

specification

Customer : 昊一源

Customer P/N:

Part Name: DIRECT CONNECTED EXTERNAL
ANTENNA

HJ P/N: 3D0203BK02-003

Spec Description : 2dBi DUAL FREQUENCY
ANTENNA,CD379 BLACK,
RG178+RP-SMA PLUG,OD:10*L108mm

Prepared Date: 2023/8/19

Signature

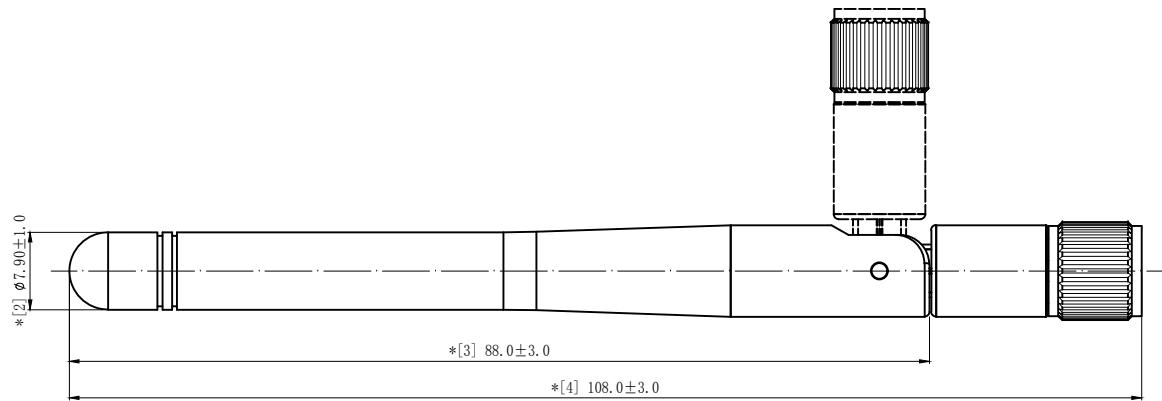
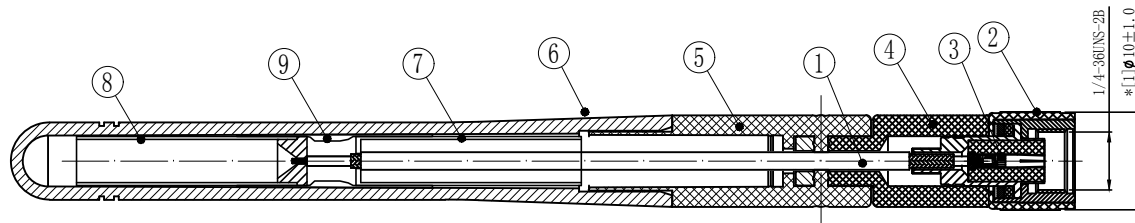
Customer		Supplier	
Confirmed by		Prepared by	S.He
Approved by		Checked by	何修明
		Approved by	刘福勇

东莞市皇捷通讯科技有限公司

CONTENTS

S/N	SYNOPSIS	PAGE
1	COVER	1
2	CONTENTS	2
3	PRODUCT DRAWING	3
4	DATESHEET	4
5	NETWORK ANALYZER/MICROWAVE DARKROOM TEST REPORT	5-11

REVISION	DESCRIPTION	DATE	DRAFTER
A0	FIRST ISSUE	19. 11. 21	Mark



PRODUCT WEIGHT: 9.50g

TECHNICAL REQUIREMENTS:

- ELECTRICAL CHARACTERISTICS: CHARACTERISTIC IMPEDANCE: 50 Ω; GAIN 2DBI
APPLICABLE FREQUENCY RANGE: 2.4GHZ -2.5GHZ VSWR: 2.0 MAX;
5.15GHZ TO 5.85GHZ VSWR: 2.0 MAX.
- DIMENSIONAL INSPECTION: [*] IS A FAI INSPECTION ITEM* FOR KEY TESTING PROJECTS; FOR CPK CONTROLLED PROJECTS.
- APPEARANCE INSPECTION: VISUAL FULL INSPECTION. THE SURFACE OF THE PRODUCT MUST NOT BE SCRATCHED, DAMAGED, OR DIRTY; THE COATING COLOR SHOULD BE BRIGHT AND UNIFORM, WITHOUT OXIDATION.
- PACKAGING SPECIFICATIONS: 50PCS/PACK
- ENVIRONMENTAL REQUIREMENTS: BOTH THE PRODUCT AND THE MATERIALS USED MUST COMPLY WITH ROHS REQUIREMENTS.

9	2TB050BK1-020	OD:5.0*L20.0mm, HEAT SHRINK TUBING BLACK	1	---
8	2YG009	L23.00*Ø5.00*Ø0.60	1	---
7	2YG011	L23.00*Ø5.00*Ø1.55	1	---
6	2SBKG0200	HOUSING, L67.5*Ø9.35, TPEE, BLACK	1	---
5	2SBKU32N3	UPPER FIXED SEAT, Ø9.35*L28.8, PC, BLACK	1	---
4	2SBKD34N2	LOWER FIXED SEAT, Ø9.35*L19.7*Ø5.10, PC, BLACK	1	---
3	2LC15PF801-5	SMA MOTHER NEEDLE, OD1.5*L7.8	1	---
2	2LC15PM808-8	SMA PLUG, OD10.0*L16.5*ØD5.1, POM, BLACK	1	---
1	2C5R17811BN1	COAXIAL CABLE, RG178, BROWN	1	---
No.	PART NUMBER	PART NAME & DESCRIPTION	Q' TY	REMARKS

GENERAL TOLERANCE:

LINEAR:	
X	±2.00
X.X	±1.00
X.XX	±0.50
X.XXX	±0.30
ANGLE:	
X°	±4.00°
X.X°	±3.00°
X.XX°	±2.00°
X.XXX°	±1.00°

HJ-Tech 东莞市皇捷通讯科技有限公司

FILE NAME: PRODUCT DRAWING	TITLE: DIRECT CONNECTED EXTERNAL ANTENNA 2dBi DUAL FREQUENCY ANTENNA, CD379 BLACK, RG178+RP-SMA PLUG, OD:10*L108mm
ENG/DATE: Mark/19. 11. 21	P/N: 3D0203BK02-003
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

P/N : 3D0203BK02-003

DESCRIPTION : 2dBi DUAL FREQUENCY ANTENNA,CD379 BLACK,RG178+RP-SMA
 N : PLUG,OD:10*L108mm



ELECTRICAL PERFORMANCE

1	NOMINAL IMPEDANCE :	50Ω
2	FREQUENCY RANGE :	2.4~2.5GHz; 5.15~5.85GHz
3	VSWR :	2.0 MAX.
4	GAIN :	2dBi
5	POLARIZATION MODE :	VERTICAL
6	RADIATION DIRECTION :	OMNIDIRECTIONAL

MECHANICAL PROPERTIES

1	ANTENNA SIZE :	OD10*108mm
2	ANTENNA HOUSING :	TPEE,BLACK
2	ANTENNA CONNECTOR :	RP-SMA PLUG

ENVIRONMENTAL SPECIFICATION

1	OPERATION TEMPERATURE :	-40° 至 +60°
2	CORROSION :	SALT WATER DENSITY:(5±1)%,TEMPERATUR:(35±3)°C,48HRS.
3	STORAGE ENVIRONMENT:	TEMPERATURE: -40° ~ +85°C; HUMIDITY: 20% ~ 75%
4	MEMORY CYCLE :	AT LEAST 6 MONTHS IF CONDITIONS ARE MET.
5	ENVIRONMENTAL :	RoHS COMPLIANT.

DURABILITY SPECIFICATION

1	DURABILITY :	RP-SMA PLUG: 500 CYCLES
2	SERVICE LIFE :	UNDER THE ABOVE ELECTRICAL, MECHANICAL, AND ENVIRONMENTAL PERFORMANCE CONDITIONS, THE SERVICE LIFE IS 10 YEARS

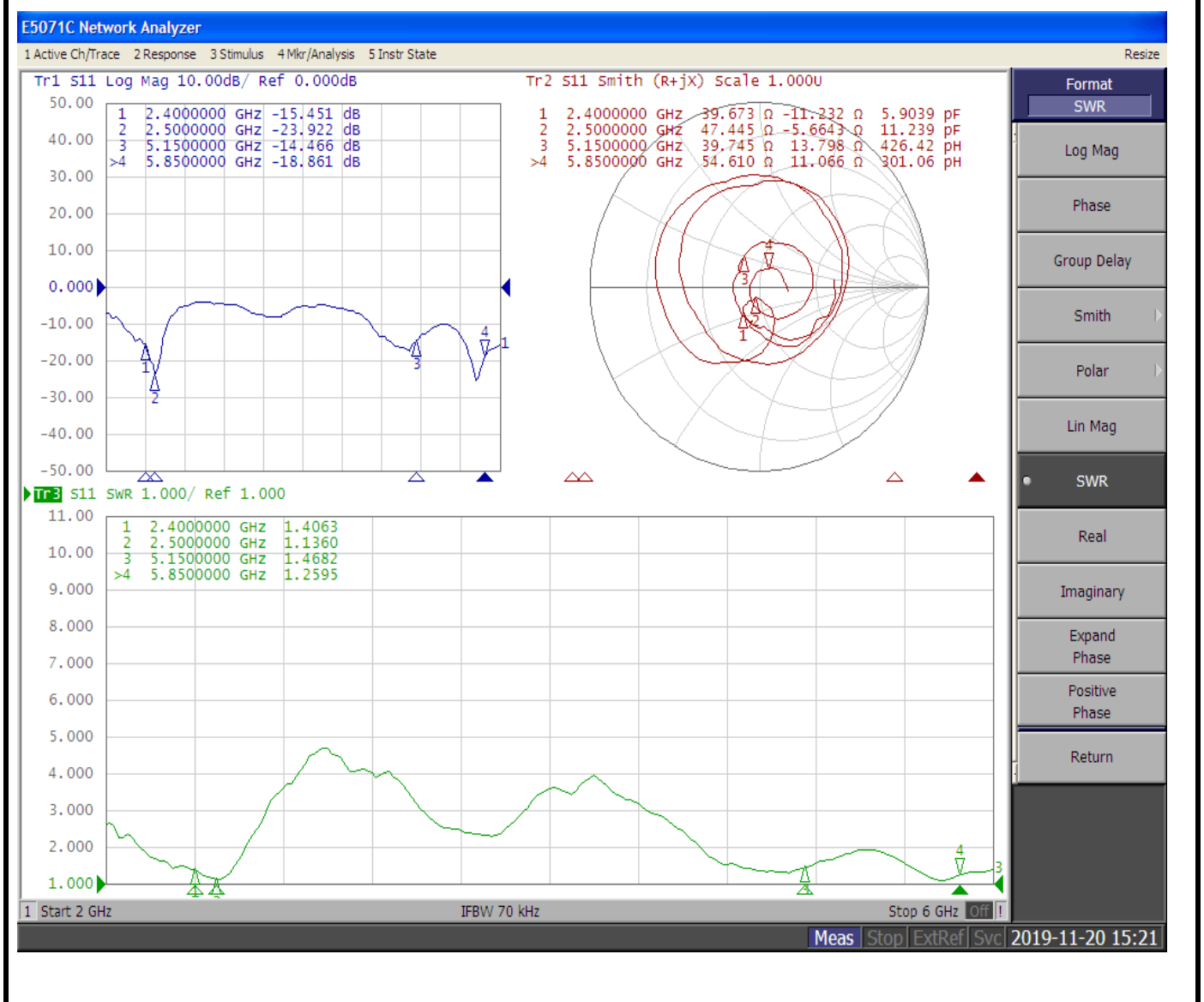


Antenna Electrical Characteristic Test Report

Doc No:HJ-QR-Q-22 Rev:A0

Part Number:	3D0203BK02-003	Item	Judge
Part Name:	DIRECT CONNECTED EXTERNAL ANTENNA L=108mm	VSWR \leq 2.0	PASS
Test Equipment	Network analyzer	Gain (dBi) $>$ 1.5dBi	PASS
Test Date	11.21		

Antenna test data



Checker: WANGJUN

Tester:

Mark

P/N:

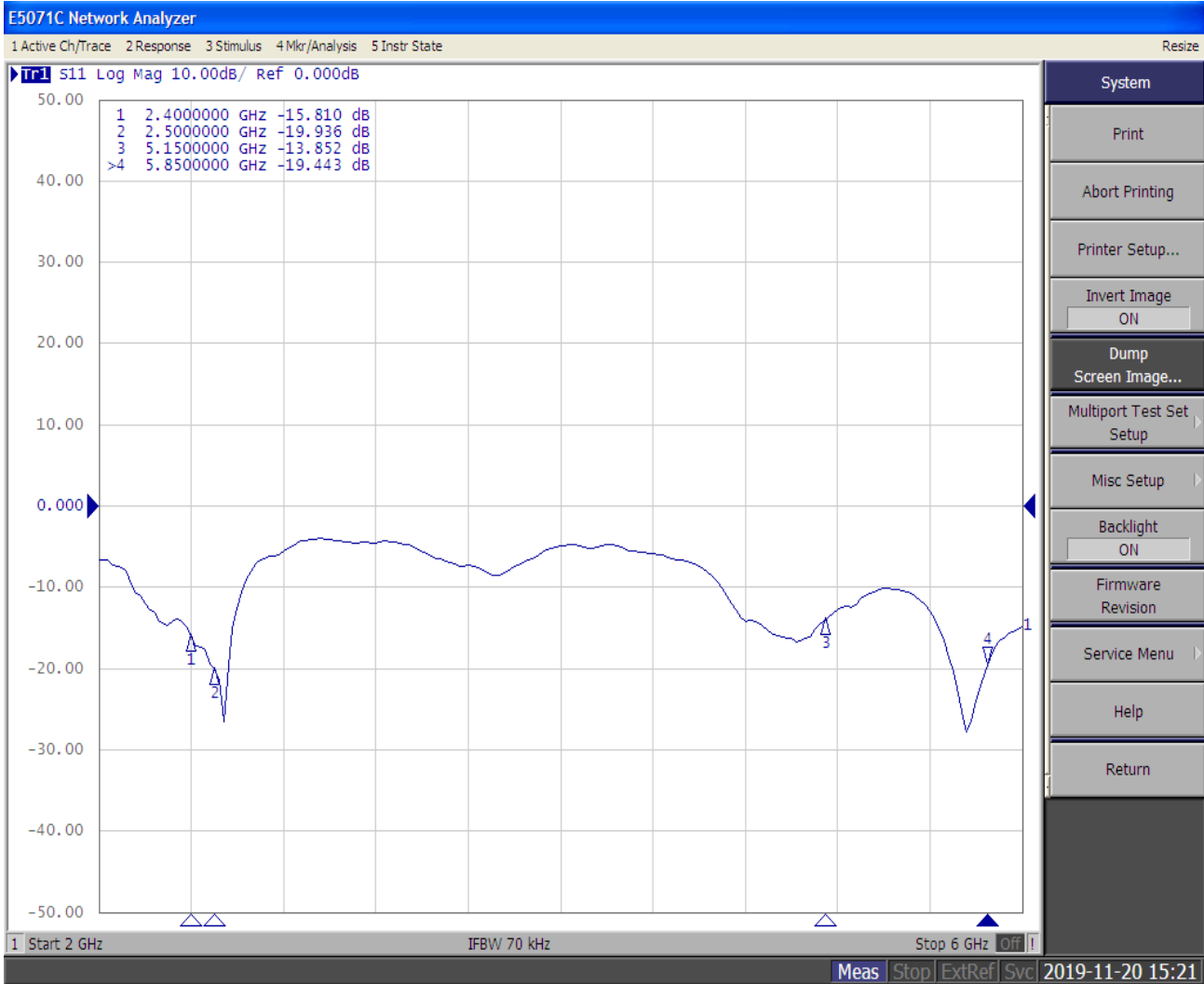
3D0203BK02-003

Part Name

DIRECT CONNECTED EXTERNAL ANTENNA

Antenna test data

S11



Checker: WANGJUN

Tester: Mark

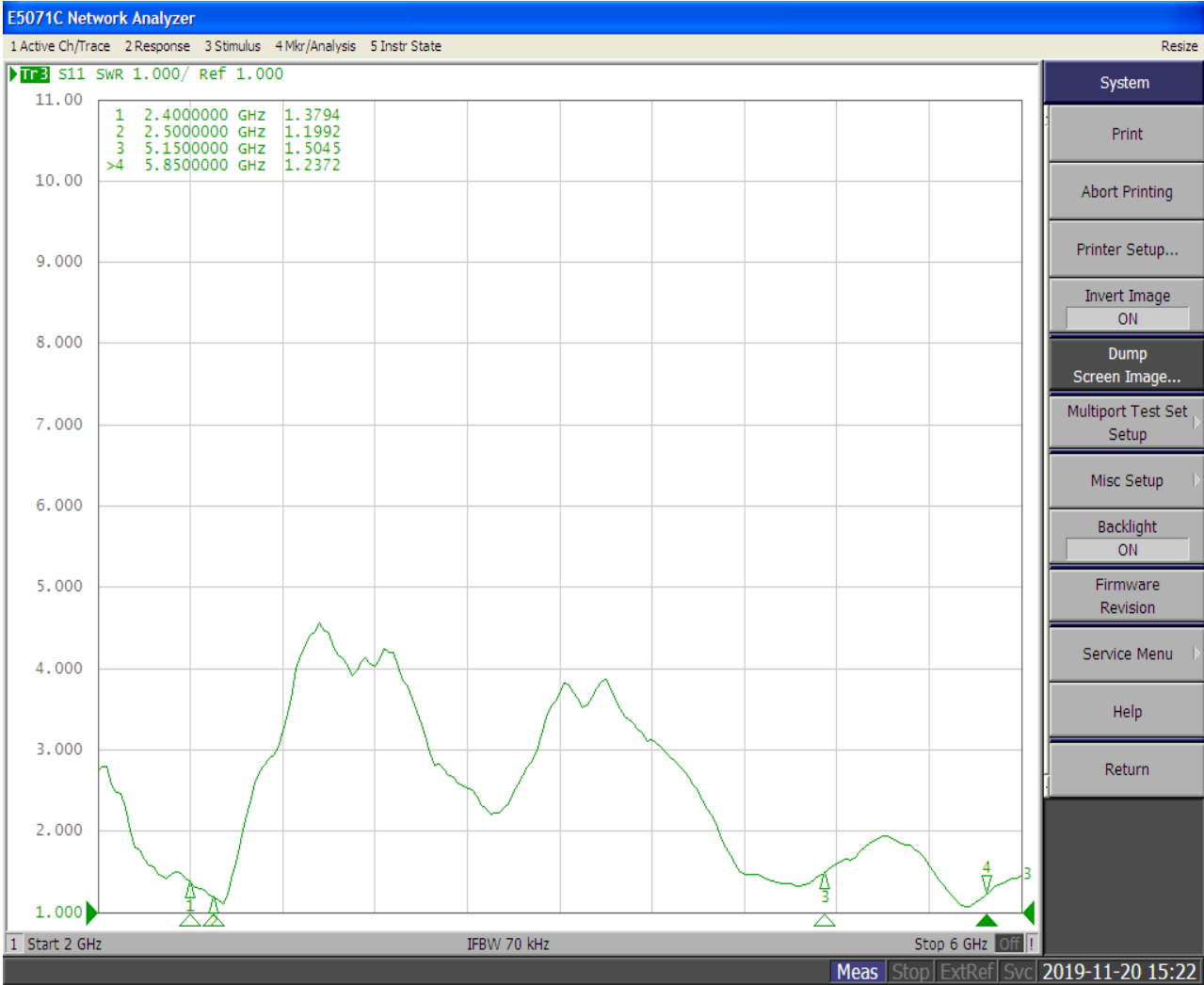
产品料号

3D0203BK02-003

产品名称

DIRECT CONNECTED EXTERNAL ANTENNA

Antenna test data



Checker: WANGJUN

Tester: Mark

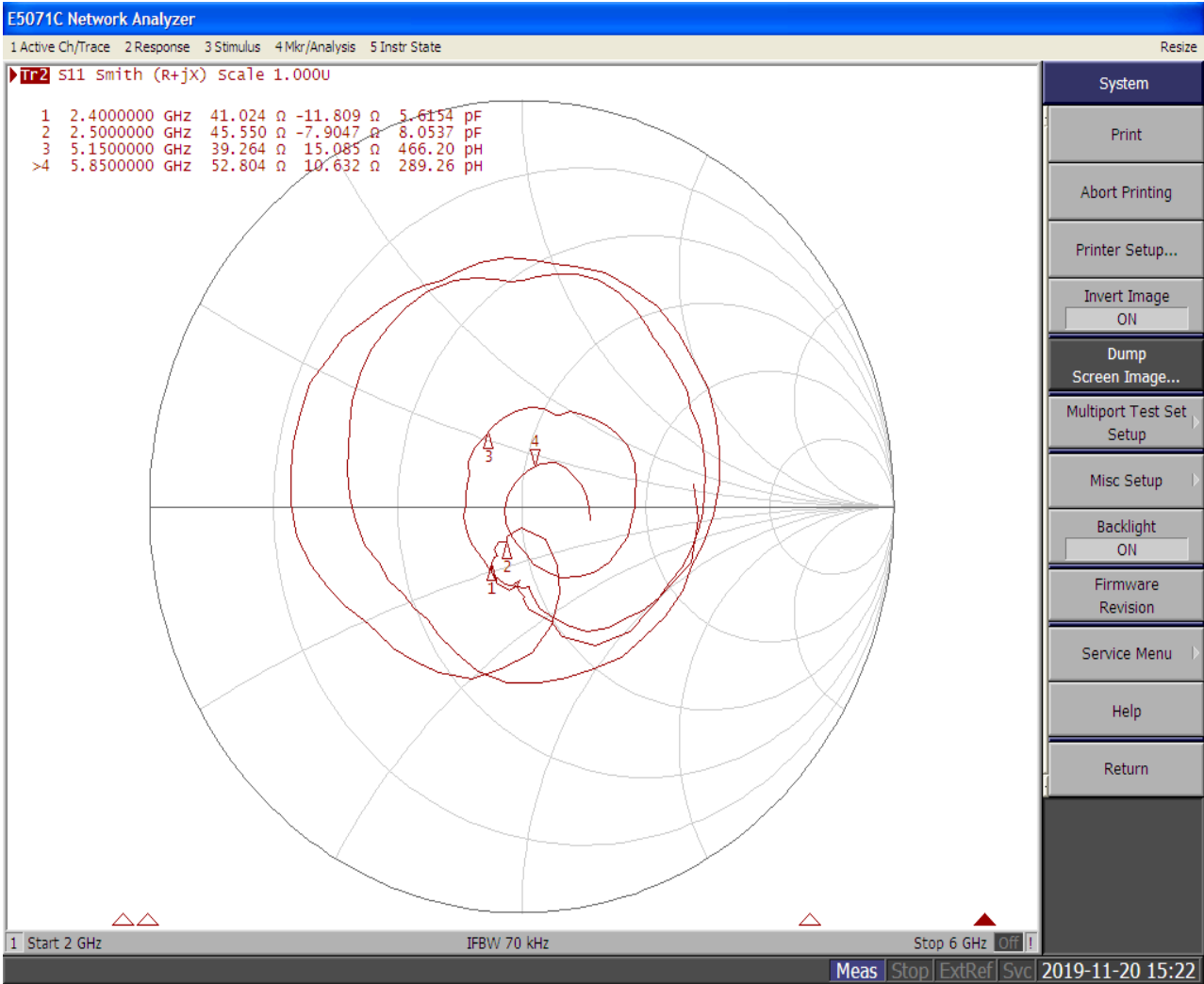
P/N:

3D0203BK02-003

Part Name

DIRECT CONNECTED EXTERNAL ANTENNA

Antenna test data



Checker: WANGJUN

Tester: Mark

P/N:

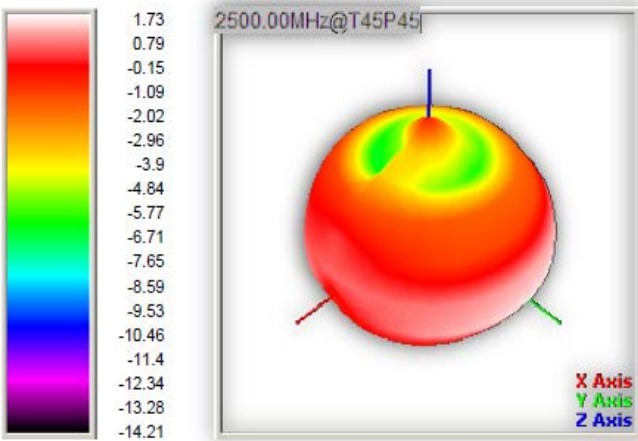
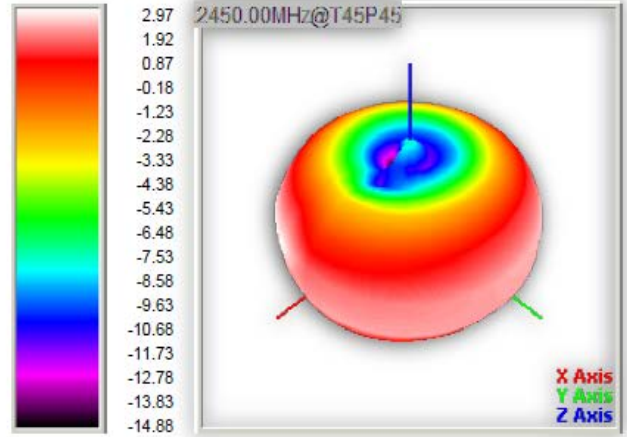
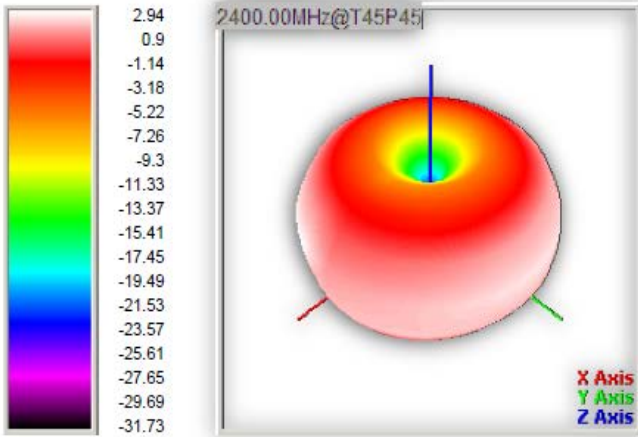
3D0203BK02-003

Part Name

DIRECT CONNECTED EXTERNAL ANTENNA

Radiation Patter(3D)

2.4~2.5GHz



Checker: WANGJUN

Tester: Mark

P/N:

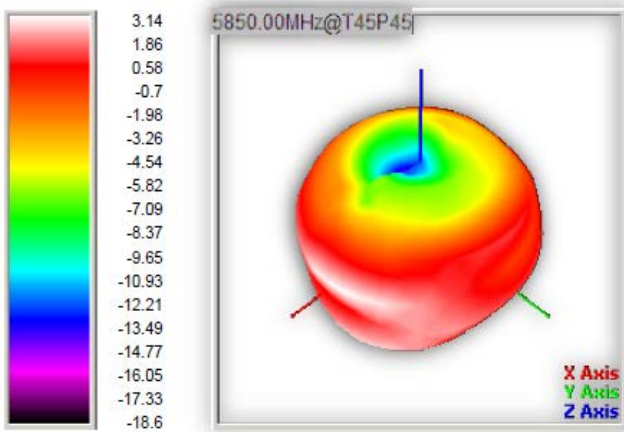
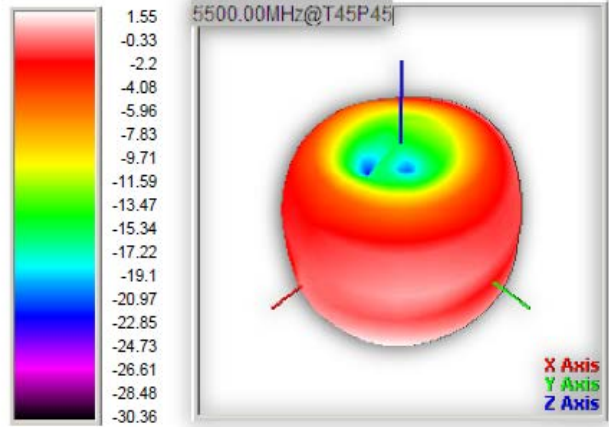
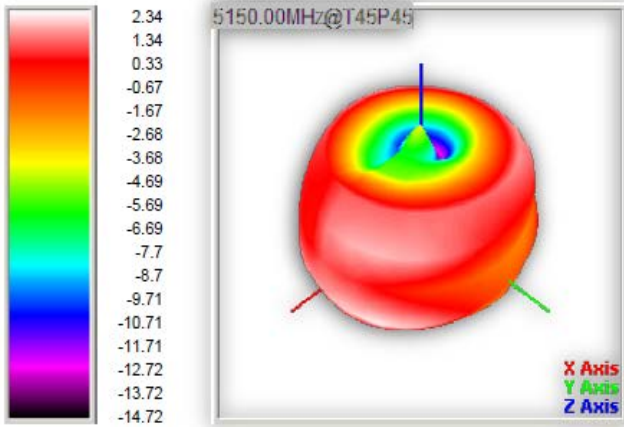
3D0203BK02-003

Part Name

DIRECT CONNECTED EXTERNAL ANTENNA

Radiation Patter(3D)

5.15~5.85GHz



Checker: WANGJUN

Tester: Mark

P/N:

3D0203BK02-003

Part Name

DIRECT CONNECTED EXTERNAL ANTENNA

Matching circuit



No-source test data

Frequency(MHz)	2400	2420	2450	2470	2500	5150	5300	5500	5700	5850
Peak Gain(dBi)	2.94	2.83	2.97	2.53	1.73	2.34	2.61	2.86	2.73	3.14
Efficiency (%)	74.00	76.20	78.70	76.90	66.60	73.00	64.50	75.40	67.10	78.90

Checker: WANGJUN

Tester: Mark