



REPORT No.: SZ23070206S01

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				Cable Loss			
Mode		Max.				Max.			
		24.28				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	21.5
20	64QAM	1	49	20.55	20.63	20.58	
20	64QAM	1	99	20.59	20.62	20.57	
20	64QAM	50	0	20.49	20.50	20.42	21.5
20	64QAM	50	24	20.47	20.48	20.46	
20	64QAM	50	50	20.41	20.45	20.42	
20	64QAM	100	0	20.36	20.42	20.36	18.5
20	256QAM	1	0	17.83	17.90	17.87	
20	256QAM	1	49	17.76	17.84	17.79	
20	256QAM	1	99	17.80	17.83	17.78	18.5
20	256QAM	50	0	17.70	17.71	17.63	
20	256QAM	50	24	17.68	17.69	17.67	
20	256QAM	50	50	17.62	17.66	17.63	18.5
20	256QAM	100	0	17.57	17.63	17.57	
Channel				18675	18900	19125	Tune-up limit (dBm)
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	18.5
15	256QAM	75	0	17.53	17.56	17.51	
Channel				18650	18900	19150	Tune-up limit (dBm)
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	20.44	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	18.5
10	256QAM	50	0	17.53	17.61	17.50	
Channel				18625	18900	19175	Tune-up limit (dBm)
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	22.5
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	20.48	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	21.5
20	64QAM	1	49	20.60	20.68	20.63	
20	64QAM	1	99	20.64	20.67	20.62	
20	64QAM	50	0	20.54	20.55	20.47	21.5
20	64QAM	50	24	20.52	20.53	20.51	
20	64QAM	50	50	20.46	20.50	20.47	
20	64QAM	100	0	20.41	20.47	20.41	18.5
20	256QAM	1	0	17.88	17.95	17.92	
20	256QAM	1	49	17.81	17.89	17.84	
20	256QAM	1	99	17.85	17.88	17.83	18.5
20	256QAM	50	0	17.75	17.76	17.68	
20	256QAM	50	24	17.73	17.74	17.72	
20	256QAM	50	50	17.67	17.71	17.68	18.5
20	256QAM	100	0	17.62	17.68	17.62	
Channel				18675	18900	19125	Tune-up limit (dBm)
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	

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	
5	64QAM	1	0	20.57	20.67	20.64	21.5
5	64QAM	1	12	20.54	20.58	20.54	
5	64QAM	1	24	20.57	20.61	20.52	
5	64QAM	12	0	20.47	20.48	20.41	
5	64QAM	12	7	20.44	20.40	20.41	21.5
5	64QAM	12	13	20.35	20.38	20.34	
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	
5	256QAM	12	13	17.56	17.59	17.55	18.5
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	
3	QPSK	8	4	21.48	21.59	21.50	22.5
3	QPSK	8	7	21.49	21.53	21.52	
3	QPSK	15	0	21.44	21.51	21.43	
3	16QAM	1	0	21.75	21.73	21.75	
3	16QAM	1	8	21.72	21.73	21.66	22.5
3	16QAM	1	14	21.63	21.67	21.65	
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	
3	64QAM	1	14	20.52	20.60	20.52	21.5
3	64QAM	8	0	20.43	20.49	20.34	
3	64QAM	8	4	20.44	20.44	20.44	
3	64QAM	8	7	20.40	20.44	20.41	
3	64QAM	15	0	20.34	20.41	20.33	21.5
3	256QAM	1	0	17.78	17.82	17.82	
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	
1.4	QPSK	3	1	22.42	22.45	22.35	22.5
1.4	QPSK	3	3	22.36	22.40	22.37	
1.4	QPSK	6	0	21.44	21.54	21.46	
1.4	16QAM	1	0	21.72	21.71	21.68	
1.4	16QAM	1	3	21.72	21.69	21.65	22.5
1.4	16QAM	1	5	21.63	21.72	21.72	
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	
1.4	64QAM	1	5	20.52	20.56	20.53	21.5
1.4	64QAM	3	0	20.61	20.55	20.48	
1.4	64QAM	3	1	20.58	20.56	20.53	
1.4	64QAM	3	3	20.51	20.52	20.50	
1.4	64QAM	6	0	20.31	20.37	20.29	21.5
1.4	256QAM	1	0	17.81	17.86	17.85	
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	

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	
5	64QAM	1	0	20.69	20.79	20.76	21.5
5	64QAM	1	12	20.59	20.63	20.59	
5	64QAM	1	24	20.62	20.66	20.57	
5	64QAM	12	0	20.52	20.53	20.46	
5	64QAM	12	7	20.49	20.45	20.46	21.5
5	64QAM	12	13	20.40	20.43	20.39	
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	
5	256QAM	12	13	17.61	17.64	17.60	18.5
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	
3	QPSK	8	4	21.60	21.71	21.62	22.5
3	QPSK	8	7	21.61	21.65	21.64	
3	QPSK	15	0	21.56	21.63	21.55	
3	16QAM	1	0	21.87	21.85	21.87	
3	16QAM	1	8	21.84	21.85	21.78	22.5
3	16QAM	1	14	21.75	21.79	21.77	
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	
3	64QAM	1	14	20.57	20.65	20.57	21.5
3	64QAM	8	0	20.48	20.54	20.39	
3	64QAM	8	4	20.49	20.49	20.49	
3	64QAM	8	7	20.45	20.49	20.46	
3	64QAM	15	0	20.39	20.46	20.38	21.5
3	256QAM	1	0	17.83	17.87	17.87	
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	
1.4	QPSK	3	1	22.54	22.57	22.47	22.5
1.4	QPSK	3	3	22.48	22.52	22.49	
1.4	QPSK	6	0	21.56	21.66	21.58	
1.4	16QAM	1	0	21.84	21.83	21.80	
1.4	16QAM	1	3	21.84	21.81	21.77	22.5
1.4	16QAM	1	5	21.75	21.84	21.84	
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	
1.4	64QAM	1	5	20.64	20.68	20.65	21.5
1.4	64QAM	3	0	20.73	20.67	20.60	
1.4	64QAM	3	1	20.63	20.61	20.58	
1.4	64QAM	3	3	20.56	20.57	20.55	
1.4	64QAM	6	0	20.36	20.42	20.34	21.5
1.4	256QAM	1	0	17.86	17.91	17.90	
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	

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				20950	20175	20300	23.5
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	22.5
20	QPSK	1	99	22.37	22.44	22.41	
20	QPSK	50	0	21.51	21.63	21.52	
20	QPSK	50	24	21.55	21.49	21.47	22.5
20	QPSK	50	50	21.52	21.55	21.48	
20	QPSK	100	0	21.55	21.56	21.45	
20	16QAM	1	0	21.82	21.73	21.56	22.5
20	16QAM	1	49	21.70	21.79	21.74	
20	16QAM	1	99	21.80	21.57	21.84	
20	16QAM	50	0	20.63	20.58	20.62	21.5
20	16QAM	50	24	20.72	20.57	20.56	
20	16QAM	50	50	20.59	20.62	20.64	
20	16QAM	100	0	20.57	20.59	20.55	21.5
20	64QAM	1	0	20.67	20.81	20.76	
20	64QAM	1	49	20.70	20.74	20.64	
20	64QAM	1	99	20.80	20.68	20.50	21.5
20	64QAM	50	0	20.65	20.54	20.54	
20	64QAM	50	24	20.48	20.49	20.56	
20	64QAM	50	50	20.61	20.54	20.59	21.5
20	64QAM	100	0	20.53	20.56	20.55	
20	256QAM	1	0	17.52	17.66	17.61	
20	256QAM	1	49	17.55	17.59	17.49	18.5
20	256QAM	1	99	17.65	17.53	17.35	
20	256QAM	50	0	17.50	17.39	17.39	
20	256QAM	50	24	17.33	17.34	17.41	18.5
20	256QAM	50	50	17.46	17.39	17.44	
20	256QAM	100	0	17.38	17.41	17.40	
Channel				20025	20175	20325	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5	23.5
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	22.5
15	QPSK	36	0	21.47	21.53	21.42	
15	QPSK	36	20	21.61	21.42	21.43	
15	QPSK	36	39	21.51	21.48	21.39	22.5
15	QPSK	75	0	21.50	21.48	21.35	
15	16QAM	1	0	21.78	21.67	21.50	
15	16QAM	1	37	21.77	21.89	21.69	22.5
15	16QAM	1	74	21.82	21.97	21.83	
15	16QAM	36	0	20.62	20.49	20.56	
15	16QAM	36	20	20.68	20.48	20.48	21.5
15	16QAM	36	39	20.55	20.60	20.62	
15	16QAM	75	0	20.47	20.55	20.54	
15	64QAM	1	0	20.64	20.80	20.71	21.5
15	64QAM	1	37	20.64	20.64	20.59	
15	64QAM	1	74	20.78	20.63	20.44	
15	64QAM	36	0	20.62	20.44	20.47	21.5
15	64QAM	36	20	20.39	20.46	20.49	
15	64QAM	36	39	20.57	20.52	20.51	
15	64QAM	75	0	20.47	20.53	20.54	18.5
15	256QAM	1	0	17.49	17.65	17.56	
15	256QAM	1	37	17.49	17.49	17.44	
15	256QAM	1	74	17.63	17.48	17.29	18.5
15	256QAM	36	0	17.47	17.29	17.32	
15	256QAM	36	20	17.24	17.31	17.34	
15	256QAM	36	39	17.42	17.37	17.36	18.5
15	256QAM	75	0	17.32	17.38	17.39	
Channel				20000	20175	20350	
Frequency (MHz)				1715	1732.5	1750	23.5
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	22.5
10	QPSK	25	0	21.45	21.62	21.47	
10	QPSK	25	12	21.53	21.40	21.46	
10	QPSK	25	25	21.43	21.53	21.41	22.5
10	QPSK	50	0	21.46	21.52	21.39	
10	16QAM	1	0	21.76	21.68	21.49	
10	16QAM	1	25	21.76	21.93	21.73	22.5
10	16QAM	1	49	21.78	21.98	21.79	
10	16QAM	25	0	20.55	20.54	20.57	
10	16QAM	25	12	20.64	20.50	20.52	21.5
10	16QAM	25	25	20.58	20.53	20.60	
10	16QAM	50	0	20.56	20.53	20.46	
10	64QAM	1	0	20.57	20.72	20.74	21.5
10	64QAM	1	25	20.68	20.73	20.62	
10	64QAM	1	49	20.75	20.61	20.40	
10	64QAM	25	0	20.64	20.44	20.45	21.5
10	64QAM	25	12	20.40	20.46	20.50	
10	64QAM	25	25	20.57	20.52	20.53	
10	64QAM	50	0	20.46	20.47	20.53	18.5
10	256QAM	1	0	17.42	17.57	17.59	
10	256QAM	1	25	17.53	17.58	17.47	
10	256QAM	1	49	17.60	17.46	17.25	18.5
10	256QAM	25	0	17.49	17.29	17.30	
10	256QAM	25	12	17.25	17.31	17.35	
10	256QAM	25	25	17.42	17.37	17.38	18.5
10	256QAM	50	0	17.31	17.32	17.38	
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	23.5
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	22.5
5	QPSK	12	0	21.42	21.58	21.46	
5	QPSK	12	7	21.56	21.44	21.38	
5	QPSK	12	13	21.49	21.49	21.38	22.5
5	QPSK	25	0	21.53	21.52	21.37	
5	16QAM	1	0	21.72	21.71	21.52	
5	16QAM	1	12	21.75	21.91	21.72	22.5
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	23.5	
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		
20	QPSK	50	24	21.62	21.56	21.55	22.5	
20	QPSK	50	50	21.64	21.67	21.60		
20	QPSK	100	0	21.67	21.68	21.57		
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	22.5	
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		
20	16QAM	100	0	20.69	20.71	20.67		
20	64QAM	1	0	20.79	20.93	20.88	21.5	
20	64QAM	1	49	20.77	20.81	20.71		
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		
20	64QAM	50	50	20.68	20.61	20.66	21.5	
20	64QAM	100	0	20.60	20.63	20.62		
20	256QAM	1	0	17.59	17.73	17.68		
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		Tune-up limit (dBm)
Frequency (MHz)				1717.5	1732.5	1747.5		
15	QPSK	1	0	22.50	22.55	22.46	23.5	
15	QPSK	1	37	22.54	22.55	22.49		
15	QPSK	1	74	22.40	22.55	22.52		
15	QPSK	36	0	21.59	21.65	21.54		
15	QPSK	36	20	21.73	21.54	21.55		
15	QPSK	36	39	21.63	21.60	21.51	22.5	
15	QPSK	75	0	21.52	21.50	21.37		
15	16QAM	1	0	21.80	21.69	21.52		
15	16QAM	1	37	21.79	21.81	21.71		
15	16QAM	1	74	21.91	22.06	21.92		
15	16QAM	36	0	20.71	20.58	20.65	21.5	
15	16QAM	36	20	20.77	20.57	20.57		
15	16QAM	36	39	20.64	20.69	20.71		
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		
15	64QAM	36	39	20.64	20.59	20.58		
15	64QAM	75	0	20.54	20.60	20.61	21.5	
15	256QAM	1	0	17.56	17.72	17.63		
15	256QAM	1	37	17.56	17.56	17.51		
15	256QAM	1	74	17.70	17.55	17.36		
15	256QAM	36	0	17.54	17.36	17.39		
15	256QAM	36	20	17.31	17.38	17.41	18.5	
15	256QAM	36	39	17.49	17.44	17.43		
15	256QAM	75	0	17.39	17.45	17.46		
Channel				20000	20175	20350		Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750		
10	QPSK	1	0	22.51	22.52	22.45	23.5	
10	QPSK	1	25	22.44	22.48	22.40		
10	QPSK	1	49	22.35	22.49	22.39		
10	QPSK	25	0	21.51	21.68	21.53		
10	QPSK	25	12	21.59	21.46	21.52		
10	QPSK	25	25	21.49	21.59	21.47	22.5	
10	QPSK	50	0	21.52	21.58	21.45		
10	16QAM	1	0	21.89	21.81	21.62		
10	16QAM	1	25	21.86	22.03	21.83		
10	16QAM	1	49	21.88	22.08	21.89		
10	16QAM	25	0	20.65	20.64	20.67	21.5	
10	16QAM	25	12	20.71	20.57	20.59		
10	16QAM	25	25	20.65	20.60	20.67		
10	16QAM	50	0	20.63	20.60	20.53		
10	64QAM	1	0	20.64	20.79	20.81		
10	64QAM	1	25	20.75	20.80	20.69	21.5	
10	64QAM	1	49	20.82	20.68	20.47		
10	64QAM	25	0	20.71	20.51	20.52		
10	64QAM	25	12	20.47	20.53	20.57		
10	64QAM	25	25	20.64	20.59	20.60		
10	64QAM	50	0	20.53	20.54	20.60	18.5	
10	256QAM	1	0	17.49	17.64	17.66		
10	256QAM	1	25	17.60	17.65	17.54		
10	256QAM	1	49	17.67	17.53	17.32		
10	256QAM	25	0	17.56	17.36	17.37		
10	256QAM	25	12	17.32	17.38	17.42	18.5	
10	256QAM	25	25	17.49	17.44	17.45		
10	256QAM	50	0	17.38	17.39	17.45		
Channel				19975	20175	20375		Tune-up limit (dBm)
Frequency (MHz)				1712.5	1732.5	1752.5		
5	QPSK	1	0	22.51	22.51	22.42	23.5	
5	QPSK	1	12	22.42	22.44	22.46		
5	QPSK	1	24	22.43	22.49	22.39		
5	QPSK	12	0	21.49	21.65	21.53		
5	QPSK	12	7	21.51	21.54	21.48		
5	QPSK	12	13	21.59	21.59	21.48	22.5	
5	QPSK	25	0	21.63	21.62	21.47		
5	16QAM	1	0	21.82	21.81	21.62		
5	16QAM	1	12	21.92	22.08	21.89		
5	16QAM	1	24	21.97	22.08	21.93		

