT-s-OFDM QPSK	1	1	18.81	19.02	19.00	20
Channel				515000	519000	523000	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	DFT-s-OFDM QPSK	1	1	19.14	19.19	19.11	20

n38 (PC3)(ANT0)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				518000	519000	520000	
Frequency (MHz)				2590	2595	2600	
40	DFT-s-OFDM PI/2 BPSK	1	1	18.79	18.74	18.62	19.5
40		1	53	18.59	18.55	18.64	
40		1	104	18.57	18.52	18.62	
40		50	1	18.77	18.69	18.62	19.5
40		50	25	18.67	18.63	18.67	
40		50	50	18.58	18.50	18.59	
40		100	0	18.75	18.68	18.72	
40	DFT-s-OFDM QPSK	1	1	18.87	18.82	18.73	19.5
40		1	53	18.74	18.65	18.63	
40		1	104	18.74	18.68	18.80	
40		50	1	18.83	18.72	18.76	19.5
40		50	25	18.83	18.70	18.75	
40		50	50	18.69	18.61	18.70	
40		100	0	18.82	18.76	18.77	
40	DFT-s-OFDM 16QAM	1	1	18.71	18.47	18.43	19.5
40	DFT-s-OFDM 64QAM	1	1	18.63	18.67	18.49	19.5
40	DFT-s-OFDM 256QAM	1	1	17.91	17.88	17.83	19
40	CP-OFDM QPSK	1	1	18.71	18.73	18.66	19.5
40	CP-OFDM 16QAM	1	1	18.57	18.60	18.62	19.5
40	CP-OFDM 64QAM	1	1	18.69	18.47	18.42	19.5
40	CP-OFDM 256QAM	1	1	16.06	16.26	16.09	17
Channel				517000	519000	521000	Tune-up limit (dBm)
Frequency (MHz)				2585	2595	2605	
30	DFT-s-OFDM QPSK	1	1	20.37	20.23	20.26	19.5
Channel				516000	519000	522000	Tune-up limit (dBm)
Frequency (MHz)				2580	2595	2610	
20	DFT-s-OFDM QPSK	1	1	20.21	20.17	20.14	19.5
Channel				515500	519000	522500	Tune-up limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5	
15	DFT-s-OFDM QPSK	1	1	20.30	20.31	20.01	19.5
Channel				515000	519000	523000	Tune-up limit (dBm)
Frequency (MHz)				2575	2595	2615	
10	DFT-s-OFDM QPSK	1	1	20.11	20.13	20.09	19.5

n41 (PC2)

BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	20.00
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	18.90	19.02	18.87	18.81	18.77	20.00
100		1	136	18.73	18.78	18.75	18.73	18.57	
100		1	271	18.67	18.77	18.64	18.40	18.45	
100		135	1	18.46	18.42	18.36	18.29	18.27	20.00
100		135	67	18.84	18.86	18.85	18.80	18.70	
100		135	136	18.20	18.24	18.26	18.14	17.90	
100	DFT-s-OFDM QPSK	270	0	18.36	18.39	18.41	18.31	18.20	20.00
100		1	1	18.88	18.94	19.20	18.77	18.70	
100		1	136	18.67	18.75	18.73	18.65	18.54	
100		1	271	18.64	18.77	18.64	18.37	18.43	20.00
100		135	1	17.94	17.92	17.94	17.76	17.75	
100		135	67	18.86	18.84	18.91	18.82	18.87	
100	DFT-s-OFDM 16QAM	135	136	17.68	17.75	17.73	17.60	17.35	20.00
100		270	0	17.83	17.86	17.90	17.78	17.67	
100		1	1	17.86	17.91	17.77	17.75	17.66	
100	DFT-s-OFDM 64QAM	1	1	16.46	16.57	16.45	16.36	16.32	17.50
100	DFT-s-OFDM 256QAM	1	1	14.25	14.28	14.20	14.11	14.10	15.00
100	CP-OFDM QPSK	1	1	17.42	17.51	17.37	17.33	17.30	18.50
100	CP-OFDM 16QAM	1	1	16.98	16.92	16.82	16.90	16.83	17.50
100	CP-OFDM 64QAM	1	1	15.06	15.13	14.96	15.10	14.89	16.00
100	CP-OFDM 256QAM	1	1	12.23	12.32	12.24	12.20	12.05	13.00
Channel				508200	513402	518598	523800	528996	20.00
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	18.84	18.88	18.74	18.70	18.69	20.00
Channel				507204	512904	518598	524298	529998	20.00
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	18.82	18.88	18.75	18.72	18.65	20.00
Channel				506202	512400	518598	524796	531000	20.00
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	18.90	18.96	18.82	18.76	18.71	20.00
Channel				505200	511902	518598	525798	531996	20.00
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	19.07	18.99	18.94	18.84	18.79	20.00
Channel				504204	511404	518598	525798	532998	20.00
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	19.13	19.02	18.97	18.84	18.73	20.00
Channel				503202	510900	518598	526296	534000	20.00
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	19.16	19.10	19.06	18.89	18.70	20.00
Channel				502200	510402	518598	526800	534996	20.00
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	19.15	18.99	18.98	18.78	18.59	20.00
Channel				501204	509904	518598	527298	535998	20.00
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	19.17	18.97	19.05	18.84	18.46	20.00

