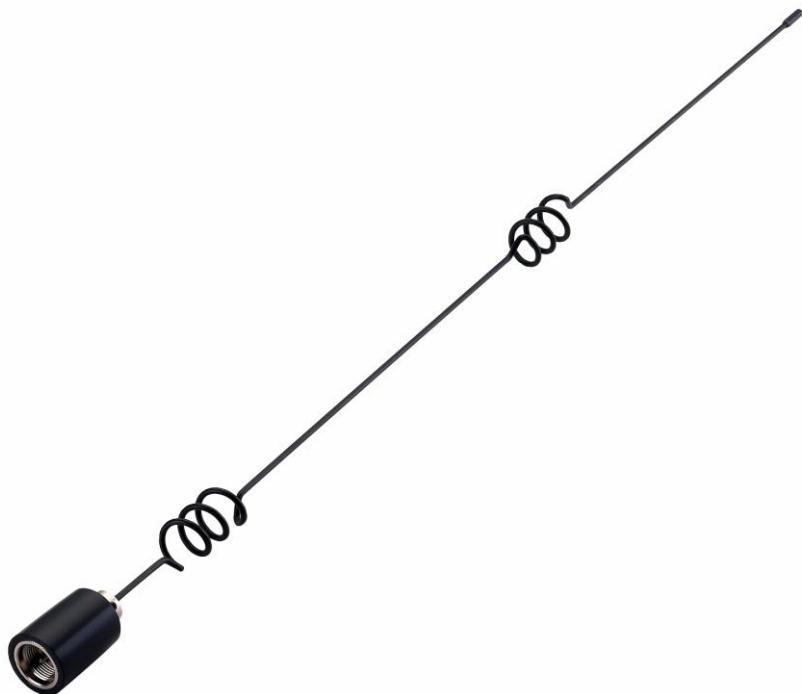


SPECIFICATION

Part No. : **TI.16.5F11**

Product Name : 915MHz 5dBi
Outdoors Omni-Directional Rigid Whip Antenna

Feature : Stable performance at 902 MHz to 928MHz
Omni-directional pattern in the azimuth
Robust Weatherproof Brass Whip and Casing
High Efficiency
N-type Male Connector
RoHS compliant



I. Introduction

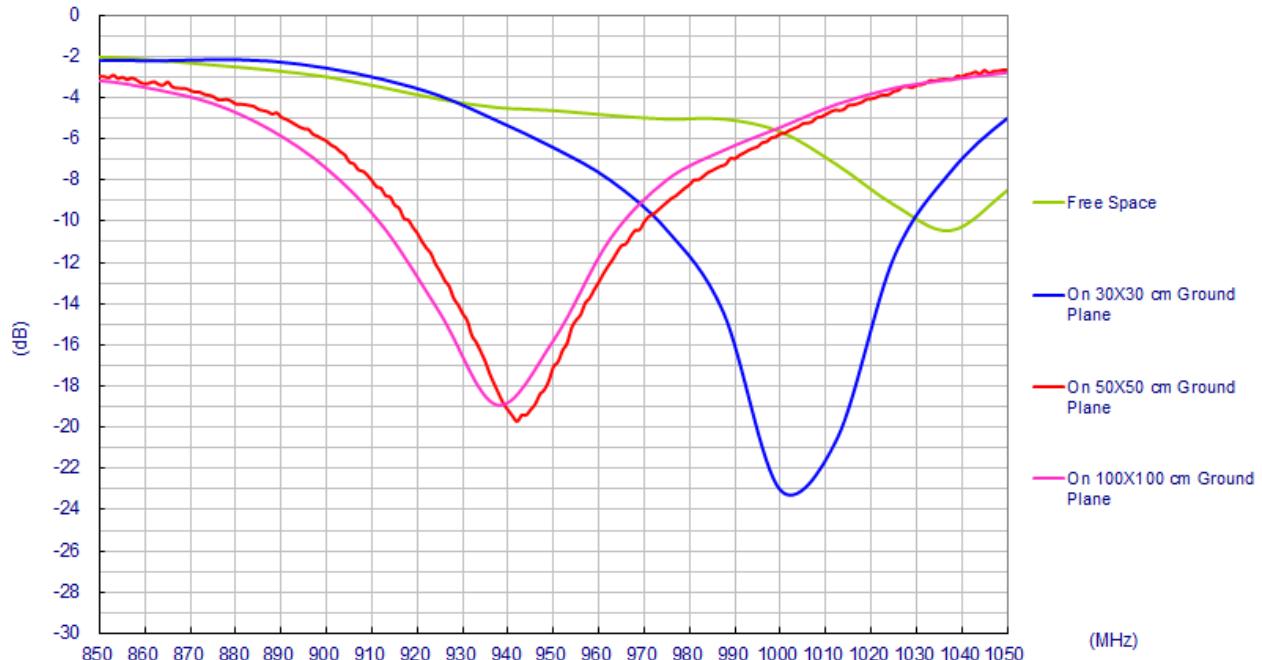
TI.16 is a 5dBi 915MHz ISM band (902MHz to 928MHz) Dipole Omni-directional antenna. This robust whip is suitable for outdoors applications where wide coverage is required especially in the azimuth plane, including metering, remote monitoring. As standard low frequency monopole antenna, its radiation property improves with mounting on metal plate. Connector can be customized on request.

II. Specification Table

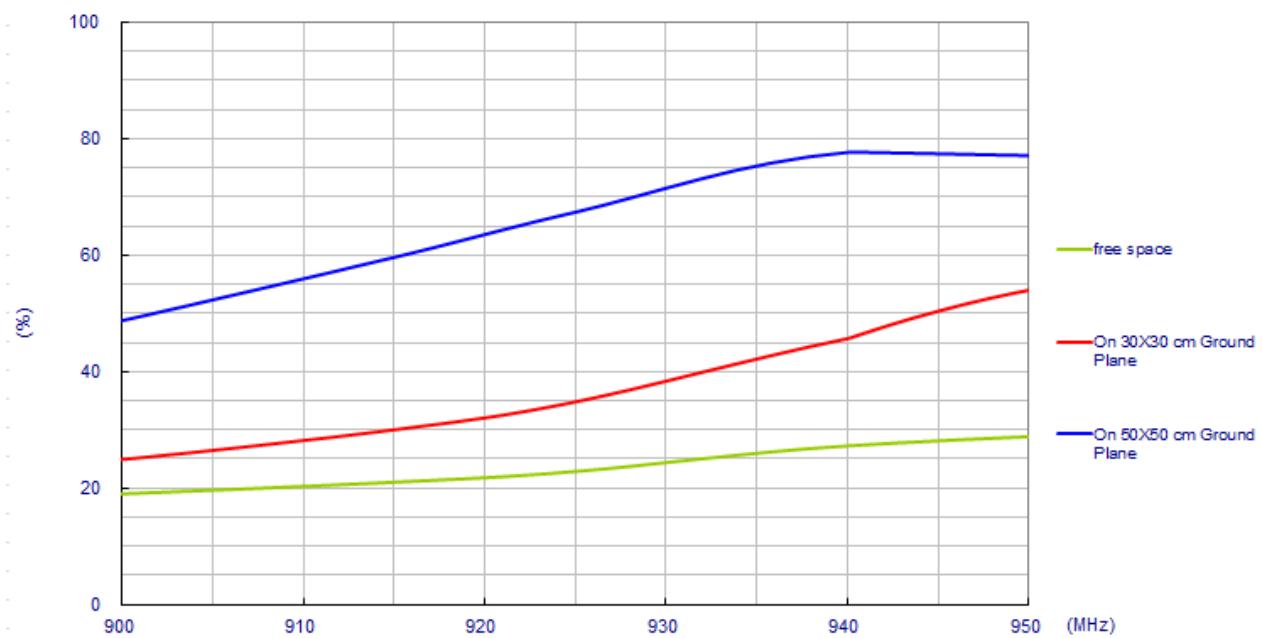
ISM 915MHz			
Frequency (MHz)	900	915	925
Peak Gain (dBi)	Free Space	-2.3	-1.7
	Ground (30x30cm)	-1.1	-0.3
	Ground (50x50cm)	3.9	4.6
Average Gain (dBi)	Free Space	-7.2	-6.8
	Ground (30x30cm)	-6.0	-5.2
	Ground (50x50cm)	-3.1	-2.2
Efficiency	Free Space	19%	21%
	Ground (30x30cm)	25%	30%
	Ground (50x50cm)	49%	60%
Impedance	50Ω		
Polarization	Linear		
Radiation Pattern	Omni		
Input Power	50 W		
MECHANICAL			
Dimensions	620mm		
Base Diameter	25mm		
Whip Diameter	19mm at widest		
Whip Material	Coated Brass		
Connector	N Male Straight		
ENVIRONMENTAL			
Temperature Range	-40°C to 85°C		
Humidity	Non-condensing 65°C 95% RH		

