

友恺

样品承认书

Parts Approval Sheet

生产供应商: 国质信

Supplier

适用项目: B340T

Type/Spec

品 牌: NQI

Brand

送样日期: 2024.01.09

Send out Date

承认日期:

Approve Date

物料名称: WIFI 天线

Parts Name

NQI 料号: NQI-B340T-BA1104X-ASM-V0

Parts No

客户料号:

Quantity

文件编号: NQI-RD-SPEC-20231226

Document No

样品版本: V0

Version

Supplier		Customer	
Approved By	Prepared By	Engineering Dept	Quality Dept

联系方式 (Contact): 深圳市龙岗区平吉大道 66 号康利城 7 栋 103 号 (No. 103, Building 7, Kangli City, 66 Pingji Avenue, Longgang District, Shenzhen)

Email: nqi@nqi.com.cn

Tel: +86-0755-28500656

Fax: +86-0755-28700656



承认书履历表 (Admission resume)

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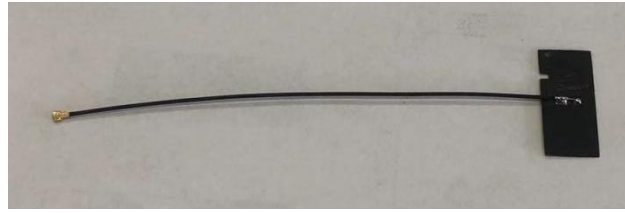


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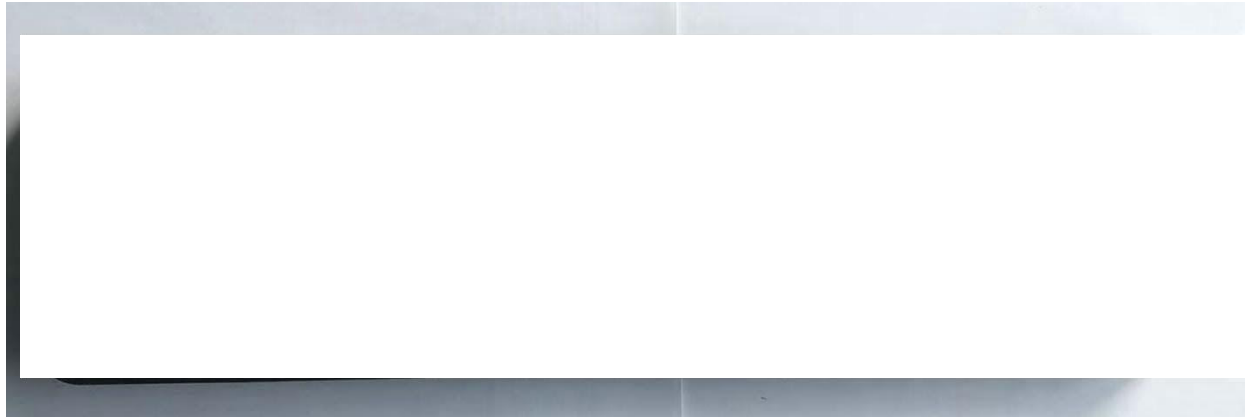
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一. 样品及说明 Sample and description:



二. 整机图片 Machine picture:

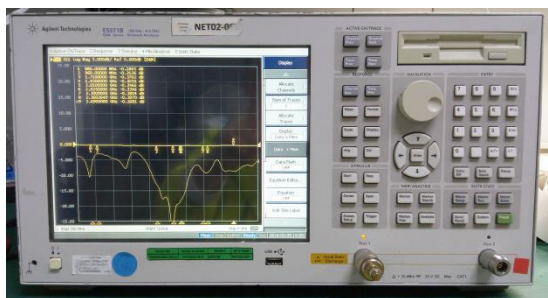
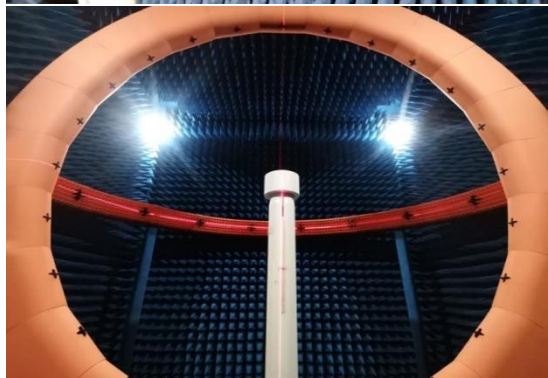
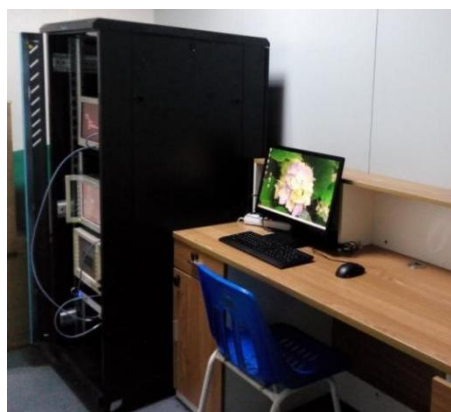
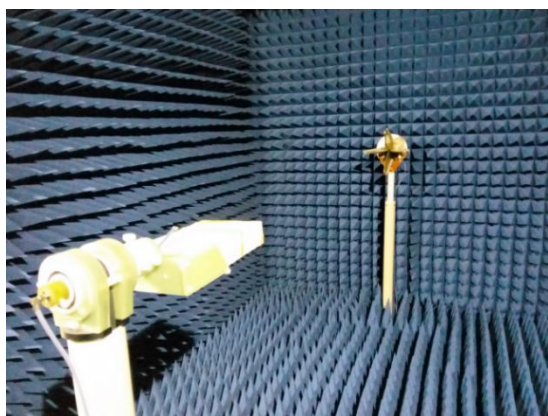


三. 测试设备及项目 Test equipment and items:

类别 (Class)	测试项目 (Test item)	设备 (Equipment)
1. S parameter	1. 回波损耗(RL) 2. 驻波比 (VSWR) 3. 史密斯原图 (Smith chart)	网分 (VNA) : Agilent E5071B R&S ZVB8 Protek A333
2. 耦合测试 (Coupling testing)	1. 发射功率 (MAX Power) 2. 接收灵敏度 (MIN Sens)	1. 2G/3G Tester: Agilent 8960 2. The coupling box: TESCOM TC-5060A 3. 3D Chamber: ETS 3D Chamber (5x3x3)
3. 3D 无源测试 (Passive Test)	1. 效率 (Effeciency) 2. 增益 (Gain) 3. 辐射方向图 (radiation pattern)	1. 3D Chamber: TEM24 3D Chamber (5x5x5) ETS 3D Chamber (5x3x3) 2. 网分 (VNA) : Agilent E5071B R&S ZVB8

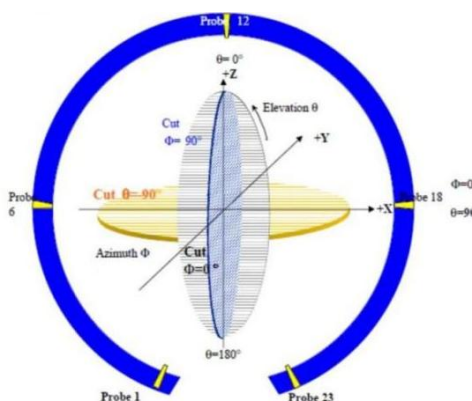
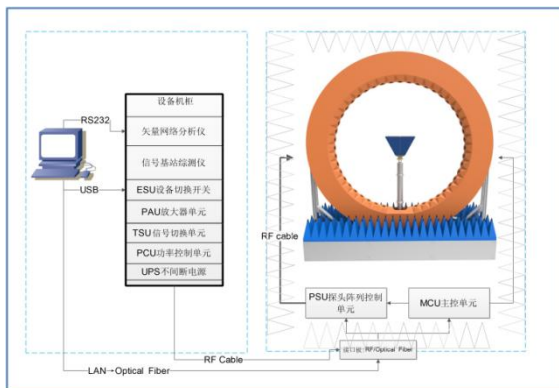


4.3D 有源测试 (Active Test)	1. 3D 功率 (TRP) 2. 3D 灵敏度 (TIS) 3. 吞吐量 (Throughput rate)	1. 3D Chamber: TEM24 3D Chamber (5x5x5) ETS 3D Chamber (5x3x3) 2.2G/3G Tester: Agilent 8960 3.4G Tester: MT8820C/CMW500 4.WIFI/BT/NB-iot Tester: CMW500 5. 5G Tester: SP9500-CTS 6.Head: HEAD-P10 (FACE-P10)
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四. 暗室 (Chamber) 连接及坐标 Chamber connection and coordinates:



五. 天线匹配网络 Antenna matching network:

原版匹配 Original match

六. 天线装配方式及环境处理 Antenna assembly method and environmental treatment:



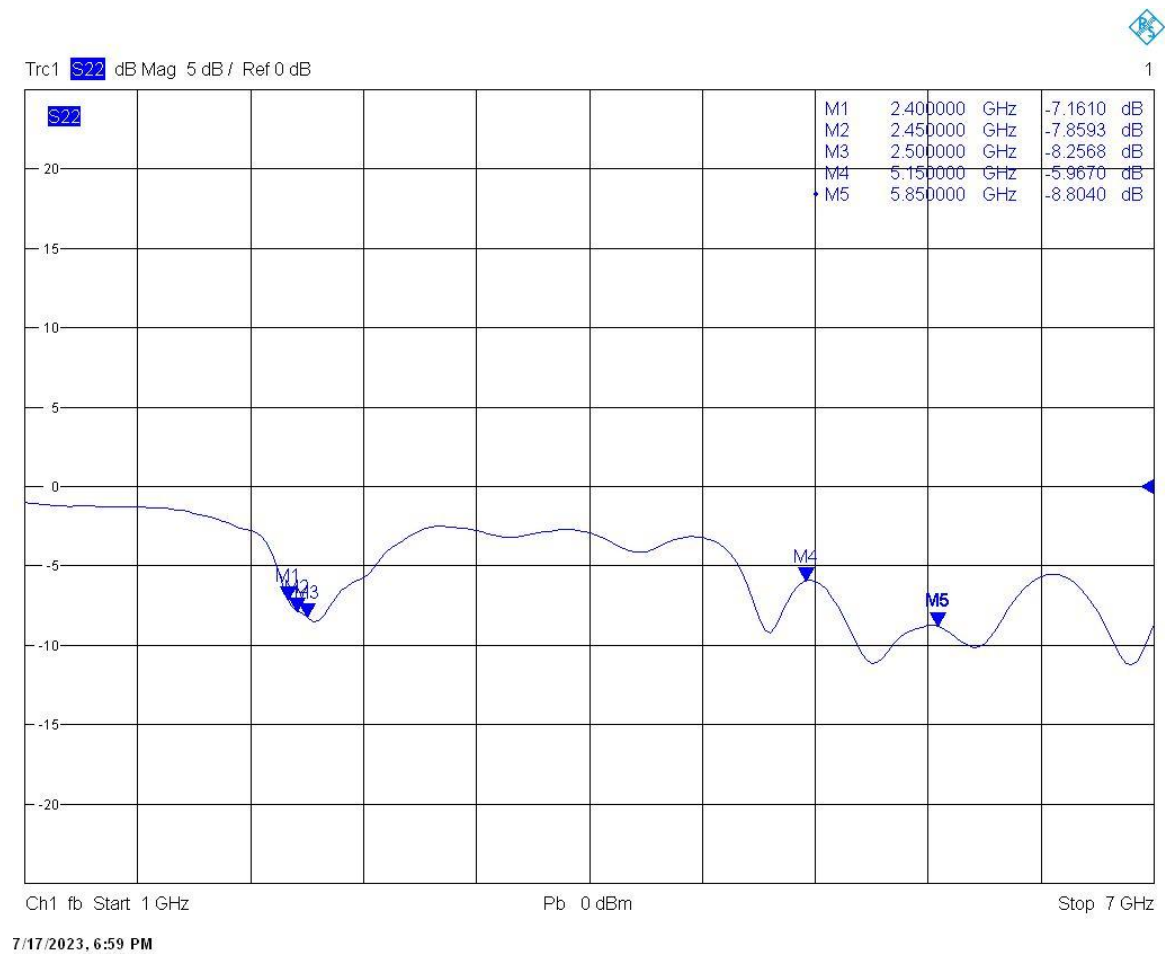


