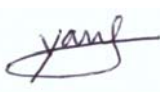# Specifications of Near Field Ant.

MESSRS. ㈜아이디로

ITEM :   Near Field Antenna

PART NAME :   MNFA1010-900L

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 24, 2021

QUANTITY :   pcs

SUPPLIER : MAC technologies Inc.		
DRAWN	CHECKED	APPROVED

mac technologies

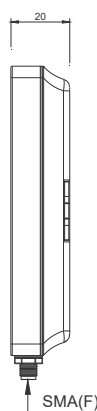# 1. Electrical Specifications.

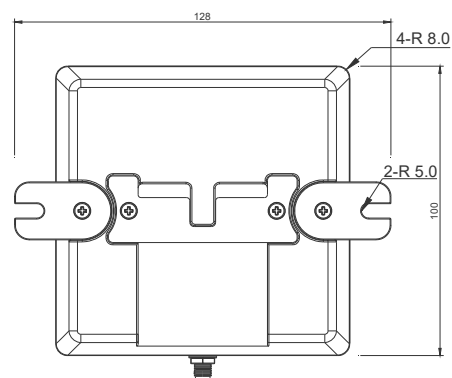| NO.	Parameter	Spec.	Unit	Remark
1	Center Frequency	919.0	MHz	
2	Near Field Intensity	-10.0	dBA/m	@ Center of ant. 2 cm from radome, 30 dBm input power
3	Far Field Gain	-20	dBi	
4	Polarization	Linear		
5	VSWR	2.0 : 1 max.	dB	
6	Impedance	50	Ohm	
7	Input Power	30	dBm	

2. Mechanical Dimensions. (unit : mm)
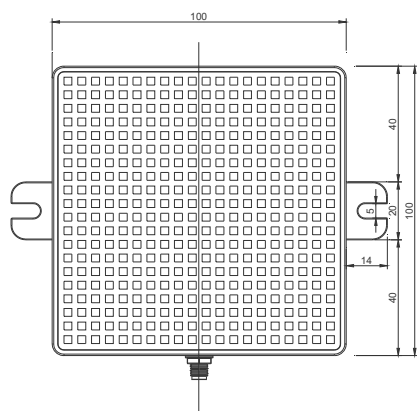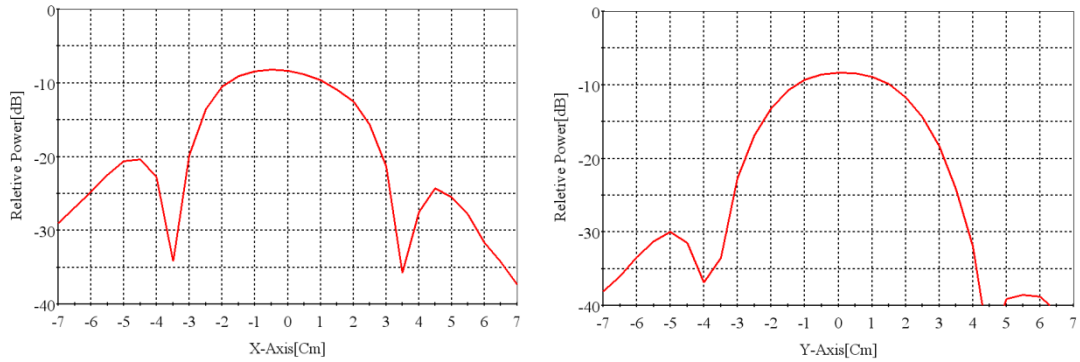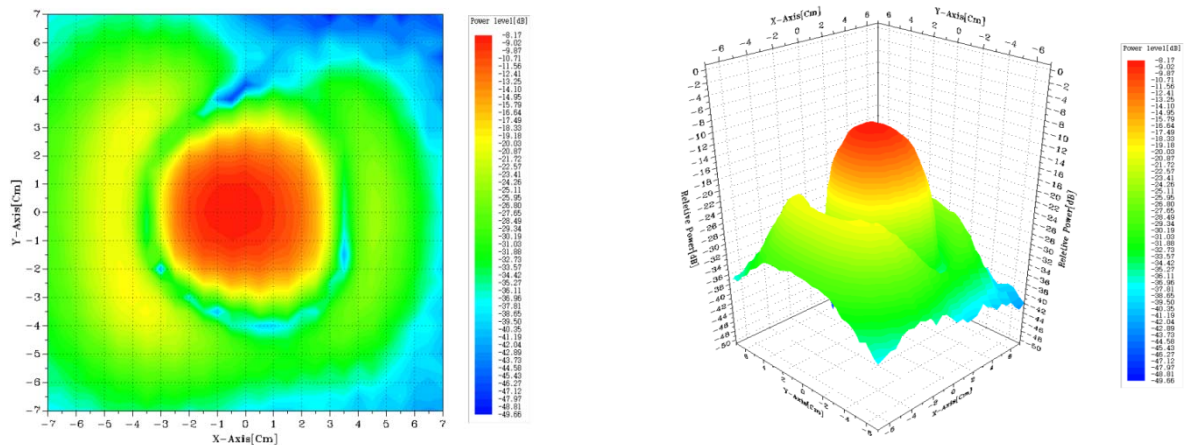

[TOP VIEW]   [SIDE VIEW]   [BOTTOM VIEW]

SMA(F)

