# $25.0 \times 6.0 \times 0.5$ (mm) WiFi Dual Band PCB Antenna with Cable (P2507-00) Engineering Specification

#### 1. Explanation of Product Number

S 2 5 В В В 0 1 0 0 || 1 1 (1) (2) (3) (4) (5)

#### **Product Code:**

(1) Application:

B: WiFi / BT antenna

(2) Dimensions:

C5: 25 x6.0 x 0.5

(3) Material:

F: FPC

(4) Working Frequencies

1B: 2400~2500 & 4900~5900 MHz

(5) Antenna Series:

01: serial number

Tolerances (Unless oth $X: \pm 1$ $X.X: \pm $ Angle: $\pm$	• •	Unictor Technologie	Unictron Technologies C Website: www.unictro	•
Scale :	Unit: mm	THIS SPECIFICA	ATION IS THE PROPERTY OF	UNICTRON
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	Approved By : Frank	OR USED IN PERMISSION	ALL CIRCUMSTANCES WITHOUT	WRITTEN
•	m) WiFi Dual Band PCB Antenna 507-00) Engineering	PART	S2B1BC5A1B01001	REV.
Specification	507-00) Engineering	NO.	32D IDCJA IDU IUU I	Α
		-	PAGE 1 OF	12

## 2.Features

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

#### 3. Applications

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

#### 4. Description

Unictron's FPC antenna with cable series are specially designed for IEEE802.11(a/b/g/n/ac) applications. Based on Unictron's proprietary design and processes, this 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 Dimension	ons	25 x 6.0 x 0.5	mm
Center Frequence	cy .	2400~2500	MHz
Bandwidth		90 min.	MHz
VSWR		2 max.	
Impedance		50	Ω
Polarization		Linear Polarization	
Gain*		0.9 (typical)	dBi
Gairi	Efficiency	56(typical)	%

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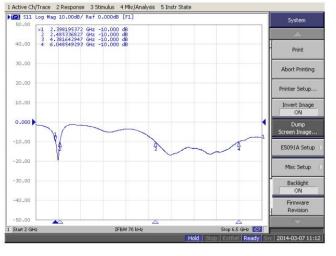
## 5-2. 4900~5900 MHz Band

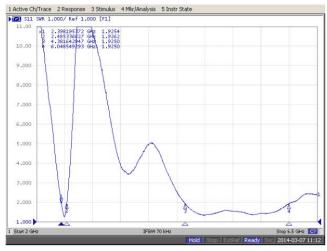
Characteristics		Specifications	Unit
Center Frequency		4900~5900	MHz
Bandwidth		90 min.	MHz
VSWR		2 max.	
Impedance		50	Ω
Polarization		Linear Polarization	
Gain*	Peak	2.9 (typical)	dBi
Gain	Efficiency	68(typical)	%

## 6. Return Loss & VSWR

Return Loss (S<sub>11</sub>)

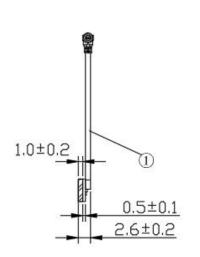
VSWR (S<sub>11</sub>)

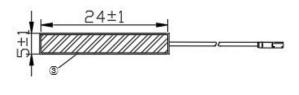


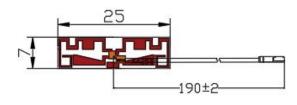


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# 7. Antenna Dimensions (unit: mm) .







Unit :mm

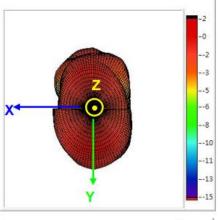
3	3M9448A(24*5.0*1mm)	1
2	P-0322-00 (25*6*0.5mm)	1
1	0.81*190mm+USS RF 二代	1
ITEM	Description	Qʻty
	Material	

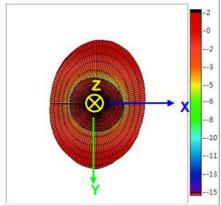
Tolerances (Unless otl X: ± 1 X.X: ± Angle: ±	• •	Unict Technologie	Unictron Technologies Coss Corp.  Website: www.unictro	•
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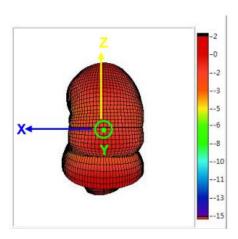
## 8. Radiation Pattern

8-1. 2400~2500 MHz Band

8-1-1. 3D Gain Pattern @ 2442 MHz (unit: dBi)

