

Reference Design Sheet – Y514C1840-VA1-23-D2-4010 (RGBWW LES23)

Performance Specifications:

Output	Input Voltage [V]	Wattage [W]	Lumens [lm]	Efficacy [lm/W]
Standard	24	49.8	4670	94

Note: All performance measurements taken @ 4000K, 100% intensity, 25°C ambient and no diffuser in use

Calibrated CCT Specs:

CCT [K]	Typical CRI
1800	83
2200	84
3000	93
3500	95
4000	93
6500 (max)	83

Transmittance:

Diffuser	Transmittance
ARK-DF-SF2-DM23	86
ARK-DF-SF2-FL23	82

Recommended Thermal Management Specifications:

Standard Output:

Thermal Interface Material: Thermal paste – PN: TC3-1G or equivalent. Thermal conductivity 8.50W/m-K.
Heat Sink: Aluminum. Dissipated power(W): 95 – Thermal Resistance (°C/W): 0.52

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

Temperature Conditions*:

Output	Max T [°C]
Max LED Surface	145

*Refer to the ORB High Output System Thermal Testing Guideline application note in the Resource section:
www.arkalumen.com/resources/

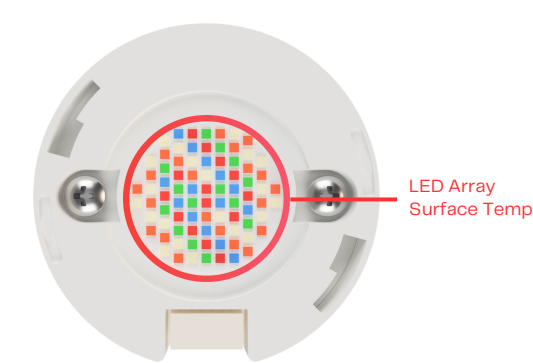


Figure 1 - To measure LED array surface temperature, use thermal camera with diffuser removed after system reached thermal equilibrium

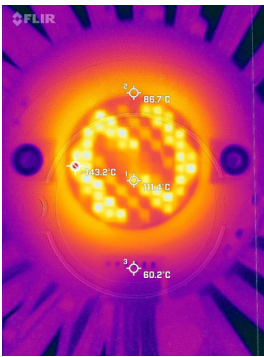


Figure 2 - Example thermal capture of LED array surface temperature

System Inclusions:

DMX/RDM

Order Code	LoDA	Holder	Diffuser	APT Controller	Firmware
Y514C1840-VA1-23-D2-4010	L514C-RGB1840	LES23	ARK-DF-SF2-DM23	APT-CV5-VA-SQ	4010
Y514C1840-VA1-23-F2-4010	L514C-RGB1840	LES23	ARK-DF-SF2-FL23	APT-CV5-VA-SQ	4010

Other system combinations available (alternative control protocols, cable lengths). Contact Arkalumen for all options.