



REPORT No.: SZ24040065S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

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

Full Power for ANT 0 & ANT 2 & ANT 4 & ANT 5

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)	WCDMA Band V (dBm)			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		4132	4162	4233	
Rx Channel		9662	9800	9938		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		826.4	836.4	846.6	
3GPP Rel 99	RMC 12.2Kbps	24.21	24.28	24.25	25.00	24.26	24.33	24.29	25.00
3GPP Rel 5	HSDPA Subtest-1	23.01	22.99	23.06	24.00	23.37	23.38	22.65	24.00
3GPP Rel 5	HSDPA Subtest-2	22.98	22.98	22.97	24.00	23.21	23.42	22.64	24.00
3GPP Rel 5	HSDPA Subtest-3	22.49	22.52	22.52	23.50	22.67	22.86	22.19	23.50
3GPP Rel 5	HSDPA Subtest-4	22.45	22.57	22.51	23.50	22.68	22.82	22.21	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.04	23.04	23.02	24.00	23.09	23.36	23.16	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.03	23.06	23.00	24.00	23.13	23.35	23.12	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.54	22.55	22.55	23.50	22.55	22.85	22.84	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.51	22.58	22.51	23.50	22.60	22.84	22.58	23.50
3GPP Rel 6	HSUPA Subtest-1	23.07	23.13	23.15	24.00	23.08	23.39	22.67	24.00
3GPP Rel 6	HSUPA Subtest-2	22.54	22.48	22.50	23.50	23.32	22.85	22.28	23.50
3GPP Rel 6	HSUPA Subtest-3	23.08	23.14	23.00	24.00	23.04	23.43	22.69	24.00
3GPP Rel 6	HSUPA Subtest-4	23.07	23.04	23.06	24.00	22.94	23.37	22.56	24.00
3GPP Rel 6	HSUPA Subtest-5	22.98	23.10	23.09	24.00	22.92	23.42	22.68	24.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	22.63	22.58	22.61	23.50	22.53	22.84	22.01	23.50
Attenuator			Cable Loss	0.8			Cable Loss	0.6	
Mode			Max.	24.28			Max.	24.33	

Band 2 (1900MHz Band) (dBm)_ANT0							
Part 24E							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	22.56	22.59	22.55	23.5
20	QPSK	1	49	22.34	22.40	22.36	
20	QPSK	1	99	22.32	22.38	22.37	
20	QPSK	50	0	21.58	21.65	21.55	22.5
20	QPSK	50	24	21.55	21.61	21.57	
20	QPSK	50	50	21.50	21.57	21.55	
20	QPSK	100	0	21.52	21.55	21.50	22.5
20	16QAM	1	0	21.76	21.78	21.76	
20	16QAM	1	49	21.73	21.75	21.67	
20	16QAM	1	99	21.70	21.74	21.73	21.5
20	16QAM	50	0	20.42	20.46	20.39	
20	16QAM	50	24	20.44	20.45	20.38	
20	16QAM	50	50	20.43	20.44	20.37	21.5
20	16QAM	100	0	20.36	20.42	20.38	
20	64QAM	1	0	20.62	20.69	20.66	
20	64QAM	1	49	20.55	20.63	20.58	21.5
20	64QAM	1	99	20.59	20.62	20.57	
20	64QAM	50	0	20.49	20.50	20.42	
20	64QAM	50	24	20.47	20.48	20.46	21.5
20	64QAM	50	50	20.41	20.45	20.42	
20	64QAM	100	0	20.36	20.42	20.36	
20	256QAM	1	0	17.83	17.90	17.87	18.5
20	256QAM	1	49	17.76	17.84	17.79	
20	256QAM	1	99	17.80	17.83	17.78	
20	256QAM	50	0	17.70	17.71	17.63	18.5
20	256QAM	50	24	17.68	17.69	17.67	
20	256QAM	50	50	17.62	17.66	17.63	
20	256QAM	100	0	17.57	17.63	17.57	
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	22.38	22.44	22.37	23.5
15	QPSK	1	37	22.26	22.35	22.31	
15	QPSK	1	74	22.31	22.36	22.32	
15	QPSK	36	0	21.56	21.61	21.58	22.5
15	QPSK	36	20	21.47	21.54	21.56	
15	QPSK	36	39	21.48	21.55	21.54	
15	QPSK	75	0	21.50	21.47	21.43	22.5
15	16QAM	1	0	21.75	21.73	21.69	
15	16QAM	1	37	21.66	21.68	21.63	
15	16QAM	1	74	21.62	21.66	21.68	21.5
15	16QAM	36	0	20.36	20.39	20.38	
15	16QAM	36	20	20.39	20.44	20.32	
15	16QAM	36	39	20.41	20.38	20.29	21.5
15	16QAM	75	0	20.31	20.41	20.33	
15	64QAM	1	0	20.58	20.62	20.62	
15	64QAM	1	37	20.54	20.62	20.50	21.5
15	64QAM	1	74	20.57	20.60	20.56	
15	64QAM	36	0	20.47	20.45	20.37	
15	64QAM	36	20	20.45	20.44	20.40	21.5
15	64QAM	36	39	20.39	20.44	20.35	
15	64QAM	75	0	20.32	20.35	20.30	
15	256QAM	1	0	17.79	17.83	17.83	18.5
15	256QAM	1	37	17.75	17.83	17.71	
15	256QAM	1	74	17.78	17.81	17.77	
15	256QAM	36	0	17.68	17.66	17.58	18.5
15	256QAM	36	20	17.66	17.65	17.61	
15	256QAM	36	39	17.60	17.65	17.56	
15	256QAM	75	0	17.53	17.56	17.51	
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.37	22.48	22.40	23.5
10	QPSK	1	25	22.27	22.35	22.30	
10	QPSK	1	49	22.25	22.34	22.29	
10	QPSK	25	0	21.61	21.58	21.58	22.5
10	QPSK	25	12	21.54	21.56	21.53	
10	QPSK	25	25	21.48	21.49	21.51	
10	QPSK	50	0	21.45	21.54	21.46	22.5
10	16QAM	1	0	21.69	21.70	21.72	
10	16QAM	1	25	21.70	21.68	21.59	
10	16QAM	1	49	21.64	21.68	21.65	21.5
10	16QAM	25	0	20.39	20.43	20.33	
10	16QAM	25	12	20.40	20.39	20.33	
10	16QAM	25	25	20.40	20.43	20.33	21.5
10	16QAM	50	0	20.29	20.40	20.34	
10	64QAM	1	0	20.60	20.65	20.63	
10	64QAM	1	25	20.52	20.59	20.51	21.5
10	64QAM	1	49	20.56	20.61	20.53	
10	64QAM	25	0	20.48	20.49	20.35	
10	64QAM	25	12	20.43	20.40	20.43	21.5
10	64QAM	25	25	20.39	20.44	20.41	
10	64QAM	50	0	20.32	20.40	20.29	
10	256QAM	1	0	17.81	17.86	17.84	18.5
10	256QAM	1	25	17.73	17.80	17.72	
10	256QAM	1	49	17.77	17.82	17.74	
10	256QAM	25	0	17.69	17.70	17.56	18.5
10	256QAM	25	12	17.64	17.61	17.64	
10	256QAM	25	25	17.60	17.65	17.62	
10	256QAM	50	0	17.53	17.61	17.50	
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	22.35	22.42	22.39	23.5
5	QPSK	1	12	22.29	22.39	22.30	
5	QPSK	1	24	22.25	22.30	22.34	
5	QPSK	12	0	21.57	21.58	21.56	22.5
5	QPSK	12	7	21.48	21.53	21.49	
5	QPSK	12	13	21.46	21.55	21.51	
5	QPSK	25	0	21.50	21.48	21.45	22.5
5	16QAM	1	0	21.74	21.70	21.72	
5	16QAM	1	12	21.67	21.74	21.64	
5	16QAM	1	24	21.62	21.67	21.66	

Band 2 (1900MHz Band) (dBm)_ANT4							
Part 24E							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	22.60	22.63	22.61	23.5
20	QPSK	1	49	22.57	22.60	22.52	
20	QPSK	1	99	22.48	22.49	22.44	
20	QPSK	50	0	21.62	21.69	21.68	22.5
20	QPSK	50	24	21.60	21.60	21.62	
20	QPSK	50	50	21.55	21.62	21.60	
20	QPSK	100	0	21.62	21.65	21.60	22.5
20	16QAM	1	0	21.81	21.83	21.81	
20	16QAM	1	49	21.78	21.80	21.72	
20	16QAM	1	99	21.75	21.79	21.78	21.5
20	16QAM	50	0	20.47	20.51	20.44	
20	16QAM	50	24	20.49	20.50	20.43	
20	16QAM	50	50	20.46	20.49	20.42	21.5
20	16QAM	100	0	20.41	20.47	20.43	
20	64QAM	1	0	20.67	20.74	20.71	
20	64QAM	1	49	20.60	20.68	20.63	21.5
20	64QAM	1	99	20.64	20.67	20.62	
20	64QAM	50	0	20.54	20.55	20.47	
20	64QAM	50	24	20.52	20.53	20.51	21.5
20	64QAM	50	50	20.46	20.50	20.47	
20	64QAM	100	0	20.41	20.47	20.41	
20	256QAM	1	0	17.88	17.95	17.92	18.5
20	256QAM	1	49	17.81	17.89	17.84	
20	256QAM	1	99	17.85	17.88	17.83	
20	256QAM	50	0	17.75	17.76	17.68	18.5
20	256QAM	50	24	17.73	17.74	17.72	
20	256QAM	50	50	17.67	17.71	17.68	
20	256QAM	100	0	17.62	17.68	17.62	
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	22.50	22.56	22.49	23.5
15	QPSK	1	37	22.38	22.47	22.43	
15	QPSK	1	74	22.43	22.48	22.44	
15	QPSK	36	0	21.68	21.73	21.70	22.5
15	QPSK	36	20	21.59	21.66	21.68	
15	QPSK	36	39	21.60	21.67	21.66	
15	QPSK	75	0	21.62	21.59	21.55	22.5
15	16QAM	1	0	21.87	21.85	21.81	
15	16QAM	1	37	21.78	21.80	21.75	
15	16QAM	1	74	21.74	21.78	21.80	21.5
15	16QAM	36	0	20.48	20.51	20.50	
15	16QAM	36	20	20.44	20.49	20.37	
15	16QAM	36	39	20.46	20.43	20.34	21.5
15	16QAM	75	0	20.36	20.46	20.38	
15	64QAM	1	0	20.63	20.67	20.67	
15	64QAM	1	37	20.59	20.67	20.55	21.5
15	64QAM	1	74	20.62	20.65	20.61	
15	64QAM	36	0	20.52	20.50	20.42	
15	64QAM	36	20	20.50	20.49	20.45	21.5
15	64QAM	36	39	20.44	20.49	20.40	
15	64QAM	75	0	20.37	20.40	20.35	
15	256QAM	1	0	17.84	17.88	17.88	18.5
15	256QAM	1	37	17.80	17.88	17.76	
15	256QAM	1	74	17.83	17.86		

5	16QAM	12	0	20.35	20.42	20.32	21.5
5	16QAM	12	7	20.42	20.44	20.33	
5	16QAM	12	13	20.39	20.38	20.36	
5	16QAM	25	0	20.31	20.41	20.35	21.5
5	64QAM	1	0	20.57	20.67	20.64	
5	64QAM	1	12	20.54	20.58	20.54	
5	64QAM	1	24	20.57	20.61	20.52	21.5
5	64QAM	12	0	20.47	20.48	20.41	
5	64QAM	12	7	20.44	20.40	20.41	
5	64QAM	12	13	20.35	20.38	20.34	18.5
5	64QAM	25	0	20.33	20.35	20.31	
5	256QAM	1	0	17.78	17.88	17.85	
5	256QAM	1	12	17.75	17.79	17.75	18.5
5	256QAM	1	24	17.78	17.82	17.73	
5	256QAM	12	0	17.68	17.69	17.62	
5	256QAM	12	7	17.65	17.61	17.62	18.5
5	256QAM	12	13	17.56	17.59	17.55	
5	256QAM	25	0	17.54	17.56	17.52	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	22.37	22.43	22.38	23.5
3	QPSK	1	8	22.30	22.32	22.34	
3	QPSK	1	14	22.30	22.35	22.32	
3	QPSK	8	0	21.58	21.61	21.59	22.5
3	QPSK	8	4	21.48	21.59	21.50	
3	QPSK	8	7	21.49	21.53	21.52	
3	QPSK	15	0	21.44	21.51	21.43	22.5
3	16QAM	1	0	21.75	21.73	21.75	
3	16QAM	1	8	21.72	21.73	21.66	
3	16QAM	1	14	21.63	21.67	21.65	21.5
3	16QAM	8	0	20.41	20.42	20.35	
3	16QAM	8	4	20.37	20.42	20.35	
3	16QAM	8	7	20.38	20.38	20.36	21.5
3	16QAM	15	0	20.31	20.40	20.36	
3	64QAM	1	0	20.57	20.61	20.61	
3	64QAM	1	8	20.48	20.58	20.53	21.5
3	64QAM	1	14	20.52	20.60	20.52	
3	64QAM	8	0	20.43	20.49	20.34	
3	64QAM	8	4	20.44	20.44	20.44	21.5
3	64QAM	8	7	20.40	20.44	20.41	
3	64QAM	15	0	20.34	20.41	20.33	
3	256QAM	1	0	17.78	17.82	17.82	18.5
3	256QAM	1	8	17.69	17.79	17.74	
3	256QAM	1	14	17.73	17.81	17.73	
3	256QAM	8	0	17.64	17.70	17.55	18.5
3	256QAM	8	4	17.65	17.65	17.65	
3	256QAM	8	7	17.61	17.65	17.62	
3	256QAM	15	0	17.55	17.62	17.54	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.33	22.48	22.40	23.5
1.4	QPSK	1	3	22.27	22.34	22.33	
1.4	QPSK	1	5	22.24	22.35	22.33	
1.4	QPSK	3	0	22.30	22.39	22.36	22.5
1.4	QPSK	3	1	22.42	22.45	22.35	
1.4	QPSK	3	3	22.36	22.40	22.37	
1.4	QPSK	6	0	21.44	21.54	21.46	21.5
1.4	16QAM	1	0	21.72	21.71	21.68	
1.4	16QAM	1	3	21.72	21.69	21.65	
1.4	16QAM	1	5	21.63	21.72	21.72	21.5
1.4	16QAM	3	0	21.52	21.57	21.49	
1.4	16QAM	3	1	21.50	21.54	21.46	
1.4	16QAM	3	3	21.51	21.55	21.44	21.5
1.4	16QAM	6	0	20.54	20.51	20.44	
1.4	64QAM	1	0	20.60	20.65	20.64	
1.4	64QAM	1	3	20.52	20.56	20.53	21.5
1.4	64QAM	1	5	20.52	20.56	20.53	
1.4	64QAM	3	0	20.61	20.55	20.48	
1.4	64QAM	3	1	20.58	20.56	20.53	21.5
1.4	64QAM	3	3	20.51	20.52	20.50	
1.4	64QAM	6	0	20.31	20.37	20.29	
1.4	256QAM	1	0	17.81	17.86	17.85	18.5
1.4	256QAM	1	3	17.73	17.77	17.74	
1.4	256QAM	1	5	17.73	17.77	17.74	
1.4	256QAM	3	0	17.82	17.76	17.69	18.5
1.4	256QAM	3	1	17.79	17.77	17.74	
1.4	256QAM	3	3	17.72	17.73	17.71	
1.4	256QAM	6	0	17.52	17.58	17.50	18.5

5	16QAM	12	0	20.47	20.54	20.44	21.5
5	16QAM	12	7	20.54	20.56	20.45	
5	16QAM	12	13	20.51	20.50	20.48	
5	16QAM	25	0	20.43	20.53	20.47	21.5
5	64QAM	1	0	20.69	20.79	20.76	
5	64QAM	1	12	20.59	20.63	20.59	
5	64QAM	1	24	20.62	20.66	20.57	21.5
5	64QAM	12	0	20.52	20.53	20.46	
5	64QAM	12	7	20.49	20.45	20.46	
5	64QAM	12	13	20.40	20.43	20.39	18.5
5	64QAM	25	0	20.38	20.40	20.36	
5	256QAM	1	0	17.83	17.93	17.90	
5	256QAM	1	12	17.80	17.84	17.80	18.5
5	256QAM	1	24	17.83	17.87	17.78	
5	256QAM	12	0	17.73	17.74	17.67	
5	256QAM	12	7	17.70	17.66	17.67	18.5
5	256QAM	12	13	17.61	17.64	17.60	
5	256QAM	25	0	17.59	17.61	17.57	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	22.49	22.55	22.50	23.5
3	QPSK	1	8	22.42	22.44	22.46	
3	QPSK	1	14	22.42	22.47	22.44	
3	QPSK	8	0	21.70	21.73	21.71	22.5
3	QPSK	8	4	21.60	21.71	21.62	
3	QPSK	8	7	21.61	21.65	21.64	
3	QPSK	15	0	21.56	21.63	21.55	22.5
3	16QAM	1	0	21.87	21.85	21.87	
3	16QAM	1	8	21.84	21.85	21.78	
3	16QAM	1	14	21.75	21.79	21.77	21.5
3	16QAM	8	0	20.53	20.54	20.47	
3	16QAM	8	4	20.49	20.54	20.47	
3	16QAM	8	7	20.50	20.50	20.48	21.5
3	16QAM	15	0	20.43	20.52	20.48	
3	64QAM	1	0	20.62	20.66	20.66	
3	64QAM	1	8	20.53	20.63	20.58	21.5
3	64QAM	1	14	20.57	20.65	20.57	
3	64QAM	8	0	20.48	20.54	20.39	
3	64QAM	8	4	20.49	20.49	20.49	21.5
3	64QAM	8	7	20.45	20.49	20.46	
3	64QAM	15	0	20.39	20.46	20.38	
3	256QAM	1	0	17.83	17.87	17.87	18.5
3	256QAM	1	8	17.74	17.84	17.79	
3	256QAM	1	14	17.78	17.86	17.78	
3	256QAM	8	0	17.69	17.75	17.60	18.5
3	256QAM	8	4	17.70	17.70	17.70	
3	256QAM	8	7	17.66	17.70	17.67	
3	256QAM	15	0	17.60	17.67	17.59	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	22.45	22.60	22.52	23.5
1.4	QPSK	1	3	22.39	22.46	22.45	
1.4	QPSK	1	5	22.36	22.47	22.45	
1.4	QPSK	3	0	22.42	22.51	22.48	22.5
1.4	QPSK	3	1	22.54	22.57	22.47	
1.4	QPSK	3	3	22.48	22.52	22.49	
1.4	QPSK	6	0	21.56	21.66	21.58	22.5
1.4	16QAM	1	0	21.84	21.83	21.80	
1.4	16QAM	1	3	21.84	21.81	21.77	
1.4	16QAM	1	5	21.75	21.84	21.84	21.5
1.4	16QAM	3	0	21.64	21.69	21.61	
1.4	16QAM	3	1	21.62	21.66	21.58	
1.4	16QAM	3	3	21.63	21.67	21.56	21.5
1.4	16QAM	6	0	20.66	20.63	20.56	
1.4	64QAM	1	0	20.72	20.77	20.76	
1.4	64QAM	1	3	20.64	20.68	20.65	21.5
1.4	64QAM	1	5	20.64	20.68	20.65	
1.4	64QAM	3	0	20.73	20.67	20.60	
1.4	64QAM	3	1	20.63	20.61	20.58	21.5
1.4	64QAM	3	3	20.56	20.57	20.55	
1.4	64QAM	6	0	20.36	20.42	20.34	
1.4	256QAM	1	0	17.86	17.91	17.90	18.5
1.4	256QAM	1	3	17.78	17.82	17.79	
1.4	256QAM	1	5	17.78	17.82	17.79	
1.4	256QAM	3	0	17.87	17.81	17.74	18.5
1.4	256QAM	3	1	17.84	17.82	17.79	
1.4	256QAM	3	3	17.77	17.78	17.76	
1.4	256QAM	6	0	17.57	17.63	17.55	18.5

Band 4 (AWS Band) (dBm)_ANT0 Part 27L (only on channel required)							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.51	22.60	22.54	
20	QPSK	1	49	22.45	22.47	22.40	
20	QPSK	1	99	22.37	22.44	22.41	
20	QPSK	50	0	21.51	21.63	21.52	22.5
20	QPSK	50	24	21.55	21.49	21.47	
20	QPSK	50	50	21.52	21.55	21.48	
20	QPSK	100	0	21.55	21.58	21.45	22.5
20	16QAM	1	0	21.82	21.73	21.58	
20	16QAM	1	49	21.70	21.79	21.74	
20	16QAM	1	99	21.80	21.57	21.84	21.5
20	16QAM	50	0	20.63	20.58	20.62	
20	16QAM	50	24	20.72	20.57	20.56	
20	16QAM	50	50	20.59	20.62	20.64	21.5
20	16QAM	100	0	20.57	20.59	20.55	
20	64QAM	1	0	20.67	20.81	20.76	
20	64QAM	1	49	20.70	20.74	20.64	21.5
20	64QAM	1	99	20.80	20.68	20.50	
20	64QAM	50	0	20.65	20.54	20.54	
20	64QAM	50	24	20.48	20.49	20.56	21.5
20	64QAM	50	50	20.61	20.54	20.59	
20	64QAM	100	0	20.53	20.56	20.55	
20	256QAM	1	0	17.52	17.66	17.61	18.5
20	256QAM	1	49	17.55	17.59	17.49	
20	256QAM	1	99	17.65	17.53	17.35	
20	256QAM	50	0	17.50	17.39	17.39	18.5
20	256QAM	50	24	17.33	17.34	17.41	
20	256QAM	50	50	17.46	17.39	17.44	
20	256QAM	100	0	17.38	17.41	17.40	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.38	22.43	22.34	
15	QPSK	1	37	22.42	22.43	22.37	
15	QPSK	1	74	22.28	22.43	22.40	
15	QPSK	36	0	21.47	21.53	21.42	22.5
15	QPSK	36	20	21.61	21.42	21.43	
15	QPSK	36	39	21.51	21.48	21.39	
15	QPSK	75	0	21.50	21.48	21.35	22.5
15	16QAM	1	0	21.78	21.67	21.50	
15	16QAM	1	37	21.77	21.89	21.69	
15	16QAM	1	74	21.82	21.97	21.83	21.5
15	16QAM	36	0	20.62	20.49	20.56	
15	16QAM	36	20	20.68	20.48	20.48	
15	16QAM	36	39	20.55	20.60	20.62	21.5
15	16QAM	75	0	20.47	20.55	20.54	
15	64QAM	1	0	20.64	20.80	20.71	
15	64QAM	1	37	20.64	20.64	20.59	21.5
15	64QAM	1	74	20.78	20.63	20.44	
15	64QAM	36	0	20.62	20.44	20.47	
15	64QAM	36	20	20.39	20.46	20.49	21.5
15	64QAM	36	39	20.57	20.52	20.51	
15	64QAM	75	0	20.47	20.53	20.54	
15	256QAM	1	0	17.49	17.65	17.56	18.5
15	256QAM	1	37	17.49	17.49	17.44	
15	256QAM	1	74	17.63	17.48	17.29	
15	256QAM	36	0	17.47	17.29	17.32	18.5
15	256QAM	36	20	17.24	17.31	17.34	
15	256QAM	36	39	17.42	17.37	17.36	
15	256QAM	75	0	17.32	17.38	17.39	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.45	22.46	22.39	
10	QPSK	1	25	22.38	22.42	22.34	
10	QPSK	1	49	22.29	22.43	22.33	
10	QPSK	25	0	21.45	21.62	21.47	22.5
10	QPSK	25	12	21.53	21.40	21.46	
10	QPSK	25	25	21.43	21.53	21.41	
10	QPSK	50	0	21.46	21.52	21.39	22.5
10	16QAM	1	0	21.76	21.68	21.49	
10	16QAM	1	25	21.76	21.93	21.73	
10	16QAM	1	49	21.78	21.98	21.79	21.5
10	16QAM	25	0	20.55	20.54	20.57	
10	16QAM	25	12	20.64	20.50	20.52	
10	16QAM	25	25	20.58	20.53	20.60	21.5
10	16QAM	50	0	20.56	20.53	20.46	
10	64QAM	1	0	20.57	20.72	20.74	
10	64QAM	1	25	20.68	20.73	20.62	21.5
10	64QAM	1	49	20.75	20.61	20.40	
10	64QAM	25	0	20.64	20.44	20.45	
10	64QAM	25	12	20.40	20.46	20.50	21.5
10	64QAM	25	25	20.57	20.52	20.53	
10	64QAM	50	0	20.46	20.47	20.53	
10	256QAM	1	0	17.42	17.57	17.59	18.5
10	256QAM	1	25	17.53	17.58	17.47	
10	256QAM	1	49	17.60	17.46	17.25	
10	256QAM	25	0	17.49	17.29	17.30	18.5
10	256QAM	25	12	17.25	17.31	17.35	
10	256QAM	25	25	17.42	17.37	17.38	
10	256QAM	50	0	17.31	17.32	17.38	
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	22.44	22.44	22.35	
5	QPSK	1	12	22.35	22.37	22.39	
5	QPSK	1	24	22.36	22.42	22.32	
5	QPSK	12	0	21.42	21.58	21.46	22.5
5	QPSK	12	7	21.56	21.44	21.38	
5	QPSK	12	13	21.49	21.49	21.38	
5	QPSK	25	0	21.53	21.52	21.37	22.5
5	16QAM	1	0	21.72	21.71	21.52	
5	16QAM	1	12	21.75	21.91	21.72	
5	16QAM	1	24	21.80	21.91	21.76	

Band 4 (AWS Band) (dBm)_ANT4 Part 27L (only on channel required)							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	22.63	22.67	22.64	
20	QPSK	1	49	22.59	22.59	22.62	
20	QPSK	1	99	22.57	22.58	22.59	
20	QPSK	50	0	21.66	21.70	21.62	22.5
20	QPSK	50	24	21.62	21.56	21.55	
20	QPSK	50	50	21.64	21.67	21.60	
20	QPSK	100	0	21.67	21.68	21.57	22.5
20	16QAM	1	0	21.94	21.85	21.68	
20	16QAM	1	49	21.82	21.91	21.86	
20	16QAM	1	99	21.92	21.69	21.96	21.5
20	16QAM	50	0	20.75	20.70	20.74	
20	16QAM	50	24	20.84	20.69	20.68	
20	16QAM	50	50	20.71	20.74	20.76	21.5
20	16QAM	100	0	20.69	20.71	20.67	
20	64QAM	1	0	20.79	20.93	20.88	
20	64QAM	1	49	20.77	20.81	20.71	21.5
20	64QAM	1	99	20.87	20.75	20.57	
20	64QAM	50	0	20.72	20.61	20.61	
20	64QAM	50	24	20.55	20.56	20.63	21.5
20	64QAM	50	50	20.68	20.61	20.66	
20	64QAM	100	0	20.60	20.63	20.62	
20	256QAM	1	0	17.59	17.73	17.68	18.5
20	256QAM	1	49	17.62	17.66	17.56	
20	256QAM	1	99	17.72	17.60	17.42	
20	256QAM	50	0	17.57	17.46	17.46	18.5
20	256QAM	50	24	17.40	17.41	17.48	
20	256QAM	50	50	17.53	17.46	17.51	
20	256QAM	100	0	17.45	17.48	17.47	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	22.50	22.55	22.46	
15	QPSK	1	37	22.54	22.55	22.49	
15	QPSK	1	74	22.40	22.52	22.52	
15	QPSK	36	0	21.59	21.65	21.54	22.5
15	QPSK	36	20	21.73	21.54	21.55	
15	QPSK	36	39	21.63	21.60	21.51	
15	QPSK	75	0	21.52	21.50	21.37	22.5
15	16QAM	1	0	21.80	21.69	21.52	
15	16QAM	1	37	21.79	21.91	21.71	
15	16QAM	1	74	21.91	22.06	21.92	21.5
15	16QAM	36	0	20.71	20.58	20.65	
15	16QAM	36	20	20.77	20.57	20.57	
15	16QAM	36	39	20.64	20.69	20.71	21.5
15	16QAM	75	0	20.59	20.67	20.66	
15	64QAM	1	0	20.76	20.92	20.83	
15	64QAM	1	37	20.76	20.76	20.71	21.5
15	64QAM	1	74	20.85	20.70	20.51	
15	64QAM	36	0	20.69	20.51	20.54	
15	64QAM	36	20	20.46	20.53	20.56	21.5
15	64QAM	36	39	20.64	20.59	20.58	
15	64QAM	75	0	20.54	20.60	20.61	
15	256QAM	1	0	17.56	17.72	17.63	18.5
15	256QAM	1	37	17.56	17.56	17.51	
15	256QAM	1	74	17.70	17.55	17.36	

5	16QAM	12	0	20.61	20.51	20.58	21.5
5	16QAM	12	7	20.62	20.52	20.48	
5	16QAM	12	13	20.54	20.54	20.60	
5	16QAM	25	0	20.48	20.50	20.46	21.5
5	64QAM	1	0	20.58	20.78	20.70	
5	64QAM	1	12	20.61	20.69	20.59	
5	64QAM	1	24	20.77	20.65	20.46	21.5
5	64QAM	12	0	20.63	20.53	20.51	
5	64QAM	12	7	20.45	20.42	20.50	
5	64QAM	12	13	20.57	20.45	20.58	18.5
5	64QAM	25	0	20.52	20.53	20.46	
5	256QAM	1	0	17.43	17.63	17.55	
5	256QAM	1	12	17.46	17.54	17.44	18.5
5	256QAM	1	24	17.62	17.50	17.31	
5	256QAM	12	0	17.48	17.38	17.36	
5	256QAM	12	7	17.30	17.27	17.35	18.5
5	256QAM	12	13	17.42	17.30	17.43	
5	256QAM	25	0	17.37	17.38	17.31	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.35	22.45	22.31	23.5
3	QPSK	1	8	22.39	22.44	22.35	
3	QPSK	1	14	22.31	22.34	22.32	
3	QPSK	8	0	21.44	21.58	21.48	22.5
3	QPSK	8	4	21.52	21.46	21.45	
3	QPSK	8	7	21.48	21.47	21.45	
3	QPSK	15	0	21.45	21.47	21.39	22.5
3	16QAM	1	0	21.72	21.72	21.49	
3	16QAM	1	8	21.76	21.90	21.72	
3	16QAM	1	14	21.82	21.93	21.81	21.5
3	16QAM	8	0	20.58	20.49	20.55	
3	16QAM	8	4	20.69	20.49	20.50	
3	16QAM	8	7	20.49	20.55	20.61	21.5
3	16QAM	15	0	20.48	20.51	20.52	
3	64QAM	1	0	20.66	20.74	20.74	
3	64QAM	1	8	20.66	20.68	20.55	21.5
3	64QAM	1	14	20.78	20.63	20.40	
3	64QAM	8	0	20.59	20.44	20.44	
3	64QAM	8	4	20.43	20.42	20.46	21.5
3	64QAM	8	7	20.52	20.46	20.55	
3	64QAM	15	0	20.46	20.48	20.52	
3	256QAM	1	0	17.51	17.59	17.59	18.5
3	256QAM	1	8	17.51	17.53	17.40	
3	256QAM	1	14	17.63	17.48	17.25	
3	256QAM	8	0	17.44	17.29	17.29	18.5
3	256QAM	8	4	17.28	17.27	17.31	
3	256QAM	8	7	17.37	17.31	17.40	
3	256QAM	15	0	17.31	17.33	17.37	Tune-up limit (dBm)
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.35	22.43	22.32	23.5
1.4	QPSK	1	3	22.35	22.38	22.31	
1.4	QPSK	1	5	22.31	22.42	22.36	
1.4	QPSK	3	0	22.45	22.40	22.45	22.5
1.4	QPSK	3	1	22.44	22.44	22.42	
1.4	QPSK	3	3	22.42	22.46	22.46	
1.4	QPSK	6	0	21.46	21.46	21.35	22.5
1.4	16QAM	1	0	21.73	21.70	21.47	
1.4	16QAM	1	3	21.82	21.90	21.73	
1.4	16QAM	1	5	21.77	21.93	21.83	21.5
1.4	16QAM	3	0	21.55	21.55	21.58	
1.4	16QAM	3	1	21.70	21.49	21.46	
1.4	16QAM	3	3	21.52	21.59	21.54	21.5
1.4	16QAM	6	0	20.50	20.49	20.46	
1.4	64QAM	1	0	20.57	20.72	20.75	
1.4	64QAM	1	3	20.67	20.69	20.61	21.5
1.4	64QAM	1	5	20.73	20.67	20.45	
1.4	64QAM	3	0	20.57	20.50	20.53	
1.4	64QAM	3	1	20.44	20.48	20.54	21.5
1.4	64QAM	3	3	20.54	20.47	20.54	
1.4	64QAM	6	0	20.44	20.46	20.47	
1.4	256QAM	1	0	17.42	17.57	17.60	18.5
1.4	256QAM	1	3	17.52	17.54	17.46	
1.4	256QAM	1	5	17.58	17.52	17.30	
1.4	256QAM	3	0	17.42	17.35	17.38	18.5
1.4	256QAM	3	1	17.29	17.33	17.39	
1.4	256QAM	3	3	17.39	17.32	17.39	
1.4	256QAM	6	0	17.29	17.31	17.32	18.5

5	16QAM	12	0	20.81	20.71	20.78	21.5
5	16QAM	12	7	20.82	20.72	20.68	
5	16QAM	12	13	20.64	20.64	20.70	
5	16QAM	25	0	20.58	20.60	20.56	21.5
5	64QAM	1	0	20.68	20.88	20.80	
5	64QAM	1	12	20.71	20.79	20.69	
5	64QAM	1	24	20.87	20.75	20.56	21.5
5	64QAM	12	0	20.73	20.63	20.61	
5	64QAM	12	7	20.55	20.52	20.60	
5	64QAM	12	13	20.67	20.55	20.68	18.5
5	64QAM	25	0	20.62	20.63	20.56	
5	256QAM	1	0	17.53	17.73	17.65	
5	256QAM	1	12	17.56	17.64	17.54	18.5
5	256QAM	1	24	17.72	17.60	17.41	
5	256QAM	12	0	17.58	17.48	17.46	
5	256QAM	12	7	17.40	17.37	17.45	18.5
5	256QAM	12	13	17.52	17.40	17.53	
5	256QAM	25	0	17.47	17.48	17.41	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	22.42	22.52	22.38	23.5
3	QPSK	1	8	22.46	22.51	22.42	
3	QPSK	1	14	22.38	22.41	22.39	
3	QPSK	8	0	21.51	21.63	21.55	22.5
3	QPSK	8	4	21.62	21.56	21.55	
3	QPSK	8	7	21.58	21.57	21.55	
3	QPSK	15	0	21.55	21.57	21.49	22.5
3	16QAM	1	0	21.82	21.82	21.59	
3	16QAM	1	8	21.86	22.00	21.82	
3	16QAM	1	14	21.92	22.03	21.91	21.5
3	16QAM	8	0	20.66	20.59	20.65	
3	16QAM	8	4	20.79	20.59	20.60	
3	16QAM	8	7	20.59	20.65	20.71	21.5
3	16QAM	15	0	20.58	20.61	20.62	
3	64QAM	1	0	20.76	20.84	20.84	
3	64QAM	1	8	20.76	20.78	20.65	21.5
3	64QAM	1	14	20.88	20.73	20.50	
3	64QAM	8	0	20.69	20.54	20.54	
3	64QAM	8	4	20.53	20.52	20.56	21.5
3	64QAM	8	7	20.62	20.56	20.65	
3	64QAM	15	0	20.56	20.58	20.62	
3	256QAM	1	0	17.61	17.69	17.69	18.5
3	256QAM	1	8	17.61	17.63	17.50	
3	256QAM	1	14	17.73	17.58	17.35	
3	256QAM	8	0	17.54	17.39	17.39	18.5
3	256QAM	8	4	17.38	17.37	17.41	
3	256QAM	8	7	17.44	17.38	17.47	
3	256QAM	15	0	17.38	17.40	17.44	Tune-up limit (dBm)
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	22.45	22.53	22.42	23.5
1.4	QPSK	1	3	22.45	22.48	22.41	
1.4	QPSK	1	5	22.41	22.52	22.46	
1.4	QPSK	3	0	22.62	22.57	22.62	22.5
1.4	QPSK	3	1	22.61	22.61	22.59	
1.4	QPSK	3	3	22.59	22.63	22.63	
1.4	QPSK	6	0	21.63	21.63	21.52	22.5
1.4	16QAM	1	0	21.90	21.87	21.64	
1.4	16QAM	1	3	21.99	22.07	21.90	
1.4	16QAM	1	5	21.94	22.10	22.00	22.5
1.4	16QAM	3	0	21.72	21.72	21.75	
1.4	16QAM	3	1	21.87	21.66	21.63	
1.4	16QAM	3	3	21.69	21.76	21.71	21.5
1.4	16QAM	6	0	20.67	20.66	20.63	
1.4	64QAM	1	0	20.74	20.89	20.92	
1.4	64QAM	1	3	20.84	20.86	20.78	21.5
1.4	64QAM	1	5	20.90	20.84	20.62	
1.4	64QAM	3	0	20.74	20.67	20.70	
1.4	64QAM	3	1	20.61	20.65	20.71	21.5
1.4	64QAM	3	3	20.71	20.64	20.71	
1.4	64QAM	6	0	20.61	20.63	20.64	
1.4	256QAM	1	0	17.59	17.74	17.77	18.5
1.4	256QAM	1	3	17.62	17.64	17.56	
1.4	256QAM	1	5	17.65	17.59	17.37	
1.4	256QAM	3	0	17.49	17.42	17.45	18.5
1.4	256QAM	3	1	17.36	17.40	17.46	
1.4	256QAM	3	3	17.46	17.39	17.46	
1.4	256QAM	6	0	17.36	17.38	17.39	18.5

Band 5 (Cellular Band) (dBm)_ANT0							
Part 22H(only on channel required)							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20450	20525	20600	
Frequency (MHz)				829	836.5	844	
10	QPSK	1	0	23.34	23.37	23.29	
10	QPSK	1	25	23.17	23.20	23.09	
10	QPSK	1	49	23.09	23.16	22.91	
10	QPSK	25	0	22.27	22.35	22.21	
10	QPSK	25	12	22.34	22.31	22.26	
10	QPSK	25	25	22.26	22.22	22.25	
10	QPSK	50	0	22.15	22.17	22.14	
10	16QAM	1	0	22.24	22.14	22.10	
10	16QAM	1	25	22.23	22.41	22.27	
10	16QAM	1	49	22.20	22.21	22.13	
10	16QAM	25	0	21.19	21.10	21.07	
10	16QAM	25	12	21.11	21.07	21.04	
10	16QAM	25	25	21.19	21.15	21.10	
10	16QAM	50	0	21.23	21.09	21.08	
10	64QAM	1	0	21.25	21.32	21.21	
10	64QAM	1	25	21.12	21.10	21.16	
10	64QAM	1	49	21.27	21.07	21.23	
10	64QAM	25	0	21.22	21.15	21.10	
10	64QAM	25	12	21.30	21.10	21.15	
10	64QAM	25	25	21.14	21.15	21.10	
10	64QAM	50	0	21.15	21.12	21.14	
10	256QAM	1	0	18.31	18.38	18.27	
10	256QAM	1	25	18.18	18.16	18.22	
10	256QAM	1	49	18.33	18.13	18.29	
10	256QAM	25	0	18.28	18.21	18.16	
10	256QAM	25	12	18.36	18.16	18.21	
10	256QAM	25	25	18.20	18.21	18.16	
10	256QAM	50	0	18.21	18.18	18.20	
Channel				20425	20525	20625	
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.18	23.19	23.11	
5	QPSK	1	12	23.14	23.14	23.07	
5	QPSK	1	24	23.04	23.11	22.85	
5	QPSK	12	0	22.26	22.32	22.08	
5	QPSK	12	7	22.30	22.28	22.23	
5	QPSK	12	13	22.16	22.18	22.15	
5	QPSK	25	0	22.20	22.18	22.23	
5	16QAM	1	0	22.34	22.25	22.20	
5	16QAM	1	12	22.33	22.53	22.39	
5	16QAM	1	24	22.32	22.29	22.25	
5	16QAM	12	0	21.25	21.21	21.12	
5	16QAM	12	7	21.19	21.18	21.10	
5	16QAM	12	13	21.24	21.23	21.17	
5	16QAM	25	0	21.33	21.14	21.11	
5	64QAM	1	0	21.19	21.26	21.19	
5	64QAM	1	12	21.02	21.09	21.11	
5	64QAM	1	24	21.22	20.98	21.14	
5	64QAM	12	0	21.15	21.11	21.04	
5	64QAM	12	7	21.26	21.05	21.09	
5	64QAM	12	13	21.06	21.06	21.00	
5	64QAM	25	0	21.24	21.22	21.25	
5	256QAM	1	0	18.25	18.32	18.25	
5	256QAM	1	12	18.08	18.15	18.17	
5	256QAM	1	24	18.28	18.04	18.20	
5	256QAM	12	0	18.21	18.17	18.10	
5	256QAM	12	7	18.32	18.11	18.15	
5	256QAM	12	13	18.12	18.12	18.06	
5	256QAM	25	0	18.30	18.28	18.31	
Channel				20415	20525	20635	
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.09	23.17	23.13	
3	QPSK	1	8	23.16	23.14	23.02	
3	QPSK	1	14	23.00	23.09	22.83	
3	QPSK	8	0	22.20	22.31	22.09	
3	QPSK	8	4	22.30	22.28	22.21	
3	QPSK	8	7	22.02	22.07	22.05	
3	QPSK	15	0	22.07	22.06	22.10	
3	16QAM	1	0	22.21	22.05	22.06	
3	16QAM	1	8	22.21	22.39	22.20	
3	16QAM	1	14	22.13	22.11	22.11	
3	16QAM	8	0	21.16	21.04	21.00	
3	16QAM	8	4	21.02	21.04	21.03	
3	16QAM	8	7	21.13	21.05	21.02	
3	16QAM	15	0	21.19	21.06	21.03	
3	64QAM	1	0	21.17	21.23	21.18	
3	64QAM	1	8	21.11	21.05	21.15	
3	64QAM	1	14	21.23	21.04	21.20	
3	64QAM	8	0	21.17	21.06	21.06	
3	64QAM	8	4	21.26	21.09	21.11	
3	64QAM	8	7	21.12	21.06	21.04	
3	64QAM	15	0	21.05	21.11	21.05	
3	256QAM	1	0	18.23	18.29	18.24	
3	256QAM	1	8	18.17	18.11	18.21	
3	256QAM	1	14	18.29	18.10	18.26	
3	256QAM	8	0	18.23	18.12	18.12	
3	256QAM	8	4	18.32	18.15	18.17	
3	256QAM	8	7	18.18	18.12	18.10	
3	256QAM	15	0	18.11	18.17	18.11	
Channel				20497	20525	20643	
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.19	23.20	23.07	
1.4	QPSK	1	3	23.12	23.12	23.01	
1.4	QPSK	1	5	23.08	23.13	22.86	
1.4	QPSK	3	0	23.08	23.19	22.93	
1.4	QPSK	3	1	23.14	23.11	23.04	
1.4	QPSK	3	3	23.03	23.07	23.10	
1.4	QPSK	6	0	22.14	22.04	22.05	
1.4	16QAM	1	0	22.21	22.09	22.02	
1.4	16QAM	1	3	22.21	22.39	22.17	
1.4	16QAM	1	5	22.19	22.16	22.08	23

Band 7 (2600MHz Band) (dBm)_ANT0							
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	22.48	22.56	22.53	
20	QPSK	1	49	22.35	22.42	22.47	
20	QPSK	1	99	22.46	22.47	22.48	
20	QPSK	50	0	21.56	21.69	21.68	
20	QPSK	50	24	21.63	21.68	21.67	
20	QPSK	50	50	21.66	21.65	21.67	
20	QPSK	100	0	21.71	21.72	21.64	
20	16QAM	1	0	21.57	21.51	21.56	
20	16QAM	1	49	21.64	21.63	21.55	
20	16QAM	1	99	21.65	21.70	21.66	
20	16QAM	50	0	20.55	20.70	20.76	
20	16QAM	50	24	20.59	20.64	20.56	
20	16QAM	50	50	20.58	20.69	20.54	
20	16QAM	100	0	20.57	20.62	20.67	
20	64QAM	1	0	20.60	20.64	20.68	
20	64QAM	1	49	20.64	20.70	20.45	
20	64QAM	1	99	20.59	20.46	20.36	
20	64QAM	50	0	20.56	20.60	20.64	
20	64QAM	50	24	20.56	20.69	20.48	
20	64QAM	50	50	20.53	20.68	20.62	
20	64QAM	100	0	20.61	20.60	20.50	
20	256QAM	1	0	17.64	17.68	17.72	
20	256QAM	1	49	17.68	17.74	17.49	
20	256QAM	1	99	17.63	17.50	17.40	
20	256QAM	50	0	17.60	17.64	17.68	
20	256QAM	50	24	17.60	17.73	17.52	
20	256QAM	50	50	17.57	17.72	17.66	
20	256QAM	100	0	17.65	17.64	17.54	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.37	22.47	22.41	
15	QPSK	1	37	22.27	22.34	22.39	
15	QPSK	1	74	22.39	22.44	22.46	
15	QPSK	36	0	21.53	21.68	21.60	
15	QPSK	36	20	21.53	21.66	21.61	
15	QPSK	36	39	21.60	21.64	21.65	
15	QPSK	75	0	21.63	21.60	21.55	
15	16QAM	1	0	21.53	21.50	21.48	
15	16QAM	1	37	21.59	21.54	21.54	
15	16QAM	1	74	21.62	21.69	21.56	
15	16QAM	36	0	20.48	20.68	20.75	
15	16QAM	36	20	20.56	20.55	20.51	
15	16QAM	36	39	20.54	20.68	20.47	
15	16QAM	75	0	20.55	20.61	20.66	
15	64QAM	1	0	20.56	20.54	20.66	
15	64QAM	1	37	20.55	20.65	20.41	
15	64QAM	1	74	20.51	20.41	20.34	
15	64QAM	36	0	20.46	20.52	20.55	
15	64QAM	36	20	20.51	20.65	20.45	
15	64QAM	36	39	20.43	20.64	20.61	
15	64QAM	75	0	20.60	20.52	20.48	
15	256QAM	1	0	17.60	17.58	17.70	
15	256QAM	1	37	17.59	17.69	17.45	
15	256QAM	1	74	17.55	17.45	17.38	
15	256QAM	36	0	17.50	17.56	17.59	
15	256QAM	36	20	17.55	17.69	17.49	
15	256QAM	36	39	17.47	17.68	17.65	
15	256QAM	75	0				

1.4	16QAM	3	0	22.24	22.17	22.19	22
1.4	16QAM	3	1	22.23	22.18	22.12	
1.4	16QAM	3	3	22.24	22.24	22.22	
1.4	16QAM	6	0	21.35	21.21	21.18	22
1.4	64QAM	1	0	21.38	21.40	21.26	
1.4	64QAM	1	3	21.19	21.16	21.21	
1.4	64QAM	1	5	21.35	21.11	21.35	22
1.4	64QAM	3	0	21.29	21.28	21.21	
1.4	64QAM	3	1	21.36	21.17	21.20	
1.4	64QAM	3	3	21.19	21.19	21.16	22
1.4	64QAM	6	0	21.27	21.24	21.24	
1.4	256QAM	1	0	18.44	18.46	18.32	
1.4	256QAM	1	3	18.25	18.22	18.27	19
1.4	256QAM	1	5	18.41	18.17	18.41	
1.4	256QAM	3	0	18.35	18.34	18.27	
1.4	256QAM	3	1	18.42	18.23	18.26	19
1.4	256QAM	3	3	18.25	18.25	18.22	
1.4	256QAM	6	0	18.33	18.30	18.30	

5	16QAM	12	0	20.53	20.60	20.68	21.5
5	16QAM	12	7	20.51	20.60	20.50	
5	16QAM	12	13	20.50	20.60	20.47	
5	16QAM	25	0	20.48	20.52	20.61	21.5
5	64QAM	1	0	20.52	20.59	20.61	
5	64QAM	1	12	20.59	20.68	20.36	
5	64QAM	1	24	20.55	20.44	20.28	21.5
5	64QAM	12	0	20.52	20.52	20.58	
5	64QAM	12	7	20.46	20.63	20.38	
5	64QAM	12	13	20.52	20.63	20.52	18.5
5	64QAM	25	0	20.51	20.55	20.42	
5	256QAM	1	0	17.56	17.63	17.65	
5	256QAM	1	12	17.63	17.72	17.40	18.5
5	256QAM	1	24	17.59	17.48	17.32	
5	256QAM	12	0	17.56	17.56	17.62	
5	256QAM	12	7	17.50	17.67	17.42	18.5
5	256QAM	12	13	17.56	17.67	17.56	
5	256QAM	25	0	17.55	17.59	17.46	

Band 12 (700MHz Low Band) (dBm)_ANT0							
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	24
Frequency (MHz)				704	707.5	711	
10	QPSK	1	0	23.42	23.47	23.35	24
10	QPSK	1	25	23.35	23.38	23.39	
10	QPSK	1	49	23.25	23.40	23.42	
10	QPSK	25	0	22.58	22.63	22.62	23
10	QPSK	25	12	22.60	22.51	22.58	
10	QPSK	25	25	22.60	22.55	22.52	
10	QPSK	50	0	22.54	22.63	22.59	23
10	16QAM	1	0	22.78	22.75	22.62	
10	16QAM	1	25	22.53	22.60	22.60	
10	16QAM	1	49	22.58	22.53	22.64	22
10	16QAM	25	0	21.56	21.58	21.69	
10	16QAM	25	12	21.54	21.59	21.56	
10	16QAM	25	25	21.66	21.63	21.65	22
10	16QAM	50	0	21.70	21.64	21.61	
10	64QAM	1	0	21.70	21.65	21.55	
10	64QAM	1	25	21.76	21.71	21.69	22
10	64QAM	1	49	21.82	21.84	21.78	
10	64QAM	25	0	21.54	21.74	21.58	
10	64QAM	25	12	21.61	21.67	21.69	22
10	64QAM	25	25	21.56	21.63	21.57	
10	64QAM	50	0	21.60	21.58	21.61	
10	256QAM	1	0	18.32	18.27	18.17	19
10	256QAM	1	25	18.38	18.33	18.31	
10	256QAM	1	49	18.44	18.46	18.40	
10	256QAM	25	0	18.16	18.36	18.20	19
10	256QAM	25	12	18.23	18.29	18.31	
10	256QAM	25	25	18.18	18.25	18.19	
10	256QAM	50	0	18.22	18.20	18.23	
Channel				23035	23095	23155	24
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	23.22	23.37	23.25	24
5	QPSK	1	12	23.30	23.37	23.30	
5	QPSK	1	24	23.24	23.35	23.36	
5	QPSK	12	0	22.55	22.56	22.58	23
5	QPSK	12	7	22.51	22.46	22.55	
5	QPSK	12	13	22.52	22.47	22.51	
5	QPSK	25	0	22.53	22.50	22.55	23
5	16QAM	1	0	22.74	22.70	22.52	
5	16QAM	1	12	22.43	22.58	22.58	
5	16QAM	1	24	22.53	22.52	22.57	22
5	16QAM	12	0	21.47	21.56	21.61	
5	16QAM	12	7	21.53	21.51	21.48	
5	16QAM	12	13	21.58	21.55	21.59	22
5	16QAM	25	0	21.68	21.54	21.59	
5	64QAM	1	0	21.68	21.57	21.51	
5	64QAM	1	12	21.68	21.64	21.67	22
5	64QAM	1	24	21.78	21.80	21.68	
5	64QAM	12	0	21.50	21.69	21.55	
5	64QAM	12	7	21.54	21.64	21.62	22
5	64QAM	12	13	21.52	21.58	21.48	
5	64QAM	25	0	21.59	21.55	21.60	
5	256QAM	1	0	18.30	18.19	18.13	19
5	256QAM	1	12	18.30	18.26	18.29	
5	256QAM	1	24	18.40	18.42	18.30	
5	256QAM	12	0	18.12	18.31	18.17	19
5	256QAM	12	7	18.16	18.28	18.24	
5	256QAM	12	13	18.14	18.20	18.10	
5	256QAM	25	0	18.21	18.17	18.22	
Channel				23025	23095	23165	24
Frequency (MHz)				700.5	707.5	714.5	
3	QPSK	1	0	23.27	23.45	23.33	24
3	QPSK	1	8	23.33	23.33	23.38	
3	QPSK	1	14	23.23	23.39	23.32	
3	QPSK	8	0	22.57	22.57	22.57	23
3	QPSK	8	4	22.55	22.41	22.54	
3	QPSK	8	7	22.51	22.50	22.45	
3	QPSK	15	0	22.48	22.50	22.54	23
3	16QAM	1	0	22.71	22.70	22.52	
3	16QAM	1	8	22.48	22.53	22.58	
3	16QAM	1	14	22.48	22.48	22.62	22
3	16QAM	8	0	21.54	21.52	21.67	
3	16QAM	8	4	21.45	21.49	21.48	
3	16QAM	8	7	21.63	21.59	21.60	22
3	16QAM	15	0	21.69	21.59	21.51	
3	64QAM	1	0	21.66	21.60	21.51	
3	64QAM	1	8	21.73	21.70	21.61	22
3	64QAM	1	14	21.75	21.77	21.71	
3	64QAM	8	0	21.52	21.73	21.48	
3	64QAM	8	4	21.52	21.59	21.65	22
3	64QAM	8	7	21.55	21.56	21.51	
3	64QAM	15	0	21.54	21.52	21.53	
3	256QAM	1	0	18.28	18.22	18.13	19
3	256QAM	1	8	18.35	18.32	18.23	
3	256QAM	1	14	18.37	18.39	18.33	
3	256QAM	8	0	18.14	18.35	18.10	19
3	256QAM	8	4	18.14	18.21	18.27	
3	256QAM	8	7	18.17	18.18	18.13	
3	256QAM	15	0	18.16	18.14	18.15	
Channel				23017	23095	23173	24
Frequency (MHz)				699.7	707.5	715.3	
1.4	QPSK	1	0	23.26	23.46	23.27	24
1.4	QPSK	1	3	23.33	23.32	23.36	
1.4	QPSK	1	5	23.24	23.30	23.35	
1.4	QPSK	3	0	23.37	23.41	23.41	23
1.4	QPSK	3	1	23.42	23.30	23.39	
1.4	QPSK	3	3	23.34	23.30	23.28	
1.4	QPSK	6	0	22.49	22.49	22.51	23
1.4	16QAM	1	0	22.73	22.68	22.60	
1.4	16QAM	1	3	22.46	22.51	22.53	
1.4	16QAM	1	5	22.57	22.43	22.61	

Band 13(700MHz Band) (dBm)_ANT0							
Part 27F							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23230			24
Frequency (MHz)				782			
10	QPSK	1	0		23.41		24
10	QPSK	1	25		23.40		
10	QPSK	1	49		23.37		
10	QPSK	25	0		22.50		23
10	QPSK	25	12		22.45		
10	QPSK	25	25		22.41		
10	QPSK	50	0		22.46		23
10	16QAM	1	0		22.76		
10	16QAM	1	25		22.48		
10	16QAM	1	49		22.62		22
10	16QAM	25	0		21.53		
10	16QAM	25	12		21.57		
10	16QAM	25	25		21.51		22
10	16QAM	50	0		21.46		
10	64QAM	1	0		21.66		
10	64QAM	1	25		21.74		22
10	64QAM	1	49		21.54		
10	64QAM	25	0		21.55		
10	64QAM	25	12		21.49		22
10	64QAM	25	25		21.53		
10	64QAM	50	0		21.42		
10	256QAM	1	0		18.43		19
10	256QAM	1	25		18.51		
10	256QAM	1	49		18.31		
10	256QAM	25	0		18.32		19
10	256QAM	25	12		18.26		
10	256QAM	25	25		18.30		
10	256QAM	50	0		18.19		
Channel				23205	23230	23255	24
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	23.38	23.39	23.25	24
5	QPSK	1	12	23.31	23.34	23.35	
5	QPSK	1	24	23.26	23.30	23.33	
5	QPSK	12	0	22.42	22.45	22.45	23
5	QPSK	12	7	22.37	22.35	22.37	
5	QPSK	12	13	22.37	22.34	22.40	
5	QPSK	25	0	22.43	22.39	22.41	23
5	16QAM	1	0	22.57	22.66	22.36	
5	16QAM	1	12	22.41	22.41	22.43	
5	16QAM	1	24	22.47	22.55	22.54	22
5	16QAM	12	0	21.46	21.49	21.34	
5	16QAM	12	7	21.47	21.48	21.52	
5	16QAM	12	13	21.56	21.47	21.42	22
5	16QAM	25	0	21.38	21.45	21.38	
5	64QAM	1	0	21.44	21.65	21.51	
5	64QAM	1	12	21.69	21.69	21.53	22
5	64QAM	1	24	21.47	21.53	21.48	
5	64QAM	12	0	21.33	21.48	21.34	
5	64QAM	12	7	21.33	21.44	21.43	22
5	64QAM	12	13	21.47	21.49	21.40	
5	64QAM	25	0	21.37	21.41	21.45	
5	256QAM	1	0	18.21	18.42	18.28	19
5	256QAM	1	12	18.46	18.46	18.30	
5	256QAM	1	24	18.24	18.30	18.25	
5	256QAM	12	0	18.10	18.25	18.11	19
5	256QAM	12	7	18.10	18.21	18.20	
5	256QAM	12	13	18.24	18.26	18.17	
5	256QAM	25	0	18.14	18.18	18.22	

1.4	16QAM	3	0	22.47	22.57	22.61	22
1.4	16QAM	3	1	22.48	22.50	22.47	
1.4	16QAM	3	3	22.63	22.58	22.61	
1.4	16QAM	6	0	21.64	21.55	21.57	22
1.4	64QAM	1	0	21.68	21.57	21.47	
1.4	64QAM	1	3	21.68	21.63	21.65	
1.4	64QAM	1	5	21.81	21.79	21.72	22
1.4	64QAM	3	0	21.52	21.67	21.57	
1.4	64QAM	3	1	21.52	21.60	21.68	
1.4	64QAM	3	3	21.51	21.59	21.47	22
1.4	64QAM	6	0	21.58	21.48	21.60	
1.4	256QAM	1	0	18.30	18.19	18.09	
1.4	256QAM	1	3	18.30	18.25	18.27	19
1.4	256QAM	1	5	18.43	18.41	18.34	
1.4	256QAM	3	0	18.14	18.29	18.19	
1.4	256QAM	3	1	18.14	18.22	18.30	19
1.4	256QAM	3	3	18.13	18.21	18.09	
1.4	256QAM	6	0	18.20	18.10	18.22	

