



SPECIFICATION

APPLICATION FOR APPROVAL

客户名称 CUSTOMER : 上海英众信息科技有限公司
客户案号 CS P/N : XB22-Aux
零件名称 PART NAME : AUK02130B-Main
耀登案号 DEVE NO. : B52462-00

承认日期 DATE : Jul. 8, 2021

客户确认:			
射频工程师	结构工程师	研发经理	产品经理
耀登电通科技(昆山)有限公司			
电气工程师	结构工程师	研发经理	项目经理
陈金马	张海洋	钱磊	王显文

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(southern district)

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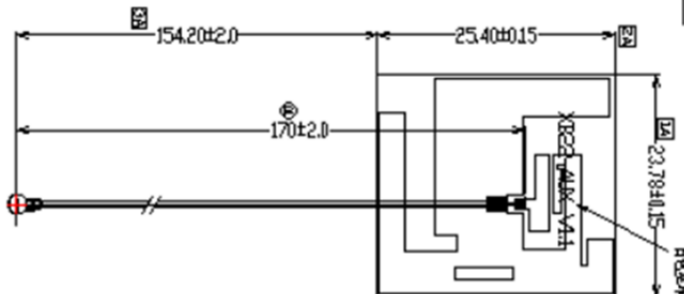
INDEX

- 一、规格书封面 (Cover)
- 二、规格书目录 (Index)
- 三、天线基本参数 (The Basic Parameters)
- 四、电气测试报告 (RF Performance Test Report)
- 五、工程图纸 (Product Drawing)
- 六、尺寸报告 (Dimensional check reports)
- 七、可靠性测试报告 (Reliability test report)

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天线基本参数 (The Basic Parameters)

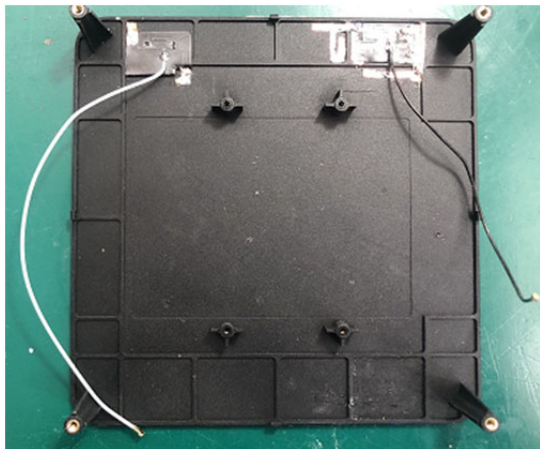
项目 (Item)	特性 (Specifications)
天线结构组成	FPC+CABLE
频率 (Frequency)	2.4g~5.8g
驻波比 (V. S. W. R)	≤ 3
增益 (Gain)	≤ 7
极化方式 (Polarization)	linear polarization
特性阻抗 (Impedance)	50 Ω
塑胶材质 (Plastic material)	not
接头形式 (joint type)	4 Generation terminal+Cable
工作温度 (Operation temperature)	-40°C to 85°C
储存温度 (Storage temperature)	-40°C to 85°C
湿度 (humidity)	Non-condensing 65°C 95% RH
Antenna Picture	

