

Shenzhen Panlong Communications Technology Co., Ltd.

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Antenna Specifications

Customer :	BYM		
Model	TD-P165	Number :	P165
Number:			
Product	Half-and-half	Product	GPS/ 1575MHz
Materials:	electrolytic	Description	BT
	copper	:	
Part Number :	P165	Date:	2026-06-28
Material Code:	P165		

	Quality	Structure	Radio Frequency

1.Graphical Reference.....

2.Performance Testing.....

 2.1Specifications and Standards.....

3.(VSWR) Testing.....

 3.1 Test Setup.....

4.Test Data.....

 4.1 TD-P165 GPS BTPassive Test Data.....

5.Antenna Pattern.....

6.Product Test Report.....

7.Antenna Matching Circuit.....

1.Graphical Reference

TD-P165

Number	P165
Model Number	P165
Frequency band	GPS BT
GPS Frequency Bands	1575MHz
Input Impedance	50Ω
Allowed Power	5W
Operating Temperature Range	-25 ~ +65 ℃
Storage Temperature Range	-40 ~ +85 ℃

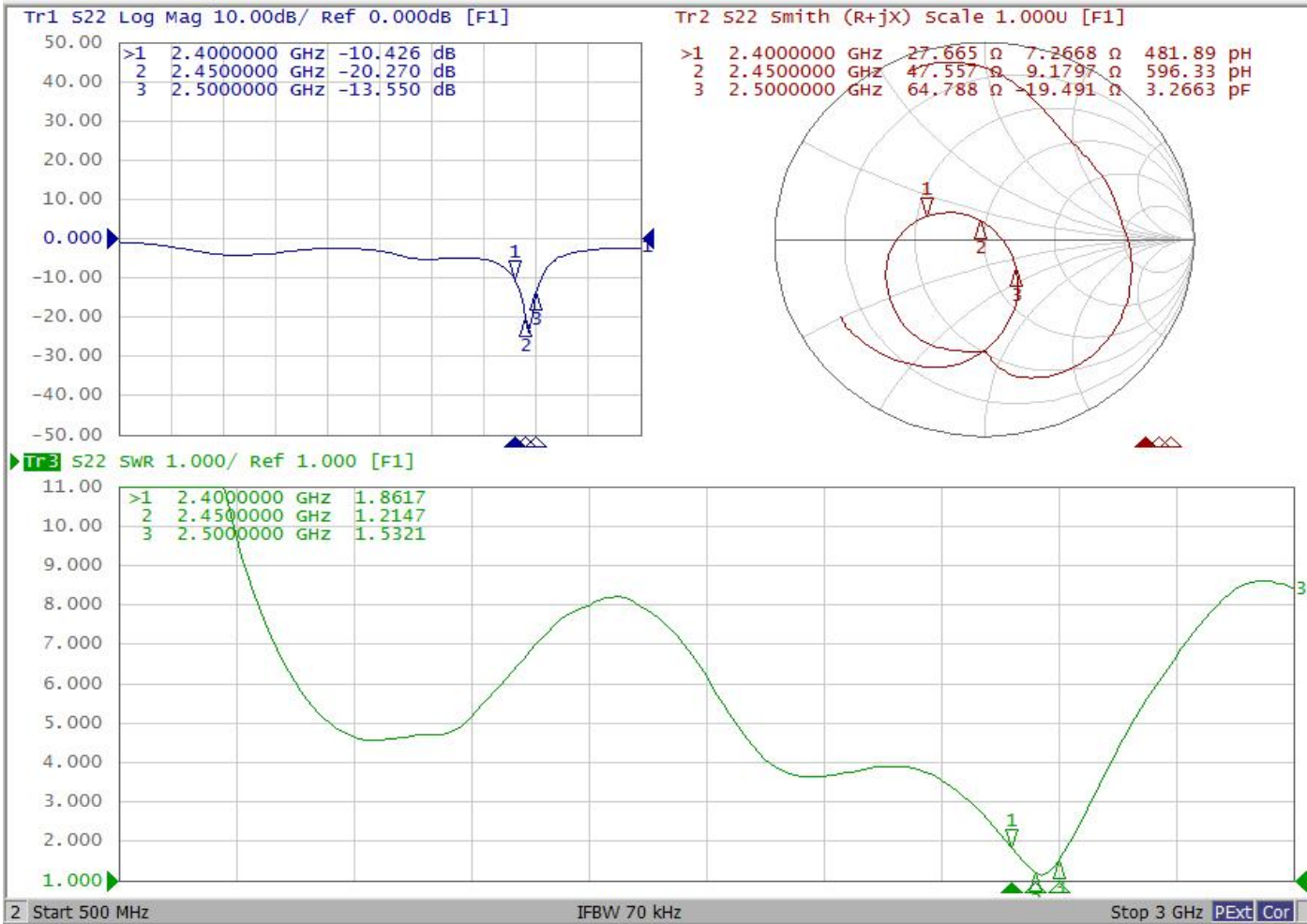
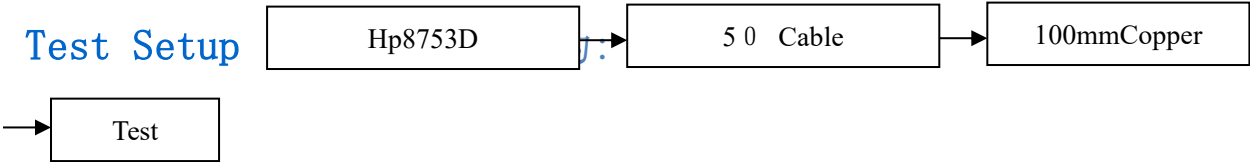
2.Electrical Performance Testing

2.1Specifications and Standards

TD-P139	Frequency (MHz)	VSWR	Frequency (MHz)	VSWR
Frequency band	Transmitter End		Receiving End	
GPS	1550-1600			

3. VSWR (Voltage Standing Wave Ratio) Testing

3.1 Test Setup



4Test Data

4. 4.1 TD-P165 GPS 2.4G BTPassive Test Data

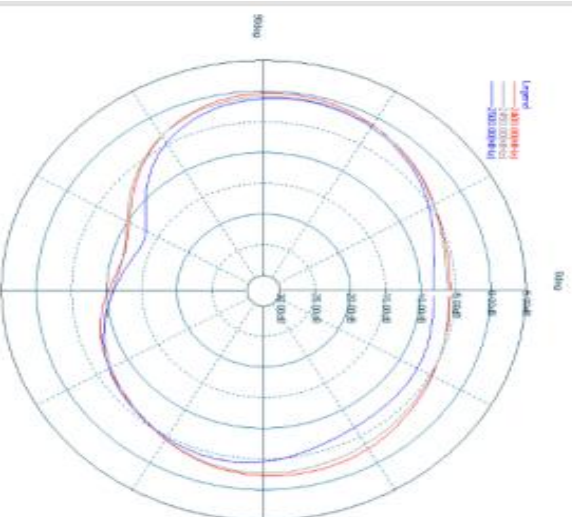
GPS

frequency	Efficiency /	Efficiency /	Frequency	MaxGain/c	AvgGain/dBI
1550	-10.32	9.29	1550	-7.35	-10.32
1560	-10.57	8.77	1560	-7.56	-10.57
1570	-10.52	8.87	1570	-7.39	-10.52
1580	-10.21	9.53	1580	-6.95	-10.21
1590	-10.72	8.47	1590	-7.24	-10.72
1600	-11.04	7.87	1600	-7.3	-11.04

