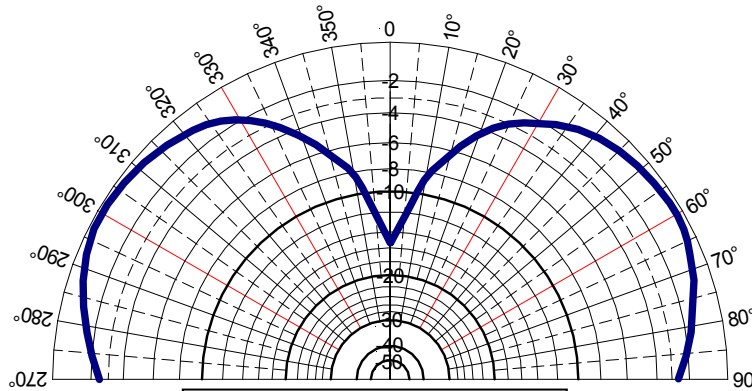


# Phantom® Mobile Antennas for CELL / GSM / WiFi / 802.11 / BT / ISM Wireless



Normalized to 3 dBi  
Elevation Pattern (Y, Z or H-plane)

## FEATURES

- Patented Field Diversity
- High performance mobile antenna operates on a 6" diameter (min.) ground plane.
- High performance whipless design for mobile application.
- Easy installation w/ optional NMO mounts
- 100% tested on a network analyzer

## ELECTRICAL SPECIFICATIONS

VSWR:	< 2:1
Nominal Gain:	3 dBi
Maximum Power:	150 W
Nominal Impedance:	50Ω
Polarization:	Vertical & Horizontal
Pattern:	Omni-Directional
Half-Power Beamwidth:	130° x 360°
(Elevation° x Azimuth°)	
Coaxial Cable Length & Type:	None
Termination:	NMO Socket or, type N-female

## MECHANICAL SPECIFICATIONS

Color:	Black or White
Height:	2.30"
Diameter:	1.438"
Weight:	0.15 lb
Material:	ABS
Mounting Info: <1000MHz:	NMO (PN: MB8, MAB8)
DC to 6 GHz:	NMO (PN: MB195) (Sold Separately)
Noise Suppressor (optional):	BlackHawk NS1535 1-35 VOLT, 15Amp Noise Suppressor (Sold Separately)



