



REPORT No.: SZ24040065S01

Annex E Conducted Power

Note:

Conducted power unit: dBm

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

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

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

Band 2 (1900MHz Band) (dBm)_ANT0									
Part 24E									
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)		
Channel				18700	18900	19100			
Frequency (MHz)				1860	1880	1900			
20	QPSK	1	0	22.56	22.59	22.55	23.5		
20	QPSK	1	49	22.34	22.40	22.36			
20	QPSK	1	99	22.32	22.38	22.37			
20	QPSK	50	0	21.58	21.65	21.55	22.5		
20	QPSK	50	24	21.55	21.61	21.57			
20	QPSK	50	50	21.50	21.57	21.55			
20	QPSK	100	0	21.52	21.55	21.50	22.5		
20	16QAM	1	0	21.76	21.78	21.76			
20	16QAM	1	49	21.73	21.75	21.67			
20	16QAM	1	99	21.70	21.74	21.73	21.5		
20	16QAM	50	0	20.42	20.46	20.39			
20	16QAM	50	24	20.44	20.45	20.38			
20	16QAM	50	50	20.43	20.44	20.37	21.5		
20	16QAM	100	0	20.36	20.42	20.38			
20	64QAM	1	0	20.62	20.69	20.66			
20	64QAM	1	49	20.55	20.63	20.58	21.5		
20	64QAM	1	99	20.59	20.62	20.57			
20	64QAM	50	0	20.49	20.50	20.42			
20	64QAM	50	24	20.47	20.48	20.46	21.5		
20	64QAM	50	50	20.41	20.45	20.42			
20	64QAM	100	0	20.36	20.42	20.36			
20	256QAM	1	0	17.83	17.90	17.87	18.5		
20	256QAM	1	49	17.76	17.84	17.79			
20	256QAM	1	99	17.80	17.83	17.78			
20	256QAM	50	0	17.70	17.71	17.63	18.5		
20	256QAM	50	24	17.68	17.69	17.67			
20	256QAM	50	50	17.62	17.66	17.63			
20	256QAM	100	0	17.57	17.63	17.57			
Channel				18675	18900	19125	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		
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	20.40	20.43	21.5		
10	64QAM	25	25	20.39	20.44	20.41			
10	64QAM	50	0	20.32	20.40	20.29			
10	256QAM	1	0	17.81	17.86	17.84	18.5		
10	256QAM	1	25	17.73	17.80	17.72			
10	256QAM	1	49	17.77	17.82	17.74			
10	256QAM	25	0	17.69	17.70	17.56	18.5		
10	256QAM	25	12	17.64	17.61	17.64			
10	256QAM	25	25	17.60	17.65	17.62			
10	256QAM	50	0	17.53	17.61	17.50	18.5		
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		

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	
20	64QAM	1	49	20.60	20.68	20.63	21.5
20	64QAM	1	99	20.64	20.67	20.62	
20	64QAM	50	0	20.54	20.55	20.47	
20	64QAM	50	24	20.52	20.53	20.51	21.5
20	64QAM	50	50	20.46	20.50	20.47	
20	64QAM	100	0	20.41	20.47	20.41	
20	256QAM	1	0	17.88	17.95	17.92	18.5
20	256QAM	1	49	17.81	17.89	17.84	
20	256QAM	1	99	17.85	17.88	17.83	
20	256QAM	50	0	17.75	17.76	17.68	18.5
20	256QAM	50	24	17.73	17.74	17.72	
20	256QAM	50	50	17.67	17.71	17.68	
20	256QAM	100	0	17.62	17.68	17.62	Tune-up limit (dBm)
Channel				18675	18900	19125	
Frequency (MHz)				1857.5	1880	1902.5	
15	QPSK	1	0	22.50	22.56	22.49	23.5
15	QPSK	1	37	22.38	22.47	22.43	
15	QPSK	1	74	22.43	22.48	22.44	
15	QPSK	36	0	21.68	21.73	21.70	22.5
15	QPSK	36	20	21.59	21.66	21.68	
15	QPSK	36	39	21.60	21.67	21.66	
15	QPSK	75	0	21.62	21.59	21.55	22.5
15	16QAM	1	0	21.87	21.85	21.81	
15	16QAM	1	37	21.78	21.80	21.75	
15	16QAM	1	74	21.74	21.78	21.80	21.5
15	16QAM	36	0	20.48	20.51	20.50	
15	16QAM	36	20	20.44	20.49	20.37	
15	16QAM	36	39	20.46	20.43	20.34	21.5
15	16QAM	75	0	20.36	20.46	20.38	
15	64QAM	1	0	20.63	20.67	20.67	
15	64QAM	1	37	20.59	20.67	20.55	21.5
15	64QAM	1	74	20.62	20.65	20.61	
15	64QAM	36	0	20.52	20.50	20.42	
15	64QAM	36	20	20.50	20.49	20.45	21.5
15	64QAM	36	39	20.44	20.49	20.40	
15	64QAM	75	0	20.37	20.40	20.35	
15	256QAM	1	0	17.84	17.88	17.88	18.5
15	256QAM	1	37	17.80	17.88	17.76	
15	256QAM	1	74	17.83	17.86	17.82	
15	256QAM	36	0	17.73	17.71	17.63	18.5
15	256QAM	36	20	17.71	17.70	17.66	
15	256QAM	36	39	17.65	17.70	17.61	
15	256QAM	75	0	17.58	17.61	17.56	Tune-up limit (dBm)
Channel				18650	18900	19150	
Frequency (MHz)				1855	1880	1905	
10	QPSK	1	0	22.49	22.60	22.52	23.5
10	QPSK	1	25	22.39	22.47	22.42	
10	QPSK	1	49	22.37	22.46	22.41	
10	QPSK	25	0	21.73	21.70	21.70	22.5
10	QPSK	25	12	21.66	21.68	21.65	
10	QPSK	50	0	21.57	21.66	21.58	
10	16QAM	1	0	21.74	21.75	21.77	22.5
10	16QAM	1	25	21.75	21.73	21.64	
10	16QAM	1	49	21.69	21.73	21.70	
10	16QAM	25	0	20.44	20.48	20.38	21.5
10	16QAM	25	12	20.45	20.44	20.38	
10	16QAM	25	25	20.45	20.48	20.38	
10	16QAM	50	0	20.34	20.45	20.39	21.5
10	64QAM	1	0	20.65	20.70	20.68	
10	64QAM	1	25	20.57	20.64	20.56	
10	64QAM	1	49	20.61	20.66	20.58	21.5
10	64QAM	25	0	20.53	20.54	20.40	
10	64QAM	25	12	20.48	20.45	20.48	
10	64QAM	25	25	20.44	20.49	20.46	21.5
10	64QAM	50	0	20.37	20.45	20.34	
10	256QAM	1	0	17.86	17.91	17.89	
10	256QAM	1	25	17.78	17.85	17.77	18.5
10	256QAM	1	49	17.82	17.87	17.79	
10	256QAM	25	0	17.74	17.75	17.61	
10	256QAM	25	12	17.69	17.66	17.69	18.5
10	256QAM	25	25	17.65	17.70	17.67	
10	256QAM	50	0	17.58	17.66	17.57	
Channel				18625	18900	19175	
Frequency (MHz)				1852.5	1880	1907.5	
5	QPSK	1	0	22.47	22.54	22.51	23.5
5	QPSK	1	12	22.41	22.51	22.42	
5	QPSK	1	24	22.37	22.42	22.46	
5	QPSK	12	0	21.69	21.70	21.68	22.5
5	QPSK	12	7	21.60	21.65	21.61	
5	QPSK	12	13	21.58	21.67	21.63	
5	QPSK	25	0	21.62	21.60	21.57	22.5
5	16QAM	1	0	21.86	21.82	21.84	
5	16QAM	1	12	21.79	21.86	21.76	
5	16QAM	1	24	21.74	21.79	21.78	22.5



5	16QAM	12	0	20.35	20.42	20.32	21.5
5	16QAM	12	7	20.42	20.44	20.33	
5	16QAM	12	13	20.39	20.38	20.36	
5	16QAM	25	0	20.31	20.41	20.35	21.5
5	64QAM	1	0	20.57	20.67	20.64	
5	64QAM	1	12	20.54	20.58	20.54	
5	64QAM	1	24	20.57	20.61	20.52	21.5
5	64QAM	12	0	20.47	20.48	20.41	
5	64QAM	12	7	20.44	20.40	20.41	
5	64QAM	12	13	20.35	20.38	20.34	21.5
5	64QAM	25	0	20.33	20.35	20.31	
5	256QAM	1	0	17.78	17.88	17.85	
5	256QAM	1	12	17.75	17.79	17.75	18.5
5	256QAM	1	24	17.78	17.82	17.73	
5	256QAM	12	0	17.68	17.69	17.62	
5	256QAM	12	7	17.65	17.61	17.62	18.5
5	256QAM	12	13	17.56	17.59	17.55	
5	256QAM	25	0	17.54	17.56	17.52	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	22.37	22.43	22.38	23.5
3	QPSK	1	8	22.30	22.32	22.34	
3	QPSK	1	14	22.30	22.35	22.32	
3	QPSK	8	0	21.58	21.61	21.59	22.5
3	QPSK	8	4	21.48	21.59	21.50	
3	QPSK	8	7	21.49	21.53	21.52	
3	QPSK	15	0	21.44	21.51	21.43	22.5
3	16QAM	1	0	21.75	21.73	21.75	
3	16QAM	1	8	21.72	21.73	21.66	
3	16QAM	1	14	21.63	21.67	21.65	21.5
3	16QAM	8	0	20.41	20.42	20.35	
3	16QAM	8	4	20.37	20.42	20.35	
3	16QAM	8	7	20.38	20.38	20.36	21.5
3	16QAM	15	0	20.31	20.40	20.36	
3	64QAM	1	0	20.57	20.61	20.61	
3	64QAM	1	8	20.48	20.58	20.53	21.5
3	64QAM	1	14	20.52	20.60	20.52	
3	64QAM	8	0	20.43	20.49	20.34	
3	64QAM	8	4	20.44	20.44	20.44	21.5
3	64QAM	8	7	20.40	20.44	20.41	
3	64QAM	15	0	20.34	20.41	20.33	
3	256QAM	1	0	17.78	17.82	17.82	18.5
3	256QAM	1	8	17.69	17.79	17.74	
3	256QAM	1	14	17.73	17.81	17.73	
3	256QAM	8	0	17.64	17.70	17.55	18.5
3	256QAM	8	4	17.65	17.65	17.65	
3	256QAM	8	7	17.61	17.65	17.62	
3	256QAM	15	0	17.55	17.62	17.54	Tune-up limit (dBm)
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	23.5
1.4	QPSK	1	0	22.33	22.48	22.40	
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	
1.4	QPSK	3	3	22.36	22.40	22.37	22.5
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	21.5
1.4	16QAM	3	3	21.51	21.55	21.44	
1.4	16QAM	6	0	20.54	20.51	20.44	
1.4	64QAM	1	0	20.60	20.65	20.64	21.5
1.4	64QAM	1	3	20.52	20.56	20.53	
1.4	64QAM	1	5	20.52	20.56	20.53	
1.4	64QAM	3	0	20.61	20.55	20.48	21.5
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	18.5
1.4	256QAM	3	0	17.82	17.76	17.69	
1.4	256QAM	3	1	17.79	17.77	17.74	
1.4	256QAM	3	3	17.72	17.73	17.71	18.5
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	21.5
5	64QAM	1	0	20.69	20.79	20.76	
5	64QAM	1	12	20.59	20.63	20.59	
5	64QAM	1	24	20.62	20.66	20.57	21.5
5	64QAM	12	0	20.52	20.53	20.46	
5	64QAM	12	7	20.49	20.45	20.46	
5	64QAM	12	13	20.40	20.43	20.39	18.5
5	64QAM	25	0	20.38	20.40	20.36	
5	256QAM	1	0	17.83	17.93	17.90	
5	256QAM	1	12	17.80	17.84	17.80	18.5
5	256QAM	1	24	17.83	17.87	17.78	
5	256QAM	12	0	17.73	17.74	17.67	
5	256QAM	12	7	17.70	17.66	17.67	18.5
5	256QAM	12	13	17.61	17.64	17.60	
5	256QAM	25	0	17.59	17.61	17.57	
Channel				18615	18900	19185	Tune-up limit (dBm)
Frequency (MHz)				1851.5	1880	1908.5	
3	QPSK	1	0	22.49	22.55	22.50	23.5
3	QPSK	1	8	22.42	22.44	22.46	
3	QPSK	1	14	22.42	22.47	22.44	
3	QPSK	8	0	21.70	21.73	21.71	22.5
3	QPSK	8	4	21.60	21.71	21.62	
3	QPSK	8	7	21.61	21.65	21.64	
3	QPSK	15	0	21.56	21.63	21.55	22.5
3	16QAM	1	0	21.87	21.85	21.87	
3	16QAM	1	8	21.84	21.85	21.78	
3	16QAM	1	14	21.75	21.79	21.77	21.5
3	16QAM	8	0	20.53	20.54	20.47	
3	16QAM	8	4	20.49	20.54	20.47	
3	16QAM	8	7	20.50	20.50	20.48	21.5
3	16QAM	15	0	20.43	20.52	20.48	
3	64QAM	1	0	20.62	20.66	20.66	
3	64QAM	1	8	20.53	20.63	20.58	21.5
3	64QAM	1	14	20.57	20.65	20.57	
3	64QAM	8	0	20.48	20.54	20.39	
3	64QAM	8	4	20.49	20.49	20.49	21.5
3	64QAM	8	7	20.45	20.49	20.46	
3	64QAM	15	0	20.39	20.46	20.38	
3	256QAM	1	0	17.83	17.87	17.87	18.5
3	256QAM	1	8	17.74	17.84	17.79	
3	256QAM	1	14	17.78	17.86	17.78	
3	256QAM	8	0	17.69	17.75	17.60	18.5
3	256QAM	8	4	17.70	17.70	17.70	
3	256QAM	8	7	17.66	17.70	17.67	
3	256QAM	15	0	17.60	17.67	17.59	Tune-up limit (dBm)
Channel				18607	18900	19193	
Frequency (MHz)				1850.7	1880	1909.3	23.5
1.4	QPSK	1	0	22.45	22.60	22.52	
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	
1.4	QPSK	3	3	22.48	22.52	22.49	22.5
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	21.5
1.4	16QAM	3	3	21.63	21.67	21.56	
1.4	16QAM	6	0	20.66	20.63	20.56	
1.4	64QAM	1	0	20.72	20.77	20.76	21.5
1.4	64QAM	1	3	20.64	20.68	20.65	
1.4	64QAM	1	5	20.64	20.68	20.65	
1.4	64QAM	3	0	20.73	20.67	20.60	21.5
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	18.5
1.4	256QAM	3	0	17.87	17.81	17.74	
1.4	256QAM	3	1	17.84	17.82	17.79	
1.4	256QAM	3	3	17.77	17.78	17.76	18.5
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	
Frequency (MHz)				1720	1732.5	1745	23.5
20	QPSK	1	0	22.51	22.60	22.54	
20	QPSK	1	49	22.45	22.47	22.40	
20	QPSK	1	99	22.37	22.44	22.41	
20	QPSK	50	0	21.51	21.63	21.52	
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	
20	64QAM	1	0	20.67	20.81	20.76	
20	64QAM	1	49	20.70	20.74	20.64	21.5
20	64QAM	1	99	20.80	20.68	20.50	
20	64QAM	50	0	20.65	20.54	20.54	
20	64QAM	50	24	20.48	20.49	20.56	21.5
20	64QAM	50	50	20.61	20.54	20.59	
20	64QAM	100	0	20.53	20.56	20.55	
20	256QAM	1	0	17.52	17.66	17.61	18.5
20	256QAM	1	49	17.55	17.59	17.49	
20	256QAM	1	99	17.65	17.53	17.35	
20	256QAM	50	0	17.50	17.39	17.39	
20	256QAM	50	24	17.33	17.34	17.41	
20	256QAM	50	50	17.46	17.39	17.44	18.5
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	
15	QPSK	1	0	22.38	22.43	22.34	23.5
15	QPSK	1	37	22.42	22.43	22.37	
15	QPSK	1	74	22.28	22.43	22.40	
15	QPSK	36	0	21.47	21.53	21.42	22.5
15	QPSK	36	20	21.61	21.42	21.43	
15	QPSK	36	39	21.51	21.48	21.39	
15	QPSK	75	0	21.50	21.48	21.35	22.5
15	16QAM	1	0	21.78	21.67	21.50	
15	16QAM	1	37	21.77	21.89	21.69	
15	16QAM	1	74	21.82	21.97	21.83	
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	
15	64QAM	36	20	20.39	20.46	20.49	
15	64QAM	36	39	20.57	20.52	20.51	21.5
15	64QAM	75	0	20.47	20.53	20.54	
15	256QAM	1	0	17.49	17.65	17.56	
15	256QAM	1	37	17.49	17.49	17.44	18.5
15	256QAM	1	74	17.63	17.48	17.29	
15	256QAM	36	0	17.47	17.29	17.32	
15	256QAM	36	20	17.24	17.31	17.34	18.5
15	256QAM	36	39	17.42	17.37	17.36	
15	256QAM	75	0	17.32	17.38	17.39	
Channel				20000	20175	20350	Tune-up limit (dBm)
Frequency (MHz)				1715	1732.5	1750	
10	QPSK	1	0	22.45	22.46	22.39	23.5
10	QPSK	1	25	22.38	22.42	22.34	
10	QPSK	1	49	22.29	22.43	22.33	
10	QPSK	25	0	21.45	21.62	21.47	22.5
10	QPSK	25	12	21.53	21.40	21.46	
10	QPSK	25	25	21.43	21.53	21.41	
10	QPSK	50	0	21.46	21.52	21.39	22.5
10	16QAM	1	0	21.76	21.68	21.49	
10	16QAM	1	25	21.76	21.93	21.73	
10	16QAM	1	49	21.78	21.98	21.79	
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	
10	64QAM	1	25	20.68	20.73	20.62	
10	64QAM	1	49	20.75	20.61	20.40	21.5
10	64QAM	25	0	20.64	20.44	20.45	
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	
10	256QAM	1	0	17.42	17.57	17.59	18.5
10	256QAM	1	25	17.53	17.58	17.47	
10	256QAM	1	49	17.60	17.46	17.25	
10	256QAM	25	0	17.49	17.29	17.30	18.5
10	256QAM	25	12	17.25	17.31	17.35	
10	256QAM	25	25	17.42	17.37	17.38	
10	256QAM	50	0	17.31	17.32	17.38	Tune-up limit (dBm)
Channel				19975	20175	20375	
Frequency (MHz)				1712.5	1732.5	1752.5	
5	QPSK	1	0	22.44	22.44	22.35	23.5
5	QPSK	1	12	22.35	22.37	22.39	
5	QPSK	1	24	22.36	22.42	22.32	
5	QPSK	12	0	21.42	21.58	21.46	22.5
5	QPSK	12	7	21.56	21.44	21.38	
5	QPSK	12	13	21.49	21.49	21.38	
5	QPSK	25	0	21.53	21.52	21.37	22.5
5	16QAM	1	0	21.72	21.71	21.52	
5	16QAM	1	12	21.75	21.91	21.72	
5	16QAM	1	24	21.80	21.91	21.76	Tune-up limit (dBm)

