



深圳市鑫尔盛科技有限公司

ShenZhen XinErSheng Technology Co.,Ltd

承认书

SPECIFICATION FOR APPROVAL

Customer name: _____

Product name: WIFI Dual-band two-in-one PCB Antennae

Customer Material Number: B02-015-0148W042-XES-WiFi

Manufacturer part number: XESANT12B1336705

Sample quantity: 5PCS

Make	Audit	Approve	Date landed
Biao	Lisen	Amy	2024.04.20

The customer acknowledges:

Make	Audit	Approve	atelanded

Company Address: Building D, 3rd Floor, 96 Lingxia Road, Fourth Industrial Zone, Fengyong, Bao'an District, Shenzhen City

Phone: 0755-33881455

Fax: 0755-33233276

Email:huxiuli@xinershengant.com

Antennae1: PCB Ant

Main technical parameters of the product

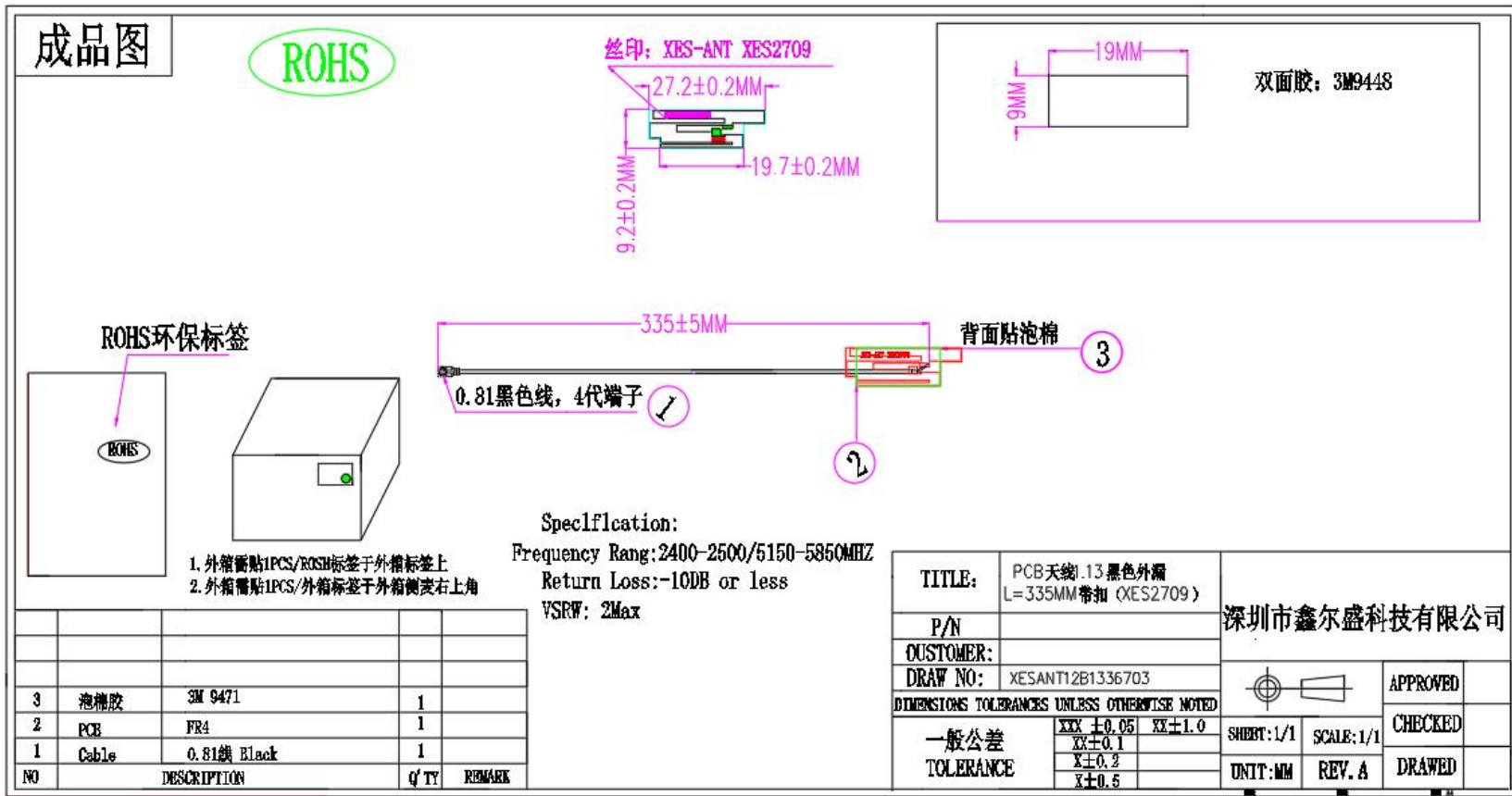
主要技术参数		Main technical specifications	
频率范围（MHZ）	2400-2500/5150-5850	Frequency Range(MHZ)	2400-2500/5150-5850
中心频率 特性阻抗（Ω）	50±10	Impedance(Ω)	50±10
2. 4G 峰值增益（dBi）	2±1	2. 4G Peak Gain(dBi)	2±1
5. 8G 峰值增益（dBi）	3. 5±1	5. 8G Peak Gain(dBi)	3. 5±1
反射损耗	≤-10	ReTurnLoss(dB)	≤-10
输出电压驻波比	≤2	VSWR	≤2
极化方式	垂直极化	Polarization	Linear Vertical
连接方式	IPEX	Connector Type	IPEX
物理特性		Physical Properties	
天线本体材料	PCB	Antenna Base	PCB
工作温度	-20℃-+60℃	Operating Temp	-20℃-+60℃
保存温度	-20℃-+70℃	Storage Temp	-20℃-+70℃

