

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: 767601

Luminaire Tested: **GSM-XX-400-HPS-XX-AR-SG-XX-HS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 767601
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GSM-XX-400-HPS-XX-AR-SG-XX-HS
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-VERTICAL LAMP-ROUND DISTRIBUTION
Light Source: 400 WATT HPS CLEAR E-18
Ballast/Driver: -

Summary

Lumens per Lamp: 50000 (1 lamp)
Luminaire Lumens: 28005.4 lumens
Efficiency: 56.0%
Efficacy: 70.0 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type IV - 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: 25 FT

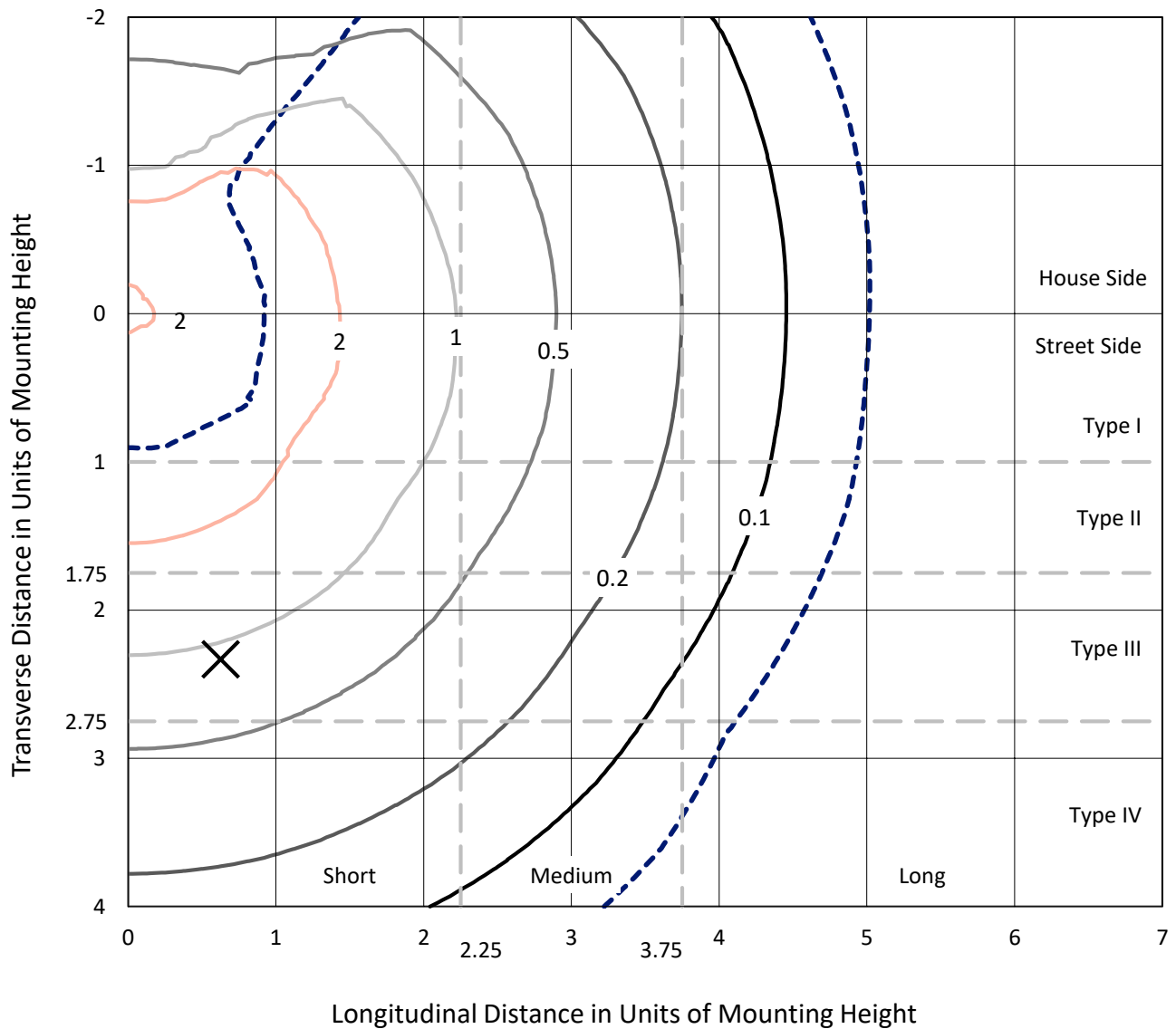


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

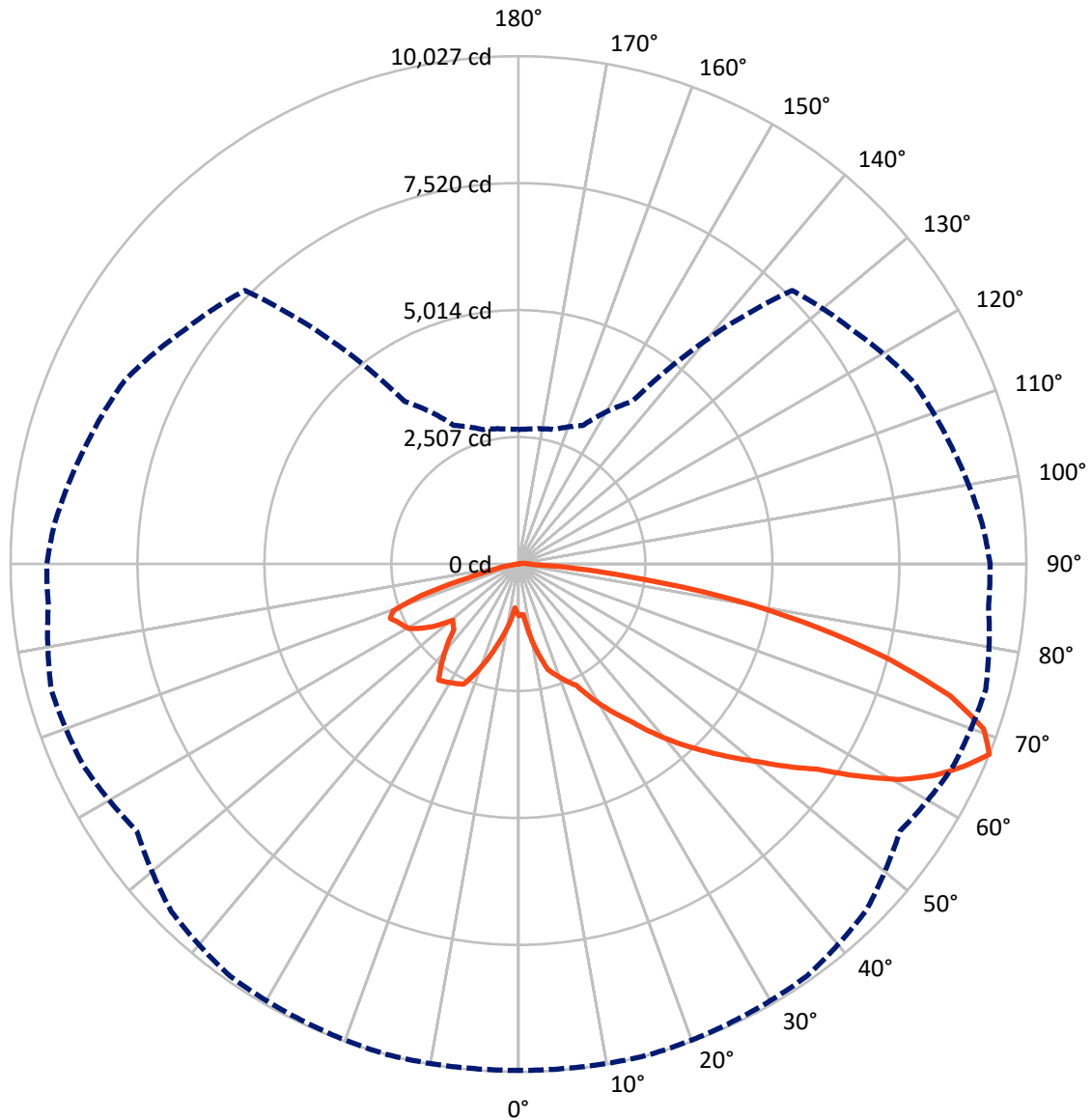


Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Short - Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 15-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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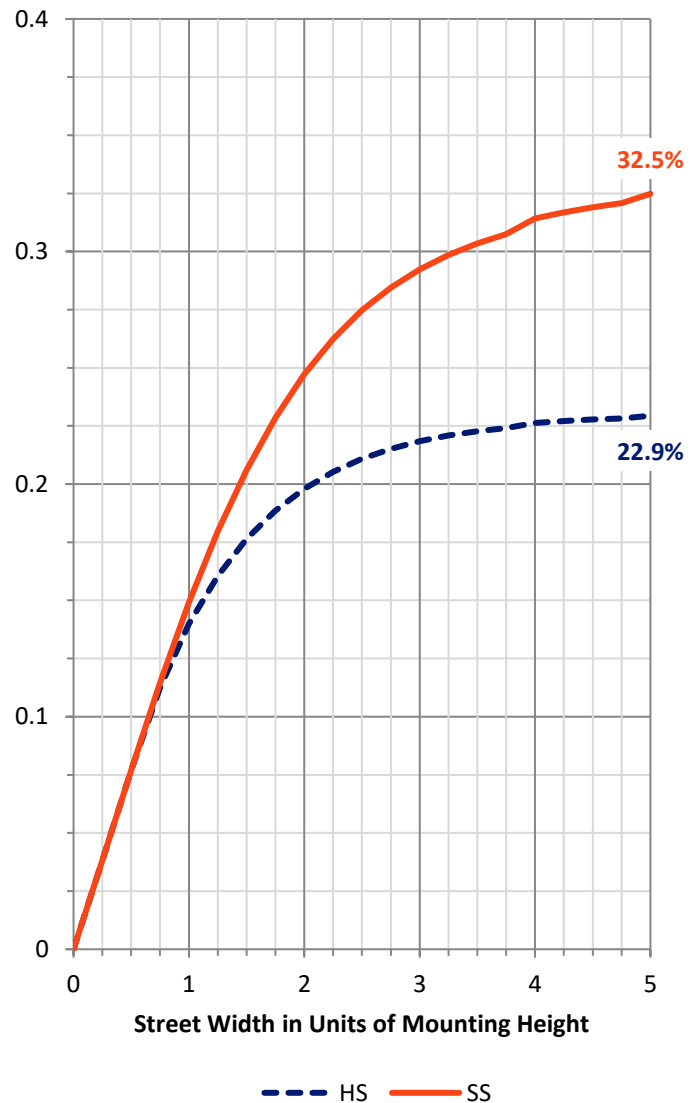
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11459.9	20.6	11480.5
	% Lamp	22.9	0.0	23.0
Street Side	Lumens	16450.0	74.9	16524.9
	% Lamp	32.9	0.1	33.0
Total	Lumens	27909.9	95.5	28005.4
	% Lamp	55.8	0.2	56.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	104.8	0.4	0.2
10°-20°	508.2	1.8	1.0
20°-30°	1224.5	4.4	2.4
30°-40°	2279.3	8.1	4.6
40°-50°	3649.3	13.0	7.3
50°-60°	5326.7	19.0	10.7
60°-70°	7446.7	26.6	14.9
70°-80°	6161.6	22.0	12.3
80°-90°	1221.0	4.4	2.4
90°-100°	79.4	0.3	0.2
100°-110°	22.4	0.1	0.0
110°-120°	1.9	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°	27909.9	99.7	55.8
0°-180°	28005.4	100.0	56.0



