

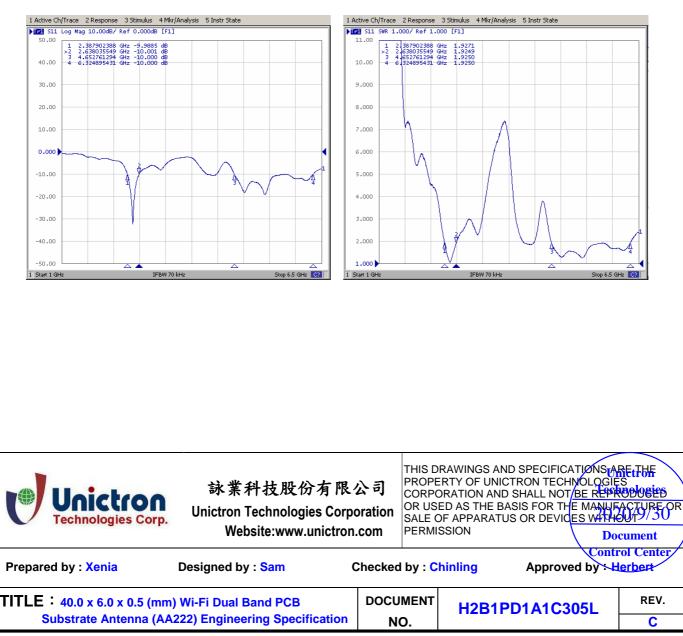
2.	Features					
	*Stable and reliat	ble in performance	es			
	*Compact size					
	*RoHS compliance	ce				
3.	Applications					
	* IEEE802.11(a/b/	/g/n).				
	* Hand-held devic	es when IEEE802	2.11(a/b/g/n) fun	ctions are neede	ed.	
4.	Description					
	Unictron's PCB	antenna with	cable series	s are speciall	y designe	ed for
	IEEE802.11(a/b/g	g/n) applications.	Based on U	nictron's proprie	etary desig	in and
	processes, this a	ntenna has excel	lent stability and	d sensitivity to co	onsistently p	orovide
	high signal recep	tion efficiency.				
5.	Operating Condi	tion:				
	Temperature	-10 to ·	+85 °C (With	double-sided tap	be)	
		- 40 to	+85 °C (With	out double-sided	tape)	
	Humidity	10 to	95% RH			
6.	Storage Condition	on:				
	-		+85 °C (With	double-sided tap		
	remperature	-10 10 -		uouble-sided lap		
	Temperature		,	out double-sided tap	•	
	Humidity	- 40 to	,	•	•	
7.	Humidity Electrical Specif	- 40 to 10 to ications (Ante	+85 °C (With 95% RH	out double-sided	•	
7.	Humidity Electrical Specif 7-1. 2400~2484 M	- 40 to 10 to ications (Ante r 1Hz Band	+85 °C (With 95% RH nna in device	out double-sided	tape)	
7.	Humidity Electrical Specif 7-1. 2400~2484 M Character	- 40 to 10 to ications (Anter 1Hz Band istics	+85 °C (With 95% RH nna in device Specif	out double-sided	tape) Unit	
7.	Humidity Electrical Specif 7-1. 2400~2484 M Character Outline Dimensions	- 40 to 10 to ications (Anter 1Hz Band istics	+85 °C (With 95% RH nna in device Specif 40.0 x (out double-sided	tape) Unit mm	
7.	Humidity Electrical Specif 7-1. 2400~2484 M Character Outline Dimensions Working Frequency	- 40 to 10 to ications (Anter 1Hz Band istics	+85 °C (With 95% RH nna in device Specif 40.0 x (2400	out double-sided (cations) 6.0 x 0.5 ~2484	tape) Unit mm MHz	
7.	Humidity Electrical Specif 7-1. 2400~2484 M Character Outline Dimensions Working Frequency Bandwidth	- 40 to 10 to ications (Anter 1Hz Band istics	+85 °C (With 95% RH nna in device Specif 40.0 x (2400 84 Min	out double-sided (cations) 6.0 x 0.5 ~2484 (typical)	tape) Unit mm	
7.	Humidity Electrical Specif 7-1. 2400~2484 M Character Outline Dimensions Working Frequency Bandwidth VSWR	- 40 to 10 to ications (Anter 1Hz Band istics	+85 °C (With 95% RH nna in device Specif 40.0 x 2400 84 Min 2 Max.	out double-sided (typical)	tape) Unit MHz MHz	
7.	Humidity Electrical Specif 7-1. 2400~2484 M Character Outline Dimensions Working Frequency Bandwidth VSWR Impedance	- 40 to 10 to ications (Anter 1Hz Band istics	+85 °C (With 95% RH nna in device Specif 40.0 x (2400 84 Min 2 Max.	out double-sided ications 5.0 x 0.5 ~2484 (typical) (typical) 50	tape) Unit mm MHz	
7.	Humidity Electrical Specifi 7-1. 2400~2484 M Character Outline Dimensions Working Frequency Bandwidth VSWR Impedance Polarization	- 40 to 10 to ications (Anter 1Hz Band istics	+85 °C (With 95% RH nna in device Specif 40.0 x (2400 84 Min 2 Max. Linear Pe	out double-sided (cations) 6.0 x 0.5 ~2484 (typical) (typical) 0 olarization	tape) Unit mm MHz MHz	
7.	Humidity Electrical Specifi 7-1. 2400~2484 M Character Outline Dimensions Working Frequency Bandwidth VSWR Impedance Polarization Peak Gain	- 40 to 10 to ications (Anter 1Hz Band istics	+85 °C (With 95% RH nna in device Specif 40.0 x (2400 84 Min 2 Max. Linear Po 2.7 (out double-sided (ications) 6.0 x 0.5 2484 (typical) (typical) 50 plarization (typical)	tape) Unit mm MHz MHz Ω dBi	
	Humidity Electrical Specif 7-1. 2400~2484 M Character Outline Dimensions Working Frequency Bandwidth VSWR Impedance Polarization Peak Gain Efficiency	- 40 to 10 to ications (Anter //Hz Band istics	+85 °C (With 95% RH nna in device Specif 40.0 x 2400 84 Min 2 Max. Linear Pe 2.7 (1 80 (t	out double-sided (ications) 6.0 x 0.5 ~2484 (typical) (typical) (typical) (typical) (typical) (typical)	tape) Unit MHz MHz Ω Δ dBi	
	Humidity Electrical Specifi 7-1. 2400~2484 M Character Outline Dimensions Working Frequency Bandwidth VSWR Impedance Polarization Peak Gain	- 40 to 10 to ications (Anter //Hz Band istics	+85 °C (With 95% RH nna in device Specif 40.0 x 2400 84 Min 2 Max. Linear P 2.7 (1 80 (t)	out double-sided (ications) 6.0 x 0.5 ~2484 (typical) (typical) (typical) (pical) ions of user's ground p	tape) Unit mm MHz MHz Ω dBi % olane and rado	
	Humidity Electrical Specif 7-1. 2400~2484 M Character Outline Dimensions Working Frequency Bandwidth VSWR Impedance Polarization Peak Gain Efficiency	- 40 to 10 to ications (Anter //Hz Band istics / @ 2442 MHz) to another frequency ad	+85 °C (With 95% RH nna in device Specif 40.0 x 2400 84 Min 2 Max. Linear Pe 2.7 (80 (t) coording to the conditional true	out double-sided (ications 6.0 x 0.5 ~2484 (typical) (typical) (typical) (pical) ions of user's ground p DRAWINGS AND SPEC PERTY OF UNICTRON	tape)	SETTER S
