



QUBE 6010

UHF RFID Antenna

Specification

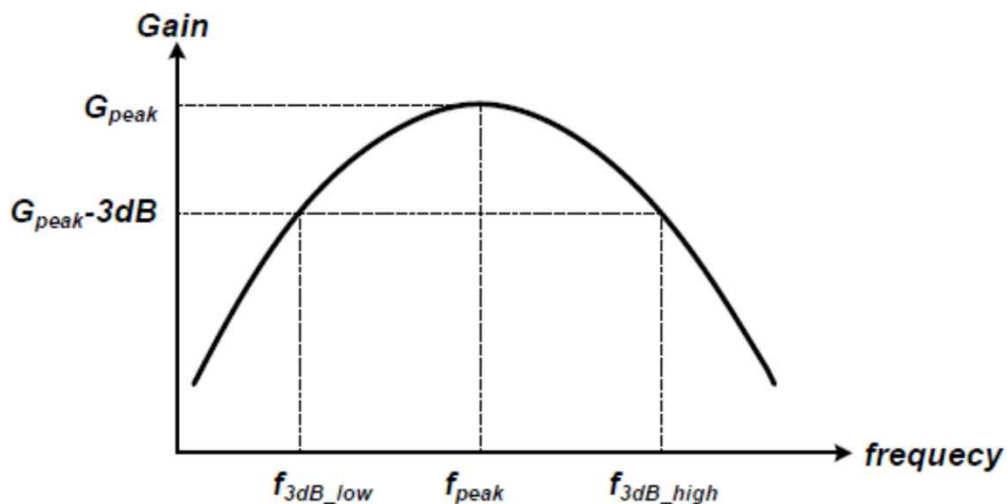
1. Part Name

KSA-921A6010B100C

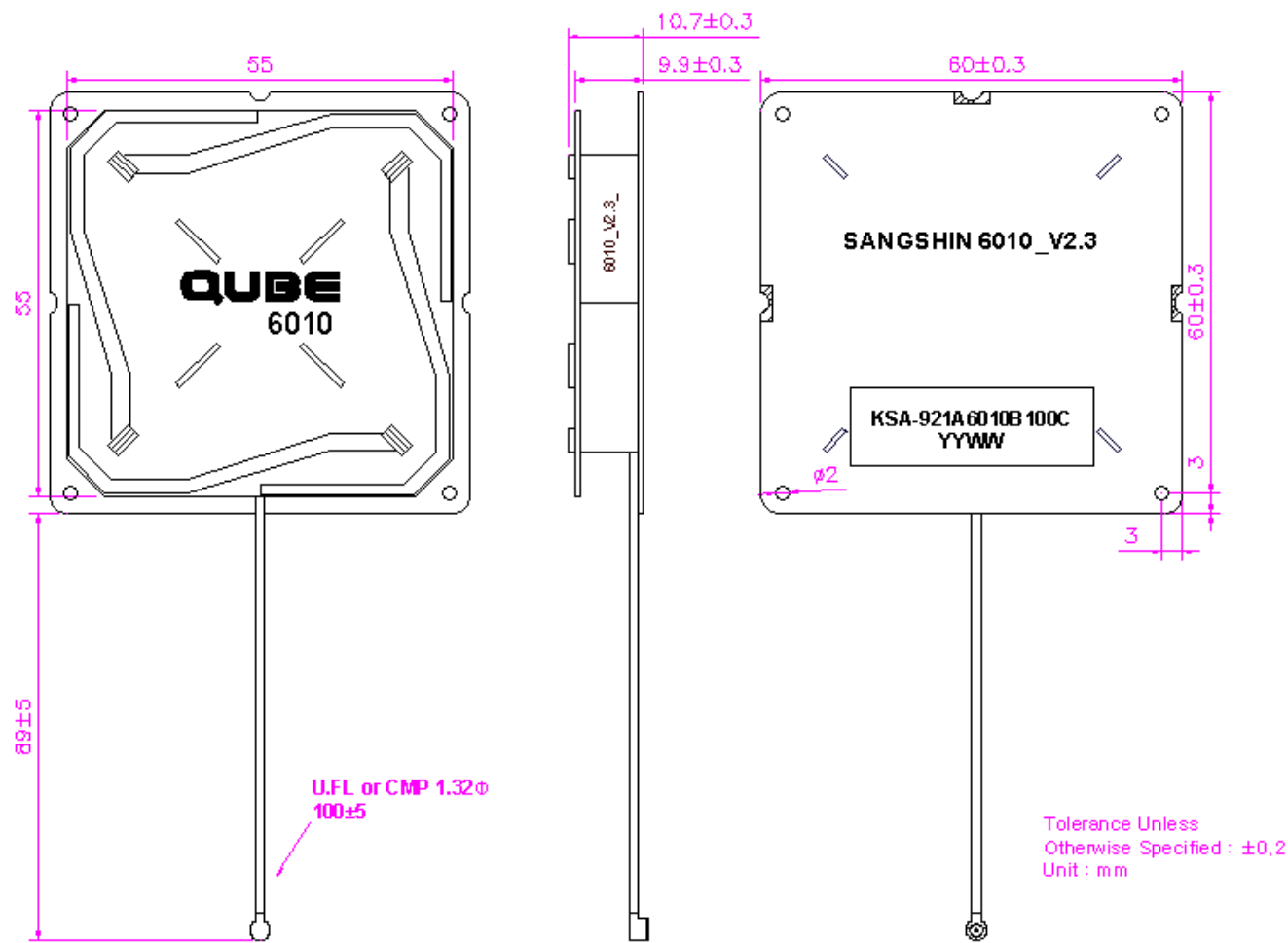
2. Electrical Specifications

Item	Specifications			
	Min.	Typical	Max.	Unit
Center Frequency (= Fc)	917	921	925	MHz
Operating Frequency	$F_c \pm 12$	$F_c \pm 14$		MHz
Return Loss @ Operating Frequency			-15	dB
