
Kunshan Ruixiang Communication Technology Co., Ltd.

Antenna Specification Sheet

2026/3/6

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City, Guangdong Province

Version Revision History:

Version	Editor	Date	Revision History
T01	Guanjiahao	March 6, 2026	First edition

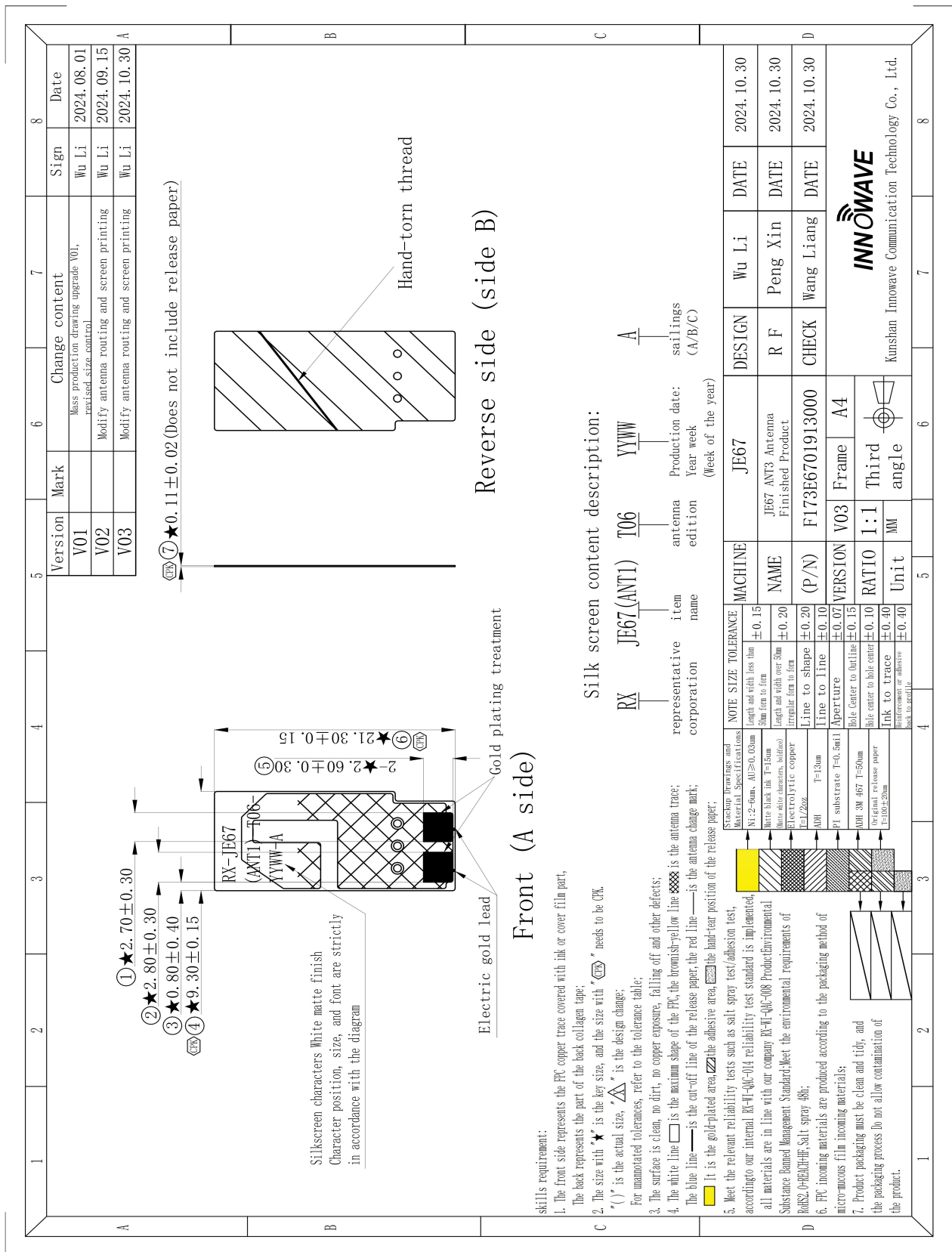
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1 Specification Sheet

