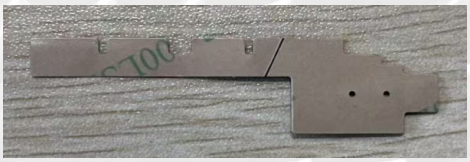

Antenna Datasheet

Product OC: Y0REB0CC2CA
Version: 1.0
Date: 2025-02-18

Product Name: 4G FPC Antenna
Key Features:
Frequency Band: 700–960 MHz, 1710–2690 MHz
Dimensions: 46.08 mm × 14.14 mm × 0.13 mm
Efficiency: Up to 58.4 %
RoHS and REACH Compliant

Contents

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1 Specification

Test Condition: Assembled in test device

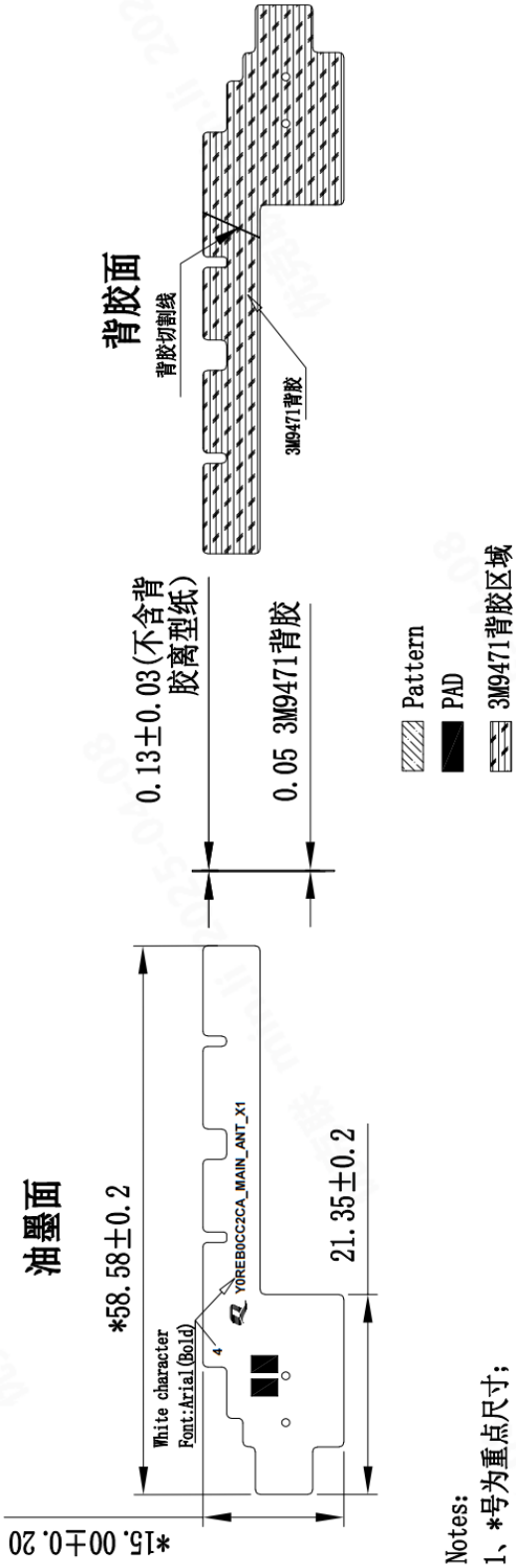
1.1. Electrical

Electrical	
Frequency Range	700–960 MHz, 1710–2690 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 16.0
Peak Gain	1.9 dBi

1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	46.08 mm × 14.14 mm × 0.13 mm
Material & Color	FPC & Black
Weight	Typ. 0.3 g
Mounting Type	Adhesive
Environmental	
Operation Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
RoHS & REACH Compliant	Yes

