



Full&Default Power SA Mode

		GSM850 Ant0 Default							
GSM850 Ant0		Burst Average Power (dBm)			Turn-up Limit (dBm)	Frame Average Power (dBm)			Turn-up Limit (dBm)
TX Channel		128	198	251		128	198	251	
Frequency (MHz)		854.2	856.4	848.8		854.2	856.4	848.8	
GSM 1 Tx slot		32.57	32.08	32.57	34.00	23.57	23.08	23.57	25.00
GPRS 1 Tx slot		23.54	22.11	22.40	34.00	23.54	23.11	23.45	25.00
GPRS 2 Tx slots		29.20	29.14	29.18	31.00	23.20	23.14	23.18	25.00
GPRS 3 Tx slots		27.86	27.48	27.46	29.20	23.60	23.22	23.20	24.94
GPRS 4 Tx slots		26.17	26.21	26.18	26.00	23.17	23.21	23.18	25.00
EDGE 1 Tx slot		26.11	26.16	26.11	27.50	17.13	17.16	17.11	18.50
EDGE 2 Tx slots		23.29	23.34	23.40	24.50	17.29	17.34	17.40	18.50
EDGE 3 Tx slots		21.83	21.44	21.61	22.70	17.37	17.18	17.35	18.44
EDGE 4 Tx slots		20.21	20.06	20.44	21.50	17.21	17.06	17.44	18.50

WCDMA V Ant0 Default

Band		WCDMA V Ant0			Turn-up Limit (dBm)
TX Channel		4132	4182	4233	
RX Channel		4557	4607	4658	
Frequency (MHz)		826.4	836.4	846.5	
3GPP Rel 99	AMR 12.2Kbps	24.00	23.99	24.00	25.00
3GPP Rel 99	RMC 12.2Kbps	24.00	24.02	23.97	25.00
3GPP Rel 6	HS-PA Subtest-1	23.94	23.03	23.02	24.00
3GPP Rel 6	HS-PA Subtest-2	23.01	23.05	22.93	24.00
3GPP Rel 6	HS-PA Subtest-3	22.41	22.55	22.53	23.50
3GPP Rel 6	HS-PA Subtest-4	22.96	22.54	22.48	23.50
3GPP Rel 8	DC-HS-PA Subtest-1	23.00	23.02	23.01	24.00
3GPP Rel 8	DC-HS-PA Subtest-2	23.02	23.07	23.03	24.00
3GPP Rel 8	DC-HS-PA Subtest-3	22.40	22.48	22.51	23.50
3GPP Rel 8	DC-HS-PA Subtest-4	22.55	22.55	22.42	23.50
3GPP Rel 6	HS-PA Subtest-1	23.03	23.01	23.00	24.00
3GPP Rel 6	HS-PA Subtest-2	20.96	21.03	21.06	22.00
3GPP Rel 6	HS-PA Subtest-3	21.94	21.97	22.01	23.00
3GPP Rel 6	HS-PA Subtest-4	20.99	21.00	21.04	22.00
3GPP Rel 6	HS-PA Subtest-5	23.04	23.01	22.99	24.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.42	20.50	20.58	21.50



GSM850 Ant1 Default							
GSM850 Ant1	Burst Average Power (dBm)			Turn-up	Frame-Average Power (dBm)		
TX Channel	126	189	251	Limit	126	189	251
Frequency (MHz)	842.2	846.4	848.8	(dBm)	842.2	846.4	848.8
GSM 1 Tx slot	32.47	32.45	32.51	34.00	23.47	23.45	23.51
GPRS 1 Tx slot	32.53	32.55	32.64	34.00	23.53	23.55	23.64
GPRS 2 Tx slots	29.57	29.51	29.46	31.00	23.57	23.51	23.46
GPRS 3 Tx slots	27.52	27.64	27.61	29.20	23.26	23.38	23.35
GPRS 4 Tx slots	26.14	26.20	26.05	28.00	23.14	23.20	23.05
EDGE 1 Tx slot	25.96	25.97	26.74	27.50	16.96	16.97	16.74
EDGE 2 Tx slots	23.42	23.58	23.25	24.50	17.42	17.58	17.25
EDGE 3 Tx slots	21.57	21.68	21.58	22.70	17.31	17.42	17.32
EDGE 4 Tx slots	20.31	20.32	20.33	21.50	17.31	17.32	17.33

WCDMA V Ant1 Default				
Band	WCDMA V Ant1			Tune-up
TX Channel	4132	4182	4233	Limit
Rx Channel	4307	4407	4468	(dBm)
Frequency (MHz)	50.34	50.34	50.36	
3GPP Rel 99 RMC 12.2kops	23.40	23.44	23.42	25.00
3GPP Rel 99 RMC 12.2kops	23.48	23.55	23.44	25.00
3GPP Rel 6 HSDPA Subtest-1	22.48	22.52	22.50	24.00
3GPP Rel 6 HSDPA Subtest-2	22.47	22.50	22.40	24.00
3GPP Rel 6 HSDPA Subtest-3	22.01	22.05	21.97	23.50
3GPP Rel 6 HSDPA Subtest-4	21.93	22.02	21.84	23.50
3GPP Rel 8 DC-HSDPA Subtest-1	22.43	22.50	22.42	24.00
3GPP Rel 8 DC-HSDPA Subtest-2	22.47	22.52	22.46	24.00
3GPP Rel 8 DC-HSDPA Subtest-3	21.97	22.02	22.05	23.50
3GPP Rel 8 DC-HSDPA Subtest-4	21.96	22.02	21.92	23.50
3GPP Rel 6 HSUPA Subtest-1	22.47	22.49	22.40	24.00
3GPP Rel 6 HSUPA Subtest-2	20.46	20.54	20.51	22.00
3GPP Rel 6 HSUPA Subtest-3	21.44	21.55	21.52	23.00
3GPP Rel 6 HSUPA Subtest-4	20.46	20.47	20.47	22.00
3GPP Rel 6 HSUPA Subtest-5	22.45	22.49	22.44	24.00
3GPP Rel 7 HSPA+ (HSQAM) Subtest-1	19.95	20.00	19.95	21.50



GSM1900 Ant2 Default									
GSM1900 Ant2		Burnt Average Power (dBm)			Tune-up	Frame-Average Power (dBm)			Tune-up
Tx Channel	512	661	810	Limit (dBm)		512	661	810	
Frequency (MHz)	1862.2	1863	1863.8			1862.2	1863	1863.8	
GSM 1 Tx slot	30.70	30.00	30.05	31.00	21.70	21.00	21.05	22.00	
GPRS 1 Tx slot	30.17	30.08	30.07	31.00	21.17	21.08	21.07	22.00	
GPRS 2 Tx slots	26.53	26.65	26.56	26.00	20.53	20.65	20.56	22.00	
GPRS 3 Tx slots	25.14	25.21	25.02	26.20	20.88	20.95	20.76	22.00	
GPRS 4 Tx slots	23.44	23.46	23.28	25.00	20.44	20.46	20.28	22.00	
EDGE 1 Tx slot	25.87	25.62	25.54	26.50	16.87	16.62	16.54	17.50	
EDGE 2 Tx slots	17.05	17.97	17.95	17.50	16.97	16.85	16.50	17.50	
EDGE 3 Tx slots	17.42	17.22	17.28	17.70	17.16	16.96	17.02	17.44	
EDGE 4 Tx slots	19.56	19.36	19.57	20.50	16.56	16.36	16.57	17.44	

WCDMA II Ant2 Default				WCDMA IV Ant2 Default			
Band	WCDMA II Ant2			Tune-up Limit	WCDMA IV Ant2		
	TX Channel	9262	9400		1312	1413	1513
Rx Channel	9662	9800	9938		1537	1638	1738
Frequency (MHz)	1920.4	1890	1907.6		1172.4	1122.5	1122.5
3GPP Rel 99 RAC 12.2kops	23.35	23.37	23.25	25.00	23.62	23.67	23.58
3GPP Rel 99 RAC 12.2kops	23.38	23.40	23.29	25.00	23.62	23.70	23.63
3GPP Rel 6 HSDPA Subtest-1	22.34	22.44	22.30	24.00	22.59	22.73	22.66
3GPP Rel 6 HSDPA Subtest-2	22.33	22.42	22.30	24.00	22.57	22.68	22.61
3GPP Rel 6 HSDPA Subtest-3	21.86	21.93	21.82	23.50	22.06	22.28	22.16
3GPP Rel 6 HSDPA Subtest-4	21.88	21.87	21.77	23.50	22.08	22.16	22.08
3GPP Rel 8 DC-HSDPA Subtest-1	22.36	22.35	22.27	24.00	22.53	22.69	22.59
3GPP Rel 8 DC-HSDPA Subtest-2	22.31	22.41	22.28	24.00	22.49	22.63	22.63
3GPP Rel 8 DC-HSDPA Subtest-3	21.83	21.93	21.81	23.50	22.05	22.25	22.16
3GPP Rel 8 DC-HSDPA Subtest-4	21.83	21.92	21.85	23.50	22.02	22.15	22.15
3GPP Rel 6 HSUPA Subtest-1	22.30	22.40	22.27	24.00	22.58	22.72	22.61
3GPP Rel 6 HSUPA Subtest-2	20.30	20.45	20.35	22.00	20.60	20.75	20.68
3GPP Rel 6 HSUPA Subtest-3	21.39	21.43	21.25	23.00	21.58	21.77	21.69
3GPP Rel 6 HSUPA Subtest-4	20.38	20.43	20.28	22.00	20.55	20.76	20.71
3GPP Rel 6 HSUPA Subtest-5	22.29	22.38	22.32	24.00	22.63	22.76	22.67
3GPP Rel 7 HSPA+ (HSQM) Subtest-1	19.84	19.94	19.85	21.50	20.15	20.19	20.19



GSM1900 Ant3 Default								
GSM1900 Ant3		Burnt Average Power (dBm)			Frame-Average Power (dBm)			
TX Channel	512	661	810	Limit	512	661	810	Limit
Frequency (MHz)	1862.2	1863	1863.8		1862.2	1863	1863.8	
GSM 1 Tx slot	29.42	29.55	29.27	31.00	20.42	20.55	20.27	22.00
GPRS 1 Tx slot	29.52	29.57	29.38	31.00	20.52	20.57	20.38	22.00
GPRS 2 Tx slots	28.03	28.08	28.34	28.00	20.03	20.08	20.34	22.00
GPRS 3 Tx slots	24.57	24.53	24.32	26.20	20.31	20.27	20.06	22.00
GPRS 4 Tx slots	23.42	23.46	23.25	25.00	20.42	20.46	20.25	22.00
EDGE 1 Tx slot	25.01	25.18	25.04	26.50	16.01	16.18	16.04	17.50
EDGE 2 Tx slot	22.37	22.54	22.17	23.50	16.37	16.54	16.17	17.50
EDGE 3 Tx slots	21.10	21.13	21.05	21.70	16.84	16.87	16.79	17.50
EDGE 4 Tx slots	19.27	19.25	19.25	20.50	16.27	16.25	16.25	17.50

WCDMA II Ant3 Default										WCDMA IV Ant3 Default					
Band		WCDMA II Ant3				Tune-up Limit		WCDMA IV Ant3				Tune-up Limit			
TX Channel		9262	9400	9538				1312	1413	1513					
Rx Channel		9662	9800	9938				1537	1638	1735					
Frequency (MHz)		1920.4	1890	1907.6				1710	1790	1870					
3GPP Rel 99	RMC 12.26kops	22.94	22.84	22.81	24.50	23.05	23.09	22.98	23.04	23.05	22.59	23.04	23.05		
3GPP Rel 99	RMC 12.26kops	22.82	22.67	22.62	24.50	23.08	23.11	23.04	23.04	23.04	22.50	23.04	23.05		
3GPP Rel 6	HS-DS-SS Subtest-1	21.64	21.65	21.65	23.00	22.12	22.22	22.22	22.12	23.00	21.64	21.65	21.65		
3GPP Rel 6	HS-DS-SS Subtest-2	21.53	21.56	21.56	23.00	22.14	22.11	22.11	22.14	23.00	21.53	21.56	21.56		
3GPP Rel 6	HS-DS-SS Subtest-3	21.09	21.20	21.10	22.50	21.59	21.65	21.61	22.50	21.09	21.20	21.10	21.10		
3GPP Rel 6	HS-DS-SS Subtest-4	21.04	21.12	21.14	22.50	21.55	21.62	21.61	22.50	21.04	21.12	21.14	21.14		
3GPP Rel 8	DC-HS-DS-SS Subtest-1	21.62	21.67	21.58	23.00	22.11	22.11	22.16	23.00	21.62	21.67	21.58	21.58		
3GPP Rel 8	DC-HS-DS-SS Subtest-2	21.45	21.53	21.55	23.00	21.59	21.59	22.11	23.00	21.45	21.53	21.55	21.55		
3GPP Rel 8	DC-HS-DS-SS Subtest-3	20.95	21.17	21.05	22.50	21.45	21.70	21.46	22.50	20.95	21.17	21.05	21.05		
3GPP Rel 8	DC-HS-DS-SS Subtest-4	20.91	21.12	21.01	22.50	21.37	21.53	21.59	22.50	20.91	21.12	21.01	21.01		
3GPP Rel 6	HS-UPA Subtest-1	21.40	21.56	21.52	23.00	21.90	22.02	22.02	23.00	21.40	21.56	21.52	21.52		
3GPP Rel 6	HS-UPA Subtest-2	19.62	19.71	19.64	21.00	20.04	20.16	20.15	21.00	19.62	19.71	19.64	19.64		
3GPP Rel 6	HS-UPA Subtest-3	20.62	20.76	20.76	22.00	21.10	21.20	21.23	22.00	20.62	20.76	20.76	20.76		
3GPP Rel 6	HS-UPA Subtest-4	19.52	19.60	19.49	21.00	20.06	20.06	20.05	21.00	19.52	19.60	19.49	19.49		
3GPP Rel 6	HS-UPA Subtest-5	21.48	21.65	21.55	23.00	21.55	22.15	22.01	23.00	21.48	21.65	21.55	21.55		
3GPP Rel 7	HSPA+ (HS-DM) Subtest-1	19.17	19.21	19.23	20.50	19.61	19.71	19.63	20.50	19.17	19.21	19.23	19.23		



WCDMA IV An14 Default					
Band		WCDMA IV An14			Tune-up Limit (dBm)
TX Channel		1312	1413	1513	
Rx Channel		1317	1418	1518	
Frequency (MHz)		1125.4	1125.6	1125.6	
3GPP Rel 99	AMR 12.2Kbps	23.11	23.21	23.13	25.00
3GPP Rel 99	RMC 12.2Kbps	23.18	23.25	23.17	25.00
3GPP Rel 6	HSDPA Subtest-1	22.27	22.26	22.26	24.00
3GPP Rel 6	HSDPA Subtest-2	22.19	22.26	22.22	24.00
3GPP Rel 6	HSDPA Subtest-3	21.71	21.76	21.69	23.50
3GPP Rel 6	HSDPA Subtest-4	21.69	21.74	21.74	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.22	22.27	22.25	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.12	22.22	22.17	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	21.61	21.69	21.66	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	21.52	21.69	21.66	23.50
3GPP Rel 6	HSUPA Subtest-1	22.09	22.15	22.09	24.00
3GPP Rel 6	HSUPA Subtest-2	20.14	20.31	20.22	22.00
3GPP Rel 6	HSUPA Subtest-3	21.29	21.32	21.37	23.00
3GPP Rel 6	HSUPA Subtest-4	20.17	20.24	20.12	22.00
3GPP Rel 6	HSUPA Subtest-5	22.04	22.24	22.13	24.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	19.76	19.91	19.74	21.50



WCDMA IV Ant5 Default					
Band		WCDMA IV Ant5			Turn-up Limit (dBm)
TX Channel		1312	1413	1513	
Rx Channel		1317	1418	1518	
Frequency (MHz)		1712.4	1723.6	1734.6	
3GPP Rel 99	AMR 12.2Kbps	20.86	20.90	20.80	22.50
3GPP Rel 99	RMC 12.2Kbps	20.89	20.93	20.83	22.50
3GPP Rel 6	HSDPA Subtest-1	19.87	19.86	19.86	21.50
3GPP Rel 6	HSDPA Subtest-2	19.88	19.89	19.91	21.50
3GPP Rel 6	HSDPA Subtest-3	19.41	19.46	19.49	21.00
3GPP Rel 6	HSDPA Subtest-4	19.32	19.38	19.39	21.00
3GPP Rel 8	DC-HSDPA Subtest-1	19.87	19.89	19.92	21.50
3GPP Rel 8	DC-HSDPA Subtest-2	19.77	19.88	19.94	21.50
3GPP Rel 8	DC-HSDPA Subtest-3	19.23	19.43	19.34	21.00
3GPP Rel 8	DC-HSDPA Subtest-4	19.20	19.33	19.21	21.00
3GPP Rel 6	HSUPA Subtest-1	19.75	19.89	19.87	21.50
3GPP Rel 6	HSUPA Subtest-2	17.92	18.00	17.87	19.50
3GPP Rel 6	HSUPA Subtest-3	18.95	19.06	19.04	20.50
3GPP Rel 6	HSUPA Subtest-4	17.81	17.85	17.89	19.50
3GPP Rel 6	HSUPA Subtest-5	19.77	19.89	19.79	21.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	17.43	17.51	17.53	19.00

Reduced Power SA Mode for DSI1

GSM850 And DSI1								
GSM850 And	Power Average Power (dBm)			Turn-up Limit	Power Average Power (dBm)			Turn-up Limit
	128	189	251		128	189	251	
TX Channel	854.2	856.4	848.8	(dBm)	854.2	856.4	848.8	(dBm)
Frequency (MHz)								
GSM 1 Tx slot	32.57	32.98	32.57	34.00	23.57	23.08	23.57	25.00
GPRS 1 Tx slot	32.54	32.11	32.45	34.00	23.54	23.11	23.45	25.00
GPRS 2 Tx slots	29.20	29.14	29.18	31.00	23.20	23.14	23.18	25.00
GPRS 3 Tx slots	27.85	27.48	27.46	28.20	23.89	23.22	23.20	24.94
GPRS 4 Tx slots	26.11	26.21	26.18	26.00	23.17	23.21	23.18	25.00
EDGE 1 Tx slot	26.13	26.16	26.11	27.50	17.13	17.16	17.11	18.50
EDGE 2 Tx slots	23.25	23.34	23.46	24.50	17.29	17.34	17.46	18.50
EDGE 3 Tx slots	21.60	21.44	21.61	22.70	17.37	17.16	17.35	18.44
EDGE 4 Tx slots	20.21	20.06	20.44	21.50	17.21	17.06	17.44	18.50

WCDMA V And DSI1					DS-SS
Band	WCDMA V And			Turn-up Limit	
	4132	4182	4233		
TX Channel	4357	4407	4458	(dBm)	
Rx Channel	4357	4407	4458		
Frequency (MHz)					
3GPP Rel 99	AMR 12.2Kbps	24.00	23.99	24.00	25.00
3GPP Rel 99	RMC 12.2Kbps	24.00	24.02	23.97	25.00
3GPP Rel 6	HSDPA Subclass-1	22.94	23.03	23.02	24.00
3GPP Rel 6	HSDPA Subclass-2	23.01	23.05	22.93	24.00
3GPP Rel 6	HSDPA Subclass-3	22.41	22.55	22.53	23.50
3GPP Rel 6	HSDPA Subclass-4	22.56	22.54	22.48	23.50
3GPP Rel 6	DC-HSDPA Subclass-1	23.00	23.02	22.91	24.00
3GPP Rel 6	DC-HSDPA Subclass-2	23.02	23.07	23.03	24.00
3GPP Rel 6	DC-HSDPA Subclass-3	22.40	22.48	22.51	23.50
3GPP Rel 6	DC-HSDPA Subclass-4	22.55	22.55	22.42	23.50
3GPP Rel 6	HSUPA Subclass-1	23.03	23.01	23.00	24.00
3GPP Rel 6	HSUPA Subclass-2	20.96	21.03	21.06	22.00
3GPP Rel 6	HSUPA Subclass-3	21.84	21.97	22.01	23.00
3GPP Rel 6	HSUPA Subclass-4	20.99	21.00	21.04	22.00
3GPP Rel 6	HSUPA Subclass-5	23.04	23.01	22.99	24.00
3GPP Rel 7	HSPA+ (LSCAM) Subclass-1	20.42	20.59	20.58	21.50



GSM850 Ant1 DSI1							
GSM850 Ant1		Burst Average Power (dBm)			Tune-up		Frame-Average Power (dBm)
TX Channel		128	160	201	Limit	128	160
Frequency (MHz)		834.2	834.4	834.8	Limit	834.2	834.4
GSM 1 Tx slot		30.76	30.77	30.65	32.50	21.76	21.77
GPRS 1 Tx slot		30.79	30.80	30.70	32.50	21.79	21.80
GPRS 2 Tx slots		27.50	27.50	27.65	29.50	21.55	21.59
GPRS 3 Tx slots		25.81	25.78	25.74	27.50	21.55	21.52
GPRS 4 Tx slots		24.88	24.95	24.92	26.50	21.88	21.95
EDGE 1 Tx slot		25.96	25.97	25.74	27.50	18.36	18.37
EDGE 2 Tx slots		23.42	23.38	23.25	24.50	17.42	17.58
EDGE 3 Tx slots		21.57	21.68	21.58	22.70	17.31	17.42
EDGE 4 Tx slots		20.31	20.32	20.53	21.50	17.31	17.32

WCDMA V Ant1 DSI1					
Band		WCDMA V Ant1			Tune-up
TX Channel		4132	4132	4233	Limit
RX Channel		4357	4407	4458	Limit
Frequency (MHz)		836.4	836.4	846.6	Limit
3GPP Rel 99	AMR 12.2kops	20.91	20.96	21.10	22.50
3GPP Rel 99	SMC 12.2kops	21.10	21.10	20.98	22.50
3GPP Rel 6	HSDPA Subtest-1	20.19	20.20	20.07	21.50
3GPP Rel 6	HSDPA Subtest-2	20.18	20.09	20.10	21.50
3GPP Rel 6	HSDPA Subtest-3	19.60	19.63	19.58	21.00
3GPP Rel 6	HSDPA Subtest-4	19.48	19.59	19.36	21.00
3GPP Rel 8	DC-HSDPA Subtest-1	20.13	20.03	20.03	21.50
3GPP Rel 8	DC-HSDPA Subtest-2	20.01	20.04	19.99	21.50
3GPP Rel 8	DC-HSDPA Subtest-3	19.65	19.67	19.73	21.00
3GPP Rel 8	DC-HSDPA Subtest-4	19.67	19.59	19.57	21.00
3GPP Rel 6	HSPA Subtest-1	20.02	20.19	19.97	21.50
3GPP Rel 6	HSPA Subtest-2	18.10	18.26	18.02	19.50
3GPP Rel 6	HSPA Subtest-3	19.08	19.11	19.14	20.50
3GPP Rel 6	HSPA Subtest-4	18.08	18.00	18.11	19.50
3GPP Rel 6	HSPA Subtest-5	20.07	20.08	19.98	21.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	17.54	17.64	17.47	19.00



GSM1900 Arx2 DSI1

GSM1900 Arx2	Burst Average Power (dBm)			Tune-up	Frame Average Power (dBm)			Tune-up
TX Channel	512	661	810	Limit	512	661	810	Limit
Frequency (MHz)	1852.2	1860	1867.8		1852.2	1860	1867.8	
GSM 1 Tx slot	27.71	27.85	27.74	29.00	18.71	18.85	18.74	20.00
GPRS 1 Tx slot	27.84	27.90	27.85	29.00	18.84	18.90	18.85	20.00
GPRS 2 Tx slots	24.40	24.48	24.37	25.00	15.40	15.48	15.37	20.00
GPRS 3 Tx slots	22.91	22.96	22.84	24.20	13.85	13.70	13.58	19.94
GPRS 4 Tx slots	20.95	21.14	20.90	23.00	17.95	18.14	17.90	20.00
EDGE 1 Tx slot	23.87	23.62	23.54	25.50	16.87	16.62	16.54	17.50
EDGE 2 Tx slots	23.06	22.97	22.95	23.50	17.06	16.97	16.95	17.50
EDGE 3 Tx slots	21.42	21.22	21.28	21.70	17.16	16.96	17.02	17.44
EDGE 4 Tx slots	19.55	18.36	19.57	20.50	16.55	16.36	16.57	17.50

WCDMA II Arx2 DSI1

Band	WCDMA II Arx2				Tune-up Limit	WCDMA IV Arx2				Tune-up Limit
	TX Channel	9592	9400	9538		1312	1413	1513		
Rx Channel		9602	9600	9638		1337	1638	1738		
Frequency (MHz)		1852.4	1860	1907.6		1712.4	1732.6	1752.6		
3GPP Rel 99	AMR 12.2kops	18.35	18.19	18.13	19.50	16.74	16.61	16.62	20.00	
3GPP Rel 99	SMC 12.2kops	18.35	18.40	18.29	19.50	16.86	16.92	16.85	20.00	
3GPP Rel 6	HSDPA Subtest-1	17.36	17.38	17.20	18.50	17.72	17.84	17.79	19.00	
3GPP Rel 6	HSDPA Subtest-2	17.35	17.47	17.19	18.50	17.71	17.74	17.69	19.00	
3GPP Rel 6	HSDPA Subtest-3	16.89	16.89	16.70	18.00	17.32	17.42	17.42	18.50	
3GPP Rel 6	HSDPA Subtest-4	16.79	16.79	16.60	18.00	17.24	17.19	17.24	18.50	
3GPP Rel 8	DC-HSDPA Subtest-1	17.15	17.21	17.24	18.50	17.86	17.73	17.63	19.00	
3GPP Rel 8	DC-HSDPA Subtest-2	17.29	17.45	17.27	18.50	17.73	17.67	17.67	19.00	
3GPP Rel 8	DC-HSDPA Subtest-3	16.84	16.77	16.83	18.00	17.22	17.30	17.19	18.50	
3GPP Rel 8	DC-HSDPA Subtest-4	16.74	16.93	16.78	18.00	17.16	17.27	17.39	18.50	
3GPP Rel 6	HSPA Subtest-1	17.25	17.37	17.27	18.50	17.69	17.79	17.67	19.00	
3GPP Rel 6	HSPA Subtest-2	15.45	15.59	15.58	16.50	15.70	16.02	15.79	17.00	
3GPP Rel 6	HSPA Subtest-3	16.21	16.42	16.23	17.50	16.78	16.86	16.78	18.00	
3GPP Rel 6	HSPA Subtest-4	15.61	15.65	15.56	16.50	15.66	15.93	15.92	17.00	
3GPP Rel 6	HSPA Subtest-5	17.30	17.25	17.14	18.50	17.71	18.01	17.74	19.00	
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	15.65	15.64	15.61	16.00	15.22	15.28	15.45	16.50	



GSM1900 Arx3 DS11									
GSM1900 Arx3		Burst Average Power (dBm)			Tune-up		Frame Average Power (dBm)		
TX Channel		512	661	810	Limit		512	661	810
Frequency (MHz)		1852.2	1860	1869.8	dBm		1852.2	1860	1869.8
GSM 1 Tx slot		29.42	29.55	29.27	31.00		20.42	20.55	20.27
GPRS 1 Tx slot		29.52	29.57	29.38	31.00		20.52	20.57	20.38
GPRS 2 Tx slots		20.03	20.08	20.34	20.00		20.03	20.08	20.34
GPRS 3 Tx slots		24.57	24.53	24.32	26.20		20.31	20.27	20.06
GPRS 4 Tx slots		23.42	23.46	23.25	25.00		20.42	20.46	20.25
EDGE 1 Tx slot		20.01	20.16	20.04	26.50		16.01	16.16	16.04
EDGE 2 Tx slots		22.37	22.54	22.17	23.50		16.37	16.54	16.17
EDGE 3 Tx slots		21.10	21.13	21.05	21.70		16.84	16.87	16.79
EDGE 4 Tx slots		19.27	19.26	19.25	20.50		16.27	16.26	16.25

WCDMA II Arx3 DS11									
Band		WCDMA II Arx3			Tune-up		WCDMA IV Arx3		
TX Channel		9652	9650	9638	Limit		1312	1312	1313
RX Channel		9662	9600	9938	dBm		1537	1638	1738
Frequency (MHz)		1852.4	1860	1867.6			1712.4	1752.6	1752.6
3GPP Rel 99	AMR 12.2kops	22.94	22.94	22.61	24.00		23.05	23.09	22.96
3GPP Rel 99	SMC 12.2kops	22.62	22.67	22.62	24.00		23.08	23.11	23.04
3GPP Rel 6	HSDPA Subtest-1	21.64	21.65	21.65	23.00		22.12	22.22	22.12
3GPP Rel 6	HSDPA Subtest-2	21.53	21.58	21.58	23.00		22.14	22.11	22.01
3GPP Rel 6	HSDPA Subtest-3	21.59	21.20	21.10	22.50		21.59	21.61	22.50
3GPP Rel 6	HSDPA Subtest-4	21.04	21.12	21.14	22.50		21.55	21.62	21.61
3GPP Rel 6	DC-HSDPA Subtest-1	21.62	21.67	21.58	23.00		22.11	22.11	22.16
3GPP Rel 6	DC-HSDPA Subtest-2	21.45	21.53	21.05	23.00		21.08	22.11	22.00
3GPP Rel 6	DC-HSDPA Subtest-3	20.95	21.17	21.05	22.50		21.45	21.70	21.46
3GPP Rel 6	DC-HSDPA Subtest-4	20.91	21.12	21.01	22.50		21.37	21.63	21.59
3GPP Rel 6	HSPA Subtest-1	21.40	21.56	21.52	23.00		21.50	22.02	22.07
3GPP Rel 6	HSPA Subtest-2	19.62	19.71	19.64	21.00		20.04	20.16	20.15
3GPP Rel 6	HSPA Subtest-3	20.62	20.76	20.76	22.00		21.10	21.20	21.23
3GPP Rel 6	HSPA Subtest-4	19.57	19.60	19.49	21.00		20.06	20.09	20.05
3GPP Rel 6	HSPA Subtest-5	21.48	21.65	21.55	23.00		21.85	22.15	22.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	19.17	19.21	19.23	20.50		19.61	19.71	19.63



		WCDMA IV Area DSST			Area DSST
Band		WCDMA IV Area			
	TX Channel	1312	1413	1513	Time-Up Limit
	Rx Channel	1317	1418	1519	(dBm)
	Frequency (MHz)	1712.4	1732.8	1752.6	
3GPP Rel 99	AMR 12.2Kbps	18.04	18.10	18.10	20.00
3GPP Rel 99	RM-12.2Kbps	18.22	18.33	18.25	20.00
3GPP Rel 6	HSDPA Subtest-1	17.21	17.21	17.34	19.00
3GPP Rel 6	HSDPA Subtest-2	17.10	17.29	17.25	19.00
3GPP Rel 6	HSDPA Subtest-3	16.66	16.76	16.99	18.50
3GPP Rel 6	HSDPA Subtest-4	16.95	16.73	16.72	18.50
3GPP Rel 6	DC-HSDPA Subtest-1	17.22	17.23	17.19	19.00
3GPP Rel 6	DC-HSDPA Subtest-2	17.13	17.16	17.15	19.00
3GPP Rel 6	DC-HSDPA Subtest-3	16.62	16.79	16.95	18.50
3GPP Rel 6	DC-HSDPA Subtest-4	16.97	16.74	16.96	18.50
3GPP Rel 6	HSPA Subtest-1	17.13	17.15	17.12	19.00
3GPP Rel 6	HSPA Subtest-2	15.12	15.26	15.16	17.00
3GPP Rel 6	HSPA Subtest-3	16.19	16.22	16.26	18.00
3GPP Rel 6	HSPA Subtest-4	15.19	15.14	15.16	17.00
3GPP Rel 6	HSPA Subtest-5	17.00	17.20	17.14	19.00
3GPP Rel 7	HSPA+ (14.4M) Subtest-1	14.81	14.93	14.72	16.50



WCDMA IV Aris DS11					
Band	WCDMA IV Aris			Table 21	
TX Channel	1312	1413	1513	Time-to-Loss (dBm)	
Rx Channel	1537	1638	1738		
Frequency (MHz)	1712.4	1732.8	1752.6		
3GPP Rel 99	AMR 12.2Kbps	20.86	20.90	20.80	22.50
3GPP Rel 99	RMC 12.2Kbps	20.89	20.93	20.83	22.50
3GPP Rel 6	HSDPA Subtest-1	19.87	19.96	19.96	21.50
3GPP Rel 6	HSDPA Subtest-2	19.88	19.89	19.91	21.50
3GPP Rel 6	HSDPA Subtest-3	19.41	19.48	19.49	21.00
3GPP Rel 6	HSDPA Subtest-4	19.32	19.38	19.39	21.00
3GPP Rel 6	DC-HSDPA Subtest-1	19.87	19.99	19.92	21.50
3GPP Rel 6	DC-HSDPA Subtest-2	19.77	19.88	19.94	21.50
3GPP Rel 6	DC-HSDPA Subtest-3	19.23	19.43	19.34	21.00
3GPP Rel 6	DC-HSDPA Subtest-4	19.20	19.33	19.31	21.00
3GPP Rel 6	HSPA Subtest-1	19.76	19.89	19.87	21.50
3GPP Rel 6	HSPA Subtest-2	17.82	18.00	17.87	19.50
3GPP Rel 6	HSPA Subtest-3	18.96	19.06	19.04	20.50
3GPP Rel 6	HSPA Subtest-4	17.81	17.86	17.89	19.50
3GPP Rel 6	HSPA Subtest-5	19.77	19.89	19.78	21.50
3GPP Rel 7	HSPA+ (HSPA-M) Subtest-1	17.43	17.51	17.53	19.00

Reduced Power SA Mode for DSI1

Band 5 Ant1 DSI1 Main PA for END C

RF [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20450	20525	20600		
Frequency (MHz)				829	836.5	844		
10	QPSK	1	0	19.54	19.57	19.51	21	0
10	QPSK	1	25	19.54	19.54	19.50		
10	QPSK	1	49	19.38	19.50	19.43		
10	QPSK	25	0	19.47	19.53	19.47	21	0
10	QPSK	25	12	19.41	19.28	19.50		
10	QPSK	25	25	19.41	19.41	19.44		
10	QPSK	50	0	19.47	19.50	19.32	21	0
10	16QAM	1	0	19.56	19.42	19.42		
10	16QAM	1	25	19.40	19.51	19.52		
10	16QAM	1	49	19.45	19.50	19.50	21	0
10	16QAM	25	0	19.51	19.53	19.47		
10	16QAM	25	12	19.53	19.55	19.32		
10	16QAM	25	25	19.50	19.47	19.50	21	0
10	16QAM	50	0	19.49	19.42	19.49		
10	64QAM	1	0	19.40	19.35	19.40		
10	64QAM	1	25	19.42	19.47	19.23	21	0
10	64QAM	1	49	19.32	19.37	19.41		
10	64QAM	25	0	19.45	19.50	19.45		
10	64QAM	25	12	19.55	19.51	19.49	21	0
10	64QAM	25	25	19.51	19.46	19.46		
10	64QAM	50	0	19.45	19.50	19.51		
10	256QAM	1	0	19.02	19.02	19.03	20.5	0.5
10	256QAM	1	25	19.00	19.00	19.02		
10	256QAM	1	49	18.95	18.95	18.93		
10	256QAM	25	0	18.94	18.99	18.96	20.5	0.5
10	256QAM	25	12	18.94	18.94	18.87		
10	256QAM	25	25	18.86	18.94	18.93		
10	256QAM	50	0	18.84	18.91	18.82	Tune-up limit (dBm)	MPR (dB)
Channel				20425	20525	20625		
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	0	19.50	19.53	19.48	21	0
5	QPSK	1	12	19.50	19.55	19.51		
5	QPSK	1	24	19.33	19.50	19.45		
5	QPSK	12	0	19.40	19.54	19.42	21	0
5	QPSK	12	7	19.42	19.25	19.47		
5	QPSK	12	13	19.33	19.43	19.41		
5	QPSK	25	0	19.41	19.44	19.24	21	0
5	16QAM	1	0	19.48	19.34	19.38		
5	16QAM	1	12	19.31	19.52	19.51		
5	16QAM	1	24	19.37	19.53	19.51	21	0
5	16QAM	12	0	19.45	19.48	19.47		
5	16QAM	12	7	19.49	19.50	19.31		
5	16QAM	12	13	19.51	19.46	19.49	21	0
5	16QAM	25	0	19.50	19.35	19.54		
5	64QAM	1	0	19.37	19.30	19.41		
5	64QAM	1	12	19.38	19.40	19.23	21	0
5	64QAM	1	24	19.28	19.33	19.40		
5	64QAM	12	0	19.38	19.43	19.40		
5	64QAM	12	7	19.54	19.44	19.40	21	0
5	64QAM	12	13	19.52	19.40	19.40		
5	64QAM	25	0	19.36	19.46	19.44		
5	256QAM	1	0	18.97	19.02	18.96	20.5	0.5
5	256QAM	1	12	18.91	19.02	19.03		
5	256QAM	1	24	18.95	18.88	18.89		
5	256QAM	12	0	18.94	18.91	18.90	20.5	0.5
5	256QAM	12	7	18.88	18.89	18.80		
5	256QAM	12	13	18.83	18.94	18.93		
5	256QAM	25	0	18.85	18.90	18.75	Tune-up limit (dBm)	MPR (dB)
Channel				20415	20525	20635		
Frequency (MHz)				825.5	836.5	847.5		
3	QPSK	1	0	19.54	19.55	19.54	21	0
3	QPSK	1	8	19.51	19.52	19.43		
3	QPSK	1	14	19.39	19.46	19.38		
3	QPSK	8	0	19.47	19.46	19.48	21	0
3	QPSK	8	4	19.36	19.21	19.46		
3	QPSK	8	7	19.33	19.38	19.42		
3	QPSK	15	0	19.49	19.47	19.30	21	0
3	16QAM	1	0	19.47	19.34	19.43		
3	16QAM	1	8	19.35	19.52	19.51		
3	16QAM	1	14	19.45	19.56	19.52	21	0
3	16QAM	8	0	19.50	19.46	19.46		
3	16QAM	8	4	19.48	19.56	19.26		
3	16QAM	8	7	19.42	19.41	19.49	21	0
3	16QAM	15	0	19.51	19.41	19.56		
3	64QAM	1	0	19.34	19.26	19.36		
3	64QAM	1	8	19.40	19.46	19.20	21	0
3	64QAM	1	14	19.34	19.39	19.35		
3	64QAM	8	0	19.43	19.43	19.42		
3	64QAM	8	4	19.55	19.46	19.45	21	0
3	64QAM	8	7	19.43	19.47	19.47		
3	64QAM	15	0	19.39	19.46	19.47		
3	256QAM	1	0	18.93	18.97	19.06	20.5	0.5
3	256QAM	1	8	19.02	19.00	18.97		
3	256QAM	1	14	18.95	18.92	18.98		
3	256QAM	8	0	18.92	18.91	18.98	20.5	0.5
3	256QAM	8	4	18.86	18.95	18.90		
3	256QAM	8	7	18.79	18.86	18.86		
3	256QAM	15	0	18.77	18.85	18.81	Tune-up limit (dBm)	MPR (dB)
Channel				20407	20525	20643		
Frequency (MHz)				824.7	836.5	848.3		
1.4	QPSK	1	0	19.48	19.54	19.54	21	0
1.4	QPSK	1	3	19.49	19.46	19.43		
1.4	QPSK	1	5	19.40	19.43	19.38		
1.4	QPSK	3	0	19.41	19.55	19.42	21	0
1.4	QPSK	3	1	19.40	19.28	19.44		
1.4	QPSK	3	3	19.37	19.34	19.41		
1.4	QPSK	6	0	19.47	19.46	19.28	21	0
1.4	16QAM	1	0	19.49	19.33	19.35		
1.4	16QAM	1	3	19.37	19.50	19.52		
1.4	16QAM	1	5	19.40	19.50	19.52	21	0
1.4	16QAM	3	0	19.53	19.48	19.38		
1.4	16QAM	3	1	19.45	19.51	19.27		
1.4	16QAM	3	3	19.42	19.43	19.47	21	0
1.4	16QAM	6	0	19.41	19.41	19.54		
1.4	64QAM	1	0	19.42	19.31	19.43		
1.4	64QAM	1	3	19.35	19.43	19.18	21	0
1.4	64QAM	1	5	19.33	19.30	19.34		
1.4	64QAM	3	0	19.39	19.46	19.46		
1.4	64QAM	3	1	19.51	19.53	19.50	21	0
1.4	64QAM	3	3	19.52	19.44	19.38		
1.4	64QAM	6	0	19.40	19.45	19.44		
1.4	256QAM	1	0	18.94	19.00	18.98	20.5	0.5
1.4	256QAM	1	3	18.93	19.02	19.01		
1.4	256QAM	1	5	18.87	18.93	18.93		
1.4	256QAM	3	0	18.91	19.00	18.94	20.5	0.5
1.4	256QAM	3	1	18.95	18.97	18.91		
1.4	256QAM	3	3	18.78	18.92	18.95		
1.4	256QAM	6	0	18.80	18.86	18.82	20.5	0.5

Band 7 Ant4 DSI1 Main PA for ENDC

BW (MHz)	Modulation	RB Size	RB Offset	Power	Power	Power	Tune-up limit (dBm)	MPR (dB)			
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.					
Channel				20850	21100	21350					
Frequency (MHz)				2510	2535	2560					
20	QPSK	1	0	15.50	15.51	15.48	17	0			
20	QPSK	1	49	15.44	15.47	15.17					
20	QPSK	1	99	15.34	15.40	15.26	17	0			
20	QPSK	50	0	15.36	15.45	15.37					
20	QPSK	50	24	15.28	15.40	15.39	17	0			
20	QPSK	50	50	15.27	15.21	15.16					
20	QPSK	100	0	15.24	15.30	15.29	17	0			
20	16QAM	1	0	15.24	15.28	15.35					
20	16QAM	1	49	15.04	15.11	15.40	17	0			
20	16QAM	1	99	15.45	15.37	15.31					
20	16QAM	50	0	15.41	15.26	15.24	17	0			
20	16QAM	50	24	15.22	15.41	15.39					
20	16QAM	50	50	15.10	15.24	15.32	17	0			
20	16QAM	100	0	15.21	15.50	15.48					
20	64QAM	1	0	15.00	15.39	15.42	17	0			
20	64QAM	1	49	15.31	15.28	15.23					
20	64QAM	1	99	15.42	15.38	15.32	17	0			
20	64QAM	50	0	15.43	15.40	15.25					
20	64QAM	50	24	15.19	15.14	15.34	17	0			
20	64QAM	50	50	15.33	15.11	15.07					
20	64QAM	100	0	15.14	15.28	15.25	17	0			
20	256QAM	1	0	15.13	15.45	15.21					
20	256QAM	1	49	15.44	15.50	15.25	17	0			
20	256QAM	1	99	15.02	15.32	15.42					
20	256QAM	50	0	15.28	15.15	15.23	17	0			
20	256QAM	50	24	15.43	15.21	15.34					
20	256QAM	50	50	15.25	15.48	15.20	17	0			
20	256QAM	100	0	15.31	15.43	15.38					
Channel				20825	21100	21375					
Frequency (MHz)				2507.5	2535	2562.5					
15	QPSK	1	0	15.43	15.46	15.40	17	0			
15	QPSK	1	37	15.44	15.48	15.17					
15	QPSK	1	74	15.33	15.35	15.23	17	0			
15	QPSK	36	0	15.37	15.37	15.38					
15	QPSK	36	20	15.21	15.32	15.32	17	0			
15	QPSK	36	39	15.24	15.22	15.18					
15	QPSK	75	0	15.25	15.25	15.28	17	0			
15	16QAM	1	0	15.18	15.23	15.26					
15	16QAM	1	37	15.18	15.12	15.39	17	0			
15	16QAM	1	74	15.39	15.39	15.26					
15	16QAM	36	0	15.42	15.25	15.18	17	0			
15	16QAM	36	20	15.16	15.36	15.37					
15	16QAM	36	39	15.11	15.17	15.33	17	0			
15	16QAM	75	0	15.13	15.50	15.43					
15	64QAM	1	0	15.23	15.39	15.40	17	0			
15	64QAM	1	37	15.26	15.30	15.16					
15	64QAM	1	74	15.41	15.39	15.26	17	0			
15	64QAM	36	0	15.36	15.36	15.23					
15	64QAM	36	20	15.15	15.15	15.35	17	0			
15	64QAM	36	39	15.32	15.06	15.07					
15	64QAM	75	0	15.16	15.18	15.22	17	0			
15	256QAM	1	0	15.06	15.41	15.14					
15	256QAM	1	37	15.42	15.49	15.19	17	0			
15	256QAM	1	74	15.00	15.26	15.44					
15	256QAM	36	0	15.24	15.10	15.17	17	0			
15	256QAM	36	20	15.39	15.22	15.30					
15	256QAM	36	39	15.16	15.38	15.15	17	0			
15	256QAM	75	0	15.33	15.39	15.40					
Channel				20800	21100	21400					
Frequency (MHz)				2500	2535	2565					
10	QPSK	1	0	15.42	15.48	15.46	17	0			
10	QPSK	1	25	15.42	15.42	15.14					
10	QPSK	1	49	15.29	15.34	15.26	17	0			
10	QPSK	25	0	15.29	15.48	15.31					
10	QPSK	25	12	15.27	15.40	15.38	17	0			
10	QPSK	25	25	15.24	15.19	15.11					
10	QPSK	50	0	15.19	15.30	15.20	17	0			
10	16QAM	1	0	15.17	15.29	15.26					
10	16QAM	1	25	15.16	15.06	15.37	17	0			
10	16QAM	1	49	15.43	15.29	15.23					
10	16QAM	25	0	15.34	15.28	15.26	17	0			
10	16QAM	25	12	15.19	15.41	15.35					
10	16QAM	25	25	15.06	15.21	15.35	17	0			
10	16QAM	50	0	15.23	15.50	15.49					
10	64QAM	1	0	15.36	15.42	15.37	17	0			
10	64QAM	1	25	15.28	15.22	15.22					
10	64QAM	1	49	15.39	15.31	15.28	17	0			
10	64QAM	25	0	15.37	15.33	15.21					
10	64QAM	25	12	15.17	15.11	15.37	17	0			
10	64QAM	25	25	15.27	15.07	15.03					
10	64QAM	50	0	15.07	15.20	15.19	17	0			
10	256QAM	1	0	15.08	15.46	15.13					
10	256QAM	1	25	15.36	15.47	15.23	17	0			
10	256QAM	1	49	15.01	15.30	15.35					
10	256QAM	25	0	15.19	15.18	15.24	17	0			
10	256QAM	25	12	15.43	15.21	15.26					
10	256QAM	25	25	15.27	15.42	15.12	17	0			
10	256QAM	50	0	15.28	15.38	15.40					
Channel				20775	21100	21425					
Frequency (MHz)				2502.5	2535	2567.5					
5	QPSK	1	0	15.48	15.50	15.48	17	0			
5	QPSK	1	12	15.41	15.50	15.13					
5	QPSK	1	24	15.32	15.37	15.23	17	0			
5	QPSK	12	0	15.38	15.42	15.31					
5	QPSK	12	7	15.22	15.36	15.37	17	0			
5	QPSK	12	13	15.25	15.23	15.15					
5	QPSK	25	0	15.19	15.34	15.25	17	0			
5	16QAM	1	0	15.25	15.26	15.29					
5	16QAM	1	12	15.05	15.04	15.35	17	0			
5	16QAM	1	24	15.47	15.31	15.30					
5	16QAM	12	0	15.43	15.19	15.21	17	0			
5	16QAM	12	7	15.18	15.42	15.33					
5	16QAM	12	13	15.07	15.20	15.31	17	0			
5	16QAM	25	0	15.23	15.45	15.47					
5	64QAM	1	0	15.29	15.37	15.46	17	0			
5	64QAM	1	12	15.32	15.27	15.19					
5	64QAM	1	24	15.41	15.35	15.32	17	0			
5	64QAM	12	0	15.35	15.41	15.24					
5	64QAM	12	7	15.17	15.14	15.30	17	0			
5	64QAM	12	13	15.26	15.09	15.03					
5	64QAM	25	0	15.08	15.27	15.27	17	0			
5	256QAM	1	0	15.06	15.44	15.15					
5	256QAM	1	12	15.45	15.49	15.25	17	0			
5	256QAM	1	24	15.01	15.35	15.42					
5	256QAM	12	0	15.28	15.17	15.16	17	0			
5	256QAM	12	7	15.40	15.19	15.25					
5	256QAM	12	13	15.27	15.47	15.19	17	0			
5	256QAM	25	0	15.32	15.44	15.40					

Band 7 Ant5 DS11 Main PA for ENDC

BW (MHz)	Modulation	RB Size	RB Offset	Power			Tune-up limit (dBm)	MPR (dB)
				Low Ch. / Freq.	Middle Ch. / Freq.	High Ch. / Freq.		
Channel				20860	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	19.74	19.78	19.67	21	0
20	QPSK	1	49	19.62	19.70	19.62		
20	QPSK	1	99	19.55	19.67	19.56		
20	QPSK	50	0	19.44	19.64	19.59	21	0
20	QPSK	50	24	19.55	19.55	19.49		
20	QPSK	50	50	19.45	19.50	19.41		
20	QPSK	100	0	19.40	19.52	19.47	21	0
20	16QAM	1	0	19.60	19.70	19.54		
20	16QAM	1	49	19.49	19.61	19.59		
20	16QAM	1	99	19.49	19.57	19.43	21	0
20	16QAM	50	0	18.51	18.65	18.53		
20	16QAM	50	24	18.45	18.61	18.51		
20	16QAM	50	50	18.55	18.64	18.55	21	0
20	16QAM	100	0	18.40	18.54	18.47		
20	64QAM	1	0	18.53	18.66	18.55		
20	64QAM	1	49	18.55	18.60	18.41	21	0
20	64QAM	1	99	18.43	18.52	18.46		
20	64QAM	50	0	17.42	17.52	17.46		
20	64QAM	50	24	17.42	17.53	17.43	19	2
20	64QAM	50	50	17.54	17.57	17.47		
20	64QAM	100	0	17.40	17.51	17.37		
20	256QAM	1	0	15.57	15.70	15.65	17	4
20	256QAM	1	49	15.61	15.59	15.53		
20	256QAM	1	99	15.49	15.58	15.53		
20	256QAM	50	0	15.41	15.51	15.46	17	4
20	256QAM	50	24	15.46	15.49	15.36		
20	256QAM	50	50	15.49	15.52	15.45		
20	256QAM	100	0	15.39	15.56	15.53		
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	19.68	19.75	19.58	21	0
15	QPSK	1	37	19.56	19.63	19.53		
15	QPSK	1	74	19.60	19.60	19.48		
15	QPSK	36	0	19.32	19.56	19.56	21	0
15	QPSK	36	20	19.48	19.43	19.46		
15	QPSK	36	39	19.31	19.45	19.34		
15	QPSK	75	0	19.26	19.38	19.39	21	0
15	16QAM	1	0	19.52	19.59	19.44		
15	16QAM	1	37	19.40	19.51	19.49		
15	16QAM	1	74	19.38	19.47	19.36	21	0
15	16QAM	36	0	18.42	18.50	18.48		
15	16QAM	36	20	18.30	18.56	18.46		
15	16QAM	36	39	18.46	18.57	18.50	20	1
15	16QAM	75	0	18.27	18.45	18.40		
15	64QAM	1	0	18.38	18.62	18.43		
15	64QAM	1	37	18.50	18.46	18.34	20	1
15	64QAM	1	74	18.34	18.38	18.38		
15	64QAM	36	0	17.36	17.42	17.36		
15	64QAM	36	20	17.26	17.40	17.37	19	2
15	64QAM	36	39	17.43	17.50	17.34		
15	64QAM	75	0	17.44	17.41	17.33		
15	256QAM	1	0	15.51	15.65	15.58	17	4
15	256QAM	1	37	15.48	15.51	15.45		
15	256QAM	1	74	15.45	15.46	15.50		
15	256QAM	36	0	15.28	15.39	15.40	17	4
15	256QAM	36	20	15.32	15.36	15.23		
15	256QAM	36	39	15.35	15.37	15.40		
15	256QAM	75	0	15.34	15.43	15.47		
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	19.63	19.69	19.64	21	0
10	QPSK	1	25	19.53	19.63	19.51		
10	QPSK	1	49	19.60	19.62	19.49		
10	QPSK	25	0	19.39	19.49	19.46	21	0
10	QPSK	25	12	19.43	19.51	19.35		
10	QPSK	25	25	19.33	19.44	19.34		
10	QPSK	50	0	19.34	19.44	19.43	21	0
10	16QAM	1	0	19.51	19.64	19.49		
10	16QAM	1	25	19.44	19.57	19.49		
10	16QAM	1	49	19.42	19.45	19.35	20	1
10	16QAM	25	0	18.41	18.62	18.39		
10	16QAM	25	12	18.40	18.50	18.43		
10	16QAM	25	25	18.49	18.52	18.44	20	1
10	16QAM	50	0	18.35	18.44	18.39		
10	64QAM	1	0	18.44	18.56	18.41		
10	64QAM	1	25	18.47	18.51	18.34	20	1
10	64QAM	1	49	18.36	18.47	18.34		
10	64QAM	25	0	17.37	17.45	17.40		
10	64QAM	25	12	17.32	17.50	17.34	19	2
10	64QAM	25	25	17.39	17.46	17.38		
10	64QAM	50	0	17.39	17.44	17.28		
10	256QAM	1	0	15.53	15.61	15.59	17	4
10	256QAM	1	25	15.49	15.50	15.41		
10	256QAM	1	49	15.40	15.44	15.39		
10	256QAM	25	0	15.28	15.45	15.39	17	4
10	256QAM	25	12	15.35	15.38	15.22		
10	256QAM	25	25	15.36	15.38	15.39		
10	256QAM	50	0	15.30	15.51	15.41		
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	19.61	19.75	19.55	21	0
5	QPSK	1	12	19.57	19.64	19.52		
5	QPSK	1	24	19.59	19.64	19.54		
5	QPSK	12	0	19.35	19.57	19.55	21	0
5	QPSK	12	7	19.45	19.50	19.35		
5	QPSK	12	13	19.39	19.46	19.34		
5	QPSK	25	0	19.26	19.45	19.39	21	0
5	16QAM	1	0	19.52	19.58	19.40		
5	16QAM	1	12	19.40	19.51	19.47		
5	16QAM	1	24	19.45	19.45	19.39	21	0
5	16QAM	12	0	18.44	18.51	18.41		
5	16QAM	12	7	18.37	18.55	18.43		
5	16QAM	12	13	18.44	18.57	18.41	20	1
5	16QAM	25	0	18.30	18.47	18.34		
5	64QAM	1	0	18.43	18.60	18.46		
5	64QAM	1	12	18.48	18.50	18.26	20	1
5	64QAM	1	24	18.32	18.48	18.32		
5	64QAM	12	0	17.28	17.38	17.33		
5	64QAM	12	7	17.39	17.50	17.28	19	2
5	64QAM	12	13	17.41	17.52	17.39		
5	64QAM	25	0	17.44	17.46	17.29		
5	256QAM	1	0	15.48	15.83	15.52	17	4
5	256QAM	1	12	15.48	15.47	15.43		
5	256QAM	1	24	15.45	15.57	15.43		
5	256QAM	12	0	15.35	15.46	15.39	17	4
5	256QAM	12	7	15.37	15.37	15.26		
5	256QAM	12	13	15.46	15.48	15.41		
5	256QAM	25	0	15.27	15.43	15.47		

Reduced Power SA Mode for DS13

GSM850 Ant0 DS13								
Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)	
TX Channel	128	189		128	189	251		
Frequency (MHz)	824.2	836.4	848.8	824.2	836.4	848.8		
GSM 1 Tx slot	32.57	32.08	32.57	34.00	23.57	23.08	23.57	25.00
GPRS 1 Tx slot	32.54	32.11	32.45	34.00	23.54	23.11	23.45	25.00
GPRS 2 Tx slots	29.20	29.14	29.18	31.00	23.20	23.14	23.18	25.00
GPRS 3 Tx slots	27.86	27.48	27.46	29.20	23.60	23.22	23.20	24.94
GPRS 4 Tx slots	26.17	26.21	26.18	28.00	23.17	23.21	23.18	25.00
EDGE 1 Tx slot	26.13	26.16	26.11	27.50	17.13	17.16	17.11	18.50
EDGE 2 Tx slots	23.29	23.34	23.46	24.50	17.29	17.34	17.46	18.50
EDGE 3 Tx slots	21.63	21.44	21.61	22.70	17.37	17.18	17.35	18.44
EDGE 4 Tx slots	20.21	20.06	20.44	21.50	17.21	17.06	17.44	18.50

		WCDMA V Ant0 DS13			
Band		WCDMA V Ant0			Tuneup Lim. (dBm)
TX Channel		4132	4182	4233	
Rx Channel		4357	4407	4458	
Frequency (MHz)		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.00	23.99	24.00	25.00
3GPP Rel 99	RMC 12.2Kbps	24.00	24.02	23.97	25.00
3GPP Rel 6	HSODA Subtest-1	22.94	23.03	23.02	24.00
3GPP Rel 6	HSODA Subtest-2	23.01	23.05	22.93	24.00
3GPP Rel 6	HSODA Subtest-3	22.41	22.55	22.53	23.50
3GPP Rel 6	HSODA Subtest-4	22.56	22.54	22.46	23.50
3GPP Rel 6	DC-HSODA Subtest-1	23.00	23.02	22.91	24.00
3GPP Rel 8	DC-HSODA Subtest-2	23.02	23.07	23.03	24.00
3GPP Rel 8	DC-HSODA Subtest-3	22.40	22.48	22.51	23.50
3GPP Rel 8	DC-HSODA Subtest-4	22.55	22.55	22.42	23.50
3GPP Rel 6	HSUPA Subtest-1	23.03	23.01	23.00	24.00
3GPP Rel 6	HSUPA Subtest-2	20.96	21.03	21.06	22.00
3GPP Rel 6	HSUPA Subtest-3	21.94	21.97	22.01	23.00
3GPP Rel 6	HSUPA Subtest-4	20.99	21.00	21.04	22.00
3GPP Rel 6	HSUPA Subtest-5	23.04	23.01	22.99	24.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.42	20.59	20.58	21.50

GSM1900 Ant2 DSIS

GSM1900 Ant2	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	1850.2	1880	1909.8		1850.2	1880	1909.8	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	30.70	30.00	30.05	31.00	21.70	21.00	21.05	22.00
GPRS 1 Tx slot	30.17	30.08	30.07	31.00	21.17	21.08	21.07	22.00
GPRS 2 Tx slots	26.53	26.65	26.56	28.00	20.53	20.65	20.56	22.00
GPRS 3 Tx slots	25.14	25.21	25.02	26.20	20.88	20.95	20.76	21.94
GPRS 4 Tx slots	23.44	23.40	23.28	25.00	20.44	20.46	20.28	22.00
EDGE 1 Tx slot	25.87	25.62	25.54	26.50	16.87	16.62	16.54	17.50
EDGE 2 Tx slots	23.06	22.97	22.95	23.50	17.06	16.97	16.95	17.50
EDGE 3 Tx slots	21.42	21.22	21.28	21.70	17.16	16.96	17.02	17.44
EDGE 4 Tx slots	19.56	19.36	19.57	20.50	16.56	16.36	16.57	17.50

WCDMA II Ant2 DSIS

WCDMA IV Ant2 DSIS

Band	WCDMA II Ant2			Tune-up Limit (dBm)	WCDMA IV Ant2			Tune-up Limit (dBm)
	9252	9400	9538		1312	1413	1513	
TX Channel	9662	9800	9938		1537	1638	1738	
Rx Channel	9662	9800	9938		1537	1638	1738	
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99 AMR 12.2Kbps	22.80	22.91	22.95	24.50	22.66	22.54	22.68	24.00
3GPP Rel 99 RMC 12.2Kbps	22.89	22.97	22.80	24.50	22.59	22.78	22.75	24.00
3GPP Rel 6 HSDPA Subtest-1	22.03	22.13	21.98	23.50	21.45	21.59	21.68	23.00
3GPP Rel 6 HSDPA Subtest-2	21.97	21.91	21.87	23.50	21.53	21.54	21.46	23.00
3GPP Rel 6 HSDPA Subtest-3	21.37	21.43	21.49	23.00	21.09	21.12	21.22	22.50
3GPP Rel 6 HSDPA Subtest-4	21.60	21.37	21.44	23.00	21.01	20.94	20.95	22.50
3GPP Rel 8 DC-HSDPA Subtest-1	22.07	21.92	21.88	23.50	21.36	21.59	21.36	23.00
3GPP Rel 8 DC-HSDPA Subtest-2	21.81	21.98	21.96	23.50	21.44	21.45	21.48	23.00
3GPP Rel 8 DC-HSDPA Subtest-3	21.46	21.54	21.30	23.00	21.02	21.16	21.07	22.50
3GPP Rel 8 DC-HSDPA Subtest-4	21.34	21.63	21.54	23.00	21.01	20.99	21.20	22.50
3GPP Rel 6 HSUPA Subtest-1	21.87	22.00	21.82	23.50	21.43	21.63	21.56	23.00
3GPP Rel 6 HSUPA Subtest-2	19.90	20.04	20.02	21.50	19.50	19.66	19.57	21.00
3GPP Rel 6 HSUPA Subtest-3	21.10	21.00	20.74	22.50	20.53	20.65	20.51	22.00
3GPP Rel 6 HSUPA Subtest-4	20.00	19.93	19.98	21.50	19.35	19.70	19.79	21.00
3GPP Rel 6 HSUPA Subtest-5	21.94	21.91	21.92	23.50	21.40	21.69	21.56	23.00
3GPP Rel 7 HSPA+ (E-UTRA) Subtest-1	19.55	19.48	19.36	21.00	19.12	19.09	19.30	20.50

GSM1900 Ant3 DSIS

GSM1900 Ant3	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	1850.2	1880	1909.8		1850.2	1880	1909.8	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	28.94	29.08	28.66	30.50	19.94	20.08	19.66	21.50
GPRS 1 Tx slot	28.96	29.15	28.70	30.50	19.96	20.15	19.70	21.50
GPRS 2 Tx slots	25.52	25.53	25.73	27.50	19.52	19.53	19.73	21.50
GPRS 3 Tx slots	24.10	24.15	24.12	25.70	19.94	19.99	19.96	21.44
GPRS 4 Tx slots	22.91	22.97	22.70	24.50	19.91	19.97	19.70	21.50
EDGE 1 Tx slot	25.01	25.18	25.04	26.50	16.01	16.18	16.04	17.50
EDGE 2 Tx slots	22.37	22.54	22.17	23.50	16.37	16.54	16.17	17.50
EDGE 3 Tx slots	21.10	21.13	21.05	21.70	16.84	16.87	16.79	17.44
EDGE 4 Tx slots	19.27	19.25	19.25	20.50	16.27	16.25	16.25	17.50

WCDMA II Ant3 DSIS

WCDMA IV Ant3 DSIS

Band	WCDMA II Ant3			Tune-up Limit (dBm)	WCDMA IV Ant3			Tune-up Limit (dBm)
	9252	9400	9538		1312	1413	1513	
TX Channel	9662	9800	9938		1537	1638	1738	
Rx Channel	9662	9800	9938		1537	1638	1738	
Frequency (MHz)	1852.4	1890	1907.6		1742.4	1752.6	1752.6	
3GPP Rel 99 AMR 12.2Kbps	20.09	20.25	20.20	22.00	20.10	20.10	20.02	21.50
3GPP Rel 99 RMC 12.2Kbps	20.27	20.28	20.24	22.00	20.10	20.12	20.11	21.50
3GPP Rel 6 HSDPA Subtest-1	19.14	19.35	19.32	21.00	19.18	19.27	19.28	20.50
3GPP Rel 6 HSDPA Subtest-2	19.13	19.28	19.12	21.00	19.19	19.23	19.02	20.50
3GPP Rel 6 HSDPA Subtest-3	18.78	18.83	18.70	20.50	18.64	18.73	18.76	20.00
3GPP Rel 6 HSDPA Subtest-4	18.66	18.76	18.67	20.50	18.61	18.83	18.70	20.00
3GPP Rel 8 DC-HSDPA Subtest-1	19.25	19.30	19.18	21.00	19.30	19.25	19.17	20.50
3GPP Rel 8 DC-HSDPA Subtest-2	19.13	19.11	19.19	21.00	19.12	19.12	19.20	20.50
3GPP Rel 8 DC-HSDPA Subtest-3	18.64	18.74	18.54	20.50	18.61	18.77	18.66	20.00
3GPP Rel 8 DC-HSDPA Subtest-4	18.54	18.66	18.56	20.50	18.58	18.74	18.81	20.00
3GPP Rel 6 HSUPA Subtest-1	19.00	19.25	19.16	21.00	19.12	19.11	19.25	20.50
3GPP Rel 6 HSUPA Subtest-2	17.17	17.26	17.20	19.00	17.15	17.18	17.29	18.50
3GPP Rel 6 HSUPA Subtest-3	18.33	18.25	18.41	20.00	18.13	18.20	18.35	19.50
3GPP Rel 6 HSUPA Subtest-4	17.18	17.14	17.12	19.00	17.24	17.16	17.06	18.50
3GPP Rel 6 HSUPA Subtest-5	19.01	19.25	19.22	21.00	18.96	19.22	19.01	20.50
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	16.81	16.90	16.90	18.50	16.71	16.93	16.70	18.00

Reduced Power SA Mode for DS14

GSM850 Ant0 DS14								
Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)	
TX Channel	128	189		128	189	251		
Frequency (MHz)	824.2	836.4	848.8	824.2	836.4	848.8		
GSM 1 Tx slot	32.57	32.08	32.57	34.00	23.57	23.08	23.57	25.00
GPRS 1 Tx slot	32.54	32.11	32.45	34.00	23.54	23.11	23.45	25.00
GPRS 2 Tx slots	29.20	29.14	29.18	31.00	23.20	23.14	23.18	25.00
GPRS 3 Tx slots	27.86	27.48	27.46	29.20	23.60	23.22	23.20	24.94
GPRS 4 Tx slots	26.17	26.21	26.18	28.00	23.17	23.21	23.18	25.00
EDGE 1 Tx slot	26.13	26.16	26.11	27.50	17.13	17.16	17.11	18.50
EDGE 2 Tx slots	23.29	23.34	23.46	24.50	17.29	17.34	17.46	18.50
EDGE 3 Tx slots	21.63	21.44	21.61	22.70	17.37	17.18	17.35	18.44
EDGE 4 Tx slots	20.21	20.06	20.44	21.50	17.21	17.06	17.44	18.50

WCDMA V Ant0 DS14					
TX Channel		WCDMA V Ant0			Tune-up Limit (dBm)
Band	4132	4182	4233		
Rx Channel	4357	4407	4458		
Frequency (MHz)	826.4	836.4	846.6		
3GPP Rel 99	AMR 12.2Kbps	24.00	23.99	24.00	25.00
3GPP Rel 99	RMC 12.2Kbps	24.00	24.02	23.97	25.00
3GPP Rel 6	HS-DSPA Subtest-1	22.94	23.03	22.93	24.00
3GPP Rel 6	HS-DSPA Subtest-2	23.01	23.05	22.93	24.00
3GPP Rel 6	HS-DSPA Subtest-3	22.41	22.55	22.53	23.50
3GPP Rel 6	HS-DSPA Subtest-4	22.56	22.54	22.48	23.50
3GPP Rel 6	DC-HS-DSPA Subtest-1	23.00	23.02	22.91	24.00
3GPP Rel 8	DC-HS-DSPA Subtest-2	23.02	23.07	23.03	24.00
3GPP Rel 8	DC-HS-DSPA Subtest-3	22.40	22.48	22.51	23.50
3GPP Rel 8	DC-HS-DSPA Subtest-4	22.55	22.55	22.42	23.50
3GPP Rel 6	HS-UPA Subtest-1	23.03	23.01	23.00	24.00
3GPP Rel 6	HS-UPA Subtest-2	20.96	21.03	21.06	22.00
3GPP Rel 6	HS-UPA Subtest-3	21.94	21.97	22.01	23.00
3GPP Rel 6	HS-UPA Subtest-4	20.99	21.00	21.04	22.00
3GPP Rel 6	HS-UPA Subtest-5	23.04	23.01	22.99	24.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.42	20.59	20.58	21.50

GSM850 Ant1 DS1							
GSM850 Ant1	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)		
	128	189	251		128	189	251
TX Channel	824.2	836.4	848.8	824.2	836.4	848.8	Tune-up Limit (dBm)
Frequency (MHz)	824.2	836.4	848.8		836.4	848.8	
GSM 1 Tx slot	32.47	32.45	32.51	34.00	23.47	23.45	23.51
GPRS 1 Tx slot	32.53	32.55	32.64	34.00	23.53	23.55	23.64
GPRS 2 Tx slots	29.57	29.51	29.46	31.00	23.57	23.51	23.46
GPRS 3 Tx slots	27.52	27.64	27.61	29.20	23.26	23.36	23.35
GPRS 4 Tx slots	26.14	26.20	26.05	28.00	23.14	23.20	23.05
EDGE 1 Tx slot	25.96	25.97	25.74	27.50	16.96	16.97	16.74
EDGE 2 Tx slots	23.42	23.58	23.25	24.50	17.42	17.58	17.25
EDGE 3 Tx slots	21.57	21.68	21.58	22.70	17.31	17.42	17.32
EDGE 4 Tx slots	20.31	20.32	20.33	21.50	17.31	17.32	17.33

WCDMA V Ant1 DS1				
Band	WCDMA V Ant1			Tune-up Limit (dBm)
TX Channel	4132	4182	4233	
Rx Channel	4357	4407	4458	824.2
Frequency (MHz)	824.2	836.4	848.8	
3GPP Rel 99	AMR 12.2Kbps	20.91	20.96	21.10
3GPP Rel 99	RMC 12.2Kbps	21.10	21.12	20.99
3GPP Rel 6	HS-DS-SS Subtest-1	20.19	20.20	20.07
3GPP Rel 6	HS-DS-SS Subtest-2	20.18	20.09	20.10
3GPP Rel 6	HS-DS-SS Subtest-3	19.60	19.63	19.58
3GPP Rel 6	HS-DS-SS Subtest-4	19.48	19.59	19.36
3GPP Rel 8	DC-HS-SS Subtest-1	20.13	20.03	20.03
3GPP Rel 8	DC-HS-SS Subtest-2	20.01	20.04	19.99
3GPP Rel 8	DC-HS-SS Subtest-3	19.65	19.67	19.73
3GPP Rel 8	DC-HS-SS Subtest-4	19.67	19.59	19.57
3GPP Rel 6	HS-SS Subtest-1	20.02	20.19	19.97
3GPP Rel 6	HS-SS Subtest-2	18.10	18.25	18.02
3GPP Rel 6	HS-SS Subtest-3	19.08	19.11	19.14
3GPP Rel 6	HS-SS Subtest-4	18.08	18.00	18.11
3GPP Rel 6	HS-SS Subtest-5	20.07	20.08	19.98
3GPP Rel 7	HSPA+ (E-UTRA) Subtest-1	17.54	17.64	17.47

GSM1900 Ant2 DS14							
GSM1900 Ant2 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)		
	512	661	810		512	661	810
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8
GSM 1 Tx slot	30.70	30.00	30.05	31.00	21.70	21.00	21.05
GPRS 1 Tx slot	30.17	30.08	30.07	31.00	21.17	21.08	21.07
GPRS 2 Tx slots	26.53	26.65	26.56	28.00	20.53	20.65	20.56
GPRS 3 Tx slots	25.14	25.21	25.02	26.20	20.88	20.95	20.76
GPRS 4 Tx slots	23.44	23.40	23.28	25.00	20.44	20.46	20.28
EDGE 1 Tx slot	25.87	25.62	25.54	26.50	16.87	16.62	16.54
EDGE 2 Tx slots	23.06	22.97	22.95	23.50	17.06	16.97	16.95
EDGE 3 Tx slots	21.42	21.22	21.28	21.70	17.16	16.96	17.02
EDGE 4 Tx slots	19.56	19.36	19.57	20.50	16.56	16.36	16.57

WCDMA II Ant2 DS14				WCDMA IV Ant2 DS14			
Band TX Channel	WCDMA II Ant2			Tune-up Limit (dBm)	WCDMA IV Ant2		
	9252	9400	9538		1312	1413	1513
Rx Channel	9662	9800	9938		1537	1638	1738
Frequency (MHz)	1852.4	1880	1907.6		1742.4	1752.6	1752.6
3GPP Rel 99 AMR 12.2Kbps	23.35	23.37	23.26	25.00	23.62	23.67	23.58
3GPP Rel 99 RMC 12.2Kbps	23.38	23.40	23.29	25.00	23.62	23.70	23.63
3GPP Rel 6 HSDPA Subtest-1	22.34	22.44	22.30	24.00	22.59	22.73	22.66
3GPP Rel 6 HSDPA Subtest-2	22.33	22.42	22.30	24.00	22.57	22.68	22.61
3GPP Rel 6 HSDPA Subtest-3	21.86	21.93	21.82	23.50	22.06	22.28	22.18
3GPP Rel 6 HSDPA Subtest-4	21.88	21.87	21.77	23.50	22.08	22.16	22.08
3GPP Rel 8 DC-HSDPA Subtest-1	22.36	22.35	22.27	24.00	22.53	22.69	22.59
3GPP Rel 8 DC-HSDPA Subtest-2	22.31	22.41	22.28	24.00	22.49	22.63	22.63
3GPP Rel 8 DC-HSDPA Subtest-3	21.83	21.93	21.81	23.50	22.05	22.25	22.16
3GPP Rel 8 DC-HSDPA Subtest-4	21.83	21.92	21.85	23.50	22.02	22.15	22.15
3GPP Rel 6 HSUPA Subtest-1	22.30	22.40	22.27	24.00	22.55	22.72	22.61
3GPP Rel 6 HSUPA Subtest-2	20.30	20.45	20.35	22.00	20.60	20.75	20.68
3GPP Rel 6 HSUPA Subtest-3	21.39	21.43	21.25	23.00	21.58	21.77	21.69
3GPP Rel 6 HSUPA Subtest-4	20.38	20.43	20.28	22.00	20.55	20.76	20.71
3GPP Rel 6 HSUPA Subtest-5	22.29	22.38	22.32	24.00	22.60	22.76	22.67
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	19.84	19.94	19.85	21.50	20.15	20.19	20.19

GSM1900 Ant3 DS14									
GSM1900 Ant3	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)	
	512	661	810		512	661	810		
TX Channel	1850.2	1880	1909.8		1850.2	1880	1909.8		
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8		
GSM 1 Tx slot	29.42	29.55	29.27	31.00	20.42	20.55	20.27	22.00	
GPRS 1 Tx slot	29.52	29.57	29.38	31.00	20.52	20.57	20.38	22.00	
GPRS 2 Tx slots	26.03	26.08	26.34	28.00	20.03	20.08	20.34	22.00	
GPRS 3 Tx slots	24.57	24.53	24.32	26.20	20.31	20.27	20.06	21.94	
GPRS 4 Tx slots	23.42	23.46	23.25	25.00	20.42	20.46	20.25	22.00	
EDGE 1 Tx slot	25.01	25.18	25.04	26.50	16.01	16.18	16.04	17.50	
EDGE 2 Tx slots	22.37	22.54	22.17	23.50	16.37	16.54	16.17	17.50	
EDGE 3 Tx slots	21.10	21.13	21.05	21.70	16.84	16.87	16.79	17.44	
EDGE 4 Tx slots	19.27	19.25	19.25	20.50	16.27	16.25	16.25	17.50	

		WCDMA II Ant3 DS14				WCDMA IV Ant3 DS14			
Band		WCDMA II Ant3			Tune-up Limit (dBm)	WCDMA IV Ant3			Tune-up Limit (dBm)
TX Channel		9252	9400	9538		1312	1413	1513	
Rx Channel		9662	9800	9938		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1742.4	1752.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	22.54	22.64	22.61	24.00	23.05	23.09	22.98	24.50
3GPP Rel 99	RMC 12.2Kbps	22.62	22.67	22.62	24.00	23.08	23.11	23.04	24.50
3GPP Rel 6	HSDSA Subtest-1	21.64	21.65	21.65	23.00	22.12	22.22	22.12	23.00
3GPP Rel 6	HSDSA Subtest-2	21.53	21.58	21.58	23.00	22.14	22.11	22.01	23.00
3GPP Rel 6	HSDSA Subtest-3	21.09	21.20	21.10	22.50	21.59	21.65	21.61	22.50
3GPP Rel 6	HSDSA Subtest-4	21.04	21.12	21.14	22.50	21.55	21.62	21.61	22.50
3GPP Rel 8	DC-HSDPA Subtest-1	21.62	21.67	21.58	23.00	22.11	22.11	22.16	23.00
3GPP Rel 8	DC-HSDPA Subtest-2	21.45	21.53	21.55	23.00	21.98	22.11	22.00	23.00
3GPP Rel 8	DC-HSDPA Subtest-3	20.95	21.17	21.05	22.50	21.45	21.70	21.46	22.50
3GPP Rel 8	DC-HSDPA Subtest-4	20.91	21.12	21.01	22.50	21.37	21.53	21.59	22.50
3GPP Rel 6	HSUPA Subtest-1	21.40	21.56	21.52	23.00	21.90	22.02	22.07	23.00
3GPP Rel 6	HSUPA Subtest-2	19.62	19.71	19.64	21.00	20.04	20.16	20.15	21.00
3GPP Rel 6	HSUPA Subtest-3	20.62	20.76	20.76	22.00	21.10	21.20	21.23	22.00
3GPP Rel 6	HSUPA Subtest-4	19.52	19.60	19.49	21.00	20.06	20.06	20.05	21.00
3GPP Rel 6	HSUPA Subtest-5	21.48	21.65	21.55	23.00	21.95	22.15	22.00	23.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	19.17	19.21	19.23	20.50	19.61	19.71	19.63	20.50

