

PROFESSOR TECHNOLOGY CO.,LTD.

INTRODUCTION Copper Tube 915MHz(29.5mm) Antenna

INTRODUCTION

1. GENERAL DESCRIPTION

P/N	
915Mhz-29.5mm-EA-272I-V5	(Nov-11-2021)

Below is a table summarizing the antenna design specification

1.1 Electrical Properties

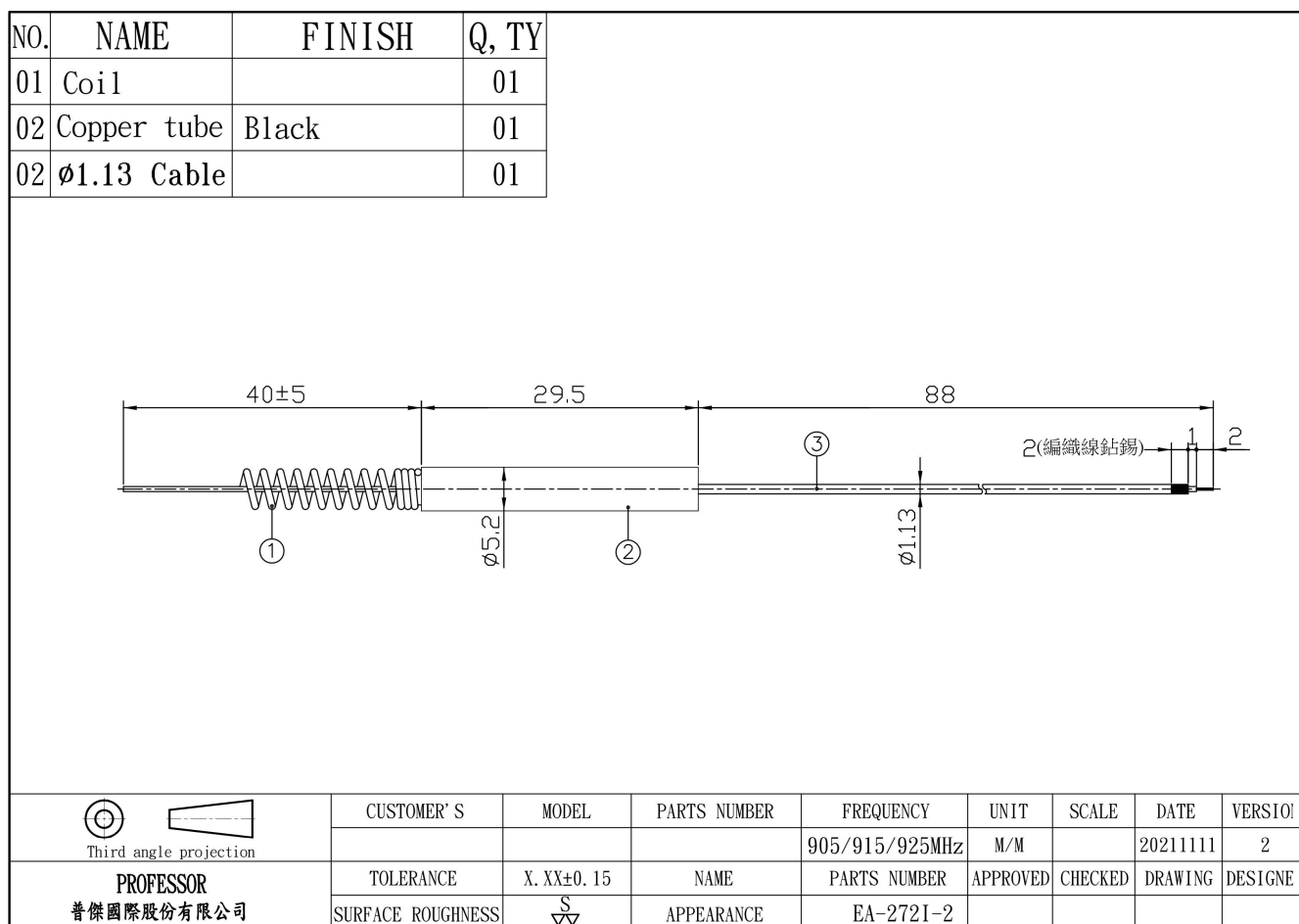
Parameter	Description
Frequency Band	905/915/925 MHz
Nominal Impedance	50 ohm
Polarization	Vertical
Return loss (Check test data)	905MHz (-16.116dB),915MHz(-14.404dB),925MHz(-13.239dB)
V.S.W.R	905MHz(1.371:1),915MHz(1.471:1),925MHz(1.557:1)
Reflection coefficient	905MHz(0.156),915MHz(0.190),925MHz(0.218)

