



# APPROVAL SHEET

Shenzhen Be-Comfortable Technology Co. Ltd

CUSTOMER NAME		
CUSTOMER P/N		
PART NAME	2. 4G/5. 8G White custom waterproof antenna	
P/ N	YJC-60302-W27	
APPROVAL REV.	A0	
DELIVERY DATE	May 25, 2022	
PREPARED BY	Wu Jiexiong	
CHECKED BY	Fang Wunfeng	
APPROVED BY		
Customer Approved		
Prepared By	Checked By	Approved By

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## Resumer:

Version	Change contents and reasons	Date	Issue
A0	Initial release	July 16, 2020	
A1	Updated joint torque standard	May 25th, 2022	



Antenna plan:

由 Autodesk 教育版产品制作

**Requirement:**

1. The finished product must be pass test 100% OK
2. The finished product shall be subject to 100% full inspection OK.
3. The finished product adopts environmental protection process.
4. Meet ROHS requirements
5. No tolerance shall be subject to general tolerances
6. Antenna torque: 300-700 gf.cm
7. Waterproof requirements: Soak the antenna in 200M depth for 24 hours without water

(Frequency Range)	2400~2500/5150~5850MHz
(Gain)	3.0dBi
(VSWR)	<1.92
(Polarization)	Linear. Vertical
(Max power rating)	50W
(Impedance)	50Ω

<small>GENERAL DIMENSIONS (DIMENSIONS)</small> <small>mm</small>		<small>UNITED STATES DIMENSIONS (DIMENSIONS)</small> <small>in</small>	
<small>0.1</small> <small>0.13</small> <small>0.25</small> <small>0.51</small> <small>1.27</small> <small>2.54</small> <small>5.08</small> <small>12.7</small> <small>25.4</small> <small>50.8</small> <small>101.6</small> <small>254</small> <small>508</small> <small>1016</small>	<small>0.004</small> <small>0.005</small> <small>0.010</small> <small>0.020</small> <small>0.050</small> <small>0.100</small> <small>0.200</small> <small>0.500</small> <small>1.000</small> <small>2.000</small> <small>5.000</small> <small>10.000</small> <small>25.000</small> <small>50.000</small> <small>100.000</small>	<small>0.004</small> <small>0.005</small> <small>0.010</small> <small>0.020</small> <small>0.050</small> <small>0.100</small> <small>0.200</small> <small>0.500</small> <small>1.000</small> <small>2.000</small> <small>5.000</small> <small>10.000</small> <small>25.000</small> <small>50.000</small> <small>100.000</small>	<small>0.004</small> <small>0.005</small> <small>0.010</small> <small>0.020</small> <small>0.050</small> <small>0.100</small> <small>0.200</small> <small>0.500</small> <small>1.000</small> <small>2.000</small> <small>5.000</small> <small>10.000</small> <small>25.000</small> <small>50.000</small> <small>100.000</small>

(PART NAME)	2.46/5.86 white waterproof antenna	(UNIT)	mm	(SCALE)	(REV)	(PRODUCT NO.)	(DATE)
DR.	Wu Jiaxiang				A0	YJC-60302-W27	2022-05-25
CHK.	Wu Longfei						
APPR.							

REV	DATE	DESCRIPTION	NAME
A0	2020-07-16	New edition issue	Ye Suiqing
A1	2022-05-25	Updated joint torque standard	Wu Jiaxiang

