

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

ORB-CC-VS – PRELIMINARY

### Performance Specifications:

Input Voltage Range [V]	Wattage [W]	Lumens [lm]	Efficacy [lm/W]
17.5 – 21.9	16.5	1410	85

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

### Max Input Current

Control Mode:	Max Input Current [mA]
0-10V & Selectable White	800
Dim-to-Warm	870

### Relative Lumen:

CCT [K]	Lumens [lm]
1800	0.62
3000	0.97
3500	1.02
4000	1.00

### CCT Specs:

CCT [K]	Typical CRI
1800 – 4000	90+

Note: Arkalumen maintains a CRI of 90+

### Diffuser Transmittance:

Diffuser	Transmittance
ARK-DF-SF2	96
ARK-DF-SF4	91

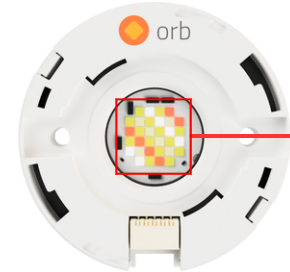
## Temperature Conditions:

Output	Max T [°C]
Max Tc	85
Max LED Surface	145

Note: Temperature conditions applicable for 4000K, 100% intensity



Figure 1 - USB Tc temperature is measured on the metal sleeve of the micro-USB programming port. To measure USB Tc, insert a K-type thermal probe between micro-USB and top encasement of the ORB controller as shown. Solder the tip of the thermal probe to the center of the USB connector.



LED Array  
Surface Temp

Figure 2 - To measure LED array surface temperature, use thermal camera with diffuser removed after system reached thermal equilibrium

## System Inclusions:

Order Code	Control Mode:	LoDA	ORB	Cable	Inner Reflector	Diffuser/Holder	Firmware
<b>Z302A182740-CC2-13-X-4000TW</b>	0-10V	L302A-182740	ORB-CC-VS	ARK-C1-4B-30	ARK-IR-PL-LES13	ARK-RH-SA*	4000
<b>Z302A182740-CC2-13-2-4000TW</b>	0-10V	L302A-182740	ORB-CC-VS	ARK-C1-4B-30	ARK-IR-PL-LES13	ARK-DF-SF2	4000
<b>Z302A182740-CC1-13-X-4000DW</b>	Dim-to-Warm	L302A-182740	ORB-CC-VS	ARK-C1-2A-30	ARK-IR-PL-LES13	ARK-RH-SA*	4000
<b>Z302A182740-CC1-13-2-4000DW</b>	Dim-to-Warm	L302A-182740	ORB-CC-VS	ARK-C1-2A-30	ARK-IR-PL-LES13	ARK-DF-SF2	4000
<b>Z302A182740-CC1-13-X-4000SW</b>	Selectable White Programmable	L302A-182740	ORB-CC-VS	ARK-C1-4B-30	ARK-IR-PL-LES13	ARK-RH-SA*	4000
<b>Z302A182740-CC1-13-2-4000SW</b>	Selectable White Programmable	L302A-182740	ORB-CC-VS	ARK-C1-4B-30	ARK-IR-PL-LES13	ARK-DF-SF2	4000
<b>Z302A182740-CC2-13-X-4000DS</b>	Selectable White DIP Switch	L302A-182740	ORB-CC-VS	ARK-C1-2A-3	ARK-IR-PL-LES13	ARK-RH-SA*	4000
<b>Z302A182740-CC2-13-2-4000DS</b>	Selectable White DIP Switch	L302A-182740	ORB-CC-VS	ARK-C1-2A-30	ARK-IR-PL-LES13	ARK-DF-SF2	4000

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