

4", 6", 8" COMMERCIAL LED DOWNLIGHTS

5-CCT SWITCH: 10-20W, 2700K-5000K, 750-1500 lm
 HIGH LUMEN: 13-55W, 3000K-4000K, 1250-5000 lm

THE BIRCH™ SYSTEM

The die-cast module houses powerful LED & driver technology to provide increased durability and outstanding illumination.



FEATURES

- 5-CCT Option: IC Rated for direct contact with insulation, for use in IC and Non-IC applications
- High Lumen Option: Non-IC for use in Non-IC applications
- Adjustable Focus Beam Angle allows for manual beam angle adjustment from 25° to 45° (5-CCT) & 22° to 50° (High Lumen)
- Life span of 50,000 hours L70
- Optional 90 minutes Emergency Battery Backup

SET UP

1. Select a Housing.
2. Select a Light Engine.
3. Select a Trim.



SPECIFICATIONS

Wattage
 5-CCT Option:
 10W / 12W / 20W
 High Lumen Option:
 13W / 20W / 32-35W / 40W / 55W

Lumens
 5-CCT Option:
 750 lm / 1000 lm / 1500 lm
 High Lumen Option:
 1250 lm / 2000 lm / 3000 lm /
 3200 lm / 4000 lm / 5000 lm

Voltage 120/277V

Color Temp.
 5-CCT Option:
 27K, 30K, 35K, 40K, 50K
 High Lumen Option:
 30K, 35K, 40K

CRI 93+

Damp Location ETL Listed

Dimming 0-10V (5%)

Beam Angle
 5-CCT Option:
 25° to 45°
 High Lumen Option:
 22° to 50°

Finishes

- White
- Haze
- Haze/ White
- Black

1. Specify housing part number

BIRCH™ HOUSINGS

HOUSINGS Example: ELB4EH-EM5

ITEM	SIZE	STYLE	OPTIONAL
ELB			
ELB	4 4" Round	EH ² Architectural Frame	(Blank) ◆ No EM -EM5 ³ 90 Minute EM Backup
	44SQ 4" Square	PF ◆ Plaster Frame	
	6 ◆ 6" Round	RT ¹ ◆ Retrofit	
	8 8" Round	RMD ¹ Remodel/Retrofit	
	(Blank) ¹ Remodel/Retrofit		
	¹ Remodel & Retrofit work with all sizes. Leave Size Blank.	¹ Remodel & Retrofit work with all sizes. Leave Blank. ² Not Available for 8" Round Option (8). Requires larger bars, ordered separately.	³ Not available for Retrofit option (RT).

◆ = ELCO's Choice

2. Specify light engine part number (Select one)

BIRCH™ LIGHT ENGINES

5-CCT SWITCH LED MODULE Example: ELB15RCT5ICA

ITEM	LUMENS	COLOR TEMP	IC AIRTIGHT
ELB	15R	CT5	ICA
ELB	15R 750 lm / 1000 lm / 1500 lm	CT5 5-CCT Switch	ICA IC Rated

NON- IC HIGH LUMEN LED MODULE Example: ELB25RCT5

ITEM	LUMENS	COLOR TEMP
ELB		
ELB	25R ¹ 1500 lm / 2000 lm / 2500 lm	30 3000K
	50R ² 3200 lm / 4000 lm / 5000 lm	35 3500K
		40 4000K
		CT5 5-CCT Switch
	¹ Only for CT5 option. ² Only for 6" & 8". Not compatible with 6" Adjustable Reflector Option.	

3. Specify trim part number

BIRCH™ TRIMS

ROUND TRIMS

ITEM	STYLE	FINISH
ELB		
ELB	410 4" Fixed Reflector	W ◆ White
	610 ◆ 6" Fixed Reflector	H Haze
	629 6" Adjustable Reflector	HW ^{1,2} Haze/White
	810 8" Fixed Reflector	BB ^{1,3} Black
		¹ Not available for 8" Fixed Reflector Option (810) ² Not available for 6" Adjustable Reflector Option (629) ³ Black is denoted as B for 6" Adjustable Reflector Option (629)

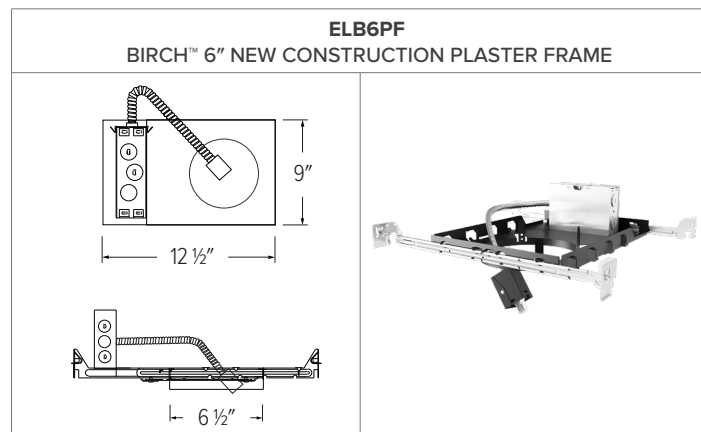
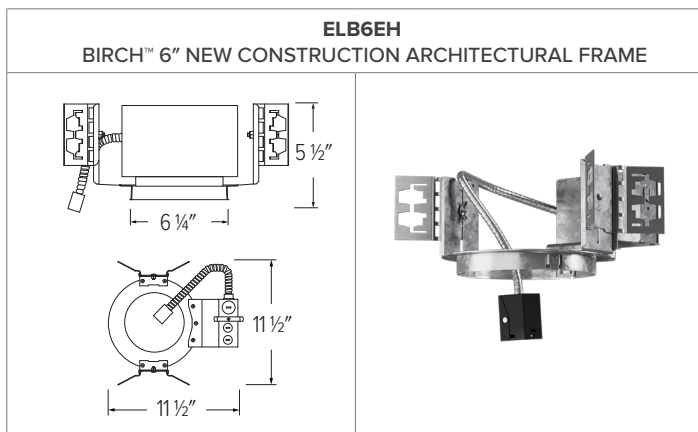
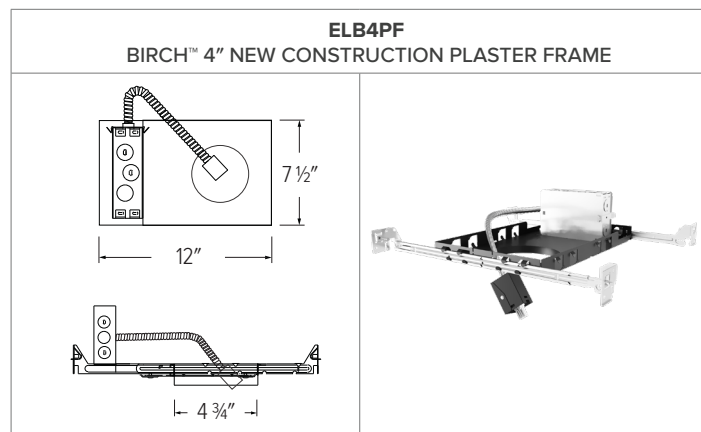
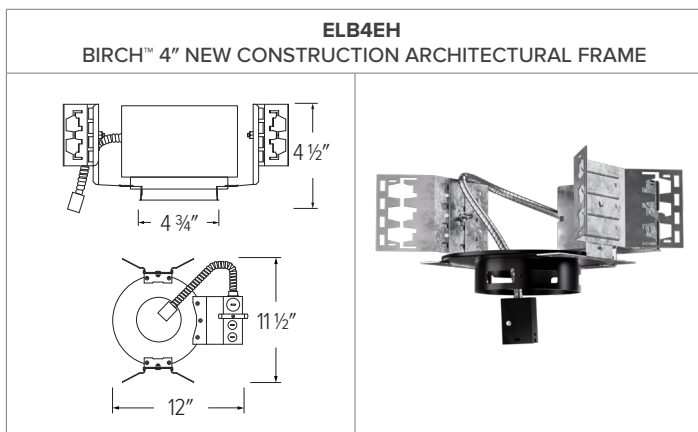
◆ = ELCO's Choice

SQUARE TRIMS

ITEM	FINISH
ELB440	
ELB440	W ◆ White
	H Haze
	HW Haze/White
	BB Black

PRODUCT DIMENSIONS

BIRCH™ ROUND HOUSINGS



Hanger Bars for Birch™ Architectural Frames

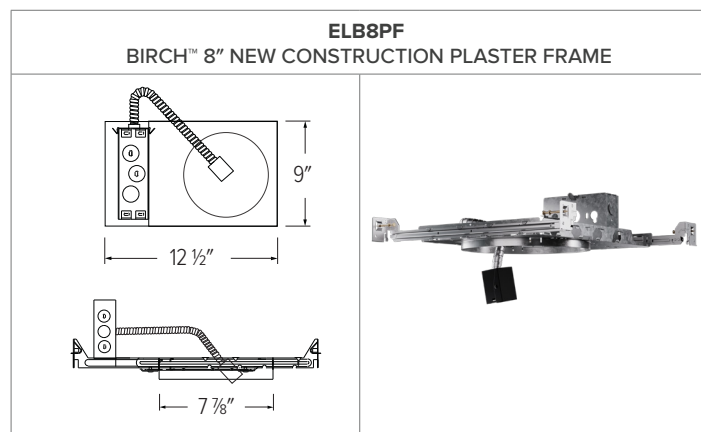
27" Flat Hanger Bars for Wood Construction (Set of 2)

FB27



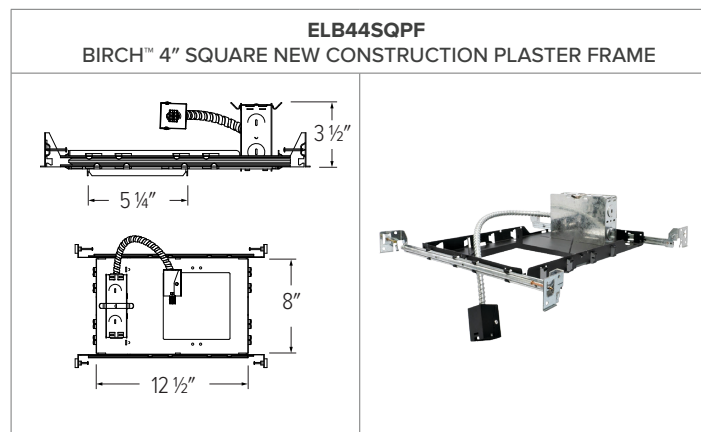
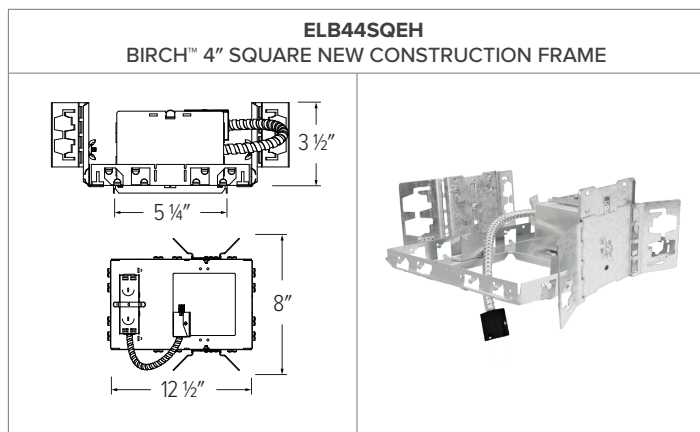
26" C-Channel Hanger Bars for T-Bar Ceilings (Set of 2)

CH26



PRODUCT DIMENSIONS

4" BIRCH™ SQUARE HOUSINGS



Hanger Bars for **Birch™** Architectural Frames

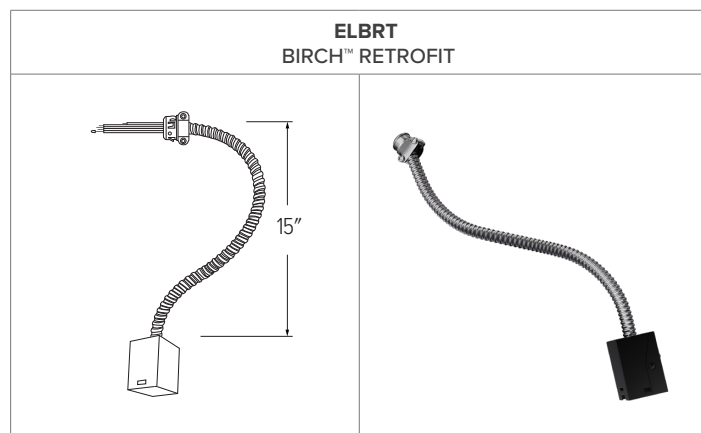
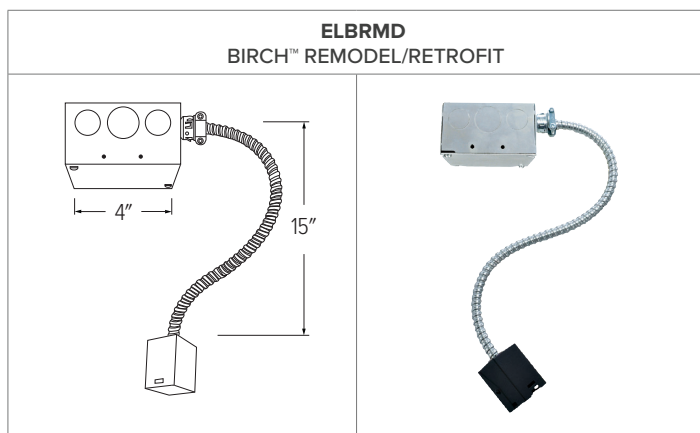
27" Flat Hanger
Bars for Wood
Construction (Set of 2)
FB27



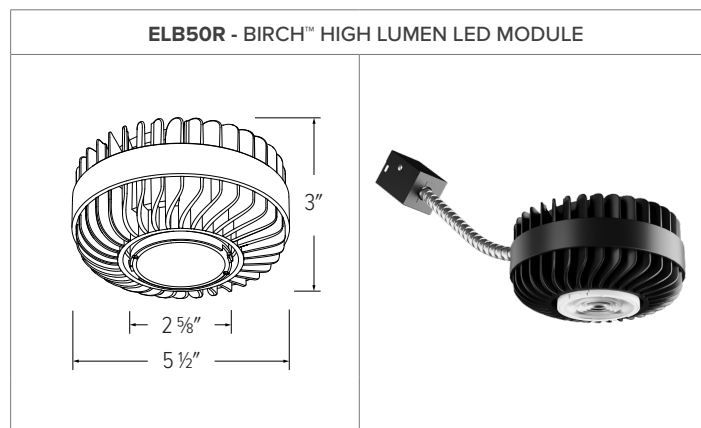
26" C-Channel
Hanger Bars for
T-Bar Ceilings (Set of 2)
CH26



BIRCH™ RETROFIT HOUSINGS



BIRCH™ LIGHT ENGINES



PRODUCT DIMENSIONS

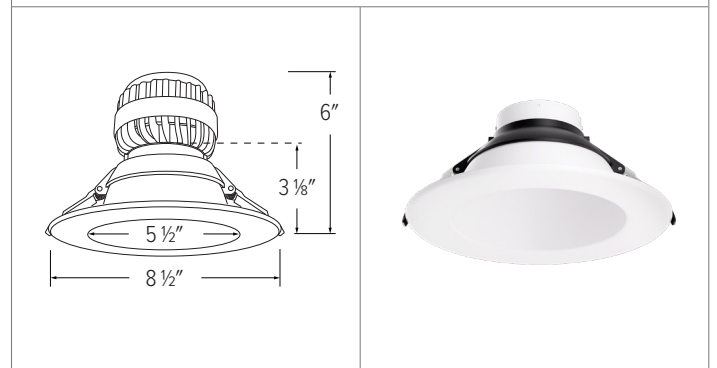
BIRCH™ ROUND TRIMS

ELB410 - 4" ROUND REFLECTOR



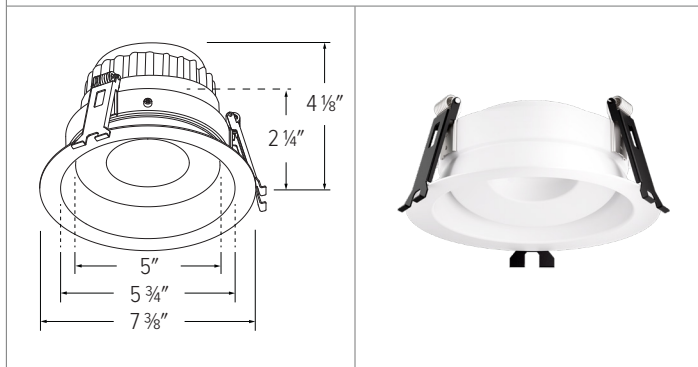
W (White) **H (Haze)** **HW (Haze/White)** **BB (Black)**

ELB610 - 6" ROUND REFLECTOR



W (White) **H (Haze)** **HW (Haze/White)** **BB (Black)**

ELB629 - 6" ROUND ADJUSTABLE



W (White) **H (Haze)** **BB (Black)**

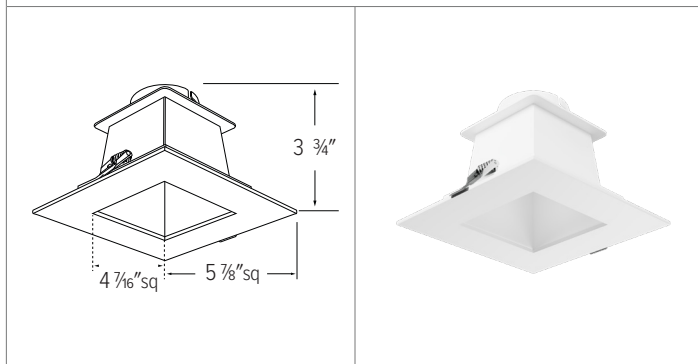
ELB810 - 8" ROUND REFLECTOR



W (White) **H (Haze)**

BIRCH™ SQUARE TRIMS

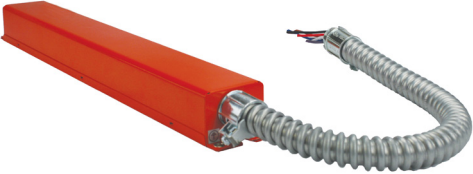
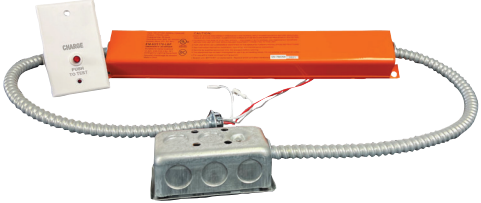
ELB440 - 4" SQUARE REFLECTOR



W (White) **H (Haze)** **HW (Haze/White)** **BB (Black)**

ACCESSORIES

EMERGENCY BATTERY BACKUP

<p>KEM-LD5 EMERGENCY BATTERY BACKUP</p>	<p>KEM-ERT EMERGENCY BATTERY BACKUP</p>
	
<p>KEM-LD5</p> <p>90 minutes of emergency operation. 0°C to 50°C operating temperature. Input: 120/277VAC, 50-60Hz, 25W Max Output: ~110VDC (120VAC input)/ ~270VDC (277VAC input) Charging time: 36 hours Compatible with ELB15RCT5ICA, ELB30R,ELB50R cUL listed</p>	<p>KEM-ERT</p> <p>90 minutes of emergency operation. Input: 100-277VAC, 50/60Hz., 25W Max Output: 170VDC, 25W Charging time: 36 hours Suitable for damp location cUL listed Compatible to Birch LED Modules (ELB15RCT5ICA & ELB30R), 3" - 8" Elm System Fixtures (ERT3, ERT4, ERT6, & ERT8 Series) & Canless Koto™ System</p>

TECHNICAL DETAILS

Optics: Frosted polycarbonate module lens diffuses light evenly throughout while reducing glare with LED technology. Adjustable beam angle with a twist of the lens.

Construction (Housing): Constructed from 16 gauge galvanized steel for large architectural applications.

Construction (Light Engine): Integrated driver and light engine with Encased Quick Connect. Diecast aluminum body with heat fins allow for efficient cooling.

Installation (Housing): Designed for commercial architectural buildings. Easily installed with hanger bars. Light engine installed into frame.

Installation (Remodel/Retrofit): Designed to be installed in existing holes for retrofitting less efficient lighting technologies.

Installation (Retrofit): : Designed to add Birch™ System downlighting to an existing commercial application with a junction box on site.

Installation (Light Engine): Twist-On design for tool-less trim installation, for use with Birch™ Trims. Can be used in 4", 6", and 8" Commercial Frames and Remodel/Retrofit applications with Encase Quick Connect base. For use in IC and Non-IC applications.

Junction Box: Positioned to accommodate straight conduit runs. 1/2" trade size conduit knockouts and pryout knockout slots for easy romex installation.

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.

