

品名：RFMTA300910IMLB401

1.Explanation of part number :

RF	MTA	3009	10	I	M	L	B	4	01
Type Code	Product Code	Metal Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	Metal Antenna	Per 2 digits of length, width e.g.: 3009 Length 30.00mm, Width9.50mm	2 digits for cable length e.g.: 10 Length 10.0cm	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 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:∅ 0.81 2:∅ 1.32 3:∅ 1.13 4:Low Loss ∅ 1.13 5:∅ 0.5 6:RG316 7: ∅ 1.37 8:RG178 9:Low Loss ∅ 1.37	01~99 series number

2.Electrical Specification :

Item	Specification
Working Frequency Range	2.4 ~ 2.5 / 5.15 ~ 5.85 GHz (Note-1)
Return Loss	-10dB(Max)
Peak Gain	3.46 dBi(@2.4 ~ 2.5 GHz) 3.37 dBi(@5.15 ~ 5.85 GHz)
VSWR	< 2.0
Polarization	Linear Vertical
Admitted Power	1W
Operation Temperature	-20°C ~ +65°C

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 : 黄瑞郎

APPROVED BY : 陳振榮

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TITLE : RFMTA300910IMLB401

DOCUMENT NO.

SPEC REV.
P0

1. Antenna Drawing :

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Revision	Engineering Change Description	Date	Owner
1/1	暫行發行	2020/07/22	HWCHAN

Frequency : 2.4/5. x GHz

3.00
1.50
1.00
A - center conductor
B - Dielectric
C - Outer conductor
D - Isolat
E

2 30.00±0.2

3 9.50±0.1

4 6.00±0.15

5 100±3

6 7.00±0.05

7 1.20±0.1

SCALE 1:2

INDEX	PART NO.	DESCRIPTION	MATERIAL	QTY
E	3MVEH1945	線厚度:4mm(不含膠型線)	規格: 環空	1
D	3MVEH1945	線厚度:4mm(不含膠型線)	規格: 環空	1
C	3MVEH1945	線厚度:4mm(不含膠型線)	規格: 環空	1
B	3MVEH1945	線厚度:4mm(不含膠型線)	規格: 環空	1
A	3MVEH1945	線厚度:4mm(不含膠型線)	規格: 環空	1

SELECT	A	B	C	D
PREC. CLASS	0.06	0.1	0.2	0.5
6-75mm	0.08	0.2	0.5	1.5
30-125mm	0.12	0.3	0.8	2.0
120-215mm	0.26	0.5	1.2	3.0
215-310mm	0.3	0.8	2.0	5.0
315-410mm	0.5	1.2	3.0	8.0
410-510mm	0.5	1.2	3.0	8.0

※標記 □ 記號者, 為重點檢尺寸

CAO GENERATED DRAWING, DO NOT MANUALLY UPDATE

INPAQ Technology Co., Ltd.

