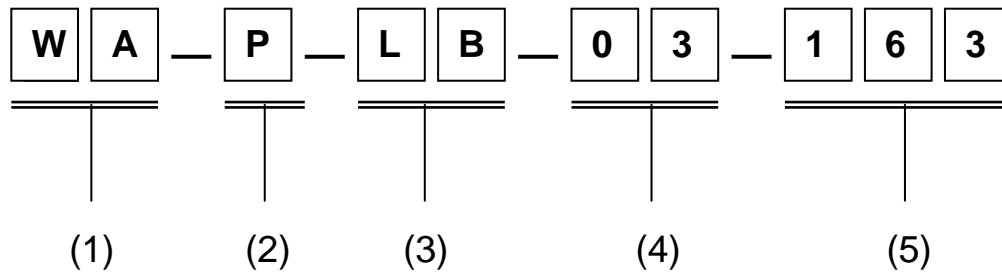


# Embedded Dual Band Wi-Fi Antenna for WA-P-LB-03-163

## 1. Explanation of part number :



- (1) Product Type : Wireless Antenna
- (2) Material : PCB
- (3) Frequency : 2400~2500 / 5150~5850 MHz
- (4) Coaxial Cable Type : Gray Cable
- (5) Suffix : 163

## 2. Electrical Specification :

Those specifications were specially defined for **SD1 WiFi 2** model **Wi-Fi Antenna**, and all characteristics were measured under the model's handset testing jig.

### 2-1. 2400-2500MHz :

Characteristics		Specifications	Unit
Outline Dimension		18x18x0.8	mm
Center Frequency		2450	MHz
VSWR		2 max.	
Polarization		Linear Polarization	
Impedance		50	Ω
Gain	Peak	2.43	dBi
	Efficiency	60.56	%

### 2-2. 5150-5850MHz :

Characteristics		Specifications	Unit
Center Frequency		5500	MHz
VSWR		2 max.	
Polarization		Linear Polarization	
Impedance		50	Ω
Gain	Peak	4.41	dBi
	Efficiency	61.86	%

UNLESS OTHER SPECIFIED TOLERANCES ON :  
 X=N/A      X.X=N/A      X.XX=N/A  
 ANGLES=N/A      HOLEDIA=N/A



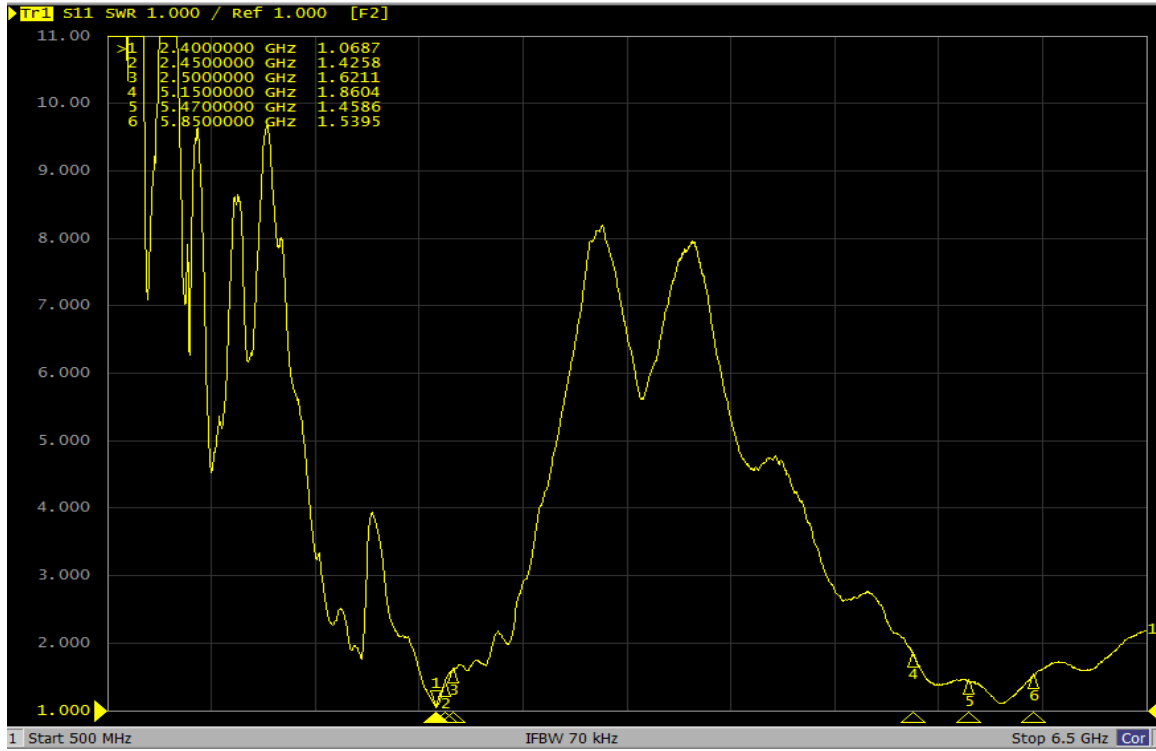
**INPAQ TECHNOLOGY CO., LTD.**


SCALE : N/A      UNIT : mm  
 DRAWN BY:黃建棠      CHECKED BY:鄭榮謀  
 DESIGNED BY:許嘉晉      APPROVED BY:謝立庭

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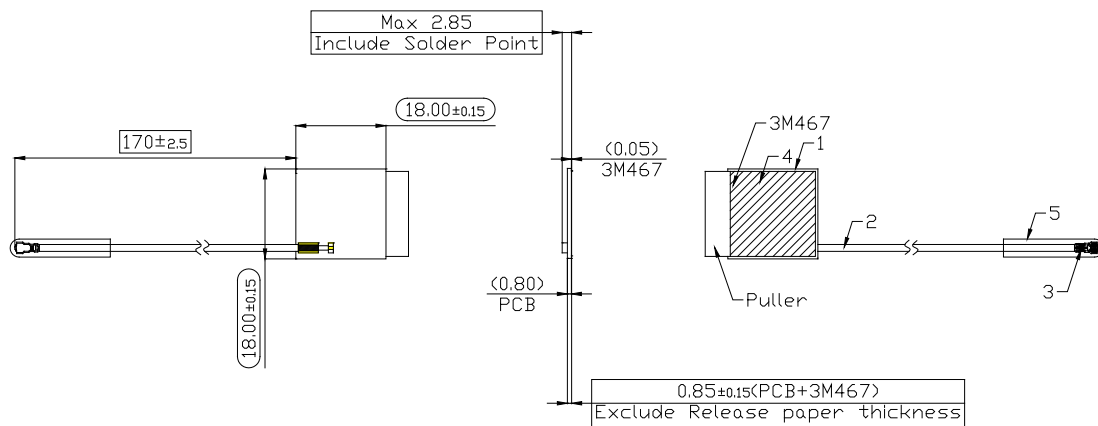
2-3. Return loss :



UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A      X.X=N/A      X.XX=N/A ANGLES=N/A      HOLEDIA=N/A		 <b>INPAQ TECHNOLOGY CO., LTD.</b>
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DESIGNED BY:許嘉晉	APPROVED BY:謝立庭	
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		SPEC REV. <b>P1</b>

### 3. Antenna Drawing :

3-1 The appearance of the antenna is according to drawing Figure . 3-1-1



NOTE:

- 外觀標準:需完整無破損，不可有變形、髒污、毛邊、翹曲、裂縫、褶疊等情形。  
Appearance standard : They must be complete, It means those must not have the deformations, dirt, burns, warps, cracks, folds, etc.
- 工程圖上"□"號為重點尺寸標註指示  
Mark "□" are the key dimensions.
- 工程圖上"≡"號為Cpk量測尺寸標註指示  
Mark "≡" are CPK dimensions.
- QC&FQC只需量測重點尺寸&CPK  
CPK&KEY dimensions for □QC&FQC.

Drawing Rev.P0

Figure 3-1-1.

ITEM	DESCRIPTION	MATERIAL SPECIFICATION	QUANTITY	UNIT
1	PCB	18x18x0.8mm	1	PCS
2	Cable	RF Cable1.37,LLS,Gray	1	PCS
3	Connector	I-PEX MHF 4-L I-PEX Equivalent(compatible)	1	PCS
4	Adhesive	17x17x0.05,3M467	1	PCS
5	Tube	O.D.1.5x20 mm	1	PCS

UNLESS OTHER SPECIFIED TOLERANCES ON :  
 X=N/A      X.X=N/A      X.XX=N/A  
 ANGLES=N/A      HOLEDIA=N/A



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 DESIGNED BY:許嘉晉      APPROVED BY:謝立庭