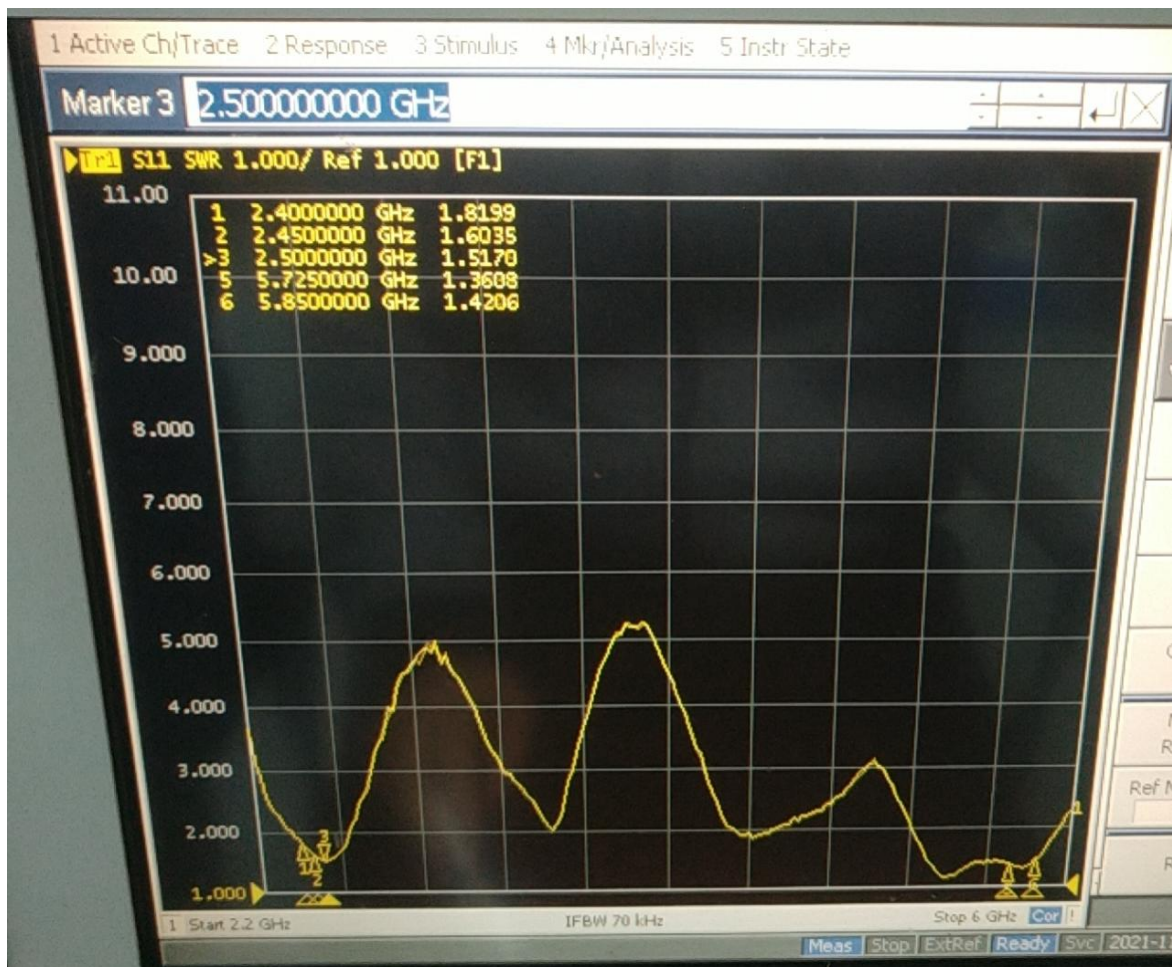
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Antenna diagram :



