

SPECIFICATION



Shenzhen Daxian Technology Co., Ltd.

CE-2190B

Client	佳禾	frequency range	2400MHz~2500MHz
product name	CE-2190B	Version	V1.0
code	1E-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

Shenzhen Topant Technology Co., Ltd.

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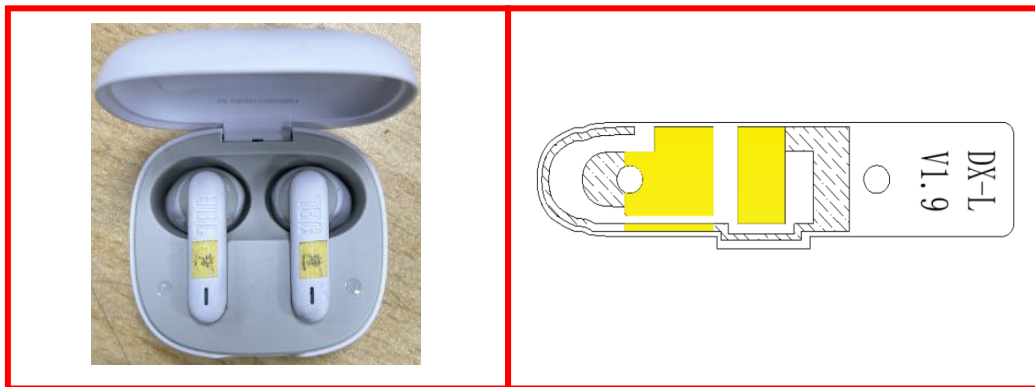
FAX:755-84276383

一 项目说明

Client:	佳禾
Type:	bluetotth headst
frequency range:	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

Left antenna exterior view

Figure 1

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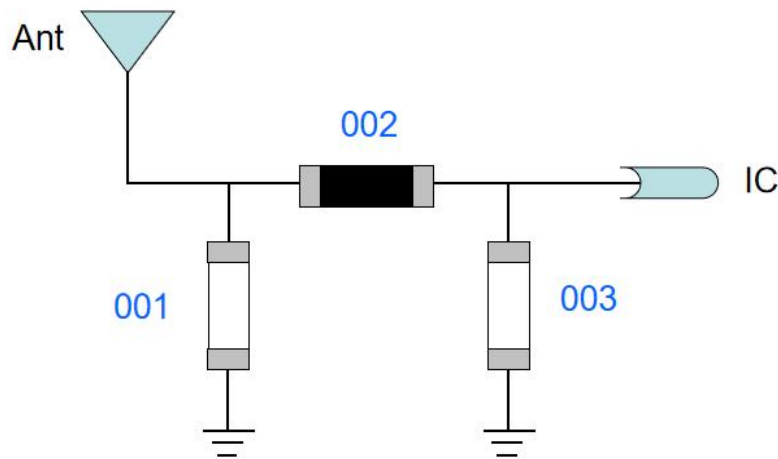
1.1 Electrical performance description

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
LEFT 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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Confidentiality requirements

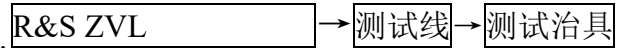
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3 Tests

3.1 Testing of Standing Wave (VSWR)

3.1.1 Test Connection: The VSWR testing

device is sequentially connected as follows:



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:

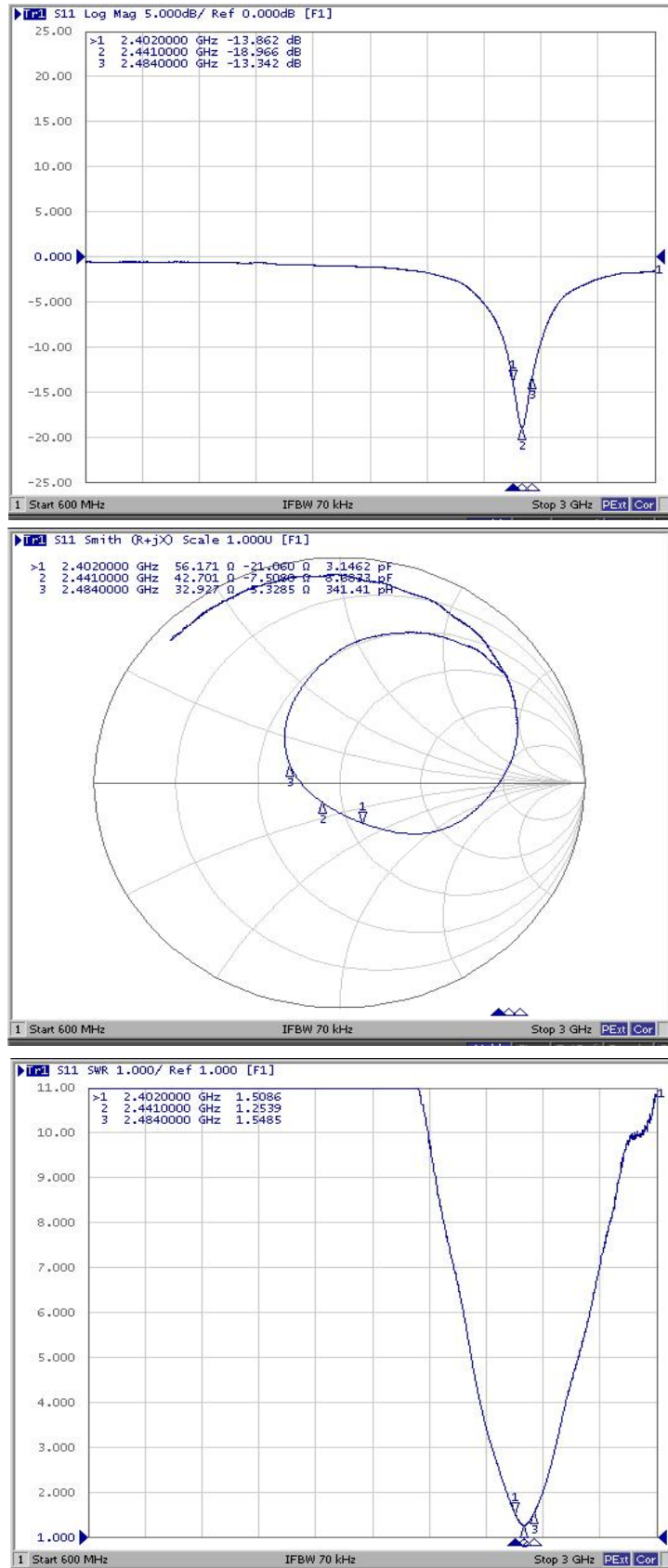
L边-自由空间		
CH	TRP (dBm)	TIS (dBm)
0	2.33	-85.67
39	3.59	-87.07
78	3.33	-85.52

L边-头模状态		
CH	TRP (dBm)	TIS (dBm)
0	-3.22	-78.66
39	-2.37	-79.6
78	-3.01	-78.82

Frequency (MHz)	AVG Gain (dB)	Efficiency (%)	Gain (dBi)
2400	-9.42	11.43	-4.31
2410	-9.26	11.84	-4.1
2420	-8.91	12.86	-3.7
2430	-8.85	13.04	-3.57
2440	-8.67	13.59	-3.5
2450	-8.91	12.86	-3.62
2460	-8.73	13.39	-3.63
2470	-8.65	13.66	-3.35
2480	-8.88	12.95	-3.76
2490	-9.07	12.39	-4.13
2500	-9.4	11.49	-4.77

