

SPECIFICATION



Shenzhen Daxian Technology Co., Ltd.

CE-2190B

Client	佳禾	frequency range	2400MHz~2500MHz
product name	CE-2190B	Version	V1.0
Code	2E-2190B-020	Color	Yellow
R F	靳群	Structural design	周锐斌
QA	杨进	Technical Director	张磊
Date	2024-04-19		

深圳市大显科技有限公司

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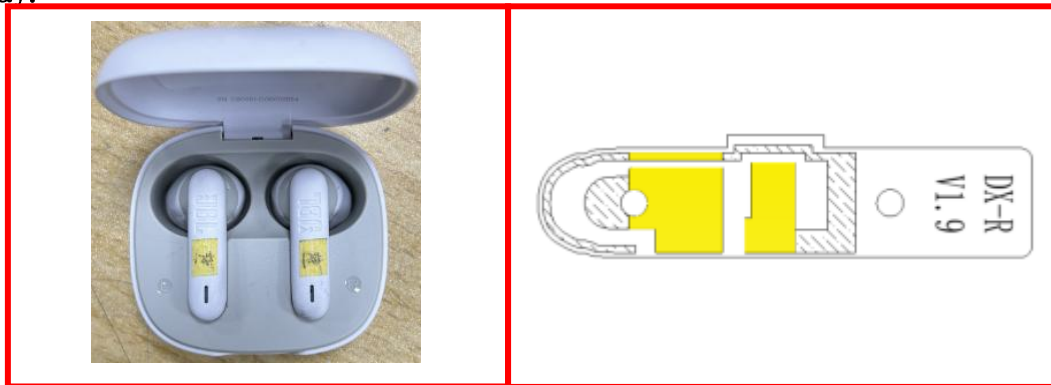
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– Project Description

Client:	佳禾
Type:	bluetooth headset
frequency:	2400 ~ 2500MHz
type:	FPC
Feed form:	welding

一、BT ANT

This report mainly provides various test results of the electrical performance of the CE-2190B project antenna. Figure 1 shows the antenna designed by the large display.



Overall appearance diagram Right antenna exterior view

Figure 1

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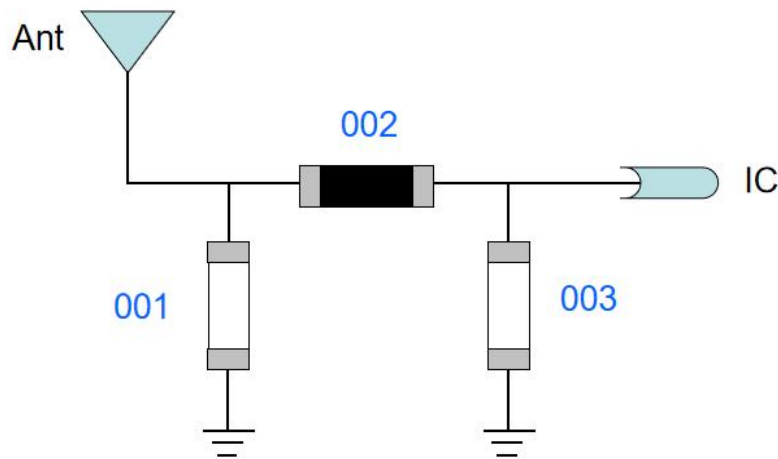
1.1 Electrical performance description

1.1.1 Electrical performance specifications

The frequency range of the antenna is 2400-2500MHz. The table below indicates the electrical performance specifications of the antenna.

Frequency Range	Frequency (MHz)	VSWR
BT	2400 ~ 2500	≤ 2

1.1.2 Matching circuit



主板匹配: L&R 都没有做更改, 均改为如下状态:

001: N/C

002: 0欧姆

003: N/C

1.2 Structural Specification Standards

1.2.1 Antenna Composition

The antenna is mainly composed of FPC.

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2、 The Equipment of Active Test

Satimo 3D Chamber 6×4×4(m)

Agilent 8960 E5515c

Network analyzer-R&S ZVL



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3 TESTING

3.1 VSWR

Actual measurement (attached diagram)

3.2 Testing of Efficiency, Power (TRP), Sensitivity (TIS)

3.2.1 Testing site:

Da Xian microwave darkroom. The testing frequency range is 400MHz to 6GHz, the quiet zone range is 50cm circumference, and the reflectivity is less than -50 dB.

