

品名：RFPCA431209IMLB301

History List

[illegible]

1.Explanation of part number :

RF	PCA	4312	09	I	M	L	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 e.g.: 4312 Length 43.5mm, Width 12.0 mm	2 digits for cable length e.g.:09 Cable Length:9.0 cm	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 5: 5 GHz 6: 6GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band N: NFC T:LTE band W: WCDMA band	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 3:Ø1.13 6:RG316 7:Ø1.37 8:RG178 9:Low Loss Ø1.37	01~99 series number

2.Electrical Specification :

Item	Specification
Working Frequency Range	2400 ~ 2500 / 5150 ~ 5850 MHz
Return Loss	-10 dB (Max.)
VSWR	2 max.
Peak Gain	3.55 dBi@ 2400 ~ 2500 MHz 3.85 dBi@5150 ~ 5850 MHz
Polarization	Linear Vertical
Radiation Pattern	Directional
Impedance	50Ω
Operation Temperature	-20℃ ~ +65℃

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 : 詹惠雯

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

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

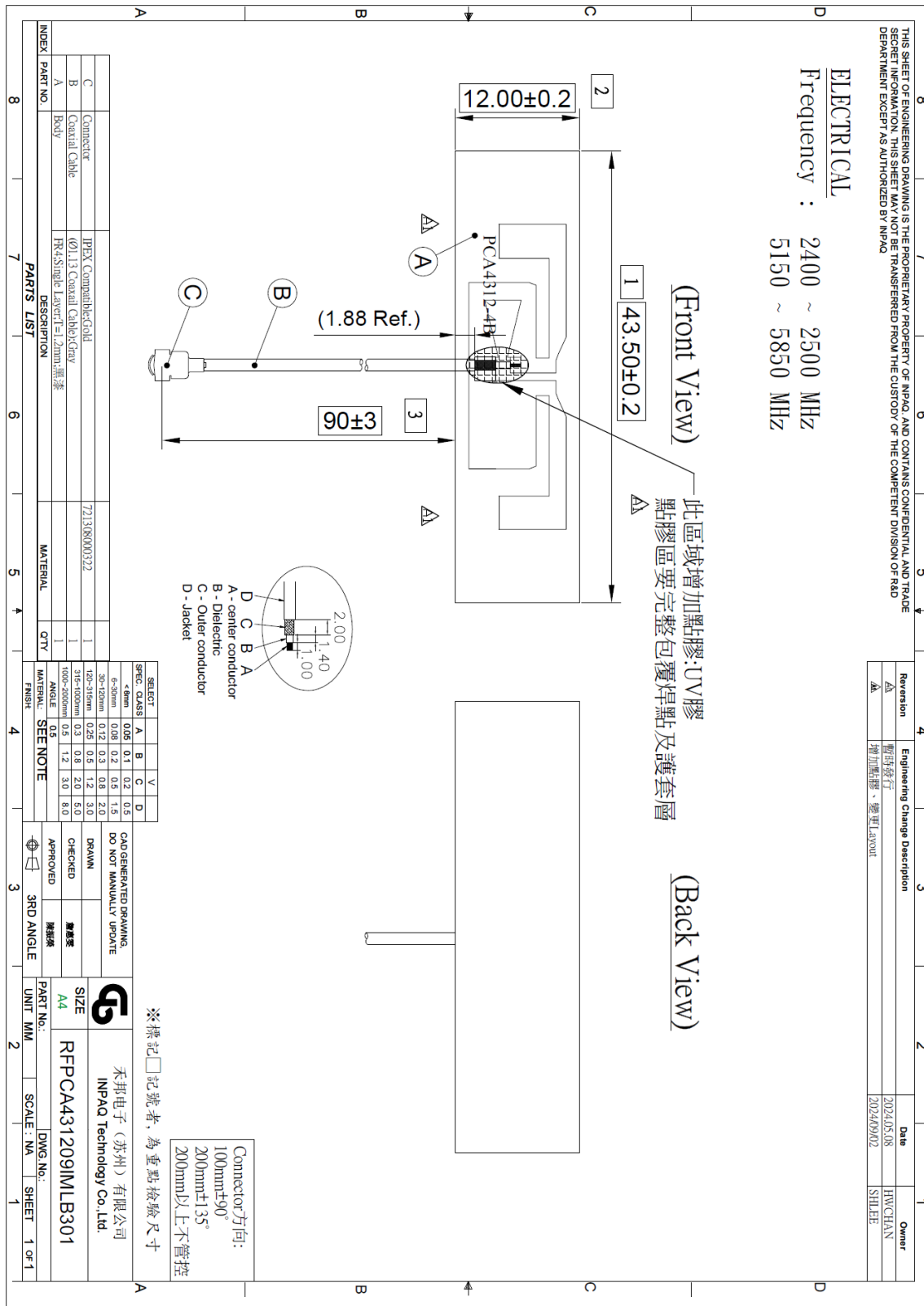
TITLE : RFPCA431209IMLB301

DOCUMENT NO.

ENS070033190-000803517995

SPEC REV.
A1

3. Antenna 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 : 詹惠愛

CHECKED BY : 詹惠愛

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

TITLE : RFP-CA431209IMLB301



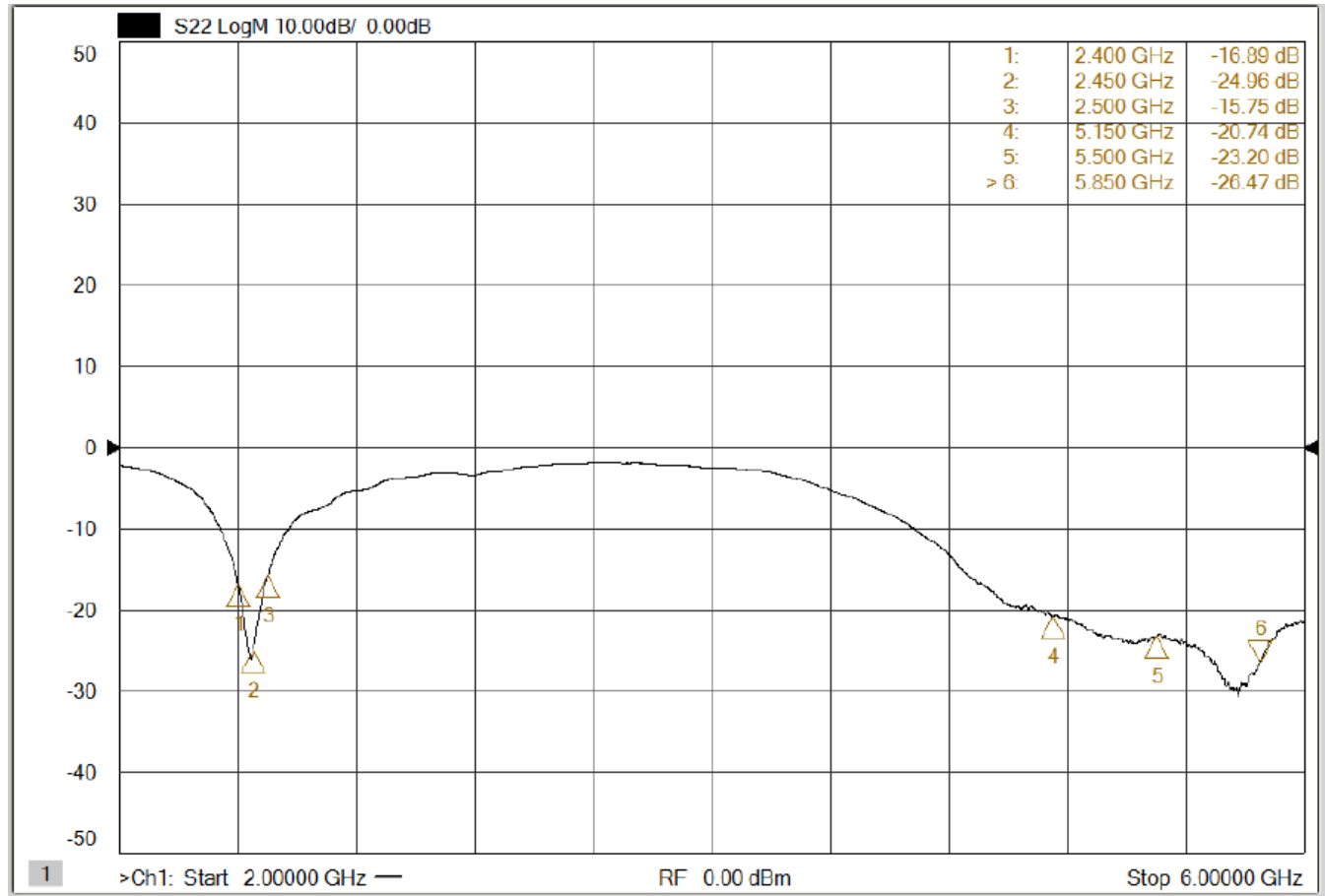
INPAQ TECHNOLOGY CO., LTD.

