



Annex A

Output Power



Output Power for 6dBi gain PtoP antennas

Bandwidth	Frequency	Data Rate	TP	J7 Level	J8 Level	J7 Level	J8 Level	Total Summed Power	Limit	Margin
MHz	MHz			dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	vt0	18	21.5	20.1	140.3	102.6	23.9	30	-6.1
10	5800	vt0	20	21.7	23.9	148.3	245.5	26.0	30	-4.0
10	5840	vt0	20	20.1	23.4	101.6	218.8	25.1	30	-4.9
20	5740	vt0	18	21.5	20.1	140.3	103.3	23.9	30	-6.1
20	5800	vt0	20	21.8	23.9	152.8	244.3	26.0	30	-4.0
20	5835	vt0	18	18.2	21.7	66.1	148.9	23.3	30	-6.7
30	5745	vt0	16	19.9	17.8	97.5	60.7	22.0	30	-8.0
30	5800	vt0	20	21.8	23.8	151.4	242.1	25.9	30	-4.1
30	5830	vt0	17	17.4	21.2	55.0	130.9	22.7	30	-7.3
40	5750	vf0	17	19.5	18.8	89.1	75.5	22.2	30	-7.8
40	5800	vf0	20	21.0	23.3	126.5	214.8	25.3	30	-4.7
40	5825	vf0	18	18.0	21.4	62.7	136.5	23.0	30	-7.0
50	5755	vf0	17	19.6	19.2	91.2	82.2	22.4	30	-7.6
50	5800	vf0	20	21.0	23.0	125.0	200.0	25.1	30	-4.9
50	5820	vf0	18	18.3	21.3	67.3	134.0	23.0	30	-7.0
60	5760	vf0	16	18.5	18.1	71.3	64.9	21.3	30	-8.7
60	5765	vf0	20	21.1	23.1	127.9	201.8	25.2	30	-4.8
60	5815	vf0	17	17.5	20.5	56.5	113.0	22.3	30	-7.7
80	5770	ve00	15	17.1	17.6	51.2	56.9	20.3	30	-9.7
80	5800	ve00	16	17.0	19.8	49.9	95.9	21.6	30	-8.4
80	5810	ve00	16	16.6	19.7	45.6	92.3	21.4	30	-8.6



Output Power for 16dBi gain PtoP antennas

Bandwidth	Frequency	Data Rate	J7 Level	J8 Level	J7 Level	J8 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	vt0	11.5	10.1	14.0	10.3	13.9	30	-16.1
10	5800	vt0	11.7	13.9	14.8	24.5	16.0	30	-14.0
10	5840	vt0	10.1	13.4	10.2	21.9	15.1	30	-14.9
20	5740	vt0	11.5	10.1	14.0	10.3	13.9	30	-16.1
20	5800	vt0	11.8	13.9	15.3	24.4	16.0	30	-14.0
20	5835	vt0	8.2	11.7	6.6	14.9	13.3	30	-16.7
30	5745	vt0	9.9	7.8	9.7	6.1	12.0	30	-18.0
30	5800	vt0	11.8	13.8	15.1	24.2	15.9	30	-14.1
30	5830	vt0	7.4	11.2	5.5	13.1	12.7	30	-17.3
40	5750	vf0	9.5	8.8	8.9	7.6	12.2	30	-17.8
40	5800	vf0	11.0	13.3	12.6	21.5	15.3	30	-14.7
40	5825	vf0	8.0	11.4	6.3	13.6	13.0	30	-17.0
50	5755	vf0	9.6	9.2	9.1	8.2	12.4	30	-17.6
50	5800	vf0	11.0	13.0	12.5	20.0	15.1	30	-14.9
50	5820	vf0	8.3	11.3	6.7	13.4	13.0	30	-17.0
60	5760	vf0	8.5	8.1	7.1	6.5	11.3	30	-18.7
60	5765	vf0	11.1	13.1	12.8	20.2	15.2	30	-14.8
60	5815	vf0	7.5	10.5	5.6	11.3	12.3	30	-17.7
80	5770	ve00	7.1	7.6	5.1	5.7	10.3	30	-19.7
80	5800	ve00	7.0	9.8	5.0	9.6	11.6	30	-18.4
80	5810	ve00	6.6	9.7	4.6	9.2	11.4	30	-18.6