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	21.56	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	20.56	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	23.5
1.4	QPSK	1	0	22.35	22.43	22.32	
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	
1.4	QPSK	3	1	22.44	22.44	22.42	
1.4	QPSK	3	3	22.42	22.46	22.46	22.5
1.4	QPSK	6	0	21.46	21.46	21.35	
1.4	16QAM	1	0	21.73	21.70	21.47	
1.4	16QAM	1	3	21.82	21.90	21.73	22.5
1.4	16QAM	1	5	21.77	21.93	21.83	
1.4	16QAM	3	0	21.55	21.55	21.58	
1.4	16QAM	3	1	21.70	21.49	21.46	21.5
1.4	16QAM	3	3	21.52	21.59	21.54	
1.4	16QAM	6	0	20.50	20.49	20.46	
1.4	64QAM	1	0	20.57	20.72	20.75	21.5
1.4	64QAM	1	3	20.67	20.69	20.61	
1.4	64QAM	1	5	20.73	20.67	20.45	
1.4	64QAM	3	0	20.57	20.50	20.53	21.5
1.4	64QAM	3	1	20.44	20.48	20.54	
1.4	64QAM	3	3	20.54	20.47	20.54	
1.4	64QAM	6	0	20.44	20.46	20.47	18.5
1.4	256QAM	1	0	17.42	17.57	17.60	
1.4	256QAM	1	3	17.52	17.54	17.46	
1.4	256QAM	1	5	17.58	17.52	17.30	18.5
1.4	256QAM	3	0	17.42	17.35	17.38	
1.4	256QAM	3	1	17.29	17.33	17.39	
1.4	256QAM	3	3	17.39	17.32	17.39	18.5
1.4	256QAM	6	0	17.29	17.31	17.32	

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	23.5
1.4	QPSK	1	0	22.45	22.53	22.42	
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	
1.4	QPSK	3	1	22.61	22.61	22.59	
1.4	QPSK	3	3	22.59	22.63	22.63	22.5
1.4	QPSK	6	0	21.63	21.63	21.52	
1.4	16QAM	1	0	21.90	21.87	21.64	
1.4	16QAM	1	3	21.99	22.07	21.90	22.5
1.4	16QAM	1	5	21.94	22.10	22.00	
1.4	16QAM	3	0	21.72	21.72	21.75	
1.4	16QAM	3	1	21.87	21.66	21.63	21.5
1.4	16QAM	3	3	21.69	21.76	21.71	
1.4	16QAM	6	0	20.67	20.66	20.63	
1.4	64QAM	1	0	20.74	20.89	20.92	21.5
1.4	64QAM	1	3	20.84	20.86	20.78	
1.4	64QAM	1	5	20.90	20.84	20.62	
1.4	64QAM	3	0	20.74	20.67	20.70	21.5
1.4	64QAM	3	1	20.61	20.65	20.71	
1.4	64QAM	3	3	20.71	20.64	20.71	
1.4	64QAM	6	0	20.61	20.63	20.64	18.5
1.4	256QAM	1	0	17.59	17.74	17.77	
1.4	256QAM	1	3	17.62	17.64	17.56	
1.4	256QAM	1	5	17.65	17.59	17.37	18.5
1.4	256QAM	3	0	17.49	17.42	17.45	
1.4	256QAM	3	1	17.36	17.40	17.46	
1.4	256QAM	3	3	17.46	17.39	17.46	18.5
1.4	256QAM	6	0	17.36	17.38	17.39	

Band 5 (Celluar 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	24	
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	23	
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	23	
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	22	
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	21.06		
10	64QAM	1	0	21.25	21.32	21.21	22	
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	22	
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	19	
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	19	
10	256QAM	25	0	18.21	18.18	18.20		
Channel				20425	20525	20625		Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	0	23.18	23.19	23.11	24	
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	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	23	
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	22	
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	22	
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	19	
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	19	
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	Tune-up limit (dBm)	
Frequency (MHz)				825.5	836.5	847.5		
3	QPSK	1	0	23.09	23.17	23.13		24
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	23	
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	23	
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	22	
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	22	
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	22	
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	19	
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				20407	20525	20643	Tune-up limit (dBm)	
Frequency (MHz)				824.7	836.5	848.3		
1.4	QPSK	1	0	23.19	23.20	23.07		24
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	23	
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	23	
1.4	16QAM	1	5	22.19	22.16	22.08		

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	23.5	
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	22.5	
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	22.5	
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	21.5	
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	21.5	
20	16QAM	100	0		20.57	20.62	20.67		
20	64QAM	1	0		20.60	20.64	20.68	21.5	
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	21.5	
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	18.5	
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	18.5	
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	18.5	
20	256QAM	100	0		17.65	17.64	17.54		
Channel					20825	21100	21375	Tune-up limit (dBm)	
Frequency (MHz)					2507.5	2535	2562.5		
15	QPSK	1	0		22.37	22.47	22.41	23.5	
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	22.5	
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	22.5	
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	21.5	
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	21.5	
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	21.5	
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	21.5	
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	18.5	
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	18.5	
15	256QAM	36	20		17.55	17.69	17.49		
15	256QAM	36	39		17.47	17.66	17.65		
15	256QAM	75	0		17.64	17.56	17.52		
Channel					20800	21100	21400	Tune-up limit (dBm)	
Frequency (MHz)					2505	2535	2565		
10	QPSK	1	0		22.31	22.44	22.42	23.5	
10	QPSK	1	25		22.31	22.40	22.37		
10	QPSK	1	49		22.38	22.38	22.41		
10	QPSK	25	0		21.48	21.67	21.58	22.5	
10	QPSK	25	12		21.58	21.64	21.62		
10	QPSK	25	25		21.61	21.55	21.66		
10	QPSK	50	0		21.70	21.67	21.62	22.5	
10	16QAM	1	0		21.49	21.47	21.48		
10	16QAM	1	25		21.60	21.61	21.45		
10	16QAM	1	49		21.59	21.61	21.64	21.5	
10	16QAM	25	0		20.53	20.61	20.74		
10	16QAM	25	12		20.56	20.61	20.46		
10	16QAM	25	25		20.55	20.61	20.48	21.5	
10	16QAM	50	0		20.52	20.61	20.66		
10	64QAM	1	0		20.59	20.62	20.67		
10	64QAM	1	25		20.55	20.65	20.42	21.5	
10	64QAM	1	49		20.55	20.36	20.28		
10	64QAM	25	0		20.47	20.54	20.59		
10	64QAM	25	12		20.52	20.68	20.46	21.5	
10	64QAM	25	25		20.50	20.58	20.56		
10	64QAM	50	0		20.54	20.59	20.42		
10	256QAM	1	0		17.63	17.66	17.71	18.5	
10	256QAM	1	25		17.59	17.69	17.46		
10	256QAM	1	49		17.59	17.40	17.32		
10	256QAM	25	0		17.51	17.58	17.63	18.5	
10	256QAM	25	12		17.56	17.72	17.50		
10	256QAM	25	25		17.54	17.62	17.60		
10	256QAM	50	0		17.58	17.63	17.46		
Channel					20775	21100	21425	Tune-up limit (dBm)	
Frequency (MHz)					2502.5	2535	2567.5		
5	QPSK	1	0		22.37	22.48	22.35	23.5	
5	QPSK	1	12		22.32	22.38	22.44		
5	QPSK	1	24		22.40	22.43	22.42		
5	QPSK	12	0		21.53	21.65	21.61	22.5	
5	QPSK	12	7		21.62	21.66	21.61		
5	QPSK	12	13		21.58	21.61	21.64		
5	QPSK	25	0		21.63	21.66	21.56	22.5	
5	16QAM	1	0		21.56	21.42	21.49		
5	16QAM	1	12		21.61	21.58	21.49		
5	16QAM	1	24		21.57	21.68	21.62		

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			
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	Tune-up limit (dBm)		
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	18.26	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	Tune-up limit (dBm)		
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	Tune-up limit (dBm)		
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			
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	22.5

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	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			

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	18.5
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	23.5
1.4	QPSK	1	0	22.21	22.37	22.33	
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	
1.4	QPSK	3	1	22.38	22.40	22.36	
1.4	QPSK	3	3	22.43	22.40	22.37	22.5
1.4	QPSK	6	0	21.34	21.21	21.45	
1.4	16QAM	1	0	21.68	21.64	21.63	
1.4	16QAM	1	3	21.55	21.67	21.40	22.5
1.4	16QAM	1	5	21.55	21.62	21.66	
1.4	16QAM	3	0	21.32	21.54	21.33	
1.4	16QAM	3	1	21.52	21.49	21.35	21.5
1.4	16QAM	3	3	21.39	21.42	21.41	
1.4	16QAM	6	0	20.56	20.52	20.53	
1.4	64QAM	1	0	20.82	20.75	20.74	21.5
1.4	64QAM	1	3	20.66	20.82	20.55	
1.4	64QAM	1	5	20.63	20.70	20.73	
1.4	64QAM	3	0	20.56	20.51	20.47	21.5
1.4	64QAM	3	1	20.50	20.55	20.49	
1.4	64QAM	3	3	20.50	20.51	20.54	
1.4	64QAM	6	0	20.62	20.49	20.41	18.5
1.4	256QAM	1	0	17.81	17.74	17.73	
1.4	256QAM	1	3	17.65	17.81	17.54	
1.4	256QAM	1	5	17.62	17.69	17.72	18.5
1.4	256QAM	3	0	17.55	17.50	17.46	
1.4	256QAM	3	1	17.49	17.54	17.48	
1.4	256QAM	3	3	17.49	17.50	17.53	18.5
1.4	256QAM	6	0	17.61	17.48	17.40	

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	18.5
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	23.5
1.4	QPSK	1	0	22.34	22.50	22.46	
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	
1.4	QPSK	3	1	22.51	22.53	22.49	
1.4	QPSK	3	3	22.56	22.53	22.50	22.5
1.4	QPSK	6	0	21.47	21.34	21.58	
1.4	16QAM	1	0	21.81	21.77	21.76	
1.4	16QAM	1	3	21.68	21.80	21.53	22.5
1.4	16QAM	1	5	21.68	21.75	21.79	
1.4	16QAM	3	0	21.45	21.67	21.46	
1.4	16QAM	3	1	21.65	21.62	21.48	21.5
1.4	16QAM	3	3	21.52	21.55	21.54	
1.4	16QAM	6	0	20.69	20.65	20.66	
1.4	64QAM	1	0	20.95	20.88	20.87	21.5
1.4	64QAM	1	3	20.79	20.95	20.68	
1.4	64QAM	1	5	20.76	20.83	20.86	
1.4	64QAM	3	0	20.69	20.64	20.60	21.5
1.4	64QAM	3	1	20.63	20.68	20.62	
1.4	64QAM	3	3	20.63	20.64	20.67	
1.4	64QAM	6	0	20.75	20.62	20.54	18.5
1.4	256QAM	1	0	17.94	17.87	17.86	
1.4	256QAM	1	3	17.78	17.94	17.67	
1.4	256QAM	1	5	17.75	17.82	17.85	18.5
1.4	256QAM	3	0	17.68	17.63	17.59	
1.4	256QAM	3	1	17.62	17.67	17.61	
1.4	256QAM	3	3	17.62	17.63	17.66	18.5
1.4	256QAM	6	0	17.74	17.61	17.53	

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				55340	55630	55960	56150	56640	3692.5
Frequency (MHz)				55340	55630	55960	56150	56640	
20	QPSK	1	0	22.09	22.09	22.15	21.99	21.98	23
20	QPSK	1	49	22.00	22.07	21.90	21.92	21.88	
20	QPSK	1	99	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	24	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	16QAM	1	0	21.23	21.25	21.19	21.13	21.14	
20	16QAM	1	49	21.16	21.03	21.13	21.06	21.02	22
20	16QAM	1	99	21.09	20.95	21.16	21.04	21.06	
20	16QAM	50	0	20.24	20.20	20.06	20.00	19.91	
20	16QAM	50	24	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	64QAM	1	0	20.14	20.21	20.12	20.02	20.06	
20	64QAM	1	49	20.13	19.85	20.03	19.94	19.96	
20	64QAM	1	99	20.07	19.98	20.07	19.97	20.01	21
20	64QAM	50	0	20.19	20.13	20.00	19.93	19.77	
20	64QAM	50	24	20.09	20.04	20.03	19.91	19.95	
20	64QAM	50	50	19.96	19.97	19.98	19.87	19.89	
20	64QAM	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	49	17.18	16.90	17.08	16.99	17.01	
20	256QAM	1	99	17.12	17.03	17.12	17.03	17.06	
20	256QAM	50	0	17.24	17.18	17.05	16.96	16.82	18
20	256QAM	50	24	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				55315	55620	55960	56160	56655	Tune-up limit (dBm)
Frequency (MHz)				3557.5	3608	3625	3642	3692.5	
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	21.26	21.08	21.02	
15	QPSK	36	24	21.14	21.14	21.12	20.92	20.85	22
15	QPSK	36	39	21.26	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	39	20.15	19.96	19.96	19.90	20.00	21
15	16QAM	75	0	20.13	20.08	20.19	20.12	20.12	
15	64QAM	1	0	20.14	20.21	20.17	20.03	20.07	
15	64QAM	1	37	20.21	19.88	20.10	19.93	19.98	
15	64QAM	1	74	20.15	20.06	20.07	19.98	20.08	21
15	64QAM	36	0	20.18	20.23	20.01	20.01	19.83	
15	64QAM	36	20	20.09	20.03	20.04	19.93	20.02	
15	64QAM	36	39	19.98	20.00	19.97	19.93	19.92	
15	64QAM	75	0	20.15	20.08	20.05	20.05	20.09	18
15	256QAM	1	0	17.09	17.15	17.11	16.97	17.01	
15	256QAM	1	37	17.15	16.82	17.04	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	39	16.96	16.98	16.95	16.91	16.90	
15	256QAM	75	0	17.13	17.06	17.07	17.03	17.07	
Channel				55290	55815	55960	56165	56660	Tune-up limit (dBm)
Frequency (MHz)				3555	3607.5	3625	3642.5	3695	
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	20.06	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	64QAM	1	0	20.20	20.25	20.13	20.06	20.11	
10	64QAM	1	25	20.21	19.86	20.06	20.00	19.98	
10	64QAM	1	49	20.06	20.01	20.10	20.08	20.02	21
10	64QAM	25	0	20.19	20.21	20.01	19.97	19.87	
10	64QAM	25	12	20.16	20.08	20.04	20.00	20.04	
10	64QAM	25	25	20.06	19.97	20.06	19.95	19.93	
10	64QAM	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	16.98	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				55010	55010	55960	56170	56175	Tune-up limit (dBm)
Frequency (MHz)				3552.5	3607	3625	3643	3697.5	
5	QPSK	1	0	21.95	21.86	22.09	21.88	21.94	23
5	QPSK	1	12	21.95	21.94	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	20.08	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	64QAM	1	0	20.19	20.22	20.15	20.05	20.08	
5	64QAM	1	12	20.13	19.86	20.07	19.93	20.03	
5	64QAM	1	24	20.08	19.99	20.16	20.05	20.10	21
5	64QAM	12	0	20.19	20.14	20.04	19.88	19.82	
5	64QAM	12	7	20.04	20.06	19.98	19.92	19.97	
5	64QAM	12	13	19.94	19.94	19.94	19.90	19.87	
5	64QAM	25	0	20.14	20.09	20.16	20.01	20.08	18
5	256QAM	1	0	17.13	17.16	17.09	16.99	17.02	
5	256QAM	1	12	17.07	16.90	16.97	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	16.98	16.88	16.90	
5	256QAM	12	13	16.92	16.92	16.92	16.87	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				55340	55630	55960	56150	56640	3692.5
Frequency (MHz)				55340	55630	55960	56150	56640	
20	QPSK	1	0	21.97	21.88	22.03	21.87	21.86	23
20	QPSK	1	49	21.88	21.95	21.78	21.80	21.76	
20	QPSK	1	99	21.97	21.82	21.93	21.83	21.75	
20	QPSK	50	0	21.20	21.15	21.21	21.02	21.04	

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

SCC LTE Downlink													
Configure	CA Configuration	PCC				SCC							
		Band	BW (MHz)	UL Channel	UL Freq (MHz)	UL Modulation (Modulation)	Band	BW (MHz)	DL Channel	DL Freq (MHz)	CA TX (dBm)	Rel 8 TX (dBm)	Power
Intra-band/inter-band	CA_13A-48A	13	10	23230	782	QPSK16QAM	48	20	55990	3625	22.88	23.41	
	CA_13A-48A	13	10	23230	782	QPSK16QAM	48	20	132422	1755	22.88	23.41	
	CA_2A-13A	2	10	18600	1860	QPSK16QAM	13	10	23230	782	22.81	22.59	
	CA_2A-2A	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	22.12	22.59	
	CA_2A-48A	2	20	18700	1860	QPSK16QAM	48	20	55990	3625	22.13	22.59	
	CA_2A-4A	2	10	18600	1860	QPSK16QAM	4	10	18710	1745	22.32	22.59	
	CA_2A-5A	2	10	18600	1860	QPSK16QAM	5	10	20450	829	22.13	22.59	
	CA_2A-6A	2	10	18600	1860	QPSK16QAM	6	20	132422	1755	22.14	22.59	
	CA_48A-48A	48	20	55990	3625	QPSK16QAM	48	20	132422	1755	22.16	22.59	
	CA_48C	48	20	55991	3615.1	QPSK16QAM	48	20	55990	3624.9	22.35	22.59	
	CA_4A-13A	4	10	20175	1752.5	QPSK16QAM	13	10	23230	782	22.34	22.60	
	CA_4A-48A	4	20	20050	1720	QPSK16QAM	48	20	55990	3625	22.35	22.60	
	CA_4A-4A	4	10	20050	1720	QPSK16QAM	4	20	20300	1745	22.46	22.60	
	CA_4A-5A	4	10	20175	1752.5	QPSK16QAM	5	10	20450	829	22.51	22.60	
	CA_5A-48A	5	10	20450	829	QPSK16QAM	48	20	55990	3625	22.58	22.57	
	CA_5A-6A	5	10	20450	829	QPSK16QAM	6	20	132422	1755	22.59	22.57	
	CA_5A-8A	5	10	20575	831.6	QPSK16QAM	8	10	20575	841.5	22.11	22.57	
	CA_8A-48A	8	20	132072	1720	QPSK16QAM	48	20	55990	3624.9	22.51	22.62	
	CA_8B	8	20	132073	1750.1	QPSK16QAM	8	20	132472	1760	22.54	22.62	
	CA_8C	8	20	132023	1756.1	QPSK16QAM	8	20	132521	1766.9	22.51	22.62	

