

## SPECIFICATION

- Spec No : **OMB.242**
- Part No. : **OMB.242.08F21**
- Product Name : **Barracuda - Omni-Directional Outdoor Antenna  
2.4 - 2.5 GHz 8dBi**
- Dimensions : Length 523mm
- Features : Excellent Radiation Patterns  
Lightweight  
All weather operation – DC short lightning protection  
Installed for vertical polarization  
Includes tilt and swivel mast mount  
RoHS Compliant



## 1.0 Introduction

This antenna is professionally designed with the highest industrial quality. The antenna base is aluminum and resists rust. The products have good water resistance.

Great care has been taken in the manufacture and assembly of the internal copper elements so they can bear a high input power.

## Applications

- 2.4 - 2.5 GHz ISM Band
- IEEE 802.11b, 802.11g, 802.11n Wireless LAN
- Directional and multipoint applications
- Bluetooth
- Public Wireless Hotspot
- Wi-Fi, RFID
- Wireless Video Systems

## 2.0 Antenna Performance

### 2.1 Electrical Specifications

|    |                      |                     |
|----|----------------------|---------------------|
| 1  | Communication System | ISM                 |
| 2  | Frequency Band       | 2400 MHz - 2500 MHz |
| 3  | Bandwidth            | 100MHz              |
| 4  | Gain                 | 8.0 dBi             |
| 5  | Impedance            | 50 Ohm              |
| 6  | Polarization         | Vertical            |
| 7  | Max Power Handling   | 50W                 |
| 8  | VSWR                 | ≤ 1.3               |
| 9  | Vertical Beamwidth   | 12°                 |
| 10 | Horizontal Beamwidth | 360°                |

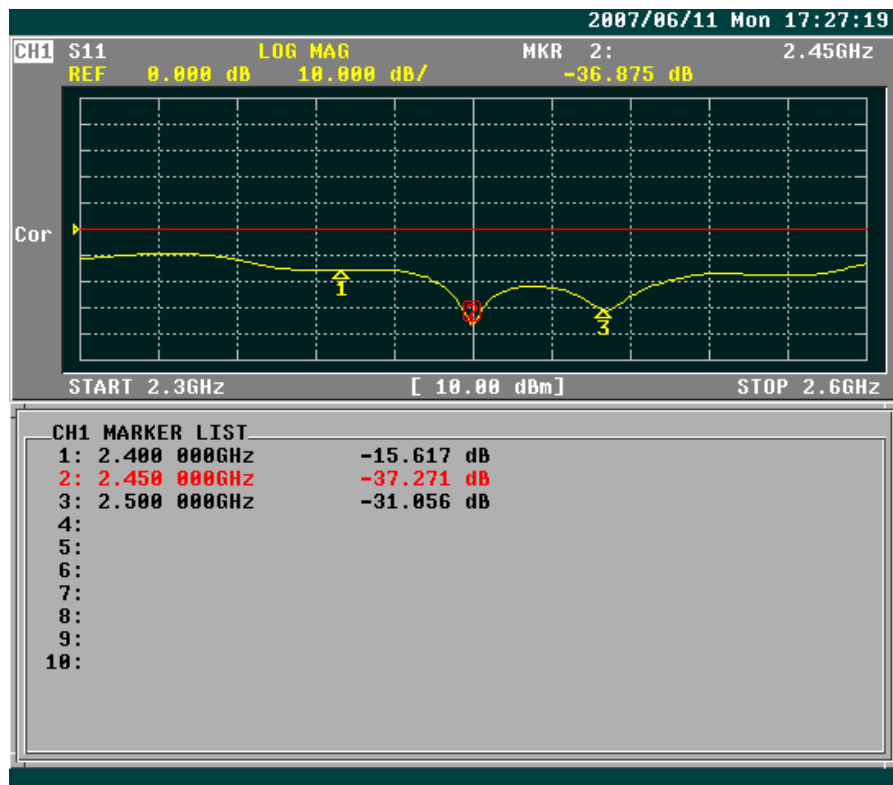
## 2.2 Mechanical Specifications

|   |                                 |                                      |
|---|---------------------------------|--------------------------------------|
| 1 | Connector                       | 1 x N Type Female                    |
| 2 | Connector Location              | Bottom                               |
| 3 | Dimensions (L*W*D)              | Length 523mm, Diameter 70mm          |
| 4 | Radome Diameter                 | 24mm                                 |
| 5 | Weight (& Mounting Bracket max) | 380g                                 |
| 6 | Internal Material               | Copper                               |
| 7 | Radome Material                 | White Fiberglass                     |
| 6 | Mounting Options                | U-Bolt(Stainless steel)              |
|   | Mounting                        | 32-45mm Stainless Steel U-Type Screw |

