



Sunol Sciences Corporation

Model JB3 Typical E-Field Antenna Factor

FREQ (MHz)	AFE (dB)	Gain (dBi)	FREQ (MHz)	AFE (dB)	Gain (dBi)	FREQ (MHz)	AFE (dB)	Gain (dBi)
30	20.9	-21.2	205	11.9	4.6	380	14.9	6.9
35	17.5	-16.3	210	10.6	6.1	385	15.0	7.0
40	13.8	-11.6	215	10.7	6.2	390	15.1	6.9
45	10.5	-7.2	220	10.8	6.3	395	15.3	6.9
50	8.1	-3.9	225	10.9	6.4	400	15.4	6.9
55	7.5	-2.4	230	11.0	6.4	405	15.5	6.8
60	7.6	-1.8	235	11.3	6.3	410	15.8	6.7
65	8.0	-1.5	240	11.6	6.2	415	16.1	6.5
70	8.3	-1.1	245	11.8	6.3	420	16.6	6.1
75	8.3	-0.5	250	11.8	6.4	425	16.9	5.9
80	8.1	0.2	255	11.8	6.6	430	16.9	6.0
85	7.9	1.0	260	12.0	6.5	435	16.9	6.1
90	7.9	1.5	265	12.6	6.1	440	16.8	6.3
95	8.5	1.3	270	13.2	5.6	445	16.7	6.5
100	9.6	0.6	275	13.5	5.5	450	16.6	6.7
105	11.0	-0.4	280	13.7	5.5	455	16.6	6.8
110	12.4	-1.3	285	13.7	5.6	460	16.8	6.7
115	13.3	-1.8	290	13.6	5.9	465	17.3	6.3
120	13.8	-2.0	295	13.5	6.1	470	17.5	6.2
125	14.0	-1.8	300	13.5	6.2	475	17.7	6.0
130	14.0	-1.5	305	13.6	6.4	480	18.0	5.8
135	13.7	-0.9	310	13.7	6.4	485	18.1	5.9
140	13.4	-0.3	315	13.9	6.3	490	18.0	6.0
145	13.1	0.4	320	14.1	6.2	495	17.8	6.3
150	12.7	1.0	325	14.1	6.3	500	17.7	6.5
155	12.4	1.6	330	14.1	6.5	505	17.7	6.6
160	12.3	2.0	335	14.1	6.7	510	17.8	6.6
165	12.1	2.4	340	14.1	6.8	515	17.9	6.5
170	12.0	2.9	345	14.3	6.7	520	18.1	6.4
175	11.8	3.3	350	14.6	6.5	525	18.3	6.4
180	11.6	3.8	355	15.0	6.2	530	18.3	6.4
185	11.5	4.1	360	15.1	6.3	535	18.4	6.4
190	11.5	4.3	365	15.1	6.4	540	18.3	6.6
195	11.7	4.4	370	15.1	6.5	545	18.4	6.6
200	12.2	4.1	375	15.1	6.7	550	18.6	6.5

