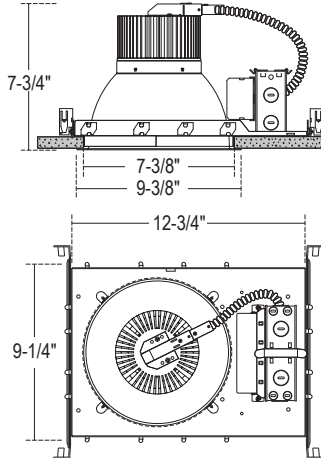
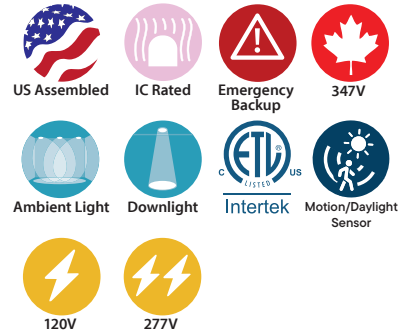


CH8C : 8" C-SERIES

(COB) CHIP ON BOARD BEAM CONTROL LED, NEW CONSTRUCTION
 1000LM - 4000LM (10W-40W)



Ceiling Cut-Out: 7-15/16"
 Ceiling Thickness: 1" Max



- Assorted dimming options.
- COB LED design allows for concentrated high CBCP beam
- Multiple Beam Spreads for flexible beam control
- Quick connector power adapter and twist-and-lock reflector for quick access and easy maintenance

ORDERING : CH8C10UE-D10-EM/CR8LC40SW-B30-T27

CH8C		/		Options				
Housing	Insulation Contact	Control	Emergency Options	J-Box	Reflector Finish	Beam Spread	CCT	Options
Housing		Emergency Options		Beam Spread				
1000lm (10W)		CH8C10	None	Blank	20° Spot	-B20		
1500lm (15W)		CH8C15	10W Emergency Battery	-EM	30° Narrow Flood	-B30		
2000lm (20W)		CH8C20	Full Power	-EMAC⁴	40° Wide Flood	-B40		
2800lm (30W)		CH8C30	Emergency Inverter	-EMAC347⁴	60° Wide Flood	-B60		
4000lm (40W)		CH8C40	Full Power	-EMAC347⁴	75° Very Wide Flood	-B75		
Insulation Contact		GTD Device		-GTD	CCT			
Non-IC		Blank	J-Box		2700K (90 CRI)	-T27		
IC Rated/Airtight		ICA⁵	None	Blank	2700K (97 CRI)	-T27-C97		
Control ¹		Junction Box (Chicago Plenum)		-CHP	3000K (90 CRI)	-T30		
0-10V Dimming		UE-D10	Reflector Finish		3000K (97 CRI)	-T30-C97		
UniDim™ 0-10V, TRIAC/ELV Dimming		UE-DUN	Satin Haze Reflector/White Finish	/CR8LC40SW	3500K (90 CRI)	-T35		
TRIAC/ELV Dimming (120V)		-DIN	White Reflector/White Finish	/CR8LC40WW	4000K (90 CRI)	-T40		
Lutron Hi-Lume		UE-DHL	All Black	/CR8LC40BB	5000K (80 CRI)	-T50		
Lutron EcoSystem		UE-ECO	Clear Specular Reflector/White Finish	/CR8LC40CW³	Options			
0-10V Dimming (347V)		-347-D10²	All Satin Haze	/CR8LC40SS	None	Blank		
1%, 0-10V Dimming		UE-D10P1			4.5" Ceiling Thickness	-CT4		
DMX Dimming with input via XLR5 (120V/277V)		UE-DMXLR5						
DMX Dimming with input via RJ45 (120V/277V)		UE-DMXRJ45						
Athena Wireless Node (120V)		-AWN						
Athena Wireless Node		-AWN-OCC						
Occupancy Sensor (120V)								
UniSense - Remotely Mounted		-SUN-RMT⁸						
Motion/Photosensor (120V)								
UniSense - Remotely Mounted		-SUN-RMT-1227⁸						
Motion/Photosensor								
Casambi Wireless Dimming		-DCSM⁷						
BubblyNet Wireless System		-DBNT⁷						
Lutron Vive Wireless Dimming Module		-VIVE⁷						

