



上海增信电子有限公司
Signal Plus Technology Co., Ltd.

规格承认书
SPECIFICATION FOR APPROVAL

日期
DATE: 2023.04.07

版本
REV.: B

客 户
CUSTOMER: DAVOLINK

客 户 料 号
CUSTOMER P/N:

品 名
PART NAME: Internal PCB Ant, 2.4G&5G 1.37 low loss black cable 90mm with
RF CONN for DVW-642 BOB

供 方 料 号
SUPPLIER P/N: 6307F00014

送样日期Date: 送样数量Q'TY: Pcs

客户确认CUSTOMER APPROVED BY		
核准 Approved by	审核 Checked by	拟制 Prepared by
Jung	Lee	Chae

供方确认SUPPLIER SIGNATURE		
核准 Approved by	审核 Checked by	拟制 Prepared by
Jack	Wang	andy

ZX-QT-RD-0011-A1

Add:上海市徐汇区桂箐路69号30栋605室 Tel:021-54266190 Fax:021-54266191

Specification

1. Electrical Properties :

- 1.1 Frequency Range.....2400~2500MHz & 5150~5850MHz
- 1.2 Impedance 50 Ω
- 1.3 VSWR ≤ 1.8
- 1.5 Gain 5dBi @ 2400~2500MHz
6dBi @ 5150~5850MHz

2. Physical Properties :

- 2.1 Cable..... RF 1.37
- 2.2 Connector IPEX compatible
- 2.3 Operating Temp. -20°C ~ +65°C
- 2.4 Storage Temp. -30°C ~ +75°C



Antenna Test Report

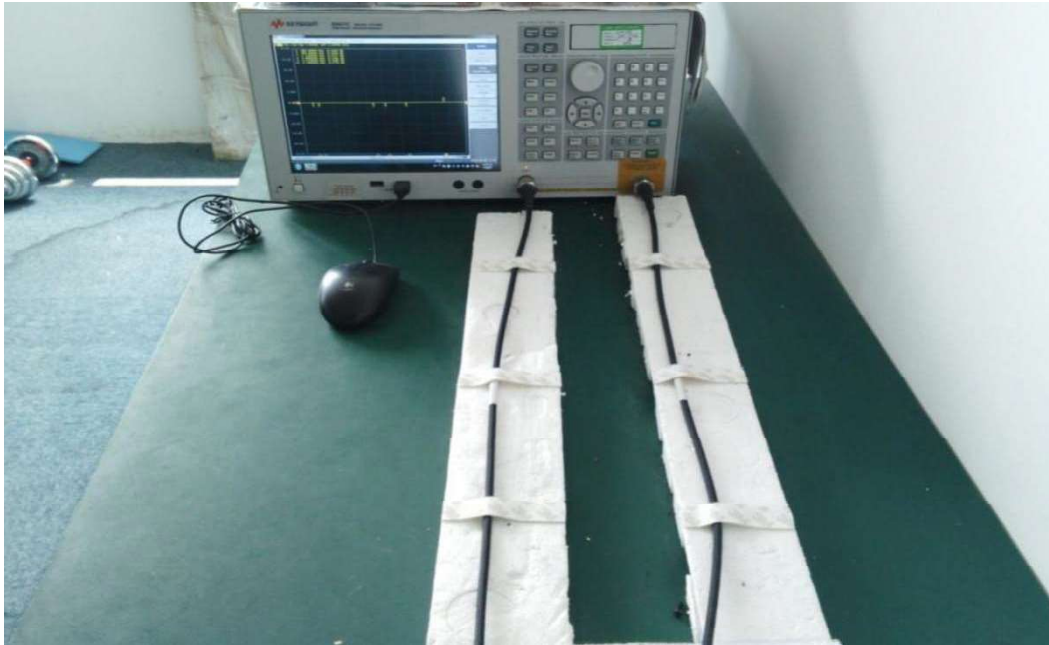
DVW-642

1. RF Fixture Experiment

1.1 Test Setup

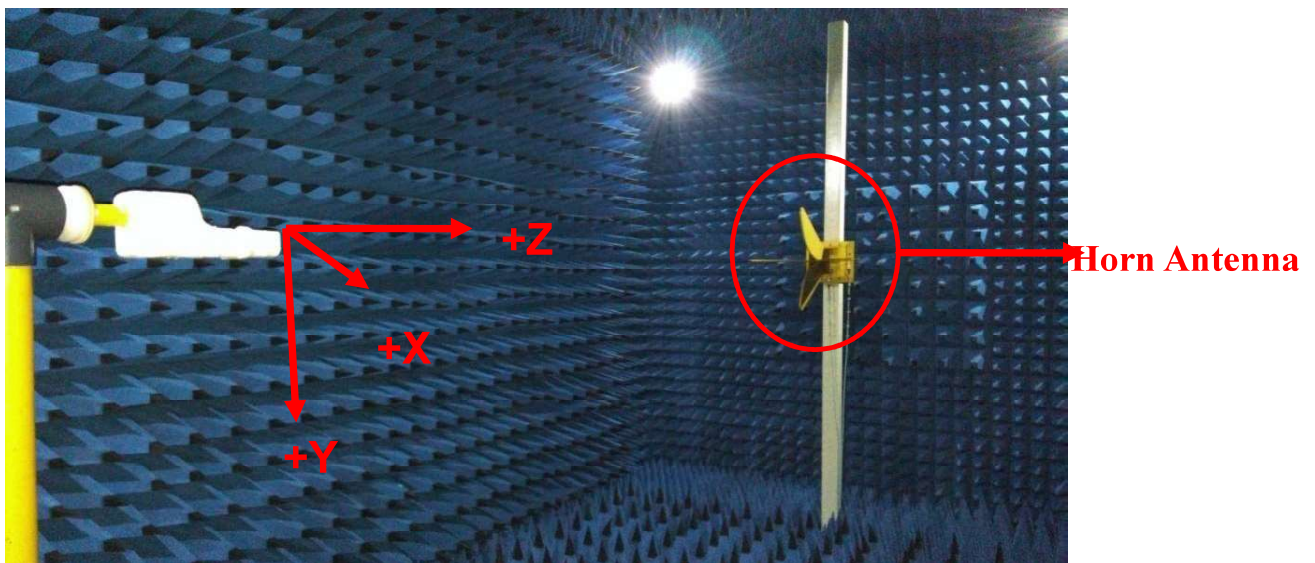
1.1.1 VNA Test Setup

VSWR and Return Loss measurements (S_{11}) were performed using an Keysight E5071C Network Analyzer. The isolation between antennas is also tested. The testing was performed with apparatus in free space.



1.1.2 Anechoic Chamber Test Setup

The gain of the antenna was measured in the anechoic chamber. The chamber provides less than -30 dB reflectivity from 400 MHz through 6 GHz. The chamber size is: 7m*4m*3m. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.



