

规格书 specification

客户 Customer : 昊一源

客户料号 Customer P/N:

产品名称 Part Name: External direct antenna

皇捷料号 HJ P/N: 3D0101BK02-001

规格描述 Spec Description : Radio frequency antenna assembly Direct Connection external antenna,CD445 black, copper tube structure,RG178 wire +SMA male and female needle

编制日期 Prepared Date: 4月20日

签署Signature			
客户Customer		供应商Supplier	
承认 Confirmed by		编制 Prepared by	S.He
批准 Approved by		审核 Checked by	何修明
		批准 Approved by	

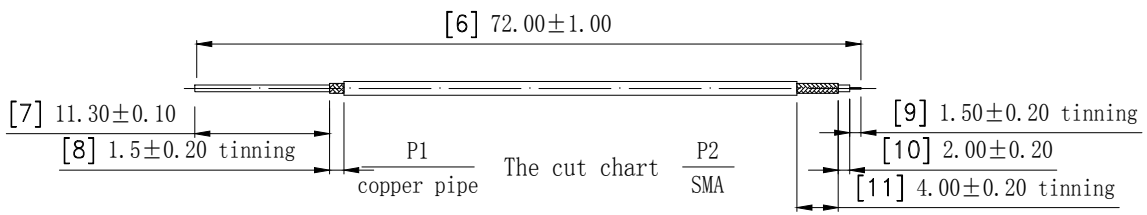
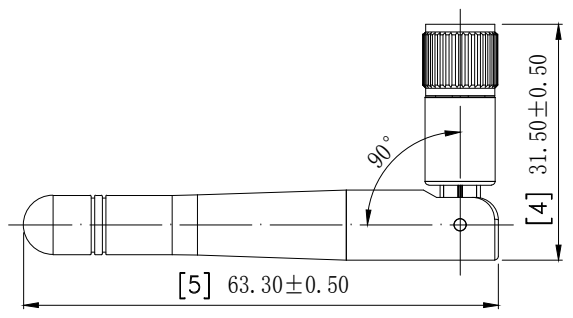
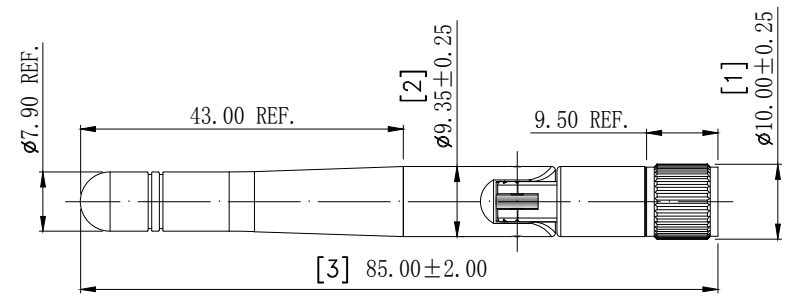
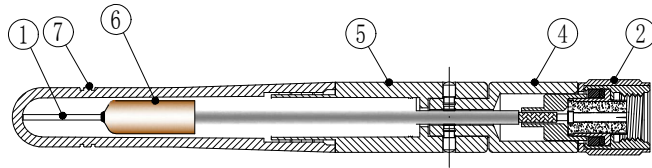
东莞市皇捷通讯科技有限公司

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REVISION	DESCRIPTION	DATE	DRAFTER
A0	FIRST RELEASE	2018. 10. 17	DENGJUN. TAN



Technical requirements:
 Electrical characteristics: 100% tested by vector network analyzer.
 Characteristic impedance :50 ω ; Applicable frequency range:
 5.125ghz-5.825ghz; Standing wave ratio: 2.5 Max.
 2. Size inspection: [*] is the FAI test item; * is the key test item;
 ■ CPK controlled items.
 Visual inspection: full visual inspection.
 The surface of the product shall not be scratched, damaged or dirty. The coating color is bright and uniform, without oxidation.
 4 Packing specification: 25PCS/ package.
 Environmental protection requirements: products and materials used should meet RoHS requirements.

7	2SBKG0100	Mast set, $\varnothing 9.40 \times L43.00$, TPEE, black	1	---
6	2YG035	copper pipe, $\varnothing 4.4 \times \varnothing 1.55 \times L12.0$	1	---
5	2SBKU32N3	On solid, $\varnothing 9.35 \times L28.8$, PC black	1	---
4	2SBKD34N2	The solid, $\varnothing 9.35 \times L19.7 \times \varnothing 5.10$ black	1	---
3	2LC15PF801-5	SMA Mother needle OD:1.5*L7.8mm, gold plating	1	---
2	2LC15PM808-8	SMA PLUG, plastic shell, black	1	---
1	2C5R17811BN1	RG178 coaxial-cable, Silver tin wire	1	The cut chart
No.	PART NUMBER	PART NAME & DESCRIPTION	Q' TY	REMARKS

GENERAL TOLERANCE: LINEAR: X ± 0.20 X.X ± 0.15 X.XX ± 0.05 X.XXX ± 0.01 ANGLE: X° $\pm 4.00^\circ$ X.X° $\pm 3.00^\circ$ X.XX° $\pm 2.00^\circ$ X.XXX° $\pm 1.00^\circ$		HJ-Tech 东莞市皇捷通讯科技有限公司	
FILE NAME: product drawing	TITLE: Radio frequency antenna assembly Direct Connection external antenna, CD445 black, copper tube structure, RG178 wire +SMA male and female needle	P/N: 3D0101BK02-001	
ENG/DATE: DENGJUN. TAN/18.10.17	CHE/DATE:	APP/DATE:	UNIT: mm
SCALE: 1:1	REVISION: A0	SHEET: 1/1	

COMPLIANCE WITH THE REQUIREMENT: ■RoHS; □HF; □SONY SS-00259; □OTHERS H431
 *NO USING ESTRICED AND BANNED SUBSTANCE

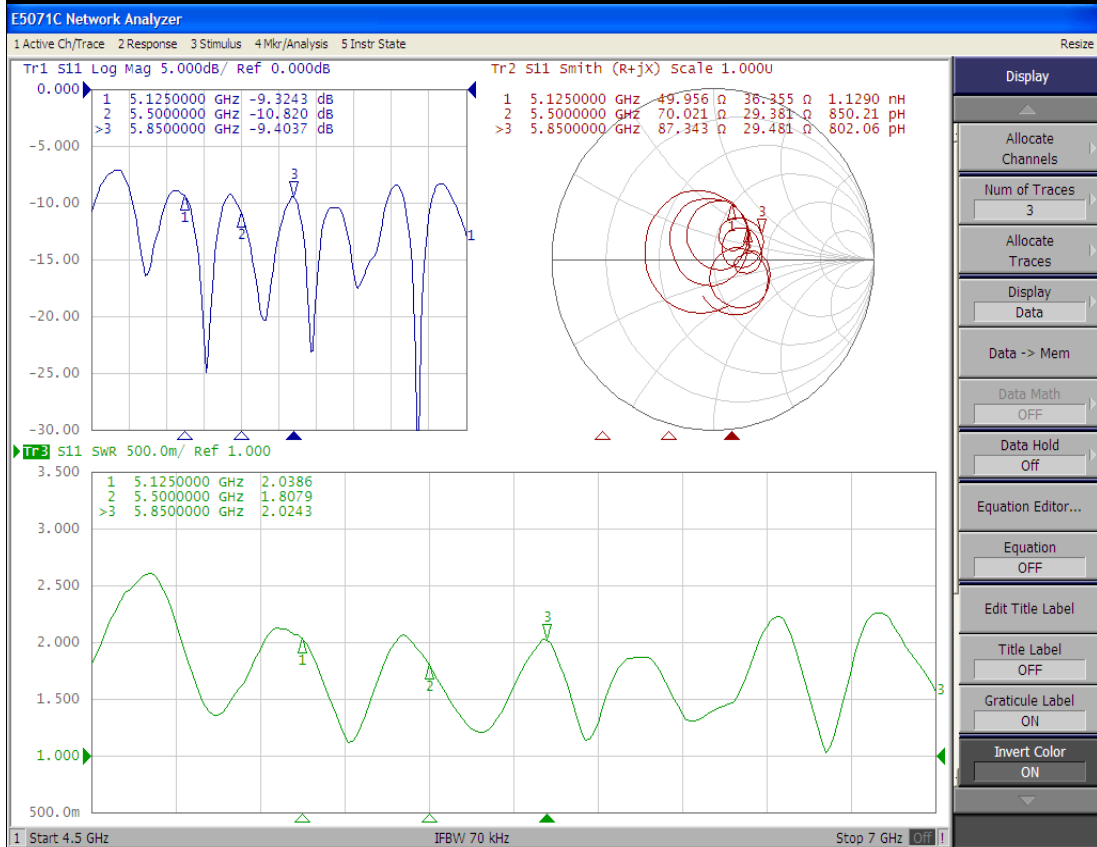


天线电气特性测试报告

Antenna Electrical Characteristic Test Report

文件编号:HJ-QR-Q-22 Rev:A0

产品料号 Part Number:	3C0819N02-001	测试项目 Item	规格 Spec	结果判定 Judge
产品名称 Part Name:	Radio frequency antenna assembly Direct Connection external antenna,CD445 black, copper tube structure,RG178 wire +SMA male and female needle	VSWR 驻波比	≤2.5	pass
测试设备 Test Equipment	暗室darkroom	Characteristic impedance 特性阻抗	50Ω	pass
数量 Quantity	5pcs	Max Gain 增益	3.0dBi	
测试日期 Test Date	2022/4/20			



