

Antenna

YF0004AA Datasheet

Antenna Services

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Status: Released



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About the Document

Revision History

Version	Date	Author	Note
1.0	2020-06-15	Kenny YIN	Initial
2.0	2020-07-16	Kenny YIN	Updated the specifications.
2.1	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 LTE
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	824–960 MHz/1710–2690 MHz
Input Impedence	50 Ω
VSWR	≤ 4.5
Gain	≤ 5 dBi
Polarization Type	Linear

Mechanical Specifications

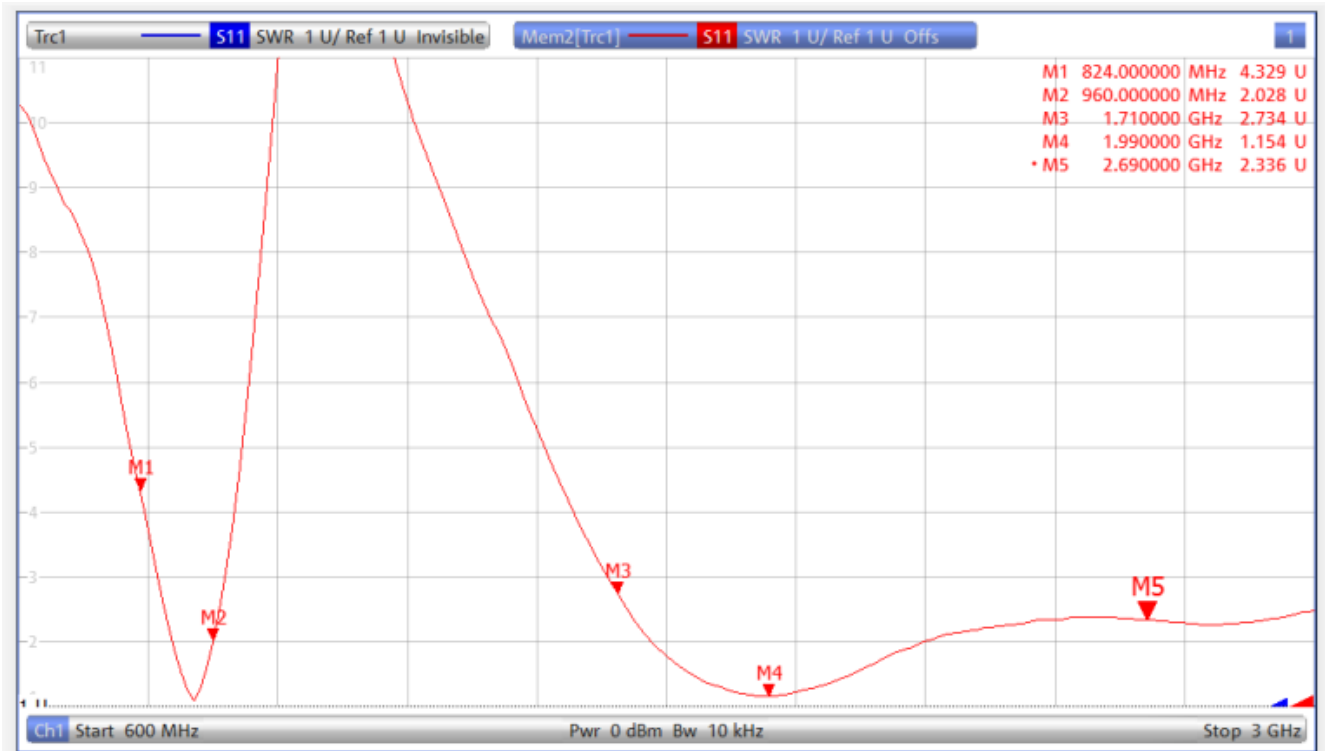
Antenna Size	87.17 mm \times 20 mm
Casing	/
Radiator	Cuprum
Connect Type	IPEX 1
Working Temperature	-20 $^{\circ}$ C to +80 $^{\circ}$ C
Radome Color	Black

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.

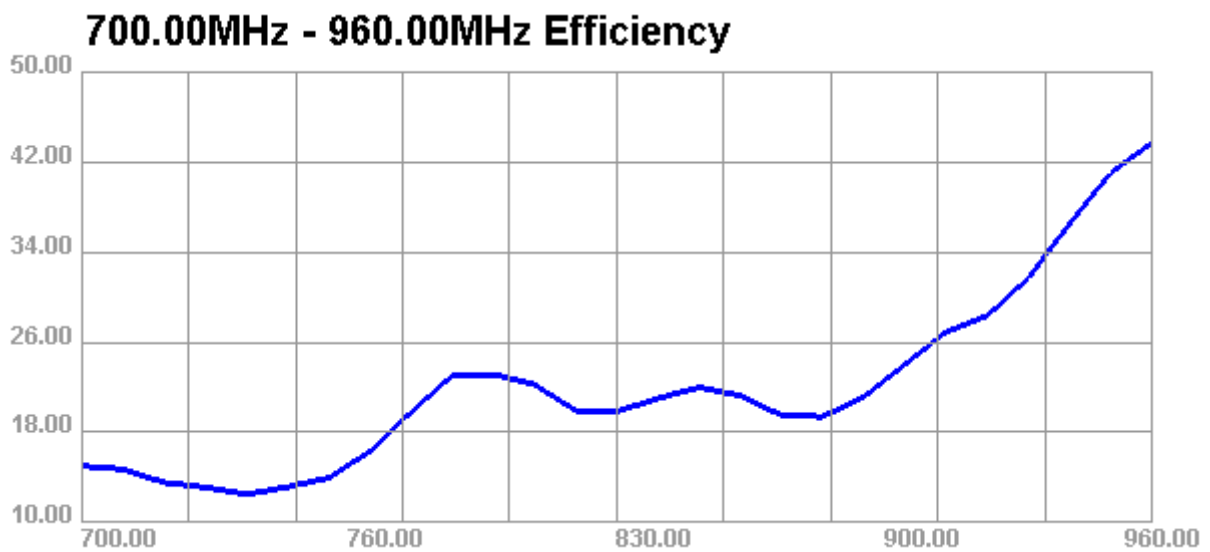


- VSWR

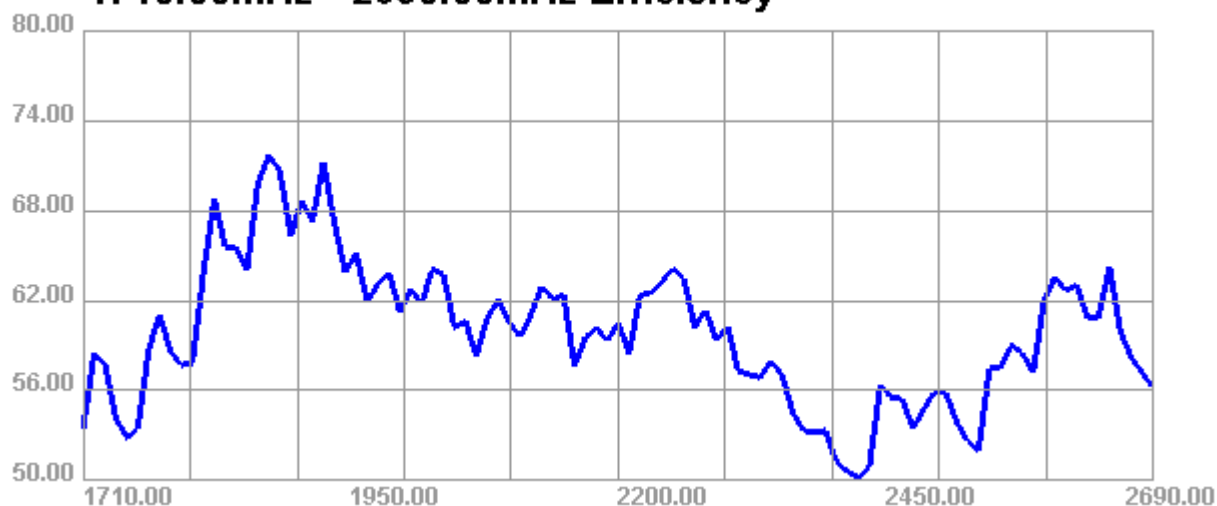


Frequency(MHz)	824	960	1710	1990	2690
VSWR	4.32	2.02	2.73	1.15	2.33

- Efficiency



