

BIKE_ Wifi antenna commissioning report



深圳市南斗星科技有限公司

专业的天线整体解决方案供应商

www.sz-southstar.com

RF: He Jian

Version:20220330 v1

Catalogue

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- 五、 Summary

Project demand information

Customer	project	Antenna implementation
Wahoo	BIKE	FPC+Cable
Parameter requirements		
WIFI	2400-2500Mhz	

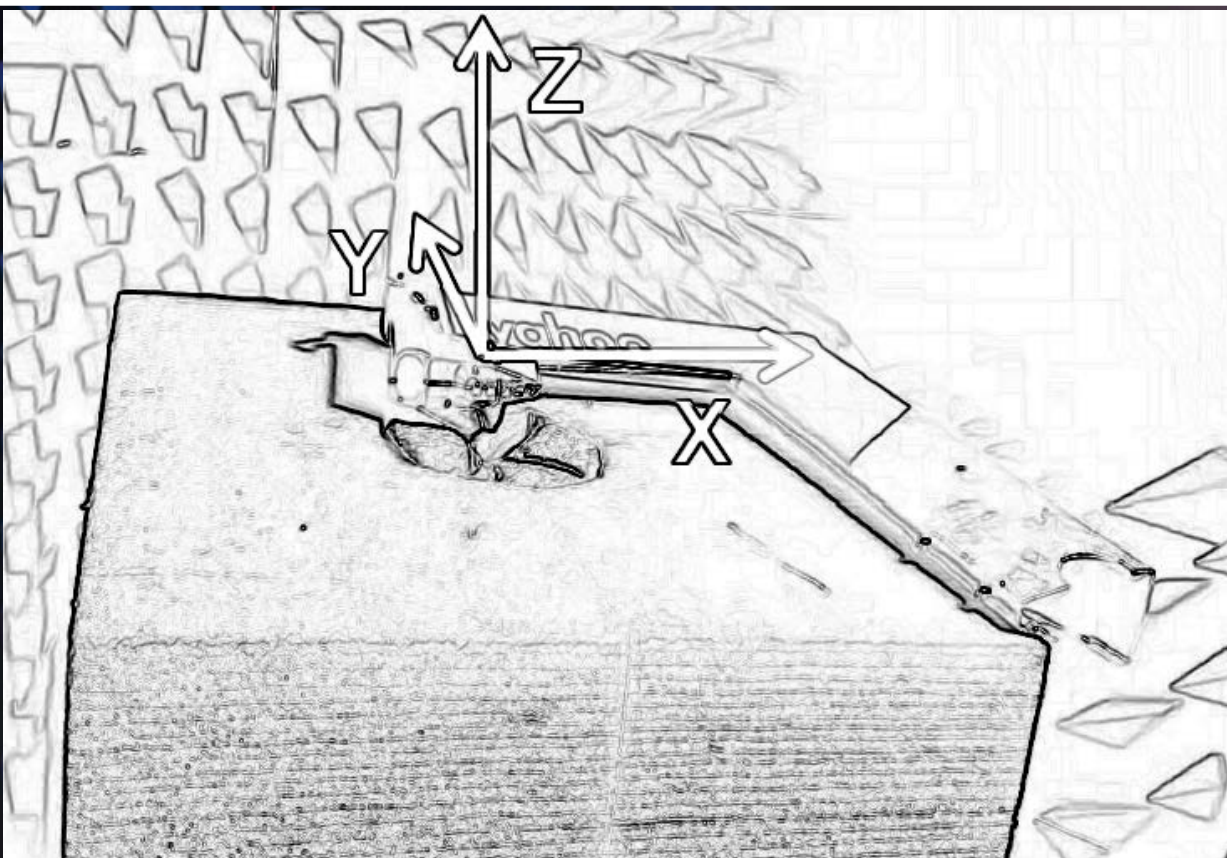
Wifi antenna assembly diagram

按照红色线条靠边对齐进行装配
(Assemble according to the red line and align with the edge)