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

DOCUMENT NO.

ENS070033190-000803517995

SPEC REV.
A1

ELECTRICAL CHARACTERISTICS**Test Report****Return Loss****ANT_WIFI**

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 : 詹惠雯

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

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

TITLE : RFPCA431209IMLB301

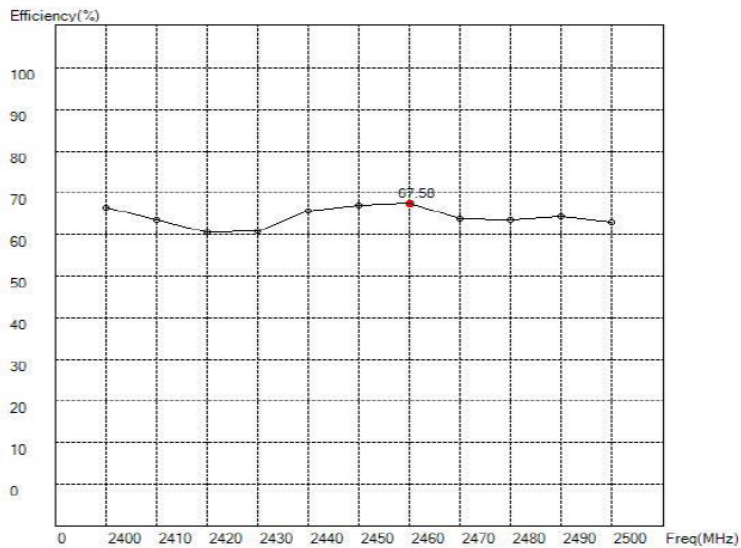
DOCUMENT
NO.

ENS070033190-000803517995

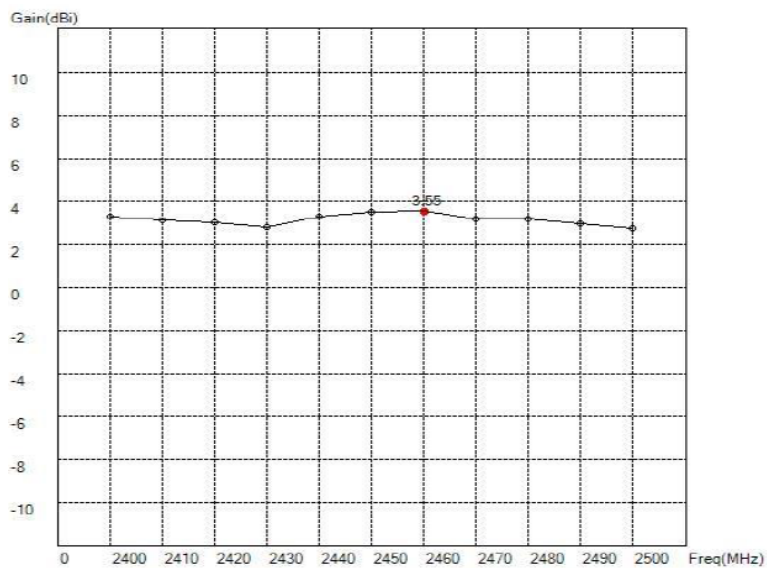
SPEC REV.
A1

Efficiency & Peak Gain

2400-2500MHz



Maximum Efficiency at 2460 MHz : 67.58 %



Maximum Peak Gain at 2460 MHz : 3.55 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 : 詹惠雯

