

GSM/GPS/GLONASS/3G/LTE Passive Antenna

MODEL: TH-82



1.. GENERAL DESCRIPTION

Model No	P/N
TH-82	TH82-SMA(M)

Below is a table summarizing the antenna design specification.

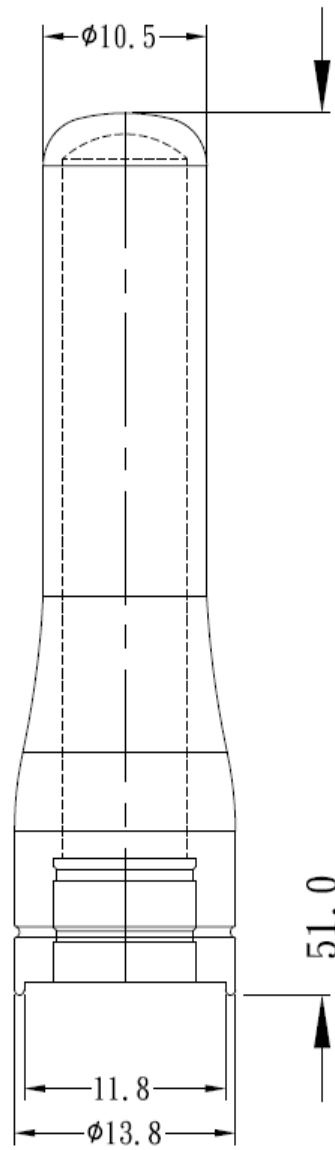
1.1 Electrical Properties

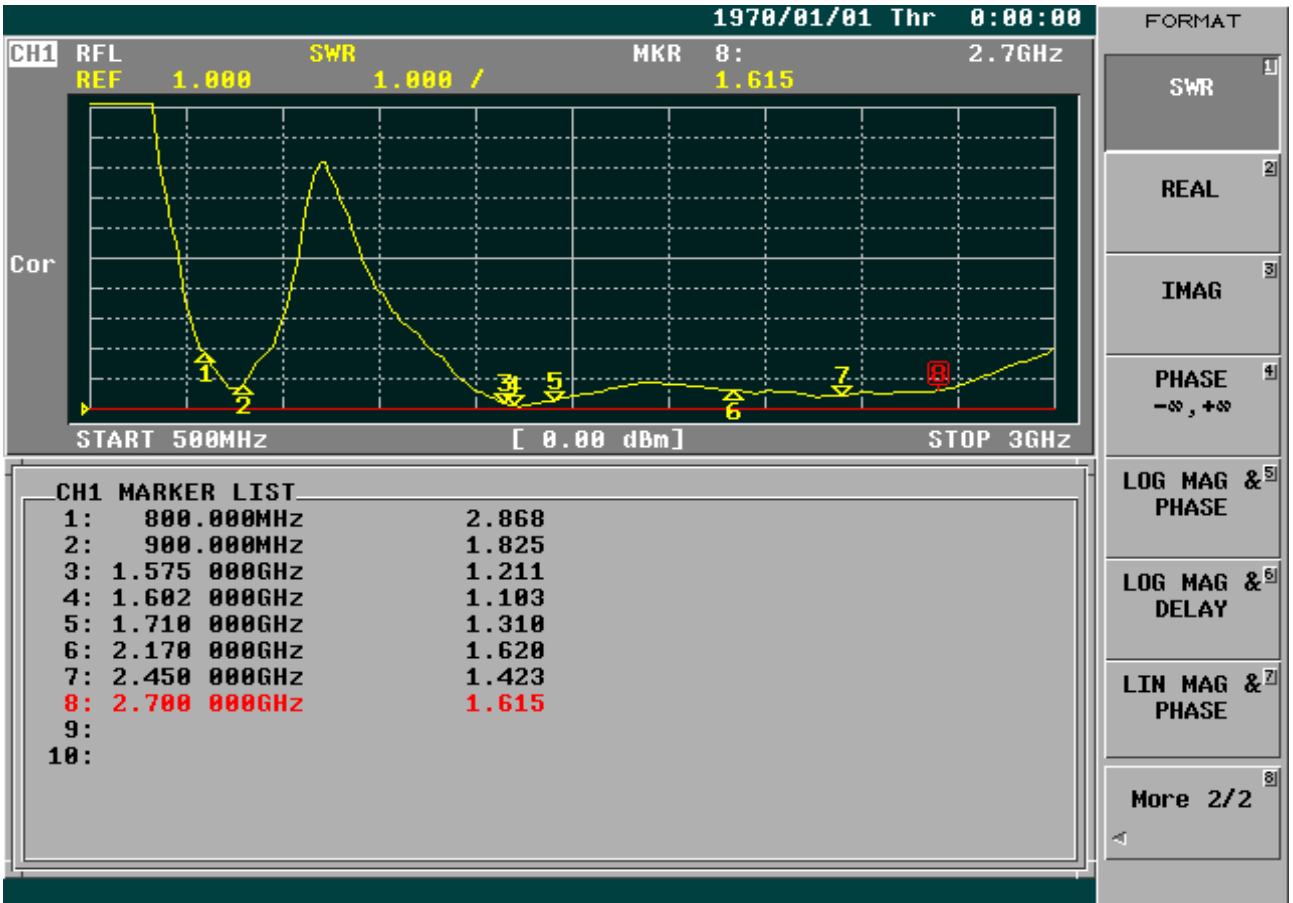
Parameter	Description
Frequency Band	LTE: 800 、 900 、 1700 、 2000 、 2500MHz GPS: 1575 ,1602MHz ON Customer Machine GND
Nominal Impedance	50 ohm
Polarization	Vertical
Electrical Wave	1 /4λ
Admitted Power radiation	1W
V.S.W.R	3.5:1
Antenna Peak Gain	0 ~3dB
Note: Gain includes the cable loss	