1.2 Mechanical Properties

Parameter	Description
Antenna Type	Internal Antenna
Antenna Material	Copper tube and Spring
Touch Type	1.13mm cable
Connector Type	Open 2-1-2
Antenna Length	157.5mm
Antenna Dimensions	5.2 mm
Antenna Color	Black
Operating Temperature Range	-30°C~+70°C
Storage Temperature Range	-35°C~+75°C

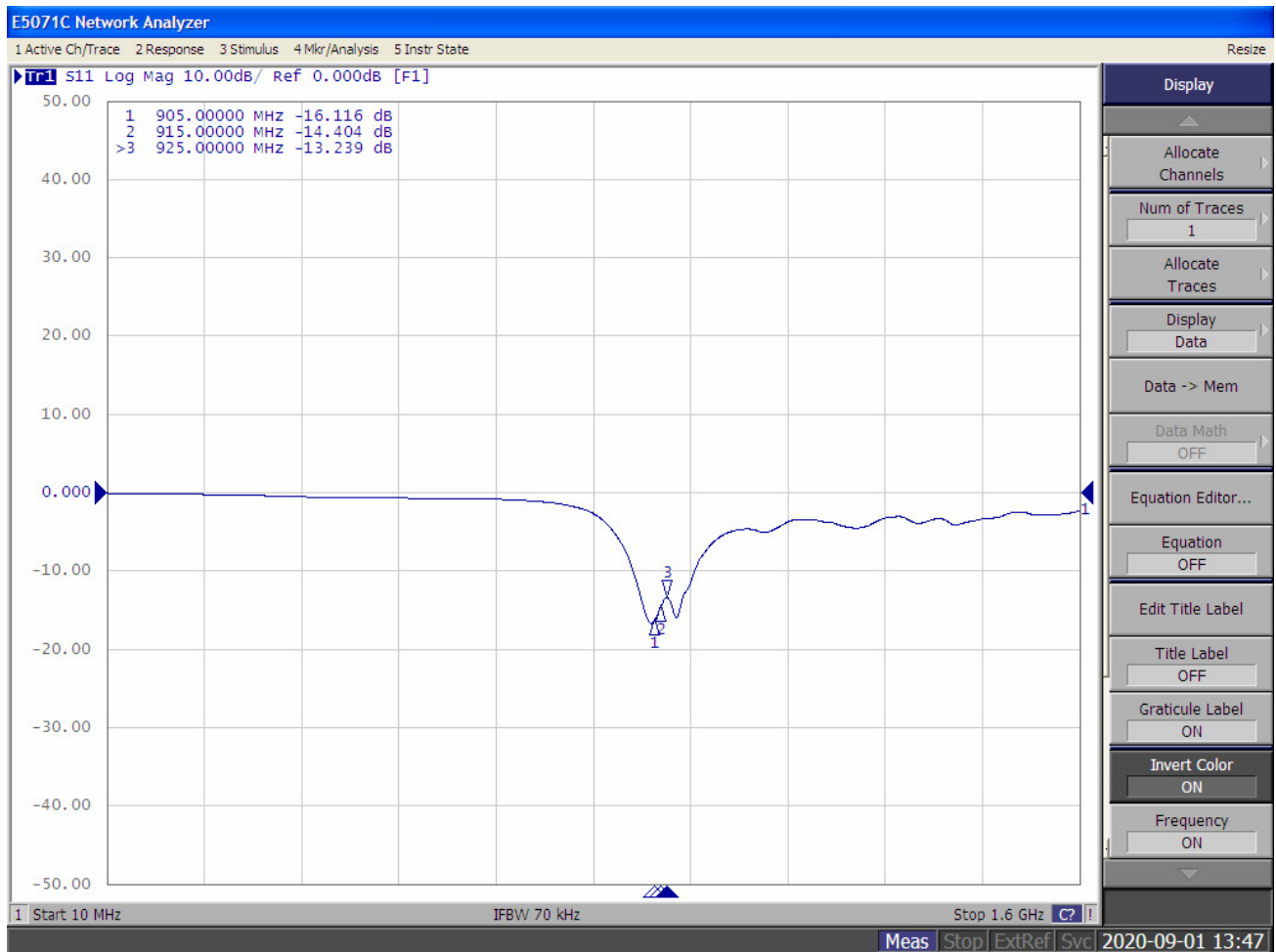
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2. Appearance

