



# TAOGLAS®



# Datasheet

## Wi-Fi Barracuda

**Part No:**  
OMB.242.08F21

### **Description:**

8dBi Omni-Directional Outdoor Antenna  
For Wi-Fi/Bluetooth/Zigbee 2.4-2.5dBi

### **Features:**

Omni-Directional Radiation Pattern  
Collinear  
8dBi Peak Gain  
Robust Design for all Weather Operation  
Length: 553mm  
Diameter: 24mm  
Weight: 380g  
IP65 Waterproof  
N Type Female Connector  
Wall/Pole Mount Bracket Included  
RoHS & Reach Compliant

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## 1. Introduction



The Barracuda OMB.242.08F21 has been designed to provide long distance coverage at the 2.4-2.5GHz Wi-Fi band. The OMB.242 is a fiberglass robust outdoor antenna for use where an omnidirectional radiation pattern is required. The base is aluminum - meaning it is resistant to rusting. The fiberglass enclosure is UV coated making this antenna suitable for the harshest outdoor environments. The Barracuda is IP65 rated and can be mounted in areas where installation may be difficult.

The peak gain of 8dBi ensures constant reception and transmission between the device and its network. The omnidirectional antenna collinear dipole design means it uniformly in the azimuth with a high gain, providing coverage over long distances, thus minimizing the number of cells or nodes needed in a network.

Typical Applications Include:

- Public Safety
- Wireless Video Systems
- Agriculture

This antenna is provided with a wall or pole mount bracket, for more information please contact your regional Taoglas customer support team.

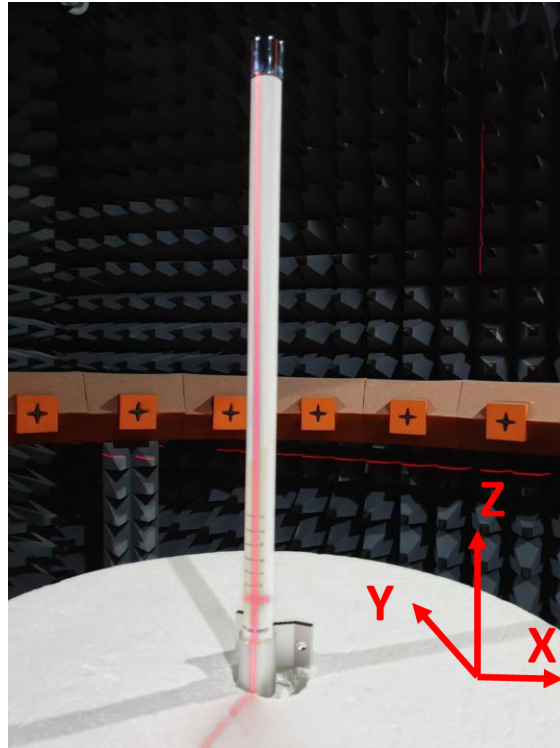
## 2. Specifications

Wi-Fi MIMO	
Frequency (MHz)	2400~2500
Efficiency (%)	
Free Space	92.66
Average Gain (dB)	
Free Space	-0.33
Peak Gain (dBi)	
Free Space	8.24
Impedance	50 Ohms
Polarization	Vertical
Radiation Pattern	Omni
Max. input power	50W
VSWR	≤ 1.3
Vertical Beamwidth	57°
Horizontal Beamwidth	360°

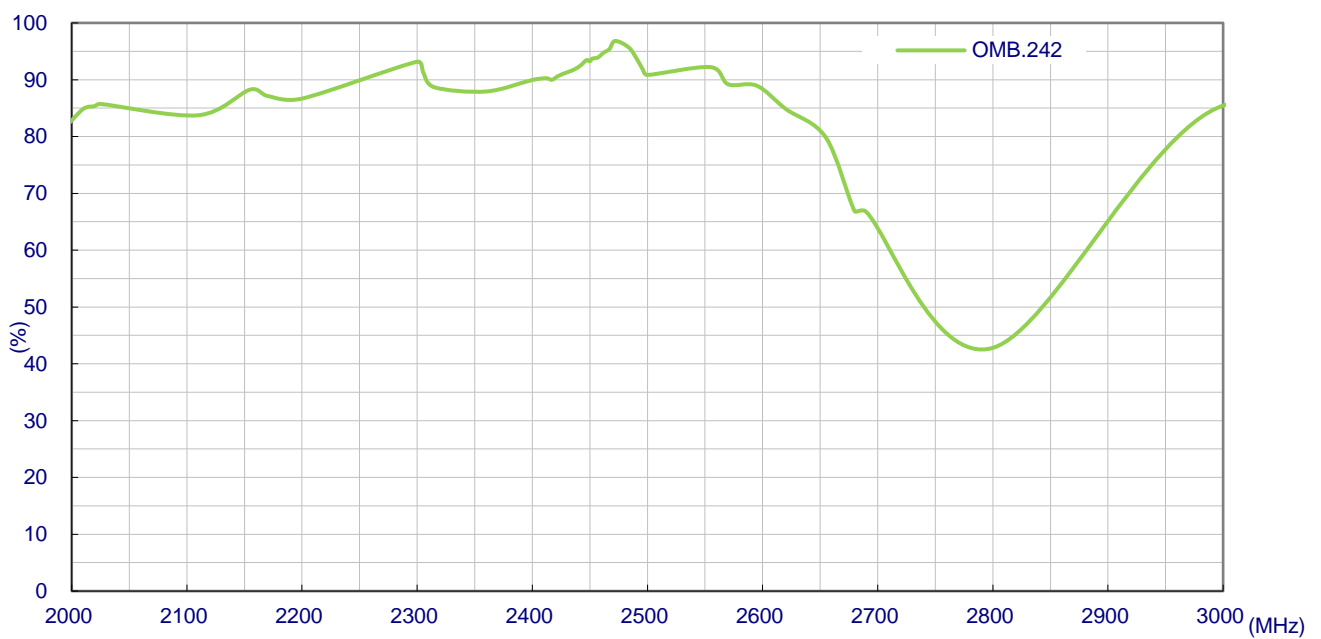
<b>Mechanical</b>	
<b>Connector</b>	1 x N Type Female
<b>Connector Location</b>	Bottom
<b>Dimensions</b>	Length 553mm, Diameter 24mm
<b>Radome Diameter</b>	24mm
<b>Weight (&amp; Mounting Bracket max)</b>	380g
<b>Internal Material</b>	Copper
<b>Radome Material</b>	White Fiberglass
<b>Base Material</b>	Aluminium
<b>Waterproof</b>	IP65
<b>Mounting Style</b>	Pole Mount/Wall Mount
<b>Mounting</b>	32-45mm Stainless Steel U-Type Screw
<b>Environmental</b>	
<b>Wind Survival</b>	>150mph(>241km/h)
<b>Operating Temperature</b>	-40°C to +60°C
<b>Storage Temperature</b>	-40°C to +80°C
<b>Operating Humidity</b>	10%~90% non-condensing
<b>Storage Humidity</b>	5%~90% non-condensing

