

Project

Date

Product Code

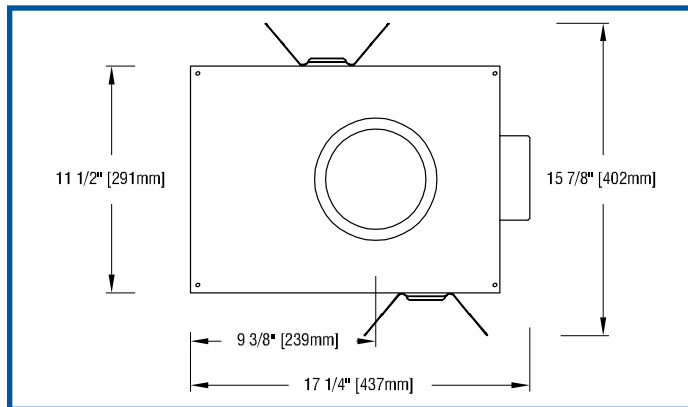
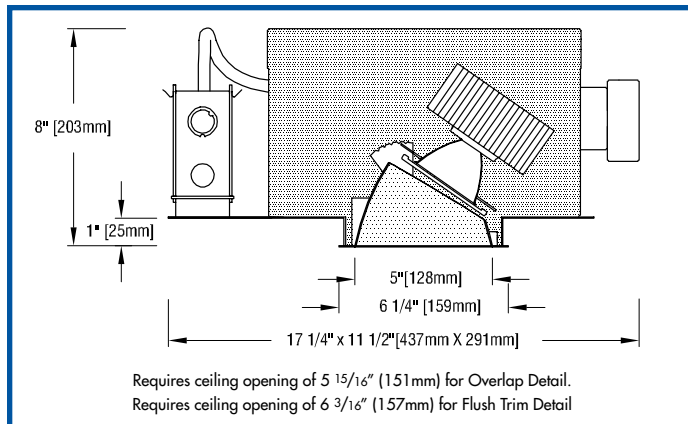
Type

Designer



FIVE HI CZS AA recessed LED accent light

HIGH OUTPUT - HIGH OUTPUT - HIGH OUTPUT - HIGH OUTPUT - HIGH OUTPUT - HIGH OUTPUT - HIGH OUTPUT - HIGH OUTPUT



FEATURES

- FIVE HI CZS AA is a 5" aperture LED accent light capable of 15° to 56° beam spreads.** Luminaire is powered by Citizen chip-on-board LED's providing CRI's of 80+, 90+ or 97. See tables below for wattages and efficacies.
- Luminaire employs an internal 'twist and lock' reflector** to produce an initial beamspread of 15°, 31°, 40° or 56°. 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. Complimentary prismatic lens 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-CZS2-AA-5	
Internal Reflector		
15° initial beam spread	15D	
31° initial beam spread	31D	
40° initial beam spread	40D	
56° initial beam spread	56D	
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	
ddimble 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 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.....	ZG0MAG	
Light Source Output (Lumens)		
1500L / CRI 97	2700K & 3000K only - L15A	
2100L	2700K & 3000K only - L21A	
2800L	2700K & 3000K only - L28A	
3000L	2700K & 3000K only - L30A	
3900L	2700K & 3000K only - L39A	
1700L / CRI 90+	2700K & 3000K only - L17H	
2300L	2700K & 3000K only - L23H	
3100L	2700K & 3000K only - L31H	
3400L	2700K & 3000K only - L34H	
4400L	2700K & 3000K only - L44H	
1900L / CRI 80+	- L19S	
2700L	- L27S	
3600L	- L36S	
4000L	- L40S	
5100L	- L51S	
Light Color		
2700 K	- 27K	
3000 K	- 30K	
3500 K	not available in CRI 90+ and CRI 97 - 35K	
4000 K	not available in CRI 90+ and CRI 97 - 40K	
5000 K	not available in CRI 90+ and CRI 97 - 50K	
Voltage 120 volt service	120	
277 volt service.....	277	
External Reflector Color and Detail		
Semi-specular Clear	COL	Trim Flush* 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.		

