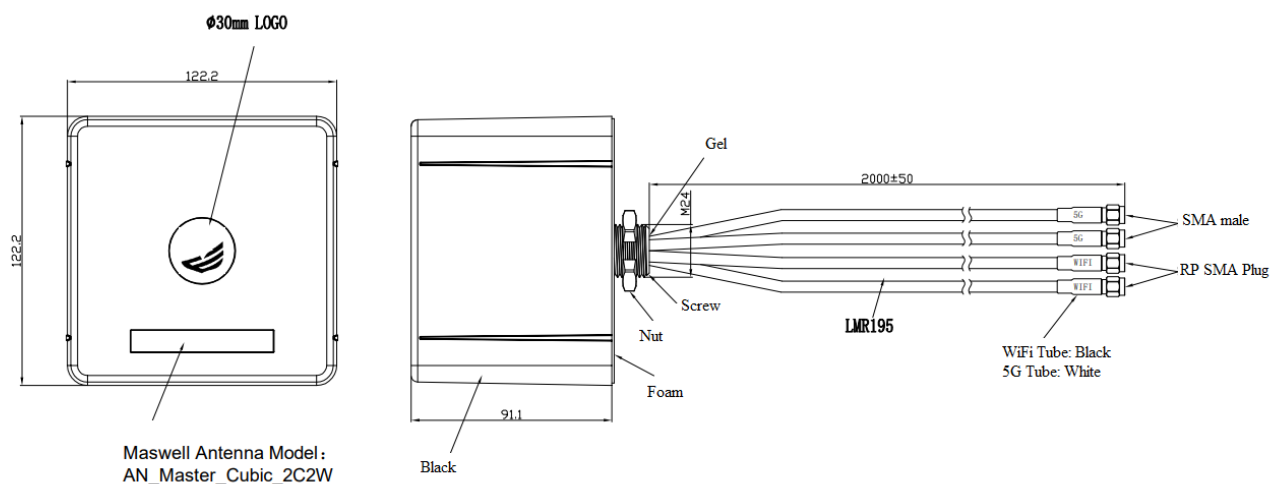


# Maswell 5G 4 in 1 Combination Antenna 2X2 MIMO 5G Plus 2X2 MIMO WiFi 7 L Plate Mount

AN\_Master\_Cubic\_2C2W-LP



## Schematic picture



# Maswell 5G 4 in 1 Combination Antenna 2X2 MIMO

## 5G Plus 2X2 MIMO WiFi 7 L Plate Mount

AN\_Master\_Cubic\_2C2W-LP

### Specifications

| Item                               |                 | Specifications                    |
|------------------------------------|-----------------|-----------------------------------|
| Antenna 1: 5G/4G<br>LTE/WiFi6E/UWB | Frequency Range | 600MHz~8.0GHz                     |
|                                    | Polarization    | Linear                            |
|                                    | Gain            | Up to 6.0 dBi (20cm Cable Length) |
|                                    | V.S.W.R         | average 3.0                       |
|                                    | Efficiency      | >50%                              |
| Antenna 2: 5G/4G<br>LTE/WiFi6E/UWB | Frequency Range | 600MHz~8.0GHz                     |
|                                    | Polarization    | Linear                            |
|                                    | Gain            | Up to 6.0 dBi (20cm Cable Length) |
|                                    | V.S.W.R         | average 3.0                       |
|                                    | Efficiency      | >50%                              |
| Antenna 3: WiFi                    | Frequency Range | 2100Mhz-7200MHz                   |
|                                    | Polarization    | Linear                            |
|                                    | Gain            | 4dBi                              |
|                                    | V.S.W.R         | <1.5                              |
|                                    | Impedance       | 50Ω                               |
| Antenna 4: WiFi                    | Frequency Range | 2100Mhz-7200MHz                   |
|                                    | Polarization    | Linear                            |
|                                    | Gain            | 4dBi                              |
|                                    | V.S.W.R         | <1.5                              |
|                                    | Impedance       | 50Ω                               |

