

APPROVAL SHEET

样品承認書

Zylux Part Number : 1029-0A00214

Part Description : ANT-RF,BLACK,BT 2.4G BT天线 L=247MM

Manufacturer Part No. : IA.0458.LA.2FI

Firmware version : NA

Approved date : 2023.12.28

Approval Condition

Conditional Approval 限量承認		Formal Approval 正式承認	✓
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料件之所有組成物質，必須遵守有害物質要求(如符合請勾選V)

All components of the material must comply with the hazardous material requirements (comply please tick V)

HALOGEN FREE(無鹵)		RoHS2.0	✓	REACH	✓	PRO65		CARB2	
詳細的有害物質管控制限制 Detailed Harzardous substances Restriction									
Zylux QMI-P40-01	✓	Samsung 0QA-2049		Sony SS-00259					

抗靜電電壓
Antistatic Voltage

器件耐熱等級
Device Heat Resistance Level

-40~80度

SUPPLIER(供應商)		
REPORTED 製作	CHECKED 核對	APPROVED 批准
陸進添	彭欽領	理霞

ZYLUX(朝陽)		
REPORTED 製作	QC CHECKED 核對	APPROVED 批准
ZYLUX RD/EE 卿帥	ZYLUX QC CHECK 葉顯才	ZYLUX RD/EE Sh Hwang

Supplier Contact point

Company Address : (地址)	深圳市福田区泰然六路苍松大厦北座601-602
TEL : (電話)	0755- 33353180

IA.0458.LA.2FI

Antenna Specification

1. Application:

This application shall apply for antenna unit which shall be used such as automotive, conventional communications, smart home, etc..

1. Electrical Specification:

Those specifications were specially defined for customer's model, and all characteristics were measured under the model's handset testing jig .

2-1. Frequency Band:

Frequency Band	MHz
BT 2.4G	2400-2500

2-2. Impedance

50 ohm nominal


2-3. VSWR

2-3-1.Measurement frequency points and VSWR value

Frequency Band(MHz)	2400	2500
2-3-3. Typical Value:	1.47	1.41

2-3-2. VSWR

Frequency Band(MHz)	2400	2500
2-3-3. Typical Value:	≤2	≤2

UNLESS OTHER SPECIFIED TOLERANCES ON: X=± X.X=± X.XX=± ANGLES=± HOLEDIA=±			KINGRF TECHNOLOGY CO., LTD.
SCALE:	UNIT: mm		
DRAWN BY: LU	CHECKED BY: YS	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
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TITLE: IA.0458.LA.2FI Antenna Specification			SPEC REV. P0

2-3-4 Measuring Method	<ol style="list-style-type: none"> 1. A 50 Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR. 2. Keeping this jig away from metal at least 20 cm
2-3-5 Picture	

