

Shenzhen Yishengbang Technology Co., LTD

Sample acceptance letter

SPECIFICATION FOR APPROVAL

Company name (to be filled in by customer): Shenzhen Nasda Industry and Trade Co., LTD

Material code (filled in by customer): NI10015-1-6

Gauge type number (filled in by customer): _____

Acceptance date (for customer): _____

Name of supplier (SLK): Shenzhen Yishengbang Technology Co., LTD

For quotient gauge type number (fill in SLK): WIFI+GPS:SLK-NSD-4419-R-170111-B

Acknowledge the signature

Acceptance by supplier (SLK field)

Shenzhen Nasda Industry and Trade
Co., LTD

engineer

audit

approval

engineer

audit

approval

Chen Shilian

Huangzhne

Lin Meicai

Seal and sign

Seal and sign

day

2023-3-30

day

written instructions or comments: ☐ take in

☐ conditional acceptance

Remarks (filled by customer) :

Supplier :Shenzhen Yishengbang Technology Co., LTD Supplier Address:
Workshop 2 / F, No. 5 Yinyuan Street, Jiaoyitang, Tangxia Town, Dongguan
City

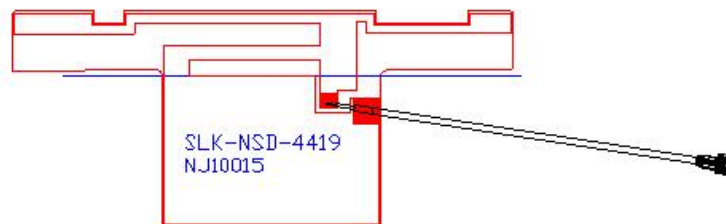
Telephone: 0769-82553115 Real: 0769-82553116

WIFI+GPS Antenna (4419)

1. Explanation of Product number :

S L K - N S D - 4 4 1 9 - R - 1 7 0 I I I - B

1 2 3 4 5



Product Code:

(1) Customer:

NSD: Nasda

(2) Project:

4419: SLK-NSD-4419 (WIFI+GPS antenna)

(3) Welding Position

R: Right

(4) Cable Length:

170III:170*0.81MM三代端子

(5)Cable Color

B: Black

2. Features

*Stable and reliable in performances

*Compact size

*RoHS compliance

3. Applications

* IEEE802.11 (a/b/g/n)

* Hand-held devices when WIFI+GPS (802.11a/b/g/n) functions are needed

4. Description

Holy bond's FPC antenna series are specially designed for WIFI+GPS (802.11a/b/g/n) applications. Based on Holy bond's proprietary design and processes, this FPC antenna has excellent stability and sensitivity to consistently provide high signal reception efficiency.

