

# Antenna

# YG0035AA Datasheet

## Antenna Services

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# About the Document

## Revision History

Version	Date	Author	Note
1.0	2020-10-26	Kenny YIN	Initial
1.1	2021-01-19	Kenny YIN	Updated the antenna image in Chapter 2.

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## 1 Product Description

The antenna is designed for superior performance, and can be widely used for wireless applications.

We provide comprehensive antenna design support such as simulation, testing and manufacturing for custom antenna solutions to meet your specific application needs.

## 2 Product Features

- Active GPS/BD antenna
- High efficiency
- Excellent performance



### 3 Product Specifications

#### Electrical Specifications

Frequency Range	1561 MHz 1575 MHz
Input Impedence	50 $\Omega$
VSWR	$\leq 2.0$
Gain	$\leq 0.5$
Polarization Type	RHCP

#### Mechanical Specifications

Antenna Size	50.3 mm $\times$ 38.4 mm $\times$ 17.1 mm
Casing	ABS
Connector Type	SMA (Male pin with internal thread)
Working Temperature	-40 $^{\circ}$ C to +80 $^{\circ}$ C
Radome Color	Black
Fixed mode	Magnet

## 4 Overall Performance

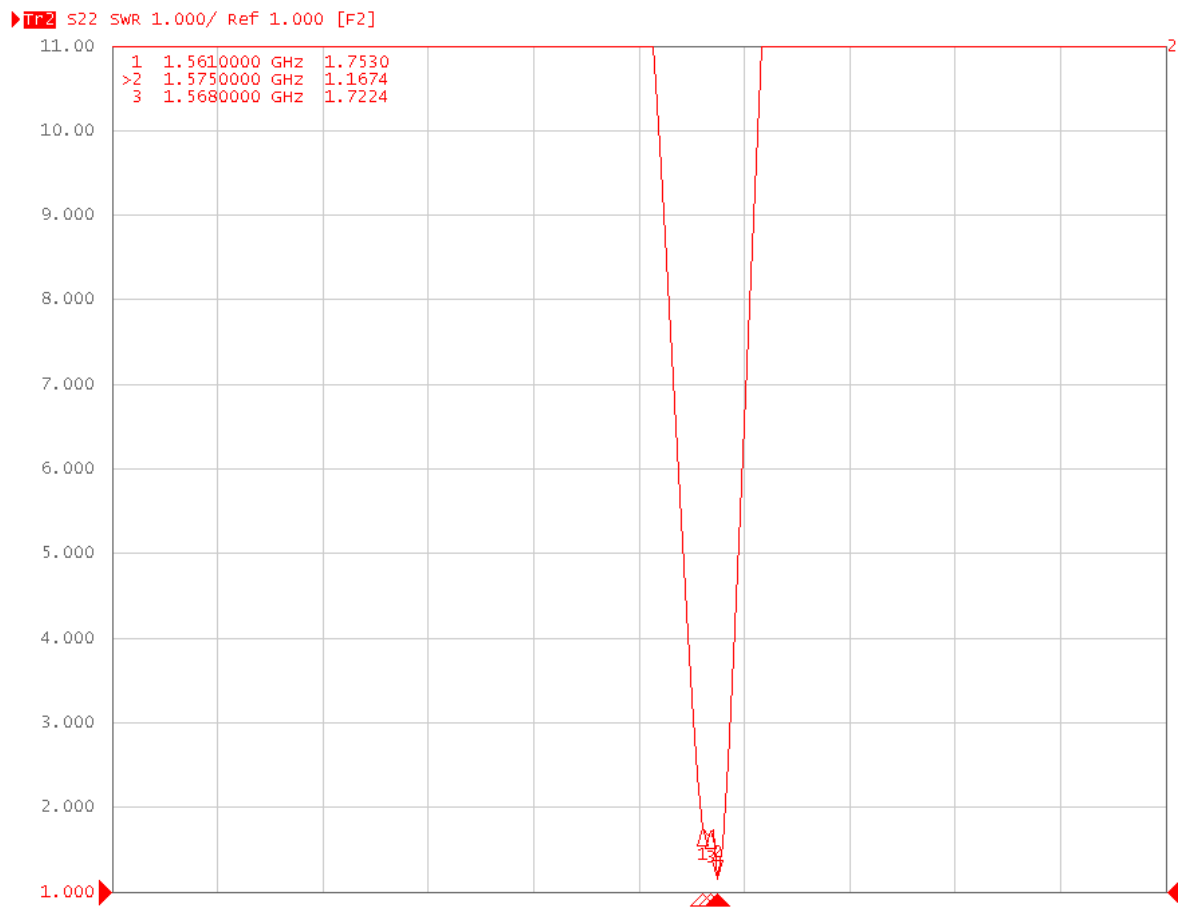
### 4.1. Test Environment

- KEYSIGHT VNA Network Analyzer E5063A, 100 kHz – 6.5 GHz.
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 400 MHz – 6.0 GHz.

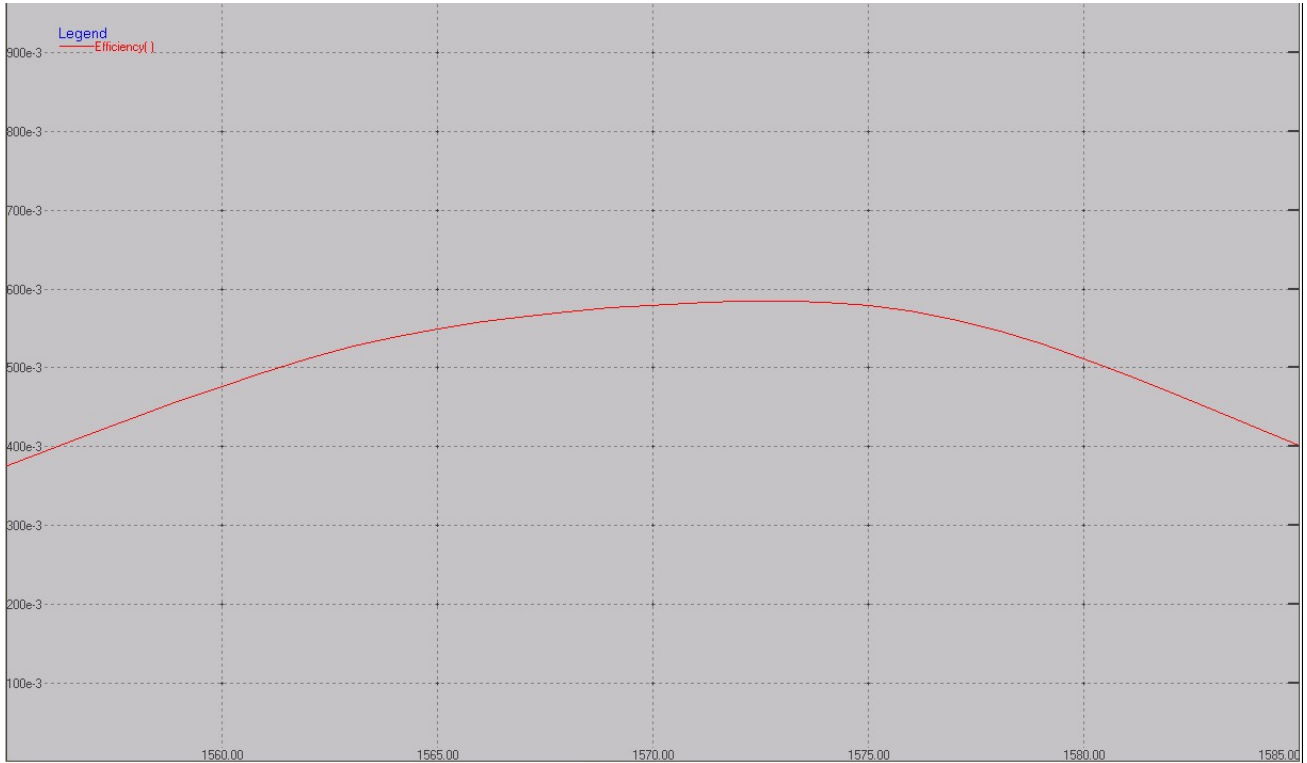




## 4.2. VSWR



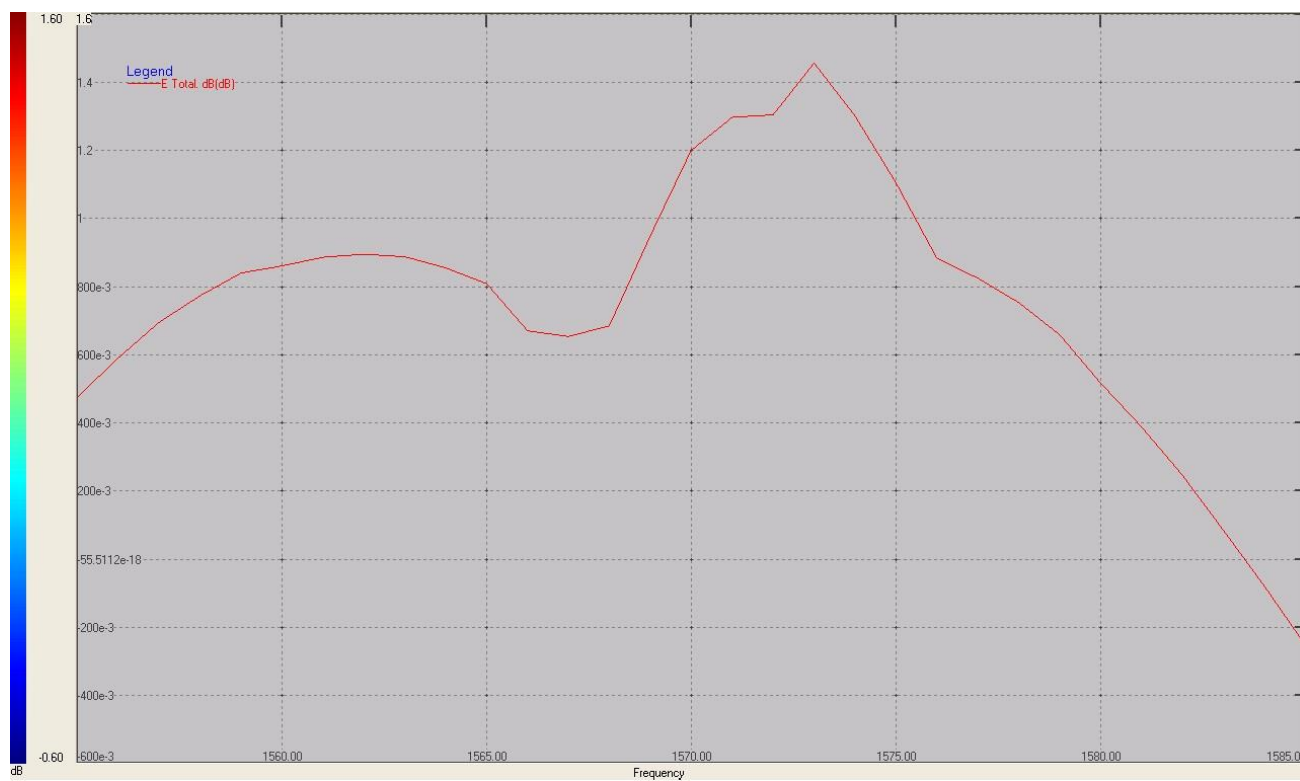
### 4.3. Efficiency



<b>Frequency (MHz)</b>	1557	1558	1559	1560	1561	1562	1563	1564	1565
<b>Efficiency</b>	41%	43%	45%	47%	50%	51%	52%	53%	54%

<b>Frequency (MHz)</b>	1571	1572	1573	1574	1575	1576	1577	1578	1579
<b>Efficiency</b>	58%	58%	58%	58%	57%	57%	56%	54%	53%

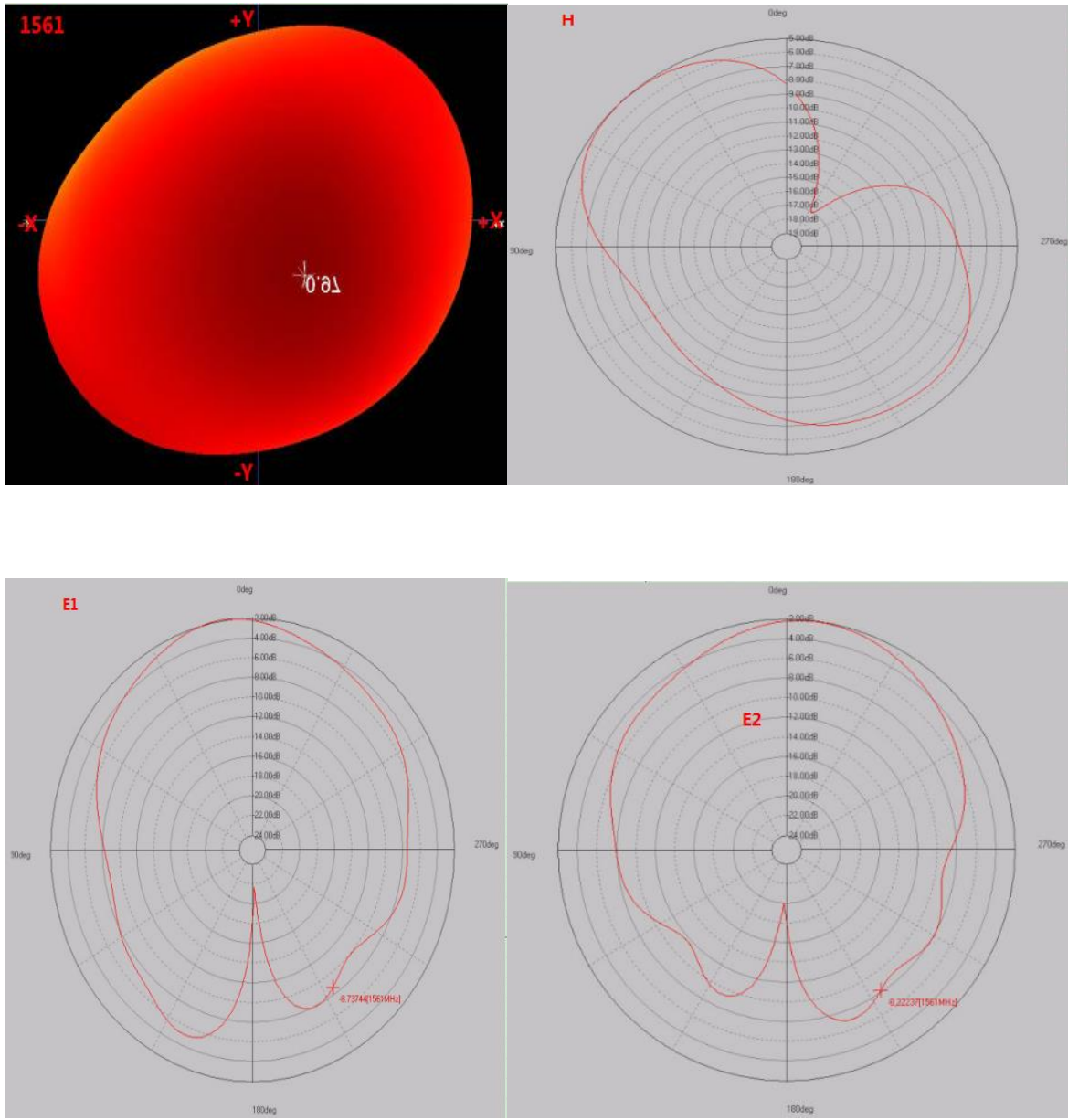
## 4.4. Gain

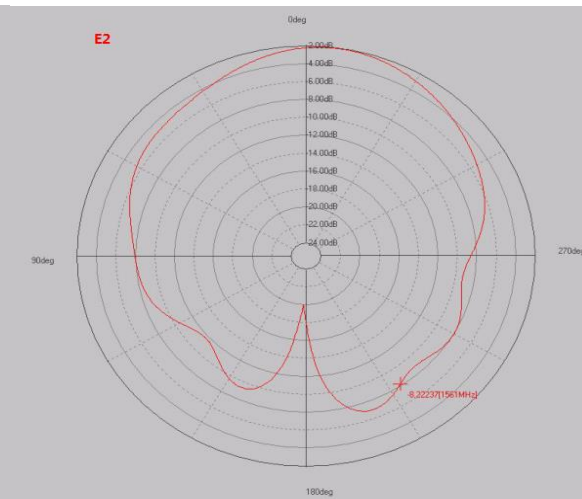
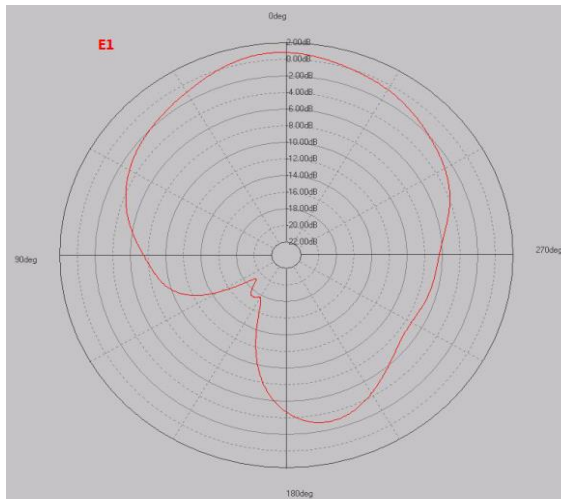
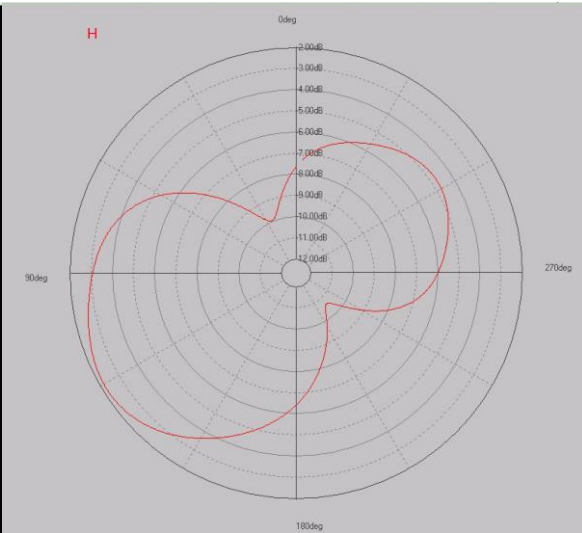
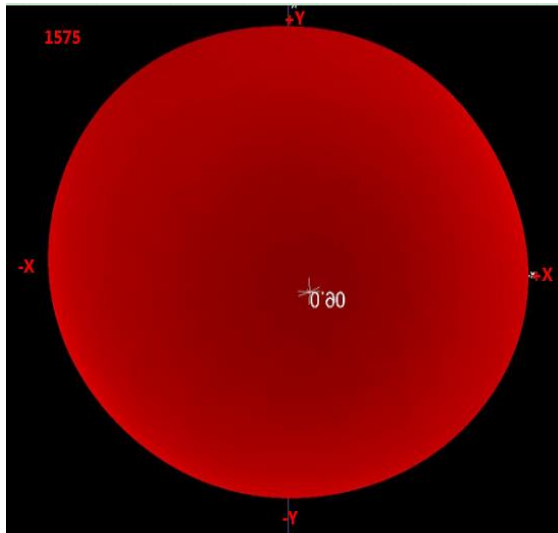


<b>Frequency (MHz)</b>	1557	1558	1559	1560	1561	1562	1563	1564	1565
<b>Gain (dBi)</b>	0.70	0.83	0.85	0.86	0.88	0.89	0.88	0.85	0.80

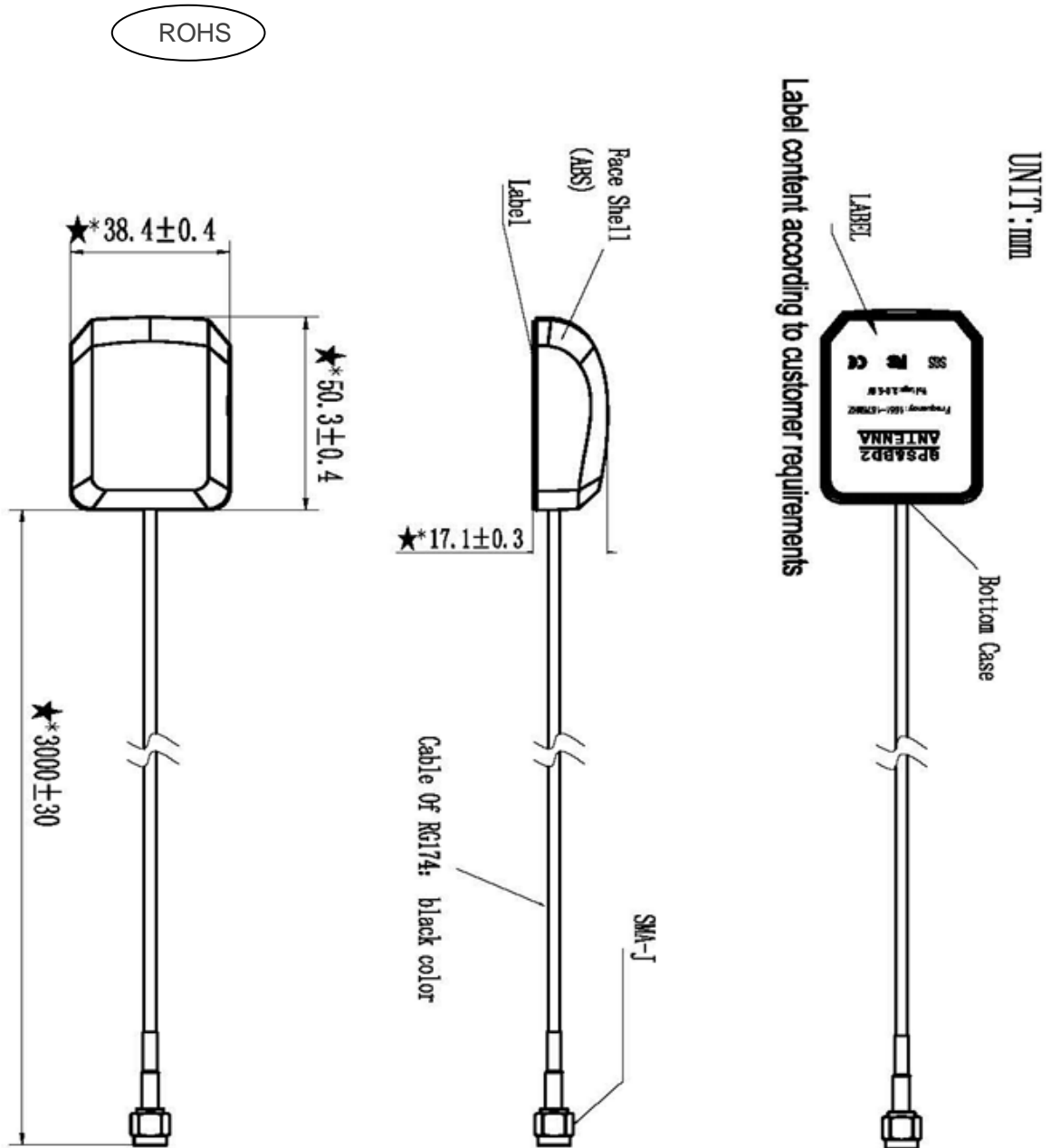
<b>Frequency (MHz)</b>	1571	1572	1573	1574	1575	1576	1577	1578	1579
<b>Gain (dBi)</b>	1.2	1.3	1.4	1.3	1.2	1.1	0.8	0.8	0.7

### 4.5. Radiation Patterns





## 5 Product Size



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