	Humidity Electrical Specifi 7-1. 2400~2484 M Character Outline Dimensions Working Frequency Bandwidth VSWR Impedance Polarization Peak Gain Efficiency ((Content frequency will be offset)	- 40 to 10 to ications (Anter //Hz Band istics // @ 2442 MHz) to another frequency ad 詠業科技股份	+85 °C (With 95% RH nna in device Specif 40.0 x (2400 84 Min 2 Max. Linear Po 2.7 (80 (tr cording to the condition THIS PRC COP	out double-sided (ications 6.0 x 0.5 ~2484 (typical) (typical) (typical) (typical) (pical) ions of user's ground p PERTY OF UNICTRON PERTY OF UNICTRON S DRAWINGS AND SPEC PERTY OF UNICTRON	Unit MHz MHz MHz Ω dBi % olane and rado	SETTURE O
	Humidity Electrical Specifi 7-1. 2400~2484 M Character Outline Dimensions Working Frequency Bandwidth VSWR Impedance Polarization Peak Gain Efficiency ((Content frequency will be offset)	- 40 to 10 to ications (Anter //Hz Band istics / @ 2442 MHz) to another frequency ad	+85 °C (With 95% RH nna in device Specif 40.0 x (2400 84 Min 2 Max. Linear P(2.7 (80 (t) cording to the condit s Corporation	out double-sided (ications 5.0 x 0.5 ~2484 (typical) (typical) (typical) (typical) (pical) ions of user's ground p DRAWINGS AND SPEC PERTY OF UNICTRON	Unit MHz MHz MHz Ω dBi % olane and rado	NETTURE Soducied ACTURE O
	Humidity Electrical Specifi 7-1. 2400~2484 M Character Outline Dimensions Working Frequency Bandwidth VSWR Impedance Polarization Peak Gain Efficiency ((Content of the offset)) Center frequency will be offset)	- 40 to 10 to ications (Anter /Hz Band istics / @ 2442 MHz) to another frequency ad 詠業科技股份 Unictron Technologie	+85 °C (With 95% RH nna in device Specif 40.0 x (2400 84 Min 2 Max. Linear P(2.7 (80 (t) cording to the condit s Corporation	out double-sided (ications 6.0 x 0.5 ~2484 (typical) (typical) (typical) (typical) (pical) ions of user's ground p perty of UNICTRON PERTY OF UNICTRON PE	tape) Unit mm MHz MHz MHz Ω Ω dBi % olane and rado	RETURE ODUCIED ACTURE UT9/30 cument of Center
<pre> Prep </pre>	Humidity Electrical Specifi 7-1. 2400~2484 M Character Outline Dimensions Working Frequency Bandwidth VSWR Impedance Polarization Peak Gain Efficiency ((Content of the offset)) Center frequency will be offset)	- 40 to 10 to ications (Anter //Hz Band istics // @ 2442 MHz) to another frequency ad 詠業科技股份 Unictron Technologie Website:www.u esigned by : Sam	+85 °C (With 95% RH nna in device Specif 40.0 x (2400 84 Min 2 Max. 2	out double-sided (ications 5.0 x 0.5 ~2484 (typical) (typical) (typical) (typical) (typical) ions of user's ground p PERTY OF UNICTRON PERTY OF UNICTRON PORATION AND SPEC PERTY OF UNICTRON Chinling App	tape)	BET FOR BOOSED ACTURE O SUT 9/30 cument of Center

