PROJECT:

TYPE:

DATE:

PRODUCT CODE:

# ESSENCE TRACK

## ESS-324

ARCHITECTURAL TRACK HEAD

## 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 accenr, 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

## Specifications:

| | |
|---|---|
| **Lumens** | 500 |
| **CCT** | 30K |
| **CRI** | 90+ |
| **Color Quality** | 2 Step Mac Adam Ellipse |
| **Optics** | **WD** (Wide 60°) |
| **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 |
| **Listings** | In Accordance with IES LM79-08, LM-08 and TM-30, TM-21 |

## Wattage:

| Nominal Lumens | Delivered Lumens | Wattage |
|---|---|---|
| **500** | **485** | **7.5W** |

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

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# ESS-324

PART NUMBER: **ESS-324-500L-30K-90-60D-DIMTR-120V-WH**

| Series | Lumens | CCT | CRI | Optics | Drivers | Voltage | Finish |
|---|---|---|---|---|---|---|---|
| ESS-324 | 500L | 30K | 90+ | 60D (60°) | DIMTR | 120V | WH (White)<br>BK (Black)<br>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.

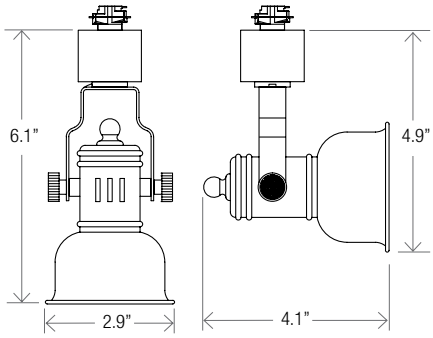
**Dimming and Driver**

**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)



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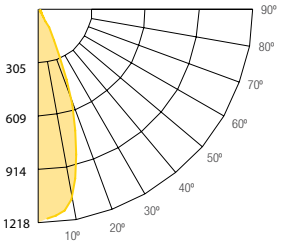
# ESS-324

**ESS-324-500L-30K-90-60D-DIMTR-120-WH**

TEST NO: **EPL05082054**

INPUT WATTS: 7.5 | LUMENS: 485 | CRI: 90 | EFFICACY: 65 | CCT: 3000K | SPACING CRITERIA: 0.58

**CandlePowerDistribution(Candelas)**




| Coneof Light | | |
|---|---|---|
| 4.0 | 4.19 fc | 10.8 ft |
| 8.0 | 1.05 fc | 21.7 ft |
| 12.0 | 0.47 fc | 32.5 ft |
| 16.0 | 0.26 fc | 43.3 ft |
| 20.0 | 0.17 fc | 54.1 ft |
| 24.0 | 0.12 fc | 65 ft |
| Distanceto Plane | Initial Footcandle at Nadir | Beam diameter |

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

**ZonalLumensSummary**

| Zone | Lumens | %Lamp | %Fixt |
|---|---|---|---|
| 0-20 | 311.23 | 64.40 | 64.20 |
| 0-30 | 425.10 | 88.00 | 87.60 |
| 0-40 | 457.13 | 94.60 | 94.20 |
| 0-60 | 479.02 | 99.20 | 98.70 |
| 0-80 | 484.55 | 100.30 | 99.90 |
| 0-90 | 485.12 | 100.40 | 100.00 |

Luminance (Average candela/M²)

| Angle in Degrees | Average 0° | Average 45° | Average 90° |
|---|---|---|---|
| 45 | 5245 | 5546 | 7451 |
| 55 | 3208 | 3189 | 2746 |
| 65 | 1970 | 2094 | 1892 |
| 75 | 1261 | 1253 | 1270 |
| 85 | 377 | 1785 | 1910 |

**LumensPerZone**

| Zone | Lumens |
|---|---|
| 0-10 | 106.54 |
| 10-20 | 204.68 |
| 20-30 | 113.87 |
| 30-40 | 32.03 |
| 40-50 | 14.83 |
| 50-60 | 7.06 |
| 60-70 | 3.88 |
| 70-80 | 1.65 |
| 80-90 | 0.58 |

**CandelaTabulation**

| | 0 |
|---|---|
| 0 | 1211.47 |
| 5 | 1205.05 |
| 15 | 873.45 |
| 25 | 303.42 |
| 35 | 50.10 |
| 45 | 16.93 |
| 55 | 8.40 |
| 65 | 3.80 |
| 75 | 1.49 |
| 85 | 0.15 |
| 90 | 0.01 |

Coefficients **of Utilization- ZonalCavityMethod**
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% | 0% |
| 0 | 120 | 120 | 120 | 120 | 117 | 117 | 117 | 117 | 112 | 112 | 112 | 107 | 107 | 107 | 102 | 102 | 102 | 100 |
| 1 | 115 | 112 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 95 |
| 2 | 110 | 106 | 102 | 99 | 108 | 104 | 101 | 98 | 101 | 98 | 96 | 98 | 96 | 94 | 95 | 94 | 92 | 91 |
| 3 | 106 | 100 | 96 | 92 | 104 | 99 | 95 | 92 | 96 | 93 | 90 | 94 | 91 | 89 | 92 | 89 | 87 | 86 |
| 4 | 101 | 95 | 90 | 87 | 100 | 94 | 90 | 86 | 92 | 88 | 85 | 90 | 87 | 84 | 88 | 86 | 83 | 82 |
| 5 | 98 | 90 | 86 | 82 | 96 | 90 | 85 | 82 | 88 | 84 | 81 | 86 | 83 | 80 | 85 | 82 | 80 | 78 |
| 6 | 94 | 86 | 81 | 78 | 93 | 86 | 81 | 78 | 84 | 80 | 77 | 83 | 79 | 77 | 82 | 79 | 76 | 75 |
| 7 | 90 | 83 | 78 | 74 | 89 | 82 | 77 | 74 | 81 | 77 | 74 | 80 | 76 | 73 | 79 | 75 | 73 | 72 |
| 8 | 87 | 79 | 74 | 71 | 86 | 79 | 74 | 71 | 78 | 74 | 71 | 77 | 73 | 70 | 76 | 73 | 70 | 69 |
| 9 | 84 | 76 | 71 | 68 | 83 | 76 | 71 | 68 | 75 | 71 | 68 | 74 | 70 | 67 | 73 | 70 | 67 | 66 |
| 10 | 81 | 73 | 69 | 65 | 80 | 73 | 68 | 65 | 72 | 68 | 65 | 72 | 68 | 65 | 71 | 67 | 65 | 64 |

ROOM CAVITY RATIO

***RC*** - *Ceiling Cavity* Reflectance ***RW*** - *Wall* Reflectance