

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: 766063

Luminaire Tested: **HMX40SXXCM**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 766063
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: HMX40SXXCM
Description: 400W HIGH PRESSURE SODIUM TYPE V HIGH MAST
Light Source: 400W HPS CL E-18
Ballast/Driver: -

Summary

Lumens per Lamp: 50000 (1 lamp)
Luminaire Lumens: 31738 lumens
Efficiency: 63.5%
Efficacy: 79.3 lumens/watt
Luminous Opening: (L: 0 ' x W: -2.33 ' x H: 2 '
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G4

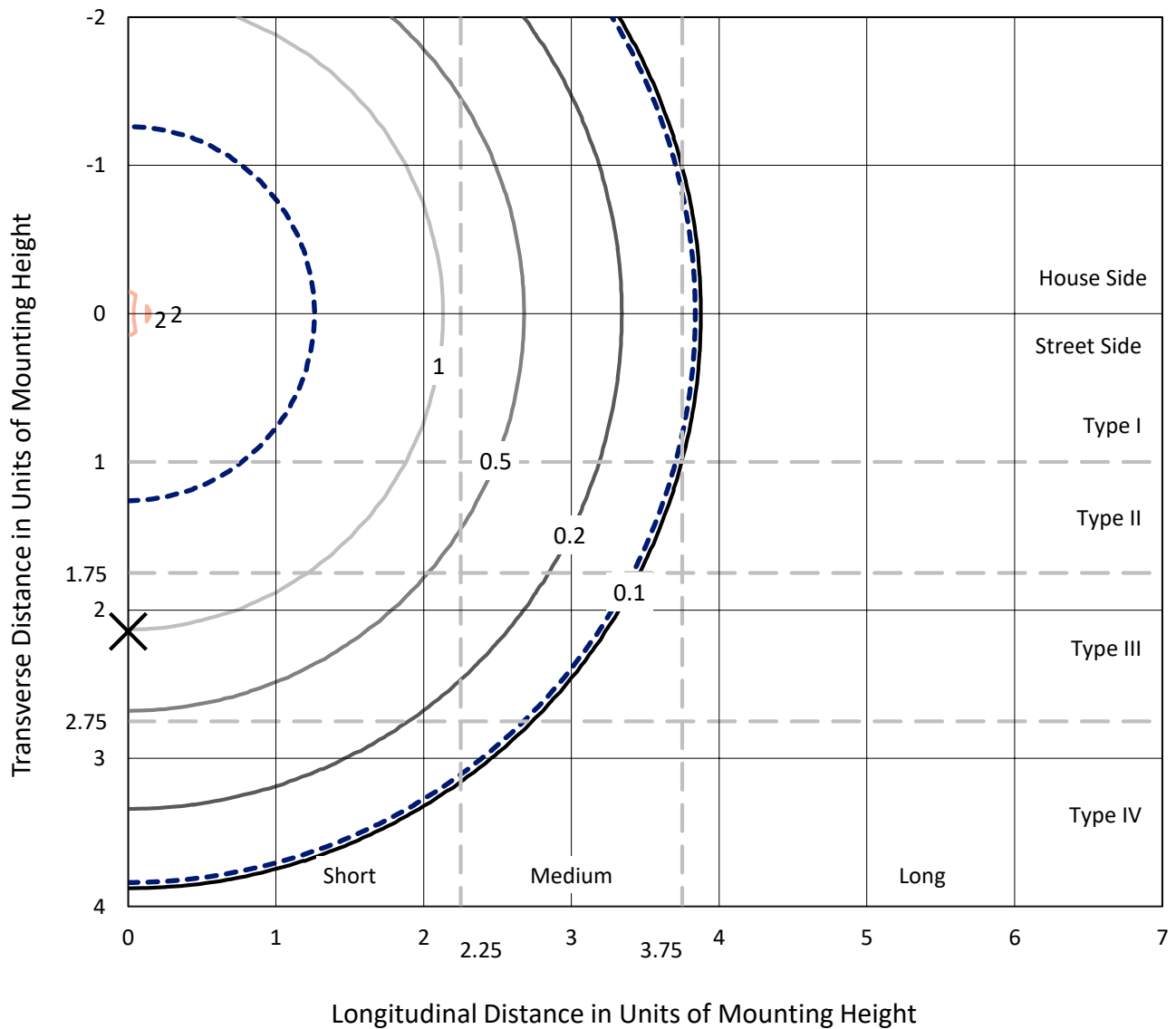
Input Watts (W): 400
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