RFMTA300910IMLB401

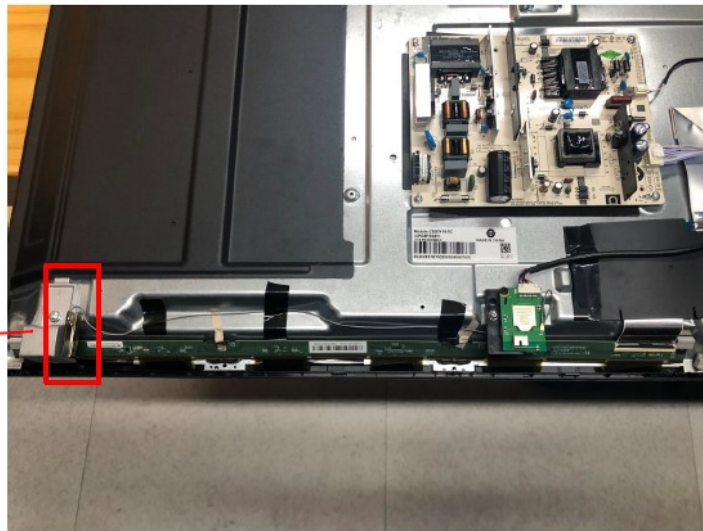
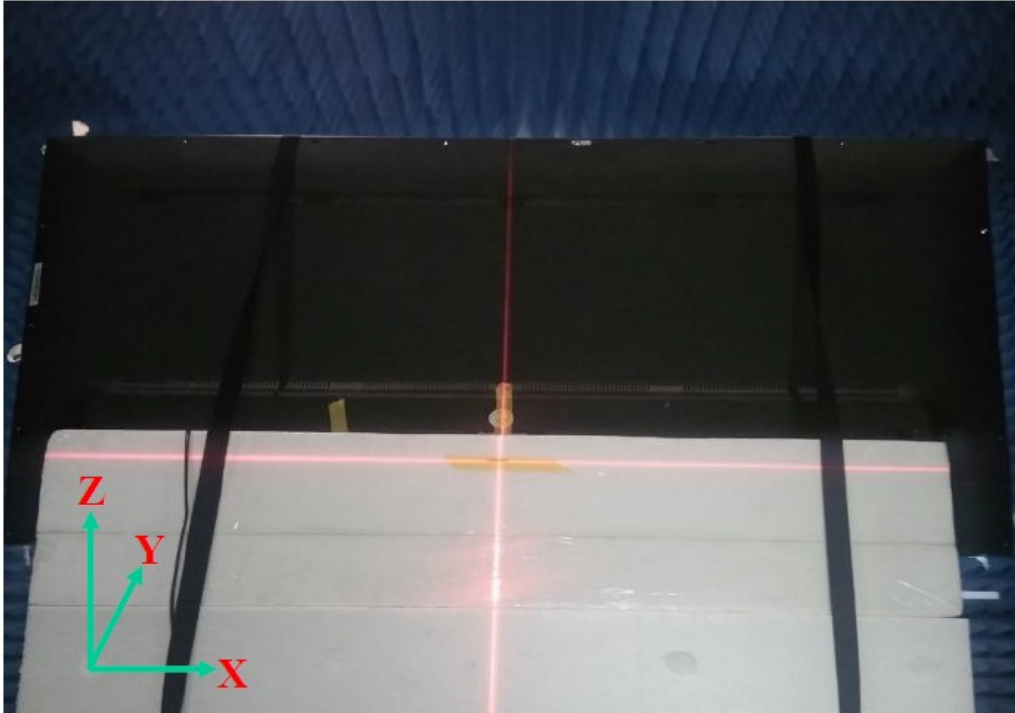
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ANGLES=N/A HOLEDIA=N/A		THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION
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DRAWN BY : 詹惠愛	CHECKED BY : 詹惠愛	
DESIGNED BY : 黃瑞郎	APPROVED BY : 陳振榮	
TITLE : RFMTA300910IMLB401		DOCUMENT NO.
		SPEC REV. P0