¹ All drivers are 120V/277V unless otherwise noted.
² -347-D10 is not available for CH8C10.
³ Clear finish reflector not recommended for placing close to vertical surfaces. Uneven striations may be visible.
⁴ Check wiring diagrams.
⁵ ICA is only available for CH8C10, CH8C15, CH8C20, and CH8C30. (CH8C40 are Non-IC rated).
⁷ Special Order.
⁸ (-SUN-RMT) Sensor sent with mounting clips for existing ceiling applications.

COMPATABILITY



VR800
 Round Vandal Resistant
 Ceiling/Wall Kit



P-CR8725W
 Wall Wash for 8"

SPECIFICATION

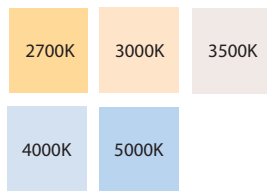
Application

Architectural/Commercial-grade recessed (COB) Chip on Board Beam Control LED allows for concentrated high center beam candlepower. Twist and lock beam control optic is designed for easy field replacement of 20°, 30°, 40°, 60° and 75° beam spread options.

Mounting

Housing suitable for new construction installations only, supplied with (2) 24" adjustable hanger bars with 90° repositioning ability. Suitable for wood & metal joist support systems, and also drywall & T-bar ceilings. Hanger bars equipped with nail-less install 3/4" serrated barbed studs and captive nails, for faster and easier secure mounting in wood joists. Set-screws lock into position and prevent shifting after installation. Earthquake structural cable compatible for drop panel ceiling or any other mounting that requires direct support from structural ceilings.

Color Temperature (CCT)



Available in 2700K, 3000K, 3500K, 4000K, 90 CRI; 5000K 80 CRI; 2700K and 3000K, 97 CRI.

COLOR TEMP:	2700K	3000K	3500K	4000K	5000K
CRI:	90, 97	90, 97	90	90	80

Insulation Contact

(CH8C10), (CH8C15), (CH8C20), and (CH8C30) are inherently thermally protected for direct insulation contact without the need for an enclosure. (CH8C40) are Non-IC rated housing and must be kept 3" from loose-fill insulation.

Power Connection

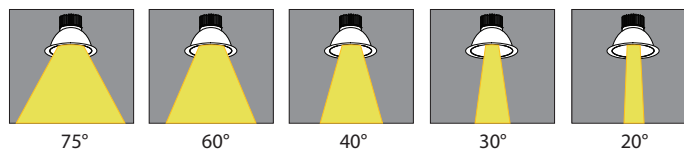
Our LED lamp array is replaceable via our on board quick disconnect terminal. Meets CA Title 24 Requirements and other standards restricting the use of Medium Base or Bi-Pin Sockets.

Thermal Management

Heat dissipation facilitated by a large exposed integral aluminum heat sink to maximize heat dissipation in an open-air environment. IC Option thermally engineered to ensure stated L70 LED life without the need for external box. The recommended ambient temperature should be below 35°C (95°F) to achieve a minimum L70 life of 50,000 hours according to the LM80 standard.

Optics

Multifaceted aluminum reflectors produces low glare illumination with multiple light control options.



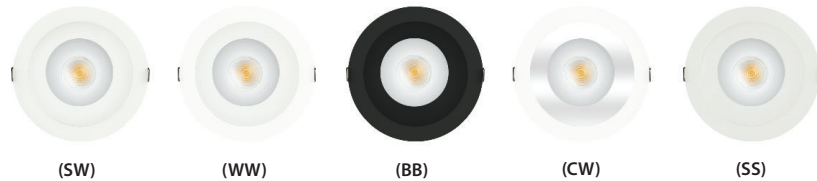
SPECIFICATION (Continued)

Reflector

Field adjustable twist and lock reflector is easily removable to provide quick access to LED lamp array. Frosted polycarbonate lens pre-installed on reflector unifies diode sources and protects diodes from dust and particles from front of aperture. Optional reflector (-EMA) features integral EM switch for 10W emergency backup (UE-D10-EM).

