

承 认 书

SPECIFICATION FOR APPROVAL

迪芬尼料号
TYMPHANY PN

T690800045500

制 造 商
MANUFACTOR

Suzhou ShuoBeide Communication Technology Co., Ltd.

制造商料号
MANUFACTOR PN

F-0A-QH-0103-001-L0

品 名 规 格
DESCRIPTION

ANT FIX 442MM 50OHM 2.4 SPEED L

日 期
DATE

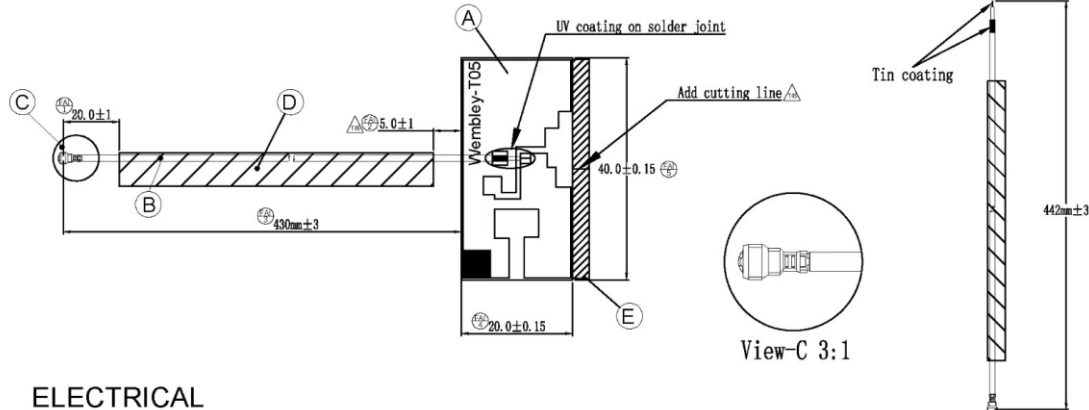
2025-05-12

制 作 MAKE	审 核 CHECK	批 准 APPROVAL

I Structure

- Customer P/N: T690800045500;
- Halogen & Lead-free, total F, Cl, Br, I $\leq 1,500$ ppm (test report required). PFAS-free.
- Hazardous substances must comply with our company's SZS-B-3-C-00-017 Environmental Related Substances Management Specification.

REV	DESCRIPTION	DATE	BY
T01	Initial Release	20241105	Weston.D
T02	Updated the cable length,optimize the patten	20241205	Weston.D
T03	Updated the foam length,add solder protection marks	20241218	Weston.D
T04	Updated with PE cable,add adhesive specification	20250117	Weston.D
T05	Updated with PU340 foam and silkscreen,add cutting line	20250430	Weston.D



ELECTRICAL
Frequency : 2400 ~ 2500 MHz

E	Double Tape	3M9495LE	1
D	Foam	PU B340,T=2mm,L=405mm,width=10mm	1
C	Connector	IPEX I	1
B	Cable	(Ø1.1 3 low loss PE Cable);Black, L=442mm	1
A	Body	FR4(Single Layer);T=0.8mm;	1

INDEX	PART NO.	DESCRIPTION	MATERIAL	QTY
PARTS LIST				

Connector Direction:
100mm±90°
200mm±135°
No control for length over 200mm.

SELECT	A	B	C	D
SPEC. CLASS				
< 8mm	0.05	0.1	0.2	0.5
8~30mm	0.08	0.2	0.5	1.5
30~120mm	0.12	0.3	0.8	2.0
120~215mm	0.25	0.5	1.2	3.0
215~1000mm	0.3	0.8	2.0	5.0
1000~2000mm	0.5	1.2	3.0	8.0
ANGLE	0.5			

THE DRAWING AND INFORMATION THEREWITH ARE PROPRIETARY TO SPEED, AND SHALL NOT BE DISCLOSED IN WHOLE OR PART WITHOUT SPEED'S CONSENT

INTER: SEE NOTES

TRAINING: SEE NOTES

DESIGN: SEE NOTES

DATE: 225K40

VERSION: TS

SCALE: 1:1

DESIGN: Weston.D

CHECK: Weston.D

DATE: 225K40

VERSION: TS



Speed Wireless Technology Inc.

PART

NUMBER

F-0A-QH-0103-001-L0

FIGURE

PART

NAME

Wembley-BT Final product drawing

AS SIZE

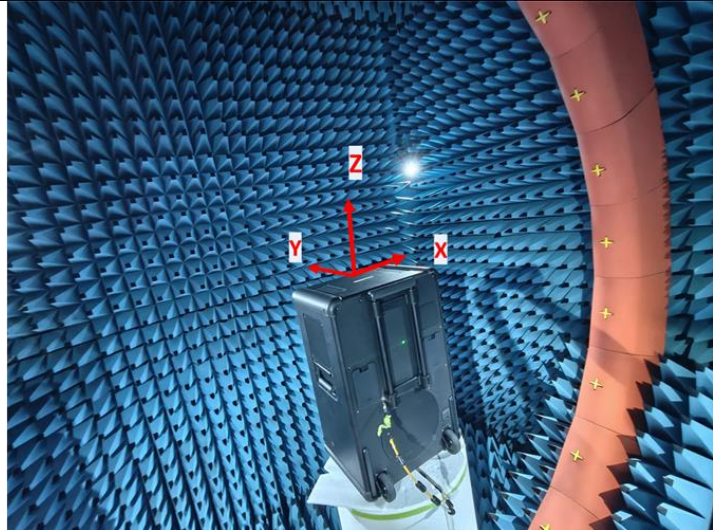
SHEET 1 / 1

II Electrical Characteristics

No.	ITEM	SPEC
1	Frequency Range	2400 MHz ~2483.5MHz
2	Impedance	50 Ω
3	Return Loss	<-10dB
4	Efficiency	31%~36%
5	Peak gain	2.62dBi ~3.89dBi
6	Radiation	Omni-directional
7	Polarization	Linear
8	Operation Temperature	-40℃ ~ +85℃

III Test Method

3.1 Chamber



3.2 Test Instrument

E5063A and CMW270

IV Test Items

4.1 S Parameter
4.2 Efficiency
4.3 Gain
4.4 Radiation pattern
4.5 Active Testing

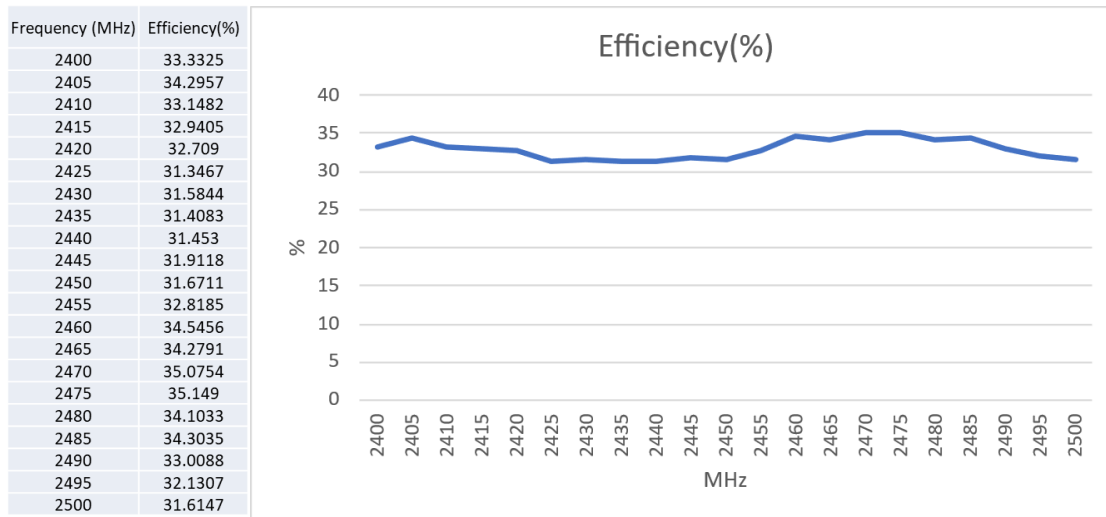
4.1 S Parameter



S Parameter

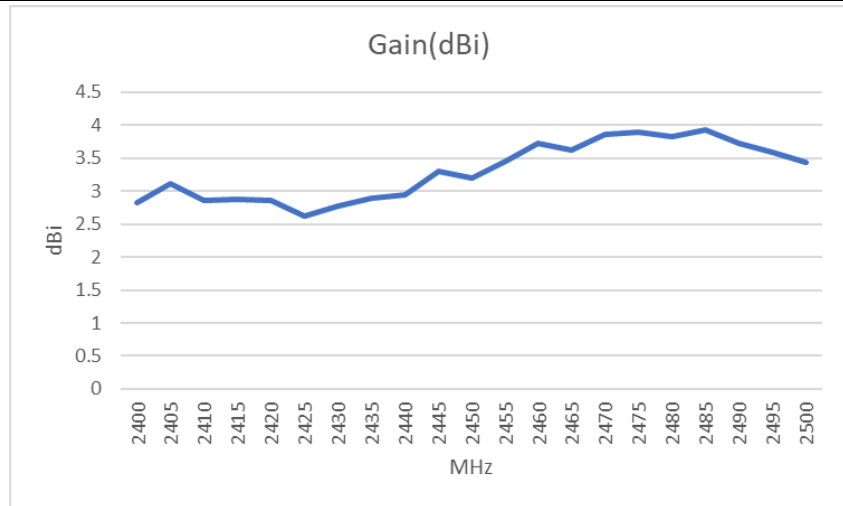
Frequency (MHz)	Return Loss(dB)
2400	-17.21
2500	-15.09

4.2 Efficiency



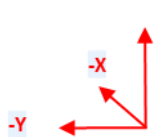
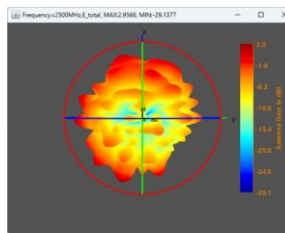
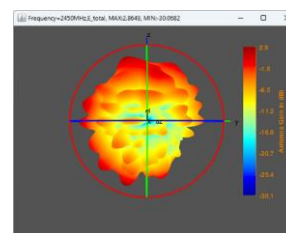
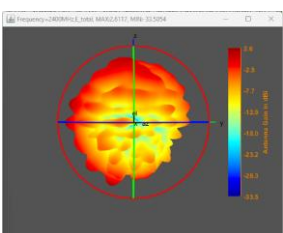
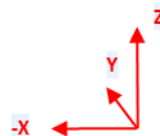
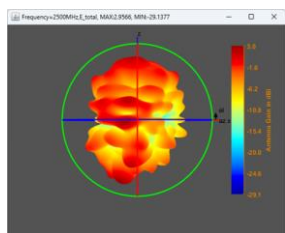
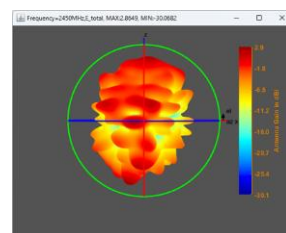
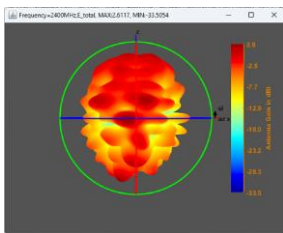
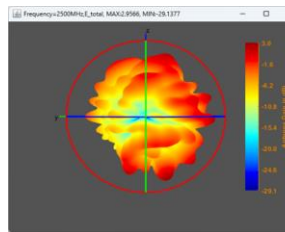
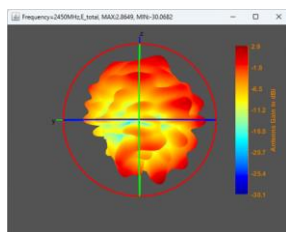
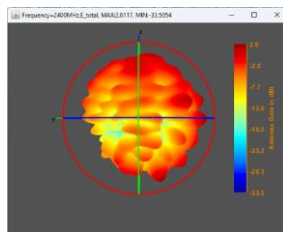
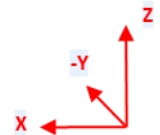
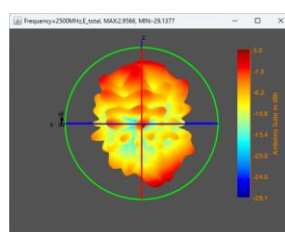
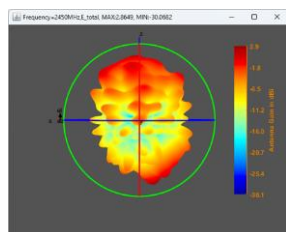
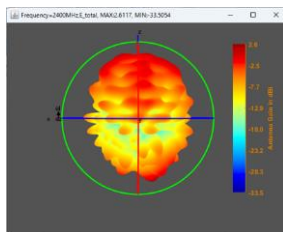
4.3 Gain

Frequency (MHz)	Gain(dBi)
2400	2.8299
2405	3.1186
2410	2.852
2415	2.8677
2420	2.8647
2425	2.6248
2430	2.775
2435	2.8893
2440	2.9361
2445	3.2944
2450	3.2041
2455	3.4574
2460	3.7292
2465	3.6173
2470	3.8535
2475	3.8909
2480	3.8184
2485	3.9205
2490	3.7237
2495	3.5948
2500	3.4287



4.4 Radiation pattern

4.4.1 3D

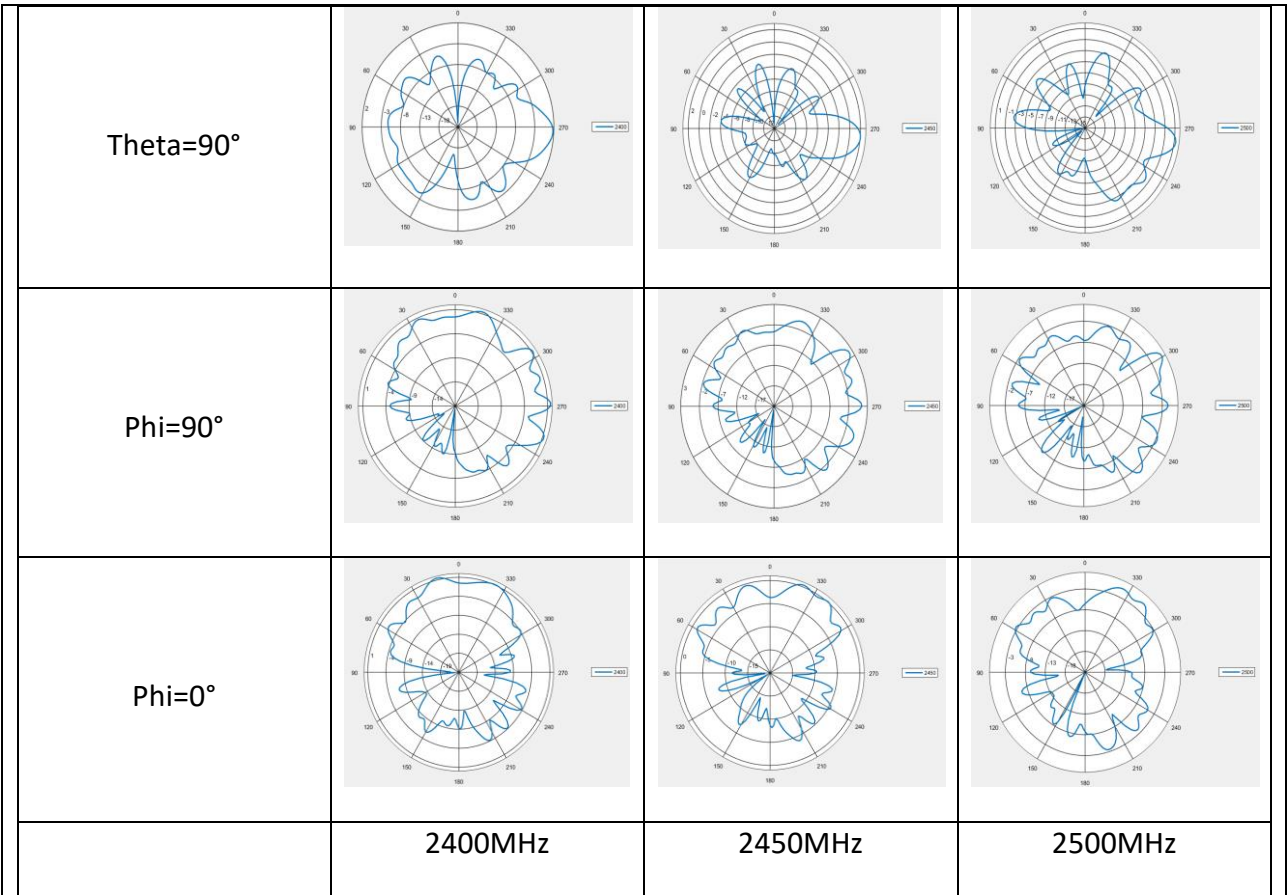


2400MHz

2450MHz

2500MHz

4.4.2 2D



4.5 Active Testing

Channel	TRP@2DH5	TIS@2DH5
0 (2402 MHz)	4.84 dBm	-90.41 dBm
39 (2441 MHz)	4.91 dBm	-90.83 dBm
78 (2480 MHz)	4.65 dBm	-90.65 dBm