詠業科技股份有限公司
Unictron Technologies Corp.

WT217-01C

APPROVAL SHEET

RoHS compliance

CUSTOMER ：無敵科技股份有限公司
ISSUE DATE ：2011.11.23

APPROVED			
COMPANY	**APPROVED BY**	**CHECK BY**	**PREPARED BY**
			Unictron Technologies Corp. 2011-11-23 Document Control Center
APPROVAL NO：H2B2BC1H1B0100			
MODEL ：WiFi/Bluetooth Metal Stamping Antenna(AA113)			
Customer NO ：			

WiFi/BT Metal Stamping Antenna (AA113)

1. Explanation of Part Number

H	2	B	2	B	C	1	H	1	B	0	1	0	0
		(1)		(2)	(3)		(4)	(5)		(6)			

Product Code:

(1) Product Categories:

B2: 2.4G Metal Stamping Antenna

(2) Applications:

B: WiFi

(3) Dimensions:

C1: 29x2.6x8.6(mm)

(4) Material:

H: Tinplate nickel plating

(5) Working Frequency and Polarization:

1B: 2400MHz ~ 2500MHz / linear polarization

(6) Antenna Series:

01: serial number

Tolerances (Unless otherwise specified) **X : ± 1** **X.X : ± 0.1** **X.XX : ± 0.01** **Angle : ±** **Hole Dia. : ±**		Unictron Technologies Corp.	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	
Drawn By : Gilespi	**Checked By : Jason**		
Designed By : Wilson	**Approved By :Jaixing**		
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2. Features

*Stable and reliable in performances
*Low temperature coefficient of frequency
*RoHS compliance

3. Applications

*2.4G Systems

4. Description

*Unictron's 2.4G antenna is specially designed for 2.4G applications. It has excellent stability and sensitivity to consistently provide high signal reception efficiency.

5. Electrical Specifications

Characteristics		Specifications	Unit
Outline Dimensions		29 x 2.6 x 8.6	mm
Frequency Range		2400 ~ 2500	MHz
VSWR		2 max	
Impedance		50	Ω
Polarization		Linear Polarization	
Gain	Peak	Type A: 2.5 @2450MHz Type B: 2.5 @2450MHz	dBi
	Efficiency	Type A: 50 @2450MHz Type B: 50 @2450MHz	%
Temperature Coefficient of Frequency		0±20 max (@ -20℃~ 80℃)	ppm/℃

Note：
1. These test results are based on customer's housing and ground plane (please refer to No.7).

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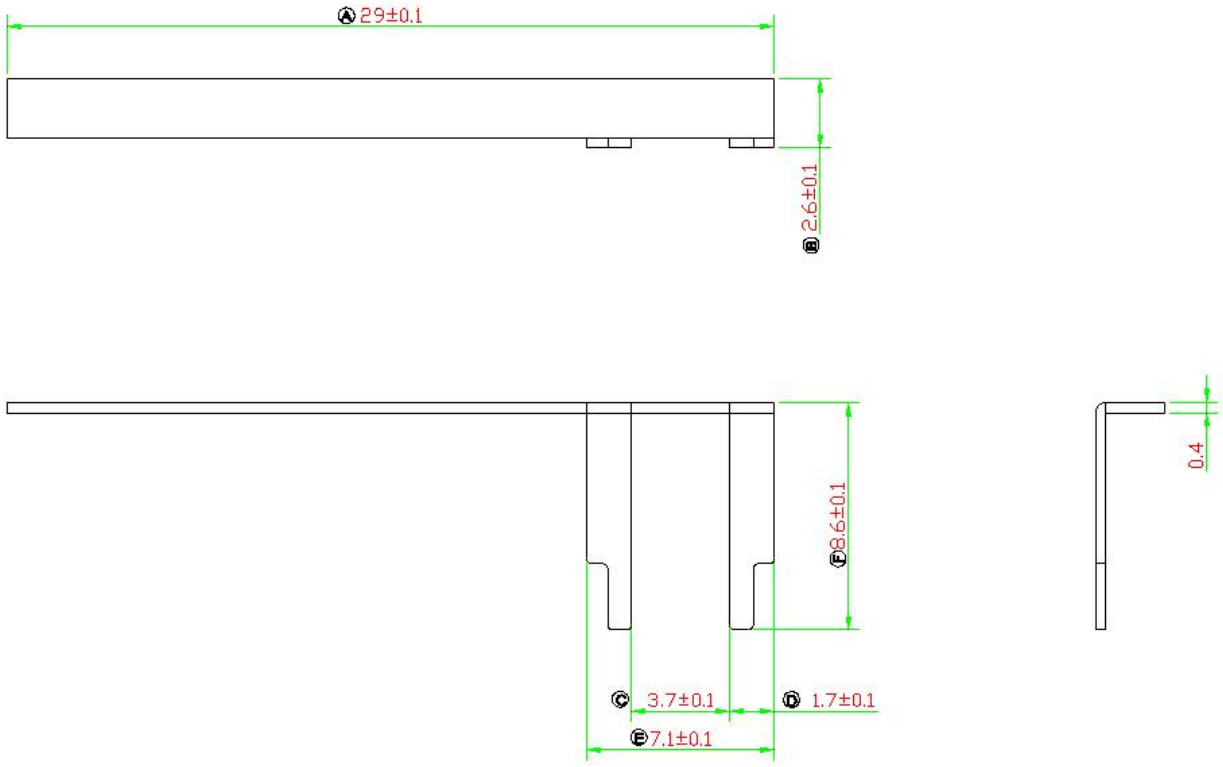
6. Antenna Dimensions (unit: mm)



7. Antenna Assembly Location Diagram & Layout Guide:

(1)Test Board

Type A

Type B

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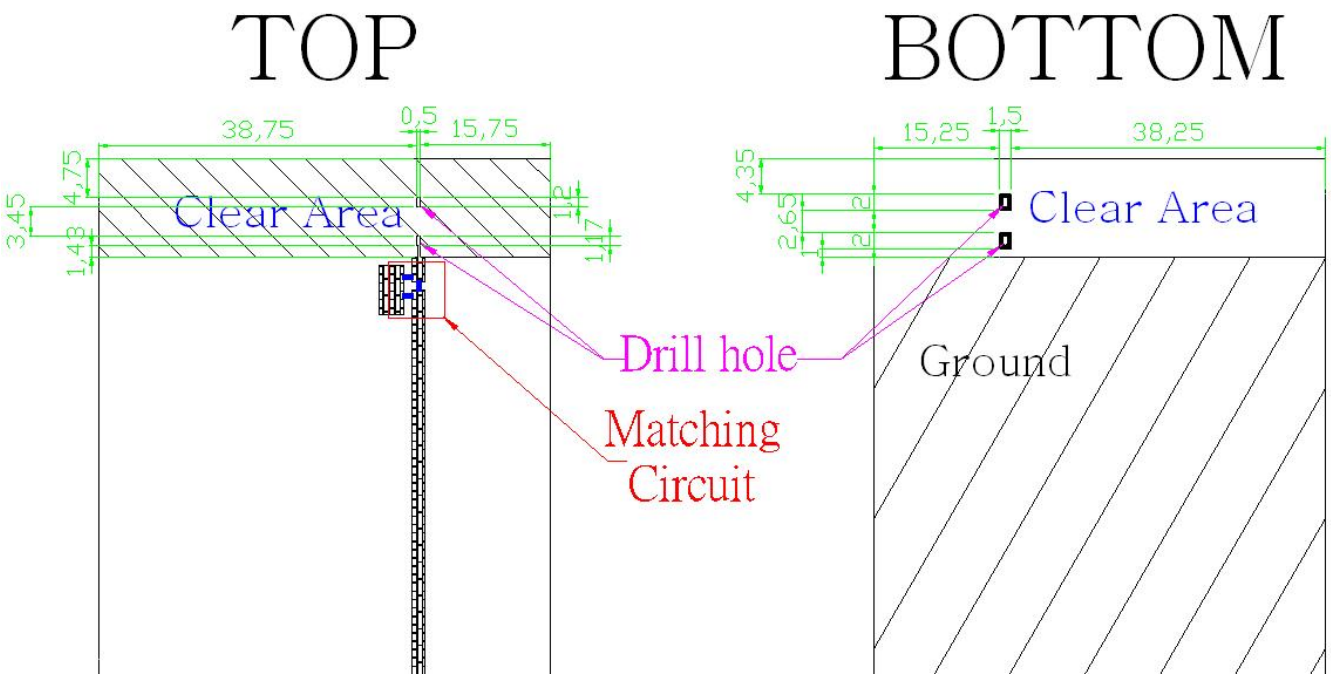
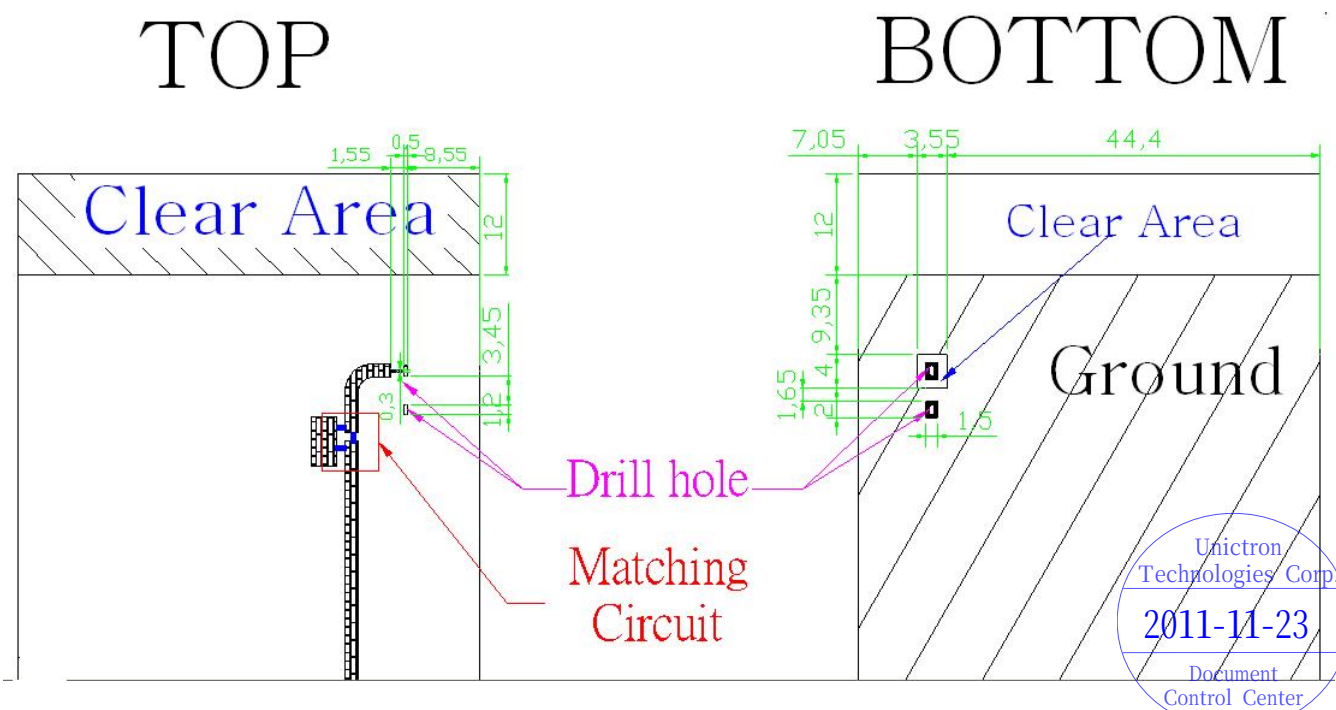
(2)Layout Guide

Type A:



Type B:



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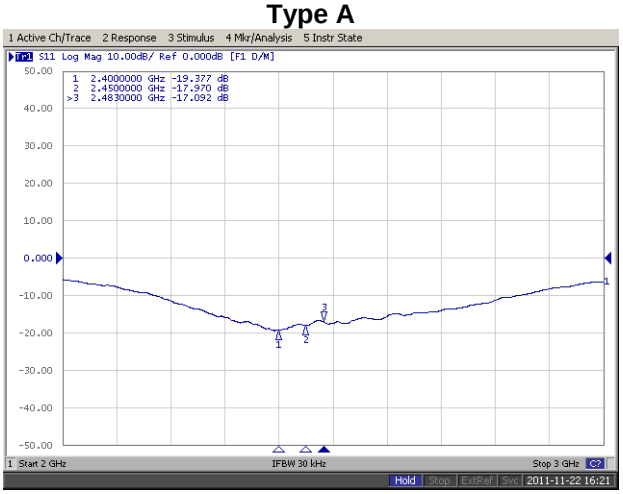
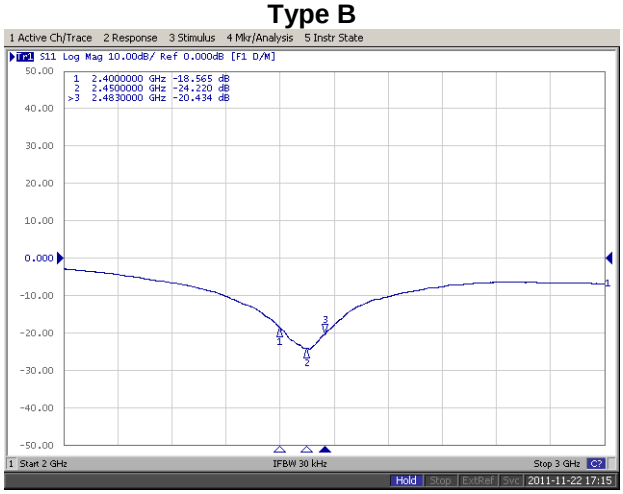
8. Electrical Characteristics

