



QUBE 6010

UHF RFID Antenna

Specification

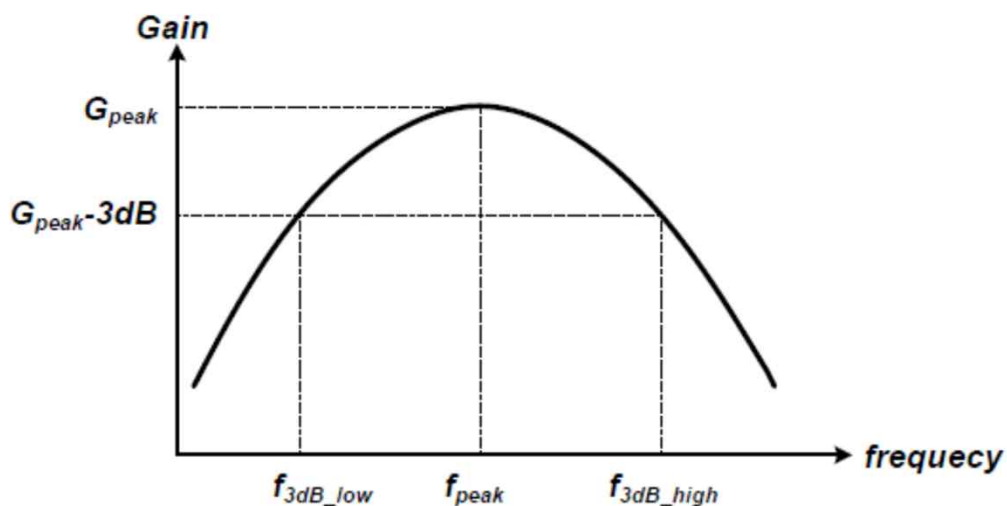
1. Part Name

KSA-866A6010B100C

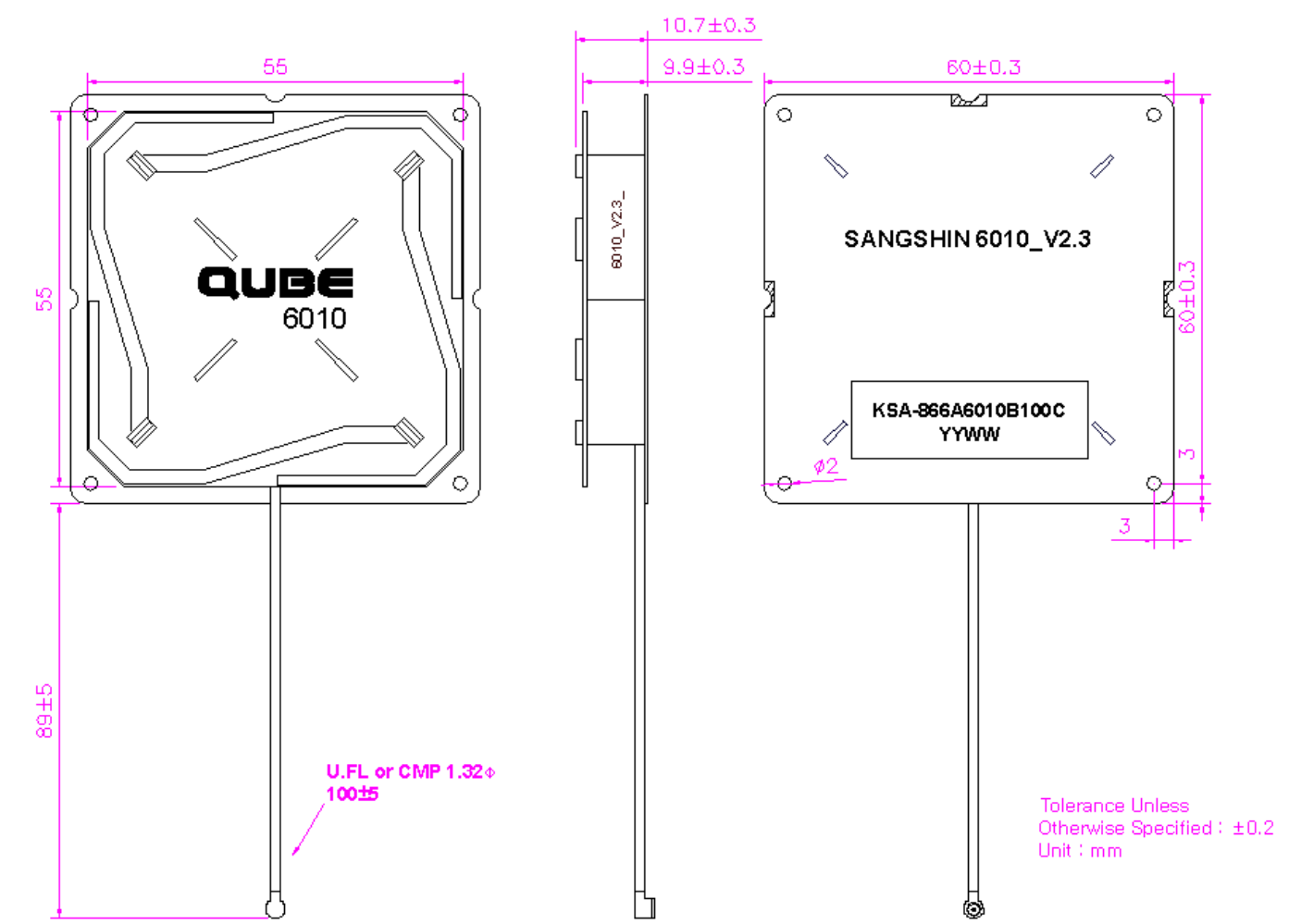
2. Electrical Specifications

Item	Specifications			
	Min.	Typical	Max.	Unit
Center Frequency (= Fc)	862	866	870	MHz
Operating Frequency	$F_c \pm 8$	$F_c \pm 12$		MHz
Return Loss @ Operating Frequency			-15	dB