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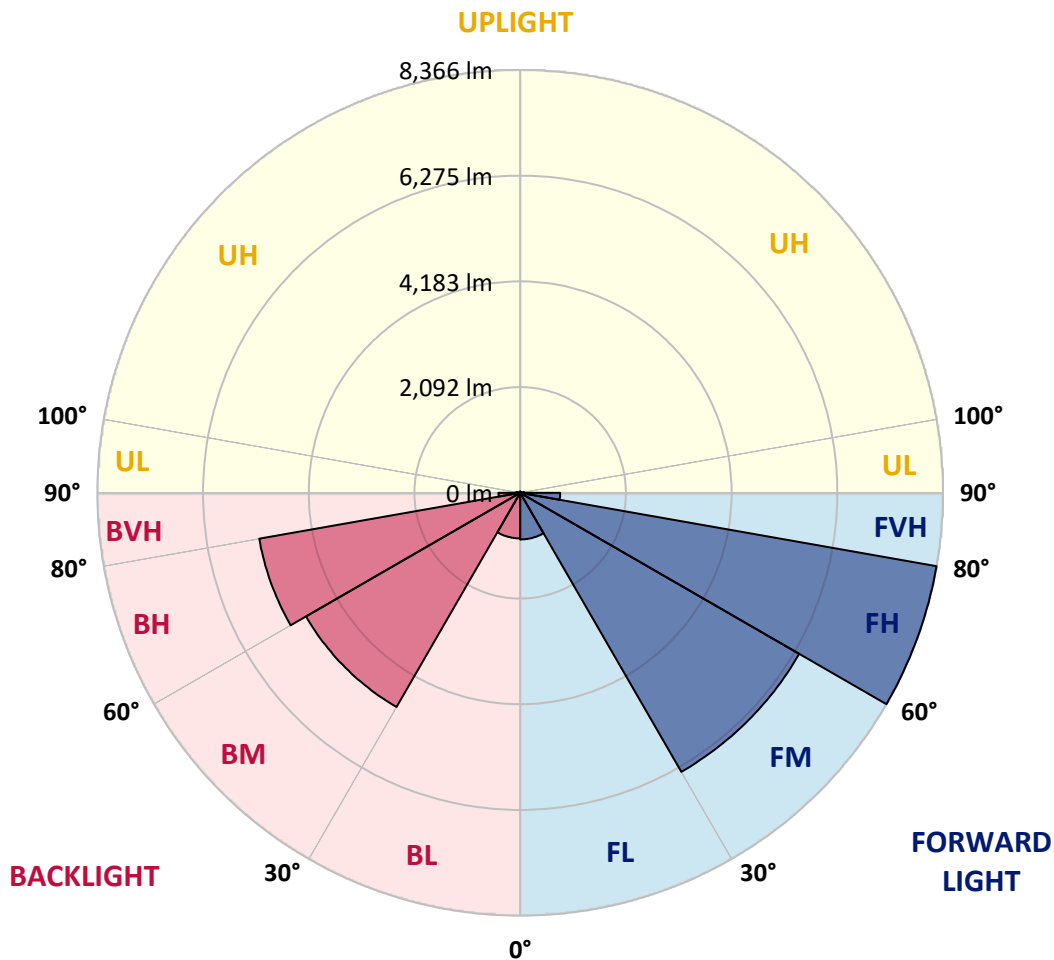
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	923.5	1.8			
FM	(30°-60°)	6374.9	12.7			
FH	(60°-80°)	8366.2	16.7			G4/12000
FVH	(80°-90°)	791.5	1.6			G5
BL	(0°-30°)	901.8	1.8	B2/1000		
BM	(30°-60°)	4891.3	9.8	B3/5000		
BH	(60°-80°)	5242.1	10.5	B5		G5
BVH	(80°-90°)	429.5	0.9			G3/500
UL	(90°-100°)	79.4	0.2		U3/500	
UH	(100°-180°)	20.6	0.0		U2/50	
Trapped Light		21994.6	44.0			

