

BT FPC Antenna (OW03-L)

1. Explanation of Product Number

S	2	B	4	B	B	1	F	1	B	0	1	7	0	0
				(1)	(2)	(3)	(4)	(5)						



Product Description:

(1) Product Categories:

B:BT Antenna

(2) Dimensions:

B1:14.32*9.13*0.15 (mm)

(3) Material:

F: FPC

(4) Working Frequencies:

1B: 2.4G-2.5G

(5) Antenna Series:

01: Serial number

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : $\pm$

Hole Dia. : $\pm$



深圳市迎丰天线技术有限公司

SHEN ZHEN YINGFENG ANTENNA TECHNOLOGY CO., LTD

Scale :

Unit : mm

Drawn By : Andy

Checked By : Simon

Designed By : Simon

Approved By : Simon

THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION

TITLE : BT FPC Antenna(OW03-L)

PART
NO.

S2B4BB1F1B01700

REV.

B

2. Features

- *Stable and reliable in performances
- *RoHS compliance
- *Low cost

3. Applications

*BT

4. Description

* YINGFENMG FPC antenna series are specially designed for 2.4G-2.5G band application. Based on YINGFENG proprietary designs and processes, this FPC antenna has excellent stability and sensitivity to consistently provide high signal reception efficiency.

5. Antenna Electrical Specifications :

Characteristics	Specifications			Unit
Outline Dimensions	14.32* 9.13*0.15			mm
Frequency	2400~2500			MHz
Impedance	50			Ω
Polarization	Linear Polarization			
Return Loss Table	Return Loss			
Freq.Band	2.4G Hz	2.45G Hz	2.5G Hz	
dB	-16.98	-29.81	-17.34	
VSWR Table	VSWR			
Freq.Band	2.4G Hz	2.45G Hz	2.5G Hz	
	1.18	1.08	1.29	
GAIN Table	Total Gain = Xpol + Ppol			
Freq.Band	2400MHz	2450MHz	2485MHz	2500MHz
Peak Gain(dBi)	1.51	1.72	1.69	1.23

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : $\pm$ Hole Dia. : $\pm$



深圳市迎丰天线技术有限公司

SHEN ZHEN YINGFENG ANTENNA TECHNOLOGY CO.,LTD

Scale : Unit : mm

Drawn By : Andy Checked By : Simon

Designed By : Simon Approved By : Simon

THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION

TITLE : BT FPC Antenna(OW03-L)

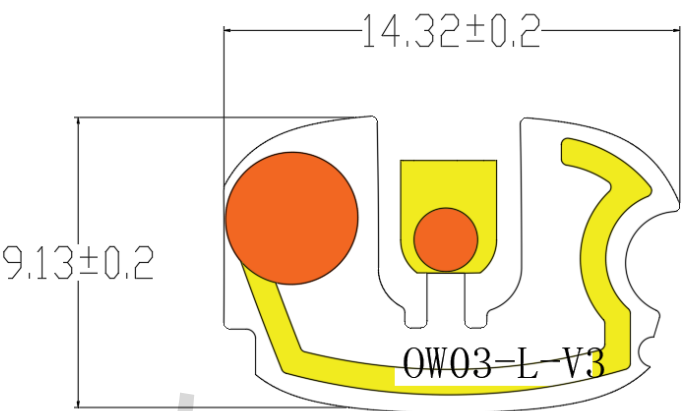
PART
NO.

