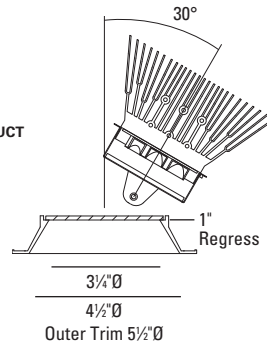


BeveLED® LED

Adjustable 30°



3230



LUMINAIRE INFORMATION

APPLICATION:

Accent luminaire for Residential, Commercial, Retail or Hospitality environments.

MATERIALS:

Trim: Die cast aluminum retained by two mounting clips.

Trim Lens: Standard fixture not supplied with trim lens. Solite and clear are optionally available. Specify below.

Housing: Fabricated of 20 ga. powder coated black galvanized steel thru wire J-box, 4 in 4 out at min. 75°C, #12 AGW thru branch circuit wiring.

Housing and trim supplied as one complete unit.

Optics: Proprietary 10° or 30° high efficiency molded lens.

LIGHT ENGINE: Field Replaceable

Available in 10W or 20W ±100K. High power white LED's tightly binned for fixture to fixture color consistency.

CRI OPTIONS:

Standard: 80+ CRI.

High: 90+ CRI.

RATED LIFE: Based on IESNA LM80-2008

20W - 50,000 hours at 70% lumen maintenance (L70).

10W - 50,000 hours at 70% lumen maintenance (L70).

HEATSINK:

Proprietary high performance extruded aluminum heatsink for maximum LED life.

DRIVER: Field Replaceable

Solid state electronic. Constant current.

High power factor. Specify 120V or 277V.

DIMMING: (optional)

Multiple 3 wire dimming drivers available.

See compatibility chart attached.

ADJUSTMENT:

360° horizontal locking, 30° vertical locking.

ACCESSORY HOLDER:

Snap in aluminum with solite lens, (2) lens max.

MOUNTING:

Butterfly brackets and adjustable nailer bars with integral nails provided. Nailer bars are extendible from 14" to 24" centers.

CEILING CUT OUT:

5 1/16" Ø

LISTINGS:

Dry/Damp.

*Wet under covered ceiling is optionally available (not standard).

IBEW union made.



NOTES:

- Housing included with trim.
- Maximum ceiling thickness 1 inch. Consult factory for other ceiling conditions.
- Fixture should be installed in applications where ambient temperatures do not exceed 40°C during normal operation.
- 5 year warranty**
- IC not currently Energy Star rated.

PHOTOMETRICS:

Consult factory.

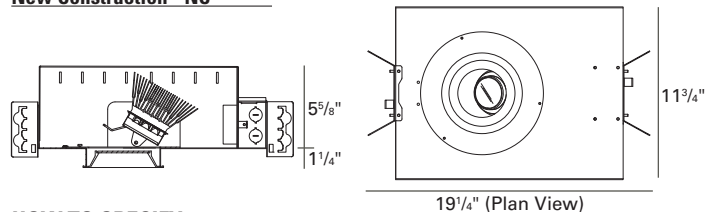
Tested in accordance with IESNA LM79-2008.

HOUSING INFORMATION

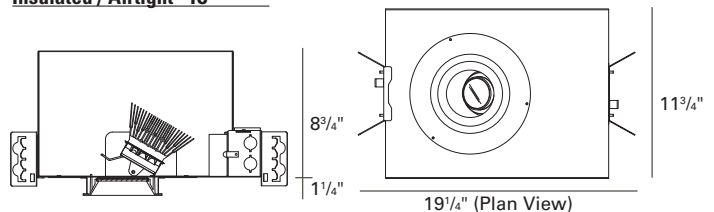
LRTA4-8310-C1 (10W)

LRTA4-8320-C1 (20W)

New Construction - NC



Insulated / Airtight - IC



HOW TO SPECIFY

Trim	Finish	Optional Trim Lens	Housing	Color Temperature	Beam Angle	Housing Type	Voltage	Accessories
3230								
3230 BeveLED Trim 30° Adjustable	10 - White 21 - Black 28 - Metalized Grey RAL - Special Color	S - Solite C - Clear Note: Standard trim not supplied with trim lens.	LRTA4-8310-C1 - 10W LRTA4-8320-C1 - 20W	Standard CRI 80+ 27 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K High CRI 90+ 27H - 2700K 30H - 3000K	10 - 10° 30 - 30°	NC - New Construction IC - Insulated / Airtight	120V 277V	W - Wet Listed (under covered ceiling) CB27 - 27" C-Channel Bars CB52 - 52" C-Channel Bars DIML2 - 0-10V Low Voltage 15% Dimming Driver DIML4 - Lutron Hi-Lume LED / ECO System Series A 3 Wire Control 1% Dimming Driver EML - Emergency lighting battery pack w/ remote test switch. Note: Housing size may differ. Above ceiling access required for service Not for use with WET LISTED (W) option