2. Performance Report :

Test Report

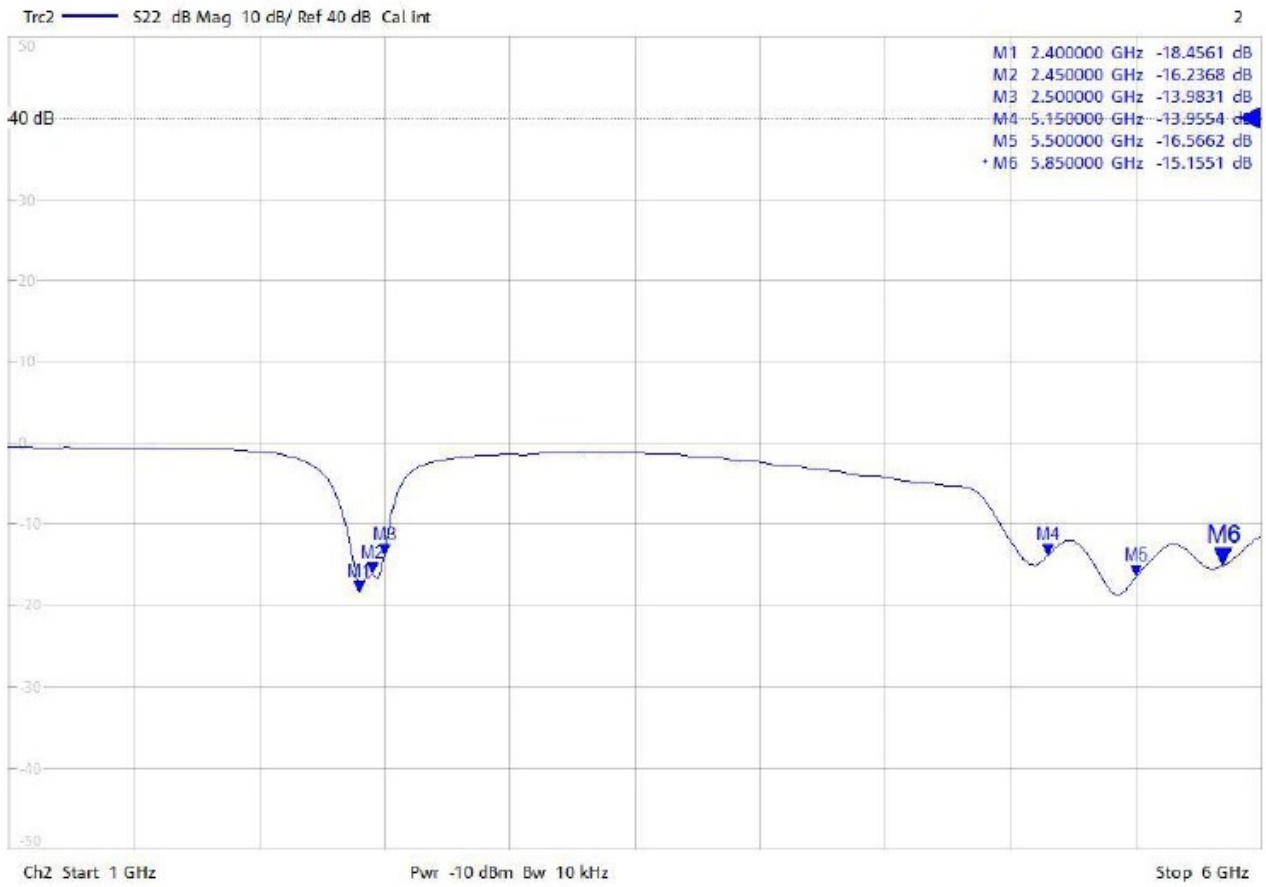
Experimental Setup




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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ELECTRICAL CHARACTERISTICS

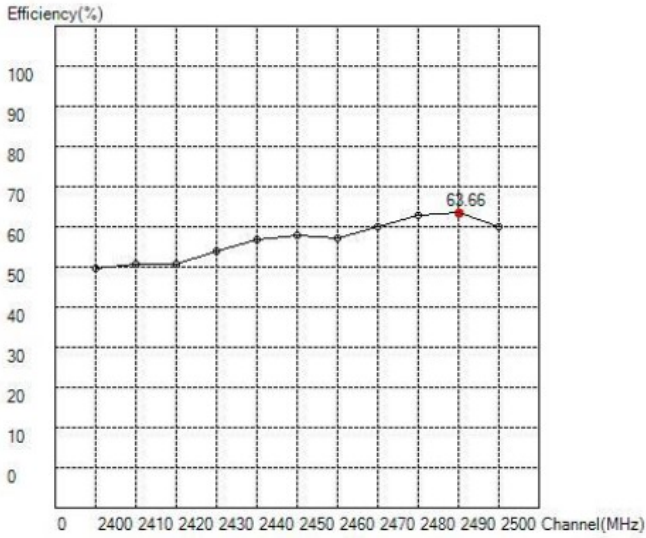
Return Loss



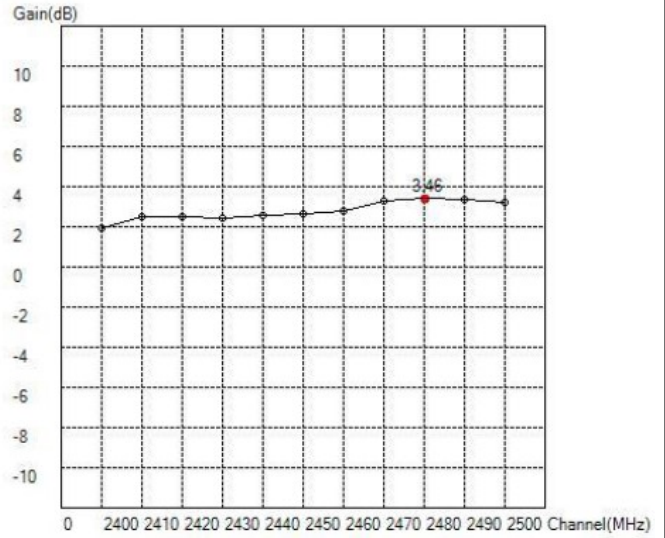
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SCALE : N/A	UNIT : mm	
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Antenna Efficiency and Peak Gain

WiFi-2G

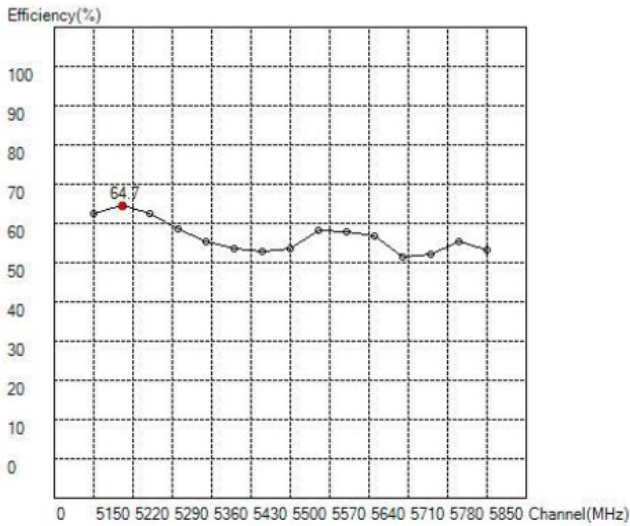


Maximum Efficiency at 2490MHz : 63.66%

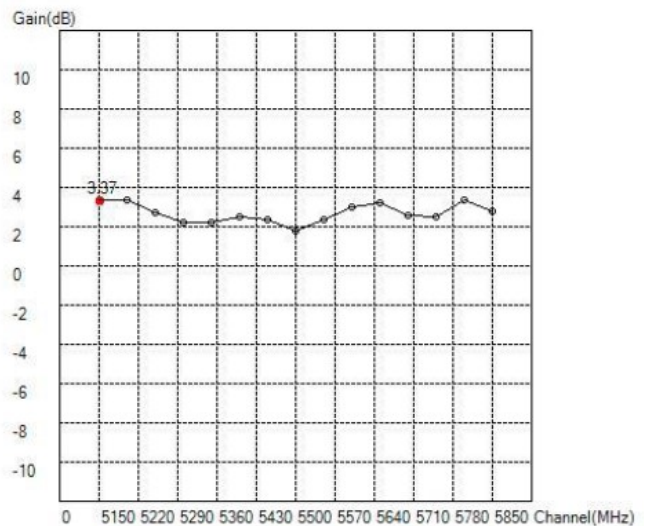


Maximum Peak Gain at 2480 MHz : 3.46 dBi

WiFi-5G



Maximum Efficiency at 5180MHz : 64.7%



Maximum Peak Gain at 5150 MHz : 3.37 dBi

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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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

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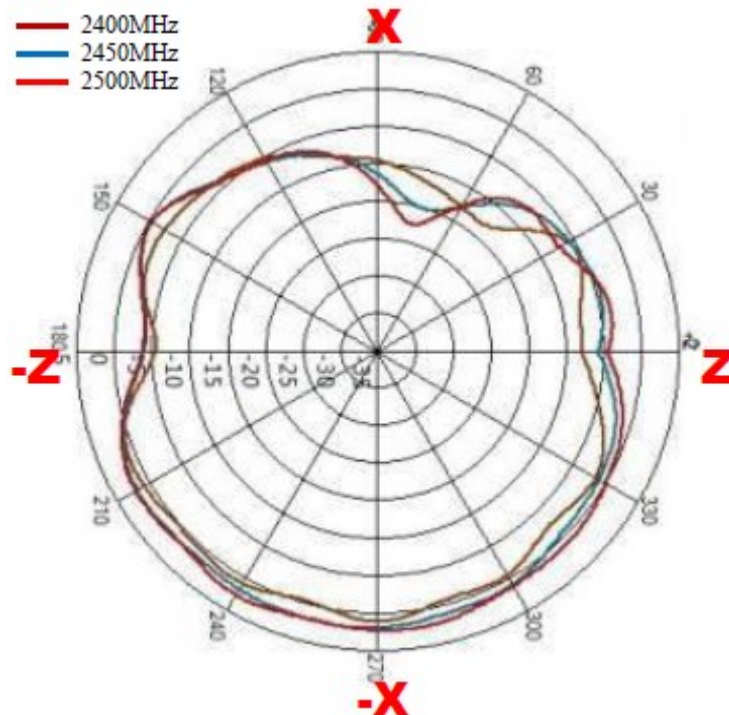
RADIATION PATTERN


