



QUBE 4010

UHF RFID Antenna

Specification

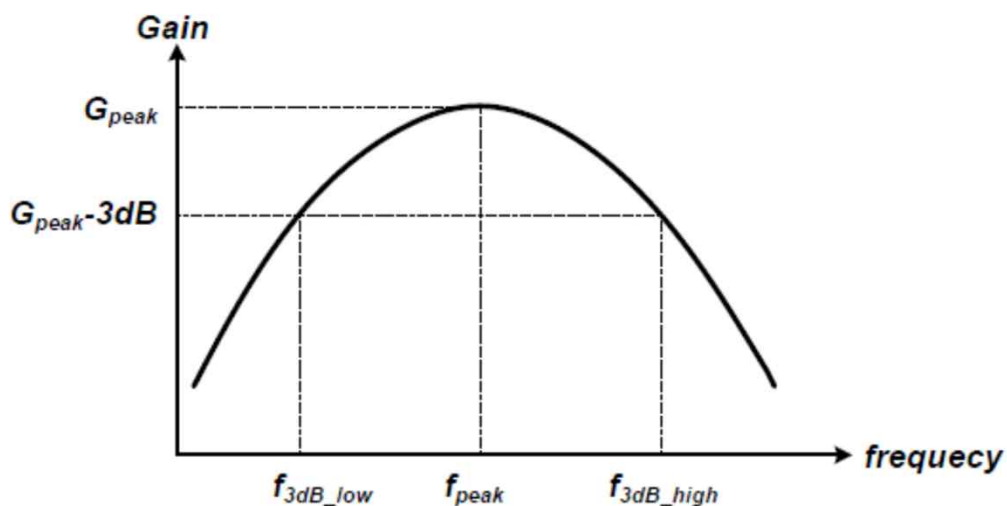
1. Part Name

KSA-921A4010B100B

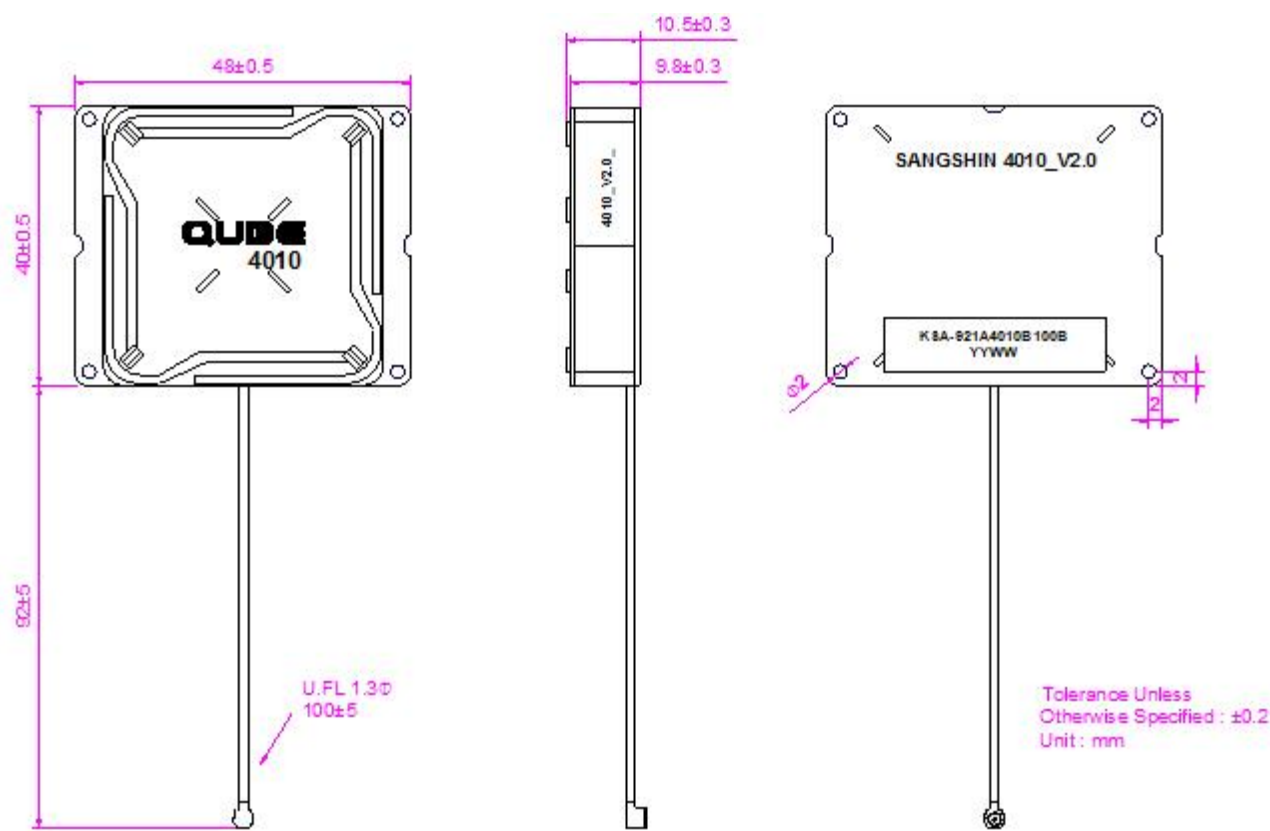
2. Electrical Specifications

Item	Specifications			
	Min.	Typical	Max.	Unit
Center Frequency (= Fc)	917	921	925	MHz
Operating Frequency	$F_c \pm 5$	$F_c \pm 8$		MHz
Return Loss @ Operating Frequency			-15	dB
