



Amphenol

DATA SHEET

MINDRAY 科室解决方案 WIFI ANTENNA

Project:	Author: Neil.Xu	File Name: MINDRAY 科室解决方案 WIFI ANTENNA DATA SHEET
Date: 2015-5-26		
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Contents

1	ANTENNA DESCRIPTION	3
1.1	Part number	3
1.2	Antenna pictures	3
2	ELECTRICAL PERFORMANCE	3
2.1	Specification	3
2.2	Measurement Set-up.....	3
2.2.1	VSWR and return loss	3
2.2.2	Efficiency, Gain and TRP/TIS	4
2.3	Reference measurement data.....	4
2.3.1	Efficiency&Gain.....	4
3	PLOTS&3D RADIATION PATTERN	5
3.1	VSWR	5
3.2	3D Radiation Pattern.....	5
4	APPEARANCE DRAWING	10

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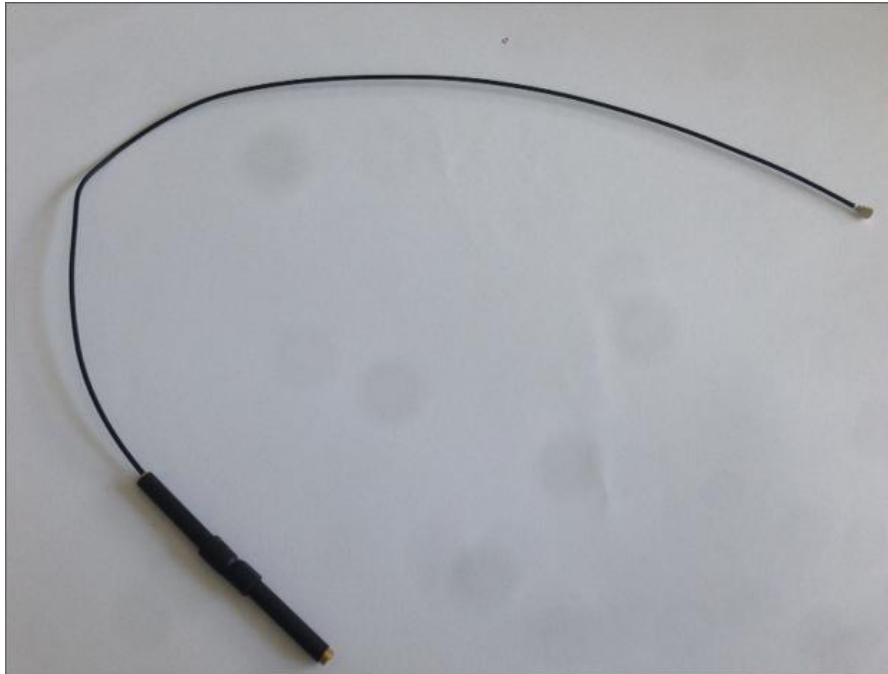
1 Antenna description

This report summarizes the electrical results of the proposed antenna to support the MINDRAY 科室解决方案 WIFI antenna program. It is external antenna. Antenna's frequency band is 2400-2500MHz&5150MHz-5850MHz. The polarisation of antenna is linear polarisation with 50ohm Nominal input impedance.

1.1 Part number

The antenna part number MG7324-41-000-R

1.2 Antenna pictures



2 Electrical Performance

2.1 Specification

Specification for MINDRAY 科室解决方案WIFI ANTENNA				
Frequency(MHz)	2400	2500	5150	5850
VSWR	<2.2	<2.2	<3	<3

2.2 Measurement Set-up

2.2.1 VSWR and return loss

VSWR measurements (S_{11}) were performed using an Agilent ENA series Network Analyser and the previously described test fixture. Coaxial chokes were used to mitigate surface currents on the outside of the cabling. The testing was performed in free space.

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2.2.2 Efficiency, Gain and TRP/TIS

The gain of the antenna was measured in Amphenol's 3D anechoic chamber in Shanghai, China. The chamber is a Satimo Stargate 64 multi probe system capable of doing tests from 380MHz to 6GHz. coaxial chokes on the feed cable were used to mitigate surface currents during passive tests. The measurement results are calibrated using dipole standards. For TRP and TIS the chamber uses a CMU 200 to establish the connection with the mobile device and read the power.