III. Antenna Characteristics

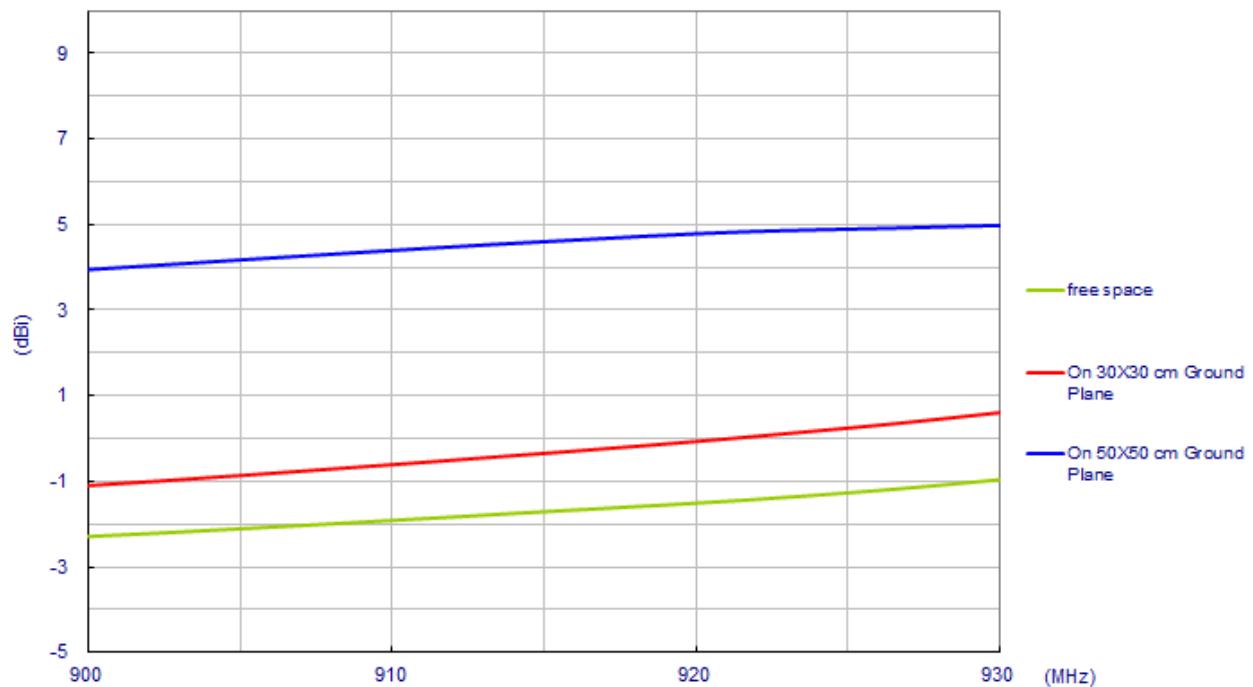
III.1. Return Loss



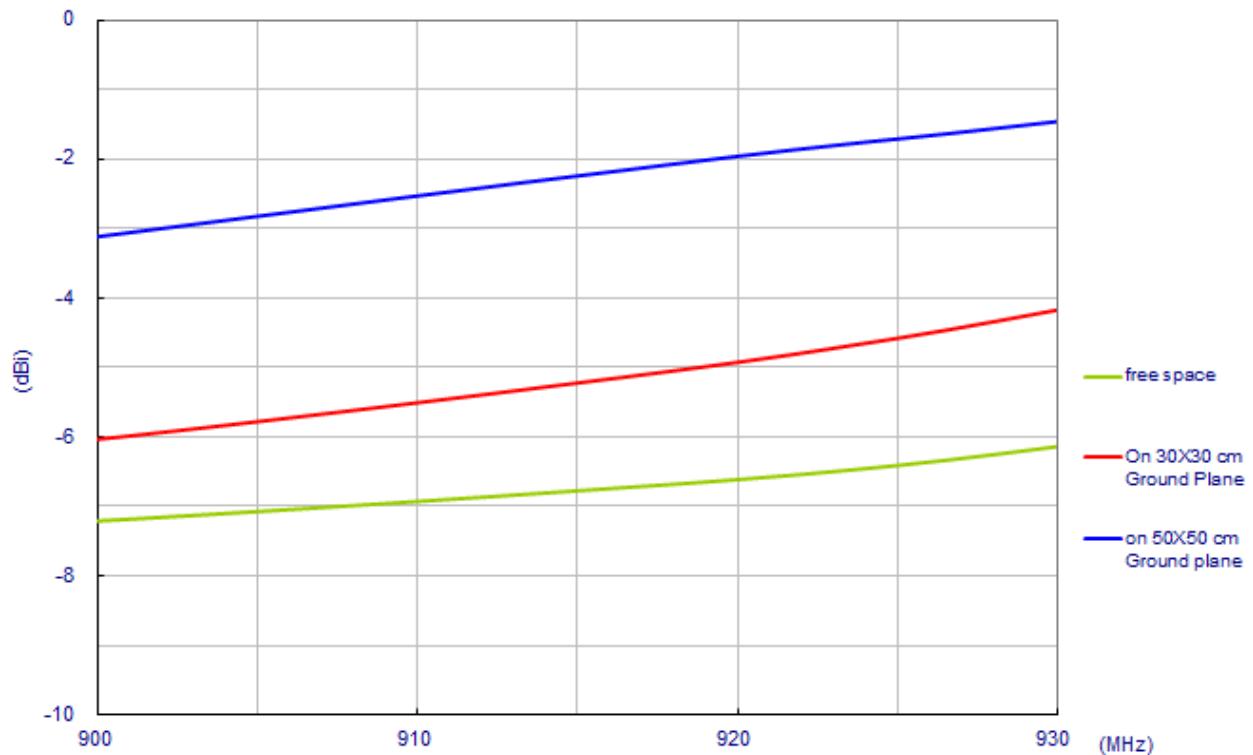