Data Preview

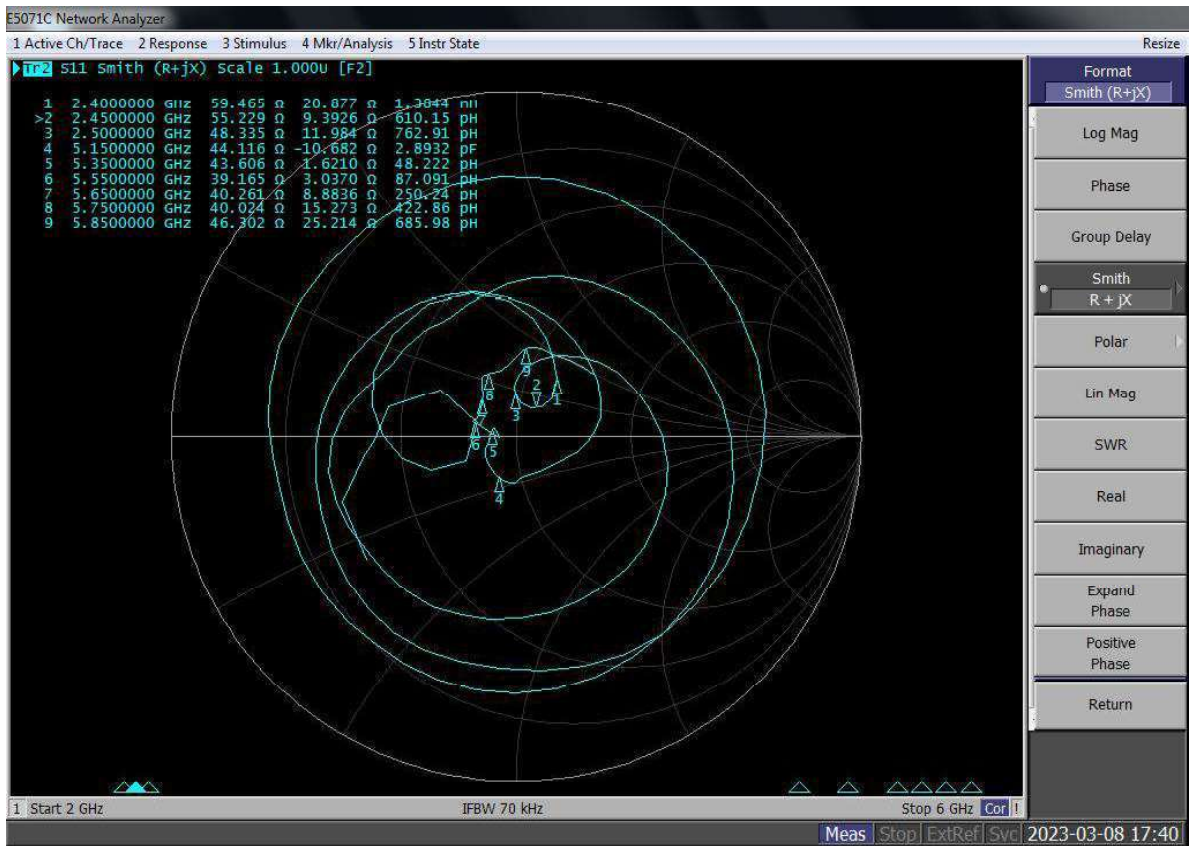
Ant1-90mm Cable

Freq.(MHz)	2400	2450	2500	5150	5350	5550	5650	5750	5850
VSWR	1.40	1.21	1.36	1.23	1.31	1.17	1.17	1.43	1.65
Gain(dBi)	5.83	5.96	5.91	6.61	6.32	6.05	6.26	6.86	6.60
Eff. (%)	75.90	80.20	82.30	80.70	80.00	80.70	75.00	80.30	75.40

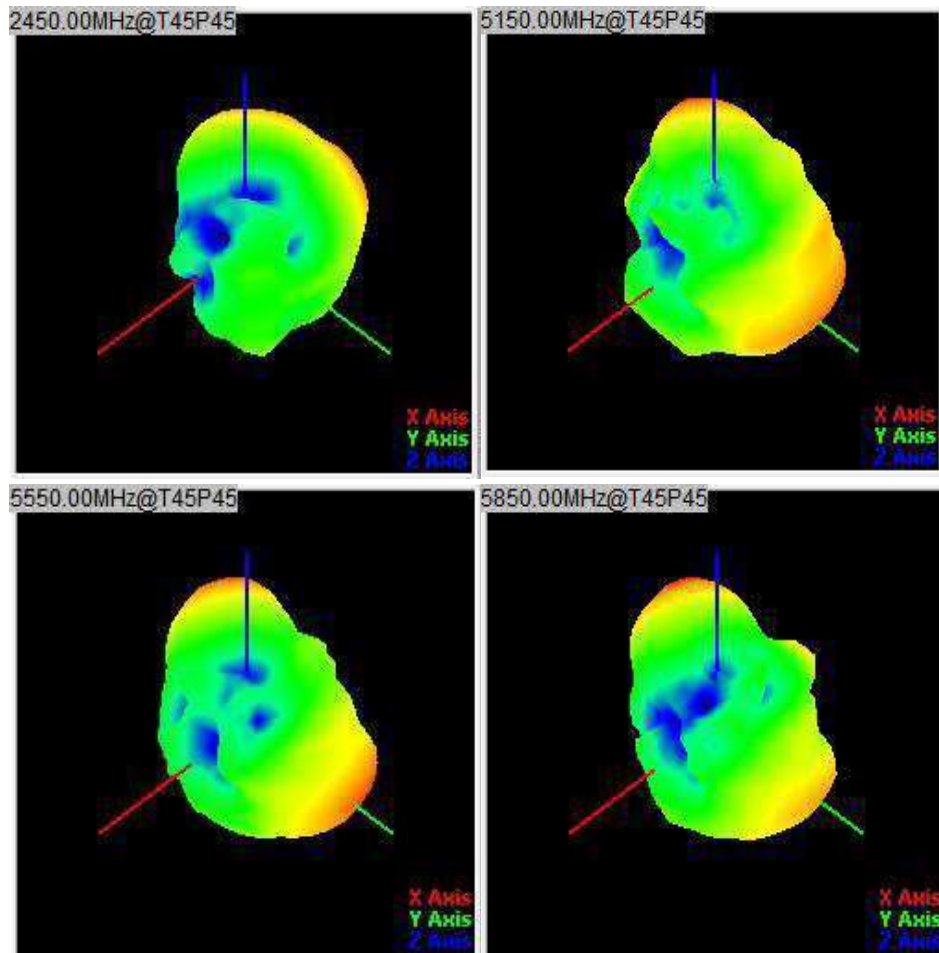
Ant2-90mm Cable

Freq.(MHz)	2400	2450	2500	5150	5350	5550	5650	5750	5850
VSWR	1.45	1.23	1.34	1.23	1.31	1.19	1.19	1.43	1.64
Gain(dBi)	5.93	5.82	5.91	6.43	5.67	5.61	5.74	6.23	5.70
Eff. (%)	78.70	74.40	74.50	80.60	82.80	79.60	80.20	76.50	77.00

