

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

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RF: He Jian

Version:20220330 v1

Catalogue

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Project demand information

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



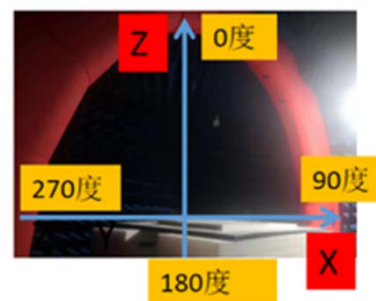
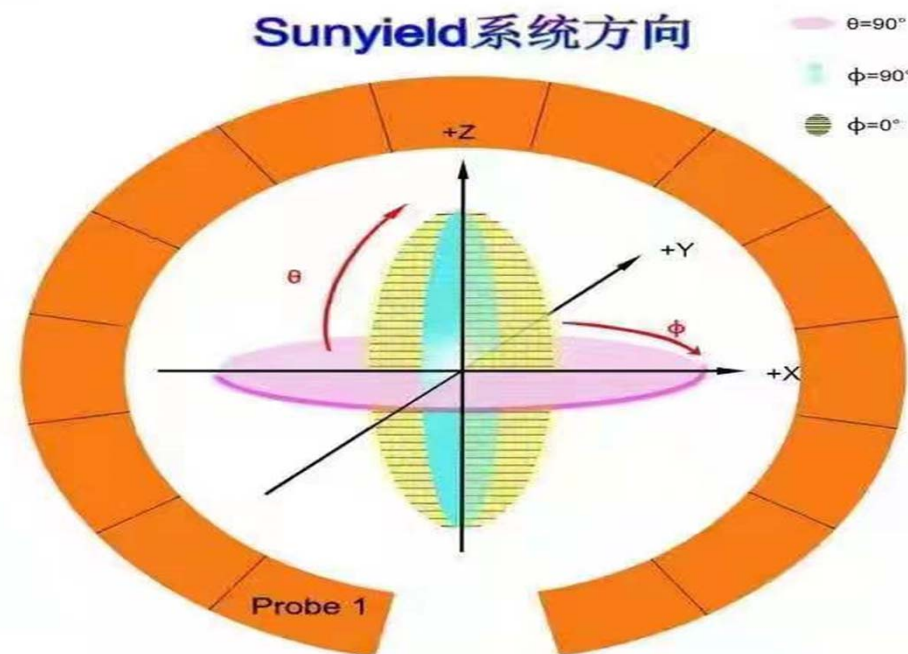
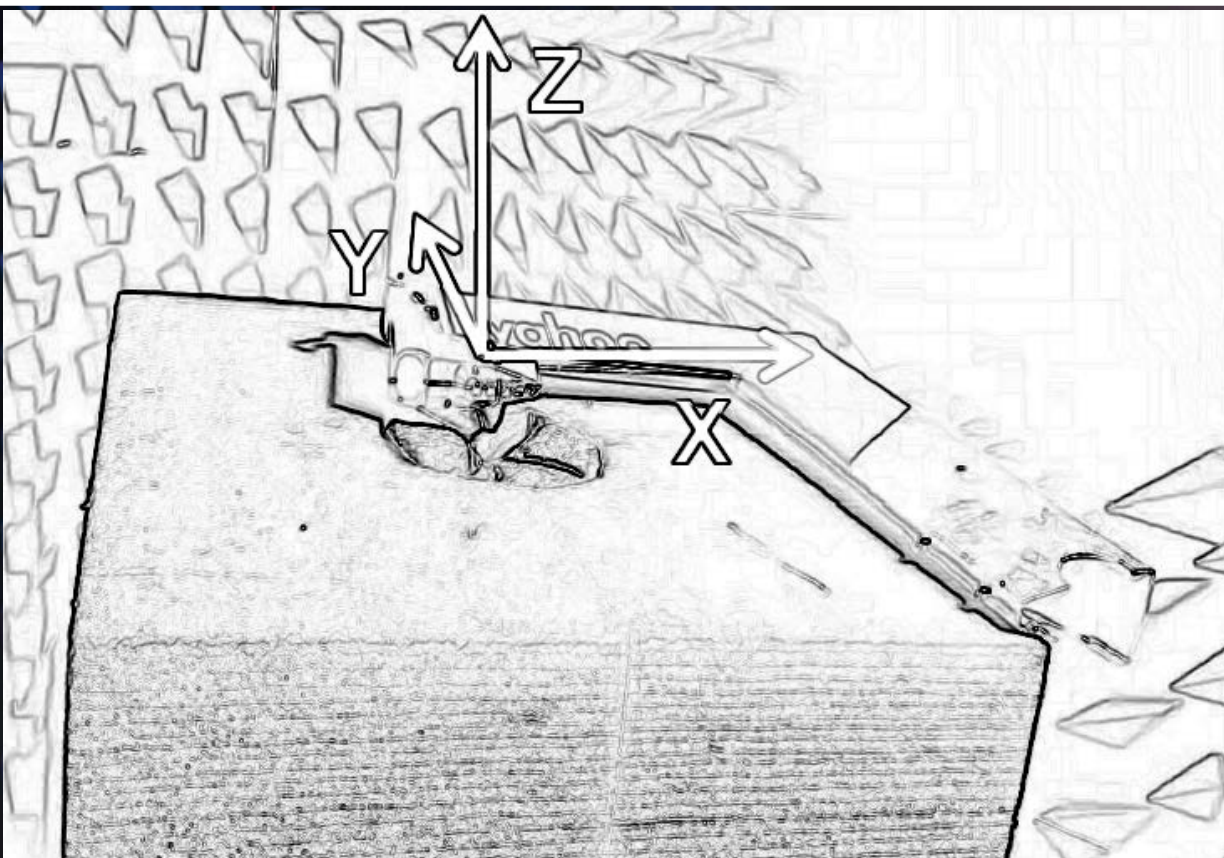
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Wifi antenna assembly diagram