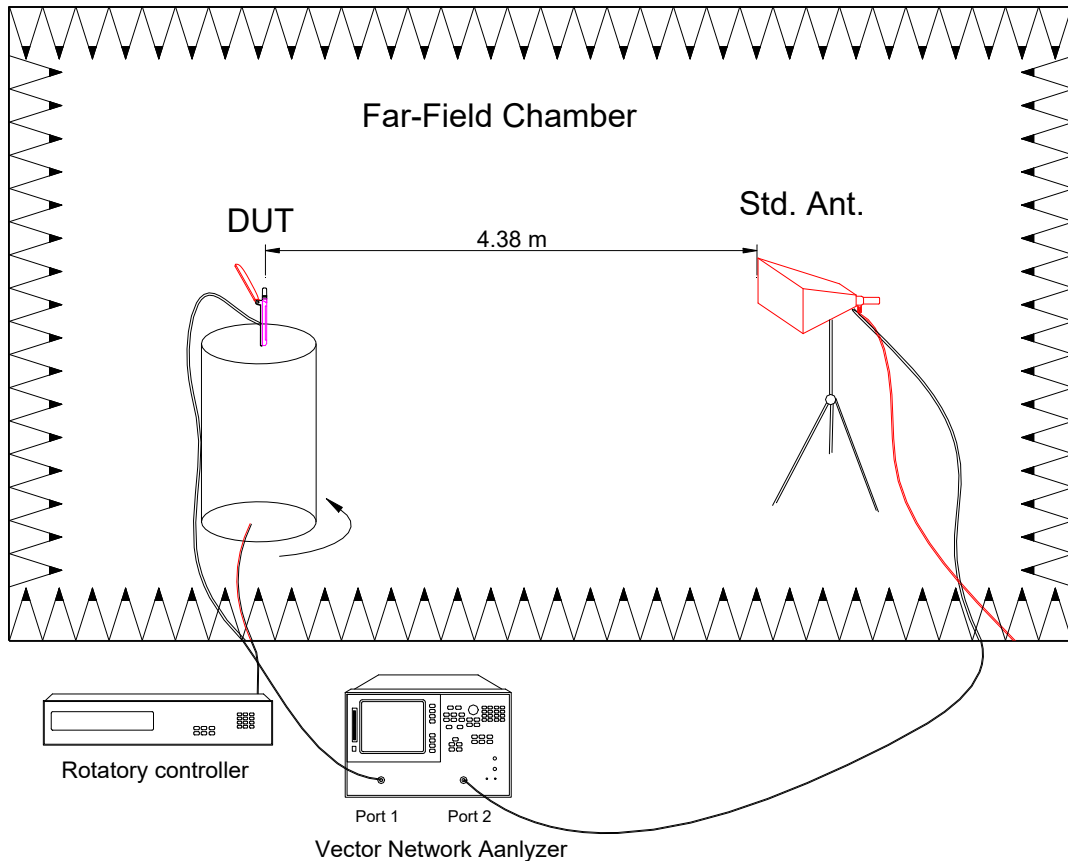
UNLESS OTHER SPECIFIED TOLERANCES ON: X=± X.X=± X.XX=± ANGLES=± HOLEDIA=±			KINGRF TECHNOLOGY CO., LTD.
SCALE:	UNIT: mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
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2-4. Efficiency and Gain

4-5.1 Measure method

1. Using a low loss coaxial cable to link a standard handset jig
2. Fixed this handset jig on chamber's rotator plane
3. Linking jig into network analyzer port and using a probing horn antenna to collect data.
4. Using another standard gain horn antenna to calibrated those data