Band 66 (dBm)_ANT0							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	22.60	22.62	22.55	23.5
20	QPSK	1	49	22.31	22.43	22.28	
20	QPSK	1	99	22.39	22.39	22.36	
20	QPSK	50	0	21.51	21.56	21.54	22.5
20	QPSK	50	24	21.44	21.52	21.51	
20	QPSK	50	50	21.55	21.50	21.52	
20	QPSK	100	0	21.51	21.56	21.53	22.5
20	16QAM	1	0	21.81	21.76	21.78	
20	16QAM	1	49	21.68	21.77	21.54	
20	16QAM	1	99	21.62	21.69	21.77	21.5
20	16QAM	50	0	20.62	20.55	20.54	
20	16QAM	50	24	20.74	20.69	20.57	
20	16QAM	50	50	20.67	20.66	20.63	21.5
20	16QAM	100	0	20.68	20.65	20.55	
20	64QAM	1	0	20.91	20.88	20.89	
20	64QAM	1	49	20.79	20.89	20.63	21.5
20	64QAM	1	99	20.70	20.83	20.84	
20	64QAM	50	0	20.59	20.54	20.54	
20	64QAM	50	24	20.66	20.64	20.56	21.5
20	64QAM	50	50	20.59	20.60	20.60	
20	64QAM	100	0	20.70	20.59	20.48	
20	256QAM	1	0	17.90	17.87	17.88	18.5
20	256QAM	1	49	17.78	17.88	17.62	
20	256QAM	1	99	17.69	17.82	17.83	
20	256QAM	50	0	17.58	17.53	17.53	18.5
20	256QAM	50	24	17.65	17.63	17.55	
20	256QAM	50	50	17.58	17.59	17.59	
20	256QAM	100	0	17.69	17.58	17.47	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.21	22.41	22.37	23.5
15	QPSK	1	37	22.29	22.36	22.18	
15	QPSK	1	74	22.33	22.38	22.32	
15	QPSK	36	0	21.29	21.33	21.32	22.5
15	QPSK	36	20	21.35	21.48	21.50	
15	QPSK	36	39	21.46	21.46	21.47	
15	QPSK	75	0	21.31	21.35	21.47	22.5
15	16QAM	1	0	21.79	21.69	21.76	
15	16QAM	1	37	21.63	21.73	21.50	
15	16QAM	1	74	21.57	21.60	21.70	21.5
15	16QAM	36	0	20.60	20.50	20.52	
15	16QAM	36	20	20.63	20.67	20.56	
15	16QAM	36	39	20.61	20.57	20.55	21.5
15	16QAM	75	0	20.61	20.57	20.45	
15	64QAM	1	0	20.86	20.84	20.82	
15	64QAM	1	37	20.70	20.79	20.59	21.5
15	64QAM	1	74	20.59	20.78	20.82	
15	64QAM	36	0	20.47	20.53	20.46	
15	64QAM	36	20	20.56	20.54	20.55	21.5
15	64QAM	36	39	20.50	20.58	20.50	
15	64QAM	75	0	20.68	20.57	20.41	
15	256QAM	1	0	17.85	17.83	17.81	18.5
15	256QAM	1	37	17.69	17.78	17.58	
15	256QAM	1	74	17.58	17.77	17.81	
15	256QAM	36	0	17.46	17.52	17.45	18.5
15	256QAM	36	20	17.55	17.53	17.54	
15	256QAM	36	39	17.49	17.57	17.49	
15	256QAM	75	0	17.67	17.56	17.40	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	22.26	22.36	22.34	23.5
10	QPSK	1	25	22.14	22.35	22.15	
10	QPSK	1	49	22.24	22.28	22.22	
10	QPSK	25	0	21.24	21.32	21.33	22.5
10	QPSK	25	12	21.32	21.40	21.38	
10	QPSK	25	25	21.41	21.40	21.41	
10	QPSK	50	0	21.32	21.21	21.47	22.5
10	16QAM	1	0	21.75	21.65	21.69	
10	16QAM	1	25	21.56	21.68	21.41	
10	16QAM	1	49	21.53	21.59	21.64	21.5
10	16QAM	25	0	20.45	20.47	20.41	
10	16QAM	25	12	20.66	20.58	20.47	
10	16QAM	25	25	20.51	20.58	20.51	21.5
10	16QAM	50	0	20.58	20.51	20.46	
10	64QAM	1	0	20.74	20.81	20.74	
10	64QAM	1	25	20.72	20.78	20.52	21.5
10	64QAM	1	49	20.54	20.75	20.73	
10	64QAM	25	0	20.52	20.48	20.40	
10	64QAM	25	12	20.57	20.56	20.41	21.5
10	64QAM	25	25	20.43	20.53	20.46	
10	64QAM	50	0	20.57	20.44	20.42	
10	256QAM	1	0	17.73	17.80	17.73	18.5
10	256QAM	1	25	17.71	17.77	17.51	
10	256QAM	1	49	17.53	17.74	17.72	
10	256QAM	25	0	17.51	17.47	17.39	18.5
10	256QAM	25	12	17.56	17.55	17.40	
10	256QAM	25	25	17.42	17.52	17.45	
10	256QAM	50	0	17.56	17.43	17.41	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	22.22	22.39	22.33	23.5
5	QPSK	1	12	22.23	22.30	22.17	
5	QPSK	1	24	22.29	22.26	22.26	
5	QPSK	12	0	21.32	21.35	21.33	22.5
5	QPSK	12	7	21.33	21.43	21.37	
5	QPSK	12	13	21.44	21.41	21.40	
5	QPSK	25	0	21.28	21.27	21.47	22.5
5	16QAM	1	0	21.70	21.67	21.70	
5	16QAM	1	12	21.51	21.68	21.43	
5	16QAM	1	24	21.50	21.61	21.62	

Band 66 (dBm)_ANT4							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	22.69	22.75	22.70	23.5
20	QPSK	1	49	22.61	22.59	22.66	
20	QPSK	1	99	22.58	22.63	22.65	
20	QPSK	50	0	21.65	21.69	21.63	22.5
20	QPSK	50	24	21.57	21.65	21.64	
20	QPSK	50	50	21.68	21.63	21.65	
20	QPSK	100	0	21.64	21.68	21.66	22.5
20	16QAM	1	0	21.94	21.89	21.91	
20	16QAM	1	49	21.81	21.90	21.67	
20	16QAM	1	99	21.75	21.82	21.90	21.5
20	16QAM	50	0	20.75	20.68	20.67	
20	16QAM	50	24	20.87	20.82	20.70	
20	16QAM	50	50	20.80	20.79	20.76	21.5
20	16QAM	100	0	20.81	20.78	20.68	
20	64QAM	1	0	21.04	21.01	21.02	
20	64QAM	1	49	20.92	21.02	20.76	21.5
20	64QAM	1	99	20.83	20.96	20.97	
20	64QAM	50	0	20.72	20.67	20.67	
20	64QAM	50	24	20.79	20.77	20.69	21.5
20	64QAM	50	50	20.72	20.73	20.73	
20	64QAM	100	0	20.83	20.72	20.61	
20	256QAM	1	0	18.03	18.00	18.01	18.5
20	256QAM	1	49	17.91	18.01	17.75	
20	256QAM	1	99	17.82	17.95	17.96	
20	256QAM	50	0	17.71	17.66	17.66	18.5
20	256QAM	50	24	17.78	17.76	17.68	
20	256QAM	50	50	17.71	17.72	17.72	
20	256QAM	100	0	17.82	17.71	17.60	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	22.34	22.54	22.50	23.5
15	QPSK	1	37	22.42	22.49	22.31	
15	QPSK	1	74	22.46	22.51	22.45	
15	QPSK	36	0	21.42	21.46	21.45	22.5
15	QPSK	36	20	21.48	21.61	21.63	
15	QPSK	36	39	21.59	21.59	21.60	
15	QPSK	75	0	21.44	21.48	21.60	22.5
15	16QAM	1	0	21.92	21.82	21.89	
15	16QAM	1	37	21.76	21.86	21.63	
15	16QAM	1	74	21.70	21.73	21.83	21.5
15	16QAM	36	0	20.73	20.63	20.65	
15	16QAM	36	20	20.76	20.80	20.69	
15	16QAM	36	39	20.74	20.70	20.68	21.5
15	16QAM	75	0	20.74	20.70	20.58	
15	64QAM	1	0	20.99	20.97	20.95	
15	64QAM	1	37	20.83	20.92	20.72	21.5
15	64QAM	1	74	20.72	20.91	20.95	
15	64QAM	36	0	20.60	20.66	20.59	
15	64QAM	36	20	20.69	20.67	20.68	21.5
15	64QAM	36	39	20.63	20.71	20.63	
15	64QAM	75	0	20.81	20.70	20.54	
15	256QAM	1	0	17.98	17.96	17.94	18.5
15	256QAM	1	37	17.82	17.91	17.71	
15	256QAM	1	74	17.71	17.90	17.94	
15	256QAM						

5	16QAM	12	0	20.52	20.40	20.43	21.5
5	16QAM	12	7	20.63	20.57	20.42	
5	16QAM	12	13	20.50	20.59	20.54	
5	16QAM	25	0	20.62	20.57	20.45	21.5
5	64QAM	1	0	20.76	20.75	20.81	
5	64QAM	1	12	20.62	20.81	20.55	
5	64QAM	1	24	20.56	20.70	20.77	21.5
5	64QAM	12	0	20.51	20.40	20.43	
5	64QAM	12	7	20.59	20.56	20.43	
5	64QAM	12	13	20.52	20.54	20.51	21.5
5	64QAM	25	0	20.53	20.53	20.38	
5	256QAM	1	0	17.75	17.74	17.80	
5	256QAM	1	12	17.61	17.80	17.54	18.5
5	256QAM	1	24	17.55	17.69	17.76	
5	256QAM	12	0	17.50	17.39	17.42	
5	256QAM	12	7	17.58	17.55	17.42	18.5
5	256QAM	12	13	17.51	17.53	17.50	
5	256QAM	25	0	17.52	17.52	17.37	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	22.22	22.32	22.29	23.5
3	QPSK	1	8	22.14	22.32	22.19	
3	QPSK	1	14	22.24	22.25	22.30	
3	QPSK	8	0	21.31	21.29	21.32	22.5
3	QPSK	8	4	21.35	21.38	21.38	
3	QPSK	8	7	21.41	21.41	21.38	
3	QPSK	15	0	21.30	21.21	21.38	22.5
3	16QAM	1	0	21.71	21.68	21.63	
3	16QAM	1	8	21.59	21.64	21.47	
3	16QAM	1	14	21.45	21.61	21.71	21.5
3	16QAM	8	0	20.47	20.47	20.42	
3	16QAM	8	4	20.60	20.57	20.50	
3	16QAM	8	7	20.54	20.53	20.57	21.5
3	16QAM	15	0	20.53	20.51	20.45	
3	64QAM	1	0	20.85	20.76	20.83	
3	64QAM	1	8	20.72	20.79	20.56	21.5
3	64QAM	1	14	20.60	20.72	20.69	
3	64QAM	8	0	20.45	20.47	20.39	
3	64QAM	8	4	20.60	20.49	20.50	21.5
3	64QAM	8	7	20.50	20.45	20.49	
3	64QAM	15	0	20.61	20.48	20.37	
3	256QAM	1	0	17.84	17.75	17.82	18.5
3	256QAM	1	8	17.71	17.78	17.55	
3	256QAM	1	14	17.59	17.71	17.68	
3	256QAM	8	0	17.44	17.46	17.38	18.5
3	256QAM	8	4	17.59	17.48	17.49	
3	256QAM	8	7	17.49	17.44	17.48	
3	256QAM	15	0	17.60	17.47	17.36	Tune-up limit (dBm)
Channel				131979	132322	132665	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.21	22.37	22.33	23.5
1.4	QPSK	1	3	22.24	22.32	22.21	
1.4	QPSK	1	5	22.25	22.33	22.21	
1.4	QPSK	3	0	22.35	22.33	22.47	22.5
1.4	QPSK	3	1	22.38	22.40	22.36	
1.4	QPSK	3	3	22.43	22.40	22.37	
1.4	QPSK	6	0	21.34	21.21	21.45	22.5
1.4	16QAM	1	0	21.68	21.64	21.63	
1.4	16QAM	1	3	21.55	21.67	21.40	
1.4	16QAM	1	5	21.55	21.62	21.66	22.5
1.4	16QAM	3	0	21.32	21.54	21.33	
1.4	16QAM	3	1	21.52	21.49	21.35	
1.4	16QAM	3	3	21.39	21.42	21.41	21.5
1.4	16QAM	6	0	20.56	20.52	20.53	
1.4	64QAM	1	0	20.82	20.75	20.74	
1.4	64QAM	1	3	20.66	20.82	20.55	21.5
1.4	64QAM	1	5	20.63	20.70	20.73	
1.4	64QAM	3	0	20.56	20.51	20.47	
1.4	64QAM	3	1	20.50	20.55	20.49	21.5
1.4	64QAM	3	3	20.50	20.51	20.54	
1.4	64QAM	6	0	20.62	20.49	20.41	
1.4	256QAM	1	0	17.81	17.74	17.73	18.5
1.4	256QAM	1	3	17.65	17.81	17.54	
1.4	256QAM	1	5	17.62	17.69	17.72	
1.4	256QAM	3	0	17.55	17.50	17.46	18.5
1.4	256QAM	3	1	17.49	17.54	17.48	
1.4	256QAM	3	3	17.49	17.50	17.53	
1.4	256QAM	6	0	17.61	17.48	17.40	18.5

5	16QAM	12	0	20.65	20.53	20.56	21.5
5	16QAM	12	7	20.76	20.70	20.55	
5	16QAM	12	13	20.63	20.72	20.67	
5	16QAM	25	0	20.75	20.70	20.58	21.5
5	64QAM	1	0	20.89	20.88	20.94	
5	64QAM	1	12	20.75	20.94	20.68	
5	64QAM	1	24	20.69	20.83	20.90	21.5
5	64QAM	12	0	20.64	20.53	20.56	
5	64QAM	12	7	20.72	20.69	20.56	
5	64QAM	12	13	20.65	20.67	20.64	21.5
5	64QAM	25	0	20.66	20.66	20.51	
5	256QAM	1	0	17.88	17.87	17.93	
5	256QAM	1	12	17.74	17.93	17.67	18.5
5	256QAM	1	24	17.68	17.82	17.89	
5	256QAM	12	0	17.63	17.52	17.55	
5	256QAM	12	7	17.71	17.68	17.55	18.5
5	256QAM	12	13	17.64	17.66	17.63	
5	256QAM	25	0	17.65	17.65	17.50	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	22.35	22.45	22.42	23.5
3	QPSK	1	8	22.27	22.45	22.32	
3	QPSK	1	14	22.37	22.38	22.43	
3	QPSK	8	0	21.44	21.42	21.45	22.5
3	QPSK	8	4	21.48	21.51	21.51	
3	QPSK	8	7	21.54	21.54	21.51	
3	QPSK	15	0	21.43	21.34	21.51	22.5
3	16QAM	1	0	21.84	21.81	21.76	
3	16QAM	1	8	21.72	21.77	21.60	
3	16QAM	1	14	21.58	21.74	21.84	21.5
3	16QAM	8	0	20.60	20.60	20.55	
3	16QAM	8	4	20.73	20.70	20.63	
3	16QAM	8	7	20.67	20.66	20.70	21.5
3	16QAM	15	0	20.66	20.64	20.58	
3	64QAM	1	0	20.98	20.89	20.96	
3	64QAM	1	8	20.85	20.92	20.69	21.5
3	64QAM	1	14	20.73	20.85	20.82	
3	64QAM	8	0	20.58	20.60	20.52	
3	64QAM	8	4	20.73	20.62	20.63	21.5
3	64QAM	8	7	20.63	20.58	20.62	
3	64QAM	15	0	20.74	20.61	20.50	
3	256QAM	1	0	17.97	17.88	17.95	18.5
3	256QAM	1	8	17.84	17.91	17.68	
3	256QAM	1	14	17.72	17.84	17.81	
3	256QAM	8	0	17.57	17.59	17.51	18.5
3	256QAM	8	4	17.72	17.61	17.62	
3	256QAM	8	7	17.62	17.57	17.61	
3	256QAM	15	0	17.73	17.60	17.49	Tune-up limit (dBm)
Channel				131979	132322	132665	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	22.34	22.50	22.46	23.5
1.4	QPSK	1	3	22.37	22.45	22.34	
1.4	QPSK	1	5	22.38	22.46	22.34	
1.4	QPSK	3	0	22.48	22.46	22.60	22.5
1.4	QPSK	3	1	22.51	22.53	22.49	
1.4	QPSK	3	3	22.56	22.53	22.50	
1.4	QPSK	6	0	21.47	21.34	21.58	22.5
1.4	16QAM	1	0	21.81	21.77	21.76	
1.4	16QAM	1	3	21.68	21.80	21.53	
1.4	16QAM	1	5	21.68	21.75	21.79	22.5
1.4	16QAM	3	0	21.45	21.67	21.46	
1.4	16QAM	3	1	21.65	21.62	21.48	
1.4	16QAM	3	3	21.52	21.55	21.54	21.5
1.4	16QAM	6	0	20.69	20.65	20.66	
1.4	64QAM	1	0	20.95	20.88	20.87	
1.4	64QAM	1	3	20.79	20.95	20.68	21.5
1.4	64QAM	1	5	20.76	20.83	20.86	
1.4	64QAM	3	0	20.69	20.64	20.60	
1.4	64QAM	3	1	20.63	20.68	20.62	21.5
1.4	64QAM	3	3	20.63	20.64	20.67	
1.4	64QAM	6	0	20.75	20.62	20.54	
1.4	256QAM	1	0	17.94	17.87	17.86	18.5
1.4	256QAM	1	3	17.78	17.94	17.67	
1.4	256QAM	1	5	17.75	17.82	17.85	
1.4	256QAM	3	0	17.68	17.63	17.59	18.5
1.4	256QAM	3	1	17.62	17.67	17.61	
1.4	256QAM	3	3	17.62	17.63	17.66	
1.4	256QAM	6	0	17.74	17.61	17.53	18.5



Band 48 (3.5G Band) (dBm)_ANT2									
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									
Frequency (MHz)									
20	QPSK	1	0	22.09	23.09	22.15	21.99	21.98	23
20	QPSK	1	48	22.00	22.07	21.90	21.92	21.88	
20	QPSK	1	96	22.09	21.94	22.05	21.95	21.87	
20	QPSK	50	0	21.08	21.09	21.17	21.12	21.16	
20	QPSK	50	34	21.14	21.11	21.05	20.90	20.87	22
20	QPSK	50	50	21.16	21.05	21.01	20.84	20.74	
20	QPSK	100	0	21.15	21.11	21.17	20.96	21.04	
20	QPSK	1	0	21.23	21.25	21.19	21.13	21.14	
20	16QAM	1	0	21.16	21.03	21.03	21.06	21.02	22
20	16QAM	1	48	21.09	20.95	21.18	21.04	21.06	
20	16QAM	50	0	20.24	20.20	20.06	20.00	19.91	
20	16QAM	50	34	20.18	20.03	20.09	19.97	19.94	
20	16QAM	50	50	20.15	19.91	19.94	19.86	19.90	21
20	16QAM	100	0	20.06	20.03	20.09	20.03	20.04	
20	16QAM	1	0	20.14	20.21	20.12	20.02	20.06	
20	16QAM	1	48	20.13	19.85	20.03	19.94	19.96	
20	256QAM	50	0	20.07	19.98	20.07	19.98	20.01	21
20	256QAM	50	34	20.19	20.13	20.00	19.93	19.77	
20	256QAM	50	50	20.09	20.04	20.03	19.91	19.95	
20	256QAM	100	0	19.96	19.97	19.98	19.87	19.89	
20	256QAM	100	0	20.22	20.17	20.21	20.12	20.11	18
20	256QAM	1	0	17.19	17.26	17.17	17.07	17.11	
20	256QAM	1	48	17.18	16.90	17.08	16.99	17.01	
20	256QAM	1	96	17.12	17.03	17.12	17.03	17.06	
20	256QAM	50	0	17.24	17.18	17.05	16.98	16.92	18
20	256QAM	50	34	17.14	17.09	17.08	16.96	17.00	
20	256QAM	50	50	17.01	17.02	17.03	16.92	16.94	
20	256QAM	100	0	17.20	17.15	17.19	17.10	17.09	
Channel									
Frequency (MHz)									
15	QPSK	1	0	22.01	21.86	22.11	21.90	21.86	23
15	QPSK	1	37	21.96	21.94	21.85	21.84	21.86	
15	QPSK	1	74	21.97	21.85	21.92	21.87	21.83	
15	QPSK	36	0	21.16	21.16	21.28	21.08	21.02	
15	QPSK	36	20	21.14	21.14	21.05	20.92	20.82	22
15	QPSK	36	36	21.25	21.15	21.09	20.86	20.83	
15	QPSK	75	0	21.17	21.16	21.09	20.97	20.88	
15	16QAM	1	0	21.30	21.24	21.19	21.12	21.19	
15	16QAM	1	37	21.18	21.07	21.22	21.07	21.10	22
15	16QAM	1	74	21.16	20.94	21.19	21.12	21.05	
15	16QAM	36	0	20.28	20.23	20.09	20.01	19.97	
15	16QAM	36	20	20.28	20.05	20.14	19.99	20.02	
15	16QAM	36	36	20.15	19.96	19.98	19.90	20.00	21
15	16QAM	75	0	20.08	20.08	20.19	20.09	20.12	
15	16QAM	1	0	20.14	20.21	20.17	20.03	20.07	
15	16QAM	1	37	20.21	19.88	20.10	19.93	19.98	
15	16QAM	1	74	20.15	20.06	20.07	19.98	20.08	21
15	16QAM	36	0	20.18	20.23	20.01	20.01	19.83	
15	16QAM	36	20	20.09	20.03	20.04	19.93	20.02	
15	16QAM	36	36	19.98	20.00	19.97	19.93	19.92	
15	16QAM	75	0	20.15	20.08	20.09	20.05	20.06	18
15	256QAM	1	0	17.15	17.15	17.01	16.97	17.01	
15	256QAM	1	37	17.15	16.82	17.14	16.87	16.92	
15	256QAM	1	74	17.09	17.00	17.01	16.92	17.02	
15	256QAM	36	0	17.12	17.17	16.95	16.95	16.77	18
15	256QAM	36	20	17.03	16.97	16.98	16.87	16.96	
15	256QAM	36	36	16.96	16.98	16.95	16.91	16.90	
15	256QAM	75	0	17.13	17.08	17.07	17.03	17.07	
Channel									
Frequency (MHz)									
10	QPSK	1	0	21.97	21.92	22.07	21.90	21.86	23
10	QPSK	1	25	21.89	21.94	21.83	21.89	21.85	
10	QPSK	1	49	22.02	21.96	21.92	21.90	21.87	
10	QPSK	25	0	21.25	21.17	21.22	21.10	20.96	
10	QPSK	25	12	21.24	21.13	21.15	20.99	20.88	22
10	QPSK	25	25	21.26	21.07	21.10	20.92	20.83	
10	QPSK	50	0	21.22	21.14	21.16	20.98	20.90	
10	16QAM	1	0	21.30	21.25	21.21	21.12	21.18	
10	16QAM	1	25	21.21	21.11	21.14	21.13	21.11	22
10	16QAM	1	49	21.17	21.00	21.28	21.11	21.11	
10	16QAM	25	0	20.24	20.27	20.09	20.08	19.93	
10	16QAM	25	12	20.26	20.10	20.15	20.04	19.94	
10	16QAM	25	25	20.19	19.95	19.98	19.96	19.91	21
10	16QAM	50	0	20.07	20.08	20.16	20.11	20.13	
10	16QAM	1	0	20.20	20.25	20.13	20.06	20.11	
10	16QAM	1	25	20.21	19.86	20.06	20.00	19.98	
10	16QAM	1	49	20.06	20.01	20.10	20.08	20.02	21
10	16QAM	25	0	20.19	20.21	20.01	19.97	19.87	
10	16QAM	25	12	20.16	20.08	20.04	20.00	20.04	
10	16QAM	25	25	20.06	19.97	20.06	19.95	19.93	
10	16QAM	50	0	20.21	20.15	20.17	20.02	20.07	18
10	256QAM	1	0	17.14	17.19	17.07	17.00	17.05	
10	256QAM	1	25	17.15	16.80	17.00	16.94	16.92	
10	256QAM	1	49	17.00	16.95	17.04	17.02	16.96	
10	256QAM	25	0	17.13	17.15	16.95	16.91	16.81	18
10	256QAM	25	12	17.10	17.02	16.88	16.94	16.98	
10	256QAM	25	25	17.00	16.91	17.00	16.89	16.87	
10	256QAM	50	0	17.19	17.13	17.15	17.00	17.05	
Channel									
Frequency (MHz)									
5	QPSK	1	0	21.85	21.86	22.09	21.88	21.84	23
5	QPSK	1	12	21.85	21.84	21.87	21.86	21.90	
5	QPSK	1	24	22.01	21.84	21.90	21.88	21.89	
5	QPSK	12	0	21.25	21.18	21.23	21.09	20.97	
5	QPSK	12	7	21.17	21.21	21.08	20.94	20.94	22
5	QPSK	12	13	21.15	21.07	21.05	20.92	20.84	
5	QPSK	25	0	21.15	21.20	21.10	20.97	20.84	
5	16QAM	1	0	21.24	21.28	21.24	21.23	21.23	
5	16QAM	1	12	21.17	21.05	21.13	21.08	21.13	22
5	16QAM	1	24	21.09	21.03	21.17	21.14	21.07	
5	16QAM	12	0	20.24	20.20	20.13	19.99	19.91	
5	16QAM	12	7	20.18	19.94	20.13	20.07	19.96	
5	16QAM	12	13	20.18	19.94	19.98	19.87	19.93	21
5	16QAM	25	0	20.12	20.12	20.15	20.12	20.09	
5	16QAM	1	0	20.19	20.22	20.15	20.05	20.08	
5	16QAM	1	12	20.13	19.86	20.07	19.93	20.03	
5	16QAM	1	24	20.08	19.99	20.16	20.05	20.10	21
5	16QAM	12	0	20.19	20.14	20.04	19.88	19.82	
5	16QAM	12	7	20.04	20.06	19.98	19.90	19.92	
5	16QAM	12	13	19.94	19.94	19.94	19.90	19.87	
5	16QAM	25	0	20.14	20.09	20.16	20.01	20.06	18
5	256QAM	1	0	17.13	17.16	17.09	16.99	17.02	
5	256QAM	1	12	17.07	16.80	17.01	16.97	16.97	
5	256QAM	1	24	17.02	16.93	17.10	16.99	17.04	
5	256QAM	12	0	17.17	17.12	17.02	16.86	16.90	18
5	256QAM	12	7	17.02	17.04	16.88	16.88	16.85	
5	256QAM	12	13	16.92	16.92	16.88	16.85	16.85	
5	256QAM	25	0	17.12	17.07	17.14	16.99	17.06	

Band 48 (3.5G Band) (dBm)_ANT5									
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									
Frequency (MHz)									
20	QPSK	1	0	21.97	21.88	22.03	21.87	21.88	23
20	QPSK	1	48	21.88	21.95	21.78	21.80	21.78	
20	QPSK	1	96	21.97	21.82	21.93	21.83	21.75	
20	QPSK	50	0	21.20	21.15	21.21	21.06	21.04	
20	QPSK	50	34	21.16	21.13	21.07	20.92	20.89	22
20	QPSK	50	50	21.18	21.07	21.03	20.86	20.76	
20	QPSK	100	0	21.17	21.13	21.19	20.98	21.06	
20	16QAM	1	0	21.25	21.27	21.21	21.15	21.18	
20	16QAM	1	48	21.09	20.96	20.99	20.99	20.99	22
20	16QAM	1	96	21.11	20.97	21.20	21.06	21.08	
20	16QAM	50	0	20.26	20.22	20.08	20.02	19.93	
20	16QAM	50	34	20.20	20.05	20.11	19.99	19.96	
20	16QAM	50	50	20.17	19.93	19.96	19.88	19.92	21
20	16QAM	100	0	20.08	20.05	20.11	20.05	20.06	
20	16QAM	1	0	20.16	20.23	20.14	20.04	20.08	
20	16QAM	1	48	20.15	19.87	20.05	19.96	19.98	
20	16QAM	1	96	20.09	20.00	20.09	20.00	20.03	21
20	16QAM	50	0	20.21	20.15	20.02	19.95	19.79	
20	16QAM	50	34	20.09	20.00	20.05	19.93	19.97	
20	16QAM	50	50	19.98	19.99	20.00	19.89	19.91	
20	16QAM	100	0	20.17	20.12	20.16	20.00	20.06	18
20	256QAM	1	0	17.14	17.21	17.12	17.02	17.06	
20	256QAM	1	48	17.13	16.85	17.03	16.94	16.96	
20	256QAM	1	96	17.07	16.98	17.07	16.98	17.01	

