

Antenna Test Lab Co. Summary

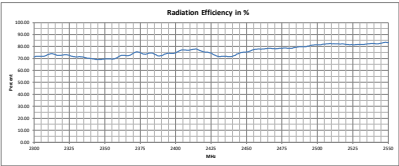
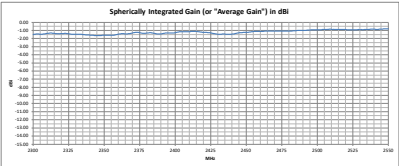
www.AntennaTestLab.com

Test Date	Friday, January 27, 2023
Tested By:	Glenn Robb (919) 200-0292 Info@AntennaTestLab.com
Sample Description	Embedded Microstrip Antenna 3M/Scott P/N 200764

Axis	Antenna Under Test Orientation Notes (See Coordinate Diagram Tab And Separate Setup Photos)
+Z Axis is Theta= 0 & Phi=any	
-Z Axis is Theta= 180 & Phi=any	Axis of feed line
+X axis is Theta=90 & Phi=0	
-X axis is Theta=90 & Phi=180	
+Y axis is Theta=90 & Phi=90	
-Y axis is Theta=90 & Phi=270	
Other Coordinate Notes, 3-Axis Cuts in Spherical Coordinates ...	
XZ Cut (Turntable) is Theta=0-360 & Phi=0, or Theta=0-180 & Phi=0 then Theta=180-0 & Phi=180	
YZ Cut is Theta=0-360 & Phi=90, or Theta=0-180 & Phi=90 then Theta=180-0 & Phi=270	
XY Cut is Theta=90 & Phi=0-360	

Notes And Observations
Customers may download 3-Dimensional pattern visualization software (use on Theta-Ring.TXT file) from
http://antennatestlab.com/antenna-education-tutorials/plotting

