

TDE台德 部品承认书

PART FOR APPROVAL

File No: JX-RD-04-036

Ver: 1.0

No:

原厂名称（品牌名称）Vendor Name: Shenzhen HamyWe Technology Co., Ltd.

原厂型号 Vendor Part P/N: X2938-WBT1032B-WIFI

原厂规格描述 Part Description: FPC L=187MM

供应商确认签章Supplier: Shenzhen HamyWe Technology Co., Ltd.

台德适用机型 Model: WBT1032B

台德 ERP 料号 Part No:E110002918

台德部品名称 Part Name: FPC Antenna

台德规格描述 Part Description:

FPC (X2938-WBT1032B-WIFI -V1.0) L=
187MM, ROHS2.0+REACH

备注 Remarks: _____

RD/研发中心	QA/品质中心	APPROVED/批准



天线承认书

Parts Approval Sheet

Customer	台德	Project	WBT1032B
Band	WIFI	Color	BLACK
PN	X2938	Version	V0
Customer material number			

DATE: 2024/07/30

R&D			QC
Issued by	Checked by	Confirmed by	Checked by
伍海沅	项念	项念	蔡枝
Customer Confirm			

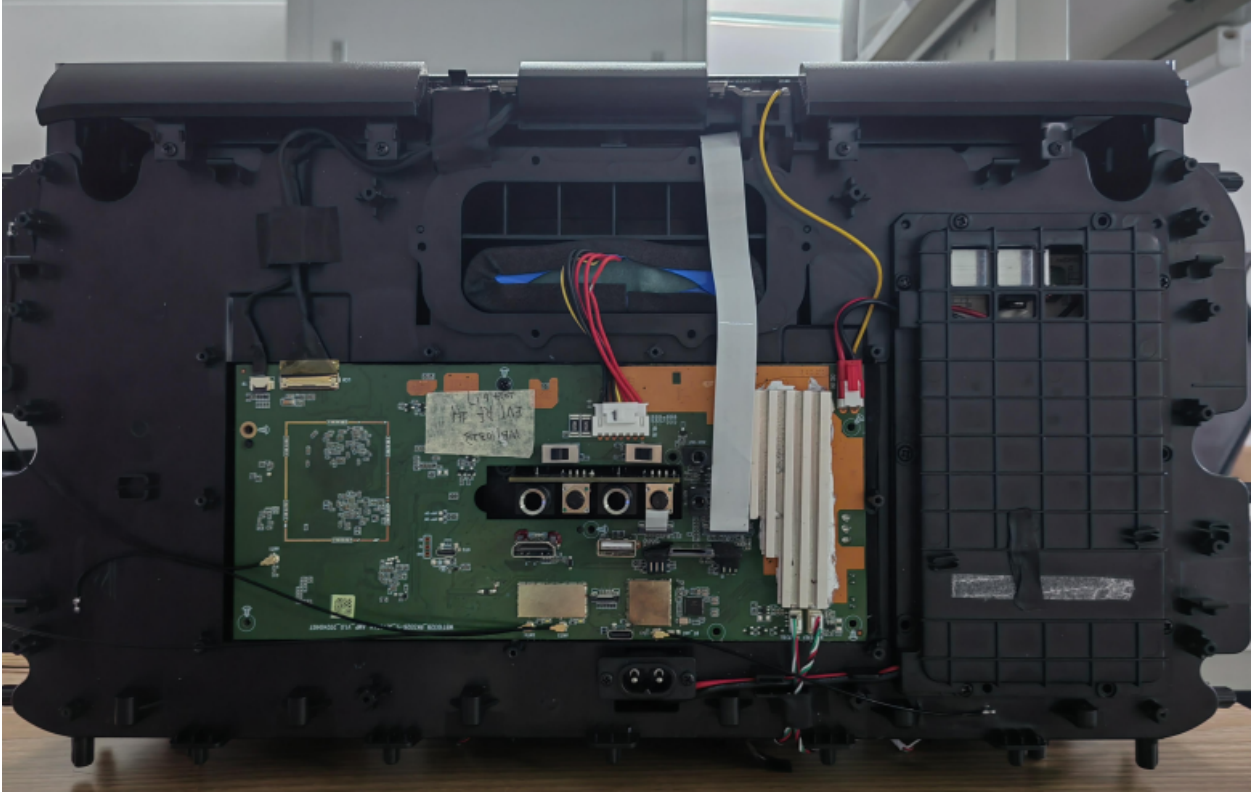
Environmental requirements: ☒ ROHS ☐ REACH ☐ 无

