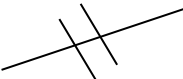




RFID Quadrifilar Helix Antenna Specification

Unit Name.	RFID QHA Specification
Parts Name	KSA-963A6015B140C
Date	17-Jul-25

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

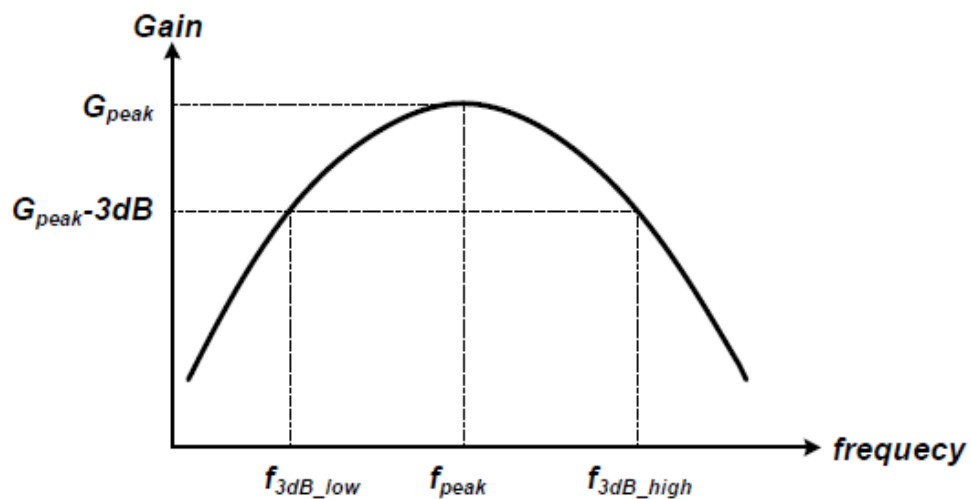
1. Part Name

KSA-963A6015B140C

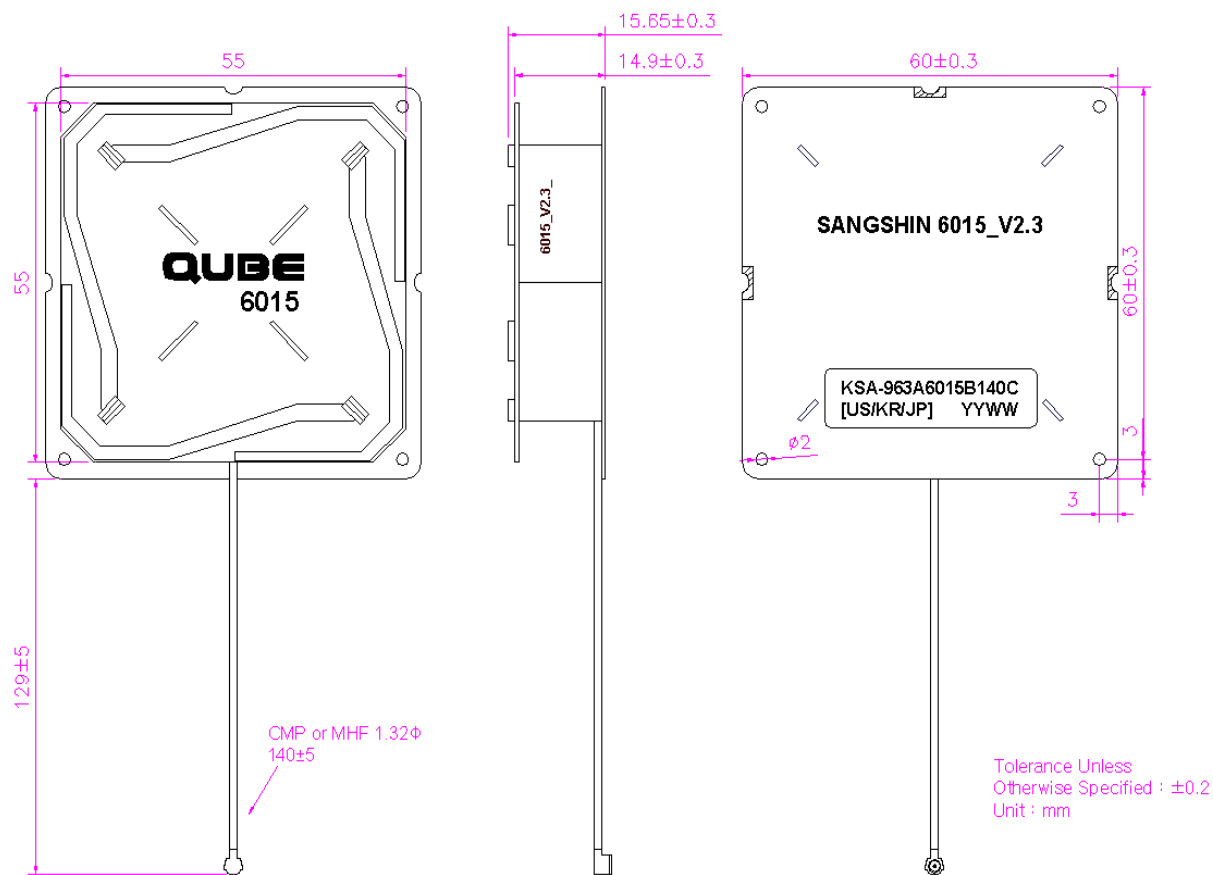
2. Electrical Specifications

Item	Specifications			
	Min.	Typical	Max.	Unit
Center Frequency (= Fc)	959	963	967	MHz
3dB Bandwidth	26	30		MHz
Return Loss @ Fc			-15	dB
Polarization	R.H.C.P			
Peak Gain @ Fc (RHCP)		3		dBic
Gain @ Reference Antenna	-14	-11		dB

Note 1. 3dB Bandwidth is defined as frequency range between f_{3dB_low} and f_{3dB_high} .



3. Dimensions



* Both CMP(Gigalane) and MHF(I-PEX) can be used interchangeably.
However, only one type, either CMP or MHF, must be used in the same LOT production.