4-5.2 Chamber definition

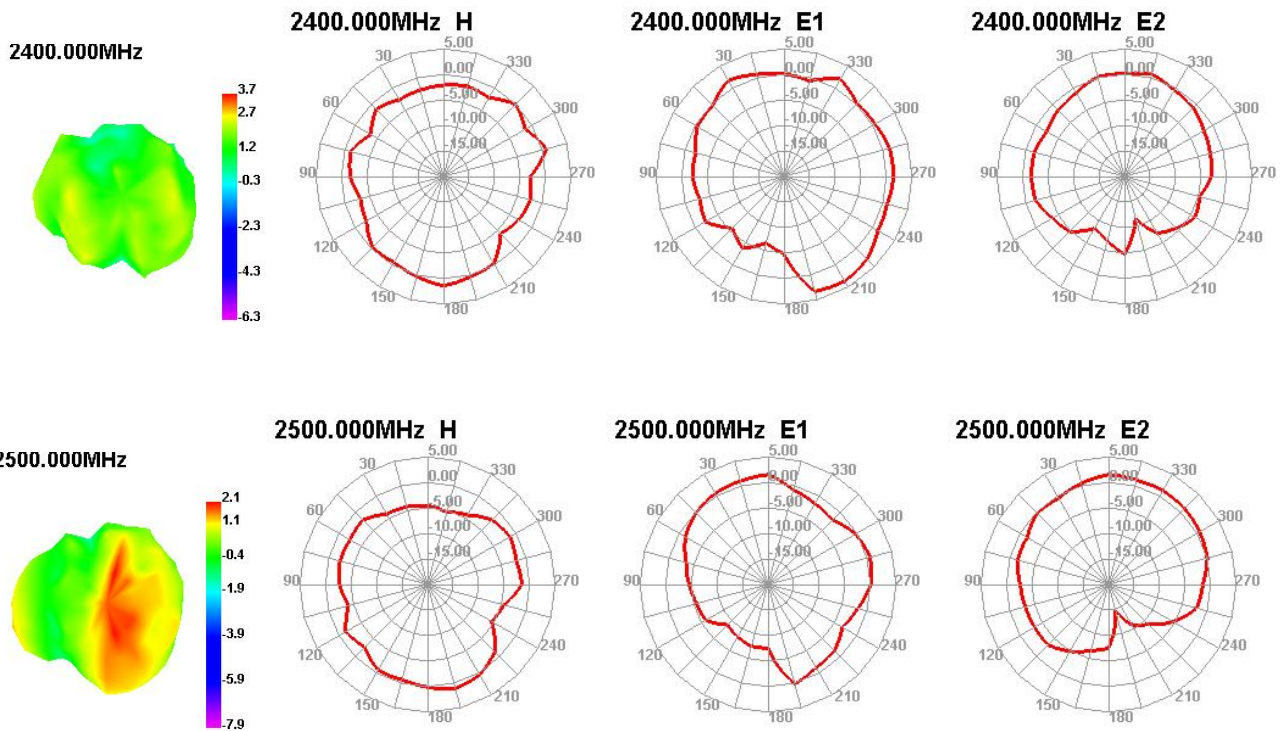


1. An anechoic chamber (7mx4mx3m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quite room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn antenna (BBHA9120 LPF 700MHz ~6GHz)

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2-4-1 Efficiency and Gain

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	80.69	-0.93	3.68
2410	72.05	-1.47	3.26
2420	84.99	-0.51	4.04
2430	74.9	-1.26	3.44
2440	81.64	-0.88	3.32
2450	59.63	-2.25	1.65
2460	68.28	-1.66	2.17
2470	65.61	-1.83	1.92
2480	65.13	-1.86	2.03
2490	69.89	-1.56	2.3
2500	63.5	-1.97	2.09



UNLESS OTHER SPECIFIED TOLERANCES ON:

$X = \pm$ $X.X = \pm$ $X.XX = \pm$

ANGLES = \pm HOLEDIA = \pm



KINGRF TECHNOLOGY CO., LTD.

SCALE:

UNIT: mm

DRAWN BY: LU

CHECKED BY: YS

DESIGNED BY: JINTIAN

APPROVED BY: YS

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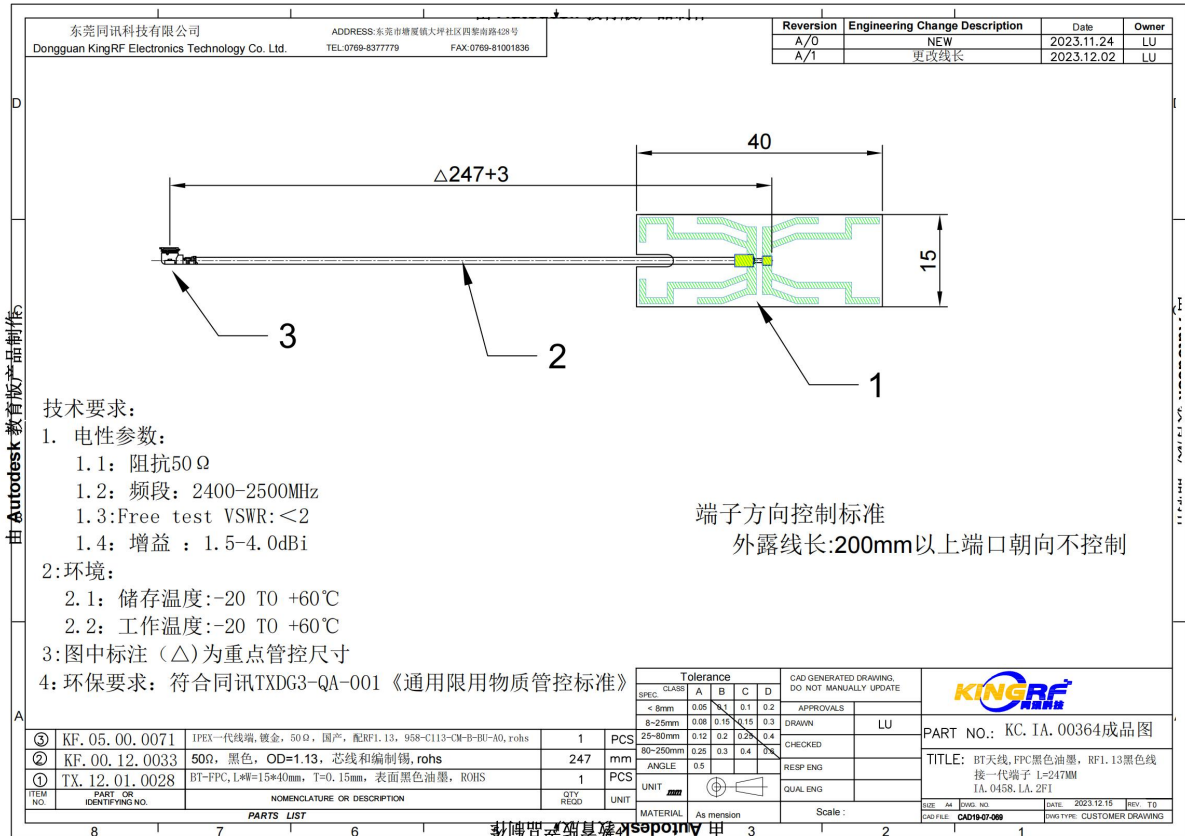
SPEC REV.

P0

3. Mechanical Specification:

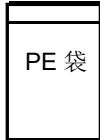
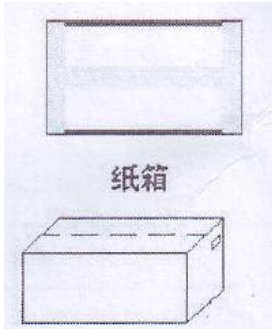
3-1. Mechanical Configuration (Unit: mm)


The appearance of the antenna is according to drawing



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SCALE: DRAWN BY: LU DESIGNED BY: JINTIAN	UNIT: mm CHECKED BY: YS APPROVED BY: YS	
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5. 包装规格:

产品料号: XXX			
产品型号: XXX			
一、标签要求:			
需方	XXX		
供方	XXXXX		
物料编码	XX		
产品型号	XX		
数量/单	XXX PCS	出厂日期	X 年 X 月 X 日
备注/其他			
二、装箱要求:			
作业说明:			
1. 内包装:			
产品 XXpcs 一袋, 放入小 PE 袋;			
2. 外包装:			
XxPCS 一箱;			
3. 注意事项:			
a. 是否要增设隔板、珍珠棉;			
b. 标签的帖附, 如 ROHS 等;			

UNLESS OTHER SPECIFIED TOLERANCES ON: $X = \pm$ $X.X = \pm$ $X.XX = \pm$ ANGLES = \pm HOLEDIA = \pm			KINGRF TECHNOLOGY CO., LTD.
SCALE:	UNIT: mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF KINGRF TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
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DESIGNED BY: JINTIAN	APPROVED BY: YS		
TITLE: IA.0458.LA.2FI Antenna Specification			SPEC REV. P0

