

Scaled data based on original data using
LM-31-95 IESNA Approved Method for Photometric Testing of Roadway Luminaires
Using Incandescent Filament and High Intensity Discharge Lamps

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: LUMIERE

Report Number: ITL52171

Luminaire Tested: **1900-AA-30-MH39PAR20-FL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: ITL52171
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 1900-AA-30-MH39PAR20-FL
Description: CYLINDRICAL METAL HOUSING WITH ADJUSTABLE TOP PIECE, FABRICATED METAL SOCKET ASSEMBLY, TWO CLEAR FLAT GLASS INTERNAL PANELS BETWEEN LAMP AND UPPER OPTIC ASSEMBLY, CLEAR CYLINDRICAL PLASTIC LENS WITH CONVEX TOP AND WHITE PAINTED TOP SURFACE. TOP PIECE ADJUSTED SO BOTTOM ALIGNED WITH UPPER EDGE OF LENS FOR THIS TEST.
Light Source: ONE 39-WATT PAR-20 METAL HALIDE, PHILIPS CDM35/PAR20/M/FL, VERTICAL BASE-DOWN POSITION.
Ballast/Driver: -

Summary

Lumens per Lamp: 2000 (1 lamp)
Luminaire Lumens: 145.9 lumens
Efficiency: 7.3%
Efficacy: 3.7 lumens/watt
Luminous Opening: (L: 0 ' x W: -0.29 ' x H: 0.08 '
IES Classification: Type V - Short - Cutoff
BUG Rating: B0 - U2 - G0

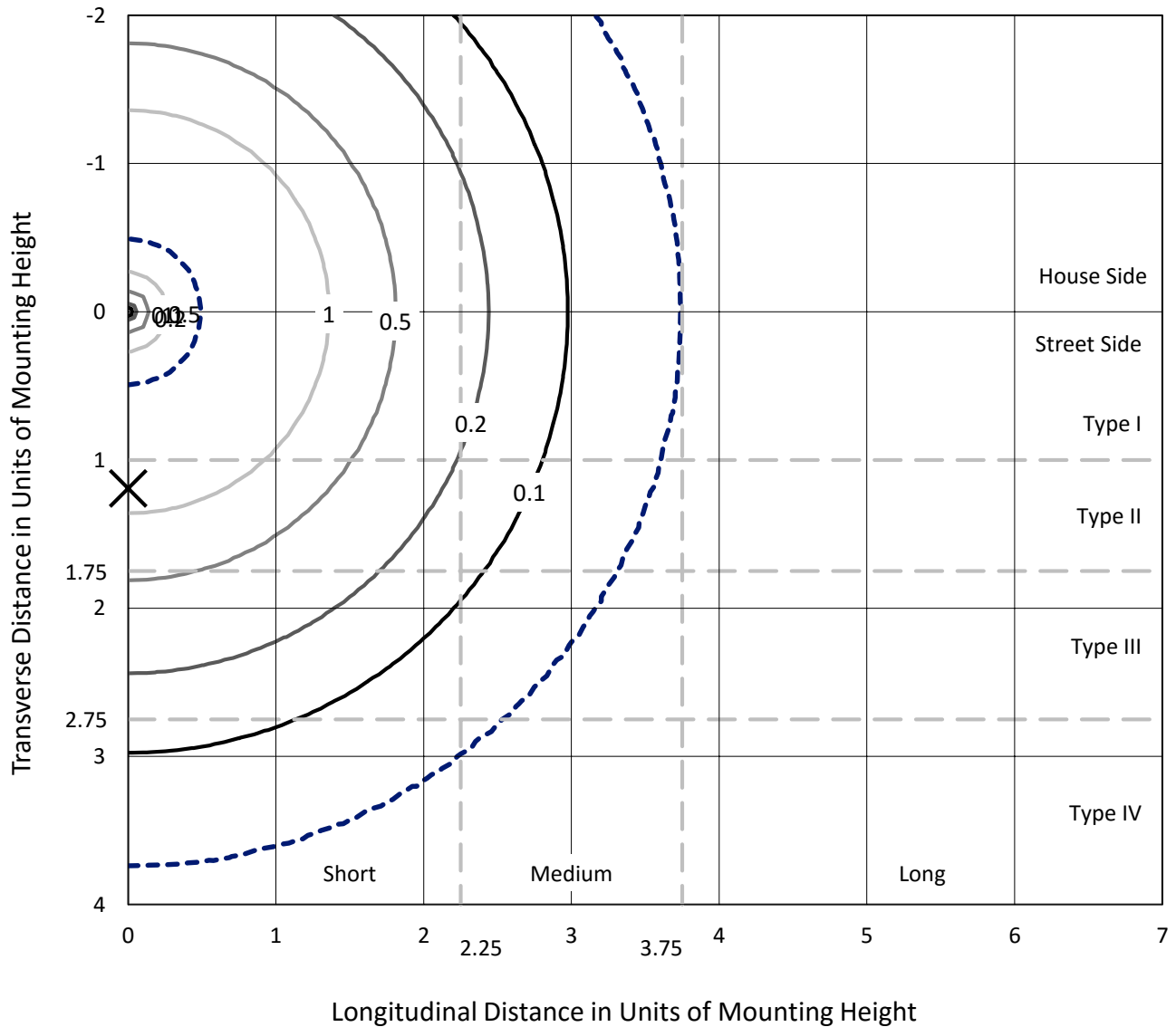
Input Watts (W): 39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

