

Antenna specification

Doc No.	IS-QR-PD-010
Rev.	V1.0
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Antenna specification

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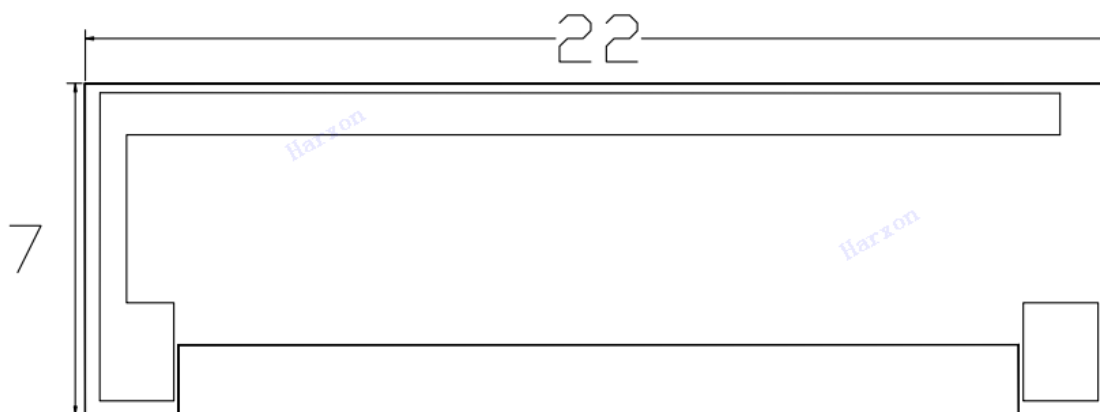
Antenna model: MARB AT V1.0

APPLications

※Bluetooth Home RF

※ISM band 2.4GHz applications

1. Dimensions



Size: length: 22mm width: 7mm

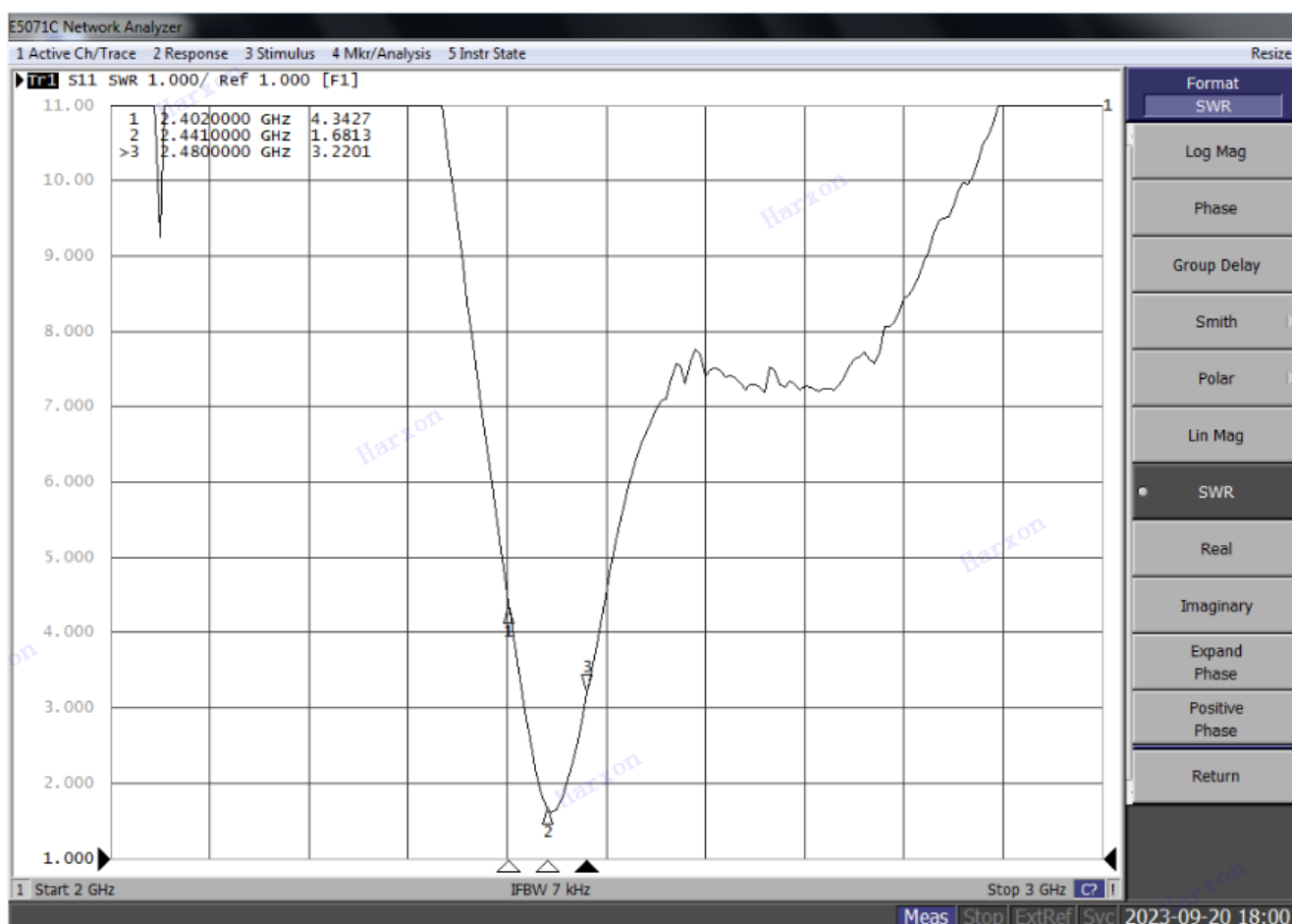
2. Specifications

number	Item	Specifications
1	Working Central Frequency	2441 MHz
2	Band Width	(2402-2480)MHz
3	Gain	0dBi
4	VSWR	Resonance point ≤ 2.0
5	Antenna type	PCB antenna
6	Azimuth Beam width	Omni - directional
7	Impedance	50ohm
8	Modulation mode	GFSK