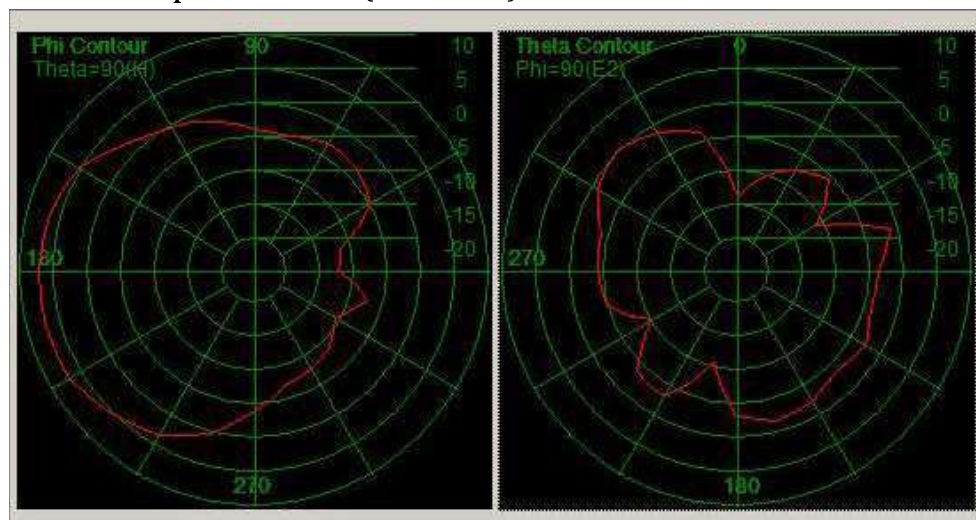
S11:Ant1-90mm Cable



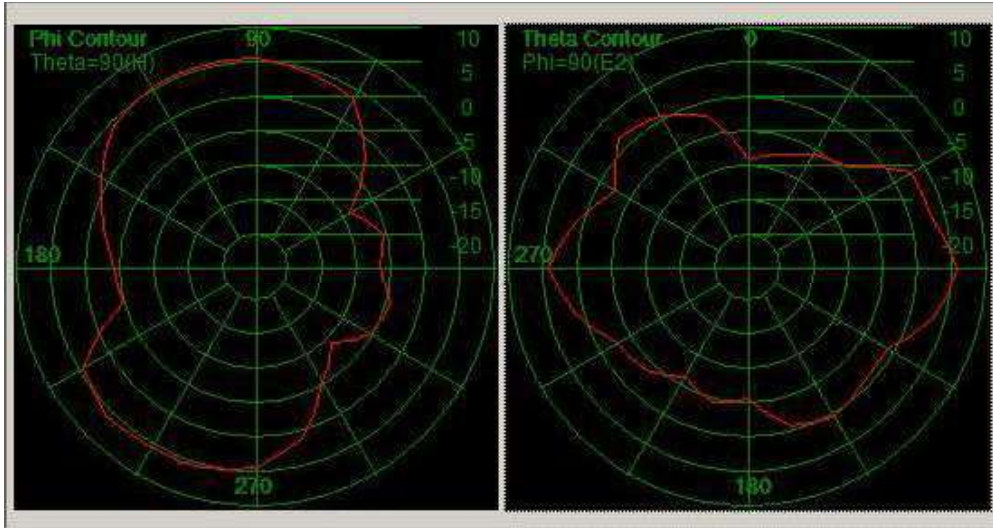
Radiation patterns:3D



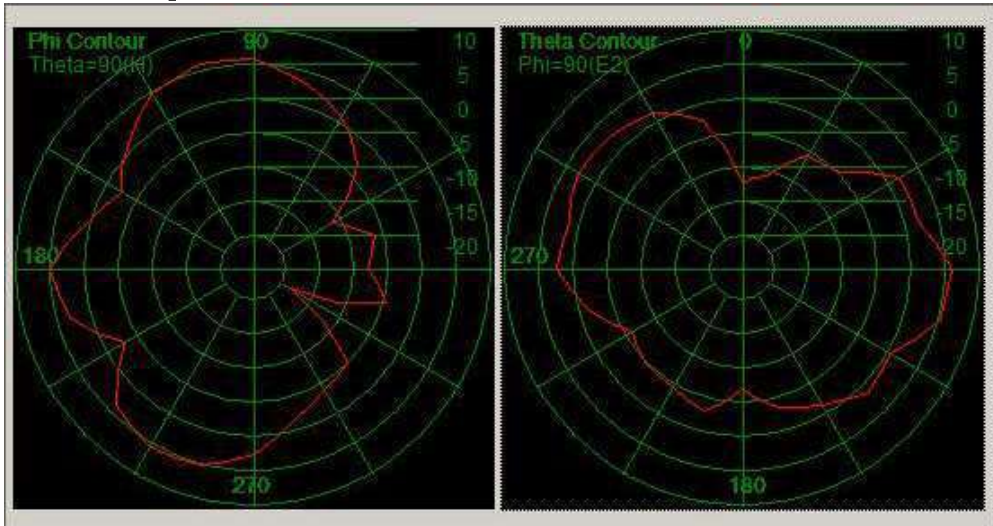
Radiation patterns:2D(2450MHz)