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1.Summary

This report summarizes the electrical results of the our antenna to support the project WBT1032B. The test fixture is made for further testing, which is show below:



2.General Description

2.1Antenna Components/Part revisions

The antenna part number is T: A

2.2Definitions

VSWR: Voltage Standing Wave Rate

TRP: total radiated power

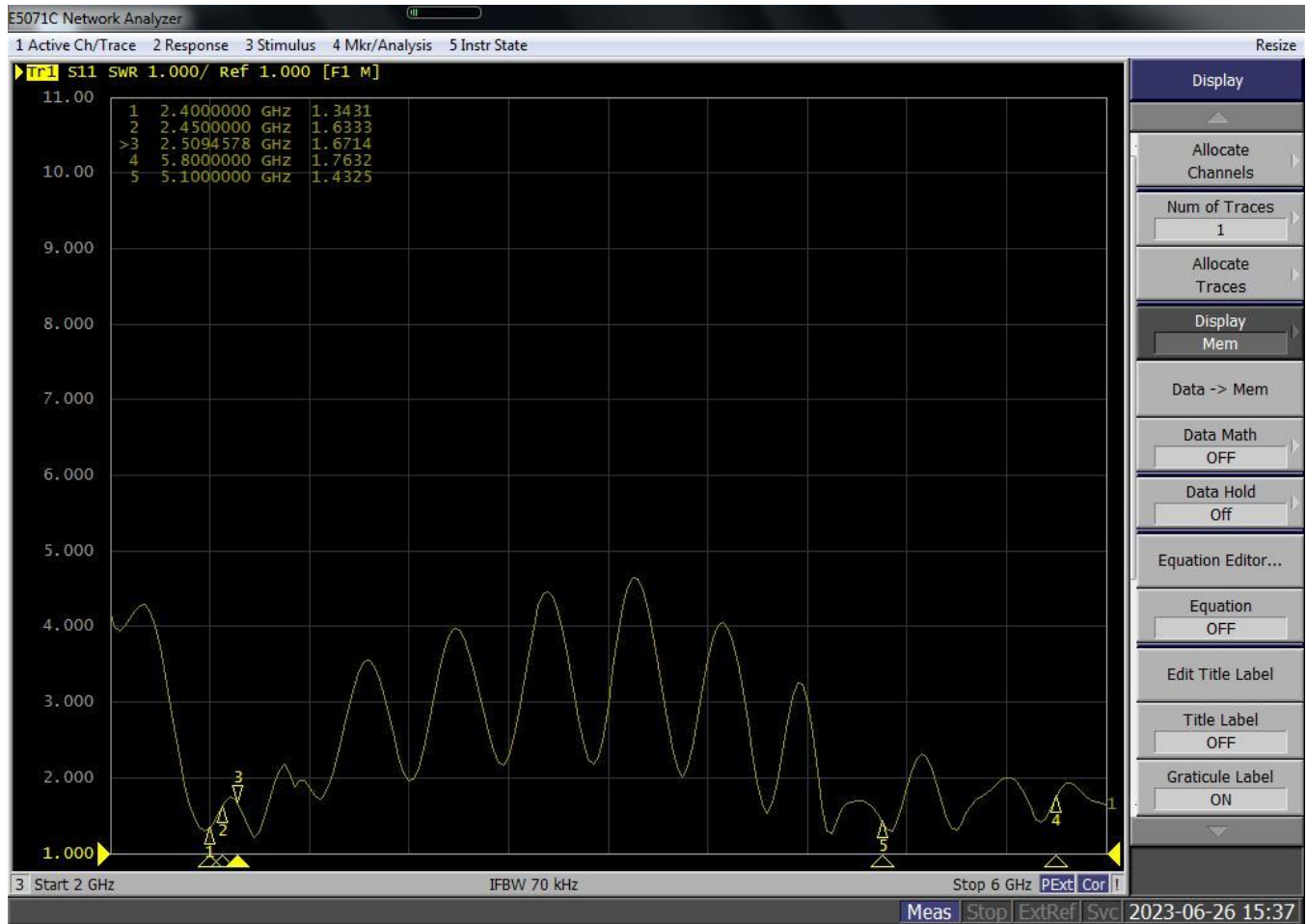
TIS: total isotropic sensitivity

3. Electrical Performance

3.1 Matching Circuit Description



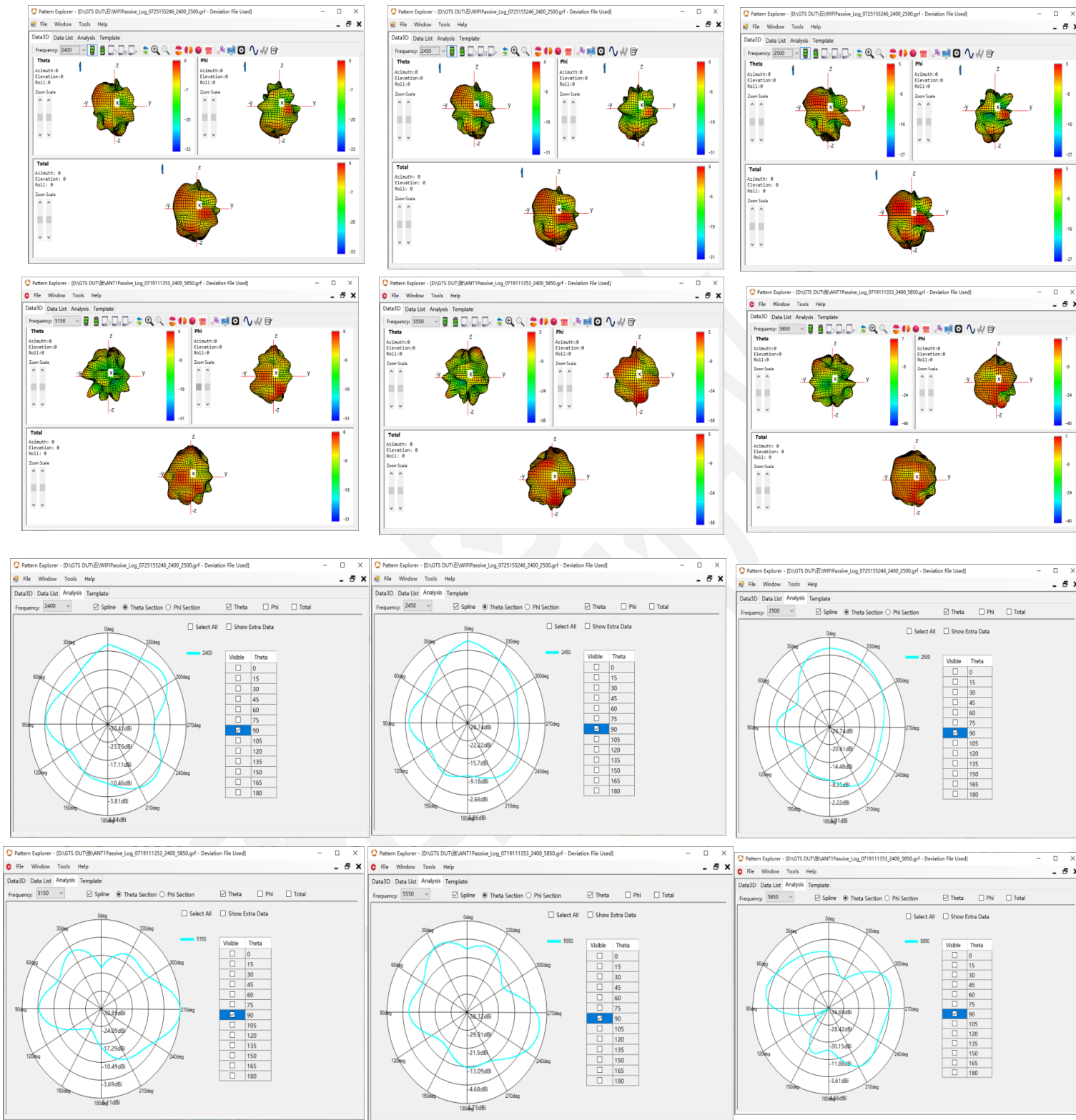
3.2 VSWR(Test in free space)