5、 Attachment chart

5.1 VSWR

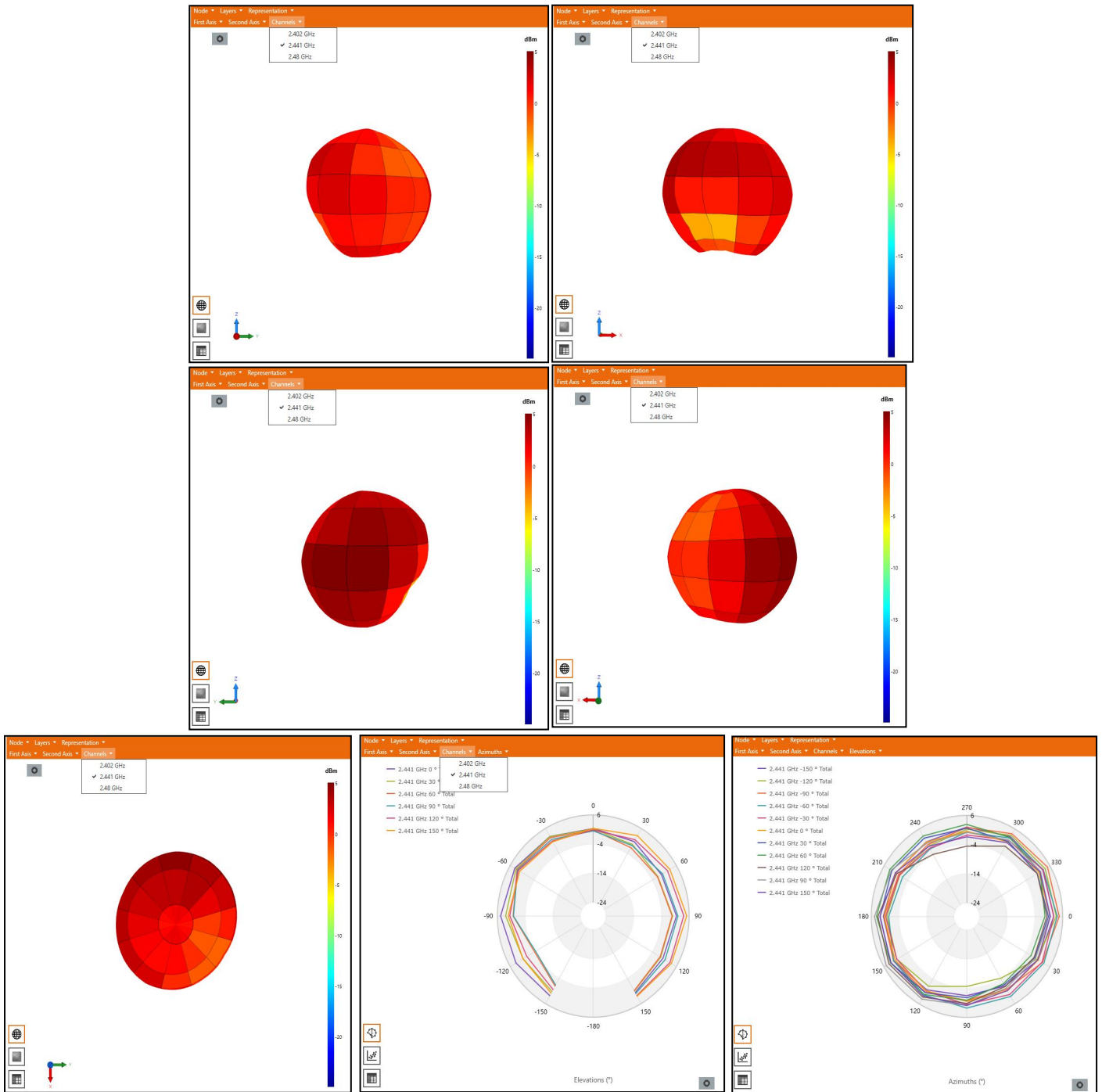


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