Reflector Finish

The 1-piece, self-flanged, LED design provides a clean trim finish without a secondary trim ring. Heavy gauge aluminum reflector prevents ugly dents during shipping & installation. Deeply mounted singular LED provides 50° visual cutoff. Available in Satin Haze Reflector/White Finish, White Reflector/White Finish, All Black, and All Satin Haze.



Junction Box

16-gauge pre-wired galvanized steel Junction Box, 26 cubic-inch for a maximum of (8) #12 AWG wires. Furnished with (7) 1/2" knockouts. Strain clamps are included to install or remove covers for an easily accessed ground wire. (-CHP) option is Chicago Plenum, air-tight Junction Box.

Certifications and Listings



cETLus listed to UL1598 and UL8750. Suitable for dry locations only. NYC approved: Calendar #41937. Conforms to City of Chicago Environmental Air CCEA-200 with Section 18-27-300.22 and special requirements Section 14-20-210C-4. Assembled in USA.

Caution

LITON recommends use of surge protectors on the power entering LED Housings. Surge damage is not covered by warranty. (+1KV). Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

SPECIFICATION (Continued)

Control Options

ELV and TRIAC Driver 120V (-DIN):

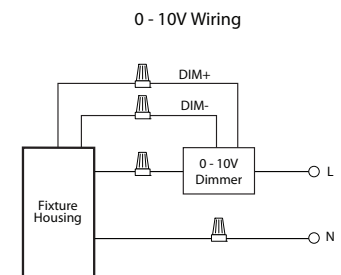
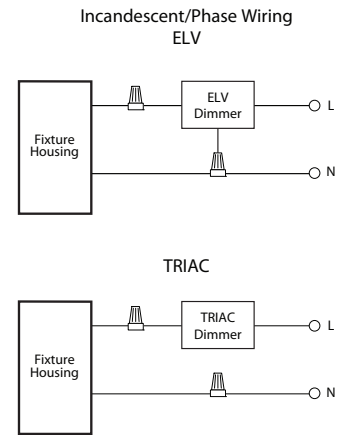
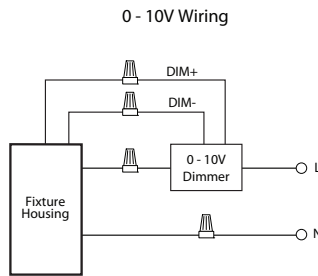
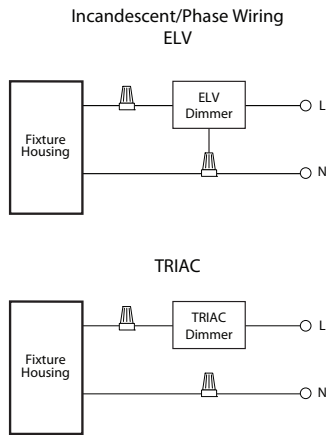
Compatible with electronic low voltage, and 2-Wire incandescent dimmers. Also known as leading edge, Reverse Phase, Forward Phase dimming. Allows smooth dimming down to 5% depending upon the dimmer's limitations.

0-10V Driver 120V/277V (UE-D10):

Compatible with most existing 0-10V systems. Also known as fluorescent or 5-Wire dimming. Allows smooth dimming down to 5% depending upon the dimmer's limitations. Compatible with daylight harvesting controls.