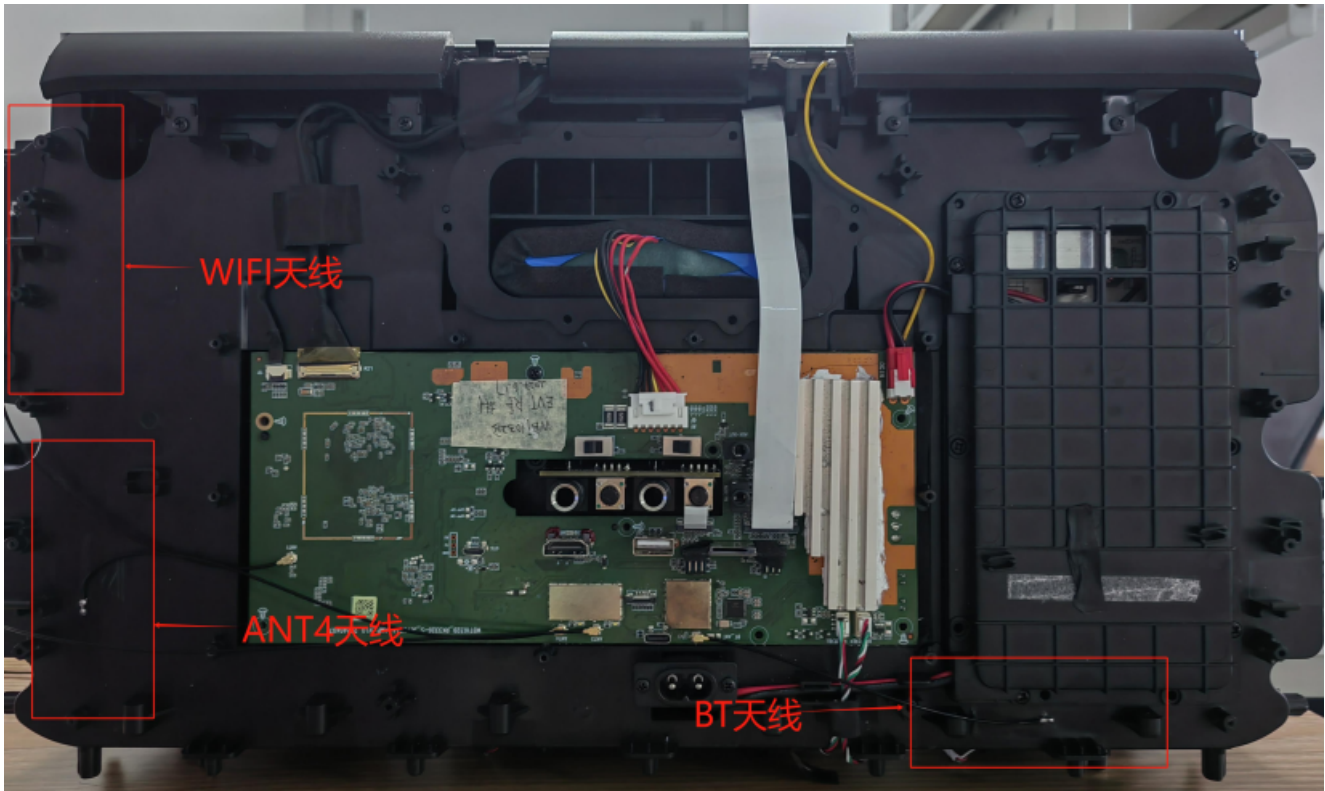
3.3 Gain&Efficiency

WIFI							
Freq(MHZ)	efficiency_db	Gain	efficiency (%)	Freq(MHZ)	efficiency_db	Gain	efficiency (%)
2400.00	-1.95	5.24	63.81	5150.00	-2.21	5.16	60.05
2410.00	-1.91	5.28	64.43	5160.00	-2.33	5.33	58.47
2420.00	-1.97	5.37	63.46	5170.00	-2.51	5.21	56.12
2430.00	-1.97	5.30	63.48	5180.00	-2.57	5.47	55.37
2440.00	-1.94	5.23	63.96	5190.00	-2.51	5.41	56.08
2450.00	-1.85	5.03	65.26	5200.00	-2.37	5.99	57.99
2460.00	-1.85	5.24	65.31	5210.00	-2.80	6.02	52.52
2470.00	-1.79	5.27	66.21	5220.00	-2.78	6.46	52.73
2480.00	-1.69	5.49	67.74	5230.00	-2.54	6.55	55.66
2490.00	-1.64	5.42	68.49	5240.00	-2.68	6.19	53.93
2500.00	-1.80	4.70	66.07	5250.00	-2.66	6.50	54.23
				5260.00	-2.86	6.41	51.74
				5270.00	-2.81	6.39	52.31
				5280.00	-3.04	5.88	49.65
				5290.00	-2.84	5.49	51.98
				5300.00	-2.90	4.71	51.28
				5310.00	-3.09	5.51	49.04
				5320.00	-2.95	4.77	50.66
				5330.00	-3.08	5.25	49.25
				5340.00	-3.11	5.49	48.91
				5350.00	-2.86	5.42	51.79
				5360.00	-3.04	5.37	49.71
				5370.00	-3.03	4.87	49.80
				5380.00	-2.84	5.17	51.99
				5390.00	-3.00	4.91	50.18
				5400.00	-3.01	4.49	49.98
				5410.00	-2.90	5.28	51.34
				5420.00	-3.04	5.33	49.65
				5430.00	-3.31	4.26	46.65
