

➤ **Customer:** Duoke

➤ **Project:** DK069

➤ **ME:** XiaoXiang

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➤ **RF:** Liu Hou Xiong

TEL- 17328763286

➤ **Date:** 20.1.2024

Catalogue

1.Basic information	X
2.Matching circuit	X

3.Antenna return loss.....	X
4.Gain	X
5.OTA.....	X
6.EMC optimization.....	X

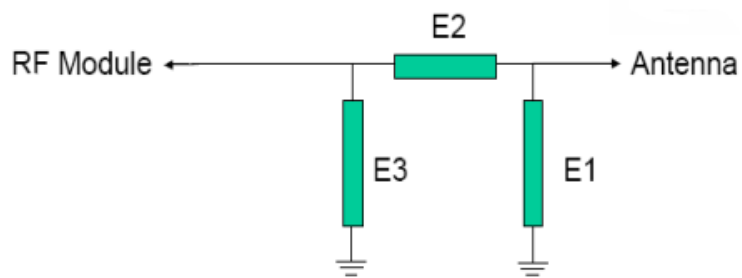
1.Basic information

Frequency band:

1.1: 80211.a/b/g/n/ac 2.4G/5G

2: Matching circuit

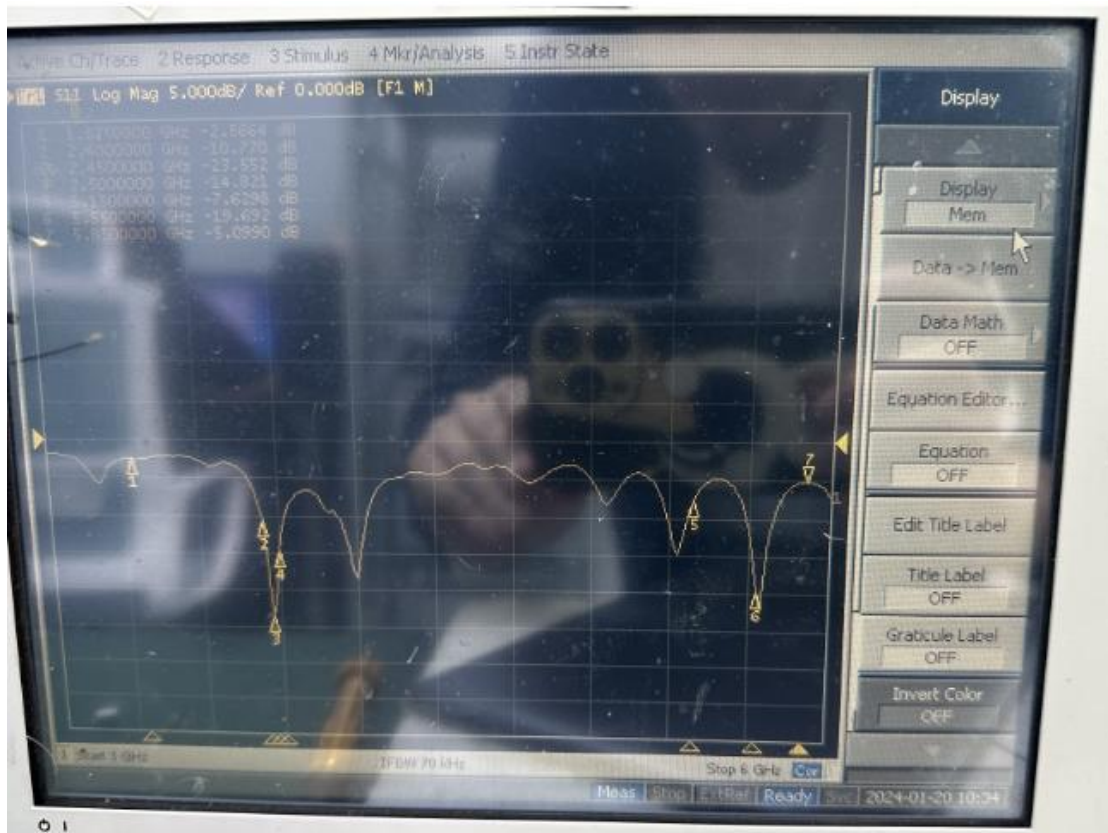
2.1 WIFI antenna



Element	Value
E1 (0201)	NA
E2 (0201)	0 Ω
E3 (0201)	NA

3.Antenna return loss

3.1 WIFI antenna return loss



4.Gain

Band	Avg Gain/dBi	Peak Gain/dBi
WIFI/2.4G	-3.4	1.7
WIFI/5.8G	-4.1	-1.2

5.OTA

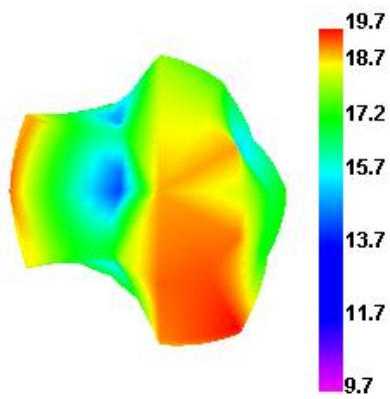
5.1 Antenna OTA

Band	Channel	TRP	TIS
2.4-b (11M)	1	15.2	
	6	15.1	
	13	15.6	-81.8
2.4-g (54M)	1	13.1	
	6	13.2	
	13	13.2	-70.1
2.4-n (MCS7)	1	13.1	
	6	13.5	
	13	13.4	-65.7
5-a (54M)	36	11.8	
	100	12.1	
	165	12.3	-71.5
5-ac (MCS7)	36	11.3	
	100	11.8	
	165	12	-65.4

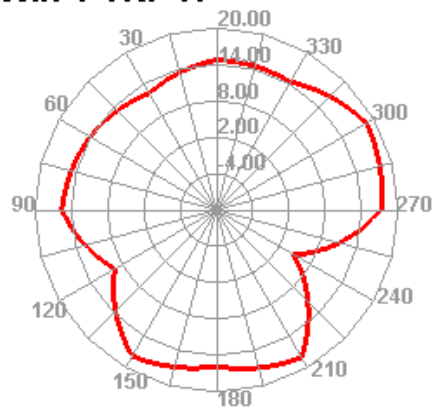
5.2 Antenna radiation pattern

5.2.1 WIFI

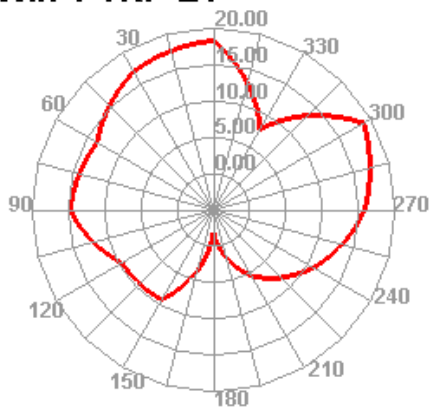
Wifi 1 TRP



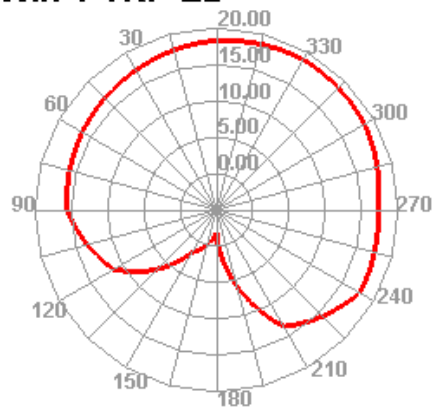
Wifi 1 TRP H



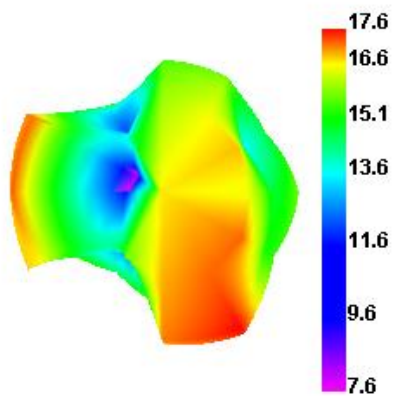
Wifi 1 TRP E1



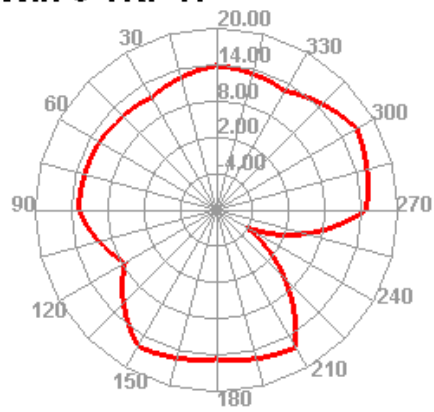
Wifi 1 TRP E2



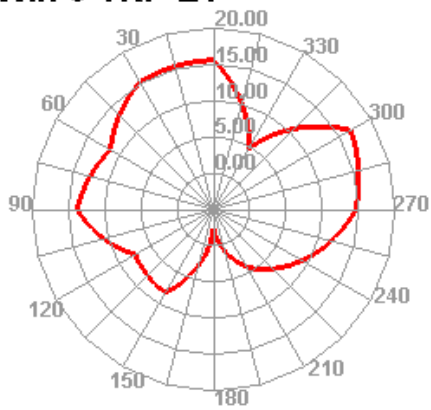
Wifi 6 TRP



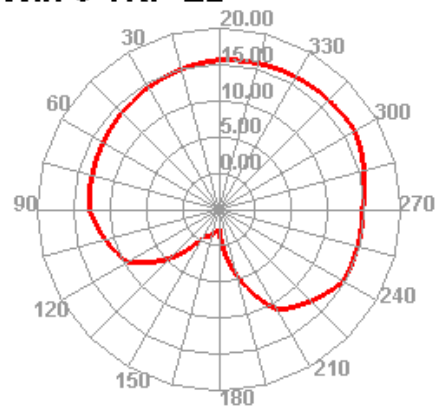
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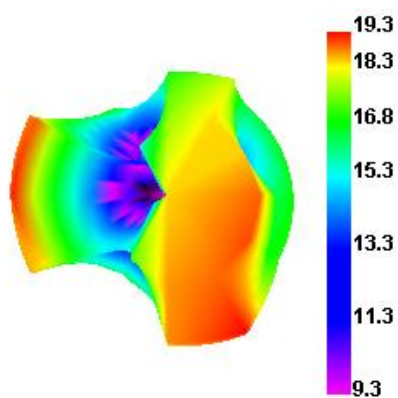
Wifi 6 TRP E1



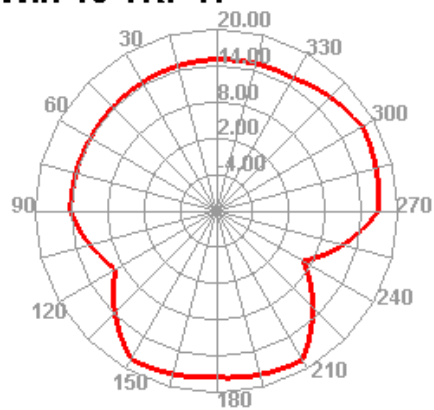
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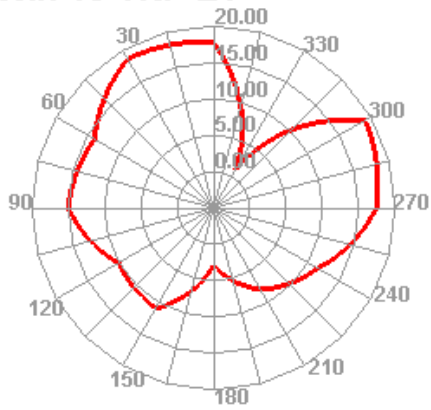
Wifi 13 TRP



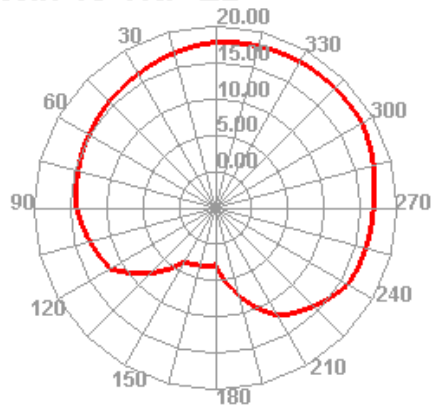
Wifi 13 TRP H



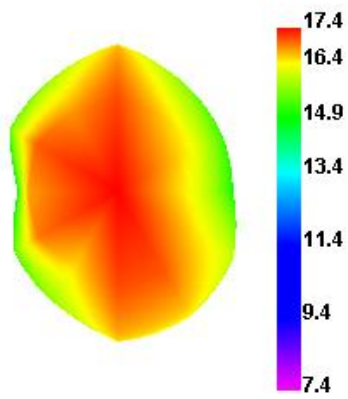
Wifi 13 TRP E1



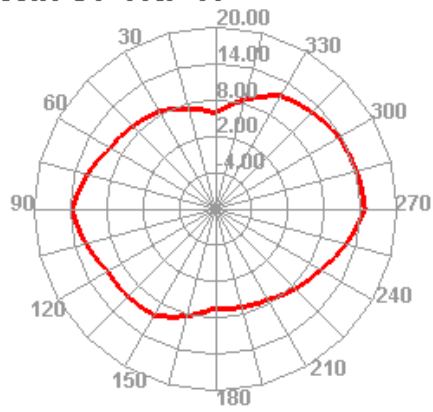
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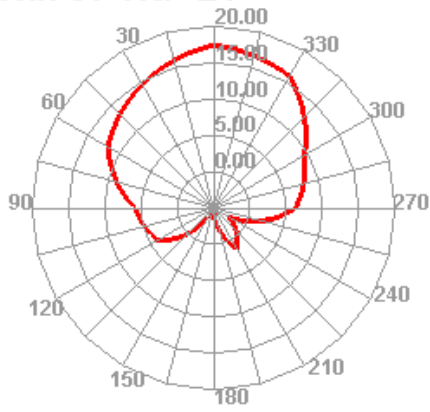
Wifi 36 TRP



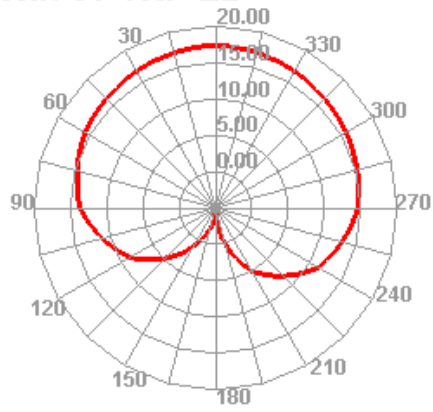
Wifi 36 TRP H



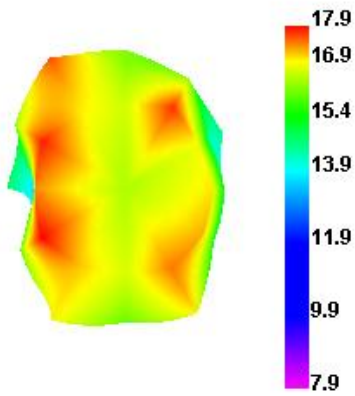
Wifi 36 TRP E1



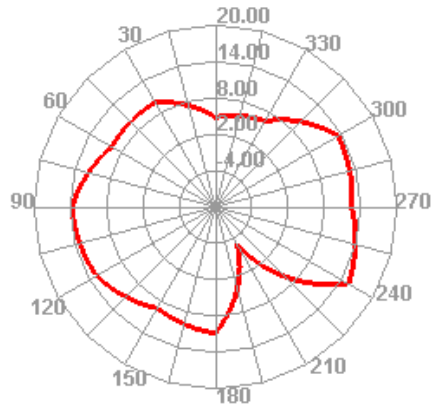
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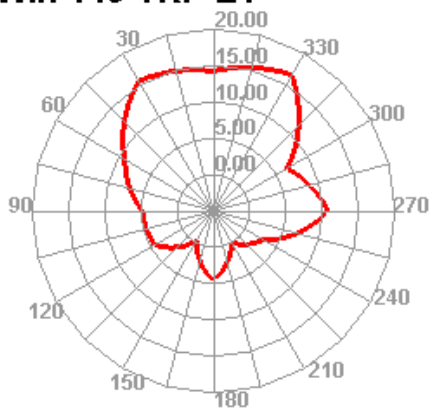
Wifi 149 TRP



