

## Sample acceptance certificate

Document version number: A2

	<b>client</b>	<b>Contract manufacturing</b>	<b>Material supplier</b>
<b>Name of partner:</b>	<b>Anker</b>	Lixun	Youbi
<b>project name :</b>	<b>T8708</b>	<b>T8708</b>	<b>T8708</b>
<b>Material number:</b>	<b>32002000210</b>	<b>3201-0000C-0001R</b>	<b>UB02C35W2D5577A</b>
<b>Material description:</b>	2.4/5.8G External lead-out antenna L=35mm + first-generation terminal		
<b>Date of acknowledgement:</b>	<b>2025-05-26</b>	<b>Version of the letter acknowledged:</b>	<b>V2</b>

<b>Supplier confirmation</b>	
<b>research and development</b>	<b>character</b>

<b>Anker approval</b>	
<b>Smart research and development ZhiXin MD /HW /ID/ certification</b>	<b>Zhi Xin SQE</b>

*Signature explanation: 1. This letter of recognition shall be in at least 5 copies, one copy for anchor R&D and SQE respectively, one copy for material manufacturer and OEM*

*Keep two copies in the factory;*

- 2. Anker Each owner signature shall be signed with the full English name of the company.*
- 3. First, send the electronic file to Anker's corresponding R&D and SQE for confirmation. After OK, send the paper file for signature and approval.*

## Declaration

## APPROVAL SHEET

CUSTOMER NAME: Anker

Product name 2.4/5.8G External wire type antenna L=35mm + first  
generation terminal

CUSTOMER P/N: 32002000210

Youbi P/N: UB02C35W2D5577A REV: B

	<b>MANUFACTURER SIGNATURE</b>	<b>CUSTOMER SIGNATURE</b>
<b>CHECKED BY:</b>	Lina	
<b>APPROVED BY:</b>	 Yuefei.zhu	
<b>DATE:</b>	2025/05/26	

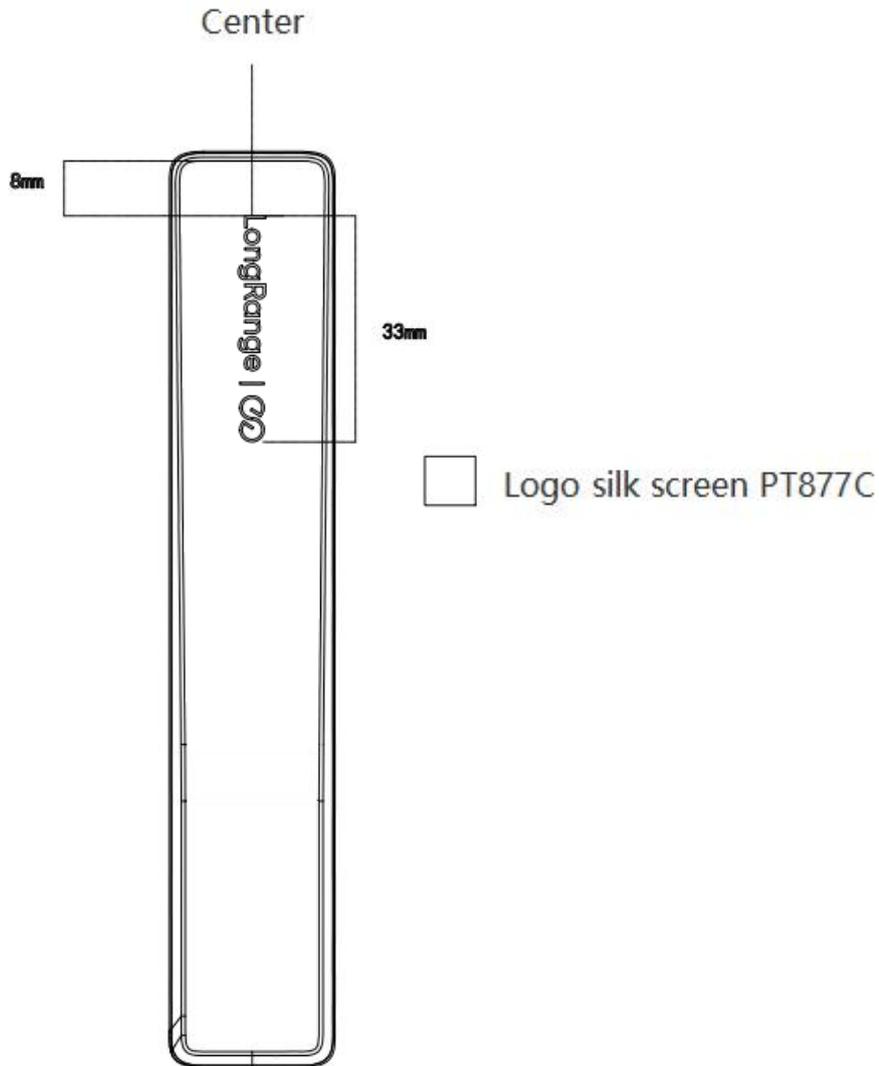
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**1. Revision history**