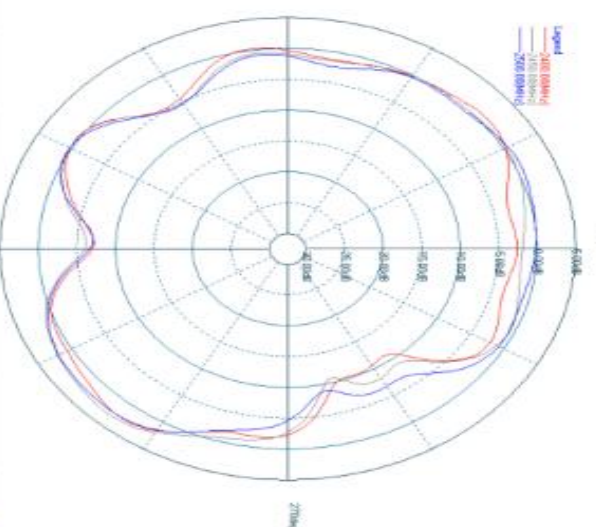
BT

Frequency	Efficiency	Efficiency . dB	Gain . dB
2400	26%	-5.79	2.58
2410	25%	-6.00	2.48
2420	25%	-6.03	2.87
2430	25%	-6.02	3.17
2440	25%	-5.95	3.22
2450	26%	-5.80	3.25
2460	26%	-5.51	2.54
2470	26%	-5.79	2.55
2480	25%	-6.00	2.64
2490	24%	-6.26	2.77
2500	24%	-6.26	2.60

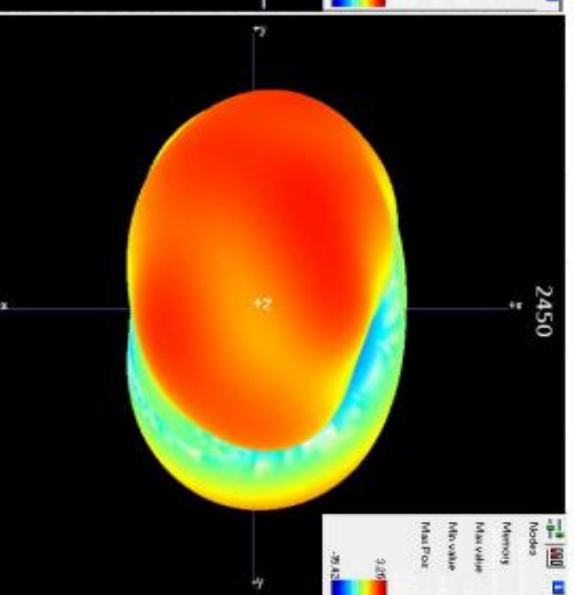
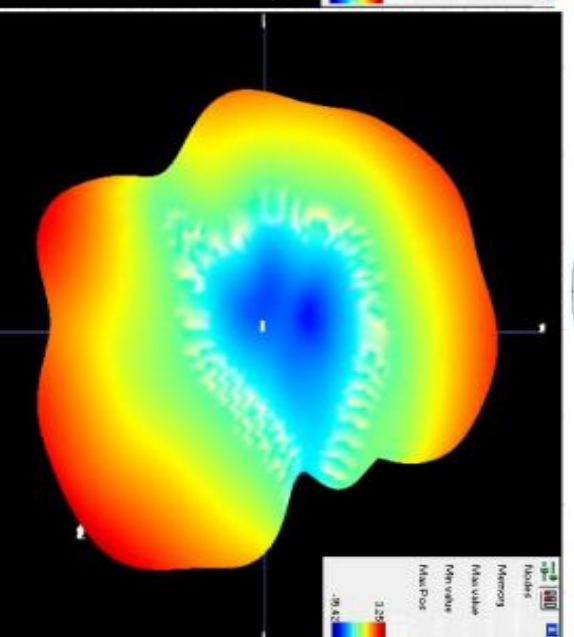
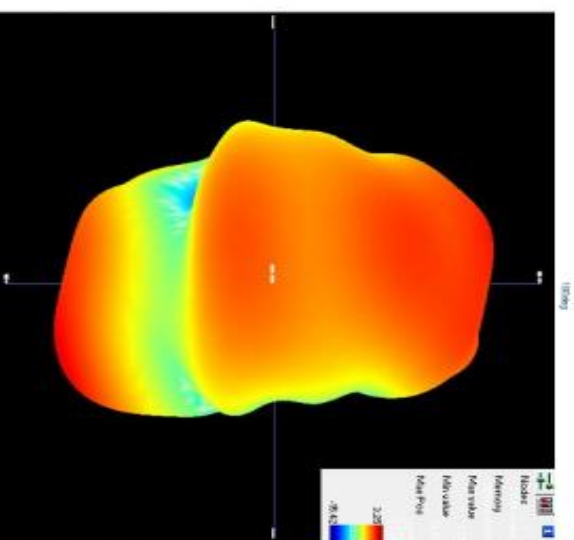
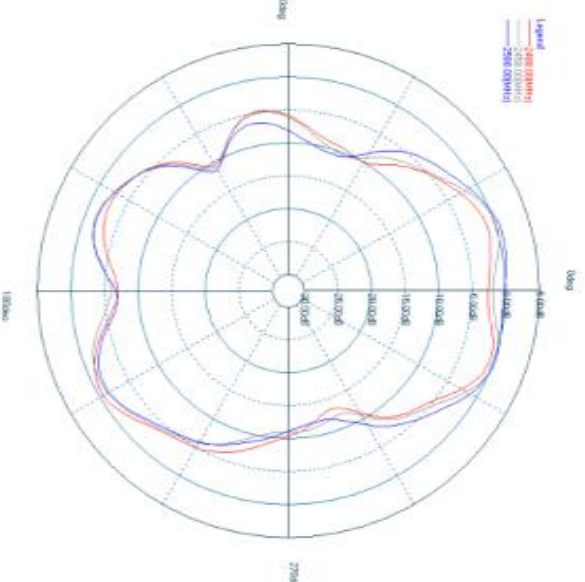
XOZ



