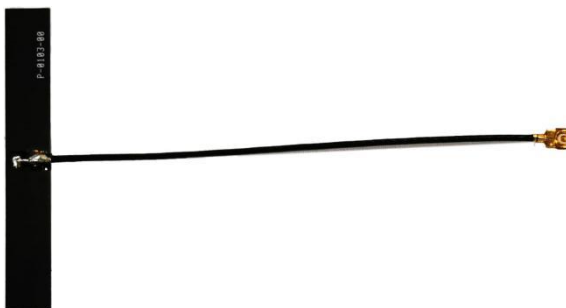


40x6x0.15mmmm WiFi / BT FPC Antenna (4006-06)

1.Explanation of Product Number



Product Code:

(1) Product Categories:

B4: FPC Antenna

(2) Application:

P: WiFi / BT antenna

(3) Dimensions:

E6: 40x6x0.15mm/ L=0.81*150mm+IPEXIV

(4)Material:

F: FPCB

(5) Working Frequencies

1P: 2400~2500 / 5150~5850 MHz

(6) Antenna Series:

06: serial number

Tolerances (Unless otherwise specified) X : ± 1 X.X : ± 0.1 X.XX : ± 0.01 Angle : ± Hole Dia. : ±		 Unictron Technologies Corporation Website: www.unictron.com		
Scale :	Unit: mm	THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION		
Prepared By :shelley	Checked By :Joy			
	Approved By : Frank			
TITLE: 40x6x0.15mmWiFi / BT FPC Antenna (4006-06)		PART NO.	S2B4PE6F1P06001	REV. A
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2.Features

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

3.Applications

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

4.Description

Unictron's FPC antenna series are specially designed for WiFi (802.11 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.

5.Electrical Specifications

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

Characteristics	Specifications			Unit
Outline Dimensions	40x6x0.15			mm
Frequency	2450			MHz
Impedance	50			Ω
Polarization	Linear Polarization			
Return Loss Table	Return Loss			
Freq.Band	2.4G Hz	2.45G Hz	2.5G Hz	
dB	-17.09	-13.14	-10.99	
VSWR Table	VSWR			
Freq.Band	2.4G Hz	2.45G Hz	2.5G Hz	
	1.31	1.55	1.76	
GAIN Table	Total Gain =Xpol + Ppol			
Freq.Band	2400MHz	2450MHz	2480MHz	2500MHz
Peak Gain(dBi)	2.57	2.37	2.75	3.12

Tolerances (Unless otherwise specified)

X: ± 1 X.X: ± 0.1 X.XX: ± 0.01

Angle: $\pm$ Hole Dia.: $\pm$

Scale:

Unit: mm

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Approved By : Frank



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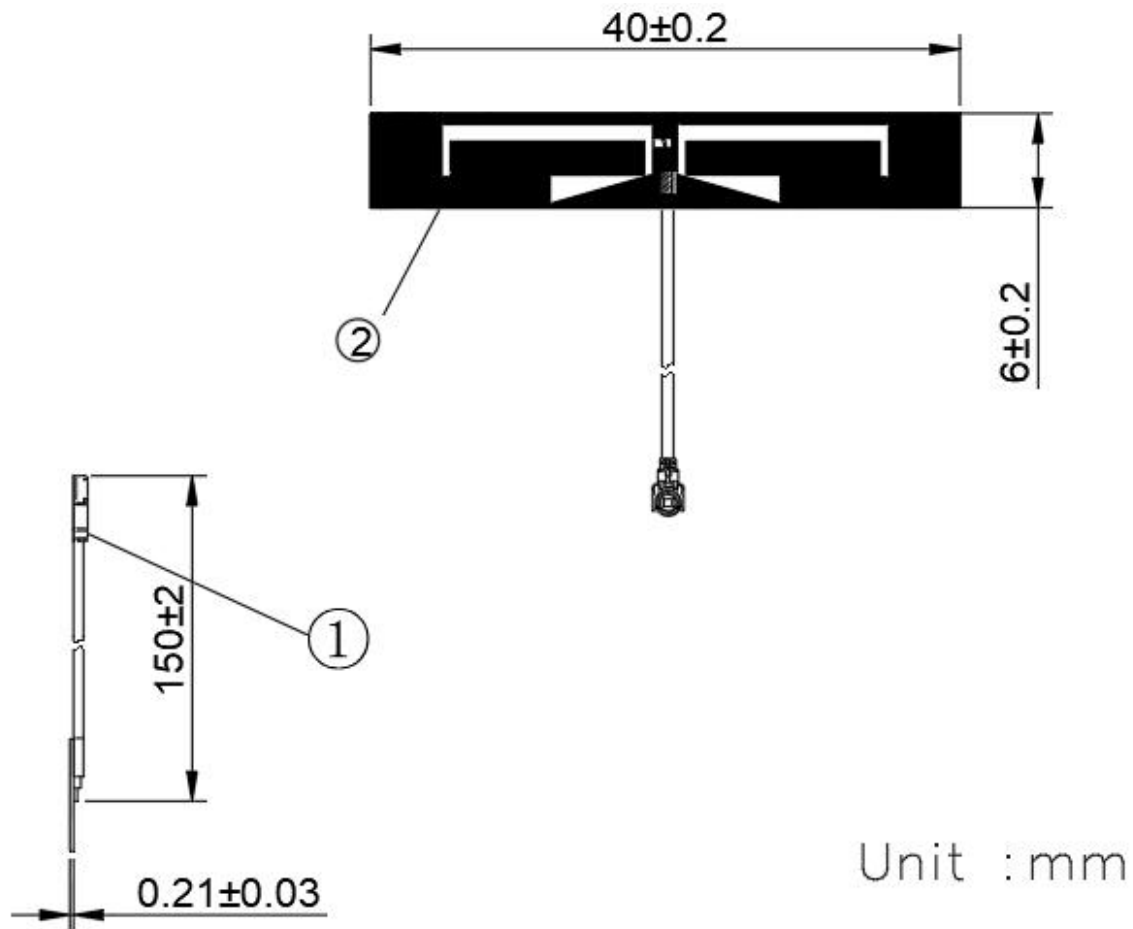
5-2-2. Electrical Table (5150~5850 MHz Band)

Characteristics	Specifications			Unit
Outline Dimensions	40x6x0.15			mm
Frequency	5150~5850			MHz
Impedance	50			Ω
Polarization	Linear Polarization			
Return Loss Table	Return Loss			
Freq.Band	5.15GHz	5.55GHz	5.85GHz	
dB	-10.46	-10.59	-10.375.	
VSWR Table	VSWR			
Freq.Band	5.15GHz	5.55GHz	5.85GHz	
	1.84	1.85	1.86	
GAIN Table	Total Gain =Xpol + Ppol			
Freq.Band	5150MHZ	5350MHZ	5550MHZ	5850MHZ
Peak Gain(dBi)	4.39	3.34	2.56	2.91

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

Tolerances (Unless otherwise specified) X : ± 1 X.X : ± 0.1 X.XX : ± 0.01 Angle : $\pm$ Hole Dia. : $\pm$		 Unictron Technologies Corporation Website: www.unictron.com	
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6. Antenna Dimensions (unit: mm) .



2	P-0103-00(40x6x0.12mm)mm	1
1	Cable(ϕ 0.81mm),L=150 $\pm$ 2mm+IPEXIV	1
ITEM	Description	Q'ty
Material		

Tolerances (Unless otherwise specified)

X : $\pm$ 1 X.X : $\pm$ 0.1 X.XX : $\pm$ 0.01

Angle : $\pm$ Hole Dia. : $\pm$

Scale :