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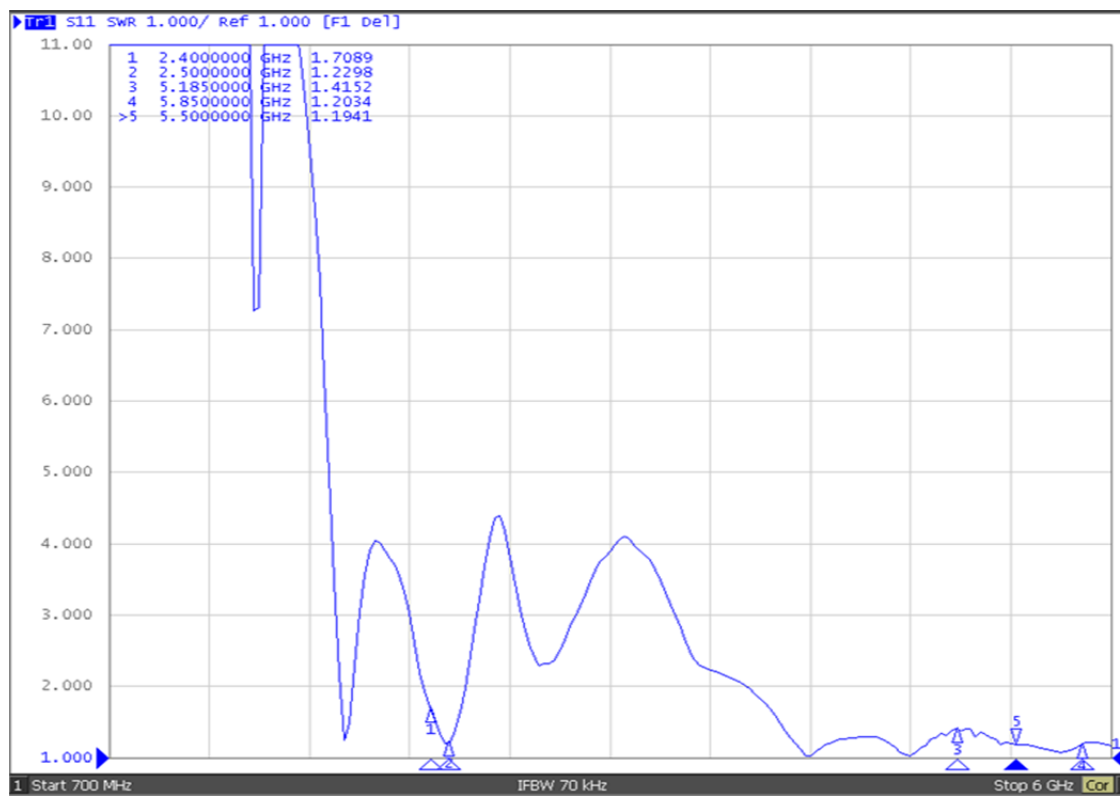
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电气测试报告 (RF Performance Test Report)

组装位置



V.S.W.R



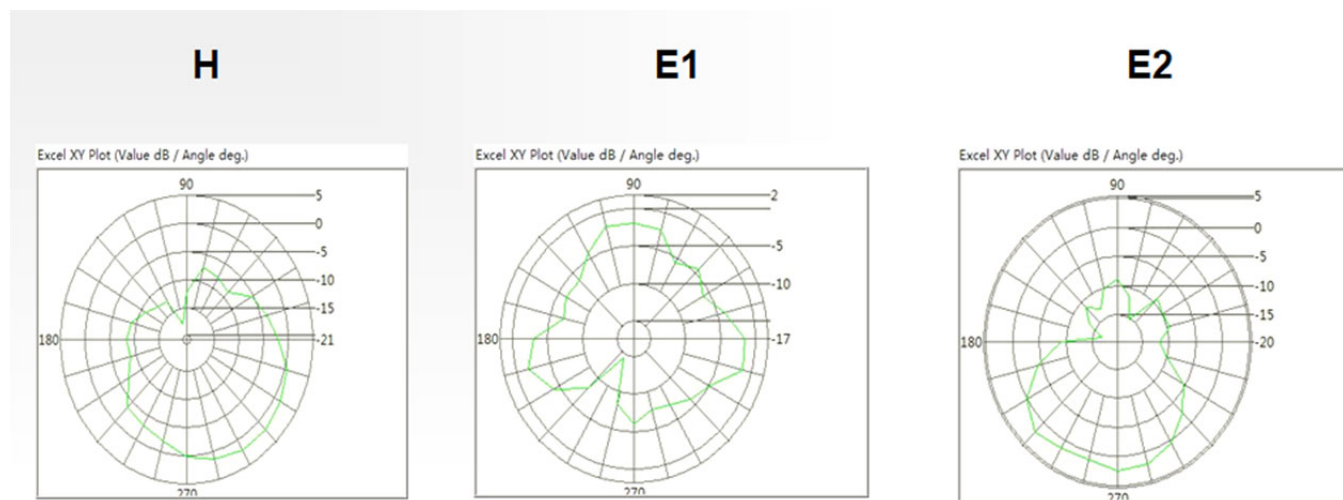
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Aux-Passive test data

Frequency	Efficiency(%)	Gain(dBi)	Frequency	Efficiency(%)	Gain(dBi)
2.4G	54.33	2.23	5.15G	79.98	6.41
2.41G	53.46	2.21	5.2G	76.91	6.15
2.42G	53.58	2.34	5.25G	73.11	5.83
2.43G	51.05	2.14	5.3G	77.27	6.24
2.44G	51.17	2.12	5.35G	69.5	5.89
2.45G	54.58	2.34	5.4G	72.11	6.19
2.46G	54.95	2.14	5.45G	68.39	5.95
2.47G	54.58	2.19	5.5G	67.14	5.96
2.48G	57.15	2.41	5.55G	53.95	5.15
2.49G	55.34	2.33	5.6G	54.45	5.23
2.5G	52.24	2.13	5.65G	53.21	5.28
			5.7G	63.24	5.8
			5.75G	60.53	5.26
			5.8G	62.37	5.36
			5.85G	64.27	5.25

