

860MHz - 870MHz 5dBi Omni-Directional Outdoor Antenna



Applications:

- 860MHz - 870MHz Frequency Band
- IEEE 802.22 WRAN
- Point to Point Bridge
- Multipoint Application
- Bluetooth
- Public Wireless Hotspot
- Wireless Video Systems

Features:

- Superior performance
- Lightweight
- Good appearance design
- DC Short lightning protection
- Support is up and down or so to adjust
- Behind and support is made of aluminum
- Outdoor antenna for public hotspots
- Includes tilt and swivel mast mounting brackets
- RoHS Compliant

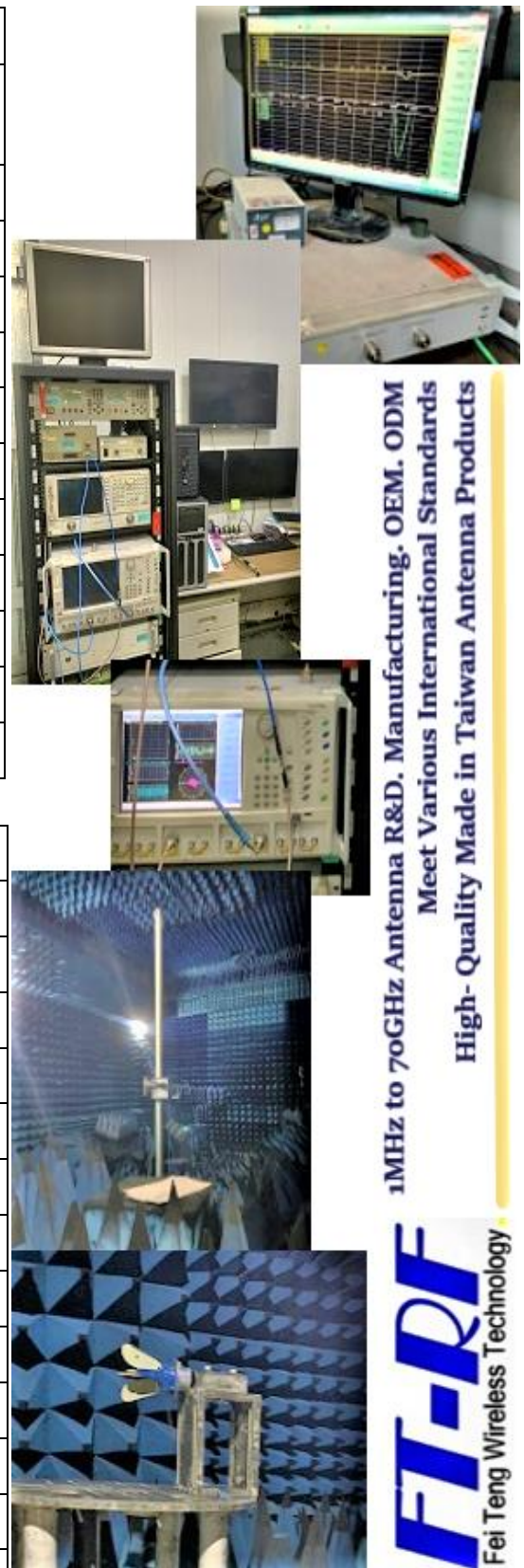
| | |
|-----------------------|------------------------------------------|
| Model: OA-868M08-NF | -3db Beamwidth: Horz.360 deg Vert.17 deg |
| LxWxH: 1475x70x50mm | N.W.: 800g |
| Connector: N-Female | Frequency: 860MHz - 870MHz |
| Styling: Dipole Array | Polarization: Vertical |
| Gain: 9dBi | Max Power (C.W): 100W |

