

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: 766062

Luminaire Tested: **HMX40SXXNM**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 766062
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: HMX40SXXNM
Description: 400W HPS TYPE V HIGH MAST
Light Source: 400W HPS CL E-18
Ballast/Driver: -

Summary

Lumens per Lamp: 50000 (1 lamp)
Luminaire Lumens: 37426.1 lumens
Efficiency: 74.9%
Efficacy: 93.6 lumens/watt
Luminous Opening: (L: 0 ' x W: -2.33 ' x H: 2 '
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G5

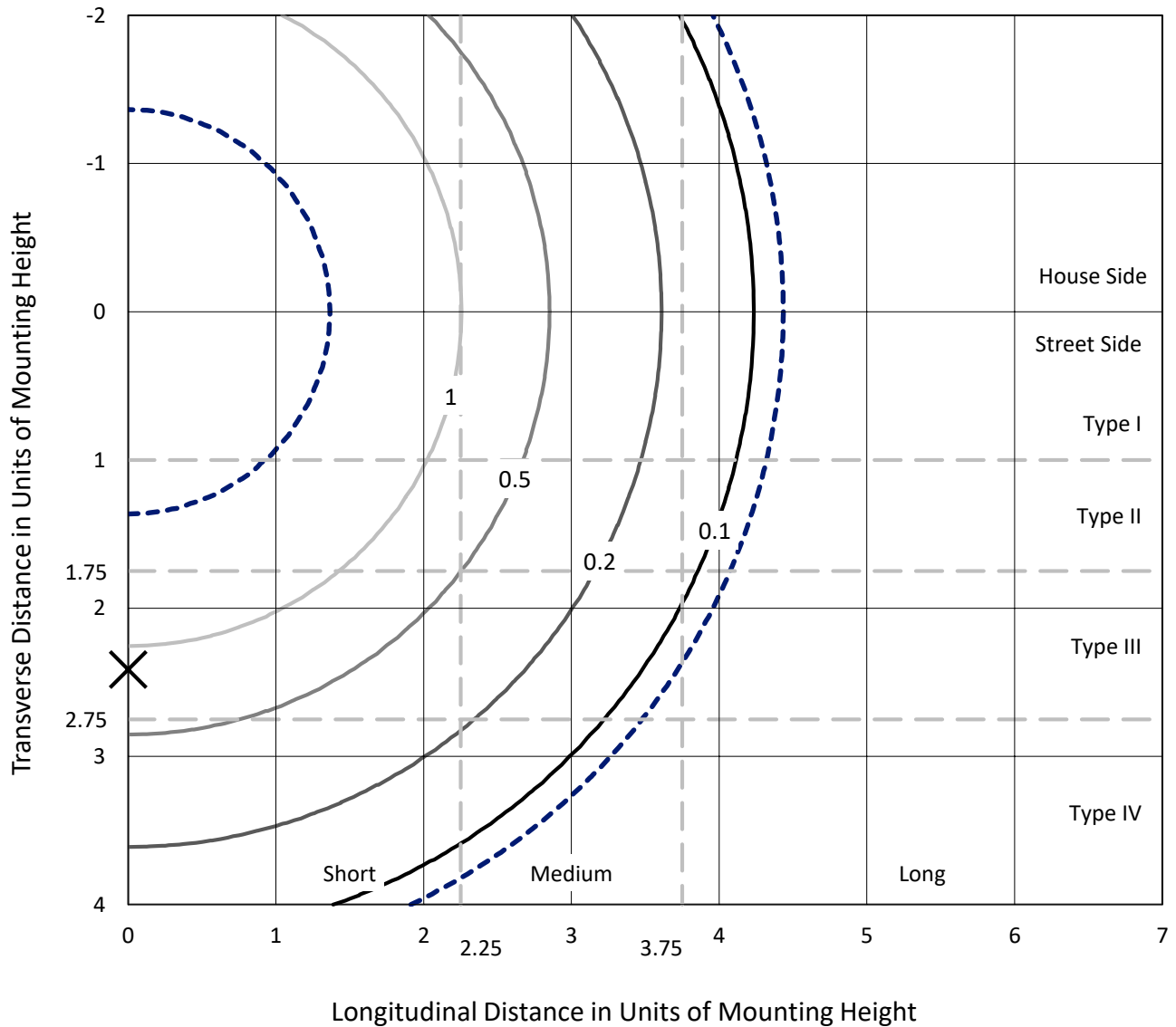
Input Watts (W): 400
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

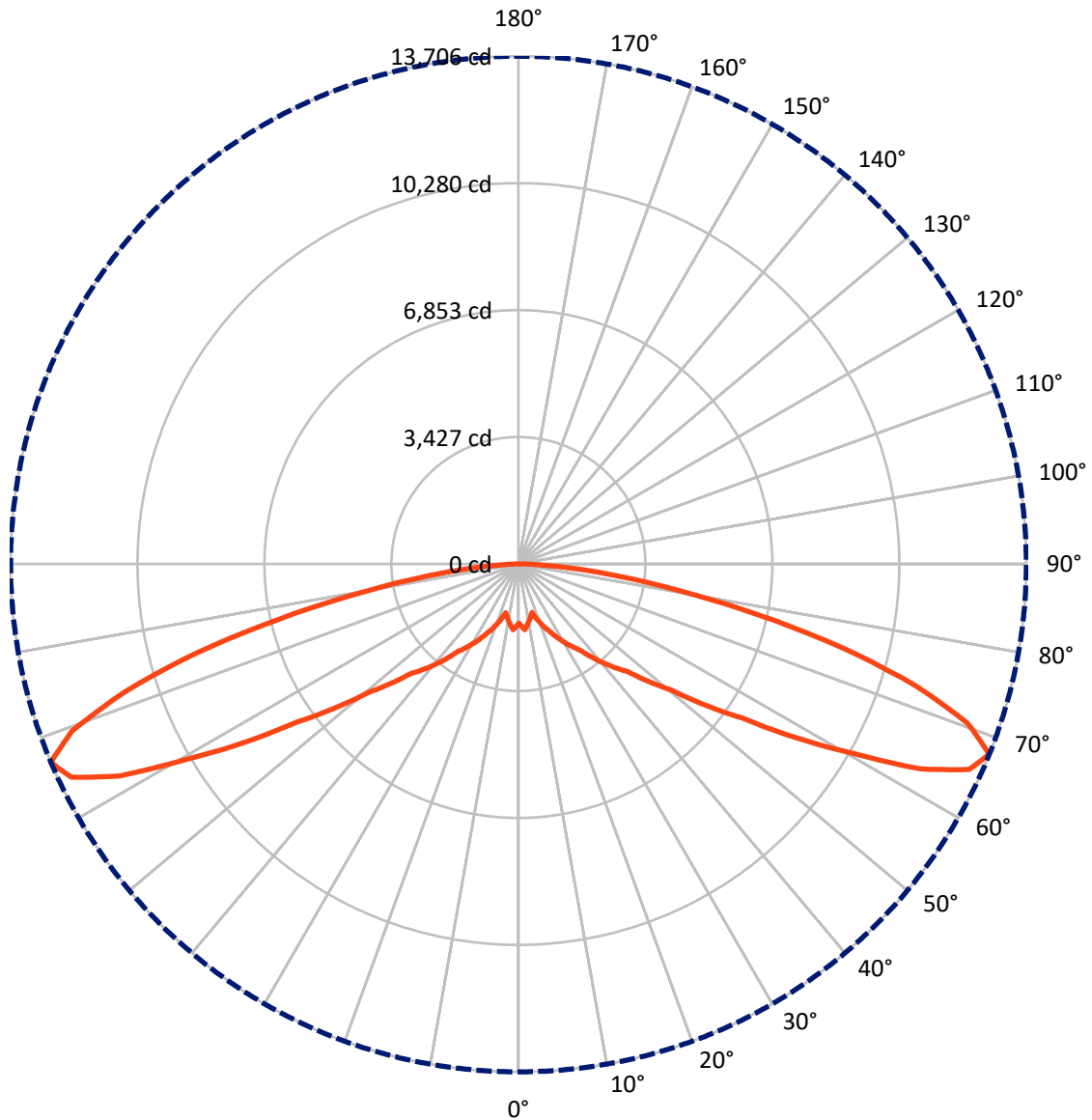
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 1.8 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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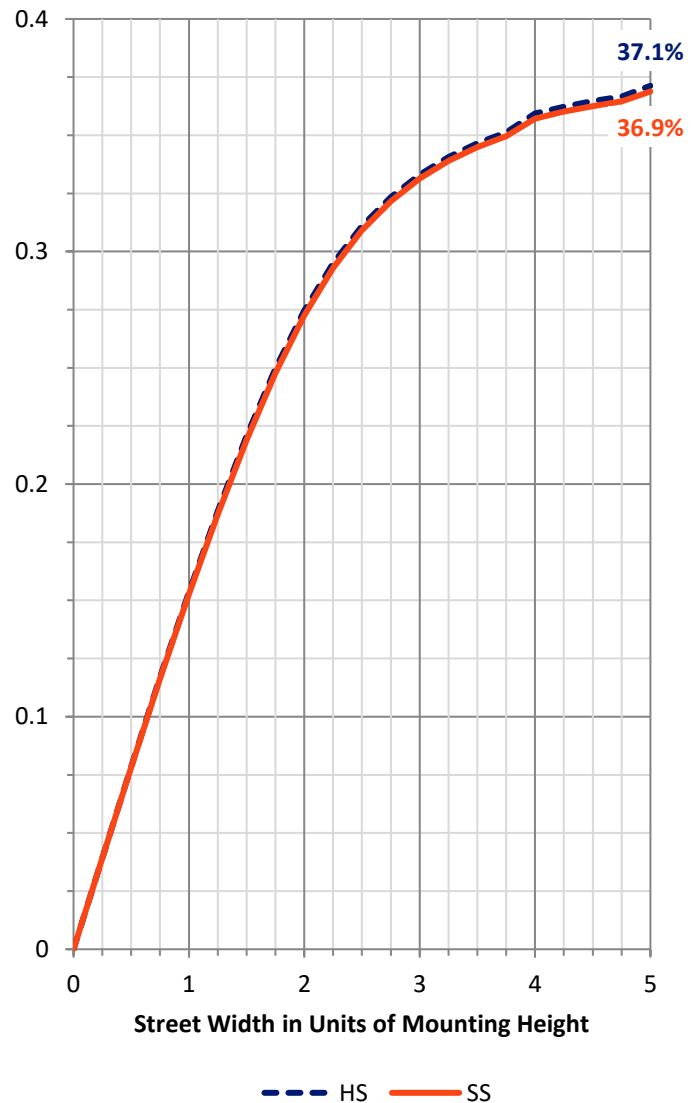
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18713.0	0.0	18713.0
	% Lamp	37.4	0.0	37.4
Street Side	Lumens	18713.0	0.0	18713.0
	% Lamp	37.4	0.0	37.4
Total	Lumens	37426.1	0.0	37426.1
	% Lamp	74.9	0.0	74.9