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

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

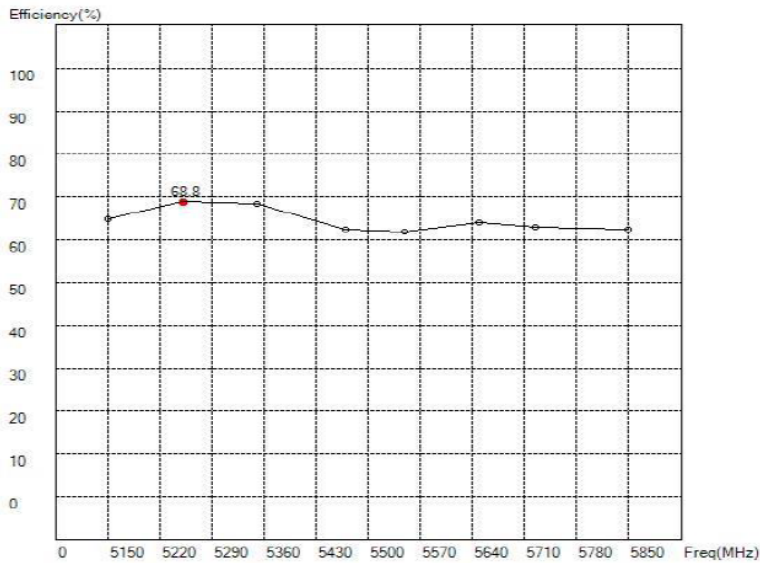
TITLE : RFPCA431209IMLB301

DOCUMENT
NO.

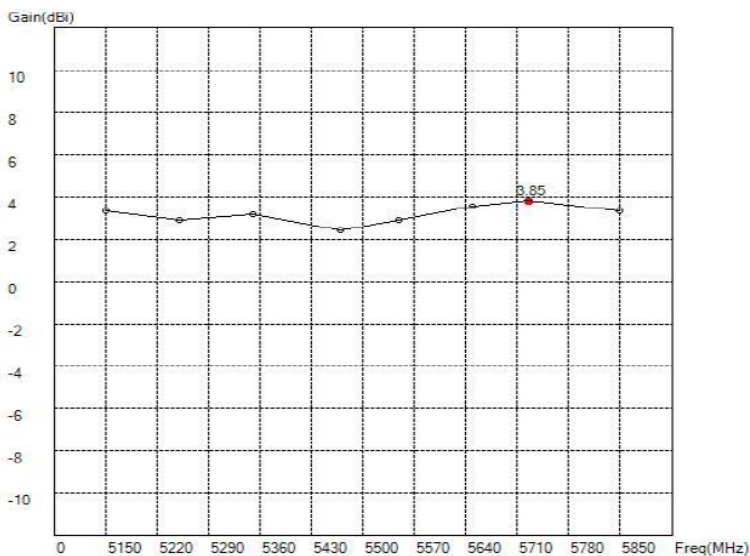
ENS070033190-000803517995

SPEC REV.
A1

5150-5850MHz



Maximum Efficiency at 5250 MHz : 68.80 %



Maximum Peak Gain at 5725 MHz : 3.85 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 : 詹惠雯

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

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

TITLE : RFPCA431209IMLB301

DOCUMENT
NO.