Light Color	2700 K	- 27K
	3000 K	- 30K
	3500 K	not available in CRI 90+ and CRI 97 - 35K
	4000 K	not available in CRI 90+ and CRI 97 - 40K
	5000 K	not available in CRI 90+ and CRI 97 - 50K

Voltage 120 volt service	120
277 volt service.....	277

External Reflector Color and Detail		
Semi-specular Clear	COL	Trim Flush* 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

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

EXTRA REFLECTORS

 Specify as separate line items.

15° initial beam spread	CZS-REF15
31° initial beam spread	CZS-REF31
40° initial beam spread	CZS-REF40
56° initial beam spread	CZS-REF56



OPTICAL ACCESSORIES *Specify as separate line*

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

prismatic lens (Solite) (included with fixture).....	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 15° reflector (TESTED PER IESNA LM-79-2008)

Leading Testing Laboratories Report No. UT18080001-01a. 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 Citizen LED, 5100 lumens, 3000K CCT, 80 CRI, with 15° 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

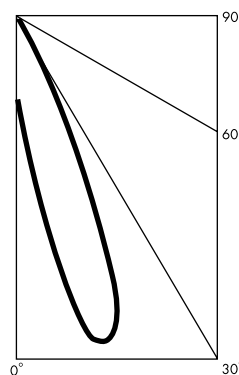
(3000K LED, 15° beam spread integral reflector)

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage	EM Light Output (90 min. run)
1500 Lumens 97 CRI (L15A)	978*	8357*	61*	16	371*
2100 Lumens 97 CRI (L21A)	1349*	11527*	64*	21	371*
2800 Lumens 97 CRI (L28A)	1821*	15561*	61*	30	371*
3000 Lumens 97 CRI (L30A)	2023*	17290*	60*	34	371*
3900 Lumens 97 CRI (L39A)	2596*	22189*	54*	48	371*
1700 Lumens 90 CRI (L17H)	1113*	9510*	70*	16	405*
2300 Lumens 90 CRI (L23H)	1517*	12968*	72*	21	405*
3100 Lumens 90 CRI (L31H)	2023*	17290*	67*	30	405*
3400 Lumens 90CRI (L34H)	2259*	19307*	66*	34	405*
4400 Lumens 90 CRI (L44H)	2900*	24783*	60*	48	405*
1900 Lumens 80 CRI (L19S)	1281*	10950*	80*	16	472*
2700 Lumens 80 CRI (L27S)	1787*	15273*	85*	21	472*
3600 Lumens 80 CRI (L36S)	2394*	20460*	80*	30	472*
4000 Lumens 80 CRI (L40S)	2630*	22477*	77*	34	472*
5100 Lumens 80 CRI (L51S)	3372	28817	72	48	472*

*estimated values

CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	6505	6505	6505	6505	6505
5	10968	7864	5239	3618	4281
15	28817	7236	2108	1507	1437
25	9165	2503	188	17	24
35	144	18	3	6	5
45	5	4	2	1	0
55	0	0	0	0	0
65	0	0	0	0	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



PHOTOMETRIC REPORT with 31° reflector (TESTED PER IESNA LM-79-2008)

Leading Testing Laboratories Report No. UT18090004-01a. 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 Citizen LED, 5100 lumens, 3000K CCT, 80 CRI, with 31° 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

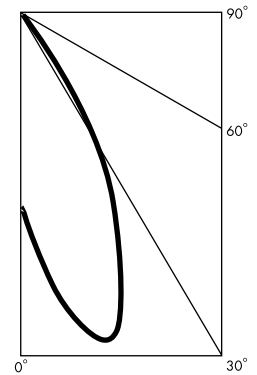
(3000K LED, 31° beam spread integral reflector)

