

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: 766058

Luminaire Tested: **HMX40SXXNS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 766058
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: HMX40SXXNS
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: 36133 lumens
Efficiency: 72.3%
Efficacy: 90.3 lumens/watt
Luminous Opening: (L: 0 ' x W: -2.33 ' x H: 2 '
IES Classification: Type V - Short - Cutoff
BUG Rating: B5 - U1 - G2

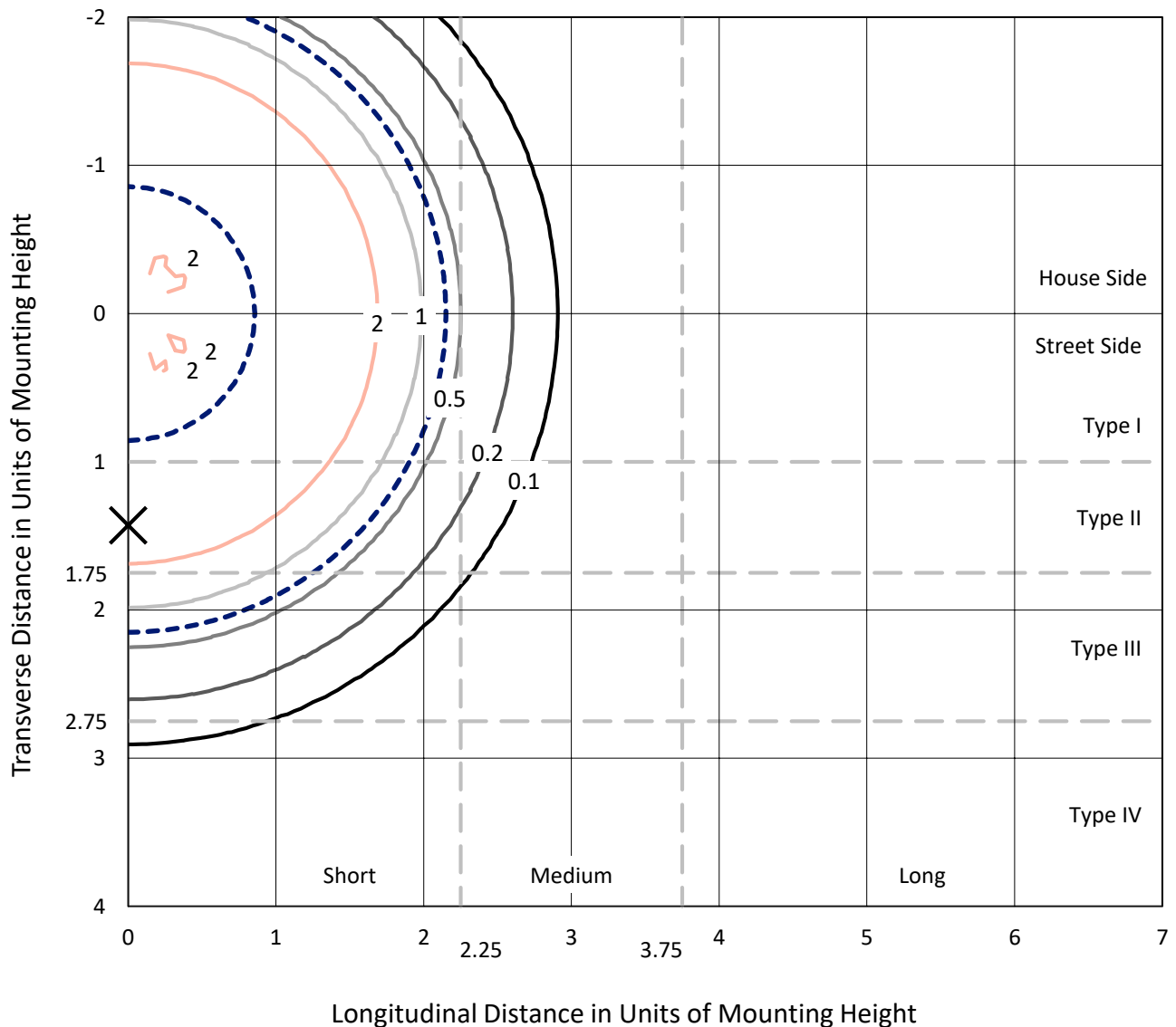
Input Watts (W): 400
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: 766058
 CATALOG NUMBER: HMX40SXXNS

Iso-Footcandle Lines of Horizontal Illumination

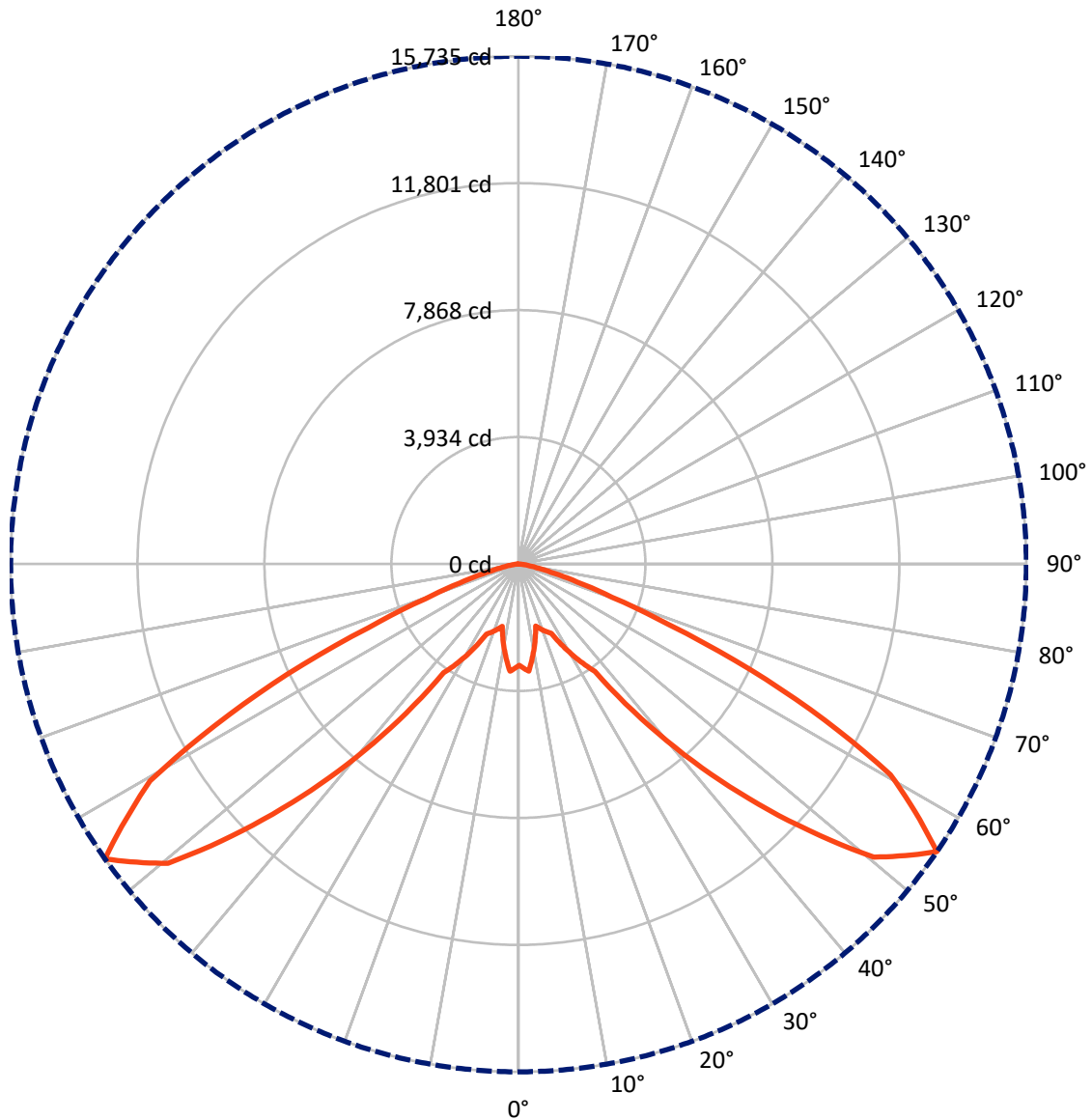
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.3 fc
 Type V - Short - Cutoff

