



SHENZHEN YINGJIACHUANG ELECTRONIC TECHNOLOGY CO., LTD

<http://www.szsyzc.com>

APPROVAL SHEET

CUSTOMER NAME	Xiong Mai	
CUSTOMER P/N		
PART NAME	2.4GHz Black FPC Built-in antenna (Suitable for Binocular ball machine)	
P/ N	YJC-6N055-B62	
APPROVAL REV.	A0	
DELIVERY DATE	2022-7-20	
PREPARED BY	Teng, Huang	
CHECKED BY	Wenfeng, Fang	
APPROVED BY	 Customer Approved	
Prepared By	Checked By	Approved By

Contact address:

ShenZhen Factory:

Building C, Bright Valley No. 11, Guangming District Matianban Shiwei Community, oil Magang, Shenzhen

Hangzhou Office:

212, Building B, Dahua Jianghong International Innovation zone, No. 369 Internet Street, Binjiang District, Hangzhou

TEL: +86-755-27810060/23192199

FAX: +86-0755-27810057

Company internet: <http://www.szsyzc.com>

E-mail: yjc@szsyzc.com



Directory

1、	Cover	1
2、	Directory	2
3、	The resume of Revision	3
4、	Antenna plan map	4
5、	Antenna technical parameters	5
6、	Environmental performance test	5
7、	Physical antenna map and attached position map	6
8、	Antenna performance testing map	6
9、	OTA Active test data	7
10、	2D 3D test data	8-10
11、	ROHS Material control reports	11



