

TP-LINK®

Antenna Specification



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Product Number: 3101504344

Product Name: Antenna

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Specification For Approval

Product Number: 3101504344

Product Name: Antenna

TP-LINK®

Date: _____

File No. : _____

Version: 1.0

Customer: _____ / _____

Customer P/N : _____ / _____

TP-LINK P/N: 3101504344

Description: Antenna|5.15-5.85GHz|1dBi|LP|Omni|2W||I-PEX|160mm|D1.13mm|HX-223|

无||2045-JI160REV1.0|绿色|不防水||蓝色线|自制件|扣于 J52|

TP-LINK Checked By:

Customer Approved By:

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I. Specification

Sample Photo



A. Electrical Characteristics

Frequency	5150~5850MHz
Impedance	50 Ohm
S.W.R.	<= 2.0
Antenna Type	Dipole
Antenna Gain	1.0dBi
Max Input Power	2 W
Polarization	Linear
Radiation pattern	Omni-Directional

B. Material & Mechanical Characteristics

Material of Radiator	Cu
Cable Type	O.D. 1.13mm (Black)
Connector Type	WELD
Connector Pull Test	3Kg

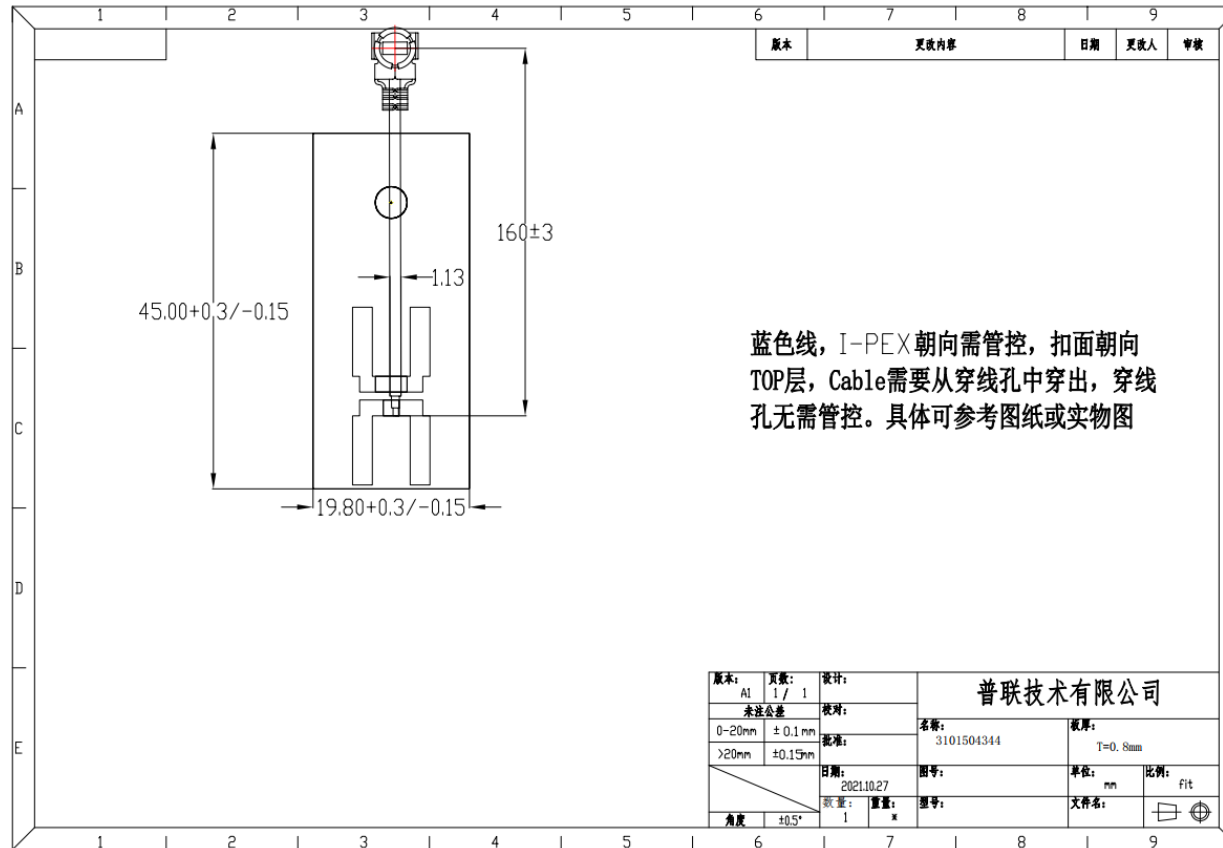
C. Environmental

Operation Temperature	- 40°C ~ + 65°C
Storage Temperature	- 40°C ~ + 70°C

II. Characteristics and Reliability Test

Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	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	Solderability	MIL-STD-202G, 210F, cond. A Solder iron: 350+- 10°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M5	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%
M6	Bend Test	3 angles: 0° ,45° ,90° .100 times for each angle	1. No Visual Damage 2. No Obvious shake
M7	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	1Cycle: -40°C (30 minutes) to +70°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. <=5%
E3	Life (HighTemp.)	MIL-STD-202G,108A, cond. A Temp: 70°C; Time: 8 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. <=5%

