



**Full&Default Power SA Mode**

GSM850 Ant0 Default								
GSM850 Ant0	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	128	198	251		128	198	251	
TX Channel	128	198	251	Limit	128	198	251	Limit
Frequency (MHz)	854.2	856.4	858.8		854.2	856.4	858.8	
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	32.46	34.00	23.54	23.11	23.45	25.00
GPRS 2 Tx slot	29.20	29.14	29.18	31.00	23.20	23.14	23.18	25.00
GPRS 3 Tx slot	27.86	27.48	27.46	29.20	23.60	23.22	23.20	24.94
GPRS 4 Tx slot	28.17	28.21	28.18	29.00	23.17	23.21	23.18	25.00
EDGE 1 Tx slot	23.20	23.34	23.40	24.50	17.20	17.34	17.40	18.50
EDGE 2 Tx slot	21.83	21.44	21.61	22.70	17.37	17.18	17.35	18.44
EDGE 4 Tx slot	20.21	20.06	20.44	21.90	17.21	17.06	17.44	18.90

**WCDMA V Ant0 Default**

Band	WCDMA V Ant0			Tune-up Limit (dBm)
	4132	4182	4233	
TX Channel	459	460	459	
RX Channel	459	460	459	
Frequency (MHz)	820.4	836.4	856.6	
3GPP Rel 99	AMR 12.2kpps	24.00	23.99	24.00
3GPP Rel 99	RMC 12.2kpps	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	22.54	22.48
3GPP Rel 8	DC-HSDPA Subtest-1	23.00	23.02	22.91
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	20.56





GSM850 Ant1 Default

GSM850 Ant1	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	125	189	251		125	189	251	
TX Channel	125	189	251					
Frequency (MHz)	124.2	188.4	144.8		124.2	188.4	144.8	
GSM 1 Tx slot	22.47	22.45	22.51	24.00	23.47	23.45	23.51	25.00
GPRS 1 Tx slot	22.53	22.55	22.64	24.00	23.53	23.55	23.64	25.00
GPRS 2 Tx slot	28.97	28.91	28.98	31.00	28.97	28.91	28.98	29.00
GPRS 3 Tx slot	27.52	27.64	27.61	29.20	23.26	23.38	23.35	24.94
GPRS 4 Tx slot	26.14	26.20	26.05	28.00	23.14	23.20	23.05	25.00
EDGE 1 Tx slot	25.96	25.97	25.74	27.50	16.96	16.97	16.74	18.50
EDGE 3 Tx slot	23.42	23.58	23.25	24.50	17.42	17.58	17.25	18.50
EDGE 3 Tx slot	21.57	21.68	21.58	22.70	17.31	17.42	17.32	18.44
EDGE 4 Tx slot	20.31	20.32	20.33	21.50	17.31	17.32	17.33	18.50

WCDMA V Ant1 Default

Band	WCDMA V Ant1			Tune-up Limit (dBm)
	4152	4185	4233	
TX Channel	4152	4185	4233	
Rx Channel	4357	4407	4458	
Frequency (MHz)	187.4	187.4	186.6	
3GPP Rel 99 RMC 12.5Kbps	21.43	21.44	21.42	21.00
3GPP Rel 99 RMC 12.5Kbps	23.48	23.54	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	22.46	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 DCHSDPA Subtest-1	22.43	22.50	22.42	24.00
3GPP Rel 8 DCHSDPA Subtest-2	22.47	22.52	22.48	24.00
3GPP Rel 8 DCHSDPA Subtest-3	21.97	22.02	22.05	23.50
3GPP Rel 8 DCHSDPA Subtest-4	21.96	22.02	21.92	23.50
3GPP Rel 6 HSUPA Subtest-1	22.47	22.46	22.46	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+ (HSDM) Subtest-1	19.95	20.00	19.95	21.50







GSM1900 Ant2 Default

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	512	661	810		512	661	810	
Frequency (MHz)	1852.2	1853	1853.8		1852.2	1853	1853.8	
GSM 1 Tx slot	30.70	30.00	30.05	31.00	21.70	21.00	21.05	22.00
GPRS 2 Tx slot	30.17	30.08	30.07	31.00	21.17	21.08	21.07	22.00
GPRS 3 Tx slot	28.53	28.65	28.56	28.00	20.53	20.65	20.56	22.00
GPRS 4 Tx slot	25.14	25.21	25.02	26.20	20.88	20.95	20.76	21.84
EDGE 1 Tx slot	25.87	25.62	25.54	26.50	18.87	18.62	18.54	17.50
EDGE 3 Tx slot	23.08	22.97	22.95	23.50	17.08	16.97	16.95	17.50
EDGE 3 Tx slot	21.42	21.22	21.28	21.70	17.18	16.98	17.02	17.44
EDGE 4 Tx slot	19.56	19.36	19.57	20.50	18.56	18.36	18.57	17.50

WCDMA II Ant2 Default

Band	WCDMA II Ant2			Tune-up Limit (dBm)	WCDMA IV Ant2			Tune-up Limit (dBm)
	Tx Channel	9262	9400		9538	1312	1413	
Rx Channel	9662	9800	9938		1537	1638	1738	
Frequency (MHz)	1927.4	1930	1937.6		1127.4	1127.5	1127.5	
3GPP Rel 99 AMC 12.2kops	23.25	23.17	23.25	25.00	23.62	23.67	23.58	25.00
3GPP Rel 99 RMC 12.2kops	23.38	23.40	23.20	25.00	23.62	23.70	23.63	25.00
3GPP Rel 6 HSDPA Subtest-1	22.34	22.44	22.30	24.00	22.59	22.73	22.66	24.00
3GPP Rel 6 HSDPA Subtest-2	22.33	22.42	22.30	24.00	22.57	22.68	22.61	24.00
3GPP Rel 6 HSDPA Subtest-3	21.88	21.93	21.82	23.50	22.06	22.28	22.18	23.50
3GPP Rel 6 HSDPA Subtest-4	21.88	21.87	21.77	23.50	22.08	22.16	22.08	23.50
3GPP Rel 8 DCHSDPA Subtest-1	22.36	22.35	22.27	24.00	22.53	22.69	22.59	24.00
3GPP Rel 8 DCHSDPA Subtest-2	22.31	22.41	22.28	24.00	22.48	22.63	22.63	24.00
3GPP Rel 8 DCHSDPA Subtest-3	21.83	21.93	21.81	23.50	22.05	22.25	22.16	23.50
3GPP Rel 8 DCHSDPA Subtest-4	21.83	21.92	21.85	23.50	22.02	22.15	22.15	23.50
3GPP Rel 6 HSUPA Subtest-1	22.50	22.40	22.27	24.00	22.58	22.72	22.61	24.00
3GPP Rel 6 HSUPA Subtest-2	20.30	20.45	20.35	22.00	20.69	20.75	20.68	22.00
3GPP Rel 6 HSUPA Subtest-3	21.39	21.43	21.25	23.00	21.58	21.77	21.69	23.00
3GPP Rel 6 HSUPA Subtest-4	20.38	20.43	20.28	22.00	20.55	20.76	20.71	22.00
3GPP Rel 6 HSUPA Subtest-5	22.28	22.38	22.32	24.00	22.60	22.76	22.67	24.00
3GPP Rel 7 HSPA+ (HSDM) Subtest-1	19.84	19.94	19.85	21.50	20.15	20.19	20.19	21.50









GSM1900 Ant3 Default

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	512	661	810		512	661	810	
Frequency (MHz)	1852.2	1853	1853.8		1852.2	1853	1853.8	
GSM 1 Tx slot	29.42	29.55	29.27	31.00	20.42	20.55	20.27	22.00
GPRS 2 Tx slot	29.52	29.57	29.38	31.00	20.52	20.57	20.38	22.00
GPRS 3 Tx slot	28.03	28.08	28.34	28.00	20.03	20.08	20.34	22.00
GPRS 4 Tx slot	24.27	24.23	24.32	26.20	20.31	20.27	20.06	21.84
EDGE 1 Tx slot	25.01	25.18	25.04	28.50	18.01	18.18	18.04	17.50
EDGE 3 Tx slot	22.37	22.54	22.17	23.50	16.37	16.54	16.17	17.50
EDGE 3 Tx slot	21.10	21.13	21.05	21.70	16.84	16.87	16.79	17.44
EDGE 4 Tx slot	19.27	19.25	19.25	20.50	18.27	18.25	18.25	17.50

WCDMA II Ant3 Default

Band	WCDMA II Ant3			Tune-up Limit (dBm)	WCDMA IV Ant3 Default			Tune-up Limit (dBm)
	9262	9400	9538		1312	1413	1513	
TX Channel	9262	9400	9538		1312	1413	1513	
Rx Channel	8662	8800	8938		1537	1638	1738	
Frequency (MHz)	19274	19300	19376		11274	11275	11275	
3GPP Rel 99 AMC 12.2kops	22.24	22.44	22.41	24.50	23.00	23.09	22.59	24.50
3GPP Rel 99 RMC 12.2kops	22.62	22.67	22.62	24.50	23.08	23.11	23.04	24.50
3GPP Rel 6 HSDPA Subtest-1	21.84	21.85	21.85	23.00	22.12	22.22	22.12	23.00
3GPP Rel 6 HSDPA Subtest-2	21.53	21.58	21.58	23.00	22.16	22.11	22.01	23.00
3GPP Rel 6 HSDPA Subtest-3	21.09	21.20	21.10	22.50	21.59	21.65	21.61	22.50
3GPP Rel 6 HSDPA Subtest-4	21.04	21.12	21.14	22.50	21.55	21.62	21.61	22.50
3GPP Rel 8 DCHSDPA Subtest-1	21.82	21.87	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	21.58	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	21.48	22.50
3GPP Rel 8 DC-HSDPA Subtest-4	20.91	21.12	21.01	22.50	21.37	21.53	21.58	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	21.55	22.15	22.00	23.00
3GPP Rel 7 HSPA+ (HSDM) Subtest-1	19.17	19.21	19.23	20.50	19.61	19.71	19.63	20.50



Band 2 Ant3 Default Main PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Ch./Freq., Power Main Ch./Freq., Power Plan Ch./Freq., Turn-on time (ms), Turn-off time (ms), MPR (dB). Includes channel frequency ranges from 18890 to 19150.

Band 4 Ant3 Default Main PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Ch./Freq., Power Main Ch./Freq., Power Plan Ch./Freq., Turn-on time (ms), Turn-off time (ms), MPR (dB). Includes channel frequency ranges from 17170 to 17530.

Band 7 Ant3 Default Main PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Ch./Freq., Power Main Ch./Freq., Power Plan Ch./Freq., Turn-on time (ms), Turn-off time (ms), MPR (dB). Includes channel frequency ranges from 25070 to 25430.

Band 66 Ant3 Default Main PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Ch./Freq., Power Main Ch./Freq., Power Plan Ch./Freq., Turn-on time (ms), Turn-off time (ms), MPR (dB). Includes channel frequency ranges from 15020 to 15380.

Band 2 Ant3 Default Main PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Ch./Freq., Power Main Ch./Freq., Power Plan Ch./Freq., Turn-on time (ms), Turn-off time (ms), MPR (dB). Includes channel frequency ranges from 18890 to 19150.

Band 4 Ant3 Default Main PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Ch./Freq., Power Main Ch./Freq., Power Plan Ch./Freq., Turn-on time (ms), Turn-off time (ms), MPR (dB). Includes channel frequency ranges from 17170 to 17530.

Band 7 Ant3 Default Main PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Ch./Freq., Power Main Ch./Freq., Power Plan Ch./Freq., Turn-on time (ms), Turn-off time (ms), MPR (dB). Includes channel frequency ranges from 25070 to 25430.

Band 66 Ant3 Default Main PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Ch./Freq., Power Main Ch./Freq., Power Plan Ch./Freq., Turn-on time (ms), Turn-off time (ms), MPR (dB). Includes channel frequency ranges from 15020 to 15380.





WCDMA IV Rev4 Default

Band		WCDMA IV Rev4			Tune-up Limit (dBm)
TX Channel		1512	1413	1513	
Rx Channel		1517	1616	1728	
Frequency (MHz)		1122.4	1122.6	1122.6	
3GPP Rel 99	AMR 12.2Kbps	23.11	23.21	23.13	25.00
3GPP Rel 99	RM-C 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	21.62	21.69	21.66	23.50
3GPP Rel 6	HSPA Subtest-1	22.09	22.19	22.09	24.00
3GPP Rel 6	HSPA Subtest-2	20.14	20.31	20.22	22.00
3GPP Rel 6	HSPA Subtest-3	21.29	21.32	21.37	23.00
3GPP Rel 6	HSPA Subtest-4	20.17	20.24	20.12	22.00
3GPP Rel 6	HSPA 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 Aes5 Default

Band	WCDMA IV Aes5			Time-up Limit (dBm)
	1312	1413	1513	
TX Channel	1312	1413	1513	
Rx Channel	1317	1418	1728	
Frequency (MHz)	1122.4	1122.6	1122.6	
3GPP Rel 99	AMR 12.2Kbps	20.86	20.90	20.90
3GPP Rel 99	RM-C 12.2Kbps	20.89	20.93	20.93
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 8	DC-HSDPA Subtest-1	19.97	19.99	19.99
3GPP Rel 8	DC-HSDPA Subtest-2	19.77	19.88	19.94
3GPP Rel 8	DC-HSDPA Subtest-3	19.23	19.43	19.34
3GPP Rel 8	DC-HSDPA Subtest-4	19.40	19.53	19.31
3GPP Rel 6	HSPA Subtest-1	19.75	19.89	19.87
3GPP Rel 6	HSPA Subtest-2	17.92	18.00	17.87
3GPP Rel 6	HSPA Subtest-3	18.95	19.06	19.04
3GPP Rel 6	HSPA Subtest-4	17.81	17.85	17.85
3GPP Rel 6	HSPA Subtest-5	19.77	19.89	19.79
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	17.43	17.51	17.53















## Reduced Power SA Mode for DSI1

GSM850 Amd	GSM850 Amd DSI1			Turn-up Limit (dBm)	Frame-Average Power (dBm)			Turn-up Limit (dBm)
	128	189	351		128	189	251	
TX Channel	824.2	836.4	848.6		824.2	836.4	848.6	
Frequency (MHz)	824.2	836.4	848.6	34.00	23.57	23.09	23.57	25.00
EDGE 1 Tx slots	22.54	22.98	23.45	34.00	23.54	23.11	23.45	25.00
GPRS 1 Tx slots	29.20	29.14	29.18	31.05	23.20	23.14	23.18	25.00
GPRS 2 Tx slots	27.86	27.48	27.46	29.20	23.69	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 slots	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	21.63	21.44	21.61	22.70	17.37	17.18	17.35	18.44
EDGE 4 Tx slots	20.21	20.98	20.44	21.50	17.21	17.06	17.44	18.50

Band	WCDMA V Amd DSI1			Turn-up Limit (dBm)
	4152	4182	4233	
TX Channel	4337	4407	4458	
Rx Channel	4337	4407	4458	
Frequency (MHz)	832.4	836.4	840.6	
3GPP Rel 99	AMR 12.2kops	24.00	23.99	24.00
3GPP Rel 99	RMC 12.2kops	24.00	24.02	23.97
3GPP Rel 6	HSDPA Subtest-1	22.94	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	22.56	22.54	22.48
3GPP Rel 6	DC-HSDPA Subtest-1	23.00	23.02	22.91
3GPP Rel 6	DC-HSDPA Subtest-2	23.02	23.07	23.03
3GPP Rel 6	DC-HSDPA Subtest-3	22.40	22.46	22.51
3GPP Rel 6	DC-HSDPA Subtest-4	22.55	22.55	22.42
3GPP Rel 6	HSUPA Subtest-1	23.03	23.01	23.00
3GPP Rel 6	HSUPA Subtest-2	20.96	21.03	21.06
3GPP Rel 6	HSUPA Subtest-3	21.84	21.97	22.01
3GPP Rel 6	HSUPA Subtest-4	20.99	21.00	21.04
3GPP Rel 6	HSUPA Subtest-5	23.04	23.01	22.99
3GPP Rel 7	HS-AMC (QAM) Subtest-1	20.42	20.99	20.58





**GSM850 Airt 1 DSI1**

GSM850 Airt 1	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	201		176	189	251	
TX Channel	32.2	33.2	34.8	423.2	423.2	423.4	423.8	
Frequency (MHz)	30.76	30.77	30.85	32.50	21.76	21.77	21.65	
GSM 1 Tx slots	30.76	30.80	30.70	32.50	21.79	21.80	21.70	
GPRS 1 Tx slots	27.25	27.59	27.68	29.50	21.55	21.59	21.58	
GPRS 3 Tx slots	25.81	25.78	25.74	27.50	21.55	21.52	21.48	
GPRS 4 Tx slots	24.85	24.95	24.92	26.50	21.88	21.95	21.92	
EDGE 1 Tx slots	25.96	25.97	25.74	27.50	18.96	18.97	18.74	
EDGE 2 Tx slots	23.42	23.38	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	20.53	21.50	17.31	17.32	17.33	

**WCDMA V Airt DSI1**

Band	WCDMA V Airt			Tune-up Limit (dBm)
	4132	4132	4233	
TX Channel	4357	4407	4458	
RX Channel	4357	4407	4458	
Frequency (MHz)	836.4	836.4	846.6	
3GPP Rel 99 AMR 12.2kops	20.91	20.96	21.10	22.50
3GPP Rel 99 RMC 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	20.19	20.09	20.10	21.50
3GPP Rel 6 HSDPA Subtest-3	19.60	19.63	19.38	21.00
3GPP Rel 6 HSDPA Subtest-4	19.48	19.59	19.36	21.00
3GPP Rel 6 DC-HSDPA Subtest-1	20.13	20.03	20.03	21.50
3GPP Rel 6 DC-HSDPA Subtest-2	20.01	20.04	19.99	21.50
3GPP Rel 6 DC-HSDPA Subtest-3	19.60	19.67	19.73	21.00
3GPP Rel 6 DC-HSDPA Subtest-4	19.67	19.59	19.67	21.00
3GPP Rel 6 HSUPA Subtest-1	20.02	20.19	19.97	21.50
3GPP Rel 6 HSUPA Subtest-2	18.10	18.26	18.02	19.50
3GPP Rel 6 HSUPA Subtest-3	19.08	19.11	19.14	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	19.96	21.50
3GPP Rel 7 HSPA+ (16QAM) Subtest-1	17.54	17.64	17.47	19.00









**GSM1900 Anz2 DSH1**

GSM1900 Anz2	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	1952.2	1890	1907.6	1952.2	1900	1920.6		
Frequency (MHz)	27.71	27.85	27.74	29.00	18.71	18.85	18.74	
GSM 1 Tx slots	27.84	27.90	27.80	29.00	18.84	18.90	18.85	
GPRS 2 Tx slots	23.40	23.49	23.37	20.00	18.40	18.48	18.37	
GPRS 3 Tx slots	22.91	22.96	22.84	24.20	18.65	18.70	18.58	
GPRS 4 Tx slots	20.95	21.14	20.90	23.00	17.95	18.14	17.90	
EDGE 1 Tx slots	23.67	23.62	23.54	26.50	16.67	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	19.50	19.36	19.57	20.50	16.56	16.36	16.57	

**WCDMA II Anz2 DSH1**

Band	WCDMA II Anz2			Tune-up Limit (dBm)	WCDMA IV Anz2 DSH1			Tune-up Limit (dBm)
	9652	9668	9638		1312	1313	1313	
TX Channel	9662	9600	9938	1312	1313	1313		
RX Channel	9662	9600	9938	1537	1638	1738		
Frequency (MHz)	1852.4	1880	1907.6	1712.4	1732.6	1752.6		
3GPP Rel 99	AMR 12.2kops	18.35	18.19	18.13	19.50	18.74	18.61	
3GPP Rel 99	AMR 12.7kops	18.38	18.40	19.29	19.50	18.86	18.92	
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	17.71	17.74	
3GPP Rel 6	HSDPA Subtest-3	18.39	18.89	18.70	18.00	17.32	17.42	
3GPP Rel 6	HSDPA Subtest-4	18.79	18.79	18.60	18.00	17.24	17.19	
3GPP Rel 8	DC-HSDPA Subtest-1	17.15	17.21	17.24	18.50	17.86	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	18.84	18.77	18.83	18.00	17.22	17.30	
3GPP Rel 8	DC-HSDPA Subtest-4	18.74	18.93	18.78	18.00	17.16	17.27	
3GPP Rel 6	HSPA Subtest-1	17.20	17.37	17.27	18.50	17.69	17.79	
3GPP Rel 6	HSPA Subtest-2	15.45	15.59	15.58	16.50	15.70	16.02	
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+ (16QAM) Subtest-1	15.65	15.64	15.61	16.00	15.22	15.28	







GSM1900 Arx3 DS11

GSM1900 Arx3	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
TX Channel	192.2	189.9	190.8		192.2	189.9	190.8	
Frequency (MHz)	29.42	29.55	29.27	31.00	20.42	20.55	20.27	22.00
GSM 1 Tx slots	29.52	29.57	29.38	31.00	20.52	20.57	20.38	22.00
GPRS 2 Tx slots	29.03	29.08	29.34	29.00	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 slots	21.01	21.18	21.04	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	19.26	19.25	20.50	16.27	16.25	16.25	17.50

WCDMA II Arx3 DS11

Band	WCDMA II Arx3			Tune-up Limit (dBm)	WCDMA IV Arx3 DS11			Tune-up Limit (dBm)
	9622	9603	9638		1312	1313	1313	
TX Channel	9622	9603	9638		1312	1313	1313	
RX Channel	9622	9600	9638		1537	1638	1738	
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2kops	22.94	22.94	22.81	24.00	23.05	22.96	24.90
3GPP Rel 99	RM-12.7kops	22.62	22.67	22.82	24.00	23.08	23.11	24.50
3GPP Rel 6	HSDPA Subtest-1	21.64	21.65	21.65	23.00	22.12	22.22	23.00
3GPP Rel 6	HSDPA Subtest-2	21.53	21.58	21.58	23.00	22.14	22.11	23.00
3GPP Rel 6	HSDPA Subtest-3	21.09	21.20	21.10	22.50	21.59	21.65	22.50
3GPP Rel 6	HSDPA Subtest-4	21.04	21.12	21.14	22.50	21.65	21.62	21.61
3GPP Rel 8	DC-HSDPA Subtest-1	21.62	21.67	21.58	23.00	22.11	22.11	23.00
3GPP Rel 8	DC-HSDPA Subtest-2	21.65	21.53	21.65	23.00	21.68	22.11	23.00
3GPP Rel 8	DC-HSDPA Subtest-3	20.95	21.17	21.05	22.50	21.45	21.70	21.46
3GPP Rel 8	DC-HSDPA Subtest-4	20.91	21.12	21.01	22.50	21.37	21.63	21.59
3GPP Rel 6	HSUPA Subtest-1	21.40	21.56	21.52	23.00	21.90	22.02	23.00
3GPP Rel 6	HSUPA Subtest-2	19.62	19.71	19.64	21.00	20.04	20.16	20.15
3GPP Rel 6	HSUPA Subtest-3	20.62	20.76	20.76	22.00	21.10	21.20	21.23
3GPP Rel 6	HSUPA Subtest-4	19.82	19.69	19.49	21.00	20.06	20.06	21.00
3GPP Rel 6	HSUPA Subtest-5	21.48	21.65	21.55	23.00	21.95	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 Ar44 DS11			Rev: 01
Band		WCDMA IV Ar44			Time-P Limit (dBm)
TX Channel		1312	1413	1513	
RX Channel		1317	1418	1518	
Frequency (MHz)		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	18.04	18.10	18.10	20.00
3GPP Rel 99	RA6: 12.2Kbps	18.22	18.33	18.25	20.00
3GPP Rel 6	HSDPA Subsect-1	17.21	17.21	17.34	19.00
3GPP Rel 6	HSDPA Subsect-2	17.10	17.23	17.25	19.00
3GPP Rel 6	HSDPA Subsect-3	16.66	16.76	16.99	18.50
3GPP Rel 6	HSDPA Subsect-4	16.95	16.73	16.72	18.50
3GPP Rel 6	DC-HSDPA Subsect-1	17.22	17.23	17.19	19.00
3GPP Rel 6	DC-HSDPA Subsect-2	17.13	17.16	17.15	19.00
3GPP Rel 6	DC-HSDPA Subsect-3	16.62	16.79	16.55	18.50
3GPP Rel 6	DC-HSDPA Subsect-4	16.57	16.74	16.56	18.50
3GPP Rel 6	HSPA Subsect-1	17.13	17.15	17.12	19.00
3GPP Rel 6	HSPA Subsect-2	16.12	16.26	16.19	17.00
3GPP Rel 6	HSPA Subsect-3	16.19	16.22	16.26	18.00
3GPP Rel 6	HSPA Subsect-4	16.19	16.14	16.18	17.00
3GPP Rel 6	HSPA Subsect-5	17.00	17.20	17.14	19.00
3GPP Rel 7	HSPA+ (E-UMTS) Subsect-1	14.81	14.93	14.72	16.50









		WCDMA IV Ar65 DS11			Table 31
Band		WCDMA IV Ar65			Time-CP Loss (dB)
TX Channel		1312	1413	1513	
	RX Channel	1317	1418	1518	
	Frequency (MHz)	1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2kops	20.86	20.90	20.80	22.50
3GPP Rel 99	RA6: 12.2kops	20.89	20.93	20.83	22.50
3GPP Rel 6	HSDPA Subsect-1	19.87	19.96	19.96	21.50
3GPP Rel 6	HSDPA Subsect-2	19.88	19.83	19.91	21.50
3GPP Rel 6	HSDPA Subsect-3	19.41	19.46	19.49	21.00
3GPP Rel 6	HSDPA Subsect-4	19.32	19.36	19.39	21.00
3GPP Rel 6	DC-HSDPA Subsect-1	19.87	19.99	19.92	21.50
3GPP Rel 6	DC-HSDPA Subsect-2	19.77	19.88	19.84	21.00
3GPP Rel 6	DC-HSDPA Subsect-3	19.23	19.43	19.34	21.00
3GPP Rel 6	DC-HSDPA Subsect-4	19.20	19.33	19.31	21.00
3GPP Rel 6	HSPA Subsect-1	19.76	19.89	19.87	21.50
3GPP Rel 6	HSPA Subsect-2	17.82	18.00	17.87	19.50
3GPP Rel 6	HSPA Subsect-3	18.96	19.06	19.04	20.50
3GPP Rel 6	HSPA Subsect-4	17.81	17.86	17.89	19.50
3GPP Rel 6	HSPA Subsect-5	19.77	19.89	19.78	21.00
3GPP Rel 7	HSPA+ (HSPA) Subsect-1	17.43	17.51	17.53	19.00

















Band 2 Ant2 DSI1 Main PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch / Freq, Power Mid Ch / Freq, Power High Ch / Freq, Tune-up (int), MPR (dB), Channel, Frequency (MHz). Rows include various modulation schemes (QPSK, 16QAM, 64QAM, 256QAM) across multiple channels.

Band 7 Ant2 DSI1 Main PA for ENDC

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low Ch / Freq, Power Mid Ch / Freq, Power High Ch / Freq, Tune-up (int), MPR (dB), Channel, Frequency (MHz). Rows include various modulation schemes (QPSK, 16QAM, 64QAM, 256QAM) across multiple channels.







