# 承　認　書
APPROVAL

| | |
|---|---|
| 廠　商<br>CUSTOMER | 神準科技股份有限公司 |
| 料　號<br>PART NO. | 7102A0455010 |
| 品　名<br>PARTNAME | 8619 Replacement Ant. |
| 生產廠商<br>COMPANY | 權億科技股份有限公司 |
| 備　註<br>PART NO | 98619PRSX019 |
| 日　期<br>DATE | 2019/10/02 |
| 產品重量(g):<br>WEIGHT | 15.1 g |
| 產品主要材質:<br>MAIN MATERIAL | ABS |
| 公　司<br>COMPANY | 權億科技股份有限公司 |
| 地　址<br>ADDRESS | 桃園市中壢區合圳北路19號 |
| 電　話：<br>TELEPHONE | 03-452-9998 |
| 傳真：<br>FAX | 03-452-2866 |

權億科技股份有限公司
Master Wave Technology Co., Ltd.

# 承 認 書

# APPROVAL SHEET

Customers: 神準科技股份有限公司

Customer Model No.: 7102A0455010

Master Wave Model No.: 98619PRSX019

Product Description: 8619 Replacement Ant.

Issue Date: 2019/10/2

REV.: 03

| 客戶承認用印 | 權億承認用印 |
|---|---|
| | 權億科技股份有限公司 2019.10.02 發行章 RF BU |

| 核准 Approve | 主管 Chief | 承辦 Responsible |
|---|---|---|
| Hero | Matt | Doris |

**MASTER WAVE TECHNOLOGY CO., LTD.**
權億科技股份有限公司
Address: No. 19, Hezun N. Rd., Zhongli Dist., Taoyuan City 320, Taiwan (R.O.C.)
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**Shengyih Electronic Plastic Co. Ltd (Shou Zhou)**
聲億電子塑膠有限公司 (蘇州廠 )
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Tel：+86-512-65046030 Fax：+86-512-65046033

**Shengyih Electronic Co. Ltd (Dongguan)**
聲億電子有限公司 (東莞廠)
Address: Mu-Lun Administration Area, Changping Town,Dongguan City.Guangdong Province,China
Tel：+86-769-83914045 Fax：+86-769-83914046

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-Carton

## Modification History:

| REV. | Date | Content |
|---|---|---|
| 00 | 2019/5/31 | |
| 01 | 2019/6/11 | 更改包裝 |
| 02 | 2019/8/19 | 增加尺寸 |
| 03 | 2019/10/2 | 增加"PE-LD",兩種字樣通用 |

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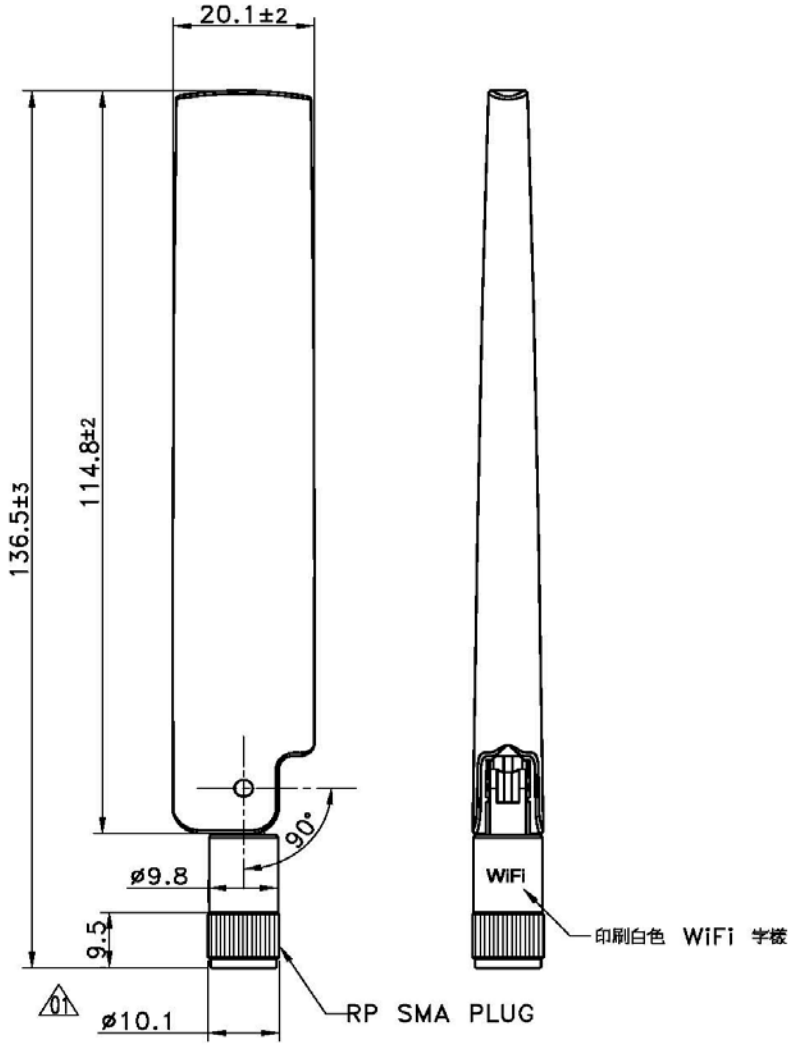
Master Wave Technology Co., Ltd.