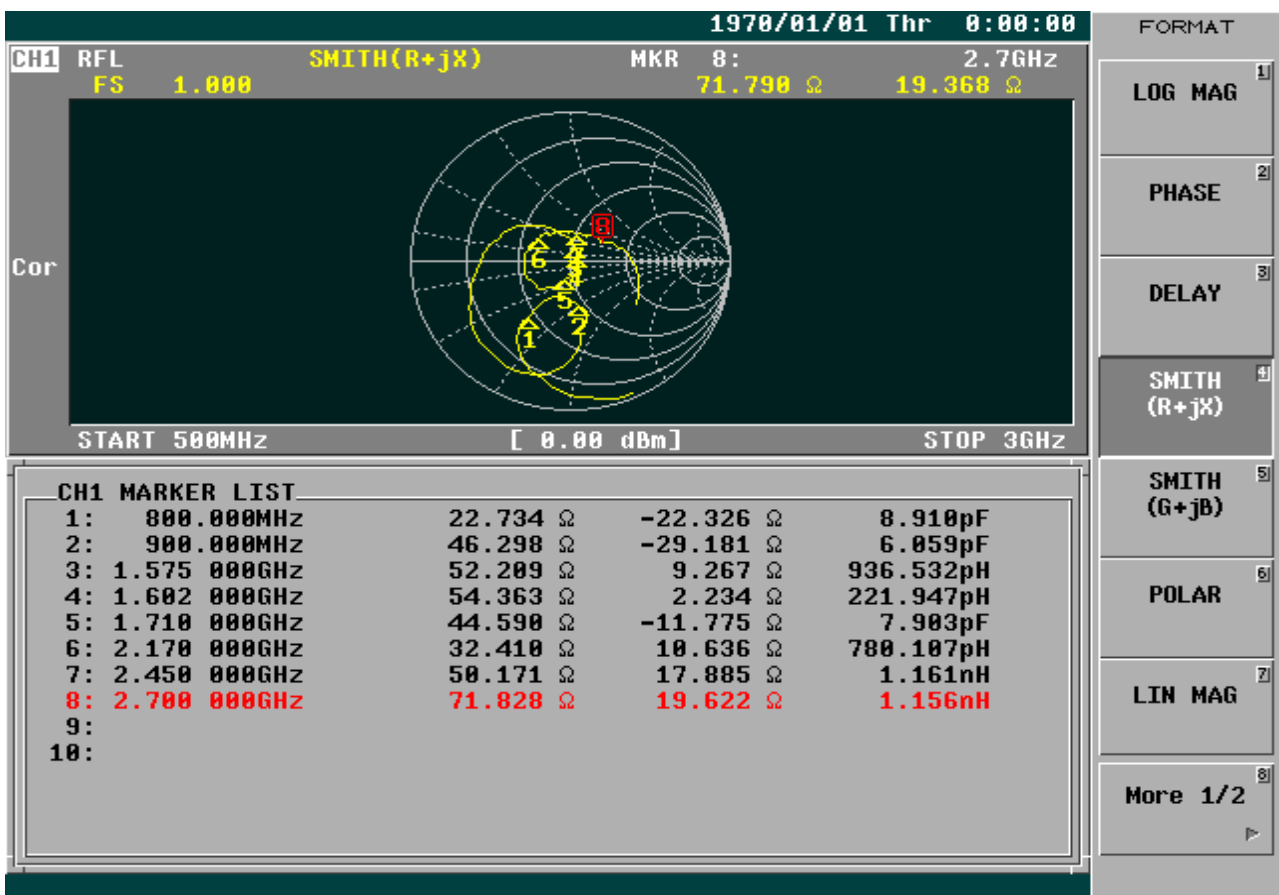