## Model and Ordering Information:

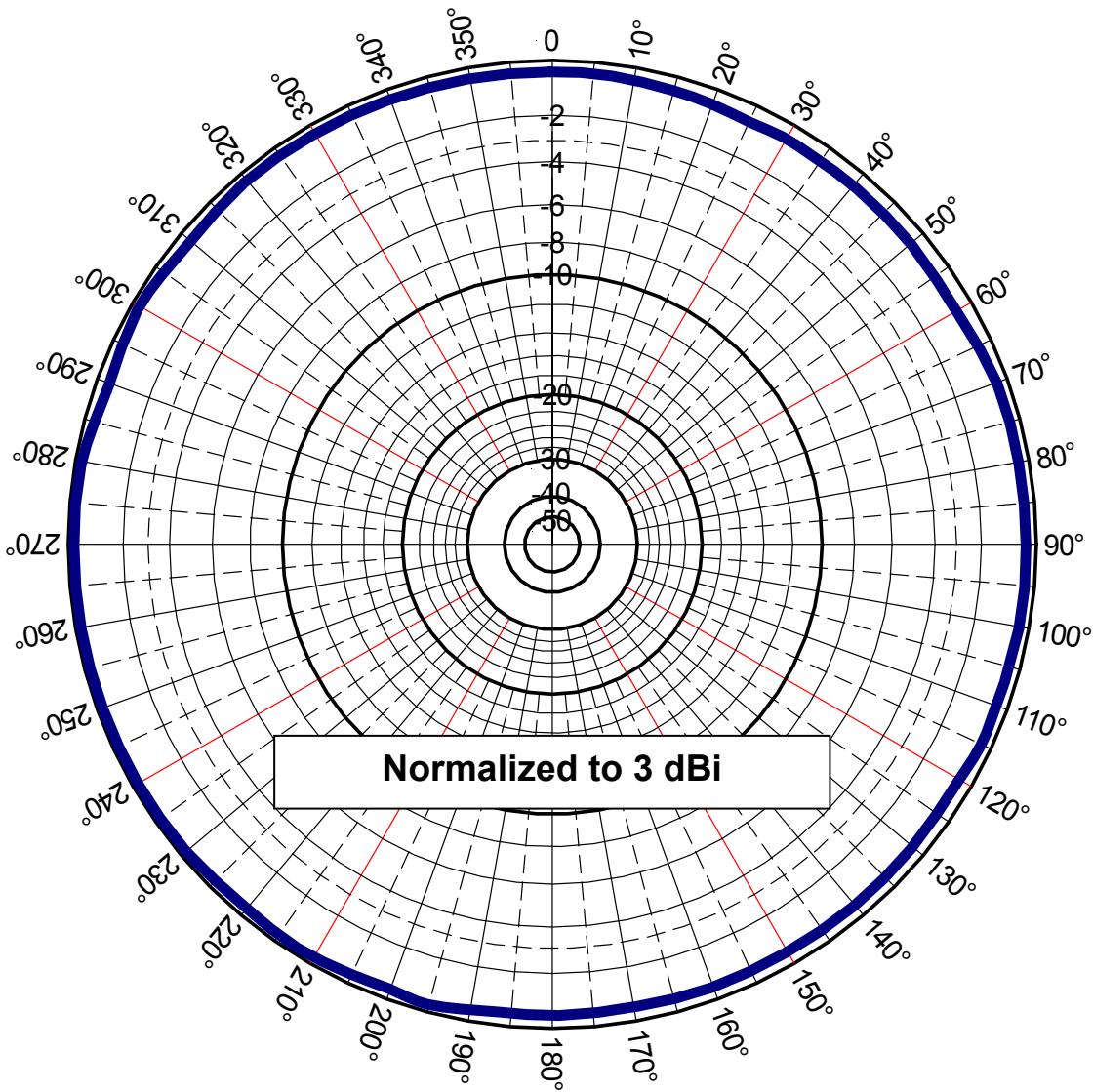
Model#	Description
TRA(B)7463	746-796 MHz 3 dBi Phantom® ¾ NMO, White Radome (Or, Black by inserting "B")
TRA(B)8063	806-866 MHz 3 dBi Phantom® ¾ NMO, White Radome (Or, Black by inserting "B")
TRA(B)8213	821-896 MHz 3 dBi Phantom® ¾ NMO, White Radome (Or, Black by inserting "B")
TRA(B)8903	890-960 MHz 3 dBi Phantom® ¾ NMO, White Radome (Or, Black by inserting "B")
TRA(B)9023	902-928 MHz 3 dBi Phantom® ¾ NMO, White Radome (Or, Black by inserting "B")
TRA(B)16003	1600-1850 MHz 3 dBi Phantom® ¾ NMO, White Radome (Or, Black by inserting "B")
TRA(B)17753	1775-1825 MHz 3 dBi Phantom® ¾ NMO, White Radome (Or, Black by inserting "B")
TRA(B)18503	1850-1970 MHz 3 dBi Phantom® ¾ NMO, White Radome (Or, Black by inserting "B")
TRA(B)20003	2000-2170 MHz 3 dBi Phantom® ¾ NMO, White Radome (Or, Black by inserting "B")
TRA(B)24003	2.4-2.5 GHz 3 dBi Phantom® ¾ NMO, White Radome (Or, Black by inserting "B")
TRA(B)58003	4.9-6.0 GHz 3 dBi Phantom® ¾ NMO, White Radome (Or, Black by inserting "B")
TRADCA	G - Drop ceiling antenna adaptor for P mount Phantom
TRADCAGP	G - Drop ceiling antenna adaptor for P-mount Phantom w/ 6"x6"x0.016" ground plane

### Permanent Mounting Option:

Please order by antenna model and insert letter "P" to indicate permanent mounting option (TRA8063P for white and TRAB8063P for black model).