				5440.00	-3.33	4.81	46.40
				5450.00	-3.16	5.76	48.30
				5460.00	-3.06	5.79	49.43
				5470.00	-3.06	4.84	49.45
				5480.00	-2.86	5.57	51.80
				5490.00	-2.71	5.75	53.61
				5500.00	-2.97	5.56	50.43
				5510.00	-3.20	5.01	47.84
				5520.00	-3.22	5.38	47.62
				5530.00	-3.01	5.70	50.00
				5540.00	-3.38	4.91	45.89
				5550.00	-3.36	4.43	46.14
				5560.00	-3.29	4.90	46.83
				5570.00	-3.16	5.03	48.35
				5580.00	-3.11	4.63	48.89
				5590.00	-3.21	4.55	47.80
				5600.00	-3.27	4.43	47.05
				5610.00	-3.17	4.42	48.23
				5620.00	-3.23	4.53	47.51
				5630.00	-3.07	4.24	49.31
				5640.00	-3.44	4.26	45.28
				5650.00	-3.28	4.60	46.94
				5660.00	-3.15	3.88	48.45
				5670.00	-3.11	4.40	48.86
				5680.00	-2.93	5.02	50.92
				5690.00	-3.01	4.55	49.97
				5700.00	-2.89	4.94	51.37
				5710.00	-2.43	5.56	57.09
				5720.00	-2.75	4.93	53.03
				5730.00	-2.78	5.00	52.68
				5740.00	-2.75	4.60	53.14
				5750.00	-2.47	5.37	56.67
				5760.00	-2.49	5.15	56.36
				5770.00	-2.31	4.34	58.71
				5780.00	-2.54	5.43	55.77
				5790.00	-2.54	5.72	55.77
				5800.00	-2.41	5.50	57.43
				5810.00	-2.33	5.45	58.44
				5820.00	-2.71	5.67	53.64
				5830.00	-2.13	5.74	61.20
				5840.00	-2.37	6.41	57.98
				5850.00	-2.03	6.35	62.73