SCC LTE Downlink																				
Configure	CA Configuration	PCC				SCC1				SCC2										
		Band	BW (MHz)	UL Channel	UL Freq (MHz)	UL Modulation (Modulation)	Band	BW (MHz)	DL Channel	DL Freq (MHz)	CA TX (dBm)	Rel 8 TX (dBm)	Power							
Intra-band/inter-band	CA_13A-48A-48A	13	10	23230	782	QPSK16QAM	48	20	55340	3560	48	20	56940	3690	23.12	23.41				
	CA_13A-48A-48A	13	10	23230	782	QPSK16QAM	48	20	132422	1755	48	20	56940	3690	23.22	23.41				
	CA_13A-48C	13	10	23230	782	QPSK16QAM	48	20	56442	3670.2	48	20	56940	3690	23.24	23.41				
	CA_13A-48A-48A	13	10	23230	782	QPSK16QAM	66	20	66886	2155	66	20	67236	2190	23.18	23.41				
	CA_13A-48B	13	10	23230	782	QPSK16QAM	66	10	67187	2185.1	66	10	67286	2195	23.14	23.41				
	CA_13A-48C	13	10	23230	782	QPSK16QAM	48	20	55990	3625	48	20	67236	2190	23.18	23.41				
	CA_2A-13A-48A	2	20	18700	1860	QPSK16QAM	13	10	23230	782	48	20	55990	3625	22.42	22.59				
	CA_2A-13A-48A	2	20	18700	1860	QPSK16QAM	13	10	23230	782	48	20	132422	1755	22.38	22.59				
	CA_2A-2A-13A	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	13	10	23230	782	22.31	22.59				
	CA_2A-2A-4A	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	4	10	20300	1745	22.28	22.59				
	CA_2A-2A-5A	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	5	10	20450	829	22.25	22.59				
	CA_2A-2A-6A	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	6	20	132422	1755	22.14	22.59				
	CA_2A-2A-8A	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	66	20	67236	2190	22.24	22.59				
	CA_2A-4A-48A	2	20	18700	1860	QPSK16QAM	48	20	55990	3625	48	20	55990	3625	22.13	22.59				
	CA_2A-4A-6A	2	20	18700	1860	QPSK16QAM	48	20	55990	3625	48	20	132422	1755	22.42	22.59				
	CA_2A-48C	2	20	18700	1860	QPSK16QAM	48	20	56442	3670.2	48	20	56940	3690	22.51	22.59				
	CA_2A-4A-13A	2	20	18700	1860	QPSK16QAM	13	10	23230	782	48	20	55990	3625	22.53	22.59				
	CA_2A-4A-4A	2	20	18700	1860	QPSK16QAM	4	20	20300	1745	5	10	20450	829	22.28	22.59				
	CA_2A-5A-48A	2	20	18700	1860	QPSK16QAM	5	10	20450	829	48	20	55990	3625	22.28	22.59				
	CA_2A-5A-6A	2	20	18700	1860	QPSK16QAM	5	10	20450	829	48	20	132422	1755	22.45	22.59				
Intra-band/inter-band	CA_2A-48B	2	20	18700	1860	QPSK16QAM	5	10	20450	829	66	20	67236	2190	22.42	22.59				
	CA_2A-48A-48A	2	20	18700	1860	QPSK16QAM	48	20	55990	3625	48	20	67236	2190	22.48	22.59				
	CA_2A-48B	2	20	18700	1860	QPSK16QAM	66	10	67187	2185.1	66	10	67286	2195	22.41	22.59				
	CA_2A-48B	2	20	18700	1860	QPSK16QAM	66	20	67187	2185.1	66	20	67286	2195	22.35	22.59				
	CA_4A-48A-48A	4	20	20050	1720	QPSK16QAM	48	20	55990	3625	48	20	55990	3625	22.32	22.59				
	CA_4A-48A-48A	4	20	20050	1720	QPSK16QAM	48	20	55990	3625	48	20	132422	1755	22.42	22.59				
	CA_4A-48C	4	20	20050	1720	QPSK16QAM	48	20	56442	3670.2	48	20	56940	3690	22.38	22.59				
	CA_48A-48A-48A	48	20	55340	3560	QPSK16QAM	48	20	55940	3590	66	20	67236	2190	22.29	22.59				
	CA_48A-48A-48A	48	20	55340	3560	QPSK16QAM	66	10	67187	2185.1	66	10	67286	2195	22.51	22.59				
	CA_48A-48C	48	20	55340	3560	QPSK16QAM	48	20	55940	3590	66	20	67236	2190	22.29	22.59				
	CA_48C-48A	48	20	55991	3591.1	QPSK16QAM	48	20	55990	3590.9	48	20	55990	3590.9	22.31	22.59				
	CA_48C	48	20	55792	3605.2	QPSK16QAM	48	20	55990	3605	48	20	56188	3644.8	22.23	22.59				
	CA_48C-48C	48	20	55991	3591.1	QPSK16QAM	48	20	55990	3590.9	48	20	67236	2190	22.25	22.59				
	CA_48C	48	20	55792	3605.2	QPSK16QAM	48	20	55990	3605	48	20	56188	3644.8	22.23	22.59				
	CA_4A-48B	4	20	20050	1720	QPSK16QAM	48	20	55990	3625	48	20	56188	3644.8	22.21	22.60				
	CA_4A-48A	4	20	20050	1720	QPSK16QAM	4	20	20300	1745	5	10	20450	829	22.25	22.60				
	CA_4A-48B	4	20	20050	1720	QPSK16QAM	48	20	55990	3625	48	20	132422	1755	22.32	22.60				
	CA_4A-48A-48A	4	20	20050	1720	QPSK16QAM	48	20	55990	3625	48	20	67236	2190	22.42	22.59				
	CA_2A-2A-48C	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	66	10	67187	2185.1	22.42	22.59				
	CA_2A-2A-48B	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	66	10	67236	2190	22.42	22.59				
Intra-band/inter-band	CA_2A-48A-48C	2	20	18700	1860	QPSK16QAM	48	20	55990	3625	48	20	56442	3670.2	48	20	56940	3690	22.52	22.59
	CA_2A-48A-48C	2	20	18700	1860	QPSK16QAM	48	20	55990	3625	48	20	56442	3670.2	48	20	56940	3690	22.52	22.59
	CA_2A-48C-48A	2	20	18700	1860	QPSK16QAM	48	20	55990	3625	48	20	56442	3670.2	48	20	56940	3690	22.52	22.59
	CA_2A-48C-48A	2	20	18700	1860	QPSK16QAM	48	20	55990	3625	48	20	56442	3670.2	48	20	56940	3690	22.52	22.59
	CA_2A-13A-48A	2	20	18700	1860	QPSK16QAM	13	10	23230	782	48	20	55990	3625	22.42	22.59				
	CA_2A-13A-48A	2	20	18700	1860	QPSK16QAM	13	10	23230	782	48	20	55990	3625	22.42	22.59				
	CA_2A-13A-48A	2	20	18700	1860	QPSK16QAM	13	10	23230	782	48	20	55990	3625	22.42	22.59				
	CA_2A-13A-48A	2	20	18700	1860	QPSK16QAM	13	10	23230	782	48	20	55990	3625	22.42	22.59				
	CA_2A-2A-13A-48A	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	13	10	23230	782	22.31	22.59				
	CA_2A-2A-13A-48A	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	13	10	23230	782	22.31	22.59				
	CA_2A-2A-13A-48A	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	13	10	23230	782	22.31	22.59				
	CA_2A-2A-13A-48A	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	13	10	23230	782	22.31	22.59				
	CA_2A-2A-4A-48A	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	4	10	20300	1745	22.28	22.59				
	CA_2A-2A-4A-48A	2	20	18700	1860	QPSK16QAM	2	20	19100	1900	4	10	20300	1745	22.28	2				

5A_n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.83	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	DFT-s-OFDM QPSK	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		1	1	22.79	22.89	22.84	23.5
20	DFT-s-OFDM 16QAM	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	DFT-s-OFDM 64QAM	50	50	22.34	22.30	22.21	
20		100	0	22.21	22.44	22.26	
20	DFT-s-OFDM 256QAM	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

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		50	1	22.72	22.64	22.57	23.5
20	DFT-s-OFDM QPSK	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		1	1	22.68	22.78	22.74	23.5
20	DFT-s-OFDM QPSK	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	DFT-s-OFDM 16QAM	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		50	1	22.69	22.69	22.62	23.5
20	DFT-s-OFDM QPSK	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		1	1	22.75	22.79	22.73	23.5
20	DFT-s-OFDM QPSK	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	23.5
20		50	25	22.45	22.43	22.37	
20	DFT-s-OFDM 16QAM	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	DFT-s-OFDM QPSK	100	0	22.89	22.92	22.94	23.5
20		1	1	22.87	22.99	22.82	
20		1	53	22.84	22.92	22.85	
20		1	104	22.91	22.87	22.73	23.5
20		50	1	22.60	22.68	22.62	
20		50	25	22.65	22.66	22.54	
20	DFT-s-OFDM 16QAM	50	50	22.52	22.57	22.59	23.5
20		100	0	22.66	22.72	22.56	
20	DFT-s-OFDM 64QAM	1	1	22.91	22.83	22.93	23.5
20	DFT-s-OFDM 256QAM	1	1	21.38	21.23	21.33	22.5
20	CP-OFDM QPSK	1	1	19.35	19.47	19.57	20.5
20	CP-OFDM 16QAM	1	1	21.64	21.65	21.74	22.5
20	CP-OFDM 64QAM	1	1	20.55	20.68	20.72	21.5
20	CP-OFDM 256QAM	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

B48_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	22.20	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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	23.5
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	
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	
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	23.5
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	22.60	22.67	22.64	23.5
Channel				344000	349000	354000	23.5
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	22.77	22.74	22.62	23.5
Channel				343500	349000	354500	23.5
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	23.5
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	22.18	22.58	22.46	23.5
Channel				342500	349000	355500	23.5
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	22.69	22.61	22.67	23.5
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	22.73	22.21	22.06	23.5
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	22.70	22.41	22.25	23.5
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	22.68	22.54	22.56	23.5
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	22.70	22.66	22.57	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	Tune-up limit (dBm)
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	DFT-s-OFDM QPSK	216	0	22.77	22.76	22.63	23.5
40		1	1	22.81	22.83	22.74	
40		1	108	22.70	22.72	22.62	
40		1	214	22.63	22.58	22.57	23.5
40		108	1	22.50	22.52	22.33	
40		108	54	22.46	22.48	22.23	
40	DFT-s-OFDM 16QAM	108	108	22.47	22.42	22.37	23.5
40		216	0	22.51	22.52	22.32	
40		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	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	22.68	22.72	22.64	23.5
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	22.22	22.75	22.58	23.5
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	22.41	22.71	22.59	23.5
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	22.67	22.57	22.56	23.5
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	22.68	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	DFT-s-OFDM QPSK	270	0		25.59		27
100		1	1		26.29		
100		1	136		25.90		
100		1	271		25.99		27
100		135	1		26.08		
100		135	67		25.69		
100	DFT-s-OFDM 16QAM	135	136		25.85		27
100		270	0		25.90		
100		1	1		25.68		
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	25.55	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	DFT-s-OFDM QPSK	270	0		25.93		27
100		1	1		26.33		
100		1	136		25.96		
100		1	271		25.37		27
100		135	1		25.95		
100		135	67		25.76		
100	DFT-s-OFDM 16QAM	135	136		25.20		27
100		270	0		25.94		
100		1	1		25.43		
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		23.65		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	25.61	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		Tune-up limit (dBm)
Frequency (MHz)					3500.01		
100	DFT-s-OFDM Pi/2 BPSK	1	1		26.08		27
100		1	136		25.82		
100		1	271		25.85		
100		135	1		25.74		27
100		135	67		25.78		
100		135	136		25.66		
100	DFT-s-OFDM QPSK	270	0		25.64		27
100		1	1		26.31		
100		1	136		25.80		
100		1	271		25.75		27
100		135	1		25.85		
100		135	67		25.55		
100	DFT-s-OFDM 16QAM	135	136		25.61		27
100		270	0		25.87		
100		1	1		25.21		
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	DFT-s-OFDM QPSK	270	0		25.63		27
100		1	1		26.22		
100		1	136		25.93		
100		1	271		25.98		27
100		135	1		26.05		
100		135	67		25.96		
100	DFT-s-OFDM 16QAM	135	136		25.30		27
100		270	0		25.87		
100		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	Tune-up limit (dBm)
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	
100	DFT-s-OFDM QPSK	1	1	26.15	26.21	26.20	27
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	25.68	27
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	
100	DFT-s-OFDM 16QAM	1	1	24.57	24.64	24.89	25.5
100	DFT-s-OFDM 64QAM	1	1	23.23	23.22	23.15	24.5
100	DFT-s-OFDM 256QAM	1	1	21.20	21.20	21.30	22.5
100	CP-OFDM QPSK	1	1	24.08	24.15	24.46	25.5
100	CP-OFDM 16QAM	1	1	23.51	23.60	23.50	24.5
100	CP-OFDM 64QAM	1	1	22.18	22.29	22.61	23.5
100	CP-OFDM 256QAM	1	1	19.20	19.05	19.35	20.5
Channel				649668	656000	662332	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
Frequency (MHz)				3735	3840	3945	
70	DFT-s-OFDM QPSK	1	1	25.57	25.62	25.77	27
Channel				648668	656000	663332	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	DFT-s-OFDM QPSK	1	1	25.54	25.99	26.13	27
Channel				647668	656000	664332	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	DFT-s-OFDM QPSK	270	0	25.54	25.80	25.22	27
100		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	27
100		135	1	25.89	25.98	25.83	
100		135	67	25.69	25.88	25.64	
100	DFT-s-OFDM 16QAM	135	136	25.59	25.69	25.75	27
100		270	0	25.64	25.68	25.61	
100		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	DFT-s-OFDM QPSK	270	0	25.16	24.64	24.90	27
100		1	1	26.15	26.20	26.19	
100		1	136	25.87	25.83	25.65	
100		1	271	25.55	25.13	25.76	27
100		135	1	25.88	25.89	25.76	
100		135	67	25.62	25.72	25.65	
100	DFT-s-OFDM 16QAM	135	136	25.25	25.52	25.61	27
100		270	0	25.76	25.88	25.87	
100		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	DFT-s-OFDM QPSK	270	0	25.23	25.50	25.32	27
100		1	1	26.17	26.20	26.18	
100		1	136	25.66	25.85	25.69	
100		1	271	25.58	25.92	25.79	27
100		135	1	25.76	25.88	25.71	
100		135	67	25.66	25.75	25.73	
100	DFT-s-OFDM 16QAM	135	136	25.59	25.57	25.68	27
100		270	0	25.73	25.95	25.78	
100		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

