

Overview

Southwest Antennas Part # 1066-087 is an omni-directional, horizontally polarized concealment antenna that operates at 4.4 - 5.3 GHz and a peak gain of 6.4 dBi. For concealment or surveillance purposes this antenna has been made to resemble a standard GPS "puck" style antenna, but instead provides for C-Band communication.

Designed for quick deployment, this antenna features a low profile radome with integrated magnetic mount that can be attached to any ferromagnetic surface. 15 feet of integrated cable offers flexibility to easily mount the antenna away from the attached radio for improved performance in RF unfriendly environments.

Features:

- C-Band frequency coverage
 - 4.4 - 5.3 GHz
- Small form factor "puck" design
 - Magnetic base for rapid deployment
- High performance antenna design
- 20W power handling
- 6.4 dBi peak gain
- Horizontal polarization
- 15 feet of integrated LMR-100 cable
- Type-N(m) RF connector
- Ideal for Concealment & Surveillance Applications



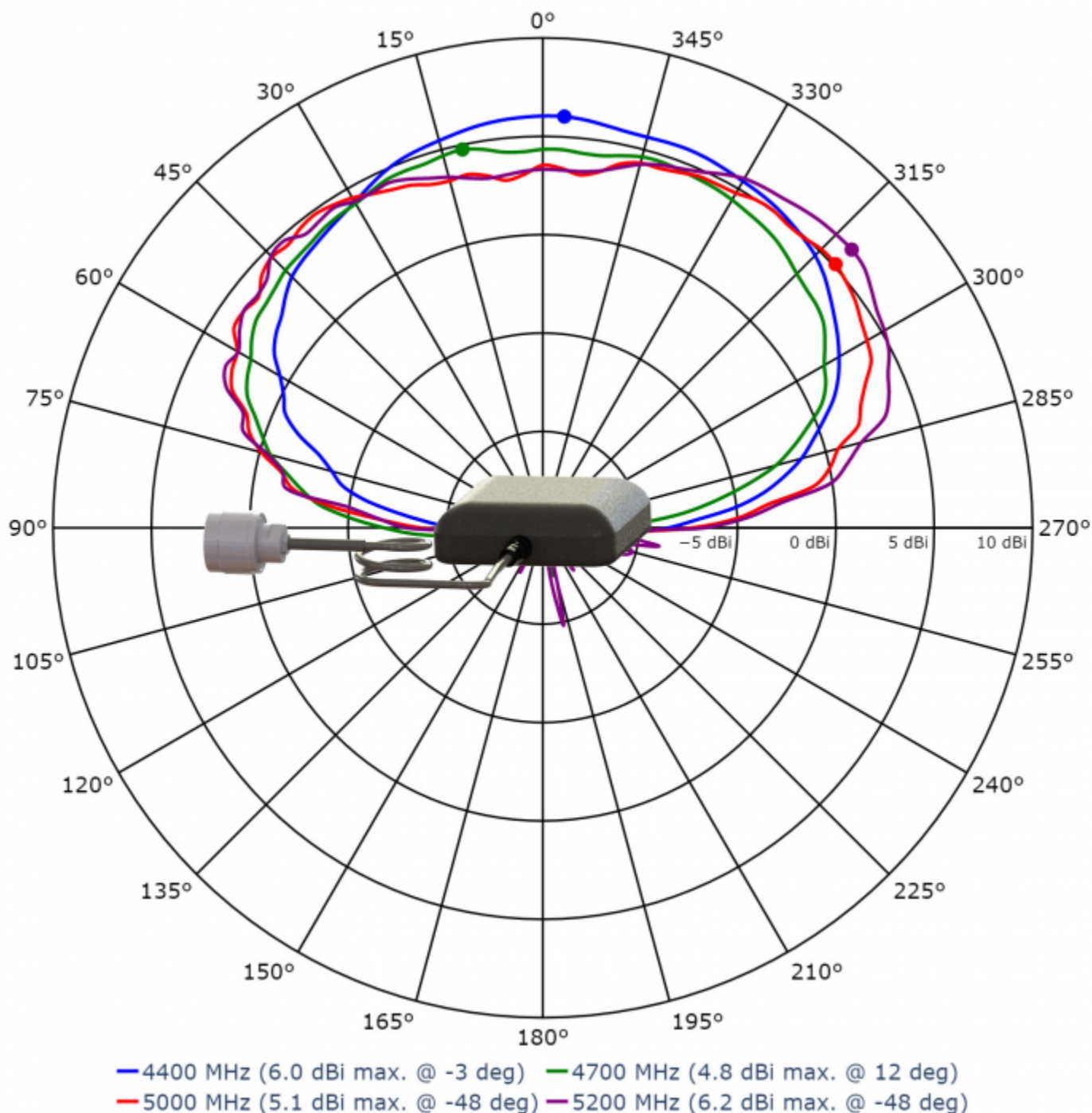
Ground Plane Note: Antenna pattern and specification performance is based on antenna being mounted to a 6" x 6" ground plane. Performance may vary if antenna is deployed without a suitable ground plane.

Antenna Specifications

Parameter	Value	Units	Tolerance
Antenna Pattern	Omni Antenna		
Frequency Band	S & C		
Impedance	50	Ohms	
Minimum Frequency	4.4 / 4,400	GHz / MHz	
Maximum Frequency	5.3 / 5,300	GHz / MHz	
Frequency Bandwidth	0.9 / 900	GHz / MHz	
Maximum VSWR	2:1	Ratio	
Maximum Gain	6.4	dBi	
Polarization	Horizontal		
Maximum RF Input Power	20	Watts	
Horizontal (AZ) Beamwidth	360	Degrees	
Vertical (EL) Beamwidth	91 - 158	Degrees	
Ground Plane Required	6" x 6" size minimum for performance listed on datasheet		
Mount Style	Integrated magnetic mount in base of radome		
RF Connector Type	Type-N(m)		
RF Connector Features	Rotating connector		
RF Cable Type	LMR-100		
RF Cable Length	15	feet	(10 dB max, 9.6 dB typical @ 4,800 MHz)
Operating Temperature Range	-40 to +85	C	
Product Length	2.40 / 60.96	inches / mm	
Product Width	2.40 / 60.96	inches / mm	

Parameter	Value	Units	Tolerance
Product Height	0.77 / 19.56	inches / mm	
Product Weight	4.6 / 130.4	oz / grams	

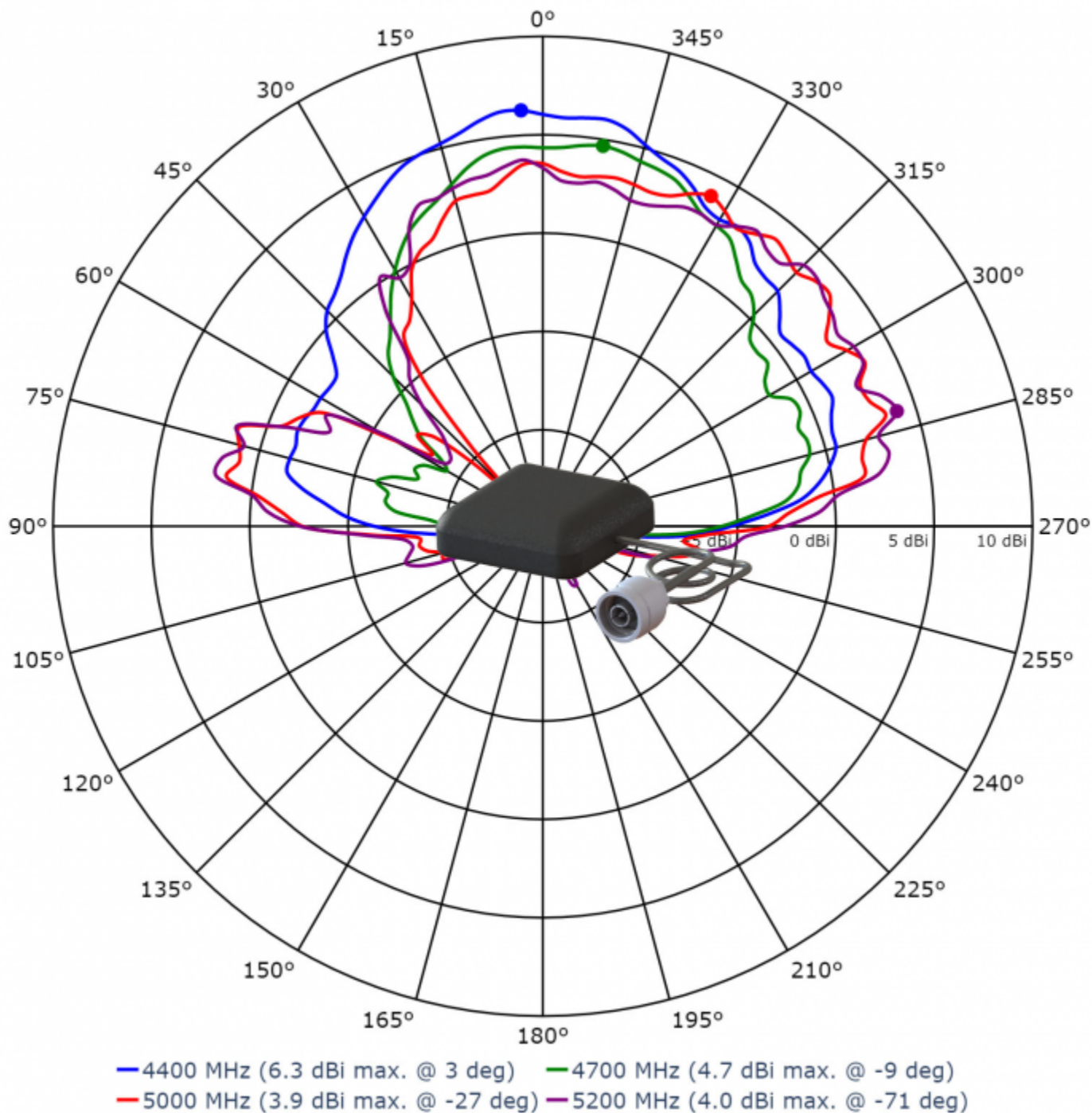
1001-256 Omni, Elevation (Phi = 90) (w/ Ground Plane)