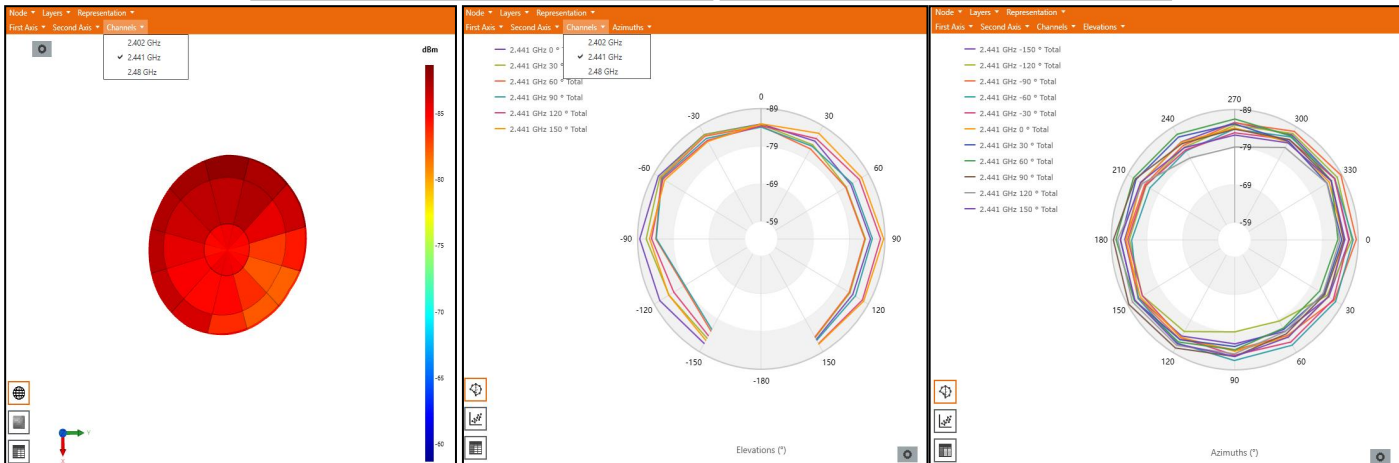
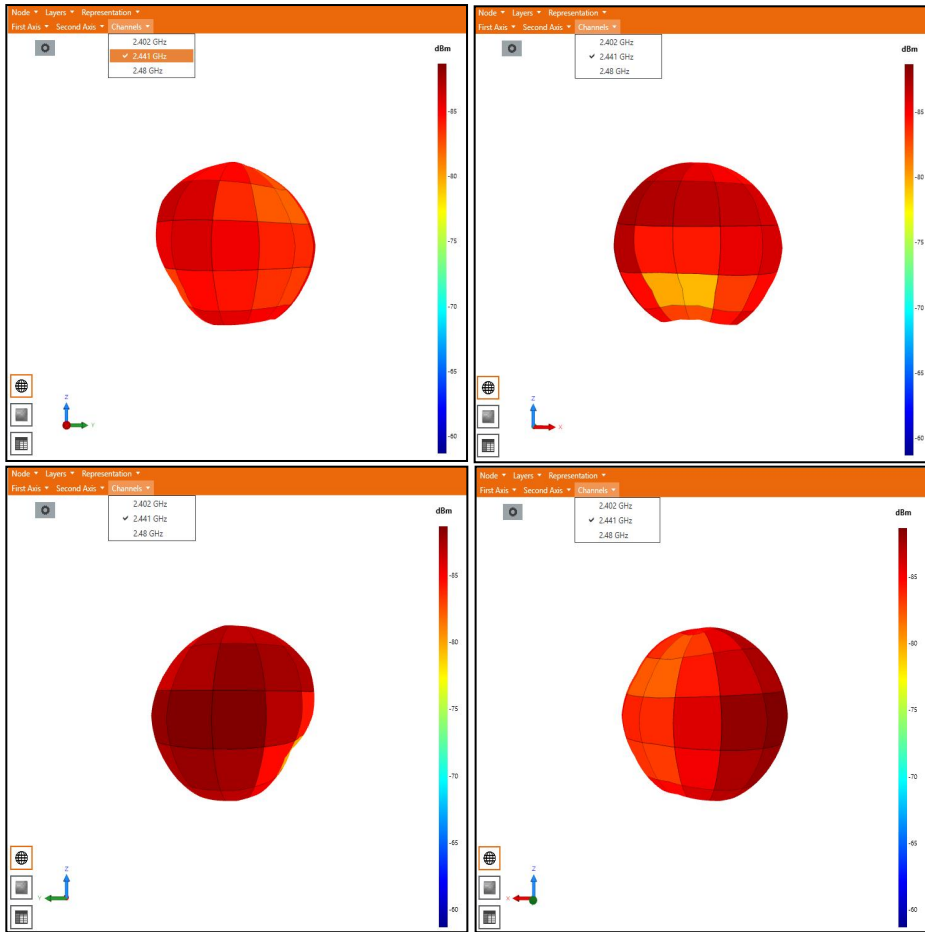
6. Active Radiation Field 3D&2D Graph L- Edge Free Space TRP