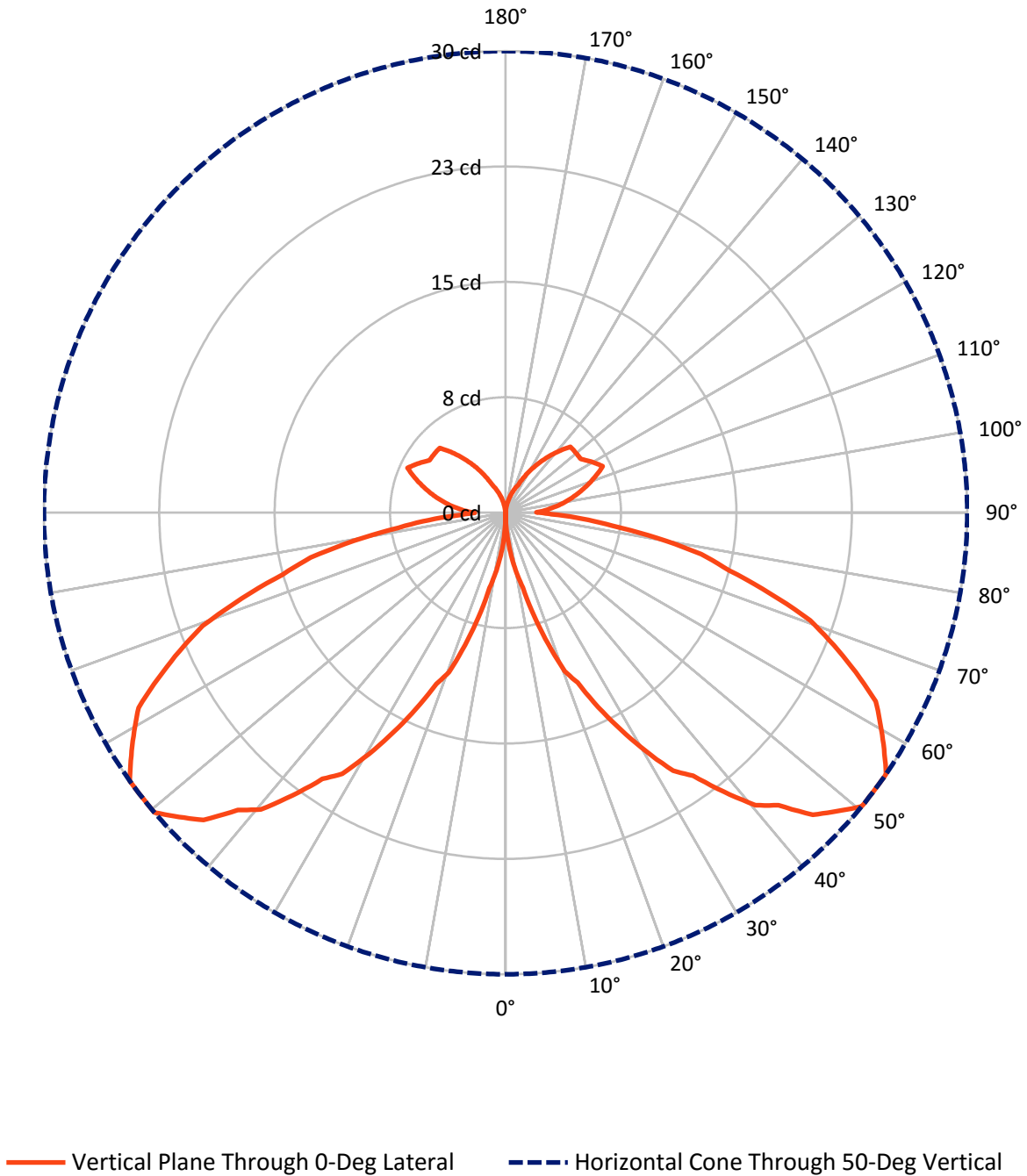
✕ Max cd
 - - - 1/2 Max cd



Based on 2.5 foot mounting height. Maximum calculated value = 1.9 fc
 Type V - Short - Cutoff

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Luminous Intensity Polar Plot



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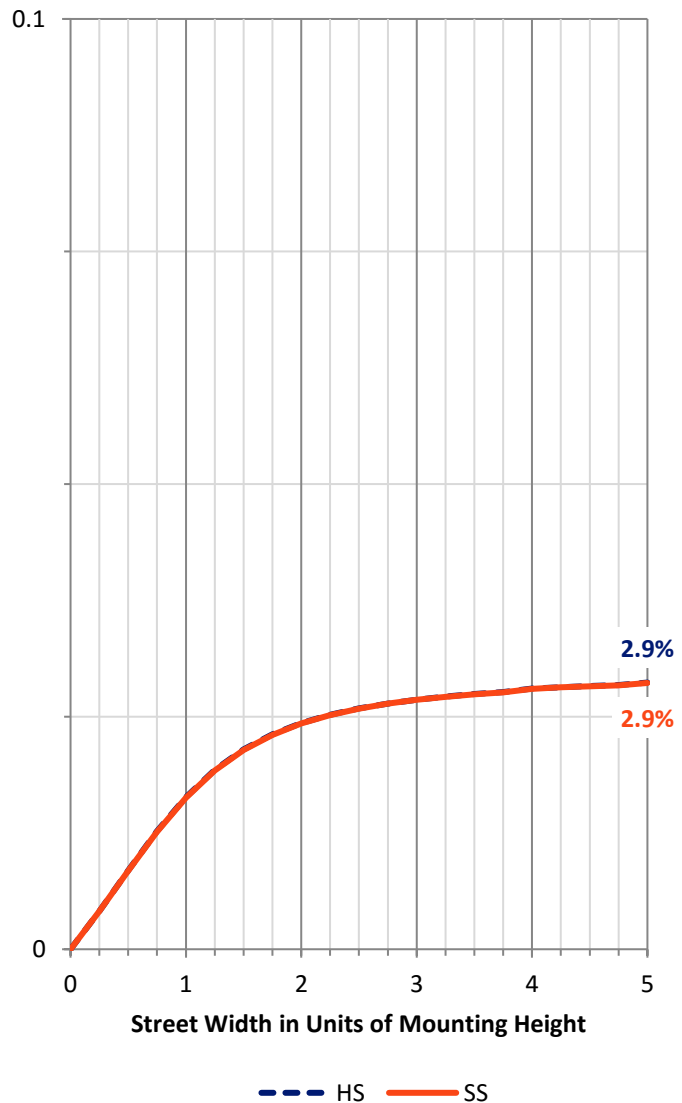
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|--------|----------|--------|-------|
| House Side | Lumens | 58.5 | 14.4 | 72.9 |
| | % Lamp | 2.9 | 0.7 | 3.6 |
| Street Side | Lumens | 58.5 | 14.4 | 72.9 |
| | % Lamp | 2.9 | 0.7 | 3.6 |
| Total | Lumens | 117.0 | 28.9 | 145.9 |
