

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: STREETWORKS

Report Number: 48463 _320MP

Luminaire Tested: **HMX32PXXCM**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 48463 _320MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: HMX32PXXCM
Description: 400W MH TYPE V HIGH MAST
Light Source: 320 WATT PULSE-START CLEAR VBU BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 33000 (1 lamp)
Luminaire Lumens: 19338.7 lumens
Efficiency: 58.6%
Efficacy: 55.3 lumens/watt
Luminous Opening: (L: -2.33 ' x W: 0 ' x H: 2 '
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

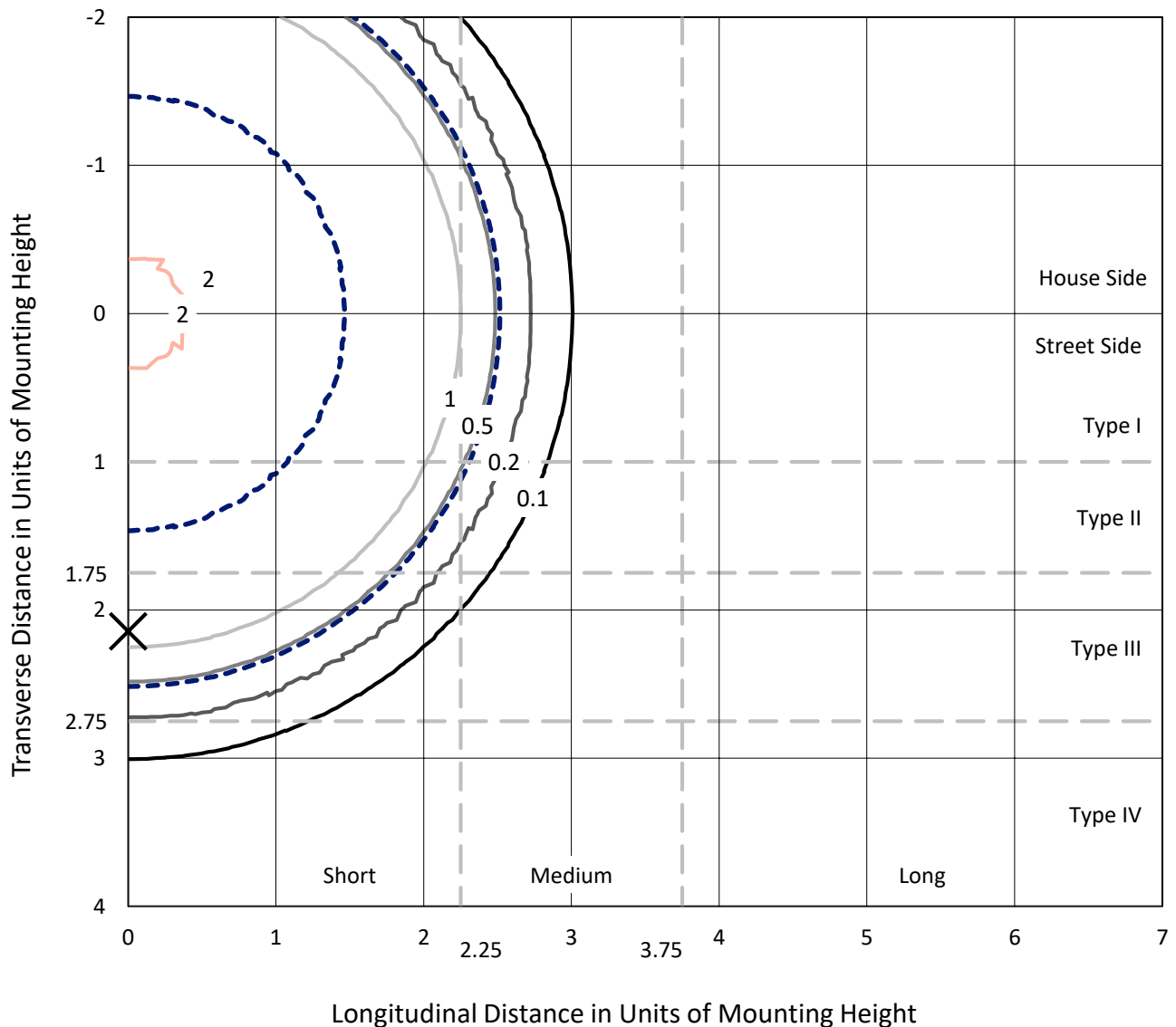
Input Watts (W): 350
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

