

Admit it

The product description:	The manufacturer: Welletronics Communication Technology Limited The name of the material: Bluetooth RF antenna Material code: 3.01.MP01F10000 The version number: V1.0	Project type: MP01 BT antenna Specification/Color: white Sign the sample date: 2023.02.04 note:				
The attachment:	☒ Description of electrical and mechanical properties (Specification) ☒ QCEngineering drawing ☒ Reliability test report ☒ The sample ☒ The packing way ☒ CPK report ☒ Raw material list report /RoHS report/HF/REACH ☒ Manufacturing flow chart ☒ Full size measurement report					
Supplier sign and approve	artificial: _____ audit: _____ approval: _____					
The above shall be filled in by the supplier and the following shall be filled in by Aidu						
	department	Confirm the content	Verify the results	Confirm person/date		
Technical confirmation column	Supplier quality	☐ RoHS material ☐ no RoHS material	☐ Meet REACH requirements ☐ Meet halogen-free requirements ☐ Other Environmental Requirements			
	ID of Design Department	☐ The customer request ID ☐ Color confirmation	☐ Surface process confirmation ☐ Shell, hardware, key material			
	Structural engineer	☐ Confirm the size of 2D drawing files ☐ Specifications and technical requirements	☐ Focus on size marking control ☐ Electrical performance parameter ☐ Adapter validation ☐ function	☐ Shell, hardware, key material ☐ The effect		
	Hardware engineer	☐ Confirm the size of 2D drawing files ☐ Specifications and technical requirements	☐ Focus on size marking control ☐ Electrical performance parameter ☐ Adapter validation ☐ function	☐ Shell, hardware, key material ☐ The effect		
	R&d quality	☐ Test standard confirmation ☐ appearance	☐ Standardization of dimension marking (key dimensions) ☐ Reliability verification ☐ Adapter validation	☐ function ☐ The effect		
Final confirmation	Project Manager	☐ Acknowledge the completeness of the documents ☐ Standardization of dimension marking (key dimensions) ☐ Specifications and technical requirements ☐ appearance	☐ Electrical performance parameter ☐ function ☐ The effect			
Admitted conditions:	☐ Official recognition ☐ Set limit to admit ☐ Refuse to admit					
Distribution department:	☐ IQC ☐ supplier ☐ The customer ☐ after-sales ☐ SQE/ Document control ☐ other _____					

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Three 、 Change history**Change of resume**

Serial number	Date of change	entry name	Edition	Change content	Remarks
1	Feb 4, 2023	MP01 BT antenna	V1.0	nothing	New issue

Four、 Electrical characteristics

1. Antenna Structure

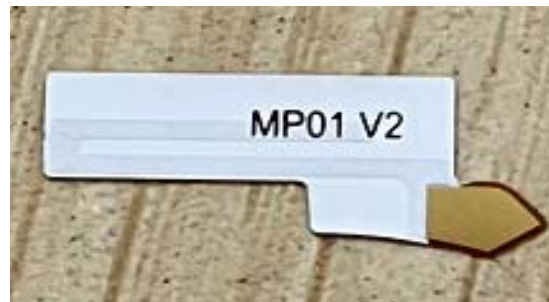


Figure antenna structure

2. Test Results

BT-Return Loss/VSWR



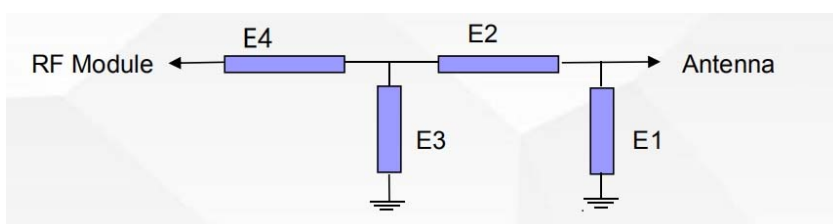
3. Test Repor No source by space test efficiency/pattern

