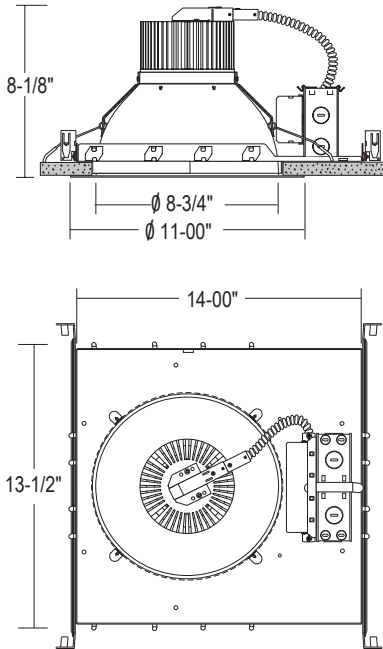


CH9C : 9"/10" C-SERIES

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



Ceiling Cut-Out: 9-1/4"
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 : CH9C10UE-D10-EM/CR9LC40SW-B30-T27

CH9C10

Housing	Insulation Contact	Driver Options	Emergency Options	J-Box	Reflector Finish	Beam Spread	CCT
	Insulation Contact			J-Box		Beam Spread	CCT
	Non-IC IC Rated/ Airtight			None Junction Box (Chicago Plenum)		20° Spot 30° Narrow Flood 40° Wide Flood 60° Wide Flood 75° Very Wide Flood	2700K (90 CRI) 2700K (97 CRI) 3000K (90 CRI) 3000K (97 CRI) 3500K (90 CRI) 4000K (90 CRI) 5000K (80 CRI)
	Blank ICA⁵			Blank -CHP		-B20 -B30 -B40 -B60 -B75	-T27 -T27-C97 -T30 -T30-C97 -T35 -T40 -T50
Housing		Driver Options ¹		Emergency Options		Reflector Finish	
1000lm (10W)	CH9C10	0-10V Dimming	UE-D10	None	Blank	Satin Haze Reflector/ White Finish	/CR9LC40SW
1500lm (15W)	CH9C15	UniDim™ 0-10V ELV and Triac Dimming	UE-DUN	Remote Location Emergency Battery	-EM	White Reflector/ White Finish	/CR9LC40WW
2000lm (20W)	CH9C20	120V ELV and Triac Dimming	-DIN	Remote Location Emergency Inverter	-EMAC⁴	All Black	/CR9LC40BB
2800lm (30W)	CH9C30	Lutron Hi-ume	UE-DHL	Generator Transfer Device	-GTD	Clear Specular Reflector/White Finish	/CR9LC40CW³
4000lm (40W)	CH9C40	Lutron EcoSystem	UE-ECO			All Satin Haze	/CR9LC40SS
		347V, 0-10V Dimming	-347-D10²				
		0-10V Dimming (1%)	UE-D10P1				
		Athena Wireless Node	-AWN				
		Athena Wireless Node Occupancy Sensor	-AWN-OCC				

¹ All drivers are 120V/277V unless otherwise noted.

² -347-D10 is not available for CH9C10.

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 CH9C10, CH9C15, CH9C20, and CH9C30.

SPECIFICATION

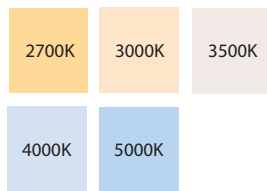
Application

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

(CH9C10), (CH9C15), (CH9C20), and (CH9C30) are inherently thermally protected for direct insulation contact without the need for an enclosure. Non-IC rated housings must be kept 3" from loose-fill insulation.

Power Connection

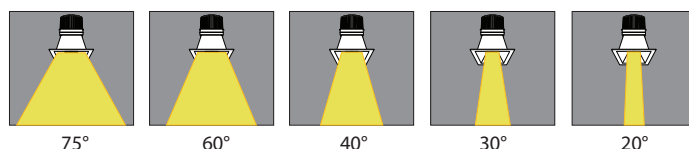
Our LED lamp array is replaceable via our on board quick disconnect terminal. Meets CA Title 24 Requirements and other standards restricting the use of Medium Base or Bi-Pin Sockets.

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 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.



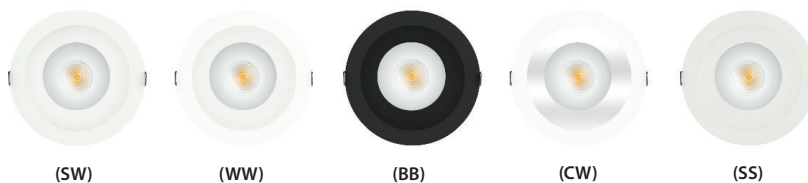
SPECIFICATION (Continued)

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 12W emergency backup (UE-D10-EM).