2 Drawing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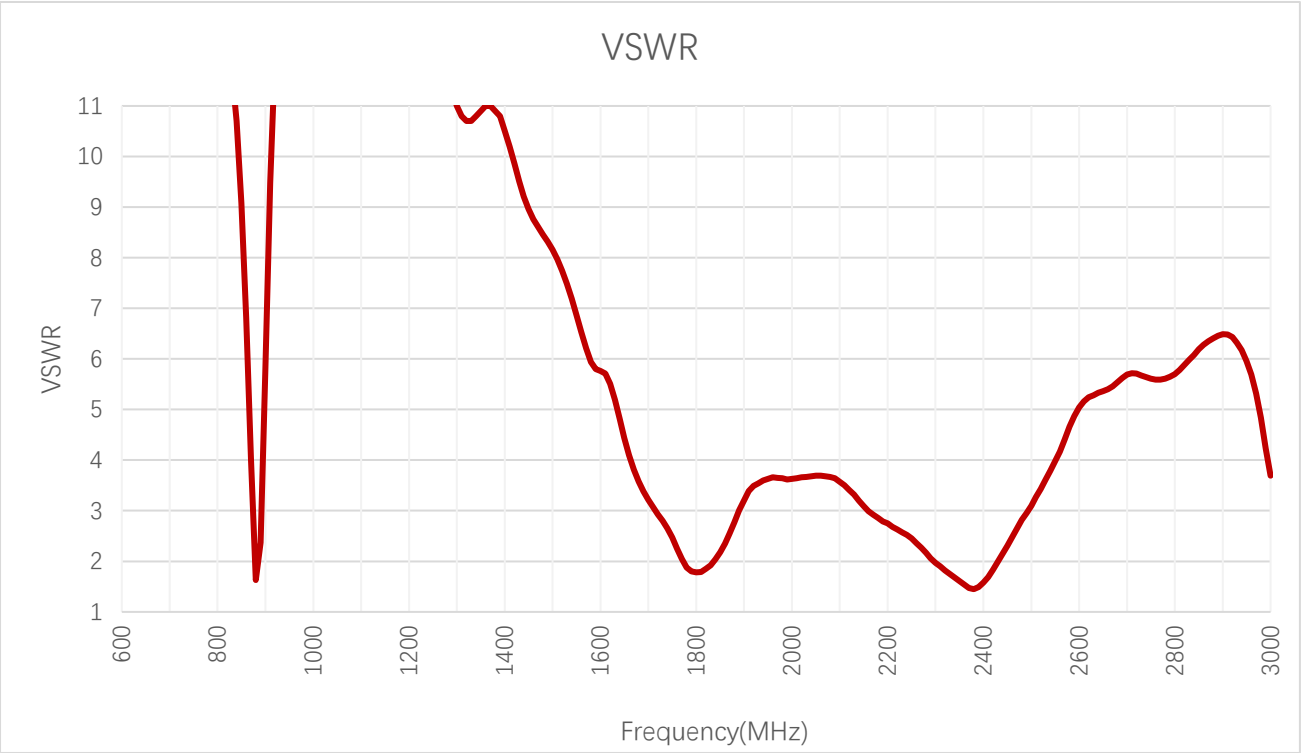
背胶切割线
3M9471背胶
0.13±0.03(不含背胶离型纸)
0.05 3M9471背胶
Pattern
PAD
3M9471背胶区域
油墨面
*58.58±0.2
White character
Font:Arial(Bold)
4
Y0REB0CC2CA_MAIN_ANT_X1
21.35±0.2
*15.00±0.20
Notes:
1、*号为重点尺寸;

3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR



VSWR

Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
VSWR	-	-	16.0	11.7	5.8	14.4	-	3.1	2.7	2.8
Frequency (MHz)	**1950**	**2140**	**2350**	**2450**	**2600**	**2690**	**4700**	**5000**	**5500**	**6000**
VSWR	3.6	3.2	1.6	2.3	5.0	-	-	-	-	-