Free space

Add the arm

Freq	Efficien cy_dB	Efficien cy_Pcent	Gain	Freq	Efficien cy_dB	Efficien cy_Pcent	Gain
2400	-6.69	21.42	-2.53	2400	-11.46	7.14	-5.13
2410	-6.95	20.19	-2.66	2410	-11.88	6.49	-5.65
2420	-6.88	20.49	-2.61	2420	-11.95	6.38	-5.75
2430	-7.02	19.87	-2.69	2430	-12.12	6.14	-5.93
2440	-7.01	19.93	-2.6	2440	-12.08	6.2	-5.93
2450	-7.12	19.41	-2.77	2450	-12.2	6.03	-6.12
2460	-7.24	18.9	-2.84	2460	-12.39	5.77	-6.28
2470	-7.12	19.4	-2.64	2470	-12.34	5.83	-6.22
2480	-7.07	19.62	-2.58	2480	-12.33	5.85	-6.07
2490	-6.91	20.36	-2.32	2490	-12.32	5.87	-6.01
2500	-6.96	20.13	-2.21	2500	-12.51	5.61	-6.27

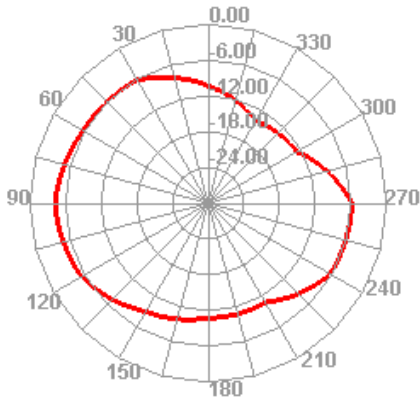
Match



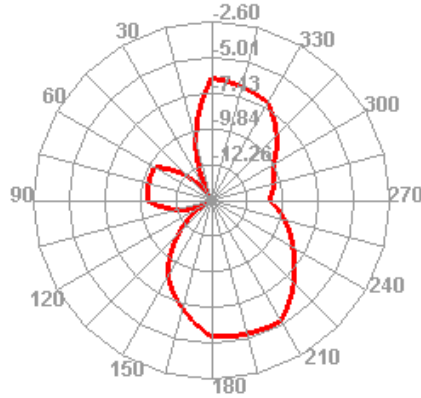
The antenna	Element	Value
	E1	1.8PF
	E2	2.2nh
	E3	
	E4	