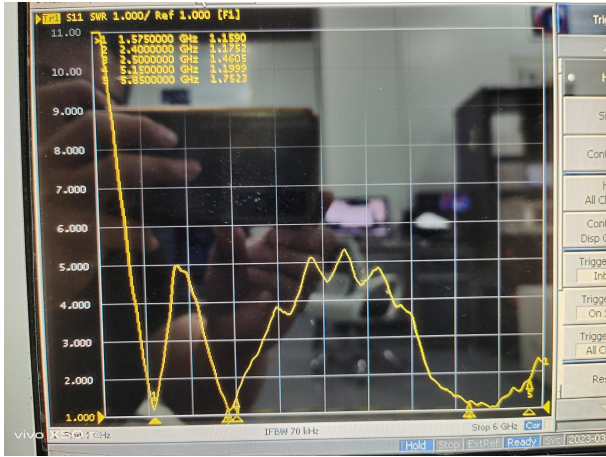
5. Electrical Specifications

5-1

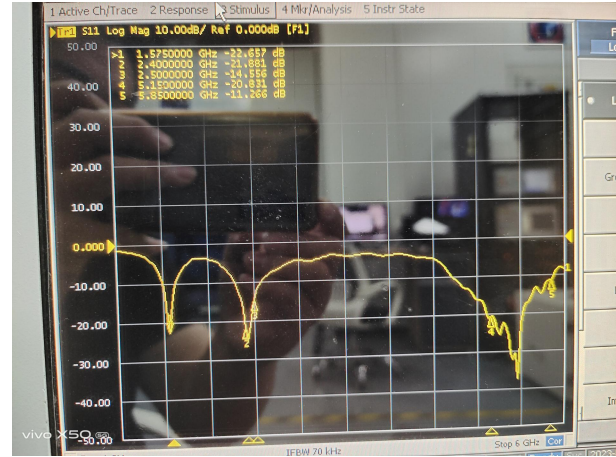
主要技术指标		Main technical specifications	
频率范围 (MHZ)	1.575-2400-2500 +5150-5850	Frequency Range (MHZ)	1.575-2400-2500+5150- 5850
特性阻抗(Ω)	50	Impedance(Ω)	50
增益(dBi)	2.5 $\pm$ 0.5	Gain(dBi)	2.5 $\pm$ 0.5
输出电压 驻波比	≤ 2	VSWR	≤ 2
极化方式	垂直极化	Polarization	Linear, Vertical
方向性	全向性	Radiation	Omni-directional
连接方式	三代端子	Connector Type	三代端子
物理性能		Physical Properties	
天线材料	FPC	Antenna cover	FPC
工作温度	-20 $^{\circ}$ C $\sim$ +70 $^{\circ}$ C	Operating Temp	-20 $^{\circ}$ C $\sim$ +70 $^{\circ}$ C
保存温度	-20 $^{\circ}$ C $\sim$ +70 $^{\circ}$ C	Storage Temp	-20 $^{\circ}$ C $\sim$ +70 $^{\circ}$ C

5-2.

VSWR



S11

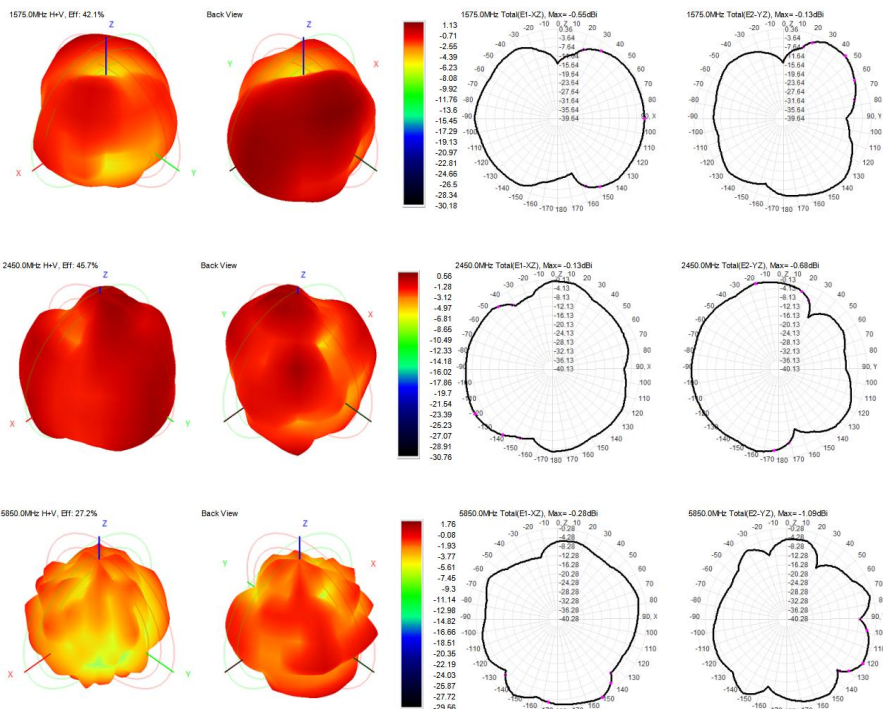


5-3.WIFI +BT Antenna Gain/Efficiency/Radiation Pattern of 3D

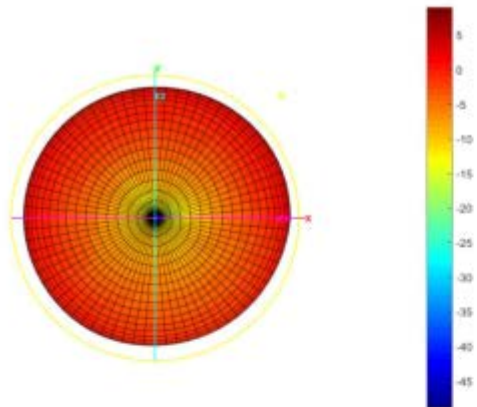
Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
1570.0	-4.09	0.86	39.03
1575.0	-3.75	1.13	42.13
1580.0	-3.47	1.39	44.97
2400.0	-3.31	0.37	46.68
2410.0	-3.39	0.44	45.80
2420.0	-3.64	0.02	43.23
2430.0	-3.30	0.41	46.75
2440.0	-3.35	0.47	46.22
2450.0	-3.40	0.56	45.71
2460.0	-3.62	0.62	43.47
2470.0	-3.56	0.43	44.08
2480.0	-3.29	1.09	46.84
2490.0	-3.36	0.97	46.18
2500.0	-3.66	0.28	43.09
5150.0	-5.12	1.83	30.78
5350.0	-5.04	1.79	31.30
5550.0	-4.88	2.08	32.50
5750.0	-4.73	1.83	33.64
5850.0	-5.66	1.76	27.17