n41 (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel				509202	513900	518598	523296	528000	20.00
Frequency (MHz)				2546.01	2569.5	2592.99	2616.48	2640	
100	DFT-s-OFDM PI/2 BPSK	1	1	18.89	19.01	18.86	18.80	18.76	20.00
100		1	136	18.72	18.77	18.74	18.72	18.56	
100		1	271	18.66	18.76	18.63	18.39	18.44	
100		135	1	18.45	18.41	18.35	18.28	18.26	20.00
100		135	67	18.83	18.85	18.84	18.79	18.69	
100		135	136	18.19	18.23	18.25	18.13	17.89	
100	DFT-s-OFDM QPSK	270	0	18.35	18.38	18.40	18.30	18.19	20.00
100		1	1	18.87	18.93	19.19	18.76	18.69	
100		1	136	18.66	18.74	18.72	18.64	18.53	
100		1	271	18.63	18.76	18.63	18.36	18.42	20.00
100		135	1	17.93	17.91	17.93	17.75	17.74	
100		135	67	18.85	18.83	18.90	18.81	18.66	
100	DFT-s-OFDM 16QAM	135	136	17.67	17.74	17.72	17.59	17.34	20.00
100		270	0	17.82	17.85	17.89	17.77	17.66	
100		1	1	17.85	17.90	17.76	17.74	17.65	18.50
100	DFT-s-OFDM 64QAM	1	1	16.45	16.56	16.44	16.35	16.31	17.00
100	DFT-s-OFDM 256QAM	1	1	14.24	14.27	14.19	14.10	14.09	15.00
100	CP-OFDM QPSK	1	1	17.41	17.50	17.36	17.32	17.29	18.00
100	CP-OFDM 16QAM	1	1	16.97	16.91	16.81	16.89	16.82	17.50
100	CP-OFDM 64QAM	1	1	15.05	15.12	14.95	15.09	14.88	15.50
100	CP-OFDM 256QAM	1	1	12.22	12.31	12.23	12.19	12.04	13.00
Channel				508200	513402	518598	523800	528996	20.00
Frequency (MHz)				2541	2567.01	2592.99	2619	2644.98	
90	DFT-s-OFDM QPSK	1	1	18.83	18.87	18.73	18.69	18.68	20.00
Channel				507204	512904	518598	524298	529998	20.00
Frequency (MHz)				2536.02	2564.52	2592.99	2621.49	2649.99	
80	DFT-s-OFDM QPSK	1	1	18.81	18.87	18.74	18.71	18.64	20.00
Channel				506202	512400	518598	524796	531000	20.00
Frequency (MHz)				2531.01	2562	2592.99	2623.98	2655	
70	DFT-s-OFDM QPSK	1	1	18.89	18.95	18.81	18.75	18.70	20.00
Channel				505200	511902	518598	525798	531996	20.00
Frequency (MHz)				2526	2559.51	2592.99	2626.5	2659.98	
60	DFT-s-OFDM QPSK	1	1	19.06	18.98	18.93	18.83	18.78	20.00
Channel				504204	511404	518598	525798	532998	20.00
Frequency (MHz)				2521.02	2557.02	2592.99	2626.5	2664.99	
50	DFT-s-OFDM QPSK	1	1	19.12	19.01	18.96	18.83	18.72	20.00
Channel				503202	510900	518598	526296	534000	20.00
Frequency (MHz)				2516.01	2554.5	2592.99	2631.48	2670	
40	DFT-s-OFDM QPSK	1	1	19.15	19.09	19.05	18.88	18.69	20.00
Channel				502200	510402	518598	526800	534996	20.00
Frequency (MHz)				2511	2552.01	2592.99	2634	2674.98	
30	DFT-s-OFDM QPSK	1	1	19.14	18.98	18.97	18.77	18.58	20.00
Channel				501204	509904	518598	527298	535998	20.00
Frequency (MHz)				2506.02	2549.52	2592.99	2636.49	2679.99	
20	DFT-s-OFDM QPSK	1	1	19.16	18.96	19.04	18.83	18.45	20.00

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	
Frequency (MHz)				3570	3597.51	3624.99	3652.5	3679.98	
40	DFT-s-OFDM PI/2 BPSK	1	1	19.32	19.15	19.35	19.31	19.53	22.5
40		1	53	19.20	19.39	19.15	19.42	19.63	
40		1	104	19.36	19.32	19.52	19.65	19.95	
40		50	1	18.79	18.79	18.64	18.95	19.05	22.5
40		50	25	19.28	19.31	19.22	19.47	19.70	
40		50	50	18.66	18.81	18.71	19.00	19.16	
40	DFT-s-OFDM QPSK	100	0	18.79	18.83	18.71	18.98	19.15	21
40		1	1	19.94	19.97	20.06	20.03	20.02	
40		1	53	19.21	19.30	19.15	19.36	19.62	
40		1	104	19.34	19.32	19.54	19.64	19.72	20.5
40		50	1	18.28	18.24	18.14	18.46	18.59	
40		50	25	19.57	19.62	19.68	19.59	19.58	
40	DFT-s-OFDM 16QAM	50	50	18.11	18.32	18.24	18.51	18.69	20.5
40		100	0	18.29	18.36	18.23	18.46	18.56	
40	DFT-s-OFDM 64QAM	1	1	18.25	18.08	18.25	18.19	18.46	21.5
40	DFT-s-OFDM 256QAM	1	1	16.86	16.72	16.90	16.82	17.09	20.5
40	CP-OFDM QPSK	1	1	14.66	14.49	14.66	14.65	14.88	17.5
40	CP-OFDM 16QAM	1	1	17.84	17.72	17.87	17.81	18.09	25
40	CP-OFDM 64QAM	1	1	17.35	17.34	17.51	17.32	17.70	24
40	CP-OFDM 256QAM	1	1	15.39	15.35	15.49	15.35	15.71	23
40	CP-OFDM 256QAM	1	1	12.72	12.52	12.68	12.62	12.89	19
Channel				637668	639668	641666	643666	645666	Tune-up limit (dBm)
Frequency (MHz)				3565.02	3595.02	3624.99	3654.99	3684.99	
30	DFT-s-OFDM QPSK	1	1	19.62	19.61	19.62	19.77	19.95	22.5
Channel				637334	639500	641666	643832	646000	Tune-up limit (dBm)
Frequency (MHz)				3560.01	3592.5	3624.99	3657.48	3690	
20	DFT-s-OFDM QPSK	1	1	19.67	19.60	19.55	19.75	19.92	22.5
Channel				637000	639334	641666	644000	646332	Tune-up limit (dBm)
Frequency (MHz)				3555	3590.01	3624.99	3660	3694.98	
10	DFT-s-OFDM QPSK	1	1	19.61	19.48	19.39	19.72	19.89	22.5

n66 (PC3)(ANT0)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	23.00
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	22.00	22.10	22.06	23.00
40		1	108	21.94	21.93	21.75	
40		1	214	21.93	21.94	21.85	
40		108	1	21.46	21.46	21.36	23.00
40		108	54	22.04	21.98	21.86	
40		108	108	21.45	21.37	21.33	
40		216	0	21.44	21.49	21.39	
40	DFT-s-OFDM QPSK	1	1	22.11	22.06	22.09	23.00
40		1	108	21.91	21.87	21.65	
40		1	214	22.02	21.96	21.79	
40		108	1	21.16	20.99	21.13	23.00
40		108	54	22.04	22.02	22.03	
40		108	108	21.17	20.94	21.08	
40		216	0	22.01	21.93	21.90	
40	DFT-s-OFDM 16QAM	1	1	20.92	20.99	20.92	22.00
40	DFT-s-OFDM 64QAM	1	1	19.27	19.35	19.28	20.00
40	DFT-s-OFDM 256QAM	1	1	16.88	16.97	17.02	18.00
40	CP-OFDM QPSK	1	1	20.69	20.52	20.54	21.50
40	CP-OFDM 16QAM	1	1	19.95	19.98	19.85	21.00
40	CP-OFDM 64QAM	1	1	17.93	17.94	17.93	19.00
40	CP-OFDM 256QAM	1	1	15.05	15.02	14.93	16.00
Channel				345000	349000	353000	23.00
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	22.00	22.02	21.93	23.00
Channel				344000	349000	354000	23.00
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	21.94	21.89	21.85	23.00
Channel				343500	349000	354500	23.00
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	22.08	22.03	21.92	23.00
Channel				343000	349000	355000	23.00
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	22.03	22.07	21.86	23.00
Channel				342500	349000	355500	23.00
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	21.89	21.94	21.78	23.00