Band 38 Ant3 Default Main PA											
BW [MHz]	Modulat ion	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel				37850	38000	38150					
Frequency (MHz)				2580	2595	2610					
20	QPSK	1	0	23.32	23.45	23.41	25	0			
20	QPSK	1	49	23.23	23.31	23.26					
20	QPSK	1	99	23.14	23.20	23.11					
20	QPSK	50	0	22.20	22.37	22.28	24	1			
20	QPSK	50	24	22.24	22.23	22.18					
20	QPSK	50	50	22.08	22.22	22.14					
20	QPSK	100	0	22.23	22.34	22.16	24	1			
20	16QAM	1	0	22.65	22.73	22.63					
20	16QAM	1	49	22.57	22.62	22.50					
20	16QAM	1	99	22.31	22.64	22.51	23	2			
20	16QAM	50	0	21.25	21.38	21.18					
20	16QAM	50	24	21.28	21.24	21.11					
20	16QAM	50	50	21.29	21.36	21.16	23	2			
20	16QAM	100	0	21.27	21.32	21.27					
20	64QAM	1	0	21.37	21.57	21.38					
20	64QAM	1	49	21.39	21.34	21.29	23	2			
20	64QAM	1	99	21.28	21.45	21.28					
20	64QAM	50	0	20.20	20.26	20.27					
20	64QAM	50	24	20.03	20.25	20.06	22	3			
20	64QAM	50	50	20.12	20.28	20.16					
20	64QAM	100	0	20.26	20.29	20.13					
20	256QAM	1	0	18.36	18.45	18.23	20	5			
20	256QAM	1	49	18.36	18.34	18.23					
20	256QAM	1	99	18.29	18.35	18.22					
20	256QAM	50	0	18.18	18.27	18.22	20	5			
20	256QAM	50	24	18.12	18.20	18.17					
20	256QAM	50	50	18.20	18.22	18.19					
20	256QAM	100	0	18.16	18.32	18.28					
Channel				37825	38000	38175				Tune-up limit (dBm)	
Frequency (MHz)				2577.5	2595	2612.5					
15	QPSK	1	0	23.23	23.39	23.31	25	0			
15	QPSK	1	37	23.15	23.23	23.21					
15	QPSK	1	74	23.10	23.14	23.01					
15	QPSK	36	0	22.10	22.30	22.17	24	1			
15	QPSK	36	20	22.18	22.15	22.08					
15	QPSK	36	39	22.00	22.11	22.11					
15	QPSK	75	0	22.15	22.30	22.13	24	1			
15	16QAM	1	0	22.58	22.60	22.58					
15	16QAM	1	37	22.48	22.58	22.46					
15	16QAM	1	74	22.19	22.60	22.38					
15	16QAM	36	0	21.20	21.27	21.12					
15	16QAM	36	20	21.20	21.13	21.00	23	2			
15	16QAM	36	39	21.20	21.28	21.12					
15	16QAM	75	0	21.21	21.21	21.21					
15	64QAM	1	0	21.28	21.44	21.23	23	2			
15	64QAM	1	37	21.34	21.26	21.18					
15	64QAM	1	74	21.16	21.31	21.17					
15	64QAM	36	0	20.15	20.13	20.14	22	3			
15	64QAM	36	20	20.04	20.11	20.07					
15	64QAM	36	39	20.08	20.16	20.04					
15	64QAM	75	0	20.12	20.22	20.02	20	5			
15	256QAM	1	0	18.30	18.31	18.11					
15	256QAM	1	37	18.29	18.30	18.16					
15	256QAM	1	74	18.19	18.22	18.14					
15	256QAM	36	0	18.14	18.14	18.12					
15	256QAM	36	20	18.08	18.16	18.10	20	5			
15	256QAM	36	39	18.19	18.08	18.14					
15	256QAM	75	0	18.04	18.26	18.19					
Channel				37800	38000	38200	Tune-up limit (dBm)				
Frequency (MHz)				2575	2595	2615					
10	QPSK	1	0	23.26	23.40	23.30	25	0			
10	QPSK	1	25	23.15	23.17	23.16					
10	QPSK	1	49	23.03	23.08	23.06					
10	QPSK	25	0	22.14	22.26	22.18	24	1			
10	QPSK	25	12	22.16	22.13	22.10					
10	QPSK	25	25	22.06	22.11	22.08					
10	QPSK	50	0	22.11	22.21	22.13	24	1			
10	16QAM	1	0	22.60	22.67	22.60					
10	16QAM	1	25	22.43	22.54	22.44					
10	16QAM	1	49	22.17	22.50	22.41					
10	16QAM	25	0	21.17	21.33	21.06					
10	16QAM	25	12	21.16	21.09	21.00	23	2			
10	16QAM	25	25	21.19	21.29	21.11					
10	16QAM	50	0	21.16	21.16	21.16					
10	64QAM	1	0	21.29	21.53	21.30	23	2			
10	64QAM	1	25	21.28	21.29	21.15					
10	64QAM	1	49	21.25	21.41	21.14					
10	64QAM	25	0	20.10	20.23	20.23	22	3			
10	64QAM	25	12	20.04	20.15	20.09					
10	64QAM	25	25	20.09	20.16	20.02					
10	64QAM	50	0	20.16	20.25	20.06					
10	256QAM	1	0	18.23	18.35	18.17					
10	256QAM	1	25	18.25	18.25	18.11	20	5			
10	256QAM	1	49	18.18	18.26	18.16					
10	256QAM	25	0	18.11	18.23	18.14					
10	256QAM	25	12	18.08	18.12	18.10	20	5			
10	256QAM	25	25	18.16	18.17	18.08					
10	256QAM	50	0	18.11	18.28	18.21					
Channel				37775	38000	38225	Tune-up limit (dBm)				
Frequency (MHz)				2572.5	2595	2617.5					
5	QPSK	1	0	23.29	23.35	23.33	25	0			
5	QPSK	1	12	23.13	23.18	23.12					
5	QPSK	1	24	23.08	23.10	23.07					
5	QPSK	12	0	22.08	22.22	22.13	24	1			
5	QPSK	12	7	22.10	22.16	22.04					
5	QPSK	12	13	22.03	22.17	22.02					
5	QPSK	25	0	22.11	22.31	22.03	24	1			
5	16QAM	1	0	22.59	22.62	22.48					
5	16QAM	1	12	22.49	22.55	22.36					
5	16QAM	1	24	22.24	22.53	22.37	23	2			
5	16QAM	12	0	21.20	21.29	21.05					
5	16QAM	12	7	21.14	21.14	21.09					
5	16QAM	12	13	21.22	21.21	21.05	23	2			
5	16QAM	25	0	21.22	21.20	21.13					
5	64QAM	1	0	21.27	21.51	21.33					
5	64QAM	1	12	21.28	21.31	21.21	23	2			
5	64QAM	1	24	21.17	21.39	21.21					
5	64QAM	12	0	20.05	20.14	20.19					
5	64QAM	12	7	20.06	20.11	20.05	22	3			
5	64QAM	12	13	20.09	20.17	20.07					
5	64QAM	25	0	20.14	20.24	20.06					
5	256QAM	1	0	18.32	18.35	18.15	20	5			
5	256QAM	1	12	18.31	18.31	18.18					
5	256QAM	1	24	18.23	18.32	18.19					
5	256QAM	12	0	18.12	18.15	18.14	20	5			
5	256QAM	12	7	18.04	18.18	18.07					
5	256QAM	12	13	18.10	18.09	18.12					
5	256QAM	25	0	18.02	18.20	18.21					

Band 41 Ant3 Default Main PA										
BW [MHz]	Modulate on	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	23.41	23.36	23.48	23.29	23.26	25	0
20	QPSK	1	49	23.18	23.24	23.41	23.23	23.18		
20	QPSK	1	99	23.02	23.17	23.22	23.16	23.03		
20	QPSK	50	0	22.25	22.29	22.39	22.35	22.29		
20	QPSK	50	24	22.14	22.29	22.30	22.27	22.14	24	1
20	QPSK	50	50	22.06	22.18	22.41	22.15	22.06		
20	QPSK	100	0	22.14	22.30	22.30	22.21	22.08		
20	16QAM	1	0	22.57	22.76	22.82	22.71	22.59		
20	16QAM	1	49	22.38	22.65	22.69	22.52	22.46	24	1
20	16QAM	1	99	22.50	22.35	22.75	22.59	22.45		
20	16QAM	50	0	21.15	21.34	21.47	21.19	21.08		
20	16QAM	50	24	21.09	21.34	21.30	21.16	21.06		
20	16QAM	50	50	21.22	21.36	21.41	21.26	21.16	23	2
20	16QAM	100	0	21.21	21.36	21.35	21.28	21.23		
20	16QAM	1	0	21.40	21.38	21.66	21.50	21.37		
20	16QAM	49	0	21.21	21.43	21.35	21.11	21.27		
20	64QAM	1	99	21.32	21.31	21.48	21.39	21.30	23	3
20	64QAM	50	0	20.24	20.24	20.34	20.38	20.34		
20	64QAM	50	24	20.01	20.13	20.29	20.13	20.08		
20	64QAM	50	50	20.02	20.18	20.39	20.23	20.09		
20	64QAM	100	0	20.11	20.29	20.39	20.25	20.15	20	5
20	256QAM	1	0	18.27	18.41	18.54	18.34	18.25		
20	256QAM	1	49	18.25	18.46	18.39	18.34	18.31		
20	256QAM	1	99	18.14	18.40	18.46	18.27	18.15		
20	256QAM	50	0	18.27	18.22	18.32	18.31	18.23	20	5
20	256QAM	50	24	18.24	18.19	18.24	18.28	18.21		
20	256QAM	50	50	18.16	18.30	18.27	18.20	18.11		
20	256QAM	100	0	18.30	18.17	18.32	18.36	18.28		
Channel				39725	40173	40603	41088	41515	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.5	2548.3	2592	2637.8	2682.5		
15	QPSK	1	0	23.32	23.29	23.42	23.21	23.20	25	0
15	QPSK	1	37	23.10	23.15	23.38	23.20	23.15		
15	QPSK	1	74	23.06	23.14	23.35	23.14	23.03		
15	QPSK	36	0	22.12	22.18	22.28	22.29	22.20		
15	QPSK	36	20	22.10	22.25	22.27	22.23	22.11	24	1
15	QPSK	36	39	22.10	22.03	22.27	22.06	22.02		
15	QPSK	75	0	22.00	22.26	22.27	22.12	22.03		
15	16QAM	1	0	22.45	22.69	22.73	22.68	22.49		
15	16QAM	1	37	22.32	22.54	22.62	22.46	22.41	24	1
15	16QAM	1	74	22.41	22.21	22.63	22.54	22.31		
15	16QAM	36	0	21.01	21.27	21.43	21.16	21.04		
15	16QAM	36	20	21.01	21.28	21.23	21.03	21.09		
15	16QAM	36	39	21.08	21.28	21.35	21.19	21.05	23	2
15	16QAM	75	0	21.11	21.30	21.32	21.23	21.09		
15	64QAM	1	0	21.34	21.27	21.61	21.39	21.24		
15	64QAM	1	37	21.07	21.32	21.29	21.20	21.13		
15	64QAM	1	74	21.20	21.18	21.38	21.31	21.16	23	2
15	64QAM	36	0	20.16	20.14	20.21	20.31	20.20		
15	64QAM	36	20	20.09	20.38	20.36	20.21	20.03		
15	64QAM	36	39	20.16	20.14	20.32	20.12	20.00		
15	64QAM	75	0	20.05	20.19	20.30	20.21	20.09	22	3
15	256QAM	1	0	18.20	18.33	18.50	18.28	18.19		
15	256QAM	1	37	18.13	18.42	18.24	18.28	18.20		
15	256QAM	1	74	18.10	18.32	18.41	18.18	18.10		
15	256QAM	36	0	18.21	18.12	18.25	18.24	18.13	20	5
15	256QAM	36	20	18.12	18.09	18.16	18.21	18.12		
15	256QAM	36	39	18.01	18.20	18.22	18.06	18.08		
15	256QAM	75	0	18.23	18.13	18.22	18.33	18.15		
Channel				39700	40160	40620	41080	41540	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2501	2547	2593	2639	2685		
10	QPSK	1	0	23.32	23.28	23.38	23.15	23.11	25	0
10	QPSK	1	25	23.11	23.12	23.27	23.15	23.11		
10	QPSK	1	49	23.06	23.11	23.07	23.09	23.03		
10	QPSK	25	0	22.27	22.14	22.32	22.27	22.20		
10	QPSK	25	12	22.11	22.24	22.19	22.21	22.15	24	1
10	QPSK	25	25	22.08	22.02	22.27	22.20	22.09		
10	QPSK	50	0	22.12	22.21	22.33	22.14	22.03		
10	16QAM	1	0	22.53	22.62	22.71	22.68	22.66		
10	16QAM	1	25	22.45	22.53	22.63	22.44	22.48	24	1
10	16QAM	1	49	22.48	22.20	22.71	22.45	22.50		
10	16QAM	25	0	21.11	21.22	21.36	21.07	21.09		
10	16QAM	25	12	21.09	21.28	21.21	21.02	21.09		
10	16QAM	25	25	21.24	21.29	21.30	21.15	21.15	23	2
10	16QAM	50	0	21.22	21.29	21.30	21.20	21.27		
10	64QAM	1	0	21.39	21.29	21.51	21.43	21.38		
10	64QAM	1	25	21.22	21.29	21.23	21.22	21.24		
10	64QAM	1	49	21.39	21.23	21.43	21.25	21.30	23	2
10	64QAM	25	0	20.22	20.11	20.23	20.30	20.39		
10	64QAM	25	12	20.07	20.01	20.20	20.09	20.13		
10	64QAM	25	25	20.22	20.03	20.25	20.09	20.09		
10	256QAM	50	0	20.10	20.22	20.33	20.21	20.15	20	5
10	256QAM	1	0	18.22	18.30	18.41	18.24	18.10		
10	256QAM	1	25	18.12	18.31	18.31	18.29	18.24		
10	256QAM	1	49	18.01	18.33	18.40	18.14	18.06		
10	256QAM	25	0	18.21	18.15	18.21	18.22	18.11	20	5
10	256QAM	25	12	18.14	18.15	18.12	18.23	18.09		
10	256QAM	25	25	18.09	18.16	18.17	18.09	18.04		
10	256QAM	50	0	18.17	18.08	18.19	18.23	18.22		
Channel				39675	40148	40620	41093	41565	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	23.31	23.30	23.35	23.15	23.12	25	0
5	QPSK	1	12	23.06	23.10	23.37	23.09	23.06		
5	QPSK	1	24	23.03	23.08	23.15	23.03	23.08		
5	QPSK	12	0	22.28	22.15	22.27	22.30	22.28		
5	QPSK	12	7	22.11	22.25	22.25	22.23	22.12	24	1
5	QPSK	12	13	22.01	22.14	22.16	22.02	22.08		
5	QPSK	25	0	22.09	22.26	22.37	22.11	22.06		
5	16QAM	1	0	22.55	22.67	22.68	22.56	22.56		
5	16QAM	1	12	22.34	22.55	22.64	22.45	22.49	24	1
5	16QAM	1	24	22.50	22.24	22.62	22.48	22.42		
5	16QAM	12	0	21.12	21.21	21.44	21.16	21.12		
5	16QAM	12	7	21.09	21.30	21.19	21.06	21.08		
5	16QAM	12	13	21.19	21.29	21.27	21.15	21.20	23	2
5	16QAM	25	0	21.26	21.31	21.22	21.17	21.29		
5	64QAM	1	0	21.44	21.30	21.55	21.44	21.37		
5	64QAM	1	12	21.24	21.38	21.25	21.23	21.23		
5	64QAM	1	24	21.34	21.25	21.40	21.25	21.27	23	2
5	64QAM	12	0	20.21	20.17	20.21	20.27	20.41		
5	64QAM	12	7	20.07	20.01	20.23	20.01	20.06		
5	64QAM	12	13	20.17	20.09	20.35	20.14	20.10		
5	64QAM	25	0	20.10	20.15	20.31	20.22	20.15	22	3
5	256QAM	1	0	18.21	18.27	18.46	18.29	18.11		
5	256QAM	1	12	18.13	18.42	18.36	18.28	18.17		
5	256QAM	1	24	18.06	18.33	18.32	18.15	18.02		
5	256QAM	12	0	18.21	18.09	18.21	18.15	18.13	20	5
5	256QAM	12	7	18.19	18.09	18.11	18.25	18.09		
5	256QAM	12	13	18.12	18.21	18.14	18.12	18.05		
5	256QAM	25	0	18.16	18.03	18.28	18.21	18.15		



WCDMA IV Ant4 DS#4				
Band		WCDMA IV Ant4		
TX Channel		1312	1413	Tune-up Limit (dBm)
Rx Channel		1537	1638	
Frequency (MHz)		1712.4	1732.6	
		1752.6		
3GPP Rel 99	AMR 12.2Kbps	19.58	19.75	19.66
3GPP Rel 99	RMC 12.2Kbps	19.64	19.81	19.76
3GPP Rel 6	HSDPA Subtest-1	18.67	18.65	18.84
3GPP Rel 6	HSDPA Subtest-2	18.71	18.68	18.62
3GPP Rel 6	HSDPA Subtest-3	18.14	18.20	18.22
3GPP Rel 6	HSDPA Subtest-4	18.14	18.27	18.15
3GPP Rel 6	DC-HSDPA Subtest-1	18.75	18.86	18.77
3GPP Rel 6	DC-HSDPA Subtest-2	18.62	18.65	18.53
3GPP Rel 6	DC-HSDPA Subtest-3	18.06	18.13	18.13
3GPP Rel 6	DC-HSDPA Subtest-4	18.04	18.23	18.24
3GPP Rel 6	HSUPA Subtest-1	18.84	18.76	18.54
3GPP Rel 6	HSUPA Subtest-2	16.86	16.91	16.74
3GPP Rel 6	HSUPA Subtest-3	17.80	17.90	17.85
3GPP Rel 6	HSUPA Subtest-4	16.58	16.61	16.53
3GPP Rel 6	HSUPA Subtest-5	18.57	18.60	18.57
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	16.23	16.47	16.30

Band 4 Ant4 DS14 Main PA										
BW (MHz)	Modulat on	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Turn-on Time (ms)	APR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	19.72	19.75	19.84	21.5	0		
20	QPSK	1	8	19.70	19.72	19.80				
20	QPSK	1	96	19.82	19.82	19.82				
20	QPSK	1	96	19.82	19.82	19.82				
20	QPSK	50	0	19.85	19.77	19.58	21.5	0		
20	QPSK	50	24	19.80	19.70	19.55				
20	QPSK	50	50	19.75	19.67	19.84				
20	QPSK	100	0	19.81	19.81	19.84	21.5	0		
20	QPSK	100	0	19.87	19.85	19.83				
20	16QAM	1	49	19.75	19.69	19.85	21.5	0		
20	16QAM	1	59	19.82	19.75	19.87				
20	16QAM	50	0	19.75	19.69	19.85				
20	16QAM	50	24	19.88	19.72	19.71	21.5	0		
20	16QAM	50	50	19.59	19.66	19.89				
20	16QAM	100	0	19.80	19.85	19.82	21.5	0		
20	16QAM	100	0	19.80	19.82	19.81				
20	16QAM	1	49	19.80	19.73	19.84	21.5	0		
20	16QAM	1	59	19.80	19.73	19.84				
20	16QAM	1	96	19.82	19.85	19.81	21.5	0		
20	16QAM	1	96	19.82	19.85	19.81				
20	16QAM	50	24	19.75	19.76	19.52	21.5	0		
20	16QAM	50	50	19.75	19.85	19.52				
20	16QAM	100	0	19.80	19.70	19.55	21.5	0		
20	16QAM	100	0	19.80	19.70	19.55				
20	256QAM	1	49	19.75	19.64	19.85	20	1.5		
20	256QAM	1	49	19.72	19.50	19.25				
20	256QAM	1	59	19.82	19.70	19.85	20	1.5		
20	256QAM	1	59	19.82	19.70	19.85				
20	256QAM	50	24	19.28	19.20	19.30	20	1.5		
20	256QAM	50	24	19.28	19.20	19.30				
20	256QAM	50	50	19.21	19.23	19.29	20	1.5		
20	256QAM	50	50	19.21	19.23	19.29				
20	256QAM	100	0	19.25	19.20	19.25	20	1.5		
20	256QAM	100	0	19.25	19.20	19.25				
20	256QAM	1	59	19.80	19.53	19.49	20	1		
20	256QAM	1	59	19.80	19.53	19.49				
20	256QAM	50	24	19.30	19.42	19.41	21	0		
20	256QAM	50	24	19.30	19.42	19.41				
20	256QAM	50	50	19.46	19.52	19.73	21	0		
20	256QAM	50	50	19.46	19.52	19.73				
20	256QAM	100	0	19.40	19.58	19.41	20	1		
20	256QAM	100	0	19.40	19.58	19.41				
20	256QAM	1	59	19.40	19.53	19.49	20	1		
20	256QAM	1	59	19.40	19.53	19.49				
20	256QAM	50	24	19.34	19.44	19.33	20	1		
20	256QAM	50	24	19.34	19.44	19.33				
20	256QAM	50	50	19.36	19.50	19.42	20	1		
20	256QAM	50	50	19.36	19.50	19.42				
20	256QAM	100	0	19.40	19.40	19.25	20	1		
20	256QAM	100	0	19.40	19.40	19.25				
Channel										
Frequency (MHz)										
15	QPSK	1	0	19.71	19.75	19.71	21.5	0		
15	QPSK	1	8	19.83	19.81	19.85				
15	QPSK	1	74	19.88	19.88	19.82	21.5	0		
15	QPSK	1	74	19.88	19.88	19.82				
15	QPSK	36	0	19.84	19.84	19.52	21.5	0		
15	QPSK	36	20	19.89	19.79	19.58				
15	QPSK	36	36	19.57	19.64	19.81	21.5	0		
15	QPSK	36	36	19.58	19.60	19.83				
15	16QAM	1	4	19.88	19.82	19.83	21.5	0		
15	16QAM	1	37	19.83	19.87	19.82				
15	16QAM	1	74	19.75	19.84	19.85	21.5	0		
15	16QAM	1	74	19.75	19.84	19.85				
15	16QAM	36	0	19.88	19.88	19.81	21.5	0		
15	16QAM	36	20	19.84	19.82	19.85				
15	16QAM	36	36	19.84	19.88	19.80	21.5	0		
15	16QAM	36	36	19.84	19.88	19.80				
15	16QAM	75	0	19.84	19.88	19.80	21.5	0		
15	16QAM	75	0	19.84	19.88	19.80				
15	16QAM	1	0	19.81	19.82	19.55	21.5	0		
15	16QAM	1	37	19.84	19.82	19.55				
15	16QAM	1	74	19.85	19.84	19.80	21.5	0		
15	16QAM	1	74	19.85	19.84	19.80				
15	16QAM	36	0	19.82	19.80	19.72	21.5	0		
15	16QAM	36	20	19.82	19.80	19.72				
15	16QAM	36	36	19.53	19.54	19.57	21.5	0		
15	16QAM	36	36	19.53	19.54	19.57				
15	16QAM	75	0	19.85	19.77	19.70	21.5	0		
15	16QAM	75	0	19.85	19.77	19.70				
15	256QAM	1	0	19.75	19.82	19.75	20	1.5		
15	256QAM	1	37	19.09	19.17	19.13				
15	256QAM	1	74	19.15	19.17	19.13	20	1.5		
15	256QAM	1	74	19.15	19.17	19.13				
15	256QAM	36	0	19.20	19.08	19.22	20	1.5		
15	256QAM	36	20	19.20	19.08	19.22				
15	256QAM	36	36	19.16	19.19	19.18	20	1.5		
15	256QAM	36	36	19.16	19.19	19.18				
15	256QAM	75	0	19.04	19.25	19.15	20	1.5		
15	256QAM	75	0	19.04	19.25	19.15				
Channel										
Frequency (MHz)										
10	QPSK	1	0	19.71	19.75	19.71	21.5	0		
10	QPSK	1	8	19.83	19.81	19.85				
10	QPSK	1	25	19.73	19.84	19.48	21	0		
10	QPSK	1	49	19.48	19.83	19.40				
10	QPSK	25	0	19.87	19.79	19.56	21	0		
10	QPSK	25	12	19.18	19.65	19.70				
10	QPSK	25	25	19.63	19.45	19.40	21	0		
10	QPSK	25	25	19.63	19.45	19.40				
10	16QAM	1	0	19.82	19.82	19.72	21	0		
10	16QAM	1	0	19.82	19.82	19.72				
10	16QAM	1	25	19.40	19.52	19.60	21	0		
10	16QAM	1	25	19.40	19.52	19.60				
10	16QAM	25	12	19.48	19.79	19.15	21	0		
10	16QAM	25	12	19.48	19.79	19.15				
10	16QAM	25	25	19.16	19.44	19.50	21	0		
10	16QAM	25	25	19.16	19.44	19.50				
10	16QAM	50	0	19.41	19.65	19.85	21	0		
10	16QAM	50	0	19.41	19.65	19.85				
10	16QAM	1	0	19.17	19.67	19.65	21	0		
10	16QAM	1	0	19.17	19.67	19.65				
10	16QAM	1	25	19.43	19.30	19.52	21	0		
10	16QAM	1	25	19.43	19.30	19.52				
10	16QAM	25	0	19.48	19.58	19.56	21	0		
10	16QAM	25	0	19.48	19.58	19.56				
10	16QAM	25	12	19.41	19.35	19.44	21	0		
10	16QAM	25	12	19.41	19.35	19.44				
10	16QAM	25	25	19.59	19.31	19.25	21	0		
10	16QAM	25	25	19.59	19.31	19.25				
10	16QAM	50	0	19.42	19.48	19.70	21	0		
10	16QAM	50	0	19.42	19.48	19.70				
10	256QAM	1	0	19.30	19.61	19.41	20	1		
10	256QAM	1	0	19.30	19.61	19.41				
10	256QAM	1	25	19.39	19.45	19.35	20	1		
10	256QAM	1	25	19.39	19.45	19.35				
10	256QAM	1	49	19.31	19.48	19.43	20	1		
10	256QAM	1	49	19.31	19.48	19.43				
10	256QAM	25	0	19.20	19.45	19.35	20	1		
10	256QAM	25	0	19.20	19.45	19.35				
10	256QAM	25	12	19.19	19.35	19.19	20	1		
10	256QAM	25	12	19.19	19.35	19.19				
10	256QAM	25	25	19.22	19.40	19.30	20	1		
10	256QAM	25	25	19.22	19.40	19.30				
10	256QAM	50	0	19.35	19.35	19.37	20	1		
10	256QAM	50	0	19.35	19.35	19.37				
Channel										
Frequency (MHz)										
5	QPSK	1	0	19.75	19.75	19.75	21.5	0		

Band 38 Ant4 DSI4 Main PA										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	19.46	19.68	19.53	21	0		
20	QPSK	1	49	19.49	19.26	19.35				
20	QPSK	1	99	19.22	19.21	19.45				
20	QPSK	50	0	19.31	19.59	19.52				
20	QPSK	50	24	19.35	19.58	19.38				
20	QPSK	50	50	19.26	19.22	19.31	21	0		
20	QPSK	100	0	19.01	19.22	19.10				
20	16QAM	1	0	19.33	19.26	19.47				
20	16QAM	1	49	19.26	19.31	19.27				
20	16QAM	1	99	19.25	19.44	19.37				
20	16QAM	50	0	19.31	19.49	19.45	21	0		
20	16QAM	50	24	19.32	19.26	19.07				
20	16QAM	50	50	19.06	19.33	19.19				
20	16QAM	100	0	19.30	19.49	19.53				
20	64QAM	1	0	19.21	19.45	19.37	21	0		
20	64QAM	1	49	19.22	19.31	19.22				
20	64QAM	1	99	19.25	19.21	19.31				
20	64QAM	50	0	19.20	19.53	19.06				
20	64QAM	50	24	19.24	18.92	19.52				
20	64QAM	50	50	19.33	18.99	19.27	21	0		
20	64QAM	100	0	19.19	19.27	19.31				
20	256QAM	1	0	18.41	18.65	18.35				
20	256QAM	1	49	18.33	18.41	18.46				
20	256QAM	1	99	18.47	18.32	18.51				
20	256QAM	50	0	18.39	18.39	18.38	20	1		
20	256QAM	50	24	18.53	18.33	18.50				
20	256QAM	50	50	18.37	18.44	18.47				
20	256QAM	100	0	18.38	18.43	18.34				
Channel				37825	38000	38175	1 tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2577.5	2595	2612.5				
15	QPSK	1	0	19.18	19.51	19.43	21	0		
15	QPSK	1	37	19.39	19.16	19.27				
15	QPSK	1	74	19.23	19.18	19.18				
15	QPSK	36	0	19.04	19.50	19.20				
15	QPSK	36	20	19.30	19.26	19.15				
15	QPSK	36	39	19.18	19.13	19.16	21	0		
15	QPSK	75	0	19.52	19.30	19.10				
15	16QAM	1	0	19.16	19.03	19.28				
15	16QAM	1	37	19.11	19.22	19.28				
15	16QAM	1	74	19.31	19.31	19.12				
15	16QAM	36	0	19.16	19.38	19.34	21	0		
15	16QAM	36	20	19.08	19.29	19.52				
15	16QAM	36	39	19.44	19.32	19.52				
15	16QAM	75	0	19.13	19.36	19.35				
15	64QAM	1	0	19.02	19.26	19.40				
15	64QAM	1	37	19.04	19.20	19.18	21	0		
15	64QAM	1	74	19.30	19.14	19.19				
15	64QAM	36	0	19.25	19.33	19.01				
15	64QAM	36	20	19.18	19.52	19.37				
15	64QAM	36	39	19.37	19.01	19.12				
15	64QAM	75	0	19.44	19.11	19.35	20	1		
15	256QAM	1	0	18.32	18.55	18.27				
15	256QAM	1	37	18.21	18.30	18.35				
15	256QAM	1	74	18.35	18.20	18.37				
15	256QAM	36	0	18.24	18.34	18.34				
15	256QAM	36	20	18.39	18.21	18.47	20	1		
15	256QAM	36	39	18.31	18.33	18.42				
15	256QAM	75	0	18.24	18.38	18.30				
Channel				37800	38000	38200	1 tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	19.36	19.58	19.27	21	0		
10	QPSK	1	25	19.40	19.31	19.22				
10	QPSK	1	49	19.18	19.16	19.23				
10	QPSK	25	0	19.23	19.31	19.40				
10	QPSK	25	12	19.26	19.32	19.31				
10	QPSK	25	25	19.30	19.28	19.25	21	0		
10	QPSK	50	0	19.50	19.31	19.35				
10	16QAM	1	0	19.29	19.06	19.42				
10	16QAM	1	25	19.49	19.16	19.31				
10	16QAM	1	49	19.30	19.35	19.20				
10	16QAM	25	0	19.25	19.23	19.20	21	0		
10	16QAM	25	12	19.14	19.32	19.05				
10	16QAM	25	25	19.08	19.16	19.17				
10	16QAM	50	0	19.26	19.20	19.25				
10	64QAM	1	0	19.52	19.11	19.37				
10	64QAM	1	25	19.01	19.24	19.20	21	0		
10	64QAM	1	49	19.31	19.30	19.13				
10	64QAM	25	0	19.17	19.32	19.42				
10	64QAM	25	12	19.06	19.30	19.39				
10	64QAM	25	25	19.23	19.00	19.24				
10	64QAM	50	0	19.32	19.21	19.29	20	1		
10	256QAM	1	0	18.34	18.53	18.25				
10	256QAM	1	25	18.26	18.28	18.41				
10	256QAM	1	49	18.41	18.20	18.42				
10	256QAM	25	0	18.34	18.34	18.28				
10	256QAM	25	12	18.47	18.20	18.43	20	1		
10	256QAM	25	25	18.23	18.30	18.33				
10	256QAM	50	0	18.28	18.35	18.24				
Channel				37775	38000	38225	1 tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2572.5	2595	2617.5				
5	QPSK	1	0	19.25	19.60	19.39	21	0		
5	QPSK	1	12	19.39	19.37	19.16				
5	QPSK	1	24	19.20	19.06	19.20				
5	QPSK	12	0	19.24	19.42	19.28				
5	QPSK	12	7	19.24	19.39	19.26				
5	QPSK	12	13	19.19	19.27	19.36	21	0		
5	QPSK	25	0	19.41	19.24	19.39				
5	16QAM	1	0	19.29	19.04	19.49				
5	16QAM	1	12	19.14	19.14	19.32				
5	16QAM	1	24	19.13	19.25	19.25				
5	16QAM	12	0	19.24	19.16	19.28	21	0		
5	16QAM	12	7	19.07	19.18	19.52				
5	16QAM	12	13	19.42	19.33	19.00				
5	16QAM	25	0	19.28	19.33	19.26				
5	64QAM	1	0	19.03	19.14	19.33				
5	64QAM	1	12	19.01	19.38	19.22	21	0		
5	64QAM	1	24	19.22	19.17	19.20				
5	64QAM	12	0	19.22	19.24	19.43				
5	64QAM	12	7	19.04	19.36	19.36				
5	64QAM	12	13	19.29	19.11	19.14				
5	64QAM	25	0	19.08	19.18	19.35	20	1		
5	256QAM	1	0	18.36	18.50	18.32				
5	256QAM	1	12	18.26	18.36	18.35				
5	256QAM	1	24	18.37	18.26	18.39	20	1		
5	256QAM	12	0	18.34	18.26	18.29				
5	256QAM	12	7	18.50	18.22	18.42				
5	256QAM	12	13	18.23	18.31	18.33				
5	256QAM	25	0	18.27	18.36	18.29				



		WCDMA IV Ant5 DS14		
Band		WCDMA IV Ant5		
TX Channel		1312	1413	1513
Rx Channel		1537	1638	1738
Frequency (MHz)		1712.4	1732.6	1752.6
3GPP Rel 99	AMR 12.2Kbps	20.86	20.90	20.80
3GPP Rel 99	RMC 12.2Kbps	20.89	20.93	20.83
3GPP Rel 6	HSDPA Subtest-1	19.87	19.96	19.96
3GPP Rel 6	HSDPA Subtest-2	19.88	19.89	19.91
3GPP Rel 6	HSDPA Subtest-3	19.41	19.46	19.49
3GPP Rel 6	HSDPA Subtest-4	19.32	19.38	19.39
3GPP Rel 6	DC-HSDPA Subtest-1	19.87	19.99	19.92
3GPP Rel 6	DC-HSDPA Subtest-2	19.77	19.88	19.84
3GPP Rel 6	DC-HSDPA Subtest-3	19.23	19.43	19.34
3GPP Rel 6	DC-HSDPA Subtest-4	19.20	19.33	19.31
3GPP Rel 6	HSUPA Subtest-1	19.75	19.89	19.87
3GPP Rel 6	HSUPA Subtest-2	17.92	18.00	17.97
3GPP Rel 6	HSUPA Subtest-3	18.85	19.06	19.04
3GPP Rel 6	HSUPA Subtest-4	17.81	17.86	17.89
3GPP Rel 6	HSUPA Subtest-5	19.77	19.89	19.79
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	17.43	17.51	17.53



Band 4 Ant5 DS14 Main PA															
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Turn-on (sec)	APRS (dB)							
Channel															
1720 1732.5 1745															
20	QPSK	1	0	20.95	21.07	20.95	22.5	0							
20	QPSK	1	8	20.92	20.99	20.93		1							
20	QPSK	1	16	20.91	20.94	20.93		1							
20	QPSK	80	0	18.86	18.92	18.87		0							
20	QPSK	50	24	19.91	19.99	19.94	21.5	1							
20	QPSK	50	50	19.84	19.91	19.81		1							
20	QPSK	100	0	18.82	18.92	18.85		0							
20	16QAM	1	0	20.02	20.07	19.97		0							
20	16QAM	1	49	19.90	20.01	19.96	21.5	1							
20	16QAM	1	99	19.84	19.97	19.85		1							
20	16QAM	50	0	19.85	19.93	19.83		0							
20	16QAM	50	24	19.85	19.95	19.87		0							
20	16QAM	50	50	19.89	19.94	19.92	20.5	2							
20	16QAM	100	0	19.84	19.97	19.85		0							
20	16QAM	1	49	19.84	19.95	19.85		0							
20	16QAM	1	99	19.87	19.94	19.85		0							
20	16QAM	50	0	17.82	17.87	17.80	19.5	3							
20	16QAM	50	24	17.77	17.88	17.83		3							
20	16QAM	50	50	17.89	17.93	17.90		3							
20	16QAM	100	0	17.91	17.98	17.82		3							
20	256QAM	1	0	19.98	19.97	19.92	17.5	5							
20	256QAM	1	49	19.99	19.94	19.96		5							
20	256QAM	1	99	19.92	19.96	19.93		5							
20	256QAM	50	0	19.81	19.96	19.84		5							
20	256QAM	50	24	19.85	19.92	19.87	17.5	5							
20	256QAM	50	50	19.85	19.92	19.80		5							
20	256QAM	100	0	19.84	19.93	19.89		5							
Channel <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="ghost"></td>															
1717.5 1732.5 1747.5															
15	QPSK	1	0	20.95	20.92	20.94	22.5	0							
15	QPSK	1	8	20.92	20.99	20.93		1							
15	QPSK	1	16	20.91	20.94	20.93		1							
15	QPSK	80	0	19.79	19.88	19.84		0							
15	QPSK	36	0	19.81	19.93	19.77	21.5	1							
15	QPSK	36	36	19.83	19.97	19.76		1							
15	QPSK	75	0	19.80	19.87	19.72		0							
15	16QAM	1	0	19.95	19.87	19.88		0							
15	16QAM	1	97	19.83	19.89	19.85	21.5	1							
15	16QAM	1	74	19.72	19.84	19.74		1							
15	16QAM	36	0	19.87	19.92	19.79		0							
15	16QAM	36	20	19.77	19.87	19.79		0							
15	16QAM	36	36	19.85	19.92	19.80	20.5	2							
15	16QAM	75	0	19.80	19.88	19.72		0							
15	16QAM	1	0	19.82	19.89	19.80		0							
15	16QAM	1	97	19.86	19.92	19.82		0							
15	16QAM	1	74	19.82	19.82	19.75	20.5	2							
15	16QAM	36	0	17.74	17.85	17.77		2							
15	16QAM	36	20	17.82	17.87	17.72		2							
15	16QAM	36	36	17.72	17.88	17.80		2							
15	256QAM	1	0	19.85	19.95	19.82	17.5	5							
15	256QAM	1	97	19.81	19.97	19.86		5							
15	256QAM	1	74	19.78	19.84	19.74		5							
15	256QAM	36	0	19.75	19.85	19.78		5							
15	256QAM	36	20	19.71	19.83	19.81	17.5	5							
15	256QAM	36	36	19.82	19.92	19.75		5							
15	256QAM	75	0	19.71	19.89	19.84		5							
15	256QAM	75	0	19.71	19.89	19.84		5							
Channel															
20000 20175 20350															
10	QPSK	1	0	20.85	20.96	20.89	22.5	0							
10	QPSK	1	25	20.86	20.94	20.84		0							
10	QPSK	1	49	20.85	20.92	20.77		0							
10	QPSK	25	0	19.85	19.91	19.83		0							
10	QPSK	25	12	19.85	19.89	19.81	21.5	1							
10	QPSK	25	16	19.75	19.83	19.72		1							
10	QPSK	50	0	19.71	19.91	19.76		0							
10	16QAM	1	0	19.89	20.02	19.89		0							
10	16QAM	1	99	19.79	19.95	19.89	21.5	1							
10	16QAM	1	49	19.72	19.92	19.72		1							
10	16QAM	25	0	19.82	19.98	19.84		0							
10	16QAM	25	12	19.75	19.84	19.78		0							
10	16QAM	25	26	19.77	19.89	19.80	20.5	2							
10	16QAM	50	0	19.79	19.92	19.82		0							
10	16QAM	1	0	19.88	19.92	19.85		0							
10	16QAM	1	25	19.85	19.95	19.74		0							
10	16QAM	1	49	19.82	19.94	19.84	20.5	2							
10	16QAM	25	0	19.82	19.98	19.84		0							
10	16QAM	25	12	19.75	19.84	19.78		0							
10	16QAM	25	26	19.77	19.89	19.80		0							
10	16QAM	50	0	19.79	19.92	19.82	20.5	2							
10	16QAM	1	0	19.88	19.92	19.85		0							
10	16QAM	1	25	19.85	19.95	19.74		0							
10	16QAM	1	49	19.82	19.94	19.84		0							
10	16QAM	25	0	19.82	19.98	19.84	20.5	2							
10	16QAM	25	12	19.75	19.84	19.78		2							
10	16QAM	25	26	19.77	19.89	19.80		2							
10	16QAM	50	0	19.79	19.92	19.82		2							
10	256QAM	1	0	19.88	19.92	19.85	17.5	5							
10	256QAM	1	25	19.85	19.95	19.74		5							
10	256QAM	1	49	19.82	19.94	19.84		5							
10	256QAM	25	0	19.82	19.98	19.84		5							
10	256QAM	25	12	19.75	19.84	19.78	17.5	5							
10	256QAM	25	26	19.77	19.89	19.80		5							
10	256QAM	50	0	19.79	19.92	19.82		5							
10	256QAM	50	0	19.79	19.92	19.82		5							
Channel															
1711.5 1732.5 1753.5															
3	QPSK	1	0	20.86	20.97	20.92	22.5	0							
3	QPSK	1	8	20.84	20.96	20.86		0							
3	QPSK	1	14	20.90	20.93	20.75		0							
3	QPSK	8	0	19.84	19.99	19.91		0							
3	QPSK	8	4	19.83	19.93	19.78	21.5	1							
3	QPSK	8	7	19.72	19.76	19.75		1							
3	QPSK	15	0	19.77	19.82	19.73		0							
3	16QAM	1	0	19.96	19.94	19.84		0							
3	16QAM	1	8	19.75	19.87	19.81	21.5	1							
3	16QAM	1	14	19.78	19.87	19.72		1							
3	16QAM	8	0	19.82	19.90	19.80									

Band 38 Ant5 DS4 Main PA											
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel				37850	38000	38150					
Frequency (MHz)				2580	2595	2610					
20	QPSK	1	0	18.60	18.89	18.63	20.5	0			
20	QPSK	1	49	18.58	18.69	18.59					
20	QPSK	1	99	18.68	18.74	18.60					
20	QPSK	50	0	18.58	18.83	18.73					
20	QPSK	50	24	18.80	18.77	18.63					
20	QPSK	50	50	18.62	18.81	18.61	20.5	0			
20	QPSK	100	0	18.63	18.75	18.67					
20	16QAM	1	0	18.84	18.74	18.70					
20	16QAM	1	49	18.66	18.82	18.85					
20	16QAM	1	99	18.61	18.76	18.64					
20	16QAM	50	0	18.75	18.74	18.69	20	0.5			
20	16QAM	50	24	18.57	18.66	18.62					
20	16QAM	50	50	18.67	18.70	18.71					
20	16QAM	100	0	18.70	18.70	18.65					
20	64QAM	1	0	18.76	18.75	18.71					
20	64QAM	1	49	18.61	18.69	18.63	20	0.5			
20	64QAM	1	99	18.65	18.65	18.64					
20	64QAM	50	0	17.63	17.69	17.67					
20	64QAM	50	24	17.58	17.60	17.58					
20	64QAM	50	50	17.63	17.65	17.59					
20	64QAM	100	0	17.82	17.81	17.77	19	1.5			
20	256QAM	1	0	15.67	15.76	15.71					
20	256QAM	1	49	15.68	15.73	15.74					
20	256QAM	1	99	15.59	15.68	15.61					
20	256QAM	50	0	15.68	15.71	15.68					
20	256QAM	50	24	15.54	15.61	15.61	17	3.5			
20	256QAM	50	50	15.67	15.67	15.61					
20	256QAM	100	0	15.63	15.72	15.66					
Channel				37825	38000	38175	Tune-up limit (dBm)			MPR (dB)	
Frequency (MHz)				2577.5	2595	2612.5					
15	QPSK	1	0	18.75	18.81	18.61	20.5	0			
15	QPSK	1	37	18.68	18.88	18.68					
15	QPSK	1	74	18.64	18.69	18.71					
15	QPSK	36	0	18.62	18.80	18.72					
15	QPSK	36	20	18.85	18.87	18.74					
15	QPSK	36	39	18.76	18.70	18.58	20.5	0			
15	QPSK	75	0	18.60	18.68	18.55					
15	16QAM	1	0	18.60	18.59	18.80					
15	16QAM	1	37	18.63	18.83	18.73					
15	16QAM	1	74	18.62	18.80	18.60					
15	16QAM	36	0	18.74	18.67	18.61	20	0.5			
15	16QAM	36	20	18.53	18.67	18.64					
15	16QAM	36	39	18.60	18.64	18.70					
15	16QAM	75	0	18.64	18.61	18.60					
15	64QAM	1	0	18.67	18.73	18.65					
15	64QAM	1	37	18.56	18.69	18.55	20	0.5			
15	64QAM	1	74	18.57	18.65	18.65					
15	64QAM	36	0	17.56	17.68	17.63					
15	64QAM	36	20	17.54	17.55	17.59					
15	64QAM	36	39	17.55	17.56	17.52					
15	64QAM	75	0	17.82	17.78	17.78	19	1.5			
15	256QAM	1	0	15.67	15.67	15.70					
15	256QAM	1	37	15.59	15.71	15.73					
15	256QAM	1	74	15.53	15.68	15.60					
15	256QAM	36	0	15.59	15.66	15.60					
15	256QAM	36	20	15.55	15.53	15.57	17	3.5			
15	256QAM	36	39	15.62	15.64	15.57					
15	256QAM	75	0	15.63	15.69	15.60					
Channel				37800	38000	38200	Tune-up limit (dBm)			MPR (dB)	
Frequency (MHz)				2575	2595	2615					
10	QPSK	1	0	18.61	18.78	18.62	20.5	0			
10	QPSK	1	25	18.57	18.71	18.67					
10	QPSK	1	49	18.62	18.75	18.70					
10	QPSK	25	0	18.53	18.87	18.77					
10	QPSK	25	12	18.65	18.70	18.74					
10	QPSK	25	25	18.67	18.70	18.62	20.5	0			
10	QPSK	50	0	18.68	18.67	18.68					
10	16QAM	1	0	18.83	18.63	18.74					
10	16QAM	1	25	18.63	18.88	18.78					
10	16QAM	1	49	18.74	18.76	18.74					
10	16QAM	25	0	18.72	18.65	18.68	20	0.5			
10	16QAM	25	12	18.55	18.66	18.60					
10	16QAM	25	25	18.61	18.60	18.68					
10	16QAM	50	0	18.63	18.67	18.66					
10	64QAM	1	0	18.68	18.73	18.73					
10	64QAM	1	25	18.59	18.63	18.58	20	0.5			
10	64QAM	1	49	18.61	18.63	18.65					
10	64QAM	25	0	17.55	17.69	17.63					
10	64QAM	25	12	17.59	17.52	17.50					
10	64QAM	25	25	17.54	17.65	17.58					
10	64QAM	50	0	17.77	17.74	17.75	19	1.5			
10	256QAM	1	0	15.61	15.72	15.71					
10	256QAM	1	25	15.60	15.64	15.73					
10	256QAM	1	49	15.54	15.64	15.61					
10	256QAM	25	0	15.58	15.72	15.59					
10	256QAM	25	12	15.53	15.62	15.60	17	3.5			
10	256QAM	25	25	15.68	15.62	15.57					
10	256QAM	50	0	15.62	15.73	15.64					
Channel				37775	38000	38225	Tune-up limit (dBm)			MPR (dB)	
Frequency (MHz)				2572.5	2595	2617.5					
5	QPSK	1	0	18.63	18.81	18.68	20.5	0			
5	QPSK	1	12	18.71	18.77	18.55					
5	QPSK	1	24	18.71	18.75	18.62					
5	QPSK	12	0	18.59	18.75	18.71					
5	QPSK	12	7	18.68	18.76	18.70					
5	QPSK	12	13	18.72	18.65	18.64	20.5	0			
5	QPSK	25	0	18.65	18.69	18.59					
5	16QAM	1	0	18.72	18.87	18.81					
5	16QAM	1	12	18.65	18.86	18.71					
5	16QAM	1	24	18.75	18.88	18.63					
5	16QAM	12	0	18.74	18.76	18.69	20	0.5			
5	16QAM	12	7	18.54	18.57	18.59					
5	16QAM	12	13	18.66	18.71	18.66					
5	16QAM	25	0	18.67	18.72	18.66					
5	64QAM	1	0	18.73	18.76	18.72					
5	64QAM	1	12	18.54	18.65	18.63	20	0.5			
5	64QAM	1	24	18.67	18.59	18.60					
5	64QAM	12	0	17.56	17.65	17.62					
5	64QAM	12	7	17.55	17.58	17.57					
5	64QAM	12	13	17.61	17.63	17.52					
5	64QAM	25	0	17.81	17.76	17.73	19	1.5			
5	256QAM	1	0	15.62	15.77	15.63					
5	256QAM	1	12	15.65	15.68	15.72					
5	256QAM	1	24	15.60	15.60	15.51					
5	256QAM	12	0	15.61	15.61	15.67					
5	256QAM	12	7	15.55	15.56	15.59	17	3.5			
5	256QAM	12	13	15.63	15.67	15.55					
5	256QAM	25	0	15.63	15.70	15.63					

Band 41 Ant5 DSI4 Main PA										
BW [MHz]	Modulate on	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				2506	2549.5	2593	2636.5	2680		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	18.69	18.62	18.91	18.67	18.77	20.5	0
20	QPSK	1	49	18.69	18.70	18.64	18.66	18.80		
20	QPSK	1	99	18.50	18.68	18.74	18.71	18.53		
20	QPSK	50	0	18.73	18.75	18.86	18.68	18.77		
20	QPSK	50	24	18.62	18.61	18.85	18.80	18.61	20.5	0
20	QPSK	50	50	18.57	18.71	18.58	18.54	18.60		
20	QPSK	100	0	18.55	18.67	18.71	18.69	18.64		
20	16QAM	1	0	18.77	18.67	18.87	18.78	18.59		
20	16QAM	1	49	18.77	18.63	18.79	18.65	18.61	20.5	0
20	16QAM	1	99	18.53	18.62	18.77	18.57	18.60		
20	16QAM	50	0	18.32	18.33	18.36	18.32	18.24		
20	16QAM	50	24	18.11	18.13	18.26	18.27	18.14		
20	16QAM	50	50	18.23	18.29	18.33	18.30	18.23	20	0.5
20	16QAM	100	0	18.17	18.25	18.29	18.29	18.23		
20	64QAM	1	0	18.34	18.38	18.37	18.30	18.34		
20	64QAM	1	49	18.25	18.22	18.31	18.24	18.17		
20	64QAM	1	99	18.14	18.24	18.22	18.26	18.17	19	1.5
20	64QAM	50	0	17.27	17.23	17.33	17.25	17.28		
20	64QAM	50	24	17.14	17.18	17.20	17.19	17.08		
20	64QAM	50	50	17.17	17.27	17.30	17.25	17.23		
20	64QAM	100	0	17.28	17.40	17.41	17.42	17.36	17	3.5
20	256QAM	1	0	15.26	15.26	15.38	15.34	15.31		
20	256QAM	1	49	15.32	15.26	15.36	15.36	15.25		
20	256QAM	1	99	15.12	15.20	15.25	15.22	15.13		
20	256QAM	50	0	15.20	15.27	15.29	15.24	15.24	17	3.5
20	256QAM	50	24	15.18	15.10	15.25	15.22	15.14		
20	256QAM	50	50	15.13	15.25	15.23	15.32	15.20		
20	256QAM	100	0	15.17	15.26	15.30	15.32	15.26		
Channel				2503.5	2546.3	2593	2637.8	2682.5	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2503.5	2546.3	2593	2637.8	2682.5		
15	QPSK	1	0	18.59	18.50	18.87	18.71	19.05	21	0
15	QPSK	1	37	18.56	18.64	18.62	18.61	18.62		
15	QPSK	1	74	18.56	18.56	18.62	18.61	18.65		
15	QPSK	36	0	18.50	18.75	18.82	18.56	18.62		
15	QPSK	36	20	18.52	18.52	18.60	18.66	18.63	20.5	0
15	QPSK	36	39	18.66	18.50	18.53	18.55	18.65		
15	QPSK	75	0	18.58	18.70	18.57	18.66	18.51		
15	16QAM	1	0	18.57	18.67	18.63	18.75	18.62		
15	16QAM	1	37	18.69	18.67	18.58	18.56	18.60	20.5	0
15	16QAM	1	74	18.62	18.61	18.76	18.64	18.58		
15	16QAM	36	0	18.22	18.19	18.27	18.29	18.15		
15	16QAM	36	20	18.04	18.06	18.21	18.14	18.02		
15	16QAM	36	39	18.18	18.20	18.29	18.18	18.11	20	0.5
15	16QAM	75	0	18.11	18.16	18.16	18.19	18.11		
15	64QAM	1	0	18.27	18.25	18.26	18.17	18.25		
15	64QAM	1	37	18.12	18.12	18.22	18.22	18.03		
15	64QAM	1	74	18.04	18.12	18.08	18.22	18.05	20	0.5
15	64QAM	36	0	17.17	17.11	17.21	17.16	17.18		
15	64QAM	36	20	17.10	17.14	17.09	17.16	17.04		
15	64QAM	36	39	17.09	17.19	17.16	17.17	17.11		
15	64QAM	75	0	17.19	17.35	17.38	17.30	17.23	19	1.5
15	256QAM	1	0	15.17	15.22	15.26	15.28	15.28		
15	256QAM	1	37	15.18	15.22	15.29	15.25	15.11		
15	256QAM	1	74	15.04	15.13	15.11	15.17	15.07		
15	256QAM	36	0	15.10	15.16	15.21	15.12	15.19	17	3.5
15	256QAM	36	20	15.03	15.08	15.13	15.18	15.10		
15	256QAM	36	39	15.00	15.14	15.14	15.17	15.08		
15	256QAM	75	0	15.11	15.20	15.24	15.21	15.15		
Channel				39700	40180	40620	41080	41540	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				39701	40180	40620	41080	41540		
10	QPSK	1	0	18.64	18.68	18.63	18.60	18.77	21	0
10	QPSK	1	49	18.63	18.68	18.64	18.68	18.71		
10	QPSK	25	0	18.51	18.65	18.56	18.52	18.56		
10	QPSK	25	12	18.64	18.65	18.79	18.59	18.56		
10	QPSK	25	25	18.64	18.66	18.55	18.52	18.53	20.5	0
10	QPSK	50	0	18.52	18.52	18.59	18.59	18.51		
10	16QAM	1	0	18.68	18.66	18.84	18.74	18.55		
10	16QAM	1	25	18.62	18.71	18.77	18.62	18.72		
10	16QAM	1	49	18.64	18.62	18.69	18.60	18.58	20.5	0
10	16QAM	25	0	18.17	18.21	18.26	18.23	18.13		
10	16QAM	25	12	18.08	18.00	18.18	18.18	18.07		
10	16QAM	25	25	18.17	18.21	18.28	18.16	18.17		
10	16QAM	50	0	18.08	18.16	18.16	18.25	18.15	20	0.5
10	64QAM	1	0	18.22	18.34	18.25	18.18	18.22		
10	64QAM	1	25	18.19	18.10	18.27	18.12	18.06		
10	64QAM	1	49	18.05	18.12	18.16	18.14	18.13		
10	64QAM	1	99	17.23	17.18	17.19	17.19	17.19	19	1.5
10	64QAM	25	12	17.00	17.10	17.16	17.12	17.05		
10	64QAM	25	25	17.07	17.21	17.18	17.14	17.11		
10	64QAM	50	0	17.19	17.34	17.32	17.28	17.24		
10	256QAM	1	0	15.16	15.17	15.30	15.30	15.27	17	3.5
10	256QAM	1	25	15.23	15.18	15.30	15.28	15.18		
10	256QAM	1	49	15.08	15.06	15.19	15.19	15.02		
10	256QAM	25	0	15.12	15.13	15.17	15.09	15.19		
10	256QAM	25	12	15.08	15.04	15.12	15.10	15.04	17	3.5
10	256QAM	25	25	15.02	15.19	15.19	15.18	15.16		
10	256QAM	50	0	15.08	15.23	15.26	15.18	15.12		
Channel				39675	40148	40620	41093	41565		
Frequency (MHz)				2498.5	2545.8	2593	2640.30	2687.5		
5	QPSK	1	0	18.71	18.63	18.73	18.57	18.70	21	0
5	QPSK	1	12	18.50	18.53	18.75	18.60	18.75		
5	QPSK	1	24	18.55	18.53	18.65	18.60	18.57		
5	QPSK	12	0	18.63	18.64	18.76	18.56	18.69		
5	QPSK	12	7	18.53	18.56	18.61	18.56	18.59	20.5	0
5	QPSK	12	13	18.55	18.58	18.66	18.66	18.50		
5	QPSK	25	0	18.65	18.58	18.77	18.65	18.70		
5	16QAM	1	0	18.55	18.65	18.71	18.74	18.72		
5	16QAM	1	12	18.64	18.54	18.72	18.59	18.64	20.5	0
5	16QAM	1	24	18.57	18.68	18.78	18.60	18.52		
5	16QAM	12	0	18.27	18.20	18.26	18.24	18.14		
5	16QAM	12	7	18.04	18.06	18.20	18.19	18.07		
5	16QAM	12	13	18.13	18.22	18.28	18.24	18.09	20	0.5
5	16QAM	25	0	18.05	18.12	18.19	18.20	18.10		
5	64QAM	1	0	18.25	18.29	18.33	18.27	18.21		
5	64QAM	1	12	18.20	18.10	18.27	18.20	18.09		
5	64QAM	1	24	18.00	18.16	18.19	18.13	18.13	20	0.5
5	64QAM	12	0	17.16	17.11	17.26	17.20	17.17		
5	64QAM	12	7	17.09	17.06	17.07	17.09	17.06		
5	64QAM	12	13	17.09	17.14	17.20	17.11	17.07		
5	256QAM	25	0	15.23	15.36	15.28	15.28	15.25	19	1.5
5	256QAM	12	7	15.21	15.21	15.32	15.28	15.24		
5	256QAM	1	12	15.17	15.17	15.32	15.23	15.22		
5	256QAM	1	24	15.05	15.05	15.17	15.09	15.00		
5	256QAM	12	0	15.11	15.24	15.19	15.17	15.17	17	3.5
5	256QAM	12	7	15.14	15.05	15.18	15.09	15.10		
5	256QAM	12	13	15.09	15.14	15.18	15.11	15.14		
5	256QAM	25	0	15.04	15.20	15.21	15.27	15.14		

Band 42 Ant6 DSI4 Mian PA													
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)					
Channel				42190	42590	42990							
Frequency (MHz)				3460	3500	3540							
20	QPSK	1	0	19.34	19.62	19.28	20.2	0					
20	QPSK	1	49	19.11	19.19	19.17							
20	QPSK	1	99	19.15	19.26	19.34							
20	QPSK	50	0	19.12	19.50	19.24							
20	QPSK	50	24	19.11	19.20	19.05	20.2	0					
20	QPSK	50	50	18.92	19.05	19.10							
20	QPSK	100	0	19.05	19.42	19.41							
20	16QAM	1	0	19.07	19.31	19.41							
20	16QAM	1	49	19.02	19.29	19.02	20.2	0					
20	16QAM	1	99	19.08	19.11	19.16							
20	16QAM	50	0	19.20	19.16	19.24							
20	16QAM	50	24	19.00	19.22	19.27							
20	16QAM	50	50	19.22	19.52	19.25	20.2	0					
20	16QAM	100	0	19.08	19.26	19.27							
20	64QAM	1	0	19.44	19.40	19.14							
20	64QAM	1	49	19.23	19.46	19.20	20.2	0					
20	64QAM	1	99	18.98	19.31	19.27							
20	64QAM	50	0	19.16	18.99	19.30							
20	64QAM	50	24	19.44	19.45	19.04							
20	64QAM	50	50	19.09	19.32	19.33	20.2	0					
20	64QAM	100	0	19.16	19.38	19.38							
20	256QAM	1	0	19.14	19.26	19.49							
20	256QAM	1	49	19.19	19.15	18.87	20.2	0					
20	256QAM	1	99	19.29	19.18	19.17							
20	256QAM	50	0	19.20	19.24	19.33							
20	256QAM	50	24	19.05	19.23	19.07							
20	256QAM	50	50	19.21	19.15	19.13	20.2	0					
20	256QAM	100	0	19.11	19.60	19.22							
Channel				42165	42990	43015	Tune-up limit (dBm)						
Frequency (MHz)				3457.5	3500	3542.5							
15	QPSK	1	0	19.19	19.51	19.19	20.2	0					
15	QPSK	1	37	19.06	19.28	19.16							
15	QPSK	1	74	19.16	19.39	19.20							
15	QPSK	36	0	19.25	19.27	19.26							
15	QPSK	36	20	19.08	19.23	18.92	20.2	0					
15	QPSK	36	39	19.04	18.94	19.18							
15	QPSK	75	0	19.11	19.61	19.28							
15	16QAM	1	0	19.12	19.49	19.35							
15	16QAM	1	37	19.11	19.41	19.11	20.2	0					
15	16QAM	1	74	19.15	19.30	19.05							
15	16QAM	36	0	19.26	19.13	19.10							
15	16QAM	36	20	19.00	19.21	19.22							
15	16QAM	36	39	19.03	19.50	19.39	20.2	0					
15	16QAM	75	0	19.25	19.37	19.14							
15	64QAM	1	0	19.44	19.50	19.26							
15	64QAM	1	37	19.28	19.49	19.16							
15	64QAM	1	74	18.94	19.16	19.28	20.2	0					
15	64QAM	36	0	18.98	19.06	19.34							
15	64QAM	36	20	19.34	19.26	19.17							
15	64QAM	36	39	19.09	19.11	19.34							
15	64QAM	75	0	19.01	19.54	19.46	20.2	0					
15	256QAM	1	0	19.26	19.31	19.35							
15	256QAM	1	37	18.99	19.24	18.89							
15	256QAM	1	74	19.44	19.30	19.11							
15	256QAM	36	0	19.36	19.29	19.13	20.2	0					
15	256QAM	36	20	19.08	19.10	19.24							
15	256QAM	36	39	19.09	19.32	19.00							
15	256QAM	75	0	19.31	19.60	19.13							
Channel				42140	42990	43040	Tune-up limit (dBm)						
Frequency (MHz)				3455	3500	3545							
10	QPSK	1	0	19.24	19.29	19.28	20.2	0					
10	QPSK	1	25	18.92	19.30	19.25							
10	QPSK	1	49	19.34	19.38	19.29							
10	QPSK	25	0	19.27	19.28	19.16							
10	QPSK	25	12	19.23	19.14	19.14	20.2	0					
10	QPSK	25	25	19.05	18.84	19.07							
10	QPSK	50	0	19.07	19.39	19.30							
10	16QAM	1	0	19.15	19.36	19.40							
10	16QAM	1	25	19.13	19.30	19.07	20.2	0					
10	16QAM	1	49	19.08	19.16	19.08							
10	16QAM	25	0	19.20	19.20	19.17							
10	16QAM	25	12	18.95	19.08	19.28							
10	16QAM	25	25	19.06	19.53	19.20	20.2	0					
10	16QAM	50	0	19.09	19.29	18.98							
10	64QAM	1	0	19.35	19.36	19.29							
10	64QAM	1	25	19.12	19.48	19.04							
10	64QAM	1	49	18.93	19.36	19.36	20.2	0					
10	64QAM	25	0	19.01	19.07	19.42							
10	64QAM	25	12	19.41	19.40	19.16							
10	64QAM	25	25	19.12	19.31	19.22							
10	64QAM	50	0	19.12	19.40	19.46	20.2	0					
10	256QAM	1	0	19.19	19.24	19.45							
10	256QAM	1	25	19.03	19.03	18.92							
10	256QAM	1	49	19.30	19.20	19.17							
10	256QAM	25	0	19.21	19.24	19.31	20.2	0					
10	256QAM	25	12	18.89	19.08	19.03							
10	256QAM	25	25	19.19	19.31	19.11							
10	256QAM	50	0	19.16	19.56	19.18							
Channel				42115	42990	43065	Tune-up limit (dBm)						
Frequency (MHz)				3452.5	3500	3547.5							
5	QPSK	1	0	19.38	19.49	19.21	20.2	0					
5	QPSK	1	12	19.10	19.33	19.29							
5	QPSK	1	24	19.38	19.41	19.20							
5	QPSK	12	0	19.10	19.27	19.22							
5	QPSK	12	7	19.05	19.10	18.97	20.2	0					
5	QPSK	12	13	18.99	19.03	19.04							
5	QPSK	25	0	19.21	19.58	19.41							
5	16QAM	1	0	19.16	19.32	19.43							
5	16QAM	1	12	19.02	19.25	19.10	20.2	0					
5	16QAM	1	24	18.96	19.30	19.04							
5	16QAM	12	0	19.30	19.21	19.09							
5	16QAM	12	7	19.10	19.12	19.27							
5	16QAM	12	13	19.20	19.46	19.27	20.2	0					
5	16QAM	25	0	19.26	19.33	19.15							
5	64QAM	1	0	19.30	19.47	19.21							
5	64QAM	1	12	19.19	19.55	19.09							
5	64QAM	1	24	19.15	19.33	19.24	20.2	0					
5	64QAM	12	0	19.17	19.08	19.40							
5	64QAM	12	7	19.35	19.34	19.09							
5	64QAM	12	13	19.22	19.33	19.22							
5	64QAM	25	0	19.11	19.51	19.39	20.2	0					
5	256QAM	1	0	19.19	19.20	19.32	20.2	0					
5	256QAM	1	12	19.18	19.21	18.89							
5	256QAM	12	0	19.37	19.28	19.32							
5	256QAM	12	7	18.89	19.21	19.15							
5	256QAM	12	13	19.07	19.35	19.20	20.2	0					
5	256QAM	25	0	19.13	19.62	19.00							

Reduced Power SA Mode for DSIS

GSM850 And DSIS							
GSM850 And TX Channel	Burst Average Power (dBm)			Turn-up Limit (dBm)	Frame Average Power (dBm)		Turn-up Limit (dBm)
	128 dBm	198 dBm	251 dBm		128 dBm	198 dBm	
GSM 1 Tx slot	32.57	32.08	32.57	34.00	23.57	23.08	23.57
GPRS 1 Tx slot	32.54	32.11	32.45	34.00	23.54	23.11	23.45
GPRS 2 Tx slot	29.20	29.14	29.18	31.00	23.20	23.14	23.18
GPRS 3 Tx slot	27.86	27.48	27.46	29.20	23.60	23.22	23.20
GPRS 4 Tx slot	26.17	26.21	26.18	26.00	23.17	23.21	23.18
EDGE 1 Tx slot	26.13	26.16	26.11	27.50	17.13	17.16	17.11
EDGE 2 Tx slot	23.29	23.34	23.40	24.50	17.29	17.34	17.40
EDGE 3 Tx slot	21.83	21.44	21.61	22.70	17.37	17.18	17.35
EDGE 4 Tx slot	20.21	20.06	20.44	21.50	17.21	17.06	17.44

WCDMA V And DSIS				
Band		WCDMA V And		
TX Channel		4132	4182	4233
RX Channel		4557	4607	4658
Frequency (MHz)		826.4	836.4	846.6
3GPP Rel 99	AMR 12.2Kbps	24.00	23.99	24.00
3GPP Rel 99	RMC 12.2Kbps	24.00	24.02	23.97
3GPP Rel 6	HSDPA Subtest-1	23.94	23.03	23.02
3GPP Rel 6	HSDPA Subtest-2	23.01	23.05	22.93
3GPP Rel 6	HSDPA Subtest-3	22.41	22.55	22.53
3GPP Rel 6	HSDPA Subtest-4	22.96	22.94	22.48
3GPP Rel 8	DC-HSDPA Subtest-1	23.00	23.02	23.01
3GPP Rel 8	DC-HSDPA Subtest-2	23.02	23.07	23.03
3GPP Rel 8	DC-HSDPA Subtest-3	22.40	22.48	22.51
3GPP Rel 8	DC-HSDPA Subtest-4	22.55	22.55	22.42
3GPP Rel 6	HSPA Subtest-1	23.03	23.01	23.00
3GPP Rel 6	HSPA Subtest-2	20.96	21.03	21.06
3GPP Rel 6	HSPA Subtest-3	21.94	21.97	22.01
3GPP Rel 6	HSPA Subtest-4	20.99	21.00	21.04
3GPP Rel 6	HSPA Subtest-5	23.04	23.01	22.99
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.42	20.50	20.58

GSM850 Ant1 DSIS									
GSM850 Ant1	Burst Average Power (dBm)			Tune-up	Frame Average Power (dBm)			Tune-up	
TX Channel	126	189	251	Limit	126	189	251	Limit	
Frequency (MHz)	842.2	846.4	848.8	(dBm)	842.2	846.4	848.8	(dBm)	
GSM 1 Tx slot	30.76	30.77	30.65	32.50	21.76	21.77	21.65	23.50	
GPRS 1 Tx slot	30.79	30.80	30.70	32.50	21.79	21.80	21.70	23.50	
GPRS 2 Tx slots	27.55	27.59	27.58	29.50	21.55	21.59	21.58	23.50	
GPRS 3 Tx slots	25.81	25.76	25.74	27.50	21.55	21.52	21.48	23.24	
GPRS 4 Tx slots	24.88	24.95	24.92	26.50	21.88	21.95	21.92	23.50	
EDGE 1 Tx slot	25.96	25.97	25.74	27.50	16.96	16.97	16.74	18.50	
EDGE 2 Tx slots	23.42	23.58	23.25	24.50	17.42	17.58	17.25	18.50	
EDGE 3 Tx slots	21.57	21.68	21.58	22.70	17.31	17.42	17.32	18.44	
EDGE 4 Tx slots	20.31	20.32	20.33	21.50	17.31	17.32	17.33	18.50	

WCDMA V Ant1 DSIS									
Band	WCDMA V Ant1			Tune-up					
TX Channel	4132	4182	4233	Limit					
Rx Channel	4307	4407	4468	(dBm)					
Frequency (MHz)	2124	2134	2146						
3GPP Rel 99 RMC 12.2Kbps	20.91	20.96	21.10	22.50					
3GPP Rel 99 RMC 12.2Kbps	21.10	21.12	20.99	22.50					
3GPP Rel 6 HSDPA Subtest-1	20.19	20.20	20.07	21.50					
3GPP Rel 6 HSDPA Subtest-2	20.18	20.09	20.10	21.50					
3GPP Rel 6 HSDPA Subtest-3	19.60	19.63	19.58	21.00					
3GPP Rel 6 HSDPA Subtest-4	19.48	19.59	19.36	21.00					
3GPP Rel 8 DC-HSDPA Subtest-1	20.13	20.03	20.03	21.50					
3GPP Rel 8 DC-HSDPA Subtest-2	20.01	20.04	19.99	21.50					
3GPP Rel 8 DC-HSDPA Subtest-3	19.65	19.67	19.73	21.00					
3GPP Rel 8 DC-HSDPA Subtest-4	19.67	19.59	19.57	21.00					
3GPP Rel 6 HSUPA Subtest-1	20.02	20.19	19.97	21.50					
3GPP Rel 6 HSUPA Subtest-2	18.10	18.25	18.02	19.50					
3GPP Rel 6 HSUPA Subtest-3	18.08	18.11	18.14	20.50					
3GPP Rel 6 HSUPA Subtest-4	18.08	18.00	18.11	19.50					
3GPP Rel 6 HSUPA Subtest-5	20.07	20.08	19.98	21.50					
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	17.54	17.64	17.47	19.00					

GSM1900 Ant2 DSIS							
	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)		
	512	661	810		512	661	810
TX Channel	512	661	810		512	661	810
Frequency (MHz)	1862.9	1863	1863.8		1862.9	1863	1863.8
GSM 1 Tx slot	27.71	27.85	27.74	29.00	18.71	18.85	18.74
GPRS 1 Tx slot	27.84	27.90	27.85	29.00	18.84	18.90	18.85
GPRS 2 Tx slots	25.40	25.48	25.37	26.00	16.40	16.48	16.37
GPRS 3 Tx slots	22.81	22.86	22.84	24.20	13.81	13.70	13.84
GPRS 4 Tx slots	20.85	21.14	20.90	23.00	11.85	12.14	11.90
EDGE 1 Tx slot	25.87	25.62	25.54	26.50	16.87	16.62	16.54
EDGE 3 Tx slots	23.05	22.97	22.95	23.50	14.05	13.97	13.95
EDGE 3 Tx slots	21.42	21.22	21.28	21.70	12.42	12.22	12.28
EDGE 4 Tx slots	19.56	19.36	19.57	20.50	10.56	10.36	10.57

WCDMA II Ant2 DSIS				WCDMA IV Ant2 DSIS			
Band	WCDMA II Ant2			Tune-up Limit (dBm)	WCDMA IV Ant2		
	TX Channel	9262	9400		1312	1413	1513
Frequency (MHz)	Rx Channel	9662	9800	Limit (dBm)	1537	1638	1738
	9524	1830	1907.6		1724	1725	1725
3GPP Rel 99	AMC 12.2kops	18.35	18.15	18.15	19.50	18.74	18.82
3GPP Rel 99	AMC 12.2kops	18.35	18.40	18.20	19.50	18.86	18.85
3GPP Rel 6	HSDPA Subtest-1	17.36	17.38	17.20	18.50	17.72	17.84
3GPP Rel 6	HSDPA Subtest-2	17.35	17.47	17.19	18.50	17.77	17.74
3GPP Rel 6	HSDPA Subtest-3	16.89	16.86	16.70	18.00	17.32	17.42
3GPP Rel 6	HSDPA Subtest-4	16.79	16.79	16.60	18.00	17.24	17.19
3GPP Rel 8	DC-HSDPA Subtest-1	17.19	17.21	17.24	18.50	17.66	17.73
3GPP Rel 8	DC-HSDPA Subtest-2	17.29	17.45	17.27	18.50	17.73	17.67
3GPP Rel 8	DC-HSDPA Subtest-3	16.84	16.77	16.83	18.00	17.22	17.30
3GPP Rel 8	DC-HSDPA Subtest-4	16.74	16.93	16.78	18.00	17.16	17.27
3GPP Rel 6	HSPA Subtest-1	17.20	17.57	17.27	18.50	17.69	17.78
3GPP Rel 6	HSPA Subtest-2	15.45	15.59	15.58	16.50	15.70	15.79
3GPP Rel 6	HSPA Subtest-3	16.21	16.42	16.23	17.50	16.78	16.86
3GPP Rel 6	HSPA Subtest-4	15.61	15.65	15.56	16.50	15.66	15.93
3GPP Rel 6	HSPA Subtest-5	17.30	17.25	17.14	18.50	17.71	18.01
3GPP Rel 7	HSPA+ (HSQAM) Subtest-1	15.65	15.64	15.61	16.00	15.22	15.28

GSM1900 Ant3 DSIS								
GSM1900 Ant3		Burst Average Power (dBm)			Turn-up	Frame Average Power (dBm)		
TX Channel	512	661	810	Limit	512	661	810	Limit
Frequency (MHz)	1862.9	1863	1863.8	(dBm)	1862.9	1863	1863.8	(dBm)
GSM 1 Tx slot	28.94	29.08	28.66	30.50	19.94	20.08	19.66	21.50
GPRS 1 Tx slot	28.96	29.15	28.70	30.50	19.96	20.15	19.70	21.50
GPRS 2 Tx slots	25.52	25.53	25.73	27.50	16.52	16.53	16.73	21.50
GPRS 3 Tx slots	24.10	24.15	24.12	25.70	15.84	15.89	15.86	21.44
GPRS 4 Tx slots	22.81	22.87	22.70	24.50	15.91	15.97	15.70	21.50
EDGE 1 Tx slot	25.01	25.18	25.04	26.50	16.01	16.18	16.04	17.50
EDGE 3 Tx slots	22.37	22.54	22.17	23.50	16.37	16.54	16.17	17.50
EDGE 3 Tx slots	21.10	21.13	21.05	21.70	16.84	16.87	16.79	17.44
EDGE 4 Tx slots	19.27	19.25	19.25	20.50	16.27	16.25	16.25	17.50

