



Shenzhen Yuhong Industrial Co., Ltd

Part specifications

Customer name: Dongguan Hele Electronics Co.,Ltd
Product Model: TW10-R
Risuntek P/N:
Version: A0
Product Name: LDS antenna
Description: Sabic support+LDS
Date: 2023/5/12

(Customer Signatures)

(PM)	(ME)	(QE)

(Inner Signatures)

(QE)	(ME)	(RF)

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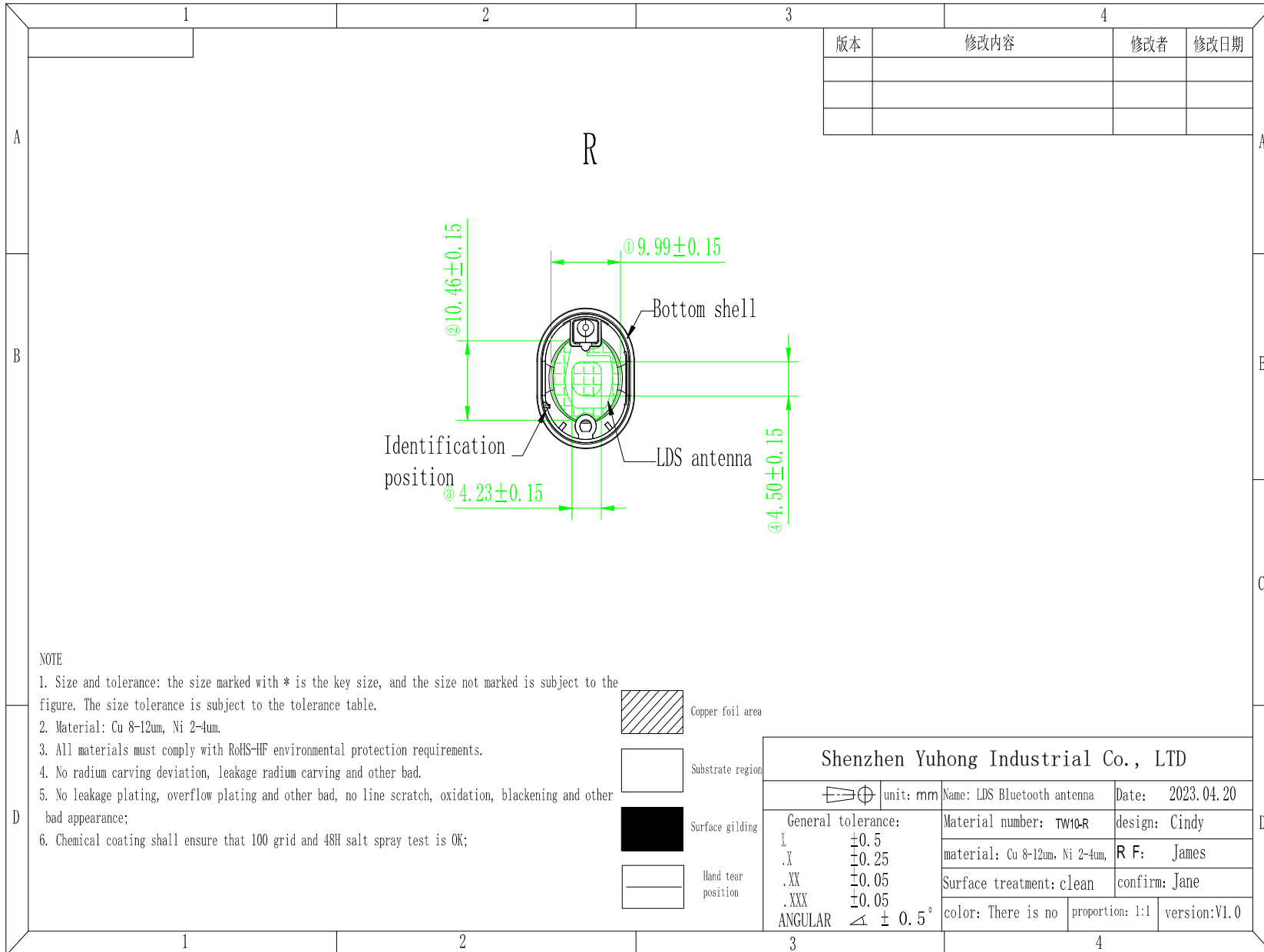
catalogue