n77(3450-3550MHz) (PC2)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			25.02			26.00
100		1	136			24.63			
100		1	271			24.27			
100		135	1			24.14			
100		135	67			24.71			
100	DFT-s-OFDM QPSK	135	136			23.73			25.50
100		270	0			24.17			
100		1	1			25.21			26.00
100		1	136			24.61			
100		1	271			24.24			
100	DFT-s-OFDM 16QAM	135	1			23.66			
100		135	67			24.72			
100		135	136			23.20			25.50
100		270	0			23.62			
100		1	1			23.61			24.50
100	DFT-s-OFDM 64QAM	1	1			22.29			23.00
100	DFT-s-OFDM 256QAM	1	1			20.07			21.00
100	CP-OFDM QPSK	1	1			23.26			24.00
100	CP-OFDM 16QAM	1	1			22.71			23.50
100	CP-OFDM 64QAM	1	1			20.84			22.00
100	CP-OFDM 256QAM	1	1			18.14			18.50
Channel				633000	633168	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	24.67	24.66	24.68	24.69	24.67	26.00
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	24.73	24.73	24.69	24.66	24.66	26.00
Channel				632334	632634	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	24.76	24.73	24.74	24.76	24.74	26.00
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	24.89	24.91	24.86	24.76	24.80	26.00
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	24.97	24.95	24.89	24.84	24.88	26.00
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	25.16	25.19	25.15	25.11	24.91	26.00
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	25.11	25.18	25.10	25.01	24.61	26.00
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	25.06	25.04	25.12	24.76	24.47	26.00
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	25.07	25.00	25.05	24.67	24.45	26.00
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	24.92	25.01	24.93	24.54	24.39	23.00

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		
Frequency (MHz)				3750	3795	3840	3885	3930		
100	DFT-s-OFDM PI/2 BPSK	1	1	24.79	24.77	24.67	24.93	24.85	26.00	
100		1	136	24.97	24.83	24.98	24.84	24.64		
100		1	271	24.81	24.93	24.79	24.64	25.09		
100		DFT-s-OFDM 16QAM	135	1	24.67	24.21	24.23	24.29	24.20	26.00
100			135	67	25.02	24.89	25.06	24.89	24.74	
100			135	136	24.24	24.20	24.24	24.16	24.42	
100			270	0	24.40	24.35	24.52	24.42	24.33	
100	DFT-s-OFDM QPSK	1	1	25.57	25.53	25.67	25.59	25.56	26.50	
100		1	136	24.97	24.81	25.00	24.81	24.65		
100		1	271	24.78	24.90	24.79	24.59	24.89		
100		DFT-s-OFDM 64QAM	135	1	24.20	23.76	23.76	23.80	23.69	26.00
100			135	67	25.02	24.80	25.06	24.90	24.91	
100			135	136	23.77	23.73	23.72	23.61	23.93	
100			270	0	23.88	23.80	24.00	23.89	23.82	
100	DFT-s-OFDM 256QAM	1	1	23.74	23.64	23.58	23.85	23.80	25.00	
100	DFT-s-OFDM 16QAM	1	1	22.33	22.42	22.26	22.57	22.46	23.50	
100	DFT-s-OFDM 256QAM	1	1	20.12	20.06	19.94	20.25	20.13	21.00	
100	CP-OFDM QPSK	1	1	23.32	23.30	23.18	23.48	23.42	24.50	
100	CP-OFDM 16QAM	1	1	22.90	22.78	22.75	23.03	23.00	24.00	
100	CP-OFDM 64QAM	1	1	20.99	20.93	20.93	21.02	20.98	22.00	
100	CP-OFDM 256QAM	1	1	18.12	18.06	18.02	18.27	18.20	19.00	
Channel				649666	652834	656000	659166	662332	Tune-up limit (dBm)	
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98		
90	DFT-s-OFDM QPSK	1	1	24.75	24.71	24.76	24.92	24.76	26.00	
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	24.80	24.75	24.79	24.86	24.70	26.00	
Channel				649000	652500	656000	659500	663000	Tune-up limit (dBm)	
Frequency (MHz)				3735	3787.5	3840	3892.5	3945		
70	DFT-s-OFDM QPSK	1	1	24.83	24.76	24.77	24.78	24.66	26.00	
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	24.88	24.85	24.85	24.84	24.55	26.00	
Channel				648334	652168	656000	659832	663666	Tune-up limit (dBm)	
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99		
50	DFT-s-OFDM QPSK	1	1	24.92	24.97	24.98	25.06	25.13	26.00	
Channel				648000	652000	656000	660000	664000	Tune-up limit (dBm)	
Frequency (MHz)				3720	3780	3840	3900	3960		
40	DFT-s-OFDM QPSK	1	1	25.31	25.12	25.25	25.33	25.35	26.00	
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	25.15	25.02	25.15	25.15	25.41	26.00	
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	25.07	25.05	25.23	24.99	25.63	26.00	
Channel				647168	651584	656000	660416	664832	Tune-up limit (dBm)	
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48		
15	DFT-s-OFDM QPSK	1	1	25.18	25.04	25.33	25.00	25.64	26.00	
Channel				647000	651500	656000	660500	665000	Tune-up limit (dBm)	
Frequency (MHz)				3705	3772.5	3840	3907.5	3975		
10	DFT-s-OFDM QPSK	1	1	25.04	24.98	25.22	24.91	25.65	26.00	

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			21.69			22.50
100		1	136			21.74			
100		1	271			21.23			
100		135	1			21.73			22.50
100		135	67			21.81			
100		135	136			21.21			
100	DFT-s-OFDM QPSK	270	0			21.73			23.00
100		1	1			22.18			
100		1	136			21.73			
100		1	271			21.22			22.50
100		135	1			21.76			
100		135	67			21.85			
100	DFT-s-OFDM 16QAM	135	136			21.24			22.50
100		270	0			21.74			
100		1	1			21.56			
100		1	1			21.81			22.50
100		1	1			20.04			21.00
100	CP-OFDM QPSK	1	1			21.73			22.50
100	CP-OFDM 16QAM	1	1			21.71			22.50
100	CP-OFDM 64QAM	1	1			20.80			21.50
100	CP-OFDM 256QAM	1	1			18.02			19.00
Channel				633000	633168	633334	633500	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3497.52	3500.01	3502.5	3504.99	
90	DFT-s-OFDM QPSK	1	1	21.68	21.65	21.76	21.62	21.75	22.50
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	21.71	21.79	21.79	21.75	21.71	22.50
Channel				632334	632634	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	21.70	21.81	21.80	21.72	21.71	22.50
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	21.87	21.87	21.81	21.77	21.88	22.50
Channel				631668	632500	633334	634166	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3487.5	3500.01	3510	3525	
50	DFT-s-OFDM QPSK	1	1	21.95	21.96	21.92	21.96	21.88	22.50
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	22.18	22.21	22.15	22.10	21.91	22.50
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	22.13	22.17	22.08	22.06	21.64	22.50
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	22.12	22.03	22.10	21.78	21.48	22.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	22.07	22.03	22.09	21.76	21.47	22.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	21.99	21.95	21.93	21.60	21.33	22.50