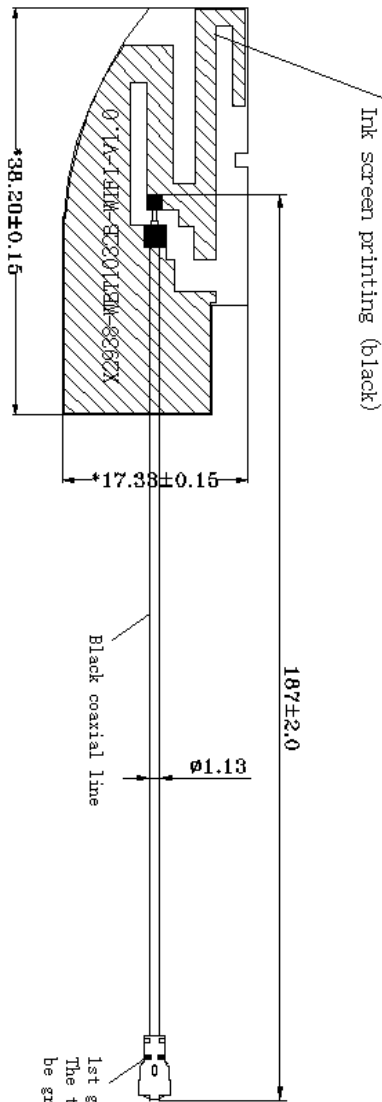
3.4 2D & 3D Radiation Pattern



3.5 Environment treatment



4. Antenna Engineer drawing

1		2		3		4		5		6																																																	
Environmental requirements : RO SH ☒ REACH ☐ No																																																											
																																																											
technical requirement 1: * Important dimension annotation 2: Comparison test graph of antenna voltage standing wave ratio: 3: The antenna welding part is firm and the cable size is accurate: Soldering should be full and round: There should be no oil residue on the surface. 4: The silk screen font is clear and not easy to peel off: 5: The inclination angle of the connector should not be greater than or less than 35° 6: The back is a back adhesive surface: Cut the centrifugal paper surface to the tearing position 7: There should be no copper leakage at the cutting port. 8: The product must comply with the EU RoHS requirements.																																																											
Shenzhen HamyWe Technology Co., Ltd <table border="1"> <thead> <tr> <th colspan="4">unified tolerances standard</th> <th>Type of machine</th> <th>Product name</th> <th>TIPI</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>XXX</td> <td>±2</td> <td></td> <td>0.1</td> <td>12938-TE110328</td> <td>TIPI</td> <td></td> <td>2025.06.20</td> </tr> <tr> <td>XX</td> <td>±1</td> <td></td> <td>0.05</td> <td>12938-TE110328-TIPI</td> <td></td> <td></td> <td></td> </tr> <tr> <td>X</td> <td>±0.5</td> <td></td> <td>0.05</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>X</td> <td>±0.2</td> <td></td> <td>0.05</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>XX</td> <td>±0.10</td> <td>Angle</td> <td>±3°</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>												unified tolerances standard				Type of machine	Product name	TIPI	Date	XXX	±2		0.1	12938-TE110328	TIPI		2025.06.20	XX	±1		0.05	12938-TE110328-TIPI				X	±0.5		0.05					X	±0.2		0.05					XX	±0.10	Angle	±3°				
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5. Reliability Testing Report

customer	台德	part number	FPC	Work Date	2024.07.26
Test item	Test requirement			Test result	Evaluation
neutral Salt-Fog test	Hydrochloric fog through neutral testing: In the time of 24 hours, no rust corrosion, color fading or solder peel off to the antenna fpc sop in Nacl 5% ± 1% PH value 6.5-7.2, above 85% humidity. and 35℃ ± 2℃ Seals environment.			Norust corrosion, color fading or solder peel off on the antenna surface after testing	pass
tester: 伍海沅			approval: 伍海沅		