REPORT NUMBER: 766058
CATALOG NUMBER: HMX40SXXNS

Luminous Intensity Polar Plot



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

REPORT NUMBER: 766058
 CATALOG NUMBER: HMX40SXXNS

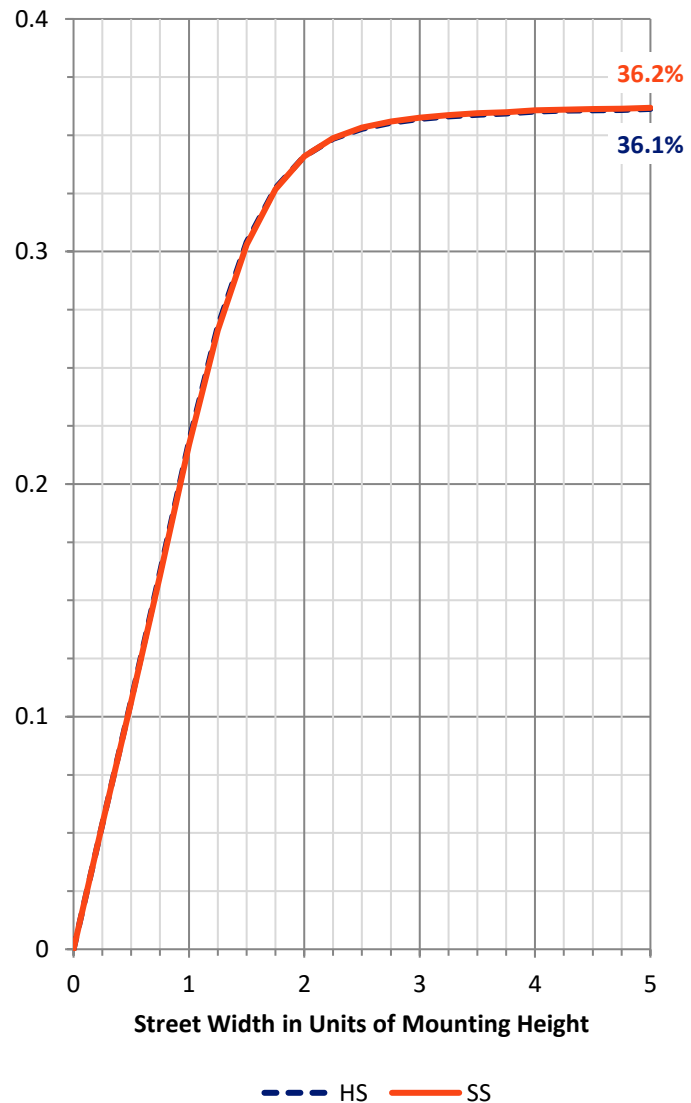
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18066.4	0.1	18066.5
	% Lamp	36.1	0.0	36.1
Street Side	Lumens	18066.4	0.1	18066.5
	% Lamp	36.1	0.0	36.1
Total	Lumens	36132.7	0.3	36133.0
	% Lamp	72.3	0.0	72.3

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	291.9	0.8	0.6
10°-20°	687.9	1.9	1.4
20°-30°	1256.2	3.5	2.5
30°-40°	3365.9	9.3	6.7
40°-50°	8424.4	23.3	16.8
50°-60°	13224.2	36.6	26.4
60°-70°	7824.9	21.7	15.6
70°-80°	1424.0	3.9	2.8
80°-90°	136.8	0.4	0.3
90°-100°	0.3	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°	36132.7	100.0	72.3
0°-180°	36133.0	100.0	72.3

