

PROJECT:

TYPE:

DATE:

PRODUCT CODE:

ESSENCE TRACK

ARCHITECTURAL TRACK HEAD

ESS-401



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	1104	13W

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

Specifications:

Lumens 1100

CCT 40K

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-401-1100L-40K-90-38D-DIMTR-120V-WH**

Series	Lumens	CCT	CRI	Optics	Drivers	Voltage	Finish
ESS-401	1100L	40K	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.

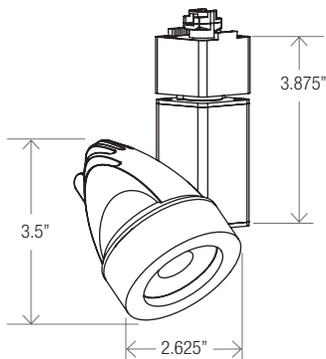
Dimming and Driver

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)

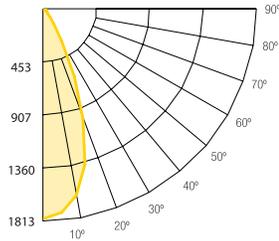


ESS-401-1100L-40K-90-38D-DIMTR-120

TEST NO: **EPL0818128**

INPUT WATTS: 13.6 LUMENS: 1104 CRI: 90 EFFICACY: 81 CCT: 3000K SPACING CRITERIA: 0.70

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	544.98	49.90	49.40
0-30	861.43	78.90	78.00
0-40	997.07	91.30	90.30
0-60	1078.32	98.80	97.70
0-80	1100.39	100.80	99.70
0-90	1103.98	101.10	100.00

Luminance (Average candela/ft²)

Angle in Degrees	Average		
	0°	45°	90°
45	34138	35954	71934
55	15975	18106	20848
65	12320	12388	16379
75	15230	14242	13107
85	15873	17178	15764

Lumens Per Zone

Zone	Lumens
0-10	164.33
10-20	380.64
20-30	316.45
30-40	135.64
40-50	58.09
50-60	23.16
60-70	13.34
70-80	8.74
80-90	3.59

Candela Tabulation

Zone	Σ
0	1813.34
5	1771.59
15	1391.31
25	633.24
35	149.59
45	50.95
55	19.34
65	10.99
75	8.32
85	2.92
90	0.07

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	RC	80%				70%				50%				30%				10%				0%	
		RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%		
0		120	120	120	120	118	118	118	118	112	112	112	108	108	108	103	103	103	101				
1		115	112	109	107	112	110	108	106	106	104	102	102	101	99	98	97	96	95				
2		109	104	100	97	107	103	99	96	99	96	94	96	94	92	94	92	90	88				
3		104	98	93	89	102	96	92	88	94	90	87	91	88	86	89	87	84	83				
4		99	92	87	82	98	91	86	82	89	84	81	87	83	80	85	82	79	78				
5		95	87	81	77	93	86	80	77	84	79	76	82	78	75	81	77	75	73				
6		90	82	76	72	89	81	76	72	80	75	71	78	74	71	77	73	70	69				
7		86	78	72	68	85	77	72	68	76	71	67	75	70	67	73	70	67	65				
8		83	74	68	64	82	73	68	64	72	67	64	71	67	63	70	66	63	62				
9		79	70	65	61	78	70	64	61	69	64	60	68	63	60	67	63	60	59				
10		76	67	61	58	75	67	61	58	66	61	58	65	61	57	64	60	57	56				

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

Cone of Light		
4.0	6.27 fc	13.9 ft
8.0	1.57 fc	27.7 ft
12.0	0.7 fc	41.6 ft
16.0	0.39 fc	55.5 ft
20.0	0.25 fc	69.3 ft
24.0	0.17 fc	83.2 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

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