

## Original Design Chip Antenna Data Sheet

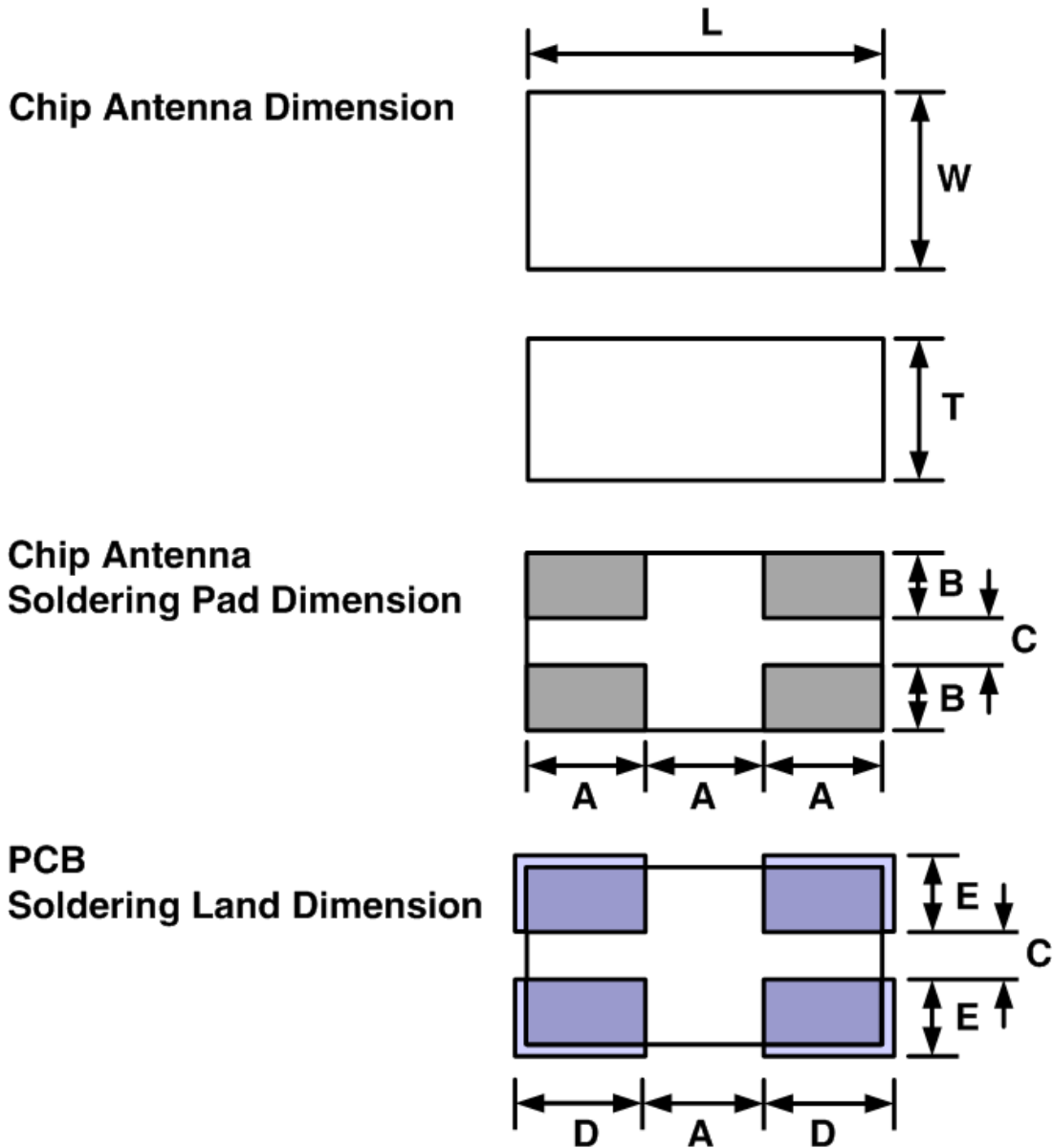
- P/N : SDBTPTR3015 -

<b>- Application Frequency</b>	
	<b>Band[MHz]</b>
<b>Bluetooth</b>	<b>2400 ~ 2485</b>
<b>WiFi / Zigbee</b>	<b>2400 ~ 2485</b>
<b>S-DMB</b>	<b>2630 ~ 2655</b>
<b>Wibro</b>	<b>2300 ~ 2390</b> <b>band1 : 2300 ~ 2327</b> <b>band2 : 2331.5 ~ 2358.5</b> <b>band3 : 2363 ~ 2390</b>