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	0	22.63	22.67	22.64	23.5	
20	QPSK	1	49	0	22.59	22.59	22.62		
20	QPSK	1	99	0	22.57	22.58	22.59		
20	QPSK	50	0	0	21.66	21.70	21.62	22.5	
20	QPSK	50	24	0	21.62	21.56	21.55		
20	QPSK	50	50	0	21.64	21.67	21.60		
20	QPSK	100	0	0	21.67	21.68	21.57	22.5	
20	16QAM	1	0	0	21.94	21.85	21.68		
20	16QAM	1	49	0	21.82	21.91	21.86		
20	16QAM	1	99	0	21.92	21.69	21.96	21.5	
20	16QAM	50	0	0	20.75	20.70	20.74		
20	16QAM	50	24	0	20.84	20.69	20.68		
20	16QAM	50	50	0	20.71	20.74	20.76	21.5	
20	16QAM	100	0	0	20.69	20.71	20.67		
20	64QAM	1	0	0	20.79	20.93	20.88		
20	64QAM	1	49	0	20.77	20.81	20.71	21.5	
20	64QAM	1	99	0	20.87	20.75	20.57		
20	64QAM	50	0	0	20.72	20.61	20.61		
20	64QAM	50	24	0	20.55	20.56	20.63	21.5	
20	64QAM	50	50	0	20.68	20.61	20.66		
20	64QAM	100	0	0	20.60	20.63	20.62		
20	256QAM	1	0	0	17.59	17.73	17.68	18.5	
20	256QAM	1	49	0	17.62	17.66	17.56		
20	256QAM	1	99	0	17.72	17.60	17.42		
20	256QAM	50	0	0	17.57	17.46	17.46	18.5	
20	256QAM	50	24	0	17.40	17.41	17.48		
20	256QAM	50	50	0	17.53	17.46	17.51		
20	256QAM	100	0	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	0	22.50	22.55	22.48	23.5	
15	QPSK	1	37	0	22.54	22.55	22.49		
15	QPSK	1	74	0	22.40	22.55	22.52		
15	QPSK	36	0	0	21.59	21.65	21.54	22.5	
15	QPSK	36	20	0	21.73	21.54	21.55		
15	QPSK	36	39	0	21.63	21.60	21.51		
15	QPSK	75	0	0	21.52	21.50	21.37	22.5	
15	16QAM	1	0	0	21.80	21.69	21.52		
15	16QAM	1	37	0	21.79	21.91	21.71		
15	16QAM	1	74	0	21.91	22.06	21.92	21.5	
15	16QAM	36	0	0	20.71	20.58	20.65		
15	16QAM	36	20	0	20.77	20.57	20.57		
15	16QAM	36	39	0	20.64	20.69	20.71	21.5	
15	16QAM	75	0	0	20.59	20.67	20.66		
15	64QAM	1	0	0	20.76	20.92	20.83		
15	64QAM	1	37	0	20.76	20.76	20.71	21.5	
15	64QAM	1	74	0	20.85	20.70	20.51		
15	64QAM	36	0	0	20.69	20.51	20.54		
15	64QAM	36	20	0	20.46	20.53	20.56	21.5	
15	64QAM	36	39	0	20.64	20.59	20.58		
15	64QAM	75	0	0	20.54	20.60	20.61		
15	256QAM	1	0	0	17.56	17.72	17.63	18.5	
15	256QAM	1	37	0	17.56	17.56	17.51		
15	256QAM	1	74	0	17.70	17.55	17.36		
15	256QAM	36	0	0	17.54	17.36	17.39	18.5	
15	256QAM	36	20	0	17.31	17.38	17.41		
15	256QAM	36	39	0	17.49	17.44	17.43		
15	256QAM	75	0	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	0	22.51	22.52	22.45	23.5	
10	QPSK	1	25	0	22.44	22.48	22.40		
10	QPSK	1	49	0	22.35	22.49	22.39		
10	QPSK	25	0	0	21.51	21.68	21.53	22.5	
10	QPSK	25	12	0	21.59	21.46	21.52		
10	QPSK	25	25	0	21.49	21.59	21.47		
10	QPSK	50	0	0	21.52	21.58	21.45	22.5	
10	16QAM	1	0	0	21.89	21.81	21.62		
10	16QAM	1	25	0	21.86	22.03	21.83		
10	16QAM	1	49	0	21.88	22.08	21.89	21.5	
10	16QAM	25	0	0	20.65	20.64	20.67		
10	16QAM	25	12	0	20.71	20.57	20.59		
10	16QAM	25	25	0	20.65	20.60	20.67	21.5	
10	16QAM	50	0	0	20.63	20.60	20.53		
10	64QAM	1	0	0	20.64	20.79	20.81		
10	64QAM	1	25	0	20.75	20.80	20.69	21.5	
10	64QAM	1	49	0	20.82	20.68	20.47		
10	64QAM	25	0	0	20.71	20.51	20.52		
10	64QAM	25	12	0	20.47	20.53	20.57	21.5	
10	64QAM	25	25	0	20.64	20.59	20.60		
10	64QAM	50	0	0	20.53	20.54	20.60		
10	256QAM	1	0	0	17.49	17.64	17.66	18.5	
10	256QAM	1	25	0	17.60	17.65	17.54		
10	256QAM	1	49	0	17.67	17.53	17.32		
10	256QAM	25	0	0	17.56	17.36	17.37	18.5	
10	256QAM	25	12	0	17.32	17.38	17.42		
10	256QAM	25	25	0	17.49	17.44	17.45		
10	256QAM	50	0	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	0	22.51	22.51	22.42	23.5	
5	QPSK	1	12	0	22.42	22.44	22.46		
5	QPSK	1	24	0	22.43	22.49	22.39		
5	QPSK	12	0	0	21.49	21.65	21.53	22.5	
5	QPSK	12	7	0	21.51	21.54	21.48		
5	QPSK	12	13	0	21.59	21.59	21.48		
5	QPSK	25	0	0	21.63	21.62	21.47	22.5	
5	16QAM	1	0	0	21.82	21.81	21.62		
5	16QAM	1	12	0	21.92	22.08	21.89		
5	16QAM	1	24	0	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	19
10	256QAM	1	25	18.18	18.16	18.22	
10	256QAM	1	49	18.33	18.13	18.29	
10	256QAM	25	0	18.28	18.21	18.16	
10	256QAM	25	12	18.36	18.16	18.21	19
10	256QAM	25	25	18.20	18.21	18.16	
10	256QAM	50	0	18.21	18.18	18.20	
Channel				20425	20525	20625	24
Frequency (MHz)				826.5	836.5	846.5	
5	QPSK	1	0	23.18	23.19	23.11	
5	QPSK	1	12	23.14	23.14	23.07	
5	QPSK	1	24	23.04	23.11	22.85	23
5	QPSK	12	0	22.26	22.32	22.08	
5	QPSK	12	7	22.30	22.28	22.23	
5	QPSK	12	13	22.16	22.18	22.15	
5	QPSK	25	0	22.20	22.18	22.23	23
5	16QAM	1	0	22.34	22.25	22.20	
5	16QAM	1	12	22.33	22.53	22.39	
5	16QAM	1	24	22.32	22.29	22.25	
5	16QAM	12	0	21.25	21.21	21.12	22
5	16QAM	12	7	21.19	21.18	21.10	
5	16QAM	12	13	21.24	21.23	21.17	
5	16QAM	25	0	21.33	21.14	21.11	
5	64QAM	1	0	21.19	21.26	21.19	22
5	64QAM	1	12	21.02	21.09	21.11	
5	64QAM	1	24	21.22	20.98	21.14	
5	64QAM	12	0	21.15	21.11	21.04	
5	64QAM	12	7	21.26	21.05	21.09	22
5	64QAM	12	13	21.06	21.06	21.00	
5	64QAM	25	0	21.24	21.22	21.25	
5	256QAM	1	0	18.25	18.32	18.25	
5	256QAM	1	12	18.08	18.15	18.17	19
5	256QAM	1	24	18.28	18.04	18.20	
5	256QAM	12	0	18.21	18.17	18.10	
5	256QAM	12	7	18.32	18.11	18.15	
5	256QAM	12	13	18.12	18.12	18.06	19
5	256QAM	25	0	18.30	18.28	18.31	
Channel				20415	20525	20635	24
Frequency (MHz)				825.5	836.5	847.5	
3	QPSK	1	0	23.09	23.17	23.13	
3	QPSK	1	8	23.16	23.14	23.02	
3	QPSK	1	14	23.00	23.09	22.83	23
3	QPSK	8	0	22.20	22.31	22.09	
3	QPSK	8	4	22.30	22.28	22.21	
3	QPSK	8	7	22.02	22.07	22.05	
3	QPSK	15	0	22.07	22.06	22.10	23
3	16QAM	1	0	22.21	22.05	22.06	
3	16QAM	1	8	22.21	22.39	22.20	
3	16QAM	1	14	22.13	22.11	22.11	
3	16QAM	8	0	21.16	21.04	21.00	22
3	16QAM	8	4	21.02	21.04	21.03	
3	16QAM	8	7	21.13	21.05	21.02	
3	16QAM	15	0	21.19	21.06	21.03	
3	64QAM	1	0	21.17	21.23	21.18	22
3	64QAM	1	8	21.11	21.05	21.15	
3	64QAM	1	14	21.23	21.04	21.20	
3	64QAM	8	0	21.17	21.06	21.06	
3	64QAM	8	4	21.26	21.09	21.11	22
3	64QAM	8	7	21.12	21.06	21.04	
3	64QAM	15	0	21.05	21.11	21.05	
3	256QAM	1	0	18.23	18.29	18.24	
3	256QAM	1	8	18.17	18.11	18.21	19
3	256QAM	1	14	18.29	18.10	18.26	
3	256QAM	8	0	18.23	18.12	18.12	
3	256QAM	8	4	18.32	18.15	18.17	
3	256QAM	8	7	18.18	18.12	18.10	19
3	256QAM	15	0	18.11	18.17	18.11	
Channel				20497	20525	20643	24
Frequency (MHz)				824.7	836.5	848.3	
1.4	QPSK	1	0	23.19	23.20	23.07	
1.4	QPSK	1	3	23.12	23.12	23.01	
1.4	QPSK	1	5	23.08	23.13	22.86	24
1.4	QPSK	3	0	23.08	23.19	22.93	
1.4	QPSK	3	1	23.14	23.11	23.04	
1.4	QPSK	3	3	23.03	23.07	23.10	
1.4	QPSK	6	0	22.14	22.04	22.05	23
1.4	16QAM	1	0	22.21	22.09	22.02	
1.4	16QAM	1	3	22.21	22.39	22.17	
1.4	16QAM	1	5	22.19	22.16	22.08	