WiFi-2G

X-Z Plane

Phi=0.00deg

Gain . dB

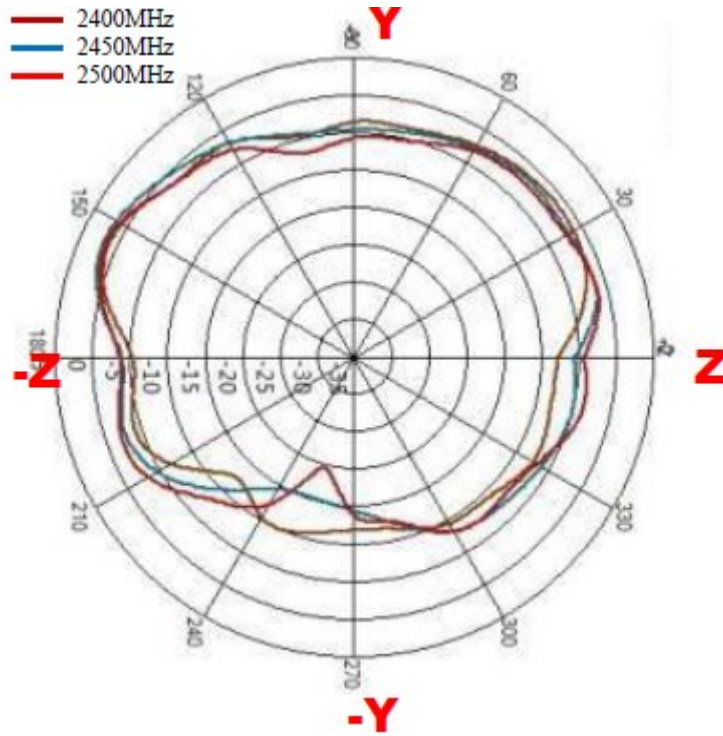



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ANGLES = N/A		HOLEDIA = N/A	
SCALE : N/A	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
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DESIGNED BY : 黃瑞郎	APPROVED BY : 陳振榮		
TITLE : RFMTA300910IMLB401		DOCUMENT NO.	SPEC REV. P0

Y-Z Plane

Phi=90.00deg

Gain . dB

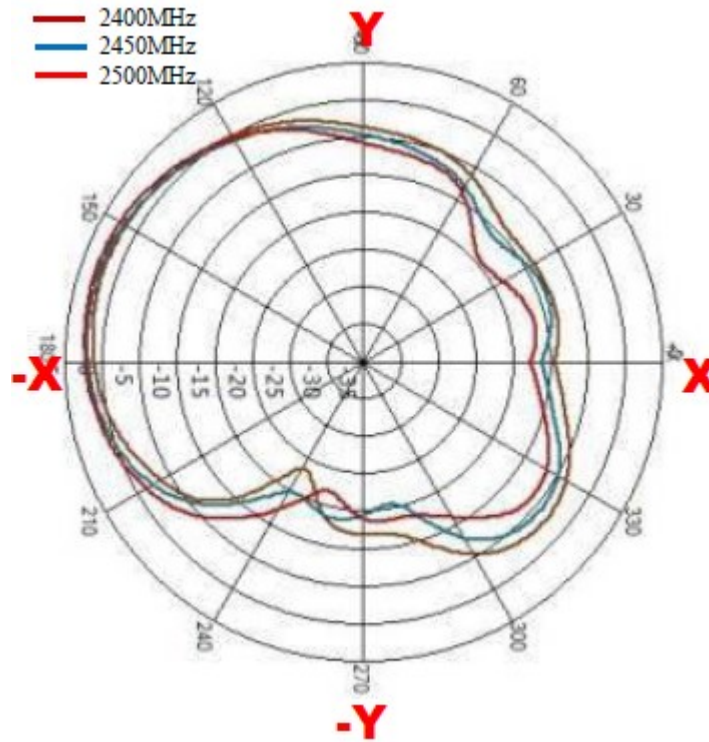


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DESIGNED BY : 黃瑞郎	APPROVED BY : 陳振榮		
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X-Y Plane

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	1.16	-2.55	1.17	-4.01	1.95	-2.98
2450	2.07	-1.37	1.91	-3.44	2.45	-3.06
2500	2.59	-0.92	1.48	-3.77	2.95	-2.90

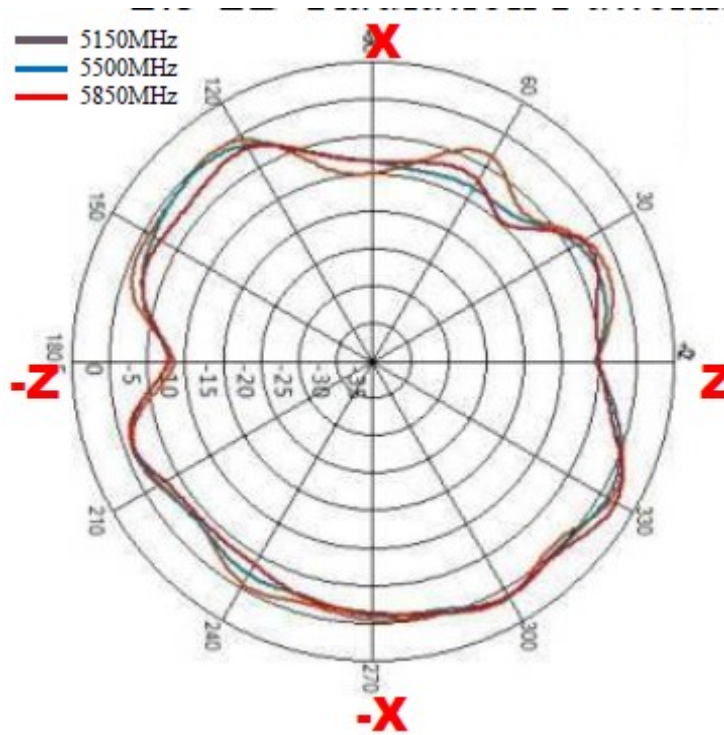
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DESIGNED BY : 黃瑞郎	APPROVED BY : 陳振榮		
TITLE : RFMTA300910IMLB401		DOCUMENT NO.	SPEC REV. P0


