Specifications of Ceramic Patch Ant.

RFID NFC MOBILITÉ

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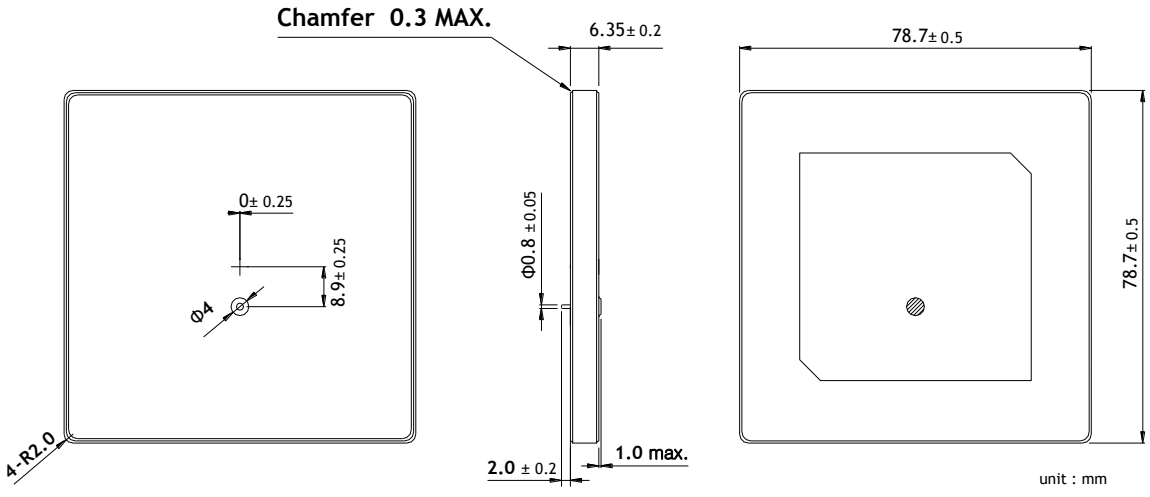
1. Electrical Specifications.

NO.	Parameter	Spec.			Unit	Remark
		Ant. Element	PCB & Cable Ass'y	Set Ass'y		
1	Center Frequency		866.0 ± 2		MHz	
2	Band Width	typ.	18 typ.	typ.	MHz	@ -10 dB R.L
3	VSWR	max.	2.0 : 1 max.	max.	Ratio	
4	Impedance		50		Ohms	
5	Peak Gain	typ.	1 typ.	typ.	dBiL	@ PCB & Cable Ass'y
6	Polarization		RHCP			

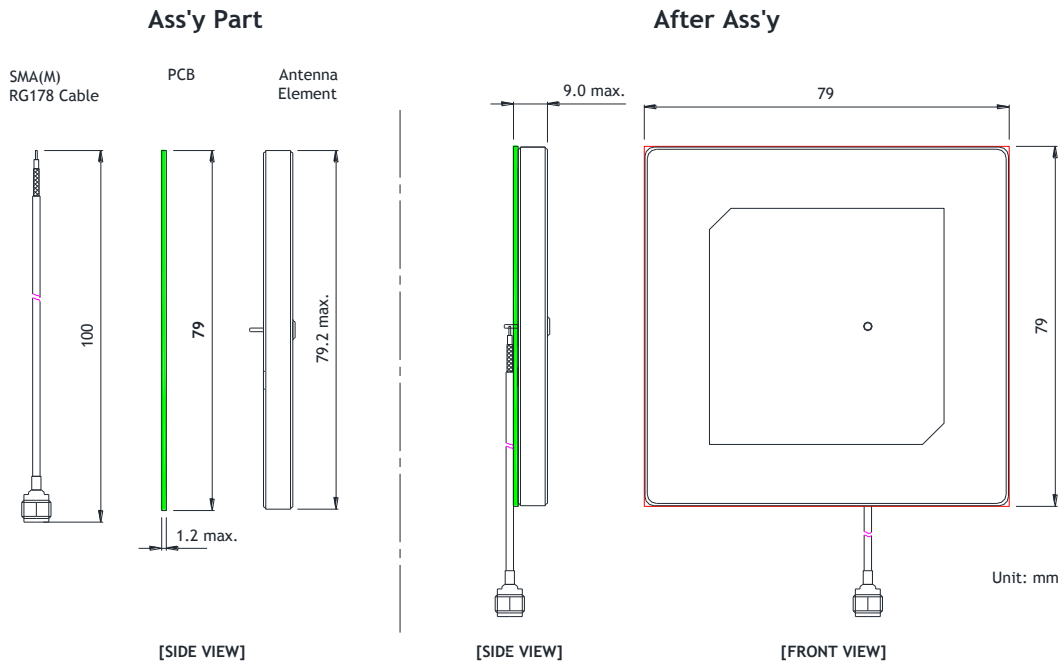
2. Mechanical Dimensions. (unit : mm)