ENS070033190-000803517995

SPEC REV.
A1

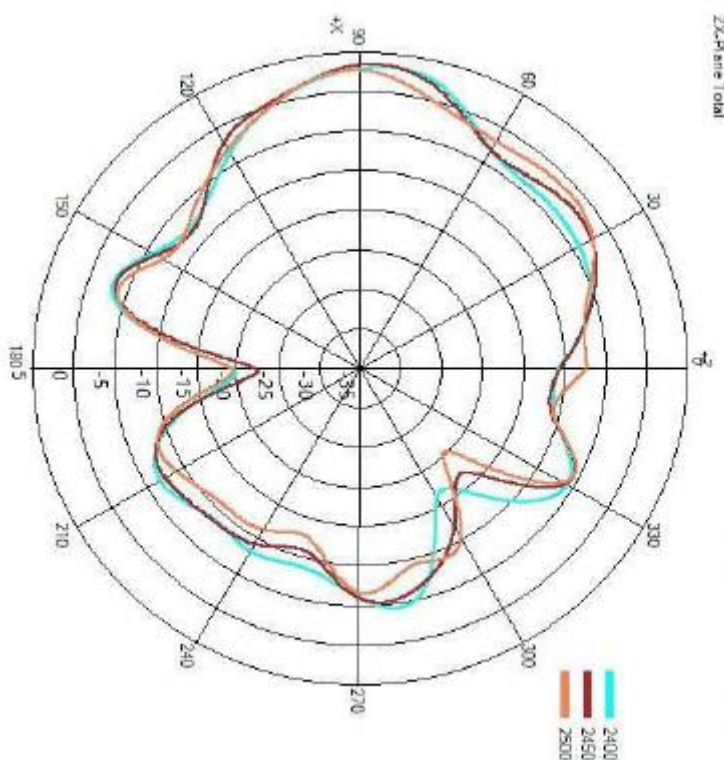
Radiation Patterns

2400-2500MHz

X-Z Plane

Phi=0.00deg

Gain . 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 : 詹惠雯

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

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

TITLE : RFPCA431209IMLB301

DOCUMENT
NO.

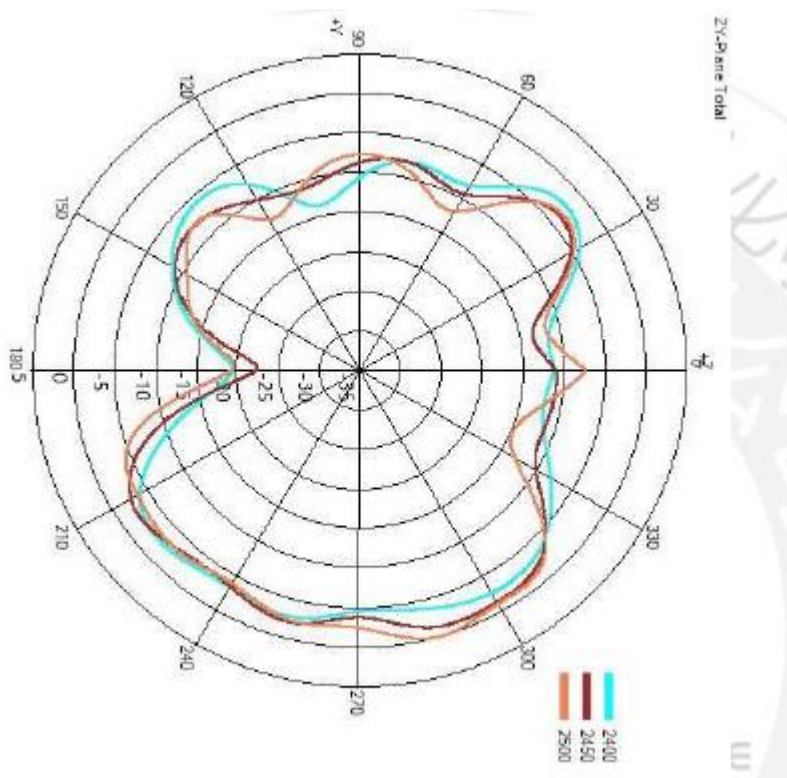
ENS070033190-000803517995

SPEC REV.
A1

Y-Z Plane

Phi=90.00deg

Gain . 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 : 詹惠雯

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

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

TITLE : RFPCA431209IMLB301

DOCUMENT
NO.

