

PROJECT:

TYPE:

DATE:

PRODUCT CODE:

ESSENCE TRACK

ARCHITECTURAL TRACK HEAD

ESS-314



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
2500	2592	37W

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

Specifications:

Lumens 2500

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-314-2500L-30K-90-38D-DIMTR-120V-WH**

Series	Lumens	CCT	CRI	Optics	Drivers	Voltage	Finish
ESS-314	2500L	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.

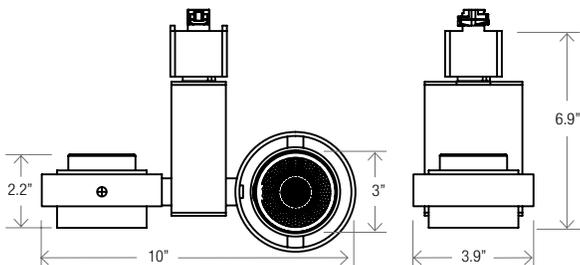
Dimming and Driver

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)

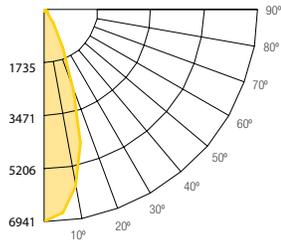


ESS-314-2500L-30K-90-38D-DIMTR-120

TEST NO: **EPL05082054**

INPUT WATTS: 37 LUMENS: 2592 CRI: 90 EFFICACY: 70 CCT: 3000K SPACING CRITERIA: 0.56

CandlePowerDistribution(Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1732.05	68.10	66.80
0-30	2330.84	91.60	89.90
0-40	2461.73	96.80	95.00
0-60	2555.11	100.50	98.60
0-80	2588.64	101.80	99.90
0-90	2592.47	101.90	100.00

Luminance (Average candela/ft²)

Angle in Degrees	Average		
	0°	45°	90°
45	18574	19063	30396
55	15159	14713	14472
65	12171	11881	11897
75	8346	8261	10335
85	3846	11412	14302

Lumens Per Zone

Zone	Lumens
0-10	598.68
10-20	1133.38
20-30	598.78
30-40	130.90
40-50	57.92
50-60	35.46
60-70	22.67
70-80	10.86
80-90	3.83

Candela Tabulation

0	0
0	6941.08
5	6696.05
15	4527.83
25	1363.05
35	158.30
45	59.95
55	39.69
65	23.48
75	9.86
85	1.53
90	0.18

Coefficients of Utilization Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

Cone of Light		
4.0	24 fc	10.6 ft
8.0	6 fc	21.2 ft
12.0	2.67 fc	31.7 ft
16.0	1.5 fc	42.3 ft
20.0	0.96 fc	52.9 ft
24.0	0.67 fc	63.5 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

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

ROOM CAVITY RATIO	RC	80%				70%				50%				30%				10%				0%			
		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%			
0		121	121	121	121	119	119	119	119	113	113	113	108	108	108	104	104	104	104	104	104	102			
1		117	114	112	110	114	112	110	108	108	106	105	104	103	102	101	100	99	99	99	99	97			
2		112	108	104	101	110	106	103	100	103	100	98	100	98	96	97	95	94	94	94	92				
3		108	102	98	94	106	101	97	94	98	95	92	96	93	91	93	91	89	88	88	88				
4		103	97	92	89	102	96	92	88	94	90	87	92	89	86	90	87	85	84	84	84				
5		100	93	88	84	98	92	87	84	90	86	83	88	85	82	87	84	82	80	80	80				
6		96	89	84	80	95	88	83	80	86	82	79	85	82	79	84	81	78	77	77	77				
7		93	85	80	77	91	84	80	76	83	79	76	82	78	76	81	78	75	74	74	74				
8		89	82	77	73	88	81	76	73	80	76	73	79	75	73	78	75	72	71	71	71				
9		86	79	74	70	86	78	73	70	77	73	70	76	73	70	76	72	70	69	69	69				
10		84	76	71	68	83	75	71	68	75	70	68	74	70	67	73	70	67	66	66	66				

RC- Ceiling Cavity Reflectance

RW - Wall Reflectance