| REV | ZONE | DESCRIPTION | ENG | APPROVED | DATE |
|---|---|---|---|---|---|
| 01 | 3B | 增加尺寸 | Doris | Jerry | 2019/8/16 |




| Electrical Properties | | |
|---|---|---|
| Frequency Range | 2.4~2.5 | 5.X GHz |
| Impedance | 50Ω | |
| V.S.W.R. | ≤2.0 | |
| Radiation | Omni | |
| Gain | 3 dBi | 5 dBi |
| Polarization | Vertical | |
| Mechanical Properties | | |
| Whip | ABS | |
| Connector | Brass | |
| Weight | - | |
| Operating Temp | -20°C~+65°C | |

UNLESS OTHERWISE SPECFIED TOLERANCES ON : ±0.5

DATE: 2019/8/16
UNIT: mm
THIRD ANGLE PROJECTION
MAT'L:
FINISH: Black
SCALE: 1/1

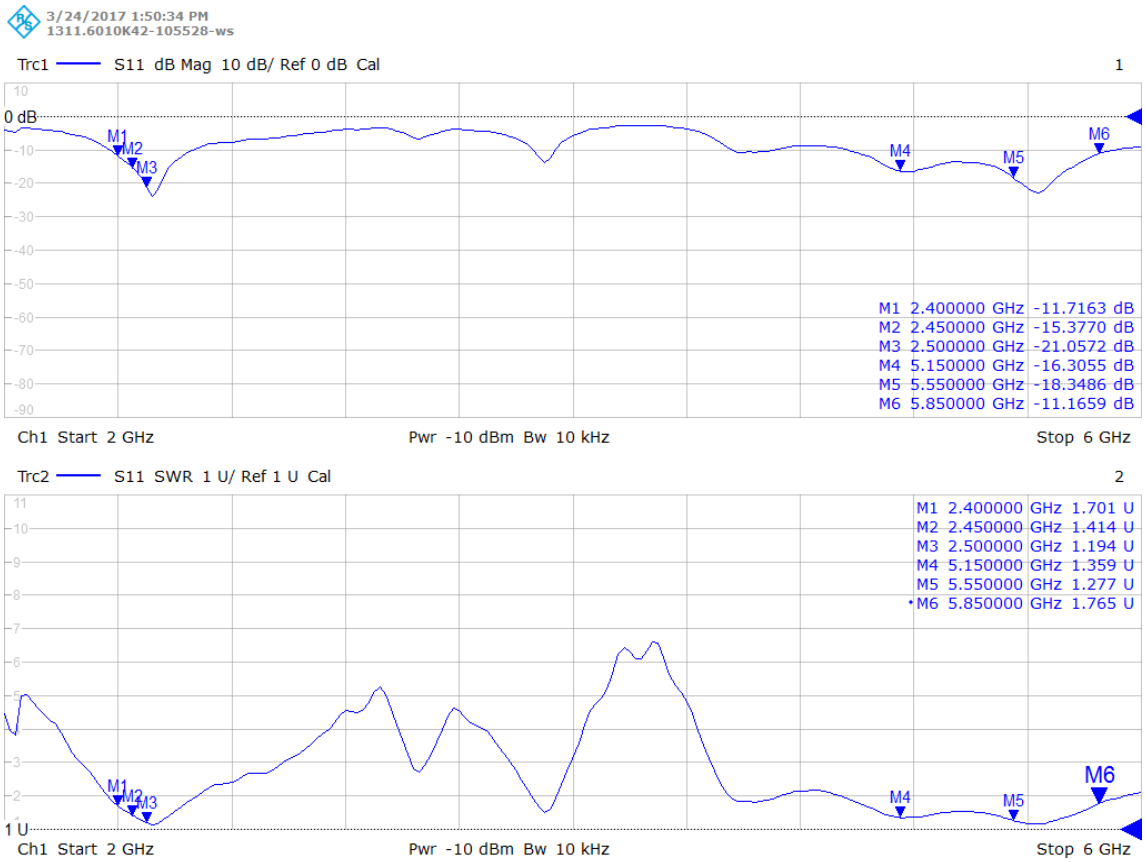
Master Wave Technology CO.,LTD