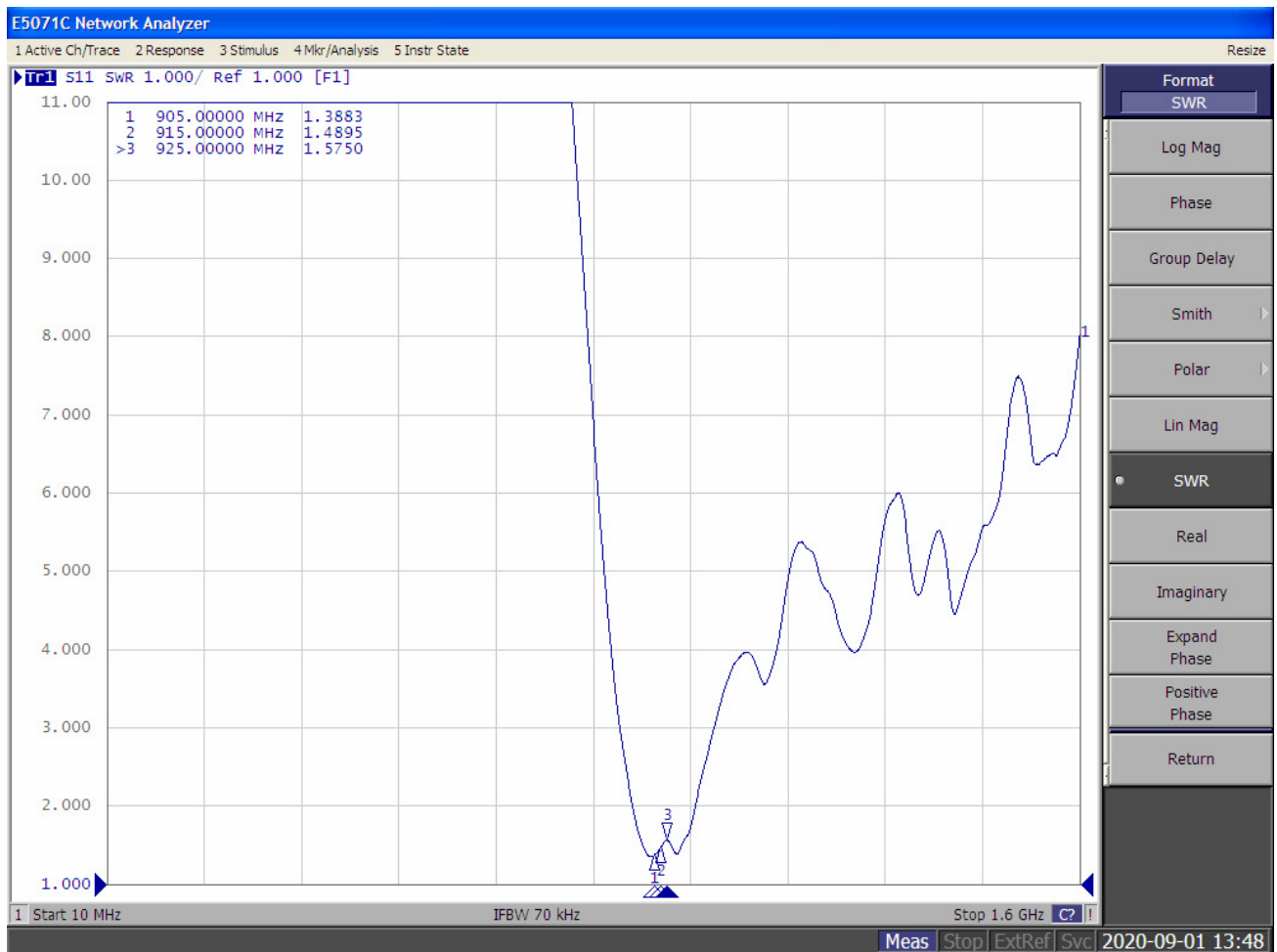


3. Return Loss, V.S.W.R. and Smith Chart

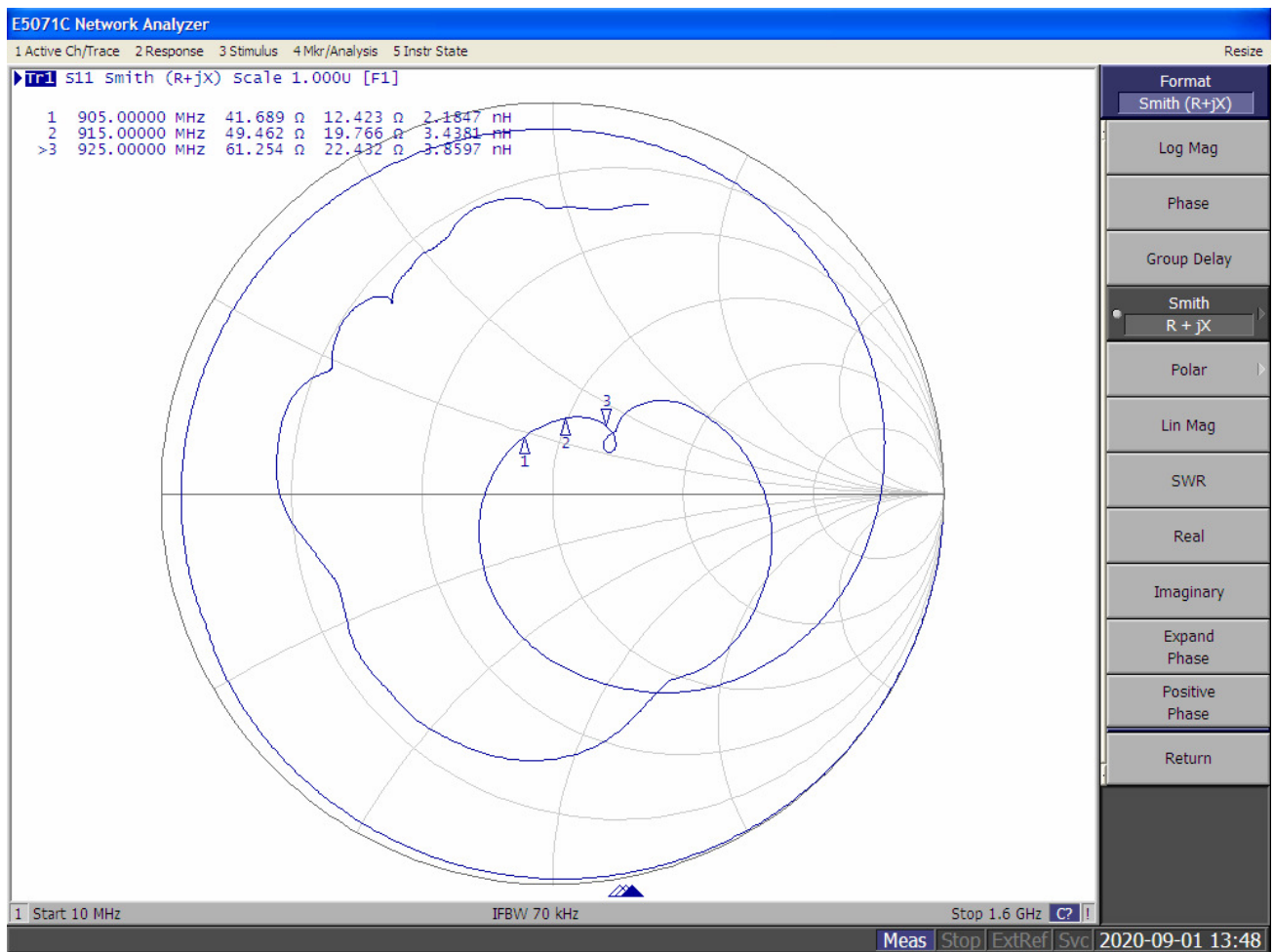
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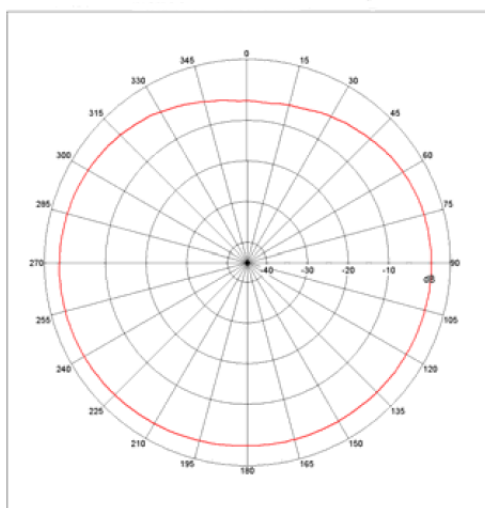
Antenna Gain

Gain Table

Unit in dBi	XY-plane		XZ-plane		YZ-plane		Efficiency
	Peak	Avg.	Peak	Avg.	Peak	Avg.	
Module Board	-0.2	-0.5	0	-3.6	-1.1	-3.0	60.2 %

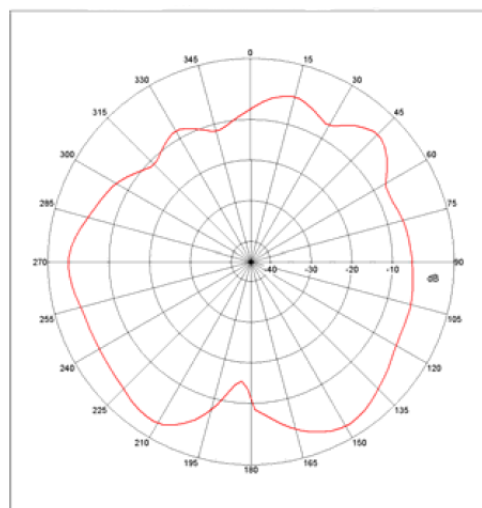
XY-plane

Far-field Power Distribution(H+V) on X-Y Plane



XZ-plane

Far-field Power Distribution(H+V) on X-Z Plane



YZ-plane

Far-field Power Distribution(H+V) on Y-Z Plane

