



Annex A

Output Power



Output Power for 10dBi PtoMP Antenna

Band Width	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Combined Output Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5160	vt0	5.5	4.3	3.5	2.7	8.0	26	-18.0
10	5200	vt0	9.7	12.1	9.3	16.2	14.1	26	-11.9
10	5245	vt0	13.3	15.1	21.4	32.4	17.3	26	-8.7
20	5165	vt0	1.4	1.9	1.4	1.5	4.6	26	-21.4
20	5200	vt0	10.2	10.6	10.6	11.5	13.4	26	-12.6
20	5240	vt0	10.5	10.3	11.2	10.7	13.4	26	-12.6
30	5170	vt0	1.6	0.4	1.4	1.1	4.1	26	-21.9
30	5200	vt0	12.7	12.8	18.6	19.1	15.8	26	-10.2
30	5235	vt0	12.2	13.2	16.5	20.9	15.7	26	-10.3
40	5175	vf0	3.6	4.5	2.3	2.8	7.1	26	-18.9
40	5200	vf0	10.6	11.8	11.5	15.1	14.3	26	-11.7
40	5230	vf0	11.9	13.5	15.5	22.4	15.8	26	-10.2

Output Power for 13dBi PtoMP Antenna

Band Width	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Combined Output Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5160	vt0	2.5	1.3	1.8	1.3	5.0	23	-18.0
10	5200	vt0	6.7	9.1	4.7	8.1	11.1	23	-11.9
10	5245	vt0	10.3	12.1	10.7	16.2	14.3	23	-8.7
20	5165	vt0	-1.6	-1.1	0.7	0.8	1.6	23	-21.4
20	5200	vt0	7.2	7.6	5.3	5.8	10.4	23	-12.6
20	5240	vt0	7.5	7.3	5.6	5.4	10.4	23	-12.6
30	5170	vt0	-1.4	-2.6	0.7	0.5	1.1	23	-21.9
30	5200	vt0	9.7	9.8	9.3	9.5	12.8	23	-10.2
30	5235	vt0	9.2	10.2	8.3	10.5	12.7	23	-10.3
40	5175	vf0	0.6	1.5	1.1	1.4	4.1	23	-18.9
40	5200	vf0	7.6	8.8	5.8	7.6	11.3	23	-11.7
40	5230	vf0	8.9	10.5	7.8	11.2	12.8	23	-10.2



Output Power for 16dBi PtoP Antenna

Band Width	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Combined Output Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5160	vt0	-0.5	-1.7	0.9	0.7	2.0	30	-28.0
10	5200	vt0	3.7	6.1	2.3	4.1	8.1	30	-21.9
10	5245	vt0	7.3	9.1	5.4	8.1	11.3	30	-18.7
20	5165	vt0	-4.6	-4.1	0.3	0.4	-1.4	30	-31.4
20	5200	vt0	4.2	4.6	2.7	2.9	7.4	30	-22.6
20	5240	vt0	4.5	4.3	2.8	2.7	7.4	30	-22.6
30	5170	vt0	-4.4	-5.6	0.4	0.3	-1.9	30	-31.9
30	5200	vt0	6.7	6.8	4.7	4.8	9.8	30	-20.2
30	5235	vt0	6.2	7.2	4.1	5.2	9.7	30	-20.3
40	5175	vf0	-2.4	-1.5	0.6	0.7	1.1	30	-28.9
40	5200	vf0	4.6	5.8	2.9	3.8	8.3	30	-21.7
40	5230	vf0	5.9	7.5	3.9	5.6	9.8	30	-20.2

Output Power for 17dBi PtoP Antenna

Band Width	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Combined Output Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5160	vt0	-1.5	-2.7	0.7	0.5	1.0	30	-29.0
10	5200	vt0	2.7	5.1	1.9	3.2	7.1	30	-22.9
10	5245	vt0	6.3	8.1	4.3	6.5	10.3	30	-19.7
20	5165	vt0	-5.6	-5.1	0.3	0.3	-2.4	30	-32.4
20	5200	vt0	3.2	3.6	2.1	2.3	6.4	30	-23.6
20	5240	vt0	3.5	3.3	2.2	2.1	6.4	30	-23.6
30	5170	vt0	-5.4	-6.6	0.3	0.2	-2.9	30	-32.9
30	5200	vt0	5.7	5.8	3.7	3.8	8.8	30	-21.2
30	5235	vt0	5.2	6.2	3.3	4.2	8.7	30	-21.3
40	5175	vf0	-3.4	-2.5	0.5	0.6	0.1	30	-29.9
40	5200	vf0	3.6	4.8	2.3	3.0	7.3	30	-22.7
40	5230	vf0	4.9	6.5	3.1	4.5	8.8	30	-21.2