TITLE : 8619 Replacement Antenna

| APPROVED BY: | CHECKED BY: | DESIGNED BY: | DRAWN BY: | WEIGHT: | MODEL NO. : 98619PRSX019 | REV |
|---|---|---|---|---|---|---|
| | | Daniel | | 15.1g | PART NO. : | 01 |

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MASTER WAVE AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.

# Electrical Test

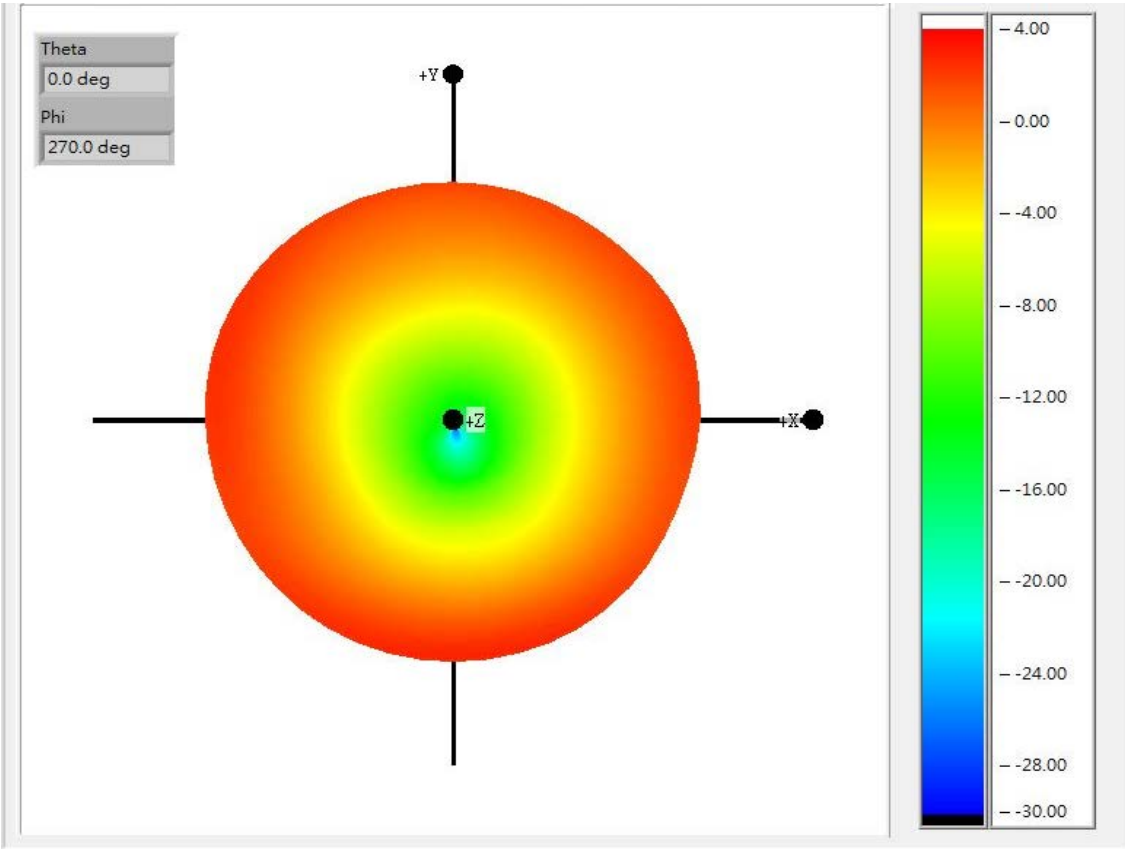


## Antenna Efficiency

| Frequency (MHz) | 2400 | 2450 | 2500 | 5150 | 5550 | 5850 |
|---|---|---|---|---|---|---|
| Peak Gain (dBi) | 3.19 | 3.10 | 3.05 | 5.85 | 5.73 | 5.03 |
| Efficiency (%) | 66.01 | 63.67 | 64.16 | 56.92 | 54.43 | 51.33 |