S2B4BB1F1B01700

REV.
B

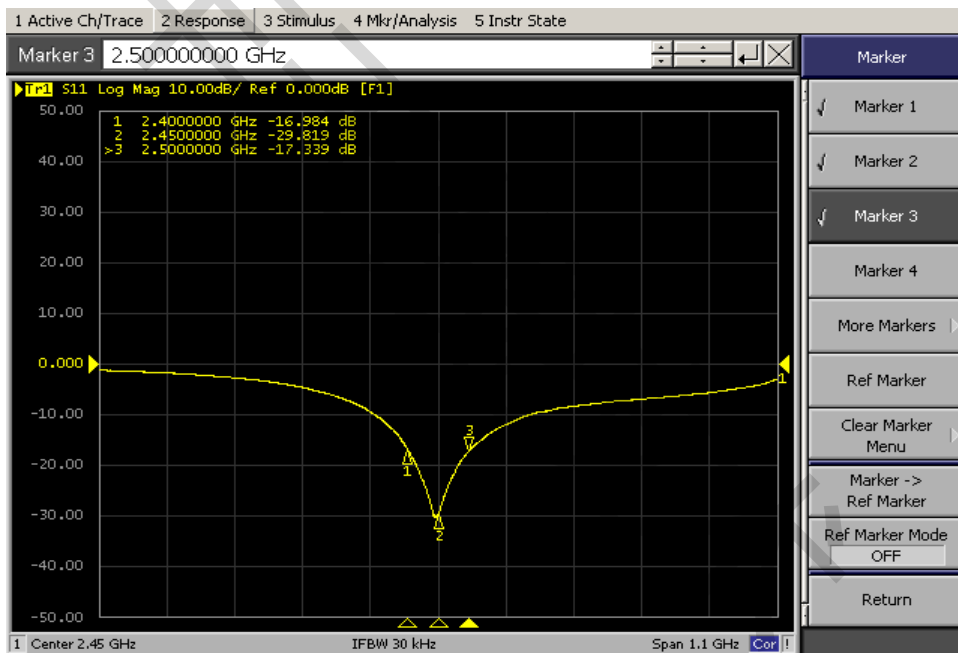
6. Dimensions (unit: mm)

blc errand: ±0.2mm



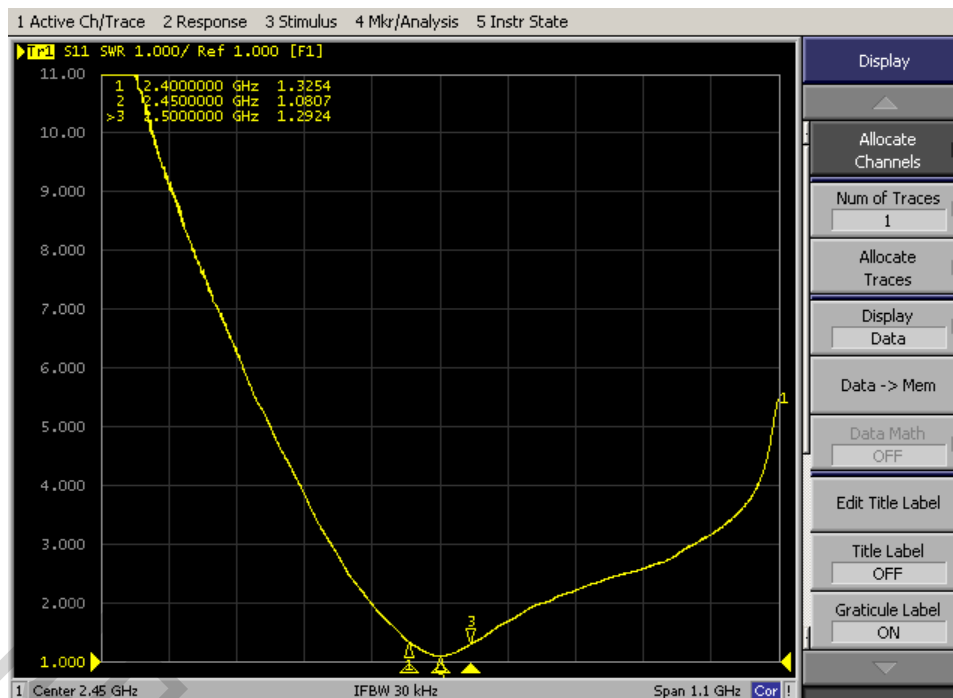
7. Measurement Characteristics:

(1) Return Loss

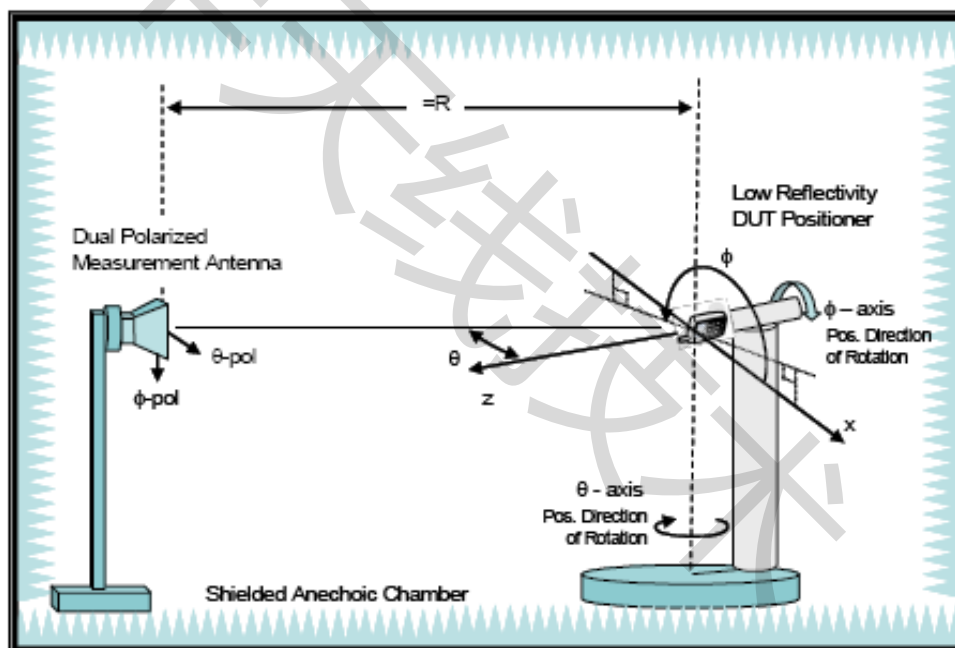


(2) VSWR

Tolerances (Unless otherwise specified) X : ± 1 X.X : ± 0.1 X.XX : ± 0.01 Angle : ± Hole Dia. : ±		 深圳市迎丰天线技术有限公司 SHEN ZHEN YINGFENG ANTENNA TECHNOLOGY CO.,LTD	
Scale :	Unit : mm	THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION	
Drawn By : Andy	Checked By : Simon		
Designed By : Simon	Approved By : Simon		
TITLE : BT FPC Antenna(OW03-L)		PART NO.	S2B4BB1F1B01700 REV. B



8. Three D Radiation Pattern measurements



9. Radiation Pattern

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : $\pm$

Hole Dia. : $\pm$



深圳市迎丰天线技术有限公司

SHEN ZHEN YINGFENG ANTENNA TECHNOLOGY CO., LTD

Scale :

Unit : mm

Drawn By : Andy

Checked By : Simon

Designed By : Simon

Approved By : Simon

THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION

TITLE : BT FPC Antenna(OW03-L)

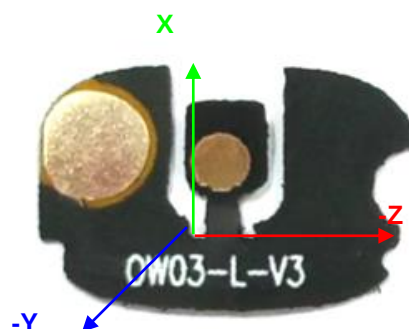
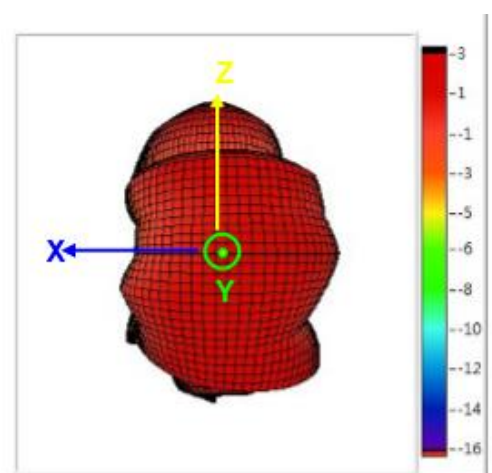
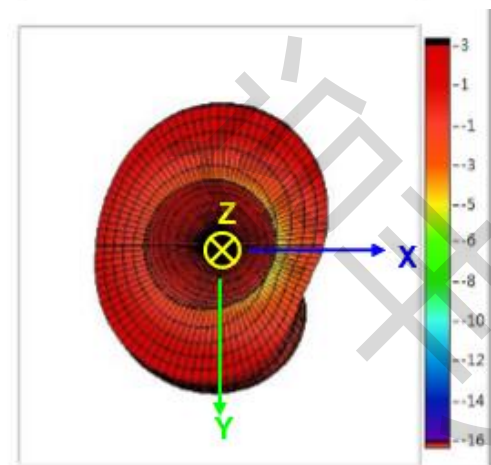
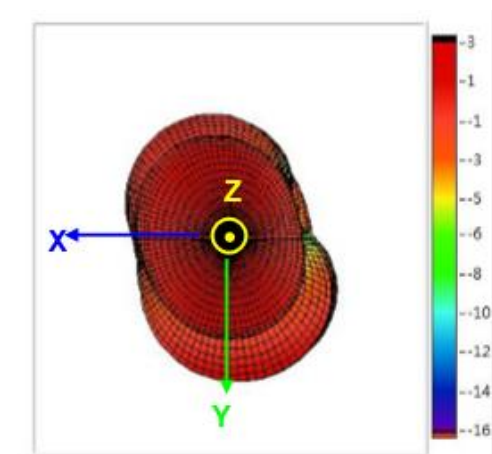
PART
NO.