3. simulation parameter

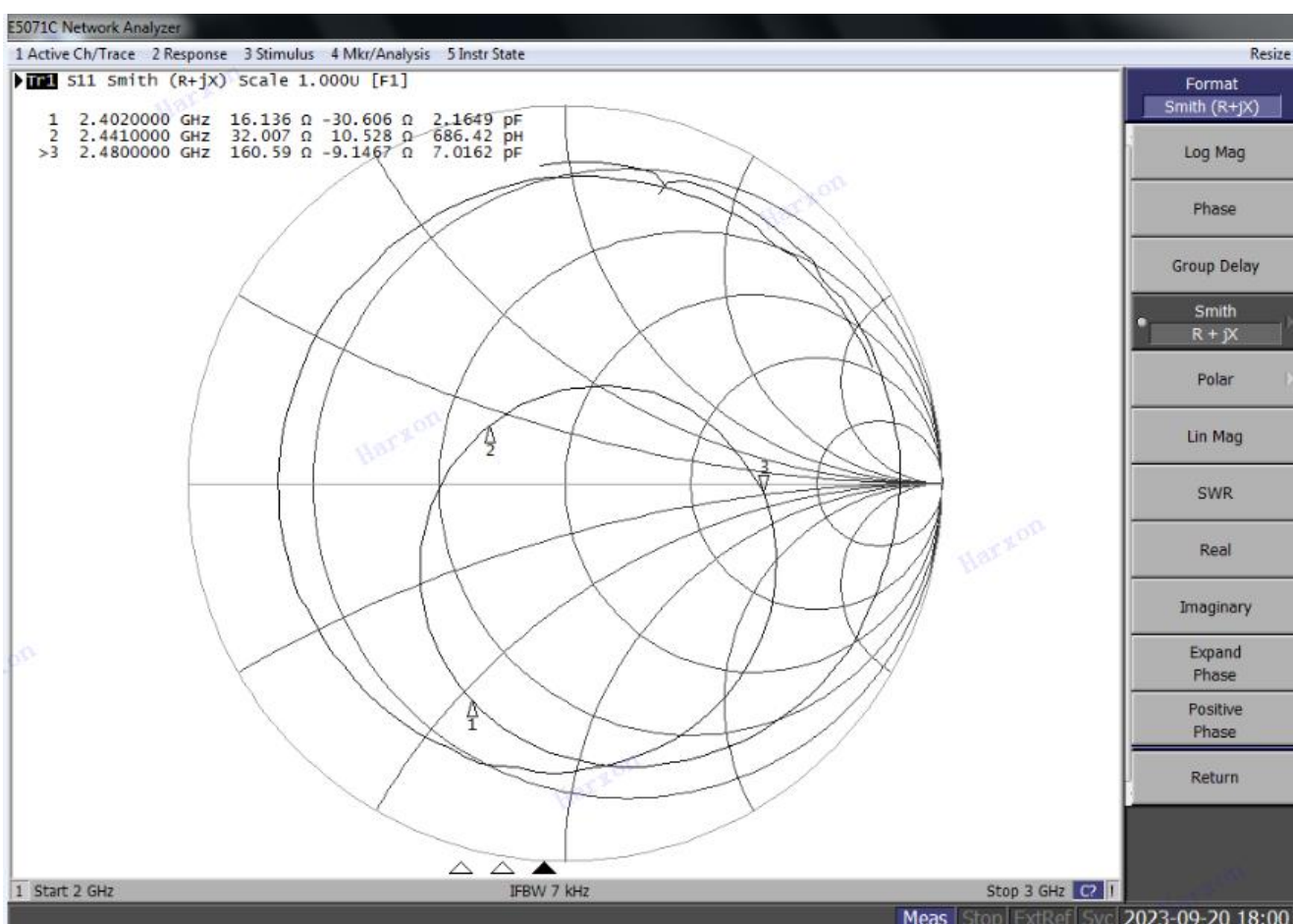
① VSWR

Mkr1: 2402MHz 4.3 Mkr2: 2441MHz 1.7 Mkr3: 2480 MHz 3.2



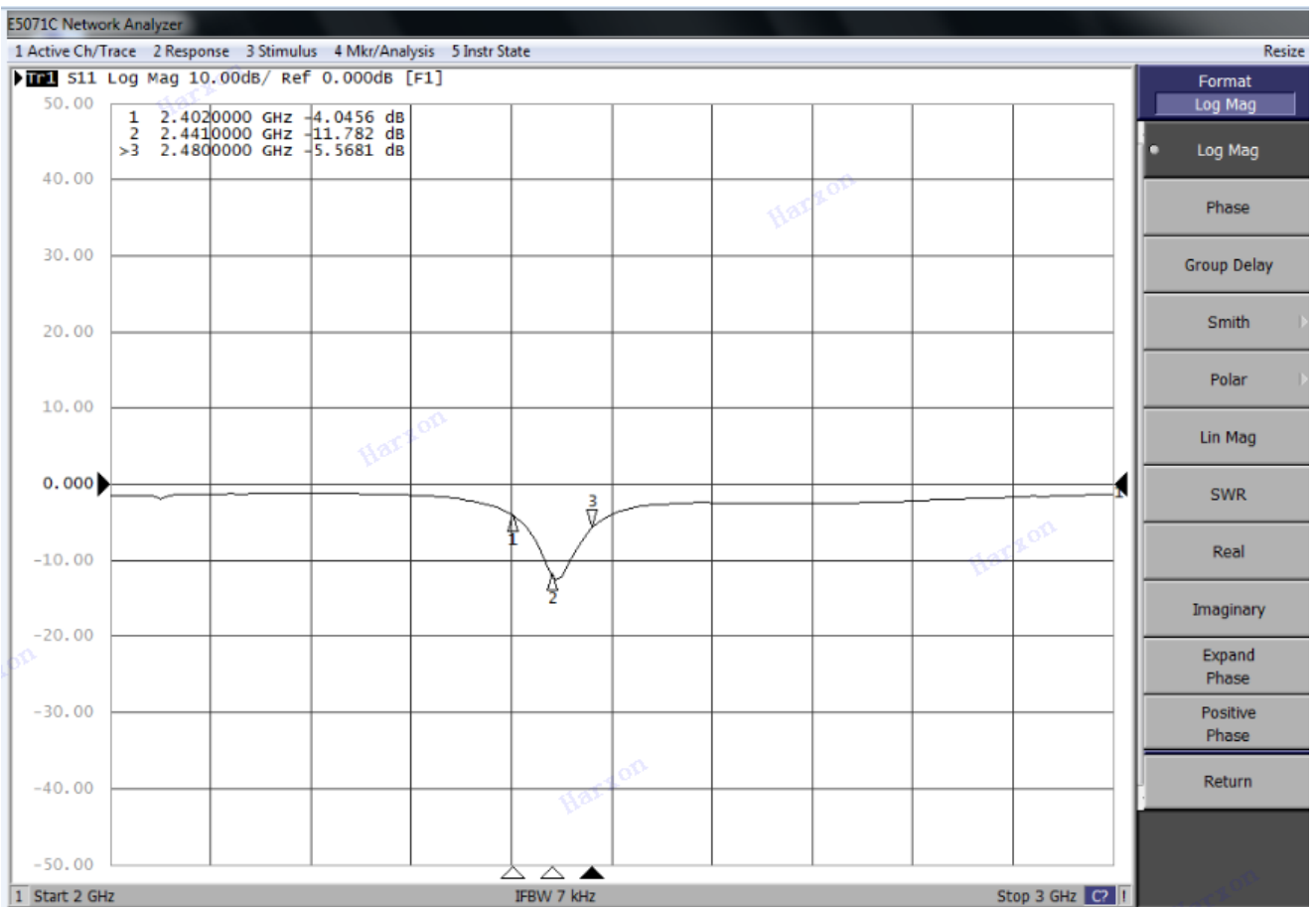