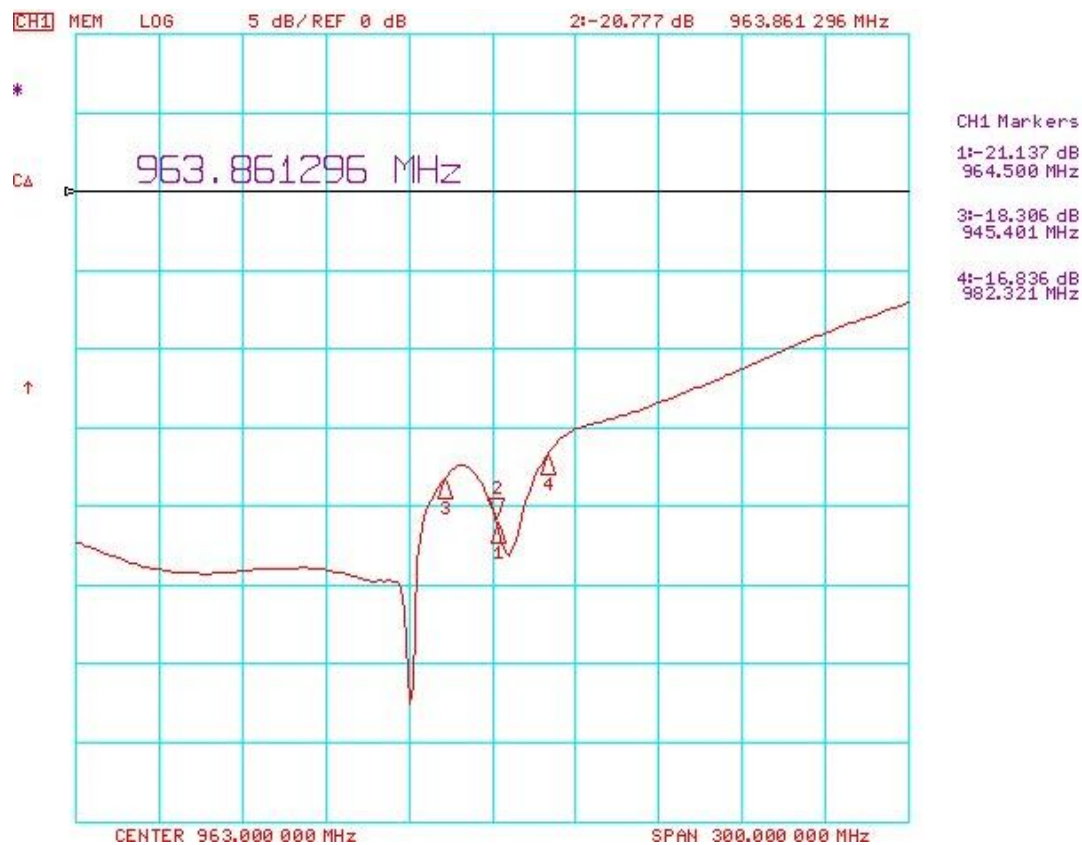
* YYWW : Date Code

* Dimensions of Connector

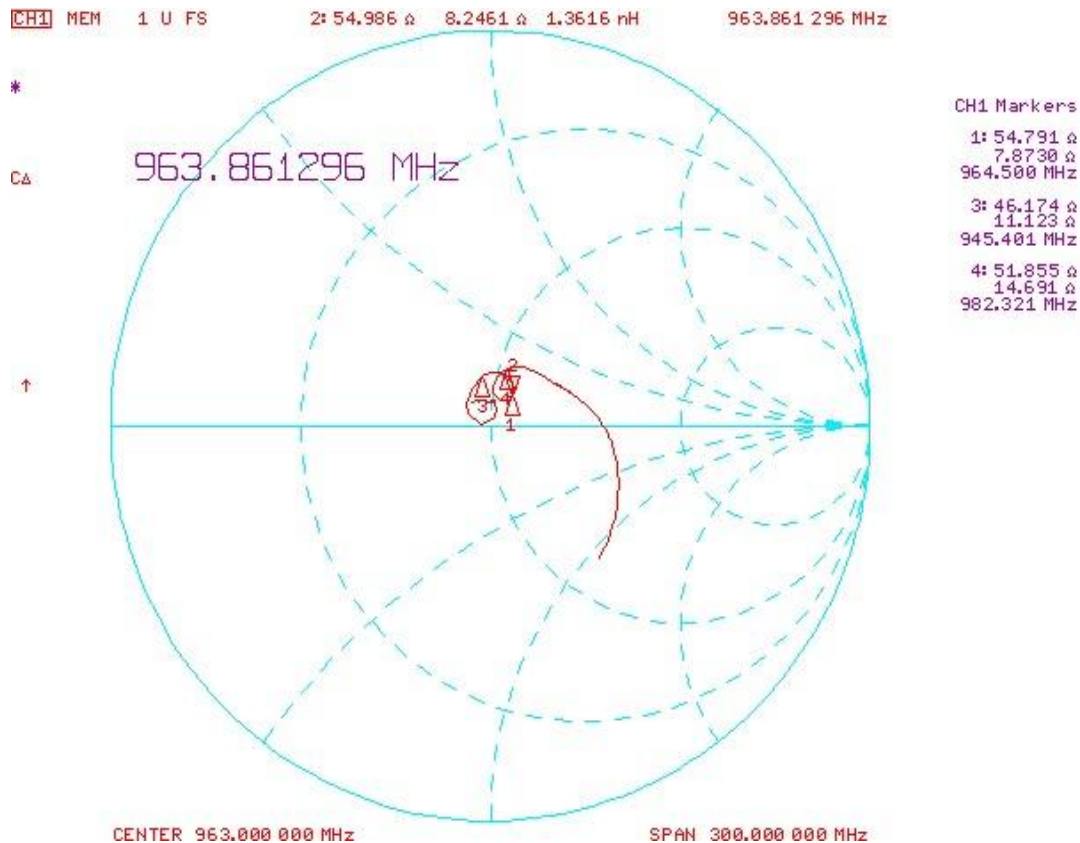
