

specification

Customer : Shenzhen Hollyland Technology Co., Ltd.

Customer P/N: _____

Part Name: External direct antenna

HJ P/N: 3D0101BK02-001

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

Prepared Date: 2022/4/20

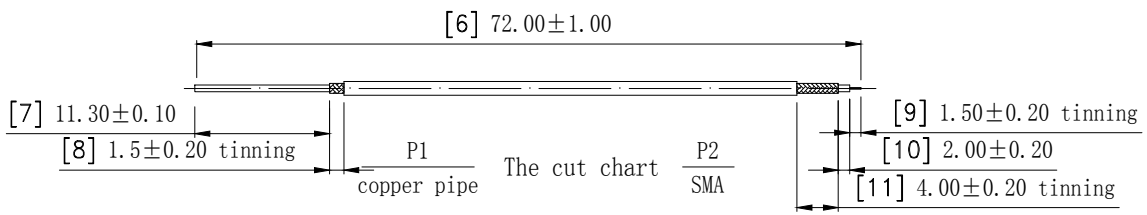
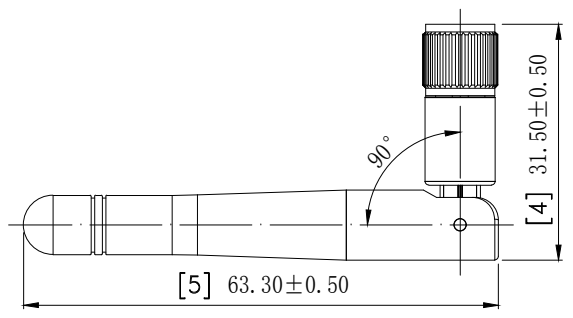
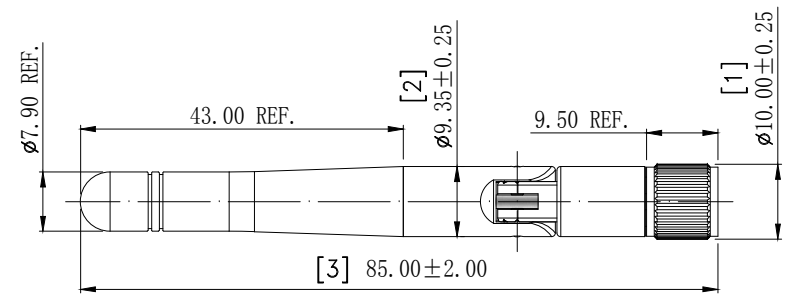
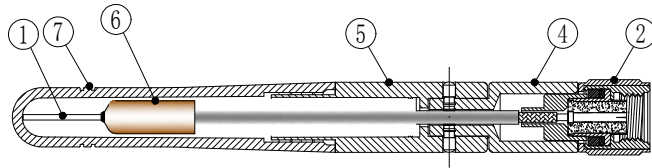
Signature			
Customer		Supplier	
Confirmed by		Prepared by	S. He
Approved by		Checked by	HE XIU
		Approved by	

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, $\phi 9.40 \times L43.00$, TPEE, black	1	---
6	2YG035	copper pipe, $\phi 4.4 \times \phi 1.55 \times L12.0$	1	---
5	2SBKU32N3	On solid, $\phi 9.35 \times L28.8$, PC black	1	---
4	2SBKD34N2	The solid, $\phi 9.35 \times L19.7 \times \phi 5.10$ 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		
ENG/DATE: DENGJUN. TAN/18.10.17	P/N: 3D0101BK02-001		
APP/DATE:	UNIT: mm	SCALE: 1:1	REVISION: AO
			SHEET: 1/1

