

# Antenna

# YE0007AA Datasheet

## Antenna Services

Version: 3.1

Date: 2020-12-11

Status: Released



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# About the Document

## Revision History

Version	Date	Author	Note
1.0	2020-06-01	Kenny YIN	Initial
2.0	2020-06-02	Kenny YIN	Updated the specifications.
3.0	2020-06-10	Kenny YIN	Updated the specifications.
3.1	2020-12-11	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

- Cellular 5G&LTE
- High efficiency
- Excellent performance



### 3 Product Specifications

#### Passive Electrical Specifications

Frequency Range	600–6000 MHz
Input Impedence	50 $\Omega$
VSWR	$\leq 3.0$
Gain	$\leq 5$ dBi
Polarization Type	Linear

#### Mechanical Specifications

Antenna Size (mm)	152.4 mm × 21.79 mm × 14.49 mm
Casing	ABS
Radiator	Cuprum
Connect Type	SMA (Male pin with internal thread)
Working Temperature	-20 °C to +85 °C
Radome Color	Black

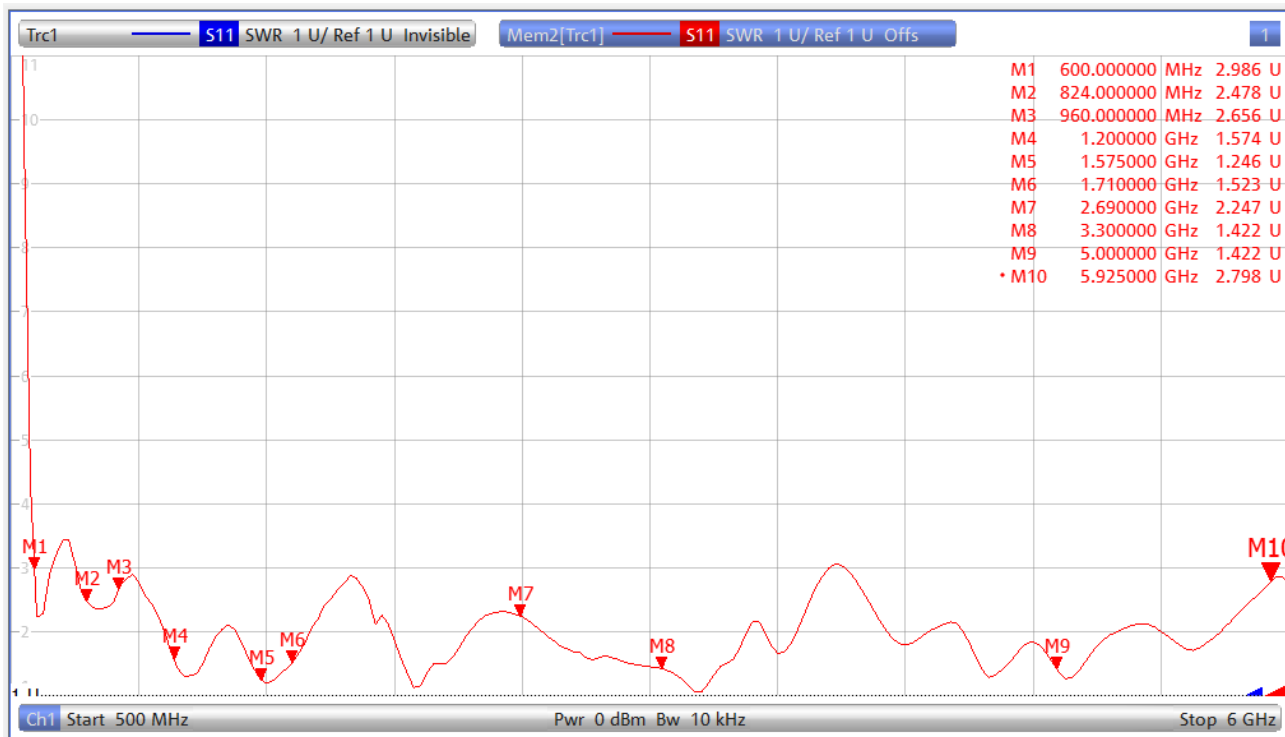
## 4 Overall Performance

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



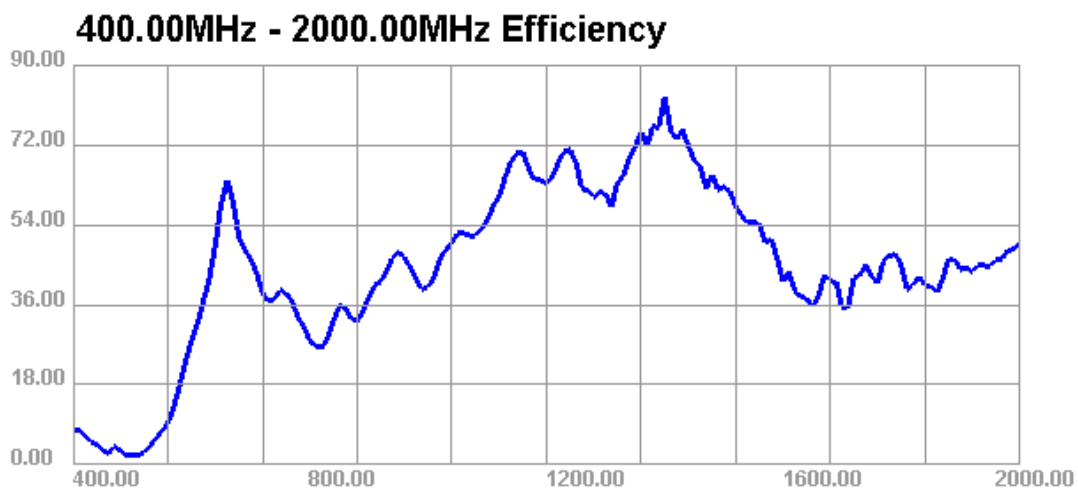


● VSWR



Frequency (MHz)	600	824	960	1200	1575	1710	2690	3300	5000	5925
VSWR	2.98	2.47	2.65	1.57	1.24	1.52	2.24	1.42	1.42	2.78