Polarization	R.H.C.P			
Peak Gain @ Fc (RHCP)		2.5		dBic
Gain @ Reference Antenna	-13	-11		dB
Axial Ratio @ Fc			1.3	
Beamwidth (@3dB)	80	100		degree
Impedance		50		Ω
Operating Temperature	-30		+70	°C
Weight		14		g

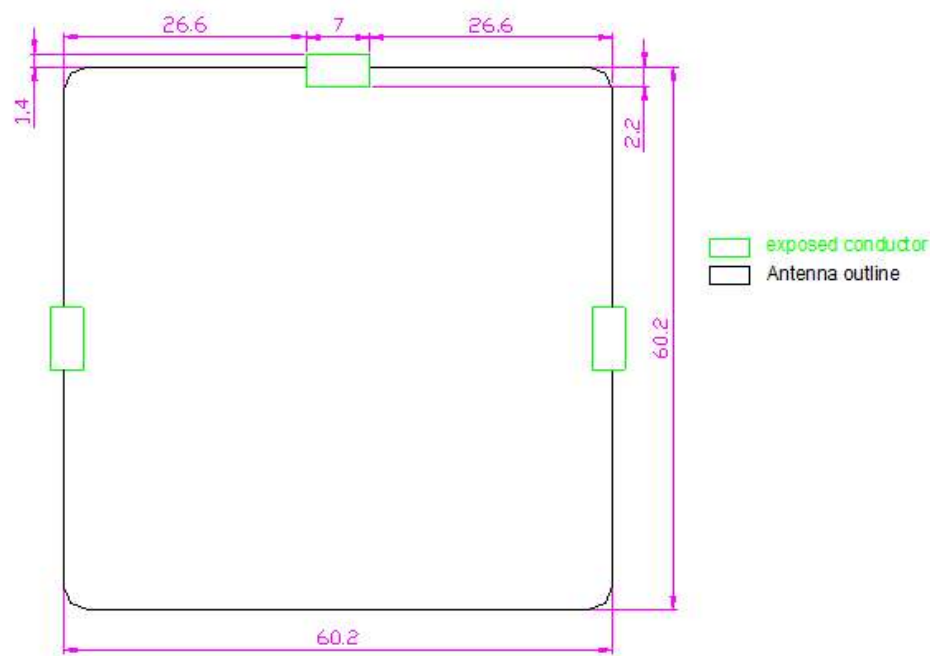
Note 1. Operating frequency is defined as frequency range between f_{3dB_low} and f_{3dB_high} .