2.4GHz WLAN ANT 1 (W0)

	Model	Observed	Expected	Standard Error	Chi-Square	D.F.	P-Value	Exp. Obs. Ratio
Cognitive Function (n = 100)	BDI-17 Mean	20.1	19.5	0.80	0.00	99		
	BDI-17 SD	9.8	9.7	0.40	0.00	99		
	BDI-17 Range	10-30	10-30	1.00	0.00	99		100.00
	BDI-17 Median	17.0	16.80	0.70	0.00	99		
	BDI-17 IQR	13.0-23.0	13.0-23.0	1.00	0.00	99		99.00
	BDI-17 Skewness	0.10	0.00	0.10	0.00	99		
	BDI-17 Kurtosis	-0.20	-0.10	0.20	0.00	99		
	BDI-17 Alpha	0.90	0.90	0.02	0.00	99		99.97
	BDI-17 Cronbach's Alpha	0.90	0.90	0.02	0.00	99		
	BDI-17 Test-Retest	0.85	0.85	0.03	0.00	99		99.75
	BDI-17 Split-Half	0.80	0.80	0.04	0.00	99		99.50
	BDI-17 Correlation	0.70	0.70	0.05	0.00	99		99.00
Cognitive Function (n = 100)	BDI-17 Mean	20.1	19.5	0.80	0.00	99		
	BDI-17 SD	9.8	9.7	0.40	0.00	99		
	BDI-17 Range	10-30	10-30	1.00	0.00	99		100.00
	BDI-17 Median	17.0	16.80	0.70	0.00	99		
	BDI-17 IQR	13.0-23.0	13.0-23.0	1.00	0.00	99		99.00
	BDI-17 Skewness	0.10	0.00	0.10	0.00	99		
	BDI-17 Kurtosis	-0.20	-0.10	0.20	0.00	99		
	BDI-17 Alpha	0.90	0.90	0.02	0.00	99		99.97
	BDI-17 Cronbach's Alpha	0.90	0.90	0.02	0.00	99		
	BDI-17 Test-Retest	0.85	0.85	0.03	0.00	99		99.75
	BDI-17 Split-Half	0.80	0.80	0.04	0.00	99		99.50
	BDI-17 Correlation	0.70	0.70	0.05	0.00	99		99.00
Cognitive Function (n = 100)	BDI-17 Mean	20.1	19.5	0.80	0.00	99		
	BDI-17 SD	9.8	9.7	0.40	0.00	99		
	BDI-17 Range	10-30	10-30	1.00	0.00	99		100.00
	BDI-17 Median	17.0	16.80	0.70	0.00	99		
	BDI-17 IQR	13.0-23.0	13.0-23.0	1.00	0.00	99		99.00
	BDI-17 Skewness	0.10	0.00	0.10	0.00	99		
	BDI-17 Kurtosis	-0.20	-0.10	0.20	0.00	99		
	BDI-17 Alpha	0.90	0.90	0.02	0.00	99		99.97
	BDI-17 Cronbach's Alpha	0.90	0.90	0.02	0.00	99		
	BDI-17 Test-Retest	0.85	0.85	0.03	0.00	99		99.75
	BDI-17 Split-Half	0.80	0.80	0.04	0.00	99		99.50
	BDI-17 Correlation	0.70	0.70	0.05	0.00	99		99.00
Cognitive Function (n = 100)	BDI-17 Mean	20.1	19.5	0.80	0.00	99		
	BDI-17 SD	9.8	9.7	0.40	0.00	99		
	BDI-17 Range	10-30	10-30	1.00	0.00	99		100.00
	BDI-17 Median	17.0	16.80	0.70	0.00	99		
	BDI-17 IQR	13.0-23.0	13.0-23.0	1.00	0.00	99		99.00
	BDI-17 Skewness	0.10	0.00	0.10	0.00	99		
	BDI-17 Kurtosis	-0.20	-0.10	0.20	0.00	99		
	BDI-17 Alpha	0.90	0.90	0.02	0.00	99		99.97
	BDI-17 Cronbach's Alpha	0.90	0.90	0.02	0.00	99		
	BDI-17 Test-Retest	0.85	0.85	0.03	0.00	99		99.75
	BDI-17 Split-Half	0.80	0.80	0.04	0.00	99		99.50
	BDI-17 Correlation	0.70	0.70	0.05	0.00	99		99.00

5GHz WLAN ANT 1 (W0)

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5GHz WLAN ANT 1 (W0)

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5GHz WLAN ANT 1 (W0)

[illegible]

5GHz WLAN ANT 1 (W0)

Year	State	Population		Population		Population		Population		Population
		2016	2017	2018	2019	2020	2021	2022	2023	
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000	10000	10000	10000	10000	10000	10000	10000	10000
BOS 17-000000	2016-2017	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2017-2018	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2018-2019	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2019-2020	10000	10000	10000	10000	10000	10000	10000	10000	10000
	2020-2021	10000								

2.4GHz WLAN ANT 2 (W1)

	Block	Channel	Program Name	Start/End Time	Channel	Program Name	Start/End Time	Day	Day 2
LIVE	BS2 TG-Media	DTH	BS2 TG-Media	06:00-07:00	BS2 TG-Media	06:00-07:00	BS		
		DTH	BS2 TG-Media	07:00-08:00	BS2 TG-Media	07:00-08:00	BS		
		DTH	BS2 TG-Media	08:00-09:00	BS2 TG-Media	08:00-09:00	BS		10:00
		DTH	BS2 TG-Media	09:00-10:00	BS2 TG-Media	09:00-10:00	BS		
		DTH	BS2 TG-Media	10:00-11:00	BS2 TG-Media	10:00-11:00	BS		
	BS2 TG-Media	DTH	BS2 TG-Media	11:00-12:00	BS2 TG-Media	11:00-12:00	BS		05:00
		DTH	BS2 TG-Media	12:00-13:00	BS2 TG-Media	12:00-13:00	BS		
		DTH	BS2 TG-Media	13:00-14:00	BS2 TG-Media	13:00-14:00	BS		
		DTH	BS2 TG-Media	14:00-15:00	BS2 TG-Media	14:00-15:00	BS		
		DTH	BS2 TG-Media	15:00-16:00	BS2 TG-Media	15:00-16:00	BS		06:00
LIVE	BS2 TG-ARTS MEDIA	DTH	BS2 TG-ARTS MEDIA	06:00-07:00	BS2 TG-ARTS MEDIA	06:00-07:00	BS		
		DTH	BS2 TG-ARTS MEDIA	07:00-08:00	BS2 TG-ARTS MEDIA	07:00-08:00	BS		
		DTH	BS2 TG-ARTS MEDIA	08:00-09:00	BS2 TG-ARTS MEDIA	08:00-09:00	BS		10:00
		DTH	BS2 TG-ARTS MEDIA	09:00-10:00	BS2 TG-ARTS MEDIA	09:00-10:00	BS		
		DTH	BS2 TG-ARTS MEDIA	10:00-11:00	BS2 TG-ARTS MEDIA	10:00-11:00	BS		
	BS2 TG-ARTS MEDIA	DTH	BS2 TG-ARTS MEDIA	11:00-12:00	BS2 TG-ARTS MEDIA	11:00-12:00	BS		05:00
		DTH	BS2 TG-ARTS MEDIA	12:00-13:00	BS2 TG-ARTS MEDIA	12:00-13:00	BS		
		DTH	BS2 TG-ARTS MEDIA	13:00-14:00	BS2 TG-ARTS MEDIA	13:00-14:00	BS		
		DTH	BS2 TG-ARTS MEDIA	14:00-15:00	BS2 TG-ARTS MEDIA	14:00-15:00	BS		
		DTH	BS2 TG-ARTS MEDIA	15:00-16:00	BS2 TG-ARTS MEDIA	15:00-16:00	BS		06:00
LIVE	BS2 TG-ARTS MEDIA	DTH	BS2 TG-ARTS MEDIA	06:00-07:00	BS2 TG-ARTS MEDIA	06:00-07:00	BS		
		DTH	BS2 TG-ARTS MEDIA	07:00-08:00	BS2 TG-ARTS MEDIA	07:00-08:00	BS		
		DTH	BS2 TG-ARTS MEDIA	08:00-09:00	BS2 TG-ARTS MEDIA	08:00-09:00	BS		10:00
		DTH	BS2 TG-ARTS MEDIA	09:00-10:00	BS2 TG-ARTS MEDIA	09:00-10:00	BS		
		DTH	BS2 TG-ARTS MEDIA	10:00-11:00	BS2 TG-ARTS MEDIA	10:00-11:00	BS		
	BS2 TG-ARTS MEDIA	DTH	BS2 TG-ARTS MEDIA	11:00-12:00	BS2 TG-ARTS MEDIA	11:00-12:00	BS		05:00
		DTH	BS2 TG-ARTS MEDIA	12:00-13:00	BS2 TG-ARTS MEDIA	12:00-13:00	BS		
		DTH	BS2 TG-ARTS MEDIA	13:00-14:00	BS2 TG-ARTS MEDIA	13:00-14:00	BS		
		DTH	BS2 TG-ARTS MEDIA	14:00-15:00	BS2 TG-ARTS MEDIA	14:00-15:00	BS		
		DTH	BS2 TG-ARTS MEDIA	15:00-16:00	BS2 TG-ARTS MEDIA	15:00-16:00	BS		06:00
LIVE	BS2 TG-ARTS MEDIA	DTH	BS2 TG-ARTS MEDIA	06:00-07:00	BS2 TG-ARTS MEDIA	06:00-07:00	BS		
		DTH	BS2 TG-ARTS MEDIA	07:00-08:00	BS2 TG-ARTS MEDIA	07:00-08:00	BS		
		DTH	BS2 TG-ARTS MEDIA	08:00-09:00	BS2 TG-ARTS MEDIA	08:00-09:00	BS		10:00
		DTH	BS2 TG-ARTS MEDIA	09:00-10:00	BS2 TG-ARTS MEDIA	09:00-10:00	BS		
		DTH	BS2 TG-ARTS MEDIA	10:00-11:00	BS2 TG-ARTS MEDIA	10:00-11:00	BS		
	BS2 TG-ARTS MEDIA	DTH	BS2 TG-ARTS MEDIA	11:00-12:00	BS2 TG-ARTS MEDIA	11:00-12:00	BS		05:00
		DTH	BS2 TG-ARTS MEDIA	12:00-13:00	BS2 TG-ARTS MEDIA	12:00-13:00	BS		
		DTH	BS2 TG-ARTS MEDIA	13:00-14:00	BS2 TG-ARTS MEDIA	13:00-14:00	BS		
		DTH	BS2 TG-ARTS MEDIA	14:00-15:00	BS2 TG-ARTS MEDIA	14:00-15:00	BS		
		DTH	BS2 TG-ARTS MEDIA	15:00-16:00	BS2 TG-ARTS MEDIA	15:00-16:00	BS		06:00
LIVE	BS2 TG-ARTS MEDIA	DTH	BS2 TG-ARTS MEDIA	06:00-07:00	BS2 TG-ARTS MEDIA	06:00-07:00	BS		
		DTH	BS2 TG-ARTS MEDIA	07:00-08:00	BS2 TG-ARTS MEDIA	07:00-08:00	BS		
		DTH	BS2 TG-ARTS MEDIA	08:00-09:00	BS2 TG-ARTS MEDIA	08:00-09:00	BS		10:00
		DTH	BS2 TG-ARTS MEDIA	09:00-10:00	BS2 TG-ARTS MEDIA	09:00-10:00	BS		
		DTH	BS2 TG-ARTS MEDIA	10:00-11:00	BS2 TG-ARTS MEDIA	10:00-11:00	BS		
	BS2 TG-ARTS MEDIA	DTH	BS2 TG-ARTS MEDIA	11:00-12:00	BS2 TG-ARTS MEDIA	11:00-12:00	BS		05:00
		DTH	BS2 TG-ARTS MEDIA	12:00-13:00	BS2 TG-ARTS MEDIA	12:00-13:00	BS		
		DTH	BS2 TG-ARTS MEDIA	13:00-14:00	BS2 TG-ARTS MEDIA	13:00-14:00	BS		
		DTH	BS2 TG-ARTS MEDIA	14:00-15:00	BS2 TG-ARTS MEDIA	14:00-15:00	BS		
		DTH	BS2 TG-ARTS MEDIA	15:00-16:00	BS2 TG-ARTS MEDIA	15:00-16:00	BS		06:00