CA_5B_ANT0											
Combination:10MHz+10MHz(50RB+50RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
20450	20450	20549	QPSK	1	0	0	0	1	0	23.07	24.00
20525	20476	20575	QPSK	1	0	0	0	1	0	23.11	24.00
20600	20501	20600	QPSK	1	0	0	0	1	0	23.09	24.00
20450	20450	20549	16QAM	1	0	0	0	1	0	22.21	23.00
20525	20476	20575	16QAM	1	0	0	0	1	0	22.29	23.00
20600	20501	20600	16QAM	1	0	0	0	1	0	22.18	23.00
20450	20450	20549	64QAM	1	0	0	0	1	0	21.36	22.00
20525	20476	20575	64QAM	1	0	0	0	1	0	21.55	22.00
20600	20501	20600	64QAM	1	0	0	0	1	0	21.58	22.00
20450	20450	20549	256QAM	1	0	0	0	1	0	18.34	19.00
20525	20476	20575	256QAM	1	0	0	0	1	0	18.35	19.00
20600	20501	20600	256QAM	1	0	0	0	1	0	18.22	19.00
20450	20450	20549	QPSK	25	0	0	0	1	0	22.10	23.00
20525	20476	20575	QPSK	25	0	0	0	1	0	22.18	23.00
20600	20501	20600	QPSK	25	0	0	0	1	0	22.14	23.00

CA_48C_ANT5											
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	21.97	23.00
55990	55891	56089	QPSK	1	0	0	0	1	0	22.12	23.00
56640	56442	56640	QPSK	1	0	0	0	1	0	21.93	23.00
55340	55340	55538	16QAM	1	0	0	0	1	0	21.15	22.00
55990	55891	56089	16QAM	1	0	0	0	1	0	21.22	22.00
56640	56442	56640	16QAM	1	0	0	0	1	0	21.12	22.00
55340	55340	55538	64QAM	1	0	0	0	1	0	20.19	21.00
55990	55891	56089	64QAM	1	0	0	0	1	0	20.31	21.00
56640	56442	56640	64QAM	1	0	0	0	1	0	20.22	21.00
55340	55340	55538	256QAM	1	0	0	0	1	0	17.14	18.00
55990	55891	56089	256QAM	1	0	0	0	1	0	17.15	18.00
56640	56442	56640	256QAM	1	0	0	0	1	0	17.16	18.00
55340	55340	55538	QPSK	50	0	0	0	1	0	21.08	22.00
55990	55891	56089	QPSK	50	0	0	0	1	0	21.16	22.00
56640	56442	56640	QPSK	50	0	0	0	1	0	21.13	22.00

CA_66B_ANT0											
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	22.65	23.50
132322	132398	132491	QPSK	1	0	0	0	1	0	22.75	23.50
132572	132549	132642	QPSK	1	0	0	0	1	0	22.69	23.50
132070	132047	132140	16QAM	1	0	0	0	1	0	21.72	22.50
132322	132398	132491	16QAM	1	0	0	0	1	0	21.73	22.50
132572	132549	132642	16QAM	1	0	0	0	1	0	21.66	22.50
132070	132047	132140	64QAM	1	0	0	0	1	0	20.55	21.50
132322	132398	132491	64QAM	1	0	0	0	1	0	20.67	21.50
132572	132549	132642	64QAM	1	0	0	0	1	0	20.59	21.50
132070	132047	132140	256QAM	1	0	0	0	1	0	17.77	18.50
132322	132398	132491	256QAM	1	0	0	0	1	0	17.81	18.50
132572	132549	132642	256QAM	1	0	0	0	1	0	17.68	18.50
132070	132047	132140	QPSK	36	0	0	0	1	0	21.58	22.50
132322	132398	132491	QPSK	36	0	0	0	1	0	21.69	22.50
132572	132549	132642	QPSK	36	0	0	0	1	0	21.66	22.50

CA_66C_ANT0											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
132070	132072	132270	QPSK	1	0	0	0	1	0	22.63	23.50
132322	132323	132521	QPSK	1	0	0	0	1	0	22.78	23.50
132572	132374	132572	QPSK	1	0	0	0	1	0	22.67	23.50
132070	132072	132270	16QAM	1	0	0	0	1	0	21.66	22.50
132322	132323	132521	16QAM	1	0	0	0	1	0	21.75	22.50
132572	132374	132572	16QAM	1	0	0	0	1	0	21.68	22.50
132070	132072	132270	64QAM	1	0	0	0	1	0	20.69	21.50
132322	132323	132521	64QAM	1	0	0	0	1	0	20.75	21.50
132572	132374	132572	64QAM	1	0	0	0	1	0	20.66	21.50
132070	132072	132270	256QAM	1	0	0	0	1	0	17.52	18.50
132322	132323	132521	256QAM	1	0	0	0	1	0	17.72	18.50
132572	132374	132572	256QAM	1	0	0	0	1	0	17.64	18.50
132070	132072	132270	QPSK	50	0	0	0	1	0	21.75	22.50
132322	132323	132521	QPSK	50	0	0	0	1	0	21.85	22.50
132572	132374	132572	QPSK	50	0	0	0	1	0	21.77	22.50



2CC LTE Uplink													
Configure	CA Configuration	Ant	PCC					SCC				Power	
			Band	BW (MHz)	UL Channel	UL Fre. (MHz)	UL Mode (Modulation/ RB/Offset)	Band	BW (MHz)	UL Channel	UL Fre. (MHz)	Measured Power(dBm)	Tune-up limit(dBm)
Inter-band	2A-4A	ANT0 ANT4	2	20	18700	1860	QPSK/1#0	4	20	20300	1745	22.58	23.50
	2A-5A	ANT4 ANT0	2	20	18700	1860	QPSK/1#0	5	10	20450	829	22.64	23.50
	2A-13A	ANT4 ANT0	2	20	18700	1860	QPSK/1#0	13	10	23230	782	22.61	23.50
	2A-66A	ANT0 ANT4	2	20	18700	1860	QPSK/1#0	66	20	132572	1770	22.75	23.50
	4A-5A	ANT4 ANT0	4	20	20050	1720	QPSK/1#0	5	10	20450	829	22.56	23.50
	4A-13A	ANT4 ANT0	4	20	20050	1720	QPSK/1#0	13	10	23230	782	22.53	23.50
	5A-66A	ANT0 ANT4	5	10	20450	829	QPSK/1#0	66	20	132572	1770	23.17	24.00
	13A-66A	ANT0 ANT4	13	10	23230	782	QPSK/1#0	66	20	132572	1770	23.15	24.00
	2A-12A	ANT0 ANT4	2	20	18900	1880	QPSK/1#0	12	10	23060	704	22.49	23.50
	2A-66A	ANT0 ANT4	2	20	18900	1880	QPSK/1#0	66	20	132572	1770	22.50	23.50
	4A-12A	ANT0 ANT4	4	20	20175	1732.5	QPSK/1#0	12	10	23060	704	22.53	23.50
	12A-66A	ANT0 ANT4	12	10	23060	704	QPSK/1#0	66	20	132572	1770	23.11	24.00



Table with columns: Configure, CA Configuration, Band, BW (MHz), UL Channel, UL Freq (MHz), UL Modulation, DL Channel, DL Freq (MHz), DL Modulation, CA TX (dBm), Rel 8 TX (dBm). Includes rows for CA 13A-48A, CA 13A-48B, CA 13A-48C, CA 13A-48D, CA 2A-13A, CA 2A-48A, CA 2A-48B, CA 2A-48C, CA 2A-48D, CA 4A-13A, CA 4A-48A, CA 4A-48B, CA 4A-48C, CA 4A-48D, CA 5A-48A, CA 5A-48B, CA 5A-48C, CA 5A-48D, CA 6A-48A, CA 6A-48B, CA 6A-48C, CA 6A-48D, CA 8A-48A, CA 8A-48B, CA 8A-48C, CA 8A-48D, CA 12A-13A, CA 12A-48A, CA 12A-48B.

Table with columns: Configure, CA Configuration, Band, BW (MHz), UL Channel, UL Freq (MHz), UL Modulation, DL Channel, DL Freq (MHz), DL Modulation, CA TX (dBm), Rel 8 TX (dBm). Includes rows for CA 13A-48A-66A, CA 13A-48A-66B, CA 13A-48A-66C, CA 13A-48A-66D, CA 2A-13A-48A, CA 2A-13A-48B, CA 2A-13A-48C, CA 2A-13A-48D, CA 2A-2A-13A, CA 2A-2A-48A, CA 2A-2A-48B, CA 2A-2A-48C, CA 2A-2A-48D, CA 4A-13A-48A, CA 4A-13A-48B, CA 4A-13A-48C, CA 4A-13A-48D, CA 4A-4A-48A, CA 4A-4A-48B, CA 4A-4A-48C, CA 4A-4A-48D, CA 5A-48A-66A, CA 5A-48A-66B, CA 5A-48A-66C, CA 5A-48A-66D, CA 6A-48A-66A, CA 6A-48A-66B, CA 6A-48A-66C, CA 6A-48A-66D, CA 8A-48A-66A, CA 8A-48A-66B, CA 8A-48A-66C, CA 8A-48A-66D, CA 12A-13A-48A, CA 12A-13A-48B, CA 12A-13A-48C, CA 12A-13A-48D, CA 12A-66A-66A, CA 12A-66A-66B, CA 12A-66A-66C, CA 12A-66A-66D.

Table with columns: Configure, CA Configuration, Band, BW (MHz), UL Channel, UL Freq (MHz), UL Modulation, DL Channel, DL Freq (MHz), DL Modulation, CA TX (dBm), Rel 8 TX (dBm). Includes rows for CA 13A-48A-66A, CA 13A-48A-66B, CA 13A-48A-66C, CA 13A-48A-66D, CA 2A-13A-48A, CA 2A-13A-48B, CA 2A-13A-48C, CA 2A-13A-48D, CA 2A-2A-13A, CA 2A-2A-48A, CA 2A-2A-48B, CA 2A-2A-48C, CA 2A-2A-48D, CA 4A-13A-48A, CA 4A-13A-48B, CA 4A-13A-48C, CA 4A-13A-48D, CA 4A-4A-48A, CA 4A-4A-48B, CA 4A-4A-48C, CA 4A-4A-48D, CA 5A-48A-66A, CA 5A-48A-66B, CA 5A-48A-66C, CA 5A-48A-66D, CA 6A-48A-66A, CA 6A-48A-66B, CA 6A-48A-66C, CA 6A-48A-66D, CA 8A-48A-66A, CA 8A-48A-66B, CA 8A-48A-66C, CA 8A-48A-66D, CA 12A-13A-48A, CA 12A-13A-48B, CA 12A-13A-48C, CA 12A-13A-48D, CA 12A-66A-66A, CA 12A-66A-66B, CA 12A-66A-66C, CA 12A-66A-66D.

Table with columns: Configure, CA Configuration, Band, BW (MHz), UL Channel, UL Freq (MHz), UL Modulation, DL Channel, DL Freq (MHz), DL Modulation, CA TX (dBm), Rel 8 TX (dBm). Includes rows for CA 13A-48A-66C, CA 13A-48A-66D, CA 13A-48A-66E, CA 13A-48A-66F, CA 2A-13A-48A, CA 2A-13A-48B, CA 2A-13A-48C, CA 2A-13A-48D, CA 2A-2A-13A, CA 2A-2A-48A, CA 2A-2A-48B, CA 2A-2A-48C, CA 2A-2A-48D, CA 4A-13A-48A, CA 4A-13A-48B, CA 4A-13A-48C, CA 4A-13A-48D, CA 4A-4A-48A, CA 4A-4A-48B, CA 4A-4A-48C, CA 4A-4A-48D, CA 5A-48A-66A, CA 5A-48A-66B, CA 5A-48A-66C, CA 5A-48A-66D, CA 6A-48A-66A, CA 6A-48A-66B, CA 6A-48A-66C, CA 6A-48A-66D, CA 8A-48A-66A, CA 8A-48A-66B, CA 8A-48A-66C, CA 8A-48A-66D, CA 12A-13A-48A, CA 12A-13A-48B, CA 12A-13A-48C, CA 12A-13A-48D, CA 12A-66A-66A, CA 12A-66A-66B, CA 12A-66A-66C, CA 12A-66A-66D.

Table with columns: Configure, CA Configuration, Band, BW (MHz), UL Channel, UL Freq (MHz), UL Modulation, DL Channel, DL Freq (MHz), DL Modulation, CA TX (dBm), Rel 8 TX (dBm). Includes rows for CA 13A-48A-66C, CA 13A-48A-66D, CA 13A-48A-66E, CA 13A-48A-66F, CA 2A-13A-48A, CA 2A-13A-48B, CA 2A-13A-48C, CA 2A-13A-48D, CA 2A-2A-13A, CA 2A-2A-48A, CA 2A-2A-48B, CA 2A-2A-48C, CA 2A-2A-48D, CA 4A-13A-48A, CA 4A-13A-48B, CA 4A-13A-48C, CA 4A-13A-48D, CA 4A-4A-48A, CA 4A-4A-48B, CA 4A-4A-48C, CA 4A-4A-48D, CA 5A-48A-66A, CA 5A-48A-66B, CA 5A-48A-66C, CA 5A-48A-66D, CA 6A-48A-66A, CA 6A-48A-66B, CA 6A-48A-66C, CA 6A-48A-66D, CA 8A-48A-66A, CA 8A-48A-66B, CA 8A-48A-66C, CA 8A-48A-66D, CA 12A-13A-48A, CA 12A-13A-48B, CA 12A-13A-48C, CA 12A-13A-48D, CA 12A-66A-66A, CA 12A-66A-66B, CA 12A-66A-66C, CA 12A-66A-66D.

Table with columns: Configure, CA Configuration, Band, BW (MHz), UL Channel, UL Freq (MHz), UL Modulation, DL Channel, DL Freq (MHz), DL Modulation, CA TX (dBm), Rel 8 TX (dBm). Includes rows for CA 13A-48A-66C, CA 13A-48A-66D, CA 13A-48A-66E, CA 13A-48A-66F, CA 2A-13A-48A, CA 2A-13A-48B, CA 2A-13A-48C, CA 2A-13A-48D, CA 2A-2A-13A, CA 2A-2A-48A, CA 2A-2A-48B, CA 2A-2A-48C, CA 2A-2A-48D, CA 4A-13A-48A, CA 4A-13A-48B, CA 4A-13A-48C, CA 4A-13A-48D, CA 4A-4A-48A, CA 4A-4A-48B, CA 4A-4A-48C, CA 4A-4A-48D, CA 5A-48A-66A, CA 5A-48A-66B, CA 5A-48A-66C, CA 5A-48A-66D, CA 6A-48A-66A, CA 6A-48A-66B, CA 6A-48A-66C, CA 6A-48A-66D, CA 8A-48A-66A, CA 8A-48A-66B, CA 8A-48A-66C, CA 8A-48A-66D, CA 12A-13A-48A, CA 12A-13A-48B, CA 12A-13A-48C, CA 12A-13A-48D, CA 12A-66A-66A, CA 12A-66A-66B, CA 12A-66A-66C, CA 12A-66A-66D.

Table with columns: Configure, CA Configuration, Band, BW (MHz), UL Channel, UL Freq (MHz), UL Modulation, DL Channel, DL Freq (MHz), DL Modulation, CA TX (dBm), Rel 8 TX (dBm). Includes rows for CA 13A-48A-66C, CA 13A-48A-66D, CA 13A-48A-66E, CA 13A-48A-66F, CA 2A-13A-48A, CA 2A-13A-48B, CA 2A-13A-48C, CA 2A-13A-48D, CA 2A-2A-13A, CA 2A-2A-48A, CA 2A-2A-48B, CA 2A-2A-48C, CA 2A-2A-48D, CA 4A-13A-48A, CA 4A-13A-48B, CA 4A-13A-48C, CA 4A-13A-48D, CA 4A-4A-48A, CA 4A-4A-48B, CA 4A-4A-48C, CA 4A-4A-48D, CA 5A-48A-66A, CA 5A-48A-66B, CA 5A-48A-66C, CA 5A-48A-66D, CA 6A-48A-66A, CA 6A-48A-66B, CA 6A-48A-66C, CA 6A-48A-66D, CA 8A-48A-66A, CA 8A-48A-66B, CA 8A-48A-66C, CA 8A-48A-66D, CA 12A-13A-48A, CA 12A-13A-48B, CA 12A-13A-48C, CA 12A-13A-48D, CA 12A-66A-66A, CA 12A-66A-66B, CA 12A-66A-66C, CA 12A-66A-66D.



B4_n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.55	22.42	22.39	23.5
20		1	53	22.53	22.43	22.35	
20		1	104	22.40	22.33	22.35	
20		50	1	22.48	22.49	22.42	23.5
20		50	25	22.51	22.40	22.44	
20		50	50	22.51	22.35	22.38	
20		100	0	22.52	22.38	22.45	
20	DFT-s-OFDM QPSK	1	1	22.55	22.61	22.59	23.5
20		1	53	22.57	22.29	22.30	
20		1	104	22.46	22.28	22.30	
20		50	1	22.56	22.40	22.38	23.5
20		50	25	22.51	22.39	22.43	
20		50	50	22.47	22.44	22.45	
20		100	0	22.47	22.38	22.46	
20	DFT-s-OFDM 16QAM	1	1	22.12	22.21	22.23	23.5
20	DFT-s-OFDM 64QAM	1	1	20.87	21.10	21.07	22.5
20	DFT-s-OFDM 256QAM	1	1	18.85	18.61	18.66	19.5
20	CP-OFDM QPSK	1	1	22.09	21.98	21.92	22.5
20	CP-OFDM 16QAM	1	1	21.46	21.44	21.30	22.5
20	CP-OFDM 64QAM	1	1	19.78	19.67	19.66	20.5
20	CP-OFDM 256QAM	1	1	16.93	16.80	16.75	17.5
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	22.56	22.42	22.35	23.5
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	22.46	22.43	22.19	23.5
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	22.46	22.49	22.23	23.5

5A_n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.83	22.79	22.58	23.5
20		1	53	22.86	22.68	22.55	
20		1	104	22.84	22.62	22.62	
20		50	1	22.78	22.69	22.57	23.5
20		50	25	22.86	22.67	22.60	
20		50	50	22.72	22.64	22.62	
20		100	0	22.76	22.71	22.62	
20	DFT-s-OFDM QPSK	1	1	22.79	22.89	22.84	23.5
20		1	53	22.72	22.68	22.58	
20		1	104	22.71	22.55	22.58	
20		50	1	22.38	22.40	22.26	23.5
20		50	25	22.25	22.33	22.25	
20		50	50	22.34	22.30	22.21	
20		100	0	22.21	22.44	22.26	
20	DFT-s-OFDM 16QAM	1	1	22.85	22.78	22.63	23.5
20	DFT-s-OFDM 64QAM	1	1	21.18	21.15	21.34	22.5
20	DFT-s-OFDM 256QAM	1	1	19.47	19.44	19.09	20.5
20	CP-OFDM QPSK	1	1	21.65	21.61	21.53	22.5
20	CP-OFDM 16QAM	1	1	21.05	20.98	20.97	21.5
20	CP-OFDM 64QAM	1	1	19.82	19.73	19.59	20.5
20	CP-OFDM 256QAM	1	1	17.52	17.48	17.14	18.5
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	22.79	22.82	22.59	23.5
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	22.57	22.67	22.46	23.5
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	22.65	22.70	22.46	23.5

B12_n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.64	22.49	22.37	23.5
20		1	53	22.52	22.34	22.36	
20		1	104	22.50	22.37	22.36	
20		50	1	22.53	22.46	22.45	23.5
20		50	25	22.52	22.45	22.41	
20		50	50	22.52	22.39	22.43	
20		100	0	22.55	22.40	22.42	
20	DFT-s-OFDM QPSK	1	1	22.66	22.71	22.68	23.5
20		1	53	22.60	22.34	22.35	
20		1	104	22.57	22.31	22.30	
20		50	1	22.56	22.38	22.40	23.5
20		50	25	22.56	22.43	22.39	
20		50	50	22.57	22.43	22.40	
20		100	0	22.57	22.44	22.43	
20	DFT-s-OFDM 16QAM	1	1	22.25	22.22	22.24	23.5
20	DFT-s-OFDM 64QAM	1	1	21.38	21.16	21.08	22.5
20	DFT-s-OFDM 256QAM	1	1	18.68	18.70	18.66	19.5
20	CP-OFDM QPSK	1	1	22.02	21.99	21.91	22.5
20	CP-OFDM 16QAM	1	1	21.61	21.45	21.33	22.5
20	CP-OFDM 64QAM	1	1	19.91	19.70	19.69	20.5
20	CP-OFDM 256QAM	1	1	16.94	16.85	16.74	17.5
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	22.65	22.51	22.44	23.5
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	22.55	22.38	22.29	23.5
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	22.49	22.36	22.30	23.5

13A_n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.70	22.65	22.57	23.5
20		1	53	22.72	22.64	22.58	
20		1	104	22.73	22.56	22.59	
20	DFT-s-OFDM PI/2 BPSK	50	1	22.72	22.64	22.57	23.5
20		50	25	22.76	22.65	22.60	
20		50	50	22.70	22.64	22.61	
20		100	0	22.74	22.67	22.63	
20	DFT-s-OFDM QPSK	1	1	22.68	22.78	22.74	23.5
20		1	53	22.74	22.67	22.59	
20		1	104	22.67	22.55	22.60	
20		50	1	22.40	22.45	22.26	23.5
20		50	25	22.37	22.29	22.26	
20	50	50	22.42	22.30	22.23		
20	100	0	22.34	22.44	22.24		
20	DFT-s-OFDM 16QAM	1	1	22.75	22.75	22.66	23.5
20	DFT-s-OFDM 64QAM	1	1	21.16	21.15	21.01	22.5
20	DFT-s-OFDM 256QAM	1	1	19.45	19.40	19.32	20.5
20	CP-OFDM QPSK	1	1	21.63	21.53	21.48	22.5
20	CP-OFDM 16QAM	1	1	20.96	20.93	20.87	21.5
20	CP-OFDM 64QAM	1	1	19.75	19.69	19.58	20.5
20	CP-OFDM 256QAM	1	1	17.48	17.40	17.30	18.5
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	22.68	22.74	22.53	23.5
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	22.60	22.67	22.48	23.5
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	22.61	22.65	22.53	23.5

66A_n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.73	22.68	22.59	23.5
20		1	53	22.77	22.67	22.58	
20		1	104	22.74	22.62	22.65	
20	DFT-s-OFDM PI/2 BPSK	50	1	22.69	22.69	22.62	23.5
20		50	25	22.75	22.69	22.63	
20		50	50	22.76	22.64	22.61	
20		100	0	22.75	22.67	22.61	
20	DFT-s-OFDM QPSK	1	1	22.75	22.79	22.73	23.5
20		1	53	22.77	22.65	22.62	
20		1	104	22.74	22.57	22.63	
20		50	1	22.46	22.52	22.35	
20	DFT-s-OFDM QPSK	50	25	22.45	22.43	22.37	23.5
20		50	50	22.47	22.37	22.34	
20		100	0	22.40	22.48	22.34	
20	DFT-s-OFDM 16QAM	1	1	22.63	22.72	22.62	23.5
20	DFT-s-OFDM 64QAM	1	1	21.22	21.12	21.08	22.5
20	DFT-s-OFDM 256QAM	1	1	19.48	19.42	19.36	20.5
20	CP-OFDM QPSK	1	1	21.63	21.61	21.51	22.5
20	CP-OFDM 16QAM	1	1	20.69	20.66	20.59	21.5
20	CP-OFDM 64QAM	1	1	19.45	19.52	19.60	20.5
20	CP-OFDM 256QAM	1	1	17.52	17.47	17.33	18.5
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	22.66	22.72	22.56	23.5
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	22.51	22.69	22.46	23.5
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	22.53	22.66	22.65	23.5

2A_n5							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.75	22.77	22.84	23.5
20		1	53	22.83	22.90	22.87	
20		1	104	22.85	22.87	22.77	
20		50	1	22.93	22.94	22.90	23.5
20		50	25	22.87	22.92	22.97	
20		50	50	22.97	22.95	22.90	
20		100	0	22.89	22.92	22.94	
20	DFT-s-OFDM QPSK	1	1	22.87	22.99	22.82	23.5
20		1	53	22.84	22.92	22.85	
20		1	104	22.91	22.87	22.73	
20		50	1	22.60	22.68	22.62	23.5
20		50	25	22.65	22.66	22.54	
20		50	50	22.52	22.57	22.59	
20		100	0	22.66	22.72	22.56	
20	DFT-s-OFDM 16QAM	1	1	22.91	22.83	22.93	23.5
20	DFT-s-OFDM 64QAM	1	1	21.38	21.23	21.33	22.5
20	DFT-s-OFDM 256QAM	1	1	19.35	19.47	19.57	20.5
20	CP-OFDM QPSK	1	1	21.64	21.65	21.74	22.5
20	CP-OFDM 16QAM	1	1	20.55	20.68	20.72	21.5
20	CP-OFDM 64QAM	1	1	19.71	19.78	19.86	20.5
20	CP-OFDM 256QAM	1	1	17.37	17.49	17.64	18.5
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	22.76	22.96	22.85	23.5
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	22.67	22.81	22.72	23.5
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	22.69	22.87	22.71	23.5

B4_n5 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800	Tune-up limit (dBm)
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.33	22.40	22.37	23.5
20		1	53	22.37	22.32	22.36	
20		1	104	22.31	22.27	22.29	
20		50	1	22.41	22.49	22.49	23.5
20		50	25	22.39	22.46	22.43	
20		50	50	22.42	22.54	22.45	
20		100	0	22.41	22.44	22.46	
20	DFT-s-OFDM QPSK	1	1	22.58	22.60	22.57	23.5
20		1	53	22.27	22.25	22.25	
20		1	104	22.22	22.22	22.20	
20		50	1	22.39	22.41	22.49	23.5
20		50	25	22.40	22.47	22.42	
20		50	50	22.33	22.40	22.45	
20		100	0	22.42	22.49	22.43	
20	DFT-s-OFDM 16QAM	1	1	22.55	22.22	22.14	23.5
20	DFT-s-OFDM 64QAM	1	1	20.97	21.22	21.23	22.5
20	DFT-s-OFDM 256QAM	1	1	18.62	18.65	18.62	19.5
20	CP-OFDM QPSK	1	1	21.81	21.88	21.89	22.5
20	CP-OFDM 16QAM	1	1	21.21	21.19	21.36	22.5
20	CP-OFDM 64QAM	1	1	19.90	20.08	19.95	21.5
20	CP-OFDM 256QAM	1	1	16.68	16.54	16.46	17.5
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	22.54	22.49	22.48	23.5
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	22.32	22.33	22.26	23.5
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	22.45	22.40	22.35	23.5

B48_n5							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800	23.5
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.20	22.19	22.18	23.5
20		1	53	22.20	22.17	22.14	
20		1	104	22.16	22.14	22.12	
20		50	1	22.27	22.26	22.34	23.5
20		50	25	22.22	22.27	22.28	
20		50	50	22.26	22.24	22.23	
20		100	0	22.20	22.29	22.27	
20	DFT-s-OFDM QPSK	1	1	22.25	22.37	22.33	23.5
20		1	53	22.25	22.13	22.13	
20		1	104	22.20	22.08	22.06	
20		50	1	22.17	22.23	22.18	23.5
20		50	25	22.11	22.15	22.15	
20		50	50	22.16	22.10	22.17	
20		100	0	22.11	22.19	22.16	
20	DFT-s-OFDM 16QAM	1	1	22.32	22.28	22.27	23.5
20	DFT-s-OFDM 64QAM	1	1	20.78	20.65	20.61	21.5
20	DFT-s-OFDM 256QAM	1	1	18.78	18.98	18.96	19.5
20	CP-OFDM QPSK	1	1	21.31	21.44	21.20	22.5
20	CP-OFDM 16QAM	1	1	20.31	20.20	20.21	21.5
20	CP-OFDM 64QAM	1	1	19.35	19.20	19.22	20.5
20	CP-OFDM 256QAM	1	1	17.20	17.02	17.11	18.5
Channel				166300	167300	168300	23.5
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	22.29	22.23	22.27	23.5
Channel				165800	167300	168800	23.5
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	22.10	22.10	22.08	23.5
Channel				165300	167300	169300	23.5
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	22.19	22.20	22.16	23.5

66A_n5							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800	23.5
Frequency (MHz)				834	836.5	839	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.51	22.52	22.60	23.5
20		1	53	22.62	22.67	22.63	
20		1	104	22.54	22.65	22.59	
20		50	1	22.65	22.70	22.63	23.5
20		50	25	22.67	22.76	22.71	
20		50	50	22.70	22.69	22.65	
20		100	0	22.62	22.73	22.69	
20	DFT-s-OFDM QPSK	1	1	22.82	22.85	22.83	23.5
20		1	53	22.61	22.65	22.58	
20		1	104	22.50	22.56	22.56	
20		50	1	22.45	22.49	22.40	23.5
20		50	25	22.42	22.43	22.42	
20		50	50	22.41	22.47	22.41	
20		100	0	22.37	22.50	22.48	
20	DFT-s-OFDM 16QAM	1	1	22.71	22.68	22.82	23.5
20	DFT-s-OFDM 64QAM	1	1	21.04	21.12	21.19	22.5
20	DFT-s-OFDM 256QAM	1	1	18.61	18.45	18.51	19.5
20	CP-OFDM QPSK	1	1	21.53	21.50	21.62	22.5
20	CP-OFDM 16QAM	1	1	20.55	20.42	20.36	21.5
20	CP-OFDM 64QAM	1	1	19.52	19.61	19.22	20.5
20	CP-OFDM 256QAM	1	1	17.40	17.37	17.48	18.5
Channel				166300	167300	168300	23.5
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	22.61	22.72	22.81	23.5
Channel				165800	167300	168800	23.5
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	22.57	22.51	22.66	23.5
Channel				165300	167300	169300	23.5
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	22.59	22.68	22.57	23.5