### Reduced Power SA Mode for DS13

GSM850 Ant0 DS13								
GSM850 Ant0	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
TX Channel	128	189	251		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 slot	29.20	28.14	29.18	31.00	23.20	23.14	23.18	25.00
GPRS 3 Tx slot	27.86	27.48	27.46	29.20	23.60	23.22	23.20	24.94
GPRS 4 Tx slot	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 slot	23.29	23.34	23.46	24.50	17.29	17.34	17.46	18.50
EDGE 3 Tx slot	21.63	21.44	21.61	22.70	17.37	17.18	17.35	18.44
EDGE 4 Tx slot	20.21	20.06	20.44	21.50	17.21	17.06	17.44	18.50

WCDMA V Ant0 DS13					
Band	WCDMA V Ant0			Tune-up Limit (dBm)	
TX Channel	4182	4182	4233		
Rx Channel	4357	4407	4453		
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	HSDPA Subtest-1	22.94	23.03	23.02	24.00
3GPP Rel 6	HSDPA Subtest-2	23.01	23.05	22.93	24.00
3GPP Rel 6	HSDPA Subtest-3	22.41	22.55	22.53	23.50
3GPP Rel 6	HSDPA Subtest-4	22.56	22.54	22.46	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.00	23.02	22.91	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.02	23.07	23.03	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.40	22.48	22.51	23.50
3GPP Rel 8	DC-HSDPA 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 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (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	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	23.46	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	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 TX Channel	WCDMA II Ant2			Tune-up Limit (dBm)	WCDMA IV Ant2			Tune-up Limit (dBm)
	9262	9400	9538		1312	1413	1513	
Rx Channel Frequency (MHz)	9662	9800	9938		1537	1638	1738	
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	22.76	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	21.84	21.91	21.92	23.50	21.40	21.69	21.56	23.00
3GPP Rel 7 HSPA+ (FQAM) Subtest-1	19.55	19.48	19.36	21.00	19.12	19.09	19.30	20.50









**GSM1900 Ant3 DSIS**

GSM1900 Ant3 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
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	19.24	19.29	19.26	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 TX Channel	WCDMA II Ant3			Tune-up Limit (dBm)	WCDMA IV Ant3			Tune-up Limit (dBm)
	9262	9400	9538		1312	1413	1513	
Rx Channel	9662	9800	9938		1537	1638	1738	
Frequency (MHz)	1852.4	1896	1927.6		1742.4	1752.6	1752.6	
3GPP Rel 99 AMR 12.2Kbps	20.03	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+ (FQAM) Subtest-1	16.81	16.80	16.90	18.50	16.71	16.93	16.70	18.00









**Reduced Power SA Mode for DSI4**

<b>Band 7 Ant2 DSI4 Main PA for ENDC</b>													
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				20850	21100	21350							
Frequency (MHz)				2510	2535	2560							
20	QPSK	1	0	22.46	22.55	22.48	23.5	0					
20	QPSK	1	49	22.30	22.45	22.42							
20	QPSK	1	99	22.21	22.38	22.33							
20	QPSK	50	0	22.23	22.31	22.18							
20	QPSK	50	24	22.23	22.26	22.15	23.5	0					
20	QPSK	50	50	22.16	22.19	21.99							
20	QPSK	100	0	22.05	22.22	22.08							
20	16QAM	1	0	22.36	22.49	22.51							
20	16QAM	1	49	22.30	22.41	22.41	23.5	0					
20	16QAM	1	99	22.37	22.42	22.32							
20	16QAM	50	0	22.13	22.14	22.11							
20	16QAM	50	24	21.99	22.09	21.98							
20	16QAM	50	50	22.07	22.09	22.04	23.5	0					
20	16QAM	100	0	21.96	22.10	22.10							
20	84QAM	1	0	22.27	22.40	22.19							
20	84QAM	1	49	22.23	22.34	22.29			23.5	0			
20	84QAM	1	99	22.16	22.21	22.17							
20	84QAM	50	0	21.17	21.20	21.14							
20	84QAM	50	24	21.09	21.17	21.05							
20	84QAM	50	50	21.10	21.24	21.09	22.5	1					
20	84QAM	100	0	21.17	21.26	21.17							
20	256QAM	1	0	19.24	19.28	19.28							
20	256QAM	1	49	19.17	19.28	19.20			20.5	3			
20	256QAM	1	99	19.02	19.19	19.09							
20	256QAM	50	0	19.14	19.19	19.12							
20	256QAM	50	24	19.05	19.07	19.03							
20	256QAM	50	50	19.03	19.18	19.08	20.5	3					
20	256QAM	100	0	19.03	19.20	19.11							
Channel				20825	21100	21375							
Frequency (MHz)				2507.5	2535	2562.5							
15	QPSK	1	0	22.49	22.53	22.38	23.5	0					
15	QPSK	1	37	22.25	22.43	22.37							
15	QPSK	1	74	22.24	22.39	22.27							
15	QPSK	36	0	22.25	22.22	22.12							
15	QPSK	36	20	22.17	22.25	22.12	23.5	0					
15	QPSK	36	39	22.19	22.18	21.94							
15	QPSK	75	0	22.07	22.24	22.05							
15	16QAM	1	0	22.32	22.48	22.46							
15	16QAM	1	37	22.30	22.34	22.44	23.5	0					
15	16QAM	1	74	22.36	22.35	22.34							
15	16QAM	36	0	21.99	22.01	22.06							
15	16QAM	36	20	21.94	21.97	21.89							
15	16QAM	36	39	22.03	21.99	22.01	23.5	0					
15	16QAM	75	0	21.88	22.00	21.99							
15	84QAM	1	0	22.17	22.28	22.14							
15	84QAM	1	37	22.20	22.28	22.19			23.5	0			
15	84QAM	1	74	22.02	22.10	22.13							
15	84QAM	36	0	21.13	21.12	21.06							
15	84QAM	36	20	21.01	21.02	21.01							
15	84QAM	36	39	21.04	21.15	20.95	22.5	1					
15	84QAM	75	0	21.09	21.14	21.08							
15	256QAM	1	0	19.14	19.14	19.17							
15	256QAM	1	37	19.05	19.15	19.09			20.5	3			
15	256QAM	1	74	18.96	19.09	19.03							
15	256QAM	36	0	19.02	19.14	19.01							
15	256QAM	36	20	18.94	18.98	18.99							
15	256QAM	36	39	18.97	19.15	19.05	20.5	3					
15	256QAM	75	0	18.94	19.13	18.98							
Channel				20800	21100	21400							
Frequency (MHz)				2505	2535	2565							
10	QPSK	1	0	22.49	22.53	22.34	23.5	0					
10	QPSK	1	25	22.30	22.46	22.31							
10	QPSK	1	49	22.22	22.34	22.29							
10	QPSK	25	0	22.18	22.23	22.11							
10	QPSK	25	12	22.15	22.25	22.10	23.5	0					
10	QPSK	25	25	22.11	22.15	22.01							
10	QPSK	50	0	22.07	22.19	22.09							
10	16QAM	1	0	22.37	22.48	22.52							
10	16QAM	1	25	22.30	22.40	22.35	23.5	0					
10	16QAM	1	49	22.37	22.34	22.30							
10	16QAM	25	0	22.06	22.09	22.02							
10	16QAM	25	12	21.85	21.95	21.89							
10	16QAM	25	25	22.04	22.01	21.89	23.5	0					
10	16QAM	50	0	21.85	22.02	22.05							
10	84QAM	1	0	22.14	22.30	22.25							
10	84QAM	1	25	22.16	22.24	22.25							
10	84QAM	1	49	22.04	22.13	22.13	23.5	0					
10	84QAM	25	0	21.02	21.07	21.07							
10	84QAM	25	12	20.95	21.11	20.91							
10	84QAM	25	25	21.08	21.14	20.96							
10	84QAM	50	0	21.10	21.20	21.09	22.5	1					
10	256QAM	1	0	19.19	19.20	19.22							
10	256QAM	1	25	19.13	19.23	19.12			20.5	3			
10	256QAM	1	49	18.92	19.13	18.95							
10	256QAM	25	0	19.07	19.08	19.07							
10	256QAM	25	12	18.96	18.97	18.93							
10	256QAM	25	25	18.90	19.15	19.00	20.5	3					
10	256QAM	50	0	18.95	19.17	19.03							
Channel				20775	21100	21425							
Frequency (MHz)				2502.5	2535	2567.5							
5	QPSK	1	0	22.43	22.52	22.44	23.5	0					
5	QPSK	1	12	22.31	22.46	22.43							
5	QPSK	1	24	22.20	22.38	22.33							
5	QPSK	12	0	22.19	22.34	22.13							
5	QPSK	12	7	22.25	22.18	22.11	23.5	0					
5	QPSK	12	13	22.17	22.21	21.90							
5	QPSK	25	0	21.99	22.13	22.04							
5	16QAM	1	0	22.30	22.47	22.43							
5	16QAM	1	12	22.27	22.33	22.35	23.5	0					
5	16QAM	1	24	22.29	22.36	22.27							
5	16QAM	12	0	22.01	22.00	22.02							
5	16QAM	12	7	21.90	21.96	21.90							
5	16QAM	12	13	21.97	22.04	21.96	23.5	0					
5	16QAM	25	0	21.89	22.02	21.99							
5	84QAM	1	0	22.15	22.33	22.15							
5	84QAM	1	12	22.16	22.21	22.21							
5	84QAM	1	24	22.02	22.10	22.07	23.5	0					
5	84QAM	12	0	21.07	21.05	21.04							
5	84QAM	12	7	21.00	21.11	20.93							
5	84QAM	12	13	21.04	21.13	20.98							
5	84QAM	25	0	21.14	21.22	21.11	22.5	1					
5	256QAM	1	0	19.20	19.24	19.12							
5	256QAM	1	12	19.09	19.22	19.08			20.5	3			
5	256QAM	1	24	18.99	19.09	19.01							
5	256QAM	12	0	19.09	19.15	19.07							
5	256QAM	12	7	18.97	19.01	18.92							
5	256QAM	12	13	18.94	19.10	18.96	20.5	3					
5	256QAM	25	0	18.98	19.10	18.99							



Reduced Power SA Mode for DS14

GSM850 Ant0 DS14								
GSM850 Ant0	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	TX Channel	128	189		251	128	189	
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 slot	29.20	28.14	29.18	31.00	23.20	23.14	23.18	25.00
GPRS 3 Tx slot	27.86	27.48	27.46	29.20	23.60	23.22	23.20	24.94
GPRS 4 Tx slot	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 slot	23.29	23.34	23.46	24.50	17.29	17.34	17.46	18.50
EDGE 3 Tx slot	21.63	21.44	21.61	22.70	17.37	17.18	17.35	18.44
EDGE 4 Tx slot	20.21	20.06	20.44	21.50	17.21	17.06	17.44	18.50

WCDMA V Ant0 DS14					
Band	WCDMA V Ant0			Tune-up Limit (dBm)	
TX Channel	4182	4182	4233		
Frequency (MHz)	4357	4407	4453		
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 Subtest-1	22.94	23.03	23.02	24.00
3GPP Rel 6	HSDPA Subtest-2	23.01	23.05	22.93	24.00
3GPP Rel 6	HSDPA Subtest-3	22.41	22.55	22.53	23.50
3GPP Rel 6	HSDPA Subtest-4	22.56	22.54	22.46	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	23.00	23.02	22.91	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	23.02	23.07	23.03	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.40	22.48	22.51	23.50
3GPP Rel 8	DC-HSDPA 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





**GSM850 Ant1 DSM**

GSM850 Ant1 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8	34.00	824.2	836.4	848.8	25.00
GSM 1 Tx slot	32.47	32.45	32.51	34.00	23.47	23.45	23.51	25.00
GPRS 1 Tx slot	32.53	32.55	32.64	34.00	23.53	23.55	23.64	25.00
GPRS 2 Tx slots	29.57	29.51	29.46	31.00	23.57	23.51	23.46	25.00
GPRS 3 Tx slots	27.52	27.54	27.61	29.20	23.26	23.38	23.35	24.94
GPRS 4 Tx slots	26.14	26.20	26.05	28.00	23.14	23.20	23.05	25.00
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 DSM**

Band TX Channel	WCDMA V Ant1			Tune-up Limit (dBm)
	4132	4182	4233	
Rx Channel	4357	4407	4458	
Frequency (MHz)	826.4	835.4	845.6	
3GPP Rel 99 AMR 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	19.08	19.11	19.14	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+ (E-UMTS) Subtest-1	17.54	17.64	17.47	19.00







GSM1900 Ant2 DS14

GSM1900 Ant2 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (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	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	23.46	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	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 DS14

WCDMA IV Ant2 DS14

Band TX Channel	WCDMA II Ant2			Tune-up Limit (dBm)	WCDMA IV Ant2			Tune-up Limit (dBm)	
	9262	9400	9538		1312	1413	1513		
Rx Channel Frequency (MHz)	9662	9800	9938		1537	1638	1738		
3GPP Rel 99	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	25.00
3GPP Rel 99	RMK 12.2Kbps	23.38	23.40	23.29	25.00	23.62	23.70	23.63	25.00
3GPP Rel 6	HSDPA Subtest-1	22.34	22.44	22.30	24.00	22.59	22.73	22.66	24.00
3GPP Rel 6	HSDPA Subtest-2	22.33	22.42	22.30	24.00	22.57	22.68	22.61	24.00
3GPP Rel 6	HSDPA Subtest-3	21.86	21.93	21.82	23.50	22.06	22.28	22.18	23.50
3GPP Rel 6	HSDPA Subtest-4	21.88	21.87	21.77	23.50	22.08	22.16	22.08	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.36	22.35	22.27	24.00	22.53	22.69	22.59	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.31	22.41	22.28	24.00	22.49	22.63	22.63	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	21.83	21.93	21.81	23.50	22.05	22.25	22.16	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	21.83	21.92	21.85	23.50	22.02	22.15	22.15	23.50
3GPP Rel 6	HSUPA Subtest-1	22.30	22.40	22.27	24.00	22.55	22.72	22.61	24.00
3GPP Rel 6	HSUPA Subtest-2	20.30	20.45	20.35	22.00	20.60	20.75	20.68	22.00
3GPP Rel 6	HSUPA Subtest-3	21.39	21.43	21.25	23.00	21.58	21.77	21.69	23.00
3GPP Rel 6	HSUPA Subtest-4	20.38	20.43	20.28	22.00	20.55	20.76	20.71	22.00
3GPP Rel 6	HSUPA Subtest-5	22.29	22.38	22.32	24.00	22.60	22.76	22.67	24.00
3GPP Rel 7	HSPA+ (eHSPA) Subtest-1	19.84	19.84	19.85	21.50	20.15	20.19	20.19	21.50







GSM1900 Ant3 DS14

GSM1900 Ant3 TX Channel	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
	1850.2	1880	1909.8		1850.2	1880	1909.8	
Frequency (MHz)	1850.2	1880	1909.8	31.00	20.42	20.55	20.27	22.00
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 TX Channel	WCDMA II Ant3			Tune-up Limit (dBm)	WCDMA IV Ant3			Tune-up Limit (dBm)
	9262	9400	9538		1312	1413	1513	
	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 HSDPA Subtest-1	21.64	21.65	21.65	23.00	22.12	22.22	22.12	23.00
3GPP Rel 6 HSDPA Subtest-2	21.53	21.58	21.58	23.00	22.14	22.11	22.01	23.00
3GPP Rel 6 HSDPA Subtest-3	21.09	21.20	21.10	22.50	21.59	21.65	21.61	22.50
3GPP Rel 6 HSDPA 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	21.96	22.15	22.00	23.00
3GPP Rel 7 HSPA+ (FQAM) Subtest-1	19.17	19.21	19.23	20.50	19.61	19.71	19.63	20.50









WCDMA IV Arit4 DS14

Band		WCDMA IV Arit4			Tune-up Limit (dBm)
TX Channel		1312	1415	1513	
Rx Channel		1537	1638	1738	
Frequency (MHz)		1742.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	19.58	19.75	19.66	21.50
3GPP Rel 99	RMC 12.2Kbps	19.64	19.81	19.76	21.50
3GPP Rel 6	HSDPA Subtest-1	18.67	18.65	18.84	20.50
3GPP Rel 6	HSDPA Subtest-2	18.71	18.68	18.62	20.50
3GPP Rel 6	HSDPA Subtest-3	18.14	18.20	18.22	20.00
3GPP Rel 6	HSDPA Subtest-4	18.14	18.27	18.15	20.00
3GPP Rel 6	DC-HSDPA Subtest-1	18.75	18.86	18.77	20.50
3GPP Rel 6	DC-HSDPA Subtest-2	18.62	18.65	18.53	20.50
3GPP Rel 6	DC-HSDPA Subtest-3	18.06	18.13	18.13	20.00
3GPP Rel 6	DC-HSDPA Subtest-4	18.04	18.23	18.24	20.00
3GPP Rel 6	HSUPA Subtest-1	18.64	18.76	18.54	20.50
3GPP Rel 6	HSUPA Subtest-2	16.66	16.91	16.74	18.50
3GPP Rel 6	HSUPA Subtest-3	17.80	17.90	17.85	19.50
3GPP Rel 6	HSUPA Subtest-4	16.58	16.61	16.53	18.50
3GPP Rel 6	HSUPA Subtest-5	18.57	18.60	18.57	20.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	16.23	16.47	16.30	18.00







WCDMA IV Ant5 DS14

Band		WCDMA IV Ant5			Tune-up Limit (dBm)
TX Channel		1312	1415	1513	
Rx Channel		1537	1638	1738	Tune-up Limit (dBm)
Frequency (MHz)		1742.4	1732.6	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	19.46	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	19.84	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	HSUPA Subtest-1	19.75	19.89	19.87	21.50
3GPP Rel 6	HSUPA Subtest-2	17.92	18.00	17.97	19.50
3GPP Rel 6	HSUPA Subtest-3	18.85	19.06	19.04	20.50
3GPP Rel 6	HSUPA Subtest-4	17.81	17.86	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 DSIS

GSM850 Ant0	GSM850 Ant0 DSIS			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	Burst Average Power (dBm)	128	198		251	128	198	
TX Channel	128	198	251	34.00	23.57	23.08	23.57	25.00
Frequency (MHz)	854.2	856.4	858.8	(dBm)	854.2	856.4	858.8	(dBm)
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	32.46	34.00	23.54	23.11	23.45	25.00
GPRS 2 Tx slot	29.20	29.14	29.18	31.00	23.20	23.14	23.18	25.00
GPRS 3 Tx slot	27.86	27.48	27.46	29.20	23.60	23.22	23.20	24.94
GPRS 4 Tx slot	28.17	28.21	28.18	29.00	23.17	23.21	23.18	25.00
EDGE 1 Tx slot	23.20	23.34	23.40	24.50	17.20	17.34	17.40	18.50
EDGE 2 Tx slot	21.83	21.44	21.61	22.70	17.37	17.18	17.35	18.44
EDGE 4 Tx slot	20.21	20.06	20.44	21.90	17.21	17.06	17.44	18.90

WCDMA V Ant0 DSIS

Band	WCDMA V Ant0			Tune-up Limit (dBm)
	4132	4182	4233	
TX Channel	457	467	453	
RX Channel	457	467	453	
Frequency (MHz)	824.4	836.4	848.6	
3GPP Rel 99	AMR 12.2kpps	24.00	23.99	24.00
3GPP Rel 99	RMC 12.2kpps	24.00	24.02	23.97
3GPP Rel 6	HS-SSA Subtest-1	23.94	23.03	23.02
3GPP Rel 6	HS-SSA Subtest-2	23.01	23.05	22.93
3GPP Rel 6	HS-SSA Subtest-3	22.41	22.55	22.53
3GPP Rel 6	HS-SSA Subtest-4	22.96	22.54	22.48
3GPP Rel 8	DC-HS-SSA Subtest-1	23.00	23.02	22.91
3GPP Rel 8	DC-HS-SSA Subtest-2	23.02	23.07	23.03
3GPP Rel 8	DC-HS-SSA Subtest-3	22.40	22.48	22.51
3GPP Rel 8	DC-HS-SSA Subtest-4	22.55	22.55	22.42
3GPP Rel 6	HS-SSA Subtest-1	23.03	23.01	23.00
3GPP Rel 6	HS-SSA Subtest-2	20.96	21.03	21.06
3GPP Rel 6	HS-SSA Subtest-3	21.94	21.97	22.01
3GPP Rel 6	HS-SSA Subtest-4	20.99	21.00	21.04
3GPP Rel 6	HS-SSA Subtest-5	23.04	23.01	22.99
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	20.42	20.50	20.56





**GSM50 Ant1 DSS**

GSM50 Ant1	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame Average Power (dBm)			Tune-up Limit (dBm)
	126	189	251		126	189	251	
TX Channel	126	189	251		126	189	251	
Frequency (MHz)	302.2	303.4	304.8		302.2	303.4	304.8	
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 slot	27.55	27.59	27.58	29.50	21.55	21.59	21.58	23.50
GPRS 3 Tx slot	26.81	26.76	26.74	27.50	21.55	21.52	21.48	23.24
GPRS 4 Tx slot	24.88	24.90	24.62	26.50	21.88	21.90	21.62	23.50
EDGE 1 Tx slot	25.96	25.97	25.74	27.50	16.96	16.97	16.74	18.50
EDGE 3 Tx slot	23.42	23.58	23.25	24.50	17.42	17.58	17.25	18.50
EDGE 3 Tx slot	21.57	21.68	21.58	22.70	17.31	17.42	17.32	18.44
EDGE 4 Tx slot	20.31	20.32	20.33	21.50	17.31	17.32	17.33	18.50

**WCDMA V Ant1 DSS**

Band	WCDMA V Ant1			Tune-up Limit (dBm)	
	TX Channel	4152	4185		4233
Rx Channel	4307	4407	4468		
Frequency (MHz)	20.24	20.34	20.36		
3GPP Rel 99	AMC 12.5kpps	20.91	20.98	21.10	22.50
3GPP Rel 99	AMC 12.5kpps	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	19.95	19.63	19.58	21.00
3GPP Rel 6	HSDPA Subtest-4	19.48	19.59	19.36	21.00
3GPP Rel 8	DCHSDPA 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+ (HSDM) 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)			Tune-up Limit (dBm)
	512	661	810		512	661	810	
GSM1900 Ant2								
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1852.9	1853	1853.8		1852.9	1853	1853.8	
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 slot	28.40	28.48	28.37	29.00	18.40	18.48	18.37	20.00
GPRS 3 Tx slot	22.81	22.86	22.84	24.20	18.65	18.70	18.68	19.84
GPRS 4 Tx slot	20.95	21.14	20.90	23.00	17.95	18.14	17.90	20.00
EDGE 1 Tx slot	25.87	25.62	25.54	26.50	16.87	16.62	16.54	17.50
EDGE 3 Tx slot	23.08	22.97	22.95	23.50	17.08	16.97	16.95	17.50
EDGE 3 Tx slot	21.42	21.22	21.28	21.70	17.16	16.96	17.02	17.44
EDGE 4 Tx slot	19.56	19.36	19.57	20.50	16.56	16.36	16.57	17.50

**WCDMA II Ant2 DSIS**

Band	WCDMA II Ant2			Tune-up Limit (dBm)	WCDMA IV Ant2 DSIS			Tune-up Limit (dBm)	
	9262	9403	9538		1312	1413	1513		
TX Channel	9262	9403	9538		1312	1413	1513		
Rx Channel	9662	9800	9938		1537	1638	1738		
Frequency (MHz)	1827.4	1830	1837.6		1127.4	1227.5	1327.5		
3GPP Rel 99	AMC 12.5kpps	18.25	18.15	18.13	19.50	18.24	18.81	18.82	20.00
3GPP Rel 99	RMC 12.5kpps	18.38	18.40	18.20	19.50	18.86	18.52	18.85	20.00
3GPP Rel 6	HSDPA Subtest-1	17.36	17.38	17.20	18.50	17.72	17.84	17.79	18.00
3GPP Rel 6	HSDPA Subtest-2	17.25	17.47	17.19	18.50	17.77	17.74	17.69	18.00
3GPP Rel 6	HSDPA Subtest-3	16.89	16.86	16.70	18.00	17.52	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	DCHSDPA Subtest-1	17.19	17.21	17.24	18.50	17.66	17.73	17.63	19.00
3GPP Rel 8	DCHSDPA 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	16.64	16.77	16.63	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	17.38	18.50
3GPP Rel 6	HSPA Subtest-1	17.20	17.57	17.27	18.50	17.69	17.78	17.67	19.00
3GPP Rel 6	HSPA Subtest-2	15.45	15.59	15.56	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	16.68	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	17.38	17.25	17.14	18.50	17.71	18.01	17.74	19.00
3GPP Rel 7	HSPA+ (HSDM) Subtest-1	15.65	15.64	15.61	16.00	15.22	15.28	15.45	16.50







Band 38 Ant2 DSI5 Main PA

Table with columns: 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). Contains 254 rows of channel configuration data.

Band 41 Ant2 DSI5 Main PA

Table with columns: 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). Contains 254 rows of channel configuration data.



**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	512	661	810		512	661	810	
Frequency (MHz)	1852.9	1853	1853.8		1852.9	1853	1853.8	
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 slot	28.92	29.33	29.73	27.50	19.92	19.53	19.73	21.50
GPRS 3 Tx slot	24.10	24.15	24.12	25.70	19.84	19.89	19.86	21.44
GPRS 4 Tx slot	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 3 Tx slot	22.37	22.54	22.17	23.50	16.37	16.54	16.17	17.50
EDGE 3 Tx slot	21.10	21.13	21.05	21.70	16.84	16.87	16.79	17.44
EDGE 4 Tx slot	19.27	19.25	19.25	20.50	16.27	16.25	16.25	17.50

**WCDMA II Ant3 DSIS**

Band	WCDMA II Ant3			Tune-up Limit (dBm)	WCDMA IV Ant3 DSIS			Tune-up Limit (dBm)
	9262	9400	9538		1312	1413	1519	
TX Channel	9262	9400	9538		1312	1413	1519	
Rx Channel	9662	9800	9938		1537	1638	1738	
Frequency (MHz)	1927.4	1830	1971.6		1127.4	1227.5	1327.5	
3GPP Rel 99 AMC 12.2kbps	20.03	20.25	20.29	22.00	20.10	20.10	20.02	21.50
3GPP Rel 99 RMC 12.2kbps	20.27	20.25	20.24	22.00	20.10	20.12	20.11	21.50
3GPP Rel 6 HSDPA Subtest-1	18.14	18.35	18.32	21.00	18.18	18.27	18.28	20.50
3GPP Rel 6 HSDPA Subtest-2	18.11	18.28	18.12	21.00	18.19	18.23	18.02	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 DCHSDPA Subtest-1	19.25	19.30	19.18	21.00	19.30	19.25	19.17	20.50
3GPP Rel 8 DCHSDPA Subtest-2	19.13	19.11	19.19	21.00	19.12	19.12	19.20	20.50
3GPP Rel 8 DCHSDPA Subtest-3	18.64	18.74	18.54	20.50	18.61	18.77	18.66	20.00
3GPP Rel 8 DCHSDPA 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	18.12	18.11	18.25	20.50
3GPP Rel 6 HSUPA Subtest-2	17.17	17.26	17.20	19.00	17.15	17.18	17.26	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 HSPA+ (HSDM) Subtest-1	19.01	19.25	19.22	21.00	18.96	19.22	19.01	20.50
3GPP Rel 7 HSPA+ (HSDM) Subtest-1	16.81	16.90	16.90	18.50	16.71	16.93	16.70	18.00







WCDMA IV An4 DSSS

Band	WCDMA IV An4			Tune-up Limit (dBm)	
	1312	1413	1513		
TX Channel	1312	1413	1513		
Rx Channel	1337	1438	1538		
Frequency (MHz)	1125.4	1125.6	1125.6		
3GPP Rel 99	AMR 12.2Kbps	18.04	18.10	18.10	20.00
3GPP Rel 99	RM-C 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	16.57	16.74	16.59	18.50
3GPP Rel 6	HSPA Subtest-1	17.13	17.15	17.12	19.00
3GPP Rel 6	HSPA Subtest-2	16.12	16.28	16.19	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	15.19	17.00
3GPP Rel 6	HSPA Subtest-5	17.00	17.20	17.14	19.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	14.81	14.99	14.72	16.50









WCDMA IV Ant5 DSIS

Band	WCDMA IV Ant5			Time-up Limit (dBm)
	1512	1413	1513	
TX Channel	1512	1413	1513	
Rx Channel	1517	1616	1728	
Frequency (MHz)	1122.4	1122.6	1122.6	
3GPP Rel 99	AMR 12.2Kbps	20.86	20.90	20.90
3GPP Rel 99	RMC 12.2Kbps	20.89	20.93	20.93
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 8	DC-HSDPA Subtest-1	19.97	19.99	19.99
3GPP Rel 8	DC-HSDPA Subtest-2	19.77	19.88	19.94
3GPP Rel 8	DC-HSDPA Subtest-3	19.23	19.43	19.34
3GPP Rel 8	DC-HSDPA Subtest-4	19.20	19.33	19.31
3GPP Rel 6	HSPA Subtest-1	19.75	19.89	19.87
3GPP Rel 6	HSPA Subtest-2	17.92	18.00	17.87
3GPP Rel 6	HSPA Subtest-3	18.95	19.06	19.04
3GPP Rel 6	HSPA Subtest-4	17.81	17.85	17.85
3GPP Rel 6	HSPA Subtest-5	19.77	19.89	19.79
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	17.43	17.51	17.53







Band 42 Ant7 DS15 Main PA								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Time-up limit (min)	MPR (dB)
Channel							19.5	0
Frequency (MHz)				3456	3500	3540		
20	QPSK	1	0	17.97	18.24	18.09		
20	QPSK	1	49	18.07	17.98	18.18		
Channel							19.5	0
Frequency (MHz)				3794	3815	3786		
20	QPSK	50	0	18.02	18.16	17.95		
20	QPSK	50	24	18.15	18.12	17.94		
Channel							19.5	0
Frequency (MHz)				4132	4153	4145		
20	16QAM	1	49	18.17	18.06	18.15		
20	16QAM	1	99	17.79	17.95	17.80		
Channel							19.5	0
Frequency (MHz)				4470	4491	4483		
20	16QAM	50	0	17.83	17.89	17.97		
20	16QAM	50	24	17.92	18.05	18.13		
Channel							19.5	0
Frequency (MHz)				4808	4829	4821		
20	16QAM	50	50	17.99	18.07	18.10		
20	16QAM	100	0	18.04	18.12	18.10		
Channel							19.5	0
Frequency (MHz)				5146	5167	5159		
20	64QAM	1	0	18.19	18.09	18.07		
20	64QAM	1	49	18.11	18.20	18.05		
Channel							19.5	0
Frequency (MHz)				5484	5505	5496		
20	64QAM	50	0	18.00	17.82	17.91		
20	64QAM	50	24	17.88	17.94	17.95		
Channel							19.5	0
Frequency (MHz)				5822	5843	5835		
20	64QAM	100	0	18.03	18.03	18.03		
20	256QAM	1	0	18.21	18.03	18.03		
Channel							19.5	0
Frequency (MHz)				6160	6181	6173		
20	256QAM	1	49	18.11	17.87	17.97		
20	256QAM	1	99	18.08	17.95	17.97		
Channel							19.5	0
Frequency (MHz)				6498	6519	6511		
20	256QAM	50	24	17.89	17.75	18.11		
20	256QAM	50	50	17.83	17.90	18.01		
Channel							19.5	0
Frequency (MHz)				6836	6857	6849		
20	256QAM	100	0	17.95	18.16	18.02		
20	256QAM	100	0	17.95	18.16	18.02		

Band 48 Ant7 DS15 Main PA								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Time-up limit (min)	MPR (dB)
Channel							19.5	0
Frequency (MHz)				3560	3609	3641		
20	QPSK	1	0	17.88	18.08	17.87		
20	QPSK	1	49	18.01	17.81	17.96		
Channel							19.5	0
Frequency (MHz)				3898	3947	3979		
20	QPSK	50	0	17.82	18.05	17.88		
20	QPSK	50	24	18.00	17.79	17.78		
Channel							19.5	0
Frequency (MHz)				4236	4285	4317		
20	QPSK	100	0	17.86	18.05	17.86		
20	16QAM	1	0	17.73	17.89	18.00		
Channel							19.5	0
Frequency (MHz)				4574	4623	4655		
20	16QAM	1	49	17.90	18.05	17.71		
20	16QAM	1	99	17.73	17.81	17.66		
Channel							19.5	0
Frequency (MHz)				4912	4961	4993		
20	16QAM	50	0	17.80	17.78	17.84		
20	16QAM	50	24	17.59	17.82	17.95		
Channel							19.5	0
Frequency (MHz)				5250	5299	5331		
20	16QAM	50	50	17.85	17.98	17.88		
20	16QAM	100	0	17.99	17.92	17.81		
Channel							19.5	0
Frequency (MHz)				5588	5637	5669		
20	64QAM	1	0	18.05	17.82	17.93		
20	64QAM	1	49	17.88	17.88	17.76		
Channel							19.5	0
Frequency (MHz)				5926	5975	6007		
20	64QAM	50	0	18.00	17.78	17.80		
20	64QAM	50	24	17.73	17.78	17.83		
Channel							19.5	0
Frequency (MHz)				6264	6313	6345		
20	64QAM	100	0	17.84	18.04	17.78		
20	64QAM	50	50	17.88	17.83	17.80		
Channel							19.5	0
Frequency (MHz)				6602	6651	6683		
20	256QAM	1	0	17.94	18.03	17.87		
20	256QAM	1	49	17.93	17.95	17.77		
Channel							19.5	0
Frequency (MHz)				6940	6989	7021		
20	256QAM	1	99	18.07	17.72	17.95		
20	256QAM	1	99	17.91	17.90	17.97		
Channel							19.5	0
Frequency (MHz)				7278	7327	7359		
20	256QAM	50	24	17.88	17.58	17.85		
20	256QAM	50	50	17.97	17.70	17.80		
Channel							19.5	0
Frequency (MHz)				7616	7665	7697		
20	256QAM	100	0	17.85	17.88	17.95		
20	256QAM	100	0	17.85	17.88	17.95		





Band 2 Ant2 Default Other PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mode, Ch. Freq., Turn-up (dB), and MPE (dB). Contains multiple rows for different channels and modulation types.

FullDefault Power NSA Mode

Band 7 Ant2 Default Main PA-1

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mode, Ch. Freq., Turn-up (dB), and MPE (dB). Contains multiple rows for different channels and modulation types.

Band 7 Ant2 Default Other PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mode, Ch. Freq., Turn-up (dB), and MPE (dB). Contains multiple rows for different channels and modulation types.



















Band 2 Ant2 DS11 Other PA for END C

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mid, Power High, Turn-up (dBm), and MPE (dB). Contains multiple rows for different frequency channels and modulation types.

Reduced Power NSA Mode for DS11

Band 2 Ant2 DS11 Main PA-1 for END C

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mid, Power High, Turn-up (dBm), and MPE (dB). Contains multiple rows for different frequency channels and modulation types.

Band 7 Ant2 DS11 Other PA for END C

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mid, Power High, Turn-up (dBm), and MPE (dB). Contains multiple rows for different frequency channels and modulation types.









Band 2 Ant2 DS1 Other PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mode, Power High, Turn-up (dBm), and MPE (dB). It lists various frequency channels and their corresponding power levels and modulation parameters.

Reduced Power NSA Mode for DS1

Band 7 DS1 Main PA-1

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mode, Power High, Turn-up (dBm), and MPE (dB). It lists various frequency channels and their corresponding power levels and modulation parameters.

Band 7 Ant2 DS1 Other PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mode, Power High, Turn-up (dBm), and MPE (dB). It lists various frequency channels and their corresponding power levels and modulation parameters.

















Band 38 Ant5 DS11 Other PA										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Turn-up limit (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2580	2595	2610				
20	QPSK	1	0	21.24	21.36	21.26			22.5	0
20	QPSK	1	49	21.08	21.09	21.33				
20	QPSK	1	99	21.12	21.16	21.18				
20	QPSK	50	0	19.83	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	19.62				
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	19.58	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	18.62				
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	50	24	16.51	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				37855	38005	38155	Turn-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2577.5	2595	2612.5				
15	QPSK	1	0	21.28	21.35	21.22			22.5	0
15	QPSK	1	37	21.30	21.27	21.29				
15	QPSK	1	74	21.14	21.11	21.18				
15	QPSK	38	0	19.89	20.01	19.76				
15	QPSK	38	20	20.17	20.27	20.29			21.5	1
15	QPSK	38	39	20.23	20.25	20.25				
15	QPSK	75	0	20.20	20.24	20.30				
15	16QAM	1	0	19.19	19.24	19.13			21.5	1
15	16QAM	1	37	19.88	19.97	19.88				
15	16QAM	1	74	19.79	20.00	19.82				
15	16QAM	38	0	18.98	19.17	19.05				
15	16QAM	38	20	19.07	19.19	19.00			20.5	2
15	16QAM	38	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	19.14	19.13	19.13				
15	64QAM	1	74	19.05	19.19	19.00				
15	64QAM	38	0	18.07	18.22	18.12				
15	64QAM	38	20	18.13	18.17	18.04			19.5	3
15	64QAM	38	39	18.06	18.17	18.04				
15	64QAM	75	0	18.13	18.28	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	38	0	15.99	16.19	15.96				
15	256QAM	38	20	16.08	16.19	16.12			17.5	5
15	256QAM	38	39	16.00	16.25	15.97				
15	256QAM	75	0	16.00	16.20	16.04				
Channel				37860	38000	38500	Turn-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2675	2695	2715				
10	QPSK	1	0	21.24	21.35	21.21			22.5	0
10	QPSK	1	25	21.24	21.21	21.29				
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	19.62				
10	16QAM	1	25	19.90	20.00	19.69			21.5	1
10	16QAM	1	49	19.81	20.01	19.86				
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	19.19	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	50	0	18.02	18.29	18.04				
10	64QAM	50	12	18.03	18.21	18.04			19.5	3
10	64QAM	50	25	18.05	18.16	18.01				
10	64QAM	100	0	18.16	18.23	18.06				
10	256QAM	1	0	15.98	16.20	16.04			17.5	5
10	256QAM	1	25	16.07	16.18	16.10				
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				3777.5	38000	38225	Turn-up limit (dBm)	MPR (dB)		
Frequency (MHz)				2572.5	2595	2617.5				
5	QPSK	1	0	21.17	21.25	21.24			22.5	0
5	QPSK	1	12	21.04	21.09	21.04				
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	18.98	19.19	18.97			20.5	2
5	16QAM	12	13	19.05	19.29	19.08				
5	16QAM	25	0	18.99	19.14	18.97				
5	64QAM	1	0	19.17	19.26	19.11			20.5	2
5	64QAM	1	12	19.12	19.14	19.06				
5	64QAM	1	24	19.06	19.21	19.03				
5	64QAM	12	0	17.97	18.22	18.04			19.5	3
5	64QAM	12	7	18.10	18.23	18.04				
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			17.5	5
5	256QAM	1	12	16.12	16.15	16.06				
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 DS11 Other PA										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Power High Ch. / Freq.	Power High 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	21.22	21.23	21.36	21.35	21.35		
20	QPSK	1	49	21.23	21.21	21.34	21.25	21.35	22.5	0
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		
20	QPSK	50	24	20.19	20.20	20.34	20.32	20.39	21.5	1
20	QPSK	50								



Band 2 Ant2 DS13 Other PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mod, Power High, Turn-up (dBm), and MPE (dB). Includes sub-sections for Channel, Frequency (MHz), and Channel.

Reduced Power NSA Mode for DS13

Band 7 Ant2 DS13 Main PA-1

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mod, Power High, Turn-up (dBm), and MPE (dB). Includes sub-sections for Channel, Frequency (MHz), and Channel.

Band 7 Ant2 DS13 Other PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mod, Power High, Turn-up (dBm), and MPE (dB). Includes sub-sections for Channel, Frequency (MHz), and Channel.



Band 38 Ant2 DS13 Other PA													
BW (MHz)	Modulat on	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Turn-up (dBm)	MPR (dB)					
Channel				37650	38000	38150							
Frequency (MHz)				2590	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	0					
20	QPSK	1	99	18.99	19.15	19.18	20	0					
20	QPSK	50	0	19.13	19.25	19.21	20	0					
20	QPSK	50	24	19.18	19.22	19.20	20	0					
20	QPSK	50	50	19.20	19.22	19.20	20	0					
20	QPSK	100	0	19.08	19.18	19.08	20	0					
20	16QAM	1	0	19.19	19.25	19.24	20	0					
20	16QAM	1	49	19.11	19.23	19.25	20	0					
20	16QAM	1	99	19.14	19.20	19.23	20	0					
20	16QAM	50	0	19.13	19.21	19.26	20	0					
20	16QAM	50	24	19.07	19.15	19.17	20	0					
20	16QAM	50	50	19.14	19.22	19.21	20	0					
20	16QAM	100	0	19.16	19.22	19.25	20	0					
20	64QAM	1	0	19.25	19.27	19.20	20	0					
20	64QAM	1	49	19.03	19.19	19.20	20	0					
20	64QAM	1	99	18.96	19.17	19.10	20	0					
20	64QAM	50	0	19.08	19.23	19.25	20	0					
20	64QAM	50	24	18.15	18.21	18.23	19	1					
20	64QAM	50	50	18.11	18.17	18.12	19	1					
20	64QAM	100	0	17.81	17.90	17.94	19	1					
20	256QAM	1	0	16.08	16.21	16.16	17	3					
20	256QAM	1	49	16.12	16.18	16.14	17	3					
20	256QAM	1	99	16.04	16.20	16.19	17	3					
20	256QAM	50	0	16.20	16.25	16.20	17	3					
20	256QAM	50	24	16.20	16.24	16.22	17	3					
20	256QAM	50	50	16.07	16.17	16.22	17	3					
20	256QAM	100	0	16.09	16.23	16.24	17	3					
Channel				37625	38000	38175	Time-up (dBm)	MPR (dB)					
Frequency (MHz)				2377.5	2395	2412.5							
15	QPSK	1	0	19.27	19.22	19.15	20	0					
15	QPSK	1	37	19.08	19.21	19.21	20	0					
15	QPSK	1	74	18.93	19.18	19.10	20	0					
15	QPSK	36	0	19.08	19.28	19.13	20	0					
15	QPSK	36	20	19.20	19.21	19.22	20	0					
15	QPSK	36	39	19.15	19.20	19.15	20	0					
15	QPSK	75	0	19.02	19.12	19.06	20	0					
15	16QAM	1	0	19.11	19.24	19.18	20	0					
15	16QAM	1	37	19.10	19.17	19.21	20	0					
15	16QAM	1	74	19.12	19.21	19.20	20	0					
15	16QAM	36	0	19.11	19.18	19.26	20	0					
15	16QAM	36	20	19.06	19.17	19.15	20	0					
15	16QAM	36	39	19.09	19.21	19.20	20	0					
15	16QAM	75	0	18.99	18.94	18.82	20	0					
15	64QAM	1	0	19.19	19.24	19.19	20	0					
15	64QAM	1	37	19.03	19.19	19.25	20	0					
15	64QAM	1	74	18.91	19.07	19.17	20	0					
15	64QAM	36	0	18.09	18.26	18.16	19	1					
15	64QAM	36	20	18.11	18.23	18.19	19	1					
15	64QAM	36	39	18.07	18.20	18.11	19	1					
15	64QAM	75	0	17.76	17.90	17.91	19	1					
15	256QAM	1	0	16.09	16.20	16.09	17	3					
15	256QAM	1	37	16.14	16.12	16.16	17	3					
15	256QAM	1	74	15.98	16.15	16.21	17	3					
15	256QAM	36	0	16.23	16.25	16.20	17	3					
15	256QAM	36	20	16.11	16.28	16.15	17	3					
15	256QAM	36	39	15.98	16.13	16.18	17	3					
15	256QAM	75	0	16.08	16.17	16.23	17	3					
Channel				37675	38000	38225	Time-up (dBm)	MPR (dB)					
Frequency (MHz)				2575	2595	2615							
10	QPSK	1	0	19.22	19.28	19.22	20	0					
10	QPSK	1	25	19.08	19.17	19.16	20	0					
10	QPSK	1	49	18.93	19.17	19.14	20	0					
10	QPSK	25	0	19.14	19.28	19.12	20	0					
10	QPSK	25	12	19.13	19.23	19.17	20	0					
10	QPSK	25	25	19.16	19.19	19.21	20	0					
10	QPSK	50	0	19.02	19.15	19.00	20	0					
10	16QAM	1	0	19.22	19.23	19.18	20	0					
10	16QAM	1	25	19.03	19.18	19.26	20	0					
10	16QAM	1	49	19.11	19.21	19.21	20	0					
10	16QAM	25	0	19.12	19.16	19.19	20	0					
10	16QAM	25	12	19.02	19.06	19.15	20	0					
10	16QAM	25	25	19.10	19.23	19.13	20	0					
10	16QAM	50	0	18.75	18.89	18.92	20	0					
10	64QAM	1	0	19.23	19.26	19.25	20	0					
10	64QAM	1	25	19.07	19.20	19.23	20	0					
10	64QAM	1	49	19.01	19.11	19.09	20	0					
10	64QAM	25	0	18.11	18.19	18.26	19	1					
10	64QAM	25	12	18.18	18.22	18.20	19	1					
10	64QAM	25	25	18.09	18.19	18.05	19	1					
10	64QAM	50	0	17.80	17.83	17.97	19	1					
10	256QAM	1	0	15.99	16.24	16.08	17	3					
10	256QAM	1	25	16.09	16.11	16.10	17	3					
10	256QAM	1	49	15.96	16.19	16.20	17	3					
10	256QAM	25	0	16.13	16.16	16.23	17	3					
10	256QAM	25	12	16.15	16.25	16.22	17	3					
10	256QAM	25	25	16.04	16.15	16.21	17	3					
10	256QAM	50	0	16.10	16.22	16.23	17	3					
Channel				37775	38000	38225	Time-up (dBm)	MPR (dB)					
Frequency (MHz)				2592.5	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	20	0					
5	QPSK	1	24	18.94	19.07	19.20	20	0					
5	QPSK	12	0	19.12	19.18	19.13	20	0					
5	QPSK	12	7	19.19	19.23	19.14	20	0					
5	QPSK	12	13	19.21	19.23	19.15	20	0					
5	QPSK	25	0	19.08	19.17	19.08	20	0					
5	16QAM	1	0	19.21	19.26	19.20	20	0					
5	16QAM	1	12	19.07	19.20	19.20	20	0					
5	16QAM	1	24	19.10	19.19	19.19	20	0					
5	16QAM	12	0	19.14	19.21	19.17	20	0					
5	16QAM	12	7	18.98	19.18	19.10	20	0					
5	16QAM	12	13	19.12	19.15	19.24	20	0					
5	64QAM	1	0	19.25	19.28	19.25	20	0					
5	64QAM	1	12	19.08	19.21	19.17	20	0					
5	64QAM	1	24	19.01	19.08	19.11	20	0					
5	64QAM	12	0	18.10	18.21	18.19	19	1					
5	64QAM	12	7	18.08	18.19	18.15	19	1					
5	64QAM	12	13	18.07	18.15	18.05	19	1					
5	64QAM	25	0	17.73	17.88	17.86	19	1					
5	256QAM	1	0	16.01	16.19	16.08	17	3					
5	256QAM	1	12	16.06	16.18	16.13	17	3					
5	256QAM	1	24	15.96	16.15	16.20	17	3					
5	256QAM	12	0	16.13	16.16	16.14	17	3					
5	256QAM	12	7	16.22	16.25	16.21	17	3					
5	256QAM	12	13	16.09	16.18	16.16	17	3					
5	256QAM	25	0	16.01	16.25	16.24	17	3					

Band 41 Ant2 DS13 Other PA													
BW (MHz)	Modulat on	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Turn-up (dBm)	MPR (dB)					
Channel				39750	40185	40620							
Frequency (MHz)				2908	2908.5	2909							
20	QPSK	1	0	19.47	19.25	19.52	20	0					
20	QPSK	1	49	19.46	19.17	19.43	20	0					
20	QPSK	1	99	19.41	19.11	19.40	20	0					
20	QPSK	50	0	19.41	19.26	19.50	20	0					
20	QPSK	50	24	19.44	19.32	19.46	20	0					
20	QPSK	50	50	19.46	19.19	19.42	20	0					
20	QPSK	100	0	19.35	19.24	19.50	20	0					
20	16QAM	1	0	19.47	19.27	19.37	20	0					
20	16QAM	1	49	19.41	19.24	19.40	20	0					
20	16QAM	1	99	19.45	19.15	19.37	20	0					
20	16QAM	50	0	19.42	19.22	19.50	20	0					
20	16QAM	50	24	19.41	19.31	19.47	20	0					
20	16QAM	50	50	19.44	19.13	19.37	20	0					
20	16QAM	100	0	19.42	19.25	19.45	20	0					
20	64QAM	1	0	19.49	19.28	19.40	20	0					
20	64QAM	1	49	19.36	19.20	19.33	20	0					
20	64QAM	1	99	19.51	19.15	19.38	20	0					
20	64QAM	50	0	19.32	19.25	19.49	20	0					
20	64QAM	50	24	18.48	18.30	18.42	19	1					
20	64QAM	50	50	18.37	18.17	18.40	19	1					
20	64QAM	100	0	18.33	18.23	18.45	19	1					
20	256QAM	1	0	16.39	16.15	16.46	17	3					
20	256QAM	1	49	16.52	16.28	16.35	17	3					
20	256QAM	1	99	16.45	16.17	16.33	17	3					



Band 2 Ant3 DS13 Other PA									
BW (MHz)	Modulat	RB Size	RB Offset	Power Low Ch./F.Freq.	Power Mean Ch./F.Freq.	Power High Ch./F.Freq.	Turnup (dB)	APR3 (dB)	APR4 (dB)
Channel 1860 1868 1800									
20	QPSK	1	0	20.24	20.45	20.27	21	0	
20	QPSK	1	68	20.19	20.28	20.34			
20	QPSK	50	0	19.98	20.35	20.26			
20	QPSK	50	64	20.02	20.31	20.34			
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	19.98			
20	HQAM	1	49	19.73	19.97	19.75	19.5	1.5	
20	HQAM	1	99	19.59	19.85	19.90			
20	HQAM	50	0	19.92	20.21	20.14			
20	HQAM	50	24	20.02	20.11	20.05			
20	HQAM	50	50	19.99	20.20	20.07			
20	HQAM	100	0	19.77	20.04	20.07			
20	HQAM	1	0	20.15	20.34	20.36			
20	HQAM	1	49	19.93	20.20	20.21	21	0	
20	HQAM	50	0	19.93	20.24	20.14			
20	HQAM	50	9	19.93	20.24	20.14			
20	HQAM	50	24	20.08	20.13	19.97			
20	HQAM	50	50	19.93	20.17	20.07			
20	HQAM	100	0	19.77	19.98	20.09			
20	HQAM	1	0	19.45	19.65	19.44			
20	HQAM	1	49	18.42	18.62	18.58	19.5	1.5	
20	HQAM	1	99	18.44	18.62	18.62			
20	HQAM	50	0	18.46	18.65	18.64			
20	HQAM	50	24	18.49	18.72	18.71			
20	HQAM	50	50	18.41	18.67	18.66			
20	HQAM	100	0	18.45	18.67	18.64			
Channel 1865 1869 1925									
Frequency (MHz) 1822.5 1880 1922.5									
15	QPSK	1	0	20.34	20.37	20.32	21	0	
15	QPSK	1	37	20.16	20.24	20.32			
15	QPSK	1	74	20.12	20.30	20.40			
15	QPSK	36	0	19.98	20.26	20.30			
15	QPSK	36	36	19.93	20.12	20.19	21	0	
15	QPSK	36	36	19.85	20.29	20.28			
15	HQAM	1	37	19.85	20.26	20.20			
15	HQAM	1	74	19.85	19.92	19.85			
15	HQAM	36	0	19.99	20.13	20.20			
15	HQAM	36	20	20.00	19.97	19.90	21	0	
15	HQAM	36	36	19.99	20.11	20.07			
15	HQAM	75	0	19.86	20.20	20.40			
15	HQAM	75	0	19.86	20.20	20.20			
15	HQAM	75	0	19.86	20.20	20.22			
15	HQAM	75	0	19.89	19.86	19.88			
15	HQAM	75	0	19.87	19.86	19.88			
15	HQAM	75	0	19.43	18.56	18.51	19.5	1.5	
15	HQAM	75	37	18.41	18.64	18.53			
15	HQAM	36	20	18.45	18.62	18.58			
15	HQAM	36	20	18.51	18.70	18.65			
15	HQAM	36	36	18.39	18.65	18.59			
15	HQAM	75	0	18.43	18.62	18.66			
Channel 1860 1868 1925									
Frequency (MHz) 1855 1868 1905									
10	QPSK	1	0	20.16	20.42	20.28	21	0	
10	QPSK	1	25	20.18	20.42	20.28			
10	QPSK	1	49	20.12	20.24	20.28			
10	QPSK	25	0	19.92	20.24	20.29			
10	QPSK	25	12	19.93	20.14	20.18	21	0	
10	QPSK	25	25	19.93	20.28	20.11			
10	QPSK	50	0	19.82	20.06	20.23			
10	HQAM	1	0	19.83	19.91	19.94			
10	HQAM	1	25	19.79	19.86	19.91	21	0	
10	HQAM	1	49	19.86	20.02	20.06			
10	HQAM	25	12	19.96	20.03	20.06			
10	HQAM	25	25	19.96	20.02	20.04			
10	HQAM	50	0	19.87	20.13	19.94			
10	HQAM	1	0	20.21	20.23	20.37			
10	HQAM	1	16	19.95	20.33	20.34	21	0	
10	HQAM	1	49	20.19	20.34	20.16			
10	HQAM	25	0	19.88	20.05	20.00			
10	HQAM	25	12	19.84	20.02	20.11			
10	HQAM	25	25	20.04	20.06	20.17			
10	HQAM	50	0	19.84	20.10	20.09			
10	HQAM	1	0	18.48	18.65	18.57			
10	HQAM	1	25	18.38	18.58	18.59	19.5	1.5	
10	HQAM	1	49	18.35	18.55	18.55			
10	HQAM	25	12	18.47	18.64	18.67			
10	HQAM	25	25	18.35	18.65	18.63			
10	HQAM	50	0	18.39	18.67	18.61			
Channel 1865 1869 1925									
Frequency (MHz) 1822.5 1880 1922.5									
5	QPSK	1	0	20.22	20.41	20.35	21	0	
5	QPSK	1	12	20.23	20.41	20.35			
5	QPSK	1	24	20.08	20.23	20.28			
5	QPSK	12	0	19.91	20.24	20.19			
5	QPSK	12	7	20.00	20.23	20.02	21	0	
5	QPSK	12	13	19.96	20.25	20.16			
5	QPSK	25	0	19.88	20.24	20.19			
5	HQAM	1	0	19.87	19.88	20.02			
5	HQAM	1	12	19.88	20.00	19.88			
5	HQAM	1	24	19.88	19.84	19.81			
5	HQAM	12	0	19.79	20.14	20.24			
5	HQAM	12	7	19.83	20.07	19.99	21	0	
5	HQAM	12	13	19.81	20.02	20.20			
5	HQAM	25	0	19.89	20.08	20.01			
5	HQAM	1	0	20.18	20.33	20.22			
5	HQAM	1	12	20.09	20.15	20.31			
5	HQAM	1	24	20.05	20.18	20.08			
5	HQAM	12	0	19.80	20.17	20.09			
5	HQAM	12	7	19.89	20.07	20.08			
5	HQAM	12	13	19.82	20.03	20.12	21	0	
5	HQAM	25	0	19.91	20.02	19.91			
5	HQAM	1	0	18.41	18.62	18.51			
5	HQAM	1	12	18.39	18.63	18.60	19.5	1.5	
5	HQAM	1	24	18.40	18.62	18.54			
5	HQAM	12	0	18.52	18.62	18.65			
5	HQAM	12	7	18.48	18.65	18.70			
5	HQAM	12	13	18.33	18.60	18.64	19.5	1.5	
5	HQAM	25	0	18.41	18.70	18.58			
Channel 1865 1869 1925									
Frequency (MHz) 1822.5 1880 1922.5									
3	QPSK	1	0	20.23	20.37	20.33	21	0	
3	QPSK	1	8	20.17	20.44	20.41			
3	QPSK	1	14	20.13	20.25	20.39			
3	QPSK	8	0	20.03	20.21	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	HQAM	1	0	19.86	20.15	20.18			
3	HQAM	1	0	19.74	19.91	19.96			
3	HQAM	1	8	19.74	19.90	19.98	21	0	
3	HQAM	1	14	19.87	20.00	19.97			
3	HQAM	8	0	19.85	20.20	20.09			
3	HQAM	8	4	19.86	20.15	20.12			
3	HQAM	8	7	19.98	20.02	20.02			
3	HQAM	15	0	19.86	20.15	20.03			
3	HQAM	1	0	20.18	20.26	20.33	21	0	
3	HQAM	1	8	20.02	20.25	20.22			
3	HQAM	1	14	20.16	20.24	20.23			
3	HQAM	8	0	19.82	20.24	20.06			
3	HQAM	8	7	20.01	20.04	20.15	21	0	
3	HQAM	15	0	18.36	18.56	18.48			
3	HQAM	15	0	18.45	18.58	18.62			
3	HQAM	1	8	18.37	18.54	18.59	19.5	1.5	
3	HQAM	1	14	18.42	18.62	18.59			
3	HQAM	8	0	18.48	18.65	18.66	19.5	1.5	
3	HQAM	8	4	18.48	18.65	18.66			
3	HQAM	8	7	18.35	18.56	18.58			
3	HQAM	15	0	18.38	18.61	18.58			
Channel 1867 1869 1923									
Frequency (MHz) 1822.5 1880 1923									
1.4	QPSK	1	0	20.23	20.32	20.39	21	0	
1.4	QPSK	1	3	20.35	20.37	20.46			
1.4	QPSK	1	6	20.02	20.25	20.29			
1.4	QPSK	3	0	20.10	20.21	20.19			
1.4	QPSK	3	1	19.91	20.16	20.22			
1.									