WiFi-5G

X-Z Plane

Phi=0.00deg

Gain . dB

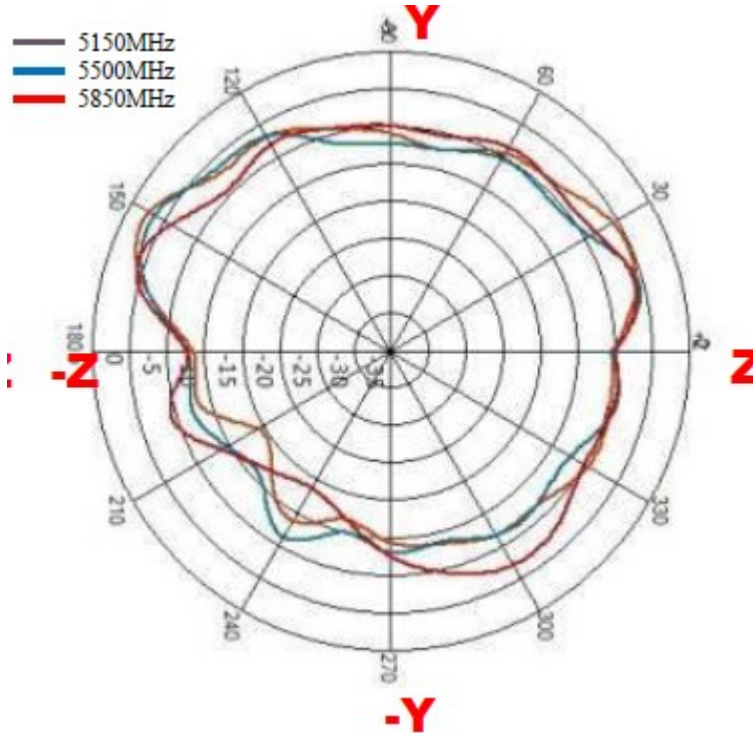



UNLESS OTHER SPECIFIED TOLERANCES ON : X = N/A X.X = N/A X.XX = N/A ANGLES = N/A HOLEDIA = N/A		 INPAQ TECHNOLOGY CO., LTD.
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TITLE : RFMTA300910IMLB401		DOCUMENT NO.
		SPEC REV. P0

Y-Z Plane

Phi=90.00deg

Gain . dB

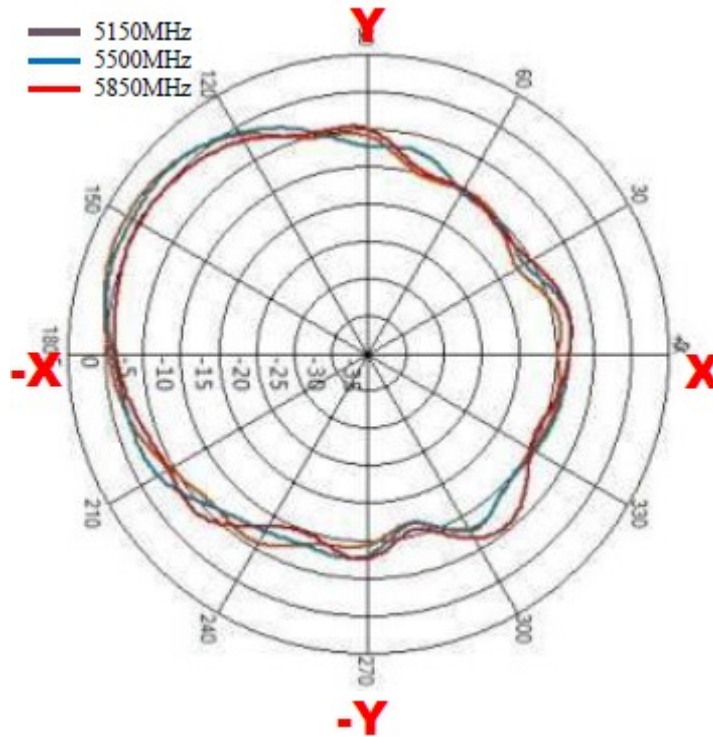


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ANGLES = N/A		THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
HOLEDIA = N/A			
SCALE : N/A	UNIT : mm		
DRAWN BY : 詹惠雯	CHECKED BY : 詹惠雯		
DESIGNED BY : 黄瑞郎	APPROVED BY : 陳振榮		
TITLE : RFMTA300910IMLB401		DOCUMENT NO.	SPEC REV. P0