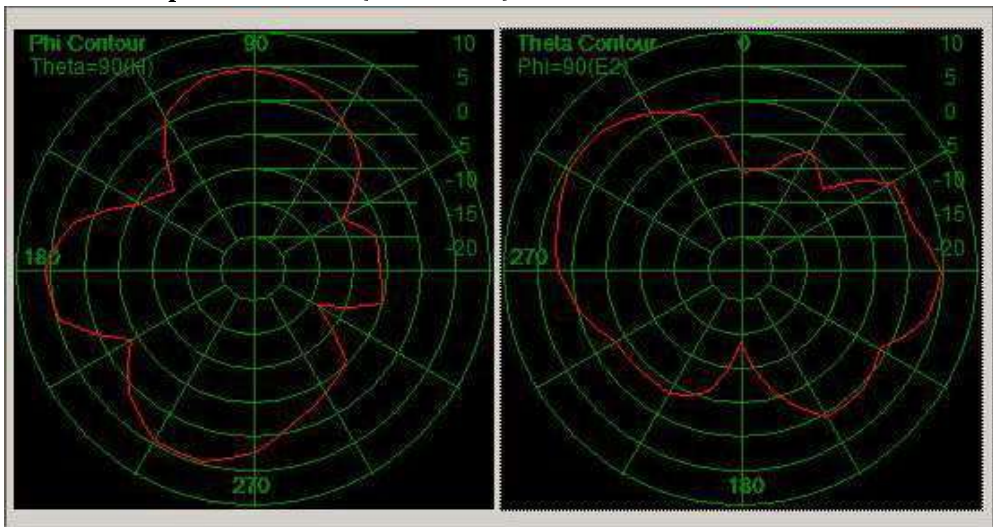
Radiation patterns:2D(5150MHz)



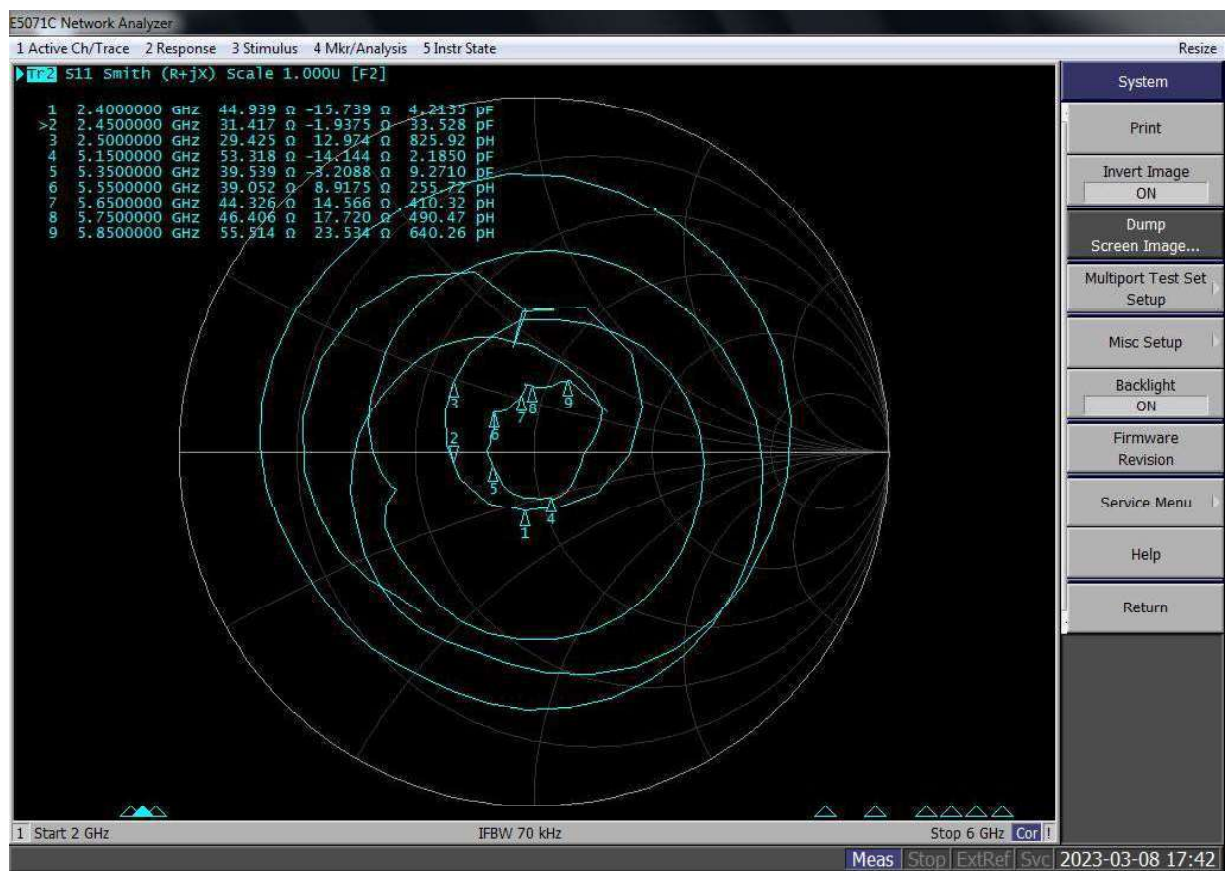
Radiation patterns:2D(5550MHz)



