

PROJECT:

TYPE:

DATE:

PRODUCT CODE:

ESSENCE TRACK

ARCHITECTURAL TRACK HEAD

ESS-312



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
1200	1254	19W

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

Specifications:

Lumens 1200

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-312-1200L-30K-90-38D-DIMTR-120V-WH**

Series	Lumens	CCT	CRI	Optics	Drivers	Voltage	Finish
ESS-312	1200L	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.

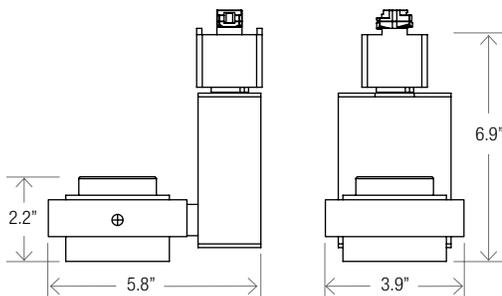
Dimming and Driver

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)

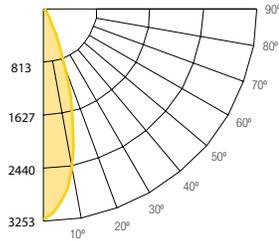


ESS-312-1200L-30K-90-38D-DIMTR-120

TEST NO: **EPL05082054**

INPUT WATTS: 19.1 LUMENS: 1254 CRI: 90 EFFICACY: 66 CCT: 3000K SPACING CRITERIA: 0.58

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	822.76	65.90	65.60
0-30	1119.17	89.60	89.20
0-40	1184.78	94.90	94.50
0-60	1233.42	98.80	98.40
0-80	1251.99	100.30	99.80
0-90	1254.05	100.40	100.00

Luminance (Average candela/ft²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	7882	8848	17257
55	6787	7005	7796
65	5567	5728	6350
75	3716	3919	5409
85	151	5354	7139

Lumens Per Zone

Zone	Lumens
0-10	279.77
10-20	542.99
20-30	296.41
30-40	65.61
40-50	30.32
50-60	18.32
60-70	12.28
70-80	6.29
80-90	2.05

Candela Abulation

θ	Candela
0	3224.32
5	2962.27
15	1757.58
25	421.75
35	52.66
45	25.44
55	17.77
65	10.74
75	4.39
85	0.06
90	0.06

Coefficients of Utilization Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

Cone of Light		
4.0	11.2 fc	10.9 ft
8.0	2.79 fc	21.7 ft
12.0	1.24 fc	32.6 ft
16.0	0.7 fc	43.5 ft
20.0	0.45 fc	54.3 ft
24.0	0.31 fc	65.2 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%			
		RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%			
0		120	120	120	120	117	117	117	117	112	112	112	107	107	107	102	102	102	102	102	102	102	100		
1		115	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	94	92	91	95		
2		110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	94	95	94	92	90	88	91		
3		106	100	96	93	104	99	95	92	96	93	90	94	91	89	92	90	88	86	84	82	86			
4		102	95	91	87	100	94	90	87	92	88	86	90	87	85	88	86	84	82	80	78	82			
5		98	91	86	82	96	90	85	82	88	84	81	87	83	81	85	82	80	79	77	75	79			
6		94	87	82	78	93	86	81	78	85	81	78	83	80	77	82	79	77	75	73	71	75			
7		91	83	78	75	90	83	78	75	81	77	74	80	77	74	79	76	73	72	70	68	72			
8		88	80	75	72	87	79	75	71	78	74	71	77	74	71	77	73	71	69	67	65	69			
9		85	77	72	69	84	76	72	69	75	71	68	75	71	68	74	70	68	67	65	63	67			
10		82	74	69	66	81	74	69	66	73	69	66	72	68	66	71	68	65	64	62	60	64			

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance