



## Approval Sheet

( Supplier ) : Shenzhen Yingjia Chuang electronic technology Co., LTD  
( Part Name ) : 2.4G/5G Integrated white antenna 1.13 Black line L=305MM  
( P code ) : \_\_\_\_\_  
( version ) : V1.0  
( material Code ) : 112010218  
( Date ) : August 5th, 2023

### Supplier confirmation

Creation/date	Audit/Date	Approval/Date
Yin Feijie	Fang Wenfeng	Chauhan

### Customer confirmation

Quality/Date	R&d/Date	Product Manager/Date



# APPROVAL SHEET

CUSTOMER NAME	Mirui	
CUSTOMER P/N	112010218	
PART NAME	2.4G white Integrated antenna 1.13 Black cable L=305MM	
P/ N	YJC-6C305-W05	
APPROVAL REV.	V1.0	
DELIVERY DATE	August 5th, 2023	
PREPARED BY	Yin Feijie	
CHECKED BY	Fang Wenfeng	
APPROVED BY	Chauhan	
Customer Approved		
Prepared By	Checked By	Approved By

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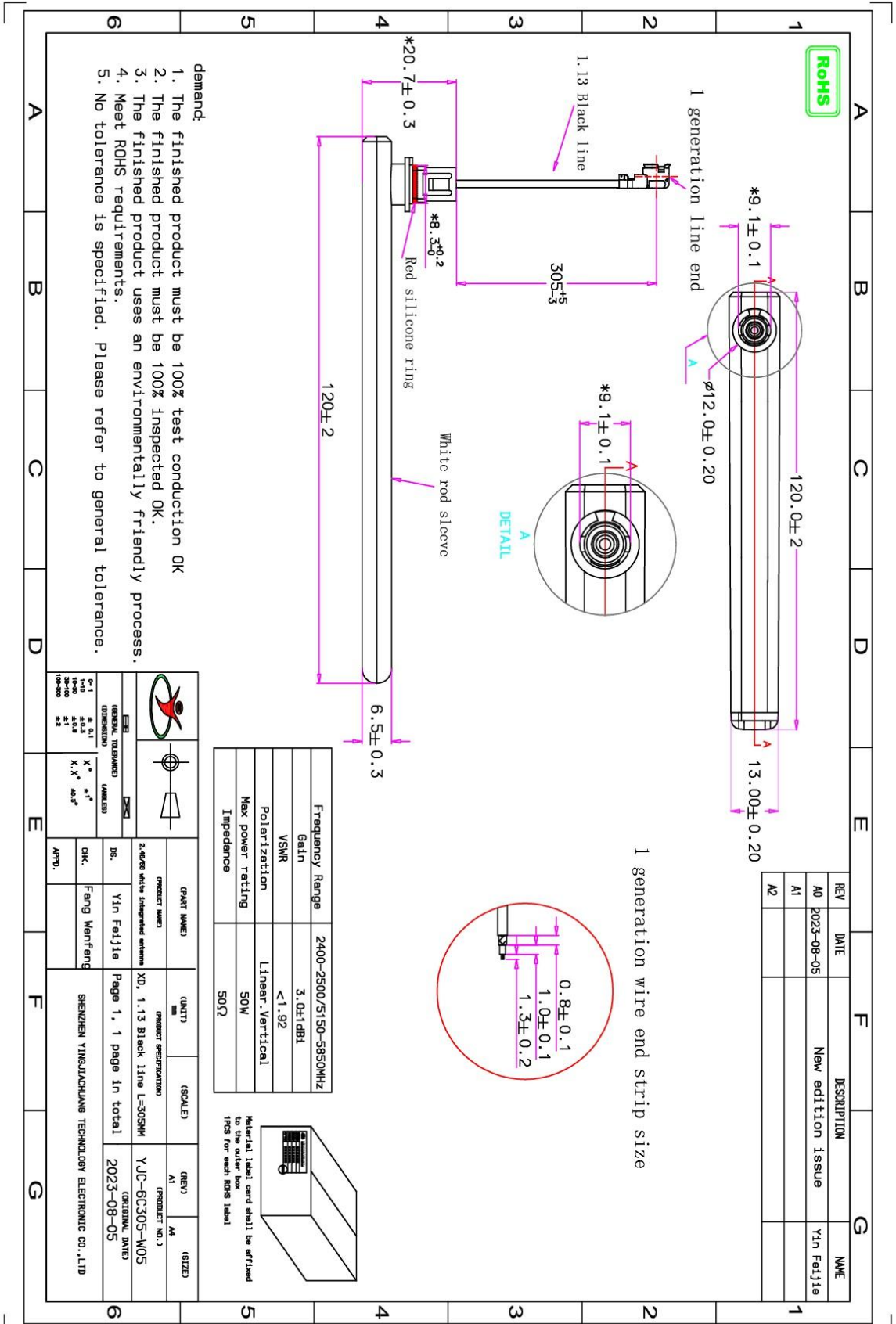
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resume :

edition	Content of change and reasons for change	date	release
V1.0	Initial release	August 5th, 2023	

