

Project		Catalog #		Type	
Prepared by		Notes		Date	



# Metalux

## Accord 22AC LED

2' x 2' Specification Grade LED Troffer

### Typical Applications

Office • Education • Healthcare • Retail

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- Control Solutions [page 4](#)
- Product Warranty

### Product Certification



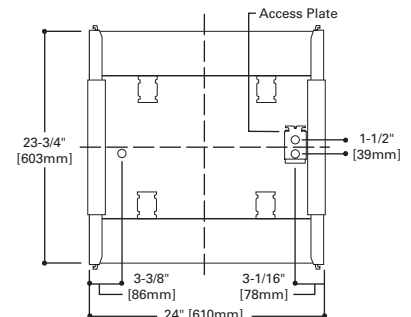
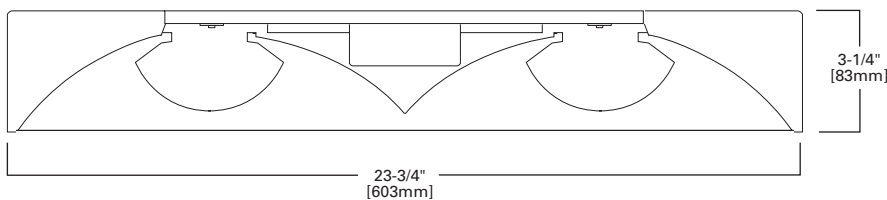
### Product Features



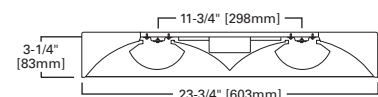
### Top Product Features

- 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 Buy American and other domestic preference requirements

### Dimensional and Mounting Details



**NOTE:** 2' x 2' and 2' x 4' allow for row mounting



### Ceiling Compatibility

G Grid/Lay-in Standard	F Drywall Frame Kit	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**

Domestic Preferences	Rating	Series	Type	Lamp Type	Lumen Outputs	Shielding	Voltage	
Domestic Preferences <sup>(1)</sup>	Rating	Series <sup>(2)</sup>	Type	Lamp Type	Lumen Outputs	Shielding	Voltage <sup>(5)</sup>	
<b>[Blank]</b> =Standard <b>BAA</b> =Buy American Act <b>TAA</b> =Trade Agreements Act	<b>[Blank]</b> =Standard <b>ATW-SW4</b> = Chicago Rated	<b>22AC</b> =2x2 Accord Series	<b>[Blank]</b> =Standard <b>A</b> =Air (vented) <sup>(3)</sup>	<b>LD5</b> =LED 5.0	<b>Stock Lumen Outputs.</b> <b>23</b> =2300 Lumens <sup>(4)</sup> <b>34</b> =3400 Lumens	<b>MTO Lumen Outputs.</b> <b>20</b> =2000 Lumens <sup>(4)</sup> <b>27</b> =2700 Lumens <b>38</b> =3800 Lumens <b>44</b> =4400 Lumens	<b>[Blank]</b> =Standard Lens	<b>UNV</b> =Universal Voltage 120-277 <b>347V</b> =347 Volt <sup>(6)</sup> <b>120V</b> =120 Volt <sup>(7)</sup> <b>277V</b> =277 Volt <sup>(7)</sup>
<b>Notes</b> <sup>(1)</sup> Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1919 (TAA), respectively. Please refer to <a href="#">DOMESTIC PREFERENCES</a> website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.		<b>Notes</b> <sup>(2)</sup> DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to <a href="#">www.designlights.org</a> for details.	<b>Notes</b> <sup>(3)</sup> Air versions are not designed for continuous row mount applications. Air version is vented but does not meet air handling requirements.		<b>Notes</b> <sup>(4)</sup> 2000 and 2300 lumen options are not available with Step-dim driver.		<b>Notes</b> <sup>(5)</sup> Products also available in non-US voltages and frequencies for international markets. <sup>(6)</sup> 347V emergency option not available with emergency options. <sup>(7)</sup> Must specify voltage as 120V or 277V when ordering GTR2 option.	