东莞同讯科技有限公司
盐水喷雾腐蚀试验报告

测试日期:2023/12/21

客户/代码 Customer/Code	/	测试员 Tester	孙永嬉	工程确认 Supervisor	陆进添
样品名称 Product/Part No.	KF.05.00.0071	生产线别 Line No.		样品数量 Quantity	15pcs
生产批号 Lot No.		测试仪器 Test Instrument	盐水喷雾腐蚀试验机 Salt Spray Corrosion Tester		
试验条件 Test Conditions		<input checked="" type="checkbox"/> GB/T10125		<input type="checkbox"/> 其它(other)::	
盐水浓度 Salt Concentration	5.0±0.1%				
喷雾量 Fallout Rate	1-2ml/80cm ² /h				
溶液PH值 Salt Solution PH	6.5-7.2				
压缩空气压力 Air Pressure	1.2±0.5Kg/cm ²				
试验室相对湿度(%) Test Chamber Relative Humidity(%)	≤70%RH				
压力桶温度 (°C) Pressure Tub Temperature (°C)	47±2°C				
试验箱温度 (°C) Salt Solution Reservoir Temperature (°C)	35±2°C				
试验累计计时(从喷雾时起计时) Accumulated Hours(since salt spray)	从(From): 12月21日 8:30, 至(To) 12月23日 8:30。 累计(Total): <input type="checkbox"/> 8h <input type="checkbox"/> 12h <input type="checkbox"/> 16h <input type="checkbox"/> 24h <input checked="" type="checkbox"/> 48h <input type="checkbox"/> __h				
判定 Test Result	判定依据 According as	依GB/T6461-2002 标准判定 Standard GB/T6461-2002		依以下标准判定: Below standard:	
	测试样品粘贴 Affixing Samples				
	试验结果描述 Test Result Description	结论: 经过48小时盐雾试验后,产品镀金表面无腐蚀现象, 经判定盐雾合格			
	结果判定 Result Decision	<input checked="" type="checkbox"/> 合格 <input type="checkbox"/> 不合格 <input type="checkbox"/> 仅供参考 Acceptable Reject Only for reference			

东莞网讯科技有限公司

高低温试验测试报告

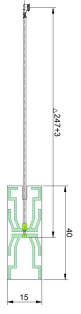
High and low temperature test report

报告编号: XBHQA2023122601

日期: 2023-12-26

产品名称 Product name	BT-FPC	送检部门 Inspection department	工程	料号 Serial No	1029-0A00214	试样数量Qty	3PCS
试验日期 Date	12月21日	试验时间 tTest time	48H	开始START	当日12:00	客户Customer	佳德
				结束OVER	12月23日12:00	供应商Supplier	网讯
测试仪器 instrumer	可程式恒温恒湿试验机			仪器编号 NO.	XBH-PG-HS001-051		
试验条件 Condition	高温80+/-2℃			低温-40+/-2℃			
试验时间 Tset time	48H			48H			
测试方法 Test method	将产品放置在温度为80+/-2℃的高温环境内存放48H, 再在温度-40+/-2℃的低温环境存放48H, 试验完成后再常温环境下放置2H以上后进行外观检验						
判定标准 Judging standard	部件无裂痕、明显变形、脱落、FPC起翘、电性能测试通过合格						
试验结果 Experiment a result	部件无裂痕、明显变形、脱落、FPC起翘						
判定结果 judge	OK						
说明: 1. 高低温实验作业标准依照中华人名共和国国家标准 GB/T2424. 5-2005执行。 2. 试件外观判定标准依照中华人名共和国国标准 GB/T6461-02标准执行。	Explain: 1.High and low temperature experiment operation standards in accordance with thepeo ple' s Republic of China national standard GB/T2424. 5- 2005 inplementation. 2.Judge standard according to pelople' s Republic of China national stanrd GB/T6461-02 standard a peeformance.						
审核Examine	试验员Tester						
陆进添	孙永嬉						

Zhao Yang Elec. (Shenzhen) Co., Ltd
Ingredient list
成份清單

一 供應商基本信息 (Supplier Basic Information)		佳德无线科技（深圳）有限公司		填寫部門 (Fill in the)	業務部
供應商名稱 (Supplier Name)	填寫人員 (Fill in the)			填寫日期 (Fill in the date)	2023. 12. 26
司電話 (The phone compar		0755-33353180		公司傳真 (fax)	0755-33353180
E-MAIL	產品圖樣				