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	23.00
Frequency (MHz)				3750	3795	3840	3885	3930	
100	DFT-s-OFDM PI/2 BPSK	1	1	21.75	21.72	21.70	21.96	21.81	23.00
100		1	136	21.94	21.78	22.06	21.89	21.59	
100		1	271	21.76	21.99	21.85	21.57	21.89	
100		135	1	22.13	21.69	21.78	21.73	21.77	23.00
100		135	67	21.96	21.86	22.09	21.93	21.70	
100		135	136	21.70	21.74	21.66	21.60	22.00	
100	DFT-s-OFDM QPSK	270	0	21.96	21.82	22.08	21.98	21.78	23.50
100		1	1	22.72	22.70	22.73	22.68	22.70	
100		1	136	21.92	21.79	21.95	21.87	21.57	
100		1	271	21.74	22.00	21.81	21.57	22.15	23.00
100		135	1	22.10	21.68	21.78	21.74	21.68	
100		135	67	21.96	21.86	22.00	21.96	21.67	
100	DFT-s-OFDM 16QAM	135	136	21.71	21.79	21.69	21.61	21.88	23.00
100		270	0	21.94	21.85	21.97	22.01	21.76	
100		1	1	21.65	21.63	21.58	21.75	21.71	22.50
100	DFT-s-OFDM 64QAM	1	1	21.87	21.84	21.85	22.07	21.93	23.00
100	DFT-s-OFDM 256QAM	1	1	20.07	20.06	20.04	20.20	20.16	21.00
100	CP-OFDM QPSK	1	1	21.78	21.74	21.73	21.95	21.86	23.00
100	CP-OFDM 16QAM	1	1	21.86	21.79	21.82	21.96	21.89	23.00
100	CP-OFDM 64QAM	1	1	20.89	20.83	20.89	20.98	20.98	22.00
100	CP-OFDM 256QAM	1	1	18.09	18.04	18.03	18.22	18.17	19.00
Channel				649666	652834	656000	659166	662332	23.00
Frequency (MHz)				3744.99	3792.51	3840	3887.49	3934.98	
90	DFT-s-OFDM QPSK	1	1	21.81	21.75	21.69	21.88	21.82	23.00
Channel				649334	652668	656000	659332	662666	23.00
Frequency (MHz)				3740.01	3790.02	3840	3889.98	3939.99	
80	DFT-s-OFDM QPSK	1	1	21.81	21.80	21.73	21.88	21.70	23.00
Channel				649000	652500	656000	659500	663000	23.00
Frequency (MHz)				3735	3787.5	3840	3892.5	3945	
70	DFT-s-OFDM QPSK	1	1	21.82	21.82	21.84	21.87	21.62	23.00
Channel				648668	652334	656000	659666	663332	23.00
Frequency (MHz)				3730.02	3785.01	3840	3894.99	3949.98	
60	DFT-s-OFDM QPSK	1	1	21.93	21.91	21.91	21.89	21.52	23.00
Channel				648334	652168	656000	659832	663666	23.00
Frequency (MHz)				3725.01	3782.52	3840	3894.99	3954.99	
50	DFT-s-OFDM QPSK	1	1	22.04	21.96	21.93	21.99	22.11	23.00
Channel				648000	652000	656000	660000	664000	23.00
Frequency (MHz)				3720	3780	3840	3900	3960	
40	DFT-s-OFDM QPSK	1	1	22.30	22.17	22.23	22.30	22.46	23.00
Channel				647668	651834	656000	660166	664332	23.00
Frequency (MHz)				3715.02	3777.51	3840	3902.49	3964.98	
30	DFT-s-OFDM QPSK	1	1	22.13	22.00	22.11	22.11	22.54	23.00
Channel				647334	651668	656000	660332	664666	23.00
Frequency (MHz)				3710.01	3775.02	3840	3904.98	3969.99	
20	DFT-s-OFDM QPSK	1	1	22.11	22.05	22.33	22.04	22.69	23.00
Channel				647168	651584	656000	660416	664832	23.00
Frequency (MHz)				3707.52	3773.76	3840	3906.24	3972.48	
15	DFT-s-OFDM QPSK	1	1	22.11	22.06	22.36	22.01	22.71	23.00
Channel				647000	651500	656000	660500	665000	23.00
Frequency (MHz)				3705	3772.5	3840	3907.5	3975	
10	DFT-s-OFDM QPSK	1	1	22.09	21.98	22.18	21.89	22.69	23.00

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			24.69			25.50
100		1	136			24.73			
100		1	271			24.12			
100		135	1			24.31			25.50
100		135	67			24.86			
100		135	136			23.75			
100	DFT-s-OFDM QPSK	270	0			24.19			26.00
100		1	1			25.18			
100		1	136			24.70			
100		1	271			24.12			25.50
100		135	1			23.80			
100		135	67			24.77			
100		135	136			23.25			25.50
100		270	0			23.70			
100	DFT-s-OFDM 16QAM	1	1			23.62			24.50
100	DFT-s-OFDM 64QAM	1	1			22.28			23.50
100	DFT-s-OFDM 256QAM	1	1			19.99			21.00
100	CP-OFDM QPSK	1	1			23.21			24.50
100	CP-OFDM 16QAM	1	1			22.80			23.50
100	CP-OFDM 64QAM	1	1			20.86			21.50
100	CP-OFDM 256QAM	1	1			18.12			19.00
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	24.71	24.70	24.68	24.67	24.69	25.50
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	24.73	24.74	24.86	24.84	24.81	25.50
Channel				632334	632634	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	24.84	24.80	24.85	24.83	24.80	25.50
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	24.95	24.93	24.92	24.82	24.85	25.50
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	24.96	24.95	24.89	24.84	24.88	25.50
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	25.22	24.81	25.24	25.19	24.93	25.50
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	25.15	25.14	25.14	25.00	24.68	25.50
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	25.07	25.16	25.10	24.85	24.50	25.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	25.04	25.06	25.02	24.74	24.40	25.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	25.09	24.99	25.04	24.59	24.42	23.50