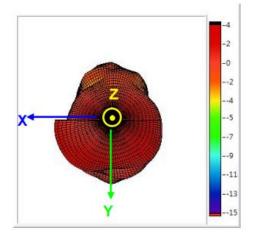


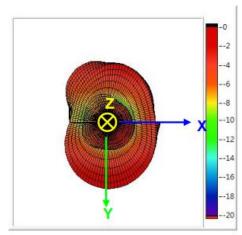


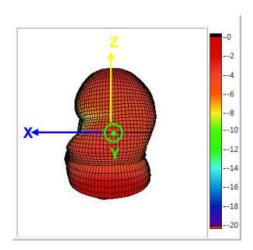


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## 8-2. 3D Gain Pattern @ 4900MHz (unit: dBi)

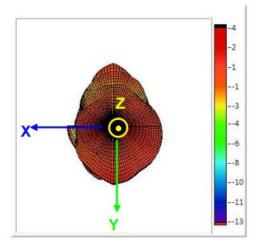


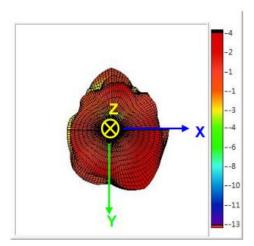


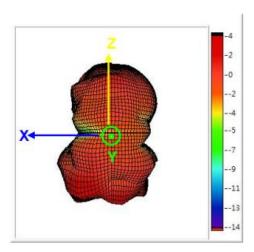


Tolerances (Unless otherwix: ± 1 X.X: ± 0.1	• •	Unictor Technologie	Unictron Technologies Co	•
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Specification	oo, Engineering	NO.	0251500A1501001	Α
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# 8-2-2. 3D Gain Pattern @ 5150 MHz (unit: dBi)

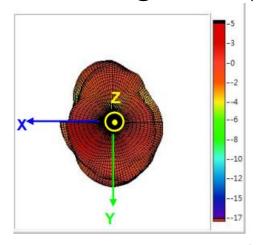


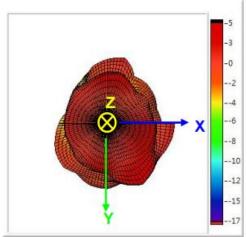


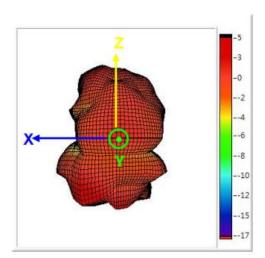


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Specification	ngmeening	NO.	020100071001001	Α	
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# 8-2-3. 3D Gain Pattern @ 5500 MHz (unit: dBi)

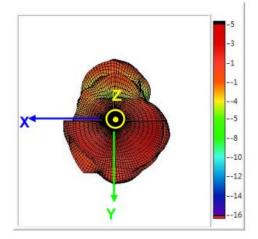


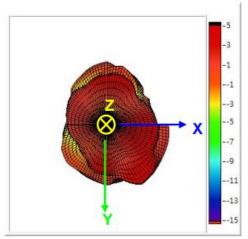


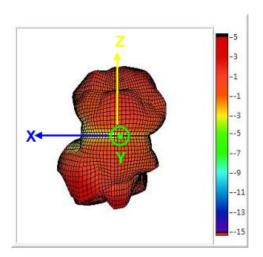


Tolerances (Unless otherwix: ± 1 X.X: ± 0.1	• •	Unictor Technologie	Unictron Technologies Co	•
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# 8-2-4. 3D Gain Pattern @ 5850 MHz (unit: dBi)







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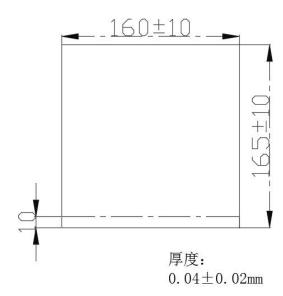
## 9. Packing Intruduction

- 9.1 Quantity/Packing: 25/ parcel; 2500PCS/ carton
- 9.2 parcel type(unit:mm)

包装如下图:

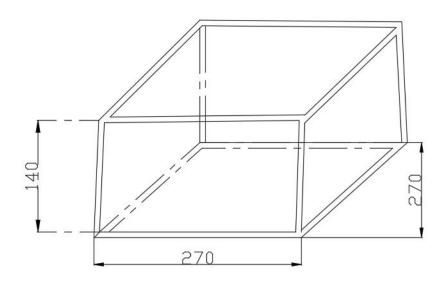


## 9.3 PE 袋尺寸



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# 9.4 Carton type(unit:mm)



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Specification		NO.	025150071501001	Α
			PAGE 11 OF	12

# 10. Revision Control:

Revision	Date	Content	Remark
Α	May.31.2023	New Issued.	N/A

Tolerances (Unless otherwise specified)		Unictron Technologies Corporation		
$X: \pm 1$ $X.X: \pm 0.1$ Angle: $\pm$ Ho	. X.XX: ± 0.01 ole Dia.: ±	Unict Technologie	Wahaita, ununu uniatra	•
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Specification		NO.	SZDIDOJAIDUIUUI	Α
	·	·	PAGE 12 OF	12