WCDMA II Ant3 DSIS										WCDMA IV Ant3 DSIS				
Band	WCDMA II Ant3			Tune-up	WCDMA IV Ant3			Limit						
TX Channel	9262	9400	9538		1312	1413	1513							
Rx Channel	9662	9800	9938	(dBm)	1537	1638	1738							
Frequency (MHz)	1923.4	1930	1937.6		1723.4	1723.5	1723.5							
3GPP Rel 99	AMC 12.2kops	20.03	20.25	20.20	22.00	20.10	20.10	20.02	21.50					
3GPP Rel 99	AMC 12.2kops	20.27	20.25	20.24	22.00	20.10	20.12	20.11	21.50					
3GPP Rel 6	HSDPA Subtest-1	19.14	19.35	19.32	21.00	19.18	19.27	19.28	20.50					
3GPP Rel 6	HSDPA Subtest-2	19.13	19.28	19.12	21.00	19.19	19.23	19.02	20.50					
3GPP Rel 6	HSDPA Subtest-3	18.78	18.83	18.70	20.50	18.64	18.73	18.76	20.00					
3GPP Rel 6	HSDPA Subtest-4	18.66	18.76	18.67	20.50	18.61	18.63	18.70	20.00					
3GPP Rel 8	DC-HSDPA Subtest-1	19.25	19.30	19.18	21.00	19.30	19.25	19.17	20.50					
3GPP Rel 8	DC-HSDPA Subtest-2	19.13	19.11	19.15	21.00	19.12	19.12	19.20	20.50					
3GPP Rel 8	DC-HSDPA Subtest-3	18.64	18.74	18.54	20.50	18.61	18.77	18.68	20.00					
3GPP Rel 8	DC-HSDPA Subtest-4	18.54	18.66	18.56	20.50	18.58	18.74	18.81	20.00					
3GPP Rel 6	HSPA Subtest-1	19.00	19.25	19.16	21.00	19.12	19.11	19.25	20.50					
3GPP Rel 6	HSPA Subtest-2	17.17	17.26	17.20	19.00	17.15	17.18	17.29	18.50					
3GPP Rel 6	HSPA Subtest-3	18.33	18.25	18.41	20.00	18.13	18.20	18.35	19.50					
3GPP Rel 6	HSPA Subtest-4	17.18	17.14	17.12	19.00	17.24	17.16	17.06	18.50					
3GPP Rel 6	HSPA Subtest-5	19.01	19.25	19.22	21.00	19.96	19.22	19.01	20.50					
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	16.81	16.90	16.90	18.50	16.71	16.93	16.70	18.00					

WCDMA IV Aest DS8					
Band		WCDMA IV Aest			Turn-up Limit (dBm)
TX Channel		1312	1413	1513	
Rx Channel		1337	1438	1538	
Frequency (MHz)		1725.4	1725.6	1725.6	
3GPP Rel 99	AMR 12.2Kbps	18.04	18.10	18.10	20.00
3GPP Rel 99	RMC 12.2Kbps	18.22	18.33	18.05	20.00
3GPP Rel 6	HSDPA Subtest-1	17.21	17.21	17.34	19.00
3GPP Rel 6	HSDPA Subtest-2	17.10	17.29	17.25	19.00
3GPP Rel 6	HSDPA Subtest-3	16.66	16.76	16.59	18.50
3GPP Rel 6	HSDPA Subtest-4	16.55	16.73	16.72	18.50
3GPP Rel 8	DC-HSDPA Subtest-1	17.22	17.23	17.15	19.00
3GPP Rel 8	DC-HSDPA Subtest-2	17.13	17.16	17.15	19.00
3GPP Rel 8	DC-HSDPA Subtest-3	16.62	16.79	16.55	18.50
3GPP Rel 8	DC-HSDPA Subtest-4	16.50	16.74	16.59	18.50
3GPP Rel 6	HSUPA Subtest-1	17.13	17.15	17.12	19.00
3GPP Rel 6	HSUPA Subtest-2	15.12	15.28	15.19	17.00
3GPP Rel 6	HSUPA Subtest-3	16.19	16.22	16.26	18.00
3GPP Rel 6	HSUPA Subtest-4	15.10	15.14	15.10	17.00
3GPP Rel 6	HSUPA Subtest-5	17.00	17.20	17.14	19.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	14.81	14.59	14.72	16.50



WCDMA IV Ar65 DSIS					
Band		WCDMA IV Ar65			Turn-up Limit (dBm)
TX Channel		1312	1413	1513	
Rx Channel		1337	1438	1538	
Frequency (MHz)		1722.4	1723.6	1724.6	
3GPP Rel 99	AMR 12.2Kbps	20.86	20.90	20.80	22.50
3GPP Rel 99	RMC 12.2Kbps	20.89	20.93	20.83	22.50
3GPP Rel 6	HSDPA Subtest-1	19.87	19.86	19.86	21.50
3GPP Rel 6	HSDPA Subtest-2	19.88	19.89	19.91	21.50
3GPP Rel 6	HSDPA Subtest-3	19.41	19.46	19.49	21.00
3GPP Rel 6	HSDPA Subtest-4	19.32	19.38	19.39	21.00
3GPP Rel 8	DC-HSDPA Subtest-1	19.87	19.89	19.92	21.50
3GPP Rel 8	DC-HSDPA Subtest-2	19.77	19.88	19.94	21.50
3GPP Rel 8	DC-HSDPA Subtest-3	19.23	19.43	19.34	21.00
3GPP Rel 8	DC-HSDPA Subtest-4	19.20	19.33	19.21	21.00
3GPP Rel 6	HSUPA Subtest-1	19.75	19.89	19.87	21.50
3GPP Rel 6	HSUPA Subtest-2	17.92	18.00	17.87	19.50
3GPP Rel 6	HSUPA Subtest-3	18.95	19.06	19.04	20.50
3GPP Rel 6	HSUPA Subtest-4	17.81	17.85	17.89	19.50
3GPP Rel 6	HSUPA Subtest-5	19.77	19.89	19.79	21.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	17.43	17.51	17.53	19.00

Band 42 Ant7 DS15 Main PA									
BW [MHz]	Modulat ion	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Turn-up limit (dBm)	MPR (dB)	
Channel				43000	43500	43900			
Frequency (MHz)									
20	QPSK	1	0	17.97	18.24	18.09			
20	QPSK	1	49	18.07	17.98	18.18	19.5	0	
20	QPSK	1	99	18.02	18.02	17.81			
20	QPSK	50	0	18.12	18.16	17.95			
20	QPSK	50	24	18.15	18.12	17.94	19.5	0	
20	QPSK	50	50	18.08	17.67	17.68			
20	QPSK	100	0	17.94	18.16	17.89			
20	16QAM	1	0	17.87	18.15	18.19			
20	16QAM	1	49	18.17	18.06	18.15	19.5	0	
20	16QAM	1	99	17.79	17.95	17.80			
20	16QAM	50	0	17.83	17.89	17.97			
20	16QAM	50	24	17.92	18.06	18.13	19.5	0	
20	16QAM	50	50	17.99	18.07	18.10			
20	16QAM	100	0	18.04	18.12	18.10			
20	64QAM	1	0	18.19	18.09	18.07			
20	64QAM	1	49	18.11	18.20	18.05	19.5	0	
20	64QAM	1	99	18.08	17.80	17.91			
20	64QAM	50	0	17.88	17.94	17.95			
20	64QAM	50	24	18.12	18.12	17.75	19.5	0	
20	64QAM	50	50	18.19	17.94	18.02			
20	64QAM	100	0	18.03	18.11	17.92			
20	256QAM	1	0	18.21	18.03	18.03			
20	256QAM	1	49	18.11	17.87	17.97	19.5	0	
20	256QAM	1	99	18.08	17.95	17.97			
20	256QAM	50	0	17.99	18.10	18.23			
20	256QAM	50	24	17.79	17.74	18.11	19.5	0	
20	256QAM	50	50	17.93	17.99	18.01			
20	256QAM	100	0	17.95	18.16	18.02			
Channel				42195	42590	43015	turn-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
15	QPSK	1	0	18.08	18.15	17.97			
15	QPSK	1	37	18.00	18.10	18.07	19.5	0	
15	QPSK	1	74	17.91	17.99	17.93			
15	QPSK	38	0	18.09	18.21	18.02			
15	QPSK	38	20	18.02	17.91	18.03	19.5	0	
15	QPSK	38	39	17.87	17.55	17.76			
15	QPSK	75	0	18.10	18.08	18.22			
15	16QAM	1	0	17.87	17.98	18.11			
15	16QAM	1	37	18.06	18.02	18.08	19.5	0	
15	16QAM	1	74	17.92	18.01	17.82			
15	16QAM	38	0	17.91	18.00	18.00			
15	16QAM	38	20	17.84	18.13	18.13	19.5	0	
15	16QAM	38	39	17.95	17.97	17.96			
15	16QAM	75	0	18.08	18.11	18.14			
15	64QAM	1	0	18.07	18.19	18.18			
15	64QAM	1	37	18.16	18.01	18.15	19.5	0	
15	64QAM	1	74	18.00	17.94	18.14			
15	64QAM	38	0	18.02	17.93	18.04			
15	64QAM	38	20	18.02	18.18	17.97	19.5	0	
15	64QAM	38	39	18.07	17.96	18.16			
15	64QAM	75	0	18.11	18.03	18.22			
15	256QAM	1	0	17.99	18.15	17.95	19.5	0	
15	256QAM	1	37	18.11	17.73	17.95			
15	256QAM	1	74	18.11	18.02	17.95			
15	256QAM	38	0	18.00	18.07	18.17	19.5	0	
15	256QAM	38	20	17.99	17.71	18.01			
15	256QAM	38	39	17.92	17.93	17.85			
15	256QAM	75	0	17.98	18.18	17.99			
Channel				42140	42590	43040	turn-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
10	QPSK	1	0	18.04	18.07	18.11			
10	QPSK	1	25	18.10	18.08	18.11	19.5	0	
10	QPSK	1	49	17.92	18.04	17.84			
10	QPSK	25	0	18.18	18.14	17.97			
10	QPSK	25	12	18.18	18.10	17.98	19.5	0	
10	QPSK	25	25	18.01	17.77	17.82			
10	QPSK	50	0	18.04	18.19	17.84			
10	16QAM	1	0	17.90	18.02	18.19			
10	16QAM	1	25	18.19	18.11	18.07	19.5	0	
10	16QAM	1	49	17.99	18.02	17.95			
10	16QAM	25	0	17.91	18.00	17.94			
10	16QAM	25	12	17.75	17.93	18.19	19.5	0	
10	16QAM	25	25	17.97	17.97	18.03			
10	16QAM	50	0	18.01	18.17	18.13			
10	64QAM	1	0	18.09	17.98	18.20			
10	64QAM	1	25	18.14	18.17	17.94	19.5	0	
10	64QAM	1	49	18.11	17.90	18.05			
10	64QAM	25	0	17.83	17.92	18.11			
10	64QAM	25	12	18.10	18.13	17.85	19.5	0	
10	64QAM	25	25	18.09	18.22	17.92			
10	64QAM	50	0	17.94	18.20	17.93			
10	256QAM	1	0	18.17	18.02	18.05	19.5	0	
10	256QAM	1	25	18.20	17.90	18.04			
10	256QAM	1	49	18.05	18.10	18.07			
10	256QAM	25	0	18.13	17.93	18.08	19.5	0	
10	256QAM	25	12	17.86	17.70	18.06			
10	256QAM	25	25	18.00	17.98	17.83			
10	256QAM	50	0	18.06	18.14	17.96			
Channel				42115	42590	43040	turn-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
5	QPSK	1	0	17.99	18.05	18.21			
5	QPSK	1	12	18.13	17.98	18.09	19.5	0	
5	QPSK	1	24	17.95	17.99	17.92			
5	QPSK	12	0	18.02	18.00	18.11			
5	QPSK	12	7	18.10	17.99	17.95	19.5	0	
5	QPSK	12	13	17.98	17.72	17.68			
5	QPSK	25	0	18.13	18.15	18.10			
5	16QAM	1	0	18.03	18.12	18.10			
5	16QAM	1	12	18.15	17.94	18.14	19.5	0	
5	16QAM	1	24	17.97	18.01	17.84			
5	16QAM	12	0	17.96	18.09	18.11			
5	16QAM	12	7	17.83	17.96	18.13	19.5	0	
5	16QAM	12	13	17.90	18.02	18.08			
5	16QAM	25	0	18.11	17.98	18.16			
5	64QAM	1	0	18.17	18.14	17.96	19.5	0	
5	64QAM	1	12	18.18	18.20	18.14			
5	64QAM	1	24	18.16	18.04	17.91			
5	64QAM	12	0	18.02	17.80	18.13			
5	64QAM	12	7	18.06	18.22	17.80	19.5	0	
5	64QAM	12	13	18.15	18.15	17.88			
5	64QAM	25	0	17.94	18.19	17.96			
5	256QAM	1	0	18.11	18.02	17.89	19.5	0	
5	256QAM	1	12	18.18	17.89	18.01			
5	256QAM	1	24	18.13	18.01	18.00			
5	256QAM	12	0	18.08	17.92	18.01			
5	256QAM	12	7	18.00	17.84	18.08	19.5	0	
5	256QAM	12	13	18.03	17.87	17.82			
5	256QAM	25	0	18.01	18.12	17.89			

Band 48 Ant7 DS15 Main PA										
BW [MHz]	Modulat on	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Turn-up limit (dBm)	MPR (dB)	
Channel				53590	53930	54190	54540			
Frequency (MHz)										
20	QPSK	1	0	17.88	18.08	17.87	17.95			
20	QPSK	1	49	18.01	17.81	17.96	17.89	19.5	0	
20	QPSK	1	99	17.88	17.90	17.83	17.73			
20	QPSK	50	0	17.82	18.05	17.88	17.95			
20	QPSK	50	24	18.00	17.79	17.78	17.71	19.5	0	
20	QPSK	50	50	17.77	17.82	17.72	17.84			
20	QPSK	100	0	17.86	18.05	17.85	18.06			
20	16QAM	1	0	17.73	17.80	18.00	18.08			
20	16QAM	1	49	17.90	18.05	17.71	17.75	19.5	0	
20	16QAM	1	99	17.73	17.81	17.66	17.79			
20	16QAM	50	0	17.80	17.78	17.84	17.92			
20	16QAM	50	24	17.89	17.82	17.96	17.88	19.5	0	
20	16QAM	50	50	17.85	17.98	17.88	17.88			
20	16QAM	100	0	17.99	17.92	17.81	17.80			
20	64QAM	1	0	18.05	17.82	17.93	18.02			
20	64QAM	1	49	17.98	17.96	17.70	17.88	19.5	0	
20	64QAM	1	99	18.00	17.78	17.80	17.75			
20	64QAM	50	0	17.73	17.76	17.83	17.91			
20	64QAM	50	24	17.84	18.04	17.78	17.81	19.5	0	
20	64QAM	50	50	17.88	17.93	17.80	17.87			
20	64QAM	100	0	17.94	18.03	17.87	17.85			
20	256QAM	1	0	17.93	17.95	17.77	17.88			
20	256QAM	1	49	17.79	17.88	17.85	17.77	19.5	0	
20	256QAM	1	99	18.07	17.72	17.95	18.02			
20	256QAM	50	0	17.91	17.90	17.97	17.95			



Band 2 Ant3 Default Other PA									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Turn-on time (sec)	APRS (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	23.84	23.82	23.92			
20	QPSK	1	8	23.76	23.88	24.00	24.5	0	
20	QPSK	1	96	23.68	23.91	23.91			
20	QPSK	50	0	22.63	22.65	22.84			
20	QPSK	50	24	22.54	22.76	22.71	23.5	1	
20	QPSK	50	50	22.55	22.78	22.78			
20	QPSK	100	0	22.54	22.74	22.72			
20	QPSK	100	0	22.38	22.58	22.51			
20	16QAM	1	49	22.30	22.51	22.48	23.5	1	
20	16QAM	1	99	22.28	22.54	22.48			
20	16QAM	50	0	21.48	21.72	21.74			
20	16QAM	50	24	21.54	21.69	21.80	22.5	2	
20	16QAM	50	50	21.47	21.71	21.69			
20	16QAM	100	0	20.48	20.74	20.69			
20	16QAM	50	24	20.57	20.71	20.95	21.5	3	
20	16QAM	50	50	20.58	20.70	20.71			
20	16QAM	100	0	20.49	20.67	20.59			
20	16QAM	1	0	18.45	18.60	18.64			
20	256QAM	1	49	18.42	18.62	18.58	19.5	5	
20	256QAM	1	99	18.44	18.62	18.62			
20	256QAM	50	0	18.45	18.62	18.61			
20	256QAM	50	24	18.49	18.72	18.71	19.5	5	
20	256QAM	50	50	18.41	18.67	18.66			
20	256QAM	100	0	18.45	18.62	18.64			
Channel				1897.5	1898.0	1910.5			
Frequency (MHz)									
15	QPSK	1	0	23.85	23.81	23.85			
15	QPSK	1	8	23.75	23.49	23.49	24.5	0	
15	QPSK	1	74	23.60	23.67	23.86			
15	QPSK	36	0	22.61	22.63	22.77			
15	QPSK	36	20	22.48	22.74	22.68	23.5	1	
15	QPSK	36	36	22.55	22.72	22.70			
15	QPSK	75	0	22.57	22.77	22.69			
15	16QAM	1	0	22.35	22.32	22.43	23.5	1	
15	16QAM	1	37	22.23	22.48	22.39			
15	16QAM	1	74	22.25	22.45	22.45			
15	16QAM	36	0	21.50	21.67	21.66			
15	16QAM	36	20	21.51	21.60	21.59	22.5	2	
15	16QAM	36	36	21.45	21.68	21.62			
15	16QAM	75	0	21.45	21.68	21.62			
15	16QAM	1	0	21.62	21.62	21.84	22.5	2	
15	16QAM	1	37	21.57	21.70	21.84			
15	16QAM	1	74	21.58	21.75	21.80			
15	16QAM	36	0	20.48	20.74	20.68			
15	16QAM	36	20	20.58	20.74	20.64	21.5	3	
15	16QAM	36	36	20.58	20.69	20.69			
15	16QAM	75	0	20.47	20.68	20.62			
15	256QAM	1	0	18.41	18.62	18.58			
15	256QAM	1	37	18.35	18.58	18.51	19.5	5	
15	256QAM	1	74	18.41	18.64	18.53			
15	256QAM	36	0	18.45	18.62	18.62			
15	256QAM	36	20	18.51	18.70	18.65	19.5	5	
15	256QAM	36	36	18.39	18.68	18.59			
15	256QAM	75	0	18.43	18.62	18.66			
Channel				1898.0	1899.0	1910.5			
Frequency (MHz)									
10	QPSK	1	0	23.82	23.84	23.95			
10	QPSK	1	25	23.72	23.94	23.96	24.5	0	
10	QPSK	1	49	23.62	23.85	23.91			
10	QPSK	25	0	22.62	22.66	22.78			
10	QPSK	25	12	22.48	22.78	22.68	23.5	1	
10	QPSK	25	25	22.50	22.79	22.76			
10	QPSK	50	0	22.62	22.74	22.74			
10	16QAM	1	0	22.31	22.59	22.53			
10	16QAM	1	25	22.23	22.48	22.44	23.5	1	
10	16QAM	1	49	22.25	22.50	22.45			
10	16QAM	25	0	21.49	21.65	21.60			
10	16QAM	25	12	21.55	21.65	21.61	22.5	2	
10	16QAM	25	25	21.43	21.70	21.60			
10	16QAM	50	0	21.48	21.63	21.57			
10	16QAM	1	0	21.62	21.62	21.88	22.5	2	
10	16QAM	1	25	21.62	21.73	21.80			
10	16QAM	1	49	21.65	21.85	21.71			
10	16QAM	25	0	20.44	20.70	20.63			
10	16QAM	25	12	20.48	20.63	20.67	21.5	3	
10	16QAM	25	25	20.53	20.62	20.66			
10	16QAM	50	0	20.46	20.63	20.59			
10	256QAM	1	0	18.46	18.65	18.57			
10	256QAM	1	25	18.38	18.58	18.59	19.5	5	
10	256QAM	1	49	18.35	18.58	18.55			
10	256QAM	25	0	18.49	18.71	18.61			
10	256QAM	25	12	18.47	18.64	18.67	19.5	5	
10	256QAM	25	25	18.35	18.65	18.63			
10	256QAM	50	0	18.39	18.67	18.61			
Channel				1899.0	1900.0	1910.5			
Frequency (MHz)									
5	QPSK	1	0	23.84	23.84	23.92			
5	QPSK	1	12	23.81	23.98	23.98	24.5	0	
5	QPSK	1	24	23.59	23.63	23.94			
5	QPSK	12	0	22.62	22.66	22.86			
5	QPSK	12	7	22.45	22.78	22.63	23.5	1	
5	QPSK	12	13	22.50	22.71	22.73			
5	QPSK	25	0	22.66	22.70	22.74			
5	16QAM	1	0	22.38	22.50	22.45			
5	16QAM	1	12	22.30	22.60	22.49	23.5	1	
5	16QAM	1	24	22.23	22.45	22.41			
5	16QAM	12	0	21.45	21.67	21.74			
5	16QAM	12	7	21.54	21.65	21.62	22.5	2	
5	16QAM	12	13	21.41	21.72	21.69			
5	16QAM	25	0	21.49	21.66	21.51			
5	16QAM	1	0	21.62	21.61	21.81	22.5	2	
5	16QAM	1	12	21.61	21.80	21.88			
5	16QAM	1	24	21.59	21.84	21.77			
5	16QAM	12	0	20.44	20.65	20.65			
5	16QAM	12	7	20.54	20.67	20.64	21.5	3	
5	16QAM	12	13	20.58	20.63	20.68			
5	256QAM	1	0	18.41	18.58	18.51			
5	256QAM	1	12	18.39	18.63	18.60	19.5	5	
5	256QAM	1	24	18.40	18.62	18.54			
5	256QAM	12	0	18.52	18.68	18.65			
5	256QAM	12	7	18.48	18.65	18.60	19.5	5	
5	256QAM	12	13	18.33	18.56	18.54			
5	256QAM	25	0	18.41	18.70	18.58			
Channel				1899.5	1900.0	1910.5			
Frequency (MHz)									
3	QPSK	1	0	23.77	23.94	23.92			
3	QPSK	1	8	23.73	23.99	23.99	24.5	0	
3	QPSK	1	14	23.68	23.67	23.99			
3	QPSK	8	0	22.62	22.66	22.77			
3	QPSK	8	4	22.51	22.72	22.64	23.5	1	
3	QPSK	8	7	22.49	22.69	22.70			
3	QPSK	15	0	22.46	22.71	22.63			
3	16QAM	1	0	22.40	22.69	22.50			
3	16QAM	1	8	22.32	22.44	22.41	23.5	1	
3	16QAM	1	14	22.27	22.53	22.48			
3	16QAM	8	0	21.50	21.72	21.77			
3	16QAM	8	4	21.55	21.68	21.54	22.5	2	
3	16QAM	8	7	21.39	21.63	21.68			
3	16QAM	15	0	21.44	21.67	21.61			
3	16QAM	1	0	21.71	21.69	21.81	22.5	2	
3	16QAM	1	21.66	21.82	21.83				
3	16QAM	1	14	21.62	21.81	21.72			
3	16QAM	8	0	20.72	20.93	20.92			
3	16QAM	8	4	20.83	20.68	20.62	21.5	3	
3	16QAM	8	7	20.53	20.70	20.68			
3	256QAM	1	0	18.45	18.58	18.52			
3	256QAM	1	8	18.37	18.54	18.59	19.5	5	
3	256QAM	1	14	18.44	18.61	18.59			
3	256QAM	8	0	18.48	18.71	18.61			
3	256QAM	8	4	18.35	18.61	18.66	19.5	5	
3	256QAM	8	7	18.38	18.61	18.68			
3	256QAM	15	0	18.38	18.71	18.69			
3	256QAM	1	0	18.39	18.61	18.59	19.5	5	
3	256QAM	1	8	18.36	18.71	18.59	19.5	5	

Band 38 Ant3 Default Other PA									
BW [MHz]	Modulat on	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Time-up limit (dftm)	MPR (dB)	
Channel				37650	38000	38150			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	0	24.43	24.58	24.47			
20	QPSK	1	49	24.48	24.55	24.47		25	0
20	QPSK	1	99	23.96	24.08	23.96			
20	QPSK	50	0	23.34	23.43	23.33			
20	QPSK	50	24	23.32	23.40	23.26		24	1
20	QPSK	50	50	23.26	23.35	23.27			
20	QPSK	100	0	23.31	23.41	23.32			
20	16QAM	1	0	23.20	23.26	23.17			
20	16QAM	1	49	23.19	23.27	23.15		24	1
20	16QAM	50	24	23.14	23.20	23.10			
20	16QAM	50	0	22.25	22.41	22.33			
20	16QAM	50	24	22.25	22.40	22.29			
20	16QAM	50	50	22.38	22.42	22.31		23	2
20	16QAM	100	0	22.31	22.44	22.35			
20	64QAM	1	0	22.38	22.52	22.42			
20	64QAM	1	49	22.38	22.48	22.41		23	2
20	64QAM	1	99	22.34	22.46	22.41			
20	64QAM	50	0	21.32	21.41	21.26			
20	64QAM	50	24	21.28	21.36	21.21		22	3
20	64QAM	50	50	21.28	21.35	21.26			
20	64QAM	100	0	21.40	21.48	21.35			
20	256QAM	1	0	19.24	19.39	19.33			
20	256QAM	1	49	19.25	19.38	19.23		20	5
20	256QAM	1	99	19.31	19.38	19.25			
20	256QAM	50	0	19.29	19.42	19.27			
20	256QAM	50	24	19.24	19.38	19.24		20	5
20	256QAM	50	50	19.34	19.41	19.35			
20	256QAM	100	0	19.40	19.46	19.31			
Channel				37650	38000	38150	Time-up limit (dftm)	MPR (dB)	
Frequency (MHz)				2577.5	2595	2612.5			
15	QPSK	1	0	24.34	24.53	24.47			
15	QPSK	1	37	24.45	24.51	24.39		25	0
15	QPSK	1	74	23.95	24.00	23.88			
15	QPSK	36	0	23.31	23.36	23.29			
15	QPSK	36	20	23.26	23.32	23.27		24	1
15	QPSK	36	39	23.25	23.26	23.27			
15	QPSK	75	0	23.26	23.43	23.34			
15	16QAM	1	0	23.17	23.19	23.09			
15	16QAM	1	37	23.16	23.30	23.11		24	1
15	16QAM	1	74	23.09	23.11	23.07			
15	16QAM	36	0	22.20	22.38	22.34			
15	16QAM	36	20	22.23	22.40	22.34			
15	16QAM	36	39	22.29	22.41	22.29		23	2
15	16QAM	75	0	22.32	22.41	22.32			
15	64QAM	1	0	22.36	22.51	22.45			
15	64QAM	1	37	22.39	22.48	22.44		23	2
15	64QAM	1	74	22.34	22.40	22.36			
15	64QAM	36	0	21.32	21.40	21.25			
15	64QAM	36	20	21.19	21.38	21.12		22	3
15	64QAM	36	39	21.28	21.32	21.18			
15	64QAM	75	0	21.37	21.41	21.37			
15	256QAM	1	0	19.24	19.36	19.27			
15	256QAM	1	37	19.27	19.35	19.21		20	5
15	256QAM	1	74	19.29	19.36	19.24			
15	256QAM	36	0	19.29	19.42	19.30			
15	256QAM	36	20	19.16	19.39	19.26		20	5
15	256QAM	36	39	19.29	19.36	19.30			
15	256QAM	75	0	19.32	19.48	19.34			
Channel				37600	38000	38000	Time-up limit (dftm)	MPR (dB)	
Frequency (MHz)				2475	2495	2495			
10	QPSK	1	0	24.43	24.52	24.38			
10	QPSK	1	25	24.38	24.47	24.44		25	0
10	QPSK	1	49	23.97	23.99	23.96			
10	QPSK	25	0	23.25	23.39	23.27			
10	QPSK	25	12	23.28	23.36	23.29		24	1
10	QPSK	25	25	23.25	23.35	23.26			
10	QPSK	50	0	23.29	23.39	23.26			
10	16QAM	1	0	23.11	23.24	23.09			
10	16QAM	1	25	23.20	23.26	23.18		24	1
10	16QAM	1	49	23.17	23.14	23.02			
10	16QAM	25	0	22.25	22.41	22.35			
10	16QAM	25	12	22.26	22.33	22.24		23	2
10	16QAM	25	25	22.32	22.41	22.23			
10	16QAM	50	0	22.34	22.37	22.37			
10	64QAM	1	0	22.34	22.51	22.39			
10	64QAM	1	25	22.34	22.44	22.40		23	2
10	64QAM	1	49	22.35	22.41	22.38			
10	64QAM	25	0	21.24	21.39	21.17			
10	64QAM	25	12	21.25	21.31	21.21		22	3
10	64QAM	25	25	21.25	21.35	21.25			
10	64QAM	50	0	21.42	21.44	21.37			
10	256QAM	1	0	19.23	19.42	19.35			
10	256QAM	1	25	19.27	19.38	19.25		20	5
10	256QAM	1	49	19.32	19.35	19.16			
10	256QAM	25	0	19.24	19.42	19.24			
10	256QAM	25	12	19.26	19.41	19.26		20	5
10	256QAM	25	25	19.26	19.34	19.36			
10	256QAM	50	0	19.41	19.46	19.31			
Channel				37775	38000	38025	Time-up limit (dftm)	MPR (dB)	
Frequency (MHz)				2572.5	2595	2617.5			
5	QPSK	1	0	24.37	24.54	24.49			
5	QPSK	1	12	24.36	24.48	24.42		25	0
5	QPSK	1	24	23.97	24.09	23.89			
5	QPSK	12	0	23.27	23.42	23.34			
5	QPSK	12	7	23.35	23.36	23.20		24	1
5	QPSK	12	13	23.22	23.30	23.26			
5	QPSK	25	0	23.22	23.41	23.30			
5	16QAM	1	0	23.22	23.25	23.15			
5	16QAM	1	12	23.14	23.29	23.15		24	1
5	16QAM	1	24	23.17	23.23	23.06			
5	16QAM	12	0	22.21	22.41	22.33			
5	16QAM	12	7	22.18	22.36	22.23		23	2
5	16QAM	12	13	22.36	22.35	22.24			
5	16QAM	25	0	22.29	22.41	22.35			
5	64QAM	1	0	22.30	22.53	22.35			
5	64QAM	1	12	22.39	22.42	22.37		23	2
5	64QAM	1	24	22.28	22.43	22.36			
5	64QAM	12	0	21.24	21.44	21.22			
5	64QAM	12	7	21.31	21.30	21.21		22	3
5	64QAM	12	13	21.22	21.28	21.24			
5	64QAM	25	0	21.36	21.42	21.37			
5	256QAM	1	0	19.21	19.38	19.27			
5	256QAM	1	12	19.22	19.36	19.23		20	5
5	256QAM	1	24	19.27	19.32	19.19			
5	256QAM	12	0	19.20	19.38	19.21			
5	256QAM	12	7	19.22	19.40	19.20		20	5
5	256QAM	12	13	19.30	19.34	19.29			
5	256QAM	25	0	19.38	19.44	19.22			

Band 41 Ant3 Default Other PA										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Mod Ch [FHz]	Power Low Mod Ch [FHz]	Power High Mod Ch [FHz]	Power High Mod Ch [FHz]	Time-up limit (frames)	MPR (dB)	
Channel				39750	40165	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	24.17	24.15	24.55	24.15	24.34	25	0
20	QPSK	1	49	24.11	24.16	24.42	24.09	24.30		
20	QPSK	1	99	24.13	24.15	24.50	24.12	24.32		
20	QPSK	50	0	23.17	23.20	23.51	23.18	23.38	24	1
20	QPSK	50	24	23.07	23.13	23.41	23.09	23.28		
20	QPSK	50	50	23.14	23.14	23.46	23.10	23.37		
20	16QAM	1	0	23.13	23.11	23.43	23.14	23.30	24	1
20	16QAM	1	49	23.12	23.14	23.38	23.15	23.28		
20	16QAM	50	24	22.17	23.10	23.49	23.15	23.35		
20	16QAM	50	0	22.22	22.23	22.51	22.19	22.25	23	
20	16QAM	50	24	22.09	22.12	22.43	22.10	22.23		
20	16QAM	50	50	22.15	22.15	22.44	22.13	22.37		
20	16QAM	100	0	22.24	22.18	22.55	22.06	22.33	23	
20	64QAM	1	0	22.18	22.11	22.40	22.08	22.33		
20	64QAM	1	49	22.09	22.09	22.34	22.11	22.20		
20	64QAM	1	99	22.17	22.13	22.51	22.07	22.33	22	3
20	64QAM	50	0	21.20	21.24	21.52	21.20	21.35		
20	64QAM	50	24	21.02	21.11	21.42	21.14	21.25		
20	64QAM	50	50	21.11	21.10	21.42	21.07	21.36	20	5
20	64QAM	100	0	21.25	21.19	21.54	21.12	21.37		
20	256QAM	1	0	19.22	19.19	19.47	19.22	19.36		
20	256QAM	1	49	19.04	19.16	19.41	19.13	19.24	20	5
20	256QAM	1	99	19.16	19.14	19.49	19.13	19.36		
20	256QAM	50	0	19.18	19.21	19.59	19.07	19.37		
20	256QAM	50	24	19.16	19.11	19.47	19.19	19.26	20	5
20	256QAM	50	50	19.17	19.11	19.40	19.16	19.30		
20	256QAM	100	0	19.23	19.15	19.54	19.11	19.31		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	Time-up limit (frames)	MPR (dB)
15	QPSK	1	0	24.14	24.09	24.47	24.15	24.33	25	0
15	QPSK	1	37	24.12	24.11	24.33	24.10	24.33		
15	QPSK	1	74	24.13	24.13	24.31	24.11	24.32		
15	QPSK	36	0	23.12	23.20	23.49	23.14	23.38	23	1
15	QPSK	36	20	23.03	23.09	23.36	23.09	23.27		
15	QPSK	36	36	23.14	23.14	23.48	23.12	23.34		
15	QPSK	75	0	23.17	23.12	23.55	23.13	23.34	24	1
15	16QAM	1	37	23.06	23.10	23.37	23.16	23.35		
15	16QAM	1	74	23.06	23.01	23.51	23.11	23.32		
15	16QAM	36	0	22.20	22.20	22.54	22.14	22.31	23	2
15	16QAM	36	20	22.09	22.09	22.39	22.12	22.32		
15	16QAM	36	36	22.08	22.12	22.44	22.05	22.32		
15	16QAM	75	0	22.20	22.07	22.48	22.04	22.34	22	3
15	64QAM	1	0	22.09	22.08	22.33	22.03	22.31		
15	64QAM	1	37	22.04	22.12	22.33	22.06	22.28		
15	64QAM	36	0	21.14	21.19	21.45	21.15	21.28	22	3
15	64QAM	36	20	20.98	21.14	21.37	21.08	21.18		
15	64QAM	36	36	20.86	21.13	21.42	21.09	21.27		
15	64QAM	75	0	21.15	21.14	21.41	21.11	21.24	20	5
15	256QAM	1	0	19.25	19.15	19.43	19.14	19.29		
15	256QAM	1	37	16.87	16.07	16.40	19.15	19.16		
15	256QAM	1	74	19.14	19.06	19.49	19.13	19.33	20	5
15	256QAM	50	0	19.17	19.17	19.58	19.07	19.36		
15	256QAM	50	20	19.17	19.03	19.41	19.11	19.22		
15	256QAM	36	0	19.11	19.05	19.32	19.13	19.28	20	5
15	256QAM	36	19	19.12	19.17	19.56	19.03	19.36		
Frequency (MHz)				39750	40165	40620	41055	41490		
10	QPSK	1	0	24.13	24.13	24.49	24.08	24.30	25	0
10	QPSK	1	25	24.09	24.10	24.45	24.10	24.28		
10	QPSK	1	49	24.13	24.18	24.52	24.07	24.29		
10	QPSK	25	0	23.15	23.20	23.54	23.13	23.36	24	1
10	QPSK	25	13	23.05	23.15	23.36	23.01	23.26		
10	QPSK	50	0	23.20	23.18	23.49	23.05	23.37		
10	16QAM	1	0	23.15	23.10	23.43	23.13	23.31	24	1
10	16QAM	1	25	23.13	23.15	23.33	23.10	23.29		
10	16QAM	25	0	22.21	22.09	22.52	22.13	22.27		
10	16QAM	25	12	22.09	22.12	22.40	22.08	22.24	23	2
10	16QAM	25	25	22.12	22.15	22.37	22.12	22.37		
10	16QAM	50	0	22.26	22.09	22.50	22.04	22.28		
10	64QAM	1	0	22.20	22.07	22.47	22.07	22.32	22	
10	64QAM	1	25	22.03	22.01	22.31	22.08	22.21		
10	64QAM	25	0	21.23	21.23	21.50	21.12	21.36		
10	64QAM	25	12	21.03	21.03	21.37	21.15	21.26	20	5
10	64QAM	25	25	21.10	21.11	21.39	21.07	21.36		
10	64QAM	50	0	21.18	21.21	21.48	21.14	21.36		
10	16QAM	1	0	19.14	19.12	19.39	19.15	19.28	20	5
10	16QAM	1	25	19.06	19.15	19.44	19.06	19.22		
10	256QAM	1	49	19.13	19.13	19.48	19.02	19.37		
10	256QAM	25	0	19.17	19.23	19.58	19.03	19.34	20	5
10	256QAM	25	12	19.17	19.04	19.42	19.03	19.29		
10	256QAM	25	25	19.17	19.13	19.39	19.16	19.27		
Channel				39750	40165	40620	41055	41490	Time-up limit (frames)	MPR (dB)
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
5	QPSK	1	0	24.10	24.15	24.40	24.09	24.30	25	0
5	QPSK	1	12	24.09	24.16	24.36	24.01	24.32		
5	QPSK	1	24	24.07	24.14	24.42	24.09	24.23		
5	QPSK	12	0	23.12	23.12	23.44	23.14	23.32	24	1
5	QPSK	12	13	23.05	23.07	23.38	23.03	23.33		
5	QPSK	25	0	23.20	23.18	23.55	23.08	23.38		
5	16QAM	1	0	23.10	23.08	23.41	23.09	23.30	23	2
5	16QAM	1	12	23.08	23.08	23.37	23.12	23.35		
5	16QAM	1	24	23.09	23.08	23.31	23.12	23.35		
5	16QAM	12	0	22.20	22.24	22.44	22.16	22.28	23	2
5	16QAM	12	7	22.02	22.10	22.43	22.12	22.26		
5	16QAM	12	13	22.12	22.06	22.39	22.09	22.28		
5	64QAM	1	0	22.14	22.08	22.34	22.04	22.27	23	2
5	64QAM	1	12	22.09	22.04	22.34	22.12	22.24		
5	64QAM	1	24	22.09	22.04	22.43	22.03	22.18		
5	64QAM	12	0	21.12	21.27	21.51	21.13	21.37	22	3
5	64QAM	12	7	21.04	21.13	21.44	21.09	21.18		
5	64QAM	12	13	21.08	21.13	21.41	21.01	21.36		
5	64QAM	25	0	21.20	21.21	21.47	21.04	21.36	20	5
5	64QAM	25	12	21.16	21.16	21.47	21.11	21.37		
5	256QAM	1	12	19.06	19.16	19.33	19.10	19.15		
5	256QAM	1	24	19.19	19.11	19.46	19.11	19.29	20	5
5	256QAM	12	0	19.17	19.22	19.51	19.08	19.37		
5	256QAM	12	7	19.07	19.08	19.49	19.12	19.27		
5	256QAM	12	13	19.12	19.06	19.43	19.06	19.26	20	5
5	256QAM	25	0	19.08	19.15	19.49	19.09	19.26		

Band 7 Ant4 Default Other PA											
BW (MHz)	Module on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)			
Channel				20860	21100	21350					
Frequency (MHz)				2507.5	2535	2565					
20	QPSK	1	0	24.43	24.52	24.45	25.5	0			
20	QPSK	1	49	24.35	24.47	24.33					
20	QPSK	1	99	24.29	24.41	24.33					
20	QPSK	50	0	23.28	23.37	23.25	24.5	1			
20	QPSK	50	24	23.26	23.34	23.25					
20	QPSK	50	50	23.20	23.24	23.14					
20	QPSK	100	0	23.22	23.35	23.23	24.5	1			
20	16QAM	1	0	23.13	23.24	23.13					
20	16QAM	1	49	23.08	23.21	23.02					
20	16QAM	1	99	23.08	23.19	23.03	23.5	2			
20	16QAM	50	0	22.20	22.30	22.16					
20	16QAM	50	24	22.14	22.22	22.11					
20	16QAM	50	50	22.16	22.26	22.19	23.5	3			
20	16QAM	100	0	22.19	22.26	22.10					
20	64QAM	1	0	22.31	22.46	22.33					
20	64QAM	1	49	22.35	22.43	22.34	23.5	3			
20	64QAM	1	99	22.26	22.38	22.25					
20	64QAM	50	0	21.20	21.28	21.19					
20	64QAM	50	24	21.10	21.20	21.06	22.5	3			
20	64QAM	50	50	21.10	21.21	21.06					
20	64QAM	100	0	21.29	21.36	21.21					
20	256QAM	1	0	19.29	19.42	19.32	20.5	5			
20	256QAM	1	49	19.27	19.36	19.23					
20	256QAM	1	99	19.32	19.38	19.26					
20	256QAM	50	0	19.43	19.49	19.33	20.5	5			
20	256QAM	50	24	19.33	19.48	19.33					
20	256QAM	50	50	19.31	19.42	19.27					
20	256QAM	100	0	19.36	19.45	19.28	20.5	5			
Channel				20825	21100	21375					
Frequency (MHz)				2507.5	2535	2562.5					
15	QPSK	1	0	24.36	24.51	24.39	25.5	0			
15	QPSK	1	37	24.35	24.41	24.35					
15	QPSK	1	74	24.21	24.41	24.35					
15	QPSK	36	0	23.28	23.33	23.17	24.5	1			
15	QPSK	36	20	23.18	23.28	23.21					
15	QPSK	36	39	23.12	23.21	23.15					
15	QPSK	75	0	23.13	23.34	23.15	24.5	1			
15	16QAM	1	0	23.11	23.26	23.12					
15	16QAM	1	37	23.08	23.18	23.03					
15	16QAM	1	74	23.06	23.16	22.99	23.5	2			
15	16QAM	36	0	22.17	22.28	22.17					
15	16QAM	36	20	22.14	22.25	22.03					
15	16QAM	36	39	22.15	22.27	22.07	23.5	2			
15	16QAM	75	0	22.15	22.16	22.07					
15	64QAM	1	0	22.31	22.43	22.31					
15	64QAM	1	37	22.29	22.36	22.31	22.5	3			
15	64QAM	1	74	22.28	22.40	22.18					
15	64QAM	36	0	21.15	21.26	21.17					
15	64QAM	36	20	21.04	21.20	21.01	22.5	3			
15	64QAM	36	39	21.05	21.18	20.96					
15	64QAM	75	0	21.23	21.39	21.19					
15	256QAM	1	0	19.25	19.37	19.29	20.5	5			
15	256QAM	1	37	19.28	19.34	19.21					
15	256QAM	1	74	19.33	19.33	19.28					
15	256QAM	36	0	19.37	19.46	19.29	20.5	5			
15	256QAM	36	20	19.29	19.39	19.25					
15	256QAM	36	39	19.27	19.36	19.23					
15	256QAM	75	0	19.30	19.42	19.20	20.5	5			
Channel				20800	21100	21400					
Frequency (MHz)				2505	2535	2565					
10	QPSK	1	0	24.41	24.46	24.36	25.5	0			
10	QPSK	1	25	24.29	24.41	24.28					
10	QPSK	1	49	24.21	24.43	24.31					
10	QPSK	25	0	23.26	23.30	23.27	24.5	1			
10	QPSK	25	12	23.25	23.30	23.27					
10	QPSK	25	25	23.11	23.22	23.07					
10	16QAM	1	0	23.10	23.16	23.12	24.5	1			
10	16QAM	1	25	23.11	23.19	23.03					
10	16QAM	1	49	23.00	23.16	22.99					
10	16QAM	25	0	22.11	22.23	22.19	23.5	2			
10	16QAM	25	12	22.16	22.23	22.03					
10	16QAM	25	25	22.11	22.26	22.13					
10	16QAM	50	0	22.22	22.20	22.06	23.5	2			
10	64QAM	1	0	22.33	22.43	22.26					
10	64QAM	1	25	22.30	22.37	22.31					
10	64QAM	1	49	22.21	22.32	22.21	22.5	3			
10	64QAM	25	0	21.18	21.23	21.20					
10	64QAM	25	12	21.01	21.15	21.05					
10	64QAM	25	25	21.03	21.22	21.01	20.5	5			
10	64QAM	50	0	21.25	21.30	21.13					
10	256QAM	1	0	19.23	19.37	19.31					
10	256QAM	1	25	19.23	19.36	19.17	20.5	5			
10	256QAM	1	49	19.31	19.37	19.19					
10	256QAM	25	0	19.35	19.47	19.30					
10	256QAM	25	12	19.31	19.40	19.28	20.5	5			
10	256QAM	25	25	19.31	19.40	19.20					
10	256QAM	50	0	19.35	19.42	19.29					
Channel				20775	21100	21425					
Frequency (MHz)				2502.5	2535	2567.5					
5	QPSK	1	0	24.42	24.51	24.42	25.5	0			
5	QPSK	1	12	24.30	24.49	24.31					
5	QPSK	1	24	24.27	24.39	24.32					
5	QPSK	12	0	23.23	23.31	23.26	24.5	1			
5	QPSK	12	7	23.20	23.33	23.24					
5	QPSK	12	13	23.20	23.26	23.07					
5	QPSK	25	0	23.17	23.31	23.23	24.5	1			
5	16QAM	1	0	23.07	23.26	23.05					
5	16QAM	1	12	23.00	23.24	23.00					
5	16QAM	1	24	23.11	23.19	22.94	23.5	2			
5	16QAM	12	0	22.21	22.31	22.12					
5	16QAM	12	7	22.11	22.17	22.11					
5	16QAM	12	13	22.13	22.26	22.13	23.5	2			
5	16QAM	25	0	22.22	22.27	22.08					
5	64QAM	1	0	22.33	22.40	22.29					
5	64QAM	1	12	22.26	22.44	22.26	22.5	3			
5	64QAM	1	24	22.21	22.38	22.17					
5	64QAM	12	0	21.21	21.19	21.18					
5	64QAM	12	7	21.01	21.11	21.08	22.5	3			
5	64QAM	12	13	21.03	21.23	20.87					
5	64QAM	25	0	21.29	21.29	21.13					
5	256QAM	1	0	19.21	19.41	19.29	20.5	5			
5	256QAM	1	12	19.30	19.36	19.26					
5	256QAM	1	24	19.29	19.30	19.25					
5	256QAM	12	0	19.40	19.49	19.29	20.5	5			
5	256QAM	12	7	19.31	19.42	19.26					
5	256QAM	12	13	19.26	19.36	19.20					
5	256QAM	25	0	19.28	19.41	19.24					

Band 7 Ant4 Default Other PA-1									
BW (MHz)	Module on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				20860	21100	21350			
Frequency (MHz)				20860	21100	21350			
20	QPSK	1	0	24.43	24.53	24.28	25.5	0	
20	QPSK	1	49	24.30	24.40	24.16			
20	QPSK	1	99	24.27	24.38	24.25	24.5	1	
20	QPSK	50	0	23.34	23.38	23.11			
20	QPSK	50	24	23.22	23.33	23.02	23.5	2	
20	QPSK	50	24	23.14	23.24	22.90			
20	QPSK	100	0	23.30	23.35	23.06	22.5	3	
20	16QAM	1	0	23.26	23.34	23.10			
20	16QAM	1	49	23.25	23.24	23.05	20.5	5	
20	16QAM	1	99	23.16	23.23	23.16			
20	16QAM	50	0	22.37	22.44	22.17	20.5	5	
20	16QAM	50	24	22.28	22.34	22.01			
20	16QAM	50	50	22.21	22.18	22.00	20.5	5	
20	16QAM	100	0	22.29	22.38	22.01			
20	64QAM	1	0	22.32	22.31	22.08	20.5	5	
20	64QAM	1	49	22.27	22.19	22.00			
20	64QAM	99	21	22.13	22.22	22.00	20.5	5	
20	64QAM	50	0	21.32	21.41	21.01			
20	64QAM	50	50	21.25	21.30	21.01	20.5	5	
20	64QAM	100	0	21.27	21.33	21.08			
20	256QAM	1	0	19.31	19.43	19.09	20.5	5	
20	256QAM	1	49	19.28	19.38	19.08			
20	256QAM	1	99	19.19	19.28	18.99	20.5	5	
20	256QAM	50	0	19.36	19.38	19.09			
20	256QAM	50	24	19.28	19.31	19.01	20.5	5	
20	256QAM	50	50	19.22	19.24	19.02			
20	256QAM	100	0	19.18	19.24	19.14			
Channel				20860	21100	21350	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				20860	20935	20960			
15	QPSK	1	0	24.34	24.52	24.24	25.5	0	
15	QPSK	1	37	24.28	24.38	24.12			
15	QPSK	1	74	24.21	24.31	24.00	24.5	1	
15	QPSK	36	0	23.32	23.35	23.12			
15	QPSK	36	38	23.28	23.32	23.08	23.5	2	
15	QPSK	36	29	23.12	23.19	22.92			
15	QPSK	75	0	23.28	23.28	23.00	23.5	2	
15	16QAM	1	0	23.21	23.29	23.12			
15	16QAM	1	37	23.21	23.18	22.97	23.5	2	
15	16QAM	1	74	23.18	23.06	23.11			
15	16QAM	36	0	22.32	22.37	22.09	23.5	2	
15	16QAM	36	20	22.24	22.29	21.92			
15	16QAM	36	38	22.14	22.13	21.93	23.5	2	
15	16QAM	75	0	22.29	22.30	21.93			
15	16QAM	1	0	22.31	22.34	22.02	23.5	2	
15	16QAM	1	37	22.27	22.24	21.98			
15	16QAM	1	74	22.07	22.15	21.14	23.5	2	
15	64QAM	36	0	21.25	21.44	21.08			
15	64QAM	36	20	21.30	21.40	21.04	23.5	3	
15	64QAM	36	39	21.18	21.22	21.04			
15	64QAM	75	0	21.19	21.28	21.04	23.5	3	
15	256QAM	1	0	19.42	19.46	19.05			
15	256QAM	1	37	19.12	19.34	18.95	20.5	5	
15	256QAM	1	74	19.20	19.25	18.97			
15	256QAM	36	0	19.36	19.32	19.02	20.5	5	
15	256QAM	36	20	19.19	19.26	19.07			
15	256QAM	36	39	19.16	19.25	19.06	20.5	5	
15	256QAM	75	0	19.11	19.15	18.99			
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505 <th>2535<th>2565</th><th></th><th></th><th></th></th>	2535 <th>2565</th> <th></th> <th></th> <th></th>	2565			
10	QPSK	1	0	24.32	24.51	24.18	25.5	0	
10	QPSK	1	25	24.25	24.34	24.07			
10	QPSK	1	49	24.19	24.30	24.04	24.5	1	
10	QPSK	25	0	23.35	23.39	23.13			
10	QPSK	25	12	23.24	23.32	22.98	23.5	2	
10	QPSK	25	25	23.14	23.21	22.97			
10	QPSK	50	0	23.22	23.31	23.00	24.5	1	
10	16QAM	1	0	23.22	23.24	22.97			
10	16QAM	1	25	23.17	23.28	23.03	24.5	1	
10	16QAM	1	49	23.16	23.18	22.96			
10	16QAM	25	0	22.32	22.43	22.17	23.5	2	
10	16QAM	25	12	22.19	22.29	22.03			
10	16QAM	25	25	22.24	22.31	21.93	23.5	2	
10	16QAM	50	0	22.27	22.25	22.05			
10	64QAM	1	25	22.22	22.17	22.00	23.5	2	
10	64QAM	25	0	22.12	22.21	22.17			
10	64QAM	25	0	21.27	21.42	21.05	22.5	3	
10	64QAM	25	12	21.29	21.37	20.96			
10	64QAM	25	25	21.20	21.30	20.92	20.5	5	
10	256QAM	1	0	19.34	19.35	19.02			
10	256QAM	1	25	19.12	19.33	18.99	20.5	5	
10	256QAM	1	49	19.22	19.20	18.90			
10	256QAM	25	0	19.35	19.34	19.07	20.5	5	
10	256QAM	25	12	19.17	19.23	18.96			
10	256QAM	25	12	19.17	19.23	18.96	20.5	5	
10	256QAM	50	0	19.10	19.25	19.06			
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	24.36	24.48	24.20	25.5	0	
5	QPSK	1	12	24.21	24.34	24.16			
5	QPSK	1	24	24.08	24.24	24.00	24.5	1	
5	QPSK	12	0	23.34	23.39	23.06			
5	QPSK	12	7	23.16	23.25	22.94	24.5	1	
5	QPSK	12	13	23.23	23.28	23.01			
5	QPSK	25	0	23.28	23.32	23.02	24.5	1	
5	15QAM	1	0	23.28	23.32	23.17			
5	15QAM	1	12	23.12	23.21	23.00	24.5	1	
5	16QAM	1	24	23.08	23.17	23.15			
5	16QAM	12	0	22.39	22.36	22.14	23.5	2	
5	16QAM	12	7	22.18	22.28	22.04			
5	16QAM	12	13	22.19	22.12	22.02	23.5	2	
5	16QAM	25	0	22.22	22.31	22.00			
5	16QAM	25	12	22.31	22.37	22.08	23.5	2	
5	64QAM	1	12	22.18	22.27	21.93			
5	64QAM	1	24	22.12	22.24	22.01	22.5	3	
5	64QAM	12	0	21.31	21.36	21.01			
5	64QAM	12	7	21.23	21.34	21.04	22.5	3	
5	64QAM	25	0	21.24	21.33	21.07			
5	256QAM	1	0	19.30	19.43	19.01	20.5	5	
5	256QAM	1	12	19.11	19.28	19.00			
5	256QAM	1	24	19.21	19.28	18.91	20.5	5	
5	256QAM	12	0	19.36	19.39	19.09			
5	256QAM	12	7	19.27	19.31	19.03	20.5	5	
5	256QAM	12	13	19.27	19.30	19.03			
5	256QAM	25	0	19.09	19.20	19.04			

Band 38 Ant4 Default Other PA										
BW (MHz)	Modulat ion	RB Size	RB Offset	Power Low Ch./Freq	Power Main Ch./Freq	Power High Ch./Freq	Time-up (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	24.12	24.18	23.96	25.5	0		
20	QPSK	1	49	24.05	24.12	23.91				
20	QPSK	1	99	23.97	24.07	23.82				
20	QPSK	50	0	23.04	23.17	22.82				
20	QPSK	50	24	22.90	23.00	22.66	24.5	1		
20	QPSK	50	50	22.74	22.81	22.54				
20	QPSK	100	0	22.82	23.03	22.77				
20	16QAM	1	0	23.03	23.13	22.87				
20	16QAM	1	49	22.97	23.03	22.77	24.5	1		
20	16QAM	1	99	22.96	22.98	22.76				
20	16QAM	50	0	22.07	22.15	21.84				
20	16QAM	50	24	22.01	22.08	21.82				
20	16QAM	50	50	22.04	22.06	21.88	23.5	2		
20	16QAM	100	0	22.21	22.34	21.96				
20	64QAM	1	0	22.10	22.16	22.04				
20	64QAM	1	49	22.08	22.22	22.13				
20	64QAM	1	99	22.05	22.15	22.01	23.5	2		
20	64QAM	50	0	21.07	21.14	20.88				
20	64QAM	50	24	21.04	21.14	20.82				
20	64QAM	50	50	21.05	21.13	20.89				
20	64QAM	100	0	20.05	20.10	19.89	22.5	3		
20	256QAM	1	0	19.10	19.21	18.95				
20	256QAM	1	49	19.07	19.19	18.84				
20	256QAM	1	99	19.09	19.18	18.86				
20	256QAM	50	0	19.02	19.15	18.80	20.5	5		
20	256QAM	50	24	18.99	19.05	18.79				
20	256QAM	50	50	19.01	19.05	18.82				
20	256QAM	100	0	19.10	19.20	18.94				
Channel				37875	38000	38175	Time-up (dBm)	MPR (dB)		
Frequency (MHz)				2577.5	2595	2612.5	Time-up (dBm)	MPR (dB)		
15	QPSK	1	0	24.15	24.15	23.95	25.5	0		
15	QPSK	1	37	23.99	24.06	23.87				
15	QPSK	1	74	23.90	24.00	23.80				
15	QPSK	36	0	23.00	23.11	22.84				
15	QPSK	36	20	22.89	22.98	22.58	24.5	1		
15	QPSK	36	39	22.88	22.82	22.55				
15	QPSK	75	0	22.91	23.04	22.64				
15	16QAM	1	0	22.97	23.08	22.82				
15	16QAM	1	37	22.95	22.95	22.71	24.5	1		
15	16QAM	1	74	22.84	22.89	22.71				
15	16QAM	36	0	22.04	22.07	21.78				
15	16QAM	36	20	21.95	22.06	21.81				
15	16QAM	36	39	22.05	21.99	21.87	23.5	2		
15	16QAM	75	0	22.21	22.26	21.91				
15	64QAM	1	0	22.08	22.17	22.03				
15	64QAM	1	37	22.05	22.21	22.10				
15	64QAM	1	74	22.01	22.07	22.01	22.5	3		
15	64QAM	36	0	21.04	21.17	20.86				
15	64QAM	36	20	21.04	21.12	20.75				
15	64QAM	36	39	21.03	21.14	20.78				
15	64QAM	75	0	21.06	21.07	21.07	20.5	5		
15	256QAM	1	0	19.06	19.20	18.88				
15	256QAM	1	37	19.02	19.20	18.79				
15	256QAM	1	74	19.12	19.11	18.87				
15	256QAM	36	0	18.97	19.13	18.71	20.5	5		
15	256QAM	36	20	18.99	19.06	18.73				
15	256QAM	36	39	19.02	18.99	18.79				
15	256QAM	75	0	19.08	19.15	18.96				
Channel				37800	38000	38200	Time-up (dBm)	MPR (dB)		
Frequency (MHz)				2575	2595	2615	Time-up (dBm)	MPR (dB)		
10	QPSK	1	0	24.12	24.15	23.91	25.5	0		
10	QPSK	1	25	24.00	24.07	23.93				
10	QPSK	1	49	23.89	24.07	23.78				
10	QPSK	25	0	23.04	23.20	22.80				
10	QPSK	25	12	22.89	22.82	22.87	24.5	1		
10	QPSK	25	25	22.67	22.77	22.70				
10	QPSK	50	0	22.95	23.03	22.86				
10	16QAM	1	0	22.97	23.13	22.84				
10	16QAM	1	25	22.94	22.97	22.75	24.5	1		
10	16QAM	1	49	22.97	22.97	22.69				
10	16QAM	25	0	22.05	22.11	21.85				
10	16QAM	25	12	21.99	22.07	21.83				
10	16QAM	25	25	22.02	21.99	21.80	23.5	2		
10	16QAM	50	0	22.18	22.26	21.98				
10	64QAM	1	0	22.12	22.15	22.01				
10	64QAM	1	25	22.08	22.14	22.14				
10	64QAM	1	49	22.02	22.09	22.02	23.5	2		
10	64QAM	25	0	21.05	21.05	20.89				
10	64QAM	25	12	21.04	21.08	20.84				
10	64QAM	25	25	21.05	21.14	20.85				
10	64QAM	50	0	21.04	21.01	20.86	22.5	3		
10	64QAM	25	12	21.04	21.08	20.84				
10	64QAM	25	25	21.05	21.14	20.85				
10	256QAM	1	0	19.13	19.13	18.92				
10	256QAM	1	25	19.00	19.13	18.80	20.5	5		
10	256QAM	1	49	19.00	19.13	18.79				
10	256QAM	25	0	19.03	19.12	18.83				
10	256QAM	25	12	18.91	19.04	18.74				
10	256QAM	25	25	18.98	18.99	18.77	20.5	5		
10	256QAM	50	0	19.04	19.16	18.94				
10	256QAM	50	0	19.04	19.16	18.94				
10	256QAM	50	0	19.04	19.16	18.94				
Channel				37825	38000	38225	Time-up (dBm)	MPR (dB)		
Frequency (MHz)				2572.5	2595	2617.5	Time-up (dBm)	MPR (dB)		
5	QPSK	1	0	24.12	24.13	23.88	25.5	0		
5	QPSK	1	12	24.05	24.06	23.85				
5	QPSK	1	24	23.94	24.01	23.80				
5	QPSK	12	0	23.01	23.13	22.76				
5	QPSK	12	7	22.83	23.01	22.57	24.5	1		
5	QPSK	12	13	22.71	22.82	22.52				
5	QPSK	25	0	22.88	22.97	22.68				
5	16QAM	1	0	22.98	23.08	22.87				
5	16QAM	1	12	22.85	22.97	22.75	24.5	1		
5	16QAM	1	24	22.88	23.01	22.73				
5	16QAM	12	0	22.07	22.14	21.86				
5	16QAM	12	7	21.96	22.08	21.75				
5	16QAM	12	13	22.00	22.02	21.85	23.5	2		
5	16QAM	25	0	22.21	22.36	21.97				
5	64QAM	1	0	22.11	22.14	22.04				
5	64QAM	1	12	22.07	22.15	22.14				
5	64QAM	1	24	22.02	22.08	22.01	23.5	2		
5	64QAM	12	0	22.07	22.15	22.14				
5	64QAM	12	7	22.02	22.08	22.01				
5	64QAM	12	13	21.97	22.06	21.87				
5	64QAM	12	7	20.98	21.10	20.79	22.5	3		
5	64QAM	12	13	20.98	21.15	20.80				
5	64QAM	25	0	21.01	21.10	20.80				
5	64QAM	25	12	21.00	21.12	20.81				
5	64QAM	25	12	19.05	19.19	18.86	20.5	5		
5	256QAM	1	24	19.03	19.14	18.81				
5	256QAM	12	0	18.99	19.06	18.83				
5	256QAM	12	7	18.96	19.03	18.71				
5	256QAM	12	13	19.00	19.08	18.79	20.5	5		
5	256QAM	25	0	19.03	19.22	18.83				
5	256QAM	25	12	19.02	19.17	18.81				
5	256QAM	25	25	19.03	19.27	18.91				

Band 7 Ant5 Default Main PA-1									
BW (MHz)	Module on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				2550	2100	2130			
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	0	20.81	20.87	20.84			
20	QPSK	1	49	20.78	20.84	20.86			
20	QPSK	1	99	20.76	20.80	20.80		22	0
20	QPSK	50	0	19.69	19.73	19.69			
20	QPSK	50	24	19.60	19.64	19.60			
20	QPSK	50	50	19.65	19.69	19.61		21	1
20	QPSK	100	0	19.64	19.67	19.63			
20	16QAM	1	0	19.64	19.62	19.61			
20	16QAM	1	49	19.59	19.61	19.64			
20	16QAM	1	99	19.67	19.68	19.65		21	1
20	16QAM	50	0	18.70	18.73	18.69			
20	16QAM	50	24	18.66	18.66	18.60			
20	16QAM	50	50	18.57	18.63	18.68		20	2
20	16QAM	100	0	18.73	18.70	18.63			
20	64QAM	1	0	18.62	18.61	18.63			
20	64QAM	1	49	18.58	18.61	18.63		20	2
20	64QAM	1	99	18.56	18.64	18.61			
20	64QAM	50	0	17.68	17.65	17.66			
20	64QAM	50	24	17.58	17.67	17.66		19	3
20	64QAM	50	50	17.58	17.64	17.60			
20	64QAM	100	0	17.53	17.61	17.53			
20	256QAM	1	0	15.62	15.70	15.70			
20	256QAM	1	49	15.59	15.61	15.58		17	5
20	256QAM	1	99	15.59	15.64	15.64			
20	256QAM	50	0	15.58	15.62	15.63			
20	256QAM	50	24	15.55	15.68	15.71			
20	256QAM	50	50	15.58	15.56	15.50		17	5
20	256QAM	100	0	15.67	15.73	15.69			
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	0	20.78	20.81	20.81			
15	QPSK	1	37	20.72	20.82	20.80			
15	QPSK	1	74	20.71	20.73	20.77		22	0
15	QPSK	36	0	19.63	19.63	19.64			
15	QPSK	36	20	19.60	19.57	19.57			
15	QPSK	36	39	19.59	19.64	19.55		21	1
15	QPSK	75	0	19.60	19.70	19.56			
15	16QAM	1	0	19.60	19.59	19.63			
15	16QAM	1	37	19.54	19.61	19.67		21	1
15	16QAM	1	74	19.66	19.61	19.61			
15	16QAM	36	0	18.62	18.72	18.66			
15	16QAM	36	20	18.60	18.71	18.60		20	2
15	16QAM	36	39	18.58	18.64	18.60			
15	16QAM	75	0	18.65	18.69	18.54			
15	64QAM	1	0	18.60	18.56	18.59			
15	64QAM	1	37	18.57	18.63	18.66		20	2
15	64QAM	1	74	18.55	18.56	18.52			
15	64QAM	36	0	17.67	17.63	17.63			
15	64QAM	36	20	17.52	17.67	17.57		19	3
15	64QAM	36	39	17.58	17.65	17.56			
15	64QAM	75	0	17.53	17.53	17.52			
15	256QAM	1	0	15.56	15.73	15.63			
15	256QAM	1	37	15.55	15.63	15.53		17	5
15	256QAM	1	74	15.54	15.65	15.63			
15	256QAM	36	0	15.56	15.55	15.61			
15	256QAM	36	20	15.56	15.69	15.68			
15	256QAM	36	39	15.54	15.58	15.50		17	5
15	256QAM	75	0	15.60	15.73	15.63			
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	0	20.77	20.83	20.82			
10	QPSK	1	25	20.75	20.81	20.81		22	0
10	QPSK	1	49	20.75	20.78	20.74			
10	QPSK	25	0	19.68	19.61	19.72			
10	QPSK	25	12	19.57	19.61	19.62		21	1
10	QPSK	25	25	19.60	19.66	19.66			
10	QPSK	50	0	19.63	19.64	19.58			
10	16QAM	1	0	19.61	19.58	19.56			
10	16QAM	1	25	19.57	19.57	19.64		21	1
10	16QAM	1	49	19.60	19.64	19.65			
10	16QAM	25	0	18.63	18.74	18.64			
10	16QAM	25	12	18.63	18.64	18.54		20	2
10	16QAM	25	25	18.51	18.58	18.65			
10	16QAM	50	0	18.65	18.68	18.56			
10	64QAM	1	0	18.62	18.67	18.63			
10	64QAM	1	25	18.57	18.55	18.55		20	2
10	64QAM	1	49	18.54	18.60	18.59			
10	64QAM	25	0	17.69	17.62	17.57			
10	64QAM	25	12	17.54	17.59	17.64		19	3
10	64QAM	25	25	17.61	17.57	17.57			
10	64QAM	50	0	17.50	17.57	17.55			
10	256QAM	1	0	15.55	15.71	15.69			
10	256QAM	1	25	15.52	15.61	15.61		17	5
10	256QAM	1	49	15.52	15.67	15.56			
10	256QAM	25	0	15.50	15.57	15.58			
10	256QAM	25	12	15.60	15.65	15.69		17	5
10	256QAM	25	25	15.59	15.54	15.57			
10	256QAM	50	0	15.60	15.74	15.61			
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	20.79	20.83	20.85			
5	QPSK	1	12	20.71	20.78	20.85		22	0
5	QPSK	1	24	20.69	20.81	20.72			
5	QPSK	12	0	19.64	19.63	19.64			
5	QPSK	12	7	19.52	19.63	19.58		21	1
5	QPSK	12	13	19.57	19.64	19.58			
5	QPSK	25	0	19.55	19.63	19.62			
5	16QAM	1	0	19.61	19.63	19.56			
5	16QAM	1	12	19.52	19.54	19.57		21	1
5	16QAM	1	24	19.66	19.70	19.65			
5	16QAM	12	0	18.64	18.69	18.71			
5	16QAM	12	7	18.67	18.61	18.58		20	2
5	16QAM	12	13	18.51	18.65	18.69			
5	16QAM	25	0	18.68	18.62	18.55			
5	64QAM	1	0	18.60	18.62	18.56			
5	64QAM	1	12	18.61	18.61	18.56		20	2
5	64QAM	1	24	18.56	18.59	18.56			
5	64QAM	12	0	17.61	17.67	17.67			
5	64QAM	12	7	17.56	17.68	17.62		19	3
5	64QAM	12	13	17.61	17.58	17.58			
5	64QAM	25	0	17.52	17.62	17.62			
5	256QAM	1	0	15.55	15.65	15.69			
5	256QAM	1	12	15.57	15.57	15.50		17	5
5	256QAM	1	24	15.61	15.57	15.67			
5	256QAM	12	0	15.60	15.62	15.63			
5	256QAM	12	7	15.60	15.56	15.73			
5	256QAM	12	13	15.57	15.57	15.51		17	5
5	256QAM	25	0	15.64	15.65	15.68			

Band 7 Ant5 Default Other PA									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				20825	21100	21375			
Frequency (MHz)				2507.5	2535	2562.5			
20	QPSK	1	0	21.03	21.17	21.16			
20	QPSK	1	49	21.01	21.13	21.10	22.5	0	
20	QPSK	1	99	21.00	21.14	21.15			
20	QPSK	50	0	19.64	20.08	20.02			
20	QPSK	50	24	19.86	19.96	19.95	21.5	1	
20	QPSK	50	50	19.83	19.85	19.91			
20	QPSK	100	0	19.96	20.07	20.01			
20	16QAM	1	0	19.62	19.91	19.67			
20	16QAM	1	49	19.61	19.90	19.96	21.5	1	
20	16QAM	1	99	19.74	19.88	19.84			
20	16QAM	50	0	18.98	19.03	19.09			
20	16QAM	50	24	18.90	18.95	18.97	20.5	2	
20	16QAM	50	50	18.90	18.97	19.02			
20	16QAM	100	0	18.95	19.02	19.00			
20	64QAM	1	0	19.01	19.11	19.16			
20	64QAM	1	49	18.96	19.07	19.05	20.5	2	
20	64QAM	1	99	18.92	19.04	19.08			
20	64QAM	50	0	17.89	17.96	17.91			
20	64QAM	50	24	17.83	17.98	18.02	19.5	3	
20	64QAM	50	50	17.87	17.92	17.89			
20	64QAM	100	0	18.01	18.07	18.10			
20	256QAM	1	0	16.03	16.12	16.16			
20	256QAM	1	49	16.04	16.11	16.09	17.5	5	
20	256QAM	1	99	16.02	16.13	16.12			
20	256QAM	50	0	15.96	16.06	16.16			
20	256QAM	50	24	15.99	16.12	16.17	17.5	5	
20	256QAM	50	50	15.96	16.06	16.06			
20	256QAM	100	0	15.98	16.08	16.13			
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	0	21.01	21.10	21.09			
15	QPSK	1	37	21.03	21.14	21.07	22.5	0	
15	QPSK	1	74	21.01	21.14	21.08			
15	QPSK	50	0	19.62	20.06	20.00			
15	QPSK	50	24	19.83	19.93	19.91	21.5	1	
15	QPSK	50	39	19.81	19.92	19.91			
15	16QAM	1	0	19.60	19.88	19.66			
15	16QAM	1	49	19.76	20.06	20.07	21.5	1	
15	16QAM	1	37	19.75	19.86	19.99			
15	16QAM	50	0	18.97	19.03	19.86			
15	16QAM	50	24	18.94	18.97	19.09	20.5	2	
15	16QAM	50	20	18.85	18.91	18.89			
15	16QAM	50	39	18.91	18.90	18.94	20.5	2	
15	16QAM	75	0	18.90	19.04	18.94			
15	64QAM	1	0	18.85	19.02	19.11			
15	64QAM	1	49	18.92	19.03	19.07	20.5	2	
15	64QAM	1	74	18.92	18.96	19.03			
15	64QAM	50	0	17.81	17.98	17.97			
15	64QAM	50	20	17.76	17.94	18.03			
15	64QAM	50	39	17.87	17.85	17.90	19.5	3	
15	64QAM	100	0	18.00	18.06	18.05			
15	256QAM	1	0	15.99	16.03	16.18			
15	256QAM	1	37	15.98	16.09	16.02	17.5	5	
15	256QAM	1	74	15.96	16.06	16.07			
15	256QAM	50	0	15.94	16.04	16.11			
15	256QAM	50	20	15.83	16.07	16.08	17.5	5	
15	256QAM	50	39	15.93	16.01	16.03			
15	256QAM	75	0	15.90	16.10	16.10			
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	0	20.99	21.12	21.07			
10	QPSK	1	25	20.94	21.16	21.11	22.5	0	
10	QPSK	1	49	21.02	21.07	21.01			
10	QPSK	50	0	19.60	20.04	20.00			
10	QPSK	50	25	19.72	19.96	19.88	21.5	1	
10	QPSK	50	50	19.62	19.91	20.01			
10	16QAM	1	0	19.76	19.88	19.85			
10	16QAM	1	25	19.83	19.91	19.92	21.5	1	
10	16QAM	1	49	19.93	19.97	19.76			
10	16QAM	25	0	19.00	19.96	19.07			
10	16QAM	25	12	18.82	18.96	18.95	20.5	2	
10	16QAM	25	25	18.82	19.04	18.94			
10	16QAM	50	0	18.67	19.04	18.96			
10	16QAM	50	12	18.74	18.94	19.11	20.5	2	
10	64QAM	1	25	18.97	19.00	19.05			
10	64QAM	25	0	17.83	17.99	17.84			
10	64QAM	25	12	17.66	17.99	18.02	19.5	3	
10	64QAM	25	25	17.83	17.86	17.96			
10	256QAM	1	0	17.80	18.07	18.13			
10	256QAM	1	0	16.03	16.08	16.15			
10	256QAM	1	25	16.06	16.04	16.08	17.5	5	
10	256QAM	1	49	15.96	16.06	16.09			
10	256QAM	25	0	15.89	16.09	16.08			
10	256QAM	25	12	15.93	16.13	16.13	17.5	5	
10	256QAM	25	25	15.90	16.02	16.09			
10	256QAM	50	0	15.96	16.04	16.12			
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	21.00	21.14	21.11			
5	QPSK	1	12	20.96	21.05	21.12	22.5	0	
5	QPSK	1	24	20.97	21.05	21.09			
5	QPSK	12	0	19.85	20.05	20.02			
5	QPSK	12	7	19.83	19.90	19.91	21.5	1	
5	QPSK	12	13	19.76	19.94	19.89			
5	QPSK	25	0	19.95	19.95	19.83			
5	16QAM	1	0	19.75	19.91	20.01	21.5	1	
5	16QAM	1	12	19.72	19.93	19.94			
5	16QAM	1	24	19.74	19.83	19.82			
5	16QAM	12	0	18.93	18.96	19.08			
5	16QAM	12	7	18.83	18.88	18.90	20.5	2	
5	16QAM	12	13	18.88	18.82	18.97			
5	16QAM	25	0	18.96	18.95	18.91			
5	64QAM	1	0	19.05	19.04	19.12	20.5	2	
5	64QAM	1	12	18.91	18.99	19.04			
5	64QAM	1	24	18.93	18.99	19.01			
5	64QAM	12	0	17.88	17.93	17.87			
5	64QAM	12	7	17.76	17.79	17.82	19.5	3	
5	64QAM	12	13	17.75	17.79	17.85			
5	64QAM	25	0	18.01	17.99	18.12			
5	256QAM	1	0	16.02	16.10	16.09			
5	256QAM	1	12	15.98	16.06	16.07	17.5	5	
5	256QAM	1	24	16.01	16.14	16.11			
5	256QAM	12	0	15.97	16.09	16.16			
5	256QAM	12	7	15.93	16.12	16.16	17.5	5	
5	256QAM	12	13	15.99	16.08	16.04			
5	256QAM	25	0	15.91	16.03	16.13			