# Maswell 5G 4 in 1 Combination Antenna 2X2 MIMO 5G Plus 2X2 MIMO WiFi 7 L Plate Mount

AN\_Master\_Cubic\_2C2W-LP

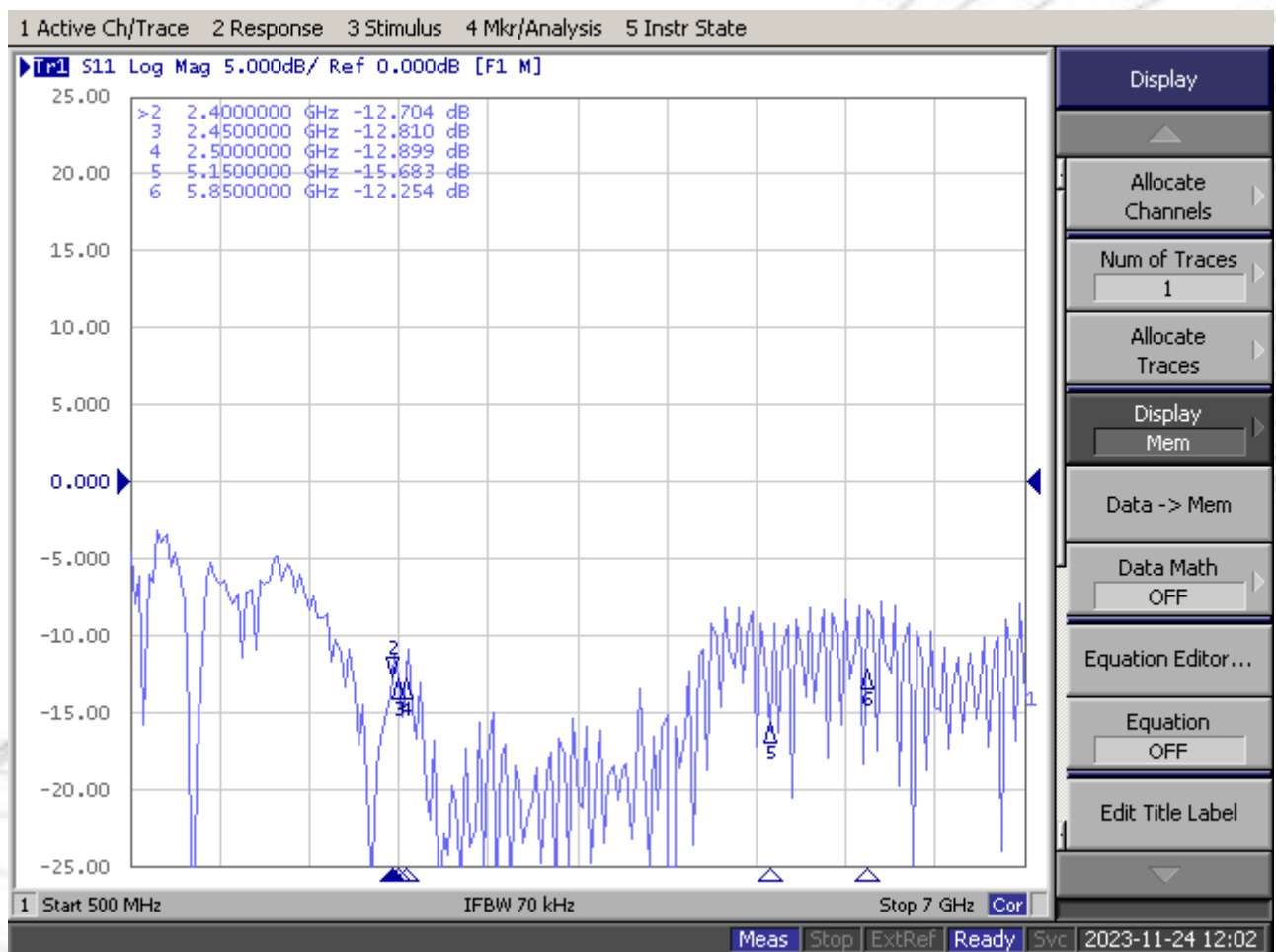
## Specifications

| Item                     |                               | Specifications                                                            |
|--------------------------|-------------------------------|---------------------------------------------------------------------------|
| Mechanical               | Dimension                     | 122mm *122mm*91mm                                                         |
|                          | Cable                         | LMR195 2meter or Customised                                               |
|                          | Mounting Method               | L plate (Supplied) U bolt and Screw                                       |
|                          | Connector                     | SMA Male for 5G MIMO<br>RP SMA Plug for WIFI MIMO                         |
| Environmental            | Operating Temperature         | -40°C ~ +85°C                                                             |
|                          | Relative Humidity             | Up to 95%                                                                 |
|                          | Radome Material               | ASA/ (UL Yellow Card)                                                     |
|                          | UV Exposure & Water Immersion | F1 (UL746C)                                                               |
|                          | Waterproof Grade              | IP 67 (EURO: EN 60529:1991+A1:2000+A2:2013 +AC:2019 CHINA: GB/T4208-2017) |
|                          | Vibration                     | 10 to 55Hz with 1.5mm amplitude 2hours                                    |
| Environmentally Friendly |                               | ROHS Compliant                                                            |