FREQ (MHz)	AFE (dB)	Gain (dBi)	FREQ (MHz)	AFE (dB)	Gain (dBi)	FREQ (MHz)	AFE (dB)	Gain (dBi)
555	18.8	6.3	800	20.9	7.4	1045	23.7	7.0
560	18.8	6.4	805	20.9	7.4	1050	23.8	6.9
565	18.8	6.5	810	20.9	7.5	1055	23.7	7.0
570	18.9	6.5	815	21.1	7.4	1060	23.8	6.9
575	18.8	6.6	820	21.4	7.1	1065	24.0	6.7
580	18.9	6.6	825	21.7	6.9	1070	24.0	6.8
585	18.9	6.7	830	21.9	6.7	1075	23.8	7.0
590	18.7	7.0	835	22.0	6.6	1080	23.7	7.2
595	18.7	7.1	840	22.0	6.7	1085	23.6	7.3
600	18.8	7.0	845	22.0	6.8	1090	23.6	7.4
605	19.0	6.9	850	21.9	6.9	1095	23.6	7.4
610	19.0	7.0	855	22.0	6.9	1100	23.7	7.3
615	19.1	6.9	860	21.9	7.0	1105	23.8	7.3
620	19.2	6.8	865	21.9	7.1	1110	23.8	7.3
625	19.3	6.9	870	21.8	7.2	1115	24.0	7.2
630	19.5	6.8	875	21.8	7.2	1120	24.1	7.1
635	19.7	6.6	880	21.9	7.2	1125	24.4	6.9
640	19.7	6.6	885	21.9	7.2	1130	24.6	6.7
645	19.7	6.8	890	22.0	7.2	1135	24.6	6.7
650	19.7	6.8	895	22.0	7.3	1140	24.6	6.8
655	19.8	6.8	900	22.0	7.3	1145	24.6	6.8
660	19.8	6.9	905	22.1	7.3	1150	24.6	6.9
665	19.9	6.8	910	22.2	7.2	1155	24.5	6.9
670	20.1	6.7	915	22.3	7.1	1160	24.6	6.9
675	20.1	6.7	920	22.3	7.2	1165	24.6	7.0
680	20.0	6.9	925	22.0	7.5	1170	24.7	6.9
685	19.9	7.1	930	21.9	7.7	1175	24.7	6.9
690	19.9	7.1	935	21.9	7.7	1180	24.9	6.8
695	20.0	7.0	940	22.1	7.6	1185	24.9	6.8
700	20.1	7.0	945	22.2	7.5	1190	25.0	6.7
705	20.1	7.1	950	22.4	7.4	1195	25.0	6.8
710	20.2	7.1	955	22.5	7.4	1200	25.1	6.8
715	20.1	7.2	960	22.4	7.4	1205	25.2	6.7
720	20.1	7.3	965	22.4	7.5	1210	25.0	6.9
725	20.1	7.3	970	22.5	7.5	1215	25.0	7.0
730	20.2	7.3	975	22.6	7.5	1220	25.0	7.0
735	20.4	7.2	980	22.9	7.1	1225	25.0	7.0
740	20.7	6.9	985	23.3	6.8	1230	25.0	7.0
745	21.0	6.7	990	23.4	6.7	1235	25.0	7.1
750	21.0	6.7	995	23.3	6.9	1240	25.1	7.0
755	20.9	6.9	1000	23.0	7.2	1245	25.3	6.9
760	20.8	7.1	1005	22.8	7.5	1250	25.4	6.8
765	21.0	6.9	1010	22.7	7.6	1255	25.4	6.8
770	21.1	6.8	1015	22.7	7.6	1260	25.4	6.8
775	21.2	6.8	1020	22.8	7.6	1265	25.5	6.8
780	21.3	6.8	1025	23.0	7.4	1270	25.6	6.7
785	21.2	6.9	1030	23.2	7.3	1275	25.7	6.7
790	21.1	7.1	1035	23.4	7.1	1280	25.7	6.7
795	21.0	7.3	1040	23.5	7.1	1285	25.7	6.7

FREQ (MHz)	AFE (dB)	Gain (dBi)	FREQ (MHz)	AFE (dB)	Gain (dBi)	FREQ (MHz)	AFE (dB)	Gain (dBi)
1290	25.8	6.6	1535	26.7	7.2	1780	28.3	6.9
1295	25.9	6.5	1540	26.8	7.2	1785	28.3	6.9
1300	25.9	6.6	1545	26.9	7.1	1790	28.4	6.9
1305	25.9	6.6	1550	27.1	7.0	1795	28.4	6.9
1310	25.9	6.6	1555	27.2	6.8	1800	28.6	6.8
1315	26.0	6.6	1560	27.3	6.8	1805	28.8	6.6
1320	25.9	6.7	1565	27.4	6.7	1810	28.9	6.4
1325	25.9	6.8	1570	27.6	6.6	1815	28.9	6.5
1330	25.9	6.8	1575	27.7	6.5	1820	28.9	6.6
1335	25.8	6.9	1580	27.7	6.5	1825	28.8	6.7
1340	25.8	7.0	1585	27.7	6.6	1830	28.6	6.8
1345	25.8	7.0	1590	27.7	6.6	1835	28.4	7.1
1350	25.9	7.0	1595	27.7	6.6	1840	28.2	7.4
1355	26.0	6.9	1600	27.8	6.5	1845	28.1	7.4
1360	26.1	6.8	1605	27.7	6.7	1850	28.2	7.3
1365	26.2	6.7	1610	27.6	6.7	1855	28.2	7.4
1370	26.2	6.7	1615	27.7	6.7	1860	28.2	7.4
1375	26.2	6.8	1620	27.7	6.7	1865	28.3	7.4
1380	26.3	6.7	1625	27.9	6.6	1870	28.4	7.3
1385	26.4	6.6	1630	27.9	6.6	1875	28.6	7.1
1390	26.4	6.7	1635	28.0	6.5	1880	28.8	6.9
1395	26.4	6.8	1640	28.1	6.4	1885	29.0	6.8
1400	26.3	6.8	1645	27.8	6.7	1890	29.0	6.8
1405	26.2	7.0	1650	27.7	6.9	1895	29.1	6.7
1410	26.1	7.1	1655	27.6	7.0	1900	29.2	6.6
1415	26.2	7.1	1660	27.3	7.3	1905	29.5	6.3
1420	26.3	7.0	1665	27.1	7.5	1910	29.4	6.4
1425	26.3	7.0	1670	27.1	7.5	1915	29.3	6.6
1430	26.2	7.2	1675	27.3	7.4	1920	29.1	6.8
1435	26.2	7.2	1680	27.5	7.2	1925	29.0	6.9
1440	26.1	7.3	1685	27.8	7.0	1930	29.0	7.0
1445	26.3	7.2	1690	27.9	6.9	1935	29.0	7.0
1450	26.5	7.0	1695	27.9	6.9	1940	29.3	6.7
1455	26.6	6.9	1700	27.9	7.0	1945	29.3	6.7
1460	26.7	6.8	1705	28.0	6.8	1950	29.4	6.6
1465	26.8	6.8	1710	28.0	6.9	1955	29.4	6.7
1470	26.7	6.9	1715	28.2	6.8	1960	29.5	6.6
1475	26.6	7.0	1720	28.2	6.8	1965	29.5	6.6
1480	26.5	7.1	1725	28.1	6.8	1970	29.6	6.6
1485	26.6	7.1	1730	28.2	6.8	1975	29.5	6.7
1490	26.7	7.0	1735	28.1	6.9	1980	29.5	6.7
1495	26.8	7.0	1740	28.0	7.1	1985	29.5	6.7
1500	26.8	6.9	1745	27.9	7.2	1990	29.4	6.8
1505	26.8	7.0	1750	27.8	7.3	1995	29.3	6.9
1510	26.9	6.9	1755	28.0	7.2	2000	29.3	7.0
1515	26.7	7.1	1760	28.1	7.1	2005	29.7	6.6
1520	26.7	7.2	1765	28.2	6.9	2010	29.8	6.5
1525	26.7	7.2	1770	28.3	6.9	2015	29.9	6.4
1530	26.8	7.1	1775	28.3	6.9	2020	30.0	6.4