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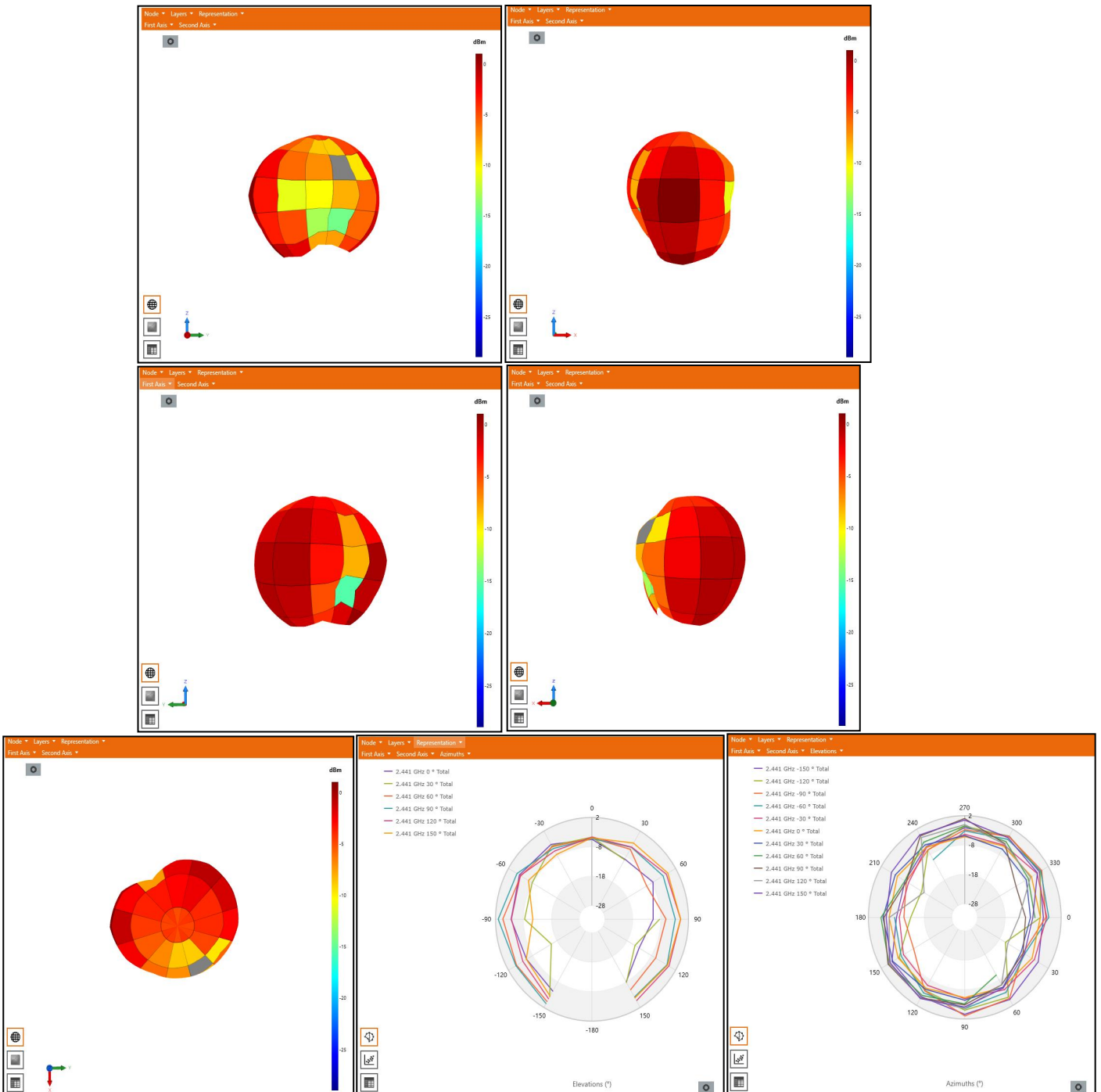
TIS



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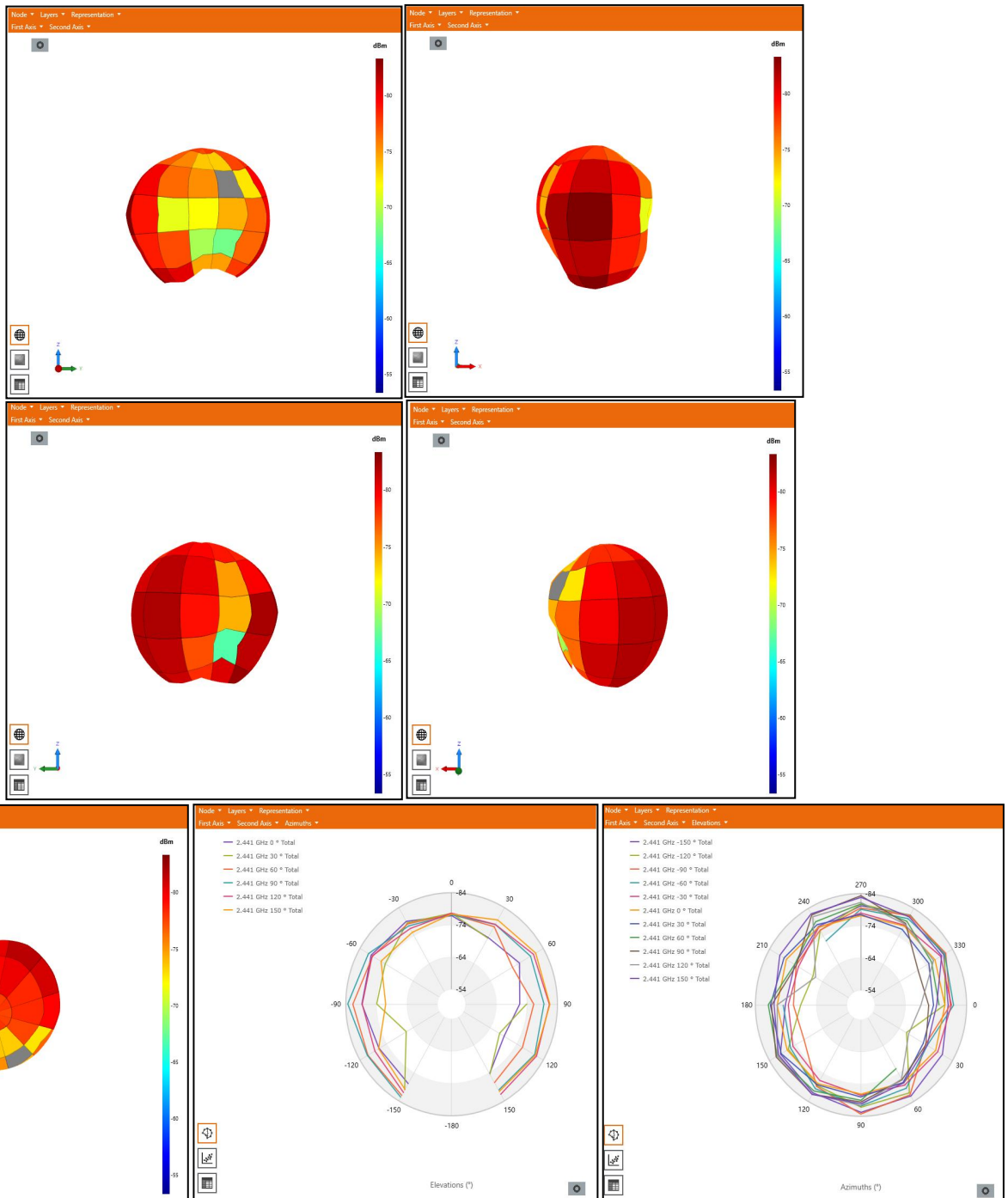
TRP