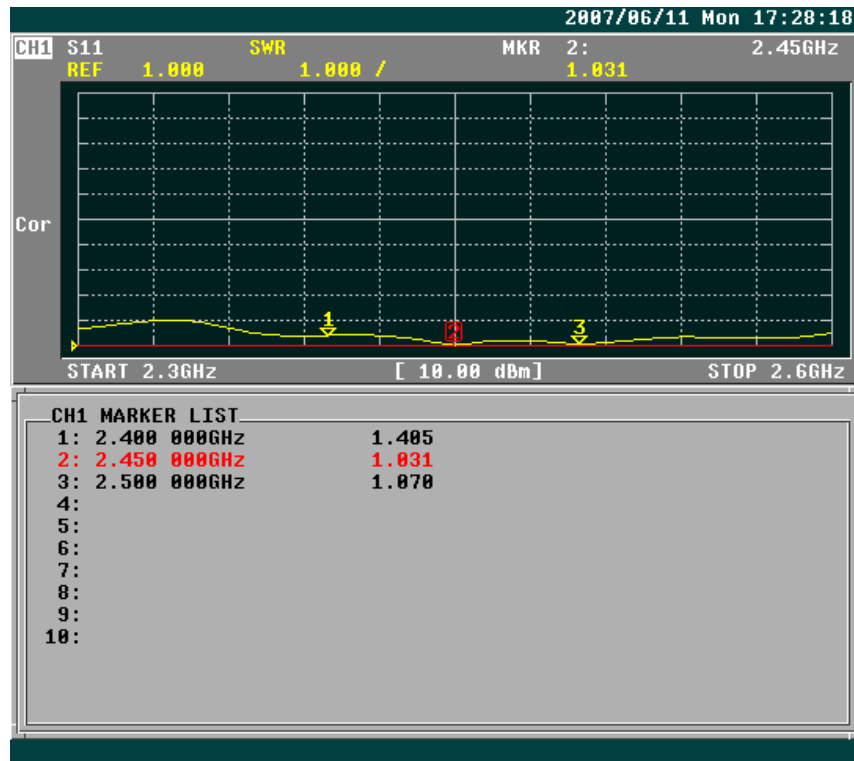
## 2.3 Environmental Ratings

|   |                       |                |
|---|-----------------------|----------------|
| 1 | Lightening Protection | DC Grounded    |
| 2 | Temperature           | -40°C to +80°C |
| 3 | Wind Survival         | >150mph        |

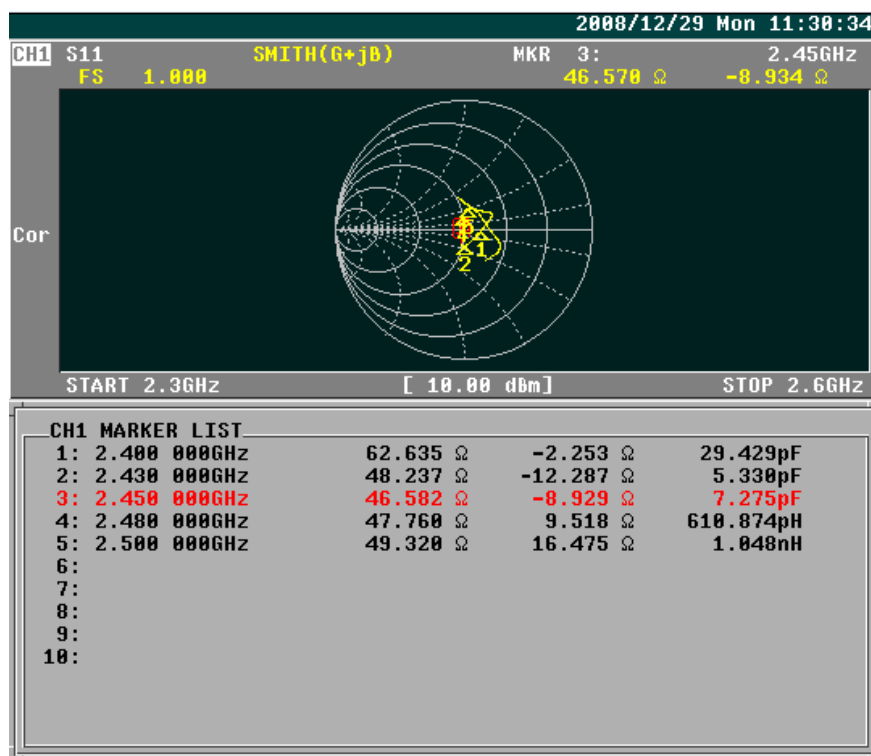
## 3.0 Return Loss



## 4.0 VSWR



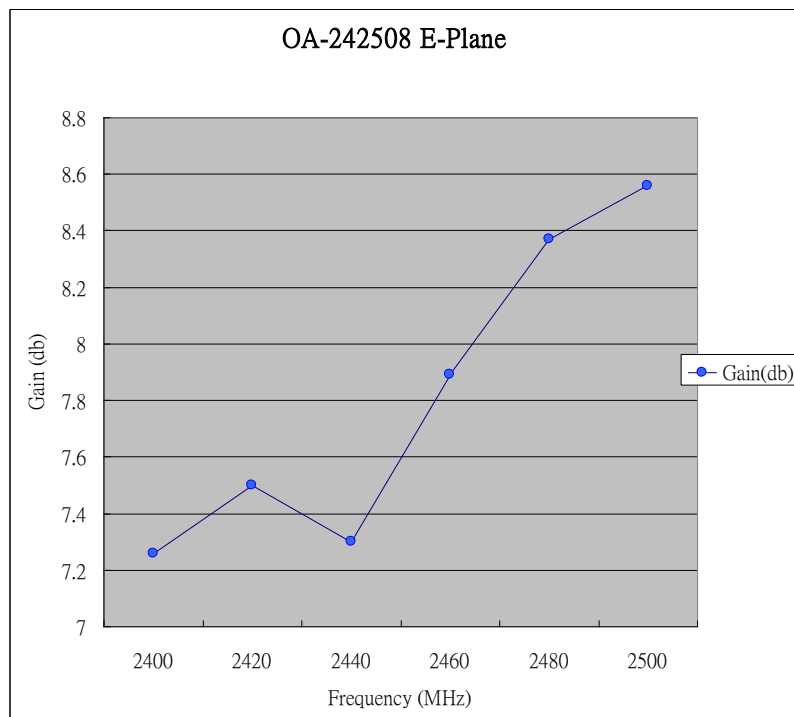
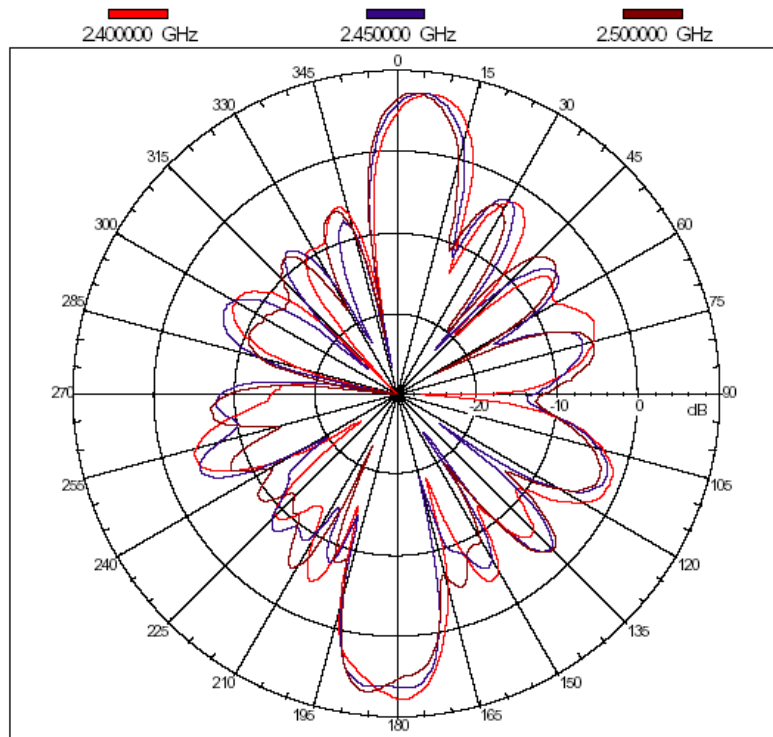
## 5.0 Smith Chart