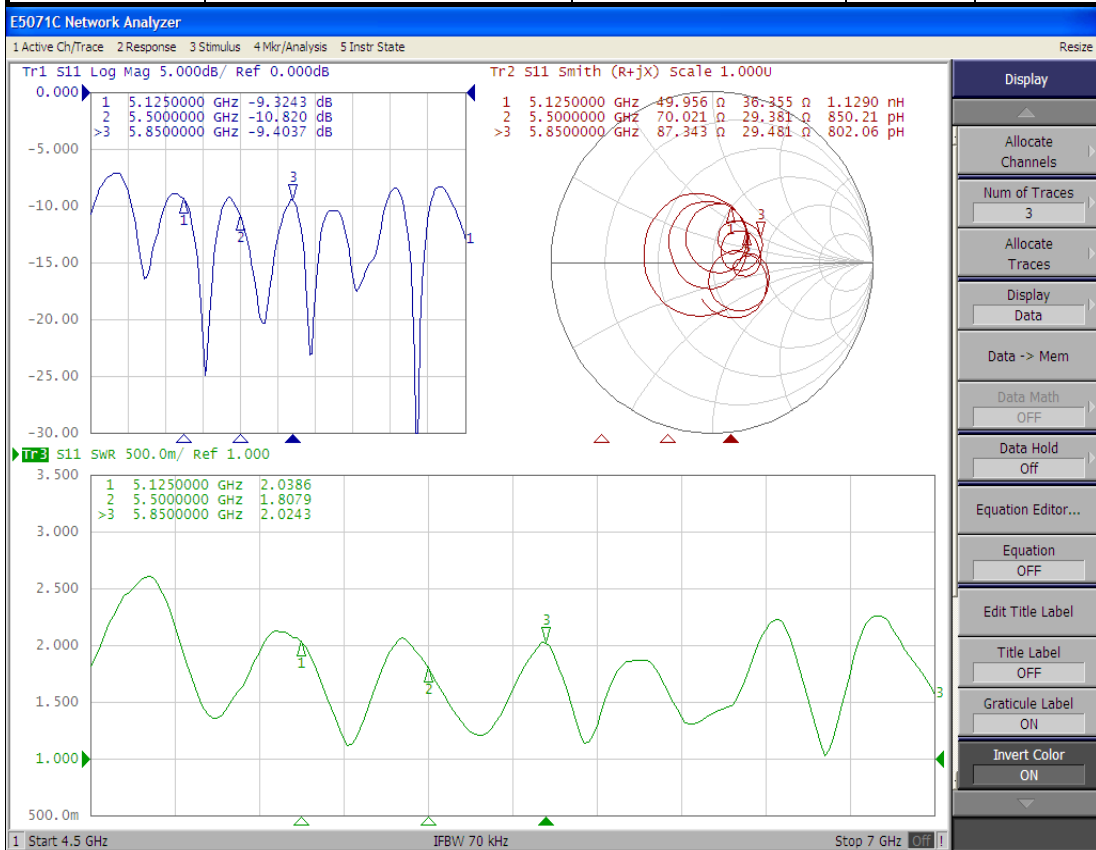
COMPLIANCE WITH THE REQUIREMENT: ■RoHS; □HF; □SONY SS-00259; □OTHERS H431
 *NO USING ESTRICED AND BANNED SUBSTANCE



Antenna Electrical Characteristic Test Report

DOCUMENT NUMBER:HJ-QR-Q-22 Rev:A0

Part Number:	3C0819N02-001	Item	Spec	Judge
Part Name:	Radio frequency antenna assembly Direct Connection external antenna,CD445 black, copper tube structure,RG178 wire +SMA male and female needle	VSWR	≤2.5	pass
Test Equipment	DARKROOM	Characteristic impedance	50Ω	pass
Quantity	5pcs			
Test Date	2022/4/20			



1 Start 4.5 GHz					IFBW 70 kHz					Stop 7 GHz				
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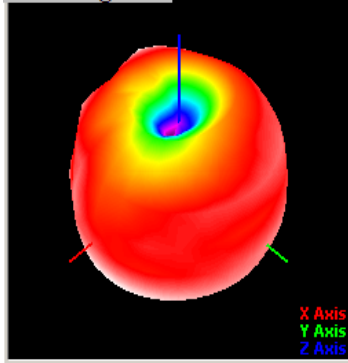
Antenna Electrical Characteristic Test Report

DOCUMENT NUMBER:HJ-QR-Q-22 Rev:A0

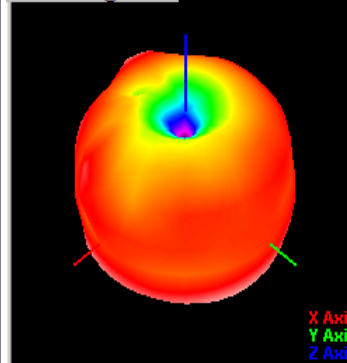
Part Number:	3C0819N02-001	Item	Spec	Judge
Part Name:	Radio frequency antenna assembly Direct Connection external antenna,CD445 black, copper tube structure, RG178 wire +SMA male and female needle	VSWR	≤2.5	pass
Test Equipment	DARKROOM	Characteristic impedance	50Ω	pass
Quantity	5pcs			
Test Date	2022/4/20			

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)	-3.90	-3.00	-2.94	-3.63	-4.32	-3.33	-3.17	-4.10	-4.08	-4.08	-4.84	-4.60	-4.01	-3.89	-4.31
Peak EIRP (dBm)	-0.62	0.07	0.18	-0.05	-0.57	0.53	0.83	0.19	0.29	-0.02	-1.07	-1.02	-0.32	-0.14	-0.76
Directivity (dBi)	3.27	3.07	3.13	3.58	3.75	3.86	4.00	4.28	4.37	4.06	3.77	3.58	3.69	3.75	3.55
Efficiency (dB)	-3.90	-3.00	-2.94	-3.63	-4.32	-3.33	-3.17	-4.10	-4.08	-4.08	-4.84	-4.60	-4.01	-3.89	-4.31
Efficiency (%)	40.80	50.10	50.80	43.40	37.00	46.50	48.20	38.90	39.10	39.10	32.80	34.70	39.70	40.80	37.10
Gain (dBi)	-0.62	0.07	0.18	-0.05	-0.57	0.53	0.83	0.19	0.29	-0.02	-1.07	-1.02	-0.32	-0.14	-0.76
NHPRP ±Pi/4 (dBm)	-4.59	-3.70	-3.61	-4.27	-4.97	-3.98	-3.85	-4.78	-4.77	-4.78	-5.54	-5.26	-4.63	-4.50	-4.91
NHPRP ±Pi/6 (dBm)	-5.70	-4.76	-4.65	-5.30	-6.02	-5.06	-4.95	-5.88	-5.87	-5.85	-6.58	-6.24	-5.58	-5.44	-5.87
NHPRP ±Pi/8 (dBm)	-6.56	-5.58	-5.46	-6.09	-6.84	-5.90	-5.83	-6.77	-6.75	-6.69	-7.38	-7.02	-6.35	-6.23	-6.67
Upper Hem. PRP (dBm)	-6.55	-5.68	-5.69	-6.39	-7.07	-6.06	-5.94	-6.93	-6.91	-6.87	-7.62	-7.50	-7.02	-6.99	-7.46
Lower Hem. PRP (dBm)	-7.30	-6.37	-6.23	-6.90	-7.61	-6.63	-6.44	-7.29	-7.28	-7.33	-8.09	-7.72	-7.02	-6.82	-7.18
Upper Hem. PRP (%)	22.15	27.01	26.96	22.95	19.62	24.76	25.45	20.26	20.37	20.58	17.29	17.77	19.87	20.01	17.93
Lower Hem. PRP (%)	18.63	23.08	23.81	20.41	17.36	21.74	22.72	18.68	18.70	18.50	15.53	16.91	19.88	20.79	19.16

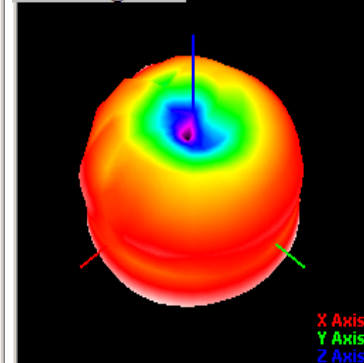
5125.00MHz@T45P45



5675.00MHz@T45P45



5825.00MHz@T45P45



Checker: HE XIU

Tester:

S.He