②Smith Chart

Mkr1: 2402MHz 16 Mkr2: 2441MHz 32 Mkr3: 2480MHz 160



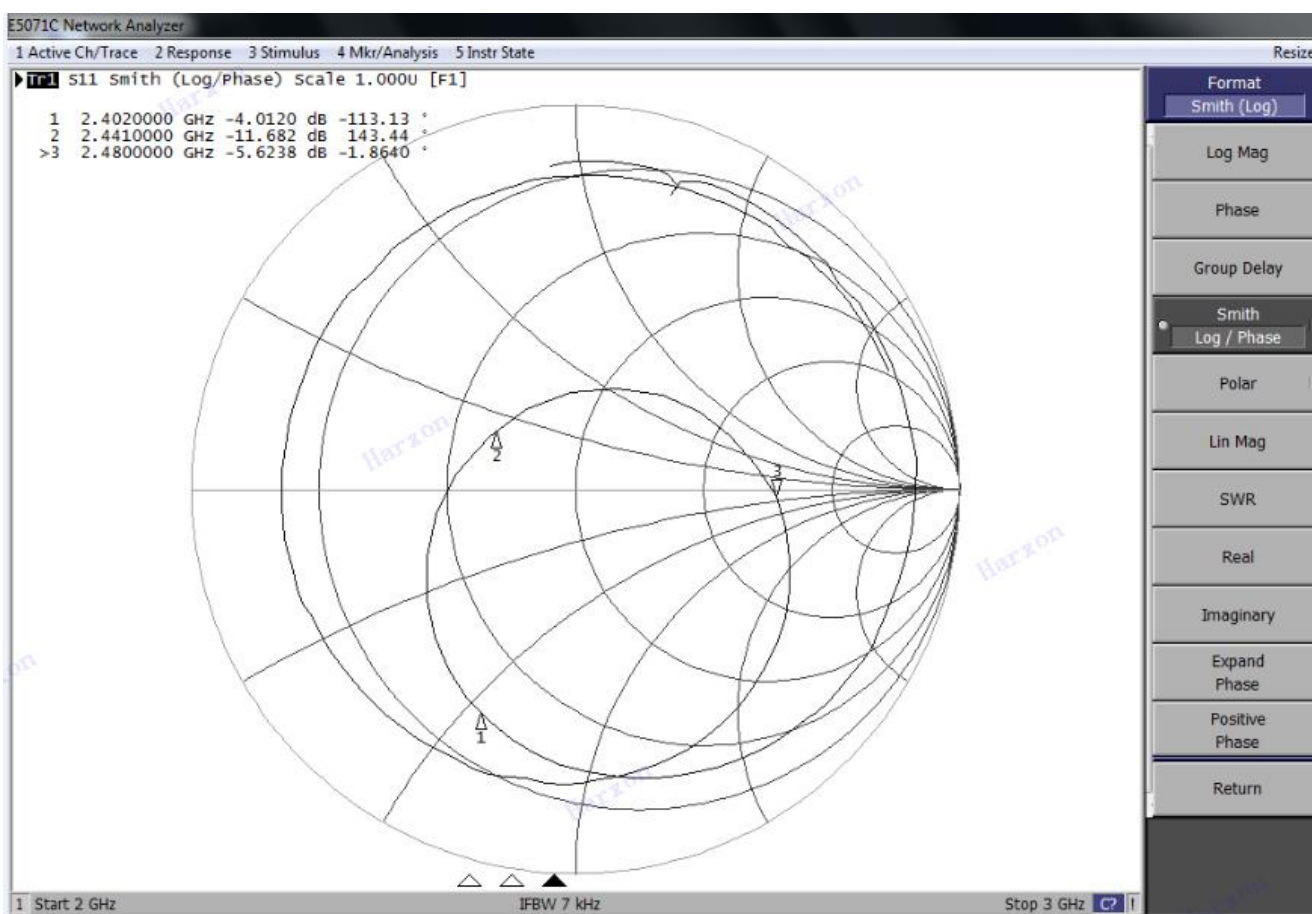
③Return Loss

Mkr1: 2402MHz -4 Mkr2: 2441MHz -11 Mkr3: 2480 MHz -5.6