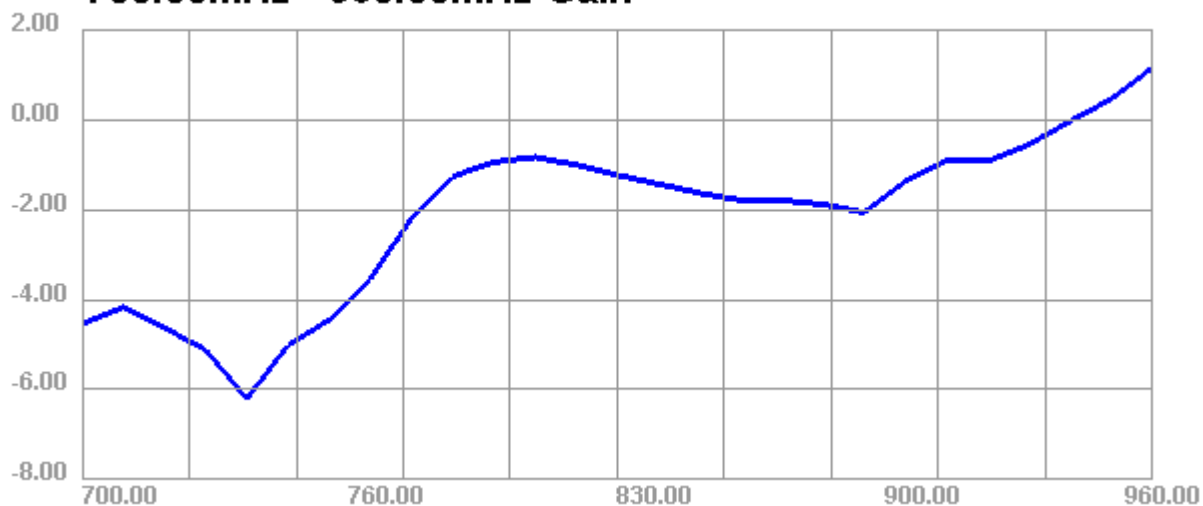
1710.00MHz - 2690.00MHz Efficiency

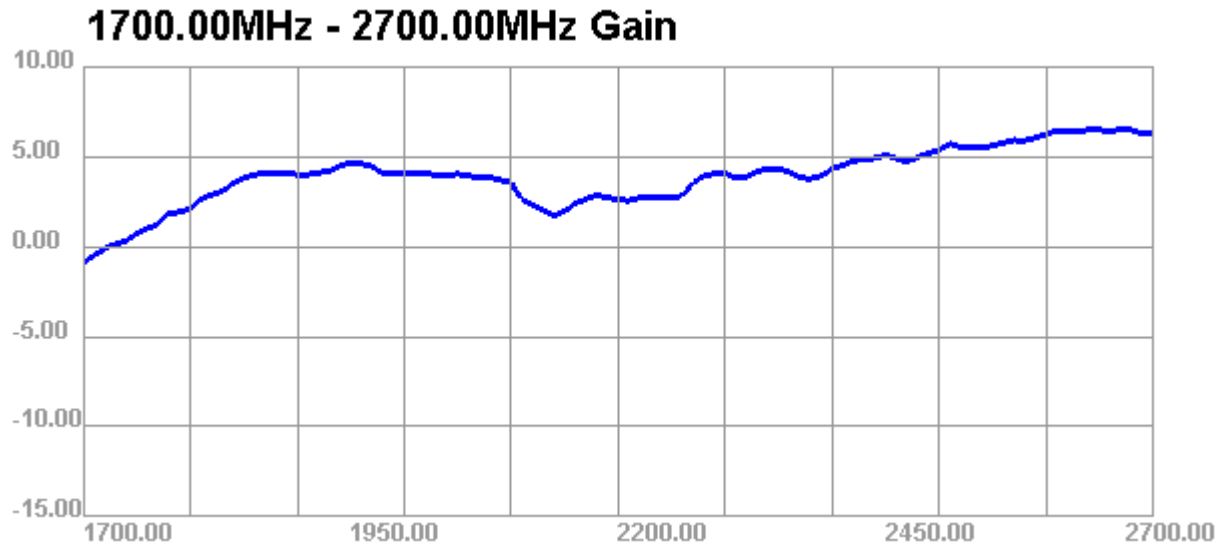


Frequency(MHz)	824	960	1710	1990	2690
Efficiency(%)	20.1%	43.7%	53.5%	63.9%	56.2%