Output Power for 17dBi gain PtoP antennas

Bandwidth	Frequency	Data Rate	J7 Level	J8 Level	J7 Level	J8 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	vt0	10.5	9.1	11.1	8.1	12.9	30	-17.1
10	5800	vt0	10.7	12.9	11.8	19.5	15.0	30	-15.0
10	5840	vt0	9.1	12.4	8.1	17.4	14.1	30	-15.9
20	5740	vt0	10.5	9.1	11.1	8.2	12.9	30	-17.1
20	5800	vt0	10.8	12.9	12.1	19.4	15.0	30	-15.0
20	5835	vt0	7.2	10.7	5.2	11.8	12.3	30	-17.7
30	5745	vt0	8.9	6.8	7.7	4.8	11.0	30	-19.0
30	5800	vt0	10.8	12.8	12.0	19.2	14.9	30	-15.1
30	5830	vt0	6.4	10.2	4.4	10.4	11.7	30	-18.3
40	5750	vf0	8.5	7.8	7.1	6.0	11.2	30	-18.8
40	5800	vf0	10.0	12.3	10.0	17.1	14.3	30	-15.7
40	5825	vf0	7.0	10.4	5.0	10.8	12.0	30	-18.0
50	5755	vf0	8.6	8.2	7.2	6.5	11.4	30	-18.6
50	5800	vf0	10.0	12.0	9.9	15.9	14.1	30	-15.9
50	5820	vf0	7.3	10.3	5.3	10.6	12.0	30	-18.0
60	5760	vf0	7.5	7.1	5.7	5.2	10.3	30	-19.7
60	5765	vf0	10.1	12.1	10.2	16.0	14.2	30	-15.8
60	5815	vf0	6.5	9.5	4.5	9.0	11.3	30	-18.7
80	5770	ve00	6.1	6.6	4.1	4.5	9.3	30	-20.7
80	5800	ve00	6.0	8.8	4.0	7.6	10.6	30	-19.4
80	5810	ve00	5.6	8.7	3.6	7.3	10.4	30	-19.6



Output Power for 19dBi gain PtoP antennas

Bandwidth	Frequency	Data Rate	J7 Level	J8 Level	J7 Level	J8 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	vt0	8.5	7.1	7.0	5.1	10.9	30	-19.1
10	5800	vt0	8.7	10.9	7.4	12.3	13.0	30	-17.0
10	5840	vt0	7.1	10.4	5.1	11.0	12.1	30	-17.9
20	5740	vt0	8.5	7.1	7.0	5.2	10.9	30	-19.1
20	5800	vt0	8.8	10.9	7.7	12.2	13.0	30	-17.0
20	5835	vt0	5.2	8.7	3.3	7.5	10.3	30	-19.7
30	5745	vt0	6.9	4.8	4.9	3.0	9.0	30	-21.0
30	5800	vt0	8.8	10.8	7.6	12.1	12.9	30	-17.1
30	5830	vt0	4.4	8.2	2.8	6.6	9.7	30	-20.3
40	5750	vf0	6.5	5.8	4.5	3.8	9.2	30	-20.8
40	5800	vf0	8.0	10.3	6.3	10.8	12.3	30	-17.7
40	5825	vf0	5.0	8.4	3.1	6.8	10.0	30	-20.0
50	5755	vf0	6.6	6.2	4.6	4.1	9.4	30	-20.6
50	5800	vf0	8.0	10.0	6.3	10.0	12.1	30	-17.9
50	5820	vf0	5.3	8.3	3.4	6.7	10.0	30	-20.0
60	5760	vf0	5.5	5.1	3.6	3.3	8.3	30	-21.7
60	5765	vf0	8.1	10.1	6.4	10.1	12.2	30	-17.8
60	5815	vf0	4.5	7.5	2.8	5.7	9.3	30	-20.7
80	5770	ve00	4.1	4.6	2.6	2.9	7.3	30	-22.7
80	5800	ve00	4.0	6.8	2.5	4.8	8.6	30	-21.4
80	5810	ve00	3.6	6.7	2.3	4.6	8.4	30	-21.6