2A_n66							
BW (MHz)	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	22.68	22.72	22.75	23.5
40		1	108	22.68	22.75	22.60	
40		1	214	22.74	22.63	22.59	
40		108	1	22.61	22.62	22.63	23.5
40		108	54	22.74	22.67	22.66	
40		108	108	22.77	22.65	22.77	
40		216	0	22.76	22.69	22.76	
40	DFT-s-OFDM QPSK	1	1	22.75	22.82	22.75	23.5
40		1	108	22.69	22.74	22.58	
40		1	214	22.60	22.48	22.61	
40		108	1	22.54	22.55	22.52	23.5
40		108	54	22.52	22.48	22.38	
40		108	108	22.37	22.42	22.39	
40		216	0	22.53	22.54	22.52	
40	DFT-s-OFDM 16QAM	1	1	22.73	22.80	22.78	23.5
40	DFT-s-OFDM 64QAM	1	1	21.14	21.14	21.26	22.5
40	DFT-s-OFDM 256QAM	1	1	19.41	19.49	19.21	20.5
40	CP-OFDM QPSK	1	1	21.43	21.50	21.46	22.5
40	CP-OFDM 16QAM	1	1	20.62	20.55	20.68	21.5
40	CP-OFDM 64QAM	1	1	19.61	19.68	19.55	20.5
40	CP-OFDM 256QAM	1	1	17.42	17.48	17.42	18.5
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1785	
30	DFT-s-OFDM QPSK	1	1	22.60	22.67	22.64	23.5
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	22.77	22.74	22.62	23.5
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	22.75	22.72	22.58	23.5
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	22.18	22.58	22.46	23.5
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	22.69	22.68	22.50	23.5

5A_n66							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	23.5
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	22.64	22.76	22.77	23.5
40		1	108	22.64	22.73	22.60	
40		1	214	22.74	22.59	22.60	
40		108	1	22.79	22.72	22.74	23.5
40		108	54	22.76	22.71	22.64	
40		108	108	22.76	22.79	22.76	
40		216	0	22.69	22.71	22.68	
40	DFT-s-OFDM QPSK	1	1	22.74	22.81	22.72	23.5
40		1	108	22.69	22.70	22.58	
40		1	214	22.70	22.62	22.61	
40		108	1	22.46	22.48	22.43	23.5
40		108	54	22.44	22.44	22.35	
40		108	108	22.43	22.40	22.39	
40		216	0	22.44	22.46	22.42	
40	DFT-s-OFDM 16QAM	1	1	22.66	22.78	22.68	23.5
40	DFT-s-OFDM 64QAM	1	1	21.10	21.17	21.16	22.5
40	DFT-s-OFDM 256QAM	1	1	19.42	19.43	19.38	20.5
40	CP-OFDM QPSK	1	1	21.20	21.27	21.17	22.5
40	CP-OFDM 16QAM	1	1	20.58	20.64	20.56	21.5
40	CP-OFDM 64QAM	1	1	19.33	19.42	19.32	20.5
40	CP-OFDM 256QAM	1	1	17.42	17.48	17.40	18.5
Channel				345000	349000	353000	23.5
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	22.69	22.61	22.67	23.5
Channel				344000	349000	354000	23.5
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	22.73	22.21	22.06	23.5
Channel				343500	349000	354500	23.5
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	22.70	22.41	22.25	23.5
Channel				343000	349000	355000	23.5
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	22.68	22.54	22.56	23.5
Channel				342500	349000	355500	23.5
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	22.70	22.66	22.57	23.5

B12_n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	22.47	22.51	22.57	23.5
40		1	108	22.47	22.55	22.40	
40		1	214	22.43	22.41	22.39	
40		108	1	22.59	22.53	22.55	23.5
40		108	54	22.56	22.62	22.51	
40		108	108	22.61	22.57	22.44	
40		216	0	22.57	22.56	22.43	
40	DFT-s-OFDM QPSK	1	1	22.56	22.65	22.20	23.5
40		1	108	22.50	22.52	22.42	
40		1	214	22.43	22.38	22.37	
40		108	1	22.30	22.32	22.13	23.5
40		108	54	22.26	22.28	22.03	
40		108	108	22.27	22.22	22.17	
40		216	0	22.31	22.32	22.12	
40	DFT-s-OFDM 16QAM	1	1	21.06	21.43	21.94	22.5
40	DFT-s-OFDM 64QAM	1	1	22.13	20.20	20.77	21.5
40	DFT-s-OFDM 256QAM	1	1	18.18	18.20	18.51	19.5
40	CP-OFDM QPSK	1	1	21.22	21.52	21.81	22.5
40	CP-OFDM 16QAM	1	1	21.16	21.40	21.17	22.5
40	CP-OFDM 64QAM	1	1	19.36	19.24	19.56	20.5
40	CP-OFDM 256QAM	1	1	16.22	16.35	16.62	17.5
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	22.40	22.47	22.37	23.5
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	22.56	22.40	22.20	23.5
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	22.29	22.44	22.47	23.5
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	22.35	22.43	22.46	23.5
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	22.36	22.25	22.35	23.5

13A_n66							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	23.5
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	22.67	22.71	22.77	23.5
40		1	108	22.67	22.75	22.60	
40		1	214	22.63	22.61	22.59	
40		108	1	22.79	22.73	22.75	23.5
40		108	54	22.76	22.82	22.71	
40		108	108	22.81	22.77	22.64	
40		216	0	22.77	22.76	22.63	
40	DFT-s-OFDM QPSK	1	1	22.81	22.83	22.74	23.5
40		1	108	22.70	22.72	22.62	
40		1	214	22.63	22.58	22.57	
40		108	1	22.50	22.52	22.33	23.5
40		108	54	22.46	22.48	22.23	
40		108	108	22.47	22.42	22.37	
40		216	0	22.51	22.52	22.32	
40	DFT-s-OFDM 16QAM	1	1	22.69	22.74	22.65	23.5
40	DFT-s-OFDM 64QAM	1	1	21.11	21.19	21.11	22.5
40	DFT-s-OFDM 256QAM	1	1	19.40	19.45	19.35	20.5
40	CP-OFDM QPSK	1	1	21.35	21.39	21.31	22.5
40	CP-OFDM 16QAM	1	1	20.70	20.75	20.64	21.5
40	CP-OFDM 64QAM	1	1	19.46	19.53	19.41	20.5
40	CP-OFDM 256QAM	1	1	17.41	17.50	17.38	18.5
Channel				345000	349000	353000	23.5
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	22.68	22.72	22.64	23.5
Channel				344000	349000	354000	23.5
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	22.22	22.75	22.58	23.5
Channel				343500	349000	354500	23.5
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	22.41	22.71	22.59	23.5
Channel				343000	349000	355000	23.5
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	22.67	22.57	22.56	23.5
Channel				342500	349000	355500	23.5
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	22.68	22.57	22.50	23.5

2A_n77(3450-3550MHz)							
BW (MHz)	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					633334		Tune-up limit (dBm)
Frequency (MHz)					3500.01		
100	DFT-s-OFDM Pi/2 BPSK	1	1		25.89		27
100		1	136		25.92		
100		1	271		26.02		
100		135	1		25.69		27
100		135	67		26.01		
100		135	136		25.34		
100		270	0		25.59		
100	DFT-s-OFDM QPSK	1	1		26.29		27
100		1	136		25.90		
100		1	271		25.99		
100		135	1		26.08		27
100		135	67		25.69		
100		135	136		25.85		
100		270	0		25.90		
100	DFT-s-OFDM 16QAM	1	1		25.68		27
100	DFT-s-OFDM 64QAM	1	1		24.10		25.5
100	DFT-s-OFDM 256QAM	1	1		21.76		22.5
100	CP-OFDM QPSK	1	1		23.54		24.5
100	CP-OFDM 16QAM	1	1		22.61		23.5
100	CP-OFDM 64QAM	1	1		21.97		22.5
100	CP-OFDM 256QAM	1	1		19.54		20.5
Channel				633000	633334	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3500.01	3504.99	
90	DFT-s-OFDM QPSK	1	1	26.09	26.19	26.14	27
Channel				632668	633334	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3500.01	3510	
80	DFT-s-OFDM QPSK	1	1	26.11	26.19	26.06	27
Channel				632334	633334	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3500.01	3514.98	
70	DFT-s-OFDM QPSK	1	1	26.13	26.16	26.01	27
Channel				632000	633334	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3500.01	3519.99	
60	DFT-s-OFDM QPSK	1	1	26.00	26.20	26.11	27
Channel				631668	633334	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3500.01	3525	
50	DFT-s-OFDM QPSK	1	1	26.04	26.21	26.12	27
Channel				631334	633334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3500.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	25.79	26.08	26.16	27
Channel				631000	633334	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3500.01	3534.99	
30	DFT-s-OFDM QPSK	1	1	25.89	26.15	25.97	27
Channel				630668	633334	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3500.01	3540	
20	DFT-s-OFDM QPSK	1	1	25.97	26.23	25.95	27
Channel				630500	633334	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3500.01	3542.49	
15	DFT-s-OFDM QPSK	1	1	25.98	26.11	25.99	27
Channel				630334	633334	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3500.01	3544.98	
10	DFT-s-OFDM QPSK	1	1	25.65	26.11	25.89	27

5A_n77(3450-3550MHz)							
BW (MHz)	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					633334		Tune-up limit (dBm)
Frequency (MHz)					3500.01		
100	DFT-s-OFDM Pi/2 BPSK	1	1		26.27		27
100		1	136		25.98		
100		1	271		26.02		
100		135	1		25.63		27
100		135	67		25.97		
100		135	136		25.29		
100		270	0		25.93		
100	DFT-s-OFDM QPSK	1	1		26.33		27
100		1	136		25.96		
100		1	271		25.37		
100		135	1		25.95		27
100		135	67		25.76		
100		135	136		25.20		
100		270	0		25.94		
100	DFT-s-OFDM 16QAM	1	1		25.43		27
100	DFT-s-OFDM 64QAM	1	1		23.56		24.5
100	DFT-s-OFDM 256QAM	1	1		21.81		22.5
100	CP-OFDM QPSK	1	1		24.03		25.5
100	CP-OFDM 16QAM	1	1		23.85		24.5
100	CP-OFDM 64QAM	1	1		22.13		23.5
100	CP-OFDM 256QAM	1	1		18.73		19.5
Channel				633000	633334	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3500.01	3504.99	
90	DFT-s-OFDM QPSK	1	1	25.85	25.83	25.76	27
Channel				632668	633334	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3500.01	3510	
80	DFT-s-OFDM QPSK	1	1	25.92	25.82	25.71	27
Channel				632334	633334	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3500.01	3514.98	
70	DFT-s-OFDM QPSK	1	1	25.95	25.78	25.63	27
Channel				632000	633334	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3500.01	3519.99	
60	DFT-s-OFDM QPSK	1	1	26.02	25.81	25.77	27
Channel				631668	633334	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3500.01	3525	
50	DFT-s-OFDM QPSK	1	1	26.10	25.82	25.86	27
Channel				631334	633334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3500.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	26.11	26.20	25.81	27
Channel				631000	633334	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3500.01	3534.99	
30	DFT-s-OFDM QPSK	1	1	26.12	26.14	25.59	27
Channel				630668	633334	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3500.01	3540	
20	DFT-s-OFDM QPSK	1	1	26.12	26.15	25.56	27
Channel				630500	633334	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3500.01	3542.49	
15	DFT-s-OFDM QPSK	1	1	26.09	26.13	25.81	27
Channel				630334	633334	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3500.01	3544.98	
10	DFT-s-OFDM QPSK	1	1	26.10	26.06	26.02	27



13A_n77(3450-3550MHz)							
BW (MHz)	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					633334		
Frequency (MHz)					3500.01		
100	DFT-s-OFDM Pi/2 BPSK	1	1		26.08		27
100		1	136		25.82		
100		1	271		25.65		
100		135	1		25.74		27
100		135	67		25.78		
100		135	136		25.66		
100		270	0		25.64		
100	DFT-s-OFDM QPSK	1	1		26.31		27
100		1	136		25.80		
100		1	271		25.75		
100		135	1		25.85		27
100		135	67		25.55		
100		135	136		25.61		
100		270	0		25.87		
100	DFT-s-OFDM 16QAM	1	1		25.21		25.5
100	DFT-s-OFDM 64QAM	1	1		23.88		24.5
100	DFT-s-OFDM 256QAM	1	1		21.55		22.5
100	CP-OFDM QPSK	1	1		24.67		25.5
100	CP-OFDM 16QAM	1	1		23.44		24.5
100	CP-OFDM 64QAM	1	1		22.80		23.5
100	CP-OFDM 256QAM	1	1		19.55		20.5
Channel				633000	633334	633666	
Frequency (MHz)				3495	3500.01	3504.99	
90	DFT-s-OFDM QPSK	1	1	25.86	26.11	25.70	27
Channel				632668	633334	634000	
Frequency (MHz)				3490.02	3500.01	3510	
80	DFT-s-OFDM QPSK	1	1	25.89	26.09	25.67	27
Channel				632334	633334	634332	
Frequency (MHz)				3485.01	3500.01	3514.98	
70	DFT-s-OFDM QPSK	1	1	25.91	26.10	25.58	27
Channel				632000	633334	634666	
Frequency (MHz)				3480	3500.01	3519.99	
60	DFT-s-OFDM QPSK	1	1	26.03	25.80	25.71	27
Channel				631668	633334	635000	
Frequency (MHz)				3475.02	3500.01	3525	
50	DFT-s-OFDM QPSK	1	1	26.09	25.82	25.85	27
Channel				631334	633334	635332	
Frequency (MHz)				3470.01	3500.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	26.11	26.00	25.79	27
Channel				631000	633334	635666	
Frequency (MHz)				3465	3500.01	3534.99	
30	DFT-s-OFDM QPSK	1	1	26.12	25.93	25.68	27
Channel				630668	633334	636000	
Frequency (MHz)				3460.02	3500.01	3540	
20	DFT-s-OFDM QPSK	1	1	26.10	25.89	25.55	27
Channel				630500	633334	636166	
Frequency (MHz)				3457.5	3500.01	3542.49	
15	DFT-s-OFDM QPSK	1	1	26.08	25.88	25.59	27
Channel				630334	633334	636332	
Frequency (MHz)				3455.01	3500.01	3544.98	
10	DFT-s-OFDM QPSK	1	1	26.03	25.69	25.48	27



66A_n77(3450-3550MHz)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				633334			Tune-up limit (dBm)
Frequency (MHz)				3500.01			
100	DFT-s-OFDM Pi/2 BPSK	1	1	25.96			27
100		1	136	25.95			
100		1	271	24.80			
100		135	1	25.67			27
100		135	67	26.02			
100		135	136	24.48			
100		270	0	25.63			27
100	DFT-s-OFDM QPSK	1	1	26.22			
100		1	136	25.93			
100		1	271	25.98			
100		135	1	26.05			
100		135	67	25.96			
100		135	136	25.30			
100	DFT-s-OFDM 16QAM	1	1	24.46			25.5
100	DFT-s-OFDM 64QAM	1	1	23.55			24.5
100	DFT-s-OFDM 256QAM	1	1	21.22			22.5
100	CP-OFDM QPSK	1	1	24.56			25.5
100	CP-OFDM 16QAM	1	1	23.12			24.5
100	CP-OFDM 64QAM	1	1	22.16			23.5
100	CP-OFDM 256QAM	1	1	19.20			20.5
Channel				633000	633334	633666	Tune-up limit (dBm)
Frequency (MHz)				3495	3500.01	3504.99	
90	DFT-s-OFDM QPSK	1	1	25.93	25.86	25.81	27
Channel				632668	633334	634000	Tune-up limit (dBm)
Frequency (MHz)				3490.02	3500.01	3510	
80	DFT-s-OFDM QPSK	1	1	25.96	25.85	25.74	27
Channel				632334	633334	634332	Tune-up limit (dBm)
Frequency (MHz)				3485.01	3500.01	3514.98	
70	DFT-s-OFDM QPSK	1	1	25.98	25.82	25.67	27
Channel				632000	633334	634666	Tune-up limit (dBm)
Frequency (MHz)				3480	3500.01	3519.99	
60	DFT-s-OFDM QPSK	1	1	26.10	25.90	25.79	27
Channel				631668	633334	635000	Tune-up limit (dBm)
Frequency (MHz)				3475.02	3500.01	3525	
50	DFT-s-OFDM QPSK	1	1	26.13	25.90	25.79	27
Channel				631334	633334	635332	Tune-up limit (dBm)
Frequency (MHz)				3470.01	3500.01	3529.98	
40	DFT-s-OFDM QPSK	1	1	26.10	26.13	25.30	27
Channel				631000	633334	635666	Tune-up limit (dBm)
Frequency (MHz)				3465	3500.01	3534.99	
30	DFT-s-OFDM QPSK	1	1	26.15	25.97	25.63	27
Channel				630668	633334	636000	Tune-up limit (dBm)
Frequency (MHz)				3460.02	3500.01	3540	
20	DFT-s-OFDM QPSK	1	1	26.12	25.92	25.60	27
Channel				630500	633334	636166	Tune-up limit (dBm)
Frequency (MHz)				3457.5	3500.01	3542.49	
15	DFT-s-OFDM QPSK	1	1	26.08	25.94	25.64	27
Channel				630334	633334	636332	Tune-up limit (dBm)
Frequency (MHz)				3455.01	3500.01	3544.98	
10	DFT-s-OFDM QPSK	1	1	25.98	26.07	25.55	27

2A_n77(3700-3980MHz)								
BW (MHz)	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)	
Channel				650000	656000	662000	27	
Frequency (MHz)				3750	3840	3930		
100	DFT-s-OFDM PI/2 BPSK	1	1	25.83	25.96	26.20	27	
100		1	136	26.02	26.10	26.04		
100		1	271	25.94	25.79	26.01		
100		135	1	24.63	25.60	25.80	27	
100		135	67	26.03	25.60	26.04		
100		135	136	25.47	25.66	25.82		
100		270	0	25.56	25.80	25.25	27	
100	DFT-s-OFDM QPSK	1	1	26.15	26.21	26.20		
100		1	136	26.03	25.88	26.01		
100		1	271	25.92	25.46	26.12		
100		135	1	25.73	25.89	25.88		
100		135	67	25.25	25.55	25.22		
100		135	136	24.94	25.16	24.99		
100		270	0	25.33	25.32	25.22	27	
100	DFT-s-OFDM 16QAM	1	1	24.57	24.64	24.89		
100	DFT-s-OFDM 64QAM	1	1	23.23	23.22	23.15		
100	DFT-s-OFDM 256QAM	1	1	21.20	21.20	21.30		
100	CP-OFDM QPSK	1	1	24.08	24.15	24.46		
100	CP-OFDM 16QAM	1	1	23.51	23.60	23.50		
100	CP-OFDM 64QAM	1	1	22.18	22.29	22.61		
100	CP-OFDM 256QAM	1	1	19.20	19.05	19.35		
Channel				649668	656000	662332		27
Frequency (MHz)				3744.99	3840	3934.98		
90	DFT-s-OFDM QPSK	1	1	25.48	25.61	25.88	27	
Channel				649334	656000	662666	27	
Frequency (MHz)				3740.01	3840	3939.99		
80	DFT-s-OFDM QPSK	1	1	25.52	25.64	25.85	27	
Channel				649000	656000	663000	27	
Frequency (MHz)				3735	3840	3945		
70	DFT-s-OFDM QPSK	1	1	25.57	25.62	25.77	27	
Channel				648668	656000	663332	27	
Frequency (MHz)				3730.02	3840	3949.98		
60	DFT-s-OFDM QPSK	1	1	25.64	25.66	25.74	27	
Channel				648334	656000	663666	27	
Frequency (MHz)				3725.01	3840	3954.99		
50	DFT-s-OFDM QPSK	1	1	25.71	25.77	25.99	27	
Channel				648000	656000	664000	27	
Frequency (MHz)				3720	3840	3960		
40	DFT-s-OFDM QPSK	1	1	25.54	25.99	26.13	27	
Channel				647668	656000	664332	27	
Frequency (MHz)				3715.02	3840	3964.98		
30	DFT-s-OFDM QPSK	1	1	25.47	25.99	26.09	27	
Channel				647334	656000	664666	27	
Frequency (MHz)				3710.01	3840	3969.99		
20	DFT-s-OFDM QPSK	1	1	25.84	26.07	26.03	27	
Channel				647168	656000	664832	27	
Frequency (MHz)				3707.52	3840	3972.48		
15	DFT-s-OFDM QPSK	1	1	25.83	26.13	26.04	27	
Channel				647000	656000	665000	27	
Frequency (MHz)				3705	3840	3975		
10	DFT-s-OFDM QPSK	1	1	25.61	25.88	26.10	27	

5A_n77(3700-3980MHz)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				650000	656000	662000	Tune-up limit (dBm)
Frequency (MHz)				3750	3840	3930	
100	DFT-s-OFDM Pi/2 BPSK	1	1	25.81	25.90	26.20	27
100		1	136	25.99	26.20	26.00	
100		1	271	25.55	25.56	25.99	
100		135	1	25.76	25.57	25.78	27
100		135	67	26.01	25.80	26.03	
100		135	136	25.64	25.51	25.76	
100		270	0	25.54	25.80	25.22	27
100	DFT-s-OFDM QPSK	1	1	26.20	26.24	26.18	
100		1	136	26.00	26.20	25.99	
100		1	271	25.92	25.89	25.90	
100		135	1	25.89	25.98	25.83	
100		135	67	25.69	25.88	25.64	
100		135	136	25.59	25.69	25.75	
100	DFT-s-OFDM 16QAM	1	1	24.49	24.55	24.62	25.5
100	DFT-s-OFDM 64QAM	1	1	23.21	23.32	23.10	24.5
100	DFT-s-OFDM 256QAM	1	1	21.36	21.00	21.30	22.5
100	CP-OFDM QPSK	1	1	24.03	24.12	24.44	25.5
100	CP-OFDM 16QAM	1	1	23.61	23.74	24.08	24.5
100	CP-OFDM 64QAM	1	1	22.17	22.23	22.58	23.5
100	CP-OFDM 256QAM	1	1	19.21	19.01	19.31	20.5
Channel				649666	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3840	3934.98	
90	DFT-s-OFDM QPSK	1	1	25.46	26.01	25.86	27
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	DFT-s-OFDM QPSK	1	1	25.50	26.08	25.83	27
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	DFT-s-OFDM QPSK	1	1	25.52	26.05	25.82	27
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	DFT-s-OFDM QPSK	1	1	25.62	26.03	25.76	27
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	DFT-s-OFDM QPSK	1	1	25.69	25.76	26.11	27
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	DFT-s-OFDM QPSK	1	1	25.96	25.95	26.10	27
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840	3964.98	
30	DFT-s-OFDM QPSK	1	1	25.80	25.96	26.02	27
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	DFT-s-OFDM QPSK	1	1	25.82	26.07	26.11	27
Channel				647168	656000	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3840	3972.48	
15	DFT-s-OFDM QPSK	1	1	25.83	26.09	26.03	27
Channel				647000	656000	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3840	3975	
10	DFT-s-OFDM QPSK	1	1	25.99	25.88	26.10	27

13A_n77(3700-3980MHz)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				650000	656000	662000	Tune-up limit (dBm)
Frequency (MHz)				3750	3840	3930	
100	DFT-s-OFDM Pi/2 BPSK	1	1	25.44	25.57	25.82	27
100		1	136	25.63	25.82	25.65	
100		1	271	25.61	25.98	25.65	
100		135	1	25.39	25.21	25.49	27
100		135	67	25.63	25.87	25.73	
100		135	136	25.55	25.28	25.43	
100		270	0	25.16	24.64	24.90	
100	DFT-s-OFDM QPSK	1	1	26.15	26.20	26.19	27
100		1	136	25.87	25.83	25.65	
100		1	271	25.55	25.13	25.76	
100		135	1	25.88	25.89	25.76	27
100		135	67	25.62	25.72	25.65	
100		135	136	25.25	25.52	25.61	
100		270	0	25.76	25.88	25.67	
100	DFT-s-OFDM 16QAM	1	1	24.46	24.55	24.88	25.5
100	DFT-s-OFDM 64QAM	1	1	23.18	23.24	23.53	24.5
100	DFT-s-OFDM 256QAM	1	1	21.22	21.19	21.33	22.5
100	CP-OFDM QPSK	1	1	24.00	24.12	24.44	25.5
100	CP-OFDM 16QAM	1	1	23.64	23.81	24.02	24.5
100	CP-OFDM 64QAM	1	1	22.16	22.21	22.57	23.5
100	CP-OFDM 256QAM	1	1	19.10	19.04	19.35	20.5
Channel				649666	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3840	3934.98	
90	DFT-s-OFDM QPSK	1	1	25.82	26.02	25.84	27
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	DFT-s-OFDM QPSK	1	1	25.79	26.05	25.79	27
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	DFT-s-OFDM QPSK	1	1	25.88	26.01	25.81	27
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	DFT-s-OFDM QPSK	1	1	25.58	26.03	25.88	27
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	DFT-s-OFDM QPSK	1	1	25.65	26.01	26.04	27
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	DFT-s-OFDM QPSK	1	1	25.92	26.03	26.08	27
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840	3964.98	
30	DFT-s-OFDM QPSK	1	1	25.73	25.92	26.11	27
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	DFT-s-OFDM QPSK	1	1	25.79	26.01	26.13	27
Channel				647168	656000	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3840	3972.48	
15	DFT-s-OFDM QPSK	1	1	25.81	26.05	26.07	27
Channel				647000	656000	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3840	3975	
10	DFT-s-OFDM QPSK	1	1	25.54	25.85	26.11	27

66A_n77(3700-3980MHz)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				650000	656000	662000	Tune-up limit (dBm)
Frequency (MHz)				3750	3840	3930	
100	DFT-s-OFDM Pi/2 BPSK	1	1	25.50	25.61	25.89	27
100		1	136	25.69	25.88	25.71	
100		1	271	25.59	25.94	25.65	
100		135	1	25.45	25.25	25.50	27
100		135	67	25.69	25.88	25.75	
100		135	136	25.61	25.66	25.28	
100		270	0	25.23	25.50	25.32	
100	DFT-s-OFDM QPSK	1	1	26.17	26.20	26.18	27
100		1	136	25.66	25.85	25.69	
100		1	271	25.58	25.92	25.79	
100		135	1	25.76	25.88	25.71	27
100		135	67	25.66	25.75	25.73	
100		135	136	25.59	25.57	25.68	
100		270	0	25.73	25.95	25.78	
100	DFT-s-OFDM 16QAM	1	1	24.48	24.64	24.89	25.5
100	DFT-s-OFDM 64QAM	1	1	23.37	23.31	23.58	24.5
100	DFT-s-OFDM 256QAM	1	1	21.33	21.48	21.34	22.5
100	CP-OFDM QPSK	1	1	24.07	24.16	24.46	25.5
100	CP-OFDM 16QAM	1	1	23.70	23.82	24.09	24.5
100	CP-OFDM 64QAM	1	1	22.19	22.31	22.62	23.5
100	CP-OFDM 256QAM	1	1	19.12	19.05	19.35	20.5
Channel				649666	656000	662332	Tune-up limit (dBm)
Frequency (MHz)				3744.99	3840	3934.98	
90	DFT-s-OFDM QPSK	1	1	25.47	25.60	25.89	27
Channel				649334	656000	662666	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3939.99	
80	DFT-s-OFDM QPSK	1	1	25.51	25.66	25.85	27
Channel				649000	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	DFT-s-OFDM QPSK	1	1	25.57	25.67	25.76	27
Channel				648668	656000	663332	Tune-up limit (dBm)
Frequency (MHz)				3730.02	3840	3949.98	
60	DFT-s-OFDM QPSK	1	1	25.63	26.03	25.74	27
Channel				648334	656000	663666	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3954.99	
50	DFT-s-OFDM QPSK	1	1	25.69	26.12	25.88	27
Channel				648000	656000	664000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	DFT-s-OFDM QPSK	1	1	25.90	26.09	26.12	27
Channel				647668	656000	664332	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840	3964.98	
30	DFT-s-OFDM QPSK	1	1	25.81	26.10	26.03	27
Channel				647334	656000	664666	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3969.99	
20	DFT-s-OFDM QPSK	1	1	25.85	26.07	26.15	27
Channel				647168	656000	664832	Tune-up limit (dBm)
Frequency (MHz)				3707.52	3840	3972.48	
15	DFT-s-OFDM QPSK	1	1	25.85	26.13	26.20	27
Channel				647000	656000	665000	Tune-up limit (dBm)
Frequency (MHz)				3705	3840	3975	
10	DFT-s-OFDM QPSK	1	1	25.61	25.91	26.10	27

