Project	Catalog #	Туре	
Prepared by	Notes	Date	



# **Metalux**

# **Accord 22AC LED**

2' x 2' Specification Grade LED Troffer

**Typical Applications** 

Office • Education • Healthcare • Retail

# Interactive Menu

- Order Information page 2
- Photometric Data page 3
- Control Solutions page 5
- Product Warranty

# **Product Certification**













# **Product Features**









**CLICK HERE** 

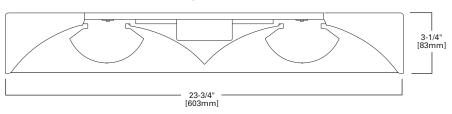




# **Top Product Features**

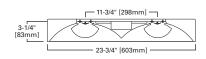
- Available in 1' x 4', 2' x 2' and 2' x 4' recessed & surface versions
- · Advanced optical control
- · High performance efficacy up to 127 lumens per watt
- Over 60% energy savings when compared to fluorescent troffers
- Three CCT options: 3000K, 3500K and 4000K at 85 CRI
- · Options to meet Build America, Buy America, Buy American and other domestic preference requirements

# **Dimensional and Mounting Details**



# 23-3/4 1-1/2" [603mm] 3-3/8" 3-1/16" - 24" [610mm]

NOTE:  $2' \times 2'$  and  $2' \times 4'$  allow for row mounting



# **Ceiling Compatibility**





Ceiling Type**	Trim Type
Exposed Grid	G
Concealed T	G or T
Slot Grid	G or T
Flange	***

# **Order Information**

SAMPLE ORDER NUMBER: 22AC-LD5-34-UNV-L835-CD1-U

Daniel Bulling	Patient	Out				0.44	OLIVE III	W.B.
Domestic Preferences	Rating	Series	Туре	Lamp Type	Lumen	Outputs	Shielding	Voltage
Domestic Preferences (1)	Rating	Series (2)	Туре	Lamp Type	Lumen	Outputs	Shielding	Voltage (5)
[Blank]=Standard BAA=Buy American Act TAA=Trade Agreements Act BABA=Build America Buy America Act	[Blank]=Standard ATW-SW4= Chicago Rated	22AC=2x2 Accord Series	[Blank]=Standard A=Air (vented) (3)	<b>LD5</b> =LED 5.0	<b>Stock Lumen Outputs 23</b> =2300 Lumens <sup>(4)</sup> <b>34</b> =3400 Lumens	MTO Lumen Outputs 20=2000 Lumens <sup>(4)</sup> 27=2700 Lumens 38=3800 Lumens 44=4400 Lumens	[Blank]=Standard Lens	UNV=Universal Voltage 120-277 347V=347 Volt <sup>(6)</sup> 120V=120 Volt <sup>(7)</sup> 277V=277 Volt <sup>(7)</sup>
(1) Only product configurations with these prefixes are built to be compliant with the Buy American Act of 1933 (BAA). Trade Agreements Act of 1937 (TAA), or the Build America Buy America Act (BABA), BABA is the minimum Government compliance requirement for the Build America Buy America standards which is part of the Infrastructure and Investment Jobs Act (IIAA). Individual Government Agencies may have more stringent compliance standards. Please refer to DOMESTIC_PREFERENCES website or consult the CLS. Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.		Notes (2) DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Penium, refer to www.designlights.org for details.	Notes (3) Air versions are not designed for continuous row mount applications. Air version is vented but does not meet air handling requirements.		No (4) 2000 and 2300 lumen opt Step-dim driver.	tes ions are not available with		Notes (5) Products also available in non- US voltages and frequencies for  international markets. (6) 347V  emergency option not available  with emergency options. (7) Must  specify voltage as 120V or 277V  when ordering GTR2 option.