**Band 38 Ant3 DSI3 Other PA**

BW (MHz)	Modul on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MFR (dB)
Channel								
Frequency (MHz)				37850	38000	38150		
20	QPSK	1	0	19.75	19.80	19.85		
20	QPSK	1	49	19.87	19.88	19.84	20.5	0
20	QPSK	1	99	19.44	19.53	19.29		
20	QPSK	50	0	19.70	19.83	19.86		
20	QPSK	50	24	19.82	19.77	19.86	20.5	0
20	QPSK	50	50	19.70	19.79	19.67		
20	QPSK	100	0	19.76	19.88	19.84		
20	16QAM	1	0	19.58	19.66	19.84		
20	16QAM	1	49	19.84	19.79	19.80	20.5	0
20	16QAM	50	0	19.54	19.70	19.74		
20	16QAM	50	24	19.57	19.85	19.76	20.5	0
20	16QAM	50	50	19.74	19.73	19.70		
20	16QAM	100	0	19.72	19.95	19.71		
20	84QAM	1	0	19.76	19.97	19.84		
20	84QAM	1	49	19.77	19.81	19.80	20.5	0
20	84QAM	1	99	19.84	19.83	19.82		
20	84QAM	50	0	19.82	19.79	19.75		
20	84QAM	50	24	19.85	19.75	19.79	20.5	0
20	84QAM	50	50	19.58	19.83	19.76		
20	84QAM	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	50	0	19.21	19.39	19.25		
20	256QAM	50	24	19.28	19.42	19.27	20	0.5
20	256QAM	50	50	19.24	19.38	19.24		
20	256QAM	100	0	19.30	19.41	19.35		
Channel								
Frequency (MHz)				37550	38000	38150	Time-up limit (dBm)	MFR (dB)
15	QPSK	1	0	19.69	19.82	19.88	20.5	0
15	QPSK	1	37	19.53	19.91	19.85		
15	QPSK	1	74	19.48	19.38	19.48		
15	QPSK	38	0	19.83	19.93	19.72		
15	QPSK	38	20	19.82	19.82	19.76	20.5	0
15	QPSK	38	39	19.57	19.73	19.57		
15	16QAM	75	0	19.62	19.85	19.85		
15	16QAM	1	0	19.54	19.83	19.86	20.5	0
15	16QAM	1	37	19.45	19.75	19.50		
15	16QAM	1	74	19.61	19.59	19.58		
15	16QAM	38	0	19.83	19.72	19.64		
15	16QAM	38	20	19.80	19.85	19.85	20.5	0
15	16QAM	38	39	19.72	19.90	19.59		
15	16QAM	75	0	19.80	19.82	19.74		
15	84QAM	1	0	19.69	19.89	19.83		
15	84QAM	1	37	19.48	19.88	19.71	20.5	0
15	84QAM	1	74	19.80	19.87	19.74		
15	84QAM	38	0	19.64	19.78	19.85		
15	84QAM	38	20	19.70	19.85	19.56	20.5	0
15	84QAM	38	39	19.72	19.82	19.74		
15	84QAM	75	0	19.69	19.80	19.82		
15	256QAM	1	0	19.24	19.38	19.27		
15	256QAM	1	37	19.27	19.35	19.21	20	0.5
15	256QAM	1	74	19.29	19.36	19.24		
15	256QAM	38	0	19.26	19.42	19.20	20	0.5
15	256QAM	38	20	19.16	19.38	19.26		
15	256QAM	38	39	19.29	19.36	19.30		
15	256QAM	75	0	19.32	19.48	19.34		
Channel								
Frequency (MHz)				37800	38000	38200	Time-up limit (dBm)	MFR (dB)
10	QPSK	1	0	19.90	19.94	19.78	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	20.5	0
10	16QAM	1	25	19.88	19.84	19.80		
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	19.81	20.5	0
10	16QAM	25	25	19.71	19.84	19.81		
10	16QAM	50	0	19.73	19.73	19.76		
10	84QAM	1	0	19.74	19.88	19.70		
10	84QAM	1	25	19.75	19.88	19.82	20.5	0
10	84QAM	1	49	19.73	19.85	19.77		
10	84QAM	25	0	19.68	19.84	19.54		
10	84QAM	25	12	19.69	19.74	19.70	20.5	0
10	84QAM	25	25	19.59	19.84	19.52		
10	84QAM	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								
Frequency (MHz)				37775	38000	38225	Time-up limit (dBm)	MFR (dB)
5	QPSK	1	0	19.88	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	19.87	19.71	19.80		
5	QPSK	25	0	19.59	19.74	19.89		
5	16QAM	1	0	19.87	19.85	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	19.69	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	84QAM	1	0	19.87	19.93	19.83		
5	84QAM	1	12	19.72	19.78	19.76	20.5	0
5	84QAM	1	24	19.84	19.78	19.74		
5	84QAM	12	0	19.79	19.76	19.88		
5	84QAM	12	7	19.59	19.77	19.88	20.5	0
5	84QAM	12	13	19.56	19.72	19.85		
5	84QAM	25	0	19.83	19.83	19.76		
5	256QAM	1	0	19.21	19.38	19.27		
5	256QAM	1	12	19.22	19.36	19.23	20	0.5
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	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 DSI3 Other PA**

BW (MHz)	Modul on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Time-up limit (dBm)	MFR (dB)
Channel										
Frequency (MHz)				39750	40185	40620	41055	41490		
20	QPSK	1	0	19.73	19.87	19.87	19.76	19.88		
20	QPSK	1	49	19.70	19.82	19.82	19.72	19.83	20.5	0
20	QPSK	1	99	19.76	19.75	19.99	19.80	19.97		
20	QPSK	50	0	19.83	19.83	20.15	19.88	19.98		
20	QPSK	50	24	19.83	19.60	20.10	19.84	19.91	20.5	0
20	QPSK	50	50	19.83	19.75	20.10	19.82	20.03		
20	QPSK	100	0	19.84	19.79	19.99	19.75	19.97		
20	16QAM	1	0	19.64	19.60	19.98	19.68	19.85		
20	16QAM	1	49	19.87	19.72	19.91	19.70	19.85	20.5	0
20	16QAM	50	0	19.79	19.75	19.88	19.73	19.81		
20	16QAM	50	24	19.76	19.79	20.00	19.82	19.69	20.5	0
20	16QAM	50	50	19.72	19.68	20.02	19.59	20.05		
20	16QAM	100	0	19.88	19.62	20.01	19.55	19.69		
20	84QAM	1	0	19.79	19.98	19.88	19.72	19.88		
20	84QAM	1	49	19.70	19.70	19.94	19.67	19.73	20.5	0
20	84QAM	1	99	19.84	19.81	20.13	19.58	20.01		
20	84QAM	50	0	19.72	19.70	19.93	19.78	19.80		
20	84QAM	50	24	19.53	19.82	19.86	19.62	19.80	20.5	0
20	84QAM	50	50	19.78	19.59	19.82	19.54	19.92		
20	84QAM	100	0	19.91	19.71	20.02	19.72	19.97		



**Reduced Power NSA Mode for DS14**

**Band 7 Ant2 DS14 Main PA-1 for ENDC**

Band	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				2050	2100	2150		
Frequency (MHz)				2510	2535	2550		
20	QPSK	1	0	22.53	22.69	22.99	23.5	0
20	QPSK	1	49	22.45	22.80	22.53	23.5	0
20	QPSK	1	99	22.36	22.48	22.89	23.5	0
20	QPSK	50	0	22.00	22.11	22.01	23.5	0
20	QPSK	50	24	21.96	22.08	22.02	23.5	0
20	QPSK	50	50	22.03	22.05	22.02	23.5	0
20	QPSK	100	0	22.04	22.07	22.02	23.5	0
20	16QAM	1	0	21.91	21.99	21.98	23.5	0
20	16QAM	1	49	21.93	21.99	21.98	23.5	0
20	16QAM	1	99	21.92	21.97	21.92	23.5	0
20	16QAM	50	0	22.07	22.10	22.03	23.5	0
20	16QAM	50	24	21.93	21.98	21.98	23.5	0
20	16QAM	50	50	21.95	22.00	21.98	23.5	0
20	16QAM	100	0	22.06	22.00	22.03	23.5	0
20	16QAM	1	0	21.98	22.00	22.03	23.5	0
20	16QAM	1	49	21.97	21.94	21.91	23.5	0
20	16QAM	1	99	22.02	22.04	21.97	23.5	0
20	16QAM	50	0	21.04	21.13	21.02	23.5	0
20	16QAM	50	24	20.89	20.99	21.03	23.5	0
20	16QAM	50	50	20.98	21.08	21.05	23.5	0
20	16QAM	100	0	20.99	21.01	21.00	23.5	0
20	256QAM	1	0	19.01	19.08	19.04	20.5	3
20	256QAM	1	49	18.92	19.02	19.04	20.5	3
20	256QAM	1	99	18.98	19.10	19.02	20.5	3
20	256QAM	50	0	19.01	19.03	19.08	20.5	3
20	256QAM	50	24	18.93	19.00	19.00	20.5	3
20	256QAM	50	50	18.93	18.94	18.95	20.5	3
20	256QAM	100	0	19.03	18.99	18.94	20.5	3
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	22.51	22.64	22.53	23.5	0
15	QPSK	1	37	22.45	22.64	22.53	23.5	0
15	QPSK	1	74	22.30	22.46	22.41	23.5	0
15	QPSK	36	0	21.93	22.11	21.99	23.5	0
15	QPSK	36	20	21.87	22.08	21.98	23.5	0
15	QPSK	36	39	22.00	22.04	21.98	23.5	0
15	QPSK	75	0	21.97	22.05	21.98	23.5	0
15	16QAM	1	0	21.82	21.97	21.90	23.5	0
15	16QAM	1	37	21.89	21.99	21.91	23.5	0
15	16QAM	1	74	21.85	21.98	21.92	23.5	0
15	16QAM	36	0	22.08	22.08	22.00	23.5	0
15	16QAM	36	20	21.95	21.98	21.97	23.5	0
15	16QAM	36	39	21.95	21.98	21.95	23.5	0
15	16QAM	75	0	21.88	22.00	21.97	23.5	0
15	16QAM	1	0	21.96	22.02	22.04	23.5	0
15	16QAM	1	37	21.84	21.84	21.91	23.5	0
15	16QAM	1	74	21.98	22.00	21.94	23.5	0
15	16QAM	36	0	20.98	21.07	21.03	23.5	0
15	16QAM	36	20	20.89	20.98	21.01	23.5	0
15	16QAM	36	39	20.97	20.97	21.00	23.5	0
15	16QAM	75	0	20.91	21.03	20.95	23.5	0
15	256QAM	1	0	18.94	19.09	19.03	20.5	3
15	256QAM	1	37	18.84	18.94	18.98	20.5	3
15	256QAM	1	74	18.99	19.01	18.95	20.5	3
15	256QAM	36	0	18.95	18.96	18.96	20.5	3
15	256QAM	36	20	18.95	18.99	19.01	20.5	3
15	256QAM	36	39	18.93	18.92	18.90	20.5	3
15	256QAM	75	0	18.98	18.97	18.96	20.5	3
Channel				20600	21100	21600	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	22.55	22.84	22.51	23.5	0
10	QPSK	1	25	22.42	22.58	22.54	23.5	0
10	QPSK	1	49	22.30	22.50	22.47	23.5	0
10	QPSK	25	0	22.01	22.08	22.02	23.5	0
10	QPSK	25	12	21.92	22.03	21.98	23.5	0
10	QPSK	25	25	21.97	22.08	21.95	23.5	0
10	QPSK	50	0	22.05	22.08	22.04	23.5	0
10	16QAM	1	0	21.89	22.00	21.99	23.5	0
10	16QAM	1	25	21.89	21.90	21.91	23.5	0
10	16QAM	1	49	21.91	21.92	21.87	23.5	0
10	16QAM	25	0	22.06	22.06	21.98	23.5	0
10	16QAM	25	12	21.98	21.91	21.90	23.5	0
10	16QAM	25	25	21.92	22.01	21.91	23.5	0
10	16QAM	50	0	22.03	22.00	21.93	23.5	0
10	16QAM	1	0	21.84	22.00	22.04	23.5	0
10	16QAM	1	25	21.93	21.89	21.89	23.5	0
10	16QAM	1	49	21.96	22.01	21.98	23.5	0
10	16QAM	25	0	21.01	21.05	20.98	23.5	0
10	16QAM	25	12	20.88	20.95	21.02	23.5	0
10	16QAM	25	25	20.97	21.01	20.94	23.5	0
10	16QAM	50	0	20.97	20.92	21.00	23.5	0
10	256QAM	1	0	18.92	19.03	18.98	20.5	3
10	256QAM	1	25	18.85	18.95	19.00	20.5	3
10	256QAM	1	49	18.99	19.07	19.04	20.5	3
10	256QAM	25	0	18.98	19.03	18.99	20.5	3
10	256QAM	25	12	18.89	18.98	19.02	20.5	3
10	256QAM	25	25	18.94	18.93	18.95	20.5	3
10	256QAM	50	0	19.03	19.01	18.91	20.5	3
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	22.46	22.65	22.51	23.5	0
5	QPSK	1	12	22.40	22.56	22.48	23.5	0
5	QPSK	1	24	22.30	22.41	22.51	23.5	0
5	QPSK	12	0	21.96	22.06	22.00	23.5	0
5	QPSK	12	13	22.01	21.99	21.95	23.5	0
5	QPSK	25	0	22.01	22.09	21.96	23.5	0
5	16QAM	1	0	21.87	21.95	21.98	23.5	0
5	16QAM	1	12	21.94	21.92	21.89	23.5	0
5	16QAM	1	24	21.87	21.94	21.86	23.5	0
5	16QAM	12	0	22.10	22.08	22.02	23.5	0
5	16QAM	12	7	21.82	21.84	21.85	23.5	0
5	16QAM	12	13	21.82	21.83	21.84	23.5	0
5	16QAM	25	0	22.02	21.99	22.02	23.5	0
5	16QAM	1	0	22.01	21.83	22.02	23.5	0
5	16QAM	1	12	21.99	21.93	21.94	23.5	0
5	16QAM	1	24	21.88	22.04	21.89	23.5	0
5	16QAM	12	0	21.05	21.12	20.99	23.5	0
5	16QAM	12	7	20.90	20.93	20.95	23.5	0
5	16QAM	12	13	20.91	21.00	20.93	23.5	0
5	16QAM	25	0	20.90	20.93	21.00	23.5	0
5	256QAM	1	0	18.99	19.06	18.96	20.5	3
5	256QAM	1	12	18.84	19.02	19.00	20.5	3
5	256QAM	1	24	18.97	19.08	18.95	20.5	3
5	256QAM	12	0	18.99	18.97	18.95	20.5	3
5	256QAM	12	7	18.95	18.95	18.95	20.5	3
5	256QAM	12	13	18.91	18.90	18.90	20.5	3
5	256QAM	25	0	19.06	18.92	18.95	20.5	3

**Band 7 Ant2 DS14 Other PA for ENDC**

Band	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				2050	2100	2150		
Frequency (MHz)				2510	2535	2550		
20	QPSK	1	0	18.43	18.47	18.39	19	0
20	QPSK	1	49	18.30	18.30	18.28	19	0
20	QPSK	1	99	18.42	18.46	18.32	19	0
20	QPSK	50	0	18.26	18.34	18.33	19	0
20	QPSK	50	24	18.00	18.08	18.26	19	0
20	QPSK	50	50	17.92	17.98	18.26	19	0
20	QPSK	100	0	18.16	18.31	18.27	19	0
20	16QAM	1	0	17.97	18.01	18.21	19	0
20	16QAM	1	49	17.95	17.93	18.26	19	0
20	16QAM	1	99	17.89	17.94	18.24	19	0
20	16QAM	50	0	18.12	18.14	18.28	19	0
20	16QAM	50	24	18.07	18.12	18.29	19	0
20	16QAM	50	50	17.97	17.98	18.32	19	0
20	16QAM	100	0	18.19	18.15	18.35	19	0
20	16QAM	1	0	18.10	18.13	18.24	19	0
20	16QAM	1	49	18.04	18.01	18.21	19	0
20	16QAM	1	99	17.99	17.94	18.24	19	0
20	16QAM	50	0	17.04	17.15	17.37	19	0
20	16QAM	50	24	16.99	17.01	17.32	19	0
20	16QAM	50	50	16.86	16.93	17.28	19	0
20	16QAM	100	0	17.17	17.15	17.38	19	0
20	256QAM	1	0	15.24	15.27	15.49	16	3
20	256QAM	1	49	15.20	15.24	15.50	16	3
20	256QAM	1	99	15.14	15.17	15.49	16	3
20	256QAM	50	0	15.32	15.33	15.48	16	3
20	256QAM	50	24	15.21	15.23	15.47	16	3
20	256QAM	50	50	15.22	15.19	15.43	16	3
20	256QAM	100	0	15.07	15.08	15.48	16	3
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	18.24	18.42	18.30	19	0
15	QPSK	1	37	18.07	18.33	18.25	19	0
15	QPSK	1	74	18.45	18.45	18.2		



Band 2 Ant2 DS4 Other PA

Table with 10 columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mod, Power High, Turn-up (dBm), and MPE (dB). It lists various antenna configurations for Band 2 Ant2 DS4 Other PA.

Reduced Power NSA Mode for DS4

Band 7 Ant2 DS4 Main PA-1

Table with 10 columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mod, Power High, Turn-up (dBm), and MPE (dB). It lists various antenna configurations for Band 7 Ant2 DS4 Main PA-1.

Band 7 Ant2 DS4 Other PA

Table with 10 columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mod, Power High, Turn-up (dBm), and MPE (dB). It lists various antenna configurations for Band 7 Ant2 DS4 Other PA.



Band 38 Ant2 DS14 Other PA										
BW (MHz)	Modulat on	RB Size	RB Offset	Power Low Ch./Freq	Power Major Ch./Freq	Power High Ch./Freq	Time-up (dBm)	MPR (dB)		
Channel				37850	38000	38150				
Frequency (MHz)				2905	2995	3105				
20	QPSK	1	0	21.23	21.29	21.34				
20	QPSK	1	49	21.11	21.19	21.24			22	0
20	QPSK	1	99	21.04	21.14	21.21				
20	QPSK	50	0	20.12	20.24	20.26				
20	QPSK	50	24	20.12	20.24	20.26				
20	QPSK	50	50	20.16	20.24	20.23			21	1
20	QPSK	100	0	20.07	20.17	20.14				
20	16QAM	1	0	20.20	20.25	20.27				
20	16QAM	1	49	20.17	20.23	20.25			21	1
20	16QAM	1	99	20.16	20.22	20.27				
20	16QAM	50	0	19.13	19.21	19.26				
20	16QAM	50	24	19.07	19.15	19.17			20	2
20	16QAM	50	50	19.14	19.22	19.21				
20	16QAM	100	0	19.76	19.92	19.89				
20	64QAM	1	0	19.57	19.87	19.82				
20	64QAM	1	49	19.53	19.84	19.85			20	2
20	64QAM	1	99	19.49	19.85	19.84				
20	64QAM	50	0	18.08	18.18	18.25				
20	64QAM	50	24	18.15	18.21	18.23			19	3
20	64QAM	50	50	18.11	18.17	18.12				
20	64QAM	100	0	17.81	17.90	17.94				
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				
20	256QAM	50	24	16.20	16.24	16.22			17	5
20	256QAM	50	50	16.08	16.17	16.22				
20	256QAM	100	0	16.09	16.23	16.24				
Channel				37855	38000	38175	Time-up (dBm)	MPR (dB)		
Frequency (MHz)				2977.5	2995	3012.5				
15	QPSK	1	0	21.20	21.26	21.22				
15	QPSK	1	37	21.14	21.17	21.22			22	0
15	QPSK	1	74	20.98	21.10	21.26				
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				
15	16QAM	1	0	20.16	20.20	20.24				
15	16QAM	1	37	20.11	20.18	20.25			21	1
15	16QAM	1	74	20.09	20.14	20.20				
15	16QAM	36	0	19.11	19.19	19.26				
15	16QAM	36	20	19.06	19.17	19.15			20	2
15	16QAM	36	39	19.09	19.21	19.20				
15	16QAM	75	0	18.89	18.84	18.82				
15	64QAM	1	0	18.15	18.26	18.31			20	2
15	64QAM	1	37	18.55	19.60	19.85				
15	64QAM	1	74	19.49	19.82	19.85				
15	64QAM	36	0	18.09	18.26	18.16				
15	64QAM	36	20	18.11	18.23	18.19			19	3
15	64QAM	36	39	18.07	18.21	18.11				
15	64QAM	75	0	17.76	17.90	17.91				
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				
15	256QAM	36	20	16.11	16.26	16.15			17	5
15	256QAM	36	39	15.98	16.13	16.18				
15	256QAM	75	0	16.08	16.17	16.23				
Channel				37860	38000	38175	Time-up (dBm)	MPR (dB)		
Frequency (MHz)				2975	2995	3015				
10	QPSK	1	0	21.18	21.25	21.19				
10	QPSK	1	25	21.08	21.10	21.22			22	0
10	QPSK	1	49	20.95	21.11	21.27				
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				
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				
10	16QAM	25	12	19.02	19.06	19.15			20	2
10	16QAM	25	25	19.10	19.23	19.13				
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				
10	64QAM	25	0	18.11	18.19	18.26				
10	64QAM	25	12	18.18	18.22	18.20			19	3
10	64QAM	25	25	18.09	18.19	18.05				
10	64QAM	50	0	17.80	17.83	17.87				
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				
10	256QAM	25	12	16.15	16.25	16.22			17	5
10	256QAM	25	25	16.04	16.15	16.21				
10	256QAM	50	0	16.10	16.22	16.23				
Channel				37775	38000	38225	Time-up (dBm)	MPR (dB)		
Frequency (MHz)				2972.5	2995	3017.5				
5	QPSK	1	0	21.17	21.21	21.24				
5	QPSK	1	12	21.14	21.15	21.20			22	0
5	QPSK	1	24	20.97	21.12	21.22				
5	QPSK	12	0	20.10	20.18	20.28				
5	QPSK	12	7	20.04	20.23	20.25				
5	QPSK	12	13	20.17	20.29	20.33			21	1
5	QPSK	25	0	20.02	20.14	20.09				
5	16QAM	1	0	20.12	20.26	20.29				
5	16QAM	1	12	20.20	20.22	20.19			21	1
5	16QAM	1	24	20.10	20.15	20.20				
5	16QAM	12	0	19.14	19.21	19.17				
5	16QAM	12	7	18.98	19.18	19.10			20	2
5	16QAM	12	13	19.12	19.15	19.24				
5	16QAM	25	0	18.75	18.91	18.89				
5	64QAM	1	0	19.53	19.65	19.55				
5	64QAM	1	12	19.50	19.59	19.59			20	2
5	64QAM	1	24	19.45	19.59	19.56				
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	18.15	18.05				
5	64QAM	25	0	17.73	17.88	17.86				
5	256QAM	1	0	16.01	16.19	16.08				
5	256QAM	1	12	16.06	16.18	16.13			17	5
5	256QAM	1	24	15.96	16.15	16.20				
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	16.09	16.18	16.16				
5	256QAM	25	0	16.01	16.25	16.24				

Band 41 Ant2 DS14 Other PA											
BW (MHz)	Modulat on	RB Size	RB Offset	Power Low Ch./Freq	Power Major Ch./Freq	Power High Ch./Freq	Power High Ch./Freq	Power High Ch./Freq	Time-up (dBm)	MPR (dB)	
Channel				39750	40185	40620	41055	41490			
Frequency (MHz)				2908	2988.5	3069	3150.5	3230			
20	QPSK	1	0	21.43	21.22	21.47	21.24	21.42			
20	QPSK	1	49	21.45	21.20	21.41	21.17	21.39		22	0
20	QPSK	1	99	21.42	21.16	21.40	21.16	21.41			
20	QPSK	50	0	20.38	20.20	20.30	20.30	20.38			
20	QPSK	50	24	20.47	20.20	20.42	20.16	20.44			
20	QPSK	50	50	20.41	20.15	20.38	20.17	20.45		21	1
20	QPSK	100	0	20.37	20.27	20.46	20.21	20.41			
20	16QAM	1	0	20.44	20.25	20.40	20.18	20.35			
20	16QAM	1	49	20.41	20.21	20.36	20.10	20.42		21	1
20	16QAM	1	99	20.47	20.15	20.37	20.22	20.38			
20	16QAM	50	0	19.42	19.22	19.50	19.32	19.44			
20	16QAM	50	24	19.41	19.31	19.47	19.17	19.48		20	2
20	16QAM	50	50	19.44	19.13	19.37	19.16	19.43			
20	16QAM	100	0	19.42	19.25	19.45	19.25	19.46			
20	64QAM	1	0	19.49	19.28	19.40	19.17	19.35			
20	64QAM	1	49	19.36	19.20	19.33	19.08	19.46		20	2
20	64QAM	1	99	19.51	19.15	19.38	19.18	19.38			
20	64QAM	50	0	18.32	18.25	18.49	18.28	18.34			
20	64QAM	50	24	18.48	18.30	18.42	18.11	18.42		19	3
20	64QAM	50	50	18.37	18.17	18.40	18.14	18.50			
20	64QAM	100	0	18.33	18.23	18.45	18.17	18.43			
20	256QAM	1	0	16.39	16.15	16.46	16.33</				