Unit: mm

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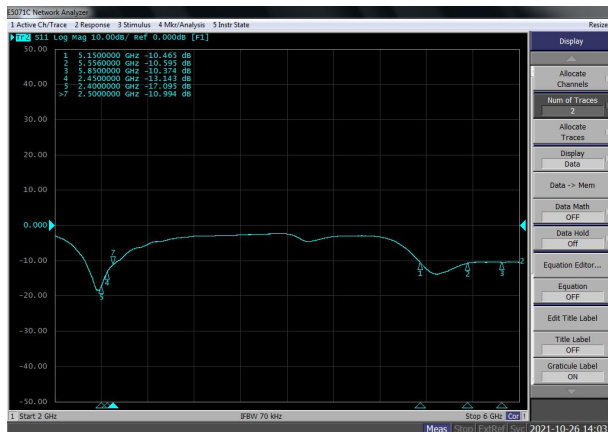
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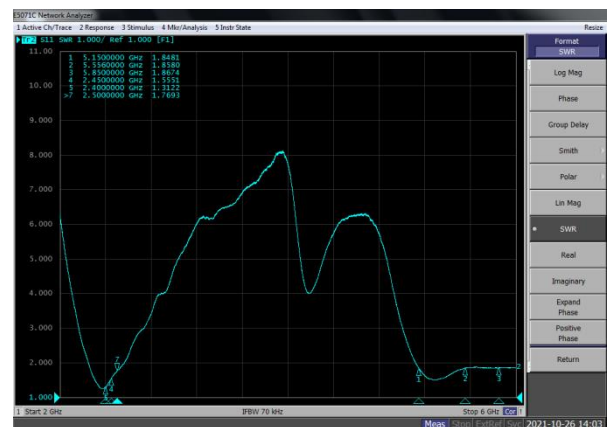
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7.Return Loss & VSWR

Return Loss (S_{11})



VSWR (S_{11})



Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : $\pm$ Hole Dia. : $\pm$

Scale :

Unit: mm

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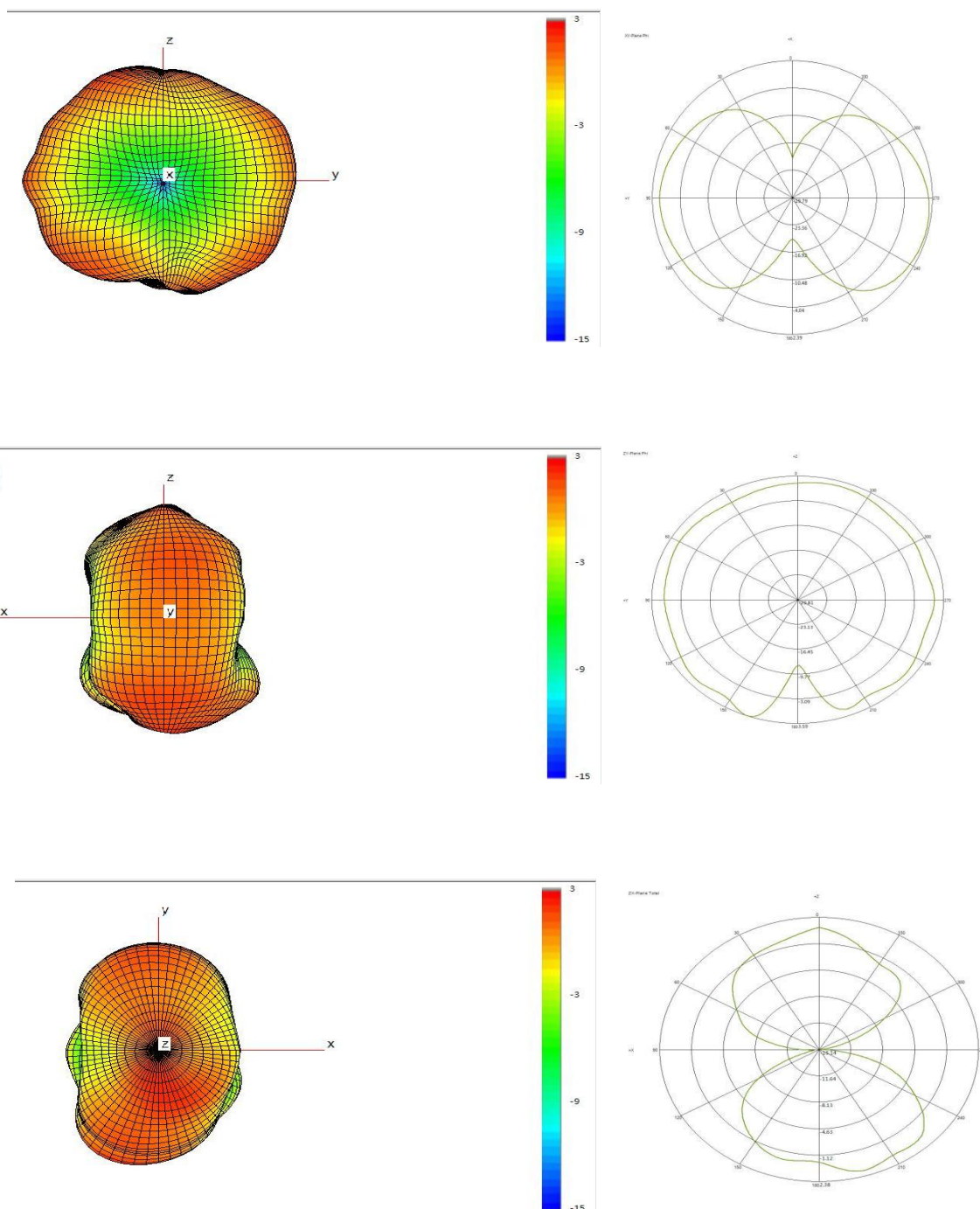
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8.Radiation Pattern

