

## Reference Design Sheet – L301A-183065 (WWW LES9)

ORB3-VA, ORB3-VD, ORB3-VWC

### Performance Specifications:

Output	Input Voltage [V]	Wattage [W]	Lumens [lm]	Efficacy [lm/W]
Standard	24	12.5	1000	80

Note: All performance measurements taken @ 6500K, 100% intensity, 25°C ambient with ARK-IR-PL-LES9 and ARK-RH-SA in use

### Calibrated CCT Specs:

CCT [K]	Typical CRI
1800 (min)	94
3000	92
3500	94
4000	95
6500 (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 3000K, 100% intensity

### Diffuser Transmittance:

Diffuser	Transmittance
ARK-DF-SF2	74
ARK-DF-SF4	67

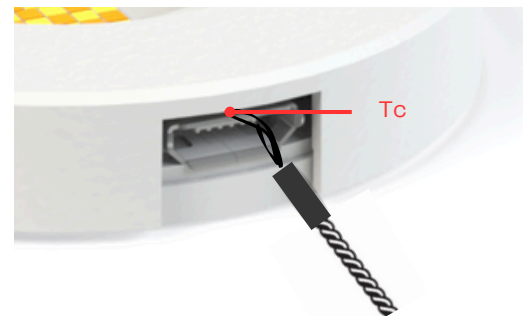


Figure 1 - Tc is measured on the metal sleeve of the micro-USB programming port. To measure Tc, insert thermal probe between micro-USB and top encasement of the ORB controller as shown.

## 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>Z301A183065-VA1-9-X-4010</b>	L301A-183065	ORB3-VA	ARK-C1-5A-30	ARK-IR-PL-LES9	ARK-RH-SA*	4010
<b>Z301A183065-VA1-9-2-4010</b>	L301A-183065	ORB3-VA	ARK-C1-5A-30	ARK-IR-PL-LES9	ARK-DF-SF2	4010
<b>Z301A183065-VA1-9-4-4010</b>	L301A-183065	ORB3-VA	ARK-C1-5A-30	ARK-IR-PL-LES9	ARK-DF-SF4	4010

### 0-10V

Order Code	LoDA	ORB	Cable	Inner Reflector	Diffuser/Holder	Firmware
<b>Z301A183065-VD1-9-X-4010</b>	L301A-183065	ORB3-VD	ARK-C1-5B-30	ARK-IR-PL-LES9	ARK-RH-SA*	4010
<b>Z301A183065-VD1-9-2-4010</b>	L301A-183065	ORB3-VD	ARK-C1-5B-30	ARK-IR-PL-LES9	ARK-DF-SF2	4010
<b>Z301A183065-VD1-9-4-4010</b>	L301A-183065	ORB3-VD	ARK-C1-5B-30	ARK-IR-PL-LES9	ARK-DF-SF4	4010

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Order Code	LoDA	ORB	Cable	Inner Reflector	Diffuser/Holder	Firmware
<b>Z301A183065-VWC1-9-X-4010</b>	L301A-183065	ORB3-VWC	ARK-C1-2A-30	ARK-IR-PL-LES9	ARK-RH-SA*	4010
<b>Z301A183065-VWC1-9-2-4010</b>	L301A-183065	ORB3-VWC	ARK-C1-2A-30	ARK-IR-PL-LES9	ARK-DF-SF2	4010
<b>Z301A183065-VWC1-9-4-4010</b>	L301A-183065	ORB3-VWC	ARK-C1-2A-30	ARK-IR-PL-LES9	ARK-DF-SF4	4010

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