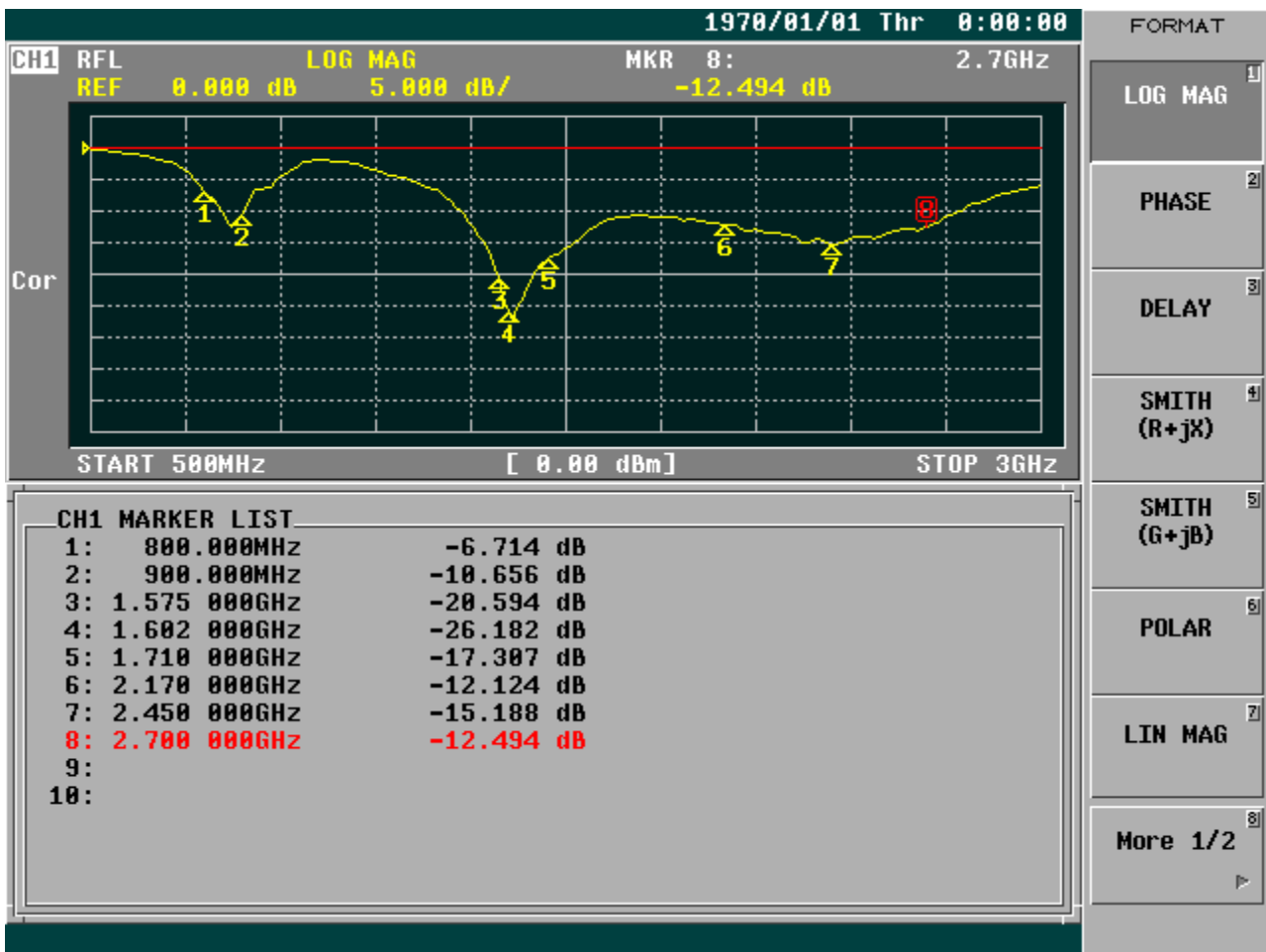
1.2 Mechanical Properties

