

Project name:		
Fixture type:		
Date:		

Birch™ High Lumen LED Module (1250 lm-5000 lm)

The beautifully designed die-cast module houses powerful and advanced LED technology to provide increased durability and outstanding illumination. Works with 4", 6" & 8" Birch Commercial Frames, Remodel, Retrofits and Twist-On Trims.



Features

- Non-IC for use in Non-IC applications
- Select Lumen Output (1250 lm to 5000 lm) by using manual switch on module
- Adjustable Focus Beam Angle allows for manual beam angle adjustment from 22° to 50° range with the ease of a twist
- Featured Twist-On mechanism to easily lock module to any size trim
- Encased Quick Connector for easy module installation
- ELB30R works in 4", 6", and 8" Commercial Frames, Remodel and Retrofit applications
- ELB50R works with 6" & 8" Commercial Frames, Remodel and Retrofit applications Only. Only for use with ELB610 and ELB810 trims
- 120/277V input with 0-10V dimming
- Excellent color rendering 93+ CRI
- Meets Energy Star Requirements
- ETL listed for damp location
- Life span of 50,000 hours L70

Specifications

Wattage	13W / 20W / 35W	
Lumens	1250 lm / 2000 lm / 3000 lm	
Voltage	120/277V	
Color Temp.	3500K	
Dimmable	0-10V	
Lamp Type	LED	
Beam Angle	22° to 50°	
CRI	93+	
Damp Location Listed		

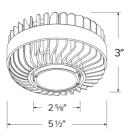
ELB30 - Dimensions



ELB30 Lumen Select



ELB50 - Dimensions



Technical Details

Optics: Frosted polycarbonate module lens diffuses light evenly throughout while reducing glare with LED technology.

Construction: Integrated driver and light engine with Encased Quick Connect. Diecast aluminum body with heat fins allows for efficient cooling.

Installation: Twist-On design for tool-less trim installation, for use with Birch™ Trims. ELB30R can be used in 4", 6", and 8" Commercial Frames and Remodel/Retrofit applications with Encase Quick Connect base. ELB50R can be used in 6", and 8" Commercial Frames and Remodel/Retrofit applications with Encase Quick Connect base and only for use with ELB610 and ELB810 trims. For use in non-IC applications.

Electrical: Module connects to 120/277V power supply. High-efficiency driver with a power factor >0.9. Start time of less than 0.75 seconds.

LED Technology: Extremely accurate Color Rendering Index of 93+. Lumen Maintenance of 50,000 hours L70 Life span. Superior Thermal Management by utilizing integrated heat sink. Instant On to Full Brightness technology. No LED pixelation.

Dimmability: 0-10V dimmable. Dims down to 5%. For a full list of dimmers, refer to the Dimmer Compatibility List. Industry-leading dimming that dims smoothly with no hot spots or flickering.

Listings: ETL Listed for Damp Location.

ELB50 Lumen Select



Product Number

Item	Lamp type	Lumens	сст	Watts	Voltage	Dimming	Beam Angle
ELB30R35	LED	1250 lm / 2000 lm / 3000 lm	3500K	13W / 20W / 35	120/277V	0-10V	22° to 50°

Product Number Builder Example: ELB30R30

Birch High Lumen LED Module	Lumens	Color Temperature
ELB		
	30R 1250 lm / 2000 lm / 3000	30 3000K
	50R 3200 lm / 4000 lm / 5000 ¹	35 3500K
		40 4000K

 $^{^{1}}$ For use with 6" & 8" Only. Only for use with ELB610 and ELB810 trims.

Compatible Products



For use with **Birch™ LED Modules**

4", 6", & 8" Birch™ Architectural Frames



4" Architectural Commercial Frame
New Construction

SPECIFICATIONS

Frame (hanger bars required)

with Emergency Backup



6" Architectural Commercial Frame
New Construction



8" Architectural Commercial Frame
New Construction

CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS
ELB6EH	Frame (hanger bars required)	ELB8EH	Frame (hanger bars required)
ELB6EH-EM5	with Emergency Backup	ELB8EH-EM5	with Emergency Backup

Hanger Bars for Birch™ Architectural Frames

CAT NO.

