SPECIFICATION FOR APPROVAL
产品规格承认书

CUSTOMER客户：

CUSTOMER P/N 客户品号：

REFOND P/N 公司型号： RF-BFA50-WR18-V01

ISSUE DATE 发行日期：2023-02-08

□R&D 研发 ■Mass Product 量产供货		
Supplier 供应商		
Approved By 核准	Checked By 初审	Prepared By 编制
Customer 客户		
Approved By 核准	Checked By 初审	Received By 接受
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Contents 目录

1. Description 产品介绍

1.1General Description 产品描述

The light source module are made of IR LED as light source, with the advantages of small in size,long life and high reliability.

该光源组件采用红外 LED 作为光源，具有体积小、寿命长、可靠性高等优点.

1.2 Application 产品应用

►Optical indicator.光学指示

►cameras. 相机

►General use.其他应用

1.3Light Board structure And Electrical line sequence /灯板结构和电性线序

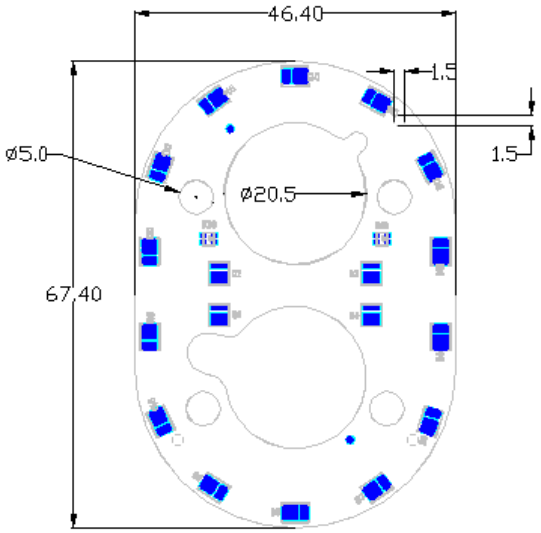
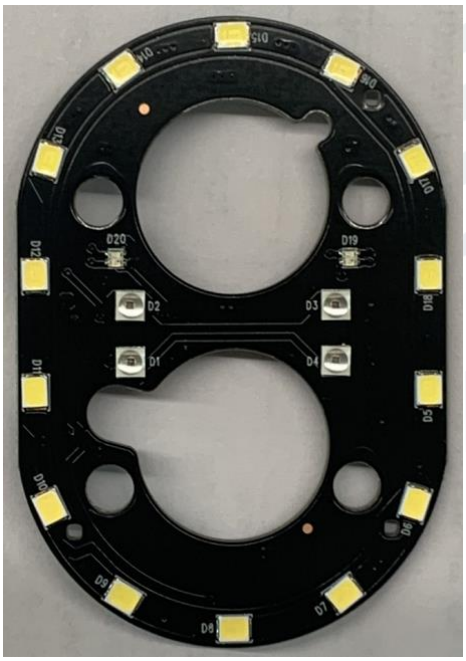
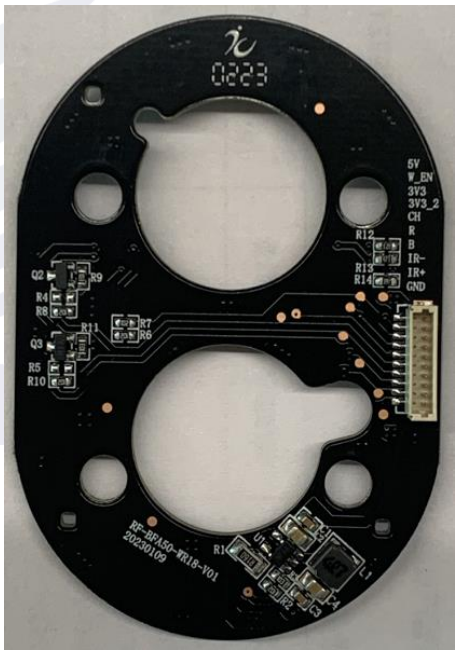


Fig.1-1 Top view 正面视图





5V	W_EN	3V3	3V3_2	CH	R	B	IR-	IR+	GND

Fig.1-2Light Board Schematic 灯板电性图

Notes 备注:

1. All dimensions units are millimeters. 所有尺寸标注单位为毫米

2. All dimensions tolerances are ±0.2mm unless otherwise noted.除特别标注外，所有尺寸公差为±0.2 毫米

1.4Product Parameters 产品参数

产品型号	RF-BFA50-WR18-V01
灯板外径	67.4*46.4MM
板材厚度	1.6MM±10％
灯板材质	双面玻纤板
外观颜色	黑色亮光
输入电压	5V
工作电流	500mA±10％
LED 规格	RF-T65HP32DS-CF-N-Y&RF-E30AX-IRR-FS
LED 数量	18pcs
串接方案	红外：2 串 2 并，白光：14 颗串联
红外线发射角度	120°
红外线波长	850nm
感光器件	/
指示灯规格	RF-P2S196TS-B38-E2
感光波长	/
LED 启动照度	/
IRCUT 控制电压	/
工作环境温度	(-20℃-65℃)
储存环境温度	(-40℃-80℃)
储存环境湿度	＜60%

2. Handling Precautions 产品使用注意事项

(1) LED operating environment and sulfur element composition cannot be over 100PPM in the LEDmating usage material. This is provided for informational purposes only and is not a warranty or endorsement.LED 工作环境及与 LED 适配的材料中硫元素及化合物成份不可超过 100PPM.这只是一个建议，不作任何品质担保。

(2)If there are no special requirements, the material components of the module are controlled according to ROSH2.0 and REACH.如无特别需求说明，模组各项物料成分按照 ROSH2.0 和 REACH 管控。

(3) VOCs (Volatile organic compounds) emitted from materials used in the construction of fixtures can penetrate silicone encapsulants of LEDs and discolor when exposed to heat and photonic energy. The result can be a significant loss of light output from the fixture. Knowledge of the properties of the materials selected to be used in the construction of fixtures can help prevent these issues. Refond advises against theuse of any chemicals or materials that have been found or are suspected to have an adverse affect on device performance or reliability. To verifycompatibility, Refond recommends that all chemicals and materials be tested in the specific application and environment for which they are intended tobe used. Attaching LEDs, do not use adhesives that outgas organic vapor. 应用套件中的挥发性物质会渗透到 LED 内部，在通电产生光子及热的条件下，会导致 LED 变色，进而造成严重光衰，提前了解套件材料能够避免产生这些问题。瑞丰反对使用任何对 LED 器件的性能或者可靠性有害的物质或材料，不管这些材料是已经证实了的还是仅仅怀疑有害。针对特定的用途和使用环境，瑞丰建议对所有的物质和材料进行相容性的测试。在贴装 LED 时候，不要使用能产生有机挥发性气体的粘结剂。

(4) In designing a circuit,the current through each LED must be exceed the absolute maximum rating specified for each LED.In the meanwhile,resistors for protection should be applied,otherwise slight voltage shift will cause big current change,burn out may happen. The driving circuit must be designed to allow forward voltage only when it is ON or OFF.If the reverse voltage is applied to LED, migration can be generated resulting in LED damage. 设计电路时，通过 LED 的电流不能超过规定的最大值，同时，还需使用保护电阻，否则，微小的电压变化将会引起较大电流变化，可能导致产品损毁。电路设计必须保证只有在开启或者关闭的时候出现正向电压的变化，不要施加反压，否则会损坏 LED。

(6) Thermal Design is paramount importance because heat generation may result in the Characteristics decline,such as brightness decreased,Color change and so on.Please consider the heat generation of the LEDs when making the system design.LED 容易因为自身的发热和环境的温度改变而改变，温度升高会降低 LED 发光效率，影响发光颜色，所以在设计时应充分考虑散热问题。

(9)Similar to most Solid state devices; LEDs are sensitive to Electro-Static Discharge (ESD) and Electrical Over Stress (EOS). 像其他的半导体电子器件一样，LED 对静电过流击穿非常敏感，需要做好防护。

(10) Other points for attention, please refer to our relevant information.

其它注意事项请参照瑞丰相关资料。

Version History/修订历史

Date日期	Revisor修订者	Version版本	Verifier审核	Remarks备注
2023-02-08	张嘉文	E/0	张富永	量产新版本

Declare 申明

This specification is written both in English and in Chinese and the latter is formal.

产品规格书以中英文方式书写，若有冲突以中文版本为准。