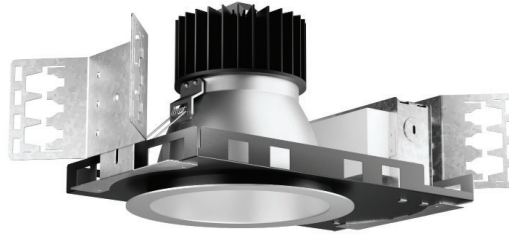
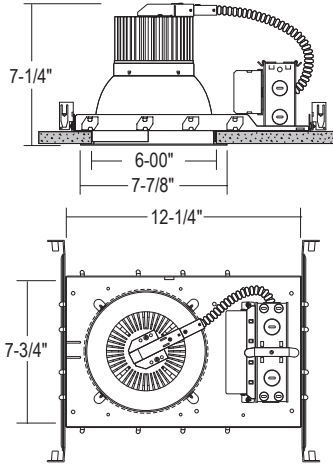
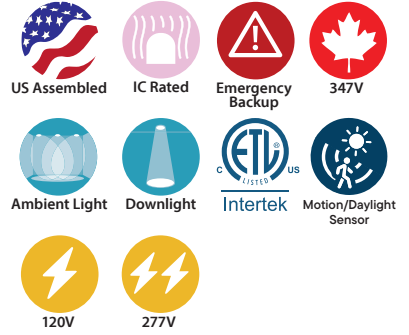


## CH6C : 6" C-SERIES

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



Ceiling Cut-Out: 6-3/8"  
 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 : CH6C10UE-D10-EM/CR6LC40SW-B30-T27

CH6C											
Housing	Insulation Contact	Control	Emergency Options	J-Box	Mounting	Reflector Finish	Beam Spread	CCT	Options		
Housing		Emergency Options		Reflector Finish		CCT					
1000lm (10W)		<b>CH6C10</b>	None	<b>Blank</b>	Satin Haze Reflector/	<b>/CR6LC40SW</b>	2700K (90 CRI)	<b>-T27</b>			
1500lm (15W)		<b>CH6C15</b>	10W Emergency Battery	<b>-EM</b>	White Finish	<b>/CR6LC40WW</b>	2700K (97 CRI)	<b>-T27-C97</b>			
2100lm (20W)		<b>CH6C20</b>	Full Power	<b>-EMAC<sup>4</sup></b>	White Reflector/		3000K (90 CRI)	<b>-T30</b>			
2800lm (30W)		<b>CH6C30</b>	Emergency Inverter	<b>-EMAC347<sup>4</sup></b>	White Finish		3000K (97 CRI)	<b>-T30-C97</b>			
4000lm (40W)		<b>CH6C40</b>	Full Power	<b>-EMAC347<sup>4</sup></b>	All Black	<b>/CR6LC40BB</b>	3500K (90 CRI)	<b>-T35</b>			
Insulation Contact		GTD Device		<b>-GTD</b>	Clear Specular	<b>/CR6LC40CW<sup>3</sup></b>	4000K (90 CRI)	<b>-T40</b>			
Non-IC		<b>Blank</b>			Reflector/White Finish		5000K (80 CRI)	<b>-T50</b>			
IC Rated/Airtight		<b>ICA<sup>5</sup></b>			All Satin Haze	<b>/CR6LC40SS</b>					
Control <sup>1</sup>		J-Box		Beam Spread		Options					
0-10V Dimming			None	<b>Blank</b>	20° Spot	<b>-B20</b>	None	<b>Blank</b>			
UniDim™ 0-10V, TRIAC/ELV Dimming		<b>UE-D10</b>	Junction Box (Chicago Plenum)	<b>-CHP</b>	30° Narrow Flood	<b>-B30</b>	4.5" Ceiling Thickness	<b>-CT4</b>			
TRIAC/ELV Dimming (120V)		<b>-DIN</b>	Mounting		40° Wide Flood	<b>-B40</b>					
Lutron Hi-Lume		<b>UE-DHL</b>	24" Adjustable	<b>Blank</b>	60° Wide Flood	<b>-B60</b>					
Lutron EcoSystem		<b>UE-ECO</b>	Architectural C-Channel	<b>-BWNG<sup>6</sup></b>	75° Very Wide Flood	<b>-B75</b>					
0-10V Dimming (347V)		<b>-347-D10<sup>2</sup></b>									
1%, 0-10V Dimming		<b>UE-D10P1</b>									
DMX Dimming with input via XLR5 (120V/277V)		<b>UE-DMXLR5</b>									
DMX Dimming with input via RJ45 (120V/277V)		<b>UE-DMXRJ45</b>									
Athena Wireless Node (120V)		<b>-AWN</b>									
Athena Wireless Node		<b>-AWN-OCC</b>									
Occupancy Sensor (120V)											
UniSense - Remotely Mounted Motion/Photosensor (120V)		<b>-SUN-RMT<sup>8</sup></b>									
UniSense - Remotely Mounted Motion/Photosensor		<b>-SUN-RMT-1227<sup>8</sup></b>									
Casambi Wireless Dimming		<b>-DCSM<sup>7</sup></b>									
BubblyNet Wireless System		<b>-DBNT<sup>7</sup></b>									
Lutron Vive Wireless Dimming Module		<b>-VIVE<sup>7</sup></b>									

<sup>1</sup> All drivers are 120V/277V unless otherwise noted.  
<sup>2</sup> -347-D10 is not available for CH6C10.  
<sup>3</sup> Clear finish reflector not recommended for placing close to vertical surfaces. Uneven striations may be visible.  
<sup>4</sup> Check wiring diagram.  
<sup>5</sup> ICA is only available for CH6C10, CH6C15, CH6C20 and CH6C30. (CH6C40 are Non-IC rated.)  
<sup>6</sup> (-BWNG) option does **NOT** include Hanger Bars. Hanger Bars ordered separately.  
<sup>7</sup> Special Order.  
<sup>8</sup> (-SUN-RMT) Sensor sent with mounting clips for existing ceiling applications.

### COMPATABILITY



**VR80**  
 Round Vandal Resistant Ceiling/Wall Kit



**P-CR672SW**  
 Wall Wash for 6"



**CR6-GSKT**  
 6" Commercial Self-Adhesive Gasket

## SPECIFICATION

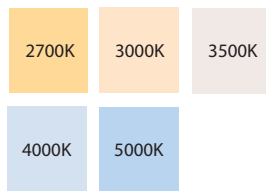
### Application

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. Binned with 2-step MacAdam Ellipses.

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

### Insulation Contact

(CH6C10), (CH6C15), (CH6C20), and (CH6C30) are inherently thermally protected for direct insulation contact without the need for an enclosure. (CH6C40) are Non-IC rated housing and must be kept 3" from loose-fill insulation.

### Power Connection

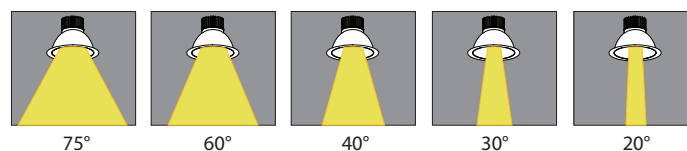
Our LED lamp array is replaceable via our on board quick disconnect terminal. Meets CA Title 24 Requirements and other standards restricting the use of Medium Base or Bi-Pin Sockets.

### Thermal Management

Heat dissipation facilitated by a large exposed integral aluminum heat sink to maximize heat dissipation in an open-air environment. 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

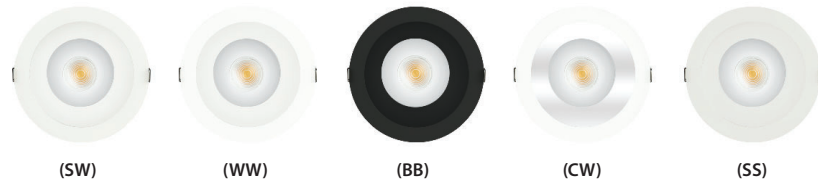
---

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

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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, Clear Specular Reflector/White Finish, and All Satin Haze.



### Junction Box

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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

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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

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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):

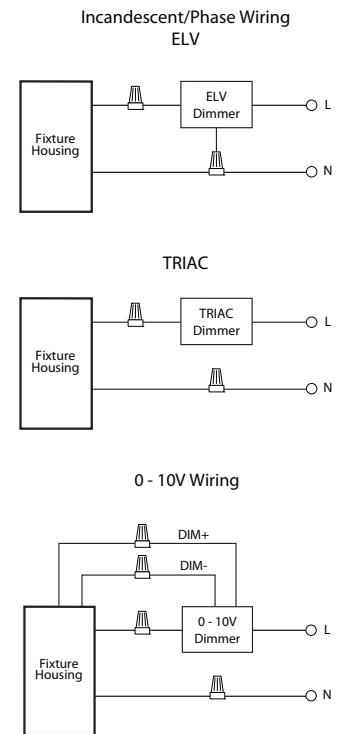
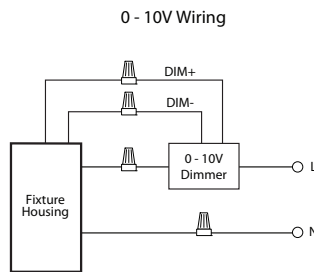
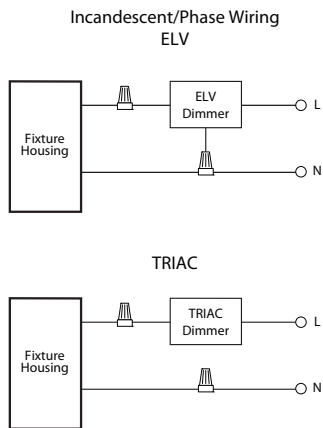
Compatible with electronic low voltage, and 2-Wire incandescent dimmers. Also known as leading edge, Reverse Phase, Forward Phase dimming. Allows smooth dimming down to 5% depending upon the dimmer's limitations.

#### 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.

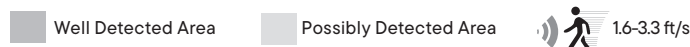
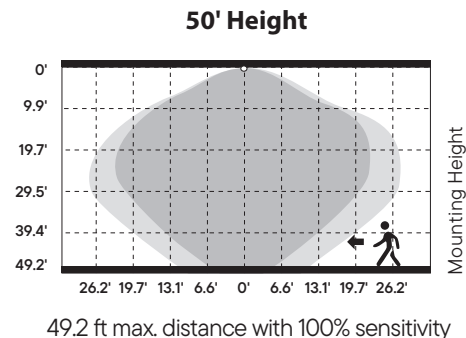
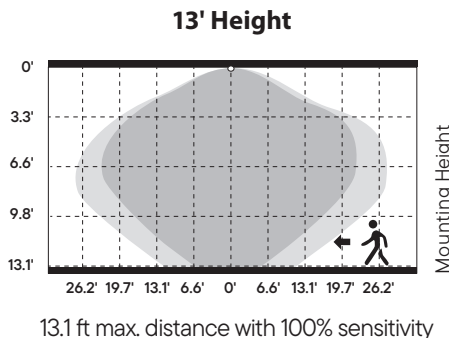
#### UniDim™ Driver 120V/277V (UE-DUN):

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).