7-2. 5150~5850 MHz Band										
Chara	acteristics	Specifications	Unit							
Working Frequ	ency	5150~5850	MHz							
Bandwidth		800 Min. (typical)	MHz							
VSWR(2.5 Max. (typical)								
Impedance		50	Ω							
Polarization		Linear Polarization								
Peak Gain	(@5550 MHz)	3.5 (typical)	dBi							
Efficiency		72.3 (typical)								

*Center frequency will be offset to another frequency according to the conditions of user's ground plane and radome

7-3. Return Loss & VSWR

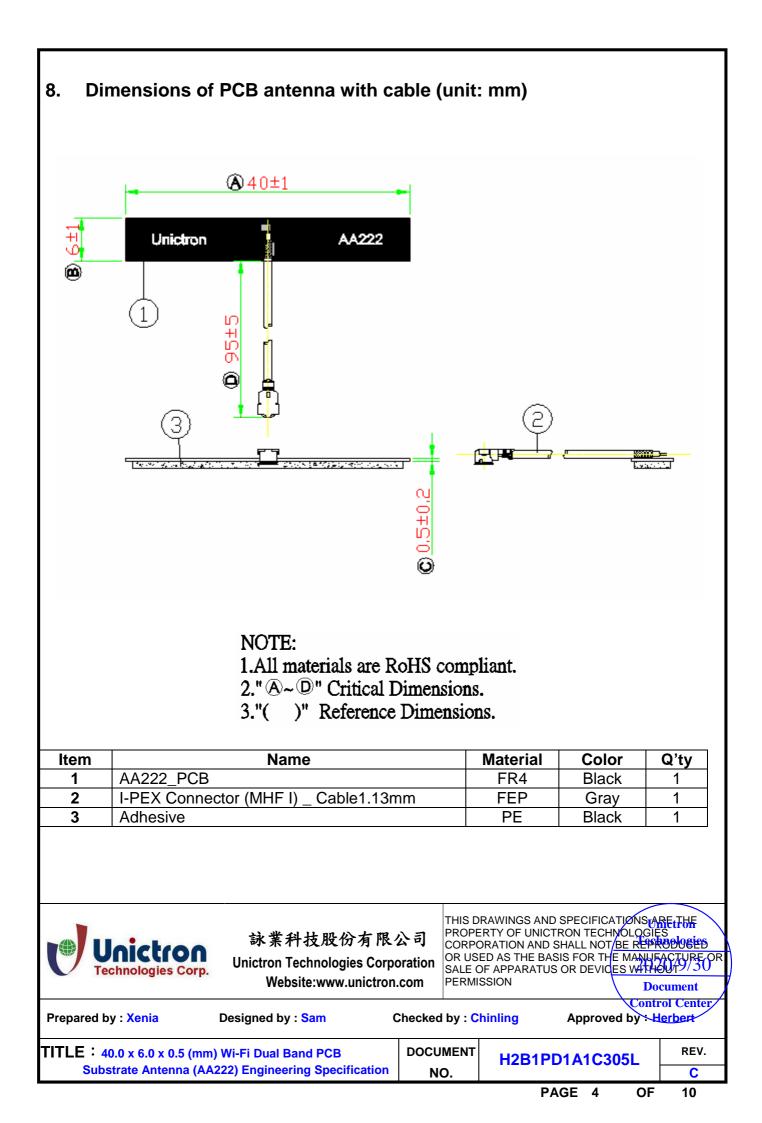
Return Loss



PAGE 3

VSWR

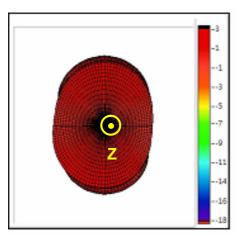
OF 10

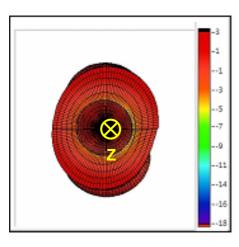


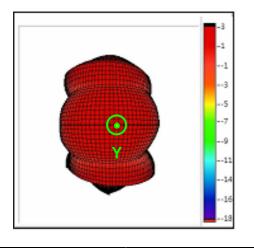
9. **Radiation Pattern**

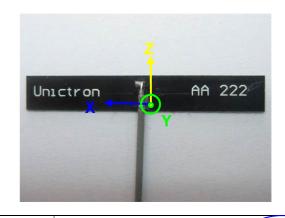
9-1.2400~2484 MHz Band

9-1-1.3D Gain Pattern @ 2442 MHz (unit: dBi)









