

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: 766061

Luminaire Tested: **HMX40SXXDW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 766061
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: HMX40SXXDW
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: 32229.8 lumens
Efficiency: 64.5%
Efficacy: 80.6 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type V - Short - Cutoff
BUG Rating: B5 - U3 - G5

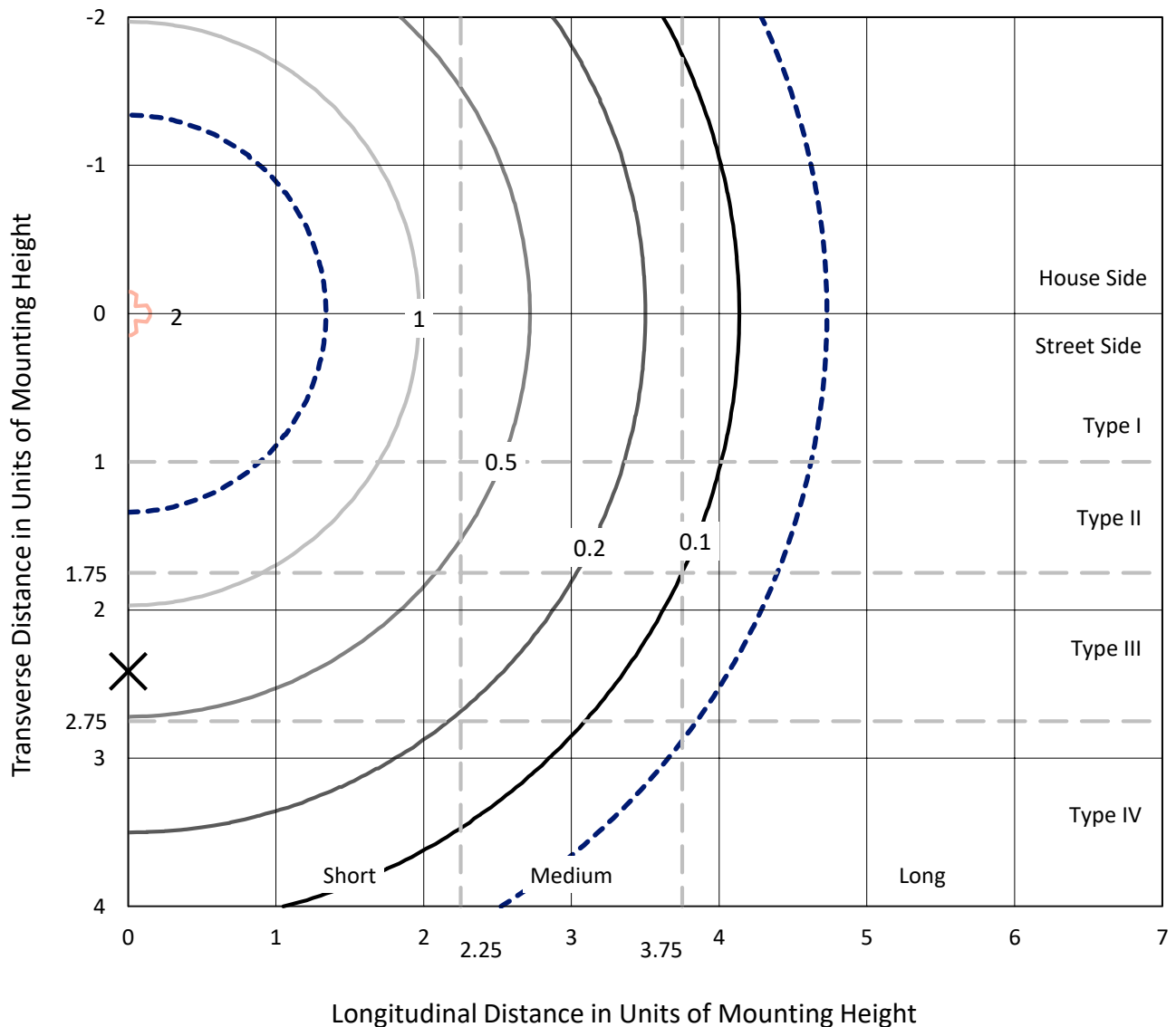
Input Watts (W): 400
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

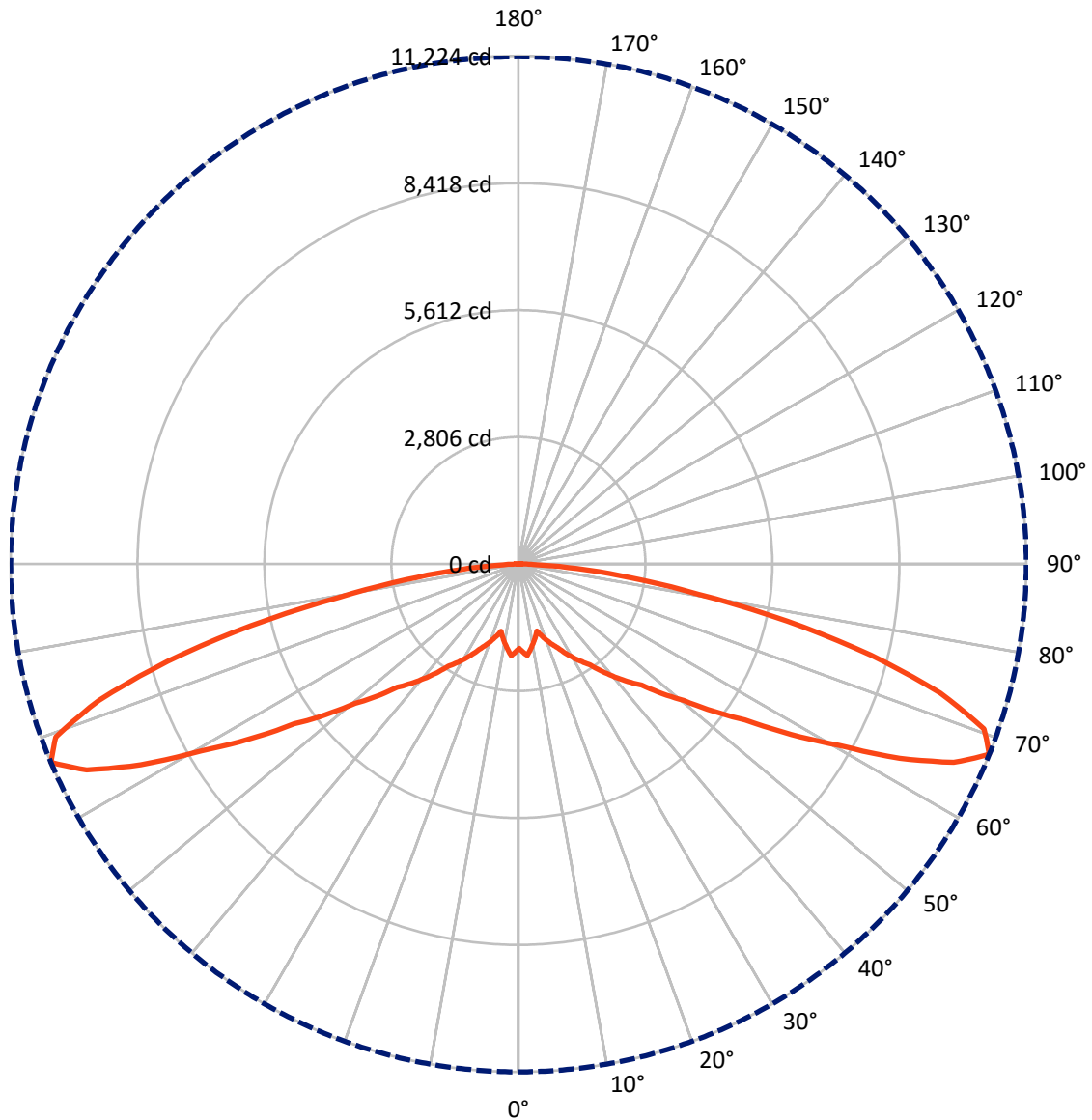
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 2.1 fc
 Type V - Short - 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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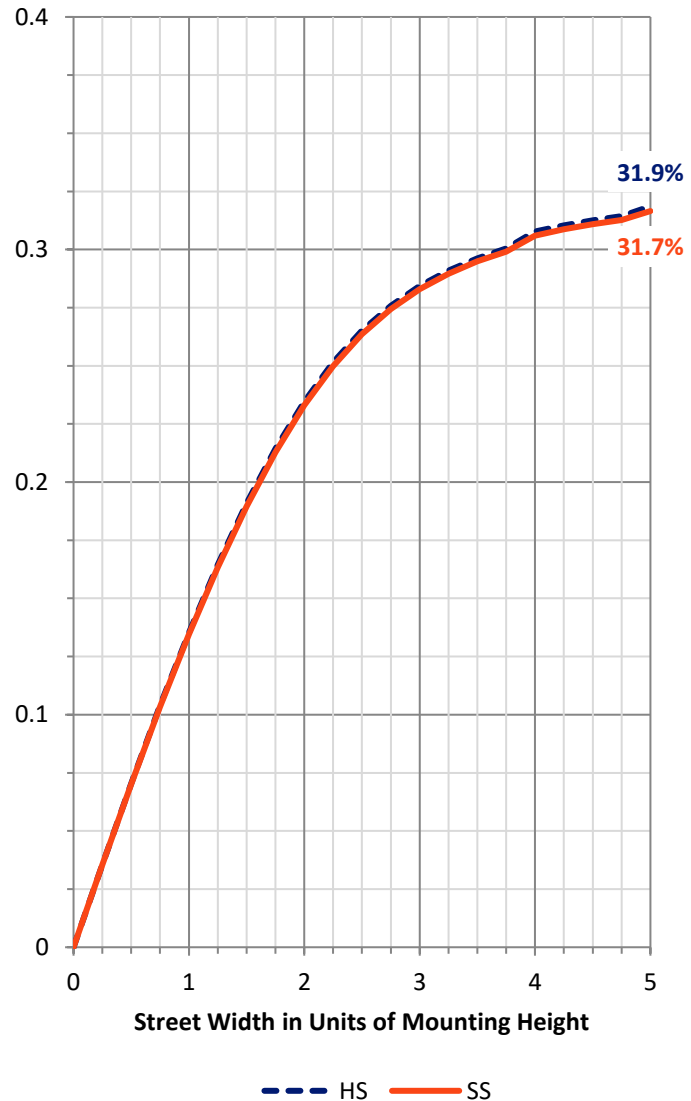
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16071.9	43.0	16114.9
	% Lamp	32.1	0.1	32.2
Street Side	Lumens	16071.9	43.0	16114.9
	% Lamp	32.1	0.1	32.2
Total	Lumens	32143.8	86.0	32229.8
	% Lamp	64.3	0.2	64.5

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	183.0	0.6	0.4
10°-20°	508.3	1.6	1.0
20°-30°	974.2	3.0	1.9
30°-40°	1786.6	5.5	3.6
40°-50°	3107.7	9.6	6.2
50°-60°	5639.5	17.5	11.3
60°-70°	10137.7	31.5	20.3
70°-80°	8262.3	25.6	16.5
80°-90°	1684.8	5.2	3.4
90°-100°	69.0	0.2	0.1
100°-110°	22.7	0.1	0.0
110°-120°	2.5	0.0	0.0
120°-130°	0.4	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°	32143.8	99.7	64.3
0°-180°	32229.8	100.0	64.5

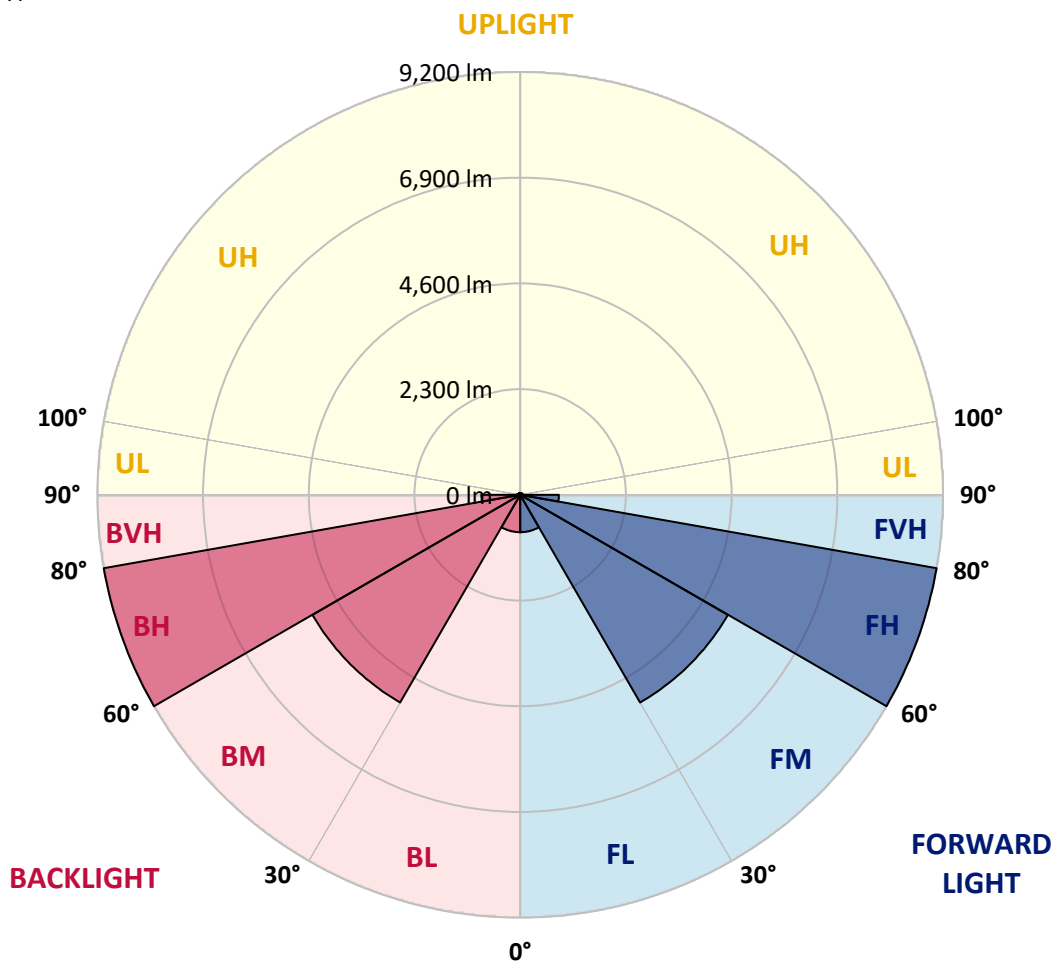


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	813.8	1.6			
FM (30°-60°)	5219.2	10.4			
FH (60°-80°)	9200.0	18.4			G4/12000
FVH (80°-90°)	842.4	1.7			G5
BL (0°-30°)	813.8	1.6	B2/1000		
BM (30°-60°)	5219.2	10.4	B4/8500		
BH (60°-80°)	9200.0	18.4	B5		G4/12000
BVH (80°-90°)	842.4	1.7			G5
UL (90°-100°)	69.0	0.1		U3/500	
UH (100°-180°)	43.0	0.1		U2/50	
Trapped Light	17770.2	35.5			

BUG Rating: B5-U3-G5
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°
0°	1864
5°	2030
15°	1536
25°	2070
35°	2743
45°	3820
50°	4744
55°	6081
60°	8134
62.5°	9453
65°	10570
67.5°	11224
70°	10918
72.5°	9755
75°	8045
77.5°	6071
80°	4026
82.5°	2508
85°	1307
87.5°	334
90°	70
95°	72
105°	6
115°	2
125°	0
135°	0
145°	0
155°	0
165°	0
175°	0
180°	0

(END OF REPORT)