# Maswell 5G 4 in 1 Combination Antenna 2X2 MIMO 5G Plus 2X2 MIMO WiFi 7 L Plate Mount

AN\_Master\_Cubic\_2C2W-LP

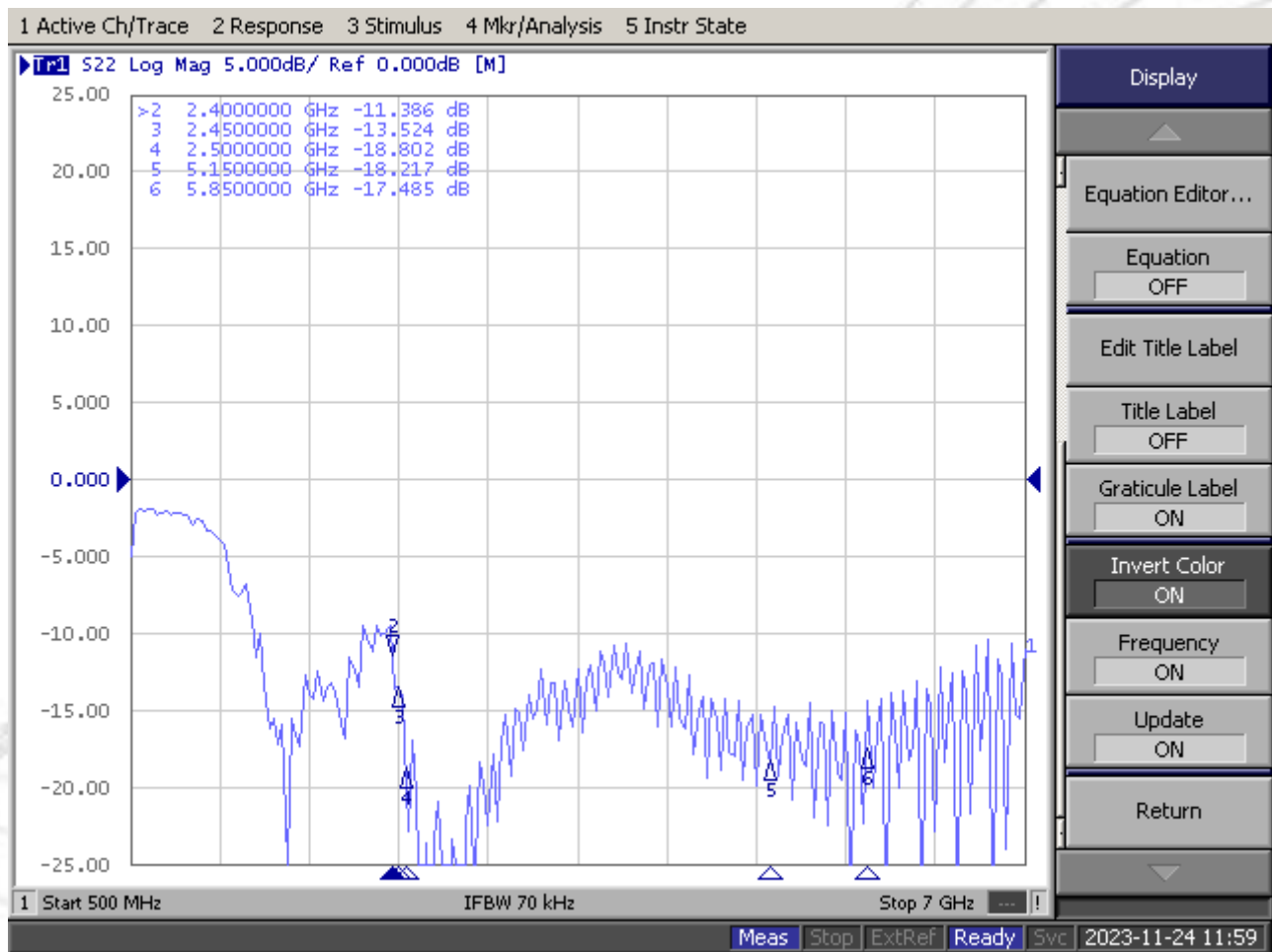
## 5G S11 Reflection Coefficient



# Maswell 5G 4 in 1 Combination Antenna 2X2 MIMO 5G Plus 2X2 MIMO WiFi 7 L Plate Mount

AN\_Master\_Cubic\_2C2W-LP

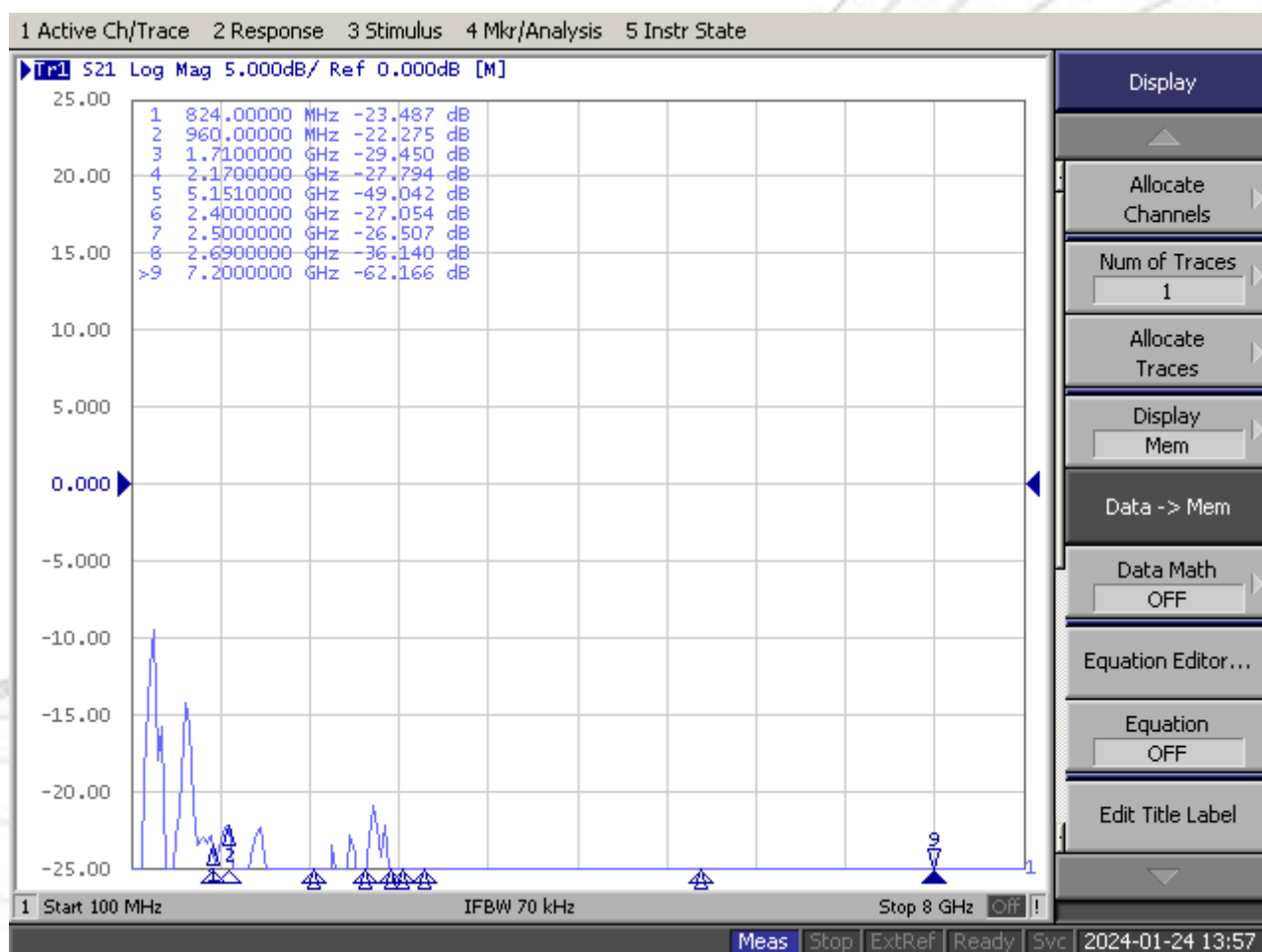
## WiFi 7/WiFi 6E S11 Reflection Coefficient