3.2. Radiation Performance Test

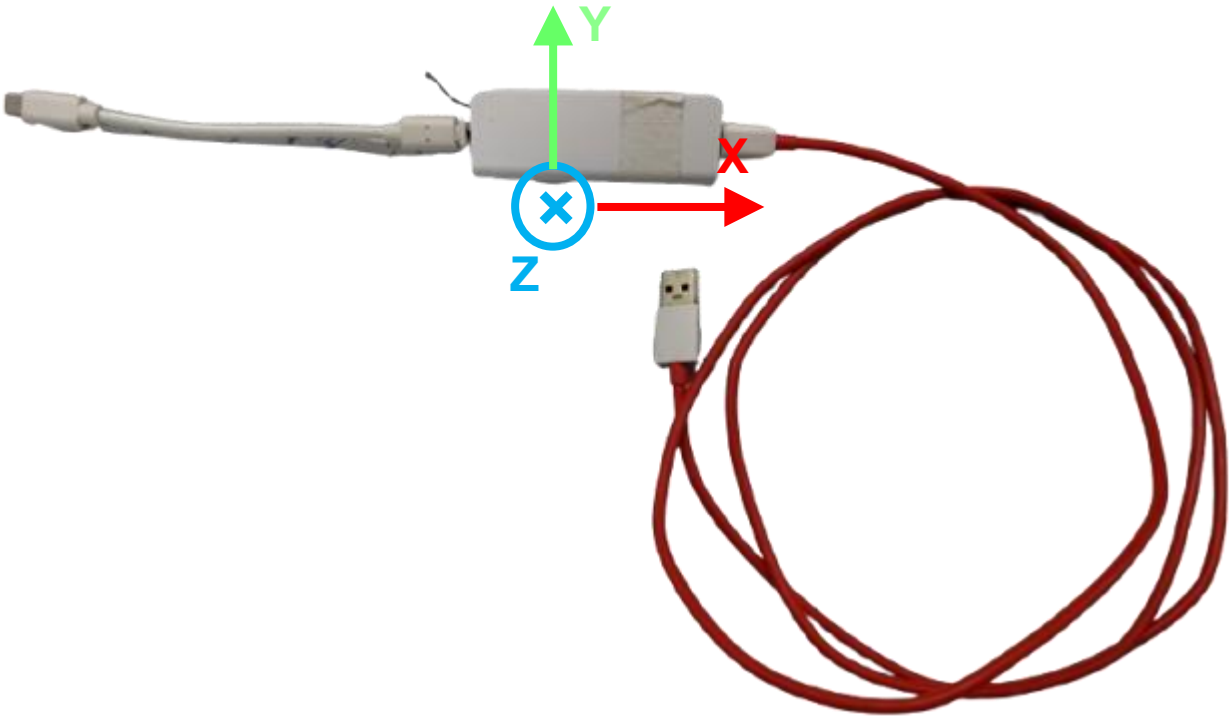
3.2.1. Efficiency and Gain

Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency(%)	Frequency (MHz)	Gain(dBi)	Efficiency (dB)	Efficiency(%)
700	-8.8	-13.2	4.8	2300	-2.2	-6.5	22.4
710	-8.1	-12.6	5.5	2310	-2.3	-6.6	22.1
720	-7.7	-12.1	6.2	2320	-2.4	-6.7	21.6
730	-7.5	-11.5	7.1	2330	-2.4	-6.5	22.4
740	-7.2	-10.8	8.3	2340	-2.5	-6.4	23.0
750	-7.7	-10.7	8.6	2350	-2.8	-6.7	21.4
760	-7.6	-10.7	8.6	2360	-3.1	-7.1	19.7
770	-7.9	-10.7	8.6	2370	-3.2	-7.2	19.0
780	-8.5	-10.9	8.1	2380	-3.4	-7.2	19.1
790	-9.2	-11.5	7.0	2390	-3.5	-7.4	18.3
800	-5.5	-8.0	16.0	2400	-3.9	-7.7	17.1
810	-5.7	-8.3	14.7	2410	-4.0	-7.8	16.6
820	-5.8	-9.0	12.6	2420	-3.9	-7.7	17.2
830	-6.0	-9.3	11.7	2430	-3.8	-7.7	17.0
840	-6.4	-9.8	10.6	2440	-3.7	-8.0	16.0
850	-7.2	-10.5	9.0	2450	-3.5	-8.1	15.6
860	-7.7	-10.9	8.1	2460	-3.1	-7.8	16.5
870	-8.7	-11.6	6.9	2470	-2.6	-7.5	17.7
880	-9.3	-12.5	5.6	2480	-2.7	-7.6	17.4
890	-3.8	-5.9	25.5	2490	-3.1	-7.8	16.6
900	-4.7	-6.8	21.1	2500	-3.4	-7.9	16.3
910	-5.7	-7.7	16.8	2510	-3.6	-7.9	16.3
920	-6.8	-8.8	13.1	2520	-4.2	-8.3	15.0
930	-7.6	-9.9	10.2	2530	-4.8	-8.8	13.3
940	-8.0	-10.6	8.7	2540	-5.1	-9.1	12.4
950	-8.9	-11.7	6.7	2550	-5.1	-9.1	12.4
960	-9.7	-13.1	4.9	2560	-5.2	-9.2	12.1
				2570	-5.5	-9.5	11.3
				2580	-5.8	-9.7	10.7
				2590	-6.0	-9.8	10.4
				2600	-6.2	-10.1	9.8
				2610	-6.6	-10.5	9.0
				2620	-6.9	-10.8	8.2
				2630	-7.0	-11.0	8.0
				2640	-6.8	-10.9	8.1
				2650	-6.9	-10.9	8.2
				2660	-6.8	-11.1	7.7
				2670	-6.7	-11.2	7.7
				2680	-6.3	-11.0	7.9
				2690	-5.9	-10.9	8.1
				2700	-5.7	-10.9	8.1

Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)	Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
1700	-3.6	-8.7	13.7	1950	0.6	-2.8	52.2
1710	-2.9	-8.3	14.9	1960	0.8	-2.9	51.9
1720	-2.8	-7.8	16.8	1970	0.8	-3.0	50.6
1730	-2.4	-7.6	17.2	1980	0.8	-3.1	48.9
1740	-2.0	-7.3	18.9	1990	0.9	-3.2	48.2
1750	-1.9	-7.0	20.2	2000	1.0	-3.1	48.5
1760	-1.7	-6.7	21.5	2010	1.3	-3.2	47.7
1770	-1.7	-6.5	22.3	2020	1.4	-3.3	46.5
1780	-1.5	-6.2	24.2	2030	1.6	-3.4	46.0
1790	-1.4	-5.8	26.2	2040	1.6	-3.5	44.6
1800	-1.1	-5.4	29.0	2050	1.4	-3.9	40.4
1810	-1.1	-5.1	30.7	2060	1.1	-4.4	36.4
1820	-0.9	-4.9	32.5	2070	1.1	-4.5	35.4
1830	-0.9	-4.7	33.7	2080	1.1	-4.6	34.6
1840	-0.8	-4.6	35.0	2090	0.7	-5.1	31.3
1850	-0.6	-4.4	36.3	2100	0.2	-5.7	27.2
1860	-0.5	-4.3	37.4	2110	-0.3	-6.2	24.3
1870	-0.3	-4.1	39.2	2120	-0.7	-6.6	22.0
1880	-0.1	-3.9	41.1	2130	-1.4	-7.2	19.0
1890	0.1	-3.7	43.2	2140	-1.9	-7.9	16.4
1900	0.7	-3.1	49.1	2150	-2.2	-8.3	14.8
1910	0.5	-2.9	50.8	2160	-2.4	-8.5	14.1
1920	0.5	-2.9	51.6	2170	-2.7	-8.8	13.2
1930	0.4	-2.8	52.0	2180	-3.3	-9.3	11.9
1940	0.3	-2.9	51.9	2190	-3.8	-9.6	11.0
				2200	-4.0	-9.6	11.0

3.2.2. 2D Radiation Pattern

- Test Condition: Assembled in test device
- Test Chamber: FS-S-1



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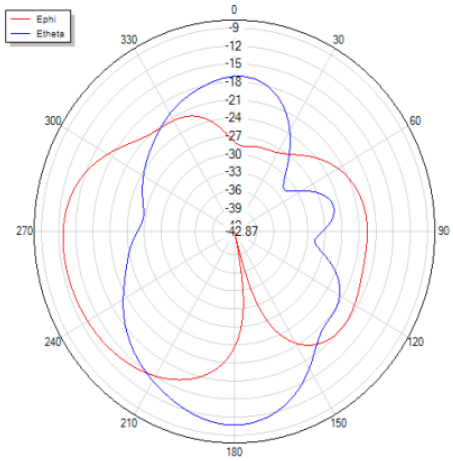

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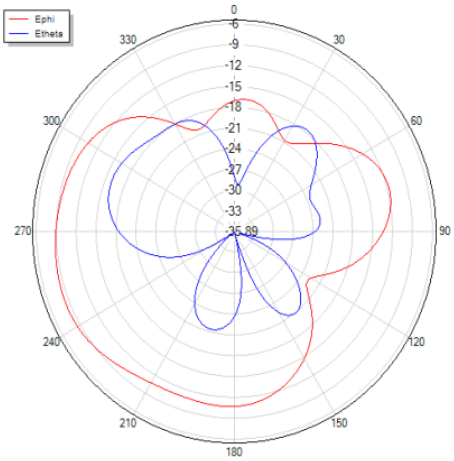

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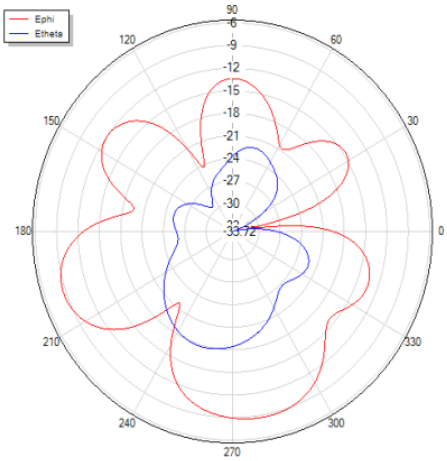

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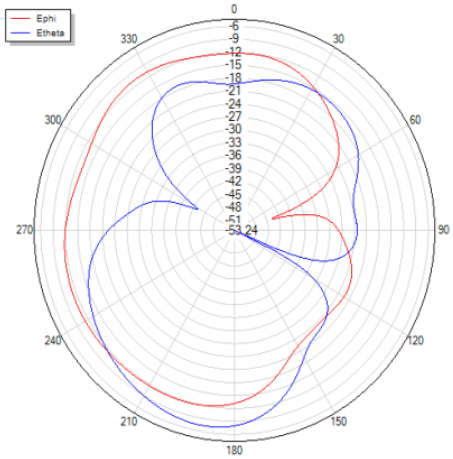

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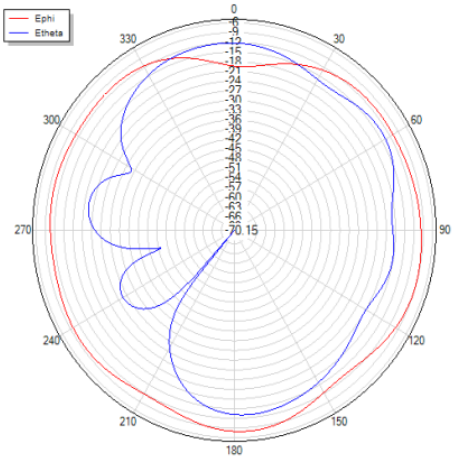

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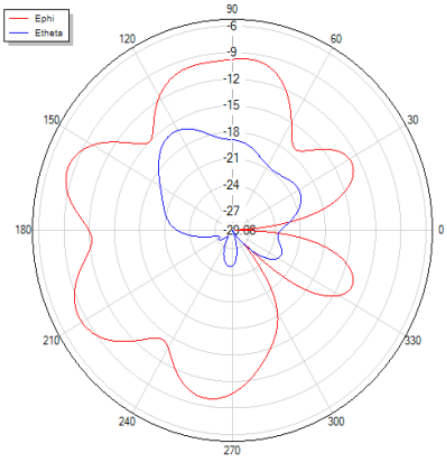

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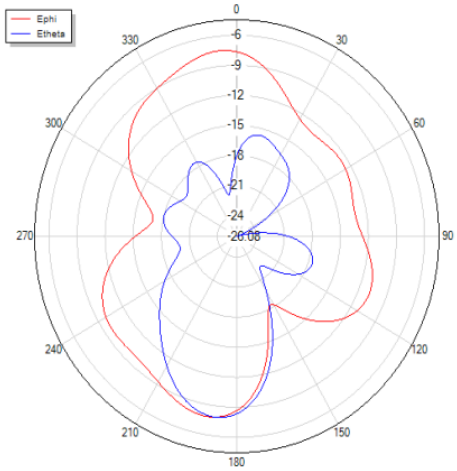

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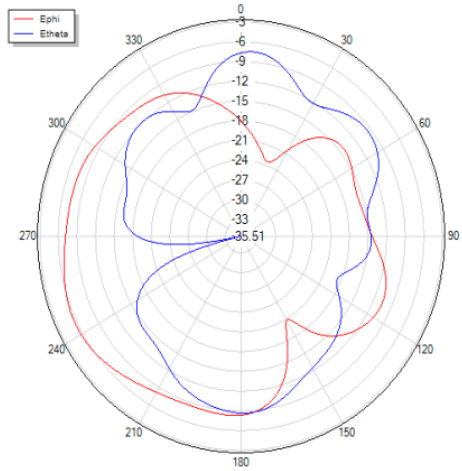

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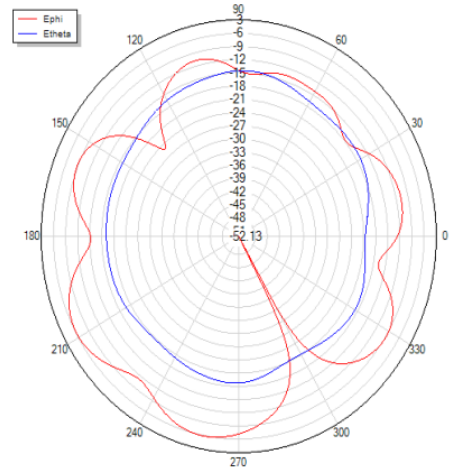