Polarization	R.H.C.P			
Peak Gain @ Fc (RHCP)		0		dBic
Gain @ Reference Antenna		-11		dB
Axial Ratio @ Fc			1.3	
Beamwidth (@3dB)	80	110		degree
Impedance		50		Ω
Operating Temperature	-30		+70	°C
Weight		7.0		g

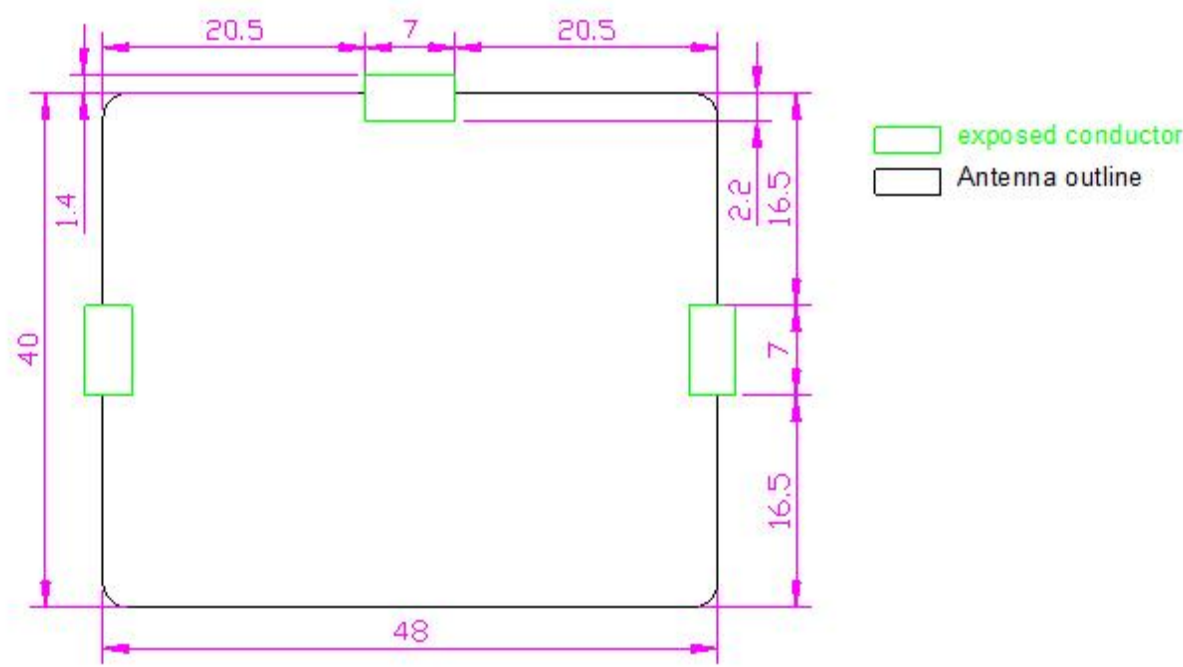
Note 1. Operating frequency is defined as frequency range between f_{3dB_low} and f_{3dB_high} .