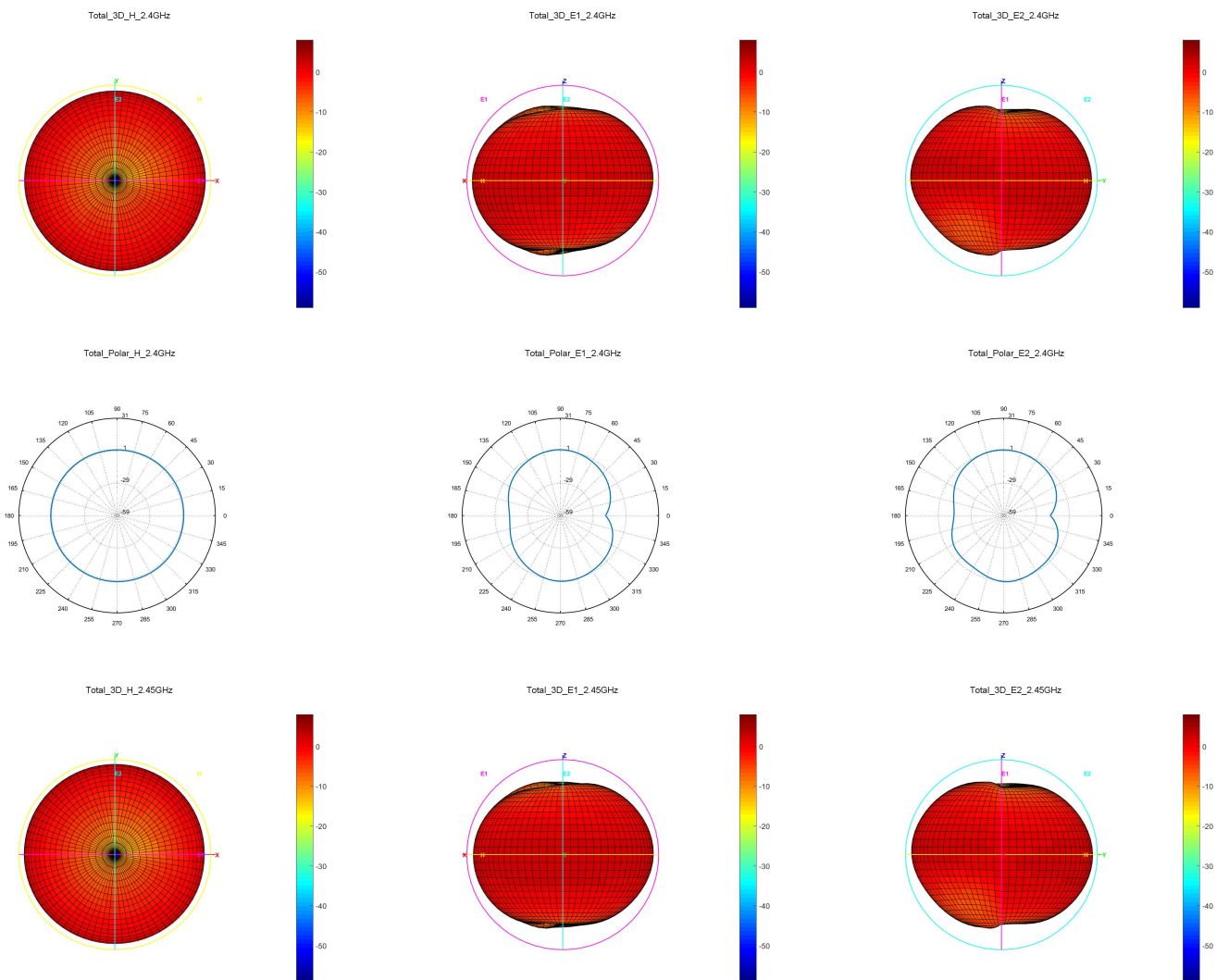
Antenna performance test diagram:





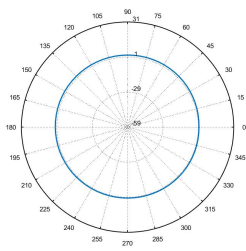
2D and 3D test data (2.4G) :

Frequency	Efficiency (%)	Gain. (dBi)
2400MHz	84.92	2.21
2410MHz	86.70	2.30
2420MHz	87.70	2.49
2430MHz	89.54	2.59
2440MHz	87.90	2.60
2450MHz	87.30	2.68
2460MHz	87.70	2.77
2470MHz	87.10	2.89
2480MHz	84.92	2.83
2490MHz	86.50	2.81
2500MHz	84.14	2.64

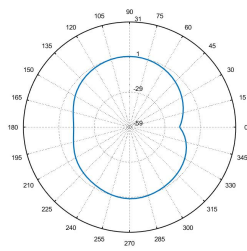




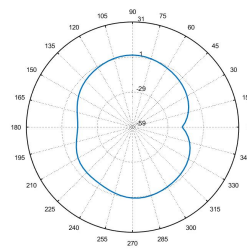
Total\_Polar\_H\_2.45GHz



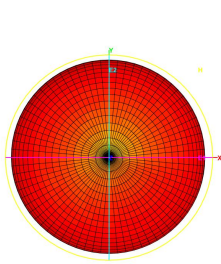
Total\_Polar\_E1\_2.45GHz



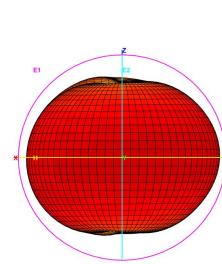
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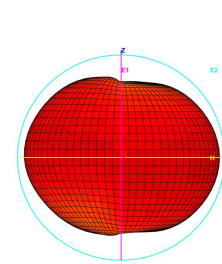
Total\_3D\_H\_2.5GHz