3.2.2 Testing instruments:

R&S CMW500 、 Agilent's 8960, network analyzer E5071C, standard horn antenna, French SATIMO-SG24SYSTEM system, printer, etc.

3.2.3 Test data: In the microwave anechoic chamber, the values related to power and sensitivity tested are shown in the table below:

Free space active testing:

Passive efficiency testing:

R边-自由空间		
CH	TRP (dBm)	TIS (dBm)
0	3.8	-85.21
39	3.97	-86.19
78	3.37	-84.77

R边-头模状态		
CH	TRP (dBm)	TIS (dBm)
0	-2.43	-78.22
39	-2.89	-78.47
78	-3.75	-78.27

Frequency (MHz)	AVG Gain (dB)	Efficiency (%)	Gain (dBi)
2400	-11.41	7.22	-7.37
2410	-10.86	8.2	-6.82
2420	-10.83	8.26	-7.06
2430	-10.25	9.44	-6.75
2440	-9.83	10.41	-6.3
2450	-9.61	10.94	-6.17
2460	-9.52	11.16	-6.09
2470	-9.58	11.02	-5.97
2480	-9.46	11.33	-5.72
2490	-9.67	10.79	-5.74
2500	-9.78	10.52	-5.78

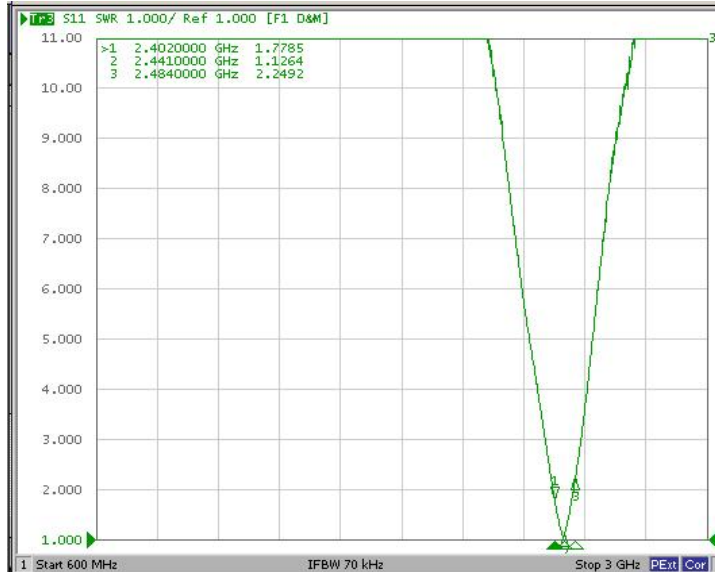
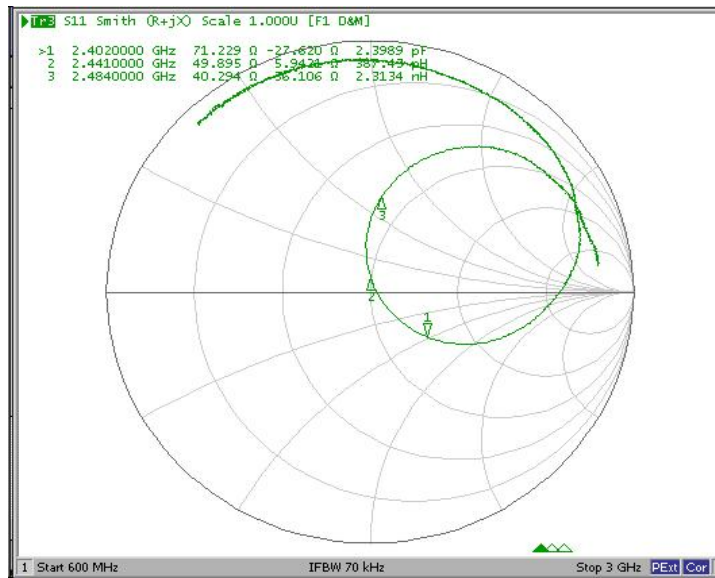
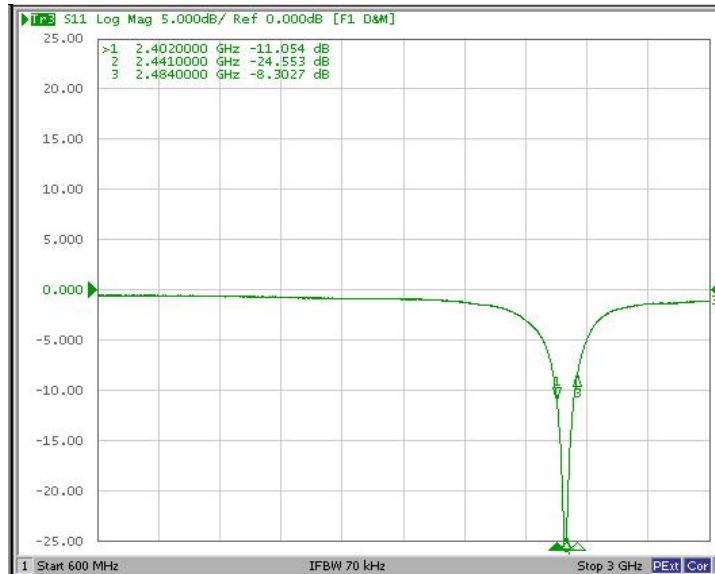
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5、Attachment chart