二 料件成份信息表 (Ingredient information table)							
料號 (P/N(Part Number))	1029-0A00214	產品名稱 (The name of the Product)	BT天线1A. 0458. LA. 2FI	產品重量 (g) (Product weight (g))	1.00g		
零件名稱 Part name	Part mass (mg) 零件重量	(組成零件的 均一材料名稱) Homogeneous Material Name	均一材料廠商名稱/生產國 Homogeneous material manufacturer name/country of origin	材質重量 Material mass (mg)	構成之化學成份名稱 substance name		
2. 4G 5.8G FPC 天线	1.00g	基材	中号	0.0646	P1铜箔基材7440-50-8	铜箔7440-50-8 54% 聚亚酰胺膜25038-81-7 16% 无卤环氧树脂接着	
		背胶	3M中国有限公司	0.0534	丙烯酸酯聚合物胶水	丙烯酸酯聚合物胶 水 16.5%	
		油墨	优立实业	0.0220	液态热固软板油墨	液态热固软板油墨 3.5%	
		RF1.13 黑色线材	天迈通信	0.8	Cu/Teflon FEP		
		IPBX端子	彩美	0.06	CE210	A22300095944101004E	

三 聲明

供應商必須保證上述数据真实有效，如果发生变更会将变更后数据和时通知朝陽公司。
The supplier shall ensure that the above data is true and valid and, if any changes are made, notify the Zhaoyang company of the changed data in time.

四、說明：

1. 該表一個表格對應一個料號，請不要多個料號填寫進一個表格。行數不夠的情況下，請自行添加足夠的行數。
1. The table corresponds to a material number. Please don't fill in a form with the numbers. If the number of rows is not enough, please add enough lines yourself.
2. 該表填寫的時機為：在我司承認之前，作為承認資料之一進行提供。
2. The timing of the form is as follows: prior to our company's recognition, it is provided as one of the acknowledged data.
3. 該表從2017年8月9日開始填寫電子檔即可，不用填好后打印簽字蓋章。但是必須得到貴司主管人員確認該表的正確性。
3. The table from August 9, 2017 began to fill in the electronic file, you can not fill it, print, signature, seal. However, you must have your supervisor confirm the validity of the Statement.

審核人員：

職位：

審核人員聯繫電話：

E-Mail：

朝陽電子(深圳)有限公司/Zhaoyang Elec. (Shen Zhen) Co., Ltd.
 原材(物)料檢驗表/Material Inspect Sheet

品名/Part Name	BT天线		料號/Part NO.	1029-0A00214	*第 / 次試摸/T__	*模號/Mold NO.	/	*生產設備/Machine			
規格/Description	ANT-T, BLACK, 2.4G/5GHZ WF/B T型天線IA. 0458. LA. 2FI L=247MM						溫/濕度/Temperature/Humidity	-20 TO +60° C			
廠商 Vendor	佳德无线		*模具廠商 Mold Maker		檢驗日期 Check Date	2023. 11. 25	*模穴號 Cav. NO.	重量 Weight	1	生產產地 Produce place	东莞
檢查項目/Ins. Item	外露线长	FPC板长	FPC板宽					单重/g			
規格/Specification	247	40	15					1			
公差/Tolerance	±3	±0.2	±0.2					±5%			
測 定 值 Data	1	247	40	15				1.02			
	2	247	40	15				1.01			
	3	247	40	15				1.02			
	4	247	40	15				1.01			
	5	248	40	15				1.02			
	6	247	40	15				1.02			
	7	247	40	15				1.02			
	8	248	40	15				1.02			
	9	247	40	15				1.02			
	10	247	40	15				1.01			
判定欄/Judgement	OK	OK	OK					OK			
外觀記錄/Appearance Record	OK										
裝配記錄/Assembly Record	OK										
			<input checked="" type="checkbox"/> 合格/OK <input type="checkbox"/> 不合格/NG			備注 Remark		主管/Approval Yassel		檢驗者/Inspector	

*__僅對屬於本廠模具或有指定時方填寫/*__Only for Zylux' mold need

(QMR-P14-09.B)