



ShenZhen VLG Wireless TECHNOLOGY CO.,LTD

SPECIFICATION

Project	Acoustic imager WIFI antenna			Frequency Band	2400-2500,5150-5850MHz		
VLG SCT P/N	V1334-556-A-01			Version	A		
RF	yuncheng.li	Check	yucheng. li	QC	hong. yu	Check	hong. yu
ME	cong.zeng		cong. zeng	PM	lin. dong		lin. dong
Date	August 25th, 2026						
Customer item P/N	Customer Project Name: Acoustic imager WIFI antenna						
	Customer Item No. :						
Customer Remark							
VLG Wireless Technology							
R&d project customer satisfaction survey (Customer please according to our research and development, a comment or PM management staff, supervise and urge us serve you better)							
RF	☐ satisfaction		☐ largely satisfactory		☐ Not satisfied		
ME	☐ satisfaction		☐ largely satisfactory		☐ Not satisfied		
PM	☐ satisfaction		☐ largely satisfactory		☐ Not satisfied		
Customer Suggestions:							
The antenna : images							
							

The form number: VLG/QRF7.3-24/A4

Save the fixed number of year: 2 years

Company address:4th Floor , B5 Building, Taohuayuan Technological Innovation Ecological Park, Tiegang , Xixiang, Bao 'an District, Shenzhen

Design Specifications	Typical	Units
Antenna Form	FPC+Leadwire	
Working Frequency	2400-2500,5150-5850	MHz
Gain	0.48~ 3.81	dBi
Antenna efficiency	37.67~54.66	%
Return Loss	<-5	
Ploriaztion	Linear polarization	
Axial Ratio	When the antenna is circularly polarized, indicate the axial ratio within the operating bandwidth	N/A
Radiation Pattern	Non omnidirectional	
Impedance	50 ohm	
Power Handling	33	dBm
Interface	IPEX	
Overall Dimensions	See drawing section	
Weight	no requirement	
Operatin Temp	-30 ----- 70	°C
Storing Temp	-30 ----- 70	°C

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Acoustic imager WIFI antenna Specification

1、 Indication

The report mainly provides the test status of various electrical performance parameters of the Acoustic imager WIFI antenna. (As shown in Figure 1 below)



Figure 1 Acoustic imager WIFI antenna

2、 Electrical Performance

2.1 Specification standard

Acoustic imager WIFI antenna working band is at 2400-2500, 5150-5850MHz.

2.2 Antenna matching circuit

Acoustic imager WIFI antenna matches the original matching circuit.

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2.3 Return Loss Test

A. Test setup

Return Loss measurements (S11) were performed using Agilent E5071B Network Analyzer and the previously described test fixture. A ferrite-loaded coaxial cable was used to mitigate surface currents on the outside of the cabling. The testing was performed in free space ETS AMP8500S chamber.