5.1 VSWR

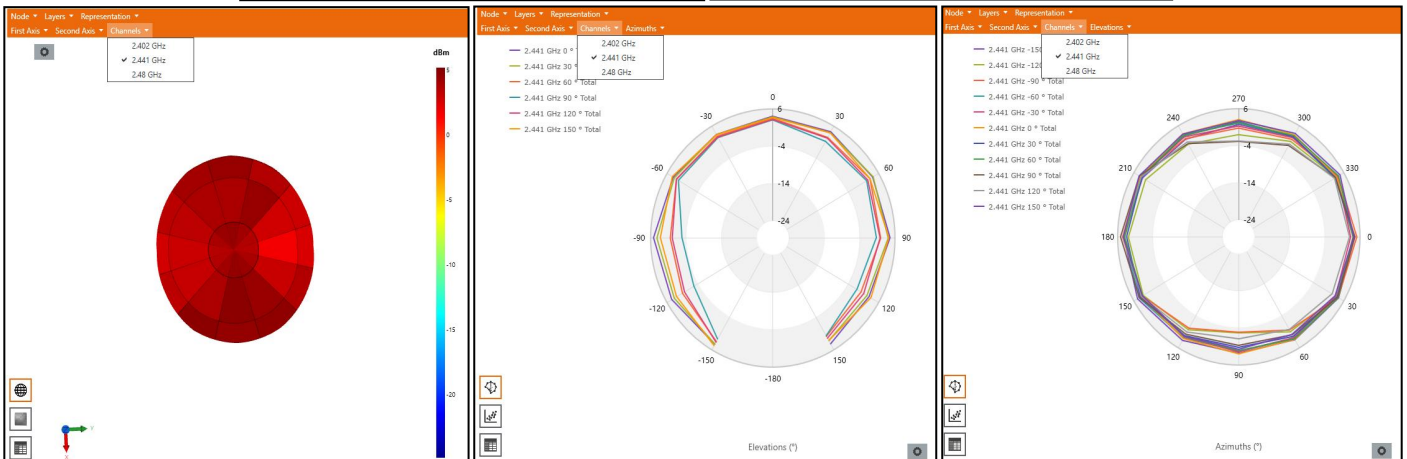
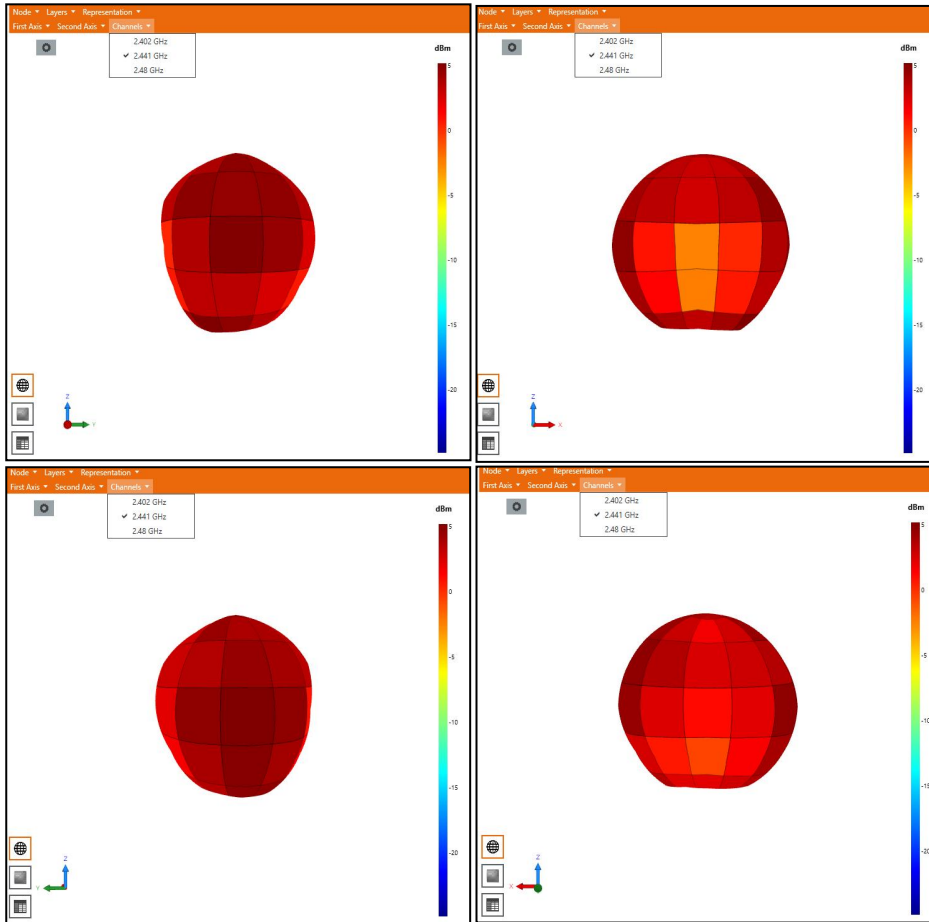