3. Dimensions



- Foot Print

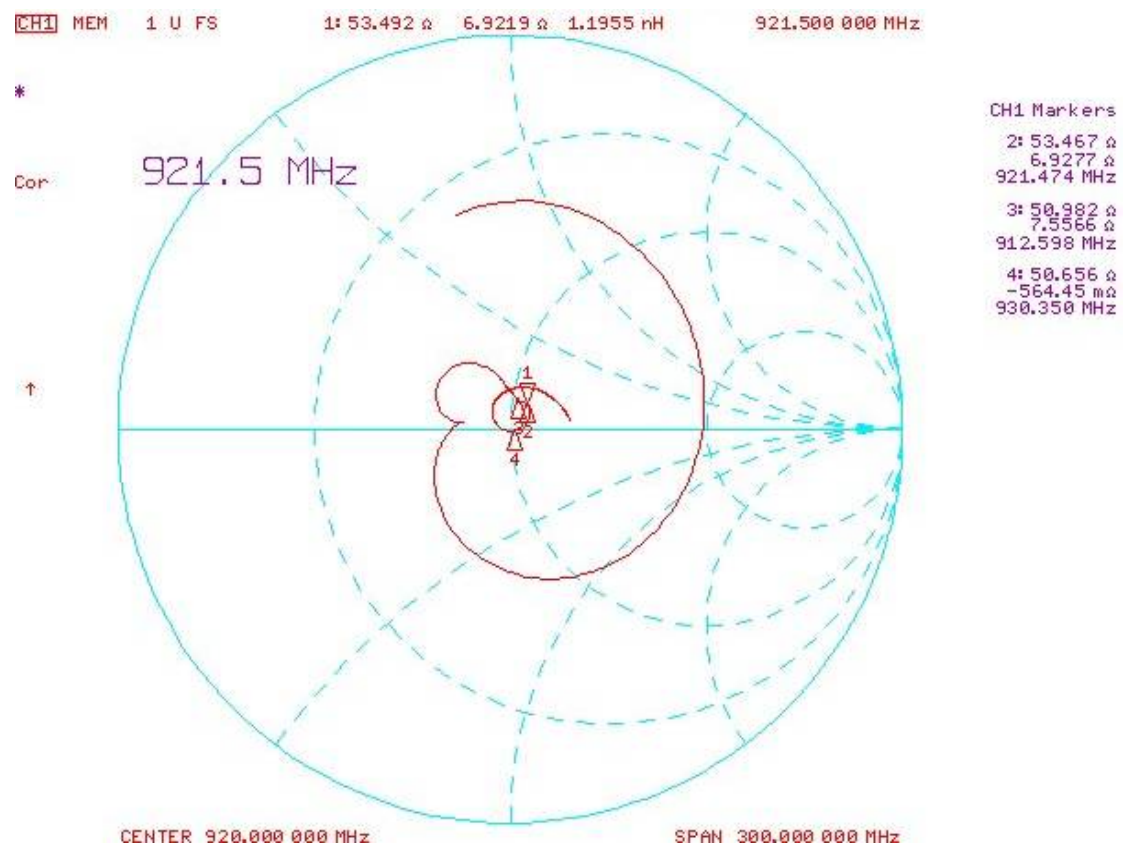


