



Reference Design Sheet – L501A-RGB3030 (RGBW LES13)

Performance Specifications:

| Output | Lumens [lm] | Efficacy [lm/W] | Wattage [W] |
|----------|-------------|-----------------|-------------|
| Standard | 1618 | 93 | 17.3 |
| High | 2160 | 82 | 26.3 |

Note: All performance measurements taken @ 3000K, 100% intensity, 25°C ambient with ARK-IR-PL-LES13 and no diffuser in use

Calibrated CCT Specs:

| CCT [K] | Typical CRI |
|---------|-------------|
| 3000 | 92 |
| 3500 | 92 |
| 4000 | 90 |

Diffuser Transmittance:

| Diffuser | Transmittance |
|------------|---------------|
| ARK-DF-SF2 | 95 |
| ARK-DF-SF4 | 86 |
| ARK-DF-SF6 | 80 |
| ARK-DF-SF8 | 74 |

Temperature Conditions:

| Output | Max T [°C] |
|--------------------|------------|
| Standard Output Tc | 75 |
| High Output Tc | 80 |
| Environment Ta | 40 |

Note: Temperature conditions applicable for 3000K, 100% intensity



Figure 1: Tc point on ORB controller, micro USB connector shield

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Recommended Thermal Management Specifications:

Standard Output:

Thermal Interface Material: Thermal paste – PN: TC3-1G or equivalent. Alternatively, 18x18mm phase change thermal pad – PN: ARK-TM-PC1-1818
Heat Sink: Anodized aluminum. Dissipated power(W): 48 – Thermal Resistance (°C/W): 1.1

High Output:

Thermal Interface Material: Thermal paste – PN: TC3-1G or equivalent.
Heat Sink: Anodized aluminum. Dissipated power(W): 57 – Thermal Resistance (°C/W): 0.9

Contact Arkalumen for validation of any other thermal interface materials. The use of gallium based paste is not recommended.

System Inclusions:

DMX/RDM

| Order Code | LoDA | ORB | Cable | Inner Reflector | Diffuser/Holder | Firmware |
|--------------------------------|---------------|---------|--------------|-----------------|-----------------|----------|
| Z501A3030-VA1-13-X-4010 | L501A-RGB3030 | ORB5-VA | ARK-C1-5A-30 | ARK-IR-PL-LES13 | ARK-RH-SA* | 4010 |
| Z501A3030-VA1-13-6-4010 | L501A-RGB3030 | ORB5-VA | ARK-C1-5A-30 | ARK-IR-PL-LES13 | ARK-DF-SF6 | 4010 |

Casambi

| Order Code | LoDA | ORB | Cable | Inner Reflector | Diffuser/Holder | Firmware |
|---------------------------------|---------------|----------|--------------|-----------------|-----------------|----------|
| Z501A3030-VWC1-13-X-4010 | L501A-RGB3030 | ORB5-VWC | ARK-C1-2A-30 | ARK-IR-PL-LES13 | ARK-RH-SA* | 4010 |
| Z501A3030-VWC1-13-6-4010 | L501A-RGB3030 | ORB5-VWC | ARK-C1-2A-30 | ARK-IR-PL-LES13 | ARK-DF-SF6 | 4010 |

**When selecting a system without a diffuser, an inner reflector holder (RH) will be included
Other system combinations available (alternative diffusers, cables). Contact Arkalumen for all options.