

APPROVAL SHEET

Dipole Antenna

2.4~2.5/5.15~5.85/5.925~7.125 GHz Working Frequency

P/N: RFDPA161517IMLB902

Customer : 威強電工業電腦股份有限公司

Customer 's Part No. : CKP-32505-012600-100-HF

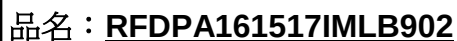
Approval No. :

Issue Date :

佳邦科技股份有限公司 INPAQ TECHNOLOGY CO., LTD.

地址 Add : 326 桃園市楊梅區高獅路 566 之 1 號
(566-1,Ko-Shi Road, Yang-Mei, Tao-Yuan 32668,Taiwan.

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History List

PAGE 1 OF 20

品名：RFDPA161517IMLB902

1. Explanation of part number：

RF	DPA	1615	17	I	M	L	B	9	02
Type Code	Product Code	Dipole Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
RF Device	Dipole Antenna	Per 2 digits of length, width e.g.: 1614 Length 160.0mm, Width140.0mm	2 digits for cable length e.g.:20 5G1 : Length 17.5cm 5G2 : Length 17.5cm 2G1 : Length 20.0cm 2G2 : Length 13.0cm BT : Length 7.0cm	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female B: Reverse Male F: Female M: Male N: None	0: 0GHz 3: 3GHz 6: 6GHz 5: 5GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.X GHz tri-band N: NFC T: LTE band W: WCDMA band	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 2:Ø1.32 3:Ø1.13 4:Low Loss Ø1.13 5:Ø0.5 6:RG316 7: Ø1.37 8:RG178 9:Low Loss Ø1.37	01~99 series number

2. Electrical Specification：

Item	Specification
Working Frequency Range	2.4~2.5 / 5.15 ~ 5.85 / 5.925 ~7.125 GHz
Gain	2.83 dBi(@2.4~2.5 GHz) 3.98 dBi(@5.15 ~ 5.85 GHz) 4.53 dBi(@5.925 ~7.125 GHz)
Return Loss	-10dB(Max)
VSWR	2 max.
Polarization	Linear
Radiation Pattern	Omni-directional
Impedance	50Ω
Operation Temperature	-20℃ ~ +65℃
Cable Loss	2GHz ≤ 0.79 dB 6GHz ≤ 1.25 dB 5GHz ≤ 0.85 dB

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：邱瑩鈺

CHECKED BY：詹惠雯

DESIGNED BY：王章程

APPROVED BY：陳振榮

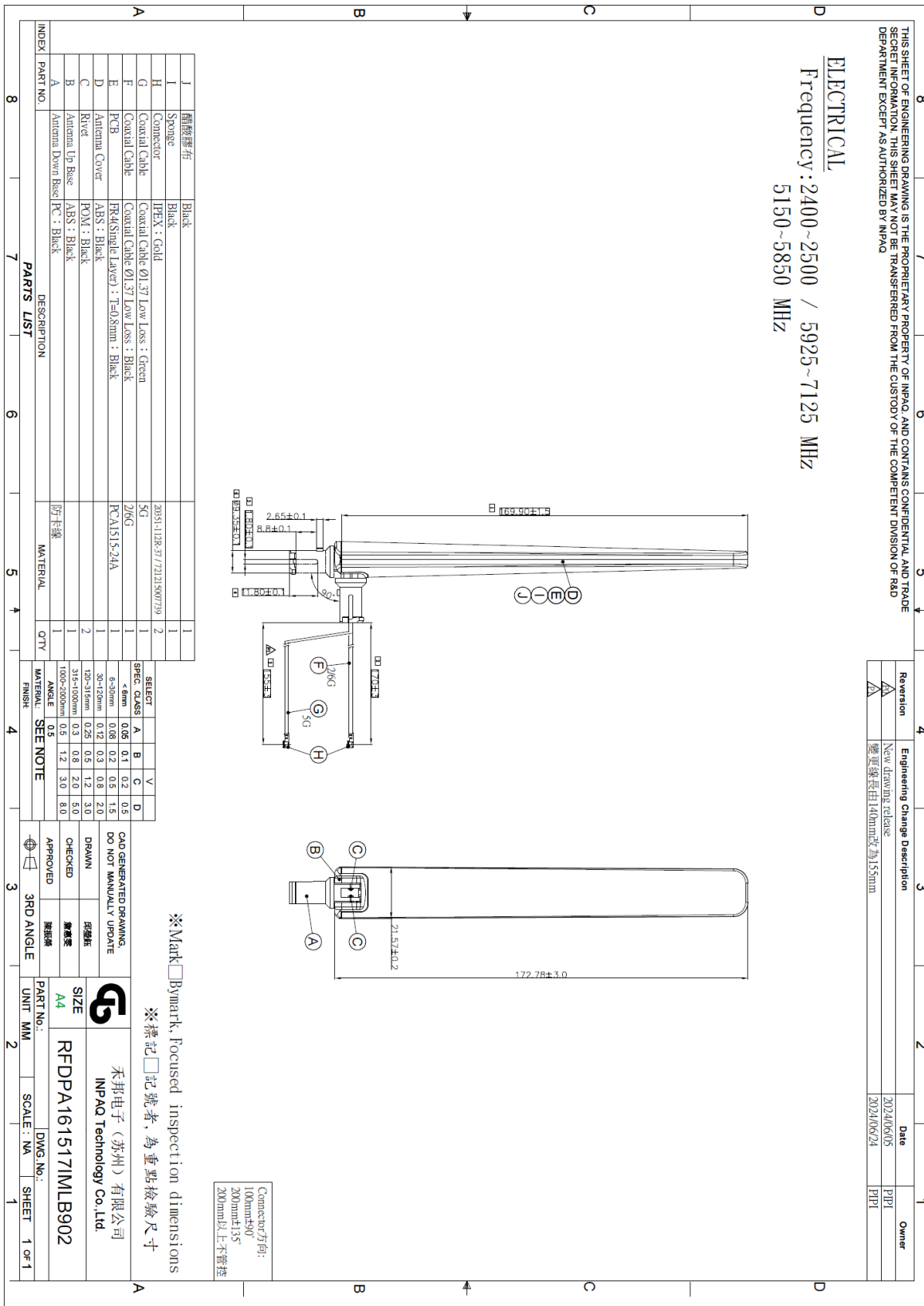
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TITLE：RFDPA161517IMLB902

