

## Reference Design Sheet – L302A-182740 (WWW LES13)

ORB3-VA, ORB3-VD, ORB3-VWC

### Performance Specifications:

Output	Input Voltage [V]	Wattage [W]	Lumens [lm]	Efficacy [lm/W]
Standard	24	16.7	1680	100

Note: All performance measurements taken @ 3000K, 100% intensity, 25°C ambient with ARK-IR-PL-LES13 and ARK-RH-SA in use

### Calibrated CCT Specs:

CCT [K]	Typical CRI
1800 (min)	95
2200	95
3000	96
4000 (max)	95

Note: Arkalumen maintains a CRI of 90+

### Temperature Conditions:

Output	Max T [°C]
Standard Output Tc	75
Environment Ta	40

Note: Temperature conditions applicable for 2700K, 100% intensity

### Diffuser Transmittance:

Diffuser	Transmittance
ARK-DF-SF2	92
ARK-DF-SF4	81

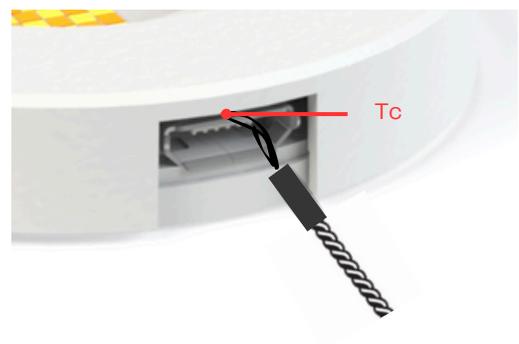


Figure 1 - Tc is measured on the metal sleeve of the micro-USB programming port. To measure Tc, insert thermal probe between micro-USB and top encasement of the ORB controller as shown.

## 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

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
<b>Z302A182740-VA1-13-X-4010</b>	L302A-182740	ORB3-VA	ARK-C1-5A-30	ARK-IR-PL-LES13	ARK-RH-SA*	4010
<b>Z302A182740-VA1-13-2-4010</b>	L302A-182740	ORB3-VA	ARK-C1-5A-30	ARK-IR-PL-LES13	ARK-DF-SF2	4010
<b>Z302A182740-VA1-13-4-4010</b>	L302A-182740	ORB3-VA	ARK-C1-5A-30	ARK-IR-PL-LES13	ARK-DF-SF4	4010

### O-10V

Order Code	LoDA	ORB	Cable	Inner Reflector	Diffuser/Holder	Firmware
<b>Z302A182740-VD1-13-X-4010</b>	L302A-182740	ORB3-VD	ARK-C1-5B-30	ARK-IR-PL-LES13	ARK-RH-SA*	4010
<b>Z302A182740-VD1-13-2-4010</b>	L302A-182740	ORB3-VD	ARK-C1-5B-30	ARK-IR-PL-LES13	ARK-DF-SF2	4010
<b>Z302A182740-VD1-13-4-4010</b>	L302A-182740	ORB3-VD	ARK-C1-5B-30	ARK-IR-PL-LES13	ARK-DF-SF4	4010

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Order Code	LoDA	ORB	Cable	Inner Reflector	Diffuser/Holder	Firmware
<b>Z302A182740-VWC1-13-X-4010</b>	L302A-182740	ORB3-VWC	ARK-C1-2A-30	ARK-IR-PL-LES13	ARK-RH-SA*	4010
<b>Z302A182740-VWC1-13-2-4010</b>	L302A-182740	ORB3-VWC	ARK-C1-2A-30	ARK-IR-PL-LES13	ARK-DF-SF2	4010
<b>Z302A182740-VWC1-13-4-4010</b>	L302A-182740	ORB3-VWC	ARK-C1-2A-30	ARK-IR-PL-LES13	ARK-DF-SF4	4010

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