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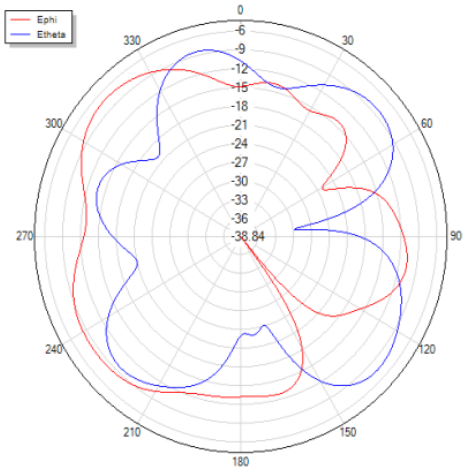

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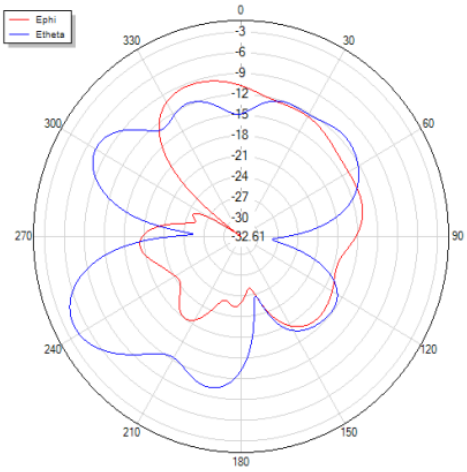

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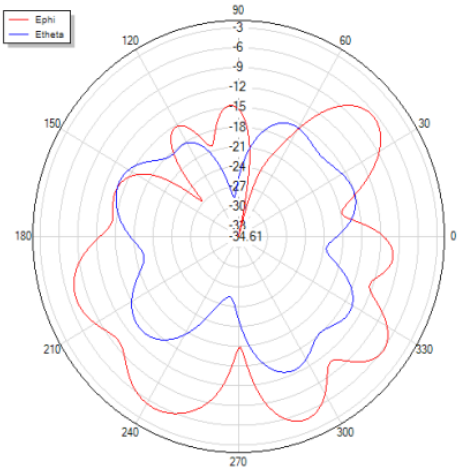

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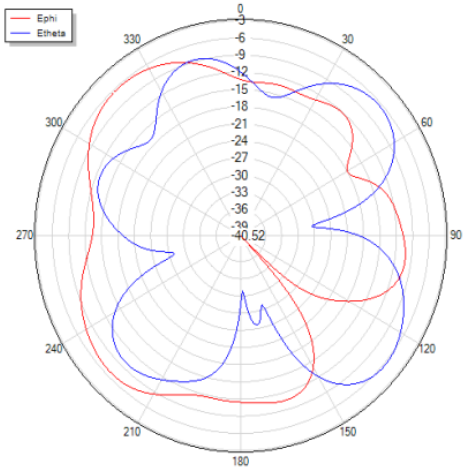

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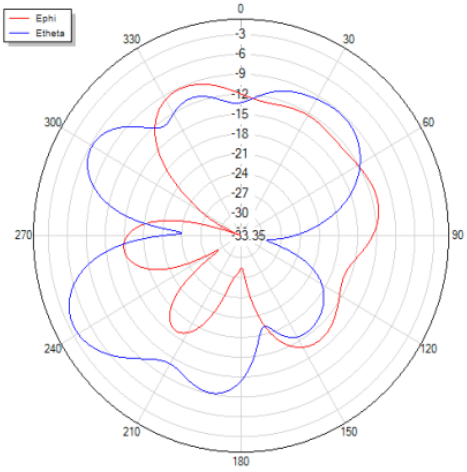

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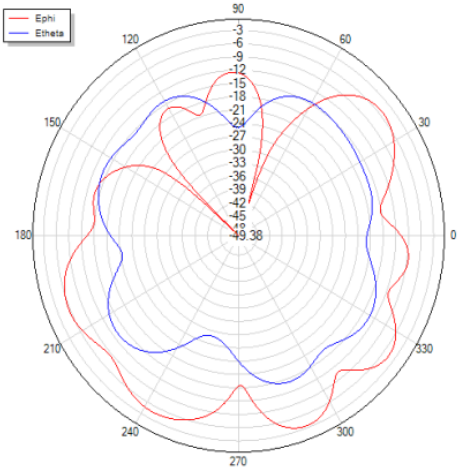

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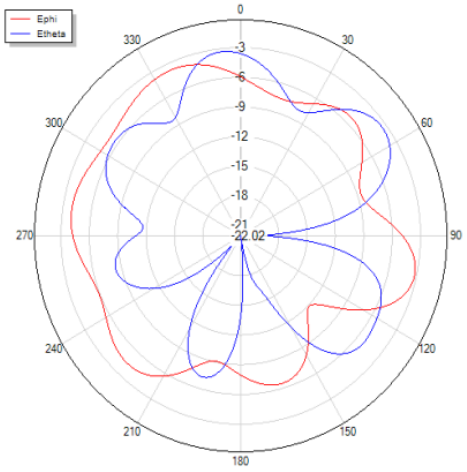