DOCUMENT NO.

SPEC REV.
P1

3. Drawing :



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

SCALE : N/A

UNIT : mm

DRAWN BY : 邱發鈺

CHECKED BY : 詹惠愛

DESIGNED BY : 王韋程

APPROVED BY : 陳振榮

TITLE : RFDPA161517IMLB902



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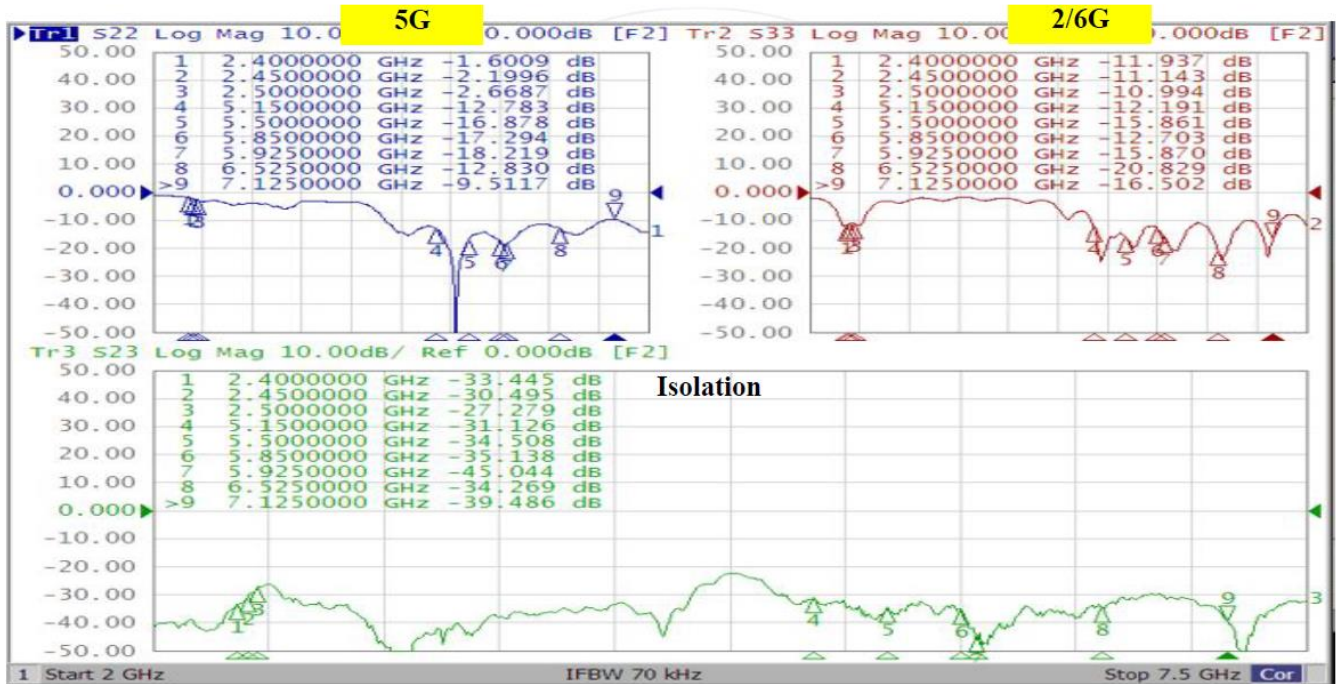
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SPEC REV.
P1