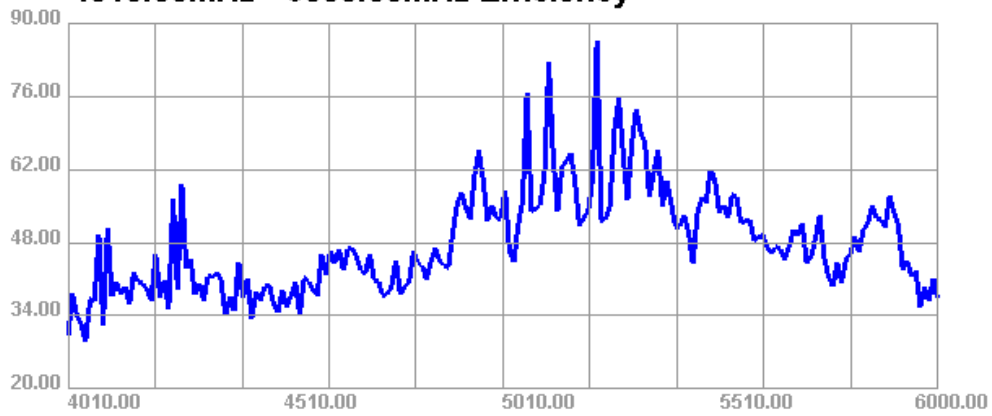
● Efficiency



**2010.00MHz - 4000.00MHz Efficiency**



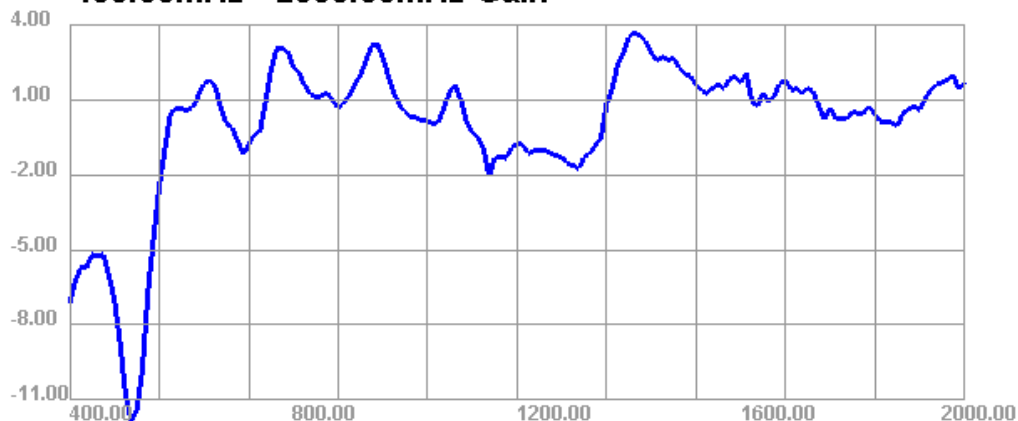
**4010.00MHz - 6000.00MHz Efficiency**



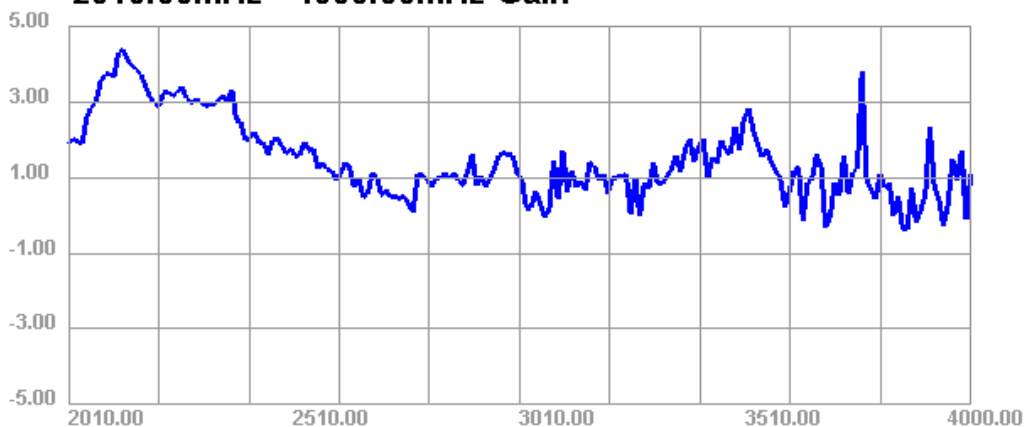
<b>Frequency (MHz)</b>	600	824	960	1200	1575	1710	2690	3300	5000	5925
<b>Efficiency (%)</b>	49.9	42.8	62.9	36.2	75.4	67.8	50.8	47.6	52.6	44.4

● Gain

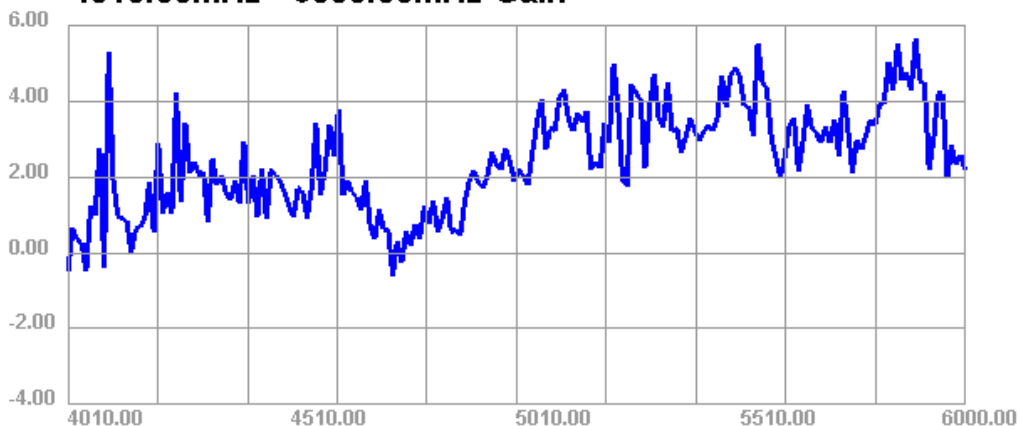
**400.00MHz - 2000.00MHz Gain**



**2010.00MHz - 4000.00MHz Gain**

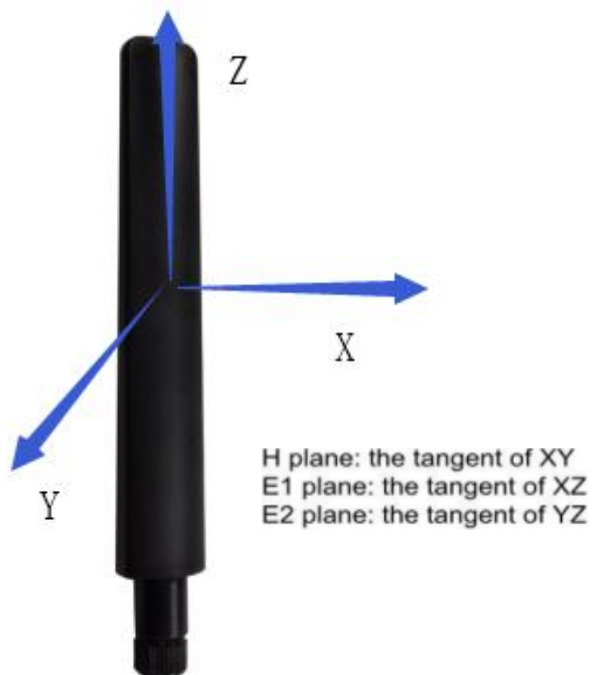


**4010.00MHz - 6000.00MHz Gain**

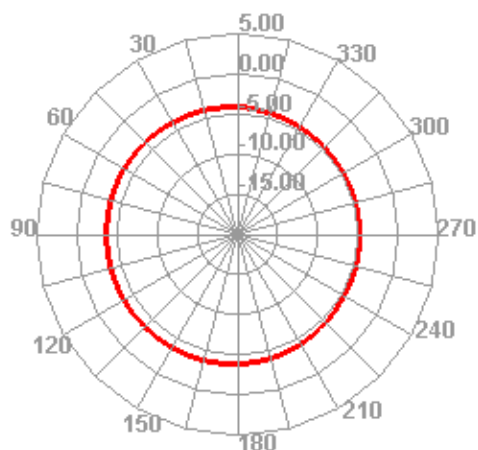
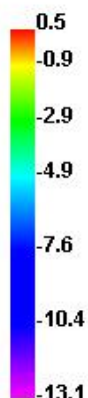
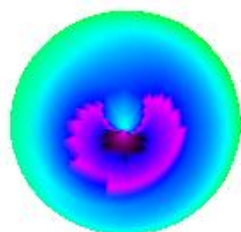


<b>Frequency (MHz)</b>	600	824	960	1200	1575	1710	2690	3300	5000	5925
<b>Gain (dBi)</b>	0.63	1.58	2.65	-0.75	1.87	1.25	0.99	1.44	1.88	3.02

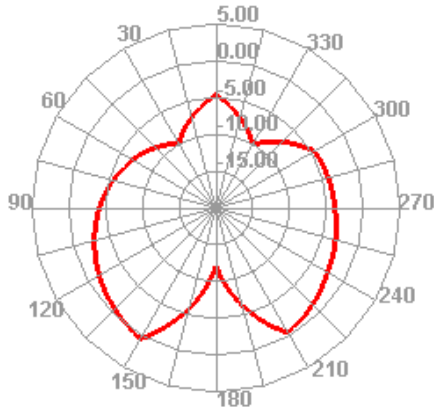
- Radiation Patterns



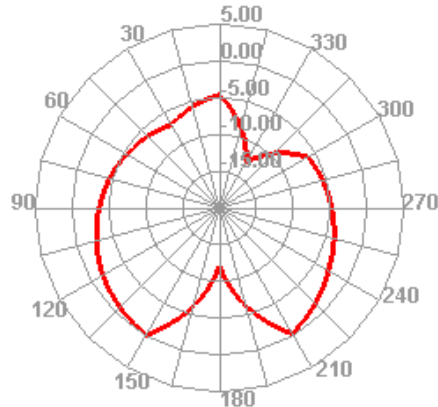
600.000MHz



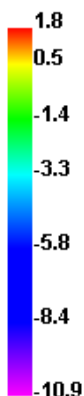
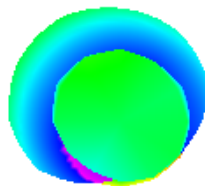
600.000MHz E1



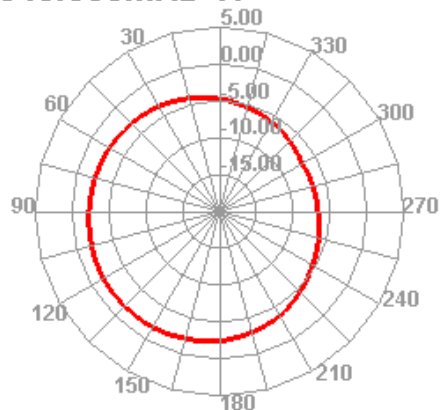
600.000MHz E2



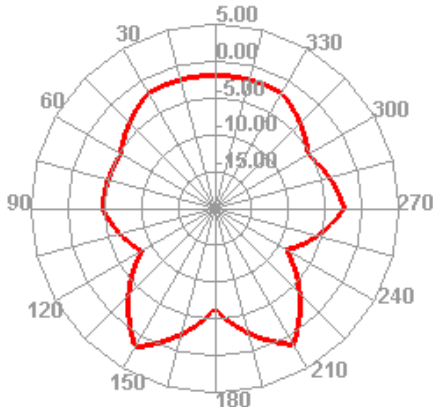
**840.000MHz**



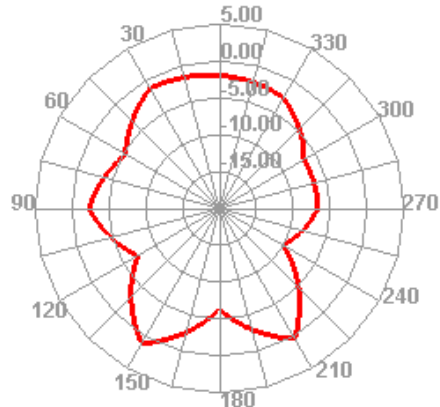
**840.000MHz H**



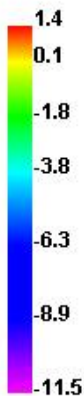
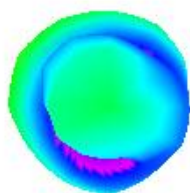
**840.000MHz E1**



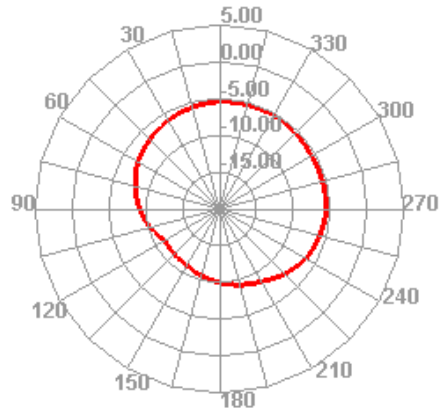
**840.000MHz E2**



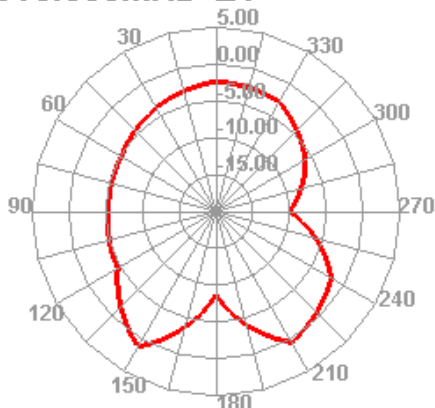
**960.000MHz**



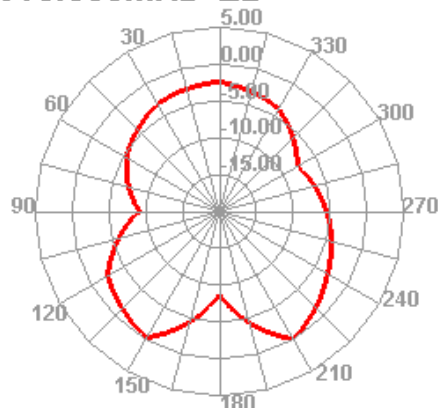
**960.000MHz H**



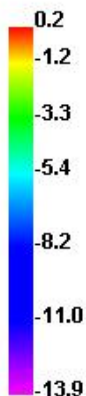
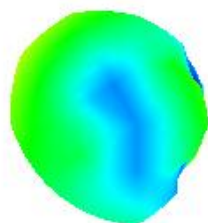
**960.000MHz E1**



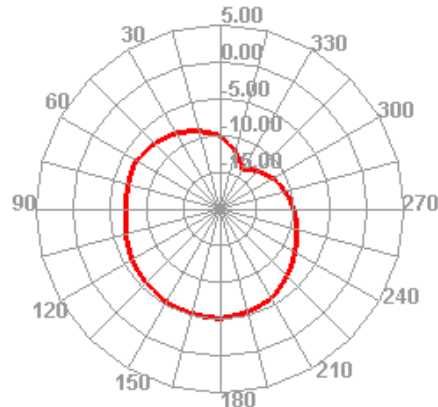
**960.000MHz E2**



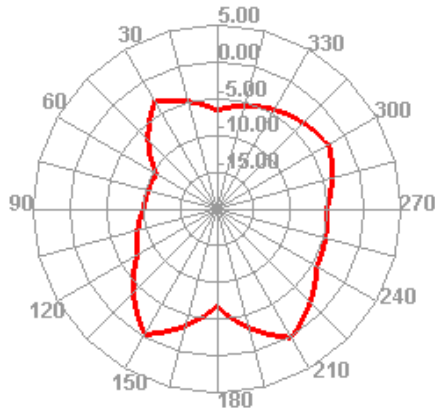
**1200.000MHz**



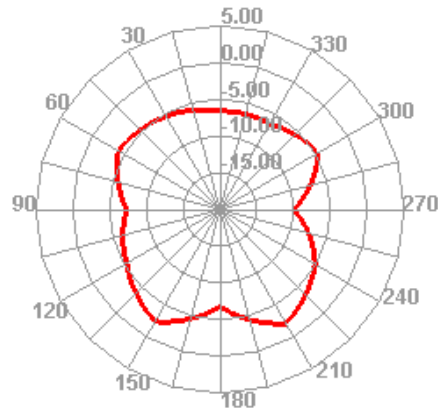
**1200.000MHz H**



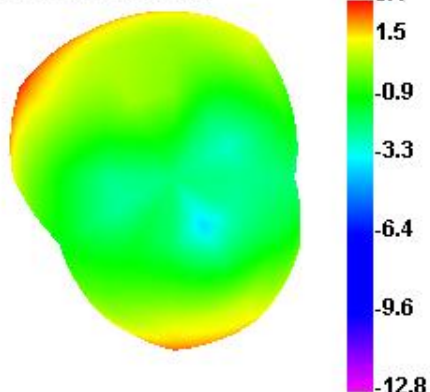
**1200.000MHz E1**



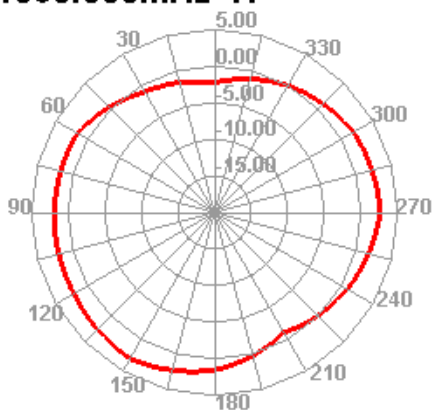
**1200.000MHz E2**



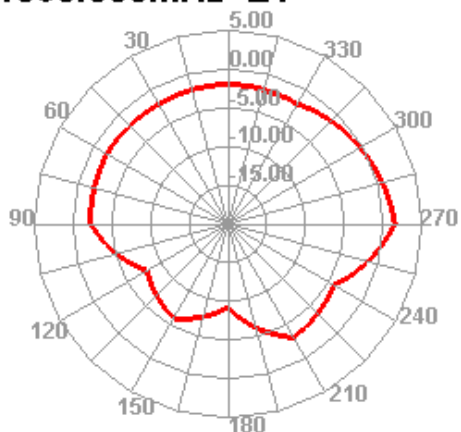
**1560.000MHz**



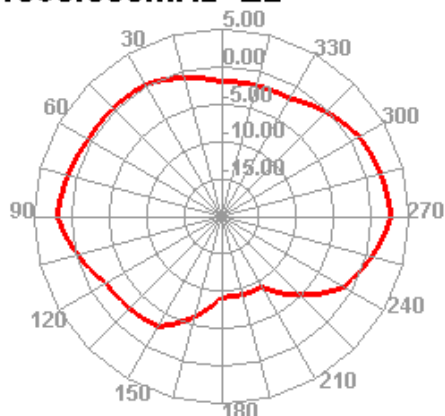
**1560.000MHz H**



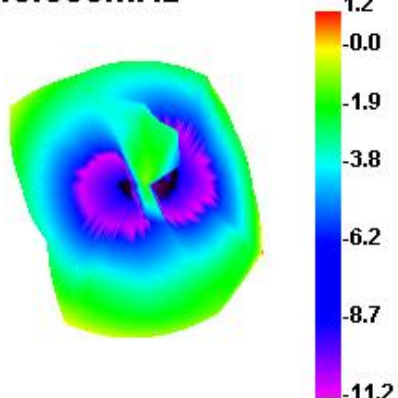
**1560.000MHz E1**



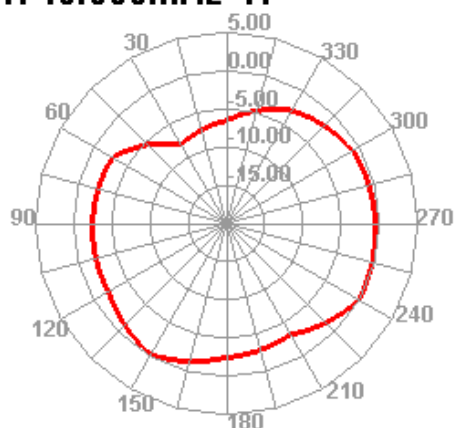
**1560.000MHz E2**



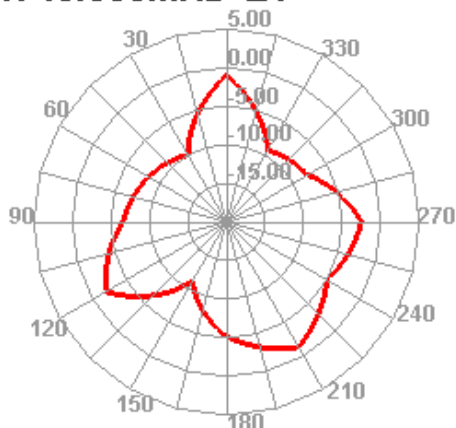
**1740.000MHz**



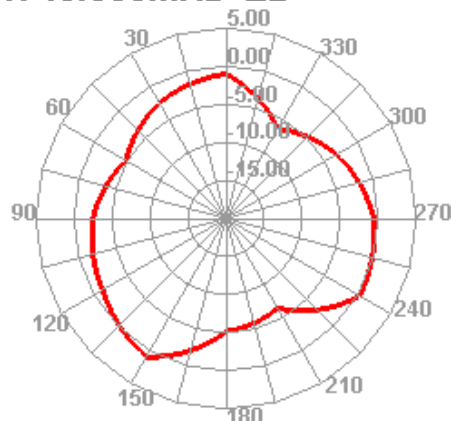
**1740.000MHz H**



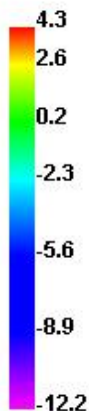
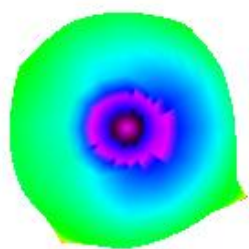
**1740.000MHz E1**