BeveLED[®] LED Adjustable 30°

PERFORMANCE SUMMARY

Data shown using 80+ CRI, 90+ CRI, de-rate data by approximately 20%

BeveLED Adjustable, 30° Beam, 20W

3230-10-LRTA4-8320-C1-30-30-NC-120V

LTL Report No. : 20492

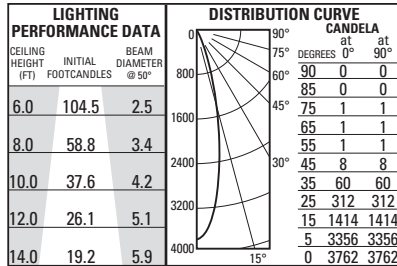
Spacing Criteria: .42 CBCP: 3762



ZONAL LUMEN SUMMARY

Zone	Lumens	% of Lamp	% of Luminaire
0-30	829.9	N/A	94.3%
0-40	870.2	N/A	98.9%
0-60	878.5	N/A	99.8%
0-90	880.2	N/A	100.0%
90-180	0.0	N/A	0.0%
0-180	880.2	N/A	100.0%

Total lumen Output: 880.2 Lumens
Luminaire Efficacy: 45.1 Lumens per Watt
CIE Type: Direct
Spacing Criterion: 0.42

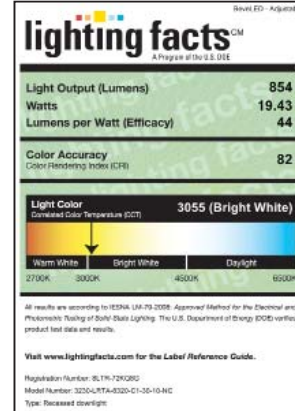


BeveLED Adjustable, 10° Beam, 20W

3230-10-LRTA4-8320-C1-30-10-NC-120V

LTL Report No. : 20488

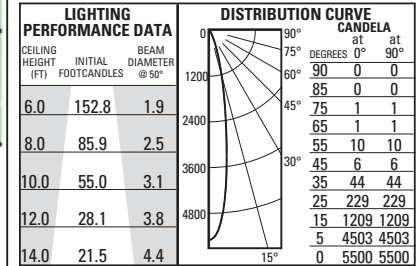
Spacing Criteria: .31 CBCP: 5500



ZONAL LUMEN SUMMARY

Zone	Lumens	% of Lamp	% of Luminaire
0-30	831.5	N/A	95.4%
0-40	868.5	N/A	98.9%
0-60	880.6	N/A	99.7%
0-90	880.6	N/A	100.0%
90-180	0.0	N/A	0.0%
0-180	880.6	N/A	100.0%

Total lumen Output: 855.5 Lumens
Luminaire Efficacy: 43.9 Lumens per Watt
CIE Type: Direct
Spacing Criterion: 0.31



ACCENT LIGHTING PERFORMANCE DATA

FC on Vertical Plane				FC on Vertical Plane				FC on Vertical Plane				FC on Vertical Plane			
D	FC	L	W	D	FC	L	W	D	FC	L	W	D	FC	L	W
6	105	2.7	2.7	6	67	3.6	3.1	2	115	4.2	1.8	2	247	2.3	1.4
8	59	3.6	3.6	8	38	4.8	4.1	3	52	6.3	2.7	3	110	3.5	2.1
10	38	4.4	4.4	10	24	6.0	5.1	4	30	8.3	3.5	4	62	4.7	2.8
12	26	5.3	5.3	12	17	7.2	6.1	5	19	10.5	4.5	5	39	5.8	3.5
14	19	6.2	6.2	14	12	8.4	7.2	6	13	12.5	5.3	6	27	7.0	4.2
16	15	7.1	7.1	16	9	9.7	8.2	8	7	16.8	7.1	8	15	9.3	5.5