ELECTRICAL CHARACTERISTICS

S-parameter



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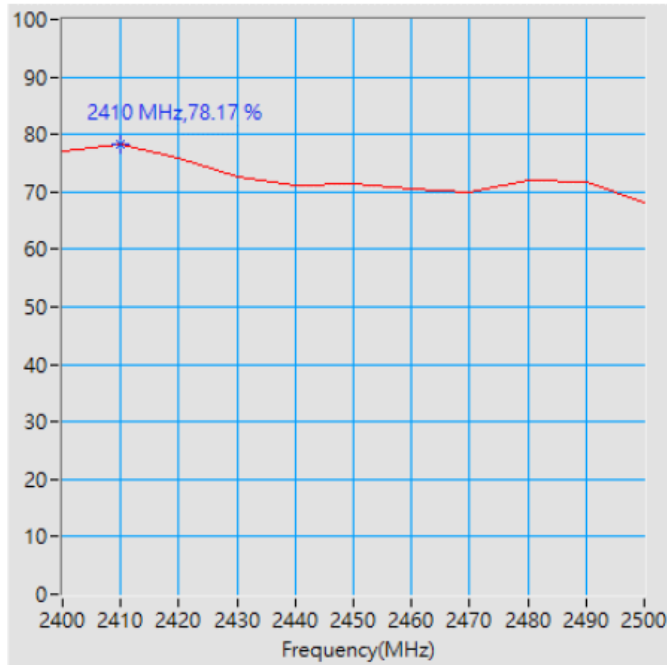
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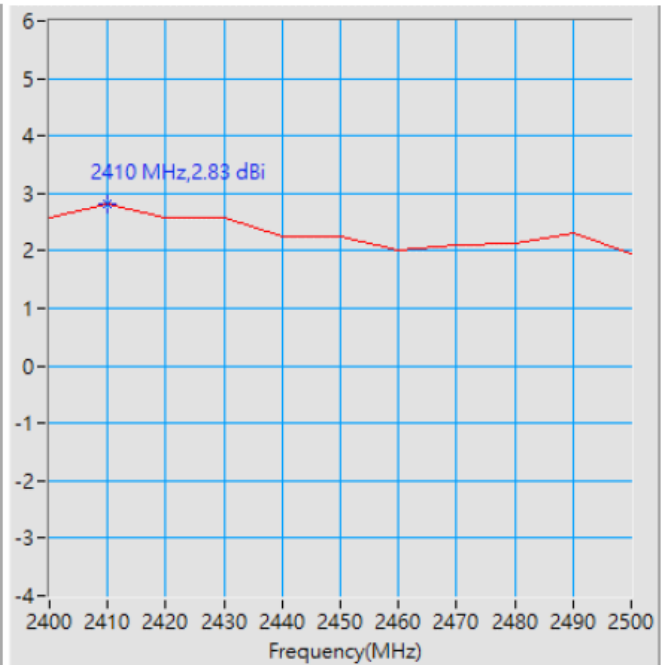
SPEC REV.
P1

■ Antenna Efficiency and Peak Gain

(2400 ~ 2500) MHz



Maximum Efficiency at 2410 MHz : 78.17 %



Maximum Peak Gain at 2410 MHz : 2.83 dBi

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.

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UNIT : mm

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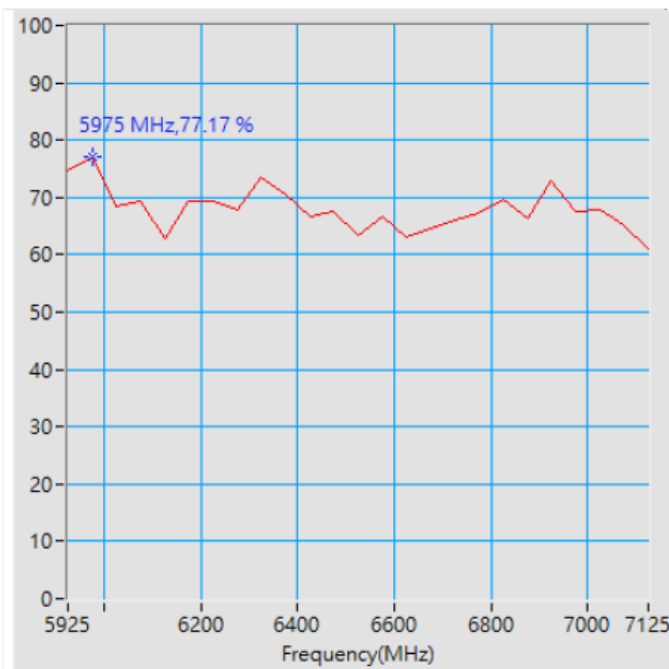
APPROVED BY : 陳振榮

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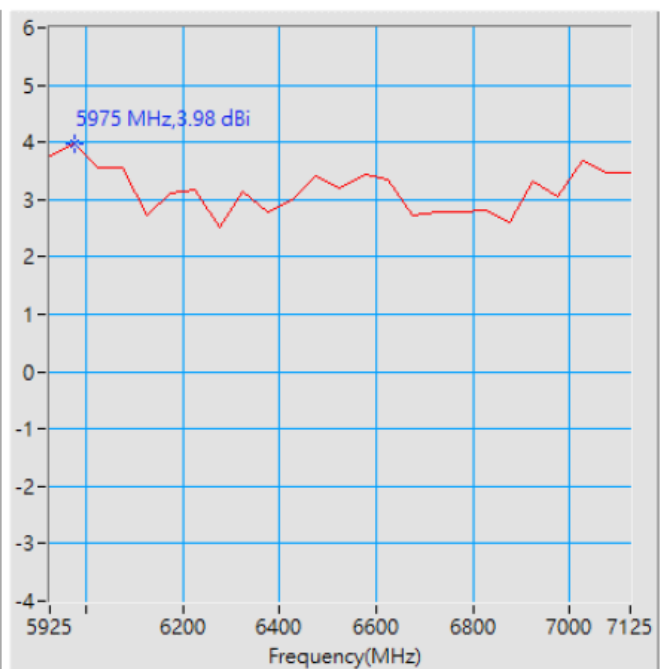
TITLE : RFDPA161517IMLB902

DOCUMENT
NO.

SPEC REV.
P1

(5925 ~ 7125) MHz

Maximum Efficiency at 5975 MHz : 77.17 %



Maximum Peak Gain at 5975 MHz : 3.98 dBi

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 : 邱瑩鈺

CHECKED BY : 詹惠雯

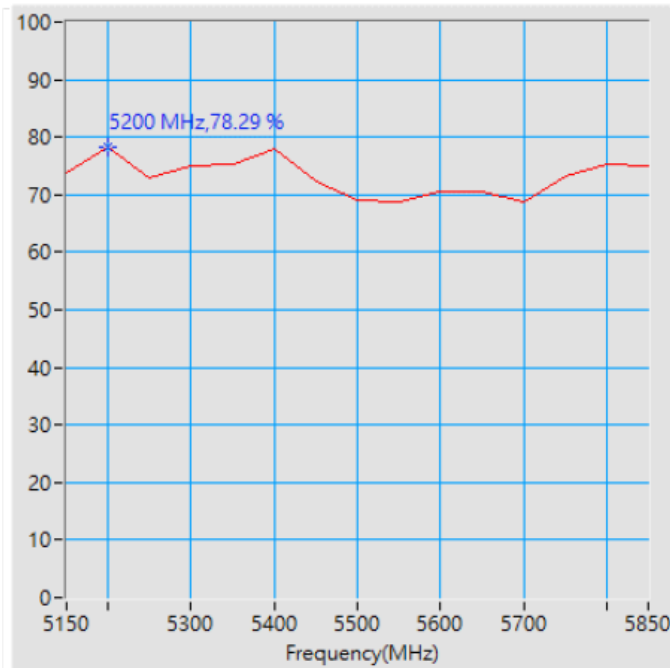
DESIGNED BY : 王章程

APPROVED BY : 陳振榮

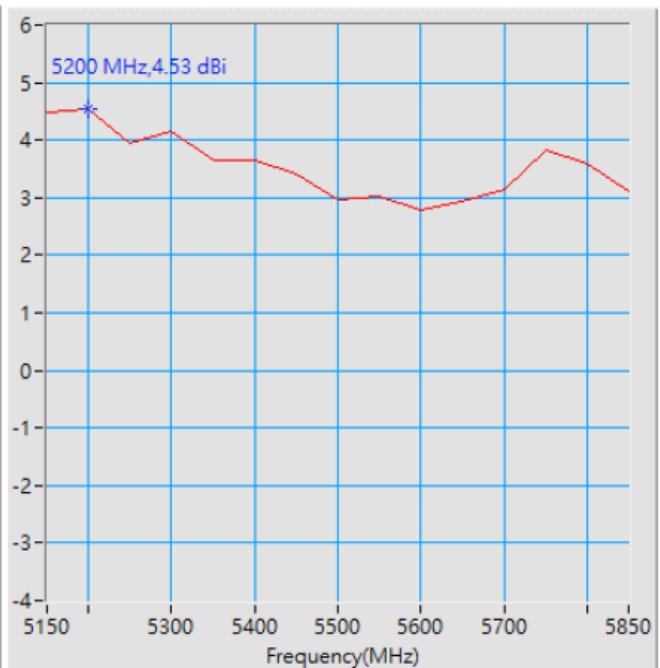
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TITLE : RFDPA161517IMLB902