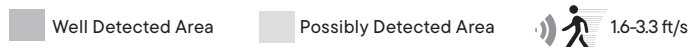
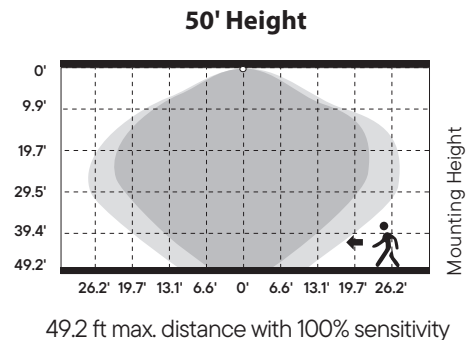
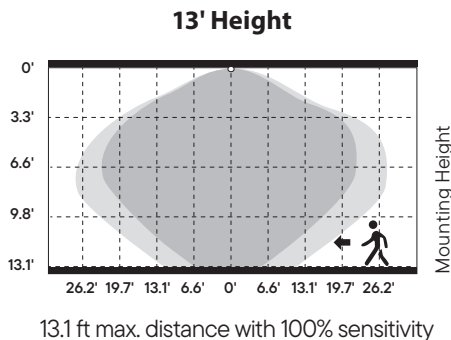
UniDim™ Driver 120V/277V (UE-DUN):

All in one ELV and TRIAC phase dimming (120V only), and 0-10V dimming (120V/277V). Works with most 3-Wire ELV, 2-Wire incandescent and 120V/277V 5-Wire 0-10V fluorescent dimmers.



Unisense™ PROGRAMMABLE MOTION + DAYLIGHT (-SUN-RMT, -SUN-RMT-1227)

- Microwave and PIR (Passive Infrared) sensors depending on option
- Daylight harvesting
- Dusk/dawn sensing capabilities
- Motion Sensor



SPECIFICATION (Continued)

Warranty

Covered by a 5-Year Warranty to be free of defects in materials and craftsmanship. Recommended for applications where ambient temperatures do not exceed 35°C (95°F), installations exceeding this temperature will result in reduced LED lamp life and a voided warranty.

Emergency Options

Emergency LED Battery Back-up available, remotely mounted adjacently by the installer. When AC power fails, the device immediately switches to the emergency mode, operating the LEDs for a minimum of 90 minutes. Remote test switch and plate cover included. Optional Generator Transfer Device switches the driver to auxiliary generator power during the loss of normal AC power, (recommended for applications requiring individual circuit switching).

EMERGENCY BATTERY (-EM): 10W

- Must be installed in Dry Locations
- 10W constant output to LED lamp

Not rated for outdoor mounting. Damp location rated.

-EM Lumen Data (Battery)

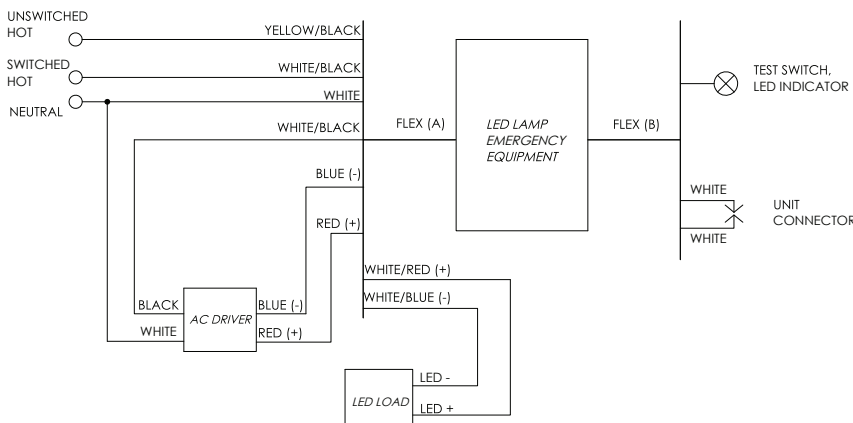
Fixture/Trim	CH8C10/CR8LC40
Fixture Wattage:	10W
Fixture Lumens:	1000
Multiplier:	1
EM Lumens:	1000

Fixture/Trim	CH8C15/CR8LC40
Fixture Wattage:	15W
Fixture Lumens:	1500
Multiplier:	0.67
EM Lumens:	1000

Fixture/Trim	CH8C20/CR8LC40
Fixture Wattage:	20W
Fixture Lumens:	2000
Multiplier:	0.5
EM Lumens:	1000

Fixture/Trim	CH8C30/CR8LC40
Fixture Wattage:	30W
Fixture Lumens:	2800
Multiplier:	0.33
EM Lumens:	920