# Maswell 5G 4 in 1 Combination Antenna 2X2 MIMO 5G Plus 2X2 MIMO WiFi 7 L Plate Mount

AN\_Master\_Cubic\_2C2W-LP

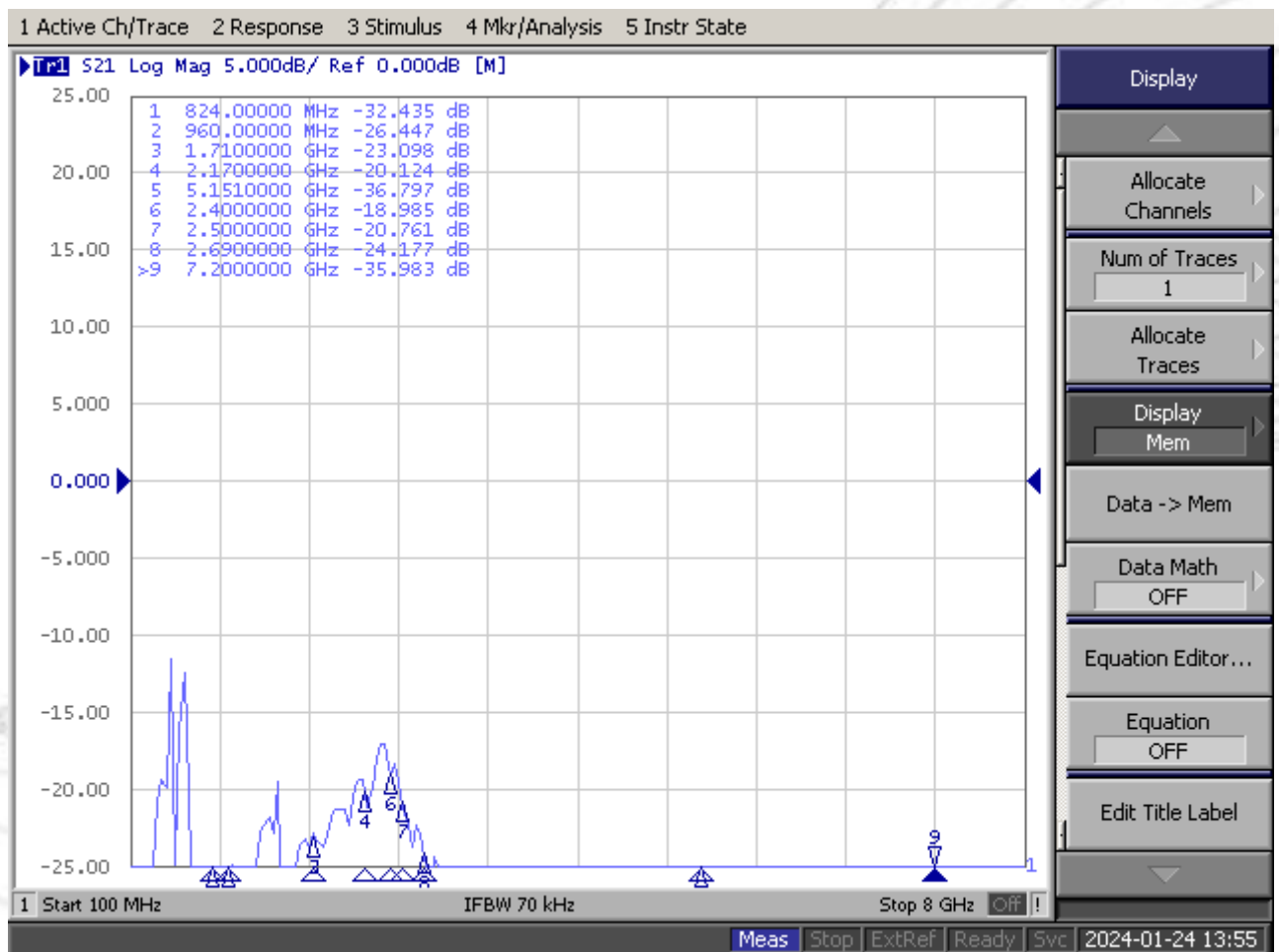
## Isolation Between Port 1/Cable 1 and Port 2/Cable 2



# Maswell 5G 4 in 1 Combination Antenna 2X2 MIMO 5G Plus 2X2 MIMO WiFi 7 L Plate Mount

AN\_Master\_Cubic\_2C2W-LP

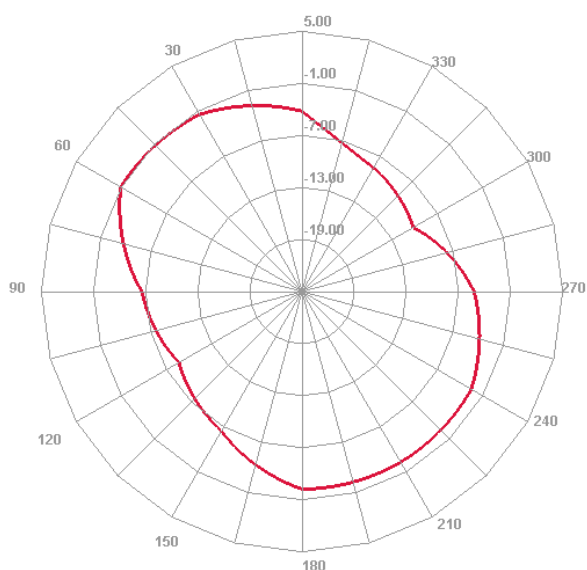
## Isolation Between Port 1/Cable 1 and Port 4/Cable 4



