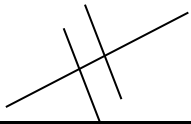




RFID Quadrifilar Helix Antenna Specification

Unit Name.	RFID QHA Specification
Parts Name	KSA-891A6015B109B
Date	17-Aug-17

Written by	Checked by	Approved by
SM Yun		

Head Office & Factory

507 DANGSANRO YUNSUHMYON SEJONGSI

THE REPUBLIC OF KOREA

TEL : (044) 865-9008

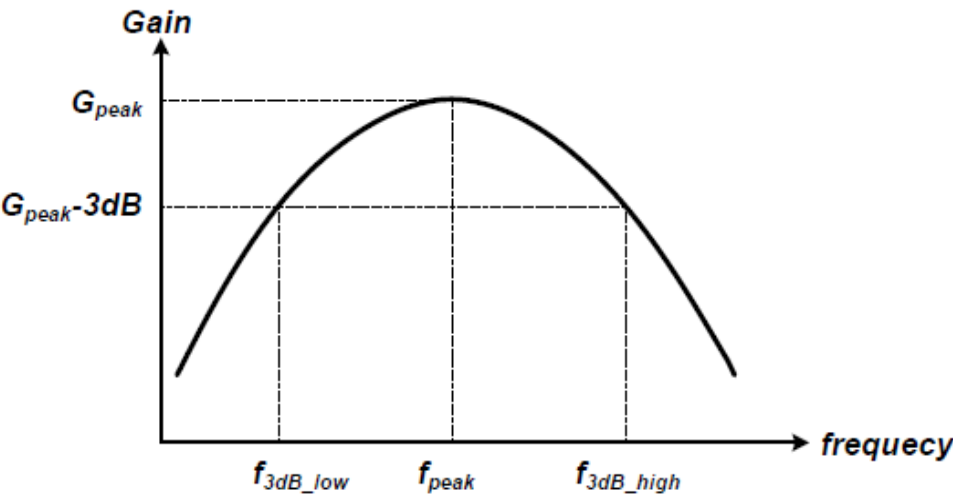
FAX : (044) 865-9229

1. Part Name
KSA-891A6015B109B