- Gain

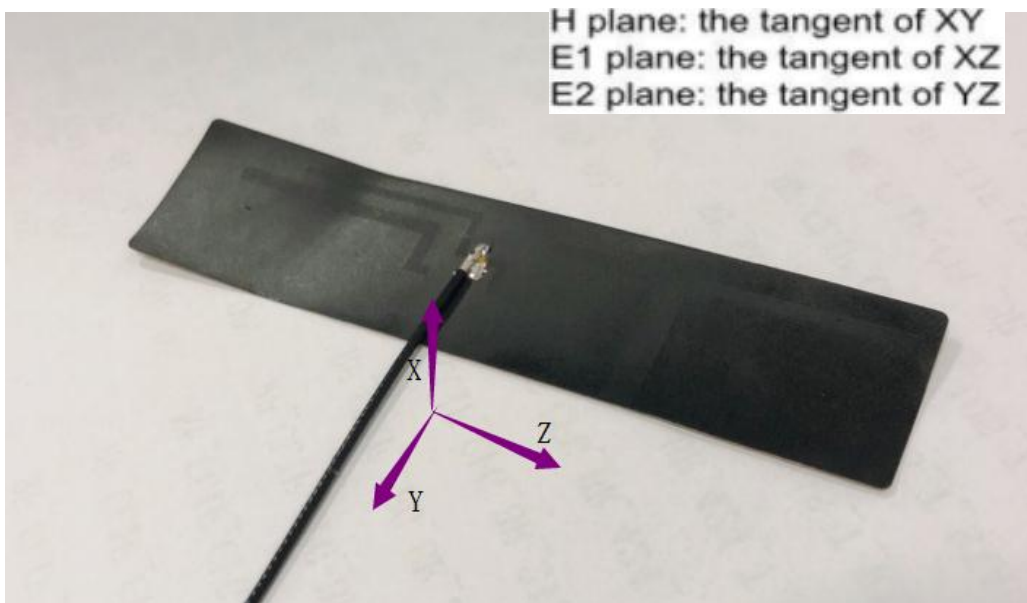
700.00MHz - 960.00MHz Gain



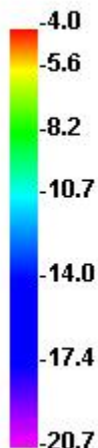


Frequency(MHz)	824	960	1710	1990	2690
Gain(dBi)	-3.97	1.81	-0.5	4.1	6.3

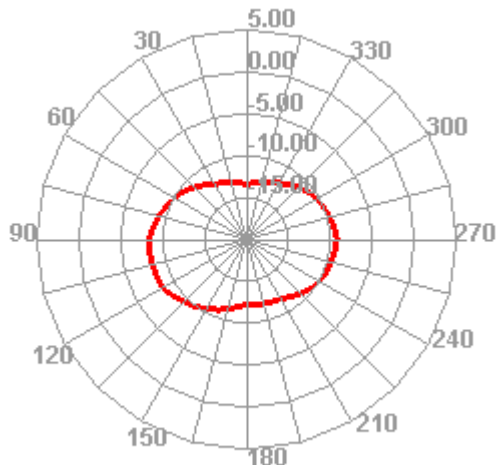
- Radiation Patterns



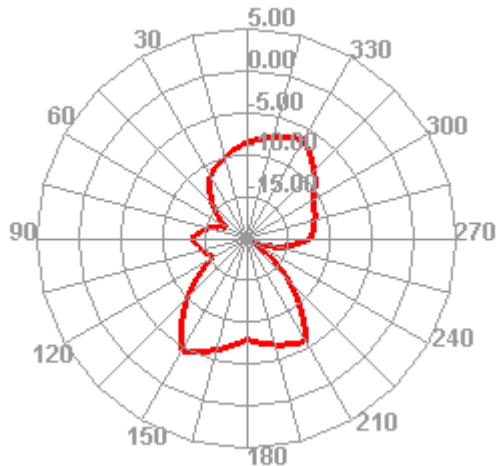
820.000MHz



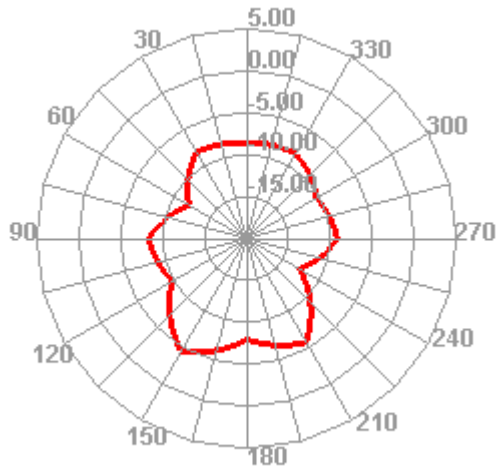
820.000MHz H



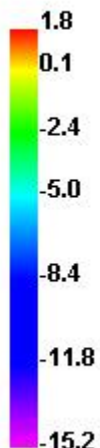
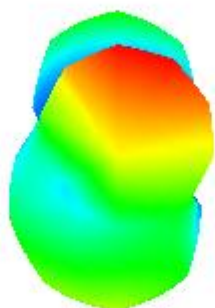
820.000MHz E1



