

# 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

## 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.

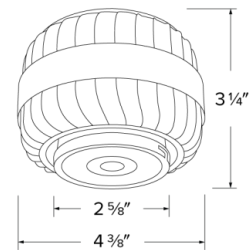
**Dimmability:** 0-10V dimmable. Dims down to 5%. For a full list of dimmers, refer to the Dimmer Compatibility List. Industry-leading dimming that dims smoothly with no hot spots or flickering.

**Listings:** ETL Listed for Damp Location.

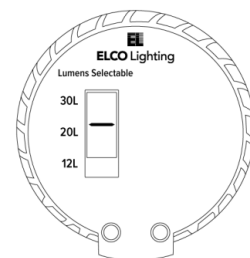
## Specifications

<b>Wattage</b>	13W / 20W / 35W - 32W / 40W / 55W
<b>Lumens</b>	1250 lm - 5000 lm
<b>Voltage</b>	120/277V
<b>Color Temp.</b>	3000K - 4000K
<b>Dimmable</b>	0-10V
<b>Lamp Type</b>	LED
<b>Beam Angle</b>	22° to 50°
<b>CRI</b>	93+
<b>Damp Location</b>	Listed

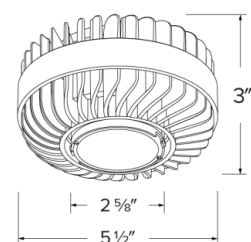
## ELB30 - Dimensions



## ELB30 Lumen Select

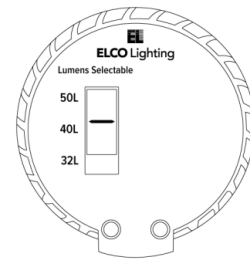


## ELB50 - Dimensions



**Warranty:** ELCO Products are built to last with a 5-year Limited Warranty.

## ELB50 Lumen Select



### Product Numbers

Item	Lamp type	Lumens	CCT	Watts	Voltage	Dimming	Beam Angle
<b>ELB30R30</b>	LED	1250 lm / 2000 lm / 3000 lm	3000K	13W / 20W / 35	120/277V	0-10V	22° to 50°
<b>ELB30R35</b>	LED	1250 lm / 2000 lm / 3000 lm	3500K	13W / 20W / 35	120/277V	0-10V	22° to 50°
<b>ELB30R40</b>	LED	1250 lm / 2000 lm / 3000 lm	4000K	13W / 20W / 35	120/277V	0-10V	22° to 50°
<b>ELB50R30</b>	LED	3200 lm / 4000 lm / 5000 lm	3000K	32W / 40W / 55	120/277V	0-10V	22° to 50°
<b>ELB50R35</b>	LED	3200 lm / 4000 lm / 5000 lm	3500K	32W / 40W / 55	120/277V	0-10V	22° to 50°
<b>ELB50R40</b>	LED	3200 lm / 4000 lm / 5000 lm	4000K	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

**50R** 3200 lm / 4000 lm / 5000 <sup>1</sup>

**30** 3000K

**35** 3500K

**40** 4000K

<sup>1</sup> 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**



6" Architectural Commercial Frame  
**New Construction**



8" Architectural Commercial Frame  
**New Construction**

CAT NO.	SPECIFICATIONS
ELB4EH	Frame (hanger bars required)
ELB4EH-EM5	with Emergency Backup

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

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

Hanger Bars for **Birch™** Architectural Frames

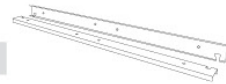
27" **Flat Hanger Bars** for Wood Construction

CAT NO.	SPECIFICATIONS
FB27	Set of 2

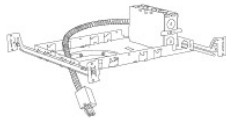


26" **C-Channel Hanger Bars** for T-Bar Ceilings

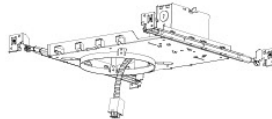
CAT NO.	SPECIFICATIONS
CH26	Set of 2



## 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
ELB4PF	Frame
ELB4PF-EM5	with Emergency Backup

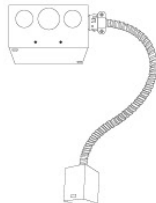
CAT NO.	SPECIFICATIONS
ELB6PF	Frame
ELB6PF-EM5	with Emergency Backup