Polarization	R.H.C.P			
Peak Gain @ Fc (RHCP)		2.3		dBic
Gain @ Reference Antenna	-17	-14		dB
Axial Ratio @ Fc			1.3	
Beamwidth (@3dB)	80	100		degree
Impedance		50		Ω
Operating Temperature	-30		+70	°C
Weight		14		g

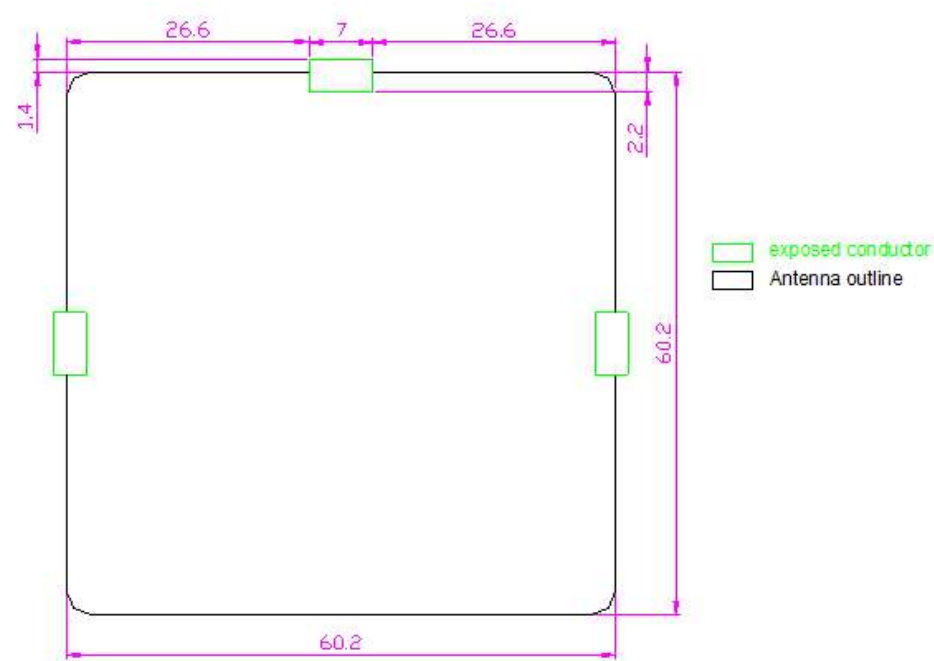
Note 1. Operating frequency is defined as frequency range between f_{3dB_low} and f_{3dB_high} .



