



Annex A

Output Power



Output Power for 10dBi gain PtoMP 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	21.6	19.4	145.5	87.5	23.7	26	-2.3
10	5800	vt0	21.9	21.2	156.0	130.9	24.6	26	-1.4
10	5840	vt0	20.6	19.7	113.5	93.3	23.2	26	-2.8
20	5740	vt0	17.9	17.2	61.4	52.0	20.5	26	-5.5
20	5800	vt0	22.1	21.1	160.7	128.8	24.6	26	-1.4
20	5835	vt0	18.0	16.5	62.5	44.2	20.3	26	-5.7
30	5745	vt0	14.1	14.1	25.8	25.9	17.1	26	-8.9
30	5800	vt0	21.0	20.3	126.5	107.6	23.7	26	-2.3
30	5830	vt0	14.4	15.3	27.2	33.7	17.8	26	-8.2
40	5750	vf0	13.1	13.4	20.3	21.9	16.3	26	-9.7
40	5800	vf0	20.7	18.2	116.7	66.2	22.6	26	-3.4
40	5825	vf0	16.3	14.8	42.7	29.9	18.6	26	-7.4
50	5755	vf0	13.7	13.6	23.2	22.9	16.6	26	-9.4
50	5800	vf0	19.6	17.2	92.0	52.5	21.6	26	-4.4
50	5820	vf0	16.5	14.8	44.9	30.2	18.8	26	-7.2
60	5760	vf0	11.0	10.8	12.6	11.9	13.9	26	-12.1
60	5800	vf0	19.8	17.5	95.9	56.5	21.8	26	-4.2
60	5815	vf0	12.9	12.9	19.3	19.3	15.9	26	-10.1
80	5770	ve00	10.5	10.5	11.3	11.3	13.5	26	-12.5
80	5810	ve00	8.8	8.6	7.5	7.3	11.7	26	-14.3



Output Power for 13dBi gain PtoMP 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	18.6	16.4	72.9	43.9	20.7	23	-2.3
10	5800	vt0	18.9	18.2	78.2	65.6	21.6	23	-1.4
10	5840	vt0	17.6	16.7	56.9	46.8	20.2	23	-2.8
20	5740	vt0	14.9	14.2	30.8	26.1	17.5	23	-5.5
20	5800	vt0	19.1	18.1	80.5	64.6	21.6	23	-1.4
20	5835	vt0	15.0	13.5	31.3	22.1	17.3	23	-5.7
30	5745	vt0	11.1	11.1	12.9	13.0	14.1	23	-8.9
30	5800	vt0	18.0	17.3	63.4	54.0	20.7	23	-2.3
30	5830	vt0	11.4	12.3	13.6	16.9	14.8	23	-8.2
40	5750	vf0	10.1	10.4	10.2	11.0	13.3	23	-9.7
40	5800	vf0	17.7	15.2	58.5	33.2	19.6	23	-3.4
40	5825	vf0	13.3	11.8	21.4	15.0	15.6	23	-7.4
50	5755	vf0	10.7	10.6	11.6	11.5	13.6	23	-9.4
50	5800	vf0	16.6	14.2	46.1	26.3	18.6	23	-4.4
50	5820	vf0	13.5	11.8	22.5	15.1	15.8	23	-7.2
60	5760	vf0	8.0	7.8	6.3	6.0	10.9	23	-12.1
60	5800	vf0	16.8	14.5	48.1	28.3	18.8	23	-4.2
60	5815	vf0	9.9	9.9	9.7	9.7	12.9	23	-10.1
80	5770	ve00	7.5	7.5	5.6	5.7	10.5	23	-12.5
80	5810	ve00	5.8	5.6	3.8	3.6	8.7	23	-14.3



