

PROJECT:

TYPE:

DATE:

PRODUCT CODE:

# ESSENCE TRACK

ARCHITECTURAL TRACK HEAD

# ESS-311



### 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
600	626	10W

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

### Specifications:

<b>Lumens</b>	600
<b>CCT</b>	30K
<b>CRI</b>	90+
<b>Color Quality</b>	2 Step Mac Adam Ellipse
<b>Optics</b>	MD (Medium Distribution 38°)
<b>Finish</b>	White, Black, Custom Color (RAL)
<b>Aiming</b>	360° (horizontal), 180° (vertically)
<b>Dimming</b>	Flicker Free 10% Dimming TRIAC forward-phase or leading-edge 120V.
<b>Lifetime</b>	L70 at 50,000 Hours
<b>Photometrics</b>	In Accordance with IES LM79-08, LM-08 and TM-30, TM-21
<b>Certifications &amp; Features</b>	   

PART NUMBER: **ESS-311-600L-30K-90-38D-DIMTR-120V-WH**

Series	Lumens	CCT	CRI	Optics	Drivers	Voltage	Finish
ESS-311	600L	30K	90+	38D <small>(38°)</small>	DIMTR	120V	WH <small>(White)</small> BK <small>(Black)</small> CC <small>(RAL)</small>

### 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.

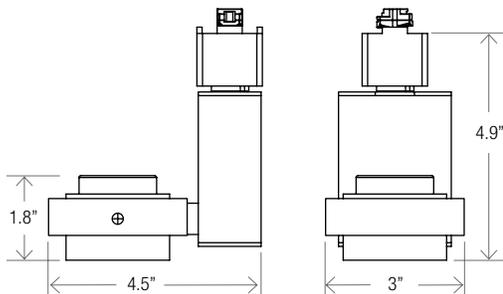
### Dimming and Driver

#### 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)

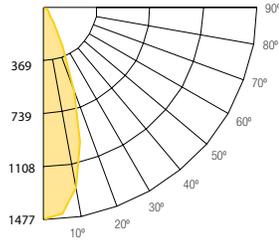


**ESS-311-600L-30K-90-38D-DIMTR-120**

TEST NO: **EPL05082054**

INPUT WATTS: 9.9      LUMENS: 626      CRI: 90      EFFICACY: 63      CCT: 3000K      SPACING CRITERIA: 0.60

**Candle Power Distribution (Candelas)**



**Zonal Lumens Summary**

Zone	Lumens	%Lamp	%Fixt
0-20	382.18	62.10	61.00
0-30	540.47	87.80	86.30
0-40	590.19	95.80	94.20
0-60	620.13	100.70	99.00
0-80	625.66	101.60	99.90
0-90	626.27	101.70	100.00

**Luminance (Average candela/m<sup>2</sup>)**

Angle in Degrees	Average		
	0°	45°	90°
45	6791	6144	7687
55	3583	3021	2952
65	1508	1690	1840
75	855	999	1033
85	427	1709	1835

**Lumens Per Zone**

Zone	Lumens
0-10	128.02
10-20	254.16
20-30	158.29
30-40	49.72
40-50	21.21
50-60	8.73
60-70	4.07
70-80	1.45
80-90	0.61

**Candela Tabulation**

θ	Q
0	1477.41
5	1446.59
15	973.43
25	292.38
35	59.33
45	21.92
55	9.38
65	2.91
75	1.01
85	0.17
90	0.02

**Coefficients of Utilization Zonal Cavity Method**

Effective Floor Cavity Reflectance 0.20

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%		
0	121	121	121	121	121	118	118	118	118	113	113	113	108	108	108	104	104	104	104	104	104	102		
1	116	114	111	109	109	114	111	109	108	107	106	104	104	102	101	100	99	98	98	98	98	96		
2	111	107	103	100	100	109	105	102	99	102	99	97	99	97	95	96	95	93	93	93	93	91		
3	107	101	97	93	93	105	100	96	92	97	94	91	95	92	90	92	90	88	87	87	87	87		
4	102	96	91	87	87	101	95	90	87	93	89	86	91	87	85	89	86	84	82	82	84	82		
5	98	91	86	82	82	97	90	85	82	88	84	81	87	83	80	85	82	80	78	78	80	78		
6	94	87	82	78	78	93	86	81	78	85	80	77	83	79	77	82	79	76	75	75	76	75		
7	91	83	78	74	74	90	82	77	74	81	77	73	80	76	73	79	75	73	72	72	73	72		
8	88	79	74	71	71	86	79	74	71	78	73	70	77	73	70	76	72	70	68	68	70	68		
9	84	76	71	68	68	83	76	71	67	75	70	67	74	70	67	73	69	67	66	66	67	66		
10	81	73	68	65	65	80	73	68	65	72	68	65	71	67	64	71	67	64	64	64	64	63		

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

Cone of Light		
4.0	5.11 fc	11.2 ft
8.0	1.28 fc	22.5 ft
12.0	0.57 fc	33.7 ft
16.0	0.32 fc	45 ft
20.0	0.2 fc	56.2 ft
24.0	0.14 fc	67.5 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

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