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6、 3D & 2D

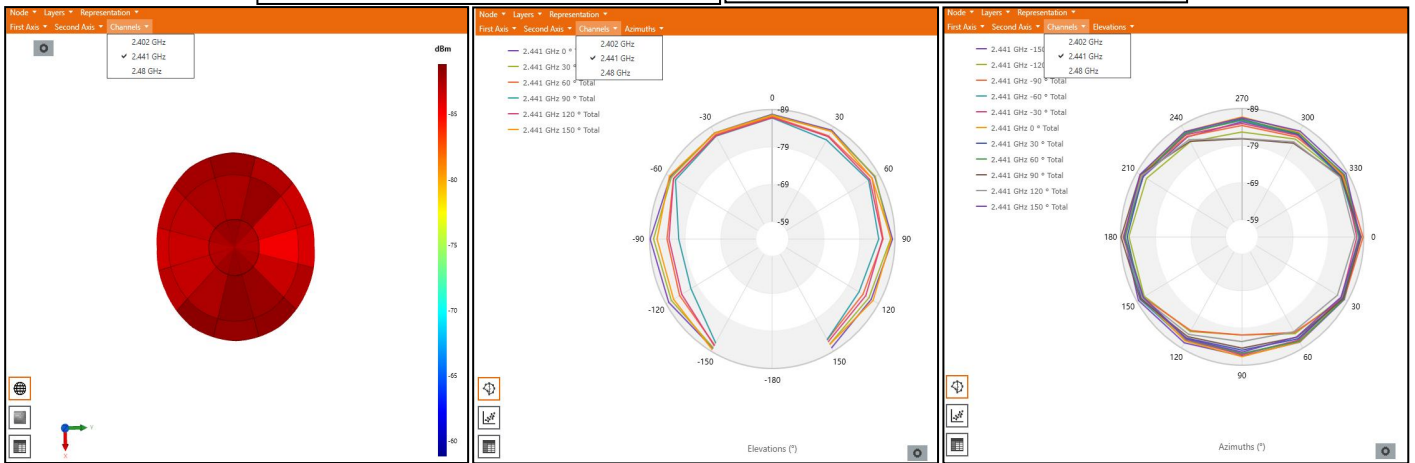
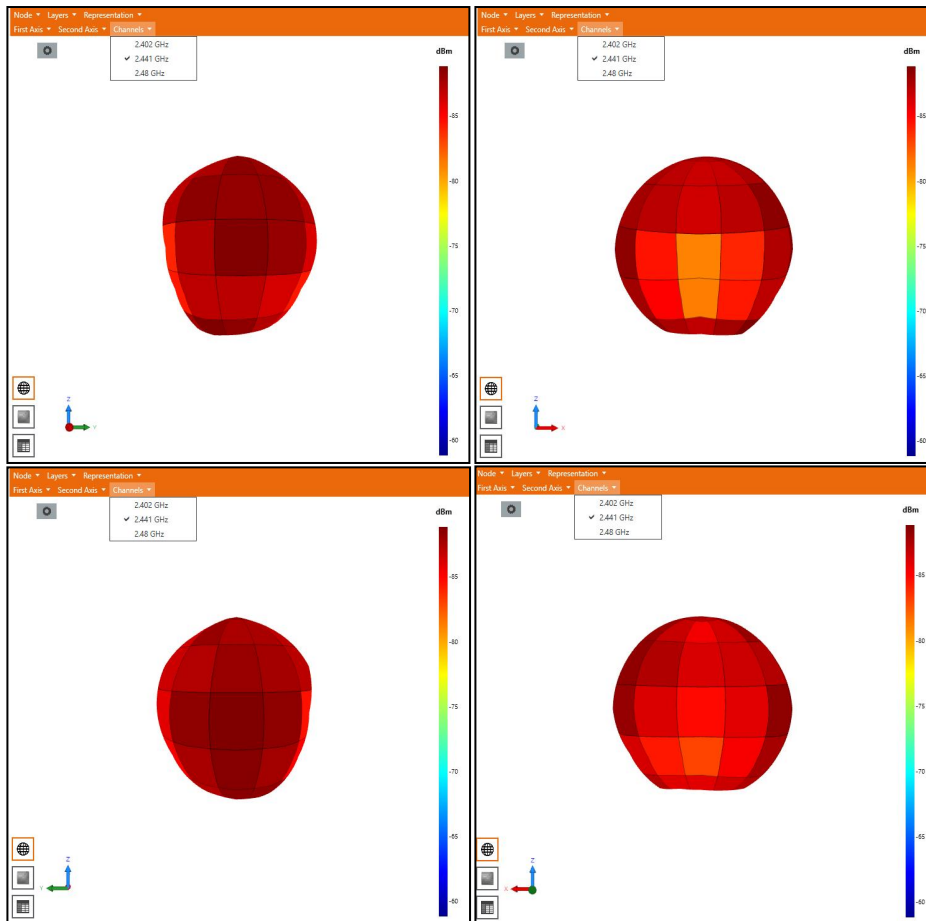
TRP