Band 38 Ant5 Default Other PA									
BW [MHz]	Modulat on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				37850	38000	38150			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	0	21.24	21.38	21.26			
20	QPSK	1	49	21.28	21.29	21.33		22.5	0
20	QPSK	1	99	21.12	21.16	21.18			
20	QPSK	50	0	19.93	20.35	19.85			
20	QPSK	50	24	20.21	20.28	20.31		21.5	1
20	QPSK	50	50	20.20	20.27	20.34			
20	QPSK	100	0	20.24	20.28	20.21			
20	16QAM	1	0	20.28	20.35	20.33			
20	16QAM	1	49	20.27	20.31	20.38		21.5	1
20	16QAM	50	24	19.51	19.54	19.82			
20	16QAM	50	0	19.45	19.53	19.32			
20	16QAM	50	24	19.46	19.52	19.50			
20	16QAM	50	50	19.48	19.53	19.59		20.5	2
20	16QAM	100	0	19.46	19.52	19.50			
20	64QAM	1	0	19.56	19.60	19.68			
20	64QAM	1	49	19.52	19.53	19.61		20.5	2
20	64QAM	1	99	19.51	19.56	19.57			
20	64QAM	50	0	18.46	18.53	18.80			
20	64QAM	50	24	18.51	18.54	18.82			
20	64QAM	50	50	18.48	18.53	18.53		19.5	3
20	64QAM	100	0	18.54	18.56	18.54			
20	256QAM	1	0	16.45	16.52	16.55			
20	256QAM	1	49	16.50	16.54	16.59		17.5	5
20	256QAM	1	99	16.53	16.53	16.54			
20	256QAM	50	0	16.47	16.55	16.53			
20	256QAM	50	24	16.53	16.57	16.80		17.5	5
20	256QAM	50	50	16.44	16.52	16.55			
20	256QAM	100	0	16.48	16.50	16.55			
Channel				37555	37600	37615	16.44	MPR	(dB)
Frequency (MHz)				2577.5	2595	2612.5			
15	QPSK	1	0	21.28	21.35	21.22			
15	QPSK	1	37	21.30	21.27	21.29		22.5	0
15	QPSK	1	74	21.14	21.17	21.18			
15	QPSK	36	0	19.89	20.01	19.76			
15	QPSK	36	20	20.17	20.27	20.29		21.5	1
15	QPSK	36	39	20.23	20.25	20.25			
15	QPSK	75	0	20.20	20.24	20.36			
15	16QAM	1	0	19.81	20.07	19.76			
15	16QAM	1	37	19.88	19.97	19.88		21.5	1
15	16QAM	1	74	19.79	20.00	19.82			
15	16QAM	36	0	18.98	19.17	19.05			
15	16QAM	36	20	19.07	19.16	19.09		20.5	2
15	16QAM	36	39	19.05	19.24	19.07			
15	16QAM	75	0	19.07	19.19	19.01			
15	64QAM	1	0	19.14	19.32	19.21		20.5	2
15	64QAM	1	37	19.24	19.13				
15	64QAM	1	74	19.05	19.19	19.00			
15	64QAM	36	0	18.07	18.22	18.12			
15	64QAM	36	20	18.13	18.17	18.04		19.5	3
15	64QAM	36	39	18.06	18.17	18.04			
15	64QAM	75	0	18.13	18.26	17.97			
15	256QAM	1	0	16.07	16.17	15.97			
15	256QAM	1	37	16.12	16.27	16.03		17.5	5
15	256QAM	1	74	16.16	16.16	16.01			
15	256QAM	36	0	15.99	16.19	15.98			
15	256QAM	36	20	16.08	16.19	16.12		17.5	5
15	256QAM	36	39	16.00	16.25	15.97			
15	256QAM	75	0	16.00	16.20	16.04			
Channel				37600	38000	38500	16.00	MPR	(dB)
Frequency (MHz)				2615	2695	2615			
10	QPSK	1	0	21.24	21.35	21.21			
10	QPSK	1	25	21.24	21.21	21.29		22.5	0
10	QPSK	1	49	21.14	21.18	21.10			
10	QPSK	25	0	19.91	20.02	19.78			
10	QPSK	25	12	20.15	20.29	20.32		21.5	1
10	QPSK	25	25	20.17	20.22	20.28			
10	QPSK	50	0	20.21	20.29	20.34			
10	16QAM	1	0	19.90	20.05	19.82		21.5	1
10	16QAM	1	25	19.90	20.00	19.90			
10	16QAM	1	49	19.81	20.01	19.96			
10	16QAM	25	0	19.05	19.25	18.95			
10	16QAM	25	12	19.09	19.25	18.97		20.5	2
10	16QAM	25	25	19.11	19.19	19.06			
10	16QAM	50	0	19.07	19.18	18.92			
10	64QAM	1	0	19.20	19.30	19.13			
10	64QAM	1	25	19.10	19.21	19.09		20.5	2
10	64QAM	1	49	19.11	19.25	19.07			
10	64QAM	25	0	18.02	18.20	18.04			
10	64QAM	25	12	18.03	18.21	18.04		19.5	3
10	64QAM	25	25	18.05	18.16	18.01			
10	64QAM	50	0	18.16	18.23	18.06			
10	256QAM	1	0	15.96	16.20	16.04			
10	256QAM	1	25	16.07	16.18	16.10		17.5	5
10	256QAM	1	49	16.08	16.18	16.04			
10	256QAM	25	0	16.09	16.23	16.00			
10	256QAM	25	12	16.06	16.23	16.11		17.5	5
10	256QAM	25	25	16.03	16.23	15.99			
10	256QAM	50	0	16.00	16.20	16.00			
Channel				37775	38000	38225	16.00	MPR	(dB)
Frequency (MHz)				2572.5	2595	2617.5			
5	QPSK	1	0	21.17	21.25	21.24			
5	QPSK	1	12	21.24	21.29	21.24		22.5	0
5	QPSK	1	24	21.14	21.14	21.21			
5	QPSK	12	0	19.88	20.01	19.81			
5	QPSK	12	7	20.17	20.31	20.32		21.5	1
5	QPSK	12	13	20.20	20.25	20.28			
5	QPSK	25	0	20.25	20.27	20.35			
5	16QAM	1	0	19.82	20.05	19.75			
5	16QAM	1	12	19.87	20.02	19.87		21.5	1
5	16QAM	1	24	19.85	19.98	19.89			
5	16QAM	12	0	19.02	19.21	19.02			
5	16QAM	12	7	19.88	19.19	18.97		20.5	2
5	16QAM	12	13	19.05	19.20	19.08			
5	16QAM	25	0	18.99	19.14	18.97			
5	64QAM	1	0	19.17	19.26	19.11			
5	64QAM	1	12	19.12	19.14	19.06		20.5	2
5	64QAM	1	24	19.06	19.21	19.03			
5	64QAM	12	0	17.97	18.22	18.04			
5	64QAM	12	7	18.10	18.23	18.04		19.5	3
5	64QAM	12	13	18.08	18.26	18.00			
5	64QAM	25	0	18.06	18.27	17.99			
5	256QAM	1	0	16.01	16.22	16.05			
5	256QAM	1	12	16.12	16.15	16.06		17.5	5
5	256QAM	1	24	16.08	16.17	15.99			
5	256QAM	12	0	16.07	16.20	16.02			
5	256QAM	12	7	16.12	16.22	16.07		17.5	5
5	256QAM	12	13	15.99	16.17	16.02			
5	256QAM	25	0	16.11	16.15	16.06			

Band 41 Ant5 Default Other PA									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Mod Ch / Freq	Power Middle Mod Ch / Freq	Power High Mod Ch / Freq	Power Low Mod Ch / Freq	Power High Mod Ch / Freq	
Channel				39750	40165	40620	41055	41490	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	
20	QPSK	1	0	21.22	21.23	21.39	21.35	21.35	22.5
20	QPSK	1	49	21.23	21.21	21.34	21.25	21.35	
20	QPSK	1	99	21.24	21.19	21.31	21.35	21.35	
20	QPSK	50	0	20.20	20.17	20.40	20.35	20.38	21.5
20	QPSK	50	24	20.19	20.20	20.34	20.32	20.39	
20	QPSK	50	50	20.27	20.15	20.29	20.34	20.27	
20	16QAM	100	0	20.13	20.19	20.37	20.30	20.32	21.5
20	16QAM	1	0	20.22	20.26	20.33	20.39	20.41	
20	16QAM	1	49	20.24	20.18	20.35	20.35	20.31	
20	16QAM	1	99	20.24	20.14	20.37	20.32	20.32	20.5
20	16QAM	50	24	19.15	19.15	19.37	19.36	19.41	
20	16QAM	50	50	19.32	19.16	19.25	19.31	19.24	
20	16QAM	100	0	19.16	19.24	19.31	19.35	19.34	20.5
20	64QAM	1	0	19.24	19.26	19.29	19.38	19.42	
20	64QAM	1	49	19.24	19.22	19.36	19.39	19.31	
20	64QAM	1	99	19.25	19.16	19.30	19.32	19.18	19.5
20	64QAM	50	0	18.15	18.16	18.41	18.31	18.38	
20	64QAM	50	24	18.16	18.15	18.26	18.26	18.43	
20	64QAM	50	50	18.31	18.20	18.25	18.38	18.24	17.5
20	64QAM	100	0	18.15	18.15	18.31	18.39	18.28	
20	256QAM	1	0	16.19	16.19	16.37	16.34	16.42	
20	256QAM	1	49	16.15	16.14	16.38	16.34	16.35	17.5
20	256QAM	1	99	16.27	16.12	16.27	16.31	16.22	
20	256QAM	50	0	16.09	16.13	16.37	16.43	16.30	
20	256QAM	50	24	16.20	16.24	16.38	16.35	16.37	17.5
20	256QAM	50	50	16.30	16.15	16.33	16.32	16.31	
20	256QAM	100	0	16.24	16.10	16.27	16.33	16.16	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680.5	
15	QPSK	1	0	21.17	21.20	21.34	21.31	21.30	23
15	QPSK	1	37	21.22	21.13	21.25	21.29	21.35	
15	QPSK	1	74	21.26	21.25	21.27	21.29	21.31	
15	QPSK	36	0	20.12	20.17	20.42	20.37	20.30	21.5
15	QPSK	36	20	20.14	20.13	20.27	20.26	20.34	
15	QPSK	36	36	20.24	20.13	20.32	20.29	20.29	
15	QPSK	75	0	20.11	20.10	20.30	20.40	20.29	21.5
15	QPSK	75	0	20.11	20.10	20.32	20.32	20.33	
15	16QAM	1	37	20.26	20.18	20.31	20.33	20.25	
15	16QAM	1	74	20.25	20.07	20.25	20.33	20.08	20.5
15	16QAM	36	0	19.16	19.17	19.33	19.36	19.35	
15	16QAM	36	36	19.17	19.14	19.33	19.36	19.42	
15	16QAM	36	39	19.31	19.10	19.17	19.28	19.21	20.5
15	16QAM	75	0	19.18	19.22	19.25	19.27	19.33	
15	64QAM	1	0	19.17	19.19	19.21	19.40	19.38	
15	64QAM	1	37	19.26	19.21	19.30	19.37	19.32	19.5
15	64QAM	1	74	19.23	19.10	19.26	19.27	19.13	
15	64QAM	36	0	18.15	18.18	18.36	18.30	18.30	
15	64QAM	36	20	18.10	18.10	18.22	18.21	18.36	19.5
15	64QAM	36	39	18.32	18.11	18.22	18.31	18.22	
15	64QAM	75	0	18.16	18.13	18.30	18.30	18.25	
15	256QAM	1	0	16.12	16.13	16.28	16.25	16.37	17.5
15	256QAM	1	37	16.16	16.06	16.34	16.34	16.37	
15	256QAM	1	74	16.26	16.09	16.23	16.22	16.17	
15	256QAM	36	0	16.08	16.16	16.40	16.36	16.38	17.5
15	256QAM	36	20	16.18	16.25	16.29	16.31	16.29	
15	256QAM	36	39	16.31	16.11	16.34	16.34	16.32	
15	256QAM	75	0	16.27	16.04	16.21	16.35	16.16	
Frequency (MHz)				2506	2549.5	2593	2636.5	2680.5	
10	QPSK	1	0	21.10	21.15	21.30	21.34	21.31	23
10	QPSK	1	25	21.17	21.14	21.29	21.25	21.34	
10	QPSK	1	49	21.25	21.19	21.26	21.32	21.17	
10	QPSK	25	0	20.12	20.12	20.31	20.30	20.38	21.5
10	QPSK	25	12	20.18	20.23	20.32	20.30	20.36	
10	QPSK	25	25	20.19	20.06	20.31	20.33	20.22	
10	QPSK	50	0	20.09	20.18	20.30	20.35	20.28	20.5
10	QPSK	50	25	20.12	20.12	20.27	20.28	20.33	
10	16QAM	1	25	20.16	20.18	20.34	20.28	20.26	
10	16QAM	1	49	20.24	20.07	20.20	20.31	20.20	20.5
10	16QAM	25	0	19.08	19.06	19.29	19.27	19.24	
10	16QAM	25	12	19.11	19.15	19.38	19.33	19.34	
10	16QAM	25	25	19.13	19.15	19.35	19.32	19.35	20.5
10	64QAM	1	0	19.12	19.20	19.23	19.29	19.35	
10	64QAM	1	0	19.22	19.25	19.23	19.40	19.37	
10	64QAM	1	25	19.25	19.17	19.38	19.35	19.34	20.5
10	64QAM	25	0	19.16	19.28	19.33	19.39	19.20	
10	64QAM	25	0	18.10	18.12	18.42	18.29	18.40	
10	64QAM	25	12	18.16	18.17	18.28	18.22	18.35	19.5
10	64QAM	25	25	18.32	18.17	18.28	18.41	18.25	
10	64QAM	50	0	18.14	18.16	18.36	18.34	18.27	
10	256QAM	1	0	16.19	16.18	16.29	16.34	16.33	17.5
10	256QAM	1	25	16.10	16.12	16.31	16.30	16.37	
10	256QAM	1	49	16.27	16.08	16.19	16.30	16.21	
10	256QAM	25	0	16.12	16.11	16.34	16.38	16.25	17.5
10	256QAM	25	12	16.13	16.22	16.32	16.32	16.28	
10	256QAM	25	25	16.30	16.09	16.35	16.25	16.22	
Channel				39675	40165	40620	41083	41564	
Frequency (MHz)				2505.5	2549.5	2593	2644.3	2692.5	
5	QPSK	1	0	21.15	21.25	21.31	21.27	21.39	23
5	QPSK	1	12	21.21	21.19	21.32	21.21	21.34	
5	QPSK	1	24	21.23	21.22	21.25	21.25	21.24	
5	QPSK	12	0	20.11	20.09	20.43	20.27	20.40	21.5
5	QPSK	12	12	20.13	20.13	20.33	20.32	20.37	
5	QPSK	25	0	20.09	20.15	20.39	20.39	20.26	
5	16QAM	1	0	20.22	20.28	20.27	20.30	20.37	21.5
5	16QAM	1	12	20.22	20.22	20.32	20.32	20.32	
5	16QAM	1	24	20.22	20.14	20.29	20.25	20.20	
5	16QAM	12	0	19.14	19.13	19.35	19.35	19.29	20.5
5	16QAM	12	7	19.06	19.16	19.29	19.31	19.41	
5	16QAM	12	19	19.13	19.16	19.29	19.32	19.36	
5	64QAM	1	0	19.29	19.24	19.33	19.35	19.34	20.5
5	64QAM	1	12	19.21	19.21	19.38	19.38	19.31	
5	64QAM	1	24	19.25	19.15	19.39	19.23	19.12	
5	64QAM	12	0	18.15	18.11	18.41	18.31	18.34	19.5
5	64QAM	12	7	18.16	18.16	18.27	18.20	18.40	
5	64QAM	12	19	18.14	18.15	18.22	18.34	18.17	
5	64QAM	25	0	18.17	18.11	18.25	18.34	18.25	17.5
5	64QAM	25	12	18.15	18.18	18.33	18.33	18.43	
5	256QAM	1	12	16.13	16.14	16.40	16.28	16.29	
5	256QAM	1	24	16.23	16.12	16.22	16.24	16.16	
5	256QAM	12	0	16.11	16.06	16.31	16.37	16.21	
5	256QAM	12	7	16.08	16.19	16.31	16.32	16.30	
5	256QAM	12	19	16.21	16.16	16.27	16.26	16.33	
5	256QAM	25	0	16.21	16.16	16.27	16.26	16.33	
5	256QAM	25	0	16.15	16.09	16.19	16.29	16.15	



Band 2 Ant2 DS1 Other PA for ENDC

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 20060	Power Line Ch. Freq. 18800	Power Mode Ch. Freq. 18800	Power High Ch. Freq. 19000	Turn-up (dB)	APRS (dB)
Channel									
Frequency (MHz)									
20	QPSK	1	0	15.00	15.00	15.00	15.03	17	0
20	QPSK	1	49	15.00	15.00	15.00	15.03		
20	QPSK	1	99	15.01	15.00	15.00	15.01		
20	QPSK	50	0	15.00	15.00	15.00	15.41		
20	QPSK	50	24	15.02	15.02	15.02	15.36	17	0
20	QPSK	50	50	15.10	15.04	15.04	15.29		
20	QPSK	100	0	15.00	15.00	15.00	15.30		
20	16QAM	1	0	15.14	15.04	15.04	15.14		
20	16QAM	1	49	15.07	15.06	15.06	15.33	17	0
20	16QAM	1	99	15.00	15.00	15.00	15.30		
20	16QAM	50	0	15.13	15.04	15.04	15.38		
20	16QAM	50	24	15.19	15.25	15.30	15.39	17	0
20	16QAM	50	50	15.17	15.35	15.43	15.43		
20	16QAM	100	0	15.17	15.41	15.52	15.52		
20	16QAM	1	0	15.28	15.52	15.58	15.58		
20	16QAM	1	49	15.04	15.30	15.54	15.54	17	0
20	16QAM	1	99	15.30	15.41	15.42	15.42		
20	16QAM	50	0	15.31	15.30	15.44	15.44		
20	16QAM	50	24	15.28	15.40	15.46	15.46	17	0
20	16QAM	50	50	15.08	15.38	15.48	15.48		
20	16QAM	100	0	15.16	15.37	15.36	15.36		
20	256QAM	1	0	15.08	15.42	15.35	15.35		
20	256QAM	1	49	15.17	15.30	15.21	15.21	17	0
20	256QAM	1	99	15.19	15.40	15.38	15.38		
20	256QAM	50	0	15.24	15.40	15.44	15.44		
20	256QAM	50	24	15.17	15.38	15.42	15.42	17	0
20	256QAM	50	50	15.28	15.33	15.24	15.24		
20	256QAM	100	0	15.25	15.37	15.33	15.33		
Channel									
Frequency (MHz)									
15	QPSK	1	0	13.30	13.30	13.30	13.46	17	0
15	QPSK	1	37	13.24	13.48	13.40	13.40		
15	QPSK	1	74	13.19	13.52	13.36	13.36		
15	QPSK	36	0	13.23	13.42	13.40	13.40		
15	QPSK	36	20	13.27	13.33	13.33	13.33	17	0
15	QPSK	36	36	13.16	13.38	13.28	13.28		
15	QPSK	75	0	13.17	13.42	13.34	13.34		
15	16QAM	1	0	13.09	13.34	13.13	13.13		
15	16QAM	1	37	13.08	13.23	13.25	13.25	17	0
15	16QAM	1	74	13.07	13.40	13.25	13.25		
15	16QAM	36	0	13.13	13.43	13.31	13.31		
15	16QAM	36	20	13.17	13.20	13.20	13.20	17	0
15	16QAM	36	36	13.18	13.38	13.40	13.40		
15	16QAM	75	0	13.21	13.41	13.33	13.33		
15	16QAM	1	0	13.10	13.41	13.31	13.31		
15	16QAM	1	37	13.25	13.47	13.43	13.43		
15	16QAM	1	74	13.21	13.42	13.41	13.41		
15	16QAM	36	0	13.22	13.46	13.42	13.42		
15	16QAM	36	20	13.19	13.37	13.45	13.45	17	0
15	16QAM	36	36	13.06	13.35	13.45	13.45		
15	16QAM	75	0	13.15	13.40	13.35	13.35		
15	16QAM	1	0	13.20	13.50	13.40	13.40		
15	256QAM	1	37	13.20	13.50	13.42	13.42	17	0
15	256QAM	1	74	13.20	13.40	13.40	13.40		
15	256QAM	36	0	13.25	13.48	13.38	13.38		
15	256QAM	36	20	13.18	13.43	13.41	13.41	17	0
15	256QAM	36	36	13.17	13.37	13.33	13.33		
15	256QAM	75	0	13.17	13.37	13.33	13.33		
Channel									
Frequency (MHz)									
10	QPSK	1	0	10.30	10.30	10.30	10.38	17	0
10	QPSK	1	25	10.23	10.47	10.35	10.35		
10	QPSK	1	49	10.25	10.44	10.32	10.32		
10	QPSK	25	0	10.25	10.48	10.48	10.48		
10	QPSK	25	12	10.22	10.39	10.29	10.29	17	0
10	QPSK	25	25	10.08	10.30	10.25	10.25		
10	QPSK	50	0	10.16	10.43	10.27	10.27		
10	16QAM	1	0	10.07	10.33	10.16	10.16	17	0
10	16QAM	1	25	10.03	10.25	10.26	10.26		
10	16QAM	1	49	10.02	10.30	10.28	10.28		
10	16QAM	25	0	10.12	10.42	10.39	10.39		
10	16QAM	25	12	10.12	10.26	10.28	10.28	17	0
10	16QAM	25	25	10.15	10.37	10.33	10.33		
10	16QAM	50	0	10.22	10.40	10.34	10.34		
10	16QAM	1	0	10.04	10.41	10.37	10.37		
10	16QAM	1	25	10.33	10.38	10.53	10.53		
10	16QAM	1	49	10.27	10.44	10.33	10.33		
10	16QAM	25	0	10.28	10.46	10.47	10.47		
10	16QAM	25	12	10.20	10.35	10.47	10.47	17	0
10	16QAM	25	25	10.14	10.41	10.49	10.49		
10	16QAM	50	0	10.16	10.40	10.34	10.34		
10	256QAM	1	0	10.31	10.43	10.31	10.31		
10	256QAM	1	25	10.13	10.28	10.22	10.22	17	0
10	256QAM	1	49	10.30	10.40	10.30	10.30		
10	256QAM	25	0	10.10	10.35	10.45	10.45		
10	256QAM	25	12	10.26	10.31	10.46	10.46	17	0
10	256QAM	25	25	10.30	10.40	10.35	10.35		
10	256QAM	50	0	10.14	10.30	10.37	10.37		
Channel									
Frequency (MHz)									
5	QPSK	1	0	15.44	15.52	15.49	15.49		
5	QPSK	1	12	15.29	15.50	15.37	15.37	17	0
5	QPSK	1	24	15.21	15.47	15.38	15.38		
5	QPSK	12	0	15.28	15.52	15.43	15.43		
5	QPSK	12	7	15.29	15.42	15.38	15.38	17	0
5	QPSK	12	13	15.12	15.39	15.29	15.29		
5	QPSK	25	0	15.18	15.47	15.33	15.33		
5	16QAM	1	0	15.09	15.33	15.12	15.12		
5	16QAM	1	12	15.07	15.37	15.27	15.27	17	0
5	16QAM	1	24	15.05	15.37	15.25	15.25		
5	16QAM	12	0	15.11	15.33	15.35	15.35		
5	16QAM	12	7	15.11	15.30	15.25	15.25	17	0
5	16QAM	12	13	15.10	15.32	15.40	15.40		
5	16QAM	25	0	15.19	15.43	15.37	15.37		
5	16QAM	1	0	15.23	15.43	15.40	15.40		
5	16QAM	1	12	15.34	15.38	15.45	15.45	17	0
5	16QAM	1	24	15.21	15.44	15.38	15.38		
5	16QAM	12	0	15.33	15.43	15.48	15.48		
5	16QAM	12	7	15.18	15.38	15.43	15.43	17	0
5	16QAM	12	13	15.25	15.34	15.31	15.31		
5	256QAM	1	0	15.28	15.48	15.38	15.38		
5	256QAM	1	12	15.20	15.32	15.25	15.25	17	0
5	256QAM	1	24	15.25	15.47	15.33	15.33		
5	256QAM	12	0	15.23	15.40	15.46	15.46		
5	256QAM	12	7	15.18	15.42	15.38	15.38	17	0
5	256QAM	12	13	15.25	15.34	15.31	15.31		
5	256QAM	25	0	15.21	15.34	15.34	15.34		
Channel									
Frequency (MHz)									
3	QPSK	1	0	15.34	15.51	15.38	15.38		
3	QPSK	1	8	15.33	15.41	15.36	15.36	17	0
3	QPSK	1	14	15.25	15.47	15.37	15.37		
3	QPSK	8	0	15.29	15.51	15.49	15.49		
3	QPSK	8	4	15.27	15.38	15.30	15.30	17	0
3	QPSK	8	10	15.05	15.36	15.33	15.33		
3	QPSK	15	0	15.16	15.37	15.35	15.35		
3	16QAM	1	0	15.11	15.33	15.15	15.15		
3	16QAM	1	8	15.01	15.23	15.17	15.17	17	0
3	16QAM	1	14	15.00	15.28	15.23	15.23		
3	16QAM	8	0	15.18	15.33	15.39	15.39		
3	16QAM	8	4	15.16	15.28	15.12	15.12	17	0
3	16QAM	8	7	15.21	15.30	15.37	15.37		
3	16QAM	15	0	15.12	15.34	15.43	15.43		
3	16QAM	1	0	15.20	15.48	15.38	15.38		
3	16QAM	1	8	15.24	15.42	15.53	15.53	17	0
3	16QAM	1	14	15.22	15.47	15.36	15.36		
3	16QAM	8	0	15.24	15.43	15.47	15.47		
3	16QAM	8	4	15.21	15.39	15.44	15.44	17	0
3	16QAM	15	0	15.12	15.31	15.39	15.39		
3	256QAM	1	0	15.23	15.43	15.34	15.34		
3	256QAM	1	8	15.11	15.20	15.29	15.29	17	0
3	256QAM	1	14	15.20	15.44	15.32	15.32		
3	256QAM	8	0	15.24	15.36	15.38	15.38		
3	256QAM	8	4	15.20	15.37	15.41	15.41	17	0
3	256QAM	8	10	15.08	15.38	15.48	15.48		
3	256QAM	15	0	15.25	15.34	15.31	15.31		
3	256QAM	25	0	15.21	15.34	15.34	15.34		
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	15.43	15.51	15.43	15.43		
1.4	QPSK	1	8	15.33	15.41	15.37	15.37	17	0
1.4	QPSK	1	5	15.23	15.48	15.30	15.30		
1.4	QPSK	3	0	15.27	15.48	15.31	15.31		
1.4	QPSK	3	3	15.28	15.33	15.27	15.27	17	0
1.4	QPSK	3	7	15.07	15.37	15.27	15.27		
1.4	16QAM	1	0	15.30	15.30	15.14	15.14		
1.4	16QAM	1	3	15.03	15.21	15.25	15.25	17	0
1.4	16QAM	1	5</						

Band 7 Ant4 DS11 Other PA for ENDC										
BW (MHz)	Module on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				2500	2535	2560				
Frequency (MHz)				2510	2535	2550				
20	QPSK	1	0	16.46	16.60	16.54	17.5	0		
20	QPSK	1	49	16.30	16.42	16.40				
20	QPSK	1	99	16.27	16.43	16.18				
20	QPSK	50	0	16.23	16.43	16.26	17.5	0		
20	QPSK	50	24	16.31	16.31	16.29				
20	QPSK	50	50	16.31	16.24	16.16				
20	QPSK	100	0	16.17	16.31	16.16	17.5	0		
20	16QAM	1	0	16.23	16.33	16.16				
20	16QAM	1	49	16.02	16.22	15.97				
20	16QAM	1	99	15.99	16.17	16.05	17.5	0		
20	16QAM	50	0	16.12	16.27	16.28				
20	16QAM	50	24	16.19	16.20	16.03				
20	16QAM	50	50	16.21	16.23	16.16	17.5	0		
20	16QAM	100	0	16.14	16.23	16.01				
20	64QAM	1	0	16.23	16.44	16.32				
20	64QAM	1	49	16.36	16.43	16.39	17.5	0		
20	64QAM	1	99	16.32	16.37	16.28				
20	64QAM	50	0	16.22	16.37	16.12				
20	64QAM	50	24	16.12	16.14	16.04	17.5	0		
20	64QAM	50	50	16.13	16.15	16.03				
20	64QAM	100	0	16.28	16.36	16.25				
20	256QAM	1	49	16.25	16.34	16.26	17.5	0		
20	256QAM	1	99	16.36	16.38	16.23				
20	256QAM	50	0	16.39	16.55	16.27				
20	256QAM	50	24	16.28	16.43	16.27	17.5	0		
20	256QAM	50	50	16.28	16.47	16.33				
20	256QAM	100	0	16.41	16.48	16.28				
Channel				20625	21100	21375	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2507.5	2535	2562.5				
15	QPSK	1	0	16.47	16.57	16.43	17.5	0		
15	QPSK	1	37	16.35	16.42	16.34				
15	QPSK	1	74	16.30	16.40	16.26				
15	QPSK	36	0	16.27	16.41	16.17	17.5	0		
15	QPSK	36	20	16.33	16.36	16.20				
15	QPSK	36	39	16.29	16.28	16.09				
15	QPSK	75	0	16.25	16.26	16.17	17.5	0		
15	16QAM	1	0	16.23	16.26	16.14				
15	16QAM	1	37	16.10	16.22	15.98				
15	16QAM	1	74	16.00	16.19	16.02	17.5	0		
15	16QAM	36	0	16.20	16.28	16.17				
15	16QAM	36	20	16.19	16.22	16.02				
15	16QAM	36	39	16.14	16.30	16.03	17.5	0		
15	16QAM	75	0	16.15	16.22	16.01				
15	64QAM	1	0	16.31	16.45	16.36				
15	64QAM	1	37	16.37	16.44	16.40	17.5	0		
15	64QAM	1	74	16.30	16.37	16.26				
15	64QAM	36	0	16.25	16.34	16.20				
15	64QAM	36	20	16.14	16.10	16.14	17.5	0		
15	64QAM	36	39	16.06	16.18	16.04				
15	64QAM	75	0	16.33	16.36	16.19				
15	256QAM	1	0	16.31	16.38	16.27	17.5	0		
15	256QAM	1	37	16.21	16.38	16.24				
15	256QAM	1	74	16.29	16.37	16.26				
15	256QAM	36	0	16.38	16.53	16.35	17.5	0		
15	256QAM	36	20	16.32	16.53	16.34				
15	256QAM	36	39	16.29	16.42	16.25				
15	256QAM	75	0	16.36	16.42	16.23	17.5	0		
Channel				20600	21100	21400				
Frequency (MHz)				2505	2535	2565				
10	QPSK	1	0	16.46	16.55	16.44	17.5	0		
10	QPSK	1	25	16.36	16.42	16.38				
10	QPSK	1	49	16.28	16.35	16.22				
10	QPSK	25	0	16.26	16.36	16.18	17.5	0		
10	QPSK	25	12	16.31	16.27	16.28				
10	QPSK	25	25	16.23	16.20	16.08				
10	QPSK	50	0	16.18	16.28	16.15	17.5	0		
10	16QAM	1	0	16.23	16.26	16.19				
10	16QAM	1	25	16.11	16.16	15.93				
10	16QAM	1	49	16.03	16.14	16.03	17.5	0		
10	16QAM	25	0	16.20	16.34	16.26				
10	16QAM	25	12	16.23	16.20	16.02				
10	16QAM	25	25	16.14	16.31	16.19	17.5	0		
10	16QAM	50	0	16.14	16.25	16.09				
10	64QAM	1	0	16.34	16.41	16.37				
10	64QAM	1	25	16.32	16.42	16.41	17.5	0		
10	64QAM	1	49	16.32	16.41	16.26				
10	64QAM	25	0	16.21	16.27	16.14				
10	64QAM	25	12	16.09	16.14	16.05	17.5	0		
10	64QAM	25	25	16.14	16.15	16.12				
10	64QAM	50	0	16.36	16.33	16.27				
10	256QAM	1	0	16.24	16.39	16.36	17.5	0		
10	256QAM	1	25	16.23	16.34	16.24				
10	256QAM	1	49	16.27	16.32	16.30				
10	256QAM	25	0	16.46	16.49	16.34	17.5	0		
10	256QAM	25	12	16.39	16.49	16.38				
10	256QAM	25	25	16.27	16.44	16.22				
10	256QAM	50	0	16.31	16.45	16.31	17.5	0		
Channel				20775	21100	21425				
Frequency (MHz)				2502.5	2535	2567.5				
5	QPSK	1	0	16.47	16.57	16.45	17.5	0		
5	QPSK	1	12	16.35	16.39	16.30				
5	QPSK	1	24	16.29	16.36	16.32				
5	QPSK	12	0	16.29	16.36	16.21	17.5	0		
5	QPSK	12	7	16.35	16.39	16.30				
5	QPSK	12	13	16.27	16.25	16.14				
5	QPSK	25	0	16.19	16.28	16.23	17.5	0		
5	16QAM	1	0	16.16	16.27	16.14				
5	16QAM	1	12	16.09	16.23	15.91				
5	16QAM	1	24	16.01	16.18	15.95	17.5	0		
5	16QAM	12	0	16.15	16.32	16.26				
5	16QAM	12	7	16.20	16.20	16.01				
5	16QAM	12	13	16.13	16.32	16.17	17.5	0		
5	16QAM	25	0	16.15	16.20	16.10				
5	64QAM	1	0	16.26	16.36	16.28				
5	64QAM	1	12	16.35	16.39	16.37	17.5	0		
5	64QAM	1	24	16.30	16.41	16.23				
5	64QAM	12	0	16.25	16.36	16.17				
5	64QAM	12	7	16.13	16.20	16.14	17.5	0		
5	64QAM	12	13	16.07	16.21	16.12				
5	64QAM	25	0	16.36	16.31	16.19				
5	256QAM	1	0	16.34	16.46	16.29	17.5	0		
5	256QAM	1	12	16.23	16.33	16.17				
5	256QAM	1	24							

Band 7 Ant5 DSI1 Main PA-1 for ENDC

BW (MHz)	Module on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				2500	2100	2130	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	19.80	19.90	19.84	21	0
20	QPSK	1	49	19.75	19.82	19.67		
20	QPSK	1	99	19.80	19.74	19.79		
20	QPSK	50	0	19.69	19.70	19.69		
20	QPSK	50	24	19.60	19.64	19.60	21	0
20	QPSK	50	50	19.65	19.69	19.61		
20	QPSK	100	0	19.64	19.67	19.63		
20	16QAM	1	0	19.64	19.62	19.61		
20	16QAM	1	49	19.59	19.61	19.64	21	0
20	16QAM	1	99	19.67	19.68	19.65		
20	16QAM	50	0	18.70	18.73	18.69		
20	16QAM	50	24	18.66	18.68	18.60		
20	16QAM	50	50	18.57	18.63	18.68	20	1
20	16QAM	100	0	18.73	18.70	18.63		
20	64QAM	1	0	18.62	18.61	18.63		
20	64QAM	1	49	18.58	18.61	18.63		
20	64QAM	1	99	18.56	18.64	18.61	19	2
20	64QAM	50	0	17.68	17.65	17.68		
20	64QAM	50	24	17.58	17.67	17.66		
20	64QAM	50	50	17.58	17.64	17.60		
20	64QAM	100	0	17.53	17.61	17.53	17	4
20	256QAM	1	0	15.62	15.70	15.70		
20	256QAM	1	49	15.59	15.61	15.58		
20	256QAM	1	99	15.59	15.64	15.64		
20	256QAM	50	0	15.58	15.62	15.63	17	4
20	256QAM	50	24	15.65	15.68	15.71		
20	256QAM	50	50	15.58	15.56	15.50		
20	256QAM	100	0	15.67	15.73	15.69		
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	19.84	19.85	19.89	21	0
15	QPSK	1	37	19.82	19.88	19.84		
15	QPSK	1	74	19.73	19.82	19.77		
15	QPSK	36	0	19.63	19.63	19.64		
15	QPSK	36	20	19.60	19.57	19.57	21	0
15	QPSK	36	39	19.59	19.64	19.55		
15	QPSK	75	0	19.60	19.70	19.56		
15	16QAM	1	0	19.60	19.59	19.63		
15	16QAM	1	37	19.54	19.61	19.67	21	0
15	16QAM	1	74	19.66	19.61	19.61		
15	16QAM	36	0	18.62	18.72	18.66		
15	16QAM	36	20	18.60	18.71	18.60		
15	16QAM	36	39	18.58	18.64	18.60	20	1
15	16QAM	75	0	18.65	18.69	18.54		
15	64QAM	1	0	18.60	18.56	18.59		
15	64QAM	1	37	18.57	18.63	18.66		
15	64QAM	1	74	18.55	18.56	18.52	19	2
15	64QAM	36	0	17.67	17.63	17.63		
15	64QAM	36	20	17.52	17.67	17.57		
15	64QAM	36	39	17.58	17.65	17.56		
15	64QAM	75	0	17.53	17.53	17.52	17	4
15	256QAM	1	0	15.56	15.73	15.63		
15	256QAM	1	37	15.55	15.63	15.53		
15	256QAM	1	74	15.54	15.55	15.63		
15	256QAM	36	0	15.56	15.55	15.61	17	4
15	256QAM	36	20	15.56	15.69	15.68		
15	256QAM	36	39	15.54	15.58	15.50		
15	256QAM	75	0	15.60	15.73	15.63		
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2295	2535	2565		
10	QPSK	1	0	19.81	19.89	19.82	21	0
10	QPSK	1	25	19.72	19.79	19.84		
10	QPSK	1	49	19.82	19.85	19.78		
10	QPSK	25	0	19.68	19.61	19.72		
10	QPSK	25	12	19.57	19.61	19.62	21	0
10	QPSK	25	25	19.60	19.66	19.68		
10	QPSK	50	0	19.63	19.64	19.58		
10	16QAM	1	0	19.61	19.58	19.56		
10	16QAM	1	25	19.57	19.57	19.64	21	0
10	16QAM	1	49	19.60	19.64	19.65		
10	16QAM	25	0	18.63	18.74	18.64		
10	16QAM	25	12	18.63	18.64	18.54		
10	16QAM	25	25	18.51	18.58	18.65	20	1
10	16QAM	50	0	18.65	18.68	18.56		
10	64QAM	1	0	18.62	18.57	18.63		
10	64QAM	1	25	18.57	18.55	18.55		
10	64QAM	1	49	18.54	18.60	18.59	19	2
10	64QAM	25	0	17.69	17.62	17.57		
10	64QAM	25	12	17.54	17.59	17.64		
10	64QAM	25	25	17.61	17.57	17.57		
10	64QAM	50	0	17.50	17.57	17.55	17	4
10	256QAM	1	0	15.55	15.71	15.69		
10	256QAM	1	25	15.52	15.61	15.61		
10	256QAM	1	49	15.52	15.67	15.56		
10	256QAM	25	0	15.50	15.57	15.58	17	4
10	256QAM	25	12	15.60	15.65	15.69		
10	256QAM	25	25	15.59	15.54	15.57		
10	256QAM	50	0	15.60	15.74	15.61		
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	19.76	19.83	19.79	21	0
5	QPSK	1	12	19.80	19.88	19.88		
5	QPSK	1	24	19.82	19.78	19.85		
5	QPSK	12	0	19.64	19.63	19.64		
5	QPSK	12	7	19.52	19.63	19.58	21	0
5	QPSK	12	13	19.57	19.64	19.58		
5	QPSK	25	0	19.55	19.63	19.62		
5	16QAM	1	0	19.61	19.63	19.56		
5	16QAM	1	12	19.52	19.54	19.57	21	0
5	16QAM	1	24	19.66	19.70	19.65		
5	16QAM	12	0	18.64	18.69	18.71		
5	16QAM	12	7	18.67	18.61	18.58		
5	16QAM	12	13	18.51	18.65	18.69	20	1
5	16QAM	25	0	18.68	18.62	18.55		
5	64QAM	1	0	18.60	18.62	18.56		
5	64QAM	1	12	18.61	18.61	18.56		
5	64QAM	1	24	18.56	18.59	18.56	19	2
5	64QAM	12	0	17.61	17.67	17.67		
5	64QAM	12	7	17.56	17.68	17.62		
5	64QAM	12	13	17.61	17.58	17.58		
5	256QAM	1	0	15.55	15.65	15.69	17	4
5	256QAM	1	12	15.57	15.57	15.50		
5	256QAM	1	24	15.61	15.57	15.67		
5	256QAM	12	0	15.60	15.62	15.63		
5	256QAM	12	7	15.60	15.59	15.73	17	4
5	256QAM	12	13	15.57	15.57	15.51		
5	256QAM	25	0	15.64	15.65	15.68		

Band 7 Ant5 DSI1 Other PA for ENDC

BW (MHz)	Module on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				20850	21100	21350	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	20.03	20.20	20.11	21.5	0
20	QPSK	1	49	20.04	20.09	20.09		
20	QPSK	1	99	20.01	20.10	20.10		
20	QPSK	50	0	19.94	20.08	20.02		
20	QPSK	50	24	19.86	19.96	19.95	21.5	0
20	QPSK	50	50	19.83	19.95	19.91		
20	QPSK	100	0	19.96	20.07	20.01		
20	16QAM	1	0	19.82	19.91	19.87		
20	16QAM	1	49	19.81	19.90	19.96	21.5	0
20	16QAM	1	99	19.74	19.88	19.84		
20	16QAM	50	0	18.98	19.03	19.09		
20	16QAM	50	24	18.90	18.95	18.97		
20	16QAM	50	50	18.90	18.97	19.02	20.5	1
20	16QAM	100	0	18.95	19.02	19.00		
20	64QAM	1	0	19.01	19.11	19.16		
20	64QAM	1	49	18.96	19.07	19.05		
20	64QAM	1	99	18.92	19.04	19.08	19.5	2
20	64QAM	50	0	17.89	17.96	17.91		
20	64QAM	50	24	17.83	17.98	18.02		
20	64QAM	50	50	17.87	17.92	17.89		
20	256QAM	100	0	16.01	16.07	16.10	19.5	2
Channel <th>20850</th> <th>21100</th> <th>21350</th>				20850	21100	21350		
Frequency (MHz) <th>2507.5</th> <th>2532.5</th> <th>2562.5</th>				2507.5	2532.5	2562.5		
15	QPSK	1	0	20.07	20.15	20.14	21.5	0
15	QPSK	1	37	20.06	20.19	20.05		
15	QPSK	1	74	20.03	20.12	20.12		
15	QPSK	36	0	19.92	20.09	19.97		
15	QPSK	36	20	19.83	19.93	19.91	21.5	0
15	QPSK	36	39	19.81	19.92	19.91		
15	QPSK	75	0	19.03	19.03	19.06		
15	16QAM	1	0	19.76	19.86	19.79		
15	16QAM	1	49	19.74	19.85	19.86	21.5	0
15	16QAM	1	99	19.69	19.82	19.86		
15	16QAM	1	74	19.74	19.88	19.80		
15	16QAM	36	0	18.94	18.97	19.09		
15	16QAM	36	20	18.85	18.91	18.89	20.5	1
15	16QAM	36	39	18.91	18.90	18.94		
15	16QAM	75	0	18.90	19.04	18.94		
15	16QAM	75	0	18.90	19.04	18.94		
15	64QAM	1	0	18.96	19.04	19.11	20.5	1
15	64QAM	1	37	18.95	19.03	19.07		
15	64QAM	1	74	18.92	18.96	19.03		
15	64QAM	36	0	17.81	17.88	17.93		
15	64QAM	36	20	17.76	17.94	18.03	19.5	2
15	64QAM	36	39	17.78	17.87	17.90		
15	64QAM	75	0	18.90	19.05	18.95		
15	64QAM	75	0	18.90	19.05	18.95		
15	256QAM	1	0	15.99	16.03	16.18	17.5	4
15	256QAM	1	37	15.98	16.09	16.02		
15	256QAM	1	74	15.98	16.06	16.07		
15	256QAM	36	0	15.94	16.04	16.11		
15	256QAM	36	20	15.93	16.03	16.08	17.5	4
15	256QAM	36	39	15.90	16.01	16.03		
15	256QAM	75	0	15.90	16.01	16.03		
15	256QAM	75	0	15.90	16.01	16.03		
Channel <th>20800</th> <th>21100</th> <th>21400</th> <th>Tune-up limit (dBm)</th> <th>MPR (dB)</th>				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz) <th>2505</th> <th>2535</th> <th>2565</th> <th rowspan="2">Tune-up limit (dBm)</th> <th rowspan="2">MPR (dB)</th>				2505	2535	2565	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz) <th>2505</th> <th>2535</th> <th>2565</th>				2505	2535	2565		
10	QPSK	1	0	19.98	20.12	20.13	21.5	0
10	QPSK	1	25	19.96	20.18	20.05		
10	QPSK	1	49	19.99	20.09	20.09		
10	QPSK	25	0	19.89	20.04	20.03		
10	QPSK	25	12	19.78	19.96	19.88	21.5	0
10	QPSK	25	25	19.85	19.93	19.87		
10	QPSK	50	0	19.92	20.01	20.08		
10	16QAM	1	0	19.76	19.86	19.85		
10	16QAM	1	49	19.75	19.86	19.92	21.5	0
10	16QAM	1	99	19.70	19.86	19.78		
10	16QAM	25	0	19.00	18.96	19.07		
10	16QAM	25	12	18.82	18.86	18.95		
10	16QAM	25	25	18.82	18.83	18.94	20.5	1
10	16QAM	50	0	18.87	19.04	18.96		
10	16QAM	50	12	18.83	18.94	19.11		
10	64QAM	1	25	18.97	19.00	19.05		
10	64QAM	1	49	18.94	19.06	19.02	19.5	2
10	64QAM	25	0	17.83	17.99	17.84		
10	64QAM	25	12	17.86	17.99	18.02		
10	64QAM	25	25	17.86	17.83	17.86		
10	256QAM	25	0	17.88	18.07	18.13	17.5	4
10	256QAM	1	0	16.03	16.08	16.15		
10	256QAM	1	25	16.06	16.04	16.08		
10	256QAM	1	49	15.98	16.06	16.09		
10	256QAM	25	0	15.89	16.09	16.08	17.5	4
10	256QAM	25	12	15.93	16.13	16.13		
10	256QAM	25	25	15.90	16.02	16.09		
10	256QAM	50	0	15.96	16.04	16.12		
Channel <th>20775</th> <th>21100</th> <th>21425</th> <th>Tune-up limit (dBm)</th> <th>MPR (dB)</th>				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz) <th>2502.5</th> <th>2535</th> <th>2567.5</th> <th rowspan="2">Tune-up limit (dBm)</th> <th rowspan="2">MPR (dB)</th>				2502.5	2535	2567.5	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz) <th>2502.5</th> <th>2535</th> <th>2567.5</th>				2502.5	2535	2567.5		
5	QPSK	1	0	20.00	20.15	20.18	21.5	0
5	QPSK	1	12	19.98	20.08	20.05		
5	QPSK	1	24	19.95	20.02	20.05		
5	QPSK	12	0	19.85	20.00	19.92		
5	QPSK	12	7	19.83	19.93	19.91	21.5	0
5	QPSK	12	13	19.86	19.94	19.89		
5	QPSK	25	0	19.95	19.95	19.83		
5	16QAM	1	0	19.75	19.91	19.83		
5	16QAM	1	24	19.74	19.83	19.84	21.5	0
5	16QAM	1	24	19.74	19.83	19.82		
5	16QAM	12	0	18.93	18.98	19.08		
5	16QAM	12	7	18.83	18.88	18.98		
5	16QAM	12	13	18.88	18.82	18.87	20.5	1
5	16QAM	25	0	18.86	18.85	18.91		
5	16QAM	25	12	18.85	18.86	18.92		
5	64QAM	1	12	18.91	18.98	19.04		
5	64QAM	1	24	18.93	18.99	19.01	20.5	1
5	64QAM	12	0	17.86	17.93	17.87		
5	64QAM	12	7	17.76	17.90	17.82		
5	64QAM	12	13	17.87	17.93	17.85		
5	256QAM	1	0	16.02	16.10	16.09	17.5	4
5	256QAM	1	12	15.98	16.06	16.07		
5	256QAM	12	0	16.01	16.14	16.11		
5	256QAM	12	0	15.97	16.09	16.16		
5	256QAM	12	13	15.99	16.02	16.10	17.5	4
5	256QAM	12	13	15.99	16.06	16.04		
5	256QAM	25	0	15.91	16.03	16.13	17.5	4
5	256QAM	25	0	15.91	16.03	16.13		



Band 2 Ant2 DS1 Other PA												
BW (MHz)	Modulation	RB Size	RB Offset	Power Line Ch. Freq. 19000	Power Mode Ch. Freq. 19000	Power High Ch. Freq. 19000	Turn-up (dB)	APRS (dB)				
Channel												
Frequency (MHz)												
20	QPSK	1	0	18.43	18.43	18.43	17.5	0				
20	QPSK	1	49	18.47	18.54	18.61	17.5	0				
20	QPSK	1	99	18.44	18.67	18.58	17.5	0				
20	QPSK	50	0	18.44	18.60	18.43	17.5	0				
20	QPSK	50	24	18.46	18.57	18.54	17.5	0				
20	QPSK	50	50	18.31	18.58	18.45	17.5	0				
20	QPSK	100	0	18.35	18.60	18.43	17.5	0				
20	16QAM	1	0	18.32	18.49	18.30	17.5	0				
20	16QAM	1	49	18.27	18.44	18.30	17.5	0				
20	16QAM	1	99	18.25	18.43	18.43	17.5	0				
20	16QAM	50	0	18.33	18.58	18.55	17.5	0				
20	16QAM	50	24	18.34	18.50	18.46	17.5	0				
20	16QAM	50	50	18.30	18.54	18.58	17.5	0				
20	16QAM	100	0	18.37	18.59	18.58	17.5	0				
20	16QAM	1	0	18.43	18.60	18.63	17.5	0				
20	16QAM	1	49	18.45	18.57	18.68	17.5	0				
20	16QAM	1	99	18.46	18.61	18.56	17.5	0				
20	16QAM	50	0	18.47	18.63	18.62	17.5	0				
20	16QAM	50	24	18.43	18.55	18.63	17.5	0				
20	16QAM	50	50	18.31	18.62	18.65	17.5	0				
20	16QAM	100	0	18.37	18.63	18.49	17.5	0				
20	256QAM	1	0	18.45	18.63	18.56	17.5	0				
20	256QAM	1	49	18.35	18.62	18.44	17.5	0				
20	256QAM	1	99	18.41	18.60	18.55	17.5	0				
20	256QAM	50	0	18.40	18.63	18.60	17.5	0				
20	256QAM	50	24	18.40	18.57	18.61	17.5	0				
20	256QAM	50	50	18.44	18.63	18.49	17.5	0				
20	256QAM	100	0	18.40	18.62	18.57	17.5	0				
Channel												
Frequency (MHz)												
15	QPSK	1	0	18.52	18.74	18.65	17.5	0				
15	QPSK	1	37	18.51	18.67	18.58	17.5	0				
15	QPSK	1	74	18.39	18.60	18.55	17.5	0				
15	QPSK	36	0	18.47	18.12	18.65	17.5	0				
15	QPSK	36	20	18.46	18.59	18.57	17.5	0				
15	QPSK	36	36	18.34	18.52	18.50	17.5	0				
15	QPSK	75	0	18.34	18.62	18.52	17.5	0				
15	16QAM	1	0	18.23	18.39	18.31	17.5	0				
15	16QAM	1	37	18.27	18.47	18.41	17.5	0				
15	16QAM	1	74	18.19	18.41	18.44	17.5	0				
15	16QAM	36	0	18.36	18.55	18.63	17.5	0				
15	16QAM	36	20	18.46	18.53	18.52	17.5	0				
15	16QAM	36	36	18.34	18.52	18.52	17.5	0				
15	16QAM	75	0	18.33	18.55	18.54	17.5	0				
15	16QAM	1	0	18.34	18.60	18.64	17.5	0				
15	16QAM	1	37	18.38	18.61	18.58	17.5	0				
15	16QAM	1	74	18.46	18.56	18.58	17.5	0				
15	16QAM	36	0	18.47	18.55	18.52	17.5	0				
15	16QAM	36	20	18.41	18.63	18.59	17.5	0				
15	16QAM	36	36	18.30	18.62	18.65	17.5	0				
15	16QAM	75	0	18.35	18.52	18.54	17.5	0				
15	256QAM	1	0	18.45	18.63	18.54	17.5	0				
15	256QAM	1	37	18.31	18.65	18.43	17.5	0				
15	256QAM	1	74	18.35	18.60	18.58	17.5	0				
15	256QAM	36	0	18.45	18.59	18.57	17.5	0				
15	256QAM	36	20	18.37	18.58	18.62	17.5	0				
15	256QAM	36	36	18.42	18.67	18.61	17.5	0				
15	256QAM	75	0	18.44	18.52	18.58	17.5	0				
Channel												
Frequency (MHz)												
10	QPSK	1	0	18.58	18.77	18.62	17.5	0				
10	QPSK	1	25	18.46	18.70	18.65	17.5	0				
10	QPSK	1	49	18.45	18.61	18.53	17.5	0				
10	QPSK	25	0	18.54	18.60	18.60	17.5	0				
10	QPSK	25	12	18.46	18.55	18.63	17.5	0				
10	QPSK	25	25	18.35	18.63	18.48	17.5	0				
10	QPSK	50	0	18.39	18.62	18.59	17.5	0				
10	16QAM	1	0	18.23	18.39	18.33	17.5	0				
10	16QAM	1	25	18.31	18.41	18.40	17.5	0				
10	16QAM	1	49	18.19	18.43	18.48	17.5	0				
10	16QAM	25	0	18.35	18.58	18.55	17.5	0				
10	16QAM	25	12	18.26	18.54	18.42	17.5	0				
10	16QAM	25	25	18.29	18.60	18.58	17.5	0				
10	16QAM	50	0	18.32	18.55	18.48	17.5	0				
10	16QAM	1	0	18.45	18.60	18.64	17.5	0				
10	16QAM	1	25	18.45	18.62	18.61	17.5	0				
10	16QAM	1	49	18.43	18.59	18.59	17.5	0				
10	16QAM	25	0	18.43	18.60	18.64	17.5	0				
10	16QAM	25	12	18.41	18.55	18.60	17.5	0				
10	16QAM	25	25	18.38	18.59	18.65	17.5	0				
10	16QAM	50	0	18.35	18.62	18.54	17.5	0				
10	256QAM	1	0	18.42	18.59	18.50	17.5	0				
10	256QAM	1	25	18.39	18.48	18.46	17.5	0				
10	256QAM	1	49	18.35	18.62	18.51	17.5	0				
10	256QAM	25	0	18.40	18.55	18.56	17.5	0				
10	256QAM	25	12	18.46	18.59	18.62	17.5	0				
10	256QAM	25	25	18.38	18.60	18.65	17.5	0				
10	256QAM	50	0	18.42	18.57	18.50	17.5	0				
Channel												
Frequency (MHz)												
5	QPSK	1	0	18.51	18.76	18.70	17.5	0				
5	QPSK	1	12	18.50	18.70	18.60	17.5	0				
5	QPSK	1	24	18.43	18.61	18.54	17.5	0				
5	QPSK	12	0	18.44	18.60	18.67	17.5	0				
5	QPSK	12	7	18.46	18.61	18.55	17.5	0				
5	QPSK	12	13	18.35	18.60	18.46	17.5	0				
5	QPSK	25	0	18.34	18.62	18.54	17.5	0				
5	16QAM	1	0	18.21	18.41	18.41	17.5	0				
5	16QAM	1	12	18.25	18.57	18.46	17.5	0				
5	16QAM	1	24	18.28	18.49	18.45	17.5	0				
5	16QAM	12	0	18.36	18.65	18.61	17.5	0				
5	16QAM	12	7	18.39	18.65	18.53	17.5	0				
5	16QAM	12	13	18.34	18.49	18.55	17.5	0				
5	16QAM	25	0	18.38	18.61	18.51	17.5	0				
5	16QAM	1	0	18.43	18.67	18.57	17.5	0				
5	16QAM	1	12	18.36	18.59	18.58	17.5	0				
5	16QAM	1	24	18.48	18.58	18.59	17.5	0				
5	16QAM	19	0	18.43	18.63	18.56	17.5	0				
5	16QAM	12	7	18.44	18.57	18.58	17.5	0				
5	16QAM	12	13	18.35	18.64	18.62	17.5	0				
5	16QAM	25	0	18.35	18.62	18.54	17.5	0				
5	256QAM	1	0	18.49	18.59	18.58	17.5	0				
5	256QAM	1	12	18.39	18.54	18.48	17.5	0				
5	256QAM	1	24	18.35	18.57	18.55	17.5	0				
5	256QAM	12	0	18.44	18.53	18.64	17.5	0				
5	256QAM	1	12	18.33	18.62	18.48	17.5	0				
5	256QAM	1	24	18.39	18.60	18.55	17.5	0				
5	256QAM	8	0	18.36	18.55	18.53	17.5	0				
5	256QAM	8	4	18.39	18.50	18.53	17.5	0				
5	256QAM	8	7	18.41	18.52	18.48	17.5	0				
5	256QAM	15	0	18.38	18.51	18.60	17.5	0				
Channel												
Frequency (MHz)												
1.4	QPSK	1	0	18.52	18.76	18.70	17.5	0				
1.4	QPSK	1	5	18.52	18.66	18.70	17.5	0				
1.4	QPSK	1	5									

Band 38 Ant2 DSI1 Other PA										
BW (MHz)	Modulat ion	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Time-up limit (s/min)	MPR (dB)		
Channel				37650	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	15.27	15.29	15.28	16	0		
20	QPSK	1	49	15.09	15.17	15.25				
20	QPSK	1	99	15.07	15.18	15.24	16	0		
20	QPSK	50	0	15.16	15.25	15.29				
20	QPSK	50	24	15.09	15.23	15.21	16	0		
20	QPSK	50	50	15.17	15.20	15.19				
20	QPSK	100	0	15.01	15.14	15.09	16	0		
20	16QAM	1	0	15.23	15.23	15.21				
20	16QAM	1	49	15.22	15.22	15.23	16	0		
20	16QAM	1	99	15.21	15.18	15.24				
20	16QAM	50	0	15.12	15.19	15.16	16	0		
20	16QAM	50	24	15.07	15.11	15.11				
20	16QAM	50	50	15.15	15.18	15.25	16	0		
20	16QAM	100	0	15.18	15.19	15.16				
20	64QAM	1	0	15.12	15.19	15.16	16	0		
20	64QAM	1	49	15.17	15.22	15.14				
20	64QAM	1	99	15.09	15.11	15.10	16	0		
20	64QAM	50	0	15.07	15.25	15.20				
20	64QAM	50	24	15.13	15.22	15.20	16	0		
20	64QAM	50	50	15.07	15.20	15.13				
20	256QAM	1	0	15.03	15.20	15.21	16	0		
20	256QAM	1	49	15.07	15.21	15.18				
20	256QAM	1	99	15.08	15.19	15.18	16	0		
20	256QAM	50	0	15.22	15.28	15.23				
20	256QAM	50	24	15.19	15.22	15.24	16	0		
20	256QAM	50	50	15.07	15.11	15.24				
20	256QAM	100	0	15.10	15.26	15.26	16	0		
Channel				37625	38000	38175			Time-up limit (s/min)	MPR (dB)
Frequency (MHz)				2577.5	2595	2612.5				
15	QPSK	1	0	15.18	15.27	15.26	16	0		
15	QPSK	1	37	15.06	15.10	15.23				
15	QPSK	1	74	15.19	15.20	15.22	16	0		
15	QPSK	36	0	15.10	15.25	15.21				
15	QPSK	36	20	15.11	15.23	15.20	16	0		
15	QPSK	36	39	15.16	15.22	15.22				
15	QPSK	75	0	15.02	15.14	15.02	16	0		
15	16QAM	1	0	15.16	15.24	15.13				
15	16QAM	1	37	15.15	15.15	15.19	16	0		
15	16QAM	1	74	15.13	15.10	15.26				
15	16QAM	36	0	15.06	15.19	15.24	16	0		
15	16QAM	36	20	15.05	15.07	15.04				
15	16QAM	36	39	15.15	15.20	15.18	16	0		
15	16QAM	75	0	15.16	15.21	15.08				
15	64QAM	1	0	15.13	15.16	15.11	16	0		
15	64QAM	1	37	15.10	15.22	15.07				
15	64QAM	1	74	15.08	15.04	15.06	16	0		
15	64QAM	36	0	15.10	15.27	15.15				
15	64QAM	36	20	15.10	15.19	15.22	16	0		
15	64QAM	36	39	15.09	15.20	15.12				
15	64QAM	75	0	15.12	15.14	15.06	16	0		
15	256QAM	1	0	15.15	15.13	15.22				
15	256QAM	1	37	15.09	15.15	15.13	16	0		
15	256QAM	1	74	15.01	15.20	15.10				
15	256QAM	36	0	15.15	15.24	15.24	16	0		
15	256QAM	36	20	15.13	15.20	15.23				
15	256QAM	36	39	15.05	15.14	15.26	16	0		
15	256QAM	75	0	15.03	15.26	15.20				
Channel				37600	38000	38200	Time-up limit (s/min)	MPR (dB)		
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	15.28	15.21	15.28	16	0		
10	QPSK	1	25	15.07	15.20	15.26				
10	QPSK	1	49	15.03	15.21	15.22	16	0		
10	QPSK	25	0	15.19	15.26	15.12				
10	QPSK	25	12	15.06	15.19	15.21	16	0		
10	QPSK	25	25	15.17	15.12	15.13				
10	QPSK	50	0	15.07	15.10	15.04	16	0		
10	16QAM	1	0	15.21	15.18	15.17				
10	16QAM	1	25	15.14	15.15	15.19	16	0		
10	16QAM	1	49	15.16	15.15	15.21				
10	16QAM	25	0	15.13	15.16	15.17	16	0		
10	16QAM	25	12	15.06	15.13	15.11				
10	16QAM	25	25	15.07	15.16	15.21	16	0		
10	16QAM	50	0	15.11	15.21	15.11				
10	64QAM	1	0	15.09	15.16	15.09	16	0		
10	64QAM	1	25	15.15	15.17	15.06				
10	64QAM	1	49	15.00	15.14	15.02	16	0		
10	64QAM	25	0	15.01	15.23	15.23				
10	64QAM	25	12	15.07	15.22	15.21	16	0		
10	64QAM	25	25	15.01	15.14	15.06				
10	64QAM	50	0	15.15	15.09	15.14	16	0		
10	256QAM	1	0	15.06	15.19	15.18				
10	256QAM	1	25	15.03	15.15	15.09	16	0		
10	256QAM	1	49	15.08	15.13	15.16				
10	256QAM	25	0	15.18	15.20	15.16	16	0		
10	256QAM	25	12	15.16	15.22	15.19				
10	256QAM	25	25	15.02	15.13	15.16	16	0		
10	256QAM	50	0	15.03	15.25	15.28				
Channel				37700	38000	38200	Time-up limit (s/min)	MPR (dB)		
Frequency (MHz)				2575	2595	2617.5				
5	QPSK	1	0	15.25	15.25	15.28	16	0		
5	QPSK	1	12	15.11	15.11	15.18				
5	QPSK	1	24	15.06	15.09	15.22	16	0		
5	QPSK	12	0	15.12	15.26	15.14				
5	QPSK	12	7	15.07	15.19	15.14	16	0		
5	QPSK	12	13	15.13	15.22	15.17				
5	QPSK	25	0	15.03	15.06	15.07	16	0		
5	16QAM	1	0	15.14	15.15	15.19				
5	16QAM	1	12	15.15	15.16	15.23	16	0		
5	16QAM	1	24	15.17	15.17	15.25				
5	16QAM	12	0	15.05	15.13	15.13	16	0		
5	16QAM	12	7	15.00	15.12	15.06				
5	16QAM	12	13	15.13	15.16	15.26	16	0		
5	16QAM	25	0	15.15	15.11	15.08				
5	64QAM	1	0	15.05	15.15	15.08	16	0		
5	64QAM	1	12	15.13	15.23	15.06				
5	64QAM	1	24	15.10	15.10	15.03	16	0		
5	64QAM	12	0	15.09	15.19	15.14				

Band 38 Ant3 DS1 Other PA										
BW (MHz)	Modulat on	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turnup limit (dBm)	MPT (dB)		
Channel				37650	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	24.43	24.58	24.10	25	0		
20	QPSK	1	49	24.46	24.55	24.47				
20	QPSK	1	99	23.96	24.08	23.96				
20	QPSK	50	0	23.34	23.43	23.33				
20	QPSK	50	24	23.32	23.40	23.26	24	1		
20	QPSK	50	50	23.26	23.35	23.27				
20	QPSK	100	0	23.31	23.41	23.32				
20	16QAM	1	0	23.20	23.26	23.17				
20	16QAM	1	49	23.19	23.27	23.15	24	1		
20	16QAM	1	99	23.14	23.20	23.10				
20	16QAM	50	24	22.25	22.41	22.33				
20	16QAM	50	50	22.38	22.42	22.31				
20	16QAM	100	0	22.31	22.44	22.35	23	2		
20	64QAM	1	0	22.38	22.52	22.42				
20	64QAM	1	49	22.38	22.48	22.41				
20	64QAM	1	99	22.34	22.46	22.41				
20	64QAM	50	0	21.32	21.41	21.26	22	3		
20	64QAM	50	24	21.28	21.36	21.21				
20	64QAM	50	50	21.28	21.35	21.26				
20	64QAM	100	0	21.40	21.48	21.35				
20	256QAM	1	0	19.24	19.39	19.33	20	5		
20	256QAM	1	49	19.25	19.38	19.23				
20	256QAM	1	99	19.31	19.38	19.25				
20	256QAM	50	0	19.29	19.42	19.27				
20	256QAM	50	24	19.24	19.38	19.24	20	5		
20	256QAM	50	50	19.34	19.41	19.35				
20	256QAM	100	0	19.40	19.46	19.31				
Channel <th>37650</th> <th>38000</th> <th>38150</th> <th>Turnup limit (dBm)</th> <th colspan="2">MPT (dB)</th>				37650	38000	38150				Turnup limit (dBm)
Frequency (MHz)				2577.5	2595	2612.5				
15	QPSK	1	0	24.34	24.53	24.47	25	0		
15	QPSK	1	37	24.45	24.51	24.39				
15	QPSK	1	74	23.95	24.00	23.88				
15	QPSK	36	0	23.31	23.36	23.29				
15	QPSK	36	20	23.26	23.32	23.27	24	1		
15	QPSK	36	39	23.25	23.26	23.27				
15	QPSK	75	0	23.26	23.43	23.34				
15	16QAM	1	0	23.17	23.19	23.09				
15	16QAM	1	37	23.16	23.30	23.11	24	1		
15	16QAM	1	74	23.09	23.11	23.07				
15	16QAM	36	0	22.20	22.38	22.34				
15	16QAM	36	20	22.23	22.40	22.34				
15	16QAM	36	39	22.29	22.41	22.29	23	2		
15	16QAM	75	0	22.32	22.41	22.32				
15	64QAM	1	0	22.36	22.51	22.45				
15	64QAM	1	37	22.39	22.48	22.44				
15	64QAM	1	74	22.34	22.40	22.36	23	2		
15	64QAM	36	0	21.32	21.40	21.25				
15	64QAM	36	20	21.19	21.38	21.12				
15	64QAM	36	39	21.28	21.32	21.18				
15	64QAM	75	0	21.37	21.41	21.37	22	3		
15	256QAM	1	0	19.24	19.36	19.27				
15	256QAM	1	37	19.27	19.35	19.21				
15	256QAM	1	74	19.29	19.36	19.24				
15	256QAM	36	0	19.29	19.42	19.20	20	5		
15	256QAM	36	20	19.16	19.39	19.26				
15	256QAM	36	39	19.29	19.36	19.30				
15	256QAM	75	0	19.32	19.48	19.34				
Channel				37600	38000	38200	Turnup limit (dBm)	MPT (dB)		
Frequency (MHz)				2471.5	2495	2517.5				
10	QPSK	1	0	24.43	24.52	24.38	25	0		
10	QPSK	1	25	24.38	24.47	24.44				
10	QPSK	1	49	23.97	23.99	23.96				
10	QPSK	50	0	23.25	23.39	23.27				
10	QPSK	25	12	23.28	23.39	23.29	24	1		
10	QPSK	25	25	23.25	23.35	23.26				
10	QPSK	50	0	23.29	23.39	23.26				
10	16QAM	1	0	23.11	23.24	23.09				
10	16QAM	1	25	23.20	23.20	23.18	24	1		
10	16QAM	1	49	23.17	23.14	23.02				
10	16QAM	25	0	22.25	22.41	22.35				
10	16QAM	25	12	22.26	22.33	22.24				
10	16QAM	25	25	22.32	22.41	22.23	23	2		
10	16QAM	50	0	22.34	22.37	22.27				
10	64QAM	1	0	22.34	22.51	22.39				
10	64QAM	1	25	22.34	22.44	22.40				
10	64QAM	1	49	22.35	21.39	21.17	23	2		
10	64QAM	25	12	21.25	21.31	21.21				
10	64QAM	25	25	21.25	21.35	21.25				
10	64QAM	50	0	21.42	21.44	21.27				
10	256QAM	1	0	19.23	19.42	19.35	20	5		
10	256QAM	1	25	19.27	19.38	19.25				
10	256QAM	1	49	19.32	19.35	19.16				
10	256QAM	25	0	19.24	19.42	19.24				
10	256QAM	25	12	19.26	19.41	19.26	20	5		
10	256QAM	25	25	19.26	19.34	19.36				
10	256QAM	50	0	19.41	19.46	19.31				
Channel				37775	38000	38225	Turnup limit (dBm)	MPT (dB)		
Frequency (MHz)				2572.5	2595	2617.5				
5	QPSK	1	0	24.37	24.54	24.48	25	0		
5	QPSK	1	12	24.39	24.48	24.42				
5	QPSK	1	24	23.97	24.09	23.89				
5	QPSK	12	0	23.27	23.42	23.34				
5	QPSK	12	7	23.35	23.36	23.20	24	1		
5	QPSK	12	13	23.22	23.30	23.26				
5	QPSK	25	0	23.22	23.41	23.30				
5	16QAM	1	0	23.22	23.25	23.15				
5	16QAM	1	12	23.14	23.29	23.15	24	1		
5	16QAM	1	24	23.17	23.23	23.06				
5	16QAM	12	0	22.21	22.41	22.33				
5	16QAM	12	7	22.18	22.36	22.23				
5	16QAM	12	13	22.36	22.35	22.24	23	2		
5	16QAM	25	0	22.29	22.41	22.35				
5	64QAM	1	0	22.30	22.53	22.35				
5	64QAM	1	12	22.39	22.42	22.37				
5	64QAM	1	24	22.28	22.43	22.36	22	3		
5	64QAM	12	0	21.24	21.44	21.22				
5	64QAM	12	7	21.31	21.30	21.21				
5	64QAM	12	13	21.22	21.28	21.24				
5	64QAM	25	0	21.36	21.42	21.37	20	5		
5	256QAM	1	0	19.21	19.38	19.27				
5	256QAM	1	12	19.22	19.36	19.23				
5	256QAM	1	24	19.27	19.32	19.19				
5	256QAM	12	0	19.20	19.38	19.21	20	5		
5	256QAM	12	7	19.22	19.40	19.20				
5	256QAM	12	13	19.30	19.34	19.29				
5	256QAM	25	0	19.38	19.44	19.22				

Band 41 Ant3 DS1 Other PA												
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Mode Ch / Freq	Power High Mode Ch / Freq	Power High Mode Ch / Freq	Power High Mode Ch / Freq	Turn-up limit (dBm)	MPR (dB)			
Channel				39750	40165	40620	41055	41490				
Frequency (MHz)				2506	2549.5	2593	2636.5	2680				
20	QPSK	1	0	24.17	24.15	24.55	24.15	24.34	25	0		
20	QPSK	1	49	24.11	24.16	24.42	24.09	24.30				
20	QPSK	1	99	24.13	24.15	24.50	24.12	24.32				
20	QPSK	50	0	23.17	23.20	23.51	23.18	23.38				
20	QPSK	50	24	23.07	23.13	23.41	23.09	23.28				
20	QPSK	100	0	23.21	23.21	23.49	23.11	23.39	24	1		
20	16QAM	1	0	23.13	23.11	23.43	23.14	23.30				
20	16QAM	1	49	23.12	23.14	23.38	23.15	23.26				
20	16QAM	1	99	23.17	23.10	23.49	23.13	23.35				
20	16QAM	50	24	22.22	22.23	22.51	22.19	22.26				
20	16QAM	50	24	22.22	22.12	22.42	22.22	22.23	23			
20	16QAM	50	25	22.15	22.15	22.44	22.13	22.37				
20	16QAM	100	0	22.24	22.16	22.55	22.06	22.33				
20	16QAM	1	0	22.18	22.11	22.40	22.08	22.33				
20	16QAM	1	49	22.19	22.09	22.51	22.13	22.20				
20	16QAM	1	99	22.17	22.13	22.51	22.07	22.33	22	3		
20	16QAM	50	0	21.20	21.24	21.52	21.20	21.35				
20	16QAM	50	24	21.02	21.11	21.42	21.14	21.25				
20	16QAM	100	0	21.25	21.19	21.54	21.12	21.37				
20	256QAM	1	0	19.22	19.19	19.47	19.22	19.36				
20	256QAM	1	49	19.04	19.16	19.41	19.11	19.24	20	5		
20	256QAM	1	99	19.16	19.14	19.49	19.13	19.36				
20	256QAM	50	24	19.12	19.21	19.49	19.13	19.37				
20	256QAM	50	24	19.16	19.11	19.47	19.19	19.26				
20	256QAM	50	50	19.17	19.11	19.40	19.16	19.30				
20	256QAM	100	0	19.03	19.15	19.54	19.11	19.31	Turn-up limit (dBm)	MPR (dB)		
20	256QAM	100	0	19.19	19.13	19.50	19.15	19.27				
20	256QAM	1	0	25.03	25.48	25.93	25.03	25.62				
15	QPSK	1	0	24.14	24.09	24.37	24.10	24.33			25	0
15	QPSK	1	37	24.12	24.11	24.43	24.15	24.33				
15	QPSK	1	74	24.13	24.13	24.51	24.09	24.32				
15	QPSK	36	0	23.12	23.20	23.49	23.14	23.39				
15	QPSK	36	20	23.03	23.09	23.36	23.09	23.27				
15	QPSK	36	36	23.14	23.14	23.48	23.12	23.34	24	1		
15	QPSK	75	0	23.17	23.12	23.55	23.13	23.34				
15	16QAM	1	0	23.13	23.13	23.41	23.14	23.34				
15	16QAM	1	37	23.06	23.10	23.37	23.16	23.35				
15	16QAM	1	74	23.06	23.01	23.51	23.11	23.32				
15	16QAM	36	0	22.20	22.20	22.54	22.14	22.31	23	2		
15	16QAM	36	36	22.09	22.09	22.39	22.07	22.32				
15	16QAM	36	39	22.08	22.12	22.44	22.05	22.32				
15	16QAM	75	0	22.20	22.07	22.48	22.04	22.34				
15	16QAM	1	0	22.09	22.08	22.33	22.03	22.21				
15	16QAM	1	37	22.07	22.12	22.33	22.06	22.20	22	3		
15	16QAM	1	74	22.17	22.07	22.40	22.12	22.27				
15	16QAM	36	0	21.14	21.19	21.45	21.15	21.28				
15	16QAM	36	20	20.98	21.14	21.37	21.06	21.18				
15	16QAM	36	39	20.86	21.13	21.42	21.09	21.17				
15	16QAM	1	0	21.15	21.14	21.41	21.13	21.24	20	5		
15	256QAM	1	0	19.25	19.15	19.43	19.14	19.29				
15	256QAM	1	37	16.87	16.07	16.40	19.15	19.16				
15	256QAM	1	74	19.14	19.06	19.49	19.13	19.34				
15	256QAM	36	20	19.17	19.17	19.49	19.16	19.35				
15	256QAM	36	20	19.17	19.03	19.41	19.11	19.22	Turn-up limit (dBm)	MPR (dB)		
15	256QAM	36	39	19.11	19.05	19.32	19.13	19.28				
15	256QAM	75	0	19.12	19.17	19.56	19.03	19.35				
10	QPSK	1	0	24.15	24.13	24.50	24.16	24.35			25	0
10	QPSK	1	25	24.09	24.10	24.45	24.10	24.28				
10	QPSK	1	49	24.13	24.16	24.52	24.07	24.29				
10	QPSK	25	0	23.15	23.18	23.54	23.13	23.36				
10	QPSK	25	25	23.13	23.10	23.45	23.01	23.26				
10	QPSK	50	0	23.20	23.18	23.49	23.05	23.37	24	1		
10	16QAM	1	0	23.15	23.10	23.43	23.13	23.31				
10	16QAM	1	49	23.19	23.09	23.52	23.06	23.28				
10	16QAM	25	0	22.21	22.20	22.52	22.13	22.27				
10	16QAM	25	12	22.09	22.12	22.40	22.08	22.24				
10	16QAM	75	0	22.12	22.12	22.37	22.12	22.37	23	2		
10	16QAM	50	0	22.26	22.09	22.50	22.04	22.28				
10	16QAM	1	25	22.20	22.07	22.41	22.07	22.32				
10	16QAM	1	25	22.63	22.01	22.31	22.08	22.21				
10	16QAM	25	12	21.83	21.23	21.50	21.12	21.36				
10	16QAM	25	12	21.03	21.03	21.37	21.15	21.26	22			
10	16QAM	25	25	21.10	21.11	21.39	21.07	21.36				
10	16QAM	50	0	21.18	21.21	21.44	21.14	21.36				
10	16QAM	50	0	19.14	19.12	19.39	19.15	19.28				
10	16QAM	1	25	19.06	19.15	19.44	19.06	19.22				
10	256QAM	1	49	19.13	19.13	19.48	19.02	19.37	20	5		
10	256QAM	25	0	19.17	19.23	19.58	19.03	19.34				
10	256QAM	25	12	19.11	19.04	19.42	19.03	19.27				
10	256QAM	25	25	19.17	19.13	19.39	19.16	19.27				
10	256QAM	50	0	19.10	19.11	19.45	19.06	19.33				
Channel				39750	40165	40620	41060	41565				
Frequency (MHz)				2506	2549.5	2593	2636.5	2680				
5	QPSK	1	0	24.10	24.15	24.40	24.09	24.30	25	0		
5	QPSK	1	12	24.09	24.16	24.36	24.01	24.32				
5	QPSK	1	24	24.07	24.14	24.42	24.09	24.23				
5	QPSK	12	0	23.12	23.12	23.44	23.14	23.32				
5	QPSK	12	13	23.05	23.07	23.38	23.03	23.33				
5	QPSK	25	0	23.20	23.16	23.55	23.03	23.38	24	1		
5	16QAM	1	0	23.10	23.06	23.41	23.09	23.30				
5	16QAM	1	24	23.08	23.08	23.17	23.17	23.25				
5	16QAM	12	0	22.20	22.24	22.44	22.16	22.28				
5	16QAM	12	7	22.02	22.10	22.43	22.12	22.24				
5	16QAM	12	13	22.12	22.06	22.32	22.09	22.28	23	2		
5	16QAM	12	25	22.18	22.19	22.46	22.01	22.34				
5	16QAM	1	0	22.14	22.08	22.34	22.04	22.27				
5	16QAM	1	12	22.09	22.04	22.34	22.12	22.16				
5	16QAM	1	24	22.09	22.04	22.43	22.03	22.24				
5	16QAM	12	13	21.04	21.13	21.44	21.09	21.18	22	3		
5	16QAM	12	13	21.08	21.13	21.41	21.01	21.36				
5	16QAM	25	0	21.20	21.21	21.47	21.04	21.36				
5	16QAM	1	18	19.16	19.18	19.47	19.11	19.37				
5	256QAM	1	12	19.06	19.16	19.33	19.10	19.15				
5	256QAM	1	24	19.19	19.11	19.46	19.11	19.29	20	5		
5	256QAM	12	0	19.17	19.22	19.51	19.08	19.37				
5	256QAM	12	7	19.08	19.17	19.46	19.11	19.27				
5	256QAM	12	13	19.12	19.06	19.43	19.05	19.26				
5	256QAM	25	0	19.08	19.15	19.49	19.09	19.26				

