

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: 766031

Luminaire Tested: **GSM-XX-400-HPS-XX-AS-SG-XX-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 766031
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GSM-XX-400-HPS-XX-AS-SG-XX-X
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-VERTICAL LAMP-SQUARE DISTRIBUTION
Light Source: 400 WATT HPS CLEAR E-18
Ballast/Driver: -

Summary

Lumens per Lamp: 50000 (1 lamp)
Luminaire Lumens: 34867.9 lumens
Efficiency: 69.7%
Efficacy: 87.2 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type V - Short - Semi-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: 25 FT

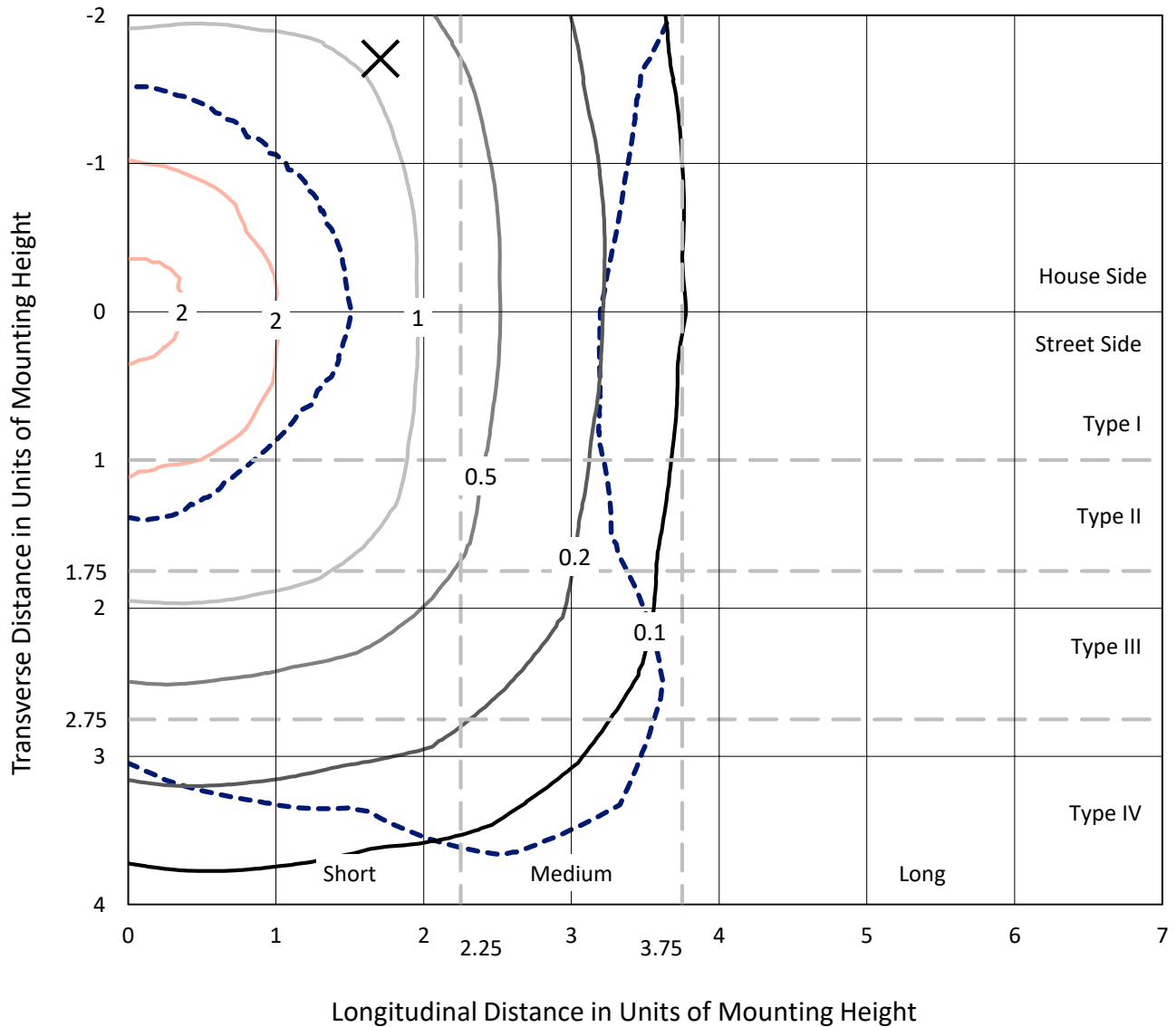


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

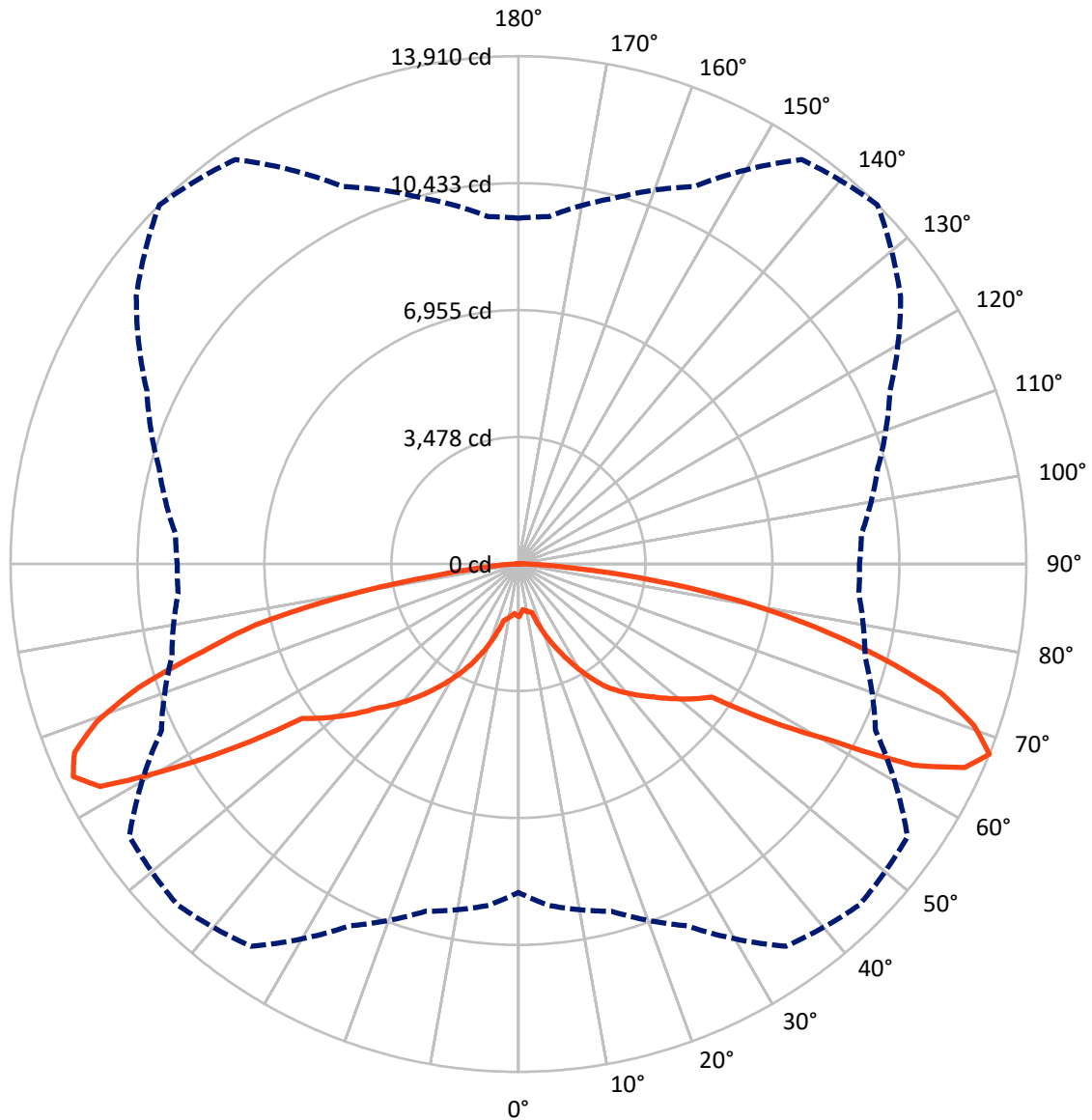


Based on 30 foot mounting height. Maximum calculated value = 2.7 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 135-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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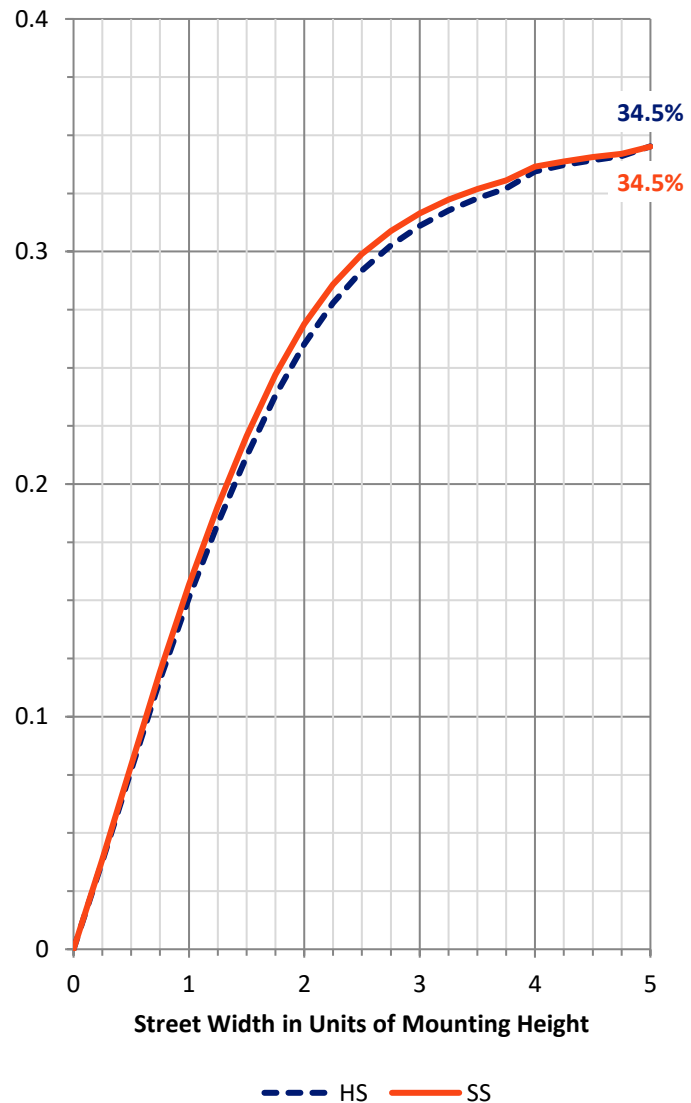
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17374.3	57.8	17432.1
	% Lamp	34.7	0.1	34.9
Street Side	Lumens	17381.0	54.8	17435.8
	% Lamp	34.8	0.1	34.9
Total	Lumens	34755.3	112.6	34867.9
	% Lamp	69.5	0.2	69.7

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	131.6	0.4	0.3
10°-20°	509.9	1.5	1.0
20°-30°	1313.7	3.8	2.6
30°-40°	2581.2	7.4	5.2
40°-50°	4102.5	11.8	8.2
50°-60°	6447.6	18.5	12.9
60°-70°	10725.2	30.8	21.5
70°-80°	7584.2	21.8	15.2
80°-90°	1388.4	4.0	2.8
90°-100°	78.6	0.2	0.2
100°-110°	31.0	0.1	0.1
110°-120°	7.5	0.0	0.0
120°-130°	0.7	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°	34755.3	99.7	69.5
0°-180°	34867.9	100.0	69.7



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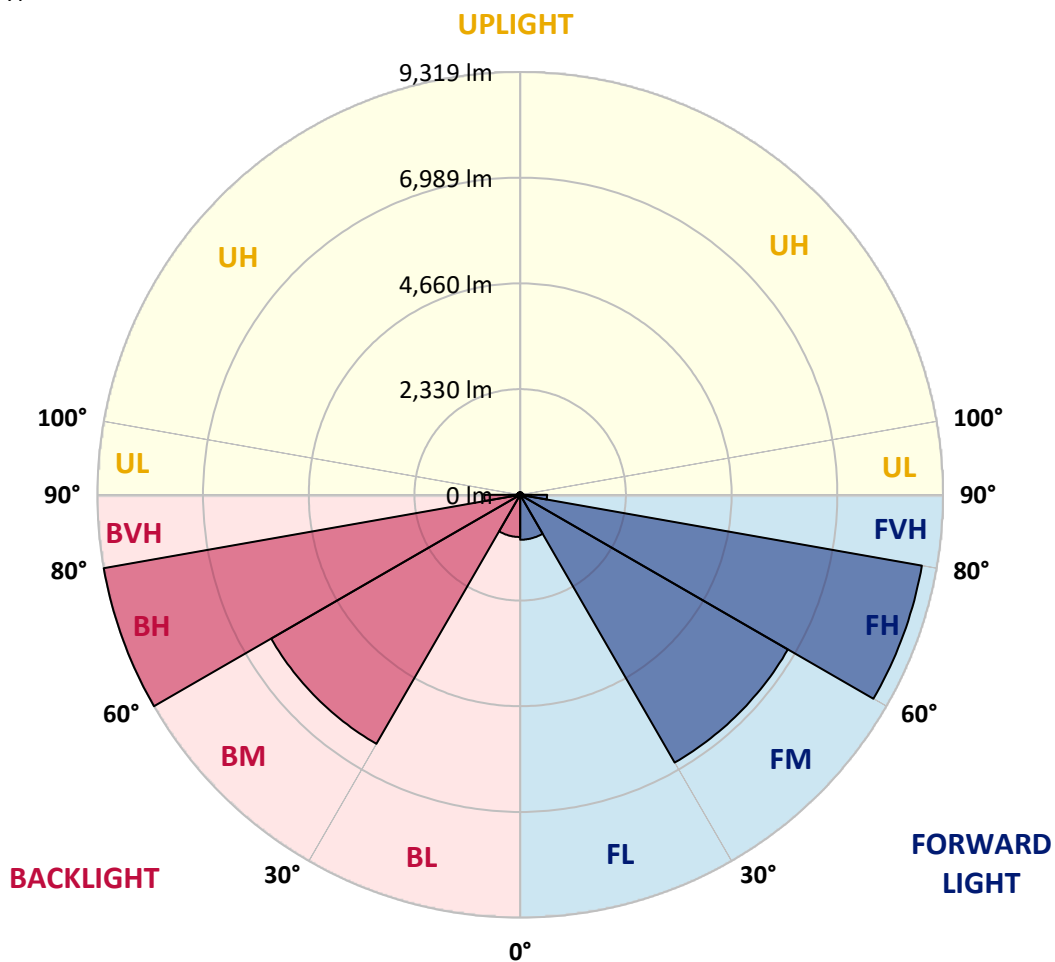
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	990.3	2.0			
FM	(30°-60°)	6813.3	13.6			
FH	(60°-80°)	8990.2	18.0			G4/12000
FVH	(80°-90°)	594.1	1.2			G4/750
BL	(0°-30°)	930.7	1.9	B2/1000		
BM	(30°-60°)	6336.9	12.7	B4/8500		
BH	(60°-80°)	9319.2	18.6	B5		G4/12000
BVH	(80°-90°)	794.3	1.6			G5
UL	(90°-100°)	78.6	0.2		U3/500	
UH	(100°-180°)	57.8	0.1		U3/500	
Trapped Light		15132.1	30.3			

BUG Rating: B5-U3-G5

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1446	1446	1446	1446	1446	1446	1446	1446	1446	1446	1446
5°	1305	1344	1357	1346	1371	1360	1312	1437	1386	1454	1472
15°	1606	1568	1579	1635	1611	1596	1554	1559	1534	1536	1511
25°	2819	2783	2997	3020	2990	2932	2949	2883	2914	2854	2811
35°	4297	4343	4324	4177	4331	4207	4432	4076	4299	4034	3988
45°	5466	5557	5371	5615	5452	5540	5422	5461	5239	5256	4985
50°	6426	6070	6046	6297	6394	6419	6208	6219	5804	5675	5338
55°	6919	6844	7007	7132	7331	7283	7310	6933	6638	6353	6184
60°	9140	9101	9326	10040	10714	11052	10742	9930	8994	8632	8567
62.5°	9493	9666	10346	11144	12203	12978	12435	11095	10049	9652	9588
65°	9460	9747	10415	11361	12850	13511	13139	11283	10260	9851	9812
67.5°	8995	9382	9847	10931	12780	13206	13010	10790	9827	9357	9343
70°	8021	8330	8786	9815	11788	12325	12055	9717	8526	8269	8159
72.5°	6476	6924	7592	8633	10402	10939	10755	8484	7268	7012	6973
75°	5129	5499	6137	6760	8902	8960	8889	6497	5687	5160	5469
77.5°	3571	3937	4411	5334	6817	7384	6685	5035	3690	3675	3773
80°	2252	2403	2633	3205	4393	4941	4279	2943	2506	2402	2804
82.5°	1394	1534	1465	1648	2441	2331	2286	1422	1225	1129	1844
85°	345	387	544	765	811	857	832	653	445	451	419
87.5°	170	210	294	321	411	347	426	256	234	178	206
90°	47	38	68	110	163	114	164	90	75	56	33
95°	11	15	57	92	113	65	125	72	53	17	10
105°	6	11	32	42	25	14	15	35	26	11	7
115°	0	3	3	4	4	6	6	3	3	3	1
125°	0	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1446	1446	1446	1446	1446	1446	1446	1446	1446	1446
5°	1386	1468	1365	1351	1257	1286	1223	1113	1099	1144
15°	1502	1502	1407	1403	1378	1475	1486	1426	1443	1528
25°	2787	2798	2732	2606	2687	2721	2766	2812	2885	2883
35°	4147	4034	4020	3888	4129	4006	4120	4189	4137	4353
45°	5170	5198	5044	4905	5193	5211	5118	5191	5114	5230
50°	5533	5685	5697	5587	5807	5801	5622	5506	5390	5669
55°	6314	6311	6375	6245	6439	6449	6348	6205	6060	6106
60°	8836	8656	8960	9308	9780	10057	9198	8860	8482	8528
62.5°	9518	9993	10652	10939	12130	11991	10758	10021	9219	9065
65°	9767	10522	11251	12225	13433	13088	11440	10430	9574	9446
67.5°	9429	10192	11229	12776	13910	13523	11407	10389	9550	9471
70°	8074	9120	10252	12084	13235	12907	10744	9553	8836	8625
72.5°	7214	7931	8978	10865	12102	11732	9388	8169	7598	7325
75°	5377	6166	7101	9330	10285	9944	7924	6635	6163	6148
77.5°	3581	4491	5675	7334	8304	7954	6120	4943	4635	4378
80°	2591	2952	3501	5104	6183	5391	3820	3194	2814	3020
82.5°	1297	1502	2250	2929	3795	3350	2727	2079	1968	1970
85°	519	647	892	1090	1609	1482	1053	700	644	604
87.5°	189	273	358	544	532	552	504	334	262	284
90°	61	95	118	189	192	185	135	99	86	61
95°	15	54	78	129	70	93	67	50	18	11
105°	10	28	36	24	18	22	42	40	13	8
115°	1	1	3	4	3	3	3	1	0	0
125°	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)