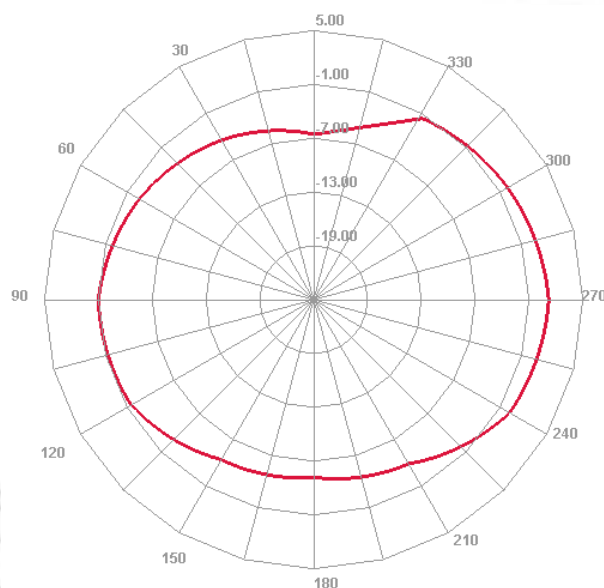
# Maswell 5G 4 in 1 Combination Antenna 2X2 MIMO 5G Plus 2X2 MIMO WiFi 7 L Plate Mount

AN\_Master\_Cubic\_2C2W-LP

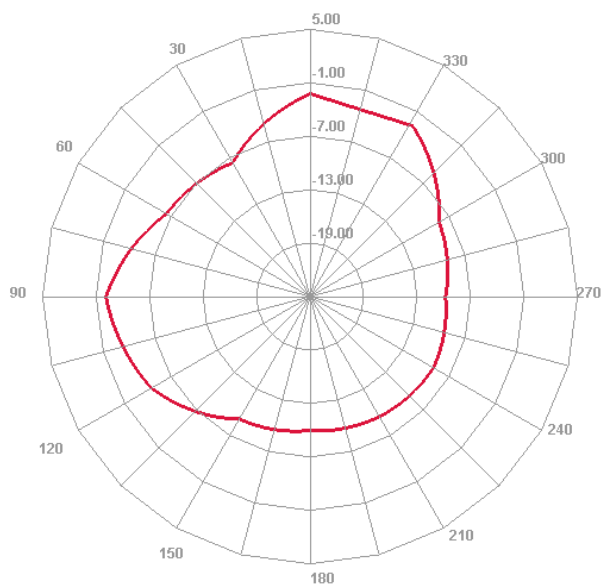
## Radiation Pattern (5G)



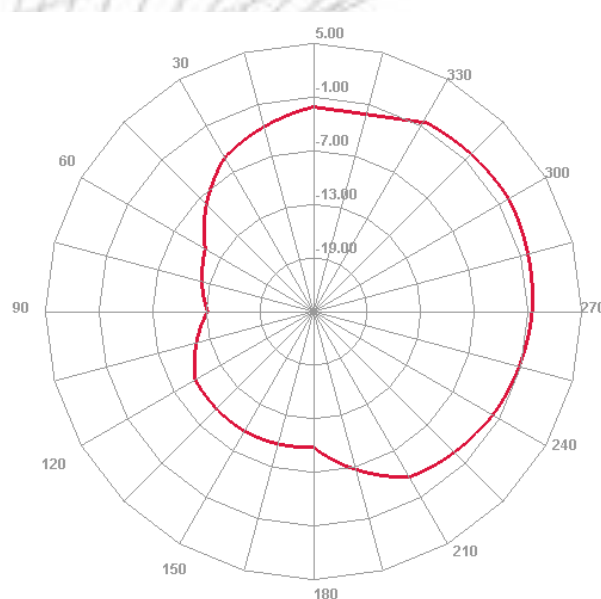
900MHz E plane



900MHz H plane



1800MHz E plane

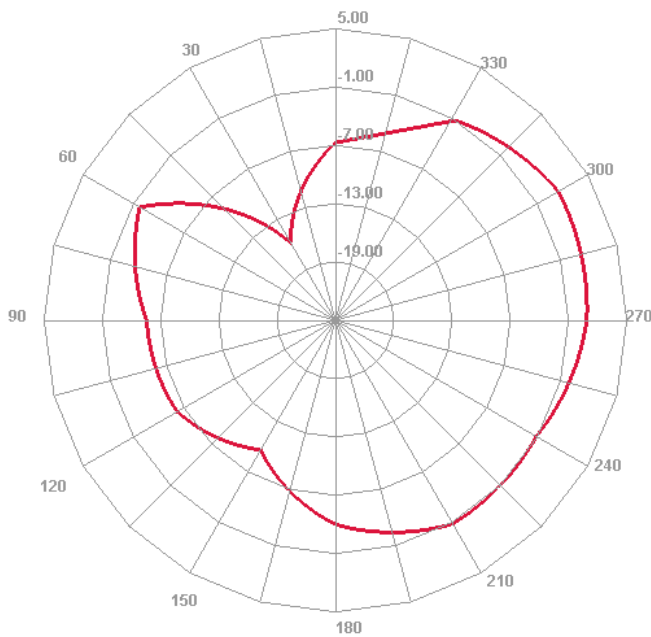


1800MHz H plane

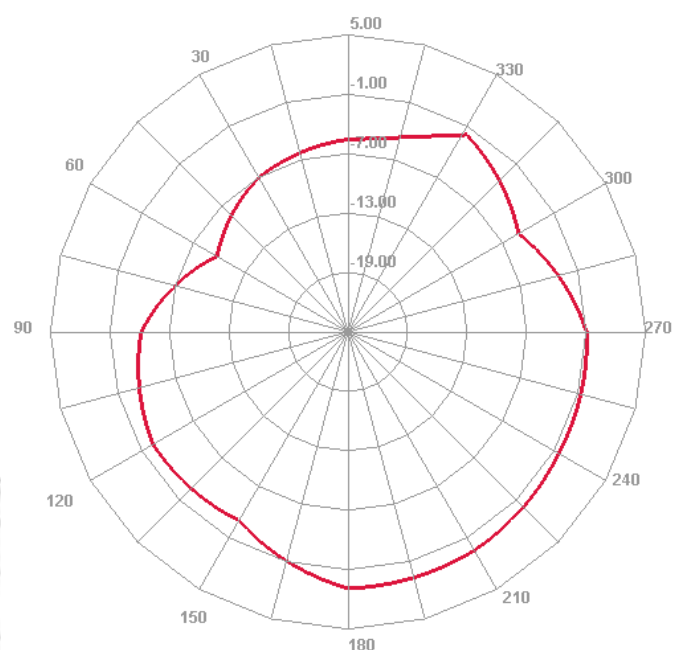
# Maswell 5G 4 in 1 Combination Antenna 2X2 MIMO 5G Plus 2X2 MIMO WiFi 7 L Plate Mount

AN\_Master\_Cubic\_2C2W-LP

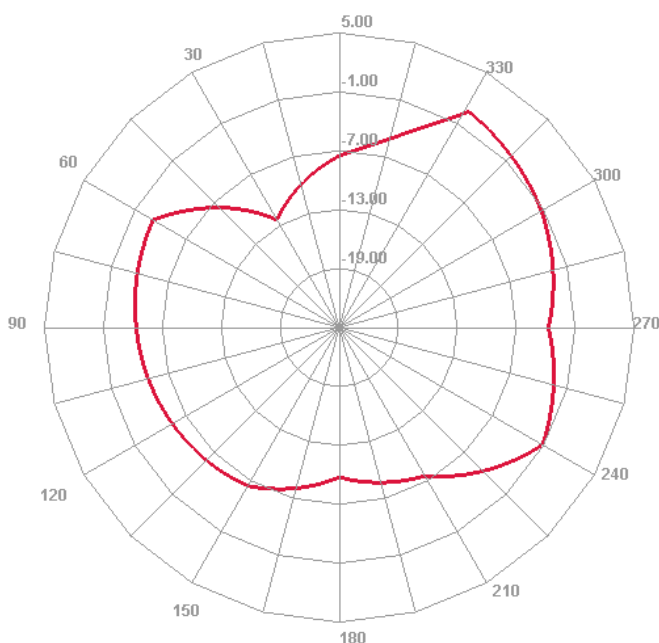
## Radiation Pattern (5G)



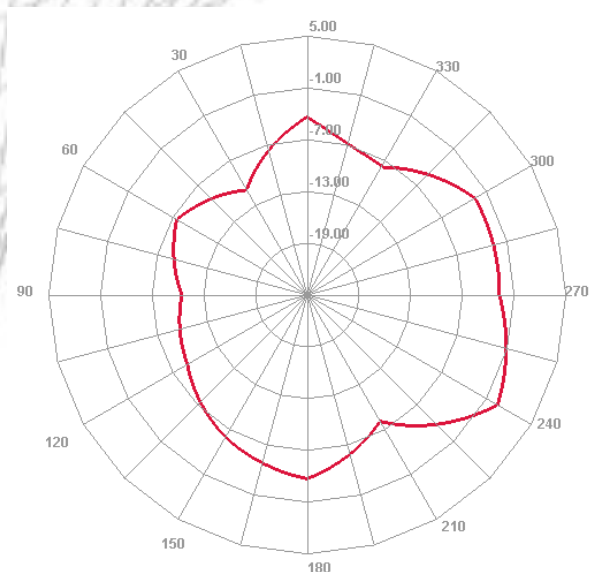
3500MHz E plane



3500MHz H plane



4800MHz E plane

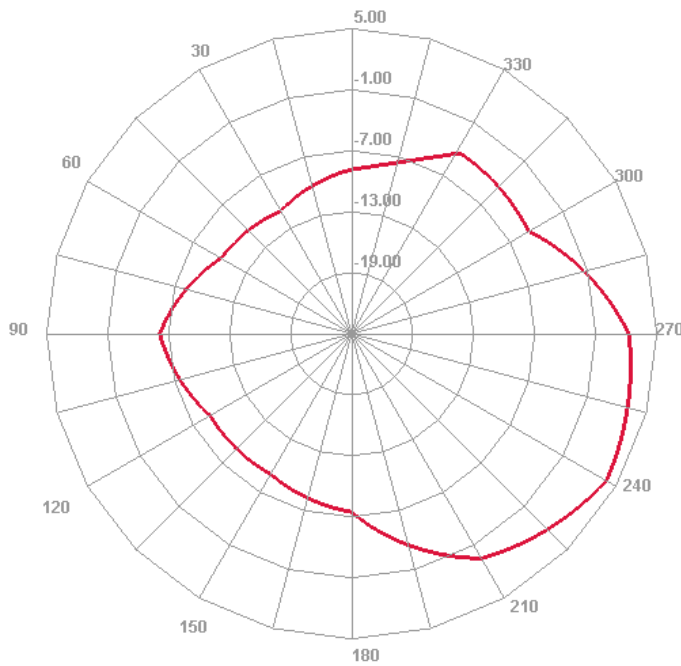


4800MHz H plane

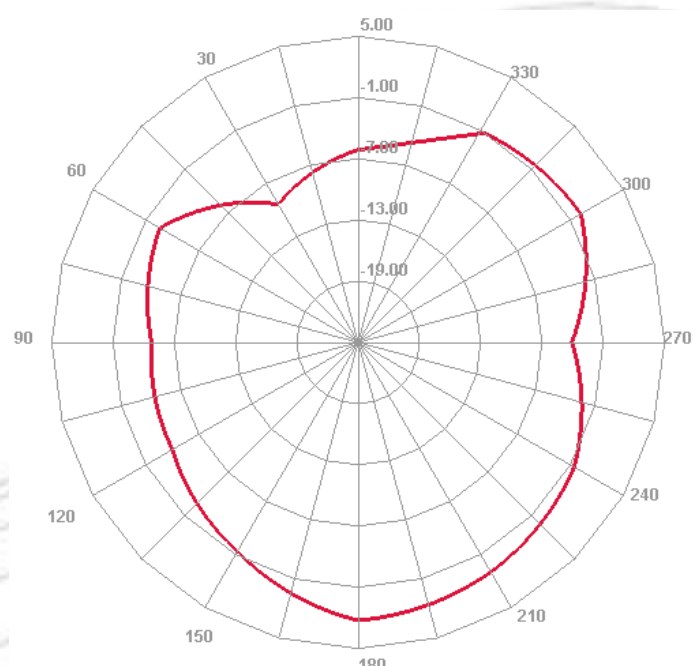
# Maswell 5G 4 in 1 Combination Antenna 2X2 MIMO 5G Plus 2X2 MIMO WiFi 7 L Plate Mount

AN\_Master\_Cubic\_2C2W-LP

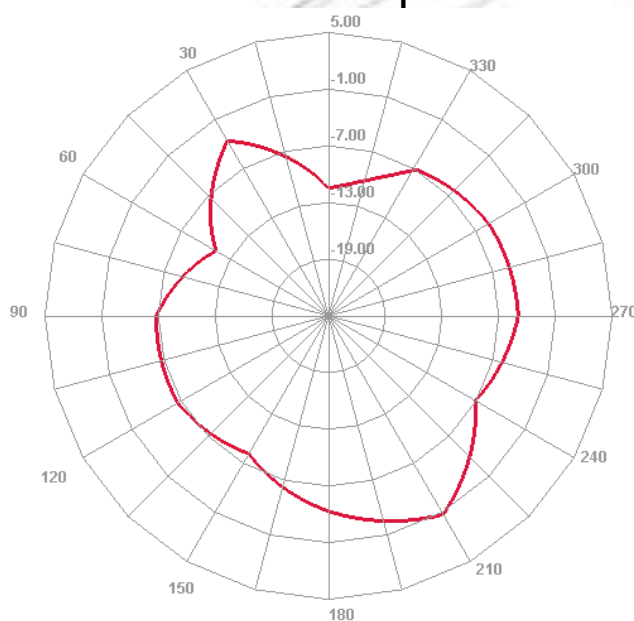
## Radiation Pattern (WiFi)



