

Specifications of Near Field Ant.

MESSRS. (주)아이디로

ITEM : Near Field Antenna
PART NAME : MNFA1004-900
MODEL NAME
FEATURES : Antenna has strong near-field performance for
reading short-distance.
Low far-field gain for reading in antenna dimension.
UHF band to enable global operation.
DATE : February 22, 2021
QUANTITY : pcs

SUPPLIER : MAC technologies Inc.		
DRAWN	CHECKED	APPROVED

 **mac** technologies

615, Cheongju Techno S Tower, 530, Jikji-daero,

Heungdeok-gu, Cheongju-si, Chungbuk, KOREA, 28578

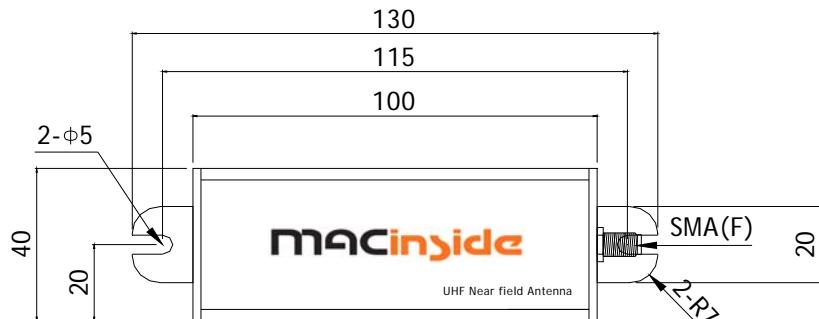
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Date	February 24, 2021

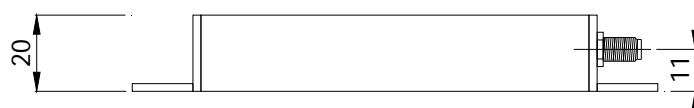
1. Electrical Specifications.

NO.	Parameter	Spec.	Unit	Remark
1	Center Frequency	919.0	MHz	
2	Near Field Intensity	-13.0	dBA/m	@ Center of ant. 2 cm from radome, 30 dBm input power
3	Far Field Gain	-20	dBi	
4	Polarization	Linear		
5	VSWR	1.5 : 1 max.	dB	
6	Impedance	50	Ohm	
7	Input Power	30	dBm	

2. Mechanical Dimensions. (unit : mm)



[TOP VIEW]

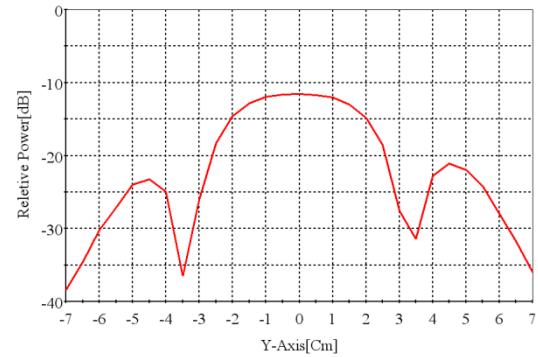
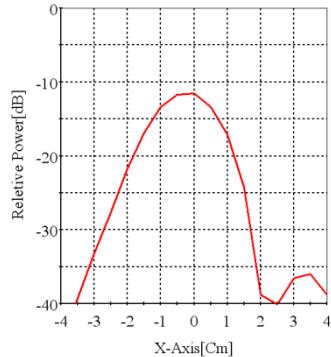


[SIDE VIEW]

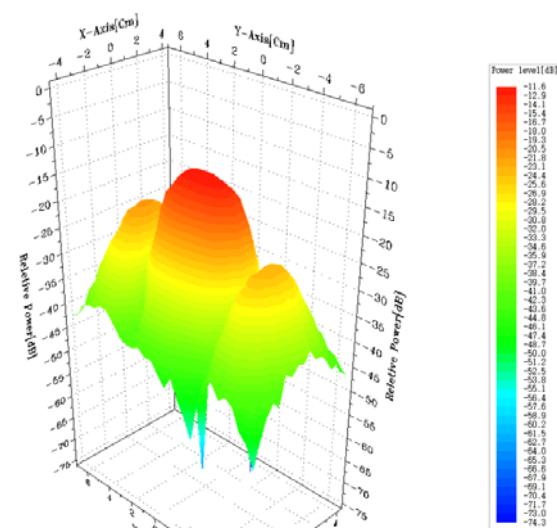
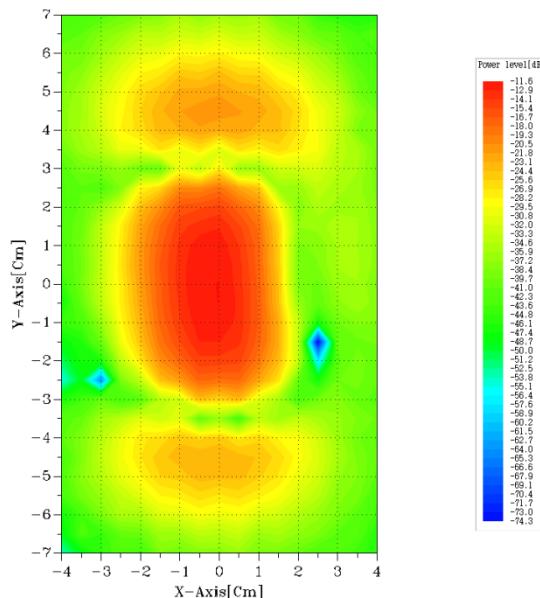
Tolerance Unless
Otherwise Specified : ± 2.0
Unit : mm

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3. Near Field Intensity Plots. (dBA/m with 30dBm input power)



1D Power distribution at Z=2 cm from Radome

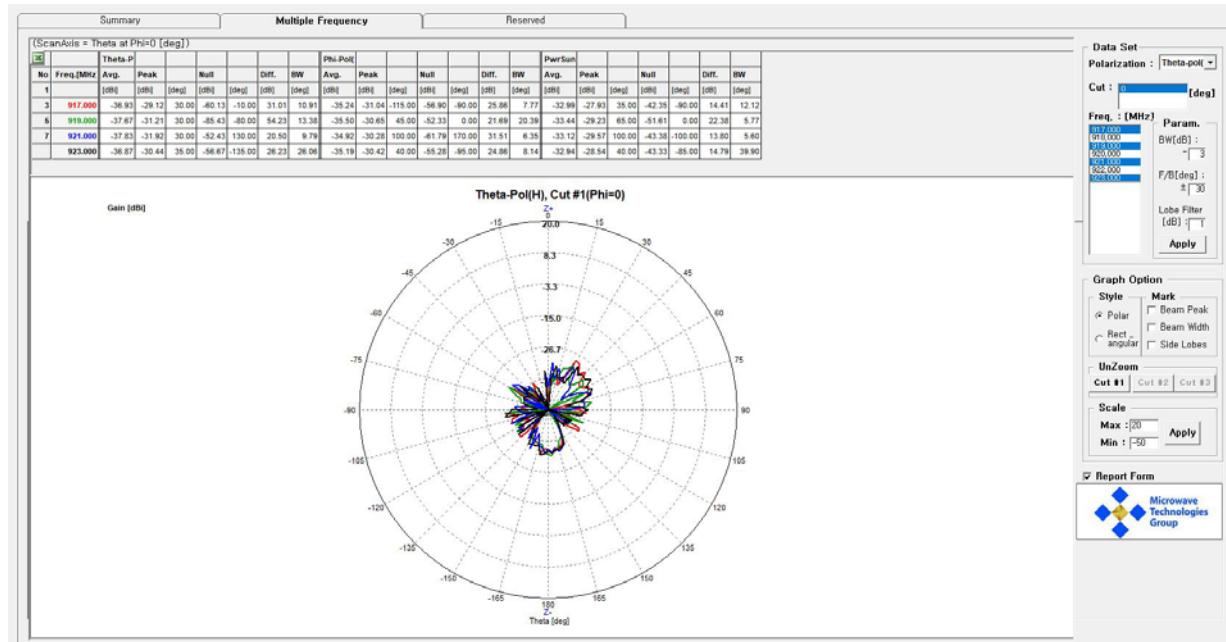


2D and 3D Power distribution at Z=2 cm from Radome

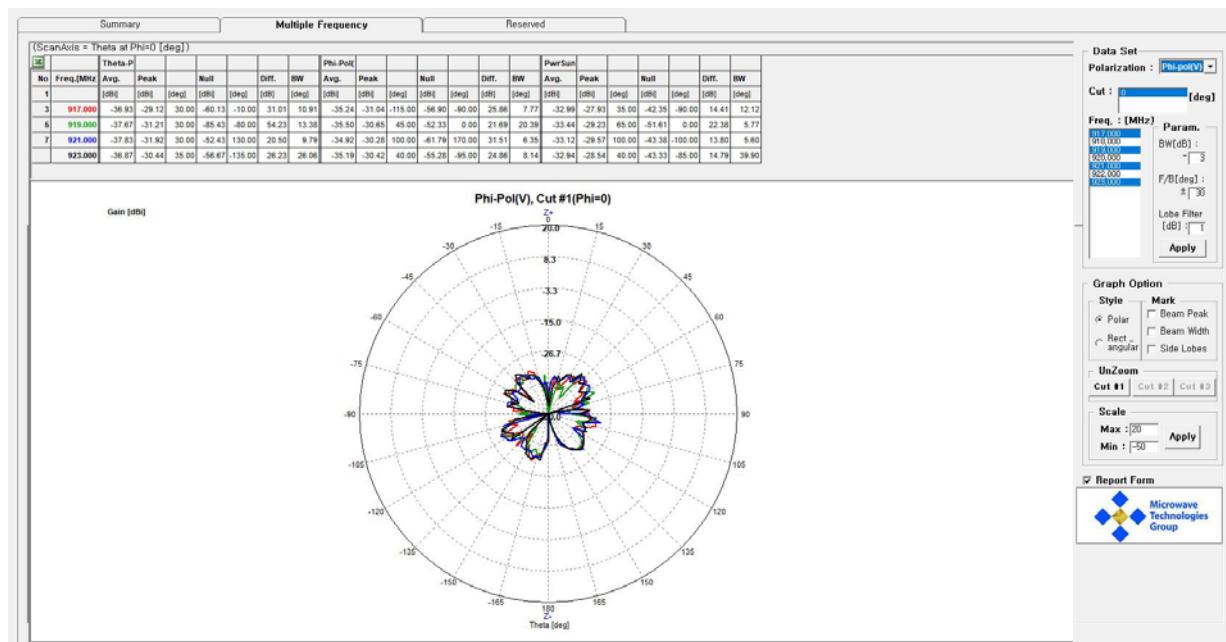
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4. Radiation Patterns.

4-1. H-Pol. (Frequency 917.0, 919.0, 921.0, 923.0 MHz)



4-2. V-Pol. (Frequency 917.0, 919.0, 921.0, 923.0 MHz)



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4-3. Gain Test data

Source Antenna Polarization	Gain			
	917.0 MHz	919.0 MHz	921.0 MHz	923.0 MHz
H-Pol. (dBi)	-29.12	-31.21	-31.92	-30.44
V-Pol. (dBi)	-31.04	-30.65	-30.28	-30.42

4-4. Gain Measurement System