S2B4BB1F1B01700

REV.

B

9-1.3D Gain Pattern (Radiation Pattern at 2450 MHz)



Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : $\pm$ Hole Dia. : $\pm$



深圳市迎丰天线技术有限公司

SHEN ZHEN YINGFENG ANTENNA TECHNOLOGY CO., LTD

Scale :	Unit : mm
Drawn By : Andy	Checked By : Simon
Designed By : Simon	Approved By : Simon

THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION

TITLE : BT FPC Antenna(OW03-L)

PART
NO.

S2B4BB1F1B01700

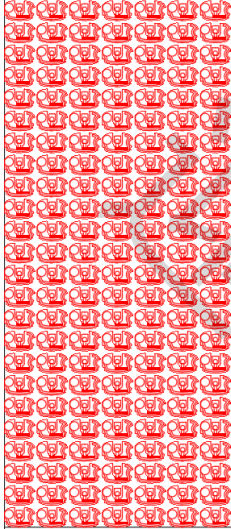
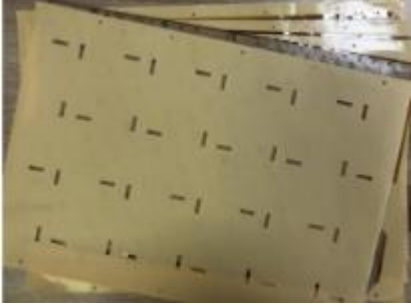
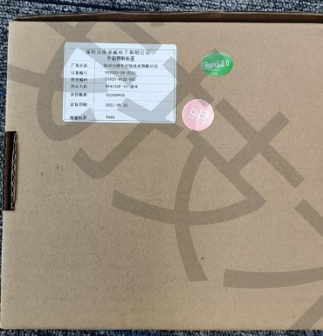
REV.

B

9-3.complete machine Efficiency Table

Frequency(MHz)	2400	2420	2450	2460	2480	2500
Efficiency (dB)	-2.22	-1.71	-2.09	-2.13	-2.24	-2.07
Efficiency (%)	30.9	32.3	36	35	29.18	26
Gain (dBi)	1.51	1.62	1.72	1.7	1.69	1.23

10-1 产品包装 Product packaging

版本 edition:: V3.0	页码 Page: 1/1
1.产品排版: 24*4=168PCS	2.离型纸隔层摆放保护天线 Barrier paper protection products
	
3.密封袋封装效果 Sealing bag packaging effect	4.纸箱封箱效果(贴出货标签和 ROHS 标签) Carton sealing effect
	

10-2.Revision Control:

Revision	Date	Content	Remark
A	2024-08-05	New Issued.	N/A

Tolerances (Unless otherwise specified) X : ± 1 X.X : ± 0.1 X.XX : ± 0.01 Angle : ± Hole Dia. : ±		 深圳市迎丰天线技术有限公司 SHEN ZHEN YINGFENG ANTENNA TECHNOLOGYCO.,LTD	
Scale :	Unit : mm	THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION	
Drawn By : Andy	Checked By : Simon		
Designed By :Simon	Approved By :Simon		
TITLE : BT FPC Antenna(OW03-L)		PART NO.	REV.
		S2B4BB1F1B01700	B

BT FPC Antenna (OW03-R)