# Phantom® Mobile Antennas for CELL / GSM / WiFi / 802.11 / Bluetooth Wireless

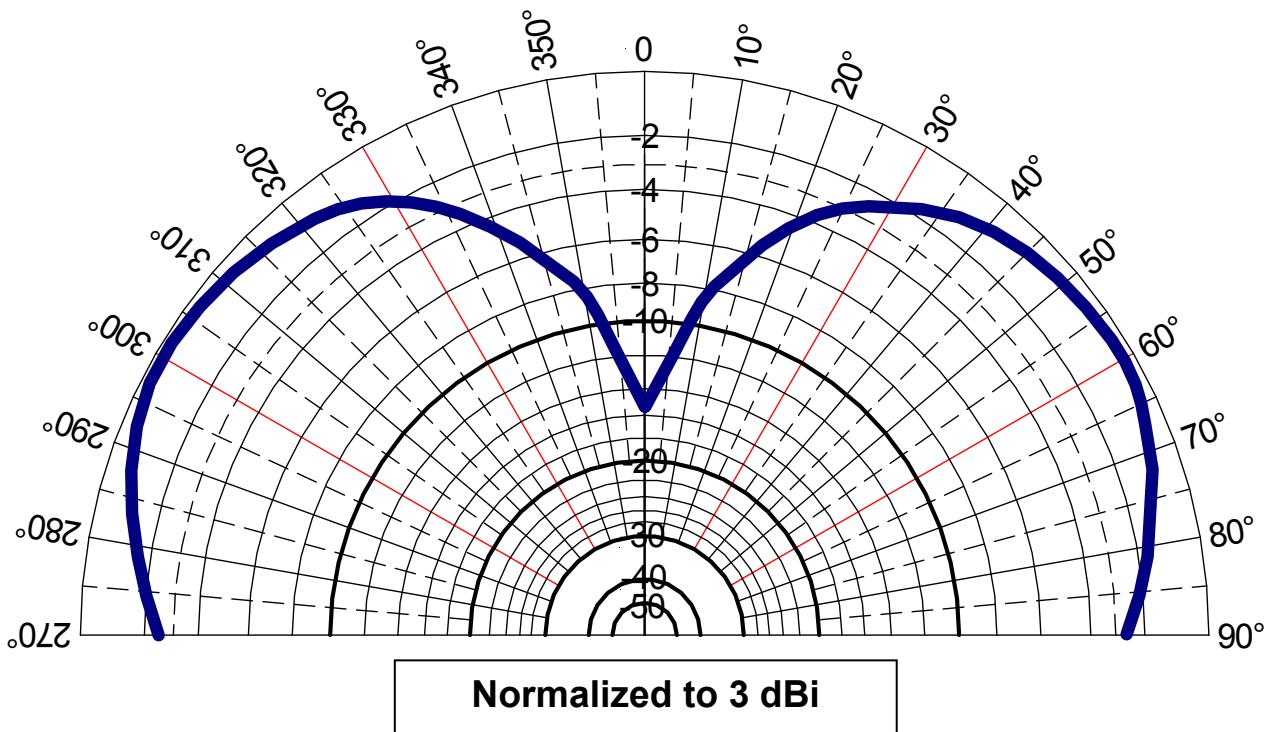
## ANTENNA RADIATION PATTERN



**Azimuthal Pattern (X,Y or E-plane)**