Parameter	Description
Antenna Type	External Antenna
Material	TPU50D (& 3403 Glue)
Touch Type	Screw Type

Connector Type	SMA (Male) , Center PIN offset +/-0.08mm
Antenna Dimensions	OD13.8 x 51.0mm±0.5
Antenna Color	Black
Operating Temperature Range	-30°C~+70°C
Storage Temperature Range	-35°C~+80°C



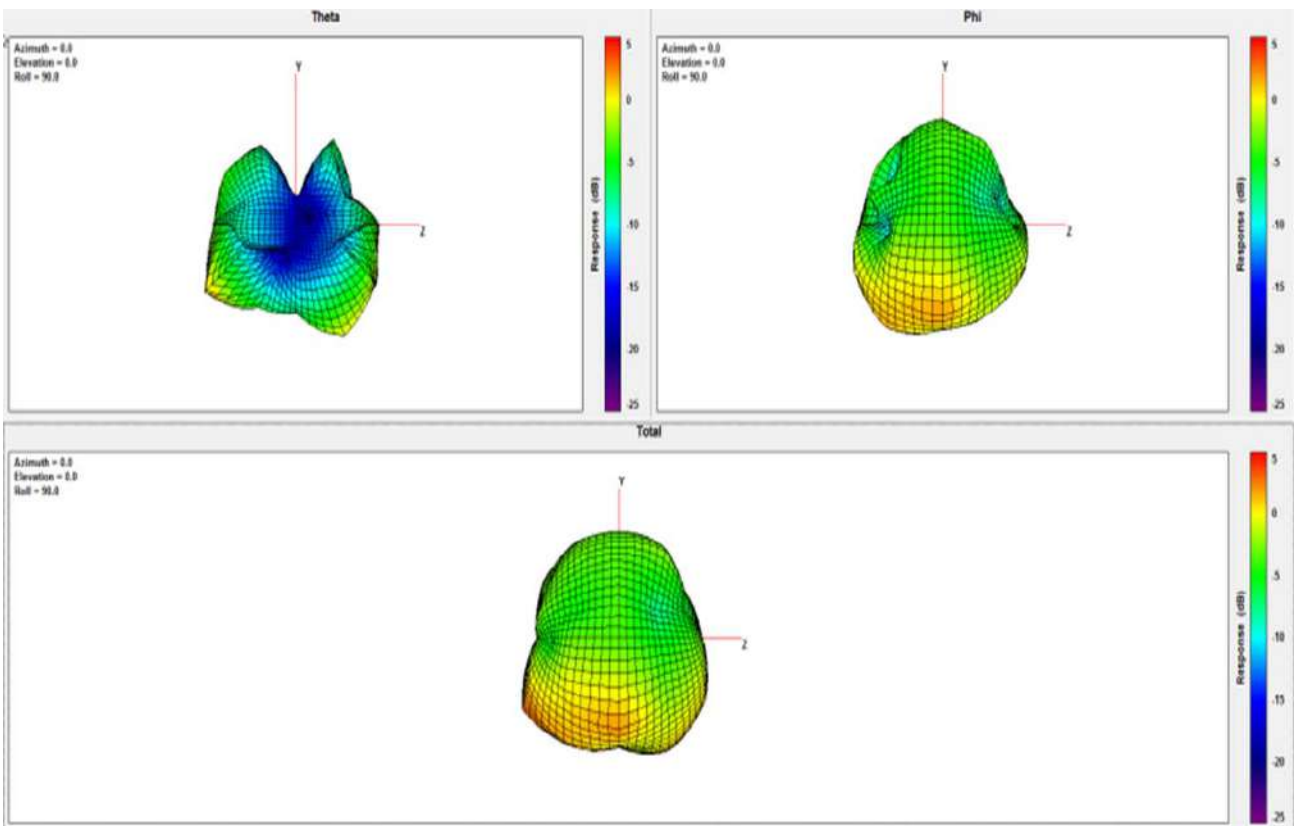
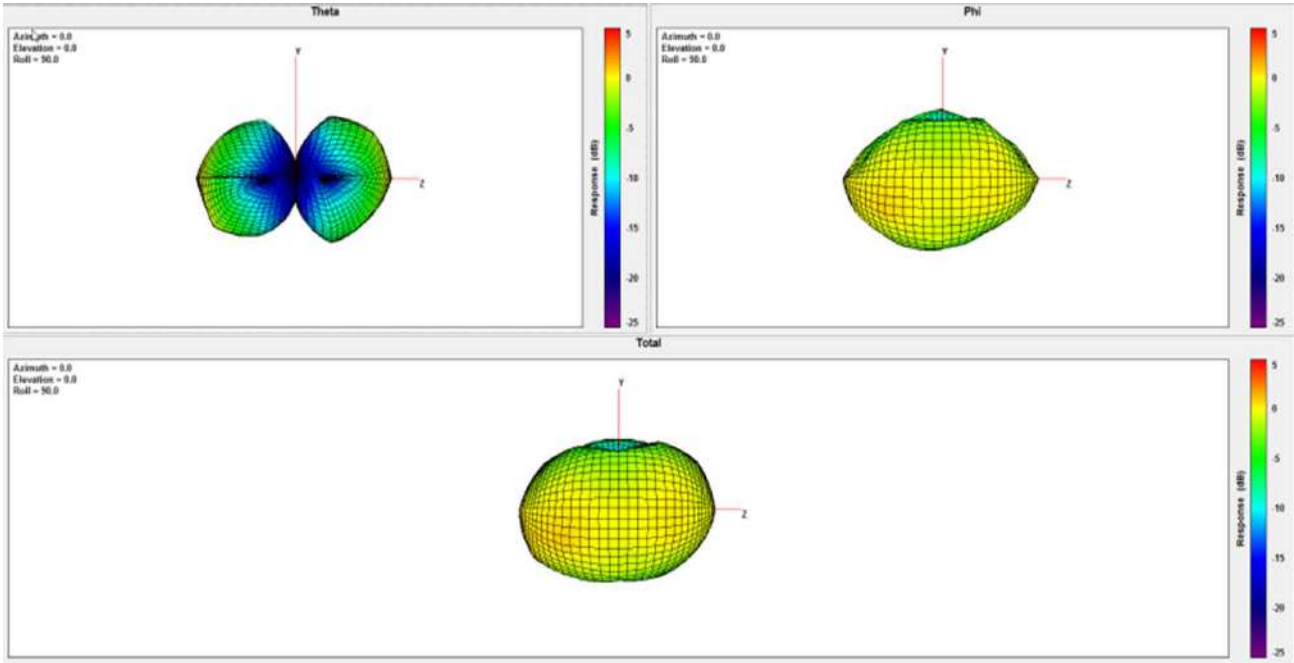