SHENZHEN YINGJIACHUANG ELECTRONIC TECHNOLOGY CO., LTD

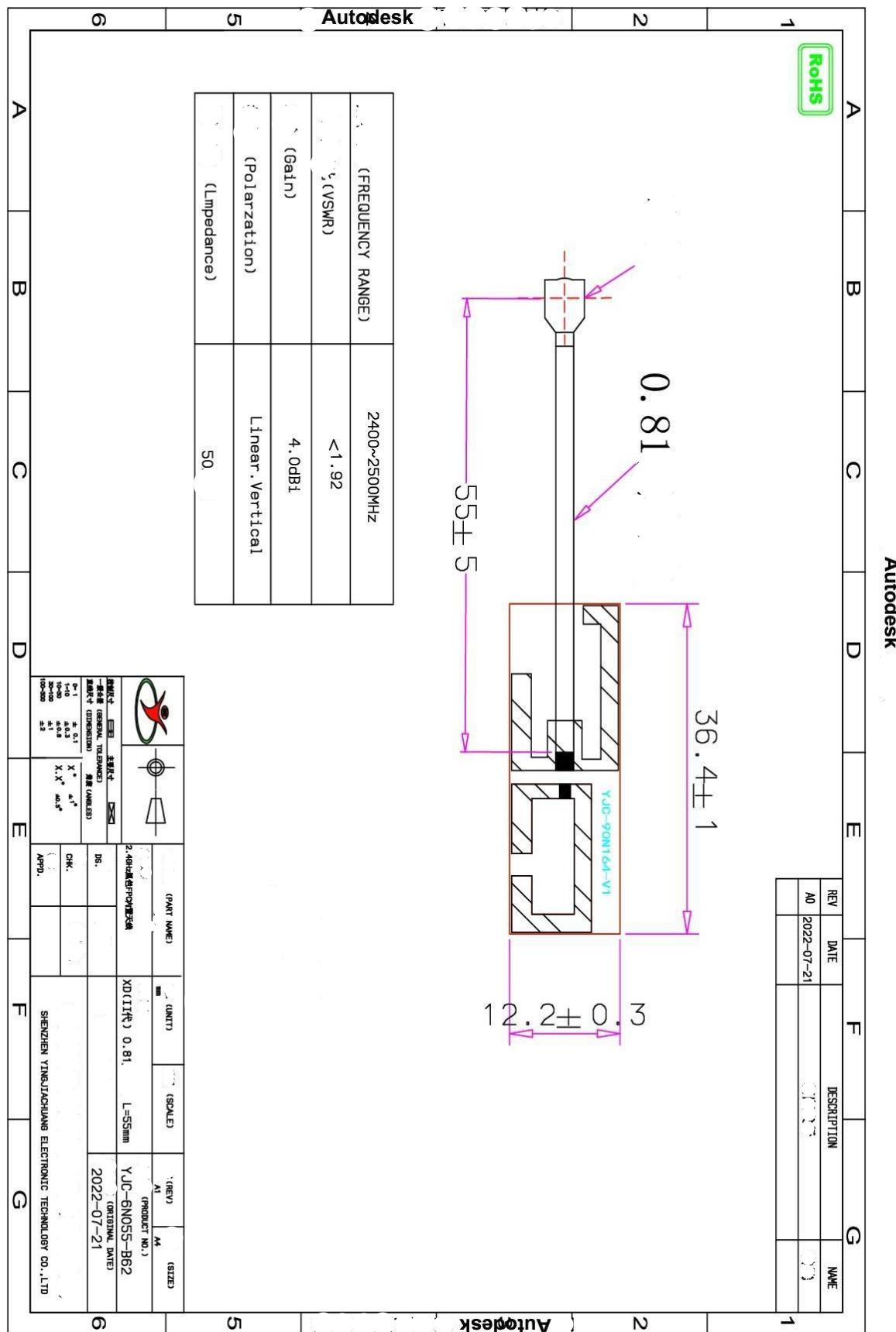
<http://www.szsyjc.com>

The resume of the revision

version	The changes of the content and the reasons	Date	Release
A/0	First version released	2022-7-21	



Antenna plan:





Antenna technical parameters and environmental test

Electrical Specifications	
Frequency Range	2400-2500MHz
VSWR	<1.92
Input Impedance	50 Ω
Direction	A11
Gain	4.58 dBi
Mechanical Specifications	
Antenna Color	Black
Input connector	XD(II)
Working Temperature	-20°C~+70°C
Working Humidity	20%~80%

Environmental performance testing:

Project	Test conditions	Specs
Storage environment	<p>Test temperature, humidity, atmospheric pressure in the absence of a designation</p> <p>1. temperature is -20°C~+70°C</p> <p>2. the humidity is 45%—85%</p> <p>3. the atmospheric pressure is 86kpa-106kpa</p>	Normal electrical and mechanical properties
Test in High and low temperature	Perform 5 circles Between 70 °C and -20 °C, Check the appearance quality in 1-2H under normal conditions	The dimensions should meet the regulations and meet the mechanical and electrical properties



SHENZHEN YINGJIACHUANG ELECTRONIC TECHNOLOGY CO., LTD

<http://www.szsyjc.com>

Test of the resistance in constant damp and heat	relative humidity 95±3%, the test temperature:40°C. After 2H persistent working, measure the electrical properties within 5 minutes after the sample was taken out.	The dimensions should meet the regulations and meet the mechanical and electrical properties
Vibration test	Frequency range 10-55HZ, amplitude of displacement: 0.35MM, Amplitude of acceleration: 50.0M/S, Number of sweep cycles: 30 times	Normal electrical and mechanical properties
Drop test	3 times free fall in the 1M perpendicular direction	Normal electrical and mechanical properties

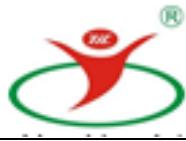


Physical antenna map and attached position map:



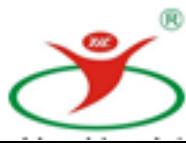
Antenna performance testing map:





OTA Active test data:

Item	Measureme nt	Band	Channel	Frequency	Max	Min	Total
1	TRP	WIFI_B (11M)	1	2412	17.95	5.82	14.43
2	TRP	WIFI_B (11M)	6	2437	18.41	6.09	14.74
3	TRP	WIFI_B (11M)	11	2462	18.08	4.55	14.58
4	TIS(EIRP)	WIFI_B (11M)	1	2412	-75.11	-86.29	-82.79
5	TIS(EIRP)	WIFI_B (11M)	6	2437	-74.59	-85.81	-82.14
6	TIS(EIRP)	WIFI_B (11M)	11	2462	-74.44	-87.03	-83.33
7	TRP	WIFI_G (6M)	1	2412	16.07	3.90	12.63
8	TRP	WIFI_G (6M)	6	2437	16.87	4.88	13.34
9	TRP	WIFI_G (6M)	11	2462	16.08	2.68	12.61
10	TIS(EIRP)	WIFI_G (54M)	1	2412	-59.60	-70.75	-67.31
11	TIS(EIRP)	WIFI_G (54M)	6	2437	-61.76	-72.73	-69.20
12	TIS(EIRP)	WIFI_G (54M)	11	2462	-62.29	-74.63	-71.16
13	TRP	WIFI_N_ISM (6.5M)	1	2412	14.48	0.60	10.38
14	TRP	WIFI_N_ISM (6.5M)	6	2437	12.56	1.49	9.71
15	TRP	WIFI_N_ISM (6.5M)	11	2462	15.62	-9.16	11.69

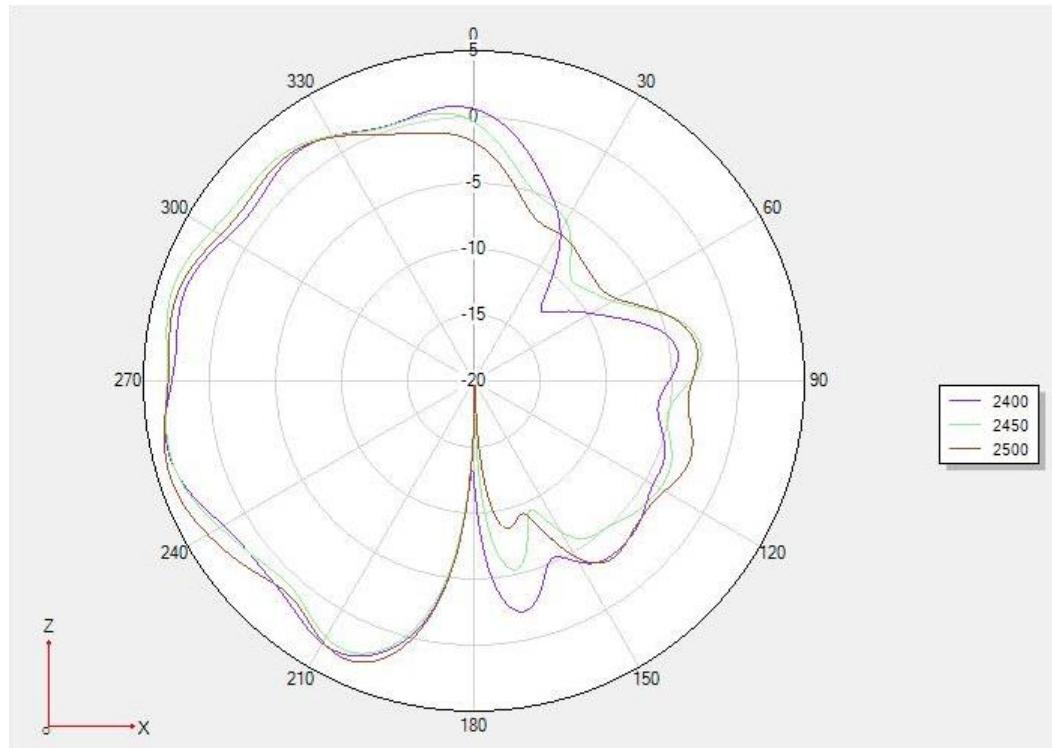


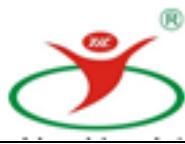
2D 3D test data

(2.4G test data)