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			24.81			26.00
100		1	136			25.00			
100		1	271			24.91			
100		135	1			24.69			
100	DFT-s-OFDM QPSK	135	67			25.18			26.00
100		135	136			24.38			
100		270	0			24.51			
100		1	1			25.48			
100	DFT-s-OFDM 16QAM	1	136			24.97			26.50
100		1	271			24.88			
100		135	1			24.20			
100		135	67			24.95			
100	DFT-s-OFDM 64QAM	135	136			23.78			26.00
100		270	0			24.05			
100		1	1			23.74			
100		1	1			22.31			
100	DFT-s-OFDM 256QAM	1	1			20.10			21.00
100	CP-OFDM QPSK	1	1			23.30			24.50
100	CP-OFDM 16QAM	1	1			22.80			23.50
100	CP-OFDM 64QAM	1	1			20.94			22.00
100	CP-OFDM 256QAM	1	1			18.11			19.00
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	24.79	24.82	24.84	24.92	25.00	26.00
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	24.82	24.90	24.95	24.98	25.13	26.00
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	24.88	24.95	25.05	25.19	25.15	26.00
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	24.94	25.06	25.11	25.09	24.99	26.00
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	25.04	25.23	25.25	25.06	25.02	26.00
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	25.33	25.51	25.52	25.36	25.33	26.00
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	25.22	25.51	25.40	25.25	25.11	26.00
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	25.17	25.47	25.27	25.17	25.11	26.00
Channel				647168	648584	650000	651416	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	25.17	25.49	25.34	25.13	25.14	26.00
Channel				647000	648500	650000	651500	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	25.05	25.34	25.17	25.07	25.12	23.00

n78(3450-3550MHz) (PC3)									
BW [MHz]	Modulation	RB num	RB start	Low Channel	Low/Middle Channel	Middle Channel	Middle/High Channel	High Channel	Tune-up limit (dBm)
Channel						633334			
Frequency (MHz)						3500.01			
100	DFT-s-OFDM PI/2 BPSK	1	1			21.73			22.50
100		1	136			21.73			
100		1	271			21.27			
100		135	1			21.83			22.50
100		135	67			21.81			
100		135	136			21.31			
100	DFT-s-OFDM QPSK	270	0			21.72			23.00
100		1	1			22.24			
100		1	136			21.70			
100		1	271			21.16			23.00
100		135	1			21.95			
100		135	67			21.80			
100		135	136			21.31			23.00
100		270	0			21.72			
100	DFT-s-OFDM 16QAM	1	1			21.60			22.50
100	DFT-s-OFDM 64QAM	1	1			21.83			22.50
100	DFT-s-OFDM 256QAM	1	1			20.07			21.00
100	CP-OFDM QPSK	1	1			21.75			22.50
100	CP-OFDM 16QAM	1	1			21.84			22.50
100	CP-OFDM 64QAM	1	1			20.86			21.50
100	CP-OFDM 256QAM	1	1			18.04			19.00
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	21.74	21.73	21.72	21.68	21.70	22.50
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	21.78	21.78	21.76	21.86	21.83	22.50
Channel				632334	632634	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	21.81	21.89	21.92	21.86	21.82	22.50
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	21.97	21.96	21.88	21.82	21.84	22.50
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	21.95	21.95	21.85	21.82	21.86	22.50
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	22.20	21.84	22.23	22.22	21.98	22.50
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	22.19	22.13	22.14	22.04	21.70	22.50
Channel				630668	632000	633334	634668	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3480	3500.01	3520.02	3540	
20	DFT-s-OFDM QPSK	1	1	22.12	22.14	22.12	21.90	21.50	22.50
Channel				630500	631916	633334	634750	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3478.74	3500.01	3521.25	3542.49	
15	DFT-s-OFDM QPSK	1	1	22.05	22.11	22.04	21.71	21.48	22.50
Channel				630334	631834	633334	634834	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3477.51	3500.01	3522.51	3544.98	
10	DFT-s-OFDM QPSK	1	1	22.06	22.11	22.02	21.66	21.41	22.50

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			21.79			23.00
100		1	136			21.94			
100		1	271			21.88			
100		135	1			22.60			23.00
100	DFT-s-OFDM QPSK	135	67			22.00			
100		135	136			21.85			
100		270	0			21.97			23.50
100		1	1			22.66			
100	DFT-s-OFDM 16QAM	1	136			21.94			
100		1	271			21.88			23.00
100		135	1			22.14			
100		135	67			22.00			
100	DFT-s-OFDM 64QAM	135	136			21.74			23.00
100		270	0			21.88			
100		1	1			21.65			
100		1	1			21.88			22.50
100	DFT-s-OFDM 256QAM	1	1			20.08			21.00
100	CP-OFDM QPSK	1	1			21.80			22.50
100	CP-OFDM 16QAM	1	1			21.83			22.50
100	CP-OFDM 64QAM	1	1			20.92			22.00
100	CP-OFDM 256QAM	1	1			18.13			19.00
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	21.80	21.80	21.85	21.86	21.89	23.00
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	21.84	21.88	22.00	22.07	22.12	23.00
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	21.88	21.99	22.11	22.18	22.17	23.00
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	21.91	22.03	22.12	22.07	22.05	23.00
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	22.07	22.18	22.26	22.17	22.01	23.00
Channel				648000	649000	650000	651000	652000	Tune-up limit (dBm)
Frequency (MHz)				3720	3735	3750	3765	3780	
40	DFT-s-OFDM QPSK	1	1	22.30	22.60	22.57	22.45	22.31	23.00
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	22.19	22.51	22.39	22.23	22.18	23.00
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	22.15	22.46	22.33	22.24	22.10	23.00
Channel				647168	648584	650000	651416	652832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3728.76	3750	3771.24	3792.48	
15	DFT-s-OFDM QPSK	1	1	22.21	22.45	22.33	22.20	22.18	23.00
Channel				647000	648500	650000	651500	653000	Tune-up limit (dBm)
Frequency (MHz)				3705	3727.5	3750	3772.5	3795	
10	DFT-s-OFDM QPSK	1	1	22.05	22.38	22.13	22.06	22.09	22.50

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				
20850	20850	21048	QPSK	1	0	0	0	1	0	16.94	18.00
21100	21001	21199	QPSK	1	0	0	0	1	0	16.98	18.00
21350	21152	21350	QPSK	1	0	0	0	1	0	16.96	18.00
20850	20850	21048	16QAM	1	0	0	0	1	0	16.04	17.00
21100	21001	21199	16QAM	1	0	0	0	1	0	16.05	17.00
21350	21152	21350	16QAM	1	0	0	0	1	0	16.01	17.00
20850	20850	21048	64QAM	1	0	0	0	1	0	15.07	16.00
21100	21001	21199	64QAM	1	0	0	0	1	0	15.18	16.00
21350	21152	21350	64QAM	1	0	0	0	1	0	15.04	16.00
20850	20850	21048	256QAM	1	0	0	0	1	0	11.99	13.00
21100	21001	21199	256QAM	1	0	0	0	1	0	12.00	13.00
21350	21152	21350	256QAM	1	0	0	0	1	0	11.93	13.00
20850	20850	21048	QPSK	50	0	0	0	1	0	15.98	17.00
21100	21001	21199	QPSK	50	0	0	0	1	0	16.05	17.00
21350	21152	21350	QPSK	50	0	0	0	1	0	15.96	17.00

