APPROVAL SHEET
FOR
众悦 T30 Pro
（WIFI band internal antenna）

Issued by		**Checked by**	
Confirmed by		**Date**	**2025-01-11**
Customer Confirm			

Project: 众悦 T30 Pro		Author: 李凯	File Name: 众悦 T30 Pro-**APP-RA**
Date: 2025-01-11			
Rev:	Language:	Check:	
A	ENG		

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Revision History

Date	Revision	Description of Changes
2025-01-11	R:A	Antenna performance approved by customer

1 SUMMARY

2 GENERAL DESCRIPTION

2.1 Definitions

3 MECHANICAL DESCRIPTION

4 ELECTRICAL PERFORMANCE

4.1 Set-up
4.1.1 VSWR and return loss
4.1.2 Efficiency, Gain and TRP/TIS
4.1.3 Matching Circuit Description

4.2 Measurement Data
4.2.1 VSWR
4.2.2 Active result

5 MECHANICAL DRAWING

6 CONCLUSION

1 Summary

This report summarizes the electrical results of the proposed antenna to support the T30 Pro 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.

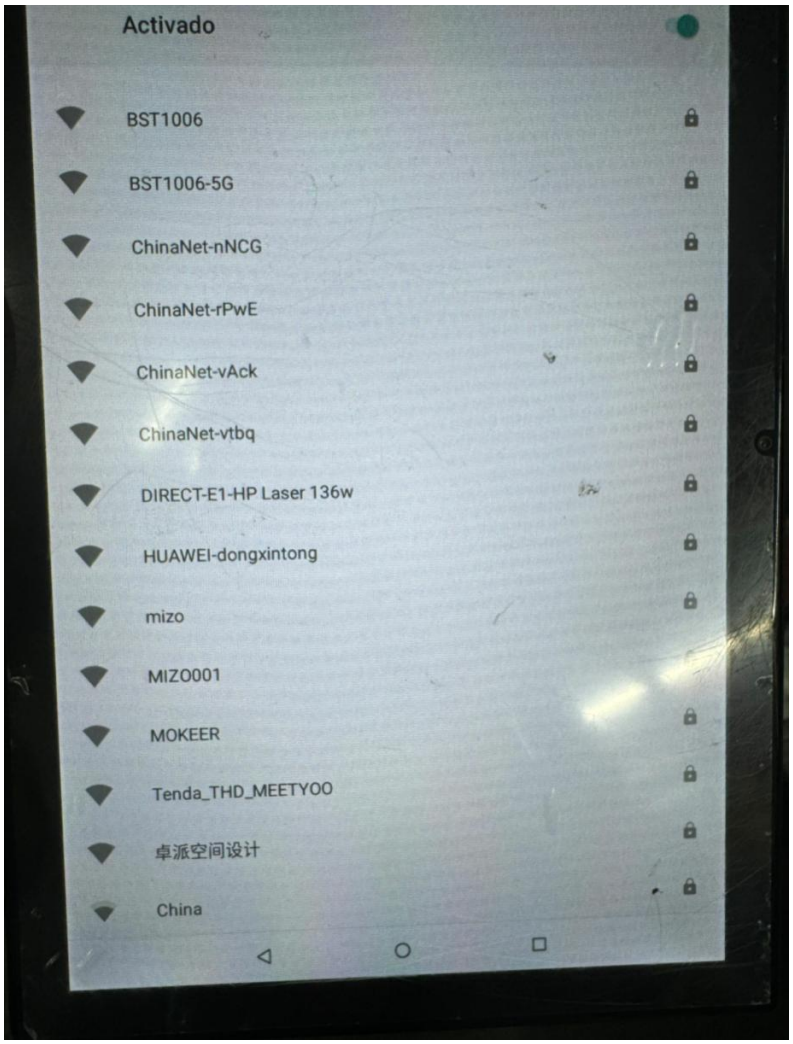
4.1.3 Matching Circuit Description

No matching.

4.2 Measurement Data

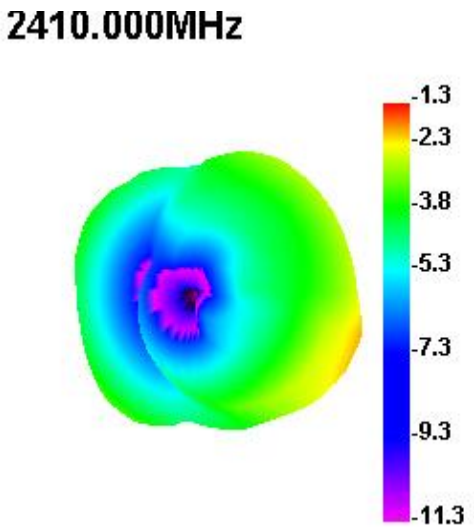
Effective Radiated Power Summation

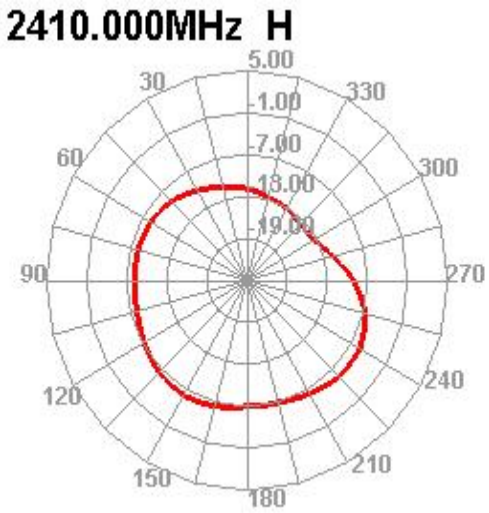
5 Mechanical drawing


Activado
BST1006
BST1006-5G
ChinaNet-nNCG
ChinaNet-rPwE
ChinaNet-vAck
ChinaNet-vtbq
DIRECT-E1-HP Laser 136w
HUAWEI-dongxintong
mizo
MIZO001
MOKEER
Tenda_THD_MEETYOO
卓派空间设计
China

天线效率，增益：

Freq (MHz)	Effi (%)	Gain (dBi)	Directivity (dBi)
2400	18.72	-1.56	5.72
2410	19.89	-1.29	5.73
2420	21.96	-0.87	5.72
2430	24.71	-0.35	5.73
2440	24.93	-0.26	5.77
2450	29.2	0.42	5.76
2460	30.66	0.61	5.74
2470	31.3	0.67	5.72
2480	34.91	1.1	5.67
2490	34.97	1	5.56
2500	35.39	1	5.51





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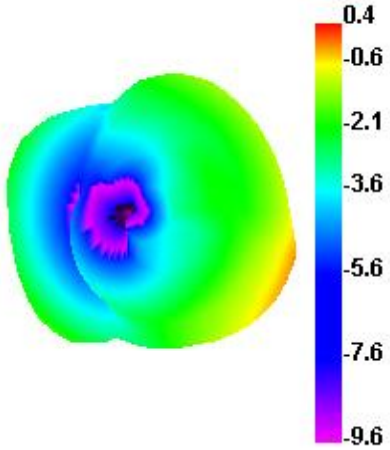
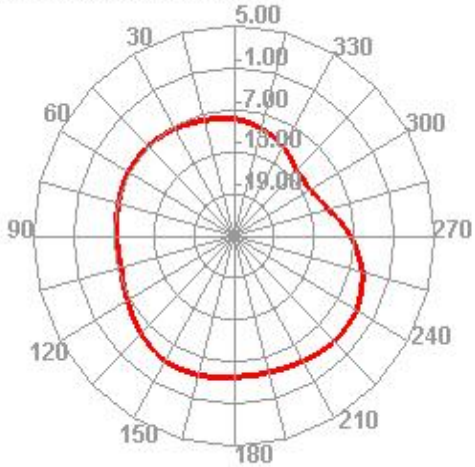
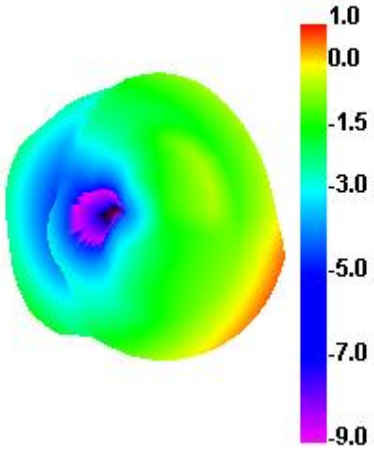
2450.000MHz



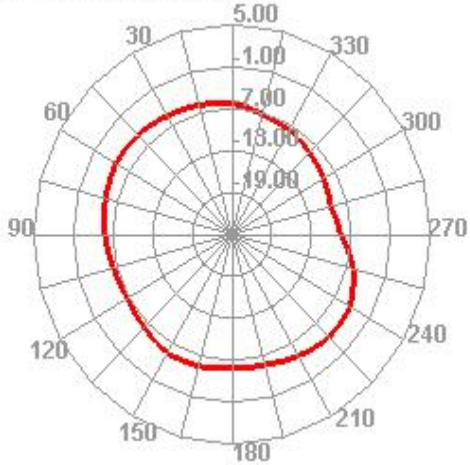
2450.000MHz H



2500.000MHz



2500.000MHz H



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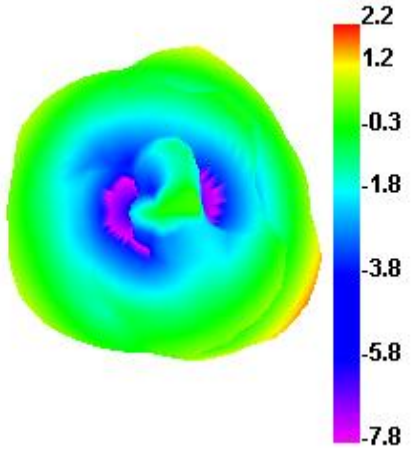
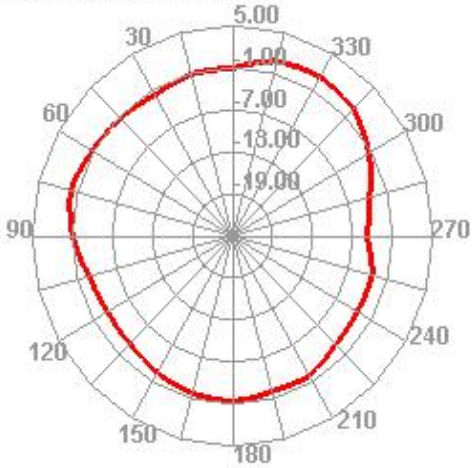
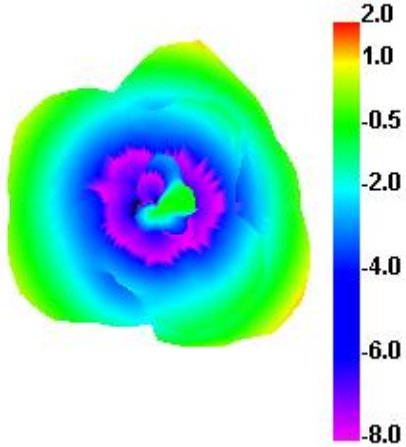
5800.000MHz



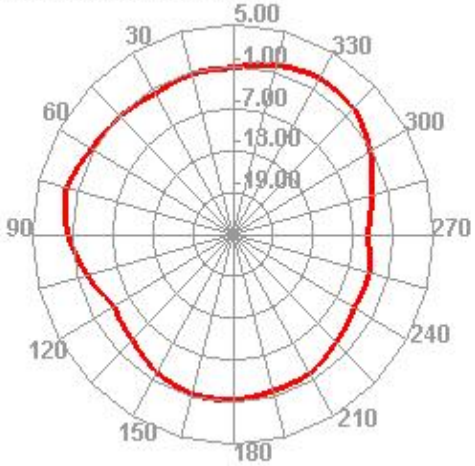
5800.000MHz H



5860.000MHz



5860.000MHz H



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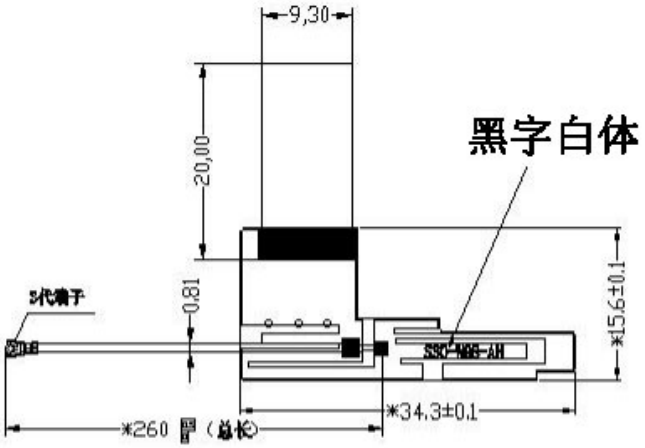
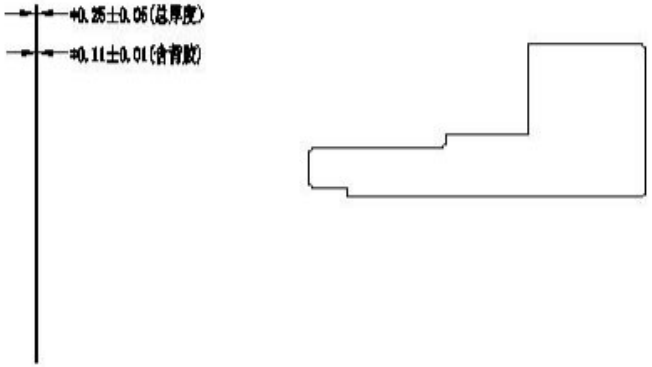


Floor 5, block A, Building 6, Phase 2, Dongjiu Innovation Technology Park, Xialilang Community, Nanwan Street, Longgang District, Shenzhen



注:

1、打※为配合尺寸,打*为重点尺寸,"Trim"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铺黑油(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(3M300/9471LSE)
5、FPC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。

日期	修改内容	版本	备注

ShenZhen Eastong Electronic technology Co., LTD

Floor 5, block A, Building 6, Phase 2, Dongjiu Innovation Technology Park, Xialilang Community, Nanwan Street, Longgang District, Shenzhen

第三角法				机种	T30 Pro-ZY	日期	2024-06-29	页码	2/3
未注公差参见标准			0.02	品名	FPC_WIFI	设计	CHH	审核	
10以下	±0.05		⌀0.03	料号		审核	工程		
10~20	±0.10		0.02	材质	FI(聚酰亚胺)一对半		射频		
20~40	±0.15		0.04	镜面处理		确认			
40以上	±0.15		0.02						
请勿实测图纸				外观处理	黑色	单位	mm	比例 FIT	版本 T:A

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