Fixture/Trim	CH8C40/CR8LC40
Fixture Wattage:	40W
Fixture Lumens:	4000
Multiplier:	0.25
EM Lumens:	1000



Input Voltage:	120-277VAC/60Hz
Output Voltage:	10W
Wattage:	10W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	No

SPECIFICATION (Continued)

FULL POWER EMERGENCY INVERTER (-EMAC or -EMAC347): 10W - 40W

- Must be installed in Dry Locations
- Wattage package will determine battery sent; corresponding wiring diagrams below
- 170 VDC output to AC DRIVER during EM mode

Not rated for outdoor mounting. Damp location rated.

-EMAC Lumen Data (Battery)

Fixture/Trim	CH8C10/CR8LC40
Fixture Wattage:	10W
Fixture Lumens:	1000
EM Lumens:	1000

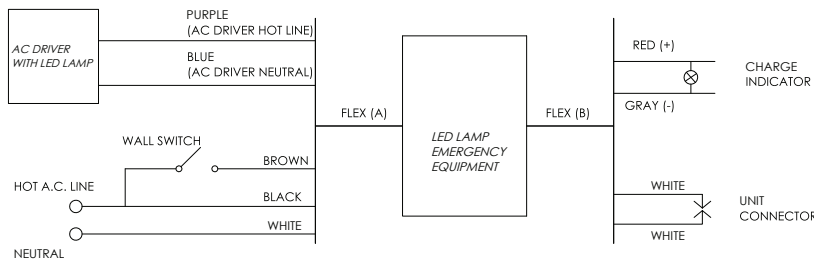
Fixture/Trim	CH8C15/CR8LC40
Fixture Wattage:	15W
Fixture Lumens:	1500
EM Lumens:	1500

Fixture/Trim	CH8C20/CR8LC40
Fixture Wattage:	20W
Fixture Lumens:	2000
EM Lumens:	2000

Fixture/Trim	CH8C30/CR8LC40
Fixture Wattage:	30W
Fixture Lumens:	2800
EM Lumens:	2800

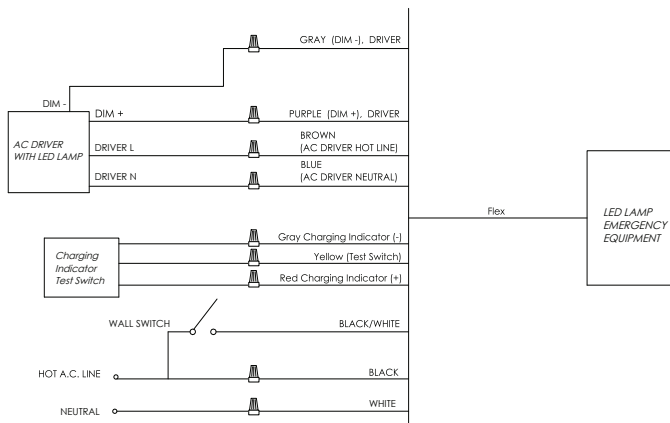
Fixture/Trim	CH8C40/CR8LC40
Fixture Wattage:	40W
Fixture Lumens:	4000
EM Lumens:	4000

<25W LOAD



Input Voltage:	120-277VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	25W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	No

<40W LOAD

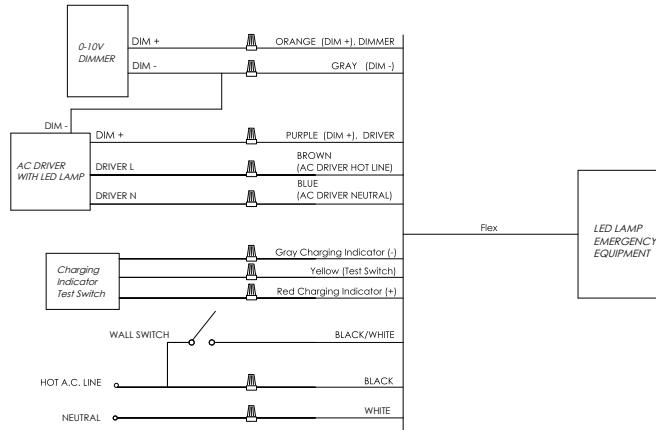


Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	40W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

