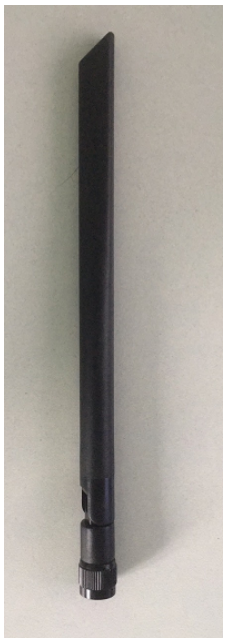
DONGGUAN HUANGJIE COMMUNICATION TECHNOLOGY CO., LTD.



1.88-1.93G antenna

Gel antenn3D1805BK06-002

trait:

- The Outward Appearance Fine
- all weather operations
- Optimized size
- Medium gain、 low standing wave

Model NO	3D1805BK06-002
Electric Spec	
Frequency rang-MHz	1.88-1.93G
Bandwidth -MHz	See waveform diagram for details
Gain -dBi	4.33 DBI MAX
VSWR	1.88-1.93G ≤2.0
Impedance-Ω	50
Connector model	TNC PLUG FEMALE Or user specifiedTNC PLUG or others
CABLE Spec	RG178 Cable Or user specified RG178 Cable or others

Mechanical Specification	
Size -mm	205*13
Antenna weight-kg	/
Working Temperature -° c	-40～60
Radome color	black

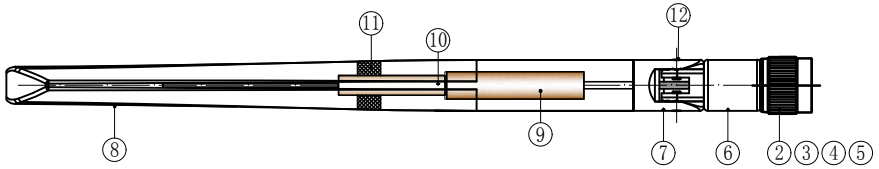
公司网址Website：Http://www.iphone-line.com

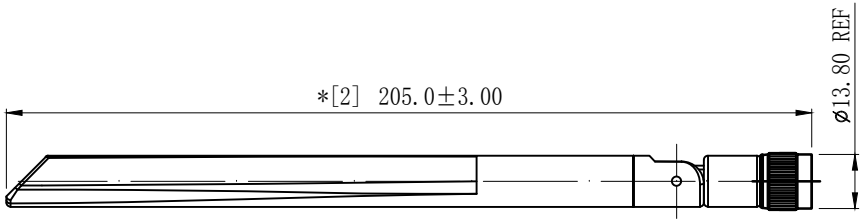
电话Tel：0769-83328111

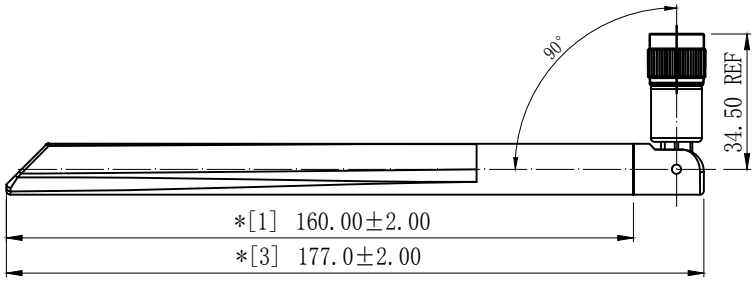
工厂地址Address：No.3 Taihe Road, Daxiandi Industrial Zone, Quantang Village, Liaobu Town, Dongguan City