| | % Lamp | 5.9 | 1.4 | 7.3 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10° | 0.3 | 0.2 | 0.0 |
| 10°-20° | 2.1 | 1.5 | 0.1 |
| 20°-30° | 6.6 | 4.6 | 0.3 |
| 30°-40° | 13.5 | 9.3 | 0.7 |
| 40°-50° | 21.5 | 14.7 | 1.1 |
| 50°-60° | 26.4 | 18.1 | 1.3 |
| 60°-70° | 24.6 | 16.9 | 1.2 |
| 70°-80° | 16.2 | 11.1 | 0.8 |
| 80°-90° | 5.7 | 3.9 | 0.3 |
| 90°-100° | 3.3 | 2.2 | 0.2 |
| 100°-110° | 5.3 | 3.6 | 0.3 |
| 110°-120° | 6.2 | 4.3 | 0.3 |
| 120°-130° | 5.6 | 3.8 | 0.3 |
| 130°-140° | 4.3 | 2.9 | 0.2 |
| 140°-150° | 2.5 | 1.7 | 0.1 |
| 150°-160° | 1.0 | 0.7 | 0.1 |
| 160°-170° | 0.3 | 0.2 | 0.0 |
| 170°-180° | 0.0 | 0.0 | 0.0 |
| 0°-90° | 117.0 | 80.2 | 5.9 |
| 0°-180° | 145.9 | 100.0 | 7.3 |