3. Dimensions

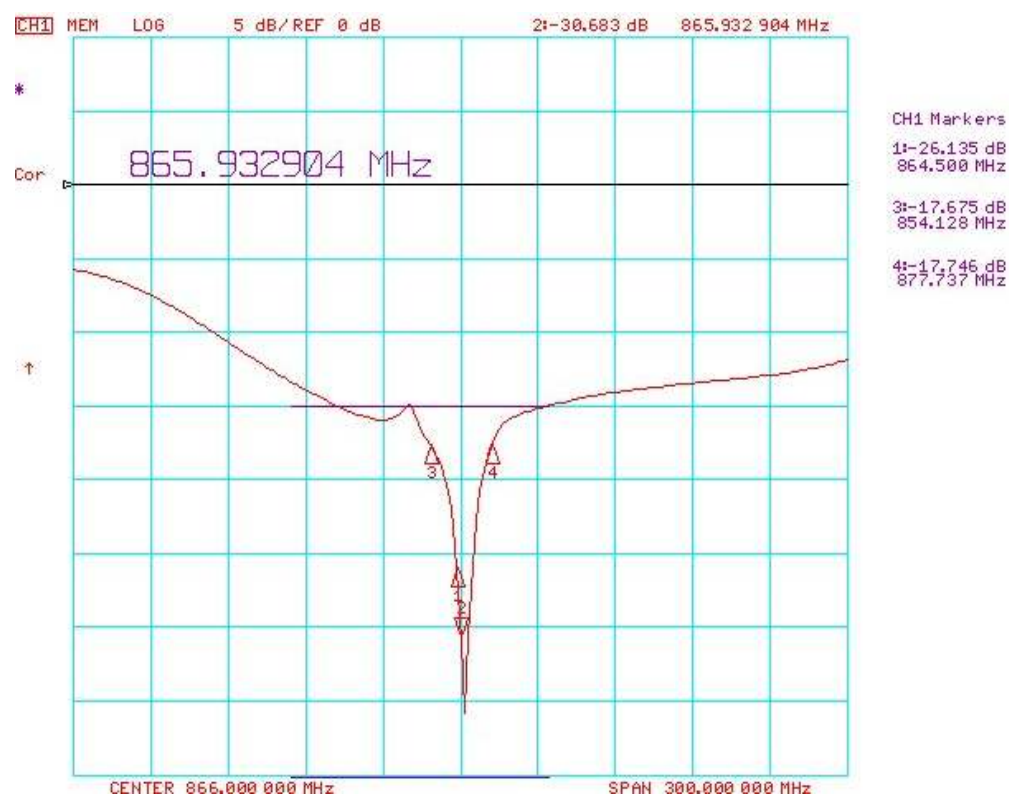


- Foot Print

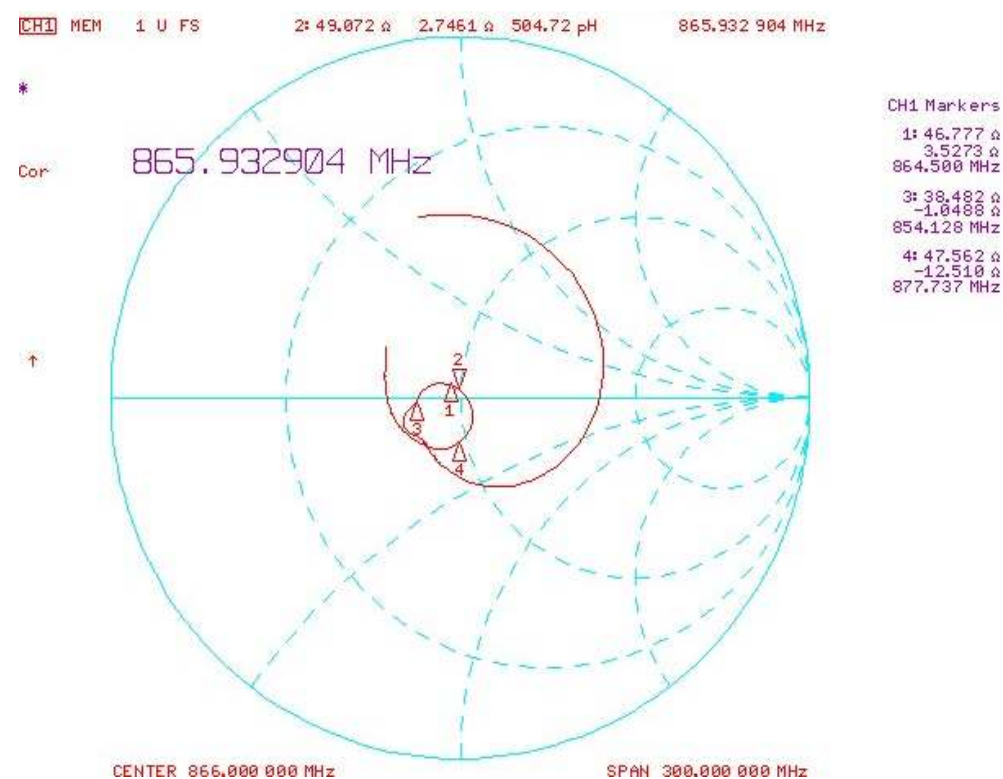