3. The direction of figure

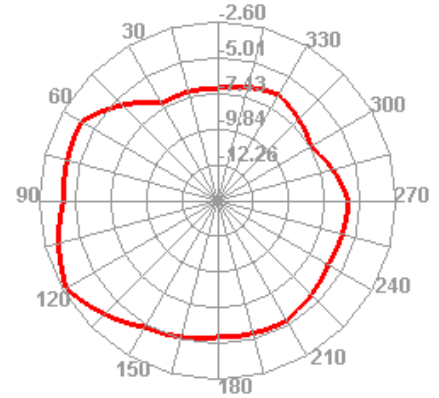
2440.000MHz H



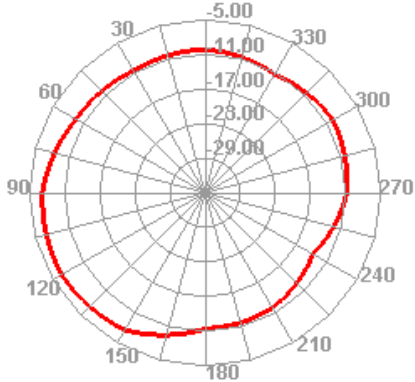
2440.000MHz E1



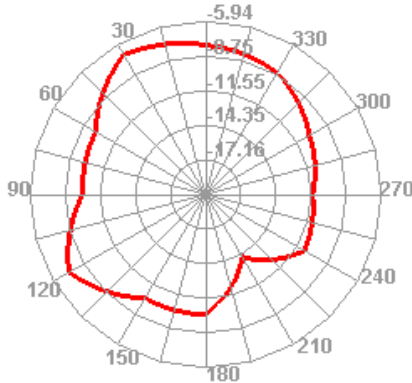
2440.000MHz E2



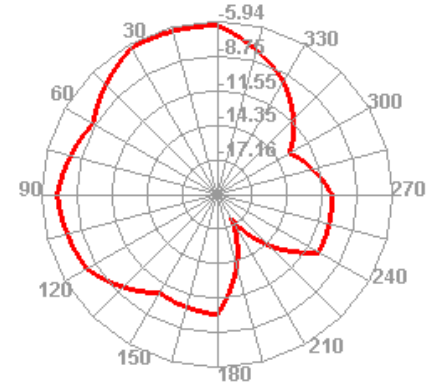
2440.000MHz H



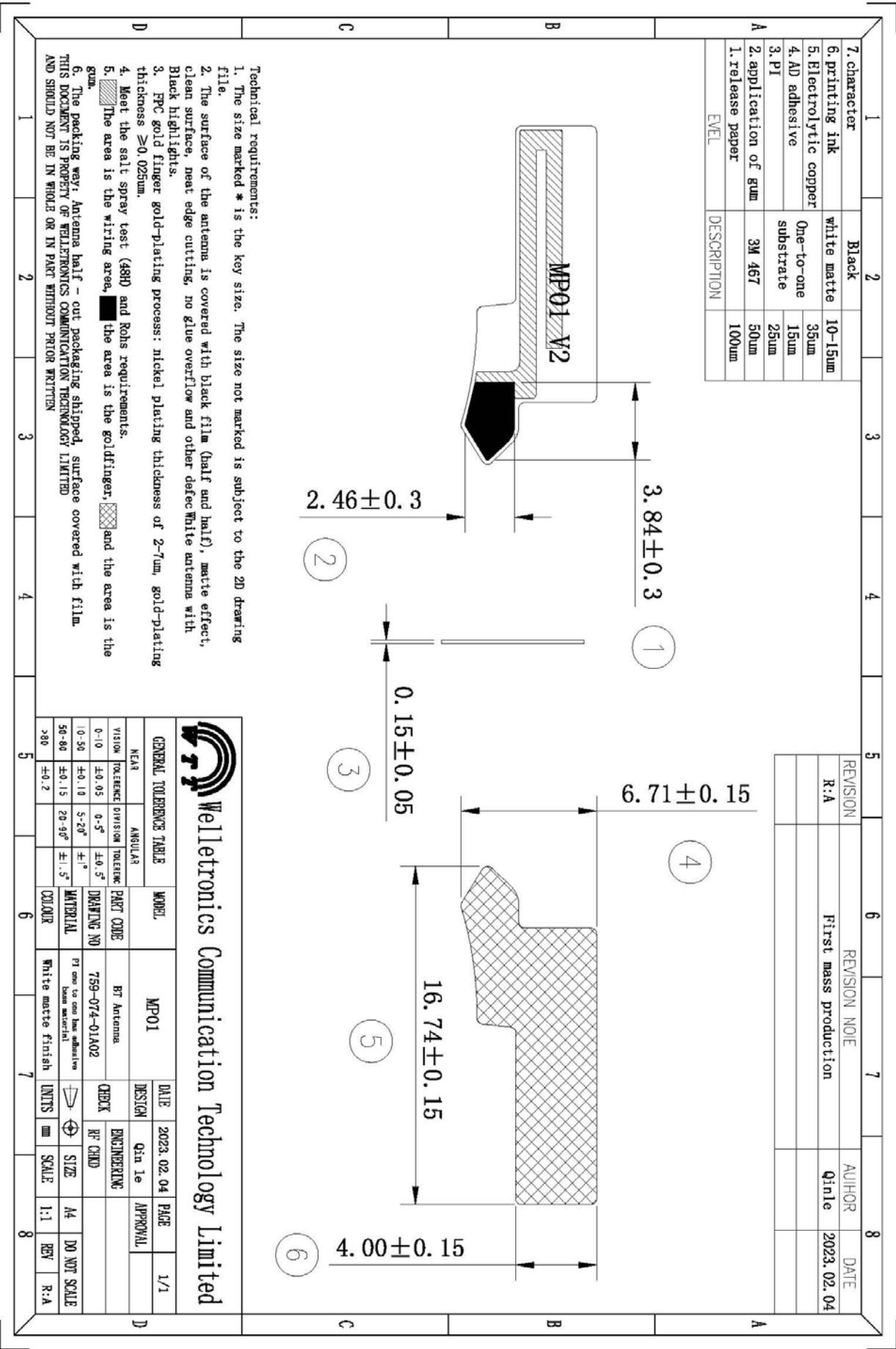
2440.000MHz E1



2440.000MHz E2



Five、The 2D drawings



Full-scale measurement report

[illegible]

Seven、Cpk Report

CPK Report

Part Number	759-074-01A02		Vendor	WTT	
Description	MP01 BT antenna		Inspected	肖洁	
Tool Number			Inches/MM	mm	
Cavity			Material Name	FPC	
			Material Code		
Revision	R:A		Date	3-Feb-23	
Dim. Designator	4	5			
Nominal	6.71	16.74			
+ Tolerance(All	0.15	0.15			
- Tolerance	-0.15	-0.15			
Upper Limit	6.86	16.89			
Lower Limit	6.56	16.59			
1	6.69	16.75			
2	6.72	16.74			
3	6.70	16.76			
4	6.72	16.73			
5	6.73	16.75			
6	6.70	16.72			
7	6.75	16.73			
8	6.72	16.75			
9	6.73	16.70			
10	6.71	16.78			
11	6.76	16.76			
12	6.73	16.80			
13	6.71	16.73			
14	6.70	16.72			
15	6.65	16.77			
16	6.69	16.68			
17	6.71	16.69			
18	6.65	16.73			
19	6.68	16.75			
20	6.77	16.70			
21	6.72	16.78			
22	6.75	16.72			
23	6.76	16.77			
24	6.65	16.81			
25	6.70	16.67			
26	6.72	16.73			
27	6.75	16.75			
28	6.76	16.78			
29	6.77	16.79			
30	6.65	16.68			
MAX.	6.77	16.81			
MIN.	6.65	16.67			
AVERAGE	6.72	16.74			
STDEV	0.04	0.04			
CP	1.40	1.37			
Cpk	1.35	1.37			
TOOLING	CMM	CMM			

Approved By: Kun Yao

Written By: Jie Xiao



Welletronics Communication Technology Co., Ltd

Environment-Concerned Substance report

supplier's Name : Welletronics Communication Technology Co., Ltd

(Raw material Manufacturer) : Welletronics Communication Technology Co., Ltd

Names of material and type : MP01 BT antenna

RoHS test report NO.

Name of hazardous substance	Threshold value ppm (mg/Kg)	If yes, which products/part numbers	Do you products contain this substance (Yes or No)	How much ppm (mg/kg)	Implement schedule
Cadmium and its compounds	100	759-074-01A02	NO	/	03-Feb-23
Lead and its compounds	1000		NO	/	03-Feb-23
Chromium VI and its compounds	1000		NO	/	03-Feb-23
Mercury and its compounds	1000		NO	/	03-Feb-23
Poly branjinatated Biphenyls (PBBS)	1000		NO	/	03-Feb-23
Poly branjinatated Diphenyl ethers(PBDES)	1000		NO	/	03-Feb-23

(Contact Person) : Tianhua Liu

(Position) : Quality Manager

(TEL): 0755-29076623

e-Mail: qc1@wt-china.com

(Date) : 03-Feb-23

Nine、Salt spray test

Salt spray test

Customer	AiDu	Written By	Jie Xiao	Orig. Date	3-Feb-23			
Part Number	759-074-01A02	Revised By	Kun Yao	Revised Date	3-Feb-23			
Description1	MP01 BT antenna	Approved By	TianHua Liu	Approved Date	3-Feb-23			
Date of trial	Starting at 09.00 on 1-Feb-23							
	And end at 09.00 on 3-Feb-23							
	A total of 48 hours of continuous spray							
Experimental operation	1、Test operation status						OK	
	2、Test box temperature						35℃	
	3、Saturated Air Bucket Temperature						47℃	
	4、Specific gravity of salt spray test						5%	
	5、Specimen supported angle						30°	
	6、Compressed air pressure						1kg/cm ²	
	Time		Testing time	Laboratory thermometer (℃)	Saturated Air Barrel Temperature (℃)	compressed air pressure (kg/cm ²)	Machine running condition	Remarks
	17:00 on 1-Feb		8	35	47	1kg/cm ²	OK	
	1:00 on 2-Feb		16	35	47	1kg/cm ²	OK	
	9:00 on 2-Feb		24	35	47	1kg/cm ²	OK	
	17:00 on 2-Feb		32	35	47	1kg/cm ²	OK	
	1:00 on 3-Feb		40	35	47	1kg/cm ²	OK	
	9:00 on 3-Feb		48	35	47	1kg/cm ²	OK	
NO	Post-test status						Determine	Remarks
1	No oxidation on coating surface and no foammg and falling off of ink						OK	5PCS
2								
3								
4								
Remarks:								