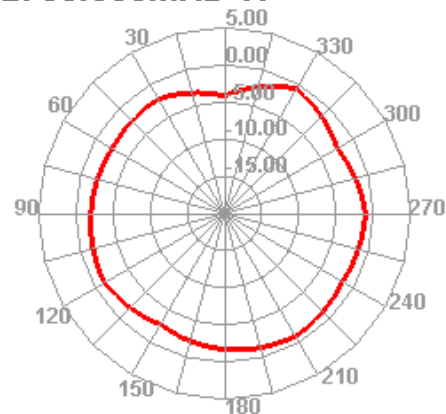
**1740.000MHz E2**



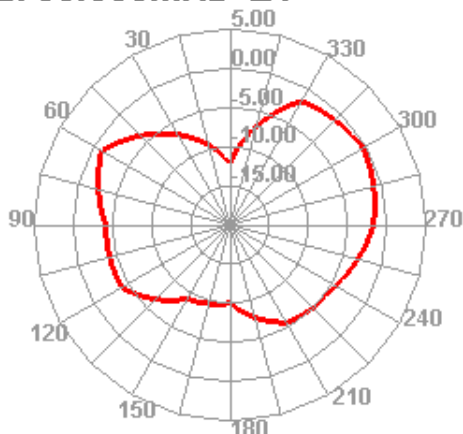
**2700.000MHz**



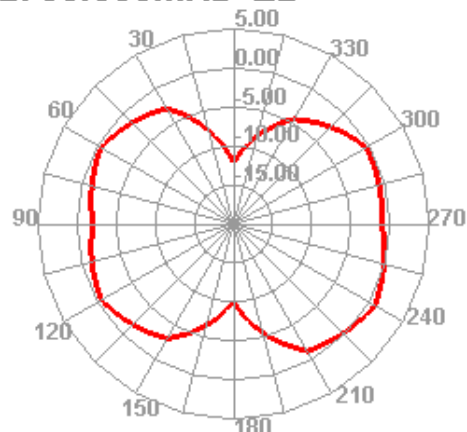
**2700.000MHz H**



**2700.000MHz E1**

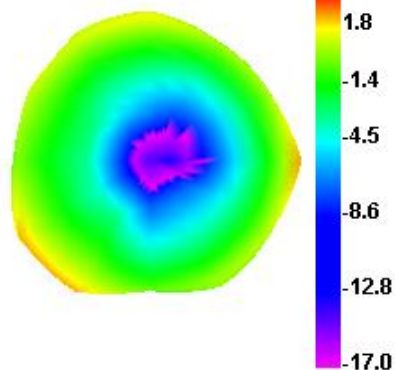


**2700.000MHz E2**

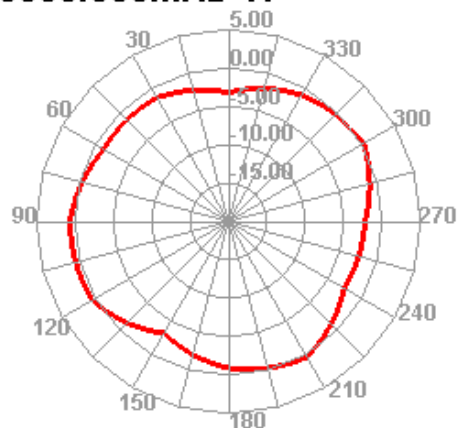




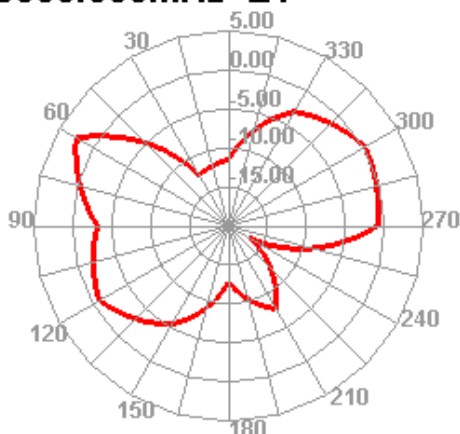
**3300.000MHz**



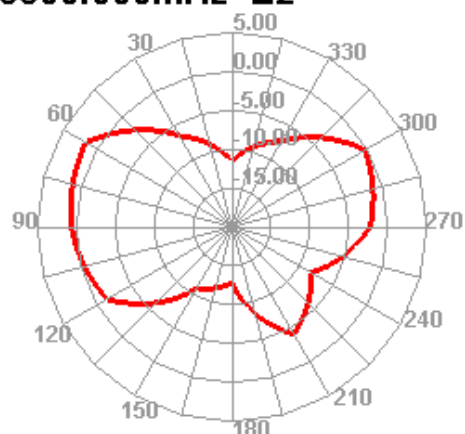
**3300.000MHz H**



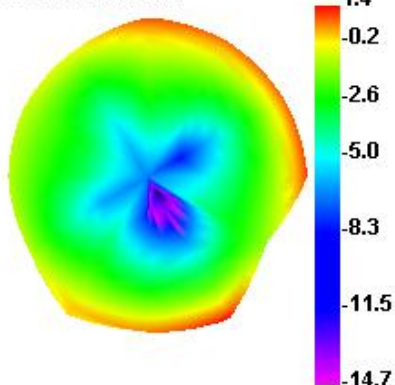