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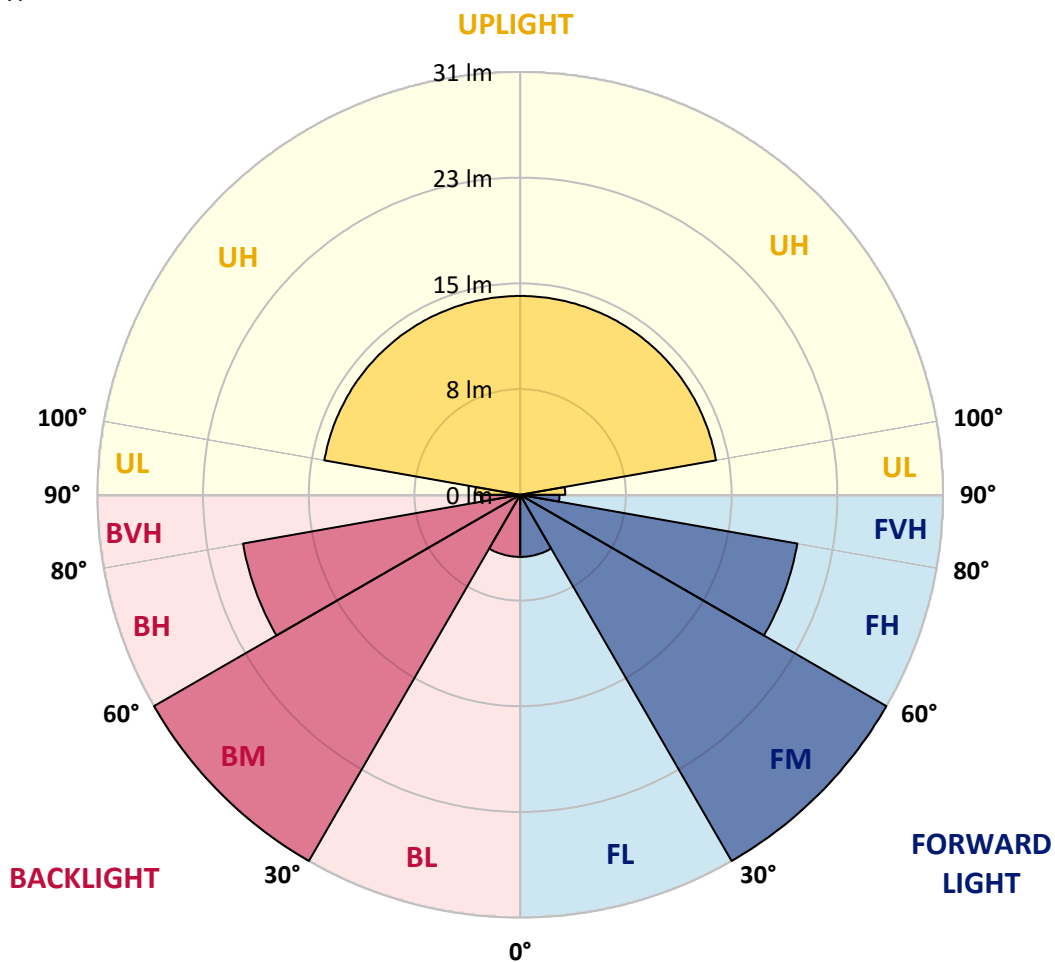
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Lamp | Zone Rating/Lumen Limit | | |
|---------------|-------------|--------|--------|-------------------------|-------|--------|
| | | | | B | U | G |
| FL | (0°-30°) | 4.5 | 0.2 | | | |
| FM | (30°-60°) | 30.7 | 1.5 | | | |
| FH | (60°-80°) | 20.4 | 1.0 | | | G0/660 |
| FVH | (80°-90°) | 2.9 | 0.1 | | | G0/10 |
| BL | (0°-30°) | 4.5 | 0.2 | B0/110 | | |
| BM | (30°-60°) | 30.7 | 1.5 | B0/220 | | |
| BH | (60°-80°) | 20.4 | 1.0 | B0/110 | | G0/660 |
| BVH | (80°-90°) | 2.9 | 0.1 | | | G0/10 |
| UL | (90°-100°) | 3.3 | 0.2 | | U1/10 | |
| UH | (100°-180°) | 14.4 | 0.7 | | U2/50 | |
| Trapped Light | | 1854.1 | 92.7 | | | |