III.2. Antenna Efficiency



III.3. Peak Gain

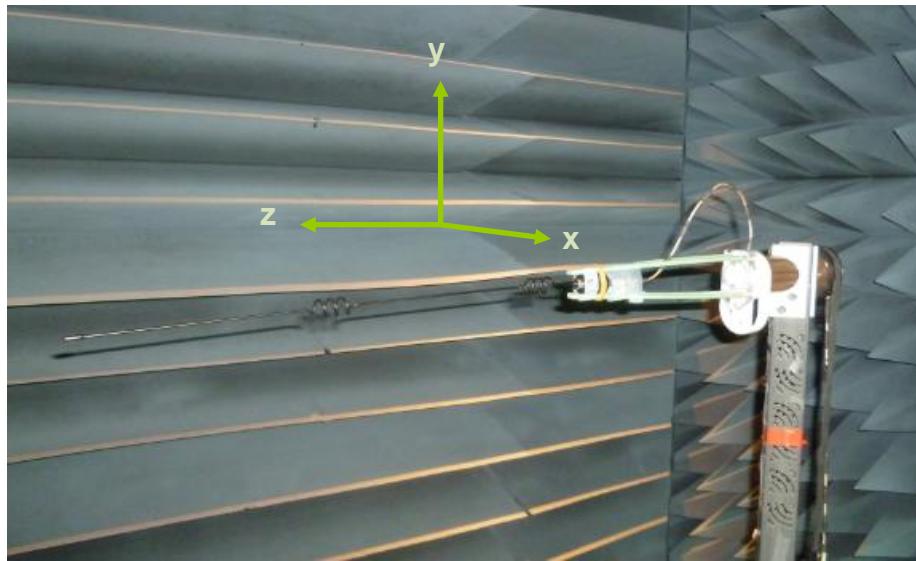


III.4. Average Gain