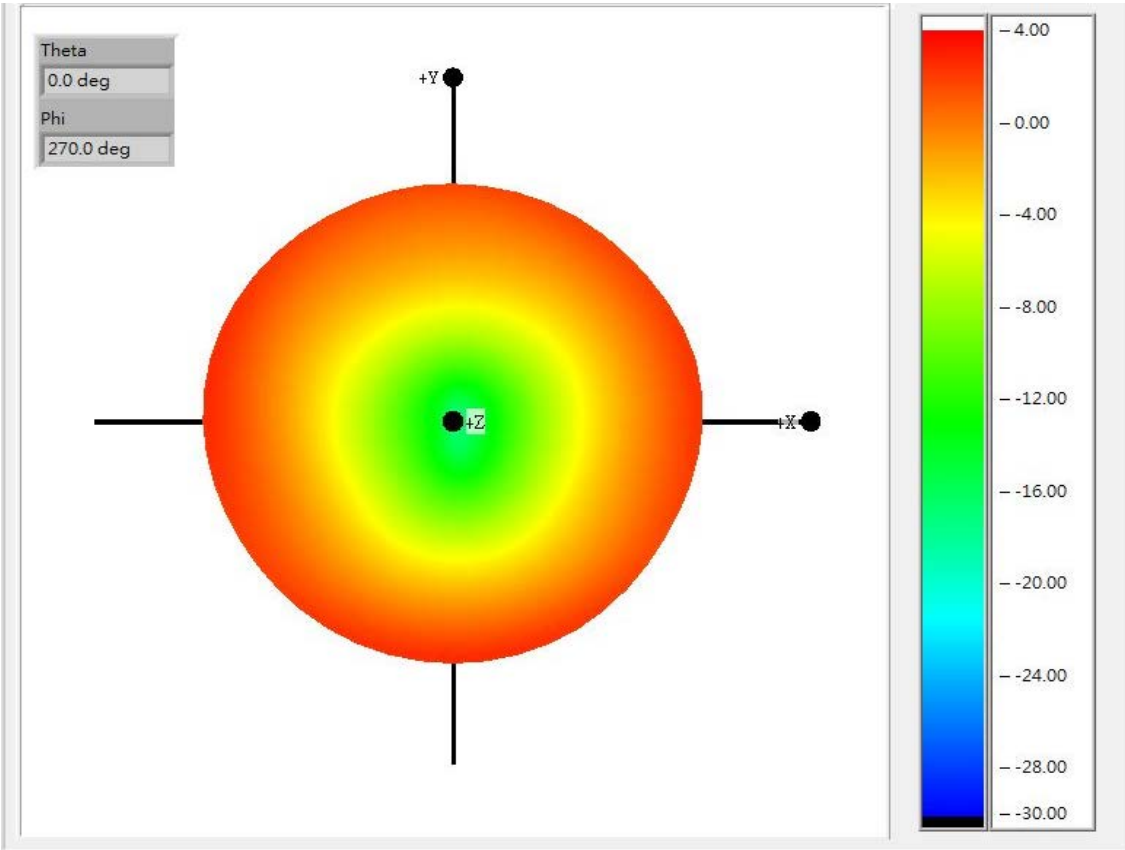
# 3D Radiation Pattern

## 2400 MHz



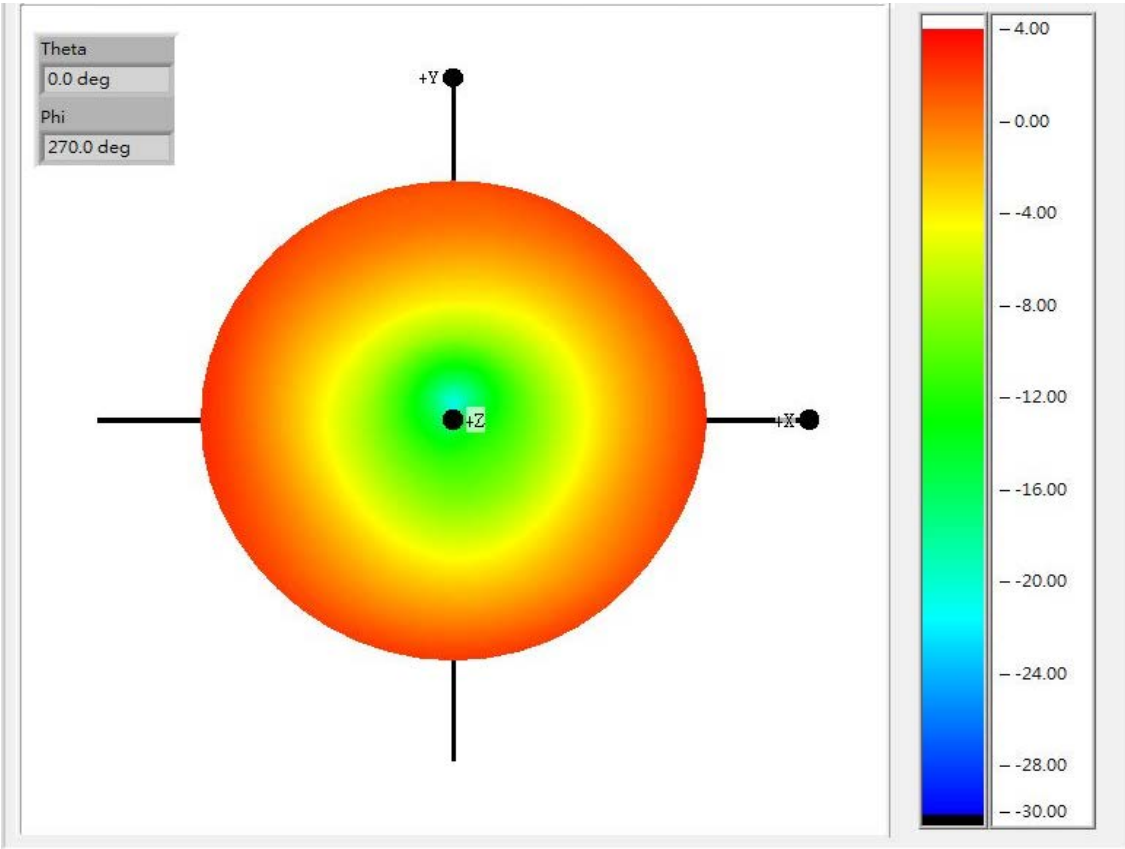
# 3D Radiation Pattern

## 2450 MHz



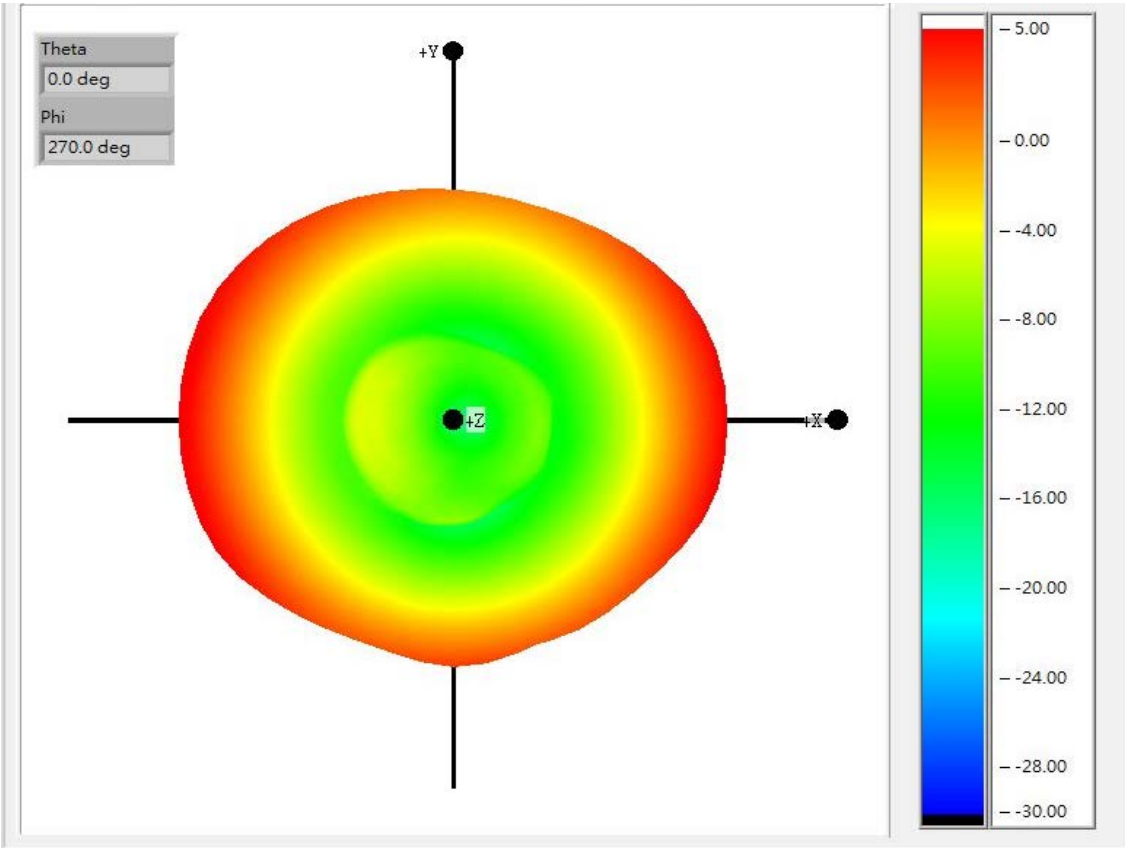
# 3D Radiation Pattern

## 2500 MHz



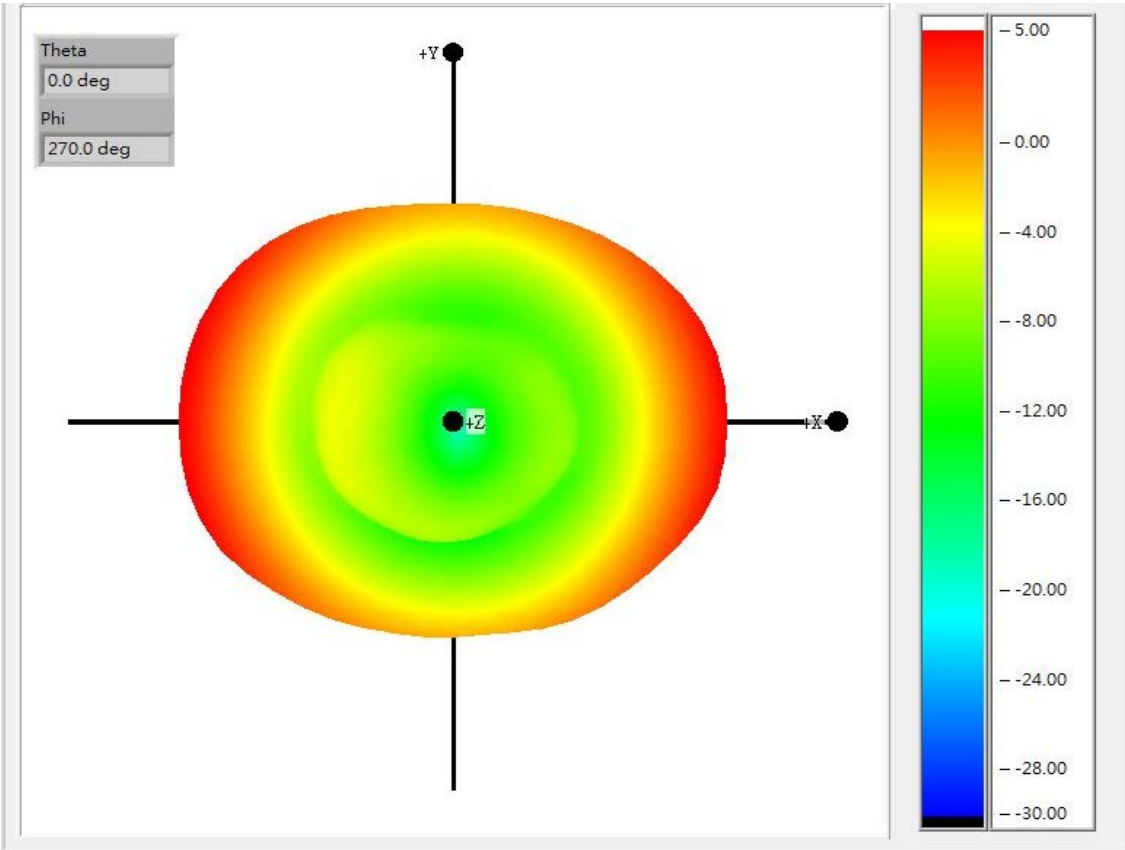
# 3D Radiation Pattern

## 5150 MHz



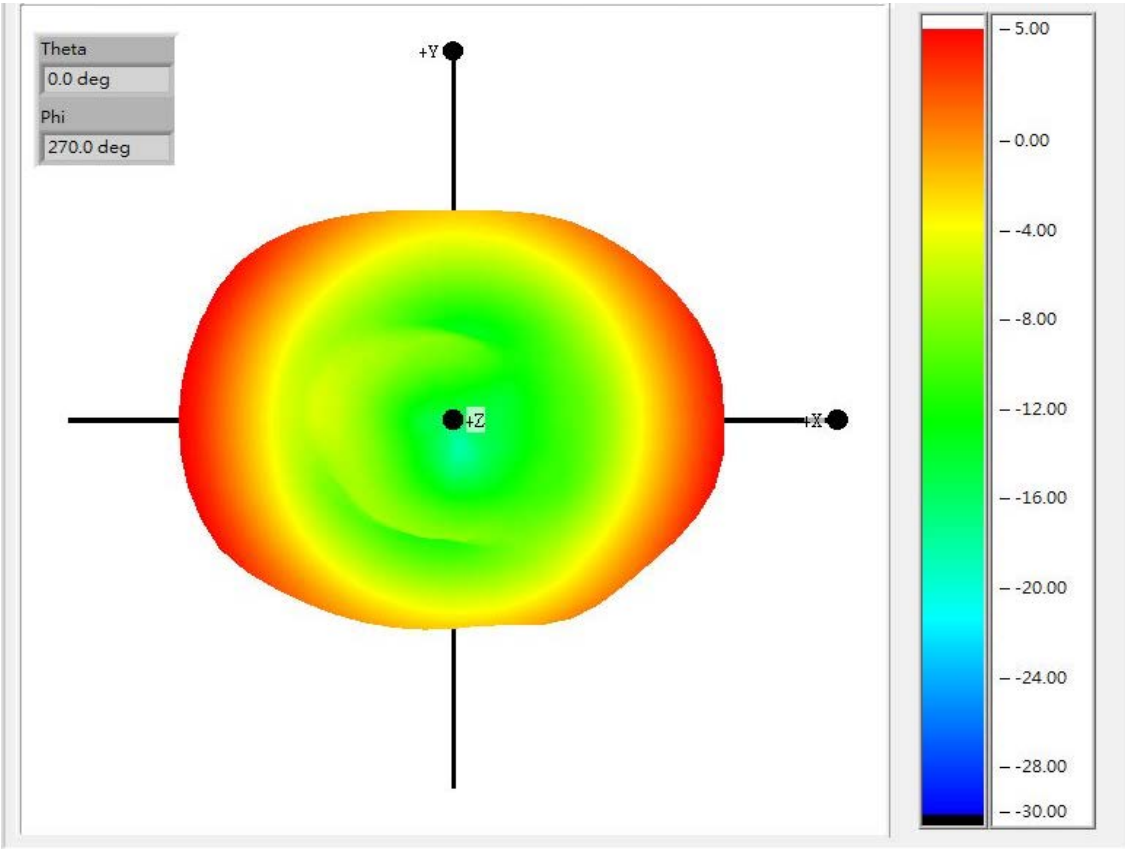
# 3D Radiation Pattern

## 5550 MHz



# 3D Radiation Pattern

## 5850 MHz



## Connector SMA

| | | |
|---|---|---|
| Electrical Properties | Impedance | 50 ohm |
| | Frequency Range | 0~6 GHz |
| | V.S.W.R | ≦1.5 |
| | Working Voltage | ≦170Vrms |
