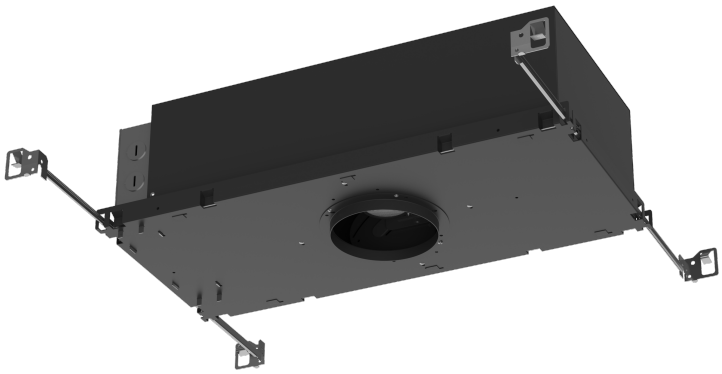
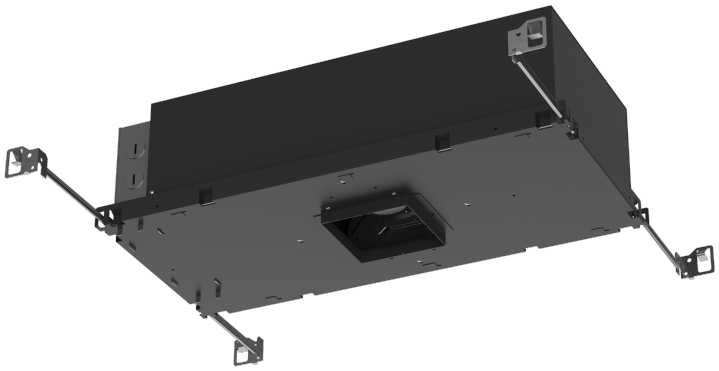
LFX-DL-TUNC

Tunable LED Light Fixture





- *Ceiling mounted tunable LED downlight fixture for indoor use*
- *Full-color tunable, tunable white, and warm to dim tunable*
- *Designed for use with Crestron Home® OS*
- *35° and 55° optics are available*
- *Field-replaceable optic*
- *Dimming range from 0.1% to 100%*
- *1650 to 8000K color temperature range*
- *CRI (Color Rendering Index) of 96*
- *Color accuracy <2 SDCM over the life of the product*
- *DMX-C control using a DIN-GWDL gateway*
- *Configure and order using the Crestron Light Fixture Configuration Tool*
- *Available in fixed, adjustable, and wall wash configurations*
- *Designed for new construction installations*
- *Adjustable fixtures allow up to 40° tilt and 360° rotation*
- *Round and square aluminum trims with reflector and a 3.5 in. (90 mm) aperture*
- *Trims available with or without a flange*
- *Trim options include adjustable tilt and rotation, 20° wall wash, and 2 in. (51 mm) pinhole*
- *Trim and reflectors available in white, black, bronze, matte silver, and matte nickel*
- *Optional media available for elongating, softening, honeycomb, frosted, and perimeter frosted effects*
- *Mounts using adjustable hanger bars*
- *Enclosures available for insulated, noninsulated, and Chicago plenum installations*
- *Utilizes Lumenetix® Araya® CTM3 LED array*

The LFX-DL-TUNC is a fully-tunable LED light fixture. Adjust the hue, saturation, color temperature, and light intensity to create a light color that is perfect for any space.

The LFX-DL-TUNC is fully configurable to fit any space in a new construction. Use the Crestron Light Fixture Configuration Tool to specify and order fixtures.

Housing

The LFX-DL-TUNC housing is designed for new construction installations with joists spaced between 14 in. (356 mm) and 25 in. (635 mm). Enclosures are available for installation in noninsulated ceilings, insulated ceilings, and Chicago plenum ceilings and can be configured for use in wet locations.

The housing has a 3.5 in. round or square aperture for use with round or square trims.

Adjustments

Adjustable fixtures are available for installation in vaulted ceilings or to highlight objects in a room. Adjustable fixtures allow the light engine to be tilted up to 40° and rotated up to 360°. Pair adjustable fixtures with adjustable or wall wash trims.

Optics

Optics provide variations in the beam spread and lumen output of the light fixture. The 35° optic provides a narrower beam spread to concentrate light in a smaller area while the 55° optic provides a wider beam spread to distribute light across a larger area.

The optic is included with the light fixture and can also be purchased separately using the Crestron Light Fixture Configuration Tool. To purchase separately, refer to LFX-DL-ACCY.

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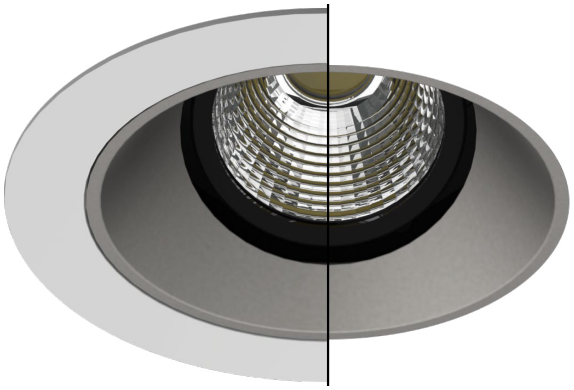
LFX-DL-TUNC

Tunable LED Light Fixture

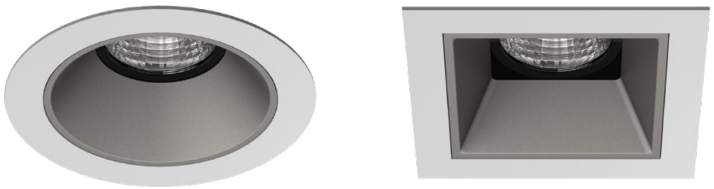
Trims

Die-cast aluminum trims provide a clean finish and are available with or without a trim flange. Round and square trims are available with options for wall wash, pinhole, and adjustable applications. For ceilings thicker than 0.75 in. (19 mm), extension clips up to 1.88 in. (48 mm) are available.

Flanged and Flangeless Trims

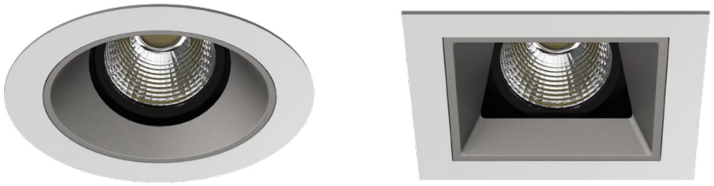


Fixed Trims - Round (Left) and Square (Right)



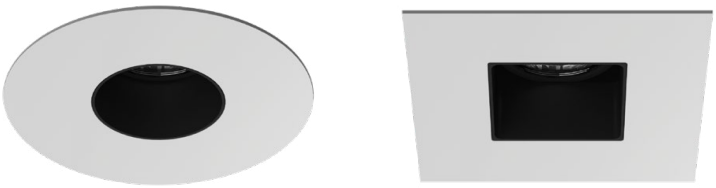
Adjustable and wall wash trims are compatible with light fixtures that have the adjustable light option. They can direct light towards a centerpiece in a room or accent a painting or photograph on a wall. Adjustable trims can rotate and tilt to match the orientation of the light fixture. Wall wash trims are set to 20° tilt.

Adjustable and Wall Wash Trims - Round (Left) and Square (Right)



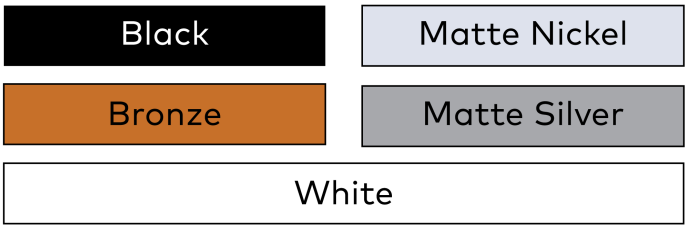
Pinhole trims help direct the light to a single point of interest. Pinhole trims have a 2 in. (51 mm) aperture.

Pinhole Trims - Round (Left) and Square (Right)



For wet location installations, clear or frosted glass is added to the trim.

The trim and reflector are available in white, black, bronze, matte silver, and matte nickel.



The trim is included with the light fixture and can also be purchased separately using the Crestron Light Fixture Configuration Tool. To purchase separately, refer to LFX-DL-TRIM.

DMX-C Controllable

Built on the DMX512 standard, DMX-C offers the speed and reliability of a traditional DMX system with the seamless and consistent user experience of the Crestron Home® OS. When connected to a DIN-GWDL, DMX-C lighting fixtures are autodiscovered, autoaddressed, and treated as native Crestron devices with a consistent and intuitive interface.

Color Tunable using the Crestron Home Color UI

The fully-tunable LED light fixtures output a wide range of white and colored light. The light output ranges from 1650K to 8000K (candle reddish to daylight), hue from 0 to 360°, and saturation from 0 to 100%. The dimming ranges from 0.1% to 100%.

The LFX-DL-TUNC is designed for use with Crestron Home® OS. Use the Crestron Home® Setup app and Crestron Home® OS app to configure and control tunable lights.

Use the Crestron Home Color UI to easily control the tunable white and full color lighting loads. Adjust hue, saturation, intensity and color temperature. Create scenes to set the mood for entertaining or ensure the optimal setting for a professional conference call. Set lighting schedules or implement Circadian lighting rhythms.

Circadian Rhythm Lighting Control

Sunlight has a predictable rhythm of color temperature and intensity. Connected light fixtures can be synchronized with this natural rhythm using the LFX-DL-TUNC Circadian rhythm lighting controls.

SolarSync® Sensor

Match outside light using an outdoor SolarSync® Sensor (GLS-LCCT, sold separately). SolarSync communicates the outside color temperature to Crestron Home® in real-time and tunes your indoor lighting accordingly.

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LFX-DL-TUNC

Tunable LED Light Fixture

Specifications

Performance Summary

Lumen Output	35° Fixed:	711 lm @ 20 W
	35° Adjustable:	693 lm @ 20 W
	35° Pinhole:	498 lm @ 20 W
	55° Fixed:	830 lm @ 20 W
	55° Adjustable:	800 lm @ 20 W
	55° Wall Wash:	497 lm @ 20 W
Luminous Efficacy	35° Fixed:	36 lm/W
	35° Adjustable:	35 lm/W
	35° Pinhole:	25 lm/W
	55° Fixed:	42 lm/W
	55° Adjustable:	40 lm/W
	55° Wall Wash:	25 lm/W
Color Rendering Index	35° Fixed:	96 CRI
	35° Adjustable:	96 CRI
	35° Pinhole:	96 CRI
	55° Fixed:	96 CRI
	55° Adjustable:	96 CRI
	55° Wall Wash:	97 CRI
Color Accuracy	<2 SDCM over the life of the product	
L70 Estimate	50,000 hours	
Dimming	0.1 to 100%; Tunable color	
CCT (Correlated Color Temperature)	1650 to 8000K	
Saturation	0 to 100%	
Hue	0 to 360°	

Housing and Light Engine

Enclosure Type

Enclosures available for insulation contact, non-insulation contact, and Chicago plenum installation locations;

> **NOTE:** Extension clips are available for ceilings thicker than 0.75 in. (19 mm).