<b>Emergency Options</b>	CCT	Flex	Driver Type
Emergency options	001	I ICA	Dilver Type

Emergency Options	ССТ	Flex	Driver Type
EL7W=7-watt 120V-277V emergency battery pack <sup>(8)</sup> EL10W=10-watt 120V-277V emergency battery pack <sup>(8)</sup> EL14W=14-watt 120V-277V emergency battery pack <sup>(8)</sup> EL10WSD=10W emergency battery pack with self-diagnostic installed <sup>(8), (10)</sup> EL14WSD=14W emergency battery pack with self-diagnostic installed <sup>(8), (10)</sup> ETRD= 120-277V Emergency Transfer Relay with dimming control <sup>(9)</sup>	<b>L830</b> =3000K <b>L835</b> =3500K <b>L840</b> =4000K	A3/8-4/18GDIM=3/8" Flex with 0-10V Dimming Leads See below for details. A3/8-5/18GDIM=Flex with 0-10V Dimming leads and Blue for alternate wiring. See below for details.	CD=0-10V Dimming Driver (1%-100% Dimming) SR=Sensor-ready Dimming Driver (1%-100% Dimming) SLTD=Fifth Light DALI Driver (10%-100% Dimming) (11) (8) SLTHD=Fifth Light Dimming Driver (1%-100% Dimming) (8) SD=Step Dimming Driver (50%-100% Dimming) (12) LH=Lutron HiLume (LDE1 series) 1%-100% EcoSystem Driver with Soft-on Fade to Black dimming (9) L5=Lutron 5 Series (LDE5-Series) 5%-100% EcoSystem Driver (10)
Notes		Flexible Metal Conduit Options	Notes
(8) Factory installed with integral test switch/indicator/laser test. 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 7=700 lumens). IES-format photometry for luminaire under emergency operation available. Battery option increases total height by 1 inch. (9) Used to bypass local control during outage. Must be used in conjunction with UL 1008 device (provided by others). ETRD option only requires one relay when used on a dimming fixture. (10) EL10WSD and EL14WSD not available with 347V.		Flex options available for 0-10V dimming control, DALI dimming control, emergency and night light functions. 72-inch factory-installed and pre-wired to driver, fitted to luminaire housing access plate with 90° enclosed FMC connector. Not all options may be combined and installation ratings vary by type.  A3/8-4/18GDIM series notes: Factory installed dimming option 3/8° flexible metal conduit with 2#18 power and ground wires and 2#18 UL-listed jacketed 0-10V +/-control wires. Meets UL 66, 83, 1479, 1569, 1581, 2556. NEC® 250, 118, 300, 22(C), 392, 396, 330, 501, 502, 503, 530, 504, 505, 518, 520, 530, 645, 72; Federal Specification A-A-59544 (formerly J-C-308); all applicable OSHA and HUD Requirements. UL classified 1, 2, and 3-hour through penetration with applicable fire stop product (not included). May be surface mounted, fished and/or embedded in plaster. Cable tray and approved raceway rated, install per NEC®; Environmental Air-Handling Space Installation per NEC® 300.22(C).	(11) 2000, 2300, 2700 and 3400 lumen options are not available with a Fifth Light "SLTD" and "SLTPD" driver. (12) 22000 and 2300 lumen options are not available with Step-dim driver.  Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (B) Consult Fifth Light system pages for additional details and compatibility. (D) Consult Marketplace Options - Lutron system pages for additional details and compatibility. Optionatible only with driver series shown, and may require two or more drivers. Requires field commissioning to operate or dim. Contact Lutron at www.lutron.com.

Number of Drivers Integrated Sensing Systems		Packaging	Accessories
Number of Drivers	Integrated Sensing Systems	Packaging	Accessories (order separately) (13)
1=1 Driver	[Blank]=No Sensor WPS (formerly WAA)=WaveLinx PRO Wireless Sensor, Occupancy w/ photocell, Networked (A)	U=Unit Pack PALC=Job Pack, in carton	T3A END E.Q. BRACKET PARTS BAG DF-22W-U=2' x 2' Drywall Frame Kit SK-22-WS=2' x 2' Shallow Surface Mount Kit SK-22-WT=2' x 2' Tall Surface Mount Kit
	Notes  Integrated options must be used in conjunction with the associated system and may not be compatible with other options or accessories. Please refer to the following: (A) Consult WaveLinx system pages for additional details and compatibility.		Notes (13) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.



# **Product Specifications**

## Construction

- Shallow 3-1/4" deep housing is die-formed of code gauge, prime cold rolled steel
- Heavy gauge endplates are securely attached with screws for strength and rigidity and the elimination of gaps
- · End plates have integral grid-lock feature for safety and convenience
- · Four auxiliary fixture end suspension points provided
- · Large access plate for supply connection
- · Driver can be accessed from below without tools.

## **Integrated Controls**

- 0-10V dimming to 1% standard
- · Integrated WaveLinx options provide wireless individual fixture control and enable code compliance, increased energy savings, grouping of fixtures, and connection to WaveLinx control systems
- · DALI 2.0, Lutron, and step-dimming available

## **Electrical**

- LED's available in 3000K, 3500K or 4000K with a minimum CRI of 80
- Color accuracy ≤3-Step MacAdam ellipse (SDCM)
- · Projected life is 60,000 hours at 89% lumen output
- · Electronic drivers available for 120-277V and 347V applications

## **Emergency Battery Options**

- · 120V-277V integral emergency battery pack comes in 7-watts, 10-watt, or 14-watts
- Self-diagnostic emergency battery available in 10 or 14-watts (NFPA 101® Life Safety Code®)
- Constant power to the LED system for controlled, predictable discharge
- Integrated test switch/indicator light visible from floor
- · Min. 90-minute backup period for code compliance
- · Integral emergency transfer relay available for generator equipped power systems

- · Multistage, iron phosphate pretreatment ensure maximum bonding and rust inhibition
- · White enamel finish

### Reflectors

· High reflectance baked matte white enamel finish for luminous uniformity

## **Shielding**

· Positively retained frosted acrylic profile lenses provide a soft but effective distribution of light

## Compliance

- · Modules are UL recognized components
- · Indoor luminaires are cULus listed for 25°C ambient environments
- · Complies with IESNA LM-79
- · LEDs compliant with LM-80 standards
- DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.

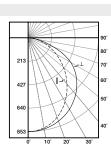
## **BABA Domestic Preference Compliance**

· FHWA and FTA agencies are utilizing their BAA rules for BABA compliance. Cooper's products with a BAA designation are manufactured in the US and utilize a BAA COTS exemption rule for compliance. To verify a configured product with specific accessories and options meet BABA Domestic Preference Requirements; submit this catalog number to Cooper Lighting Quotation team for validation by our Engineering and Manufacturing teams. Please refer to the **DOMESTIC PREFERENCES** website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

## **Limited Warranty**

· Five-year limited warranty standard. Optional ten year limited warranty available.

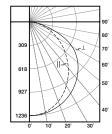
# Photometric Data



## 22AC-LD5-23-UNVL835-CD1-U

**Electronic Driver** Linear LED 3500K Spacing criterion: (II) 1.18 x mounting height, ( $\perp$ ) 1.31 x mounting height Lumens: 2392 Input Watts: 19.5W Efficacy: 122.7 LPW

Test Report: 22AC-LD5-23-UNVL835-CD1-U.IES



## 22AC-LD5-34-UNVL835-CD1-U

**Electronic Driver** Linear LED 3500K Spacing criterion: (II) 1.18 x mounting height, ( $\perp$ ) 1.31 x mounting height Lumens: 3466 Input Watts: 30.2W Efficacy: 114.8 LPW Test Report: 22AC-LD5-34-UNVL835-CD1-U.IES



**View IES files** 

# **Energy and Performance Data**

Stock or MTO	Catalog Logic (Curved)	Delivered Lumens	Watts	Efficacy (LPW)
МТО	22AC-LD5-20-UNV-L830-CD1-U	1997	16.7	119
МТО	22AC-LD5-20-UNV-L835-CD1-U	2076	16.7	124
МТО	22AC-LD5-20-UNV-L840-CD1-U	2118	16.7	127
МТО	22AC-LD5-23-UNV-L830-CD1-U	2301	19.5	118
Stock	22AC-LD5-23-UNV-L835-CD1-U	2392	19.5	123
Stock	22AC-LD5-23-UNV-L840-CD1-U	2440	19.5	125
МТО	22AC-LD5-27-UNV-L830-CD1-U	2599	22.4	116
МТО	22AC-LD5-27-UNV-L835-CD1-U	2702	22.4	121
МТО	22AC-LD5-27-UNV-L840-CD1-U	2756	22.4	123
МТО	22AC-LD5-34-UNV-L830-CD1-U	3334	30.2	110
Stock	22AC-LD5-34-UNV-L835-CD1-U	3466	30.2	115
Stock	22AC-LD5-34-UNV-L840-CD1-U	3535	30.2	117
МТО	22AC-LD5-38-UNV-L830-CD1-U	3681	34.3	107
МТО	22AC-LD5-38-UNV-L835-CD1-U	3827	34.3	112
МТО	22AC-LD5-38-UNV-L840-CD1-U	3904	34.3	114
МТО	22AC-LD5-44-UNV-L830-CD1-U	4270	42.3	101
МТО	22AC-LD5-44-UNV-L835-CD1-U	4439	42.3	105
МТО	22AC-LD5-44-UNV-L840-CD1-U	4528	42.3	107

# **Lumen Maintenance**

Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours) (1)	Theoretical L70 (Hours) <sup>(2)</sup>
25°C	> 89%	> 178,000

Notes: (1) Supported by IES TM-21 standards. (2) Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, that explains proper use of IES TM-21 and LM-80.