B. Return Loss

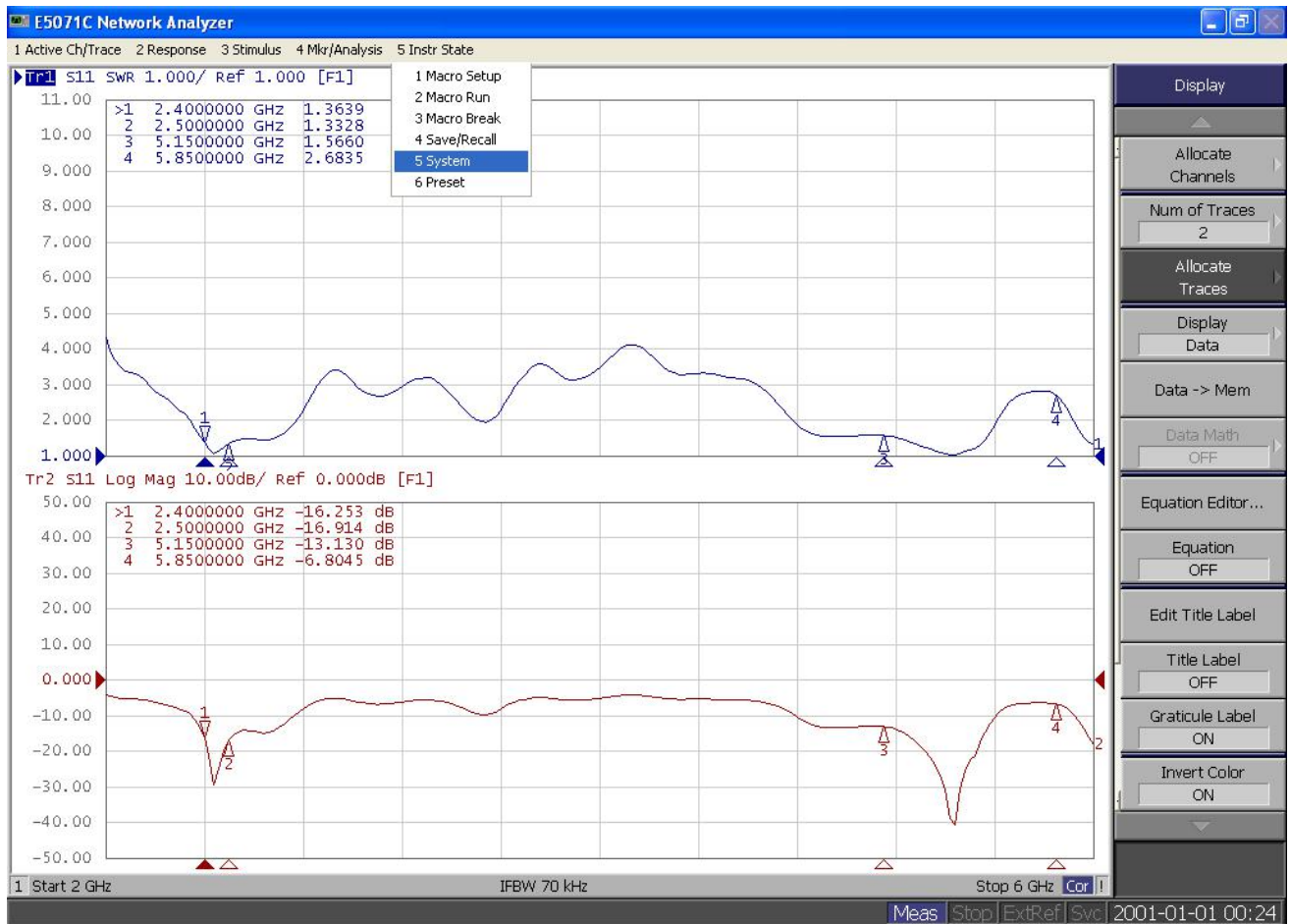
The table below shows the standing wave ratio value of the edge frequency of the working band of Acoustic imager WIFI antenna matches the original matching circuit.

Frequency band	frequency (MHz)	Return Loss
WiFi	2400	-16.25
	2500	-16.91
	5150	-13.13
	5850	-6.80