4. S-parameter Data

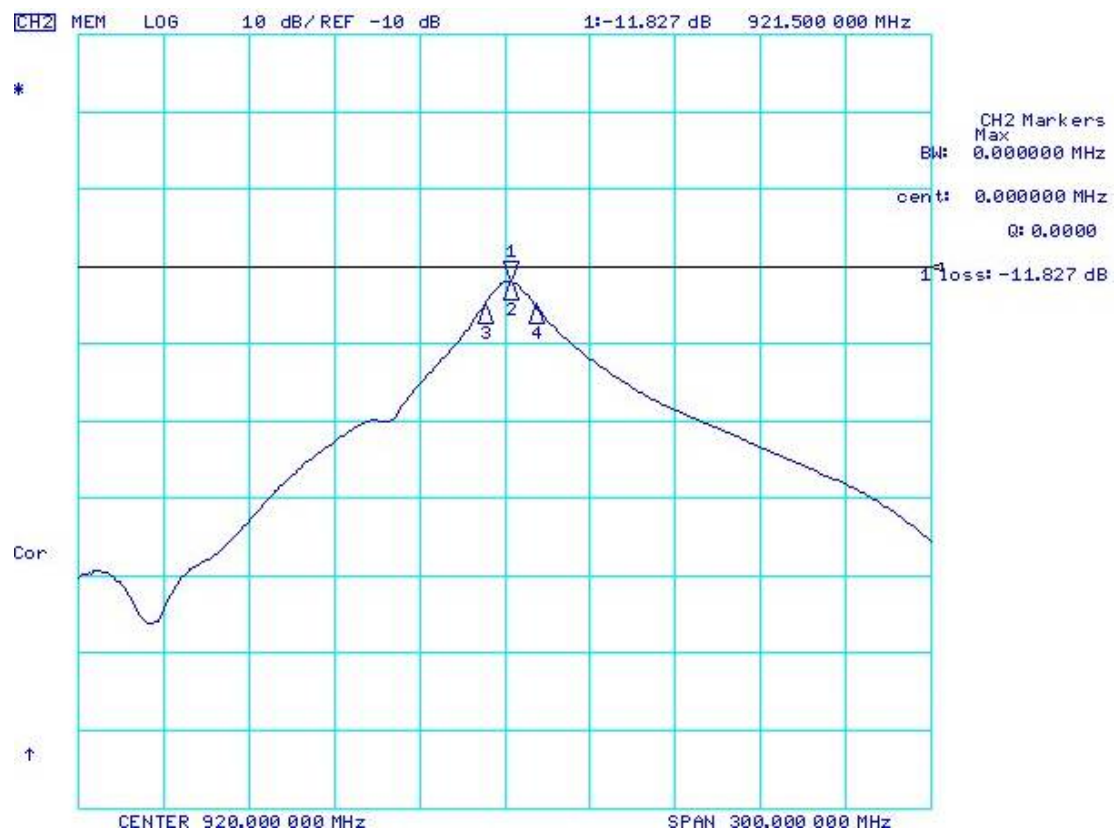
4.1 Return Loss (S11)