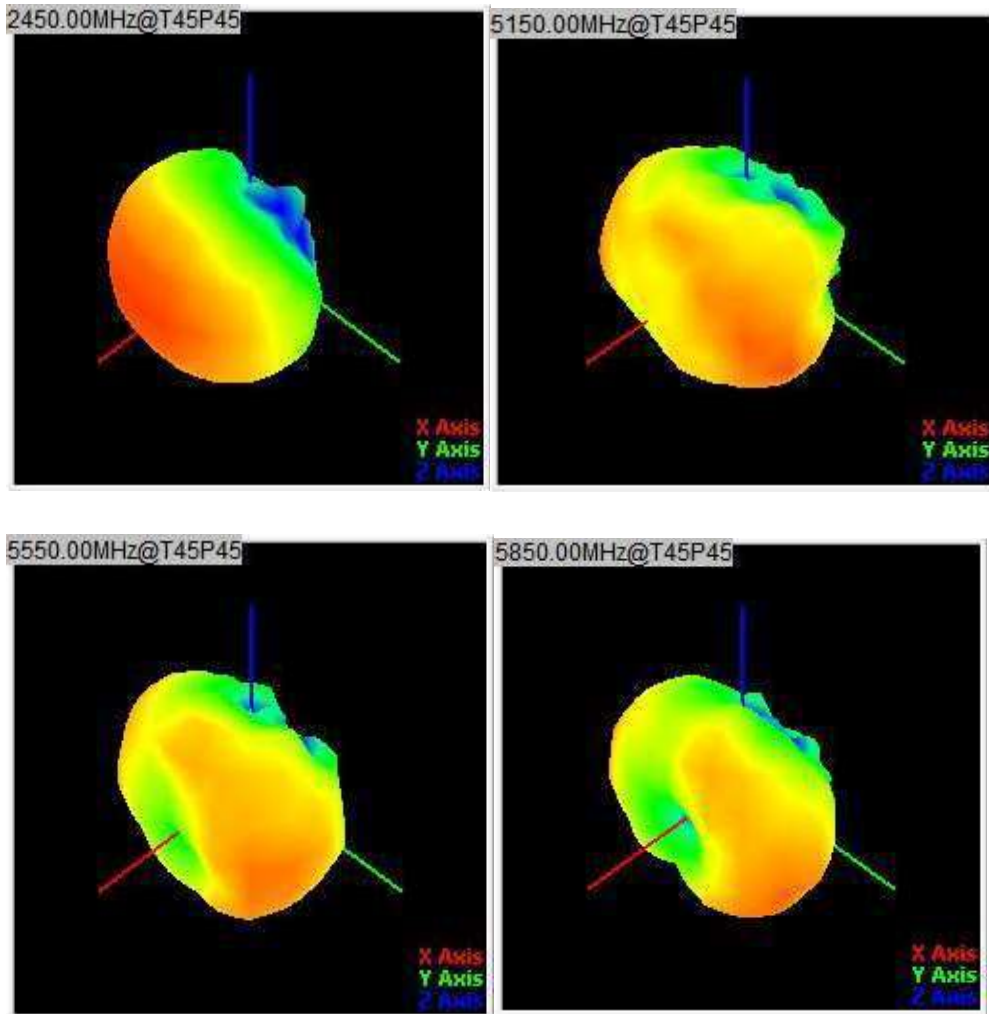
Radiation patterns:2D(5850MHz)