5.2GHz WLAN ANT 2 (W1)

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5.3GHz WLAN ANT 2 (W1)

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5.5 WLAN ANT 2 (W1)

[illegible]

5.8 WLAN ANT 2 (W1)

	Base	Frequency (MHz)	Transmit Power (dBm)	Channel Width (MHz)	Channel Number	Bandwidth (MHz)	Signal Rate (Mbps)
Frequency band 1 (5.15-5.825 GHz)	IEEE 802.11a	5180	18	20	36	30	6
		5200	18	20	38	30	6
		5220	18	20	40	30	6
	IEEE 802.11b	5240	18	20	42	30	11
		5260	18	20	44	30	11
		5280	18	20	46	30	11
	IEEE 802.11g	5300	18	20	48	30	24
		5320	18	20	50	30	24
		5340	18	20	52	30	24
	IEEE 802.11n	5360	18	20	54	30	30
		5380	18	20	56	30	30
		5400	18	20	58	30	30
Frequency band 2 (5.725-5.875 GHz)	IEEE 802.11a	5740	18	20	100	30	6
		5760	18	20	102	30	6
		5780	18	20	104	30	6
	IEEE 802.11b	5800	18	20	106	30	11
		5820	18	20	108	30	11
		5840	18	20	110	30	11
	IEEE 802.11g	5860	18	20	112	30	24
		5880	18	20	114	30	24
		5900	18	20	116	30	24
	IEEE 802.11n	5920	18	20	118	30	30
		5940	18	20	120	30	30
		5960	18	20	122	30	30

2.4GHz WLAN MIMO (W0+1)

[illegible]

5.2GHz WLAN MIMO (W0+1)

	Block	Start Date	End Date	Frequency	Start Time	End Time	Days	Days of the Week
COLUMBIA SOUTH WEST	BSC 17-17-10000	03-01	03-03	WED	18:00	18:30	WED	
		03-04	03-05	THU	18:00	18:30	THU	
		03-06	03-07	FRI	18:00	18:30	FRI	03-06
	BSC 17-17-10000	03-08	03-09	SAT	18:00	18:30	SAT	
		03-10	03-11	SUN	18:00	18:30	SUN	
		03-12	03-13	MON	18:00	18:30	MON	
	BSC 17-17-10000	03-14	03-15	TUE	18:00	18:30	TUE	
		03-16	03-17	WED	18:00	18:30	WED	
		03-18	03-19	THU	18:00	18:30	THU	03-17
	BSC 17-17-10000	03-20	03-21	FRI	18:00	18:30	FRI	
		03-22	03-23	SAT	18:00	18:30	SAT	
		03-24	03-25	SUN	18:00	18:30	SUN	03-23
	BSC 17-17-10000	03-26	03-27	MON	18:00	18:30	MON	
		03-28	03-29	TUE	18:00	18:30	TUE	
		03-30	03-31	WED	18:00	18:30	WED	03-29
	BSC 17-17-10000	04-01	04-02	THU	18:00	18:30	THU	
		04-03	04-04	FRI	18:00	18:30	FRI	
		04-05	04-06	SAT	18:00	18:30	SAT	04-04
	BSC 17-17-10000	04-07	04-08	SUN	18:00	18:30	SUN	
		04-09	04-10	MON	18:00	18:30	MON	
		04-11	04-12	TUE	18:00	18:30	TUE	04-10
	BSC 17-17-10000	04-13	04-14	WED	18:00	18:30	WED	
		04-15	04-16	THU	18:00	18:30	THU	
		04-17	04-18	FRI	18:00	18:30	FRI	04-16
BSC 17-17-10000	04-19	04-20	SAT	18:00	18:30	SAT		
	04-21	04-22	SUN	18:00	18:30	SUN		
	04-23	04-24	MON	18:00	18:30	MON	04-22	
BSC 17-17-10000	04-25	04-26	TUE	18:00	18:30	TUE		
	04-27	04-28	WED	18:00	18:30	WED		
	04-29	04-30	THU	18:00	18:30	THU	04-28	
BSC 17-17-10000	05-01	05-02	FRI	18:00	18:30	FRI		
	05-03	05-04	SAT	18:00	18:30	SAT		
	05-05	05-06	SUN	18:00	18:30	SUN	05-04	

5.3GHz WLAN MIMO (W0+1)

[illegible]

5.5 WLAN MIMO (W0+1)

	Model	Year	Engine (cc)	Power (kW)	Top Speed (km/h)	0-100 (s)	Weight (kg)	Price (€)	
B&B T&L Models	B&B T&L Model	2017-2018	5000	50 kW	160	10.5	750	5.5	
		2019-2020	5000	50 kW	160	10.5	750		
		2021-2022	5000	50 kW	160	10.5	750		
	B&B T&L Model 2023	2023-2024	5000	50 kW	160	10.5	750	5.5	
		2025-2026	5000	50 kW	160	10.5	750		
		2027-2028	5000	50 kW	160	10.5	750		
	B&B T&L Model 2029	2029-2030	5000	50 kW	160	10.5	750	5.5	
		2031-2032	5000	50 kW	160	10.5	750		
		2033-2034	5000	50 kW	160	10.5	750		
	B&B T&L Model 2035	B&B T&L Model 2035	2035-2036	5000	50 kW	160	10.5	750	5.5
			2037-2038	5000	50 kW	160	10.5	750	
			2039-2040	5000	50 kW	160	10.5	750	
B&B T&L Model 2041		2041-2042	5000	50 kW	160	10.5	750	5.5	
		2043-2044	5000	50 kW	160	10.5	750		
		2045-2046	5000	50 kW	160	10.5	750		
B&B T&L Model 2047		2047-2048	5000	50 kW	160	10.5	750	5.5	
		2049-2050	5000	50 kW	160	10.5	750		
		2051-2052	5000	50 kW	160	10.5	750		
B&B T&L Model 2053		B&B T&L Model 2053	2053-2054	5000	50 kW	160	10.5	750	5.5
			2055-2056	5000	50 kW	160	10.5	750	
			2057-2058	5000	50 kW	160	10.5	750	
	B&B T&L Model 2059	2059-2060	5000	50 kW	160	10.5	750	5.5	
		2061-2062	5000	50 kW	160	10.5	750		
		2063-2064	5000	50 kW	160	10.5	750		
	B&B T&L Model 2065	B&B T&L Model 2065	2065-2066	5000	50 kW	160	10.5	750	5.5
			2067-2068	5000	50 kW	160	10.5	750	
			2069-2070	5000	50 kW	160	10.5	750	
		B&B T&L Model 2071	2071-2072	5000	50 kW	160	10.5	750	5.5
			2073-2074	5000	50 kW	160	10.5	750	
			2075-2076	5000	50 kW	160	10.5	750	
B&B T&L Model 2077		B&B T&L Model 2077	2077-2078	5000	50 kW	160	10.5	750	5.5
			2079-2080	5000	50 kW	160	10.5	750	
			2081-2082	5000	50 kW	160	10.5	750	
		B&B T&L Model 2083	2083-2084	5000	50 kW	160	10.5	750	5.5
			2085-2086	5000	50 kW	160	10.5	750	
			2087-2088	5000	50 kW	160	10.5	750	
	B&B T&L Model 2089	B&B T&L Model 2089	2089-2090	5000	50 kW	160	10.5	750	5.5
			2091-2092	5000	50 kW	160	10.5	750	
			2093-2094	5000	50 kW	160	10.5	750	
		B&B T&L Model 2095	2095-2096	5000	50 kW	160	10.5	750	5.5
			2097-2098	5000	50 kW	160	10.5	750	
			2099-2100	5000	50 kW	160	10.5	750	
B&B T&L Model 2101		B&B T&L Model 2101	2101-2102	5000	50 kW	160	10.5	750	5.5
			2103-2104	5000	50 kW	160	10.5	750	
			2105-2106	5000	50 kW	160	10.5	750	
		B&B T&L Model 2107	2107-2108	5000	50 kW	160	10.5	750	5.5
			2109-2110	5000	50 kW	160	10.5	750	
			2111-2112	5000	50 kW	160	10.5	750	

5.8 WLAN MIMO (W0+1)

[illegible]

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	17.5
20	64QAM	1	49	16.55	16.63	16.58	
20	64QAM	1	99	16.59	16.62	16.57	
20	64QAM	50	0	16.49	16.50	16.42	17.5
20	64QAM	50	24	16.47	16.48	16.46	
20	64QAM	50	50	16.41	16.45	16.42	
20	64QAM	100	0	16.36	16.42	16.36	14.5
20	256QAM	1	0	13.83	13.90	13.87	
20	256QAM	1	49	13.76	13.84	13.79	
20	256QAM	1	99	13.80	13.83	13.78	14.5
20	256QAM	50	0	13.70	13.71	13.63	
20	256QAM	50	24	13.68	13.69	13.67	
20	256QAM	50	50	13.62	13.66	13.63	14.5
20	256QAM	100	0	13.57	13.63	13.57	
Channel				18675	18900	19125	Tune-up limit (dBm)
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	17.5
15	64QAM	36	20	16.45	16.44	16.40	
15	64QAM	36	39	16.39	16.44	16.35	
15	64QAM	75	0	16.32	16.35	16.30	14.5
15	256QAM	1	0	13.79	13.83	13.83	
15	256QAM	1	37	13.75	13.83	13.71	
15	256QAM	1	74	13.78	13.81	13.77	14.5
15	256QAM	36	0	13.68	13.66	13.58	
15	256QAM	36	20	13.66	13.65	13.61	
15	256QAM	36	39	13.60	13.65	13.56	14.5
15	256QAM	75	0	13.53	13.56	13.51	
Channel				18650	18900	19150	Tune-up limit (dBm)
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	14.5
Channel				18625	18900	19175	Tune-up limit (dBm)
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	20.5
20	64QAM	1	49	19.60	19.68	19.63	
20	64QAM	1	99	19.64	19.67	19.62	
20	64QAM	50	0	19.54	19.55	19.47	20.5
20	64QAM	50	24	19.52	19.53	19.51	
20	64QAM	50	50	19.46	19.50	19.47	
20	64QAM	100	0	19.41	19.47	19.41	17.5
20	256QAM	1	0	16.88	16.95	16.92	
20	256QAM	1	49	16.81	16.89	16.84	
20	256QAM	1	99	16.85	16.88	16.83	17.5
20	256QAM	50	0	16.75	16.76	16.68	
20	256QAM	50	24	16.73	16.74	16.72	
20	256QAM	50	50	16.67	16.71	16.68	17.5
20	256QAM	100	0	16.62	16.68	16.62	
Channel				18675	18900	19125	Tune-up limit (dBm)
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