BUG Rating: B5-U3-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021
5°	1021	1016	1001	980	960	934	904	888	873	868	878
15°	2154	2149	2154	2139	2042	1899	1772	1772	1818	1761	1777
25°	2716	2701	2655	2604	2578	2435	2323	2384	2481	2512	2542
35°	3972	3895	3809	3798	3804	3625	3400	3569	3712	3742	3747
45°	5422	5432	5304	5442	5366	5177	4871	5238	5330	5396	5407
50°	6086	6203	6132	6142	6223	5917	5662	5958	6121	6096	6254
55°	7199	7199	7148	7076	7076	6724	6407	6581	6800	6586	6535
60°	8669	8689	8643	8592	8511	8199	7714	7934	8036	7842	7755
62.5°	9241	9225	9200	9139	9088	8776	8281	8521	8608	8409	8342
65°	9710	9700	9649	9608	9557	9282	8797	9072	9164	8945	8894
67.5°	9996	10001	10027	9976	9930	9695	9195	9465	9552	9317	9312
70°	9700	9700	9746	9726	9700	9491	9047	9261	9394	9190	9246
72.5°	8863	8904	8914	8878	8888	8725	8337	8521	8679	8557	8608
75°	7566	7571	7602	7561	7566	7444	7122	7255	7382	7311	7326
77.5°	6035	6055	6055	6060	6055	5973	5682	5789	5892	5841	5846
80°	4329	4309	4375	4350	4334	4253	4069	4095	4151	4115	4130
82.5°	2440	2471	2497	2517	2512	2456	2297	2277	2313	2231	2226
85°	1062	1072	1133	1098	1077	1036	970	909	858	802	807
87.5°	286	296	286	271	255	245	225	199	168	148	138
90°	214	209	204	204	199	189	179	158	128	107	97
95°	123	123	117	107	107	107	123	117	107	82	82
105°	31	20	15	10	5	5	10	10	15	15	10
115°	0	0	0	0	0	0	0	0	0	0	0
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
166°	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°	1021	1021	1021	1021	1021	1021	1021	1021	1021	1021
5°	868	873	878	888	883	873	878	868	868	868
15°	1777	1782	1843	1848	1853	1818	1680	1639	1644	1644
25°	2558	2558	2573	2583	2594	2604	2614	2609	2609	2604
35°	3752	3829	3819	3814	3839	3788	3410	2782	2711	2696
45°	5274	5463	5345	5238	5049	4748	2885	1818	1629	1613
50°	5932	6178	5907	5789	5636	4763	2430	1705	1685	1664
55°	6499	6489	6366	6269	6172	4605	2435	2144	2093	2083
60°	7663	7469	7336	7148	6964	4350	2660	2512	2476	2471
62.5°	8209	7964	7765	7484	7239	4140	2762	2578	2578	2573
65°	8781	8419	8199	7806	7505	3967	2869	2650	2650	2634
67.5°	9190	8863	8577	8051	7638	3916	3017	2747	2675	2655
70°	9164	8904	8659	7913	7449	3967	3068	2639	2568	2542
72.5°	8582	8419	8250	7403	6826	3589	2890	2017	1664	1583
75°	7347	7306	7142	6448	5784	2900	2012	1021	664	653
77.5°	5871	5851	5820	5248	4610	2216	1297	526	291	255
80°	4151	4217	4197	3773	3273	1496	756	271	128	112
82.5°	2251	2287	2348	2124	1818	735	291	112	56	51
85°	781	853	878	812	623	255	107	41	15	20
87.5°	133	133	133	112	97	41	26	15	15	10
90°	92	92	82	71	66	31	15	10	10	10
95°	66	61	51	31	26	15	5	0	0	0
105°	10	5	5	5	0	5	0	0	0	0
115°	0	0	0	0	0	0	0	0	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
166°	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)