

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: 766060

Luminaire Tested: **HMX40SXXNW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 766060
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: HMX40SXXNW
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: 37544.5 lumens
Efficiency: 75.1%
Efficacy: 93.9 lumens/watt
Luminous Opening: (L: 0 ' x W: -2.33 ' x H: 2 '
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U2 - G5

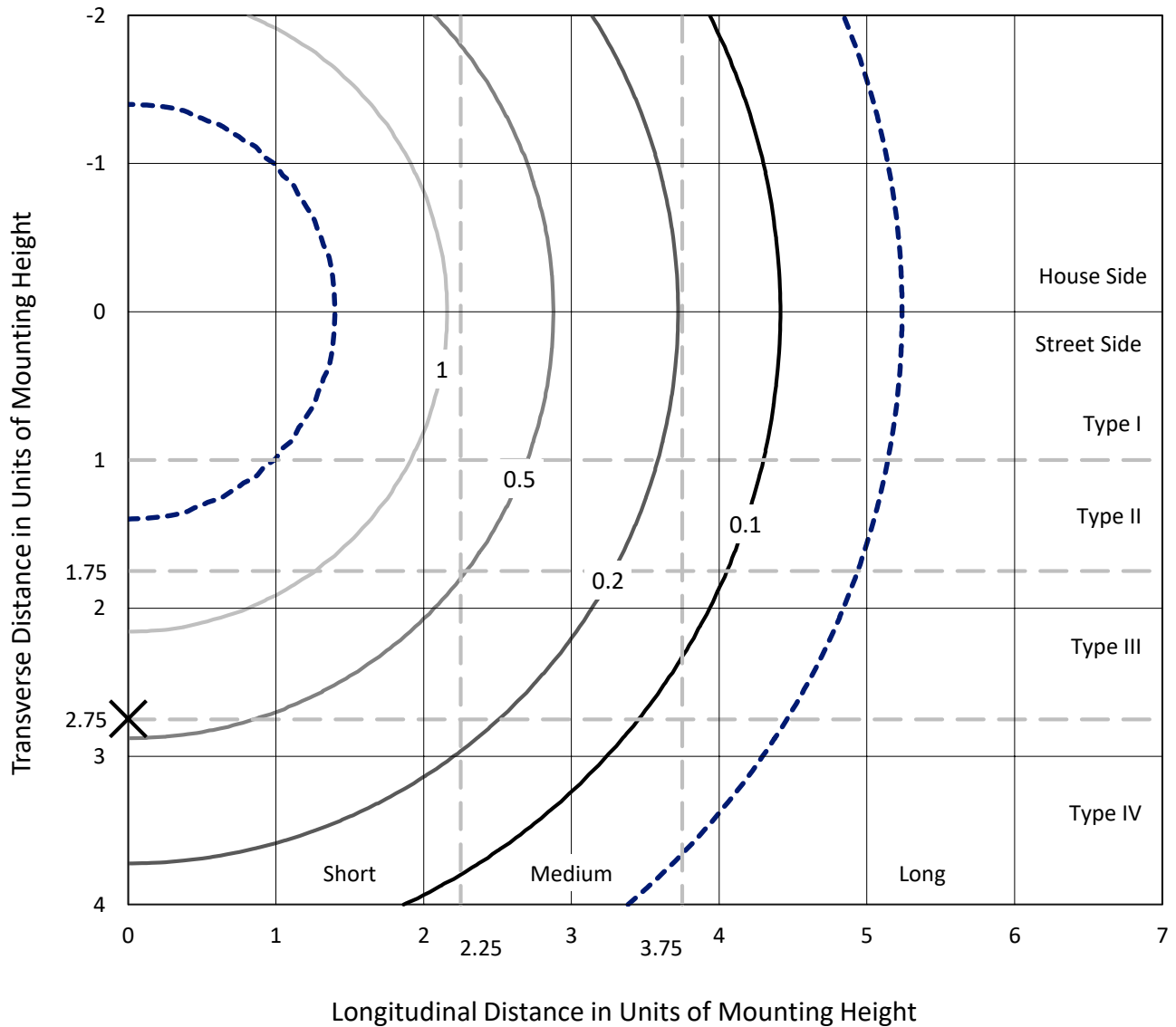
Input Watts (W): 400
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

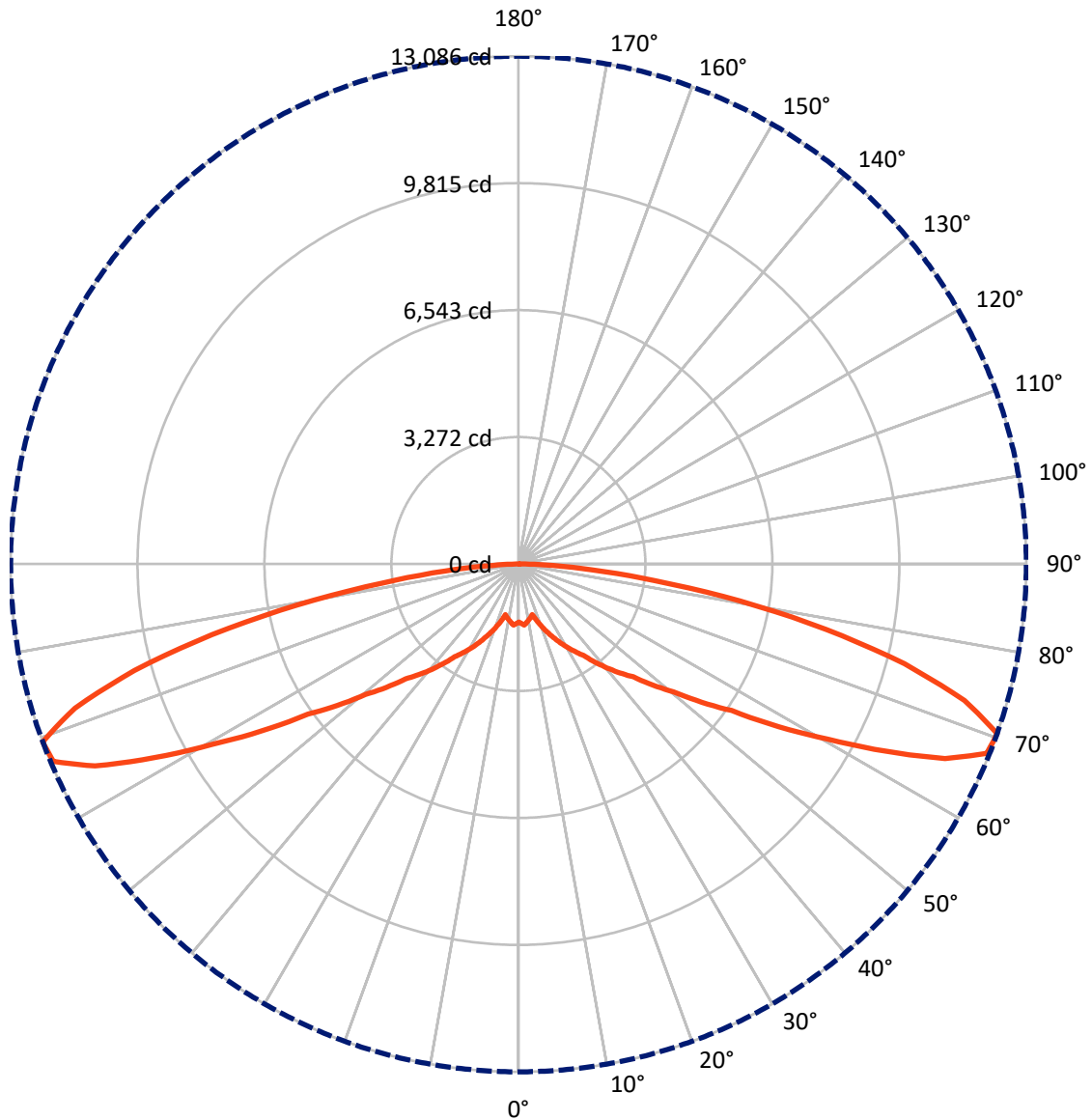
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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