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	23.5
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	22.48	22.56	22.53	
20	QPSK	1	49	22.35	22.42	22.47	
20	QPSK	1	99	22.46	22.47	22.48	22.5
20	QPSK	50	0	21.56	21.69	21.68	
20	QPSK	50	24	21.63	21.68	21.67	
20	QPSK	50	50	21.66	21.65	21.67	
20	QPSK	100	0	21.71	21.72	21.84	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	
20	16QAM	50	0	20.55	20.70	20.76	21.5
20	16QAM	50	24	20.59	20.64	20.56	
20	16QAM	50	50	20.58	20.69	20.54	
20	16QAM	100	0	20.57	20.62	20.67	
20	64QAM	1	0	20.60	20.64	20.68	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	
20	64QAM	50	24	20.56	20.69	20.48	21.5
20	64QAM	50	50	20.53	20.68	20.62	
20	64QAM	100	0	20.61	20.60	20.50	
20	256QAM	1	0	17.64	17.68	17.72	
20	256QAM	1	49	17.68	17.74	17.49	18.5
20	256QAM	1	99	17.63	17.50	17.40	
20	256QAM	50	0	17.60	17.64	17.68	
20	256QAM	50	24	17.60	17.73	17.52	
20	256QAM	50	50	17.57	17.72	17.66	18.5
20	256QAM	100	0	17.65	17.64	17.54	
Channel				20825	21100	21375	23.5
Frequency (MHz)				2507.5	2535	2562.5	
15	QPSK	1	0	22.37	22.47	22.41	
15	QPSK	1	37	22.27	22.34	22.39	
15	QPSK	1	74	22.39	22.44	22.46	22.5
15	QPSK	36	0	21.53	21.68	21.60	
15	QPSK	36	20	21.53	21.66	21.61	
15	QPSK	36	39	21.60	21.64	21.65	
15	QPSK	75	0	21.63	21.60	21.55	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	
15	16QAM	36	0	20.48	20.68	20.75	21.5
15	16QAM	36	20	20.56	20.55	20.51	
15	16QAM	36	39	20.54	20.68	20.47	
15	16QAM	75	0	20.55	20.61	20.66	
15	64QAM	1	0	20.56	20.54	20.66	21.5
15	64QAM	1	37	20.55	20.65	20.41	
15	64QAM	1	74	20.51	20.41	20.34	
15	64QAM	36	0	20.46	20.52	20.55	
15	64QAM	36	20	20.51	20.65	20.45	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	
15	256QAM	1	37	17.59	17.69	17.45	18.5
15	256QAM	1	74	17.55	17.45	17.38	
15	256QAM	36	0	17.50	17.56	17.59	
15	256QAM	36	20	17.55	17.69	17.49	
15	256QAM	36	39	17.47	17.68	17.65	18.5



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			
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		22
10	64QAM	25	12		21.49		
10	64QAM	25	25		21.53		
10	64QAM	50	0		21.42		19
10	256QAM	1	0		18.43		
10	256QAM	1	25		18.51		
10	256QAM	1	49		18.31		19
10	256QAM	25	0		18.32		
10	256QAM	25	12		18.26		
10	256QAM	25	25		18.30		19
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	19

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

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	0	22.69	22.75	22.70	23.5	
20	QPSK	1	49	0	22.61	22.59	22.66		
20	QPSK	1	99	0	22.58	22.63	22.65		
20	QPSK	50	0	0	21.65	21.69	21.63	22.5	
20	QPSK	50	24	0	21.57	21.65	21.64		
20	QPSK	50	50	0	21.68	21.63	21.65		
20	QPSK	100	0	0	21.64	21.68	21.66	22.5	
20	16QAM	1	0	0	21.94	21.89	21.91		
20	16QAM	1	49	0	21.81	21.90	21.67		
20	16QAM	1	99	0	21.75	21.82	21.90	21.5	
20	16QAM	50	0	0	20.75	20.68	20.67		
20	16QAM	50	24	0	20.87	20.82	20.70		
20	16QAM	50	50	0	20.80	20.79	20.76	21.5	
20	16QAM	100	0	0	20.81	20.78	20.68		
20	64QAM	1	0	0	21.04	21.01	21.02		
20	64QAM	1	49	0	20.92	21.02	20.76	21.5	
20	64QAM	1	99	0	20.83	20.96	20.97		
20	64QAM	50	0	0	20.72	20.67	20.67		
20	64QAM	50	24	0	20.79	20.77	20.69	21.5	
20	64QAM	50	50	0	20.72	20.73	20.73		
20	64QAM	100	0	0	20.83	20.72	20.61		
20	256QAM	1	0	0	18.03	18.00	18.01	18.5	
20	256QAM	1	49	0	17.91	18.01	17.75		
20	256QAM	1	99	0	17.82	17.95	17.96		
20	256QAM	50	0	0	17.71	17.66	17.66	18.5	
20	256QAM	50	24	0	17.78	17.76	17.68		
20	256QAM	50	50	0	17.71	17.72	17.72		
20	256QAM	100	0	0	17.82	17.71	17.60		
Channel					132047	132322	132597	Tune-up limit (dBm)	
Frequency (MHz)					1717.5	1745	1772.5		
15	QPSK	1	0	0	22.34	22.54	22.50	23.5	
15	QPSK	1	37	0	22.42	22.49	22.31		
15	QPSK	1	74	0	22.46	22.51	22.45		
15	QPSK	36	0	0	21.42	21.46	21.45	22.5	
15	QPSK	36	20	0	21.48	21.61	21.63		
15	QPSK	36	39	0	21.59	21.59	21.60		
15	QPSK	75	0	0	21.44	21.48	21.60	22.5	
15	16QAM	1	0	0	21.92	21.82	21.89		
15	16QAM	1	37	0	21.76	21.86	21.63		
15	16QAM	1	74	0	21.70	21.73	21.83	21.5	
15	16QAM	36	0	0	20.73	20.63	20.65		
15	16QAM	36	20	0	20.76	20.80	20.69		
15	16QAM	36	39	0	20.74	20.70	20.68	21.5	
15	16QAM	75	0	0	20.74	20.70	20.58		
15	64QAM	1	0	0	20.99	20.97	20.95		
15	64QAM	1	37	0	20.83	20.92	20.72	21.5	
15	64QAM	1	74	0	20.72	20.91	20.95		
15	64QAM	36	0	0	20.60	20.66	20.59		
15	64QAM	36	20	0	20.69	20.67	20.68	21.5	
15	64QAM	36	39	0	20.63	20.71	20.63		
15	64QAM	75	0	0	20.81	20.70	20.54		
15	256QAM	1	0	0	17.98	17.96	17.94	18.5	
15	256QAM	1	37	0	17.82	17.91	17.71		
15	256QAM	1	74	0	17.71	17.90	17.94		
15	256QAM	36	0	0	17.59	17.65	17.58	18.5	
15	256QAM	36	20	0	17.68	17.66	17.67		
15	256QAM	36	39	0	17.62	17.70	17.62		
15	256QAM	75	0	0	17.80	17.69	17.53		
Channel					132022	132322	132622	Tune-up limit (dBm)	
Frequency (MHz)					1715	1745	1775		
10	QPSK	1	0	0	22.39	22.49	22.47	23.5	
10	QPSK	1	25	0	22.27	22.48	22.28		
10	QPSK	1	49	0	22.37	22.41	22.35		
10	QPSK	25	0	0	21.37	21.45	21.46	22.5	
10	QPSK	25	12	0	21.45	21.53	21.51		
10	QPSK	25	25	0	21.54	21.53	21.54		
10	QPSK	50	0	0	21.45	21.34	21.60	22.5	
10	16QAM	1	0	0	21.88	21.78	21.82		
10	16QAM	1	25	0	21.69	21.81	21.54		
10	16QAM	1	49	0	21.66	21.72	21.77	21.5	
10	16QAM	25	0	0	20.58	20.60	20.54		
10	16QAM	25	12	0	20.79	20.71	20.60		
10	16QAM	25	25	0	20.64	20.71	20.64	21.5	
10	16QAM	50	0	0	20.71	20.64	20.59		
10	64QAM	1	0	0	20.87	20.94	20.87		
10	64QAM	1	25	0	20.85	20.91	20.65	21.5	
10	64QAM	1	49	0	20.67	20.88	20.86		
10	64QAM	25	0	0	20.65	20.61	20.53		
10	64QAM	25	12	0	20.70	20.69	20.54	21.5	
10	64QAM	25	25	0	20.56	20.66	20.59		
10	64QAM	50	0	0	20.70	20.57	20.55		
10	256QAM	1	0	0	17.86	17.93	17.86	18.5	
10	256QAM	1	25	0	17.84	17.90	17.64		
10	256QAM	1	49	0	17.66	17.87	17.85		
10	256QAM	25	0	0	17.64	17.60	17.52	18.5	
10	256QAM	25	12	0	17.69	17.68	17.53		
10	256QAM	25	25	0	17.55	17.65	17.58		
10	256QAM	50	0	0	17.69	17.56	17.54		
Channel					131997	132322	132647	Tune-up limit (dBm)	
Frequency (MHz)					1712.5	1745	1777.5		
5	QPSK	1	0	0	22.35	22.52	22.46	23.5	
5	QPSK	1	12	0	22.36	22.43	22.30		
5	QPSK	1	24	0	22.42	22.39	22.39		
5	QPSK	12	0	0	21.45	21.48	21.48	22.5	
5	QPSK	12	7	0	21.46	21.56	21.50		
5	QPSK	12	13	0	21.57	21.54	21.53		
5	QPSK	25	0	0	21.41	21.40	21.60	22.5	
5	16QAM	1	0	0	21.83	21.80	21.83		
5	16QAM	1	12	0	21.64	21.81	21.56		
5	16QAM	1	24	0	21.63	21.74	21.75		

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	23.5
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	17.88	
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	23.5
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	3697.5
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	48	22.00	22.07	21.90	21.92	21.88	
20	QPSK	1	96	22.09	21.94	22.05	21.95	21.87	
20	QPSK	50	0	21.08	21.09	21.17	21.12	21.16	
20	QPSK	50	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	QPSK	1	0	21.23	21.25	21.19	21.13	21.14	
20	16QAM	1	48	21.16	21.03	21.13	21.06	21.09	22
20	16QAM	1	96	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	48	20.13	19.85	20.03	19.94	19.96	
20	64QAM	1	96	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	48	17.18	16.90	17.08	16.99	17.01	
20	256QAM	1	96	17.12	17.03	17.12	17.03	17.06	
20	256QAM	50	0	17.24	17.18	17.05	16.96	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				55515	55820	55960	56160	56655	3692.5
Frequency (MHz)				55515	55820	55960	56160	56655	
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	21.82	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	17.08	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				55590	55815	55960	56165	56660	3695
Frequency (MHz)				55590	55815	55960	56165	56660	
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	21.82	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				55910	55985	55990	56170	56175	3697.5
Frequency (MHz)				55910	55985	55990	56170	56175	
5	QPSK	1	0	21.95	21.86	22.09	21.88	21.84	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	12	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	13	20.18	19.94	19.98	19.87	19.93	
5	16QAM	25	0	20.12	20.12	20.15	20.12	20.09	21
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	
5	64QAM	12	0	20.19	20.14	20.04	19.88	19.82	21
5	64QAM	12	13	20.04	20.06	19.98	19.92	19.97	
5	64QAM	12	25	19.94	19.94	19.94	19.90	19.87	
5	64QAM	25	0	20.14	20.09	20.16	20.01	20.08	
5	256QAM	1	0	17.13	17.16	17.09	16.99	17.02	18
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	
5	256QAM	12	7	17.02	17.04	16.88	16.88	16.80	18
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	
5	256QAM	25	0	17.07	17.02	17.02	16.94	17.01	