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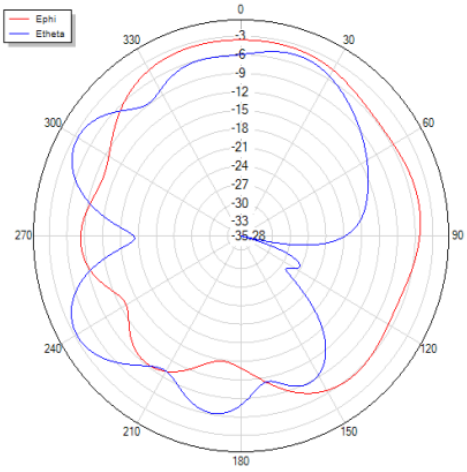

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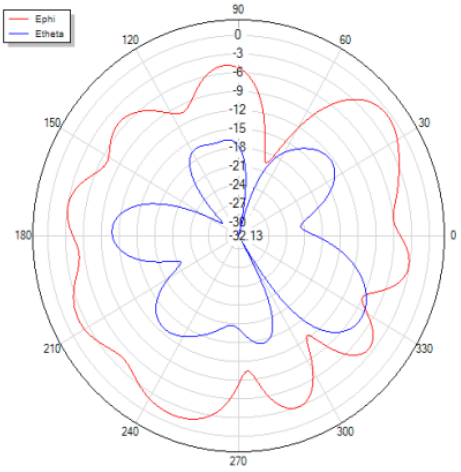

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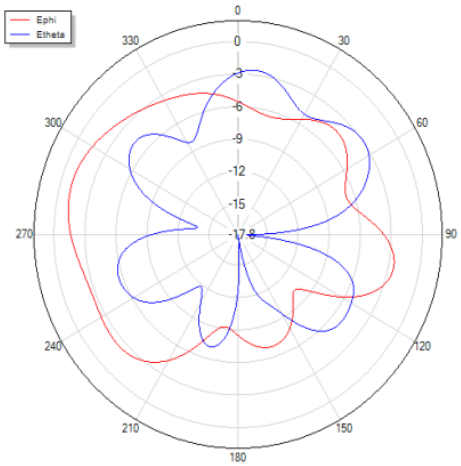

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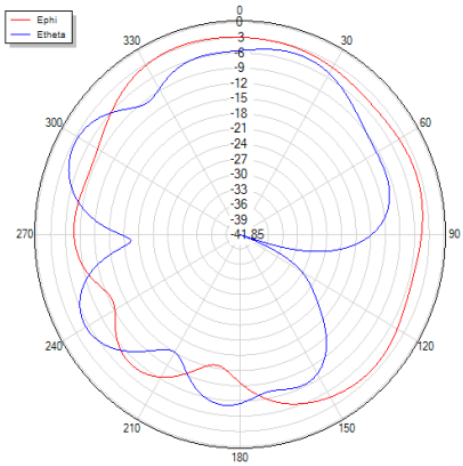

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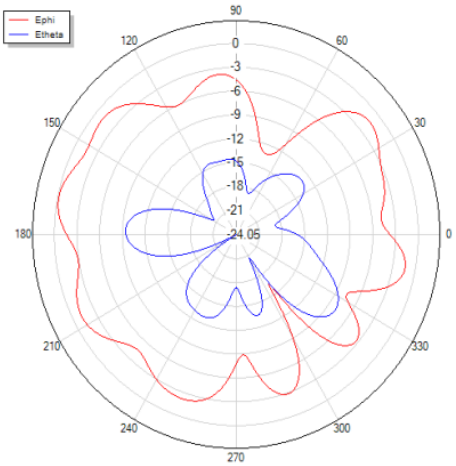

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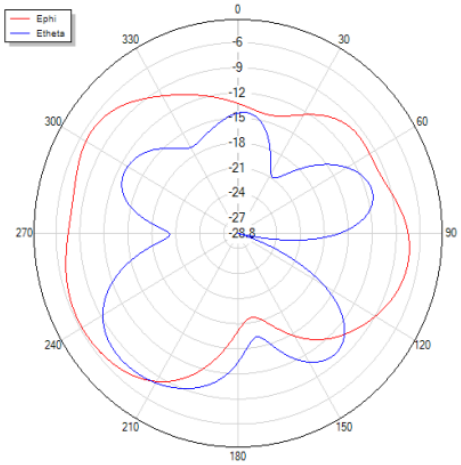

