

PROJECT:

TYPE:

DATE:

PRODUCT CODE:

# ESSENCE TRACK

ARCHITECTURAL TRACK HEAD

ESS-333



## 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
500	429	7.1W

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

## Specifications:

<b>Lumens</b>	500
<b>CCT</b>	30K
<b>CRI</b>	90+
<b>Color Quality</b>	2 Step Mac Adam Ellipse
<b>Optics</b>	SPD (Spot Light 25°), MD (Medium Distribution 38°), WD (Wide Distribution 60°)
<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>Listings</b>	In Accordance with IES LM79-08, LM-08 and TM-30, TM-21



PART NUMBER: **ESS-333-500L-30K-90-25D-DIMTR-120V-WH**

Series	Lumens	CCT	CRI	Optics	Drivers	Voltage	Finish
ESS-333	500L	30K	90+	25D (25°) 38D (38°) 60D (60°)	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.

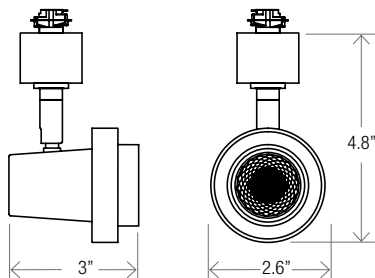
### Dimming and Driver

#### 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)

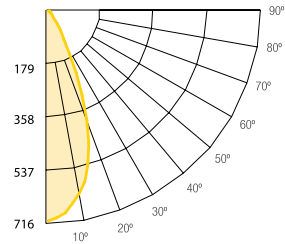


## ESS-333-500L-30K-90-38D-DIMTR-120-WH

TEST NO: EPL111816

INPUT WATTS: 7.1 LUMENS: 429 CRI: 90 EFFICACY: 60 CCT: 3000K SPACING CRITERIA: 0.68

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	215.64	50.40	50.20
0-30	335.04	78.20	78.00
0-40	382.46	89.30	89.10
0-60	415.10	96.90	96.70
0-80	427.60	99.90	99.60
0-90	429.39	100.30	100.00

Luminance (Average candela/ft²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	14039	17639	31489
55	9968	10211	10826
65	8897	8644	9732
75	9155	8824	9031
85	8407	10003	10126

Lumens Per Zone

Zone	Lumens
0-10	64.78
10-20	150.86
20-30	119.40
30-40	47.41
40-50	21.95
50-60	10.70
60-70	7.61
70-80	4.89
80-90	1.78

Candela Tabulation

Q	
0	714.36
5	688.97
15	542.59
25	232.33
35	56.93
45	18.56
55	10.69
65	7.03
75	4.43
85	1.37
90	0.04

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%	0%	
	0	119	119	119	119	117	117	117	117	111	111	111	107	107	107	107	102	102	102	100
	1	114	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93	
	2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87	
	3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	82	
	4	98	91	85	81	96	90	85	81	88	83	80	86	82	79	84	81	78	77	
	5	94	86	80	76	92	85	79	75	83	78	75	81	77	74	80	76	73	72	
	6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	69	68	
	7	86	77	71	67	84	76	71	67	75	70	66	74	69	66	73	69	66	64	
8	82	73	67	63	81	72	67	63	71	66	63	70	66	63	69	65	62	61		
9	79	69	64	60	77	69	64	60	68	63	60	67	63	60	66	62	59	58		
10	75	66	61	57	74	66	61	57	65	60	57	64	60	57	64	60	57	55		

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance