

三合一天线规格书

3-in-1 antenna specification

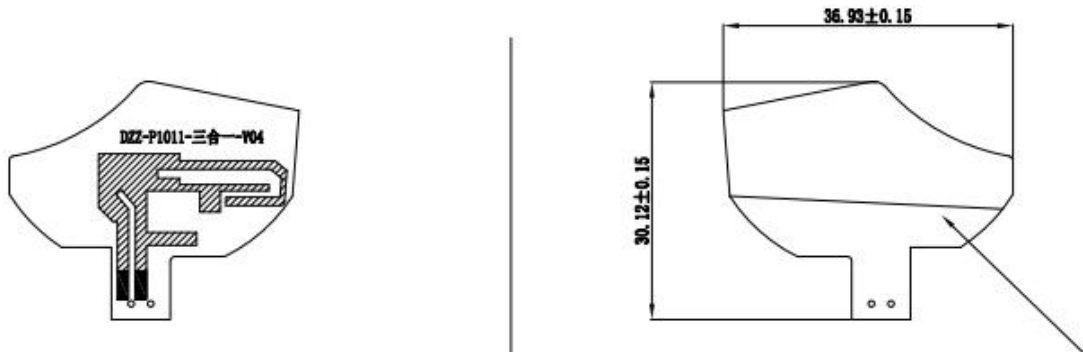
基本信息

General information

制造商 Manufacturer	Be-comfortable
天线型号 Model Name	P1011-GPS&WIFI&BT ant
日期 Date	2023-07-31
版本 Version	1.0
地址 address	深圳市宝安区西乡街道鹤洲社区恒丰工业城C6栋1606 No.1606,Build C6,HengFeng industrial city,xixiang street,baoan district,Shenzhen

天线外观

Antenna Appearance



技术规格

Technical Specifications

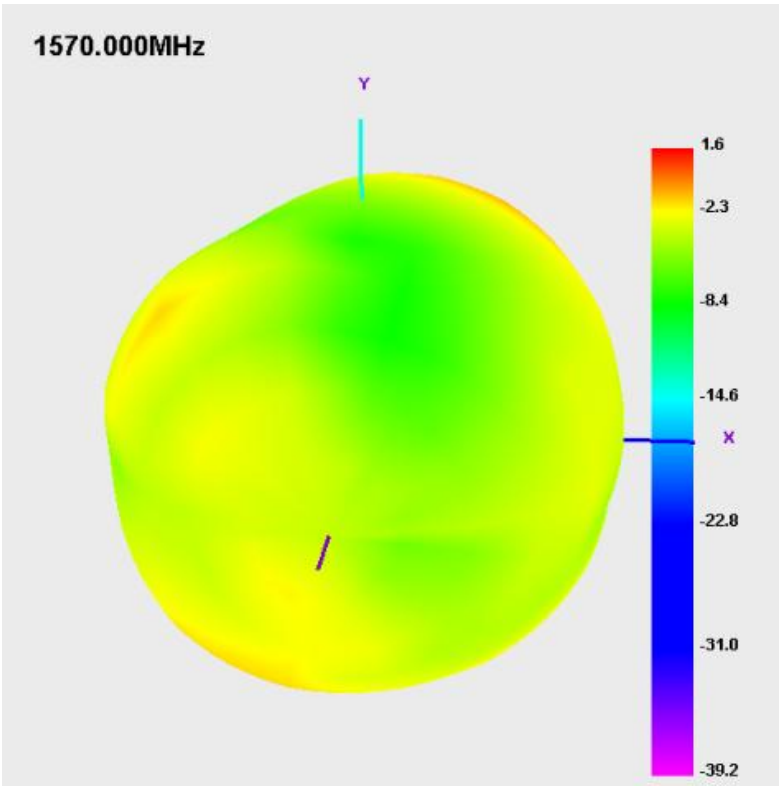
频率范围 Frequency Range	1575.42MHZ+2400-2500MHZ~5150-5850MHZ
天线类型 Antenna Type	PIFA
尺寸 Dimensions	36.93*30.12mm
阻抗 Impedance	50 ohm
最大增益 Maximum Gain	2.94dbi
驻波比 VSWR	≤3
.....	

Efficiency and gain

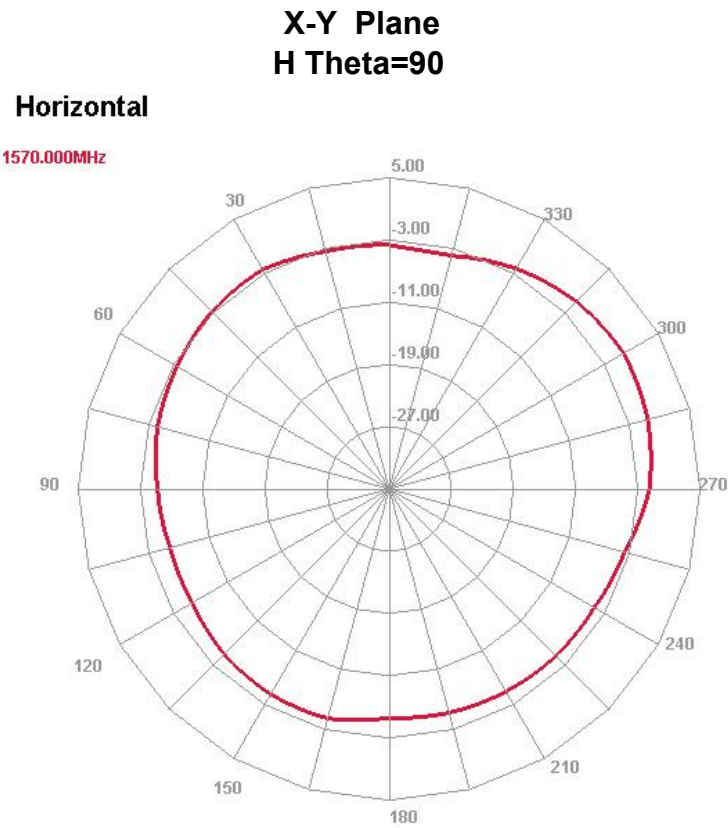
Frequency (MHz)	Gain (dB)	Efficiency (%)
1540	0.65	33.15
1550	0.55	36.19
1560	1.34	38.52
1570	1.56	39.75
1580	1.17	39.81
1590	0.93	40.2
1600	0.7	40.02

Frequency (MHz)	Gain (dBi)	Efficiency (%)	Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400	1.05	45.78	5100	2.49	50.7
2410	2.26	47.89	5200	2.68	53.55
2420	2.15	49.28	5300	2.94	47.94
2430	2.67	50.89	5400	2.89	45.53
2440	2.67	52.19	5500	2.9	50.62
2450	2.73	54.5	5600	2.91	49.24
2460	2.61	54.94	5700	2.66	50.7
2470	2.41	52.73	5800	2.35	47.68
2480	2.06	52.12	5900	1.88	45.53
2490	1.7	49.76			
2500	1.59	47.49			

Free space 3D radiation pattern



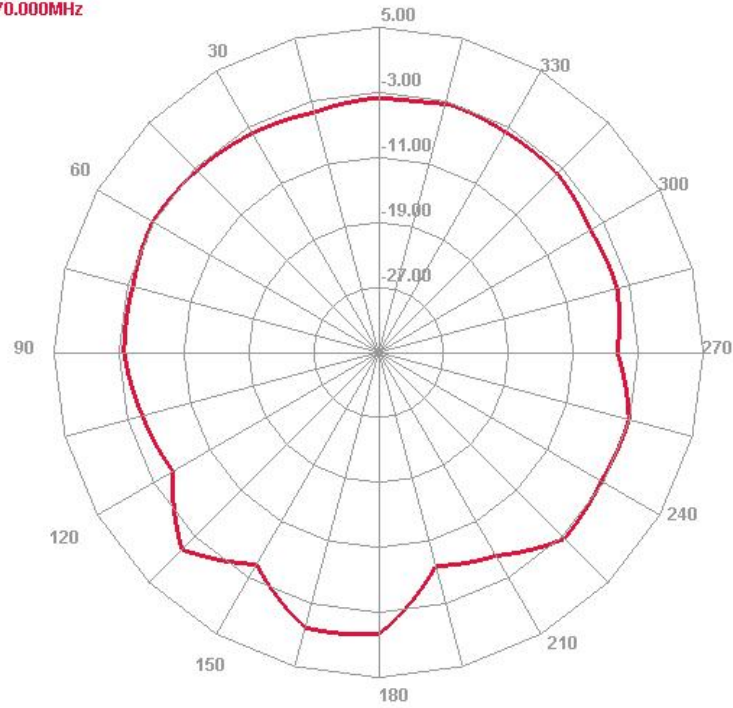
Free space 2D radiation pattern



X-Z Plane
V Phi=0

E1 Face

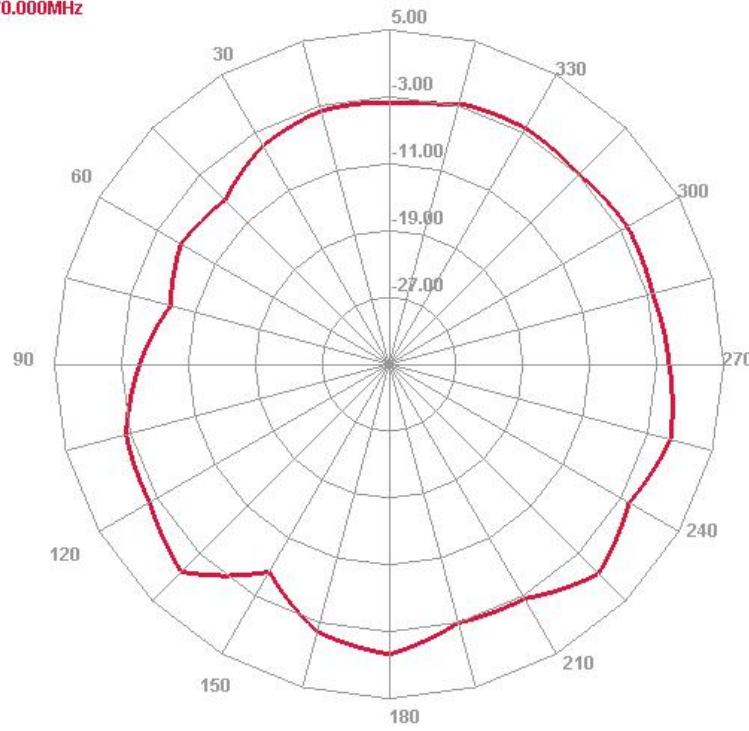
1570.000MHz

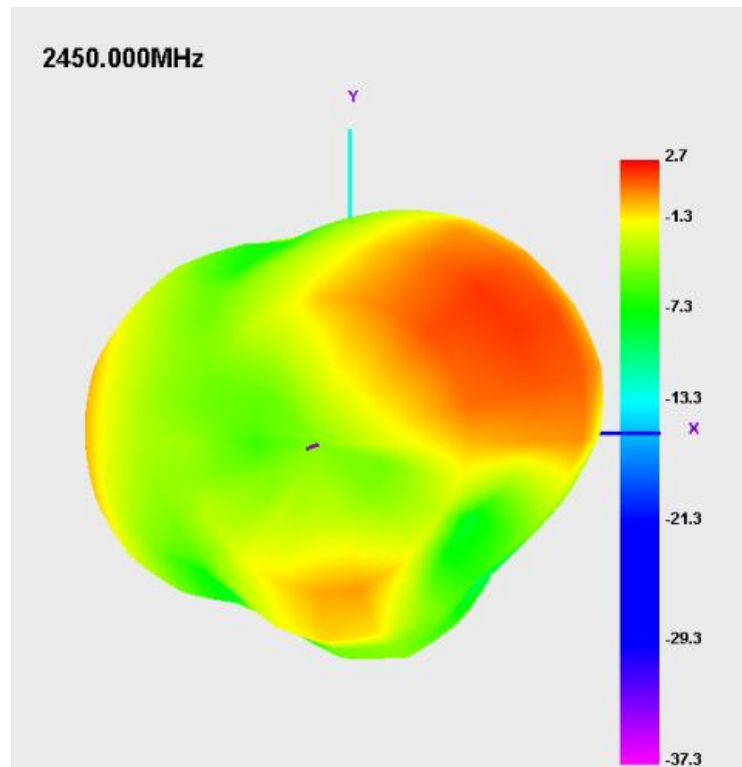


Y-Z Plane
V Phi=90

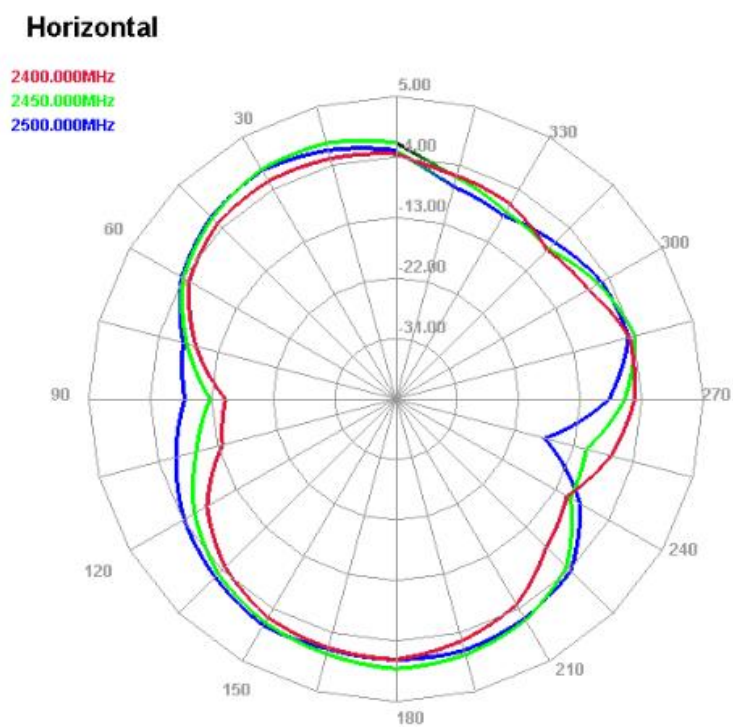
E2 Face

1570.000MHz



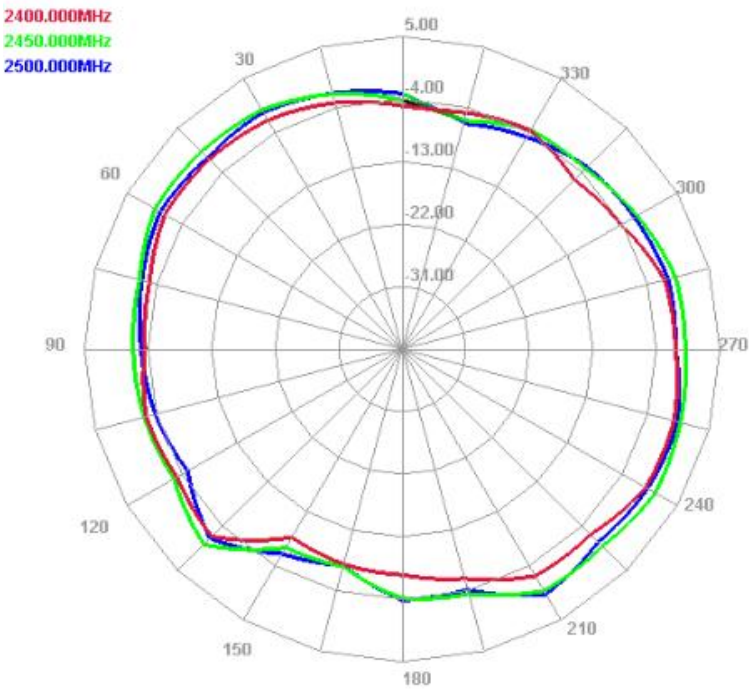