Electrical Specifications

| | |
|-----------------------|-------------------------------------------|
| Frequency Range | 860MHz to 870MHz |
| V.S.W.R (MAX) | 868MHz: 1.5 :1 860MHz and 870MHz: <2.0 |
| Antenna Type | Collinear |
| Radiation | Omni Directional |
| Gain (MAX) | 9 dBi |
| Polarization | Vertical |
| Maximum Power | 100 Watts |
| Vertical Beam-width | 17 Deg |
| Horizontal Beam-width | 360 Deg |
| Impedance | 50 Ohm |
| Antenna Design | Dipole Array |
| Internal Material | Copper |
| Connector | N-Female |

Mechanical Specifications

| | |
|----------------------------|-------------------------|
| Length (MAX) | 1475+/-5 mm |
| Diameter (MAX) | 70 x 50mm |
| Antenna Weight (G.W) | 800 g |
| Accessories (G.W) | 70 g |
| Application | Indoor / Outdoor |
| Radome Material | White Fiberglass |
| Parts Material | Aluminum |
| Mount Style | Pole Mount / Wall Mount |
| Mounting | Stainless Steel |
| Wind Survival | Greater than 150MPH |
| Storage Temperature | -20 to +80 |
| Operating Temperature | -20 to +60 |
| Operating Humidity | 10%~80% non-condensing |
| Storage Humidity | 5%~80% non-condensing |
| Safety, Emission and other | RoHS |

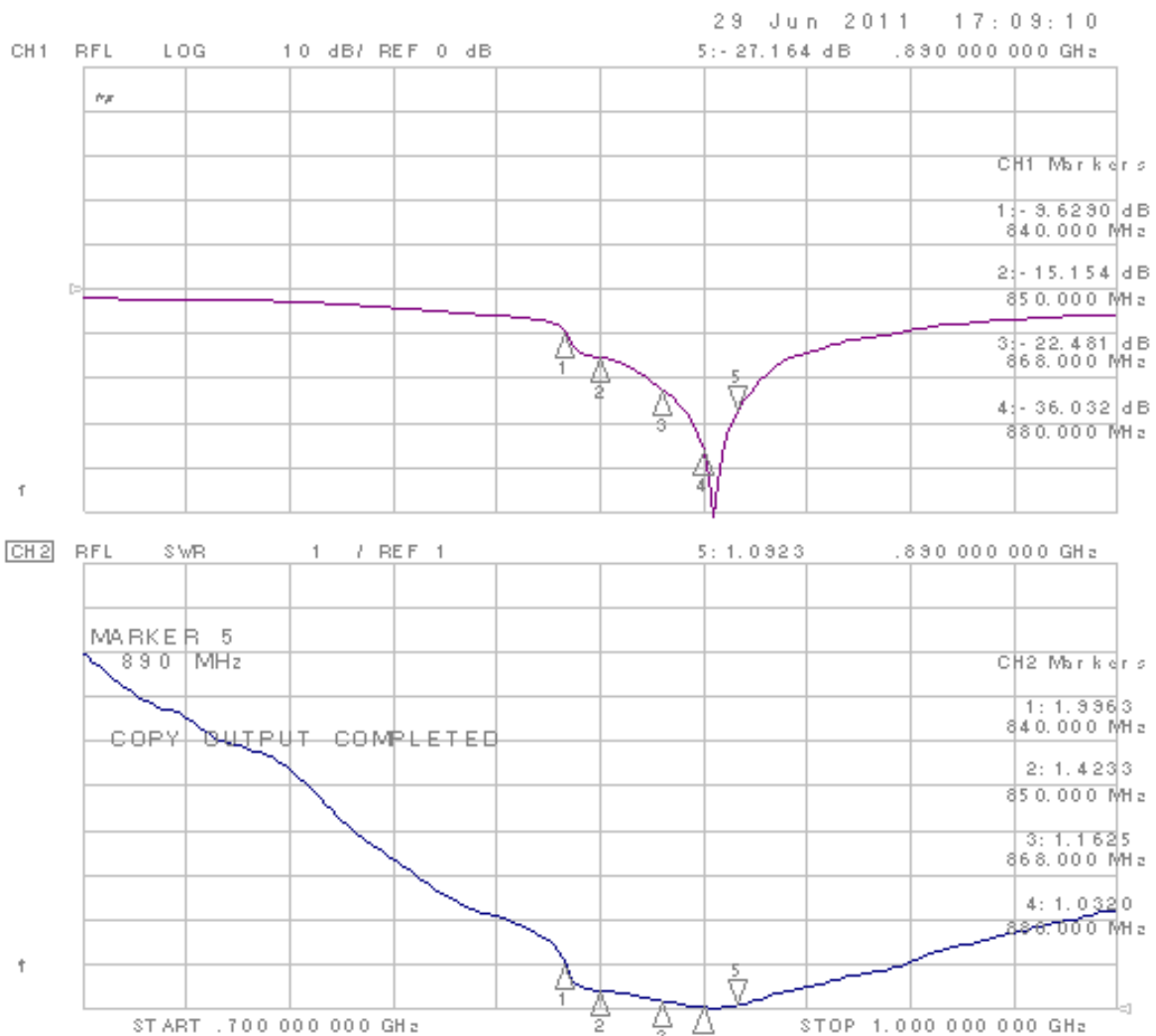


1MHz to 70GHz Antenna R&D. Manufacturing. OEM. ODM.
Meet Various International Standards
High-Quality Made in Taiwan Antenna Products

Network Analyzer Test Report

| | |
|----------------------|---------------------------------------|
| Test Equipment | Agilent 8720ET 50MHz-20.5GHz |
| Test Equipment Cable | Agilent 60cm SMA male to SMA male |
| RF connector Adapter | Agilent SMA-Female to N-Male DC~18GHz |
| Correction | 85052D-DC-26.5GHz |
| Test Model | OA-868M09-NF |
| Test Port | S11 |

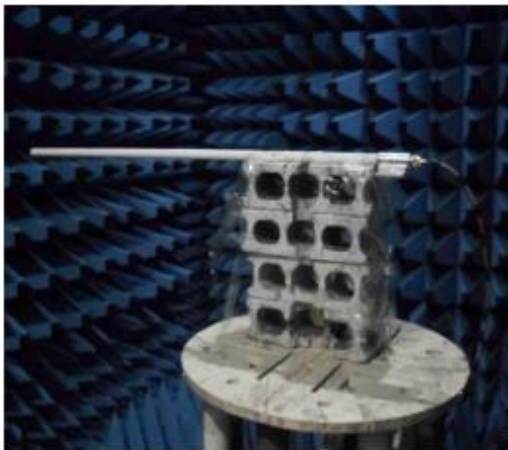
Return Loss & V.S.W.R



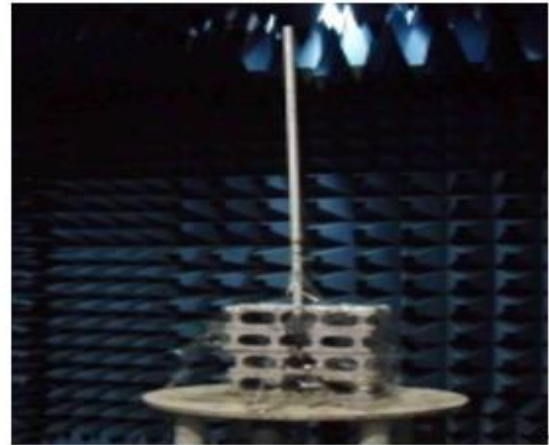
RF Chamber Test Report

| | |
|----------------|------------------------------|
| Test Equipment | Agilent 8720ET 50MHz-20.5GHz |
| Chamber | 7M(D) X 7M(H) X14M(L) |
| Test Frequency | 860MHz - 870MHz |
| Test Antenna | FT-RF HA-07M18G-NF |

Vertical Pattern Photo

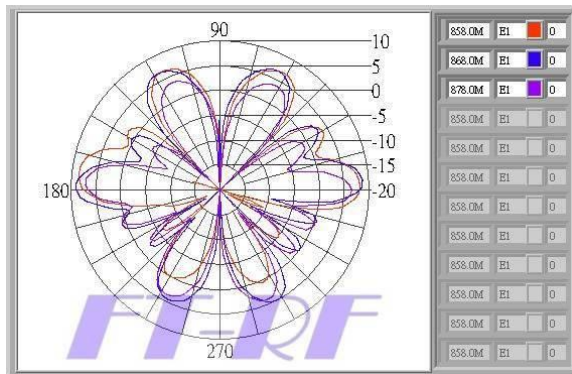


Horizontal Pattern Photo



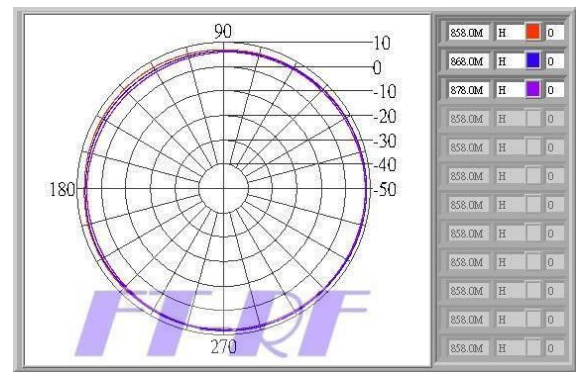
Vertical Pattern

E-plane co-pol----- -3dB beamwidth=17 Deg



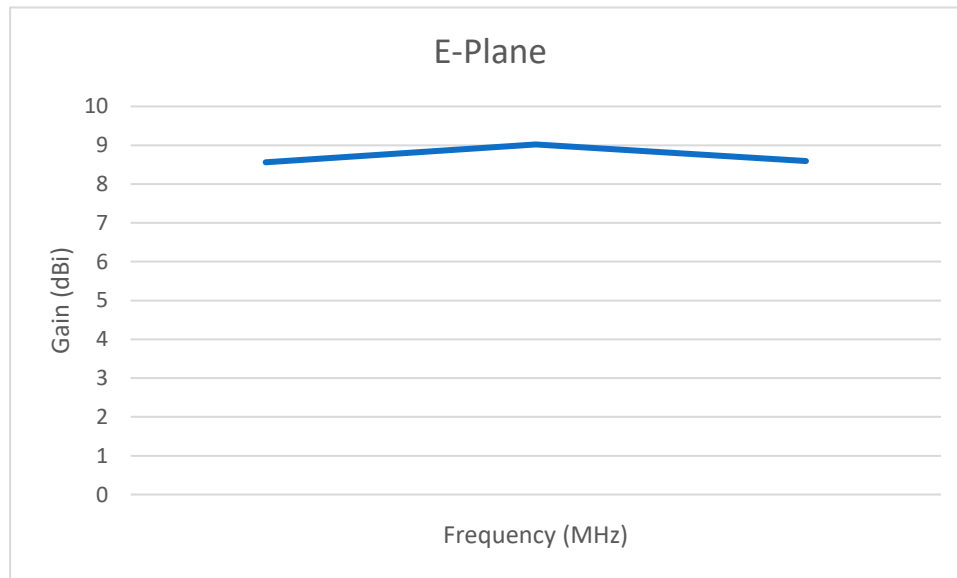
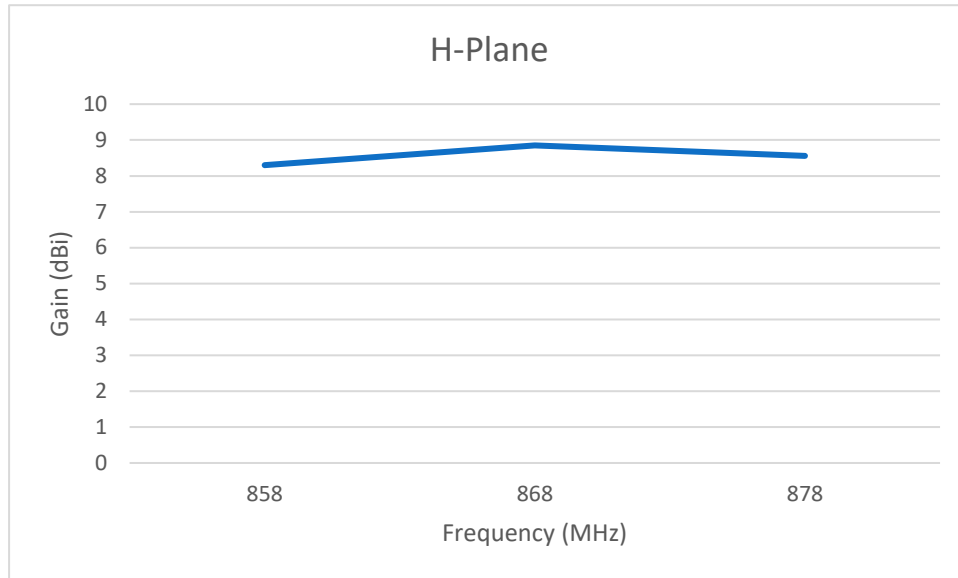
Horizontal Pattern

H-plane co-pol-----3dB beamwidth=360 Deg



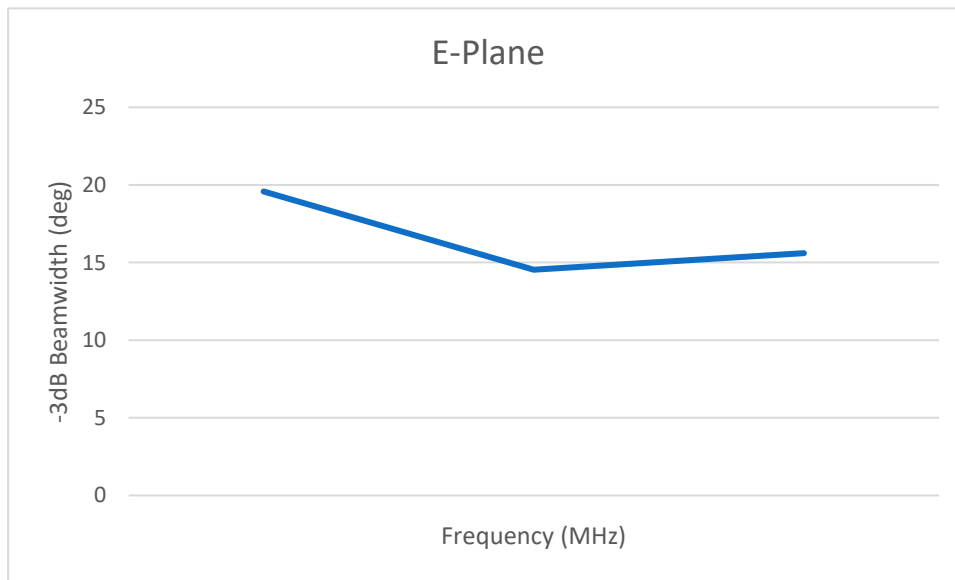
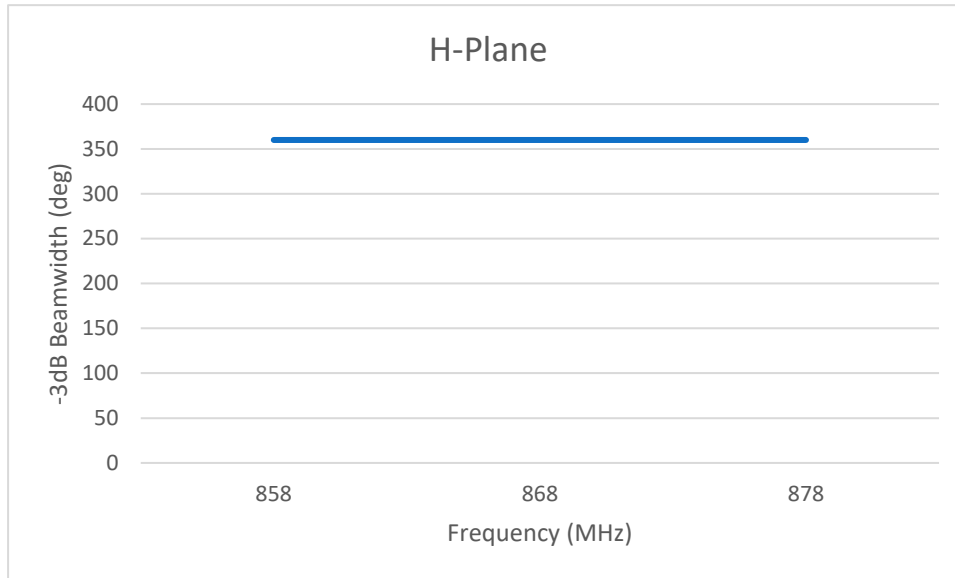
Antenna Gain

| Frequency (MHz) | H-plane (dBi) | E-plane (dBi) |
|-----------------|---------------|---------------|
| 858 | 8.3 | 8.56 |
| 868 | 8.85 | 9.02 |
| 878 | 8.56 | 8.59 |

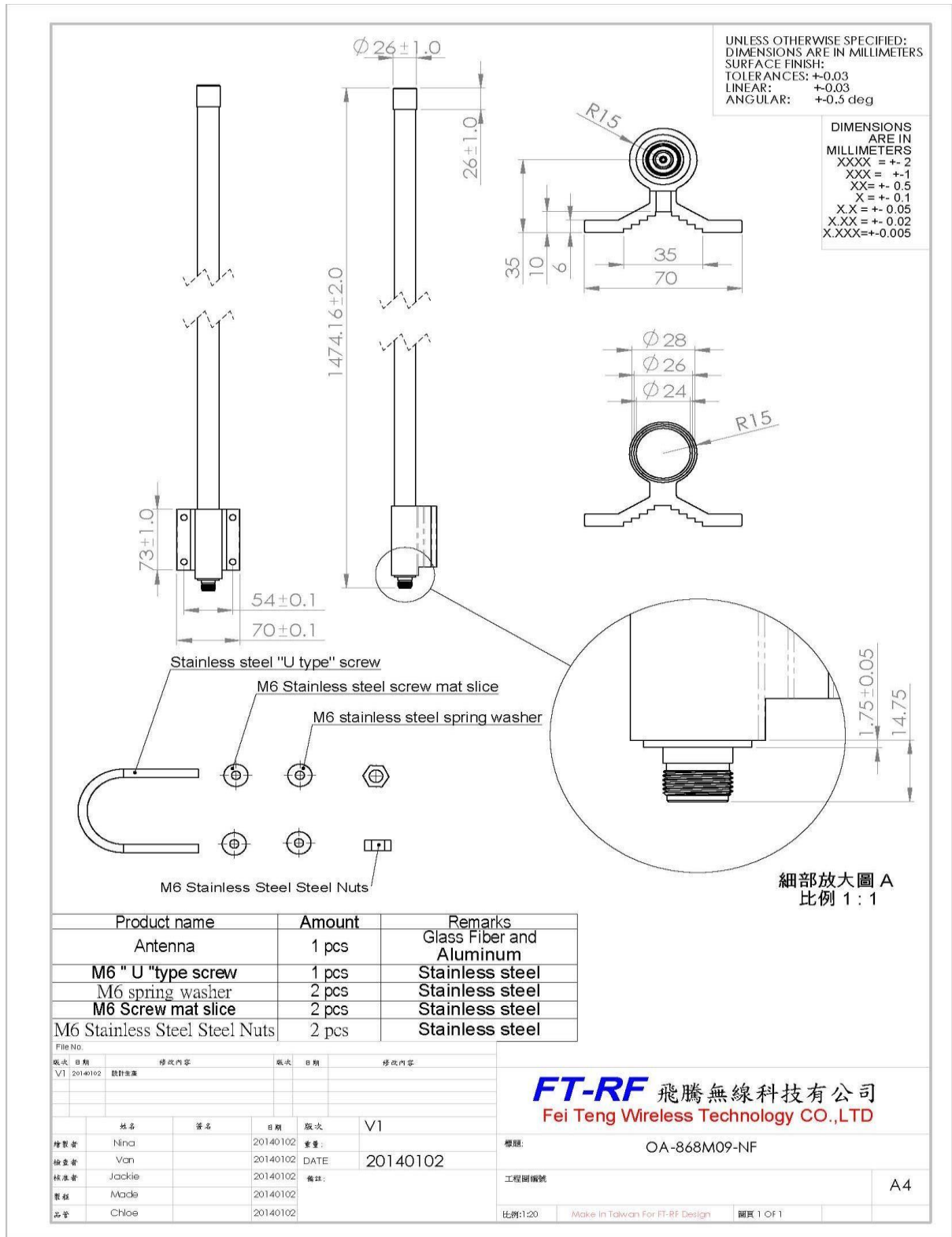


Antenna -3db Beamwidth Curve




| Frequency (MHz) | H-plane (deg) | E-plane (deg) |
|-----------------|---------------|---------------|
| 858 | 360 | 19.58 |
| 868 | 360 | 14.54 |
| 878 | 360 | 15.6 |
| AVG | 360 | 16.6 |



Antenna Dimension



Packing List & Label List

| | | | | | | | |
|-------------------------------------------------------------------------------------|----------------------------|---------------------------------------|--------------------------------------------------------------------------------------|----------------------|--|--|--|
|  | | 1 Set Packing | | 398x421x83mm | | | |
| | | Antenna | | | | | |
| | | Stainless steel "U type" screw | | | | | |
| | | M6 Stainless steel screw mat slice M6 | | | | | |
| | | Stainless steel screw | | | | | |
| | | Waterproof tape | | | | | |
| | | Carton (10pcs) | | | | | |
| | | ITEM NO. | | OA-868M09-NF 10 sets | | | |
| | | Q'TY | | 10 PCS | | | |
| | | G. W. | | 8.7 KG | | | |
| N. W. | | 8 KG | | | | | |
| CARTON | | 1545x398x177mm | | | | | |
| 1 set carton Label | | | Antenna Label | | | | |
| Size | 50 x 80 mm(white) | | Size | 30 x 50 mm (blue) | | | |
| Customer: | Manufacture Data: yy/mm/dd | | OA-868M09-NF 860MHz - 870MHz 9dBi Omni Directional Outdoor Antenna | | | | |
| Customer Mode: | | | | | | | |
| Order Number: | | | | | | | |
| Weight: | kg | | | | | | |
| Carton: | Box | | | | | | |