CA_38C PC2											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
37850	37850	38048	QPSK	1	0	0	0	1	0	20.91	22.00
38000	37901	38099	QPSK	1	0	0	0	1	0	20.94	22.00
38150	37952	38150	QPSK	1	0	0	0	1	0	20.92	22.00
37850	37850	38048	16QAM	1	0	0	0	1	0	20.03	21.00
38000	37901	38099	16QAM	1	0	0	0	1	0	20.08	21.00
38150	37952	38150	16QAM	1	0	0	0	1	0	20.07	21.00
37850	37850	38048	64QAM	1	0	0	0	1	0	18.80	19.50
38000	37901	38099	64QAM	1	0	0	0	1	0	18.83	19.50
38150	37952	38150	64QAM	1	0	0	0	1	0	18.81	19.50
37850	37850	38048	256QAM	1	0	0	0	1	0	15.87	16.50
38000	37901	38099	256QAM	1	0	0	0	1	0	15.91	16.50
38150	37952	38150	256QAM	1	0	0	0	1	0	15.89	16.50
37850	37850	38048	QPSK	50	0	0	0	1	0	19.82	20.50
38000	37901	38099	QPSK	50	0	0	0	1	0	19.84	20.50
38150	37952	38150	QPSK	50	0	0	0	1	0	19.83	20.50

CA_38C PC3											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
37850	37850	38048	QPSK	1	0	0	0	1	0	18.83	19.50
38000	37901	38099	QPSK	1	0	0	0	1	0	18.92	19.50
38150	37952	38150	QPSK	1	0	0	0	1	0	18.88	19.50
37850	37850	38048	16QAM	1	0	0	0	1	0	17.87	18.50
38000	37901	38099	16QAM	1	0	0	0	1	0	17.90	18.50
38150	37952	38150	16QAM	1	0	0	0	1	0	17.86	18.50
37850	37850	38048	64QAM	1	0	0	0	1	0	16.85	17.50
38000	37901	38099	64QAM	1	0	0	0	1	0	16.93	17.50
38150	37952	38150	64QAM	1	0	0	0	1	0	16.88	17.50
37850	37850	38048	256QAM	1	0	0	0	1	0	13.79	14.50
38000	37901	38099	256QAM	1	0	0	0	1	0	13.85	14.50
38150	37952	38150	256QAM	1	0	0	0	1	0	13.78	14.50
37850	37850	38048	QPSK	50	0	0	0	1	0	17.85	18.50
38000	37901	38099	QPSK	50	0	0	0	1	0	17.86	18.50
38150	37952	38150	QPSK	50	0	0	0	1	0	17.81	18.50

CA_41C (PC2)											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	0	0	1	0	21.14	22.00
40620	40521	40719	QPSK	1	0	0	0	1	0	21.21	22.00
41490	41292	41490	QPSK	1	0	0	0	1	0	21.16	22.00
39750	39750	39948	16QAM	1	0	0	0	1	0	20.27	21.00

39750	40521	40719	16QAM	1	0	0	0	1	0	20.36	21.00
41490	41292	41490	16QAM	1	0	0	0	1	0	20.34	21.00
39750	39750	39948	64QAM	1	0	0	0	1	0	19.31	20.00
40620	40521	40719	64QAM	1	0	0	0	1	0	19.37	20.00
41490	41292	41490	64QAM	1	0	0	0	1	0	19.29	20.00
39750	39750	39948	256QAM	1	0	0	0	1	0	16.14	17.00
40620	40521	40719	256QAM	1	0	0	0	1	0	16.27	17.00
41490	41292	41490	256QAM	1	0	0	0	1	0	16.18	17.00
39750	39750	39948	QPSK	50	0	0	0	1	0	20.29	21.00
40620	40521	40719	QPSK	50	0	0	0	1	0	20.41	21.00
41490	41292	41490	QPSK	50	0	0	0	1	0	20.25	21.00

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CA_41C (PC3)											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
39750	39750	39948	QPSK	1	0	0	0	1	0	19.11	20.00
40620	40521	40719	QPSK	1	0	0	0	1	0	19.18	20.00
41490	41292	41490	QPSK	1	0	0	0	1	0	19.13	20.00
39750	39750	39948	16QAM	1	0	0	0	1	0	18.24	19.00
40620	40521	40719	16QAM	1	0	0	0	1	0	18.33	19.00
41490	41292	41490	16QAM	1	0	0	0	1	0	18.31	19.00
39750	39750	39948	64QAM	1	0	0	0	1	0	17.28	18.00
40620	40521	40719	64QAM	1	0	0	0	1	0	17.34	18.00
41490	41292	41490	64QAM	1	0	0	0	1	0	17.26	18.00
39750	39750	39948	256QAM	1	0	0	0	1	0	14.11	15.00
40620	40521	40719	256QAM	1	0	0	0	1	0	14.24	15.00
41490	41292	41490	256QAM	1	0	0	0	1	0	14.15	15.00
39750	39750	39948	QPSK	50	0	0	0	1	0	18.26	19.00
40620	40521	40719	QPSK	50	0	0	0	1	0	18.38	19.00
41490	41292	41490	QPSK	50	0	0	0	1	0	18.22	19.00

CA_42C											
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				
41690	41623	41740	QPSK	1	0	0	0	1	0	22.94	24.00
42590	42498	42615	QPSK	1	0	0	0	1	0	23.07	24.00
43490	43373	43490	QPSK	1	0	0	0	1	0	23.03	24.00
41690	41645	41789	16QAM	1	0	0	0	1	0	21.98	23.00
42590	42496	42640	16QAM	1	0	0	0	1	0	22.07	23.00
43490	43346	43490	16QAM	1	0	0	0	1	0	22.04	23.00
41690	41668	41839	64QAM	1	0	0	0	1	0	20.95	22.00
42590	42493	42664	64QAM	1	0	0	0	1	0	21.06	22.00
43490	43319	43490	64QAM	1	0	0	0	1	0	21.01	22.00
41690	41690	41888	256QAM	1	0	0	0	1	0	17.98	19.00
42590	42491	43557	256QAM	1	0	0	0	1	0	17.99	19.00
43490	43292	43490	256QAM	1	0	0	0	1	0	17.97	19.00
41690	41623	41740	QPSK	50	0	0	0	1	0	22.01	23.00
42590	42498	42615	QPSK	50	0	0	0	1	0	22.10	23.00
43490	43373	43490	QPSK	50	0	0	0	1	0	22.02	23.00

CA_43C											
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				
43690	43615	43615	QPSK	1	0	0	0	1	0	22.53	23.50
44090	44590	44590	QPSK	1	0	0	0	1	0	22.60	23.50
44490	45490	45490	QPSK	1	0	0	0	1	0	22.55	23.50
43690	43615	43615	16QAM	1	0	0	0	1	0	21.66	22.50
44090	44590	44590	16QAM	1	0	0	0	1	0	21.75	22.50
44490	45490	45490	16QAM	1	0	0	0	1	0	21.73	22.50
43690	43615	43615	64QAM	1	0	0	0	1	0	20.70	21.50
44090	44590	44590	64QAM	1	0	0	0	1	0	20.76	21.50
44490	45490	45490	64QAM	1	0	0	0	1	0	20.68	21.50
43690	43615	43615	256QAM	1	0	0	0	1	0	17.53	18.50
44090	44590	44590	256QAM	1	0	0	0	1	0	17.66	18.50
44490	45490	45490	256QAM	1	0	0	0	1	0	17.57	18.50
43690	43615	43615	QPSK	50	0	0	0	1	0	21.68	22.50