III. Mechanical Drawing and Material Description



Product Number: 3101504344

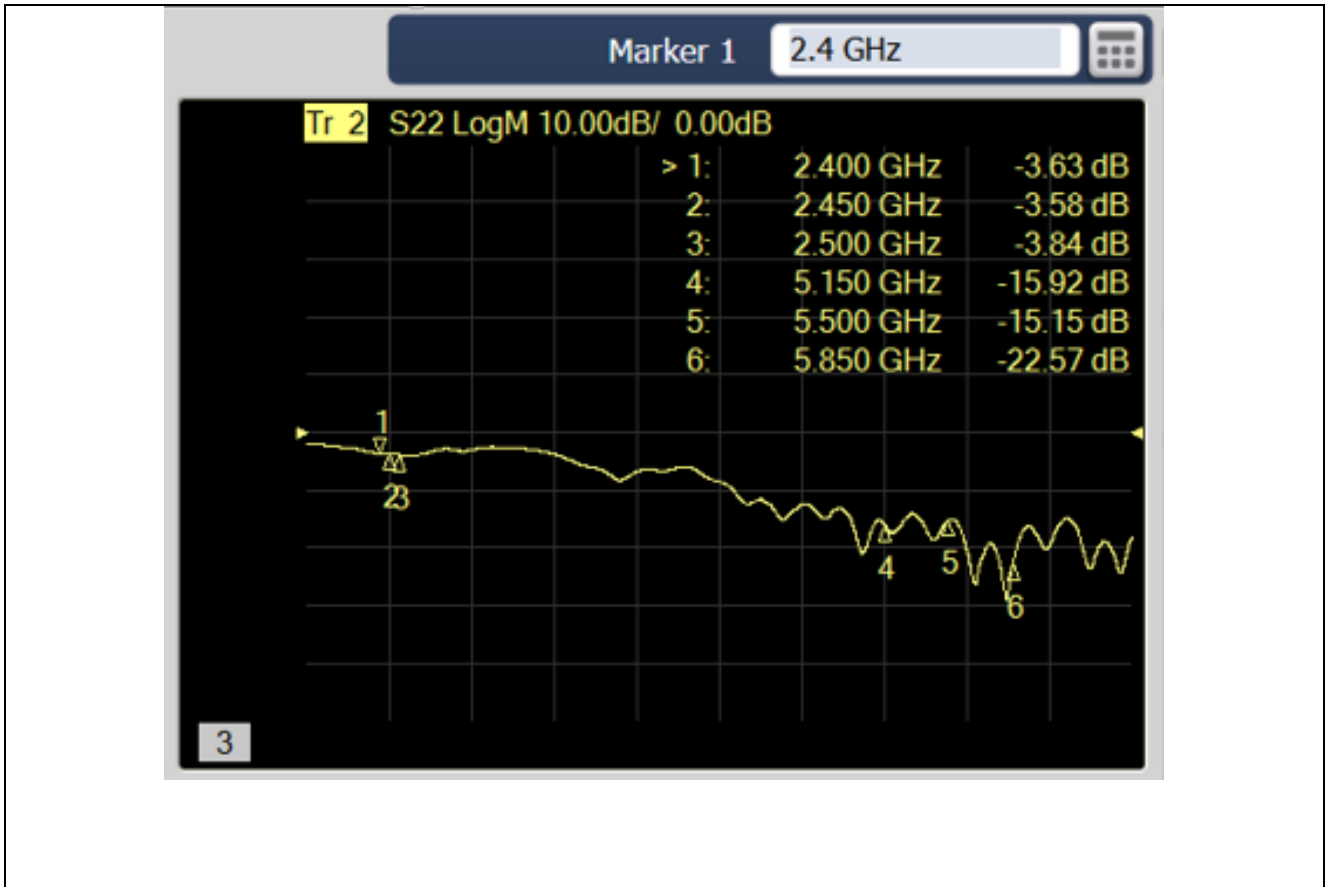
Product Name: Antenna



IV. RoHS Test Report

NO.	Product Model	Constituents	Material	Test Result for RoHS-corresponding Substance						PFOS	Halogen				Series No.	Date	Title	Test Agent													
				Cd	Pb	Hg	Cr(VI)	PBBs	PBDEs	PFOS	F	Cl	Br	I																	
1	3120500194	Cable	FEP	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	[REDACTED]	N.D.	N.D.	N.D.	N.D.	RLSHD000593720060	2011/04/25	Jacket	上海 SGS													
			FEP	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		N.D.	N.D.	N.D.	N.D.			Insulation	上海 SGS													
			Wire-TC	N.D.	N.D.	N.D.	N.D.	[REDACTED]	[REDACTED]		[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]			[REDACTED]	[REDACTED]	[REDACTED]	Outner conductor	CTI										
			Wire-TC	N.D.	N.D.	N.D.	N.D.													Inner conductor	CTI										
2	6142504116	杆套	ABS	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	SHAEC1200148411	2012/01/09	上海 ABS	上海 SGS												
3	6142504290	基座	PC	[REDACTED]	N.D.	[REDACTED]	N.D.	[REDACTED]	[REDACTED]							N.D.	N.D.	GZ1106084755	2011/07/05	PC S-2000VR	广州 SGS										
4	6142504118	定位塞	HDPE	[REDACTED]	N.D.	[REDACTED]	N.D.	[REDACTED]	[REDACTED]							N.D.	N.D.	SHAEC1109428201	2011/06/27	HDPE	上海 SGS										
5	6410500346	Foam	EVA	N.D.	17	N.D.	N.D.	N.D.	N.D.							[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	CANEC1103057901	2011/08/11	EVA	广州 SGS						
6	3110500039	RFConnector	Gold plating	N.D.	N.D.	N.D.	Negative	[REDACTED]	Negative	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]							[REDACTED]	CE/2015/32675	2015/03/10	Plug Housing	SGS					
			PBT	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.														Negative	1110	N.D.	N.D.	N.D.	CE/2014/B2826	2014/11/18	Plug Housing	SGS
			Phosphor Bronze	N.D.	N.D.	N.D.	Negative	[REDACTED]	Negative														[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	CE/2015/30055	2015/03/02	Plug Housing	SGS
7	2051500322	PCB	PTFE	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	SHAEC1200879510	2014/02/12	板材	SGS											
			RS-2000 BGL	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.							135	256	N.D.	N.D.	RSH03G002208001C	2014/04/24	防焊油墨	CTI							
			2M-400W F	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.							148	124	N.D.	N.D.	CE/2014/80454	2014/08/12	文字油墨	SGS							
			OSP F-005	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.							[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	CANEC1404310001	2014/04/08	OSP 药水	CTI							