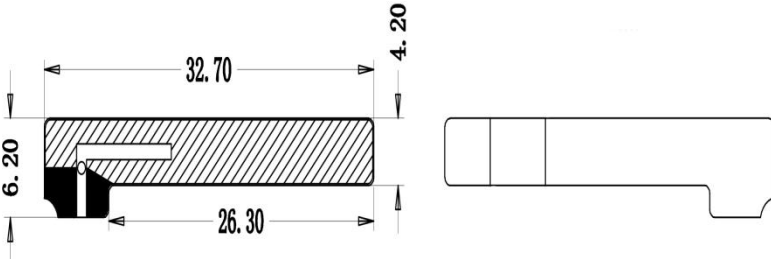
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XOY



6. Product Inspection Report

Comprehensive Evaluation	☒ OK ☐ NG			Confirm	Review				
Model Number	P165	Illustration: 							
Product Name	GPS BT Antenna								
Part Number									
Shipment Date	2026-06-28								
一、 Visual Inspection:									
Inspection Items	Random Inspection	Test Results							
1. Surface impurities and dirt	10PCS	OK							
2. Excess Adhesive		OK							
3. Scrap		OK							
4. Tear		OK							
5. Gold-Plated Oxidation		OK							
二、 Reliability Testing:									
Test Items	Standards	1	2	3	4	5	Test Results		
1. Adhesion Test	The ink must not peel off	No	No	No	No	No	OK		
2. Salt Spray Test Conditions	The gold surface shows no signs of corrosion	No	No	No	No	No	OK		
3. Abrasion Test									
三、 Dimensions:									
Location	Reference	Tolerance+ (mm)	Tolerance- (mm)	1	2	3	4	5	Test Results

	Value (mm)								
	15.40	0.20	0.20	15.30	15.40	15.40	15.40	15.40	OK
	14.60	0.20	0.20	14.60	14.60	14.60	14.60	14.70	OK
									OK
									OK