Band 2 Ant3 DS14 Other PA										
BW (MHz)	Modulat	RB Size	RB Offset	Power Low Ch. / Freqs.	Power Mean Ch. / Freqs.	Power High Ch. / Freqs.	Turnup limit (dB)	APR	APR (dB)	
Channel										
				1860	1868	1800				
20	QPSK	1	0	23.84	24.02	23.92				
20	QPSK	1	66	23.76	23.94	23.82	24.5	0		
20	QPSK	1	99	23.68	23.81	23.91				
20	QPSK	50	0	22.83	22.85	22.94				
20	QPSK	50	84	22.84	22.71	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	HQAM	1	49	22.30	22.51	22.48	23.5	1		
20	HQAM	1	99	22.28	22.54	22.48				
20	HQAM	50	0	21.45	21.72	21.74				
20	HQAM	50	24	21.54	21.68	21.60	22.5	2		
20	HQAM	50	50	21.47	21.71	21.68				
20	HQAM	100	0	21.45	21.66	21.60				
20	HQAM	1	0	21.70	21.67	21.90				
20	HQAM	1	49	21.60	21.86	21.98	22.5	2		
20	HQAM	50	0	20.67	20.74	20.69				
20	HQAM	50	24	20.57	20.71	20.65				
20	HQAM	50	50	20.98	20.70	20.70	21.5	3		
20	HQAM	100	0	20.49	20.67	20.59				
20	HQAM	1	0	18.45	18.61	18.64				
20	HQAM	49	18.42	18.62	18.58	19.5	5			
20	HQAM	1	99	18.44	18.62	18.62				
20	HQAM	50	0	18.45	18.61	18.64				
20	HQAM	50	24	18.49	18.72	18.71	19.5	5		
20	HQAM	50	50	18.41	18.67	18.66				
20	HQAM	100	0	18.42	18.62	18.64				
Channel										
				1895	1893	1925				
15	QPSK	1	0	23.85	24.01	23.85				
15	QPSK	1	37	23.75	23.49	23.49	24.5	0		
15	QPSK	1	74	23.60	23.87	23.86				
15	QPSK	36	0	22.81	22.83	22.77				
15	QPSK	36	36	22.48	22.74	22.68	23.5	1		
15	QPSK	36	36	22.55	22.72	22.70				
15	HQAM	1	0	22.35	22.47	22.47				
15	HQAM	1	37	22.23	22.46	22.39	23.5	1		
15	HQAM	1	74	22.25	22.46	22.46				
15	HQAM	36	0	21.50	21.67	21.66				
15	HQAM	36	20	21.51	21.60	21.59	22.5	2		
15	HQAM	36	36	21.45	21.68	21.64				
15	HQAM	75	0	21.45	21.68	21.64				
15	HQAM	1	0	21.82	21.82	21.84				
15	HQAM	1	37	21.67	21.79	21.84	23.5	1		
15	HQAM	1	74	21.68	21.78	21.80				
15	HQAM	36	0	20.48	20.74	20.68				
15	HQAM	36	36	20.58	20.64	20.61				
15	HQAM	36	36	20.56	20.55	20.59	21.5	3		
15	HQAM	75	0	20.47	20.65	20.62				
15	HQAM	1	0	18.41	18.61	18.59				
15	HQAM	1	37	18.43	18.61	18.51	19.5	5		
15	HQAM	1	74	18.41	18.64	18.53				
15	HQAM	36	0	18.45	18.72	18.64				
15	HQAM	36	20	18.51	18.70	18.65	19.5	5		
15	HQAM	36	36	18.39	18.56	18.59				
15	HQAM	75	0	18.43	18.62	18.66				
Channel										
				1895	1896	1926				
10	QPSK	1	0	23.82	23.84	23.84				
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	22.86	22.86	22.79				
10	QPSK	25	12	22.48	22.78	22.68	23.5	1		
10	QPSK	25	25	22.50	22.79	22.76				
10	HQAM	1	0	22.26	22.29	22.34				
10	HQAM	1	25	22.21	22.58	22.44	23.5	1		
10	HQAM	1	49	22.28	22.45	22.50				
10	HQAM	25	0	21.45	21.68	21.68				
10	HQAM	25	12	21.55	21.65	21.61	22.5	2		
10	HQAM	25	12	21.40	21.70	21.60				
10	HQAM	50	0	21.40	21.63	21.57				
10	HQAM	1	0	21.82	21.78	21.80	22.5	2		
10	HQAM	1	49	21.65	21.85	21.71				
10	HQAM	25	0	20.50	20.76	20.63				
10	HQAM	25	12	20.58	20.68	20.67	21.5	3		
10	HQAM	25	25	20.53	20.62	20.66				
10	HQAM	50	0	20.46	20.63	20.59				
10	HQAM	1	0	18.38	18.55	18.57				
10	HQAM	1	25	18.38	18.58	18.59	19.5	5		
10	HQAM	1	49	18.35	18.55	18.55				
10	HQAM	25	0	18.49	18.71	18.61				
10	HQAM	25	12	18.47	18.64	18.67	19.5	5		
10	HQAM	25	25	18.35	18.65	18.63				
10	HQAM	50	0	18.39	18.67	18.61				
Channel										
				1895	1896	1926				
5	QPSK	1	0	23.81	23.84	23.84				
5	QPSK	1	12	23.81	23.84	23.98	24.5	0		
5	QPSK	1	24	23.69	23.85	23.94				
5	QPSK	12	0	22.82	22.84	22.86				
5	QPSK	12	7	22.45	22.75	22.63	23.5	1		
5	QPSK	12	13	22.50	22.71	22.73				
5	HQAM	1	0	22.16	22.19	22.24				
5	HQAM	1	12	22.30	22.50	22.49	23.5	1		
5	HQAM	1	24	22.31	22.45	22.41				
5	HQAM	12	0	21.45	21.67	21.74				
5	HQAM	12	7	21.54	21.65	21.62	22.5	2		
5	HQAM	12	13	21.41	21.70	21.60				
5	HQAM	25	0	21.49	21.68	21.61				
5	HQAM	1	0	21.82	21.81	21.81	22.5	2		
5	HQAM	1	12	21.61	21.80	21.88				
5	HQAM	1	24	21.59	21.84	21.77				
5	HQAM	12	0	20.44	20.65	20.65				
5	HQAM	12	7	20.54	20.61	20.64	21.5	3		
5	HQAM	12	13	20.58	20.63	20.64				
5	HQAM	25	0	20.49	20.67	20.64				
5	HQAM	1	0	18.41	18.59	18.51				
5	HQAM	1	12	18.39	18.63	18.60	19.5	5		
5	HQAM	1	24	18.40	18.62	18.54				
5	HQAM	12	0	18.52	18.62	18.65				
5	HQAM	12	7	18.48	18.65	18.70	19.5	5		
5	HQAM	12	13	18.33	18.56	18.54				
5	HQAM	25	0	18.41	18.70	18.58				
Channel										
				1865	1866	1865				
3	QPSK	1	0	23.77	23.84	23.92				
3	QPSK	1	8	23.73	23.89	23.99	24.5	0		
3	QPSK	1	14	23.68	23.87	23.99				
3	QPSK	8	0	22.82	22.82	22.77				
3	QPSK	8	4	22.51	22.72	22.64	23.5	1		
3	QPSK	8	7	22.49	22.65	22.70				
3	HQAM	1	0	22.26	22.27	22.24				
3	HQAM	1	8	22.32	22.44	22.41	23.5	1		
3	HQAM	1	14	22.27	22.51	22.48				
3	HQAM	8	0	21.50	21.72	21.77				
3	HQAM	8	4	21.55	21.68	21.64	22.5	2		
3	HQAM	8	7	21.39	21.60	21.68				
3	HQAM	15	0	21.44	21.67	21.81				
3	HQAM	1	0	21.71	21.60	21.81	22.5	2		
3	HQAM	1	8	21.66	21.85	21.83				
3	HQAM	1	14	21.62	21.81	21.72				
3	HQAM	8	0	20.41	20.72	20.63				
3	HQAM	8	4	20.51	20.62	20.62	21.5	3		
3	HQAM	8	7	20.53	20.70					



Band 38 Ant3 DS14 Other PA										
BW (MHz)	Modul on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)		
	Channel			37850	38600	38150				
	Frequency (MHz)			2580	2595	2610				
20	QPSK	1	0	24.43	24.58	24.47				
	QPSK	1	49	24.46	24.55	24.53			25	0
	QPSK	1	99	23.98	24.08	23.99				
	QPSK	50	0	23.34	23.43	23.33				
	QPSK	50	24	23.32	23.40	23.28			24	1
	QPSK	50	50	23.26	23.35	23.27				
	QPSK	100	0	23.31	23.41	23.32				
	16QAM	1	0	23.20	23.26	23.17				
	16QAM	1	49	23.19	23.27	23.15			24	1
	16QAM	50	0	22.25	22.41	22.33				
	16QAM	50	24	22.25	22.40	22.29				
	16QAM	50	50	22.38	22.42	22.31			23	2
	16QAM	100	0	22.31	22.44	22.35				
	64QAM	1	0	22.26	22.52	22.42				
	64QAM	1	49	22.38	22.48	22.41			23	2
	64QAM	1	99	22.34	22.46	22.41				
	64QAM	50	0	21.32	21.41	21.28				
	64QAM	50	24	21.28	21.38	21.21			22	3
	64QAM	50	50	21.08	21.35	21.28				
	64QAM	100	0	21.40	21.48	21.35				
	256QAM	1	0	19.24	19.39	19.33				
	256QAM	1	49	19.25	19.38	19.23			20	5
	256QAM	50	0	19.21	19.38	19.25				
	256QAM	50	24	19.26	19.42	19.27				
	256QAM	50	50	19.24	19.38	19.24			20	5
	256QAM	100	0	19.40	19.48	19.35				
	256QAM	100	0	19.40	19.48	19.35				
	Channel			37550	38300	38175	Turn-up limit (dBm)	MPR (dB)		
	Frequency (MHz)			2577.5	2595	2612.5				
15	QPSK	1	0	24.34	24.53	24.47			25	0
	QPSK	1	37	24.45	24.51	24.39				
	QPSK	1	74	23.95	24.05	23.98				
	QPSK	36	0	23.31	23.38	23.29				
	QPSK	36	20	23.26	23.32	23.27			24	1
	QPSK	36	39	23.25	23.28	23.27				
	QPSK	75	0	23.26	23.43	23.34				
	16QAM	1	0	23.17	23.19	23.09				
	16QAM	1	37	23.16	23.30	23.11			24	1
	16QAM	1	74	23.09	23.11	23.07				
	16QAM	36	0	22.20	22.38	22.34				
	16QAM	36	20	22.23	22.32	22.04				
	16QAM	36	39	22.28	22.41	22.29			23	2
	16QAM	75	0	22.32	22.41	22.32				
	64QAM	1	0	22.38	22.51	22.45				
	64QAM	1	37	22.39	22.48	22.34			23	2
	64QAM	1	74	22.34	22.40	22.36				
	64QAM	36	0	21.32	21.40	21.25				
	64QAM	36	20	21.19	21.38	21.12			22	3
	64QAM	36	39	21.28	21.32	21.18				
	64QAM	75	0	21.37	21.41	21.37				
	256QAM	1	0	19.24	19.38	19.27				
	256QAM	1	37	19.27	19.35	19.21			20	5
	256QAM	1	74	19.29	19.36	19.24				
	256QAM	36	0	19.26	19.42	19.20				
	256QAM	36	20	19.16	19.38	19.26			20	5
	256QAM	36	39	19.29	19.36	19.30				
	256QAM	75	0	19.32	19.48	19.34				
	Channel			37600	38600	38500	Turn-up limit (dBm)	MPR (dB)		
	Frequency (MHz)			2615	2695	2615				
10	QPSK	1	0	24.43	24.52	24.38			25	0
	QPSK	1	25	24.38	24.47	24.44				
	QPSK	1	49	23.97	23.99	23.96				
	QPSK	50	0	23.28	23.38	23.29				
	QPSK	25	12	23.28	23.38	23.29			24	1
	QPSK	25	25	23.25	23.35	23.26				
	QPSK	50	0	23.29	23.39	23.28				
	16QAM	1	0	23.11	23.24	23.09				
	16QAM	1	25	23.20	23.29	23.18				
	16QAM	1	49	23.17	23.14	23.02			24	1
	16QAM	25	0	22.25	22.41	22.35				
	16QAM	25	12	22.28	22.33	22.24			23	2
	16QAM	25	25	22.32	22.41	22.23				
	16QAM	50	0	22.34	22.37	22.37				
	64QAM	1	0	22.34	22.51	22.39				
	64QAM	1	25	22.34	22.44	22.40				
	64QAM	1	49	22.35	22.41	22.38			23	2
	64QAM	1	25	21.24	21.39	21.17				
	64QAM	25	12	21.25	21.31	21.21			22	3
	64QAM	25	25	21.25	21.35	21.25				
	64QAM	50	0	21.42	21.44	21.27				
	256QAM	1	0	19.23	19.42	19.35				
	256QAM	1	25	19.27	19.38	19.25			20	5
	256QAM	1	49	19.32	19.35	19.16				
	256QAM	25	0	19.24	19.42	19.24				
	256QAM	25	12	19.26	19.41	19.28				
	256QAM	25	25	19.26	19.34	19.38			20	5
	256QAM	50	0	19.41	19.46	19.31				
	Channel			37775	38600	38525	Turn-up limit (dBm)	MPR (dB)		
	Frequency (MHz)			2572.5	2595	2617.5				
5	QPSK	1	0	24.37	24.54	24.49			25	0
	QPSK	1	12	24.38	24.48	24.42				
	QPSK	1	24	23.97	24.09	23.89				
	QPSK	12	0	23.27	23.42	23.34				
	QPSK	12	7	23.35	23.38	23.20			24	1
	QPSK	12	13	23.22	23.30	23.28				
	QPSK	25	0	23.22	23.41	23.30				
	16QAM	1	0	23.22	23.25	23.15				
	16QAM	1	12	23.14	23.29	23.15			24	1
	16QAM	1	24	23.17	23.23	23.06				
	16QAM	12	0	22.21	22.41	22.33				
	16QAM	12	7	22.18	22.36	22.23			23	2
	16QAM	12	13	22.38	22.42	22.37				
	16QAM	25	0	22.29	22.41	22.35				
	64QAM	1	0	22.30	22.53	22.35				
	64QAM	1	12	22.39	22.42	22.37			23	2
	64QAM	1	24	22.28	22.43	22.36				
	64QAM	12	0	21.24	21.44	21.22				
	64QAM	12	7	21.31	21.30	21.21			22	3
	64QAM	12	13	21.22	21.28	21.24				
	64QAM	25	0	21.38	21.42	21.37				
	256QAM	1	0	19.21	19.38	19.27				
	256QAM	1	12	19.22	19.36	19.23			20	5
	256QAM	1	24	19.27	19.32	19.19				
	256QAM	12	0	19.20	19.38	19.21				
	256QAM	12	7	19.22	19.40	19.20			20	5
	256QAM	12	13	19.30	19.34	19.29				
	256QAM	25	0	19.38	19.44	19.22				

Band 41 Ant3 DS14 Other PA											
BW (MHz)	Modul on	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)
	Channel			39750	40165	40620	41065	41650			
	Frequency (MHz)			2506	2549.5	2593	2636.5	2680			
20	QPSK	1	0	24.17	24.15	24.55	24.15	24.36			
	QPSK	1	49	24.11	24.16	24.42	24.09	24.30			25
	QPSK	1	99	24.13	24.15	24.50	24.12	24.32			
	QPSK	50	0	23.17	23.20	23.51	23.18	23.38			
	QPSK	50	24	23.07	23.13	23.41	23.09	23.28			24
	QPSK	50	50	23.14	23.14	23.46	23.10	23.37			
	QPSK	100	0	23.21	23.19	23.54	23.11	23.39			
	16QAM	1	0	23.13	23.11	23.43	23.14	23.30			
	16QAM										



Band 7 Ant4 DSI4 Other PA										
BW (MHz)	Modula-tion	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)										
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	20.38		21.5	0	
20	QPSK	50	24	20.22	20.31	20.22				
20	QPSK	50	50	20.13	20.18	20.07		21.5	0	
20	QPSK	100	0	20.26	20.40	20.32				
20	16QAM	1	0	20.21	20.14	20.03		21.5	0	
20	16QAM	1	49	20.16	20.28	20.04				
20	16QAM	1	99	20.21	20.16	20.00				
20	16QAM	50	0	20.14	20.19	20.15		21.5	0	
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	20.18	20.15				
20	84QAM	1	0	20.27	20.55	20.27		21.5	0	
20	84QAM	1	49	20.44	20.37	20.37				
20	84QAM	1	99	20.28	20.42	20.33				
20	84QAM	50	0	20.28	20.40	20.28		21.5	0	
20	84QAM	50	24	20.14	20.21	20.18				
20	84QAM	50	50	20.31	20.31	20.11				
20	84QAM	100	0	20.24	20.37	20.11		21.5	0	
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		20.5	1	
Channel				20625	21100	21375				
Frequency (MHz)										
15	QPSK	1	0	20.39	20.39	20.31		21.5	0	
15	QPSK	1	37	20.15	20.29	20.17				
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		21.5	0	
15	16QAM	1	74	19.88	20.04	19.98				
15	16QAM	36	0	20.17	20.14	20.07		21.5	0	
15	16QAM	36	20	20.07	20.04	19.90				
15	16QAM	36	39	20.06	20.16	19.98				
15	16QAM	75	0	20.15	20.21	19.91		21.5	0	
15	84QAM	1	0	20.15	20.29	20.26				
15	84QAM	1	37	20.29	20.41	20.18		21.5	0	
15	84QAM	1	74	20.11	20.18	20.17				
15	84QAM	36	0	20.09	20.24	20.09		21.5	0	
15	84QAM	36	20	20.04	20.02	19.98				
15	84QAM	36	39	20.01	20.01	19.96				
15	84QAM	75	0	20.30	20.16	20.21		21.5	0	
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				20600	21100	21400				
Frequency (MHz)										
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	20.03				
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		21.5	0	
10	16QAM	1	49	20.09	20.16	19.88				
10	16QAM	25	12	20.20	20.15	20.14		21.5	0	
10	16QAM	25	12	20.01	20.02	19.98				
10	16QAM	25	25	19.94	20.08	20.13				
10	16QAM	50	0	20.16	20.23	19.93		21.5	0	
10	84QAM	1	0	20.28	20.36	20.14				
10	84QAM	1	25	20.34	20.36	20.34		21.5	0	
10	84QAM	1	49	20.07	20.26	20.15				
10	84QAM	25	0	20.03	20.27	20.04		21.5	0	
10	84QAM	25	12	20.02	20.19	20.00				
10	84QAM	25	25	19.90	20.18	19.86				
10	84QAM	50	0	20.25	20.16	20.04		21.5	0	
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	19.20				
Channel				20775	21100	21425				
Frequency (MHz)										
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	20.28	20.20		21.5	0	
5	QPSK	12	13	19.98	20.06	20.09				
5	QPSK	25	0	20.23	20.25	20.19				
5	16QAM	1	0	20.07	20.23	20.05		21.5	0	
5	16QAM	1	12	20.01	20.11	19.88				
5	16QAM	1	24	19.99	20.03	19.93				
5	16QAM	12	0	20.02	20.24	19.95		21.5	0	
5	16QAM	12	7	20.15	20.19	20.10				
5	16QAM	12	13	20.17	20.16	19.97				
5	16QAM	25	0	20.04	20.25	19.98		21.5	0	
5	84QAM	1	0	20.16	20.38	20.29		21.5	0	
5	84QAM	1	12	20.35	20.36	20.30				
5	84QAM	1	24	20.16	20.36	20.26				
5	84QAM	12	0	20.07	20.24	20.17		21.5	0	
5	84QAM	12	7	20.11	20.18	19.85				
5	84QAM	12	13	20.06	20.15	20.03				
5	84QAM	25	0	20.14	20.33	20.13		21.5	0	
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	19.35				
5	256QAM	12	13	19.26	19.38	19.20				
5	256QAM	25	0	19.28	19.41	19.24		20.5	1	

Band 7 Ant4 DSI4 Other PA-1										
BW (MHz)	Modula-tion	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)										
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				
20	QPSK	50	0	20.30	20.50	20.33		21.5	0	
20	QPSK	50	24	20.22	20.47	20.34				
20	QPSK	50	50	20.15	20.35	20.05				
20	QPSK	100	0	20.17	20.35	20.17				
20	16QAM	1	0	20.07	20.27	20.24		21.5	0	
20	16QAM	1	49	20.09	20.20	19.91				
20	16QAM	1	99	20.11	20.28	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				
20	16QAM	100	0	20.22	20.38	20.12		21.5	0	
20	84QAM	1	0	20.31	20.51	20.33		21.5	0	
20	84QAM	1	49	20.27	20.37	20.43				
20	84QAM	1	99	20.37	20.28	20.28				
20	84QAM	50	0	20.30	20.36	20.11		21.5	0	
20	84QAM	50	24	20.10	20.20	19.96				
20	84QAM	50	50	20.22	20.27	19.88				
20	84QAM	100	0	20.19	20.28	20.22		21.5	0	
20	256QAM	1	0	19.31	19.43	19.09		20.5	1	
20	256QAM	1	49	19.17	19.38	18.88				
20	256QAM	1	99	19.19	19.26	18.96				
20	256QAM	50	0	19.36	19.36	19.09		20.5	1	
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		20.5	1	
Channel				20625	21100	21375				
Frequency (MHz)										
15	QPSK	1	0	20.42	20.51	20.45		21.5	0	
15	QPSK	1	37	20.36	20.40	20.20				
15	QPSK	1	74	20.28	20.32	20.28				
15	QPSK	36	0	20.24	20.32	20.09		21.5	0	
15	QPSK	36	20	20.12	20.30	20.26				
15	QPSK	36	39	20.05	20.11	19.88				
15	QPSK	75	0	20.15	20.20	20.19				



Band 38 Ant4 DSI4 Other PA										
BW (MHz)	Modulat on	RB Size	RB Offset	Power Low Ch./Frec	Power Middle Ch./Frec	Power High Ch./Frec	Time-up (dBm)	MPR (dB)		
Channel				37550	38000	38150				
Frequency (MHz)				25850	2585	26150				
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	20.06	19.86				
20	QPSK	50	24	19.90	20.00	19.86				
20	QPSK	50	50	19.74	19.81	19.54		21.5	0	
20	QPSK	100	0	19.82	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		21.5	0	
20	16QAM	50	50	20.04	20.08	19.86				
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		21.5	0	
20	64QAM	1	99	20.05	20.15	20.01				
20	64QAM	50	0	20.07	20.10	19.88				
20	64QAM	50	24	20.04	20.14	19.82		21.5	0	
20	64QAM	50	50	20.05	20.13	19.85				
20	64QAM	100	0	20.05	20.07	19.70				
20	256QAM	1	0	19.10	19.21	18.95		20.5	1	
20	256QAM	1	49	19.07	19.16	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				37625	38000	38175	Time-up (dBm)	MPR (dB)		
Frequency (MHz)				25775	2595	26250				
15	QPSK	1	0	19.83	20.10	19.81		21.5	0	
15	QPSK	1	37	19.88	20.12	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	19.96		21.5	0	
15	QPSK	36	39	19.84	19.95	19.75				
15	QPSK	75	0	19.88	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	19.86	19.92	19.81				
15	16QAM	36	0	19.84	20.12	19.83				
15	16QAM	36	20	20.03	19.90	19.82		21.5	0	
15	16QAM	36	39	19.84	19.99	19.67				
15	16QAM	75	0	19.88	20.04	19.80				
15	64QAM	1	0	20.11	19.96	20.08				
15	64QAM	1	37	19.88	20.09	20.06		21.5	0	
15	64QAM	1	74	20.01	20.17	19.99				
15	64QAM	36	0	19.91	20.11	19.83				
15	64QAM	36	20	19.84	20.04	19.77		21.5	0	
15	64QAM	36	39	19.83	20.01	19.81				
15	64QAM	75	0	19.96	20.17	19.84				
15	256QAM	1	0	19.06	19.20	18.88		20.5	1	
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	19.06	19.15	18.85				
Channel				37775	38000	38225	Time-up (dBm)	MPR (dB)		
Frequency (MHz)				25975	2595	26250				
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	19.84	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	20.10	19.80				
10	16QAM	1	25	19.89	20.07	19.81		21.5	0	
10	16QAM	1	49	19.88	20.10	19.73				
10	16QAM	25	0	19.88	19.93	19.88				
10	16QAM	25	12	19.86	20.09	19.88		21.5	0	
10	16QAM	25	25	19.85	19.99	19.69				
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		21.5	0	
10	64QAM	1	49	20.00	20.09	19.87				
10	64QAM	25	0	19.89	20.06	19.70				
10	64QAM	25	12	20.02	20.08	19.64		21.5	0	
10	64QAM	25	25	20.00	20.04	19.74				
10	64QAM	50	0	19.84	20.16	19.81				
10	256QAM	1	0	19.13	19.13	18.92		20.5	1	
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				
10	256QAM	25	12	18.91	19.04	18.74		20.5	1	
10	256QAM	25	25	18.98	18.99	18.77				
10	256QAM	50	0	19.04	19.16	18.84				
Channel				37775	38000	38225	Time-up (dBm)	MPR (dB)		
Frequency (MHz)				25975	2595	26250				
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	19.79		21.5	0	
5	16QAM	1	24	19.85	20.09	19.79				
5	16QAM	12	0	20.02	20.17	19.80				
5	16QAM	12	7	20.02	20.17	19.80		21.5	0	
5	16QAM	12	13	20.02	20.17	19.80				
5	16QAM	25	0	19.89	20.16	19.81				
5	64QAM	1	0	19.89	20.16	19.84				
5	64QAM	1	12	20.05	20.08	20.11		21.5	0	
5	64QAM	1	24	19.83	20.16	19.95				
5	64QAM	12	0	20.04	20.06	19.72				
5	64QAM	12	7	19.92	20.12	19.82		21.5	0	
5	64QAM	12	13	20.02	20.06	19.86				
5	64QAM	25	0	19.84	20.05	19.65				
5	256QAM	1	0	19.01	19.18	18.91		20.5	1	
5	256QAM	1	12	19.06	19.10	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	19.03	19.04	18.76				
5	256QAM	25	0	19.03	19.22	18.91				

Band 41 Ant4 DSI4 Other PA										
BW (MHz)	Modulat on	RB Size	RB Offset	Power Low Ch./Frec	Power Middle Ch./Frec	Power High Ch./Frec	Power High Ch./Frec	Time-up (dBm)	MPR (dB)	
Channel				39750	40185	40620	41055	41490		
Frequency (MHz)				25875	2585	26185	26620	26955		
20	QPSK	1	0	20.44	20.27	20.54	20.35	20.48		
20	QPSK	1	49	20.28	20.21	20.34	20.21	20.35	21.5	0
20	QPSK	1	99	20.31	20.09	20.39	20.18	20.31		
20	QPSK	50	0	20.39	20.16	20.52	20.37	20.44		
20	QPSK	50	24	20.17	20.03	20.41	20.07	20.16		
20	QPSK	50	50	19.92	19.91					



Band 7 Ant5 DS14 Main PA-1											
BW (MHz)	Module on	RB Size	RB Offset	Power Low Ch./Freq. 2550	Power Middle Ch./Freq. 2100	Power High Ch./Freq. 2350	Tune-up limit (dBm)	MPR (dB)			
Channel				2510	2535	2560					
Frequency (MHz)											
20	QPSK	1	0	18.67	18.85	18.75					
20	QPSK	1	49	18.61	18.79	18.71			20	0	
20	QPSK	1	99	18.70	18.78	18.73					
20	QPSK	50	0	18.68	18.73	18.84					
20	QPSK	50	24	18.70	18.66	18.68			20	0	
20	QPSK	50	50	18.51	18.59	18.65					
20	QPSK	100	0	18.50	18.57	18.50					
20	16QAM	1	0	18.64	18.67	18.55			20	0	
20	16QAM	1	49	18.63	18.84	18.60					
20	16QAM	1	99	18.55	18.63	18.66					
20	16QAM	50	0	18.70	18.73	18.69					
20	16QAM	50	24	18.66	18.66	18.60			20	0	
20	16QAM	50	50	18.57	18.63	18.68					
20	16QAM	100	0	18.73	18.70	18.63					
20	84QAM	1	0	18.62	18.61	18.63			20	0	
20	84QAM	1	49	18.58	18.61	18.63					
20	84QAM	1	99	18.56	18.84	18.61					
20	84QAM	50	0	17.68	17.65	17.68					
20	84QAM	50	24	17.58	17.67	17.66					
20	84QAM	50	50	17.58	17.64	17.60			19	1	
20	84QAM	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	15.59			17	3	
20	256QAM	1	99	15.59	15.64	15.64					
20	256QAM	50	0	15.58	15.62	15.63					
20	256QAM	50	24	15.65	15.68	15.71					
20	256QAM	50	50	15.58	15.56	15.50			17	3	
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	18.78	18.65					
15	QPSK	1	37	18.65	18.82	18.63			20	0	
15	QPSK	1	74	18.65	18.61	18.69					
15	QPSK	36	0	18.55	18.64	18.69					
15	QPSK	36	20	18.52	18.55	18.70			20	0	
15	QPSK	36	39	18.53	18.62	18.51					
15	QPSK	75	0	18.53	18.67	18.61					
15	16QAM	1	0	18.62	18.69	18.64					
15	16QAM	1	37	18.51	18.79	18.60			20	0	
15	16QAM	1	74	18.53	18.55	18.66					
15	16QAM	36	0	18.62	18.72	18.66					
15	16QAM	36	20	18.60	18.71	18.60			20	0	
15	16QAM	36	39	18.58	18.64	18.69					
15	16QAM	75	0	18.65	18.69	18.54					
15	84QAM	1	0	18.60	18.56	18.59					
15	84QAM	1	37	18.57	18.63	18.66			20	0	
15	84QAM	1	74	18.55	18.56	18.52					
15	84QAM	36	0	17.67	17.63	17.63					
15	84QAM	36	20	17.52	17.67	17.57			19	1	
15	84QAM	36	39	17.58	17.65	17.56					
15	84QAM	75	0	17.63	17.63	17.52					
15	256QAM	1	0	15.56	15.73	15.63					
15	256QAM	1	37	15.55	15.63	15.63			17	3	
15	256QAM	1	74	15.54	15.65	15.63					
15	256QAM	36	0	15.56	15.65	15.61					
15	256QAM	36	20	15.56	15.69	15.68			17	3	
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)				2925	2935	2965					
10	QPSK	1	0	18.62	18.68	18.76					
10	QPSK	1	25	18.77	18.63	18.74			20	0	
10	QPSK	1	49	18.72	18.75	18.84					
10	QPSK	25	0	18.64	18.65	18.57					
10	QPSK	25	12	18.54	18.61	18.58			20	0	
10	QPSK	25	25	18.58	18.60	18.69					
10	QPSK	50	0	18.71	18.63	18.51					
10	16QAM	1	0	18.72	18.80	18.74					
10	16QAM	1	25	18.51	18.70	18.51			20	0	
10	16QAM	1	49	18.64	18.54	18.58					
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	84QAM	1	0	18.62	18.67	18.63					
10	84QAM	1	25	18.57	18.55	18.55			20	0	
10	84QAM	1	49	18.54	18.69	18.69					
10	84QAM	25	0	17.69	17.62	17.57					
10	84QAM	25	12	17.54	17.59	17.64			19	1	
10	84QAM	25	25	17.61	17.67	17.57					
10	84QAM	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	3	
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	3	
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)				2922.5	2935	2967.5					
5	QPSK	1	0	18.64	18.73	18.70					
5	QPSK	1	12	18.62	18.73	18.77			20	0	
5	QPSK	1	24	18.68	18.60	18.66					
5	QPSK	12	0	18.58	18.62	18.55					
5	QPSK	12	7	18.65	18.51	18.52			20	0	
5	QPSK	25	0	18.60	18.75	18.60					
5	16QAM	1	0	18.69	18.53	18.76					
5	16QAM	1	12	18.61	18.59	18.61			20	0	
5	16QAM	1	24	18.70	18.65	18.68					
5	16QAM	12	0	18.64	18.69	18.71					
5	16QAM	12	7	18.67	18.61	18.58			20	0	
5	16QAM	12	13	18.51	18.65	18.69					
5	16QAM	25	0	18.68	18.62	18.55					
5	84QAM	1	0	18.60	18.62	18.56					
5	84QAM	1	12	18.61	18.61	18.56			20	0	
5	84QAM	1	24	18.56	18.59	18.56					
5	84QAM	12	0	17.61	17.67	17.67					
5	84QAM	12	7	17.56	17.68	17.62			19	1	
5	84QAM	12	13	17.61	17.58	17.58					
5	84QAM	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	15.60			17	3	
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	3	
5	256QAM	12	13	15.57	15.57	15.61					
5	256QAM	25	0	15.64	15.65	15.68					

Band 7 Ant5 DS14 Other PA										
BW (MHz)	Module on	RB Size	RB Offset	Power Low Ch./Freq. 2550	Power Middle Ch./Freq. 2100	Power High Ch./Freq. 2350	Tune-up limit (dBm)	MPR (dB)		
Channel				2510	2535	2560				
Frequency (MHz)										
20	QPSK	1	0	19.04	19.21	19.15				
20	QPSK	1	49	19.14	19.16	19.12			20.5	0
20	QPSK	1	99	19.07	19.08	19.15				
20	QPSK	50	0	18.90	19.12	19.02				
20	QPSK	50	24	18.96	18.88	18.91			20.5	0
20	QPSK	50	50	18.95	19.11	18.96				
20	QPSK	100	0	18.88	19.10	18.84				
20	16QAM	1	0	18.96	19.04	18.95				
20	16QAM	1	49	18.96	18.85	18.98			20.5	0
20	16QAM	1	99	19.05	18.89	19.02				
20	16QAM	50	0	18.98	19.03	19.09				
20	16QAM	50	24	18.90	18.95	18.97			20.5	0
20	16QAM	50	50	18.90	18.97	19.02				
20	16QAM	100	0	18.95	19.02	19.00				
20	84QAM	1	0	19.01	19.11	19.16				
20	84QAM	1	49	18.96	19.07	19.05			20.5	0
20	84QAM	1	99	18.92	19.04	19.08				
20	84QAM	50	0	17.89	17.96	17.91				
20	84QAM	50	24	17.83	17.98	18.02			19.5	1
20	84QAM	50	50	17.87	17.82	17.86				
20	84QAM	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	3
20	256QAM	1	99	16.02	16.13	16.12				
20	256QAM	50	0	15.96	16.10	16.16				
20	256QAM	50	24	15.99	16.12	16.17				
20	256QAM	50	50	15.96	16.06	16.06			17.5	3
20	256QAM	100	0	15.98						



### Band 38 Ant5 DS14 Other PA

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)
	Channel			37850	38000	38150		
	Frequency (MHz)			2580	2595	2610		
20	QPSK	1	0	19.69	19.77	19.85	21	0
20	QPSK	1	49	19.58	19.51	19.84		
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	19.88	19.61		
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		
20	16QAM	1	99	19.50	19.81	19.75		
20	16QAM	50	0	19.70	19.68	19.67		
20	16QAM	50	24	19.71	19.87	19.75		
20	16QAM	50	50	19.73	19.88	19.74		
20	16QAM	100	0	19.71	19.67	19.75		
20	84QAM	1	0	19.73	19.75	19.70		
20	84QAM	1	49	19.70	19.68	19.76		
20	84QAM	1	99	19.76	19.71	19.72		
20	84QAM	50	0	19.86	19.83	19.10		
20	84QAM	50	24	19.81	19.84	19.12		
20	84QAM	50	50	19.88	19.83	19.03		
20	84QAM	100	0	19.04	19.86	19.04		
20	256QAM	1	0	16.85	16.82	17.05		
20	256QAM	1	49	17.00	16.94	17.09		
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		
20	256QAM	50	50	16.94	16.92	17.05		
20	256QAM	100	0	16.98	16.96	17.02		
	Channel			37850	38000	38150	Turn-up limit (dBm)	MPR (dB)
	Frequency (MHz)			2577.5	2595	2612.5		
15	QPSK	1	0	19.59	19.57	19.54	21	0
15	QPSK	1	37	19.56	19.70	19.62		
15	QPSK	1	74	19.59	19.59	19.54		
15	QPSK	38	0	19.33	19.71	19.24		
15	QPSK	38	20	19.71	19.51	19.65		
15	QPSK	38	39	19.62	19.47	19.80		
15	QPSK	75	0	19.63	19.69	19.58		
15	16QAM	1	0	19.74	19.74	19.74		
15	16QAM	1	37	19.61	19.70	19.68		
15	16QAM	1	74	19.60	19.56	19.73		
15	16QAM	38	0	19.48	19.57	19.55		
15	16QAM	38	20	19.57	19.59	19.59		
15	16QAM	38	39	19.55	19.64	19.57		
15	16QAM	75	0	19.57	19.59	19.51		
15	84QAM	1	0	19.64	19.72	19.71		
15	84QAM	1	37	19.55	19.64	19.65		
15	84QAM	1	74	19.55	19.59	19.50		
15	84QAM	38	0	18.57	18.82	18.82		
15	84QAM	38	20	18.63	18.57	18.54		
15	84QAM	38	39	18.56	18.57	18.54		
15	84QAM	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		
15	256QAM	1	74	16.66	16.56	16.51		
15	256QAM	38	0	16.49	16.59	16.48		
15	256QAM	38	20	16.58	16.59	16.62		
15	256QAM	38	39	16.50	16.65	16.47		
15	256QAM	75	0	16.50	16.60	16.54		
	Channel			37800	38000	38000	Turn-up limit (dBm)	MPR (dB)
	Frequency (MHz)			2675	2695	2715		
10	QPSK	1	0	19.71	19.59	19.55	21	0
10	QPSK	1	25	19.70	19.68	19.65		
10	QPSK	1	49	19.45	19.40	19.67		
10	QPSK	25	0	19.42	19.59	19.61		
10	QPSK	25	12	19.68	19.56	19.61		
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		
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		
10	16QAM	25	25	19.61	19.59	19.58		
10	16QAM	50	0	19.57	19.58	19.42		
10	84QAM	1	0	19.70	19.70	19.63		
10	84QAM	1	25	19.60	19.61	19.59		
10	84QAM	1	49	19.61	19.65	19.57		
10	84QAM	25	0	18.52	18.60	18.54		
10	84QAM	25	12	18.53	18.61	18.54		
10	84QAM	25	25	18.55	18.56	18.51		
10	84QAM	50	0	18.66	18.63	18.56		
10	256QAM	1	0	16.48	16.60	16.54		
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		
10	256QAM	25	25	16.53	16.63	16.49		
10	256QAM	50	0	16.50	16.60	16.50		
	Channel			37775	38000	38025	Turn-up limit (dBm)	MPR (dB)
	Frequency (MHz)			2572.5	2595	2617.5		
5	QPSK	1	0	19.70	19.74	19.80	21	0
5	QPSK	1	12	19.62	19.60	19.63		
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		
5	QPSK	12	13	19.60	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	19.76		
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		
5	16QAM	12	13	19.55	19.60	19.58		
5	16QAM	25	0	19.49	19.54	19.47		
5	84QAM	1	0	19.67	19.66	19.61		
5	84QAM	1	12	19.62	19.54	19.56		
5	84QAM	1	24	19.56	19.61	19.53		
5	84QAM	12	0	18.47	18.62	18.54		
5	84QAM	12	7	18.60	18.63	18.54		
5	84QAM	12	13	18.58	18.66	18.50		
5	84QAM	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		
5	256QAM	1	24	16.58	16.57	16.49		
5	256QAM	12	0	16.57	16.60	16.52		
5	256QAM	12	7	16.62	16.62	16.57		
5	256QAM	12	13	16.49	16.57	16.52		
5	256QAM	25	0	16.61	16.55	16.58		

### Band 41 Ant5 DS14 Other PA

BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MPR (dB)
	Channel			39750	40165	40620	41085	41460					
	Frequency (MHz)			2508	2549.5	2593	2636.5	2680					
20	QPSK	1	0	19.66	19.77	19.76	19.76	19.75	19.63			21	0
20	QPSK	1	49	19.72	19.64	19.68	19.70	19.72	19.68				
20	QPSK	1	99	19.65	19.70	19.76	19.65	19.65	19.65				
20	QPSK	50	0	19.45	19.53	19.77	19.69	19.68					
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					
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	1	99	19.47	19.58	19.57	19.56	19.59					
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	16QAM	100	0	19.16	19.24	19.31	19.35	19.34					
20	84QAM	1	0	19.24	19.26	19.26	19.38	19.42					
20	84QAM	1	49	19.24	19.22	19.36	19.39	19.31					
20	84QAM	1	99	19.25	19.16	19.30	19.32	19.18					
20	84QAM	50	0	18.15	18.16	18.41	18.31	18.38					
20	84QAM	50	24	18.16	18.15	18.26	18.26	18.43					
20	84QAM	50	50	18.31	18.20	18.28	18.38	18.24					
20	84QAM	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					
20	256QAM	1	99	16.27	16.12	16.27	16.31	16.23					
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					
20	256QAM	100	0</										



Reduced Power NSA Mode for DSIS

Band 2 Ant3 DSIS Other PA for END C													
RF MHz	Modulation	RB Size	RB Offset	Power Low Ch1 Freq 18950	Power Meds Ch1 Freq 18900	Power High Ch1 Freq 19050	Tune-Up (MHz)	MFR (dB)					
20	QPSK	1	0	19.27	19.41	19.55	20	0					
20	QPSK	1	49	19.35	19.41	19.55	20	0					
20	QPSK	1	99	19.08	19.24	19.22							
20	QPSK	50	0	19.04	19.23	19.16							
20	QPSK	50	24	19.97	19.07	19.91	20	0					
20	QPSK	50	50	18.91	19.09	19.91							
20	QPSK	100	0	18.85	19.01	18.87							
20	16QAM	1	0	18.52	18.95	19.70	20	0					
20	16QAM	1	49	18.58	18.91	18.61	20	0					
20	16QAM	1	99	18.43	18.90	18.74							
20	16QAM	50	0	18.88	19.10	19.86							
20	16QAM	50	24	18.90	19.00	18.99	20	0					
20	16QAM	50	50	18.88	19.06	18.92							
20	16QAM	100	0	18.73	18.96	18.92							
20	16QAM	1	0	19.04	19.21	19.26	20	0					
20	16QAM	1	49	18.70	19.14	19.12							
20	16QAM	1	99	19.02	19.27	19.11	20	0					
20	16QAM	50	0	18.71	19.15	19.03							
20	16QAM	50	24	19.00	19.03	18.87	20	0					
20	16QAM	50	50	18.72	19.12	18.94							
20	16QAM	100	0	18.70	18.93	18.97							
20	256QAM	1	0	18.46	18.65	18.64	19.5	0.5					
20	256QAM	1	49	18.42	18.62	18.58							
20	256QAM	1	99	18.44	18.62	18.62							
20	256QAM	50	0	18.90	18.71	18.64	19.5	0.5					
20	256QAM	50	24	18.40	18.72	18.71							
20	256QAM	50	50	18.41	18.67	18.66							
20	256QAM	100	0	18.42	18.69	18.64							
	Channel			18975	18900	19150	Tune-Up (MHz)	MFR (dB)					
	Frequency (MHz)			18975	18900	19150							
16	QPSK	1	0	19.33	19.43	19.33	20	0					
16	QPSK	1	37	19.20	19.33	19.24							
16	QPSK	1	74	19.09	19.19	19.16							
16	QPSK	36	0	18.97	19.14	19.12	20	0					
16	QPSK	36	20	18.91	19.07	18.87							
16	QPSK	36	39	18.89	19.02	18.99							
16	QPSK	75	0	18.81	19.01	18.85							
16	16QAM	1	0	18.63	18.87	18.71	20	0					
16	16QAM	1	37	18.54	18.86	18.59							
16	16QAM	1	74	18.46	19.22	18.67							
16	16QAM	36	0	18.61	19.11	19.01	20	0					
16	16QAM	36	20	18.62	18.93	18.90							
16	16QAM	36	39	18.97	19.08	18.82							
16	16QAM	75	0	18.71	18.89	18.91							
16	16QAM	1	0	18.96	19.13	19.26	20	0					
16	16QAM	1	37	18.73	19.08	19.15							
16	16QAM	1	74	18.95	19.25	19.06							
16	16QAM	36	0	18.61	19.09	19.01	20	0					
16	16QAM	36	20	19.01	18.97	18.96							
16	16QAM	36	39	18.72	19.11	18.96							
16	16QAM	75	0	18.63	18.91	18.99							
16	256QAM	1	0	18.41	18.65	18.59	19.5	0.5					
16	256QAM	1	37	18.43	18.58	18.61							
16	256QAM	1	74	18.41	18.64	18.54							
16	256QAM	36	0	18.43	18.72	18.55	19.5	0.5					
16	256QAM	36	20	18.51	18.70	18.62							
16	256QAM	36	39	18.20	18.56	18.59							
16	256QAM	75	0	18.43	18.62	18.66							
	Channel			18950	18900	19150	Tune-Up (MHz)	MFR (dB)					
	Frequency (MHz)			18950	18900	19150							
10	QPSK	1	0	19.33	19.40	19.20	20	0					
10	QPSK	1	25	19.28	19.32	19.27							
10	QPSK	1	49	19.08	19.22	19.22							
10	QPSK	25	0	19.00	19.19	19.15	20	0					
10	QPSK	25	12	18.90	19.07	18.91							
10	QPSK	25	25	18.85	19.00	19.03							
10	QPSK	50	0	18.86	18.96	18.94							
10	16QAM	1	0	18.54	18.90	18.69	20	0					
10	16QAM	1	25	18.52	18.91	18.54							
10	16QAM	1	49	18.40	18.73	18.68							
10	16QAM	25	0	18.78	19.09	19.03	20	0					
10	16QAM	25	12	18.82	18.92	18.90							
10	16QAM	25	25	18.82	19.08	18.78							
10	16QAM	50	0	18.67	18.97	18.89							
10	16QAM	1	0	19.02	19.20	19.25	20	0					
10	16QAM	1	25	18.78	19.08	19.12							
10	16QAM	1	49	19.01	19.18	19.06							
10	16QAM	25	0	18.70	19.09	19.06	20	0					
10	16QAM	25	12	18.99	19.03	18.67							
10	16QAM	25	25	18.76	19.12	18.88							
10	16QAM	50	0	18.60	18.84	18.95							
10	256QAM	1	0	18.45	18.58	18.57	19.5	0.5					
10	256QAM	1	25	18.38	18.56	18.59							
10	256QAM	1	49	18.32	18.55	18.55							
10	256QAM	25	0	18.40	18.71	18.61	19.5	0.5					
10	256QAM	25	12	18.47	18.64	18.67							
10	256QAM	25	25	18.25	18.68	18.63							
10	256QAM	50	0	18.50	18.67	18.61							
	Channel			18925	18900	19175	Tune-Up (MHz)	MFR (dB)					
	Frequency (MHz)			18925	18900	19175							
5	QPSK	1	0	19.32	19.43	19.28	20	0					
5	QPSK	1	12	19.20	19.40	19.22							
5	QPSK	1	24	19.06	19.18	19.21							
5	QPSK	12	0	19.00	19.24	19.24	20	0					
5	QPSK	12	7	18.92	19.00	18.92							
5	QPSK	12	13	18.80	19.05	19.01							
5	QPSK	25	0	18.82	19.01	18.91							
5	16QAM	1	0	18.67	18.87	18.62	20	0					
5	16QAM	1	12	18.50	18.96	18.58							
5	16QAM	1	24	18.44	18.78	18.67							
5	16QAM	12	0	18.67	19.03	19.02	20	0					
5	16QAM	12	7	18.88	18.93	18.91							
5	16QAM	12	13	18.83	19.02	18.78							
5	16QAM	25	0	18.69	18.96	18.88							
5	16QAM	1	0	19.00	19.22	19.26	20	0					
5	16QAM	1	12	18.70	19.06	19.09							
5	16QAM	1	24	18.98	19.19	19.05							
5	16QAM	12	0	18.74	19.15	19.03	20	0					
5	16QAM	12	7	19.00	19.35	18.83							
5	16QAM	12	13	18.70	19.13	18.89							
5	16QAM	25	0	18.71	18.91	18.94							
5	256QAM	1	0	18.41	18.58	18.61	19.5	0.5					
5	256QAM	1	12	18.39	18.63	18.60							
5	256QAM	1	24	18.40	18.62	18.54							
5	256QAM	12	0	18.52	18.82	18.65	19.5	0.5					
5	256QAM	12	7	18.49	18.65	18.70							
5	256QAM	12	13	18.33	18.59	18.64							
5	256QAM	25	0	18.41	18.70	18.58							
	Channel			18915	18900	19185	Tune-Up (MHz)	MFR (dB)					
	Frequency (MHz)			18915	18900	19185							
3	QPSK	1	0	19.35	19.41	19.25	20	0					
3	QPSK	1	8	19.27	19.43	19.29							
3	QPSK	1	14	19.00	19.25	19.14							
3	QPSK	3	0	19.00	19.23	19.12	20	0					
3	QPSK	3	4	18.85	19.03	18.84							
3	QPSK	3	7	18.86	19.10	19.06							
3	QPSK	15	0	18.70	19.03	18.80							
3	16QAM	1	0	18.63	18.89	18.71	20	0					
3	16QAM	1	8	18.60	18.88	18.53							
3	16QAM	1	14	18.42	18.75	18.71							
3	16QAM	3	0	18.76	19.04	19.08	20	0					
3	16QAM	3	4	18.67	19.01	18.95							
3	16QAM	3	7	18.88	19.01	18.82							
3	16QAM	15	0	18.69	18.91	18.92							
3	16QAM	1	0	18.67	19.17	19.26	20	0					
3	16QAM	1	8	18.70	19.10	19.13							
3	16QAM	1	14	18.94	19.26	19.03							
3	16QAM	3	0	18.60	19.16	19.03	20	0					
3	16QAM	3	4	18.96	18.96	18.80							
3	16QAM	3	7	18.72	19.05	18.89							
3	16QAM	15	0	18.71	18.93	18.95							
3	256QAM	1	0	18.40	18.58	18.62	19.5	0.5					
3	256QAM	1	8	18.37	18.54	18.59							
3	256QAM	1	14	18.44	18.53	18.54							
3	256QAM	3	0	18.48	18.74	18.61	19.5	0.5					
3	256QAM	3	4	18.45	18.60	18.66							
3	256QAM	3	7	18.35	18.61	18.68							
3	256QAM	15	0	18.38	18.61	18.56							
	Channel			18907	18900	19191	Tune-Up (MHz)	MFR (dB)					
	Frequency (MHz)			18907	18900	19191							
14	QPSK	1	0	19.40	19.35	19.37	20	0					
14	QPSK	1	3	19.28	19.44	19.32							
14	QPSK	1	5	19.02	19.18	19.14							
14	QPSK	3	0	19.00	19.19	19.13	20	0					
14	QPSK	3	1	18.83	19.04	18.85							
14	QPSK	3	3	18.67	19.10	19.00							
14	QPSK	6	0	18.84	19.00	18.84	20	0					
14	16QAM	1	0	18.63	18.88	18.69	20	0					
14	16QAM	1	3	18.58	18.92	18.59							
14	16QAM	1	5	18.47	18.79	18.71							
14	16QAM	3	0	18.85	19.06	19.01	20	0					
14	16QAM	3	1	18.80	18.97	18.90							
14	16QAM	3	3	18.60	19.05	18.78							
14	16QAM	6	0	18.70	18.88	18.86	20	0					
14	16QAM	1	0	19.00	19.19	19.25							
14	16QAM	1	3	18.71	19.09	19.12							
14	16QAM	1	5	18.97	19.25	19.07	20	0					
14	16QAM	3	0	18.64	19.13	19.05							
14	16QAM	3	1	19.00	19.06	18.83							



Band 2 Ant2 DS15 Other PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mod, Power High, Turn-up (dBm), and MPE (dB). It lists various frequency channels and their corresponding power levels and modulation parameters.

Reduced Power NSA Mode for DS15

Band 7 DS15 Main PA-1

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mod, Power High, Turn-up (dBm), and MPE (dB). It lists various frequency channels and their corresponding power levels and modulation parameters.

Band 7 Ant2 DS15 Other PA

Table with columns: BW (MHz), Modulation, RB Size, RB Offset, Power Low, Power High, Power Mod, Power High, Turn-up (dBm), and MPE (dB). It lists various frequency channels and their corresponding power levels and modulation parameters.





