Project	Catalog #	Тур	ре
Prepared by	Notes	Dat	te



# **Corelite**

Jaylum - J2

**LED** Suspended Direct / Indirect

**Typical Applications** 

Office • Education • Healthcare • Hospitality • Retail

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# **Top Product Features**

- · Low-profile architectural design and quality
- Highly efficient LED (Up to 133 lumens per watt)
- Multiple lumen packages (Up to 1,250 lumens per ft)
- · Individual or continuous mounting
- Available with VividTune white tuning
- · Options to meet Buy American Act requirements

# **Product Certification**









# **Product Features**





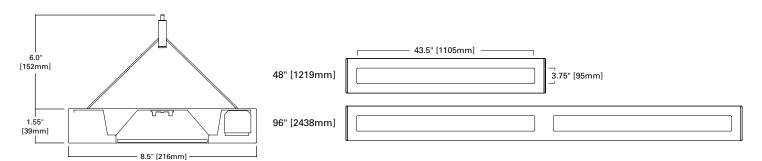








# **Dimensions and Fixture lengths**





# **Order Information**

SAMPLE ORDER NUMBER: J2-WL-40L835-1D-UNV-STD-WAA-W-AC48-T1-16

Domestic Preference	Series	Shielding / Optics	Lumen Package Nominal per 4' section	CRI	Color Temperature	Number of Circuits	Additional Circuiting	Input Voltage
Domestic Preference	Series	Shielding / Optics	Lumen Package Nominal per 4' section	CRI	Color Temperature	Number of Circuits	Additional Circuiting	Input Voltage
[Blank]=Standard BAA=Buy American Act	J2=Jaylum Suspended Direct/Indirect QS-J2=Jaylum Suspended Direct/Indirect Quick Spec	WL=Frosted Lens (25% Up / 75% Dn)	20L=2,000 Lms (500 lms/ft) 30L=3,000 Lms (750 lms/ft) 40L=4,000 Lms (1,000 lms/ft) 50L=5,000 Lms (1,250 lms/ft)	8=80 CRI 9=90 CRI	<b>30</b> =3000K <b>35</b> =3500K <b>40</b> =4000K <b>305</b> 0=Tunable White 3000K-5000K <b>2765</b> =Tunable White 2700K-6500K	1=Single Circuit	D=None (Default Dimming) E=Emergency Circuit S=Secondary Circuit N=Emergency + Secondary Circuit	120=120V 277=277 UNV=Universal (120V-277V) 347=347V
Notes  Only product configurations with this designated prefix are built to be complain with the Buy American Act of 1933 (BAA), Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.	Notes  Shaded options indicate valid quick ship selections. See Quick Spec Terms and Conditions for more information.v	Notes  More distributions are available. See Jaylum J3 series.	Notes  Refer to performance table on Page 4 for more detail.	W2A driver or (2) 10V dimm color, 1 intens	Notes coptions to be used with hity Must be used with two ing control channels, 1 ity, Not compatible with or sensor options.	Notes Refers to wiring in cross section.	Notes  Select "D" wiring for individual fixtures. Secondary circuit not available with integrated sensor options.	Notes Integral 347V driver with STD 0-10V option only. Factory supplied 34TV remote transformer for all other driver options.

<b>Driver Dimming Options</b>	Integral Sensor	Integral Emergency	Top Cover (Optional)	Finish	Suspension Length	Ceiling Type	Run Length
Driver Dimming Options	Integral Sensor	Integral Emergency	Top Cover (Optional)	Finish	Suspension Length	Ceiling Type	Run Length
STD=Standard 0-10V (1%-100%) SR=Sensor Ready (1%-100%) SLT=Fifth Light DALI (1%-100%) LH=Lutron HiLume 1% EcoSystems W2A=Tunable White, 2ch, 0-10V Intensity and CCT Control	WAA=WaveLinx Wireless Integrated Sensor WAB=WaveLinx Lite Wireless Integrated Sensor LWIPD1=Enlighted Wireless Integrated Sensor	B06=6-watt, 120V-277V Emergency Battery Pack B10=10-watt, 120V-277V Emergency Battery Pack EPC=LVS Controls EPC UL924 Bypass Relay	DC=Dust Cover DLED=Downlight Kit (85% DOWN)	W=White S=Silver B=Black CC=Custom Color	Adj. Cable AC48=48" AC120=120" AC240=240" AC360=360"	T1=15/16" T-Bar T9=9/16" T-Bar T8=Slotted T-Bar JB=Junction Box / Structure UM=Universal Ceiling Kit (T1, T9, JB) _S=Swivel at Cancopy (_=T1, T9, TS or JB)	4=4 ft 8=8 ft XX=Specify Row Length
Notes	Notes	Notes	Notes			Notes	Notes
One driver per 4' section unless otherwise noted.	WAA and WAB sensor must be used with "STD" driver. LW sensor must be used with "St" sensor ready driver, Integrated Sensors combined with Emergency Circuit require one UI-924 Bypass Relay per emergency section. SWPD1 has been renamed to WAA, but remains the same sensor.	EPC option used to bypass local control during outage. Must be used in conjunction with UL1008 device (provided by others)	Dust Cover cannot be combined with DLED kit.		White mounting hardware standard; for black mounting hardware, add "-B" after ceiling type.		Standard row configurations over 8' consist of 4' and 8' luminaires.



# **Product Specifications**

#### Construction

- · Low profile housing
- Integral high reflectance gear tray constructed from die-formed 20 gauge cold rolled steel
- 8-1/2" x 1-1/2" profile

#### **End Caps**

- · Standard endcaps are rounded die cast aluminum
- Mechanically attached flush to end of fixture without exposed fasteners
- End cap adds 1/2" at each end

#### Lengths

- · Available in 4-ft and 8-ft sections
- All sections are modular eliminating the need for starter, joiner and end sections
- Row configurations over 8-ft consist of 4-ft and 8-ft luminaires unless otherwise specified

#### Finish

- Electrostatically applied polyester powder coat paint
- White, silver, or black
- RAL custom colors are available

#### Mountine

- · Aircraft cable mounts on 4'-0" and 8'-0" centers
- Fixture is balanced with cross cable to allow for minimal leveling
- Minimum mounting height from ceiling to top of fixture is 8"
- All sections are continuously wired with push-in connectors for fast installation
- · Fixtures can be joined for straight continuous runs

#### **Shielding / Optics**

 Bottom lens is a high light transmission 0.08" thick frosted acrylic material.

#### **LED and Light Engine**

- · LED's are available in 3000K, 3500K or 4000K
- CRI options of either ≥80CRI or ≥90CRI
- Lumen output will be affected refer to lumen adjustment factor table

## **Integrated Controls**

- Cooper Lighting Solutions' Connected Lighting Systems:
  - · WaveLinx sensor
  - · Enlighted sensor
  - · Fifth Light DALI driver
- Refer to the Connected Lighting options page and ordering information for more details

#### **Emergency Options**

- Optional 120V-277V integral emergency battery pack is 12W maximum, 90 minute output, and powers a 4-foot section
- Test switch/indicator button located on the top side of the luminaire
- For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack (100 lm/W x 12 = 1200 lumens)
- The combination of integrated sensor and emergency circuit options require an EPC UL924 bypass relay that disables sensor control of emergency sections when normal power is lost

#### **Electrical**

- · Long-Life LED system
- Integral electronic drivers to deliver optimal performance
- Standard with 120-277V 0-10V dimming drivers (1% standard)
- · 347V 0-10V drivers are available
- Dimming wires come standard, can be capped in the field for standard switched operation
- Single power feed drop supplied as standard

#### **Lumen Maintenance**

 Projected lumen maintenance based on TM-21 standards is L93 > 60,000 hours at 25°C ambient conditions

#### Weight

· 3.5 lbs per foot

#### Compliance

- UL recognized components and indoor luminaires are cULus - 1598 only , 25°C ambient environments
- · damp location listed
- · RoHS compliant
- Tested according to IESNA LM-79 and LM-80 procedures
- DesignLights Consortium® Qualified and classified for DLC Standard and DLC Premium (refer to www. designlights.org)

#### Warranty

 Five year warranty standard www.cooperlighting.com/legal



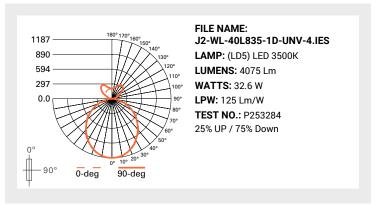
# **Quick-Tab Alignment**

Corelite's patented quick-tab alignment system creates a seamless and simple installation every time. Simply align the tabs into the corresponding slots. The fixture can then hang freely while a single contractor makes the final connections; it all slides back together and is securely fastened in place.



# **Photometric Data**





Note: Refer to IES files for more product data.

# **Energy and Performance Data**

	J2 LED Light Level Outputs and Distributions (3500K, 80 CRI)							
		Delivered	Delivered Lumens		tage		Distribution	
Series	Lumen Package	4FT	Per FT	4FT	Per FT	Efficacy LPW	% Up	% Down
	20L	1977	494	14.9	3.7	133	25%	
10.14/1	30L	3012	753	23.1	5.8	130		75%
J2-WL	40L	4075	1019	32.6	8.2	125		
	50L	4961	1240	42.9	10.7	116		
	20L	1820	455	14.9	3.7	122	13%	
J2-WL	30L	2773	693	23.1	5.8	120		87%
w/ DLED	40L	3752	938	32.6	8.2	115		
	50L	4567	1142	42.9	10.7	106		

## Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (Hours)
25°C	>93%	331,000

## **Lumen Adjustment Factors**

CCT	80 CRI	90 CRI
3000K	0.961	0.830
3500K	1.000	0.861
4000K	1.019	0.883

Example Calculation: 40L / 3500K / 80 CRI Lumen Output selected = 1019 lms/ft

3500K / 90 CRI Desired Lumen Adjustment Factor = 0.861

Adjusted Lumen Output = 1019 lms/ft x 0.861 = 877 lms/ft

## Color Data (3500K)

		80CRI	90CRI
	R <sub>f</sub>	82.5	92.4
TM-30-15	R <sub>g</sub>	96.0	100.6
CRI/CIE	R <sub>a</sub>	83.1	96.1
	R <sub>9</sub>	14.0	72.1

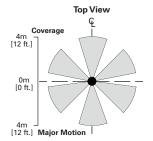


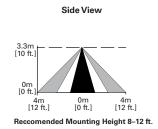
# **Jaylum Linear Suspended - J2**

# Control Systems

- · WaveLinx Wireless
- · WaveLinx Wired
- WaveLinx Lite
- Enlighted
- · iLumin Plus
- VividTune







The Jaylum (J2) with Integrated Sensor technology provides automatic energy savings without sacrificing performance. The Jaylum (J2) delivers superior lighting with integrated occupancy and daylighting controls. For standalone and controlled applications, the WaveLinx Lite integral sensor provides out-of-the-box functionality with no gateways required and factory startup is not needed. When more connectivity is required, the WaveLinx Wireless sensor meets modern code and utility requirements, delivers energy and cost savings, while enabling buildings to become smart buildings. The WaveLinx Wireless Connected Lighting System combined with Trellix provides an open IoT platform and infrastructure that connects intelligent sensors leveraging the real-estate of the physical light fixture to solve higher complexity problems to deliver actionable insights through the aggregation of valuable data.

For additional information integrated sensors and connected lighting, please visit Cooper Lighting Solutions' Connected Lighting Website.



# **Sensor Integration**

Integrated sensors are located at the end of each 4' unit and in the middle of each 8' unit for individual and continuous runs. Each unit can be individually controllable or grouped together with the integrated sensors.

# Systems comparison chart

Cooper Lighting Solutions provides many lighting system solutions designed to satisfy code requirements and meet the unique needs of any project.









		_		
	Standalone	<b>Controlled</b> WaveLinx Lite	<b>Connected</b> WaveLinx Wireless	Enterprise Trellix
Occupancy	Yes	Yes	Yes	Yes
Daylighting	Yes	Yes	Yes	Yes
Gateways	_	-	1 WAC	300 WACs
Devices	_	50 per Area (1400 per site)	150 per WAC	45,000 per Core Enterprise
Software	_	WaveLinx Lite Mobile App	WaveLinx Mobile App	Trellix Core
Areas	_	28 per Site	16 per WAC	up to 4,800
Zones	_	16 per Area	16 per Area	up to 76,800
Scheduling	-	-	Local	Global
VividTune™	_	-	Yes	Yes
Plug-Load Contro	ol –	-	Yes	Yes
Integration	-	-	-	BACnet, API
Dashboards	_	-	-	Energy, Occupancy
Configuration	-	Installer	Technician	Technician / IT

# SCALABILITY







## Jaylum (J2) with VividTune Tunable White

VividTune tunable white luminaires from Cooper Lighting Solutions deliver high-quality light in a broad range of continuously variable color temperatures and intensities. Create a dynamic environment by adjusting the ambient light warmer or cooler to influence mood, support the task at hand, or create a dramatic ambience. The ability to control correlated color temperature and intensity separately using simple controls is the next evolution of LED lighting for the commercial, educational, healthcare and hospitality space. The unparalleled flexibility and number of available lighting environments enable users to find the right light with tunable white.

## **Performance Data**

Tunable White - J2 LED Light Level Outputs (3500K, 80 CRI)							
Series		Delivered	d Lumens	Wattage		F46	
	Lumen Package	4FT	Per FT	4FT	Per FT	Efficacy LPW	
J2-WL	20L	2043	511	17	4.3	120	
	30L	2974	744	25.8	6.5	115	
	40L	3959	990	36.7	9.2	108	
	50L	5009	1252	50.7	12.7	99	
J2-WL w/ DLED	20L	1881	470	17	4.3	111	
	30L	2739	685	25.8	6.5	106	
	40L	3645	911	36.7	9.2	99	
	50L	4612	1153	50.7	12.7	91	

# Black Body Locus ANSI C78.377-2017 Quadrangles

3000K - 5000K 2700K - 6500K

Tunable White - Lumen Adjustment Factors						
007	3000K	-5000K	2700K-6500K			
ССТ	80 CRI	90 CRI	80 CRI	90 CRI		
2700K	-	-	0.918	0.784		
3000K	0.946	0.778	0.944	0.815		
3500K	1.000	0.850	0.977	0.856		
4000K	1.053	0.919	0.998	0.883		
4500K	1.062	0.934	1.016	0.916		
5000K	1.062	0.934	1.03	0.924		
6500K	-	-	1.045	0.949		

# **Controlling VividTune Tunable White**

VividTune luminaires make tunable white more accessible by using simple and familiar controls. From wall dimmers to wireless controls, VividTune tunable white luminaires are compatible with industry standard 0-10V dimming controls. A single 0-10V dimming input is used to control intensity (brightness) while a second 0-10V dimming input is used to adjust CCT. For suggested control configurations, go to <a href="https://www.cooperlighting.com">www.cooperlighting.com</a> for tunable white application guides.

warm 2700K		CCT 0-10V	cool 6500K
10%	Intensity 0-10V	_	100%

## Example of Lumen Adjustment Calculation

J2-WL-40L93050 ... at 90 CRI tuned to 4000K

Lumen Adjustment Factor = 0.919

Light Output Per Foot= 990 lm/ft x 0.919 = 910 lm/ft

Efficacy = 
$$\frac{910 \text{ lm}}{9.2 \text{ W}}$$
 = 99 lm/W

