

# PHILIPS LIGHTOLIER

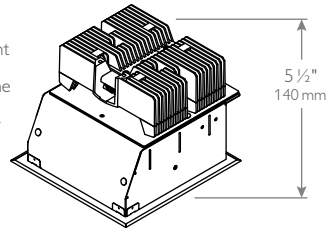
## Downlighting

### Calculite LED 6"x6" Lensed Wall Wash

Square aperture,  
1500/2000/3000/3500lm



Total height  
of  
Light engine  
+  
Reflector



Calculite LED 6" features an LED array of high brightness white light LEDs. The new LED boards in Calculite LED ensure a less than 2-step SDCM color variation between luminaires.

Complete product = Frame-in kit + Trim kit  
Lumen package for the frame-in kit must match the trim kit.

Project: \_\_\_\_\_  
Location: \_\_\_\_\_  
Cat.No: \_\_\_\_\_  
Type: \_\_\_\_\_  
Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
Notes: \_\_\_\_\_

#### Frame-in kit

example: C6X6L15NUVBZ10V

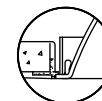
Series	Lumens	Installation	Input voltage	Version	Dimming	Options
<b>C6X6L</b>	<input type="checkbox"/>	<b>N</b>	<input type="checkbox"/>	<b>VB</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>C6X6L</b> Calculite 6" LED square aperture	<b>15</b> 1500lm	<b>N</b> New construction	<b>U</b> Universal (120/277V)	<b>VB</b> Version B	<b>Z10V</b> 0-10V dimming <b>LD</b> Lutron driver	<b>EM</b> Emergency <sup>1</sup> <b>LC</b> Chicago Plenum <sup>3</sup>
	<b>20</b> 2000lm <b>30</b> 3000lm <b>35</b> 3500lm	<b>N</b> New construction	<b>1</b> 120V <b>2</b> 277V	<b>VB</b> Version B	<b>Z10V</b> 0-10V dimming <b>LD</b> Lutron driver	<b>EM</b> Emergency <sup>1</sup> <b>LC</b> Chicago Plenum <sup>3</sup>
	<b>C6X6L</b> Calculite 6" LED square aperture (347v configurations)	<b>15</b> 1500lm <b>20</b> 2000lm <b>35</b> 3500lm	<b>N</b> New construction	<b>1</b> 120V	<b>VB</b> Version B	<b>Z10V</b> 0-10V dimming
<b>30</b> 3000lm		<b>N</b> New construction	<b>2</b> 277V	<b>VB</b> Version B	<b>Z10V</b> 0-10V dimming	<b>-347</b> 347V (for Canada) <sup>2</sup>

#### Trim kit

example: C6X6L1520DL35KCCDPVB

Series	Lumens	Style	CCT	Reflector	Flange	Version <sup>1</sup>
<b>C6X6L</b>	<b>1520</b>	<b>WW</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>VB</b>
<b>C6X6L</b> Calculite 6" LED square aperture	<b>1520</b> 1500/2000/ 3000/3500lm	<b>WW</b> Lensed wall wash	<b>27K</b> 2700K	<b>CL</b> Clear	<b>W</b> White (painted) <b>P</b> Polished (matches aperture) <b>FT</b> Flangeless (flush-mount) <sup>4</sup>	<b>VB</b> Version B
			<b>30K</b> 3000K	<b>CCL</b> Comfort clear		
			<b>35K</b> 3500K	<b>CCD</b> Comfort clear diffuse		
			<b>40K</b> 4000K	<b>CCZ</b> Champagne bronze <b>WH</b> White (painted)		

1. Consult LED-EM spec sheet for **EM** option details and restrictions.
2. Consult factory for availability of other 347V fixture configurations.
3. Consult factory for availability for other **LC** fixture configurations.
4. Accessory **CA6X6FMR** required for gypsum applications (minimal 1/4" reflector flange).