Reduced Power for ANT 0 & ANT 4

Band		WCDMA Band II (dBm)			Tune-up Limit (dBm)
TX Channel		9262	9400	9538	
Rx Channel		9662	9800	9938	
Frequency (MHz)		1852.4	1880	1907.6	
3GPP Rel 99	RMC 12.2Kbps	19.21	19.28	19.25	20.00
3GPP Rel 5	HSDPA Subtest-1	18.01	17.99	18.06	19.00
3GPP Rel 5	HSDPA Subtest-2	17.98	17.98	17.97	19.00
3GPP Rel 5	HSDPA Subtest-3	17.49	17.52	17.52	18.50
3GPP Rel 5	HSDPA Subtest-4	17.45	17.57	17.51	18.50
3GPP Rel 8	DC-HSDPA Subtest-1	18.04	18.04	18.02	19.00
3GPP Rel 8	DC-HSDPA Subtest-2	18.03	18.06	18.00	19.00
3GPP Rel 8	DC-HSDPA Subtest-3	17.54	17.55	17.55	18.50
3GPP Rel 8	DC-HSDPA Subtest-4	17.51	17.58	17.51	18.50
3GPP Rel 6	HSUPA Subtest-1	18.07	18.13	18.15	19.00
3GPP Rel 6	HSUPA Subtest-2	17.54	17.48	17.50	18.50
3GPP Rel 6	HSUPA Subtest-3	18.08	18.14	18.00	19.00
3GPP Rel 6	HSUPA Subtest-4	18.07	18.04	18.06	19.00
3GPP Rel 6	HSUPA Subtest-5	17.98	18.10	18.09	19.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	17.63	17.58	17.61	18.50
Attenuator			Cable Loss	0.8	
Mode			Max.	19.28	

Band 2 (1900MHz Band) (dBm)_ANT0							
Part 24E							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	18.56	18.59	18.55	19.5
20	QPSK	1	49	18.34	18.40	18.36	
20	QPSK	1	99	18.32	18.38	18.37	
20	QPSK	50	0	17.58	17.65	17.55	18.5
20	QPSK	50	24	17.55	17.61	17.57	
20	QPSK	50	50	17.50	17.57	17.55	
20	QPSK	100	0	17.52	17.55	17.50	18.5
20	16QAM	1	0	17.76	17.78	17.76	
20	16QAM	1	49	17.73	17.75	17.67	
20	16QAM	1	99	17.70	17.74	17.73	17.5
20	16QAM	50	0	16.42	16.46	16.39	
20	16QAM	50	24	16.44	16.45	16.38	
20	16QAM	50	50	16.43	16.44	16.37	17.5
20	16QAM	100	0	16.36	16.42	16.38	
20	64QAM	1	0	16.62	16.69	16.66	
20	64QAM	1	49	16.55	16.63	16.58	17.5
20	64QAM	1	99	16.59	16.62	16.57	
20	64QAM	50	0	16.49	16.50	16.42	
20	64QAM	50	24	16.47	16.48	16.46	17.5
20	64QAM	50	50	16.41	16.45	16.42	
20	64QAM	100	0	16.36	16.42	16.36	
20	256QAM	1	0	13.83	13.90	13.87	14.5
20	256QAM	1	49	13.76	13.84	13.79	
20	256QAM	1	99	13.80	13.83	13.78	
20	256QAM	50	0	13.70	13.71	13.63	14.5
20	256QAM	50	24	13.68	13.69	13.67	
20	256QAM	50	50	13.62	13.66	13.63	
20	256QAM	100	0	13.57	13.63	13.57	
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	18.38	18.44	18.37	19.5
15	QPSK	1	37	18.26	18.35	18.31	
15	QPSK	1	74	18.31	18.36	18.32	
15	QPSK	36	0	17.56	17.61	17.58	18.5
15	QPSK	36	20	17.47	17.54	17.56	
15	QPSK	36	39	17.48	17.55	17.54	
15	QPSK	75	0	17.50	17.47	17.43	18.5
15	16QAM	1	0	17.75	17.73	17.69	
15	16QAM	1	37	17.66	17.68	17.63	
15	16QAM	1	74	17.62	17.66	17.68	17.5
15	16QAM	36	0	16.36	16.39	16.38	
15	16QAM	36	20	16.39	16.44	16.32	
15	16QAM	36	39	16.41	16.38	16.29	17.5
15	16QAM	75	0	16.31	16.41	16.33	
15	64QAM	1	0	16.58	16.62	16.62	
15	64QAM	1	37	16.54	16.62	16.50	17.5
15	64QAM	1	74	16.57	16.60	16.56	
15	64QAM	36	0	16.47	16.45	16.37	
15	64QAM	36	20	16.45	16.44	16.40	17.5
15	64QAM	36	39	16.39	16.44	16.35	
15	64QAM	75	0	16.32	16.35	16.30	
15	256QAM	1	0	13.79	13.83	13.83	14.5
15	256QAM	1	37	13.75	13.83	13.71	
15	256QAM	1	74	13.78	13.81	13.77	
15	256QAM	36	0	13.68	13.66	13.58	14.5
15	256QAM	36	20	13.66	13.65	13.61	
15	256QAM	36	39	13.60	13.65	13.56	
15	256QAM	75	0	13.53	13.56	13.51	
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	18.37	18.48	18.40	19.5
10	QPSK	1	25	18.27	18.35	18.30	
10	QPSK	1	49	18.25	18.34	18.29	
10	QPSK	25	0	17.61	17.58	17.58	18.5
10	QPSK	25	12	17.54	17.56	17.53	
10	QPSK	25	25	17.48	17.49	17.51	
10	QPSK	50	0	17.45	17.54	17.46	18.5
10	16QAM	1	0	17.69	17.70	17.72	
10	16QAM	1	25	17.70	17.68	17.59	
10	16QAM	1	49	17.64	17.68	17.65	17.5
10	16QAM	25	0	16.39	16.43	16.33	
10	16QAM	25	12	16.40	16.39	16.33	
10	16QAM	25	25	16.40	16.43	16.33	17.5
10	16QAM	50	0	16.29	16.40	16.34	
10	64QAM	1	0	16.60	16.65	16.63	
10	64QAM	1	25	16.52	16.59	16.51	17.5
10	64QAM	1	49	16.56	16.61	16.53	
10	64QAM	25	0	16.48	16.49	16.35	
10	64QAM	25	12	16.43	16.40	16.43	17.5
10	64QAM	25	25	16.39	16.44	16.41	
10	64QAM	50	0	16.32	16.40	16.29	
10	256QAM	1	0	13.81	13.86	13.84	14.5
10	256QAM	1	25	13.73	13.80	13.72	
10	256QAM	1	49	13.77	13.82	13.74	
10	256QAM	25	0	13.69	13.70	13.56	14.5
10	256QAM	25	12	13.64	13.61	13.64	
10	256QAM	25	25	13.60	13.65	13.62	
10	256QAM	50	0	13.53	13.61	13.50	
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	18.35	18.42	18.39	19.5
5	QPSK	1	12	18.29	18.39	18.30	
5	QPSK	1	24	18.25	18.30	18.34	
5	QPSK	12	0	17.57	17.58	17.56	18.5
5	QPSK	12	7	17.48	17.53	17.49	
5	QPSK	12	13	17.46	17.55	17.51	
5	QPSK	25	0	17.50	17.48	17.45	18.5
5	16QAM	1	0	17.74	17.70	17.72	
5	16QAM	1	12	17.67	17.74	17.64	
5	16QAM	1	24	17.62	17.67	17.66	

Band 2 (1900MHz Band) (dBm)_ANT4							
Part 24E							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				18700	18900	19100	
Frequency (MHz)				1860	1880	1900	
20	QPSK	1	0	21.60	21.63	21.61	22.5
20	QPSK	1	49	21.57	21.60	21.52	
20	QPSK	1	99	21.48	21.49	21.44	
20	QPSK	50	0	20.62	20.69	20.68	21.5
20	QPSK	50	24	20.60	20.60	20.62	
20	QPSK	50	50	20.55	20.62	20.60	
20	QPSK	100	0	20.62	20.65	20.60	21.5
20	16QAM	1	0	20.81	20.83	20.81	
20	16QAM	1	49	20.78	20.80	20.72	
20	16QAM	1	99	20.75	20.79	20.78	20.5
20	16QAM	50	0	19.47	19.51	19.44	
20	16QAM	50	24	19.49	19.50	19.43	
20	16QAM	50	50	19.48	19.49	19.42	20.5
20	16QAM	100	0	19.41	19.47	19.43	
20	64QAM	1	0	19.67	19.74	19.71	
20	64QAM	1	49	19.60	19.68	19.63	20.5
20	64QAM	1	99	19.64	19.67	19.62	
20	64QAM	50	0	19.54	19.55	19.47	
20	64QAM	50	24	19.52	19.53	19.51	20.5
20	64QAM	50	50	19.46	19.50	19.47	
20	64QAM	100	0	19.41	19.47	19.41	
20	256QAM	1	0	16.88	16.95	16.92	17.5
20	256QAM	1	49	16.81	16.89	16.84	
20	256QAM	1	99	16.85	16.88	16.83	
20	256QAM	50	0	16.75	16.76	16.68	17.5
20	256QAM	50	24	16.73	16.74	16.72	
20	256QAM	50	50	16.67	16.71	16.68	
20	256QAM	100	0	16.62	16.68	16.62	
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	21.50	21.56	21.49	22.5
15	QPSK	1	37	21.38	21.47	21.43	
15	QPSK	1	74	21.43	21.48	21.44	
15	QPSK	36	0	20.68	20.73	20.70	21.5
15	QPSK	36	20	20.59	20.66	20.68	
15	QPSK	36	39	20.60	20.67	20.66	
15	QPSK	75	0	20.62	20.59	20.55	21.5
15	16QAM	1	0	20.87	20.85	20.81	
15	16QAM	1	37	20.78	20.80	20.75	
15	16QAM	1	74	20.74	20.78	20.80	20.5
15	16QAM	36	0	19.48	19.51	19.50	
15	16QAM	36	20	19.44	19.49	19.37	
15	16QAM	36	39	19.46	19.43	19.34	20.5
15	16QAM	75	0	19.36	19.46	19.38	
15	64QAM	1	0	19.63	19.67	19.67	
15	64QAM	1	37	19.59	19.67	19.55	20.5
15	64QAM	1	74	19.62	19.65	19.61	
15	64QAM	36	0	19.52	19.50	19.42	
15	64QAM	36	20	19.50	19.49	19.45	20.5
15	64QAM	36	39	19.44	19.49	19.40	
15	64QAM	75	0	19.37	19.40	19.35	
15	256QAM	1	0	16.84	16.88	16.88	17.5
15	256QAM	1	37	16.80	16.88	16.76	
15	256QAM	1	74	16.83	16.86		

5	16QAM	12	0	16.35	16.42	16.32	17.5
5	16QAM	12	7	16.42	16.44	16.33	
5	16QAM	12	13	16.39	16.38	16.36	
5	16QAM	25	0	16.31	16.41	16.35	17.5
5	64QAM	1	0	16.57	16.67	16.64	
5	64QAM	1	12	16.54	16.58	16.54	
5	64QAM	1	24	16.57	16.61	16.52	17.5
5	64QAM	12	0	16.47	16.48	16.41	
5	64QAM	12	7	16.44	16.40	16.41	
5	64QAM	12	13	16.35	16.38	16.34	14.5
5	64QAM	25	0	16.33	16.35	16.31	
5	256QAM	1	0	13.78	13.88	13.85	
5	256QAM	1	12	13.75	13.79	13.75	14.5
5	256QAM	1	24	13.78	13.82	13.73	
5	256QAM	12	0	13.68	13.69	13.62	
5	256QAM	12	7	13.65	13.61	13.62	14.5
5	256QAM	12	13	13.56	13.59	13.55	
5	256QAM	25	0	13.54	13.56	13.52	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	18.37	18.43	18.38	19.5
3	QPSK	1	8	18.30	18.32	18.34	
3	QPSK	1	14	18.30	18.35	18.32	
3	QPSK	8	0	17.58	17.61	17.59	18.5
3	QPSK	8	4	17.48	17.59	17.50	
3	QPSK	8	7	17.49	17.53	17.52	
3	QPSK	15	0	17.44	17.51	17.43	18.5
3	16QAM	1	0	17.75	17.73	17.75	
3	16QAM	1	8	17.72	17.73	17.66	
3	16QAM	1	14	17.63	17.67	17.65	17.5
3	16QAM	8	0	16.41	16.42	16.35	
3	16QAM	8	4	16.37	16.42	16.35	
3	16QAM	8	7	16.38	16.38	16.36	17.5
3	16QAM	15	0	16.31	16.40	16.36	
3	64QAM	1	0	16.57	16.61	16.61	
3	64QAM	1	8	16.48	16.58	16.53	17.5
3	64QAM	1	14	16.52	16.60	16.52	
3	64QAM	8	0	16.43	16.49	16.34	
3	64QAM	8	4	16.44	16.44	16.44	17.5
3	64QAM	8	7	16.40	16.44	16.41	
3	64QAM	15	0	16.34	16.41	16.33	
3	256QAM	1	0	13.78	13.82	13.82	14.5
3	256QAM	1	8	13.69	13.79	13.74	
3	256QAM	1	14	13.73	13.81	13.73	
3	256QAM	8	0	13.64	13.70	13.55	14.5
3	256QAM	8	4	13.65	13.65	13.65	
3	256QAM	8	7	13.61	13.65	13.62	
3	256QAM	15	0	13.55	13.62	13.54	14.5
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	18.33	18.48	18.40	19.5
1.4	QPSK	1	3	18.27	18.34	18.33	
1.4	QPSK	1	5	18.24	18.35	18.33	
1.4	QPSK	3	0	18.30	18.39	18.36	18.5
1.4	QPSK	3	1	18.42	18.45	18.35	
1.4	QPSK	3	3	18.36	18.40	18.37	
1.4	QPSK	6	0	17.44	17.54	17.46	18.5
1.4	16QAM	1	0	17.72	17.71	17.68	
1.4	16QAM	1	3	17.72	17.69	17.65	
1.4	16QAM	1	5	17.63	17.72	17.72	17.5
1.4	16QAM	3	0	17.52	17.57	17.49	
1.4	16QAM	3	1	17.50	17.54	17.46	
1.4	16QAM	3	3	17.51	17.55	17.44	17.5
1.4	16QAM	6	0	16.54	16.51	16.44	
1.4	64QAM	1	0	16.60	16.65	16.64	
1.4	64QAM	1	3	16.52	16.56	16.53	17.5
1.4	64QAM	1	5	16.52	16.56	16.53	
1.4	64QAM	3	0	16.61	16.55	16.48	
1.4	64QAM	3	1	16.58	16.56	16.53	17.5
1.4	64QAM	3	3	16.51	16.52	16.50	
1.4	64QAM	6	0	16.31	16.37	16.29	
1.4	256QAM	1	0	13.81	13.86	13.85	14.5
1.4	256QAM	1	3	13.73	13.77	13.74	
1.4	256QAM	1	5	13.73	13.77	13.74	
1.4	256QAM	3	0	13.82	13.76	13.69	14.5
1.4	256QAM	3	1	13.79	13.77	13.74	
1.4	256QAM	3	3	13.72	13.73	13.71	
1.4	256QAM	6	0	13.52	13.58	13.50	14.5

5	16QAM	12	0	19.47	19.54	19.44	20.5
5	16QAM	12	7	19.54	19.56	19.45	
5	16QAM	12	13	19.51	19.50	19.48	
5	16QAM	25	0	19.43	19.53	19.47	20.5
5	64QAM	1	0	19.69	19.79	19.76	
5	64QAM	1	12	19.59	19.63	19.59	
5	64QAM	1	24	19.62	19.66	19.57	20.5
5	64QAM	12	0	19.52	19.53	19.46	
5	64QAM	12	7	19.49	19.45	19.46	
5	64QAM	12	13	19.40	19.43	19.39	17.5
5	64QAM	25	0	19.38	19.40	19.36	
5	256QAM	1	0	16.83	16.93	16.90	
5	256QAM	1	12	16.80	16.84	16.80	17.5
5	256QAM	1	24	16.83	16.87	16.78	
5	256QAM	12	0	16.73	16.74	16.67	
5	256QAM	12	7	16.70	16.66	16.67	17.5
5	256QAM	12	13	16.61	16.64	16.60	
5	256QAM	25	0	16.59	16.61	16.57	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	21.49	21.55	21.50	22.5
3	QPSK	1	8	21.42	21.44	21.46	
3	QPSK	1	14	21.42	21.47	21.44	
3	QPSK	8	0	20.70	20.73	20.71	21.5
3	QPSK	8	4	20.60	20.71	20.62	
3	QPSK	8	7	20.61	20.65	20.64	
3	QPSK	15	0	20.56	20.63	20.55	21.5
3	16QAM	1	0	20.87	20.85	20.87	
3	16QAM	1	8	20.84	20.85	20.78	
3	16QAM	1	14	20.75	20.79	20.77	20.5
3	16QAM	8	0	19.53	19.54	19.47	
3	16QAM	8	4	19.49	19.54	19.47	
3	16QAM	8	7	19.50	19.50	19.48	20.5
3	16QAM	15	0	19.43	19.52	19.48	
3	64QAM	1	0	19.62	19.66	19.66	
3	64QAM	1	8	19.53	19.63	19.58	20.5
3	64QAM	1	14	19.57	19.65	19.57	
3	64QAM	8	0	19.48	19.54	19.39	
3	64QAM	8	4	19.49	19.49	19.49	20.5
3	64QAM	8	7	19.45	19.49	19.46	
3	64QAM	15	0	19.39	19.46	19.38	
3	256QAM	1	0	16.83	16.87	16.87	17.5
3	256QAM	1	8	16.74	16.84	16.79	
3	256QAM	1	14	16.78	16.86	16.78	
3	256QAM	8	0	16.69	16.75	16.60	17.5
3	256QAM	8	4	16.70	16.70	16.70	
3	256QAM	8	7	16.66	16.70	16.67	
3	256QAM	15	0	16.60	16.67	16.59	17.5
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	21.45	21.60	21.52	22.5
1.4	QPSK	1	3	21.39	21.46	21.45	
1.4	QPSK	1	5	21.36	21.47	21.45	
1.4	QPSK	3	0	21.42	21.51	21.48	21.5
1.4	QPSK	3	1	21.54	21.57	21.47	
1.4	QPSK	3	3	21.48	21.52	21.49	
1.4	QPSK	6	0	20.56	20.66	20.58	21.5
1.4	16QAM	1	0	20.84	20.83	20.80	
1.4	16QAM	1	3	20.84	20.81	20.77	
1.4	16QAM	1	5	20.75	20.84	20.84	21.5
1.4	16QAM	3	0	20.64	20.69	20.61	
1.4	16QAM	3	1	20.62	20.66	20.58	
1.4	16QAM	3	3	20.63	20.67	20.56	20.5
1.4	16QAM	6	0	19.66	19.63	19.56	
1.4	64QAM	1	0	19.72	19.77	19.76	
1.4	64QAM	1	3	19.64	19.68	19.65	20.5
1.4	64QAM	1	5	19.64	19.68	19.65	
1.4	64QAM	3	0	19.73	19.67	19.60	
1.4	64QAM	3	1	19.63	19.61	19.58	20.5
1.4	64QAM	3	3	19.56	19.57	19.55	
1.4	64QAM	6	0	19.36	19.42	19.34	
1.4	256QAM	1	0	16.86	16.91	16.90	17.5
1.4	256QAM	1	3	16.78	16.82	16.79	
1.4	256QAM	1	5	16.78	16.82	16.79	
1.4	256QAM	3	0	16.87	16.81	16.74	17.5
1.4	256QAM	3	1	16.84	16.82	16.79	
1.4	256QAM	3	3	16.77	16.78	16.76	
1.4	256QAM	6	0	16.57	16.63	16.55	17.5

Band 4 (AWS Band) (dBm)_ANT0 Part 27L (only on channel required)							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	16.51	16.60	16.64	
20	QPSK	1	49	16.45	16.47	16.40	
20	QPSK	1	99	16.37	16.44	16.41	
20	QPSK	50	0	15.51	15.63	15.52	
20	QPSK	50	24	15.55	15.49	15.47	
20	QPSK	50	50	15.52	15.55	15.48	
20	QPSK	100	0	15.55	15.56	15.45	16.5
20	16QAM	1	0	15.62	15.73	15.56	
20	16QAM	1	49	15.70	15.79	15.74	
20	16QAM	1	99	15.80	15.57	15.84	16.5
20	16QAM	50	0	14.63	14.58	14.62	
20	16QAM	50	24	14.72	14.57	14.56	
20	16QAM	50	50	14.59	14.62	14.64	15.5
20	16QAM	100	0	14.57	14.59	14.55	
20	64QAM	1	0	14.67	14.81	14.76	
20	64QAM	1	49	14.70	14.74	14.64	15.5
20	64QAM	1	99	14.80	14.68	14.50	
20	64QAM	50	0	14.65	14.54	14.54	
20	64QAM	50	24	14.48	14.49	14.56	15.5
20	64QAM	50	50	14.61	14.54	14.59	
20	64QAM	100	0	14.53	14.56	14.55	
20	256QAM	1	0	11.52	11.66	11.61	12.5
20	256QAM	1	49	11.55	11.59	11.49	
20	256QAM	1	99	11.65	11.53	11.35	
20	256QAM	50	0	11.50	11.39	11.39	12.5
20	256QAM	50	24	11.33	11.34	11.41	
20	256QAM	50	50	11.46	11.39	11.44	
20	256QAM	100	0	11.38	11.41	11.40	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	16.38	16.43	16.34	
15	QPSK	1	37	16.42	16.43	16.37	
15	QPSK	1	74	16.28	16.43	16.40	
15	QPSK	36	0	15.47	15.53	15.42	
15	QPSK	36	20	15.61	15.42	15.43	
15	QPSK	36	39	15.51	15.48	15.39	
15	QPSK	75	0	15.50	15.48	15.35	16.5
15	16QAM	1	0	15.78	15.67	15.50	
15	16QAM	1	37	15.77	15.89	15.69	
15	16QAM	1	74	15.82	15.97	15.83	16.5
15	16QAM	36	0	14.62	14.49	14.56	
15	16QAM	36	20	14.68	14.48	14.48	
15	16QAM	36	39	14.55	14.60	14.62	15.5
15	16QAM	75	0	14.47	14.55	14.54	
15	64QAM	1	0	14.64	14.80	14.71	
15	64QAM	1	37	14.64	14.64	14.59	15.5
15	64QAM	1	74	14.78	14.63	14.44	
15	64QAM	36	0	14.62	14.44	14.47	
15	64QAM	36	20	14.39	14.46	14.49	15.5
15	64QAM	36	39	14.57	14.52	14.51	
15	64QAM	75	0	14.47	14.53	14.54	
15	256QAM	1	0	11.49	11.65	11.56	12.5
15	256QAM	1	37	11.49	11.49	11.44	
15	256QAM	1	74	11.63	11.48	11.29	
15	256QAM	36	0	11.47	11.29	11.32	12.5
15	256QAM	36	20	11.24	11.31	11.34	
15	256QAM	36	39	11.42	11.37	11.36	
15	256QAM	75	0	11.32	11.38	11.39	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	16.45	16.46	16.39	
10	QPSK	1	25	16.38	16.42	16.34	
10	QPSK	1	49	16.29	16.43	16.33	
10	QPSK	25	0	15.45	15.62	15.47	
10	QPSK	25	12	15.53	15.40	15.46	
10	QPSK	25	25	15.43	15.53	15.41	
10	QPSK	50	0	15.46	15.52	15.39	16.5
10	16QAM	1	0	15.76	15.68	15.49	
10	16QAM	1	25	15.76	15.93	15.73	
10	16QAM	1	49	15.78	15.98	15.79	16.5
10	16QAM	25	0	14.55	14.54	14.57	
10	16QAM	25	12	14.64	14.50	14.52	
10	16QAM	25	25	14.58	14.53	14.60	15.5
10	16QAM	50	0	14.56	14.53	14.46	
10	64QAM	1	0	14.57	14.72	14.74	
10	64QAM	1	25	14.68	14.73	14.62	15.5
10	64QAM	1	49	14.75	14.61	14.40	
10	64QAM	25	0	14.64	14.44	14.45	
10	64QAM	25	12	14.40	14.46	14.50	15.5
10	64QAM	25	25	14.57	14.52	14.53	
10	64QAM	50	0	14.46	14.47	14.53	
10	256QAM	1	0	11.42	11.57	11.59	12.5
10	256QAM	1	25	11.53	11.58	11.47	
10	256QAM	1	49	11.60	11.46	11.25	
10	256QAM	25	0	11.49	11.29	11.30	12.5
10	256QAM	25	12	11.25	11.31	11.35	
10	256QAM	25	25	11.42	11.37	11.38	
10	256QAM	50	0	11.31	11.32	11.38	
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	16.44	16.44	16.35	
5	QPSK	1	12	16.35	16.37	16.39	
5	QPSK	1	24	16.36	16.42	16.32	
5	QPSK	12	0	15.42	15.58	15.46	
5	QPSK	12	7	15.56	15.44	15.38	
5	QPSK	12	13	15.49	15.49	15.38	
5	QPSK	25	0	15.53	15.52	15.37	16.5
5	16QAM	1	0	15.72	15.71	15.52	
5	16QAM	1	12	15.75	15.91	15.72	
5	16QAM	1	24	15.80	15.91	15.76	

Band 4 (AWS Band) (dBm)_ANT4 Part 27L (only on channel required)							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20050	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	21.63	21.67	21.64	
20	QPSK	1	49	21.59	21.59	21.62	
20	QPSK	1	99	21.57	21.58	21.59	
20	QPSK	50	0	20.66	20.70	20.62	
20	QPSK	50	24	20.62	20.56	20.55	
20	QPSK	50	50	20.64	20.67	20.60	
20	QPSK	100	0	20.67	20.68	20.57	21.5
20	16QAM	1	0	20.94	20.85	20.68	
20	16QAM	1	49	20.82	20.91	20.86	
20	16QAM	1	99	20.92	20.69	20.96	21.5
20	16QAM	50	0	19.75	19.70	19.74	
20	16QAM	50	24	19.84	19.69	19.68	
20	16QAM	50	50	19.71	19.74	19.76	20.5
20	16QAM	100	0	19.69	19.71	19.67	
20	64QAM	1	0	19.79	19.93	19.88	
20	64QAM	1	49	19.77	19.81	19.71	20.5
20	64QAM	1	99	19.87	19.75	19.57	
20	64QAM	50	0	19.72	19.61	19.61	
20	64QAM	50	24	19.55	19.56	19.63	20.5
20	64QAM	50	50	19.68	19.61	19.66	
20	64QAM	100	0	19.60	19.63	19.62	
20	256QAM	1	0	16.59	16.73	16.68	17.5
20	256QAM	1	49	16.62	16.66	16.56	
20	256QAM	1	99	16.72	16.60	16.42	
20	256QAM	50	0	16.57	16.46	16.46	17.5
20	256QAM	50	24	16.40	16.41	16.48	
20	256QAM	50	50	16.53	16.46	16.51	
20	256QAM	100	0	16.45	16.48	16.47	
Channel				20025	20175	20325	
Frequency (MHz)				1717.5	1732.5	1747.5	
15	QPSK	1	0	21.50	21.55	21.46	
15	QPSK	1	37	21.54	21.55	21.49	
15	QPSK	1	74	21.40	21.55	21.52	
15	QPSK	36	0	20.59	20.65	20.54	
15	QPSK	36	20	20.73	20.54	20.55	
15	QPSK	36	39	20.63	20.60	20.51	
15	QPSK	75	0	20.52	20.50	20.37	21.5
15	16QAM	1	0	20.80	20.69	20.52	
15	16QAM	1	37	20.79	20.91	20.71	
15	16QAM	1	74	20.91	21.06	20.92	21.5
15	16QAM	36	0	19.71	19.58	19.65	
15	16QAM	36	20	19.77	19.57	19.57	
15	16QAM	36	39	19.64	19.69	19.71	20.5
15	16QAM	75	0	19.59	19.67	19.66	
15	64QAM	1	0	19.76	19.92	19.83	
15	64QAM	1	37	19.76	19.76	19.71	20.5
15	64QAM	1	74	19.85	19.70	19.51	
15	64QAM	36	0	19.69	19.51	19.54	
15	64QAM	36	20	19.46	19.53	19.56	20.5
15	64QAM	36	39	19.64	19.59	19.58	
15	64QAM	75	0	19.54	19.60	19.61	
15	256QAM	1	0	16.56	16.72	16.63	17.5
15	256QAM	1	37	16.56	16.56	16.51	
15	256QAM	1	74				

