

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: 48312 \_350MP

Luminaire Tested: **HMX35PXXDW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-31-95  
Report Number: 48312 \_350MP  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: HMX35PXXDW  
Description: 400W MH TYPE V HIGH MAST  
Light Source: 350 WATT PULSE-START CLEAR VBU BURN  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 37000 (1 lamp)  
Luminaire Lumens: 19585.8 lumens  
Efficiency: 52.9%  
Efficacy: 49.3 lumens/watt  
Luminous Opening: (L: -2.33 ' x W: 0 ' x H: 2 '  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G3

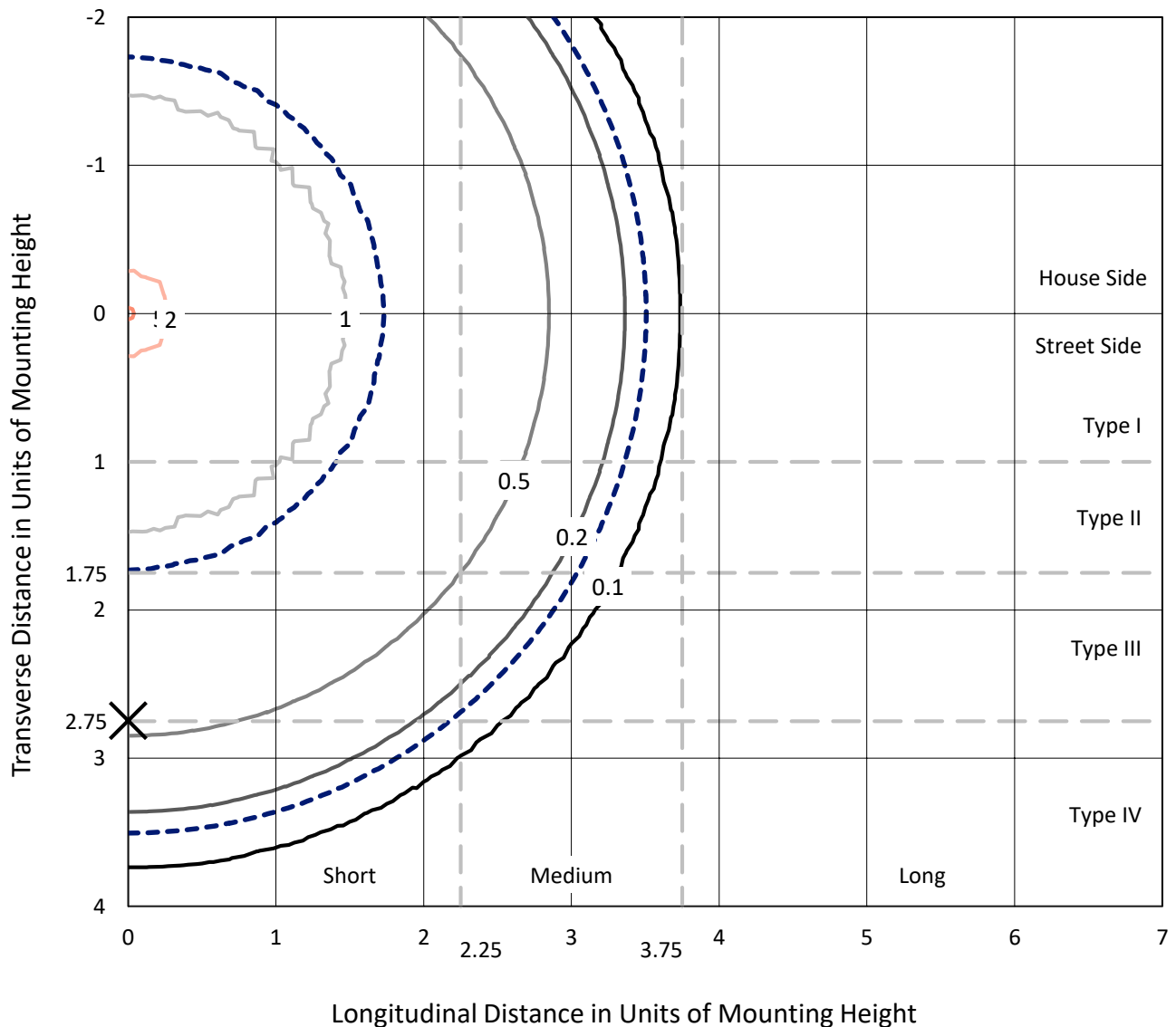
Input Watts (W): 397  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: 48312 \_350MP  
 CATALOG NUMBER: HMX35PXXDW