Output Power for 16dBi 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	20	15.6	13.4	36.6	22.0	17.7	20	-2.3
10	5800	vt0	20	15.9	15.2	39.2	32.9	18.6	20	-1.4
10	5840	vt0	19	14.6	13.7	28.5	23.4	17.2	20	-2.8
20	5740	vt0	17	11.9	11.2	15.4	13.1	14.5	20	-5.5
20	5800	vt0	20	16.1	15.1	40.4	32.4	18.6	20	-1.4
20	5835	vt0	17	12.0	10.5	15.7	11.1	14.3	20	-5.7
30	5745	vt0	14	8.1	8.1	6.5	6.5	11.1	20	-8.9
30	5800	vt0	19	15.0	14.3	31.8	27.0	17.7	20	-2.3
30	5830	vt0	15	8.4	9.3	6.8	8.5	11.8	20	-8.2
40	5750	vf0	14	7.1	7.4	5.1	5.5	10.3	20	-9.7
40	5800	vf0	19	14.7	12.2	29.3	16.6	16.6	20	-3.4
40	5825	vf0	15	10.3	8.8	10.7	7.5	12.6	20	-7.4
50	5755	vf0	14	7.7	7.6	5.8	5.7	10.6	20	-9.4
50	5800	vf0	18	13.6	11.2	23.1	13.2	15.6	20	-4.4
50	5820	vf0	15	10.5	8.8	11.3	7.6	12.8	20	-7.2
60	5760	vf0	11	5.0	4.8	3.2	3.0	7.9	20	-12.1
60	5800	vf0	18	13.8	11.5	24.1	14.2	15.8	20	-4.2
60	5815	vf0	13	6.9	6.9	4.8	4.8	9.9	20	-10.1
80	5770	ve00	11	4.5	4.5	2.8	2.8	7.5	20	-12.5
80	5810	ve00	9	2.8	2.6	1.9	1.8	5.7	20	-14.3



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	14.6	12.4	29.0	17.5	16.7	19	-2.3
10	5800	vt0	14.9	14.2	31.1	26.1	17.6	19	-1.4
10	5840	vt0	13.6	12.7	22.6	18.6	16.2	19	-2.8
20	5740	vt0	10.9	10.2	12.2	10.4	13.5	19	-5.5
20	5800	vt0	15.1	14.1	32.1	25.7	17.6	19	-1.4
20	5835	vt0	11.0	9.5	12.5	8.8	13.3	19	-5.7
30	5745	vt0	7.1	7.1	5.1	5.2	10.1	19	-8.9
30	5800	vt0	14.0	13.3	25.2	21.5	16.7	19	-2.3
30	5830	vt0	7.4	8.3	5.4	6.7	10.8	19	-8.2
40	5750	vf0	6.1	6.4	4.1	4.4	9.3	19	-9.7
40	5800	vf0	13.7	11.2	23.3	13.2	15.6	19	-3.4
40	5825	vf0	9.3	7.8	8.5	6.0	11.6	19	-7.4
50	5755	vf0	6.7	6.6	4.6	4.6	9.6	19	-9.4
50	5800	vf0	12.6	10.2	18.4	10.5	14.6	19	-4.4
50	5820	vf0	9.5	7.8	9.0	6.0	11.8	19	-7.2
60	5760	vf0	4.0	3.8	2.5	2.4	6.9	19	-12.1
60	5800	vf0	12.8	10.5	19.1	11.3	14.8	19	-4.2
60	5815	vf0	5.9	5.9	3.8	3.8	8.9	19	-10.1
80	5770	ve00	3.5	3.5	2.2	2.3	6.5	19	-12.5
80	5810	ve00	1.8	1.6	1.5	1.5	4.7	19	-14.3