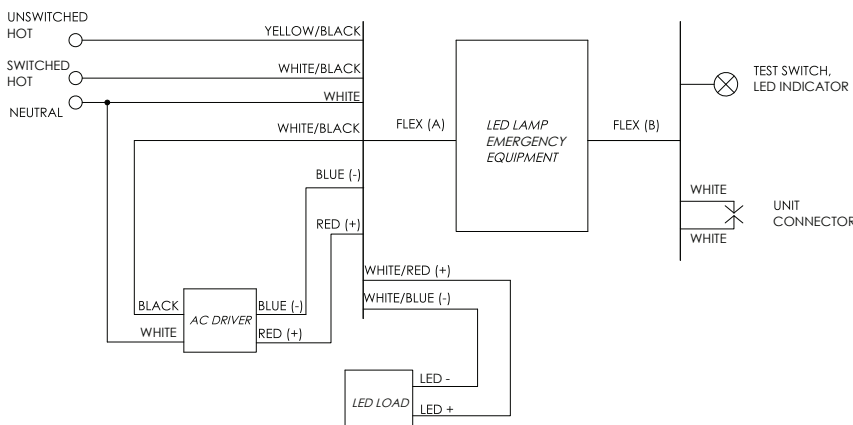
### EMERGENCY BATTERY (-EM): 10W

- 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	CH6C10/CR6LC40	Fixture/Trim	CH6C15/CR6LC40	Fixture/Trim	CH6C20/CR6LC40
Fixture Wattage:	10W	Fixture Wattage:	15W	Fixture Wattage:	20W
Fixture Lumens:	1000	Fixture Lumens:	1500	Fixture Lumens:	2100
Multiplier:	1	Multiplier:	0.67	Multiplier:	0.5
EM Lumens:	1000	EM Lumens:	1000	EM Lumens:	1050
Fixture/Trim	CH6C30/CR6LC40	Fixture/Trim	CH6C40/CR6LC40		
Fixture Wattage:	30W	Fixture Wattage:	40W		
Fixture Lumens:	2800	Fixture Lumens:	4000		
Multiplier:	0.33	Multiplier:	0.25		
EM Lumens:	920	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	CH6C10/CR6LC40
Fixture Wattage:	10W
Fixture Lumens:	1000
EM Lumens:	1000

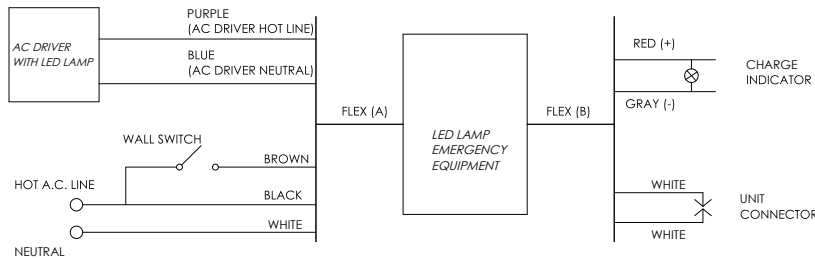
Fixture/Trim	CH6C15/CR6LC40
Fixture Wattage:	15W
Fixture Lumens:	1500
EM Lumens:	1500

Fixture/Trim	CH6C20/CR6LC40
Fixture Wattage:	20W
Fixture Lumens:	2100
EM Lumens:	2100

Fixture/Trim	CH6C30/CR6LC40
Fixture Wattage:	30W
Fixture Lumens:	2800
EM Lumens:	2800

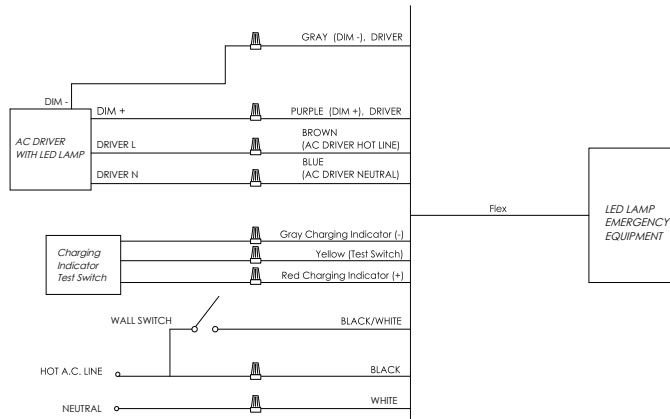
Fixture/Trim	CH6C40/CR6LC40
Fixture Wattage:	40W
Fixture Lumens:	4000
EM Lumens:	4000

#### <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

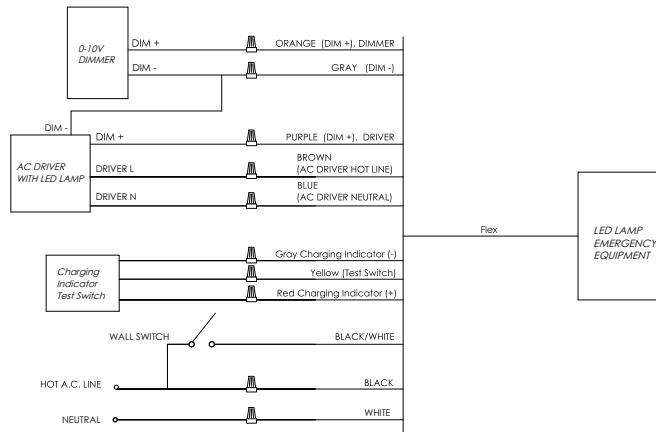


Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	40W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