4.2 Smith Chart (S11)

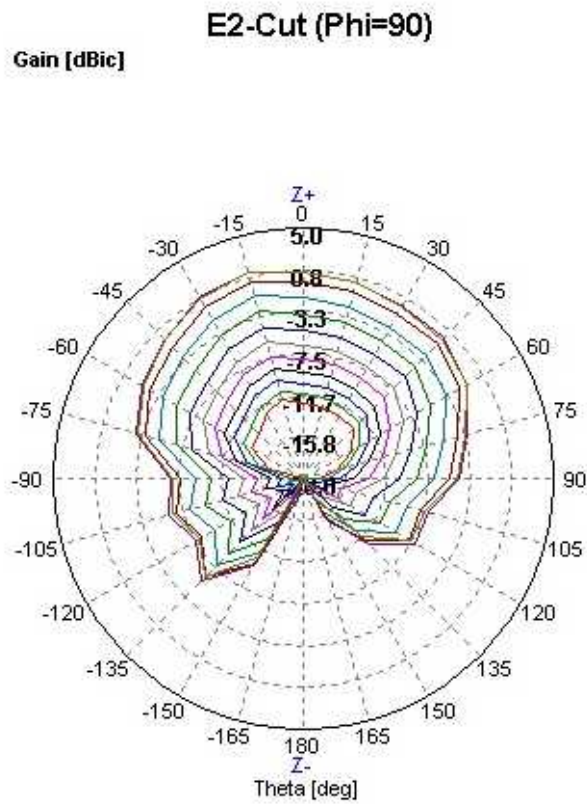


4.3 Gain (S21)



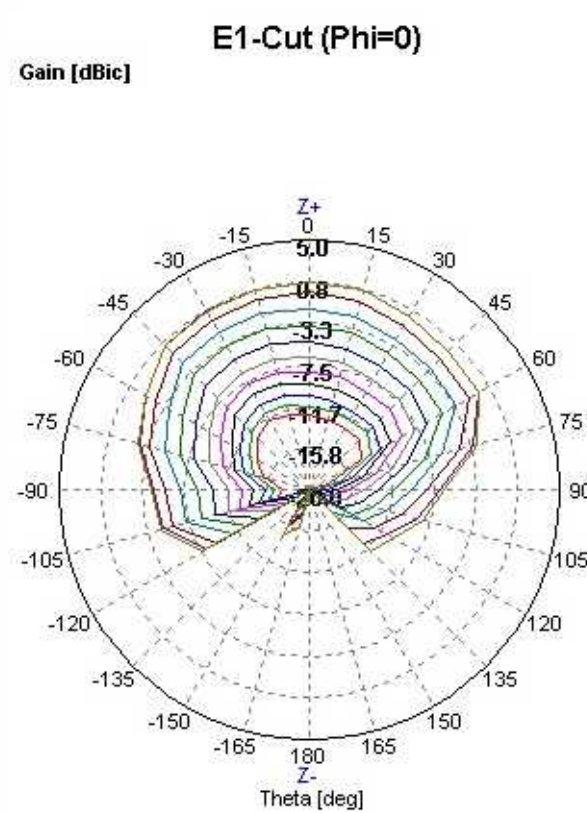
5. Antenna Chamber Data

5.1 E-Plane



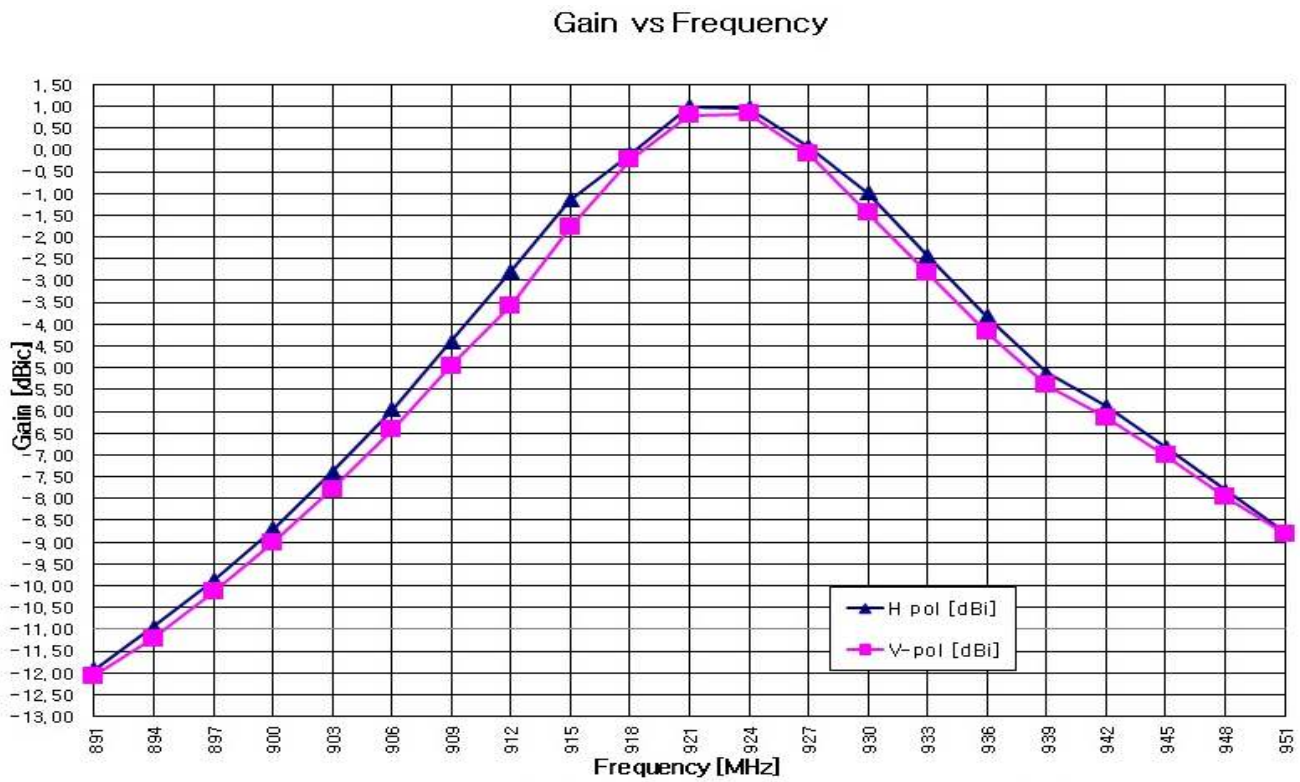
E - plane	
Frequency [MHz]	Gain [dBic]
891	-11.91
894	-10.94
897	-9.87
900	-8.69
903	-7.39
906	-5.95
909	-4.40
912	-2.78
915	-1.15
918	-0.09
921	0.99
924	0.95
927	0.07
930	-0.99