CMP	MHF

4. S-parameter Data

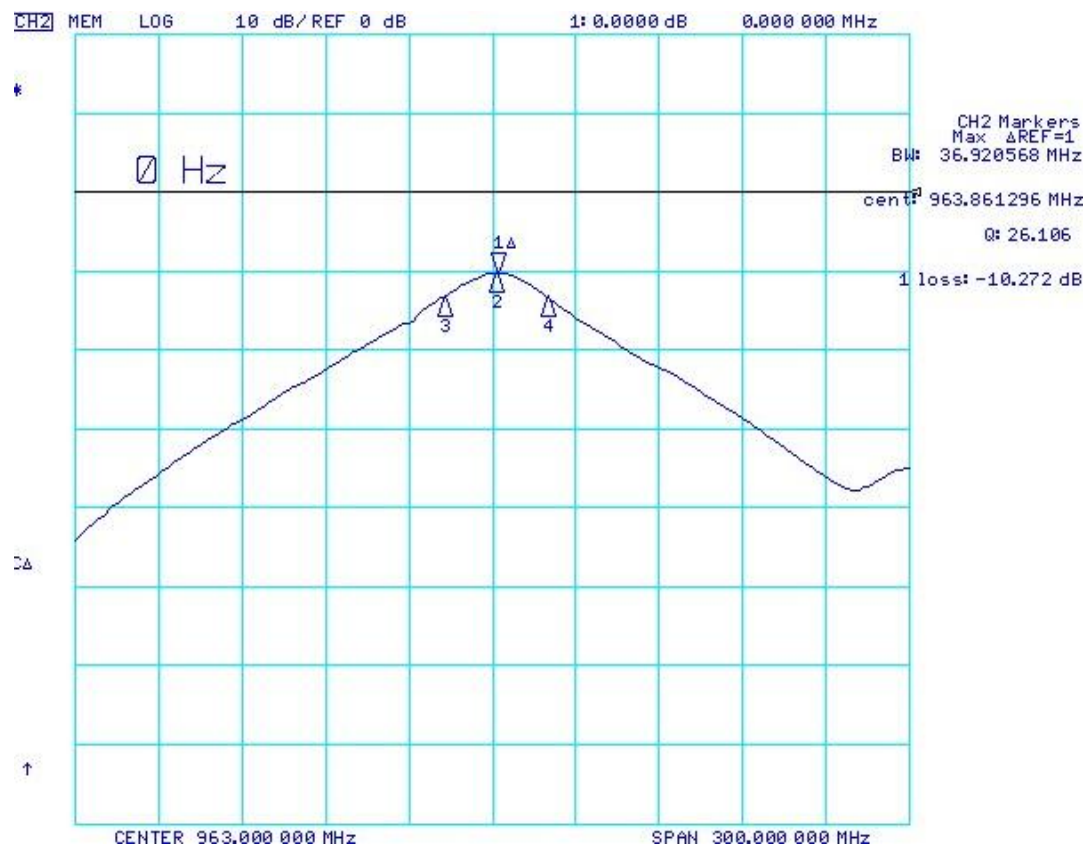
4.1 Return Loss (S11)