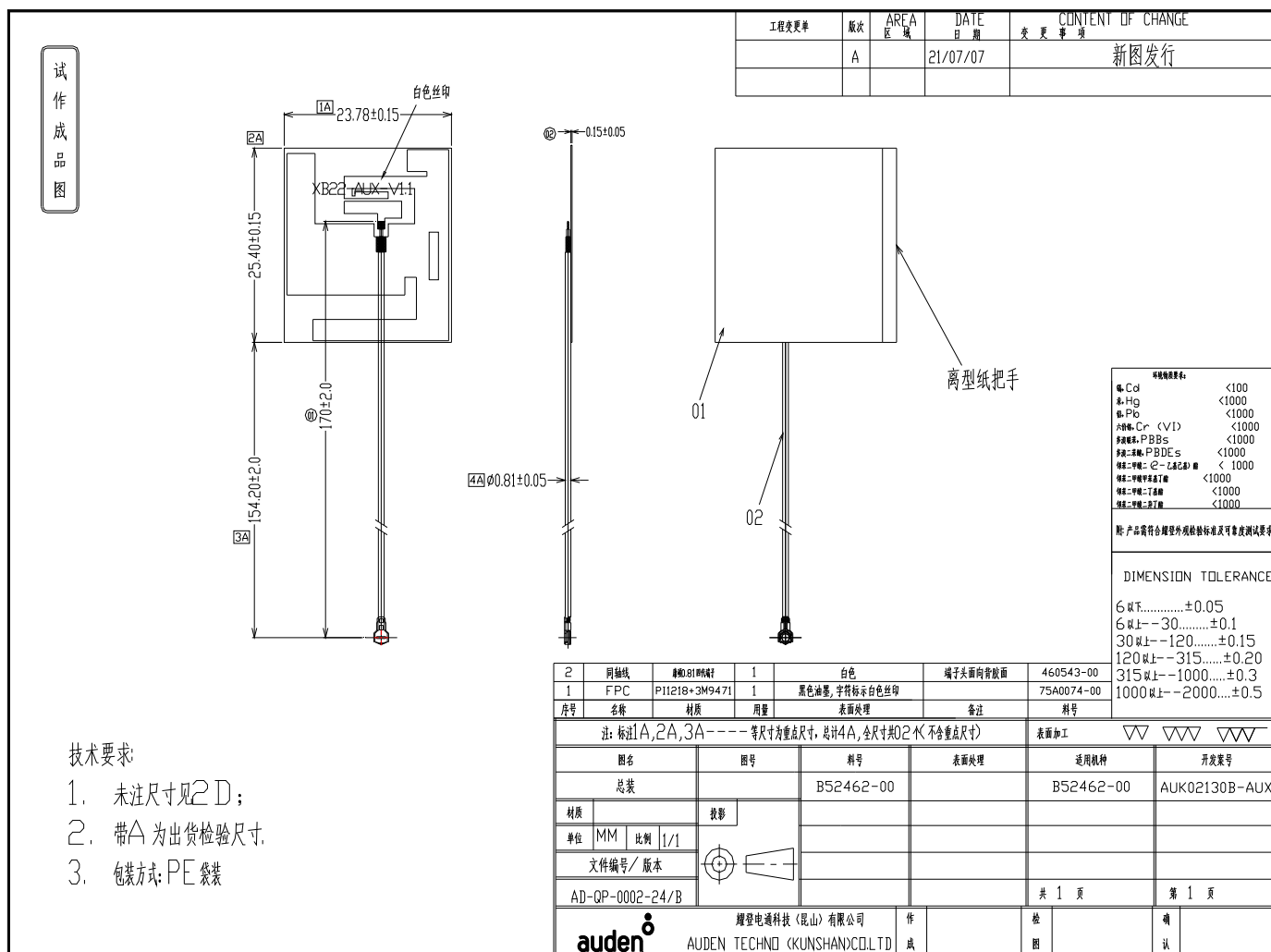
AUX 2D



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工程图纸 (Product Drawing)