### Iso-Footcandle Lines of Horizontal Illumination

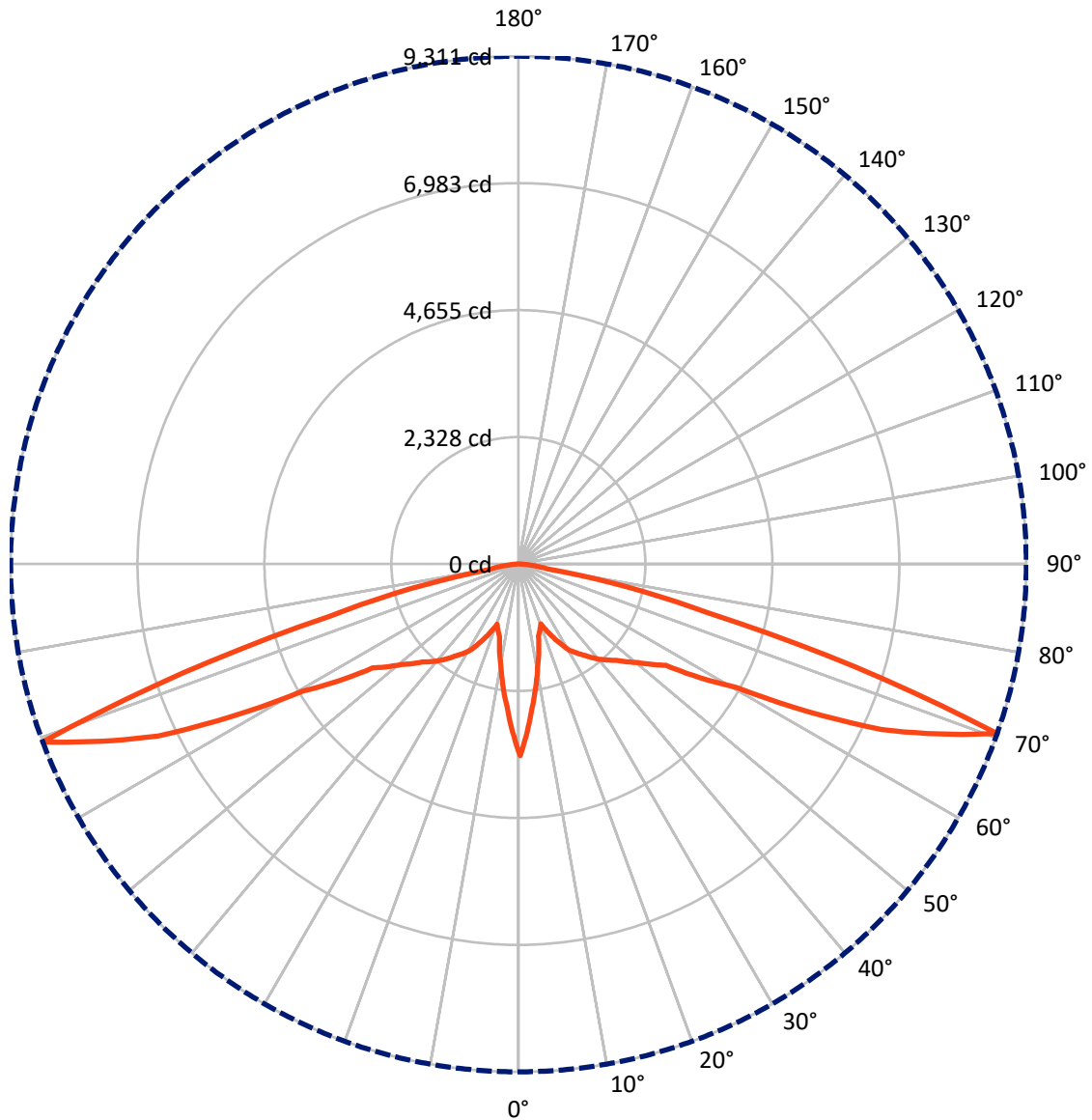
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: 48312 \_350MP  
CATALOG NUMBER: HMX35PXXDW

### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: 48312 \_350MP  
 CATALOG NUMBER: HMX35PXXDW

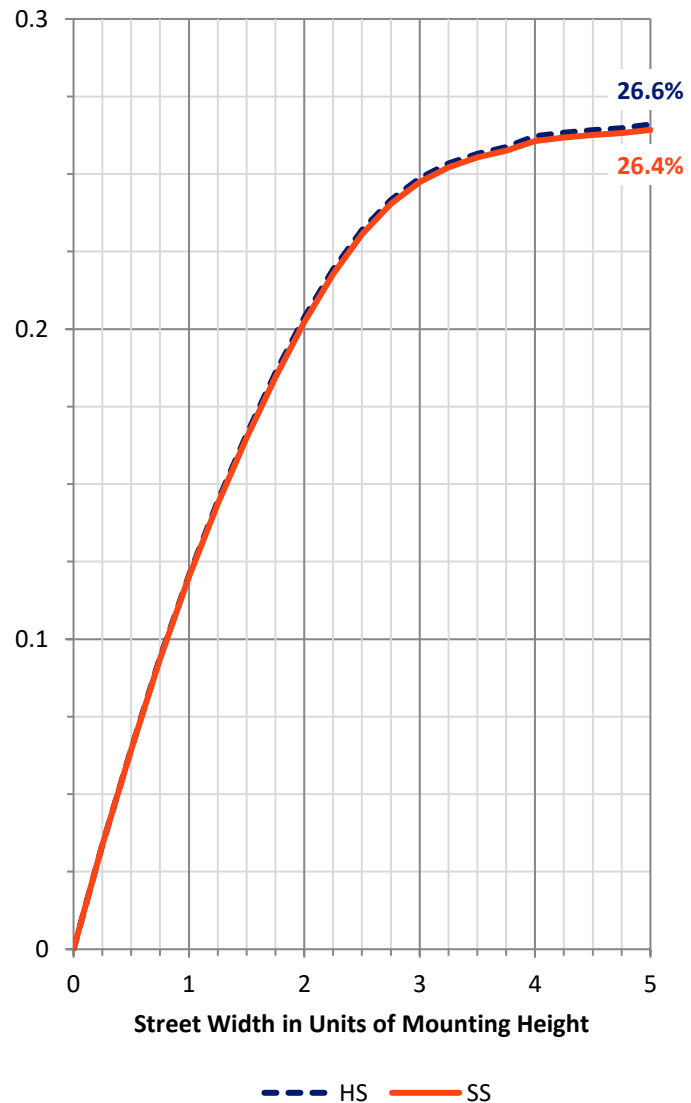
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9792.9	0.0	9792.9
	% Lamp	26.5	0.0	26.5
<b>Street Side</b>	Lumens	9792.9	0.0	9792.9
	% Lamp	26.5	0.0	26.5
<b>Total</b>	Lumens	19585.8	0.0	19585.8
	% Lamp	52.9	0.0	52.9

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	236.9	1.2	0.6
10°-20°	406.3	2.1	1.1
20°-30°	700.0	3.6	1.9
30°-40°	1296.6	6.6	3.5
40°-50°	1974.6	10.1	5.3
50°-60°	3150.9	16.1	8.5
60°-70°	7107.8	36.3	19.2
70°-80°	4482.6	22.9	12.1
80°-90°	230.1	1.2	0.6
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°	19585.8	100.0	52.9
0°-180°	19585.8	100.0	52.9

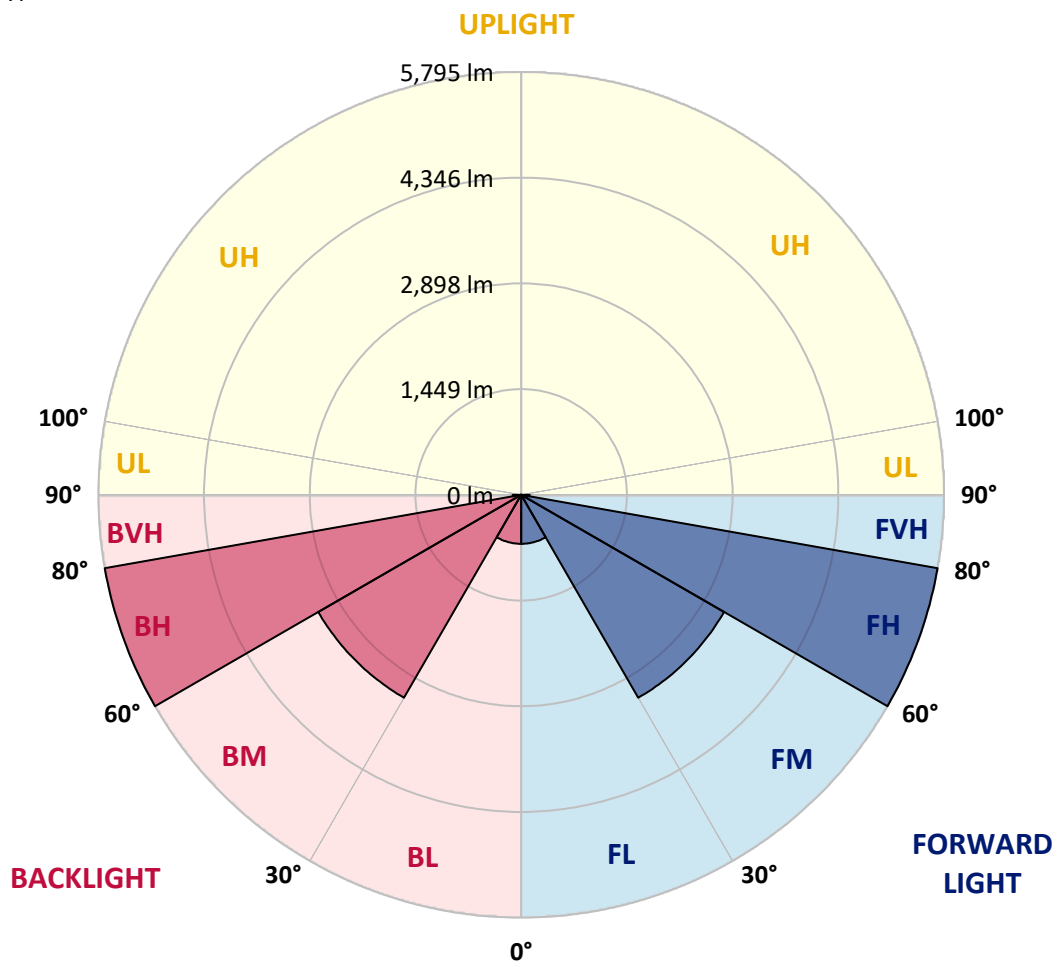


REPORT NUMBER: 48312 \_350MP  
 CATALOG NUMBER: HMX35PXXDW

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	671.6	1.8			
FM (30°-60°)	3211.1	8.7			
FH (60°-80°)	5795.2	15.7			G3/7500
FVH (80°-90°)	115.0	0.3			G2/225
BL (0°-30°)	671.6	1.8	B2/1000		
BM (30°-60°)	3211.1	8.7	B3/5000		
BH (60°-80°)	5795.2	15.7	B5		G3/7500
BVH (80°-90°)	115.0	0.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	17414.2	47.1			

