

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: 766059

Luminaire Tested: **HMX40SXXCS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 766059
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: HMX40SXXCS
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: 32515.4 lumens
Efficiency: 65.0%
Efficacy: 81.3 lumens/watt
Luminous Opening: (L: 0 ' x W: -2.33 ' x H: 2 '
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G2

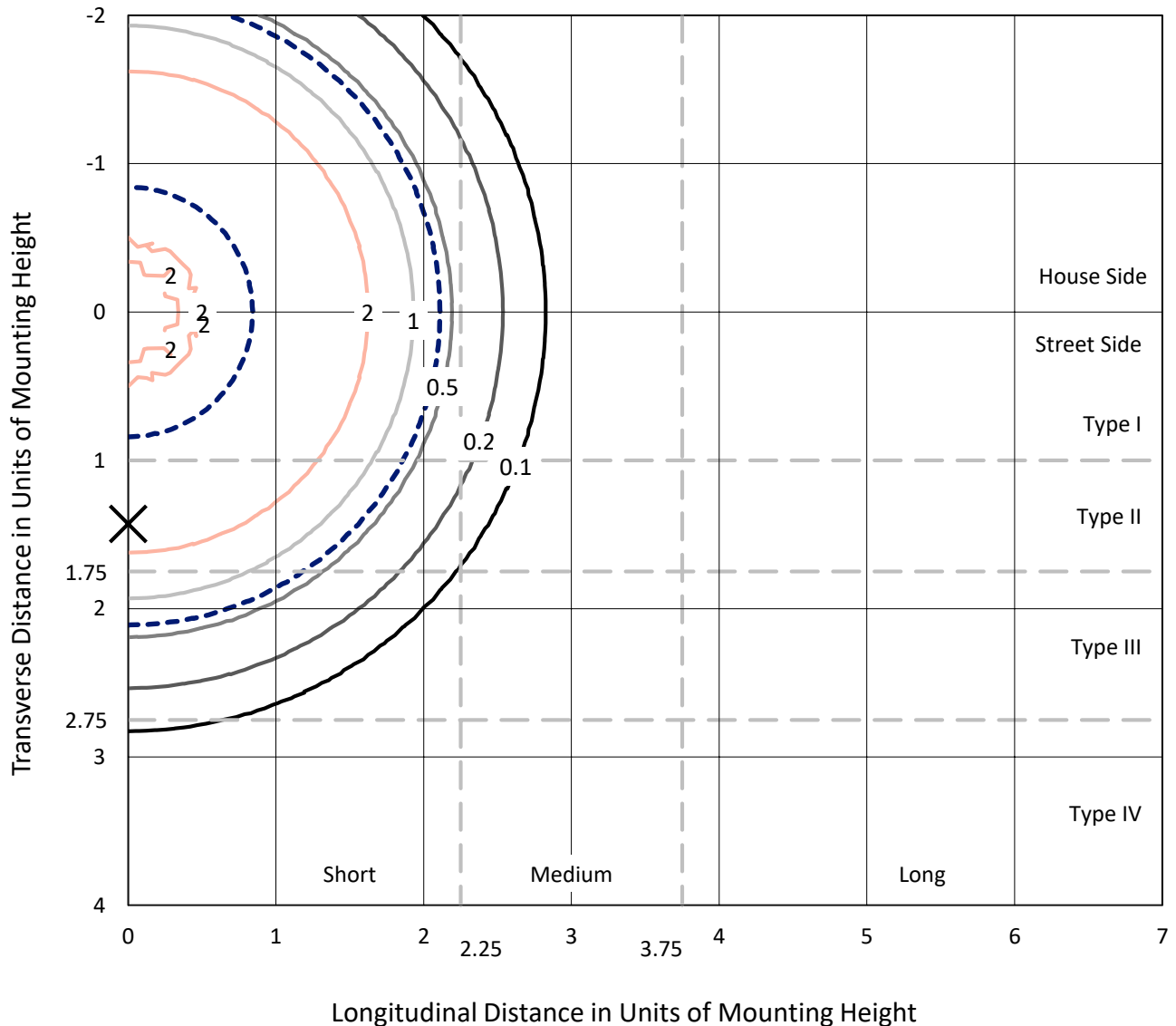
Input Watts (W): 400
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