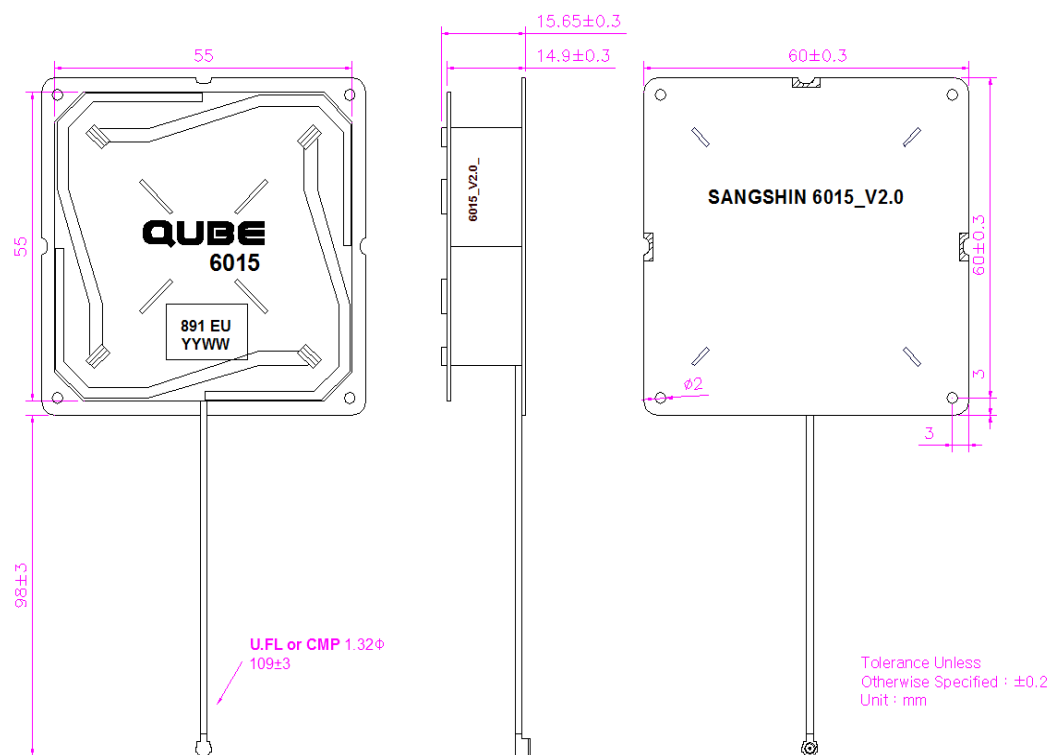
2. Electrical Specifications

Item	Specifications			
	Min.	Typical	Max.	Unit
Center Frequency (= Fc)	887	891	895	MHz
3dB Bandwidth	16	24		MHz
Return Loss @ Fc			-15	dB
Polarization	R.H.C.P			
Peak Gain @ Fc (RHCP)		2.5		dBic
Gain @ Reference Antenna	-17	-14		dB

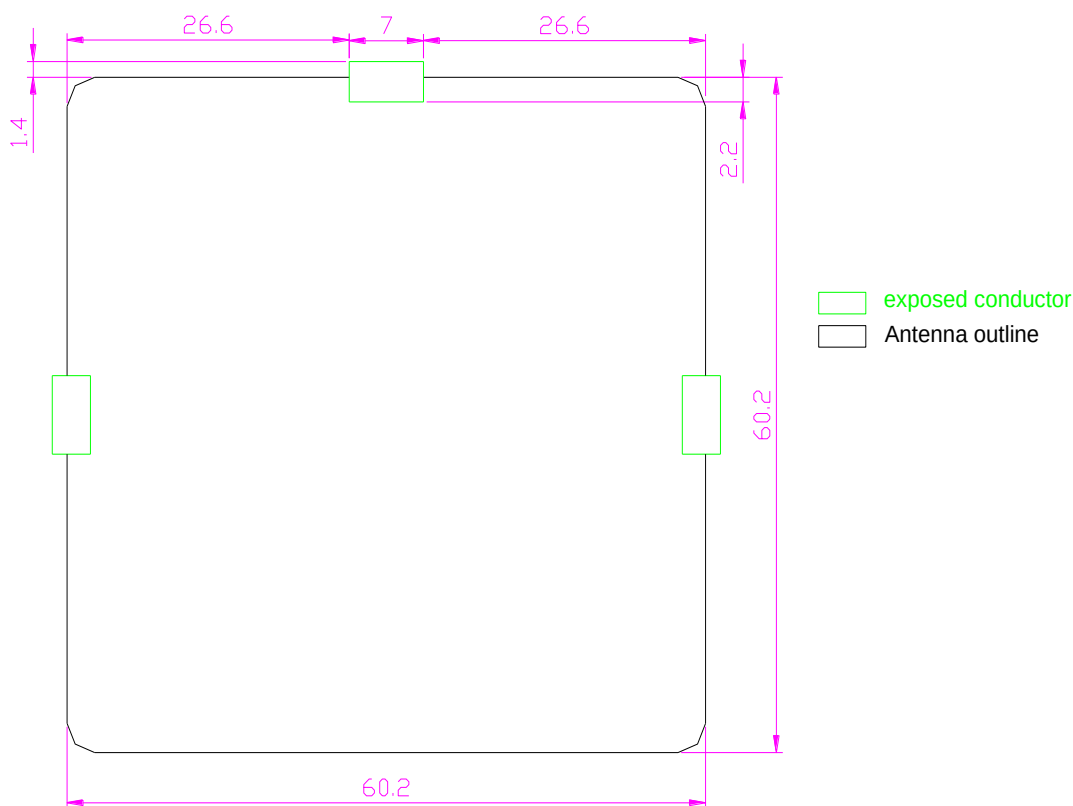
Note 1. 3dB Bandwidth is defined as frequency range between f3dB_low and f3dB_high.