Antenna plan:



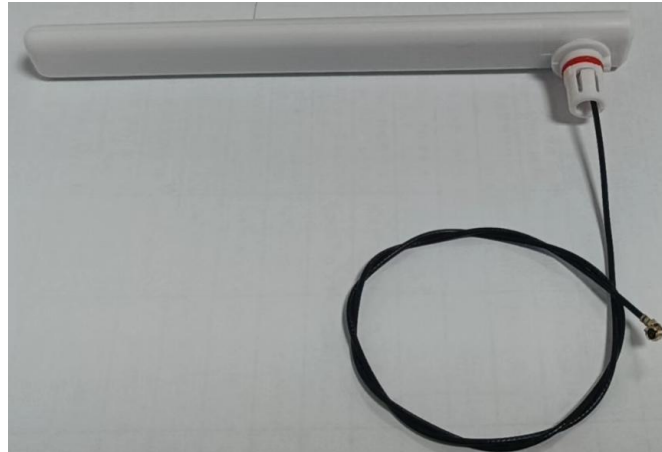
Antenna technical parameters and environmental testing :

Electrical technical parameter			
Electrical Specifications		Mechanical Specifications	
Frequency Range	2400-2500/5150-5850MHz	Antenna Color	White
VSWR	<1.92	Input connector	XD
Input Impedance	50 Ω	Cable length	305mm
Direction	All	Working Temperature	-20°C~+70°C
Gain	3.0±1dBi	Working Humidity	20%~80%

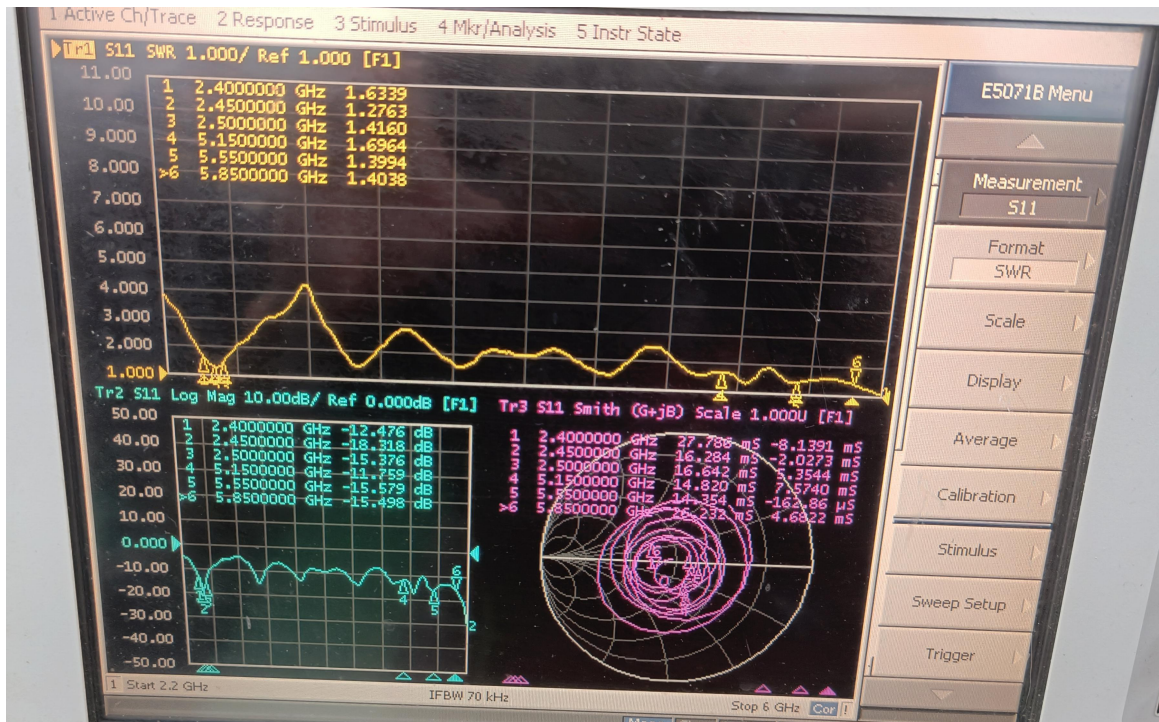
Environmental performance test:

Project	Test condition	Standard
Storage Conditions	In the absence of specified test temperature, humidity, air pressure is as follows:: 1. Temperature is - 30 °C ~ + 80 °C 2. Relative humidity of 45% to 45% 3. Air pressure is 86 kpa to 106 kpa	Electrical and mechanical performace is normal
High and low temperature test	Between 70 °C and -20 °C for 5 loops, then 1-2 h under normal conditions, check the appearance quality.	Size should meet the requirements and meet the performance of mechninery and electric.
Constant damp and hot resistance test	95 + / - 3% relative humidity, temperature test: 40 °C. Lasts 2 h after, try to take out the determination of electrical properties, within 5 min after try 1-2 h under article normal thing, check the appearance quality	Size should meet the requirements and meet the performance of mechninery and electric.
vibration test	10-55 hz, vibration frequency range of displacement amplitude: 0.35 MM, acceleration amplitude: 50.0 M/S, sweep cycles: 30 times	Electrical and mechanical performace is normal
Fall down test	1 m high altitude in accordance with the perpendicular axis free drop 3 times	Electrical and mechanical performace is normal

Antenna diagram:

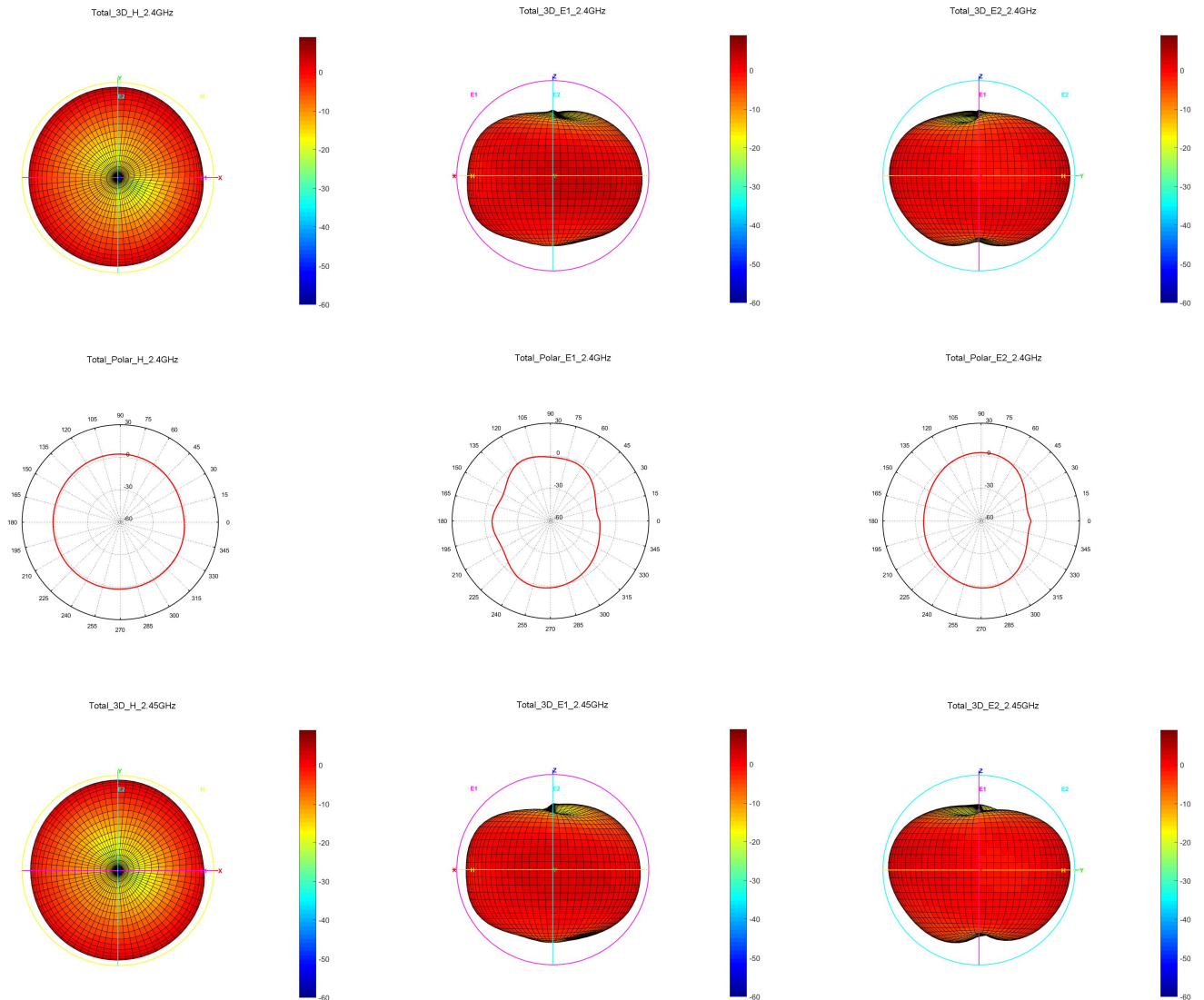


Antenna performance test diagram:



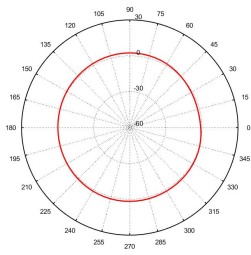
2D, 3D(2.4G) test data:

Frequency (MHz)	Efficiency (%)	Gain. (dBi)
2400MHz	76.14	2.91
2410MHz	75.56	2.75
2420MHz	77.81	2.66
2430MHz	75.45	2.53
2440MHz	71.62	2.49
2450MHz	69.76	2.41
2460MHz	66.89	2.33
2470MHz	62.36	2.21
2480MHz	68.18	2.19
2490MHz	68.40	2.26
2500MHz	64.85	2.51

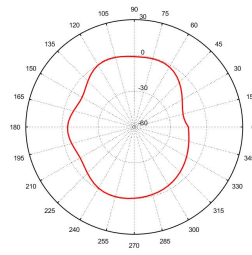




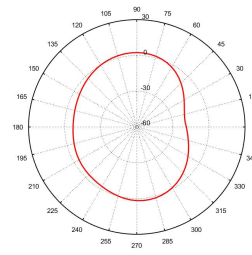
Total\_Polar\_H\_2.45GHz



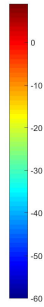
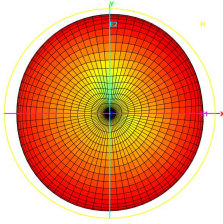
Total\_Polar\_E1\_2.45GHz



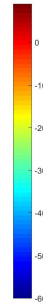
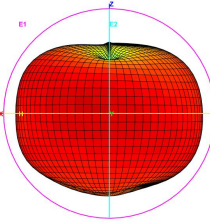
Total\_Polar\_E2\_2.45GHz



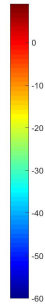
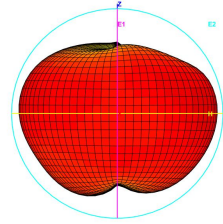
Total\_3D\_H\_2.5GHz



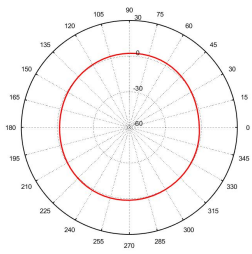
Total\_3D\_E1\_2.5GHz



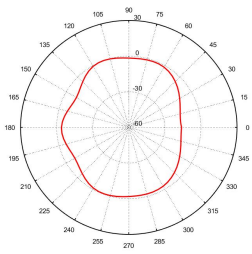
Total\_3D\_E2\_2.5GHz



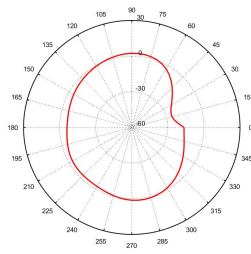
Total\_Polar\_H\_2.5GHz



Total\_Polar\_E1\_2.5GHz

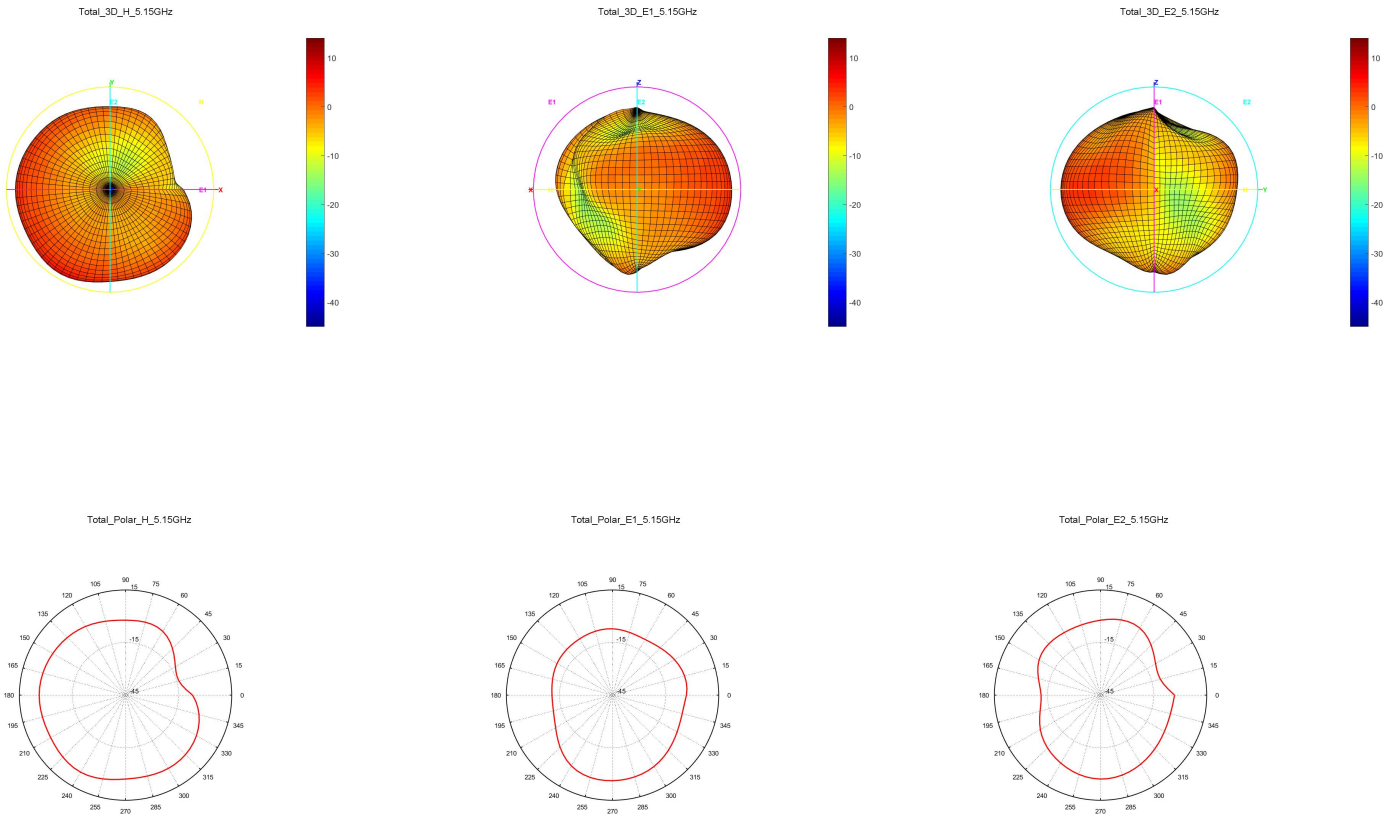


Total\_Polar\_E2\_2.5GHz

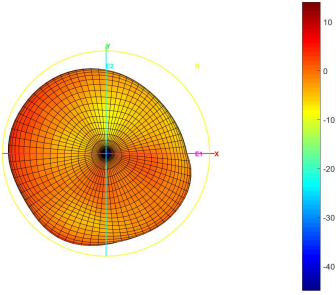


2D, 3D(5G) test data:•

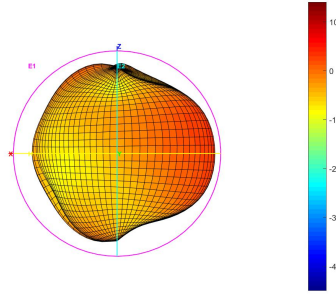
Frequency	Efficiency (%)	Gain. (dBi)
5150MHZ	61.30	3.81
5250MHZ	65.47	3.20
5350MHZ	69.58	3.65
5450MHZ	56.78	3.54
5550MHZ	62.45	3.10
5650MHZ	63.23	3.25
5750MHZ	64.66	3.25
5850MHZ	65.36	3.63