2-1. Antenna Element (The color of ceramic substrates can be changed.)

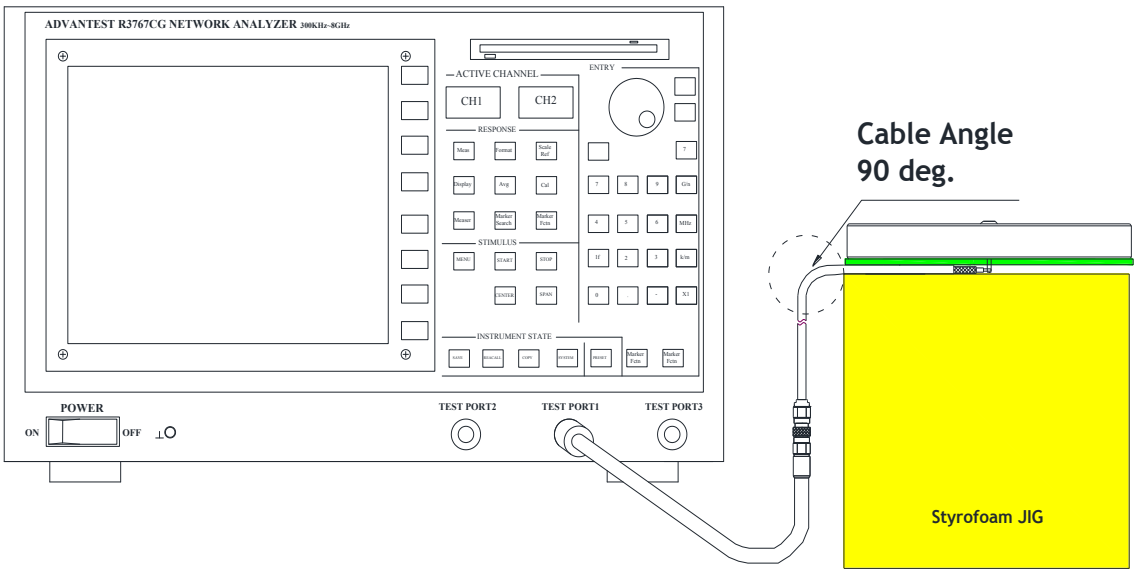


[BOTTOM VIEW] [SIDE VIEW] [TOP VIEW]