Main Product Specifications	
Manufacturer internal model	F173E6701913000
Frequency band	2400~2500MHz
Type	Built-in antenna
Technology	FPC
Measurement	21.30*9.30*0.11mm
Outward appearance	Black FPC
Characteristic impedance	50Ω
Polarization	Linear polarization
Voltage standing wave ratio	< 3.0@2400~2500MHz
Axis ratio	Not have
Efficiency	> 50% @2400~2500MHz
Gain	3.13dBi@2400~2500MHz
Directional map	See the report
Active input	Passive
Connection method	thimble
Feeder specifications	Domestic 1st generation terminal
Power capacity	1W
Salt spray grade	48H
Operating Temperature	-40~85℃
Storage temperature	15 to 28℃
Power capacity	1w
High and low temperatures	-40~85℃
Remarks	None

2 2D Product Diagram



3. Equipment List

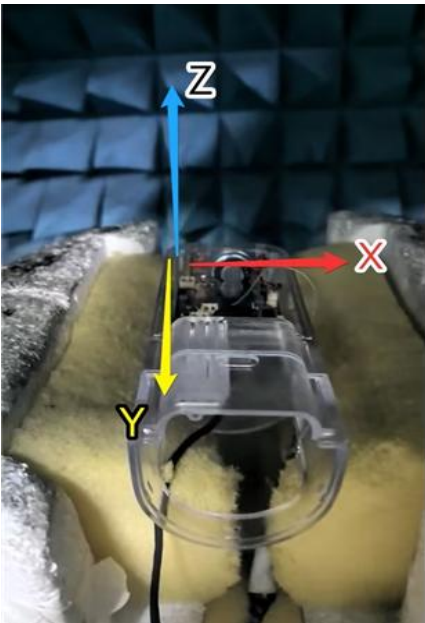
Device Name	Manufacturer	Model	Serial number	Calibration Date	Expiration Date
Anechoic chamber	GTS	RayZone 1800	CT10114450A2045	2024/11/01	2024/11/30
Network analyzer	Keysirht	E5071C	MY46528315	2024/11/01	2024/11/30

3.2 Test Configuration Diagram

无

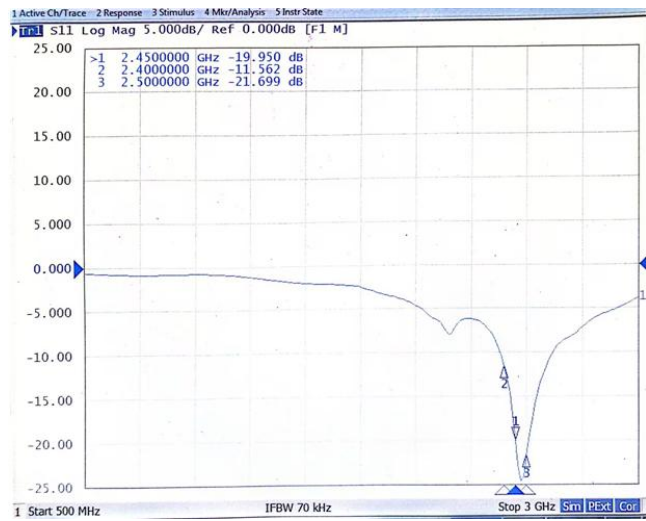
3.3 Passive testing

3.3.1 Equipment layout diagram (can be provided as a separate attachment if there are special circumstances)

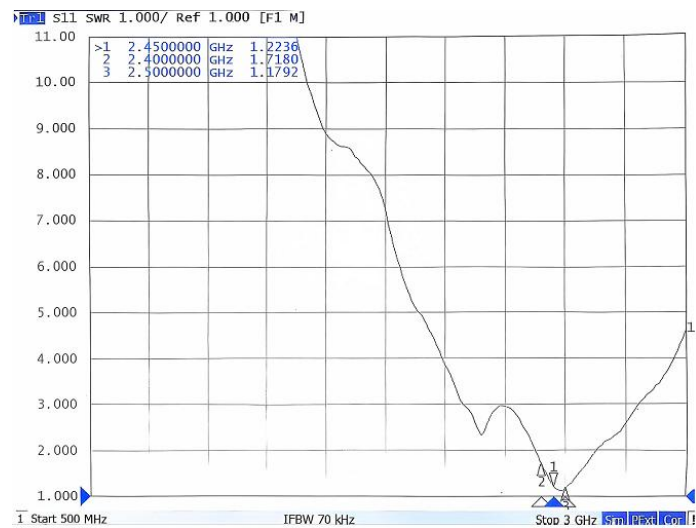


4.1Return Loss & VSWR

S11 图:



SWR 图:

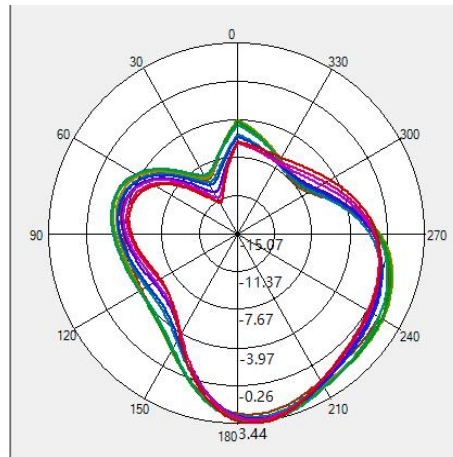


Frequency (MHz)	2400	2450	2500
Echo loss (dB)	-11.56	-19.95	-21.69
VSWR	1.71	1.22	1.17

Freq (MHz)	Effi (dB)	Effi (%)	Gain (dBi)
2400	-1.83	65.68	2.42
2410	-1.49	71.03	2.73
2420	-1.35	73.21	2.89
2430	-1.29	74.27	2.99
2440	-1.32	73.79	3.03
2450	-1.95	63.77	2.53
2460	-1.98	63.42	2.7
2470	-2.36	58.08	2.64
2480	-2.51	56.16	2.73
2490	-2.71	53.58	2.83
2500	-2.59	55.1	3.13

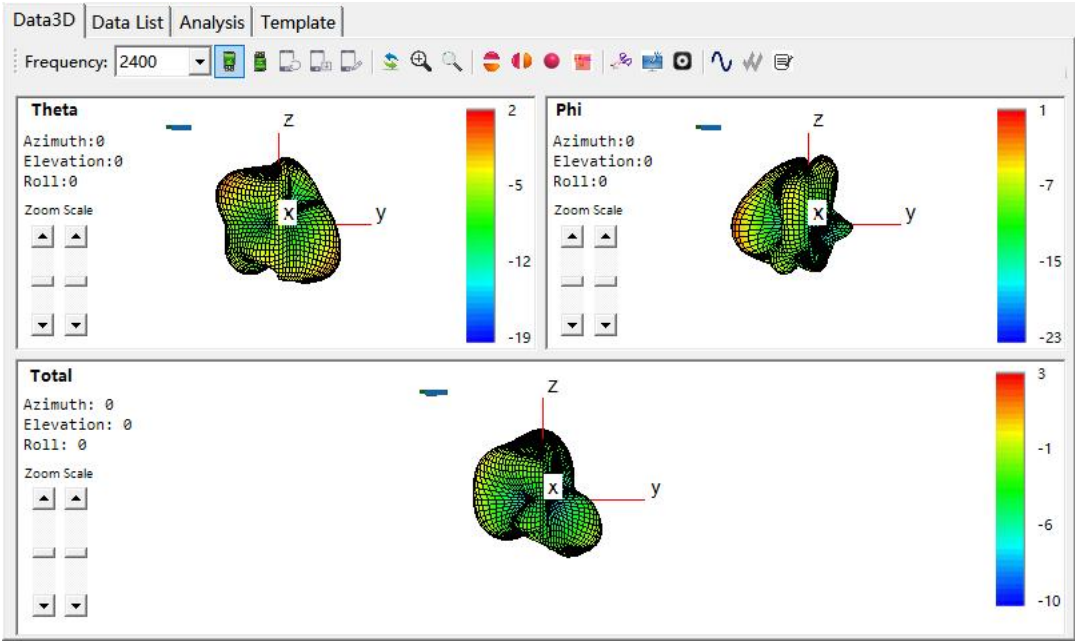
4.2 2D directional diagram(all gain units in the figure are in dBi)

Theta=90° :

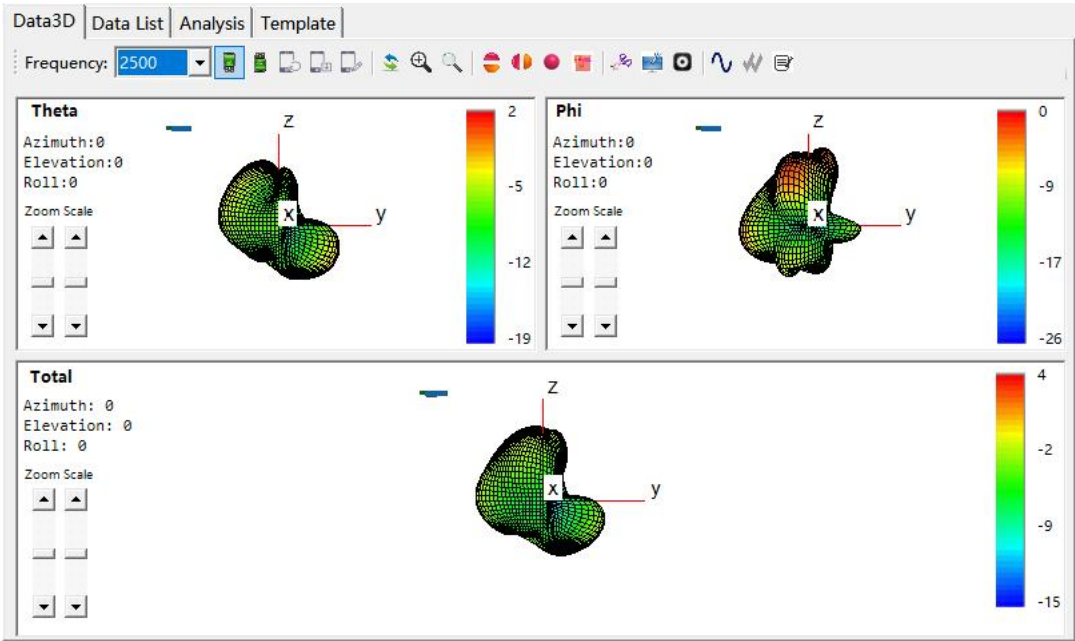


4.3 3D Direction Map

2400MHz:



2500MHz:



4.4 Active circuit test (for antennas with the source circuit part, if not omitted)



JE67 Reliability Test Report

Experiment Report Number: 20251222007

Product Name: ANT3-FPC

Color: Black

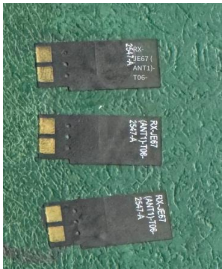
Production Date: 2025.12.22

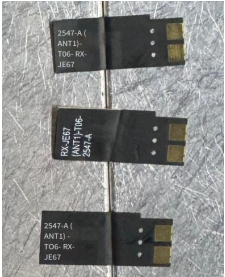
Experimenter: Huang Kailin		Confirmation: Li Guitao		Review:	
Serial number	Test Project	Sample quantity	Experimental Results		Remarks
1	Temperature shock	3PCS	OK		
2	onstant Damp Heat	3PCS	OK		
3	Salt spray test	3PCS	OK		
4	Adhesion Test	3PCS	OK		
5	Bending (antenna)	3PCS	OK		

experiment name	Temperature Shock		
Project	JE67	Production Date	2025.12.22
Product Name	ANT3-FPC	Purpose of the Experiment	Evaluate the product's ability to withstand rapid temperature changes
Color	Black	Experimenter	Huang Kailin
Sample quantity	3PCS	Experiment Receipt Date	December 22, 2025
Tool:			
Thermal Shock Chamber			
Test Method: Take the product, place it at -40° C for 30 minutes, transfer to 80° C within 5 minutes and hold for 30 minutes. Repeat this process for 48 cycles. Remove the sample from -40° C and allow it to recover at room temperature for 2 hours before inspection.			
Acceptance Criteria: RF performance is normal, appearance shows no abnormalities.			
Test results:			
Test result photo			
Final verdict:	OK		
Note:	Form Number: RX-FR-QAC-068 A0		

Experiment Name	Constant Damp Heat		
Project	JE67	Date of Production	2025.12.22
Product Name	ANT3-FPC	Purpose of the Experiment	Performance and Appearance Durability Under Temperature and Humidity Conditions
Color	Black	Experimental personnel	Huang Kailin
Sample Quantity	3PCS	Experiment Receipt Date	December 22, 2025
Tool:			
Constant temperature and humidity chamber			
Test Method:			
Retrieve the product at 60℃±2℃ and 95±2% humidity: Maintain for 48H: Rest for 2H			
Acceptance Criteria:			
RF performance is acceptable, coating appearance shows no abnormalities, with no peeling, cracking, discoloration, or other irregularities.			
Experimental Results:			
Photo of test results			
Final judgment:	OK		
Note:	Form No. : RX-FR-QAC-068 A0		