# Dielectric Chip Antenna



## ■ SDBTPTR3015 Dimension

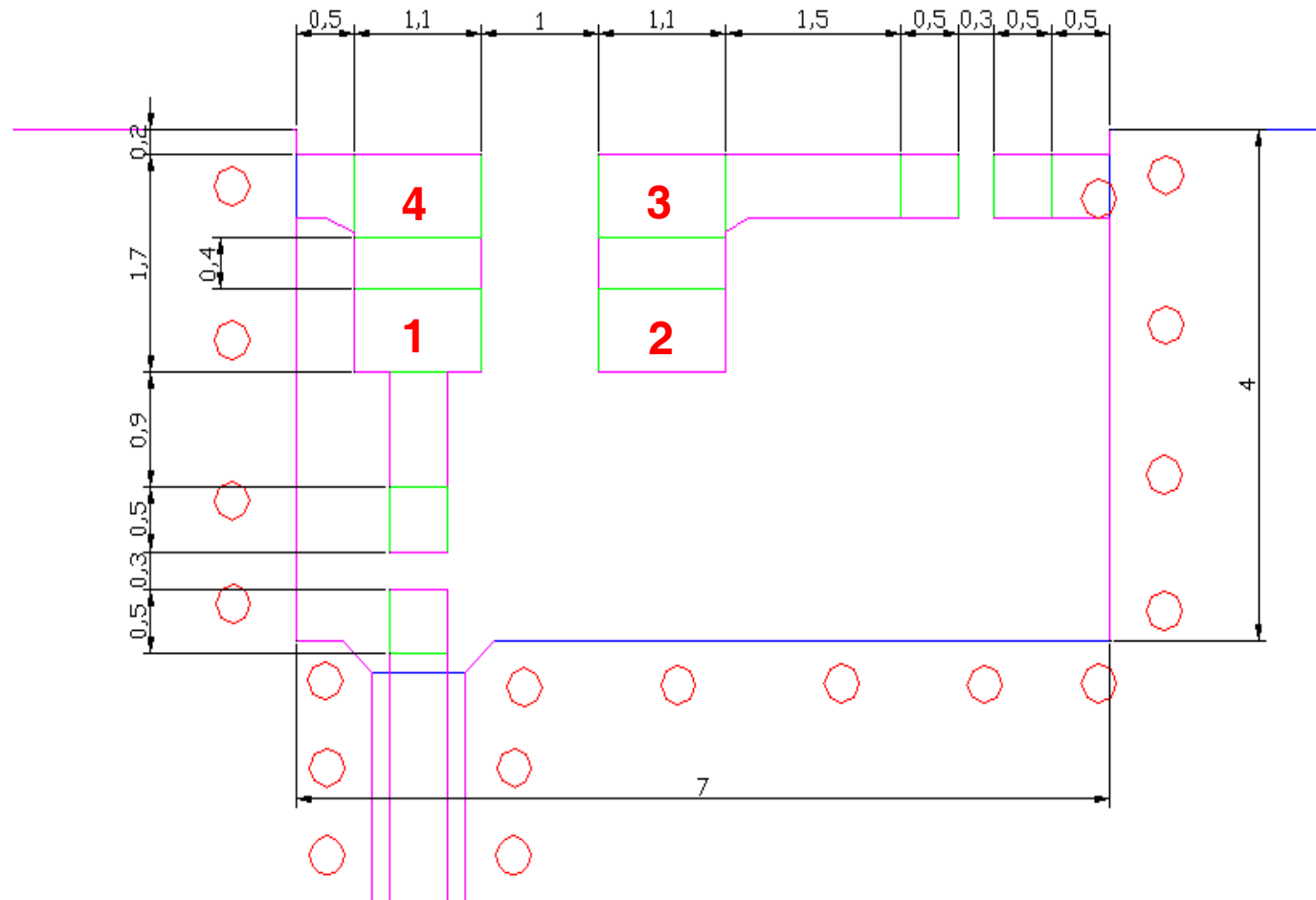


Parameter	L	W	T	A	B	C	D	E
Value[mm]	3.0 ± 0.1	1.5 ± 0.1	1.2 ± 0.1	1.0	0.55	0.4	1.1	0.65

Unless Specified tolerances are ± 0.05 mm

# Dielectric Chip Antenna

## ■ AutoCAD Drawing of Reference PCB Design for SDBTPTR3015 Product



# Dielectric Chip Antenna



## PCB Drawing

Top View	Case #1 <Default>		