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	12.6	10.4	18.3	11.0	14.7	17	-2.3
10	5800	vt0	12.9	12.2	19.6	16.5	15.6	17	-1.4
10	5840	vt0	11.6	10.7	14.3	11.7	14.2	17	-2.8
20	5740	vt0	8.9	8.2	7.7	6.5	11.5	17	-5.5
20	5800	vt0	13.1	12.1	20.2	16.2	15.6	17	-1.4
20	5835	vt0	9.0	7.5	7.9	5.6	11.3	17	-5.7
30	5745	vt0	5.1	5.1	3.2	3.3	8.1	17	-8.9
30	5800	vt0	12.0	11.3	15.9	13.6	14.7	17	-2.3
30	5830	vt0	5.4	6.3	3.4	4.2	8.8	17	-8.2
40	5750	vf0	4.1	4.4	2.6	2.8	7.3	17	-9.7
40	5800	vf0	11.7	9.2	14.7	8.3	13.6	17	-3.4
40	5825	vf0	7.3	5.8	5.4	3.8	9.6	17	-7.4
50	5755	vf0	4.7	4.6	2.9	2.9	7.6	17	-9.4
50	5800	vf0	10.6	8.2	11.6	6.6	12.6	17	-4.4
50	5820	vf0	7.5	5.8	5.6	3.8	9.8	17	-7.2
60	5760	vf0	2.0	1.8	1.6	1.5	4.9	17	-12.1
60	5800	vf0	10.8	8.5	12.1	7.1	12.8	17	-4.2
60	5815	vf0	3.9	3.9	2.4	2.4	6.9	17	-10.1
80	5770	ve00	1.5	1.5	1.4	1.4	4.5	17	-12.5
80	5810	ve00	-0.2	-0.4	0.9	0.9	2.7	17	-14.3



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	11.6	9.4	14.6	8.7	13.7	16	-2.3
10	5800	vt0	11.9	11.2	15.6	13.1	14.6	16	-1.4
10	5840	vt0	10.6	9.7	11.4	9.3	13.2	16	-2.8
20	5740	vt0	7.9	7.2	6.1	5.2	10.5	16	-5.5
20	5800	vt0	12.1	11.1	16.1	12.9	14.6	16	-1.4
20	5835	vt0	8.0	6.5	6.3	4.4	10.3	16	-5.7
30	5745	vt0	4.1	4.1	2.6	2.6	7.1	16	-8.9
30	5800	vt0	11.0	10.3	12.6	10.8	13.7	16	-2.3
30	5830	vt0	4.4	5.3	2.7	3.4	7.8	16	-8.2
40	5750	vf0	3.1	3.4	2.0	2.2	6.3	16	-9.7
40	5800	vf0	10.7	8.2	11.7	6.6	12.6	16	-3.4
40	5825	vf0	6.3	4.8	4.3	3.0	8.6	16	-7.4
50	5755	vf0	3.7	3.6	2.3	2.3	6.6	16	-9.4
50	5800	vf0	9.6	7.2	9.2	5.2	11.6	16	-4.4
50	5820	vf0	6.5	4.8	4.5	3.0	8.8	16	-7.2
60	5760	vf0	1.0	0.8	1.3	1.2	3.9	16	-12.1
60	5800	vf0	9.8	7.5	9.6	5.6	11.8	16	-4.2
60	5815	vf0	2.9	2.9	1.9	1.9	5.9	16	-10.1
80	5770	ve00	0.5	0.5	1.1	1.1	3.5	16	-12.5
80	5810	ve00	-1.2	-1.4	0.8	0.7	1.7	16	-14.3



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	10.6	8.4	11.6	7.0	12.7	15	-2.3
10	5800	vt0	10.9	10.2	12.4	10.4	13.6	15	-1.4
10	5840	vt0	9.6	8.7	9.0	7.4	12.2	15	-2.8
20	5740	vt0	6.9	6.2	4.9	4.1	9.5	15	-5.5
20	5800	vt0	11.1	10.1	12.8	10.2	13.6	15	-1.4
20	5835	vt0	7.0	5.5	5.0	3.5	9.3	15	-5.7
30	5745	vt0	3.1	3.1	2.0	2.1	6.1	15	-8.9
30	5800	vt0	10.0	9.3	10.0	8.6	12.7	15	-2.3
30	5830	vt0	3.4	4.3	2.2	2.7	6.8	15	-8.2
40	5750	vf0	2.1	2.4	1.6	1.7	5.3	15	-9.7
40	5800	vf0	9.7	7.2	9.3	5.3	11.6	15	-3.4
40	5825	vf0	5.3	3.8	3.4	2.4	7.6	15	-7.4
50	5755	vf0	2.7	2.6	1.8	1.8	5.6	15	-9.4
50	5800	vf0	8.6	6.2	7.3	4.2	10.6	15	-4.4
50	5820	vf0	5.5	3.8	3.6	2.4	7.8	15	-7.2
60	5760	vf0	0.0	-0.2	1.0	0.9	2.9	15	-12.1
60	5800	vf0	8.8	6.5	7.6	4.5	10.8	15	-4.2
60	5815	vf0	1.9	1.9	1.5	1.5	4.9	15	-10.1
80	5770	ve00	-0.5	-0.5	0.9	0.9	2.5	15	-12.5
80	5810	ve00	-2.2	-2.4	0.6	0.6	0.7	15	-14.3



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	9.6	7.4	9.2	5.5	11.7	14	-2.3
10	5800	vt0	9.9	9.2	9.8	8.3	12.6	14	-1.4
10	5840	vt0	8.6	7.7	7.2	5.9	11.2	14	-2.8
20	5740	vt0	5.9	5.2	3.9	3.3	8.5	14	-5.5
20	5800	vt0	10.1	9.1	10.1	8.1	12.6	14	-1.4
20	5835	vt0	6.0	4.5	3.9	2.8	8.3	14	-5.7
30	5745	vt0	2.1	2.1	1.6	1.6	5.1	14	-8.9
30	5800	vt0	9.0	8.3	8.0	6.8	11.7	14	-2.3
30	5830	vt0	2.4	3.3	1.7	2.1	5.8	14	-8.2
40	5750	vf0	1.1	1.4	1.3	1.4	4.3	14	-9.7
40	5800	vf0	8.7	6.2	7.4	4.2	10.6	14	-3.4
40	5825	vf0	4.3	2.8	2.7	1.9	6.6	14	-7.4
50	5755	vf0	1.7	1.6	1.5	1.4	4.6	14	-9.4
50	5800	vf0	7.6	5.2	5.8	3.3	9.6	14	-4.4
50	5820	vf0	4.5	2.8	2.8	1.9	6.8	14	-7.2
60	5760	vf0	-1.0	-1.2	0.8	0.8	1.9	14	-12.1
60	5800	vf0	7.8	5.5	6.1	3.6	9.8	14	-4.2
60	5815	vf0	0.9	0.9	1.2	1.2	3.9	14	-10.1
80	5770	ve00	-1.5	-1.5	0.7	0.7	1.5	14	-12.5
80	5810	ve00	-3.2	-3.4	0.5	0.5	-0.3	14	-14.3



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	1.6	-0.6	1.5	0.9	3.7	6	-2.3
10	5800	vt0	1.9	1.2	1.6	1.3	4.6	6	-1.4
10	5840	vt0	0.6	-0.3	1.1	0.9	3.2	6	-2.8
20	5740	vt0	-2.1	-2.8	0.6	0.5	0.5	6	-5.5
20	5800	vt0	2.1	1.1	1.6	1.3	4.6	6	-1.4
20	5835	vt0	-2.0	-3.6	0.6	0.4	0.3	6	-5.7
30	5745	vt0	-5.9	-5.9	0.3	0.3	-2.9	6	-8.9
30	5800	vt0	1.0	0.3	1.3	1.1	3.7	6	-2.3
30	5830	vt0	-5.7	-4.7	0.3	0.3	-2.2	6	-8.2
40	5750	vf0	-6.9	-6.6	0.2	0.2	-3.7	6	-9.7
40	5800	vf0	0.7	-1.8	1.2	0.7	2.6	6	-3.4
40	5825	vf0	-3.7	-5.2	0.4	0.3	-1.4	6	-7.4
50	5755	vf0	-6.4	-6.4	0.2	0.2	-3.4	6	-9.4
50	5800	vf0	-0.4	-2.8	0.9	0.5	1.6	6	-4.4
50	5820	vf0	-3.5	-5.2	0.4	0.3	-1.2	6	-7.2
60	5760	vf0	-9.0	-9.2	0.1	0.1	-6.1	6	-12.1
60	5800	vf0	-0.2	-2.5	1.0	0.6	1.8	6	-4.2
60	5815	vf0	-7.2	-7.2	0.2	0.2	-4.1	6	-10.1
80	5770	ve00	-9.5	-9.5	0.1	0.1	-6.5	6	-12.5
80	5810	ve00	-11.2	-11.4	0.1	0.1	-8.3	6	-14.3