3. Dimensions



- Foot Print

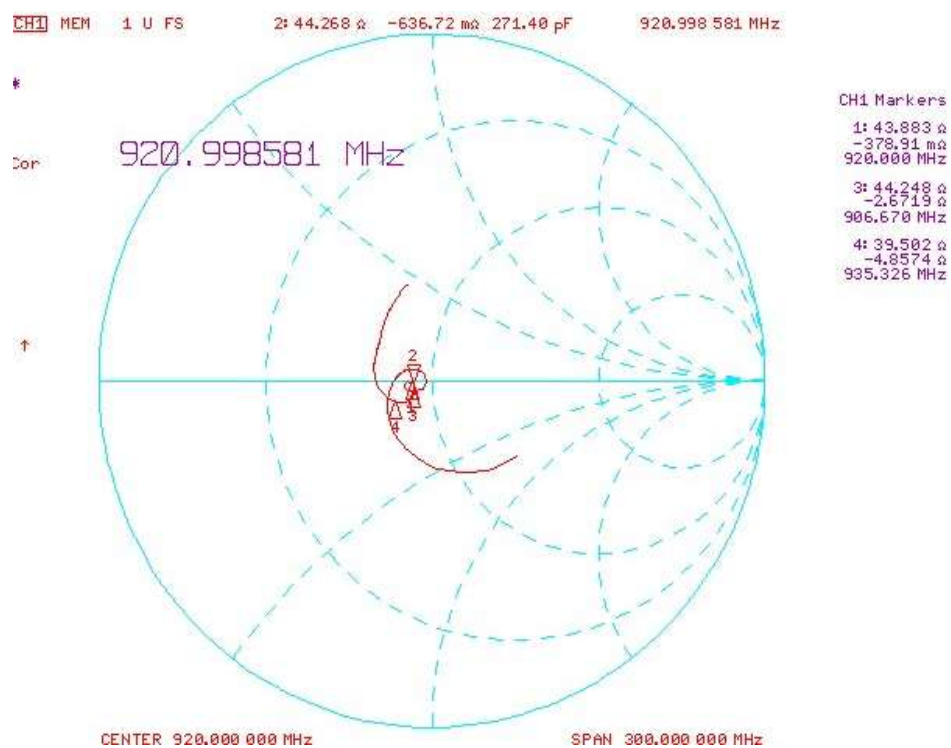


4. S-parameter Data

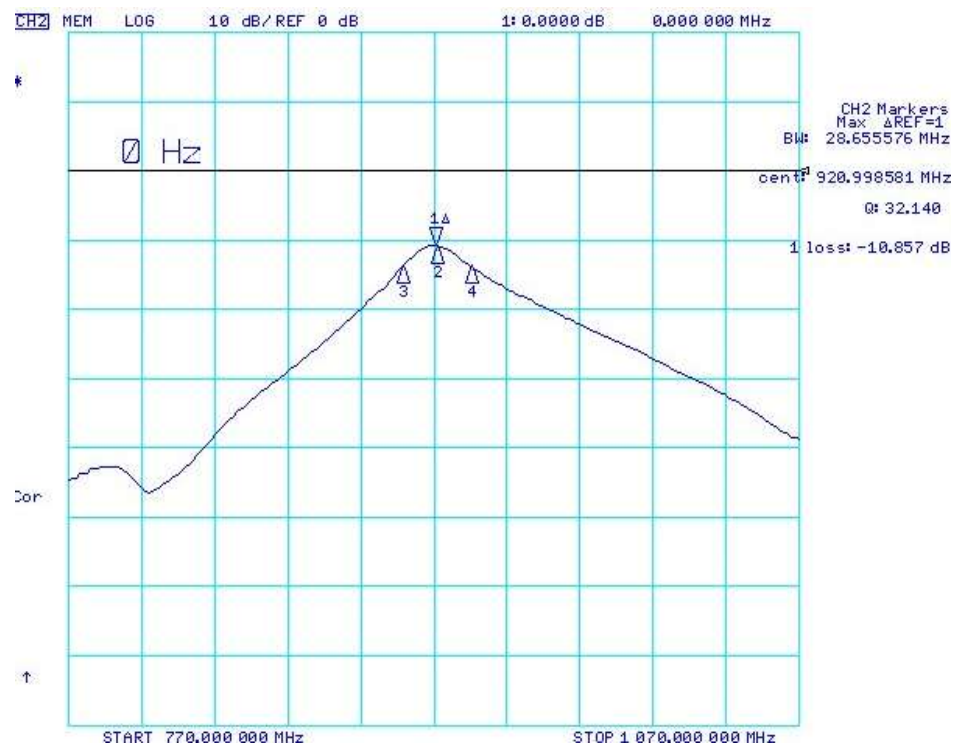
4.1 Return Loss (S11)



