

TP-LINK®

Antenna Specification



Product Number: 3101504722

Product Name: Antenna

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<http://www.tp-link.com>

Product Number: 3101504722

Product Name: Antenna

TP-LINK®

Specification For Approval

Date: _____

File No. : _____

Version: 1.0

Customer: _____ / _____

Customer P/N : _____ / _____

TP-LINK P/N: 3101504722

Description:

Antenna|5.925-7.125GHz|2.0dBi|LP|Omni|2W|I-PEX|116mm|D1.13mm|Deco XE200|无|X4080-IW116REV1.0|无|否|自制件/Deco XE200 天线-5/黑色 RFCable/红色热缩管/4 代 I-PEX/1.13mm 低损线]

TP-LINK Checked By:
Customer Approved By:

TP-LINK®

TP-LINK TECHNOLOGIES CO., LTD.

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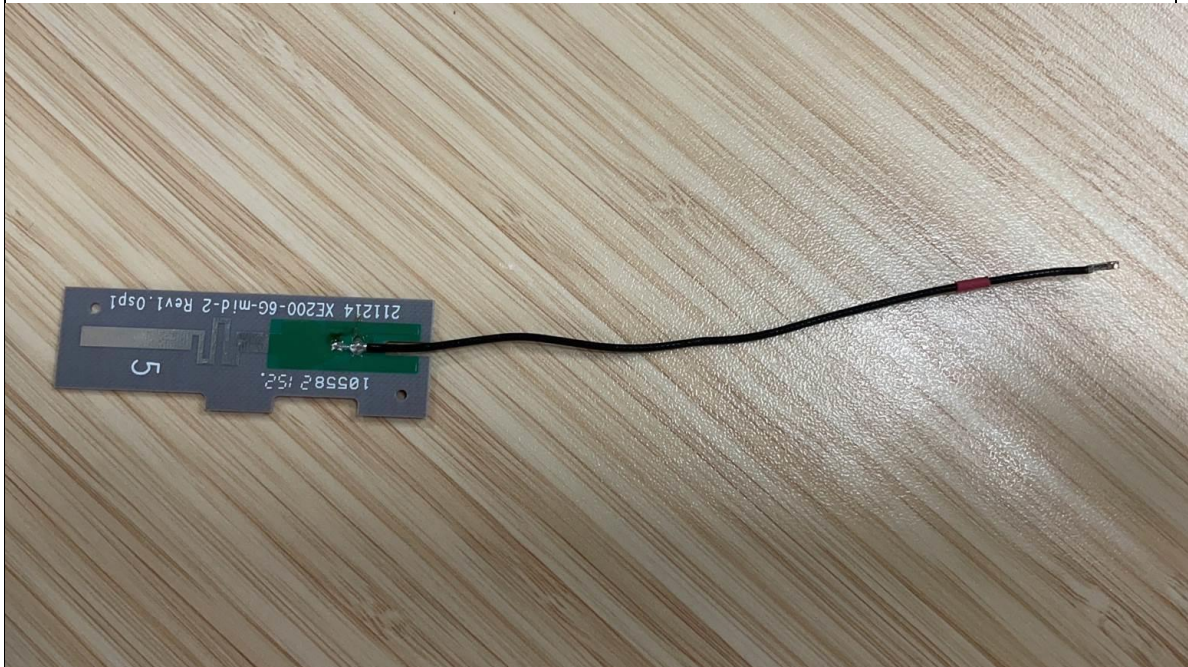
+ 86 755 26504400

http:// www.tp-link.com

Index

I.	Specification	1
II.	Characteristics and Reliability Test.....	2
III.	Mechanical Drawing and Material Description	3
IV.	RoHS Test Report	4
V.	Antenna – S Parameter Test Data.....	5
VI.	Antenna – Radiation Pattern Test Data	5
VII.	Packing Drawing	7

I. Specification

Sample Photo**A. Electrical Characteristics**

Frequency	5925~7125MHz
Impedance	50 Ohm
S.W.R.	<= 2.0
Antenna Type	Franklin
Antenna Gain	2.0dBi
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	I-PEX
Connector Pull Test	3Kg

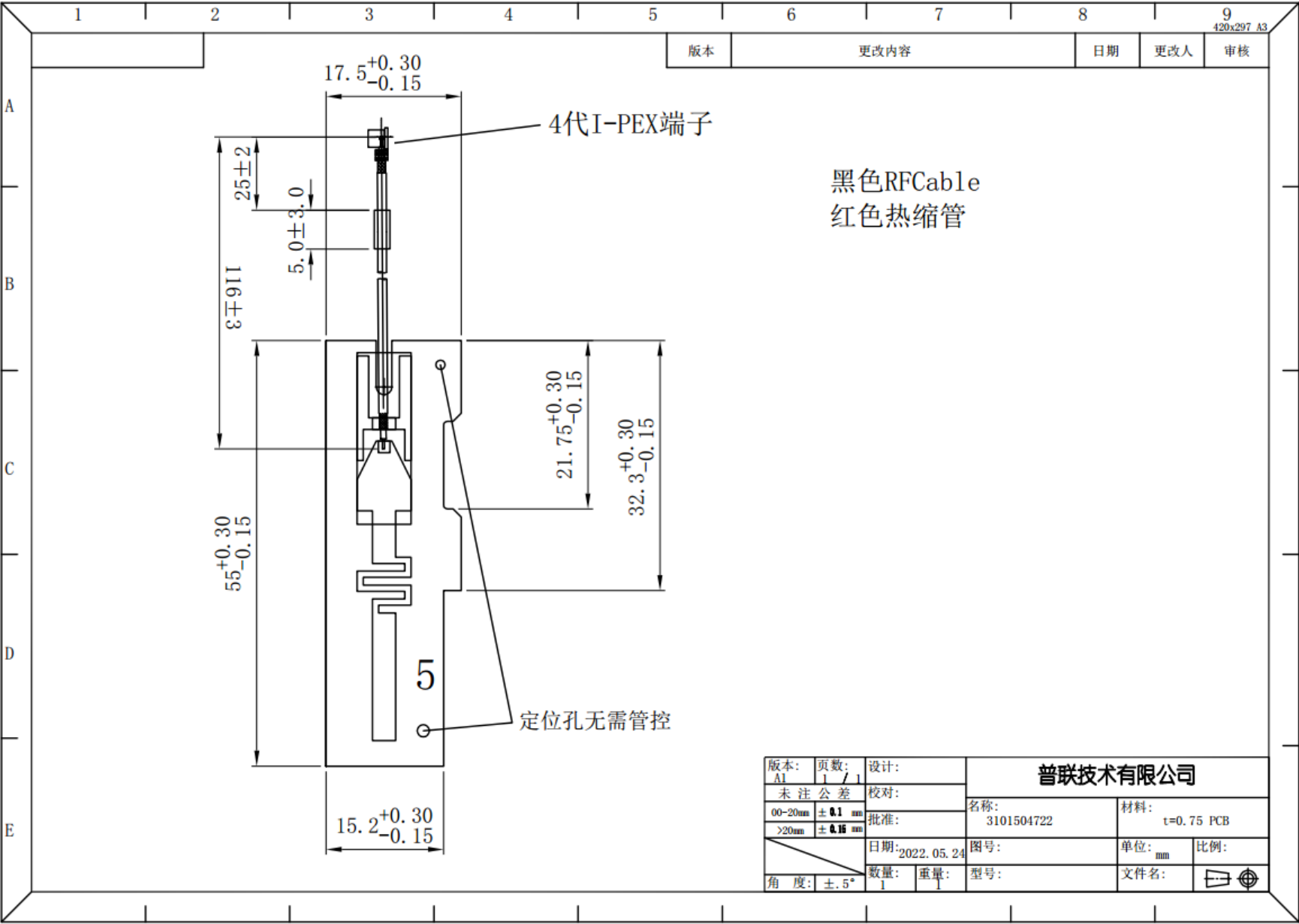
C. Environmental

Operation Temperature	- 40℃ ~ + 65℃
Storage Temperature	- 40℃ ~ + 70℃

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℃; 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℃; 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: -40℃ (30 minutes) to +70℃ (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℃; Time: 8 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. ≤ 5%