2.3 Reference measurement data

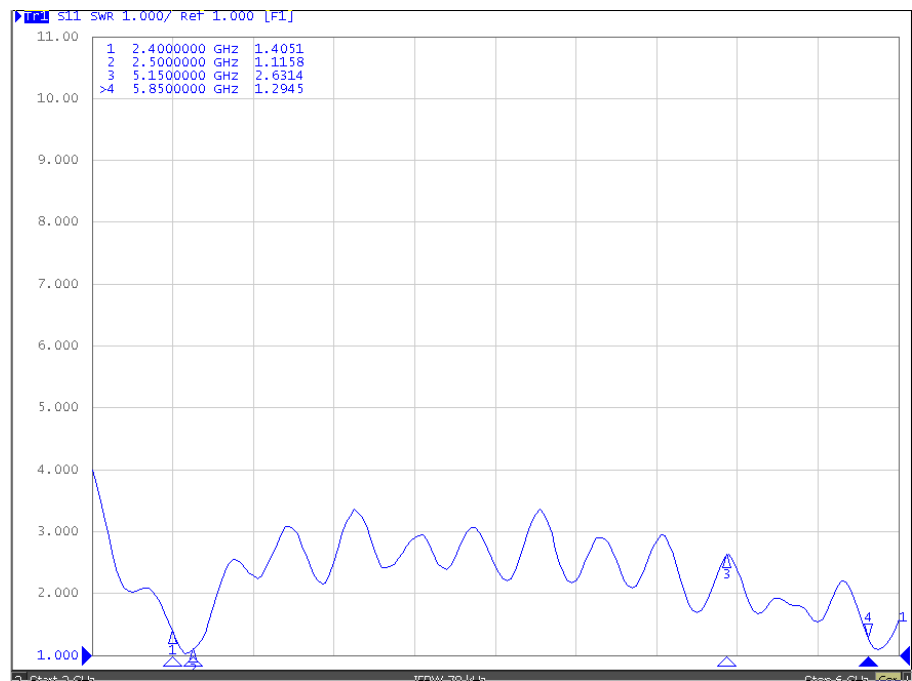
2.3.1 Efficiency&Gain

		Gain				Gain	
Frequency	Efficiency	AVE (dB)	Peak(dB)	Frequency	Efficiency	AVE (dB)	Peak(dB)
2400	72%	-1.44	1.32	5100	42%	-3.81	0.93
2410	71%	-1.48	1.18	5200	41%	-3.86	1.04
2420	71%	-1.47	1.21	5300	46%	-3.39	1.60
2430	71%	-1.48	1.15	5400	44%	-3.52	1.46
2440	71%	-1.51	1.27	5500	50%	-3.05	2.32
2450	71%	-1.48	1.29	5600	50%	-3.04	2.75
2460	70%	-1.55	1.18	5700	44%	-3.53	1.76
2470	69%	-1.59	1.16	5800	45%	-3.44	2.24
2480	69%	-1.64	1.04	5900	51%	-2.93	4.02
2490	67%	-1.72	0.97	AVG	46%	-3.40	2.01
2500	66%	-1.79	1.05				
AVG	70%	-1.56	1.17				

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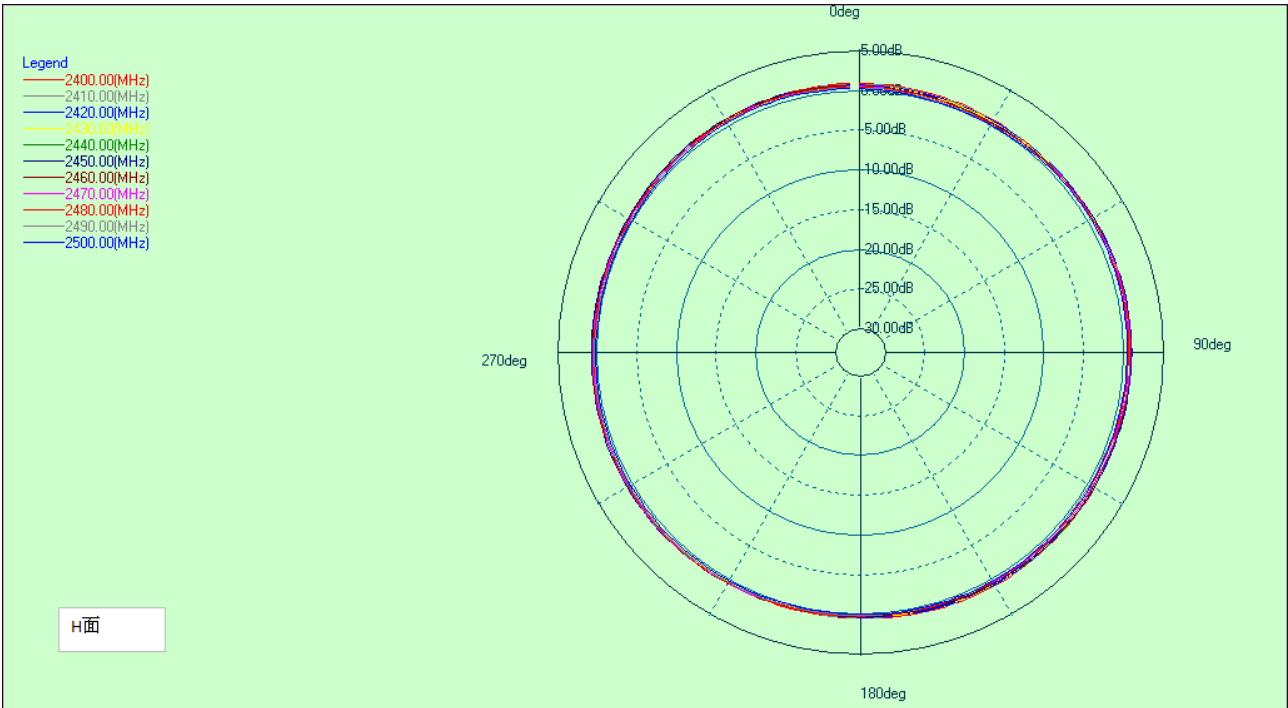
3 Plots&3D Radiation Pattern