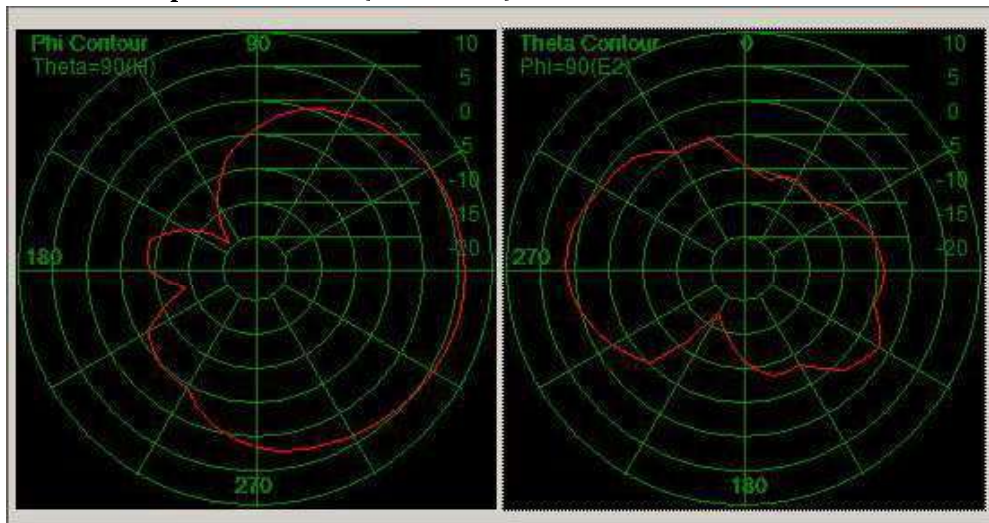
S11 :Ant2-90mm Cable



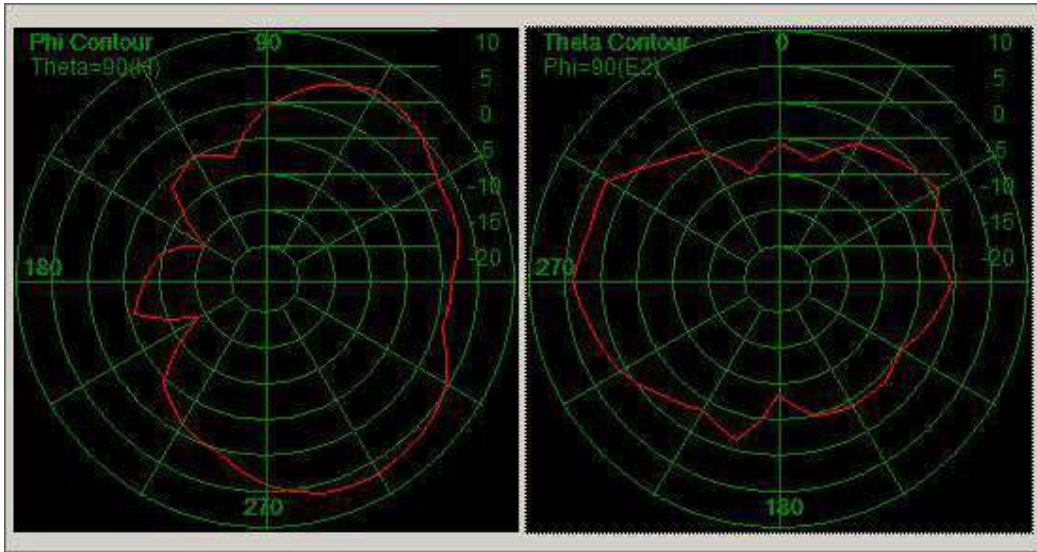
Radiation patterns:3D



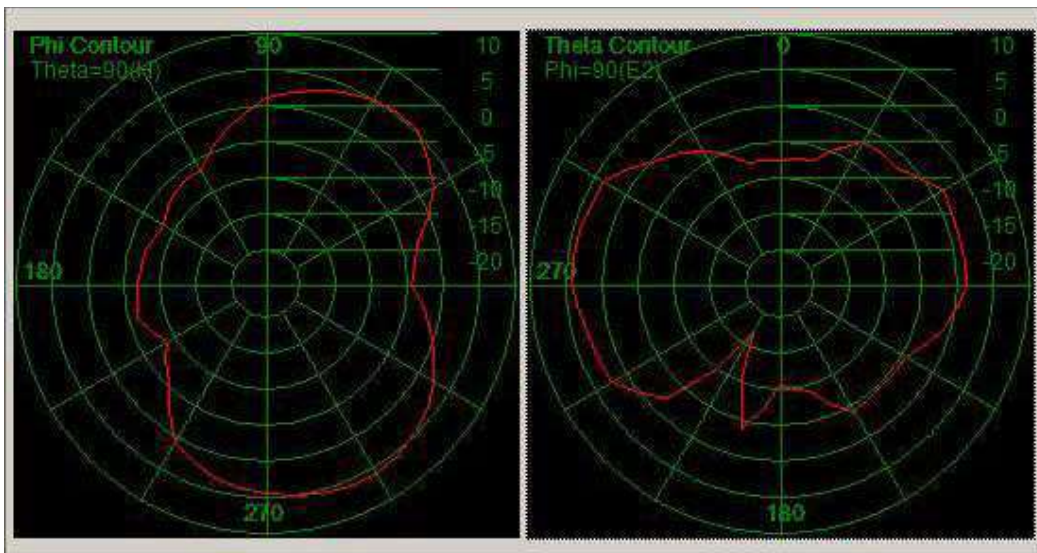
Radiation patterns:2D(2450MHz)



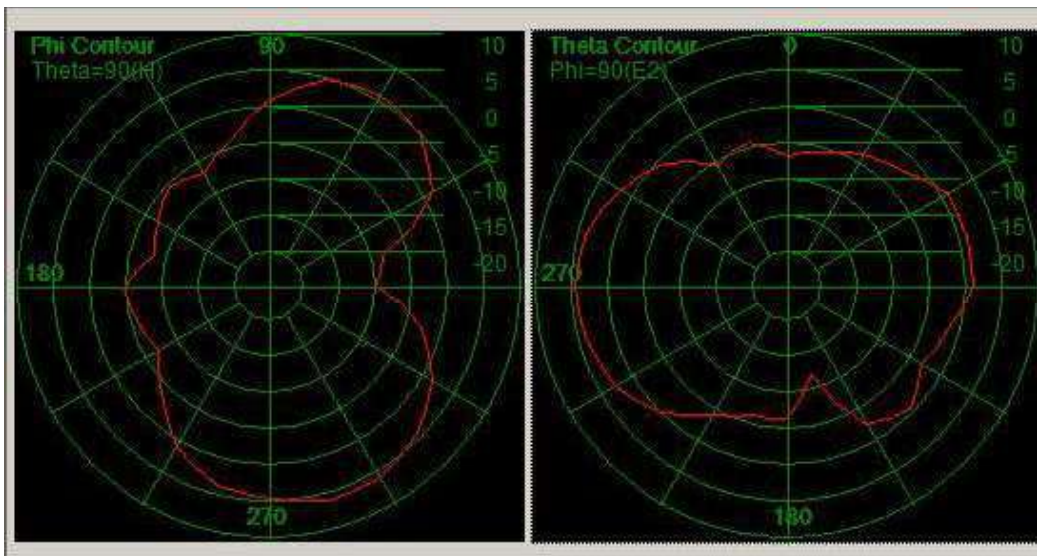
Radiation patterns:2D(5150MHz)



Radiation patterns:2D(5550MHz)



Radiation patterns:2D(5850MHz)



S21-1,2



Signal Plus Technology Co,Ltd.

FAI full size inspection report

No:QIP230303

Customer Name	Davo Link			Product Name	PCB Antenna			Date	25th Mar, 2023		
Customer P/I	/			Signal Plus P/N	6307F00014			Material	/		
NO.	Size	tolerance		Sample number					Measure Tool	Judgement	
		Upper limit	Lower limit	1	2	3	4	5			
1	45.0±0.3	45.3	44.7	44.98	44.99	44.5	44.98	44.98	a	■OK □NG	
2	3.20±0.03	3.23	3.17	3.21	3.2	3.21	3.2	3.19	a	■OK □NG	
3	33.22±0.2	33.42	33.02	33.2	33.21	33.2	33.2	33.21	a	■OK □NG	
4	15.0±0.3	15.3	14.7	15.03	15.02	15.04	15.03	15.02	a	■OK □NG	
5	0.80±0.03	0.83	0.77	0.81	0.8	0.81	0.82	0.81	a	■OK □NG	
6	90.0±3	93	87	90.5	91.2	91.3	91.1	90.2	I	■OK □NG	
Remark:											

※Measuring tools: A.Vernier caliper B.Quadratic element C.Depth gauge D.Tool microscope E.Thickness gauge F.micrometer G.torsion meter H.Drawing test machine I. Steel rule

Approved: 唐剑剑 Prepared : 王莲 Review: 韦颖