ACCENT LIGHTING PERFORMANCE DATA

FC on Vertical Plane				FC on Vertical Plane				FC on Vertical Plane				FC on Vertical Plane			
D	FC	L	W	D	FC	L	W	D	FC	L	W	D	FC	L	W
6	153	1.9	1.9	6	98	2.6	2.2	2	168	2.9	1.3	2	361	1.6	1.0
8	86	2.6	2.6	8	56	3.5	3.0	3	76	4.2	1.9	3	160	2.5	1.5
10	55	3.2	3.2	10	36	4.4	3.7	4	43	5.6	2.6	4	90	3.3	2.0
12	38	3.9	3.9	12	25	5.2	4.5	5	27	7.1	3.3	5	58	4.1	2.5
14	28	4.5	4.5	14	18	6.1	5.2	6	19	8.5	3.9	6	40	4.9	3.0
16	21	5.2	5.2	16	14	7.0	6.0	8	11	11.3	5.2	8	23	6.6	4.0

BeveLED Adjustable, 30° Beam, 10W

3230-10-LRTA4-8310-C1-30-30-NC-120V

LTL Report No. : 20716

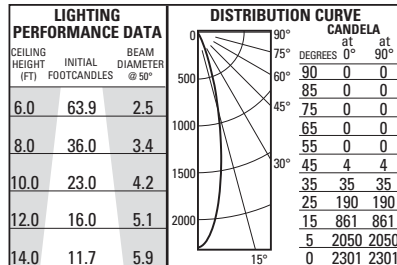
Spacing Criteria: .42 CBCP: 2301



ZONAL LUMEN SUMMARY

Zone	Lumens	% of Lamp	% of Luminaire
0-30	507.2	N/A	94.7%
0-40	531.0	N/A	99.1%
0-60	535.4	N/A	99.9%
0-90	535.8	N/A	100.0%
90-180	0.0	N/A	0.0%
0-180	535.8	N/A	100.0%

Total lumen Output: 535.8 Lumens
Luminaire Efficacy: 52.4 Lumens per Watt
CIE Type: Direct
Spacing Criterion: 0.42



BeveLED Adjustable, 10° Beam, 10W

3230-10-LRTA4-8310-C1-30-10-NC-120V

LTL Report No. : 20712

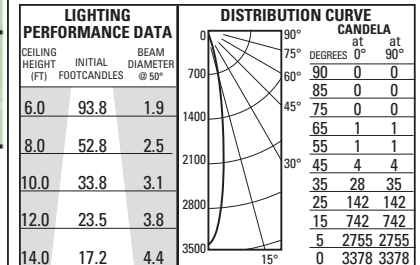
Spacing Criteria: .31 CBCP: 3378



ZONAL LUMEN SUMMARY

Zone	Lumens	% of Lamp	% of Luminaire
0-30	500.8	N/A	95.4%
0-40	519.5	N/A	98.9%
0-60	524.0	N/A	99.8%
0-90	525.1	N/A	100.0%
90-180	0.0	N/A	0.0%
0-180	525.1	N/A	100.0%

Total lumen Output: 525.1 Lumens
Luminaire Efficacy: 51.3 Lumens per Watt
CIE Type: Direct
Spacing Criterion: 0.31



ACCENT LIGHTING PERFORMANCE DATA

FC on Vertical Plane				FC on Vertical Plane				FC on Vertical Plane				FC on Vertical Plane			
D	FC	L	W	D	FC	L	W	D	FC	L	W	D	FC	L	W
6	64	2.7	2.7	6	41	3.6	3.1	2	70	4.2	1.8	2	151	2.3	1.4
8	36	3.6	3.6	8	23	4.8	4.1	3	32	6.3	2.7	3	67	3.5	2.1
10	23	4.4	4.4	10	15	6.0	5.1	4	18	8.3	3.5	4	38	4.7	2.8
12	16	5.3	5.3	12	10	7.2	6.1	5	11	10.5	4.5	5	24	5.8	3.5
14	12	6.2	6.2	14	8	8.4	7.2	6	8	12.5	5.3	6	17	7.0	4.2
16	9	7.1	7.1	16	6	9.7	8.2	8	4	16.8	7.1	8	9	9.3	5.5