Emergency Options	CCT	Flex	Driver Type
Emergency Options	CCT	Flex	Driver Type
<b>EL7W</b> =7-watt 120V-277V emergency battery pack <sup>(8)</sup> <b>EL10W</b> =10-watt 120V-277V emergency battery pack <sup>(8)</sup> <b>EL14W</b> =14-watt 120V-277V emergency battery pack <sup>(8)</sup> <b>EL10WSD</b> =10W emergency battery pack with self-diagnostic installed <sup>(8),(10)</sup> <b>EL14WSD</b> =14W emergency battery pack with self-diagnostic installed <sup>(8),(10)</sup> <b>ETRD</b> = 120-277V Emergency Transfer Relay with dimming control <sup>(9)</sup>	<b>L830</b> =3000K <b>L835</b> =3500K <b>L840</b> =4000K	<b>A3/8-4/18GDIM</b> =3/8" Flex with 0-10V Dimming Leads See below for details. <b>A3/8-5/18GDIM</b> =Flex with 0-10V Dimming leads and Blue for alternate wiring. See below for details.	<b>CD</b> =0-10V Dimming Driver (1%-100% Dimming) <b>SR</b> =Sensor-ready Dimming Driver (1%-100% Dimming) <b>5LTD</b> =Fifth Light DALI Driver (10%-100% Dimming) <sup>(11),(8)</sup> <b>5LTHD</b> =Fifth Light Dimming Driver (1%-100% Dimming) <sup>(8)</sup> <b>SD</b> =Step Dimming Driver (50%-100% Dimming) <sup>(12)</sup> <b>LH</b> =Lutron HiLume (LDE1 series) 1%-100% EcoSystem Driver with Soft-on Fade to Black dimming <sup>(6)</sup> <b>L5</b> =Lutron 5 Series (LDE5-Series) 5%-100% EcoSystem Driver <sup>(6)</sup>
<b>Notes</b> <sup>(8)</sup> 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. <sup>(9)</sup> 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. <sup>(10)</sup> EL10WSD and EL14WSD not available with 347V.		<b>Flexible Metal Conduit Options</b> 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. <b>A3/8-4/18GDIM series notes:</b> 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-30B); 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).	<b>Notes</b> <sup>(11)</sup> 2000, 2300, 2700 and 3400 lumen options are not available with a Fifth Light "5LTD" and "5LTHD" driver. <sup>(12)</sup> 22000 and 23000 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. Compatible only with driver series shown, and may require two or more drivers. Requires field commissioning to operate or dim. Contact Lutron at <a href="#">www.lutron.com</a> .

Number of Drivers	Integrated Sensing Systems	Packaging	Accessories
Number of Drivers	Integrated Sensing Systems	Packaging	Accessories (order separately) <sup>(13)</sup>
1=1 Driver	<b>[Blank]</b> =No Sensor <b>WPS (formerly WAA)</b> =WaveLinX PRO Wireless Sensor, Occupancy w/ photocell, Networked <sup>(A)</sup>	<b>U</b> =Unit Pack <b>PALC</b> =Job Pack, in carton	<b>T3A END E.Q. BRACKET PARTS BAG</b> <b>DF-22W-U</b> =2' x 2' Drywall Frame Kit <b>SK-22-WS</b> =2' x 2' Shallow Surface Mount Kit <b>SK-22-WT</b> =2' x 2' Tall Surface Mount Kit
	<b>Notes</b> 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.		<b>Notes</b> <sup>(13)</sup> 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  $\leq 3$ -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

### Finish

- 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

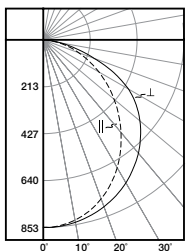
- Modules are UL recognized components
- Indoor luminaires are cULus listed for 25°C ambient environments
- Complies with IESNA LM-79
- LEDs compliant with LM-80 standards
- DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.

### Limited Warranty

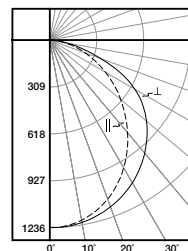
- Five-year limited warranty standard. Optional ten year limited warranty available.