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	Tune-up limit (dBm)
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	19.5
1.4	QPSK	1	0	18.33	18.48	18.40	
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	
1.4	QPSK	3	1	18.42	18.45	18.35	
1.4	QPSK	3	3	18.36	18.40	18.37	18.5
1.4	QPSK	6	0	17.44	17.54	17.46	
1.4	16QAM	1	0	17.72	17.71	17.68	
1.4	16QAM	1	3	17.72	17.69	17.65	18.5
1.4	16QAM	1	5	17.63	17.72	17.72	
1.4	16QAM	3	0	17.52	17.57	17.49	
1.4	16QAM	3	1	17.50	17.54	17.46	17.5
1.4	16QAM	3	3	17.51	17.55	17.44	
1.4	16QAM	6	0	16.54	16.51	16.44	
1.4	64QAM	1	0	16.60	16.65	16.64	17.5
1.4	64QAM	1	3	16.52	16.56	16.53	
1.4	64QAM	1	5	16.52	16.56	16.53	
1.4	64QAM	3	0	16.61	16.55	16.48	17.5
1.4	64QAM	3	1	16.58	16.56	16.53	
1.4	64QAM	3	3	16.51	16.52	16.50	
1.4	64QAM	6	0	16.31	16.37	16.29	14.5
1.4	256QAM	1	0	13.81	13.86	13.85	
1.4	256QAM	1	3	13.73	13.77	13.74	
1.4	256QAM	1	5	13.73	13.77	13.74	14.5
1.4	256QAM	3	0	13.82	13.76	13.69	
1.4	256QAM	3	1	13.79	13.77	13.74	
1.4	256QAM	3	3	13.72	13.73	13.71	14.5
1.4	256QAM	6	0	13.52	13.58	13.50	

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	Tune-up limit (dBm)
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	22.5
1.4	QPSK	1	0	21.45	21.60	21.52	
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	
1.4	QPSK	3	1	21.54	21.57	21.47	
1.4	QPSK	3	3	21.48	21.52	21.49	21.5
1.4	QPSK	6	0	20.56	20.66	20.58	
1.4	16QAM	1	0	20.84	20.83	20.80	
1.4	16QAM	1	3	20.84	20.81	20.77	21.5
1.4	16QAM	1	5	20.75	20.84	20.84	
1.4	16QAM	3	0	20.64	20.69	20.61	
1.4	16QAM	3	1	20.62	20.66	20.58	20.5
1.4	16QAM	3	3	20.63	20.67	20.56	
1.4	16QAM	6	0	19.66	19.63	19.56	
1.4	64QAM	1	0	19.72	19.77	19.76	20.5
1.4	64QAM	1	3	19.64	19.68	19.65	
1.4	64QAM	1	5	19.64	19.68	19.65	
1.4	64QAM	3	0	19.73	19.67	19.60	17.5
1.4	64QAM	3	1	19.63	19.61	19.58	
1.4	64QAM	3	3	19.56	19.57	19.55	
1.4	64QAM	6	0	19.36	19.42	19.34	17.5
1.4	256QAM	1	0	16.86	16.91	16.90	
1.4	256QAM	1	3	16.78	16.82	16.79	
1.4	256QAM	1	5	16.78	16.82	16.79	17.5
1.4	256QAM	3	0	16.87	16.81	16.74	
1.4	256QAM	3	1	16.84	16.82	16.79	
1.4	256QAM	3	3	16.77	16.78	16.76	17.5
1.4	256QAM	6	0	16.57	16.63	16.55	

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				20950	20175	20300	
Frequency (MHz)				1720	1732.5	1745	
20	QPSK	1	0	16.51	16.60	16.54	
20	QPSK	1	49	16.45	16.47	16.40	
20	QPSK	1	99	16.37	16.44	16.41	17.5
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	
20	16QAM	50	0	14.63	14.58	14.62	16.5
20	16QAM	50	24	14.72	14.57	14.56	
20	16QAM	50	50	14.59	14.62	14.64	
20	16QAM	100	0	14.57	14.59	14.55	
20	64QAM	1	0	14.67	14.81	14.76	15.5
20	64QAM	1	49	14.70	14.74	14.64	
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	
20	256QAM	1	49	11.55	11.59	11.49	12.5
20	256QAM	1	99	11.65	11.53	11.35	
20	256QAM	50	0	11.50	11.39	11.39	
20	256QAM	50	24	11.33	11.34	11.41	
20	256QAM	50	50	11.46	11.39	11.44	12.5
20	256QAM	100	0	11.38	11.41	11.40	
Channel				20025	20175	20325	Tune-up limit (dBm)
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	17.5
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	
15	16QAM	36	0	14.62	14.49	14.56	16.5
15	16QAM	36	20	14.68	14.48	14.48	
15	16QAM	36	39	14.55	14.60	14.62	
15	16QAM	75	0	14.47	14.55	14.54	
15	64QAM	1	0	14.64	14.80	14.71	15.5
15	64QAM	1	37	14.64	14.64	14.59	
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	
15	256QAM	1	37	11.49	11.49	11.44	12.5
15	256QAM	1	74	11.63	11.48	11.29	
15	256QAM	36	0	11.47	11.29	11.32	
15	256QAM	36	20	11.24	11.31	11.34	
15	256QAM	36	39	11.42	11.37	11.36	12.5
15	256QAM	75	0	11.32	11.38	11.39	
Channel				20000	20175	20350	Tune-up limit (dBm)
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	17.5
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	
10	16QAM	25	0	14.55	14.54	14.57	15.5
10	16QAM	25	12	14.64	14.50	14.52	
10	16QAM	25	25	14.58	14.53	14.60	
10	16QAM	50	0	14.56	14.53	14.46	
10	64QAM	1	0	14.57	14.72	14.74	15.5
10	64QAM	1	25	14.68	14.73	14.62	
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	
10	256QAM	1	25	11.53	11.58	11.47	12.5
10	256QAM	1	49	11.60	11.46	11.25	
10	256QAM	25	0	11.49	11.29	11.30	
10	256QAM	25	12	11.25	11.31	11.35	
10	256QAM	25	25	11.42	11.37	11.38	12.5
10	256QAM	50	0	11.31	11.32	11.38	
Channel				19975	20175	20375	Tune-up limit (dBm)
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	17.5
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		22.5
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	21.5	
20	QPSK	50	50	20.64	20.67	20.60		
20	QPSK	100	0	20.67	20.68	20.57		
20	16QAM	1	0	20.94	20.85	20.68		
20	16QAM	1	49	20.82	20.91	20.86	21.5	
20	16QAM	1	99	20.92	20.69	20.96		
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	64QAM	1	99	19.87	19.75	19.57	20.5	
20	64QAM	50	0	19.72	19.61	19.61		
20	64QAM	50	24	19.55	19.56	19.63		
20	64QAM	50	50	19.68	19.61	19.66		
20	64QAM	100	0	19.60	19.63	19.62	17.5	
20	256QAM	1	0	16.59	16.73	16.68		
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	Tune-up limit (dBm)	
Frequency (MHz)				1717.5	1732.5	1747.5		
15	QPSK	1	0	21.50	21.55	21.46		22.5
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	21.5	
15	QPSK	36	39	20.63	20.60	20.51		
15	QPSK	75	0	20.52	20.50	20.37		
15	16QAM	1	0	20.80	20.69	20.52		
15	16QAM	1	37	20.79	20.91	20.71	21.5	
15	16QAM	1	74	20.91	21.06	20.92		
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		
15	64QAM	1	74	19.85	19.70	19.51	20.5	
15	64QAM	36	0	19.69	19.51	19.54		
15	64QAM	36	20	19.46	19.53	19.56		
15	64QAM	36	39	19.64	19.59	19.58		
15	64QAM	75	0	19.54	19.60	19.61	17.5	
15	256QAM	1	0	16.56	16.72	16.63		
15	256QAM	1	37	16.56	16.56	16.51		
15	256QAM	1	74	16.70	16.55	16.36		
15	256QAM	36	0	16.54	16.36	16.39	17.5	
15	256QAM	36	20	16.31	16.38	16.41		
15	256QAM	36	39	16.49	16.44	16.43		
15	256QAM	75	0	16.39	16.45	16.46		
Channel				20000	20175	20350	Tune-up limit (dBm)	
Frequency (MHz)				1715	1732.5	1750		
10	QPSK	1	0	21.51	21.52	21.45		22.5
10	QPSK	1	25	21.44	21.48	21.40		
10	QPSK	1	49	21.35	21.49	21.39		
10	QPSK	25	0	20.51	20.68	20.53		
10	QPSK	25	12	20.59	20.46	20.52	21.5	
10	QPSK	25	25	20.49	20.59	20.47		
10	QPSK	50	0	20.52	20.58	20.45		
10	16QAM	1	0	20.89	20.81	20.62		
10	16QAM	1	25	20.86	21.03	20.83	21.5	
10	16QAM	1	49	20.88	21.08	20.89		
10	16QAM	25	0	19.65	19.64	19.67		
10	16QAM	25	12	19.71	19.57	19.59		
10	16QAM	25	25	19.65	19.60	19.67	20.5	
10	16QAM	50	0	19.63	19.60	19.53		
10	64QAM	1	0	19.64	19.79	19.81		
10	64QAM	1	25	19.75	19.80	19.69		
10	64QAM	1	49	19.82	19.68	19.47	20.5	
10	64QAM	25	0	19.71	19.51	19.52		
10	64QAM	25	12	19.47	19.53	19.57		
10	64QAM	25	25	19.64	19.59	19.60		
10	64QAM	50	0	19.53	19.54	19.60	17.5	
10	256QAM	1	0	16.49	16.64	16.66		
10	256QAM	1	25	16.60	16.65	16.54		
10	256QAM	1	49	16.67	16.53	16.32		
10	256QAM	25	0	16.56	16.36	16.37	17.5	
10	256QAM	25	12	16.32	16.38	16.42		
10	256QAM	25	25	16.49	16.44	16.45		
10	256QAM	50	0	16.38	16.39	16.45		
Channel				19975	20175	20375	Tune-up limit (dBm)	
Frequency (MHz)				1712.5	1732.5	1752.5		
5	QPSK	1	0	21.51	21.51	21.42		22.5
5	QPSK	1	12	21.42	21.44	21.46		
5	QPSK	12	0	20.49	20.65	20.53		
5	QPSK	12	7	20.51	20.54	20.48		
5	QPSK	12	13	20.59	20.59	20.48	21.5	
5	QPSK	25	0	20.63	20.62	20.47		
5	16QAM	1	0	20.82	20.81	20.62		
5	16QAM	1	12	20.92	21.08	20.89		
5	16QAM	1	24	20.97	21.08	20.93	21.5	

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	14.58	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	17.5
1.4	QPSK	1	0	16.35	16.43	16.32	
1.4	QPSK	1	3	16.35	16.38	16.31	17.5
1.4	QPSK	1	5	16.31	16.42	16.36	
1.4	QPSK	3	0	16.45	16.40	16.45	
1.4	QPSK	3	1	16.44	16.44	16.42	16.5
1.4	QPSK	3	3	16.42	16.46	16.46	
1.4	QPSK	6	0	15.46	15.46	15.35	
1.4	16QAM	1	0	15.73	15.70	15.47	16.5
1.4	16QAM	1	3	15.82	15.90	15.73	
1.4	16QAM	1	5	15.77	15.93	15.83	
1.4	16QAM	3	0	15.55	15.55	15.58	15.5
1.4	16QAM	3	1	15.70	15.49	15.46	
1.4	16QAM	3	3	15.52	15.59	15.54	
1.4	16QAM	6	0	14.50	14.49	14.46	15.5
1.4	64QAM	1	0	14.57	14.72	14.75	
1.4	64QAM	1	3	14.67	14.69	14.61	
1.4	64QAM	1	5	14.73	14.67	14.45	15.5
1.4	64QAM	3	0	14.57	14.50	14.53	
1.4	64QAM	3	1	14.44	14.48	14.54	
1.4	64QAM	3	3	14.54	14.47	14.54	15.5
1.4	64QAM	6	0	14.44	14.46	14.47	
1.4	256QAM	1	0	11.42	11.57	11.60	
1.4	256QAM	1	3	11.52	11.54	11.46	12.5
1.4	256QAM	1	5	11.58	11.52	11.30	
1.4	256QAM	3	0	11.42	11.35	11.38	
1.4	256QAM	3	1	11.29	11.33	11.39	12.5
1.4	256QAM	3	3	11.39	11.32	11.39	
1.4	256QAM	6	0	11.29	11.31	11.32	