Insulation Contact: For insulated ceilings where the enclosure will come in contact with insulation;
Non-Insulation Contact: For noninsulated ceilings;
Chicago Plenum: For Chicago plenum installations

Aperture

3.5 in. (89 mm);
Round or square

Adjustability

Fixed, adjustable, or wall wash options available;
Adjustable fixtures provide tilt adjustments up to 40° and rotation adjustments up to 360°

Optics and Media

Beam Spreads

35° or 55°;
Field replaceable

Media

Elongating, frosted, honeycomb, perimeter frosted, and softening;
Media is secured with the included media holder

Trim

Shape

Round or square;
Flanged or flangeless;
Flangeless trim is available in 3 sizes to accommodate ceilings from 0.5 in. to 1.75 in. (13 mm to 45 mm)

Type

Adjustable, fixed, pinhole, or wall wash

Finishes

Trim and reflector are available in 5 finishes;
Available in white, black, bronze, matte silver, matte nickel

Glass Lens

Clear or frosted;
Required for wet installation locations, glass is secured to the trim;
Not available with wall wash trims

Extension Clips

Install in thicker ceilings by using an optional extension clip;
Extension clips are available in five sizes to accommodate ceilings from 0.75 in. to 1.88 in. (19 mm to 48 mm)

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LFX-DL-TUNC

Tunable LED Light Fixture

Electrical

Voltage	120VAC, 277VAC; 50/60Hz
Power Consumption	20 W
Power Factor	0.981
Inrush Current	28.48A at 277VAC; 12.29A at 120VAC
Emergency lighting	No

Communications

DMX-C	DMX-C communications; Requires a DIN-GWDL for control (sold separately)

Connectors

Line	(3) 16 AWG, flying leads, black (power), white (neutral), green (ground); Connect one line in and one line out connection per junction box. Do not exceed six 12 AWG conductors in the junction box; Use 90°C cable or greater; Use a dedicated line cable that is home-run to the circuit breaker, do not connect to a switched line
DMX-C IN, DMX-C OUT	(2) RJ-45 connector, female; Use shielded CAT5 wire or better, do not connect drain to ground; Daisy-chain all fixtures, do not create loops; **DMX-C IN:** From DIN-GWDL, DIN-GWDL-SPLTR, or previous fixture in the daisy-chain; **DMX-C OUT:** To next fixture in daisy-chain, the last fixture in the daisy-chain requires a termination resistor (provided with the fixture)

Environmental

Temperature	**Operation:** 32° to 95°F (0° to 35°C), room temperature; **Storage:** 32° to 140°F (0° to 60°C), not powered
Humidity	10% to 95% RH (noncondensing)
Location	Damp or wet installation locations based on the configuration; Damp location installation requires that water spray will never come in contact with the fixture; Wet location installation requires the selection of a glass lens

Construction

Housing	**Baseplate:** 20 ga milled aluminum; **Junction box:** 18 ga galvanized steel with multiple knockouts;
Mounting	(4) Hanger bars, 2 per side; Bidirectional mounting; Adjustable between 14 - 25 in. (356 - 635 mm), 14 - 18 in. (356 - 458 mm) is recommended
Trim	Die-cast aluminum

Dimensions

Insulation Contact Housing	Width: 21.12 in. (537 mm) Height: 5.75 in. (146 mm) Depth: 9.75 in. (248 mm)
Noninsulation Contact Housing and Chicago Plenum Housing	Width: 13.44 in. (342 mm) Height: 5.48 in. (139 mm) Depth: 10.88 in. (276 mm)
Ceiling Hole	Round: Ø 4-1/2 in. (115 mm); Square: 3-7/8 in. (99 mm)
Trim Width	Round Flanged: Ø 4.97 in. (127 mm); Round Flangeless: Ø 3.72 in. (95 mm) Square Flanged: 4.62 in. (118 mm); Square Flangeless: 3.38 in. (86 mm)
Trim Depth	Flanged: Projects 0.07 in. (2 mm) from ceiling surface; Flangeless: Flush with the ceiling surface

Weight

7.50-9.50 lb (3.40-4.31 kg)

Compliance

Regulatory Model: M202133001
FCC Class A, CAN ICES-3 (A)/NMB-3(A). UL® Listed for US & Canada

Chicago Plenum In accordance with CCEA (City of Chicago Environmental Air), Chicago electrical code section 18-27-300.22©

To search for product certificates, refer to support.crestron.com/app/certificates.

Model

LFX-DL-TUNC
Tunable LED Light Fixture

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LFX-DL-TUNC

Tunable LED Light Fixture

Available Accessories

For a list of available accessories, visit the LFX-DL-TUNC product page.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or contact us for additional information by visiting www.crestron.com/contact/our-locations for your local contact.

The original language version of this document is U.S. English.
All other languages are a translation of the original document.

The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed online at www.crestron.com/legal/patents.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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Rev 10/07/22

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LFX-DL-TUNC

Tunable LED Light Fixture

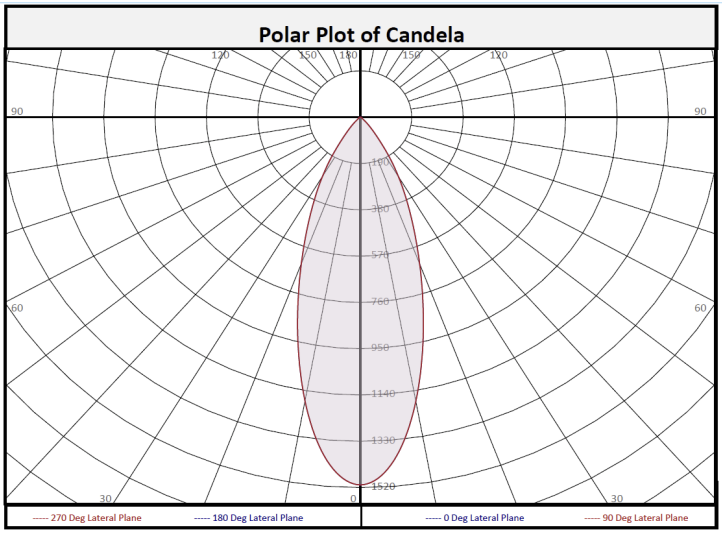
LM79 Specifications

All measurements are taken from fixtures with a round trim with white reflector finish and full power input, unless otherwise noted.

35 Degree Downlight

Measurements taken with a 0° fixed light engine at 3507K and 24.9°C ambient temperature.

Polar Plot

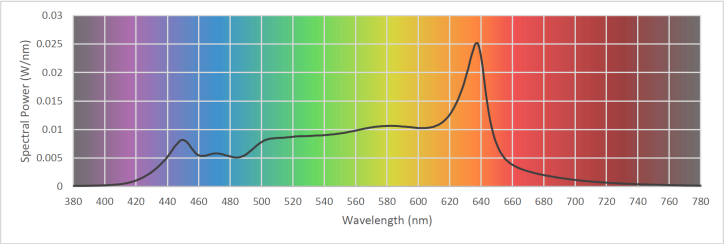


Circle of Light Plot

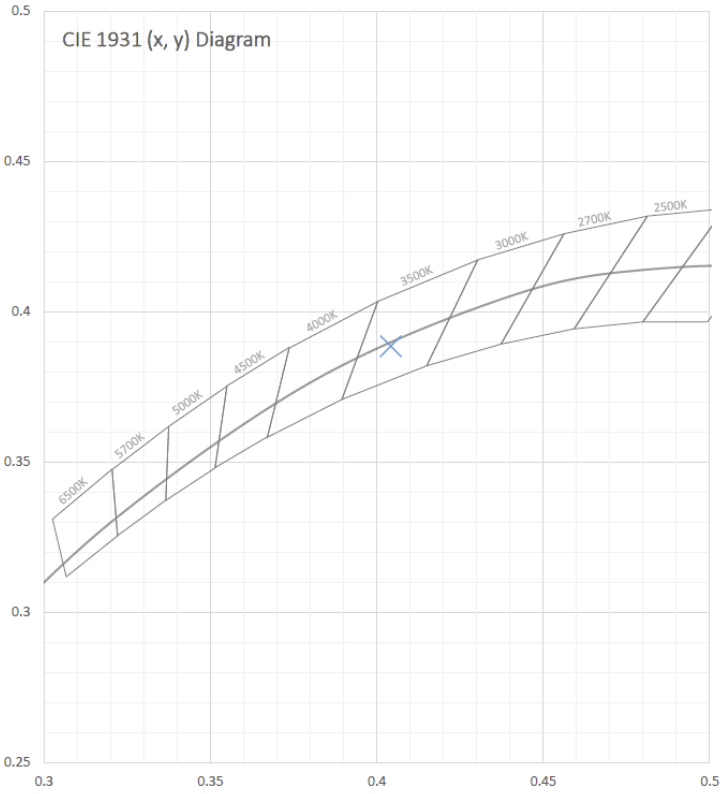
Circle of Light Plot

Height(ft)	Illuminance at Nadir (fc)	Ground-level distance to half-of-nadir illuminance (ft) 0-180 deg	90-270 deg
6.0	4.7	9.88	4.63
8.0	2.6	13.18	6.17
10.0	1.7	16.47	7.71
12.0	1.2	19.76	9.26
14.0	0.9	23.06	10.80
16.0	0.7	26.35	12.34

Spectral Power Chart



CIE 1931 (x, y) Diagram



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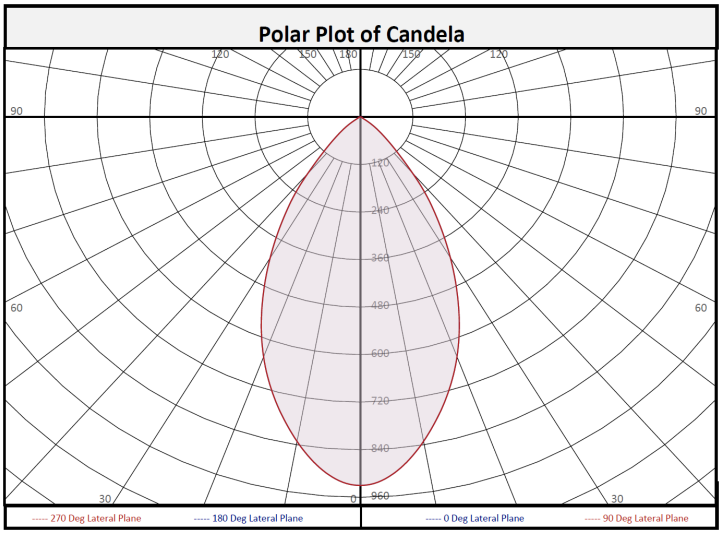
LFX-DL-TUNC

Tunable LED Light Fixture

55 Degree Downlight

Measurements taken with a 0° fixed light engine at 3517K and 24.8°C ambient temperature.