List of raw materials:

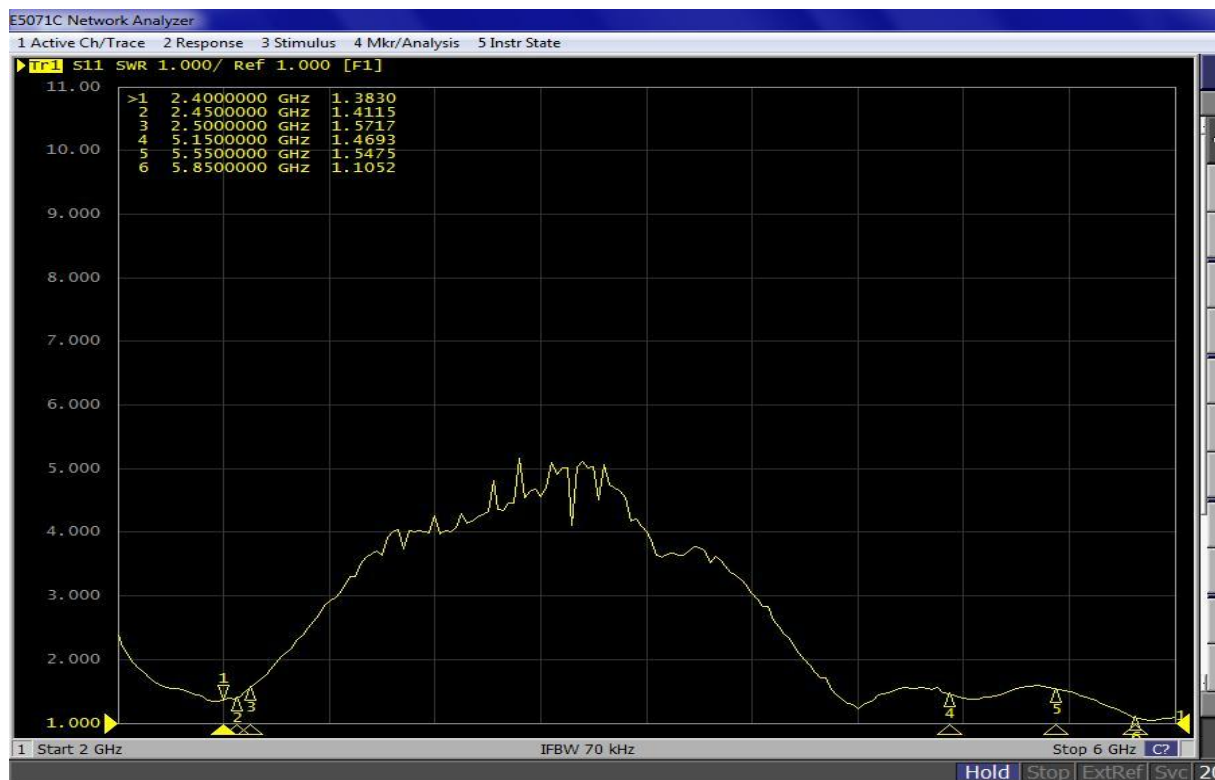
Number	Name	Main material	Quantity	Unit	Remark
1	PCB	FR4	1	PCS	
2	Wire	0.81 Black line, fourth generation buckle	1	PCS	