4. S-parameter Data

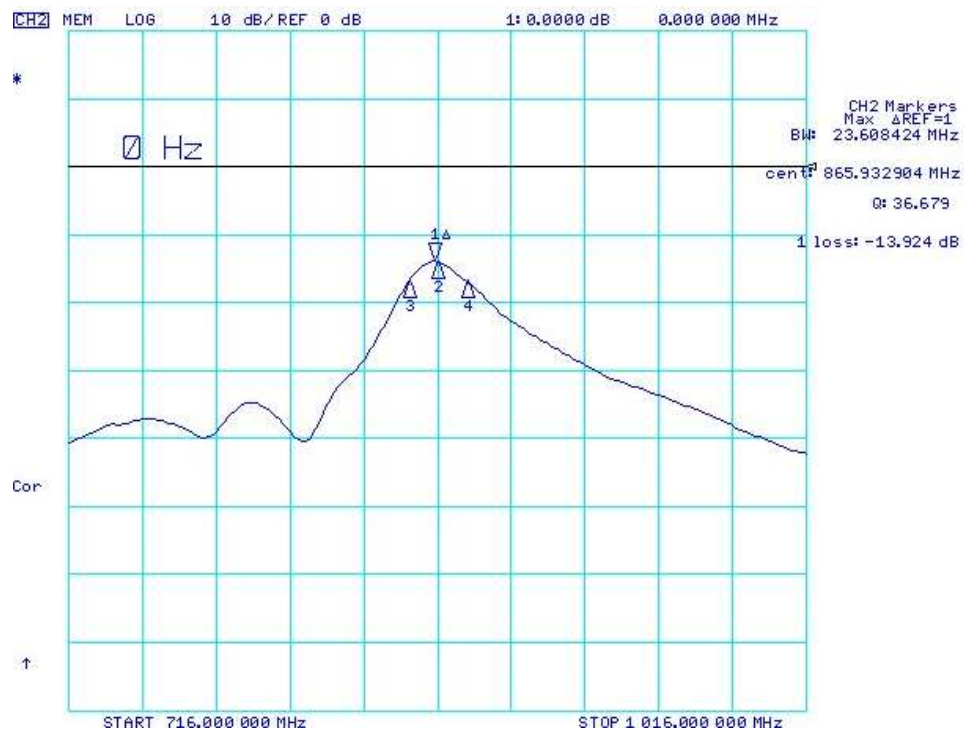
4.1 Return Loss (S11)