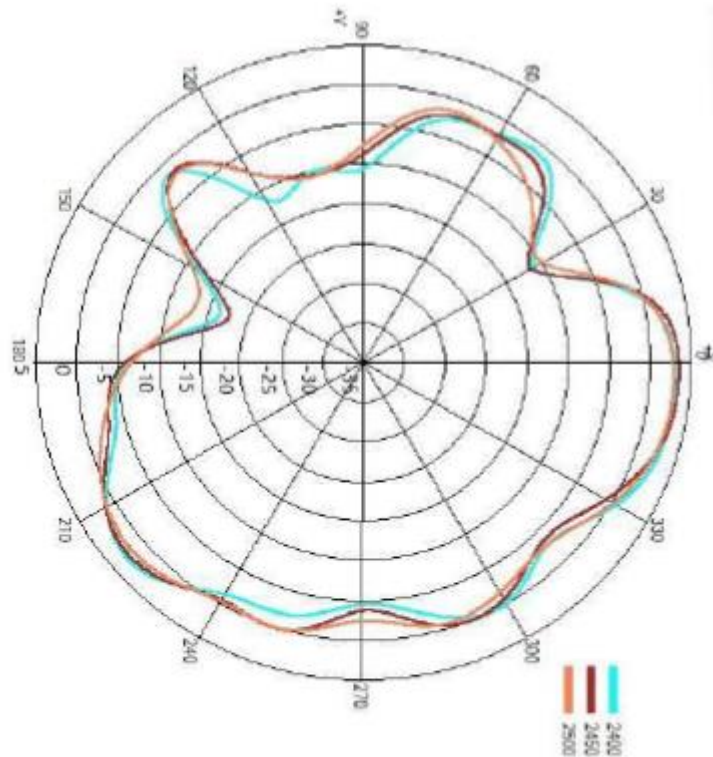
ENS070033190-000803517995

SPEC REV.
A1

X-Y Plane

Theta=90.00deg

Gain . dBi



	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
2400	2.99	-4.03	-2.57	-5.89	3.05	-1.66
2450	3.49	-3.87	-1.26	-5.68	3.49	-1.52
2500	2.78	-4.20	-0.04	-5.36	2.78	-1.62

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 : 詹惠雯

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

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

TITLE : RFPCA431209IMLB301

DOCUMENT
NO.

ENS070033190-000803517995

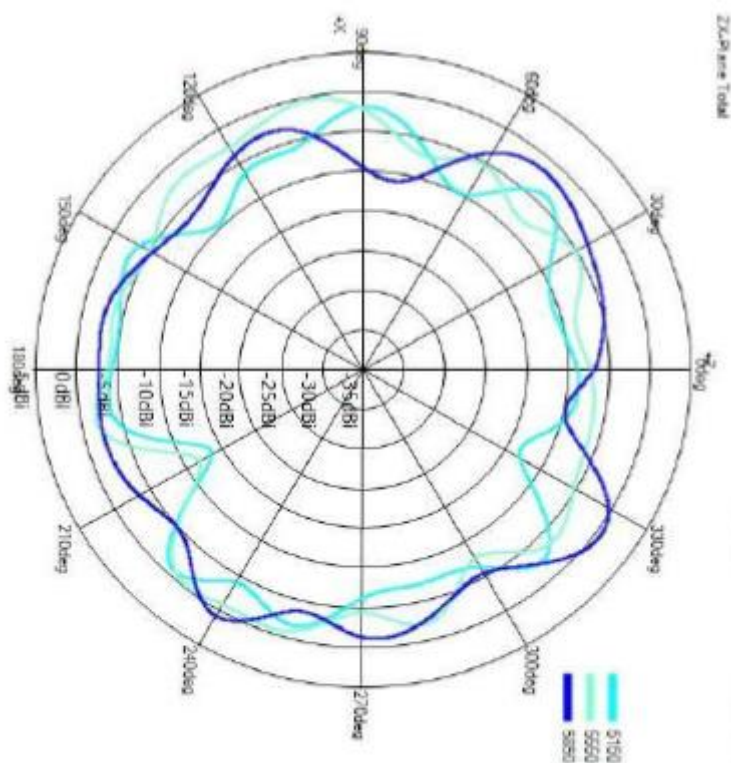
SPEC REV.
A1

5150-5850MHz

X-Z Plane

Phi=0.00deg

Gain . 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 : 詹惠雯

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

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

TITLE : RFPCA431209IMLB301

DOCUMENT
NO.

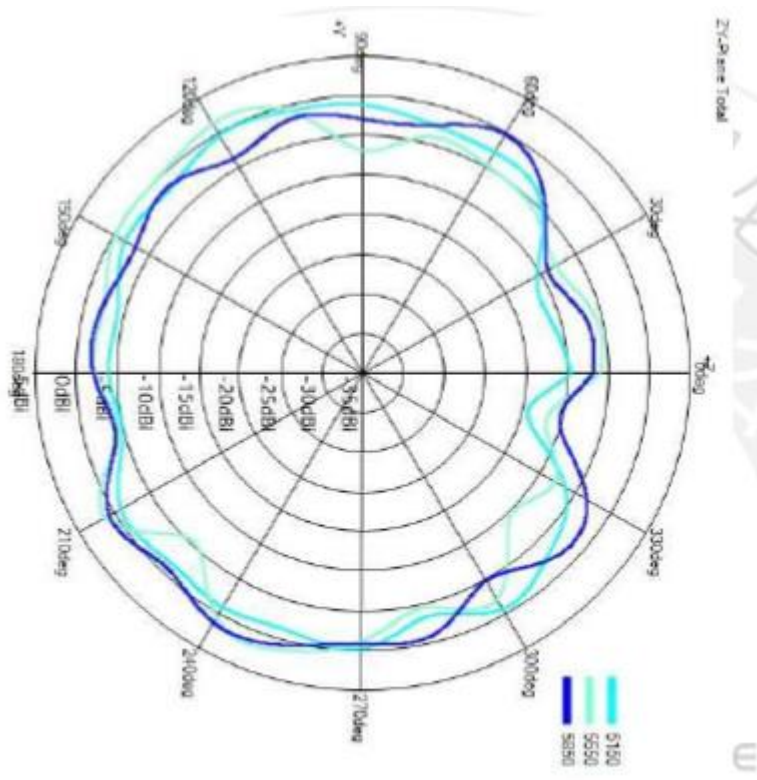
ENS070033190-000803517995

SPEC REV.
A1

Y-Z Plane

Phi=90.00deg

Gain . 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 : 詹惠雯

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

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

TITLE : RFPCA431209IMLB301

DOCUMENT
NO.

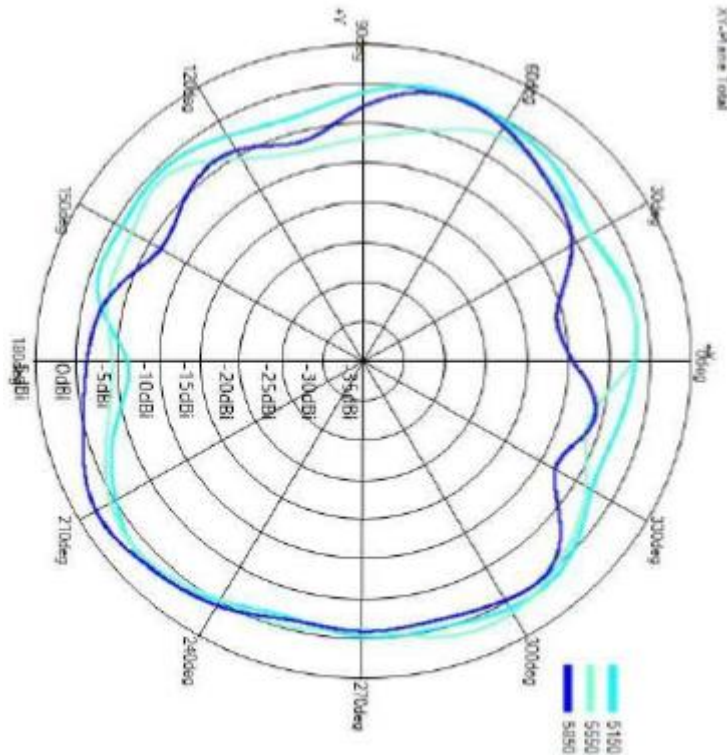
ENS070033190-000803517995

SPEC REV.
A1

X-Y Plane

Theta=90.00deg

Gain . dBi



	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
5150	-1.48	-5.53	-0.22	-2.73	1.68	-1.01
5500	-0.56	-3.89	1.42	-2.52	1.51	-1.75
5850	0.78	-3.48	1.25	-2.32	2.56	-1.86

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 : 詹惠雯

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

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

TITLE : RFPCA431209IMLB301

DOCUMENT
NO.

ENS070033190-000803517995

SPEC REV.
A1