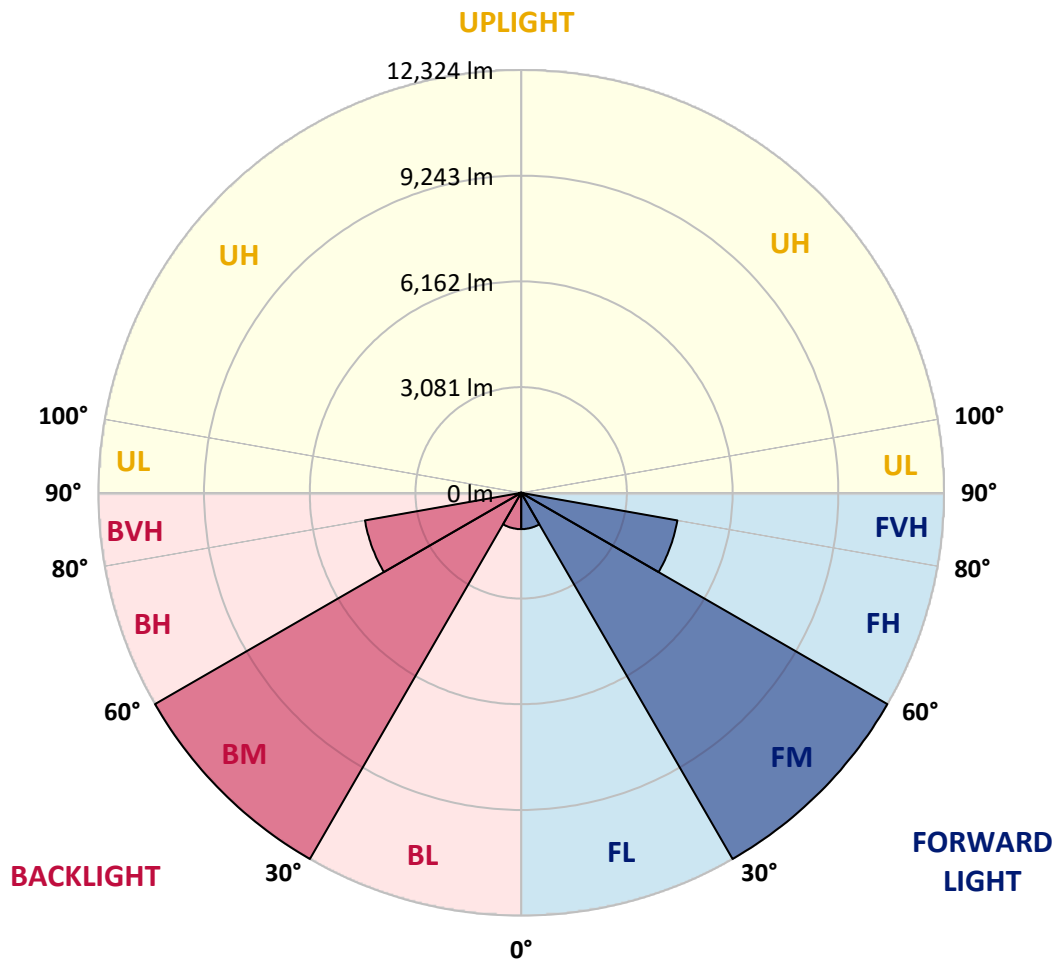


REPORT NUMBER: 766058
 CATALOG NUMBER: HMX40SXXNS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1058.0	2.1			
FM (30°-60°)	12324.3	24.6			
FH (60°-80°)	4624.5	9.2			G2/5000
FVH (80°-90°)	68.4	0.1			G1/100
BL (0°-30°)	1058.0	2.1	B3/2500		
BM (30°-60°)	12324.3	24.6	B5		
BH (60°-80°)	4624.5	9.2	B4/5000		G2/5000
BVH (80°-90°)	68.4	0.1			G1/100
UL (90°-100°)	0.3	0.0		U1/10	
UH (100°-180°)	0.1	0.0		U1/10	
Trapped Light	13867.0	27.7			

BUG Rating: B5-U1-G2
 Type V Short





REPORT NUMBER: 766058
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CANDELA DISTRIBUTION (FULL):

	0°
0°	3140
5°	3333
15°	1994
25°	2386
35°	4090
45°	10866
50°	14278
55°	15735
60°	13244
62.5°	10650
65°	7930
67.5°	5060
70°	3079
72.5°	1914
75°	1137
77.5°	647
80°	372
82.5°	201
85°	90
87.5°	26
90°	1
95°	0
105°	0
115°	0
125°	0
135°	0
145°	0
155°	0
165°	0
175°	0
180°	0

(END OF REPORT)