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]
5150	1.80	-1.82	2.60	-3.97	2.15	-3.97
5500	1.26	-2.27	1.65	-4.38	1.47	-4.00
5850	2.56	-2.42	1.02	-4.01	0.28	-4.67

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

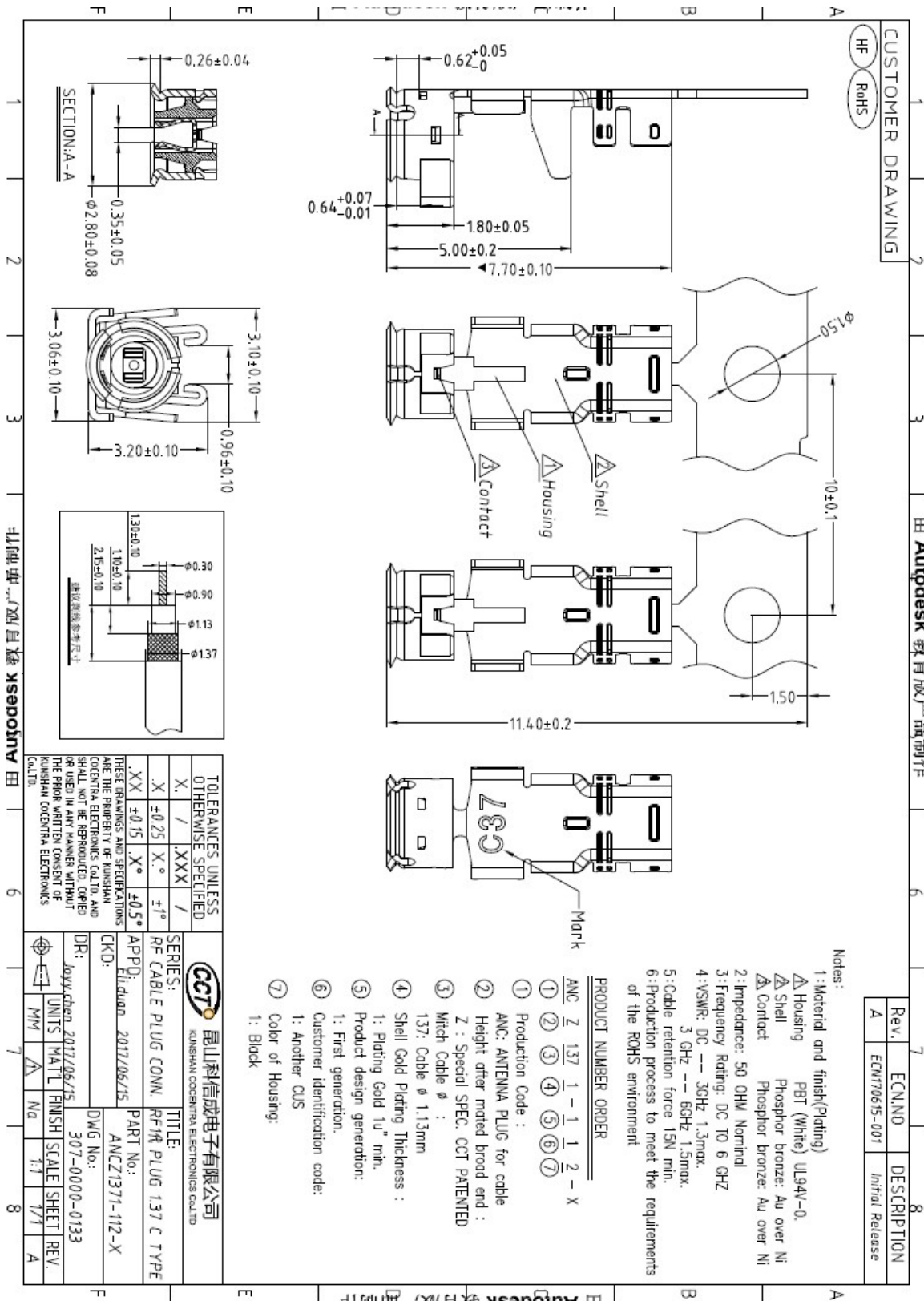
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SPEC REV. P0

Connector Specification



Notes:


- Material and finish(plating)
- Housing: PBT (White) UL94V-0.
- Shell: Phosphor bronze: Au over Ni
- Contact: Phosphor bronze: Au over Ni
- Impedance: 50 OHM Nominal
- Frequency Rating: DC TO 6 GHz
- VSWR: DC -- 3GHz 1.3max. 3 GHz -- 6GHz 1.5max.
- Cable retention force 15N min.
- Production process to meet the requirements of the ROHS environment