III. Mechanical Drawing and Material Description



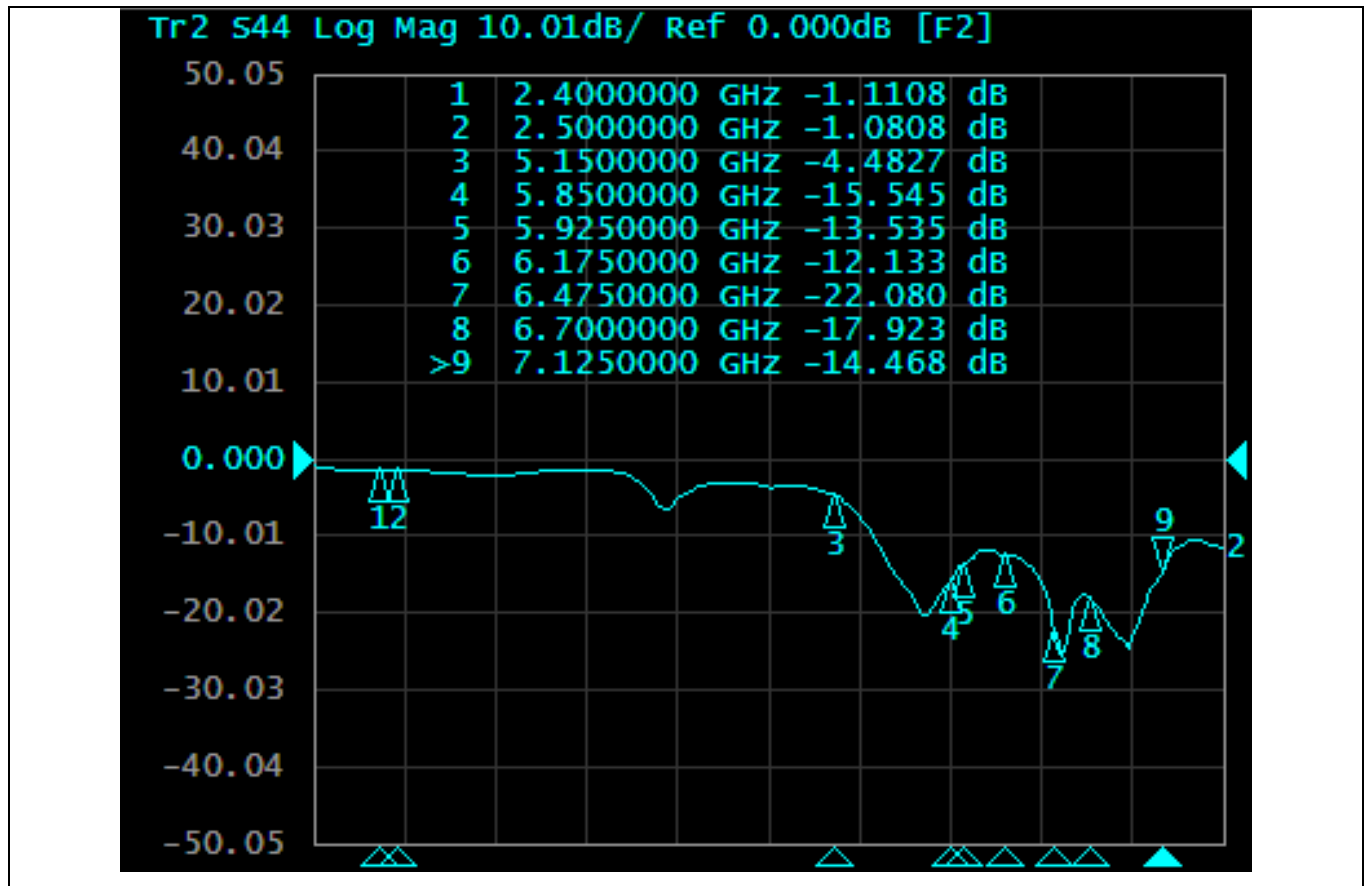
Product Number: 3101504722

Product Name: Antenna



IV. RoHS Test Report

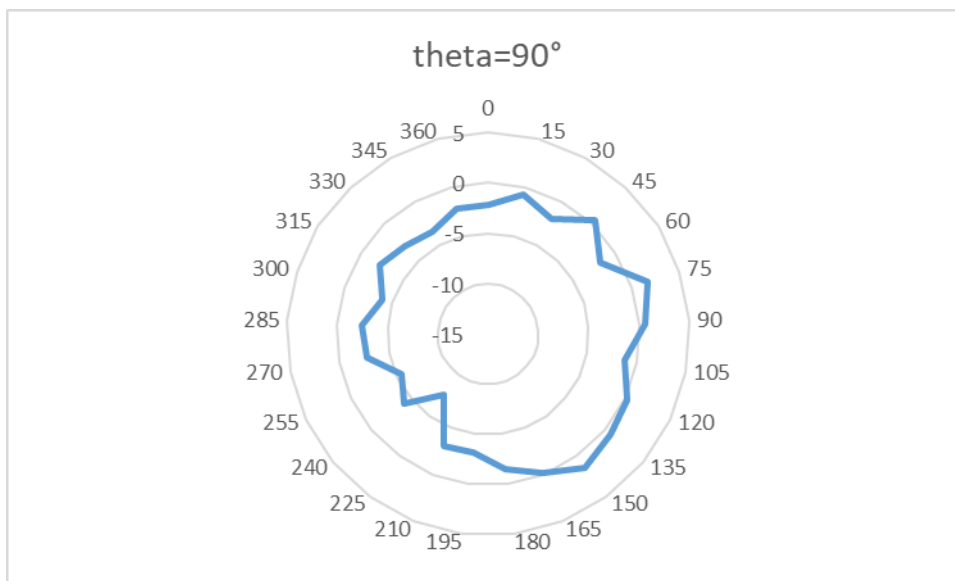
N O .	Product Model	Constit uents	Material	Test Result for RoHS-corresponding Substance						PFOS	Halogen				Series No.	Date	Title	Test Agent
				Cd	Pb	Hg	Cr(VI)	PBB s	PBD Es	PFOS	F	Cl	Br	I				
1	2051500834	PCB	FR-4	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.					SHAEC1200879510	2014/02/12	板材	SGS
			RS-2000 BGL	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.		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.						CANEC1404310001	2014/04/08	OSP 药水	CTI
2	3110500018	RFConn ec tor	Gold plating	N.D.	N.D.	N.D.	Negative			Negative					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			Negative					CE/2015/30055	2015/03/02	Plug Housing	SGS
4	3020500076	HST	EVA	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		N.D.	N.D.	N.D.	N.D.	GZ1102011758/CHEM	2011.02.12	Black plastic tube	广州 SGS
7	3120500035	Cable	Inner conductor .	N.D.	46. .	N.D.	Negative	N.D.	N.D.	N.D.					SHAEC1507036516	2015/4/28	Cable	SGS 上海
			Insulation	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	>100000	N.D.	N.D.	N.D.	SHAEC1500664111	2015/1/21	Cable	SGS 上海
			Outer conductor	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANEC1420243205	2014/12/11	Cable	广州SGS
			mesh	N.D.	N.D.	N.D.	Negative	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ECL03G00367502E	2014/12/15	Cable	CTI
			jacket .	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	>100000	N.D.	N.D.	N.D.	SHAEC1500664109	2015/1/21	Cable	SGS 上海
			FEP color Masterbat ch(black)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		>100000	N.D.	N.D.	N.D.	SHAEC1503900602	2015/03/18	Cable	SGS 上海

V. Antenna – S Parameter Test Data**VI. Antenna – Radiation Pattern Test Data**

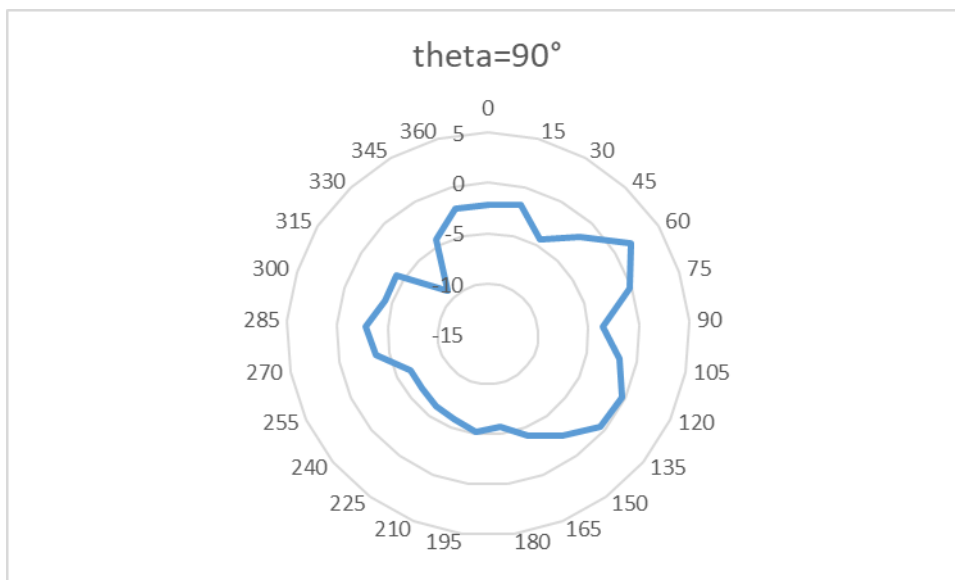
Testing Equipment Specification	
Microwave Chamber	Satimo SG24-S
Testing Equipment	Agilent 5071B

Freq. (MHz)	5925	5975	6025	6075	6125	6175	6225	6275	6325	6375	6425
Peak Gain (dBi)	1.06	1.15	1.42	1.66	1.69	1.83	1.77	1.70	1.62	1.63	1.77
Freq. (MHz)	6475	6525	6575	6625	6675	6725	6775	6825	6875	6925	6975
Peak Gain (dBi)	1.83	1.81	1.73	1.80	1.81	1.96	1.97	1.85	1.96	1.90	1.97
Freq. (MHz)	7025	7075	7125								
Peak Gain (dBi)	1.92	1.88	1.81								

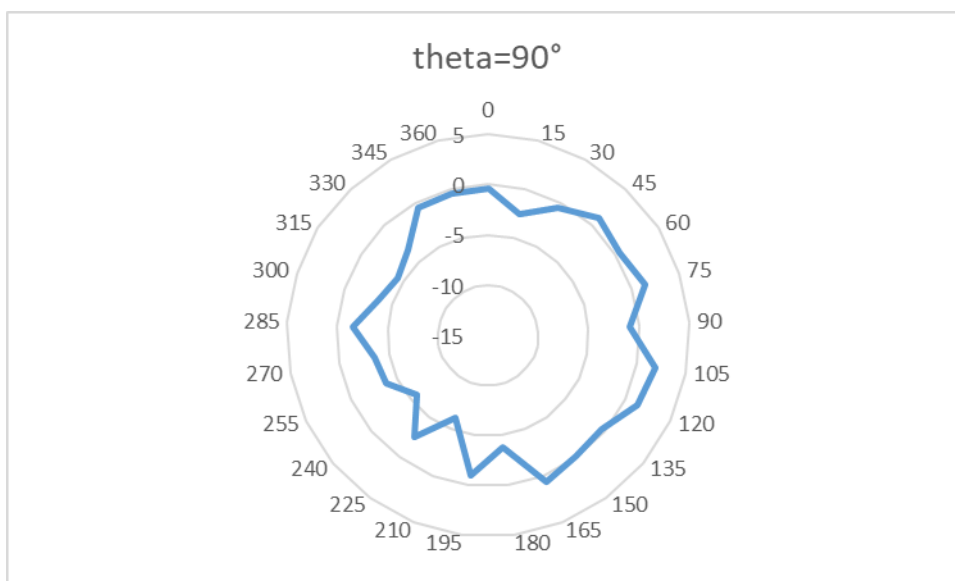
6125MHz



6525MHz



6925MHz



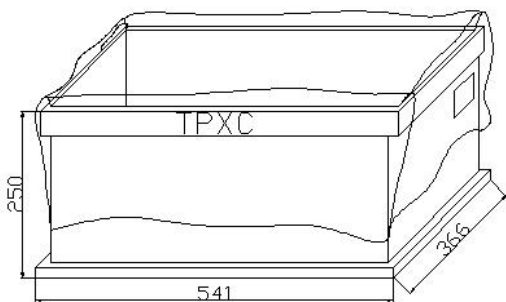
VII. Packing Drawing

i . Put ANT into Plastic Tray （仅作装箱说明）



200PCS/bag

ii. Packing

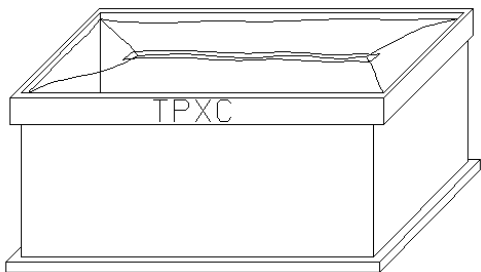


2000PCS/Box

Label

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

iii.Sealing





Antenna Specification



Product Number: 3101504724

Product Name: Antenna

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Product Name: Antenna

TP-LINK®

Specification For Approval

Date: _____

File No. : _____

Version: 1.0

Customer: _____ / _____

Customer P/N : _____ / _____

TP-LINK P/N: 3101504724

Description:

Antenna|5.925-7.125GHz|2.0dBi|LP|Omni|2W|I-PEX|130mm|D1.13mm|Deco XE200|无|X4080-IW130REV1.0|无|否|自制件/Deco XE200 天线-7/黑色 RFCable/黄色热缩管/4 代 I-PEX/1.13mm 低损线]

TP-LINK Checked By:
Customer Approved By:

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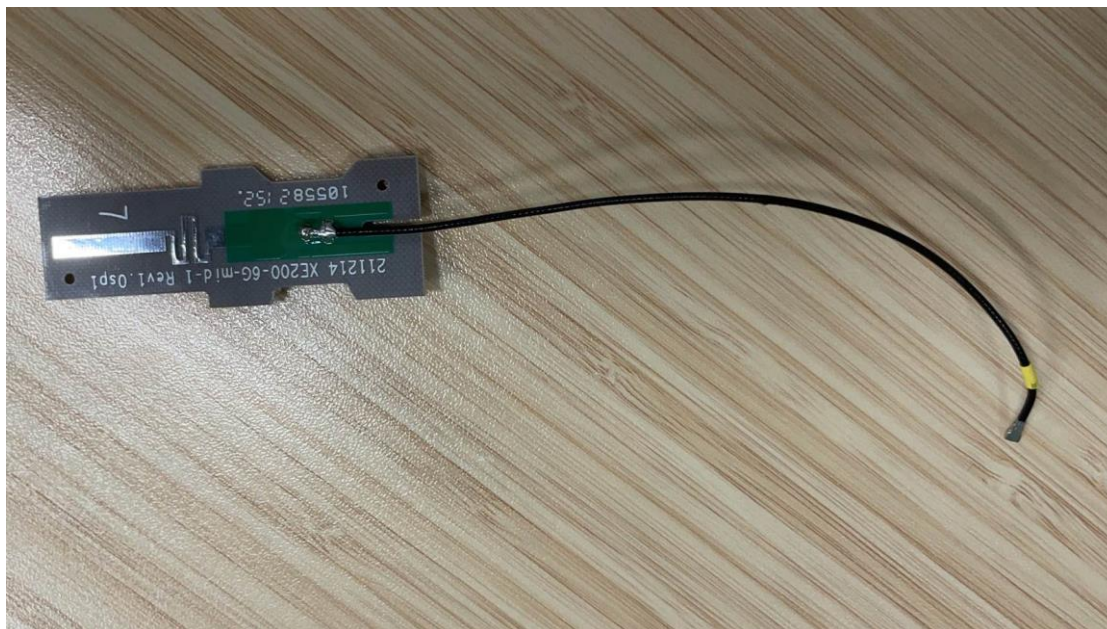
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Index

I.	Specification	1
II.	Characteristics and Reliability Test.....	2
III.	Mechanical Drawing and Material Description	3
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VI.	Antenna – Radiation Pattern Test Data	5
VII.	Packing Drawing	7

I. Specification

Sample Photo



A. Electrical Characteristics

Frequency	5925~7125MHz
Impedance	50 Ohm
S.W.R.	≤ 2.0
Antenna Type	Franklin
Antenna Gain	2.0dBi
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	I-PEX
Connector Pull Test	3Kg

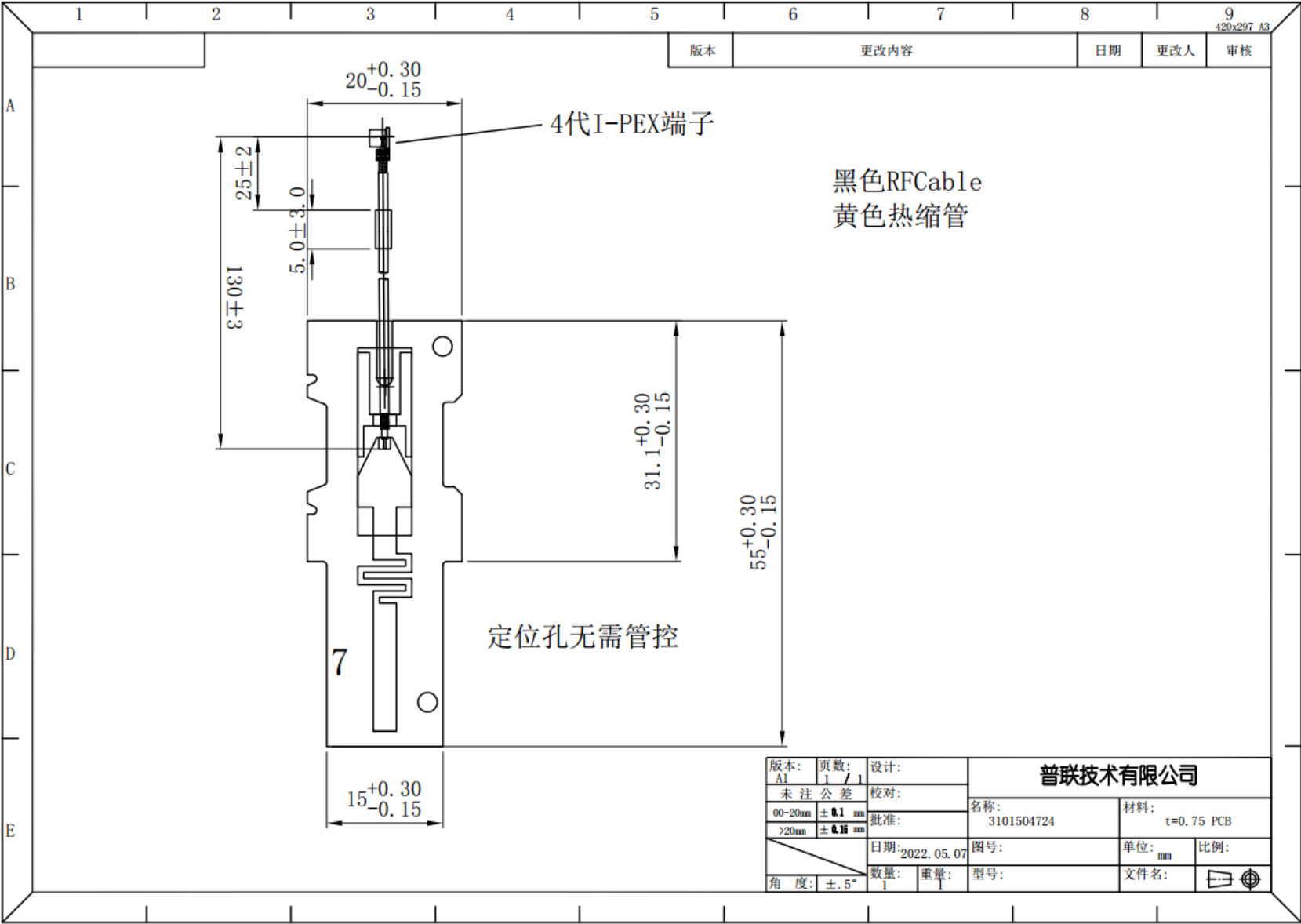
C. Environmental

Operation Temperature	- 40℃ ~ + 65℃
Storage Temperature	- 40℃ ~ + 70℃

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℃; 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℃; 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: -40℃ (30 minutes) to +70℃ (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℃; Time: 8 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. ≤ 5%

III. Mechanical Drawing and Material Description



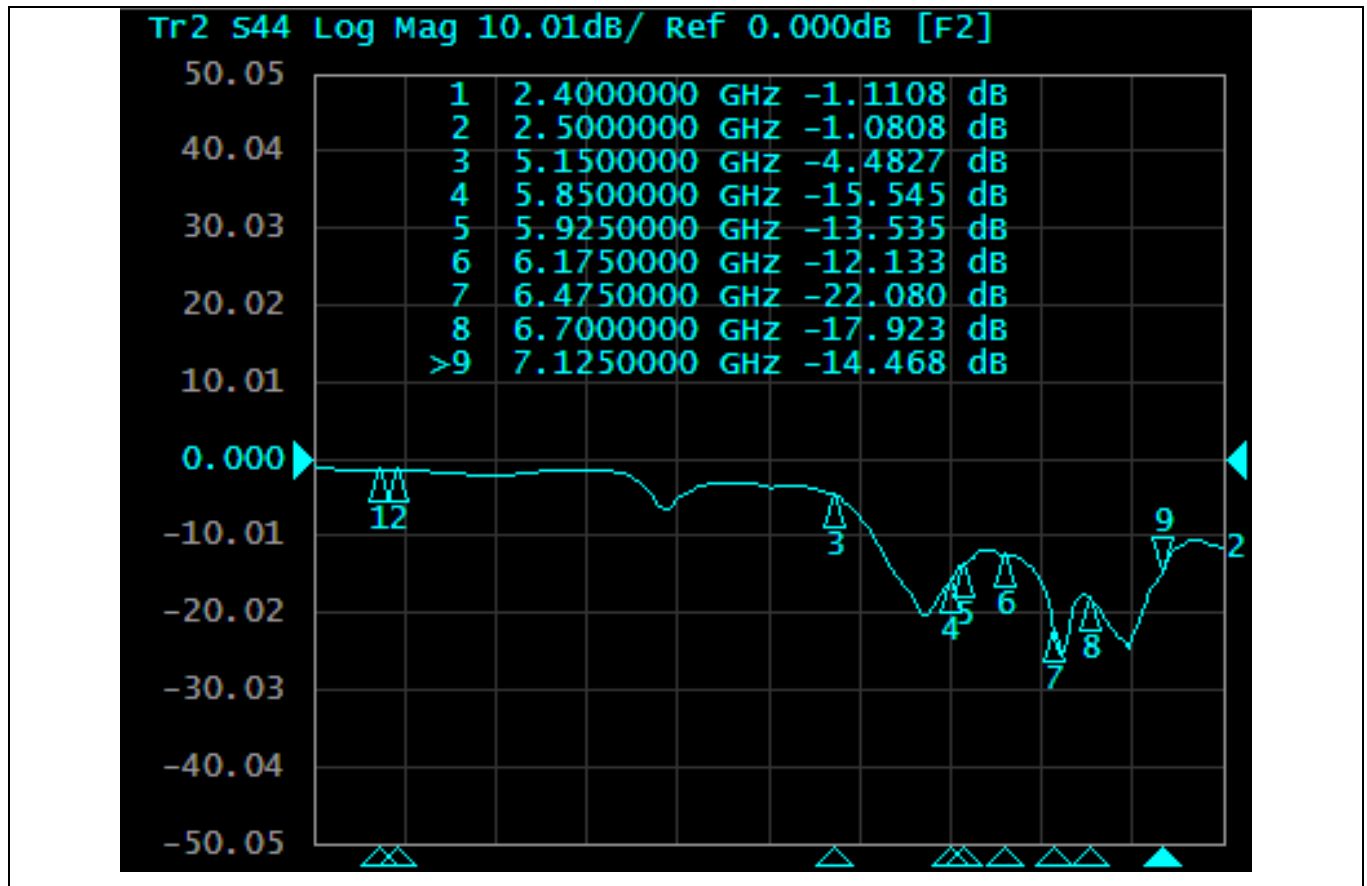
Product Number: 3101504724

Product Name: Antenna



IV. RoHS Test Report

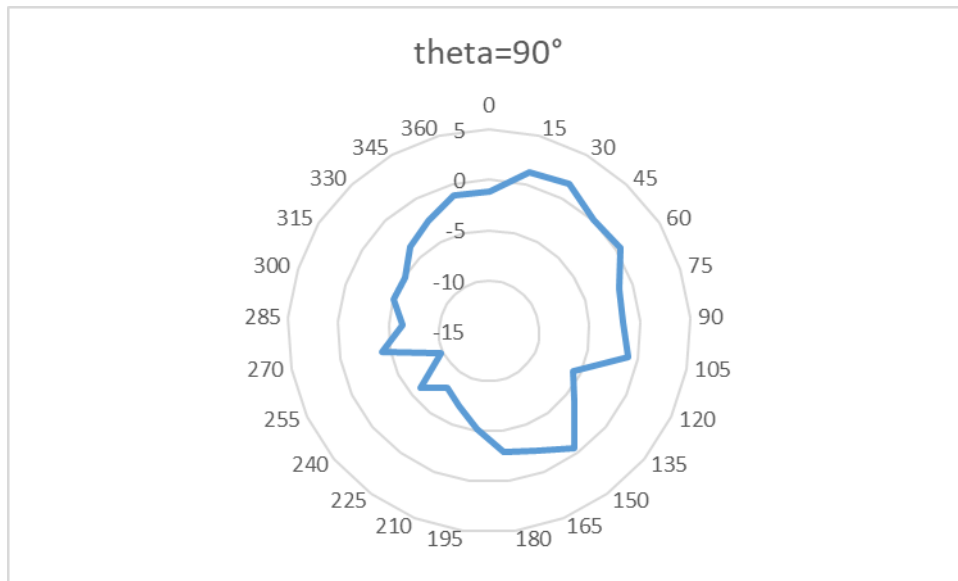
N O .	Product Model	Constit uents	Material	Test Result for RoHS-corresponding Substance						PFOS	Halogen				Series No.	Date	Title	Test Agent
				Cd	Pb	Hg	Cr(VI)	PBB s	PBD Es	PFOS	F	Cl	Br	I				
1	2051500834	PCB	FR-4	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.					SHAEC1200879510	2014/02/12	板材	SGS
			RS-2000 BGL	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.		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.						CANEC1404310001	2014/04/08	OSP 药水	CTI
2	3110500018	RFConn ec tor	Gold plating	N.D.	N.D.	N.D.	Negative			Negative					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			Negative					CE/2015/30055	2015/03/02	Plug Housing	SGS
4	3020500076	HST	EVA	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		N.D.	N.D.	N.D.	N.D.	GZ1102011758/CHEM	2011.02.12	Black plastic tube	广州 SGS
7	3120500035	Cable	Inner conductor .	N.D.	46. .	N.D.	Negative	N.D.	N.D.	N.D.					SHAEC1507036516	2015/4/28	Cable	SGS 上海
			Insulation	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	>100000	N.D.	N.D.	N.D.	SHAEC1500664111	2015/1/21	Cable	SGS 上海
			Outer conductor	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANEC1420243205	2014/12/11	Cable	广州SGS
			mesh	N.D.	N.D.	N.D.	Negative	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ECL03G00367502E	2014/12/15	Cable	CTI
			jacket .	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	>100000	N.D.	N.D.	N.D.	SHAEC1500664109	2015/1/21	Cable	SGS 上海
			FEP color Masterbat ch(black)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		>100000	N.D.	N.D.	N.D.	SHAEC1503900602	2015/03/18	Cable	SGS 上海

V. Antenna – S Parameter Test Data**VI. Antenna – Radiation Pattern Test Data**

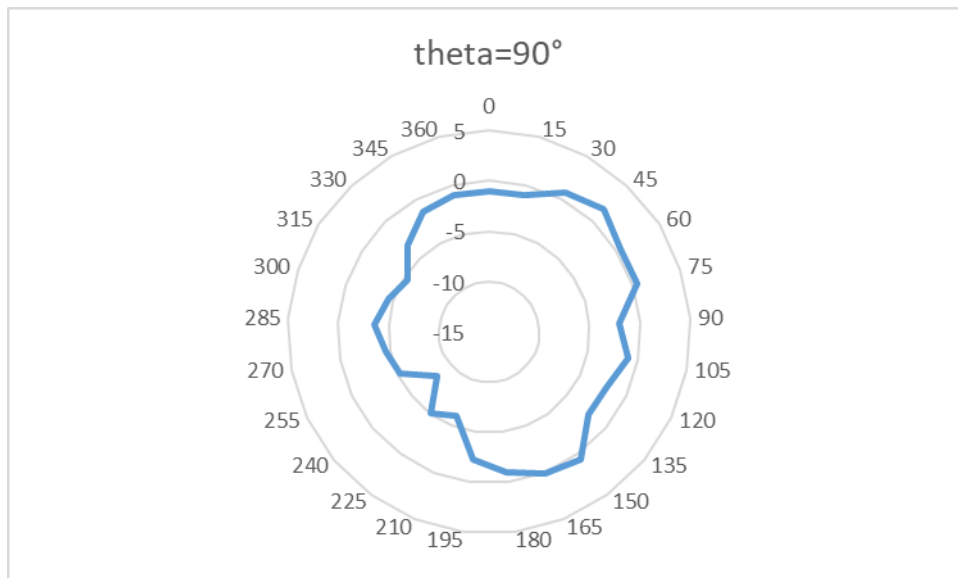
Testing Equipment Specification	
Microwave Chamber	Satimo SG24-S
Testing Equipment	Agilent 5071B

Freq. (MHz)	5925	5975	6025	6075	6125	6175	6225	6275	6325	6375	6425
Peak Gain (dBi)	1.34	1.39	1.24	1.53	1.61	1.89	1.99	1.98	1.99	1.89	1.74
Freq. (MHz)	6475	6525	6575	6625	6675	6725	6775	6825	6875	6925	6975
Peak Gain (dBi)	1.72	1.73	1.70	1.61	1.65	1.51	1.69	1.79	1.80	1.62	1.54
Freq. (MHz)	7025	7075	7125								
Peak Gain (dBi)	1.47	1.49	1.54								

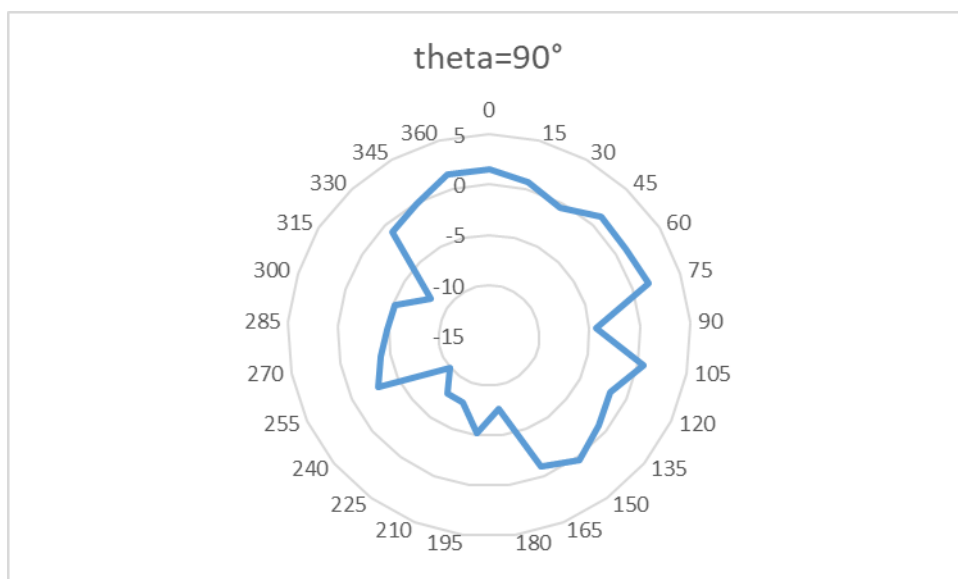
6125MHz



6525MHz



6925MHz



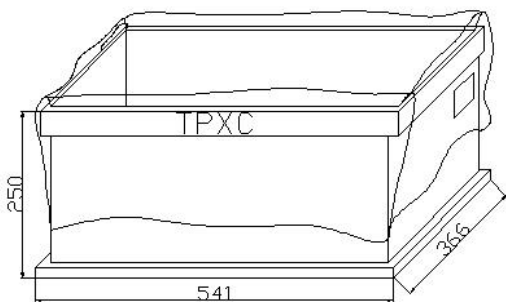
VII. Packing Drawing

i . Put ANT into Plastic Tray （仅作装箱说明）



200PCS/bag

ii. Packing

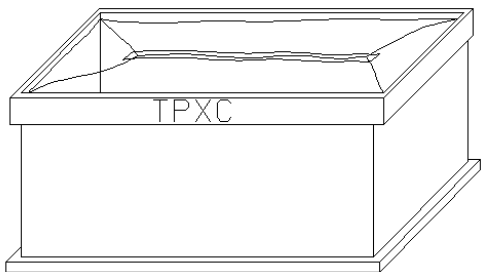


2000PCS/Box

Label

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

iii.Sealing



TP-LINK®

Antenna Specification



Product Number: 3101504728

Product Name: Antenna

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Product Number: 3101504728

Product Name: Antenna

TP-LINK®

Specification For Approval

Date: _____

File No. : _____

Version: 1.0

Customer: _____ / _____

Customer P/N : _____ / _____

TP-LINK P/N: 3101504728

Description:

Antenna|5.925-7.125GHz|2.0dBi|LP|Omni|2W|I-PEX|49mm|D1.13mm|Deco XE200|无|X4080-IW049REV1.0|无|否|[自制件/Deco XE200 天线-⑤/灰色 RFCable/红色热缩管/4 代 I-PEX/1.13mm 低损线]

TP-LINK Checked By:
Customer Approved By:

TP-LINK®

TP-LINK TECHNOLOGIES CO., LTD.

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Central Zone, Science&Technology Park,
Nanshan, Shenzhen, P.R.China

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+ 86 755 26504400

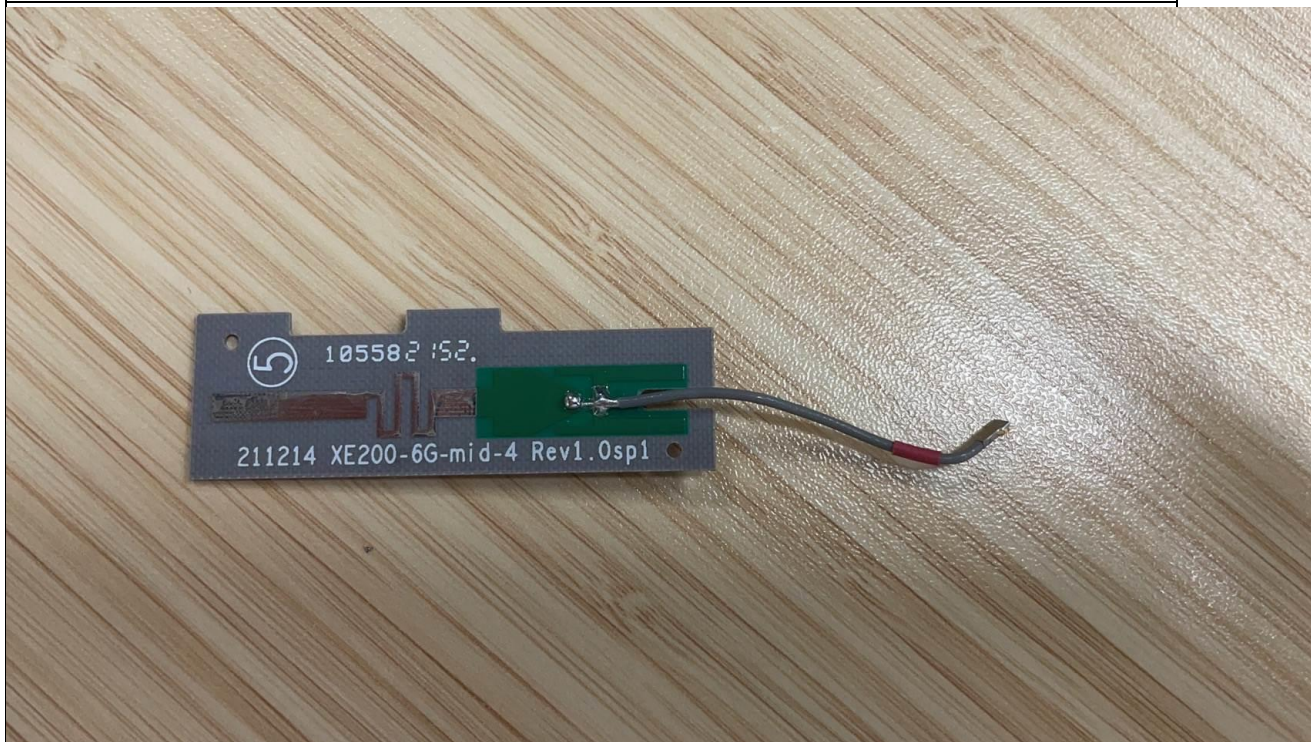
http:// www.tp-link.com

Index

I.	Specification	1
II.	Characteristics and Reliability Test.....	2
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I. Specification

Sample Photo



A. Electrical Characteristics

Frequency	5925~7125MHz
Impedance	50 Ohm
S.W.R.	≤ 2.0
Antenna Type	Franklin
Antenna Gain	2.0dBi
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 (Gray)
Connector Type	I-PEX
Connector Pull Test	3Kg

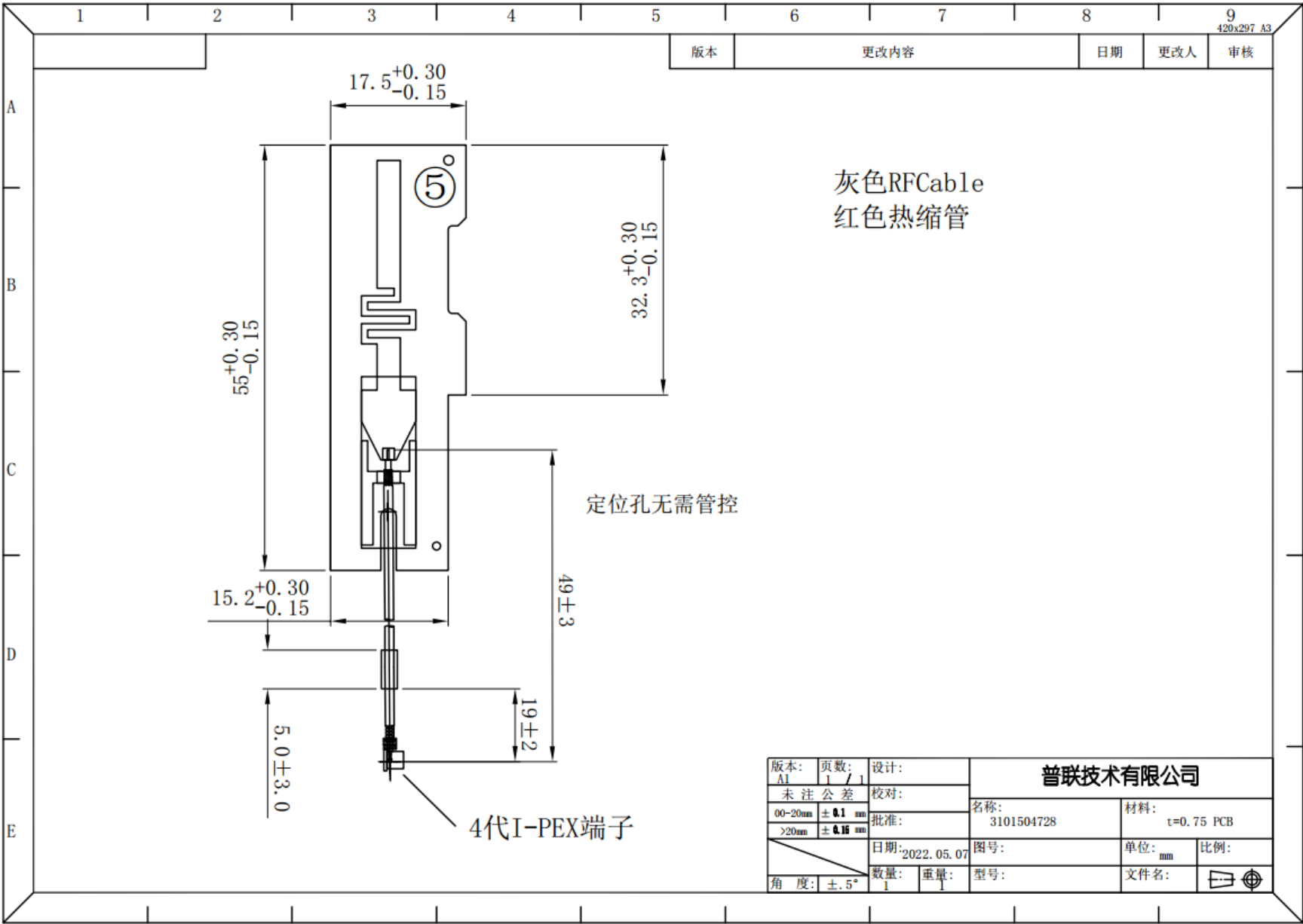
C. Environmental

Operation Temperature	- 40℃ ~ + 65℃
Storage Temperature	- 40℃ ~ + 70℃

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℃; 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℃; 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: -40℃ (30 minutes) to +70℃ (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℃; Time: 8 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. ≤ 5%

III. Mechanical Drawing and Material Description



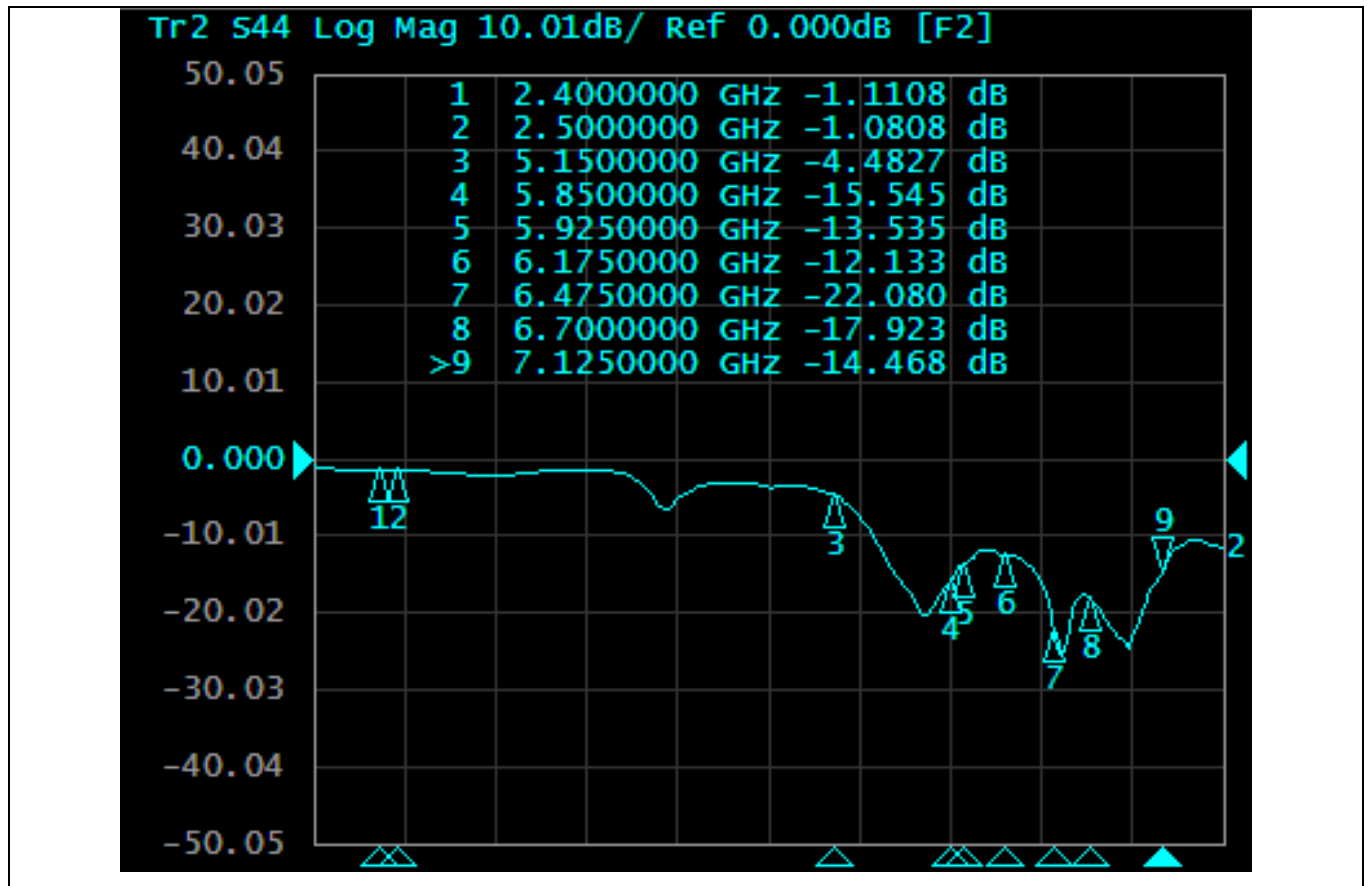
Product Number: 3101504728

Product Name: Antenna



IV. RoHS Test Report

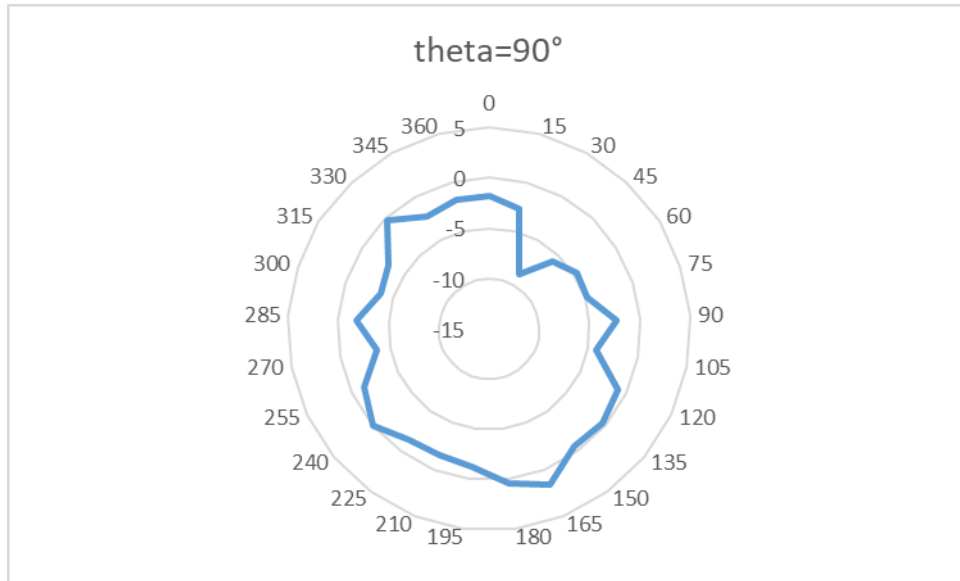
N O .	Product Model	Constit uents	Material	Test Result for RoHS-corresponding Substance						PFOS	Halogen				Series No.	Date	Title	Test Agent
				Cd	Pb	Hg	Cr(VI)	PBB s	PBD Es	PFOS	F	Cl	Br	I				
1	2051500834	PCB	FR-4	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.					SHAEC1200879510	2014/02/12	板材	SGS
			RS-2000 BGL	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.		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.						CANEC1404310001	2014/04/08	OSP 药水	CTI
2	3110500018	RFConn ec tor	Gold plating	N.D.	N.D.	N.D.	Negative			Negative					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			Negative					CE/2015/30055	2015/03/02	Plug Housing	SGS
4	3020500076	HST	EVA	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		N.D.	N.D.	N.D.	N.D.	GZ1102011758/CHEM	2011.02.12	Black plastic tube	广州 SGS
7	3120500035	Cable	Inner conductor .	N.D.	46. .	N.D.	Negative	N.D.	N.D.	N.D.					SHAEC1507036516	2015/4/28	Cable	SGS 上海
			Insulation	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	>100000	N.D.	N.D.	N.D.	SHAEC1500664111	2015/1/21	Cable	SGS 上海
			Outer conductor	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANEC1420243205	2014/12/11	Cable	广州SGS
			mesh	N.D.	N.D.	N.D.	Negative	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ECL03G00367502E	2014/12/15	Cable	CTI
			jacket .	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	>100000	N.D.	N.D.	N.D.	SHAEC1500664109	2015/1/21	Cable	SGS 上海
			FEP color Masterbat ch(black)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		>100000	N.D.	N.D.	N.D.	SHAEC1503900602	2015/03/18	Cable	SGS 上海

V. Antenna – S Parameter Test Data**VI. Antenna – Radiation Pattern Test Data**

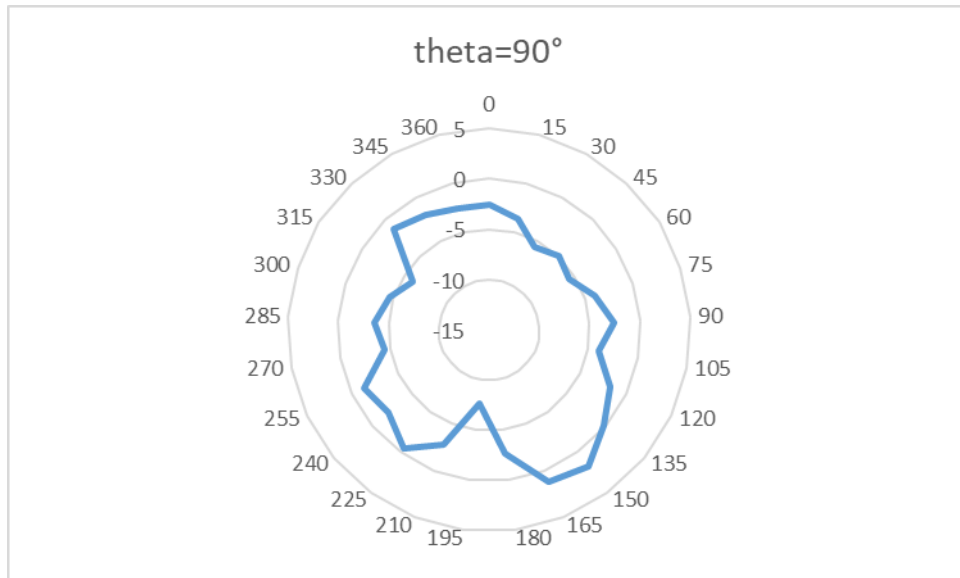
Testing Equipment Specification	
Microwave Chamber	Satimo SG24-S
Testing Equipment	Agilent 5071B

Freq. (MHz)	5925	5975	6025	6075	6125	6175	6225	6275	6325	6375	6425
Peak Gain (dBi)	1.15	1.18	1.12	1.45	1.59	1.67	1.41	1.46	1.55	1.59	1.70
Freq. (MHz)	6475	6525	6575	6625	6675	6725	6775	6825	6875	6925	6975
Peak Gain (dBi)	1.71	1.74	1.70	1.76	1.78	1.77	1.79	1.87	1.93	1.97	1.94
Freq. (MHz)	7025	7075	7125								
Peak Gain (dBi)	1.88	1.83	1.83								

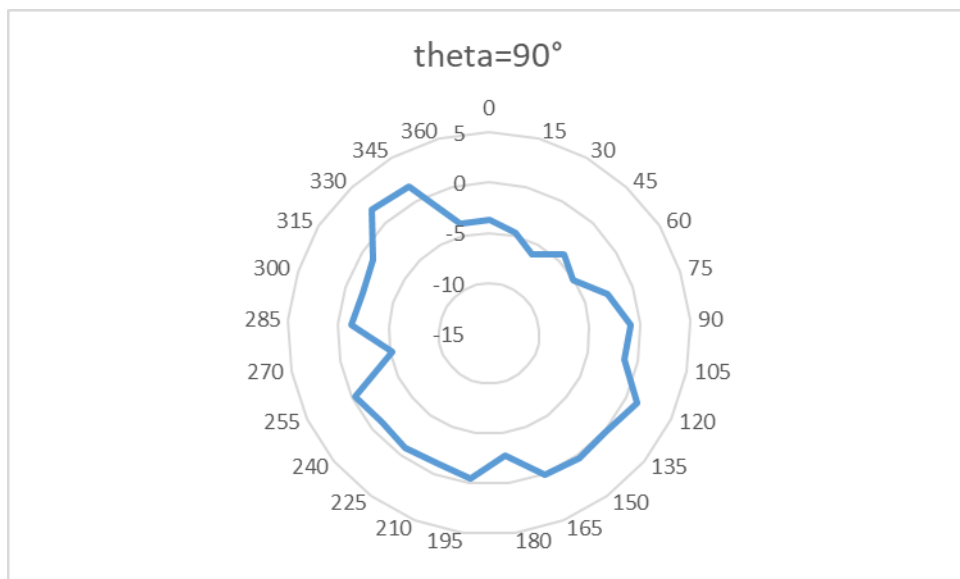
6125MHz



6525MHz



6925MHz



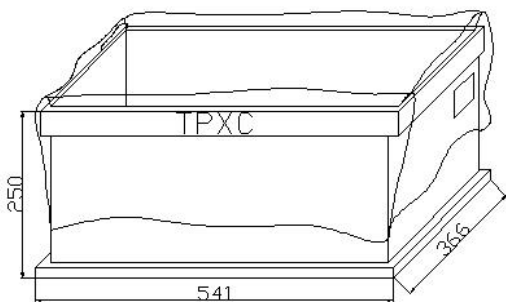
VII. Packing Drawing

i . Put ANT into Plastic Tray （仅作装箱说明）



200PCS/bag

ii. Packing

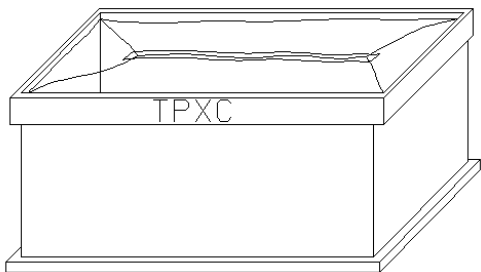


2000PCS/Box

Label

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

iii.Sealing





Antenna Specification



Product Number: 3101504730

Product Name: Antenna

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<http://www.tp-link.com>

Product Number: 3101504730

Product Name: Antenna

TP-LINK®

Specification For Approval

Date: _____

File No. : _____

Version: 1.0

Customer: _____ / _____

Customer P/N : _____ / _____

TP-LINK P/N: 3101504730

Description:

Antenna|5.925-7.125GHz|2.0dBi|LP|Omni|2W|I-PEX|122mm|D1.13mm|Deco XE200|无|X4070-IW122REV1.0|无|否|自制件/Deco XE200 天线-⑦/灰色 RFCable/黄色热缩管/4 代 I-PEX/1.13mm 低损线]

TP-LINK Checked By:
Customer Approved By:

TP-LINK®

TP-LINK TECHNOLOGIES CO., LTD.