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2.3.1 S11 parameter



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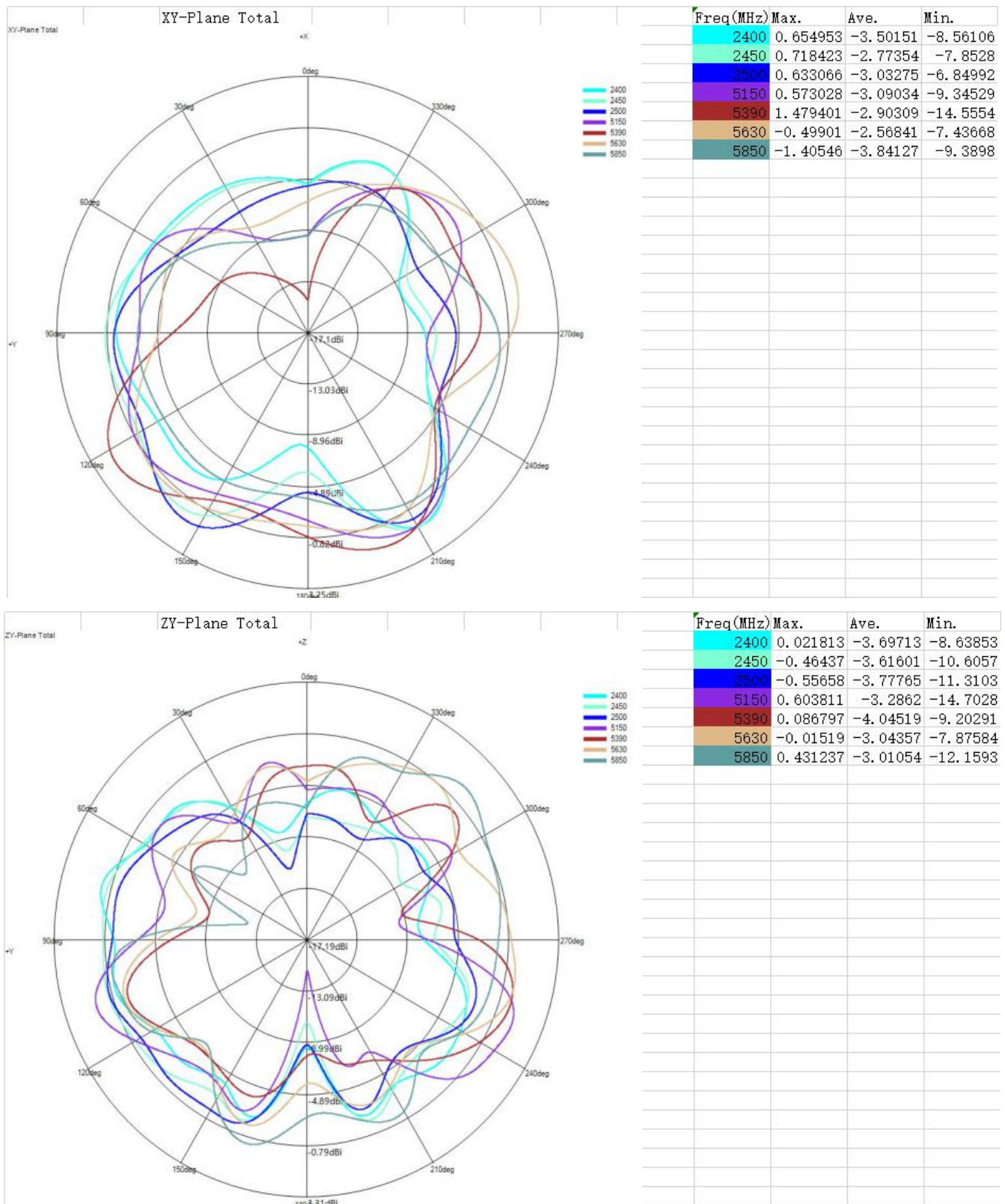
2.3.2 Antenna Passive Efficiency

Freq (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	0.99	-3.36	46.15
2410	1.05	-3.32	46.52
2420	0.99	-3.28	47.03
2430	0.92	-3.24	47.48
2440	1.16	-3.13	48.64
2450	1.66	-2.97	50.48
2460	2.05	-2.84	51.99
2470	2.47	-2.74	53.21
2480	2.80	-2.69	53.82
2490	3.11	-2.62	54.66
2500	3.22	-2.72	53.40
5150	3.16	-3.46	45.11
5190	3.45	-3.38	45.94
5230	3.78	-3.27	47.15
5270	3.81	-3.35	46.24
5310	3.76	-3.35	46.21
5350	3.50	-3.44	45.25
5390	2.78	-3.64	43.27
5430	2.20	-3.48	44.88
5470	1.90	-3.45	45.20
5510	1.89	-3.48	44.83
5550	1.83	-3.44	45.27
5590	1.60	-3.56	44.06
5630	1.30	-3.75	42.18
5670	1.24	-3.69	42.76
5710	1.01	-3.78	41.85
5750	0.55	-3.96	40.20
5790	0.48	-4.09	39.00
5830	0.90	-4.23	37.80
5850	1.10	-4.24	37.67