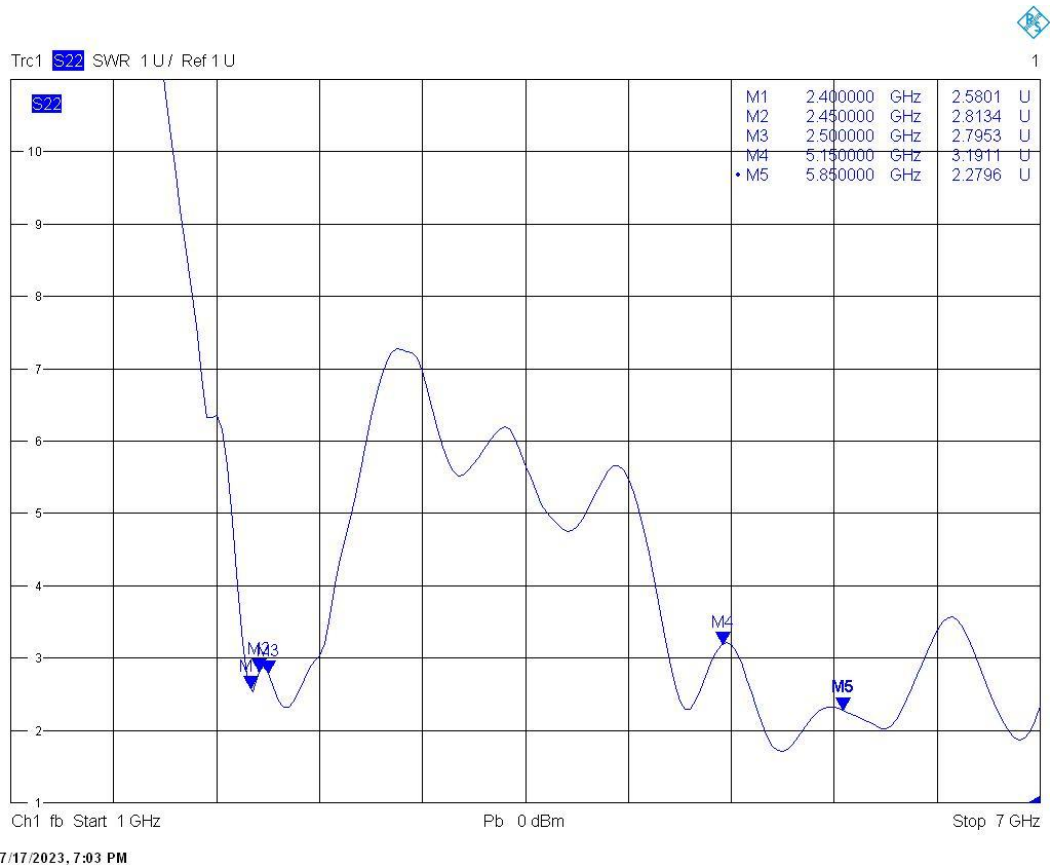
七. 天线电性能测试数据 Antenna electrical performance test data:

7. 1. 天线无源参数 Antenna passive parameters

7.1.1. 天线回波损耗 (RL) /驻波比(VSWR)