	Case #2		
	Case #3		
	Case #4		
Bottom View		<Equivalent Circuit>	

# Dielectric Chip Antenna



## ■ Matching Value

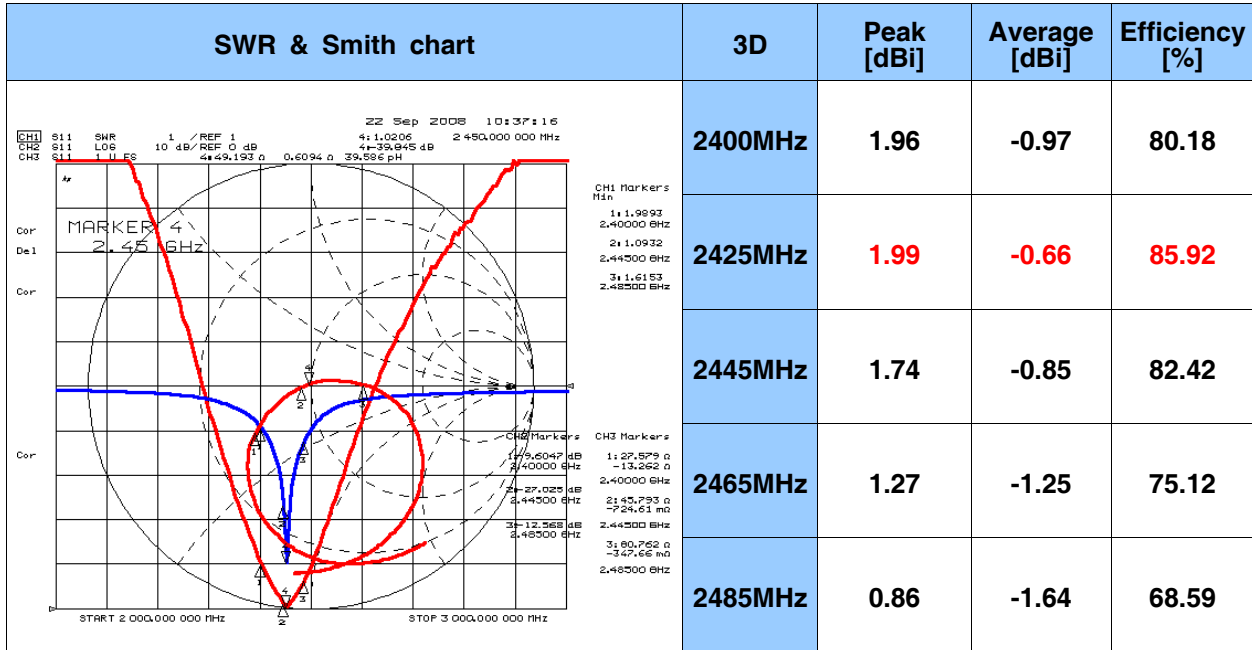
Band (MHz)	Matching Value (Default)
<p>Bluetooth / WiFi / Zigbee (2400 ~ 2485)</p>	
<p>S-DMB (2630 ~ 2655)</p>	
<p>Wibro (2300 ~ 2390) band1:2300~2327 band2:2331.5~2358.5 band3:2363~2390</p>	

