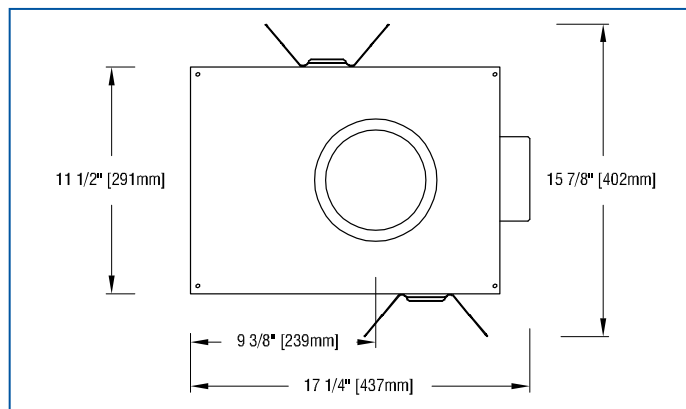
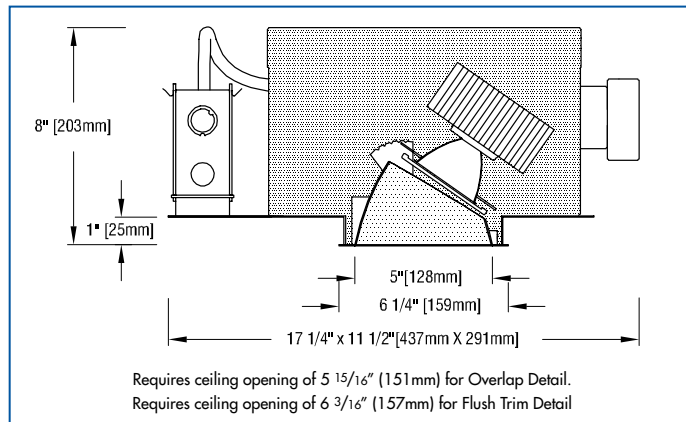


FIVE HI CLT VNSP

recessed LED very narrow spot accent light

FOCUSED BEAM - FOCUSED BEAM - FOCUSED BEAM - FOCUSED BEAM - FOCUSED BEAM - FOCUSED BEAM - FOCUSED BEAM - FOCUSED BEAM



FEATURES

- **FIVE HI CLT VNSP is a 5" aperture LED accent light capable of 7° to 14° beam spreads.** Luminaire is powered by Cree chip-on-board LED's providing CRI's of 80+, 90+ or 98. See tables below for Center Beam Candlepower (CBCP), wattages, and efficacies.
- **Luminaire employs an internal 'twist and lock' reflector** to produce an initial beamspread of 7° or 14°. To allow beamspread to be changed in installed luminaires, internal reflectors are available as accessories. Precise reflector design minimizes aperture brightness.
- **Luminaire provides 363° horizontal rotation and 0°- 35° angular adjustment** with lockable focus.
- **Luminaire accepts one or two of a number of Optical Accessories** including lenses and color filters. A complimentary beam smoother is included.
- **External reflectors are available in clear natural aluminum finishes** — semi-specular (C), slightly diffuse (V) or fully diffuse (EC) — or champagne gold, black Alzak® or white. Other finishes available on special order.
- **Luminaire includes a pair of mounting bars** (3/4" x 27" C channel). Specialty bars for wood joists and T-bar installations are also available.
- **For more information, [click here](#).**

APPLICATIONS

Luminaire is listed for Damp Location. Fixture is prewired with an insulation detecting thermal protector. Luminaire approved for eight #12 wire 90° C branch circuit pull through wiring and is suitable for use in a fire rated ceiling. Removal of external reflector allows access to LED and junction box.

Warranty Detail Our 5-year warranty does not include the provision of scaffolding, man-lifts, 'cherry pickers' or other extraordinary means of access to a product requiring maintenance.

PRODUCT CODE

For complete product code, list basic unit and select one item from each following box.

Basic Unit	FH-CLT-AA-5
Internal Reflector	
7° initial beam spread	7D
14° initial beam spread	14D
Driver	
dimble to 1% by a 0-10V dimmer on 120 or 277-volt service	DMV
dimble to 5% or 10% by either an incandescent or ELV dimmer; 120-volt service only	DMP
dimble to 1% by a 2-wire Lutron compatible dimmer	DMHU
dimble to 1% SoftOn/FadeToBlack by a Lutron EcoSystem control ...	ECO-LU
eldoLED 0-10V (Logarithmic) driver dimmable to 0.1% with a 0-10V dimmer on 120 or 277-volt service	DVOELG
eldoLED 0-10V (Linear) driver dimmable to 0.1% with a 0-10V dimmer on 120 or 277-volt service	DVOELN
eldoLED driver dimmable to 0.1%, compatible with DALI control system	DA0-EL
Moon's driver dimmable to 0.1%, compatible with DMX controllers	DX0-MN
Magnitude (Logarithmic) driver dimmable to 0.1% by a Zigbee Wireless Network; wireless range 50' through standard walls.....	ZGOMAG

Light Source Output (Lumens)	
1200L / CRI 98	2700K & 3000K only - L12A
1600L	2700K & 3000K only - L16A
1800L	2700K & 3000K only - L18A
1300L / CRI 90	2700K & 3000K only - L13H
1700L	2700K & 3000K only - L17H
1900L	2700K & 3000K only - L19H
1600L / CRI 80+	- L16S
2100L	- L21S
2400L	- L24S

Light Color	
2700 K	- 27K
3000 K	- 30K
3500 K	not available in CRI 90+ and CRI 98 - 35K
4000 K	not available in CRI 90+ and CRI 98 - 40K
5000 K	not available in CRI 90+ and CRI 98 - 50K

Voltage 120 volt service	- 120	277 volt service.....	- 277
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External Reflector Color and Detail	<i>Overlap</i>	<i>Trim Flush*</i>
Semi-specular Clear	COL	CTF
Slightly diffuse Clear	VOL	VTF
Fully diffuse Clear	ECOL	ECTF
Champagne Gold	GOL	GTF
Black	BOL	BTF
White	WOL	WTF
Standard reflector flange continues reflector finish. White painted flanges and custom painted flanges are available on special order. Add WF (white flange) or CCF (custom color flange).		
*Trim Flush reflector trim requires the use of a plaster ring Accessory (see below).		
▶ Reflectors detailed for metal or wood ceilings available on special order.		

OPTIONS *Specify by adding to the basic unit.*

Remote emergency battery pack including two components – battery pack and plate with test switch and light – to be mounted adjacent to fixture; for use in accessible ceilings.....	- RX
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ACCESSORIES *Specify as separate line item.*

Plaster ring allows use of 5 7/8" OD Trim Flush (TF) reflector in sheetrock ceiling: 6 3/16" dia hole required.....	- TF RING/5
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EXTRA REFLECTORS *Specify as separate line items.*

7° initial beam spread	- CLT-REF07
14° initial beam spread	- CLT-REF14



OPTICAL ACCESSORIES *Specify as separate line*

All are 3 3/4" (95mm) diameter. Lenses and filters are glass; screens are aluminum.

beam smoother (included with fixture)	CLR/3.75
prismatic lens (Solite)	PLS/3.75
55° spread lens	LENS/3.75
40° x 70° spread lens	LENS/3.75-4070
33% light reduction screen	SCR33/3.75
50% light reduction screen	SCR50/3.75
color filters	
surprise pink	PNK/3.75
daylight blue	DAY/3.75
amber	AMB/3.75
blue	BLU/3.75
green	GRN/3.75
red	RED/3.75



PHOTOMETRIC REPORT with 7° reflector (TESTED PER IESNA LM-79-2008)

UL Verification Services Report No. 12482407.03B. Original test report furnished upon request.

Luminaire recessed LED round accent light with semi-specular clear aluminum reflector, LED aimed at 15° above vertical

Lamp Cree LED, 2400 lumens, 3000K CCT, 80 CRI, with 7° beam spread integral reflector

Lamp Life rated 50,000 hours based on L70/B50 criteria. LM80 report by LED manufacturer furnished upon request

LUMINAIRE LIGHT OUTPUT AND EFFICACY

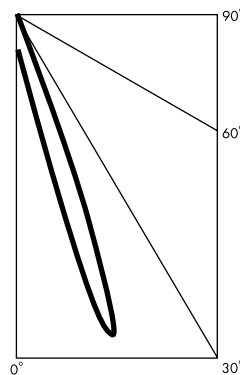
(3000K LED, 7° beam spread integral reflector)

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage
1200 Lumens 98CRI (L12A)	833*	23695*	52*	16
1600 Lumens 98CRI (L16A)	1100*	31277*	50*	22
1800 Lumens 98CRI (L18A)	1250*	35543*	48*	26
1300 Lumens 90CRI (L13H)	883*	25117*	55*	16
1700 Lumens 90CRI (L17H)	1183*	33647*	54*	22
1900 Lumens 90CRI (L19H)	1349*	38386*	52*	26
1600 Lumens 80CRI (L16S)	1100*	31277*	69*	16
2100 Lumens 80CRI (L21S)	1466*	41703*	67*	22
2400 Lumens 80CRI (L24S)	1666	47390	64	26