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	55830	55960	56150	56640	
Frequency (MHz)				3566	3609	3625	3641	3690	
20	QPSK	1	0	21.97	21.88	22.03	21.87	21.86	23
20	QPSK	1	48	21.88	21.95	21.78	21.80	21.76	
20	QPSK	1	96	21.97	21.82	21.93	21.83	21.75	
20	QPSK	50	0	21.20	21.15	21.02	21.06	21.04	22
20	QPSK	50	24	21.18	21.13	21.07	20.92	20.89	
20	QPSK	50	50	21.18	21.07	21.03	20.86	20.76	
20	QPSK	100	0	21.17	21.13	21.19	20.98	21.06	21
20	16QAM	1	0	21.25	21.27	21.21	21.15	21.16	
20	16QAM	1	48	21.18	21.05	21.15	21.08	21.11	
20	16QAM	1	96	21.11	20.97	21.20	21.06	21.08	20
20	16QAM	50	0	20.26	20.22	20.08	20.02	19.93	
20	16QAM	50	24	20.20	20.05	20.08	19.99	19.96	
20	16QAM	50	50	20.17	19.93	19.96	19.88	19.92	19
20	16QAM	100	0	20.08	20.05	20.11	20.05	20.06	
20	64QAM	1	0	20.16	20.23	20.14	20.04	20.08	
20	64QAM	1	48	20.15	19.87	20.05	19.96	19.98	18
20	64QAM	1	96	20.09	20.00	20.09	20.00	20.03	
20	64QAM	50	0	20.21	20.15	20.02	19.95	19.79	
20	64QAM	50	24	20.11	19.96	20.05	19.93	19.97	17
20	64QAM	50	50	19.98	19.99	19.99	19.89	19.91	
20	64QAM	100	0	20.17	20.12	20.16	20.07	20.06	
20	256QAM	1	0	17.14	17.10	17.14	17.05	17.04	16
20	256QAM	1	48	17.13	16.85	17.03	16.94	16.96	
20	256QAM	1	96	17.07	16.98	17.07	16.98	17.01	
20	256QAM	50	0	17.19	17.13	17.00	16.93	16.77	15
20	256QAM	50	24	17.09	17.04	17.03	16.91	16.95	
20	256QAM	50	50	16.96	16.97	16.98	16.87	16.98	
20	256QAM	100	0	17.15	17.10	17.14	17.05	17.04	14
Channel				55315	55820	55960	56165	56655	
Frequency (MHz)				3557.5	3608	3625	3642	3692.5	
15	QPSK	1	0	21.92	21.77	22.02	21.81	21.77	23
15	QPSK	1	37	21.87	21.85	21.76	21.75	21.77	
15	QPSK	1	74	21.88	21.76	21.83	21.78	21.74	
15	QPSK	36	0	21.09	21.07	21.17	20.99	20.93	22
15	QPSK	36	20	21.05	21.05	21.03	20.83	20.83	
15	QPSK	36	39	21.17	21.06	21.00	20.77	20.74	
15	QPSK	75	0	21.08	21.07	21.00	20.88	20.79	21
15	16QAM	1	0	21.21	21.15	21.13	21.03	21.10	
15	16QAM	1	37	21.09	20.98	21.13	20.98	21.01	
15	16QAM	1	74	21.07	20.85	21.10	21.03	20.96	20
15	16QAM	36	0	20.19	20.14	20.00	19.92	19.88	
15	16QAM	36	20	20.19	19.96	20.05	19.90	19.93	
15	16QAM	36	39	20.06	19.81	19.87	19.81	19.91	19
15	16QAM	75	0	20.04	19.99	20.10	19.96	20.03	
15	64QAM	1	0	20.05	20.12	20.08	19.94	19.98	
15	64QAM	1	37	20.12	19.78	19.97	19.84	19.87	18
15	64QAM	1	74	20.08	19.97	19.95	19.89	19.99	
15	64QAM	36	0	20.09	20.14	19.92	19.92	19.74	
15	64QAM	36	20	20.00	19.94	19.95	19.84	19.93	17
15	64QAM	36	39	19.93	19.95	19.92	19.88	19.87	
15	64QAM	75	0	20.10	20.03	20.04	20.00	20.04	
15	256QAM	1	0	17.03	17.10	17.06	16.92	16.96	16
15	256QAM	1	37	17.10	16.77	16.99	16.82	16.87	
15	256QAM	1	74	17.04	16.95	16.96	16.87	16.97	
15	256QAM	36	0	17.07	17.12	16.90	16.90	16.72	15
15	256QAM	36	20	16.98	16.92	16.93	16.82	16.91	
15	256QAM	36	39	16.91	16.93	16.90	16.86	16.85	
15	256QAM	75	0	17.08	17.01	17.02	16.98	17.02	14
Channel				55290	55815	55990	56165	56690	
Frequency (MHz)				3555	3607.5	3625	3642.5	3695	
10	QPSK	1	0	21.88	21.83	21.98	21.81	21.77	23
10	QPSK	1	25	21.80	21.85	21.74	21.80	21.76	
10	QPSK	1	49	21.93	21.77	21.83	21.81	21.78	
10	QPSK	5	0	21.16	21.08	21.03	21.01	20.87	22
10	QPSK	25	12	21.15	21.04	21.06	20.95	20.79	
10	QPSK	25	25	21.13	20.98	21.09	20.83	20.74	
10	QPSK	50	0	21.13	21.05	21.07	20.89	20.81	21
10	16QAM	1	0	21.21	21.16	21.12	21.03	21.09	
10	16QAM	1	25	21.12	21.02	21.05	21.04	21.02	
10	16QAM	1	49	21.08	20.91	21.19	21.02	21.02	20
10	16QAM	25	0	20.15	20.18	20.09	19.97	19.84	
10	16QAM	25	12	20.17	20.01	20.06	19.95	19.85	
10	16QAM	25	25	20.10	19.86	19.89	19.87	19.82	19
10	16QAM	50	0	19.98	19.99	19.99	19.82	20.04	
10	64QAM	1	0	20.11	20.16	20.04	19.97	20.02	
10	64QAM	1	25	20.12	19.77	19.97	19.91	19.89	18
10	64QAM	1	49	19.97	19.92	20.01	19.99	19.93	
10	64QAM	25	0	20.10	20.12	19.92	19.88	19.78	
10	64QAM	25	12	20.07	19.99	19.95	19.91	19.95	17
10	64QAM	25	25	19.97	19.88	19.87	19.86	19.84	
10	64QAM	50	0	20.16	20.10	20.12	19.97	20.02	
10	256QAM	1	0	17.09	17.14	17.02	16.95	17.00	16
10	256QAM	1	25	17.10	16.75	16.95	16.89	16.97	
10	256QAM	1	49	16.95	16.90	16.99	16.97	16.94	
10	256QAM	25	0	17.08	17.10	16.90	16.86	16.76	15
10	256QAM	25	12	17.05	16.97	16.93	16.89	16.93	
10	256QAM	25	25	16.95	16.86	16.95	16.84	16.82	
10	256QAM	50	0	17.14	17.08	17.10	16.95	17.00	14
Channel				55265	55810	55990	56170	5675	
Frequency (MHz)				3532.5	3607	3625	3643	3697.5	
5	QPSK	1	0	21.86	21.77	22.00	21.79	21.85	23
5	QPSK	1	12	21.86	21.85	21.73	21.77	21.81	
5	QPSK	1	24	21.92	21.75	21.81	21.79	21.80	
5	QPSK	12	0	21.16	21.09	21.14	21.00	20.88	22
5	QPSK	12	7	21.08	21.12	20.99	20.85	20.85	
5	QPSK	12	13	21.06	20.98	20.96	20.83	20.75	
5	QPSK	25	0	21.06	21.11	21.01	20.88	20.75	21
5	16QAM	1	0	21.15	21.19	21.15	21.14	21.14	
5	16QAM	1	12	21.08	20.98	21.04	20.99	21.04	
5	16QAM	1	24	21.00	20.94	21.08	21.05	20.98	20
5	16QAM	12	0	20.15	20.11	20.04	19.90	19.82	
5	16QAM	12	13	20.09	19.99	20.04	19.98	19.87	
5	16QAM	25	0	20.03	20.03	20.06	20.03	20.00	19
5	64QAM	1	0	20.10	20.13	20.06	19.96	19.99	
5	64QAM	1	12	20.04	19.77	19.95	19.84	19.84	
5	64QAM	1	24	19.99	19.90	20.07	19.96	20.01	18
5	64QAM	12	0	20.14	20.09	19.99	19.83	19.77	
5	64QAM	12	7	19.99	20.01	19.93	19.85	19.87	
5	64QAM	12	13	19.89	19.89	19.99	19.85	19.82	17
5	64QAM	25	0	20.09	20.04	20.11	19.96	20.03	
5	256QAM	1	0	17.08	17.11	17.04	16.94	16.97	
5	256QAM	1	12	17.02	16.75	17.06	16.82	16.92	16
5	256QAM	1	24	16.97	16.88	17.05	16.94	16.99	
5	256QAM	12	0	17.12	17.07	16.97	16.81	16.75	
5	256QAM	12	7	16.97	16.99	16.91	16.83	16.80	15
5	256QAM	12	13	16.87	16.87	16.87	16.83	16.85	
5	256QAM	25	0	17.02	17.02	17.02	16.94	17.01	



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

CA_48C_ANT5											
Combination:20MHz+20MHz(100RB+100RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
55340	55340	55538	QPSK	1	0	0	0	1	0	21.97	23.00
55990	55891	56089	QPSK	1	0	0	0	1	0	22.12	23.00
56640	56442	56640	QPSK	1	0	0	0	1	0	21.93	23.00
55340	55340	55538	16QAM	1	0	0	0	1	0	21.15	22.00
55990	55891	56089	16QAM	1	0	0	0	1	0	21.22	22.00
56640	56442	56640	16QAM	1	0	0	0	1	0	21.12	22.00
55340	55340	55538	64QAM	1	0	0	0	1	0	20.19	21.00
55990	55891	56089	64QAM	1	0	0	0	1	0	20.31	21.00
56640	56442	56640	64QAM	1	0	0	0	1	0	20.22	21.00
55340	55340	55538	256QAM	1	0	0	0	1	0	17.14	18.00
55990	55891	56089	256QAM	1	0	0	0	1	0	17.15	18.00
56640	56442	56640	256QAM	1	0	0	0	1	0	17.16	18.00
55340	55340	55538	QPSK	50	0	0	0	1	0	21.08	22.00
55990	55891	56089	QPSK	50	0	0	0	1	0	21.16	22.00
56640	56442	56640	QPSK	50	0	0	0	1	0	21.13	22.00

CA_66B_ANT0											
Combination:15MHz+10MHz(75RB+25RB)											
PCC Channel	PCC Channel (3GPP)	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level(dB)	Measured Power(dBm)	Tune-up limit(dBm)
				RB Size	RB Offset	RB Size	RB Offset				
132070	132047	132140	QPSK	1	0	0	0	1	0	22.65	23.50
132322	132398	132491	QPSK	1	0	0	0	1	0	22.75	23.50
132572	132549	132642	QPSK	1	0	0	0	1	0	22.69	23.50
132070	132047	132140	16QAM	1	0	0	0	1	0	21.72	22.50
132322	132398	132491	16QAM	1	0	0	0	1	0	21.73	22.50
132572	132549	132642	16QAM	1	0	0	0	1	0	21.66	22.50
132070	132047	132140	64QAM	1	0	0	0	1	0	20.55	21.50
132322	132398	132491	64QAM	1	0	0	0	1	0	20.67	21.50
132572	132549	132642	64QAM	1	0	0	0	1	0	20.59	21.50
132070	132047	132140	256QAM	1	0	0	0	1	0	17.77	18.50
132322	132398	132491	256QAM	1	0	0	0	1	0	17.81	18.50
132572	132549	132642	256QAM	1	0	0	0	1	0	17.68	18.50
132070	132047	132140	QPSK	36	0	0	0	1	0	21.58	22.50
132322	132398	132491	QPSK	36	0	0	0	1	0	21.69	22.50
132572	132549	132642	QPSK	36	0	0	0	1	0	21.66	22.50

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



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

20C LTE Downlink												
Config#	PCC				SEC				Power			
	CA Configuration	Band	BW (MHz)	UL Chnno	UL Freq (MHz)	UL Mode (Modulation/MBCHS)	Band	BW (MHz)	UL Chnno	Dl. Freq (MHz)	CA Tx (dBm)	Rx Tx (dBm)
Intra-band/inter-band	CA-1A-1A	13	20	23260	732.5	QPSK/16QAM	48	20	56990	3626	22.80	23.41
	CA-1A-1A	13	20	23260	732	QPSK/16QAM	48	20	56990	3626	22.80	23.41
	CA-1A-1A	2	10	18800	1880	QPSK/16QAM	13	20	23260	3626	22.81	22.59
	CA-2A-2A	2	20	18700	1860	QPSK/16QAM	2	10	19100	1900	22.12	22.59
	CA-1A-2A	2	10	1880	18700	QPSK/16QAM	13	20	23260	3626	22.81	22.59
	CA-2A-2A	2	10	18800	1880	QPSK/16QAM	4	10	19175	1732.5	22.22	22.59
	CA-2A-2A	2	10	18800	1880	QPSK/16QAM	5	10	19242.5	1732.5	22.13	22.59
	CA-2A-6A	6	20	18800	1880	QPSK/16QAM	6	20	13442.2	1735	22.10	22.53
	CA-4A-6A	48	20	55340	3565	QPSK/16QAM	96	20	13424.2	1735	22.10	22.53
	CA-5C	48	20	55651	3515.1	QPSK/16QAM	96	20	13442.2	1735	22.10	22.53
	CA-1A-1A	48	20	19175	1732.5	QPSK/16QAM	13	20	23260	3626	22.24	22.80
	CA-4A-4A	48	20	20595	1720	QPSK/16QAM	48	20	56990	3625	22.35	22.80
	CA-4A-4A	48	20	20595	1720	QPSK/16QAM	4	20	56990	3625	22.35	22.80
	CA-5A-5A	4	10	19175	1732.5	QPSK/16QAM	5	10	20450	520	22.51	22.60
	CA-5A-5A	5	10	20450	520	QPSK/16QAM	48	20	56990	3625	22.36	22.81
	CA-5A-5A	5	10	20450	520	QPSK/16QAM	5	10	20600	544	22.50	22.60
CA-5A-6A	5	10	20625	836.5	QPSK/16QAM	66	20	13442.2	1735	23.12	23.37	
CA-5B	5	10	20450	831.5	QPSK/16QAM	66	20	13442.2	1735	23.12	23.37	
CA-6B-6A	66	20	13207.2	1720	QPSK/16QAM	66	20	67326	2190	22.51	22.62	
CA-6B	66	10	15373.5	1750.1	QPSK/16QAM	56	10	13474.2	1760	22.54	22.62	
CA-5C-5C	66	10	15323.2	1745.1	QPSK/16QAM	66	10	13257.2	1754.3	22.52	22.62	
CA-1A-2A	2	20	18600	1880	QPSK/16QAM	12	20	23560	704	22.49	22.59	
CA-1A-2A	2	20	19175	1732.5	QPSK/16QAM	12	20	23560	704	22.51	22.59	
CA-1A-2A	12	20	19175	1732.5	QPSK/16QAM	66	20	13257.2	1770	22.51	22.47	

3GPP LTE Downlink																		
Configure	CA Configuration	Band	PDC			UL-MCS (Modulation)	BSC1			UL-MCS (Modulation)	BSC2			Power				
			BW (MHz)	DL Freq. (MHz)	UL Freq. (MHz)		Band	BW (MHz)	DL Freq. (MHz)		Band	BW (MHz)	DL Freq. (MHz)		CA TX (MHz)	Rel. Tx (MHz)		
Intra-band, inter-band	CA 13A-4B-4A	1	10	23230	782	20	18700	1860	782	20	55340	560	20	56840	30.12	23.12		
	CA 13A-4B-6A	1	10	23230	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	23.22	
	CA 13A-4B	1	10	23230	782	20	18700	1860	782	20	56642	1070	66	20	67238	2196	23.12	
	CA 13A-6A-4B	1	10	23230	782	20	18700	1860	782	20	56688	2155	66	20	67238	2196	23.12	
	CA 13A-6B	1	10	23230	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
	CA 13A-4B-6A	1	10	23230	782	20	18700	1860	782	20	56688	2170.2	66	20	67238	2196	23.12	
	CA 2A-13A-4B	2	20	18700	1860	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42	
	CA 2A-13A-6A	2	20	18700	1860	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28
	CA 2A-13A-12A	2	20	18700	1860	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28
	CA 2A-13A-4A	2	20	18700	1860	782	20	19100	1900	4	20	20300	1745	12	20	23155	713.9	22.36
	CA 2A-13A-6A	2	20	18700	1860	782	20	19100	1900	5	10	20480	820	22	20	23155	713.9	22.36
	CA 2A-13A-6B	2	20	18700	1860	782	20	19100	1900	4	20	20300	1745	12	20	23155	713.9	22.36
	CA 2A-13A-4A	2	20	18700	1860	782	20	19100	1900	4	20	20300	1745	12	20	23155	713.9	22.36
	CA 2A-13A-4B	2	20	18700	1860	782	20	19100	1900	4	20	20300	1745	12	20	23155	713.9	22.36
	CA 2A-13A-6A	2	20	18700	1860	782	20	19100	1900	4	20	20300	1745	12	20	23155	713.9	22.36
	CA 2A-13A-6B	2	20	18700	1860	782	20	19100	1900	4	20	20300	1745	12	20	23155	713.9	22.36
	CA 4A-13A-4A	4	20	20550	1720	782	20	18700	1860	782	20	20300	1745	12	20	23155	713.9	22.36
	CA 4A-13A-4B	4	20	20550	1720	782	20	18700	1860	782	20	20300	1745	12	20	23155	713.9	22.36
	CA 4A-13A-6A	4	20	20550	1720	782	20	18700	1860	782	20	20300	1745	12	20	23155	713.9	22.36
	CA 4A-13A-6B	4	20	20550	1720	782	20	18700	1860	782	20	20300	1745	12	20	23155	713.9	22.36
	CA 4A-4B	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42	
	CA 4A-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28
	CA 4A-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12
	CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42	
	CA 4B-4B	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28
	CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28
	CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12
	CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42	
	CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28
	CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12
	CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42	
	CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4	20	20550	1720	782	20	18700	1860	782	20	55960	3025	66	20	132422	1756	22.28	
CA 4B-4B-6B	4	20	20550	1720	782	20	18700	1860	782	20	61787	2185.1	66	20	67298	2196	23.12	
CA 4B-4A	4	20	20550	1720	782	20	18700	1860	782	20	55340	560	20	56840	30.21	22.42		
CA 4B-4B-6A	4																	

Config#	CA Configuration	PDC				SCC1				SCC2				SCC3				Power		
		Band	BW (MHz)	UL Freq. (MHz)	UL-MODE (Bandwidth)	Band	BW (MHz)	UL Freq. (MHz)	DL Channel	Band	BW (MHz)	UL Freq. (MHz)	DL Channel	Band	BW (MHz)	UL Freq. (MHz)	DL Channel			
Intra-band/inter-band	CA 13A-48A-48C	13	10	23230	782	QPSK/16QAM	48	20	55990	3629	48	20	55940	3670	2	20	55640	3690	22.78	23.41
	CA 13A-48A-68C	13	10	23230	782	QPSK/16QAM	48	20	55990	3629	68	10	57147	2185	1	10	67298	2195	22.75	23.41
	CA 13A-48A-82C	13	10	23230	782	QPSK/16QAM	48	20	55990	3629	82	10	57147	2185	1	10	67298	2195	22.75	23.41
	CA 13A-48C-68A	13	10	23230	782	QPSK/16QAM	48	20	55990	3629	68	10	57147	2185	1	10	67298	2195	22.75	23.41
	CA 13A-48C	13	10	23230	782	QPSK/16QAM	48	20	55990	3629	48	20	55990	3629	48	20	55990	3629	22.78	23.41
	CA 2A-13A-48C	2	10	18700	1860	QPSK/16QAM	13	10	23230	782	48	20	55940	3670	2	20	55640	3690	22.31	22.59
	CA 2A-13A-48A-68A	2	10	18700	1860	QPSK/16QAM	13	10	23230	782	68	20	56888	2155	68	20	67298	2190	22.32	22.59
	CA 2A-13A-48A-82A	2	10	18700	1860	QPSK/16QAM	13	10	23230	782	82	20	56888	2155	68	20	67298	2190	22.32	22.59
	CA 2A-13A-48C-68A	2	10	18700	1860	QPSK/16QAM	13	10	23230	782	68	20	67038	2170	68	20	67298	2190	22.34	22.59
	CA 2A-13A-48C	2	10	18700	1860	QPSK/16QAM	13	10	23230	782	48	20	55990	3629	48	20	55990	3629	22.78	23.41
	CA 2A-2A-48A-68A	2	20	18700	1860	QPSK/16QAM	2	20	19100	1900	68	20	20300	1745	8	10	20450	809	22.34	22.59
	CA 2A-2A-48C-68A	2	20	18700	1860	QPSK/16QAM	2	20	19100	1900	68	20	20300	1745	8	10	20450	809	22.34	22.59
	CA 2A-2A-48A-68A	2	20	18700	1860	QPSK/16QAM	2	20	19100	1900	68	20	20300	1745	8	10	20450	809	22.34	22.59
	CA 2A-2A-48C	2	20	18700	1860	QPSK/16QAM	2	20	19100	1900	68	20	20300	1745	8	10	20450	809	22.34	22.59
	CA 2A-2A-68A	2	20	18700	1860	QPSK/16QAM	2	20	19100	1900	68	20	20300	1745	8	10	20450	809	22.34	22.59
	CA 2A-68A	2	20	18700	1860	QPSK/16QAM	48	20	55990	3629	48	20	55940	3670	2	20	55640	3690	22.35	22.59
	CA 2A-68C	2	20	18700	1860	QPSK/16QAM	48	20	55990	3629	48	20	55940	3670	2	20	55640	3690	22.35	22.59
	CA 2A-82A	2	20	18700	1860	QPSK/16QAM	48	20	55990	3629	48	20	55940	3670	2	20	55640	3690	22.35	22.59
	CA 2A-4A-48A-68A	2	20	18700	1860	QPSK/16QAM	4	20	20500	1720	4	20	20300	1745	8	10	20450	809	22.35	22.59
	CA 2A-4A-48C	2	20	18700	1860	QPSK/16QAM	4	20	20500	1720	4	20	20300	1745	8	10	20450	809	22.35	22.59
	CA 2A-4A-68A	2	20	18700	1860	QPSK/16QAM	4	20	20500	1720	4	20	20300	1745	8	10	20450	809	22.35	22.59
	CA 2A-4A-82A	2	20	18700	1860	QPSK/16QAM	4	20	20500	1720	4	20	20300	1745	8	10	20450	809	22.35	22.59
	CA 2A-4A-48C-68A	2	20	18700	1860	QPSK/16QAM	4	20	20500	1720	68	20	67038	2170	68	20	67298	2190	22.36	22.59
	CA 2A-4A-48C	2	20	18700	1860	QPSK/16QAM	4	20	20500	1720	4	20	20300	1745	8	10	20450	809	22.36	22.59
	CA 2A-4A-68C	2	20	18700	1860	QPSK/16QAM	4	20	20500	1720	68	20	67038	2170	68	20	67298	2190	22.36	22.59
	CA 2A-4A-82C	2	20	18700	1860	QPSK/16QAM	4	20	20500	1720	82	20	67038	2170	68	20	67298	2190	22.36	22.59
	CA 4B-48A-48A-68A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53
	CA 4B-48A-48A-82A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53
	CA 4B-48A-68A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53
	CA 4B-48A-82A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53
	CA 4B-48C-68A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53
	CA 4B-82A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53
CA 4B-68C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-68A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-68C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-68A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-68A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-68A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-68A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-68A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-68A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-68A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-68A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-68A	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	68	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82C	48	20	55340	3560	QPSK/16QAM	48	20	55640	3690	82	20	56888	2155	68	20	67298	2190	22.22	22.53	
CA 4B-82A	48	20	55340	3560	QPSK/16QAM	48	20	556												

SCS LTE Downlink																							
Configure	CA	Band	PCC			UL Mode (Modulation/ Coding Scheme)	SCC1			SCC2			SCC3			SCC4			Power	Re- lat. (dB)			
			BW (MHz)	DL Freq. (MHz)	UL Freq. (MHz)		Band	BW (MHz)	DL Freq. (MHz)	Band	BW (MHz)	DL Freq. (MHz)	Band	BW (MHz)	DL Freq. (MHz)	Band	BW (MHz)	DL Freq. (MHz)					
Intra-band/inter-band	CA 1A-4BA-4BC	13	10	23230	782	2	10	50990	3625	48	10	50990	3605.2	48	10	50990	3605	48	10	50990	3648.8	28.28	21.4
	CA 1A-4BC-4BC	13	10	23230	782	2	10	50990	3670.2	48	10	50990	3605.2	48	10	50990	3605	48	10	50990	3648.8	28.28	21.4
	CA 1A-4BC-4BA	13	10	23230	782	2	10	50990	3605.2	48	10	50990	3670.2	48	10	50990	3605	48	10	50990	3648.8	28.28	21.4
	CA 1A-4BC-13	13	10	23230	782	2	10	50990	3605.2	48	10	50990	3605.2	48	10	50990	3605.2	48	10	50990	3648.8	28.28	21.4
	CA 1A-4BC-13	13	10	23230	782	2	10	50990	3670.2	48	10	50990	3670.2	48	10	50990	3670.2	48	10	50990	3648.8	28.28	21.4
	CA 2A-1A-4BC	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20
	CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20
	CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20
	CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20
	CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20
	CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20
	CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20
	CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20
	CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20
	CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20
	CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20	
CA 2A-1A-4BC-4BA	2	20	18700	1860	2	20	18700	1860	13	10	23230	782	66	20	18700	1860	13	10	23230	782	66	20</	

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

5A_n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	
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

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

13A_n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	22.70	22.65	22.57	23.5
20		1	53	22.72	22.64	22.58	
20		1	104	22.73	22.56	22.59	
20		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		100	0	22.89	22.92	22.94	
20	DFT-s-OFDM QPSK	1	1	22.87	22.99	22.82	23.5
20		1	53	22.84	22.92	22.85	
20		1	104	22.91	22.87	22.73	
20		50	1	22.60	22.68	22.62	23.5
20		50	25	22.65	22.66	22.54	
20		50	50	22.52	22.57	22.59	
20		100	0	22.66	22.72	22.56	
20	DFT-s-OFDM 16QAM	1	1	22.91	22.83	22.93	23.5
20	DFT-s-OFDM 64QAM	1	1	21.38	21.23	21.33	22.5
20	DFT-s-OFDM 256QAM	1	1	19.35	19.47	19.57	20.5
20	CP-OFDM QPSK	1	1	21.64	21.65	21.74	22.5
20	CP-OFDM 16QAM	1	1	20.55	20.68	20.72	21.5
20	CP-OFDM 64QAM	1	1	19.71	19.78	19.86	20.5
20	CP-OFDM 256QAM	1	1	17.37	17.49	17.64	18.5
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	DFT-s-OFDM QPSK	1	1	22.76	22.96	22.85	23.5
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	DFT-s-OFDM QPSK	1	1	22.67	22.81	22.72	23.5
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	DFT-s-OFDM QPSK	1	1	22.69	22.87	22.71	23.5

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

B48_n5							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				166800	167300	167800	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	DFT-s-OFDM QPSK	100	0	22.20	22.29	22.27	23.5
20		1	1	22.25	22.37	22.33	
20		1	53	22.25	22.13	22.13	
20		1	104	22.20	22.08	22.06	23.5
20		50	1	22.17	22.23	22.18	
20		50	25	22.11	22.15	22.15	
20	DFT-s-OFDM 16QAM	50	50	22.16	22.10	22.17	23.5
20		100	0	22.11	22.19	22.16	
20	DFT-s-OFDM 64QAM	1	1	22.32	22.28	22.27	23.5
20	DFT-s-OFDM 256QAM	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	DFT-s-OFDM QPSK	216	0	22.69	22.71	22.68	23.5
40		1	1	22.74	22.81	22.72	
40		1	108	22.69	22.70	22.58	
40		1	214	22.70	22.62	22.61	23.5
40		108	1	22.46	22.48	22.43	
40		108	54	22.44	22.44	22.35	
40	DFT-s-OFDM 16QAM	108	108	22.43	22.40	22.39	23.5
40		216	0	22.44	22.46	22.42	
40		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

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

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



2A_n77(3450-3550MHz)							
BW (MHz)	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel					633334		Tune-up limit (dBm)
Frequency (MHz)					3500.01		
100	DFT-s-OFDM Pi/2 BPSK	1	1		25.89		27
100		1	136		25.92		
100		1	271		26.02		
100		135	1		25.69		27
100		135	67		26.01		
100		135	136		25.34		
100	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		270	0		25.93		27
100	DFT-s-OFDM QPSK	1	1		26.33		
100		1	136		25.96		
100		1	271		25.37		
100		135	1		25.95		
100		135	67		25.76		
100		135	136		25.20		
100		270	0		25.94		27
100	DFT-s-OFDM 16QAM	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	DFT-s-OFDM QPSK	270	0	25.56	25.80	25.25	27
100		1	1	26.15	26.21	26.20	
100		1	136	26.03	25.88	26.01	
100		1	271	25.92	25.46	26.12	27
100		135	1	25.73	25.89	25.68	
100		135	67	25.25	25.55	25.22	
100	DFT-s-OFDM 16QAM	135	136	24.94	25.16	24.99	25.5
100		270	0	25.33	25.32	25.22	
100	DFT-s-OFDM 64QAM	1	1	24.57	24.64	24.89	24.5
100	DFT-s-OFDM 256QAM	1	1	23.23	23.22	23.15	24.5
100	CP-OFDM QPSK	1	1	21.20	21.20	21.30	22.5
100	CP-OFDM 16QAM	1	1	24.08	24.15	24.46	25.5
100	CP-OFDM 64QAM	1	1	23.51	23.60	23.50	24.5
100	CP-OFDM 256QAM	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	
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

