# Metalux

### DESCRIPTION

The Accord™ redefines lighting by improving on aesthetics, comfort and energy savings. The Accord provides the right amount of light while eliminating surface shadows commonly found in parabolics. Therefore, Accord increases the comfort level while providing significant energy savings.

The Accord is the ideal solution for offices, schools, hospitals, retail and other applications. It is designed for installations when the housing will be in direct contact with insulation.

Catalog #	Туре
Project	
Comments	Date
Prepared by	

### SPECIFICATION FEATURES

### Construction

Shallow 3-1/4" deep housing is die formed of code gauge, prime cold rolled steel. Heavy gauge end plates 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 are provided. KOs for continuous row wiring. Large access plate for supply connection.

### Controls

Metalux LED luminaires come standard with 0-10V dimming drivers (1% standard).

Options compatible with Eaton's Connected Lighting Systems:

- WaveLinx sensor
- LumaWatt Pro sensor
- SVPD sensor
- DLVP sensor and driver
- Fifth Light DALI driver

Other options include stepdimming and 3rd party drivers. Refer to the Connected Lighting options page and ordering information for more details.

### Electrical

Long-Life LED system coupled with electrical driver to deliver optimal performance. LED's available in 3000K, 3500K or 4000K with a minimum CRI of 80. Projected life is 60,000 hours at 89% lumen output. Electronic drivers are available for 120-277V and 347V applications.

## **Emergency Battery Pack Option**

Optional 120V-277V integral emergency battery pack is available in 7-watts or 14-watts to meet critical life-safety lighting requirements. The 90-minute batteries provide constant power to the LED system, ensuring code-compliance. A test switch/ indicator button can be tested safely from the ground using a laser pointer, while the patented EZ Key prevents accidental discharge of the battery during construction. Emergency/generator transfer options available - see ordering information for details.

### **Driver Access**

Driver can be accessed from below without tools.

### Finish

Durable cold rolled steel with multistage, iron phosphate pretreatment and white enamel finish to ensure maximum bonding and rust inhibition.

### Reflectors

Reflector has 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 and indoor luminaires are cULus listed for 25°C ambient environments, RoHS compliant, and LED modules comply with IESNA LM-79 and LM-80 standards. DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.

### Warranty

Five year warranty.



22AC

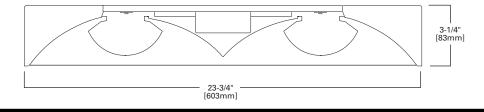
2' X 2' TROFFER LED MODULE

Specification Grade Troffer





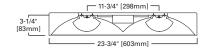




# 23-3/4" [603mm] 3-3/8" [78mm] [78mm] 24" [610mm]

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

### LAMP CONFIGURATIONS



### **CEILING COMPATIBILITY**

G	F	Ceiling	Trim
Grid/Lay-in	Drywall Frame	Type**	Type
Standard	Kit	Exposed Grid	G
	п——	Concealed T	G or T
		Slot Grid	G or T
		Flange	***

### CERTIFICATION DATA

cULus - 1598
Damp Location Listed
IC Rated
LM79/LM80 Compliant
ROHS Compliant
DesignLights Consortium® Qualified

\*\*\*See Drywall Frame Kit Accessory



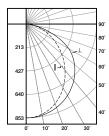






**MOUNTING DATA** 

### **PHOTOMETRICS**



### 22AC-LD5-23-UNV- Candlepower L835-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 lm/W Test Report:

22AC-LD5-23-UNV-

L835-CD1-U.IES

Angle	Along II	45°	Across ⊥
0	852	852	852
5	848	846	851
10	832	833	842
15	806	813	827
20	769	785	807
25	724	750	782
30	672	709	751
35	613	661	713
40	550	611	673
45	485	556	625
50	420	497	574
55	357	438	516
60	293	376	448
65	230	313	356
70	173	245	247
75	119	169	157
80	68	94	86
85	26	31	31
90	0	0	0

# Coefficients of Utilization

	Effe	ectiv	e floc	or cav	ity ref	ecta	nce	20	%									
rc		8	0%			7	0%			509	%		30%	6		10%	, D	0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
- 5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