Elevation Pattern

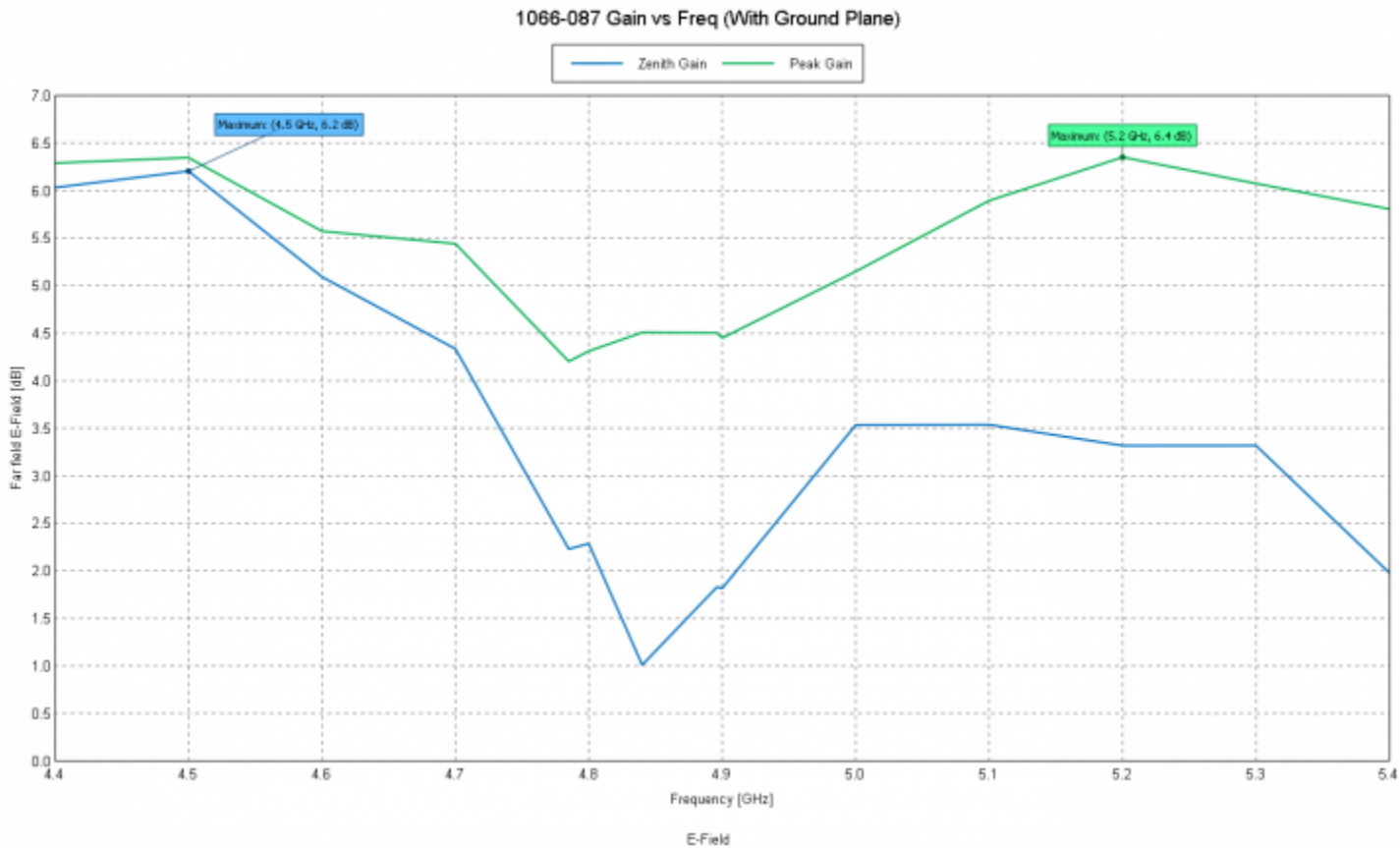
Phi=90, mounted on ground plane

1001-256 Omni, Elevation (Phi = 0) (w/ Ground Plane)