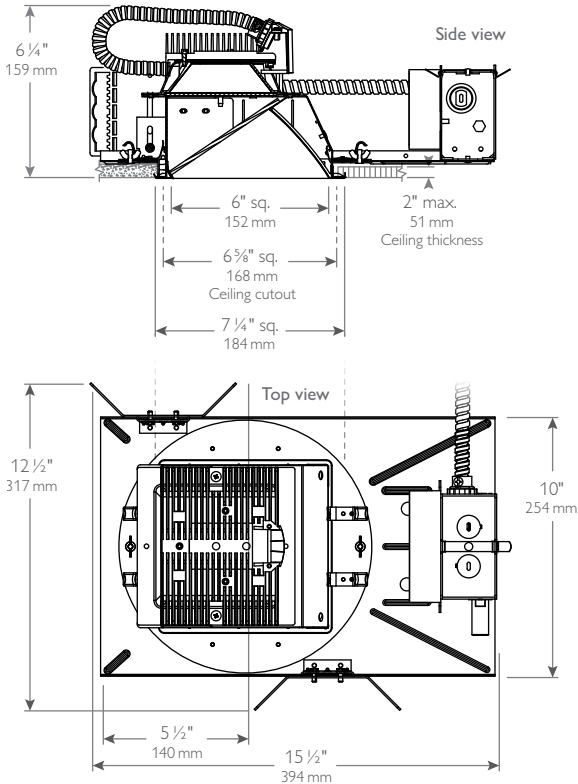


**CA6X6FMR**  
Flangeless trim with plaster ring accessory.  
(Required for gypsum installations)

# C6X6L-WW-VB Calculite LED

6x6" Square Aperture, Lensed Wall Wash, 1500/2000/3000/3500lm

## New Construction



## Frame-in kits

### New construction

**Mounting frame:** Galvanized stamped steel for dry or plaster ceilings.

**Vertical adjustment:** Light engine adjusts in frame below ceilings up to 1 1/8" max.

**Horizontal adjustment:** Rotating plate allows for 360° of adjustment prior to connection of power supply. Adjusts and locks via two wing nuts accessible through aperture.

**Mounting brackets:** Galvanized Steel. Adjustable through aperture. Use 3/4" or 1 1/2" lathing channel, 1/2" EMT or optional mounting bars (see Options and Accessories for optional mounting bars).

## Options and accessories

### Dimming capability:

0-10V or Lutron dimming (see LED-DIM spec sheet).

### Emergency capability:

Inverter (see CP-60150 spec sheet - ZI series). Integral (see LED-EM spec sheet-add "EM" suffix).