| | Dielectric Withstanding | ≦500 Vrms |
| | Voltage Insulation Resistance | ≧2000 Megohms |
| | Contact Resistance | Center contact: 3.0 Milliohms (Max.)<br>Outer contact: 2.0 Milliohms (Max.) |
| | Recommended coupling nut torque | 4.0 in. lbs. ~ 8.8in. lbs. |
| | Coupling nut retention force | ≧60 lbs. |
| | Contact captivation axial | ≧6 lbs. |
| | Coupling Proof Torque | 15 in-1bs.min |

| | |
|---|---|
| Operating Temperature | -65℃ ~ +165℃ |

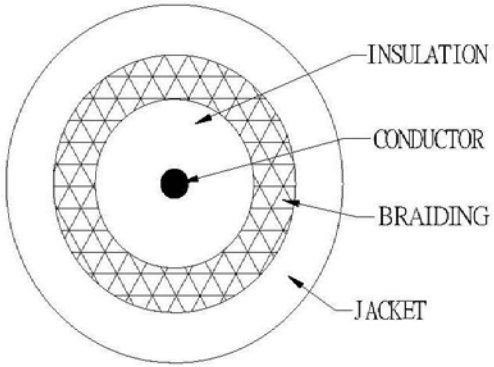
| | | |
|---|---|---|
| Material Specifications | Material Data | Material |
| | Body | Brass |
| | Center Contact | Brass |
| | Insulator | Teflon |