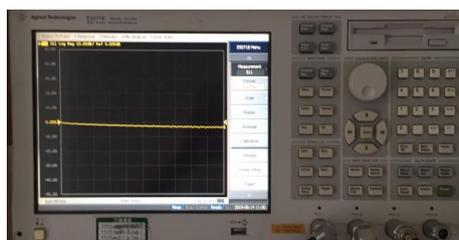
<b>Version</b>	<b>Content Revision</b>	<b>Issued by</b>	<b>Date</b>
A	Original version	lina	2025-04-22
B	Update the drawings	lina	2025-05-26

2. Product 2D drawings



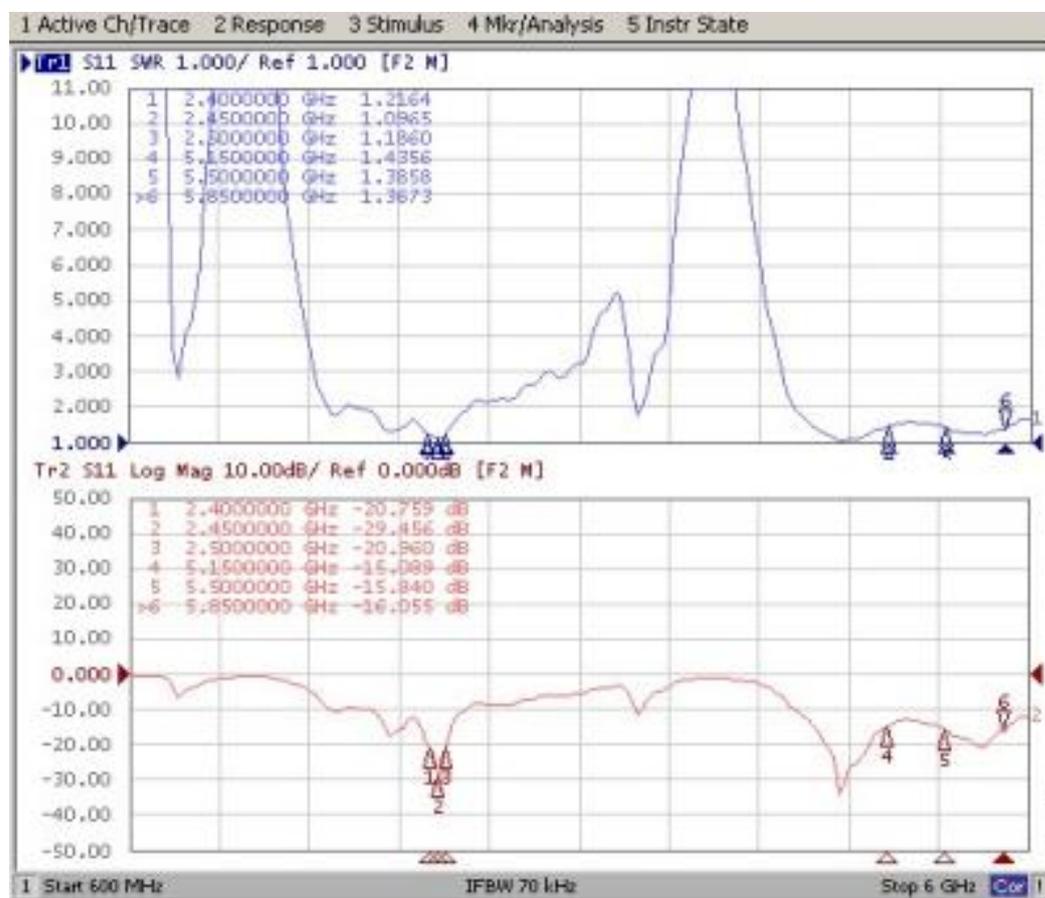
3. Test equipment

	Test items	Test equipment
<b>S Parameter</b>	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
<b>The whole machine of Passive parameters</b>	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
<b>The whole machine of Active parameters</b>	1.TRP 2.TIS	1.3D microwave darkroom (5m*5m*5m) 2.Comprehensive test instrument (CMW500)



