



Your antenna solution partner.

Datasheet

4G Core Gain V1.0

Technical Specifications

Part Number	4G Core Gain V1.0
Frequency Band	850 MHz, 1800 MHz, 2300 MHz
Application	IoT & Wireless Connectivity
Series	SMD Antenna

Key Features

- Passive Antenna
- Size of antenna : 33mm X 10mm X 1.6mm
- SMD Antenna



WIDE COVERAGE

Reliable performance across bands



HIGH PERFORMANCE

Optimized for efficiency and stability



RUGGED & RELIABLE

Built for demanding environments



GLOBAL CONNECTIVITY

Enabling IoT solutions worldwide



www.coreiot.fi

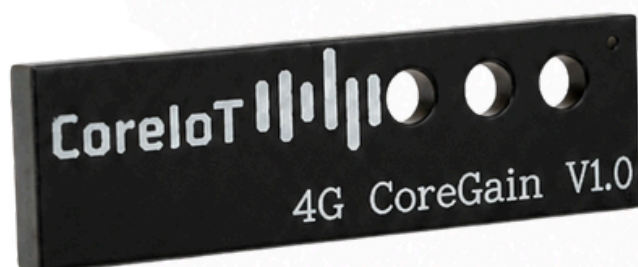


4G Core Gain V1.0

1. Introduction

A compact, high-performance multiband external antenna engineered by CoreIoT Technologies for reliable cellular wireless connectivity. Designed for robust RF performance, it supports the 850 MHz, 1800 MHz, and 2300 MHz frequency bands, making it ideal for LTE/4G devices, IoT gateways, smart metering systems, industrial automation equipment, telematics, asset tracking, and other wireless communication applications. Its durable external design enables flexible mounting and enhanced signal coverage across a wide range of deployment environments.

Final antenna performance depends on the host device design, antenna mounting location, ground plane, enclosure, and surrounding environment. Proper antenna placement and device-level validation are recommended to achieve optimum efficiency, reliable connectivity, and stable RF performance across the 850 MHz, 1800 MHz, and 2300 MHz frequency bands



Designed for connected applications

- IoT gateways and wireless routers
- Smart metering and industrial monitoring
- Connected appliances and embedded devices

Operating Bands Summary

Supports wireless operation across the 850 MHz, 1800 MHz, 2300 MHz frequency bands, making it ideal for LTE/4G, cellular IoT, telematics, smart metering, industrial automation, asset tracking, remote monitoring, and other embedded wireless communication applications requiring reliable and efficient cellular connectivity.

2. Electrical & Mechanical specifications

2.1 Electrical Specifications

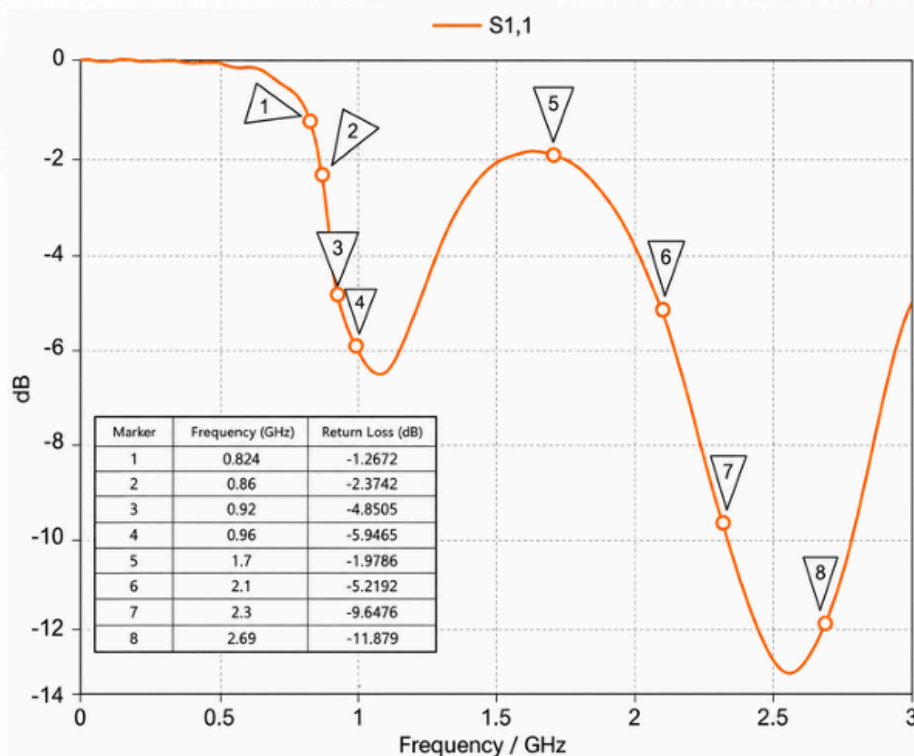
Parameter	Specification
Frequency	850 MHz, 1800 MHz, 2300 MHz
Return Loss	< -3 dB, < -5 dB, < -10dB
Efficiency	> 56%
Peak Gain	> 4.0 dBi
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional

2.2 Mechanical Specifications

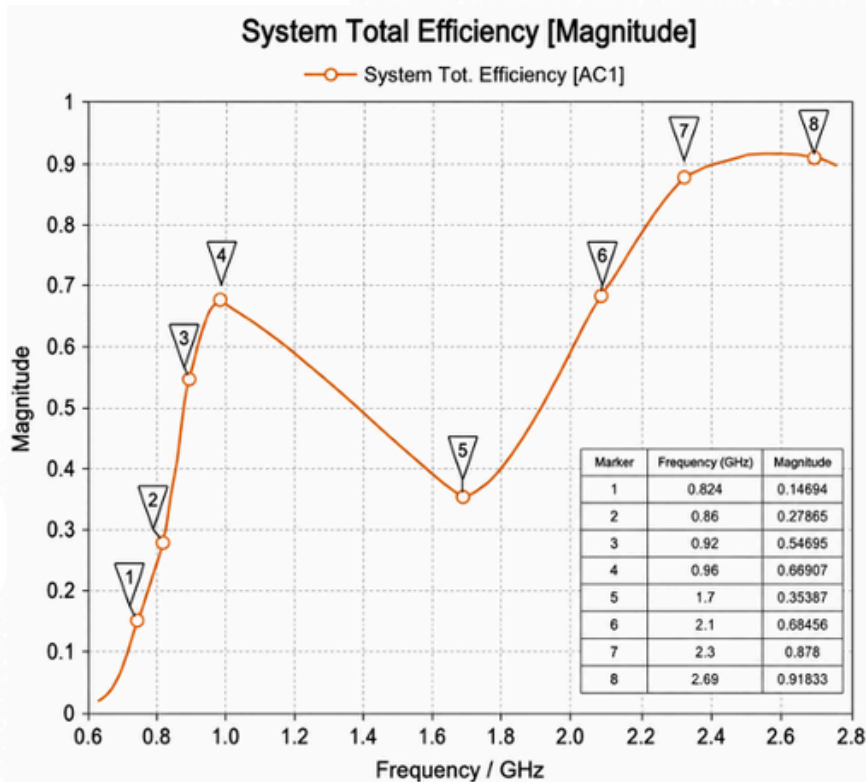
Parameter	Specification
Antenna Dimensions	33mm X 10mm X 1.6mm