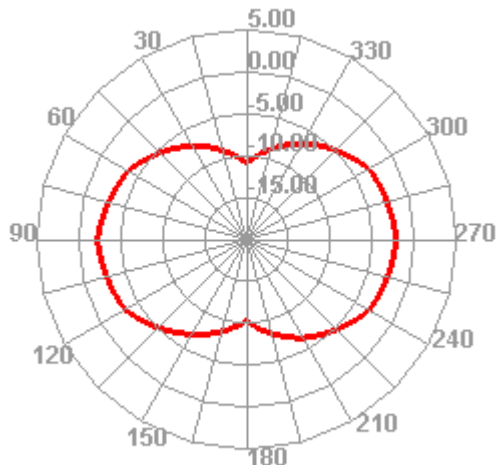
820.000MHz E2



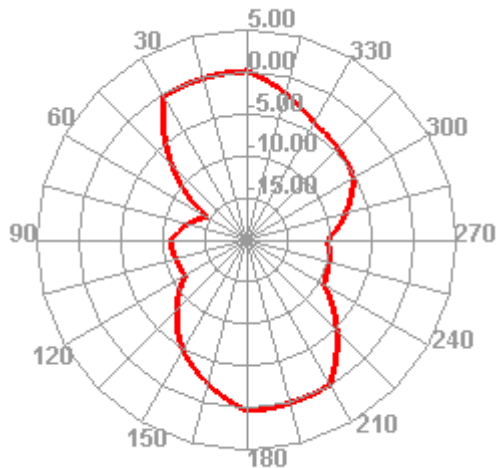
960.000MHz



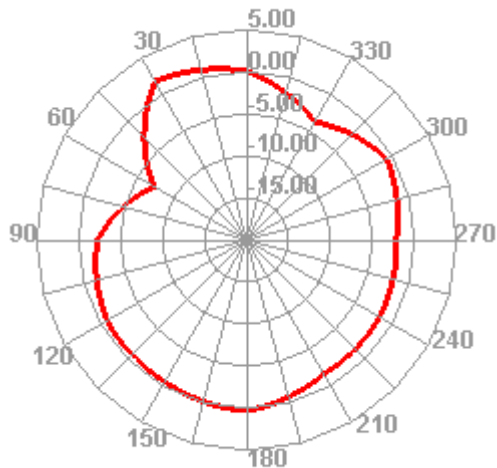
960.000MHz H



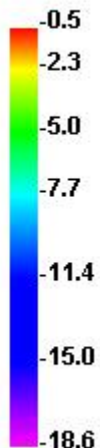
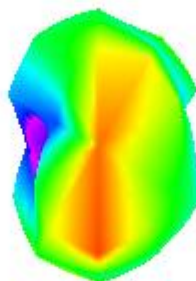
960.000MHz E1



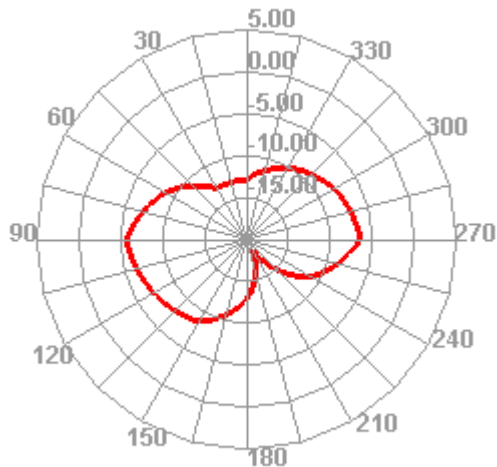
960.000MHz E2



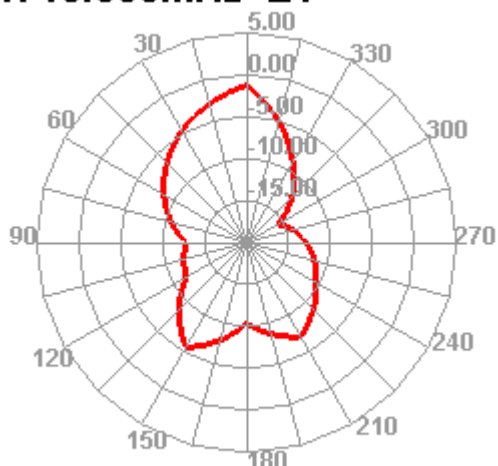
1710.000MHz



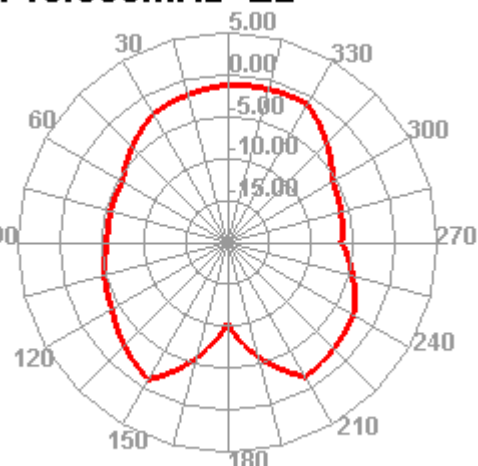
1710.000MHz H



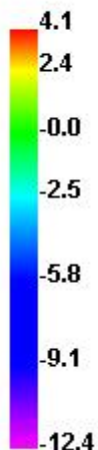
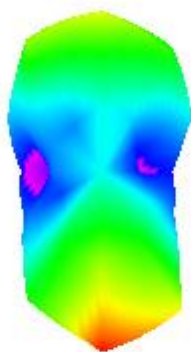
1710.000MHz E1