## 4. Antenna S11

Frequency(MHz)	VSWR	Return Loss(dB)
2400	1.21	-20.75
2450	1.09	-29.45
2500	1.18	-20.95
5150	1.43	-15.08
5500	1.38	-15.84
5850	1.36	-16.05



\* Voltage Standing Wave Ratio(VSWR)

Return Loss(RL)

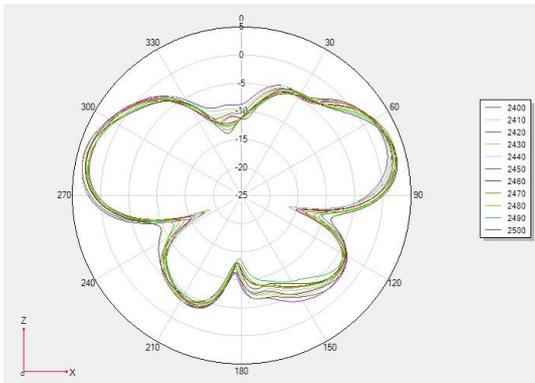
$$RL=20*\log_{10}[(VSWR+1)/(VSWR-1)]$$

## 5. Antenna efficiency and gain

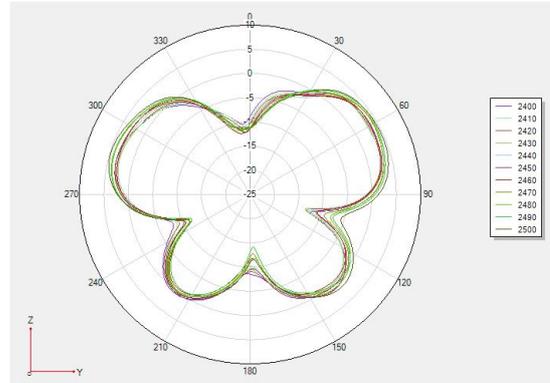
Frequency/Mhz	Efficiency / dB	Efficiency / %	MaxGain/dBi
2400	-0.87	81.85	4.23
2410	-0.98	79.8	4.24
2420	-0.77	83.75	4.25
2430	-0.95	80.35	3.58
2440	-0.84	82.41	3.52
2450	-0.99	79.62	3.89
2460	-1.26	74.82	3.6
2470	-1.08	77.98	4.64
2480	-1.14	76.91	4.54
2490	-1.08	77.98	4.57
2500	-1.13	77.09	5.12
5150	-0.92	81.07	4.8
5200	-1	79.99	4.57
5250	-0.94	81.03	4.67
5300	-1.03	79.47	4.66
5350	-0.96	80.68	4.95
5400	-1.16	77.28	5.03
5450	-1.14	77.61	5.32
5500	-1.17	77.11	5.91
5550	-1.28	75.31	6.14
5600	-1.38	73.71	5.93
5650	-1.48	72.14	5.39
5700	-1.44	72.76	5.63
5750	-1.44	72.76	5.58
5800	-1.23	76.12	6.16
5850	-1.22	76.29	6.05

6. Antenna 2D/3D radiation pattern

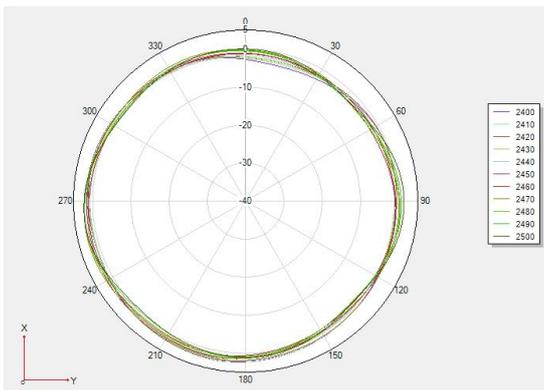
2.4G-Antenna 2D/3D Radiation Pattern



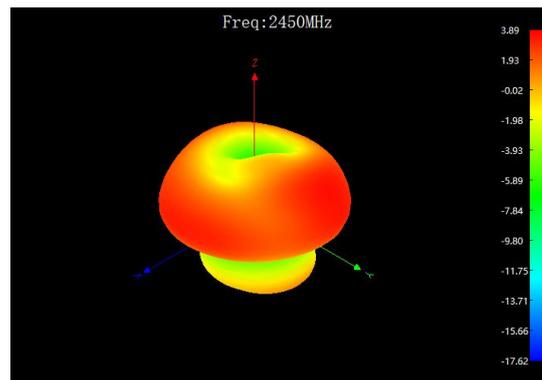
**XZ**



**YZ**

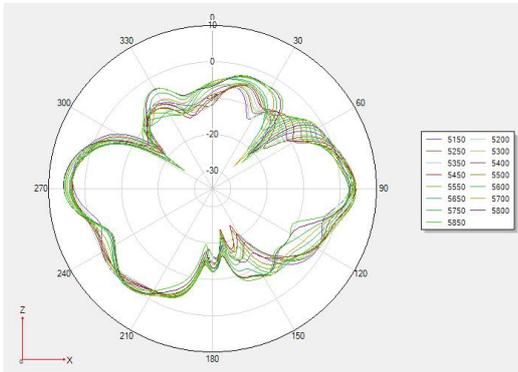


**XY**

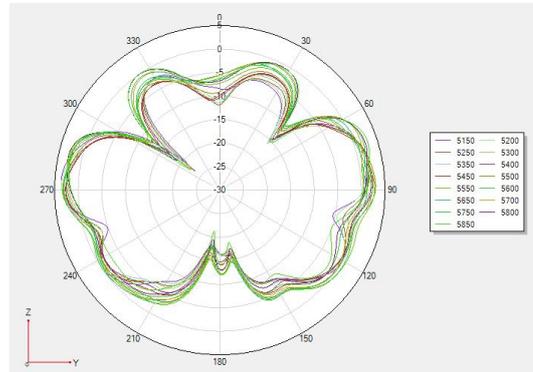


**XY**

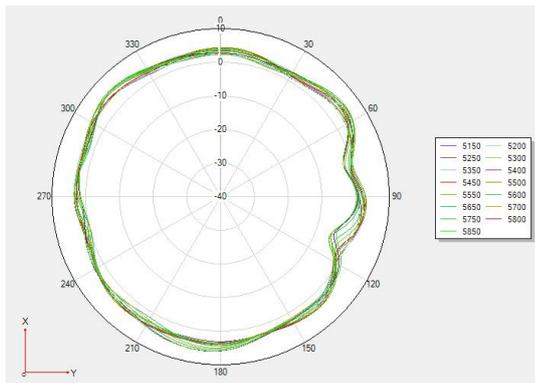
5.8G-Antenna 2D/3D Radiation Pattern



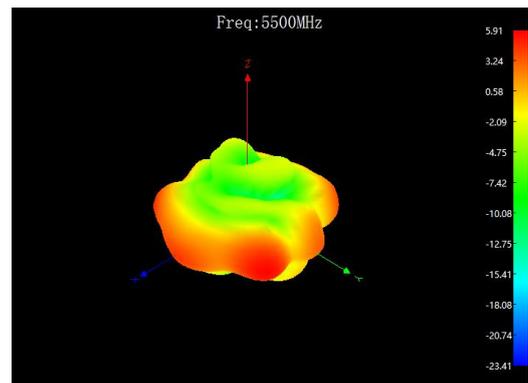
**XZ**



**YZ**



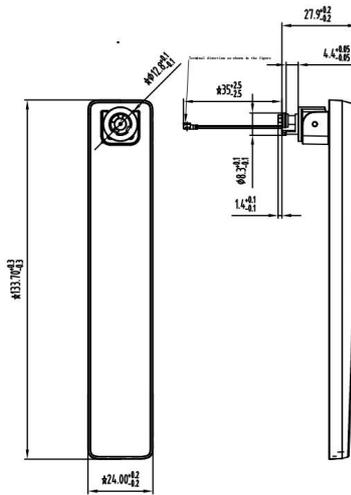
**XY**



**XY**

7. Full size test report

<b>Full dimensional inspection report</b>			
customer name	Anker	drawing number	V02
project name	External antenna	data unit	mm
Part code/material number	UB02C35W2D5577A	examination date	2025.5.23