Experiment Name	Salt spray test		
Project	JE67	Production Date	2025.12.22
Product Name	ANT3-FPC	Purpose of the experiment	Testing the product's corrosion resistance capability
Color	Black	Experimental personnel	Huang Kailin
Sample quantity	3PCS	Experimental Receipt Date	2025.12.22
Tool: Salt spray chamber 			
Test Method: Take the product, place it in an environment of $35\pm3^{\circ}\text{C}$, with a pH range of 6.5-7.2 and a saltwater concentration of $5\%\pm1\%$, and spray continuously for 48 hours. After removal, allow the sample to air dry naturally indoors for 0.5-1 hour before cleaning. Then, gently rinse the sample with clean running water at a temperature not exceeding 40°C to remove any residual salt spray solution from the surface. Immediately afterward, blow-dry the sample using air at a pressure not exceeding 200 kPa from a distance of approximately 300 mm, wipe it clean, and inspect the sample's appearance.			
Acceptance Criteria: RF qualified, the antenna/coating surface should be free from rust, discoloration, and peeling.			
Test Results:			
Test result photo			
Final verdict:	OK		
Note:	Form Number: RX-FR-QAC-068 A0		

Experiment Name	Adhesion test		
Project	JE67	Production Date	2025.12.22
Product name	ANT3-FPC	Purpose of the Experiment	Confirm the font, ink layer adhesion on the surface
Color	Black	Experimental personnel	Huang Kailin
Sample Quantity	3PCS	Date of experiment receipt	2025.12.22
Tool: 3M600#			
Test Method: Take the product, apply 3M 600# tape to the test area, smooth it down with a finger, let it sit for 60±10 seconds or more, then quickly lift the tape from the other end in a vertical direction. Repeat the same test three times at the same location.			
Acceptance criteria: The font/ink layer must not show significant detachment.			
Experimental results:			
Test result photos			
Final determinat	OK		
Note:	Form Number: RX-FR-QAC-068 A0		

Experiment name	Bend (antenna)		
Project	JE67	Production Date	2025.12.22
Product Name	ANT3-FPC	Purpose of the Experiment	Confirm the bending resistance of the gold finger.
Color	Black	experimenter	Huang Kailin
Sample quantity	3PCS	Experiment Receipt Date	2025.12.22
Tool: Bending jig			
Test Method: Take the product and bend it 180° vertically along the gold fingers, repeating this process at least twice.			
Acceptance Criteria: Gold finger without chipping, no delamination from substrate			
Experimental results:			
Test result photos			
Final decision:	OK		
Note:	Form Number: RX-FR-QAC-068 A0		

Packing

Customer Part Number:	/	Product Name:	JE67 ANT1 Antenna Finished Product
Product Specification:	JE67	Packing Material:	Carton
Packing Quantity:	1 carton	Packing Method:	Micro-adhesive film packaging, 1000 PCS per bag
Packing Quantity :	30000		

Figure 1: Single-piece Packaging



Figure 2: Carton Packing Method



Fig. 3: Packaging Box Views (Front, Side, Top)



Fig. 4: Outer Box Label / RoHS Standard



Remarks:

- 1.Products are manufactured as single units and shipped in PE bags, Packing quantity: 30,000 PCS per carton (actual quantity shall prevail).
- 2.Cartons sealing: Use cartons (outer carton without LOGO). Fold the carton and seal the bottom in an I-shape.
- 3.Quantity counting: 1,000 PCS per bag, as shown in Figure 2.
- 4.Packing into cartons: 30 bags per carton, 30,000 PCS per carton. Place neatly into the carton. (Affix quantity label and environmental label on the middle pack.For residual cartons, mark actual quantity and attach residual label.)
- 5.Affix outer box label: Remove the warehouse label.
- 6.Attach the shipping label uniformly to the upper left corner of one side of the carton.
- 7.Paste the material batch number below the label, and affix “RoHS” and “HF” marks on the right side, as shown in Figure 2.
6. Inspection: Confirmed and stamped by Quality Department.
- 7.Final sealing: Seal the carton with transparent tape in I-shape.

Notes:

- 1.Each carton shall be packed according to the specified quantity.
- 2.For incomplete cartons, fill the empty space with suitable filling materials to prevent movement of products inside.
- 3.When using recycled cartons, remove all old labels before applying new ones.
- 4.Cartons containing inspection reports, residual quantities, or other verified materials shall be clearly marked on the outer carton.
- 5.Any non-conformities identified by the inspector shall be corrected immediately.
- 6.Labels shall include item code, customer part number rule, packing quantity, purchase order number, supplier code, supplier name or LOGO, date, etc. (See figure on the right.)

- 1.The outer packaging shall be neat and clean, without any defects such as graffiti, dirt, damage or deformation.
- 2.The inner and outer labels shall use the same template. The information on the label shall be clear and legible, and the label shall be pasted neatly. The actual quantity shall be consistent with the quantity on the label, and the inclination angle shall not exceed 10 degrees.
- 3.No missing or wrong labeling.

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