4.2 Smith Chart (S11)

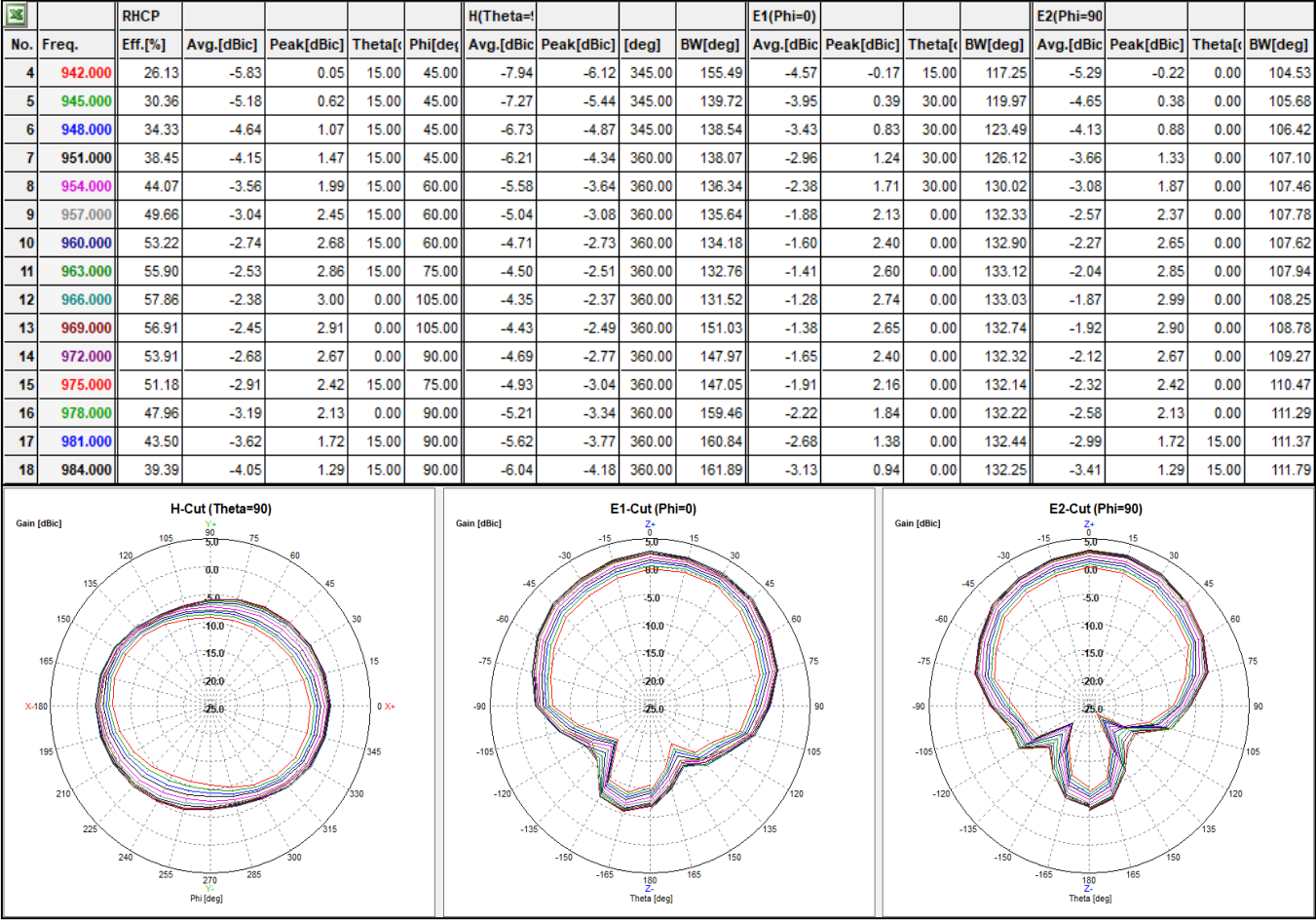


4.3 Gain (S21)

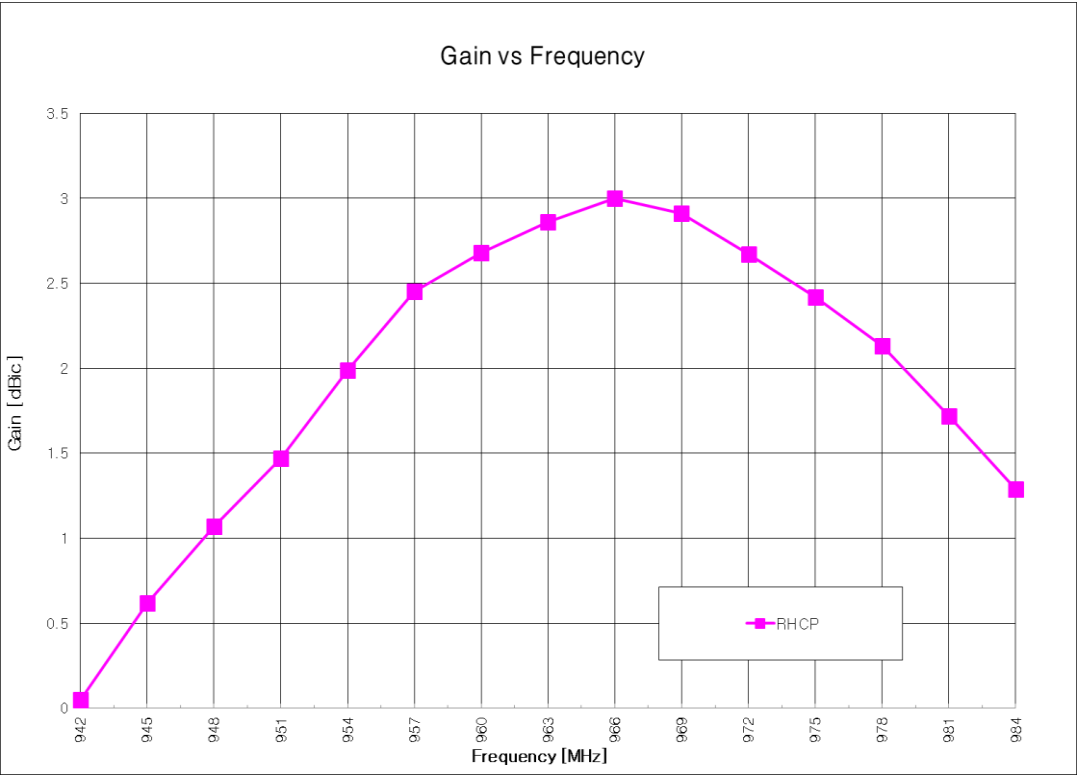


5. Antenna Chamber Data

5.1 RHCP Gain



5.2 Gain vs Frequency



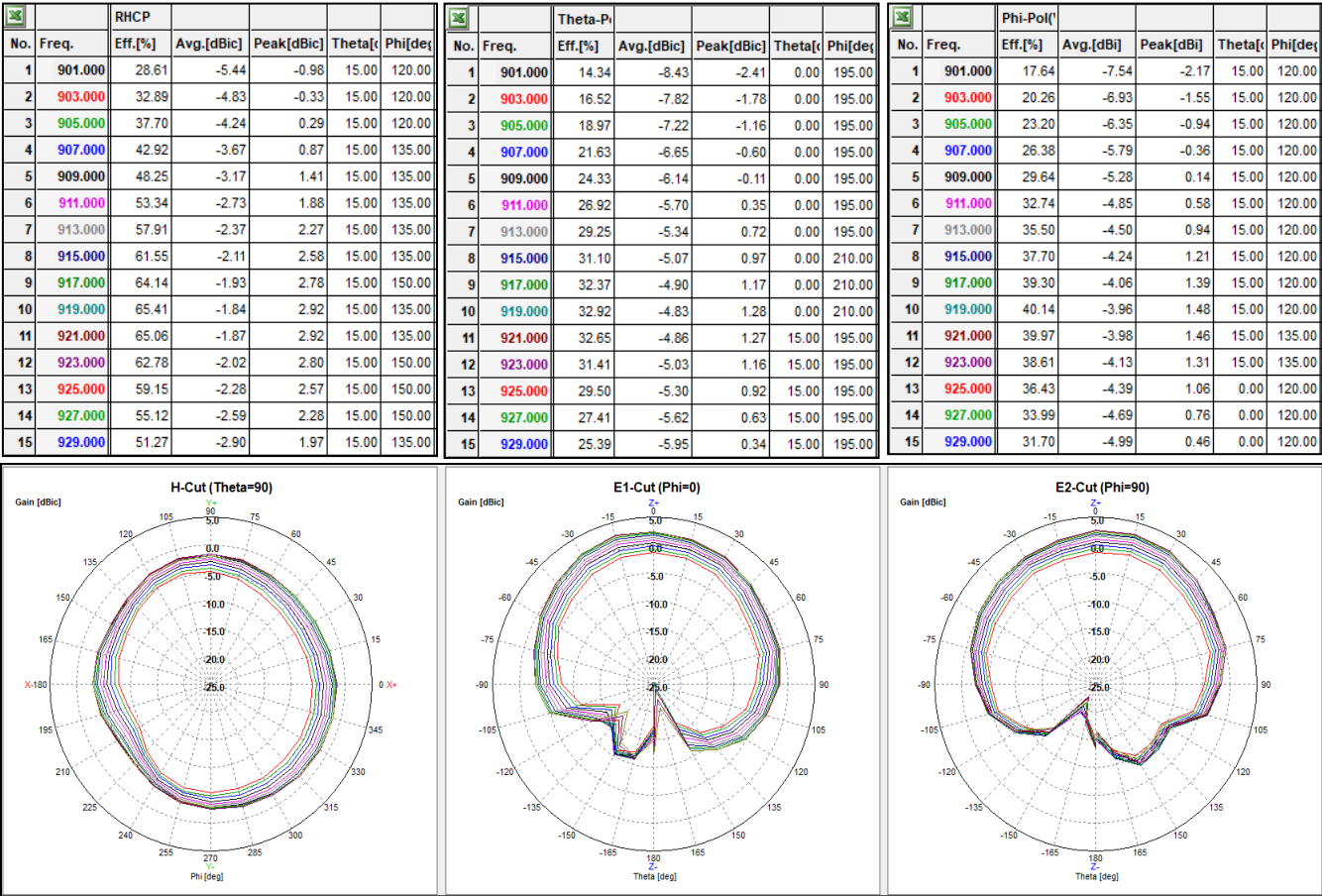