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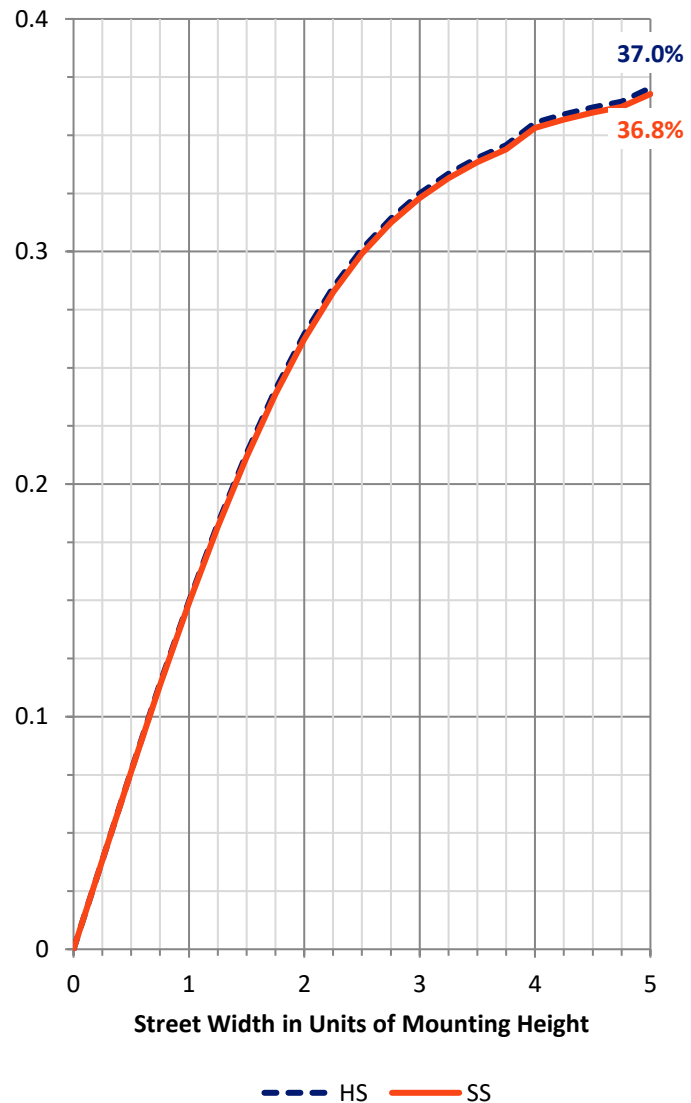
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18765.5	6.7	18772.3
	% Lamp	37.5	0.0	37.5
Street Side	Lumens	18765.5	6.7	18772.3
	% Lamp	37.5	0.0	37.5
Total	Lumens	37531.1	13.4	37544.5
	% Lamp	75.1	0.0	75.1

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	145.7	0.4	0.3
10°-20°	451.6	1.2	0.9
20°-30°	975.6	2.6	2.0
30°-40°	1889.5	5.0	3.8
40°-50°	3367.5	9.0	6.7
50°-60°	6230.3	16.6	12.5
60°-70°	11654.1	31.0	23.3
70°-80°	10508.0	28.0	21.0
80°-90°	2449.7	6.5	4.9
90°-100°	13.4	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°	37531.1	100.0	75.1
0°-180°	37544.5	100.0	75.1