order number	dimensional requirement	survey tools	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	judge	Customer comments, review comments
1	35±2.5	steel rule	33.99	34.95	34.95	34.95	34.58	OK	
2	133.7±0.3	callipers	133.73	133.74	133.73	133.75	133.72	OK	
3	24±0.2	callipers	24.03	24.02	24.03	24.05	24.04	OK	
4	27.9±0.2	callipers	27.95	27.94	27.93	27.94	27.93	OK	
5	12.8±0.1	callipers	12.84	12.83	12.82	12.83	12.82	OK	
6	8.3±0.1	callipers	8.33	8.32	8.32	8.33	8.34	OK	
7	4.4±0.05	callipers	4.42	4.41	4.43	4.42	4.41	OK	
8	1.4±0.1	callipers	1.44	1.43	1.42	1.43	1.44	OK	

Approved: Huangtu Fang;

Reviewed: /;

Inspector: Lu Yingxin.

## 8.CPK Test Report

CPK report													
Process Capability Index Report													
customer name	Anker			project stage	MP			report number	20250052301		Auditors	Zhu Zhi Jun	
project name	T8708			drawing number	A1			Testing personnel	Luk King-sin		date	2025-5-23	
Component name/section	UB02C35W2D5577A			data unit	mm			Test date	2025-5-23		page number	1	
Size number	1	2	3	4	5	6	7	8					
Size standards	133.7	24	12.8	35	27.9	8.3	4.4	1.4					
upper deviation	0.3	0.2	0.1	2.5	0.2	0.1	0.05	0.1					
lower deviation	-0.3	-0.2	-0.1	-2.5	-0.2	-0.1	-0.05	-0.1					
USL	134	24.2	12.9	37	28.1	8.4	4.45	1.5					
LSL	133.4	23.8	12.7	33	27.7	8.2	4.35	1.3					
survey tools	OMM	OMM	OMM	OMM	OMM	OMM	OMM	OMM					
1	133.75	24.03	12.83	33.99	27.96	8.33	4.41	1.43					
2	133.74	24.03	12.82	34.95	27.95	8.32	4.42	1.42					
3	133.73	24.04	12.82	34.95	27.94	8.33	4.42	1.43					
4	133.75	24.05	12.81	34.95	27.94	8.32	4.41	1.44					
5	133.74	24.02	12.83	34.93	27.86	8.32	4.42	1.43					
6	133.67	24.02	12.82	34.58	27.95	8.33	4.42	1.43					
7	133.75	24.03	12.84	34.95	27.95	8.34	4.41	1.42					
8	133.74	24.03	12.83	34.95	27.94	8.33	4.41	1.44					
9	133.72	24.05	12.84	33.98	27.95	8.33	4.42	1.43					
10	133.68	23.96	12.84	34.59	27.96	8.32	4.41	1.42					
MAX.	133.750	24.050	12.840	34.950	27.960	8.340	4.400	1.440					
MIN.	133.670	23.960	12.810	33.980	27.860	8.320	4.410	1.420					
AVG	133.727	24.026	12.828	34.682	27.940	8.327	4.415	1.429					
STDEV	0.029	0.025	0.010	0.396	0.029	0.007	0.005	0.007					
Range	0.080	0.090	0.030	0.970	0.100	0.020	-0.010	0.020					
Ca	9.00%	13.00%	28.00%	15.90%	20.00%	27.00%	30.00%	29.00%					
Cp	3.44	2.62	3.23	1.68	2.29	4.94	3.16	4.52					
Cpk	3.13	2.28	2.32	1.42	1.84	3.61	2.21	3.21					
Result (Grade)	A+	A+	A+	A	A+	A+	A+	A+					
product percent of pass	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					
A+	Cpk>1.67												
A	1.33< Cpk ≤												
B	1.0 < Cpk ≤												
C	0.67< Cpk ≤1												
D	Cpk ≤ 0.67												