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尺寸报告 (Dimensional check reports)

全尺寸测量报告																																																									
Vendor(供应商)		材质名称		天线		Part NO(料号)		B52462-00										Tool Number(模号)		Cav. Number(穴数)		Unit(单位)				Comments(设计者签字)																															
耀登						Part Name (零件名称)		总装														INCHES ■ MILLIMETERS																																			
日期		2021/7/7		MEASURED DIMENSION(实测尺寸)										% TOLERANCE USED(公差使用百分比)		DISPOSITION						ACCEPTABLE VARIANCE																																			
																0%-25%																25%-50%						50%-75%						75%-100%						100%+ Re-Measure							
DIM. #		DIMENSION		DRAWING ZONE		+ TOL.		- TOL.		NOTE		SAMPLE 1		SAMPLE 2		SAMPLE 3		SAMPLE 4		SAMPLE 5		SAMPLE 6		SAMPLE 7		SAMPLE 8		SAMPLE 9		SAMPLE 10		UPPER		LOWER		0%-25%		25%-50%		50%-75%		75%-100%		100%+ Re-Measure		Accept Fix Tool		Accept With Variance		DIMENSION		+ TOL.		- TOL.			
1		23.78		1A		0.15		0.15				23.78		23.79		23.77		23.78		23.79		23.79		23.77		23.78		23.79		23.78		7%		7%		X																					
2		25.40		2A		0.15		0.15				25.40		25.41		25.39		25.40		25.41		25.41		25.39		25.40		25.41		25.40		7%		7%		X																					
3		154.20		3A		2.00		2.00				154.20		154.30		154.40		154.20		154.30		154.30		154.40		154.20		154.30		154.20		10%		0%		X																					
4		0.81		4A		0.05		0.05				0.81		0.81		0.80		0.80		0.81		0.81		0.80		0.80		0.81		0.80		0%		20%		X																					
5		170.00		1		2.00		2.00				170.10		170.00		170.20		170.30		170.10		170.00		170.20		170.30		170.10		170.30		15%		0%		X																					
6		0.15		2		0.05		0.05				0.15		0.16		0.14		0.15		0.15		0.16		0.14		0.15		0.15		0.15		20%		20%		X																					
核准: 李金 审核: 麦建国 制表: 孙赞赞																																																									

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可靠性测试报告(Reliability test report)

NO.	ITEM	TEST CONDITION	SPECIFICATION
1	Low Temperature Test	1.Temperature: $-40\pm 2^{\circ}\text{C}$ 2.Time: 48hrs	No material deformation is allowed.
2	High Temperature Test	1.Temperature: $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 2.Time: 48hrs	
3	High Temperature/Humidity Storage Test(non operating)	1.Temperature: $+60 \pm 2^{\circ}\text{C}$ 2.Humidity: $93\%\pm 2\%\text{RH}$ 3.Time: 48hrs	
4	Salt-Spray Test	35°C , 85%RH, 48Hours(According to MIL-STD-810E) The salt-spray is generated from a 5% salt(NaCl) solution.,	NO appear rusting phenomenon is allowed

耀登电通科技(昆山)有限公司

可靠性测试汇总报告

客户		客户机种		耀登机种	AUK02130B-AUX					
可靠性测试项目及要求						测试结果				
序号	测试项目	测试时间	测试仪器	测试条件	判定标准	1	2	3	4	5
1	盐雾试验	2021/6/30	盐雾测试机	将产品放于盐雾试验机中, 在 $35^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 的密闭环境中, PH值在6.5-7.2范围内, 用5%±1%的NaCl溶液连续48h盐水喷雾后, 将样品用清水冲洗干净后检查天线外观;	表面无锈蚀、镀层剥落、起泡等不良现象, RF测试通过为合格。	OK	OK	OK	OK	OK
2	低温试验	2021/6/30	恒温恒湿机	将产品放置在温度为 $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 的低温环境存储48h, 试验完成后在常温环境下放置2小时后检查产品外观。	部件无裂痕、明显的变形、脱落, RF测试通过为合格。	OK	OK	OK	OK	OK
3	高温试验	2021/7/2	恒温恒湿机	将产品放置在温度为 $85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 的高温环境存储48h, 试验完成后在常温环境下放置2 h后检查产品外观。	部件无裂痕、明显的变形、脱落, RF测试通过为合格。	OK	OK	OK	OK	OK
4	高温高湿试验	2021/7/4	恒温恒湿机	将产品放置在温度为 $60^{\circ}\text{C} \pm 2^{\circ}\text{C}$; 湿度: $93\% \pm 2\%\text{RH}$ 环境存储48h, 试验完成后在常温环境下放置2小时后检查产品外观。	部件无裂痕、明显的变形、脱落, RF测试通过为合格。	OK	OK	OK	OK	OK
试验结果判定				可靠性试验合格						
核准: 李金				审核: 麦建国				测试员: 孙赞赞		