Output Power for 19dBi PtoP Antenna

Band Width	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Combined Output Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5160	vt0	-3.5	-4.7	0.4	0.3	-1.0	30	-31.0
10	5200	vt0	0.7	3.1	1.2	2.0	5.1	30	-24.9
10	5245	vt0	4.3	6.1	2.7	4.1	8.3	30	-21.7
20	5165	vt0	-7.6	-7.1	0.2	0.2	-4.4	30	-34.4
20	5200	vt0	1.2	1.6	1.3	1.4	4.4	30	-25.6
20	5240	vt0	1.5	1.3	1.4	1.3	4.4	30	-25.6
30	5170	vt0	-7.4	-8.6	0.2	0.1	-4.9	30	-34.9
30	5200	vt0	3.7	3.8	2.3	2.4	6.8	30	-23.2
30	5235	vt0	3.2	4.2	2.1	2.6	6.7	30	-23.3
40	5175	vf0	-5.4	-4.5	0.3	0.4	-1.9	30	-31.9
40	5200	vf0	1.6	2.8	1.4	1.9	5.3	30	-24.7
40	5230	vf0	2.9	4.5	2.0	2.8	6.8	30	-23.2

Output Power for 20dBi PtoP Antenna

Band Width	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Combined Output Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5160	vt0	-4.5	-5.7	0.4	0.3	-2.0	30	-32.0
10	5200	vt0	-0.3	2.1	0.9	1.6	4.1	30	-25.9
10	5245	vt0	3.3	5.1	2.1	3.2	7.3	30	-22.7
20	5165	vt0	-8.6	-8.1	0.1	0.2	-5.4	30	-35.4
20	5200	vt0	0.2	0.6	1.1	1.1	3.4	30	-26.6
20	5240	vt0	0.5	0.3	1.1	1.1	3.4	30	-26.6
30	5170	vt0	-8.4	-9.6	0.1	0.1	-5.9	30	-35.9
30	5200	vt0	2.7	2.8	1.9	1.9	5.8	30	-24.2
30	5235	vt0	2.2	3.2	1.6	2.1	5.7	30	-24.3
40	5175	vf0	-6.4	-5.5	0.2	0.3	-2.9	30	-32.9
40	5200	vf0	0.6	1.8	1.1	1.5	4.3	30	-25.7
40	5230	vf0	1.9	3.5	1.6	2.2	5.8	30	-24.2



Output Power for 21dBi PtoP Antenna

Band Width	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Combined Output Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5160	vt0	-5.5	-6.7	0.3	0.2	-3.0	30	-33.0
10	5200	vt0	-1.3	1.1	0.7	1.3	3.1	30	-26.9
10	5245	vt0	2.3	4.1	1.7	2.6	6.3	30	-23.7
20	5165	vt0	-9.6	-9.1	0.1	0.1	-6.4	30	-36.4
20	5200	vt0	-0.8	-0.4	0.8	0.9	2.4	30	-27.6
20	5240	vt0	-0.5	-0.7	0.9	0.9	2.4	30	-27.6
30	5170	vt0	-9.4	-10.6	0.1	0.1	-6.9	30	-36.9
30	5200	vt0	1.7	1.8	1.5	1.5	4.8	30	-25.2
30	5235	vt0	1.2	2.2	1.3	1.7	4.7	30	-25.3
40	5175	vf0	-7.4	-6.5	0.2	0.2	-3.9	30	-33.9
40	5200	vf0	-0.4	0.8	0.9	1.2	3.3	30	-26.7
40	5230	vf0	0.9	2.5	1.2	1.8	4.8	30	-25.2

Output Power for 22dBi PtoP Antenna

Band Width	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Combined Output Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5160	vt0	-6.5	-7.7	0.2	0.2	-4.0	30	-34.0
10	5200	vt0	-2.3	0.1	0.6	1.0	2.1	30	-27.9
10	5245	vt0	1.3	3.1	1.3	2.0	5.3	30	-24.7
20	5165	vt0	-10.6	-10.1	0.1	0.1	-7.4	30	-37.4
20	5200	vt0	-1.8	-1.4	0.7	0.7	1.4	30	-28.6
20	5240	vt0	-1.5	-1.7	0.7	0.7	1.4	30	-28.6
30	5170	vt0	-10.4	-11.6	0.1	0.1	-7.9	30	-37.9
30	5200	vt0	0.7	0.8	1.2	1.2	3.8	30	-26.2
30	5235	vt0	0.2	1.2	1.0	1.3	3.7	30	-26.3
40	5175	vf0	-8.4	-7.5	0.1	0.2	-4.9	30	-34.9
40	5200	vf0	-1.4	-0.2	0.7	1.0	2.3	30	-27.7
40	5230	vf0	-0.1	1.5	1.0	1.4	3.8	30	-26.2