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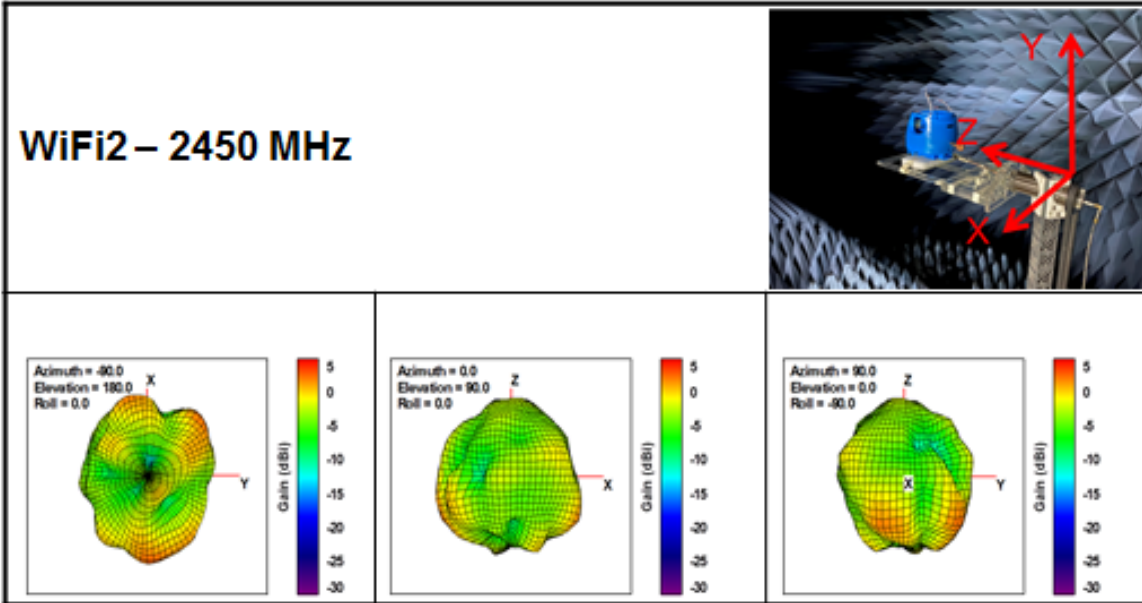
DOCUMENT NO.