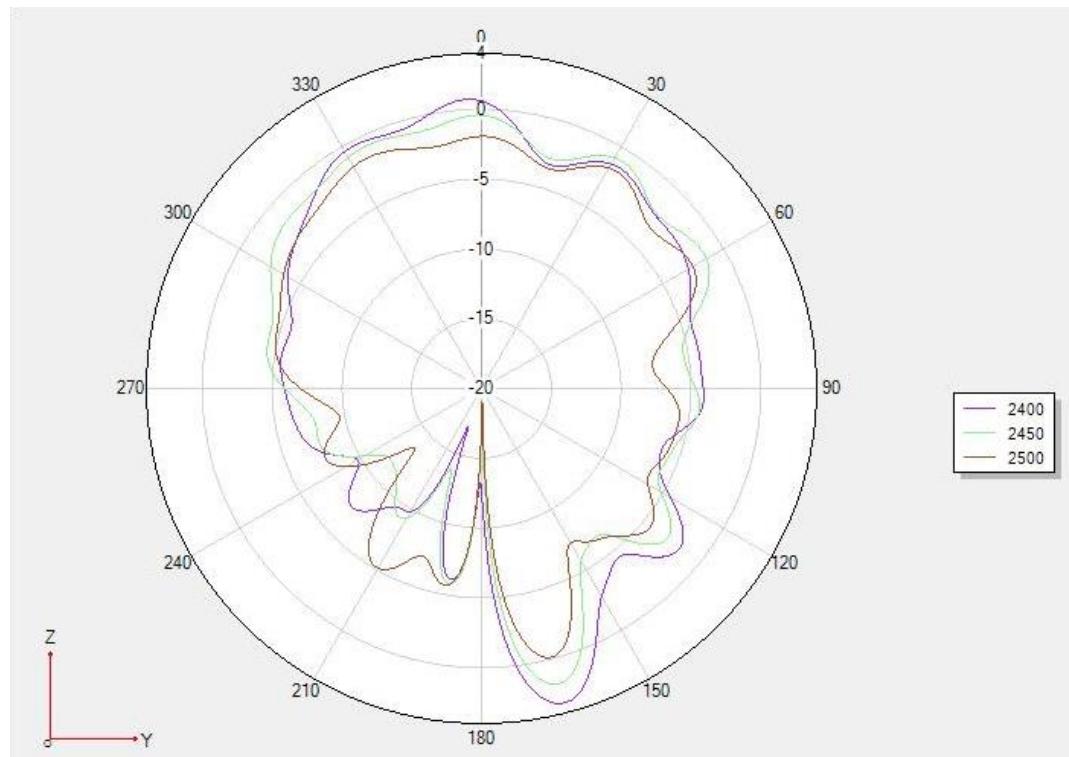
Frequency	Efficiency (%)	Gain. (dBi)
2400MHz	56.49	3.87
2410MHz	61.66	4.13
2420MHz	60.26	3.76
2430MHz	63.83	4.58
2440MHz	58.21	3.87
2450MHz	64.86	4.04
2460MHz	62.81	4.20
2470MHz	61.94	4.23
2480MHz	59.43	3.79
2490MHz	63.10	4.38
2500MHz	61.80	4.30

(phi 0 2D picture)