*estimated values

CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	1693	1693	1693	1693	1693
5	4067	2445	1879	1686	1540
15	47390	1919	963	809	736
25	2868	875	390	19	16
35	489	26	13	10	7
45	7	7	5	5	3
55	2	3	4	4	2
65	2	2	4	2	2
75	2	3	2	2	2
85	1	2	3	2	1
90	1	2	2	2	2



PHOTOMETRIC REPORT with 14° reflector (TESTED PER IESNA LM-79-2008)

UL Verification Services Report No. 12482407.04B. Original test report furnished upon request.

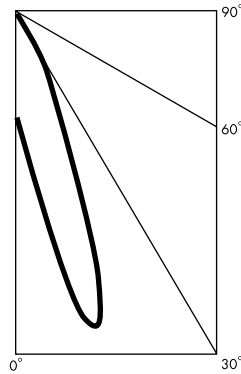
Luminaire recessed LED round accent light with semi-specular clear aluminum reflector, LED aimed at 15° above vertical
 Lamp Cree LED, 2400 lumens, 3000K CCT, 80 CRI, with 14° beam spread integral reflector
 Lamp Life rated 50,000 hours based on L70/B50 criteria. LM80 report by LED manufacturer furnished upon request

LUMINAIRE LIGHT OUTPUT AND EFFICACY

(3000K LED, 14° beam spread integral reflector)

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage
1200 Lumens 98CRI (L12A)	867*	6865*	54*	16
1600 Lumens 98CRI (L16A)	1144*	9062*	52*	22
1800 Lumens 98CRI (L18A)	1300*	10298*	50*	26
1300 Lumens 90CRI (L13H)	918*	7277*	57*	16
1700 Lumens 90CRI (L17H)	1230*	9748*	56*	22
1900 Lumens 90CRI (L19H)	1404*	11121*	54*	26
1600 Lumens 80CRI (L16S)	1144*	9062*	71*	16
2100 Lumens 80CRI (L21S)	1525*	12082*	69*	22
2400 Lumens 80CRI (L24S)	1733	13730	66	26

*estimated values



CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	2848	2848	2848	2848	2848
5	4375	3803	2848	2159	1871
15	13730	3572	1473	948	609
25	4147	1607	490	40	18
35	1801	182	23	11	7
45	39	10	7	6	5
55	3	4	5	5	4
65	3	4	5	3	3
75	2	4	3	3	2
85	2	3	3	4	2
90	2	3	3	0	0

LIGHT OUTPUT MULTIPLIER (based on 2400 lumens LED)

LED Light Engine	Light Output Multiplier	EM Light Output Multiplier (90-minute run)
1200 Lumens 98CRI (L12A)	0.5*	0.20*
1600 Lumens 98CRI (L16A)	0.66*	0.20*
1800 Lumens 98CRI (L18A)	0.75*	0.20*
1300 Lumens 90CRI (L13H)	0.53*	0.22*
1700 Lumens 90CRI (L17H)	0.71*	0.22*
1900 Lumens 90CRI (L19H)	0.81*	0.22*
1600 Lumens 80CRI (L16S)	0.66*	0.27*
2100 Lumens 80CRI (L21S)	0.88*	0.27*
2400 Lumens 80CRI (L24S)	1	0.27*

*estimated values

STANDARD DRIVER INFORMATION

(UL Class 2, dry and damp location)

Voltage	120	277
Input Watts (L12A/L16A/L18A/L13H/L17H/L19H/L16S/L21S/L24S lumens)	16/22/26	16/22/26
Input Current (A) (L12A/L16A/L18A/L13H/L17H/L19H/L16S/L21S/L24S lumens)	.13/18/22	.06/08/09
Output Current (mA)	350-600	350-600
Min. Power Factor	>0.9	>0.9
Operating Temperature Range (F)	-4 to 122	-4 to 122

REFLECTOR COLOR MULTIPLIERS

Semi-specular clear (C)	1
Slightly diffuse clear (V)	.95
Fully diffuse clear (EC)	.88
Champagne gold clear (G)	.95
Black (B)	.49

LED CCT MULTIPLIERS

2700K	.93
3000K	1
3500K	1
4000K	1
5000K	1