Band 7 Ant4 DSI1 Other PA									
BW (MHz)	Module on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				2550	2100	2130			
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	0	19.49	19.58	19.48			
20	QPSK	1	49	19.33	19.44	19.35	20.5	0	
20	QPSK	1	99	19.30	19.38	19.27			
20	QPSK	50	0	19.27	19.40	19.19			
20	QPSK	50	24	19.32	19.33	19.25	20.5	0	
20	QPSK	50	50	19.26	19.26	19.11			
20	QPSK	100	0	19.21	19.32	19.21			
20	16QAM	1	0	19.19	19.29	19.16			
20	16QAM	1	49	19.07	19.22	19.07	20.5	0	
20	16QAM	1	99	19.03	19.16	19.01			
20	16QAM	50	0	19.15	19.29	19.22			
20	16QAM	50	24	19.18	19.16	19.06	20.5	0	
20	16QAM	50	50	19.18	19.29	19.16			
20	16QAM	100	0	19.13	19.22	19.05			
20	64QAM	1	0	19.26	19.43	19.33			
20	64QAM	1	49	19.33	19.44	19.37	20.5	0	
20	64QAM	1	99	19.27	19.41	19.26			
20	64QAM	50	0	19.23	19.32	19.16			
20	64QAM	50	24	19.11	19.14	19.09	20.5	0	
20	64QAM	50	50	19.11	19.17	19.06			
20	64QAM	100	0	19.31	19.34	19.23			
20	256QAM	1	0	19.29	19.42	19.32			
20	256QAM	1	49	19.27	19.36	19.23	20.5	0	
20	256QAM	1	99	19.32	19.38	19.26			
20	256QAM	50	0	19.43	19.49	19.32			
20	256QAM	50	24	19.33	19.48	19.33	20.5	0	
20	256QAM	50	50	19.31	19.42	19.27			
20	256QAM	100	0	19.36	19.45	19.28			
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	0	19.20	19.30	19.15			
15	QPSK	1	37	19.08	19.12	19.07	20.5	0	
15	QPSK	1	74	19.03	19.11	18.94			
15	QPSK	36	0	18.84	19.13	18.93			
15	QPSK	36	20	19.01	19.05	18.93	20.5	0	
15	QPSK	36	39	18.84	18.99	18.80			
15	QPSK	75	0	18.95	19.07	18.89			
15	16QAM	1	0	18.93	18.97	18.92			
15	16QAM	1	37	18.74	18.87	18.64	20.5	0	
15	16QAM	1	74	18.75	18.83	18.71			
15	16QAM	36	0	18.90	18.95	18.97			
15	16QAM	36	20	18.84	18.85	18.74	20.5	0	
15	16QAM	36	39	18.83	19.01	18.81			
15	16QAM	75	0	18.85	18.94	18.70			
15	64QAM	1	0	19.02	19.08	19.05			
15	64QAM	1	37	19.06	19.13	19.01	20.5	0	
15	64QAM	1	74	18.97	19.13	18.95			
15	64QAM	36	0	18.89	18.97	18.84			
15	64QAM	36	20	18.93	18.98	18.82	20.5	0	
15	64QAM	36	39	18.79	18.89	18.77			
15	64QAM	75	0	19.04	19.03	18.93			
15	256QAM	1	0	19.25	19.37	19.29			
15	256QAM	1	37	19.28	19.34	19.21	20.5	0	
15	256QAM	1	74	19.33	19.33	19.28			
15	256QAM	36	0	19.37	19.46	19.29			
15	256QAM	36	20	19.29	19.39	19.25	20.5	0	
15	256QAM	36	39	19.27	19.36	19.23			
15	256QAM	75	0	19.30	19.42	19.20			
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	0	19.23	19.33	19.19			
10	QPSK	1	25	19.09	19.14	19.03	20.5	0	
10	QPSK	1	49	19.02	19.13	18.98			
10	QPSK	25	0	18.91	19.13	18.94			
10	QPSK	25	12	19.08	18.98	18.83	20.5	0	
10	QPSK	25	25	19.01	18.86	18.67			
10	QPSK	50	0	18.90	19.01	18.92			
10	16QAM	1	0	18.92	19.02	18.90			
10	16QAM	1	25	18.81	18.87	18.63	20.5	0	
10	16QAM	1	49	18.76	18.89	18.69			
10	16QAM	25	0	18.90	18.94	18.86			
10	16QAM	25	12	18.93	18.86	18.75	20.5	0	
10	16QAM	25	25	18.68	19.04	18.83			
10	16QAM	50	0	18.81	18.92	18.71			
10	64QAM	1	0	18.94	19.08	19.08			
10	64QAM	1	25	19.01	19.16	19.06	20.5	0	
10	64QAM	1	49	18.94	19.06	18.82			
10	64QAM	25	0	18.93	18.98	18.81			
10	64QAM	25	12	18.83	18.88	18.82	20.5	0	
10	64QAM	25	25	18.79	18.83	18.80			
10	64QAM	50	0	19.00	19.07	18.96			
10	256QAM	1	0	19.23	19.37	19.31			
10	256QAM	1	25	19.23	19.36	19.17	20.5	0	
10	256QAM	1	49	19.31	19.37	19.19			
10	256QAM	25	0	19.35	19.47	19.30			
10	256QAM	25	12	19.31	19.40	19.28	20.5	0	
10	256QAM	25	25	19.31	19.40	19.20			
10	256QAM	50	0	19.35	19.42	19.29			
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	19.18	19.27	19.19			
5	QPSK	1	12	19.00	19.11	19.04	20.5	0	
5	QPSK	1	24	18.96	19.08	18.98			
5	QPSK	12	0	19.02	19.14	18.90			
5	QPSK	12	7	19.03	19.06	19.00	20.5	0	
5	QPSK	12	13	19.00	18.98	18.78			
5	QPSK	25	0	18.88	19.01	18.97			
5	16QAM	1	0	18.88	18.99	18.89			
5	16QAM	1	12	18.75	18.92	18.67	20.5	0	
5	16QAM	1	24	18.74	18.90	18.77			
5	16QAM	12	0	18.79	19.04	18.94			
5	16QAM	12	7	18.89	18.84	18.76	20.5	0	
5	16QAM	12	13	18.90	18.99	18.84			
5	16QAM	25	0	18.89	18.94	18.78			
5	64QAM	1	0	18.98	19.14	18.98			
5	64QAM	1	12	19.06	19.12	19.09	20.5	0	
5	64QAM	1	24	19.02	19.17	18.93			
5	64QAM	12	0	18.93	18.97	18.83			
5	64QAM	12	7	18.82	18.84	18.83	20.5	0	
5	64QAM	12	13	18.78	18.82	18.78			
5	64QAM	25	0	19.03	19.04	18.88			
5	256QAM	1	0	19.21	19.41	19.29			
5	256QAM	1	12	19.30	19.36	19.26	20.5	0	
5	256QAM	1	24	19.29	19.30	19.25			
5	256QAM	12	0	19.40	19.49	19.29			
5	256QAM	12	7	19.31	19.42	19.35	20.5	0	
5	256QAM	12	13	19.26	19.36	19.20			
5	256QAM	25	0	19.28	19.41	19.24			

Band 7 Ant4 DSI1 Other PA-1									
BW (MHz)	Modulation	RB Size	RB Offset	Power Level 20850	Power Middle Ch / Freq	Power High 21100	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				20850	21100	21350			
Frequency (MHz)				2507.5	2535	2562.5			
20	QPSK	1	0	19.39	19.52	19.22			
20	QPSK	1	49	19.24	19.39	19.22	20.5	0	
20	QPSK	1	99	19.32	19.38	19.29			
20	QPSK	50	0	19.28	19.35	19.17			
20	QPSK	50	24	19.26	19.28	19.00	20.5	0	
20	QPSK	50	50	19.15	19.26	18.94			
20	16QAM	1	0	19.32	19.28	19.10			
20	16QAM	1	49	19.26	19.21	18.99	20.5	0	
20	16QAM	1	99	19.14	19.21	19.12			
20	16QAM	50	0	19.35	19.47	19.17			
20	16QAM	50	24	19.24	19.39	18.99	20.5	0	
20	16QAM	50	50	19.15	19.12	19.00			
20	16QAM	100	0	19.26	19.39	19.06			
20	64QAM	1	0	19.34	19.36	19.00			
20	64QAM	1	49	19.31	19.14	18.97	20.5	0	
20	64QAM	1	99	19.08	19.28	19.17			
20	64QAM	50	0	19.32	19.36	19.15			
20	64QAM	50	24	19.24	19.34	18.87	20.5	0	
20	64QAM	50	50	19.23	19.27	19.03			
20	64QAM	100	0	19.25	19.35	19.10			
20	256QAM	1	0	19.31	19.43	19.09			
20	256QAM	1	49	19.17	19.38	18.98	20.5	0	
20	256QAM	1	99	19.19	19.26	18.96			
20	256QAM	50	0	19.36	19.36	19.09			
20	256QAM	50	24	19.26	19.31	19.10	20.5	0	
20	256QAM	50	50	19.22	19.24	19.02			
20	256QAM	100	0	19.18	19.24	19.14			
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	0	19.32	19.49	19.18	20.5	0	
15	QPSK	1	37	19.18	19.37	19.18			
15	QPSK	1	74	19.29	19.39	19.24			
15	QPSK	35	0	19.26	19.33	19.10			
15	QPSK	35	37	19.25	19.35	19.53	20.5	0	
15	QPSK	35	38	19.14	19.23	19.06			
15	QPSK	75	0	19.24	19.36	19.07			
15	16QAM	1	0	19.35	19.31	19.02			
15	16QAM	1	37	19.27	19.21	18.92			
15	16QAM	1	74	19.13	19.16	19.04			
15	16QAM	35	0	19.29	19.35	19.14	20.5	0	
15	16QAM	35	20	19.24	19.31	19.00			
15	16QAM	36	38	19.10	19.12	19.09			
15	16QAM	75	0	19.24	19.33	19.08			
15	64QAM	1	0	19.33	19.38	18.96			
15	64QAM	1	37	19.29	19.13	18.97			
15	64QAM	1	74	19.20	19.28	19.19			
15	64QAM	35	0	19.27	19.31	19.00			
15	64QAM	36	20	19.18	19.33	19.06	20.5	0	
15	64QAM	36	39	19.15	19.27	19.14			
15	64QAM	75	0	19.25	19.29	19.03			
15	256QAM	1	0	19.29	19.42	19.06			
15	256QAM	1	37	19.12	19.34	19.05			
15	256QAM	1	74	19.20	19.25	18.87			
15	256QAM	36	0	19.36	19.32	19.07			
15	256QAM	36	39	19.16	19.26	19.07	20.5	0	
15	256QAM	75	0	19.19	19.25	19.04			
Channel				20800	21300	21600	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	0	19.37	19.48	19.21			
10	QPSK	1	25	19.18	19.39	19.22	20.5	0	
10	QPSK	1	49	19.27	19.41	19.22			
10	QPSK	25	0	19.25	19.32	19.16			
10	QPSK	25	12	19.27	19.25	19.03	20.5	0	
10	QPSK	25	25	19.10	19.28	19.06			
10	QPSK	50	0	19.27	19.41	19.01			
10	16QAM	1	0	19.30	19.30	19.05			
10	16QAM	1	25	19.24	19.18	19.03	20.5	0	
10	16QAM	1	49	19.16	19.18	19.08			
10	16QAM	25	0	19.29	19.47	19.16			
10	16QAM	25	12	19.25	19.41	19.00			
10	16QAM	25	25	19.08	19.14	19.06			
10	16QAM	50	0	19.22	19.35	18.99			
10	64QAM	1	0	19.25	19.37	19.19			
10	64QAM	1	25	19.13	19.27	18.81	20.5	0	
10	64QAM	1	49	19.02	19.29	18.98			
10	64QAM	25	0	19.34	19.35	19.08			
10	64QAM	25	12	19.22	19.29	18.93	20.5	0	
10	64QAM	25	25	19.22	19.20	18.92			
10	64QAM	49	15	19.34	19.34	19.05			
10	256QAM	1	0	19.34	19.35	19.02			
10	256QAM	1	25	19.12	19.33	18.99	20.5	0	
10	256QAM	25	0	19.35	19.34	19.07			
10	256QAM	25	12	19.17	19.23	19.08			
10	256QAM	25	25	19.15	19.15	19.04			
10	256QAM	50	0	19.10	19.28	19.05			
Channel				20775	21200	21625	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	19.35	19.48	19.20			
5	QPSK	1	12	19.26	19.33	19.19	20.5	0	
5	QPSK	1	24	19.28	19.40	19.21			
5	QPSK	12	7	19.23	19.27	19.18			
5	QPSK	12	13	19.09	19.26	18.89	20.5	0	
5	QPSK	25	0	19.22	19.41	19.07			
5	16QAM	1	0	19.29	19.25	19.19			
5	16QAM	1	12	19.22	19.22	18.92	20.5	0	
5	16QAM	1	24	19.19	19.24	19.15			
5	16QAM	12	0	19.36	19.43	19.15			
5	16QAM	12	7	19.22	19.40	18.87			
5	16QAM	12	13	19.09	19.13	19.00	20.5	0	
5	16QAM	25	0	19.22	19.32	19.07			
5	16QAM	25	0	19.22	19.25	19.00			
5	16QAM	1	12	19.30	19.16	19.06	20.5	0	
5	64QAM	1	24	19.07	19.21	19.10			
5	64QAM	12	0	19.35	19.28	19.08			
5	64QAM	12	7	19.16	19.29	18.98			
5	64QAM	12	13	19.21	19.19	18.81			
5	64QAM	25	0	19.27	19.34	19.01			
5	256QAM	1	0	19.30	19.43	19.01			
5	256QAM	1	12	19.11	19.29	19.00	20.5	0	
5	256QAM	1	24	19.21	19.28	19.19			
5	256QAM	12	0	19.36	19.39	19.09			
5	256QAM	12	7	19.17	19.27	19.03			
5	256QAM	12	13	19.17	19.20	19.04	20.5	0	
5	256QAM	25	0	19.09	19.18	19.06			

Band 38 Ant4 DS1 Other PA										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Time-up (dBm)	MPR (dB)		
Channel				37500	38000	38150				
Frequency (MHz)				2590	2595	2610				
20	QPSK	1	0	18.13	18.21	17.97	19.5	0		
20	QPSK	1	49	18.00	18.06	17.95				
20	QPSK	1	99	17.98	18.01	17.77				
20	QPSK	50	0	17.89	18.14	17.80	19.5	0		
20	QPSK	50	24	17.95	17.95	17.83				
20	QPSK	50	50	17.72	17.79	17.60				
20	QPSK	100	0	17.87	18.00	17.67	19.5	0		
20	16QAM	1	0	18.06	18.10	17.88				
20	16QAM	1	49	17.93	18.05	17.82				
20	16QAM	1	99	17.98	18.03	17.79	19.5	0		
20	16QAM	50	0	18.08	18.13	17.90				
20	16QAM	50	24	18.04	18.12	17.85				
20	16QAM	50	50	18.05	18.05	17.87	19.5	0		
20	16QAM	100	0	18.18	18.20	17.97				
20	64QAM	1	0	18.07	18.13	18.08	19.5	0		
20	64QAM	1	49	18.03	18.16	18.11				
20	64QAM	1	99	18.04	18.17	18.00				
20	64QAM	50	0	18.13	18.19	17.89	19.5	0		
20	64QAM	50	24	17.98	18.17	17.79				
20	64QAM	50	50	18.09	18.16	17.90				
20	64QAM	100	0	17.00	17.06	16.88	19.5	0		
20	256QAM	1	0	18.10	18.15	17.99				
20	256QAM	1	49	18.04	18.11	17.90				
20	256QAM	1	99	18.07	18.19	17.88	19.5	0		
20	256QAM	50	0	18.03	18.18	17.83				
20	256QAM	50	24	17.98	18.07	17.77				
20	256QAM	50	50	17.98	18.07	17.79	19.5	0		
20	256QAM	100	0	18.07	18.20	17.93				
Channel				37625	38000	38175	Time-up (dBm)	MPR (dB)		
Frequency (MHz)				2577.5	2595	2612.5				
15	QPSK	1	0	18.13	18.17	17.89	19.5	0		
15	QPSK	1	37	17.93	18.09	17.81				
15	QPSK	1	74	17.82	18.01	17.74				
15	QPSK	36	0	17.84	18.16	17.78	19.5	0		
15	QPSK	36	20	17.93	17.97	17.61				
15	QPSK	36	39	17.70	17.75	17.52				
15	QPSK	75	0	17.80	18.00	17.58	19.5	0		
15	16QAM	1	0	18.02	18.02	17.86				
15	16QAM	1	37	17.85	18.07	17.83				
15	16QAM	1	74	17.89	18.03	17.80	19.5	0		
15	16QAM	36	0	18.07	18.08	17.85				
15	16QAM	36	20	17.99	18.07	17.82				
15	16QAM	36	39	17.96	17.98	17.88	19.5	0		
15	16QAM	75	0	18.12	18.16	18.00				
15	64QAM	1	0	18.05	18.08	18.00	19.5	0		
15	64QAM	1	37	17.98	18.09	18.04				
15	64QAM	1	74	18.03	18.10	18.01				
15	64QAM	36	0	18.14	18.16	17.81	19.5	0		
15	64QAM	36	20	17.90	18.18	17.74				
15	64QAM	36	39	18.04	18.08	17.83				
15	64QAM	75	0	17.95	18.01	17.83	19.5	0		
15	256QAM	1	0	18.08	18.19	17.96				
15	256QAM	1	37	17.97	18.00	17.89				
15	256QAM	1	74	18.06	18.11	17.89	19.5	0		
15	256QAM	36	0	18.06	18.19	17.86				
15	256QAM	36	20	17.98	18.01	17.75				
15	256QAM	36	39	17.89	18.10	17.73	19.5	0		
15	256QAM	75	0	18.02	18.20	17.87				
Channel				37700	38000	38200	Time-up (dBm)	MPR (dB)		
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	18.04	18.18	17.99	19.5	0		
10	QPSK	1	25	17.96	18.00	17.67				
10	QPSK	1	49	17.85	18.03	17.75				
10	QPSK	25	0	17.97	18.08	17.72	19.5	0		
10	QPSK	25	12	17.87	17.95	17.83				
10	QPSK	25	25	17.65	17.75	17.55				
10	QPSK	50	0	17.92	18.02	17.82	19.5	0		
10	16QAM	1	0	17.97	18.01	17.83				
10	16QAM	1	25	17.85	18.00	17.83				
10	16QAM	1	49	17.97	18.02	17.74	19.5	0		
10	16QAM	25	0	17.99	18.05	17.83				
10	16QAM	25	12	17.89	18.14	17.88				
10	16QAM	25	25	17.98	18.05	17.80	19.5	0		
10	16QAM	50	0	18.15	18.18	17.90				
10	64QAM	1	0	18.01	18.06	18.02	19.5	0		
10	64QAM	1	25	17.96	18.10	18.10				
10	64QAM	1	49	18.06	18.19	18.01				
10	64QAM	25	0	18.12	18.18	17.89	19.5	0		
10	64QAM	25	12	17.93	18.17	17.73				
10	64QAM	25	25	18.04	18.14	17.93				
10	64QAM	50	0	17.93	17.98	17.85	19.5	0		
10	256QAM	1	0	18.03	18.14	17.98				
10	256QAM	1	25	18.00	18.12	17.89				
10	256QAM	1	49	17.99	18.16	17.90	19.5	0		
10	256QAM	25	0	18.05	18.16	17.78				
10	256QAM	25	12	17.98	18.03	17.79				
10	256QAM	25	25	17.92	18.01	17.82	19.5	0		
10	256QAM	50	0	18.06	18.12	17.88				
Channel				37775	38000	38225	Time-up (dBm)	MPR (dB)		
Frequency (MHz)				2592.5	2595	2597.5				
5	QPSK	1	0	18.04	18.12	17.97	19.5	0		
5	QPSK	1	12	18.03	18.08	17.89				
5	QPSK	1	24	17.98	17.92	17.72				
5	QPSK	12	0	17.95	18.15	17.81	19.5	0		
5	QPSK	12	7	17.92	17.94	17.63				
5	QPSK	12	13	17.69	17.73	17.60				
5	QPSK	25	0	17.99	17.94	17.62	19.5	0		
5	16QAM	1	0	17.98	18.04	17.90				
5	16QAM	1	12	17.86	18.08	17.73				
5	16QAM	1	24	17.99	17.98	17.81	19.5	0		
5	16QAM	12	0	18.04	18.15	17.87				
5	16QAM	12	7	18.00	18.11	17.82				
5	16QAM	12	13	17.99	17.98	17.84	19.5	0		
5	16QAM	25	0	18.11	18.15	17.94				
5	64QAM	1	0	18.05	18.13	18.09	19.5	0		
5	64QAM	1	12	17.97	18.08	18.03				
5	64QAM	1	24	18.02	18.12	17.91				
5	64QAM	12	0	18.12	18.14	17.86	19.5	0		
5	64QAM	12	7	17.96	18.17	17.71				
5	64QAM	12	13	18.01	18.11	17.91	19.5			
5	64QAM	25	0	17.95	17.97	17.88	19.5	0		
5	64QAM	25	12	17.96	18.01	17.74				
5	64QAM	25	24	18.03	18.15	17.91				
5	256QAM	1	0	18.07	18.14	17.83	19.5	0		
5	256QAM	1	24	18.07	18.14	17.82				
5	256QAM	12	0	18.04	18.16	18.00				
5	256QAM	12	7	17.95	18.09	17.77	19.5	0		
5	256QAM	12	13	17.96	18.09	17.78				
5	256QAM	25	0	18.01	18.14	17.92				

Band 7 Ant5 DS1 Main PA-1										
BW (MHz)	Module on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				20860	21100	21350				
Frequency (MHz)				2510	2535	2560				
20	QPSK	1	0	20.81	20.87	20.84	22	0		
20	QPSK	1	49	20.78	20.84	20.86				
20	QPSK	1	99	20.76	20.80	20.80				
20	QPSK	50	0	19.69	19.70	19.69	21	1		
20	QPSK	50	24	19.60	19.64	19.60				
20	QPSK	50	50	19.65	19.69	19.61				
20	QPSK	100	0	19.64	19.67	19.63	21	1		
20	16QAM	1	0	19.64	19.62	19.61				
20	16QAM	1	49	19.59	19.61	19.64				
20	16QAM	1	99	19.67	19.68	19.65	20	2		
20	16QAM	50	0	18.70	18.73	18.69				
20	16QAM	50	24	18.66	18.68	18.60				
20	16QAM	50	50	18.57	18.63	18.66	20	2		
20	16QAM	100	0	18.73	18.70	18.63				
20	64QAM	1	0	18.62	18.61	18.63				
20	64QAM	1	49	18.58	18.61	18.63	20	2		
20	64QAM	1	99	18.56	18.64	18.61				
20	64QAM	50	0	17.68	17.65	17.66				
20	64QAM	50	24	17.58	17.67	17.66	19	3		
20	64QAM	50	50	17.58	17.64	17.60				
20	64QAM	100	0	17.53	17.61	17.53				
20	256QAM	1	0	15.62	15.70	15.70	17	5		
20	256QAM	1	49	15.59	15.61	15.58				
20	256QAM	1	99	15.59	15.64	15.64				
20	256QAM	50	0	15.58	15.62	15.63	17	5		
20	256QAM	50	24	15.65	15.68	15.71				
20	256QAM	50	50	15.58	15.56	15.50				
20	256QAM	100	0	15.67	15.73	15.69				
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2507.5	2535	2562.5				
15	QPSK	1	0	20.78	20.81	20.81	22	0		
15	QPSK	1	37	20.72	20.82	20.80				
15	QPSK	1	74	20.71	20.73	20.77				
15	QPSK	36	0	19.63	19.63	19.64	21	1		
15	QPSK	36	20	19.60	19.57	19.57				
15	QPSK	36	39	19.59	19.64	19.55				
15	QPSK	75	0	19.60	19.70	19.56	21	1		
15	16QAM	1	0	19.60	19.59	19.63				
15	16QAM	1	37	19.54	19.61	19.67				
15	16QAM	1	74	19.66	19.61	19.61	20	2		
15	16QAM	36	0	18.62	18.72	18.66				
15	16QAM	36	20	18.60	18.71	18.60				
15	16QAM	36	39	18.58	18.64	18.59	20	2		
15	16QAM	75	0	18.65	18.69	18.54				
15	64QAM	1	0	18.60	18.56	18.59				
15	64QAM	1	37	18.57	18.63	18.66	19	3		
15	64QAM	1	74	18.55	18.56	18.52				
15	64QAM	36	0	17.67	17.63	17.63				
15	64QAM	36	20	17.52	17.67	17.57	17	5		
15	64QAM	36	39	17.58	17.65	17.56				
15	64QAM	75	0	17.63	17.63	17.52				
15	256QAM	1	0	15.56	15.73	15.63	17	5		
15	256QAM	1	37	15.55	15.63	15.53				
15	256QAM	1	74	15.54	15.65	15.63				
15	256QAM	36	0	15.56	15.55	15.61	17	5		
15	256QAM	36	20	15.56	15.69	15.68				
15	256QAM	36	39	15.54	15.58	15.50				
15	256QAM	75	0	15.60	15.73	15.63				
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2205	2235	2265				
10	QPSK	1	0	20.77	20.83	20.82	22	0		
10	QPSK	1	25	20.75	20.81	20.81				
10	QPSK	1	49	20.75	20.78	20.74				
10	QPSK	25	0	19.68	19.61	19.72	21	1		
10	QPSK	25	12	19.57	19.61	19.62				
10	QPSK	25	25	19.60	19.66	19.58				
10	QPSK	50	0	19.63	19.64	19.58	21	1		
10	16QAM	1	0	19.61	19.58	19.56				
10	16QAM	1	25	19.57	19.57	19.64				
10	16QAM	1	49	19.60	19.64	19.65	20	2		
10	16QAM	25	0	18.63	18.74	18.64				
10	16QAM	25	12	18.63	18.64	18.54				
10	16QAM	25	25	18.51	18.58	18.65	20	2		
10	16QAM	50	0	18.65	18.68	18.56				
10	64QAM	1	0	18.62	18.67	18.63				
10	64QAM	1	25	18.57	18.55	18.55	19	3		
10	64QAM	1	49	18.54	18.60	18.59				
10	64QAM	25	0	17.69	17.62	17.57				
10	64QAM	25	12	17.54	17.59	17.64	17	5		
10	64QAM	25	25	17.61	17.57	17.57				
10	64QAM	50	0	17.50	17.57	17.55				
10	256QAM	1	0	15.55	15.71	15.69	17	5		
10	256QAM	1	25	15.52	15.61	15.61				
10	256QAM	1	49	15.52	15.67	15.56				
10	256QAM	25	0	15.50	15.57	15.58	17	5		
10	256QAM	25	12	15.60	15.65	15.69				
10	256QAM	25	25	15.59	15.54	15.57				
10	256QAM	50	0	15.60	15.74	15.61				
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2502.5	2535	2567.5				
5	QPSK	1	0	20.79	20.83	20.85	22	0		
5	QPSK	1	12	20.71	20.78	20.85				
5	QPSK	1	24	20.69	20.81	20.72				
5	QPSK	12	0	19.64	19.63	19.64	21	1		
5	QPSK	12	7	19.52	19.63	19.58				
5	QPSK	12	13	19.57	19.64	19.58				
5	QPSK	25	0	19.55	19.63	19.62	21	1		
5	16QAM	1	0	19.61	19.63	19.56				
5	16QAM	1	12	19.52	19.54	19.57				
5	16QAM	1	24	19.68	19.70	19.65	20	2		
5	16QAM	12	0	18.64	18.69	18.71				
5	16QAM	12	7	18.67	18.61	18.58				
5	16QAM	12	13	18.51	18.65	18.69	20	2		
5	16QAM	25	0	18.68	18.62	18.55				
5	64QAM	1	0	18.60	18.62	18.56				
5	64QAM	1	12	18.61	18.61	18.56	20	2		
5	64QAM	1	24	18.56	18.59	18.56				
5	64QAM	12	0	17.61	17.67	17.67				
5	64QAM	12	7	17.56	17.68	17.62	19	3		
5	64QAM	12	13	17.61	17.58	17.58				
5	64QAM	25	0	17.52	17.62	17.62				
5	256QAM	1	0	15.55	15.65	15.69	17	5		
5	256QAM	1	12	15.57	15.57	15.50				
5	256QAM	1	24	15.61	15.57	15.67				
5	256QAM	12	0	15.60	15.62	15.63	17	5		
5	256QAM	12	7	15.59	15.59	15.57				
5	256QAM	12	13	15.57	15.57	15.51				
5	256QAM	25	0	15.64	15.65	15.58				

Band 38 Ant5 DS1i Other PA									
BW [MHz]	Modulat on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				37850	38000	38150			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	0	21.24	21.38	21.26			
20	QPSK	1	49	21.28	21.29	21.33		22.5	0
20	QPSK	1	99	21.12	21.16	21.18			
20	QPSK	50	0	19.93	20.35	19.85			
20	QPSK	50	24	20.21	20.28	20.31		21.5	1
20	QPSK	50	50	20.20	20.27	20.34			
20	QPSK	100	0	20.24	20.28	20.21			
20	16QAM	1	0	20.28	20.35	20.33			
20	16QAM	1	49	20.27	20.31	20.38		21.5	1
20	16QAM	50	24	19.51	19.54	19.82			
20	16QAM	50	0	19.45	19.53	19.32			
20	16QAM	50	24	19.46	19.52	19.50			
20	16QAM	50	50	19.48	19.53	19.59		20.5	2
20	16QAM	100	0	19.46	19.52	19.50			
20	64QAM	1	0	19.56	19.60	19.68			
20	64QAM	1	49	19.52	19.53	19.61		20.5	2
20	64QAM	1	99	19.51	19.56	19.57			
20	64QAM	50	0	18.46	18.53	18.80			
20	64QAM	50	24	18.51	18.54	18.82		19.5	3
20	64QAM	50	50	18.48	18.53	18.53			
20	64QAM	100	0	18.54	18.56	18.54			
20	256QAM	1	0	16.45	16.52	16.55			
20	256QAM	1	49	16.50	16.54	16.59		17.5	5
20	256QAM	1	99	16.53	16.53	16.54			
20	256QAM	50	0	16.47	16.55	16.53			
20	256QAM	50	24	16.53	16.57	16.60		17.5	5
20	256QAM	50	50	16.44	16.52	16.55			
20	256QAM	100	0	16.48	16.50	16.55			
Channel				37555	37600	37615	16.44	MPR	(dB)
Frequency (MHz)				2577.5	2595	2612.5			
15	QPSK	1	0	21.28	21.35	21.22			
15	QPSK	1	37	21.30	21.27	21.29		22.5	0
15	QPSK	1	74	21.14	21.17	21.18			
15	QPSK	36	0	19.89	20.01	19.76			
15	QPSK	36	20	20.17	20.27	20.29		21.5	1
15	QPSK	36	39	20.23	20.25	20.25			
15	QPSK	75	0	20.20	20.24	20.30			
15	16QAM	1	0	19.81	20.07	19.76			
15	16QAM	1	37	19.88	19.97	19.88		21.5	1
15	16QAM	1	74	19.79	20.00	19.82			
15	16QAM	36	0	18.98	19.17	19.05			
15	16QAM	36	20	19.07	19.16	19.09		20.5	2
15	16QAM	36	39	19.05	19.24	19.07			
15	16QAM	75	0	19.07	19.19	19.01			
15	64QAM	1	0	19.14	19.32	19.21		20.5	2
15	64QAM	1	37	19.24	19.13				
15	64QAM	1	74	19.05	19.19	19.00			
15	64QAM	36	0	18.07	18.22	18.12			
15	64QAM	36	20	18.13	18.17	18.04		19.5	3
15	64QAM	36	39	18.06	18.17	18.04			
15	64QAM	75	0	18.13	18.26	17.97			
15	256QAM	1	0	16.07	16.17	15.97			
15	256QAM	1	37	16.12	16.27	16.03		17.5	5
15	256QAM	1	74	16.16	16.16	16.01			
15	256QAM	36	0	15.99	16.19	15.98			
15	256QAM	36	20	16.08	16.19	16.12		17.5	5
15	256QAM	36	39	16.00	16.25	15.97			
15	256QAM	75	0	16.00	16.20	16.04			
Channel				37600	38000	38500	16.00	MPR	(dB)
Frequency (MHz)				2615	2695	2745			
10	QPSK	1	0	21.24	21.35	21.21			
10	QPSK	1	25	21.24	21.21	21.29		22.5	0
10	QPSK	1	49	21.14	21.18	21.10			
10	QPSK	25	0	19.91	20.02	19.78			
10	QPSK	25	12	20.15	20.29	20.32		21.5	1
10	QPSK	25	25	20.17	20.22	20.28			
10	QPSK	50	0	20.21	20.29	20.34			
10	16QAM	1	0	19.90	20.05	19.82		21.5	1
10	16QAM	1	25	19.90	20.00	19.90			
10	16QAM	1	49	19.81	20.01	19.96			
10	16QAM	25	0	19.05	19.25	18.95			
10	16QAM	25	12	19.09	19.25	18.97		20.5	2
10	16QAM	25	25	19.11	19.19	19.06			
10	16QAM	50	0	19.07	19.18	18.92			
10	64QAM	1	0	19.20	19.30	19.13			
10	64QAM	1	25	19.10	19.21	19.09		20.5	2
10	64QAM	1	49	19.11	19.25	19.07			
10	64QAM	25	0	18.02	18.20	18.04			
10	64QAM	25	12	18.03	18.21	18.04		19.5	3
10	64QAM	25	25	18.05	18.16	18.01			
10	64QAM	50	0	18.16	18.23	18.06			
10	256QAM	1	0	15.96	16.20	16.04			
10	256QAM	1	25	16.07	16.18	16.10		17.5	5
10	256QAM	1	49	16.08	16.18	16.04			
10	256QAM	25	0	16.09	16.23	16.00			
10	256QAM	25	12	16.06	16.23	16.11		17.5	5
10	256QAM	25	25	16.03	16.23	15.99			
10	256QAM	50	0	16.00	16.20	16.00			
Channel				37775	38000	38225	16.00	MPR	(dB)
Frequency (MHz)				2572.5	2595	2617.5			
5	QPSK	1	0	21.17	21.25	21.24			
5	QPSK	1	12	21.24	21.29	21.24		22.5	0
5	QPSK	1	24	21.14	21.14	21.21			
5	QPSK	12	0	19.88	20.01	19.81			
5	QPSK	12	7	20.17	20.31	20.32		21.5	1
5	QPSK	12	13	20.20	20.25	20.28			
5	QPSK	25	0	20.25	20.27	20.35			
5	16QAM	1	0	19.82	20.05	19.75			
5	16QAM	1	12	19.87	20.02	19.87		21.5	1
5	16QAM	1	24	19.85	19.98	19.89			
5	16QAM	12	0	19.02	19.21	19.02			
5	16QAM	12	7	19.88	19.19	18.97		20.5	2
5	16QAM	12	13	19.05	19.20	19.08			
5	16QAM	25	0	18.99	19.14	18.97			
5	64QAM	1	0	19.17	19.26	19.11			
5	64QAM	1	12	19.12	19.14	19.06		20.5	2
5	64QAM	1	24	19.06	19.21	19.03			
5	64QAM	12	0	17.97	18.22	18.04			
5	64QAM	12	7	18.10	18.23	18.04		19.5	3
5	64QAM	12	13	18.08	18.26	18.00			
5	64QAM	25	0	18.06	18.27	17.99			
5	256QAM	1	0	16.01	16.22	16.05			
5	256QAM	1	12	16.12	16.15	16.06		17.5	5
5	256QAM	1	24	16.08	16.17	15.99			
5	256QAM	12	0	16.07	16.20	16.02			
5	256QAM	12	7	16.12	16.22	16.07		17.5	5
5	256QAM	12	13	15.99	16.17	16.02			
5	256QAM	25	0	16.11	16.15	16.06			

Band 41 Ant5 DS1i Other PA										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Mod Ch / Freq	Power Low Mod Ch / Freq	Power High Mod Ch / Freq	Power High Mod Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				39750	40165	40620	41055	41490		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680		
20	QPSK	1	0	21.22	21.23	21.39	21.35	21.35	22.5	0
20	QPSK	1	49	21.23	21.21	21.34	21.25	21.35		
20	QPSK	1	99	21.24	21.19	21.31	21.35	21.26		
20	QPSK	50	0	20.20	20.17	20.40	20.35	20.38	21.5	1
20	QPSK	50	24	20.19	20.20	20.34	20.32	20.39		
20	QPSK	50	50	20.27	20.15	20.29	20.34	20.27		
20	16QAM	100	0	20.22	20.26	20.33	20.39	20.41	21.5	1
20	16QAM	1	49	20.24	20.18	20.35	20.35	20.31		
20	16QAM	1	99	20.24	20.14	20.37	20.34	20.32		
20	16QAM	50	24	19.15	19.15	19.37	19.36	19.41	20.5	
20	16QAM	50	50	19.32	19.16	19.25	19.31	19.24		
20	16QAM	100	0	19.16	19.24	19.31	19.35	19.34		
20	64QAM	1	0	19.24	19.26	19.36	19.38	19.42	20.5	
20	64QAM	1	49	19.24	19.22	19.36	19.39	19.31		
20	64QAM	1	99	19.25	19.16	19.30	19.32	19.18		
20	64QAM	50	0	18.15	18.16	18.41	18.31	18.38	19.5	3
20	64QAM	50	24	18.16	18.15	18.26	18.26	18.43		
20	64QAM	50	50	18.31	18.20	18.25	18.38	18.24		
20	256QAM	100	0	18.15	18.15	18.31	18.39	18.28	17.5	5
20	256QAM	1	0	16.19	16.19	16.37	16.34	16.42		
20	256QAM	1	49	16.15	16.14	16.38	16.34	16.35		
20	256QAM	1	99	16.27	16.12	16.27	16.31	16.22	17.5	5
20	256QAM	50	0	16.09	16.13	16.37	16.43	16.30		
20	256QAM	50	24	16.20	16.24	16.38	16.35	16.37		
20	256QAM	50	50	16.30	16.15	16.33	16.32	16.31	17.5	5
20	256QAM	100	0	16.24	16.10	16.27	16.33	16.16		
20	256QAM	100	0	16.25	16.11	16.29	16.35	16.17		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680.5	Tune-up limit (dBm)	MPR (dB)
15	QPSK	1	0	21.17	21.20	21.34	21.31	21.30	23	0
15	QPSK	1	37	21.22	21.13	21.25	21.29	21.35		
15	QPSK	1	75	21.26	21.15	21.27	21.32	21.33		
15	QPSK	36	0	20.12	20.17	20.42	20.37	20.30	21.5	1
15	QPSK	36	20	20.14	20.13	20.27	20.26	20.34		
15	QPSK	36	36	20.24	20.13	20.32	20.29	20.29		
15	QPSK	75	0	20.11	20.10	20.30	20.40	20.29	21.5	1
15	QPSK	75	0	20.11	20.10	20.32	20.32	20.33		
15	16QAM	1	37	20.26	20.18	20.31	20.33	20.25		
15	16QAM	1	74	20.25	20.07	20.25	20.33	20.28	20.5	2
15	16QAM	36	0	19.16	19.17	19.33	19.36	19.35		
15	16QAM	36	36	19.17	19.14	19.33	19.36	19.42		
15	16QAM	36	39	19.31	19.10	19.17	19.28	19.21	19.5	3
15	16QAM	75	0	19.18	19.22	19.25	19.27	19.33		
15	16QAM	1	0	19.17	19.19	19.21	19.40	19.38		
15	64QAM	1	0	19.26	19.21	19.30	19.37	19.35	19.5	3
15	64QAM	1	24	19.23	19.10	19.26	19.27	19.13		
15	64QAM	36	0	18.15	18.18	18.36	18.30	18.30		
15	64QAM	36	20	18.10	18.10	18.22	18.21	18.36	17.5	5
15	64QAM	36	39	18.32	18.11	18.22	18.31	18.22		
15	64QAM	75	0	18.16	18.13	18.30	18.30	18.25		
15	256QAM	1	0	16.12	16.13	16.28	16.25	16.37	17.5	5
15	256QAM	1	37	16.16	16.06	16.34	16.34	16.37		
15	256QAM	1	74	16.26	16.09	16.23	16.22	16.17		
15	256QAM	36	0	16.08	16.16	16.40	16.36	16.38	17.5	5
15	256QAM	36	20	16.18	16.25	16.29	16.31	16.29		
15	256QAM	36	39	16.31	16.11	16.34	16.34	16.32		
15	256QAM	75	0	16.27	16.04	16.21	16.35	16.16	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506	2549.5	2593	2636.5	2680.5		
10	QPSK	1	0	21.10	21.15	21.30	21.34	21.31		
10	QPSK	1	25	21.17	21.14	21.29	21.25	21.34		
10	QPSK	1	49	21.25	21.19	21.26	21.32	21.17		
10	QPSK	25	0	20.23	20.20	20.31	20.30	20.35	21.5	1
10	QPSK	25	12	20.18	20.23	20.32	20.30	20.36		
10	QPSK	25	25	20.19	20.06	20.31	20.33	20.22		
10	QPSK	50	0	20.09	20.18	20.30	20.35	20.28	20.5	2
10	QPSK	50	0	20.09	20.18	20.30	20.35	20.28		
10	16QAM	25	0	20.08	20.16	20.27	20.28	20.33		
10	16QAM	1	49	20.25	20.16	20.34	20.28	20.26	19.5	3
10	16QAM	1	49	20.24	20.07	20.20	20.31	20.20		
10	16QAM	25	0	19.08	19.06	19.29	19.27	19.24		
10	16QAM	25	12	19.11	19.15	19.38	19.33	19.34	20.5	2
10	16QAM	25	19	19.13	19.15	19.35	19.32	19.35		
10	64QAM	1	0	19.12	19.20	19.33	19.29	19.35		
10	64QAM	1	0	19.22	19.25	19.23	19.40	19.37	20.5	2
10	64QAM	1	25	19.25	19.17	19.38	19.35	19.34		
10	64QAM	1	49	19.26	19.28	19.33	19.39	19.20		
10	64QAM	25	0	18.10	18.12	18.42	18.29	18.40	19.5	5
10	64QAM	25	12	18.16	18.17	18.28	18.22	18.35		
10	64QAM	25	19	18.32	18.17	18.28	18.41	18.25		
10	16QAM	50	0	18.14	18.16	18.36	18.34	18.33	17.5	5
10	16QAM	1	25	16.10	16.12	16.31	16.30	16.37		
10	256QAM	1	49	16.27	16.08	16.19	16.30	16.21		
10	256QAM	25	0	16.12	16.11	16.34	16.38	16.25	17.5	5
10	256QAM	25	12	16.13	16.22	16.32	16.28	16.22		
10	256QAM	25	19	16.30	16.09	16.35	16.25	16.22		
Channel				3967.5	40146	40620	41083	41565	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506	2549.5	2593	2640.3	2684.5		
5	QPSK	1	0	21.15	21.25	21.31	21.27	21.39	23	0
5	QPSK	1	12	21.21	21.19	21.32	21.21	21.34		
5	QPSK	1	24	21.23	21.22	21.25	21.25	21.24		
5	QPSK	12	0	20.11	20.09	20.43	20.27	20.40	21.5	1
5	QPSK	12	0	20.11	20.13	20.33	20.32	20.37		
5	QPSK	25	0	20.09	20.15	20.39	20.39	20.26		
5	16QAM	1	0	20.22	20.28	20.27	20.30	20.37	21.5	1
5	16QAM	1	0	20.22	20.22	20.32	20.32	20.37		
5	16QAM	1	24	20.22	20.14	20.29	20.25	20.20		
5	16QAM	12	0	19.14	19.13	19.35	19.35	19.29	20.5	2
5	16QAM	12	7	19.08	19.16	19.29	19.31	19.41		
5	16QAM	12	19	19.13	19.16	19.29	19.32	19.37		
5	64QAM	1	0	19.29	19.24	19.33	19.35	19.34	20.5	2
5	64QAM	1	0	19.25	19.23	19.26	19.33	19.44		
5	64QAM	1	12	19.21	19.21	19.38	19.38	19.31		
5	64QAM	1	24	19.25	19.15	19.39	19.23	19.12	19.5	3
5	64QAM	12	0	18.15	18.11	18.41	18.33	18.36		
5	64QAM	12	7	18.16	18.16	18.27	18.20	18.40		
5	64QAM	12	13	18.34	18.15	18.22	18.34	18.17	17.5	5
5	64QAM	25	0	18.17	18.11	18.25	18.34	18.25		
5	64QAM	25	0	18.15	18.18	18.33	18.33	18.43		
5	256QAM	1	12	16.13	16.14	16.40	16.28	16.29		
5	256QAM	1	24	16.23	16.12	16.22	16.24	16.16		
5	256QAM	12	0	16.11	16.06	16.31	16.37	16.21		
5	256QAM	12	7	16.08	16.19	16.31	16.35	16.30	17.5	5
5	256QAM	12	13	16.21	16.16	16.27	16.26	16.33		
5	256QAM	25	0	16.15	16.09	16.19	16.29	16.15		



Band 2 Ant2 DS13 Other PA

BW (MHz)	Modulation	RB Size	RB Offset	Power Line Ch. Freq. 20000	Power Line Ch. Freq. 19900	Power High Ch. Freq. 19900	Power Low Ch. Freq. 20000	Turn-up (dBm)	Turn-down (dBm)	APRS (dB)
Channel										
Frequency (MHz)										
10	QPSK	1	0	22.04	22.04	22.17	22.04	23.5	0	
10	QPSK	1	49	22.04	22.17	22.11	22.04	23.5	0	
20	QPSK	1	99	21.91	22.12	22.08	21.91	23.5	0	
20	QPSK	1	49	22.04	22.08	22.07	22.04	23.5	0	
20	QPSK	50	24	21.96	22.07	22.02	21.96	23.5	0	
20	QPSK	50	50	21.89	22.05	21.93	21.89	23.5	0	
20	QPSK	100	0	21.81	22.03	22.04	21.81	23.5	0	
20	16QAM	1	0	21.77	21.98	21.92	21.77	23.5	0	
20	16QAM	1	49	21.75	21.93	21.98	21.75	23.5	0	
20	16QAM	1	99	21.70	21.87	21.87	21.70	23.5	0	
20	16QAM	50	24	21.90	22.05	21.98	21.90	23.5	0	
20	16QAM	50	50	21.82	22.03	22.02	21.82	23.5	0	
20	16QAM	100	0	21.84	22.06	22.02	21.84	23.5	0	
20	16QAM	1	0	21.99	22.15	22.12	21.99	23.5	0	
20	16QAM	1	49	21.92	22.13	22.12	21.92	23.5	0	
20	16QAM	1	99	21.83	22.11	22.11	21.83	23.5	0	
20	16QAM	50	24	22.03	22.15	22.15	22.03	23.5	0	
20	16QAM	50	50	22.02	22.16	22.14	22.02	23.5	0	
20	16QAM	100	0	22.06	22.18	22.15	22.06	23.5	0	
20	16QAM	1	0	21.86	22.08	22.08	21.86	23.5	0	
20	16QAM	1	49	21.85	22.02	22.08	21.85	23.5	0	
20	16QAM	1	99	21.88	22.05	22.03	21.88	23.5	0	
20	16QAM	50	24	21.89	22.03	22.06	21.89	23.5	0	
20	16QAM	50	50	21.82	22.02	22.02	21.82	23.5	0	
20	16QAM	100	0	21.81	22.05	22.02	21.81	23.5	0	
Channel										
Frequency (MHz)										
15	QPSK	1	0	22.03	22.23	22.15	22.03	23.5	0	
15	QPSK	1	37	22.05	22.13	22.02	22.05	23.5	0	
15	QPSK	1	74	21.96	22.07	22.00	21.96	23.5	0	
15	QPSK	36	0	22.01	22.12	22.00	22.01	23.5	0	
15	QPSK	36	20	21.82	21.99	21.98	21.82	23.5	0	
15	QPSK	36	36	21.84	22.05	22.01	21.84	23.5	0	
15	QPSK	75	0	21.74	22.02	22.03	21.74	23.5	0	
15	16QAM	1	0	21.78	21.90	21.78	21.78	23.5	0	
15	16QAM	1	37	21.74	21.89	21.97	21.74	23.5	0	
15	16QAM	1	74	21.62	21.87	21.97	21.62	23.5	0	
15	16QAM	36	0	21.82	22.01	22.11	21.82	23.5	0	
15	16QAM	36	20	21.82	21.96	21.98	21.82	23.5	0	
15	16QAM	36	36	21.83	21.84	22.00	21.83	23.5	0	
15	16QAM	75	0	21.77	22.01	21.96	21.77	23.5	0	
15	16QAM	1	0	21.96	22.14	22.05	21.96	23.5	0	
15	16QAM	1	37	21.89	22.09	22.12	21.89	23.5	0	
15	16QAM	1	74	21.82	22.06	22.04	21.82	23.5	0	
15	16QAM	36	0	22.03	22.12	22.08	22.03	23.5	0	
15	16QAM	36	20	22.06	22.18	22.10	22.06	23.5	0	
15	16QAM	36	36	22.09	22.11	22.10	22.09	23.5	0	
15	16QAM	75	0	22.02	22.06	22.05	22.02	23.5	0	
15	16QAM	1	0	21.82	22.06	22.05	21.82	23.5	0	
15	16QAM	1	37	21.88	22.03	22.00	21.88	23.5	0	
15	16QAM	1	74	21.85	22.00	22.02	21.85	23.5	0	
15	16QAM	36	0	21.86	22.02	22.03	21.86	23.5	0	
15	16QAM	36	20	21.85	22.02	22.00	21.85	23.5	0	
15	16QAM	36	36	21.86	22.00	22.02	21.86	23.5	0	
15	16QAM	75	0	21.83	22.01	21.98	21.83	23.5	0	
Channel										
Frequency (MHz)										
10	QPSK	1	0	21.99	22.26	22.18	21.99	23.5	0	
10	QPSK	1	25	21.98	22.18	22.07	21.98	23.5	0	
10	QPSK	1	49	21.90	22.12	22.04	21.90	23.5	0	
10	QPSK	25	0	21.92	22.10	22.00	21.92	23.5	0	
10	QPSK	25	12	21.78	22.01	22.03	21.78	23.5	0	
10	QPSK	25	25	21.82	22.03	22.08	21.82	23.5	0	
10	QPSK	50	0	21.81	22.10	22.17	21.81	23.5	0	
10	16QAM	1	0	21.78	21.98	21.74	21.78	23.5	0	
10	16QAM	1	25	21.74	21.89	21.91	21.74	23.5	0	
10	16QAM	1	49	21.69	21.88	21.98	21.69	23.5	0	
10	16QAM	25	0	21.88	22.08	22.07	21.88	23.5	0	
10	16QAM	25	12	21.87	22.06	22.08	21.87	23.5	0	
10	16QAM	25	25	21.81	22.05	22.05	21.81	23.5	0	
10	16QAM	50	0	21.86	22.18	22.18	21.86	23.5	0	
10	16QAM	50	25	21.82	22.13	22.13	21.82	23.5	0	
10	16QAM	1	25	21.94	22.05	22.09	21.94	23.5	0	
10	16QAM	1	49	21.85	22.11	22.10	21.85	23.5	0	
10	16QAM	25	12	22.01	22.05	22.06	22.01	23.5	0	
10	16QAM	25	25	22.01	22.15	22.08	22.01	23.5	0	
10	16QAM	50	0	22.02	22.16	22.15	22.02	23.5	0	
10	16QAM	50	25	22.05	22.19	22.15	22.05	23.5	0	
10	16QAM	1	0	21.96	22.17	22.07	21.96	23.5	0	
10	16QAM	1	25	21.88	22.07	22.05	21.88	23.5	0	
10	16QAM	1	49	21.79	22.06	22.05	21.79	23.5	0	
10	16QAM	25	0	21.92	22.07	22.06	21.92	23.5	0	
10	16QAM	25	12	21.87	22.03	22.01	21.87	23.5	0	
10	16QAM	25	25	21.84	22.00	22.04	21.84	23.5	0	
10	16QAM	50	0	21.82	22.00	22.00	21.82	23.5	0	
Channel										
Frequency (MHz)										
5	QPSK	1	0	21.96	22.26	22.14	21.96	23.5	0	
5	QPSK	1	12	21.97	22.19	22.12	21.97	23.5	0	
5	QPSK	1	24	21.92	22.13	22.07	21.92	23.5	0	
5	QPSK	12	0	21.98	22.08	22.00	21.98	23.5	0	
5	QPSK	12	7	21.86	22.03	22.07	21.86	23.5	0	
5	QPSK	12	13	21.87	22.01	22.04	21.87	23.5	0	
5	QPSK	25	0	21.84	22.09	22.06	21.84	23.5	0	
5	16QAM	1	0	21.78	21.91	21.74	21.78	23.5	0	
5	16QAM	1	12	21.71	21.87	21.97	21.71	23.5	0	
5	16QAM	1	24	21.68	21.89	21.93	21.68	23.5	0	
5	16QAM	12	0	21.84	22.08	22.07	21.84	23.5	0	
5	16QAM	12	7	21.83	22.03	22.01	21.83	23.5	0	
5	16QAM	12	13	21.82	22.07	22.07	21.82	23.5	0	
5	16QAM	25	0	21.84	22.06	22.18	21.84	23.5	0	
5	16QAM	25	12	21.80	22.13	22.10	21.80	23.5	0	
5	16QAM	25	25	21.82	22.10	22.09	21.82	23.5	0	
5	16QAM	1	0	21.92	22.10	22.00	21.92	23.5	0	
5	16QAM	1	12	21.92	22.00	22.02	21.92	23.5	0	
5	16QAM	1	24	21.82	22.02	22.04	21.82	23.5	0	
5	16QAM	12	0	22.00	22.01	22.04	22.00	23.5	0	
5	16QAM	12	7	21.94	22.05	22.07	21.94	23.5	0	
5	16QAM	12	13	21.99	22.08	22.09	21.99	23.5	0	
5	16QAM	25	0	21.93	22.08	22.10	21.93	23.5	0	
5	16QAM	25	12	21.89	22.06	22.06	21.89	23.5	0	
5	16QAM	25	25	21.84	22.00	22.02	21.84	23.5	0	
5	16QAM	1	0	21.89	22.06	22.06	21.89	23.5	0	
5	16QAM	1	12	21.84	22.02	22.00	21.84	23.5	0	
5	16QAM	1	24	21.87	22.08	22.05	21.87	23.5	0	
5	16QAM	12	0	21.99	22.03	22.03	21.99	23.5	0	
5	16QAM	12	7	21.95	22.05	22.05	21.95	23.5	0	
5	16QAM	12	13	21.97	22.00	22.00	21.97	23.5	0	
5	16QAM	25	0	21.90	22.09	22.09	21.90	23.5	0	
5	16QAM	25	12	21.85	22.05	22.05	21.85	23.5	0	
5	16QAM	25	25	21.85	22.02	22.02	21.85	23.5	0	
5	16QAM	1	0	21.85	22.10	22.10	21.85	23.5	0	
5	16QAM	1	12	21.85	22.12	22.09	21.85	23.5	0	
5	16QAM	1	24	21.85	22.13	22.11	21.85	23.5	0	
5	16QAM	12	0	21.91	22.02	22.02	21.91	23.5	0	
5	16QAM	12	7	21.89	22.03	22.03	21.89	23.5	0	
5	16QAM	12	13	21.88	22.03	22.03	21.88	23.5	0	
5	16QAM	25	0	21.83	22.10	22.10	21.83	23.5	0	
5	16QAM	25	12	21.85	22.03	22.03	21.85	23.5	0	
5	16QAM	25	25	21.85	22.03	22.03				

Band 38 Ant2 DS13 Other PA										
BW (MHz)	Modulat on	RB Size	RB Offset	Power Low Ch./Freq	Power Main Ch./Freq	Power High Ch./Freq	Turn-on time (µs)	MPR (dB)		
Channel				37650	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	19.27	19.29	19.24	20	0		
20	QPSK	1	49	19.06	19.22	19.24				
20	QPSK	1	99	18.99	19.15	19.18				
20	QPSK	50	0	19.13	19.25	19.21				
20	QPSK	50	24	19.18	19.22	19.20	20	0		
20	QPSK	50	50	19.20	19.22	19.20				
20	QPSK	100	0	19.06	19.16	19.08				
20	16QAM	1	0	19.19	19.25	19.24				
20	16QAM	1	49	19.11	19.23	19.25	20	0		
20	16QAM	1	99	19.14	19.20	19.23				
20	16QAM	50	0	19.13	19.21	19.17				
20	16QAM	50	24	19.07	19.15	19.17				
20	16QAM	50	50	19.14	19.22	19.21	20	0		
20	16QAM	100	0	18.78	18.92	18.89				
20	64QAM	1	0	19.25	19.27	19.20				
20	64QAM	1	49	19.03	19.19	19.20				
20	64QAM	1	99	18.96	19.17	19.10	19	1		
20	64QAM	50	0	18.08	18.23	18.25				
20	64QAM	50	24	18.15	18.21	18.23				
20	64QAM	50	50	18.11	18.17	18.12				
20	64QAM	100	0	17.81	17.90	17.94	17	3		
20	256QAM	1	0	16.08	16.21	16.16				
20	256QAM	1	49	16.12	16.18	16.14				
20	256QAM	1	99	16.04	16.20	16.19				
20	256QAM	50	0	16.20	16.25	16.20	17	3		
20	256QAM	50	24	16.20	16.24	16.22				
20	256QAM	50	50	16.08	16.17	16.22				
20	256QAM	100	0	16.09	16.23	16.24				
Channel				37625	38000	38175	Turn-on time (µs)	MPR (dB)		
Frequency (MHz)				2577.5	2595	2612.5				
15	QPSK	1	0	19.27	19.22	19.15	20	0		
15	QPSK	1	37	19.08	19.21	19.21				
15	QPSK	1	74	18.93	19.18	19.10				
15	QPSK	36	0	19.06	19.26	19.13				
15	QPSK	36	20	19.20	19.21	19.22	20	0		
15	QPSK	36	39	19.15	19.20	19.15				
15	QPSK	75	0	19.02	19.12	19.06				
15	16QAM	1	0	19.11	19.24	19.18				
15	16QAM	1	37	19.10	19.17	19.21	20	0		
15	16QAM	1	74	19.02	19.21	19.20				
15	16QAM	36	0	19.11	19.19	19.26				
15	16QAM	36	20	19.06	19.17	19.15				
15	16QAM	36	39	19.09	19.21	19.20	19	1		
15	16QAM	75	0	18.89	18.84	18.82				
15	64QAM	1	0	19.20	19.21	19.19				
15	64QAM	1	37	19.03	19.19	19.25				
15	64QAM	1	74	18.91	19.07	19.17	19	1		
15	64QAM	36	0	18.09	18.26	18.16				
15	64QAM	36	20	18.11	18.23	18.19				
15	64QAM	36	39	18.07	18.20	18.11				
15	64QAM	75	0	17.76	17.90	17.91	17	3		
15	256QAM	1	0	16.09	16.20	16.09				
15	256QAM	1	37	16.14	16.12	16.16				
15	256QAM	1	74	15.96	16.15	16.21				
15	256QAM	36	0	16.23	16.25	16.20	17	3		
15	256QAM	36	20	16.11	16.26	16.15				
15	256QAM	36	39	15.98	16.13	16.18				
15	256QAM	75	0	16.08	16.17	16.23				
Channel				37700	38000	38200	Turn-on time (µs)	MPR (dB)		
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	19.22	19.26	19.22	20	0		
10	QPSK	1	25	19.08	19.17	19.16				
10	QPSK	1	49	18.93	19.17	19.14				
10	QPSK	25	0	19.14	19.26	19.12				
10	QPSK	25	12	19.13	19.23	19.17	20	0		
10	QPSK	25	25	19.16	19.19	19.21				
10	QPSK	50	0	19.02	19.15	19.00				
10	16QAM	1	0	19.22	19.23	19.16				
10	16QAM	1	25	19.03	19.18	19.26	20	0		
10	16QAM	1	49	19.11	19.21	19.21				
10	16QAM	25	0	19.12	19.16	19.19				
10	16QAM	25	12	19.02	19.06	19.15				
10	16QAM	25	25	19.10	19.23	19.13	20	0		
10	16QAM	50	0	18.75	18.89	18.92				
10	64QAM	1	0	19.23	19.26	19.25				
10	64QAM	1	25	19.07	19.20	19.23				
10	64QAM	1	49	19.01	19.11	19.09	19	1		
10	64QAM	25	0	18.11	18.19	18.26				
10	64QAM	25	12	18.18	18.22	18.20				
10	64QAM	25	25	18.09	18.19	18.05				
10	64QAM	50	0	17.80	17.83	17.97	17	3		
10	256QAM	1	0	15.99	16.24	16.08				
10	256QAM	1	25	16.09	16.11	16.10				
10	256QAM	1	49	15.96	16.19	16.20				
10	256QAM	25	0	16.13	16.16	16.23	17	3		
10	256QAM	25	12	16.15	16.25	16.22				
10	256QAM	25	25	16.04	16.15	16.21				
10	256QAM	50	0	16.10	16.22	16.23				
Channel				37775	38000	38225	Turn-on time (µs)	MPR (dB)		
Frequency (MHz)				2582.5	2595	2617.5				
5	QPSK	1	0	19.28	19.21	19.27	20	0		
5	QPSK	1	12	19.01	19.24	19.23				
5	QPSK	1	24	18.94	19.07	19.20				
5	QPSK	12	0	19.12	19.18	19.13				
5	QPSK	12	7	19.19	19.23	19.14	20	0		
5	QPSK	12	13	19.21	19.23	19.15				
5	QPSK	25	0	19.08	19.17	19.08				
5	16QAM	1	0	19.21	19.26	19.20				
5	16QAM	1	12	19.07	19.20	19.20	20	0		
5	16QAM	1	24	19.10	19.19	19.19				
5	16QAM	12	0	19.14	19.21	19.17				
5	16QAM	12	7	18.98	19.18	19.10				
5	16QAM	12	13	19.12	19.15	19.24	19	1		
5	16QAM	25	0	18.75	18.91	18.89				
5	64QAM	1	0	19.19	19.21	19.17				
5	64QAM	1	12	18.98	19.20	19.23				
5	64QAM	1	24	19.01	19.08	19.11	19	1		
5	64QAM	12	0	18.10	18.21	18.19				
5	64QAM	12	7	18.08	18.19	18.15				
5	64QAM	12	13	18.07	18.15	18.05				
5	64QAM	25	0	17.73	17.88	17.86	17	3		
5	256QAM	1	0	16.01	16.19	16.18				
5	256QAM	1	12	16.06	16.16	16.15	17	3		
5	256QAM	1	24	15.95	16.15	16.20				
5	256QAM	12	0	16.13	16.16	16.24	17	3		
5	256QAM	12	7	16.22	16.25	16.21				
5	256QAM	12	13	16.17	16.22	16.18	17	3		
5	256QAM	25	0	16.01	16.25	16.24				



Band 2 Ant3 DS13 Other PA									
BW (MHz)	Modulat on	RB Size	RB Offset	Power Low Ch./Freq.	Power Main Ch./Freq.	Power High Ch./Freq.	Turn-up Int. (dB)	APRS (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	20.24	20.45	20.27			
20	QPSK	1	8	20.23	20.45	20.45	21	0	
20	QPSK	1	96	20.19	20.28	20.34			
20	QPSK	50	0	19.98	20.35	20.26			
20	QPSK	50	24	20.02	20.23	20.04			
20	QPSK	50	50	19.98	20.14	20.11	21	0	
20	QPSK	100	0	19.99	20.15	20.00			
20	QPSK	100	0	19.97	20.09	19.98			
20	16QAM	1	49	19.73	19.87	19.75	21	0	
20	16QAM	1	99	19.59	19.89	19.90			
20	16QAM	50	0	19.92	20.21	20.14			
20	16QAM	50	24	20.02	20.11	20.05	21	0	
20	16QAM	50	50	19.99	20.20	20.07			
20	16QAM	100	0	19.77	20.04	20.07			
20	16QAM	1	0	20.15	20.34	20.36			
20	16QAM	1	49	19.93	20.29	20.21	21	0	
20	16QAM	1	99	20.11	20.31	20.25			
20	16QAM	50	0	19.92	20.24	20.14			
20	16QAM	50	24	20.08	20.13	19.97	21	0	
20	16QAM	50	50	19.93	20.17	20.07			
20	16QAM	100	0	19.77	19.98	20.09			
20	16QAM	1	0	19.45	19.62	19.58	19.5	1.5	
20	256QAM	1	49	19.42	19.62	19.58			
20	256QAM	1	99	19.44	19.62	19.62			
20	256QAM	50	24	19.49	19.72	19.71	19.5	1.5	
20	256QAM	50	50	19.41	19.67	19.66			
20	256QAM	100	0	19.45	19.60	19.44			
Channel									
Frequency (MHz)									
18	QPSK	1	0	20.34	20.37	20.32			
18	QPSK	1	8	20.36	20.34	20.32	21	0	
18	QPSK	1	74	20.12	20.30	20.40			
18	QPSK	36	0	19.98	20.26	20.35			
18	QPSK	36	20	19.93	20.14	20.19	21	0	
18	QPSK	36	96	19.85	20.29	20.18			
18	QPSK	75	0	19.89	20.26	20.20			
18	16QAM	1	0	19.87	20.38	20.45			
18	16QAM	1	37	19.82	19.99	19.98	21	0	
18	16QAM	1	74	19.45	19.62	19.58			
18	16QAM	36	0	19.99	20.13	20.20			
18	16QAM	36	20	20.00	19.87	19.90	21	0	
18	16QAM	36	96	19.82	20.11	20.07			
18	16QAM	75	0	19.86	20.11	20.07			
18	16QAM	1	0	20.30	20.29	20.40			
18	16QAM	1	37	19.86	19.93	19.95	21	0	
18	16QAM	1	74	20.17	20.37	20.37			
18	16QAM	36	0	19.86	20.08	20.14			
18	16QAM	36	20	19.92	19.85	19.90	21	0	
18	16QAM	36	96	19.91	20.25	20.22			
18	16QAM	75	0	19.89	19.86	19.88			
18	256QAM	1	0	19.41	19.52	19.50	19.5	1.5	
18	256QAM	1	37	19.43	19.55	19.51			
18	256QAM	1	74	19.41	19.64	19.53			
18	256QAM	36	0	19.45	19.62	19.62			
18	256QAM	36	20	19.57	19.70	19.65	19.5	1.5	
18	256QAM	36	96	19.39	19.65	19.59			
18	256QAM	75	0	19.43	19.61	19.66			
Channel									
Frequency (MHz)									
16	QPSK	1	0	20.15	20.42	20.29			
16	QPSK	1	25	20.18	20.42	20.29	21	0	
16	QPSK	1	49	20.12	20.24	20.28			
16	QPSK	25	0	19.92	20.29	20.29			
16	QPSK	25	12	19.93	20.14	20.19			
16	QPSK	25	25	19.93	20.28	20.11	21	0	
16	QPSK	80	0	19.82	20.25	20.23			
16	16QAM	1	0	19.93	19.97	19.94			
16	16QAM	1	25	19.79	19.86	19.91	21	0	
16	16QAM	1	49	19.45	19.90	19.86			
16	16QAM	25	0	20.00	20.07	20.19			
16	16QAM	25	12	19.96	20.03	20.06			
16	16QAM	25	25	19.96	20.02	20.04	21	0	
16	16QAM	50	0	19.97	20.13	19.94			
16	16QAM	1	0	20.21	20.23	20.37			
16	16QAM	1	16	20.15	20.32	20.34	21	0	
16	16QAM	1	49	20.19	20.34	20.16			
16	16QAM	25	0	19.98	20.05	20.00			
16	16QAM	25	12	20.04	20.20	20.11	21	0	
16	16QAM	25	25	20.04	20.06	20.17			
16	16QAM	50	0	19.94	20.10	20.09			
16	256QAM	1	0	19.46	19.65	19.57	19.5	1.5	
16	256QAM	1	25	19.38	19.58	19.59			
16	256QAM	1	49	19.35	19.55	19.52			
16	256QAM	25	0	19.49	19.71	19.61	19.5	1.5	
16	256QAM	25	12	19.47	19.64	19.67			
16	256QAM	25	25	19.35	19.65	19.63			
16	256QAM	50	0	19.39	19.67	19.61			
Channel									
Frequency (MHz)									
5	QPSK	1	0	20.23	20.41	20.41			
5	QPSK	1	12	20.23	20.41	20.35	21	0	
5	QPSK	1	24	20.06	20.23	20.28			
5	QPSK	12	0	19.93	20.23	20.19			
5	QPSK	12	7	20.00	20.23	20.02	21	0	
5	QPSK	12	13	19.96	20.25	20.37			
5	QPSK	25	0	19.88	20.24	20.19			
5	16QAM	1	0	19.97	19.98	20.02			
5	16QAM	1	12	19.88	20.00	19.88	21	0	
5	16QAM	1	24	19.88	19.94	19.91			
5	16QAM	12	0	19.79	20.14	20.24			
5	16QAM	12	7	19.83	20.07	19.99	21	0	
5	16QAM	12	13	19.81	20.20	20.20			
5	16QAM	25	0	19.89	20.08	20.01			
5	16QAM	1	0	20.18	20.23	20.22			
5	16QAM	1	12	20.09	20.14	20.31	21	0	
5	16QAM	1	24	20.06	20.10	20.08			
5	16QAM	12	0	19.80	20.17	20.09			
5	16QAM	12	7	19.89	20.27	20.06	21	0	
5	16QAM	12	13	19.92	20.00	20.12			
5	16QAM	25	0	19.91	20.02	19.99			
5	256QAM	1	0	19.41	19.58	19.51	19.5	1.5	
5	256QAM	1	12	19.39	19.63	19.60			
5	256QAM	1	24	19.40	19.62	19.54			
5	256QAM	12	0	19.45	19.64	19.65	19.5	1.5	
5	256QAM	12	7	19.48	19.60	19.70			
5	256QAM	12	13	19.33	19.56	19.64	19.5	1.5	
5	256QAM	25	0	19.41	19.70	19.58			
Channel									
Frequency (MHz)									
3	QPSK	1	0	20.23	20.37	20.33			
3	QPSK	1	8	20.17	20.44	20.41	21	0	
3	QPSK	1	14	20.13	20.26	20.39			
3	QPSK	8	0	20.03	20.29	20.18			
3	QPSK	8	4	19.91	20.23	20.09	21	0	
3	QPSK	8	7	19.96	20.13	20.25			
3	QPSK	15	0	19.86	20.20	20.18			
3	16QAM	1	0	19.74	19.91	19.96			
3	16QAM	1	8	19.74	19.90	19.98	21	0	
3	16QAM	1	14	19.87	20.00	19.97			
3	16QAM	8	0	19.85	20.20	20.09			
3	16QAM	8	4	19.86	20.15	20.12	21	0	
3	16QAM	8	7	19.98	20.02	20.02			
3	16QAM	15	0	19.86	20.15	20.03			
3	16QAM	1	0	19.18	20.26	20.33			
3	16QAM	1	20	20.02	20.16	20.31	21	0	
3	16QAM	1	14	20.16	20.24	20.23			
3	16QAM	8	0	19.82	20.27	19.87			
3	16QAM	8	4	19.89	20.10	20.01	21	0	
3	16QAM	8	7	20.01	20.04	20.15			
3	256QAM	1	0	19.45	19.58	19.62	19.5	1.5	
3	256QAM	1	8	19.37	19.54	19.59			
3	256QAM	1	14	19.44	19.61	19.59			
3	256QAM	8	0	19.48	19.74	19.61	19.5	1.5	
3	256QAM	8	4	19.48	19.65	19.66			
3	256QAM	8	7	19.35	19.67	19.68			
3	256QAM	15	0	19.38	19.62	19.58	19.5	1.5	
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	20.23	20.32	20.39			
1.4	QPSK	1	3	20.35	20.37	20.46	21	0	
1.4	QPSK	1	6	20.02	20.26	20.29			
1.4	QPSK	3	0	20.10	20.27	20.19			
1.4	QPSK	3	1	19.91	20.16	20.22			
1.4	QPSK	3	6	20.02	20.16	20.15			

Band 38 Ant3 DS13 Other PA									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				37850	38000	38150			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	0	19.75	19.80	19.85	20.5	0	
20	QPSK	1	49	19.87	19.89	19.94			
20	QPSK	1	99	19.44	19.53	19.29			
20	QPSK	50	0	19.70	19.83	19.68			
20	QPSK	50	24	19.82	19.77	19.68	20.5	0	
20	QPSK	50	50	19.70	19.79	19.67			
20	QPSK	100	0	19.76	19.88	19.64			
20	16QAM	1	0	19.58	19.66	19.64			
20	16QAM	1	49	19.64	19.79	19.80	20.5	0	
20	16QAM	50	24	19.66	19.75	19.87			
20	16QAM	50	0	19.54	19.70	19.74			
20	16QAM	50	24	19.57	19.85	19.76			
20	16QAM	50	50	19.74	19.73	19.70	20.5	0	
20	16QAM	100	0	19.72	19.95	19.71			
20	64QAM	1	0	19.76	19.97	19.84			
20	64QAM	1	49	19.77	19.81	19.80	20.5	0	
20	64QAM	1	99	19.84	19.83	19.82			
20	64QAM	50	0	19.82	19.79	19.75			
20	64QAM	50	24	19.66	19.75	19.87			
20	64QAM	50	50	19.58	19.83	19.76	20.5	0	
20	64QAM	100	0	19.81	19.83	19.73			
20	256QAM	1	0	19.24	19.39	19.33			
20	256QAM	1	49	19.25	19.38	19.23	20	0.5	
20	256QAM	1	99	19.31	19.38	19.25			
20	256QAM	50	0	19.29	19.42	19.27			
20	256QAM	50	24	19.24	19.38	19.24			
20	256QAM	50	50	19.34	19.41	19.35	20	0.5	
20	256QAM	100	0	19.40	19.46	19.31			
Channel				25755	25900	26175			
Frequency (MHz)				2577.5	2595	2612.5			
15	QPSK	1	0	19.69	19.86	19.88	20.5	0	
15	QPSK	1	37	19.53	19.91	19.85			
15	QPSK	1	74	19.48	19.47	19.48			
15	QPSK	36	0	19.83	19.93	19.72			
15	QPSK	36	20	19.62	19.82	19.76	20.5	0	
15	QPSK	36	39	19.57	19.73	19.57			
15	QPSK	75	0	19.62	19.85	19.86			
15	16QAM	1	0	19.54	19.83	19.66			
15	16QAM	1	37	19.45	19.75	19.50	20.5	0	
15	16QAM	1	74	19.61	19.59	19.58			
15	16QAM	36	0	19.63	19.72	19.64			
15	16QAM	36	20	19.60	19.80	19.82			
15	16QAM	36	39	19.72	19.90	19.99	20.5	0	
15	16QAM	75	0	19.80	19.82	19.74			
15	64QAM	1	0	19.69	19.89	19.83			
15	64QAM	1	37	19.62	19.86	19.71			
15	64QAM	1	74	19.80	19.87	19.74	20.5	0	
15	64QAM	36	0	19.64	19.78	19.65			
15	64QAM	36	20	19.70	19.65	19.66			
15	64QAM	36	39	19.72	19.82	19.74			
15	64QAM	75	0	19.69	19.80	19.82	20	0.5	
15	256QAM	1	0	19.24	19.36	19.27			
15	256QAM	1	37	19.27	19.35	19.21			
15	256QAM	1	74	19.29	19.36	19.24			
15	256QAM	36	0	19.29	19.42	19.20	20	0.5	
15	256QAM	36	20	19.16	19.39	19.26			
15	256QAM	36	39	19.29	19.36	19.30			
15	256QAM	75	0	19.32	19.48	19.34			
Channel				37800	38000	38200	20.5	0	
Frequency (MHz)				26175	2635	2615			
10	QPSK	1	0	19.90	19.94	19.76			
10	QPSK	1	25	19.85	19.97	19.84			
10	QPSK	1	49	19.43	19.39	19.31	20.5	0	
10	QPSK	25	0	19.75	19.91	19.70			
10	QPSK	25	12	19.82	19.73	19.73			
10	QPSK	25	25	19.68	19.79	19.84			
10	QPSK	50	0	19.60	19.79	19.72	20.5	0	
10	16QAM	1	0	19.47	19.62	19.47			
10	16QAM	1	25	19.66	19.84	19.80			
10	16QAM	1	49	19.52	19.69	19.60			
10	16QAM	25	0	19.83	19.89	19.86	20.5	0	
10	16QAM	25	12	19.74	19.66	19.61			
10	16QAM	25	25	19.71	19.84	19.81			
10	16QAM	50	0	19.73	19.90	19.76			
10	64QAM	1	0	19.74	19.88	19.70	20.5	0	
10	64QAM	1	25	19.75	19.88	19.82			
10	64QAM	1	49	19.73	19.95	19.77			
10	64QAM	25	0	19.66	19.84	19.54			
10	64QAM	25	12	19.69	19.74	19.70	20.5	0	
10	64QAM	25	25	19.59	19.84	19.52			
10	64QAM	50	0	19.90	19.81	19.74			
10	256QAM	1	0	19.23	19.42	19.35	20	0.5	
10	256QAM	1	25	19.27	19.38	19.25			
10	256QAM	1	49	19.32	19.35	19.16			
10	256QAM	25	0	19.24	19.42	19.24			
10	256QAM	25	12	19.26	19.41	19.26	20	0.5	
10	256QAM	25	25	19.26	19.34	19.36			
10	256QAM	50	0	19.41	19.46	19.31			
Channel				37775	38000	38225			
Frequency (MHz)				26175.5	2695	2617.5	20.5	0	
5	QPSK	1	0	19.68	20.01	19.89			
5	QPSK	1	12	19.84	19.93	19.93			
5	QPSK	1	24	19.41	19.39	19.30			
5	QPSK	12	0	19.80	19.86	19.71	20.5	0	
5	QPSK	12	7	19.81	19.85	19.74			
5	QPSK	12	13	19.67	19.71	19.89			
5	QPSK	25	0	19.59	19.74	19.69			
5	16QAM	1	0	19.87	19.55	19.49	20.5	0	
5	16QAM	1	12	19.62	19.65	19.63			
5	16QAM	1	24	19.62	19.46	19.37			
5	16QAM	12	0	19.66	19.70	19.77			
5	16QAM	12	7	19.74	19.77	19.59	20.5	0	
5	16QAM	12	13	19.75	19.74	19.72			
5	16QAM	25	0	19.60	19.83	19.84			
5	64QAM	1	0	19.87	19.93	19.83	20.5	0	
5	64QAM	1	12	19.72	19.79	19.76			
5	64QAM	1	24	19.64	19.78	19.74			
5	64QAM	12	0	19.79	19.76	19.68			
5	64QAM	12	7	19.59	19.77	19.68	20.5	0	
5	64QAM	12	13	19.56	19.72	19.65			
5	64QAM	25	0	19.83	19.83	19.76			
5	256QAM	1	0	19.21	19.36	19.27	20	0.5	
5	256QAM	1	12	19.22	19.36	19.23			
5	256QAM	1	24	19.27	19.32	19.19			
5	256QAM	12	0	19.20	19.38	19.21			
5	256QAM	12	7	19.22	19.40	19.20	20	0.5	
5	256QAM	12	13	19.30	19.34	19.29			
5	256QAM	25	0	19.38	19.44	19.22			