| Amount: | Pcs | | | | | | |
| Paste Position | | | Paste Position | | | | |
|  | | |  | | | | |

RoHs and WEEE Status (RoHs and WEEE Compliance)

Certificate of Compliance

Date:

To Whom It May Concern

FT-RF hereby certifies that product:

| Model | Product |
|--------------|-------------------------------------------------------|
| OA-868M09-NF | 860MHz - 870MHz 9dBi Omni Directional Outdoor Antenna |

Is in conformance with the requirements of the European RoHS Directive 2011/65/EU and the European WEEE Directive 2012/19/EU, all materials referenced therein are in concentrations below the maximum allowable levels specified. Products manufactured by FT-RF bear the CE marking and have FCC certificate. FT-RF has been assessed and found to be in accordance with the requirements of ISO 14001:2015 and ISO 9001:2015 standards, scope of Design and Manufacture of Antenna.

Our statements in this letter regarding RoHS and WEEE compliance do not extend to, or apply to any product subjected to unintended contamination, misuse, neglect, accident, improper installation, or to use in violation of instructions furnished by FT-RF.

Sincerely,

FT-RF (Fei Teng Wireless Technology CO., LTD)

The information contained in this letter is being provided for informational purposes only and to clarify certain information concerning FT-RF products. Nothing provided in this letter is:

- (1) a representation, warranty, or agreement to indemnification by FT-RF.
- (2) a statement which may form the basis of reliance by FT-RF,
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