(1) Return Loss

Type A

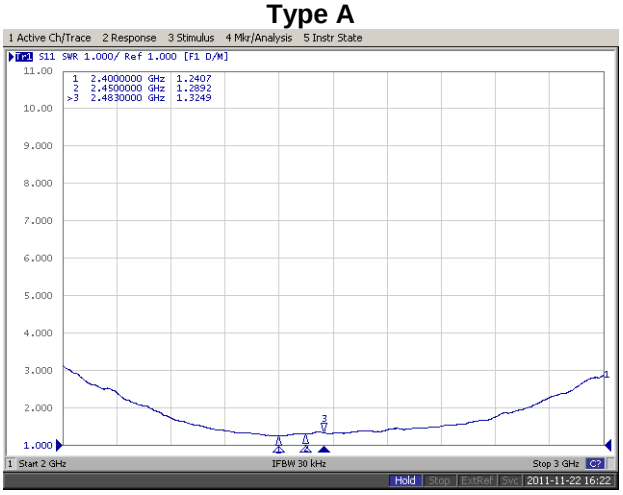


Type B

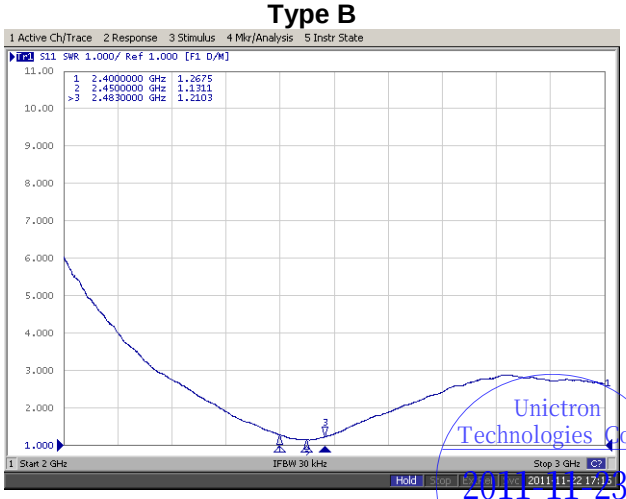


(2) VSWR

Type A



Type B