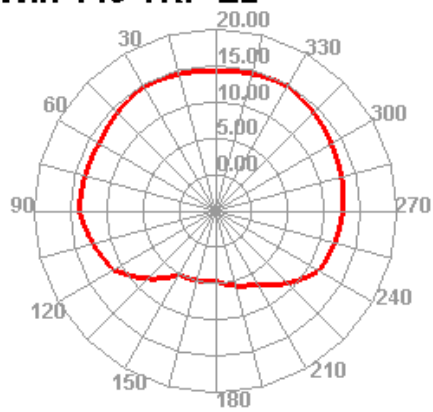
Wifi 149 TRP H



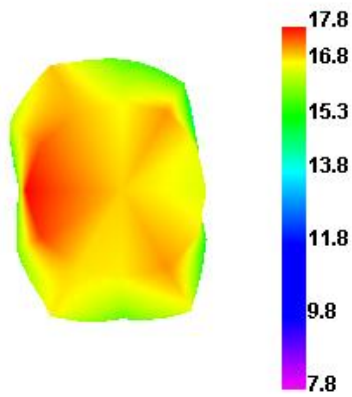
Wifi 149 TRP E1



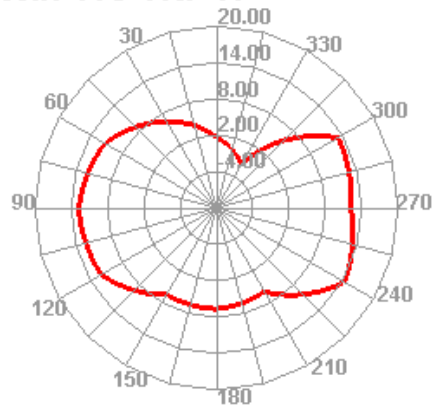
Wifi 149 TRP E2



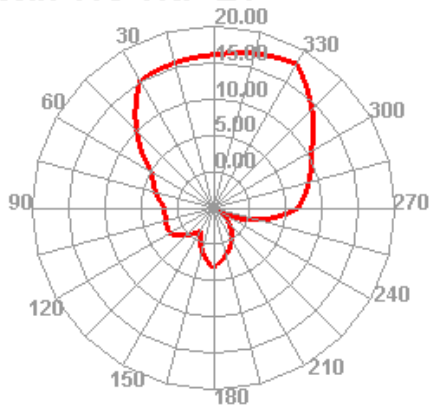
Wifi 165 TRP



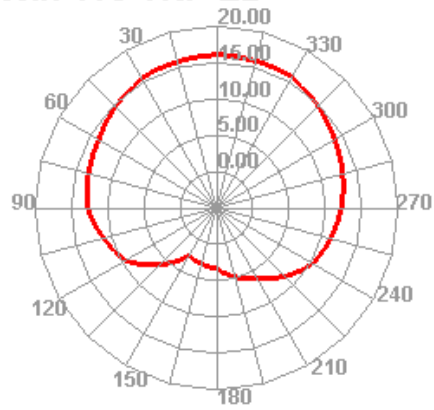
Wifi 165 TRP H



Wifi 165 TRP E1



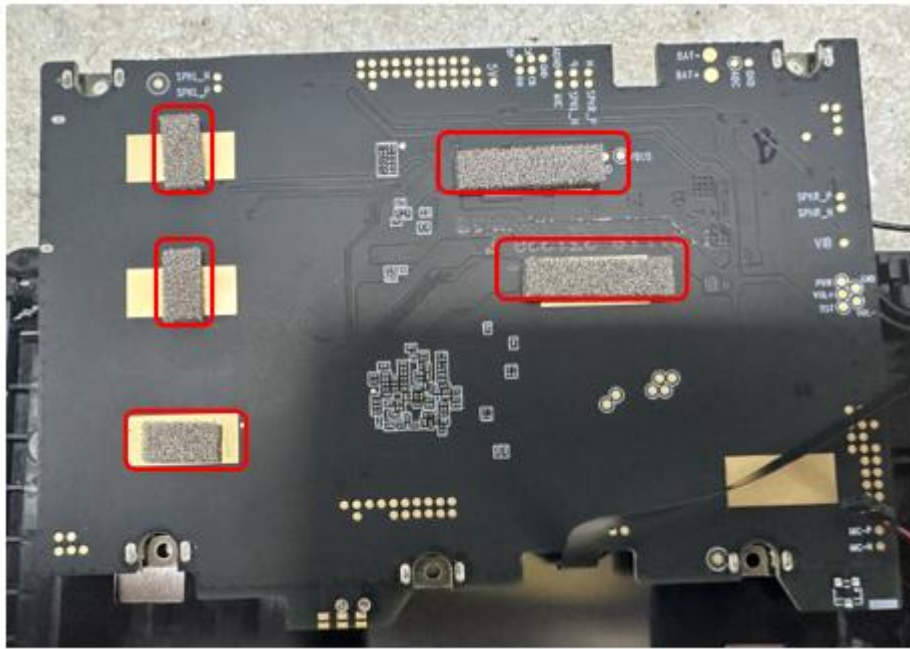
Wifi 165 TRP E2



6. EMC optimization

6.1

The red area on the back of the motherboard is fully grounded with a conductive sponge, as shown below:



由 Autodesk 教育版产品制作					5	6	7																													
				标记	签名	修改内容	日期																													
字符图标丝印颜色要求: 丝印同色亮光字符 定位孔打穿 铜箔区域 表面镀金 手繪区 产品外形 非铜区不用管胶 技术要求 1. 材质FPC(单面板, 黑色, 白色, 电解铜 半对半), T<0.125mm; 反面背胶类型: 3M-9471(粘性需过热冲击试验); 2. 标“*”号为重点管控尺寸, 未注公差按图框中自由公差管控; 未注尺寸以菲林片检验为准(电性能测试OK); 3. 镀金厚度为2微米, 不可有镀金后易断裂及脱落, 导电不良, 电路部分断裂等不良; 4. FPC表面油墨需均匀, 不可有污染物, 擦伤, 黑点, 起皱, 镀金不良等现象; 5. 产品符合ROHS标准, 整版出货 深圳市信必诺通讯科技有限公司 <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">第三视角</td> <td style="width: 15%;">项目名称</td> <td style="width: 15%;">DE069</td> <td style="width: 15%;">日期</td> <td colspan="2">2024-01-20</td> </tr> <tr> <td>0~30 ±0.05</td> <td>产品名称</td> <td>FPC天线</td> <td>设计</td> <td colspan="2">Wang</td> </tr> <tr> <td>30~50 ±0.10</td> <td>产品料号</td> <td></td> <td>审核</td> <td>MD</td> <td>Wang</td> </tr> <tr> <td>50~80 ±0.12</td> <td>材料</td> <td>PI(黑纸罩胶) 半对半</td> <td>批准</td> <td>KF</td> <td>Long</td> </tr> <tr> <td>角度 ±1°</td> <td colspan="2"></td> <td>单位</td> <td>比例</td> <td>FIT 版本 T.A</td> </tr> </table> 第 1 页, 共 1 页				第三视角	项目名称	DE069	日期	2024-01-20		0~30 ±0.05	产品名称	FPC天线	设计	Wang		30~50 ±0.10	产品料号		审核	MD	Wang	50~80 ±0.12	材料	PI(黑纸罩胶) 半对半	批准	KF	Long	角度 ±1°			单位	比例	FIT 版本 T.A			
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