

规格承认书
Specification sheet

客 户
Customer name
客户料号
Customer P/N
品 名

Shenzhen Kingbolen Electrics Technology Co.,Ltd.

Article Description
同讯料號
TOXU Part No.
承认书号码
Approval sheet No.
日 期
Date

K10-FPC

KC. IA. 00571

A20240912-001

2024. 09. 12

承认填写栏 Signature confirmation			
供应商确认（供方填写栏） Supplier signature		客户承认（需方填写栏） Customer signature	
李德文			
盖章 seal:		盖章 seal:	
日期 date	2024. 09. 12	日期 date	
备注 Remarks:			

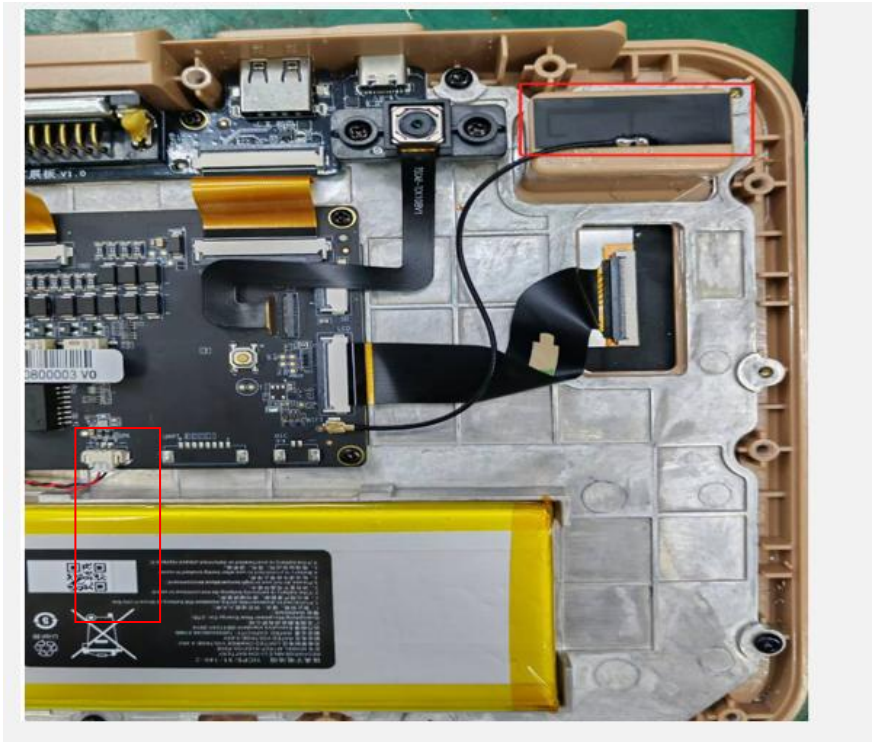
目 录 catalogue

1.封面（Cover Page）	-----page(1 to 1)
2.目录(Content)	-----page(2 to 2)
3. 变更履历(ChangeHistory Sheet)	-----page(3 to 3)
4. 产品相片(Product photos)	-----page(3 to 3)
5. 机械及电气性能(Mechanics and Electrical Specification)	-----page(4 to 4)
6. 性能报告(Performance report)	-----page(5 to 6)
7. 成品图面(Customer Drawing)	-----page(7 to 7)
8.包装规格(Packing Spec)	-----page(8 to 8)

3. 承认书变更履历

版本 (REV)	发起人 (Originator)	日期 (Date)	变更描述(Change Description)
A/1	LI	2024.09.12	First Version

4. 产品相片(Product photos):



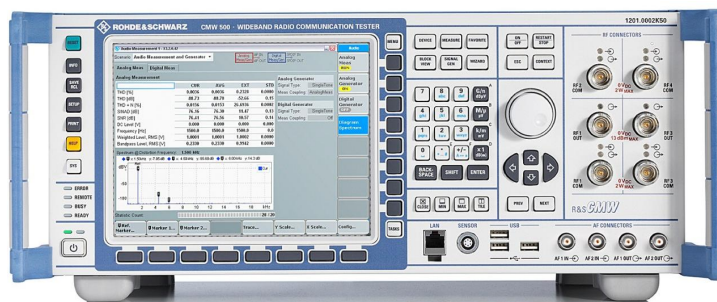
5. 机械及电气性能(Mechanics and Electrical Specification)