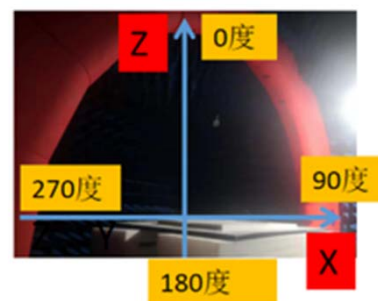
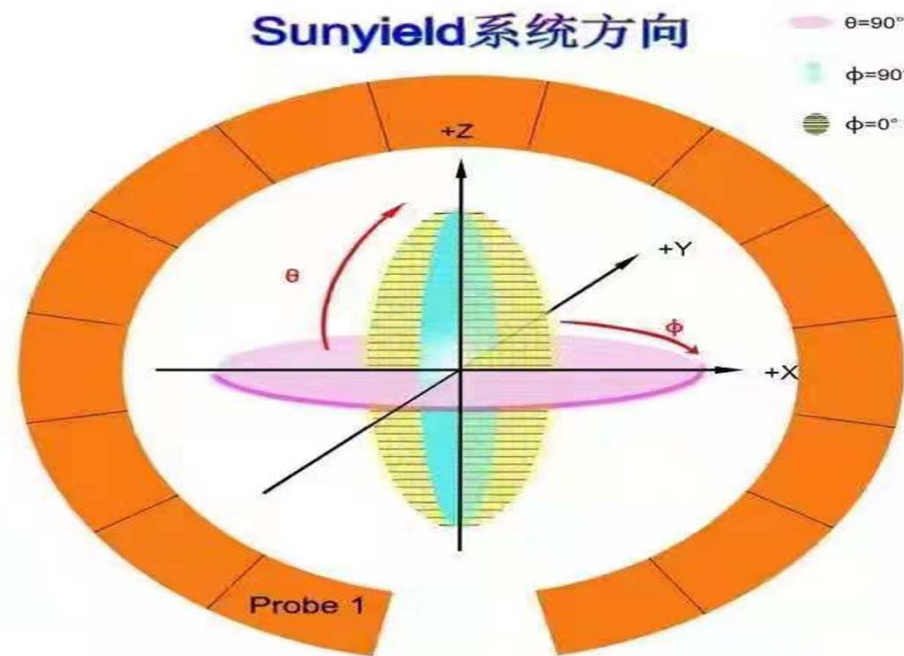




