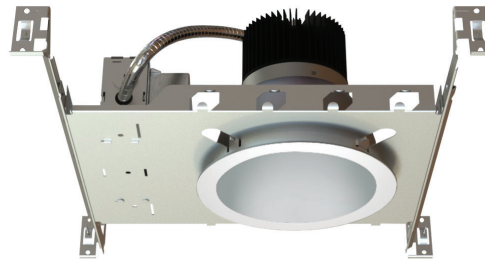
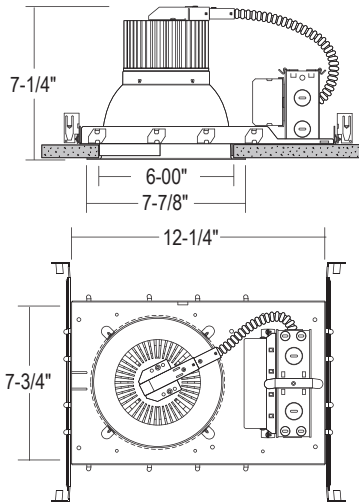


# CH6C - 6" C-SERIES

(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

### CH6C10

Housing	Insulation Contact	Driver Options	Emergency Options	J-Box	Reflector Finish	Beam Spread	CCT
Housing		Driver Options <sup>1</sup>		Emergency Options		Reflector Finish	
1000lm (10W)	<b>CH6C10<sup>4</sup></b>	0-10V Dimming	<b>UE-D10</b>	None	<b>Blank</b>	Satin Haze Reflector/ White Finish	<b>/CR6LC40SW</b>
1500lm (15W)	<b>CH6C15<sup>4</sup></b>	UniDim™ 0-10V ELV and Triac Dimming	<b>UE-DUN</b>	12W Emerg. Back-Up	<b>-EM</b>	White Reflector/ White Finish	<b>/CR6LC40WW</b>
2100lm (20W)	<b>CH6C20<sup>4</sup></b>	120V ELV and Triac Dimming	<b>-DIN</b>	Remote Locator	<b>-EMAC<sup>5</sup></b>	All Black	<b>/CR6LC40BB</b>
2800lm (30W)	<b>CH6C30</b>	Lutron HighLume	<b>UE-DHL</b>	Emergency System	<b>-GTD</b>	Clear Specular Reflector/White Finish	<b>/CR6LC40CW<sup>3</sup></b>
4000lm (40W)	<b>CH6C40<sup>6</sup></b>	Lutron EcoSystem	<b>UE-ECO</b>	Generator Transfer Device		All Satin Haze	<b>/CR6LC40SS</b>
Insulation Contact		347V	<b>-347<sup>2</sup></b>	J-Box	<b>Blank</b>	Beam Spread	
Non-IC	<b>Blank</b>	0-10V Dimming (1%)	<b>UE-D10P1</b>	None	<b>-CHP</b>	20° Spot	<b>-B20<sup>6</sup></b>
IC Rated/ Airtight	<b>ICA<sup>7</sup></b>			Junction Box (Chicago Plenum)		30° Narrow Flood	<b>-B30<sup>6</sup></b>
						40° Wide Flood	<b>-B40</b>
						60° Wide Flood	<b>-B60</b>
						70° Very Wide Flood	<b>-B70<sup>6</sup></b>
						CCT	
						2700K (90 CRI)	<b>-T27</b>
						2700K (97 CRI)	<b>-T27-C97</b>
						3000K (90 CRI)	<b>-T30</b>
						3000K (97 CRI)	<b>-T30-C97</b>
						3500K (90 CRI)	<b>-T35</b>
						4000K (90 CRI)	<b>-T40</b>
						5000K (80 CRI)	<b>-T50</b>

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

<sup>2</sup> -347 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> CH6C10, CH6C15, and CH6C20 are IC rated for direct insulation contact.

<sup>5</sup> Check wiring diagram.

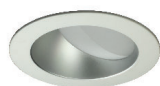
<sup>6</sup> -B20, -B30, and -B75 are not compatible with CH6C40.

<sup>7</sup> ICA is only available for CH6C10 and CH6C15.

## COMPATABILITY



**VR800**  
Round Vandal Resistant  
Kit for 6"



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



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

## SPECIFICATION

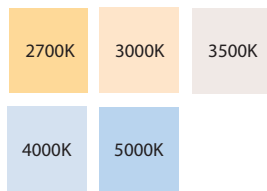
### Application

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.

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

### Insulation Contact

(CH6C10), (CH6C15), and (CH6C20) 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

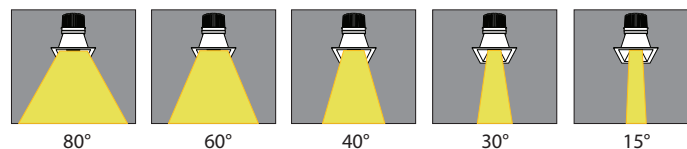
Our LED lamp array is replaceable via our on board quick disconnect terminal. Meets CA Title 24 Requirements and other standards restricting the use of Medium Base or Bi-Pin Sockets.

### Thermal Management

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



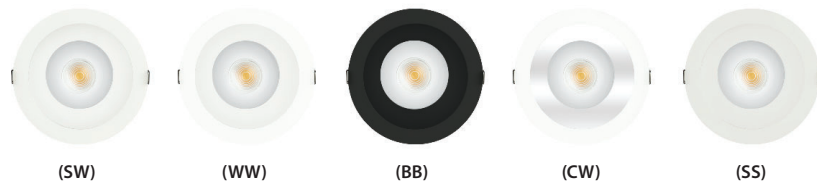
## SPECIFICATION (Continued)

### 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, Clear Specular Reflector/White Finish, 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

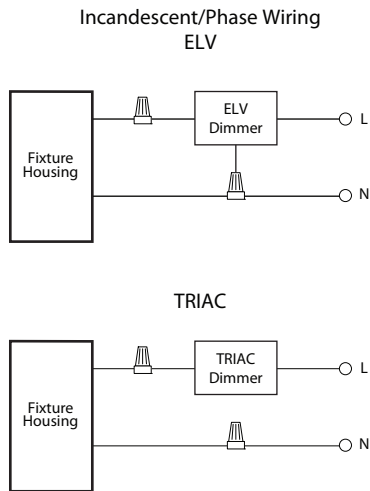
LITON recommends use of surge protectors on the power entering LED Housings. Surge damage is not covered by warranty. (+1KV). Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

## SPECIFICATION (Continued)

### Dimming Options

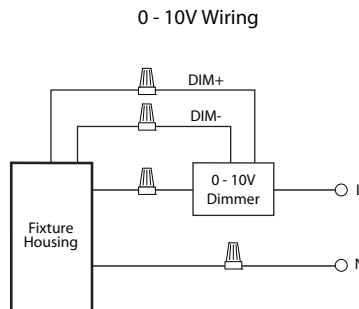
#### ELV and TRIAC Driver 120V (-DIN):

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.



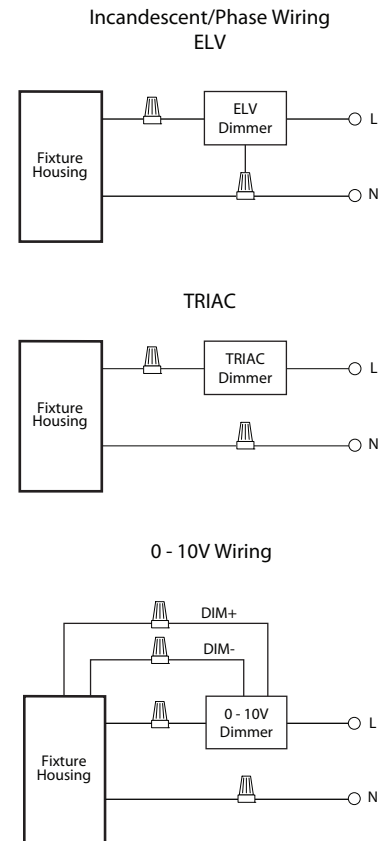
#### 0-10V Driver 120V/277V (UE-D10):

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.



### 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).

## SPECIFICATION (Continued)

### Emergency Options

When AC power fails, provides 90 minutes of power to the luminaire. In the event of a power failure, the LED Emergency backup switches to the emergency mode and operates the existing fixture for 90 minutes.

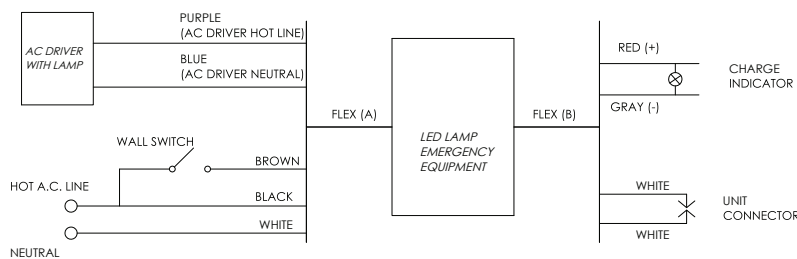
### Remote Emergency Back Up (-EMAC):

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

- Hidden Emergency Equipment
- Must be installed in Dry Locations

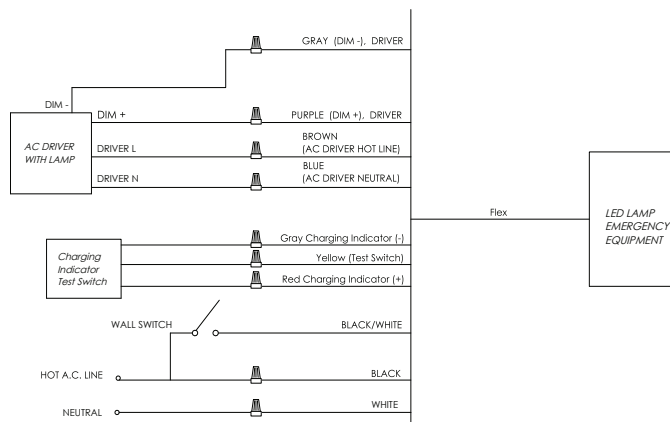
**Not rated for outdoor mounting. Damp location rated.**

#### <25W LOAD



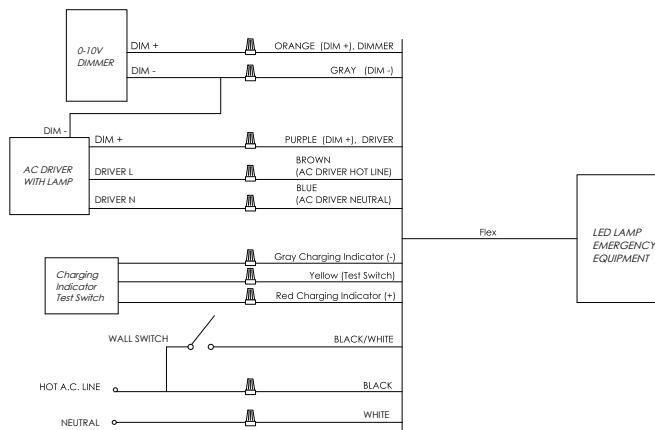
Input Voltage:	120-277VAC/60Hz
Output Voltage:	170VDC (120VAC Equivalent)
Wattage:	25W
Switching Time:	<1s
Charging Time:	24h
Operating Time:	90 minutes
Minimum Temperature:	0°C
Maximum Temperature:	50°C
Maximum Lumens:	2200lm

#### <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

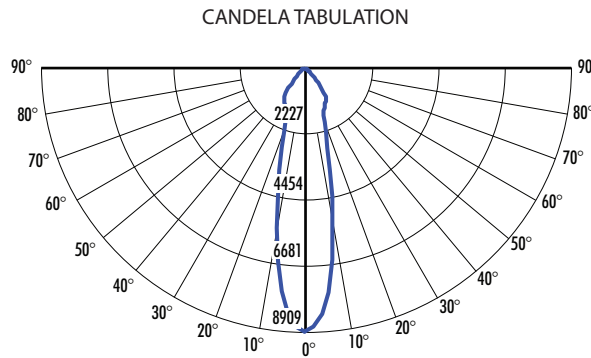
#### >40W LOAD



## 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>

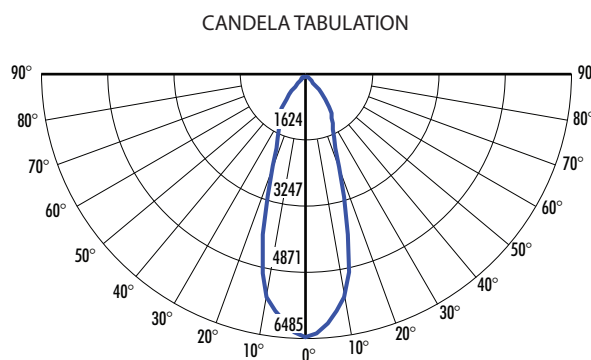


FOOTCANDLE DISTRIBUTION

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>

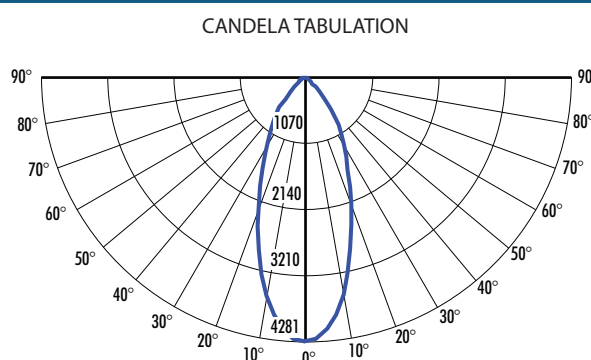


FOOTCANDLE DISTRIBUTION

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>

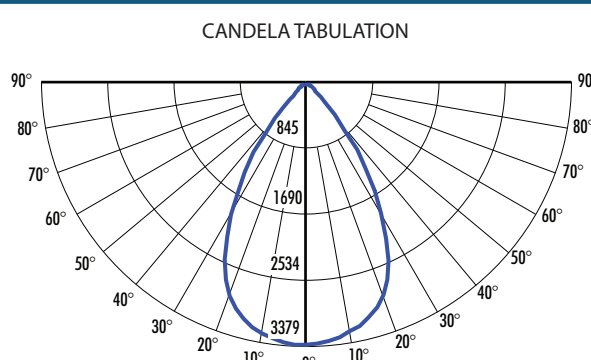


FOOTCANDLE DISTRIBUTION

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>

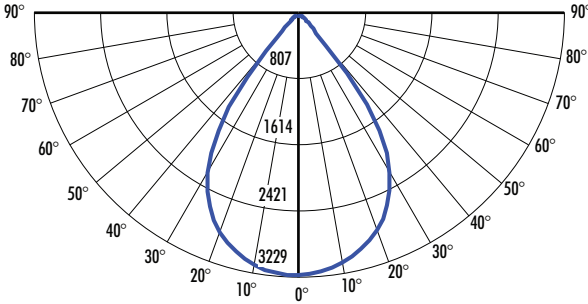
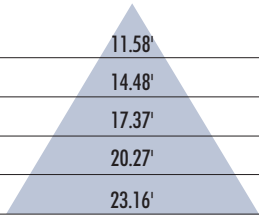


FOOTCANDLE DISTRIBUTION

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

PHOTOMETRY (Continued)

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

System Power: 43W		MULTIPLIERS				FOOTCANDLE DISTRIBUTION	
Test Date: 10/2023		REFLECTOR FINISH				Height	
Beam Angle 50%: 71.8°		CW : 1.01				Beam Diameter	
Field Angle 10%: 92.9°		SS : 0.99				FC	
Color Temperature: 3346K		SW : 1.00					
CRI: 94.3		WW : 0.968					
Lumens Delivered: 3994		CCT					
CBCP: 3228.7		2700K : 0.91					
Power Factor: 0.99		3000K : 0.97					
		3500K : 1.00					
		4000K : 1.04					
		Lumens					
		1000lm: 0.27					
		1500lm: 0.37					
		2100lm: 0.53					
		2800lm: 0.70					
		4000lm: 1.00					