

PROJECT:

TYPE:

DATE:

PRODUCT CODE:

ESSENCE TRACK

ARCHITECTURAL TRACK HEAD

ESS-310



Description:

Applications

This versatile LED track light is ideal for accentuating displays and creating focused illumination in retail, galleries, museums, hospitality, supermarkets, and commercial spaces, offering adjustable positioning and a range of color temperatures to suit any environment.

Features

- Compact LED track light providing optimal lumen output
- Precise aiming for accent, task, or general illumination
- Seamlessly integrates into any design
- Track heads adjustability: 360° horizontal/ 180° vertical
- Compatible with 1-circuit and 2-circuit tracks
- Friction-based locking system for secure adjustments
- Allows precise positioning of the light as needed
- Available in a range of color temperatures, from cool to warm tones

Wattage:

Nominal Lumens	Delivered Lumens	Wattage
1100	1222	16W

Based on 3000K, 90+ CRI. Actual wattage may vary +/-5%

Specifications:

Lumens	1100
CCT	30K
CRI	90+
Color Quality	2 Step Mac Adam Ellipse
Optics	MD (Medium Distribution 38°)
Finish	White, Black, Custom Color (RAL)
Aiming	360° (horizontal), 180° (vertically)
Dimming	Flicker Free 10% Dimming TRIAC forward-phase or leading-edge 120V.
Lifetime	L70 at 50,000 Hours
Photometrics	In Accordance with IES LM79-08, LM-08 and TM-30, TM-21

Certifications & Features



PART NUMBER: **ESS-310-1100L-30K-90-38D-DIMTR-120V-WH**

Series	Lumens	CCT	CRI	Optics	Drivers	Voltage	Finish
ESS-310	1100L	30K	90+	38D (38°)	DIMTR	120V	WH (White) BK (Black) CC (RAL)

Optics

A polycarbonate optical refractor ensures accurate beam control and uniform light distribution, available in various lumen options.

Construction

Each track head features CoolLED Advanced Thermodynamic Design, with a body made of extruded aluminum and a custom die-cast concealed heat sink. This thermal management system is specifically engineered for extended lifespan and durability.

Finish

Available in white, black and custom RAL Color finishes.

Accessories

Track heads can support 1 to 3 accessories. Please contact the factory for standard or custom options.

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Track Compatibility

Track heads are standard and compatible with Mono-point, 1-Circuit, and 2-Circuit type H tracks. Type J (Juno) adapter option available upon request.

Please consult the factory for compatibility with 2-Circuit, 2-Neutral 120V Track, 2-Circuit, 2-Neutral 277V Track, 3-Circuit 1-Neutral Track, and DALI System Track.

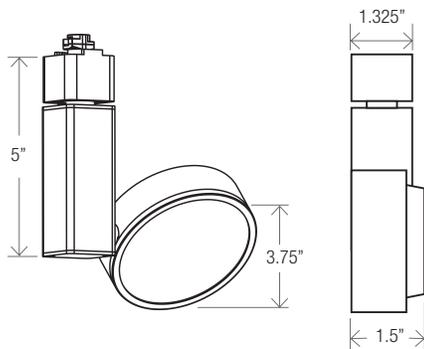
Dimming and Driver

DIMTR

Electronic constant current LED driver compatible with TRIAC forward-phase (leading-edge) dimming, available in 120V. Standard dimming down to 1%. The LED driver operates at 50 to 60Hz with a 120V input, maintains less than 20% THD, and achieves a power factor between 90% and 100%. It is thermally protected for enhanced safety. Please consult the factory for 277V or 0-10V dimming options.

Warranty

Five-year warranty for parts and components. (Labor not included)

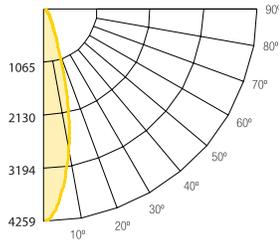


ESS-310-1100L-30K-90-38D-DIMTR-120V-WH

TEST NO: **EPL011948**

INPUT WATTS: 16 LUMENS: 1222 CRI: 90 EFFICACY: 76 CCT: 3000K SPACING CRITERIA: 0.48

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	852.83	69.80	69.80
0-30	1058.54	86.60	86.60
0-40	1138.6	93.10	93.10
0-60	1204.66	98.50	98.60
0-80	1220.78	99.90	99.90
0-90	1220.8	99.90	99.90

Luminance (Average candela/ft²)

Angle in Degrees	Average		
	0°	45°	90°
45	0	0	0
55	0	0	0
65	0	0	0
75	0	0	0
85	0	0	0

Lumens Per Zone

Zone	Lumens
0-10	342.01
10-20	510.82
20-30	205.71
30-40	80.05
40-50	39.14
50-60	26.93
60-70	14.23
70-80	1.88
80-90	0.02

Candela Tabulation

Q	
0	4239.78
5	3739.43
15	1693.94
25	354.72
35	97.87
45	44.61
55	27.47
65	13.27
75	0.34
85	0.02
90	0.04

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%				30%				10%				0%
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%			
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95			
2	110	106	102	100	108	104	101	98	101	98	96	98	96	94	95	94	92	91			
3	106	100	96	93	104	99	95	92	96	93	91	94	91	89	92	90	88	87			
4	102	95	91	88	100	94	90	87	92	89	86	90	87	85	89	86	84	83			
5	98	91	87	83	97	90	86	83	89	85	82	87	84	81	86	83	81	79			
6	95	87	83	79	93	87	82	79	85	81	78	84	81	78	83	80	77	76			
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73			
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	78	74	72	71			
9	86	78	73	70	85	78	73	70	77	73	70	76	72	70	75	72	69	68			
10	83	75	71	68	82	75	71	68	74	70	68	74	70	67	73	70	67	66			

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

Cone of Light		
4.0	14.7 fc	8.7 ft
8.0	3.67 fc	17.3 ft
12.0	1.63 fc	26 ft
16.0	0.92 fc	34.6 ft
20.0	0.59 fc	43.3 ft
24.0	0.41 fc	52 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.