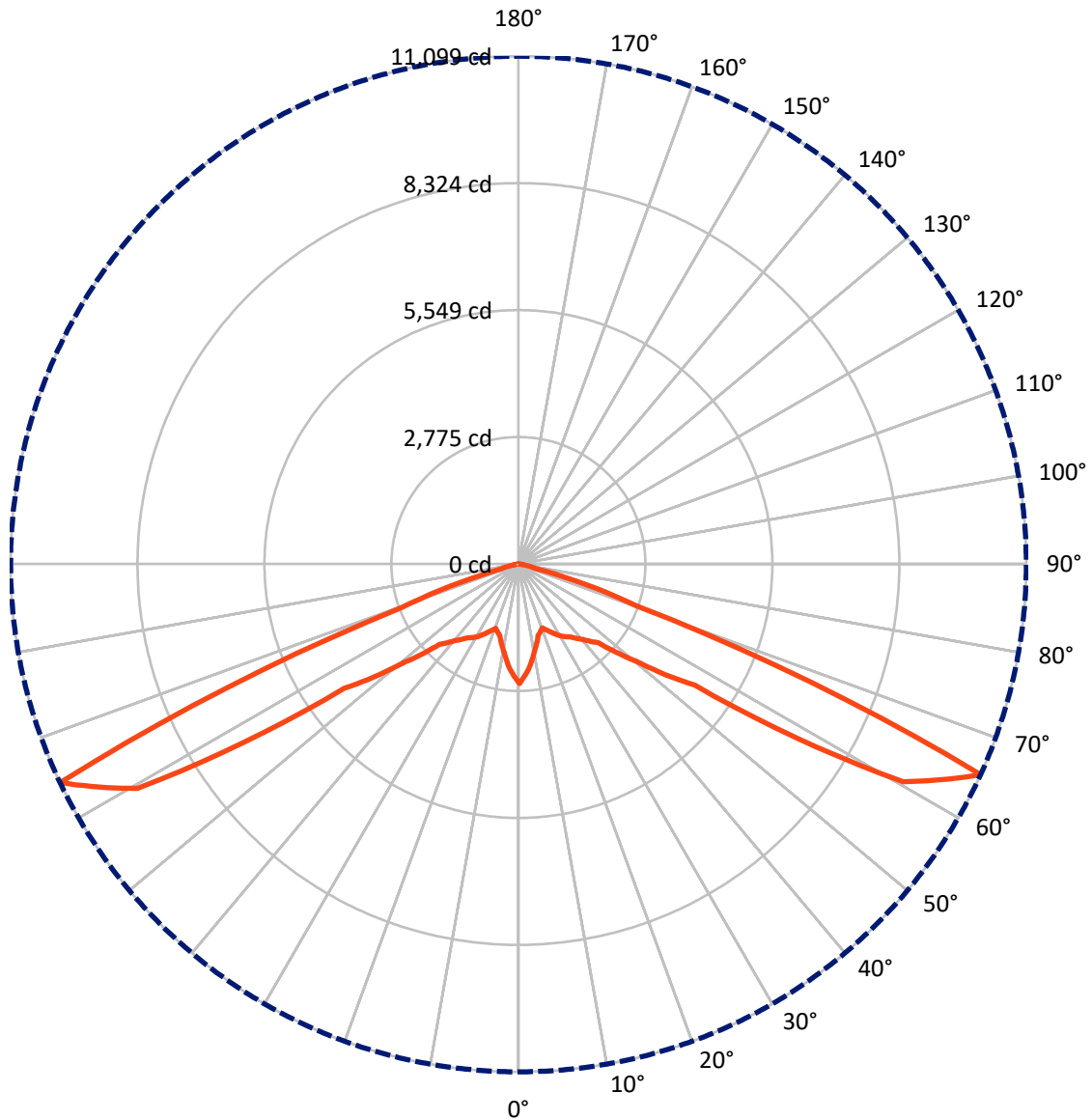
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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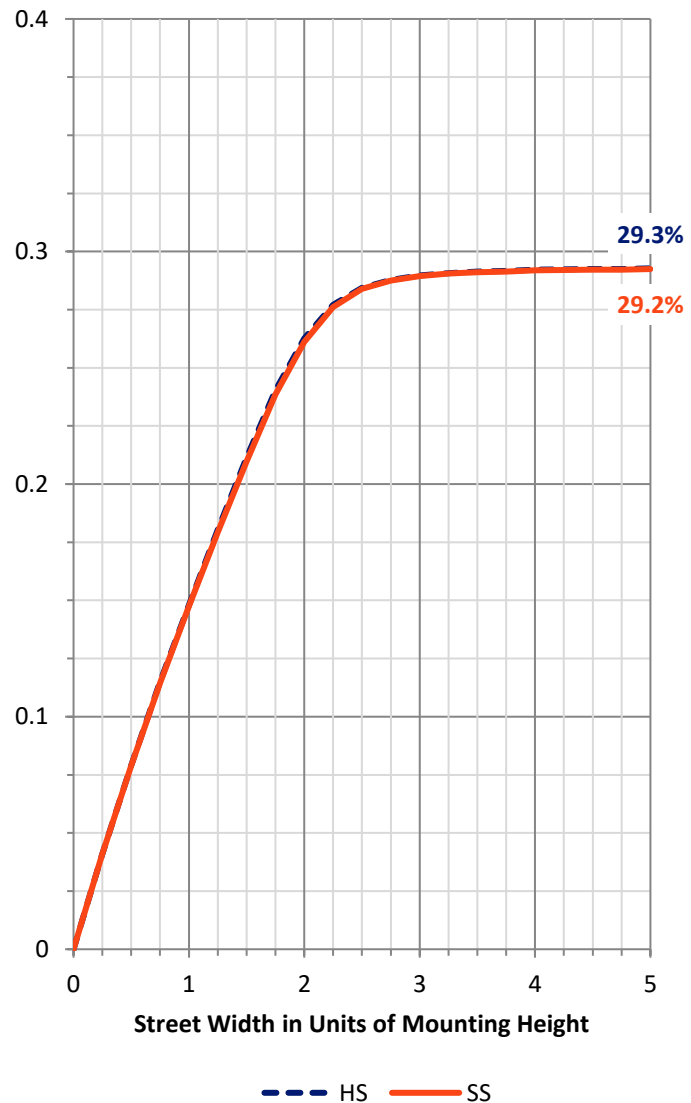
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9669.3	0.0	9669.3
	% Lamp	29.3	0.0	29.3
Street Side	Lumens	9669.3	0.0	9669.3
	% Lamp	29.3	0.0	29.3
Total	Lumens	19338.7	0.0	19338.7
	% Lamp	58.6	0.0	58.6