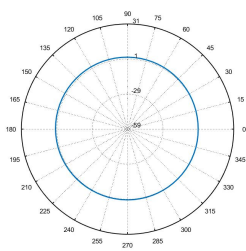
Total\_3D\_E1\_2.5GHz



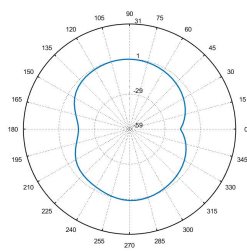
Total\_3D\_E2\_2.5GHz



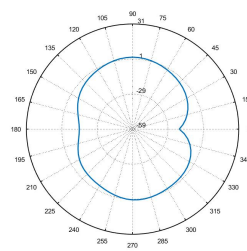
Total\_Polar\_H\_2.5GHz



Total\_Polar\_E1\_2.5GHz



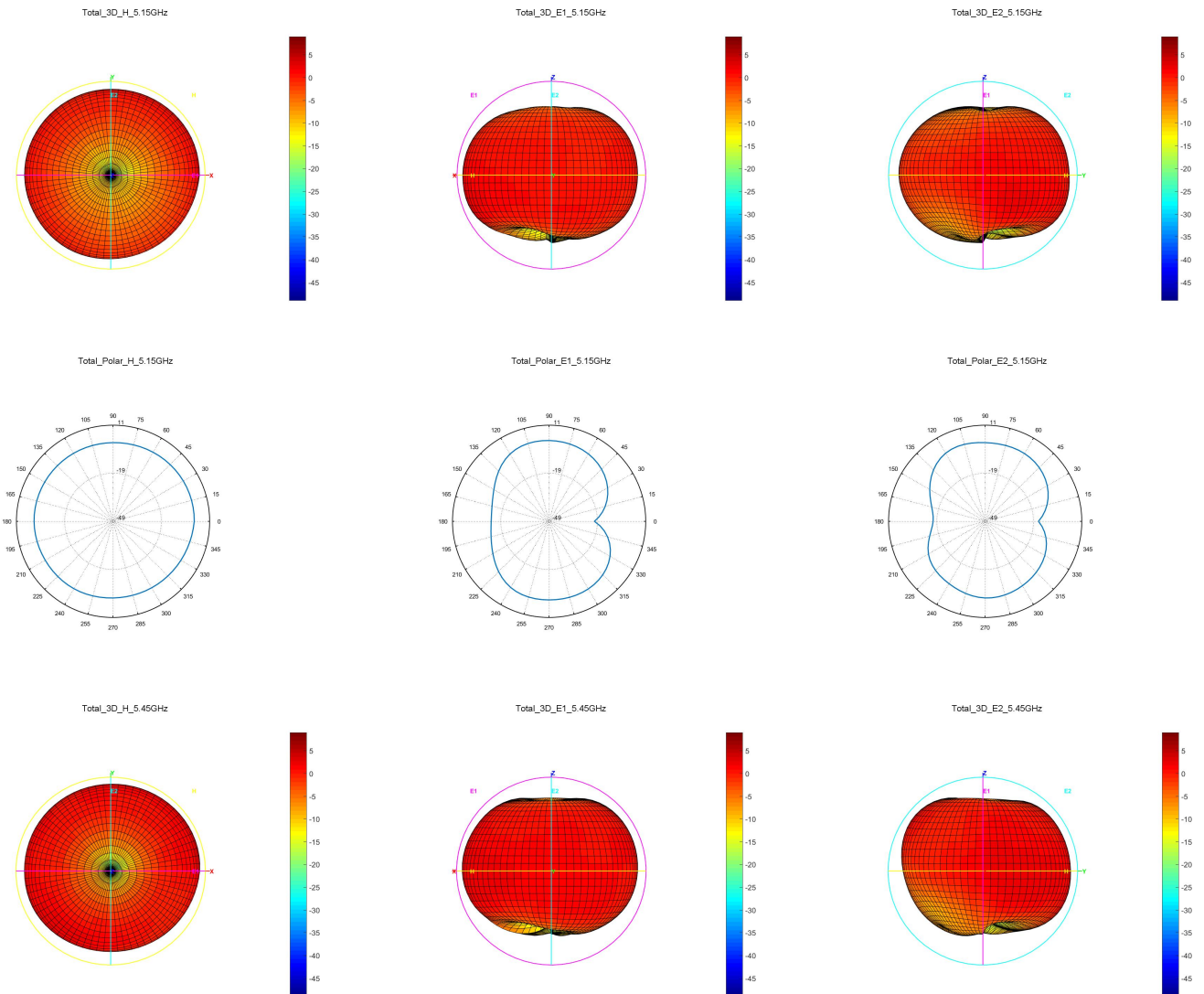
Total\_Polar\_E2\_2.5GHz





2D and 3D test data (5.8G) :

