

Project name	2:	
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.



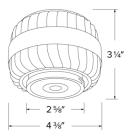
Features

- 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	32W / 40W / 55W		
Lumens	3200 lm / 4000 lm / 5000 lm		
Voltage	120/277V		
Color Temp.	3500K		
Dimmable	0-10V		
Lamp Type	LED		
Beam Angle	22° to 50°		
CRI	93+		
Damp Locatio	on Listed		

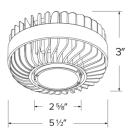
ELB30 - Dimensions



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
ELB50R35	LED	3200 lm / 4000 lm / 5000 lm	3500K	32W / 40W / 55	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.	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

CH26

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

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 Retrofit CAT NO. SPECIFICATIONS ELBRT Retrofit

Compatible Products



For use with **Birch™ LED Modules**

4", 6", & 8" Birch™ Twist-On Trims



4" Round Reflector



6"	Pol	ind	Dof	acto



6" Round Adjustable Reflector



8" Round Reflector

SPECIFICATIONS

CAT NO.	SPECIFICATIONS
ELB410W	All White
ELB410BB	All Black
ELB410H	All Haze (Semi-Specular)
ELB410HW	Haze with White Trim

Not compatible with ELB50R Module Series CAT NO. SPECIFICATIONS

ELB610W All White

ELB610BB All Black

ELB610H All Haze (Semi-Specular)

ELB610HW Haze with White Trim

CAT NO. SPECIFICATIONS

ELB629W All White

ELB629B All Black
ELB629H All Haze
(Semi-Specular)

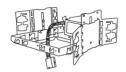
Not compatible with
ELB50R Module Series

ELB810W All White
ELB810H All Haze (Semi-Specular)

CAT NO.

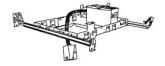
4" Birch™ Square Frames

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

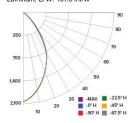
CAT NO.	SPECIFICATIONS	
ELB440W	All White	
ELB440H	All Haze	
ELB440HW	Haze with White Trim	
ELB440BB	All Black	

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



Degress Vertical	0°	Distance to Target Plane	Center Beam Footcandles
0	2063	4'	178.2

11

3

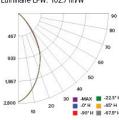
0

egress Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
0	2063	4′	178.2	3.1′
5	1957	6′	62.7	4.7'
15	1438	8′	32.2	6.4'
25	826	10′	21.6	7.9'
35	387	- ZONAL LUMEN CUMMA	DV	
45	163	ZONAL LUMEN SUMMA	RY	
55	59	Zone	Lumens	%Luminaire
65	25	0-30°	963.3	65.8

ILLUMINANCE AT A DISTANCE

PHOTOMETRIC REPORT

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



CANDLE POWER SUMMARY

75

85

90

85

90

CANDLE POWER SUMMARY

ILLUMINANCE AT A DISTANCE

0-40°

0-60°

0-90°

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 CUMMAR	v		
45	217	ZONAL LUMEN SUMMAR	T .		
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	

2.821.0

2,905.7

1,212.8

1,401.5

1,443.4

82.9

95.8

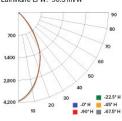
98.6

95.7

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

ILLUMINANCE AT A DISTANCE

0-60°

0-90

Degress Vertical	0°	Distance to Target Plane	Center Beam Footcandles	candles Beam Diameter	
0	4067	4'	351.5	3.2'	
5	3872	6′	123.9	4.8'	
15	2870	8′	63.6	6.4'	
25	1660	10′	42.7	8.0'	
35	789	ZONAL LUMEN CUMMA	DV		
45	334	ZONAL LUMEN SUMMA	RT		
55	122	Zone	Lumens	%Luminaire	
65	52	0-30°	1,926.7	65.4	
75	23	0-40°	2,434.1	82.6	



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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