### Mounting bars:

**1950** 18" long (set of 2)

**1951** 27" long (set of 2)

**7994** Wood joist telescoping mounting bars (minimum 13 1/4" and maximum 24 1/2")

### T-Bar anchor clips:

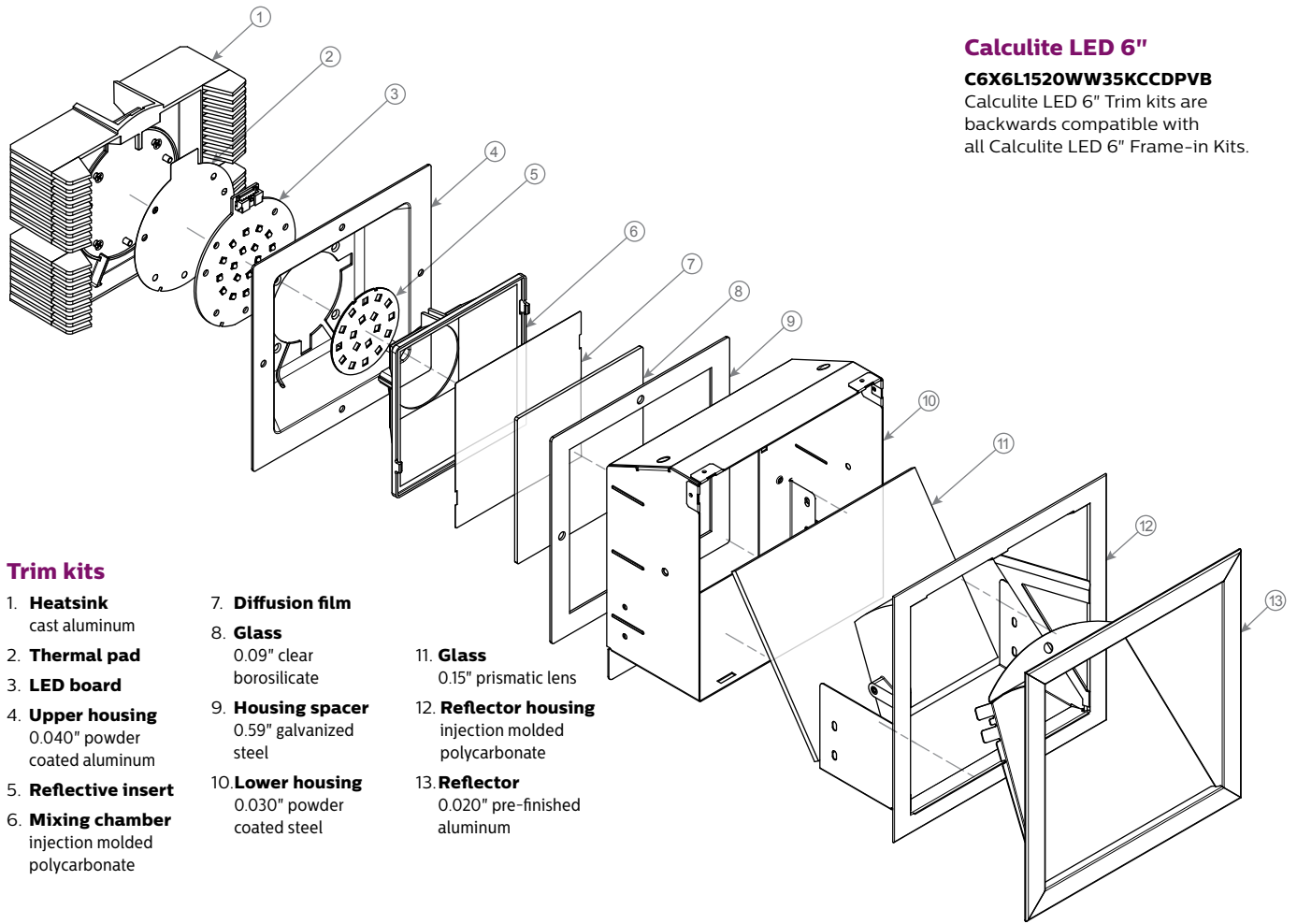
**1956** For 18" and 27" mounting bars (set of 4)

## Quick-ship

Philips is committed to providing customers with the products they need when they need them. For Service Smart (2 day) and Spec Smart (2 week) availability please reference the Philips Luminaire Smart Service Guide or contact your Philips Lighting representative. Quick-ship SKUs apply to the United States only.

# C6X6L-WW-VB Calculite LED

6x6" Square Aperture, Lensed Wall Wash, 1500/2000/3000/3500lm



## Calculite LED 6"

**C6X6L1520WW35KCCDPVB**

Calculite LED 6" Trim kits are backwards compatible with all Calculite LED 6" Frame-in Kits.

### Trim kits

- |  |  |  |
|--|--|--|
| 1. <b>Heatsink</b><br>cast aluminum                        | 7. <b>Diffusion film</b>                               | 11. <b>Glass</b><br>0.15" prismatic lens                       |
| 2. <b>Thermal pad</b>                                      | 8. <b>Glass</b><br>0.09" clear borosilicate            | 12. <b>Reflector housing</b><br>injection molded polycarbonate |
| 3. <b>LED board</b>  | 9. <b>Housing spacer</b><br>0.59" galvanized steel     | 13. <b>Reflector</b><br>0.020" pre-finished aluminum           |
| 4. <b>Upper housing</b><br>0.040" powder coated aluminum   | 10. <b>Lower housing</b><br>0.030" powder coated steel |  |
| 5. <b>Reflective insert</b>                                |  |  |
| 6. <b>Mixing chamber</b><br>injection molded polycarbonate |  |  |

### Features

**Ceiling cutout:** 6" aperture; 6<sup>5</sup>/<sub>8</sub>" (168mm) cutout.

**Depth:** 6<sup>1</sup>/<sub>4</sub>" (159 mm) including light engine.

**Power connection:** Attaches to light engine via push-in connector (on frame). Removable cover provides access.

**Junction box:** Allows inspection from below.

**Thermal protector:** Meets NEC & UL requirements. Do not install insulation above or within 3" of luminaire.

**Thermal Management:** Heat sink and thermal design along with the clean room assembly process ensures specified performance levels are maintained.

**Rated life:** Offers 60,000 hour rated life (3000lm offers 50,000 hour rated life) at 70% lumen maintenance (L70). Tested in accordance with IES LM-80-08 and TM-21-11. Color consistency between luminaires over the duration of our standard warranty will not be greater than 3 points in u', v'.

### Electrical

**Electronic power supply:** 120 or 277V, 50/60Hz, encased, overload and short circuit protected, thermal regulation to protect against overheating, sound rating: "A", -20°C minimum starting temperature.

Frame-In kit Electrical specifications	Input volts	Input freq.	Input current	LED drive current	Input power*	LED power	THD	Power factor
<b>C6X6L15NUVBZ10V</b> 1500lm w/0-10V dimming	120V	50/60Hz	0.16A	300mA	18W	15W	<15%	>0.90
	277V	50/60Hz	0.08A	300mA	18W	15W	<20%	>0.90
<b>C6X6L20N_VBZ10V</b> 2000lm w/0-10V dimming	120V	50/60Hz	0.20A	400mA	25W	20W	<15%	>0.90
	277V	50/60Hz	0.09A	400mA	25W	20W	<15%	>0.90
<b>C6X6L30N_VBZ10V</b> 3000lm w/0-10V dimming	120V	50/60Hz	0.31A	600mA	37W	30W	<20%	>0.95
	277V	50/60Hz	0.14A	600mA	37W	30W	<20%	>0.95
<b>C6X6L35N_VBZ10V</b> 3500lm w/0-10V dimming	120V	50/60Hz	0.35A	700mA	41W	35W	<10%	>0.95
	277V	50/60Hz	0.16A	700mA	41W	35W	<15%	>0.90

\* +/- .5%

— = Applies to both 120V (1) and 277V (2) Input voltages.

### Labels

cULus, I.B.E.W.  
Suitable for wet locations.  
5 year warranty.

# C6X6L-WW-VB Calculite LED

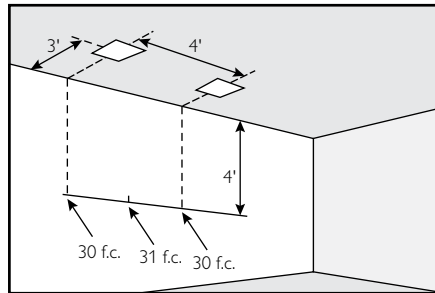
6x6" Square Aperture, Lensed Wall Wash, 1500/2000/3000/3500lm

## Calculite LED 6"

Lighting Data (example)

**C4L05NUVBZ10V / C4L05WW35KCLWVB**

The illumination on the wall 4' down from the ceiling is 25 f.c. beneath and 22 f.c. between fixtures.