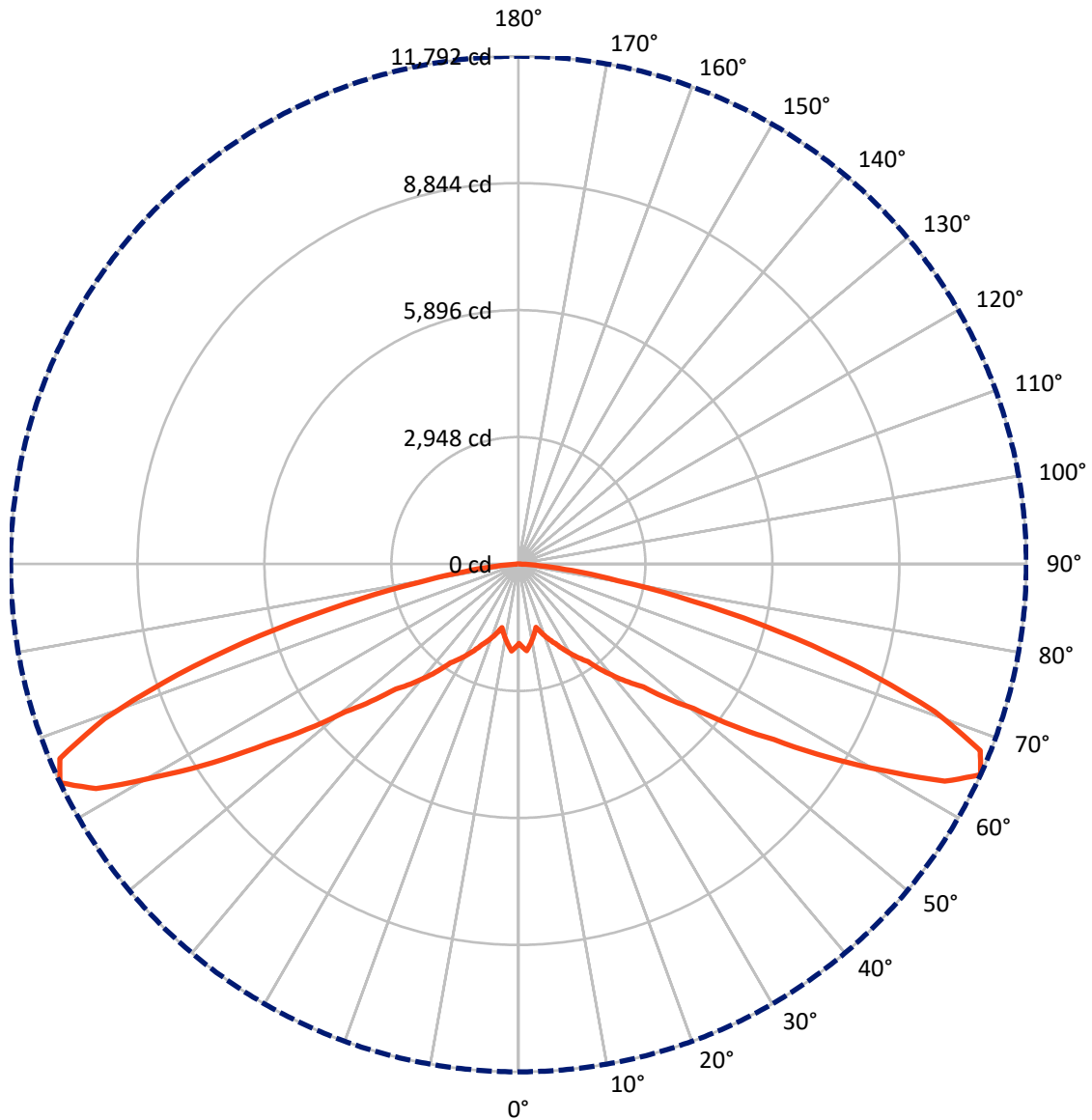
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 2.1 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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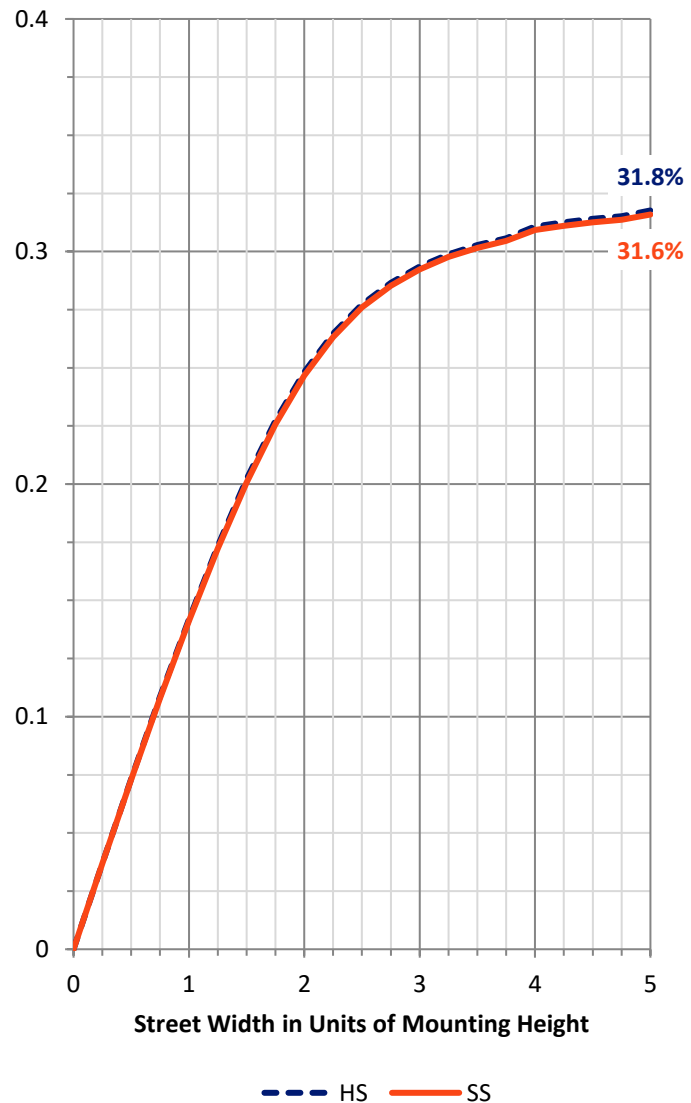
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15869.0	0.0	15869.0
	% Lamp	31.7	0.0	31.7
Street Side	Lumens	15869.0	0.0	15869.0
	% Lamp	31.7	0.0	31.7
Total	Lumens	31738.0	0.0	31738.0
	% Lamp	63.5	0.0	63.5

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	182.2	0.6	0.4
10°-20°	506.3	1.6	1.0
20°-30°	978.0	3.1	2.0
30°-40°	1839.5	5.8	3.7
40°-50°	3370.0	10.6	6.7
50°-60°	6623.1	20.9	13.2
60°-70°	11036.8	34.8	22.1
70°-80°	6572.7	20.7	13.1
80°-90°	816.8	2.6	1.6
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°	31738.0	100.0	63.5
0°-180°	31738.0	100.0	63.5



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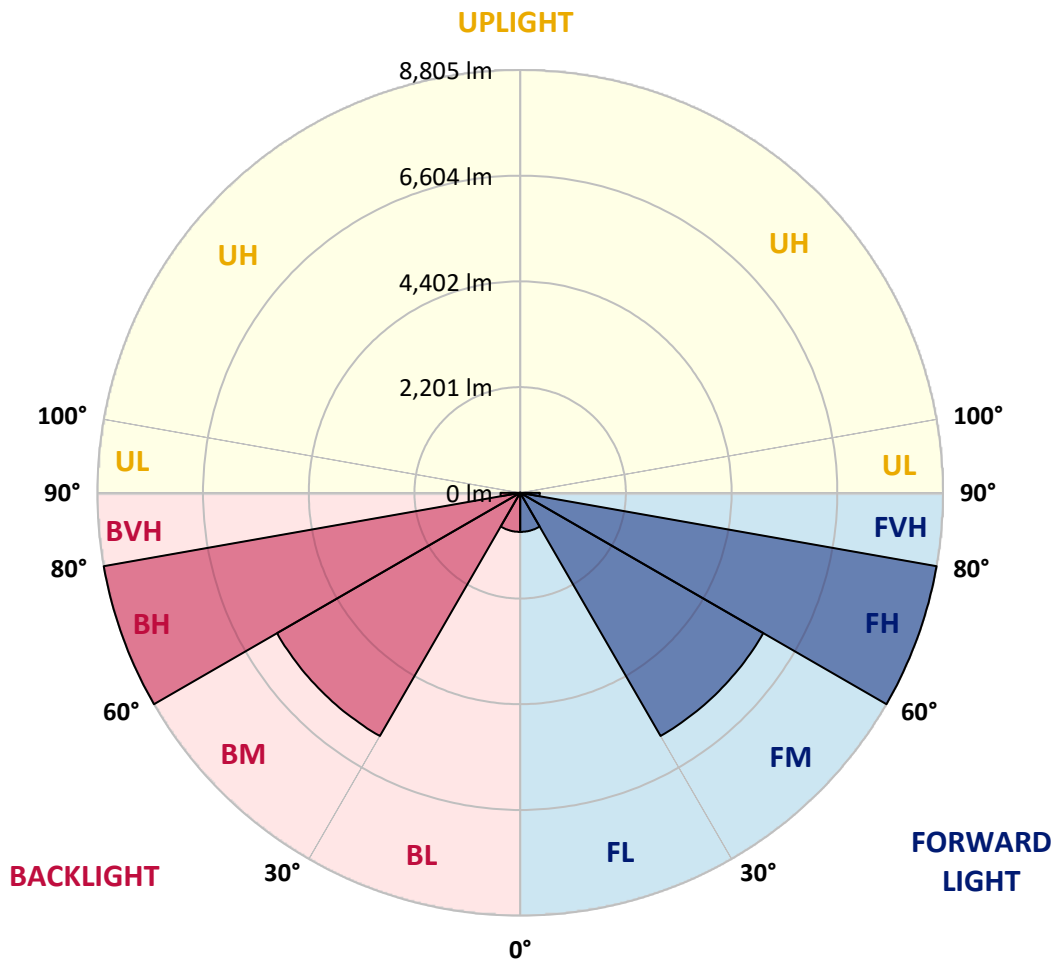
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	813.2	1.6			
FM	(30°-60°)	5846.3	11.7			
FH	(60°-80°)	8804.8	17.6			G4/12000
FVH	(80°-90°)	408.4	0.8			G3/500
BL	(0°-30°)	813.2	1.6	B2/1000		
BM	(30°-60°)	5846.3	11.7	B4/8500		
BH	(60°-80°)	8804.8	17.6	B5		G4/12000
BVH	(80°-90°)	408.4	0.8			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		18262.0	36.5			

BUG Rating: B5-U0-G4

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°
0°	1844
5°	2025
15°	1524
25°	2071
35°	2786
45°	4070
50°	5275
55°	7195
60°	9728
62.5°	11106
65°	11792
67.5°	11566
70°	10257
72.5°	8316
75°	6225
77.5°	4121
80°	2359
82.5°	1251
85°	489
87.5°	87
90°	0
95°	0
105°	0
115°	0
125°	0
135°	0
145°	0
155°	0
165°	0
175°	0
180°	0

(END OF REPORT)