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	210.7	1.1	0.6
10°-20°	466.9	2.4	1.4
20°-30°	768.2	4.0	2.3
30°-40°	1245.9	6.4	3.8
40°-50°	2027.2	10.5	6.1
50°-60°	5057.0	26.1	15.3
60°-70°	8551.5	44.2	25.9
70°-80°	957.3	5.0	2.9
80°-90°	53.9	0.3	0.2
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	19338.7	100.0	58.6
0°-180°	19338.7	100.0	58.6

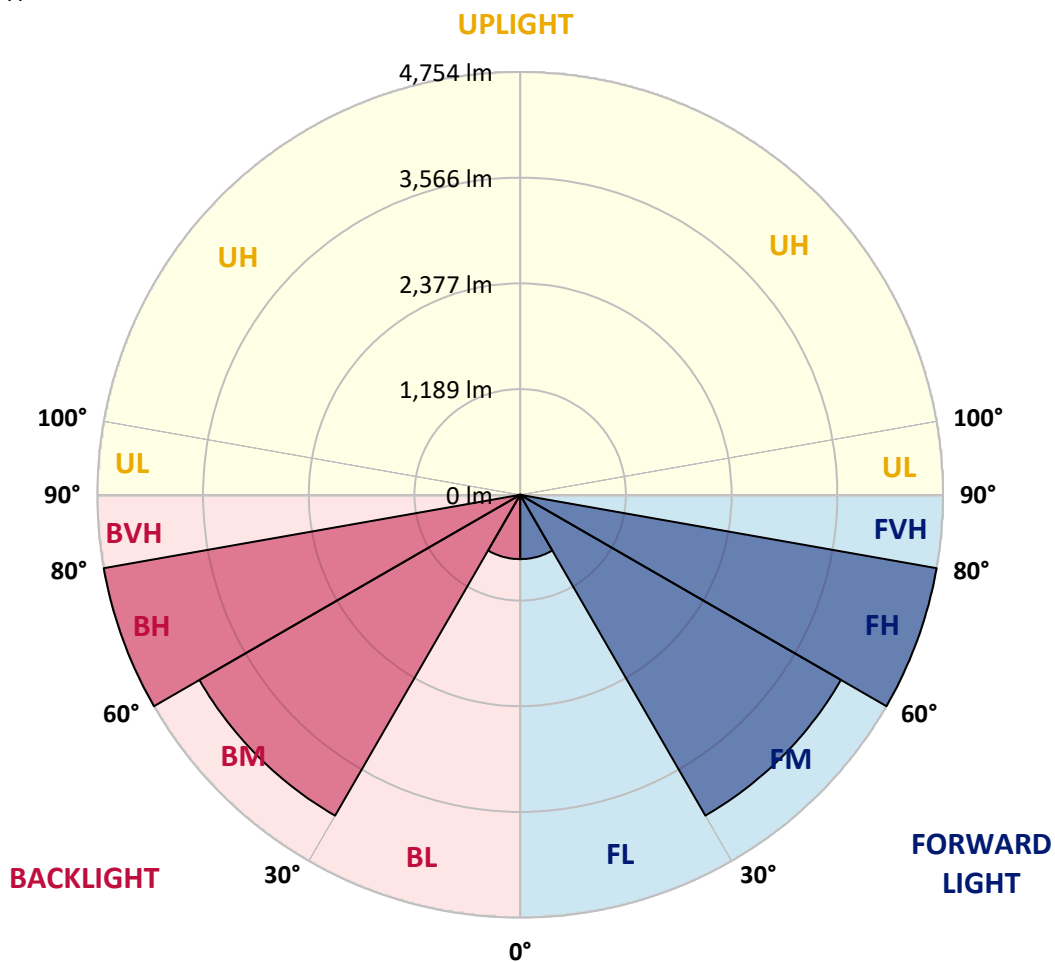


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	722.9	2.2			
FM	(30°-60°)	4165.1	12.6			
FH	(60°-80°)	4754.4	14.4			G2/5000
FVH	(80°-90°)	26.9	0.1			G1/100
BL	(0°-30°)	722.9	2.2	B2/1000		
BM	(30°-60°)	4165.1	12.6	B3/5000		
BH	(60°-80°)	4754.4	14.4	B4/5000		G2/5000
BVH	(80°-90°)	26.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		13661.3	41.4			