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

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

Emergency Battery Pack: Optional 90 minute battery pack available with test indicator switch. Note that double wall housings require Access From Above Ceiling for Battery Maintenance.

Listings: ETL Listed for Damp Location.

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

DIMMER COMPATIBILITY CHART

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
0-10V Type Dimmers			
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%
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	6161-W	5% - 100%
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	IP710-DLZ	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%

***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.

Integrating our lighting with your Smart Home System is a breeze. Simply check your Smart Home system for compatible smart switches and cross reference that with our Dimming Compatibility Chart.

Once the switches are integrated with your Smart Home system your lights will be ready to go.



BIRCH™ LED MODULE

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
	Degree Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
Product: ELB15RCT5ICA (750lm, 3000K) Wattage/Lumens: 9.8W / 907.1 lm Luminaire LPW: 92.5 lm/W	0	1137	5'	40.5	4.3'
	5	1067	7'	17.8	6.5'
	15	779	10'	9.93	8.7'
	25	490	13'	6.43	10.8'
	35	272	ZONAL LUMEN SUMMARY		
	45	135			
	55	56	Zone	Lumens	%Luminaire
	65	23	0-30°	542.4	59.8
	75	9	0-40°	709.4	78.2
	85	2	0-60°	859.9	94.8
	90	0	0-90°	894.5	98.6

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
	Degree Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
Product #: ELB15RCT5ICA (1000lm, 3000K) Wattage / Lumens: 12.1 W / 1099.6 lm Luminaire LPW: 90.8 lm/W	0	1376	5'	49.0	4.3'
	5	1289	7'	21.5	6.5'
	15	937	10'	12.0	8.7'
	25	589	13'	7.78	10.8'
	35	327	ZONAL LUMEN SUMMARY		
	45	163			
	55	67	Zone	Lumens	%Luminaire
	65	27	0-30°	656.6	59.7
	75	11	0-40°	859.5	78.2
	85	2	0-60°	1,042.2	94.8
	90	0	0-90°	1,084.2	98.6

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
	Degree Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
Product #: ELB15RCT5ICA (1500lm, 3000K) Wattage / Lumens: 19.4 W / 1626.5 lm Luminaire LPW: 83.8 lm/W	0	2031	5'	72.3	4.3'
	5	1893	7'	31.7	6.5'
	15	1386	10'	17.7	8.7'
	25	872	13'	11.5	10.8'
	35	485	ZONAL LUMEN SUMMARY		
	45	243			
	55	100	Zone	Lumens	%Luminaire
	65	41	0-30°	969.9	59.6
	75	17	0-40°	1,270.4	78.1
	85	3	0-60°	1,541.4	94.8
	90	0	0-90°	1,603.4	98.6

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
	Degree Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
Product #: ELB30R30 (1250 lm, 3000K) Wattage / Lumens: 13.6W / 1463.3 lm Luminaire LPW: 107.5 lm/W	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 SUMMARY		
	45	163			
	55	59	Zone	Lumens	%Luminaire
	65	25	0-30°	963.3	65.8
	75	11	0-40°	1,212.8	82.9
	85	3	0-60°	1,401.5	95.8
	90	0	0-90°	1,443.4	98.6

BIRCH™ LED MODULE

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
	Degree Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
Product #: ELB30R30 (2000 lm, 3000K) Wattage / Lumens: 18.8W / 1932 lm Luminaire LPW: 102.7 lm/W	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 SUMMARY		
	45	217			
	55	79	Zone	Lumens	%Luminaire
	65	34	0-30°	1,268.3	65.7
	75	15	0-40°	1,599.2	82.8
	85	3	0-60°	1,850.1	95.8
	90	0	0-90°	1,905.4	98.6

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
	Degree Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
Product #: ELB30R30 (3000 lm, 3000K) Wattage / Lumens: 32.6W / 2946.5 lm Luminaire LPW: 90.3 lm/W	0	1385	4'	315.5	3.2'
	5	1340	6'	123.9	4.8'
	15	931	8'	63.6	6.4'
	25	402	10'	42.7	8.0'
	35	112	ZONAL LUMEN SUMMARY		
	45	34			
	55	15	Zone	Lumens	%Luminaire
	65	8	0-30°	1,926.7	65.4
	75	4	0-40°	2,434.1	82.6
	85	1	0-60°	2,821.0	95.7
	90	0	0-90°	2,905.7	98.6