Polar Plot

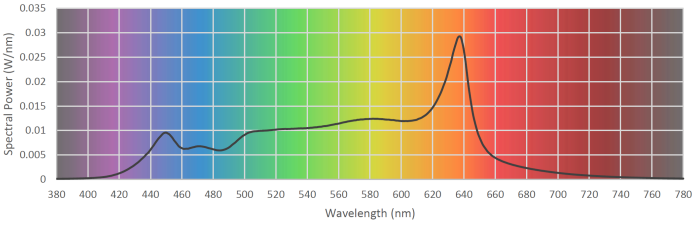


Circle of Light Plot

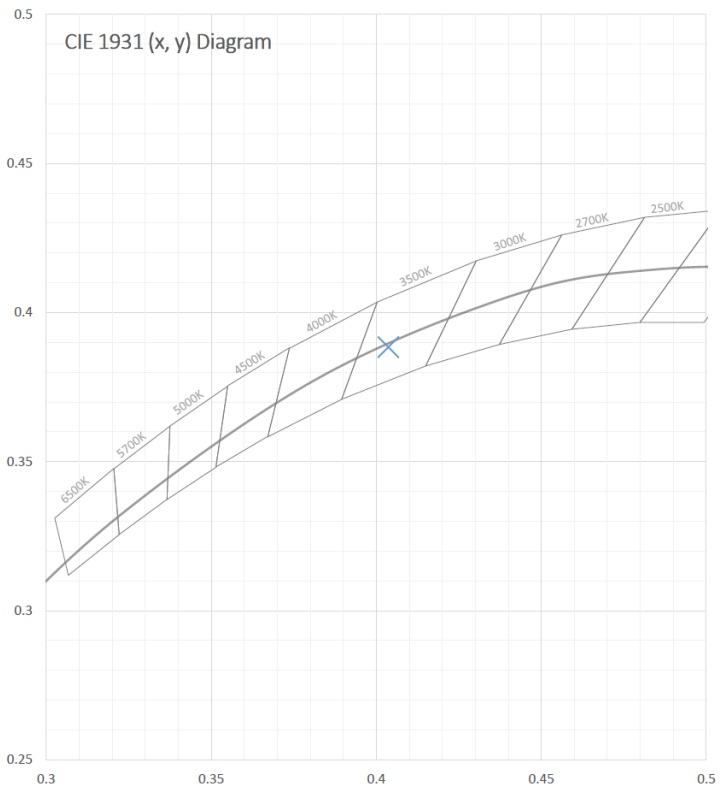
Circle of Light Plot

Height(ft)	Illuminance at Nadir (fc)	Ground-level distance to half-of-nadir illuminance (ft) 0-180 deg	90-270 deg
6.0	25.8	4.97	4.97
8.0	14.5	6.62	6.62
10.0	9.3	8.28	8.28
12.0	6.5	9.93	9.93
14.0	4.7	11.59	11.59
16.0	3.6	13.25	13.25

Spectral Power Chart



CIE 1931 (x, y) Diagram



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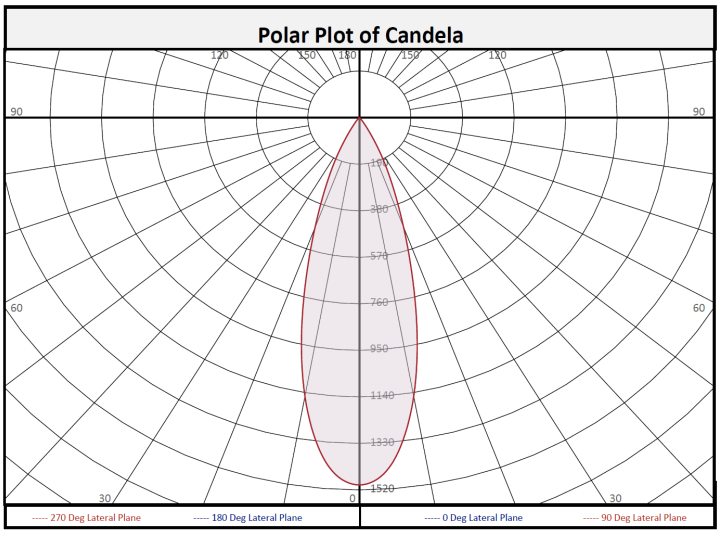
LFX-DL-TUNC

Tunable LED Light Fixture

30 Degree Pinhole Downlight

Measurements taken with a 0° fixed light engine at 3507K and 24.9°C ambient temperature.

Polar Plot

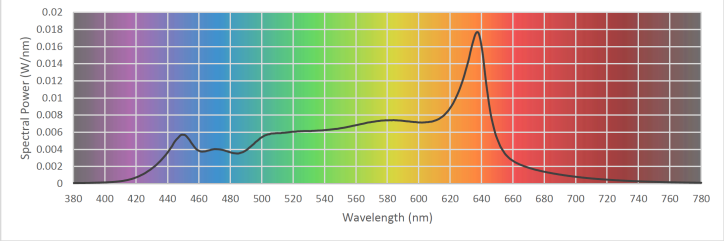


Circle of Light Plot

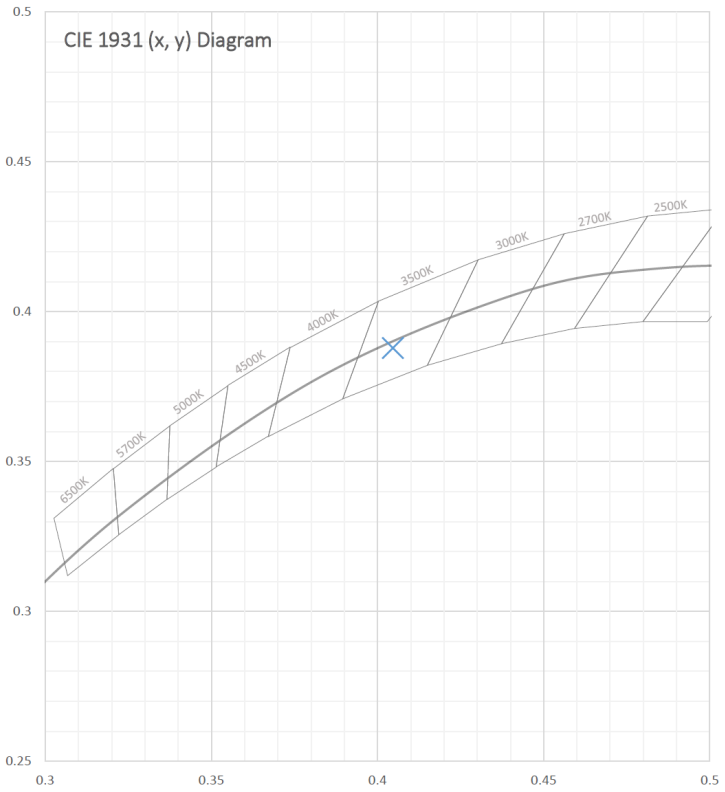
Circle of Light Plot

Height(ft)	Illuminance at Nadir (fc)	Ground-level distance to half-of-nadir illuminance (ft) 0-180 deg	90-270 deg
6.0	41.7	3.14	3.14
8.0	23.4	4.18	4.18
10.0	15.0	5.23	5.23
12.0	10.4	6.27	6.27
14.0	7.7	7.32	7.32
16.0	5.9	8.37	8.37

Spectral Power Chart



CIE 1931 (x, y) Diagram



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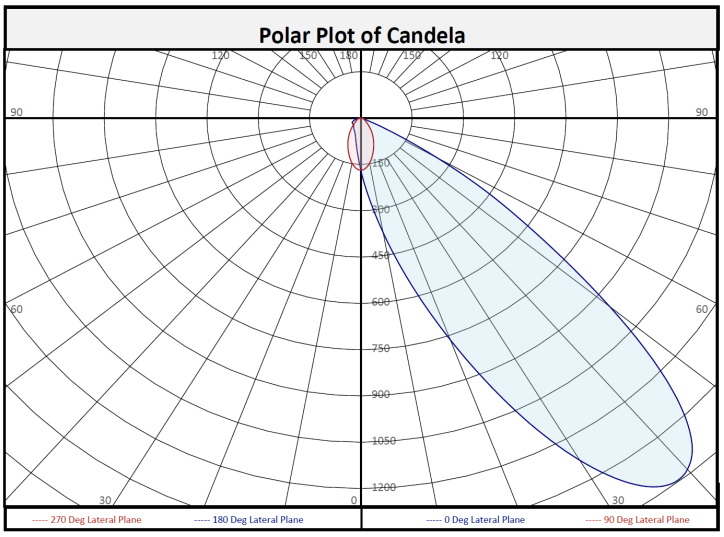
LFX-DL-TUNC

Tunable LED Light Fixture

33 Degree Adjustable Downlight

Measurements taken with an adjustable light engine set to 40° at 3518K and 25.1°C ambient temperature.

Polar Plot

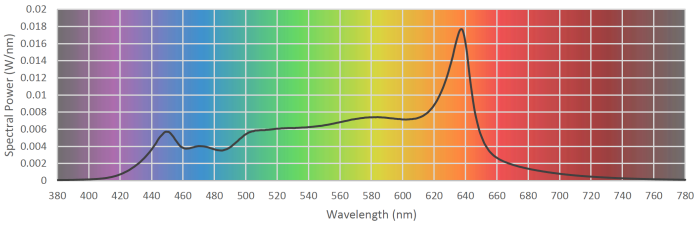


Circle of Light Plot

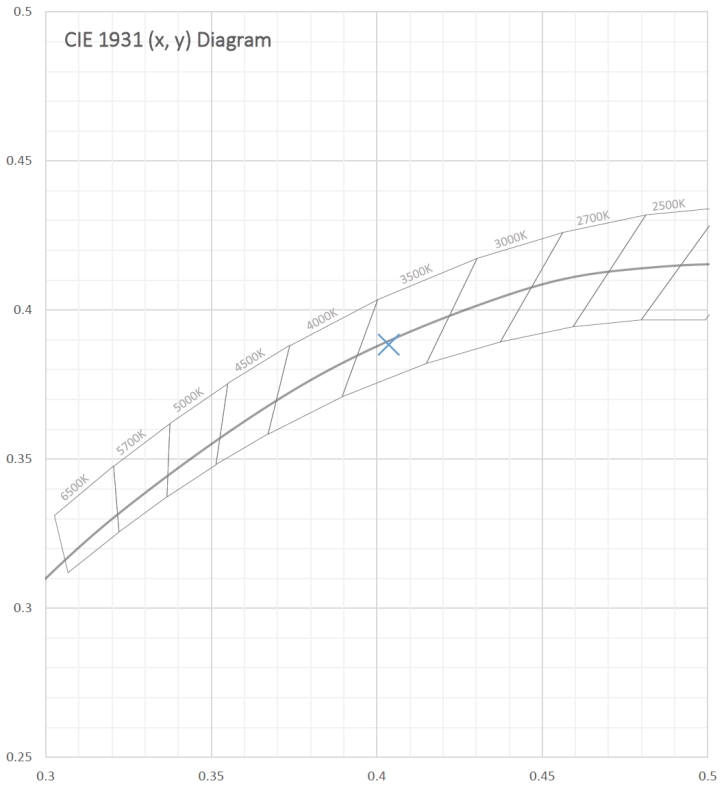
Circle of Light Plot

Height(ft)	Illuminance at Nadir (fc)	Ground-level distance to half-of-nadir illuminance (ft) 0-180 deg	90-270 deg
6.0	4.7	9.88	4.63
8.0	2.6	13.18	6.17
10.0	1.7	16.47	7.71
12.0	1.2	19.76	9.26
14.0	0.9	23.06	10.80
16.0	0.7	26.35	12.34

Spectral Power Chart



CIE 1931 (x, y) Diagram



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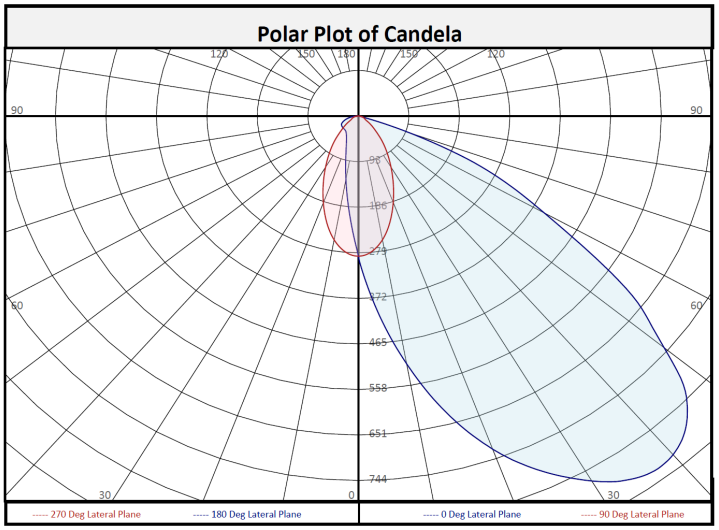
LFX-DL-TUNC

Tunable LED Light Fixture

55 Degree Adjustable Downlight

Measurements taken with an adjustable light engine set to 40° at 3527K and 25.3°C ambient temperature.

Polar Plot

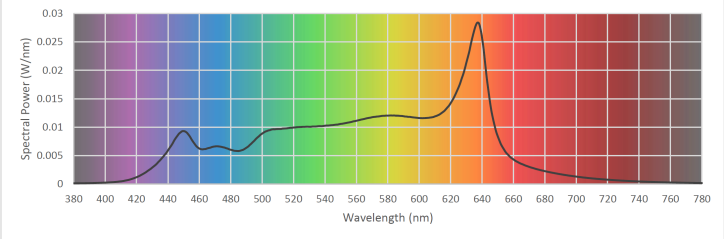


Circle of Light Plot

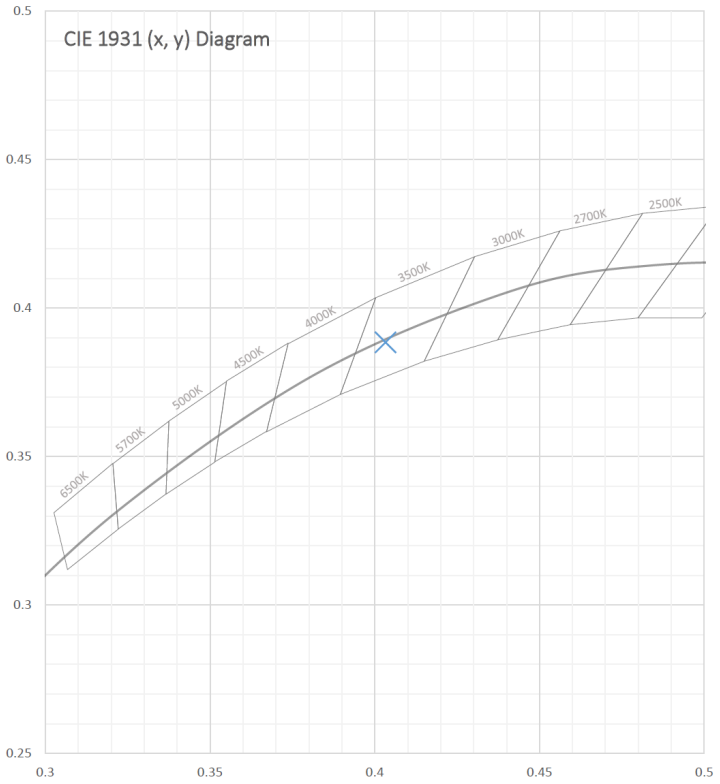
Circle of Light Plot

Height(ft)	Illuminance at Nadir (fc)	Ground-level distance to half-of-nadir illuminance (ft) 0-180 deg	90-270 deg
6.0	7.9	8.86	4.73
8.0	4.5	11.81	6.30
10.0	2.9	14.76	7.88
12.0	2.0	17.71	9.45
14.0	1.5	20.66	11.03
16.0	1.1	23.62	12.61

Spectral Power Chart



CIE 1931 (x, y) Diagram



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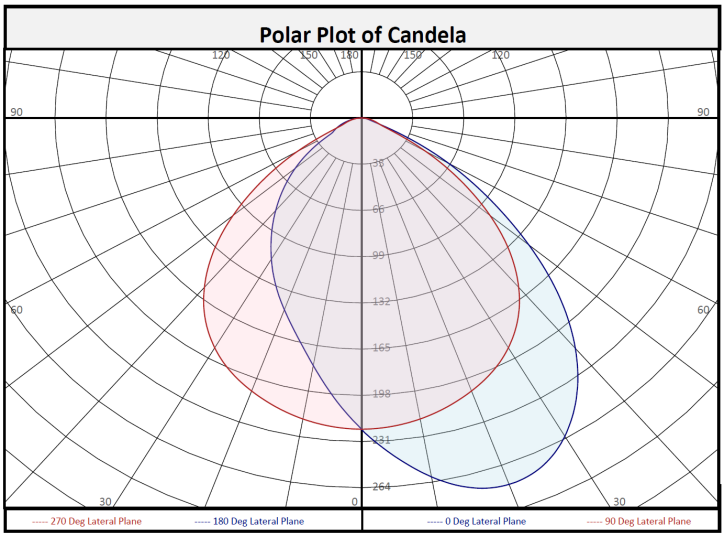
55 Degree Wall Wash Downlight at 22 degree angle

Measurements taken with an adjustable light engine set to 22° at 3554K and 25.3°C ambient temperature.

Polar Plot

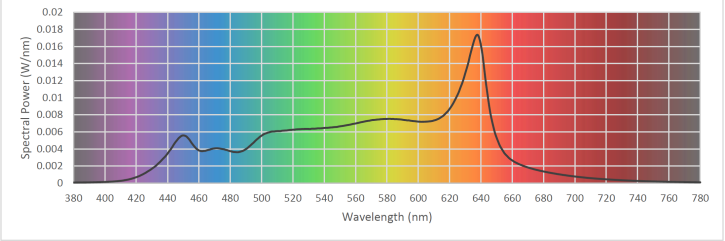


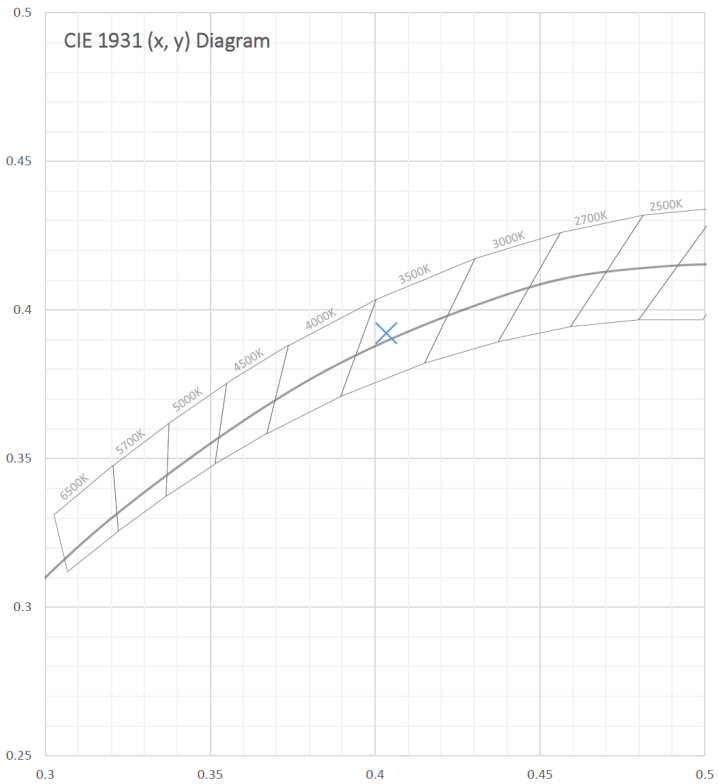
Circle of Light Plot

Circle of Light Plot

Height(ft)	Illuminance at Nadir (fc)	Ground-level distance to half-of-nadir illuminance (ft) 0-180 deg	90-270 deg
6.0	6.2	7.12	7.58
8.0	3.5	9.49	10.10
10.0	2.2	11.86	12.63
12.0	1.5	14.23	15.15
14.0	1.1	16.60	17.68
16.0	0.9	18.97	20.20

Spectral Power Chart





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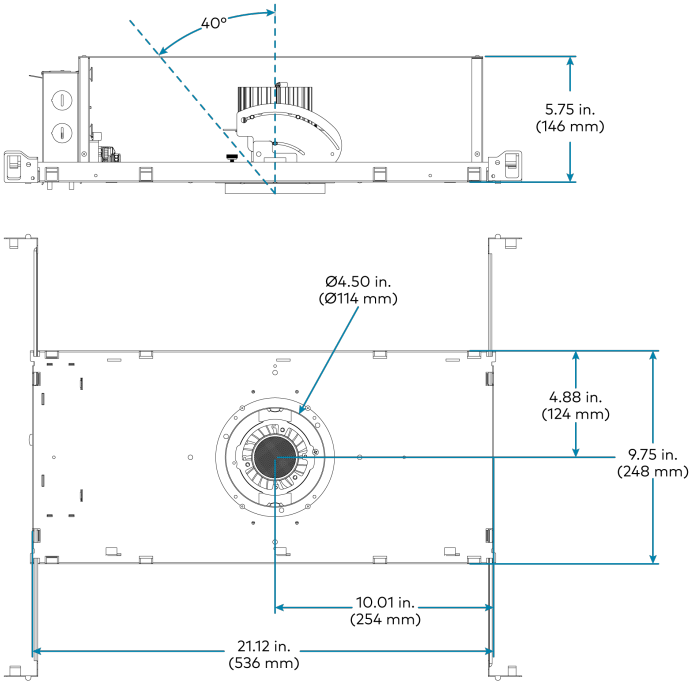
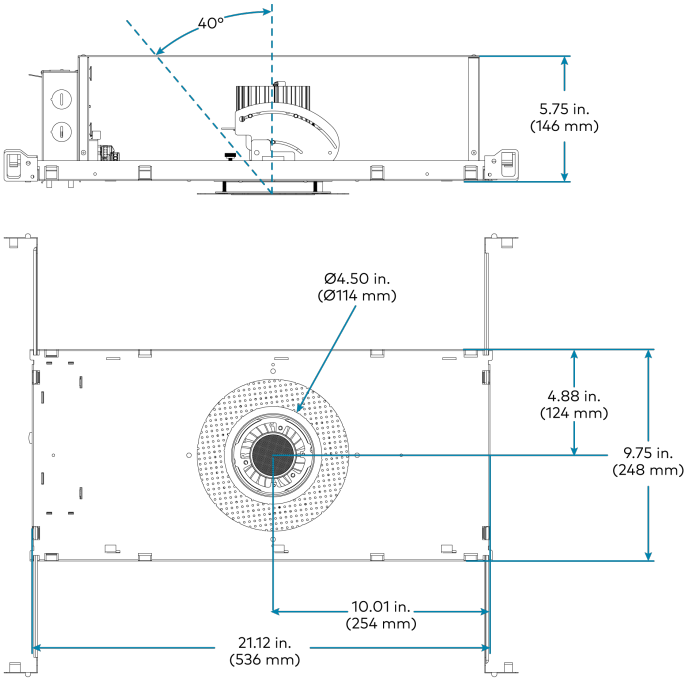
Dimension Drawings

Enclosure Dimensions

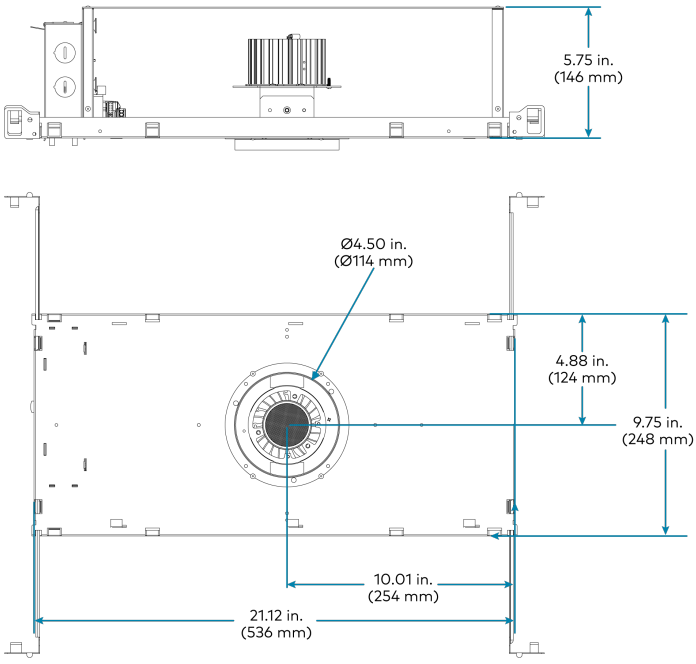
Round, Insulation Contact, Adjustable, Flanged Trim



Round, Insulation Contact, Adjustable, Flangeless Trim



Round, Insulation Contact, Fixed, Flanged Trim



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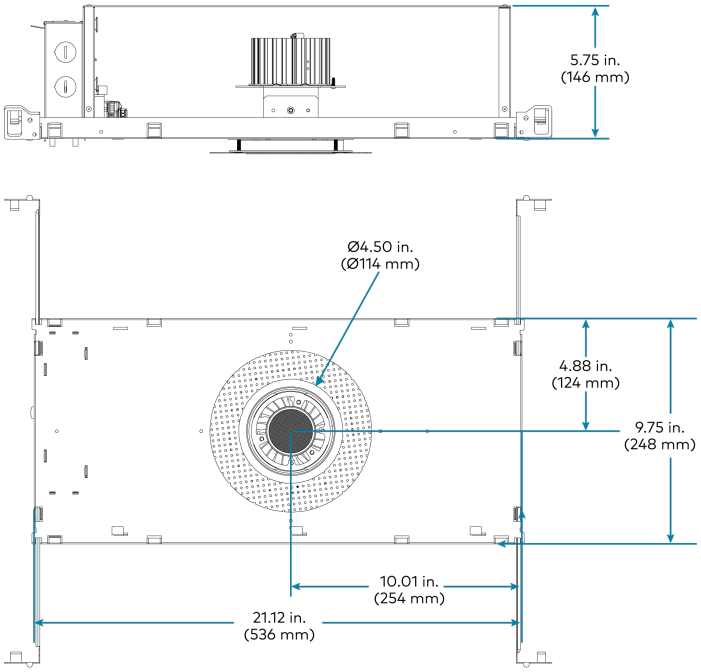
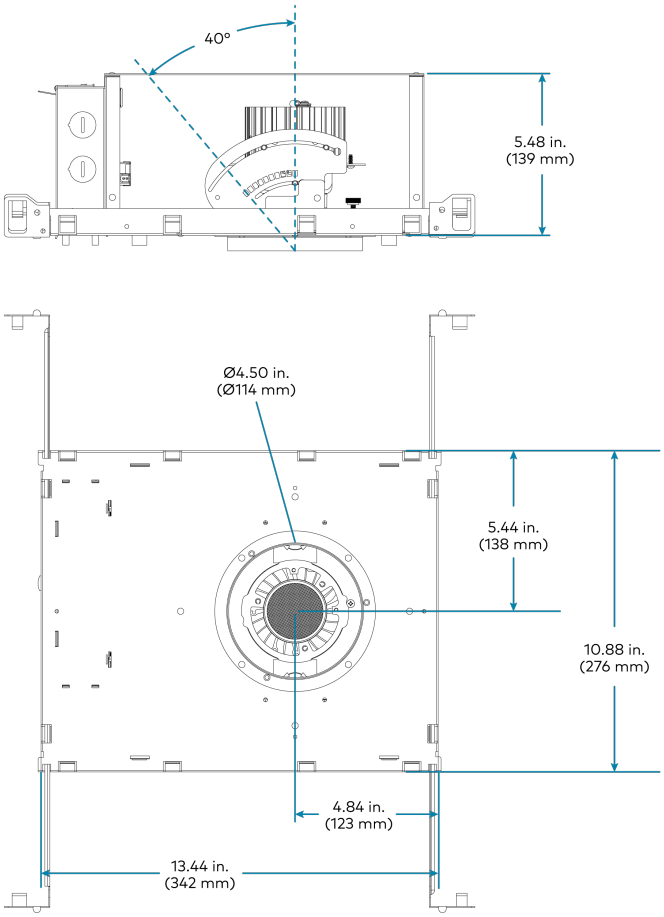
Round, Insulation Contact, Fixed, Flangeless Trim



Round, Noninsulation Contact and Chicago Plenum, Adjustable, Flanged Trim



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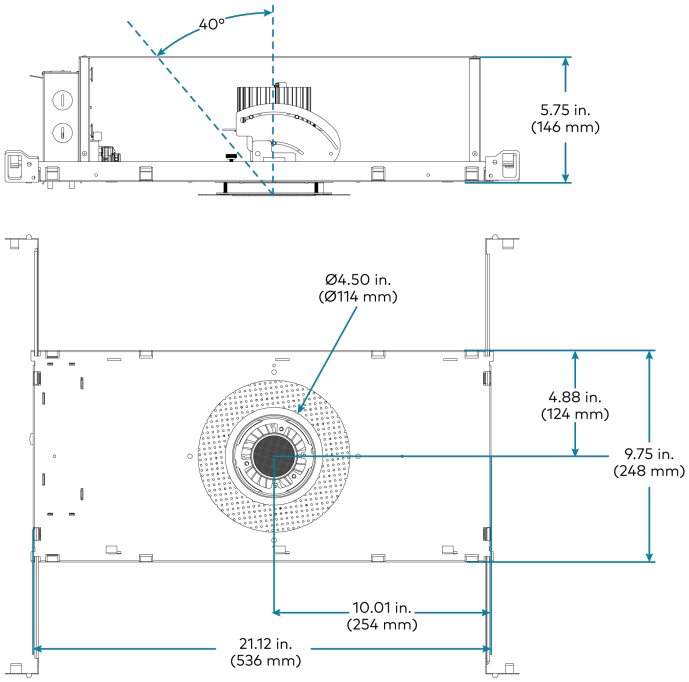
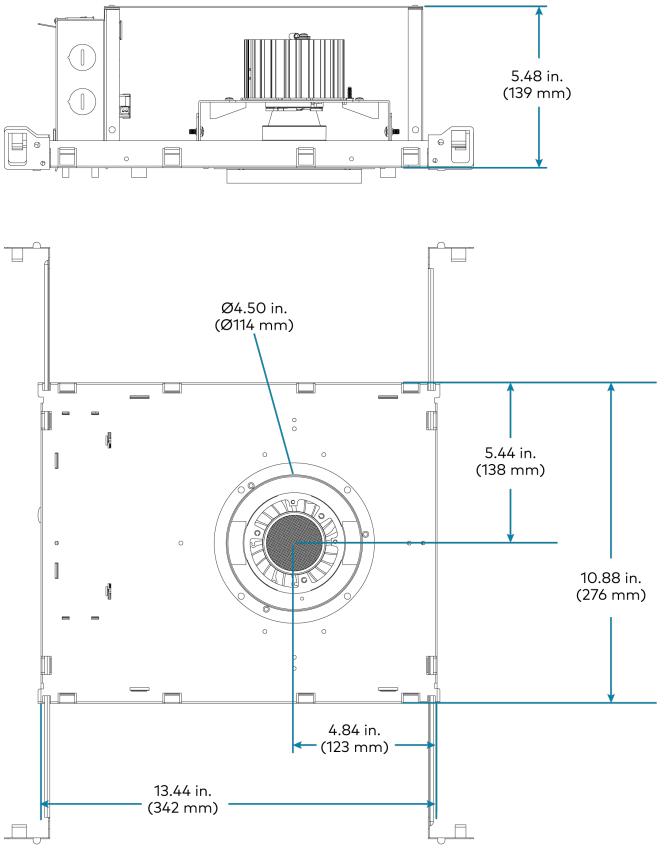
Round, Noninsulation Contact and Chicago Plenum, Adjustable, Flangeless Trim



Round, Noninsulation Contact and Chicago Plenum, Fixed, Flanged Trim



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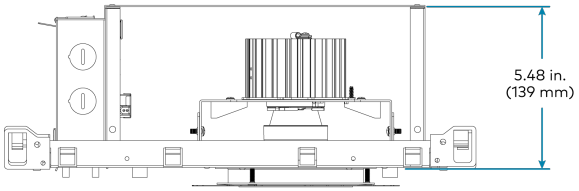
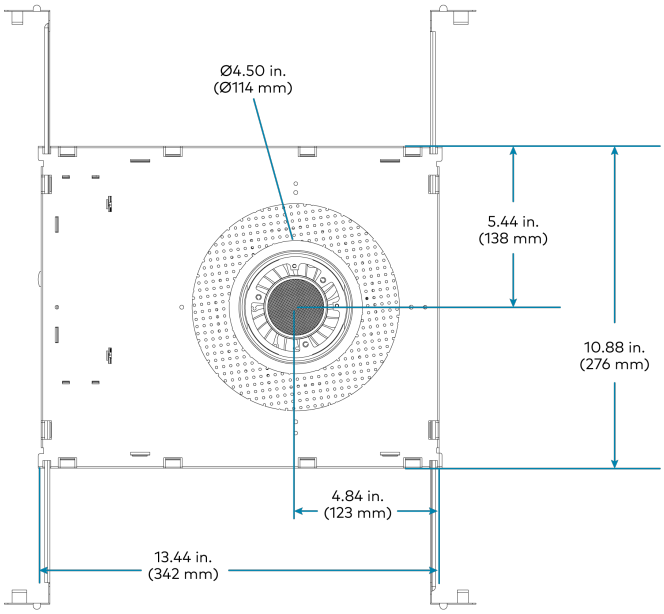
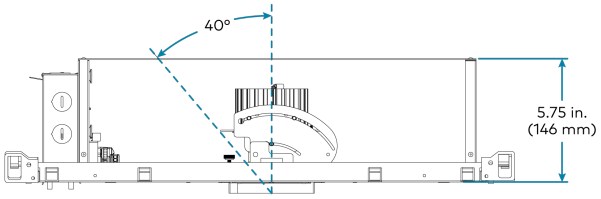
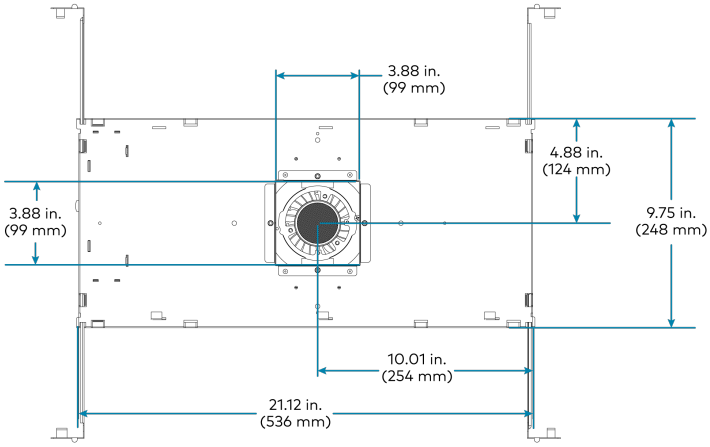
Round, Noninsulation Contact and Chicago Plenum, Fixed, Flangeless Trim



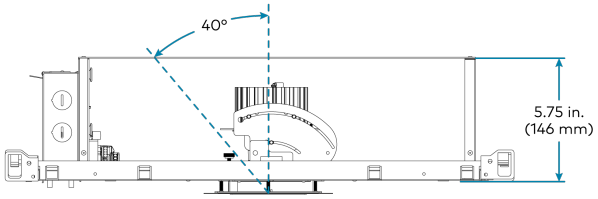


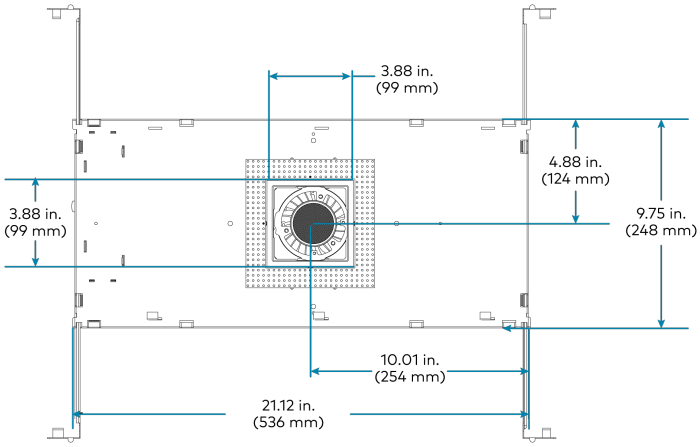
Square, Insulation Contact, Adjustable, Flanged Trim





Square, Insulation Contact, Adjustable, Flangeless Trim





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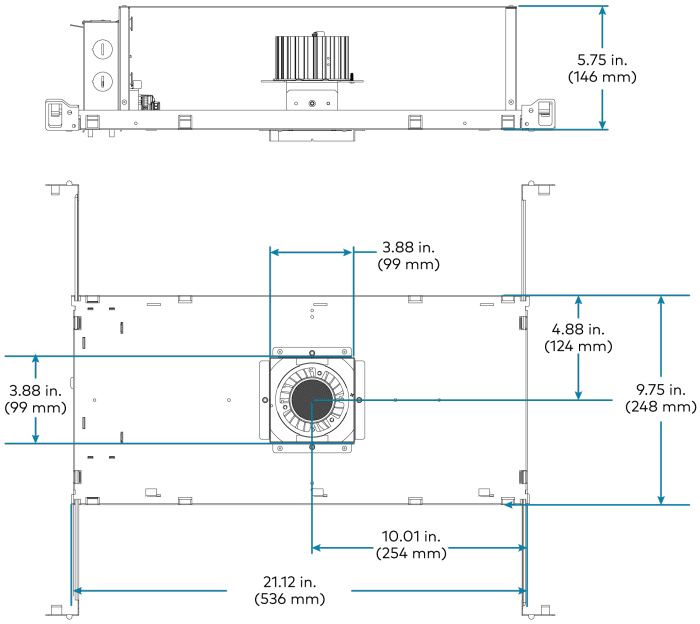
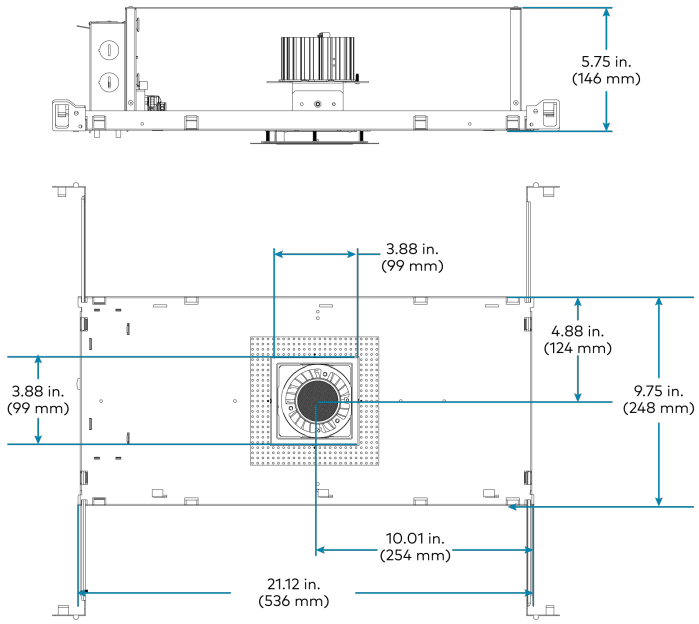
Tunable LED Light Fixture

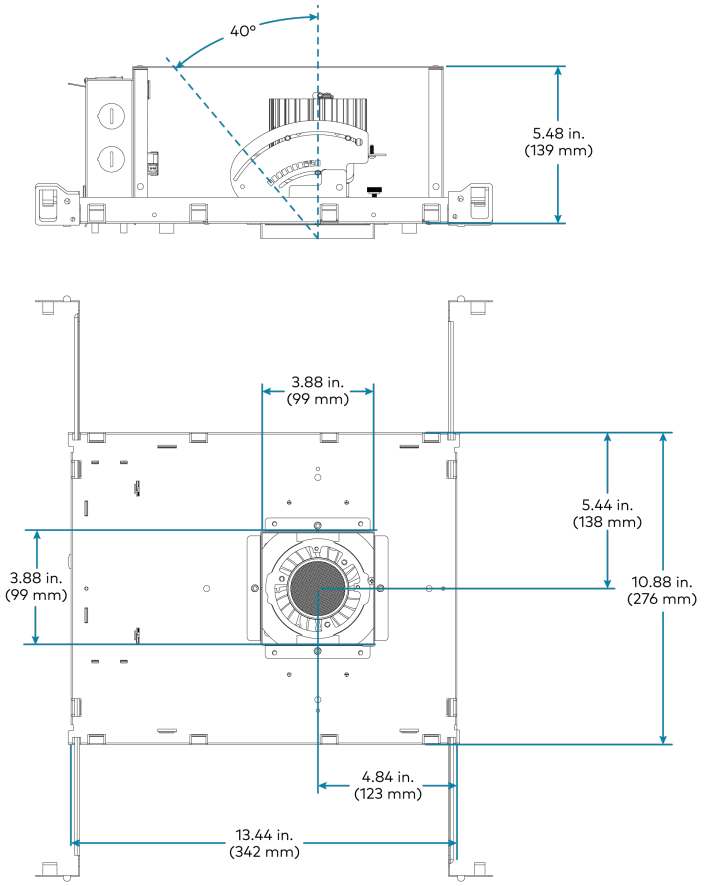
Square, Insulation Contact, Fixed, Flanged Trim