ACCENT LIGHTING PERFORMANCE DATA

FC on Vertical Plane				FC on Vertical Plane				FC on Vertical Plane				FC on Vertical Plane			
D	FC	L	W	D	FC	L	W	D	FC	L	W	D	FC	L	W
6	94	1.9	1.9	6	60	2.6	2.2	2	103	2.9	1.3	2	222	1.6	1.0
8	53	2.6	2.6	8	34	3.5	3.0	3	47	4.2	1.9	3	98	2.5	1.5
10	34	3.2	3.2	10	22	4.4	3.7	4	27	5.6	2.6	4	55	3.3	2.0
12	23	3.9	3.9	12	15	5.2	4.5	5	17	7.1	3.2	5	35	4.1	2.5
14	17	4.5	4.5	14	11	6.1	5.2	6	12	8.4	3.9	6	25	4.9	3.0
16	13	5.2	5.2	16	9	7.0	6.0	8	7	11.3	5.2	8	14	6.6	4.0



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07/28/2011

DIMMING DRIVER WIRING SCHEMES:

**DIML2 LED: 0-10V 3-Wire FL Dimming Driver Wiring
(Dims down to 15%)**

NOTE: Consult dimmer manufacturer for detailed installation information.

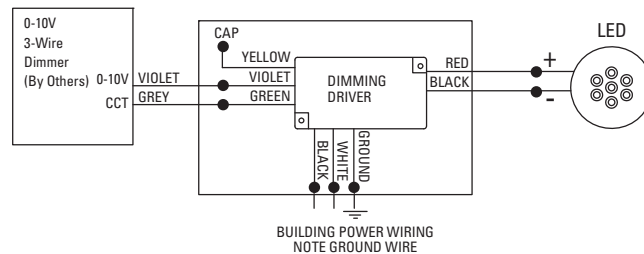
For use with 0-10V fluorescent type controls.

Use only with approved vendor models:

Lutron: DIVA DDTV-XX XX=Color

Leviton: IP710-DLX

Lightolier: V2000FAMU



Compatible Crestron Dimming System

NOTE: Consult dimmer manufacturer for detailed installation information.

Creston Model	Compatible	Min # of Fixtures Required (1)	Creston Min-Max % Limits (2)	Measured Light Output % (3)
CLS-EXP-DIMFLV	Y	1	0-100%	15-100%
DIN-4DIMFLV4	Y	1	0-100%	15-100%
DIN-A08	Y	1	0-100%	15-100%
GLX-DIMFLV8	Y	1	0-100%	15-100%
GLXP-DIMFLV8	Y	1	0-100%	15-100%

(1) Operating dimmers with less than the minimum required fixtures may cause flicker. The Max number of fixtures is limited by dimmer rating unless otherwise noted.

(2) % Level refers to the Crestron Control System Intensity. Operating the dimmer below the Min % level may cause flicker. Operating the dimmer above the Max % may show no additional brightness.

(3) % Level of light output from fixture when connected directly to power source

(4) Dimmer requires a direct connection to neutral unless otherwise noted.

See next page for: DIML4 LED Dimming Part Numbers

DIML4 LED: Lutron Hi-Lume A-Series LED Driver with Eco System Control / LED Dimming Driver Wiring (Dims down to 1%)

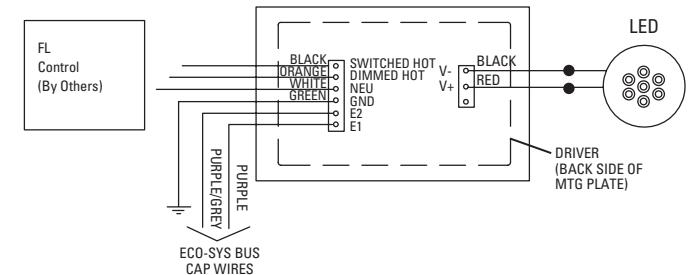
Compatible Lutron Dimmers / Test Results

NOTE: Consult dimmer manufacturer for detailed installation information.