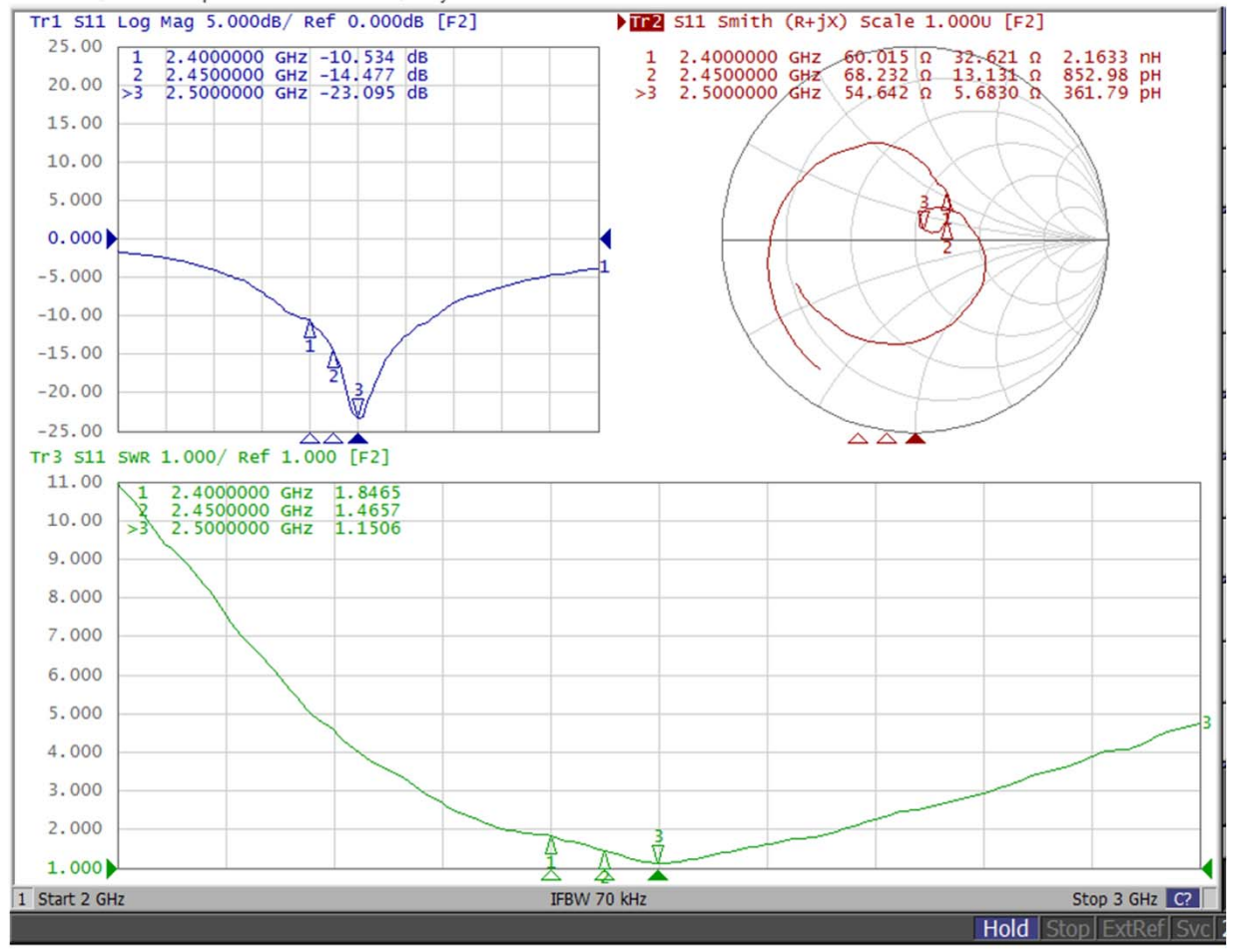
Definition of axis



Sunyield系统方向



Wifi antenna commissioning data



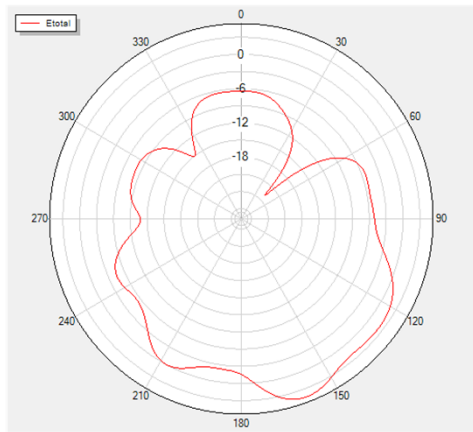
Wifi antenna efficiency and gain

frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(dB)	efficiency 效率(%)
2400	4.38	-3.24	47.37
2410	4.68	-3.15	48.47
2420	4.34	-3.06	49.43
2430	4.77	-2.91	51.21
2440	4.58	-2.76	52.95
2450	4.33	-2.71	53.53
2460	4.25	-2.82	52.25
2470	3.96	-3.01	49.98
2480	4.49	-2.86	51.72
2490	4.72	-2.81	52.33
2500	5.36	-2.72	53.43
avg.	4.53	-2.91	51.15