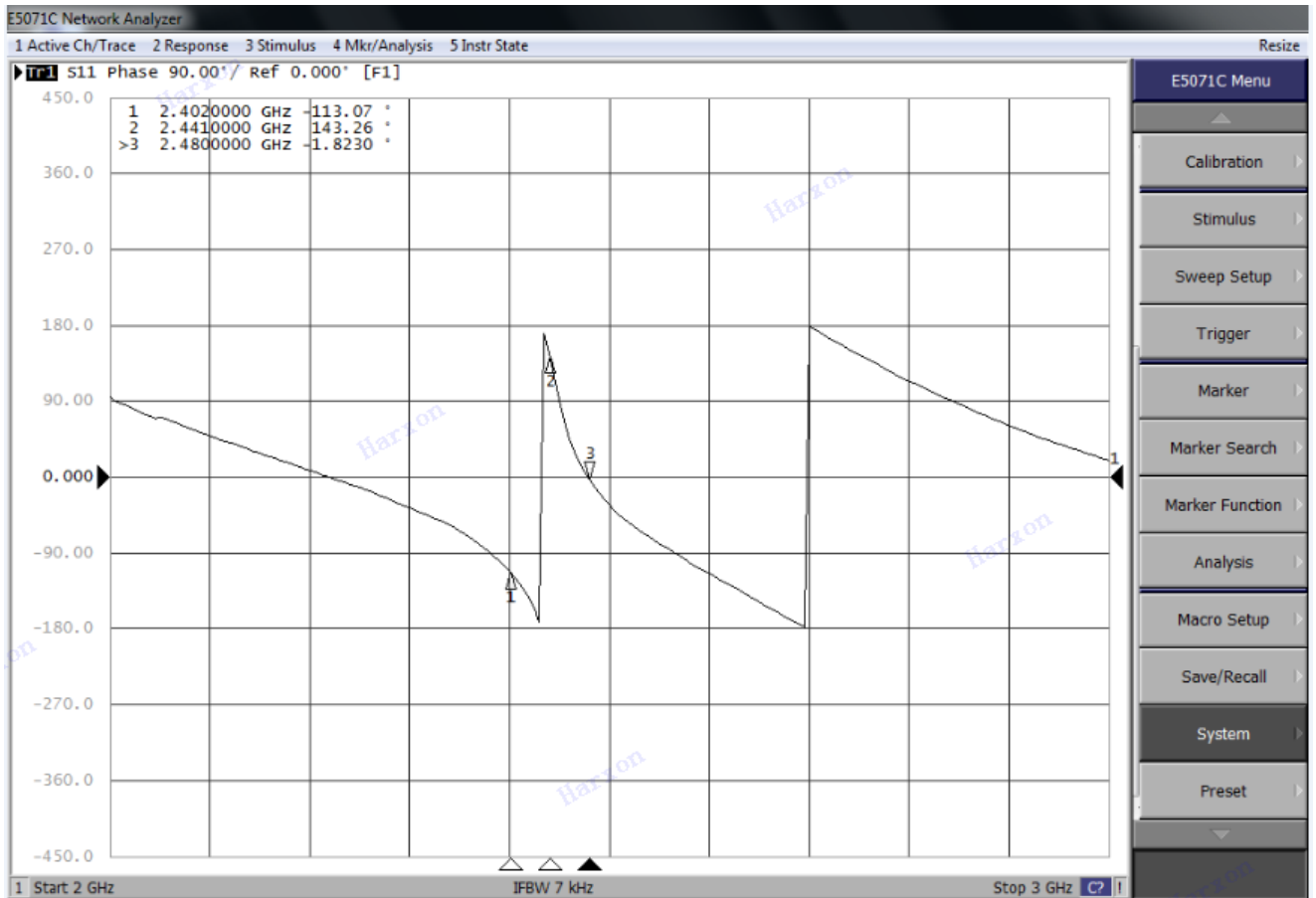
④Smith Chart

Mkr1: 2402MHz -4 Mkr2: 2441MHz -11 Mkr3: 2480 MHz -5.6

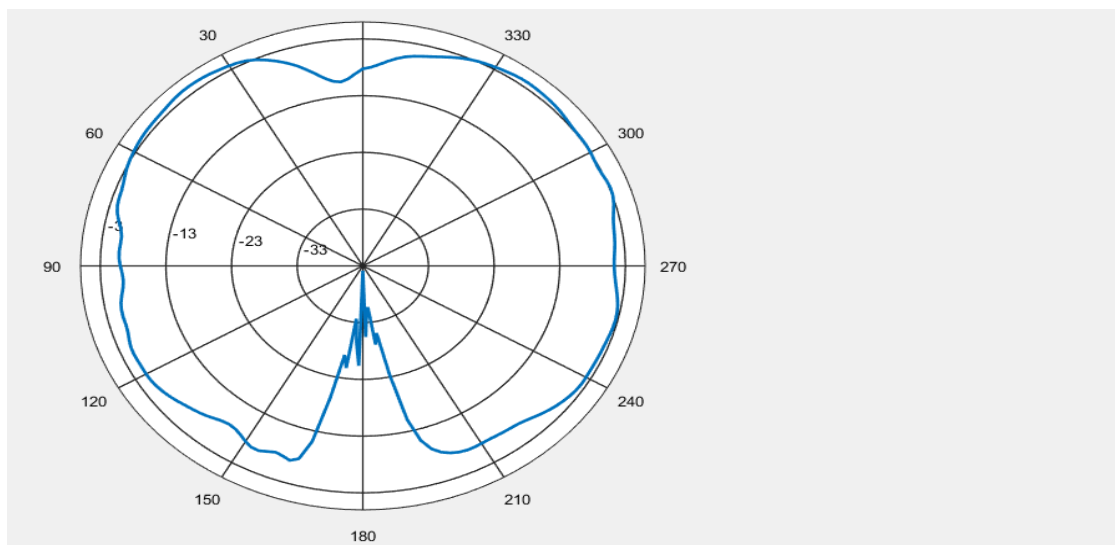