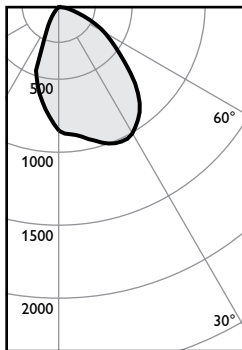


### Finish Adjust. factors      CCT Adjust. factors

CL = 100%	4000K = 103%
CCL = 95%	3500K = 100%
CCD = 87%	3000K = 97%
CCZ = 63%	2700K = 87%
WH = 87%	

## 18W LED, 3500K, 1500 lumen

### Candela Curve



Room side      Wall side

**Frame: C6X6L15NUVBZ10V**  
**Trim: C6X6L1520WW35KCLWVB**

CCT<sup>1</sup>: 3500K  
Output lumens: 1343 lms  
Input watts<sup>2</sup>: 18.2 W  
**Efficacy: 73.8 lm/w**  
CRI: 80 min  
Report no<sup>3</sup>: 692GFR

**Multiple unit data**  
Footcandles on wall

Distance from ceiling in feet	2' from wall		
	3' on ctr.	3' on ctr.	3' on ctr.
1	62	31	62
2	77	54	77
3	56	52	56
4	39	38	39
5	27	27	27
6	20	20	20
7	15	15	15
8	12	12	12
9	10	10	10
10	8	8	8
12	7	7	7
14	6	6	6

**Multiple unit data**  
Footcandles on wall

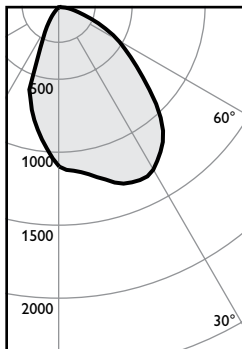
Distance from ceiling in feet	3' from wall		
	3' on ctr.	3' on ctr.	3' on ctr.
1	21	18	21
2	40	35	40
3	45	43	45
4	40	40	40
5	33	33	33
6	26	26	26
7	21	21	21
8	17	17	17
9	14	14	14
10	12	12	12
12	9	9	9
14	8	8	8

**Multiple unit data**  
Footcandles on wall (shown above)

Distance from ceiling in feet	3' from wall		
	4' on ctr.	4' on ctr.	4' on ctr.
1	18	12	18
2	34	23	34
3	37	30	37
4	31	30	31
5	25	24	25
6	20	20	20
7	16	16	16
8	13	13	13
9	11	11	11
10	9	9	9
12	7	7	7
14	6	6	6

## 25W LED, 3500K, 2000 lumen

### Candela Curve



Room side      Wall side

**Frame: C6X6L20N1VBZ10V**  
**Trim: C6X6L1520WW35KCLWVB**

CCT<sup>1</sup>: 3500K  
Output lumens: 1718 lms  
Input watts<sup>2</sup>: 25.1 W  
**Efficacy: 68.4 lm/w**  
CRI: 80 min  
Report no<sup>3</sup>: 698GFR

**Multiple unit data**  
Footcandles on wall

Distance from ceiling in feet	2' from wall		
	3' on ctr.	3' on ctr.	3' on ctr.
1	79	40	79
2	98	69	98
3	71	67	71
4	49	48	49
5	35	34	35
6	25	25	25
7	20	19	20
8	15	15	15
9	13	13	13
10	11	11	11
12	9	9	9
14	8	8	8

**Multiple unit data**  
Footcandles on wall

Distance from ceiling in feet	3' from wall		
	3' on ctr.	3' on ctr.	3' on ctr.
1	27	23	27
2	51	45	51
3	57	55	57
4	51	51	51
5	42	42	42
6	33	33	33
7	26	26	26
8	21	21	21
9	18	18	18
10	15	15	15
12	12	11	12
14	10	10	10

**Multiple unit data**  
Footcandles on wall

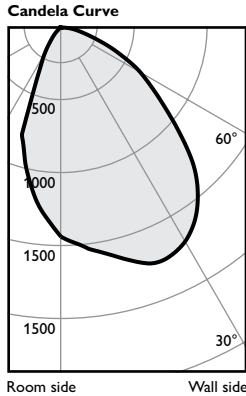
Distance from ceiling in feet	3' from wall		
	4' on ctr.	4' on ctr.	4' on ctr.
1	23	15	23
2	44	29	44
3	47	38	47
4	40	38	40
5	32	31	32
6	25	25	25
7	20	20	20
8	16	16	16
9	14	14	14
10	12	11	12
12	9	9	9
14	8	8	8

1. Correlated Color Temperature within specs as defined in ANSI\_NEMA\_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
2. Wattage controlled to within +/- 5%.
3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

# C6X6L-WW-VB Calculite LED

6x6" Square Aperture, Lensed Wall Wash, 1500/2000/3000/3500lm

## 36W LED, 3500K, 3000 lumen



**Frame: C6X6L30N1VBZ10V**  
**Trim: C6X6L1520WW35KCLWVB**

CCT<sup>1</sup>: 3500K  
Output lumens: 2244 lms  
Input watts<sup>2</sup>: 36.2 W  
**Efficacy: 62.0 lm/w**  
CRI: 80 min  
Report no<sup>3</sup>: FO34803

### Multiple unit data

Footcandles on wall

Footcandles on wall	2' from wall		Footcandles on wall
	3' on ctr.	3' on ctr.	
1	99	27	99
2	123	48	123
3	85	50	85
4	56	40	56
5	39	32	39
6	29	26	29
7	23	21	23
8	19	17	19
9	15	15	15
10	13	13	13
12	11	11	11
14	10	9	10

### Multiple unit data

Footcandles on wall

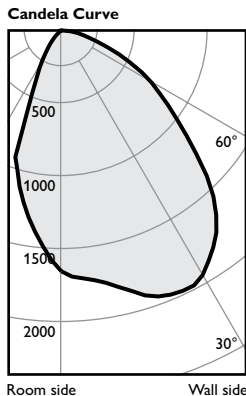
Footcandles on wall	3' from wall		Footcandles on wall
	3' on ctr.	3' on ctr.	
1	31	17	31
2	59	32	59
3	64	40	64
4	55	39	55
5	44	34	44
6	35	28	35
7	28	24	28
8	24	21	24
9	20	19	20
10	17	16	17
12	14	13	14
14	12	11	12

### Multiple unit data

Footcandles on wall

Footcandles on wall	3' from wall		Footcandles on wall
	4' on ctr.	4' on ctr.	
1	29	11	29
2	55	20	55
3	58	27	58
4	47	28	47
5	36	25	36
6	29	22	29
7	23	19	23
8	19	16	19
9	16	14	16
10	14	13	14
12	11	10	11
14	9	9	9

## 40W LED, 3500K, 3500 lumen



**Frame: C6X6L35N1VBZ10V**  
**Trim: C6X6L1520WW35KCLWVB**

CCT<sup>1</sup>: 3500K  
Output lumens: 2611 lms  
Input watts<sup>2</sup>: 40.1 W  
**Efficacy: 65.1 lm/w**  
CRI: 80 min  
Report no<sup>3</sup>: 700GFR

### Multiple unit data

Footcandles on wall

Footcandles on wall	2' from wall		Footcandles on wall
	3' on ctr.	3' on ctr.	
1	118	61	118
2	148	105	148
3	107	101	107
4	75	74	75
5	53	52	53
6	39	38	39
7	30	29	30
8	24	23	24
9	19	20	19
10	17	17	17
12	13	13	13
14	12	12	12

### Multiple unit data

Footcandles on wall

Footcandles on wall	3' from wall		Footcandles on wall
	3' on ctr.	3' on ctr.	
1	40	35	40
2	77	68	77
3	86	84	86
4	78	78	78
5	63	64	63
6	50	50	50
7	40	40	40
8	32	32	32
9	27	27	27
10	23	23	23
12	18	17	18
14	15	15	15

### Multiple unit data

Footcandles on wall

Footcandles on wall	3' from wall		Footcandles on wall
	4' on ctr.	4' on ctr.	
1	35	23	35
2	66	45	66
3	70	58	70
4	60	57	60
5	49	48	49
6	39	38	39
7	31	31	31
8	25	25	25
9	21	21	21
10	18	17	18
12	14	14	14
14	12	12	12

1. Correlated Color Temperature within specs as defined in ANSI\_NEMA\_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
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