X-Y Plane
H Theta=90



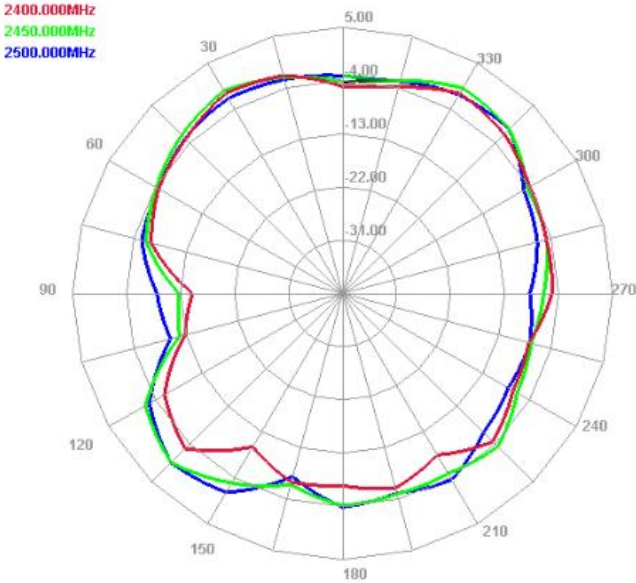
**X-Z Plane
V Phi=0**

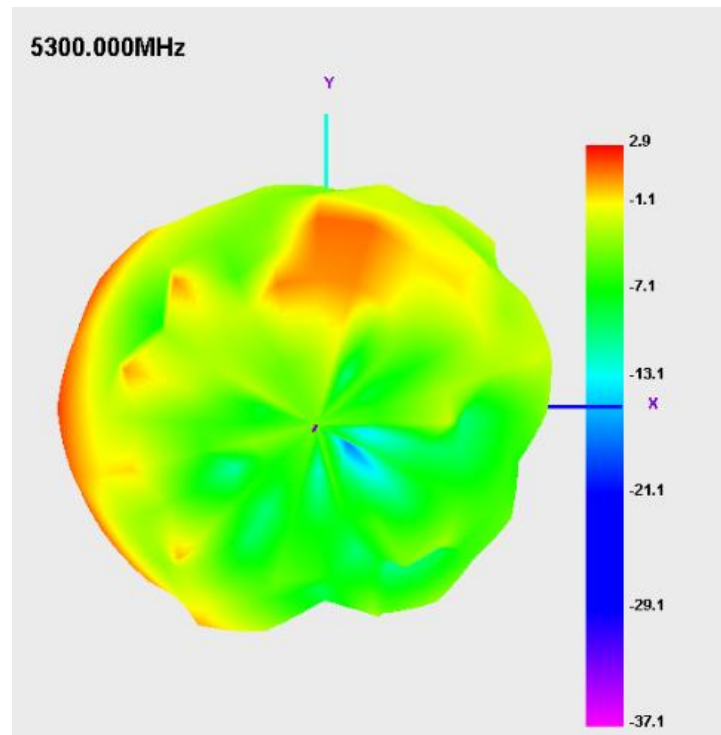
E1 Face



**Y-Z Plane
V Phi=90**