### Zonal Lumen Summary

Zone	Lumens	% Fixture	
0-30	657	27.5	
0-40	1071	44.8	
0-60	1891	79.1	
0-90	2392	100.0	
0-180	2392	100.0	

### Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	1846	2116	2379
55	1675	2055	2421
65	1465	1993	2267
75	1237	1757	1632
85	803	957	957

### 22AC-LD5-34-UNV-L835-CD1-U

**Electronic Driver** Linear LED 3500K Spacing criterion: (II) 1.18 x mounting height, (⊥) 1.31 x mounting height Lumens: 3466 Input Watts: 30.2W

Efficacy: 114.8 lm/W Test Report: 22AC-LD5-34-UNV-L835-CD1-U.IES

Cand	Candlepower								
Angle	Along II	45°							
0	1234	1234							
5	1229	1230							
10	1206	1207							

Angle	Along II	45°	$\textbf{Across} \perp$
)	1234	1234	1234
5	1229	1230	1236
10	1206	1207	1220
15	1167	1176	1198
20	1115	1137	1169
25	1049	1086	1132
30	972	1026	1087
35	888	958	1033
10	797	883	973
<b>1</b> 5	703	805	906
50	610	721	832
55	517	636	748
50	424	545	647
<b>3</b> 5	335	455	518
70	253	355	359
75	173	241	226
30	100	134	124
35	39	44	45
an	0	0	0

### Coefficients of Utilization

	Effe	ectiv	e floc	or cav	ity ref	lecta	nce	20	%									
rc		8	0%			7	0%			509	%		30%	6		10%	6	0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

### Zonal Lumen Summary

Zone	Lumens	% Fixture
0-30	951	27.4
0-40	1551	44.8
0-60	2740	79.0
0-90	3466	100.0
0-180	3466	100.0

### Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
45	2675	3064	3448
55	2426	2984	3509
65	2133	2897	3298
75	1799	2506	2350
85	1204	1359	1389

# **LUMEN MAINTENANCE**

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

## **ENERGY AND PERFORMANCE DATA BY CATALOG NUMBER**

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
МТО	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
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
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

<sup>\*</sup>Made to order (MTO) requires a typical three week lead time.



### ORDERING INFORMATION

SAMPLE NUMBER: 22AC-LD5-34-UNV-L835-CD1-U Rating Shielding Lamp Type LD5=LED 5.0 [Blank]=Standard Lens [Blank]= SQP=Lens with Square Standard ATW-SW4= Stock Lumen Outputs Pattern Insert Chicago 23=2300 Lumens RDP=Lens with Round 34=3400 Lumens Pattern Insert Rated MTO Lumen Outputs Series (8) Voltage (1) 20=2000 Lumens ( 22AC=2' x 2' Accord UNV=Universal Voltage 120-277 27=2700 Lumens (6) Series 347V=347 Volt (5) **38**=3800 Lumens 48V=48 Volt Low-voltage (Class 2) (C) 44=4400 Lumens [Blank]=Standard Options A=Air(vented) (3 Emergency EL7W=7-watt, 120V-277V emergency battery pack installed (2) EL14W=14-watt 120V-277V emergency

**Driver Type** 

CD=0-10V Dimming Driver (1%-100% Dimming)

SR=Sensor-ready Dimming Driver

for LWIPD1 option

(1%-100% Dimming) (B) **5LTD**=Fifth Light DALI Driver

(10%-100% Dimming) (4), (E) 5LTHD=Fifth Light Dimming Driver

(1%-100% Dimming) (E) **LV1**=DLVP Dimming Driver
(0%-100% Dimming) (C)

SD=Step Dimming Driver (50% or 100% Dimming) (6)

LH=Lutron HiLume (LDE1 series) 1%-100% EcoSystem Driver with Soft-on Fade to Black dimming (F)

L5=Lutron 5 Series (LDE5-Series) 5%-100% EcoSystem Driver (F)
LU=Lutron HiLume (L3D series) 1%-100% EcoSystem/3-wire Driver (F)