Reflector Finish

The 1-piece, self-flanged, LED design enables 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.
NYC approved: Calendar #41937.

Caution

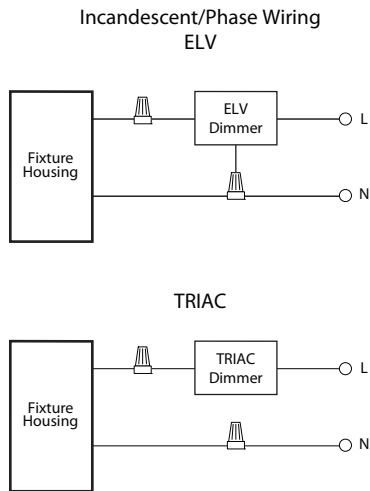
LITON recommends use of surge protectors on the power entering LED Housings. Surge damage is not covered by warranty. (+1KV). Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

SPECIFICATION (Continued)

Dimming Options

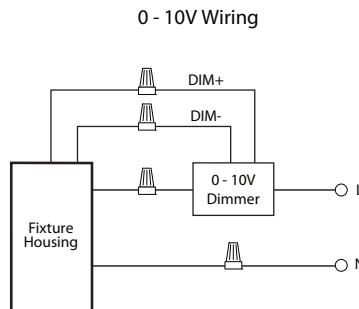
ELV and TRIAC Driver 120V (-DIN):

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.



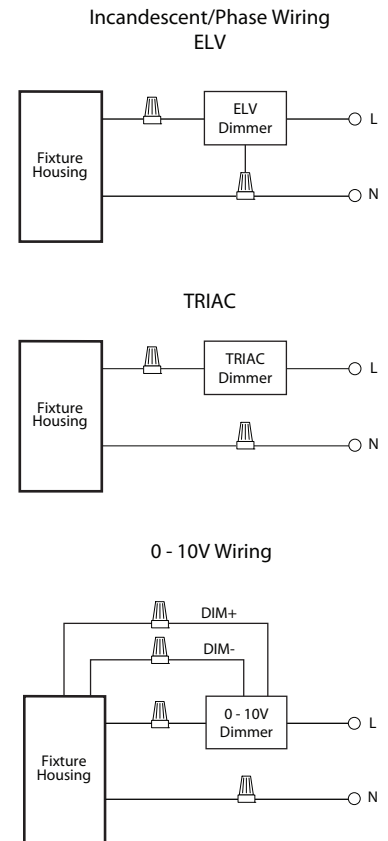
0-10V Driver 120V/277V (UE-D10):

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.



ATHENA WIRELESS NODE (-AWN, -AWN-OCC)



Radio frequency (RF) device for digital control of light fixtures in an Athena control system. Athena wireless processor or Clear Connect gateway-Type X is required to operate wireless node.

- Pre-Wired wireless node
- Installed on Junction Box outer wall
- 2.4 GHz
- cULus Listed (UL 916)
- UL 2043 Plenum Rated
- FCC compliant with the limits for a Class B digital device
- ANSI C1371.1 0-10V Electronic Off
- D4i certified
- IC (Industry Canada)
- Supports DALI-2 Type 8 tuneable-white color temperature Tc applications - IEC62386-209 ed.1

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, installations exceeding this temperature will result in reduced LED lamp life and a voided warranty.

Emergency Options

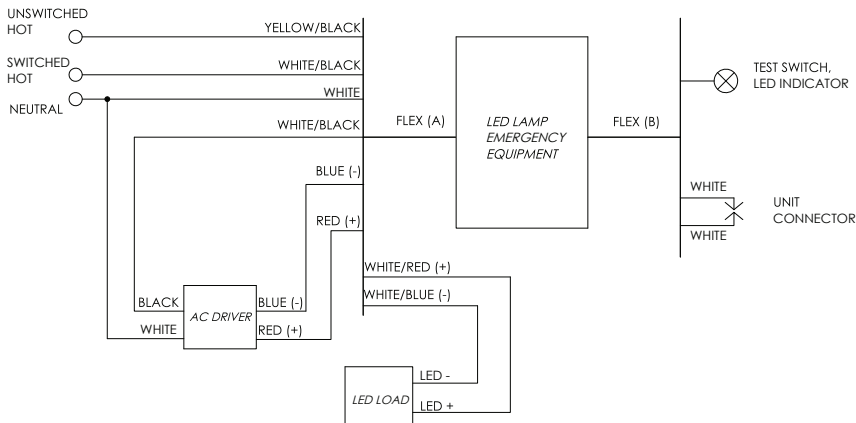
Emergency LED Battery Back-up available, remotely mounted adjacently by the installer.
When AC power fails, the device immediately switches to the emergency mode, operating the LEDs for a minimum of 90 minutes. Remote test switch and plate cover included. Optional Generator Transfer Device switches the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

REMOTE EMERGENCY BATTERY (-EM): 10W

For installation away from the surface of the building in remote hidden location.