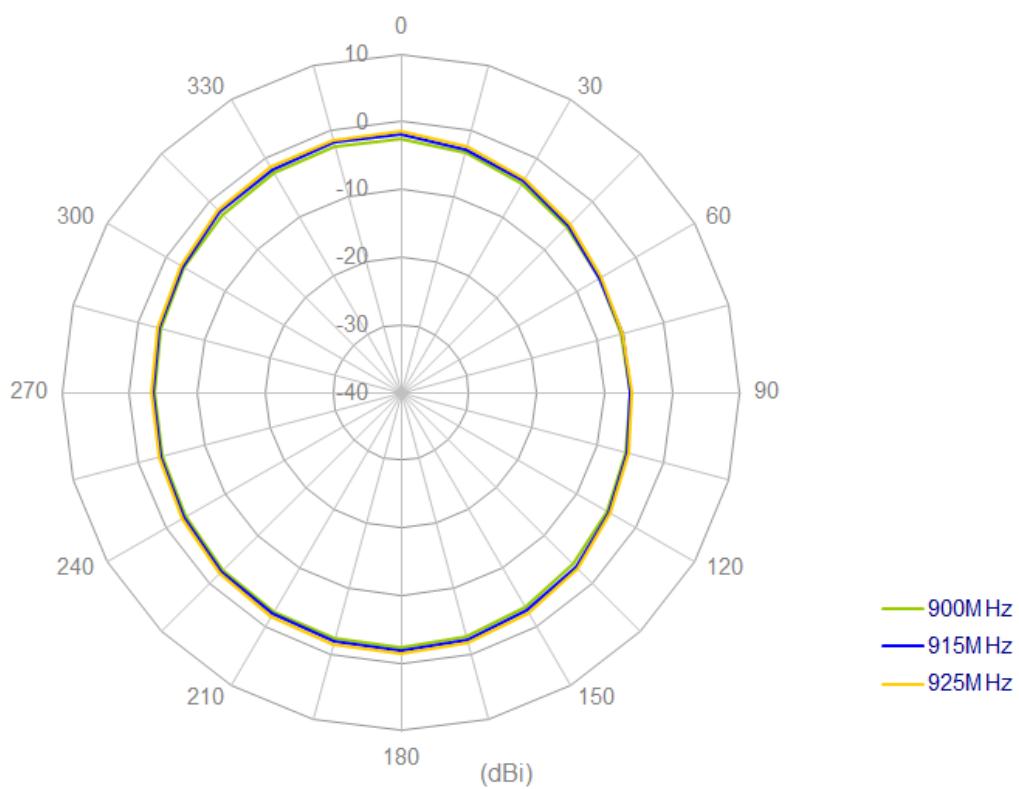
IV. Radiation Patterns

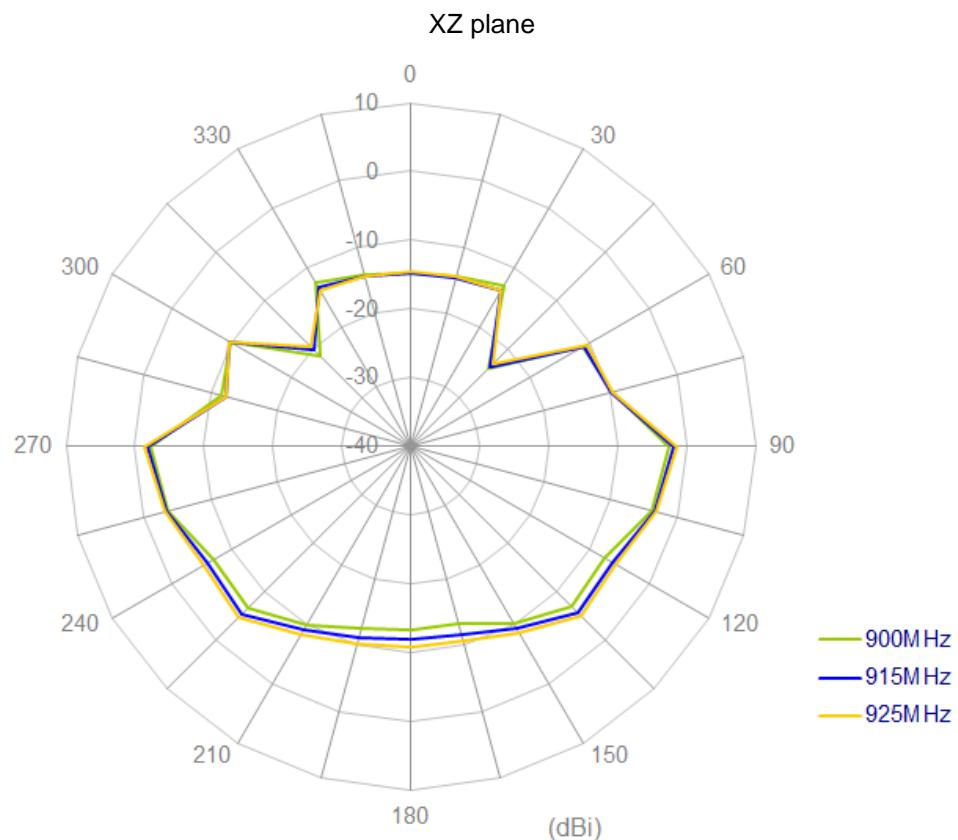
IV.1. Antenna setup (Free Space)