# 線材規格

# CABLE SPECIFICATION

| SPECIFICATION: | RG178 CABLE | |
|---|---|---|
| ITEM | | SPECIFICATION |
| CONDUCTOR | MATERIAL | Silverplated Copper coated steel Wire |
| | Composition(No./mm) | 7/0.102 |
| | NOM.O.D | 0.306±0.03 |
| INSULATION | Material | FEP(Natural)/PTFE |
| | Nom.Thick.(mm) | 0.275 |
| | NOM.O.D | 0.88±0.03 |
| BRAIDING | MATERIAL | Silver-coated annealed copper wire |
| | Composition | 16*3/0.1;Coverage ≧90% |
| JACKET | MATERIAL | FEP(*color) |
| | Nom.Thick(mm) | 0.25 |
| | Nom.O.D(mm) | 1.78±0.05 |
| | Color | Brown |

**CONSRUCTION D.W.G**




**Electrical Properties(at 20℃)**

| Item | Unit | Details |
|---|---|---|
| Conductor Resistance | Ω/km | Max.800 |
| Insulation Resistance | MΩ.km | Min.500 |
| Dielectric Strength | V(AC)/min | 1000 |
| Capacitance | pF/m | 105(1kHz) |

**REMARK**

| | | | |
|---|---|---|---|
| Characteristic Impedance | Ω | 50±2.0 | |
| Attenuation | dB/m | 1GHz | 1.70 |
| | | 2GHz | 2.42 |
| | | 3GHz | 3.08 |
| | | 4GHz | 3.63 |
| | | 5GHz | 4.15 |
| | | 6GHz | 4.80 |
| Temperature range | ℃ | -55~150 | |
| Standing wave(0-6GHz) | / | ≦1.35 | |

***MASTER WAVE TECHNOLOGY CO., LTD.***

| | | | |
|---|---|---|---|
| **CHECKED** | | **DATE** | 2013/8/8 |
| **DRAWING** | Charlene | **REV** | 01 |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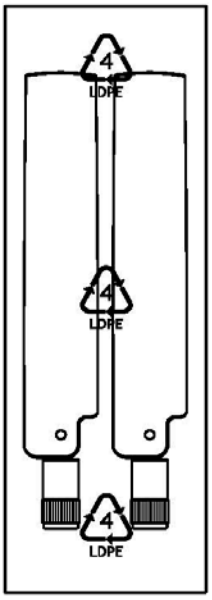
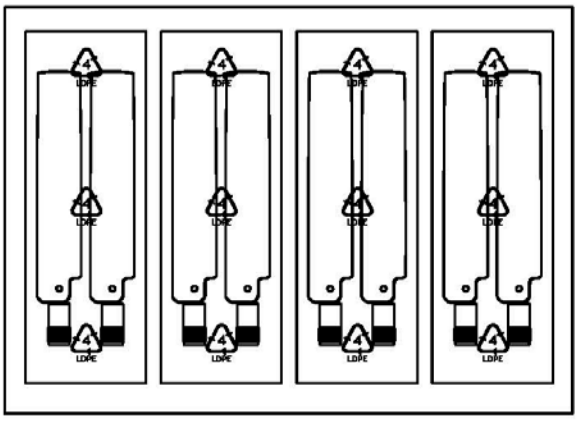
| REV | ZONE | DESCRIPTION | ENG | APPROVED | DATE |
|---|---|---|---|---|---|
| 01 | 3F | 更改包裝 | Mango | | 2019/6/11 |
| 02 | 4C | 增加"PE-LD",兩種字樣通用 | Doris | | 2019/10/02 |



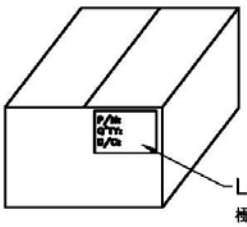

01

2PCS ANTENNA OF A BAG



02 PE-LD = LDPE

50PCS ANTENNA OF A BIG BAG



Label
標籤Label貼於外箱兩邊側麥

| | | | | |
|---|---|---|---|---|
| DATE: | | MAT'L: | Master Wave Technology CO.,LTD | |
| UNIT: mm | | FINISH: | | |
| THIRD ANGLE PROJECTION | | SCALE: – | TITLE : 8619 Replacement Antenna Packing | |
| APPROVED BY: | CHECKED BY: | DESIGNED BY: | DRAWN BY: | WEIGHT: |
| | | | MODEL NO. : | REV |
| | | | PART NO. : | 02 |

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