**BUG Rating: B5-U0-G3**  
 Type V Short





REPORT NUMBER: 48312 \_350MP  
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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3513.9	3513.9	3513.9	3513.9	3513.9	3513.9	3513.9	3513.9	3513.9	3513.9	3513.9
5°	2635.7	2635.7	2635.7	2635.7	2635.7	2635.7	2635.7	2635.7	2635.7	2635.7	2635.7
10°	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7
15°	1376.6	1376.6	1376.6	1376.6	1376.6	1376.6	1376.6	1376.6	1376.6	1376.6	1376.6
20°	1170.9	1170.9	1170.9	1170.9	1170.9	1170.9	1170.9	1170.9	1170.9	1170.9	1170.9
25°	1493.1	1493.1	1493.1	1493.1	1493.1	1493.1	1493.1	1493.1	1493.1	1493.1	1493.1
30°	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4
35°	2049.1	2049.1	2049.1	2049.1	2049.1	2049.1	2049.1	2049.1	2049.1	2049.1	2049.1
40°	2298.4	2298.4	2298.4	2298.4	2298.4	2298.4	2298.4	2298.4	2298.4	2298.4	2298.4
45°	2518.2	2518.2	2518.2	2518.2	2518.2	2518.2	2518.2	2518.2	2518.2	2518.2	2518.2
50°	2840.3	2840.3	2840.3	2840.3	2840.3	2840.3	2840.3	2840.3	2840.3	2840.3	2840.3
55°	3278.9	3278.9	3278.9	3278.9	3278.9	3278.9	3278.9	3278.9	3278.9	3278.9	3278.9
60°	4596.7	4596.7	4596.7	4596.7	4596.7	4596.7	4596.7	4596.7	4596.7	4596.7	4596.7
65°	7319.5	7319.5	7319.5	7319.5	7319.5	7319.5	7319.5	7319.5	7319.5	7319.5	7319.5
70°	9310.9	9310.9	9310.9	9310.9	9310.9	9310.9	9310.9	9310.9	9310.9	9310.9	9310.9
75°	3601.0	3601.0	3601.0	3601.0	3601.0	3601.0	3601.0	3601.0	3601.0	3601.0	3601.0
80°	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7
85°	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: 48312 \_350MP  
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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3513.9	3513.9	3513.9	3513.9	3513.9	3513.9	3513.9	3513.9	3513.9	3513.9
5°	2635.7	2635.7	2635.7	2635.7	2635.7	2635.7	2635.7	2635.7	2635.7	2635.7
10°	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7	1932.7
15°	1376.6	1376.6	1376.6	1376.6	1376.6	1376.6	1376.6	1376.6	1376.6	1376.6
20°	1170.9	1170.9	1170.9	1170.9	1170.9	1170.9	1170.9	1170.9	1170.9	1170.9
25°	1493.1	1493.1	1493.1	1493.1	1493.1	1493.1	1493.1	1493.1	1493.1	1493.1
30°	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4	1830.4
35°	2049.1	2049.1	2049.1	2049.1	2049.1	2049.1	2049.1	2049.1	2049.1	2049.1
40°	2298.4	2298.4	2298.4	2298.4	2298.4	2298.4	2298.4	2298.4	2298.4	2298.4
45°	2518.2	2518.2	2518.2	2518.2	2518.2	2518.2	2518.2	2518.2	2518.2	2518.2
50°	2840.3	2840.3	2840.3	2840.3	2840.3	2840.3	2840.3	2840.3	2840.3	2840.3
55°	3278.9	3278.9	3278.9	3278.9	3278.9	3278.9	3278.9	3278.9	3278.9	3278.9
60°	4596.7	4596.7	4596.7	4596.7	4596.7	4596.7	4596.7	4596.7	4596.7	4596.7
65°	7319.5	7319.5	7319.5	7319.5	7319.5	7319.5	7319.5	7319.5	7319.5	7319.5
70°	9310.9	9310.9	9310.9	9310.9	9310.9	9310.9	9310.9	9310.9	9310.9	9310.9
75°	3601.0	3601.0	3601.0	3601.0	3601.0	3601.0	3601.0	3601.0	3601.0	3601.0
80°	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7	538.7
85°	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4	153.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)