# Dielectric Chip Antenna

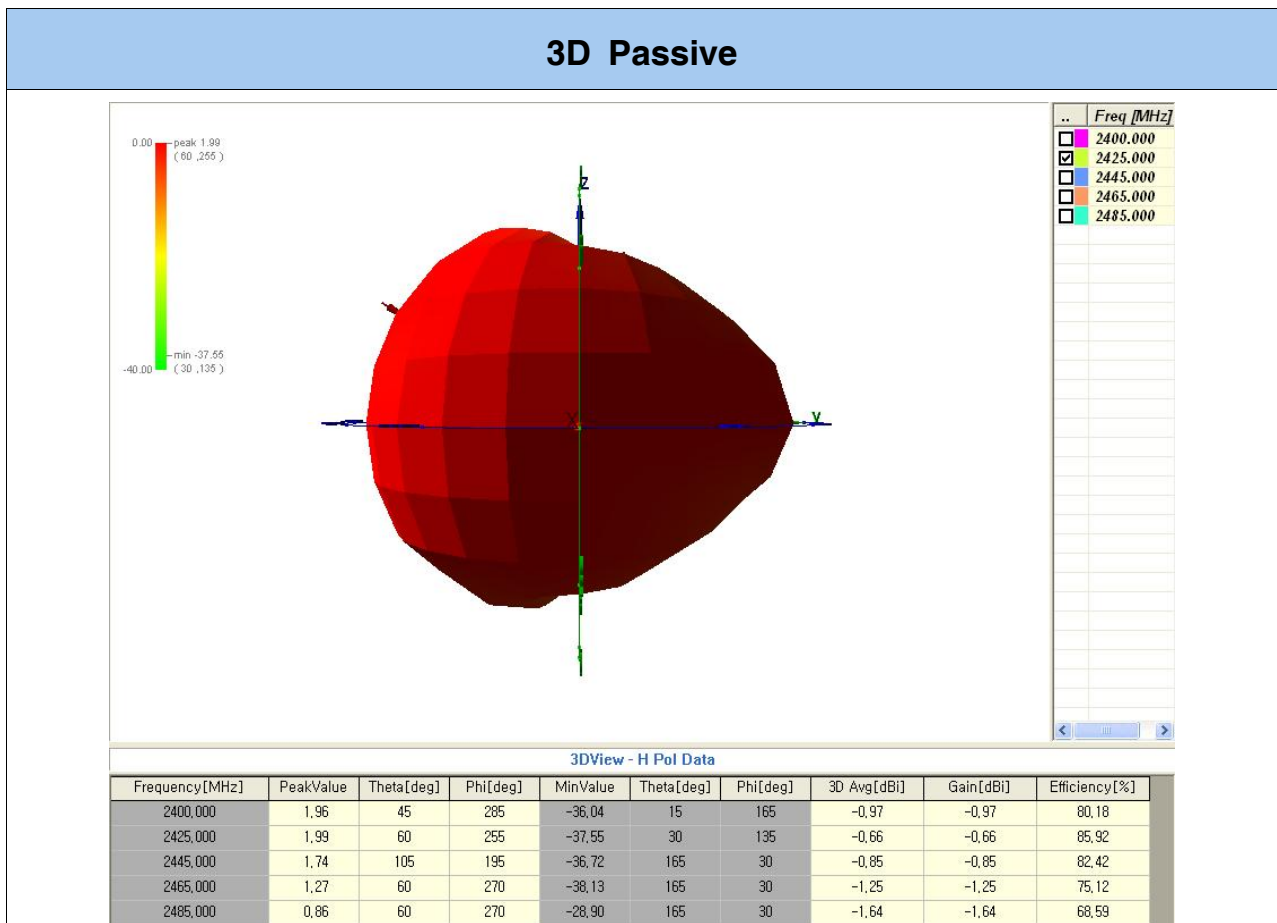


## - 3D Passive Gain For Bluetooth / WiFi / Zigbee

### ■ Test Result for Ver 0.0



### ■ Radiation Pattern Ver 0.0



# Dielectric Chip Antenna

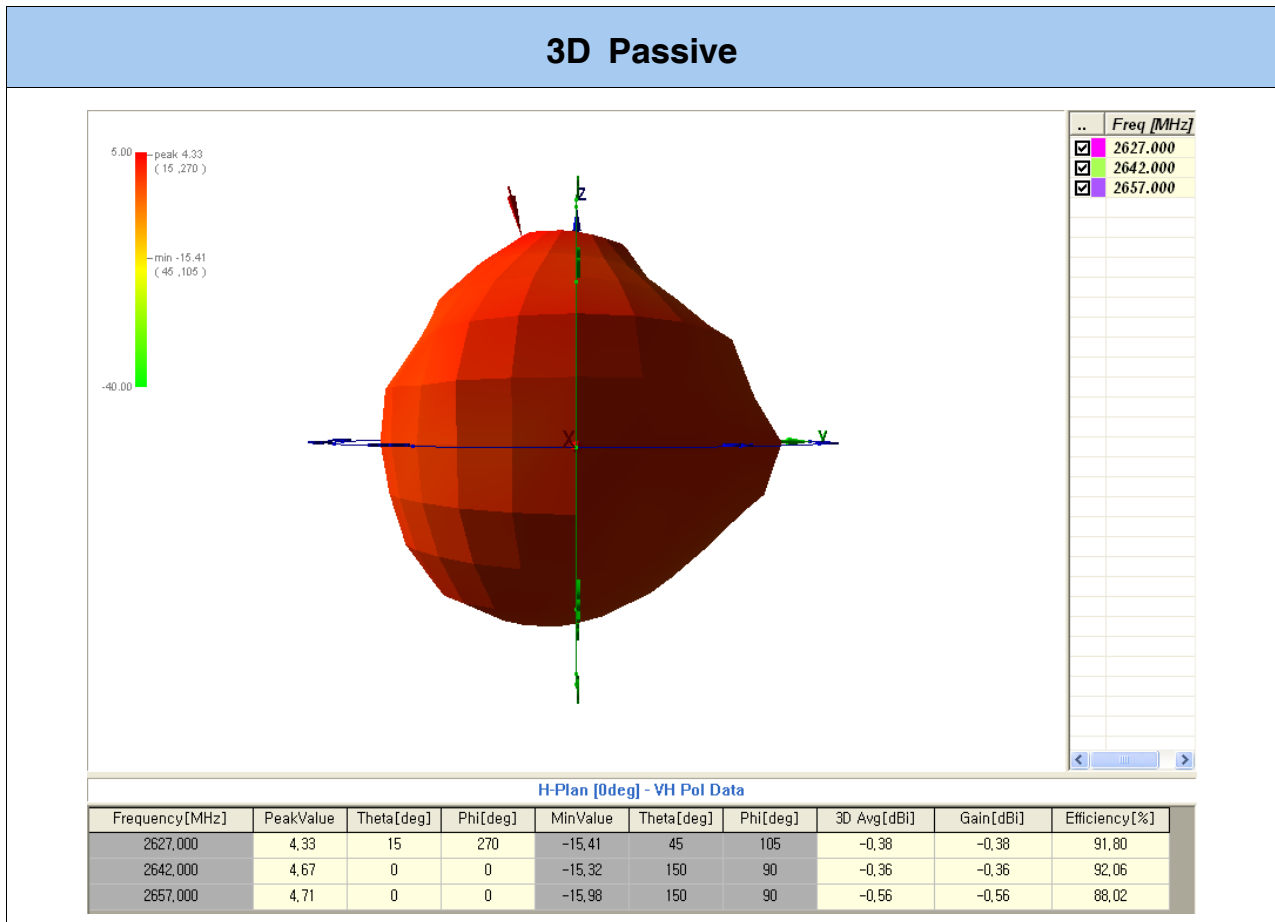


## - 3D Passive Gain For S-DMB

### ■ Test Result for Ver 0.0

SWR & Smith chart	3D	Peak [dBi]	Average [dBi]	Efficiency [%]
	2627MHz	4.33	-0.38	91.80
	2642MHz	4.67	-0.36	92.06
	2657MHz	4.71	-0.56	88.02