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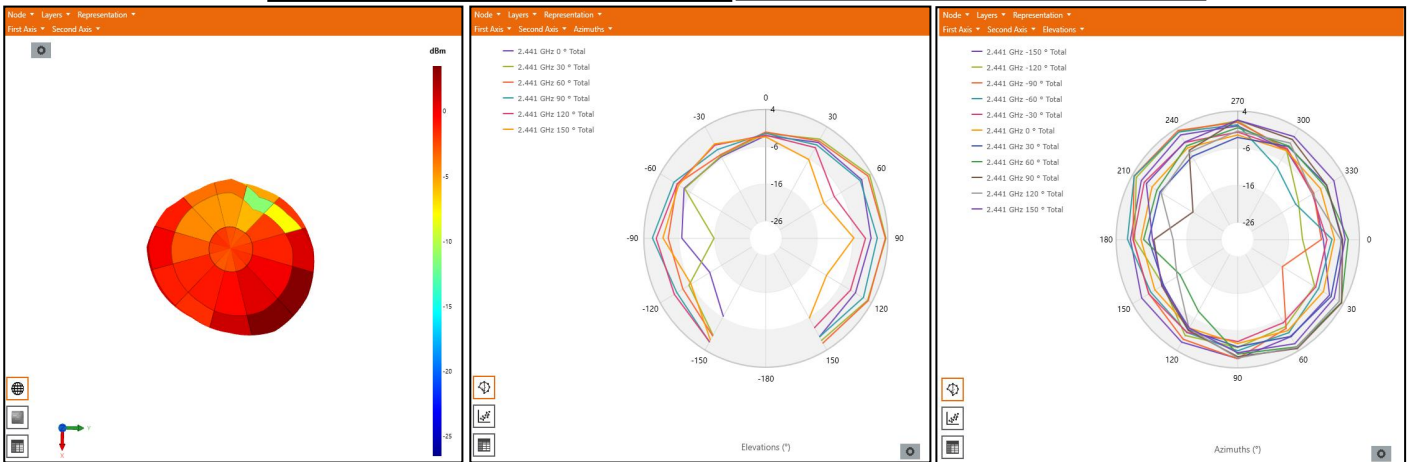
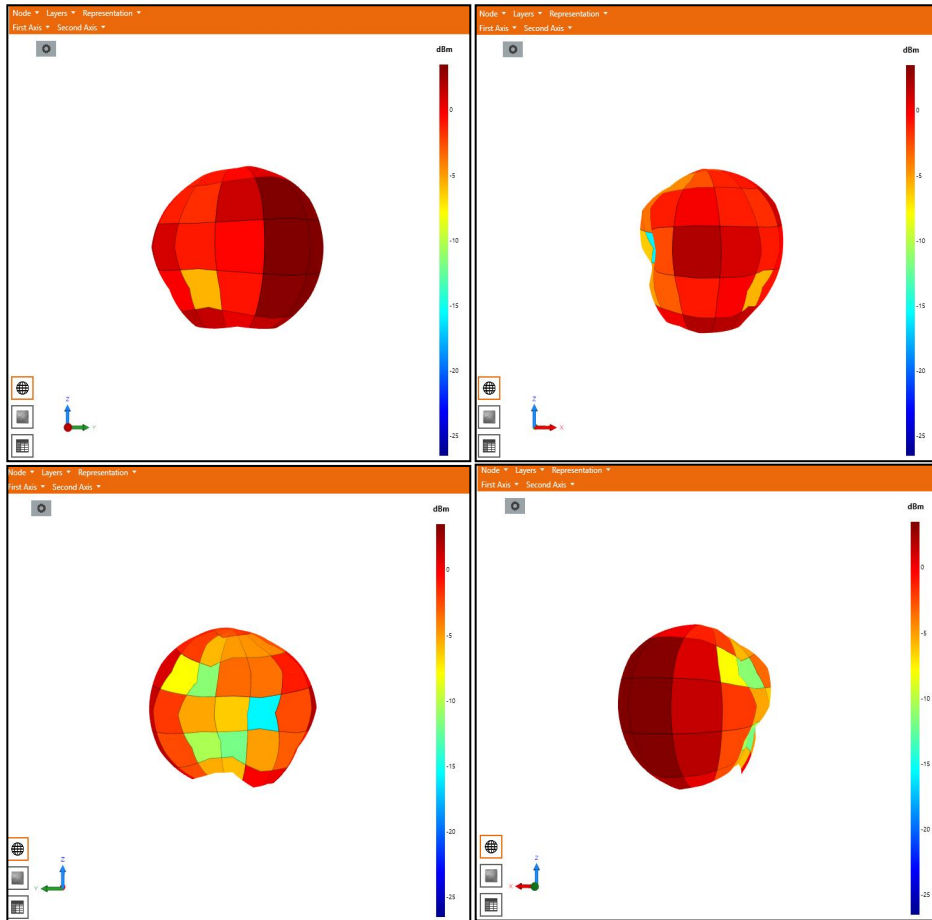
TIS