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage	EM Light Output (90 min. run)
1500 Lumens 97 CRI (L15A)	867*	2796*	54*	16	329*
2100 Lumens 97 CRI (L21A)	1195*	3857*	57*	21	329*
2800 Lumens 97 CRI (L28A)	1614*	5207*	54*	30	329*
3000 Lumens 97 CRI (L30A)	1793*	5785*	53*	34	329*
3900 Lumens 97 CRI (L39A)	2301*	7424*	48*	48	329*
1700 Lumens 90 CRI (L17H)	986*	3182*	62*	16	359*
2300 Lumens 90 CRI (L23H)	1345*	4339*	64*	21	359*
3100 Lumens 90 CRI (L31H)	1793*	5785*	60*	30	359*
3400 Lumens 90CRI (L34H)	2002*	6460*	59*	34	359*
4400 Lumens 90 CRI (L44H)	2570*	8292*	54*	48	359*
1900 Lumens 80 CRI (L19S)	1135*	3664*	71*	16	418*
2700 Lumens 80 CRI (L27S)	1584*	5110*	75*	21	418*
3600 Lumens 80 CRI (L36S)	2121*	6846*	71*	30	418*
4000 Lumens 80 CRI (L40S)	2331*	7521*	69*	34	418*
5100 Lumens 80 CRI (L51S)	2988	9642	63	48	418*

*estimated values

CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	5322	5322	5322	5322	5322
5	7223	6274	4932	3792	3488
15	9642	7174	3753	2107	1779
25	6327	3868	865	104	87
35	2014	795	67	21	21
45	75	40	5	0	0
55	4	0	0	0	0
65	0	0	0	0	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



PHOTOMETRIC REPORT with 40° reflector (TESTED PER IESNA LM-79-2008)

Leading Testing Laboratories Report No. UT18090004-02a. 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 Citizen LED, 5100 lumens, 3000K CCT, 80 CRI, with 40° 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

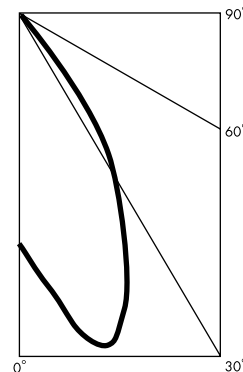
(3000K LED, 40° beam spread integral reflector)

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage	EM Light Output (90 min. run)
1500 Lumens 97 CRI (L15A)	828*	1826*	52*	16	314*
2100 Lumens 97 CRI (L21A)	1142*	2518*	54*	21	314*
2800 Lumens 97 CRI (L28A)	1542*	3400*	51*	30	314*
3000 Lumens 97 CRI (L30A)	1713*	3778*	50*	34	314*
3900 Lumens 97 CRI (L39A)	2198*	4848*	46*	48	314*
1700 Lumens 90 CRI (L17H)	942*	2078*	59*	16	343*
2300 Lumens 90 CRI (L23H)	1285*	2833*	61*	21	343*
3100 Lumens 90 CRI (L31H)	1713*	3778*	57*	30	343*
3400 Lumens 90CRI (L34H)	1913*	4218*	56*	34	343*
4400 Lumens 90 CRI (L44H)	2455*	5415*	51*	48	343*
1900 Lumens 80 CRI (L19S)	1085*	2392*	68*	16	400*
2700 Lumens 80 CRI (L27S)	1513*	3337*	72*	21	400*
3600 Lumens 80 CRI (L36S)	2027*	4470*	68*	30	400*
4000 Lumens 80 CRI (L40S)	2227*	4911*	65*	34	400*
5100 Lumens 80 CRI (L51S)	2855	6296	61	48	400*

*estimated values

CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	4199	4199	4199	4199	4199
5	4808	4548	4109	3693	3554
15	6296	5616	4337	3151	2810
25	4494	3519	1443	335	259
35	2148	1079	127	42	44
45	39	27	9	0	0
55	2	0	0	0	0
65	0	0	0	0	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



PHOTOMETRIC REPORT with 56° reflector (TESTED PER IESNA LM-79-2008)

Leading Testing Laboratories Report No. UT18090004-03a. 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 Citizen LED, 5100 lumens, 3000K CCT, 80 CRI, with 56° 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

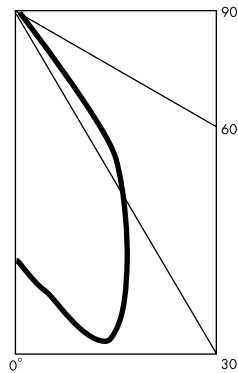
(3000K LED, 56° beam spread integral reflector)

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage	EM Light Output (90 min. run)
1500 Lumens 97 CRI (L15A)	864*	1457*	54*	16	328*
2100 Lumens 97 CRI (L21A)	1192*	2010*	57*	21	328*
2800 Lumens 97 CRI (L28A)	1609*	2714*	54*	30	328*
3000 Lumens 97 CRI (L30A)	1788*	3015*	53*	34	328*
3900 Lumens 97 CRI (L39A)	2295*	3869	48*	48	328*
1700 Lumens 90 CRI (L17H)	983*	1658*	61*	16	358*
2300 Lumens 90 CRI (L23H)	1341*	2261*	64*	21	358*
3100 Lumens 90 CRI (L31H)	1788*	3015*	60*	30	358*
3400 Lumens 90CRI (L34H)	1997*	3367*	59*	34	358*
4400 Lumens 90 CRI (L44H)	2563*	4322*	53*	48	358*
1900 Lumens 80 CRI (L19S)	1132*	1910*	71*	16	417*
2700 Lumens 80 CRI (L27S)	1579*	2663*	75*	21	417*
3600 Lumens 80 CRI (L36S)	2116*	3568*	71*	30	417*
4000 Lumens 80 CRI (L40S)	2324*	3920*	68*	34	417*
5100 Lumens 80 CRI (L51S)	2980	5025	63	48	417*

*estimated values

CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	3643	3643	3643	3643	3643
5	4027	3847	3594	3349	3262
15	5025	4539	3642	2682	2453
25	3818	3257	1696	778	652
35	2445	1480	555	276	273
45	645	439	97	6	0
55	54	14	0	0	0
65	0	0	0	0	0
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



LIGHT OUTPUT MULTIPLIER (based on 5100 lumens, 3000K LED)

LED Light Engine	Light Output Multiplier	REM Light Output Multiplier (90-minute run)
1500 Lumens 97 CRI (L15A)	0.29*	0.11*
2100 Lumens 97 CRI (L21A)	0.4*	0.11*
2800 Lumens 97 CRI (L28A)	0.54*	0.11*
3000 Lumens 97 CRI (L30A)	0.6*	0.11*
3900 Lumens 97 CRI (L39A)	0.77*	0.11*
1700 Lumens 90 CRI (L17H)	0.33*	0.12*
2300 Lumens 90 CRI (L23H)	0.45*	0.12*
3100 Lumens 90 CRI (L31H)	0.6*	0.12*
3400 Lumens 90CRI (L34H)	0.67*	0.12*
4400 Lumens 90 CRI (L44H)	0.86*	0.12*
1900 Lumens 80 CRI (L19S)	0.38*	0.14*
2700 Lumens 80 CRI (L27S)	0.53*	0.14*
3600 Lumens 80 CRI (L36S)	0.71*	0.14*
4000 Lumens 80 CRI (L40S)	0.78*	0.14*
5100 Lumens 80 CRI (L51S)	1	0.14*

*estimated values

STANDARD (0-10V DIMMING) DRIVER INFORMATION

UL Class 2, dry and damp location

Voltage	120	277
Input Watts (L15A/L21A/L28A/L30A/L39A/ L17H/L23H/L31H/L34H/L44H/ L19S/L27S/L36S/L40S/L51S lumens)	16/21/30/34/48	16/21/30/34/48
Input Current (A) (L15A/L21A/L28A/L30A/L39A/ L17H/L23H/L31H/L34H/L44H/ L19S/L27S/L36S/L40S/L51S lumens)	.13/.18/.25/.28/.40	.06/.08/.11/.12/.17
Output Current (mA)	350-1100	350-1100
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	.96
3000K	1
3500K	1.02
4000K	1.03
5000K	1.04