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

Not rated for outdoor mounting. Damp location rated.



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
Maximum Lumens:	800lm
Self-Diagnostic:	No

SPECIFICATION (Continued)

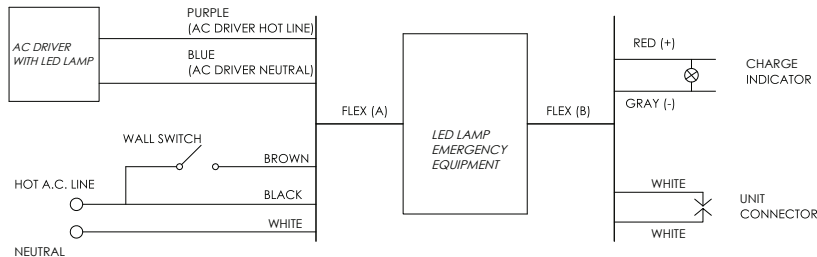
REMOTE LOCATION EMERGENCY INVERTER (-EMAC): 25W and 40W

For installation away from the surface of the building in remote hidden location.

- Hidden Emergency Equipment
- Must be installed in Dry Locations
- Wattage package will determine if 25W or 40W battery gets sent; corresponding wiring diagrams below
- 170 VDC output to AC DRIVER during EM mode

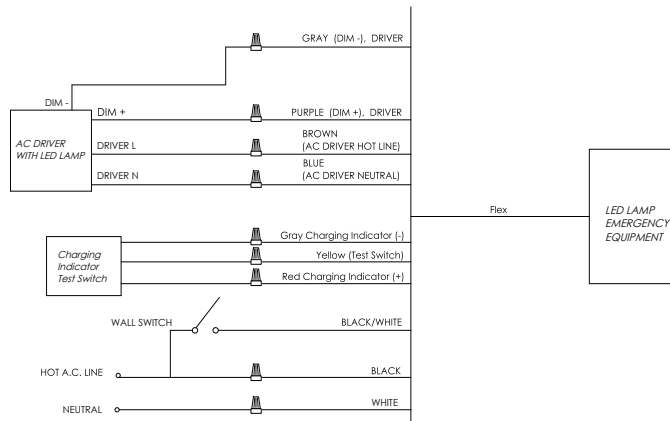
Not rated for outdoor mounting. Damp location rated.

<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
Maximum Lumens:	2200lm
Self-Diagnostic:	No

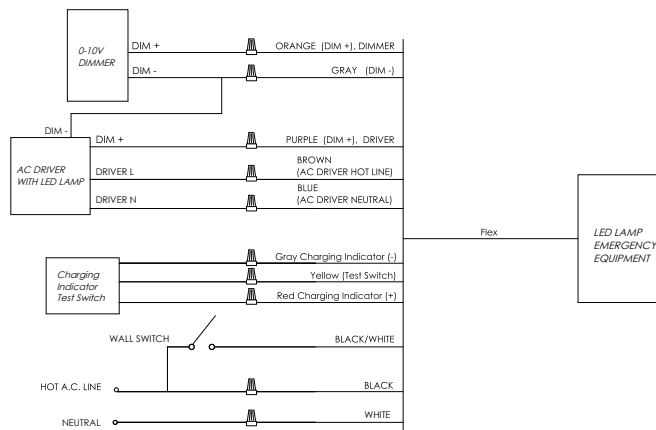
<40W LOAD



Input Voltage:	120-277VAC/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
Maximum Lumens:	3500lm
Self-Diagnostic:	Yes

>40W LOAD

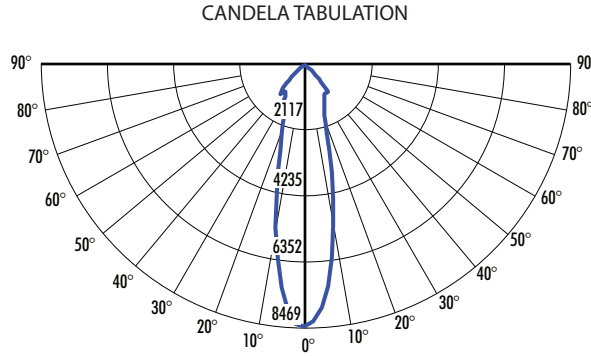
- 0-10V dimmable driver required



PHOTOMETRY

CH9C40UE-D10_CR9LC40CW-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

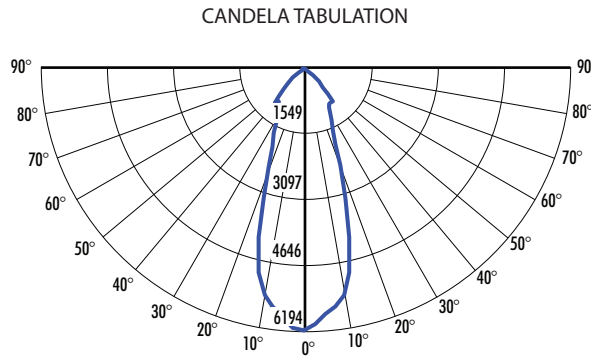


FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
10.0'	4.42'	84.69
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

CH9C40UE-D10_CR9LC40CW-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

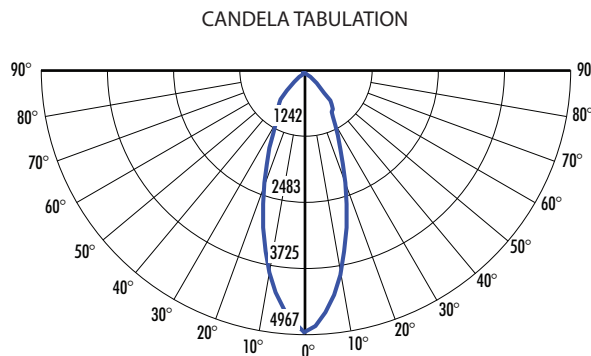


FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
10.0'	6.50'	61.94
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

CH9C40UE-D10_CR9LC40CW-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

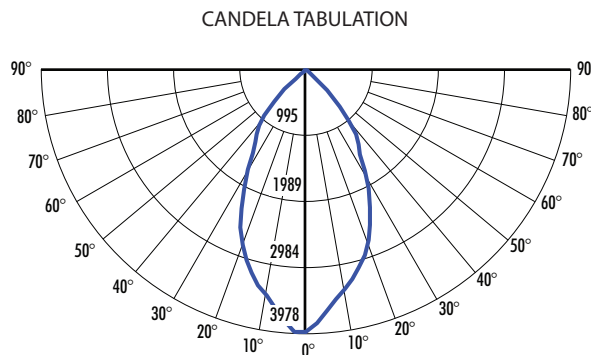


FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
10.0'	6.69'	49.67
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

CH9C40UE-D10_CR9LC40CW-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

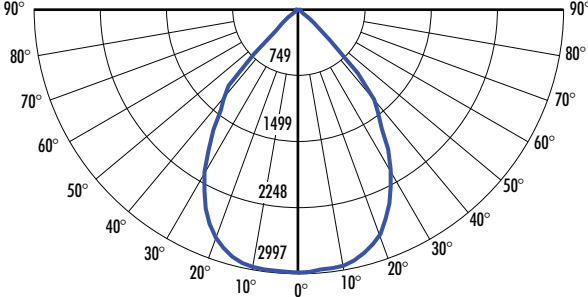


FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
10.0'	10.61'	39.78
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

PHOTOMETRY (Continued)

CH9C40UE-D10_CR9LC40CW-B75-T35 (4000lm, 40W, 75° Very Wide Flood, 3500K)

System Power: 43W		MULTIPLIERS		CANDELA TABULATION		FOOTCANDLE DISTRIBUTION																							
Test Date: 10/2023		REFLECTOR FINISH				<table><tr><th>Height</th><th>Beam Diameter</th><th>FC</th></tr><tr><td>10.0'</td><td>15.13'</td><td>29.97</td></tr><tr><td>12.0'</td><td>18.15'</td><td>20.81</td></tr><tr><td>14.0'</td><td>21.18'</td><td>15.29</td></tr><tr><td>16.0'</td><td>24.20'</td><td>11.71</td></tr><tr><td>18.0'</td><td>27.23'</td><td>9.25</td></tr><tr><td>20.0'</td><td>30.25'</td><td>7.49</td></tr></table>			Height	Beam Diameter	FC	10.0'	15.13'	29.97	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
Height	Beam Diameter	FC																											
10.0'	15.13'	29.97																											
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																											
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																											