BUG Rating: B4-U0-G2
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2611.9	2611.9	2611.9	2611.9	2611.9	2611.9	2611.9	2611.9	2611.9	2611.9	2611.9
5°	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0
10°	1932.4	1932.4	1932.4	1932.4	1932.4	1932.4	1932.4	1932.4	1932.4	1932.4	1932.4
15°	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9
20°	1488.9	1488.9	1488.9	1488.9	1488.9	1488.9	1488.9	1488.9	1488.9	1488.9	1488.9
25°	1645.1	1645.1	1645.1	1645.1	1645.1	1645.1	1645.1	1645.1	1645.1	1645.1	1645.1
30°	1827.6	1827.6	1827.6	1827.6	1827.6	1827.6	1827.6	1827.6	1827.6	1827.6	1827.6
35°	1958.6	1958.6	1958.6	1958.6	1958.6	1958.6	1958.6	1958.6	1958.6	1958.6	1958.6
40°	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3
45°	2454.6	2454.6	2454.6	2454.6	2454.6	2454.6	2454.6	2454.6	2454.6	2454.6	2454.6
50°	3342.7	3342.7	3342.7	3342.7	3342.7	3342.7	3342.7	3342.7	3342.7	3342.7	3342.7
55°	4674.4	4674.4	4674.4	4674.4	4674.4	4674.4	4674.4	4674.4	4674.4	4674.4	4674.4
60°	9662.2	9662.2	9662.2	9662.2	9662.2	9662.2	9662.2	9662.2	9662.2	9662.2	9662.2
65°	11098.7	11098.7	11098.7	11098.7	11098.7	11098.7	11098.7	11098.7	11098.7	11098.7	11098.7
70°	2741.9	2741.9	2741.9	2741.9	2741.9	2741.9	2741.9	2741.9	2741.9	2741.9	2741.9
75°	392.1	392.1	392.1	392.1	392.1	392.1	392.1	392.1	392.1	392.1	392.1
80°	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2
85°	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2611.9	2611.9	2611.9	2611.9	2611.9	2611.9	2611.9	2611.9	2611.9	2611.9
5°	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0	2311.0
10°	1932.4	1932.4	1932.4	1932.4	1932.4	1932.4	1932.4	1932.4	1932.4	1932.4
15°	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9	1619.9
20°	1488.9	1488.9	1488.9	1488.9	1488.9	1488.9	1488.9	1488.9	1488.9	1488.9
25°	1645.1	1645.1	1645.1	1645.1	1645.1	1645.1	1645.1	1645.1	1645.1	1645.1
30°	1827.6	1827.6	1827.6	1827.6	1827.6	1827.6	1827.6	1827.6	1827.6	1827.6
35°	1958.6	1958.6	1958.6	1958.6	1958.6	1958.6	1958.6	1958.6	1958.6	1958.6
40°	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3	2167.3
45°	2454.6	2454.6	2454.6	2454.6	2454.6	2454.6	2454.6	2454.6	2454.6	2454.6
50°	3342.7	3342.7	3342.7	3342.7	3342.7	3342.7	3342.7	3342.7	3342.7	3342.7
55°	4674.4	4674.4	4674.4	4674.4	4674.4	4674.4	4674.4	4674.4	4674.4	4674.4
60°	9662.2	9662.2	9662.2	9662.2	9662.2	9662.2	9662.2	9662.2	9662.2	9662.2
65°	11098.7	11098.7	11098.7	11098.7	11098.7	11098.7	11098.7	11098.7	11098.7	11098.7
70°	2741.9	2741.9	2741.9	2741.9	2741.9	2741.9	2741.9	2741.9	2741.9	2741.9
75°	392.1	392.1	392.1	392.1	392.1	392.1	392.1	392.1	392.1	392.1
80°	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2
85°	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)