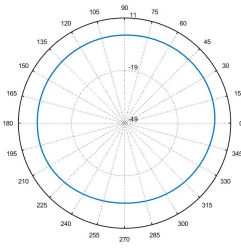
Frequency	Efficiency (%)	Gain. (dBi)
5150MHz	66.53	1.44
5250MHz	78.16	2.02
5350MHz	74.64	2.32
5450MHz	81.10	2.55
5550MHz	73.62	2.06
5650MHz	73.96	1.98
5750MHz	71.12	2.19
5850MHz	62.52	1.47



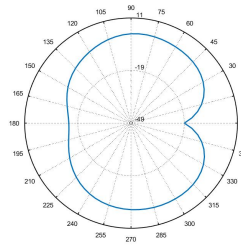




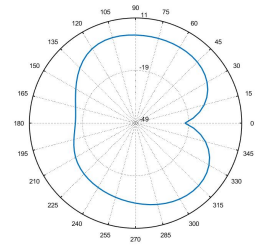
Total\_Polar\_H\_5.45GHz



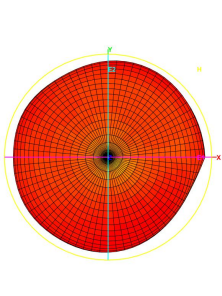
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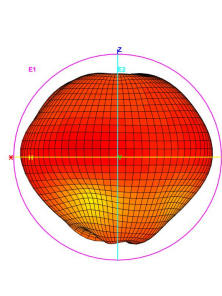
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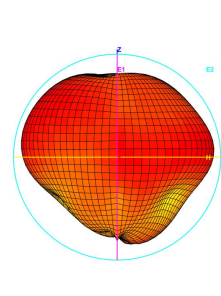
Total\_3D\_H\_5.85GHz



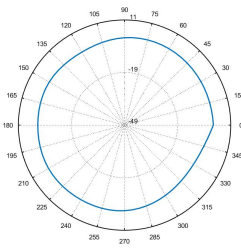
Total\_3D\_E1\_5.85GHz



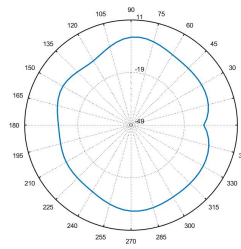
Total\_3D\_E2\_5.85GHz



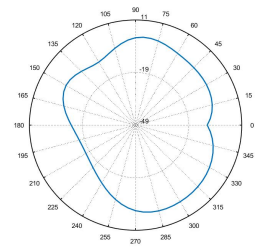
Total\_Polar\_H\_5.85GHz



Total\_Polar\_E1\_5.85GHz



Total\_Polar\_E2\_5.85GHz





Material RoHS conformity declaration form

This is to certify that the delivery to your company's components, raw materials, auxiliary materials used and the additives in the production engineering are accord with RoHS environmental requirements of the restrictions on the use of hazardous substances directive (RoHS directive 2011/65 / EU)

About components used raw materials, packaging materials, auxiliary materials and additives used in the production process such as composition of the report is as follows:

Component /Part Name	Material Composition	ICP report #	Test Org.	Test Date	Content of harmful substances (ppm)						PASS?
					Cd	Pb	Hg	Cr <sup>6+</sup>	PBB	PBDE	
Plastic parts	ABS	CANML2204785512	SGS	22/03/30	ND	ND	ND	ND	ND	ND	PASS
	PC	SZXML2200130001	SGS	22/01/20	ND	ND	ND	ND	ND	ND	PASS
Copper pipe	Brass strip	SHAEC2127949504	SGS	21/12/30	ND	35	ND	ND	ND	ND	PASS
Tin bar	Eco-friendly tin wire	SHAEC2112368002	SGS	21/06/22	ND	51	ND	ND	ND	ND	PASS
Wire rod	Teflon coaxial cable	SZXEC2102641803	SGS	21/08/23	ND	ND	ND	ND	ND	ND	PASS
Heat shrink bushing	Heat shrink bushing	CANEC2116449508	SGS	21/09/10	ND	ND	ND	ND	ND	ND	PASS
Rubber plug	Silicone plug	CANML2116817201	SGS	21/09/13	ND	ND	ND	ND	ND	ND	PASS
SMA	Copper alloy	CANEC2200189312	SGS	22/01/12	ND	27364	ND	ND	ND	ND	PASS
	Rubber core	SHAEC2118528402	SGS	21/08/30	ND	ND	ND	ND	ND	ND	PASS
	Nickel coating	SZXEC2103405307	SGS	21/11/12	ND	28	ND	ND	ND	ND	PASS