# **Shipping Data**

Catalog No.	Wt.
22AC-LD5-23	14 lbs.
22AC-LD5-34	14 lbs.



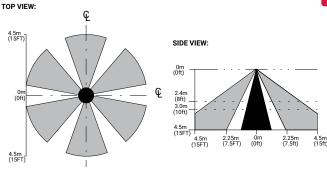


# Control Solutions

- · WaveLinx LITE wireless
- · WaveLinx PRO wireless
- WaveLinx CAT wired
- WaveLinx Wired



## Integrated Sensor Coverage Pattern



Note: Installation of integrated sensors within 3-ft (1m) of HVAC air vents is not recommended. The pattern shown is intended solely as a general guide and is not to scale.

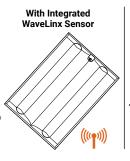
The Accord LED with WaveLinx offers no-hassle lighting control with multiple luminaire level control solutions.



WaveLinx PRO is a wireless lighting control solution, for connected spaces, that significantly reduces a building's energy consumption. From a single floor to an entire campus, WaveLinx PRO connects more than lighting assets; it shares aggregated sensor data with the WaveLinx CORE platform and other building systems, so building owners can improve operations, spaces environment, and tenants' experience. WaveLinx PRO offers a rich portfolio of wireless devices, WaveLinx PRO-enabled luminaires, and an intuitive WaveLinx mobile app for office, education, warehouse, and parking garage applications.



WaveLinx LITE is a cost effective, wireless digital lighting control solution, with out-of-the-box functionality, that saves energy and meets code. It's designed for applications that require occupancy-based, daylighting, or manual light control. Customize installations for office, education, warehouse and parking garages using the secure, simple mobile app.





node (WPN, WLN) to your space lighting design!

### Allows to:

- Keeps luminaire aesthetics
- · Connect fixtures without the realestate to include sensor option such as downlights
- · Connect sealed fixtures without a standard sensor option such as products for clinical space.

Integrated Controls Options							
Option	Out of the Box Functionality	Luminaire Level Lighting Control (LLLC)	Automatic Dimming Photocell	Occupancy Sensing	CCT Control		
WLS	x	x	Х	Х			
WLN		х					
WPS		х	Х	Х	х		
WPN		х			х		

Note: WaveLinx utilizes scenes to allow users to change an area's fixtures Correlated Color Temperature (CCT) and intensity using commissioned manual wireless wallstation scene control. To enable CCT adjustments through WaveLinx, include WPS or WPN devices in addition to VividTune or BioUp technologies for integrated fixture control.

# Systems comparison chart

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













•					
	Luminaire with standalone sensor	Standalone Spaces WaveLinx LITE	Standalone Spaces WaveLinx CAT	Networked Spaces WaveLinx PRO	Enterprise WaveLinx CORE
Occupancy	Yes	Yes	Yes	Yes	Yes
Daylighting	Yes	Yes	Yes	Yes	Yes
Wallstations	-	Yes	Yes	Yes	Yes
Gateways	-	-	-	1 WAC	300 WACs
Devices (MAX)	_	40 per Area (1120 per space)	40 per Area	200 per WAC2	32,500 per CORE Enterprise
Software	-	WaveLinx LITE Mobile App	WaveLinx CAT Mobile App	WaveLinx Mobile App	CORE
Areas	_	28 per Space	Unlimited	50 per WAC2	up to 3,000
Zones	-	16 per Area	16 per Area	16 per Area	up to 9,000
Scheduling	-	-	-	Local	Global
VividTune™	-	-	-	Yes	Yes
Plug-Load Contro	I -	Yes	Yes	Yes	Yes
Low-Voltage Pow	er –	-	Yes	Yes	Yes
Integration	-	-	-	_	BACnet, API
Dashboards	-	-	-	-	Energy, Occupancy
Configuration	-	Installer	Installer	Technician	Technician / IT

subject to change without notice.

Cooper Lighting Solutions