

Product Number: 3101504698

Product Name: Antenna

TP-LINK®

TP-LINK®

Antenna Specification



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Product Number: 3101504698

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Specification for Approval

Date: _____

File No.: _____

Version: 1.0

Customer: _____ / _____

Customer P/N: _____ / _____

TP-LINK P/N: 3101504698

Description:

Antenna|2.4-2.5GHz|1.83 dBi|LP|Omni|2W|Weld|80mm|D1.13mm|H200|无|1243-JW080REV1.0|绿色|不防水|[自制]

TP-LINK Checked By:
Customer Approved By:

TP-LINK®

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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2.4~2.5GHz
Impedance	50 Ohm
VSWR	≤ 2.0
Antenna Gain	1.83 dBi@2.4~2.5GHz
Max Input Power	≤ 2W
Polarization	Linear
Radiation pattern	Omni-Directional
B. Material & Mechanical Characteristics	
Material of Radiator	PCB(FR-4+Cu)
Cable Type	O.D. 1.13mm (Black)
Connector Type	Weld
Connector Pull Test	1.5 kg
C. Environmental Characteristics	
Operation Temperature	-10°C ~ +60°C
Storage Temperature	-40°C ~ +70°C

2. Characteristics and Reliability Test

Test Items	Test Condition and Procedure	Requirements
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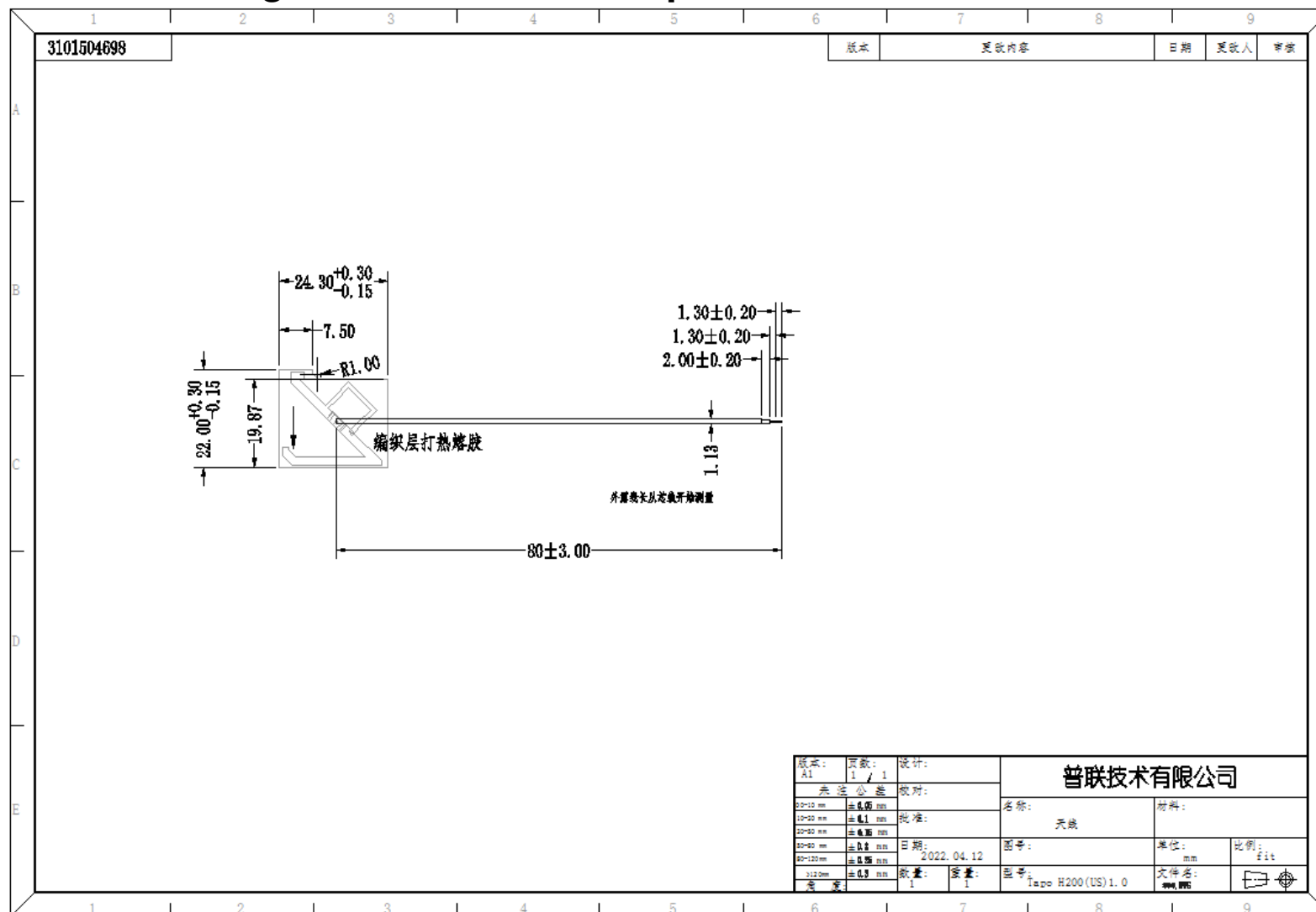
C1	VSWR	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	MIL-STD-202G, 201 A Amplitude: 0.03 inch (0.76mm); Freq.: 10 to 55 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol. <=5%
M2	Random Drop	Height: 1.5 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol. <=5%
M3	Drop Test	Combine DUT with router; Height: 0.6 Meter; 1 direction; 3 times for the direction	1. No parts separated 2. Frequency Tol. <=5%
M4	Terminal- Pull Test	MIL-STD-202G, 211A, cond. A Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol. <=5%
M5	Dimension	Inspection of dimension, color, material, package, surface process	Directive DUT specification
E1	Salt Spray	SE-GS-90T Temp: 35°C; RH: 93%±3%; NaCl solution proportion: 1.026 ~ 1.041; Time: 12 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. <=5%
E2	Thermal Shock	1 Cycle: -20°C (30 minutes) to +70°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. <=5%
E3	Life (High Temp.)	MIL-STD-202G, 108A, cond. A Temp: 70°C; Time: 8 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. <=5%