Band 38 Ant2 DSIS Other PA												
BW (MHz)	Modulat on	RB Size	RB Offset	Power Low Ch. / Freq	Power Midle Ch. / Freq	Power High Ch. / Freq	Turn-up (dBm)	MPR (dB)				
Channel								37850	38000	38150	Time-up (dBm)	MPR (dB)
Frequency (MHz)								2977.5	2995	3012.5	Time-up (dBm)	MPR (dB)
20	QPSK	1	0	15.27	15.29	15.28	16	0				
20	QPSK	1	49	15.09	15.17	15.25	16	0				
20	QPSK	1	99	15.07	15.18	15.24	16	0				
20	QPSK	50	0	15.16	15.25	15.30	16	0				
20	QPSK	50	24	15.09	15.23	15.21	16	0				
20	QPSK	50	50	15.17	15.20	15.19	16	0				
20	QPSK	100	0	15.01	15.14	15.09	16	0				
20	16QAM	1	0	15.23	15.23	15.21	16	0				
20	16QAM	50	0	15.15	15.18	15.25	16	0				
20	16QAM	1	49	15.22	15.22	15.23	16	0				
20	16QAM	1	99	15.21	15.18	15.24	16	0				
20	16QAM	50	0	15.12	15.20	15.22	16	0				
20	16QAM	50	24	15.07	15.11	15.11	16	0				
20	16QAM	50	50	15.15	15.16	15.25	16	0				
20	16QAM	100	0	15.18	15.19	15.16	16	0				
20	64QAM	1	0	15.12	15.19	15.16	16	0				
20	64QAM	1	49	15.17	15.22	15.14	16	0				
20	64QAM	1	99	15.09	15.11	15.10	16	0				
20	64QAM	50	0	15.07	15.15	15.20	16	0				
20	64QAM	50	24	15.13	15.22	15.20	16	0				
20	64QAM	50	50	15.07	15.20	15.14	16	0				
20	64QAM	100	0	15.16	15.16	15.13	16	0				
20	256QAM	1	0	15.03	15.20	15.21	16	0				
20	256QAM	1	49	15.07	15.21	15.18	16	0				
20	256QAM	1	99	15.08	15.19	15.18	16	0				
20	256QAM	50	0	15.22	15.28	15.23	16	0				
20	256QAM	50	24	15.19	15.22	15.24	16	0				
20	256QAM	50	50	15.07	15.11	15.24	16	0				
20	256QAM	100	0	15.10	15.28	15.28	16	0				
Channel								37825	38000	38175	Time-up (dBm)	MPR (dB)
Frequency (MHz)								2977.5	2995	3012.5	Time-up (dBm)	MPR (dB)
15	QPSK	1	0	15.18	15.27	15.28	16	0				
15	QPSK	1	37	15.03	15.10	15.23	16	0				
15	QPSK	1	74	15.19	15.20	15.22	16	0				
15	QPSK	36	0	15.10	15.25	15.21	16	0				
15	QPSK	36	20	15.11	15.23	15.20	16	0				
15	QPSK	36	39	15.16	15.22	15.22	16	0				
15	QPSK	75	0	15.02	15.14	15.02	16	0				
15	16QAM	1	0	15.16	15.24	15.13	16	0				
15	16QAM	1	37	15.15	15.15	15.19	16	0				
15	16QAM	1	74	15.13	15.10	15.23	16	0				
15	16QAM	36	0	15.08	15.19	15.24	16	0				
15	16QAM	36	20	15.05	15.07	15.04	16	0				
15	16QAM	36	39	15.15	15.20	15.18	16	0				
15	16QAM	75	0	15.16	15.21	15.08	16	0				
15	64QAM	1	0	15.16	15.16	15.11	16	0				
15	64QAM	1	37	15.10	15.22	15.07	16	0				
15	64QAM	1	74	15.08	15.04	15.08	16	0				
15	64QAM	36	0	15.10	15.27	15.15	16	0				
15	64QAM	36	20	15.10	15.19	15.22	16	0				
15	64QAM	36	39	15.09	15.20	15.12	16	0				
15	64QAM	75	0	15.12	15.14	15.06	16	0				
15	256QAM	1	0	15.15	15.13	15.22	16	0				
15	256QAM	1	37	15.09	15.15	15.13	16	0				
15	256QAM	1	74	15.01	15.20	15.10	16	0				
15	256QAM	36	0	15.15	15.24	15.24	16	0				
15	256QAM	36	20	15.13	15.20	15.23	16	0				
15	256QAM	36	39	15.05	15.14	15.26	16	0				
15	256QAM	75	0	15.03	15.28	15.20	16	0				
Channel								37775	38000	38225	Time-up (dBm)	MPR (dB)
Frequency (MHz)								2977.5	2995	3012.5	Time-up (dBm)	MPR (dB)
10	QPSK	1	0	15.28	15.21	15.28	16	0				
10	QPSK	1	25	15.07	15.20	15.26	16	0				
10	QPSK	1	49	15.03	15.21	15.23	16	0				
10	QPSK	25	0	15.19	15.28	15.12	16	0				
10	QPSK	25	12	15.06	15.19	15.21	16	0				
10	QPSK	25	25	15.17	15.12	15.13	16	0				
10	QPSK	50	0	15.07	15.10	15.04	16	0				
10	16QAM	1	0	15.21	15.18	15.17	16	0				
10	16QAM	1	25	15.14	15.15	15.19	16	0				
10	16QAM	1	49	15.16	15.15	15.21	16	0				
10	16QAM	25	0	15.13	15.16	15.17	16	0				
10	16QAM	25	12	15.08	15.13	15.11	16	0				
10	16QAM	25	25	15.07	15.16	15.21	16	0				
10	16QAM	50	0	15.11	15.21	15.11	16	0				
10	64QAM	1	0	15.09	15.16	15.09	16	0				
10	64QAM	1	25	15.15	15.17	15.08	16	0				
10	64QAM	1	49	15.00	15.14	15.02	16	0				
10	64QAM	25	0	15.01	15.23	15.23	16	0				
10	64QAM	25	12	15.07	15.22	15.21	16	0				
10	64QAM	25	25	15.01	15.14	15.06	16	0				
10	64QAM	50	0	15.15	15.09	15.14	16	0				
10	256QAM	1	0	15.06	15.19	15.18	16	0				
10	256QAM	1	25	15.03	15.15	15.09	16	0				
10	256QAM	1	49	15.08	15.13	15.16	16	0				
10	256QAM	25	0	15.18	15.20	15.18	16	0				
10	256QAM	25	12	15.16	15.22	15.19	16	0				
10	256QAM	25	25	15.02	15.13	15.19	16	0				
10	256QAM	50	0	15.03	15.25	15.28	16	0				
Channel								37775	38000	38225	Time-up (dBm)	MPR (dB)
Frequency (MHz)								2977.5	2995	3012.5	Time-up (dBm)	MPR (dB)
5	QPSK	1	0	15.25	15.25	15.28	16	0				
5	QPSK	1	12	15.11	15.11	15.18	16	0				
5	QPSK	1	24	15.06	15.09	15.22	16	0				
5	QPSK	12	0	15.12	15.26	15.14	16	0				
5	QPSK	12	7	15.07	15.19	15.14	16	0				
5	QPSK	12	13	15.13	15.22	15.17	16	0				
5	QPSK	25	0	15.03	15.08	15.07	16	0				
5	16QAM	1	0	15.14	15.15	15.19	16	0				
5	16QAM	1	12	15.15	15.18	15.23	16	0				
5	16QAM	1	24	15.17	15.17	15.25	16	0				
5	16QAM	12	0	15.05	15.13	15.13	16	0				
5	16QAM	12	7	15.00	15.12	15.08	16	0				
5	16QAM	12	13	15.13	15.16	15.28	16	0				
5	16QAM	25	0	15.15	15.11	15.08	16	0				
5	64QAM	1	0	15.05	15.15	15.08	16	0				
5	64QAM	1	12	15.13	15.23	15.06	16	0				
5	64QAM	1	24	15.10	15.10	15.03	16	0				
5	64QAM	12	0	15.09	15.19	15.14	16	0				
5	64QAM	12	7	15.13	15.22	15.20	16	0				
5	64QAM	12	13	15.09	15.17	15.14	16	0				
5	64QAM	25	0	15.18	15.18	15.11	16	0				
5	256QAM	1	0	15.03	15.23	15.18	16	0				
5	256QAM	1	12	15.10	15.16	15.15	16	0				
5	256QAM	1	24	15.06	15.11	15.17	16	0				
5	256QAM	12	0	15.21	15.21	15.24	16	0				
5	256QAM	12	7	15.11	15.24	15.24	16	0				
5	256QAM	12	13	15.04	15.03	15.18	16	0				
5	256QAM	25	0	15.09	15.19	15.24	16	0				

Band 41 Ant2 DSIS Other PA														
BW (MHz)	Modulat on	RB Size	RB Offset	Power Low Ch. / Freq	Power Midle Ch. / Freq	Power High Ch. / Freq	Turn-up (dBm)	MPR (dB)						
Channel								39750	40185	40620	41065	41460	Time-up (dBm)	MPR (dB)
Frequency (MHz)								2997.5	3041.5	3085.0	3128.5	3173.0	Time-up (dBm)	MPR (dB)
20	QPSK	1	0	15.48	15.18	15.49	15.23	15.41	16	0				
20	QPSK	1	49	15.44	15.16	15.40	15.15	15.41	16	0				
20	QPSK	1	99	15.43	15.13	15.40	15.17	15.40	16	0				
20	QPSK	50	0	15.42	15.40	15.36	15.26	15.38	16	0				
20	QPSK	50	24	15.44	15.29	15.46	15.13	15.40	16	0				
20	QPSK	50	50	15.46	15.11	15.39	15.17	15.41	16	0				
20	QPSK	100	0	15.39	15.25	15.47	15.20	15.48	16	0				
20	16QAM	1	0	15.39	15.20	15.46	15.13	15.40	16	0				
20	16QAM	50	0	15.38	15.10	15.36	15.26	15.38	16	0				
20	16QAM	1	49	15.35	15.23	15.30	15.13	15.44	16	0				
20	16QAM	1	99	15.48	15.18	15.43	15.17	15.39	16	0				
20	16QAM	50	0	15.36	15.21	15.48	15.35	15.39	16	0				
20	16QAM	50	24	15.37	15.38	15.47	15.12	15.39	16	0				
20	16QAM	50	50	15.40	15.10	15.36	15.26	15.38	16	0				
20	16QAM	100	0	15.38	15.28	15.44	15.24	15.45	16	0				
20	64QAM	1	0	15.31	15.31	15.42	15.13	15.32	16	0				
20	64QAM	1	49	15.36	15.23	15.29	15.09	15.43	16	0				
20	64QAM	1	99	15.35	15.17	15.37	15.18	15.40	16	0				
20	64QAM	50	0	15.30	15.31	15.46	15.22	15.39	16	0				
20	64QAM	50	24	15.32</										



Band 2 Ant3 DS15 Other PA												
BW (MHz)	Modulat	RB Size	RB Offset	Power Low Ch./Freq	Power Mean Ch./Freq	Power High Ch./Freq	Turnup time (min)	APRS (dB)				
Channel 1860 1868 1800												
20	QPSK	1	0	20.24	20.45	20.27						
20	QPSK	1	8	20.20	20.42	20.24	21	0				
20	QPSK	1	9	20.19	20.28	20.34						
20	QPSK	50	0	19.98	20.35	20.26						
20	QPSK	50	24	20.02	20.21	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	HQAM	1	0	19.87	19.97	19.88						
20	HQAM	1	49	19.73	19.87	19.76						
20	HQAM	1	99	19.59	19.80	19.90						
20	HQAM	50	0	19.92	20.21	20.14						
20	HQAM	50	24	20.02	20.11	20.06						
20	HQAM	50	50	19.99	20.20	20.07	21	0				
20	HQAM	100	0	19.77	19.96	19.97						
20	HQAM	1	0	20.15	20.34	20.36						
20	HQAM	1	49	19.93	20.20	20.21	21	0				
20	HQAM	1	99	19.85	20.24	20.14						
20	HQAM	50	0	19.85	19.86	19.86						
20	HQAM	50	24	20.08	20.13	20.07	21	0				
20	HQAM	50	50	19.93	20.17	20.07						
20	HQAM	100	0	19.77	19.88	20.09						
20	HQAM	1	0	19.46	18.65	18.64						
20	HQAM	1	49	18.42	18.62	18.58	19.5	1.5				
20	HQAM	1	99	18.44	18.62	18.62						
20	SSQAM	1	0	18.46	18.65	18.64						
20	SSQAM	1	49	18.42	18.62	18.62						
20	SSQAM	1	99	18.44	18.72	18.71	19.5	1.5				
20	SSQAM	50	50	18.41	18.67	18.66						
20	SSQAM	100	0	18.45	18.67	18.64						
Channel 1865 1869 1910 1915												
Frequency (MHz) 1822.5 1880 1922.5												
15	QPSK	1	0	20.34	20.37	20.32						
15	QPSK	1	37	20.36	20.24	20.32	21	0				
15	QPSK	1	74	20.12	20.36	20.40						
15	QPSK	36	0	19.98	20.26	20.30						
15	QPSK	36	36	20.13	20.19	20.19	21	0				
15	QPSK	36	36	19.85	20.29	20.28						
15	HQAM	1	0	19.85	20.26	20.20						
15	HQAM	1	37	19.87	20.08	19.85	20.8	1				
15	HQAM	1	74	19.46	18.65	18.64						
15	HQAM	36	0	19.99	20.13	20.20						
15	HQAM	36	20	20.00	19.87	19.90	21	0				
15	HQAM	36	36	19.96	20.01	20.20						
15	HQAM	75	0	19.86	20.11	20.07						
15	HQAM	1	0	20.09	20.29	20.40						
15	HQAM	1	37	19.96	20.33	20.36	21	0				
15	HQAM	1	74	20.17	20.37	20.17						
15	HQAM	36	0	19.88	20.08	20.14						
15	HQAM	36	36	19.88	20.33	20.22	21	0				
15	HQAM	36	36	19.91	20.25	20.22						
15	SSQAM	1	0	19.89	19.86	19.86						
15	SSQAM	1	37	19.41	18.64	18.62						
15	SSQAM	1	74	18.41	18.64	18.53	19.5	1.5				
15	SSQAM	36	0	19.85	20.02	19.86						
15	SSQAM	36	20	19.51	18.70	18.55	19.5	1.5				
15	SSQAM	36	36	19.39	18.65	18.59						
15	SSQAM	75	0	18.43	18.62	18.66						
Channel 1865 1869 1910 1915												
Frequency (MHz) 1855 1880 1905												
10	QPSK	1	0	20.16	20.34	20.28						
10	QPSK	1	25	20.18	20.42	20.28	21	0				
10	QPSK	1	49	20.12	20.24	20.28						
10	QPSK	25	0	19.92	20.25	20.29						
10	QPSK	25	12	19.93	20.14	20.18	21	0				
10	QPSK	25	25	19.93	20.28	20.11						
10	HQAM	1	0	19.83	19.91	19.94						
10	HQAM	1	25	19.79	19.86	19.91	21	0				
10	HQAM	1	49	19.46	18.65	18.66						
10	HQAM	25	0	20.00	20.01	20.19						
10	HQAM	25	12	19.98	20.03	20.06						
10	HQAM	25	25	19.98	20.02	20.04						
10	HQAM	50	0	20.21	20.23	20.37						
10	HQAM	1	0	19.18	20.33	20.34	21	0				
10	HQAM	1	49	20.19	20.34	20.16						
10	HQAM	25	0	19.88	20.05	20.00						
10	HQAM	25	12	19.84	20.20	20.11	21	0				
10	HQAM	25	25	20.04	20.08	20.17						
10	HQAM	50	0	19.84	20.10	20.09						
10	SSQAM	1	0	19.48	18.65	18.57						
10	SSQAM	1	25	18.38	18.58	18.59	19.5	1.5				
10	SSQAM	1	49	18.35	18.58	18.55						
10	SSQAM	25	0	19.49	18.71	18.51						
10	SSQAM	25	12	18.47	18.64	18.67	19.5	1.5				
10	SSQAM	25	25	18.35	18.65	18.63						
10	SSQAM	50	0	18.39	18.67	18.61						
Channel 1865 1869 1910 1915												
Frequency (MHz) 1922.5 1980 2022.5												
5	QPSK	1	0	20.22	20.43	20.43						
5	QPSK	1	12	20.23	20.41	20.35	21	0				
5	QPSK	1	24	20.08	20.23	20.28						
5	QPSK	12	0	19.93	20.24	20.19						
5	QPSK	12	7	20.00	20.23	20.02	21	0				
5	QPSK	12	13	19.98	20.25	20.16						
5	QPSK	25	0	19.88	20.24	20.18						
5	HQAM	1	0	19.87	19.88	20.02						
5	HQAM	1	12	19.88	20.00	19.88						
5	HQAM	1	24	19.88	19.84	19.81						
5	HQAM	12	0	19.79	20.14	20.24						
5	HQAM	12	7	19.83	20.07	19.99	21	0				
5	HQAM	12	13	19.81	20.20	20.20						
5	HQAM	25	0	19.89	20.08	20.01						
5	HQAM	1	0	20.18	20.33	20.22	21	0				
5	HQAM	1	12	20.09	20.15	20.31						
5	HQAM	1	24	20.05	20.10	20.08						
5	HQAM	12	0	19.80	20.17	20.08						
5	HQAM	12	7	19.89	20.02	20.08	21	0				
5	HQAM	12	13	19.92	20.20	20.12						
5	SSQAM	1	0	19.91	20.02	19.91						
5	SSQAM	1	12	19.94	19.84	19.81						
5	SSQAM	1	24	19.39	18.63	18.60	19.5	1.5				
5	SSQAM	12	0	18.40	18.62	18.54						
5	SSQAM	12	7	18.52	18.62	18.65						
5	SSQAM	12	13	18.48	18.65	18.70	19.5	1.5				
5	SSQAM	25	0	18.41	18.70	18.58						
Channel 18615 18690 19185												
Frequency (MHz) 2022.5 2032 2038												
1.4	QPSK	1	0	20.23	20.32	20.39						
1.4	QPSK	1	3	20.35	20.37	20.46						
1.4	QPSK	1	6	20.02	20.35	20.29	21	0				
1.4	QPSK	3	0	20.10	20.21	20.19						
1.4	QPSK	3	1	19.91	20.16	20.22						
1.4	QPSK	3	3	20.02	20.16	20.15	21	0				
1.4	HQAM	1	0	19.81	19.84	19.74						
1.4	HQAM	1	3	19.75	19.85	19.86						
1.4	HQAM	3	0	19.88	20.11	20.21	21	0				
1.4	HQAM	3	1	19.79	20.04	20.04						
1.4	HQAM	3	1	19.75	20.12	20.00						
1.4	HQAM	6	0	19.90	20.11	19.93	21	0				
1.4	SSQAM	1	0	18.93	20.06	20.06						
1.4	SSQAM	3	1	19.99	20.17	20.03	21	0				
1.4	SSQAM	3	3	19.91	20.20	20.20						
1.4	SSQAM	6	0	19.78	20.15	19.84	21	0				
1.4	SSQAM	1	0	18.40	18.60	18.56						
1.4	SSQAM	1	3	18.43	18.63	18.63	19.5	1.5				
1.4	SSQAM	1	6	18.41	18.64	18.54						
1.4	SSQAM	3	0	18.43	18.62	18.66						
1.4	SSQAM	3	1	18.40	18.75	18.69						
1.4	SSQAM	3	3	18.33	18.63	18.62						



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	Turn-up limit (dBm)	MFR (dB)					
Channel			37850	38000	38150								
Frequency (MHz)													
20 QPSK 1 0 19.75 19.85 19.95													
20 QPSK 1 49 19.87 19.97 20.07													
20 QPSK 1 99 19.44 19.53 19.29													
20 QPSK 50 0 19.70 19.83 19.96													
20 QPSK 50 24 19.82 19.77 19.68													
20 QPSK 50 50 19.70 19.78 19.67													
20 QPSK 100 0 19.76 19.88 19.84													
20 16QAM 1 0 19.58 19.66 19.64													
20 16QAM 1 49 19.64 19.79 19.80													
20 16QAM 50 24 19.86 19.75 19.57													
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 16QAM 100 0 19.72 19.95 19.71													
20 16QAM 1 0 19.79 19.97 19.84													
20 16QAM 1 49 19.77 19.81 19.80													
20 16QAM 1 99 19.84 19.83 19.82													
20 16QAM 50 0 19.82 19.79 19.75													
20 16QAM 50 24 19.88 19.75 19.57													
20 16QAM 50 50 19.58 19.83 19.76													
20 16QAM 100 0 19.81 19.83 19.73													
20 25GQAM 1 0 19.24 19.39 19.33													
20 25GQAM 1 49 19.25 19.38 19.23													
20 25GQAM 50 24 19.31 19.39 19.25													
20 25GQAM 50 0 19.28 19.42 19.27													
20 25GQAM 50 24 19.24 19.38 19.24													
20 25GQAM 50 50 19.34 19.41 19.35													
20 25GQAM 100 0 19.40 19.48 19.31													
Channel			37850	38000	38150	Turn-up limit (dBm)	MFR (dB)						
Frequency (MHz)													
15 QPSK 1 0 19.69 19.86 19.88													
15 QPSK 1 37 19.53 19.91 19.85													
15 QPSK 1 74 19.48 19.38 19.48													
15 QPSK 38 0 19.83 19.93 19.72													
15 QPSK 38 20 19.62 19.82 19.76													
15 QPSK 38 39 19.57 19.73 19.57													
15 16QAM 75 0 19.62 19.85 19.85													
15 16QAM 1 0 19.54 19.83 19.86													
15 16QAM 1 37 19.45 19.75 19.50													
15 16QAM 1 74 19.61 19.59 19.58													
15 16QAM 38 0 19.83 19.72 19.64													
15 16QAM 38 20 19.80 19.85 19.85													
15 16QAM 38 39 19.72 19.90 19.59													
15 16QAM 75 0 19.80 19.82 19.74													
15 16QAM 1 0 19.69 19.89 19.83													
15 16QAM 1 37 19.81 19.88 19.71													
15 16QAM 74 19.80 19.87 19.74													
15 16QAM 38 0 19.64 19.78 19.65													
15 16QAM 38 20 19.70 19.65 19.56													
15 16QAM 38 39 19.72 19.82 19.74													
15 16QAM 75 0 19.80 19.80 19.82													
15 25GQAM 1 0 19.24 19.38 19.27													
15 25GQAM 1 37 19.27 19.35 19.21													
15 25GQAM 1 74 19.29 19.36 19.24													
15 25GQAM 38 0 19.26 19.42 19.20													
15 25GQAM 38 20 19.16 19.38 19.26													
15 25GQAM 38 39 19.29 19.36 19.30													
15 25GQAM 75 0 19.32 19.48 19.34													
Channel			37800	38000	38000	Turn-up limit (dBm)	MFR (dB)						
Frequency (MHz)													
10 QPSK 1 0 19.90 19.94 19.78													
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													
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 19.88 19.84 19.80													
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 19.86 19.81													
10 16QAM 25 25 19.71 19.84 19.81													
10 16QAM 50 0 19.73 19.73 19.76													
10 16QAM 1 0 19.74 19.88 19.70													
10 16QAM 1 25 19.75 19.88 19.82													
10 16QAM 1 49 19.73 19.85 19.77													
10 16QAM 25 0 19.68 19.84 19.84													
10 16QAM 25 12 19.69 19.74 19.70													
10 16QAM 25 25 19.59 19.84 19.52													
10 16QAM 50 0 19.90 19.81 19.74													
10 25GQAM 1 0 19.23 19.42 19.35													
10 25GQAM 1 25 19.27 19.38 19.25													
10 25GQAM 1 49 19.32 19.35 19.16													
10 25GQAM 25 0 19.24 19.42 19.24													
10 25GQAM 25 12 19.26 19.41 19.26													
10 25GQAM 25 25 19.26 19.34 19.36													
10 25GQAM 50 0 19.41 19.46 19.31													
Channel			37775	38000	38225	Turn-up limit (dBm)	MFR (dB)						
Frequency (MHz)													
5 QPSK 1 0 19.88 20.01 19.89													
5 QPSK 1 12 19.84 19.93 19.80													
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													
5 QPSK 12 13 19.87 19.71 19.80													
5 QPSK 25 0 19.59 19.74 19.69													
5 16QAM 1 0 19.87 19.85 19.49													
5 16QAM 1 12 19.62 19.65 19.63													
5 16QAM 1 24 19.62 19.46 19.37													
5 16QAM 12 0 19.69 19.70 19.77													
5 16QAM 12 7 19.74 19.77 19.59													
5 16QAM 12 13 19.75 19.74 19.72													
5 16QAM 25 0 19.60 19.83 19.84													
5 16QAM 1 0 19.87 19.93 19.83													
5 16QAM 1 12 19.72 19.78 19.76													
5 16QAM 1 24 19.84 19.78 19.74													
5 16QAM 12 0 19.79 19.76 19.88													
5 16QAM 12 7 19.59 19.77 19.68													
5 16QAM 12 13 19.56 19.72 19.65													
5 16QAM 25 0 19.83 19.83 19.76													
5 25GQAM 1 0 19.21 19.38 19.27													
5 25GQAM 1 12 19.22 19.36 19.23													
5 25GQAM 1 24 19.27 19.32 19.19													
5 25GQAM 12 0 19.20 19.38 19.21													
5 25GQAM 12 7 19.22 19.40 19.20													
5 25GQAM 12 13 19.30 19.34 19.29													
5 25GQAM 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 Middle Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up limit (dBm)	MFR (dB)			
Channel			39700	40160	40620	41080	41540						
Frequency (MHz)													
20 QPSK 1 0 19.73 19.87 20.01 20.15 20.29													
20 QPSK 1 49 19.70 19.82 19.92 20.02 20.12 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 19.88 19.98													
20 QPSK 50 24 19.83 19.80 20.10 19.84 19.91													
20 QPSK 50 50 19.83 19.75 20.10 19.82 20.03													
20 QPSK 100 0 19.84 19.79 19.99 19.75 19.97													
20 16QAM 1 0 19.64 19.60 19.98 19.68 19.85													
20 16QAM 1 49 19.67 19.72 19.91 19.70 19.85													
20 16QAM 50 24 19.53 19.62 19.86 20.14 19.62 19.82													
20 16QAM 50 0 19.79 19.75 19.89 19.73 19.81													
20 16QAM 50 24 19.76 19.79 20.00 19.82 19.69													
20 16QAM 50 50 19.72 19.68 20.02 19.59 20.05													
20 16QAM 100 0 19.88 19.62 20.01 19.55 19.69													
20 16QAM 1 0 19.79 19.58 19.88 19.72 19.88													
20 16QAM 1 49 19.70 19.70 19.94 19.67 19.73													
20 16QAM 1 99 19.64 19.61 20.13 19.58 20.01													
20 16QAM 50 0 19.72 19.70 19.93 19.78 19.80													
20 16QAM 50 24 19.53 19.62 19.86 19.62 19.80													
20 16QAM 50 50 19.78 19.59 19.82 19.54 19.92													
20 16QAM 100 0 19.91 19.71 20.02 19.72 19.97													
20 25GQAM 1 0 19.22 19.19 19.47 19.22 19.36													
20 25GQAM 1 49 19.04 19.16 19.41 19.13 19.24													
20 25GQAM 50 24 19.16 19.14 19.49 19.11 19.36													
20 25GQAM 50 0 19.18 19.21 19.59 19.07 19.37													
20 25GQAM 50 24 19.16 19.11 19.47 19.19 19.26													
20 25GQAM 50 50 19.17 19.11 19.40 19.16 19.30													
20 25GQAM 100 0 19.13 19.15 19.54 19.11 19.31													
Channel			39700	40160	40620	41080	41540	Turn-up limit (dBm)	MFR (dB)				
Frequency (MHz)													
15 QPSK 1 0 19.56 19.54 19.93 19.50 19.85													
15 QPSK 1 37 19.55 19.50 19.88 19.39 19.62													
15 QPSK 1 74 19.52 19.48 19.87 19.39 19.62													
15 QPSK 38 0 19.54 19.67 19.88 19.58 19.86													
15 QPSK 38 20 19.47 19.62 19.72 19.50 19.69													
15 QPSK 38 39 19.46 19.48 19.84 19.80 19.88													
15 16QAM 75 0 19.72 19.70 19.86 19.59 19.38													
15 16QAM 1 0 19.51 19.54 19.87 19.43 19.74													
15 16QAM 1 37 19.46 19.63 19.74 19.51 19.70													
15 16QAM 1 74 19.83 19.38 19.90 19.50 19.86													
15 16QAM 38 0 19.68 19.55 19.97 19.62 19.67													
15 16QAM 38 20 19.55 19.48 19.77 19.54 19.70													
15 16QAM 38 39 19.59 19.44 19.83 19.60 19.89													
15 16QAM 75 0 19.54 19.62 19.88 19.37 19.73													
15 16QAM 1 0 19.56 19.54 19.71 19.39 19.71													
15 16QAM 1 37 19.48 19.43 19.89 19.59 19.55													
15 16QAM 74 19.57 19.46 19.91 19.55 19.76													
15 16QAM 38 0 19.57 19.57 19.84 19.83 19.85													
15 16QAM 38 20 19.52 19.60 19.86 19.44 19.64													
15 16QAM 38 39 19.50 19.57 19.87 19.51 19.78													
15 16QAM 75 0 19.65 19.83 19.88 19.46 19.46													
15 25GQAM 1 0 19.25 19.15 19.43 19.14 19.29													
15 25GQAM 1 37 19.07 19.07 19.40 19.15 19.16													
15 25GQAM 1 74 19.14 19.06 19.49 19.12 19.34													
15 25GQAM 38 0 19.10 19.17 19.53 19.00 19.26													
15 25GQAM 38 20 19.17 19.03 19.41 19.11 19.22													
15 25GQAM 38 39 19.11 19.05 19.32 19.13 19.28													
15 25GQAM 75 0 19.12 19.17 19.56 19.03 19.31													
Channel			39700	40160	40620	41080	41540	Turn-up limit (dBm)	MFR (dB)				
Frequency (MHz)													
10 QPSK 1 0 19.84 19.47 19.96 19.54 19.66													
10 QPSK 1 25 19.59 19.45 19.84 19.47 19.80													
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													
10 QPSK 25 25 19.51 19.48 19.97 19.50 19.73													
10 QPSK 50 0 19.57 19.62 19.91 19.47 19.88													
10 16QAM 1 0 19.48 19.46 19.89 19.48 19.66													
10 16QAM 1 25 19.54 19.55 19.82 19.66 19.70													
10 16QAM 1 49 19.68 19.41 19.84 19.61 19.67													
10 16QAM 25 0 19.85 19.84 19.80 19.83 19.78													
10 16QAM 25 12 19.50 19.43 19.75 19.48 19.63													
10 16QAM 25 25 19.61 19.60 19.94 19.54 19.81													
10 16QAM 50 0 19.75 19.61 19.93 19.59 19.80													
10 16QAM 1 0 19.56 19.47 19.88 19.39 19.70													
10 16QAM 1 25 19.38 19.40 19.79 19.63 19.65													
10 16QAM 1 49 19.65 19.41 19.90 19.59 19.71													
10 16QAM 25 0 19.71 19.62 19.82 19.66 19.83													
10 16QAM 25 12 19.32 19.49 19.70 19.84 19.71													
10 16QAM 25 25 19.55 19.57 19.77 19.37 19.75													
10 16QAM 50 0 19.67 19.68 19.83 19.50 19.71													
10 25GQAM 1 0 19.14 19.12 19.39 19.15 19.28													
10 25GQAM 1 25 19.06 19.15 19.44 19.06 19.22													
10 25GQAM 1 49 19.13 19.13 19.46 19.02 19.37													
10 25GQAM 25 0 19.17 19.23 19.58 19.03 19.34													
10 25GQAM 25 12 19.11 19.04 19.42 19.21 19.28													
10 25GQAM 25 25 19.17 19.13 19.39 19.16 19.27													
10 25GQAM 50 0 19.10 19.11 19.45 19.06 19.33													
Channel			39675	40148	40620	41083	41565	Turn-up limit (dBm)	MFR (dB)				
Frequency (MHz)													
5 QPSK 1 0 19.89 19.48 19.95 19.46 19.70													
5 QPSK 1 12 19.42 19.48 19.77 19.81 19.99													
5 QPSK 1 24 19.58 19.52 19.93 19.61 19.80													
5 QPSK 12 0 19.51 19.84 19.84 19.49 19.75													
5 QPSK 12 7 19.46 19.49 19.92 19.54 19.61													
5 QPSK 12 13 19.47 19.58 19.84 19.80 19.86													
5 QPSK 25 0 19.70 19.56 19.95 19.59 19.90													
5 16QAM 1 0 19.58 19.82 19.84 19.45 19.73													
5 16QAM 1 12 19.60 19.68 19.75 19.84 19.71													
5 16QAM 1 24 19.53 19.39 19.96 19.51 19.73													
5 16QAM 12 0 19.66 19.82 19.91 19.88 19.84													
5 16QAM 12 7 19.54 19.54 19.88 19.46 19.64													
5 16QAM 12 13 19.53 19.63 19.95 19.51 19.74													
5 16QAM 25 0 19.70 19.46 19.99 19.37 19.74													
5 16QAM 1 0 19.66 19.59 19.80 19.47 19.83													
5 16QAM 1 12 19.47 19.39 19.76 19.57 19.55													
5 16QAM 1 24 19.63 19.52 20.01 19.39 19.88													
5 16QAM 12 0 19.62 19.58 19.99 19.65 19.81													
5 16QAM 12 7 19.39 19.59 19.76 19.59 19.64													
5 16QAM 12 13 19.43 19.42 19.88 19.41 19.84													
5 16QAM 25 0 19.71 19.57 20.00 19.57 19.81													
5 25GQAM 1 0 19.16 19.14 19.46 19.21 19.37													
5 25GQAM 1 12 19.00 19.16 19.33 19.10 19.15													
5 25GQAM 1 24 19.19 19.11 19.46 19.11 19.29													
5 25GQAM 12 0 19.17 19.22 19.51 19.08 19.37													
5 25GQAM 12 7 19.19 19.09 19.42 19.22 19.27													
5 25GQAM 12 13 19.12 19.06 19.43 19.09 19.28													
5 25GQAM 25 0 19.08 19.15 19.49 19.09 19.26													