4.2 Smith Chart (S11)

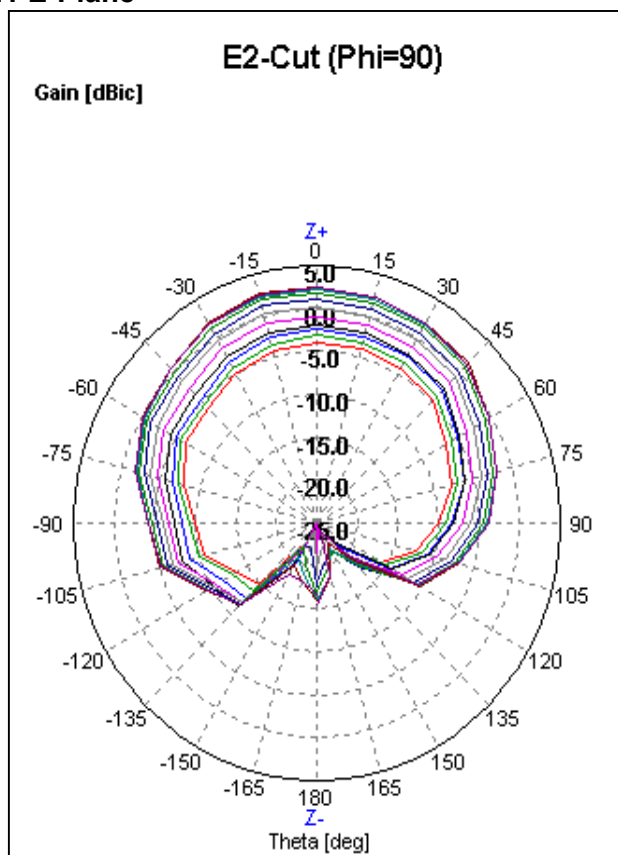


4.3 Gain (S21)

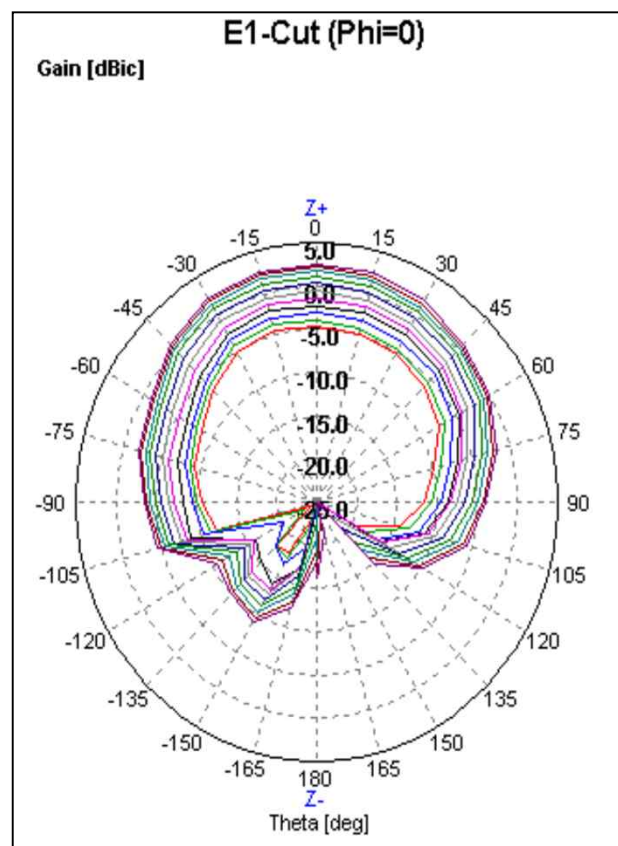


5. Antenna Chamber Data

5.1 E-Plane



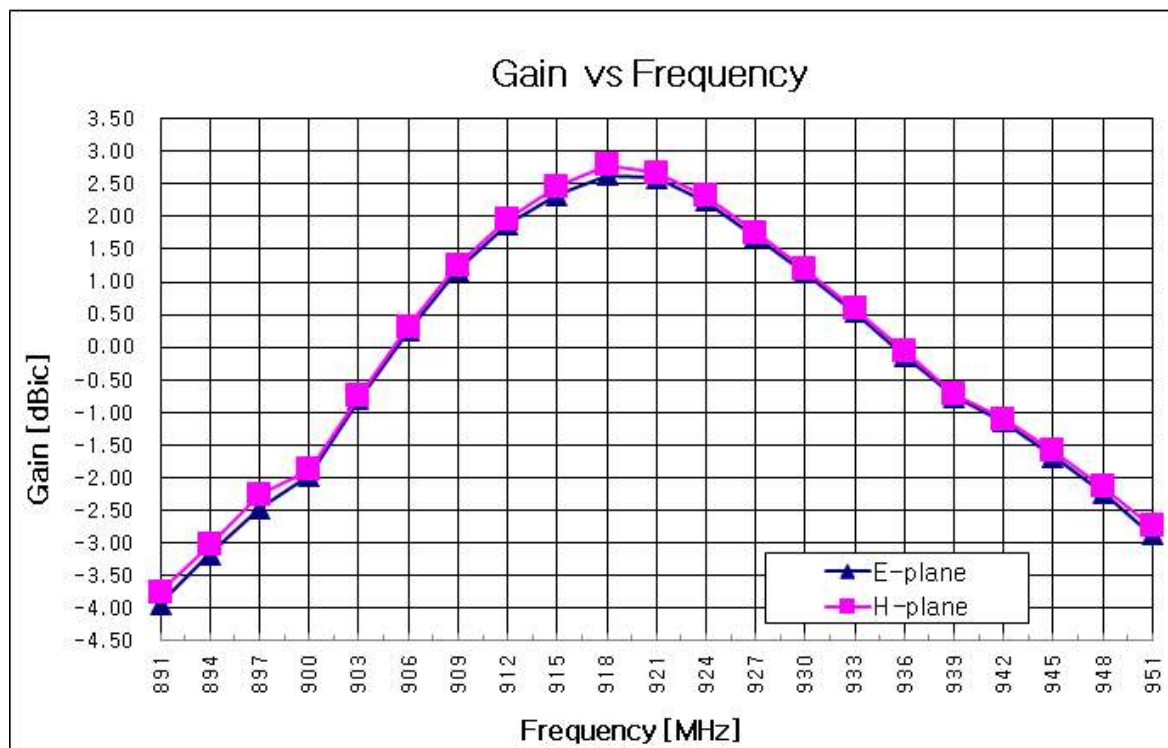
5.2 H-Plane



E - plane	
Frequency [MHz]	Gain [dBic]
891	-3.94
894	-3.18
897	-2.47
900	-1.97
903	-0.80
906	0.25
909	1.18
912	1.88
915	2.33
918	2.63
921	2.59
924	2.24
927	1.69
930	1.14
933	0.54
936	-0.13
939	-0.77
942	-1.15
945	-1.68
948	-2.23
951	-2.87