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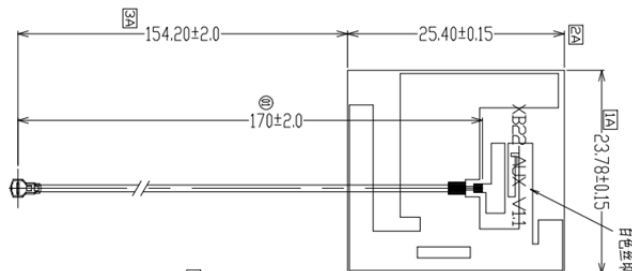
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天线基本参数 (The Basic Parameters)

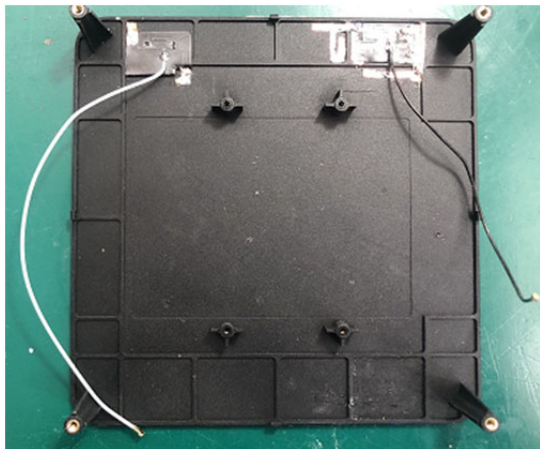
项目 (Item)	特性 (Specifications)
天线结构组成	FPC+CABLE
频率 (Frequency)	2.4g~5.8g
驻波比 (V. S. W. R)	≤ 3
增益 (Gain)	≤ 5
极化方式 (Polarization)	linear polarization
特性阻抗 (Impedance)	50Ω
塑胶材质 (Plastic material)	not
接头形式 (joint type)	4 generation terminal+Cable
工作温度 (Operation temperature)	-40°C to 85°C
储存温度 (Storage temperature)	-40°C to 85°C
湿度 (humidity)	Non-condensing 65°C 95% RH
Antenna Picture	 <p>Technical drawing of the antenna assembly showing dimensions and components. The drawing includes a cable with a connector, a printed circuit board (PCB) with a microstrip antenna, and a label 'XB22 (AUX) V1.1'. Dimensions are provided in millimeters: 154.20±2.0, 25.40±0.15, 170±2.0, and 23.78±0.15. A note '白色丝印' (White silk print) is present.</p>