WIFI 有源测试

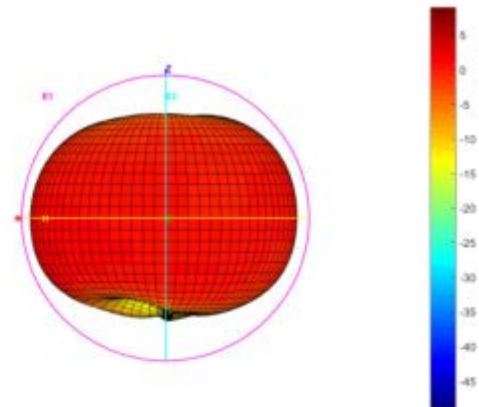
频段	1	6	11
B-TRP-11MBps	12.25	12.45	12.97
B-TIS-11MBps	-81.52	-81.24	-81.98
G-TRP-54MBps	11.16	11.06	11.01
G-TIS-54MBps	-70.59	-70.74	-70.64
N-TRP-MCS7	11.14	11.24	11.43
N-TIS-MCS7	-67.39	-67.34	-67.01
频段	36	149	165
A-TRP-54MBps	8.98	9.41	9.18
A-TIS-54MBps	-69.32	-70.37	-69.08



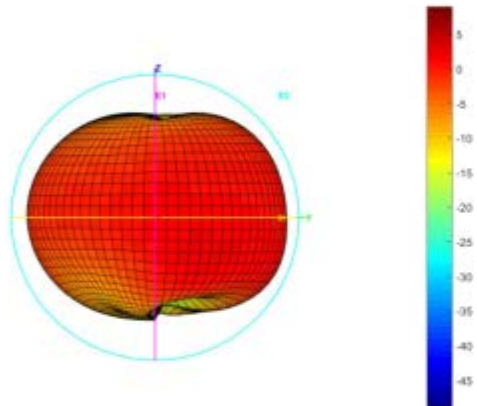
Total_3D_H_5_15GHz



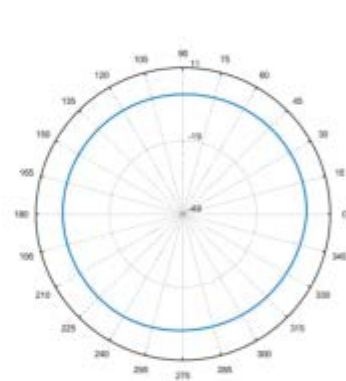
Total_3D_E1_5_15GHz



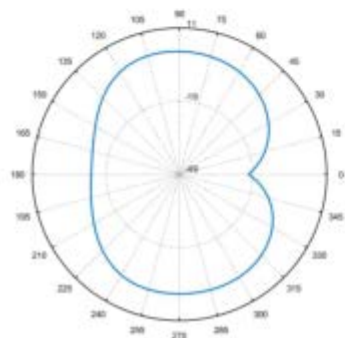
Total_3D_E2_5_15GHz



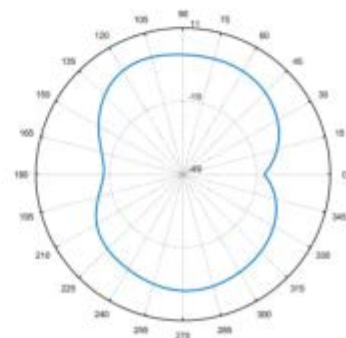
Total_Polar_H_5_15GHz