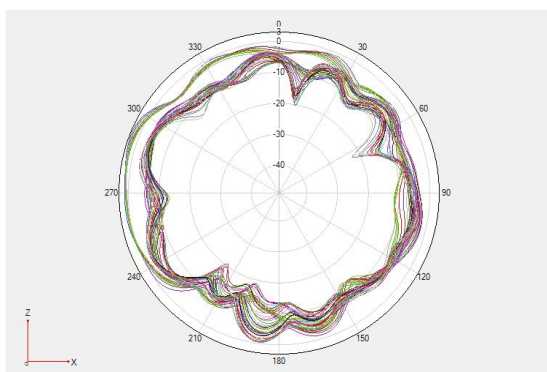
RL



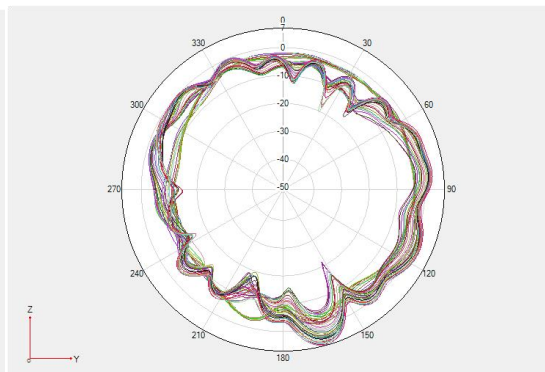


7.1.2. 天线效率 Efficiency/增益 Gain/方向图 Radiation pattern

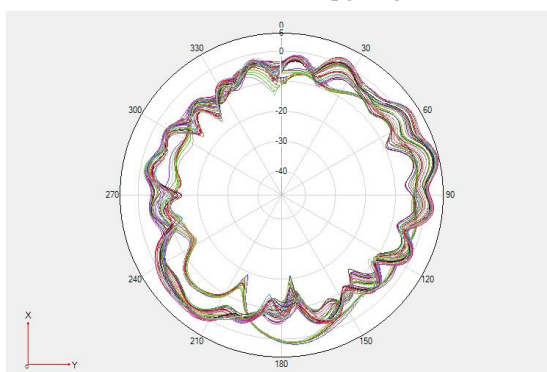
Freq (MHz)	Effi (%)	MAXGain (dBi)	Freq (MHz)	Effi (%)	MAXGain (dBi)	Freq (MHz)	Effi (%)	MAXGain (dBi)
2400	39.36	-0.26	5250	31.41	-3.13	5570	47.53	3.5
2410	38.19	-0.56	5270	32.28	-2.77	5590	44.67	3.25
2420	39.17	-0.74	5290	34.12	-2.34	5610	41.69	2.31
2430	37.67	-1	5310	37.15	-1.69	5630	41.11	2.73
2440	39.72	-0.76	5330	41.78	-0.81	5650	38.55	2.18
2450	37.67	-0.9	5350	40.74	-0.67	5670	34.83	1.84
2460	34.04	-1.04	5370	43.85	-0.06	5690	38.46	3.04
2470	32.36	-1.11	5390	42.95	0.14	5710	41.59	3.9
2480	32.43	-1.01	5410	44.77	0.76	5730	43.15	3.64
2490	34.04	-0.95	5430	40.46	0.72	5750	44.46	3.93
2500	31.48	-1.38	5450	40.93	1.21	5770	49.77	4.78
5150	29.99	-3.16	5470	39.9	1.2	5790	44.98	3.99
5170	29.11	-3.51	5490	39.36	1.68	5810	44.26	4.44
5190	30.2	-3.11	5510	43.15	2.56	5830	45.39	4.87
5210	30.34	-3.2	5530	44.16	2.76	5850	38.64	3.76
5230	28.91	-3.43	5550	44.36	3.04			



Phi=0 freq@2.4g

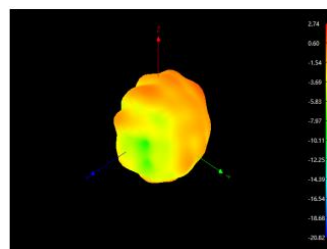
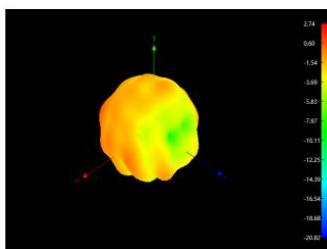
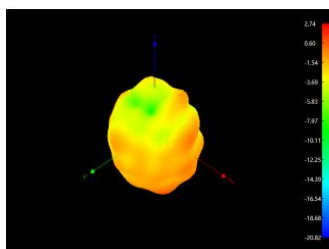


Phi=90 freq@2.4g

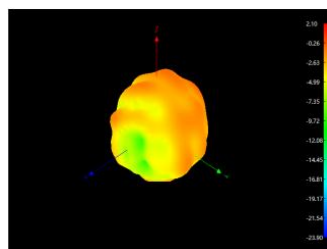
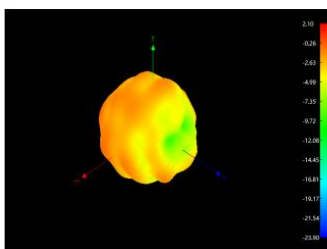
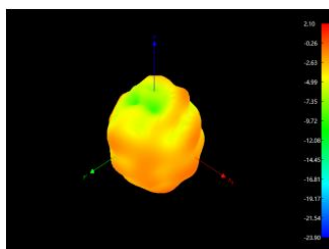