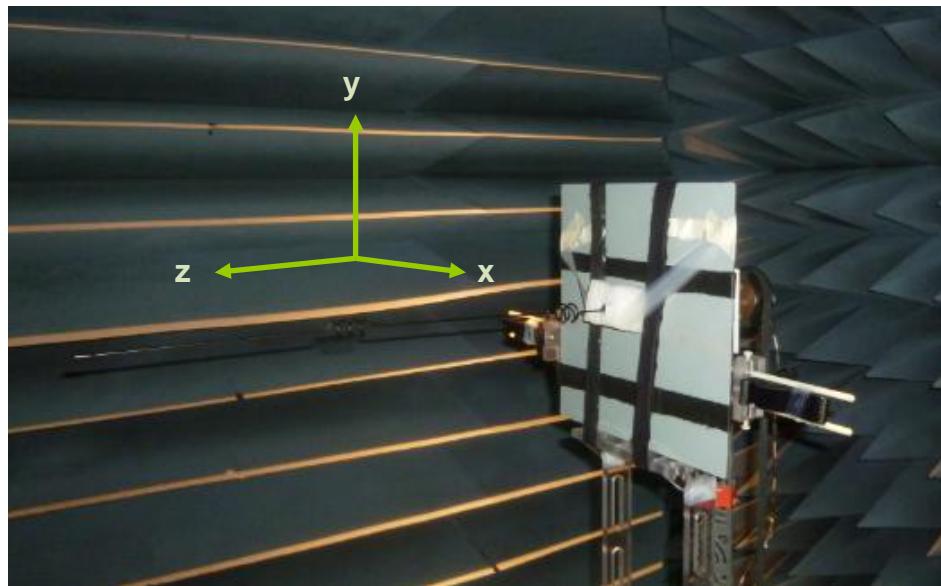
Radiation Pattern

XY plane



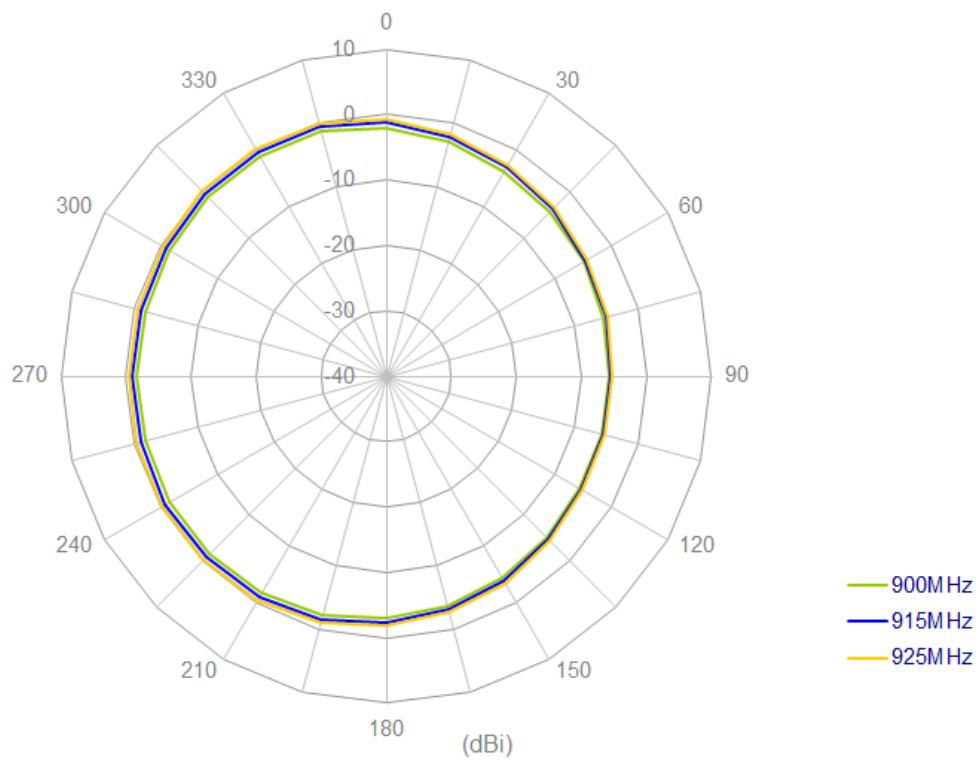


IV.2. Antenna setup (with 300x300mm ground plane)