⑤Phase

7Mkr1: 2402MHz -113 Mkr2: 2441MHz 143 Mkr3: 2480MHz -1

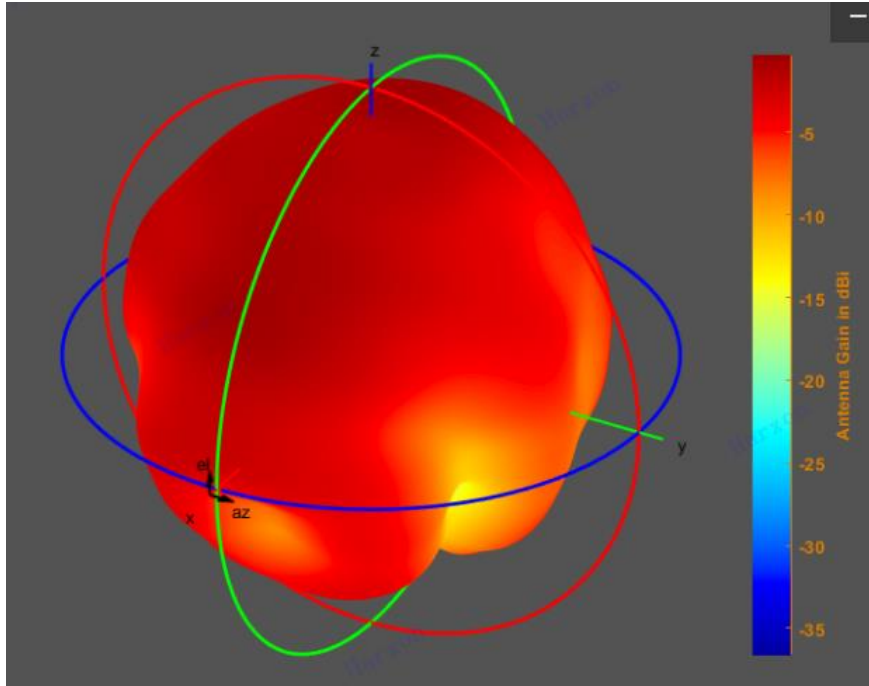


4. Radiation Patterns



2441MHz

- 3DRadiation pattern



2441MHz