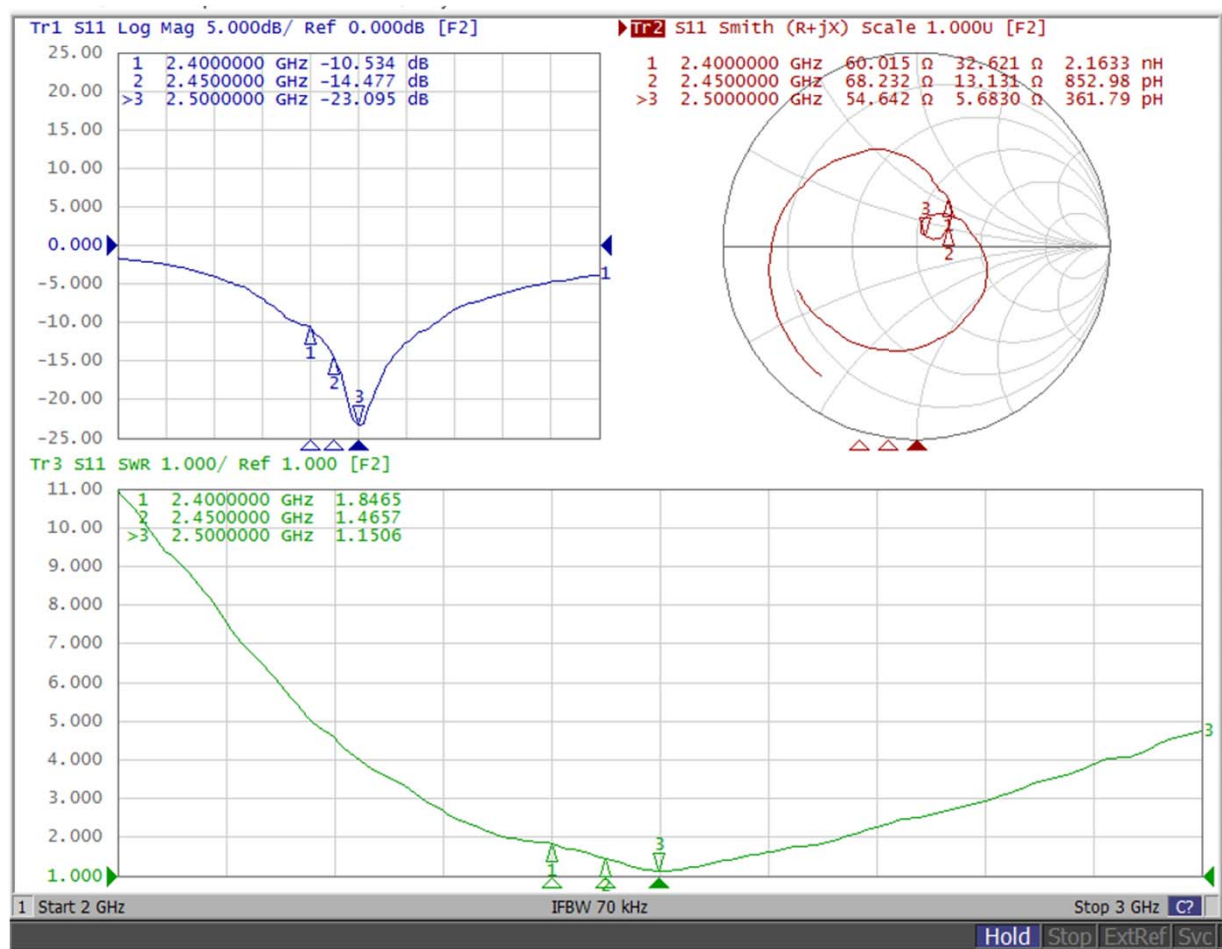


Definition of axis





Wifi antenna commissioning data



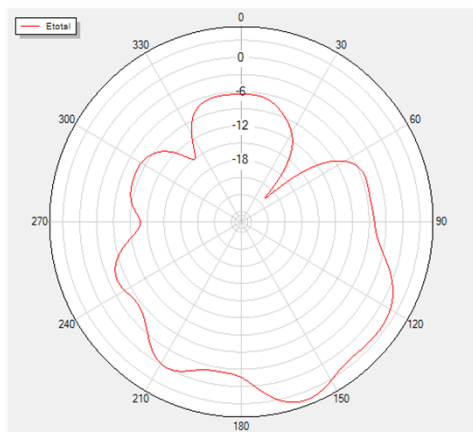
Wifi antenna efficiency and gain

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



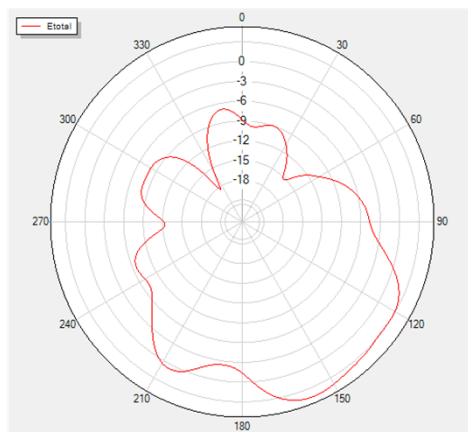
antenna pattern

Phi=0 Freq=2400MHz



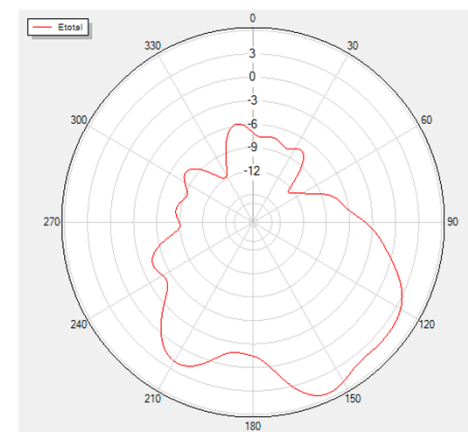
Z、X (H)

Phi=0 Freq=2450MHz



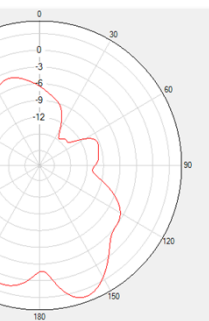
Z、X (H)