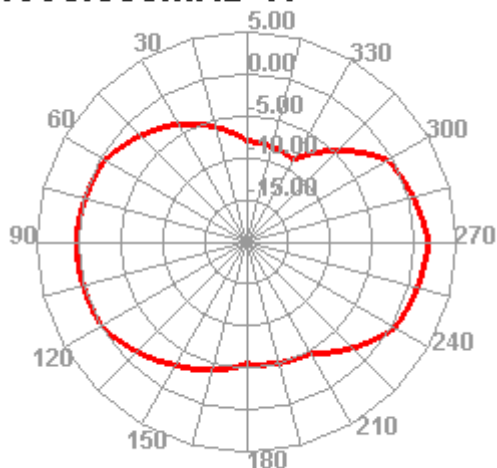
1710.000MHz E2



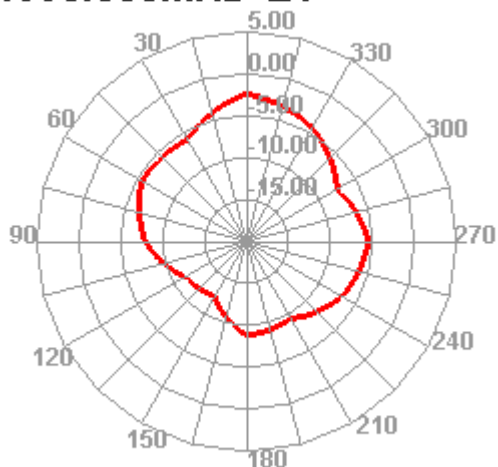
1990.000MHz



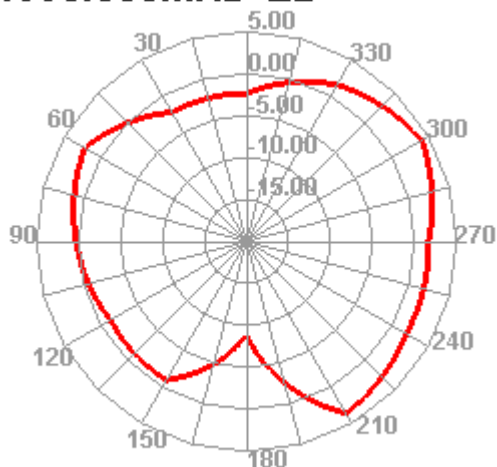
1990.000MHz H



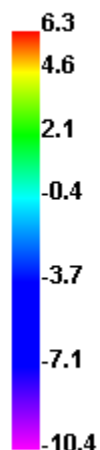
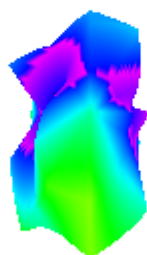
1990.000MHz E1