130	44590	44590	QPSK	50	0	0	0	1	0	21.80	22.50
44490	45490	45490	QPSK	50	0	0	0	1	0	21.64	22.50

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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	18.09	19.00
55990	55891	56089	QPSK	1	0	0	0	1	0	18.22	19.00
56640	56442	56640	QPSK	1	0	0	0	1	0	18.18	19.00
55340	55340	55538	16QAM	1	0	0	0	1	0	17.13	18.00
55990	55891	56089	16QAM	1	0	0	0	1	0	17.22	18.00
56640	56442	56640	16QAM	1	0	0	0	1	0	17.19	18.00
55340	55340	55538	64QAM	1	0	0	0	1	0	16.10	17.00
55990	55891	56089	64QAM	1	0	0	0	1	0	16.21	17.00
56640	56442	56640	64QAM	1	0	0	0	1	0	16.16	17.00
55340	55340	55538	256QAM	1	0	0	0	1	0	13.13	14.00
55990	55891	56089	256QAM	1	0	0	0	1	0	13.14	14.00
56640	56442	56640	256QAM	1	0	0	0	1	0	13.12	14.00
55340	55340	55538	QPSK	50	0	0	0	1	0	17.16	18.00
55990	55891	56089	QPSK	50	0	0	0	1	0	17.25	18.00
56640	56442	56640	QPSK	50	0	0	0	1	0	17.17	18.00

CA_66B Ant 0											
Combination:15MHz+10MHz(75RB+25RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
132070	132047	132140	QPSK	1	0	0	0	1	0	20.91	21.50
132322	132398	132491	QPSK	1	0	0	0	1	0	20.95	21.50
132572	132549	132642	QPSK	1	0	0	0	1	0	20.86	21.50
132070	132047	132140	16QAM	1	0	0	0	1	0	19.79	20.50
132322	132398	132491	16QAM	1	0	0	0	1	0	19.92	20.50
132572	132549	132642	16QAM	1	0	0	0	1	0	19.83	20.50
132070	132047	132140	64QAM	1	0	0	0	1	0	18.91	19.50
132322	132398	132491	64QAM	1	0	0	0	1	0	19.03	19.50
132572	132549	132642	64QAM	1	0	0	0	1	0	18.93	19.50
132070	132047	132140	256QAM	1	0	0	0	1	0	15.83	16.50
132322	132398	132491	256QAM	1	0	0	0	1	0	15.91	16.50
132572	132549	132642	256QAM	1	0	0	0	1	0	15.84	16.50
132070	132047	132140	QPSK	36	0	0	0	1	0	19.79	20.50
132322	132398	132491	QPSK	36	0	0	0	1	0	19.88	20.50
132572	132549	132642	QPSK	36	0	0	0	1	0	19.82	20.50

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				
132070	132072	132270	QPSK	1	0	0	0	1	0	20.75	21.50
132322	132323	132521	QPSK	1	0	0	0	1	0	20.79	21.50
132572	132374	132572	QPSK	1	0	0	0	1	0	20.70	21.50
132070	132072	132270	16QAM	1	0	0	0	1	0	19.63	20.50
132322	132323	132521	16QAM	1	0	0	0	1	0	19.76	20.50
132572	132374	132572	16QAM	1	0	0	0	1	0	19.67	20.50
132070	132072	132270	64QAM	1	0	0	0	1	0	18.75	19.50
132322	132323	132521	64QAM	1	0	0	0	1	0	18.87	19.50
132572	132374	132572	64QAM	1	0	0	0	1	0	18.77	19.50
132070	132072	132270	256QAM	1	0	0	0	1	0	15.71	16.50
132322	132323	132521	256QAM	1	0	0	0	1	0	15.77	16.50
132572	132374	132572	256QAM	1	0	0	0	1	0	15.69	16.50
132070	132072	132270	QPSK	50	0	0	0	1	0	19.63	20.50
132322	132323	132521	QPSK	50	0	0	0	1	0	19.72	20.50
132572	132374	132572	QPSK	50	0	0	0	1	0	19.66	20.50

2.4GHz WLAN ANT 1

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 1	802.11a 1Mbps	CH 1	2412	16.62	17.50	17	98.23
		CH 6	2437	16.81	17.50	17	98.52
		CH 11	2462	16.31	17.50	17	98.23
	802.11g 6Mbps	CH 1	2412	16.51	17.50	17	98.24
		CH 6	2437	16.71	17.50	17	98.34
		CH 11	2462	16.54	17.50	17	98.24
	802.11n HT20 MCS0	CH 1	2412	16.41	17.50	17	98.24
		CH 6	2437	16.81	17.50	17	98.22
		CH 11	2462	16.46	17.50	17	98.71
	802.11n HT40 MCS0	CH 3	2432	16.24	17.50	17	98.76
		CH 6	2437	16.43	17.50	17	98.69
		CH 9	2462	16.23	17.00	17	98.69
	802.11ac HEW20 MCS0	CH 1	2412	16.32	17.00	17	98.74
		CH 6	2437	16.62	17.50	17	98.71
		CH 11	2462	16.50	17.00	17	98.71
	802.11ac HEW40 MCS0	CH 3	2432	15.76	15.50	17	98.61
		CH 6	2437	15.96	17.00	17	98.61
		CH 9	2462	15.95	17.00	17	98.66

5GHz WLAN ANT 1

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5GHz WLAN ANT 1	802.11a 1Mbps	CH 36	5180	11.74	12.50	14	99.05
		CH 44	5220	11.73	12.50	14	99.05
		CH 48	5240	11.53	12.00	14	99.05
	802.11n HT20 MCS0	CH 36	5180	11.45	12.50	14	99.05
		CH 44	5220	11.39	12.50	14	99.05
		CH 48	5240	11.08	12.00	14	99.63
	802.11n HT40 MCS0	CH 36	5180	12.33	13.50	14	99.62
		CH 48	5220	12.00	13.00	14	99.62
		CH 48	5240	11.50	12.50	14	99.62
	802.11ac VHT20 MCS0	CH 44	5220	11.39	12.50	14	99.05
		CH 48	5240	11.05	12.00	14	99.63
		CH 36	5180	12.39	13.50	14	99.62
	802.11ac VHT40 MCS0	CH 48	5220	12.01	13.00	14	99.62
		CH 42	5210	11.65	12.50	14	99.55
		CH 36	5180	11.65	12.50	14	99.55
	802.11ac HEW20 MCS0	CH 40	5200	11.62	12.50	14	99.62
		CH 48	5240	11.50	12.50	14	99.62
		CH 36	5180	13.06	13.50	14	99.62
	802.11ac HEW40 MCS0	CH 48	5220	12.07	13.00	14	99.62
		CH 42	5210	11.62	12.50	14	99.70