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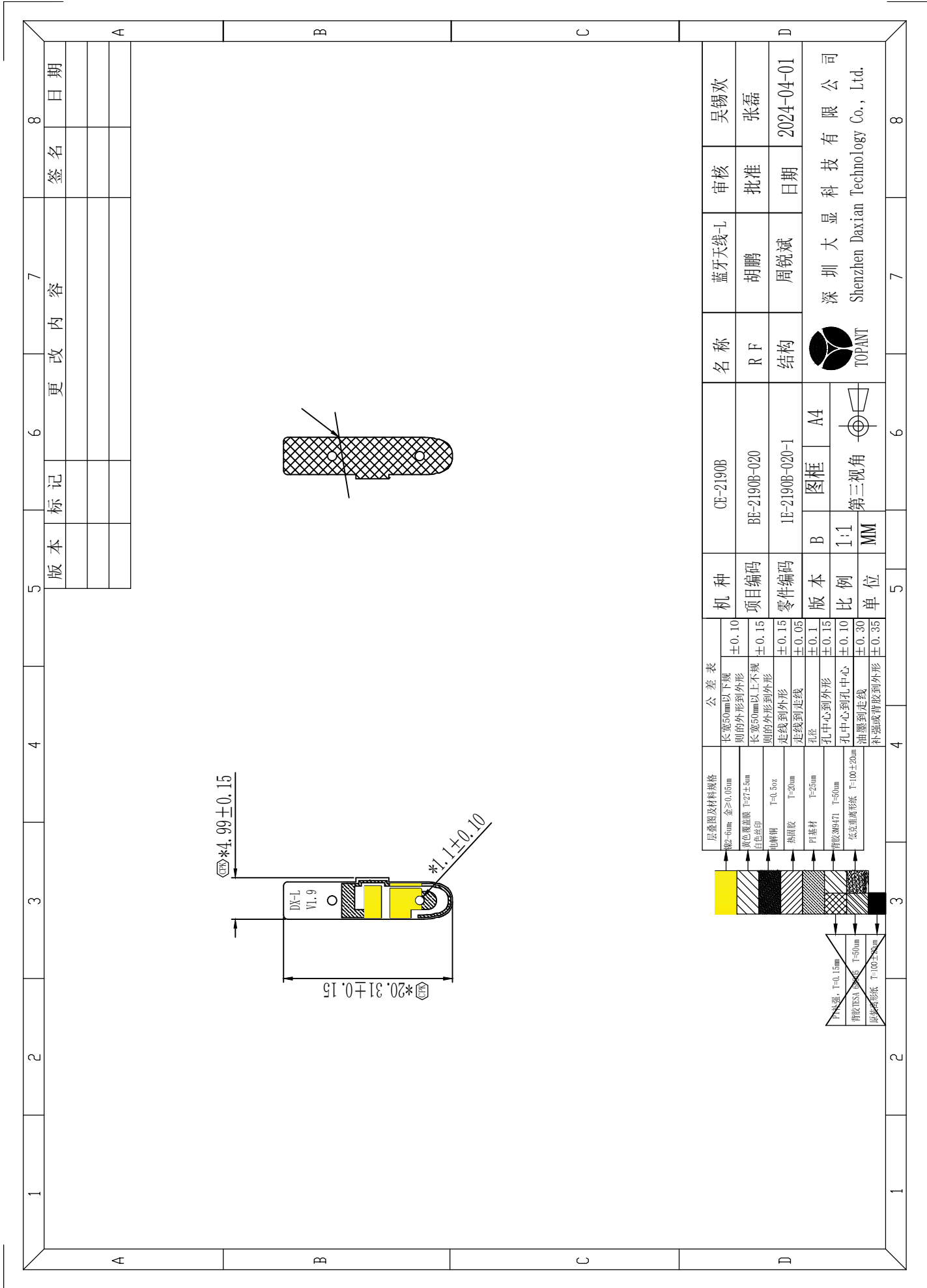
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TIS



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1 2 3 4 5 6 7 8

A B C D

版本 标记 更改内容 签名 日期

CF-2190B R F 蓝牙天线-L 吴锡欢

BE-2190B-020 胡鹏 批准 张磊

1E-2190B-020-1 周锐斌 日期 2024-04-01

图框 A4

第三视角

比例 1:1

单位 MM

机种 名称 审核

项目编码 R F 批准

零件编码 结构 日期

版本 B 图框 A4

比例 1:1

单位 MM

公差表

层叠板及材料规格	公差表
铜2-6um, 金>0.05um	长≤50mm以下规
黄色覆盖膜 T=27±5um	则的外形到外形
白色空印	长>50mm以上不规
电焊料 T=0.5oz	则的外形到外形
热固胶 T=20um	走线到外形
PI基材 T=25um	走线到走线
铜胶309471 T=50um	孔位
底空重离形纸 T=100±20um	孔中心到外形
	孔中心到孔中心
	油墨到走线
	补强或背胶到外形

层叠板及材料规格

铜2-6um, 金>0.05um

黄色覆盖膜 T=27±5um

白色空印

电焊料 T=0.5oz

热固胶 T=20um

PI基材 T=25um

铜胶309471 T=50um

底空重离形纸 T=100±20um

补强或背胶到外形

1 2 3 4 5 6 7 8

A B C D

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