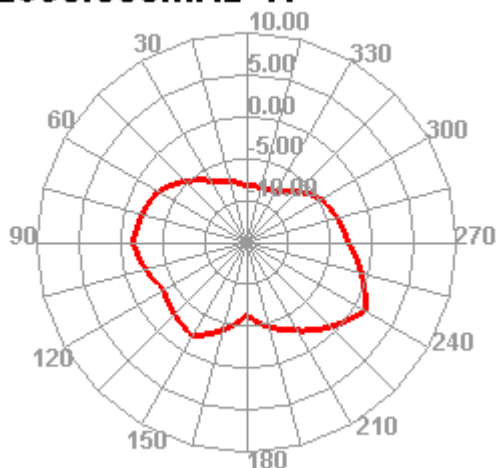
1990.000MHz E2



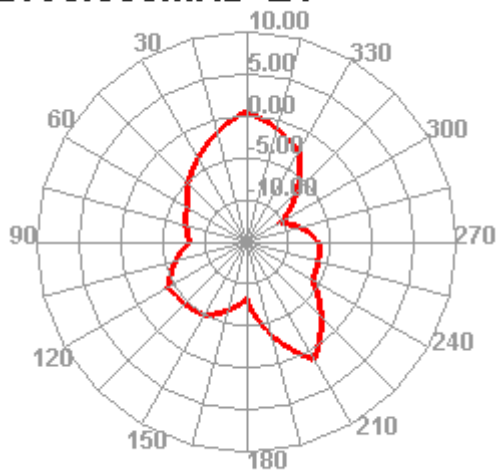
2690.000MHz



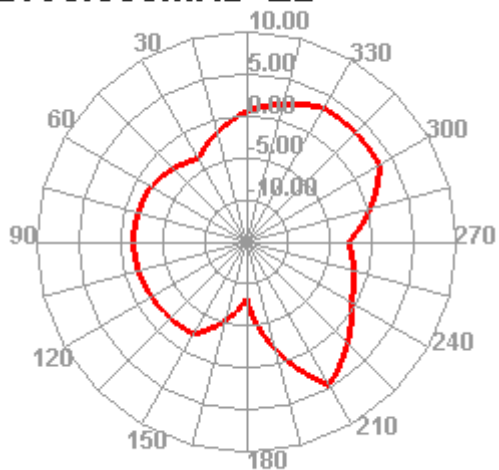
2690.000MHz H



2690.000MHz E1

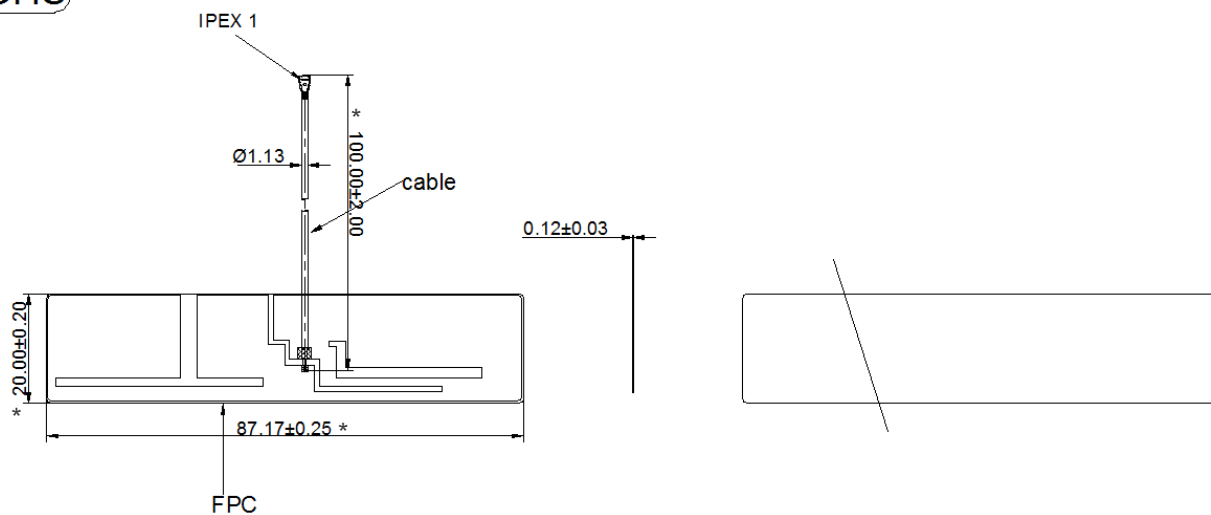


2690.000MHz E2



5 Product Size

ROHS



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