FREQ (MHz)	AFE (dB)	Gain (dBi)	FREQ (MHz)	AFE (dB)	Gain (dBi)	FREQ (MHz)	AFE (dB)	Gain (dBi)
2025	30.1	6.3	2270	30.8	6.6	2515	31.7	6.5
2030	29.9	6.5	2275	30.7	6.7	2520	31.6	6.7
2035	29.9	6.5	2280	30.6	6.8	2525	31.3	7.0
2040	29.9	6.5	2285	30.5	6.9	2530	31.3	7.0
2045	29.7	6.7	2290	30.3	7.1	2535	31.4	6.9
2050	29.6	6.9	2295	30.5	7.0	2540	31.6	6.8
2055	29.7	6.8	2300	30.6	6.8	2545	31.6	6.7
2060	29.8	6.7	2305	30.9	6.6	2550	31.5	6.8
2065	29.7	6.9	2310	31.0	6.5	2555	31.3	7.0
2070	29.7	6.8	2315	31.0	6.5	2560	31.4	7.0
2075	29.6	7.0	2320	30.8	6.8	2565	31.4	7.0
2080	29.5	7.1	2325	31.0	6.6	2570	31.6	6.8
2085	29.4	7.2	2330	31.1	6.4	2575	31.6	6.8
2090	29.3	7.3	2335	31.3	6.3	2580	31.7	6.8
2095	29.3	7.4	2340	31.4	6.2	2585	31.8	6.6
2100	29.3	7.3	2345	31.3	6.4	2590	32.0	6.5
2105	29.4	7.3	2350	31.1	6.6	2595	32.0	6.6
2110	29.5	7.2	2355	31.0	6.6	2600	32.0	6.5
2115	29.6	7.2	2360	31.0	6.7	2605	32.0	6.5
2120	29.7	7.0	2365	31.0	6.7	2610	32.0	6.6
2125	30.0	6.8	2370	31.0	6.7	2615	32.0	6.5
2130	30.3	6.5	2375	31.1	6.6	2620	32.1	6.5
2135	30.4	6.4	2380	31.3	6.5	2625	32.1	6.6
2140	30.1	6.8	2385	31.3	6.4	2630	32.1	6.5
2145	29.9	7.0	2390	31.3	6.5	2635	32.2	6.5
2150	29.8	7.0	2395	31.5	6.4	2640	32.4	6.3
2155	29.9	7.0	2400	31.4	6.4	2645	32.2	6.4
2160	30.0	6.9	2405	31.3	6.6	2650	32.2	6.5
2165	30.3	6.7	2410	31.3	6.6	2655	32.3	6.5
2170	30.5	6.5	2415	31.3	6.6	2660	32.3	6.4
2175	30.5	6.5	2420	31.2	6.7	2665	32.3	6.5
2180	30.4	6.6	2425	31.4	6.6	2670	32.3	6.5
2185	30.6	6.4	2430	31.3	6.6	2675	32.3	6.4
2190	30.6	6.4	2435	31.3	6.7	2680	32.4	6.4
2195	30.6	6.5	2440	31.1	6.9	2685	32.4	6.4
2200	30.5	6.6	2445	31.0	7.0	2690	32.5	6.4
2205	30.5	6.6	2450	31.1	6.9	2695	32.4	6.5
2210	30.5	6.6	2455	31.2	6.9	2700	32.5	6.4
2215	30.4	6.8	2460	31.1	6.9	2705	32.3	6.5
2220	30.2	7.0	2465	31.2	6.9	2710	32.4	6.5
2225	29.9	7.2	2470	31.1	6.9	2715	32.2	6.7
2230	29.9	7.3	2475	31.4	6.7	2720	32.3	6.6
2235	30.1	7.1	2480	31.5	6.7	2725	32.5	6.5
2240	30.5	6.8	2485	31.5	6.6	2730	32.7	6.3
2245	30.7	6.5	2490	31.5	6.7	2735	32.5	6.5
2250	30.9	6.4	2495	31.6	6.6	2740	32.6	6.4
2255	30.9	6.4	2500	31.7	6.5	2745	32.5	6.5
2260	30.9	6.4	2505	31.7	6.5	2750	32.9	6.2
2265	30.8	6.5	2510	31.8	6.5	2755	32.9	6.1

FREQ (MHz)	AFE (dB)	Gain (dBi)
2760	32.8	6.2
2765	32.8	6.3
2770	33.0	6.1
2775	32.8	6.3
2780	33.0	6.1
2785	33.0	6.1
2790	33.0	6.1
2795	32.8	6.3
2800	32.8	6.3
2805	32.7	6.5
2810	32.9	6.3
2815	32.8	6.4
2820	32.9	6.3
2825	32.7	6.5
2830	32.7	6.6
2835	33.0	6.3
2840	33.3	6.0
2845	33.3	6.0
2850	33.3	6.0
2855	33.5	5.9
2860	33.5	5.8
2865	33.5	5.9
2870	33.5	5.9
2875	33.5	5.9
2880	33.4	6.0
2885	33.3	6.2
2890	33.2	6.2
2895	33.2	6.3
2900	33.4	6.1
2905	33.2	6.3
2910	33.2	6.3
2915	33.2	6.3
2920	33.3	6.3
2925	33.3	6.2
2930	33.3	6.2
2935	33.4	6.2
2940	33.4	6.2
2945	33.4	6.2
2950	33.4	6.2
2955	33.5	6.2
2960	33.5	6.2
2965	33.5	6.2
2970	33.5	6.2
2975	33.5	6.2
2980	33.6	6.2
2985	33.6	6.2
2990	33.6	6.1
2995	33.6	6.2
3000	33.6	6.2