Square, Insulation Contact, Fixed, Flangeless Trim



Square, Noninsulation Contact and Chicago Plenum, Adjustable, Flanged Trim



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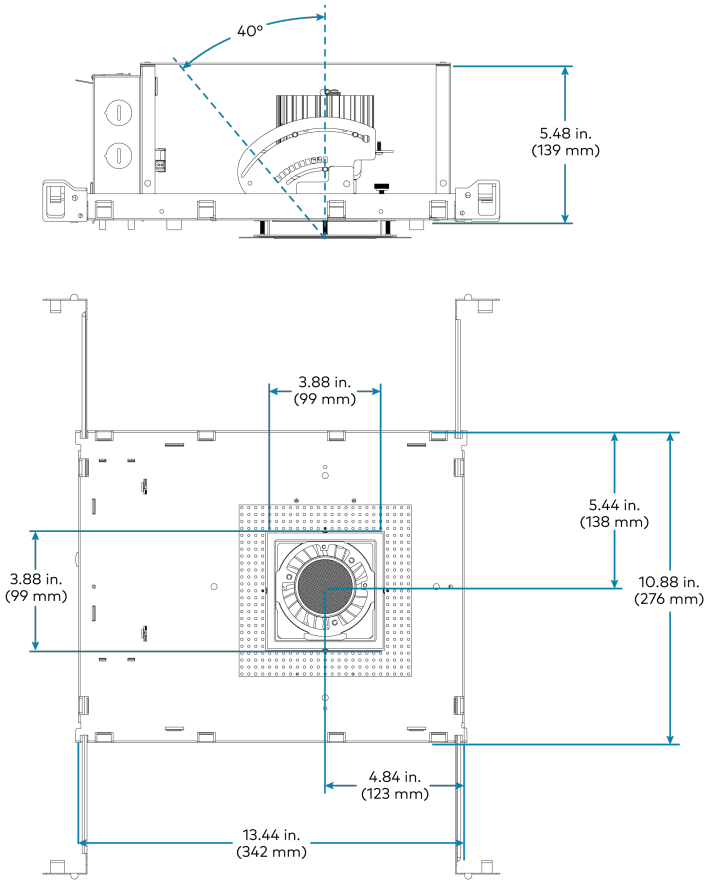
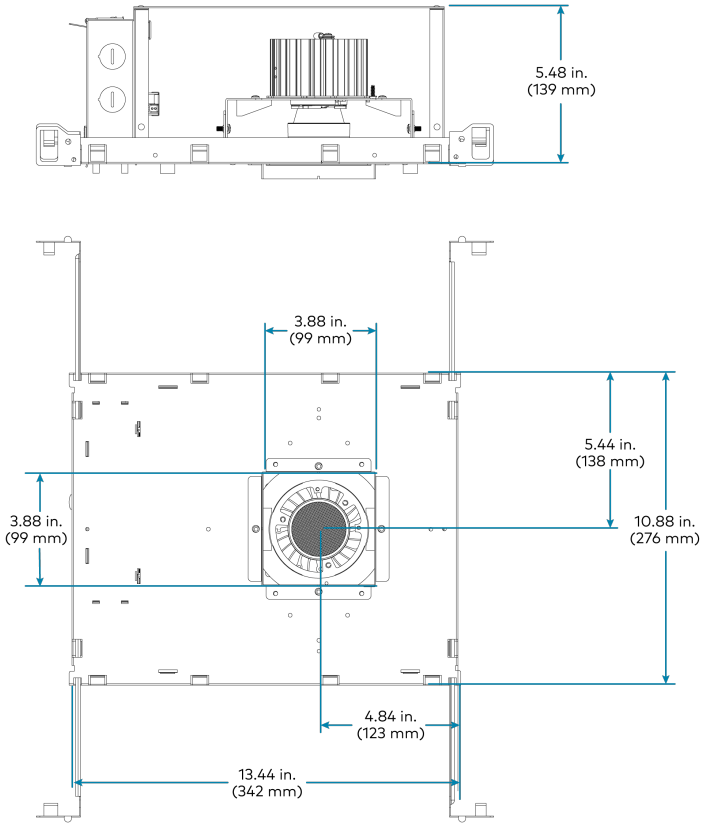
Square, Noninsulation Contact and Chicago Plenum, Adjustable, Flangeless Trim



Square, Noninsulation Contact and Chicago Plenum, Fixed, Flanged Trim



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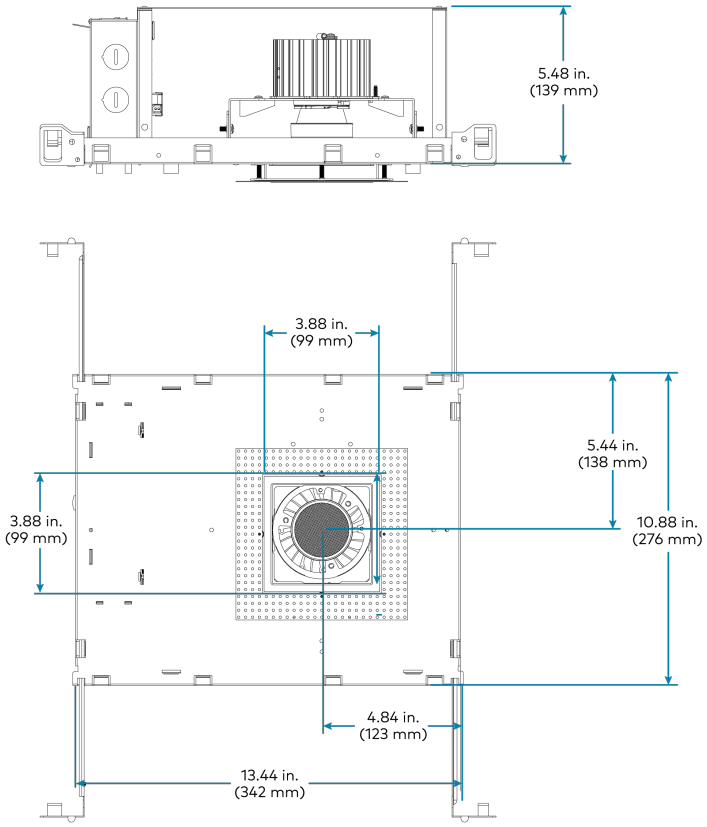
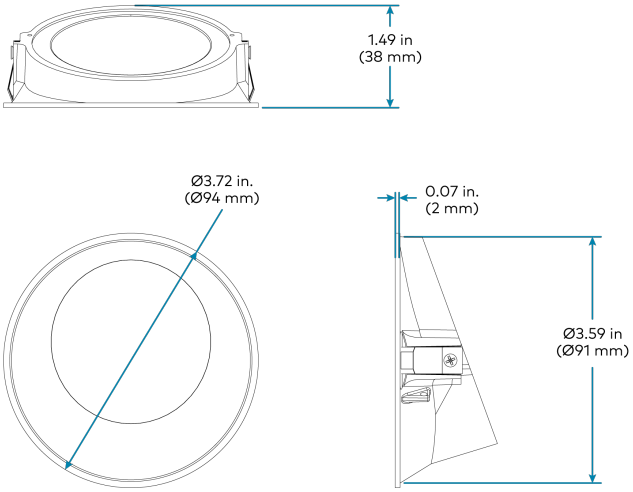
Square, Noninsulation Contact and Chicago Plenum, Fixed, Flangeless Trim

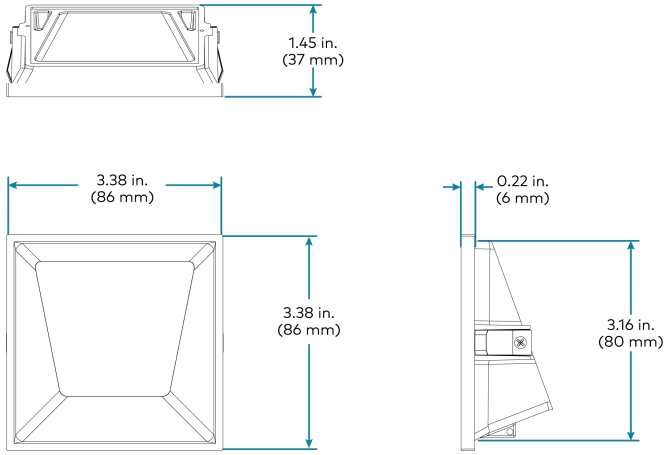


Trim Dimensions

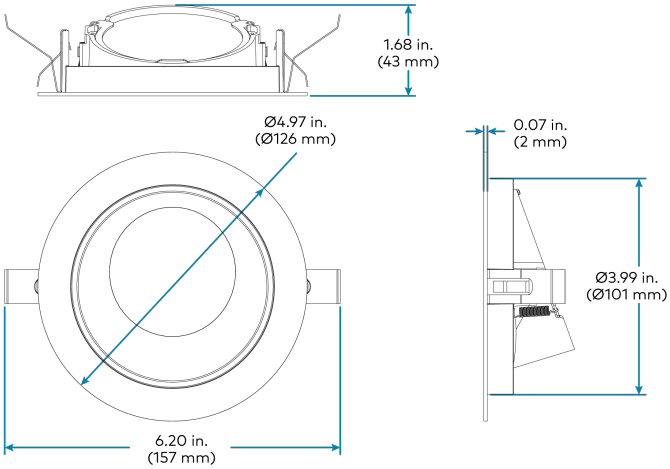
Round, Adjustable, Flangeless



Square, Adjustable, Flangeless



Round, Adjustable, Flanged



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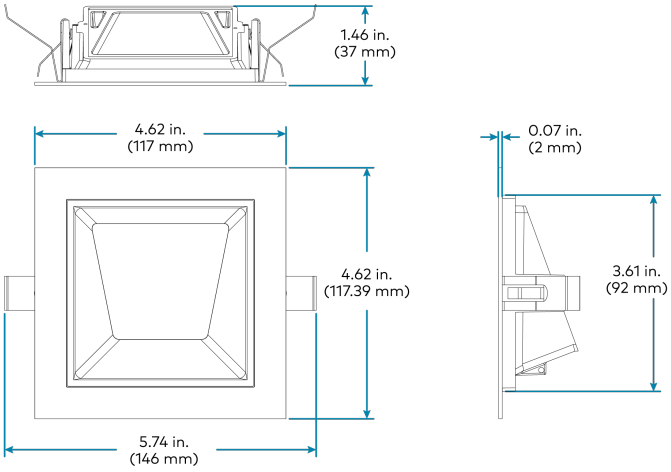
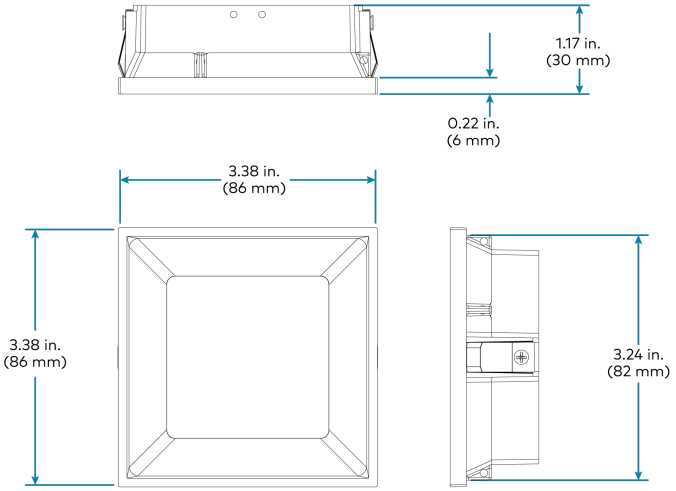
Tunable LED Light Fixture

Square, Adjustable, Flanged



Square, Fixed, Flangeless



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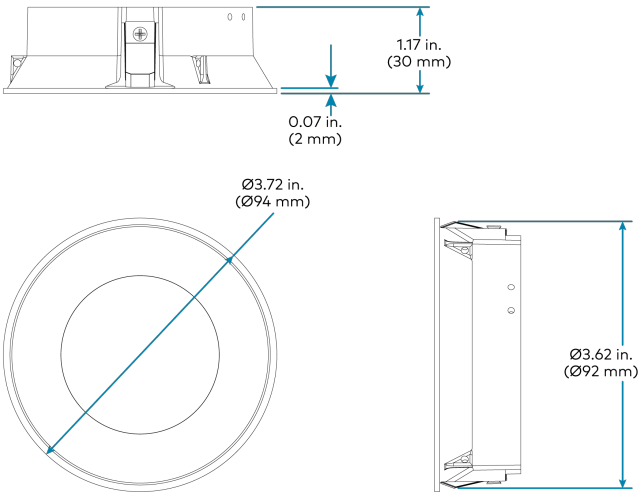
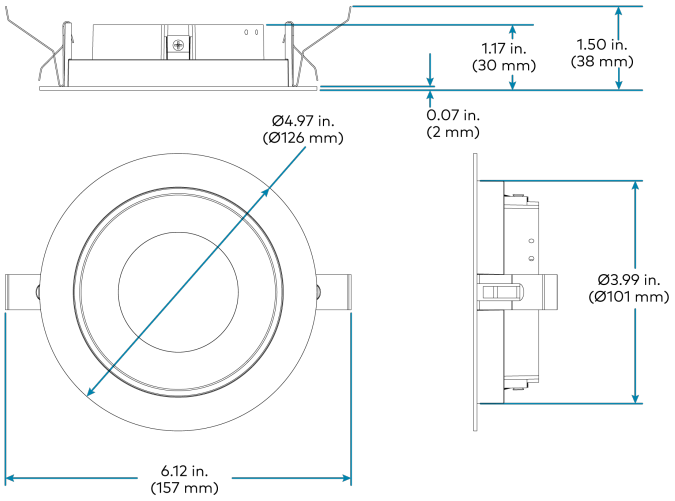