3. Antenna Characteristics

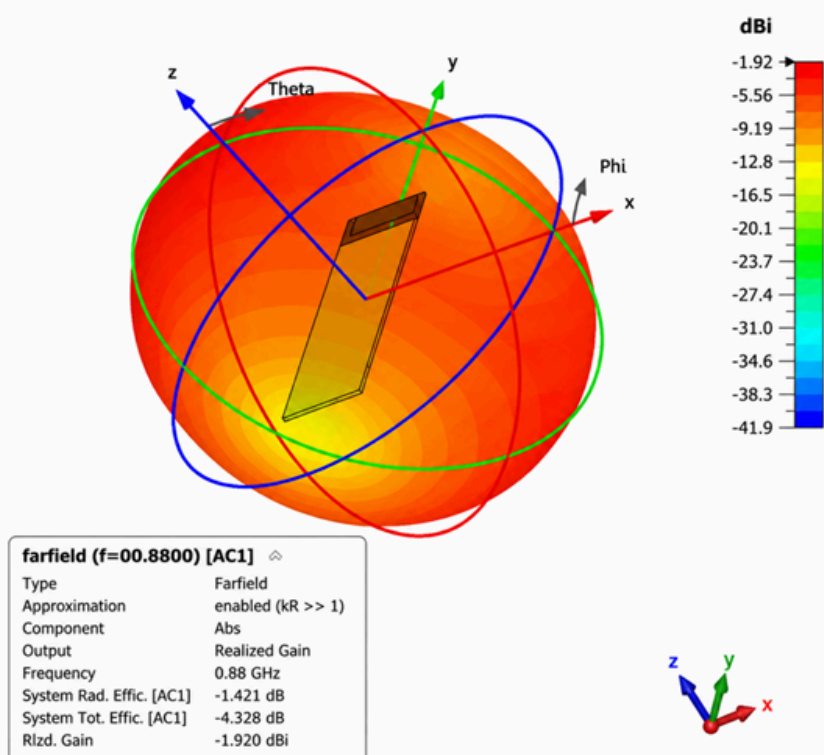
3.1 Return Loss



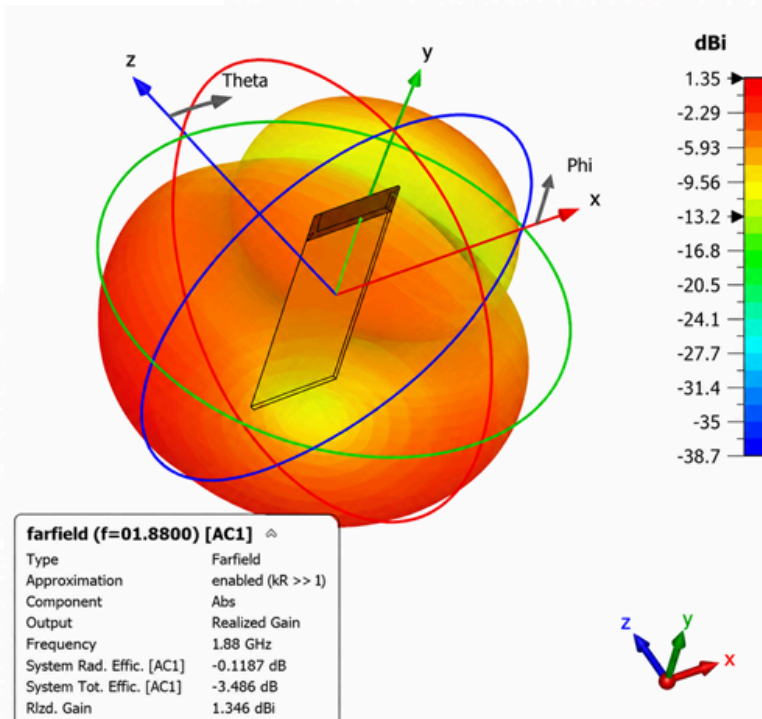
3.2 Efficiency



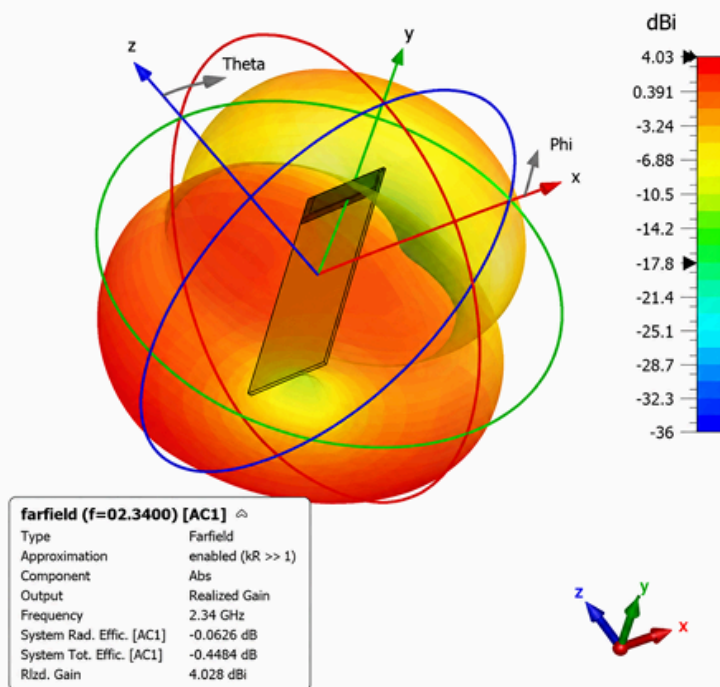
3.3 3D Radiation Pattern



@880MHz

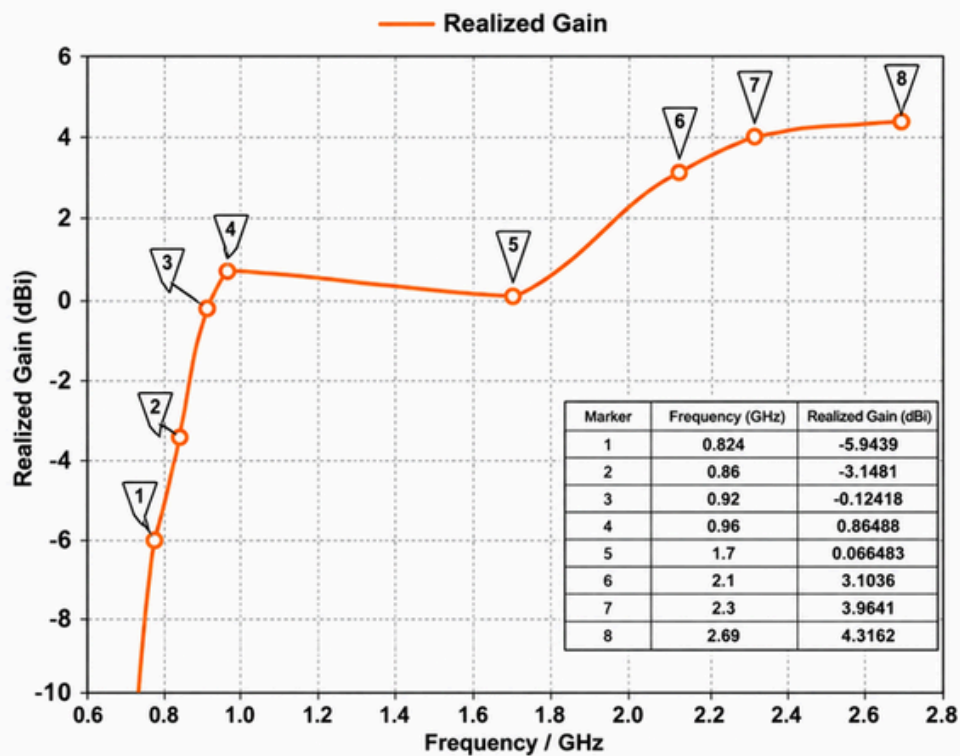


@1880MHz