933	-2.44
936	-3.82
939	-5.11
942	-5.88
945	-6.83
948	-7.81
951	-8.75

5.2 H-Plane



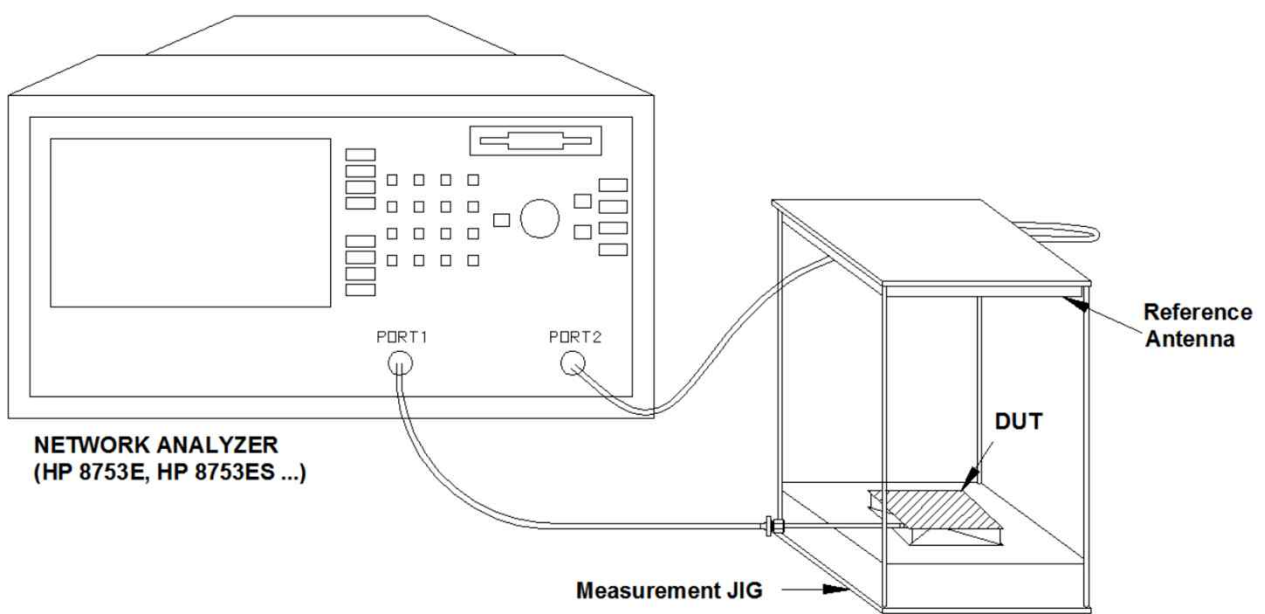
H - plane	
Frequency [MHz]	Gain [dBic]
891	-12.07
894	-11.20
897	-10.14
900	-9.00
903	-7.79
906	-6.42
909	-4.95
912	-3.57
915	-1.77
918	-0.23
921	0.80
924	0.83
927	-0.09
930	-1.45
933	-2.83
936	-4.18
939	-5.40
941	-6.13
944	-7.01
947	-7.97
950	-8.80