Output Power for 30dBi PtoP Antenna

Band Width	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Combined Output Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5160	vt0	-14.5	-15.7	0.0	0.0	-12.0	23	-35.0
10	5200	vt0	-10.3	-7.9	0.1	0.2	-5.9	23	-28.9
10	5245	vt0	-6.7	-4.9	0.2	0.3	-2.7	23	-25.7
20	5165	vt0	-18.6	-18.1	0.0	0.0	-15.4	23	-38.4
20	5200	vt0	-9.8	-9.4	0.1	0.1	-6.6	23	-29.6
20	5240	vt0	-9.5	-9.7	0.1	0.1	-6.6	23	-29.6
30	5170	vt0	-18.4	-19.6	0.0	0.0	-15.9	23	-38.9
30	5200	vt0	-7.3	-7.2	0.2	0.2	-4.2	23	-27.2
30	5235	vt0	-7.8	-6.8	0.2	0.2	-4.3	23	-27.3
40	5175	vf0	-16.4	-15.5	0.0	0.0	-12.9	23	-35.9
40	5200	vf0	-9.4	-8.2	0.1	0.2	-5.7	23	-28.7
40	5230	vf0	-8.1	-6.5	0.2	0.2	-4.2	23	-27.2

Output Power for 31dBi PtoP Antenna

Band Width	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Combined Output Power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5160	vt0	-15.5	-16.7	0.0	0.0	-13.0	22	-35.0
10	5200	vt0	-11.3	-8.9	0.1	0.1	-6.9	22	-28.9
10	5245	vt0	-7.7	-5.9	0.2	0.3	-3.7	22	-25.7
20	5165	vt0	-19.6	-19.1	0.0	0.0	-16.4	22	-38.4
20	5200	vt0	-10.8	-10.4	0.1	0.1	-7.6	22	-29.6
20	5240	vt0	-10.5	-10.7	0.1	0.1	-7.6	22	-29.6
30	5170	vt0	-19.4	-20.6	0.0	0.0	-16.9	22	-38.9
30	5200	vt0	-8.3	-8.2	0.1	0.2	-5.2	22	-27.2
30	5235	vt0	-8.8	-7.8	0.1	0.2	-5.3	22	-27.3
40	5175	vf0	-17.4	-16.5	0.0	0.0	-13.9	22	-35.9
40	5200	vf0	-10.4	-9.2	0.1	0.1	-6.7	22	-28.7
40	5230	vf0	-9.1	-7.5	0.1	0.2	-5.2	22	-27.2



Output Power for 31dBi PtoP Antenna

Band Width	Frequency	Data Rate	J3 Level	J4 Level	J3 Level	J4 Level	Combined output power	Limit	Margin
MHz	MHz		dBm	dBm	mW	mW	dBm	dBm	dB
10	5160	vt0	-18.5	-19.7	0.0	0.0	-16.0	19	-35.0
10	5200	vt0	-14.3	-11.9	0.0	0.1	-9.9	19	-28.9
10	5245	vt0	-10.7	-8.9	0.1	0.1	-6.7	19	-25.7
20	5165	vt0	-22.6	-22.1	0.0	0.0	-19.4	19	-38.4
20	5200	vt0	-13.8	-13.4	0.0	0.0	-10.6	19	-29.6
20	5240	vt0	-13.5	-13.7	0.0	0.0	-10.6	19	-29.6
30	5170	vt0	-22.4	-23.6	0.0	0.0	-19.9	19	-38.9
30	5200	vt0	-11.3	-11.2	0.1	0.1	-8.2	19	-27.2
30	5235	vt0	-11.8	-10.8	0.1	0.1	-8.3	19	-27.3
40	5175	vf0	-20.4	-19.5	0.0	0.0	-16.9	19	-35.9
40	5200	vf0	-13.4	-12.2	0.0	0.1	-9.7	19	-28.7
40	5230	vf0	-12.1	-10.5	0.1	0.1	-8.2	19	-27.2