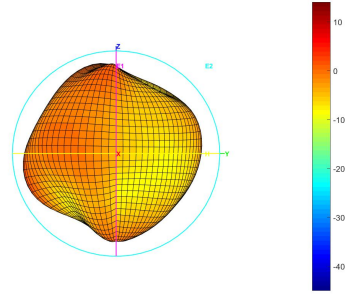
Total\_3D\_H\_5.55GHz



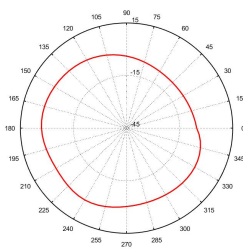
Total\_3D\_E1\_5.55GHz



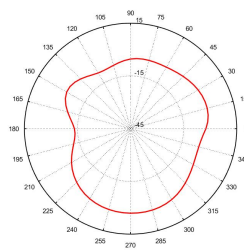
Total\_3D\_E2\_5.55GHz



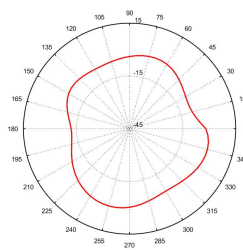
Total\_Polar\_H\_5.55GHz




Total\_Polar\_E1\_5.55GHz



Total\_Polar\_E2\_5.55GHz



Product Type		1.13 Wire		
Structure Drawing				
Structure Characteristics				
Structure	Item	Standard Value		
Inner Conductor	Material	Silver plated copper wire		
	(mm/Composition(No./mm))	7/0.08±0.005		
	Nom.Dia(mm)	Φ0.24±0.01		
Insulation	Material	FEP		
	Nom.Dia(mm)	Φ0.7±0.03		
Outer Conductor	Material	Tinned copper		
	From	Weaving		
	Shielding rate	≥90%		
	Nom.Dia(mm)	Φ0.92±0.03		
Jacket	Material	FEP		
	Nom.Dia(mm)	Φ1.13±0.05		
电气性能 Electrical Characteristics				
Item	Standard Value	Item	Frequency	Standard Value
Impedance ( Ω )	50±3	Attenuation@20 °C (dB/100m)	1GHz	≤2.23
Capacitance(pF/m)	98		2GHz	≤3.15
Tensile strengthkgf/mm <sup>2</sup>	1.76		3GHz	≤3.96
VSWR	≤1.40@0-6GHz		4GHz	≤4.6
Dielectric Strength( A.C V/1min)	1000		5GHz	≤5.15
( MHz ) Max.oper. frequency	6000		6GHz	≤5.7
Dependability				
Min.Bending Radius/Single		mm	4	
Min.Bending Radius/Repeated		mm	8	
Operating Temperature		°C	-20~+80	
Packing				
Packing Mode	1000 ( m/disc)Reel			
Trips for Use				
Storage Environment	Temperature: below 30°C, humidity: 20-65%			
Teflon Shrink	Insulation shrinkage ≅0.2mm; Sheath shrinkage ≅0.3mm			
Processing temperature	Under the condition of 250°C~260°C, it can withstand for a short time; Thermal decomposition occurs above 300°C			
The best save cycle	After 2 months, the effect of tin becomes worse after 2 months, but the soon as possible after peeling in the high temperature and high humidity environment in summer			



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	PASS
Plastic parts	ABS	CANPC23001081808	SGS	23/03/24	ND	ND	ND	ND	ND	ND	PASS
	PC	SZXML2300036201	SGS	23/01/11	ND	ND	ND	ND	ND	ND	PASS
PCB	PCB	CANEC2221844502	SGS	22/10/20	ND	12	ND	ND	ND	ND	PASS
Eco-friendly tin wire	Eco-friendly tin wire	ZXEC2203054802	SGS	22/09/19	ND	46	ND	ND	ND	ND	PASS
Wire rod	Coaxial cable	CANEC2301851703	SGS	23/02/23	ND	ND	ND	ND	ND	ND	PASS
terminal	Phosphor bronze	CANEC2301145810	SGS	23/02/08	ND	5	ND	ND	ND	ND	PASS
	Gold coating	A2220404860101001C	CTI	22/09/17	ND	ND	ND	ND	ND	ND	PASS
	Rubber core	A2230035037101002E	SGS	23/02/06	ND	ND	ND	ND	ND	ND	PASS
Silicone ring	HTV	CANEC2227525408	CTI	23/01/13	ND	ND	ND	ND	ND	ND	PASS