CAT NO.	SPECIFICATIONS
ELB8PF	Frame
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

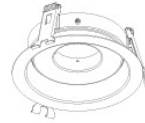
## 4", 6", & 8" Birch™ Twist-On Trims



4" Round Reflector



6" Round Reflector



6" Round Adjustable Reflector



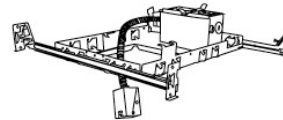
8" Round Reflector

CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS
ELB410W	All White	ELB610W	All White	ELB629W	All White	ELB810W	All White
ELB410BB	All Black	ELB610BB	All Black	ELB629B	All Black	ELB810H	All Haze (Semi-Specular)
ELB410H	All Haze (Semi-Specular)	ELB610H	All Haze (Semi-Specular)	ELB629H	All Haze (Semi-Specular)		
ELB410HW	Haze with White Trim	ELB610HW	Haze with White Trim		<ul style="list-style-type: none"> <li>Not compatible with ELB50R Module Series</li> </ul>		

## 4" Birch™ Square Frames • Not compatible with ELB50R Module Series



4" Square Architectural Frame  
New Construction



4" Square Plaster Frame  
New Construction

CAT NO.	SPECIFICATIONS	CAT NO.	SPECIFICATIONS
ELB44SQEH	Architectural Frame	ELB44SQPF	Plaster Frame
ELB44SQEH-EM5	Emergency Backup	ELB44SQPF-EM5	Emergency Backup

## 4" Square Birch™ Twist-On Trims • Not compatible with ELB50R Module Series



4" Square Reflector Trim

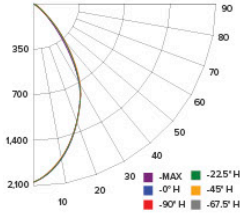
CAT NO.	SPECIFICATIONS
ELB440W	All White
ELB440H	All Haze
ELB440HW	Haze with White Trim
ELB440BB	All Black

# 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 SUMMARY

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

### ILLUMINANCE AT A DISTANCE

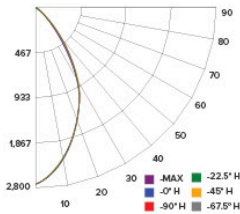
Distance to Target Plane	Center Beam Footcandles	Beam Diameter
4'	178.2	3.1'
6'	62.7	4.7'
8'	32.2	6.4'
10'	21.6	7.9'

### ZONAL LUMEN SUMMARY

Zone	Lumens	%Luminaire
0-30°	963.3	65.8
0-40°	1,212.8	82.9
0-60°	1,401.5	95.8
0-90°	1,443.4	98.6

### PHOTOMETRIC REPORT

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



### CANDLE POWER SUMMARY

Degress Vertical	0°
0	2702
5	2567
15	1891
25	1093
35	513
45	217
55	79
65	34
75	15
85	3
90	0

### ILLUMINANCE AT A DISTANCE

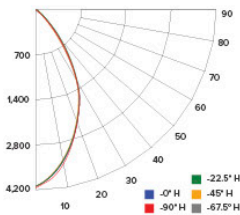
Distance to Target Plane	Center Beam Footcandles	Beam Diameter
4'	233.6	3.2'
6'	82.2	4.7'
8'	42.2	6.4'
10'	28.4	8.0'

### ZONAL LUMEN SUMMARY

Zone	Lumens	%Luminaire
0-30°	1,268.3	65.7
0-40°	1,599.2	82.8
0-60°	1,850.1	95.8
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	0°
0	4067
5	3872
15	2870
25	1660
35	789
45	334
55	122
65	52
75	23
85	5
90	0

### ILLUMINANCE AT A DISTANCE

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



**ELCO Lighting**

# 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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