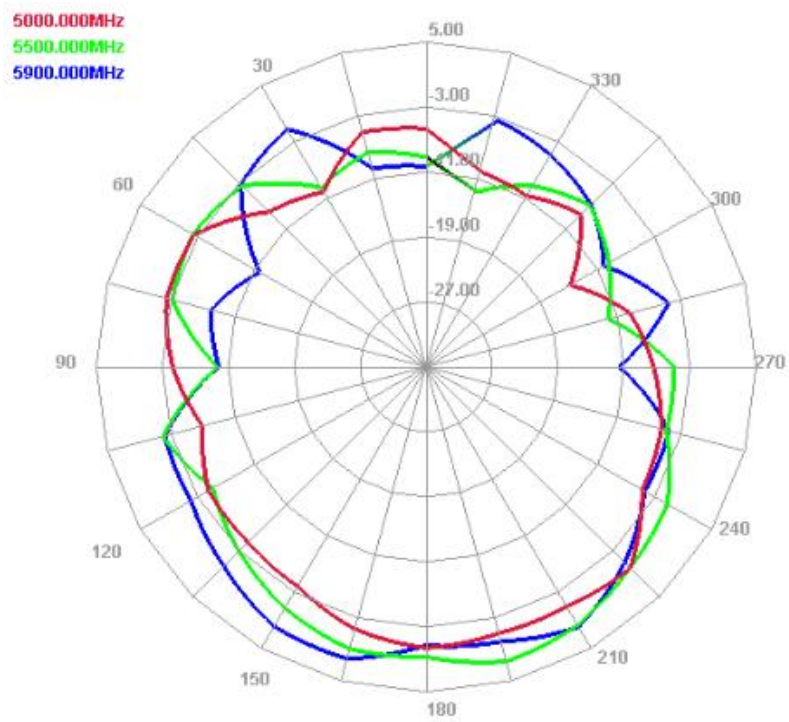
E2 Face





**X-Y Plane
H Theta=90**

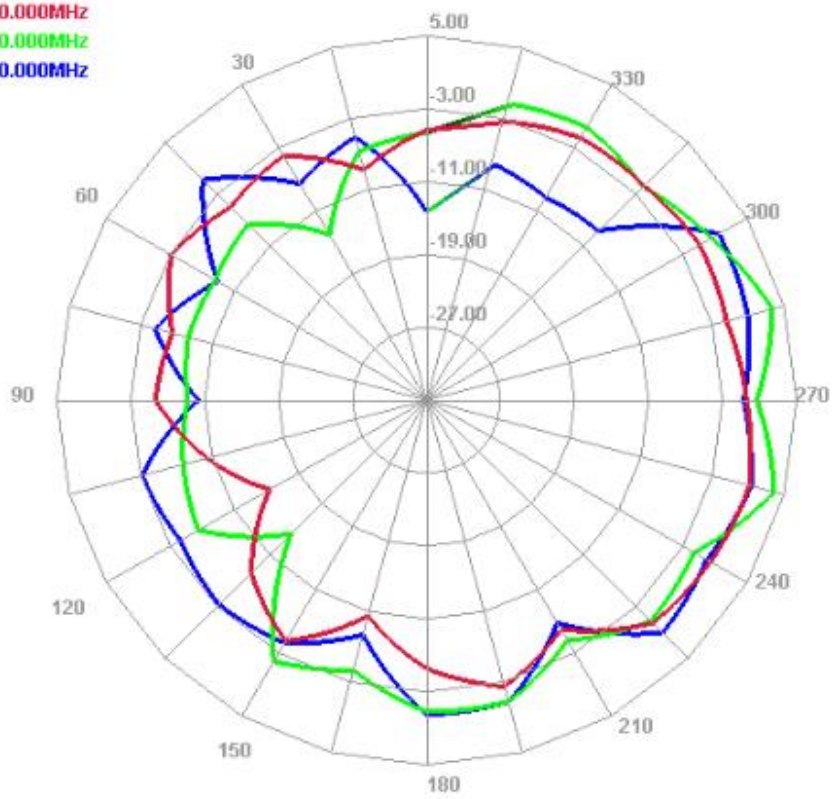
Horizontal



**X-Z Plane
V Phi=0**

E1 Face

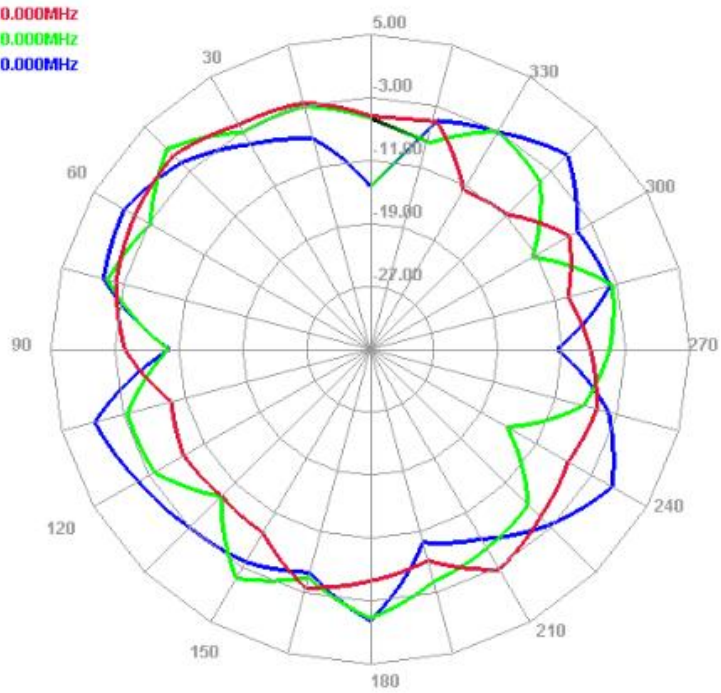
