

Antenna specification

APPROVAL

Customer	LCHSE	frequency band	2400MHZ~2500MHZ
project name	X7e	versions	PCB V1.3
Material number	ANT-A3	colour	/
Antenna vendor	JingXun		
designed By	Yao Hong guang	Day	2024-04-30
QA Manager By		Day	
Approved By		Day	
Confirmed by Customer		Day	

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1. antenna parameters

Right ear antenna

Frequency	2400~2500MHZ
Effi AVG	44.47%
PK Gain	1.29dBi
SWR	<3
Antenna Type	On board ANT
PART NO	ANT-A3
Antenna size	6.1 x 2.83mm

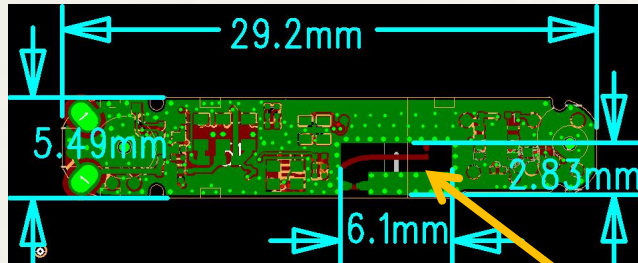
Left ear antenna

Frequency	2400~2500MHZ
Effi AVG	46.21%
PK Gain	1.35dBi
SWR	<3
Antenna Type	On board ANT
PART NO	ANT-A3
Antenna size	6.1 x 2.83mm

2. Antenna appearance and dimensions

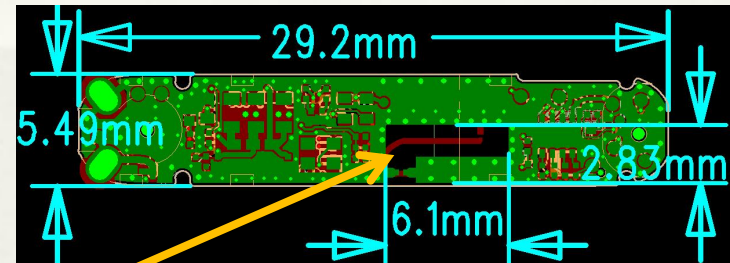
Left ear PCB

TOP



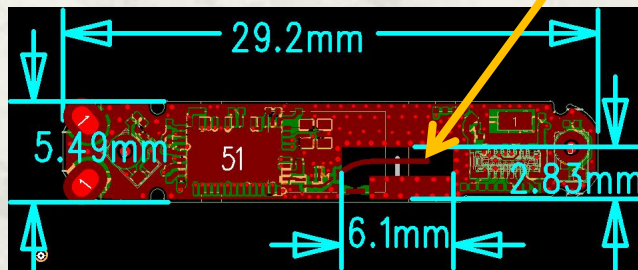
Right ear PCB

TOP

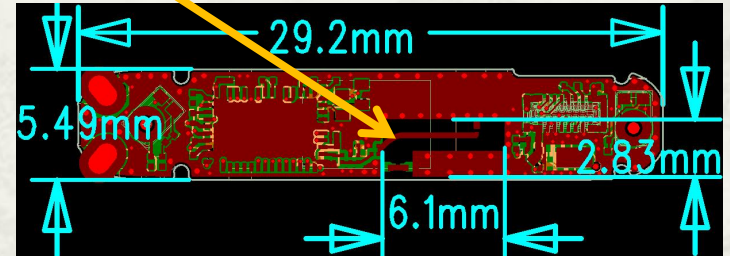


Antenna location

BOTTOM



BOTTOM



Antenna size: 6.1 x 2.83mm

*The antenna position of the left and right ear PCB is the same

3. Detailed information about antenna parameters

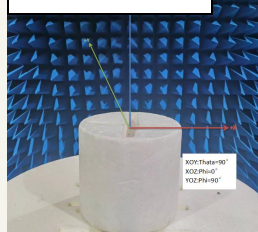
3.2 Right ear antenna efficiency

Free space			
Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain(dBi)
2400	40.27	-3.95	1.17
2410	41.69	-3.8	1.16
2420	42.62	-3.7	1.18
2430	42.61	-3.7	1.13
2440	43.47	-3.62	1.18
2450	44.29	-3.54	1.29
2460	44.86	-3.48	1.26
2470	46.35	-3.34	1.19
2480	47.42	-3.24	1.1
2490	48.13	-3.18	1.14
2500	47.49	-3.23	1.03
AVG	44.47	-3.53	1.17