- 一、 Prepare/revise the resume
- 二、 Product drawing
- 三、 Specification of electrical
and mechanical properties

一、Prepare/revise the resume

version	Revision page	Change time	Change of person	Reason and content of change	remarks
A0	—	2023/5/12	Cindy	First version of the antenna form	
A1					
A2					
A3					
A4					
A5					
A6					

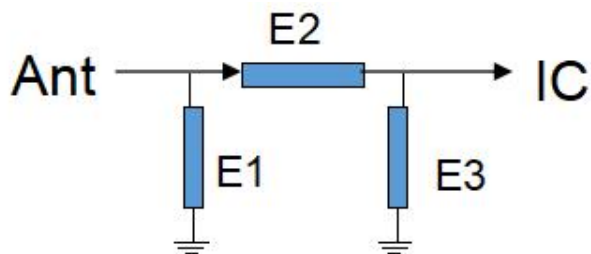
二、Product drawing



三、 Specification of electrical and mechanical properties

1、 Match the circuit diagram

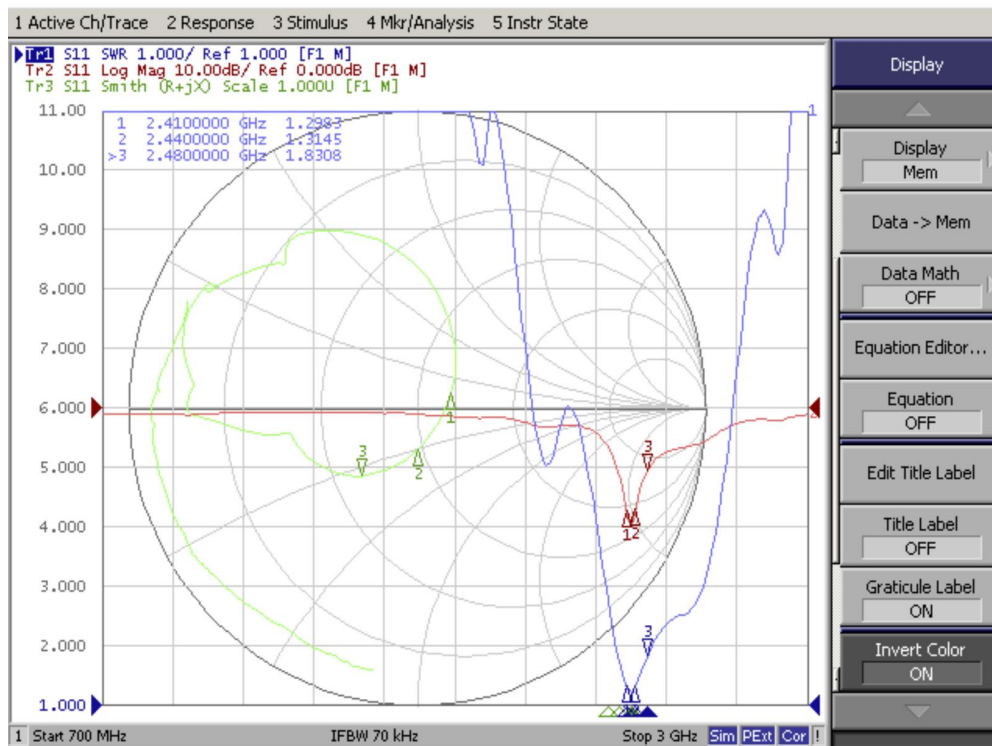
Antenna matching circuit description



Element	Value
E1	ESD
E2	0Ω
E3	2.7PF



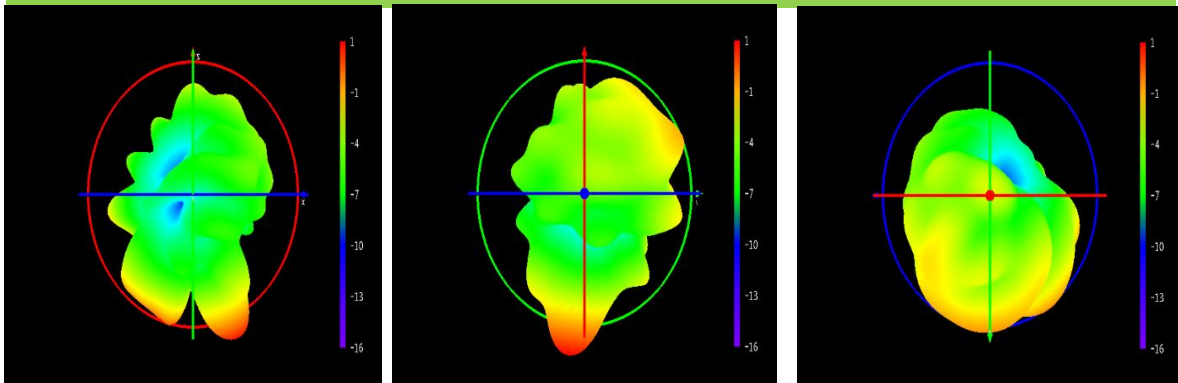
2、 S11 parameters



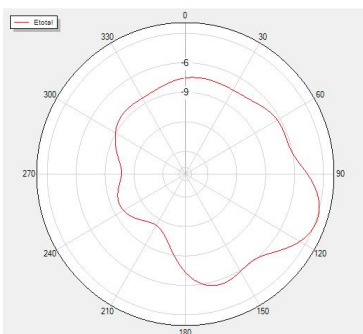
3、Passive efficiency