### 3. Antenna Characteristics

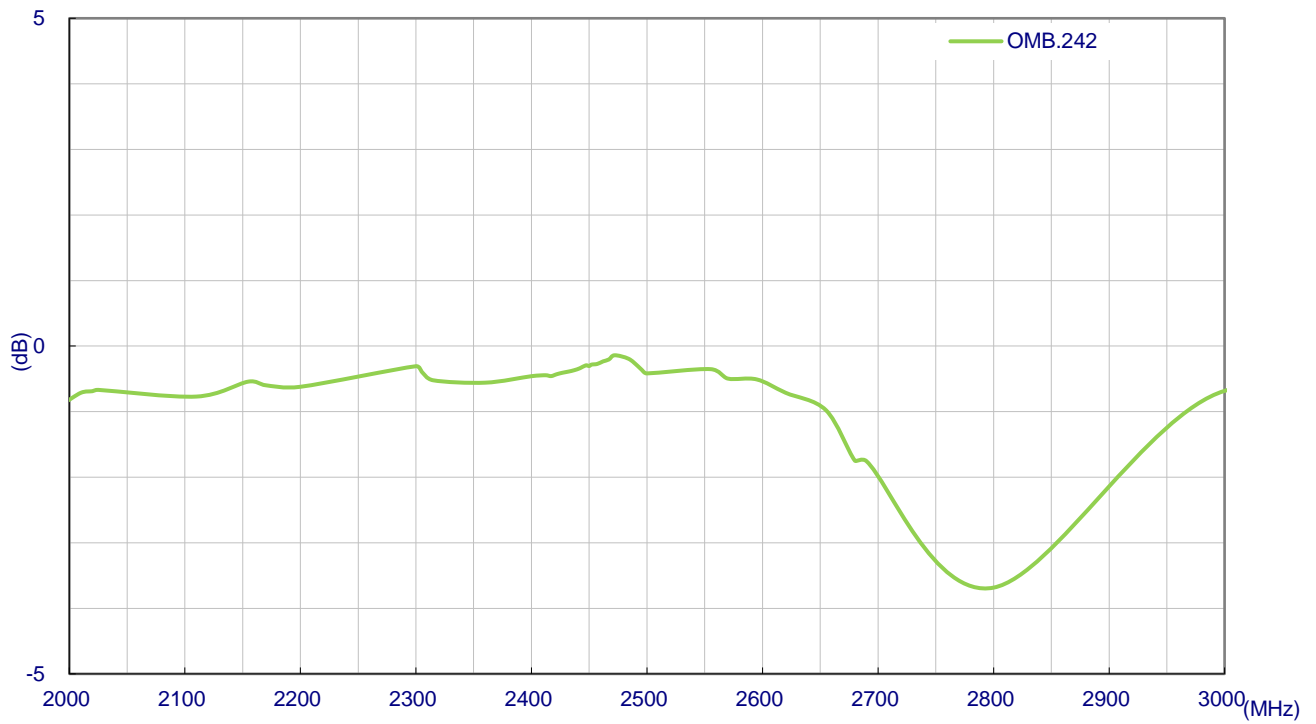
#### 3.1 Test Set Up



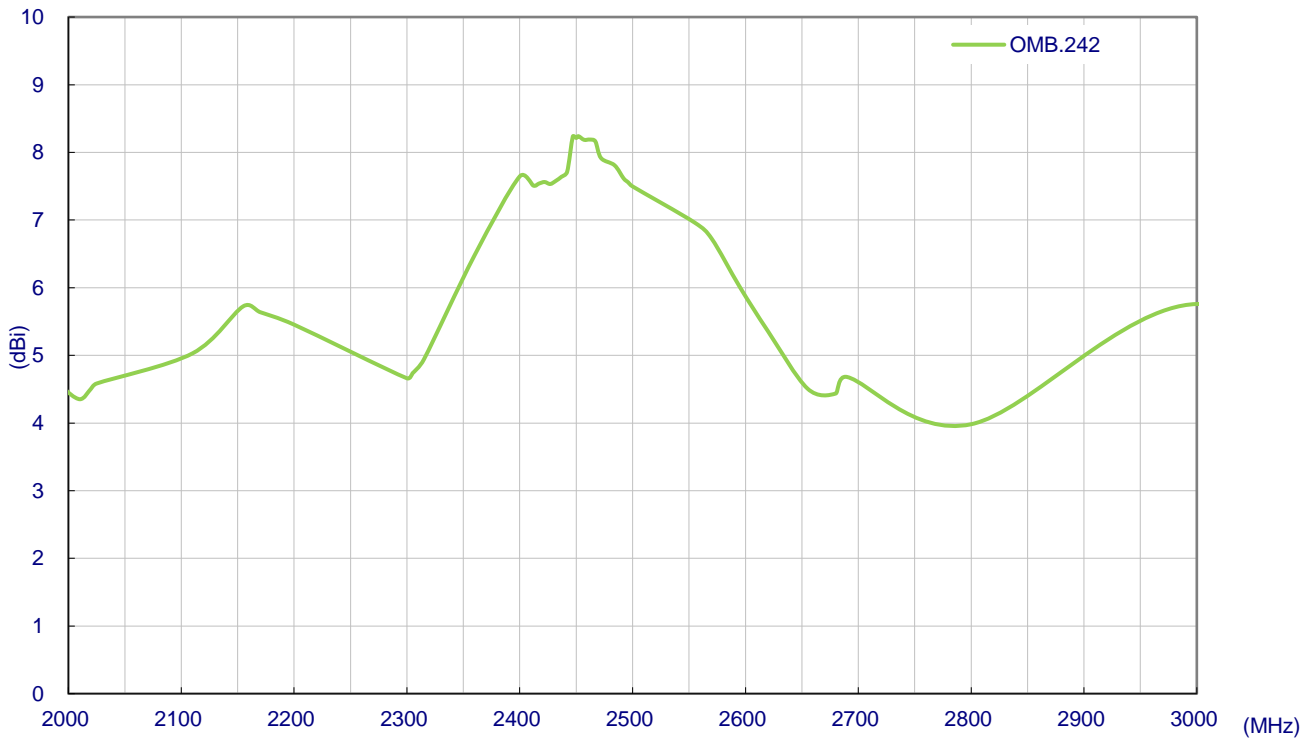
#### 3.2 Efficiency



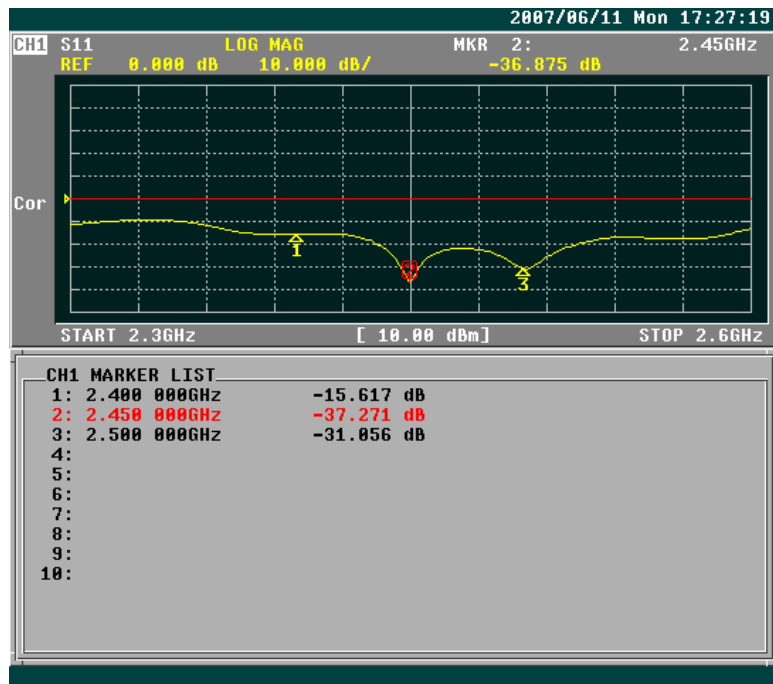
### 3.3 Average Gain



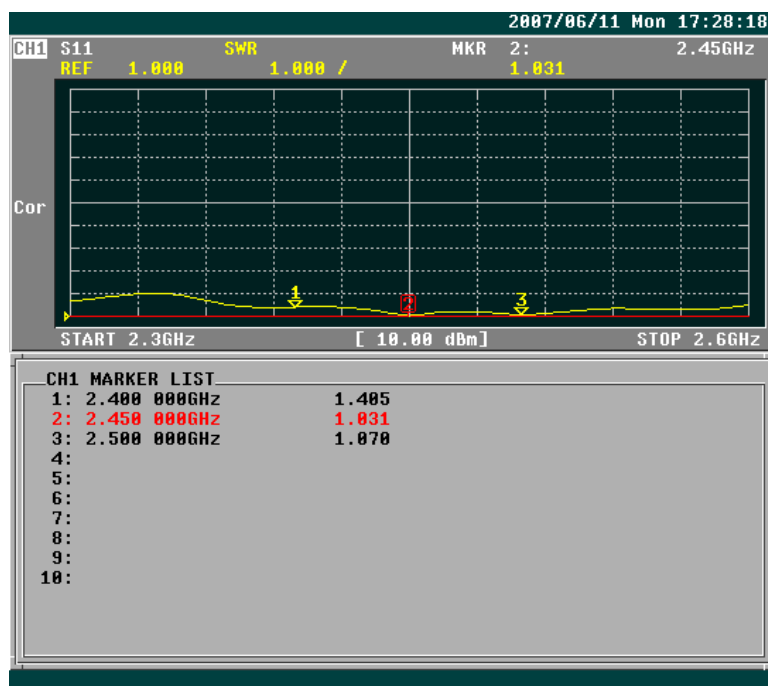
### 3.4 Peak Gain



### 3.5 Return Loss



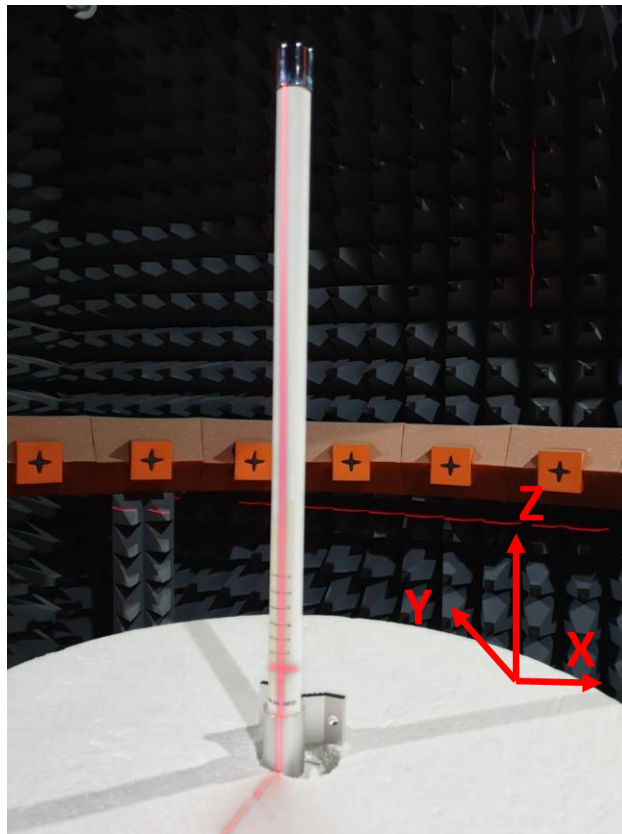