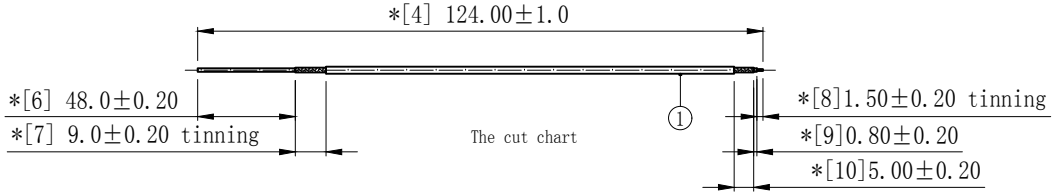
传真Fax：0769-83327688

REVISION	DESCRIPTION	DATE	DRAFTER
A0	initial issue	22.09.07	S.He









Technical requirements:
Electrical characteristics: 100% tested by vector network analyzer.
Characteristic impedance :50 ω; Applicable frequency range: 1.88-1.93g;
Standing wave ratio: Max. 2.00; Gain: 4.33 dbi 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: 20PCS/ bundle, 5 bundles/package, i.e. 1000PCS/ package. (Estimated packaging, according to the actual)
Environmental protection requirements: products and materials used should meet RoHS requirements.
Joints must be riveted and pressed.

No.	PART NUMBER	PART NAME & DESCRIPTION	Q'TY	REMARKS
12	2SBKM2802	rivet,OD:2.4*L5.1mm,POM,black	2	---
11	2MH110	L15.0xW10.0xT3.0mm,Sponge one side gum	1	---
10	2YG041	OD5.0*L27.1 copper pipe, Brass material	1	---
9	2YG132	OD7.0*L42.5 The assembly of brass, Brass material	1	---
8	2SBKG1800	Dao peak rod set, OD:13.0*L160mm,TPEE,black	1	---
7	2SBKU31R0	CD384 On solid,OD:13.00*L28.2mm,PC,black	1	---
6	2SBKD36R0	CD13 Holes under solid,OD:13.0*L25.3mm,PC+PBT,black	1	---
5	2LC17PF802-6	Insulation grain	1	set
4	2LC17PF802-9	Booster tube, zinc alloy, nickel plating	1	
3	2LC17PF802-5	TNC FEMALE gold-plated	1	
2	2LC17PF802-2	TNC PLUG, Electricity with black	1	
1	2C5R17811BN1	RG178 Transparent brown silver tin wire-50 OHM	1	---

GENERAL TOLERANCE:

LINEAR:	
X	±0.20
X.X	±0.15
X.XX	±0.05
X.XXX	±0.01
ANGLE:	
X°	±4.00°
X.X°	±3.00°
X.XX°	±2.00°
X.XXX°	±1.00°

HJ-Tech DONGGUAN HUANGJIE COMMUNICATION TECHNOLOGY CO., LTD.

FILE NAME: product drawing	TITLE: Radio frequency antenna assembly, G18 Black, Copper tube + Copper tube,RG178+TNC Male and Female needle (1.88-1.93G),(R35-RF21080-OBM)				
ENG/DATE: S.He/22.09.07					
CHE/DATE: .	P/N: 3D1805BK06-002				
APP/DATE: .	UNIT: mm		SCALE: 1:1	REVISION: A0	SHEET: 1/1

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

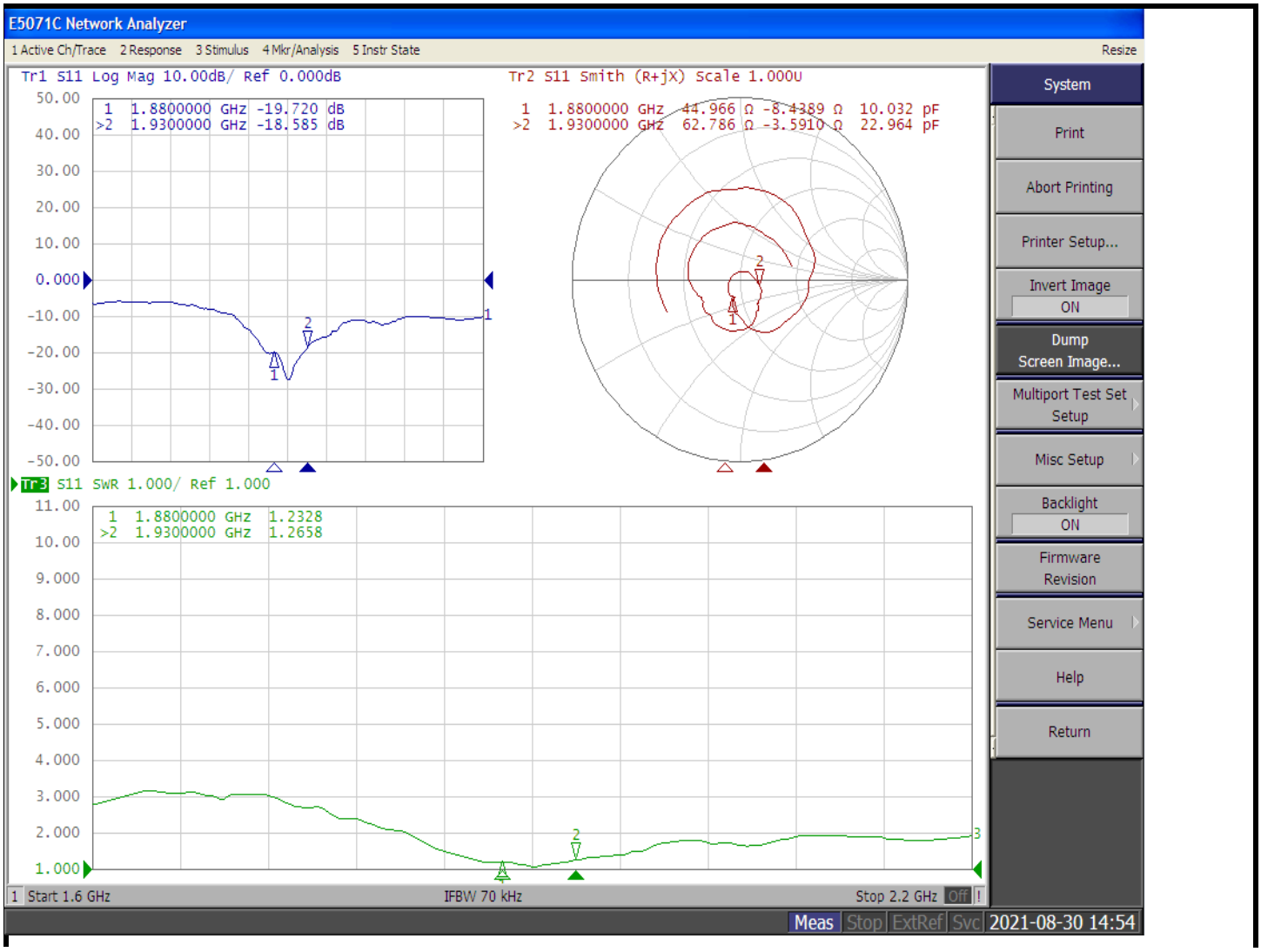
H431

DONGGUAN HUANGJIE COMMUNICATION TECHNOLOGY CO., LTD.

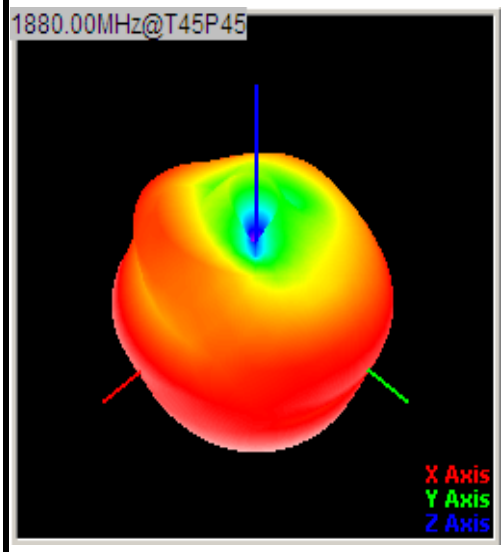
Antenna Electrical Characteristic Test Report

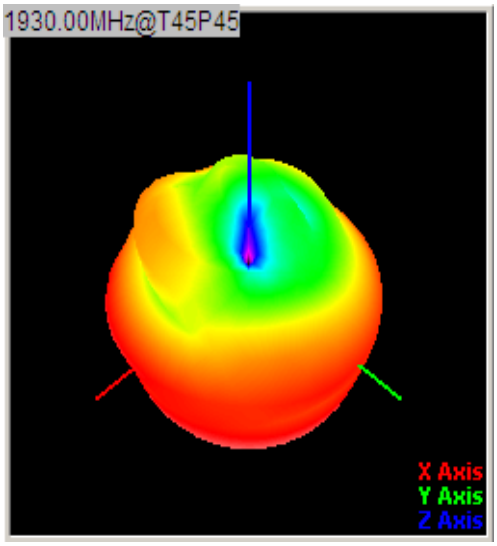
N0:HJ-QR-Q-13/A0

Part Number:	3D1805BK06-002	**Item**	**Spec**	**Judge**
Part Name:	G07 Black, Copper tube + Copper tube, RG178+TNC Male and Female needle (1.88-1.93G)	VSWR	≤2.0	pass
Test Equipment	Network analyzer/ microwave anechoic room	Characteristic impedance	50Ω	pass
Quantity	5pcs	Gain	0~3dBi	pass
Test Date	2021/8/30			



Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	1850.0	1860.0	1870.0	1880.0	1890.0	1900.0	1910.0	1920.0	1930.0	1940.0	1950.0
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
Tot. Rad. Pwr. (dBm)	-0.97	-0.79	-0.94	-0.90	-0.87	-0.96	-1.06	-0.93	-0.97	-0.81	-0.85
Peak EIRP (dBm)	2.77	2.98	2.91	3.11	3.42	3.70	3.94	4.27	4.33	3.55	3.55
Directivity (dBi)	3.75	3.77	3.84	4.01	4.29	4.66	5.00	5.20	5.30	5.36	5.40
Efficiency (dB)	-0.97	-0.79	-0.94	-0.90	-0.87	-0.96	-1.06	-0.93	-0.97	-0.81	-0.85
Efficiency (%)	79.90	83.50	80.60	81.30	81.80	80.20	78.40	80.70	80.00	83.10	82.20
Gain (dBi)	2.77	2.98	2.91	3.11	3.42	3.70	3.94	4.27	4.33	3.55	3.55
NHPRP ±Pi/4 (dBm)	-2.10	-1.92	-2.08	-2.08	-2.11	-2.28	-2.46	-2.38	-2.45	-2.29	-2.35
NHPRP ±Pi/6 (dBm)	-3.51	-3.32	-3.48	-3.49	-3.54	-3.74	-3.95	-3.91	-3.98	-3.81	-3.86
NHPRP ±Pi/8 (dBm)	-4.56	-4.37	-4.54	-4.55	-4.62	-4.83	-5.05	-5.02	-5.09	-4.92	-4.94
Upper Hem. PRP (dBm)	-6.83	-6.68	-6.83	-6.81	-6.89	-7.22	-7.66	-7.88	-8.17	-8.10	-8.09
Lower Hem. PRP (dBm)	-2.28	-2.08	-2.23	-2.18	-2.12	-2.13	-2.13	-1.91	-1.89	-1.70	-1.76
Upper Hem. PRP (%)	20.73	21.48	20.74	20.86	20.47	18.96	17.12	16.28	15.23	15.49	15.52
Lower Hem. PRP (%)	59.18	61.98	59.87	60.48	61.34	61.24	61.25	64.46	64.79	67.58	66.69





Checked by	JIANG NENG GUANG	Tested by	CHU HUAN