



Antenna Specification



Product Number:

Product Name: Antenna

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Product Number:

Product Name: Antenna

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Specification For Approval

Product Number:

Product Name: Antenna

TP-LINK®

Date: _____

File No. : _____

Version: 1.0

Customer: _____ / _____

Customer P/N : _____ / _____

TP-LINK P/N: _____

Description: Tapo T100(US)1.0 antenna

TP-LINK Checked By:
Customer Approved By:

TP-LINK®

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Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	912~932 MHz
Impedance	50 Ohm
S.W.R.	≤ 3.0
Antenna Gain	-6.0dBi
Max Input Power	≤ 2 W
Polarization	Linear
Radiation pattern	Omni-Directional
B. Material & Mechanical Characteristics	
Material of Radiator	Copper
Material of Plastic	/
Cable Type	/
Connector Type	/
Connector Pull Test	/
C. Environmental	
Operation Temperature	In accordance with PCB
Storage Temperature	In accordance with PCB

I. 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;	Directive DUT specification

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		make individual calibration to test	
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 (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%

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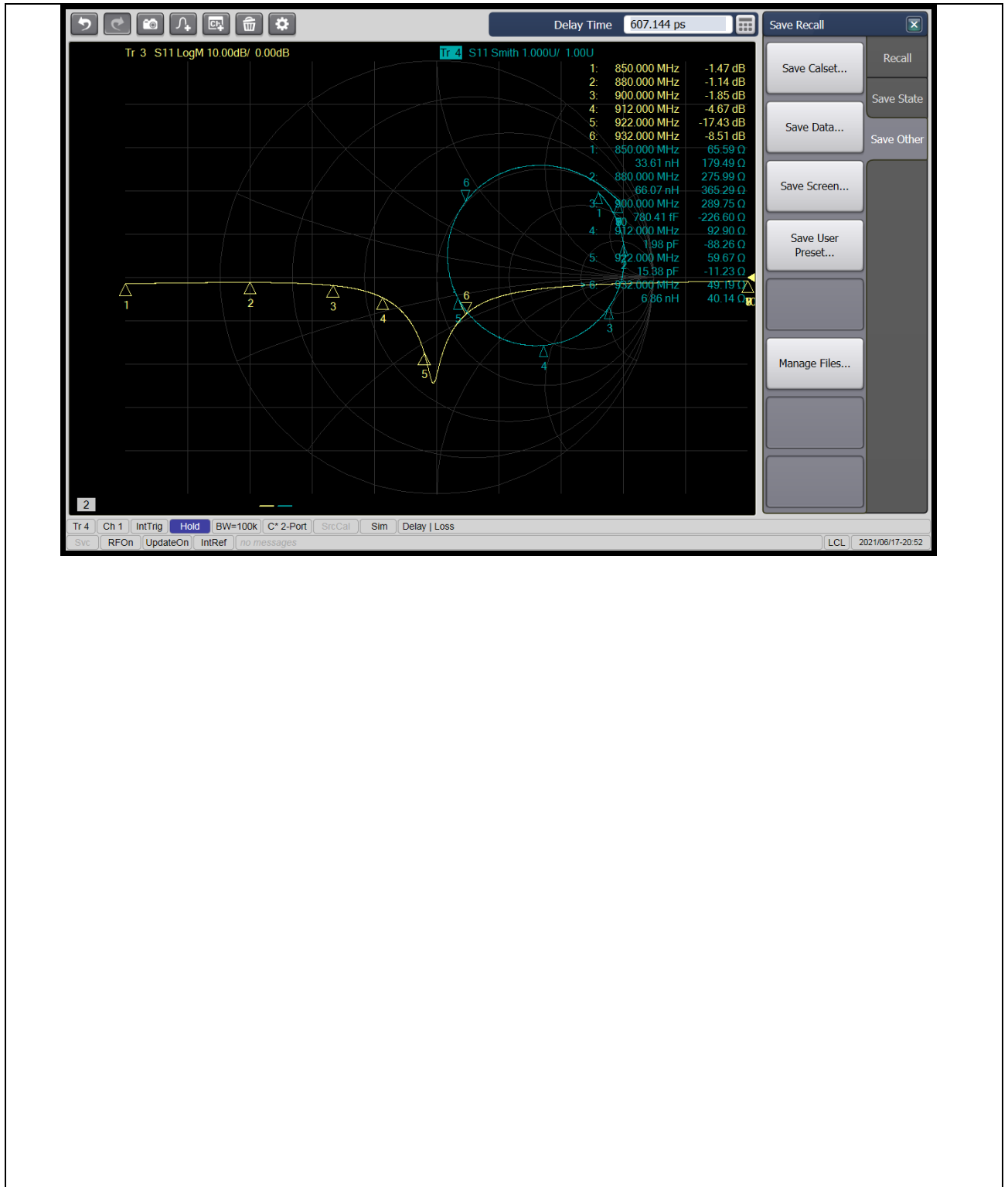
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II. Antenna – S Parameter Test Data



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III. Antenna – Radiation Pattern Test Data

Testing Equipment Specification	
Microwave Chamber	ETS AMS-8923
Testing Equipment	Agilent E5071C

III.1 Ant 1

Ant 1											
Freq. (MHz)	912	914	916	918	920	922	924	926	928	930	932
Gain (dBi)	-7.41	-6.70	-6.55	-6.36	-6.40	-6.00	-6.00	-6.15	-6.64	-6.39	-6.53
Effi. (%)	7.967	9.863	12.23	13.50	13.20	11.98	10.77	10.33	10.61	11.03	10.6

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Packing Drawing