### ■ Radiation Pattern Ver 0.0

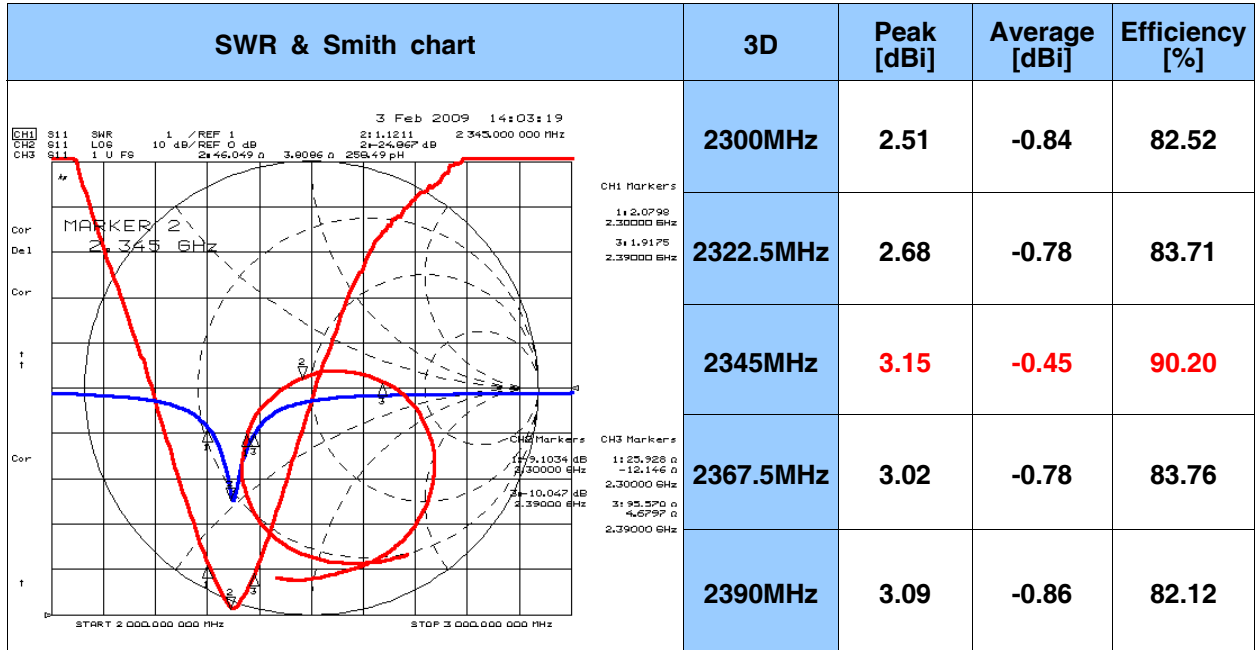


# Dielectric Chip Antenna

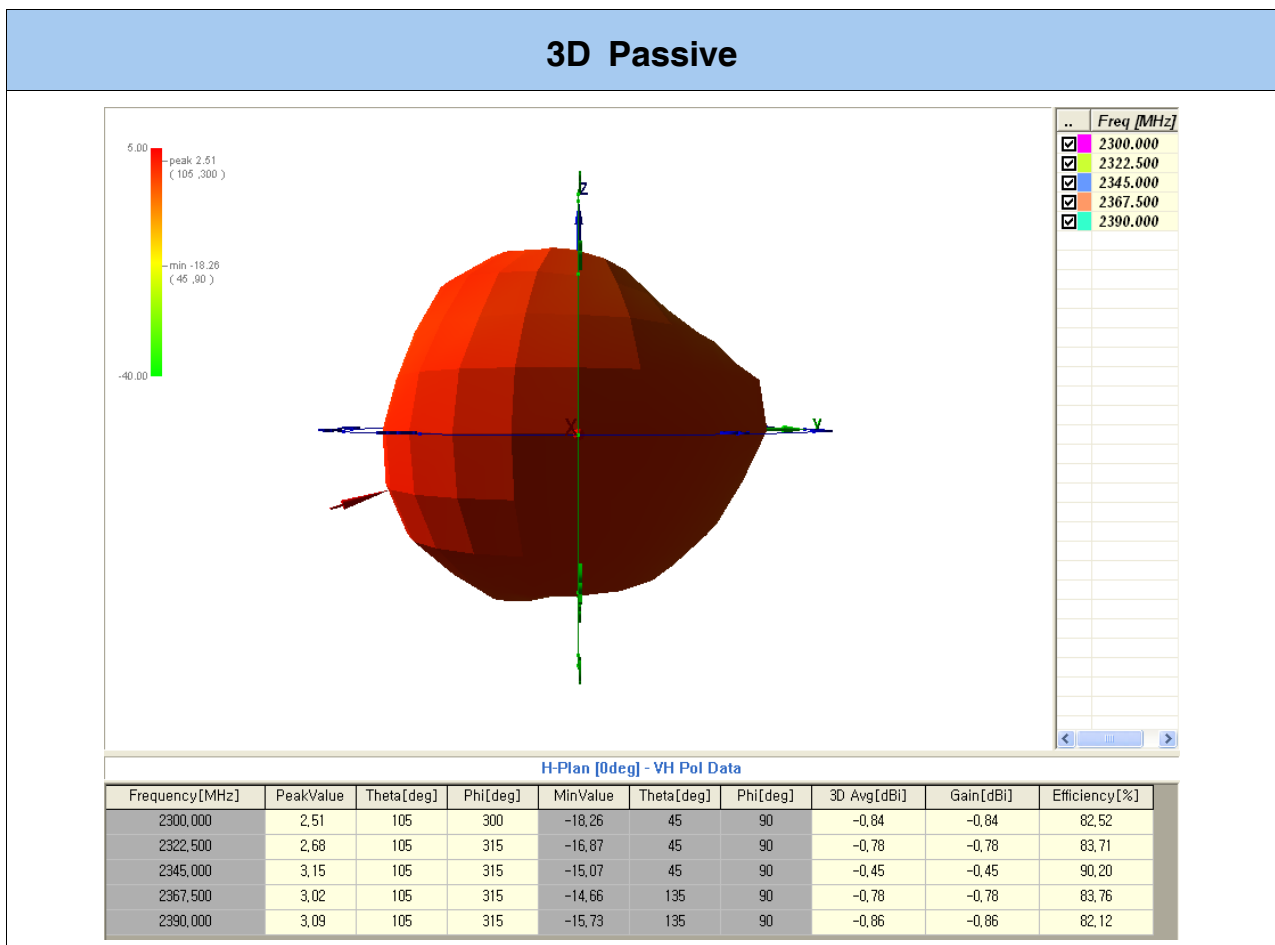


## - 3D Passive Gain For Wibro

### ■ Test Result for Ver 0.0



### ■ Radiation Pattern Ver 0.0





# Approval Specification

<b>Products</b>	<b>Dielectric Chip Antenna</b>
<b>Customer</b>	<b>LG HE Company</b>
<b>Model</b>	<b>RF-Module BM-LDS401</b>
<b>Customer CODE</b>	<b>EAA62705201</b>
<b>Supplier</b>	<b>PARTRON</b>
<b>Supplier CODE</b>	<b>SDBTPTR3015</b>



22-6, Seokwoo-dong, Hwaseong-si, Gyeonggi-do, 445-170, KOREA  
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Fax : 82-31-201-7800  
[www.partron.co.kr](http://www.partron.co.kr)

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**1. Manufacturer**

Supplier	PARTRON
Supplier CODE	SDBTPTR3015

**2. Model Name**

Basic Model	LA111-BS - BT
Variation Model	RF-Module BM-LDS401

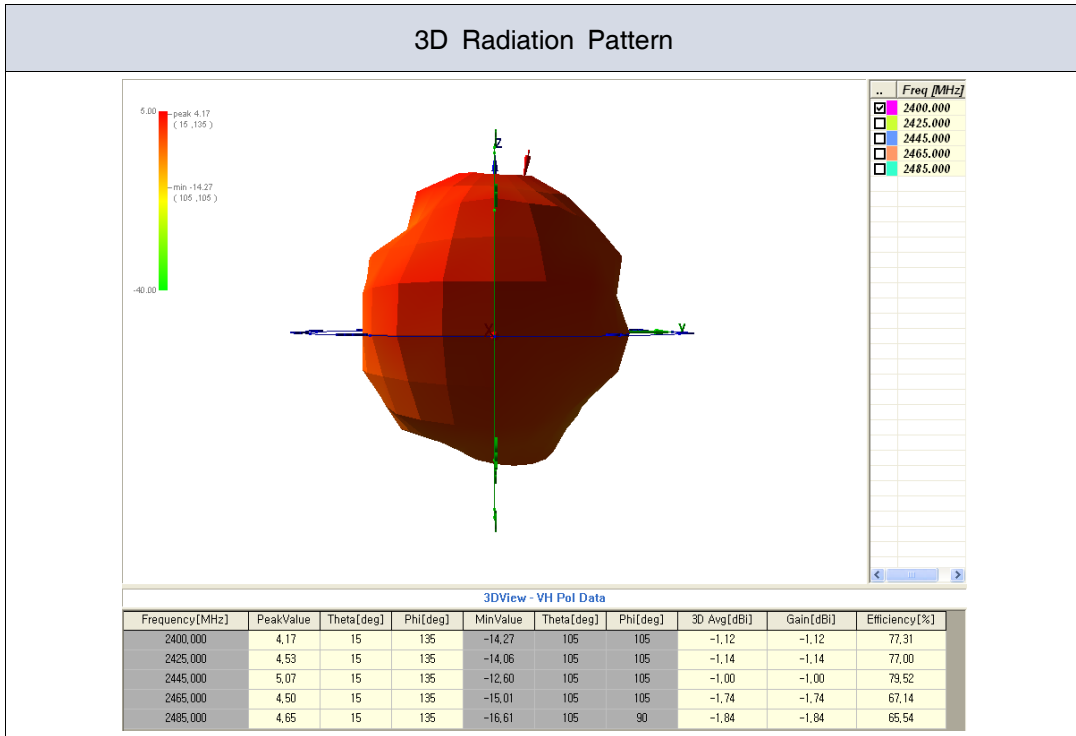
**3. Antenna Type**

- PIFA : Planar Inverted F Antenna

**4. Electrical Performance Data**
**4.1 Specification Sheet**

ITEM		SPEC	
Antenna Performance		Bluetooth	
Frequency Range [MHz]		2400 ~ 2485	
Average Gain [dBi]	3D	Peak	5.07
		Average	-1.00

#### 4.2 3D Radiation Pattern - BT Band



### 5. External Drawing

#### 5.1 Antenna Pattern Dimension