产品名称 (Name)	K10	产品型号 (Model Type)	KC. IA. 00571
电 性 能 指 标 (Electrical Specifications)			
频率范围 (Frenquency Range)	2400-2500/5150-5850MHZ	极化方式 (Polarization)	线极化linear
输入阻抗 (Impedance)	50 Ω	辐射方向 (Radiation direction)	全向 omnidirectional
驻波比 (VSWR)	≤2.0	功率容量 (Power)	10W
增益 (Gain)	3.32 dBi (MAX)	带宽 (Bandwidth)	100/700MHZ
机 械 指 标 (Mechanical Specifications)			
尺寸 (Dimensions)	32.4*11.5*0.25	颜色 (colour)	黑色black
连接器型号 (Connector)	IPEX-I	引线长度 (Cable Length)	110MM
材料 Radome Material	FPC	盐雾 (Salt spray test)	48H
工作温度 (Working Temperature)	-40℃--+85℃	存放温度 (Limit Temperature)	-40℃--+85℃
天线类型 (Antenna type)	IFA		

6 性能报告(Performance report)

6.1 测试项目及设备 Test Items and Equipment

	测试项目 Test Items	测试设备 Test Equipment
S Parameter	1. Return loss 2. VSWR	Network analyzar (Aglient E5071C)
The whole machine of Passive parameters	1. Frequency 2. Gain 3. Radiation Patten	1.3D microwarve darkroom (4M*3M*3M) 2.Network analyzer
The whole machine of Active parameters	1. TRP 2. TIS	1.3D microwave darkroom (4M*3M*3M) 3. Comprehensive test instrument 4. (CMW500)(E7515E)
Instrument calibration	Once a year, Last calibration: 2023.11.22, Valid until:2024.11.22	



地址：深圳市龙华区福城街道茜坑社区茜坑路 52 号

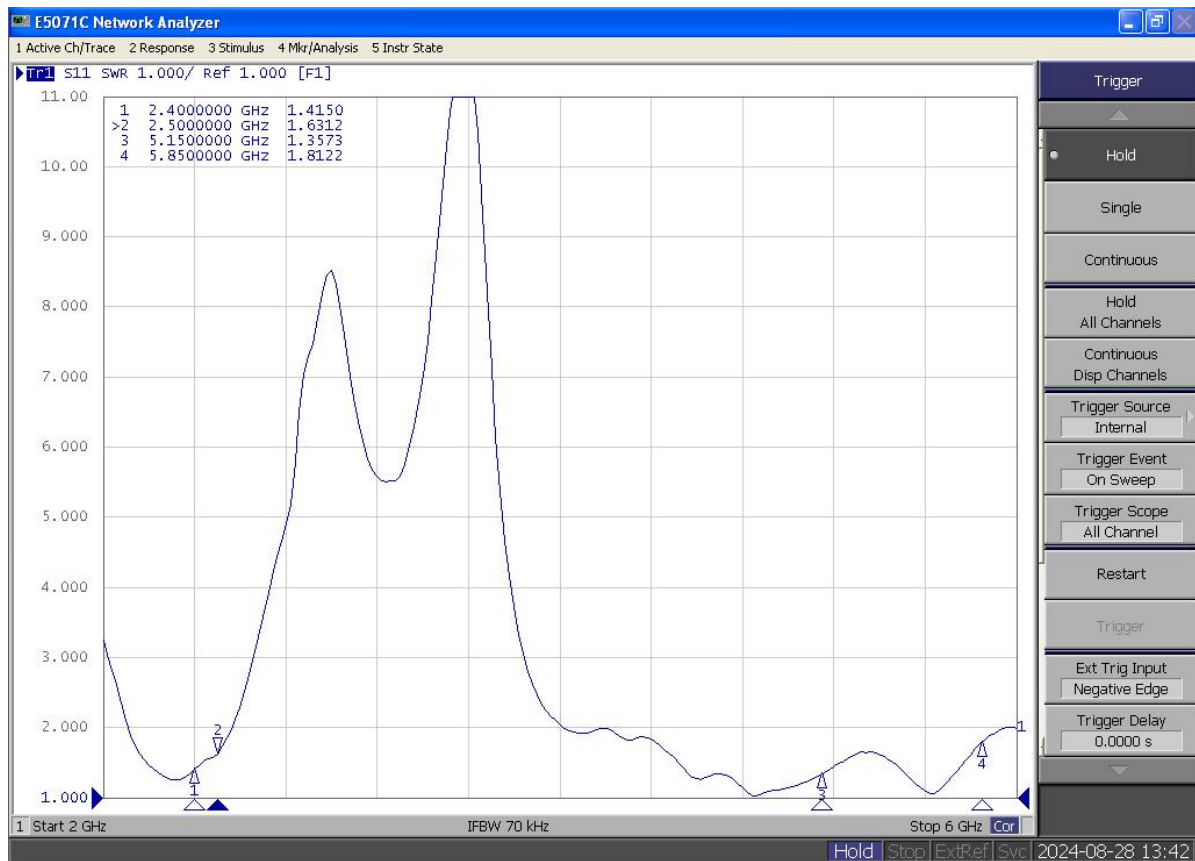
ADDRESS:5th floor, No. 52, Xikeng Road, Xikeng community, Fucheng street, Longhua District, Shenzhen

电话 (TEL) : 0755-28199597

网址 (WEB) : www.toxutech.com

6.2 性能报告(Performance report)

6.2.1 电压驻波比（VSWR）：



地址：深圳市龙华区福城街道茜坑社区茜坑路 52 号

ADDRESS: 5th floor, No. 52, Xikeng Road, Xikeng community, Fucheng street, Longhua District, Shenzhen

电话 (TEL)：0755-28199597

网址 (WEB)： www.toxutech.com

6.2.2 效率@增益@TRP/TIS（Efficiency and Gain and TRP/TIS）：

Frequency/Mhz	MaxGain/dBi	Efficiency / %	Frequency/Mhz	MaxGain/dBi	Efficiency / %
2400	2.57	48.46	5150	2.04	42.85
2410	2.37	49.81	5200	1.92	43.45
2420	2.39	48.37	5250	1.97	43.35
2430	2.83	48.37	5300	1.99	42.95
2440	2.89	47.33	5350	2.22	43.55
2450	2.98	47.67	5400	2.6	47.21
2460	2.62	46.22	5450	2.49	47.21
2470	3.09	47.41	5500	2.71	47.42
2480	2.63	47.07	5550	2.88	47.53
2490	2.77	47.41	5600	2.78	44.46
2500	2.19	47.67	5650	2.86	45.29
			5700	3.16	47.1
			5750	3.29	48.42
			5800	3.14	46.56
			5850	3.32	45.6

Band	Channel	Frequency	Max	Min	Total	参考标准
WIFI_B (11M)	1	2412	20.91	-4.84	13.94	≥14
WIFI_B (11M)	11	2462	22.32	0.51	14.55	
WIFI_B (11M)	11	2462	-69.06	-91.88	-83.85	≤-81
WIFI_G (54M)	1	2412	18.82	-7.01	11.68	≥12
WIFI_G (54M)	11	2462	19.79	-0.44	12.17	
WIFI_G (54M)	11	2462	-58.59	-79.61	-71.91	≤-71
WIFI_N_ISM (65M)	1	2412	19.24	-6.34	12.1	≥11
WIFI_N_ISM (65M)	11	2462	20.56	-0.78	12.62	
WIFI_N_ISM (65M)	11	2462	-53.86	-75.01	-68.25	≤-67
WIFI_A (54M)	36	5180	18.28	-7.24	10.91	≥10
WIFI_A (54M)	165	5825	18.01	-2.93	11.28	
WIFI_A (54M)	165	5825	-58.84	-80.39	-73.66	≤-65

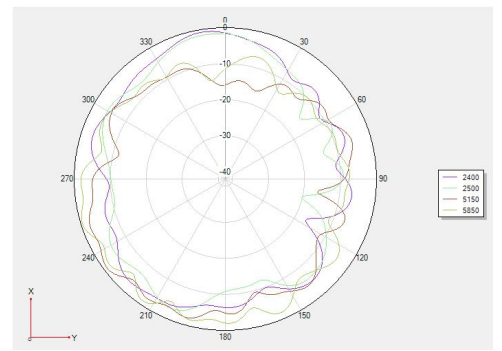
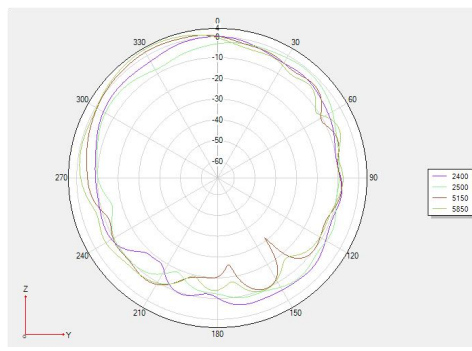
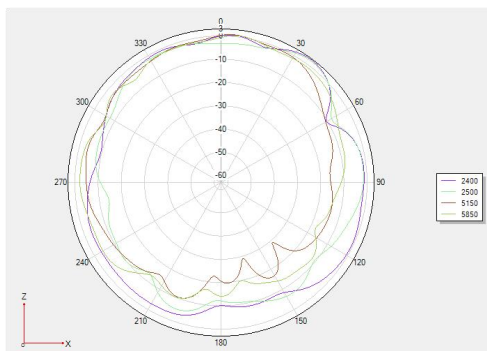
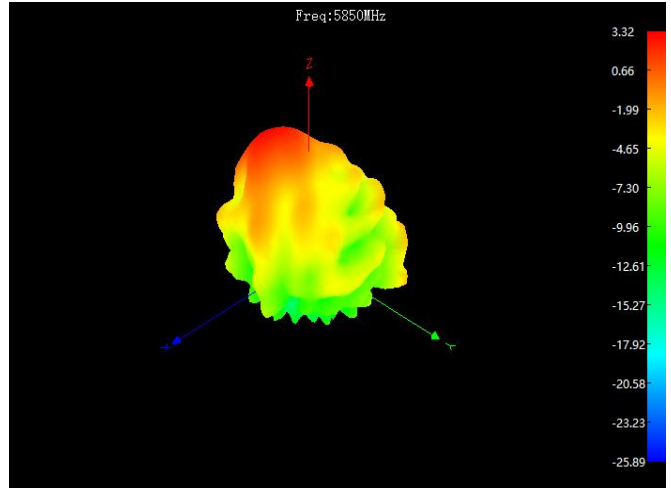
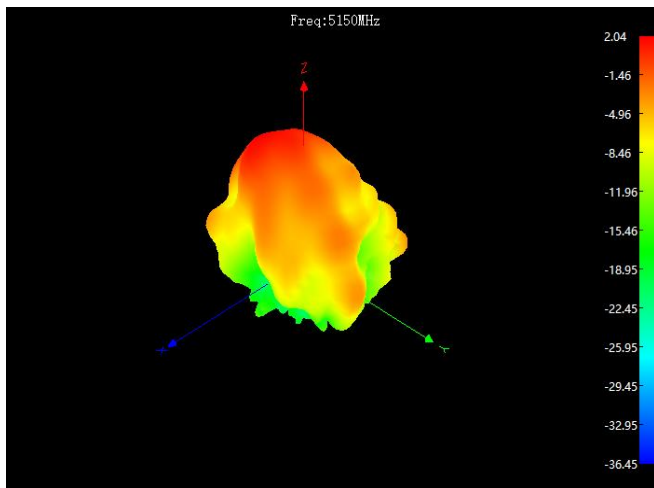
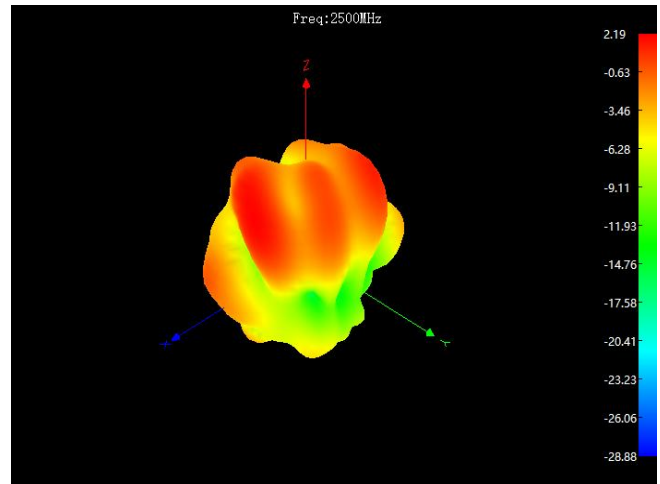
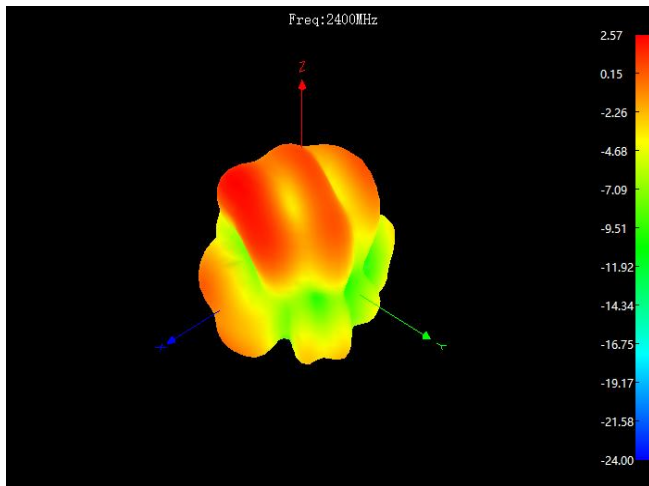
地址：深圳市龙华区福城街道茜坑社区茜坑路 52 号

ADDRESS:5th floor, No. 52, Xikeng Road, Xikeng community, Fucheng street, Longhua District, Shenzhen

电话（TEL）：0755-28199597

网址（WEB）：www.toxutech.com

6.2.3 3D@2D 辐射方向 (3D & 2D Radiation Pattern) :



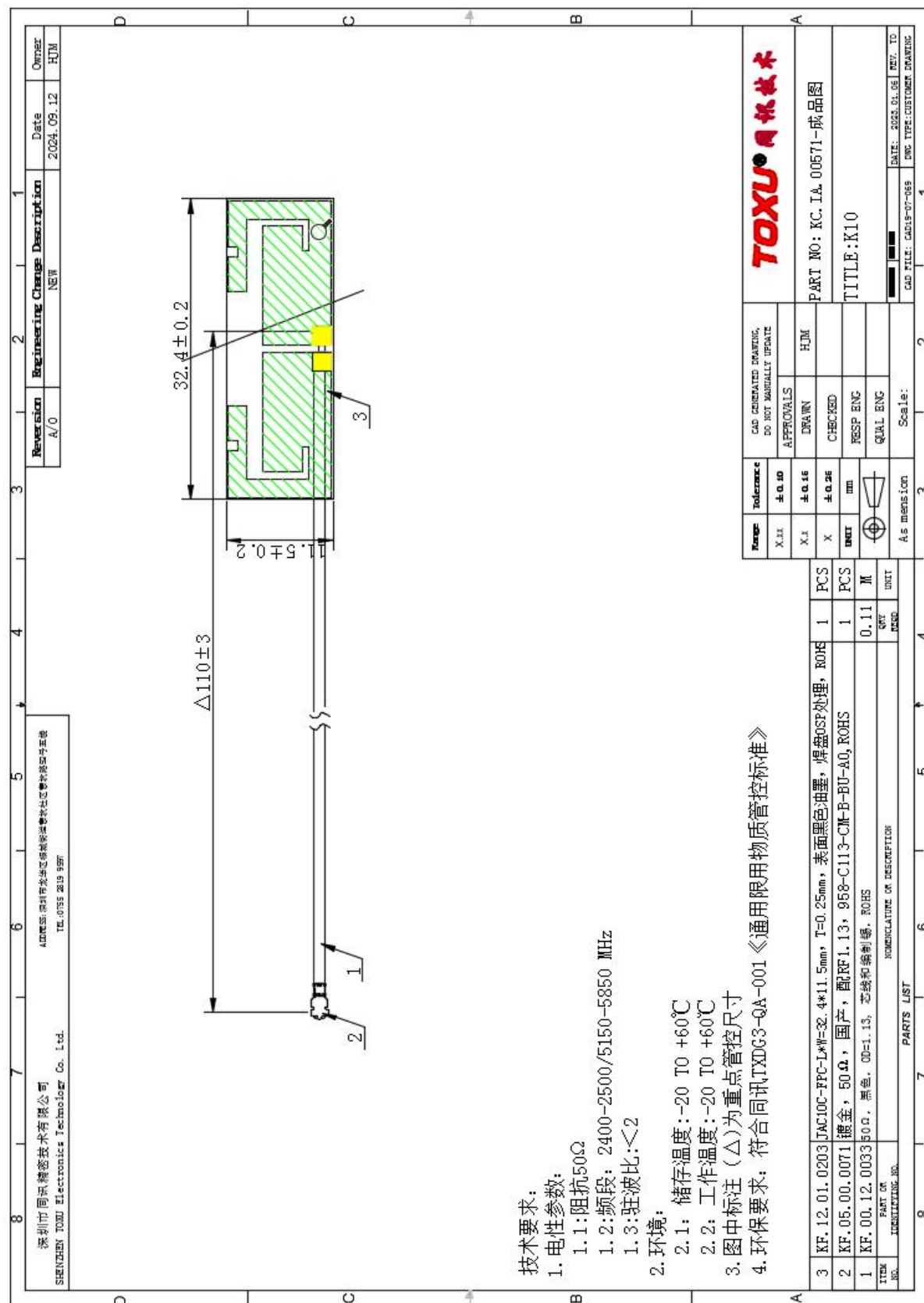
地址：深圳市龙华区福城街道茜坑社区茜坑路 52 号

ADDRESS:5th floor, No. 52, Xikeng Road, Xikeng community, Fucheng street, Longhua District, Shenzhen

电话 (TEL) : 0755-28199597

网址 (WEB) : www.toxutech.com

7.成品图 (Customer Drawing)

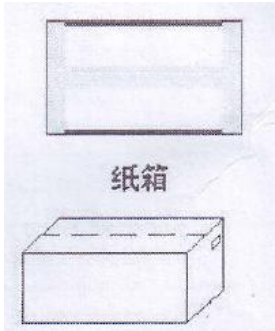


地址：深圳市龙华区福城街道茜坑社区茜坑路 52 号

ADDRESS: 5th floor, No. 52, Xikeng Road, Xikeng community, Fucheng street, Longhua District, Shenzhen
电话 (TEL) : 0755-28199597 网址 (WEB) : www.toxutech.com

8. 包装方式 (Packaging) :

Product number: XXXXX			
Product model: XXXXX			
一、Label requirements:			
Customer	xxx		
supplier	XXXXXX		
Material coding	xx		
Product model	xx		
Number	XXX PCS	Factory date	X X X
Remarks			
二、Boxing:			
Job description:			
1. Inner packaging:			
XXpcs A bag			
2. External packaging:			
Xx PCS ;			
3. Matters needing attention:			
a. Whether to add partition and pearl cotton;			
b. Label attachments, such as ROHS, etc.;			



地址：深圳市龙华区福城街道茜坑社区茜坑路 52 号

ADDRESS:5th floor, No. 52, Xikeng Road, Xikeng community, Fucheng street, Longhua District, Shenzhen

电话 (TEL) : 0755-28199597

网址 (WEB) : www.toxutech.com