5	16QAM	12	0	14.61	14.51	14.58	15.5
5	16QAM	12	7	14.62	14.52	14.48	
5	16QAM	12	13	14.54	14.54	14.60	
5	16QAM	25	0	14.48	14.50	14.46	15.5
5	64QAM	1	0	14.58	14.78	14.70	
5	64QAM	1	12	14.61	14.69	14.59	
5	64QAM	1	24	14.77	14.65	14.46	15.5
5	64QAM	12	0	14.63	14.53	14.51	
5	64QAM	12	7	14.45	14.42	14.50	
5	64QAM	12	13	14.57	14.45	14.58	12.5
5	64QAM	25	0	14.52	14.53	14.46	
5	256QAM	1	0	11.43	11.63	11.55	
5	256QAM	1	12	11.46	11.54	11.44	12.5
5	256QAM	1	24	11.62	11.50	11.31	
5	256QAM	12	0	11.48	11.38	11.36	
5	256QAM	12	7	11.30	11.27	11.35	12.5
5	256QAM	12	13	11.42	11.30	11.43	
5	256QAM	25	0	11.37	11.38	11.31	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	16.35	16.45	16.31	17.5
3	QPSK	1	8	16.39	16.44	16.35	
3	QPSK	1	14	16.31	16.34	16.32	
3	QPSK	8	0	15.44	15.56	15.48	16.5
3	QPSK	8	4	15.52	15.46	15.45	
3	QPSK	8	7	15.48	15.47	15.45	
3	QPSK	15	0	15.45	15.47	15.39	16.5
3	16QAM	1	0	15.72	15.72	15.49	
3	16QAM	1	8	15.76	15.90	15.72	
3	16QAM	1	14	15.82	15.93	15.81	15.5
3	16QAM	8	0	14.56	14.49	14.55	
3	16QAM	8	4	14.69	14.49	14.50	
3	16QAM	8	7	14.49	14.55	14.61	15.5
3	16QAM	15	0	14.48	14.51	14.52	
3	64QAM	1	0	14.66	14.74	14.74	
3	64QAM	1	8	14.66	14.68	14.55	15.5
3	64QAM	1	14	14.78	14.63	14.40	
3	64QAM	8	0	14.59	14.44	14.44	
3	64QAM	8	4	14.43	14.42	14.46	15.5
3	64QAM	8	7	14.52	14.46	14.55	
3	64QAM	15	0	14.46	14.48	14.52	
3	256QAM	1	0	11.51	11.59	11.59	12.5
3	256QAM	1	8	11.51	11.53	11.40	
3	256QAM	1	14	11.63	11.48	11.25	
3	256QAM	8	0	11.44	11.29	11.29	12.5
3	256QAM	8	4	11.28	11.27	11.31	
3	256QAM	8	7	11.37	11.31	11.40	
3	256QAM	15	0	11.31	11.33	11.37	Tune-up limit (dBm)
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	16.35	16.43	16.32	17.5
1.4	QPSK	1	3	16.35	16.38	16.31	
1.4	QPSK	1	5	16.31	16.42	16.36	
1.4	QPSK	3	0	16.45	16.40	16.45	16.5
1.4	QPSK	3	1	16.44	16.44	16.42	
1.4	QPSK	3	3	16.42	16.46	16.46	
1.4	QPSK	6	0	15.46	15.46	15.35	16.5
1.4	16QAM	1	0	15.73	15.70	15.47	
1.4	16QAM	1	3	15.82	15.90	15.73	
1.4	16QAM	1	5	15.77	15.93	15.83	15.5
1.4	16QAM	3	0	15.55	15.55	15.58	
1.4	16QAM	3	1	15.70	15.49	15.46	
1.4	16QAM	3	3	15.52	15.59	15.54	15.5
1.4	16QAM	6	0	14.50	14.49	14.46	
1.4	64QAM	1	0	14.57	14.72	14.75	
1.4	64QAM	1	3	14.67	14.69	14.61	15.5
1.4	64QAM	1	5	14.73	14.67	14.45	
1.4	64QAM	3	0	14.57	14.50	14.53	
1.4	64QAM	3	1	14.44	14.48	14.54	15.5
1.4	64QAM	3	3	14.54	14.47	14.54	
1.4	64QAM	6	0	14.44	14.46	14.47	
1.4	256QAM	1	0	11.42	11.57	11.60	12.5
1.4	256QAM	1	3	11.52	11.54	11.46	
1.4	256QAM	1	5	11.58	11.52	11.30	
1.4	256QAM	3	0	11.42	11.35	11.38	12.5
1.4	256QAM	3	1	11.29	11.33	11.39	
1.4	256QAM	3	3	11.39	11.32	11.39	
1.4	256QAM	6	0	11.29	11.31	11.32	12.5

5	16QAM	12	0	19.81	19.71	19.78	20.5
5	16QAM	12	7	19.82	19.72	19.68	
5	16QAM	12	13	19.64	19.64	19.70	
5	16QAM	25	0	19.58	19.60	19.56	20.5
5	64QAM	1	0	19.68	19.88	19.80	
5	64QAM	1	12	19.71	19.79	19.69	
5	64QAM	1	24	19.87	19.75	19.56	20.5
5	64QAM	12	0	19.73	19.63	19.61	
5	64QAM	12	7	19.55	19.52	19.60	
5	64QAM	12	13	19.67	19.55	19.68	17.5
5	64QAM	25	0	19.62	19.63	19.56	
5	256QAM	1	0	16.53	16.73	16.65	
5	256QAM	1	12	16.56	16.64	16.54	17.5
5	256QAM	1	24	16.72	16.60	16.41	
5	256QAM	12	0	16.58	16.48	16.46	
5	256QAM	12	7	16.40	16.37	16.45	17.5
5	256QAM	12	13	16.52	16.40	16.53	
5	256QAM	25	0	16.47	16.48	16.41	
Channel				19965	20175	20385	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1732.5	1753.5	
3	QPSK	1	0	21.42	21.52	21.38	22.5
3	QPSK	1	8	21.46	21.51	21.42	
3	QPSK	1	14	21.38	21.41	21.39	
3	QPSK	8	0	20.51	20.63	20.55	21.5
3	QPSK	8	4	20.62	20.56	20.55	
3	QPSK	8	7	20.58	20.57	20.55	
3	QPSK	15	0	20.55	20.57	20.49	21.5
3	16QAM	1	0	20.82	20.82	20.59	
3	16QAM	1	8	20.86	21.00	20.82	
3	16QAM	1	14	20.92	21.03	20.91	20.5
3	16QAM	8	0	19.66	19.59	19.65	
3	16QAM	8	4	19.79	19.59	19.60	
3	16QAM	8	7	19.59	19.65	19.71	20.5
3	16QAM	15	0	19.58	19.61	19.62	
3	64QAM	1	0	19.76	19.84	19.84	
3	64QAM	1	8	19.76	19.78	19.65	20.5
3	64QAM	1	14	19.88	19.73	19.50	
3	64QAM	8	0	19.69	19.54	19.54	
3	64QAM	8	4	19.53	19.52	19.56	20.5
3	64QAM	8	7	19.62	19.56	19.65	
3	64QAM	15	0	19.56	19.58	19.62	
3	256QAM	1	0	16.61	16.69	16.69	17.5
3	256QAM	1	8	16.61	16.63	16.50	
3	256QAM	1	14	16.73	16.58	16.35	
3	256QAM	8	0	16.54	16.39	16.39	17.5
3	256QAM	8	4	16.38	16.37	16.41	
3	256QAM	8	7	16.44	16.38	16.47	
3	256QAM	15	0	16.38	16.40	16.44	Tune-up limit (dBm)
Channel				19957	20175	20393	
Frequency (MHz)				1710.7	1732.5	1754.3	
1.4	QPSK	1	0	21.45	21.53	21.42	22.5
1.4	QPSK	1	3	21.45	21.48	21.41	
1.4	QPSK	1	5	21.41	21.52	21.46	
1.4	QPSK	3	0	21.62	21.57	21.62	21.5
1.4	QPSK	3	1	21.61	21.61	21.59	
1.4	QPSK	3	3	21.59	21.63	21.63	
1.4	QPSK	6	0	20.63	20.63	20.52	21.5
1.4	16QAM	1	0	20.90	20.87	20.64	
1.4	16QAM	1	3	20.99	21.07	20.90	
1.4	16QAM	1	5	20.94	21.10	21.00	21.5
1.4	16QAM	3	0	20.72	20.72	20.75	
1.4	16QAM	3	1	20.87	20.66	20.63	
1.4	16QAM	3	3	20.69	20.76	20.71	20.5
1.4	16QAM	6	0	19.67	19.66	19.63	
1.4	64QAM	1	0	19.74	19.89	19.92	
1.4	64QAM	1	3	19.84	19.86	19.78	20.5
1.4	64QAM	1	5	19.90	19.84	19.62	
1.4	64QAM	3	0	19.74	19.67	19.70	
1.4	64QAM	3	1	19.61	19.65	19.71	20.5
1.4	64QAM	3	3	19.71	19.64	19.71	
1.4	64QAM	6	0	19.61	19.63	19.64	
1.4	256QAM	1	0	16.59	16.74	16.77	17.5
1.4	256QAM	1	3	16.62	16.64	16.56	
1.4	256QAM	1	5	16.65	16.59	16.37	
1.4	256QAM	3	0	16.49	16.42	16.45	17.5
1.4	256QAM	3	1	16.36	16.40	16.46	
1.4	256QAM	3	3	16.46	16.39	16.46	
1.4	256QAM	6	0	16.36	16.38	16.39	17.5

Band 7 (2600MHz Band) (dBm)_ANT0							
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	20.98	21.06	21.03	22
20	QPSK	1	49	20.85	20.92	20.97	
20	QPSK	1	99	20.96	20.97	20.98	
20	QPSK	50	0	20.06	20.19	20.18	21
20	QPSK	50	24	20.13	20.18	20.17	
20	QPSK	50	50	20.16	20.15	20.17	
20	QPSK	100	0	20.21	20.22	20.14	21
20	16QAM	1	0	20.07	20.01	20.06	
20	16QAM	1	49	20.14	20.13	20.05	
20	16QAM	1	99	20.15	20.20	20.16	20
20	16QAM	50	0	19.05	19.20	19.26	
20	16QAM	50	24	19.09	19.14	19.06	
20	16QAM	50	50	19.08	19.19	19.04	20
20	16QAM	100	0	19.07	19.12	19.17	
20	64QAM	1	0	19.10	19.14	19.18	
20	64QAM	1	49	19.14	19.20	18.95	20
20	64QAM	1	99	19.09	18.96	18.86	
20	64QAM	50	0	19.06	19.10	19.14	
20	64QAM	50	24	19.06	19.19	18.98	20
20	64QAM	50	50	19.03	19.18	19.12	
20	64QAM	100	0	19.11	19.10	19.00	
20	256QAM	1	0	16.14	16.18	16.22	17
20	256QAM	1	49	16.18	16.24	15.99	
20	256QAM	1	99	16.13	16.00	15.90	
20	256QAM	50	0	16.10	16.14	16.18	17
20	256QAM	50	24	16.10	16.23	16.02	
20	256QAM	50	50	16.07	16.22	16.16	
20	256QAM	100	0	16.15	16.14	16.04	
Channel				20825	21100	21375	
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	20.87	20.97	20.91	22
15	QPSK	1	37	20.77	20.84	20.89	
15	QPSK	1	74	20.89	20.94	20.96	
15	QPSK	36	0	20.03	20.18	20.10	21
15	QPSK	36	20	20.03	20.16	20.11	
15	QPSK	36	39	20.10	20.14	20.15	
15	QPSK	75	0	20.13	20.10	20.05	21
15	16QAM	1	0	20.03	20.00	19.98	
15	16QAM	1	37	20.09	20.04	20.04	
15	16QAM	1	74	20.12	20.19	20.06	20
15	16QAM	36	0	18.98	19.18	19.25	
15	16QAM	36	20	19.06	19.05	19.01	
15	16QAM	36	39	19.04	19.18	18.97	20
15	16QAM	75	0	19.05	19.11	19.16	
15	64QAM	1	0	19.06	19.04	19.16	
15	64QAM	1	37	19.05	19.15	18.91	20
15	64QAM	1	74	19.01	18.91	18.84	
15	64QAM	36	0	18.96	19.02	19.05	
15	64QAM	36	20	19.01	19.15	18.95	20
15	64QAM	36	39	18.93	19.14	19.11	
15	64QAM	75	0	19.10	19.02	18.98	
15	256QAM	1	0	16.10	16.08	16.20	17
15	256QAM	1	37	16.09	16.19	15.95	
15	256QAM	1	74	16.05	15.95	15.88	
15	256QAM	36	0	16.00	16.06	16.09	17
15	256QAM	36	20	16.05	16.19	15.99	
15	256QAM	36	39	15.97	16.18	16.15	
15	256QAM	75	0	16.14	16.06	16.02	
Channel				20800	21100	21400	
Frequency (MHz)				2505	2535	2565	
10	QPSK	1	0	20.81	20.94	20.92	22
10	QPSK	1	25	20.81	20.90	20.87	
10	QPSK	1	49	20.88	20.88	20.91	
10	QPSK	25	0	19.98	20.17	20.08	21
10	QPSK	25	12	20.08	20.14	20.12	
10	QPSK	25	25	20.11	20.05	20.16	
10	QPSK	50	0	20.20	20.17	20.12	21
10	16QAM	1	0	19.99	19.97	19.98	
10	16QAM	1	25	20.10	20.11	19.95	
10	16QAM	1	49	20.09	20.11	20.14	20
10	16QAM	25	0	19.03	19.11	19.24	
10	16QAM	25	12	19.06	19.11	18.96	
10	16QAM	25	25	19.05	19.11	18.98	20
10	16QAM	50	0	19.02	19.11	19.16	
10	64QAM	1	0	19.09	19.12	19.17	
10	64QAM	1	25	19.05	19.15	18.92	20
10	64QAM	1	49	19.05	18.86	18.78	
10	64QAM	25	0	18.97	19.04	19.09	
10	64QAM	25	12	19.02	19.18	18.96	20
10	64QAM	25	25	19.00	19.08	19.06	
10	64QAM	50	0	19.04	19.09	18.92	
10	256QAM	1	0	16.13	16.16	16.21	17
10	256QAM	1	25	16.09	16.19	15.96	
10	256QAM	1	49	16.09	15.90	15.82	
10	256QAM	25	0	16.01	16.08	16.13	17
10	256QAM	25	12	16.06	16.22	16.00	
10	256QAM	25	25	16.04	16.12	16.10	
10	256QAM	50	0	16.08	16.13	15.96	
Channel				20775	21100	21425	
Frequency (MHz)				2502.5	2535	2567.5	
5	QPSK	1	0	20.87	20.98	20.85	22
5	QPSK	1	12	20.82	20.86	20.94	
5	QPSK	1	24	20.90	20.93	20.92	
5	QPSK	12	0	20.03	20.15	20.11	21
5	QPSK	12	7	20.12	20.16	20.11	
5	QPSK	12	13	20.08	20.11	20.14	
5	QPSK	25	0	20.13	20.16	20.06	21
5	16QAM	1	0	20.06	19.92	19.99	
5	16QAM	1	12	20.11	20.08	19.99	
5	16QAM	1	24	20.07	20.18	20.12	

Band 12 (700MHz Low Band) (dBm)_ANT0							
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	22.42	22.47	22.35	23
10	QPSK	1	25	22.35	22.38	22.39	
10	QPSK	1	49	22.25	22.40	22.42	
10	QPSK	25	0	21.58	21.63	21.62	22
10	QPSK	25	12	21.60	21.51	21.58	
10	QPSK	25	25	21.60	21.55	21.52	
10	QPSK	50	0	21.54	21.63	21.59	22
10	16QAM	1	0	21.78	21.75	21.62	
10	16QAM	1	25	21.53	21.60	21.60	
10	16QAM	1	49	21.58	21.53	21.64	21
10	16QAM	25	0	20.56	20.58	20.69	
10	16QAM	25	12	20.54	20.59	20.56	
10	16QAM	25	25	20.66	20.63	20.65	21
10	16QAM	50	0	20.70	20.64	20.61	
10	64QAM	1	0	20.70	20.65	20.55	
10	64QAM	1	25	20.76	20.71	20.69	21
10	64QAM	1	49	20.82	20.84	20.78	
10	64QAM	25	0	20.54	20.74	20.58	
10	64QAM	25	12	20.61	20.67	20.69	21
10	64QAM	25	25	20.56	20.63	20.57	
10	64QAM	50	0	20.60	20.58	20.61	
10	256QAM	1	0	17.32	17.27	17.17	18
10	256QAM	1	25	17.38	17.33	17.31	
10	256QAM	1	49	17.44	17.46	17.40	
10	256QAM	25	0	17.16	17.36	17.20	18
10	256QAM	25	12	17.23	17.29	17.31	
10	256QAM	25	25	17.18	17.25	17.19	
10	256QAM	50	0	17.22	17.20	17.23	
Channel				23035	23095	23155	
Frequency (MHz)				701.5	707.5	713.5	
5	QPSK	1	0	22.22	22.37	22.25	23
5	QPSK	1	12	22.30	22.37	22.30	
5	QPSK	1	24	22.24	22.35	22.36	
5	QPSK	12	0	21.55	21.56	21.58	22
5	QPSK	12	7	21.51	21.46	21.55	
5	QPSK	12	13	21.52	21.47	21.51	
5	QPSK	25	0	21.53	21.50	21.55	22
5	16QAM	1	0	21.74	21.70	21.52	
5	16QAM	1	12	21.43	21.58	21.58	
5	16QAM	1	24	21.53	21.52	21.57	21
5	16QAM	12	0	20.47	20.56	20.61	
5	16QAM	12	7	20.53	20.51	20.48	
5	16QAM	12	13	20.58	20.55	20.59	21
5	16QAM	25	0	20.68	20.54	20.59	
5	64QAM	1	0	20.68	20.57	20.51	
5	64QAM	1	12	20.68	20.64	20.67	21
5	64QAM	1	24	20.78	20.80	20.68	
5	64QAM	12	0	20.50	20.69	20.55	
5	64QAM	12	7	20.54	20.64	20.62	21
5	64QAM	12	13	20.52	20.58	20.48	
5	64QAM	25	0	20.59	20.55	20.60	
5	256QAM	1	0	17.30	17.19	17.13	18
5	256QAM	1	12	17.30	17.26	17.29	
5	256QAM	1	24	17.40	17.42	17.30	
5	256QAM	12	0	17.12	17.31	17.17	18
5	256QAM</						



5	16QAM	12	0	19.03	19.10	19.18	20
5	16QAM	12	7	19.01	19.10	19.00	
5	16QAM	12	13	19.00	19.10	18.97	
5	16QAM	25	0	18.98	19.02	19.11	20
5	64QAM	1	0	19.02	19.09	19.11	
5	64QAM	1	12	19.09	19.18	18.86	
5	64QAM	1	24	19.05	18.94	18.78	20
5	64QAM	12	0	19.02	19.02	19.08	
5	64QAM	12	7	18.96	19.13	18.88	
5	64QAM	12	13	19.02	19.13	19.02	17
5	64QAM	25	0	19.01	19.05	18.92	
5	256QAM	1	0	16.06	16.13	16.15	
5	256QAM	1	12	16.13	16.22	15.90	17
5	256QAM	1	24	16.09	15.98	15.82	
5	256QAM	12	0	16.06	16.06	16.12	
5	256QAM	12	7	16.00	16.17	15.92	17
5	256QAM	12	13	16.06	16.17	16.06	
5	256QAM	25	0	16.05	16.09	15.96	

1.4	16QAM	3	0	21.47	21.57	21.61	21
1.4	16QAM	3	1	21.48	21.50	21.47	
1.4	16QAM	3	3	21.63	21.58	21.61	
1.4	16QAM	6	0	20.64	20.55	20.57	21
1.4	64QAM	1	0	20.68	20.57	20.47	
1.4	64QAM	1	3	20.68	20.63	20.65	
1.4	64QAM	1	5	20.81	20.79	20.72	21
1.4	64QAM	3	0	20.52	20.67	20.57	
1.4	64QAM	3	1	20.52	20.60	20.68	
1.4	64QAM	3	3	20.51	20.59	20.47	21
1.4	64QAM	6	0	20.58	20.48	20.60	
1.4	256QAM	1	0	17.30	17.19	17.09	
1.4	256QAM	1	3	17.30	17.25	17.27	18
1.4	256QAM	1	5	17.43	17.41	17.34	
1.4	256QAM	3	0	17.14	17.29	17.19	
1.4	256QAM	3	1	17.14	17.22	17.30	18
1.4	256QAM	3	3	17.13	17.21	17.09	
1.4	256QAM	6	0	17.20	17.10	17.22	

Band 13(700MHz Band) (dBm)_ANT0							
Part 27F							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				23230			23
Frequency (MHz)				782			
10	QPSK	1	0	22.41			23
10	QPSK	1	25	22.40			
10	QPSK	1	49	22.37			
10	QPSK	25	0	21.50			22
10	QPSK	25	12	21.45			
10	QPSK	25	25	21.41			
10	QPSK	50	0	21.46			22
10	16QAM	1	0	21.76			
10	16QAM	1	25	21.48			
10	16QAM	1	49	21.62			21
10	16QAM	25	0	20.53			
10	16QAM	25	12	20.57			
10	16QAM	25	25	20.51			21
10	16QAM	50	0	20.46			
10	64QAM	1	0	20.66			
10	64QAM	1	25	20.74			21
10	64QAM	1	49	20.54			
10	64QAM	25	0	20.55			
10	64QAM	25	12	20.49			21
10	64QAM	25	25	20.53			
10	64QAM	50	0	20.42			
10	256QAM	1	0	17.43			18
10	256QAM	1	25	17.51			
10	256QAM	1	49	17.31			
10	256QAM	25	0	17.32			18
10	256QAM	25	12	17.26			
10	256QAM	25	25	17.30			
10	256QAM	50	0	17.19			
Channel				23205	23230	23255	23
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0	22.38	22.39	22.25	23
5	QPSK	1	12	22.31	22.34	22.35	
5	QPSK	1	24	22.26	22.30	22.33	
5	QPSK	12	0	21.42	21.45	21.45	22
5	QPSK	12	7	21.37	21.35	21.37	
5	QPSK	12	13	21.37	21.34	21.40	
5	QPSK	25	0	21.43	21.39	21.41	22
5	16QAM	1	0	21.57	21.66	21.36	
5	16QAM	1	12	21.41	21.41	21.43	
5	16QAM	1	24	21.47	21.55	21.54	21
5	16QAM	12	0	20.46	20.49	20.34	
5	16QAM	12	7	20.47	20.48	20.52	
5	16QAM	12	13	20.56	20.47	20.42	21
5	16QAM	25	0	20.38	20.45	20.38	
5	64QAM	1	0	20.44	20.65	20.51	
5	64QAM	1	12	20.69	20.69	20.53	21
5	64QAM	1	24	20.47	20.53	20.48	
5	64QAM	12	0	20.33	20.48	20.34	
5	64QAM	12	7	20.33	20.44	20.43	21
5	64QAM	12	13	20.47	20.49	20.40	
5	64QAM	25	0	20.37	20.41	20.45	
5	256QAM	1	0	17.21	17.42	17.28	18
5	256QAM	1	12	17.46	17.46	17.30	
5	256QAM	1	24	17.24	17.30	17.25	
5	256QAM	12	0	17.10	17.25	17.11	18
5	256QAM	12	7	17.10	17.21	17.20	
5	256QAM	12	13	17.24	17.26	17.17	
5	256QAM	25	0	17.14	17.18	17.22	

Band 66 (dBm)_ANT0							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	17.5
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	16.60	16.62	16.55	17.5
20	QPSK	1	49	16.31	16.43	16.28	
20	QPSK	1	99	16.39	16.39	16.36	
20	QPSK	50	0	15.51	15.56	15.54	16.5
20	QPSK	50	24	15.44	15.52	15.51	
20	QPSK	50	50	15.55	15.50	15.52	
20	QPSK	100	0	15.51	15.56	15.53	16.5
20	16QAM	1	0	15.61	15.76	15.78	
20	16QAM	1	49	15.68	15.77	15.54	
20	16QAM	1	99	15.62	15.69	15.77	15.5
20	16QAM	50	0	14.62	14.55	14.54	
20	16QAM	50	24	14.74	14.69	14.57	
20	16QAM	50	50	14.67	14.66	14.63	15.5
20	16QAM	100	0	14.68	14.65	14.55	
20	64QAM	1	0	14.91	14.88	14.89	
20	64QAM	1	49	14.79	14.89	14.63	15.5
20	64QAM	1	99	14.70	14.83	14.84	
20	64QAM	50	0	14.59	14.54	14.54	
20	64QAM	50	24	14.66	14.64	14.56	15.5
20	64QAM	50	50	14.59	14.60	14.60	
20	64QAM	100	0	14.70	14.59	14.48	
20	256QAM	1	0	11.90	11.87	11.88	12.5
20	256QAM	1	49	11.78	11.88	11.62	
20	256QAM	1	99	11.69	11.82	11.83	
20	256QAM	50	0	11.58	11.53	11.53	12.5
20	256QAM	50	24	11.65	11.63	11.55	
20	256QAM	50	50	11.58	11.59	11.59	
20	256QAM	100	0	11.69	11.58	11.47	
Channel				132047	132322	132597	17.5
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	16.21	16.41	16.37	17.5
15	QPSK	1	37	16.29	16.36	16.18	
15	QPSK	1	74	16.33	16.38	16.32	
15	QPSK	36	0	15.29	15.33	15.32	16.5
15	QPSK	36	20	15.35	15.48	15.50	
15	QPSK	36	39	15.46	15.46	15.47	
15	QPSK	75	0	15.31	15.35	15.47	16.5
15	16QAM	1	0	15.79	15.69	15.76	
15	16QAM	1	37	15.63	15.73	15.50	
15	16QAM	1	74	15.57	15.60	15.70	15.5
15	16QAM	36	0	14.60	14.50	14.52	
15	16QAM	36	20	14.63	14.67	14.56	
15	16QAM	36	39	14.61	14.57	14.55	15.5
15	16QAM	75	0	14.61	14.57	14.45	
15	64QAM	1	0	14.86	14.84	14.82	
15	64QAM	1	37	14.70	14.79	14.59	15.5
15	64QAM	1	74	14.59	14.78	14.82	
15	64QAM	36	0	14.47	14.53	14.46	
15	64QAM	36	20	14.56	14.54	14.55	15.5
15	64QAM	36	39	14.50	14.58	14.50	
15	64QAM	75	0	14.68	14.57	14.41	
15	256QAM	1	0	11.85	11.83	11.81	12.5
15	256QAM	1	37	11.69	11.78	11.58	
15	256QAM	1	74	11.58	11.77	11.81	
15	256QAM	36	0	11.46	11.52	11.45	12.5
15	256QAM	36	20	11.55	11.53	11.54	
15	256QAM	36	39	11.49	11.57	11.49	
15	256QAM	75	0	11.67	11.56	11.40	
Channel				132022	132322	132622	17.5
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	16.26	16.36	16.34	17.5
10	QPSK	1	25	16.14	16.35	16.15	
10	QPSK	1	49	16.24	16.28	16.22	
10	QPSK	25	0	15.24	15.32	15.33	16.5
10	QPSK	25	12	15.32	15.40	15.38	
10	QPSK	25	25	15.41	15.40	15.41	
10	QPSK	50	0	15.32	15.21	15.47	16.5
10	16QAM	1	0	15.75	15.65	15.69	
10	16QAM	1	25	15.56	15.68	15.41	
10	16QAM	1	49	15.53	15.59	15.64	15.5
10	16QAM	25	0	14.45	14.47	14.41	
10	16QAM	25	12	14.66	14.58	14.47	
10	16QAM	25	25	14.51	14.58	14.51	15.5
10	16QAM	50	0	14.58	14.51	14.46	
10	64QAM	1	0	14.74	14.81	14.74	
10	64QAM	1	25	14.72	14.78	14.52	15.5
10	64QAM	1	49	14.54	14.75	14.73	
10	64QAM	25	0	14.52	14.48	14.40	
10	64QAM	25	12	14.57	14.56	14.41	15.5
10	64QAM	25	25	14.43	14.53	14.46	
10	64QAM	50	0	14.57	14.44	14.42	
10	256QAM	1	0	11.73	11.80	11.73	12.5
10	256QAM	1	25	11.71	11.77	11.51	
10	256QAM	1	49	11.53	11.74	11.72	
10	256QAM	25	0	11.51	11.47	11.39	12.5
10	256QAM	25	12	11.56	11.55	11.40	
10	256QAM	25	25	11.42	11.52	11.45	
10	256QAM	50	0	11.56	11.43	11.41	
Channel				131997	132322	132647	17.5
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	16.22	16.39	16.33	17.5
5	QPSK	1	12	16.23	16.30	16.17	
5	QPSK	1	24	16.29	16.26	16.26	
5	QPSK	12	0	15.32	15.35	15.33	16.5
5	QPSK	12	7	15.33	15.43	15.37	
5	QPSK	12	13	15.44	15.41	15.40	
5	16QAM	1	0	15.70	15.67	15.70	16.5
5	16QAM	1	12	15.51	15.68	15.43	
5	16QAM	1	24	15.50	15.61	15.62	



