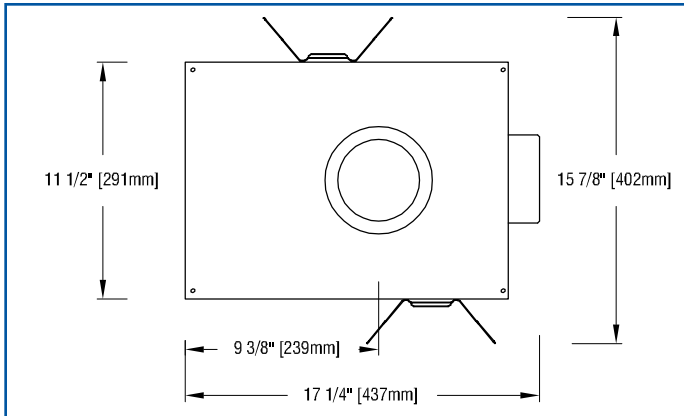
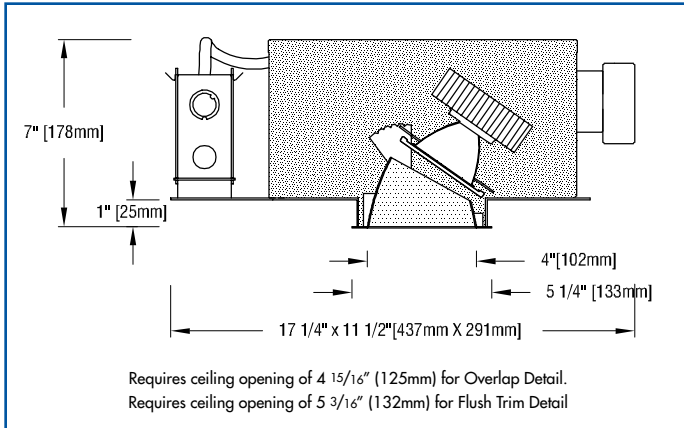



FOUR HI TUNE AA

recessed tunable white accent light



- Luminaire includes a Bridgelux Vesta Tunable White COB LED and may be controlled by one of a number of protocols; see 'Control Options' box on this page. Tunable parameters include:
 - on / off
 - CCT range of 2700K to 6500K
 - dimming 100% to 0.1% at constant CCT
- Luminaire provides 363° horizontal rotation and 0° - 35° angular adjustment with lockable focus. Precise reflector design minimizes aperture brightness.
- Luminaire employ an internal 'twist and lock' reflector to produce an internal beam spread of 15°, 31°, 40° or 56°. To allow beam spread to be changed after installation, internal reflectors are also available as accessories.
- Luminaire accepts one or two of a number of [Optical Accessories](#). A complimentary prismatic lens is included.
- External reflectors are available in three clear natural aluminum finishes - semi-specular (C), slightly diffuse (V) or fully diffuse (EC) - as well as champagne gold or black Alzak®. Other finishes available on special order. A LightPlate trim may be used instead of an external reflector.
- 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 and is RoHS compliant. Luminaire is prewired with thermal protector, approved for eight #12 wire 90° branch circuit pull-through wiring, and suitable for use in a fire rated ceiling. Removal of the external reflector allows access to the junction box.

Four High Tune AA is a 4" aperture, tunable white accent light powered by a Bridgelux® Vesta chip-on-board LED module that produces 90+CRI white light between 2700K and 6500K. See tables below for wattages and efficacies.

PRODUCT CODE

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

Basic Unit FH-BTS-AA-4

Internal Reflector	
15° initial beam spread	- 15D
31° initial beam spread	- 31D
40° initial beam spread	- 40D
56° initial beam spread	- 56D

Light Source Output	
1300 lumens / 90+ CRI	- L13
1800 lumens / 90+ CRI	- L18
2300 lumens / 90+ CRI	- L23

Control Options	
EldoLED 2-channel 0-10V driver, pre-set in logarithmic control curve, dims to 0.1% using two 0-10V dimmers (one dims, one controls CCT)	- DVOELG
EldoLED 2-channel 0-10V driver, pre-set in linear control curve, dims to 0.1% using two 0-10V dimmers (one dims, one controls CCT)	- DVOELN
EldoLED 2-channel DALI driver, dims to 0.1% and controls CCT by DALI control devices	- DAO-EL
Dim to 0.1% and control CCT with Casambi App on iOS or Android device, downloadable from Apple App Store or Google Play Store	- BEO-CB

Voltage	
120 volt service	- 120
277 volt service	- 277

Reflector Color and Detail	Overlap	Trim Flush*
Semi-specular clear	COL.....	CTF
Slightly diffuse Clear	VOL.....	VTF
Fully diffuse Clear	ECOL.....	ECTF
Champagne Gold	GOL.....	GTF
White	WOL.....	WTF
Black	BOL.....	BTF

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.

LightPlates may be ordered instead of the standard reflectors above (see next page).

LightPlate Downlight Spot, white	DP-OL	DP-TF
LightPlate Accent Spot, white	AP-OL	AP-TF
LightPlate Accent Slot, white	AL-OL	AL-TF
Custom painted trims for LightPlate are available on special order. Add -CC		

EXTRA REFLECTORS Specify as separate line items.

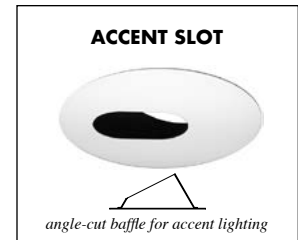
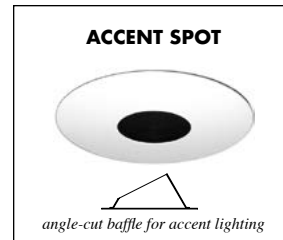
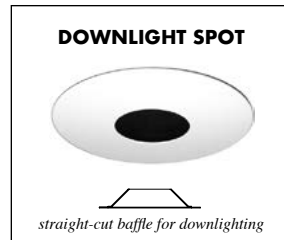
15° initial beam spread	CZS-REF15
31° initial beam spread	CZS-REF31
40° initial beam spread	CZS-REF40
56° initial beam spread	CZS-REF56

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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OPTICAL ACCESSORIES ▼ See next page

LIGHTPLATES LightPlates may be used instead of standard reflectors.



OPTICAL ACCESSORIES Specify as separate line

All are 3 3/4" (95mm) diameter.

- prismatic lens (Solite) included with fixture PLS/3.75
- 55° spread lens LENS/3.75
- 40° x 70° spread lens LENS/3.75-4070

DRIVER INFORMATION (UL Class 2, dry and damp location)

Voltage	120	277
Input Watts (L23/L18/L13 Lumens)	29/22/16	29/22/16
Input Current (L23/L18/L13 Lumens)	.24/.18/.13	.10/.08/.06
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

COLOR TEMPERATURE MULTIPLIER (CCT)

Color Temperature	Multiplier
2700K	0.85
3000K	0.89
3500K	0.96
4000K	1
5000K	1.02
5700K	1.01
6000K	1
6500K	1

LIGHT OUTPUT MULTIPLIER

(Based on 4000 lumens LED)

LED Light Engine	Light Output Multiplier
L23 (2300 lumens 90 CRI)	1
L18 (1800 lumens 90 CRI)	0.8*
L13 (1300 lumens 90 CRI)	0.58*

*estimated values

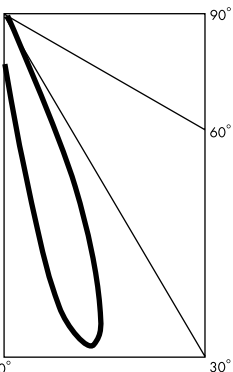
PHOTOMETRIC REPORT with 15° integral reflector (TESTED PER IESNA LM-79-2008)

Verification Services Report No. 13133717.01A. Original test report furnished upon request.

Luminaire recessed LED round accent light with 15° beam spread integral reflector, prismatic glass lens and semi-specular clear aluminum reflector, LED aimed at 15° above vertical.

Lamp BRIDGELUX TW 13mm COB LED, 2300 lumens (tested at 4000K CCT).

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



CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	1531	1531	1531	1531	1531
5	3716	2647	1502	1051	843
15	12880	3850	966	434	355
25	4135	1232	71	28	24
35	854	74	19	12	10
45	19	12	8	4	4
55	7	6	5	4	3
65	5	4	1	1	1
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

LUMINAIRE LIGHT OUTPUT AND EFFICACY

(Based on 4000K CCT)

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage
2300 lumens 90 CRI	1423	12880	49	29
1800 lumens 90 CRI	1138*	10304*	52*	22
1300 lumens 90 CRI	825*	7470*	52*	16

*estimated values

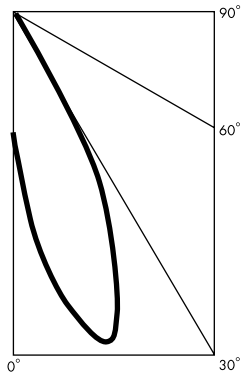
PHOTOMETRIC REPORT with 31° integral reflector (TESTED PER IESNA LM-79-2008)

Verification Services Report No. 13133717.02A. Original test report furnished upon request.

Luminaire recessed LED round accent light with 31° beam spread integral reflector, prismatic glass lens and semi-specular clear aluminum reflector, LED aimed at 15° above vertical.

Lamp BRIDGELUX TW 13mm COB LED, 2300 lumens (tested at 4000K CCT).

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



CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	2187	2187	2187	2187	2187
5	3495	3104	2245	1765	1555
15	5418	3632	1532	640	537
25	3276	1537	178	57	16
35	506	119	32	18	10
45	31	17	10	5	4
55	4	4	5	4	3
65	3	3	2	3	4
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

LUMINAIRE LIGHT OUTPUT AND EFFICACY

(Based on 4000K CCT)

	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage
LED Light Engine				
2300 lumens 90 CRI	1279	5418	44	29
1800 lumens 90 CRI	1023*	4334*	47*	22
1300 lumens 90 CRI	742*	3142*	46*	16

*estimated values

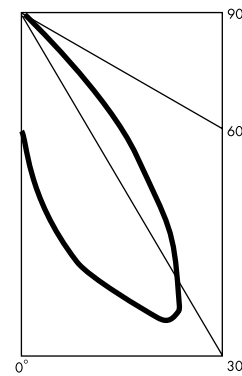
PHOTOMETRIC REPORT with 40° integral reflector (TESTED PER IESNA LM-79-2008)

Verification Services Report No. 13133717.03A. Original test report furnished upon request.

Luminaire recessed LED round accent light with 40° beam spread integral reflector, prismatic glass lens and semi-specular clear aluminum reflector, LED aimed at 15° above vertical.

Lamp BRIDGELUX TW 13mm COB LED, 2300 lumens (tested at 4000K CCT).

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



CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	2399	2399	2399	2399	2399
5	2737	2689	2358	1960	1841
15	3426	3041	2056	1165	917
25	2304	1575	410	163	179
35	607	194	35	25	24
45	17	12	11	7	5
55	3	4	6	5	4
65	3	3	2	4	7
75	0	0	0	1	1
85	0	0	0	0	0
90	0	0	0	0	0

LUMINAIRE LIGHT OUTPUT AND EFFICACY

(Based on 4000K CCT)

	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage
LED Light Engine				
2300 lumens 90 CRI	1295	3426	45	29
1800 lumens 90 CRI	1036*	2741*	47*	22
1300 lumens 90 CRI	751*	1987*	47*	16

*estimated values

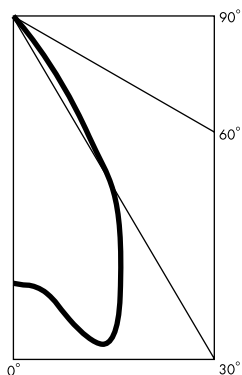
PHOTOMETRIC REPORT with 56° integral reflector (TESTED PER IESNA LM-79-2008)

Verification Services Report No. 13133717.04A. Original test report furnished upon request.

Luminaire recessed LED round accent light with 56° beam spread integral reflector, prismatic glass lens and semi-specular clear aluminum reflector, LED aimed at 15° above vertical.

Lamp BRIDGELUX TW 13mm COB LED, 2300 lumens (tested at 4000K CCT).

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



CANDLEPOWER DISTRIBUTION (Candela)

Vertical Angle	Horizontal Angle				
	0	45	90	135	180
0	1871	1871	1871	1871	1871
5	1929	1938	1895	1808	1716
15	2427	2247	2031	1203	1011
25	1759	1460	714	456	368
35	583	456	286	159	112
45	191	115	36	14	15
55	3	4	5	4	4
65	3	2	2	4	6
75	0	0	0	1	1
85	0	0	0	0	0
90	0	0	0	0	0

LUMINAIRE LIGHT OUTPUT AND EFFICACY

(Based on 4000K CCT)

	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage
LED Light Engine				
2300 lumens 90 CRI	1354	2427	47	29
1800 lumens 90 CRI	1083*	1942*	49*	22
1300 lumens 90 CRI	785*	1408*	49*	16

*estimated values