3. Dimensions

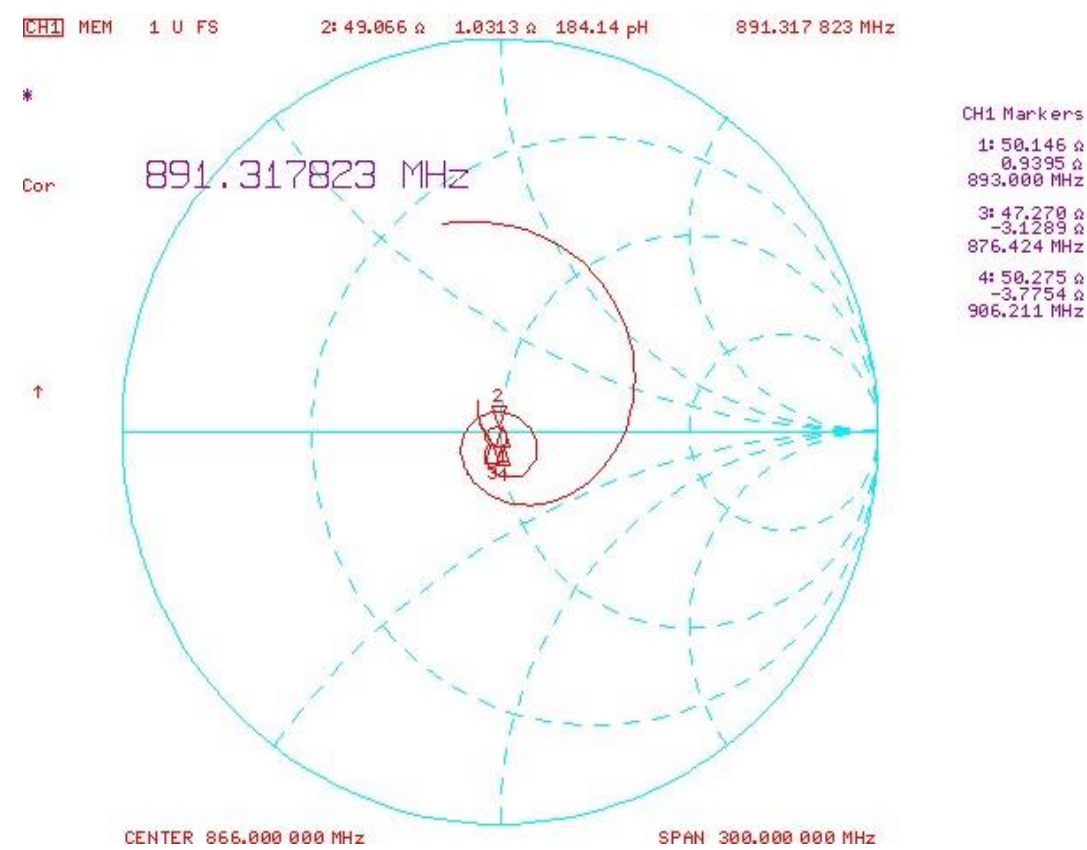


* Both U.FL(Hirose) and CMP(Gigalane) can be used interchangeably.
However, only one type, either U.FL or CMP, must be used in the same LOT production.



