

# APPROVAL SHEET

## **PCB ANTENNA**

### **2.4 GHz Band Working Frequency**

### **Halogens Free Product**

### **P/N: RFPCA331630IMAB301**

Customer : \_\_\_\_\_  
Customer 's Part No. : \_\_\_\_\_  
Approval No. : \_\_\_\_\_  
Issue Date : \_\_\_\_\_

\*Contents in this sheet are subject to change without prior notice.

| Version | Date         | Description | Author |
|---------|--------------|-------------|--------|
| V01     | 2015<br>Oct. | New Release | HWCHAN |
|         |              |             |        |
|         |              |             |        |
|         |              |             |        |
|         |              |             |        |
|         |              |             |        |

**ELECTRICAL CHARACTERISTICS**

| Item            | Specification    |
|-----------------|------------------|
| Frequency Range | 2.4 ~ 2.5 GHz    |
| Impedance       | 50 Ohm Nominal   |
| Return Loss     | -10 dB (Max)     |
| Peak Gain       | 3.96 dBi         |
| VSWR            | 2.0 (Max)        |
| Radiation       | Omni-directional |
| Polarization    | Linear Vertical  |
| Admitted Power  | 1W               |

\*note-1: Electrical characteristics will depend on customer's final application.

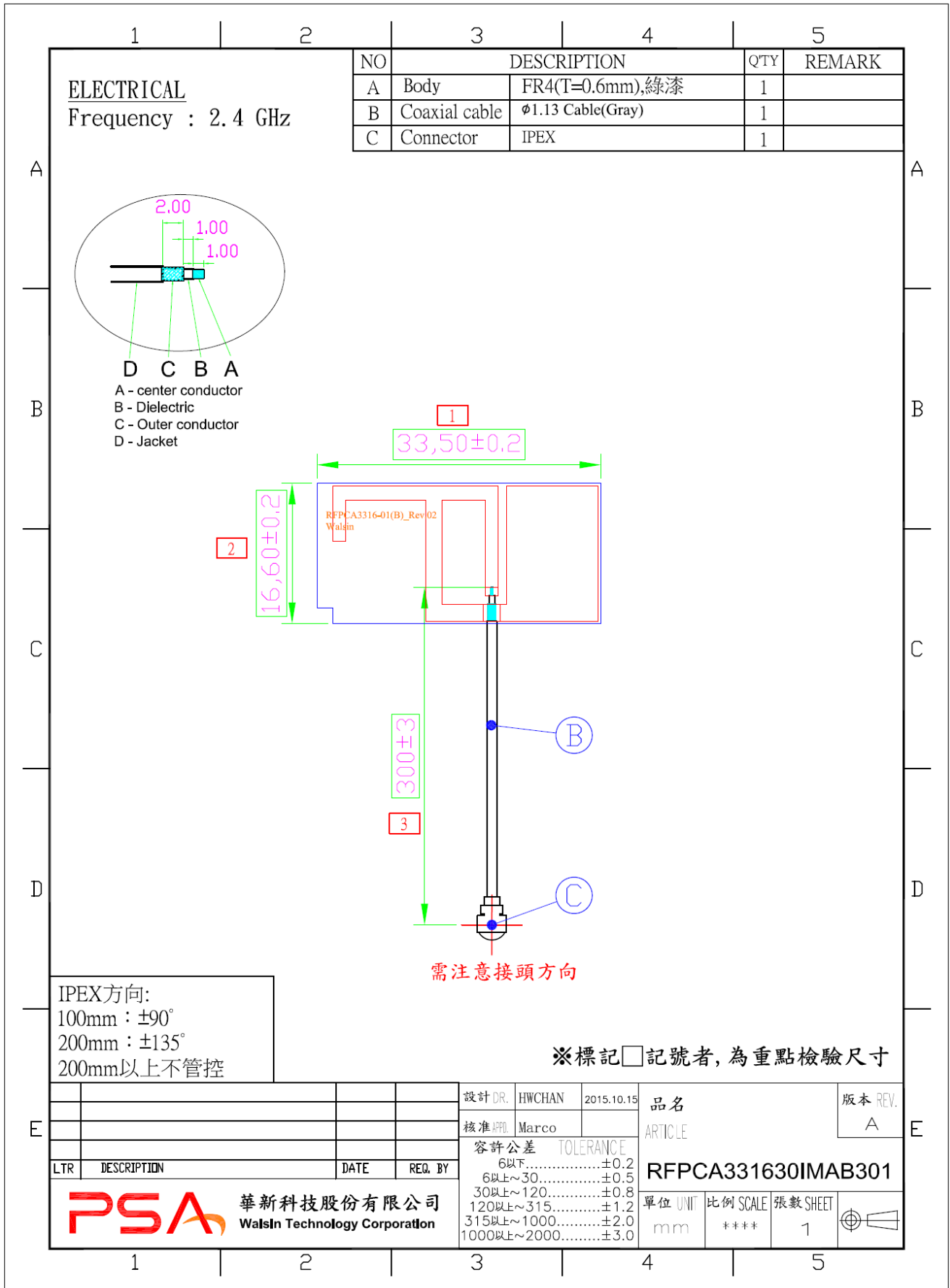
**MATERIAL TABLE**

| Items       | Description      |
|-------------|------------------|
| Cable       | ∅ 1.13(Gray)     |
| FPC Antenna | FR4(綠漆板) T=0.6mm |