6. Measurement within enclosure

6.1 Reader or Model Name
KDC1000

6.2 Electrical Specifications

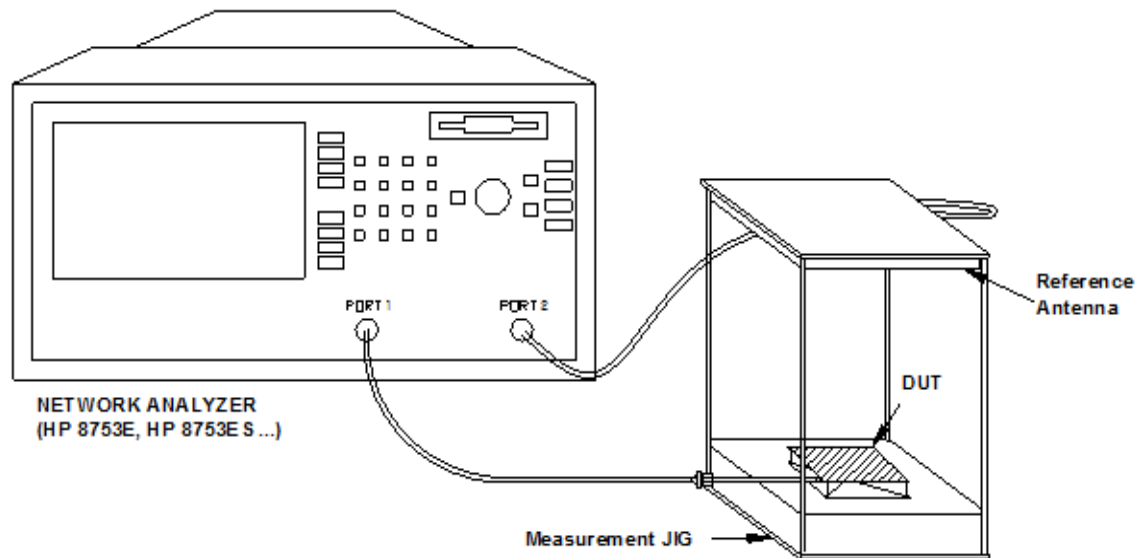
Item		Specifications			
		Min.	Typical	Max.	Unit
Center Frequency (= Fc)		917	921	925	MHz
3dB Bandwidth		26	30		MHz
Return Loss @ Fc				-15	dB
Polarization		R.H.C.P			
Peak Gain	RHCP		2.92		dBic
	H (Theta-Pol)		1.28		dB
	V (Phi-Pol)		1.48		dB
Axial Ratio @ Fc			1.3		