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



Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : $\pm$ Hole Dia. : $\pm$

Scale :

Unit: mm

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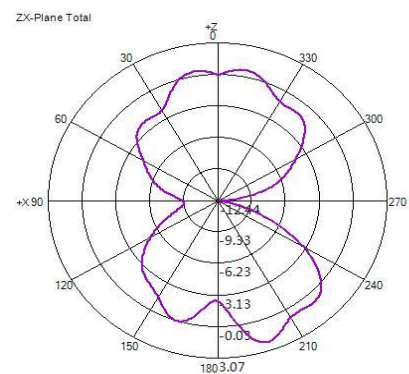
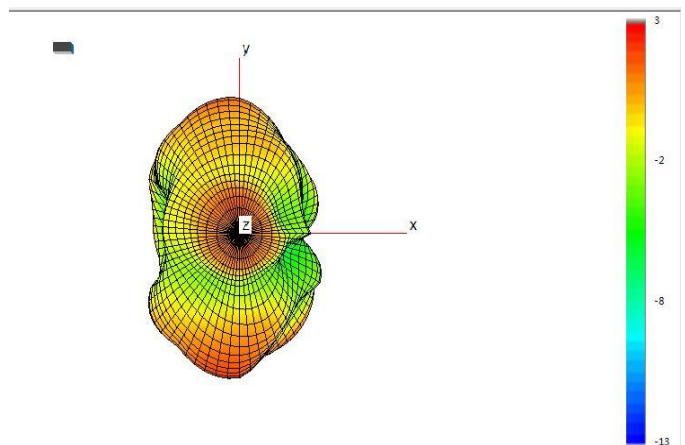
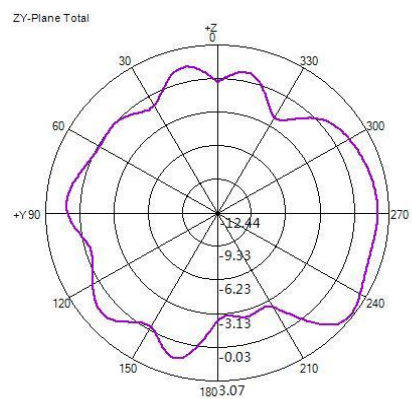
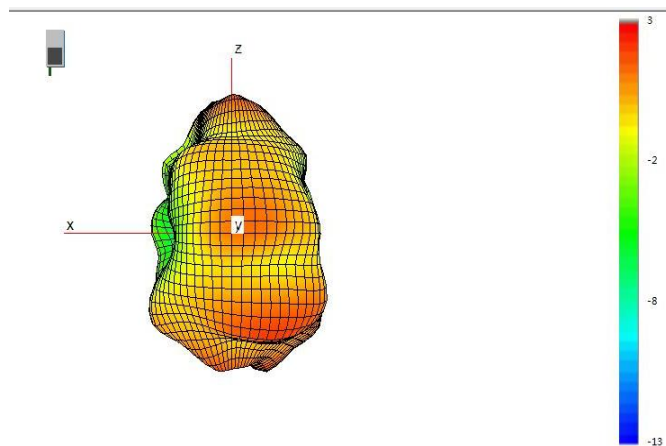
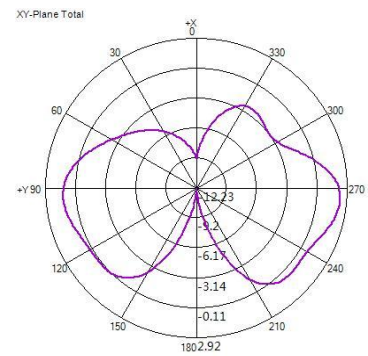
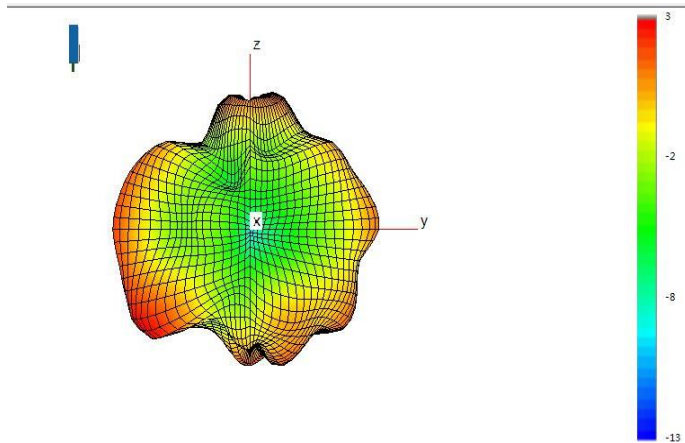
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8-2. 3D Gain Pattern @ 5500 MHz (unit: dBi)



Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : $\pm$ Hole Dia. : $\pm$

Scale :

Unit: mm

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Checked By :Joy

Approved By : Frank



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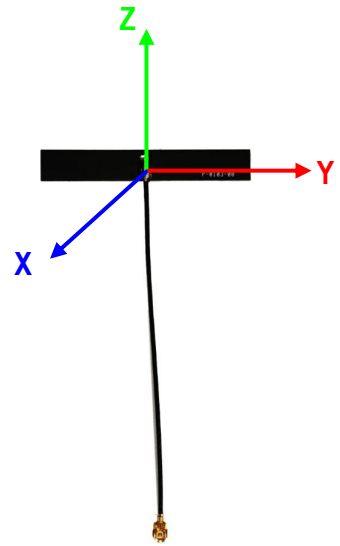
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8-3.complete machine Efficiency Table

Frequency(MHz)	2400	2420	2440	2460	2480	2500
Peak Gain	2.57	2.18	2.46	2.62	2.75	3.12
Efficiency(%)	84.65	82.12	82.58	83.15	87.23	92.16
Efficiency(db)	-0.72	-0.86	-0.83	-0.80	-0.59	-0.35

Frequency(MHz)	5150	5250	5350	5450	5550	5650	5750	5850
Peak Gain	4.39	4.12	3.34	3.09	2.56	3.09	2.91	2.91
Efficiency(%)	62.08	67.80	77.35	78.11	81.57	82.32	82.30	74.87
Efficiency(db)	-2.07	-1.69	-1.12	-1.07	-0.88	-0.84	-0.85	-1.26

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : $\pm$ Hole Dia. : $\pm$



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Scale :

Unit: mm

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9. Revision Control:

Revision	Date	Content	Remark
A	Dec.11.2023	New Issued.	N/A

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