South Buiding, No.5 Keyuan Road,
Central Zone, Science&Technology Park,
Nanshan, Shenzhen, P.R.China

TEL: + 86 755 26612350

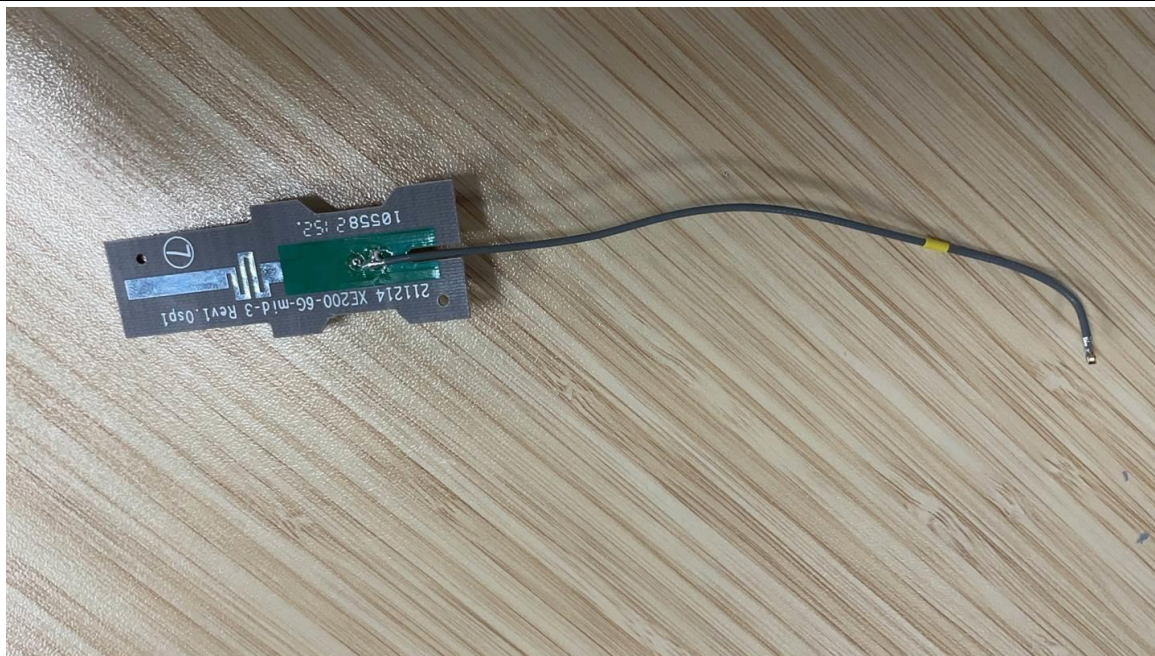
+ 86 755 26504400

http:// www.tp-link.com

Index

I.	Specification	1
II.	Characteristics and Reliability Test.....	2
III.	Mechanical Drawing and Material Description	3
IV.	RoHS Test Report	4
V.	Antenna – S Parameter Test Data.....	5
VI.	Antenna – Radiation Pattern Test Data	5
VII.	Packing Drawing	7

I. Specification

Sample Photo**A. Electrical Characteristics**

Frequency	5925~7125MHz
Impedance	50 Ohm
S.W.R.	≤ 2.0
Antenna Type	Franklin
Antenna Gain	2.0dBi
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 (Gray)
Connector Type	I-PEX
Connector Pull Test	3Kg

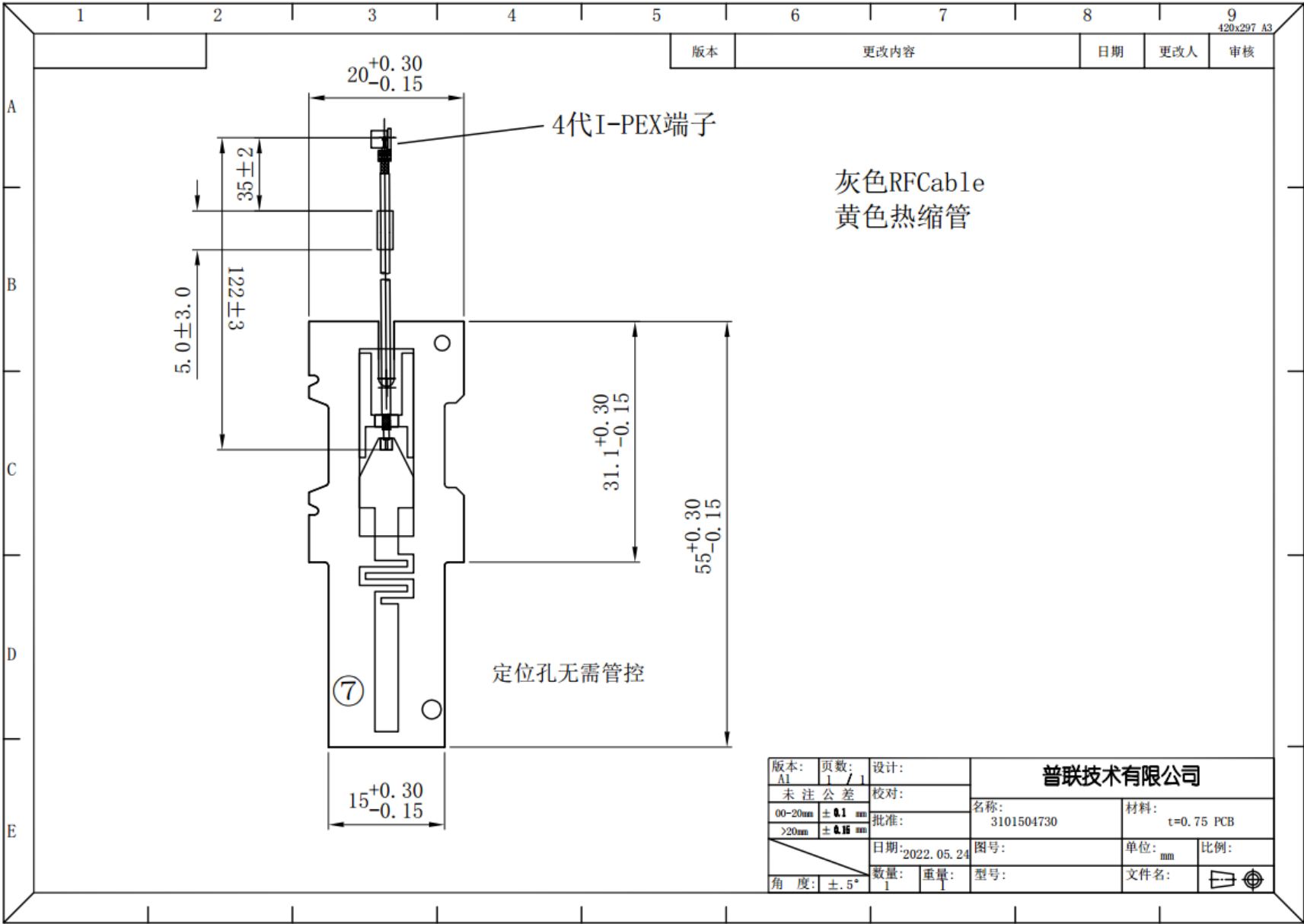
C. Environmental

Operation Temperature	- 40℃ ~ + 65℃
Storage Temperature	- 40℃ ~ + 70℃

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℃; 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℃; 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: -40℃ (30 minutes) to +70℃ (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℃; Time: 8 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. ≤ 5%

III. Mechanical Drawing and Material Description



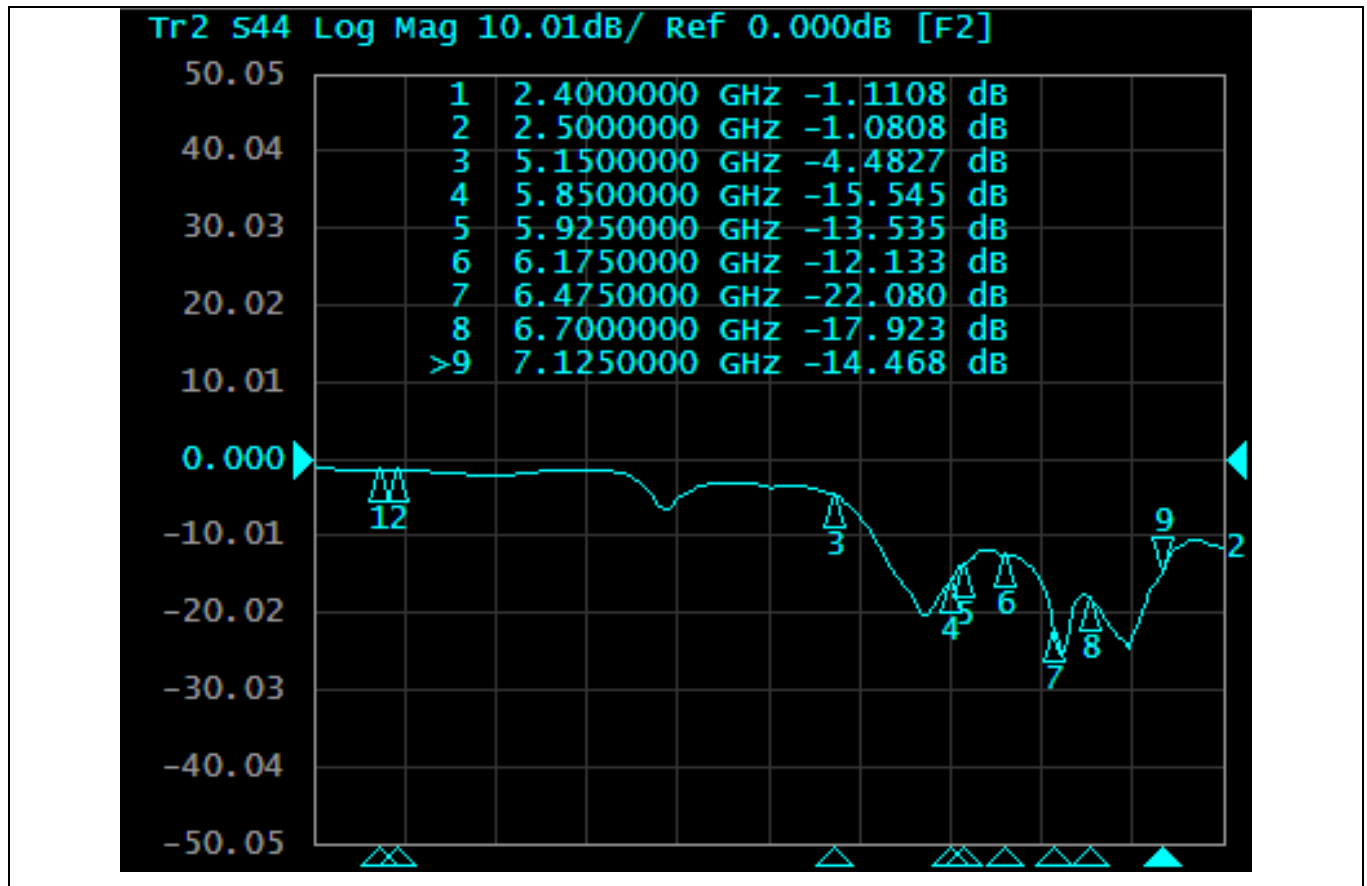
Product Number: 3101504730

Product Name: Antenna



IV. RoHS Test Report

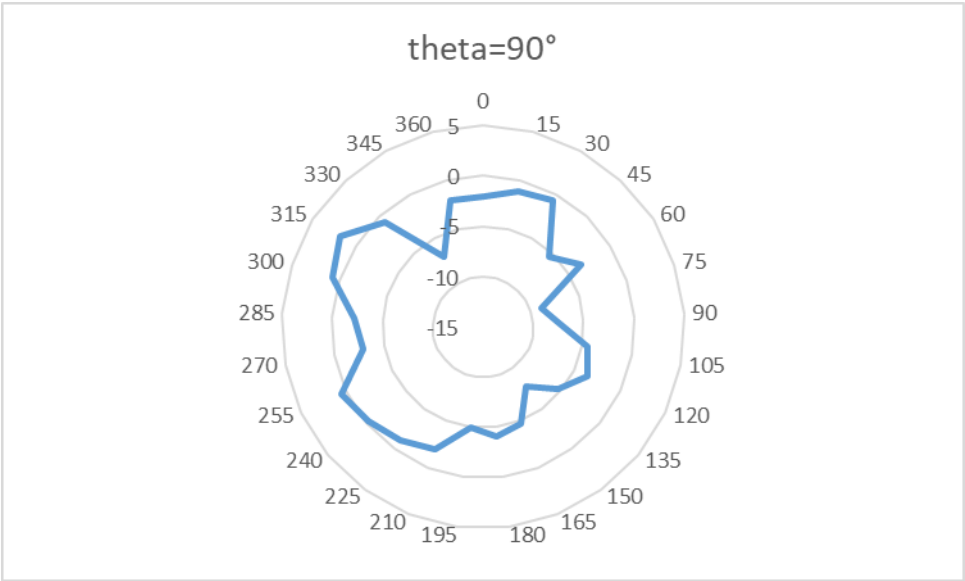
N O .	Product Model	Constit uents	Material	Test Result for RoHS-corresponding Substance						PFOS	Halogen				Series No.	Date	Title	Test Agent
				Cd	Pb	Hg	Cr(VI)	PBB s	PBD Es	PFOS	F	Cl	Br	I				
1	2051500834	PCB	FR-4	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.					SHAEC1200879510	2014/02/12	板材	SGS
			RS-2000 BGL	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.		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.						CANEC1404310001	2014/04/08	OSP 药水	CTI
2	3110500018	RFConn ec tor	Gold plating	N.D.	N.D.	N.D.	Negative			Negative					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			Negative					CE/2015/30055	2015/03/02	Plug Housing	SGS
4	3020500076	HST	EVA	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		N.D.	N.D.	N.D.	N.D.	GZ1102011758/CHEM	2011.02.12	Black plastic tube	广州 SGS
7	3120500035	Cable	Inner conductor .	N.D.	46. .	N.D.	Negative	N.D.	N.D.	N.D.					SHAEC1507036516	2015/4/28	Cable	SGS 上海
			Insulation	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	>100000	N.D.	N.D.	N.D.	SHAEC1500664111	2015/1/21	Cable	SGS 上海
			Outer conductor	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANEC1420243205	2014/12/11	Cable	广州SGS
			mesh	N.D.	N.D.	N.D.	Negative	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ECL03G00367502E	2014/12/15	Cable	CTI
			jacket .	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	>100000	N.D.	N.D.	N.D.	SHAEC1500664109	2015/1/21	Cable	SGS 上海
			FEP color Masterbat ch(black)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		>100000	N.D.	N.D.	N.D.	SHAEC1503900602	2015/03/18	Cable	SGS 上海

V. Antenna – S Parameter Test Data**VI. Antenna – Radiation Pattern Test Data**

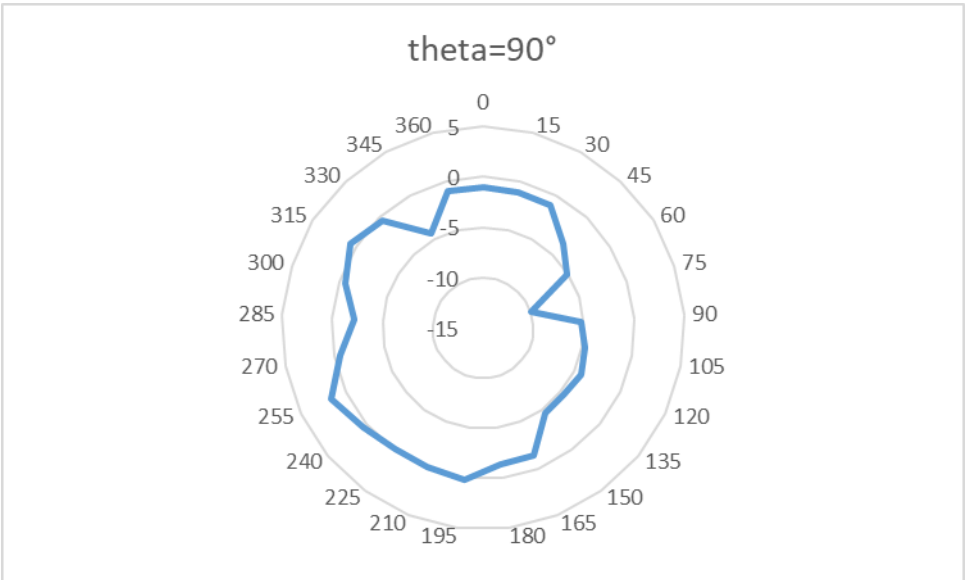
Testing Equipment Specification	
Microwave Chamber	Satimo SG24-S
Testing Equipment	Agilent 5071B

Freq. (MHz)	5925	5975	6025	6075	6125	6175	6225	6275	6325	6375	6425
Peak Gain (dBi)	1.11	1.14	1.23	1.58	1.82	1.96	1.89	1.75	1.76	1.65	1.59
Freq. (MHz)	6475	6525	6575	6625	6675	6725	6775	6825	6875	6925	6975
Peak Gain (dBi)	1.67	1.69	1.76	1.74	1.80	1.85	1.85	1.86	1.83	1.78	1.83
Freq. (MHz)	7025	7075	7125								
Peak Gain (dBi)	1.76	1.77	1.83								

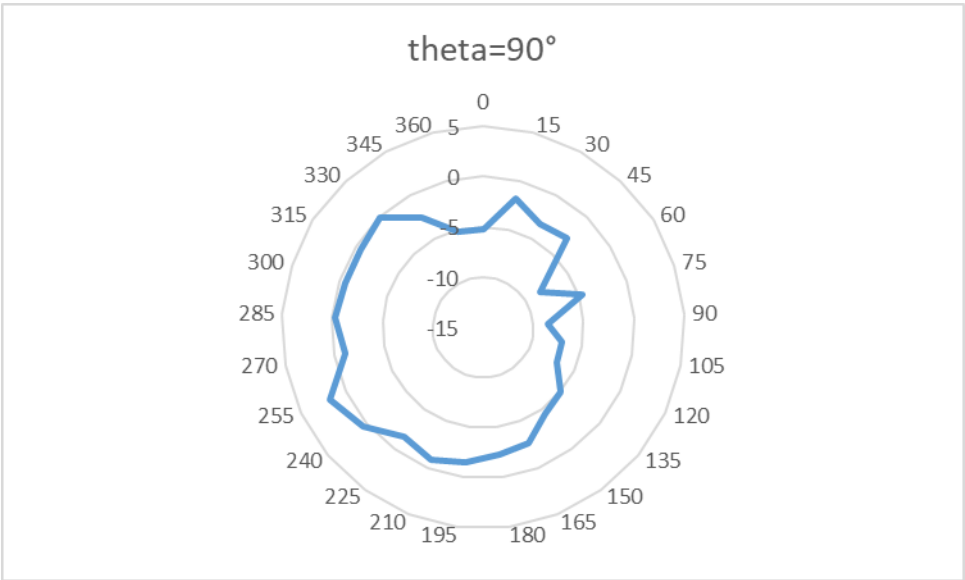
6125MHz



6525MHz



6925MHz



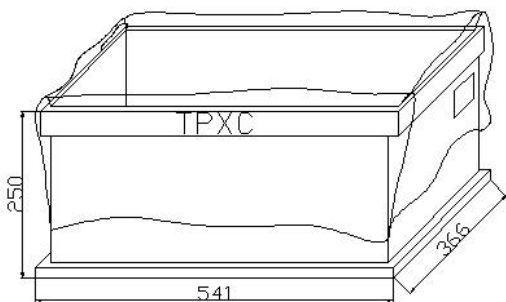
VII. Packing Drawing

i . Put ANT into Plastic Tray （仅作装箱说明）



200PCS/bag

ii. Packing



2000PCS/Box

Label

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

iii.Sealing