Band 41 Ant3 DS13 Other PA									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	
Channel				39750	40165	40620	41095	41490	
Frequency (MHz)				2508	2549.5	2593	2636.5	2680	
20	QPSK	1	0	19.73	19.67	20.17	19.76	19.88	20.5
20	QPSK	1	49	19.70	19.82	20.02	19.72	19.83	
20	QPSK	1	99	19.76	19.75	19.99	19.80	19.97	
20	QPSK	50	0	19.83	19.83	20.15	19.68	19.98	
20	QPSK	50	24	19.83	19.60	20.10	19.64	19.91	0
20	QPSK	50	50	19.63	19.75	20.10	19.62	19.93	
20	QPSK	100	0	19.84	19.76	19.99	19.75	19.97	
20	16QAM	0	19.84	19.60	19.98	19.68	19.85		
20	16QAM	1	49	19.67	19.72	19.91	19.70	19.85	20.5
20	16QAM	1	99	19.65	19.68	20.14	19.62	19.92	
20	16QAM	50	0	19.78	19.69	19.92	19.54	19.84	
20	16QAM	50	24	19.78	19.79	20.00	19.62	19.98	
20	16QAM	50	50	19.72	19.62	20.02	19.59	20.05	20.5
20	16QAM	100	0	19.88	19.68	20.01	19.55	19.89	
20	64QAM	1	0	19.79	19.58	19.88	19.72	19.86	
20	64QAM	1	49	19.70	19.70	19.97	19.67	19.73	
20	64QAM	1	99	19.64	19.61	20.13	19.58	20.01	20.5
20	64QAM	50	0	19.72	19.70	19.93	19.78	19.80	
20	64QAM	50	24	19.53	19.62	19.88	19.65	19.80	
20	64QAM	100	0	19.78	19.69	19.92	19.54	19.84	
20	256QAM	1	0	19.91	19.71	20.02	19.72	19.97	20.5
20	256QAM	1	49	19.22	19.19	19.47	19.22	19.36	
20	256QAM	1	99	19.14	19.16	19.41	19.13	19.24	
20	256QAM	50	24	19.16	19.14	19.49	19.11	19.26	
20	256QAM	50	24	19.16	19.11	19.47	19.19	19.26	20.5
20	256QAM	50	50	19.17	19.11	19.40	19.16	19.30	
20	256QAM	100	0	19.33	19.15	19.54	19.11	19.31	
20	256QAM	100	0	19.33	19.13	19.50	19.15	19.31	
Channel				25030	25443	2593	2637.8	2682.5	
Frequency (MHz)				25030	25443	2593	2637.8	2682.5	
15	QPSK	1	0	19.56	19.54	19.93	19.50	19.65	21
15	QPSK	1	37	19.55	19.50	19.88	19.39	19.62	
15	QPSK	36	0	19.52	19.48	19.87	19.41	19.68	
15	QPSK	36	0	19.54	19.67	19.88	19.58	19.86	
15	QPSK	36	20	19.47	19.62	19.72	19.50	19.69	20.5
15	QPSK	36	36	19.48	19.48	19.84	19.40	19.68	
15	QPSK	75	0	19.72	19.70	19.88	19.50	19.78	
15	16QAM	1	37	19.54	19.52	19.92	19.53	19.74	
15	16QAM	1	37	19.46	19.63	19.74	19.51	19.70	20.5
15	16QAM	1	74	19.63	19.38	19.90	19.50	19.66	
15	16QAM	36	0	19.68	19.55	19.87	19.62	19.67	
15	16QAM	36	40	19.65	19.48	19.77	19.54	19.70	
15	16QAM	36	39	19.59	19.44	19.83	19.60	19.89	20.5
15	16QAM	75	0	19.54	19.62	19.88	19.37	19.73	
15	64QAM	1	0	19.56	19.54	19.91	19.39	19.71	
15	64QAM	1	37	19.48	19.48	19.63	19.41	19.66	
15	64QAM	1	74	19.57	19.46	19.91	19.55	19.76	20.5
15	64QAM	36	0	19.57	19.57	19.84	19.63	19.85	
15	64QAM	36	20	19.52	19.60	19.86	19.44	19.64	
15	64QAM	36	39	19.50	19.57	19.87	19.51	19.76	
15	64QAM	36	40	19.49	19.52	19.87	19.51	19.74	20.5
15	256QAM	1	0	19.25	19.15	19.43	19.14	19.29	
15	256QAM	1	37	19.87	19.07	19.40	19.15	19.16	
15	256QAM	1	74	19.14	19.06	19.49	19.12	19.34	
15	256QAM	1	74	19.14	19.07	19.43	19.13	19.26	20.5
15	256QAM	36	20	19.17	19.03	19.41	19.11	19.22	
15	256QAM	36	39	19.11	19.05	19.32	19.13	19.28	
15	256QAM	75	0	19.12	19.17	19.56	19.03	19.38	
Channel				39900	40160	40620	41080	41560	
Frequency (MHz)				39900	40160	40620	41080	41560	
10	QPSK	1	0	19.64	19.47	19.90	19.54	19.66	21
10	QPSK	1	25	19.59	19.45	19.84	19.47	19.60	
10	QPSK	1	49	19.51	19.62	20.02	19.43	19.62	
10	QPSK	25	0	19.53	19.65	19.85	19.63	19.73	
10	QPSK	25	12	19.54	19.63	19.78	19.44	19.70	20.5
10	QPSK	25	25	19.51	19.46	19.97	19.50	19.73	
10	QPSK	50	0	19.57	19.62	19.91	19.47	19.88	
10	16QAM	0	19.58	19.48	19.86	19.49	19.68		
10	16QAM	25	19.54	19.46	19.97	19.62	19.70	20.5	
10	16QAM	1	49	19.68	19.41	19.84	19.61		19.77
10	16QAM	25	0	19.65	19.64	19.80	19.63		19.78
10	16QAM	25	12	19.50	19.43	19.75	19.48		19.63
10	16QAM	25	25	19.52	19.62	19.84	19.54	19.65	20.5
10	16QAM	50	0	19.75	19.61	19.93	19.55	19.61	
10	64QAM	1	0	19.56	19.47	19.68	19.39	19.70	
10	64QAM	1	25	19.38	19.40	19.79	19.53	19.55	
10	64QAM	25	12	19.45	19.41	19.80	19.39	19.71	20.5
10	64QAM	25	0	19.71	19.62	19.92	19.60	19.83	
10	64QAM	25	12	19.32	19.49	19.70	19.64	19.71	
10	64QAM	25	25	19.55	19.57	19.77	19.37	19.75	
10	256QAM	1	49	19.67	19.68	19.88	19.63	19.71	20.5
10	256QAM	1	49	19.14	19.12	19.30	19.15	19.28	
10	256QAM	1	25	19.00	19.15	19.44	19.06	19.22	
10	256QAM	1	49	19.13	19.13	19.46	19.02	19.37	
10	256QAM	25	0	19.17	19.23	19.58	19.03	19.34	20.5
10	256QAM	25	12	19.11	19.14	19.47	19.02	19.24	
10	256QAM	25	25	19.17	19.13	19.39	19.16	19.27	
10	256QAM	25	25	19.10	19.11	19.45	19.06	19.33	
Channel				39970	40146	40620	41083	41565	
Frequency (MHz)				39970	40146	40620	41083	41565	
5	QPSK	1	0	19.69	19.48	19.95	19.46	19.70	21
5	QPSK	1	12	19.42	19.48	19.77	19.61	19.59	
5	QPSK	1	24	19.58	19.52	19.93	19.61	19.80	
5	QPSK	12	0	19.51	19.64	19.84	19.49	19.75	
5	QPSK	12	12	19.50	19.49	19.84	19.53	19.61	20.5
5	QPSK	25	13	19.47	19.58	19.94	19.60	19.66	
5	16QAM	1	0	19.70	19.56	19.95	19.59	19.90	
5	16QAM	1	0	19.58	19.62	19.94	19.45	19.73	
5	16QAM	1	12	19.60	19.68	19.75	19.44	19.71	20.5
5	16QAM	1	24	19.53	19.39	19.96	19.51	19.73	
5	16QAM	12	0	19.66	19.62	19.91	19.68	19.84	
5	16QAM	12	13	19.63	19.63	19.84	19.48	19.84	
5	64QAM	1	0	19.70	19.46	19.99	19.37	19.74	20.5
5	64QAM	1	0	19.68	19.59	19.90	19.47	19.83	
5	64QAM	1	12	19.47	19.39	19.76	19.57	19.55	
5	64QAM	1	24	19.63	19.52	20.01	19.39	19.68	
5	64QAM	12	0	19.69	19.58	19.92	19.61	19.81	20.5
5	64QAM	12	7	19.39	19.69	19.78	19.59	19.64	
5	64QAM	12	13	19.63	19.42	19.88	19.41	19.64	
5	64QAM	25	0	19.71	19.57	20.00	19.57	19.81	
5	256QAM	1	0	19.16	19.16	19.40	19.11	19.27	20.5
5	256QAM	1	12	19.00	19.16	19.33	19.10	19.15	
5	256QAM	1	24	19.19	19.11	19.46	19.11	19.29	
5	256QAM	12	0	19.17	19.22	19.51	19.08	19.37	
5	256QAM	12	7	19.19	19.28	19.49	19.12	19.27	20.5
5	256QAM	12	13	19.12	19.06	19.43	19.09	19.28	
5	256QAM	25	0	19.08	19.15	19.49	19.09	19.26	
5	256QAM	25	0	19.08	19.15	19.49	19.09	19.26	

Reduced Power NSA Mode for DS14

Band 7 Ant2 DS14 Main PA-1 for ENDC

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	22.53	22.69	22.59	23.5	0	
20	QPSK	1	49	22.45	22.60	22.53			
20	QPSK	1	99	22.36	22.48	22.49			
20	QPSK	50	0	22.00	22.11	22.01			
20	QPSK	50	24	21.96	22.08	22.02	23.5	0	
20	QPSK	50	50	22.03	22.05	22.02			
20	QPSK	100	0	22.04	22.07	22.02			
20	16QAM	1	0	21.91	21.99	21.98			
20	16QAM	1	49	21.93	21.99	21.98	23.5	0	
20	16QAM	1	99	21.92	21.97	21.92			
20	16QAM	50	0	22.07	22.10	22.03			
20	16QAM	50	24	21.93	21.98	21.98			
20	16QAM	50	50	21.95	22.00	21.96	23.5	0	
20	16QAM	100	0	22.06	22.04	22.00			
20	64QAM	1	0	21.98	22.00	22.03			
20	64QAM	1	49	21.97	21.94	21.91			
20	64QAM	1	99	22.02	22.04	21.97	22.5	1	
20	64QAM	50	0	21.04	21.13	21.02			
20	64QAM	50	24	20.89	20.99	21.03			
20	64QAM	50	50	20.98	20.98	21.07			
20	64QAM	100	0	20.99	21.01	21.00	20.5	3	
20	256QAM	1	0	19.01	19.08	19.04			
20	256QAM	1	49	18.92	19.02	19.04			
20	256QAM	1	99	18.98	19.10	19.02			
20	256QAM	50	0	19.01	19.03	19.09	20.5	3	
20	256QAM	50	24	18.93	19.00	19.00			
20	256QAM	50	50	18.93	18.94	18.95			
20	256QAM	100	0	19.03	18.99	18.94			
Channel									
Frequency (MHz)									
15	QPSK	1	0	22.51	22.64	22.53	23.5	0	
15	QPSK	1	37	22.45	22.58	22.50			
15	QPSK	1	74	22.30	22.46	22.41			
15	QPSK	36	0	21.93	22.11	21.99			
15	QPSK	36	20	21.87	22.08	21.98	23.5	0	
15	QPSK	36	39	22.00	22.04	21.96			
15	QPSK	75	0	21.97	22.05	21.98			
15	16QAM	1	0	21.82	21.97	21.90			
15	16QAM	1	37	21.89	21.99	21.91	23.5	0	
15	16QAM	1	74	21.85	21.96	21.92			
15	16QAM	36	0	22.08	22.08	22.00			
15	16QAM	36	20	21.95	21.98	21.97			
15	16QAM	36	39	21.95	21.98	21.95	23.5	0	
15	16QAM	75	0	21.88	22.00	21.97			
15	64QAM	1	0	21.96	22.02	22.04			
15	64QAM	1	37	21.84	21.94	21.91			
15	64QAM	1	74	21.98	22.00	21.94	22.5	1	
15	64QAM	36	0	20.98	21.07	21.03			
15	64QAM	36	20	20.89	20.98	21.01			
15	64QAM	36	39	20.97	20.97	21.00			
15	64QAM	75	0	20.91	21.03	20.95	20.5	3	
15	256QAM	1	0	18.94	19.09	19.03			
15	256QAM	1	37	18.84	18.94	18.98			
15	256QAM	1	74	18.99	19.01	18.95			
15	256QAM	36	0	18.95	18.96	18.96	20.5	3	
15	256QAM	36	20	18.95	18.99	19.01			
15	256QAM	36	39	18.93	18.92	18.90			
15	256QAM	75	0	18.98	18.97	18.96			
Channel									
Frequency (MHz)									
10	QPSK	1	0	22.55	22.64	22.51	23.5	0	
10	QPSK	1	25	22.42	22.58	22.54			
10	QPSK	1	49	22.30	22.50	22.47			
10	QPSK	25	0	22.01	22.08	22.02			
10	QPSK	25	12	21.92	22.01	21.98	23.5	0	
10	QPSK	25	25	21.97	22.02	21.98			
10	QPSK	50	0	22.05	22.08	22.04			
10	16QAM	1	0	21.89	22.00	21.99			
10	16QAM	1	25	21.89	21.90	21.91	23.5	0	
10	16QAM	1	49	21.91	21.92	21.87			
10	16QAM	25	0	22.06	22.06	21.96			
10	16QAM	25	12	21.98	21.91	21.90			
10	16QAM	25	25	21.92	22.01	21.91	23.5	0	
10	16QAM	50	0	22.03	22.00	21.93			
10	64QAM	1	0	21.84	22.00	22.04			
10	64QAM	1	25	21.93	21.89	21.89			
10	64QAM	1	49	21.96	22.02	21.98	22.5	1	
10	64QAM	25	0	21.01	21.05	20.98			
10	64QAM	25	12	20.88	20.95	21.02			
10	64QAM	25	25	20.97	21.01	20.94			
10	64QAM	50	0	20.97	20.92	21.00	20.5	3	
10	256QAM	1	0	18.92	19.03	18.98			
10	256QAM	1	25	18.85	18.95	19.00			
10	256QAM	1	49	18.99	19.07	19.04			
10	256QAM	25	0	18.98	19.03	18.99	20.5	3	
10	256QAM	25	12	18.89	18.96	19.02			
10	256QAM	25	25	18.94	18.93	18.95			
10	256QAM	50	0	19.03	19.01	18.91			
Channel									
Frequency (MHz)									
5	QPSK	1	0	22.46	22.65	22.51	23.5	0	
5	QPSK	1	12	22.40	22.56	22.48			
5	QPSK	1	24	22.30	22.41	22.51			
5	QPSK	12	0	21.96	22.06	21.96			
5	QPSK	12	7	21.92	21.99	22.00	23.5	0	
5	QPSK	12	13	22.01	21.99	21.95			
5	QPSK	25	0	22.01	22.09	21.96			
5	16QAM	1	0	21.87	21.95	21.98			
5	16QAM	1	12	21.94	21.92	21.89	23.5	0	
5	16QAM	1	24	21.87	21.94	21.95			
5	16QAM	12	0	22.10	22.08	22.02			
5	16QAM	12	7	21.92	21.94	21.95			
5	16QAM	12	13	21.92	21.93	21.94	23.5	0	
5	16QAM	25	0	22.02	21.93	22.02			
5	64QAM	1	0	21.96	22.02	21.98			
5	64QAM	1	12	21.99	21.93	21.94			
5	64QAM	1	24	21.98	22.04	21.89	22.5	1	
5	64QAM	12	0	21.05	21.12	20.99			
5	64QAM	12	7	20.90	20.93	20.95			
5	64QAM	12	13	20.91	21.00	20.93			
5	64QAM	25	0	20.90	20.93	21.00	20.5	3	
5	256QAM	1	0	18.99	19.06	18.96			
5	256QAM	1	12	18.94	19.02	19.00			
5	256QAM	1	24	18.97	19.08	18.95			
5	256QAM	12	0	18.99	18.97	18.95	20.5	3	
5	256QAM	12	7	18.95	18.95	18.95			
5	256QAM	12	13	18.91	18.90	18.90			
5	256QAM	25	0	19.06	18.92	18.95			

Band 7 Ant2 DS14 Other PA for ENDC

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)
Channel								
Frequency (MHz)								
20	QPSK	1	0	18.43	18.47	18.39	19	0
20	QPSK	1	49	18.30	18.30	18.28		
20	QPSK	1	99	18.42	18.46	18.32		
20	QPSK	50	0	18.26	18.34	18.33		
20	QPSK	50	24	18.00	18.08	18.26	19	0
20	QPSK	50	50	17.92	17.98	18.28		
20	QPSK	100	0	18.16	18.31	18.27		
20	16QAM	1	0	17.97	18.01	18.21		
20	16QAM	1	49	17.95	17.93	18.26	19	0
20	16QAM	1	99	17.89	17.94	18.24		
20	16QAM	50	0	18.12	18.14	18.28		
20	16QAM	50	24	18.07	18.12	18.29		
20	16QAM	50	50	17.97	17.98	18.32	19	0
20	16QAM	100	0	18.19	18.15	18.35		
20	64QAM	1	0	18.10	18.13	18.24		
20	64QAM	1	49	18.04	18.01	18.21		
20	64QAM	1	99	17.99	17.94	18.24	18	1
20	64QAM	50	0	17.04	17.15	17.37		
20	64QAM	50	24	16.99	17.01	17.32		
20	64QAM	50	50	16.96	16.93	17.28		
20	64QAM	100	0	17.17	17.15	17.36	16	3
20	256QAM	1	0	15.24	15.27	15.49	16	3
20	256QAM	1	49	15.22	15.24	15.46		
20	256QAM	1	99	15.24	15.28	15.48		
20	256QAM	1	99	15.14	15.17	15.49		
20	256QAM	50	0	15.32	15.33	15.48	16	3
20	256QAM	50	24	15.21	15.23	15.47		
20	256QAM	50	50	15.22	15.19	15.43		
20	256QAM	100	0	15.07	15.06	15.48		
Channel								
Frequency (MHz)								
15	QPSK	1	0	18.24	18.32	18.62	19	0
15	QPSK	1	37	18.27	18.23	18.25		
15	QPSK	1	74	18.45	18.43	18.28		
15	QPSK	36	0	18.00	18.36	18.27		
15	QPSK	36	20	17.83	17.86	18.28	19	0
15	QPSK	36	39	17.87	17.98	18.21		
15	QPSK	75	0	18.15	18.33	18.23		
15	16QAM	1	0	17.94	18.00	18.20		
15	16QAM	1	37	17.88	17.85	18.21	18	1
15	16QAM	1	74	17.91	17.95	18.24		
15	16QAM	36	0	18.14	18.14	18.23		
15	16QAM	36	20	18.09	18.03	18.23		
15	16QAM	36	39	17.89	17.92	18.33	18	1
15	16QAM	75	0	18.19	18.16	18.23		
15	64QAM	1	0	17.03	18.08	18.23		
15	64QAM	1	37	17.03	17.86	18.21		
15	64QAM	1	74	17.01	17.96	18.22	18	1
15	64QAM	36	0	17.03	17.13	17.32		
15	64QAM	36	20	17.01	16.93	17.25		
15	64QAM	36	39	16.97	16.92	17.29		
15	64QAM	75	0	17.18	17.13	17.33	16	3
15	256QAM	1	0	15.19	15.21	15.50		
15	256QAM	1	37	15.15	15.22	15.46		
15	256QAM	1	74	15.07	15.12	15.47		
15	256QAM	36	0	15.30	15.33	15.50	16	3
15	256QAM	36	20	15.23	15.22	15.43		
15	256QAM	36	39	15.19	15.18	15.48		
15	256QAM	75	0	15.02	15.08	15.41		
Channel								
Frequency (MHz)								
10	QPSK	1	0	18.25	18.42	18.26	19	0
10	QPSK	1	25	18.22	18.30	18.25		
10	QPSK	1	49	18.35	18.40	18.26		
10	QPSK	25	0	18.06	18.26	18.30		
10	QPSK	25	12	17.95	18.09	18.19	19	0
10	QPSK	25	25	17.90	17.90	18.26		
10	QPSK	50	0	18.12	18.31	18.20		
10	16QAM	1	0	17.88	17.97	18.18		
10	16QAM	1	25	17.85	17.89	18.28	19	0
10	16QAM	1	49	17.91	17.95	18.25		
10	16QAM	25	0	18.06	18.11	18.28		
10	16QAM	25	12	18.01	18.06	18.27		
10	16QAM	50	0	18.19	18.18	18.32	19	0
10	64QAM	1	0	18.11	18.06	18.20		
10	64QAM	1	25	17.86	17.84	18.15		
10	64QAM	1	49	18.00	17.87	18.25		
10	64QAM	25	0	17.00	17.12	17.35	18	1
10	64QAM	25	12	16.93	17.02	17.32		
10	64QAM	25	25	16.95	16.91	17.27		
10	64QAM	50	0	17.10	17.12	17.36		
10	256QAM	1	0	15.23	15.21	15.42	16	3
10	256QAM	1	25	15.17	15.24	15.45		
10	256QAM	1	49	15.10	15.19	15.52		
10	256QAM	25	0	15.24	15.30	15.42		
10	256QAM	25	12	15.22	15.24	15.48	16	3
10	256QAM	25	25	15.17	15.18	15.46		
10	256QAM	50	0	15.08	15.05	15.45		
10	256QAM	50	0	15.08	15.05	15.45		
Channel								
Frequency (MHz)								
5	QPSK	1	0	18.20	18.45	18.29	19	0
5	QPSK	1	12	18.22	18.31	18.21		
5	QPSK	1	24	18.36	18.47	18.28		
5	QPSK	12	7	17.93	18.08	18.25		
5	QPSK	12	13	17.88	17.99	18.21	19	0
5	QPSK	25	0	18.12	18.26	18.25		
5	16QAM	1	0	17.96	18.00	18.15		
5	16QAM	1	12	17.91	17.91	18.18		
5	16QAM	12	7	18.06	18.09	18.24	19	0
5	16QAM	12	13	17.93	17.91	18.31		
5	16QAM	25	0	18.20	18.12	18.38		
5	16QAM	25	12	18.00	18.14	18.21		
5	64QAM	1	12	17.96	18.01	18.22	18	1
5	64QAM	1	24	18.00	17.89	18.24		
5	64QAM	12	0	17.01	17.17	17.28		
5	64QAM	12	7	16.95	16.94	17.34		
5	64QAM	12	13	16.89	16.96	17.30	18	1
5	64QAM	25	0	15.19	15.17	15.42		
5	256QAM	1	0	15.17	15.27	15.42		
5	256QAM	1	12	15.18	15.19	15.49		
5	256QAM	1	24	15.08	15.18	15.52	16	3
5	256QAM	12	0	15.32	15.26	15.40		
5	256QAM	12	12	15.17	15.17	15.46		
5	256QAM	12	13	15.23	15.03	15.43		
5	256QAM	25	0	15.07	15.03	15.49	16	3
5	256QAM	25	12	15.00	15.00	15.48		
5	256QAM	25	13	15.03	15.03	15.48		
5	256QAM	25	25	15.07	15.04	15.49		



Band 2 Ant2 DS14 Other PA												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. 20060	Power Low Ch. Freq. 21000	Power High Ch. Freq. 21000	Turn-up (dB)	APRS (dB)				
Channel												
Frequency (MHz)												
20	QPSK	1	0	24.04	24.29	24.18			24.5	0		
20	QPSK	1	49	23.99	24.17	24.15						
20	QPSK	1	98	23.89	24.12	24.11						
20	QPSK	50	0	22.99	23.13	23.12						
20	QPSK	50	24	22.97	23.07	23.08						
20	QPSK	100	0	22.87	23.07	23.04			24.5	1		
20	QPSK	50	24	22.97	23.07	23.08						
20	16QAM	1	49	22.77	22.96	22.95						
20	16QAM	1	99	22.74	22.92	22.95						
20	16QAM	50	24	21.84	22.05	21.99						
20	16QAM	50	50	21.84	22.01	22.00			23.5	2		
20	16QAM	1	0	21.99	22.18	22.12						
20	16QAM	1	49	21.99	22.10	22.12						
20	16QAM	1	98	21.85	22.08	22.02						
20	16QAM	50	0	20.93	21.11	21.10						
20	16QAM	50	24	20.92	21.08	21.10			22.5	3		
20	16QAM	100	0	20.82	21.06	21.04						
20	256QAM	1	0	18.84	19.08	19.10						
20	256QAM	1	49	18.85	19.02	18.98						
20	256QAM	1	99	18.88	19.05	19.03						
20	256QAM	50	0	18.90	19.07	19.08			20.5	5		
20	256QAM	50	24	18.92	19.08	19.08						
20	256QAM	100	0	18.92	19.07	19.02						
Channel												
Frequency (MHz)												
15	QPSK	1	0	24.03	24.21	24.11			25.5	0		
15	QPSK	1	37	23.97	24.12	24.12						
15	QPSK	1	74	23.89	24.04	24.06						
15	QPSK	36	0	22.82	23.11	23.07						
15	QPSK	36	20	22.84	23.02	23.08						
15	QPSK	36	36	22.79	23.08	23.00			24.5	1		
15	QPSK	75	0	22.82	23.01	23.00						
15	16QAM	1	0	22.70	22.92	22.83						
15	16QAM	1	37	22.77	22.89	22.89						
15	16QAM	1	74	22.75	22.84	22.80						
15	16QAM	36	0	21.82	22.01	22.11			24.5	1		
15	16QAM	36	20	21.82	21.96	21.98						
15	16QAM	36	36	21.83	21.94	22.00						
15	16QAM	75	0	21.77	22.01	21.95						
15	16QAM	1	0	21.86	22.14	22.04						
15	16QAM	1	37	21.89	22.09	22.12			23.5	2		
15	16QAM	1	74	21.92	22.06	22.02						
15	16QAM	36	0	20.89	21.12	21.08						
15	16QAM	36	20	20.88	21.10	21.10						
15	16QAM	36	36	20.89	21.11	21.10						
15	256QAM	1	0	18.92	19.06	19.02			20.5	5		
15	256QAM	1	37	18.78	19.03	19.03						
15	256QAM	1	74	18.87	19.04	19.04						
15	256QAM	36	0	18.95	18.96	18.95						
15	256QAM	36	20	18.92	18.99	19.00						
15	256QAM	36	36	18.94	18.99	19.00			20.5	5		
15	256QAM	75	0	18.93	19.01	19.08						
Channel												
Frequency (MHz)												
10	QPSK	1	0	23.99	24.20	24.19			25.5	0		
10	QPSK	1	25	23.91	24.12	24.06						
10	QPSK	1	49	23.83	24.05	24.04						
10	QPSK	25	0	23.92	23.13	23.13						
10	QPSK	25	12	23.91	23.09	23.03						
10	QPSK	25	25	22.86	23.08	23.02			24.5	1		
10	QPSK	50	0	22.89	23.01	23.08						
10	16QAM	1	0	22.70	22.93	22.81						
10	16QAM	1	25	22.72	22.94	22.89						
10	16QAM	1	49	22.72	22.94	22.88						
10	16QAM	25	0	21.86	22.08	22.07			24.5	1		
10	16QAM	25	12	21.86	22.02	21.98						
10	16QAM	25	25	21.81	22.02	22.05						
10	16QAM	50	0	21.86	21.98	21.99						
10	16QAM	50	12	21.82	22.03	22.03						
10	16QAM	1	25	21.94	22.05	22.09			23.5	2		
10	16QAM	1	49	21.85	22.11	22.10						
10	16QAM	25	12	20.91	21.05	21.06						
10	16QAM	25	25	20.81	21.15	21.08						
10	16QAM	50	0	20.82	21.05	21.05						
10	256QAM	1	0	18.96	19.11	19.07			20.5	5		
10	256QAM	1	25	18.86	19.01	18.91						
10	256QAM	1	49	18.79	19.06	19.05						
10	256QAM	25	0	18.92	19.07	19.08						
10	256QAM	25	12	18.87	19.03	19.01						
10	256QAM	25	25	18.92	19.04	19.04			20.5	5		
10	256QAM	50	0	18.92	18.99	19.00						
Channel												
Frequency (MHz)												
5	QPSK	1	0	23.96	24.26	24.18			25.5	0		
5	QPSK	1	12	23.91	24.17	24.14						
5	QPSK	1	24	23.87	24.03	23.98						
5	QPSK	12	0	23.91	23.90	23.98						
5	QPSK	12	7	22.84	23.04	23.08						
5	QPSK	12	13	23.91	23.04	23.06			24.5	1		
5	QPSK	25	0	22.86	23.09	23.04						
5	16QAM	1	0	22.68	22.88	22.86						
5	16QAM	1	12	22.68	22.87	22.89						
5	16QAM	1	24	22.75	22.87	22.97						
5	16QAM	12	0	21.84	22.08	22.05			23.5	2		
5	16QAM	12	7	21.83	22.01	21.91						
5	16QAM	12	13	21.82	21.97	21.97						
5	16QAM	25	0	21.84	22.06	21.98						
5	16QAM	1	0	21.90	22.13	22.00						
5	16QAM	1	12	21.92	22.09	22.11			23.5	2		
5	16QAM	1	24	21.88	22.11	22.05						
5	16QAM	12	7	20.93	21.10	21.02						
5	16QAM	12	13	20.84	21.05	21.14						
5	16QAM	25	0	20.74	21.00	20.93						
5	256QAM	1	0	18.97	19.01	19.10			20.5	5		
5	256QAM	1	12	18.85	19.02	18.95						
5	256QAM	1	24	18.85	19.02	19.04						
5	256QAM	12	0	18.90	19.02	19.09						
5	256QAM	12	7	18.88	18.99	19.02						
5	256QAM	12	13	18.89	19.03	19.06			20.5	5		
5	256QAM	25	0	18.94	18.99	19.07						
Channel												
Frequency (MHz)												
1.4	QPSK	1	0	24.03	24.27	24.19			25.5	0		
1.4	QPSK	1	8	23.97	24.10	24.18						
1.4	QPSK	1	14	23.87	24.00	24.06						
1.4	QPSK	3	0	24.01	24.25	24.19						
1.4	QPSK	3	1	23.98	24.10	24.08						
1.4	16QAM	1	0	22.98	23.04	23.15			24.5	1		
1.4	16QAM	1	8	22.90	23.03	23.01						
1.4	16QAM	1	14	22.80	23.02	23.03						
1.4	16QAM	3	0	22.73	22.92	22.82						
1.4	16QAM	3	1	22.71	22.86	22.86						
1.4	16QAM	3	3	22.77	22.84	22.84			24.5	1		
1.4	16QAM	6	0	21.86	22.09	22.08						
1.4	16QAM	1	0	21.43	22.02	21.80						
1.4	16QAM	1	8	21.83	22.10	22.04						
1.4	16QAM	1	3	21.81	22.12	21.03						
1.4	16QAM	3	0	21.89	22.11	21.06			22.5	3		
1.4	16QAM	3	1	21.91	22.12	22.05						
1.4	16QAM	6	0	20.90	21.12	21.03						
1.4	16QAM	1	0	20.88	21.08	21.02						
1.4	16QAM	1	8	20.88	21.08	21.07						
1.4	256QAM	1	0	18.93	19.07	19.02			20.5	5		
1.4	256QAM	1	3	18.83	19.03	18.92						
1.4	256QAM	3	0	18.91	19.04	19.04						
1.4	256QAM	3	1	18.88	19.03	19.00						
1.4	256QAM	6	0	18.92	18.98	19.05						
1.4	256QAM	3	1	18.88	19.03	19.00			20.5	5		
1.4	256QAM	6	0	18.91	18.98	19.07						
1.4	256QAM	3	1	18.88	19.04	18.95						
1.4	256QAM	6	0	18.83	18.94	18.95						

Band 38 Ant2 DSI4 Other PA										
BW (MHz)	Modulat on	RB Size	RB Offset	Power Low Ch./Freq	Power Main Ch./Freq	Power High Ch./Freq	Time-up limit (dBm)	MPR (dB)		
Channel				37650	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	21.23	21.29	21.34	22	0		
20	QPSK	1	49	21.11	21.19	21.24				
20	QPSK	1	99	21.04	21.14	21.21	21	1		
20	QPSK	50	0	20.12	20.22	20.26				
20	QPSK	50	24	20.12	20.24	20.25	21	1		
20	QPSK	50	50	20.16	20.24	20.23				
20	QPSK	100	0	20.07	20.17	20.14	20	2		
20	16QAM	1	0	20.20	20.25	20.27				
20	16QAM	1	49	20.17	20.23	20.25	21	3		
20	16QAM	1	99	20.16	20.22	20.27				
20	16QAM	50	0	19.13	19.21	19.26	20	2		
20	16QAM	50	24	19.07	19.15	19.17				
20	16QAM	50	50	19.14	19.22	19.21	17	5		
20	16QAM	100	0	18.78	18.92	18.89				
20	64QAM	1	0	19.57	19.67	19.82	20	2		
20	64QAM	1	49	19.53	19.64	19.65				
20	64QAM	1	99	19.49	19.65	19.64	19	3		
20	64QAM	50	0	18.08	18.23	18.25				
20	64QAM	50	24	18.15	18.21	18.23	17	5		
20	64QAM	50	50	18.11	18.17	18.12				
20	64QAM	100	0	17.81	17.90	17.94	20	2		
20	256QAM	1	0	16.08	16.21	16.16				
20	256QAM	1	49	16.12	16.18	16.14	17	5		
20	256QAM	1	99	16.04	16.20	16.19				
20	256QAM	50	0	16.20	16.25	16.20	17	5		
20	256QAM	50	24	16.20	16.24	16.22				
20	256QAM	50	50	16.08	16.17	16.22	17	5		
20	256QAM	100	0	16.09	16.23	16.24				
Channel				37625	38000	38175	Time-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2577.5	2595	2612.5				
15	QPSK	1	0	21.20	21.26	21.22	22	0		
15	QPSK	1	37	21.04	21.11	21.22				
15	QPSK	1	74	20.96	21.10	21.26	21	1		
15	QPSK	36	0	20.09	20.15	20.22				
15	QPSK	36	20	20.04	20.25	20.21	21	1		
15	QPSK	36	39	20.13	20.22	20.33				
15	QPSK	75	0	20.04	20.15	20.12	21	1		
15	16QAM	1	0	20.16	20.20	20.24				
15	16QAM	1	37	20.11	20.18	20.25	20	2		
15	16QAM	1	74	20.09	20.14	20.26				
15	16QAM	36	0	19.11	19.19	19.26	19	3		
15	16QAM	36	20	19.06	19.17	19.15				
15	16QAM	36	39	19.09	19.21	19.20	20	2		
15	16QAM	75	0	18.69	18.84	18.82				
15	64QAM	1	0	19.55	19.68	19.38	20	2		
15	64QAM	1	37	19.55	19.60	19.65				
15	64QAM	1	74	19.49	19.62	19.65	19	3		
15	64QAM	36	0	18.09	18.26	18.16				
15	64QAM	36	20	18.11	18.23	18.19	17	5		
15	64QAM	36	39	18.07	18.20	18.11				
15	64QAM	75	0	17.76	17.90	17.91	17	5		
15	256QAM	1	0	16.09	16.20	16.09				
15	256QAM	1	37	16.14	16.12	16.16	17	5		
15	256QAM	1	74	15.98	16.15	16.21				
15	256QAM	36	0	16.23	16.25	16.20	17	5		
15	256QAM	36	20	16.11	16.26	16.15				
15	256QAM	36	39	15.98	16.13	16.18	17	5		
15	256QAM	75	0	16.08	16.17	16.23				
Channel				37700	38000	38200	Time-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	21.18	21.25	21.19	22	0		
10	QPSK	1	25	21.08	21.10	21.22				
10	QPSK	1	49	20.95	21.11	21.27	21	1		
10	QPSK	25	0	20.05	20.20	20.28				
10	QPSK	25	12	20.11	20.26	20.24	21	1		
10	QPSK	25	25	20.09	20.22	20.31				
10	QPSK	50	0	20.00	20.17	20.08	21	1		
10	16QAM	1	0	20.22	20.20	20.23				
10	16QAM	1	25	20.11	20.21	20.19	21	1		
10	16QAM	1	49	20.12	20.16	20.22				
10	16QAM	25	0	19.12	19.16	19.19	20	2		
10	16QAM	25	12	19.02	19.06	19.15				
10	16QAM	25	25	19.10	19.23	19.13	19	3		
10	16QAM	50	0	18.75	18.89	18.92				
10	64QAM	1	0	19.60	19.69	19.55	20	2		
10	64QAM	1	25	19.51	19.59	19.58				
10	64QAM	1	49	19.51	19.61	19.64	19	3		
10	64QAM	25	0	18.11	18.19	18.26				
10	64QAM	25	12	18.18	18.22	18.20	17	5		
10	64QAM	25	25	18.09	18.19	18.05				
10	64QAM	50	0	17.80	17.83	17.97	17	5		
10	256QAM	1	0	15.99	16.24	16.08				
10	256QAM	1	25	16.09	16.11	16.10	17	5		
10	256QAM	1	49	15.96	16.19	16.20				
10	256QAM	25	0	16.13	16.16	16.23	17	5		
10	256QAM	25	12	16.15	16.25	16.22				
10	256QAM	25	25	16.04	16.15	16.21	17	5		
10	256QAM	50	0	16.10	16.22	16.23				
Channel				37775	38000	38225	Time-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2572.5	2595	2617.5				
5	QPSK	1	0	21.17	21.21	21.24	22	0		
5	QPSK	1	12	21.14	21.15	21.20				
5	QPSK	1	24	20.97	21.12	21.22	21	1		
5	QPSK	12	0	20.10	20.18	20.26				
5	QPSK	12	7	20.04	20.23	20.25	21	1		
5	QPSK	12	13	20.17	20.29	20.33				
5	QPSK	25	0	20.02	20.14	20.09	21	1		
5	16QAM	1	0	20.12	20.26	20.29				
5	16QAM	1	12	20.20	20.22	20.19	20	2		
5	16QAM	1	24	20.10	20.15	20.20				
5	16QAM	12	0	19.14	19.21	19.17	19	3		
5	16QAM	12	7	18.98	19.18	19.10				
5	16QAM	12	13	19.12	19.15	19.24	20	2		
5	16QAM	25	0	18.75	18.91	18.89				
5	64QAM	1	0	19.53	19.65	19.55	20	2		
5	64QAM	1	12	19.50	19.58	19.59				
5	64QAM	1	24	19.45	19.59	19.56	19	3		
5	64QAM	12	0	18.10	18.21	18.19				
5	64QAM	12	7	18.08	18.19	18.15	19	3		
5	64QAM	12	13	18.07	18.18	18.05				
5	64QAM	25	0	17.73	17.88	17.86	17	5		
5	64QAM	25	12	17.75	17.86	17.83				
5	256QAM	1	0	16.10	16.25	16.13	17	5		
5	256QAM	1	12	16.06	16.18	16.15				
5	256QAM	1	24	16.05	16.15	16.20	17	5		
5	256QAM	12	0	16.13	16.16	16.14				
5	256QAM	12	7	16.22	16.25	16.21	17	5		
5	256QAM	12	13	16.18	16.26	16.24				
5	256QAM	25	0	16.01	16.23	16.24	17	5		
5	256QAM	25	12	16.02	16.25	16.21				



Band 2 Ant3 DS14 Other PA									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Middle Ch / Freq.	Power High Ch / Freq.	Turn-on time (ms)	APRS (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	23.84	23.82	23.92			
20	QPSK	1	8	23.75	23.85	24.00	24.5	0	
20	QPSK	1	96	23.68	23.81	23.91			
20	QPSK	50	0	22.63	22.65	22.84			
20	QPSK	50	24	22.54	22.74	22.72	23.5	1	
20	QPSK	50	50	22.55	22.78	22.78			
20	QPSK	100	0	22.54	22.74	22.72			
20	QPSK	100	0	22.38	22.58	22.51			
20	16QAM	1	49	22.30	22.51	22.48	23.5	1	
20	16QAM	1	99	22.28	22.54	22.48			
20	16QAM	50	0	21.48	21.72	21.74			
20	16QAM	50	24	21.54	21.69	21.80	22.5	2	
20	16QAM	50	50	21.47	21.71	21.68			
20	16QAM	100	0	20.48	20.74	20.69			
20	16QAM	50	24	20.57	20.71	20.95	21.5	3	
20	16QAM	50	50	20.58	20.70	20.71			
20	16QAM	100	0	20.48	20.67	20.59			
20	256QAM	1	49	18.42	18.62	18.58			
20	256QAM	1	99	18.44	18.62	18.62	19.5	5	
20	256QAM	50	0	18.45	18.62	18.60			
20	256QAM	50	24	18.49	18.72	18.71	19.5	5	
20	256QAM	50	50	18.41	18.67	18.66			
20	256QAM	100	0	18.45	18.60	18.64			
Channel									
Frequency (MHz)									
				1857.5	1860	1902.5			
15	QPSK	1	0	23.85	23.81	23.85			
15	QPSK	1	37	23.75	23.49	23.49	24.5	0	
15	QPSK	1	74	23.60	23.67	23.86			
15	QPSK	36	0	22.61	22.63	22.77			
15	QPSK	36	20	22.48	22.74	22.68	23.5	1	
15	QPSK	36	36	22.55	22.72	22.70			
15	QPSK	75	0	22.57	22.71	22.69			
15	16QAM	1	0	22.35	22.32	22.43	23.5	1	
15	16QAM	1	37	22.23	22.48	22.39			
15	16QAM	1	74	22.25	22.45	22.40			
15	16QAM	36	0	21.50	21.67	21.66			
15	16QAM	36	20	21.51	21.60	21.59	22.5	2	
15	16QAM	36	36	21.45	21.68	21.62			
15	16QAM	75	0	21.45	21.68	21.62			
15	16QAM	1	0	21.62	21.82	21.84	22.5	2	
15	16QAM	1	37	21.57	21.70	21.84			
15	16QAM	1	74	21.58	21.75	21.80			
15	16QAM	36	0	20.48	20.74	20.68			
15	16QAM	36	20	20.58	20.64	20.84	21.5	3	
15	16QAM	36	36	20.58	20.69	20.69			
15	16QAM	75	0	20.47	20.68	20.62			
15	256QAM	1	0	18.41	18.62	18.58			
15	256QAM	1	37	18.41	18.58	18.51	19.5	5	
15	256QAM	1	74	18.41	18.64	18.53			
15	256QAM	36	0	18.45	18.61	18.58			
15	256QAM	36	20	18.51	18.70	18.65	19.5	5	
15	256QAM	36	36	18.39	18.58	18.59			
15	256QAM	75	0	18.43	18.61	18.66			
Channel									
Frequency (MHz)									
				1857.5	1860	1902.5	Turn-on time (ms)	APRS (dB)	
10	QPSK	1	0	23.82	23.84	23.95			
10	QPSK	1	25	23.72	23.84	23.98	24.5	0	
10	QPSK	1	49	23.62	23.85	23.91			
10	QPSK	25	0	22.68	22.68	22.78			
10	QPSK	25	12	22.48	22.78	22.68	23.5	1	
10	QPSK	25	25	22.50	22.79	22.76			
10	QPSK	50	0	22.62	22.74	22.72			
10	16QAM	1	0	22.31	22.59	22.53			
10	16QAM	1	25	22.32	22.48	22.44	23.5	1	
10	16QAM	1	49	22.23	22.45	22.40			
10	16QAM	25	0	21.25	21.50	21.50			
10	16QAM	25	12	21.25	21.42	21.25	22.5	2	
10	16QAM	25	25	21.20	21.39	21.24			
10	16QAM	50	0	21.21	21.36	21.40			
10	16QAM	50	0	21.18	21.40	21.37			
10	16QAM	1	0	21.37	21.58	21.44	22.5	2	
10	16QAM	1	36	21.34	21.48	21.58			
10	16QAM	1	49	21.30	21.44	21.47			
10	16QAM	25	0	20.12	20.30	20.33			
10	16QAM	25	12	20.27	20.29	20.38	21.5	3	
10	16QAM	25	25	20.13	20.34	20.22			
10	16QAM	50	0	20.28	20.47	20.39			
10	256QAM	1	0	18.31	18.55	18.45			
10	256QAM	1	25	18.37	18.49	18.37	19.5	5	
10	256QAM	1	49	18.25	18.48	18.45			
10	256QAM	25	0	18.41	18.44	18.45			
10	256QAM	25	12	18.36	18.53	18.51	19.5	5	
10	256QAM	25	25	18.35	18.47	18.42			
10	256QAM	50	0	18.35	18.52	18.51			
Channel									
Frequency (MHz)									
				1857.5	1860	1902.5	Turn-on time (ms)	APRS (dB)	
5	QPSK	1	0	23.77	23.84	23.92			
5	QPSK	1	12	23.59	23.55	23.67	24.5	0	
5	QPSK	1	24	23.57	23.65	23.58			
5	QPSK	12	0	22.36	22.45	22.38			
5	QPSK	12	7	22.45	22.78	22.63	23.5	1	
5	QPSK	12	13	22.59	22.71	22.73			
5	QPSK	25	0	22.66	22.70	22.74			
5	16QAM	1	0	22.38	22.50	22.45			
5	16QAM	1	12	22.30	22.60	22.48	23.5	1	
5	16QAM	1	24	22.23	22.43	22.41			
5	16QAM	12	0	21.45	21.67	21.74			
5	16QAM	12	7	21.54	21.65	21.62	22.5	2	
5	16QAM	12	13	21.41	21.72	21.69			
5	16QAM	25	0	21.49	21.65	21.51			
5	16QAM	1	0	21.62	21.81	21.81	22.5	2	
5	16QAM	1	12	21.61	21.82	21.88			
5	16QAM	1	24	21.58	21.84	21.77			
5	16QAM	12	0	20.44	20.65	20.65			
5	16QAM	12	7	20.54	20.67	20.64	21.5	3	
5	16QAM	12	13	20.58	20.63	20.68			
5	256QAM	1	0	18.41	18.58	18.51			
5	256QAM	1	12	18.39	18.63	18.60	19.5	5	
5	256QAM	1	24	18.40	18.62	18.54			
5	256QAM	12	0	18.52	18.68	18.65			
5	256QAM	12	7	18.48	18.65	18.60	19.5	5	
5	256QAM	12	13	18.33	18.56	18.54			
5	256QAM	25	0	18.41	18.70	18.58			
Channel									
Frequency (MHz)									
				1857.5	1860	1902.5	Turn-on time (ms)	APRS (dB)	
3	QPSK	1	0	23.77	23.84	23.92			
3	QPSK	1	8	23.73	23.89	23.89	24.5	0	
3	QPSK	1	14	23.68	23.67	23.89			
3	QPSK	8	0	22.62	22.65	22.77			
3	QPSK	8	4	22.51	22.72	22.64	23.5	1	
3	QPSK	8	7	22.49	22.69	22.70			
3	QPSK	15	0	22.46	22.71	22.63			
3	16QAM	1	0	22.40	22.59	22.50			
3	16QAM	1	8	22.32	22.44	22.41	23.5	1	
3	16QAM	1	14	22.27	22.53	22.48			
3	16QAM	8	0	21.50	21.72	21.77			
3	16QAM	8	4	21.55	21.65	21.54	22.5	2	
3	16QAM	8	7	21.39	21.63	21.68			
3	16QAM	15	0	21.44	21.72	21.69	22.5	2	
3	16QAM	1	0	21.45	21.81	21.82			
3	16QAM	1	22	21.47	21.64	21.62			
3	16QAM	1	5	21.43	21.69	21.59	21.5	3	
3	16QAM	3	0	21.64	21.89	21.82			
3	16QAM	3	7	21.60	21.82	21.82			
3	16QAM	3	13	21.65	21.80	21.77	21.5	3	
3	16QAM	3	20	21.60	21.80	20.88			
3	16QAM	15	0	20.48	20.68	20.62			
3	256QAM	1	0	18.37	18.58	18.53			
3	256QAM	1	14	18.44	18.61	18.54	19.5	5	
3	256QAM	8	0	18.41	18.64	18.54			
3	256QAM	8	4	18.35	18.61	18.66	19.5	5	
3	256QAM	8	7	18.35	18.61	18.66			
3	256QAM	15	0	18.38	18.71	18.69			
3	256QAM	15	7	18.39	18.68	18.69			
3	256QAM	1	0	18.36	18.71	18.59	19.5	5	

Band 38 Ant3 DS14 Other PA									
BW [MHz]	Modulat on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				37650	38000	38150			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	0	24.43	24.58	24.47			
20	QPSK	1	49	24.48	24.55	24.47		25	0
20	QPSK	1	99	23.96	24.08	23.96			
20	QPSK	50	0	23.34	23.43	23.33			
20	QPSK	50	24	23.32	23.40	23.26		24	1
20	QPSK	50	50	23.26	23.35	23.27			
20	QPSK	100	0	23.31	23.41	23.32			
20	16QAM	1	0	23.20	23.26	23.17			
20	16QAM	1	49	23.19	23.27	23.15		24	1
20	16QAM	50	24	23.14	23.20	23.10			
20	16QAM	50	0	22.25	22.41	22.33			
20	16QAM	50	24	22.25	22.40	22.29			
20	16QAM	50	50	22.38	22.42	22.31		23	2
20	16QAM	100	0	22.31	22.44	22.35			
20	64QAM	1	0	22.38	22.52	22.42			
20	64QAM	1	49	22.38	22.48	22.41		23	2
20	64QAM	1	99	22.34	22.46	22.41			
20	64QAM	50	0	21.32	21.41	21.26			
20	64QAM	50	24	21.28	21.36	21.21		22	3
20	64QAM	50	50	21.28	21.35	21.26			
20	64QAM	100	0	21.40	21.48	21.35			
20	256QAM	1	0	19.24	19.39	19.33			
20	256QAM	1	49	19.25	19.38	19.23		20	5
20	256QAM	1	99	19.31	19.38	19.25			
20	256QAM	50	0	19.29	19.42	19.27			
20	256QAM	50	24	19.24	19.38	19.24		20	5
20	256QAM	50	50	19.34	19.41	19.35			
20	256QAM	100	0	19.40	19.46	19.31			
Channel				37650	38000	38150	Hardware limit (dBm)	MPR (dB)	
Frequency (MHz)				2577.5	2595	2612.5			
15	QPSK	1	0	24.34	24.53	24.47		25	0
15	QPSK	1	37	24.45	24.51	24.39			
15	QPSK	1	74	23.95	24.00	23.88			
15	QPSK	36	0	23.31	23.36	23.29			
15	QPSK	36	20	23.26	23.32	23.27		24	1
15	QPSK	36	39	23.25	23.26	23.27			
15	QPSK	75	0	23.26	23.43	23.34			
15	16QAM	1	0	23.17	23.19	23.09			
15	16QAM	1	37	23.16	23.30	23.11		24	1
15	16QAM	1	74	23.09	23.11	23.07			
15	16QAM	36	0	22.20	22.38	22.34			
15	16QAM	36	20	22.23	22.40	22.34			
15	16QAM	36	39	22.29	22.41	22.29		23	2
15	16QAM	75	0	22.32	22.41	22.32			
15	64QAM	1	0	22.36	22.51	22.45			
15	64QAM	1	37	22.39	22.48	22.44		23	2
15	64QAM	1	74	22.34	22.40	22.36			
15	64QAM	36	0	21.32	21.40	21.25			
15	64QAM	36	20	21.19	21.36	21.12		22	3
15	64QAM	36	39	21.28	21.32	21.18			
15	64QAM	75	0	21.37	21.41	21.37			
15	256QAM	1	0	19.24	19.36	19.27			
15	256QAM	1	37	19.27	19.35	19.21		20	5
15	256QAM	1	74	19.29	19.36	19.24			
15	256QAM	36	0	19.29	19.42	19.30			
15	256QAM	36	20	19.16	19.39	19.26		20	5
15	256QAM	36	39	19.29	19.36	19.30			
15	256QAM	75	0	19.32	19.48	19.34			
Channel				37600	38000	38050	Hardware limit (dBm)	MPR (dB)	
Frequency (MHz)				2471.5	2495	2518.5			
10	QPSK	1	0	24.43	24.52	24.38		25	0
10	QPSK	1	25	24.38	24.47	24.44			
10	QPSK	1	49	23.97	23.99	23.96			
10	QPSK	25	0	23.25	23.39	23.27			
10	QPSK	25	12	23.28	23.36	23.29		24	1
10	QPSK	25	25	23.25	23.35	23.26			
10	QPSK	50	0	23.29	23.39	23.26			
10	16QAM	1	0	23.11	23.24	23.09			
10	16QAM	1	25	23.20	23.26	23.16		24	1
10	16QAM	1	49	23.17	23.14	23.02			
10	16QAM	25	0	22.25	22.41	22.35			
10	16QAM	25	12	22.26	22.33	22.24		23	2
10	16QAM	25	25	22.32	22.41	22.23			
10	16QAM	50	0	22.34	22.37	22.37			
10	64QAM	1	0	22.34	22.51	22.39			
10	64QAM	1	25	22.34	22.44	22.40		23	2
10	64QAM	1	49	22.35	22.41	22.38			
10	64QAM	25	0	21.24	21.39	21.17			
10	64QAM	25	12	21.25	21.31	21.21		22	3
10	64QAM	25	25	21.25	21.35	21.25			
10	64QAM	50	0	21.42	21.44	21.27			
10	256QAM	1	0	19.23	19.42	19.35			
10	256QAM	1	25	19.27	19.38	19.25		20	5
10	256QAM	1	49	19.32	19.35	19.16			
10	256QAM	25	0	19.24	19.42	19.24			
10	256QAM	25	12	19.26	19.41	19.26		20	5
10	256QAM	25	25	19.26	19.34	19.36			
10	256QAM	50	0	19.41	19.46	19.31			
Channel				37775	38000	38025	Hardware limit (dBm)	MPR (dB)	
Frequency (MHz)				2572.5	2595	2617.5			
5	QPSK	1	0	24.37	24.54	24.49		25	0
5	QPSK	1	12	24.36	24.48	24.42			
5	QPSK	1	24	23.97	24.09	23.89			
5	QPSK	12	0	23.27	23.42	23.34			
5	QPSK	12	7	23.35	23.36	23.20		24	1
5	QPSK	12	13	23.22	23.30	23.26			
5	QPSK	25	0	23.22	23.41	23.30			
5	16QAM	1	0	23.22	23.25	23.15			
5	16QAM	1	12	23.14	23.29	23.15		24	1
5	16QAM	1	24	23.17	23.23	23.06			
5	16QAM	12	0	22.21	22.41	22.33			
5	16QAM	12	7	22.18	22.36	22.23		23	2
5	16QAM	12	13	22.36	22.35	22.24			
5	16QAM	25	0	22.29	22.41	22.35			
5	64QAM	1	0	22.30	22.53	22.35			
5	64QAM	1	12	22.39	22.42	22.37		23	2
5	64QAM	1	24	22.28	22.43	22.36			
5	64QAM	12	0	21.24	21.44	21.22			
5	64QAM	12	7	21.31	21.30	21.21		22	3
5	64QAM	12	13	21.22	21.28	21.24			
5	64QAM	25	0	21.36	21.42	21.37			
5	256QAM	1	0	19.21	19.38	19.27			
5	256QAM	1	12	19.22	19.36	19.23		20	5
5	256QAM	1	24	19.27	19.32	19.19			
5	256QAM	12	0	19.20	19.38	19.21			
5	256QAM	12	7	19.22	19.40	19.20		20	5
5	256QAM	12	13	19.30	19.34	19.29			
5	256QAM	25	0	19.38	19.44	19.22			

Band 41 Ant3 DS14 Other PA												
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Mod Ch [FHz]	Power Low Mod Ch [FHz]	Power High Mod Ch [FHz]	Power High Mod Ch [FHz]	Tune-up limit (dBm)	MPR (dB)			
Channel				39750	40165	40620	41055	41490				
Frequency (MHz)				2506	2549.5	2593	2636.5	2680				
20	QPSK	1	0	24.17	24.15	24.55	24.15	24.34	25	0		
20	QPSK	1	49	24.11	24.16	24.42	24.09	24.30				
20	QPSK	1	99	24.13	24.15	24.50	24.12	24.32				
20	QPSK	50	0	23.17	23.20	23.51	23.18	23.38	24	1		
20	QPSK	50	24	23.07	23.13	23.41	23.09	23.28				
20	QPSK	50	50	23.14	23.14	23.46	23.10	23.37				
20	16QAM	1	0	23.13	23.11	23.43	23.14	23.30	24	1		
20	16QAM	1	49	23.12	23.14	23.38	23.15	23.28				
20	16QAM	50	24	22.17	23.10	23.49	23.15	23.35				
20	16QAM	50	0	22.22	22.23	22.51	22.19	22.25	23			
20	16QAM	50	24	22.09	22.12	22.43	22.10	22.23				
20	16QAM	50	50	22.15	22.15	22.44	22.13	22.37				
20	16QAM	100	0	22.24	22.18	22.55	22.06	22.33	23			
20	64QAM	1	0	22.18	22.11	22.40	22.08	22.33				
20	64QAM	1	49	22.09	22.09	22.34	22.11	22.20				
20	64QAM	1	99	22.17	22.13	22.51	22.07	22.33	22	3		
20	64QAM	50	0	21.20	21.24	21.52	21.20	21.35				
20	64QAM	50	24	21.02	21.11	21.42	21.14	21.25				
20	64QAM	50	50	21.11	21.10	21.42	21.07	21.36	20	5		
20	64QAM	100	0	21.25	21.19	21.54	21.12	21.37				
20	256QAM	1	0	19.22	19.19	19.47	19.22	19.36				
20	256QAM	1	49	19.04	19.16	19.41	19.13	19.24	20	5		
20	256QAM	1	99	19.16	19.14	19.49	19.13	19.36				
20	256QAM	50	0	19.18	19.21	19.59	19.07	19.37				
20	256QAM	50	24	19.16	19.11	19.47	19.19	19.26	20	5		
20	256QAM	50	50	19.17	19.11	19.40	19.16	19.30				
20	256QAM	100	0	19.23	19.15	19.54	19.11	19.31				
Frequency (MHz)				2506	2549.5	2593	2636.5	2680	Tune-up limit (dBm)	MPR (dB)		
15	QPSK	1	0	24.14	24.09	24.47	24.05	24.33	25	0		
15	QPSK	1	37	24.12	24.11	24.33	24.10	24.33				
15	QPSK	1	74	24.13	24.13	24.51	24.03	24.32				
15	QPSK	36	0	23.12	23.20	23.49	23.14	23.38	24	1		
15	QPSK	36	20	23.03	23.09	23.36	23.09	23.27				
15	QPSK	36	36	23.14	23.14	23.48	23.12	23.34				
15	QPSK	75	0	23.17	23.12	23.55	23.13	23.34	24	1		
15	16QAM	1	0	23.13	23.13	23.47	23.14	23.34				
15	16QAM	1	37	23.06	23.10	23.37	23.16	23.35				
15	16QAM	1	74	23.06	23.01	23.51	23.11	23.32	23	2		
15	16QAM	36	0	22.20	22.20	22.54	22.14	22.31				
15	16QAM	36	36	22.09	22.09	22.39	22.12	22.32				
15	16QAM	36	39	22.08	22.12	22.44	22.05	22.32	22			
15	16QAM	75	0	22.20	22.07	22.48	22.04	22.34				
15	64QAM	1	0	22.09	22.08	22.33	22.03	22.31				
15	64QAM	1	37	22.04	22.11	22.33	22.06	22.27	22	3		
15	64QAM	1	74	22.17	22.07	22.47	22.07	22.27				
15	64QAM	36	0	21.14	21.19	21.45	21.15	21.28				
15	64QAM	36	20	20.98	21.14	21.37	21.06	21.18	22	3		
15	64QAM	36	39	20.86	21.13	21.42	21.09	21.27				
15	64QAM	75	0	21.15	21.14	21.47	21.11	21.31				
15	256QAM	1	0	19.25	19.15	19.43	19.14	19.29	20	5		
15	256QAM	1	37	16.87	16.07	16.40	19.15	19.16				
15	256QAM	1	74	19.14	19.06	19.49	19.13	19.34				
15	256QAM	36	0	19.17	19.17	19.58	19.06	19.35	20	5		
15	256QAM	36	20	19.17	19.03	19.41	19.11	19.22				
15	256QAM	36	39	19.11	19.05	19.32	19.13	19.28				
15	256QAM	75	0	19.12	19.17	19.56	19.03	19.35	20	5		
Frequency (MHz) <td>39750</td> <td>40165</td> <td>40620</td> <td>41055</td> <td>41490</td> <td>Tune-up limit (dBm)</td> <td>MPR (dB)</td>				39750	40165	40620	41055	41490			Tune-up limit (dBm)	MPR (dB)
10	QPSK	1	0	24.15	24.13	24.59	24.08	24.30			25	0
10	QPSK	1	25	24.09	24.10	24.45	24.10	24.28				
10	QPSK	1	49	24.13	24.18	24.52	24.07	24.29				
10	QPSK	25	0	23.15	23.18	23.54	23.13	23.36	24	1		
10	QPSK	25	13	23.03	23.15	23.36	23.01	23.26				
10	QPSK	50	0	23.20	23.18	23.49	23.05	23.37				
10	16QAM	1	0	23.15	23.10	23.43	23.13	23.31	24	1		
10	16QAM	1	49	23.13	23.15	23.35	23.10	23.29				
10	16QAM	25	0	22.21	22.20	22.52	22.13	22.27				
10	16QAM	25	12	22.09	22.12	22.40	22.08	22.24	23	2		
10	16QAM	25	12	22.12	22.15	22.47	22.12	22.37				
10	16QAM	50	0	22.26	22.09	22.50	22.04	22.28				
10	64QAM	1	0	22.20	22.07	22.47	22.07	22.32	22	2		
10	64QAM	1	25	22.03	22.01	22.31	22.08	22.21				
10	64QAM	25	0	21.23	21.23	21.50	21.12	21.36				
10	64QAM	25	12	21.03	21.03	21.37	21.15	21.26	20	5		
10	64QAM	25	25	21.10	21.11	21.39	21.07	21.36				
10	64QAM	50	0	21.18	21.21	21.54	21.12	21.36				
10	16QAM	1	0	19.14	19.12	19.39	19.15	19.28	20	5		
10	16QAM	1	25	19.06	19.15	19.44	19.06	19.22				
10	256QAM	1	49	19.13	19.13	19.48	19.02	19.37				
10	256QAM	25	0	19.17	19.23	19.58	19.03	19.34	20	5		
10	256QAM	25	12	19.11	19.04	19.42	19.03	19.27				
10	256QAM	25	25	19.17	19.13	19.39	19.16	19.27				
Channel				39750	40165	40620	41055	41490	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2506	2549.5	2593	2636.5	2680				
5	QPSK	1	0	24.10	24.15	24.40	24.09	24.30	25	0		
5	QPSK	1	12	24.09	24.16	24.36	24.01	24.32				
5	QPSK	1	24	24.07	24.14	24.42	24.09	24.32				
5	QPSK	12	0	23.12	23.12	23.44	23.14	23.23	24	1		
5	QPSK	12	13	23.05	23.07	23.38	23.13	23.23				
5	QPSK	25	0	23.20	23.16	23.55	23.03	23.35				
5	16QAM	1	0	23.10	23.08	23.41	23.09	23.30	23	2		
5	16QAM	1	12	23.08	23.08	23.37	23.12	23.25				
5	16QAM	1	24	23.09	23.09	23.11	23.52	23.20				
5	16QAM	12	0	22.20	22.24	22.44	22.16	22.28	23	2		
5	16QAM	12	7	22.02	22.10	22.43	22.12	22.36				
5	16QAM	12	13	22.12	22.06	22.42	22.09	22.28				
5	64QAM	1	0	22.18	22.19	22.46	22.01	22.34	23	2		
5	64QAM	1	0	22.14	22.08	22.34	22.04	22.27				
5	64QAM	1	12	22.09	22.04	22.34	22.12	22.24				
5	64QAM	1	24	22.09	22.04	22.43	22.03	22.16	22	3		
5	64QAM	12	0	21.12	21.27	21.51	21.13	21.37				
5	64QAM	12	7	21.04	21.13	21.44	21.09	21.18				
5	64QAM	12	13	21.08	21.13	21.41	21.01	21.36	20	5		
5	64QAM	25	0	21.20	21.21	21.47	21.04	21.36				
5	256QAM	1	0	19.16	19.16	19.41	19.11	19.37				
5	256QAM	1	12	19.06	19.16	19.33	19.10	19.15	20	5		
5	256QAM	1	24	19.19	19.11	19.46	19.11	19.29				
5	256QAM	12	0	19.17	19.22	19.51	19.08	19.37				
5	256QAM	12	7	19.07	19.08	19.40	19.07	19.27	20	5		
5	256QAM	12	13	19.12	19.06	19.43	19.05	19.26				
5	256QAM	25	0	19.08	19.15	19.49	19.09	19.26				

Band 7 Ant4 DSI4 Other PA									
BW (MHz)	Module on Channel	RB Size	RB Offset	Power Limit Ch / Freq, 20860	Power Limit Ch / Freq, 21100	Power Limit Ch / Freq, 21350	Tune-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)				2507.5	2535	2560			
20	QPSK	1	0	20.37	20.58	20.36	21.5	0	
20	QPSK	1	49	20.27	20.51	20.32			
20	QPSK	1	99	20.21	20.30	20.30			
20	QPSK	50	0	20.27	20.37	20.36	21.5	0	
20	QPSK	50	24	20.22	20.31	20.22			
20	QPSK	50	50	20.13	20.18	20.07			
20	QPSK	100	0	20.26	20.40	20.32	21.5	0	
20	16QAM	1	0	20.21	20.14	20.03			
20	16QAM	1	49	20.16	20.26	20.04			
20	16QAM	1	99	20.21	20.16	20.00	21.5	0	
20	16QAM	50	0	20.14	20.19	20.15			
20	16QAM	50	24	20.19	20.34	20.05			
20	16QAM	50	50	20.19	20.25	20.23	21.5	0	
20	16QAM	100	0	20.15	20.16	20.15			
20	64QAM	1	0	20.27	20.55	20.27			
20	64QAM	1	49	20.44	20.37	20.37	21.5	0	
20	64QAM	1	99	20.28	20.42	20.33			
20	64QAM	50	0	20.28	20.40	20.28			
20	64QAM	50	24	20.14	20.21	20.18	21.5	0	
20	64QAM	50	50	20.04	20.31	20.11			
20	64QAM	100	0	20.24	20.37	20.11			
20	256QAM	1	0	19.29	19.42	19.32	20.5	1	
20	256QAM	1	49	19.27	19.36	19.23			
20	256QAM	1	99	19.32	19.38	19.26			
20	256QAM	50	0	19.43	19.49	19.32	20.5	1	
20	256QAM	50	24	19.33	19.48	19.33			
20	256QAM	50	50	19.31	19.42	19.27			
20	256QAM	100	0	19.36	19.45	19.28			
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2507.5	2535	2562.5			
15	QPSK	1	0	20.39	20.39	20.31	21.5	0	
15	QPSK	1	37	20.15	20.23	20.30			
15	QPSK	1	74	20.07	20.25	20.30			
15	QPSK	36	0	20.19	20.24	20.16	21.5	0	
15	QPSK	36	20	20.09	20.19	20.05			
15	QPSK	36	39	20.19	20.22	20.03			
15	QPSK	75	0	20.15	20.20	20.16	21.5	0	
15	16QAM	1	0	19.95	20.12	20.01			
15	16QAM	1	37	19.92	20.10	19.83			
15	16QAM	1	74	19.88	20.04	19.96	21.5	0	
15	16QAM	36	0	20.17	20.14	20.07			
15	16QAM	36	20	20.07	20.04	19.80			
15	16QAM	36	39	20.06	20.16	19.88	21.5	0	
15	16QAM	75	0	20.15	20.21	19.91			
15	64QAM	1	0	20.15	20.29	20.26			
15	64QAM	1	37	20.29	20.41	20.16	21.5	0	
15	64QAM	1	74	20.11	20.18	20.17			
15	64QAM	36	0	20.09	20.24	20.09			
15	64QAM	36	20	19.98	20.02	19.96	21.5	0	
15	64QAM	36	39	20.01	20.01	19.96			
15	64QAM	75	0	20.30	20.16	20.21			
15	256QAM	1	0	19.25	19.37	19.29	20.5	1	
15	256QAM	1	37	19.28	19.34	19.21			
15	256QAM	1	74	19.33	19.33	19.28			
15	256QAM	36	0	19.37	19.46	19.29	20.5	1	
15	256QAM	36	20	19.29	19.39	19.25			
15	256QAM	36	39	19.27	19.36	19.23			
15	256QAM	75	0	19.30	19.42	19.20			
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	0	20.34	20.52	20.27	21.5	0	
10	QPSK	1	25	20.19	20.46	20.19			
10	QPSK	1	49	20.24	20.22	20.20			
10	QPSK	25	0	20.10	20.29	20.26	21.5	0	
10	QPSK	25	12	20.17	20.16	20.10			
10	QPSK	25	25	20.14	20.13	20.08			
10	QPSK	50	0	20.14	20.31	20.08	21.5	0	
10	16QAM	1	0	19.96	20.13	20.00			
10	16QAM	1	25	19.90	20.09	19.91			
10	16QAM	1	49	20.09	20.16	19.88	21.5	0	
10	16QAM	25	0	20.20	20.15	20.14			
10	16QAM	25	12	20.01	20.24	19.98			
10	16QAM	25	25	19.94	20.08	20.13	21.5	0	
10	16QAM	50	0	20.16	20.23	19.93			
10	64QAM	1	0	20.28	20.36	20.14			
10	64QAM	1	25	20.34	20.36	20.34	21.5	0	
10	64QAM	1	49	20.07	20.26	20.05			
10	64QAM	25	0	20.03	20.27	20.04			
10	64QAM	25	12	20.02	20.19	20.00	21.5	0	
10	64QAM	25	25	19.90	20.18	19.86			
10	64QAM	50	0	20.25	20.16	20.04			
10	256QAM	1	0	19.23	19.37	19.31	20.5	1	
10	256QAM	1	25	19.23	19.36	19.17			
10	256QAM	1	49	19.31	19.37	19.19			
10	256QAM	25	0	19.35	19.47	19.30	20.5	1	
10	256QAM	25	12	19.31	19.40	19.28			
10	256QAM	25	25	19.31	19.40	19.20			
10	256QAM	50	0	19.35	19.42	19.29			
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	20.23	20.36	20.25	21.5	0	
5	QPSK	1	12	20.19	20.49	20.34			
5	QPSK	1	24	20.23	20.34	20.28			
5	QPSK	12	0	20.17	20.26	20.20	21.5	0	
5	QPSK	12	7	20.28	20.32	20.04			
5	QPSK	12	13	19.98	20.06	20.09			
5	QPSK	25	0	20.23	20.25	20.19	21.5	0	
5	16QAM	1	0	20.07	20.23	20.05			
5	16QAM	1	12	20.01	20.11	19.88			
5	16QAM	1	24	19.99	20.03	19.93	21.5	0	
5	16QAM	12	0	20.02	20.24	19.95			
5	16QAM	12	7	20.15	20.19	20.10			
5	16QAM	12	13	20.17	20.18	19.97	21.5	0	
5	16QAM	25	0	20.04	20.25	19.98			
5	64QAM	1	0	20.16	20.36	20.29			
5	64QAM	1	12	20.35	20.36	20.30	21.5	0	
5	64QAM	1	24	20.16	20.36	20.26			
5	64QAM	12	0	20.07	20.24	20.17			
5	64QAM	12	7	20.11	20.18	19.85	21.5	0	
5	64QAM	12	13	20.06	20.15	20.03			
5	64QAM	25	0	20.14	20.33	20.13			
5	256QAM	1	0	19.21	19.41	19.29	20.5	1	
5	256QAM	1	12	19.30	19.36	19.26			
5	256QAM	1	24	19.29	19.30	19.25			
5	256QAM	12	0	19.40	19.49	19.29	20.5	1	
5	256QAM	12	7	19.31	19.42	19.20			
5	256QAM	12	13	19.26	19.36	19.20			
5	256QAM	25	0	19.28	19.41	19.24			