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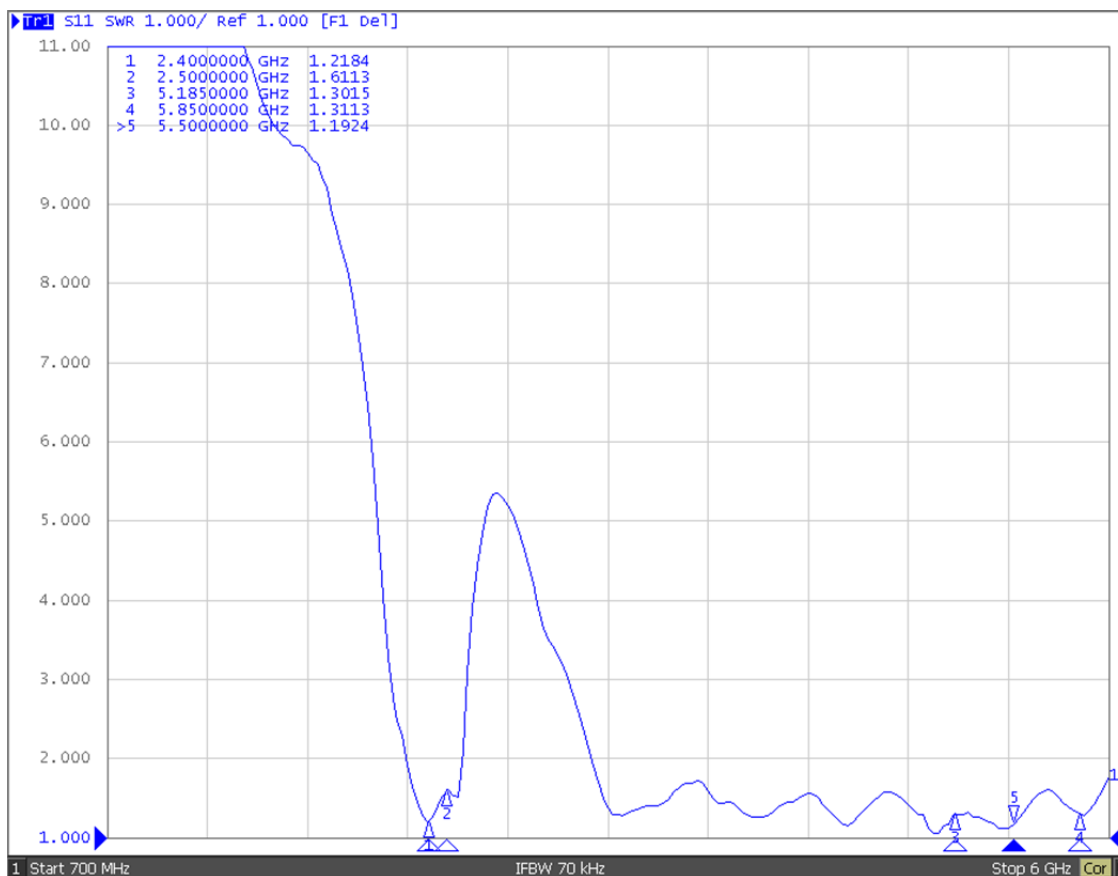
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电气测试报告 (RF Performance Test Report)

组装位置



V.S.W.R



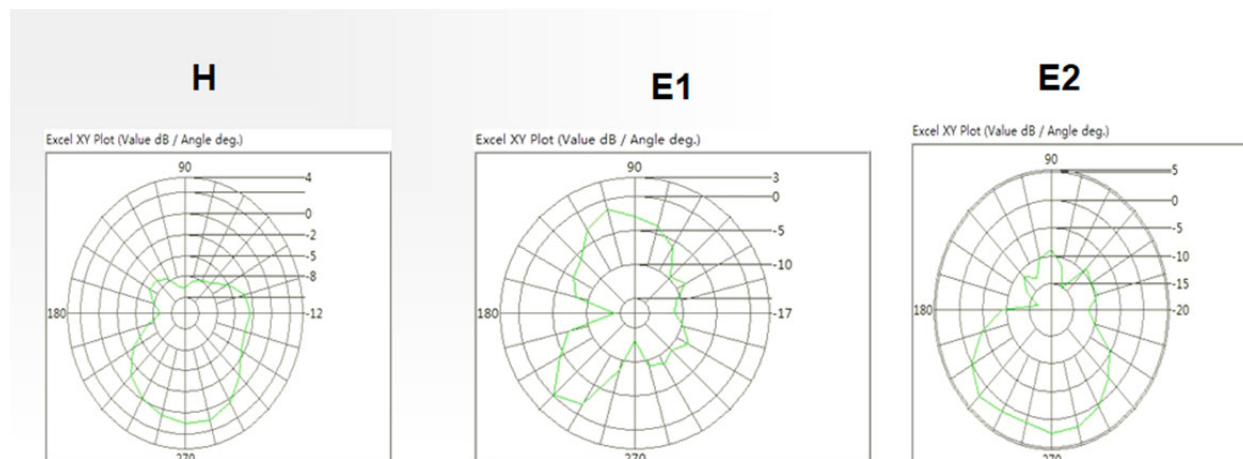
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Main-Passive test data

Frequency	Efficiency(%)	Gain(dBi)	Frequency	Efficiency(%)	Gain(dBi)
2.4G	49.09	2.25	5.15G	69.18	4.32
2.41G	47.42	2.35	5.2G	68.39	4.35
2.42G	48.53	2.58	5.25G	65.77	4.23
2.43G	48.08	2.76	5.3G	73.45	4.71
2.44G	44.98	2.55	5.35G	69.18	4.34
2.45G	50.23	3.22	5.4G	73.96	4.49
2.46G	50.12	3.37	5.45G	69.5	3.87
2.47G	50.93	3.62	5.5G	66.68	3.42
2.48G	52.97	3.86	5.55G	52.6	2
2.49G	50.93	3.77	5.6G	48.31	1.5
2.5G	49.09	3.67	5.65G	50.58	1.71
			5.7G	65.61	3.02
			5.75G	60.67	2.91
			5.8G	74.13	3.8
			5.85G	77.62	4.1

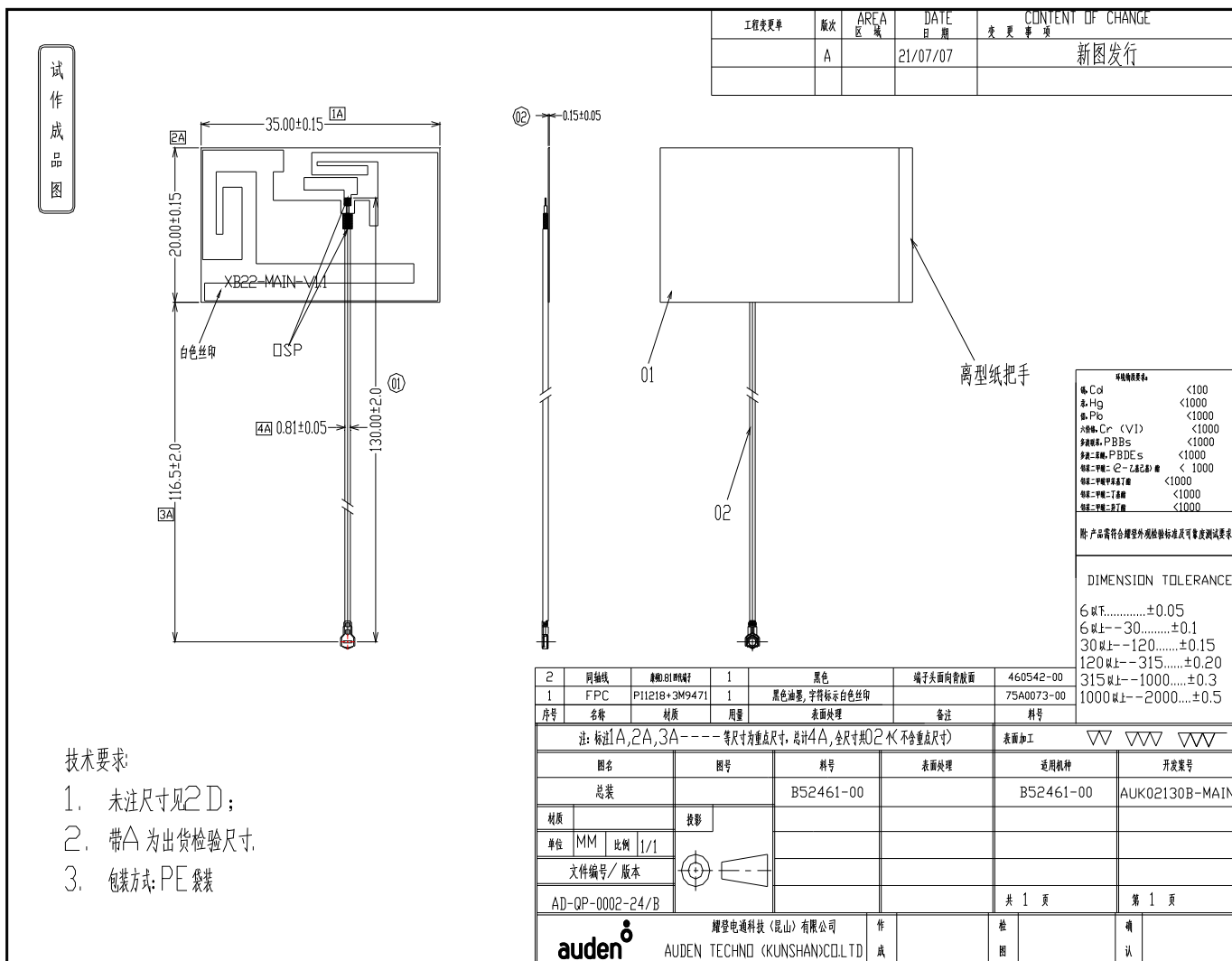
Main 2D



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工程图纸 (Product Drawing)



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尺寸报告 (Dimensional check reports)

全尺寸测量报告																													
Vendor(供应商)		材质名称		天线		Part NO(料号)		B52461-00								Tool Number(模号)		Cav. Number(穴数)		Unit(单位)				Comments(设计者签字)					
耀登						Part Name (零件名称)		总装												INCHES ■MILLIMETERS									
日期		2021/7/7		AUK02130B-MAIN												Rev(版本)		V1.0											
MEASURED DIMENSION(实测尺寸)															% TOLERANCE USED(公差使用百分比)		DISPOSITION								ACCEPTABLE VARIANCE				
DIM. #	DIMENSION	DRAWING ZONE	+ TOL.	- TOL.	NOTE	SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	SAMPLE 6	SAMPLE 7	SAMPLE 8	SAMPLE 9	SAMPLE 10	UPPER	LOWER	0% - 25 %	25% - 50 %	50% - 75 %	75% - 100 %	100% +	Re-Measure	Accept	Fix Tool	Accept With Variance	DIMENSION	+ TOL.	- TOL.
1	35.00	1A	0.15	0.15		35.00	35.01	35.00	35.02	35.00	35.01	35.00	35.02	35.00	35.02	13%	0%	X											
2	20.00	2A	0.15	0.15		20.00	20.01	20.02	20.01	20.00	20.01	20.02	20.01	20.00	20.01	13%	0%	X											
3	116.50	3A	2.00	2.00		116.50	116.70	116.80	116.90	116.60	116.70	116.80	116.90	116.60	116.90	20%	0%	X											
4	0.81	4A	0.05	0.05		0.81	0.80	0.81	0.81	0.80	0.80	0.81	0.81	0.80	0.81	0%	20%	X											
5	130.00	1	2.00	2.00		130.00	130.10	130.20	130.30	130.10	130.10	130.20	130.30	130.10	130.30	15%	0%	X											
6	0.15	2	0.05	0.05		0.15	0.16	0.15	0.14	0.15	0.16	0.15	0.14	0.15	0.14	20%	20%	X											
核准: 李金 审核: 麦建国 制表: 孙贊贊																													

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可靠性测试报告(Reliability test report)

NO.	ITEM	TEST CONDITION	SPECIFICATION
1	Low Temperature Test	1.Temperature: $-40\pm 2^{\circ}\text{C}$ 2.Time: 48hrs	No material deformation is allowed.
2	High Temperature Test	1.Temperature: $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 2.Time: 48hrs	
3	High Temperature/Humidity Storage Test(non operating)	1.Temperature: $+60 \pm 2^{\circ}\text{C}$ 2.Humidity: $93\% \pm 2\%\text{RH}$ 3.Time: 48hrs	
4	Salt-Spray Test	35°C , 85%RH, 48Hours(According to MIL-STD-810E) The salt-spray is generated from a 5% salt(NaCl) solution.,	NO appear rusting phenomenon is allowed

耀登电通科技（昆山）有限公司

可靠性测试汇总报告

客户		客户机种		耀登机种	AUK02130B-MAIN						备注
可靠性测试项目及要求						测试结果					
序号	测试项目	测试时间	测试仪器	测试条件	判定标准	1	2	3	4	5	
1	盐雾试验	2021/6/30	盐雾测试机	将产品放于盐雾试验机中，在35℃±2℃的密闭环境中，PH值在6.5-7.2范围内，用5%±1%的NaCl溶液连续48h盐水喷雾后，将样品用清水冲洗干净后检查天线外观；	表面无锈蚀、镀层剥落、起泡等不良现象，RF测试通过为合格。	OK	OK	OK	OK	OK	 盐雾试验.doc
2	低温试验	2021/6/30	恒温恒湿机	将产品放置在温度为-40℃±2℃的低温环境存储48h，试验完成后在常温环境下放置2小时后检查产品外观。	部件无裂痕、明显的变形、脱落，RF测试通过为合格。	OK	OK	OK	OK	OK	 低温试验.doc
3	高温试验	2021/7/2	恒温恒湿机	将产品放置在温度为85℃±2℃的高温环境存储48h，试验完成后在常温环境下放置2 h后检查产品外观。	部件无裂痕、明显的变形、脱落，RF测试通过为合格。	OK	OK	OK	OK	OK	 高温试验.doc
4	高温高湿试验	2021/7/4	恒温恒湿机	将产品放置在温度为60℃±2℃；湿度：93%±2%RH环境存储48h，试验完成后在常温环境下放置2小时后检查产品外观。	部件无裂痕、明显的变形、脱落，RF测试通过为合格。	OK	OK	OK	OK	OK	 高温高湿试验.doc
试验结果判定				可靠性试验合格							
核准：李金											

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