5GHz WLAN ANT 1

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5GHz WLAN ANT 1	802.11a 1Mbps	CH 52	5300	11.08	12.50	14	99.5
		CH 60	5300	11.04	12.00	14	99.1
		CH 64	5320	11.00	12.00	14	99.1
	802.11n HT20 MCS0	CH 52	5300	11.30	12.00	14	99.1
		CH 60	5300	10.79	11.50	14	99.3
		CH 64	5320	10.72	11.50	14	99.3
	802.11n HT40 MCS0	CH 54	5270	11.62	12.50	14	99.9
		CH 62	5310	11.75	12.50	14	99.6
		CH 52	5300	11.26	12.00	14	99.9
	802.11ac VHT20 MCS0	CH 60	5300	10.79	11.50	14	99.6
		CH 64	5320	10.72	11.50	14	99.6
		CH 54	5270	11.69	12.50	14	99.8
	802.11ac VHT40 MCS0	CH 62	5310	11.75	12.50	14	99.9
		CH 58	5290	11.09	12.00	14	99.6
		CH 52	5280	11.45	12.50	14	99.6
	802.11ac HEW20 MCS0	CH 60	5300	10.98	12.00	14	99.6
		CH 64	5320	10.91	12.00	14	99.8
		CH 54	5270	11.67	12.50	14	99.8
	802.11ac HEW40 MCS0	CH 62	5310	11.77	12.50	14	99.8
		CH 58	5290	11.08	12.00	14	99.9

5GHz WLAN ANT 1

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5GHz WLAN ANT 1	802.11a 1Mbps	CH 148	5745	12.56	13.50	13	99.05
		CH 157	5785	11.67	12.50	13	99.53
		CH 165	5825	11.69	12.00	13	99.53
	802.11n HT20 MCS0	CH 148	5745	12.27	13.00	13	99.90
		CH 157	5785	11.47	12.50	13	99.90
		CH 165	5825	10.90	11.50	13	99.90
	802.11n HT40 MCS0	CH 151	5765	13.11	14.00	13	99.90
		CH 159	5795	12.19	13.00	13	99.62
		CH 148	5745	12.27	13.00	13	99.90
	802.11ac VHT20 MCS0	CH 157	5785	11.44	12.50	13	99.90
		CH 165	5825	10.83	11.50	13	99.90
		CH 151	5765	13.14	14.00	13	99.90
	802.11ac VHT40 MCS0	CH 159	5795	12.24	13.00	13	99.62
		CH 155	5775	11.72	12.50	13	99.70
		CH 148	5745	12.40	13.00	13	99.90
	802.11ac HEW20 MCS0	CH 157	5785	11.65	12.50	13	99.90
		CH 165	5825	11.62	12.00	13	99.90
		CH 151	5765	13.16	14.00	13	100.00
	802.11ac HEW40 MCS0	CH 159	5795	12.29	13.00	13	99.62
		CH 155	5775	11.76	12.50	13	99.55

2.4GHz WLAN ANT 2

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
2.4GHz WLAN ANT 2	802.11a 1Mbps	CH 1	2412	17.19	18.00	17	98.22
		CH 6	2437	17.33	18.00	17	98.22
		CH 11	2462	17.17	18.00	17	98.22
	802.11g 6Mbps	CH 1	2412	17.16	18.00	17	98.34
		CH 6	2437	17.43	18.00	17	98.34
		CH 11	2462	17.51	18.50	17	98.34
	802.11n HT20 MCS0	CH 1	2412	16.86	17.50	17	98.74
		CH 6	2437	17.10	18.00	17	98.74
		CH 11	2462	17.22	18.00	17	98.70
	802.11n HT40 MCS0	CH 3	2432	16.41	17.00	17	98.69
		CH 6	2437	16.97	18.00	17	98.69
		CH 9	2462	17.11	18.00	17	98.74
	802.11ac HEW20 MCS0	CH 1	2412	17.08	18.00	17	98.74
		CH 6	2437	17.27	18.00	17	98.71
		CH 11	2462	17.37	18.00	17	98.71
	802.11ac HEW40 MCS0	CH 3	2432	16.93	17.00	17	98.66
		CH 6	2437	16.48	17.50	17	98.61
		CH 9	2462	16.74	17.50	17	98.61

5.2GHz WLAN ANT 2

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.2GHz WLAN ANT 2	802.11a 1Mbps	CH 36	5180	10.87	11.00	14	99.05
		CH 44	5220	10.41	11.50	14	99.05
		CH 48	5240	10.43	11.00	14	99.05
	802.11n HT20 MCS0	CH 36	5180	10.27	11.00	14	99.05
		CH 44	5220	10.13	11.00	14	99.90
		CH 48	5240	10.17	11.00	14	99.63
	802.11n HT40 MCS0	CH 36	5180	11.16	12.00	14	100.00
		CH 48	5220	11.12	12.00	14	99.90
		CH 48	5240	10.26	11.00	14	99.90
	802.11ac VHT20 MCS0	CH 44	5220	10.13	11.00	14	99.90
		CH 48	5240	10.16	11.00	14	99.63
		CH 36	5180	11.22	12.00	14	99.62
	802.11ac VHT40 MCS0	CH 48	5220	11.14	12.00	14	99.90
		CH 42	5210	10.41	11.50	14	99.55
		CH 36	5180	10.55	11.50	14	99.90
	802.11ac HEW20 MCS0	CH 40	5200	10.26	11.00	14	99.63
		CH 48	5240	10.26	11.00	14	99.90
		CH 36	5180	10.76	11.50	14	100.00
	802.11ac HEW40 MCS0	CH 48	5220	10.72	11.50	14	100.00
		CH 42	5210	10.43	11.50	14	99.10

5.3GHz WLAN ANT 2

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Power Setting	Duty Cycle %
5.3GHz WLAN ANT 2	802.11a 1Mbps	CH 52	5300	10.59	11.00	14	99.05
		CH 60	5300	10.36	11.50	14	99.05
		CH 64	5320	10.63	11.50	14	99.05
	802.11n HT20 MCS0	CH 52	5300	10.21	11.00	14	99.03
		CH 60	5300	10.25	11.50	14	99.90
		CH 64	5320	10.27	11.50	14	99.90
	802.11n HT40 MCS0	CH 54	5270	11.54	12.50	14	99.90
		CH 62	5310	11.35	12.50	14	99.90
		CH 52	5300	10.25	11.50	14	99.90
	802.11ac VHT20 MCS0	CH 60	5300	10.81	11.50	14	99.90
		CH 64	5320	10.23	11.00	14	99.90
		CH 54	5270	11.54	12.50	14	99.90
802.11ac VHT40 MCS0	CH 62	5310	11.37	12.50	14	99.90	
	CH 58	5290	10.52	11.50	14	99.10	
	CH 52	5280	10.40	11.50	14	99.63	
802.11ac HEW20 MCS0	CH 60	5300	10.17	11.00	14	99.90	
	CH 64	5320	10.41	11.50	14	99.90	
	CH 54	5270	11.16	12.00	14	100.00	
802.11ac HEW40 MCS0	CH 62	5310	10.96	12.00	14	100.00	
	CH 58	5290	10.52	11.50	14	99.10	