Phi=0 Freq=2500MHz



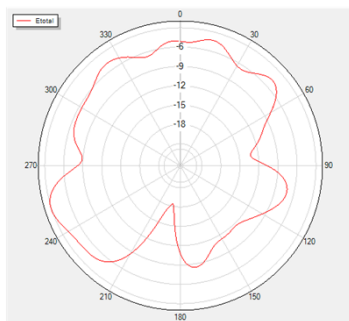
Z、X (H)

Freq=2400MHz



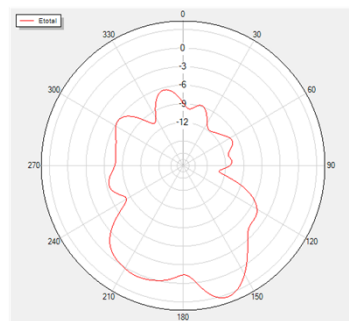
、Y

Theta=90 Freq=2400MHz



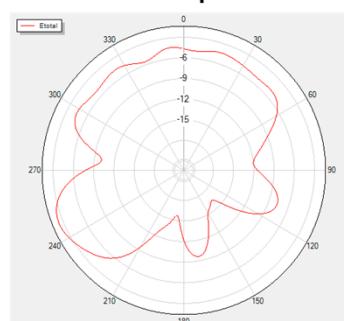
X、Y

Phi=90 Freq=2450MHz



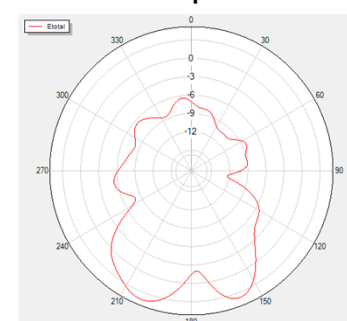
Z、Y

Theta=90 Freq=2450MHz



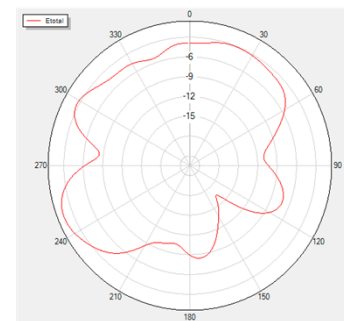
X、Y

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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