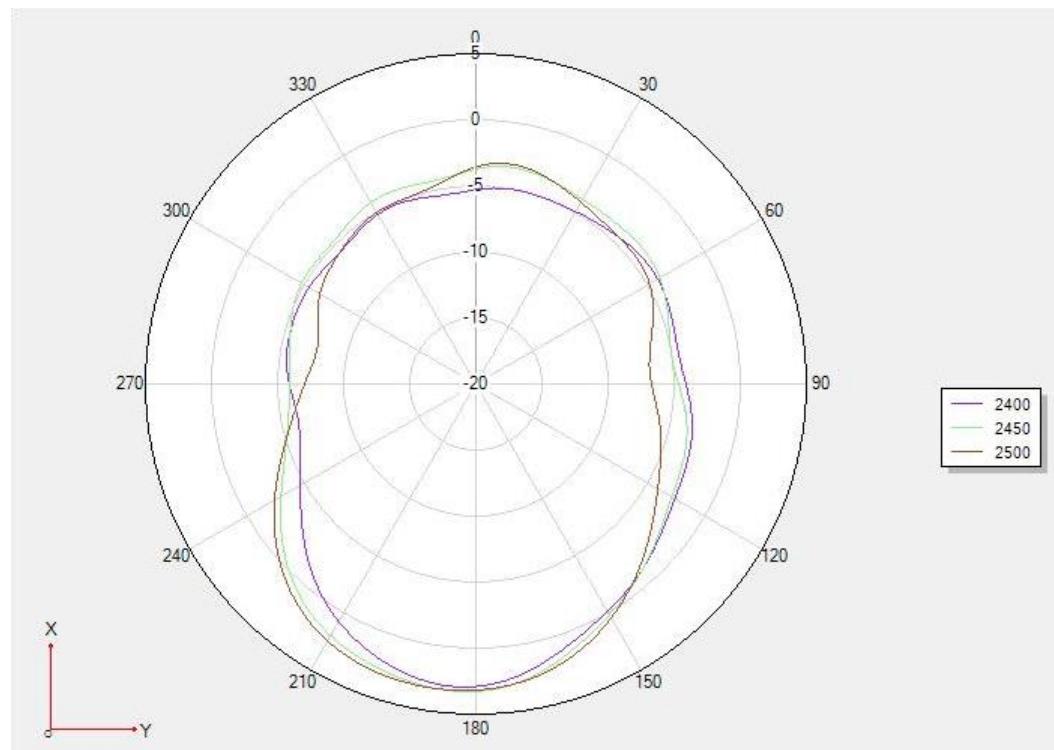




(phi 90 2D picture)

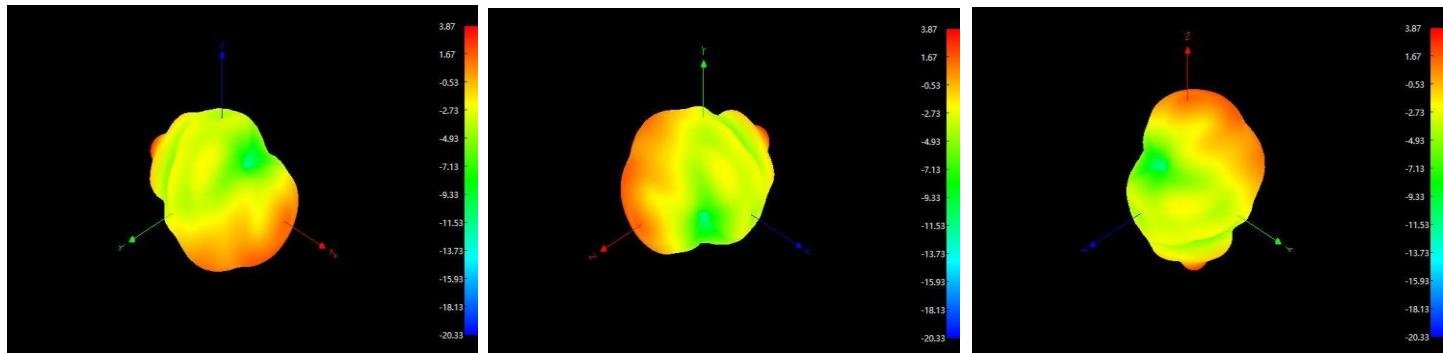


(Theta 90 2D picture)