SPECIFICATION (Continued)

>40W LOAD

- 0-10V dimmable driver required

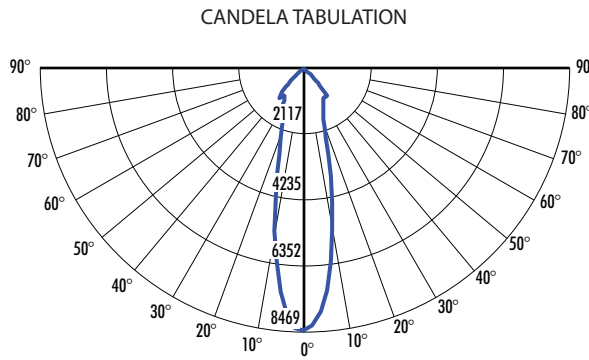


Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	44W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

PHOTOMETRY

CH8C40UE-D10_CR8LC40CW-B20-T35 (4000lm, 40W, 20° Spot, 3500K)

System Power:	44W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	24.9°	CW : 1.01
Field Angle 10%:	87.3°	SS : 0.99
Color Temperature:	3399K	SW : 1.00
CRI:	94.2	WW : 0.968
Lumens Delivered:	3700	CCT
CBCP:	8469.3	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		3500K : 1.00
		4000K : 1.04
		Lumens
		1000lm: 0.27
		1500lm: 0.37
		2000lm: 0.53
		2800lm: 0.71
		4000lm: 1.00

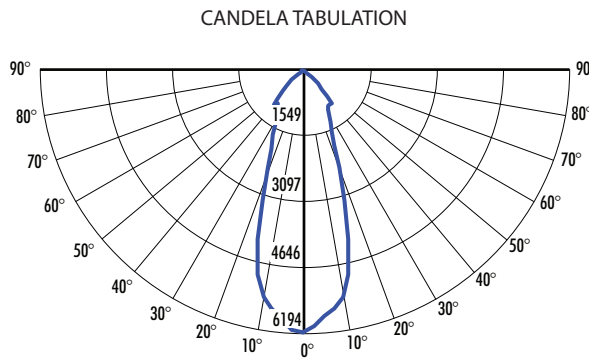


FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
12.0'	5.30'	58.81
14.0'	6.18'	43.21
16.0'	7.06'	33.08
18.0'	7.95'	26.14
20.0'	8.83'	21.17

CH8C40UE-D10_CR8LC40CW-B30-T35 (4000lm, 40W, 30° Narrow Flood, 3500K)

System Power:	43W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	36.0°	CW : 1.01
Field Angle 10%:	91.7°	SS : 0.99
Color Temperature:	3378K	SW : 1.00
CRI:	94.3	WW : 0.968
Lumens Delivered:	3752	CCT
CBCP:	6194.1	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		3500K : 1.00
		4000K : 1.04
		Lumens
		1000lm: 0.27
		1500lm: 0.37
		2000lm: 0.53
		2800lm: 0.71
		4000lm: 1.00

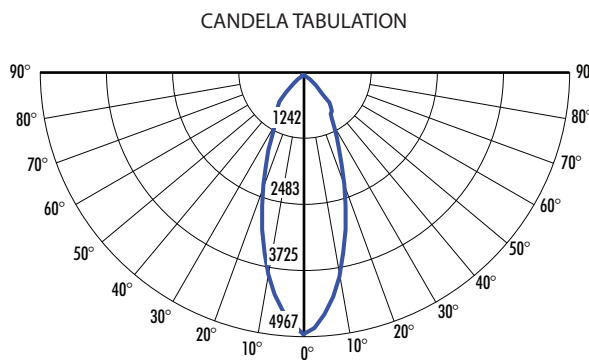


FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
12.0'	7.80'	43.01
14.0'	9.10'	31.60
16.0'	10.40'	24.20
18.0'	11.70'	19.12
20.0'	13.00'	15.49