5000.000MHz
5500.000MHz
5900.000MHz



**Y-Z Plane
V Phi=90**

E2 Face

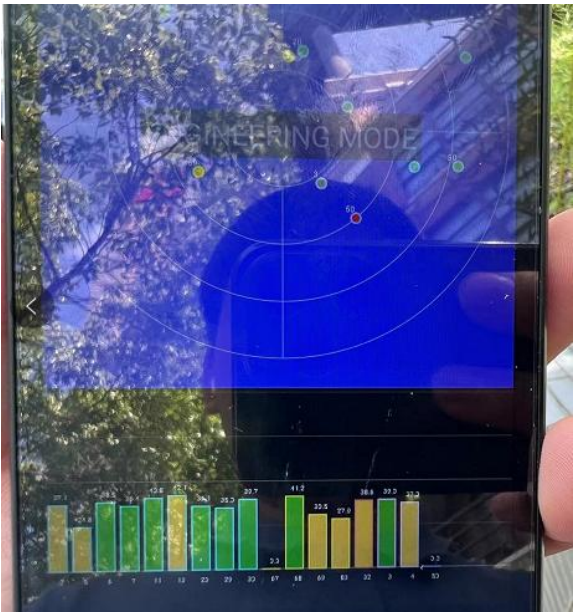
5000.000MHz
5500.000MHz
5900.000MHz



有源数据
OTA (TRP TIS)