4.2 Smith Chart (S11)

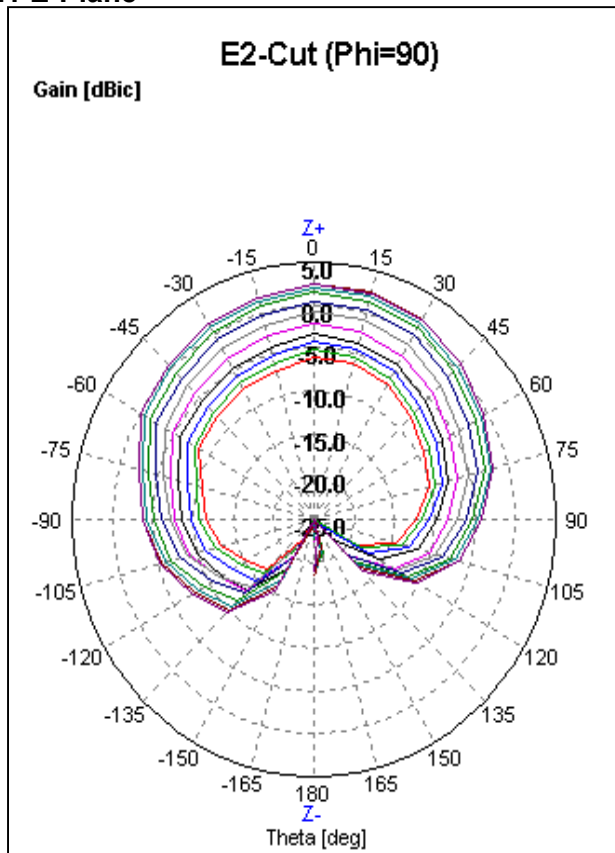


4.3 Gain (S21)

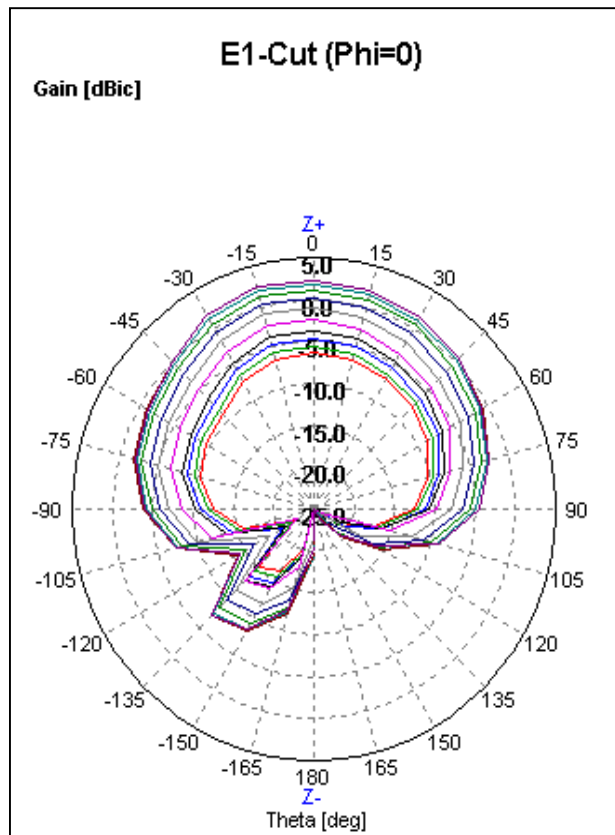


5. Antenna Chamber Data

5.1 E-Plane



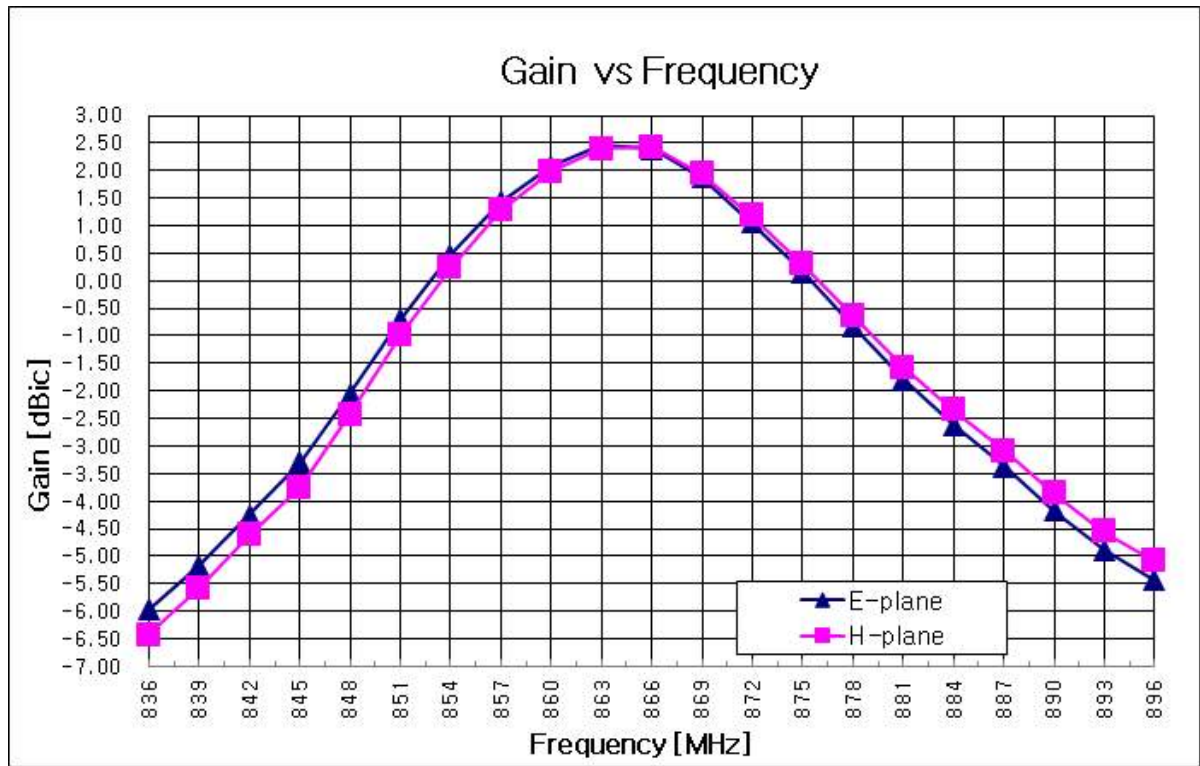
5.2 H-Plane



E - plane	
Frequency [MHz]	Gain [dBic]
836	-5.97
839	-5.17
842	-4.25
845	-3.30
848	-2.04
851	-0.70
854	0.47
857	1.43
860	2.08
863	2.45
866	2.40
869	1.87
872	1.06
875	0.15
878	-0.82
881	-1.80
884	-2.61
887	-3.37
890	-4.17
893	-4.88
896	-5.44