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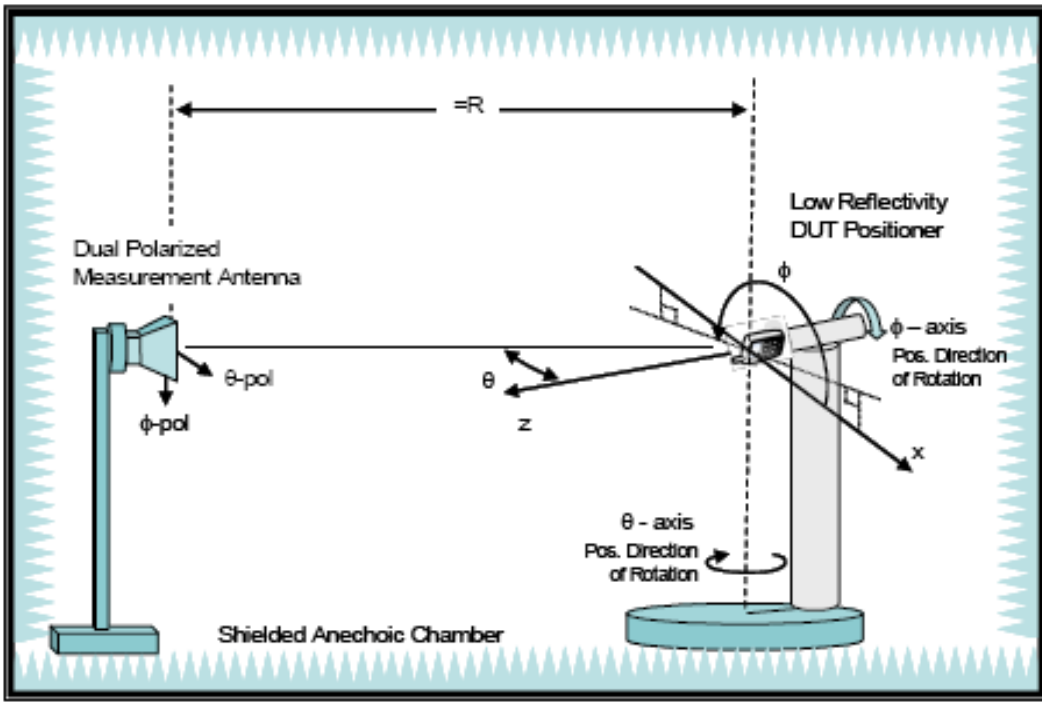
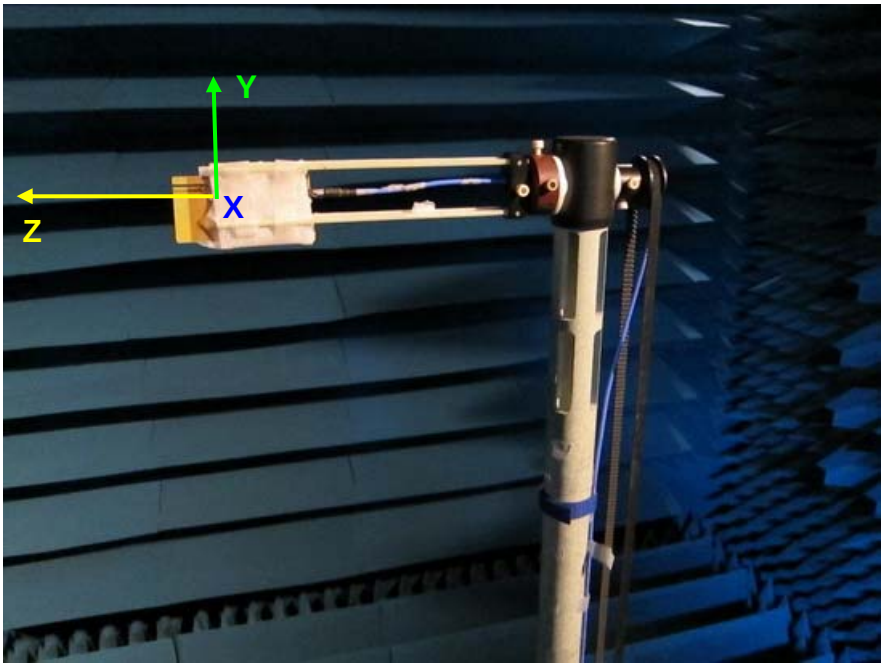
(3)Three D Radiation Pattern measurements