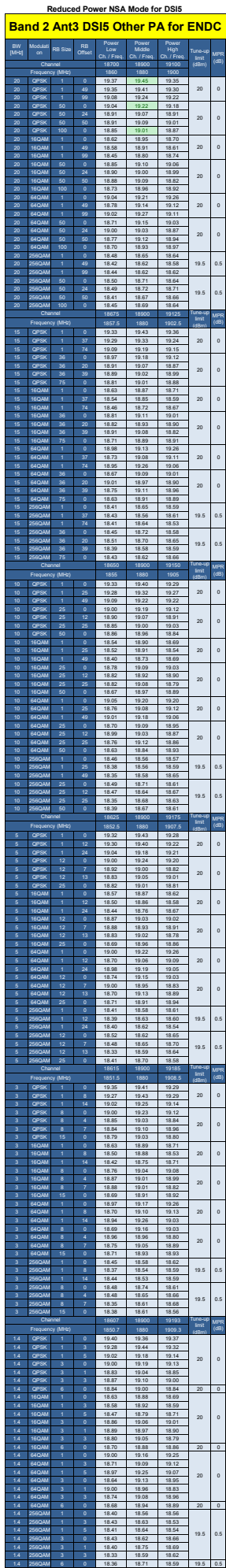
Band 7 Ant4 DSI4 Other PA-1									
BW (MHz)	Module on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				20850	21100	21350			
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	0	20.48	20.57	20.44	21.5	0	
20	QPSK	1	49	20.37	20.48	20.42			
20	QPSK	1	99	20.42	20.47	20.23	21.5	0	
20	QPSK	50	0	20.30	20.50	20.33			
20	QPSK	50	24	20.22	20.47	20.34	21.5	0	
20	QPSK	50	24	20.22	20.47	20.34			
20	QPSK	100	0	20.17	20.35	20.17	21.5	0	
20	16QAM	1	0	20.07	20.27	20.24			
20	16QAM	1	49	20.09	20.20	19.91	21.5	0	
20	16QAM	1	99	20.11	20.29	20.12			
20	16QAM	50	0	20.29	20.32	20.09	21.5	0	
20	16QAM	50	24	20.24	20.34	20.11			
20	16QAM	50	50	20.17	20.29	20.23	21.5	0	
20	16QAM	100	0	20.22	20.38	20.21			
20	64QAM	1	0	20.31	20.51	20.33	21.5	0	
20	64QAM	1	49	20.27	20.37	20.43			
20	64QAM	1	99	20.37	20.29	20.38	21.5	0	
20	64QAM	50	0	20.30	20.38	20.11			
20	64QAM	50	24	20.10	20.39	20.11	21.5	0	
20	64QAM	50	50	20.22	20.27	20.08			
20	64QAM	100	0	20.19	20.28	19.92	21.5	0	
20	25QAM	1	0	19.31	19.43	19.09			
20	25QAM	1	49	19.31	19.38	19.08	20.5	1	
20	25QAM	1	99	19.19	19.26	19.06			
20	25QAM	50	0	19.36	19.36	19.09	20.5	1	
20	25QAM	50	24	19.36	19.31	19.10			
20	25QAM	50	50	19.22	19.24	19.02	20.5	1	
20	25QAM	100	0	19.16	19.24	19.14			
Frequency (MHz)				2597.5	2535	2562.5	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	0	20.42	20.51	20.20	21.5	0	
15	QPSK	1	37	20.36	20.40	20.20			
15	QPSK	1	74	20.28	20.32	20.28	21.5	0	
15	QPSK	36	0	20.34	20.32	20.29			
15	QPSK	36	36	20.29	20.35	20.26	21.5	0	
15	QPSK	36	36	20.05	20.11	19.98			
15	QPSK	75	0	20.15	20.20	20.19	21.5	0	
15	16QAM	1	0	19.94	20.06	19.93			
15	16QAM	1	37	20.04	20.12	20.01	21.5	0	
15	16QAM	1	74	20.08	20.18	19.90			
15	16QAM	1	37	20.11	20.15	19.97	21.5	0	
15	16QAM	36	20	19.97	20.06	19.88			
15	16QAM	36	36	20.02	20.23	20.02	21.5	0	
15	16QAM	75	0	19.99	20.06	19.94			
15	16QAM	1	0	20.20	20.32	20.28	21.5	0	
15	16QAM	1	37	20.16	20.22	20.25			
15	16QAM	1	74	20.12	20.17	20.19	21.5	0	
15	16QAM	36	0	20.09	20.07	20.15			
15	16QAM	36	20	19.90	20.19	19.96	21.5	0	
15	64QAM	36	36	19.91	20.17	20.05			
15	64QAM	75	0	20.13	20.21	20.20	21.5	0	
15	64QAM	1	0	19.94	20.02	19.90			
15	25QAM	1	37	19.12	19.34	19.05	20.5	1	
15	25QAM	1	74	19.20	19.25	18.97			
15	25QAM	36	0	19.36	19.32	19.02	20.5	1	
15	25QAM	36	36	19.16	19.26	19.07			
15	25QAM	36	39	19.16	19.25	18.99	20.5	1	
15	25QAM	75	0	19.11	19.25	19.08			
Channel				20800	21100	21350	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2595	2535	2565			
10	QPSK	1	0	20.25	20.31	20.30	21.5	0	
10	QPSK	1	25	20.29	20.28	20.16			
10	QPSK	1	49	20.20	20.33	20.32	21.5	0	
10	QPSK	25	0	20.28	20.20	20.16			
10	QPSK	25	12	20.22	20.23	20.19	21.5	0	
10	QPSK	25	25	20.20	20.04	20.07			
10	QPSK	50	0	20.07	20.31	20.16	21.5	0	
10	16QAM	1	0	20.12	20.08	19.96			
10	16QAM	1	25	20.09	20.22	19.82	21.5	0	
10	16QAM	1	49	20.01	20.01	20.04			
10	16QAM	25	0	20.12	20.30	20.08	21.5	0	
10	16QAM	25	25	20.12	20.17	19.92			
10	16QAM	50	0	20.14	20.24	20.19	21.5	0	
10	64QAM	1	0	20.16	20.45	20.29			
10	64QAM	1	25	20.15	20.31	20.31	21.5	0	
10	64QAM	1	49	20.23	20.30	20.18			
10	64QAM	25	0	19.99	20.14	19.92	21.5	0	
10	64QAM	25	12	19.94	20.09	20.09			
10	64QAM	25	25	19.98	20.00	19.97	21.5	0	
10	64QAM	50	0	20.25	20.25	20.09			
10	25QAM	1	0	19.14	19.35	19.02	20.5	1	
10	25QAM	1	25	19.12	19.33	18.99			
10	25QAM	1	49	19.22	19.20	18.90	20.5	1	
10	25QAM	25	0	19.35	19.34	19.08			
10	25QAM	25	12	19.17	19.23	19.07	20.5	1	
10	25QAM	25	25	19.15	19.16	19.04			
10	25QAM	50	0	19.10	19.25	19.06	20.5	1	
Channel				20775	21100	21425			
Frequency (MHz)				2592.5	2535	2567.5			
5	QPSK	1	0	20.45	20.38	20.27	21.5	0	
5	QPSK	1	12	20.32	20.27	20.31			
5	QPSK	1	24	20.18	20.25	20.21	21.5	0	
5	QPSK	12	0	20.11	20.21	20.19			
5	QPSK	12	7	20.11	20.21	20.19	21.5	0	
5	QPSK	12	13	20.00	20.21	19.93			
5	QPSK	25	0	20.22	20.17	20.20	21.5	0	
5	16QAM	1	0	20.01	20.02	19.93			
5	16QAM	1	12	20.01	20.01	19.83	21.5	0	
5	16QAM	1	24	20.08	20.17	19.95			
5	16QAM	12	0	20.03	20.31	20.01	21.5	0	
5	16QAM	12	7	20.08	20.15	19.97			
5	16QAM	25	0	20.13	20.19	19.93	21.5	0	
5	16QAM	25	12	20.03	20.29	20.28			
5	64QAM	1	12	20.33	20.29	20.34	21.5	0	
5	64QAM	1	24	20.22	20.38	20.14			
5	64QAM	12	0	20.16	20.20	20.02	21.5	0	
5	64QAM	12	7	19.93	19.98	19.93			
5	64QAM	12	13	20.11	20.15	20.03	21.5	0	
5	25QAM	1	0	19.30	19.43	19.01			
5	25QAM	1	12	19.11	19.29	19.00	20.5	1	
5	25QAM	1	24	19.21	19.28	19.19			
5	25QAM	12	0	19.36	19.39	19.09	20.5	1	
5	25QAM	12	7	19.27	19.27	19.03			
5	25QAM	12	13	19.17	19.20	19.04	20.5	1	
5	25QAM	25	0	19.09	19.18	19.06			

Band 38 Ant4 DSI4 Other PA										
BW (MHz)	Modulat ion	RB Size	RB Offset	Power Low Ch./Freq	Power Main Ch./Freq	Power High Ch./Freq	Time-up limit (s/min)	MPR (dB)		
Channel				37650	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	20.12	20.18	19.96	21.5	0		
20	QPSK	1	49	20.05	20.12	19.91				
20	QPSK	1	99	19.97	20.07	19.82				
20	QPSK	50	0	20.04	20.17	19.80				
20	QPSK	50	24	19.90	20.00	19.68	21.5	0		
20	QPSK	50	50	19.74	19.81	19.54				
20	QPSK	100	0	19.92	20.03	19.72				
20	16QAM	1	0	20.03	20.13	19.87				
20	16QAM	1	49	19.97	20.03	19.77	21.5	0		
20	16QAM	1	99	19.95	20.03	19.80				
20	16QAM	50	0	20.07	20.15	19.84				
20	16QAM	50	24	20.01	20.08	19.82				
20	16QAM	50	50	20.04	20.08	19.88	21.5	0		
20	16QAM	100	0	20.01	19.98	19.91				
20	64QAM	1	0	20.10	20.16	20.04				
20	64QAM	1	49	19.92	20.10	19.76				
20	64QAM	1	99	20.05	20.15	20.01	21.5	0		
20	64QAM	50	0	20.07	20.14	19.88				
20	64QAM	50	24	20.04	20.14	19.82				
20	64QAM	50	50	20.05	20.13	19.85				
20	256QAM	1	0	19.10	19.21	18.95	20.5	1		
20	256QAM	1	49	19.07	19.19	18.84				
20	256QAM	1	99	19.09	19.18	18.86				
20	256QAM	50	0	19.02	19.15	18.80				
20	256QAM	50	24	18.99	19.05	18.79	20.5	1		
20	256QAM	50	50	19.01	19.05	18.82				
20	256QAM	100	0	19.10	19.20	18.94				
Channel <th>37625</th> <th>38000</th> <th>38175</th> <th>Time-up limit (s/min)</th> <th>MPR (dB)</th> <th colspan="2"></th>				37625	38000	38175			Time-up limit (s/min)	MPR (dB)
Frequency (MHz)				2577.5	2595	2612.5				
15	QPSK	1	0	19.83	20.10	19.81	21.5	0		
15	QPSK	1	37	19.98	20.09	19.69				
15	QPSK	1	74	19.99	20.02	19.80				
15	QPSK	36	0	20.00	20.01	19.73				
15	QPSK	36	20	19.94	20.08	19.66	21.5	0		
15	QPSK	36	39	19.94	19.98	19.75				
15	QPSK	75	0	19.89	20.02	19.69				
15	16QAM	1	0	19.99	20.06	19.92				
15	16QAM	1	37	20.01	20.00	19.94	21.5	0		
15	16QAM	1	74	19.96	19.92	19.91				
15	16QAM	36	0	19.94	20.12	19.83				
15	16QAM	36	20	20.03	19.90	19.82				
15	16QAM	36	39	19.84	19.99	19.67	21.5	0		
15	16QAM	75	0	19.88	20.04	19.80				
15	64QAM	1	0	20.01	19.96	20.08				
15	64QAM	1	37	19.88	20.09	20.06				
15	64QAM	1	74	20.01	20.17	19.99	21.5	0		
15	64QAM	36	0	19.91	20.11	19.83				
15	64QAM	36	20	19.94	20.04	19.77				
15	64QAM	36	39	19.93	20.00	19.81				
15	64QAM	75	0	19.96	20.17	19.84	20.5	1		
15	256QAM	1	0	19.06	19.20	18.88				
15	256QAM	1	37	19.02	19.20	18.79				
15	256QAM	1	74	19.12	19.11	18.87				
15	256QAM	36	0	18.97	19.13	18.71	20.5	1		
15	256QAM	36	20	18.99	19.06	18.73				
15	256QAM	36	39	19.02	18.99	18.79				
15	256QAM	75	0	19.08	19.15	18.96				
Channel				37700	38000	38200	Time-up limit (s/min)	MPR (dB)		
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	20.01	20.12	19.81	21.5	0		
10	QPSK	1	25	19.90	20.14	19.69				
10	QPSK	1	49	19.94	20.05	19.81				
10	QPSK	25	0	19.84	20.03	19.77				
10	QPSK	25	12	19.92	20.06	19.81	21.5	0		
10	QPSK	25	25	20.02	20.02	19.78				
10	QPSK	50	0	20.03	20.00	19.85				
10	16QAM	1	0	19.94	20.16	19.80				
10	16QAM	1	25	19.89	20.07	19.81	21.5	0		
10	16QAM	1	49	19.98	20.10	19.73				
10	16QAM	25	0	19.88	19.93	19.86				
10	16QAM	25	12	19.86	20.00	19.88				
10	16QAM	25	25	19.85	19.99	19.69	21.5	0		
10	16QAM	50	0	20.04	20.07	19.80				
10	64QAM	1	0	20.03	19.97	19.67				
10	64QAM	1	25	20.03	20.13	20.12				
10	64QAM	1	49	20.00	20.09	19.87	21.5	0		
10	64QAM	25	0	19.89	20.06	19.70				
10	64QAM	25	12	20.02	20.08	19.64				
10	64QAM	25	25	20.00	20.04	19.74				
10	64QAM	50	0	19.94	20.16	19.81	20.5	1		
10	256QAM	1	0	19.13	19.13	18.92				
10	256QAM	1	25	19.00	19.13	18.80				
10	256QAM	1	49	19.00	19.13	18.79				
10	256QAM	25	0	19.03	19.12	18.83	20.5	1		
10	256QAM	25	12	18.91	19.04	18.74				
10	256QAM	25	25	18.98	18.99	18.77				
10	256QAM	50	0	19.04	19.16	18.94				
Channel				37775	38000	38225	Time-up limit (s/min)	MPR (dB)		
Frequency (MHz)				2572.5	2595	2617.5				
5	QPSK	1	0	20.12	20.07	19.83	21.5	0		
5	QPSK	1	12	19.93	20.05	19.74				
5	QPSK	1	24	19.93	20.05	19.74				
5	QPSK	12	0	19.92	20.16	19.68				
5	QPSK	12	7	19.85	20.11	19.65	21.5	0		
5	QPSK	12	13	20.00	20.05	19.67				
5	QPSK	25	0	20.01	20.16	19.72				
5	16QAM	1	0	19.98	20.11	19.67				
5	16QAM	1	12	19.85	20.09	19.76	21.5	0		
5	16QAM	1	24	19.85	20.09	19.76				
5	16QAM	12	0	20.02	20.17	19.80				
5	16QAM	12	7	20.02	20.17	19.80				
5	16QAM	12	13	20.02	20.17	19.80	21.5	0		
5	64QAM	1	0	19.89	20.16	19.94				
5	64QAM	1	12	20.05	20.06	20.11				
5	64QAM	1	24	19.83	20.16	19.91				
5	64QAM	12	0	20.04	20.06	19.72	21.5	0		
5	64QAM	12	7	19.92	20.12	19.82				
5	64QAM	12	13	20.02	20.06	19.86				
5	64QAM	25	0	19.94	20.05	19.65				
5	256QAM	1	0	19.01	19.18	18.91	20.5	1		
5	256QAM	1	12	19.05	19.18	18.86				
5	256QAM	1	24	19.03	19.14	18.81				
5	256QAM	12	0	18.99	19.06	18.83				
5	256QAM	12	7	18.96	19.03	18.73	20.5	1		
5	256QAM	12	13	19.00	19.06	18.76				
5	256QAM	25	0	19.03	19.22	18.91				

Band 7 Ant5 DS14 Main PA-1												
BW (MHz)	Module on Channel	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)				
Channel				2500	2100	2130						
Frequency (MHz)				2510	2535	2560						
20	QPSK	1	0	18.67	18.85	18.75	20	0				
20	QPSK	1	49	18.61	18.79	18.71						
20	QPSK	1	99	18.70	18.78	18.73						
20	QPSK	50	0	18.68	18.73	18.84	20	0				
20	QPSK	50	24	18.70	18.66	18.68						
20	QPSK	50	50	18.51	18.59	18.65						
20	QPSK	100	0	18.50	18.57	18.50	20	0				
20	16QAM	1	0	18.64	18.67	18.55						
20	16QAM	1	49	18.63	18.84	18.60						
20	16QAM	1	99	18.55	18.83	18.66	20	0				
20	16QAM	50	0	18.70	18.73	18.69						
20	16QAM	50	24	18.66	18.66	18.60						
20	16QAM	50	50	18.57	18.63	18.68	20	0				
20	16QAM	100	0	18.73	18.70	18.63						
20	64QAM	1	0	18.62	18.61	18.63						
20	64QAM	1	49	18.58	18.61	18.63	20	0				
20	64QAM	1	99	18.56	18.84	18.61						
20	64QAM	50	0	17.68	17.65	17.66						
20	64QAM	50	24	17.58	17.67	17.66	19	1				
20	64QAM	50	50	17.58	17.64	17.60						
20	64QAM	100	0	17.53	17.61	17.53						
20	256QAM	1	0	15.62	15.70	15.70	17	3				
20	256QAM	1	49	15.59	15.61	15.58						
20	256QAM	1	99	15.59	15.64	15.64						
20	256QAM	50	0	15.58	15.62	15.63	17	3				
20	256QAM	50	24	15.65	15.68	15.71						
20	256QAM	50	50	15.58	15.56	15.50						
20	256QAM	100	0	15.67	15.73	15.69						
Channel				2507.5	2110	2137.5	Tune-up limit (dBm)	MPR (dB)				
Frequency (MHz)				2507.5	2535	2562.5						
15	QPSK	1	0	18.62	18.76	18.65	20	0				
15	QPSK	1	37	18.65	18.82	18.63						
15	QPSK	1	74	18.65	18.81	18.69						
15	QPSK	36	0	18.55	18.64	18.69	20	0				
15	QPSK	36	20	18.52	18.55	18.70						
15	QPSK	36	39	18.53	18.62	18.51						
15	QPSK	75	0	18.53	18.67	18.61	20	0				
15	16QAM	1	0	18.82	18.80	18.84						
15	16QAM	1	37	18.51	18.79	18.60						
15	16QAM	1	74	18.53	18.55	18.66	20	0				
15	16QAM	36	0	18.62	18.72	18.66						
15	16QAM	36	20	18.60	18.71	18.60						
15	16QAM	36	39	18.58	18.64	18.69	20	0				
15	16QAM	75	0	18.65	18.69	18.54						
15	64QAM	1	0	18.60	18.56	18.59						
15	64QAM	1	37	18.57	18.63	18.66	20	0				
15	64QAM	1	74	18.55	18.56	18.52						
15	64QAM	36	0	17.67	17.63	17.63						
15	64QAM	36	20	17.52	17.67	17.57	19	1				
15	64QAM	36	39	17.58	17.65	17.56						
15	64QAM	75	0	17.63	17.63	17.52						
15	256QAM	1	0	15.56	15.73	15.63	17	3				
15	256QAM	1	37	15.55	15.63	15.53						
15	256QAM	1	74	15.54	15.55	15.63						
15	256QAM	36	0	15.56	15.55	15.61	17	3				
15	256QAM	36	20	15.56	15.69	15.68						
15	256QAM	36	39	15.54	15.58	15.50						
15	256QAM	75	0	15.60	15.73	15.63						
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)				
Frequency (MHz)				2505	2535	2565						
10	QPSK	1	0	18.62	18.68	18.76	20	0				
10	QPSK	1	25	18.77	18.63	18.74						
10	QPSK	1	49	18.72	18.75	18.84						
10	QPSK	25	0	18.64	18.65	18.57	20	0				
10	QPSK	25	12	18.54	18.61	18.58						
10	QPSK	25	25	18.58	18.60	18.69						
10	QPSK	50	0	18.71	18.63	18.51	20	0				
10	16QAM	1	0	18.72	18.80	18.74						
10	16QAM	1	25	18.51	18.70	18.51						
10	16QAM	1	49	18.64	18.54	18.58	20	0				
10	16QAM	25	0	18.63	18.74	18.64						
10	16QAM	25	12	18.63	18.64	18.54						
10	16QAM	25	25	18.51	18.58	18.65	20	0				
10	16QAM	50	0	18.65	18.68	18.56						
10	64QAM	1	0	18.62	18.67	18.63						
10	64QAM	1	25	18.57	18.55	18.55	20	0				
10	64QAM	1	49	18.54	18.60	18.69						
10	64QAM	25	0	17.69	17.62	17.57						
10	64QAM	25	12	17.54	17.59	17.64	19	1				
10	64QAM	25	25	17.61	17.57	17.57						
10	64QAM	50	0	17.50	17.57	17.55						
10	256QAM	1	0	15.55	15.71	15.69	17	3				
10	256QAM	1	25	15.52	15.61	15.61						
10	256QAM	1	49	15.52	15.67	15.56						
10	256QAM	25	0	15.50	15.57	15.58	17	3				
10	256QAM	25	12	15.60	15.65	15.69						
10	256QAM	25	25	15.59	15.54	15.57						
10	256QAM	50	0	15.60	15.74	15.61						
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)				
Frequency (MHz)				2502.5	2535	2567.5						
5	QPSK	1	0	18.64	18.73	18.70	20	0				
5	QPSK	1	12	18.62	18.73	18.77						
5	QPSK	1	24	18.68	18.60	18.66						
5	QPSK	12	0	18.58	18.61	18.55	20	0				
5	QPSK	12	7	18.65	18.51	18.52						
5	QPSK	12	13	18.60	18.59	18.70						
5	QPSK	25	0	18.69	18.73	18.69	20	0				
5	16QAM	1	0	18.69	18.85	18.76						
5	16QAM	1	12	18.61	18.59	18.71						
5	16QAM	1	24	18.70	18.69	18.69	20	0				
5	16QAM	12	0	18.64	18.69	18.71						
5	16QAM	12	7	18.67	18.61	18.68						
5	16QAM	12	13	18.51	18.65	18.69	20	0				
5	16QAM	25	0	18.68	18.62	18.55						
5	16QAM	25	12	18.65	18.62	18.56						
5	64QAM	1	0	18.61	18.61	18.56	20	0				
5	64QAM	1	24	18.56	18.59	18.56						
5	64QAM	12	0	17.61	17.67	17.67						
5	64QAM	12	7	17.56	17.68	17.62	19	1				
5	64QAM	12	13	17.61	17.58	17.58						
5	256QAM	1	0	15.55	15.68	15.68						
5	256QAM	1	12	15.57	15.57	15.50	17	3				
5	256QAM	1	24	15.61	15.57	15.57						
5	256QAM	12	0	15.60	15.62	15.63						
5	256QAM	12	7	15.65	15.55	15.73	17	3				
5	256QAM	12	13	15.57	15.57	15.51						
5	256QAM	25	0	15.64	15.65	15.68						

Band 38 Ant5 DS14 Other PA									
BW [MHz]	Modulat on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up limit (dtm)	MPR (dB)	
Channel				37850	38000	38150			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	0	19.69	19.77	19.85			
20	QPSK	1	49	19.58	19.51	19.68	21	0	
20	QPSK	1	99	19.46	19.38	19.82			
20	QPSK	50	0	19.25	19.73	19.23			
20	QPSK	50	24	19.68	19.68	19.61	21	0	
20	QPSK	50	50	19.55	19.60	19.72			
20	QPSK	100	0	19.57	19.62	19.60			
20	16QAM	1	0	19.69	19.59	19.69			
20	16QAM	1	49	19.55	19.70	19.62	21	0	
20	16QAM	50	24	19.71	19.61	19.75			
20	16QAM	50	0	19.70	19.68	19.67			
20	16QAM	50	24	19.71	19.67	19.75	20.5	0.5	
20	16QAM	50	50	19.73	19.68	19.74			
20	16QAM	100	0	19.71	19.67	19.75			
20	64QAM	1	0	19.73	19.75	19.70			
20	64QAM	1	49	19.70	19.68	19.76	20.5	0.5	
20	64QAM	1	99	19.76	19.71	19.72			
20	64QAM	50	0	19.86	19.83	19.10			
20	64QAM	50	24	19.84	19.12				
20	64QAM	50	50	19.88	19.83	19.03	19.5	1.5	
20	64QAM	100	0	19.04	19.88	19.04			
20	256QAM	1	0	16.95	16.92	17.05			
20	256QAM	1	49	17.00	16.94	17.09	17.5	3.5	
20	256QAM	1	99	17.03	16.93	17.04			
20	256QAM	50	0	16.97	16.95	17.03			
20	256QAM	50	24	17.03	16.97	17.10	17.5	3.5	
20	256QAM	50	50	16.94	16.92	17.05			
20	256QAM	100	0	16.96	16.90	17.05			
Channel				25755	25905	26155	Time-up limit (dtm)	MPR (dB)	
Frequency (MHz)				2577.5	2595	2612.5			
15	QPSK	1	0	19.59	19.57	19.54			
15	QPSK	1	37	19.56	19.70	19.62	21	0	
15	QPSK	1	74	19.59	19.39	19.57			
15	QPSK	36	0	19.33	19.71	19.24			
15	QPSK	36	20	19.71	19.51	19.65	21	0	
15	QPSK	36	39	19.62	19.47	19.80			
15	QPSK	75	0	19.63	19.69	19.58			
15	16QAM	1	0	19.64	19.74	19.74	21	0	
15	16QAM	1	37	19.61	19.70	19.68			
15	16QAM	1	74	19.60	19.58	19.73			
15	16QAM	36	0	19.48	19.57	19.55			
15	16QAM	36	20	19.57	19.56	19.59	20.5	0.5	
15	16QAM	36	39	19.55	19.64	19.57			
15	16QAM	75	0	19.57	19.59	19.51			
15	64QAM	1	0	19.64	19.72	19.71	20.5	0.5	
15	64QAM	1	37	19.54	19.64	19.66			
15	64QAM	1	74	19.55	19.59	19.50			
15	64QAM	36	0	19.57	19.62	19.62			
15	64QAM	36	20	19.63	19.57	19.64	19.5	1.5	
15	64QAM	36	39	19.56	19.57	19.54			
15	64QAM	75	0	19.63	19.68	19.47			
15	256QAM	1	0	16.57	16.57	16.47			
15	256QAM	1	37	16.62	16.67	16.53	17.5	3.5	
15	256QAM	1	74	16.66	16.56	16.51			
15	256QAM	36	0	16.49	16.59	16.48			
15	256QAM	36	20	16.58	16.59	16.62	17.5	3.5	
15	256QAM	36	39	16.50	16.65	16.47			
15	256QAM	75	0	16.50	16.60	16.54			
Channel				37800	38000	38200	Time-up limit (dtm)	MPR (dB)	
Frequency (MHz)				26115	2605	2615			
10	QPSK	1	0	19.71	19.59	19.55			
10	QPSK	1	25	19.70	19.68	19.65	21	0	
10	QPSK	1	49	19.45	19.40	19.67			
10	QPSK	25	0	19.42	19.59	19.37			
10	QPSK	25	12	19.68	19.56	19.61	21	0	
10	QPSK	25	25	19.60	19.66	19.89			
10	QPSK	50	0	19.70	19.51	19.65			
10	16QAM	1	0	19.68	19.71	19.69	21	0	
10	16QAM	1	25	19.63	19.70	19.70			
10	16QAM	1	49	19.64	19.60	19.71			
10	16QAM	25	0	19.55	19.85	19.45			
10	16QAM	25	12	19.59	19.65	19.47	20.5	0.5	
10	16QAM	25	25	19.61	19.59	19.56			
10	16QAM	50	0	19.57	19.58	19.42			
10	64QAM	1	0	19.70	19.70	19.83			
10	64QAM	1	25	19.60	19.61	19.59	20.5	0.5	
10	64QAM	1	49	19.61	19.65	19.57			
10	64QAM	25	0	18.52	18.60	18.54			
10	64QAM	25	12	18.53	18.61	18.54	19.5	1.5	
10	64QAM	25	25	18.55	18.56	18.51			
10	64QAM	50	0	18.66	18.63	18.56			
10	256QAM	1	0	16.48	16.60	16.54	17.5	3.5	
10	256QAM	1	25	16.57	16.58	16.60			
10	256QAM	1	49	16.58	16.58	16.54			
10	256QAM	25	0	16.59	16.63	16.50			
10	256QAM	25	12	16.56	16.63	16.61	17.5	3.5	
10	256QAM	25	25	16.53	16.63	16.49			
10	256QAM	50	0	16.50	16.60	16.50			
Channel				37775	38000	38225	Time-up limit (dtm)	MPR (dB)	
Frequency (MHz)				26175.5	2595	2617.5			
5	QPSK	1	0	19.70	19.74	19.60			
5	QPSK	1	12	19.62	19.69	19.63	21	0	
5	QPSK	1	24	19.63	19.41	19.57			
5	QPSK	12	0	19.30	19.61	19.32			
5	QPSK	12	7	19.61	19.69	19.62	21	0	
5	QPSK	12	13	19.69	19.68	19.64			
5	QPSK	25	0	19.73	19.70	19.72			
5	16QAM	1	0	19.63	19.66	19.62			
5	16QAM	1	12	19.65	19.59	19.78	21	0	
5	16QAM	1	24	19.61	19.57	19.69			
5	16QAM	12	0	19.52	19.61	19.52			
5	16QAM	12	7	19.48	19.59	19.47	20.5	0.5	
5	16QAM	12	13	19.55	19.60	19.58			
5	16QAM	25	0	19.49	19.54	19.47			
5	64QAM	1	0	19.67	19.66	19.61	20.5	0.5	
5	64QAM	1	12	19.62	19.54	19.56			
5	64QAM	1	24	19.56	19.61	19.53			
5	64QAM	12	0	18.47	18.62	18.54	19.5	1.5	
5	64QAM	12	7	18.60	18.63	18.54			
5	64QAM	12	13	18.58	18.66	18.50			
5	64QAM	25	0	18.56	18.67	18.49			
5	256QAM	1	0	16.51	16.62	16.55			
5	256QAM	1	12	16.62	16.55	16.58	17.5	3.5	
5	256QAM	1	24	16.56	16.57	16.49			
5	256QAM	12	0	16.57	16.60	16.52			
5	256QAM	12	7	16.62	16.62	16.57	17.5	3.5	
5	256QAM	12	13	16.49	16.57	16.52			
5	256QAM	25	0	16.61	16.55	16.56			

Band 41 Ant5 DS14 Other PA									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq [MHz]	Power Low Middle Ch / Freq [MHz]	Power Middle Ch / Freq [MHz]	Power High Middle Ch / Freq [MHz]	Power High Ch / Freq [MHz]	
Channel				39750	40165	40620	41095	41490	
Frequency (MHz)				2508	2549.5	2593	2636.5	2680	
20	QPSK	1	0	19.68	19.77	19.78	19.75	19.63	21
20	QPSK	1	49	19.72	19.64	19.68	19.70	19.72	
20	QPSK	1	99	19.65	19.70	19.76	19.65	19.66	
20	QPSK	50	0	19.45	19.53	19.77	19.69	19.68	21
20	QPSK	50	24	19.39	19.61	19.59	19.67	19.61	
20	QPSK	50	50	19.54	19.41	19.57	19.64	19.47	
20	QPSK	100	0	19.51	19.41	19.78	19.73	19.73	21
20	16QAM	1	0	19.61	19.59	19.70	19.76	19.63	
20	16QAM	1	49	19.48	19.51	19.76	19.64	19.59	
20	16QAM	50	24	19.47	19.58	19.57	19.56	19.56	20.5
20	16QAM	50	0	19.14	19.14	19.37	19.34	19.33	
20	16QAM	50	24	19.15	19.15	19.37	19.36	19.41	
20	16QAM	50	50	19.32	19.16	19.25	19.31	19.24	20.5
20	16QAM	100	0	19.16	19.24	19.31	19.35	19.34	
20	64QAM	1	0	19.24	19.26	19.29	19.38	19.42	
20	64QAM	1	49	19.24	19.22	19.36	19.39	19.31	20.5
20	64QAM	1	99	19.25	19.16	19.30	19.32	19.18	
20	64QAM	50	0	18.15	18.16	18.41	18.31	18.38	
20	64QAM	50	24	18.16	18.15	18.28	18.26	18.43	19.5
20	64QAM	50	50	18.31	18.20	18.25	18.38	18.24	
20	64QAM	100	0	18.15	18.15	18.31	18.39	18.28	
20	256QAM	1	0	16.19	16.19	16.37	16.34	16.42	17.5
20	256QAM	1	49	16.15	16.14	16.38	16.34	16.35	
20	256QAM	1	99	16.27	16.12	16.27	16.31	16.22	
20	256QAM	50	0	16.07	16.13	16.37	16.43	16.30	17.5
20	256QAM	50	24	16.20	16.24	16.38	16.35	16.37	
20	256QAM	50	50	16.30	16.15	16.33	16.32	16.31	
Frequency (MHz)				2624	2665	2707	2750	2793	
15	QPSK	1	0	19.69	19.62	19.69	19.64	19.70	21
15	QPSK	1	37	19.62	19.61	19.74	19.53	19.62	
15	QPSK	1	75	19.57	19.69	19.69	19.69	19.69	
15	QPSK	36	0	19.45	19.28	19.49	19.61	19.59	21
15	QPSK	36	20	19.35	19.33	19.60	19.54	19.57	
15	QPSK	36	36	19.39	19.40	19.50	19.51	19.37	
15	QPSK	75	0	19.30	19.47	19.64	19.43	19.39	20.5
15	16QAM	1	0	19.54	19.36	19.56	19.60	19.53	
15	16QAM	1	37	19.54	19.42	19.52	19.59	19.61	
15	16QAM	1	74	19.47	19.26	19.46	19.44	19.40	20.5
15	16QAM	36	0	19.16	19.17	19.33	19.36	19.35	
15	16QAM	36	43	19.17	19.14	19.33	19.33	19.35	
15	16QAM	36	39	19.31	19.10	19.17	19.28	19.21	20.5
15	16QAM	75	0	19.18	19.22	19.25	19.27	19.33	
15	64QAM	1	0	19.17	19.19	19.21	19.40	19.38	
15	64QAM	1	37	19.26	19.21	19.26	19.40	19.38	20.5
15	64QAM	1	74	19.23	19.10	19.26	19.27	19.13	
15	64QAM	36	0	18.15	18.19	18.36	18.30	18.30	
15	64QAM	36	20	18.10	18.10	18.22	18.21	18.38	19.5
15	64QAM	36	39	18.32	18.11	18.22	18.31	18.22	
15	64QAM	36	75	18.16	18.13	18.12	18.30	18.25	
15	256QAM	1	0	16.12	16.13	16.28	16.25	16.37	17.5
15	256QAM	1	37	16.16	16.06	16.34	16.34	16.37	
15	256QAM	1	74	16.26	16.09	16.23	16.22	16.17	
15	256QAM	36	0	16.08	16.16	16.30	16.30	16.30	17.5
15	256QAM	36	20	16.18	16.25	16.29	16.31	16.29	
15	256QAM	36	39	16.31	16.11	16.34	16.34	16.32	
15	256QAM	75	0	16.27	16.04	16.21	16.33	16.16	
Frequency (MHz)				29050	40160	40620	41080	41540	
10	QPSK	1	0	19.61	19.67	19.74	19.72	19.75	21
10	QPSK	1	25	19.68	19.70	19.72	19.67	19.71	
10	QPSK	1	49	19.63	19.60	19.72	19.75	19.58	
10	QPSK	25	0	19.46	19.28	19.49	19.65	19.65	21
10	QPSK	25	12	19.44	19.41	19.49	19.51	19.58	
10	QPSK	25	25	19.59	19.30	19.50	19.61	19.56	
10	QPSK	50	0	19.29	19.38	19.64	19.52	19.58	21
10	16QAM	1	0	19.51	19.41	19.68	19.67	19.63	
10	16QAM	1	25	19.33	19.31	19.55	19.62	19.60	
10	16QAM	1	49	19.48	19.28	19.35	19.42	19.31	20.5
10	16QAM	25	0	19.08	19.06	19.29	19.27	19.24	
10	16QAM	25	12	19.11	19.15	19.38	19.33	19.34	
10	16QAM	25	25	19.15	19.15	19.23	19.25	19.27	20.5
10	16QAM	50	0	19.12	19.20	19.23	19.29	19.35	
10	64QAM	1	0	19.22	19.25	19.23	19.40	19.37	
10	64QAM	1	25	19.25	19.17	19.38	19.35	19.34	20.5
10	64QAM	25	0	19.08	19.08	19.33	19.29	19.20	
10	64QAM	25	12	18.10	18.12	18.42	18.29	18.40	
10	64QAM	25	12	18.16	18.17	18.28	18.22	18.35	19.5
10	64QAM	25	25	18.32	18.17	18.28	18.41	18.25	
10	64QAM	50	0	18.14	18.16	18.26	18.41	18.25	
10	256QAM	1	0	16.19	16.18	16.29	16.34	16.31	17.5
10	256QAM	1	25	16.10	16.12	16.31	16.30	16.37	
10	256QAM	1	49	16.27	16.08	16.19	16.30	16.21	
10	256QAM	25	0	16.12	16.11	16.34	16.38	16.25	17.5
10	256QAM	25	12	16.13	16.22	16.32	16.32	16.29	
10	256QAM	25	25	16.30	16.09	16.35	16.25	16.22	
Channel				39715	40146	40620	41083	41545	
Frequency (MHz)				24945	25418	25892	26443	26916	
5	QPSK	1	0	19.73	19.61	19.76	19.68	19.77	21
5	QPSK	1	12	19.72	19.69	19.70	19.71	19.72	
5	QPSK	1	24	19.58	19.55	19.65	19.75	19.58	
5	QPSK	12	0	19.31	19.48	19.53	19.47	19.66	21
5	QPSK	12	7	19.32	19.29	19.48	19.50	19.67	
5	QPSK	25	0	19.35	19.37	19.40	19.60	19.51	
5	16QAM	1	0	19.51	19.36	19.51	19.66	19.64	21
5	16QAM	1	12	19.52	19.45	19.62	19.65	19.68	
5	16QAM	1	24	19.30	19.44	19.40	19.53	19.32	
5	16QAM	12	0	19.14	19.13	19.35	19.35	19.29	20.5
5	16QAM	12	7	19.06	19.16	19.29	19.31	19.41	
5	16QAM	12	13	19.09	19.19	19.31	19.35	19.30	
5	64QAM	1	0	19.25	19.23	19.26	19.33	19.44	20.5
5	64QAM	1	12	19.21	19.21	19.38	19.38	19.31	
5	64QAM	1	24	19.25	19.15	19.29	19.23	19.12	
5	64QAM	12	0	18.15	18.11	18.41	18.13	18.33	19.5
5	64QAM	12	7	18.16	18.16	18.27	18.20	18.40	
5	64QAM	12	13	18.14	18.15	18.22	18.34	18.17	
5	64QAM	25	0	18.17	18.11	18.25	18.34	18.25	17.5
5	64QAM	25	7	18.15	18.16	18.33	18.33	18.43	
5	256QAM	1	0	16.13	16.14	16.40	16.28	16.29	
5	256QAM	1	12	16.23	16.12	16.22	16.24	16.16	
5	256QAM	12	0	16.11	16.06	16.31	16.37	16.21	
5	256QAM	12	7	16.08	16.19	16.31	16.35	16.30	
5	256QAM	12	13	16.21	16.16	16.27	16.26	16.33	
5	256QAM	25	0	16.15	16.09	16.19	16.29	16.15	





Band 2 Ant2 DS15 Other PA										
BW (MHz)	Modulation	RB Size	RB Offset	Power Line Ch. Freq. 200850	Power Mode Ch. Freq. 18900	Power High Ch. Freq. 18900	Turn-up (dB)	APRS (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	18.43	18.43	18.43	20	0		
20	QPSK	1	49	18.47	18.54	18.61	20	0		
20	QPSK	50	0	18.44	18.60	18.63	20	0		
20	QPSK	50	24	18.46	18.57	18.54	20	0		
20	QPSK	50	50	18.31	18.58	18.45	20	0		
20	QPSK	100	0	18.35	18.50	18.53	20	0		
20	16QAM	1	0	18.32	18.49	18.30	20	0		
20	16QAM	1	49	18.27	18.44	18.45	20	0		
20	16QAM	50	0	18.33	18.58	18.55	20	0		
20	16QAM	50	24	18.34	18.50	18.46	20	0		
20	16QAM	50	50	18.30	18.54	18.58	20	0		
20	16QAM	100	0	18.37	18.59	18.58	20	0		
20	256QAM	1	0	18.48	18.63	18.56	20	0		
20	256QAM	1	49	18.35	18.62	18.44	20	0		
20	256QAM	1	99	18.41	18.60	18.55	20	0		
20	256QAM	50	0	18.45	18.63	18.60	20	0		
20	256QAM	50	24	18.40	18.57	18.61	20	0		
20	256QAM	50	50	18.44	18.63	18.49	20	0		
20	256QAM	100	0	18.45	18.62	18.57	20	0		
Channel										
Frequency (MHz)										
15	QPSK	1	0	18.52	18.74	18.65	20	0		
15	QPSK	1	37	18.51	18.67	18.58	20	0		
15	QPSK	1	74	18.39	18.68	18.55	20	0		
15	QPSK	36	0	18.47	18.12	18.65	20	0		
15	QPSK	36	20	18.46	18.59	18.57	20	0		
15	QPSK	36	36	18.34	18.52	18.50	20	0		
15	QPSK	75	0	18.34	18.62	18.52	20	0		
15	16QAM	1	0	18.23	18.39	18.31	20	0		
15	16QAM	1	37	18.27	18.47	18.41	20	0		
15	16QAM	1	74	18.19	18.41	18.44	20	0		
15	16QAM	36	0	18.36	18.55	18.63	20	0		
15	16QAM	36	20	18.46	18.53	18.52	20	0		
15	16QAM	36	36	18.34	18.52	18.52	20	0		
15	16QAM	75	0	18.33	18.63	18.54	20	0		
15	16QAM	1	0	18.34	18.65	18.64	20	0		
15	16QAM	1	37	18.38	18.61	18.58	20	0		
15	16QAM	1	74	18.46	18.58	18.60	20	0		
15	16QAM	36	0	18.47	18.55	18.52	20	0		
15	16QAM	36	20	18.41	18.63	18.59	20	0		
15	16QAM	36	36	18.30	18.62	18.65	20	0		
15	16QAM	75	0	18.35	18.63	18.54	20	0		
15	16QAM	1	0	18.45	18.65	18.54	20	0		
15	256QAM	1	37	18.31	18.65	18.43	20	0		
15	256QAM	1	74	18.35	18.60	18.55	20	0		
15	256QAM	36	0	18.45	18.59	18.57	20	0		
15	256QAM	36	20	18.37	18.58	18.62	20	0		
15	256QAM	36	36	18.42	18.67	18.61	20	0		
15	256QAM	75	0	18.44	18.62	18.58	20	0		
Channel										
Frequency (MHz)										
10	QPSK	1	0	18.58	18.77	18.62	20	0		
10	QPSK	1	25	18.46	18.70	18.65	20	0		
10	QPSK	1	49	18.45	18.61	18.53	20	0		
10	QPSK	25	0	18.54	18.60	18.60	20	0		
10	QPSK	25	12	18.46	18.55	18.63	20	0		
10	QPSK	25	25	18.35	18.63	18.48	20	0		
10	QPSK	50	0	18.39	18.62	18.59	20	0		
10	16QAM	1	0	18.23	18.39	18.33	20	0		
10	16QAM	1	25	18.31	18.41	18.40	20	0		
10	16QAM	1	49	18.19	18.43	18.48	20	0		
10	16QAM	25	0	18.35	18.58	18.55	20	0		
10	16QAM	25	12	18.25	18.54	18.42	20	0		
10	16QAM	25	25	18.29	18.60	18.58	20	0		
10	16QAM	50	0	18.32	18.55	18.48	20	0		
10	16QAM	1	0	18.48	18.61	18.61	20	0		
10	16QAM	1	25	18.45	18.62	18.61	20	0		
10	16QAM	1	49	18.43	18.59	18.59	20	0		
10	16QAM	25	0	18.43	18.60	18.60	20	0		
10	16QAM	25	12	18.41	18.55	18.60	20	0		
10	16QAM	25	25	18.38	18.59	18.65	20	0		
10	16QAM	50	0	18.35	18.62	18.54	20	0		
10	256QAM	1	0	18.43	18.59	18.50	20	0		
10	256QAM	1	25	18.39	18.48	18.46	20	0		
10	256QAM	1	49	18.35	18.62	18.51	20	0		
10	256QAM	25	0	18.40	18.55	18.56	20	0		
10	256QAM	25	12	18.46	18.59	18.62	20	0		
10	256QAM	25	25	18.38	18.60	18.65	20	0		
10	256QAM	50	0	18.42	18.57	18.50	20	0		
Channel										
Frequency (MHz)										
5	QPSK	1	0	18.51	18.76	18.70	20	0		
5	QPSK	1	12	18.50	18.70	18.60	20	0		
5	QPSK	1	24	18.43	18.61	18.54	20	0		
5	QPSK	12	0	18.44	18.60	18.67	20	0		
5	QPSK	12	7	18.46	18.61	18.55	20	0		
5	QPSK	12	13	18.35	18.60	18.46	20	0		
5	QPSK	25	0	18.34	18.62	18.54	20	0		
5	16QAM	1	0	18.21	18.41	18.41	20	0		
5	16QAM	1	12	18.25	18.57	18.46	20	0		
5	16QAM	1	24	18.28	18.49	18.45	20	0		
5	16QAM	12	0	18.36	18.65	18.61	20	0		
5	16QAM	12	7	18.39	18.65	18.53	20	0		
5	16QAM	12	13	18.34	18.49	18.55	20	0		
5	16QAM	25	0	18.38	18.61	18.61	20	0		
5	16QAM	1	0	18.43	18.67	18.57	20	0		
5	16QAM	1	12	18.36	18.59	18.58	20	0		
5	16QAM	1	24	18.48	18.58	18.59	20	0		
5	16QAM	12	0	18.43	18.63	18.56	20	0		
5	16QAM	12	7	18.44	18.57	18.58	20	0		
5	16QAM	12	13	18.35	18.64	18.62	20	0		
5	16QAM	25	0	18.35	18.64	18.54	20	0		
5	256QAM	1	0	18.49	18.59	18.58	20	0		
5	256QAM	1	12	18.39	18.54	18.48	20	0		
5	256QAM	1	24	18.35	18.57	18.55	20	0		
5	256QAM	12	0	18.44	18.53	18.64	20	0		
5	256QAM	1	0	18.33	18.62	18.48	20	0		
5	256QAM	1	12	18.39	18.60	18.55	20	0		
5	256QAM	1	24	18.36	18.55	18.53	20	0		
5	256QAM	12	0	18.39	18.60	18.53	20	0		
5	256QAM	12	7	18.43	18.57	18.56	20	0		
5	256QAM	12	13	18.38	18.52	18.57	20	0		
5	256QAM	25	0	18.45	18.54	18.65	20	0		
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	18.60	18.86	19.03	20	0		
1.4	QPSK	1	1	18.60	18.86	18.70	20	0		
1.4	QPSK	1	5	18.40	18.84	18.58	20	0		
1.4	QPSK	3	0	18.52	18.82	18.62	20	0		
1.4	QPSK	3	1	18.52	18.66	18.51	20	0		
1.4	QPSK	3	3	18.43	18.67	18.58	20	0		
1.4	QPSK	3	5	18.43	18.62	18.50	20	0		
1.4	16QAM	1	0	18.47	18.61	18.51	20	0		
1.4	16QAM	3	0	18.32	18.54	18.48	20	0		
1.4	16QAM	3	1	18.32	18.48	18.44	20	0		
1.4	16QAM	3	3	18.24	18.48	18.38	20	0		
1.4	16QAM	3	5	18.30	18.47	18.49	20	0		
1.4	16QAM	3	7	18.31	18.44	18.46	20	0		
1.4	16QAM	3	9	18.30	18.60	18.50	20	0		
1.4	16QAM	3	11	18.43	18.53	18.42	20	0		
1.4	16QAM	3	13	18.37	18.48	18.48	20	0		
1.4	16QAM	3	15	18.32	18.62	18.55	20	0		
1.4	16QAM	3	17	18.40	18.58	18.50	20	0		
1.4	16QAM	3	19	18.40	18.52	18.64	20	0		
1.4	16QAM	3	21	18.38	18.54	18.62	20	0		
1.4	16QAM	3	23	18.30	18.51	18.44	20	0		
1.4	16QAM	3	25	18.30	18.59	18.51	20	0		
1.4	16QAM	3	27	18.40	18.56	18.58	20	0		
1.4	16QAM	3	29	18.35	18.57	18.58	20	0		
1.4	16QAM	3	31	18.45	18.50	18.56	20	0		
1.4	16QAM	3	33	18.37	18.49	18.58	20	0		

Band 38 Ant2 DSI5 Other PA											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Middle Ch./Freq	Power High Ch./Freq	Time-up limit (s/min)	MPR (dB)			
Channel				37650	38000	38150					
Frequency (MHz)				2580	2595	2610					
20	QPSK	1	0	15.27	15.29	15.28	16	0			
20	QPSK	1	49	15.09	15.17	15.25					
20	QPSK	1	99	15.07	15.18	15.24					
20	QPSK	50	0	15.16	15.25	15.26	16	0			
20	QPSK	50	24	15.09	15.23	15.21					
20	QPSK	50	50	15.17	15.20	15.19					
20	QPSK	100	0	15.01	15.14	15.09	16	0			
20	16QAM	1	0	15.23	15.23	15.21					
20	16QAM	1	49	15.22	15.22	15.23					
20	16QAM	1	99	15.21	15.18	15.24	16	0			
20	16QAM	50	0	15.12	15.19	15.16					
20	16QAM	50	24	15.07	15.11	15.11					
20	16QAM	50	50	15.15	15.16	15.25	16	0			
20	16QAM	100	0	15.18	15.19	15.16					
20	64QAM	1	0	15.12	15.19	15.16	16	0			
20	64QAM	1	49	15.17	15.22	15.14					
20	64QAM	1	99	15.09	15.11	15.10					
20	64QAM	50	0	15.07	15.25	15.20	16	0			
20	64QAM	50	24	15.13	15.22	15.20					
20	64QAM	50	50	15.07	15.20	15.14					
20	64QAM	100	0	15.10	15.16	15.13	16	0			
Channel				37625	38000	38175					
Frequency (MHz)				2577.5	2595	2612.5					
15	QPSK	1	0	15.18	15.27	15.26	16	0			
15	QPSK	1	37	15.06	15.10	15.23					
15	QPSK	1	74	15.19	15.20	15.22					
15	QPSK	36	0	15.10	15.25	15.21	16	0			
15	QPSK	36	20	15.11	15.23	15.20					
15	QPSK	36	39	15.16	15.22	15.22					
15	QPSK	75	0	15.02	15.14	15.02	16	0			
15	16QAM	1	0	15.16	15.24	15.13					
15	16QAM	1	37	15.15	15.15	15.19					
15	16QAM	1	74	15.13	15.10	15.19	16	0			
15	16QAM	36	0	15.06	15.19	15.24					
15	16QAM	36	20	15.05	15.07	15.04					
15	16QAM	36	39	15.15	15.20	15.18	16	0			
15	16QAM	75	0	15.16	15.21	15.08					
15	64QAM	1	0	15.13	15.16	15.11	16	0			
15	64QAM	1	37	15.10	15.22	15.07					
15	64QAM	1	74	15.08	15.04	15.08					
15	64QAM	36	0	15.10	15.27	15.15	16	0			
15	64QAM	36	20	15.10	15.19	15.22					
15	64QAM	36	39	15.09	15.20	15.12					
15	64QAM	75	0	15.12	15.14	15.06	16	0			
15	256QAM	1	0	15.15	15.13	15.22					
15	256QAM	1	37	15.09	15.15	15.13					
15	256QAM	1	74	15.01	15.20	15.10	16	0			
15	256QAM	36	0	15.15	15.24	15.24					
15	256QAM	36	20	15.13	15.20	15.23					
15	256QAM	36	39	15.05	15.14	15.26	16	0			
15	256QAM	75	0	15.03	15.26	15.20					
Channel				37600	38000	38200					
Frequency (MHz)				2575	2595	2615					
10	QPSK	1	0	15.28	15.21	15.28	16	0			
10	QPSK	1	25	15.07	15.20	15.26					
10	QPSK	1	49	15.03	15.21	15.22					
10	QPSK	25	0	15.19	15.26	15.21	16	0			
10	QPSK	25	12	15.06	15.19	15.21					
10	QPSK	25	25	15.17	15.12	15.13					
10	QPSK	50	0	15.07	15.10	15.04	16	0			
10	16QAM	1	0	15.21	15.18	15.17					
10	16QAM	1	25	15.14	15.15	15.19					
10	16QAM	1	49	15.16	15.15	15.21	16	0			
10	16QAM	25	0	15.13	15.16	15.17					
10	16QAM	25	12	15.06	15.13	15.11					
10	16QAM	25	25	15.07	15.16	15.21	16	0			
10	16QAM	50	0	15.11	15.21	15.11					
10	64QAM	1	0	15.09	15.16	15.09	16	0			
10	64QAM	1	25	15.15	15.17	15.06					
10	64QAM	1	49	15.00	15.14	15.02					
10	64QAM	25	0	15.01	15.23	15.23	16	0			
10	64QAM	25	12	15.07	15.22	15.21					
10	64QAM	25	25	15.01	15.14	15.06					
10	64QAM	50	0	15.15	15.09	15.14	16	0			
10	256QAM	1	0	15.06	15.19	15.18					
10	256QAM	1	25	15.03	15.15	15.09					
10	256QAM	1	49	15.08	15.13	15.16	16	0			
10	256QAM	25	0	15.18	15.20	15.18					
10	256QAM	25	12	15.16	15.22	15.19					
10	256QAM	25	25	15.02	15.13	15.16	16	0			
10	256QAM	50	0	15.03	15.25	15.28					
Channel				37700	38000	38200					
Frequency (MHz)				2572.5	2595	2617.5					
5	QPSK	1	0	15.25	15.25	15.28	16	0			
5	QPSK	1	12	15.11	15.11	15.18					
5	QPSK	1	24	15.06	15.09	15.22					
5	QPSK	12	0	15.12	15.26	15.14	16	0			
5	QPSK	12	7	15.07	15.19	15.14					
5	QPSK	12	13	15.13	15.22	15.17					
5	QPSK	25	0	15.03	15.06	15.07	16	0			
5	16QAM	1	0	15.14	15.15	15.19					
5	16QAM	1	12	15.15	15.16	15.23					
5	16QAM	1	24	15.17	15.17	15.25	16	0			
5	16QAM	12	0	15.05	15.13	15.13					
5	16QAM	12	7	15.00	15.12	15.06					
5	16QAM	12	13	15.13	15.16	15.26	16	0			
5	16QAM	25	0	15.15	15.11	15.08					
5	64QAM	1	0	15.05	15.15	15.08	16	0			
5	64QAM	1	12	15.13	15.23	15.06					
5	64QAM	1	24	15.10	15.10	15.03					
5	64QAM	12	0	15.09	15.19	15.14	16	0			
5	64QAM	12	7	15.13	15.22	15.20					
5	64QAM	12	13	15.09	15.17	15.14					
5	64QAM	25	0	15.18	15.18	15.11	16	0			
5	256QAM	1	0	15.03	15.23	15.16					
5	256QAM	1	12	15.10	15.16	15.15					
5	256QAM	1	24	15.05	15.11	15.17	16	0			
5	256QAM	12	0	15.21	15.21	15.24					
5	256QAM	12	7	15.11	15.24	15.24					
5	256QAM	12	13	15.04	15.03	15.18	16	0			
5	256QAM	25	0	15.09	15.19	15.24					

Band 41 Ant2 DSI5 Other PA										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq	Power Low Middle Ch./Freq	Power Middle Ch./Freq	Power High Middle Ch./Freq	Power High Ch./Freq	Time-up limit (min)	MPR (dB)
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				2608	2648.5	2693	2636.5	2680		
20	QPSK	1	0	15.48	15.18	15.48	15.23	15.41	16	0
20	QPSK	50	50	15.48	15.11	15.48	15.15	15.41		
20	QPSK	1	99	15.43	15.13	15.40	15.17	15.40		
20	QPSK	50	0	15.42	15.22	15.48	15.26	15.38		
20	QPSK	50	24	15.44	15.29	15.48	15.13	15.40	16	0
20	QPSK	50	50	15.46	15.11	15.39	15.17	15.41		
20	QPSK	100	0	15.39	15.15	15.37	15.20	15.46		
20	16QAM	1	0	15.39	15.20	15.46	15.13	15.40		
20	16QAM	1	49	15.35	15.23	15.30	15.15	15.44		
20	16QAM	1	99	15.48	15.18	15.43	15.17	15.39		
20	16QAM	50	50	15.38	15.21	15.48	15.18	15.39		
20	16QAM	50	24	15.37	15.36	15.47	15.12	15.39		
20	16QAM	50	50	15.40	15.10	15.36	15.23	15.45	16	
20	16QAM	100	0	15.38	15.28	15.44	15.24	15.46		
20	16QAM	1	49	15.31	15.31	15.42	15.13	15.32		
20	16QAM	1	99	15.35	15.17	15.37	15.18	15.40		
20	16QAM	50	0	15.30	15.31	15.46	15.22	15.30		
20	16QAM	50	24	15.32	15.25	15.45	15.08	15.37	16	0
20	16QAM	50	50	15.38	15.19	15.46	15.17	15.47		
20	16QAM	100	0	15.31	15.18	15.42	15.20	15.42		
20	256QAM	1	0	15.38	15.11	15.45	15.28	15.30		
20	256QAM	1	49	15.34	15.32	15.40	15.15	15.45	16	0
20	256QAM	1	99	15.21	15.15	15.31	15.05	15.47		
20	256QAM	50	50	15.32	15.31	15.39	15.15	15.32		
20	256QAM	50	24	15.41	15.27	15.46	15.19	15.30		
20	256QAM	50	50	15.41	15.21	15.35	15.00	15.44		
20	256QAM	100	0	15.16	15.17	15.42	15.19	15.43		
Frequency (MHz)				2693.5	2644.3	2693.3	2637.8	2689.5	Time-up limit (min)	MPR (dB)
15	QPSK	1	0	15.45	15.16	15.42	15.20	15.33	16	0
15	QPSK	1	37	15.48	15.19	15.42	15.13	15.36		
15	QPSK	1	74	15.42	15.08	15.38	15.16	15.31		
15	QPSK	36	0	15.35	15.17	15.45	15.20	15.38		
15	QPSK	36	20	15.39	15.23	15.48	15.10	15.33		
15	QPSK	36	39	15.43	15.08	15.37	15.17	15.37		
15	QPSK	75	0	15.33	15.28	15.47	15.16	15.38		
15	16QAM	1	0	15.31	15.14	15.41	15.06	15.35		
15	16QAM	1	37	15.29	15.18	15.33	15.13	15.42		
15	16QAM	1	74	15.45	15.12	15.46	15.16	15.32		
15	16QAM	36	0	15.36	15.24	15.48	15.32	15.33		
15	16QAM	36	20	15.37	15.28	15.45	15.15	15.40		
15	16QAM	36	39	15.41	15.12	15.42	15.25	15.47		
15	16QAM	75	0	15.29	15.22	15.44	15.10	15.42		
15	16QAM	1	0	15.29	15.33	15.40	15.09	15.28		
15	16QAM	1	37	15.27	15.15	15.25	15.00	15.35	16	0
15	16QAM	1	74	15.29	15.16	15.36	15.14	15.34		
15	16QAM	36	0	15.33	15.29	15.46	15.33	15.35		
15	16QAM	36	20	15.30	15.26	15.37	15.00	15.38		
15	16QAM	36	39	15.28	15.10	15.35	15.13	15.45		
15	16QAM	75	0	15.30	15.17	15.33	15.23	15.35		
15	256QAM	1	0	15.33	15.26	15.39	15.11	15.36		
15	256QAM	1	37	15.28	15.27	15.32	15.16	15.38		
15	256QAM	1	74	15.17	15.11	15.34	15.04	15.42		
15	256QAM	36	0	15.27	15.27	15.38	15.16	15.27		
15	256QAM	36	20	15.44	15.29	15.44	15.12	15.31	16	0
15	256QAM	36	39	15.39	15.16	15.37	15.05	15.38		
15	256QAM	75	0	15.14	15.12	15.41	15.22	15.37		
Channel				39700	40160	40620	41080	41540	Time-up limit (min)	MPR (dB)
Frequency (MHz)				2547	2547	2593	2639	2685		
10	QPSK	1	0	15.47	15.20	15.43	15.23	15.41	16	0
10	QPSK	1	53	15.44	15.09	15.39	15.12	15.41		
10	QPSK	1	49	15.41	15.05	15.40	15.09	15.33		
10	QPSK	25	0	15.36	15.16	15.41	15.22	15.38		
10	QPSK	25	12	15.46	15.30	15.46	15.14	15.41	16	0
10	QPSK	25	25	15.48	15.08	15.46	15.13	15.44		
10	QPSK	50	0	15.35	15.19	15.46	15.18	15.42		
10	16QAM	1	0	15.36	15.11	15.44	15.06	15.34		
10	16QAM	1	25	15.28	15.21	15.30	15.14	15.46		
10	16QAM	1	49	15.30	15.14	15.35	15.15	15.32		
10	16QAM	25	0	15.31	15.21	15.41	15.12	15.33		
10	16QAM	25	12	15.32	15.34	15.48	15.09	15.37		
10	16QAM	25	25	15.40	15.05	15.32	15.17	15.38		
10	16QAM	50	0	15.30	15.28	15.39	15.19	15.48		
10	16QAM	50	12	15.32	15.26	15.44	15.25	15.33		
10	16QAM	1	25	15.37	15.15	15.29	15.06	15.44		
10	16QAM	1	49	15.33	15.15	15.29	15.12	15.33		
10	16QAM	25	0	15.28	15.34	15.38	15.25	15.27		
10	16QAM	25	12	15.32	15.20	15.41	15.05	15.35	16	0
10	16QAM	25	25	15.34	15.20	15.40	15.11	15.33		
10	16QAM	50	0	15.30	15.09	15.35	15.12	15.36		
10	256QAM	1	0	15.35	15.11	15.38	15.23	15.34		
10	256QAM	1	25	15.38	15.28	15.38	15.16	15.40		
10	256QAM	1	49	15.15	15.16	15.25	15.04	15.47		
10	256QAM	25	0	15.32	15.23	15.34	15.17	15.34		
10	256QAM	25	12	15.30	15.18	15.45	15.19	15.31		
10	256QAM	25	25	15.43	15.17	15.33	15.19	15.39		
10	256QAM	50	0	15.09	15.14	15.39	15.21	15.39		
Frequency (MHz)				2693.5	2644.3	2693.3	2640.30	2687.5	Time-up limit (min)	MPR (dB)
5	QPSK	1	0	15.31	15.20	15.48	15.24	15.37	16	0
5	QPSK	1	12	15.38	15.18	15.31	15.07	15.32		
5	QPSK	1	24	15.44	15.06	15.34	15.09	15.36		
5	QPSK	12	0	15.32	15.17	15.46	15.15	15.40		
5	QPSK	12	7	15.37	15.32	15.38	15.01	15.38		
5	QPSK	12	13	15.41	15.14	15.38	15.13	15.41		
5	QPSK	25	0	15.41	15.26	15.39	15.18	15.48		
5	16QAM	1	0	15.33	15.19	15.44	15.15	15.42		
5	16QAM	1	12	15.35	15.19	15.25	15.05	15.39		
5	16QAM	1	24	15.44	15.12	15.39	15.13	15.37		
5	16QAM	12	0	15.32	15.22	15.40	15.19	15.39		
5	16QAM	12	7	15.36	15.34	15.30	15.05	15.40		
5	16QAM	12	13	15.34	15.12	15.28	15.07	15.35		
5	16QAM	25	0	15.36	15.28	15.41	15.20	15.42		
5	16QAM	1	0	15.29	15.24	15.41	15.07	15.26		
5	16QAM	1	12	15.30	15.21	15.38	15.01	15.43		
5	16QAM	1	24	15.33	15.09	15.36	15.12	15.33		
5	16QAM	12	0	15.31	15.22	15.40	15.10	15.34		
5	16QAM	12	7	15.32	15.17	15.37	15.05	15.31		
5	16QAM	12	13	15.27	15.13	15.32	15.14	15.43		
5	16QAM	25	0	15.23	15.14	15.37	15.13	15.41		
5	256QAM	1	0	15.32	15.11	15.37	15.17	15.32		
5	256QAM	1	12	15.27	15.30	15.43	15.13	15.43		
5	256QAM	1	24	15.17	15.10	15.27	15.06	15.47		
5	256QAM	12	0	15.25	15.23	15.41	15.19	15.25		
5	256QAM	12	7	15.42	15.20	15.39	15.19	15.33		
5	256QAM	12	13	15.30	15.22	15.37	15.07	15.36		
5	256QAM	25	0	15.15	15.12	15.43	15.14	15.43		



Band 2 Ant3 DS15 Other PA									
BW (MHz)	Modulat on	RB Size (MHz)	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Turn-up Int. (dB)	APRS (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	19.24	19.45	19.27			
20	QPSK	1	8	20.23	20.42	20.45	21	0	
20	QPSK	1	99	20.19	20.28	20.34			
20	QPSK	50	0	19.98	20.35	20.26			
20	QPSK	50	24	20.02	20.23	20.04			
20	QPSK	50	50	19.98	20.14	20.11	21	0	
20	QPSK	100	0	19.99	20.15	20.00			
20	QPSK	100	0	19.87	20.09	19.86			
20	16QAM	1	49	19.73	19.87	19.75	21	0	
20	16QAM	1	99	19.59	19.89	19.90			
20	16QAM	50	0	19.92	20.21	20.14			
20	16QAM	50	24	20.02	20.11	20.05	21	0	
20	16QAM	50	50	19.98	20.20	20.07			
20	16QAM	100	0	19.77	20.04	20.07			
20	16QAM	1	0	20.15	20.34	20.36			
20	16QAM	1	49	19.93	20.29	20.21	21	0	
20	16QAM	1	99	20.11	20.31	20.25			
20	16QAM	50	0	19.92	20.24	20.14			
20	16QAM	50	24	20.08	20.13	19.97	21	0	
20	16QAM	50	50	19.93	20.17	20.07			
20	16QAM	100	0	19.77	19.98	20.09			
20	16QAM	1	0	19.46	19.62	19.65			
20	256QAM	1	49	19.42	19.62	19.58	19.5	1.5	
20	256QAM	1	99	19.44	19.62	19.62			
20	256QAM	50	0	19.45	19.62	19.62			
20	256QAM	50	24	19.49	19.72	19.71	19.5	1.5	
20	256QAM	50	50	19.41	19.67	19.66			
20	256QAM	100	0	19.45	19.66	19.64			
Channel									
Frequency (MHz)									
15	QPSK	1	0	20.34	20.37	20.32			
15	QPSK	1	87	20.36	20.34	20.32	21	0	
15	QPSK	1	74	20.12	20.30	20.40			
15	QPSK	36	0	19.98	20.26	20.35			
15	QPSK	36	20	19.93	20.14	20.19	21	0	
15	QPSK	36	36	19.85	20.29	20.18			
15	QPSK	75	0	19.89	20.26	20.20			
15	16QAM	1	0	19.87	20.38	20.45			
15	16QAM	1	37	19.82	19.89	19.98	21	0	
15	16QAM	1	74	19.46	19.62	19.65			
15	16QAM	36	0	19.99	20.13	20.20			
15	16QAM	36	20	20.00	19.87	19.90	21	0	
15	16QAM	36	36	19.82	20.11	20.07			
15	16QAM	75	0	19.86	20.11	20.07			
15	16QAM	1	0	20.00	20.29	20.40	21	0	
15	16QAM	1	37	19.86	19.82	19.90			
15	16QAM	1	74	20.17	20.37	20.37			
15	16QAM	36	0	19.86	20.08	20.14			
15	16QAM	36	20	19.82	19.82	19.82	21	0	
15	16QAM	36	36	19.91	20.25	20.22			
15	16QAM	75	0	19.89	19.86	19.88			
15	256QAM	1	0	19.41	19.62	19.65			
15	256QAM	1	37	19.43	19.56	19.51	19.5	1.5	
15	256QAM	1	74	19.41	19.64	19.63			
15	256QAM	36	0	19.45	19.62	19.62			
15	256QAM	36	20	19.57	19.70	19.65	19.5	1.5	
15	256QAM	36	36	19.39	19.68	19.59			
15	256QAM	75	0	19.43	19.61	19.66			
Channel									
Frequency (MHz)									
10	QPSK	1	0	20.15	20.17	20.15			
10	QPSK	1	49	20.18	20.42	20.29	21	0	
10	QPSK	1	49	20.12	20.24	20.28			
10	QPSK	25	0	19.92	20.23	20.19			
10	QPSK	25	12	19.93	20.14	20.19	21	0	
10	QPSK	25	25	19.93	20.28	20.11			
10	QPSK	80	0	19.82	20.25	20.23			
10	16QAM	1	0	19.93	19.97	19.94			
10	16QAM	1	25	19.79	19.86	19.91	21	0	
10	16QAM	1	49	19.85	20.00	20.06			
10	16QAM	25	0	20.00	20.07	20.19			
10	16QAM	25	12	19.96	20.03	20.06			
10	16QAM	25	12	19.86	20.02	20.04	21	0	
10	16QAM	50	0	19.97	20.13	19.94			
10	16QAM	1	0	20.21	20.23	20.37	21	0	
10	16QAM	1	16	20.15	20.32	20.34			
10	16QAM	1	49	20.19	20.34	20.16			
10	16QAM	25	0	19.98	20.05	20.00			
10	16QAM	25	12	20.04	20.20	20.11	21	0	
10	16QAM	25	25	20.04	20.06	20.17			
10	16QAM	50	0	19.84	20.10	20.09			
10	256QAM	1	0	19.46	19.65	19.67			
10	256QAM	1	25	19.38	19.58	19.59	19.5	1.5	
10	256QAM	1	49	19.35	19.58	19.58			
10	256QAM	25	0	19.49	19.71	19.61			
10	256QAM	25	12	19.47	19.64	19.67	19.5	1.5	
10	256QAM	25	25	19.35	19.65	19.63			
10	256QAM	50	0	19.39	19.67	19.61			
Channel									
Frequency (MHz)									
5	QPSK	1	0	20.23	20.24	20.41			
5	QPSK	1	12	20.23	20.41	20.35	21	0	
5	QPSK	1	24	20.06	20.23	20.28			
5	QPSK	12	0	19.93	20.23	20.19			
5	QPSK	12	7	20.00	20.23	20.02	21	0	
5	QPSK	12	13	19.96	20.25	20.37			
5	QPSK	25	0	19.88	20.24	20.19			
5	16QAM	1	0	19.97	19.99	20.02			
5	16QAM	1	12	19.88	20.00	19.88	21	0	
5	16QAM	1	24	19.88	19.94	19.91			
5	16QAM	12	0	19.79	20.14	20.24			
5	16QAM	12	7	19.83	20.07	19.99	21	0	
5	16QAM	12	13	19.81	20.20	20.20			
5	16QAM	25	0	19.89	20.08	20.01			
5	16QAM	1	0	20.18	20.23	20.22	21	0	
5	16QAM	1	12	20.09	20.14	20.31			
5	16QAM	1	24	20.06	20.10	20.08			
5	16QAM	12	0	19.80	20.17	20.09			
5	16QAM	12	7	19.89	20.27	20.06	21	0	
5	16QAM	12	13	19.92	20.00	20.12			
5	16QAM	25	0	19.91	20.02	19.99			
5	256QAM	1	0	19.41	19.58	19.61			
5	256QAM	1	12	19.39	19.63	19.60	19.5	1.5	
5	256QAM	1	24	19.40	19.62	19.64			
5	256QAM	12	0	19.45	19.64	19.65			
5	256QAM	12	7	19.48	19.60	19.70	19.5	1.5	
5	256QAM	12	13	19.33	19.56	19.64			
5	256QAM	25	0	19.41	19.70	19.58			
Channel									
Frequency (MHz)									
3	QPSK	1	0	20.23	20.37	20.33			
3	QPSK	1	8	20.17	20.44	20.41	21	0	
3	QPSK	1	14	20.13	20.26	20.39			
3	QPSK	8	0	20.03	20.29	20.18			
3	QPSK	8	4	19.91	20.23	20.09	21	0	
3	QPSK	8	7	19.96	20.13	20.25			
3	QPSK	15	0	19.86	20.20	20.18			
3	16QAM	1	0	19.74	19.91	19.96			
3	16QAM	1	8	19.74	19.90	19.98	21	0	
3	16QAM	1	14	19.87	20.00	19.97			
3	16QAM	8	0	19.85	20.20	20.09			
3	16QAM	8	4	19.86	20.15	20.12	21	0	
3	16QAM	8	7	19.98	20.02	20.02			
3	16QAM	15	0	19.86	20.15	20.03			
3	16QAM	1	0	19.18	20.26	20.33	21	0	
3	16QAM	1	0	20.02	20.16	20.31			
3	16QAM	1	14	20.16	20.24	20.23			
3	16QAM	1	19	20.02	20.27	19.87			
3	16QAM	8	0	19.89	20.10	20.01	21	0	
3	16QAM	8	7	20.01	20.04	20.15			
3	256QAM	1	0	19.45	19.58	19.62			
3	256QAM	1	8	19.37	19.54	19.59	19.5	1.5	
3	256QAM	1	14	19.44	19.62	19.59			
3	256QAM	8	0	19.48	19.74	19.61			
3	256QAM	8	4	19.48	19.65	19.66	19.5	1.5	
3	256QAM	8	7	19.35	19.61	19.68			
3	256QAM	15	0	19.38	19.62	19.58			
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	20.23	20.32	20.39			
1.4	QPSK	1	3	20.35	20.37	20.46	21	0	
1.4	QPSK	1	6	20.02	20.26	20.29			
1.4	QPSK	3	0	20.10	20.27	20.19			
1.4	QPSK	3	1	19.91	20.16	20.22			</

Band 38 Ant3 DS15 Other PA									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				37650	38000	38150			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	0	19.75	19.80	19.80	20.5	0	
20	QPSK	1	49	19.87	19.89	19.84			
20	QPSK	1	99	19.44	19.53	19.29			
20	QPSK	50	0	19.70	19.83	19.68			
20	QPSK	50	24	19.82	19.77	19.68	20.5	0	
20	QPSK	50	50	19.70	19.79	19.67			
20	QPSK	100	0	19.76	19.88	19.64			
20	16QAM	1	0	19.58	19.66	19.64			
20	16QAM	1	49	19.64	19.79	19.80	20.5	0	
20	16QAM	50	24	19.66	19.75	19.67			
20	16QAM	50	0	19.54	19.70	19.74			
20	16QAM	50	24	19.57	19.85	19.76			
20	16QAM	50	50	19.74	19.73	19.70	20.5	0	
20	16QAM	100	0	19.72	19.95	19.71			
20	64QAM	1	0	19.76	19.97	19.84			
20	64QAM	1	49	19.77	19.81	19.80			
20	64QAM	1	99	19.84	19.83	19.82	20.5	0	
20	64QAM	50	0	19.82	19.79	19.75			
20	64QAM	50	24	19.66	19.75	19.67			
20	64QAM	50	50	19.58	19.83	19.76			
20	64QAM	100	0	19.81	19.83	19.73	20	0.5	
20	256QAM	1	0	19.24	19.39	19.33			
20	256QAM	1	49	19.25	19.38	19.23			
20	256QAM	1	99	19.31	19.38	19.25			
20	256QAM	50	0	19.29	19.42	19.27	20	0.5	
20	256QAM	50	24	19.24	19.38	19.24			
20	256QAM	50	50	19.34	19.41	19.35			
20	256QAM	100	0	19.40	19.46	19.31			
Channel				2575.5	2590.5	2615.5	Hardcopy limit (dBm)	MPR (dB)	
Frequency (MHz)				2577.5	2595	2612.5			
15	QPSK	1	0	19.69	19.86	19.88	20.5	0	
15	QPSK	1	37	19.53	19.91	19.85			
15	QPSK	1	74	19.48	19.47	19.48			
15	QPSK	36	0	19.83	19.93	19.72			
15	QPSK	36	20	19.62	19.82	19.76	20.5	0	
15	QPSK	36	39	19.57	19.73	19.57			
15	QPSK	75	0	19.62	19.86	19.86			
15	16QAM	1	0	19.54	19.83	19.66			
15	16QAM	1	37	19.45	19.75	19.50	20.5	0	
15	16QAM	1	74	19.61	19.59	19.58			
15	16QAM	36	0	19.63	19.72	19.64			
15	16QAM	36	20	19.60	19.80	19.82			
15	16QAM	36	39	19.72	19.90	19.59	20.5	0	
15	16QAM	75	0	19.80	19.82	19.74			
15	64QAM	1	0	19.69	19.89	19.83			
15	64QAM	1	37	19.62	19.86	19.71			
15	64QAM	1	74	19.80	19.87	19.74	20.5	0	
15	64QAM	36	0	19.64	19.78	19.65			
15	64QAM	36	20	19.70	19.65	19.66			
15	64QAM	36	39	19.72	19.82	19.74			
15	64QAM	75	0	19.69	19.80	19.82	20	0.5	
15	256QAM	1	0	19.24	19.36	19.27			
15	256QAM	1	37	19.27	19.35	19.21			
15	256QAM	1	74	19.29	19.36	19.24			
15	256QAM	36	0	19.29	19.42	19.20	20	0.5	
15	256QAM	36	20	19.16	19.39	19.26			
15	256QAM	36	39	19.29	19.36	19.30			
15	256QAM	75	0	19.32	19.48	19.34			
Channel				37600	38000	38200	Hardcopy limit (dBm)	MPR (dB)	
Frequency (MHz)				2617.5	2635	2652.5			
10	QPSK	1	0	19.90	19.94	19.76	20.5	0	
10	QPSK	1	25	19.85	19.97	19.84			
10	QPSK	1	49	19.43	19.39	19.31			
10	QPSK	25	0	19.75	19.91	19.70			
10	QPSK	25	12	19.82	19.73	19.73	20.5	0	
10	QPSK	25	25	19.68	19.79	19.84			
10	QPSK	50	0	19.60	19.79	19.72			
10	16QAM	1	0	19.47	19.62	19.47			
10	16QAM	1	25	19.66	19.84	19.80	20.5	0	
10	16QAM	1	49	19.52	19.69	19.60			
10	16QAM	25	0	19.83	19.89	19.86			
10	16QAM	25	12	19.74	19.66	19.61			
10	16QAM	25	25	19.71	19.84	19.81	20.5	0	
10	16QAM	50	0	19.73	19.90	19.76			
10	64QAM	1	0	19.74	19.88	19.70			
10	64QAM	1	25	19.75	19.88	19.82			
10	64QAM	1	49	19.73	19.95	19.77	20.5	0	
10	64QAM	25	0	19.66	19.84	19.54			
10	64QAM	25	12	19.69	19.74	19.70			
10	64QAM	25	25	19.59	19.84	19.52			
10	64QAM	50	0	19.90	19.81	19.74	20	0.5	
10	256QAM	1	0	19.23	19.42	19.35			
10	256QAM	1	25	19.27	19.38	19.25			
10	256QAM	1	49	19.32	19.35	19.16			
10	256QAM	25	0	19.24	19.42	19.24	20	0.5	
10	256QAM	25	12	19.26	19.41	19.26			
10	256QAM	25	25	19.26	19.34	19.36			
10	256QAM	50	0	19.41	19.46	19.31			
Channel				3777.5	38000	38225	Hardcopy limit (dBm)	MPR (dB)	
Frequency (MHz)				2672.5	2695	2617.5			
5	QPSK	1	0	19.68	20.01	19.89	20.5	0	
5	QPSK	1	12	19.84	19.93	19.93			
5	QPSK	1	24	19.41	19.39	19.30			
5	QPSK	12	0	19.80	19.86	19.71			
5	QPSK	12	7	19.81	19.85	19.74	20.5	0	
5	QPSK	12	13	19.67	19.71	19.69			
5	QPSK	25	0	19.59	19.74	19.69			
5	16QAM	1	0	19.67	19.55	19.49			
5	16QAM	1	12	19.62	19.65	19.63	20.5	0	
5	16QAM	1	24	19.62	19.46	19.37			
5	16QAM	12	0	19.66	19.70	19.77			
5	16QAM	12	7	19.74	19.77	19.59			
5	16QAM	12	13	19.75	19.74	19.72	20.5	0	
5	16QAM	25	0	19.60	19.83	19.84			
5	64QAM	1	0	19.67	19.93	19.83			
5	64QAM	1	12	19.72	19.79	19.76			
5	64QAM	1	24	19.64	19.78	19.74	20.5	0	
5	64QAM	12	0	19.79	19.76	19.68			
5	64QAM	12	7	19.59	19.77	19.68			
5	64QAM	12	13	19.56	19.72	19.65			
5	64QAM	25	0	19.83	19.83	19.76	20	0.5	
5	256QAM	1	0	19.21	19.36	19.27			
5	256QAM	1	12	19.22	19.36	19.23			
5	256QAM	1	24	19.27	19.32	19.19			
5	256QAM	12	0	19.20	19.38	19.21	20	0.5	
5	256QAM	12	7	19.22	19.40	19.20			
5	256QAM	12	13	19.30	19.34	19.29			
5	256QAM	25	0	19.38	19.44	19.22			