单成品图纸



VSWR:

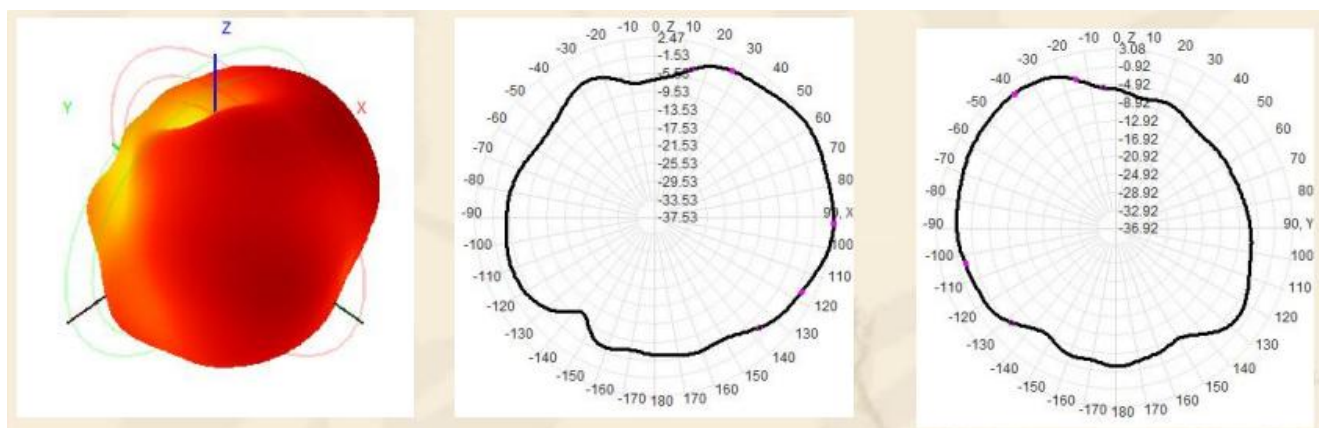


2D、3DRaditation Pattern

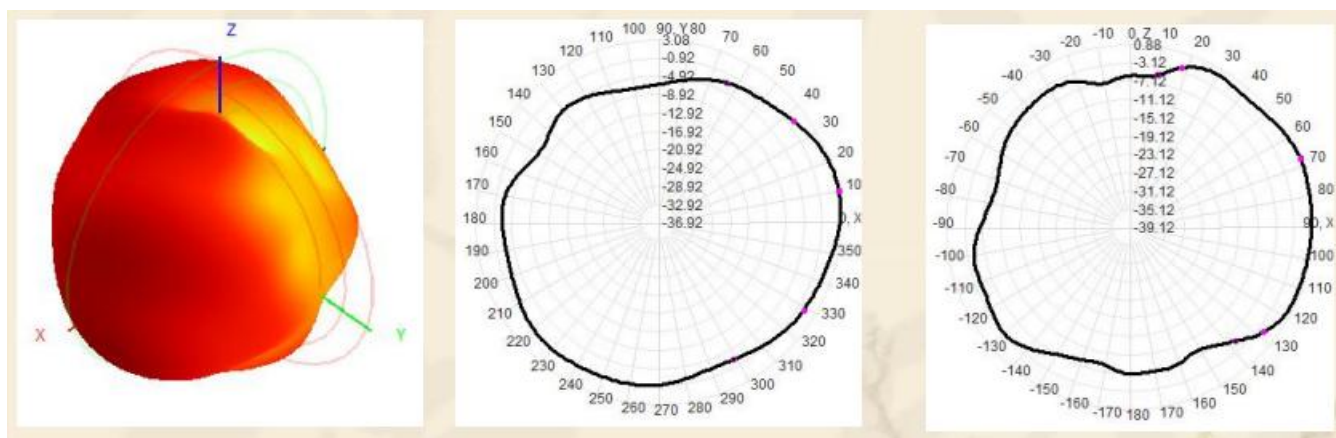
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	2.25	1.59	1.67	1.50	2.20	2.16	2.43	1.56	2.45	2.20	1.70
Efficiency (%)	47.48	51.01	47.31	47.09	50.34	47.06	51.88	48.46	47.5	47.4	46.8

Frequency (MHz)	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
Gain (dBi)	3.37	3.61	3.44	3.02	3.45	3.21	3.62	3.64	4.04	4.57	3.92	4.71	4.76	4.86	4.95
Efficiency (%)	52.99	53.72	53.11	52.01	53.05	53.09	54.69	52.11	52.88	55.42	51.52	51.85	54.35	53.94	54.95