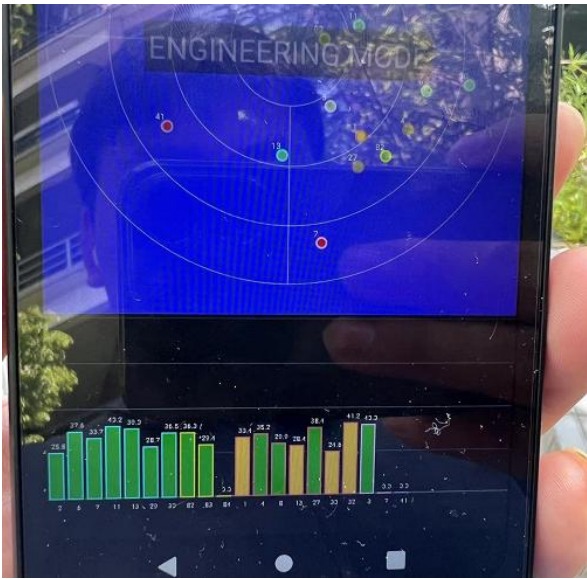
P1011A

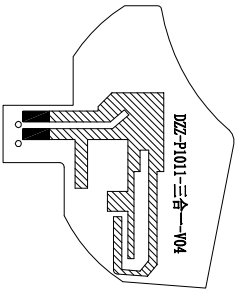
WiFi	channels	TRP (dBm)	TIS (dBm)
2.4G 11b	1	15.22	-82.16
	7	15.29	-83.21
	13	15.32	-83.19
5G 11a	36	15.53	-76.26
	165	15.71	-75.98



P1011B

WiFi	channels	TRP (dBm)	TIS (dBm)
2.4G 11b	1	15.22	-82.16
	7	15.29	-83.21
	13	15.32	-83.19
5G 11a	36	15.53	-76.26
	165	15.71	-75.98



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A		Rohs Compliant G P																																																																																																														
B		DZ-P1011-三合一-V04  36.93±0.15 30.12±0.15 Release paper cut wire																																																																																																														
C		备注: 1.FPC material: 0.5oz electrolytic copper,0.5MLI PI material, thickness 0.13±0.02; 2. Feed point treatment: gold plating 3. Surface treatment: black ink. 4. Back adhesive: 3ML9471LE Packing method: single piece 5. Screen printing font: white 6. No standard tolerance size, mold out of the size tolerance of ±0.1, copper foil line ruler The tolerance of the inch is ±0.05, and the tolerance of the marked hole is ±0.05. 7. Safety requirements: ROHS six 8. The quality requirements shall be implemented in accordance with the "IQC Incoming Inspection Specification"																																																																																																														
D		Shenzhen free technology Co., LTD <table><tr><td colspan="2"></td><td colspan="2">Third Angle</td><td colspan="2">Project</td><td colspan="2">P1012</td><td colspan="2">Date</td><td colspan="6">2023.2.16</td></tr><tr><td colspan="2">0~10</td><td colspan="2">±0.05</td><td colspan="2">○</td><td colspan="2">0.02</td><td colspan="2">Part Name</td><td colspan="6">三合一</td></tr><tr><td colspan="2">10~18</td><td colspan="2">±0.10</td><td colspan="2">◎</td><td colspan="2">ø 0.03</td><td colspan="2">Part No.</td><td colspan="6">F01-7034-R0A</td></tr><tr><td colspan="2">18~30</td><td colspan="2">±0.12</td><td colspan="2">⊥</td><td colspan="2">0.02</td><td colspan="2">Material</td><td colspan="6">FPC</td></tr><tr><td colspan="2">30~40</td><td colspan="2">±0.15</td><td colspan="2">∇</td><td colspan="2">0.04</td><td colspan="2">DWG No.</td><td colspan="6"></td></tr><tr><td colspan="2">40~</td><td colspan="2">±0.20</td><td colspan="2">Angle</td><td colspan="2">±0.5°</td><td colspan="2">Location</td><td colspan="6"></td></tr></table>																	Third Angle		Project		P1012		Date		2023.2.16						0~10		±0.05		○		0.02		Part Name		三合一						10~18		±0.10		◎		ø 0.03		Part No.		F01-7034-R0A						18~30		±0.12		⊥		0.02		Material		FPC						30~40		±0.15		∇		0.04		DWG No.								40~		±0.20		Angle		±0.5°		Location							
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