Frequency [MHz]	Integrated Spherical Gain [dBi]	Estimated Radiation Efficiency [%]
1.600	-1.57	72.29
1.605	-1.57	72.30
1.610	-1.57	72.31
1.615	-1.57	72.32
1.620	-1.57	72.33
1.625	-1.57	72.34
1.630	-1.57	72.35
1.635	-1.57	72.36
1.640	-1.57	72.37
1.645	-1.57	72.38
1.650	-1.57	72.39
1.655	-1.57	72.40
1.660	-1.57	72.41
1.665	-1.57	72.42
1.670	-1.57	72.43
1.675	-1.57	72.44
1.680	-1.57	72.45
1.685	-1.57	72.46
1.690	-1.57	72.47
1.695	-1.57	72.48
1.700	-1.57	72.49
1.705	-1.57	72.50
1.710	-1.57	72.51
1.715	-1.57	72.52
1.720	-1.57	72.53
1.725	-1.57	72.54
1.730	-1.57	72.55
1.735	-1.57	72.56
1.740	-1.57	72.57
1.745	-1.57	72.58
1.750	-1.57	72.59
1.755	-1.57	72.60
1.760	-1.57	72.61
1.765	-1.57	72.62
1.770	-1.57	72.63
1.775	-1.57	72.64
1.780	-1.57	72.65
1.785	-1.57	72.66
1.790	-1.57	72.67
1.795	-1.57	72.68
1.800	-1.57	72.69
1.805	-1.57	72.70
1.810	-1.57	72.71
1.815	-1.57	72.72
1.820	-1.57	72.73
1.825	-1.57	72.74
1.830	-1.57	72.75
1.835	-1.57	72.76
1.840	-1.57	72.77
1.845	-1.57	72.78
1.850	-1.57	72.79
1.855	-1.57	72.80
1.860	-1.57	72.81
1.865	-1.57	72.82
1.870	-1.57	72.83
1.875	-1.57	72.84
1.880	-1.57	72.85
1.885	-1.57	72.86
1.890	-1.57	72.87
1.895	-1.57	72.88
1.900	-1.57	72.89
1.905	-1.57	72.90
1.910	-1.57	72.91
1.915	-1.57	72.92
1.920	-1.57	72.93
1.925	-1.57	72.94
1.930	-1.57	72.95
1.935	-1.57	72.96
1.940	-1.57	72.97
1.945	-1.57	72.98
1.950	-1.57	72.99
1.955	-1.57	73.00
1.960	-1.57	73.01
1.965	-1.57	73.02
1.970	-1.57	73.03
1.975	-1.57	73.04
1.980	-1.57	73.05
1.985	-1.57	73.06
1.990	-1.57	73.07
1.995	-1.57	73.08
2.000	-1.57	73.09
2.005	-1.57	73.10
2.010	-1.57	73.11
2.015	-1.57	73.12
2.020	-1.57	73.13
2.025	-1.57	73.14
2.030	-1.57	73.15
2.035	-1.57	73.16
2.040	-1.57	73.17
2.045	-1.57	73.18
2.050	-1.57	73.19
2.055	-1.57	73.20
2.060	-1.57	73.21
2.065	-1.57	73.22
2.070	-1.57	73.23
2.075	-1.57	73.24
2.080	-1.57	73.25
2.085	-1.57	73.26
2.090	-1.57	73.27
2.095	-1.57	73.28
2.100	-1.57	73.29
2.105	-1.57	73.30
2.110	-1.57	73.31
2.115	-1.57	73.32
2.120	-1.57	73.33
2.125	-1.57	73.34
2.130	-1.57	73.35
2.135	-1.57	73.36
2.140	-1.57	73.37
2.145	-1.57	73.38
2.150	-1.57	73.39
2.155	-1.57	73.40
2.160	-1.57	73.41
2.165	-1.57	73.42
2.170	-1.57	73.43
2.175	-1.57	73.44
2.180	-1.57	73.45
2.185	-1.57	73.46
2.190	-1.57	73.47
2.195	-1.57	73.48
2.200	-1.57	73.49
2.205	-1.57	73.50
2.210	-1.57	73.51
2.215	-1.57	73.52
2.220	-1.57	73.53
2.225	-1.57	73.54
2.230	-1.57	73.55
2.235	-1.57	73.56
2.240	-1.57	73.57
2.245	-1.57	73.58
2.250	-1.57	73.59
2.255	-1.57	73.60
2.260	-1.57	73.61
2.265	-1.57	73.62
2.270	-1.57	73.63
2.275	-1.57	73.64
2.280	-1.57	73.65
2.285	-1.57	73.66
2.290	-1.57	73.67
2.295	-1.57	73.68
2.300	-1.57	73.69
2.305	-1.57	73.70
2.310	-1.57	73.71
2.315	-1.57	73.72
2.320	-1.57	73.73
2.325	-1.57	73.74
2.330	-1.57	73.75
2.335	-1.57	73.76
2.340	-1.57	73.77
2.345	-1.57	73.78
2.350	-1.57	73.79
2.355	-1.57	73.80
2.360	-1.57	73.81
2.365	-1.57	73.82
2.370	-1.57	73.83
2.375	-1.57	73.84
2.380	-1.57	73.85
2.385	-1.57	73.86
2.390	-1.57	73.87
2.395	-1.57	73.88
2.400	-1.57	73.89
2.405	-1.57	73.90
2.410	-1.57	73.91
2.415	-1.57	73.92
2.420	-1.57	73.93
2.425	-1.57	73.94
2.430	-1.57	73.95
2.435	-1.57	73.96
2.440	-1.57	73.97
2.445	-1.57	73.98
2.450	-1.57	73.99
2.455	-1.57	74.00
2.460	-1.57	74.01
2.465	-1.57	74.02
2.470	-1.57	74.03
2.475	-1.57	74.04
2.480	-1.57	74.05
2.485	-1.57	74.06
2.490	-1.57	74.07
2.495	-1.57	74.08
2.500	-1.57	74.09
2.505	-1.57	74.10
2.510	-1.57	74.11
2.515	-1.57	74.12
2.520	-1.57	74.13
2.525	-1.57	74.14
2.530	-1.57	74.15
2.535	-1.57	74.16
2.540	-1.57	74.17
2.545	-1.57	74.18
2.550	-1.57	74.19
2.555	-1.57	74.20
2.560	-1.57	74.21
2.565	-1.57	74.22
2.570	-1.57	74.23
2.575	-1.57	74.24
2.580	-1.57	74.25
2.585	-1.57	74.26
2.590	-1.57	74.27
2.595	-1.57	74.28
2.600	-1.57	74.29
2.605	-1.57	74.30
2.610	-1.57	74.31
2.615	-1.57	74.32
2.620	-1.57	74.33
2.625	-1.57	74.34
2.630	-1.57	74.35
2.635	-1.57	74.36
2.640	-1.57	74.37
2.645	-1.57	74.38
2.650	-1.57	74.39
2.655	-1.57	74.40
2.660	-1.57	74.41
2.665	-1.57	74.42
2.670	-1.57	74.43
2.675	-1.57	74.44
2.680	-1.57	74.45
2.685	-1.57	74.46
2.690	-1.57	74.47
2.695	-1.57	74.48
2.700	-1.57	74.49
2.705	-1.57	74.50
2.710	-1.57	74.51
2.715	-1.57	74.52
2.720	-1.57	74.53
2.725	-1.57	74.54
2.730	-1.57	74.55
2.735	-1.57	74.56
2.740	-1.57	74.57
2.745	-1.57	74.58
2.750	-1.57	74.59
2.755	-1.57	74.60
2.760	-1.57	74.61
2.765	-1.57	74.62
2.770	-1.57	74.63
2.775	-1.57	74.64
2.780	-1.57	74.65
2.785	-1.57	74.66
2.790	-1.57	74.67
2.795	-1.57	74.68
2.800	-1.57	74.69
2.805	-1.57	74.70
2.810	-1.57	74.71
2.815	-1.57	74.72
2.820	-1.57	74.73
2.825	-1.57	74.74
2.830	-1.57	74.75
2.835	-1.57	74.76
2.840	-1.57	74.77
2.845	-1.57	74.78
2.850	-1.57	74.79
2.855	-1.57	74.80
2.860	-1.57	74.81
2.865	-1.57	74.82
2.870	-1.57	74.83
2.875	-1.57	74.84
2.880	-1.57	74.85
2.885	-1.57	74.86
2.890	-1.57	74.87
2.895	-1.57	74.88
2.900	-1.57	74.89
2.905	-1.57	74.90
2.910	-1.57	74.91
2.915	-1.57	74.92
2.920	-1.57	74.93
2.925	-1.57	74.94
2.930	-1.57	74.95
2.935	-1.57	74.96
2.940	-1.57	74.97
2.945	-1.57	74.98
2.950	-1.57	74.99
2.955	-1.57	75.00
2.960	-1.57	75.01
2.965	-1.57	75.02
2.970	-1.57	75.03
2.975	-1.57	75.04
2.980	-1.57	75.05
2.985	-1.57	75.06
2.990	-1.57	75.07
2.995	-1.57	75.08
3.000	-1.57	75.09