| Connector   | IPEX             |

**ORDERING RULE**

| RF               | PCA              | 3316  | 30  | I  | M   | A   | B                                       | 3  | 01                  |
|------------------|------------------|---|---|--|---|---|---|--|---------------------|
| Type Code        | Product Code     | PCB Dimension (Unit: mm)  | Cable Length (unit: cm)                                   | Connector Brand  | Type of Connector   | Application   | Project status                          | Wire Diameter  | Project             |
| Walsin RF Device | PCA: PCB Antenna | Per 2 digits of length, width<br>e.g.:3316<br>Length 33.5mm, Width 16.6mm | 2 digits for cable length<br>e.g.:30<br>Cable Length:30cm | A: N<br>C:MCX<br>D:IPEX III<br>E: IPEX IV<br>F: IPEX A13<br>H: Hirose<br>I: IPEX<br>M: MMCX<br>S: SMA<br>T: TNC<br>U:MURATA<br>N: None | A: Reverse Female<br>B: Reverse Male<br>F: Female<br>M: Male<br>N: None | 0: 0GHz<br>3: 3GHz<br>5: 5GHz<br>6: 6GHz<br>A: 2.4GHz ISM band<br>B: GSM 900/1800 dual band<br>G: GPS band<br>L: 2.4/5.2/5.8 GHz tri-band<br>N: NFC<br>T: LTE band<br>W: WCDMA band | B: MP<br>T: Durin g Test<br>X: Pile Run | 0:None<br>1:∅ 0.81<br>3:∅ 1.13<br>6:RG316<br>7:∅ 1.37<br>8:RG178 | 01-99 series number |

Appendix A: Dimensions



# Test Report

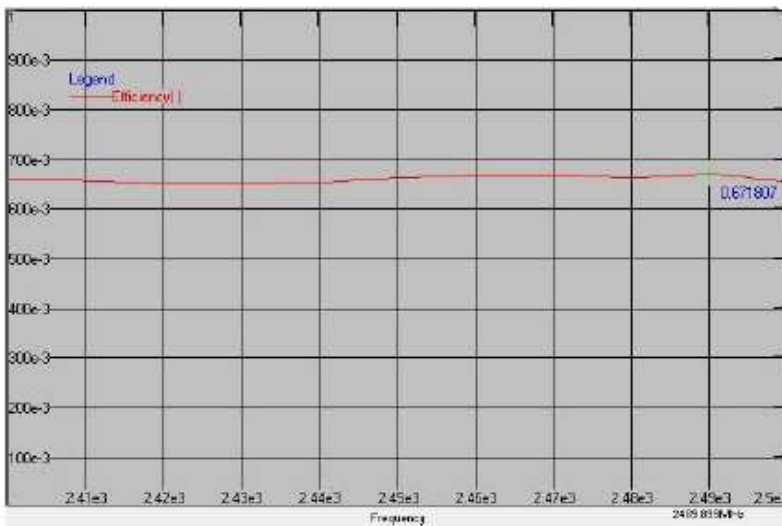
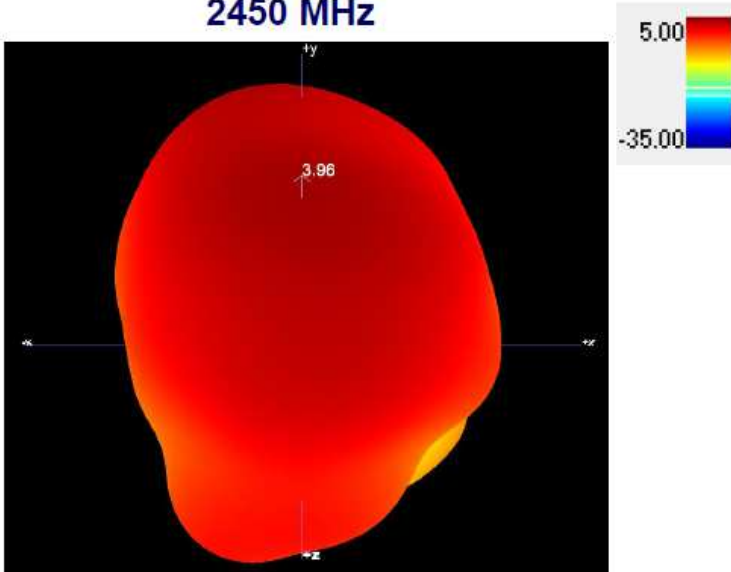
## ELECTRICAL CHARACTERISTICS

### Return Loss

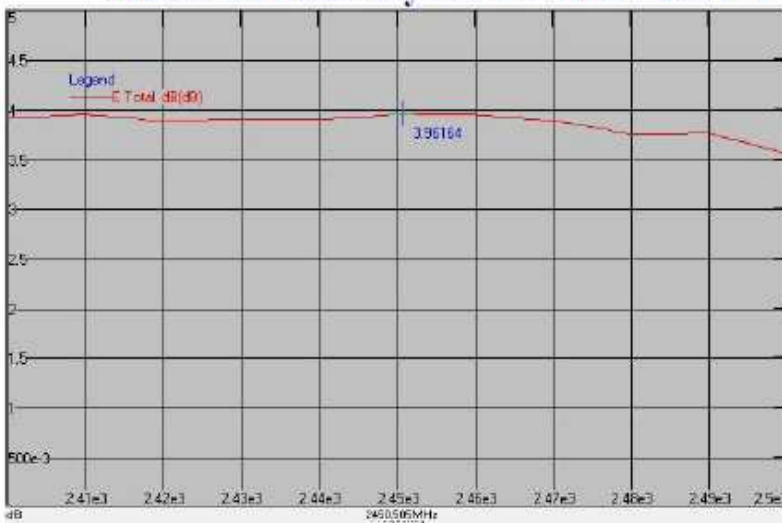


## Antenna Efficiency & Peak Gain

2450 MHz



**Maximum Efficiency at 2490 MHz : 67.18%**



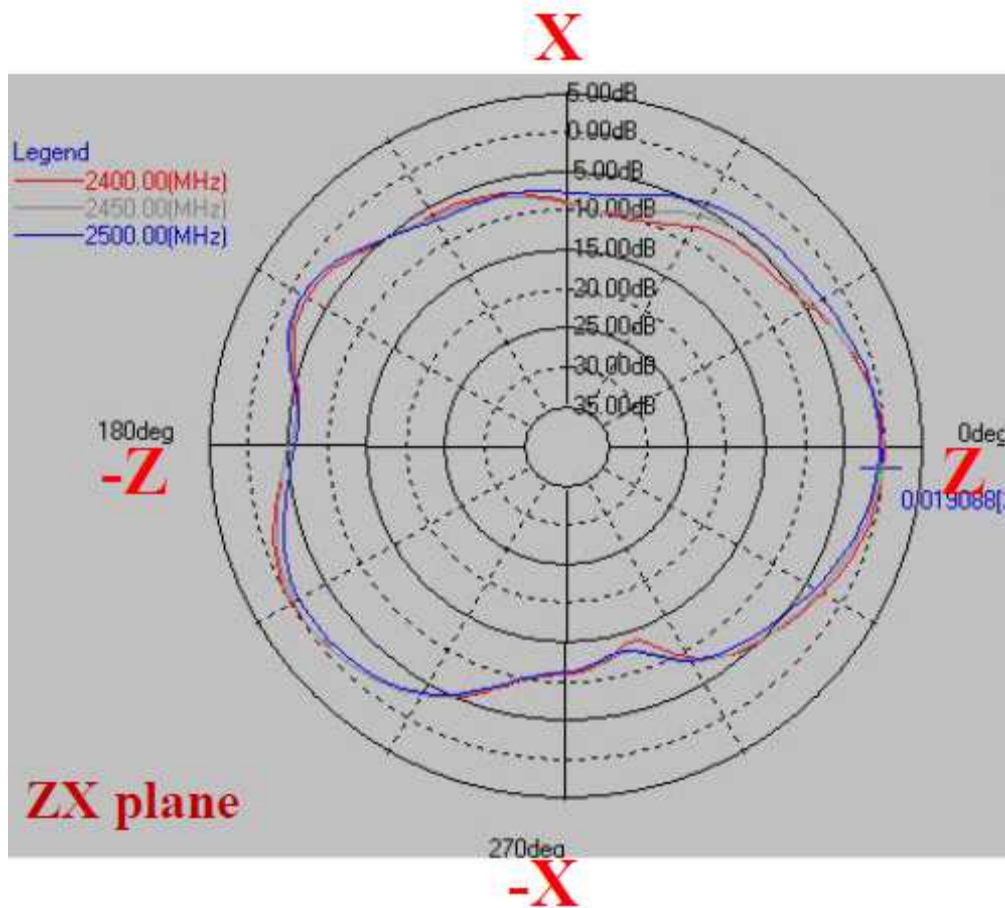
**Maximum Peak Gain at 2450 MHz : 3.96 dBi**

# RADIATION PATTERN

2400~2500 MHz

Phi=0.00deg

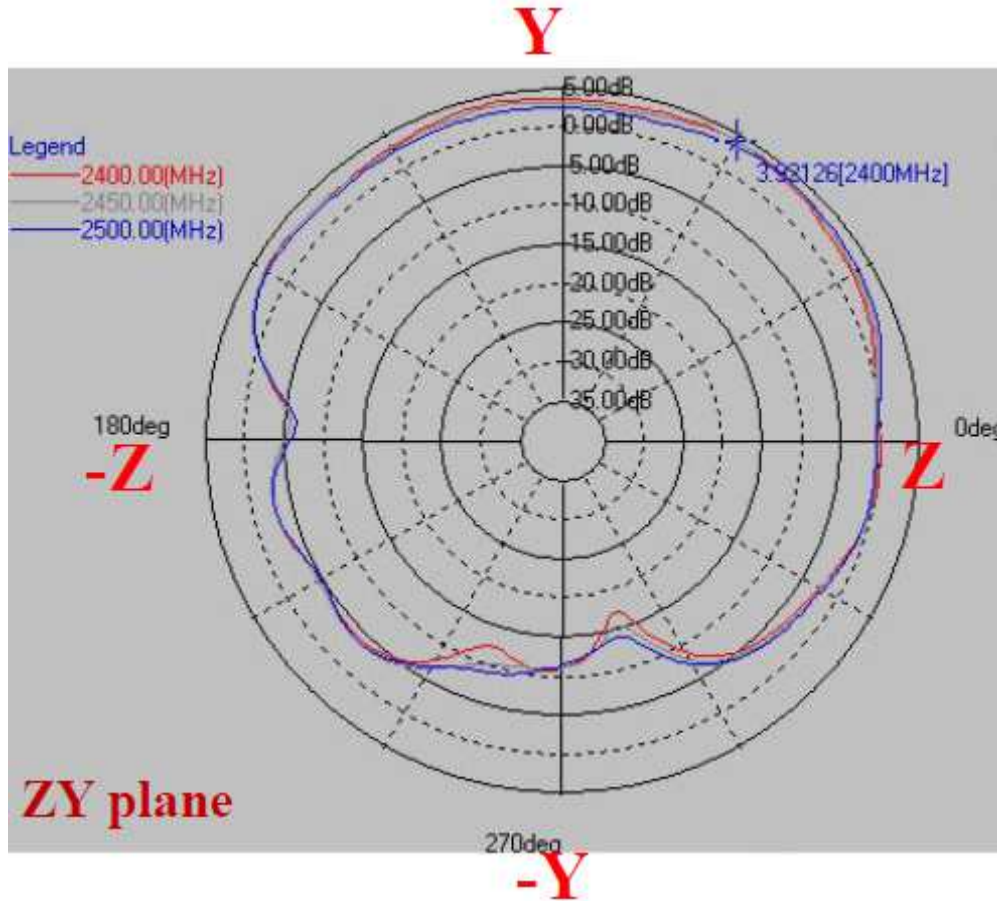
Gain . dB



|                 | ZX plane       |              |
|-----------------|----------------|--------------|
| Frequency [MHz] | Max Value [dB] | Average [dB] |
| 2400            | 0.02           | -4.00        |
| 2450            | -0.39          | -4.02        |
| 2500            | -0.42          | -4.02        |

Phi=90.00deg

Gain . dB

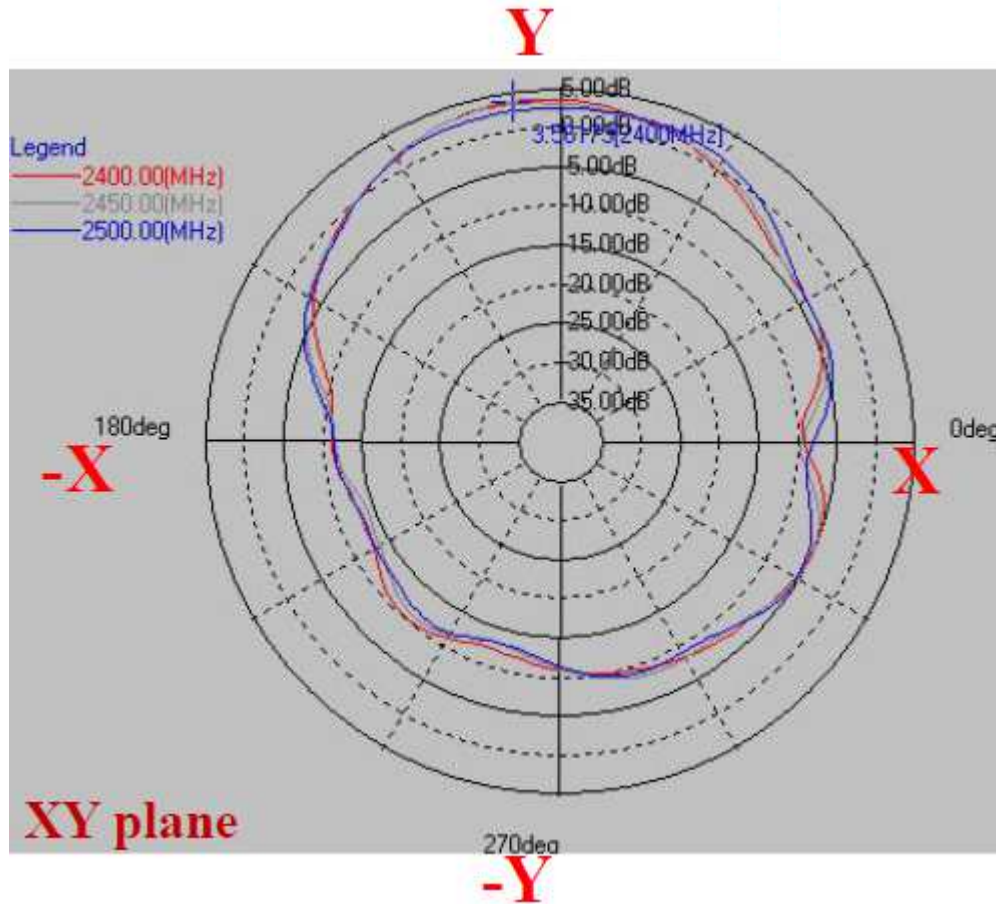


|                 | ZY plane       |              |
|-----------------|----------------|--------------|
| Frequency [MHz] | Max Value [dB] | Average [dB] |
| 2400            | 3.92           | 0.26         |
| 2450            | 3.96           | 0.21         |
| 2500            | 3.55           | -0.04        |



Theta=90.00deg

Gain . dB



|                 | XY plane       |              |
|-----------------|----------------|--------------|
| Frequency [MHz] | Max Value [dB] | Average [dB] |
| 2400            | 3.56           | -2.85        |
| 2450            | 3.23           | -2.92        |
| 2500            | 2.28           | -2.97        |

单击下面可查看定价，库存，交付和生命周期等信息

[>>Walsin Technology\(华新科技\)](#)