ZAHWELIAN AT 1 (WS)							
Room	Student	Assignment	Assignment Date	Finals	Finals Date	Finals Point	Finals %
R02 T16 Tables	0001	0001	0001	10.00	10.00	20	100.00
	0002	0002	0002	10.00	10.00	20	100.00
	0010	0010	0010	10.00	10.00	20	100.00
	0011	0011	0011	10.00	10.00	20	100.00
R02 T16 Tables	0012	0012	0012	10.00	10.00	20	100.00
	0013	0013	0013	10.00	10.00	20	100.00
	0014	0014	0014	10.00	10.00	20	100.00
	0015	0015	0015	10.00	10.00	20	100.00
R02 T16TABLES (R02)	0016	0016	0016	10.00	10.00	20	100.00
	0017	0017	0017	10.00	10.00	20	100.00
	0018	0018	0018	10.00	10.00	20	100.00
	0019	0019	0019	10.00	10.00	20	100.00
R02 T16TABLES (R02)	0020	0020	0020	10.00	10.00	20	100.00
	0021	0021	0021	10.00	10.00	20	100.00
	0022	0022	0022	10.00	10.00	20	100.00
	0023	0023	0023	10.00	10.00	20	100.00
R02 T16TABLES (R02)	0024	0024	0024	10.00	10.00	20	100.00
	0025	0025	0025	10.00	10.00	20	100.00
	0026	0026	0026	10.00	10.00	20	100.00
	0027	0027	0027	10.00	10.00	20	100.00
R02 T16TABLES (R02)	0028	0028	0028	10.00	10.00	20	100.00
	0029	0029	0029	10.00	10.00	20	100.00
	0030	0030	0030	10.00	10.00	20	100.00
	0031	0031	0031	10.00	10.00	20	100.00
R02 T16TABLES (R02) (R02)	0032	0032	0032	10.00	10.00	20	100.00
	0033	0033	0033	10.00	10.00	20	100.00
	0034	0034	0034	10.00	10.00	20	100.00
	0035	0035	0035	10.00	10.00	20	100.00
R02 T16TABLES (R02) (R02)	0036	0036	0036	10.00	10.00	20	100.00
	0037	0037	0037	10.00	10.00	20	100.00
	0038	0038	0038	10.00	10.00	20	100.00
	0039	0039	0039	10.00	10.00	20	100.00
R02 T16TABLES (R02) (R02)	0040	0040	0040	10.00	10.00	20	100.00
	0041	0041	0041	10.00	10.00	20	100.00
	0042	0042	0042	10.00	10.00	20	100.00
	0043	0043	0043	10.00	10.00	20	100.00
R02 T16TABLES (R02) (R02)	0044	0044	0044	10.00	10.00	20	100.00
	0045	0045	0045	10.00	10.00	20	100.00
	0046	0046	0046	10.00	10.00	20	100.00
	0047	0047	0047	10.00	10.00	20	100.00
R02 T16TABLES (R02) (R02)	0048	0048	0048	10.00	10.00	20	100.00
	0049	0049	0049	10.00	10.00	20	100.00
	0050	0050	0050	10.00	10.00	20	100.00
	0051	0051	0051	10.00	10.00	20	100.00
R02 T16TABLES (R02) (R02)	0052	0052	0052	10.00	10.00	20	100.00
	0053	0053	0053	10.00	10.00	20	100.00
	0054	0054	0054	10.00	10.00	20	100.00

[illegible][illegible]

SOLUBILANT (W)						
Solubility	Rate	Temperature (°C)	Concentration (g/L)	Transfer Rate (g/min)	Extraction Time (min)	Extraction %
Very Soluble	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
Soluble	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
Slightly Soluble	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
Insoluble	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100
	RSD 100 (W)	25-100	100	10.00	10	100
		25-100	100	10.00	10	100

[illegible]

ZACHRY PART 2 (REV)							
Item	Description	Quantity	Unit	Contract Price	Taxable Price	Sales Tax	Net Price
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA	10,000.00	10,000.00	0.00	
B01 T-1000	0011	1.00	EA	10,000.00	10,000.00	0.00	
	0012	1.00	EA	10,000.00	10,000.00	0.00	
	0013	1.00	EA				

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500

S	B	SCHOOL YEAR 2021											
		Date	Class	Personal Income	Investment Income	Transfer Income	Other Income	Total Income	Total Deductions	Net Income	Tax Paid		
1	B	BSE Tax-Exempt	BSE Tax-Exempt	12/15/21	10000	10000	10000	0	0	30000	0	30000	0
				12/16/21	10000	10000	10000	0	0	30000	0	30000	0
		BSE Tax-Exempt	BSE Tax-Exempt	12/17/21	10000	10000	10000	0	0	30000	0	30000	0
				12/18/21	10000	10000	10000	0	0	30000	0	30000	0
		BSE Tax-Exempt	BSE Tax-Exempt	12/19/21	10000	10000	10000	0	0	30000	0	30000	0
				12/20/21	10000	10000	10000	0	0	30000	0	30000	0
		BSE Tax-Exempt	BSE Tax-Exempt	12/21/21	10000	10000	10000	0	0	30000	0	30000	0
				12/22/21	10000	10000	10000	0	0	30000	0	30000	0
		BSE Tax-Exempt	BSE Tax-Exempt	12/23/21	10000	10000	10000	0	0	30000	0	30000	0
				12/24/21	10000	10000	10000	0	0	30000	0	30000	0
2	B	BSE Tax-Exempt	BSE Tax-Exempt	12/25/21	10000	10000	10000	0	0	30000	0	30000	0
				12/26/21	10000	10000	10000	0	0	30000	0	30000	0
		BSE Tax-Exempt	BSE Tax-Exempt	12/27/21	10000	10000	10000	0	0	30000	0	30000	0
				12/28/21	10000	10000	10000	0	0	30000	0	30000	0
		BSE Tax-Exempt	BSE Tax-Exempt	12/29/21	10000	10000	10000	0	0	30000	0	30000	0
				12/30/21	10000	10000	10000	0	0	30000	0	30000	0
		BSE Tax-Exempt	BSE Tax-Exempt	12/31/21	10000	10000	10000	0	0	30000	0	30000	0
				12/31/21	10000	10000	10000	0	0	30000	0	30000	0
		BSE Tax-Exempt	BSE Tax-Exempt	12/31/21	10000	10000	10000	0	0	30000	0	30000	0
				12/31/21	10000	10000	10000	0	0	30000	0	30000	0
3	B	BSE Tax-Exempt	BSE Tax-Exempt	12/31/21	10000	10000	10000	0	0	30000	0	30000	0
				12/31/21	10000	10000	10000	0	0	30000	0	30000	0
		BSE Tax-Exempt	BSE Tax-Exempt	12/31/21	10000	10000	10000	0	0	30000	0	30000	0
				12/31/21	10000	10000	10000	0	0	30000	0	30000	0
		BSE Tax-Exempt	BSE Tax-Exempt	12/31/21	10000	10000	10000	0	0	30000	0	30000	0
				12/31/21	10000	10000	10000	0	0	30000	0	30000	0
		BSE Tax-Exempt	B										

[illegible][illegible][illegible]

B2104 WASH MIAMI (09/15)								
State	Channel	Frequency	Power (dBm)	Transmit	Receive	Power (dBm)	Mod. Rate (kbps)	Mod. Type
B&B TV MEMPHIS	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
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	12.1	55.00	10.00	55.00	55.00			
B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
	12.1	55.00	10.00	55.00	55.00			
B&B TV MEMPHIS HD	12.1	55.00	10.00	55.00	55.00			
	12.1	5						

[illegible]

Model	Frequency (MHz)	Transmit Power (dBm)	Channel Width (MHz)	Channel #	Channel Name	Frequency (MHz)
802.11a WLAN	5180 MHz	30dB	20MHz	36	DATA	5180 MHz
	5200 MHz	30dB	20MHz	37	DATA	5200 MHz
	5220 MHz	30dB	20MHz	38	DATA	5220 MHz
	5240 MHz	30dB	20MHz	39	DATA	5240 MHz
802.11a/b/g/n WLAN	5400 MHz	30dB	20MHz	40	DATA	5400 MHz
	5420 MHz	30dB	20MHz	41	DATA	5420 MHz
	5440 MHz	30dB	20MHz	42	DATA	5440 MHz
	5460 MHz	30dB	20MHz	43	DATA	5460 MHz
802.11a/b/g/n WLAN	5600 MHz	30dB	20MHz	44	DATA	5600 MHz
	5620 MHz	30dB	20MHz	45	DATA	5620 MHz
	5640 MHz	30dB	20MHz	46	DATA	5640 MHz
	5660 MHz	30dB	20MHz	47	DATA	5660 MHz
802.11a/b/g/n WLAN	5800 MHz	30dB	20MHz	48	DATA	5800 MHz
	5820 MHz	30dB	20MHz	49	DATA	5820 MHz
	5840 MHz	30dB	20MHz	50	DATA	5840 MHz
	5860 MHz	30dB	20MHz	51	DATA	5860 MHz
802.11a/b/g/n WLAN	6000 MHz	30dB	20MHz	52	DATA	6000 MHz
	6020 MHz	30dB	20MHz	53	DATA	6020 MHz
	6040 MHz	30dB	20MHz	54	DATA	6040 MHz
	6060 MHz	30dB	20MHz	55	DATA	6060 MHz
802.11a/b/g/n WLAN	6200 MHz	30dB	20MHz	56	DATA	6200 MHz
	6220 MHz	30dB	20MHz	57	DATA	6220 MHz
	6240 MHz	30dB	20MHz	58	DATA	6240 MHz
	6260 MHz	30dB	20MHz	59	DATA	6260 MHz
802.11a/b/g/n WLAN	6400 MHz	30dB	20MHz	60	DATA	6400 MHz
	6420 MHz	30dB	20MHz	61	DATA	6420 MHz
	6440 MHz	30dB	20MHz	62	DATA	6440 MHz
	6460 MHz	30dB	20MHz	63	DATA	6460 MHz
802.11a/b/g/n WLAN	6600 MHz	30dB	20MHz	64	DATA	6600 MHz
	6620 MHz	30dB	20MHz	65	DATA	6620 MHz
	6640 MHz	30dB	20MHz	66	DATA	6640 MHz
	6660 MHz	30dB	20MHz	67	DATA	6660 MHz
802.11a/b/g/n WLAN	6800 MHz	30dB	20MHz	68	DATA	6800 MHz
	6820 MHz	30dB	20MHz	69	DATA	6820 MHz
	6840 MHz	30dB	20MHz	70	DATA	6840 MHz
	6860 MHz	30dB	20MHz	71	DATA	6860 MHz
802.11a/b/g/n WLAN	7000 MHz	30dB	20MHz	72	DATA	7000 MHz
	7020 MHz	30dB	20MHz	73	DATA	7020 MHz
	7040 MHz	30dB	20MHz	74	DATA	7040 MHz
	7060 MHz	30dB	20MHz	75	DATA	7060 MHz
802.11a/b/g/n WLAN	7200 MHz	30dB	20MHz	76	DATA	7200 MHz
	7220 MHz	30dB	20MHz	77	DATA	7220 MHz
	7240 MHz	30dB	20MHz	78	DATA	7240 MHz
	7260 MHz	30dB	20MHz	79	DATA	7260 MHz
802.11a/b/g/n WLAN	7400 MHz	30dB	20MHz	80	DATA	7400 MHz
	7420 MHz	30dB	20MHz	81	DATA	7420 MHz
	7440 MHz	30dB	20MHz	82	DATA	7440 MHz
	7460 MHz	30dB	20MHz	83	DATA	7460 MHz
802.11a/b/g/n WLAN	7600 MHz	30dB	20MHz	84	DATA	7600 MHz
	7620 MHz	30dB	20MHz	85	DATA	7620 MHz
	7640 MHz	30dB	20MHz	86	DATA	7640 MHz
	7660 MHz	30dB	20MHz	87	DATA	7660 MHz
802.11a/b/g/n WLAN	7800 MHz	30dB	20MHz	88	DATA	7800 MHz
	7820 MHz	30dB	20MHz	89	DATA	7820 MHz
	7840 MHz	30dB	20MHz	90	DATA	7840 MHz
	7860 MHz	30dB	20MHz	91	DATA	7860 MHz
802.11a/b/g/n WLAN	8000 MHz	30dB	20MHz	92	DATA	8000 MHz
	8020 MHz	30dB	20MHz	93	DATA	8020 MHz
	8040 MHz	30dB	20MHz	94	DATA	8040 MHz
	8060 MHz	30dB	20MHz	95	DATA	8060 MHz

Model	Release Date	Processor	Storage Capacity	RAM	Display Size	Weight	Price (€)
ASUS ZenBook 14	Q1-2022	Intel i5	512GB	8GB	14"	1.2kg	599
	Q2-2022	Intel i7	512GB	16GB	14"	1.2kg	799
	Q3-2022	Intel i9	1TB	32GB	14"	1.2kg	1199
Dell XPS 13	Q1-2022	Intel i5	256GB	8GB	13"	1.2kg	549
	Q2-2022	Intel i7	512GB	16GB	13"	1.2kg	749
	Q3-2022	Intel i9	1TB	32GB	13"	1.2kg	1099
HP Spectre x360	Q1-2022	Intel i5	256GB	8GB	13.3"	1.2kg	599
	Q2-2022	Intel i7	512GB	16GB	13.3"	1.2kg	799
	Q3-2022	Intel i9	1TB	32GB	13.3"	1.2kg	1199
Lenovo ThinkPad X1 Carbon	Q1-2022	Intel i5	256GB	8GB	14"	1.1kg	649
	Q2-2022	Intel i7	512GB	16GB	14"	1.1kg	849
	Q3-2022	Intel i9	1TB	32GB	14"	1.1kg	1249
Microsoft Surface Laptop 4	Q1-2022	Intel i5	256GB	8GB	13.5"	1.3kg	599
	Q2-2022	Intel i7	512GB	16GB	13.5"	1.3kg	799
	Q3-2022	Intel i9	1TB	32GB	13.5"	1.3kg	1199
Acer Swift 5	Q1-2022	Intel i5	256GB	8GB	14"	1.1kg	549
	Q2-2022	Intel i7	512GB	16GB	14"	1.1kg	749
	Q3-2022	Intel i9	1TB	32GB	14"	1.1kg	1099
Samsung Galaxy Book2	Q1-2022	Intel i5	256GB	8GB	14"	1.2kg	599
	Q2-2022	Intel i7	512GB	16GB	14"	1.2kg	799
	Q3-2022	Intel i9	1TB	32GB	14"	1.2kg	1199
Huawei MateBook X Pro	Q1-2022	Intel i5	256GB	8GB	14.2"	1.1kg	649
	Q2-2022	Intel i7	512GB	16GB	14.2"	1.1kg	849
	Q3-2022	Intel i9	1TB	32GB	14.2"	1.1kg	1249
Xiaomi Mi Notebook Pro	Q1-2022	Intel i5	256GB	8GB	14"	1.2kg	549
	Q2-2022	Intel i7	512GB	16GB	14"	1.2kg	749
	Q3-2022	Intel i9	1TB	32GB	14"	1.2kg	1099
Honor MagicBook 16	Q1-2022	Intel i5	256GB	8GB	16"	1.8kg	699
	Q2-2022	Intel i7	512GB	16GB	16"	1.8kg	899
	Q3-2022	Intel i9	1TB	32GB	16"	1.8kg	1299
Meizu 18	Q1-2022	Intel i5	256GB	8GB	14"	1.2kg	549
	Q2-2022	Intel i7	512GB	16GB	14"	1.2kg	749
	Q3-2022	Intel i9	1TB	32GB	14"	1.2kg	1099
Realme Book Pro	Q1-2022	Intel i5	256GB	8GB	14"	1.2kg	549
	Q2-2022	Intel i7	512GB	16GB	14"	1.2kg	749
	Q3-2022	Intel i9	1TB	32GB	14"	1.2kg	1099
Vivo Book Pro	Q1-2022	Intel i5	256GB	8GB	14"	1.2kg	549
	Q2-2022	Intel i7	512GB	16GB	14"	1.2kg	749
	Q3-2022	Intel i9	1TB	32GB	14"	1.2kg	1099