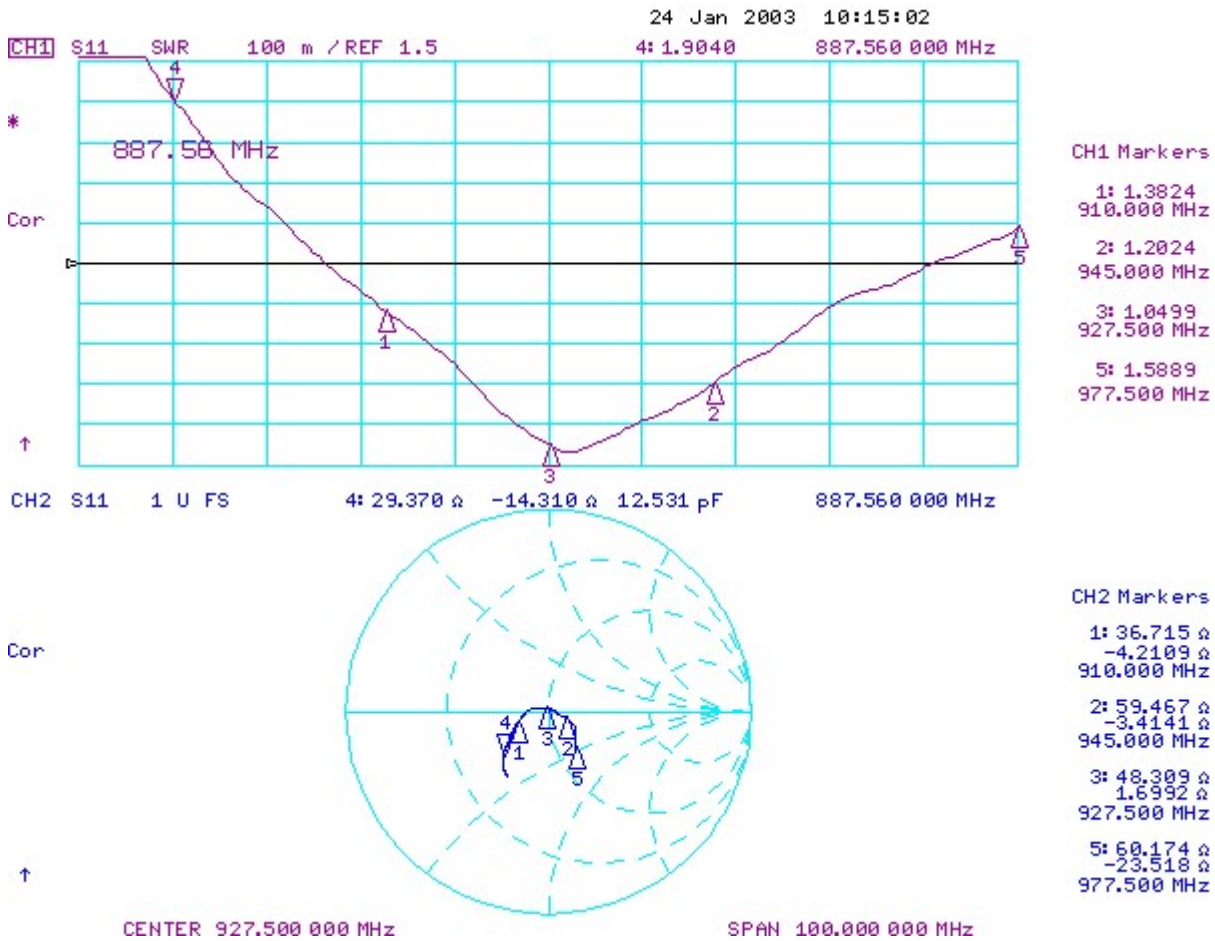
# Phantom® Mobile Antennas for CELL / GSM / WiFi / 802.11 / Bluetooth Wireless

## ANTENNA RADIATION PATTERN



Elevation Pattern (Z,Y or H-plane)