Round, Fixed, Flanged



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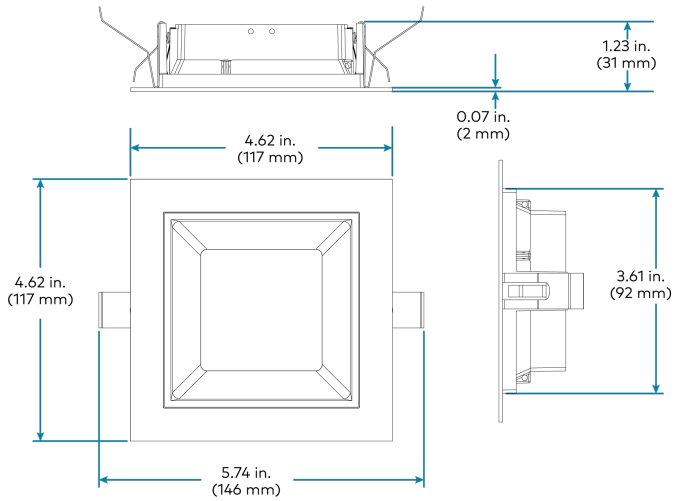
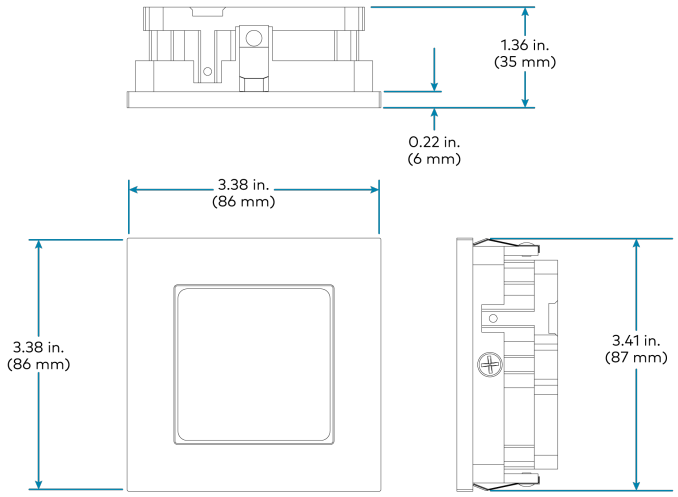
Tunable LED Light Fixture

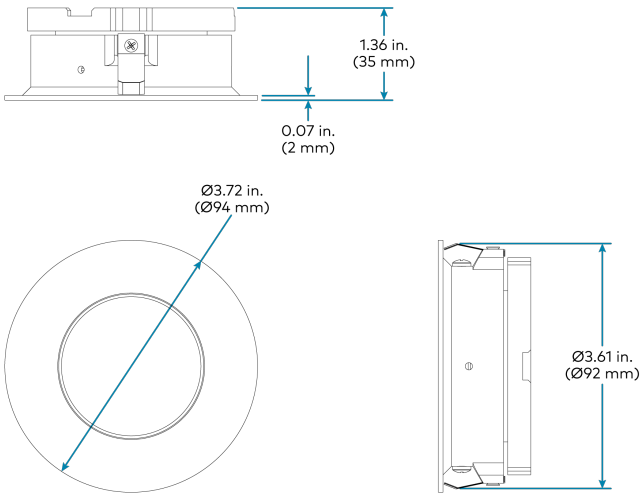
Square, Fixed, Flanged



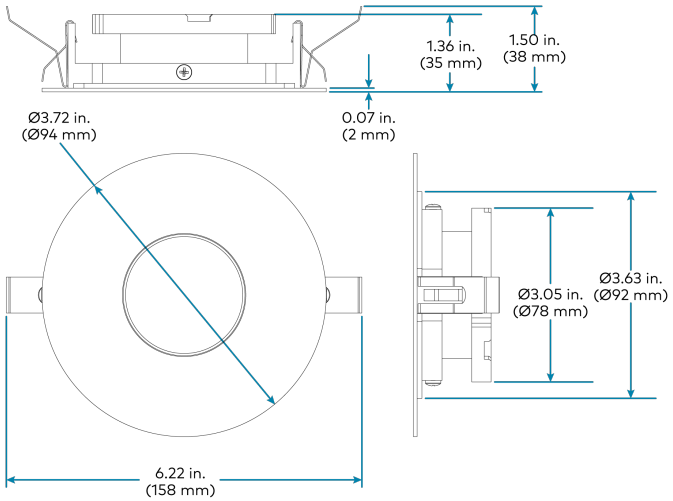
Square, Pinhole, Flangeless



Round, Pinhole, Flangeless



Round, Pinhole, Flanged



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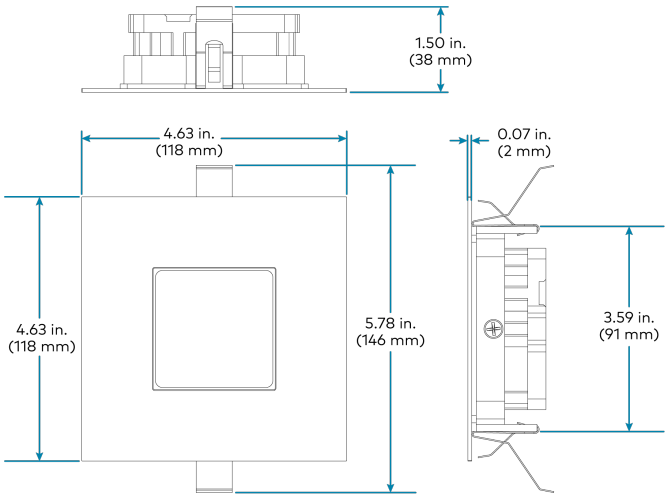
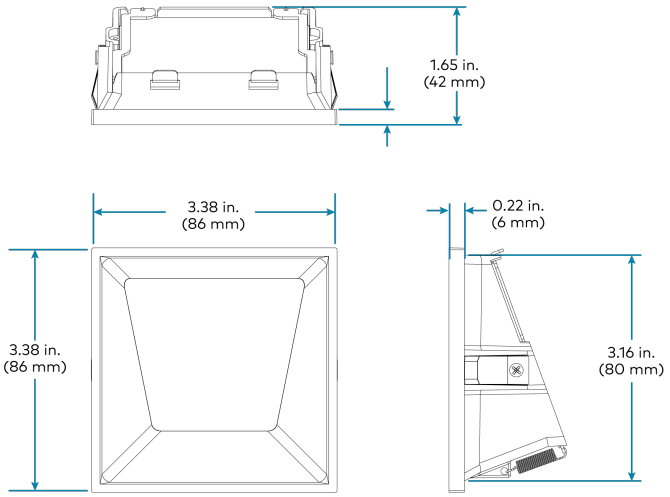
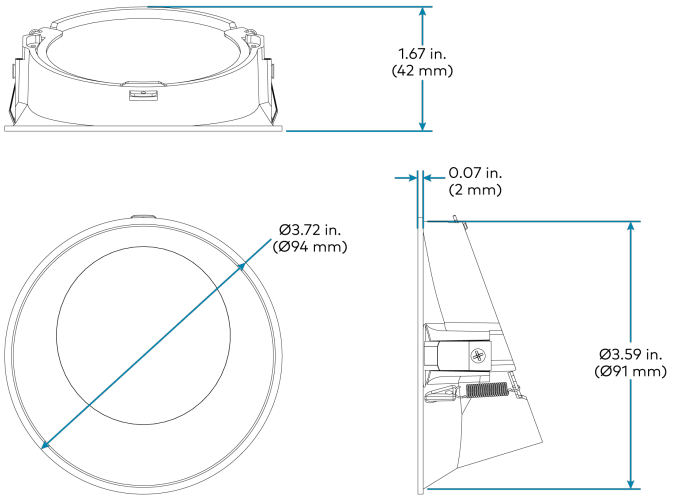
Square, Pinhole, Flanged



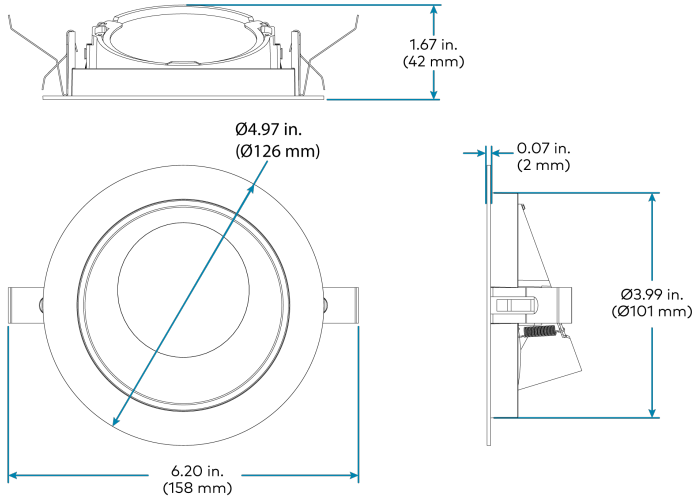
Square, Wallwash, Flangeless



Round, Wallwash, Flangeless



Round, Wallwash, Flanged



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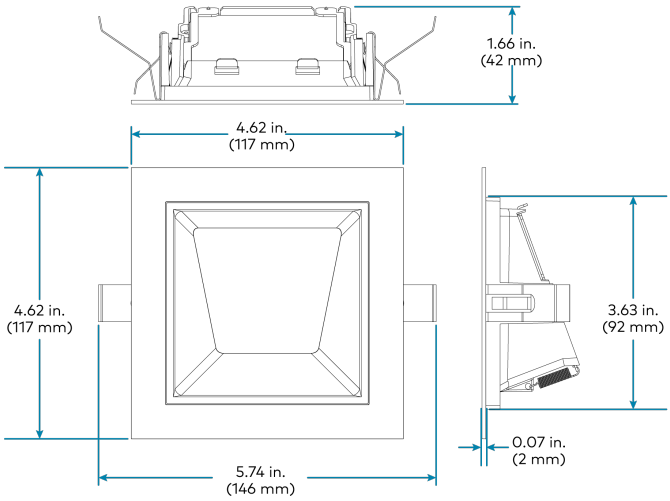
Tunable LED Light Fixture

Square, Wallwash, Flanged



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