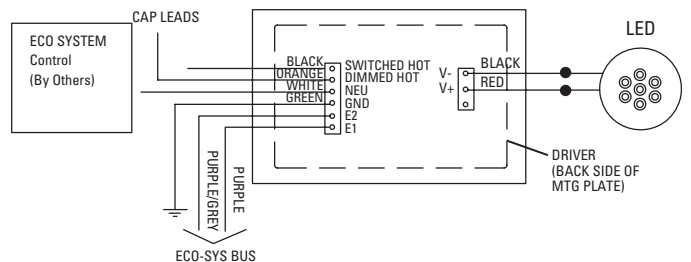
Product	Part Number	Fixtures Per Dimmer		Measured Light Output Range
		120V	277V	
NovaT	NTF-10,	1-59	-	100% - 1%
NovaT	NTF-103P, NTF-10-277	1-29	1-61	100% - 1%
NovaT	NTF-103P-277	-	1-46	100% - 1%
Nova	NF-10	1-59	-	100% - 1%
Nova	NF-103P, NF-10-277	1-29	1-61	100% - 1%
Nova	NF-103P-277	-	1-46	100% - 1%
Vareo	VF-10	1-29	-	100% - 1%
Skylark	SF-10P, SF-103P	1-29	-	100% - 1%
Skylark	SF-12P-277, SF-12P-277-3	-	1-46	100% - 1%
Diva	DVF-103, DVSCF-103P	1-29	-	100% - 1%
Diva	DVF-103P-277, DVSCF-103P-277	-	1-46	100% - 1%
Ariadni	AYF-103P	1-29	-	100% - 1%
Ariadni	AYF-103P-277	-	1-46	100% - 1%
Vierti	VTF-6AM	1-22	-	100% - 1%
Maestro	MAF-6AM, MAF-6AM-277, MSCF-6AM, MCSF-6AM-277	1-22	1-46	100% - 1%
Maestro Wireless	MRF2-F6AN-DV	1-22	1-46	100% - 1%
Spacer System	SPSF-6A, SPSF-6A-277, SPSF-6AM, SPSF-6AM-277	1-22	1-46	100% - 1%
Lyneo	LXF-103PL	1-29	-	100% - 1%
Lyneo	LXF-103PL-277	-	1-46	100% - 1%
Radio RA 2	RRD-F6AN-DV	1-22	1-46	100% - 1%
HomeWorks QS	HQRD-F6AN-DV	1-22	1-46	100% - 1%
Interfaces (1)	PHPM-3F	1-59	1-123	100% - 1%
	GRX-FDBI-16A	1-59	-	100% - 1%
EcoSystem	CS-1L-WM, CS-2L-WM, CS-1L CM, CS-2L-CM, EcoSystem ESN	64 per		100% - 1%
	Grafik Eye QS with EcoSystem	EcoSystem link		100% - 1%
	Quantum			100% - 1%

(1) For use with 3 Wire controls or Commercial Systems, RA Systems or Home Systems applications.
*Contact Lutron tech support for degangng rules when using wallbox controls on the Hi-lume A-Series LED Driver.

Wire Diagram for 3-Wire FL Control (no Eco System Control)



Wire Diagram for ECO System Digital Control



Compatible Crestron Dimmers / Test Results

NOTE: Consult dimmer manufacturer for detailed installation information.

20W

Date Tested: 06/02/2011. [Report Revised 6/28/2011]

Dimming Performance: Smooth and Continuous.

Operating Voltage / Power Rating: 120V / 277V, 20W

Control Type: 3 Wire Control (HOT, Dimmed HOT, Neutral)

Notes: Recommend setting MIN Level to 25% to avoid dead travel at low dimming levels. Recommend setting MAX Level to level indicated below to avoid dead travel at high end.

Crestron Model	Compatible	Min # of Fixtures Required (1)	Crestron Min-Max % Limits (2)	Measured Light Output % (3)	Notes
CLS-EXP-DIMFDB	Y	1	25-87%	<1-100%	MIN Level must be set to 25%
GLX-DIM6	Y	1	25-77%	<1-100%	
GLXX-2DIM8	Y	1	25-70%	<1-100%	

(1) Operating dimmers with less than the minimum required fixtures may cause flicker. The Max number of fixtures is limited by dimmer rating unless otherwise noted.
(2) % Level refers to the Crestron Control System Intensity. 0 power source
(4) Dimmer requires a direct connection to neutral unless otherwise noted.

10W

Date Tested: 06/02/2011.

Dimming Performance: Smooth and Continuous at 120V only.

Operating Voltage / Power Rating: 120V / 277V, 10W

Control Type: 3 Wire Control (HOT, Dimmed HOT, Neutral)

Notes: Recommend setting MIN Level to 25% to avoid dead travel at low dimming levels. Recommend setting MAX Level to level indicated below to avoid dead travel at high end. Power supply tested is NOT suitable for use at 277V. Supply cuts out regardless of LED Load or Dimmer connected.

Crestron Model	Compatible	Min # of Fixtures Required (1)	Crestron Min-Max % Limits (2)	Measured Light Output % (3)	Notes
CLS-EXP-DIMFDB	Y	1	25-87%	<1-100%	MIN Level must be set to 25% 120V operation only
GLX-DIM6	Y	1	25-77%	<1-100%	
GLXX-2DIM8	Y	1	25-70%	<1-100%	