3.1 VSWR

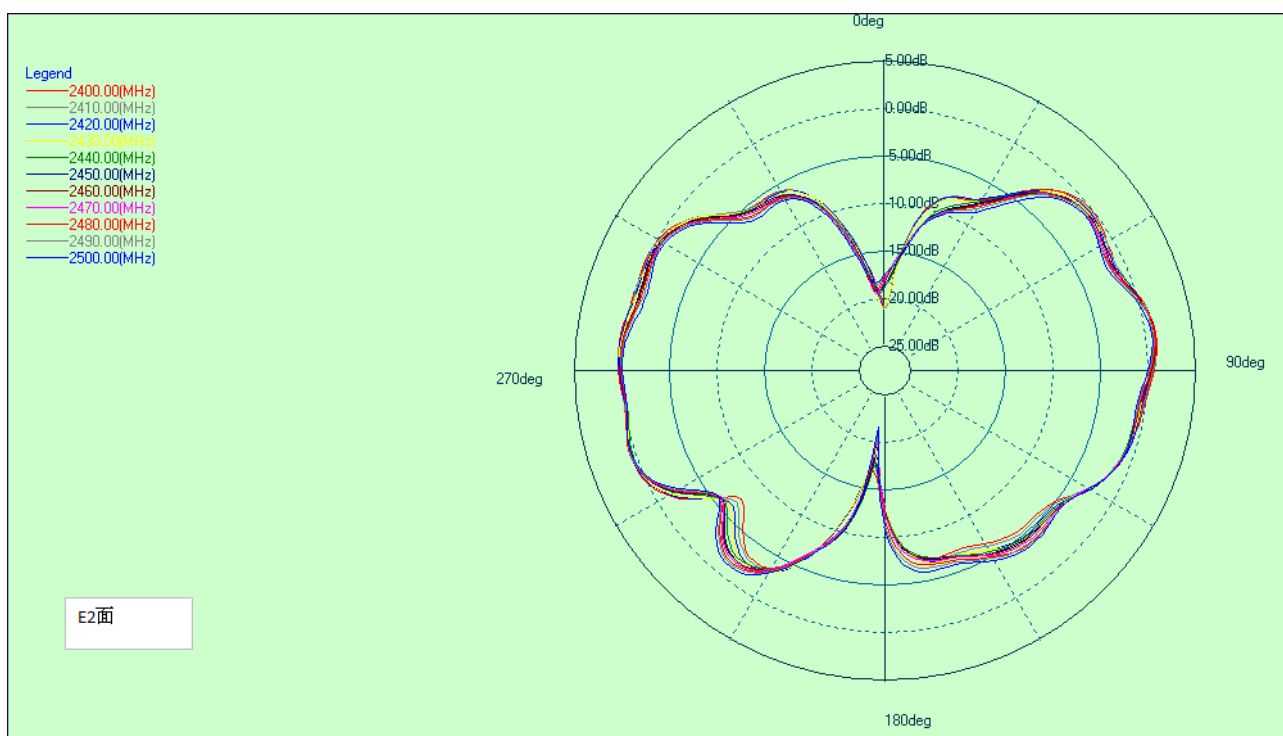
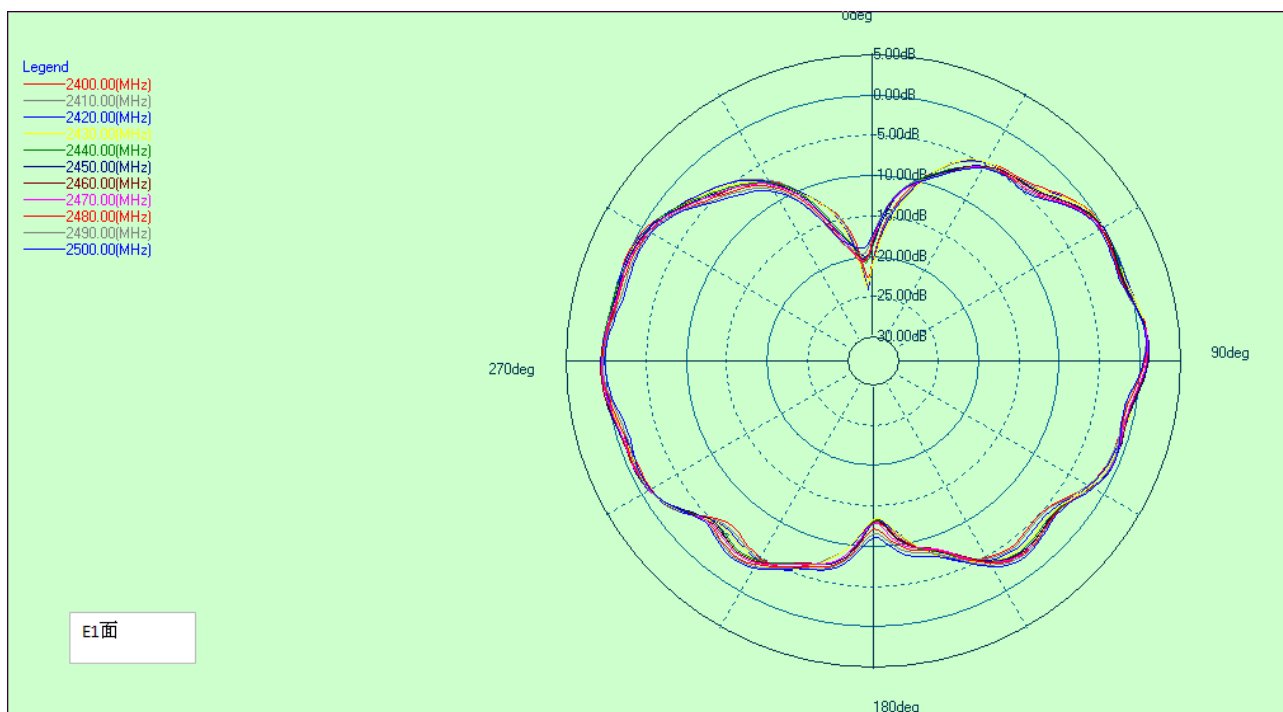