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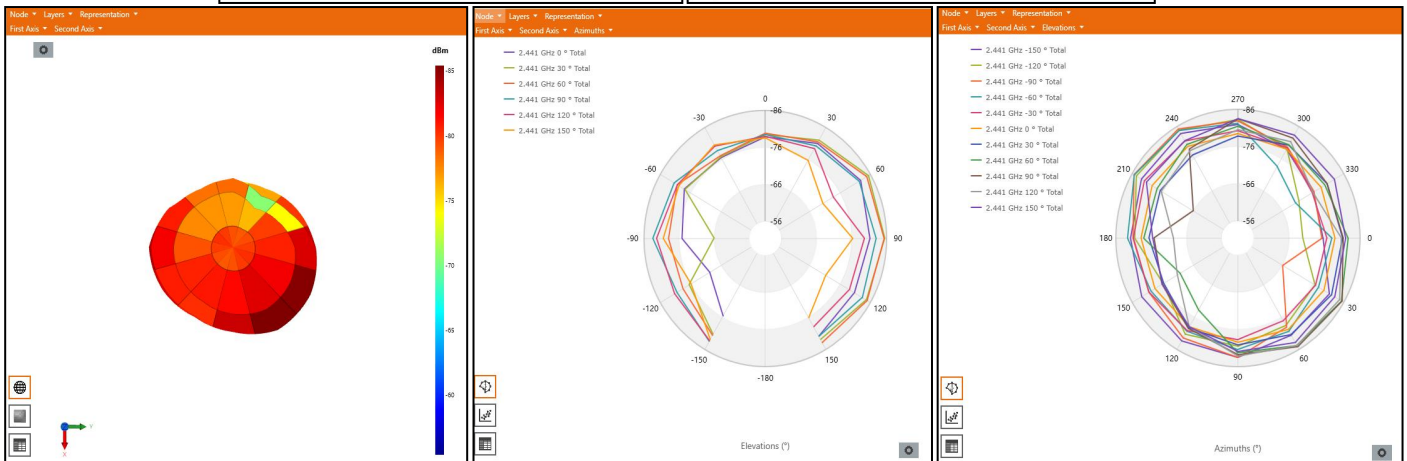
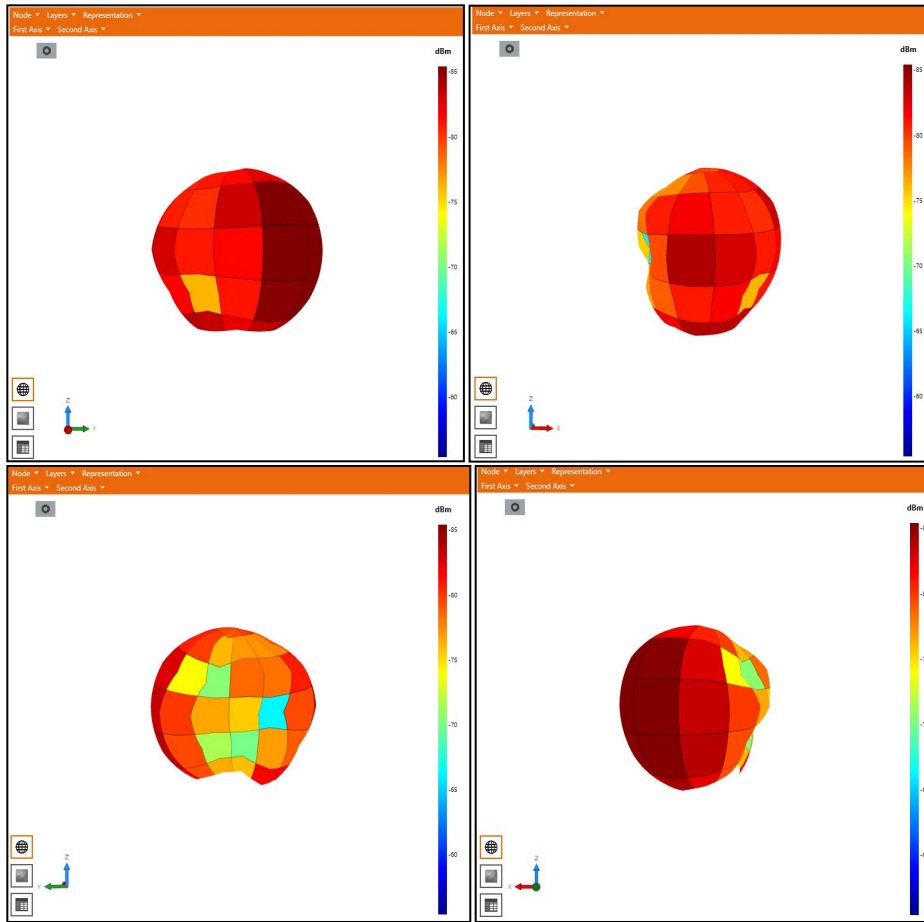
TRP



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TIS



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