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	22.5
1.4	QPSK	1	0	21.45	21.53	21.42	
1.4	QPSK	1	3	21.45	21.48	21.41	22.5
1.4	QPSK	1	5	21.41	21.52	21.46	
1.4	QPSK	3	0	21.62	21.57	21.62	
1.4	QPSK	3	1	21.61	21.61	21.59	21.5
1.4	QPSK	3	3	21.59	21.63	21.63	
1.4	QPSK	6	0	20.63	20.63	20.52	
1.4	16QAM	1	0	20.90	20.87	20.64	21.5
1.4	16QAM	1	3	20.99	21.07	20.90	
1.4	16QAM	1	5	20.94	21.10	21.00	
1.4	16QAM	3	0	20.72	20.72	20.75	20.5
1.4	16QAM	3	1	20.87	20.66	20.63	
1.4	16QAM	3	3	20.69	20.76	20.71	
1.4	16QAM	6	0	19.67	19.66	19.63	20.5
1.4	64QAM	1	0	19.74	19.89	19.92	
1.4	64QAM	1	3	19.84	19.86	19.78	
1.4	64QAM	1	5	19.90	19.84	19.62	20.5
1.4	64QAM	3	0	19.74	19.67	19.70	
1.4	64QAM	3	1	19.61	19.65	19.71	
1.4	64QAM	3	3	19.71	19.64	19.71	20.5
1.4	64QAM	6	0	19.61	19.63	19.64	
1.4	256QAM	1	0	16.59	16.74	16.77	
1.4	256QAM	1	3	16.62	16.64	16.56	17.5
1.4	256QAM	1	5	16.65	16.59	16.37	
1.4	256QAM	3	0	16.49	16.42	16.45	
1.4	256QAM	3	1	16.36	16.40	16.46	17.5
1.4	256QAM	3	3	16.46	16.39	16.46	
1.4	256QAM	6	0	16.36	16.38	16.39	

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	Tune-up limit (dBm)		
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	Tune-up limit (dBm)		
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	50	0	20.20	20.17	20.12			
10	16QAM	1	0	19.99	19.97	19.98	21		
10	16QAM	1	25	20.10	20.11	19.95			
10	16QAM	1	49	20.09	20.11	20.14			
10	16QAM	25	0	19.03	19.11	19.24	20		
10	16QAM	25	12	19.06	19.11	18.96			
10	16QAM	25	25	19.05	19.11	18.98			
10	16QAM	50	0	19.02	19.11	19.16	20		
10	64QAM	1	0	19.09	19.12	19.17			
10	64QAM	1	25	19.05	19.15	18.92			
10	64QAM	1	49	19.05	18.86	18.78	20		
10	64QAM	25	0	18.97	19.04	19.09			
10	64QAM	25	12	19.02	19.18	18.96			
10	64QAM	25	25	19.00	19.08	19.06	20		
10	64QAM	50	0	19.04	19.09	18.92			
10	256QAM	1	0	16.13	16.16	16.21			
10	256QAM	1	25	16.09	16.19	15.96	17		
10	256QAM	1	49	16.09	15.90	15.82			
10	256QAM	25	0	16.01	16.08	16.13			
10	256QAM	25	12	16.06	16.22	16.00	17		
10	256QAM	25	25	16.04	16.12	16.10			
10	256QAM		50	0	16.08	16.13		15.96	
Channel				20775	21100	21425	Tune-up limit (dBm)		
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	20.87	20.98	20.85	22		
5	QPSK	1	12	20.82	20.88	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			

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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	Tune-up limit (dBm)		
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	18		
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	12	7	17.16	17.26	17.24			
5	256QAM	12	13	17.14	17.20	17.10			
5	256QAM	25	0	17.21	17.17	17.22			
Channel				23025	23095	23165	Tune-up limit (dBm)		
Frequency (MHz)				700.5	707.5	714.5			
3	QPSK	1	0	22.27	22.45	22.33	23		
3	QPSK	1	8	22.33	22.33	22.38			
3	QPSK	1	14	22.23	22.39	22.32			
3	QPSK	8	0	21.57	21.57	21.57	22		
3	QPSK	8	4	21.55	21.41	21.54			
3	QPSK	8	7	21.51	21.50	21.45			
3	QPSK	15	0	21.48	21.50	21.54	22		
3	16QAM	1	0	21.71	21.70	21.52			
3	16QAM	1	8	21.48	21.53	21.58			
3	16QAM	1	14	21.48	21.48	21.62	21		
3	16QAM	8	0	20.54	20.52	20.67			
3	16QAM	8	4	20.45	20.49	20.48			
3	16QAM	8	7	20.63	20.59	20.60	21		
3	16QAM	15	0	20.69	20.59	20.51			
3	64QAM	1	0	20.66	20.60	20.51			
3	64QAM	1	8	20.73	20.70	20.61	21		
3	64QAM	1	14	20.75	20.77	20.71			
3	64QAM	8	0	20.52	20.73	20.48			
3	64QAM	8	4	20.52	20.59	20.65	21		
3	64QAM	8	7	20.55	20.56	20.51			
3	64QAM	15	0	20.54	20.52	20.53			
3	256QAM	1	0	17.28	17.22	17.13	18		
3	256QAM	1	8	17.35	17.32	17.23			
3	256QAM	1	14	17.37	17.39	17.33			
3	256QAM	8	0	17.14	17.35	17.10	18		
3	256QAM	8	4	17.14	17.21	17.27			
3	256QAM	8	7	17.17	17.18	17.13			
3	256QAM	15	0	17.16	17.14	17.15			
Channel				23017	23095	23173	Tune-up limit (dBm)		
Frequency (MHz)				699.7	707.5	715.3			
1.4	QPSK	1	0	22.26	22.46	22.27	23		
1.4	QPSK	1	3	22.33	22.32	22.36			
1.4	QPSK	1	5	22.24	22.30	22.35			
1.4	QPSK	3	0	22.37	22.41	22.41			
1.4	QPSK	3	1	22.42	22.30	22.39			
1.4	QPSK	3	3	22.34	22.30	22.28	22		
1.4	QPSK	6	0	21.49	21.49	21.51			
1.4	16QAM	1	0	21.73	21.68	21.60			
1.4	16QAM	1	3	21.46	21.51	21.53	22		
1.4	16QAM	1	5	21.57	21.43	21.61			

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	20.84	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			
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	Tune-up limit (dBm)
Frequency (MHz)				779.5	782	784.5	
5	QPSK	1	0		22.38	22.39	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	
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
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	QPSK	25	0	15.28	15.27	15.47	16.5
5	16QAM	1	0	15.70	15.67	15.70	
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	14.62	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	12.5
5	64QAM	25	0	14.53	14.53	14.38	
5	256QAM	1	0	11.75	11.74	11.60	
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	1776.5	
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	132665	
Frequency (MHz)				1710.7	1745	1779.3	17.5
1.4	QPSK	1	0	16.21	16.37	16.33	
1.4	QPSK	1	3	16.24	16.32	16.21	
1.4	QPSK	1	5	16.25	16.33	16.21	16.5
1.4	QPSK	3	0	16.35	16.33	16.47	
1.4	QPSK	3	1	16.38	16.40	16.36	
1.4	QPSK	3	3	16.43	16.40	16.37	16.5
1.4	QPSK	6	0	15.34	15.21	15.45	
1.4	16QAM	1	0	15.68	15.64	15.63	
1.4	16QAM	1	3	15.55	15.67	15.40	16.5
1.4	16QAM	1	5	15.55	15.62	15.66	
1.4	16QAM	3	0	15.32	15.54	15.33	
1.4	16QAM	3	1	15.52	15.49	15.35	15.5
1.4	16QAM	3	3	15.39	15.42	15.41	
1.4	16QAM	6	0	14.56	14.52	14.53	
1.4	64QAM	1	0	14.82	14.75	14.74	15.5
1.4	64QAM	1	3	14.66	14.82	14.55	
1.4	64QAM	1	5	14.63	14.70	14.73	
1.4	64QAM	3	0	14.56	14.51	14.47	15.5
1.4	64QAM	3	1	14.50	14.55	14.49	
1.4	64QAM	3	3	14.50	14.51	14.54	
1.4	64QAM	6	0	14.62	14.49	14.41	12.5
1.4	256QAM	1	0	11.81	11.74	11.73	
1.4	256QAM	1	3	11.65	11.81	11.54	
1.4	256QAM	1	5	11.62	11.69	11.72	12.5
1.4	256QAM	3	0	11.55	11.50	11.46	
1.4	256QAM	3	1	11.49	11.54	11.48	
1.4	256QAM	3	3	11.49	11.50	11.53	12.5
1.4	256QAM	6	0	11.61	11.48	11.40	

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	Tune-up limit (dBm)		
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	Tune-up limit (dBm)		
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	Tune-up limit (dBm)		
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	21.5		

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	20.5
3	64QAM	8	4	19.73	19.62	19.63	
3	64QAM	8	7	19.63	19.58	19.62	
3	64QAM	15	0	19.74	19.61	19.50	17.5
3	256QAM	1	0	16.97	16.88	16.95	
3	256QAM	1	8	16.84	16.91	16.68	
3	256QAM	1	14	16.72	16.84	16.81	17.5
3	256QAM	8	0	16.57	16.59	16.51	
3	256QAM	8	4	16.72	16.61	16.62	
3	256QAM	8	7	16.62	16.57	16.61	17.5
3	256QAM	15	0	16.73	16.60	16.49	
Channel				131979	132322	132665	Tune-up limit (dBm)
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	21.5
1.4	QPSK	3	1	21.51	21.53	21.49	
1.4	QPSK	3	3	21.56	21.53	21.50	
1.4	QPSK	6	0	20.47	20.34	20.58	20.5
1.4	16QAM	1	0	20.81	20.77	20.76	
1.4	16QAM	1	3	20.68	20.80	20.53	
1.4	16QAM	1	5	20.68	20.75	20.79	20.5
1.4	16QAM	3	0	20.45	20.67	20.46	
1.4	16QAM	3	1	20.65	20.62	20.48	
1.4	16QAM	3	3	20.52	20.55	20.54	20.5
1.4	16QAM	6	0	19.69	19.65	19.66	
1.4	64QAM	1	0	19.95	19.88	19.87	
1.4	64QAM	1	3	19.79	19.95	19.68	20.5
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	19.68	19.62	20.5
1.4	64QAM	3	3	19.63	19.64	19.67	
1.4	64QAM	6	0	19.75	19.62	19.54	
1.4	256QAM	1	0	16.94	16.87	16.86	17.5
1.4	256QAM	1	3	16.78	16.94	16.67	
1.4	256QAM	1	5	16.75	16.82	16.85	
1.4	256QAM	3	0	16.68	16.63	16.59	17.5
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

5A_n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	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	DFT-s-OFDM QPSK	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		1	1	21.29	21.39	21.34	22
20	DFT-s-OFDM 16QAM	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	DFT-s-OFDM 64QAM	50	50	20.84	20.80	20.71	
20		100	0	20.71	20.94	20.76	
20	DFT-s-OFDM 256QAM	1	1	21.35	21.28	21.13	22
20	DFT-s-OFDM 16QAM	1	1	19.68	19.65	19.84	20.5
20	DFT-s-OFDM 64QAM	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	Tune-up limit (dBm)
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	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	21.07	21.17	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	21.15	21.20	20.96	22

13A_n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	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	20.94	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	22
20		50	25	20.95	20.93	20.87	
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		216	0	21.26	21.19	21.26	
40	DFT-s-OFDM QPSK	1	1	21.25	21.32	21.25	22
40		1	108	21.19	21.24	21.08	
40		1	214	21.10	20.98	21.11	
40		108	1	21.04	21.05	21.02	22
40		108	54	21.02	20.98	20.88	
40		108	108	20.87	20.92	20.89	
40		216	0	21.03	21.04	21.02	
40	DFT-s-OFDM 16QAM	1	1	21.23	21.30	21.28	22
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	1765	
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	Tune-up limit (dBm)
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

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 16QAM	108	108	20.97	20.92	20.87	22
40		216	0	21.01	21.02	20.82	
40		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