3.2 3D Radiation Pattern

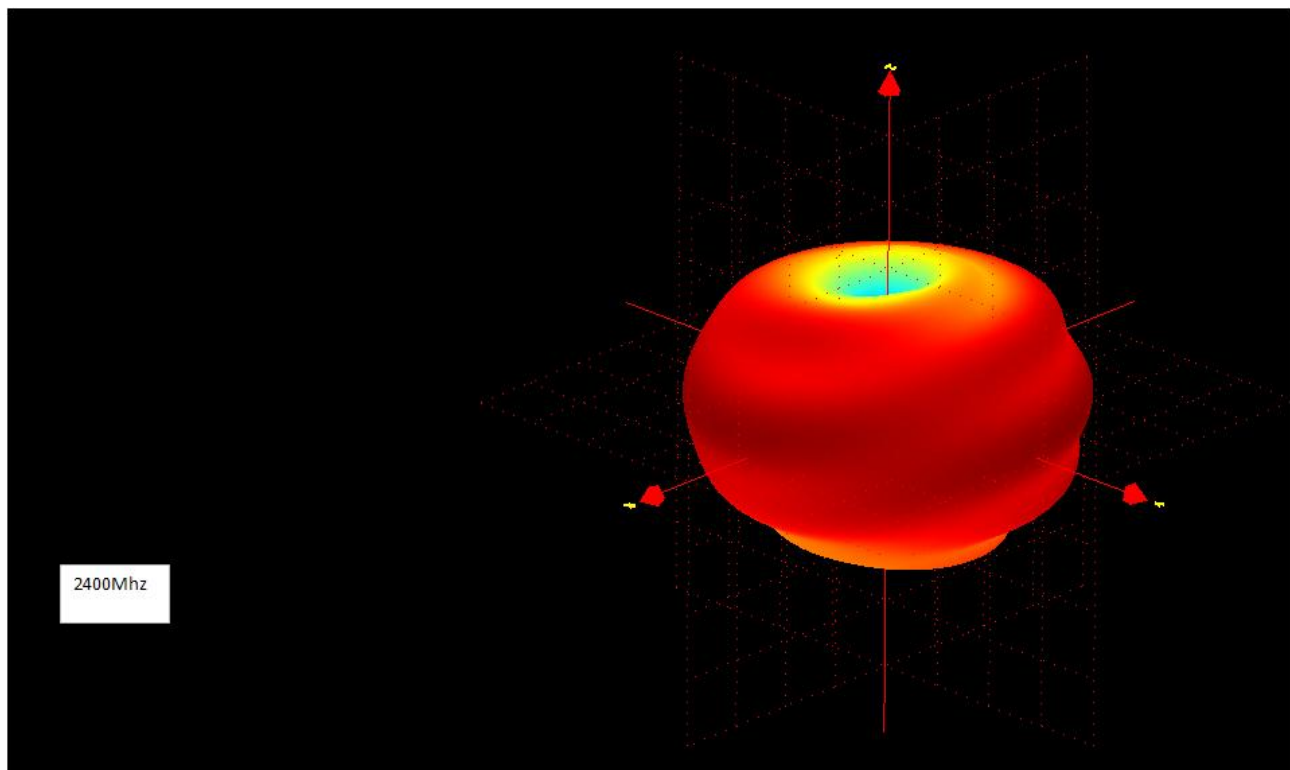
2400Mhz-2500Mhz



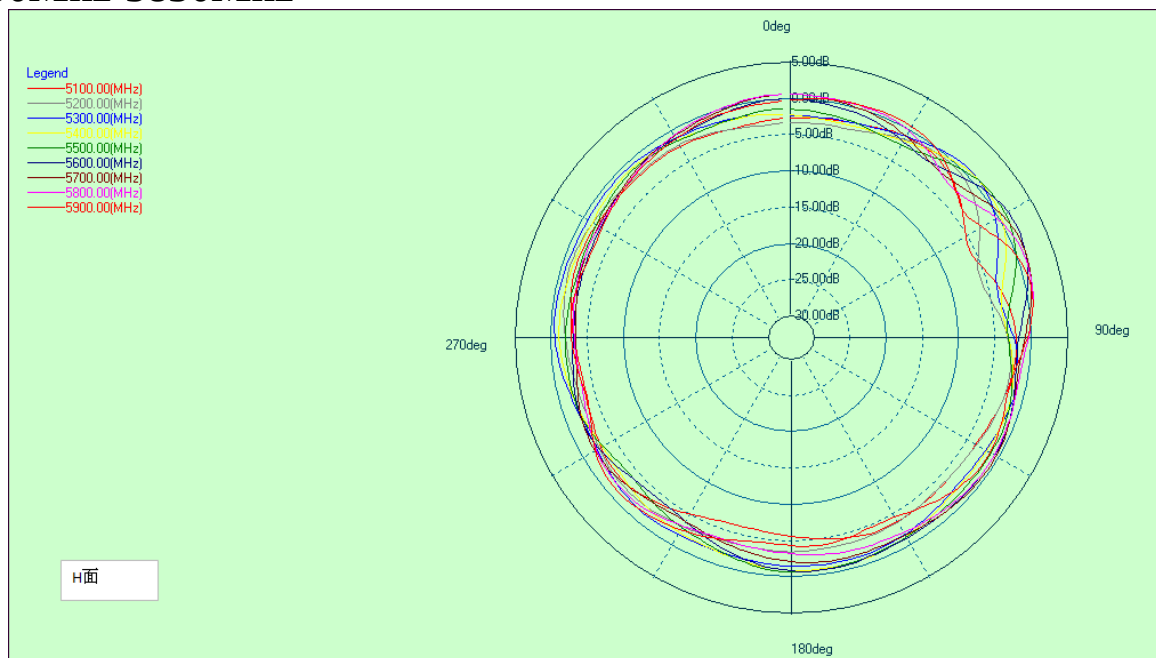
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