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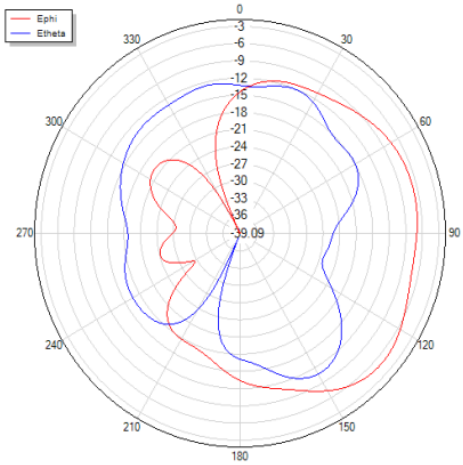

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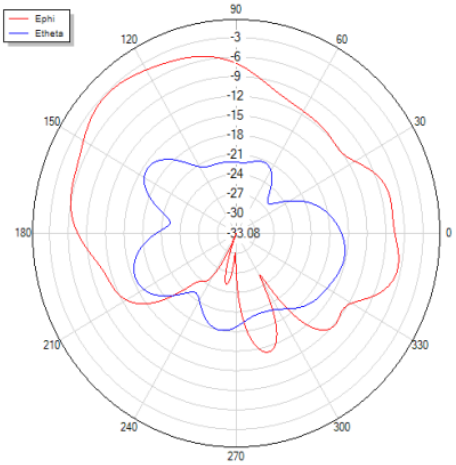

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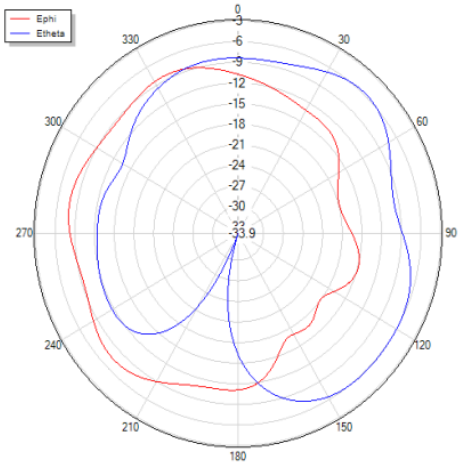

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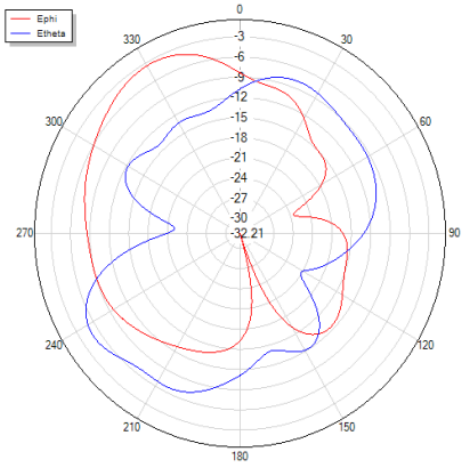

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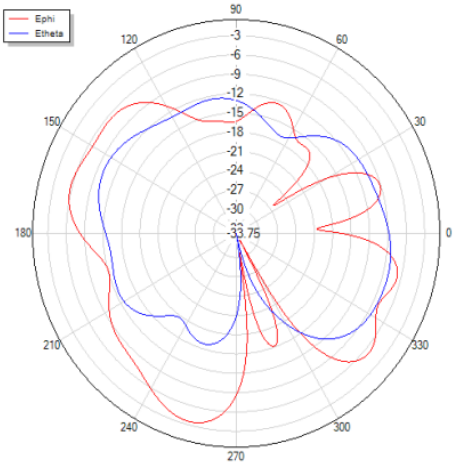

Contact Us

At Quectel, our aim is to provide timely and comprehensive services to our customers. If you require any assistance, please contact our headquarters:

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Tel: +86 21 5108 6236
Email: info@quectel.com

Or our local offices. For more information, please visit:
http://www.quectel.com/support/sales.htm.

For technical support, or to report documentation errors, please visit:
http://www.quectel.com/support/technical.htm.
Or email us at: support@quectel.com.

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Revision History

Version	Date	Author	Note
-	2025-02-18	Owen DENG/ Mike GUO/ Rainey LIAO	Creation of the document
1.0	2025-02-18	Owen DENG/ Mike GUO/ Rainey LIAO	First official release

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