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	160.2	0.4	0.3
10°-20°	464.5	1.2	0.9
20°-30°	963.9	2.6	1.9
30°-40°	1870.8	5.0	3.7
40°-50°	3424.8	9.2	6.8
50°-60°	6855.4	18.3	13.7
60°-70°	12639.8	33.8	25.3
70°-80°	9361.8	25.0	18.7
80°-90°	1863.7	5.0	3.7
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°	37426.1	100.0	74.9
0°-180°	37426.1	100.0	74.9



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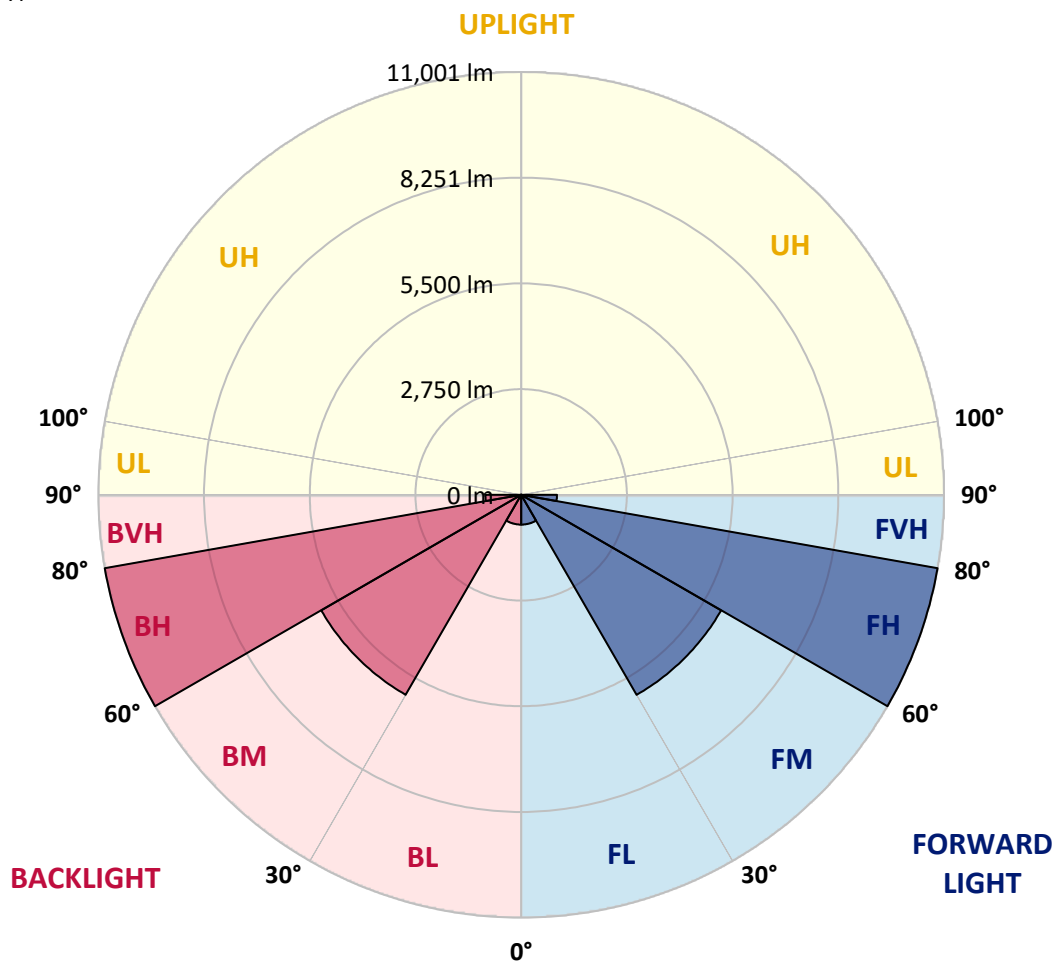
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	775.2	1.6			
FM	(30°-60°)	6009.3	12.0			
FH	(60°-80°)	11000.8	22.0			G4/12000
FVH	(80°-90°)	931.9	1.9			G5
BL	(0°-30°)	775.2	1.6	B2/1000		
BM	(30°-60°)	6009.3	12.0	B4/8500		
BH	(60°-80°)	11000.8	22.0	B5		G4/12000
BVH	(80°-90°)	931.9	1.9			G5
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		12573.9	25.1			

BUG Rating: B5-U0-G5

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°
0°	1595
5°	1781
15°	1357
25°	2060
35°	2853
45°	4146
50°	5345
55°	7347
60°	10372
62.5°	12177
65°	13369
67.5°	13706
70°	12853
72.5°	11179
75°	9045
77.5°	6652
80°	4442
82.5°	2739
85°	1450
87.5°	445
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)