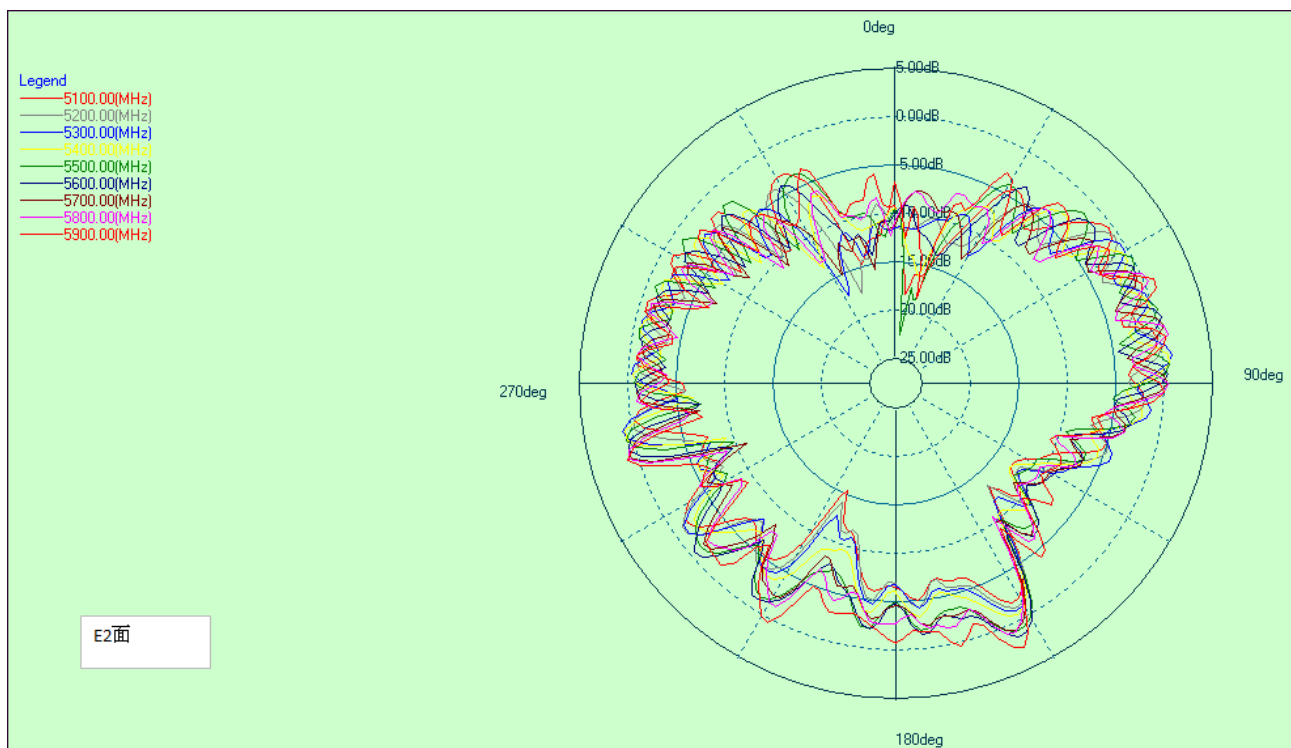
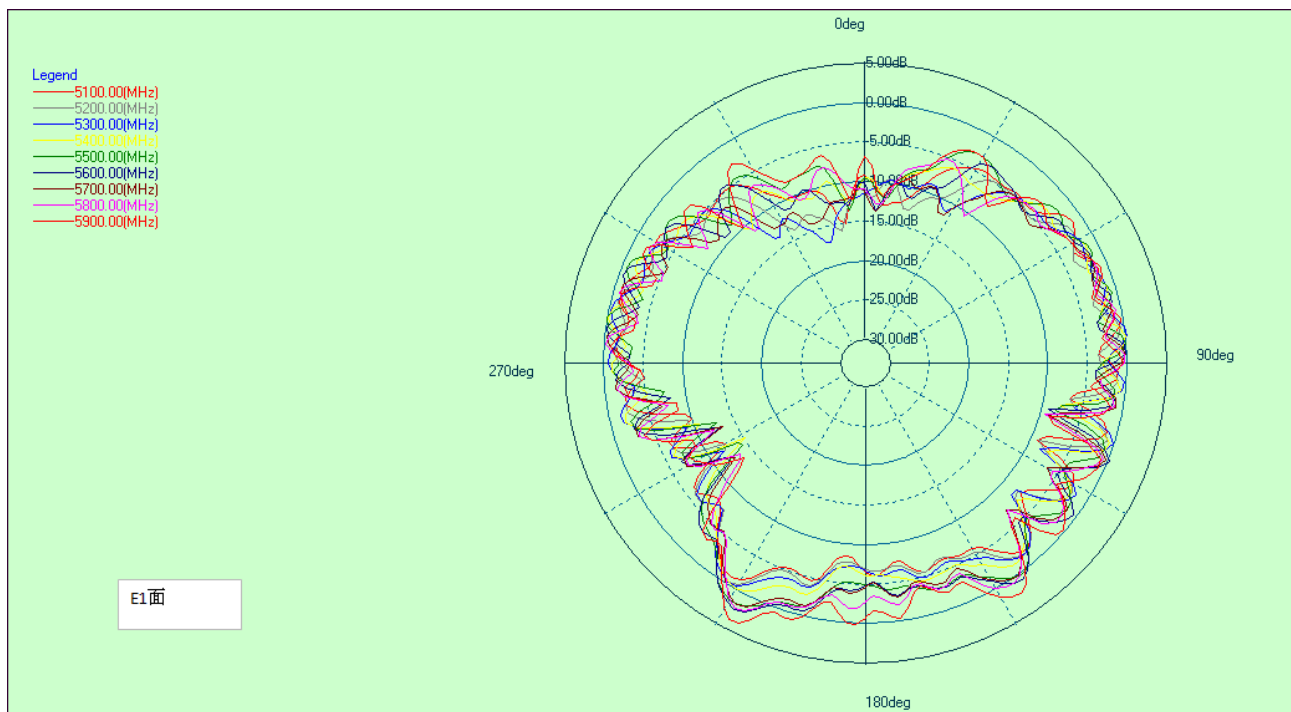