5.3 Gain vs Frequency

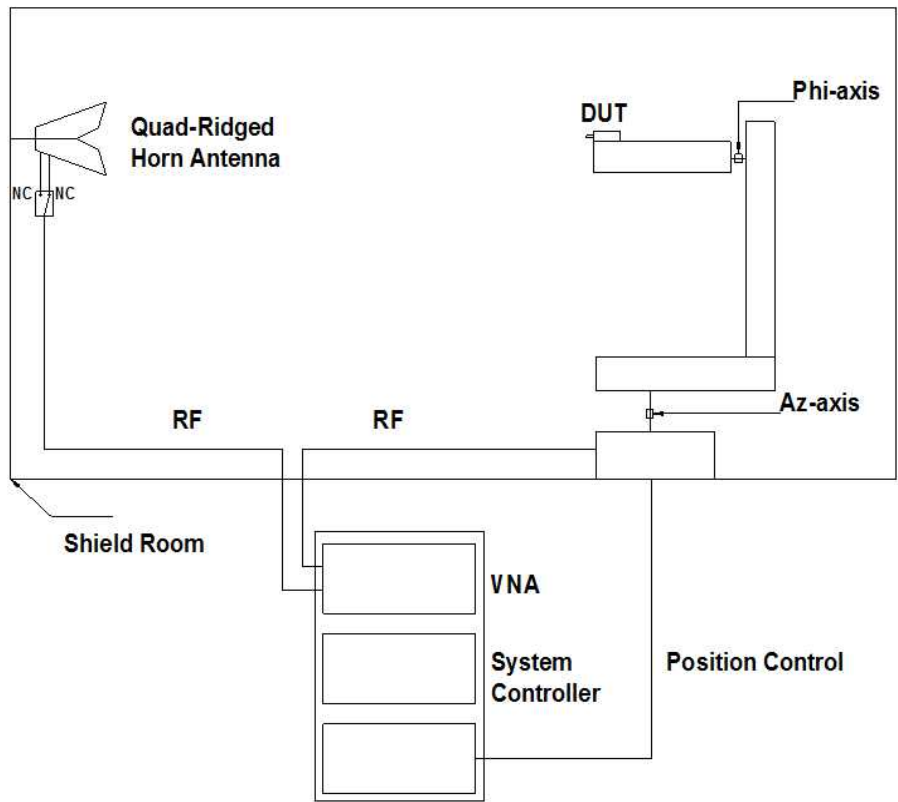


6. Measurement Condition

6.1 S-parameter Measurement



6.2 Gain Measurement



8.Revision

Revision No.	Originator	Description of Change	Date of Changes
Ver-00	JS KIM	Full specification	19-May-15

9.Address Information

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