1. Explanation of Product Number

S	2	B	4	B	B	1	F	1	B	0	1	8	0	0
				(1)	(2)	(3)	(4)	(5)						



Product Description:

(1) Product Categories:

B:BT Antenna

(2) Dimensions:

B1:14.32*9.13*0.15 (mm)

(3) Material:

F: FPC

(4) Working Frequencies:

1B: 2.4G-2.5G

(5) Antenna Series:

01: Serial number

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : $\pm$

Hole Dia. : $\pm$



深圳市迎丰天线技术有限公司

SHEN ZHEN YINGFENG ANTENNA TECHNOLOGY CO.,LTD

Scale :

Unit : mm

Drawn By : Andy

Checked By : Simon

Designed By : Simon

Approved By : Simon

THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION

TITLE : BT FPC Antenna(OW03-R)

PART
NO.

S2B4BB1F1B01800

REV.

B

2. Features

- *Stable and reliable in performances
- *RoHS compliance
- *Low cost

3. Applications

*BT

4. Description

* YINGFENMG FPC antenna series are specially designed for 2.4G-2.5G band application. Based on YINGFENG proprietary designs and processes, this FPC antenna has excellent stability and sensitivity to consistently provide high signal reception efficiency.

5. Antenna Electrical Specifications :

Characteristics	Specifications			Unit
Outline Dimensions	14.32* 9.13*0.15			mm
Frequency	2400~2500			MHz
Impedance	50			Ω
Polarization	Linear Polarization			
Return Loss Table	Return Loss			
Freq.Band	2.4G Hz	2.45G Hz	2.5G Hz	
dB	-16.98	-29.81	-17.34	
VSWR Table	VSWR			
Freq.Band	2.4G Hz	2.45G Hz	2.5G Hz	
	1.18	1.08	1.29	
GAIN Table	Total Gain = Xpol + Ppol			
Freq.Band	2400MHz	2450MHz	2485MHz	2500MHz
Peak Gain(dBi)	1.51	1..72	1.69	1.23

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : $\pm$

Hole Dia. : $\pm$



深圳市迎丰天线技术有限公司

SHEN ZHEN YINGFENG ANTENNA TECHNOLOGY CO.,LTD

Scale :

Unit : mm

Drawn By : Andy

Checked By : Simon

Designed By : Simon

Approved By : Simon

THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION

TITLE : BT FPC Antenna(OW03-R)

PART
NO.

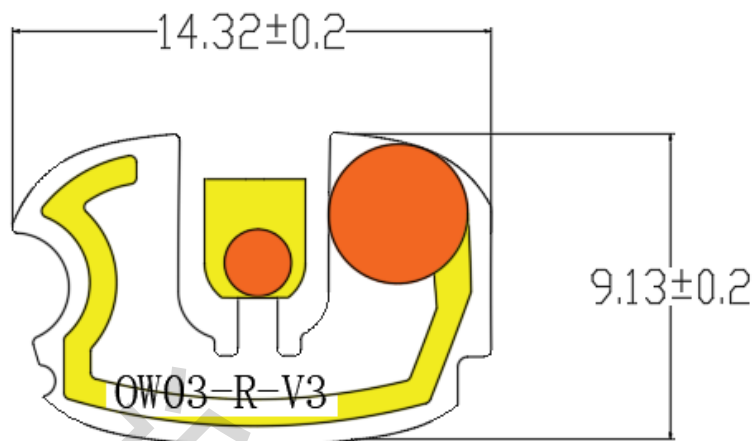
S2B4BB1F1B01800

REV.