## 6.0 Radiation Patterns

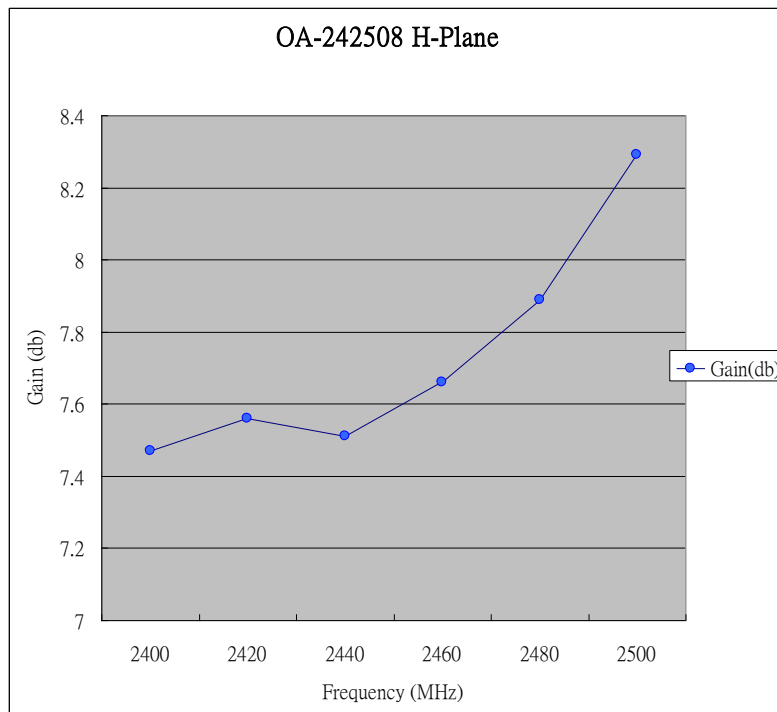
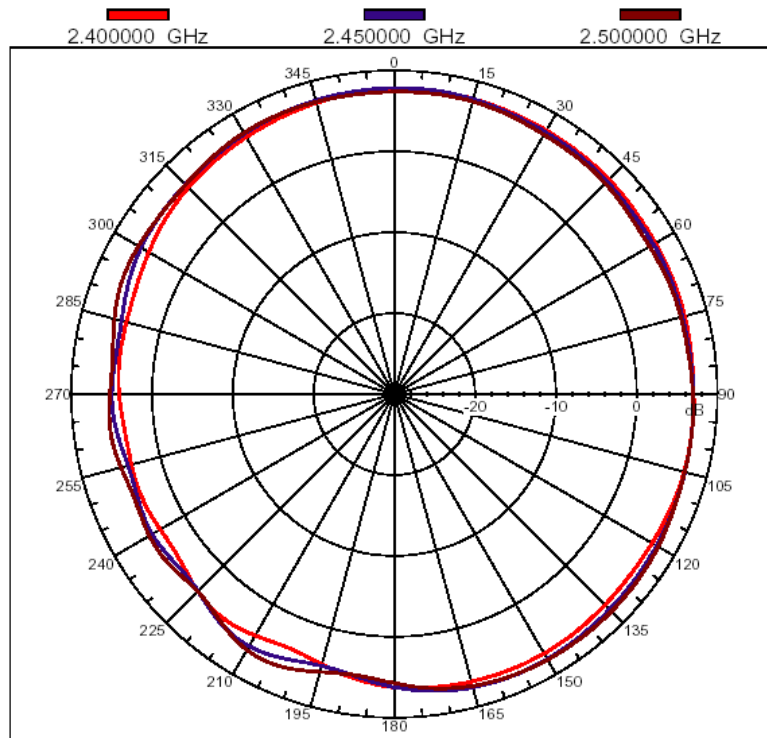
Vertical