Output Power for 20dBi gain PtoP antennas

Bandwidth	Frequency	Data Rate	J7 Level	J8 Level	J7 Level	J8 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	vt0	7.5	6.1	5.6	4.1	9.9	30	-20.1
10	5800	vt0	7.7	9.9	5.9	9.8	12.0	30	-18.0
10	5840	vt0	6.1	9.4	4.0	8.7	11.1	30	-18.9
20	5740	vt0	7.5	6.1	5.6	4.1	9.9	30	-20.1
20	5800	vt0	7.8	9.9	6.1	9.7	12.0	30	-18.0
20	5835	vt0	4.2	7.7	2.6	5.9	9.3	30	-20.7
30	5745	vt0	5.9	3.8	3.9	2.4	8.0	30	-22.0
30	5800	vt0	7.8	9.8	6.0	9.6	11.9	30	-18.1
30	5830	vt0	3.4	7.2	2.2	5.2	8.7	30	-21.3
40	5750	vf0	5.5	4.8	3.5	3.0	8.2	30	-21.8
40	5800	vf0	7.0	9.3	5.0	8.6	11.3	30	-18.7
40	5825	vf0	4.0	7.4	2.5	5.4	9.0	30	-21.0
50	5755	vf0	5.6	5.2	3.6	3.3	8.4	30	-21.6
50	5800	vf0	7.0	9.0	5.0	8.0	11.1	30	-18.9
50	5820	vf0	4.3	7.3	2.7	5.3	9.0	30	-21.0
60	5760	vf0	4.5	4.1	2.8	2.6	7.3	30	-22.7
60	5765	vf0	7.1	9.1	5.1	8.0	11.2	30	-18.8
60	5815	vf0	3.5	6.5	2.2	4.5	8.3	30	-21.7
80	5770	ve00	3.1	3.6	2.0	2.3	6.3	30	-23.7
80	5800	ve00	3.0	5.8	2.0	3.8	7.6	30	-22.4
80	5810	ve00	2.6	5.7	1.8	3.7	7.4	30	-22.6



Output Power for 21dBi gain PtoP antennas

Bandwidth	Frequency	Data Rate	J7 Level	J8 Level	J7 Level	J8 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	vt0	6.5	5.1	4.4	3.2	8.9	30	-21.1
10	5800	vt0	6.7	8.9	4.7	7.8	11.0	30	-19.0
10	5840	vt0	5.1	8.4	3.2	6.9	10.1	30	-19.9
20	5740	vt0	6.5	5.1	4.4	3.3	8.9	30	-21.1
20	5800	vt0	6.8	8.9	4.8	7.7	11.0	30	-19.0
20	5835	vt0	3.2	6.7	2.1	4.7	8.3	30	-21.7
30	5745	vt0	4.9	2.8	3.1	1.9	7.0	30	-23.0
30	5800	vt0	6.8	8.8	4.8	7.7	10.9	30	-19.1
30	5830	vt0	2.4	6.2	1.7	4.1	7.7	30	-22.3
40	5750	vf0	4.5	3.8	2.8	2.4	7.2	30	-22.8
40	5800	vf0	6.0	8.3	4.0	6.8	10.3	30	-19.7
40	5825	vf0	3.0	6.4	2.0	4.3	8.0	30	-22.0
50	5755	vf0	4.6	4.2	2.9	2.6	7.4	30	-22.6
50	5800	vf0	6.0	8.0	4.0	6.3	10.1	30	-19.9
50	5820	vf0	3.3	6.3	2.1	4.2	8.0	30	-22.0
60	5760	vf0	3.5	3.1	2.3	2.1	6.3	30	-23.7
60	5765	vf0	6.1	8.1	4.0	6.4	10.2	30	-19.8
60	5815	vf0	2.5	5.5	1.8	3.6	7.3	30	-22.7
80	5770	ve00	2.1	2.6	1.6	1.8	5.3	30	-24.7
80	5800	ve00	2.0	4.8	1.6	3.0	6.6	30	-23.4
80	5810	ve00	1.6	4.7	1.4	2.9	6.4	30	-23.6



Output Power for 22dBi gain PtoP antennas

Bandwidth	Frequency	Data Rate	J7 Level	J8 Level	J7 Level	J8 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	vt0	5.5	4.1	3.5	2.6	7.9	30	-22.1
10	5800	vt0	5.7	7.9	3.7	6.2	10.0	30	-20.0
10	5840	vt0	4.1	7.4	2.6	5.5	9.1	30	-20.9
20	5740	vt0	5.5	4.1	3.5	2.6	7.9	30	-22.1
20	5800	vt0	5.8	7.9	3.8	6.1	10.0	30	-20.0
20	5835	vt0	2.2	5.7	1.7	3.7	7.3	30	-22.7
30	5745	vt0	3.9	1.8	2.4	1.5	6.0	30	-24.0
30	5800	vt0	5.8	7.8	3.8	6.1	9.9	30	-20.1
30	5830	vt0	1.4	5.2	1.4	3.3	6.7	30	-23.3
40	5750	vf0	3.5	2.8	2.2	1.9	6.2	30	-23.8
40	5800	vf0	5.0	7.3	3.2	5.4	9.3	30	-20.7
40	5825	vf0	2.0	5.4	1.6	3.4	7.0	30	-23.0
50	5755	vf0	3.6	3.2	2.3	2.1	6.4	30	-23.6
50	5800	vf0	5.0	7.0	3.1	5.0	9.1	30	-20.9
50	5820	vf0	2.3	5.3	1.7	3.4	7.0	30	-23.0
60	5760	vf0	2.5	2.1	1.8	1.6	5.3	30	-24.7
60	5765	vf0	5.1	7.1	3.2	5.1	9.2	30	-20.8
60	5815	vf0	1.5	4.5	1.4	2.8	6.3	30	-23.7
80	5770	ve00	1.1	1.6	1.3	1.4	4.3	30	-25.7
80	5800	ve00	1.0	3.8	1.3	2.4	5.6	30	-24.4
80	5810	ve00	0.6	3.7	1.1	2.3	5.4	30	-24.6



Output Power for 30dBi gain PtoP antennas

Bandwidth	Frequency	Data Rate	J7 Level	J8 Level	J7 Level	J8 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	vt0	-2.5	-3.9	0.6	0.4	-0.1	30	-30.1
10	5800	vt0	-2.3	-0.1	0.6	1.0	2.0	30	-28.0
10	5840	vt0	-3.9	-0.6	0.4	0.9	1.1	30	-28.9
20	5740	vt0	-2.5	-3.9	0.6	0.4	-0.1	30	-30.1
20	5800	vt0	-2.2	-0.1	0.6	1.0	2.0	30	-28.0
20	5835	vt0	-5.8	-2.3	0.3	0.6	-0.7	30	-30.7
30	5745	vt0	-4.1	-6.2	0.4	0.2	-2.0	30	-32.0
30	5800	vt0	-2.2	-0.2	0.6	1.0	1.9	30	-28.1
30	5830	vt0	-6.6	-2.8	0.2	0.5	-1.3	30	-31.3
40	5750	vf0	-4.5	-5.2	0.4	0.3	-1.8	30	-31.8
40	5800	vf0	-3.0	-0.7	0.5	0.9	1.3	30	-28.7
40	5825	vf0	-6.0	-2.7	0.2	0.5	-1.0	30	-31.0
50	5755	vf0	-4.4	-4.9	0.4	0.3	-1.6	30	-31.6
50	5800	vf0	-3.0	-1.0	0.5	0.8	1.1	30	-28.9
50	5820	vf0	-5.7	-2.7	0.3	0.5	-1.0	30	-31.0
60	5760	vf0	-5.5	-5.9	0.3	0.3	-2.7	30	-32.7
60	5765	vf0	-2.9	-0.9	0.5	0.8	1.2	30	-28.8
60	5815	vf0	-6.5	-3.5	0.2	0.4	-1.7	30	-31.7
80	5770	ve00	-6.9	-6.5	0.2	0.2	-3.7	30	-33.7
80	5800	ve00	-7.0	-4.2	0.2	0.4	-2.4	30	-32.4
80	5810	ve00	-7.4	-4.4	0.2	0.4	-2.6	30	-32.6



Output Power for 31dBi gain PtoP antennas

Bandwidth	Frequency	Data Rate	J7 Level	J8 Level	J7 Level	J8 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	vt0	-3.5	-4.9	0.4	0.3	-1.1	30	-31.1
10	5800	vt0	-3.3	-1.1	0.5	0.8	1.0	30	-29.0
10	5840	vt0	-4.9	-1.6	0.3	0.7	0.1	30	-29.9
20	5740	vt0	-3.5	-4.9	0.4	0.3	-1.1	30	-31.1
20	5800	vt0	-3.2	-1.1	0.5	0.8	1.0	30	-29.0
20	5835	vt0	-6.8	-3.3	0.2	0.5	-1.7	30	-31.7
30	5745	vt0	-5.1	-7.2	0.3	0.2	-3.0	30	-33.0
30	5800	vt0	-3.2	-1.2	0.5	0.8	0.9	30	-29.1
30	5830	vt0	-7.6	-3.8	0.2	0.4	-2.3	30	-32.3
40	5750	vf0	-5.5	-6.2	0.3	0.2	-2.8	30	-32.8
40	5800	vf0	-4.0	-1.7	0.4	0.7	0.3	30	-29.7
40	5825	vf0	-7.0	-3.7	0.2	0.4	-2.0	30	-32.0
50	5755	vf0	-5.4	-5.9	0.3	0.3	-2.6	30	-32.6
50	5800	vf0	-4.0	-2.0	0.4	0.6	0.1	30	-29.9
50	5820	vf0	-6.7	-3.7	0.2	0.4	-2.0	30	-32.0
60	5760	vf0	-6.5	-6.9	0.2	0.2	-3.7	30	-33.7
60	5765	vf0	-3.9	-2.0	0.4	0.6	0.2	30	-29.8
60	5815	vf0	-7.5	-4.5	0.2	0.4	-2.7	30	-32.7
80	5770	ve00	-7.9	-7.5	0.2	0.2	-4.7	30	-34.7
80	5800	ve00	-8.0	-5.2	0.2	0.3	-3.4	30	-33.4
80	5810	ve00	-8.4	-5.4	0.1	0.3	-3.6	30	-33.6



Output Power for 34dBi gain PtoP antennas

Bandwidth	Frequency	Data Rate	J7 Level	J8 Level	J7 Level	J8 Level	Total Summed Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5735	vt0	-6.5	-7.9	0.2	0.2	-4.1	30	-34.1
10	5800	vt0	-6.3	-4.1	0.2	0.4	-2.0	30	-32.0
10	5840	vt0	-7.9	-4.6	0.2	0.3	-2.9	30	-32.9
20	5740	vt0	-6.5	-7.9	0.2	0.2	-4.1	30	-34.1
20	5800	vt0	-6.2	-4.1	0.2	0.4	-2.0	30	-32.0
20	5835	vt0	-9.8	-6.3	0.1	0.2	-4.7	30	-34.7
30	5745	vt0	-8.1	-10.2	0.2	0.1	-6.0	30	-36.0
30	5800	vt0	-6.2	-4.2	0.2	0.4	-2.1	30	-32.1
30	5830	vt0	-10.6	-6.8	0.1	0.2	-5.3	30	-35.3
40	5750	vf0	-8.5	-9.2	0.1	0.1	-5.8	30	-35.8
40	5800	vf0	-7.0	-4.7	0.2	0.3	-2.7	30	-32.7
40	5825	vf0	-10.0	-6.7	0.1	0.2	-5.0	30	-35.0
50	5755	vf0	-8.4	-8.9	0.1	0.1	-5.6	30	-35.6
50	5800	vf0	-7.0	-5.0	0.2	0.3	-2.9	30	-32.9
50	5820	vf0	-9.7	-6.7	0.1	0.2	-5.0	30	-35.0
60	5760	vf0	-9.5	-9.9	0.1	0.1	-6.7	30	-36.7
60	5765	vf0	-6.9	-5.0	0.2	0.3	-2.8	30	-32.8
60	5815	vf0	-10.5	-7.5	0.1	0.2	-5.7	30	-35.7
80	5770	ve00	-10.9	-10.5	0.1	0.1	-7.7	30	-37.7
80	5800	ve00	-11.0	-8.2	0.1	0.2	-6.4	30	-36.4
80	5810	ve00	-11.4	-8.4	0.1	0.1	-6.6	30	-36.6