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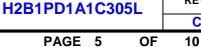
TITLE : 40.0 x 6.0 x 0.5 (mm) Wi-Fi Dual Band PCB

Substrate Antenna (AA222) Engineering Specification

Prepared by : Xenia



Designed by : Sam



Approved by Herbert

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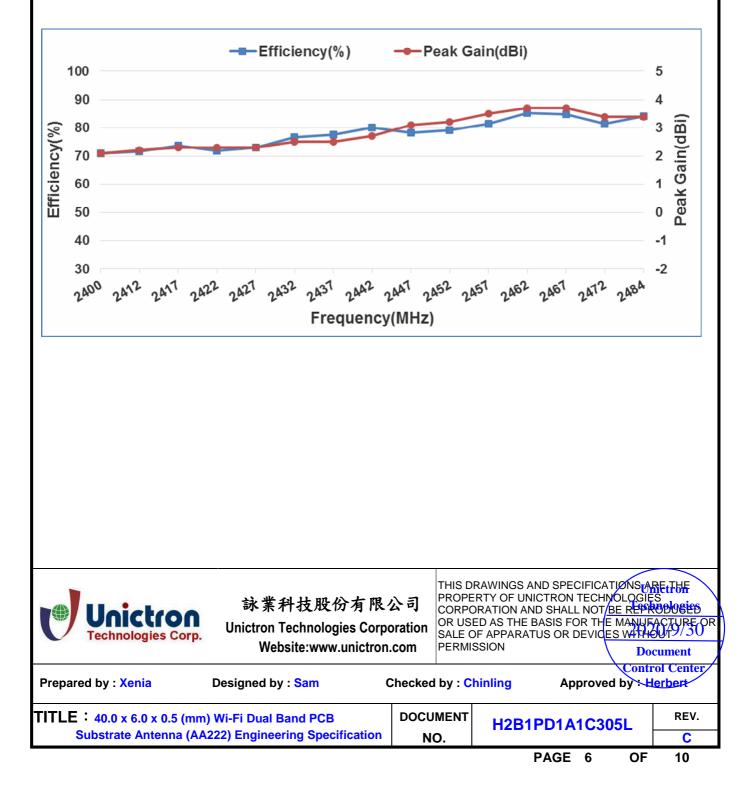
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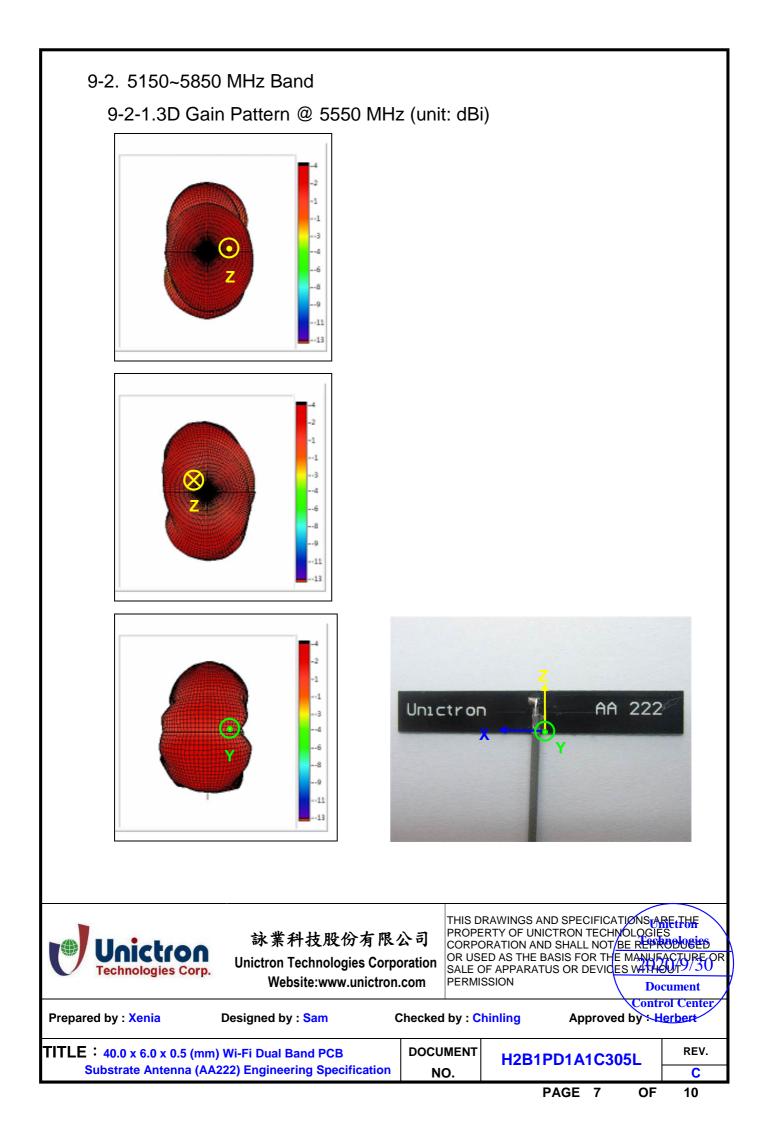
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9-1-2. 3D Efficiency Table

