

# 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

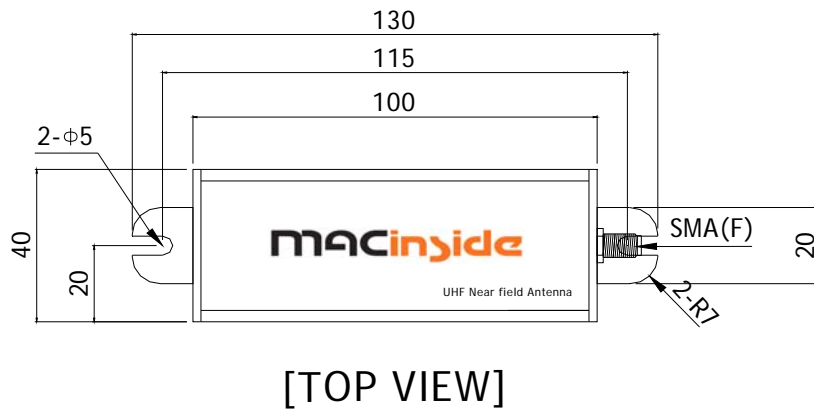
Tel : +82 43 275 2485 Fax : +82 43 275 2487

Title	RFID Near Field Ant. Preliminary Specification
Document Number	MACQM730-05-21XXX
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	

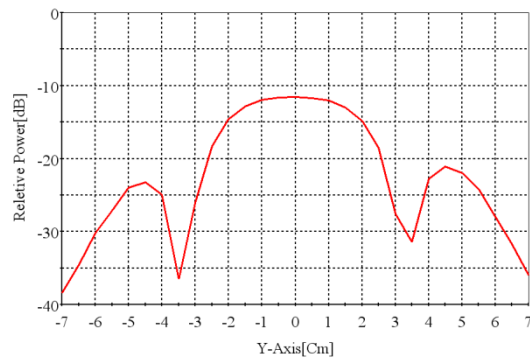
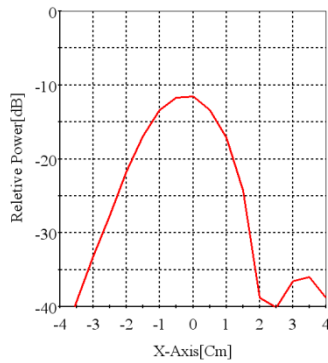
## 2. Mechanical Dimensions. (unit : mm)



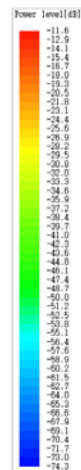
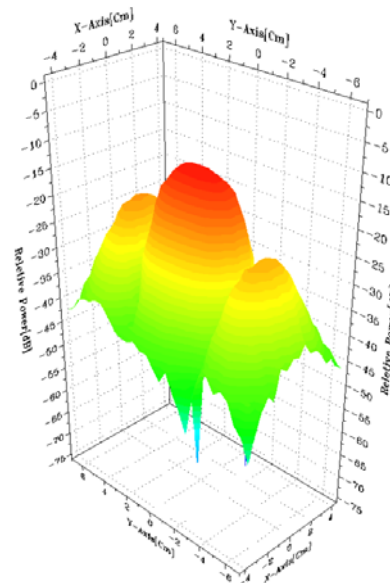
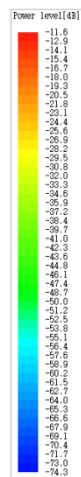
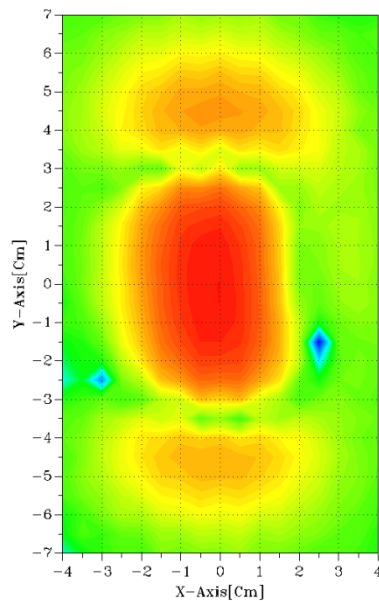
Tolerance Unless  
Otherwise Specified :  $\pm 2.0$   
Unit : mm

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



1D Power distribution at Z=2 cm from Radome

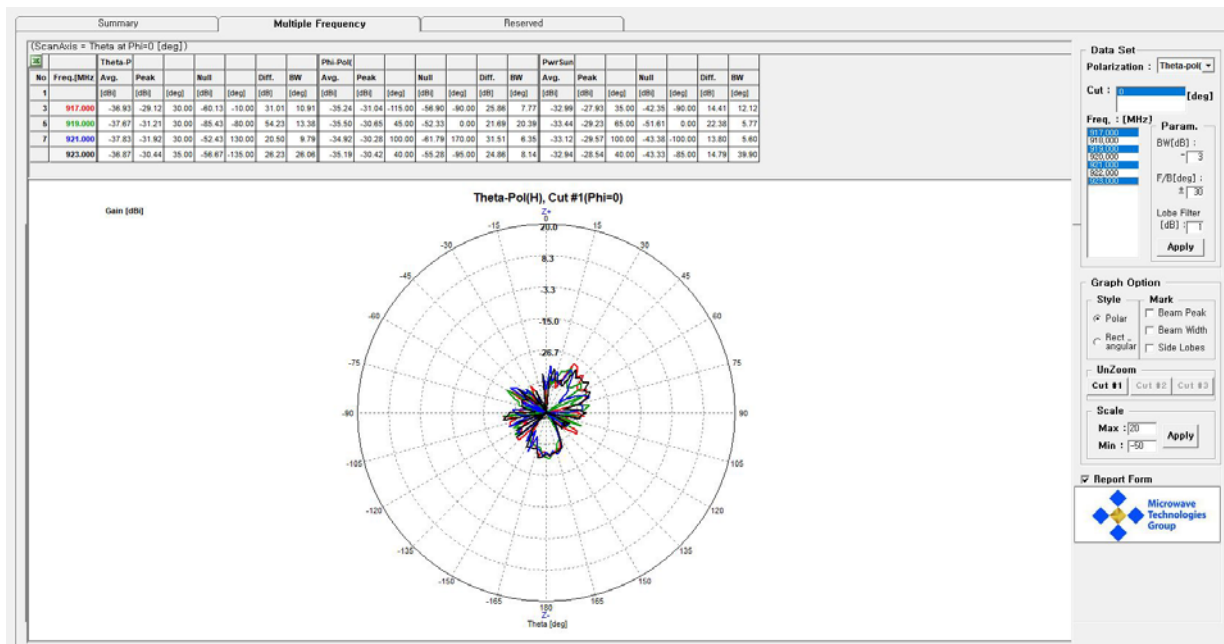


2D and 3D Power distribution at Z=2 cm from Radome

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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)