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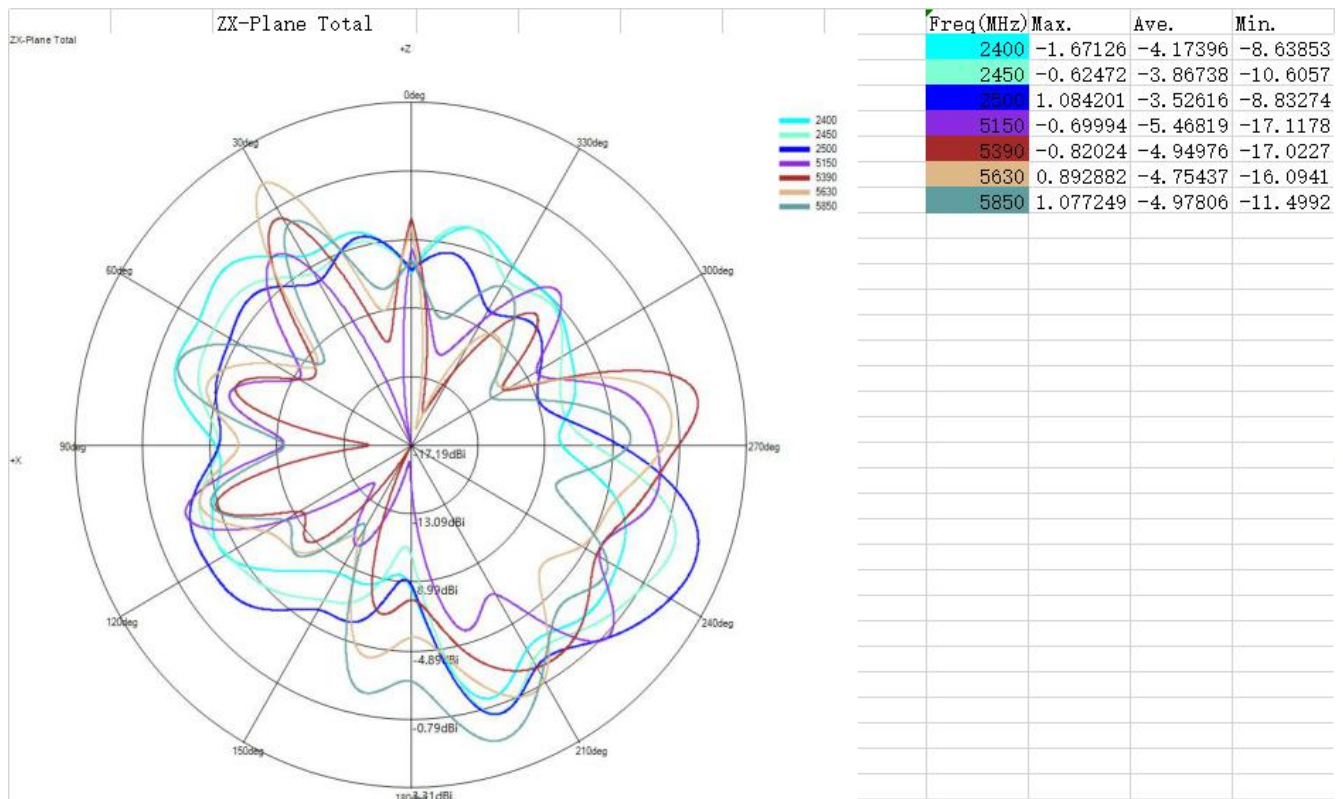
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2.3.3 Pattern



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3、Suggestion And Solution

This report is according to the customer provide Acoustic imager WIFI antenna the final version of the electrical performance of antenna.