4. S-parameter Data

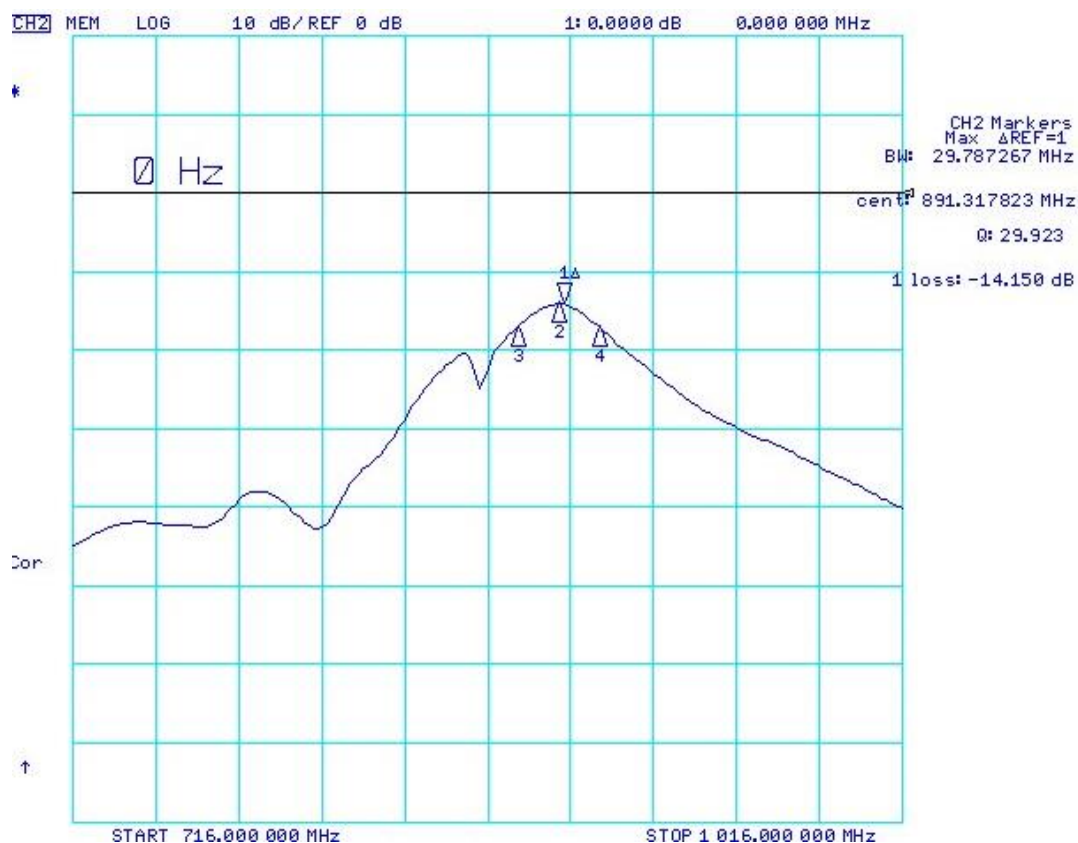
4.1 Return Loss (S11)