B

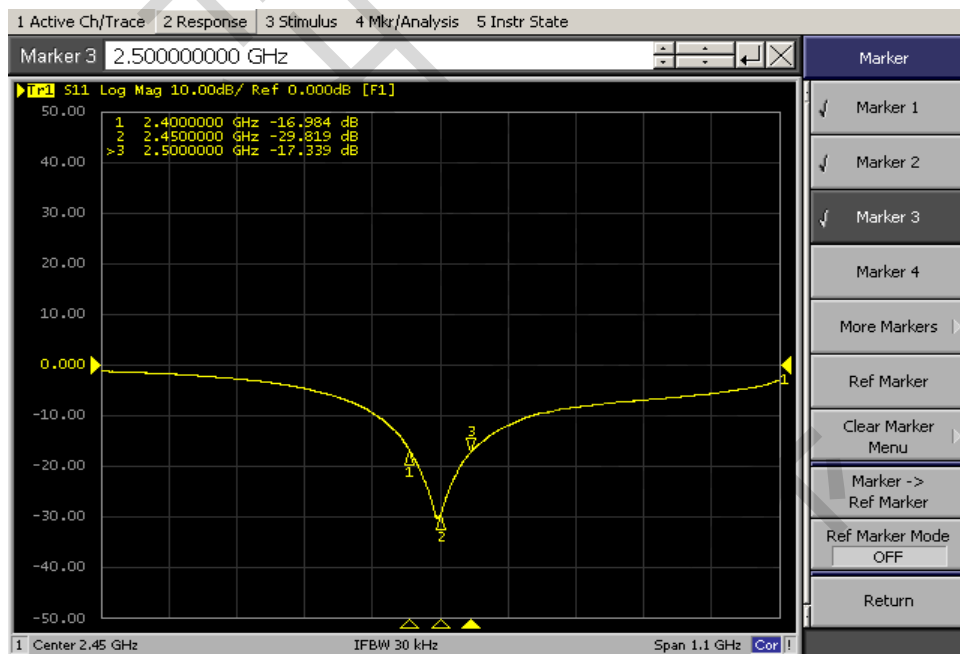
6. Dimensions (unit: mm)

blic errand: ±0.2mm



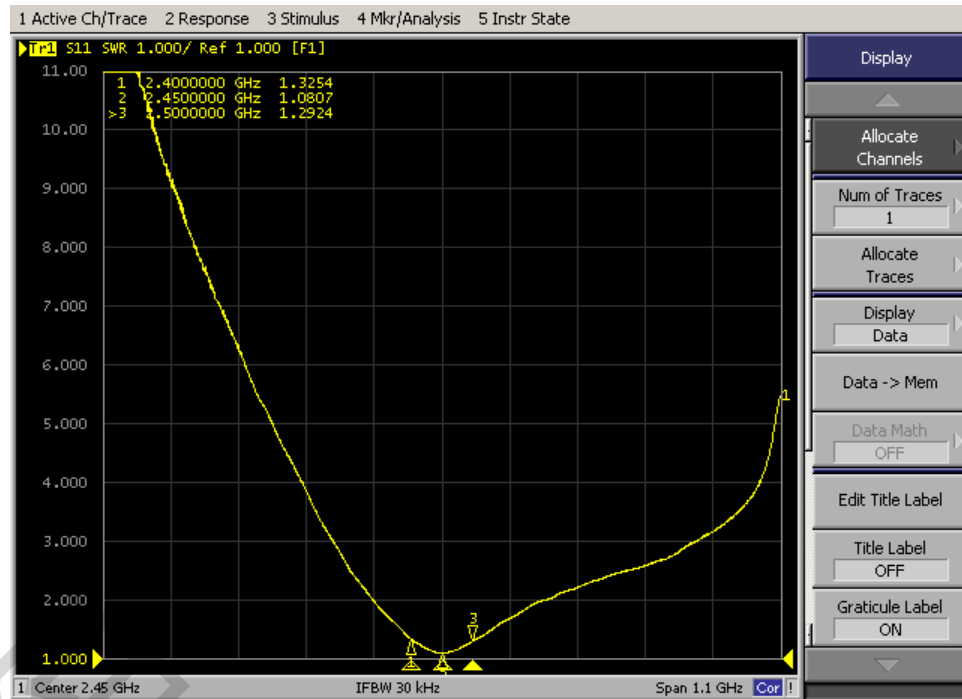
7. Measurement Characteristics:

(1) Return Loss

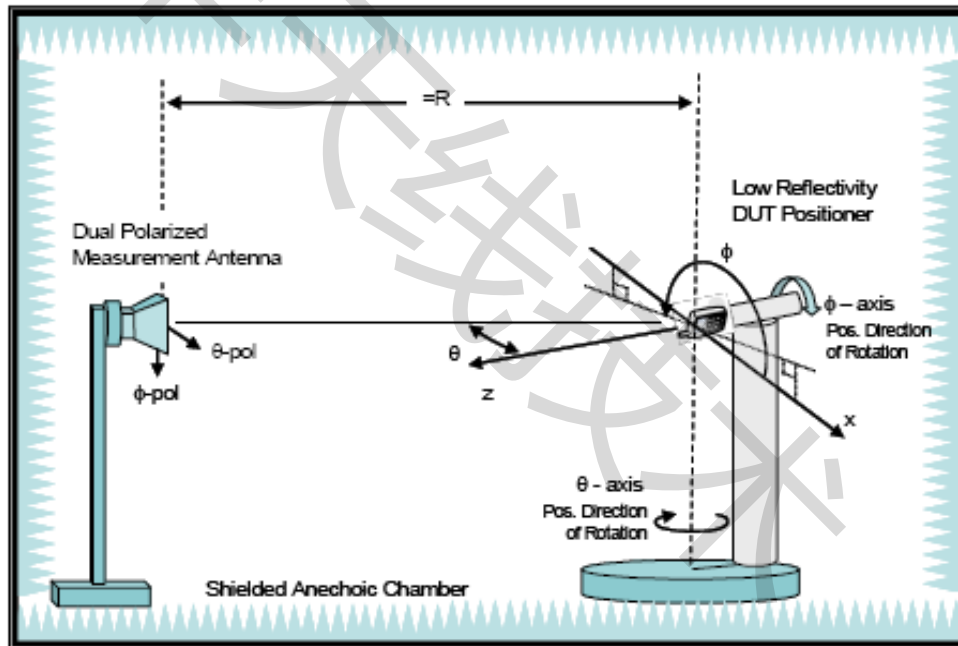


(2) VSWR

Tolerances (Unless otherwise specified)		 深圳市迎丰天线技术有限公司 SHEN ZHEN YINGFENG ANTENNA TECHNOLOGYCO.,LTD		
X : ± 1 X.X : ± 0.1 X.XX : ± 0.01				
Angle : ± Hole Dia. : ±		THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION		
Scale :	Unit : mm			
Drawn By : Andy	Checked By : Simon			
Designed By :Simon	Approved By :Simon			
TITLE : BT FPC Antenna(OW03-R)		PART NO.	S2B4BB1F1B01800	REV. B



8. Three D Radiation Pattern measurements



9. Radiation Pattern

Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : $\pm$

Hole Dia. : $\pm$



深圳市迎丰天线技术有限公司

SHEN ZHEN YINGFENG ANTENNA TECHNOLOGY CO., LTD

Scale :

Unit : mm

Drawn By : Andy

Checked By : Simon

Designed By : Simon

Approved By : Simon

THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION

TITLE : BT FPC Antenna(OW03-R)

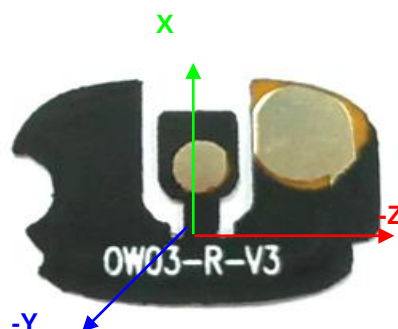
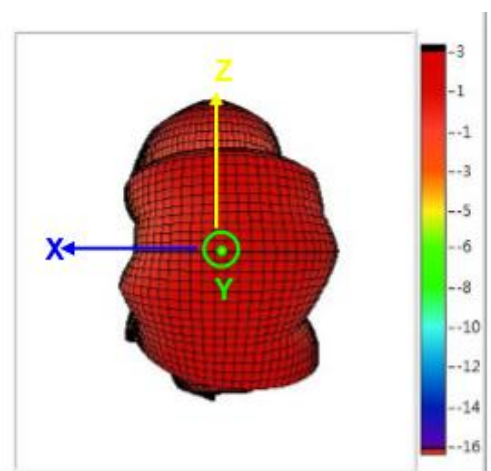
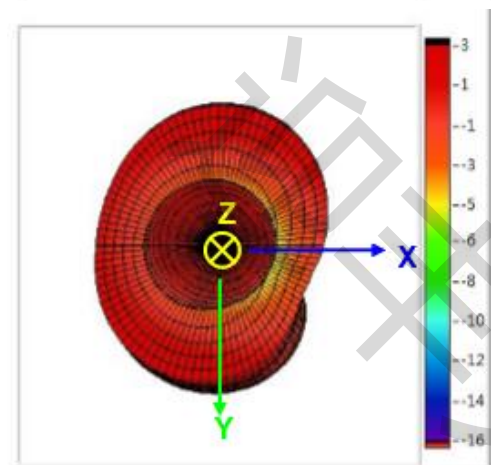
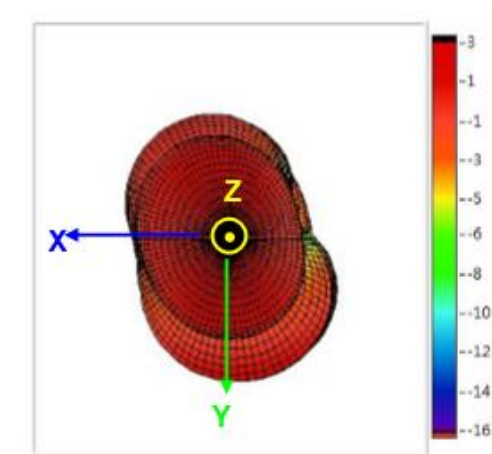
PART
NO.

S2B4BB1F1B01800

REV.

B

9-1.3D Gain Pattern (Radiation Pattern at 2450 MHz)



Tolerances (Unless otherwise specified)

X : ± 1 X.X : ± 0.1 X.XX : ± 0.01

Angle : $\pm$ Hole Dia. : $\pm$



深圳市迎丰天线技术有限公司

SHEN ZHEN YINGFENG ANTENNA TECHNOLOGY CO., LTD

Scale :	Unit : mm
Drawn By : Andy	Checked By : Simon
Designed By : Simon	Approved By : Simon

THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION

TITLE : BT FPC Antenna(OW03-R)

PART
NO.

S2B4BB1F1B01800

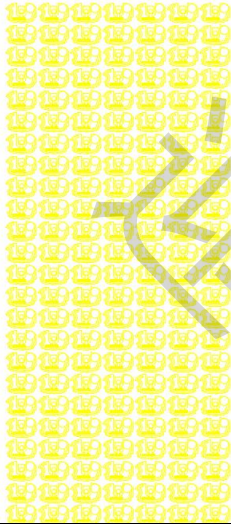
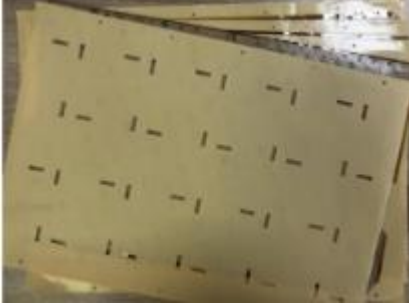
REV.

B

9-3.complete machine Efficiency Table

Frequency(MHz)	2400	2420	2450	2460	2480	2500
Efficiency (dB)	-2.22	-1.71	-2.09	-2.13	-2.24	-2.07
Efficiency (%)	30.9	32.3	36	35	29.18	26
Gain (dBi)	1.51	1.62	1.72	1.7	1.69	1.23

10-1 产品包装 Product packaging

版本 edition:: V3.0	页码 Page: 1/1
1.产品排版: 24*4=168PCS	2.离型纸隔层摆放保护天线 Barrier paper protection products
	
3.密封袋封装效果 Sealing bag packaging effect	4.纸箱封箱效果(贴出货标签和 ROHS 标签 Carton sealing effect
	

10-2.Revision Control:

Revision	Date	Content	Remark
A	2024-08-05	New Issued.	N/A

Tolerances (Unless otherwise specified) X : ± 1 X.X : ± 0.1 X.XX : ± 0.01 Angle : ± Hole Dia. : ±		 深圳市迎丰天线技术有限公司 SHEN ZHEN YINGFENG ANTENNA TECHNOLOGYCO.,LTD	
Scale :	Unit : mm	THIS SPECIFICATION IS THE PROPERTY OF UNICTRON TECHNOLOGIES CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN ALL CIRCUMSTANCES WITHOUT WRITTEN PERMISSION	
Drawn By : Andy	Checked By : Simon		
Designed By :Simon	Approved By :Simon		
TITLE : BT FPC Antenna(OW03-R)		PART NO.	REV.
		S2B4BB1F1B01800	B