ENS000143700

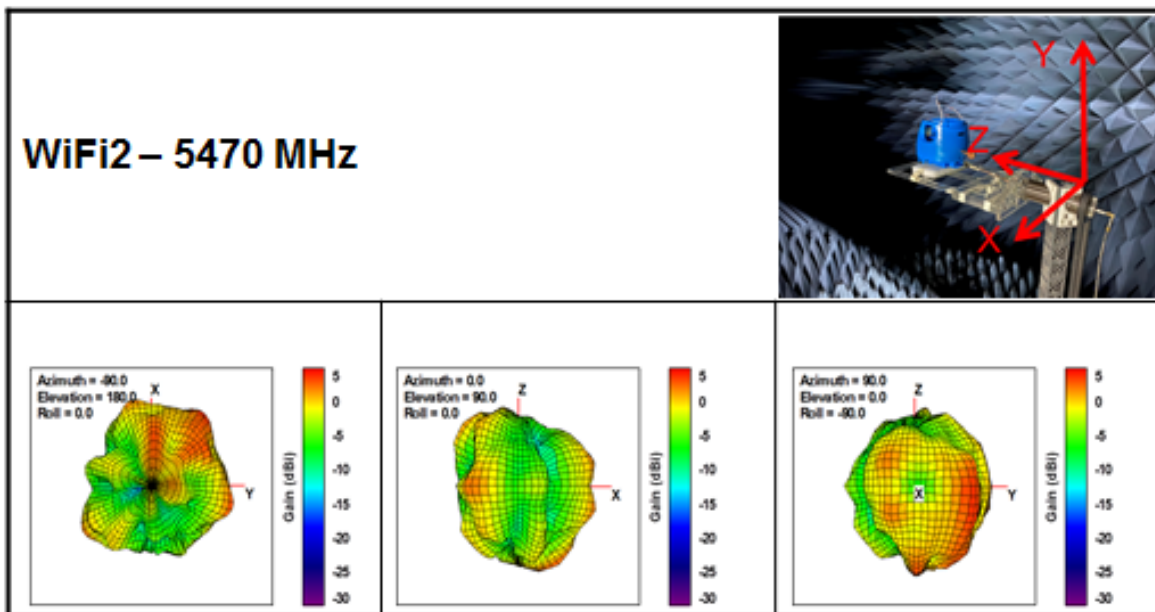
SPEC REV.  
 P1


### 4. Radiation Pattern :

#### 4-1. 2400-2500MHz :



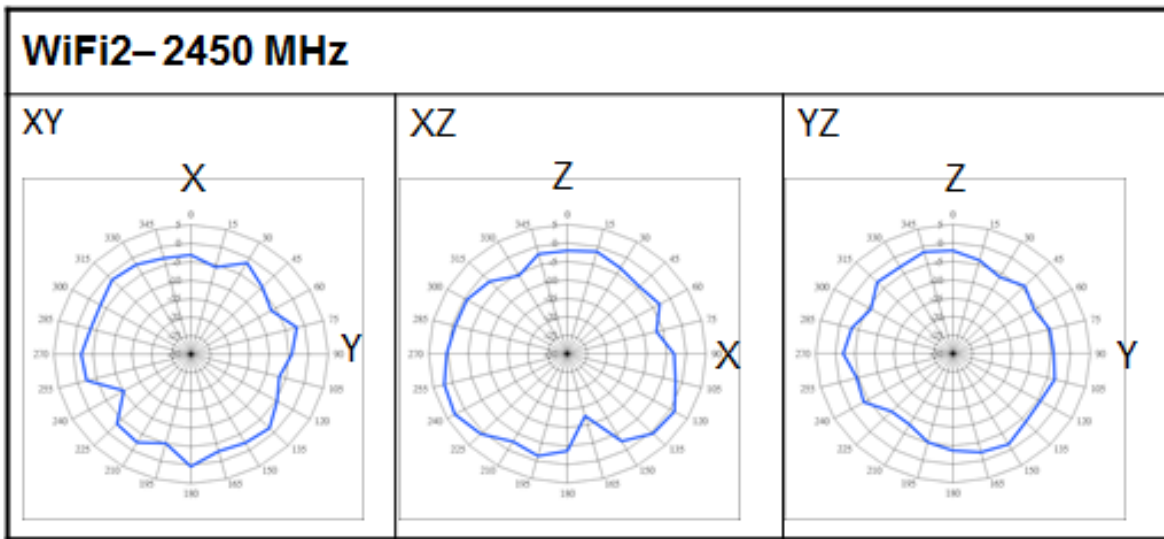
#### 4-2. 5150-5850MHz :



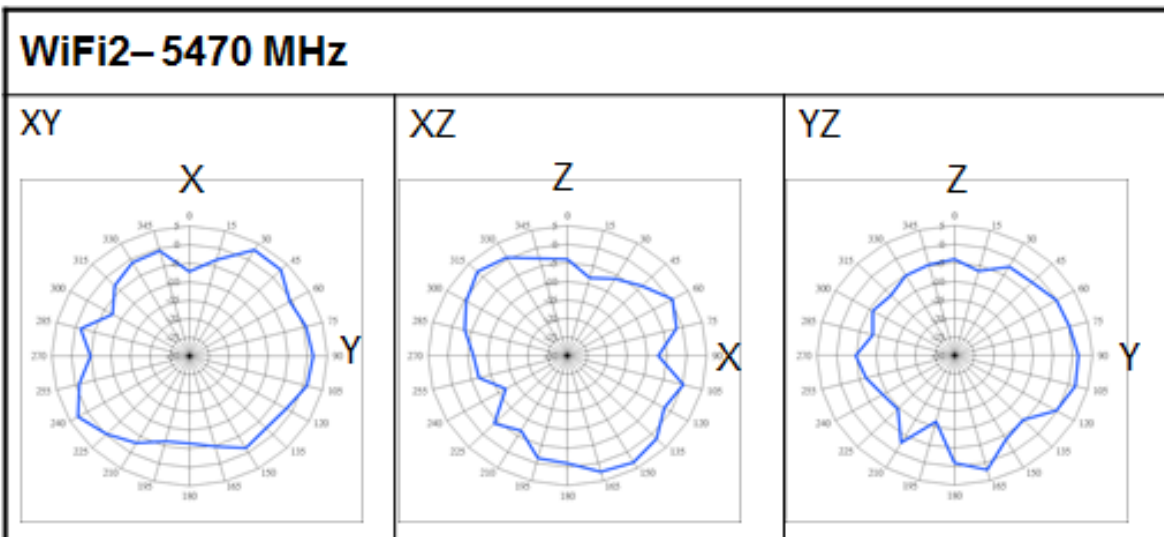
UNLESS OTHER SPECIFIED TOLERANCES ON :			<b>INPAQ TECHNOLOGY CO., LTD.</b>	
X=N/A      X.X=N/A      X.XX=N/A ANGLES=N/A      HOLEDIA=N/A				
SCALE : N/A	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION		
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5. 2D Radiation Pattern :

5-1. 2400-2500MHz :



5-2. 5150-5850MHz :



UNLESS OTHER SPECIFIED TOLERANCES ON :  
 X=N/A      X.X=N/A      X.XX=N/A  
 ANGLES=N/A      HOLEDIA=N/A



**INPAQ TECHNOLOGY CO., LTD.**

SCALE : N/A      UNIT : mm  
 DRAWN BY:黃建棠      CHECKED BY:鄭榮謀  
 DESIGNED BY:許嘉晉      APPROVED BY:謝立庭

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## 6. Efficiency Table :

Frequency / MHz	Efficiency / dB	Efficiency / %	Gain / dB
2400	-2.01	62.93	2.2
2450	-1.81	65.95	2.43
2500	-2.18	60.56	2.16
5150	-2.09	61.86	3.16
5470	-1.97	63.5	3.91
5850	-2.05	62.34	4.41

UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A            X.X=N/A            X.XX=N/A ANGLES=N/A            HOLEDIA=N/A			<b>INPAQ TECHNOLOGY CO., LTD.</b>	
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