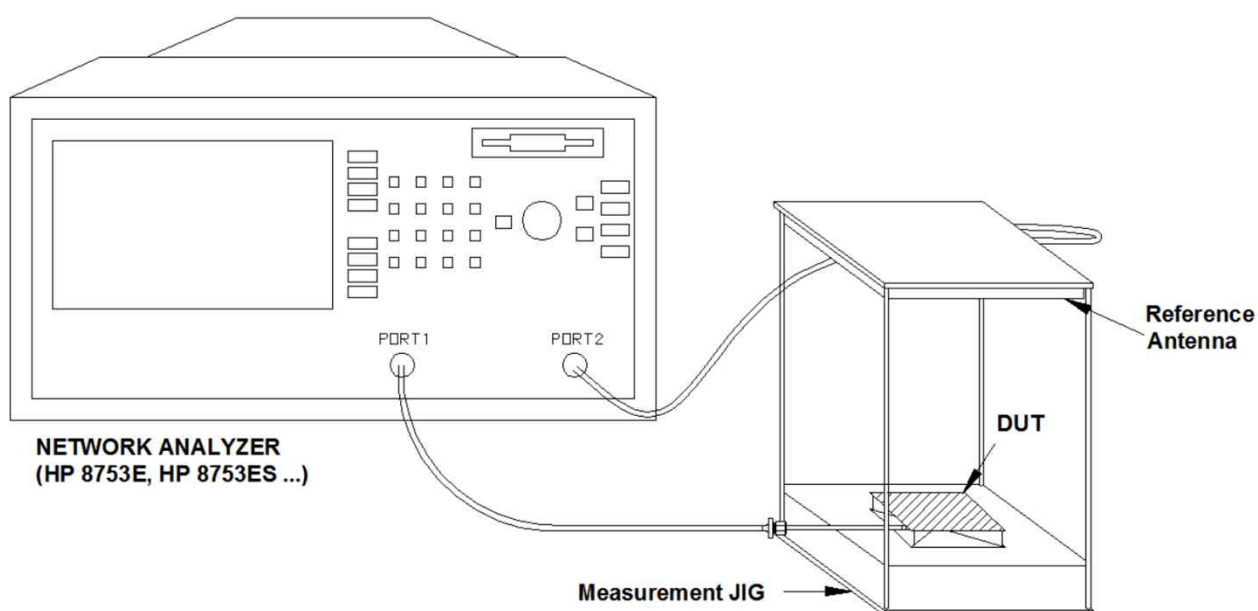
H - plane	
Frequency [MHz]	Gain [dBic]
891	-3.75
894	-3.03
897	-2.26
900	-1.88
903	-0.75
906	0.31
909	1.26
912	1.97
915	2.46
918	2.79
921	2.68
924	2.32
927	1.76
930	1.19
933	0.59
936	-0.06
939	-0.73
942	-1.11
945	-1.59
948	-2.14
951	-2.74

5.3 Gain vs Frequency

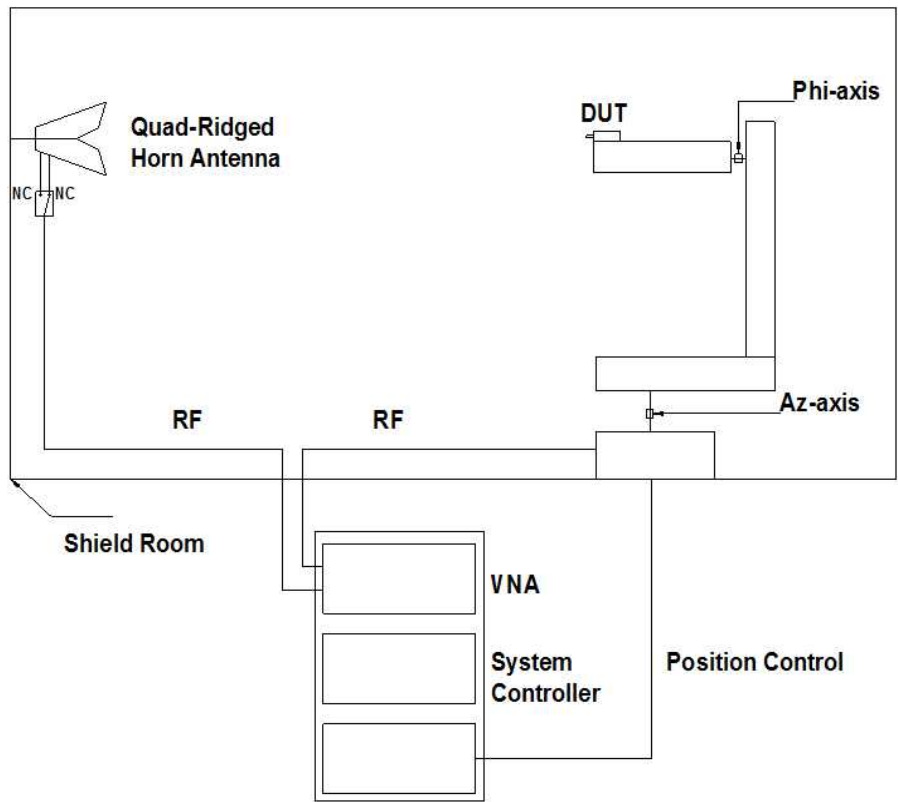


6. Measurement Condition

6.1 S-parameter Measurement



6.2 Gain Measurement



8.Revision

Revision No.	Originator	Description of Change	Date of Changes
1.0.0	SM Yun	Full specification	13-May-21

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