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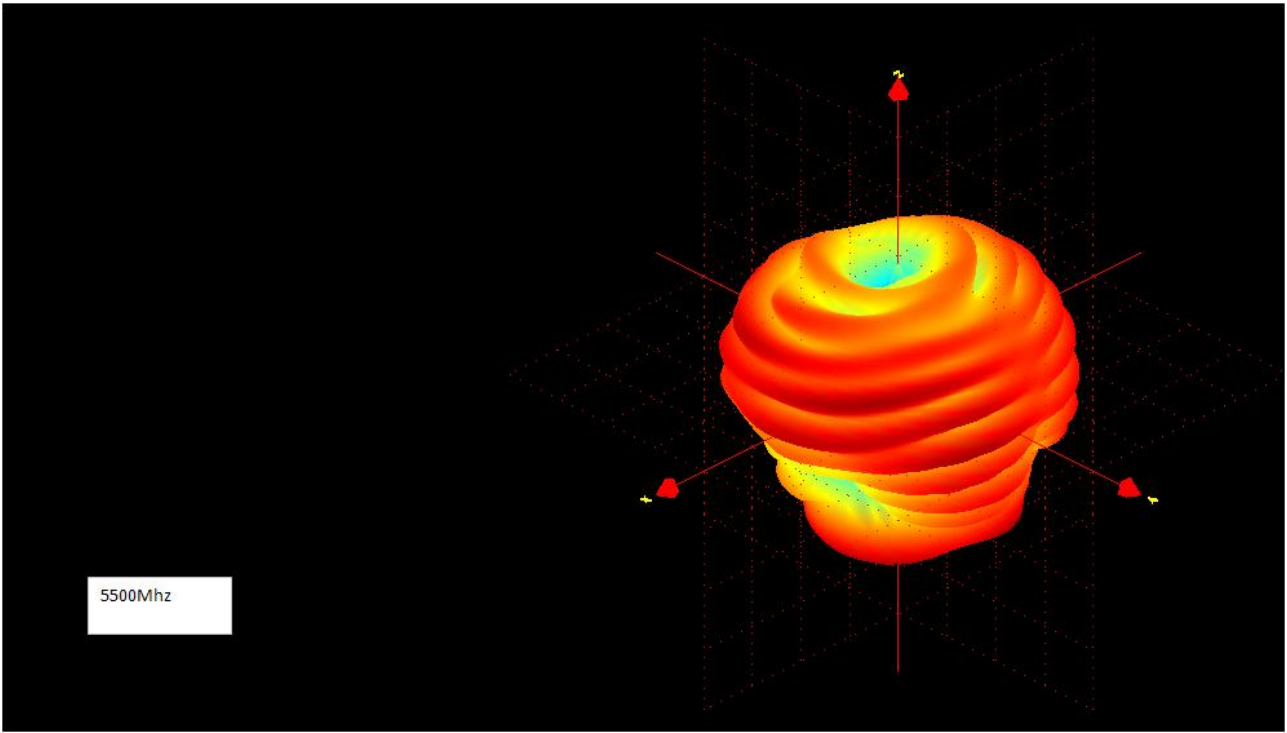
5100Mhz-5850Mhz