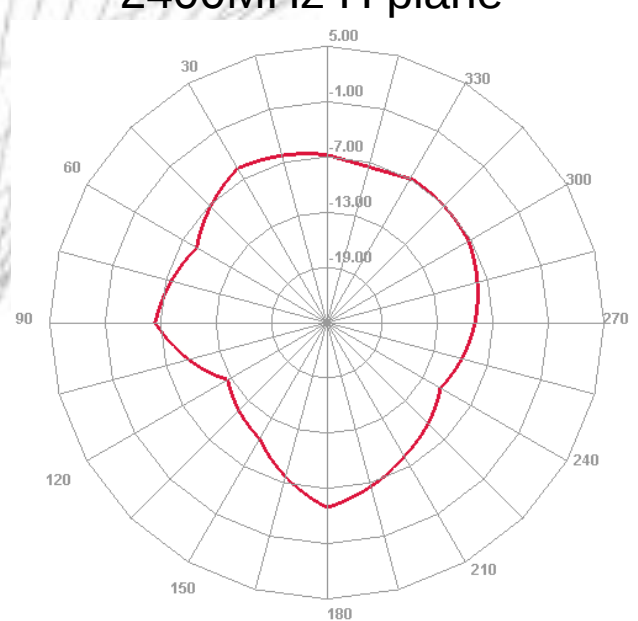
2400MHz E plane



2400MHz H plane



5800MHz E plane

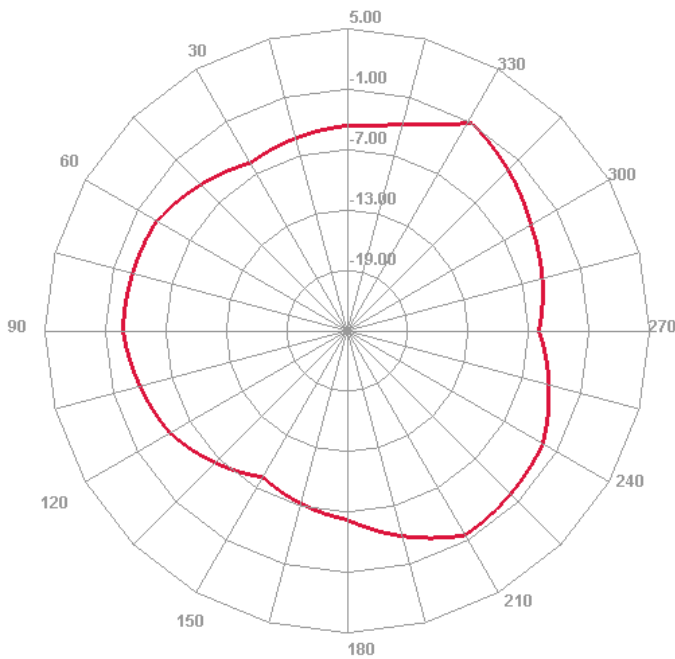


5800MHz H plane

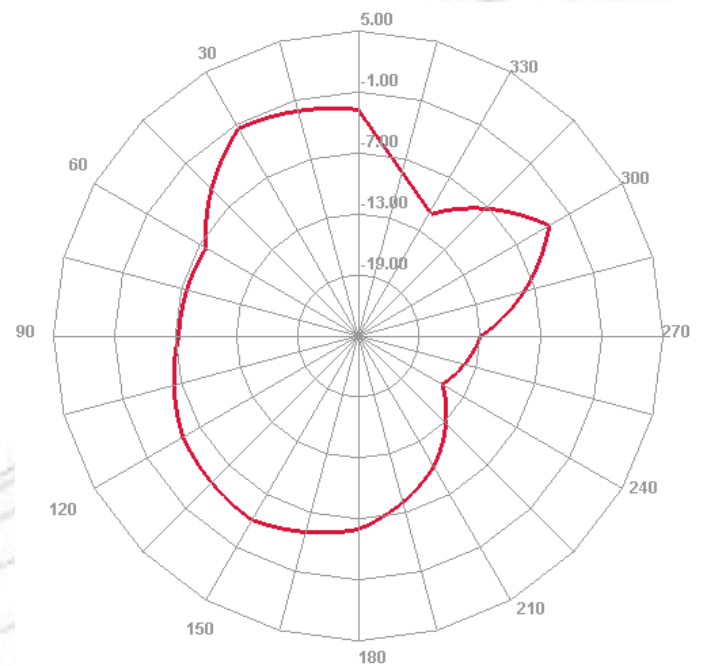
# Maswell 5G 4 in 1 Combination Antenna 2X2 MIMO 5G Plus 2X2 MIMO WiFi 7 L Plate Mount

AN\_Master\_Cubic\_2C2W-LP

## Radiation Pattern (WiFi)



7100MHz E plane



7100MHz H plane

**TEST REPORT****EN 60529****Degrees of protection provided by enclosures(IP code)**

Report reference No.: CTB231113016Q

Date of issue: 2023-11-16

**Testing laboratory**

Name: Shenzhen CTB Testing Technology Co., Ltd.

Address: 1&amp;2/F., Building A, No.26, Xinhe Road, Xinqiao, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, China

Testing location: Same as above

**Client**

Applicant: Suzhou Maswell Communication Technology Co.Ltd

Address: Room 403,Building 1,No.88 Zhenbei Road,High-tech District,Suzhou 215153,Jiangsu,China

**Test specification**

Standard: EN 60529:1991+A1:2000+A2:2013+AC:2019

Procedure deviation: N/A

Non-standard test method: N/A

Object under test: Maswell MIMO Cubic Antenna Series

Model/Type reference: AN\_Master\_Cubic\_4C/AN\_Master\_Cubic\_2C2W/AN\_Master\_Cubic\_4W and Variants

Others Model: /

Trade mark: Maswell

Manufacturer: Suzhou Maswell Communication Technology Co.Ltd

Address: Room 403,Building 1,No.88 Zhenbei Road,High-tech District,Suzhou 215153,Jiangsu,China

IP degrees: IP67

**Possible test case verdicts**

- test case does not apply to the test object: N/A(Not Applicable)

- test object does meet the requirement: P(Pass)

- test object does not meet the requirement: F(Fail)

Date of receipt of test item: 2023-11-10

Date(s) of performance of tests: 2023-11-13 to 2023-11-15

Laboratory sample number: 2231110007-1,14

Model PW-957(+)(f1)

File Number: E56070



COMPANY

CHI MEI CORPORATION  
No 398 Sec 1 Zhongzheng Rd  
Rende District  
Tainan City, 717010 Taiwan

MODEL INFO

PW-957(+)(f1)  
Acrylonitrile Styrene Acrylate (ASA) "KIBILAC", furnished as pellets  
(f1) – Suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.  
(+) – Indicate 0~0.5% acid scavengers.

| FLAMMABILITY PROPERTIES         | VALUE | TEST METHOD     |
|---------------------------------|-------|-----------------|
| Flammability                    |       | ANSI/UL 94      |
| 1.5 mm, Color: ALL              | HB    |                 |
| 3.0 mm, Color: ALL              | HB    |                 |
| ISO/IEC FLAMMABILITY PROPERTIES | VALUE | TEST METHOD     |
| Flammability                    |       | IEC 60695-11-10 |
| 1.5 mm, Color: ALL              | HB75  |                 |
| 3.0 mm, Color: ALL              | HB40  |                 |
| ELECTRICAL PROPERTIES           | VALUE | TEST METHOD     |
| Hot-wire Ignition (HWI)         |       | UL 746A         |
| 1.5 mm                          | PLC 4 |                 |
| 3.0 mm                          | PLC 3 |                 |
| High Amp Arc Ignition (HAI)     |       | UL 746A         |
| 1.5 mm                          | PLC 0 |                 |

|                                              |       |             |
|----------------------------------------------|-------|-------------|
| 3.0 mm                                       | PLC 0 |             |
| Comparative Tracking Index (CTI)             | PLC 0 | UL 746A     |
| High Voltage Arc Tracking Rate (HVTR)        | PLC 3 |             |
| High Voltage, Low Current Arc Resistance     | PLC 6 |             |
| THERMAL PROPERTIES                           | VALUE | TEST METHOD |
| Relative Thermal Index - Electrical Strength |       | UL 746B     |
| 1.5 mm                                       | 90 °C |             |
| 3.0 mm                                       | 90 °C |             |
| Relative Thermal Index - Mechanical Impact   |       | UL 746B     |
| 1.5 mm                                       | 90 °C |             |
| 3.0 mm                                       | 90 °C |             |
| Relative Thermal Index - Mechanical Strength |       | UL 746B     |
| 1.5 mm                                       | 95 °C |             |
| 3.0 mm                                       | 95 °C |             |
| PHYSICAL PROPERTIES                          | VALUE | TEST METHOD |
| UV Exposure & Water Immersion                | f1    | UL 746C     |

Report Date: 2006-08-31

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