DOCUMENT
NO.SPEC REV.
P1

(5150 ~ 5850) MHz

Maximum Efficiency at 5200 MHz : 78.29 %



Maximum Peak Gain at 5200 MHz : 4.53 dBi

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

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P1

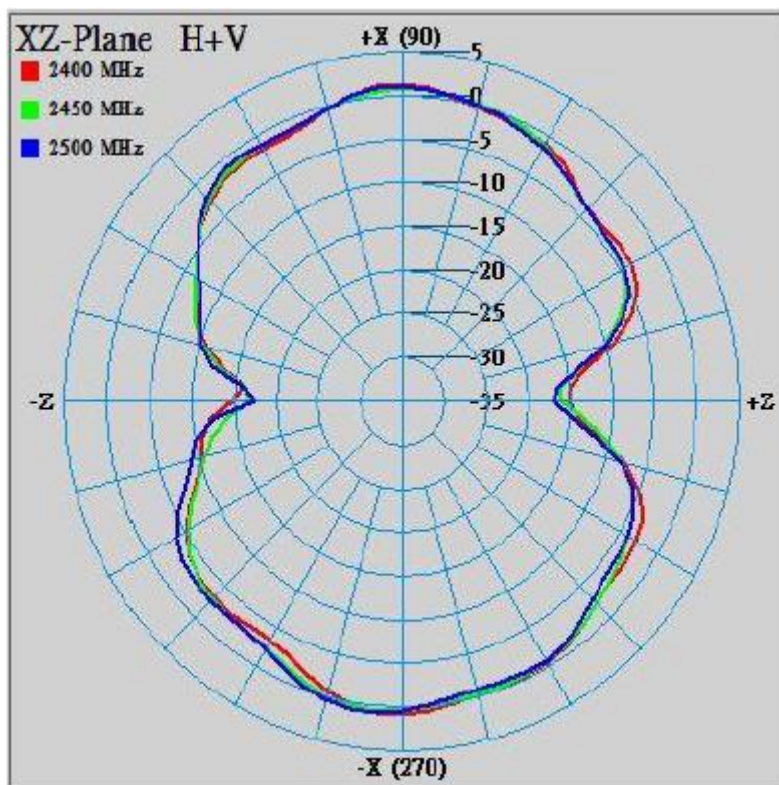
RADIATION PATTERN

(2400 ~ 2500) MHz

X-Z Plane

Phi=0.00deg

Gain . dB



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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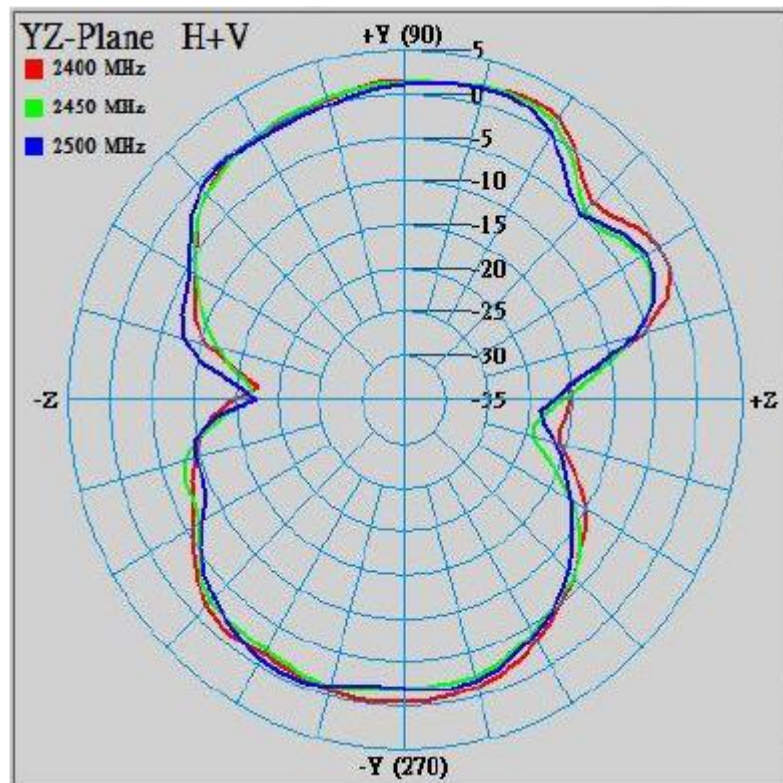
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DOCUMENT
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SPEC REV.
P1

Y-Z Plane
Phi=90.00deg

Gain . dB



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X = N/A X.X = N/A X.XX = N/A
ANGLES = N/A HOLEDIA = N/A



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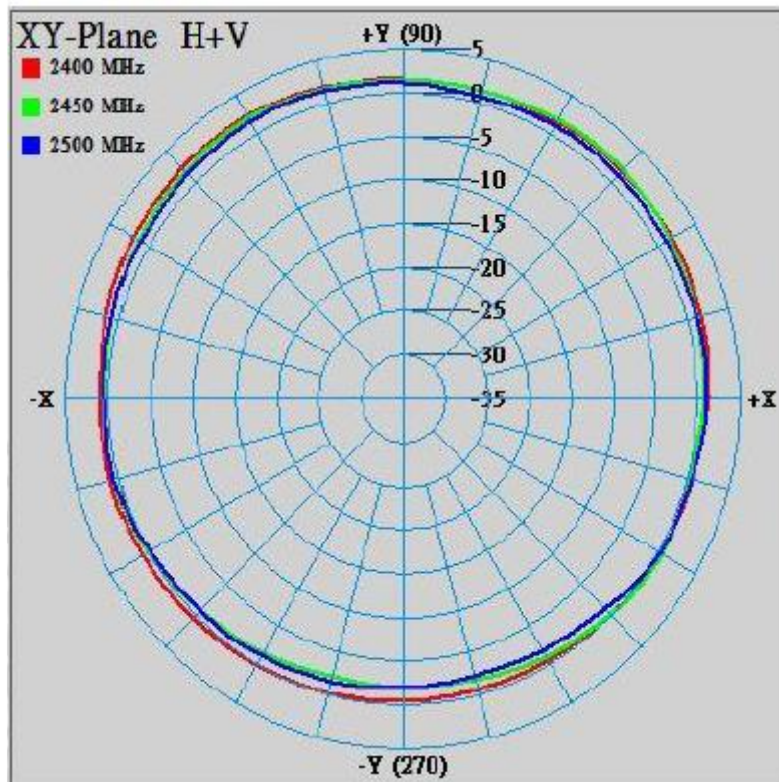
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SPEC REV.
P1

X-Y Plane

Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
2400	1.24	-2.68	2.58	-2.19	2.23	1.02
2450	0.77	-2.73	2.25	-2.72	1.96	0.58
2500	1.06	-2.67	1.93	-2.82	1.59	0.30

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



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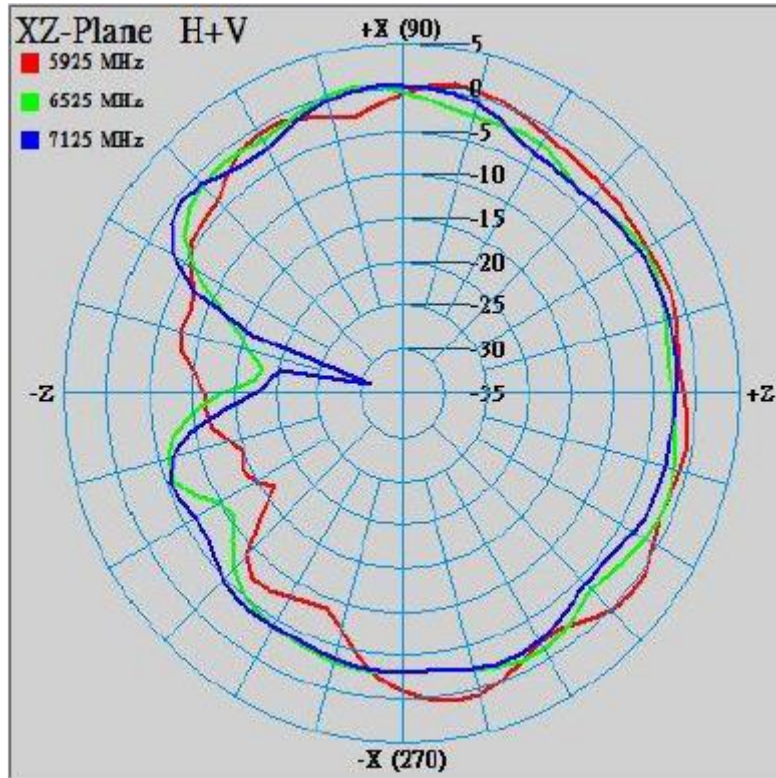
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P1

(5925 ~ 7125) MHz**X-Z Plane****Phi=0.00deg****Gain . dB**

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ANGLES = N/A HOLEDIA = N/A

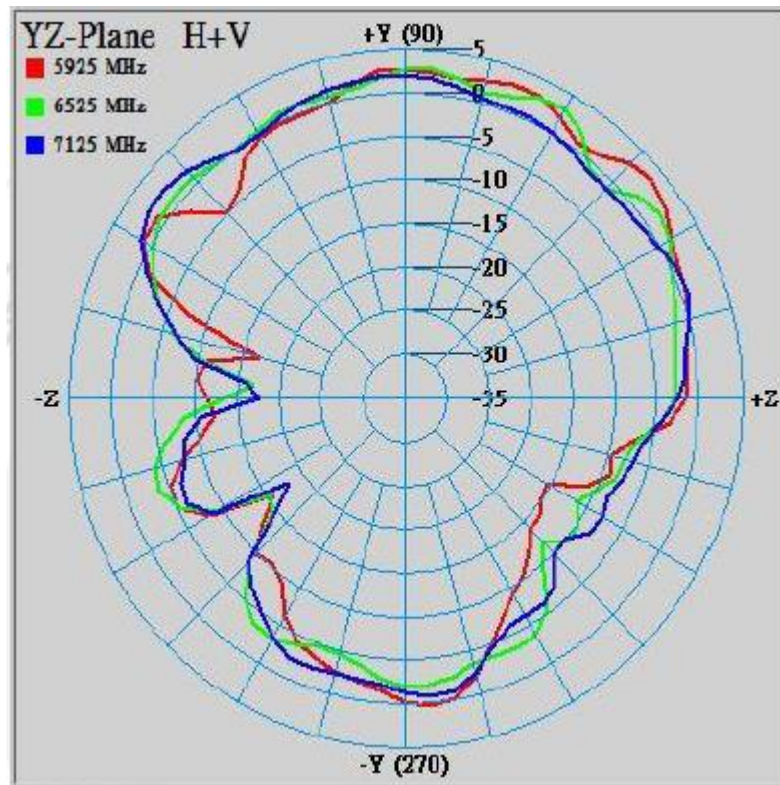
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P1**

Y-Z Plane
Phi=90.00deg

Gain . dB



UNLESS OTHER SPECIFIED TOLERANCES ON :
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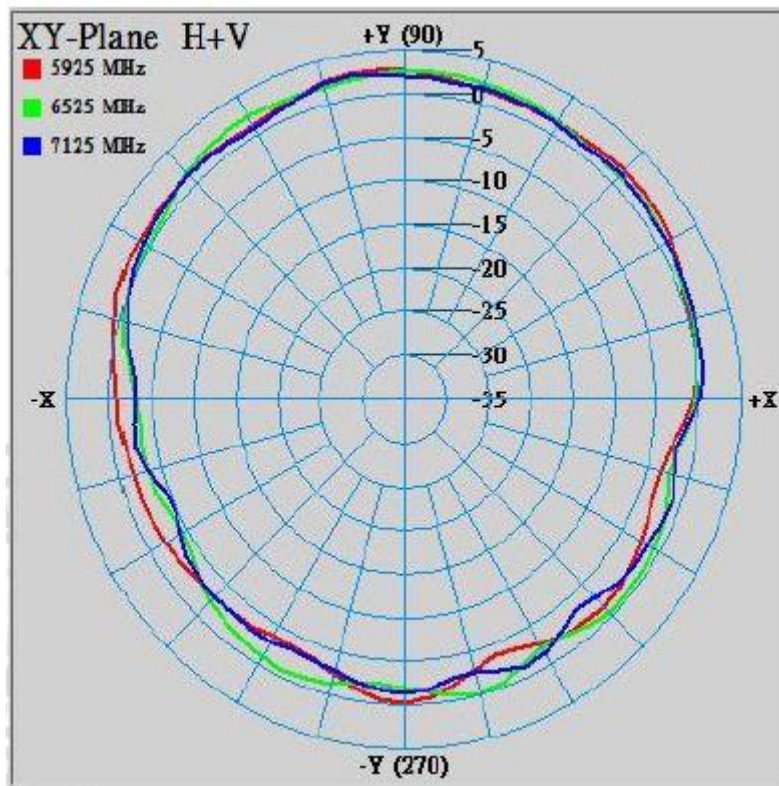
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SPEC REV.
P1

X-Y Plane

Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
5925	0.87	-2.36	3.56	-1.53	2.81	-0.05
6525	0.54	-2.96	3.14	-1.69	2.59	0.00
7125	0.27	-3.08	2.49	-1.80	2.45	-0.36

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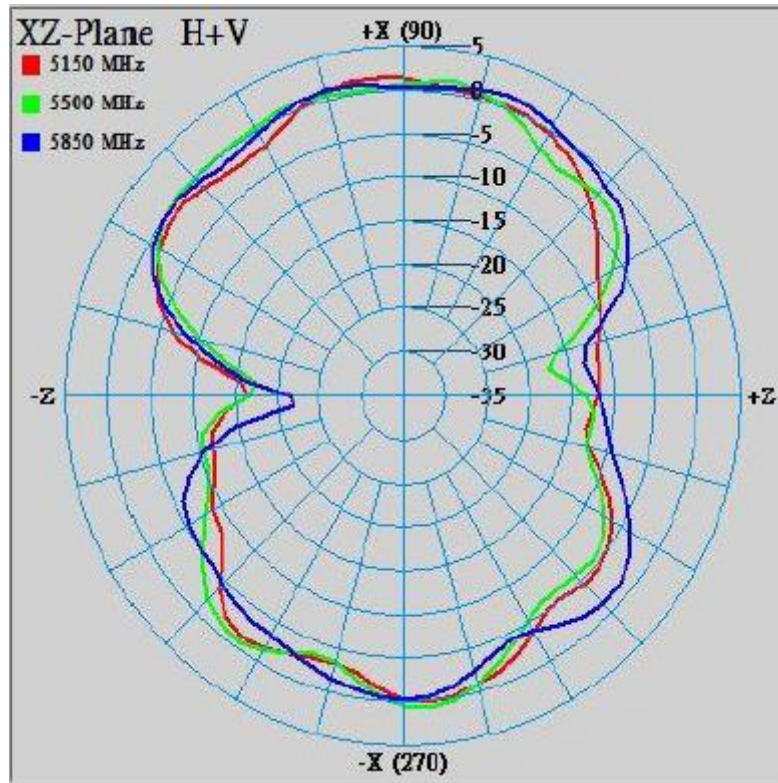
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(5150 ~ 5850) MHz**X-Z Plane**
Phi=0.00deg**Gain . dB**