BUG Rating: B0-U2-G0

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|----|
| 0° | 0 |
| 2.5° | 1 |
| 5° | 2 |
| 7.5° | 3 |
| 10° | 4 |
| 12.5° | 5 |
| 15° | 7 |
| 17.5° | 9 |
| 20° | 11 |
| 22.5° | 12 |
| 25° | 14 |
| 27.5° | 16 |
| 30° | 18 |
| 32.5° | 20 |
| 35° | 21 |
| 37.5° | 23 |
| 40° | 25 |
| 42.5° | 26 |
| 45° | 28 |
| 47.5° | 29 |
| 50° | 30 |
| 52.5° | 30 |
| 55° | 30 |
| 57.5° | 29 |
| 60° | 28 |
| 62.5° | 27 |
| 65° | 25 |
| 67.5° | 23 |
| 70° | 21 |
| 72.5° | 18 |
| 75° | 15 |
| 77.5° | 13 |
| 80° | 10 |
| 82.5° | 7 |
| 85° | 5 |
| 87.5° | 3 |
| 90° | 2 |
| 95° | 3 |
| 105° | 5 |
| 115° | 7 |
| 125° | 6 |
| 135° | 6 |
| 145° | 4 |
| 155° | 2 |
| 165° | 1 |



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CANDELA DISTRIBUTION (continued):

| | |
|------|----|
| | 0° |
| 175° | 0 |
| 180° | 0 |

(END OF REPORT)