

Reference Design Sheet – L501A-RBG4040 (RGBW LES13)

Performance Specifications:

Output	Lumens [lm]	Efficacy [lm/W]	Wattage [W]
Standard	1744	100	17.3
High	2350	90	26.3

Note: All performance measurements taken @ 4000K, 100% intensity, 25°C ambient with ARK-IR-PL-LES13 and ARK-RH-SA in use

Calibrated CCT Specs:

CCT [K]	Typical CRI
2700 (min)	78
3000	86
3500	95
4000	95
6500 (max)	87

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 4000K, 100% intensity

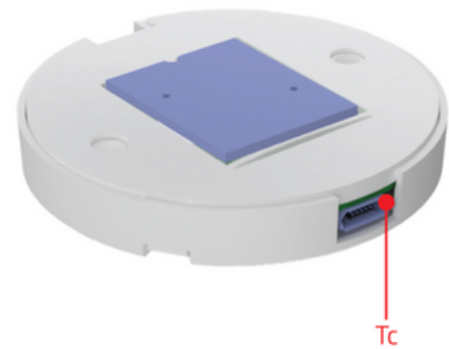


Figure 1: Tc point on ORB controller, micro USB connector shield

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
Z501A4040-VA1-13-X-4010	L501A-RBG4040	ORB5-VA	ARK-C1-5A-30	ARK-IR-PL-LES13	ARK-RH-SA*	4010
Z501A4040-VA1-13-2-4010	L501A-RBG4040	ORB5-VA	ARK-C1-5A-30	ARK-IR-PL-LES13	ARK-DF-SF2	4010
Z501A4040-VA1-13-4-4010	L501A-RBG4040	ORB5-VA	ARK-C1-5A-30	ARK-IR-PL-LES13	ARK-DF-SF4	4010
Z501A4040-VA1-13-6-4010	L501A-RBG4040	ORB5-VA	ARK-C1-5A-30	ARK-IR-PL-LES13	ARK-DF-SF6	4010
Z501A4040-VA1-13-8-4010	L501A-RBG4040	ORB5-VA	ARK-C1-5A-30	ARK-IR-PL-LES13	ARK-DF-SF8	4010

Casambi

Order Code	LoDA	ORB	Cable	Inner Reflector	Diffuser/Holder	Firmware
Z501A4040-VWC1-13-X-4010	L501A-RBG4040	ORB5-VWC	ARK-C1-2A-30	ARK-IR-PL-LES13	ARK-RH-SA*	4010
Z501A4040-VWC1-13-2-4010	L501A-RBG4040	ORB5-VWC	ARK-C1-2A-30	ARK-IR-PL-LES13	ARK-DF-SF2	4010
Z501A4040-VWC1-13-4-4010	L501A-RBG4040	ORB5-VWC	ARK-C1-2A-30	ARK-IR-PL-LES13	ARK-DF-SF4	4010
Z501A4040-VWC1-13-6-4010	L501A-RBG4040	ORB5-VWC	ARK-C1-2A-30	ARK-IR-PL-LES13	ARK-DF-SF6	4010
Z501A4040-VWC1-13-8-4010	L501A-RBG4040	ORB5-VWC	ARK-C1-2A-30	ARK-IR-PL-LES13	ARK-DF-SF8	4010

*When selecting a system without a diffuser, an inner reflector holder (RH) will be included