5	16QAM	12	0	14.52	14.40	14.43	15.5
5	16QAM	12	7	14.63	14.57	14.42	
5	16QAM	12	13	14.50	14.59	14.54	
5	16QAM	25	0	14.82	14.57	14.45	15.5
5	64QAM	1	0	14.76	14.75	14.81	
5	64QAM	1	12	14.62	14.81	14.55	
5	64QAM	1	24	14.56	14.70	14.77	15.5
5	64QAM	12	0	14.51	14.40	14.43	
5	64QAM	12	7	14.59	14.56	14.43	
5	64QAM	12	13	14.52	14.54	14.51	15.5
5	64QAM	25	0	14.53	14.53	14.38	
5	256QAM	1	0	11.75	11.74	11.80	
5	256QAM	1	12	11.61	11.80	11.54	12.5
5	256QAM	1	24	11.55	11.69	11.76	
5	256QAM	12	0	11.50	11.39	11.42	
5	256QAM	12	7	11.58	11.55	11.42	12.5
5	256QAM	12	13	11.51	11.53	11.50	
5	256QAM	25	0	11.52	11.52	11.37	
Channel				131967	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	16.22	16.32	16.29	17.5
3	QPSK	1	8	16.14	16.32	16.19	
3	QPSK	1	14	16.24	16.25	16.30	
3	QPSK	8	0	15.31	15.29	15.32	16.5
3	QPSK	8	4	15.35	15.38	15.38	
3	QPSK	8	7	15.41	15.41	15.38	
3	QPSK	15	0	15.30	15.21	15.38	16.5
3	16QAM	1	0	15.71	15.68	15.63	
3	16QAM	1	8	15.59	15.64	15.47	
3	16QAM	1	14	15.45	15.61	15.71	15.5
3	16QAM	8	0	14.47	14.47	14.42	
3	16QAM	8	4	14.60	14.57	14.50	
3	16QAM	8	7	14.54	14.53	14.57	15.5
3	16QAM	15	0	14.53	14.51	14.45	
3	64QAM	1	0	14.85	14.76	14.83	
3	64QAM	1	8	14.72	14.79	14.56	15.5
3	64QAM	1	14	14.60	14.72	14.69	
3	64QAM	8	0	14.45	14.47	14.39	
3	64QAM	8	4	14.60	14.49	14.50	15.5
3	64QAM	8	7	14.50	14.45	14.49	
3	64QAM	15	0	14.61	14.48	14.37	
3	256QAM	1	0	11.84	11.75	11.82	12.5
3	256QAM	1	8	11.71	11.78	11.55	
3	256QAM	1	14	11.59	11.71	11.68	
3	256QAM	8	0	11.44	11.46	11.38	12.5
3	256QAM	8	4	11.59	11.48	11.49	
3	256QAM	8	7	11.49	11.44	11.48	
3	256QAM	15	0	11.60	11.47	11.36	Tune-up limit (dBm)
Channel				131979	132322	132655	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	16.21	16.37	16.33	17.5
1.4	QPSK	1	3	16.24	16.32	16.21	
1.4	QPSK	1	5	16.25	16.33	16.21	
1.4	QPSK	3	0	16.35	16.33	16.47	16.5
1.4	QPSK	3	1	16.38	16.40	16.36	
1.4	QPSK	3	3	16.43	16.40	16.37	
1.4	QPSK	6	0	15.34	15.21	15.45	16.5
1.4	16QAM	1	0	15.68	15.64	15.63	
1.4	16QAM	1	3	15.55	15.67	15.40	
1.4	16QAM	1	5	15.55	15.62	15.66	16.5
1.4	16QAM	3	0	15.32	15.54	15.33	
1.4	16QAM	3	1	15.52	15.49	15.35	
1.4	16QAM	3	3	15.39	15.42	15.41	15.5
1.4	16QAM	6	0	14.56	14.52	14.53	
1.4	64QAM	1	0	14.82	14.75	14.74	
1.4	64QAM	1	3	14.66	14.82	14.55	15.5
1.4	64QAM	1	5	14.63	14.70	14.73	
1.4	64QAM	3	0	14.56	14.51	14.47	
1.4	64QAM	3	1	14.50	14.55	14.49	15.5
1.4	64QAM	3	3	14.50	14.51	14.54	
1.4	64QAM	6	0	14.62	14.49	14.41	
1.4	256QAM	1	0	11.81	11.74	11.73	12.5
1.4	256QAM	1	3	11.65	11.81	11.54	
1.4	256QAM	1	5	11.62	11.69	11.72	
1.4	256QAM	3	0	11.55	11.50	11.46	12.5
1.4	256QAM	3	1	11.49	11.54	11.48	
1.4	256QAM	3	3	11.49	11.50	11.53	
1.4	256QAM	6	0	11.61	11.48	11.40	12.5

Band 66 (dBm)_ANT4							
BW (MHz)	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				132072	132322	132572	
Frequency (MHz)				1720	1745	1770	
20	QPSK	1	0	21.69	21.75	21.70	22.5
20	QPSK	1	49	21.61	21.59	21.66	
20	QPSK	1	99	21.58	21.63	21.65	
20	QPSK	50	0	20.65	20.69	20.63	21.5
20	QPSK	50	24	20.57	20.65	20.64	
20	QPSK	50	50	20.68	20.63	20.65	
20	QPSK	100	0	20.64	20.68	20.66	21.5
20	16QAM	1	0	20.94	20.89	20.91	
20	16QAM	1	49	20.81	20.90	20.67	
20	16QAM	1	99	20.75	20.82	20.90	20.5
20	16QAM	50	0	19.75	19.68	19.67	
20	16QAM	50	24	19.87	19.82	19.70	
20	16QAM	50	50	19.80	19.79	19.76	20.5
20	16QAM	100	0	19.81	19.78	19.68	
20	64QAM	1	0	20.04	20.01	20.02	
20	64QAM	1	49	19.92	20.02	19.76	20.5
20	64QAM	1	99	19.83	19.96	19.97	
20	64QAM	50	0	19.72	19.67	19.67	
20	64QAM	50	24	19.79	19.77	19.69	20.5
20	64QAM	50	50	19.72	19.73	19.73	
20	64QAM	100	0	19.83	19.72	19.61	
20	256QAM	1	0	17.03	17.00	17.01	17.5
20	256QAM	1	49	16.91	17.01	16.75	
20	256QAM	1	99	16.82	16.95	16.96	
20	256QAM	50	0	16.71	16.66	16.66	17.5
20	256QAM	50	24	16.78	16.76	16.68	
20	256QAM	50	50	16.71	16.72	16.72	
20	256QAM	100	0	16.82	16.71	16.60	
Channel				132047	132322	132597	
Frequency (MHz)				1717.5	1745	1772.5	
15	QPSK	1	0	21.34	21.54	21.50	22.5
15	QPSK	1	37	21.42	21.49	21.31	
15	QPSK	1	74	21.46	21.51	21.45	
15	QPSK	36	0	20.42	20.46	20.45	21.5
15	QPSK	36	20	20.48	20.61	20.63	
15	QPSK	36	39	20.59	20.59	20.60	
15	QPSK	75	0	20.44	20.48	20.60	21.5
15	16QAM	1	0	20.92	20.82	20.89	
15	16QAM	1	37	20.76	20.86	20.63	
15	16QAM	1	74	20.70	20.73	20.83	20.5
15	16QAM	36	0	19.73	19.63	19.65	
15	16QAM	36	20	19.76	19.80	19.69	
15	16QAM	36	39	19.74	19.70	19.68	20.5
15	16QAM	75	0	19.74	19.70	19.58	
15	64QAM	1	0	19.99	19.97	19.95	
15	64QAM	1	37	19.83	19.92	19.72	20.5
15	64QAM	1	74	19.72	19.91	19.95	
15	64QAM	36	0	19.60	19.66	19.59	
15	64QAM	36	20	19.69	19.67	19.68	20.5
15	64QAM	36	39	19.63	19.71	19.63	
15	64QAM	75	0	19.81	19.70	19.54	
15	256QAM	1	0	16.98	16.96	16.94	17.5
15	256QAM	1	37	16.82	16.91	16.71	
15	256QAM	1	74	16.71	16.90	16.94	
15	256QAM	36	0	16.59	16.65	16.58	17.5
15	256QAM	36	20	16.68	16.66	16.67	
15	256QAM	36	39	16.62	16.70	16.62	
15	256QAM	75	0	16.80	16.69	16.53	
Channel				132022	132322	132622	
Frequency (MHz)				1715	1745	1775	
10	QPSK	1	0	21.39	21.49	21.47	22.5
10	QPSK	1	25	21.27	21.48	21.28	
10	QPSK	1	49	21.37	21.41	21.35	
10	QPSK	25	0	20.37	20.45	20.46	21.5
10	QPSK	25	12	20.45	20.53	20.51	
10	QPSK	25	25	20.54	20.53	20.54	
10	QPSK	50	0	20.45	20.34	20.60	21.5
10	16QAM	1	0	20.88	20.78	20.82	
10	16QAM	1	25	20.69	20.81	20.54	
10	16QAM	1	49	20.66	20.72	20.77	20.5
10	16QAM	25	0	19.58	19.60	19.54	
10	16QAM	25	12	19.79	19.71	19.60	
10	16QAM	25	25	19.64	19.71	19.64	20.5
10	16QAM	50	0	19.71	19.64	19.59	
10	64QAM	1	0	19.87	19.94	19.87	
10	64QAM	1	25	19.85	19.91	19.65	20.5
10	64QAM	1	49	19.67	19.88	19.86	
10	64QAM	25	0	19.65	19.61	19.53	
10	64QAM	25	12	19.70	19.69	19.54	20.5
10	64QAM	25	25	19.56	19.66	19.59	
10	64QAM	50	0	19.70	19.57	19.55	
10	256QAM	1	0	16.86	16.93	16.86	17.5
10	256QAM	1	25	16.84	16.90	16.64	
10	256QAM	1	49	16.66	16.87	16.85	
10	256QAM	25	0	16.64	16.60	16.52	17.5
10	256QAM	25	12	16.69	16.68	16.53	
10	256QAM	25	25	16.55	16.65	16.58	
10	256QAM	50	0	16.69	16.56	16.54	
Channel				131997	132322	132647	
Frequency (MHz)				1712.5	1745	1777.5	
5	QPSK	1	0	21.35	21.52	21.46	22.5
5	QPSK	1	12	21.36	21.43	21.30	
5	QPSK	1	24	21.42	21.39	21.39	
5	QPSK	12	0	20.45	20.48	20.46	21.5
5	QPSK	12	7	20.46	20.56	20.50	
5	QPSK	12	13	20.57	20.54	20.53	
5	QPSK	25	0	20.41	20.40	20.60	21.5
5	16QAM	1	0	20.83	20.80	20.83	
5	16QAM	1	12	20.64	20.81	20.56	
5	16QAM	1	24	20.63	20.74	20.75	

5	16QAM	12	0	19.65	19.53	19.56	20.5
5	16QAM	12	7	19.76	19.70	19.55	
5	16QAM	12	13	19.63	19.72	19.67	
5	16QAM	25	0	19.75	19.70	19.58	20.5
5	64QAM	1	0	19.89	19.88	19.94	
5	64QAM	1	12	19.75	19.94	19.68	
5	64QAM	1	24	19.69	19.83	19.90	20.5
5	64QAM	12	0	19.64	19.53	19.56	
5	64QAM	12	7	19.72	19.69	19.56	
5	64QAM	12	13	19.65	19.67	19.64	17.5
5	64QAM	25	0	19.66	19.66	19.51	
5	256QAM	1	0	16.88	16.87	16.93	
5	256QAM	1	12	16.74	16.93	16.67	17.5
5	256QAM	1	24	16.68	16.82	16.89	
5	256QAM	12	0	16.63	16.52	16.55	
5	256QAM	12	7	16.71	16.68	16.55	17.5
5	256QAM	12	13	16.64	16.66	16.63	
5	256QAM	25	0	16.65	16.65	16.50	
Channel				131987	132322	132657	Tune-up limit (dBm)
Frequency (MHz)				1711.5	1745	1778.5	
3	QPSK	1	0	21.35	21.45	21.42	22.5
3	QPSK	1	8	21.27	21.45	21.32	
3	QPSK	1	14	21.37	21.38	21.43	
3	QPSK	8	0	20.44	20.42	20.45	21.5
3	QPSK	8	4	20.48	20.51	20.51	
3	QPSK	8	7	20.54	20.54	20.51	
3	QPSK	15	0	20.43	20.34	20.51	21.5
3	16QAM	1	0	20.84	20.81	20.76	
3	16QAM	1	8	20.72	20.77	20.60	
3	16QAM	1	14	20.58	20.74	20.84	20.5
3	16QAM	8	0	19.60	19.60	19.55	
3	16QAM	8	4	19.73	19.70	19.63	
3	16QAM	8	7	19.67	19.66	19.70	20.5
3	16QAM	15	0	19.66	19.64	19.58	
3	64QAM	1	0	19.98	19.89	19.96	
3	64QAM	1	8	19.85	19.92	19.69	20.5
3	64QAM	1	14	19.73	19.85	19.82	
3	64QAM	8	0	19.58	19.60	19.52	
3	64QAM	8	4	19.73	19.62	19.63	20.5
3	64QAM	8	7	19.63	19.58	19.62	
3	64QAM	15	0	19.74	19.61	19.50	
3	256QAM	1	0	16.97	16.88	16.95	17.5
3	256QAM	1	8	16.84	16.91	16.68	
3	256QAM	1	14	16.72	16.84	16.81	
3	256QAM	8	0	16.57	16.59	16.51	17.5
3	256QAM	8	4	16.72	16.61	16.62	
3	256QAM	8	7	16.62	16.57	16.61	
3	256QAM	15	0	16.73	16.60	16.49	Tune-up limit (dBm)
Channel				131979	132322	132665	
Frequency (MHz)				1710.7	1745	1779.3	
1.4	QPSK	1	0	21.34	21.50	21.46	22.5
1.4	QPSK	1	3	21.37	21.45	21.34	
1.4	QPSK	1	5	21.38	21.46	21.34	
1.4	QPSK	3	0	21.48	21.46	21.60	
1.4	QPSK	3	1	21.51	21.53	21.49	
1.4	QPSK	3	3	21.56	21.53	21.50	21.5
1.4	QPSK	6	0	20.47	20.34	20.58	
1.4	16QAM	1	0	20.81	20.77	20.76	
1.4	16QAM	1	3	20.68	20.80	20.53	21.5
1.4	16QAM	1	5	20.68	20.75	20.79	
1.4	16QAM	3	0	20.45	20.67	20.46	
1.4	16QAM	3	1	20.65	20.62	20.48	20.5
1.4	16QAM	3	3	20.52	20.55	20.54	
1.4	16QAM	6	0	19.69	19.65	19.66	
1.4	64QAM	1	0	19.95	19.88	19.87	20.5
1.4	64QAM	1	3	19.79	19.95	19.68	
1.4	64QAM	1	5	19.76	19.83	19.86	
1.4	64QAM	3	0	19.69	19.64	19.60	
1.4	64QAM	3	1	19.63	19.66	19.62	
1.4	64QAM	3	3	19.63	19.64	19.67	20.5
1.4	64QAM	6	0	19.75	19.62	19.54	
1.4	256QAM	1	0	16.94	16.87	16.86	
1.4	256QAM	1	3	16.78	16.94	16.67	17.5
1.4	256QAM	1	5	16.75	16.82	16.85	
1.4	256QAM	3	0	16.68	16.63	16.59	
1.4	256QAM	3	1	16.62	16.67	16.61	
1.4	256QAM	3	3	16.62	16.63	16.66	
1.4	256QAM	6	0	16.74	16.61	16.53	17.5

CA_66B_ANT0											
Combination:15MHz+10MHz(75RB+25RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
132070	132047	132140	QPSK	1	0	0	0	1	0	16.65	17.50
132322	132398	132491	QPSK	1	0	0	0	1	0	16.75	17.50
132572	132549	132642	QPSK	1	0	0	0	1	0	16.69	17.50
132070	132047	132140	16QAM	1	0	0	0	1	0	15.72	16.50
132322	132398	132491	16QAM	1	0	0	0	1	0	15.73	16.50
132572	132549	132642	16QAM	1	0	0	0	1	0	15.66	16.50
132070	132047	132140	64QAM	1	0	0	0	1	0	14.55	15.50
132322	132398	132491	64QAM	1	0	0	0	1	0	14.67	15.50
132572	132549	132642	64QAM	1	0	0	0	1	0	14.59	15.50
132070	132047	132140	256QAM	1	0	0	0	1	0	11.77	12.50
132322	132398	132491	256QAM	1	0	0	0	1	0	11.81	12.50
132572	132549	132642	256QAM	1	0	0	0	1	0	11.68	12.50
132070	132047	132140	QPSK	36	0	0	0	1	0	15.58	16.50
132322	132398	132491	QPSK	36	0	0	0	1	0	15.69	16.50
132572	132549	132642	QPSK	36	0	0	0	1	0	15.66	16.50

CA_66C_ANT0											
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	16.63	17.50
132322	132323	132521	QPSK	1	0	0	0	1	0	16.78	17.50
132572	132374	132572	QPSK	1	0	0	0	1	0	16.67	17.50
132070	132072	132270	16QAM	1	0	0	0	1	0	15.66	16.50
132322	132323	132521	16QAM	1	0	0	0	1	0	15.75	16.50
132572	132374	132572	16QAM	1	0	0	0	1	0	15.68	16.50
132070	132072	132270	64QAM	1	0	0	0	1	0	14.69	15.50
132322	132323	132521	64QAM	1	0	0	0	1	0	14.75	15.50
132572	132374	132572	64QAM	1	0	0	0	1	0	14.66	15.50
132070	132072	132270	256QAM	1	0	0	0	1	0	11.52	12.50
132322	132323	132521	256QAM	1	0	0	0	1	0	11.72	12.50
132572	132374	132572	256QAM	1	0	0	0	1	0	11.64	12.50
132070	132072	132270	QPSK	50	0	0	0	1	0	15.75	16.50
132322	132323	132521	QPSK	50	0	0	0	1	0	15.85	16.50
132572	132374	132572	QPSK	50	0	0	0	1	0	15.77	16.50

B4_n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	21.05	20.92	20.89	22
20		1	53	21.03	20.93	20.85	
20		1	104	20.90	20.83	20.85	
20		50	1	20.98	20.99	20.92	22
20		50	25	21.01	20.90	20.94	
20		50	50	21.01	20.85	20.88	
20		100	0	21.02	20.88	20.95	
20	DFT-s-OFDM QPSK	1	1	21.05	21.11	21.09	22
20		1	53	21.07	20.79	20.80	
20		1	104	20.96	20.78	20.80	
20		50	1	21.06	20.90	20.88	22
20		50	25	21.01	20.89	20.93	
20		50	50	20.97	20.94	20.95	
20		100	0	20.97	20.88	20.96	
20	DFT-s-OFDM 16QAM	1	1	20.62	20.71	20.73	22
20	DFT-s-OFDM 64QAM	1	1	19.37	19.60	19.57	21
20	DFT-s-OFDM 256QAM	1	1	17.35	17.11	17.16	18
20	CP-OFDM QPSK	1	1	20.59	20.48	20.42	21
20	CP-OFDM 16QAM	1	1	19.96	19.94	19.80	21
20	CP-OFDM 64QAM	1	1	18.28	18.17	18.16	19
20	CP-OFDM 256QAM	1	1	15.43	15.30	15.25	16
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	21.06	20.92	20.85	22
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	20.96	20.93	20.69	22
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	20.96	20.99	20.73	22

5A_n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	22
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	21.33	21.29	21.08	22
20		1	53	21.36	21.18	21.05	
20		1	104	21.34	21.12	21.12	
20		50	1	21.28	21.19	21.07	22
20		50	25	21.36	21.17	21.10	
20		50	50	21.22	21.14	21.12	
20		100	0	21.26	21.21	21.12	
20	DFT-s-OFDM QPSK	1	1	21.29	21.39	21.34	22
20		1	53	21.22	21.18	21.08	
20		1	104	21.21	21.05	21.08	
20		50	1	20.88	20.90	20.76	22
20		50	25	20.75	20.83	20.75	
20		50	50	20.84	20.80	20.71	
20		100	0	20.71	20.94	20.76	
20	DFT-s-OFDM 16QAM	1	1	21.35	21.28	21.13	22
20	DFT-s-OFDM 64QAM	1	1	19.68	19.65	19.84	20.5
20	DFT-s-OFDM 256QAM	1	1	17.97	17.94	17.59	18.5
20	CP-OFDM QPSK	1	1	20.15	20.11	20.03	21
20	CP-OFDM 16QAM	1	1	19.55	19.48	19.47	20
20	CP-OFDM 64QAM	1	1	18.32	18.23	18.09	19
20	CP-OFDM 256QAM	1	1	16.02	15.98	15.64	16
Channel				371500	376000	380500	22
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	21.29	21.32	21.09	22
Channel				371000	376000	381000	22
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	21.07	21.17	20.96	22
Channel				370500	376000	381500	22
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	21.15	21.20	20.96	22

B12_n2 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	21.14	20.99	20.87	22
20		1	53	21.02	20.84	20.86	
20		1	104	21.00	20.87	20.86	
20		50	1	21.03	20.96	20.95	22
20		50	25	21.02	20.95	20.91	
20		50	50	21.02	20.89	20.93	
20		100	0	21.05	20.90	20.92	
20	DFT-s-OFDM QPSK	1	1	21.16	21.21	21.18	22
20		1	53	21.10	20.84	20.85	
20		1	104	21.07	20.81	20.80	
20		50	1	21.06	20.88	20.90	22
20		50	25	21.06	20.93	20.89	
20		50	50	21.07	20.93	20.90	
20		100	0	21.07	20.94	20.93	
20	DFT-s-OFDM 16QAM	1	1	20.75	20.72	20.74	22
20	DFT-s-OFDM 64QAM	1	1	19.88	19.66	19.58	21
20	DFT-s-OFDM 256QAM	1	1	17.18	17.20	17.16	18
20	CP-OFDM QPSK	1	1	20.52	20.49	20.41	21
20	CP-OFDM 16QAM	1	1	20.11	19.95	19.83	21
20	CP-OFDM 64QAM	1	1	18.41	18.20	18.19	19
20	CP-OFDM 256QAM	1	1	15.44	15.35	15.24	16
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	21.15	21.01	20.94	22
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	21.05	20.88	20.79	22
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	20.99	20.86	20.80	22

13A_n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	21.20	21.15	21.07	22
20		1	53	21.22	21.14	21.08	
20		1	104	21.23	21.06	21.09	
20		50	1	21.22	21.14	21.07	22
20		50	25	21.26	21.15	21.10	
20		50	50	21.20	21.14	21.11	
20		100	0	21.24	21.17	21.13	
20	DFT-s-OFDM QPSK	1	1	21.18	21.28	21.24	22
20		1	53	21.24	21.17	21.09	
20		1	104	21.17	21.05	21.10	
20		50	1	20.90	20.95	20.76	22
20		50	25	20.87	20.79	20.76	
20		50	50	20.92	20.80	20.73	
20		100	0	20.84	20.84	20.74	
20	DFT-s-OFDM 16QAM	1	1	21.25	21.25	21.16	22
20	DFT-s-OFDM 64QAM	1	1	19.66	19.65	19.51	20.5
20	DFT-s-OFDM 256QAM	1	1	17.95	17.90	17.82	18.5
20	CP-OFDM QPSK	1	1	20.13	20.03	19.98	21
20	CP-OFDM 16QAM	1	1	19.46	19.43	19.37	20
20	CP-OFDM 64QAM	1	1	18.25	18.19	18.08	19
20	CP-OFDM 256QAM	1	1	15.98	15.90	15.80	16
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	21.18	21.24	21.03	22
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	21.10	21.17	20.98	22
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	21.11	21.15	21.03	22

66A_n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	21.23	21.18	21.09	22
20		1	53	21.27	21.17	21.08	
20		1	104	21.24	21.12	21.15	
20	DFT-s-OFDM PI/2 BPSK	50	1	21.19	21.19	21.12	22
20		50	25	21.25	21.19	21.13	
20		50	50	21.26	21.14	21.11	
20		100	0	21.25	21.17	21.11	
20	DFT-s-OFDM QPSK	1	1	21.25	21.29	21.23	22
20		1	53	21.27	21.15	21.12	
20		1	104	21.24	21.07	21.13	
20		50	1	20.96	21.02	20.85	
20	DFT-s-OFDM QPSK	50	25	20.95	20.93	20.87	22
20		50	50	20.97	20.87	20.84	
20		100	0	20.90	20.98	20.84	
20	DFT-s-OFDM 16QAM	1	1	21.13	21.22	21.12	22
20	DFT-s-OFDM 64QAM	1	1	19.72	19.62	19.58	20.5
20	DFT-s-OFDM 256QAM	1	1	17.98	17.92	17.86	18.5
20	CP-OFDM QPSK	1	1	20.13	20.11	20.01	21
20	CP-OFDM 16QAM	1	1	19.19	19.16	19.09	20
20	CP-OFDM 64QAM	1	1	17.95	18.02	18.10	19
20	CP-OFDM 256QAM	1	1	16.02	15.97	15.83	17
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	21.16	21.22	21.06	22
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	21.01	21.19	20.96	22
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	21.03	21.16	21.15	22

2A_n66							
BW (MHz)	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	21.18	21.22	21.25	22
40		1	108	21.18	21.25	21.10	
40		1	214	21.24	21.13	21.09	
40		108	1	21.11	21.12	21.13	22
40		108	54	21.24	21.17	21.16	
40		108	108	21.27	21.15	21.27	
40	DFT-s-OFDM QPSK	216	0	21.26	21.19	21.26	22
40		1	1	21.25	21.32	21.25	
40		1	108	21.19	21.24	21.08	
40		1	214	21.10	20.98	21.11	22
40		108	1	21.04	21.05	21.02	
40		108	54	21.02	20.98	20.88	
40	108	108	20.87	20.92	20.89	22	
40	216	0	21.03	21.04	21.02		
40	DFT-s-OFDM 16QAM	1	1	21.23	21.30		21.28
40	DFT-s-OFDM 64QAM	1	1	19.64	19.64	19.76	20.5
40	DFT-s-OFDM 256QAM	1	1	17.91	17.99	17.71	18.5
40	CP-OFDM QPSK	1	1	19.93	20.00	19.96	21
40	CP-OFDM 16QAM	1	1	19.12	19.05	19.18	20
40	CP-OFDM 64QAM	1	1	18.11	18.18	18.05	19
40	CP-OFDM 256QAM	1	1	15.92	15.98	15.92	17
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1785	
30	DFT-s-OFDM QPSK	1	1	21.10	21.17	21.14	22
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	21.27	21.24	21.12	22
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	21.25	21.22	21.08	22
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	20.68	21.08	20.96	22
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	21.19	21.18	21.00	22

5A_n66							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	21.14	21.26	21.27	22
40		1	108	21.14	21.23	21.10	
40		1	214	21.24	21.09	21.10	
40		108	1	21.29	21.22	21.24	22
40		108	54	21.26	21.21	21.14	
40		108	108	21.26	21.29	21.26	
40		216	0	21.19	21.21	21.18	
40	DFT-s-OFDM QPSK	1	1	21.24	21.31	21.22	22
40		1	108	21.19	21.20	21.08	
40		1	214	21.20	21.12	21.11	
40		108	1	20.96	20.98	20.93	22
40		108	54	20.94	20.94	20.85	
40		108	108	20.93	20.90	20.89	
40		216	0	20.94	20.96	20.92	
40	DFT-s-OFDM 16QAM	1	1	21.16	21.28	21.18	22
40	DFT-s-OFDM 64QAM	1	1	19.60	19.67	19.66	20.5
40	DFT-s-OFDM 256QAM	1	1	17.92	17.93	17.88	18.5
40	CP-OFDM QPSK	1	1	19.70	19.77	19.67	20.5
40	CP-OFDM 16QAM	1	1	19.08	19.14	19.06	20
40	CP-OFDM 64QAM	1	1	17.83	17.92	17.82	18.5
40	CP-OFDM 256QAM	1	1	15.92	15.98	15.90	16.5
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	21.19	21.11	21.17	22
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	21.23	20.71	20.56	22
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	21.20	20.91	20.75	22
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	21.18	21.04	21.06	22
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	21.20	21.16	21.07	22

B12_n66 (PC3)							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channe	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	20.28	20.24	20.79	22
40		1	108	20.55	20.45	20.91	
40		1	214	20.85	20.80	20.93	
40		108	1	20.41	20.33	20.96	22
40		108	54	20.59	20.46	21.01	
40		108	108	20.73	20.60	20.87	
40	216	0	20.62	20.50	21.08		
40	DFT-s-OFDM QPSK	1	1	21.06	21.15	20.70	22
40		1	108	19.68	20.42	20.91	
40		1	214	19.96	20.73	20.62	
40		108	1	19.56	20.30	20.96	22
40		108	54	19.67	20.40	21.04	
40		108	108	19.87	20.58	21.04	
40	216	0	19.67	20.43	21.09		
40	DFT-s-OFDM 16QAM	1	1	19.56	19.93	20.44	21
40	DFT-s-OFDM 64QAM	1	1	20.63	18.70	19.27	20
40	DFT-s-OFDM 256QAM	1	1	16.68	16.70	17.01	18
40	CP-OFDM QPSK	1	1	19.72	20.02	20.31	21
40	CP-OFDM 16QAM	1	1	19.66	19.90	19.67	21
40	CP-OFDM 64QAM	1	1	17.86	17.74	18.06	19
40	CP-OFDM 256QAM	1	1	14.72	14.85	15.12	19.5
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	20.79	20.94	20.97	22
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	20.85	20.93	20.96	22
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	20.86	20.75	21.13	22
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	20.35	20.43	20.46	22
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	20.36	20.25	20.35	22

13A_n66							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	21.17	21.21	21.27	22
40		1	108	21.17	21.25	21.10	
40		1	214	21.13	21.11	21.09	
40		108	1	21.29	21.23	21.25	22
40		108	54	21.26	21.32	21.21	
40		108	108	21.31	21.27	21.14	
40	DFT-s-OFDM QPSK	216	0	21.27	21.26	21.13	22
40		1	1	21.31	21.33	21.24	
40		1	108	21.20	21.22	21.12	
40		1	214	21.13	21.08	21.07	22
40		108	1	21.00	21.02	20.83	
40		108	54	20.96	20.98	20.73	
40	DFT-s-OFDM QPSK	108	108	20.97	20.92	20.87	22
40		216	0	21.01	21.02	20.82	
40	DFT-s-OFDM 16QAM	1	1	21.19	21.24	21.15	22
40	DFT-s-OFDM 64QAM	1	1	19.61	19.69	19.61	20.5
40	DFT-s-OFDM 256QAM	1	1	17.90	17.95	17.85	18.5
40	CP-OFDM QPSK	1	1	19.85	19.89	19.81	20.5
40	CP-OFDM 16QAM	1	1	19.20	19.25	19.14	20
40	CP-OFDM 64QAM	1	1	17.96	18.03	17.91	19
40	CP-OFDM 256QAM	1	1	15.91	16.00	15.88	17
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	21.18	21.22	21.14	22
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	20.72	21.25	21.08	22
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	20.91	21.21	21.09	22
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	21.17	21.07	21.06	22
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	21.18	21.07	21.00	22