



深圳市东信通电子科技有限公司

ShenZhen Eastong Electronic technology Co., LTD

APPROVAL SHEET
FOR
Bonaxin P860
(internal antenna)

Project:BonaxinP860		Author: 许小荣	File Name: BonaxinP860-APP-RA
Date: 2022-10-29			
Rev:	Language:	Check:	
A	ENG		
CONFIDENTIAL ShenZhen Eastong Electronic technology Co., LTD			

Revision History

Date	Revision	Description of Changes
2022-10-29	R:A	Antenna performance approved by customer

2.1	Definitions	2-3
4.1	Set-up.....	4-3
4.1.1	VSWR and return loss	4-3
4.1.2	Efficiency, Gain and TRP/TIS.....	4-3
4.1.3	Matching Circuit Description.....	4-3
4.2	Measurement Data	4-4

Project:BonaxinP860		Author: 许小荣	File Name: BonaxinP860-APP-RA
Date: 2022-10-29			
Rev:	Language:	Check:	
A	ENG		
CONFIDENTIAL ShenZhen Eastong Electronic technology Co., LTD			

1 Summary

This report summarizes the electrical results of the proposed antenna to support the BonaxinP860 program. We test the antenna with the latest version handset .

2 General Description

2.1 Definitions

VSWR: Voltage Standing Wave Rate

3 Mechanical Description

4 Electrical Performance

4.1 Set-up

4.1.1 VSWR and return loss

VSWR measurements (S_{11}) were performed using an Agilent E5070B Network Analyzer 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.

4.1.2 Efficiency, Gain and TRP/TIS

The gain of the antenna was measured in Dong Xin's 3D anechoic chamber in Shenzhen. The chamber is capable of doing tests from 380MHz to 6GHz. Coaxial chokes on the feed cable were used to mitigate surface currents. The measurement results are calibrated using dipole standards. For TRP and TIS the chamber uses a Agilent 8960 to establish the connection with the mobile device. During TRP tests the 8960 reads the power received through the chamber probes whilst during TIS tests the 8960 transmits through the probe. All data is afterwards corrected by a calibration table.

4.1.3 Matching Circuit Description

No matching.

Project:BonaxinP860		Author: 许小荣	File Name: BonaxinP860-APP-RA
Date: 2022-10-29			
Rev:	Language:	Check:	
A	ENG		
CONFIDENTIAL ShenZhen Eastong Electronic technology Co., LTD			

4.2 Measurement Data

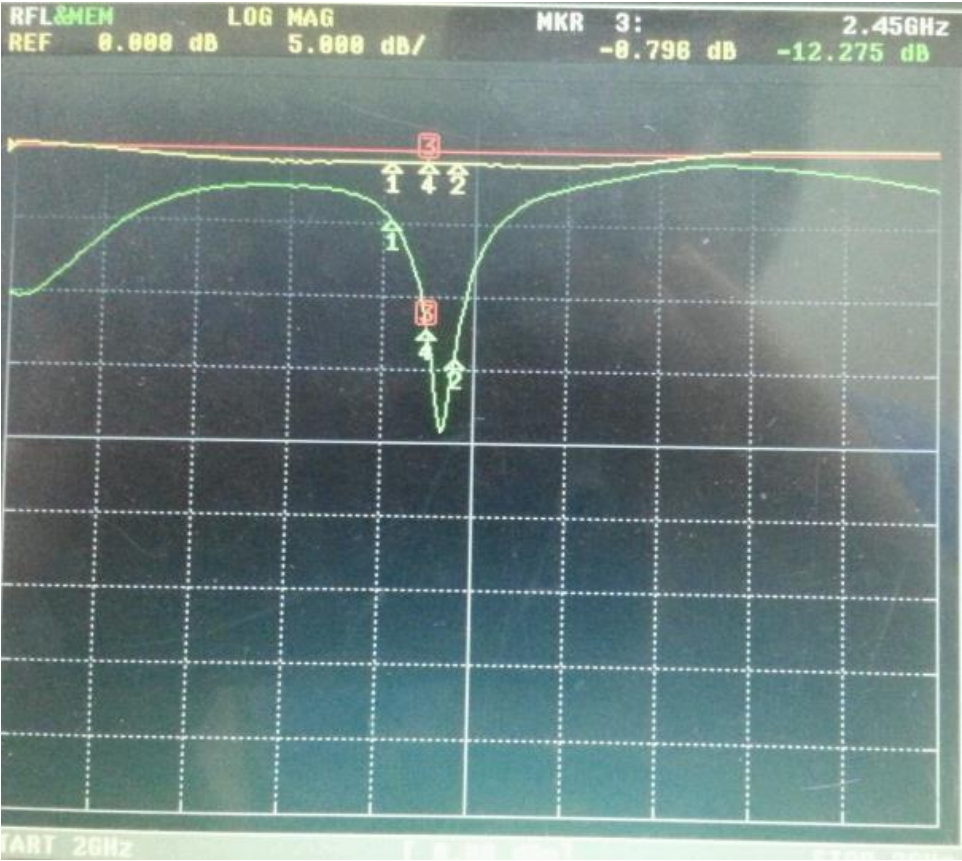
1:效率值和增益值

Freq (MHz)	Effi (%)	Gain(dBi)
2400	46.45	1.64
2410	46.98	1.57
2420	47.59	1.89
2430	47.69	1.76
2440	48.76	1.82
2450	48.98	1.73
2460	47.53	1.76
2470	47.68	1.68
2480	47.21	1.63
2490	46.43	1.57
2500	45.23	1.54

Freq (MHz)	Effi (%)	Gain(dBi)
5150	29.24	2.71
5250	30.65	2.66
5350	30.99	2.57
5450	31.12	2.45
5550	30.33	2.61
5650	30.33	2.61
5750	29.64	2.69
5850	29.13	2.72

Project:BonaxinP860		Author: 许小荣	File Name: BonaxinP860-APP-RA
Date: 2022-10-29			
Rev:	Language:	Check:	
A	ENG		
CONFIDENTIAL ShenZhen Eastong Electronic technology Co., LTD			

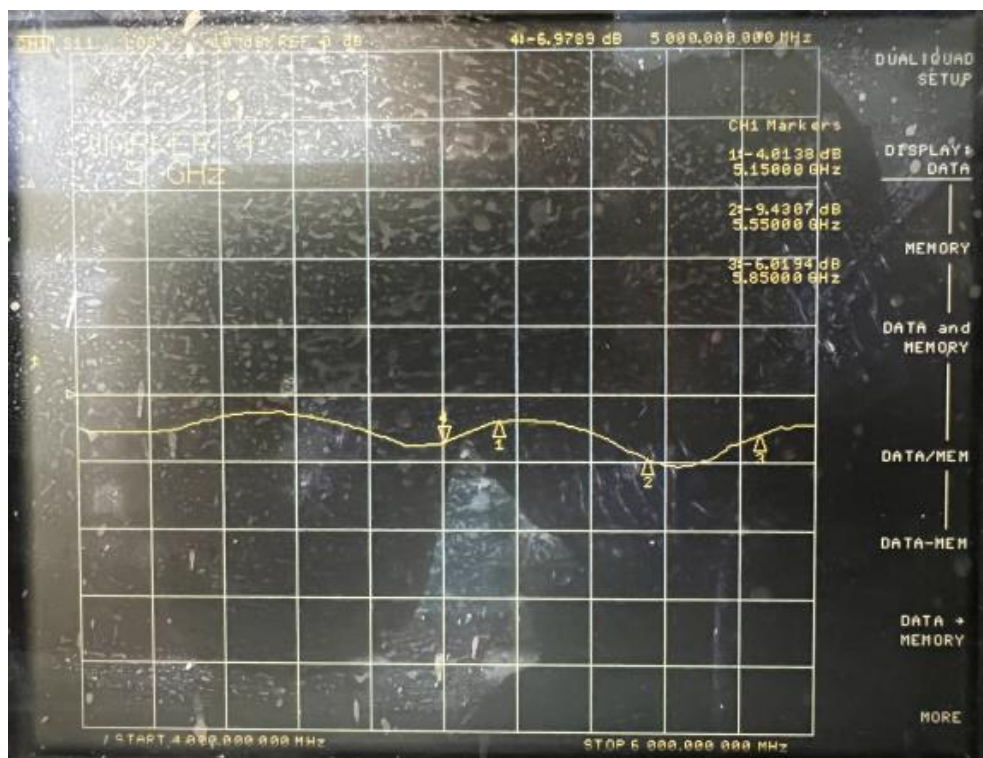
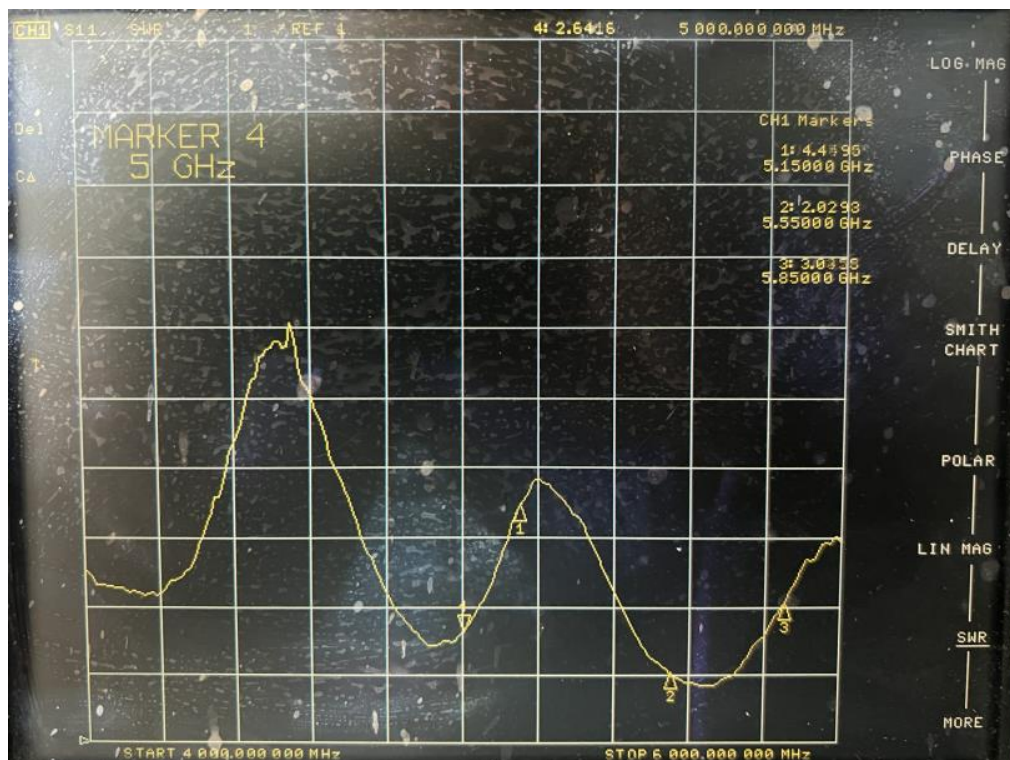
2:回波损耗



3: 驻波比



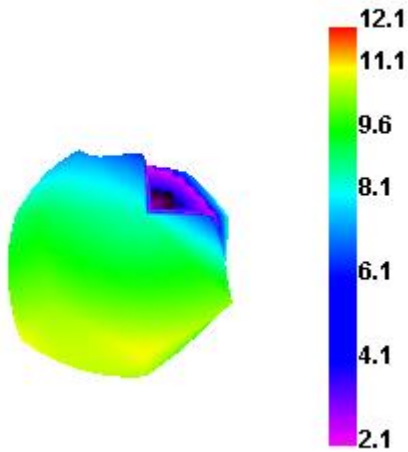
Project:BonaxinP860		Author: 许小荣	File Name: BonaxinP860-APP-RA
Date: 2022-10-29			
Rev:	Language:	Check:	
A	ENG		
CONFIDENTIAL ShenZhen Eastong Electronic technology Co., LTD			



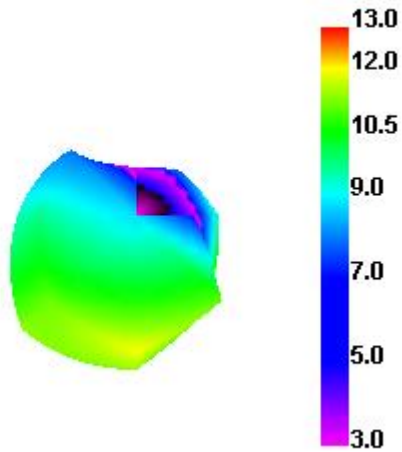
Project:BonaxinP860		Author: 许小荣	File Name: BonaxinP860-APP-RA
Date: 2022-10-29			
Rev:	Language:	Check:	
A	ENG		
CONFIDENTIAL ShenZhen Eastong Electronic technology Co., LTD			

苹果图：2.4G

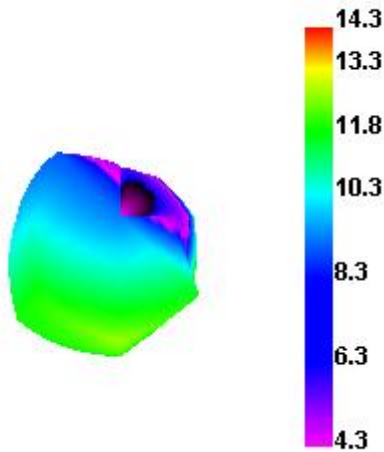
Wifi 1 TRP



Wifi 6 TRP



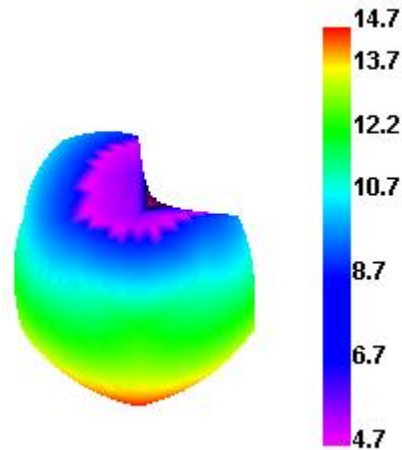
Wifi 12 TRP



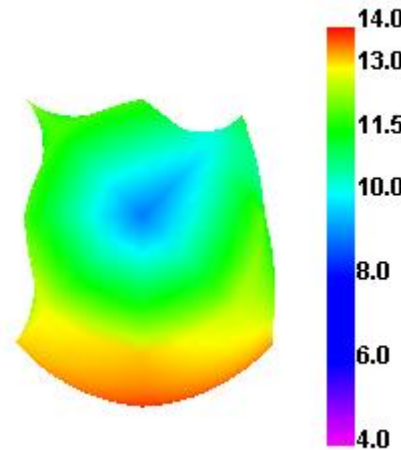
Project:BonaxinP860		Author: 许小荣	File Name: BonaxinP860-APP-RA
Date: 2022-10-29			
Rev:	Language:	Check:	
A	ENG		
CONFIDENTIAL ShenZhen Eastong Electronic technology Co., LTD			

5G:

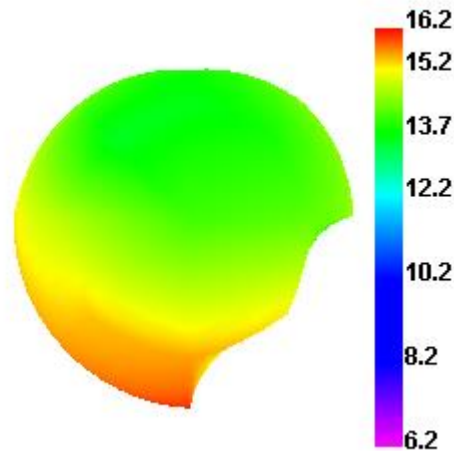
Wifi 36 TRP



Wifi 60 TRP

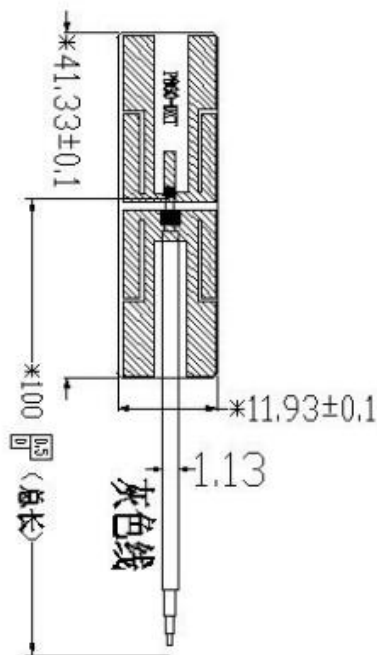


Wifi 161 TRP

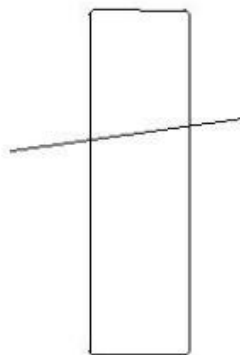


5 Mechanical drawing

Project:BonaxinP860		Author: 许小荣	File Name: BonaxinP860-APP-RA
Date: 2022-10-29			
Rev:	Language:	Check:	
A	ENG		
CONFIDENTIAL ShenZhen Eastong Electronic technology Co., LTD			



40.5±0.5(总厚度)
40.0±0.5(含铜层)



注:

- 1、打*为配合尺寸,打*为重点尺寸,"Trid"为后继需调整尺寸;
- 2、打★为必测尺寸,未标尺寸参考3D图纸;其它尺寸以实配为准;
- 3、走线面除焊盘外其它区域需涂油(哑光)。
- 4、 区域为走线区域, 区域为焊盘区域(镀金), 区域为附胶区域(3M300/9471LSR)
- 5、PVC表面油墨均匀,不可有起皱镀金不良等现象。
- 6、字符颜色要求:黑油绿字,白油亮白字。

深圳市东信通电子科技有限公司

第三角法		机 种	P860-APP	日期	2022-09-19	页码	1/1
公差标注	第三角法	品 名	PVC_主天线	设计	陈辉海	审核	
10以下	±0.05	料 号		审核		工程	
10~20	±0.10	材 质	PT(康强亚胶)-焊片	确认		材料	
20~40	±0.15	表面处理					
40以上	±0.15	表面处理	黑色	单位	mm	比例	1:1
请勿实测图板		外表面处理				版本	T:4

Date: 2022-10-29

Rev:

A

Language:

ENG

Check:

BonaxinP860-APP-RA

CONFIDENTIAL

ShenZhen Eastong Electronic technology Co., LTD