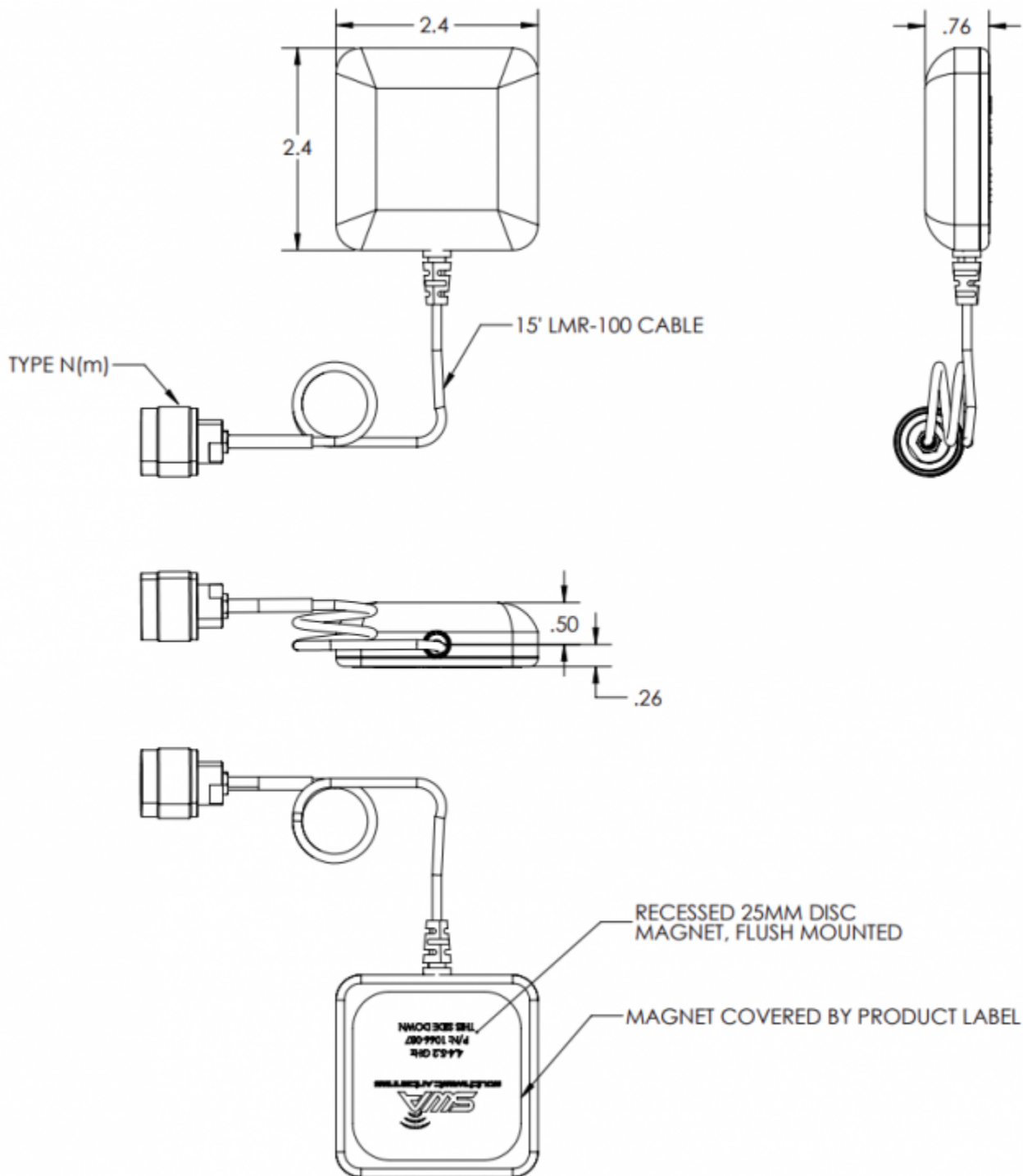


Elevation Pattern

Phi=0, mounted on ground plane



Gain vs frequency plot



Engineering Drawing

All dimensions are in inches