V. Antenna – S Parameter Test Data



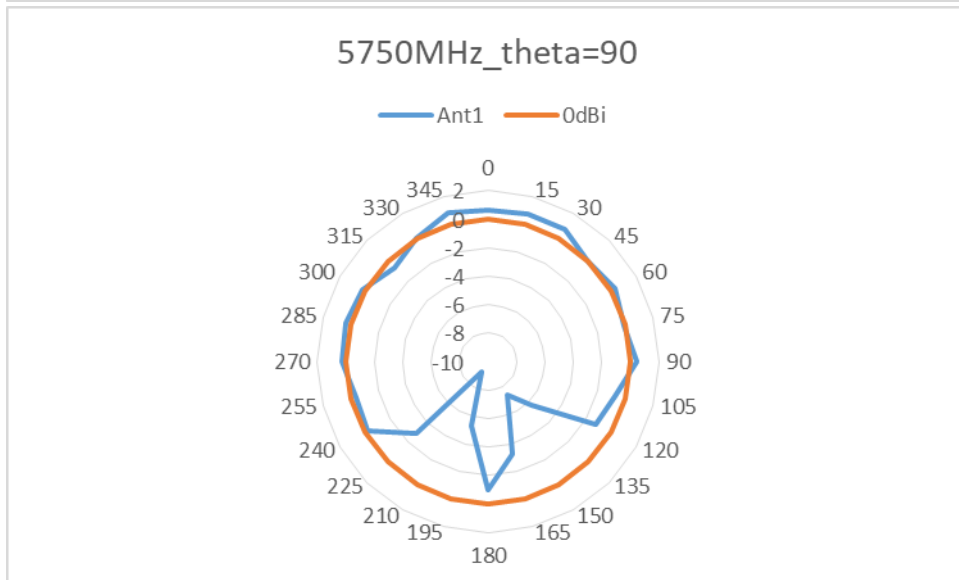
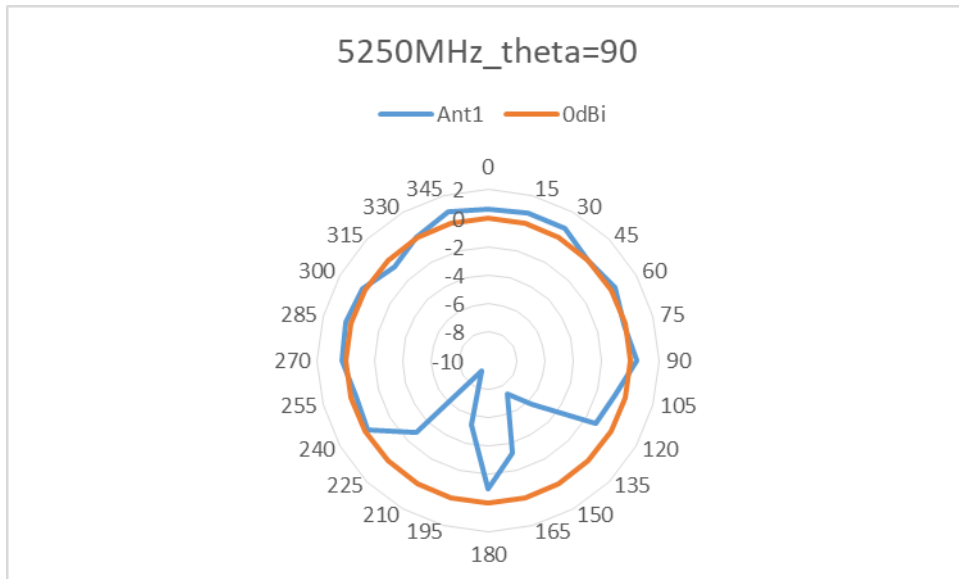
VI. Antenna – Radiation Pattern Test Data

Testing Equipment Specification	
Microwave Chamber	ETS
Testing Equipment	Agilent 5071B

PeakGain:

Freq	5150	5200	5250	5300	5350	5400	5450	5500
Gain	0.6	0.5	1.0	0.8	1.0	1.0	1.0	0.8
Freq	5550	5600	5650	5700	5750	5800	5850	
Gain	0.5	1.0	0.9	1.0	0.9	0.5	0.6	

Theta=90°



VII. Packing Drawing

i . Put ANT into Plastic Tray (200PCS/ Bag)



ii.Packing



MO:		P/N:		ROHS
Specification:				
Quantity:	(PCS)	G.W:	(Kg)	
Date:				
Manufacturer:	Cable manufacturing department			

10Bags, 2000PCS/Box

iii.Sealing