4.2 Smith Chart (S11)

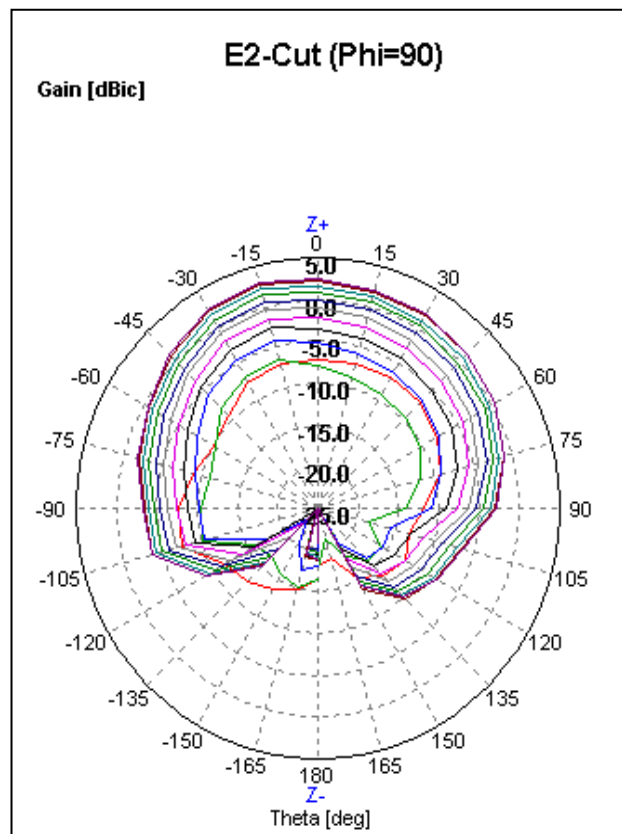


4.3 Gain (S21)



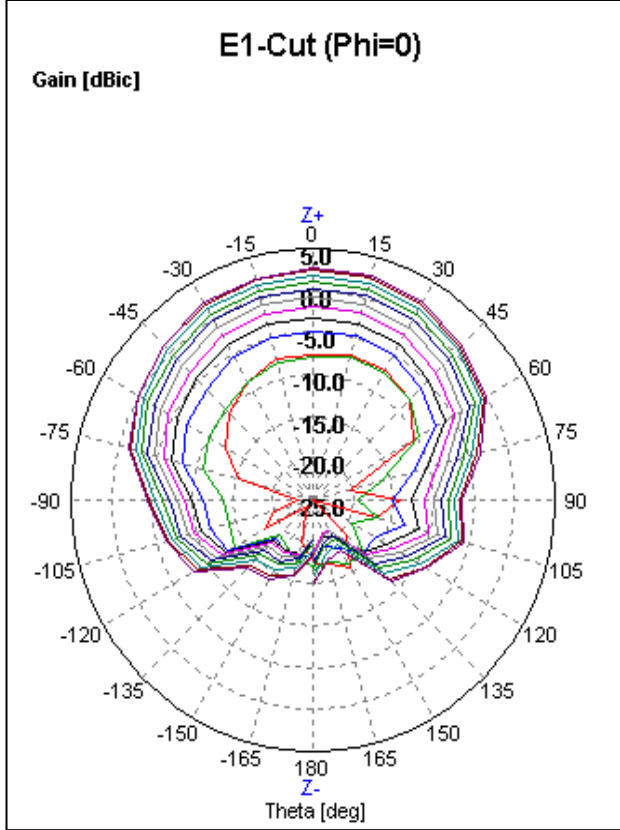
5. Antenna Chamber Data

5.1 E-Plane



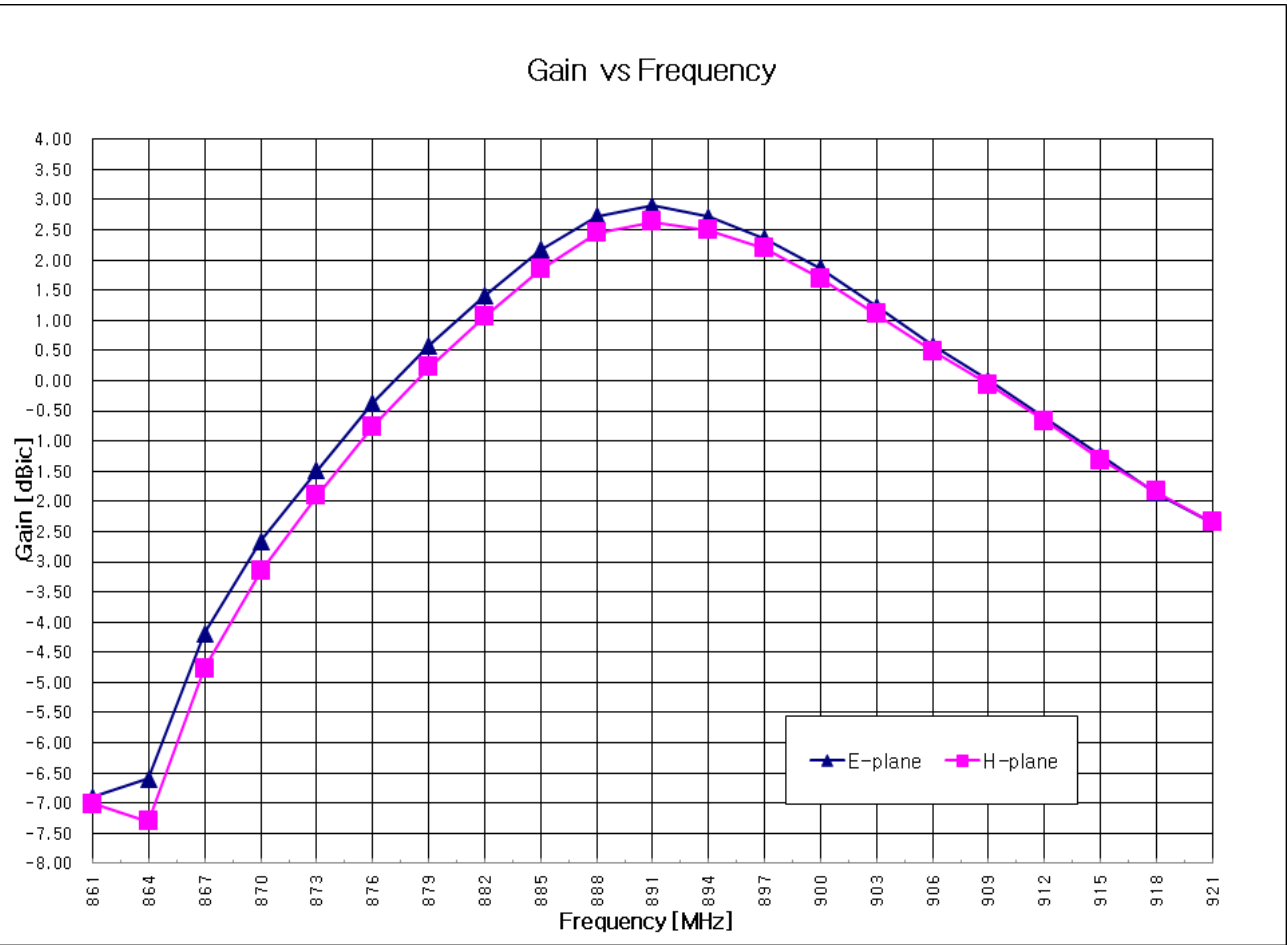
E - plane	
Frequency [MHz]	Peak Gain [dBic]
861	-6.90
864	-6.59
867	-4.19
870	-2.66
873	-1.49
876	-0.37
879	0.58
882	1.41
885	2.17
888	2.73
891	2.90
894	2.72
897	2.36
900	1.87
903	1.23
906	0.59
909	0.01
912	-0.62
915	-1.25
918	-1.86
921	-2.34