## SPECIFICATION (Continued)

### >40W LOAD

- 0-10V dimmable driver required

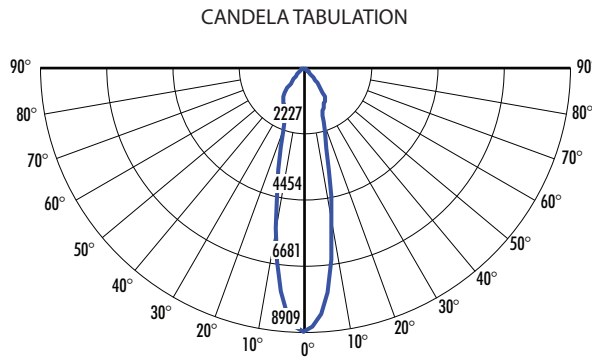


Input Voltage:	120-277VAC or 347VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	43W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Self-Diagnostic:	Yes

## PHOTOMETRY

### CH6C40UE-D10\_CR6LC40SW-B20-T35 (4000lm, 40W, 20°, 3500K)

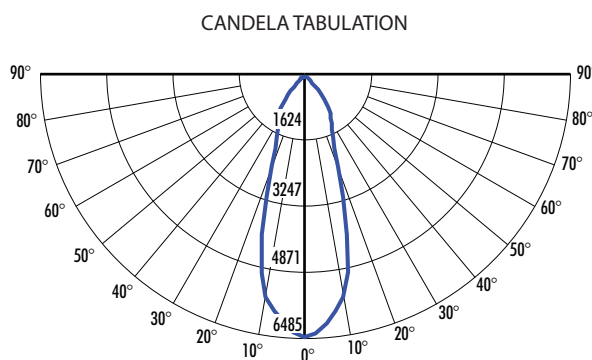
System Power:	43W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	24.1°	CW : 1.01
Field Angle 10%:	79.4°	SS : 0.99
Color Temperature:	3408K	<b>SW : 1.00</b>
CRI:	94.3	WW : 0.968
Lumens Delivered:	3754	CCT
CBCP:	8908.5	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		<b>3500K : 1.00</b>
		4000K : 1.04
		Lumens
		1000lm: 0.27
		1500lm: 0.37
		2100lm: 0.52
		2800lm: 0.70
		<b>4000lm: 1.00</b>



FOOTCANDLE DISTRIBUTION		
Height	Beam Diameter	FC
8.0'	3.42'	139.20
10.0'	4.27'	89.09
12.0'	5.12'	61.86
14.0'	5.98'	45.45
16.0'	6.83'	34.80

### CH6C40UE-D10\_CR6LC40SW-B30-T35 (4000lm, 40W, 30°, 3500K)

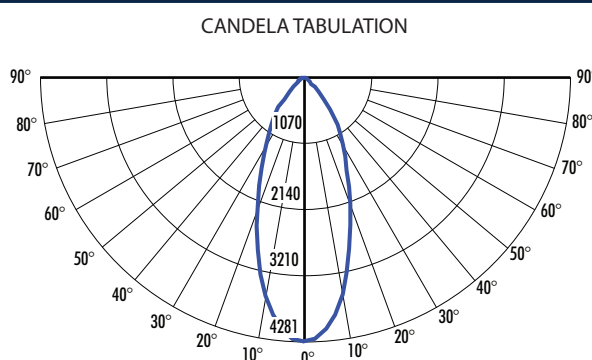
System Power:	43W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	34.4°	CW : 1.01
Field Angle 10%:	83.4°	SS : 0.99
Color Temperature:	3378K	<b>SW : 1.00</b>
CRI:	94.5	WW : 0.968
Lumens Delivered:	3799	CCT
CBCP:	6494.6	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		<b>3500K : 1.00</b>
		4000K : 1.04
		Lumens
		1000lm: 0.27
		1500lm: 0.37
		2100lm: 0.52
		2800lm: 0.70
		<b>4000lm: 1.00</b>



FOOTCANDLE DISTRIBUTION		
Height	Beam Diameter	FC
8.0'	4.95'	101.48
10.0'	6.19'	64.95
12.0'	7.43'	45.10
14.0'	9.91'	33.14
16.0'	11.14'	25.37