Band 7 Ant4 DSIS 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				250.5	253.5	256.0			
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	19.28	19.19			
20	QPSK	50	24	19.32	19.33	19.25			
20	QPSK	50	50	19.26	19.26	19.11	20.5	0	
20	QPSK	100	0	19.21	19.32	19.21			
20	16QAM	1	0	19.19	19.29	19.18			
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	19.18	19.06	20.5	0	
20	16QAM	50	50	19.18	19.29	19.18			
20	16QAM	100	0	19.13	19.22	19.05			
20	84QAM	1	0	19.28	19.43	19.33			
20	84QAM	1	49	19.33	19.44	19.37	20.5	0	
20	84QAM	1	99	19.27	19.41	19.28			
20	84QAM	50	0	19.23	19.32	19.18			
20	84QAM	50	24	19.11	19.14	19.09	20.5	0	
20	84QAM	50	50	19.11	19.17	19.06			
20	84QAM	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	19.28			
20	256QAM	50	0	19.43	19.49	19.32			
20	256QAM	50	24	19.33	19.38	19.28	20.5	0	
20	256QAM	50	50	19.31	19.42	19.27			
20	256QAM	100	0	19.36	19.45	19.28			
Channel				2082.5	2110	2137.5			
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	19.04			
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	18.94	18.99	18.80			
15	16QAM	1	0	18.95	19.07	18.89			
15	16QAM	1	37	18.83	18.87	18.91	20.5	0	
15	16QAM	1	74	18.74	18.87	18.64			
15	16QAM	1	74	18.75	18.83	18.71			
15	16QAM	36	0	18.80	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	18.91			
15	16QAM	75	0	18.85	18.94	18.70			
15	84QAM	1	0	19.02	19.08	19.05			
15	84QAM	1	37	19.06	19.13	19.01	20.5	0	
15	84QAM	1	74	18.97	19.13	18.95			
15	84QAM	36	0	18.89	18.97	18.84			
15	84QAM	36	20	18.93	18.98	18.93	20.5	0	
15	84QAM	36	39	18.79	18.89	18.77			
15	84QAM	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				2060	2110	2160			
Frequency (MHz)				2065	2085	2095			
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	18.93	20.5	0	
10	QPSK	25	25	19.01	18.86	18.97			
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	18.88	18.75	20.5	0	
10	16QAM	25	25	18.88	19.04	18.83			
10	16QAM	50	0	18.81	18.92	18.71			
10	84QAM	1	0	18.94	19.08	19.08			
10	84QAM	1	25	19.01	19.18	19.08	20.5	0	
10	84QAM	1	49	18.84	19.08	18.92			
10	84QAM	25	0	18.93	18.98	18.81			
10	84QAM	25	12	18.83	18.88	18.82	20.5	0	
10	84QAM	25	25	18.79	18.83	18.80			
10	84QAM	50	0	19.00	19.07	18.98			
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	19.20			
Channel				2077.5	2110	2142.5			
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	19.08	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	84QAM	1	0	18.98	19.14	18.98			
5	84QAM	1	12	19.06	19.12	19.09	20.5	0	
5	84QAM	1	24	19.02	19.17	18.93			
5	84QAM	12	0	18.93	18.97	18.83			
5	84QAM	12	7	18.82	18.84	18.83	20.5	0	
5	84QAM	12	13	18.78	18.82	18.78			
5	84QAM	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	19.38	19.20			
5	256QAM	25	0	19.28	19.41	19.24			

Band 7 Ant4 DSIS Other PA-1									
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				250.5	2535	2560			
Frequency (MHz)				2510	2535	2560			
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	19.28	19.28	19.00			
20	QPSK	50	50	19.15	19.26	18.84	20.5	0	
20	QPSK	100	0	19.29	19.40	19.08			
20	16QAM	1	0	19.32	19.28	19.10			
20	16QAM	1	49	19.26	19.21	18.89	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	19.08			
20	84QAM	1	0	19.34	19.36	19.00			
20	8								



Band 38 Ant4 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 (dBm)	MPR (dB)					
Channel				37850	38000	38150							
Frequency (MHz)				2925.0	2995.0	3075.0							
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	0	0	17.98	18.14	17.86							
20	QPSK	50	24	17.95	17.95	17.83							
20	QPSK	50	50	17.72	17.79	17.60		19.5	0				
20	QPSK	100	0	17.97	18.00	17.86							
20	16QAM	1	0	18.06	18.10	17.88							
20	16QAM	1	49	17.93	18.05	17.82		19.5	0				
20	16QAM	1	99	17.98	18.03	17.79							
20	16QAM	1	0	18.06	18.10	17.88							
20	16QAM	50	24	18.04	18.12	17.85		19.5	0				
20	16QAM	50	50	18.05	18.05	17.87							
20	16QAM	100	0	18.18	18.20	17.97							
20	64QAM	1	0	18.07	18.13	18.08							
20	64QAM	1	49	18.03	18.16	18.11		19.5	0				
20	64QAM	1	99	18.04	18.17	18.00							
20	64QAM	0	0	18.18	18.19	17.89							
20	64QAM	50	24	17.98	18.17	17.79		19.5	0				
20	64QAM	50	50	18.09	18.16	17.90							
20	64QAM	100	0	17.00	17.06	16.88							
20	256QAM	1	0	18.10	18.15	17.99		19.5	0				
20	256QAM	1	49	18.04	18.11	17.85							
20	256QAM	1	99	18.07	18.19	17.88							
20	256QAM	0	0	18.03	18.18	17.83		19.5	0				
20	256QAM	50	24	17.98	18.07	17.77							
20	256QAM	50	50	17.98	18.07	17.79							
20	256QAM	100	0	18.07	18.20	17.93		19.5	0				
Channel				37825	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	18.06	17.91							
15	QPSK	1	74	17.82	18.01	17.74							
15	QPSK	36	0	17.84	18.16	17.76							
15	QPSK	36	20	17.93	17.97	17.61		19.5	0				
15	QPSK	39	39	17.70	17.75	17.52							
15	QPSK	75	0	17.90	18.00	17.58							
15	16QAM	1	0	18.02	18.02	17.86							
15	16QAM	1	37	17.85	18.07	17.83		19.5	0				
15	16QAM	1	74	17.89	18.03	17.80							
15	16QAM	36	0	18.07	18.08	17.85							
15	16QAM	36	20	17.99	18.07	17.82		19.5	0				
15	16QAM	36	39	17.86	17.88	17.88							
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	18.04	17.83							
15	64QAM	75	0	17.95	18.01	17.83							
15	256QAM	1	0	18.08	18.19	17.96							
15	256QAM	1	37	17.97	18.00	17.89		19.5	0				
15	256QAM	1	74	18.06	18.11	17.89							
15	256QAM	36	0	18.06	18.19	17.86							
15	256QAM	36	20	17.98	18.01	17.75		19.5	0				
15	256QAM	36	39	17.89	18.10	17.73							
15	256QAM	75	0	18.02	18.20	17.87							
Channel				37775	38000	38225	Time-up (dBm)	MPR (dB)					
Frequency (MHz)				2975	2995	3015							
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							
10	QPSK	25	12	17.87	17.95	17.83		19.5	0				
10	QPSK	25	25	17.65	17.75	17.55							
10	QPSK	50	0	17.92	18.02	17.82							
10	16QAM	1	0	17.97	18.17	17.83		19.5	0				
10	16QAM	1	25	17.85	18.00	17.83							
10	16QAM	1	49	17.97	18.02	17.74							
10	16QAM	25	0	17.99	18.05	17.83		19.5	0				
10	16QAM	25	12	17.89	18.14	17.85							
10	16QAM	25	25	17.98	18.05	17.80							
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	18.16	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							
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							

Band 41 Ant4 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 (dBm)	MPR (dB)						
Channel				39750	40185	40620	41065	41490						
Frequency (MHz)				2938	2963.5	2993	2938.5	2993.5						
20	QPSK	1	0	18.28	18.26	18.65	18.39	17.69		19.5	0			
20	QPSK	1	49	18.25	18.25	18.59	18.39	17.51						
20	QPSK	1	99	18.15	18.22	18.60	18.39	17.52						
20	QPSK	50	0	18.35	18.20	18.67	18.60	17.66						
20	QPSK	50	24	18.23	18.21	18.55	18.32	17.55		19.5	0			
20	QPSK	50	50	18.18	18.20	18.51	18.39	17.55						
20	QPSK	100	0	18.21	18.23	18.54	18.33	17.57						
20	16QAM	1	0	18.27	18.19	18.61	18.36	17.62		19.5	0			
20	16QAM	1	49	18.24	18.25	18.64	18.41	17.59						
20	16QAM	1	99	18.20	18.16	18.54	18.39	17.58						
20	16QAM	50	0	18.25	18.24	18.54	18.42	17.88						
20	16QAM	50	24	18.24	18.29	18.56	18.43	17.58		19.5	0			
20	16QAM	50	50	18.13	18.19	18.60	18.32	17.58						
20	16QAM	100	0	18.33	18.29	18.56	18.37	17.55						
20	64QAM	1	0	18.33	18.17	18.60	18.44	17.66						
20	64QAM	1	49	18.18	18.23	18.61	18.45	17.52		19.5	0			
20	64QAM	1	99	18.23	18.22	18.64	18.43	17.57						
20	64QAM	50	0	18.33	18.24	18.62	18.42	17.68						
20	64QAM	50	24	18.25	18.24	18.63	18.38	17.51		19.5	0			
20	64QAM	50	50	18.23	18.14	18.54	18.46	17.52						
20	64QAM	100	0	18.21	18.29	18.61	18.40	17.59						
20	256QAM	1	0	18.36	18.33	18.53	18.48	17.61		19.5	0			
20	256QAM	1	49	18.33	18.15	18.53	18.35	17.55						
20	256QAM	1	99	18.29	18.21	18.53	18.42	17.60						
20	256QAM	50	0	18.14	18.40	18.60	18.38	17.54						
20	256QAM	50	24	18.19	18.12	18.43	18.42	17.60		19.5	0			
20	256QAM	50	50	18.30	18.35	18.51	18.47	17.64						
20	256QAM	100	0	18.23	18.14	18.50	18.48	17.63						
Channel				39725	40173	40620	41068	41515	Time-up (dBm)	MPR (dB)				
Frequency (MHz)				2903.5	2948.3	2993	2937.8	2992.5						
15	QPSK	1	0	18.28	18.19	18.60	18.35	17.72		19.5	0			
15	QPSK	1	37	18.16	18.24	18.54	18.37	17.67						
15	QPSK	1	74	18.08	18.24	18.61	18.38	17.53						
15	QPSK	36	0	18.35	18.12	18.54	18.47	17.58						
15	QPSK	36	20	18.26	18.20	18.58	18.29	17.50		19.5	0			
15	QPSK	39	39	18.21	18.18	18.51	18.47	17.52						
15	QPSK	75	0	18.19	18.21	18.48	18.32	17.59						
15	16QAM	1	0	18.20	18.14	18.57	18.37	17.80						
15	16QAM	1	37	18.26	18.24	18.60	18.41	17.58		19.5	0			
15	16QAM	1	74	18.11	18.13	18.53	18.34	17.60						
15	16QAM	36	0	18.27	18.24	18.53	18.38	17.68						
15	16QAM	36	20	18.25	18.29	18.53	18.41	17.57		19.5	0			
15	16QAM	36	39	18.15	18.16	18.59	18.31	17.50						
15														

### Band 7 Ant5 DS15 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			2505	2535	2560		
	Frequency (MHz)			2510	2535	2560		
20	QPSK	1	0	18.67	18.85	18.75		
20	QPSK	1	49	18.61	18.79	18.71	20	0
20	QPSK	1	99	18.70	18.78	18.73		
20	QPSK	50	0	18.68	18.73	18.84		
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	16QAM	1	0	18.64	18.67	18.55		
20	16QAM	1	49	18.63	18.64	18.60		
20	16QAM	1	99	18.55	18.63	18.66		
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	16QAM	100	0	18.73	18.70	18.63		
20	84QAM	1	0	18.62	18.61	18.63		
20	84QAM	1	49	18.58	18.61	18.63		
20	84QAM	1	99	18.56	18.64	18.61		
20	84QAM	50	0	17.68	17.65	17.66		
20	84QAM	50	24	17.58	17.67	17.66		
20	84QAM	50	50	17.58	17.64	17.60		
20	84QAM	100	0	17.53	17.61	17.53		
20	256QAM	1	0	15.82	15.70	15.70		
20	256QAM	1	49	15.59	15.61	15.59		
20	256QAM	1	99	15.59	15.64	15.64		
20	256QAM	50	0	15.58	15.62	15.63		
20	256QAM	50	24	15.65	15.68	15.71		
20	256QAM	50	50	15.58	15.56	15.50		
20	256QAM	100	0	15.87	15.73	15.69		
	Channel			20825	21100	21375		
	Frequency (MHz)			20825	2095	2092.5		
15	QPSK	1	0	18.82	18.78	18.65		
15	QPSK	1	37	18.85	18.82	18.65		
15	QPSK	1	74	18.85	18.81	18.69		
15	QPSK	36	0	18.55	18.64	18.69		
15	QPSK	36	20	18.52	18.55	18.70		
15	QPSK	36	39	18.53	18.62	18.51		
15	16QAM	75	0	18.53	18.67	18.61		
15	16QAM	1	0	18.62	18.69	18.64		
15	16QAM	1	37	18.51	18.79	18.60		
15	16QAM	1	74	18.53	18.55	18.66		
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		
15	16QAM	75	0	18.65	18.69	18.54		
15	84QAM	1	0	18.60	18.56	18.59		
15	84QAM	1	37	18.57	18.63	18.66		
15	84QAM	1	74	18.55	18.58	18.52		
15	84QAM	36	0	17.67	17.63	17.63		
15	84QAM	36	39	17.52	17.67	17.57		
15	84QAM	36	39	17.58	17.65	17.56		
15	84QAM	75	0	17.63	17.63	17.52		
15	256QAM	1	0	15.58	15.73	15.63		
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		
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			20600	21100	21400		
	Frequency (MHz)			20600	2065	2065		
10	QPSK	1	0	18.62	18.68	18.78		
10	QPSK	1	25	18.77	18.63	18.74		
10	QPSK	1	49	18.72	18.75	18.64		
10	QPSK	25	0	18.64	18.65	18.57		
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		
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		
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		
10	16QAM	50	0	18.65	18.68	18.56		
10	84QAM	1	0	18.62	18.67	18.63		
10	84QAM	1	25	18.57	18.55	18.55		
10	84QAM	1	49	18.54	18.60	18.60		
10	84QAM	25	0	17.69	17.62	17.57		
10	84QAM	25	12	17.54	17.59	17.64		
10	84QAM	25	25	17.61	17.57	17.57		
10	84QAM	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		
10	256QAM	1	49	15.52	15.67	15.59		
10	256QAM	25	0	15.50	15.57	15.58		
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		
	Frequency (MHz)			2092.5	2095	2097.5		
5	QPSK	1	0	18.64	18.73	18.70		
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	18.62	18.55		
5	QPSK	12	7	18.65	18.51	18.52		
5	QPSK	12	13	18.60	18.59	18.70		
5	QPSK	25	0	18.60	18.75	18.60		
5	16QAM	1	0	18.69	18.53	18.76		
5	16QAM	1	12	18.61	18.59	18.61		
5	16QAM	1	24	18.70	18.65	18.68		
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		
5	16QAM	25	0	18.68	18.62	18.55		
5	84QAM	1	0	18.60	18.62	18.56		
5	84QAM	1	12	18.61	18.61	18.56		
5	84QAM	1	24	18.56	18.59	18.56		
5	84QAM	12	0	17.61	17.67	17.67		
5	84QAM	12	7	17.56	17.68	17.62		
5	84QAM	12	13	17.61	17.58	17.58		
5	84QAM	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	15.60		
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		
5	256QAM	12	13	15.57	15.57	15.61		
5	256QAM	25	0	15.64	15.65	15.68		

### Band 7 Ant5 DS15 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			2510	2535	2560		
	Frequency (MHz)			2510	2535	2560		
20	QPSK	1	0	19.04	19.21	19.15		
20	QPSK	1	49	19.14	19.16	19.12	20.5	0
20	QPSK	1	99	19.07	19.08	19.15		
20	QPSK	50	0	18.90	19.12	19.02		
20	QPSK	50	24	18.96	18.88	18.91		
20	QPSK	50	50	18.95	19.11	18.96		
20	QPSK	100	0	18.88	19.10	18.84		
20	16QAM	1	0	18.96	19.04	18.95		
20	16QAM	1	49	18.96	18.85	18.98		
20	16QAM	1	99	18.95	18.89	19.02		
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	16QAM	100	0	18.95	19.02	19.00		
20	84QAM	1	0	19.01	19.11	19.16		
20	84QAM	1	49	18.96	19.07	19.05		
20	84QAM	1	99	18.92	19.04	19.08		
20	84QAM	50	0	17.89	17.86	17.91		
20	84QAM	50	24	17.83	17.88	18.02		
20	84QAM	50	50	17.87	17.82	17.88		
20	84QAM	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		
20	256QAM	1</						

Band 38 Ant5 DS15 Other PA										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Turn-up limit (dBm)	MPR (dB)		
	Channel			37850	38600	38150				
	Frequency (MHz)			2580	2595	2610				
20	QPSK	1	0	19.69	19.77	19.85				
20	QPSK	1	49	19.56	19.51	19.84		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	19.88	19.61		21	0	
20	QPSK	50	50	19.55	19.89	19.72				
20	QPSK	100	0	19.57	19.62	19.80				
20	16QAM	1	0	19.69	19.59	19.69				
20	16QAM	1	49	19.55	19.70	19.62		21	0	
20	16QAM	1	99	19.50	19.61	19.75				
20	16QAM	50	0	19.70	19.68	19.67				
20	16QAM	50	24	19.71	19.87	19.75		20.5	0.5	
20	16QAM	50	50	19.73	19.88	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	19.96	19.83	19.10				
20	64QAM	50	24	19.91	19.84	19.12		19.5	1.5	
20	64QAM	50	50	19.98	19.93	19.03				
20	64QAM	100	0	19.04	19.98	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			37550	38300	38150				
	Frequency (MHz)			2577.5	2595	2612.5		Turn-up limit (dBm)	MPR (dB)	
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	19.59	19.54				
15	QPSK	38	0	19.33	19.71	19.24				
15	QPSK	38	20	19.71	19.51	19.65		21	0	
15	QPSK	38	39	19.62	19.47	19.80				
15	16QAM	75	0	19.63	19.69	19.58				
15	16QAM	1	0	19.74	19.74	19.74				
15	16QAM	1	37	19.61	19.70	19.68		21	0	
15	16QAM	1	74	19.60	19.58	19.73				
15	16QAM	38	0	19.48	19.57	19.55				
15	16QAM	38	20	19.57	19.59	19.59		20.5	0.5	
15	16QAM	38	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	19.63				
15	64QAM	1	74	19.55	19.59	19.59				
15	64QAM	38	0	19.57	19.62	19.62				
15	64QAM	38	20	18.63	18.57	18.54		19.5	1.5	
15	64QAM	38	39	18.56	18.57	18.54				
15	64QAM	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	38	0	16.49	16.59	16.48				
15	256QAM	38	20	16.58	16.59	16.62		17.5	3.5	
15	256QAM	38	39	16.50	16.85	16.47				
15	256QAM	75	0	16.50	16.60	16.54				
	Channel			37600	38600	38500				
	Frequency (MHz)			2675	2695	2715		Turn-up limit (dBm)	MPR (dB)	
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	19.61				
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				
10	16QAM	1	25	19.63	19.70	19.70				
10	16QAM	1	49	19.64	19.60	19.71		21	0	
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	19.58				
10	16QAM	50	0	19.57	19.58	19.62				
10	64QAM	1	0	19.70	19.70	19.83				
10	64QAM	1	25	19.60	19.61	19.69		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	38600	38525				
	Frequency (MHz)			2572.5	2595	2617.5		Turn-up limit (dBm)	MPR (dB)	
5	QPSK	1	0	19.70	19.74	19.80				
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	19.60	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				
5	64QAM	1	12	19.62	19.54	19.58		20.5	0.5	
5	64QAM	1	24	19.56	19.61	19.53				
5	64QAM	12	0	18.47	18.62	18.54				
5	64QAM	12	7	18.60	18.63	18.54		19.5	1.5	
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	16.58				

Band 41 Ant5 DS15 Other PA										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Turn-up limit (dBm)	MPR (dB)		
	Channel			39750	40165	40620	41065	41460		
	Frequency (MHz)			2508	2549.5	2593	2636.5	2680		
20	QPSK	1	0	19.68	19.77	19.76	19.75	19.63		
20	QPSK	1	49	19.72	19.64	19.68	19.70	19.72		21
20	QPSK	1	99	19.65	19.70	19.76	19.65	19.68		
20	QPSK	50	0	19.45	19.53	19.77	19.69	19.68		
20	QPSK	50	24	19.39	19.61	19.59	19.67	19.61		21
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		
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		21
20	16QAM	1	99	19.47	19.56	19.57	19.56	19.59		
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		20.5
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	19.28	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	18.28	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		
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	16.23		

## 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	UL	DL Antenna	LTE	BW	DL	DL	DL Antenna	With CA	Without CA
	Band	Ant	(MHz)	Freq. (MHz)	Channel	Mod.	RB	Offset	Configuratio n	Band	(MHz)	Freq. (MHz)	Channel	Configuratio n	Tx Power (dBm)	Tx Power (dBm)
CA_2A-2A	Band 2	Ant2	20M	1880	1890	QPSK	1	0		Band 2	5M	1987.5	1175		23.81	23.87
	Band 2	Ant3	20M	1880	1890	QPSK	1	0		Band 2	5M	1987.5	1175		23.36	23.45
CA_2A-4A	Band 2	Ant2	20M	1880	1890	QPSK	1	0		Band 4	20M	2132.5	2175	4xMIMO	23.75	23.87
	Band 2	Ant3	20M	1880	1890	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
CA_7A-66A	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
	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
CA_38C	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	23.29	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
	Band 38	Ant2	20M	2580	37850	QPSK	1	0	4xMIMO	Band 38	20M	2599.8	38048	4xMIMO	23.91	24.04
CA_41A-41A	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
	Band 41	Ant2	20M	2593	40620	QPSK	1	0	4xMIMO	Band 41	5M	2687.5	41565	4xMIMO	23.95	24.05
CA_41C	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
	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
CA_66B	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
	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
CA_66C	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
	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	LTE	BW	DL	DL	DL	LTE	BW	DL	DL	DL Antenna	With CA	Without CA	
	Band	Ant	(MHz)	Freq.	Channel		RB	Offset	Band	(MHz)	Freq.	Channel	DL Antenna Configuration	Band	(MHz)	Freq.	Channel	DL Antenna Configuration	Tx. Power (dBm)	Tx. Power (dBm)	
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	23.97	
	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	24.08	
	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_41D	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