5.2 H-Plane



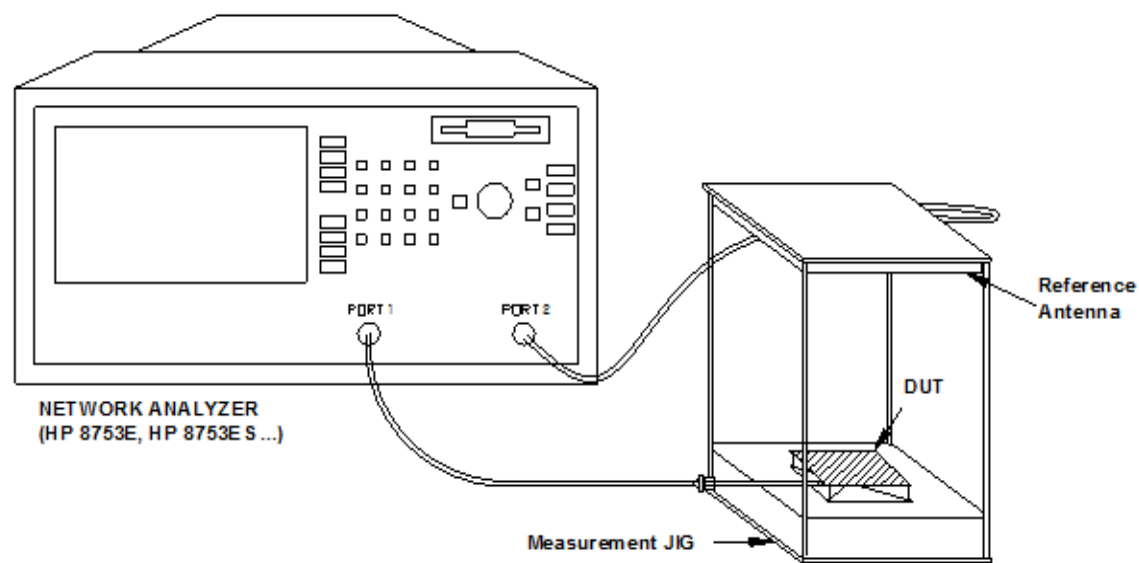
H - plane	
Frequency [MHz]	Peak Gain [dBic]
861	-7.01
864	-7.30
867	-4.76
870	-3.16
873	-1.90
876	-0.76
879	0.22
882	1.06
885	1.85
888	2.45
891	2.64
894	2.49
897	2.19
900	1.70
903	1.11
906	0.49
909	-0.06
912	-0.67
915	-1.32
918	-1.84
921	-2.35