### 3.6 VSWR





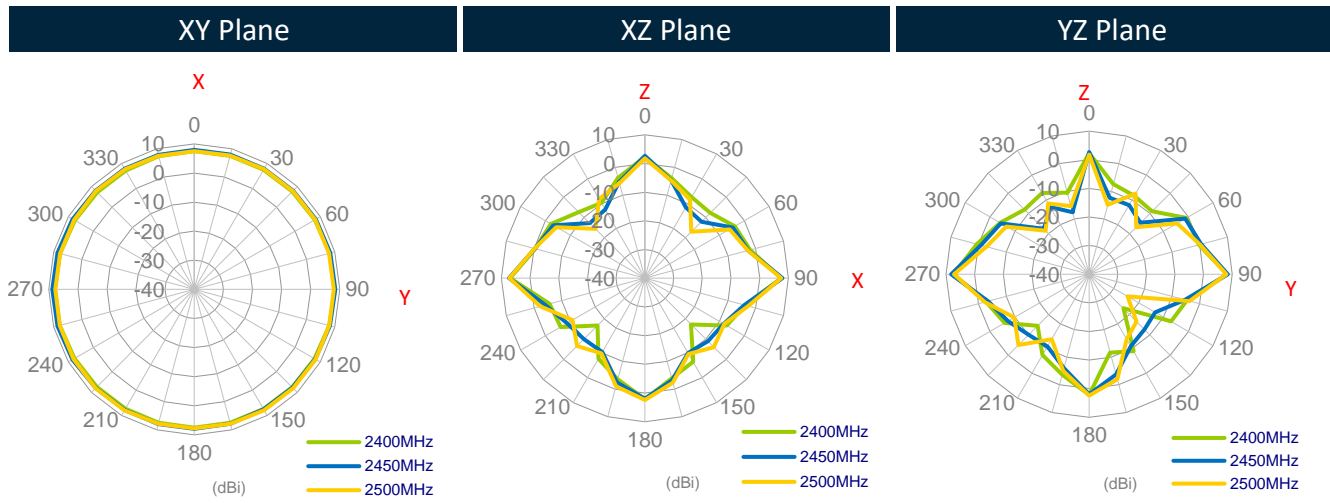
## 4. Radiation Patterns

### 4.1 Test Setup

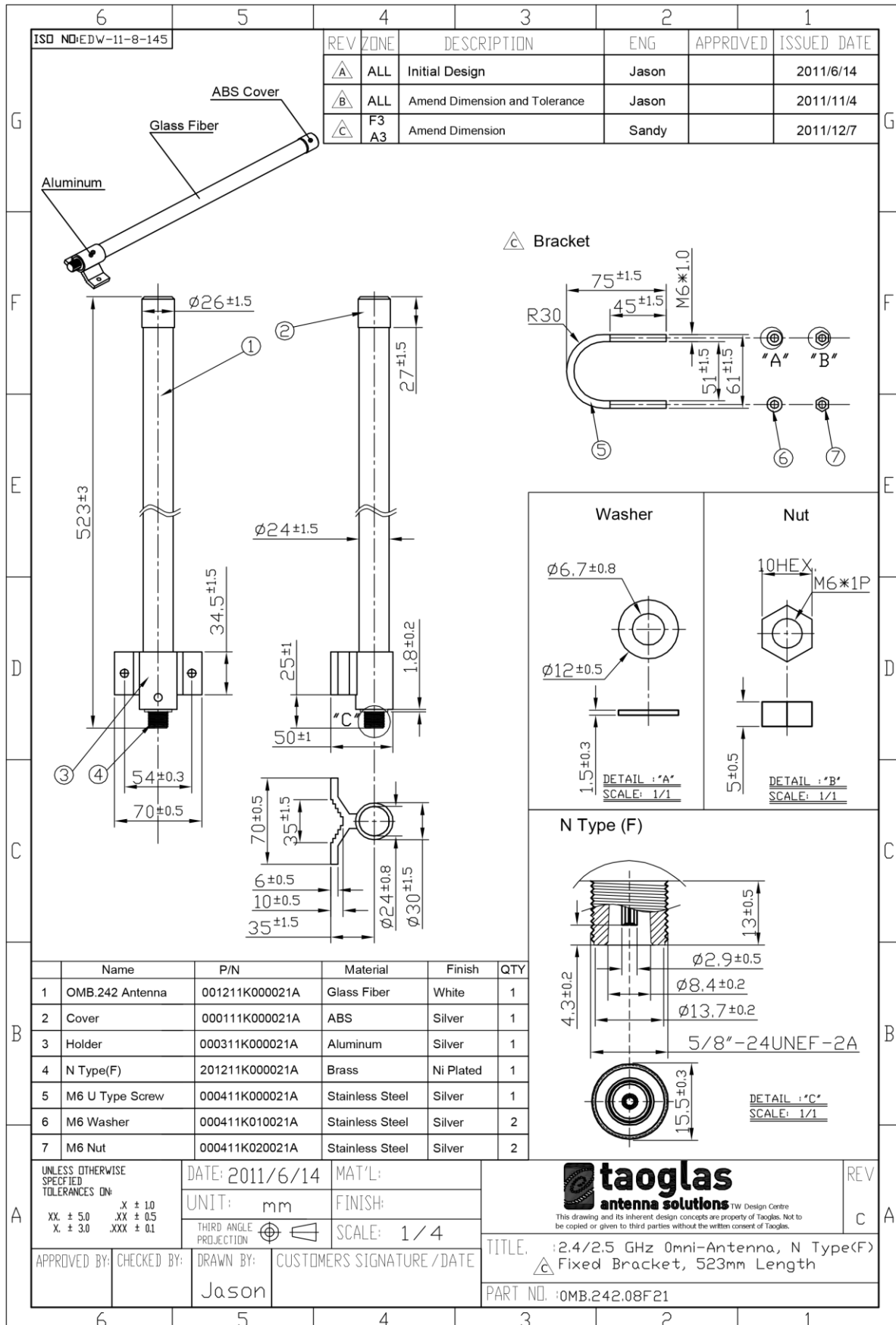


Free space

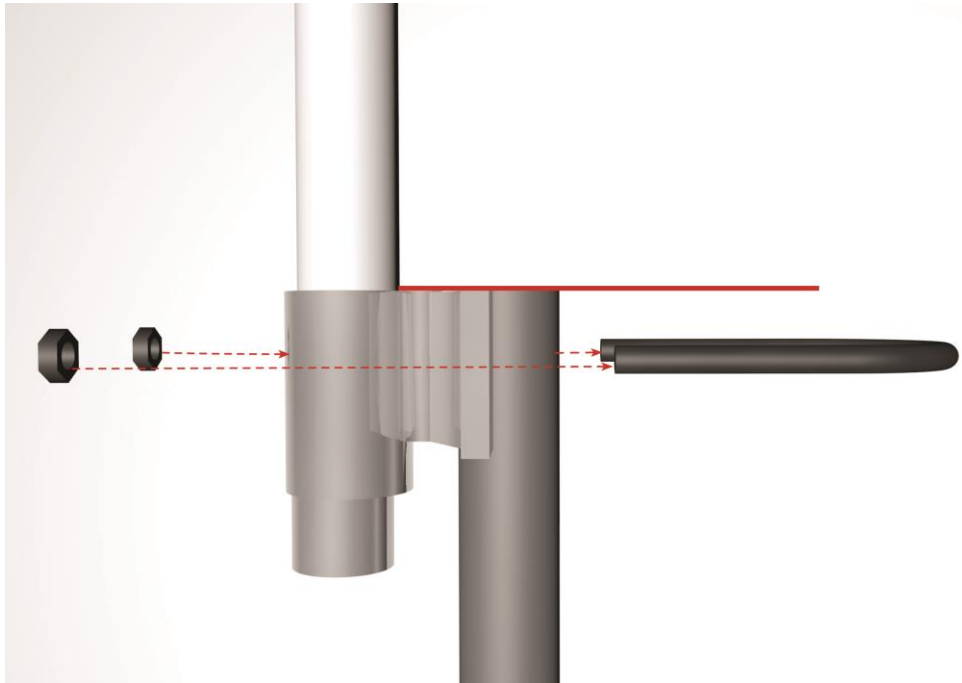
## 4.2 2D Radiation Patterns



# 5. Mechanical Drawing (Units: mm)

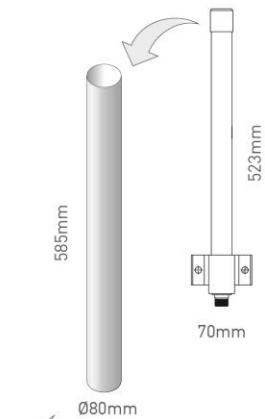


## 6. Installation Instructions

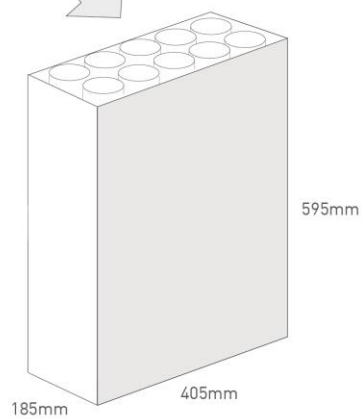