E-plane co-pol ----- 3-dB beam-with=15 Deg

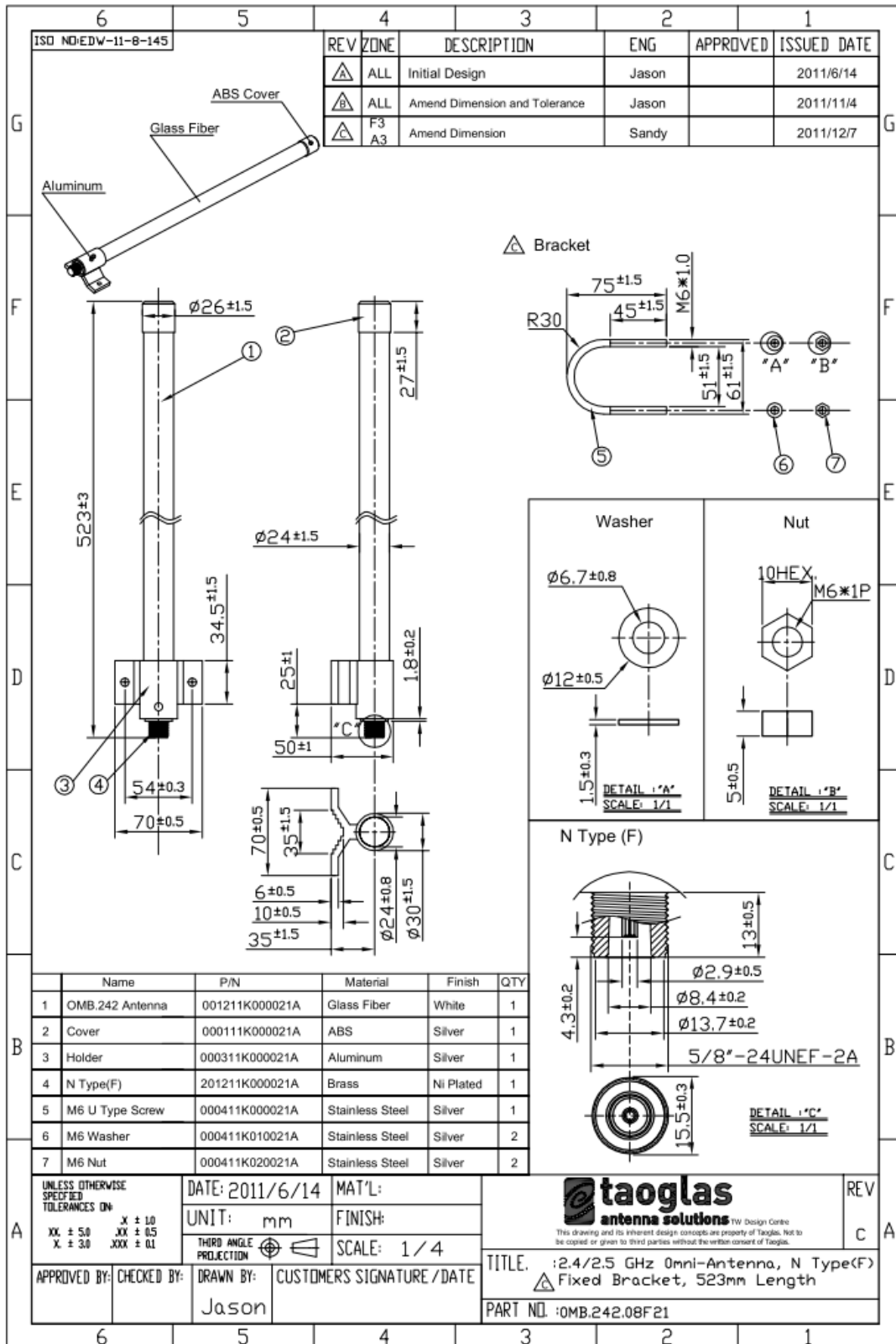


### Horizontal

H-plane co-pol ----- 3-dB beam-with=360 Deg



# 7.0 Mechanical Drawing



## 8.0 Antenna Installation Guide