## Photometric Data

[View IES files](#)



**22AC-LD5-23-UNVL835-CD1-U**  
 Electronic Driver  
 Linear LED 3500K  
 Spacing criterion: (II) 1.18 x mounting height,  
 (L) 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,  
 (L) 1.31 x mounting height  
 Lumens: 3466  
 Input Watts: 30.2W  
 Efficacy: 114.8 LPW  
 Test Report: 22AC-LD5-34-UNVL835-CD1-U.IES

## Energy and Performance Data

Stock or MTO	Catalog Logic (Curved)	Delivered Lumens	Watts	Efficacy (LPW)
MTO	22AC-LD5-20-UNV-L830-CD1-U	1997	16.7	119
MTO	22AC-LD5-20-UNV-L835-CD1-U	2076	16.7	124
MTO	22AC-LD5-20-UNV-L840-CD1-U	2118	16.7	127
MTO	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
MTO	22AC-LD5-27-UNV-L830-CD1-U	2599	22.4	116
MTO	22AC-LD5-27-UNV-L835-CD1-U	2702	22.4	121
MTO	22AC-LD5-27-UNV-L840-CD1-U	2756	22.4	123
MTO	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
MTO	22AC-LD5-38-UNV-L830-CD1-U	3681	34.3	107
MTO	22AC-LD5-38-UNV-L835-CD1-U	3827	34.3	112
MTO	22AC-LD5-38-UNV-L840-CD1-U	3904	34.3	114
MTO	22AC-LD5-44-UNV-L830-CD1-U	4270	42.3	101
MTO	22AC-LD5-44-UNV-L835-CD1-U	4439	42.3	105
MTO	22AC-LD5-44-UNV-L840-CD1-U	4528	42.3	107

### Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours) <sup>(1)</sup>	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



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



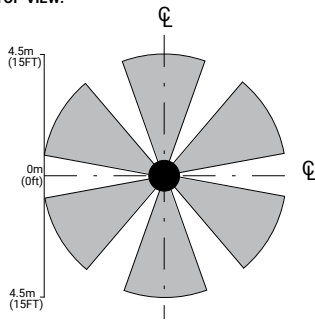
**WaveLinX PRO** is a wireless lighting control solution, for connected spaces, that significantly reduces a building's energy consumption. From a single floor to an entire campus, WaveLinX PRO connects more than lighting assets; it shares aggregated sensor data with the WaveLinX CORE platform and other 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.



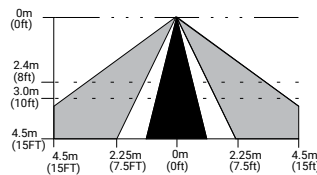
**WaveLinX LITE** is a cost effective, wireless digital lighting control solution, with out-of-the-box functionality, that saves energy and meets code. It's designed for applications that require occupancy-based, daylighting, or manual light control. Customize installations for office, education, warehouse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

### Integrated Sensor Coverage Pattern

TOP VIEW:

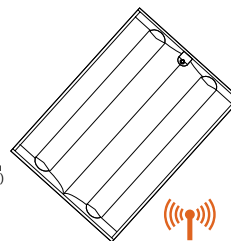


SIDE VIEW:

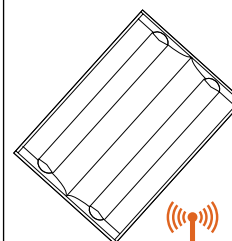


**Note:** Installation of integrated sensors within 3-ft (1m) of HVAC air vents is not recommended. The pattern shown is intended solely as a general guide and is not to scale.

With Integrated WaveLinX Sensor



With Integrated WaveLinX Node



Add a hidden WaveLinX sensor node (WPN, WLN) to your space lighting design!

**Allows to:**

- Keeps luminaire aesthetics
- Connect fixtures without the realstate 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 (LLC)	Automatic Dimming Photocell	Occupancy Sensing	CCT Control
WLS	X	X	X	X	
WLN		X			
WPS		X	X	X	X
WPN		X			X

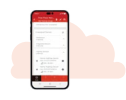
**Note:** WaveLinX utilizes scenes to allow users to change an area's fixtures Correlated Color Temperature (CCT) and intensity using commissioned manual wireless wallstation scene control. To enable CCT adjustments through WaveLinX, include WPS or WPN devices in addition to VividTune or BioUp technologies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

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