Frequency point MHz	Free space		Head die	
	gain (dBi)	efficiency	gain (dBi)	efficiency (dB)
2400	-1.13	21.4	-4.22	9.12
2410	-0.73	23.8	-4.82	9.25
2420	-0.37	26.26	-4.76	9.31
2430	-0.07	28.54	-3.79	9.32
2440	0.13	30.61	-3.81	9.31
2450	0.24	31.93	-3.79	9.26
2460	0.19	31.93	-3.77	9.18
2470	-0.07	30.46	-3.71	9.14
2480	-0.44	28.09	-3.64	9.12
2490	-0.94	25.25	-3.64	9.1
2500	-1.49	22.4	-3.69	9.1

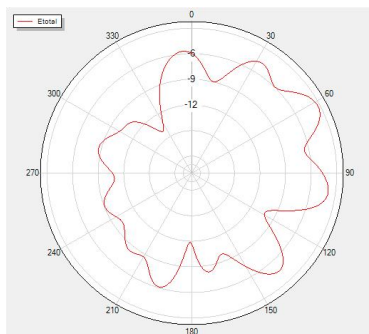
4、Gain graph



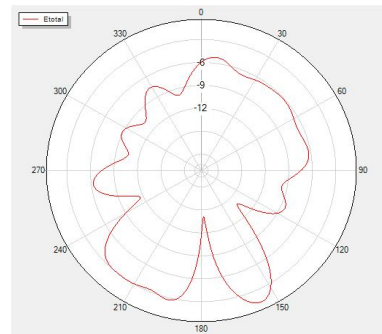
Theta=90 Freq=2450MHz



Phi=90 Freq=2450MHz



Phi=0 Freq=2450MHz



5、 Active OTA data

R	channel	TRP (dbm)	TRP (dBm)
freedom	0	0.7	-86.4
	39	1.1	-88.8
	78	1.9	-88.5
R	channel	TRP (dbm)	TRP (dBm)
Head die	0	-5.7	-81.1
	39	-5.4	-81.6
	78	-5.5	-81.2