

2.Features

- *Stable and reliable in performances
- *Compact size
- *RoHS compliance

3.Applications

- * IEEE802.11 (a/b/g/n).
- * Hand-held devices when WiFi / BT (802.11 a/b/g/n) functions are needed.

4.Description

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

Tolerances (Unless otherwise specified)
X : ± 1 X.X : ± 0.1 X.XX : ± 0.01
Angle : $\pm$ Hole Dia. : $\pm$

Scale :	Unit: mm
Prepared By :Mia	Checked By :Joy
	Approved By : Frank



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Website: www.unictron.com

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TITLE: 16.6x11.3x0.12 mm BT FPC Antenna (P-0382-01)	PART	S2B4CB1F1B01010	REV.
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5. Electrical Specifications

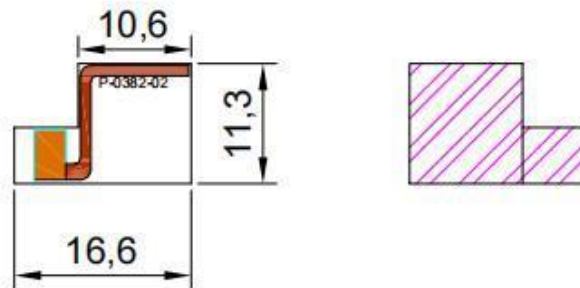
5-1. Electrical Table (2400~2500MHz Band)

Characteristics	Specifications			Unit
Outline Dimensions	16.6x11.3x0.12			mm
Frequency	2450			MHz
Impedance	50			Ω
Polarization	Linear Polarization			
Return Loss Table	Return Loss			
Freq.Band	2.4G Hz		2.5G Hz	
dB	-13.3		-12.2	
VSWR Table	VSWR			
Freq.Band	2.4GHz		2.5GHz	
dB	1.55		1.62	
GAIN Table	Total Gain =Xpol + Ppol			
Freq.Band	2400MHz	2450MHz	2480MHz	2500MHz
Peak Gain(dBi)	1.83	2.41	2.30	2.04

*The data was measured by A Test Lab Techno Corp.(CTIA Authorized Test Lab).

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6. Antenna Dimensions (unit: mm) .



注:

1: 画 为露铜区, 画 为背胶区; 画 为铜箔区, 整切, 离型纸出货

要求: 铜箔为电解同一对半, 黑底白字, 焊盘露铜镀金1u, 铜箔油墨覆盖;

第一层: 防氧化膜

长宽 ± 0.15 , 厚度 ± 0.03

直径 ± 0.1

第二层: 铜箔

第三层: 底板层

第四层: 胶层

厚度: 0.12mm

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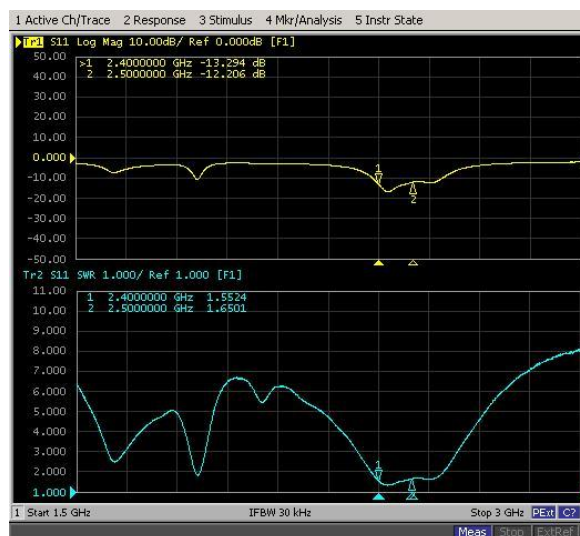
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7.Return Loss &VSWR

Return Loss (S_{11}) &VSWR(S_{11})



Freq (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	1.84	-3.78	41.92
2410	1.99	-3.61	43.55
2420	2.12	-3.48	44.87
2430	2.24	-3.36	46.12
2440	2.35	-3.22	47.62
2450	2.41	-3.15	48.45
2460	2.45	-3.09	49.09
2470	2.37	-3.09	49.06
2480	2.30	-3.12	48.73
2490	2.18	-3.17	48.22
2500	2.04	-3.20	47.87
2510	1.84	-3.30	46.73
2520	1.80	-3.42	45.52
2530	1.71	-3.55	44.14
2540	1.60	-3.73	42.40
2550	1.51	-3.87	40.99