Tolerance Unless Otherwise Specified : ±2.0
Unit : mm

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
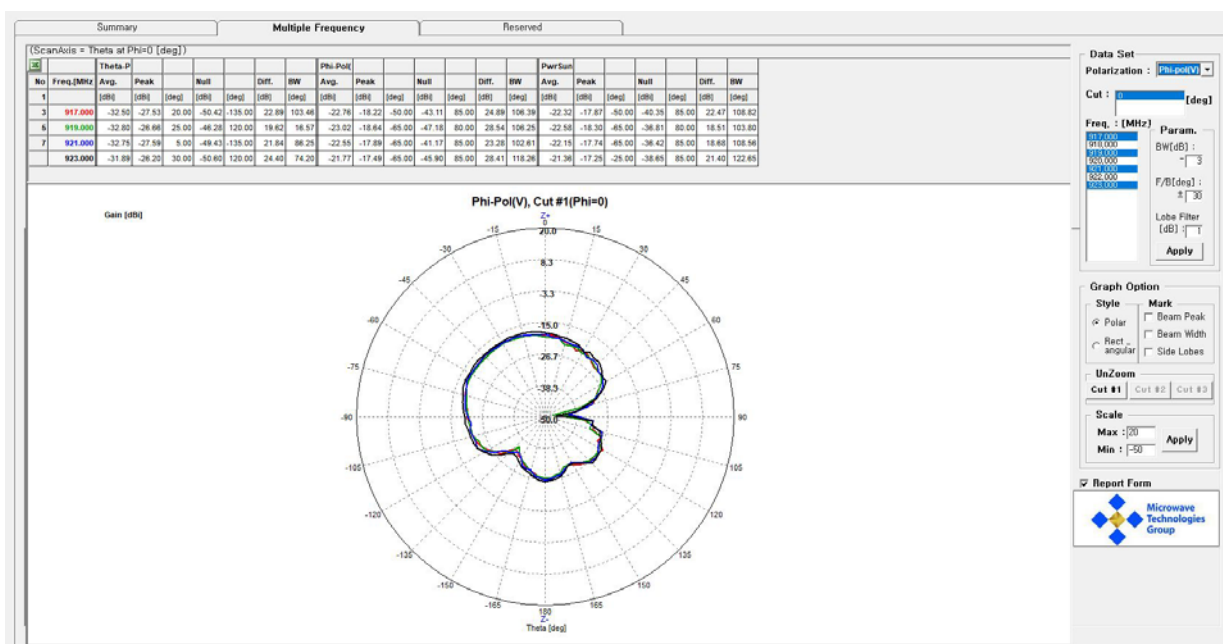
4. Radiation Patterns.

4-1. H-Pol. (Frequency 917.0, 919.0, 921.0, 923.0 MHz)
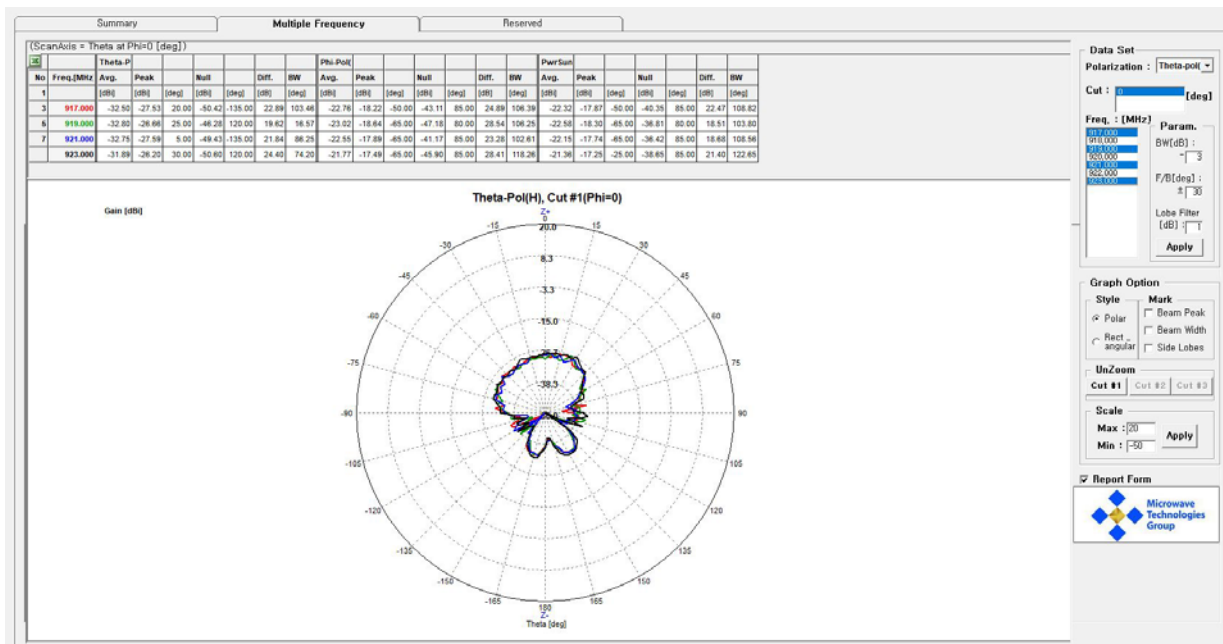
4-2. V-Pol. (Frequency 917.0, 919.0, 921.0, 923.0 MHz)

4-3. Gain Test data

Source Antenna Polarization	Gain			
	917.0 MHz	919.0 MHz	921.0 MHz	923.0 MHz
H-Pol. (dBi)	-27.53	-26.66	-27.59	-26.20
V-Pol. (dBi)	-18.22	-18.64	-17.89	-17.49

4-4. Gain Measurement System