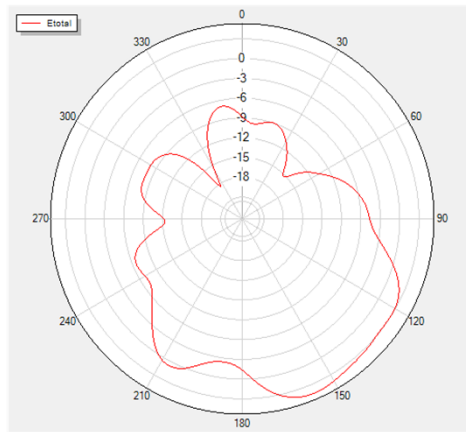
antenna pattern

Phi=0 Freq=2400MHz



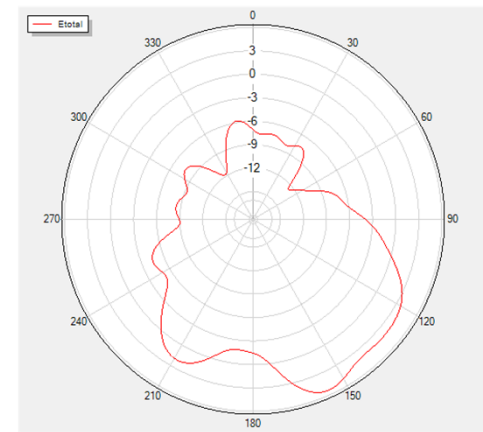
Z、X (H)

Phi=0 Freq=2450MHz



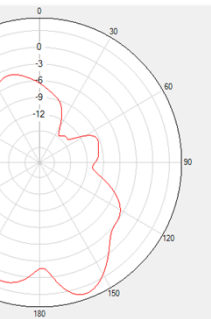
Z、X (H)

Phi=0 Freq=2500MHz



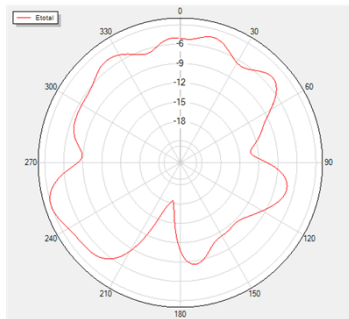
Z、X (H)

Freq=2400MHz



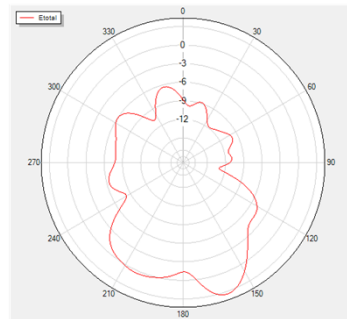
X、Y

Theta=90 Freq=2400MHz



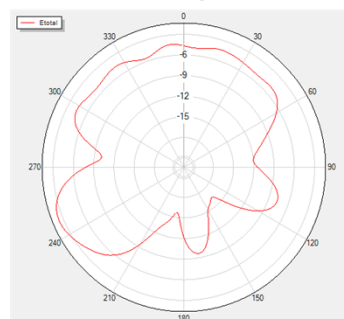
X、Y

Phi=90 Freq=2450MHz



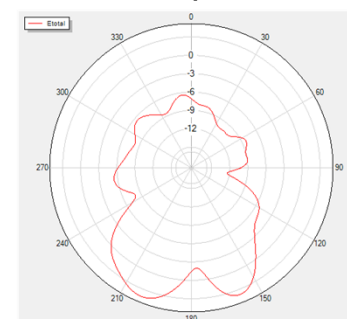
Z、Y

Theta=90 Freq=2450MHz



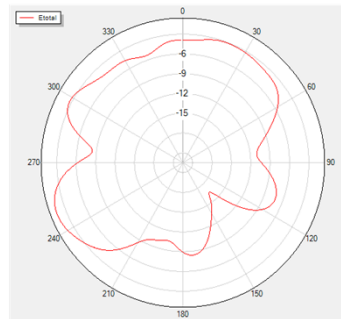
X、Y

Phi=90 Freq=2500MHz



Z、Y

Theta=90 Freq=2500MHz



X、Y

五、Summary

Shared with wifi antenna of kickr V6 project
(与kickr V6项目的wifi天线共用)



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Thank you

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