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	Shenzhen Topant Technology Co., Ltd.
深圳市龙岗区布吉镇吉华路 513 号上水径村（国防培训基地对面）达成工业园综合楼 7 楼 TEL:0755-28576002 FAX:0755-84276383 上海分部：上海市张江高科技园区集成电路产业区龙东大道 3000 号 8 号楼 201 室 TEL:021-61630552 FAX:755-84276383	Buji Town, Longgang District, Shenzhen, China Jihua Road 513, Shangshuijing Village (opposite the national defense training base) Dacheng Industrial Park, Building 7。 TEL:0755-28576002 FAX:0755-84276383 Room201,Building8,LongDongRoad3000#, Semiconductor Industry Park,ZhangJiang Hitech Zone,ShangHai TEL:021-61630552 FAX:755-84276383

Version	Change infomation	reson	applicant	date	contact person
V1.0	创建			2024.04.19	
V1.1					

Confidentiality requirements
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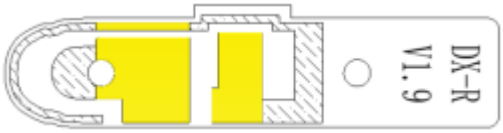
一 Project Description

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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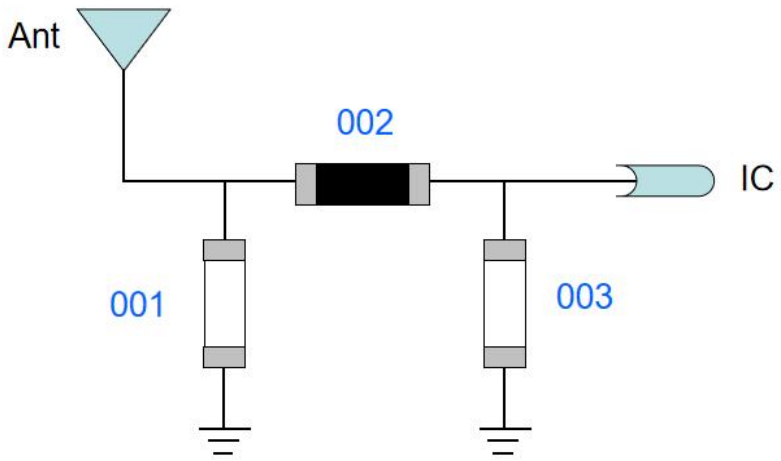
1.1 Electrical performance description

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:

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

Passive efficiency testing:

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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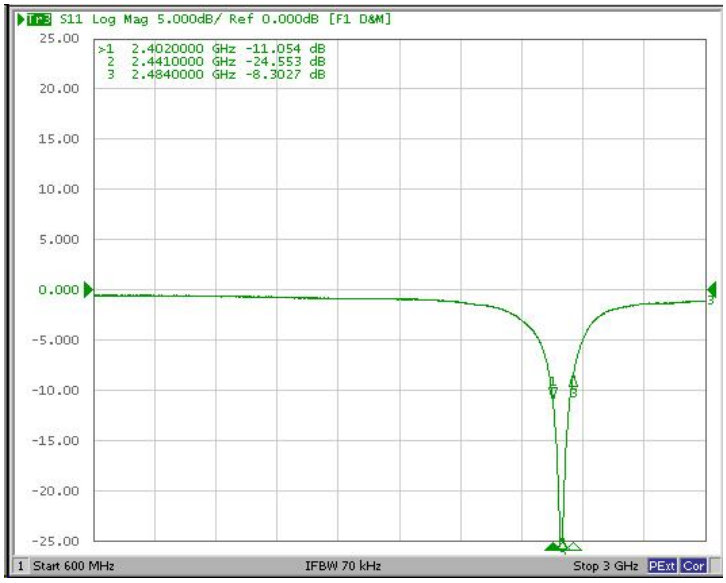
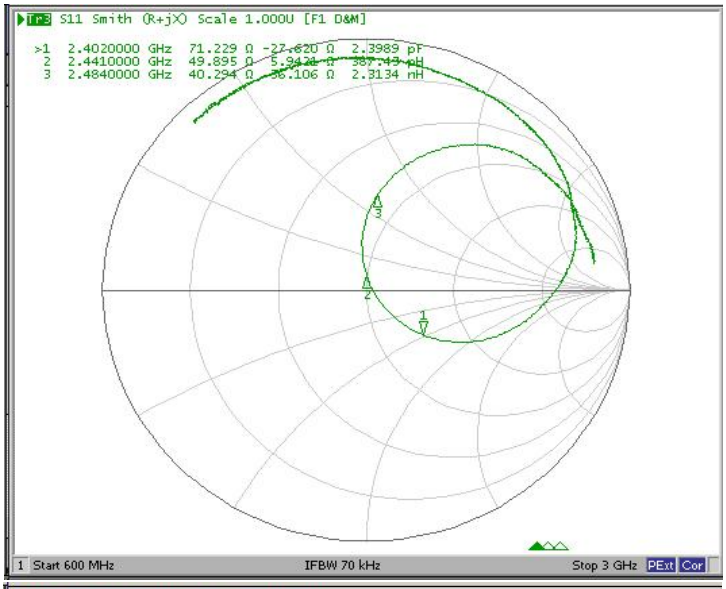
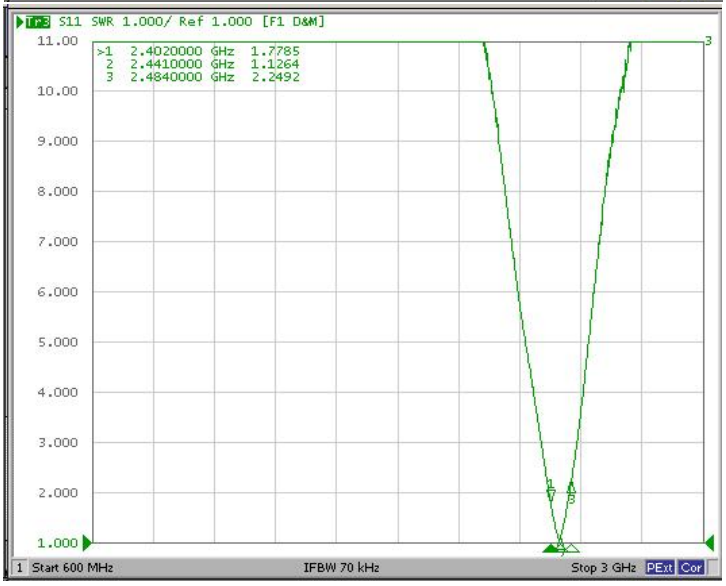
5、Attachment chart

5.1 VSWR







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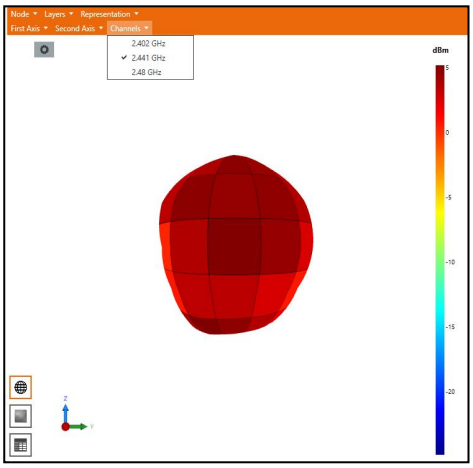
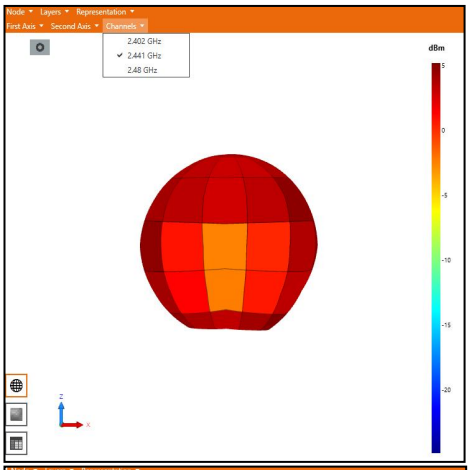
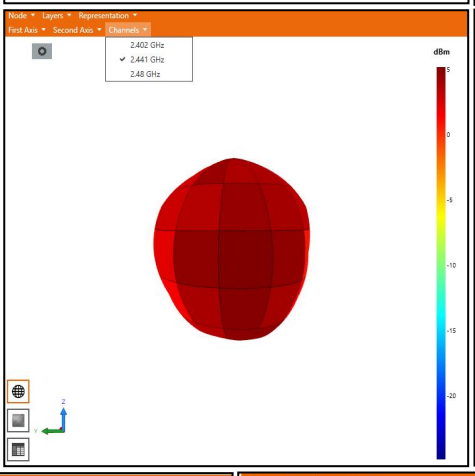
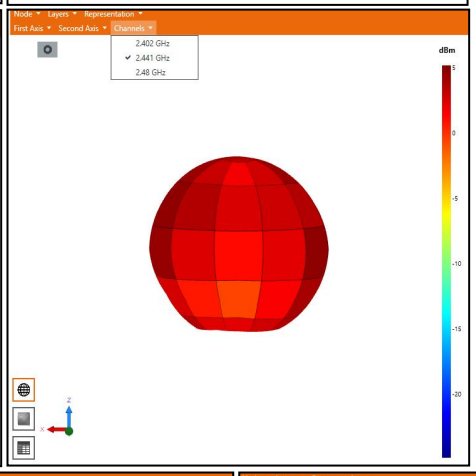
6、 3D & 2D

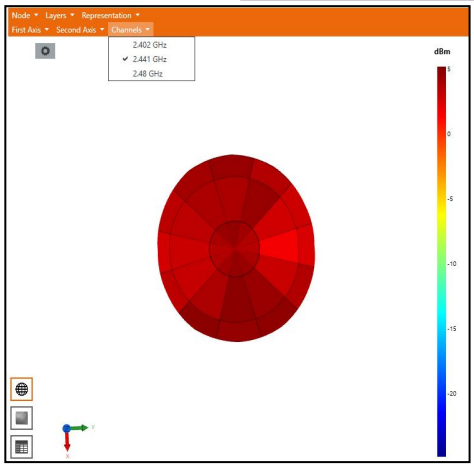
TRP

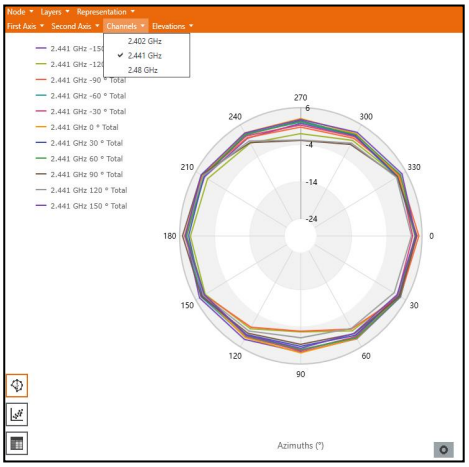












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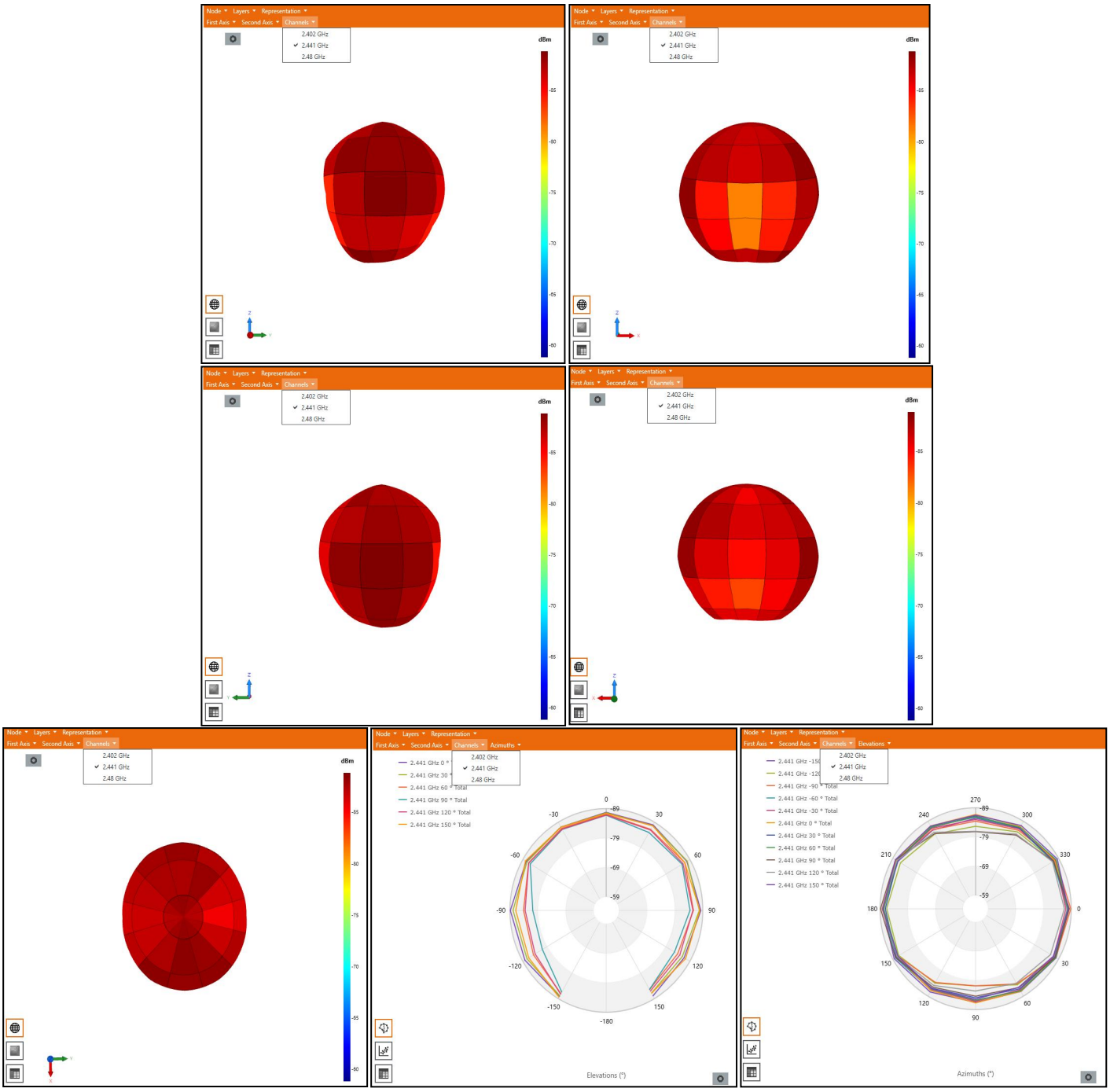
TIS



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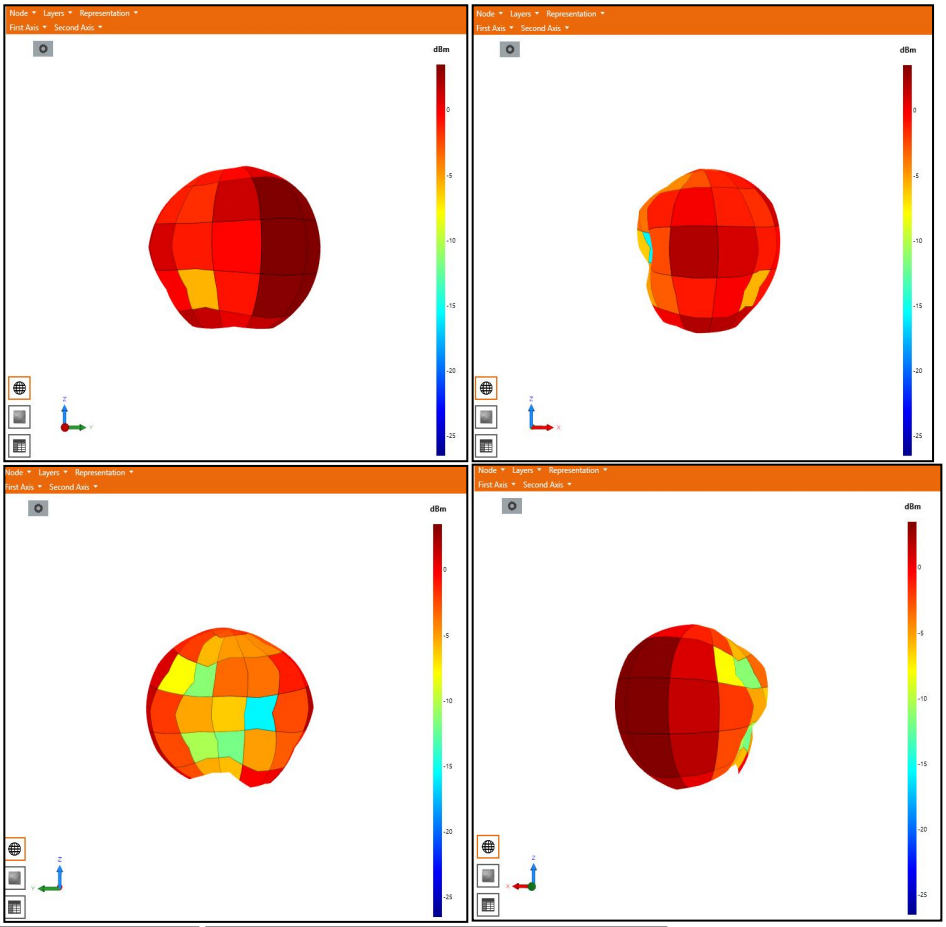
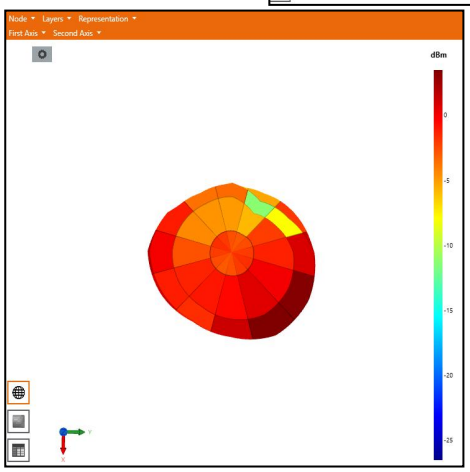
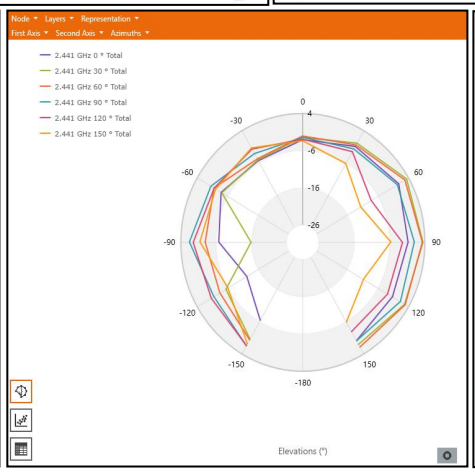
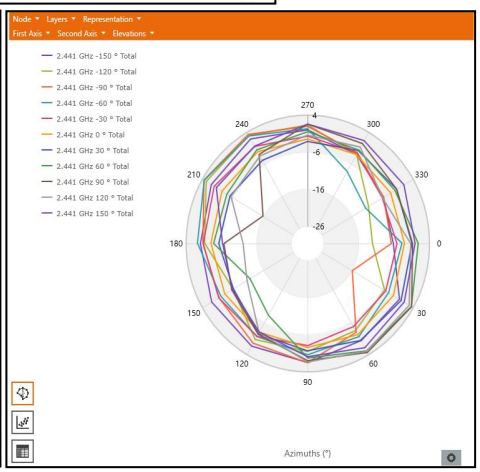
TRP









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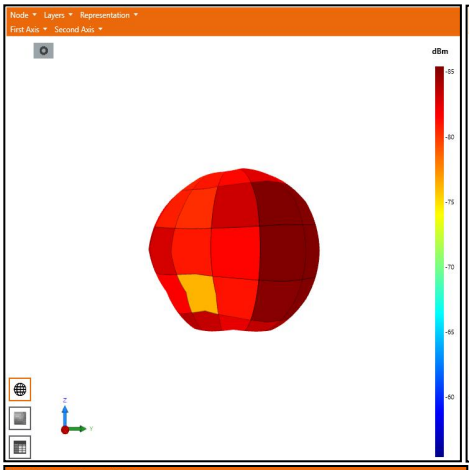

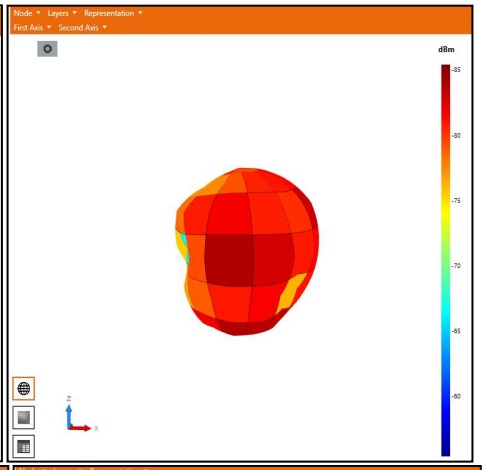

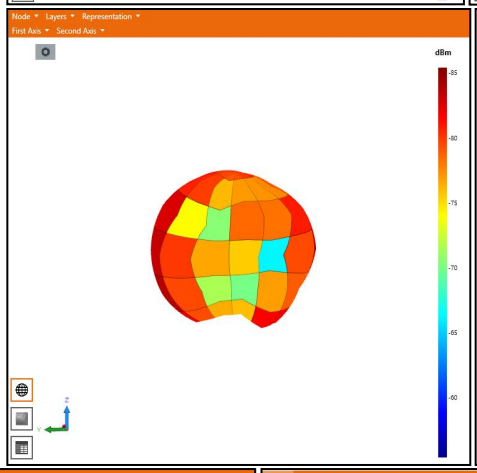

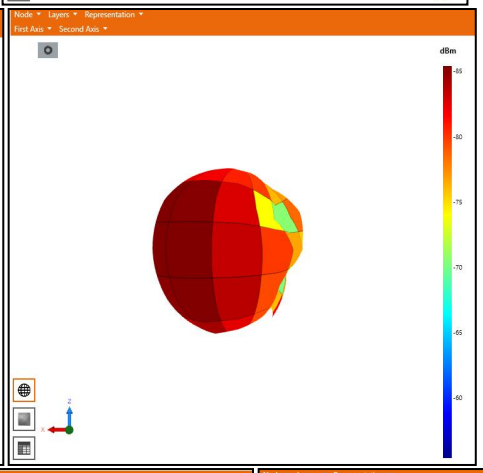

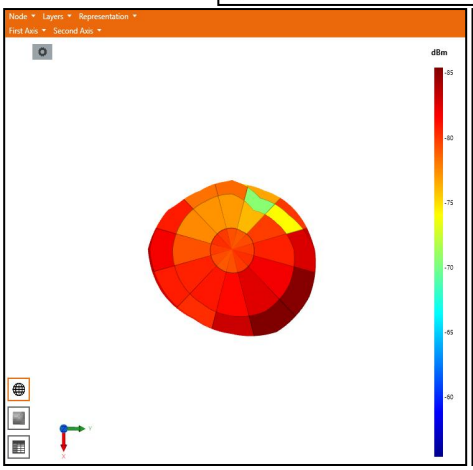

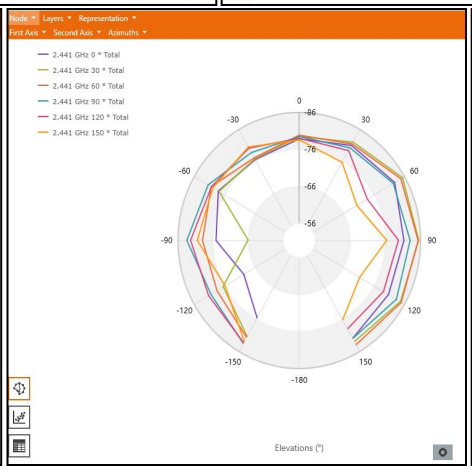

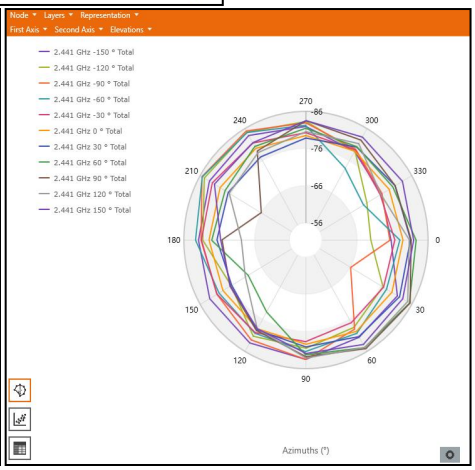

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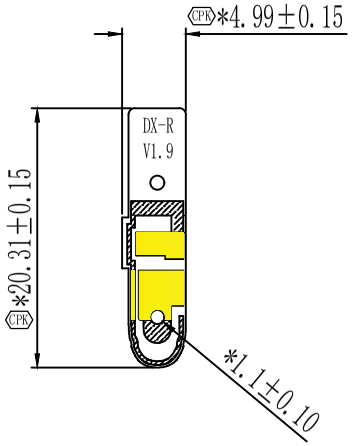
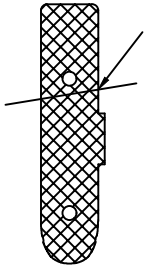
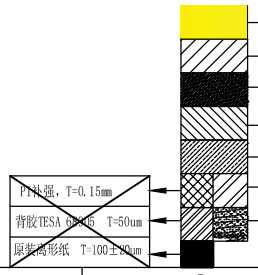
版 本	标 记	更 改 内 容	签 名	日 期





用黄色离型纸，低克重
（15-20g）



层叠图及材料规格
镍2-6um；金≥0.05um
黄色覆盖膜 T=27±5um 白色丝印
电解铜 T=0.5oz
热固胶 T=20um
PI基材 T=25um
背胶3M9471 T=50um
低克重离形纸 T=100±20um

公 差 表	
长宽50mm以下规则的外形到外形	±0.10
长宽50mm以上不规则的外形到外形	±0.15
走线到外形	±0.15
走线到走线	±0.05
孔径	±0.1
孔中心到外形	±0.15
孔中心到孔中心	±0.10
油墨到走线	±0.30
补强或背胶到外形	±0.35

机 种	CE-2190B	名 称	蓝牙天线-R	审核	吴锡欢
项目编码	BE-2190B-020	R F	胡鹏	批准	张磊
零件编码	2E-2190B-020-1	结构	周锐斌	日期	2024-04-01
版 本	B	图框	A4		
比 例	1:1	第三视角			
单 位	MM				

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