XOY:Theta=90°

XOZ:Phi=0°

YOZ:Phi=90°



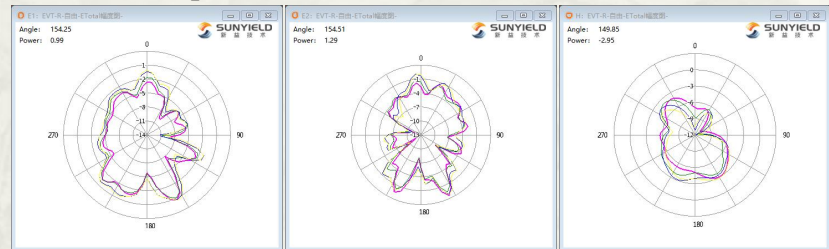
antenna location



S11 Parameters



Antenna pattern:



3. Detailed information about antenna parameters

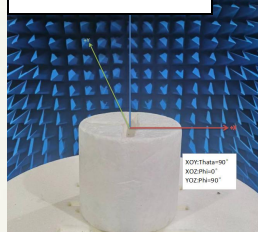
3.2 Left ear antenna efficiency

Free space			
Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain(dBi)
2400	39.35	-4.05	0.39
2410	41.15	-3.86	0.52
2420	42.96	-3.67	0.76
2430	45.07	-3.46	1.01
2440	46.96	-3.28	1.27
2450	48.31	-3.16	1.26
2460	49.2	-3.08	1.28
2470	49.48	-3.06	1.34
2480	49.21	-3.08	1.35
2490	48.61	-3.13	1.29
2500	47.99	-3.19	1.17
AVG	46.21	-3.37	1.06

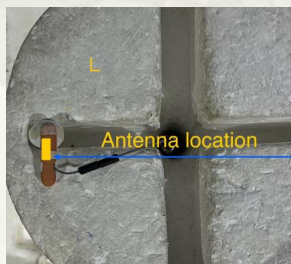
XOY:Thata=90°

XOZ:Phi=0°

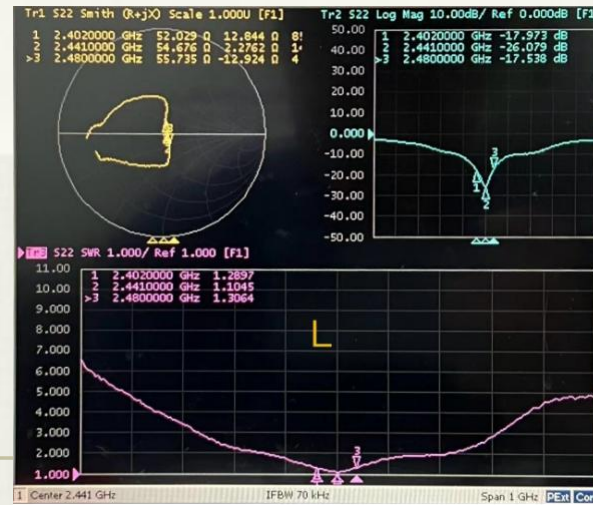
YOZ:Phi=90°



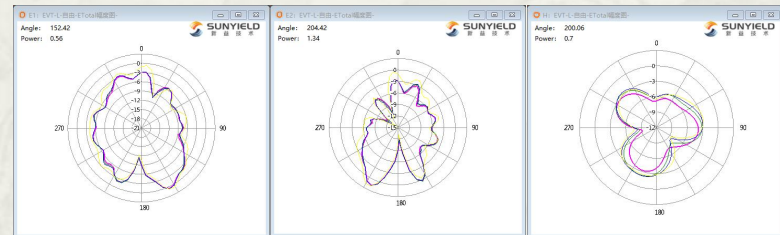
antenna location



S11 Parameters



Antenna pattern:





The End