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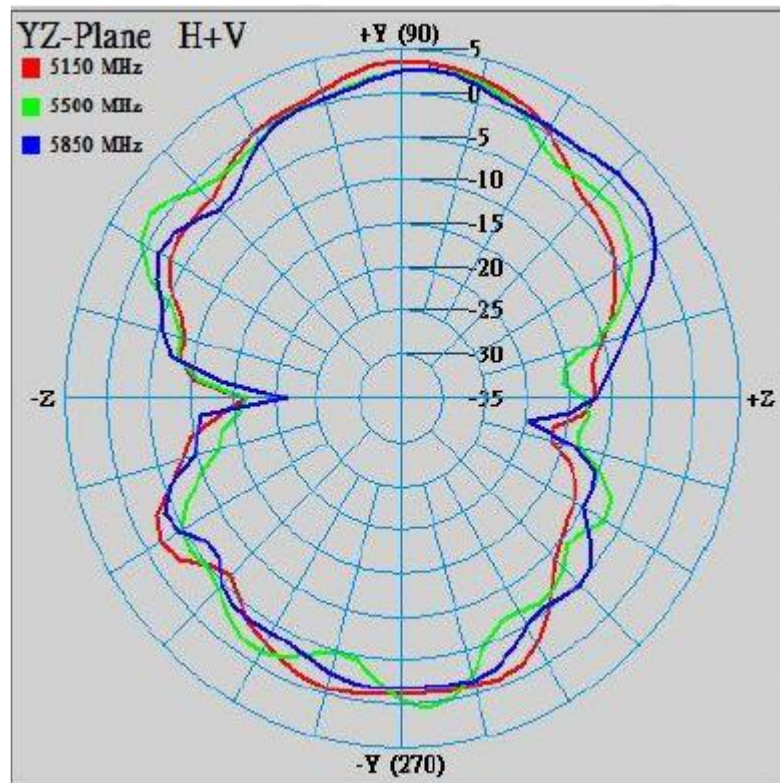
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Phi=90.00deg

Gain . dB



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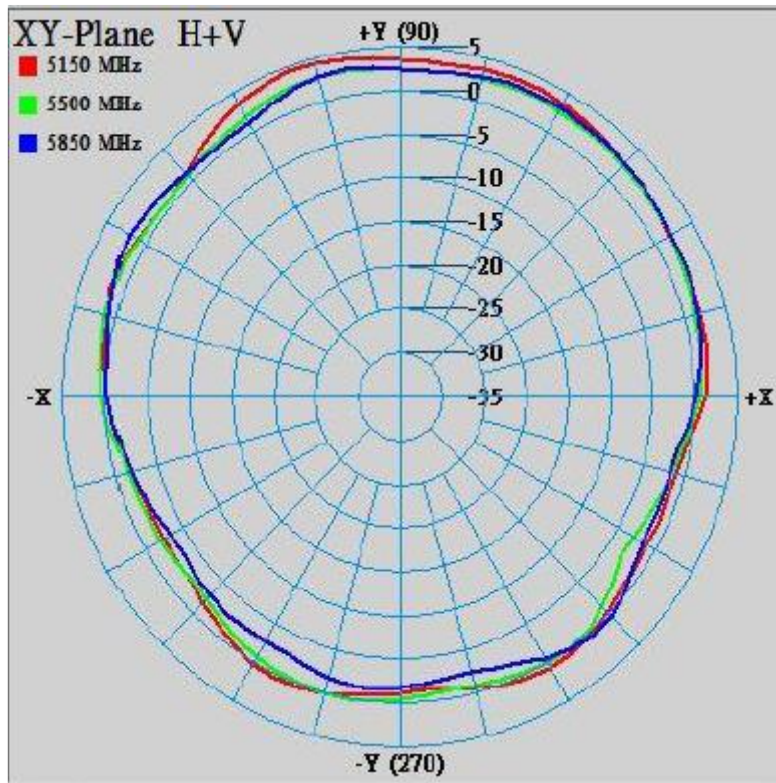
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Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
5150	1.42	-2.96	3.44	-2.24	4.48	1.26
5500	1.28	-2.77	2.66	-2.52	2.79	0.64
5850	1.41	-2.37	2.74	-2.31	3.11	0.54

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