Approved By: Kun Yao

Written By: Jie Xiao

Ten、 High and Low Temperature Testing

High and Low Temperature Testing

Customer	AiDu		Written By	Jie Xiao	Orig. Date	3-Feb-23	
Part Number	759-074-01A02		Revised By	Kun Yao	Revised Date	3-Feb-23	
Description1	MP01 BT antenna		Approved By	TianHua Liu	Approved Date	3-Feb-23	
Test time	Starting at 08:30 on 29-Jan-23					Hot test (60℃)	
	Ending at 08:30 on 29-Jan-23						
	Starting at 08:35 on 29-Jan-23					Room temperature test(20℃)	
	Ending at 10:35 on 29-Jan-23						
	Starting at 10:40 on 29-Jan-23					low temperature test(-20℃)	
	Ending at 10:40 on 31-Jan-23						
	Starting at 10:45 on 31-Jan-23					Room temperature test(20℃)	
	Ending at 12:45 31-Jan-23						
	Starting at 12:50 31-Jan-23					High Temperature and Humidity Test (60℃)	
	Ending at 12:50 2-Feb-23						
	Starting at 12:55 on 2-Feb-23					Room temperature test(20℃)	
	Ending at 14:55 on 2-Feb-23						
	Total 150H Test						
Experimental operation	Time		Test time(h/m)	Test box temperature(℃)	Air humidity intest box(%)	Machine running condition	Remarks
	29-Jan-23	08 :30 A.M	24	59.91℃		OK	High temperature section
	30-Jan-23	08:30 A.M	48	60.01℃		OK	
	30-Jan-23	10 :35 A.M	2	20.07℃		OK	normal temperature section
	31-Jan-23	10:40 A.M	24	-19.91		OK	low temperature section
	01-Feb-23	10 :40 A.M	48	-20.02		OK	
	01-Feb-23	12 :45 P.M	2	19.97		OK	normal temperature section
	02-Feb-23	12 :50 P.M	24	59.92		OK	High temperature and high humidity section
	03-Feb-23	12 :50 P.M	48	60.04	95	OK	
	03-Feb-23	14 :55 P.M	2	20.01	95.10	OK	normal temperature section
NO	Post-test status				Determine	Remarks	
1	No Foaming Abnormality On Ink Surface				OK		
2							
3							
4							

Revised By: Kun Yao

Written By: Jie Xiao

Eleven、Material quality proves

Customer		Aidu		Written By		Jie Xiao		Orig. Date		3-Feb-23									
Part Number		759-074-01A02		Revised By		Kun Yao		Revised Date		3-Feb-23									
Description		MP01 BT antenna		Approved By		Tianhua Liu		Approved Date		3-Feb-23									
The serial number	Part name	The name of the material	Material supplier	Hazardous substance content								Test LAB	Test Date	Test Report No. of Hazardous Material	Test Report Attachment	MSDS Attachment			
				Pb	Cd	Hg	Cr6+	PBBS	PBDE	DEHP	DBP						BBP	DIBP	Cl
1	Base material	Cai Lungeti	Electrol ytic copper	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SGS	2023-2-21	SHAEC2202460504		
2	The back glue	3m agents	467 of gum	ND	ND	ND	ND	ND	ND	ND	ND	ND	143	ND	SGS	2023-4-8	ROHS/CANEC2205384301 HF/CANEC2205384302	 	
3	ink	You li	PSM-800 FSDM-A/ SMH-800	ND	ND	ND	ND	ND	ND	ND	ND	ND	253	ND	SGS	2022-8-5	ROHS/ETR22705905 HF/ETR22705913	 	
4	character	Ao kai	FCR-1000A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	CTI	2023-1-22	ROHS/A222002358910 1001E HF/A22200235891010 02E		
5	electroplate	Jiahongtai	Nickel plated gold	ND	ND	ND	ND	ND	ND	ND	ND	ND	157	ND	CTI	2023-5-14	A2220171849101001C		

Twelve、Shipment packaging

Packing

General requirements: 1.State customer name, project name, model number, 2.The pictures show the inner and outer cases, the packing method when shipping, the number of layers, the quantity of single layer, etc 3.Fill in the name and quantity of packing materials in the remarks column 4.Signature of quality supervisor, date			
 Figure 1: single layer blister tray or other forms  Figure 2: basic packing method of inner box  Figure 3: packing case  Figure 4: outer packing label  Figure 5: stacking of packing cases.	Product material no:	759-074-01A02	
	The product name:	MP01 BT antenna	
	Product version:	R:A	
	The packing way:	Full page half cut package shipping	
	Blister tray	very dish:	1000pcs/bag
	carton	Each box number:	20000pcs/bag
	note:		
Put each 1000pcs into PE bag with protective film protection;20 bags in one case, 20000pcs.			
Signature: qinle 2023-2-4			