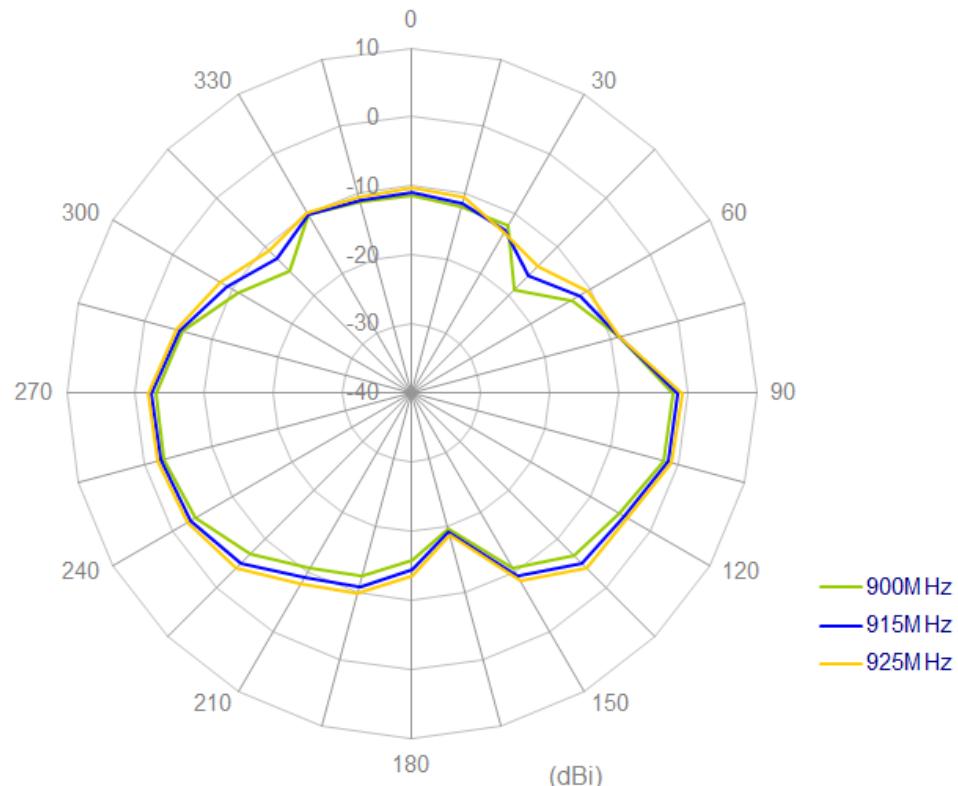


Radiation Pattern

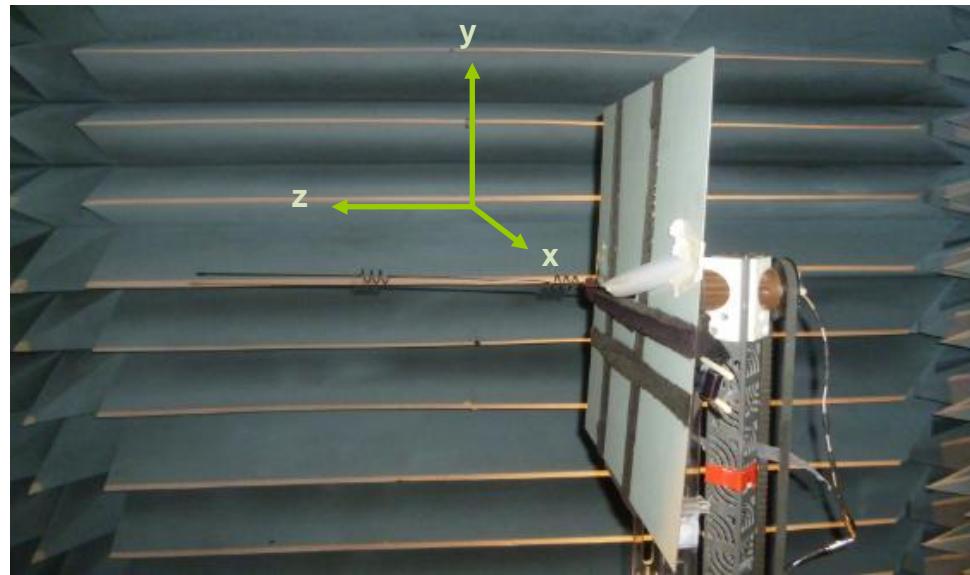
XY plane



XZ plane

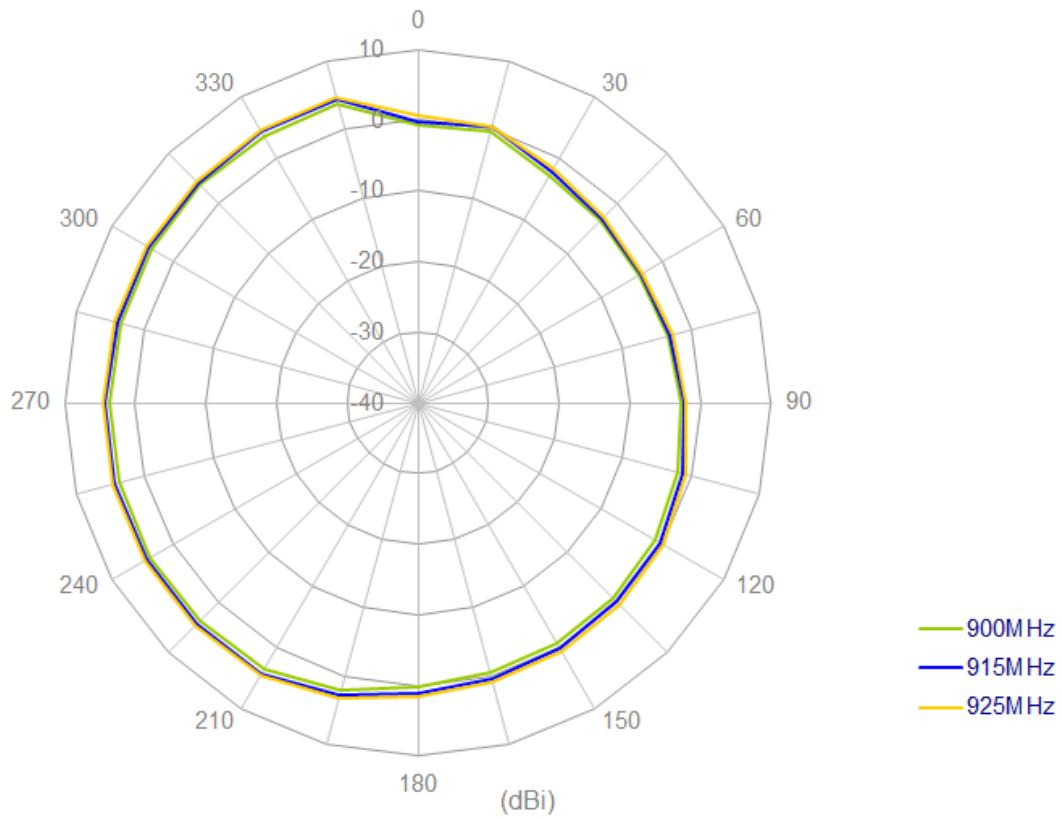


IV.3. Antenna setup (with 500x500mm ground plane)