**Number of Drivers** 

1=1 Driver

Integrated Sensing Systems SWPD1=WaveLinx Wireless Integrated Sensor (A) LWIPD1=LumaWatt Pro Wireless Integrated Sensor (B) **LWTPD1**=LumaWatt Pro Wireless Tile-mount Sensor (B) **SLVPD1**=DLVP Low-voltage Integrated Sensor (C) SVPD1=0-10V Stand-alone Integrated Sensor (D)



Packaging U=Unit Pack PALC=Job Pack, in carton

### ACCESSORIES

battery pack installed (2)

dimming control (7) <u>Lamps</u> L830=3000K 1835=3500K **L840**=4000K Flex

ELV7W=7-watt, DLVP-compatible low voltage emergency battery pack installed <sup>(C)</sup> **ELV14W**=14-watt DLVP-compatible low voltage emergency battery pack installed (C) GTR2=Bodine Generator Transfer Relay (7) **ETR2**=lota Emergency Transfer Relay <sup>(7)</sup> **ETRD**=lota Emergency Transfer Relay with

T3A END E.Q. BRACKET PARTS BAG DF-22-W=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 DF10P-C\_=Decorator Dimmer, 0-10V SF10P-\_=Decorator Dimmer, 0-10V

A3/8-4/18GDIM=3/8" Flex with 0-10V Dimming Leads Multiple other configurations available. See below for details.

NOTES: <sup>(1)</sup>Products also available in non-US voltages and frequencies for international markets. <sup>(2)</sup>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 Im/W x 7=700 lumens). IES-format photometry for luminaire under emergency operation available. <sup>(8)</sup>Air versions are not designed for continuous row mount applications. Air version is vented but does not meet air handling requirements. <sup>(4)</sup>2000, 2300, 2700 and 3400 lumen options are not available with a Fifth Light "SLTD" and "SLTHD" driver. <sup>(9)</sup>247V emergency option not available. <sup>(8)</sup>2000, 2300, 2700 and 3400 lumen options are not available with between the continuous row in the continuous row mount applications. <sup>(8)</sup>2000, 2300, 2700 and 3400 lumen options are not available with a Fifth Light "SLTD" and "SLTHD" driver. <sup>(9)</sup>247V emergency option not available with a Fifth Light "SLTD" and "SLTHD" driver. <sup>(9)</sup>247V emergency option not available with a Fifth Light "SLTD" and "SLTHD" driver. <sup>(9)</sup>247V emergency option not available with a Fifth Light "SLTD" and "SLTHD" driver. <sup>(9)</sup>247V emergency option not available with a Fifth Light "SLTD" and "SLTHD" driver. <sup>(9)</sup>247V emergency option not available with a Fifth Light "SLTD" and "SLTHD" driver. <sup>(9)</sup>247V emergency option not available with a Fifth Light "SLTD" and "SLTHD" driver. <sup>(9)</sup>247V emergency option not available with a Fifth Light "SLTD" and "SLTHD" driver. <sup>(9)</sup>247V emergency option not available with a Fifth Light "SLTD" and "SLTHD" driver. <sup>(9)</sup>247V emergency option not available with a Fifth Light "SLTD" and "SLTHD" driver. <sup>(9)</sup>247V emergency option not available with a Fifth Light "SLTD" and "SLTHD" driver. <sup>(9)</sup>247V emergency option not available with a Fifth Light "SLTD" and "SLTHD" driver. <sup>(9)</sup>247V emergency option not available with a Fifth Light

Integrated Sensing and Control System Options

NOTES: Integrated options must be used in conjuction 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) Consult LumaWatt Pro system pages for additional details and compatibility. (C) Consult DLVP system pages for additional details and compatibility. (C) Consult SVPD series system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and compatibility. (C) Consult Marketplace Options - Lutron system pages for additional details and

### Flexible Metal Conduit Options

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-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).

Specifications & dimensions subject to change without notice. Consult your Eaton Representative for availability and ordering information.

SHIPPING DATA

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