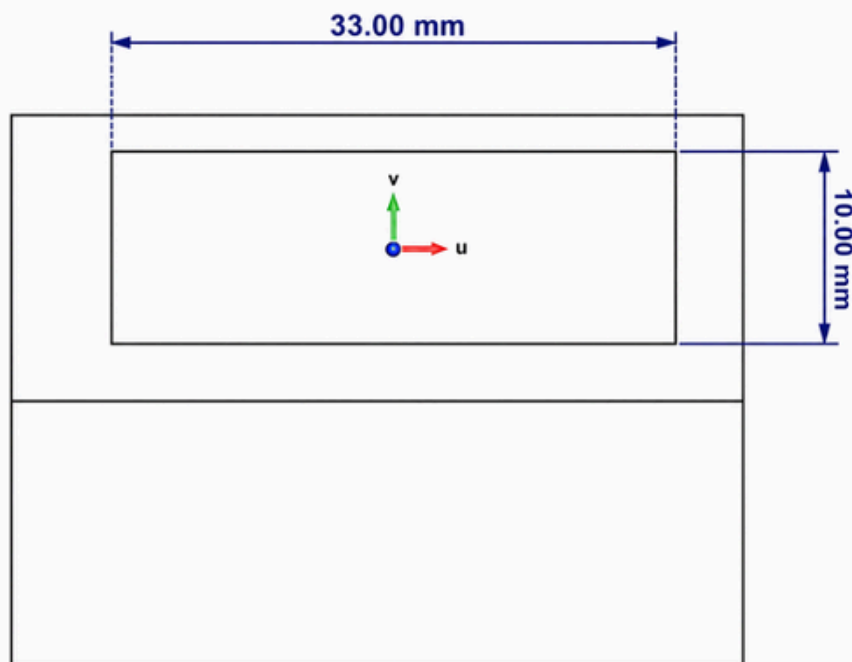
@2340MHz

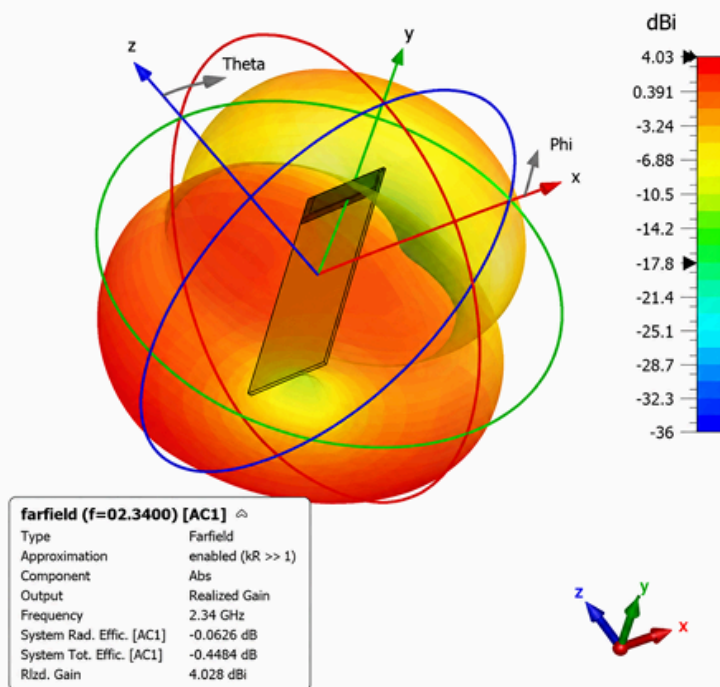
3.4 Realized Gain



4. Mechanical Drawings

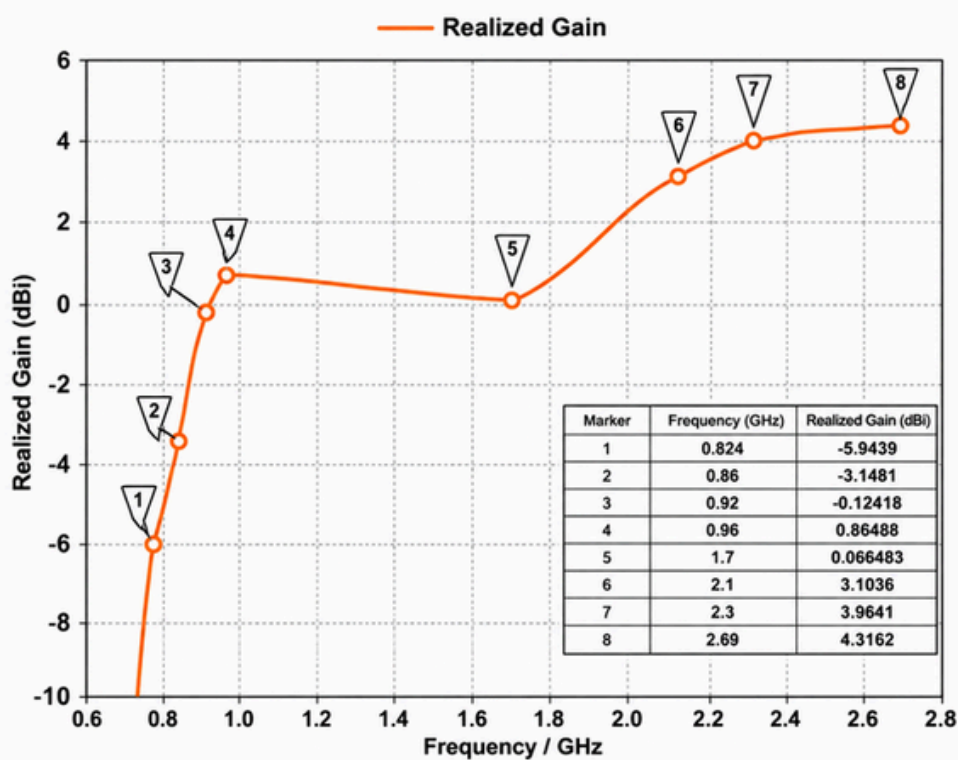
MECHANICAL DRAWING

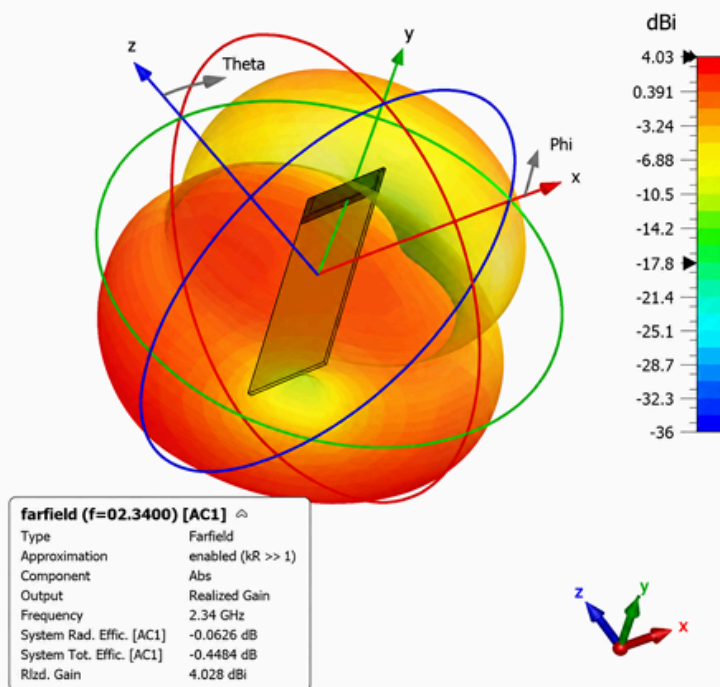




@2340MHz

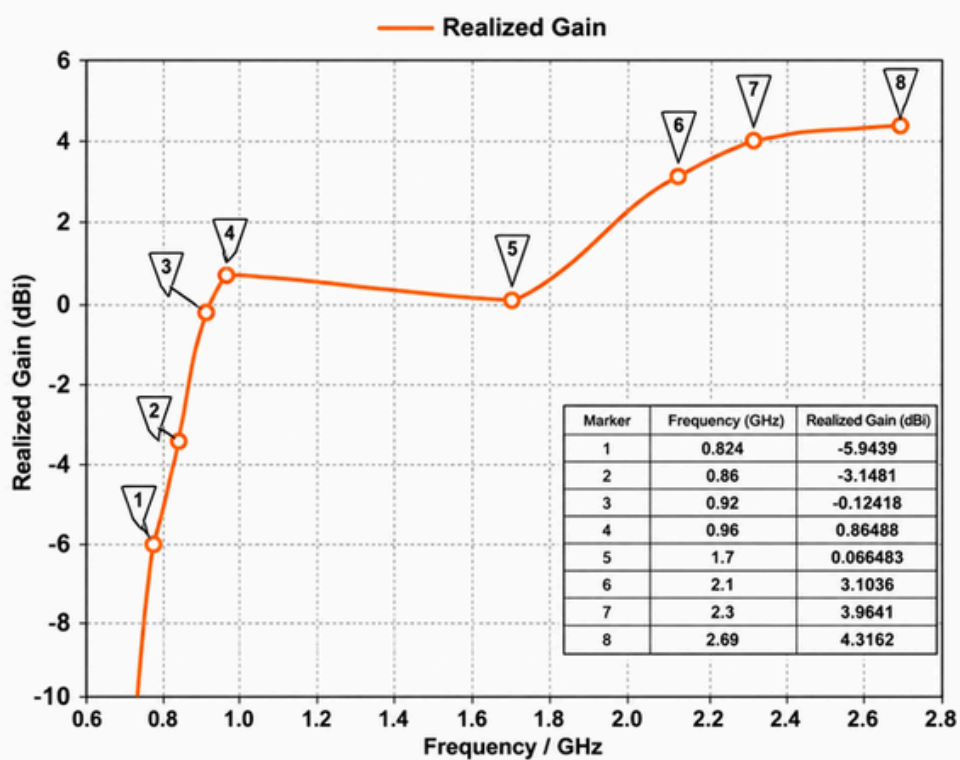
3.4 Realized Gain





@2340MHz

3.4 Realized Gain





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Contact Us

For more enquiries, product support and customization assistance.



CoreloT Technologies India Pvt Ltd



Finland Office

Tampere, Finland



India Office

Ongole, Andhra Pradesh, India



Email: support@coreiot.fi



Web: www.coreiot.fi

Contact us for more enquiries

Thank you for your interest in
CoreloT antenna solutions.



Technical Support



Custom Design



Integration Support



Global Connectivity