2-2. PCB & Cable Ass'y

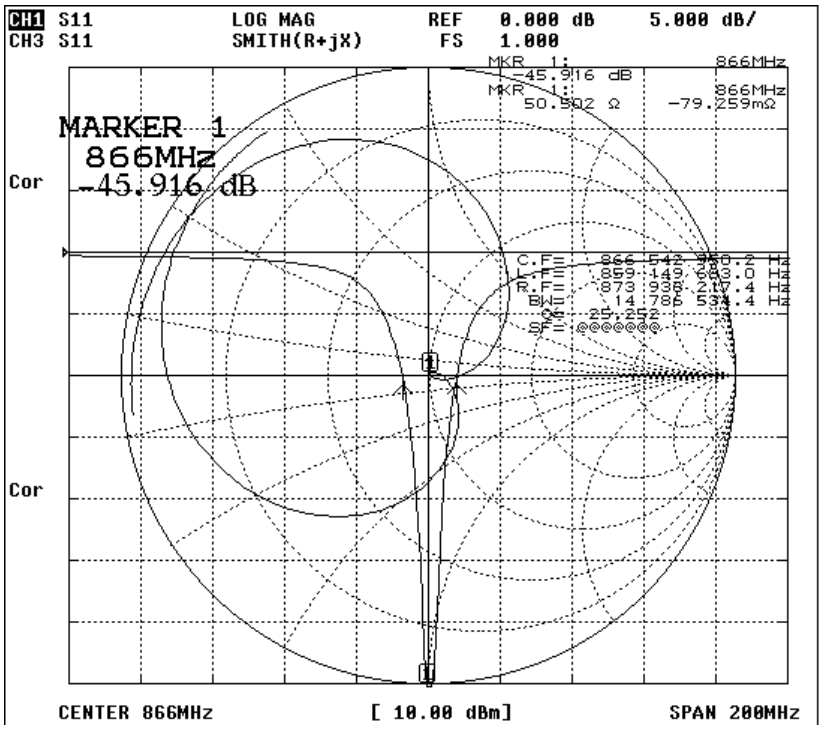


3. Test Fixture.



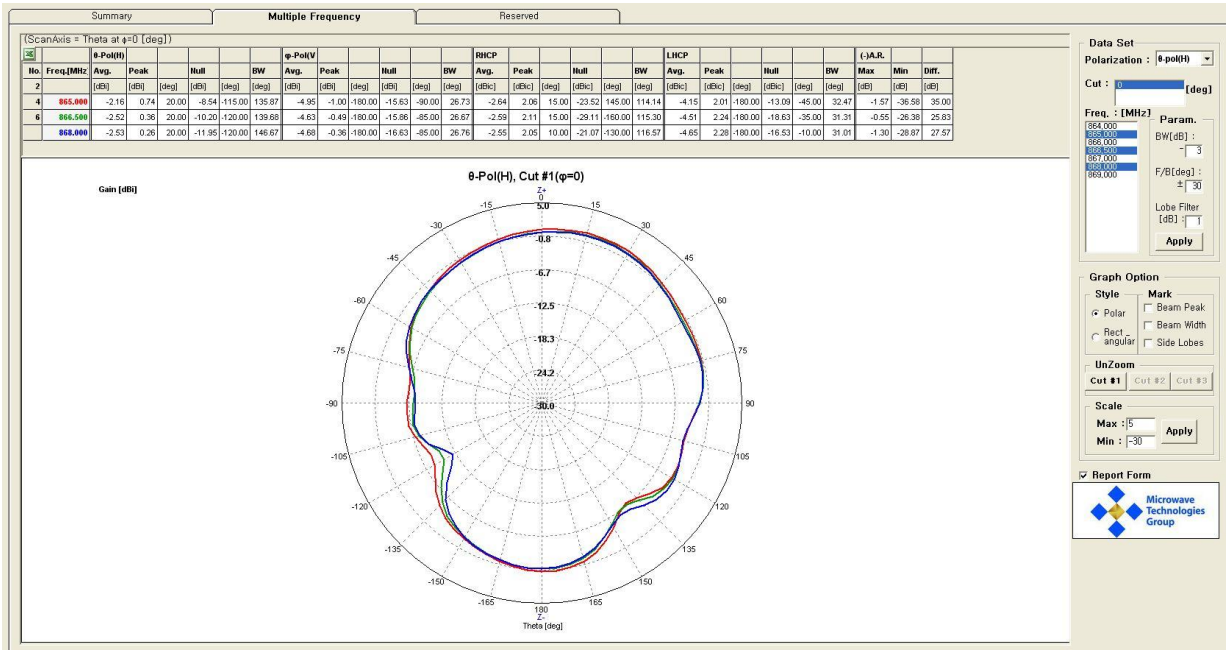
4. S11 Measurement Data.

4-1. PCB & Cable Ass'y

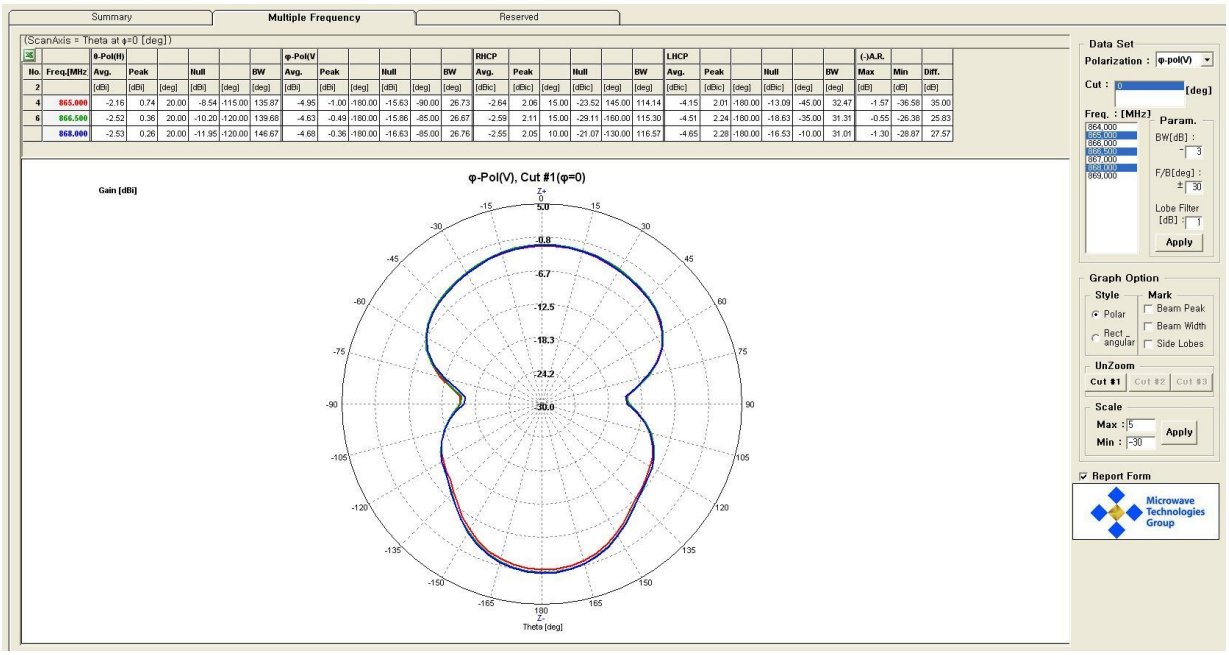


5. Radiation Patterns. (Test date: April 1, 2014)

5-1. H-Pol. (Frequency 865.0, 866.5, 868.0 MHz)



5-2. V-Pol. (Frequency 865.0, 866.5, 868.0 MHz)



5-3. Gain Test Data

Source Antenna Polarization	Gain		
	865.0 MHz	866.5 MHz	868.0 MHz
H-Pol.(dBiL)	0.74	0.36	0.26
V-Pol.(dBiL)	-1.00	-0.49	-0.36
RHCP(dBic)	2.06	2.11	2.05

5-4. List of utilized test equipment (MAC technologies Inc.)

NO	Kind of Equipment and Precision	Manufacturer	Model No.	Serial Number	Calibration Date	Specification	Note
1	Anechoic Chamber	MTG	Mobile Chamber	-	N/A	4.0 m X 2.5 m X 2.5 m (0.4 ~ 3 GHz)	
2	Network Analyzer	Agilent	8753ES	US39173213	12/08/22	30 KHz ~ 6 GHz	
3	Dual-Polarization Horn Antenna with RF Switch	MTG	QRH-004060/ RSW-001060		-	0.4 MHz ~ 6 GHz	Source
4	Calibration Antenna	Schwarzbeck Mess - Elektronik	BBHA 9120 A	1201	13/07/16	0.7 MHz ~ 3 GHz	Reference
5	Absorber Installation	EMERSON & CUMING	SABS-003 18”			Reflectivity : -25 dB @ 0.8 GHz -30 dB @ 1.0 GHz	