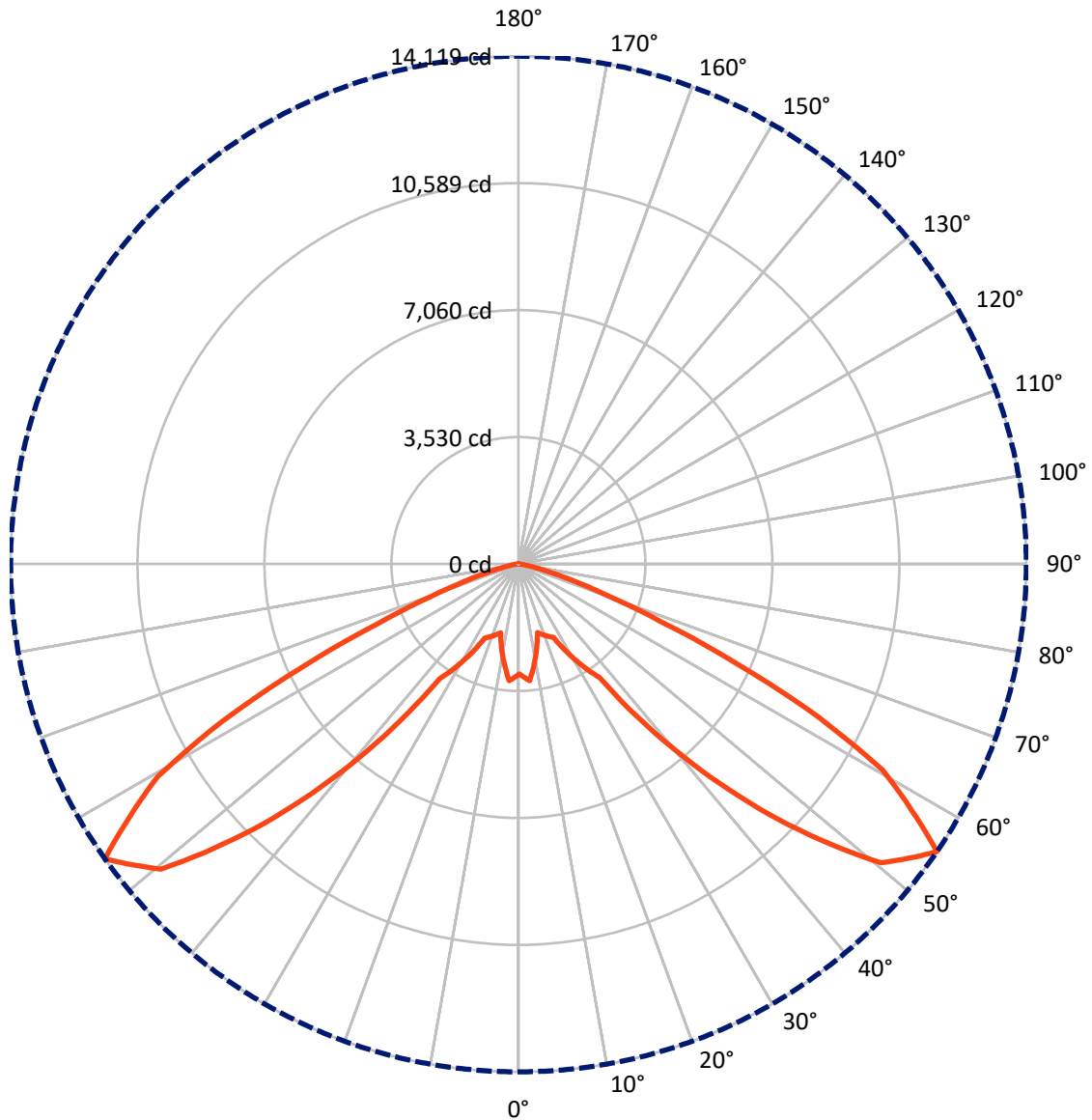
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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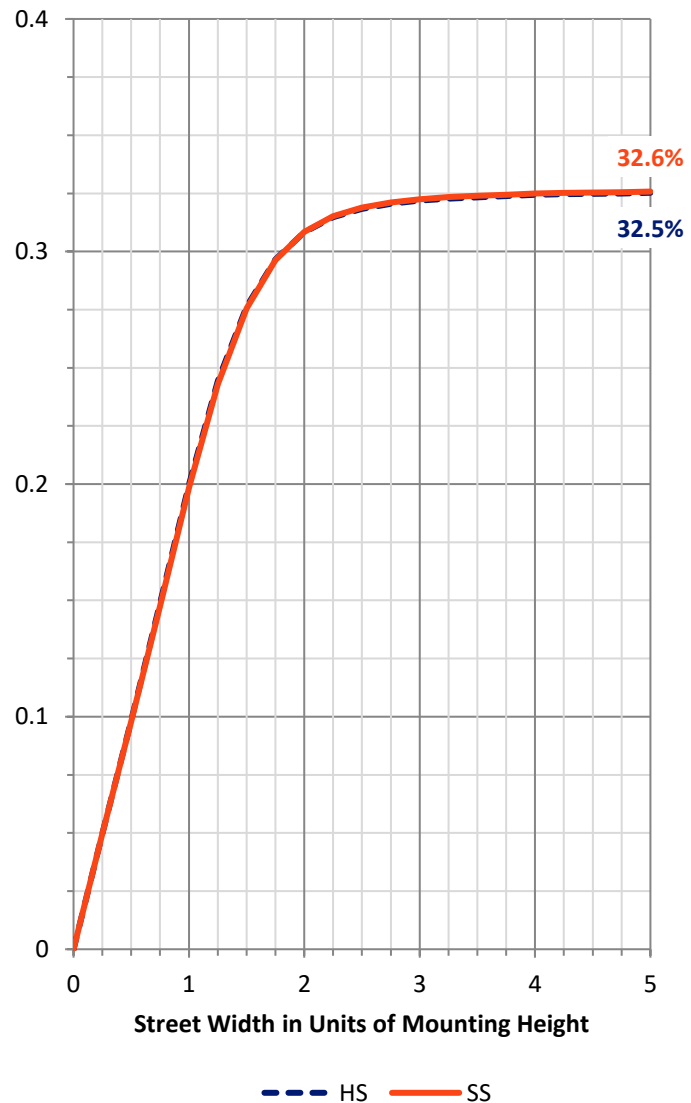
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16257.7	0.0	16257.7
	% Lamp	32.5	0.0	32.5
Street Side	Lumens	16257.7	0.0	16257.7
	% Lamp	32.5	0.0	32.5
Total	Lumens	32515.4	0.0	32515.4
	% Lamp	65.0	0.0	65.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	285.6	0.9	0.6
10°-20°	671.2	2.1	1.3
20°-30°	1200.2	3.7	2.4
30°-40°	3163.3	9.7	6.3
40°-50°	7769.6	23.9	15.5
50°-60°	11862.6	36.5	23.7
60°-70°	6741.0	20.7	13.5
70°-80°	1167.7	3.6	2.3
80°-90°	79.4	0.2	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°	32515.4	100.0	65.0
0°-180°	32515.4	100.0	65.0

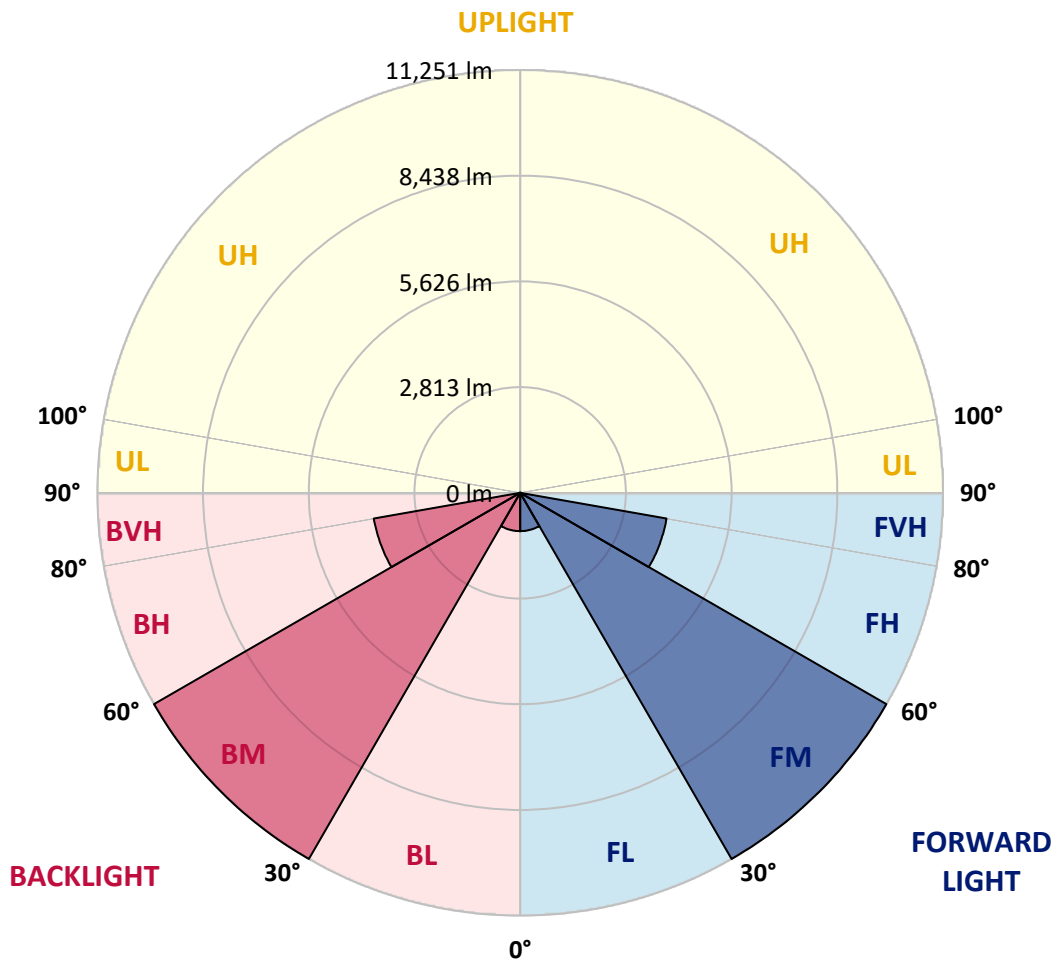


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1020.7	2.0			
FM (30°-60°)	11251.3	22.5			
FH (60°-80°)	3954.3	7.9			G2/5000
FVH (80°-90°)	39.7	0.1			G1/100
BL (0°-30°)	1020.7	2.0	B3/2500		
BM (30°-60°)	11251.3	22.5	B5		
BH (60°-80°)	3954.3	7.9	B4/5000		G2/5000
BVH (80°-90°)	39.7	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	17484.6	35.0			

BUG Rating: B5-U0-G2
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°
0°	3055
5°	3258
15°	1975
25°	2263
35°	3871
45°	10137
50°	13061
55°	14119
60°	11634
62.5°	9330
65°	6675
67.5°	4273
70°	2621
72.5°	1588
75°	912
77.5°	507
80°	263
82.5°	116
85°	40
87.5°	5
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)