2. 4G Coverage map



5G Field Pattern Diagram



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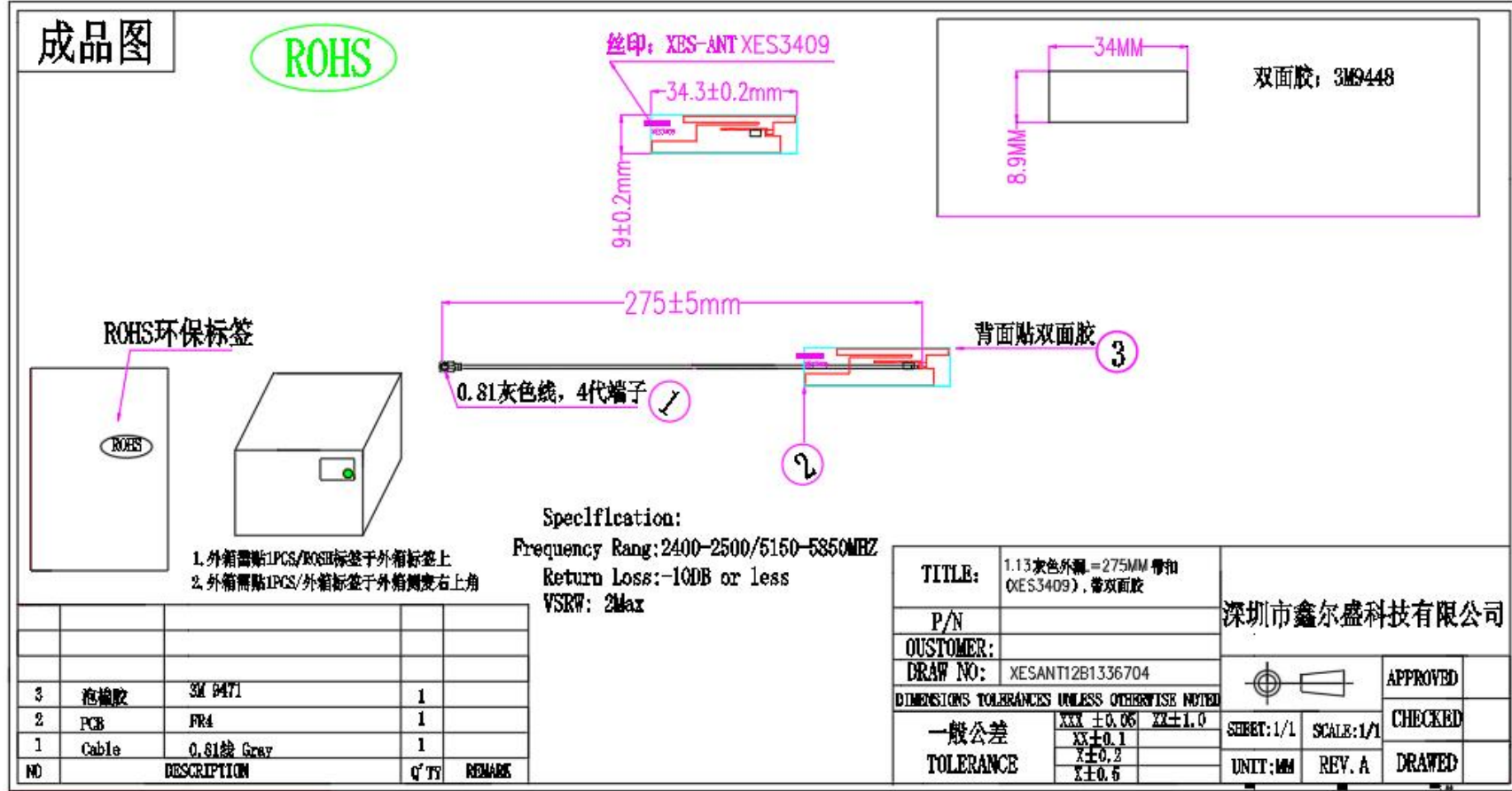
Antennae2: PCB Ant

Main technical parameters of the product

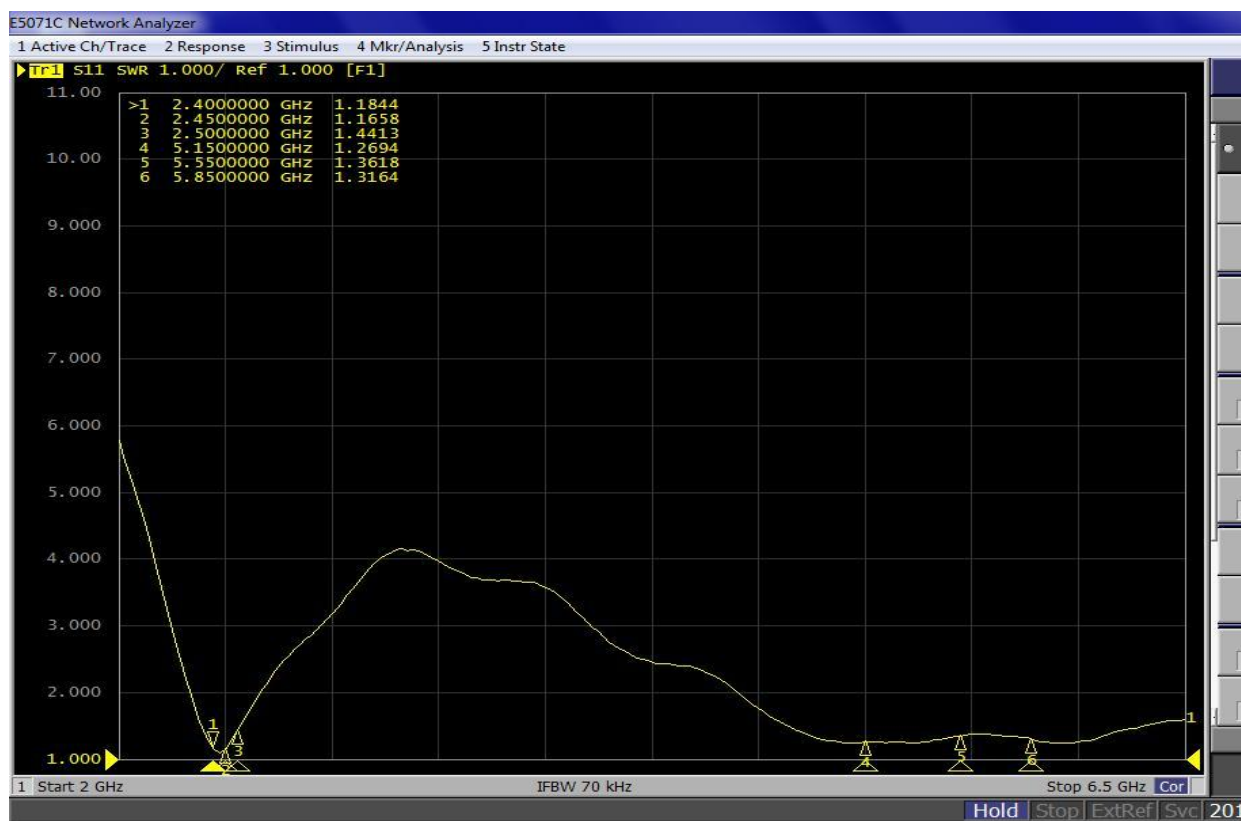
主要技术参数		Main technical specifications	
频率范围（MHZ）	2400-2500/5150-5850	Frequency Range(MHZ)	2400-2500/5150-5850
中心频率 特性阻抗（Ω）	50±10	Impedance(Ω)	50±10
2. 4G 峰值增益（dBi）	2±1	2. 4G Peak Gain(dBi)	2±1
5. 8G 峰值增益（dBi）	3. 5±1	5. 8G Peak Gain(dBi)	3. 5±1
反射损耗	≤-10	ReTurnLoss(dB)	≤-10
输出电压驻波比	≤2	VSWR	≤2
极化方式	垂直极化	Polarization	Linear Vertical
连接方式	IPEX	Connector Type	IPEX
物理特性		Physical Properties	
天线本体材料	PCB	Antenna Base	PCB
工作温度	-20℃-+60℃	Operating Temp	-20℃-+60℃
保存温度	-20℃-+70℃	Storage Temp	-20℃-+70℃

原材料清单：

Number	Name	Texture	Quantity	Unit	Remark
1	PCB	FR4	1	PCS	
2	Wire	0.81 Gray line,Fourth-generation lock	1	PCS	



VSWR:

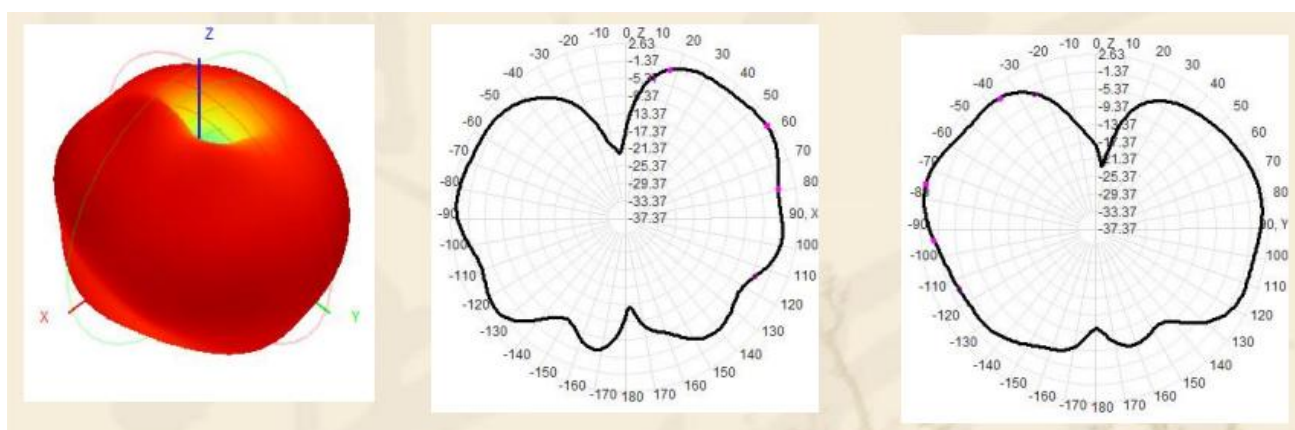


2D、3DRaditation Pattern

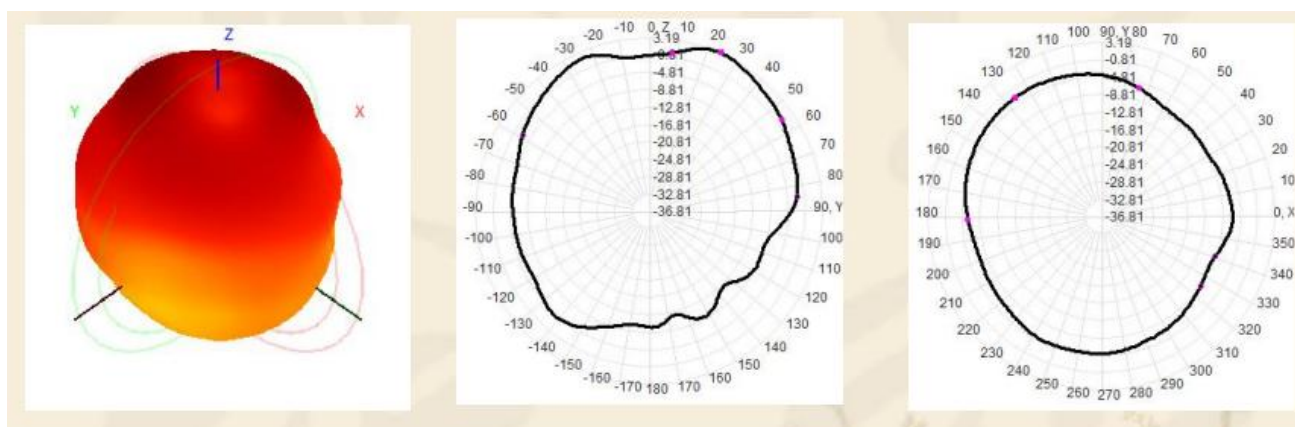
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	1.26	1.42	1.45	1.83	2.09	2.39	2.61	2.67	2.86	3.03	3.09
Efficiency (%)	48.01	48.64	49.89	51.60	51.87	54.56	55.74	55.70	56.33	57.52	58.14

Frequency (MHz)	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
Gain (dBi)	3.56	3.73	3.28	3.31	3.06	3.03	3.00	3.02	3.57	3.72	3.71	4.19	4.42	4.63	4.57
Efficiency (%)	51.80	53.32	52.63	50.55	52.47	52.01	53.92	52.43	51.64	55.42	50.67	52.83	54.50	53.65	54.02