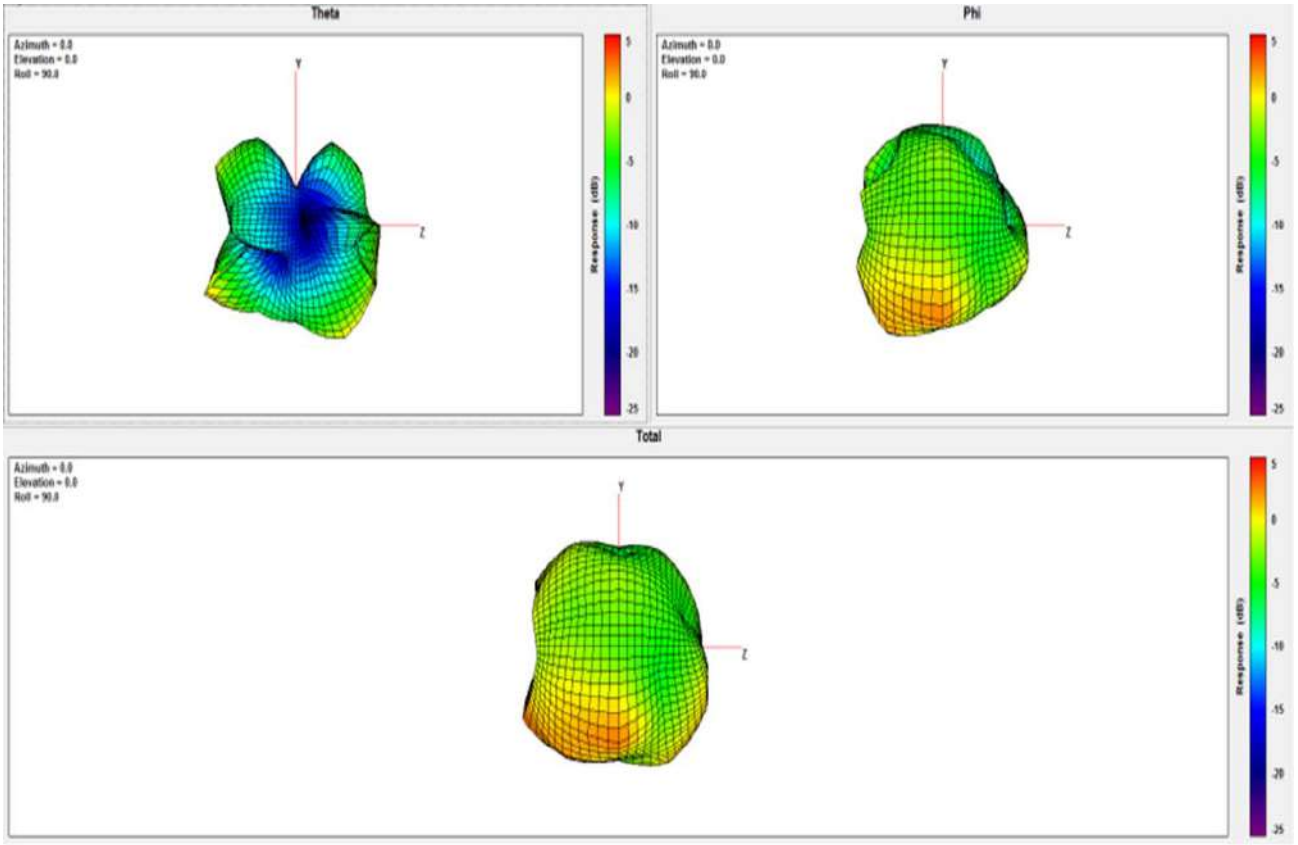


Frequency (MHz)	800	815	821	824	830	832	836	845	847	849
Peak Gain (dBi)	-0.13	0.15	0.37	0.45	0.66	0.71	0.77	0.80	0.79	0.77
Efficiency (%)	51.79	52.98	53.56	54.02	54.74	55.05	55.16	54.22	53.92	53.56
Frequency (MHz)	860	862	869	875	880	881	890	894	900	915
Peak Gain (dBi)	0.52	0.49	0.33	0.27	0.28	0.28	0.36	0.42	0.52	0.91
Efficiency (%)	51.09	50.71	49.47	48.44	48.12	48.03	47.88	48.03	48.57	51.04
Frequency (MHz)	925	940	960	1575.4	1602	1710	1750	1755	1785	1805
Peak Gain (dBi)	1.04	1.31	1.44	3.44	3.70	2.83	2.37	2.27	1.82	1.72
Efficiency (%)	51.85	54.06	54.59	54.40	58.25	66.91	67.44	66.54	65.43	66.75
Frequency (MHz)	1840	1850	1880	1882	1910	1920	1930	1950	1962	1980
Peak Gain (dBi)	2.15	2.33	2.98	3.02	3.35	3.40	3.40	3.54	3.68	3.61
Efficiency (%)	68.11	68.33	72.06	72.05	75.78	77.38	77.90	81.41	83.84	84.06
Frequency (MHz)	1990	2110	2132	2140	2155	2170	2400	2450	2500	2535
Peak Gain (dBi)	3.58	2.14	1.77	1.71	1.87	2.04	2.23	2.04	2.51	2.31
Efficiency (%)	84.29	76.28	72.92	70.72	70.35	70.06	64.24	62.30	64.51	62.95
Frequency (MHz)	2570	2620	2655	2690	2700					
Peak Gain (dBi)	1.80	2.08	2.17	2.21	2.28					

Efficiency (%)	63.43	62.41	57.31	53.48	52.72				
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3D Radiation Patterns:





2D Radiation Patterns