The definition of the measurement face

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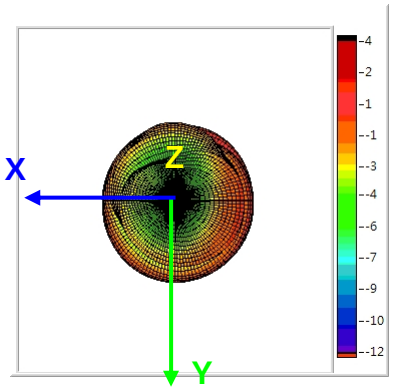
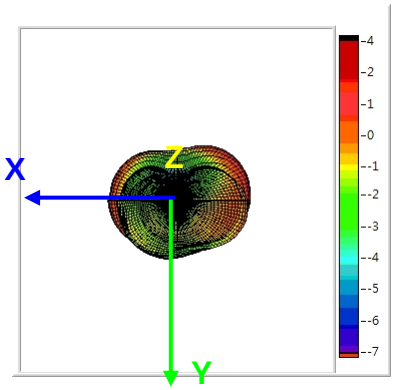
(4)WiFi/BT Antenna Three D Radiation Pattern (unit：dBi)

a. **2400MHz**

Type A (Up View)

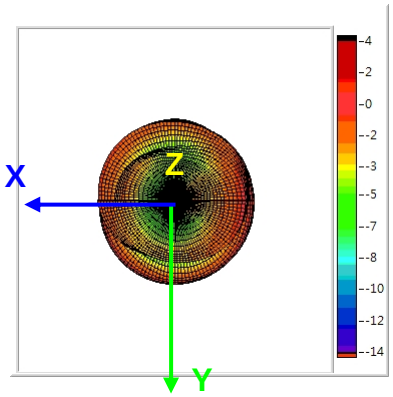


Type B (Up View)

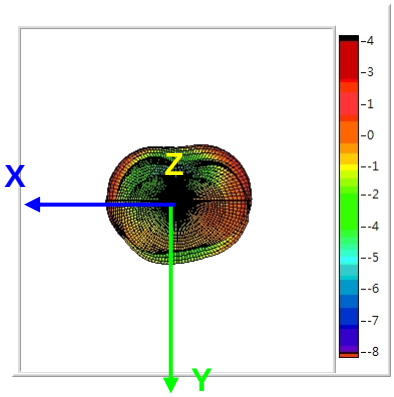


b. **2450MHz**

Type A (Up View)

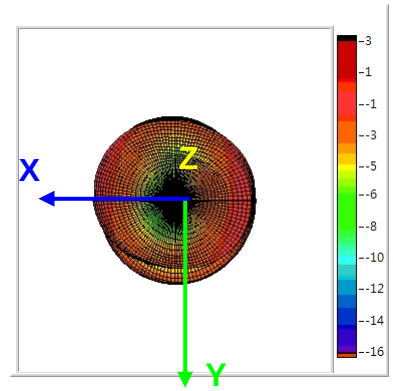


Type B (Up View)

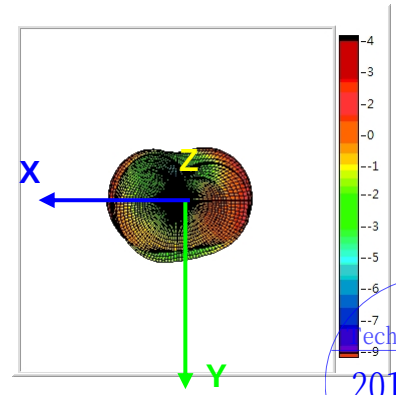


c. **2483MHz**

Type A (Up View)



Type B (Up View)



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(5)Three D Gain Table

Type A:

Frequency(MHz)	2400	2450	2483
Total Rad. Pow. (dBi)	-1.66	-1.58	-1.78
Peak Gain(dBi)	3.8	3.67	3.45
Efficiency(%)	63.23	64.5	61.37

Type B:

Frequency(MHz)	2400	2450	2483
Total Rad. Pow. (dBi)	-1.57	-1.36	-1.14
Peak Gain(dBi)	3.54	3.79	4.14
Efficiency(%)	64.66	68.11	71.91