### CH6C40UE-D10\_CR6LC40SW-B40-T35 (4000lm, 40W, 40°, 3500K)

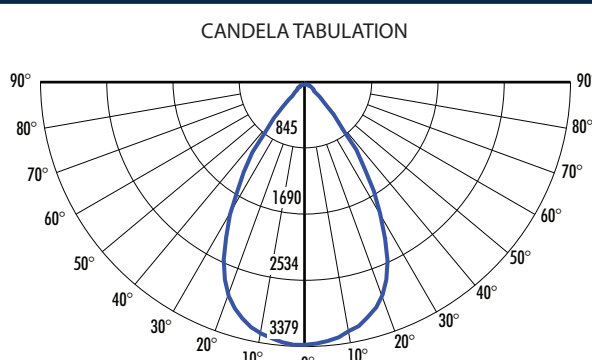
System Power:	43W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	41.0°	CW : 1.01
Field Angle 10%:	87.1°	SS : 0.99
Color Temperature:	3262K	<b>SW : 1.00</b>
CRI:	94.1	WW : 0.968
Lumens Delivered:	3008	CCT
CBCP:	4280.6	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		<b>3500K : 1.00</b>
		4000K : 1.04
		Lumens
		1000lm: 0.26
		1500lm: 0.37
		2100lm: 0.52
		2800lm: 0.71
		<b>4000lm: 1.00</b>



FOOTCANDLE DISTRIBUTION		
Height	Beam Diameter	FC
8.0'	5.98'	66.88
10.0'	7.48'	42.81
12.0'	8.97'	29.73
14.0'	10.47'	21.84
16.0'	11.96'	16.72

### CH6C40UE-D10\_CR6LC40SW-B60-T35 (4000lm, 40W, 60°, 3500K)

System Power:	43W	MULTIPLIERS
Test Date:	10/2023	REFLECTOR FINISH
Beam Angle 50%:	64.3°	CW : 1.01
Field Angle 10%:	92.8°	SS : 0.99
Color Temperature:	3297K	<b>SW : 1.00</b>
CRI:	94.1	WW : 0.968
Lumens Delivered:	3779	CCT
CBCP:	3379.2	2700K : 0.91
Power Factor:	0.99	3000K : 0.97
		<b>3500K : 1.00</b>
		4000K : 1.04
		Lumens
		1000lm: 0.27
		1500lm: 0.37
		2100lm: 0.53
		2800lm: 0.70
		<b>4000lm: 1.00</b>



FOOTCANDLE DISTRIBUTION		
Height	Beam Diameter	FC
8.0'	10.06'	52.80
10.0'	12.57'	33.79
12.0'	15.08'	23.47
14.0'	17.60'	17.24
16.0'	20.11'	13.20

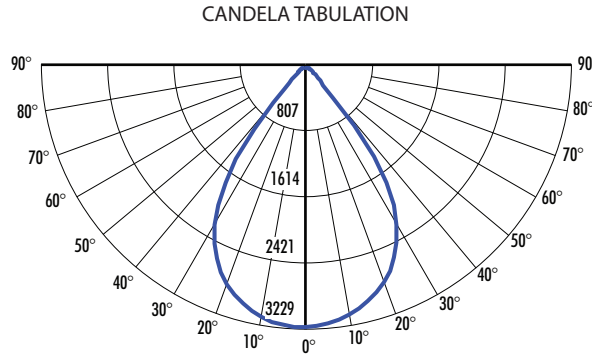
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## PHOTOMETRY (Continued)

### CH6C40UE-D10\_CR6LC40SW-B75-T35 (4000lm, 40W, 75°, 3500K)

System Power: 43W  
 Test Date: 10/2023  
 Beam Angle 50%: 71.8°  
 Field Angle 10%: 92.9°  
 Color Temperature: 3346K  
 CRI: 94.3  
 Lumens Delivered: 3994  
 CBCP: 3228.7  
 Power Factor: 0.99

MULTIPLIERS	
REFLECTOR FINISH	
CW :	1.01
SS :	0.99
<b>SW :</b>	<b>1.00</b>
WW :	0.968
CCT	
2700K :	0.91
3000K :	0.97
<b>3500K :</b>	<b>1.00</b>
4000K :	1.04
Lumens	
1000lm :	0.27
1500lm :	0.37
2100lm :	0.53
2800lm :	0.70
<b>4000lm :</b>	<b>1.00</b>



### FOOTCANDLE DISTRIBUTION

Height	Beam Diameter	FC
8.0'	11.58'	50.45
10.0'	14.48'	32.29
12.0'	17.37'	22.42
14.0'	20.27'	16.47
16.0'	23.16'	12.61