6.3 Antenna Chamber Data within enclosure

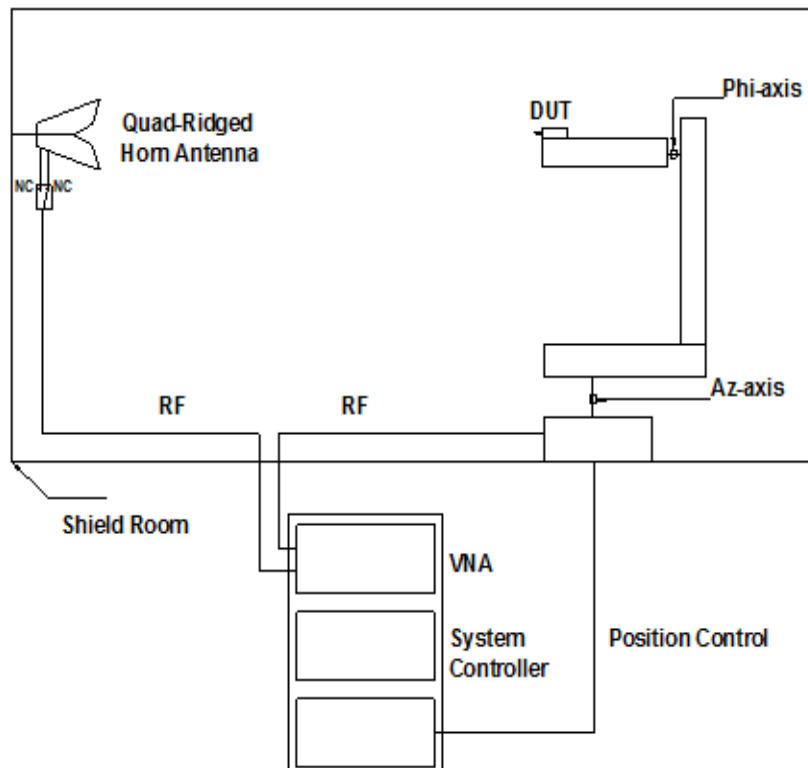


7. Measurement Condition

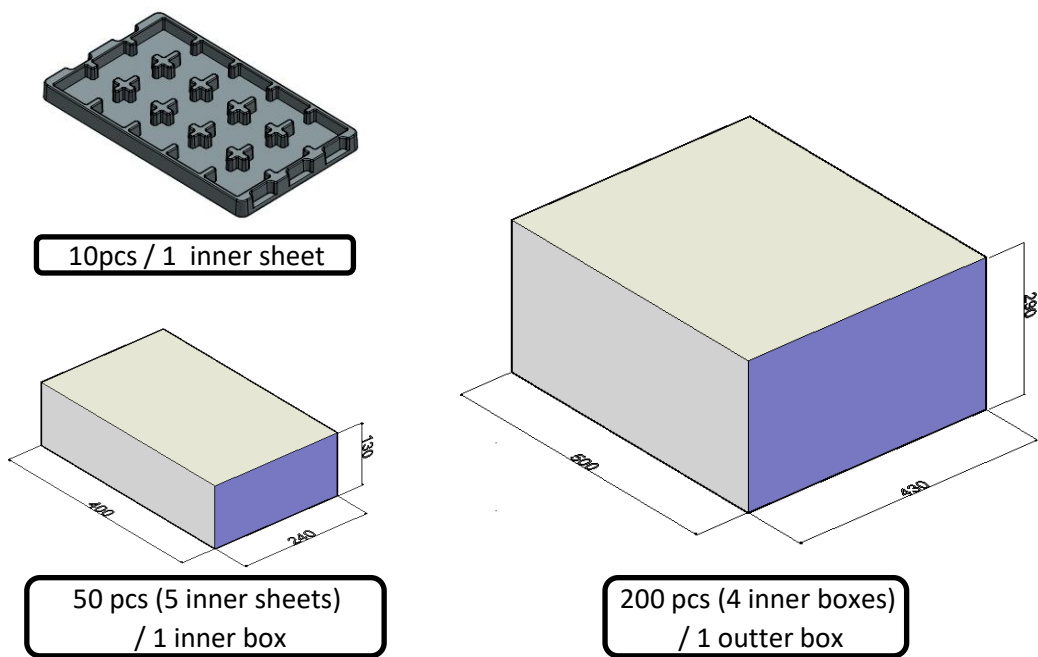
7.1 S-parameter Measurement



7.2 Gain Measurement



8. Package



9. Revision

Revision No.	Originator	Description of Change	Date of Changes
Ver-00	SM Yun	Sample Specificaton	17-Jul-25