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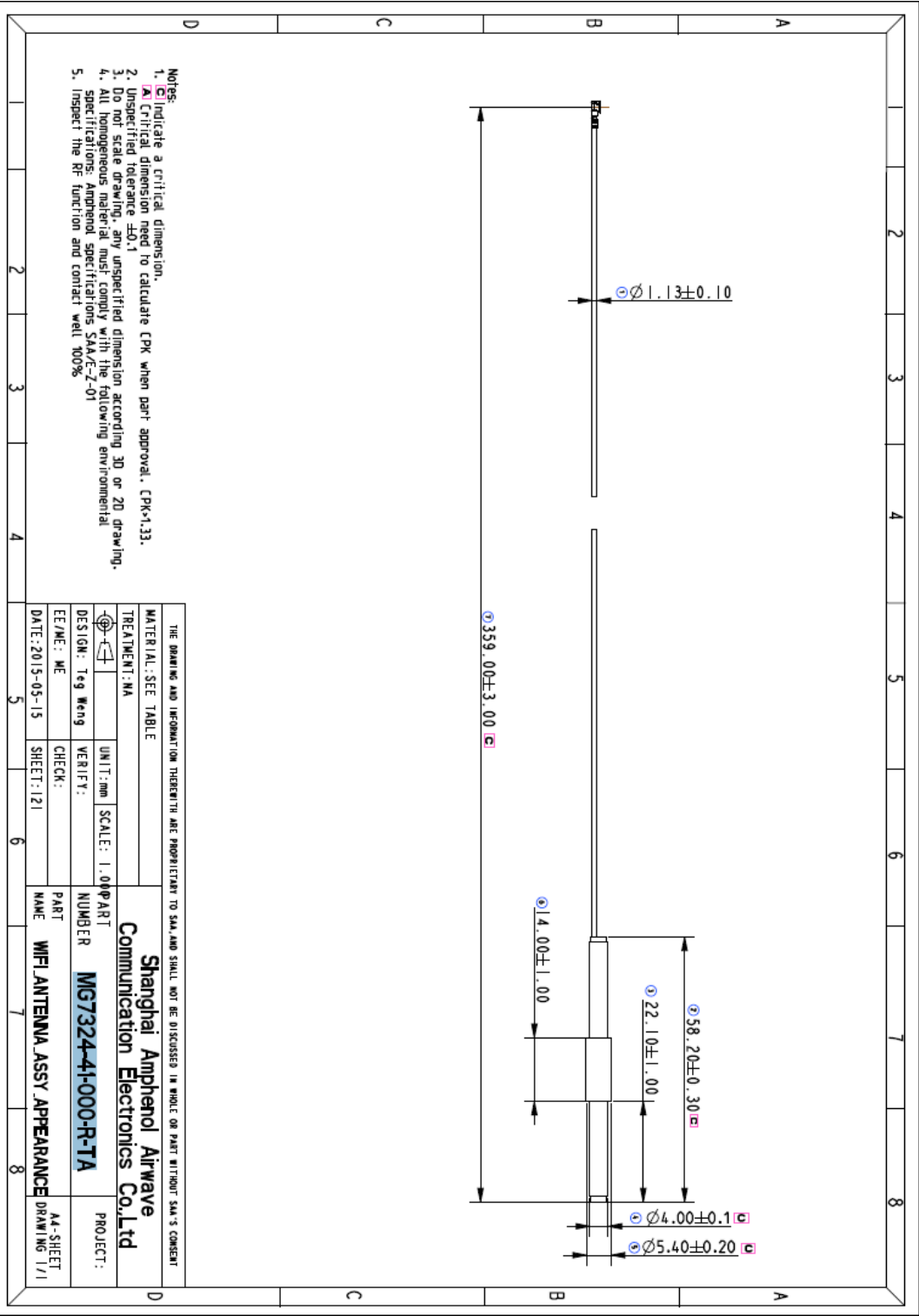


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4 Appearance Drawing



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