5.3 Gain vs Frequency

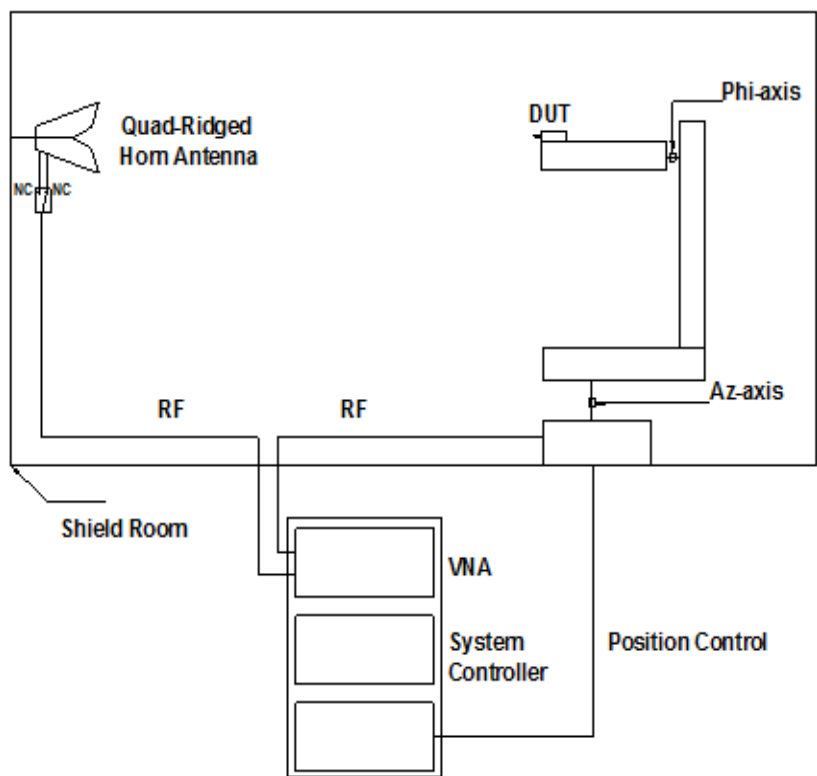


6. Measurement Condition

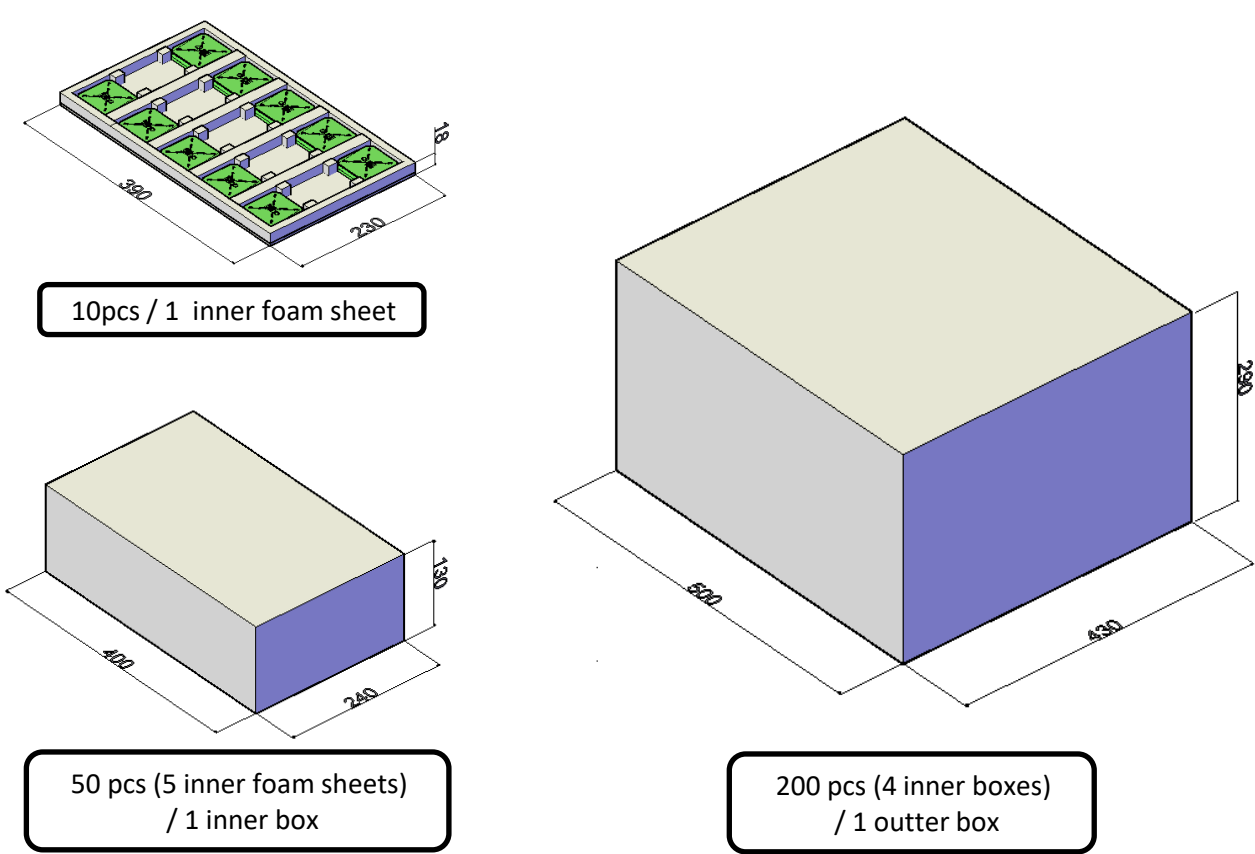
6.1 S-parameter Measurement



6.2 Gain Measurement



7. Packaging



8. Revision

Revision No.	Originator	Description of Change	Date of Changes
Ver-00	SM Yun	Preliminary	18-Jul-17
Ver-01	SM Yun	Sample Specificaton	28-Jul-17
Ver-02	SM Yun	Update on pakage	09-Aug-17
Ver-03	SM Yun	Update on chamber data	17-Aug-17