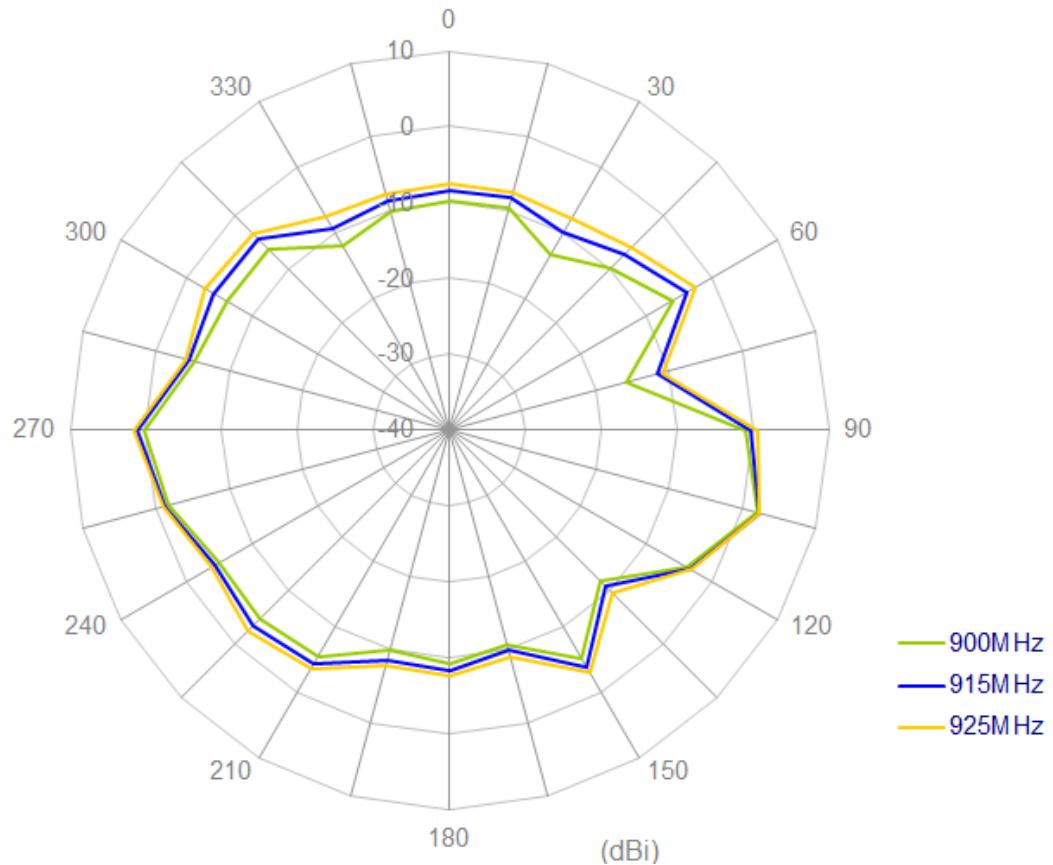


Radiation Pattern

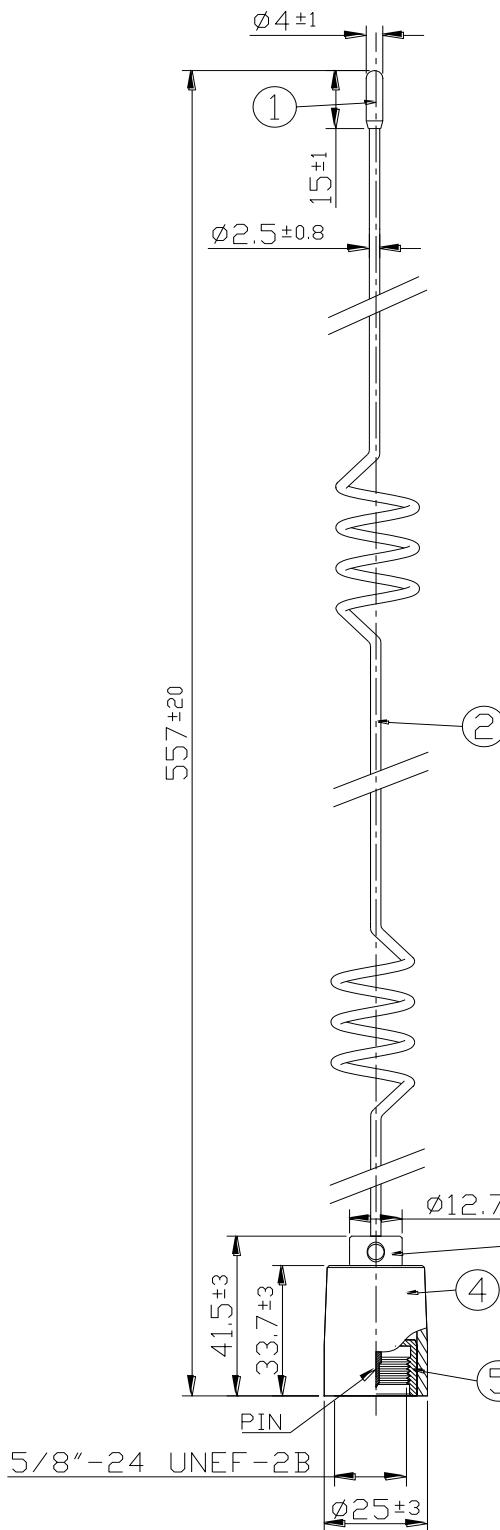
XY plane



XZ plane



V. Drawing



	Name	P/N	Material	Finish	QTY
1	Top Cap	000612C000002A	Brass	Black	1
2	Spring Antenna	000812C000002A	Brass	Black	1
3	Axis	000612C010002A	Brass	Ni Plated	1
4	NTYPE(M) Housing	000612C030002A	POM	Black	1
5	NTYP(M)Thread	000612C020002A	Brass	Ni Plated	1

VI. Packaging