Frequency (MHz)	Peak Gain (From Highest Direction) in dB
1700	1.0
1701	1.0
1702	1.0
1703	1.0
1704	1.0
1705	1.0
1706	1.0
1707	1.0
1708	1.0
1709	1.0
1710	1.0
1711	1.0
1712	1.0
1713	1.0
1714	1.0
1715	1.0
1716	1.0
1717	1.0
1718	1.0
1719	1.0
1720	1.0
1721	1.0
1722	1.0
1723	1.0
1724	1.0
1725	1.0
1726	1.0
1727	1.0
1728	1.0
1729	1.0
1730	1.0
1731	1.0
1732	1.0
1733	1.0
1734	1.0
1735	1.0
1736	1.0
1737	1.0
1738	1.0
1739	1.0
1740	1.0
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1742	1.0
1743	1.0
1744	1.0
1745	1.0
1746	1.0
1747	1.0
1748	1.0
1749	1.0
1750	1.0
1751	1.0
1752	1.0
1753	1.0
1754	1.0
1755	1.0
1756	1.0
1757	1.0
1758	1.0
1759	1.0
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1761	1.0
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1770	1.0
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1772	1.0
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1777	1.0
1778	1.0
1779	1.0
1780	1.0
1781	1.0
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1784	1.0
1785	1.0
1786	1.0
1787	1.0
1788	1.0
1789	1.0
1790	1.0
1791	1.0
1792	1.0
1793	1.0
1794	1.0
1795	1.0
1796	1.0
1797	1.0
1798	1.0
1799	1.0
1800	1.0
1801	1.0
1802	1.0
1803	1.0
1804	1.0
1805	1.0
1806	1.0
1807	1.0
1808	1.0
1809	1.0
1810	1.0
1811	1.0
1812	1.0
1813	1.0
1814	1.0
1815	1.0
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1817	1.0
1818	1.0
1819	1.0
1820	1.0
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1997	1.0
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1999	1.0
2000	1.0