PRODUCT NUMBER ORDER

ANC Z 137 1 - 1 1 2 - X

- Production Code :
- ANC: ANTENNA PLUG for cable
- Height after mated broad end :
- Special SPEC. CCT PATENTED
- Which Cable φ :
- Cable φ : 1.13mm
- Shell Gold Plating Thickness :
- Plating Gold 1u" min.
- Product design generation:
- First generation.
- Customer identification code:
- Another CUS
- Color of Housing:
- Black

Rev.	ECN/NO	DESCRIPTION
A	ECN170615-001	Initial Release

UNLESS OTHER SPECIFIED TOLERANCES ON :		 INPAQ TECHNOLOGY CO., LTD.
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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	DOCUMENT NO.
TITLE : RFMTA300910IMLB401		

Cable Specification

江苏源达线缆科技有限公司

JIANGSU YUANDA OF CABLE TECHNOLOGY CO., LTD.

中国江苏省建湖县航空路5号
Aviation Road No. 5 Jianhu, Jiangsu, China

1. 适用范围:

Scope

本规格书制定了 50 Ω FEP 绝缘射频电缆 YD137 系列的结构和电气特性。

This specification covers the construction and the electrical properties of YD137 series of 50 Ω FEP Insulation Coaxial Cable.

2. 结构/Construction:

单位/Unit:mm

项目/Item		详细资料/Details
导体/Conductor	材料/Material	镀银铜线/Silver-coated Copper Wire
	构成(根/mm) Composition(No./mm)	7/0.102
	标称直径/Nom. O. D(mm)	0.306±0.03
绝缘层 /Insulation	材料/Material	聚全氟乙丙烯(自然色) /FEP(Natural)
	标称绝缘厚度/Nom. Thick(mm)	0.295
	标称外径/Nom. O. D(mm)	0.90±0.03
屏蔽层/Shield	材料/Material	镀锡铜线/Tinned annealed copper wire
	构成/Composition	16*5/0.05
	覆盖率/Coverage(%)	90±5
	标称外径/Nom. O. D(mm)	1.13±0.05
护套/Jacket	材料/Material	聚全氟乙丙烯(*颜色)/FEP(*color)
	标称护套厚度/Nom. Thick(mm)	0.12
	标称外径/Nom. O. D(mm)	1.37±0.08
	颜色/Color	按与客户确认的颜色/According to corresponding have approved by the suppliers and customers

3. 电气特性(20℃时)/Electrical Properties(at 20℃)

项目/Item	单位/Unit	详细资料/Details
导体电阻/Conductor Resistance	Ω/km	Max. 371
绝缘电阻/Insulation Resistance	MΩ.km	Min. 500
耐压强度/Dielectric Strength	V(AC)/min	500
静电容/Capacitance	pF/m	105(1kHz)

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 : 黄瑞郎

APPROVED BY : 陈振荣

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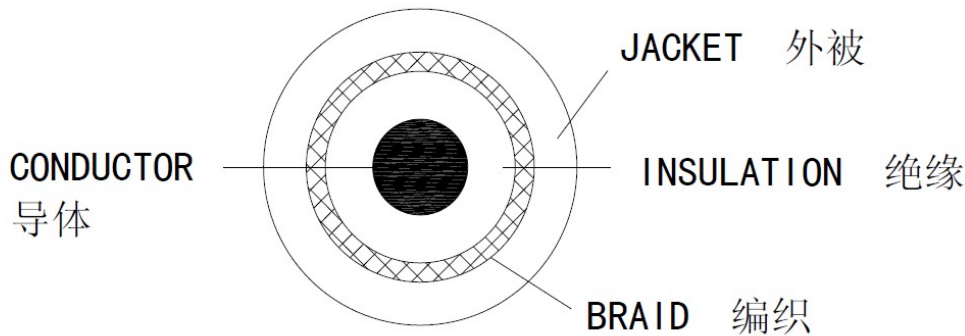
中国江苏省建湖县航空路 5 号
Aviation Road No. 5 Jianhu ,Jiangsu, China

特性阻抗 /Characteristic Impedance	Ω	50±2.0	
衰减/Attenuation	dB/m	1GHz	1.74
		2GHz	2.54
		3GHz	2.92
		4GHz	3.5
		5GHz	4.16
		6GHz	4.5
驻波比/Standing wave (0-6GHz)	/	≤1.35	

4. 包装 Packing


标准单位包装长度为 700 米/盘, 每盘最多允许 3 个接头, 接头最短长度 20 米, 在搬运过程中不能损坏包装.

Standard unit length of finished cable shall be 700m on reel, frequency of joint max. 3/reel, the mini length is 20m. The finished cable shall be packed not be damaged during transportation



 本产品有时不适合车载用途的情况也有,所以使用前请先和本公司业务部门进行商谈.
 This product is not suitable for automobile application in some cases.Please contact with our sales department before you use this product.

规格书完
End of specification

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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