1 Start 4.5 GHz					IFBW 70 kHz					Stop 7 GHz					OFF				
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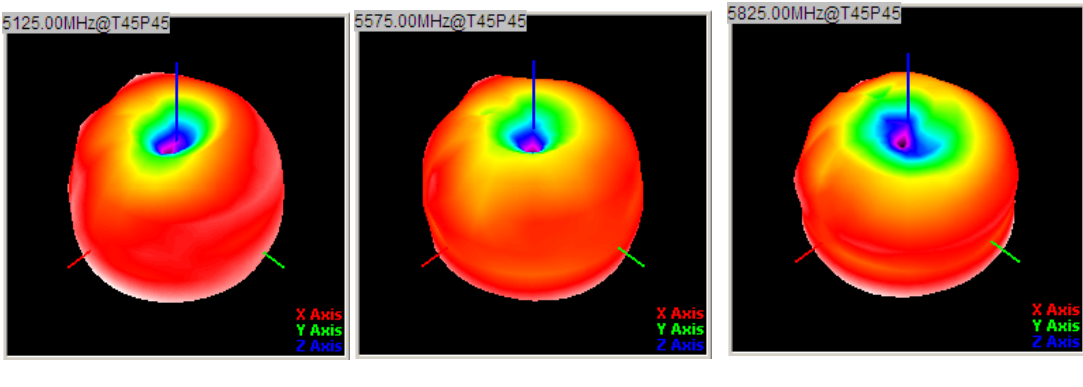
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FETUKEJI															
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Frequency (MHz)	5125.0	5175.0	5225.0	5275.0	5325.0	5375.0	5425.0	5475.0	5525.0	5575.0	5625.0	5675.0	5725.0	5775.0	5825.0
Point Values															
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-3.68	-2.80	-2.55	-3.41	-3.91	-3.12	-2.89	-3.85	-3.77	-3.91	-4.80	-4.53	-3.87	-3.74	-4.24
Peak EIRP (dBm)	0.42	1.07	1.07	0.39	-0.49	0.64	0.86	-0.47	-0.09	0.09	-0.53	-0.40	0.30	0.07	-0.58
Directivity (dBi)	2.98	3.00	2.94	2.84	2.89	2.95	2.93	2.81	2.85	3.00	2.99	3.00	2.97	2.88	2.91
Efficiency (dB)	-1.89	-1.22	-1.95	-1.55	-0.98	-0.52	-0.36	-1.79	-0.81	-0.29	-2.22	-2.19	-1.93	-1.87	-1.62
Efficiency (%)	42.90	52.50	55.60	45.60	40.60	48.80	51.40	41.20	42.00	40.60	33.10	35.20	41.00	42.30	37.70
NHPRP ±Pi/4 (dBm)	-5.61	-4.74	-4.51	-5.42	-5.88	-5.09	-4.83	-5.78	-5.64	-5.73	-6.61	-6.35	-5.71	-5.59	-6.11
NHPRP ±Pi/6 (dBm)	-7.36	-6.51	-6.30	-7.25	-7.72	-6.95	-6.69	-7.65	-7.48	-7.53	-8.37	-8.11	-7.48	-7.42	-7.95
NHPRP ±Pi/8 (dBm)	-8.64	-7.78	-7.60	-8.59	-9.09	-8.34	-8.09	-9.06	-8.87	-8.84	-9.62	-9.32	-8.68	-8.66	-9.19
Upper Hem. PRP (dBm)	-6.83	-5.94	-5.69	-6.58	-7.08	-6.29	-6.07	-7.02	-6.94	-7.09	-8.00	-7.70	-7.01	-6.87	-7.40
Lower Hem. PRP (dBm)	-6.56	-5.68	-5.43	-6.28	-6.77	-5.97	-5.73	-6.70	-6.62	-6.76	-7.63	-7.40	-6.75	-6.63	-7.11
Upper Hem. PRP (%)	20.76	25.47	26.95	22.00	19.58	23.48	24.71	19.88	20.23	19.56	15.87	16.99	19.92	20.58	18.19
Lower Hem. PRP (%)	22.09	27.04	28.66	23.56	21.05	25.30	26.70	21.36	21.79	21.08	17.25	18.22	21.12	21.71	19.46



审核Checker: 何修明

测试者Tester: S.He