ELB4EH

ELB4EH-EM5

27" Flat Hanger Bars
for Wood Construction

CAT NO. SPECIFICATIONS

FB27 Set of 2

26" C-Channel Hanger Bars for T-Bar Ceilings

CAT NO. SPECIFICATIONS

CH26 Set of 2



4", 6", & 8" Birch™Plaster Frames



4" Plaster Commercial Frame
New Construction



6" Plaster Commercial Frame New Construction



8" Plaster Commercial Frame New Construction

CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS
ELB4PF	Frame	ELB6PF	Frame	ELB8PF	Frame
ELB4PF-EM5	with Emergency Backup	ELB6PF-EM5	with Emergency Backup	ELB8PF-EM5	with Emergency Backup

Remodel & Retrofit Birch™ Applications

Remodel/Retrofit CAT NO. SPECIFICATIONS ELBRMD Remodel ELBRMD-EM5 with Emergency Backup



CAT NO.	SPECIFICATIONS	
ELBRT	Retrofit	

Retrofit



Compatible Products



For use with Birch™ LED Modules

4", 6", & 8" Birch™ Twist-On Trims

CAT NO.

ELB610W

ELB610BB

ELB610H

ELB610HW



4" Round Reflector 6" Round Refl



All White

All Black

All Haze

Haze with White Trim

(Semi-Specular)

Reflector	6" Round	Adjustable
SPECIFICATIONS	CAT NO.	SPECIFIC

ELB629W

ELB629B

ELB629H



6 Round	Adjustable Reflecto
CAT NO.	SPECIFICATIONS

All White

All Black

All Haze

Not compatible with

ELB50R Module Series

(Semi-Specular)

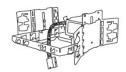
CAT NO. SPECIFICATIONS ELB810W All White All Haze (Semi-Specular) ELB810H

CAT NO.	SPECIFICATIONS
ELB410W	All White
ELB410BB	All Black
ELB410H	All Haze (Semi-Specular)
ELB410HW	Haze with White Trim
Not some	tible with

Not compatible with ELB50R Module Series

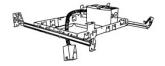
4" Birch™ Square Frames

Not compatible with ELB50R Module Series



4" Square Architectural Frame **New Construction**

CAT NO.	SPECIFICATIONS
ELB44SQEH	Architectural Frame
ELB44SQEH-EM5	Emergency Backup



4" Square Plaster Frame **New Construction**

CAT NO.	SPECIFICATIONS
ELB44SQPF	Plaster Frame
ELB44SQPF-EM5	Emergency Backup

4" Square Birch™ Twist-On Trims •

Not compatible with ELB50R Module Series



4" Square Reflector Trim

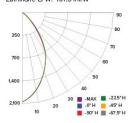
CAT NO.	SPECIFICATIONS
ELB440W	All White
ELB440H	All Haze
ELB440HW	Haze with White Trim
ELB440BB	All Black

Photometric Report

Birch™ High Lumen LED Module

PHOTOMETRIC REPORT

Product #: ELB30R30 (1250 lm, 3000K) Wattage / Lumens: 13.6W / 1463.3 lm Luminaire LPW: 107.5 lm/W



CANDLE POWER SU	MMARY	ILLUMINANCE AT A DIS	TANCE
Degress Vertical	0°	Distance to Target Plane	Center Beam Footcandles

0	2063
5	1957
15	1438
25	826
35	387
45	163
55	59
65	25
75	11
85	3
90	0

- A	10′	
70ΝΔΙ	HIMEN	SHMMARY

6'

8'

THAL LOWER SOME	AIL I		
Zone	Lumens	%Luminaire	
0-30°	963.3	65.8	
0-40°	1,212.8	82.9	
0-60°	1,401.5	95.8	
0.900	1 // 12 //	98.6	

178.2

62.7

32.2

21.6

Beam Diameter

3.1

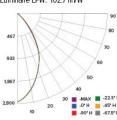
4.7

6.4'

7.9'

PHOTOMETRIC REPORT

Product #: ELB30R30 (2000 lm, 3000K) Wattage / Lumens: 18.8W / 1932 lm Luminaire LPW: 102.7 lm/W



CANDLE POWER SUMMARY

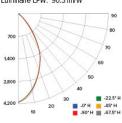
ILLUMINANCE AT A DISTANCE

Degress Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter	
0	2702	4'	233.6	3.2'	
5	2567	6′	82.2	4.7'	
15	1891	8′	42.2	6.4'	
25	1093	10′	28.4	8.0'	
35	513	- ZONAL LUMEN CUMMA	DV.		
45	217	ZONAL LUMEN SUMMA	KY		
55	79	Zone	Lumens	%Luminaire	

217	ZONAL LUMEN SUMMARY		
79	Zone	Lumens	%Luminaire
34	0-30°	1,268.3	65.7
15	0-40°	1,599.2	82.8
3	0-60°	1,850.1	95.8
0	0-90°	1,905.4	98.6

PHOTOMETRIC REPORT

Product #: ELB30R30 (3000 lm, 3000K) Wattage / Lumens: 32.6W / 2946.5 lm Luminaire LPW: 90.3 lm/W



CANDLE POWER SUMMARY

Degress Vertical

ILLUMINANCE AT A DISTANCE

0	4067	_
5	3872	
15	2870	
25	1660	
35	789	
45	334	
55	122	_
65	52	
75	23	_
85	5	
90	0	3

Distance to Target Plane	Center Beam Footcandles	Beam Diameter
4'	351.5	3.2'
6′	123.9	4.8'
8′	63.6	6.4'
10′	42.7	8.0′

ZONAL LUMEN SUMMARY

Zone	Lumens	%Luminaire	
0-30°	1,926.7	65.4	_
0-40°	2,434.1	82.6	
0-60°	2,821.0	95.7	
0-90°	2,905.7	98.6	



Dimmer Compatibility Chart 0-10V Dimming

For Birch™ System LED Modules

For Reference Only

Testing conducted by ELCO Lighting is not a substitute for and does not imply certification by an independent laboratory or any other standards certification. Refer to manufacturer specifications for more detailed information on product certifications and standards. Consult the dimmer manufacturer prior to installation to ensure compatibility.

Manufacturer	Product	Part Number	Dimmed Light Output Range
Lithonia	Slide Dimmer, 0-10V DC, 1500W for LED and CFL Lighting, Single Pole, 3-Way Wiring, Allows on/off switching without disturbing light level, Fits Standard Single or Multi-gang switch boxes	ISD BC 120/277 WH	5% - 100%
Cooper	Slide Dimmer, 0-10V, 120/277VAC 60Hz, 1200/1600W for LED and CFL Lighting, Single Pole, 3-Way Operation, Commercial/Residential Application, Title 24 Compliant	SF10P-W	5% - 100%
Lutron	Diva Dimmer, 0-10V, 120 to 277VAC 50/60Hz, 8 Amp, 2216W for LED and CFL Lighting, Single Pole, 3-Way Operation, Commercial/Residential, Indoor Application	DVSTV-WH	5% - 100%
Leviton	IllumaTech Mark 7 Dimmer, 0-10V, 120/277VAC 60Hz, 1200/1500W for LED and CFL Lighting, Electro Mechanical Preset On/Off Switch, Single Pole, 3-Way Operation, Commercial/Residential Application	IP710-DLZ	5% - 100%

*NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details

Disclaimer: Minimum and maximum loads for LEDs and CFLs are given in number of lamps and may vary depending on the lamp being used. Testing conducted by ELCO Lighting is not a substitute for and does not imply certification by an independent laboratory or any other standards certification. Refer to manufacturer specifications for more detailed information on product certifications and standards.

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