2. 4G Coverage map



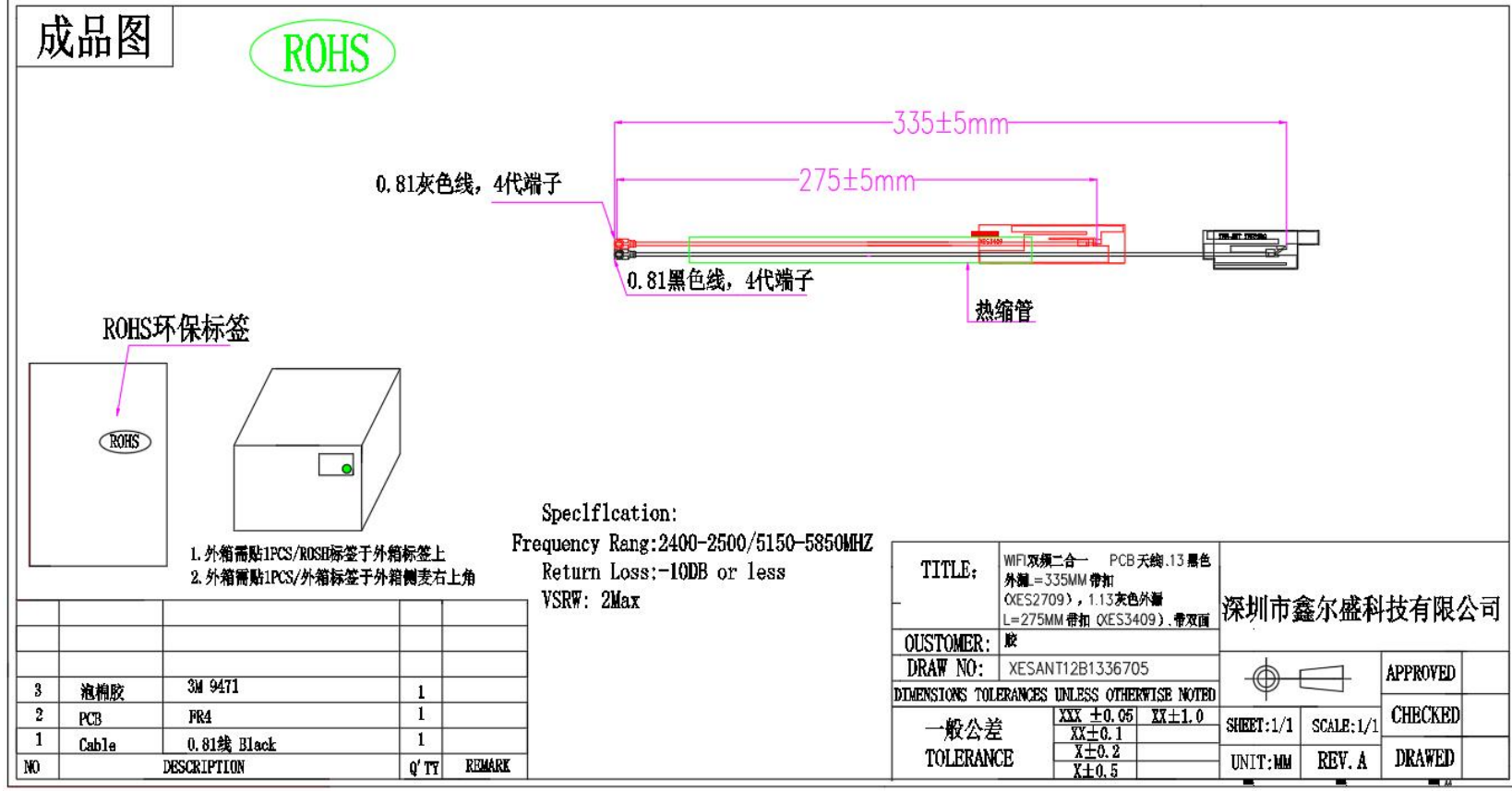
5G Field Pattern Diagram





WIFI 双频二合一 PCB 天线 1.13 黑色外漏 L=335MM 带扣 (XES2709), 1.13 灰色外漏 L=275MM 带扣 (XES3409),带双面胶

二合一产品图纸





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Overall OTA test data of the entire machine

模式	信道	原天线TRP	XES天线TRP	原天线TIS	XES天线TIS
11B	1	8.05	10.34	-61.78	-73.77
	6	7.92	9.55	-73.93	-75.46
	11	7.33	9.71	-69.84	-72.27
54G	36	12.96	13.51	-73.17	-73.7
	165	15.17	15.73	-72.79	-74.42