**3300.000MHz E1**



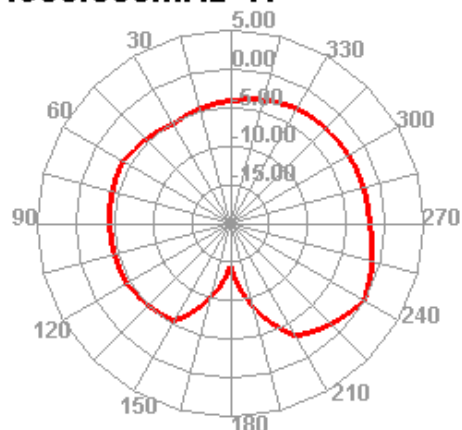
**3300.000MHz E2**



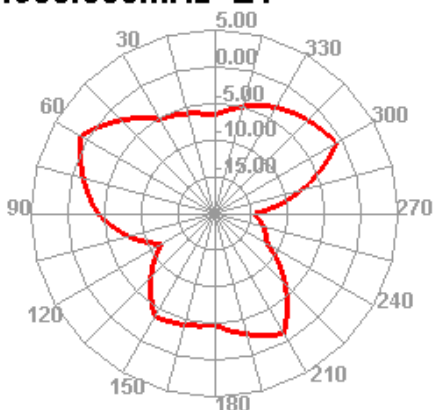
**4980.000MHz**



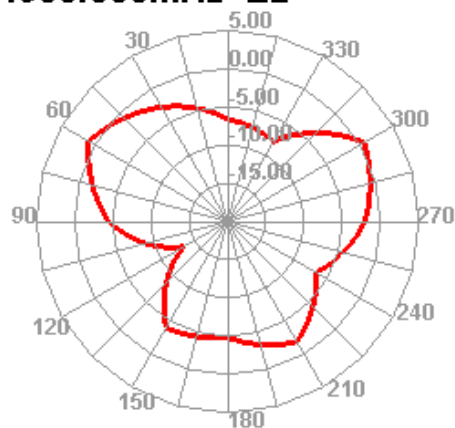
**4980.000MHz H**



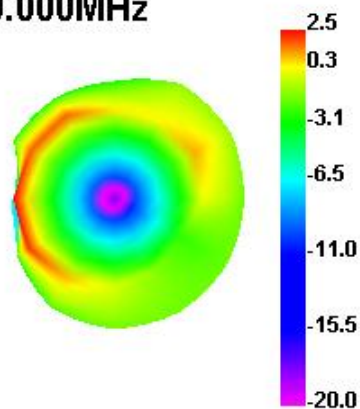
**4980.000MHz E1**



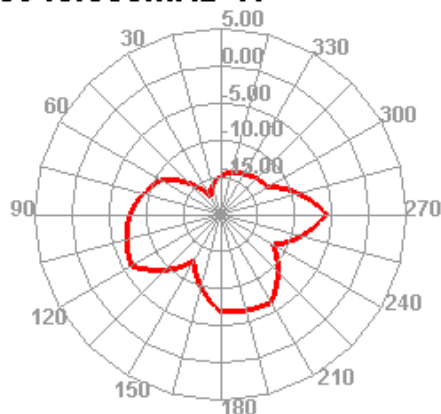
**4980.000MHz E2**



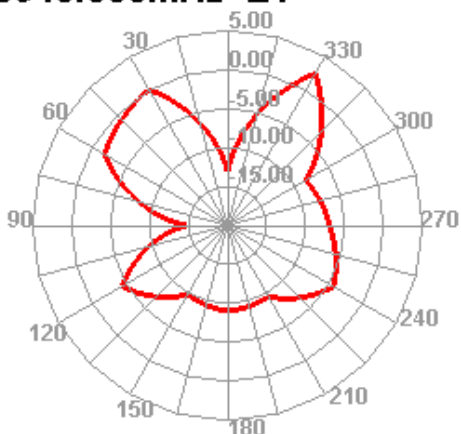
**5940.000MHz**



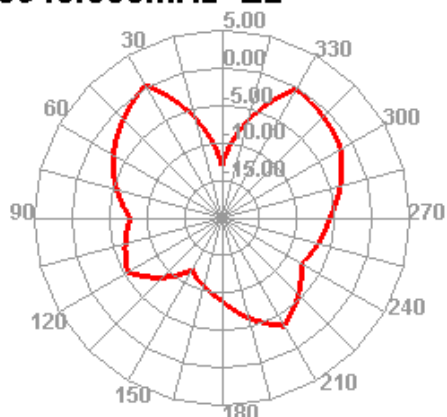
**5940.000MHz H**



**5940.000MHz E1**



**5940.000MHz E2**



## 5 Product Size

ROHS