## 7. Packaging

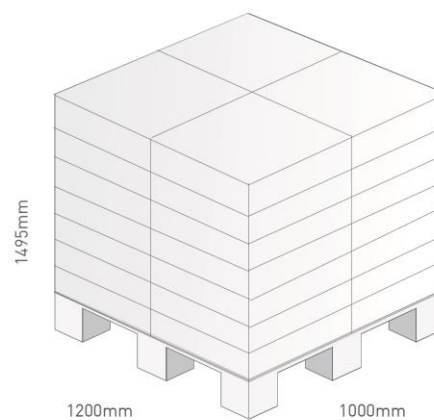
1 OMB.242.08F21 per tube  
 Tube Dimensions - Ø80mm\*Height 585mm  
 Total Weight - 536.5g



10 tubes per carton  
 10 pcs OMB.242.08F21 per carton  
 Carton Dimensions - 405\*595\*185mm  
 Weight - 6.22kg



Pallet Dimensions 1200mm\*1000mm\*1495mm  
 28 Cartons per Pallet  
 4 Cartons per layer  
 7 Layers



Changelog for the datasheet

**SPE-12-8-008 - OMB.242.08F21**

**Revision: F (Current Version)**

Date:	2019-10-31
Changes:	Installation Guide Amended
Changes Made by:	Jack Conroy

**Previous Revisions**

**Revision: E**

Date:	2018-03-27
Changes:	Installation Guide Amended
Changes Made by:	Jack Conroy

**Revision: D**

Date:	2018-03-16
Changes:	Installation Guide Detail Added
Changes Made by:	Jack Conroy

**Revision: C**

Date:	2017-03-08
Changes:	Removed Section
Changes Made by:	Aine Doyle

**Revision: B**

Date:	2012-11-20
Changes:	Packaging Details Updated
Changes Made by:	Aine Doyle

**Revision: A (Original First Release)**

Date:	2011-01-20
Notes:	
Author:	Aine Doyle



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