Theta=90 freq@2.4g

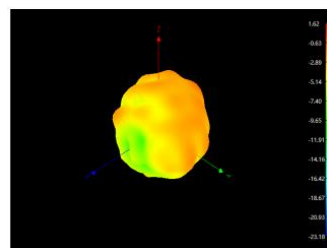
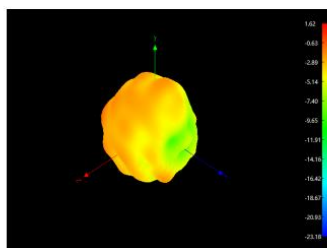
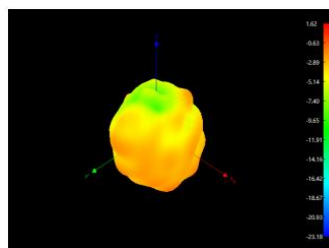
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2450MHZ

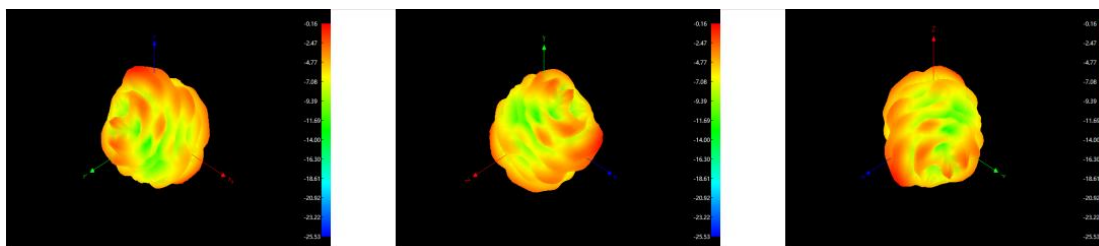


2500MHZ

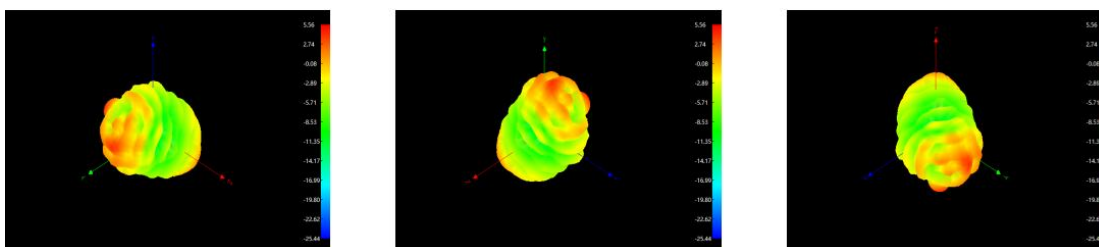




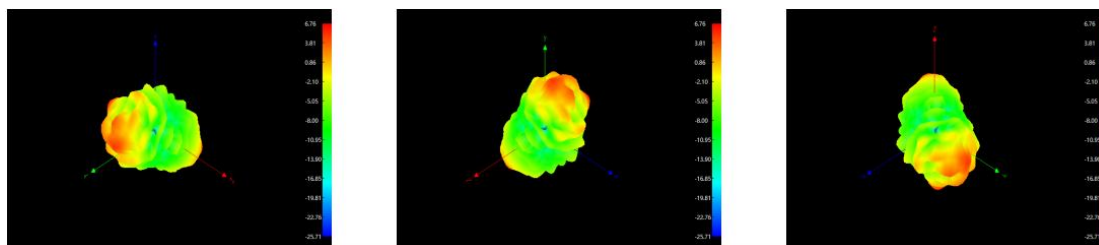
5150MHZ



5510MHZ



5850MHZ



7.2 天线有源参数 Antenna active parameter

7.2.1. TRP/TIS

NQI ANT TRP&TIS parameter Summary of B340T			
BAND	WIFI-B		
CHANNEL	1	6	11
TRP (dBm)	12.03	12.56	12.3
TIS (dBm)	-85.93	-85.54	-85.36
BAND	WIFI-A		
CHANNEL	36	149	165
TRP (dBm)	10.55	12.98	12.75
TIS (dBm)	-71.61	-72.65	-71.34



八. 天线结构图纸 Antenna structure drawing:

