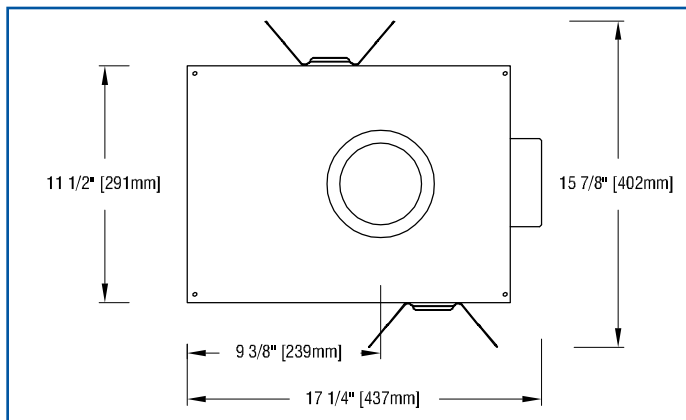
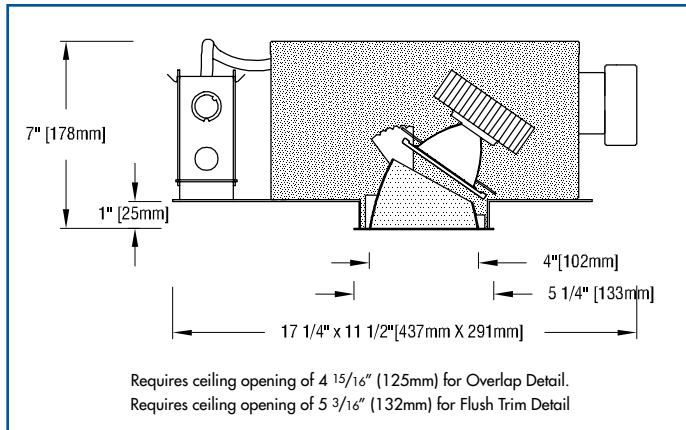


FOUR HI CLT VNSP

recessed very narrow spot accent light


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



FEATURES

- **FOUR HI CLT VNSP is a 4" 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 beam-spread 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) — as well as 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 the external reflector allows access to the LED module and junction box.

PRODUCT CODE

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

Basic Unit	FH-CLT-AA-4	
Internal Reflector		
7° initial beam spread	7D	
14° initial beam spread	14D	
Driver		
dimable to 1% by a 0-10V dimmer on 120 or 277-volt service	- DMV	
dimable to 5% or 10% by either an incandescent or ELV dimmer; 120-volt service only	- DMP	
dimable to 1% by a 2-wire Lutron compatible dimmer	- DMHU	
dimable 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 DAU 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
1300L / CRI 90	2700K & 3000K only	- L13H
1700L	2700K & 3000K only	- L17H
1600L / CRI 80+		- L16S
2100L		- L21S
Light Color		
2700 K.....	- 27K	
3000 K.....	- 30K	
3500 K	not available in CRI 90+ and CRI 98	
4000 K	not available in CRI 90+ and CRI 98	
5000 K	not available in CRI 90+ and CRI 98	
Voltage		
120 volt service	- 120	
277 volt service	- 277	
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 4 7/8" OD Trim Flush (TF) reflector in sheetrock ceiling; 5 3/16" dia hole required	- TF RING/4
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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)

Verification Services Report No. 12482407.01B. 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, 2100 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

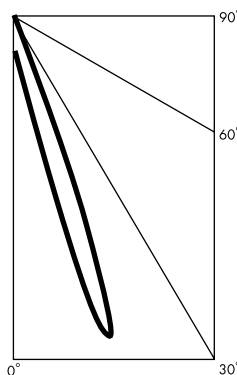
(3000K LED, 7° beam spread integral reflector)

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage
1200 Lumens 98CRI (L12A)	677*	18046*	42*	16
1600 Lumens 98CRI (L16A)	890*	23745*	40*	22
1300 Lumens 90CRI (L13H)	724*	19313*	45*	26
1700 Lumens 90CRI (L17H)	961*	25645*	44*	16
1600 Lumens 80CRI (L16S)	890*	23745*	56*	22
2100 Lumens 80CRI (L21S)	1187	31660	55	26

*estimated values

CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	1445	1445	1445	1445	1445
5	3122	2523	1470	1325	1189
15	31660	1643	809	422	39
25	2822	586	44	16	12
35	31	18	9	6	3
45	5	3	3	2	2
55	0	1	2	1	1
65	0	0	1	1	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



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

UL Verification Services Report No. 12482407.02B. Original test report furnished upon request.

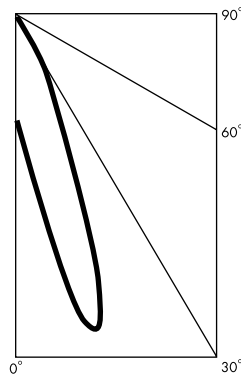
Luminaire recessed LED round accent light with semi-specular clear aluminum reflector, LED aimed at 15° above vertical
 Lamp Cree LED, 2100 lumens, 3000K CCT, 80 CRI, with 14° beam spread integral reflector
 Lamp Life rated 50,000 hours based on L70/B50 criteria. LM80 report by LED manufacturer furnished 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)	721*	5613*	45*	16
1600 Lumens 98CRI (L16A)	949*	7385*	43*	22
1300 Lumens 90CRI (L13H)	772*	6007*	48*	16
1700 Lumens 90CRI (L17H)	1025*	7976*	47*	22
1600 Lumens 80CRI (L16S)	949*	7385*	59*	16
2100 Lumens 80CRI (L21S)	1265	9847	58	22

*estimated values



CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	2737	2737	2727	2737	2737
5	3928	3367	2616	2135	1829
15	9847	2718	1182	504	179
25	3589	1118	97	55	18
35	775	82	10	7	4
45	29	5	3	3	3
55	1	1	2	1	1
65	1	1	1	1	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

LIGHT OUTPUT MULTIPLIER (based on 2100 lumens LED)

LED Light Engine	Light Output Multiplier	EM Light Output Multiplier (90-minute run)
1200 Lumens 98CRI (L12A)	0.57*	0.23*
1600 Lumens 98CRI (L16A)	0.75*	0.23*
1300 Lumens 90CRI (L13H)	0.61*	0.26*
1700 Lumens 90CRI (L17H)	0.81*	0.26*
1600 Lumens 80CRI (L16S)	0.75*	0.30*
2100 Lumens 80CRI (L21S)	1	0.30*

*estimated values

STANDARD DRIVER INFORMATION

(UL Class 2, dry and damp location)

Voltage	120	277
Input Watts (L12A/L16A/L13H/L17H/L16S/L21S lumens)	16/22	16/22
Input Current (A) (L12A/L16A/L13H/L17H/L16S/L21S lumens)	.13/18	.06/08
Output Current (mA)	350-500	350-500
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