CH8C40UE-D10_CR8LC40CW-B40-T35 (4000lm, 40W, 40° Flood, 3500K)

System Power:	43W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	37.0°	CW : 1.01
Field Angle 10%:	90.1°	SS : 0.99
Color Temperature:	3261K	SW : 1.00
CRI:	93.8	WW : 0.968
Lumens Delivered:	3018	CCT
CBCP:	4967.0	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		3500K : 1.00
		4000K : 1.04
		Lumens
		1000lm: 0.27
		1500lm: 0.37
		2000lm: 0.53
		2800lm: 0.71
		4000lm: 1.00

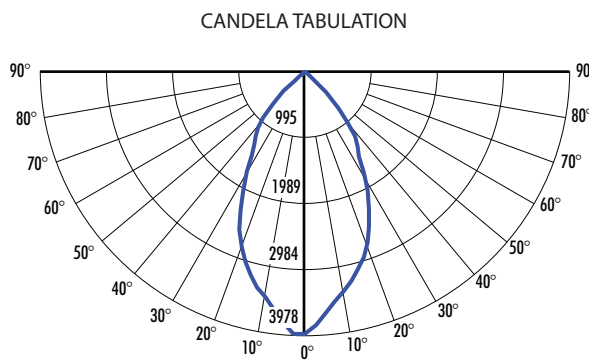


FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
12.0'	8.03'	34.49
14.0'	9.37'	25.34
16.0'	10.71'	19.40
18.0'	12.05'	15.33
20.0'	13.38'	12.42

CH8C40UE-D10_CR8LC40CW-B60-T35 (4000lm, 40W, 60° Wide Flood, 3500K)

System Power:	43W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	55.9°	CW : 1.01
Field Angle 10%:	93.7°	SS : 0.99
Color Temperature:	3310K	SW : 1.00
CRI:	93.8	WW : 0.968
Lumens Delivered:	2104	CCT
CBCP:	3978.1	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		3500K : 1.00
		4000K : 1.04
		Lumens
		1000lm: 0.27
		1500lm: 0.37
		2000lm: 0.53
		2800lm: 0.71
		4000lm: 1.00



FOOTCANDLE DISTRIBUTION

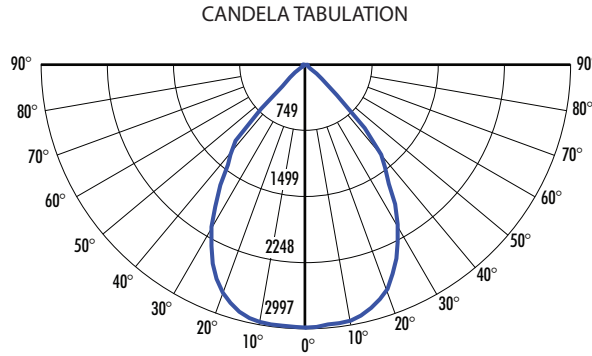
Height	Beam Diameter	FC
12.0'	12.73'	27.63
14.0'	14.86'	20.30
16.0'	16.98'	15.54
18.0'	19.10'	12.28
20.0'	21.22'	9.95

2023.10.11

PHOTOMETRY (Continued)

CH8C40UE-D10_CR8LC40CW-B75-T35 (4000lm, 40W, 75° Very Wide Flood, 3500K)

System Power:	43W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	74.2°	CW : 1.01
Field Angle 10%:	96.2°	SS : 0.99
Color Temperature:	3351K	SW : 1.00
CRI:	94.0	WW : 0.968
Lumens Delivered:	3900	CCT
CBCP:	2997.3	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		3500K : 1.00
		4000K : 1.04
		Lumens
		1000lm: 0.27
		1500lm: 0.37
		2000lm: 0.53
		2800lm: 0.71
		4000lm: 1.00



FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
12.0'	18.15'	20.81
14.0'	21.18'	15.29
16.0'	24.20'	11.71
18.0'	27.23'	9.25
20.0'	30.25'	7.49