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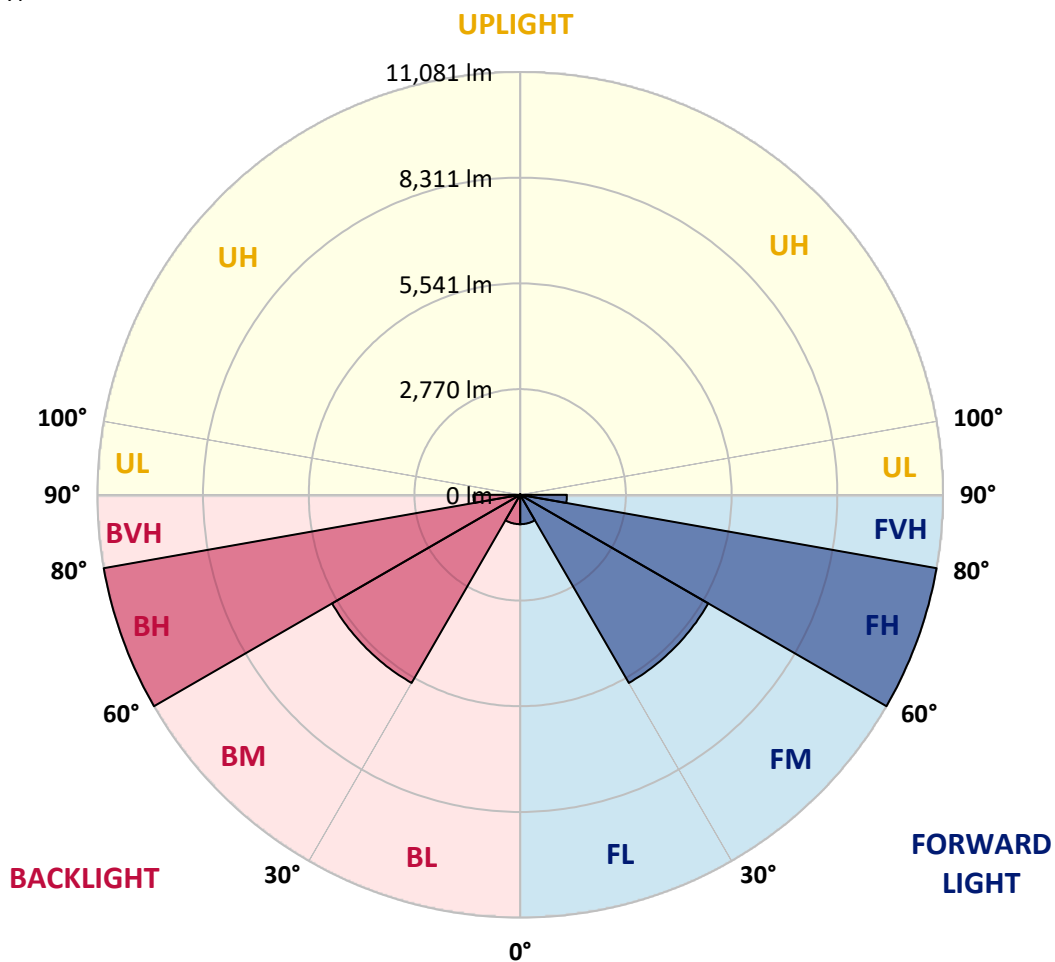
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	770.4	1.5			
FM	(30°-60°)	5693.4	11.4			
FH	(60°-80°)	11081.0	22.2			G4/12000
FVH	(80°-90°)	1224.9	2.4			G5
BL	(0°-30°)	770.4	1.5	B2/1000		
BM	(30°-60°)	5693.4	11.4	B4/8500		
BH	(60°-80°)	11081.0	22.2	B5		G4/12000
BVH	(80°-90°)	1224.9	2.4			G5
UL	(90°-100°)	13.4	0.0		U2/50	
UH	(100°-180°)	6.7	0.0		U1/10	
Trapped Light		12455.5	24.9			

BUG Rating: B5-U2-G5

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°
0°	1498
5°	1580
15°	1350
25°	2093
35°	2895
45°	4148
50°	5175
55°	6663
60°	9155
62.5°	10630
65°	12084
67.5°	13019
70°	13086
72.5°	12018
75°	10274
77.5°	8107
80°	5796
82.5°	3538
85°	1895
87.5°	654
90°	49
95°	0
105°	0
115°	0
125°	0
135°	0
145°	0
155°	0
165°	0
175°	0
180°	0

(END OF REPORT)