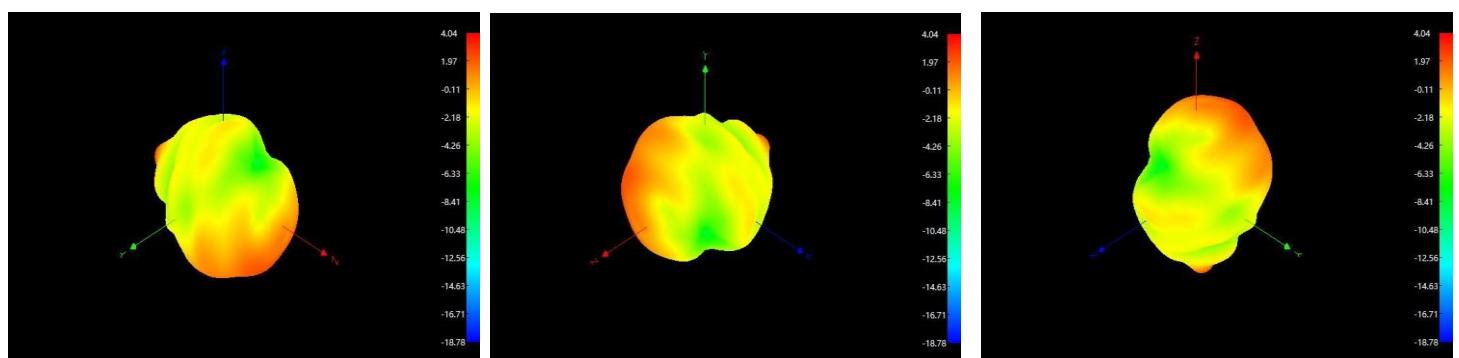


3D test picture

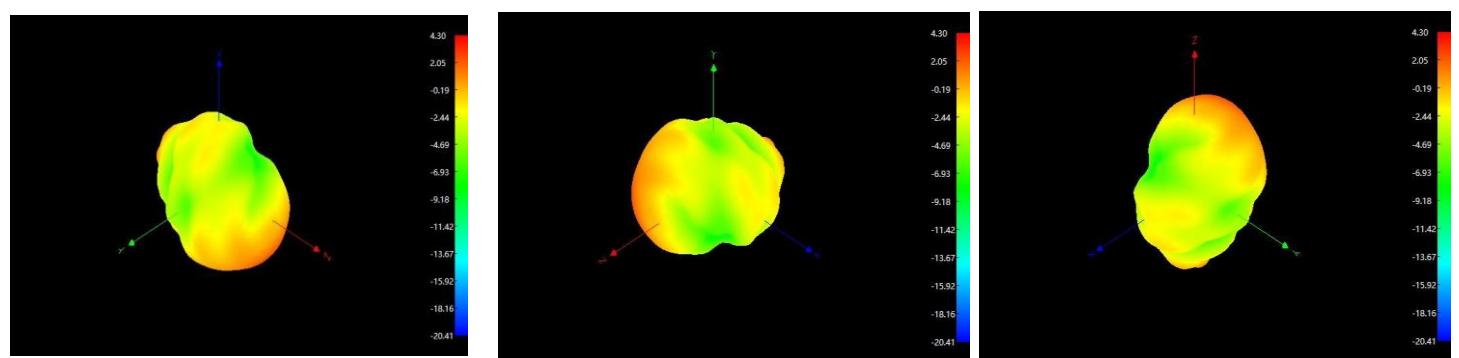
(3D 2400MHz)



(3D 2450MHz)



(3D 2500MHz)





ROHS Material control reports

It is certified that the raw materials used in auxiliary materials, and the additives in the production process meet the RoHS requirements of the use of Hazardous Substances. (RoHS instruction 2011/65/EC)

The following reports are made on the composition of components and auxiliary materials, packaging materials, and additives used in the production process

Component /Part Name	Material Composition	ICP report #	Test Org.	Test Date	Hazardous substance content (ppm)					PASS?
					Cd	Pb	Hg	Cr ⁶⁺	PBDE	
FPC	FPCFlex board	SHAEC2202460504	SGS	22/02/21	ND	ND	ND	ND	ND	PASS
XD(II)	Tin-phosphor bronze	CANEC2201952008	SGS	22/02/18	ND	5	ND	ND	ND	PASS
	Gold plating	A2200375950101001	CTI	21/10/31	ND	ND	ND	ND	ND	PASS
Wire	RG/RF series Coaxial cable	CANEC2202366903	SGS	22/02/28	ND	10	ND	ND	ND	PASS