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	22.5			
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	21.5			
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	21.5			
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	20.5			
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	20.5			
20	16QAM	100	0	16.36	16.42	16.38					
20	64QAM	1	0	16.62	16.69	16.66					
20	64QAM	1	49	16.55	16.63	16.58	17.5	20.5			
20	64QAM	1	99	16.59	16.62	16.57					
20	64QAM	50	0	16.49	16.50	16.42					
20	64QAM	50	24	16.47	16.48	16.46	17.5	20.5			
20	64QAM	50	50	16.41	16.45	16.42					
20	64QAM	100	0	16.36	16.42	16.36					
20	256QAM	1	0	13.83	13.90	13.87	14.5	17.5			
20	256QAM	1	49	13.76	13.84	13.79					
20	256QAM	1	99	13.80	13.83	13.78					
20	256QAM	50	0	13.70	13.71	13.63	14.5	17.5			
20	256QAM	50	24	13.68	13.69	13.67					
20	256QAM	50	50	13.62	13.66	13.63					
20	256QAM	100	0	13.57	13.63	13.57	14.5	17.5			
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	22.5			
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	21.5			
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	21.5			
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	20.5			
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	20.5			
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	20.5			
15	64QAM	1	74	16.57	16.60	16.56					
15	64QAM	36	0	16.47	16.45	16.37					
15	64QAM	36	20	16.45	16.44	16.40	17.5	20.5			
15	64QAM	36	39	16.39	16.44	16.35					
15	64QAM	75	0	16.32	16.35	16.30					
15	256QAM	1	0	13.79	13.83	13.83	14.5	17.5			
15	256QAM	1	37	13.75	13.83	13.71					
15	256QAM	1	74	13.78	13.81	13.77					
15	256QAM	36	0	13.68	13.66	13.58	14.5	17.5			
15	256QAM	36	20	13.66	13.65	13.61					
15	256QAM	36	39	13.60	13.65	13.56					
15	256QAM	75	0	13.53	13.56	13.51	14.5	17.5			
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	22.5			
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	21.5			
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	21.5			
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	20.5			
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	20.5			
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	20.5			
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	20.5			
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	17.5			
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	17.5			
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	17.5			
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	22.5			
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	21.5			
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	21.5			
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	18.5	21.5			

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	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	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	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	20.5	
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	20.5	
20	16QAM	100	0	19.41	19.47	19.43			
20	64QAM	1	0	19.67	19.74	19.71			
20	64QAM	1	49	19.60	19.68	19.63	20.5	20.5	
20	64QAM	1	99	19.64	19.67	19.62			
20	64QAM	50	0	19.54	19.55	19.47			
20	64QAM	50	24	19.52	19.53	19.51	20.5	20.5	
20	64QAM	50	50	19.46	19.50	19.47			
20	64QAM	100	0	19.41	19.47	19.41			
20	256QAM	1	0	16.88	16.95	16.92	17.5	17.5	
20	256QAM	1	49	16.81	16.89	16.84			
20	256QAM	1	99	16.85	16.88	16.83			
20	256QAM	50	0	16.75	16.76	16.68	17.5	17.5	
20	256QAM	50	24	16.73	16.74	16.72			
20	256QAM	50	50	16.67	16.71	16.68			
20	256QAM	100	0	16.62	16.68	16.62	Tune-up limit (dBm)		
Channel				18675	18900	19125			
Frequency (MHz)				1857.5	1880	1902.5			
15	QPSK	1	0	21.50	21.56	21.49	22.5	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	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	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	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	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	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	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	17.5	
15	256QAM	1	37	16.80	16.88	16.76			
15	256QAM	1	74	16.83	16.86	16.82			
15	256QAM	36	0	16.73	16.71	16.63	17.5	17.5	
15	256QAM	36	20	16.71	16.70	16.66			
15	256QAM	36	39	16.65	16.70	16.61			
15	256QAM	75	0	16.58	16.61	16.56	Tune-up limit (dBm)		
Channel				18650	18900	19150			
Frequency (MHz)				1855	1880	1905			
10	QPSK	1	0	21.49	21.60	21.52	22.5	22.5	
10	QPSK	1	25	21.39	21.47	21.42			
10	QPSK	1	49	21.37	21.46	21.41			
10	QPSK	25	0	20.73	20.70	20.70	21.5	21.5	
10	QPSK	25	12	20.66	20.68	20.65			
10	QPSK	25	25	20.60	20.61	20.63			
10	QPSK	50	0	20.57	20.66	20.58	21.5	21.5	
10	16QAM	1	0	20.74	20.75	20.77			
10	16QAM	1	25	20.75	20.73	20.64			
10	16QAM	1	49	20.69	20.73	20.70	20.5	20.5	
10	16QAM	25	0	19.44	19.48	19.38			
10	16QAM	25	12	19.45	19.44	19.38			
10	16QAM	25	25	19.45	19.48	19.38	20.5	20.5	
10	16QAM	50	0	19.34	19.45	19.39			
10	64QAM	1	0	19.65	19.70	19.68			
10	64QAM	1	25	19.57	19.64	19.56	20.5	20.5	
10	64QAM	1	49	19.61	19.66	19.58			
10	64QAM	25	0	19.53	19.54	19.40			
10	64QAM	25	12	19.48	19.45	19.48	20.5	20.5	
10	64QAM	25	25	19.44	19.49	19.46			
10	64QAM	50	0	19.37	19.45	19.34			
10	256QAM	1	0	16.86	16.91	16.89	17.5	17.5	
10	256QAM	1	25	16.78	16.85	16.77			
10	256QAM	1	49	16.82	16.87	16.79			
10	256QAM	25	0	16.74	16.75	16.61	17.5	17.5	
10	256QAM	25	12	16.69	16.66	16.69			
10	256QAM	25	25	16.65	16.70	16.67			
10	256QAM	50	0	16.58	16.66	16.55	Tune-up limit (dBm)		
Channel				18625	18900	19175			
Frequency (MHz)				1852.5	1880	1907.5			
5	QPSK	1	0	21.47	21.54	21.51	22.5	22.5	
5	QPSK	1	12	21.41	21.51	21.42			
5	QPSK	1	24	21.37	21.42	21.46			
5	QPSK	12	0	20.69	20.70	20.68	21.5	21.5	
5	QPSK	12	7	20.60	20.65	20.61			
5	QPSK	12	13	20.58	20.67	20.63			
5	QPSK	25	0	20.62	20.60	20.57	21.5	21.5	
5	16QAM	1	0	20.86	20.82	20.84			
5	16QAM	1	12	20.79	20.86	20.76			
5	16QAM	1	24	20.74	20.79	20.78	21.5	21.5	



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	
5	64QAM	1	0	16.57	16.67	16.64	17.5
5	64QAM	1	12	16.54	16.58	16.54	
5	64QAM	1	24	16.57	16.61	16.52	
5	64QAM	12	0	16.47	16.48	16.41	
5	64QAM	12	7	16.44	16.40	16.41	17.5
5	64QAM	12	13	16.35	16.38	16.34	
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	
5	256QAM	12	13	13.56	13.59	13.55	14.5
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	
3	QPSK	8	4	17.48	17.59	17.50	18.5
3	QPSK	8	7	17.49	17.53	17.52	
3	QPSK	15	0	17.44	17.51	17.43	
3	16QAM	1	0	17.75	17.73	17.75	
3	16QAM	1	8	17.72	17.73	17.66	18.5
3	16QAM	1	14	17.63	17.67	17.65	
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	
3	64QAM	1	14	16.52	16.60	16.52	17.5
3	64QAM	8	0	16.43	16.49	16.34	
3	64QAM	8	4	16.44	16.44	16.44	
3	64QAM	8	7	16.40	16.44	16.41	
3	64QAM	15	0	16.34	16.41	16.33	14.5
3	256QAM	1	0	13.78	13.82	13.82	
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	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	18.33	18.48	18.40	19.5
1.4	QPSK	1	3	18.27	18.34	18.33	
1.4	QPSK	1	5	18.24	18.35	18.33	
1.4	QPSK	3	0	18.30	18.39	18.36	
1.4	QPSK	3	1	18.42	18.45	18.35	18.5
1.4	QPSK	3	3	18.36	18.40	18.37	
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	
1.4	16QAM	3	3	17.51	17.55	17.44	17.5
1.4	16QAM	6	0	16.54	16.51	16.44	
1.4	64QAM	1	0	16.60	16.65	16.64	
1.4	64QAM	1	3	16.52	16.56	16.53	
1.4	64QAM	1	5	16.52	16.56	16.53	17.5
1.4	64QAM	3	0	16.61	16.55	16.48	
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	17.5
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	
1.4	256QAM	3	0	13.82	13.76	13.69	14.5
1.4	256QAM	3	1	13.79	13.77	13.74	
1.4	256QAM	3	3	13.72	13.73	13.71	
1.4	256QAM	6	0	13.52	13.58	13.50	

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	
5	64QAM	1	0	19.69	19.79	19.76	20.5
5	64QAM	1	12	19.59	19.63	19.59	
5	64QAM	1	24	19.62	19.66	19.57	
5	64QAM	12	0	19.52	19.53	19.46	
5	64QAM	12	7	19.49	19.45	19.46	20.5
5	64QAM	12	13	19.40	19.43	19.39	
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	
3	QPSK	8	4	20.60	20.71	20.62	21.5
3	QPSK	8	7	20.61	20.65	20.64	
3	QPSK	15	0	20.56	20.63	20.55	
3	16QAM	1	0	20.87	20.85	20.87	
3	16QAM	1	8	20.84	20.85	20.78	21.5
3	16QAM	1	14	20.75	20.79	20.77	
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	
3	64QAM	1	14	19.57	19.65	19.57	20.5
3	64QAM	8	0	19.48	19.54	19.39	
3	64QAM	8	4	19.49	19.49	19.49	
3	64QAM	8	7	19.45	19.49	19.46	
3	64QAM	15	0	19.39	19.46	19.38	17.5
3	256QAM	1	0	16.83	16.87	16.87	
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	
Channel				18607	18900	19193	Tune-up limit (dBm)
Frequency (MHz)				1850.7	1880	1909.3	
1.4	QPSK	1	0	21.45	21.60	21.52	22.5
1.4	QPSK	1	3	21.39	21.46	21.45	
1.4	QPSK	1	5	21.36	21.47	21.45	
1.4	QPSK	3	0	21.42	21.51	21.48	
1.4	QPSK	3	1	21.54	21.57	21.47	21.5
1.4	QPSK	3	3	21.48	21.52	21.49	
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	
1.4	16QAM	3	3	20.63	20.67	20.56	20.5
1.4	16QAM	6	0	19.66	19.63	19.56	
1.4	64QAM	1	0	19.72	19.77	19.76	
1.4	64QAM	1	3	19.64	19.68	19.65	
1.4	64QAM	1	5	19.64	19.68	19.65	20.5
1.4	64QAM	3	0	19.73	19.67	19.60	
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	20.5
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	
1.4	256QAM	3	0	16.87	16.81	16.74	17.5
1.4	256QAM	3	1	16.84	16.82	16.79	
1.4	256QAM	3	3	16.77	16.78	16.76	
1.4	256QAM	6	0	16.57	16.63	16.55	

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	22.5
20	QPSK	1	0	21.63	21.67	21.64	
20	QPSK	1	49	21.59	21.59	21.62	
20	QPSK	1	99	21.57	21.58	21.59	
20	QPSK	50	0	20.66	20.70	20.62	
20	QPSK	50	24	20.62	20.56	20.55	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	21.5
20	16QAM	1	49	20.82	20.91	20.86	
20	16QAM	1	99	20.92	20.69	20.96	
20	16QAM	50	0	19.75	19.70	19.74	20.5
20	16QAM	50	24	19.84	19.69	19.68	
20	16QAM	50	50	19.71	19.74	19.76	
20	16QAM	100	0	19.69	19.71	19.67	
20	64QAM	1	0	19.79	19.93	19.88	20.5
20	64QAM	1	49	19.77	19.81	19.71	
20	64QAM	1	99	19.87	19.75	19.57	
20	64QAM	50	0	19.72	19.61	19.61	20.5
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	
20	256QAM	50	24	16.40	16.41	16.48	17.5
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	21.5
15	QPSK	36	20	20.73	20.54	20.55	
15	QPSK	36	39	20.63	20.60	20.51	
15	QPSK	75	0	20.52	20.50	20.37	21.5
15	16QAM	1	0	20.80	20.69	20.52	
15	16QAM	1	37	20.79	20.91	20.71	
15	16QAM	1	74	20.91	21.06	20.92	
15	16QAM	36	0	19.71	19.58	19.65	
15	16QAM	36	20	19.77	19.57	19.57	20.5
15	16QAM	36	39	19.64	19.69	19.71	
15	16QAM	75	0	19.59	19.67	19.66	
15	64QAM	1	0	19.76	19.92	19.83	20.5
15	64QAM	1	37	19.76	19.76	19.71	
15	64QAM	1	74	19.85	19.70	19.51	
15	64QAM	36	0	19.69	19.51	19.54	20.5
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	
15	256QAM	36	20	16.31	16.38	16.41	17.5
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	21.5
10	QPSK	25	12	20.59	20.46	20.52	
10	QPSK	25	25	20.49	20.59	20.47	
10	QPSK	50	0	20.52	20.58	20.45	21.5
10	16QAM	1	0	20.89	20.81	20.62	
10	16QAM	1	25	20.86	21.03	20.83	
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	20.5
10	16QAM	25	25	19.65	19.60	19.67	
10	16QAM	50	0	19.63	19.60	19.53	
10	64QAM	1	0	19.64	19.79	19.81	20.5
10	64QAM	1	25	19.75	19.80	19.69	
10	64QAM	1	49	19.82	19.68	19.47	
10	64QAM	25	0	19.71	19.51	19.52	20.5
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	
10	256QAM	25	12	16.32	16.38	16.42	17.5
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	1	24	21.43	21.49	21.39	
5	QPSK	12	0	20.49	20.65	20.53	21.5
5	QPSK	12	7	20.51	20.54	20.48	
5	QPSK	12	13	20.59	20.59	20.48	
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	21.5
5	16QAM	1	24	20.97	21.08	20.93	

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

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

Band 7 (2600MHz Band) (dBm)_ANT0							
Part 27							
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				20850	21100	21350	
Frequency (MHz)				2510	2535	2560	
20	QPSK	1	0	20.98	21.06	21.03	22
20	QPSK	1	49	20.85	20.92	20.97	
20	QPSK	1	99	20.96	20.97	20.98	
20	QPSK	50	0	20.06	20.19	20.18	21
20	QPSK	50	24	20.13	20.18	20.17	
20	QPSK	50	50	20.16	20.15	20.17	
20	QPSK	100	0	20.21	20.22	20.14	21
20	16QAM	1	0	20.07	20.01	20.06	
20	16QAM	1	49	20.14	20.13	20.05	
20	16QAM	1	99	20.15	20.20	20.16	20
20	16QAM	50	0	19.05	19.20	19.26	
20	16QAM	50	24	19.09	19.14	19.06	
20	16QAM	50	50	19.08	19.19	19.04	20
20	16QAM	100	0	19.07	19.12	19.17	
20	64QAM	1	0	19.10	19.14	19.18	
20	64QAM	1	49	19.14	19.20	18.95	20
20	64QAM	1	99	19.09	18.96	18.86	
20	64QAM	50	0	19.06	19.10	19.14	
20	64QAM	50	24	19.06	19.19	18.98	20
20	64QAM	50	50	19.03	19.18	19.12	
20	64QAM	100	0	19.11	19.10	19.00	
20	256QAM	1	0	16.14	16.18	16.22	17
20	256QAM	1	49	16.18	16.24	15.99	
20	256QAM	1	99	16.13	16.00	15.90	
20	256QAM	50	0	16.10	16.14	16.18	17
20	256QAM	50	24	16.10	16.23	16.02	
20	256QAM	50	50	16.07	16.22	16.16	
20	256QAM		100	0	16.15	16.14	16.04
Channel				20825	21100	21375	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	25	25	20.11	20.05	20.16	
10	QPSK	50	0	20.20	20.17	20.12	21
10	16QAM	1	0	19.99	19.97	19.98	
10	16QAM	1	25	20.10	20.11	19.95	
10	16QAM	1	49	20.09	20.11	20.14	20
10	16QAM	25	0	19.03	19.11	19.24	
10	16QAM	25	12	19.06	19.11	18.96	
10	16QAM	25	25	19.05	19.11	18.98	20
10	16QAM	50	0	19.02	19.11	19.16	
10	64QAM	1	0	19.09	19.12	19.17	
10	64QAM	1	25	19.05	19.15	18.92	20
10	64QAM	1	49	19.05	18.86	18.78	
10	64QAM	25	0	18.97	19.04	19.09	
10	64QAM	25	12	19.02	19.18	18.96	20
10	64QAM	25	25	19.00	19.08	19.06	
10	64QAM	50	0	19.04	19.09	18.92	
10	256QAM	1	0	16.13	16.16	16.21	17
10	256QAM	1	25	16.09	16.19	15.96	
10	256QAM	1	49	16.09	15.90	15.82	
10	256QAM	25	0	16.01	16.08	16.13	17
10	256QAM	25	12	16.06	16.22	16.00	
10	256QAM	25	25	16.04	16.12	16.10	
10	256QAM		50	0	16.08	16.13	15.96
Channel				20775	21100	21425	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	

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	21		
5	64QAM	12	13	20.52	20.58	20.48			
5	64QAM	25	0	20.59	20.55	20.60			
5	256QAM	1	0	17.30	17.19	17.13	18		
5	256QAM	1	12	17.30	17.26	17.29			
5	256QAM	1	24	17.40	17.42	17.30			
5	256QAM	12	0	17.12	17.31	17.17	18		
5	256QAM	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	22		
1.4	QPSK	3	1	22.42	22.30	22.39			
1.4	QPSK	3	3	22.34	22.30	22.28			
1.4	QPSK	6	0	21.49	21.49	21.51	22		
1.4	16QAM	1	0	21.73	21.68	21.60			
1.4	16QAM	1	3	21.46	21.51	21.53			
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			23
10	QPSK	1	0		22.41		
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		
10	16QAM	1	0		21.76		22
10	16QAM	1	25		21.48		
10	16QAM	1	49		21.62		
10	16QAM	25	0		20.53		
10	16QAM	25	12		20.57		21
10	16QAM	25	25		20.51		
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		
10	64QAM	25	25		20.53		21
10	64QAM	50	0		20.42		
10	256QAM	1	0		17.43		
10	256QAM	1	25		17.51		
10	256QAM	1	49		17.31		18
10	256QAM	25	0		17.32		
10	256QAM	25	12		17.26		
10	256QAM	25	25		17.30		
10	256QAM	50	0		17.19		18
Channel				23205	23230	23255	
Frequency (MHz)				779.5	782	784.5	Tune-up limit (dBm)
5	QPSK	1	0	22.38	22.39	22.25	23
5	QPSK	1	12	22.31	22.34	22.35	
5	QPSK	1	24	22.26	22.30	22.33	
5	QPSK	12	0	21.42	21.45	21.45	
5	QPSK	12	7	21.37	21.35	21.37	22
5	QPSK	12	13	21.37	21.34	21.40	
5	QPSK	25	0	21.43	21.39	21.41	
5	16QAM	1	0	21.57	21.66	21.36	
5	16QAM	1	12	21.41	21.41	21.43	22
5	16QAM	1	24	21.47	21.55	21.54	
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	
5	64QAM	1	24	20.47	20.53	20.48	21
5	64QAM	12	0	20.33	20.48	20.34	
5	64QAM	12	7	20.33	20.44	20.43	
5	64QAM	12	13	20.47	20.49	20.40	
5	64QAM	25	0	20.37	20.41	20.45	18
5	256QAM	1	0	17.21	17.42	17.28	
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	17.5
20	QPSK	1	0	16.60	16.62	16.55	
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	
20	16QAM	1	0	15.61	15.76	15.78	16.5
20	16QAM	1	49	15.68	15.77	15.54	
20	16QAM	1	99	15.62	15.69	15.77	
20	16QAM	50	0	14.62	14.55	14.54	
20	16QAM	50	24	14.74	14.69	14.57	15.5
20	16QAM	50	50	14.67	14.66	14.63	
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	
20	64QAM	50	50	14.59	14.60	14.60	15.5
20	64QAM	100	0	14.70	14.59	14.48	
20	256QAM	1	0	11.90	11.87	11.88	
20	256QAM	1	49	11.78	11.88	11.62	12.5
20	256QAM	1	99	11.69	11.82	11.83	
20	256QAM	50	0	11.58	11.53	11.53	
20	256QAM	50	24	11.65	11.63	11.55	12.5
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	
15	QPSK	36	20	15.35	15.48	15.50	16.5
15	QPSK	36	39	15.46	15.46	15.47	
15	QPSK	75	0	15.31	15.35	15.47	
15	16QAM	1	0	15.79	15.69	15.76	
15	16QAM	1	37	15.63	15.73	15.50	16.5
15	16QAM	1	74	15.57	15.60	15.70	
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	64QAM	1	74	14.59	14.78	14.82	15.5
15	64QAM	36	0	14.47	14.53	14.46	
15	64QAM	36	20	14.56	14.54	14.55	
15	64QAM	36	39	14.50	14.58	14.50	
15	64QAM	75	0	14.68	14.57	14.41	12.5
15	256QAM	1	0	11.85	11.83	11.81	
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	
10	QPSK	25	12	15.32	15.40	15.38	16.5
10	QPSK	25	25	15.41	15.40	15.41	
10	QPSK	50	0	15.32	15.21	15.47	
10	16QAM	1	0	15.75	15.65	15.69	
10	16QAM	1	25	15.56	15.68	15.41	16.5
10	16QAM	1	49	15.53	15.59	15.64	
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	
10	64QAM	1	49	14.54	14.75	14.73	15.5
10	64QAM	25	0	14.52	14.48	14.40	
10	64QAM	25	12	14.57	14.56	14.41	
10	64QAM	25	25	14.43	14.53	14.46	
10	64QAM	50	0	14.57	14.44	14.42	12.5
10	256QAM	1	0	11.73	11.80	11.73	
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	
5	QPSK	12	7	15.33	15.43	15.37	16.5
5	QPSK	12	13	15.44	15.41	15.40	
5	QPSK	25	0	15.28	15.27	15.47	
5	16QAM	1	0	15.70	15.67	15.70	
5	16QAM	1	12	15.51	15.68	15.43	16.5
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	Tune-up limit (dBm)
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	



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

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

5A_n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	
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

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

13A_n2							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				372000	376000	380000	Tune-up limit (dBm)
Frequency (MHz)				1860	1880	1900	
20	DFT-s-OFDM PI/2 BPSK	1	1	21.20	21.15	21.07	22
20		1	53	21.22	21.14	21.08	
20		1	104	21.23	21.06	21.09	
20		50	1	21.22	21.14	21.07	22
20		50	25	21.26	21.15	21.10	
20		50	50	21.20	21.14	21.11	
20		100	0	21.24	21.17	21.13	
20	DFT-s-OFDM QPSK	1	1	21.18	21.28	21.24	22
20		1	53	21.24	21.17	21.09	
20		1	104	21.17	21.05	21.10	
20		50	1	20.90	20.95	20.76	22
20		50	25	20.87	20.79	20.76	
20		50	50	20.92	20.80	20.73	
20		100	0	20.84	20.94	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		1	1	21.23	21.18	21.09	22
20		1	53	21.27	21.17	21.08	
20		1	104	21.24	21.12	21.15	
20	DFT-s-OFDM PI/2 BPSK	50	1	21.19	21.19	21.12	22
20		50	25	21.25	21.19	21.13	
20		50	50	21.26	21.14	21.11	
20		100	0	21.25	21.17	21.11	
20	DFT-s-OFDM QPSK	1	1	21.25	21.29	21.23	22
20		1	53	21.27	21.15	21.12	
20		1	104	21.24	21.07	21.13	
20		50	1	20.96	21.02	20.85	
20		50	25	20.95	20.93	20.87	22
20		50	50	20.97	20.87	20.84	
20		100	0	20.90	20.98	20.84	
20	DFT-s-OFDM 16QAM	1	1	21.13	21.22	21.12	22
20	DFT-s-OFDM 64QAM	1	1	19.72	19.62	19.58	20.5
20	DFT-s-OFDM 256QAM	1	1	17.98	17.92	17.86	18.5
20	CP-OFDM QPSK	1	1	20.13	20.11	20.01	21
20	CP-OFDM 16QAM	1	1	19.19	19.16	19.09	20
20	CP-OFDM 64QAM	1	1	17.95	18.02	18.10	19
20	CP-OFDM 256QAM	1	1	16.02	15.97	15.83	17
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	DFT-s-OFDM QPSK	1	1	21.16	21.22	21.06	22
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	DFT-s-OFDM QPSK	1	1	21.01	21.19	20.96	22
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	DFT-s-OFDM QPSK	1	1	21.03	21.16	21.15	22

2A_n66							
BW [MHz]	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	22
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	
40		108	54	21.24	21.17	21.16	
40		108	108	21.27	21.15	21.27	
40	DFT-s-OFDM QPSK	216	0	21.26	21.19	21.26	22
40		1	1	21.25	21.32	21.25	
40		1	108	21.19	21.24	21.08	
40		1	214	21.10	20.98	21.11	
40		108	1	21.04	21.05	21.02	
40		108	54	21.02	20.98	20.88	
40	DFT-s-OFDM 16QAM	108	108	20.87	20.92	20.89	22
40		216	0	21.03	21.04	21.02	
40		1	1	21.23	21.30	21.28	
40		1	1	19.64	19.64	19.76	
40		1	1	17.91	17.99	17.71	
40		1	1	19.93	20.00	19.96	
40	CP-OFDM QPSK	1	1	19.12	19.05	19.18	20
40	CP-OFDM 16QAM	1	1	18.11	18.18	18.05	19
40	CP-OFDM 64QAM	1	1	15.92	15.98	15.92	17
40	CP-OFDM 256QAM	1	1				
Channel				345000	349000	353000	22
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	21.10	21.17	21.14	22
Channel				344000	349000	354000	22
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	21.27	21.24	21.12	22
Channel				343500	349000	354500	22
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	22
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	20.68	21.08	20.96	22
Channel				342500	349000	355500	22
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	DFT-s-OFDM QPSK	216	0	21.19	21.21	21.18	22
40		1	1	21.24	21.31	21.22	
40		1	108	21.19	21.20	21.08	
40		1	214	21.20	21.12	21.11	22
40		108	1	20.96	20.98	20.93	
40		108	54	20.94	20.94	20.85	
40	DFT-s-OFDM 16QAM	108	108	20.93	20.90	20.89	22
40		216	0	20.94	20.96	20.92	
40		1	1	21.16	21.28	21.18	22
40	DFT-s-OFDM 64QAM	1	1	19.60	19.67	19.66	20.5
40	DFT-s-OFDM 256QAM	1	1	17.92	17.93	17.88	18.5
40	CP-OFDM QPSK	1	1	19.70	19.77	19.67	20.5
40	CP-OFDM 16QAM	1	1	19.08	19.14	19.06	20
40	CP-OFDM 64QAM	1	1	17.83	17.92	17.82	18.5
40	CP-OFDM 256QAM	1	1	15.92	15.98	15.90	16.5
Channel				345000	349000	353000	Tune-up limit (dBm)
Frequency (MHz)				1725	1745	1765	
30	DFT-s-OFDM QPSK	1	1	21.19	21.11	21.17	22
Channel				344000	349000	354000	Tune-up limit (dBm)
Frequency (MHz)				1720	1745	1770	
20	DFT-s-OFDM QPSK	1	1	21.23	20.71	20.56	22
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	DFT-s-OFDM QPSK	1	1	21.20	20.91	20.75	22
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	DFT-s-OFDM QPSK	1	1	21.18	21.04	21.06	22
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	DFT-s-OFDM QPSK	1	1	21.20	21.16	21.07	22

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

13A_n66							
BW (MHz)	Modulation	RB num	RB start	Low Channel	Middle Channel	High Channel	Tune-up limit (dBm)
Channel				346000	349000	352000	Tune-up limit (dBm)
Frequency (MHz)				1730	1745	1760	
40	DFT-s-OFDM PI/2 BPSK	1	1	21.17	21.21	21.27	22
40		1	108	21.17	21.25	21.10	
40		1	214	21.13	21.11	21.09	
40		108	1	21.29	21.23	21.25	22
40		108	54	21.26	21.32	21.21	
40		108	108	21.31	21.27	21.14	
40	DFT-s-OFDM QPSK	216	0	21.27	21.26	21.13	22
40		1	1	21.31	21.33	21.24	
40		1	108	21.20	21.22	21.12	
40		1	214	21.13	21.08	21.07	22
40		108	1	21.00	21.02	20.83	
40		108	54	20.96	20.98	20.73	
40	DFT-s-OFDM 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