Band 41 Ant3 DS15 Other PA									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	
Channel				39750	40165	40620	41095	41490	
Frequency (MHz)				2508	2549.5	2593	2636.5	2680	
20	QPSK	1	0	19.73	19.67	20.17	19.76	19.88	20.5
20	QPSK	1	49	19.70	19.82	20.02	19.72	19.83	
20	QPSK	1	99	19.76	19.75	19.99	19.80	19.97	
20	QPSK	50	0	19.83	19.83	20.15	19.68	19.98	
20	QPSK	50	24	19.83	19.60	20.10	19.84	19.91	20.5
20	QPSK	50	50	19.63	19.75	20.10	19.62	20.03	
20	QPSK	100	0	19.84	19.84	19.99	19.75	19.97	
20	16QAM	0	19.84	19.80	19.98	19.68	19.85		
20	16QAM	1	49	19.67	19.72	19.91	19.70	19.85	20.5
20	16QAM	1	99	19.65	19.68	20.14	19.62	19.92	
20	16QAM	50	0	19.76	19.75	19.98	19.73	19.94	
20	16QAM	50	24	19.78	19.79	20.00	19.62	19.98	
20	16QAM	50	50	19.72	19.62	20.02	19.59	20.05	20.5
20	16QAM	100	0	19.88	19.68	20.01	19.55	19.89	
20	64QAM	1	0	19.79	19.58	19.88	19.72	19.86	
20	64QAM	1	49	19.70	19.70	19.97	19.67	19.73	
20	64QAM	1	99	19.64	19.61	20.13	19.58	20.01	20.5
20	64QAM	50	0	19.72	19.70	19.93	19.78	19.80	
20	64QAM	50	24	19.53	19.62	19.88	19.65	19.80	
20	64QAM	100	0	19.78	19.69	19.92	19.54	19.82	
20	256QAM	1	0	19.91	19.71	20.02	19.72	19.97	20.5
20	256QAM	1	49	19.22	19.19	19.47	19.22	19.36	
20	256QAM	1	99	19.04	19.16	19.49	19.13	19.24	
20	256QAM	50	24	19.16	19.14	19.49	19.13	19.24	
20	256QAM	50	24	19.16	19.11	19.47	19.19	19.26	20.5
20	256QAM	50	50	19.17	19.11	19.40	19.16	19.30	
20	256QAM	100	0	19.03	19.15	19.54	19.11	19.33	
20	Frequency (MHz)			2508	2549.5	2593	2636.5	2680	
15	QPSK	1	0	19.56	19.54	19.93	19.50	19.65	21
15	QPSK	1	37	19.55	19.50	19.88	19.39	19.62	
15	QPSK	1	74	19.52	19.48	19.87	19.34	19.58	
15	QPSK	36	0	19.54	19.67	19.88	19.58	19.86	
15	QPSK	36	20	19.47	19.62	19.72	19.50	19.69	20.5
15	QPSK	36	36	19.48	19.48	19.84	19.40	19.68	
15	QPSK	75	0	19.72	19.70	19.88	19.50	19.78	
15	16QAM	1	0	19.52	19.48	19.87	19.53	19.74	
15	16QAM	1	37	19.46	19.63	19.74	19.51	19.70	20.5
15	16QAM	1	74	19.63	19.38	19.90	19.50	19.66	
15	16QAM	36	0	19.68	19.55	19.97	19.62	19.67	
15	16QAM	36	20	19.55	19.48	19.77	19.54	19.70	
15	16QAM	36	36	19.59	19.44	19.83	19.60	19.89	20.5
15	16QAM	75	0	19.54	19.62	19.88	19.37	19.73	
15	64QAM	1	0	19.56	19.54	19.91	19.39	19.71	
15	64QAM	1	37	19.48	19.48	19.63	19.41	19.66	
15	64QAM	1	74	19.57	19.46	19.91	19.55	19.76	20.5
15	64QAM	36	0	19.57	19.57	19.84	19.63	19.85	
15	64QAM	36	20	19.52	19.60	19.86	19.44	19.64	
15	64QAM	36	36	19.50	19.57	19.87	19.51	19.76	
15	64QAM	75	0	19.49	19.52	19.87	19.47	19.74	20.5
15	256QAM	1	0	19.25	19.15	19.43	19.14	19.29	
15	256QAM	1	37	19.87	19.07	19.40	19.15	19.16	
15	256QAM	1	74	19.14	19.06	19.49	19.12	19.34	
15	256QAM	36	20	19.17	19.17	19.63	19.20	19.36	20.5
15	256QAM	36	20	19.17	19.03	19.41	19.11	19.22	
15	256QAM	36	36	19.11	19.05	19.32	19.13	19.28	
15	256QAM	75	0	19.12	19.17	19.56	19.03	19.38	
Channel				39950	40160	40620	41080	41560	
Frequency (MHz)				2508	2547	2592	2636	2685	
10	QPSK	1	0	19.64	19.47	19.60	19.54	19.66	21
10	QPSK	1	25	19.59	19.45	19.84	19.47	19.61	
10	QPSK	1	49	19.51	19.62	20.02	19.43	19.62	
10	QPSK	25	0	19.53	19.65	19.83	19.65	19.73	
10	QPSK	25	12	19.54	19.63	19.78	19.44	19.70	20.5
10	QPSK	25	25	19.51	19.46	19.97	19.50	19.73	
10	QPSK	50	0	19.57	19.62	19.91	19.47	19.88	
10	16QAM	0	19.58	19.48	19.89	19.49	19.68		
10	16QAM	25	19.54	19.65	19.77	19.62	19.70	20.5	
10	16QAM	1	49	19.68	19.41	19.84	19.61		19.67
10	16QAM	25	0	19.65	19.64	19.80	19.63		19.78
10	16QAM	25	12	19.50	19.43	19.75	19.48		19.63
10	16QAM	25	25	19.52	19.62	19.84	19.54	19.65	20.5
10	16QAM	50	0	19.75	19.61	19.93	19.55	19.61	
10	64QAM	1	0	19.56	19.47	19.68	19.39	19.70	
10	64QAM	1	25	19.38	19.40	19.79	19.53	19.55	
10	64QAM	25	12	19.45	19.41	19.80	19.39	19.71	20.5
10	64QAM	25	0	19.71	19.62	19.92	19.60	19.83	
10	64QAM	25	12	19.32	19.49	19.70	19.64	19.71	
10	64QAM	25	25	19.55	19.57	19.77	19.37	19.75	
10	256QAM	1	49	19.67	19.68	19.88	19.57	19.71	20.5
10	256QAM	1	25	19.14	19.12	19.30	19.15	19.28	
10	256QAM	1	25	19.00	19.15	19.44	19.06	19.22	
10	256QAM	1	49	19.13	19.13	19.46	19.02	19.37	
10	256QAM	25	0	19.17	19.23	19.58	19.03	19.34	20.5
10	256QAM	25	12	19.11	19.11	19.47	19.02	19.28	
10	256QAM	25	25	19.17	19.13	19.39	19.16	19.27	
10	256QAM	50	0	19.10	19.11	19.45	19.06	19.33	
Channel				39975	40148	40620	41083	41565	
Frequency (MHz)				2508	2547.8	2592	2640.3	2685	
5	QPSK	1	0	19.69	19.48	19.95	19.46	19.70	21
5	QPSK	1	12	19.42	19.48	19.77	19.61	19.59	
5	QPSK	1	24	19.58	19.52	19.93	19.61	19.80	
5	QPSK	12	0	19.51	19.64	19.84	19.49	19.75	
5	QPSK	12	12	19.50	19.49	19.83	19.53	19.61	20.5
5	QPSK	25	0	19.47	19.58	19.94	19.60	19.66	
5	16QAM	0	19.70	19.56	19.95	19.59	19.90		
5	16QAM	1	0	19.58	19.62	19.94	19.45	19.73	
5	16QAM	1	12	19.60	19.68	19.75	19.44	19.71	20.5
5	16QAM	1	24	19.53	19.39	19.96	19.51	19.73	
5	16QAM	12	0	19.66	19.62	19.91	19.68	19.84	
5	16QAM	12	12	19.63	19.63	19.84	19.48	19.84	
5	16QAM	25	0	19.72	19.46	19.99	19.37	19.74	20.5
5	64QAM	1	0	19.70	19.59	19.90	19.47	19.83	
5	64QAM	1	12	19.47	19.39	19.76	19.57	19.55	
5	64QAM	1	24	19.63	19.52	20.01	19.39	19.68	
5	64QAM	12	0	19.69	19.58	19.92	19.61	19.81	20.5
5	64QAM	12	12	19.39	19.69	19.78	19.59	19.64	
5	64QAM	12	13	19.43	19.42	19.68	19.41	19.64	
5	64QAM	25	0	19.71	19.57	20.00	19.57	19.81	
5	256QAM	1	0	19.16	19.16	19.40	19.11	19.27	20.5
5	256QAM	1	12	19.00	19.16	19.33	19.10	19.15	
5	256QAM	1	24	19.19	19.11	19.46	19.11	19.29	
5	256QAM	12	0	19.17	19.22	19.51	19.08	19.37	
5	256QAM	12	12	19.07	19.09	19.42	19.02	19.27	20.5
5	256QAM	25	0	19.12	19.06	19.43	19.09	19.28	
5	256QAM	25	0	19.08	19.15	19.49	19.09	19.26	

Band 7 Ant4 DSI5 Other PA									
BW (MHz)	Module on Channel	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				20860	21100	21150			
Frequency (MHz)				25075	2535	2565			
20	QPSK	1	0	19.49	19.55	19.48	20.5	0	
20	QPSK	1	49	19.33	19.44	19.35			
20	QPSK	1	99	19.30	19.38	19.27			
20	QPSK	50	0	19.27	19.40	19.19	20.5	0	
20	QPSK	50	24	19.32	19.33	19.25			
20	QPSK	50	50	19.26	19.26	19.11			
20	QPSK	100	0	19.21	19.32	19.21	20.5	0	
20	16QAM	1	0	19.19	19.29	19.16			
20	16QAM	1	49	19.07	19.22	18.97			
20	16QAM	1	99	19.03	19.16	19.01	20.5	0	
20	16QAM	50	0	19.15	19.29	19.22			
20	16QAM	50	24	19.18	19.16	19.06			
20	16QAM	50	50	19.18	19.29	19.16	20.5	0	
20	16QAM	100	0	19.13	19.22	19.05			
20	64QAM	1	0	19.28	19.43	19.33			
20	64QAM	1	49	19.33	19.44	19.37	20.5	0	
20	64QAM	1	99	19.27	19.41	19.26			
20	64QAM	50	0	19.23	19.32	19.16			
20	64QAM	50	24	19.11	19.14	19.09	20.5	0	
20	64QAM	50	50	19.11	19.17	19.06			
20	64QAM	100	0	19.31	19.34	19.23			
20	256QAM	1	0	19.29	19.42	19.32	20.5	0	
20	256QAM	1	49	19.27	19.36	19.23			
20	256QAM	1	99	19.32	19.38	19.26			
20	256QAM	50	0	19.43	19.49	19.32	20.5	0	
20	256QAM	50	24	19.33	19.48	19.33			
20	256QAM	50	50	19.31	19.42	19.27			
20	256QAM	100	0	19.36	19.45	19.28	20.5	0	
Channel				20825	21100	21375			
Frequency (MHz)				2507.5	2535	2562.5	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	0	19.20	19.30	19.15	20.5	0	
15	QPSK	1	37	19.08	19.12	19.07			
15	QPSK	1	74	19.03	19.11	18.94			
15	QPSK	36	0	18.84	19.13	18.93	20.5	0	
15	QPSK	36	20	19.01	19.05	18.93			
15	QPSK	36	39	18.84	18.99	18.80			
15	QPSK	75	0	18.95	19.07	18.89	20.5	0	
15	16QAM	1	0	18.93	18.97	18.82			
15	16QAM	1	37	18.74	18.87	18.64			
15	16QAM	1	74	18.75	18.83	18.71	20.5	0	
15	16QAM	36	0	18.90	18.95	18.97			
15	16QAM	36	20	18.84	18.85	18.74			
15	16QAM	36	39	18.83	19.01	18.81	20.5	0	
15	16QAM	75	0	18.85	18.94	18.70			
15	64QAM	1	0	19.02	19.08	19.05			
15	64QAM	1	37	19.06	19.13	19.01	20.5	0	
15	64QAM	1	74	18.97	19.13	18.95			
15	64QAM	36	0	18.89	18.97	18.84			
15	64QAM	36	20	18.83	18.88	18.82	20.5	0	
15	64QAM	36	39	18.79	18.89	18.77			
15	64QAM	75	0	19.04	19.03	18.93			
15	256QAM	1	0	19.25	19.37	19.29	20.5	0	
15	256QAM	1	37	19.28	19.34	19.21			
15	256QAM	1	74	19.33	19.33	19.28			
15	256QAM	36	0	19.37	19.46	19.29	20.5	0	
15	256QAM	36	20	19.29	19.39	19.25			
15	256QAM	36	39	19.27	19.36	19.23			
15	256QAM	75	0	19.30	19.42	19.20	20.5	0	
Channel				20800	21100	21400			
Frequency (MHz)				2505	2535	2565	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	0	19.23	19.33	19.19	20.5	0	
10	QPSK	1	25	19.09	19.14	19.03			
10	QPSK	1	49	19.02	19.13	18.98			
10	QPSK	25	0	18.91	19.13	18.94	20.5	0	
10	QPSK	25	12	19.08	18.98	18.83			
10	QPSK	25	25	19.07	18.86	18.67			
10	QPSK	50	0	18.90	19.01	18.92	20.5	0	
10	16QAM	1	0	18.92	19.02	18.90			
10	16QAM	1	25	18.81	18.87	18.63			
10	16QAM	1	49	18.76	18.89	18.69	20.5	0	
10	16QAM	25	0	18.90	18.94	18.86			
10	16QAM	25	12	18.93	18.86	18.75			
10	16QAM	25	25	18.68	19.04	18.83	20.5	0	
10	16QAM	50	0	18.81	18.92	18.71			
10	64QAM	1	0	18.94	19.08	19.08			
10	64QAM	1	25	19.01	19.16	19.06	20.5	0	
10	64QAM	1	49	18.94	19.06	18.82			
10	64QAM	25	0	18.93	18.98	18.81			
10	64QAM	25	12	18.83	18.88	18.82	20.5	0	
10	64QAM	25	25	18.79	18.83	18.80			
10	64QAM	50	0	19.00	19.07	18.96			
10	256QAM	1	0	19.23	19.37	19.31	20.5	0	
10	256QAM	1	25	19.23	19.36	19.17			
10	256QAM	1	49	19.31	19.37	19.19			
10	256QAM	25	0	19.35	19.47	19.30	20.5	0	
10	256QAM	25	12	19.31	19.40	19.28			
10	256QAM	25	25	19.31	19.40	19.20			
10	256QAM	50	0	19.35	19.42	19.28	20.5	0	
Channel				20775	21100	21425			
Frequency (MHz)				2502.5	2535	2567.5	Tune-up limit (dBm)	MPR (dB)	
5	QPSK	1	0	19.18	19.27	19.19	20.5	0	
5	QPSK	1	12	19.00	19.11	19.04			
5	QPSK	1	24	18.96	19.08	18.98			
5	QPSK	12	0	19.02	19.14	18.90	20.5	0	
5	QPSK	12	7	19.03	19.06	19.00			
5	QPSK	12	13	19.00	18.98	18.78			
5	QPSK	25	0	18.88	19.01	18.97	20.5	0	
5	16QAM	1	0	18.88	18.99	18.89			
5	16QAM	1	12	18.75	18.92	18.67			
5	16QAM	1	24	18.74	18.90	18.77	20.5	0	
5	16QAM	12	0	18.79	19.04	18.94			
5	16QAM	12	7	18.89	18.84	18.76			
5	16QAM	12	13	18.90	18.99	18.84	20.5	0	
5	16QAM	25	0	18.89	18.94	18.78			
5	64QAM	1	0	18.98	19.14	18.98			
5	64QAM	1	12	19.06	19.12	19.09	20.5	0	
5	64QAM	1	24	19.02	19.17	18.93			
5	64QAM	12	0	18.93	18.97	18.83			
5	64QAM	12	7	18.82	18.84	18.83	20.5	0	
5	64QAM	12	13	18.78	18.82	18.78			
5	64QAM	25	0	19.03	19.04	18.88			
5	256QAM	1	0	19.21	19.41	19.29	20.5	0	
5	256QAM	1	12	19.30	19.36	19.26			
5	256QAM	1	24	19.29	19.30	19.25			
5	256QAM	12	0	19.40	19.49	19.29	20.5	0	
5	256QAM	12	7	19.31	19.42	19.35			
5	256QAM	12	13	19.26	19.36	19.20			
5	256QAM	25	0	19.28	19.41	19.24	20.5	0	

Band 7 Ant4 DSI5 Other PA-1									
BW (MHz)	Module on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				20860	21100	21550			
Frequency (MHz)				2510	2535	2560			
20	QPSK	1	0	19.39	19.52	19.22	20.5	0	
20	QPSK	1	49	19.24	19.39	19.22			
20	QPSK	1	99	19.32	19.38	19.28			
20	QPSK	50	0	19.28	19.35	19.17			
20	QPSK	50	24	19.26	19.28	19.08	20.5	0	
20	QPSK	50	50	19.35	19.38	19.24			
20	QPSK	100	0	19.29	19.40	19.06			
20	16QAM	1	0	19.32	19.28	19.10			
20	16QAM	1	49	19.28	19.21	18.99	20.5	0	
20	16QAM	1	99	19.14	19.21	19.17			
20	16QAM	50	0	19.35	19.47	19.17			
20	16QAM	50	24	19.29	19.32	18.98			
20	16QAM	50	50	19.15	19.12	19.00	20.5	0	
20	16QAM	100	0	19.26	19.39	19.06			
20	64QAM	1	0	19.34	19.36	19.00			
20	64QAM	1	49	19.31	19.14	18.97			
20	64QAM	50	0	19.38	19.26	19.17	20.5	0	
20	64QAM	50	0	19.32	19.38	19.15			
20	64QAM	50	24	19.24	19.34	18.97			
20	64QAM	50	50	19.23	19.27	19.03			
20	64QAM	100	0	19.25	19.35	19.10	20.5	0	
20	256QAM	1	0	19.31	19.43	19.09			
20	256QAM	1	49	19.28	19.38	18.98			
20	256QAM	1	99	19.19	19.26	19.06			
20	256QAM	50	0	19.36	19.36	19.09	20.5	0	
20	256QAM	50	24	19.26	19.31	19.10			
20	256QAM	50	50	19.22	19.24	19.02			
20	256QAM	100	0	19.18	19.24	19.14			
Frequency (MHz)				2507.5	2535	2562.5	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	0	19.32	19.49	19.18	20.5	0	
15	QPSK	1	37	19.18	19.37	19.18			
15	QPSK	1	74	19.29	19.39	19.24			
15	QPSK	36	0	19.25	19.33	19.10			
15	QPSK	36	24	19.23	19.26	18.93	20.5	0	
15	QPSK	36	39	19.14	19.26	18.98			
15	QPSK	75	0	19.24	19.36	19.07			
15	16QAM	1	0	19.35	19.31	19.02			
15	16QAM	1	37	19.27	19.21	18.92	20.5	0	
15	16QAM	1	74	19.13	19.16	19.04			
15	16QAM	36	0	19.28	19.32	19.18			
15	16QAM	36	20	19.24	19.31	18.99			
15	16QAM	36	39	19.10	19.12	19.00	20.5	0	
15	16QAM	75	0	19.24	19.33	19.08			
15	64QAM	1	0	19.33	19.38	18.96			
15	64QAM	1	37	19.29	19.13	18.97			
15	64QAM	1	74	19.26	19.32	19.18	20.5	0	
15	64QAM	36	0	19.27	19.31	18.99			
15	64QAM	36	20	19.18	19.33	18.96			
15	64QAM	36	39	19.15	19.27	19.04			
15	64QAM	75	0	19.25	19.29	19.03	20.5	0	
15	256QAM	1	0	19.25	19.24	18.96			
15	256QAM	1	37	19.12	19.34	18.95			
15	256QAM	1	74	19.20	19.25	18.87			
15	256QAM	36	0	19.36	19.32	19.02	20.5	0	
15	256QAM	36	20	19.26	19.26	19.07			
15	256QAM	36	39	19.16	19.25	18.99			
15	256QAM	75	0	19.12	19.25	18.98			
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2505	2535	2565			
10	QPSK	1	0	19.37	19.48	19.21	20.5	0	
10	QPSK	1	25	19.18	19.39	19.22			
10	QPSK	1	49	19.27	19.41	19.22			
10	QPSK	25	0	19.27	19.32	19.16			
10	QPSK	25	12	19.25	19.20	18.93	20.5	0	
10	QPSK	25	25	19.10	19.28	19.00			
10	QPSK	50	0	19.27	19.41	19.01			
10	16QAM	1	0	19.30	19.30	19.05			
10	16QAM	1	25	19.24	19.18	18.93	20.5	0	
10	16QAM	1	49	19.15	19.08	18.96			
10	16QAM	25	0	19.29	19.47	19.10			
10	16QAM	25	10	19.26	19.14	18.89			
10	16QAM	50	0	19.22	19.35	18.96	20.5	0	
10	64QAM	1	0	19.25	19.37	18.99			
10	64QAM	1	25	19.17	19.25	18.91			
10	64QAM	1	49	19.02	19.29	19.16			
10	64QAM	25	0	19.34	19.35	19.08	20.5	0	
10	64QAM	25	12	19.22	19.29	18.93			
10	64QAM	25	25	19.22	19.20	18.95			
10	64QAM	50	0	19.16	19.34	19.02			
10	256QAM	1	0	19.34	19.33	19.02	20.5	0	
10	256QAM	1	25	19.12	19.33	18.89			
10	256QAM	1	49	19.22	19.20	18.90			
10	256QAM	25	0	19.35	19.34	19.07			
10	256QAM	25	12	19.17	19.23	19.06	20.5	0	
10	256QAM	25	25	19.15	19.24	18.94			
10	256QAM	50	0	19.10	19.25	19.06			
10	256QAM	50	0	19.10	19.25	19.06			
Channel				20776	21100	21425	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2502.5	2535	2567.5			
5	QPSK	1	0	19.35	19.48	19.18	20.5	0	
5	QPSK	1	12	19.26	19.33	19.19			
5	QPSK	1	24	19.28	19.40	19.21			
5	QPSK	12	7	19.23	19.22	19.19			
5	QPSK	12	7	19.23	19.22	19.21	20.5	0	
5	QPSK	12	13	19.09	19.26	18.98			
5	QPSK	25	0	19.29	19.41	19.07			
5	16QAM	1	0	19.22	19.25	19.10			
5	16QAM	12	0	19.21	19.22	18.92	20.5	0	
5	16QAM	1	24	19.09	19.24	18.97			
5	16QAM	12	0	19.36	19.43	19.15			
5	16QAM	12	7	19.22	19.40	18.97			
5	16QAM	12	13	19.09	19.13	19.00	20.5	0	
5	16QAM	25	0	19.22	19.32	19.07			
5	16QAM	25	12	19.19	19.20	18.90			
5	64QAM	1	12	19.30	19.16	18.99			
5	64QAM	1	24	19.07	19.21	19.10	20.5	0	
5	64QAM	12	0	19.35	19.28	19.08			
5	64QAM	12	7	19.16	19.29	18.91			
5	64QAM	12	13	19.21	19.19	18.98			
5	256QAM	1	0	19.34	19.21	19.01	20.5	0	
5	256QAM	1	0	19.30	19.43	19.01			
5	256QAM	1	12	19.11	19.29	19.00			
5	256QAM	1	24	19.21	19.28	19.01			
5	256QAM	12	0	19.36	19.39	19.09	20.5	0	
5	256QAM	12	0	19.27	19.30	19.03			
5	256QAM	12	13	19.17	19.20	19.04			
5	256QAM	25	0	19.09	19.18	19.06			

Band 38 Ant4 DS15 Other PA										
BW (MHz)	Modulat ion	RB Size	RB Offset	Power Low Ch./Freq	Power Main Ch./Freq	Power High Ch./Freq	Time-up limit (s/min)	MPR (dB)		
Channel				37650	38000	38150				
Frequency (MHz)				2590	2595	2610				
20	QPSK	1	0	18.13	18.21	17.97	19.5	0		
20	QPSK	1	49	18.00	18.06	17.95				
20	QPSK	1	99	17.98	18.01	17.77				
20	QPSK	50	0	17.89	18.14	17.80	19.5	0		
20	QPSK	50	24	17.95	17.95	17.83				
20	QPSK	50	50	17.72	17.79	17.60				
20	QPSK	100	0	17.87	18.00	17.68	19.5	0		
20	16QAM	1	0	18.06	18.10	17.88				
20	16QAM	1	49	17.93	18.05	17.82				
20	16QAM	1	99	17.98	18.03	17.79	19.5	0		
20	16QAM	50	0	18.08	18.13	17.90				
20	16QAM	50	24	18.04	18.12	17.85				
20	16QAM	50	50	18.05	18.05	17.87	19.5	0		
20	16QAM	100	0	18.18	18.20	17.97				
20	64QAM	1	0	18.07	18.13	18.08	19.5	0		
20	64QAM	1	49	18.03	18.16	18.11				
20	64QAM	1	99	18.04	18.17	18.00				
20	64QAM	50	0	18.13	18.19	17.89	19.5	0		
20	64QAM	50	24	17.98	18.17	17.79				
20	64QAM	50	50	18.09	18.16	17.90				
20	64QAM	100	0	17.00	17.06	16.88	19.5	0		
20	256QAM	1	0	18.10	18.15	17.99				
20	256QAM	1	49	18.04	18.11	17.90				
20	256QAM	1	99	18.07	18.19	17.88	19.5	0		
20	256QAM	50	0	18.03	18.18	17.83				
20	256QAM	50	24	17.98	18.07	17.77				
20	256QAM	50	50	17.98	18.07	17.79	19.5	0		
20	256QAM	100	0	18.07	18.20	17.93				
Channel				37625	38000	38175	Time-up limit (s/min)	MPR (dB)		
Frequency (MHz)				2577.5	2595	2612.5				
15	QPSK	1	0	18.13	18.17	17.89	19.5	0		
15	QPSK	1	37	17.93	18.09	17.81				
15	QPSK	1	74	17.82	18.01	17.74				
15	QPSK	36	0	17.84	18.16	17.78	19.5	0		
15	QPSK	36	20	17.93	17.97	17.61				
15	QPSK	36	39	17.70	17.75	17.52				
15	QPSK	75	0	17.80	18.00	17.58	19.5	0		
15	16QAM	1	0	18.02	18.02	17.86				
15	16QAM	1	37	17.85	18.07	17.83				
15	16QAM	1	74	17.89	18.03	17.80	19.5	0		
15	16QAM	36	0	18.07	18.08	17.85				
15	16QAM	36	20	17.99	18.07	17.82				
15	16QAM	36	39	17.96	17.98	17.88	19.5	0		
15	16QAM	75	0	18.12	18.16	18.00				
15	64QAM	1	0	18.05	18.08	18.00				
15	64QAM	1	37	17.98	18.09	18.04	19.5	0		
15	64QAM	1	74	18.03	18.10	18.01				
15	64QAM	36	0	18.14	18.16	17.81				
15	64QAM	36	20	17.90	18.18	17.74	19.5	0		
15	64QAM	36	39	18.04	18.08	17.83				
15	64QAM	75	0	17.95	18.01	17.83				
15	256QAM	1	0	18.08	18.19	17.96	19.5	0		
15	256QAM	1	37	17.97	18.00	17.89				
15	256QAM	1	74	18.06	18.11	17.89				
15	256QAM	36	0	18.06	18.19	17.86	19.5	0		
15	256QAM	36	20	17.98	18.01	17.75				
15	256QAM	36	39	17.89	18.10	17.73				
15	256QAM	75	0	18.02	18.20	17.87	Time-up limit (s/min)	MPR (dB)		
Channel				37600	38000	38200				
Frequency (MHz)				2575	2595	2615				
10	QPSK	1	0	18.04	18.18	17.99	19.5	0		
10	QPSK	1	25	17.96	18.00	17.87				
10	QPSK	1	49	17.85	18.03	17.75				
10	QPSK	25	0	17.97	18.08	17.72	19.5	0		
10	QPSK	25	12	17.87	17.95	17.83				
10	QPSK	25	25	17.65	17.75	17.55				
10	QPSK	50	0	17.92	18.02	17.82	19.5	0		
10	16QAM	1	0	17.97	18.01	17.83				
10	16QAM	1	25	17.85	18.00	17.83				
10	16QAM	1	49	17.97	18.02	17.74	19.5	0		
10	16QAM	25	0	17.99	18.05	17.83				
10	16QAM	25	12	17.89	18.14	17.88				
10	16QAM	25	25	17.98	18.05	17.80	19.5	0		
10	16QAM	50	0	18.15	18.18	17.90				
10	64QAM	1	0	18.01	18.06	18.02				
10	64QAM	1	25	17.96	18.10	18.10	19.5	0		
10	64QAM	1	49	18.06	18.19	18.01				
10	64QAM	25	0	18.12	18.18	17.89				
10	64QAM	25	12	17.93	18.17	17.73	19.5	0		
10	64QAM	25	25	18.04	18.14	17.93				
10	64QAM	50	0	17.93	17.98	17.85				
10	256QAM	1	0	18.03	18.14	17.98	19.5	0		
10	256QAM	1	25	18.00	18.12	17.89				
10	256QAM	1	49	17.99	18.16	17.90				
10	256QAM	25	0	18.05	18.16	17.78	19.5	0		
10	256QAM	25	12	17.98	18.03	17.79				
10	256QAM	25	25	17.92	18.01	17.82				
10	256QAM	50	0	18.06	18.12	17.88	Time-up limit (s/min)	MPR (dB)		
Channel				37775	38000	38225				
Frequency (MHz)				2592.5	2595	2597.5				
5	QPSK	1	0	18.04	18.12	17.97	19.5	0		
5	QPSK	1	12	18.03	18.08	17.89				
5	QPSK	1	24	17.98	17.92	17.72				
5	QPSK	12	0	17.95	18.15	17.81	19.5	0		
5	QPSK	12	7	17.92	17.94	17.63				
5	QPSK	12	13	17.69	17.73	17.60				
5	QPSK	25	0	17.99	17.94	17.62	19.5	0		
5	16QAM	1	0	17.98	18.04	17.90				
5	16QAM	1	12	17.86	18.08	17.73				
5	16QAM	1	24	17.99	17.98	17.81	19.5	0		
5	16QAM	12	0	18.04	18.15	17.87				
5	16QAM	12	7	18.00	18.11	17.82				
5	16QAM	12	13	17.99	17.98	17.84	19.5	0		
5	16QAM	25	0	18.11	18.15	17.94				
5	64QAM	1	0	18.05	18.13	18.09	19.5	0		
5	64QAM	1	12	17.97	18.08	18.03				
5	64QAM	1	24	18.02	18.12	17.91				
5	64QAM	12	0	18.12	18.14	17.86	19.5	0		
5	64QAM	12	7	17.96	18.17	17.71				
5	64QAM	12	13	18.01	18.11	17.91	19.5	0		
5	64QAM	25	0	17.95	17.97	17.88				
5	256QAM	1	0	18.07	18.19	17.94	19.5	0		
5	256QAM	1	12	18.04	18.15	17.91				
5	256QAM	1	24	18.07	18.14	17.83				
5	256QAM	12	0	18.04	18.16	18.00	19.5	0		
5	256QAM	12	7	17.95	18.09	17.77				
5	256QAM	12	13	17.99	18.07	17.78				
5	256QAM	25	0	18.01	18.14	17.92	19.5	0		
5	256QAM	25	12	17.96	18.03	17.79				
5	256QAM	25	25	17.92	18.01	17.82				

Band 7 Ant5 DSIS Main PA-1												
BW (MHz)	Module on Channel	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)				
Channel				20860	21100	21350						
Frequency (MHz)				25075	25325	25575						
20	QPSK	1	0	18.67	18.85	18.75	20	0				
20	QPSK	1	49	18.61	18.79	18.71						
20	QPSK	1	99	18.70	18.78	18.73						
20	QPSK	50	0	18.68	18.73	18.84	20	0				
20	QPSK	50	24	18.70	18.66	18.68						
20	QPSK	50	50	18.51	18.59	18.65						
20	QPSK	100	0	18.50	18.57	18.50	20	0				
20	16QAM	1	0	18.64	18.67	18.55						
20	16QAM	1	49	18.63	18.84	18.60						
20	16QAM	1	99	18.55	18.83	18.66	20	0				
20	16QAM	50	0	18.70	18.73	18.69						
20	16QAM	50	24	18.66	18.66	18.60						
20	16QAM	50	50	18.57	18.63	18.68	20	0				
20	16QAM	100	0	18.73	18.70	18.63						
20	64QAM	1	0	18.62	18.61	18.63						
20	64QAM	1	49	18.58	18.61	18.63	20	0				
20	64QAM	1	99	18.56	18.84	18.61						
20	64QAM	50	0	17.68	17.65	17.66						
20	64QAM	50	24	17.58	17.67	17.66	19	1				
20	64QAM	50	50	17.58	17.64	17.60						
20	64QAM	100	0	17.53	17.61	17.53						
20	256QAM	1	0	15.62	15.70	15.70	17	3				
20	256QAM	1	49	15.59	15.61	15.58						
20	256QAM	1	99	15.59	15.64	15.64						
20	256QAM	50	0	15.58	15.62	15.63	17	3				
20	256QAM	50	24	15.65	15.68	15.71						
20	256QAM	50	50	15.58	15.56	15.50						
20	256QAM	100	0	15.67	15.73	15.69						
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)				
Frequency (MHz)				2507.5	2535	2562.5						
15	QPSK	1	0	18.62	18.76	18.65	20	0				
15	QPSK	1	37	18.65	18.82	18.63						
15	QPSK	1	74	18.65	18.81	18.69						
15	QPSK	36	0	18.55	18.64	18.69	20	0				
15	QPSK	36	20	18.52	18.55	18.70						
15	QPSK	36	39	18.53	18.62	18.51						
15	QPSK	75	0	18.53	18.67	18.61	20	0				
15	16QAM	1	0	18.82	18.80	18.84						
15	16QAM	1	37	18.51	18.79	18.60						
15	16QAM	1	74	18.53	18.55	18.66	20	0				
15	16QAM	36	0	18.62	18.72	18.66						
15	16QAM	36	20	18.60	18.71	18.60						
15	16QAM	36	39	18.58	18.64	18.59	20	0				
15	16QAM	75	0	18.65	18.69	18.54						
15	64QAM	1	0	18.60	18.56	18.59						
15	64QAM	1	37	18.57	18.63	18.66	20	0				
15	64QAM	1	74	18.55	18.56	18.52						
15	64QAM	36	0	17.67	17.63	17.63						
15	64QAM	36	20	17.52	17.67	17.57	19	1				
15	64QAM	36	39	17.58	17.65	17.56						
15	64QAM	75	0	17.63	17.63	17.52						
15	256QAM	1	0	15.56	15.73	15.63	17	3				
15	256QAM	1	37	15.55	15.63	15.53						
15	256QAM	1	74	15.54	15.55	15.63						
15	256QAM	36	0	15.56	15.55	15.61	17	3				
15	256QAM	36	20	15.56	15.69	15.58						
15	256QAM	36	39	15.54	15.58	15.50						
15	256QAM	75	0	15.60	15.73	15.63						
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)				
Frequency (MHz)				2505	2535	2565						
10	QPSK	1	0	18.62	18.68	18.76	20	0				
10	QPSK	1	25	18.77	18.63	18.74						
10	QPSK	1	49	18.72	18.75	18.84						
10	QPSK	25	0	18.64	18.65	18.57	20	0				
10	QPSK	25	12	18.54	18.61	18.58						
10	QPSK	25	25	18.58	18.60	18.69						
10	QPSK	50	0	18.71	18.63	18.51	20	0				
10	16QAM	1	0	18.72	18.80	18.74						
10	16QAM	1	25	18.51	18.70	18.51						
10	16QAM	1	49	18.64	18.54	18.58	20	0				
10	16QAM	25	0	18.63	18.74	18.64						
10	16QAM	25	12	18.63	18.64	18.54						
10	16QAM	25	25	18.51	18.58	18.65	20	0				
10	16QAM	50	0	18.65	18.68	18.56						
10	64QAM	1	0	18.62	18.67	18.63						
10	64QAM	1	25	18.57	18.55	18.55	20	0				
10	64QAM	1	49	18.54	18.60	18.69						
10	64QAM	25	0	17.69	17.62	17.57						
10	64QAM	25	12	17.54	17.59	17.64	19	1				
10	64QAM	25	25	17.61	17.57	17.57						
10	64QAM	50	0	17.50	17.57	17.55						
10	256QAM	1	0	15.55	15.71	15.69	17	3				
10	256QAM	1	25	15.52	15.61	15.61						
10	256QAM	1	49	15.52	15.67	15.56						
10	256QAM	25	0	15.50	15.57	15.58	17	3				
10	256QAM	25	12	15.60	15.65	15.69						
10	256QAM	25	25	15.59	15.54	15.57						
10	256QAM	50	0	15.60	15.74	15.61						
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)				
Frequency (MHz)				2502.5	2535	2567.5						
5	QPSK	1	0	18.64	18.73	18.70	20	0				
5	QPSK	1	12	18.62	18.73	18.77						
5	QPSK	1	24	18.68	18.60	18.66						
5	QPSK	12	0	18.58	18.61	18.55	20	0				
5	QPSK	12	7	18.65	18.51	18.62						
5	QPSK	12	13	18.60	18.59	18.70						

Band 38 Ant5 DS15 Other PA									
BW [MHz]	Modulat on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up limit (dtm)	MPR (dB)	
Channel				37850	38000	38150			
Frequency (MHz)				2580	2595	2610			
20	QPSK	1	0	19.69	19.77	19.85			
20	QPSK	1	49	19.58	19.51	19.68	21	0	
20	QPSK	1	99	19.46	19.38	19.82			
20	QPSK	50	0	19.25	19.73	19.23			
20	QPSK	50	24	19.58	19.68	19.61	21	0	
20	QPSK	50	50	19.55	19.60	19.72			
20	QPSK	100	0	19.57	19.62	19.60			
20	16QAM	1	0	19.69	19.59	19.69			
20	16QAM	1	49	19.55	19.70	19.62	21	0	
20	16QAM	50	24	19.71	19.61	19.75			
20	16QAM	50	50	19.70	19.68	19.67			
20	16QAM	100	0	19.71	19.67	19.75			
20	16QAM	1	0	19.73	19.75	19.70			
20	16QAM	1	49	19.70	19.68	19.76	20.5	0.5	
20	16QAM	1	99	19.76	19.71	19.72			
20	16QAM	50	0	19.86	19.83	19.10			
20	16QAM	50	24	19.81	19.84	19.12			
20	16QAM	50	50	19.88	19.83	19.03	19.5	1.5	
20	16QAM	100	0	19.86	19.86	19.04			
20	256QAM	1	0	16.95	16.92	17.05			
20	256QAM	1	49	17.00	16.94	17.09	17.5	3.5	
20	256QAM	1	99	17.03	16.93	17.04			
20	256QAM	50	0	16.97	16.95	17.03			
20	256QAM	50	24	17.03	16.97	17.10	17.5	3.5	
20	256QAM	50	50	16.94	16.92	17.05			
20	256QAM	100	0	16.96	16.90	17.05			
Channel				25725	25750	25775	Time-up limit (dtm)	MPR (dB)	
Frequency (MHz)				2577.5	2595	2612.5			
15	QPSK	1	0	19.59	19.57	19.54			
15	QPSK	1	37	19.56	19.70	19.62	21	0	
15	QPSK	1	74	19.59	19.39	19.57			
15	QPSK	36	0	19.33	19.71	19.24			
15	QPSK	36	20	19.71	19.51	19.65	21	0	
15	QPSK	36	39	19.62	19.47	19.80			
15	QPSK	75	0	19.63	19.69	19.58			
15	16QAM	1	0	19.64	19.74	19.74	21	0	
15	16QAM	1	37	19.61	19.70	19.68			
15	16QAM	1	74	19.60	19.58	19.73			
15	16QAM	36	0	19.48	19.57	19.55			
15	16QAM	36	20	19.57	19.56	19.59	20.5	0.5	
15	16QAM	36	39	19.55	19.64	19.57			
15	16QAM	75	0	19.57	19.59	19.51			
15	16QAM	1	0	19.64	19.72	19.71			
15	16QAM	1	37	19.54	19.64	19.66	20.5	0.5	
15	16QAM	1	74	19.55	19.59	19.50			
15	16QAM	36	0	19.57	18.82	18.82			
15	16QAM	36	20	18.63	18.57	18.54	19.5	1.5	
15	16QAM	36	39	18.56	18.57	18.54			
15	16QAM	75	0	18.63	18.68	18.47			
15	256QAM	1	0	16.57	16.57	16.47			
15	256QAM	1	37	16.62	16.67	16.53	17.5	3.5	
15	256QAM	1	74	16.66	16.56	16.51			
15	256QAM	36	0	16.49	16.59	16.48			
15	256QAM	36	20	16.58	16.59	16.62	17.5	3.5	
15	256QAM	36	39	16.50	16.65	16.47			
15	256QAM	75	0	16.50	16.60	16.50			
Channel				37800	38000	38200	Time-up limit (dtm)	MPR (dB)	
Frequency (MHz)				2617.5	2645	2672.5			
10	QPSK	1	0	19.71	19.59	19.55			
10	QPSK	1	25	19.70	19.68	19.65	21	0	
10	QPSK	1	49	19.45	19.40	19.67			
10	QPSK	25	0	19.42	19.59	19.37			
10	QPSK	25	12	19.68	19.56	19.61	21	0	
10	QPSK	25	25	19.60	19.66	19.69			
10	QPSK	50	0	19.70	19.51	19.65			
10	16QAM	1	0	19.68	19.71	19.69	21	0	
10	16QAM	1	25	19.63	19.70	19.70			
10	16QAM	1	49	19.64	19.60	19.71			
10	16QAM	25	0	19.55	19.65	19.45			
10	16QAM	25	12	19.59	19.65	19.47	20.5	0.5	
10	16QAM	25	25	19.61	19.59	19.56			
10	16QAM	50	0	19.57	19.58	19.42			
10	16QAM	1	0	19.70	19.70	19.63			
10	16QAM	1	25	19.60	19.61	19.59	20.5	0.5	
10	16QAM	1	49	19.61	19.65	19.57			
10	16QAM	25	0	18.52	18.60	18.54			
10	16QAM	25	12	18.53	18.61	18.54	19.5	1.5	
10	16QAM	25	25	18.55	18.56	18.51			
10	16QAM	50	0	18.66	18.63	18.56			
10	256QAM	1	0	16.48	16.60	16.54	17.5	3.5	
10	256QAM	1	25	16.57	16.58	16.60			
10	256QAM	1	49	16.58	16.58	16.54			
10	256QAM	25	0	16.59	16.63	16.50			
10	256QAM	25	12	16.56	16.63	16.61	17.5	3.5	
10	256QAM	25	25	16.53	16.63	16.49			
10	256QAM	50	0	16.50	16.60	16.50			
Channel				37775	38000	38225	Time-up limit (dtm)	MPR (dB)	
Frequency (MHz)				2672.5	2695	2617.5			
5	QPSK	1	0	19.70	19.74	19.60			
5	QPSK	1	12	19.62	19.69	19.63	21	0	
5	QPSK	1	24	19.63	19.41	19.57			
5	QPSK	12	0	19.30	19.61	19.32			
5	QPSK	12	7	19.61	19.69	19.62	21	0	
5	QPSK	12	13	19.69	19.68	19.64			
5	QPSK	25	0	19.73	19.70	19.72			
5	16QAM	1	0	19.63	19.66	19.62			
5	16QAM	1	12	19.65	19.59	19.78	21	0	
5	16QAM	1	24	19.61	19.57	19.69			
5	16QAM	12	0	19.52	19.61	19.52			
5	16QAM	12	7	19.48	19.59	19.47	20.5	0.5	
5	16QAM	12	13	19.55	19.60	19.58			
5	16QAM	25	0	19.49	19.54	19.47			
5	16QAM	1	0	19.67	19.66	19.61			
5	16QAM	1	12	19.62	19.54	19.56	20.5	0.5	
5	16QAM	1	24	19.56	19.61	19.53			
5	16QAM	12	0	18.47	18.62	18.54	19.5	1.5	
5	16QAM	12	7	18.60	18.63	18.54			
5	16QAM	12	13	18.58	18.66	18.50			
5	16QAM	25	0	18.56	18.67	18.49			
5	256QAM	1	0	16.51	16.62	16.55			
5	256QAM	1	12	16.62	16.55	16.58	17.5	3.5	
5	256QAM	1	24	16.56	16.57	16.49			
5	256QAM	12	0	16.57	16.60	16.52			
5	256QAM	12	7	16.62	16.62	16.57	17.5	3.5	
5	256QAM	12	13	16.49	16.57	16.52			
5	256QAM	25	0	16.61	16.55	16.56			

Band 41 Ant5 DS15 Other PA										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq		
Channel				39750	40165	40620	41095	41490		
Frequency (MHz)				2508	2549.5	2593	2636.5	2680		
20	QPSK	1	0	19.68	19.77	19.78	19.75	19.63	21	
20	QPSK	1	49	19.72	19.64	19.68	19.70	19.72		
20	QPSK	1	99	19.65	19.70	19.76	19.65	19.66		
20	QPSK	50	0	19.45	19.53	19.77	19.69	19.68	21	
20	QPSK	50	24	19.39	19.61	19.59	19.67	19.61		
20	QPSK	50	50	19.54	19.41	19.57	19.64	19.47		
20	QPSK	100	0	19.51	19.41	19.78	19.73	19.73	21	
20	16QAM	1	0	19.61	19.59	19.70	19.76	19.63		
20	16QAM	1	49	19.48	19.51	19.76	19.64	19.59		
20	16QAM	50	24	19.47	19.58	19.57	19.56	19.56	20.5	
20	16QAM	50	50	19.14	19.14	19.37	19.34	19.33		
20	16QAM	100	0	19.15	19.15	19.37	19.36	19.41		
20	16QAM	50	50	19.32	19.16	19.25	19.31	19.24	20.5	
20	16QAM	100	0	19.16	19.24	19.31	19.35	19.34		
20	16QAM	1	0	19.24	19.26	19.29	19.38	19.42		
20	16QAM	1	49	19.24	19.22	19.36	19.39	19.31	20.5	
20	16QAM	1	99	19.25	19.16	19.30	19.32	19.18		
20	16QAM	50	0	18.15	18.16	18.41	18.31	18.38		
20	16QAM	50	24	18.16	18.15	18.28	18.26	18.43	19.5	
20	16QAM	50	50	18.31	18.20	18.25	18.38	18.24		
20	16QAM	100	0	18.15	18.15	18.31	18.39	18.28		
20	256QAM	1	0	16.19	16.19	16.37	16.34	16.42	17.5	
20	256QAM	1	49	16.15	16.14	16.38	16.34	16.35		
20	256QAM	1	99	16.27	16.12	16.27	16.31	16.22		
20	256QAM	50	0	16.07	16.13	16.37	16.43	16.30	17.5	
20	256QAM	50	24	16.20	16.24	16.38	16.35	16.37		
20	256QAM	50	50	16.30	16.15	16.33	16.32	16.31		
20	256QAM	100	0	16.24	16.15	16.27	16.33	16.16		
Frequency (MHz)				2708	2749.5	2793	2836.5	2880	Time-use limit (min)	MPR (dB)
15	QPSK	1	0	19.69	19.62	19.69	19.64	19.70	21	0
15	QPSK	1	37	19.62	19.61	19.74	19.53	19.62		
15	QPSK	1	75	19.67	19.69	19.69	19.69	19.69		
15	QPSK	36	0	19.45	19.28	19.49	19.61	19.59	21	0
15	QPSK	36	20	19.35	19.33	19.60	19.54	19.51		
15	QPSK	36	36	19.39	19.40	19.50	19.51	19.37		
15	QPSK	75	0	19.30	19.47	19.64	19.43	19.39	20.5	0.5
15	16QAM	1	0	19.42	19.38	19.56	19.52	19.23		
15	16QAM	1	37	19.54	19.42	19.52	19.59	19.61		
15	16QAM	1	74	19.47	19.28	19.46	19.44	19.40	21	0
15	16QAM	36	0	19.16	19.17	19.33	19.36	19.35		
15	16QAM	36	43	19.17	19.14	19.33	19.33	19.33		
15	16QAM	36	39	19.31	19.10	19.17	19.28	19.21	20.5	0.5
15	16QAM	75	0	19.18	19.22	19.25	19.27	19.33		
15	16QAM	1	0	19.17	19.19	19.21	19.40	19.38		
15	16QAM	1	37	19.26	19.21	19.26	19.26	19.26	20.5	0.5
15	16QAM	1	74	19.23	19.10	19.26	19.27	19.13		
15	16QAM	36	0	18.15	18.19	18.36	18.30	18.30		
15	16QAM	36	20	18.10	18.10	18.22	18.21	18.38	19.5	1.5
15	16QAM	36	39	18.32	18.11	18.22	18.31	18.22		
15	16QAM	75	0	18.16	18.13	18.12	18.30	18.25		
15	256QAM	1	0	16.12	16.13	16.28	16.25	16.37	17.5	3.5
15	256QAM	1	37	16.16	16.06	16.34	16.34	16.17		
15	256QAM	1	74	16.26	16.09	16.23	16.22	16.17		
15	256QAM	36	0	16.08	16.16	16.30	16.30	16.16	17.5	3.5
15	256QAM	36	20	16.18	16.25	16.29	16.31	16.29		
15	256QAM	36	39	16.31	16.11	16.34	16.34	16.32		
15	256QAM	75	0	16.27	16.04	16.21	16.33	16.16		
Frequency (MHz)				2908	2949.5	2993	3036.5	3080	Time-use limit (min)	MPR (dB)
10	QPSK	1	0	19.61	19.67	19.74	19.72	19.75	21	0
10	QPSK	1	25	19.68	19.70	19.72	19.67	19.71		
10	QPSK	1	49	19.63	19.60	19.72	19.67	19.58		
10	QPSK	25	0	19.46	19.28	19.49	19.65	19.65	21	0
10	QPSK	25	12	19.44	19.41	19.49	19.51	19.58		
10	QPSK	25	25	19.59	19.30	19.50	19.61	19.56		
10	QPSK	50	0	19.29	19.38	19.64	19.52	19.58	21	0
10	16QAM	1	0	19.31	19.31	19.46	19.47	19.43		
10	16QAM	25	19.33	19.31	19.55	19.62	19.60			
10	16QAM	1	49	19.48	19.28	19.35	19.42	19.31	20.5	0.5
10	16QAM	25	0	19.08	19.08	19.29	19.27	19.24		
10	16QAM	25	12	19.11	19.15	19.38	19.33	19.34		
10	16QAM	75	0	19.15	19.15	19.23	19.23	19.23	20.5	0.5
10	16QAM	50	0	19.12	19.20	19.23	19.29	19.35		
10	16QAM	1	0	19.22	19.25	19.23	19.40	19.37		
10	16QAM	1	25	19.25	19.17	19.38	19.35	19.34	19.5	1.5
10	16QAM	25	12	19.16	19.17	19.28	19.28	18.35		
10	16QAM	25	18	18.10	18.12	18.42	18.29	18.40		
10	16QAM	25	12	18.16	18.17	18.28	18.22	18.35	19.5	1.5
10	16QAM	25	18	18.32	18.17	18.28	18.41	18.25		
10	16QAM	50	0	18.14	18.16	18.26	18.41	18.25		
10	256QAM	1	0	16.19	16.18	16.29	16.34	16.31	17.5	3.5
10	256QAM	1	25	16.10	16.12	16.31	16.30	16.37		
10	256QAM	1	49	16.27	16.08	16.19	16.30	16.21		
10	256QAM	25	0	16.12	16.11	16.34	16.38	16.25	17.5	3.5
10	256QAM	25	12	16.13	16.22	16.32	16.32	16.29		
10	256QAM	25	18	16.30	16.09	16.35	16.25	16.22		
10	256QAM	50	0	16.17	16.10	16.21	16.29	16.14		
Channel				39675	40148	40620	41083	41565	Time-use limit (min)	MPR (dB)
Frequency (MHz)				2424	2465.5	2507	2548.5	2590		
5	QPSK	1	0	19.73	19.61	19.76	19.68	19.77	21	0
5	QPSK	1	12	19.72	19.69	19.70	19.71	19.72		
5	QPSK	1	24	19.58	19.55	19.65	19.75	19.58		
5	QPSK	12	0	19.31	19.48	19.53	19.47	19.66	21	0
5	QPSK	12	7	19.32	19.29	19.49	19.50	19.67		
5	QPSK	25	13	19.45	19.29	19.40	19.60	19.35		
5	16QAM	1	0	19.35	19.37	19.48	19.49	19.51	21	0
5	16QAM	1	0	19.51	19.36	19.51	19.66	19.64		
5	16QAM	1	0	19.52	19.45	19.62	19.65	19.68		
5	16QAM	1	24	19.30	19.44	19.40	19.53	19.32	20.5	0.5
5	16QAM	12	0	19.14	19.13	19.35	19.35	19.29		
5	16QAM	12	7	19.08	19.16	19.29	19.31	19.41		
5	16QAM	12	13	19.30	19.19	19.31	19.35	19.38	20.5	0.5
5	16QAM	1	24	19.25	19.11	19.29	19.23	19.12		
5	16QAM	1	0	18.15	18.11	18.41	18.33	18.34		
5	16QAM	12	7	18.16	18.16	18.27	18.20	18.40	19.5	1.5
5	16QAM	12	13	18.35	18.15	18.22	18.34	18.17		
5	16QAM	25	0	18.17	18.11	18.25	18.34	18.25		
5	16QAM	25	12	18.15	18.16	18.33	18.33	18.43	17.5	3.5
5	256QAM	1	12	16.13	16.14	16.40	16.28	16.29		
5	256QAM	1	24	16.23	16.12	16.22	16.24	16.16		
5	256QAM	12	0	16.11	16.06	16.31	16.37	16.21		
5	256QAM	12	7	16.18	16.19	16.31	16.35	16.30		
5	256QAM	25	13	16.21	16.16	16.27	16.26	16.33		
5	256QAM	25	0	16.15	16.09	16.19	16.29	16.15		

UL CA power

Ant 2 Full Power

CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	23.19	24.00
21100	21298	QPSK	1	99	1	0	23.38	24.00
21350	21152	QPSK	1	0	1	99	23.21	24.00

Ant 2 Full Power

CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	23.45	24.50
37901	38099	QPSK	1	99	1	0	23.49	24.50
38150	37952	QPSK	1	0	1	99	23.23	24.50

Ant 3 Full Power

CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	21.61	23.50
21100	21298	QPSK	1	99	1	0	21.65	23.50
21350	21152	QPSK	1	0	1	99	21.54	23.50

Ant 3 Full Power

CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	21.95	23.50
37901	38099	QPSK	1	99	1	0	22.07	23.50
38150	37952	QPSK	1	0	1	99	21.85	23.50

Ant 4 Full Power

CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	22.25	24.00
21100	21298	QPSK	1	99	1	0	22.39	24.00
21350	21152	QPSK	1	0	1	99	22.31	24.00

Ant 4 Full Power

CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	22.39	24.00
37901	38099	QPSK	1	99	1	0	22.53	24.00
38150	37952	QPSK	1	0	1	99	22.35	24.00

Ant 5 Full Power

CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	19.51	21.00
21100	21298	QPSK	1	99	1	0	19.69	21.00
21350	21152	QPSK	1	0	1	99	19.54	21.00

Ant 5 Full Power

CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	19.67	21.00
37901	38099	QPSK	1	99	1	0	19.98	21.00
38150	37952	QPSK	1	0	1	99	19.55	21.00

Ant 2								
CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	15.12	16.00
21100	21298	QPSK	1	99	1	0	15.40	16.00
21350	21152	QPSK	1	0	1	99	15.24	16.00

Ant 2								
CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	17.48	18.50
37901	38099	QPSK	1	99	1	0	17.52	18.50
38150	37952	QPSK	1	0	1	99	17.22	18.50

Ant 3								
CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	21.61	23.50
21100	21298	QPSK	1	99	1	0	21.65	23.50
21350	21152	QPSK	1	0	1	99	21.54	23.50

Ant 3								
CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	21.95	23.50
37901	38099	QPSK	1	99	1	0	22.07	23.50
38150	37952	QPSK	1	0	1	99	21.85	23.50

Ant 4								
CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	17.24	19.00
21100	21298	QPSK	1	99	1	0	17.31	19.00
21350	21152	QPSK	1	0	1	99	17.30	19.00

Ant 4								
CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	16.34	18.00
37901	38099	QPSK	1	99	1	0	16.47	18.00
38150	37952	QPSK	1	0	1	99	16.30	18.00

Ant 5								
CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	19.51	21.00
21100	21298	QPSK	1	99	1	0	19.69	21.00
21350	21152	QPSK	1	0	1	99	19.54	21.00

Ant 5								
CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	19.67	21.00
37901	38099	QPSK	1	99	1	0	19.98	21.00
38150	37952	QPSK	1	0	1	99	19.55	21.00

Ant 2								
CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	23.19	24.00
21100	21298	QPSK	1	99	1	0	23.38	24.00
21350	21152	QPSK	1	0	1	99	23.21	24.00

Ant 2								
CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	23.45	24.50
37901	38099	QPSK	1	99	1	0	23.49	24.50
38150	37952	QPSK	1	0	1	99	23.23	24.50

Ant 3								
CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	21.61	23.50
21100	21298	QPSK	1	99	1	0	21.65	23.50
21350	21152	QPSK	1	0	1	99	21.54	23.50

Ant 3								
CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	21.95	23.50
37901	38099	QPSK	1	99	1	0	22.07	23.50
38150	37952	QPSK	1	0	1	99	21.85	23.50

Ant 4								
CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	18.31	20.00
21100	21298	QPSK	1	99	1	0	18.44	20.00
21350	21152	QPSK	1	0	1	99	18.36	20.00

Ant 4								
CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	18.34	20.00
37901	38099	QPSK	1	99	1	0	18.46	20.00
38150	37952	QPSK	1	0	1	99	18.31	20.00

Ant 5								
CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	17.48	19.00
21100	21298	QPSK	1	99	1	0	17.66	19.00
21350	21152	QPSK	1	0	1	99	17.50	19.00

Ant 5								
CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	18.06	19.50
37901	38099	QPSK	1	99	1	0	18.33	19.50
38150	37952	QPSK	1	0	1	99	18.01	19.50

Ant 2									
CA_7C									
Combination 20MHz+20MHz (1RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset			
20850	21048	QPSK	1	99	1	0	19.22	20.00	
21100	21298	QPSK	1	99	1	0	19.33	20.00	
21350	21152	QPSK	1	0	1	99	19.25	20.00	

Ant 2									
CA_38C									
Combination 20MHz+20MHz (1RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset			
37850	38048	QPSK	1	99	1	0	21.44	22.50	
37901	38099	QPSK	1	99	1	0	21.54	22.50	
38150	37952	QPSK	1	0	1	99	21.26	22.50	

Ant 3									
CA_7C									
Combination 20MHz+20MHz (1RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset			
20850	21048	QPSK	1	99	1	0	17.56	19.50	
21100	21298	QPSK	1	99	1	0	17.65	19.50	
21350	21152	QPSK	1	0	1	99	17.55	19.50	

Ant 3									
CA_38C									
Combination 20MHz+20MHz (1RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset			
37850	38048	QPSK	1	99	1	0	17.48	19.00	
37901	38099	QPSK	1	99	1	0	17.61	19.00	
38150	37952	QPSK	1	0	1	99	17.40	19.00	

Ant 4									
CA_7C									
Combination 20MHz+20MHz (1RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset			
20850	21048	QPSK	1	99	1	0	22.25	24.00	
21100	21298	QPSK	1	99	1	0	22.39	24.00	
21350	21152	QPSK	1	0	1	99	22.31	24.00	

Ant 4									
CA_38C									
Combination 20MHz+20MHz (1RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset			
37850	38048	QPSK	1	99	1	0	22.39	24.00	
37901	38099	QPSK	1	99	1	0	22.53	24.00	
38150	37952	QPSK	1	0	1	99	22.35	24.00	

Ant 5									
CA_7C									
Combination 20MHz+20MHz (1RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset			
20850	21048	QPSK	1	99	1	0	19.51	21.00	
21100	21298	QPSK	1	99	1	0	19.69	21.00	
21350	21152	QPSK	1	0	1	99	19.54	21.00	

Ant 5									
CA_38C									
Combination 20MHz+20MHz (1RB+100RB)									
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset			
37850	38048	QPSK	1	99	1	0	19.67	21.00	
37901	38099	QPSK	1	99	1	0	19.98	21.00	
38150	37952	QPSK	1	0	1	99	19.55	21.00	

Ant 2								
CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	15.12	16.00
21100	21298	QPSK	1	99	1	0	15.40	16.00
21350	21152	QPSK	1	0	1	99	15.24	16.00

Ant 2								
CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	17.48	18.50
37901	38099	QPSK	1	99	1	0	17.52	18.50
38150	37952	QPSK	1	0	1	99	17.22	18.50

Ant 3								
CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	17.56	19.50
21100	21298	QPSK	1	99	1	0	17.65	19.50
21350	21152	QPSK	1	0	1	99	17.55	19.50

Ant 3								
CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	17.48	19.00
37901	38099	QPSK	1	99	1	0	17.61	19.00
38150	37952	QPSK	1	0	1	99	17.40	19.00

Ant 4								
CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	17.24	19.00
21100	21298	QPSK	1	99	1	0	17.31	19.00
21350	21152	QPSK	1	0	1	99	17.30	19.00

Ant 4								
CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	16.34	18.00
37901	38099	QPSK	1	99	1	0	16.47	18.00
38150	37952	QPSK	1	0	1	99	16.30	18.00

Ant 5								
CA_7C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
20850	21048	QPSK	1	99	1	0	17.48	19.00
21100	21298	QPSK	1	99	1	0	17.66	19.00
21350	21152	QPSK	1	0	1	99	17.50	19.00

Ant 5								
CA_38C								
Combination 20MHz+20MHz (1RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
37850	38048	QPSK	1	99	1	0	18.06	19.50
37901	38099	QPSK	1	99	1	0	18.33	19.50
38150	37952	QPSK	1	0	1	99	18.01	19.50



Downlink CA Power

2CA DL

CA List	PCC									SCC					Power	
	LTE	BW	BW	UL	UL	UL#	UL	DL	DL	LTE	BW	DL	DL	DL	With CA	Without CA
	Band	Ant	(MHz)	Freq. (MHz)	Channel	Mod.	RB	RB Offset	Antenna Configuration	Band	(MHz)	Freq. (MHz)	Channel	Antenna Configuration	Tx. Power (dBm)	Tx. Power (dBm)
CA_2A-2A	Band 2	Ant2	20M	1880	18900	QPSK	1	0		Band 2	5M	1987.5	1175		23.81	23.87
	Band 2	Ant3	20M	1880	18900	QPSK	1	0		Band 2	5M	1987.5	1175		23.36	23.45
CA_2A-4A	Band 2	Ant2	20M	1880	18900	QPSK	1	0		Band 4	20M	2132.5	2175	4xMIMO	23.75	23.87
	Band 2	Ant3	20M	1880	18900	QPSK	1	0		Band 4	20M	2132.5	2175	4xMIMO	23.41	23.45
CA_4A-5A	Band 4	Ant2	20M	1732.5	20175	QPSK	1	0	4xMIMO	Band 5	10M	881.5	2525		24.25	24.32
	Band 4	Ant3	20M	1732.5	20175	QPSK	1	0	4xMIMO	Band 5	10M	881.5	2525		23.27	23.38
	Band 4	Ant4	20M	1732.5	20175	QPSK	1	0	4xMIMO	Band 5	10M	881.5	2525		23.14	23.28
	Band 4	Ant5	20M	1732.5	20175	QPSK	1	0	4xMIMO	Band 5	10M	881.5	2525		21.00	21.07
	Band 5	Ant0	10M	836.5	20525	QPSK	1	0		Band 4	20M	2132.5	2175	4xMIMO	24.17	24.22
	Band 5	Ant1	10M	836.5	20525	QPSK	1	0		Band 4	20M	2132.5	2175	4xMIMO	23.99	24.08
CA_4A-7A	Band 4	Ant2	20M	1732.5	20175	QPSK	1	0	4xMIMO	Band 7	20M	2655	3100	4xMIMO	24.21	24.32
	Band 4	Ant3	20M	1732.5	20175	QPSK	1	0	4xMIMO	Band 7	20M	2655	3100	4xMIMO	23.24	23.38
	Band 4	Ant4	20M	1732.5	20175	QPSK	1	0	4xMIMO	Band 7	20M	2655	3100	4xMIMO	23.24	23.28
	Band 4	Ant5	20M	1732.5	20175	QPSK	1	0	4xMIMO	Band 7	20M	2655	3100	4xMIMO	20.96	21.07
	Band 7	Ant2	20M	2535	21100	QPSK	1	0	4xMIMO	Band 4	20M	2132.5	2175	4xMIMO	24.47	24.56
	Band 7	Ant3	20M	2535	21100	QPSK	1	0	4xMIMO	Band 4	20M	2132.5	2175	4xMIMO	23.49	23.63
	Band 7	Ant4	20M	2535	21100	QPSK	1	0	4xMIMO	Band 4	20M	2132.5	2175	4xMIMO	23.50	23.63
	Band 7	Ant5	20M	2535	21100	QPSK	1	0	4xMIMO	Band 4	20M	2132.5	2175	4xMIMO	20.53	20.65
CA_7A-66A	Band 7	Ant2	20M	2535	21100	QPSK	1	0	4xMIMO	Band 66	20M	2155	66886	4xMIMO	24.44	24.56
	Band 7	Ant3	20M	2535	21100	QPSK	1	0	4xMIMO	Band 66	20M	2155	66886	4xMIMO	23.50	23.63
	Band 7	Ant4	20M	2535	21100	QPSK	1	0	4xMIMO	Band 66	20M	2155	66886	4xMIMO	23.49	23.63
	Band 7	Ant5	20M	2535	21100	QPSK	1	0	4xMIMO	Band 66	20M	2155	66886	4xMIMO	20.54	20.65
	Band 66	Ant2	20M	1745	132322	QPSK	1	0		Band 7	20M	2655	3100	4xMIMO	24.32	24.38
	Band 66	Ant3	20M	1745	132322	QPSK	1	0		Band 7	20M	2655	3100	4xMIMO	23.28	23.41
	Band 66	Ant4	20M	1745	132322	QPSK	1	0		Band 7	20M	2655	3100	4xMIMO	23.22	23.29
	Band 66	Ant5	20M	1745	132322	QPSK	1	0		Band 7	20M	2655	3100	4xMIMO	21.05	21.14
CA_38C	Band 38	Ant2	20M	2580	37850	QPSK	1	0	4xMIMO	Band 38	20M	2599.8	38048	4xMIMO	23.91	24.04
	Band 38	Ant3	20M	2580	37850	QPSK	1	0	4xMIMO	Band 38	20M	2599.8	38048	4xMIMO	23.42	23.45
	Band 38	Ant4	20M	2580	37850	QPSK	1	0	4xMIMO	Band 38	20M	2599.8	38048	4xMIMO	23.15	23.30
	Band 38	Ant5	20M	2580	37850	QPSK	1	0	4xMIMO	Band 38	20M	2599.8	38048	4xMIMO	20.27	20.31
CA_41A-41A	Band 41	Ant2	20M	2593	40620	QPSK	1	0	4xMIMO	Band 41	5M	2687.5	41565	4xMIMO	23.95	24.05
	Band 41	Ant3	20M	2593	40620	QPSK	1	0	4xMIMO	Band 41	5M	2687.5	41565	4xMIMO	23.42	23.48
	Band 41	Ant4	20M	2593	40620	QPSK	1	0	4xMIMO	Band 41	5M	2687.5	41565	4xMIMO	23.18	23.30
	Band 41	Ant5	20M	2593	40620	QPSK	1	0	4xMIMO	Band 41	5M	2687.5	41565	4xMIMO	20.37	20.40
CA_41C	Band 41	Ant2	20M	2593	40620	QPSK	1	0	4xMIMO	Band 41	20M	2612.8	40818	4xMIMO	23.91	24.05
	Band 41	Ant3	20M	2593	40620	QPSK	1	0	4xMIMO	Band 41	20M	2612.8	40818	4xMIMO	23.43	23.48
	Band 41	Ant4	20M	2593	40620	QPSK	1	0	4xMIMO	Band 41	20M	2612.8	40818	4xMIMO	23.22	23.30
	Band 41	Ant5	20M	2593	40620	QPSK	1	0	4xMIMO	Band 41	20M	2612.8	40818	4xMIMO	20.26	20.40
CA_66B	Band 66	Ant2	15M	1745	132322	QPSK	1	0	4xMIMO	Band 66	5M	2197.5	67311	4xMIMO	24.26	24.38
	Band 66	Ant3	15M	1745	132322	QPSK	1	0	4xMIMO	Band 66	5M	2197.5	67311	4xMIMO	23.32	23.41
	Band 66	Ant4	15M	1745	132322	QPSK	1	0	4xMIMO	Band 66	5M	2197.5	67311	4xMIMO	23.17	23.29
	Band 66	Ant5	15M	1745	132322	QPSK	1	0	4xMIMO	Band 66	5M	2197.5	67311	4xMIMO	21.09	21.14
CA_66C	Band 66	Ant2	20M	1745	132322	QPSK	1	0	4xMIMO	Band 66	20M	2164.8	66984	4xMIMO	24.34	24.38
	Band 66	Ant3	20M	1745	132322	QPSK	1	0	4xMIMO	Band 66	20M	2164.8	66984	4xMIMO	23.30	23.41
	Band 66	Ant4	20M	1745	132322	QPSK	1	0	4xMIMO	Band 66	20M	2164.8	66984	4xMIMO	23.16	23.29
	Band 66	Ant5	20M	1745	132322	QPSK	1	0	4xMIMO	Band 66	20M	2164.8	66984	4xMIMO	21.07	21.14

3CA DL

3CA List	PCC									SCC1				SCC2				Power			
	LTE	BW	BW	UL	UL	Mod.	UL#	UL	DL Antenna Configuration	LTE	BW	DL	DL	DL Antenna Configuration	LTE	BW	DL	DL	DL Antenna Configuration	With CA	Without CA
	Band	Ant	(MHz)	Freq.	Channel		RB	RB		Offset	Band	(MHz)	Freq.		Channel	Band	(MHz)	Freq.		Channel	Tx. Power (dBm)
				(MHz)																	
CA_2A-7A-7A	Band 2	Ant2	20M	1880	18900	QPSK	1	0		Band 7	20M	2655	3100	4x4MIMO	Band 7	5M	2687.5	3425	4x4MIMO	23.68	23.87
	Band 2	Ant3	20M	1880	18900	QPSK	1	0		Band 7	20M	2655	3100	4x4MIMO	Band 7	5M	2687.5	3425	4x4MIMO	23.33	23.45
	Band 7	Ant4	20M	2535	21100	QPSK	1	0	4x4MIMO	Band 7	5M	2687.5	3425	4x4MIMO	Band 2	20M	1960	900		23.43	23.63
	Band 7	Ant5	20M	2535	21100	QPSK	1	0	4x4MIMO	Band 7	5M	2687.5	3425	4x4MIMO	Band 2	20M	1960	900		20.46	20.65
CA_2A-7C	Band 2	Ant2	20M	1880	18900	QPSK	1	0		Band 7	20M	2655	3100	4x4MIMO	Band 7	20M	2554.8	3298	4x4MIMO	23.75	23.87
	Band 2	Ant3	20M	1880	18900	QPSK	1	0		Band 7	20M	2655	3100	4x4MIMO	Band 7	20M	2554.8	3298	4x4MIMO	23.25	23.45
	Band 7	Ant4	20M	2535	21100	QPSK	1	0	4x4MIMO	Band 7	20M	2554.8	3298	4x4MIMO	Band 2	20M	1960	900		23.53	23.63
	Band 7	Ant5	20M	2535	21100	QPSK	1	0	4x4MIMO	Band 7	20M	2554.8	3298	4x4MIMO	Band 2	20M	1960	900		20.52	20.65
CA_4A-7C	Band 4	Ant2	20M	1732.5	20175	QPSK	1	0	4x4MIMO	Band 7	20M	2655	3100	4x4MIMO	Band 7	20M	2554.8	3298	4x4MIMO	24.15	24.32
	Band 4	Ant3	20M	1732.5	20175	QPSK	1	0	4x4MIMO	Band 7	20M	2655	3100	4x4MIMO	Band 7	20M	2554.8	3298	4x4MIMO	23.27	23.38
	Band 4	Ant4	20M	1732.5	20175	QPSK	1	0	4x4MIMO	Band 7	20M	2655	3100	4x4MIMO	Band 7	20M	2554.8	3298	4x4MIMO	23.10	23.28
	Band 4	Ant5	20M	1732.5	20175	QPSK	1	0	4x4MIMO	Band 7	20M	2655	3100	4x4MIMO	Band 7	20M	2554.8	3298	4x4MIMO	20.90	21.07
	Band 7	Ant2	20M	2535	21100	QPSK	1	0	4x4MIMO	Band 7	20M	2554.8	3298	4x4MIMO	Band 4	20M	2132.5	2175	4x4MIMO	24.46	24.56
	Band 7	Ant3	20M	2535	21100	QPSK	1	0	4x4MIMO	Band 7	20M	2554.8	3298	4x4MIMO	Band 4	20M	2132.5	2175	4x4MIMO	23.54	23.63
	Band 7	Ant4	20M	2535	21100	QPSK	1	0	4x4MIMO	Band 7	20M	2554.8	3298	4x4MIMO	Band 4	20M	2132.5	2175	4x4MIMO	23.52	23.63
	Band 7	Ant5	20M	2535	21100	QPSK	1	0	4x4MIMO	Band 7	20M	2554.8	3298	4x4MIMO	Band 4	20M	2132.5	2175	4x4MIMO	20.48	20.65
CA_5A-7A-7A	Band 5	Ant0	10M	836.5	20525	QPSK	1	0		Band 7	20M	2655	3100	4x4MIMO	Band 7	5M	2687.5	3425	4x4MIMO	24.04	24.22
	Band 5	Ant1	10M	836.5	20525	QPSK	1	0		Band 7	20M	2655	3100	4x4MIMO	Band 7	5M	2687.5	3425	4x4MIMO	23.95	24.06
	Band 7	Ant2	20M	2535	21100	QPSK	1	0	4x4MIMO	Band 7	5M	2687.5	3425	4x4MIMO	Band 5	10M	881.5	2525		24.40	24.56
	Band 7	Ant3	20M	2535	21100	QPSK	1	0	4x4MIMO	Band 7	5M	2687.5	3425	4x4MIMO	Band 5	10M	881.5	2525		23.50	23.63
	Band 7	Ant4	20M	2535	21100	QPSK	1	0	4x4MIMO	Band 7	5M	2687.5	3425	4x4MIMO	Band 5	10M	881.5	2525		23.43	23.63
CA_4A-1D	Band 7	Ant5	20M	2535	21100	QPSK	1	0	4x4MIMO	Band 7	5M	2687.5	3425	4x4MIMO	Band 5	10M	881.5	2525		20.51	20.65
	Band 41	Ant2	20M	2593	40620	QPSK	1	0	4x4MIMO	Band 41	20M	2612.8	40818	4x4MIMO	Band 41	20M	2632.6	41016	4x4MIMO	23.87	24.05
	Band 41	Ant3	20M	2593	40620	QPSK	1	0	4x4MIMO	Band 41	20M	2612.8	40818	4x4MIMO	Band 41	20M	2632.6	41016	4x4MIMO	23.29	23.48
	Band 41	Ant4	20M	2593	40620	QPSK	1	0	4x4MIMO	Band 41	20M	2612.8	40818	4x4MIMO	Band 41	20M	2632.6	41016	4x4MIMO	23.12	23.30
	Band 41	Ant5	20M	2593	40620	QPSK	1	0	4x4MIMO	Band 41	20M	2612.8	40818	4x4MIMO	Band 41	20M	2632.6	41016	4x4MIMO	20.31	20.40