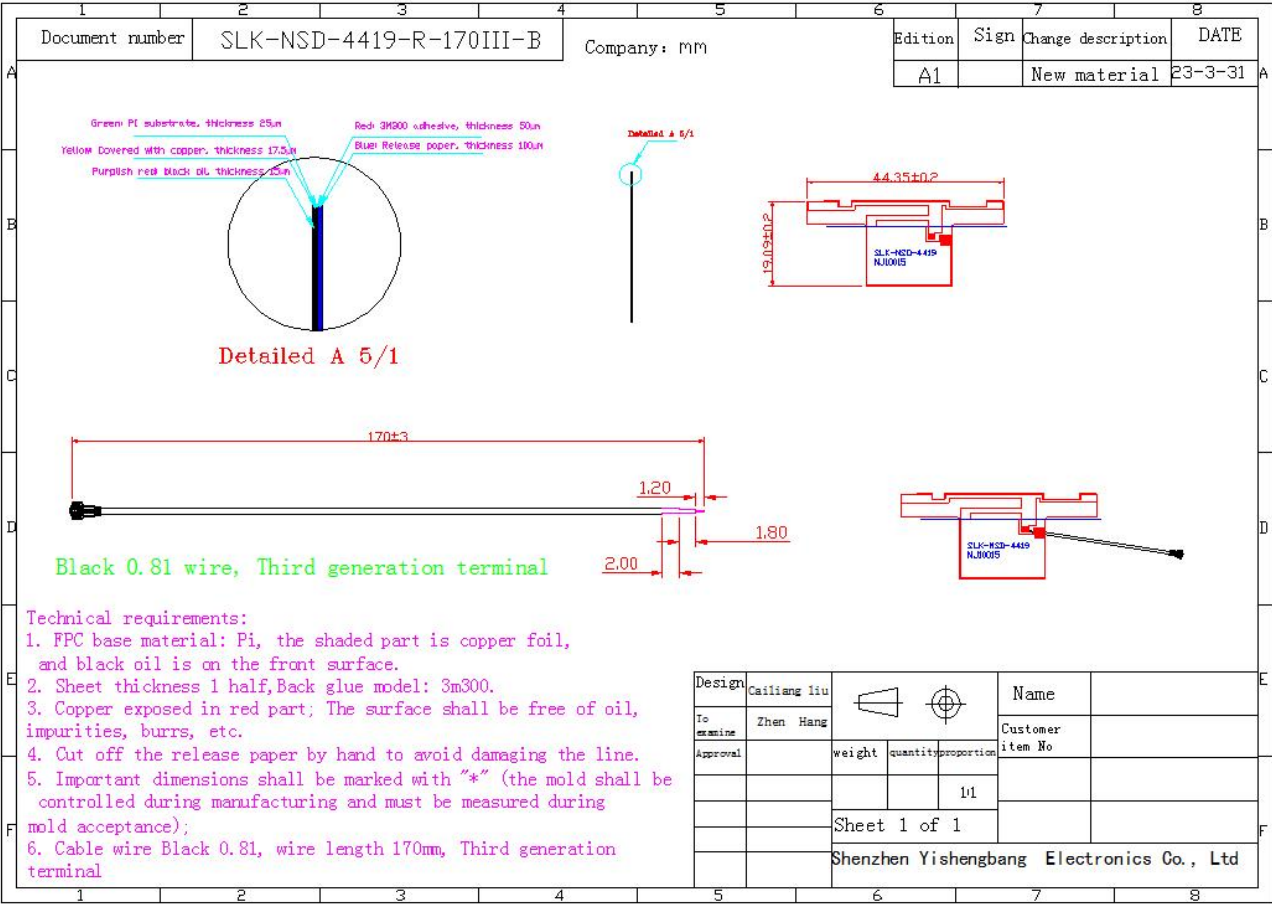
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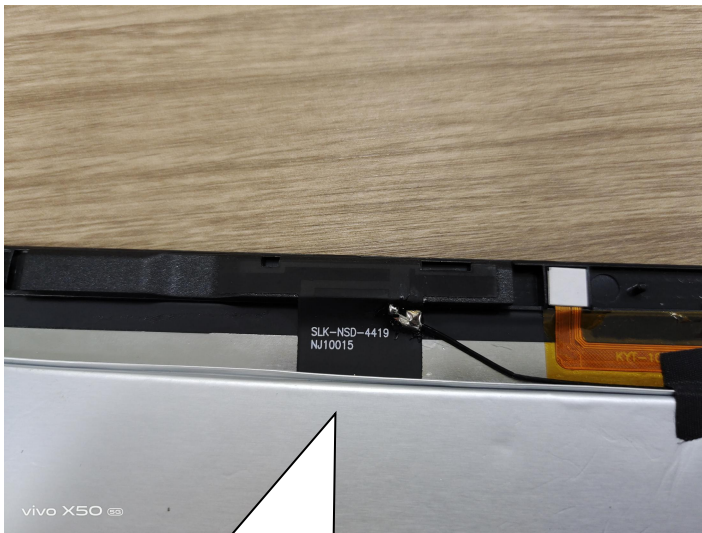
Total_Polar_E2_5_15GHz



6. Antenna Dimensions (unit: mm)



7. Antenna Picture



WIF +GPS antenna

As shown in the picture:

1. Wrap TP cables with a conductive cloth for shielding
2. Pull a conductive cloth to cover the screen line
3. The environment at the bottom of the mainboard remains unchanged, and is treated according to the customer's original environment
4. The motherboard shield cover pulls a conductive cloth and the screen contact processing