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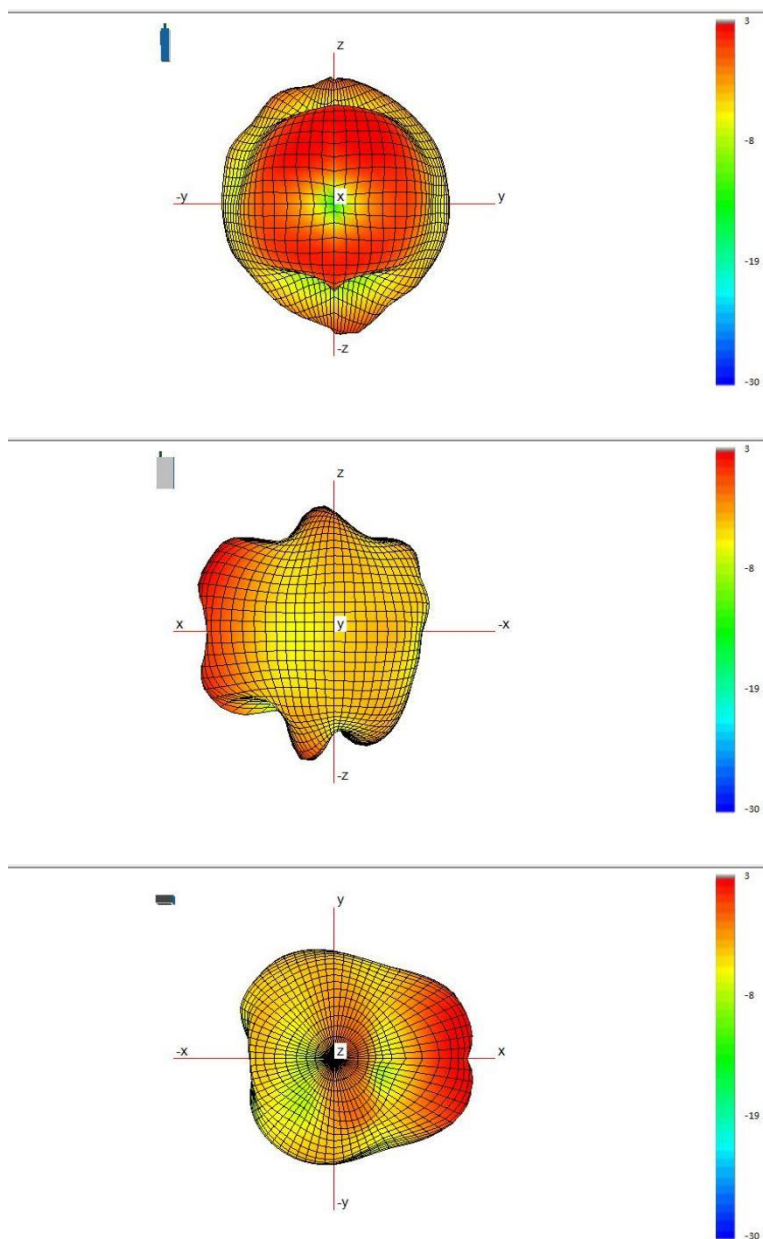
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8.Radiation Pattern

8-1.3D Gain Pattern @ 2450MHz (unit: dBi)



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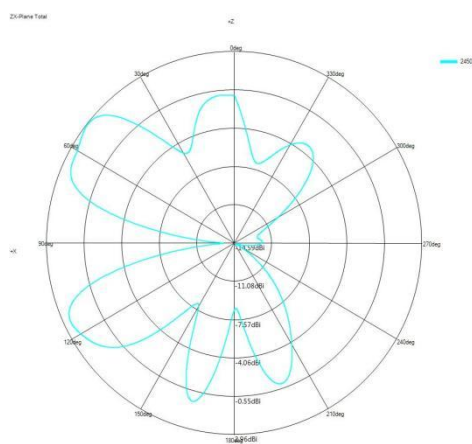
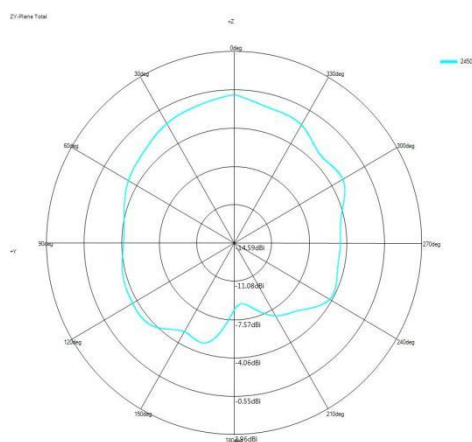
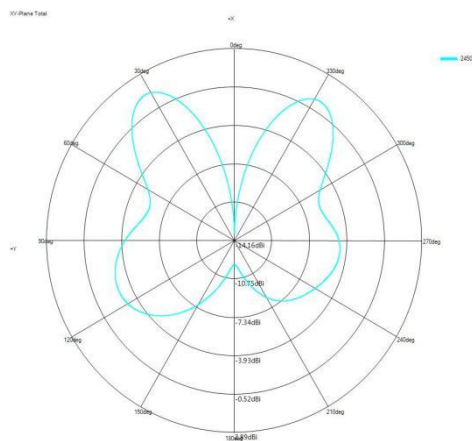
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8-2. 2D Gain complete machine (Radiation Pattern at 2450 MHz)



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9. Revision Control:

Revision	Date	Content	Remark
A	Apr.8.2025	New Issued.	N/A

Address: Room 609, Building B, Minqi Science and Technology Park, Taoyuan Street, Xili Town, Nanshan District, Shenzhen City, Guangdong Province

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