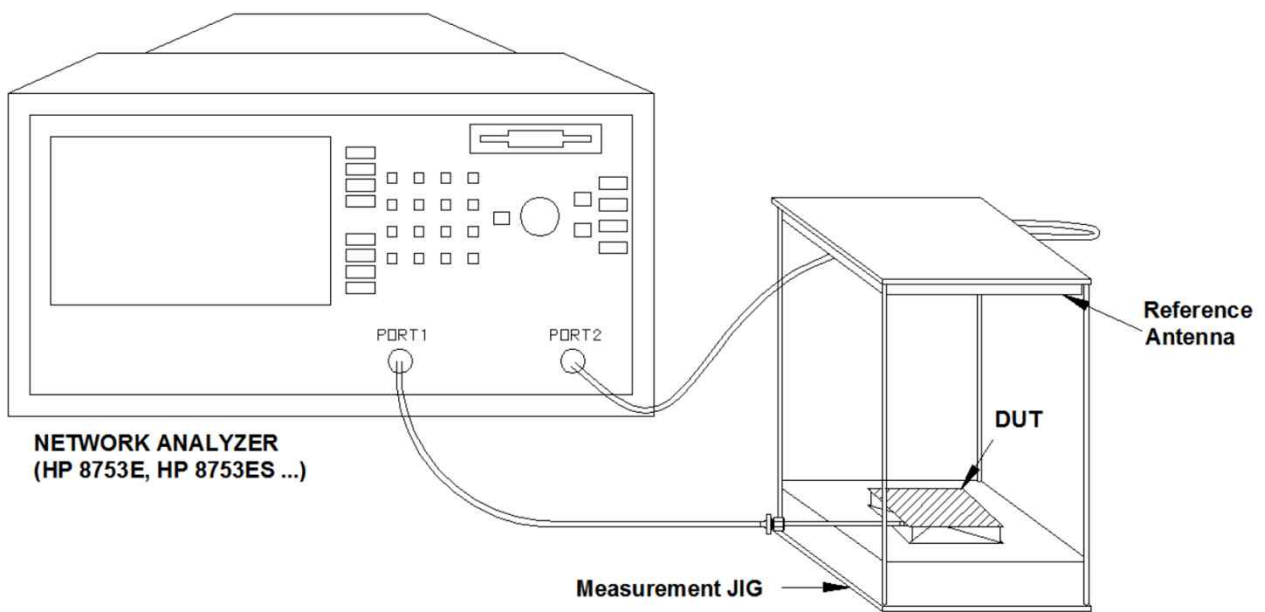
H - plane	
Frequency [MHz]	Gain [dBic]
836	-6.42
839	-5.57
842	-4.61
845	-3.75
848	-2.42
851	-0.97
854	0.24
857	1.27
860	1.98
863	2.40
866	2.42
869	1.94
872	1.18
875	0.30
878	-0.63
881	-1.57
884	-2.35
887	-3.08
890	-3.86
893	-4.55
896	-5.09

5.3 Gain vs Frequency

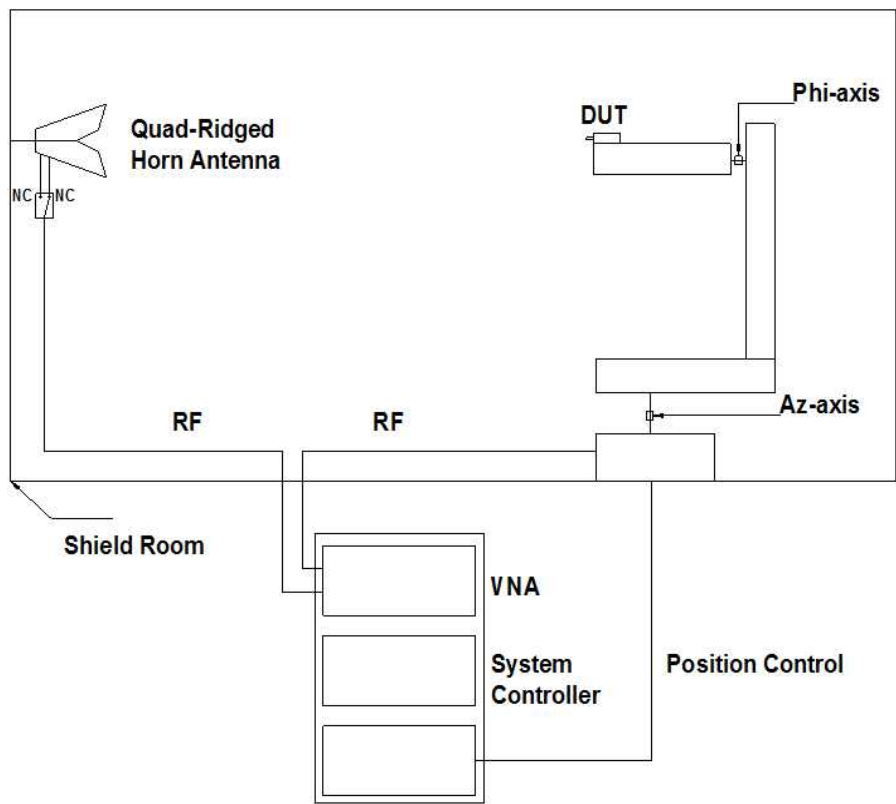


6. Measurement Condition

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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