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	0.6	-1.6	1.1	0.7	2.6	5	-2.4
10	5800	vt0	0.9	0.2	1.2	1.0	3.6	5	-1.4
10	5840	vt0	-0.4	-1.3	0.9	0.7	2.2	5	-2.8
20	5740	vt0	-3.1	-3.8	0.5	0.4	-0.4	5	-5.4
20	5800	vt0	1.1	0.1	1.3	1.0	3.6	5	-1.4
20	5835	vt0	-3	-4.5	0.5	0.4	-0.7	5	-5.7
30	5745	vt0	-6.9	-6.9	0.2	0.2	-3.9	5	-8.9
30	5800	vt0	0	-0.7	1.0	0.9	2.7	5	-2.3
30	5830	vt0	-6.7	-5.7	0.2	0.3	-3.2	5	-8.2
40	5750	vf0	-7.9	-7.6	0.2	0.2	-4.7	5	-9.7
40	5800	vf0	-0.3	-2.8	0.9	0.5	1.6	5	-3.4
40	5825	vf0	-4.7	-6.2	0.3	0.2	-2.4	5	-7.4
50	5755	vf0	-7.4	-7.4	0.2	0.2	-4.4	5	-9.4
50	5800	vf0	-1.4	-3.8	0.7	0.4	0.6	5	-4.4
50	5820	vf0	-4.5	-6.2	0.4	0.2	-2.3	5	-7.3
60	5760	vf0	-10	-10.2	0.1	0.1	-7.1	5	-12.1
60	5800	vf0	-1.2	-3.5	0.8	0.4	0.8	5	-4.2
60	5815	vf0	-8.2	-8.1	0.2	0.2	-5.1	5	-10.1
80	5770	ve00	-10.5	-10.5	0.1	0.1	-7.5	5	-12.5
80	5810	ve00	-12.2	-12.4	0.1	0.1	-9.3	5	-14.3



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	-2.4	-4.6	0.6	0.3	-0.3	2	-2.3
10	5800	vt0	-2.1	-2.8	0.6	0.5	0.6	2	-1.4
10	5840	vt0	-3.5	-4.3	0.5	0.4	-0.8	2	-2.8
20	5740	vt0	-6.1	-6.8	0.2	0.2	-3.5	2	-5.5
20	5800	vt0	-1.9	-2.9	0.6	0.5	0.6	2	-1.4
20	5835	vt0	-6.0	-7.6	0.2	0.2	-3.7	2	-5.7
30	5745	vt0	-9.9	-9.9	0.1	0.1	-6.9	2	-8.9
30	5800	vt0	-3.0	-3.7	0.5	0.4	-0.3	2	-2.3
30	5830	vt0	-9.7	-8.7	0.1	0.1	-6.2	2	-8.2
40	5750	vf0	-10.9	-10.6	0.1	0.1	-7.7	2	-9.7
40	5800	vf0	-3.3	-5.8	0.5	0.3	-1.4	2	-3.4
40	5825	vf0	-7.7	-9.2	0.2	0.1	-5.4	2	-7.4
50	5755	vf0	-10.4	-10.4	0.1	0.1	-7.4	2	-9.4
50	5800	vf0	-4.4	-6.8	0.4	0.2	-2.4	2	-4.4
50	5820	vf0	-7.5	-9.2	0.2	0.1	-5.2	2	-7.2
60	5760	vf0	-13.0	-13.2	0.1	0.0	-10.1	2	-12.1
60	5800	vf0	-4.2	-6.5	0.4	0.2	-2.2	2	-4.2
60	5815	vf0	-11.2	-11.2	0.1	0.1	-8.1	2	-10.1
80	5770	ve00	-13.5	-13.5	0.0	0.0	-10.5	2	-12.5
80	5810	ve00	-15.2	-15.4	0.0	0.0	-12.3	2	-14.3