Frequency (MHz)	2400	2412	2417	2422	2427	2432	2437	2442	2447	2452	2457	2462	2467	2472	2484
Efficiency (dB)	-1.5	-1.5	-1.3	-1.4	-1.4	-1.2	-1.1	-1.0	-1.1	-1.0	-0.9	-0.7	-0.7	-0.9	-0.8
Efficiency (%)	71.0	71.6	73.8	71.8	73.1	76.7	77.5	80.0	78.3	79.1	81.5	85.3	84.8	81.5	84.2
Gain (dBi)	2.1	2.2	2.3	2.3	2.3	2.5	2.5	2.7	3.1	3.2	3.5	3.7	3.7	3.4	3.4

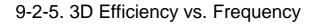
9-1-3. 3D Efficiency vs. Frequency

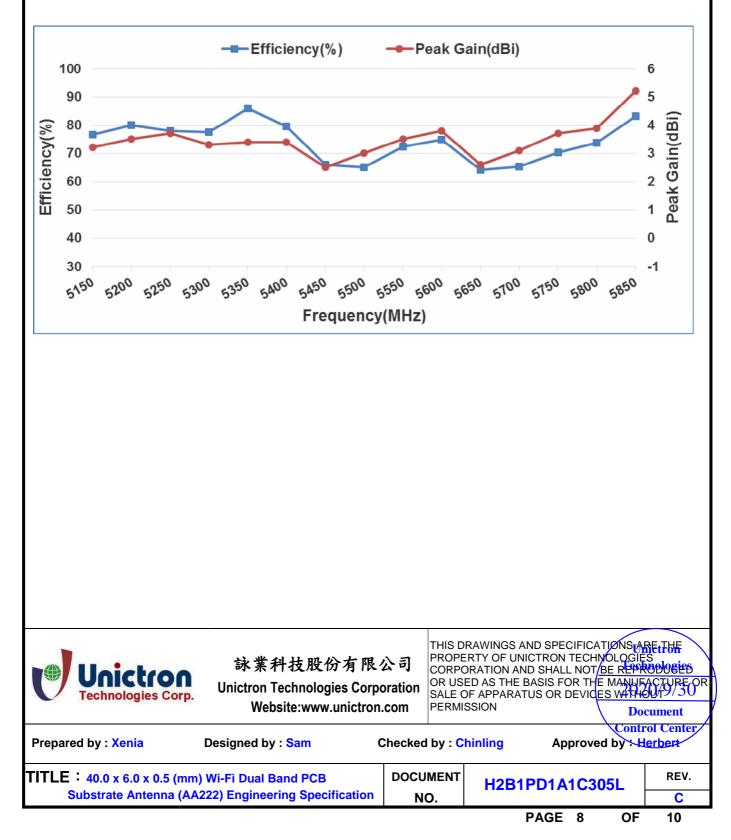




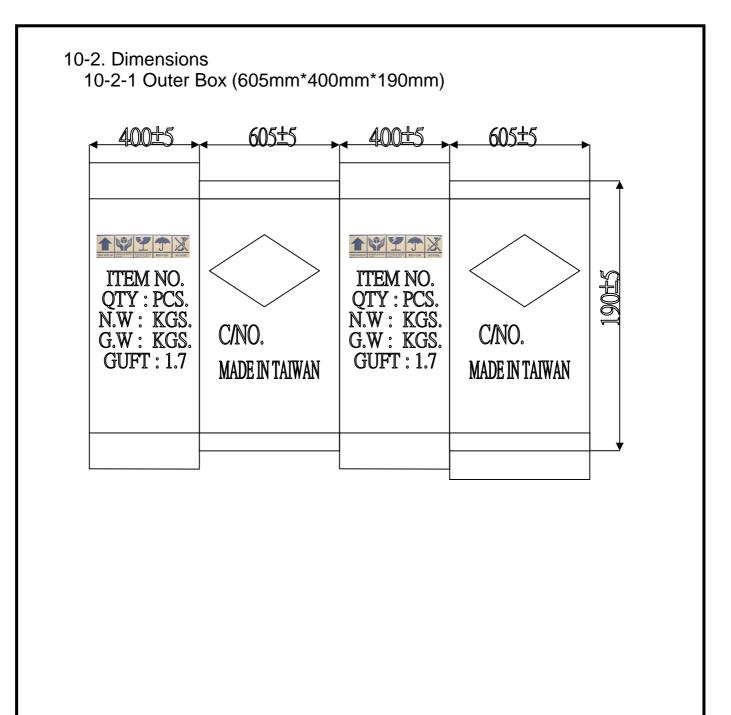
9-2-4. 3D Efficiency Table

Frequency(MHz)	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850
Efficiency(dB)	-1.2	-1.0	-1.1	-1.1	-0.7	-1.0	-1.8	-1.9	-1.4	-1.3	-1.9	-1.9	-1.5	-1.3	-0.8
Efficiency(%)	76.7	80.0	78.1	77.5	86.0	79.6	65.9	65.0	72.3	74.8	64.1	65.4	70.3	73.6	83.1
Peak Gain(dBi)	3.2	3.5	3.7	3.3	3.4	3.4	2.5	3.0	3.5	3.8	2.6	3.1	3.7	3.9	5.2





10. Package 10-1. Weight and Quantity: 10-1-1. Unit Weight: 0.9 ± 0.15 (g) 10-1-2. Quantity: Each PE Bag: 25 pcs Each Outer Box: 2500 pcs 10-1-3. Total Weight: N.W.: 2.25 ± 0.5 kg G.W.: 3.65 ± 0.5 kg Process **Photos** Remark Put 25 pcs in a PE bag and attach label on PE bag. 1 Put 100 PE bags into an outer box with 2,500 pcs of antenna inside. 2 THIS DRAWINGS AND SPECIFICATIONS AR PROPERTY OF UNICTRON TECHNOLOGIE 詠業科技股份有限公司 CORPORATION AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUE SALE OF APPARATUS OR DEVICES WITH **Unictron Technologies Corporation** Website:www.unictron.com PERMISSION **Document Control Center** Prepared by : Xenia Designed by : Sam **Checked by : Chinling** Approved by Herbert DOCUMENT TITLE : 40.0 x 6.0 x 0.5 (mm) Wi-Fi Dual Band PCB REV. H2B1PD1A1C305L Substrate Antenna (AA222) Engineering Specification NO. С OF 10





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Substrate Antenna (A	A222) Engineering Specification	NO.			С	

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