## VSWR of TRA(B)8903



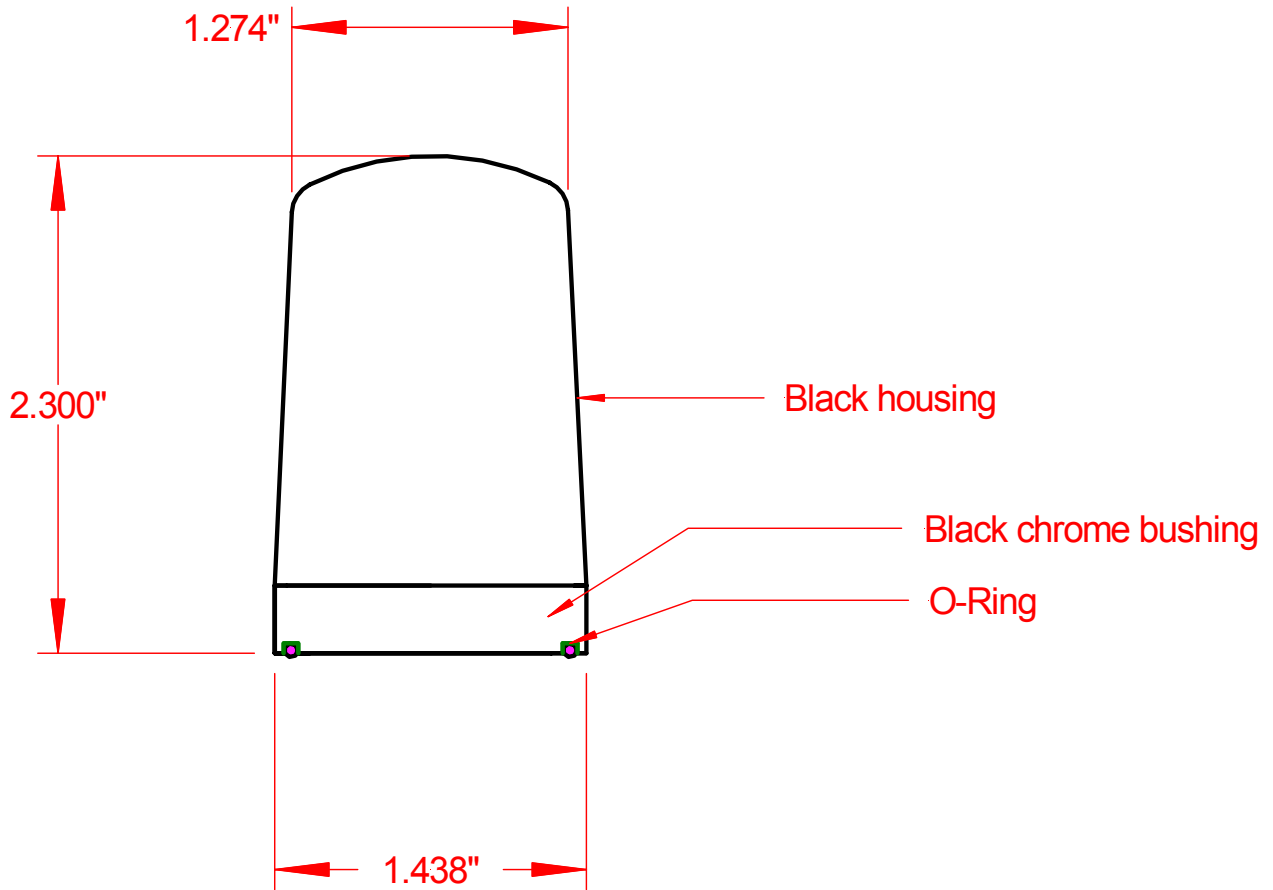
### TRA8903 Typical VSWR sweeps on a 2'x2' Ground Plane Primary Specification (BW = 70 MHz, VSWR < 2.0:1)

**Marker 4: 1.9040 to 1 @ 887.560 MHz**

**Marker 5: 1.5889 to 1 @ 977.500 MHz**

**Marker 3: 1.0499 to 1 @ 927.500 MHz**

01/24/2003



Form Factor drawing for TRA(B)8063, TRA(B)8213, TRA(B)8903, TRA(B)9023, TRA(B)16003, TRA(B)17753, TRA(B)18503, TRA(B)20003, TRA(B)24003, and TRA(B)58003.