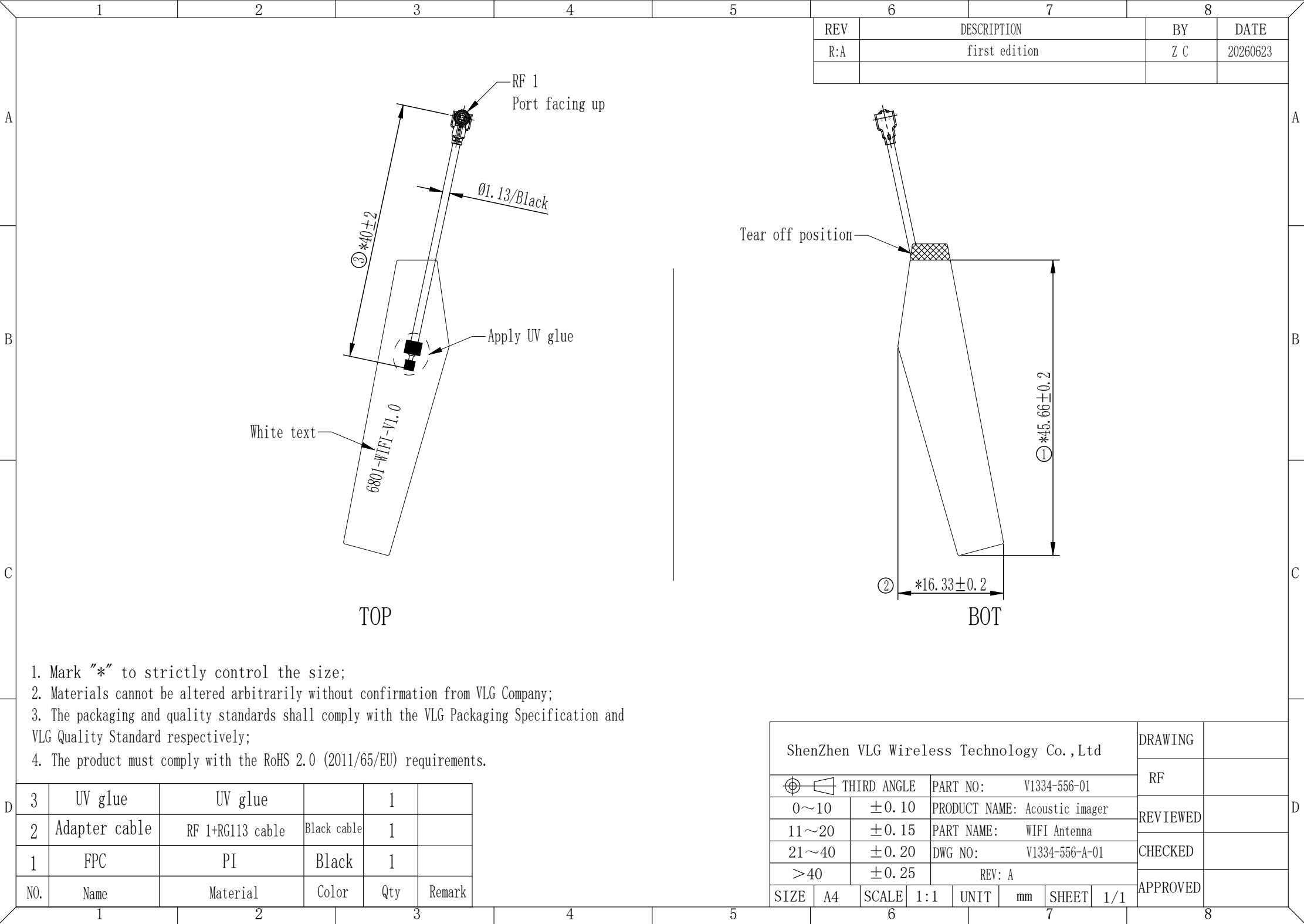
As can be seen from the above test data, this antenna provides better electrical performance.

We are looking forward to your confirmation. Thank you for your cooperation!

4、Appearance Drawing

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REV	DESCRIPTION	BY	DATE
R:A	first edition	Z C	20260623

1. Mark "*" to strictly control the size;
2. Materials cannot be altered arbitrarily without confirmation from VLG Company;
3. The packaging and quality standards shall comply with the VLG Packaging Specification and VLG Quality Standard respectively;
4. The product must comply with the RoHS 2.0 (2011/65/EU) requirements.

3	UV glue	UV glue		1	
2	Adapter cable	RF 1+RG113 cable	Black cable	1	
1	FPC	PI	Black	1	
NO.	Name	Material	Color	Qty	Remark

ShenZhen VLG Wireless Technology Co.,Ltd								DRAWING	
		THIRD ANGLE	PART NO: V1334-556-01					RF	
0~10		±0.10	PRODUCT NAME: Acoustic imager					REVIEWED	
11~20		±0.15	PART NAME: WIFI Antenna						
21~40		±0.20	DWG NO: V1334-556-A-01					CHECKED	
>40		±0.25	REV: A					APPROVED	
SIZE	A4	SCALE	1:1	UNIT	mm	SHEET	1/1		

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SAMPLE SIZE TEST REPORT

Customer		/	Product name		Acoustic imager WIFI antenna			Product type		FPC+Leadwire		
Supplier		VLG	P/N		V1334-556-A-01			Inspector		/		
Drawing edition		R: A	UNIT		mm			Inspection date		August 25th, 2026		
S/N	Test item	Test standard	Actual measurement size					judge	Test instument	DIE No.	Remark	
			1	2	3	4	5					
1	Appearance	Cosmetic defect phenomenon briefly	OK	OK	OK	OK	OK	OK	Visual			
		★ 45.66 ± 0.20	45.67	45.64	45.66	45.68	45.65	OK	PM			
		★ 16.33 ± 0.20	16.33	16.30	16.35	16.32	16.34	OK	PM			
		★ 40.00 ± 2.00	40.50	40.60	40.50	40.40	40.70	OK	PM			
Final conclusion: OK ☒ NG ☐												

Cosmetic defect phenomenom briefly : A—Exposed copper、B—Deformation、C—Scratch、D—Mixed color、E—back glue 、F—Color difference、G—Virtual welding 、H—Dirty、I— skewed hole、J—Burr、K—Press mark、L—Deformation、L—Shrink、N—Broken pillars 、O—Dot、P—Rusty、Q—Electroplating bad、R—No bumps

Detecting instrument: PG—Plug(circular hole)gauge、RG—R gauge、SG—Block gauge、LG—ring gauge、DC—Digital caliper、PM—Two dimensional

Editon:A.0

Form NO.:VLG/QRF8.2-28/A.0

Check: tao.jiang

Review: hong.yu

ShenZhen VLG Wireless Technology Co.,Ltd
APPEARANCE PERFORMANCE AND RELIABLE TEST REPORT

Supplier Name		VLG		LOT size		N	
Customer Name		/		Sample QTY		5PCS	
Product Name		Acoustic imager WIFI antenna		Inspector		/	
P/N		V1334-556-A-01		Inspection Date		August 25th, 2026	
S/N	Inspection item		Description of test results				
1	Visual check		Appearance accord with the appearance criteria				
	Judgement results		☒ OK ☐ NG				
	Reliability test	(一)Constant temperature and humidity	Place the specified 24h at 60 ± 2 °C and 95% (RH) humidity; After taking out the sample, place it at room temperature for 2 hours.				
			Judgement: ☒ OK ☐ NG 1、No mechanical damage 2、electrical performance conforms to the original test requirements 3、 Appearance is no rust and oxidati				
		(二)Salt spray test	Put in salt spray testing machine, can't overlap between sample and sample, the sample horizontal tilt 60-80 degrees as soon as possible. In temperature $35 \text{ }^{\circ}\text{C} + 2$ °C, humidity > 85% airtight environment, PH value within the scope of 6.5 to 7.2, with 5% plus or minus 1% Nacl solution for spray after 24h, rinse off with clear water after the sample of the dry, place 2 h .				
			Judgement: ☒ OK ☐ NG 1、No mechanical damage 2、electrical performance conforms to the original test requirements 3、 Appearance is no rust and oxidati				
Final conclusion			☒ OK ☐ NG				
			Final conclusion ☒ OK ☐ NG				

Edition:A.0

Form NO. :VLG/QRF8.2-29/A.0

Inspection: tao.jiang

Review: hong.yu

RoHS Limited Substance Composition Questionnaire

QR-QA20-08

Supplier: VLG Wireless TECHNOLOGY CO

Product information provided																
Material code		Material name/item		Supplier Material Number			Manufacturer							Green Material Identification		
		Acoustic imager WIFI antenna		V1334-556-A-01			VLG									
Product Composition Information																
NO.	Part name	Component material number	Component supplier	Third party testing report		Limited substance content PPM										Remarks
				date	number	Pb	Cd	Hg	Cr ⁶⁺	PBB	PBDE	DBP	BBP	DEHP	DIBP	
1	Acoustic imager WIFI antenna	VLG				○	○	○	○	○	○	○	○	○	○	

Note: Pls. use 0, X to show whether the 6 content lines are up to standard; 0 is OK; X is NO.
PPM Limit:Cd<100PPM;Pd/Hg/Cr6+/PBB/PBDE<1000PPM
Pd/Hg/Cr6+/Cd<100PPM for packing material.
The supplier must fill out the list completely and stamp;The supplier is the direct busir
If the limited use material is overproof but conforming to examption clause, pls. clirify at remark line.

Filler: hong.yu

Filler's company/Dept.:Shen Zhen WeiLiGu QA Dept.

Checker: hong.yu

Out-of-factory packaging requirements

General requirements:

- 1.Customer name, project name, model number
- 2.Caption inside and outside the box, packing when shipment, layer number, single number, etc
- 3.This packaging materials given in the note column name, quantity, etc
- 4.Quality department head to sign and date



PE bag



1. Packaging method

1. Packaging method



3. Carton packaging

4.Outer box label



5.Outer Container Shape

6.Front of packing box

Productmaterialno:	V1334-556-A-01
Product name:	Acoustic imager WIFI antenna
Product version:	R:A
Packaging method:	PE bag + clapboard + carton
Signer:	hong.yu August 25th, 2026