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3. Mechanical Drawing and Material Description



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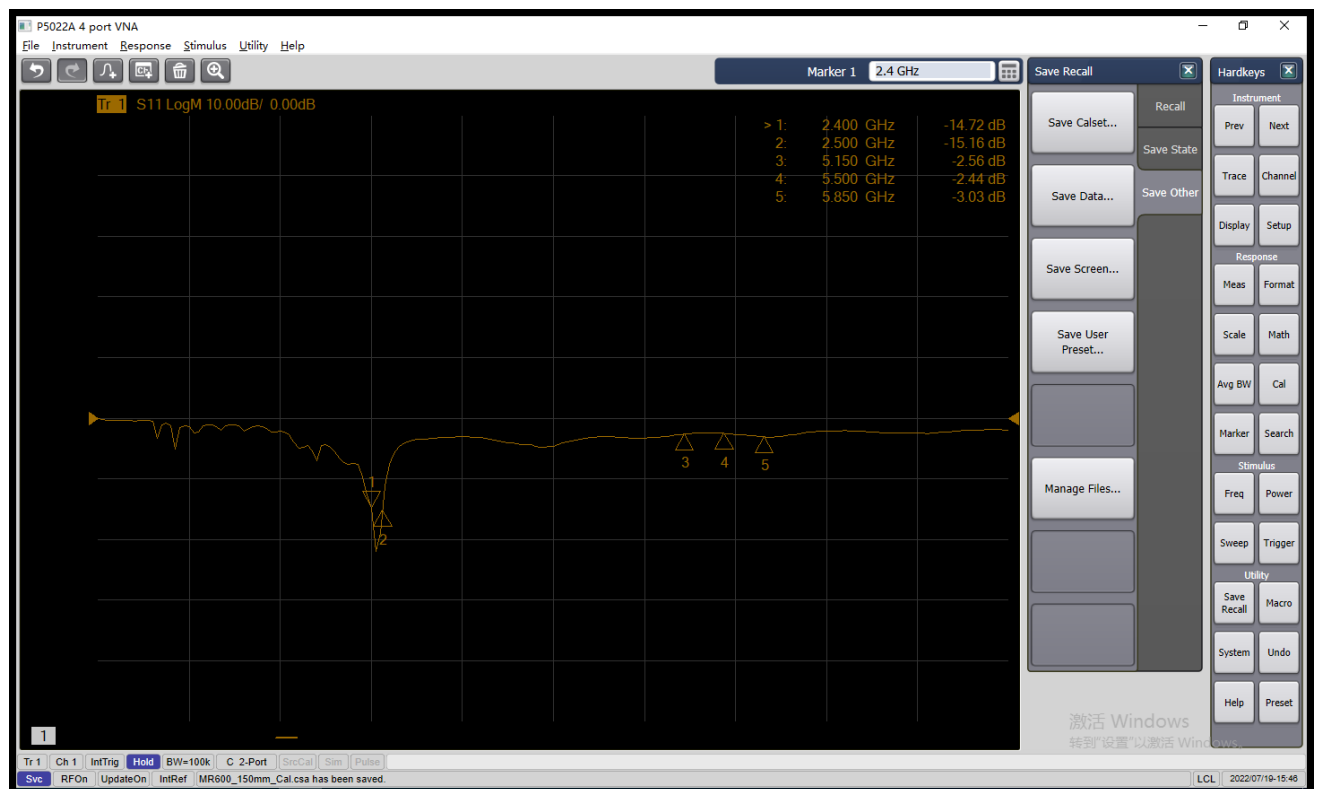
Product Name: Antenna



4. RoHS Test Report

N O .	Product Model	Constit uents	Material	Test Result for RoHS-corresponding Substance						PFOS	Halogen				Series No.	Date	Title	Test Agent	
				Cd	Pb	Hg	Cr(VI)	PBB s	PBD Es	PFOS	F	Cl	Br	I					
1	3120500035	Cable	Skin	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		374000	N.D	N.D	N.D	RLSHD000593720060	2011/04/25	Cable	CTI	
			Isolated layer	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		372000	N.D	N.D	N.D	RLSHD000593720060	2011/04/25	Cable	CTI	
			Mesh	N.D.	N.D.	N.D.	Negative								RLSHD000593720060	2011/04/25	Cable	CTI	
			Center Yarn	N.D.	N.D.	N.D.	Negative								RLSHD000593720060	2011/04/25	Cable	CTI	
3	2051500967	PCB	FR-4	N.D.	5	N.D.	N.D.	N.D.	N.D.		50mg/kg	50m g/kg	50m g/kg	50mg/ kg	NO.CANEC1512596206	2015/08/03	Sub	广州 SGS	

5. Antenna S-Parameters Measurement Data



以上驻波测试结果为天线配合 H200(US)整机的测试数据。

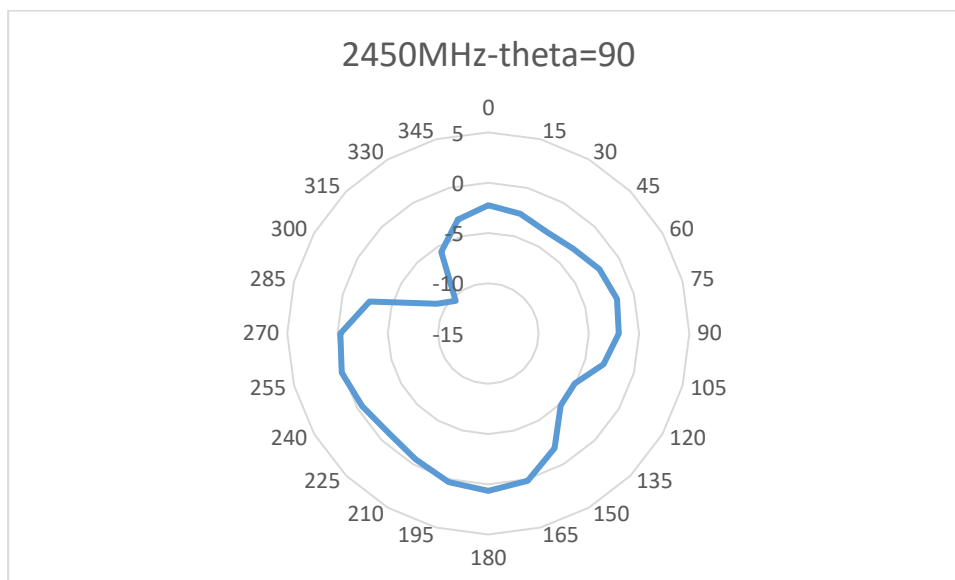
6. Antenna Radiation Pattern Measurement Data

Measurement Equipment Specification	
Microwave Chamber	ETS AMS-8923
Vector Network Analyzer	Agilent E5071C

2400~2500MHz

Freq. (GHz)	2.40	2.41	2.42	2.43	2.44	2.45	2.46	2.47	2.48	2.49	2.50
Effi. (%)	56.19	56.66	56.37	55.48	55.86	55.99	57.38	60.21	61.98	63.30	63.88
Gain (dBi)	1.83	1.65	1.43	1.22	1.26	1.22	1.30	1.48	1.44	1.44	1.43

Theta=90°



以上方向图测试结果为天线配合 H200(US)整机的测试数据。