

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: 766035

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: 766035  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GSM-XX-400-HPS-XX-RW-SG-XX-X  
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-VERTICAL LAMP-RECTANGULAR DISTRIBUTION  
Light Source: 400 WATT HPS CLEAR E-18  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 50000 (1 lamp)  
Luminaire Lumens: 36111.6 lumens  
Efficiency: 72.2%  
Efficacy: 90.3 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.81' x L: 1.81' x H: 0.83')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B5 - U3 - G4

Input Watts (W): 400  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

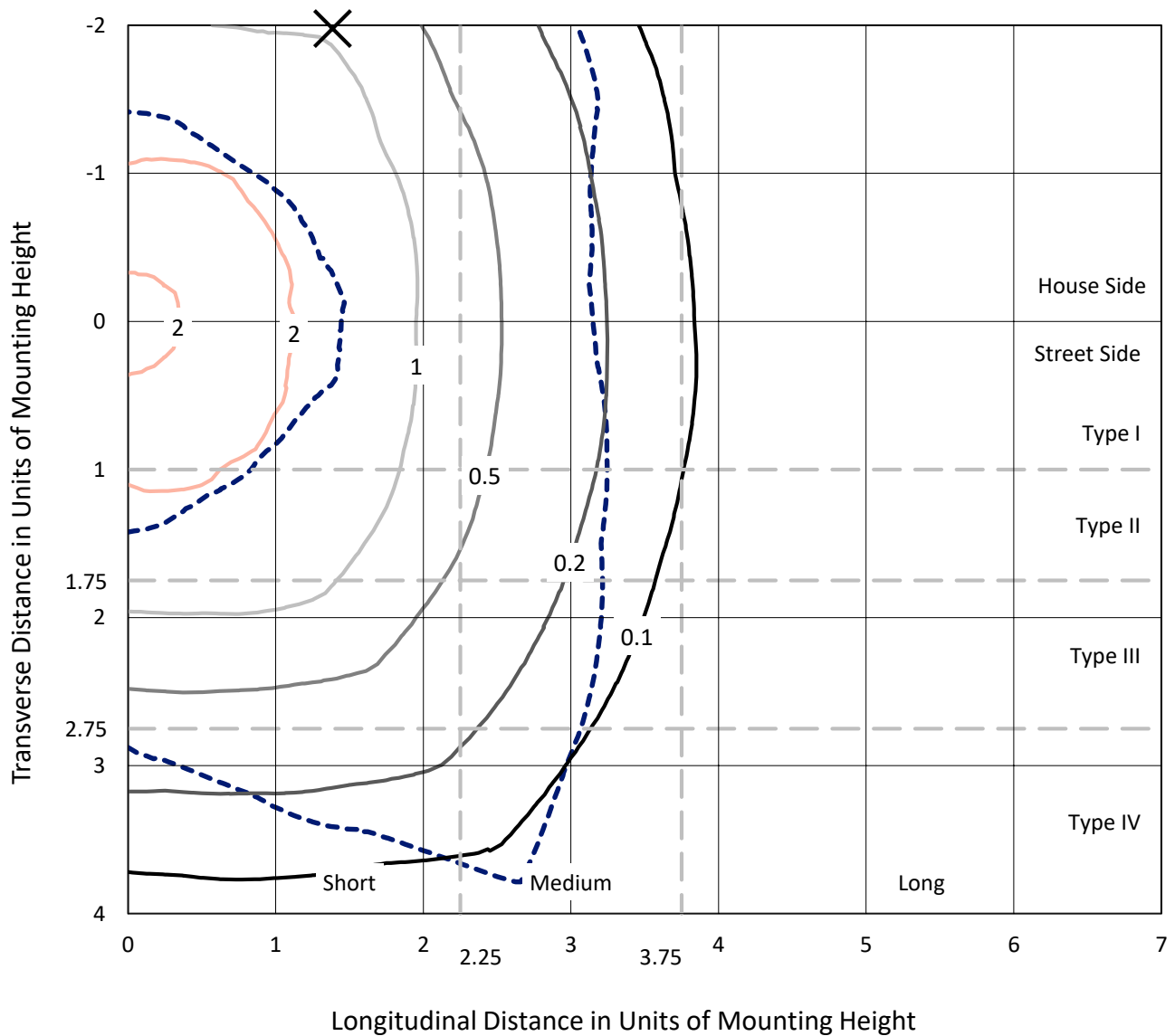


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

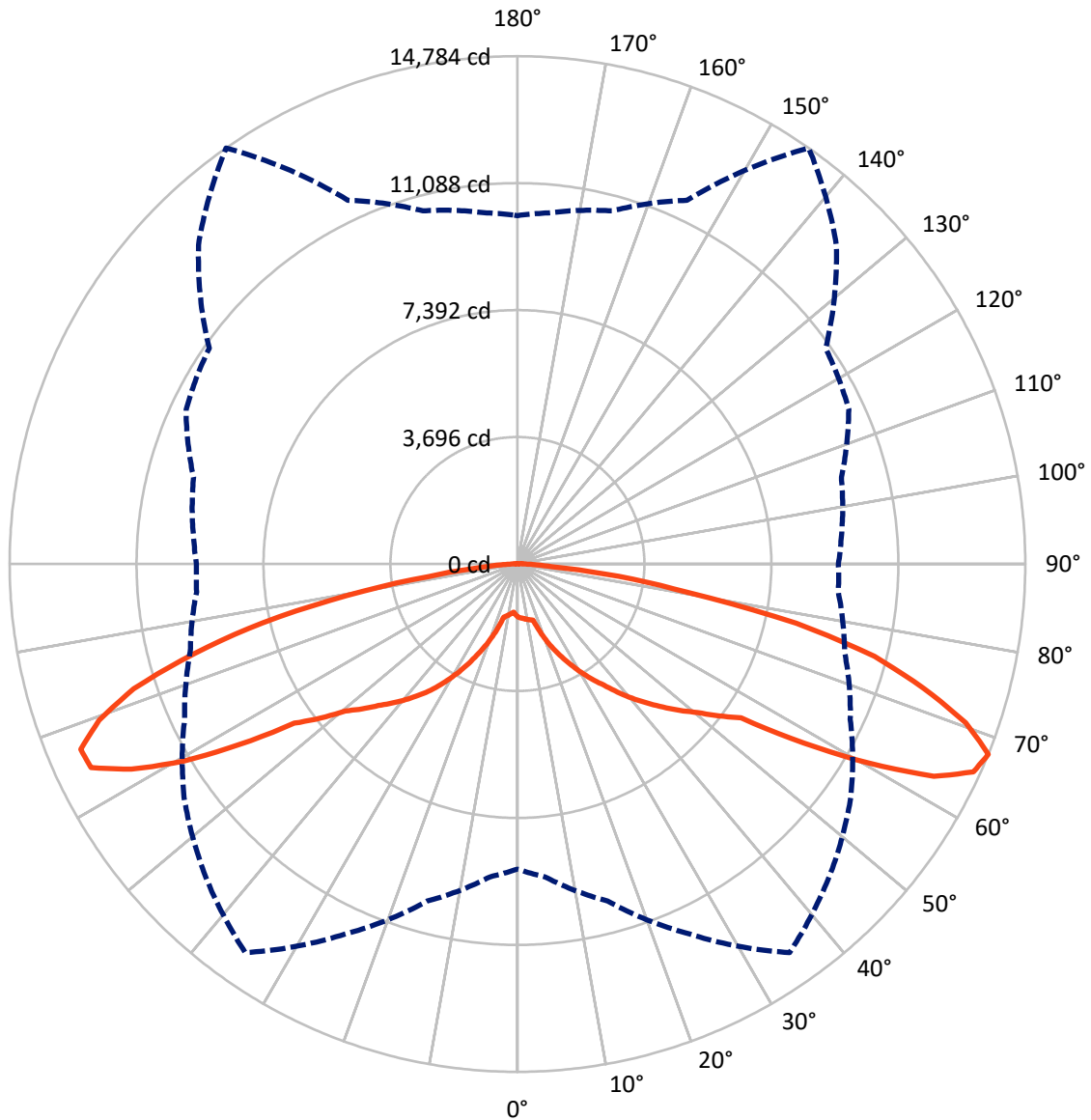


Based on 30 foot mounting height. Maximum calculated value = 2.7 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 145-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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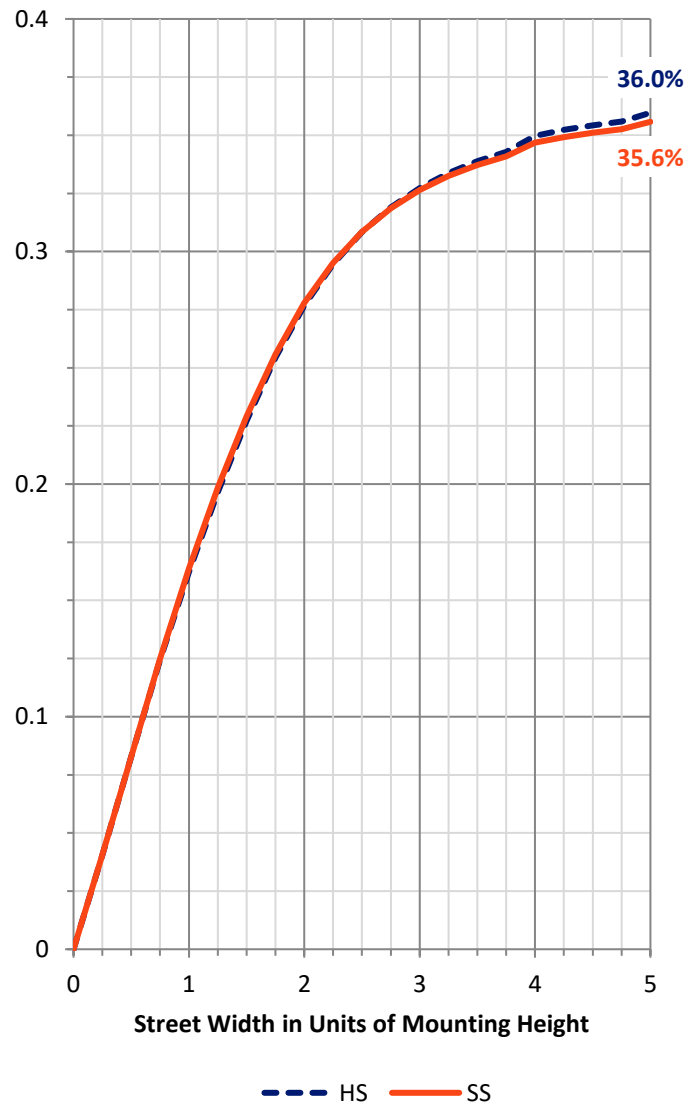
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	18036.7	76.0	18112.7
	% Lamp	36.1	0.2	36.2
<b>Street Side</b>	Lumens	17936.7	62.2	17998.9
	% Lamp	35.9	0.1	36.0
<b>Total</b>	Lumens	35973.4	138.2	36111.6
	% Lamp	71.9	0.3	72.2

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	139.6	0.4	0.3
10°-20°	534.9	1.5	1.1
20°-30°	1371.1	3.8	2.7
30°-40°	2734.3	7.6	5.5
40°-50°	4495.8	12.4	9.0
50°-60°	7131.0	19.7	14.3
60°-70°	10857.0	30.1	21.7
70°-80°	7457.9	20.7	14.9
80°-90°	1311.0	3.6	2.6
90°-100°	96.6	0.3	0.2
100°-110°	38.4	0.1	0.1
110°-120°	9.3	0.0	0.0
120°-130°	1.0	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°	35973.4	99.6	71.9
0°-180°	36111.6	100.0	72.2



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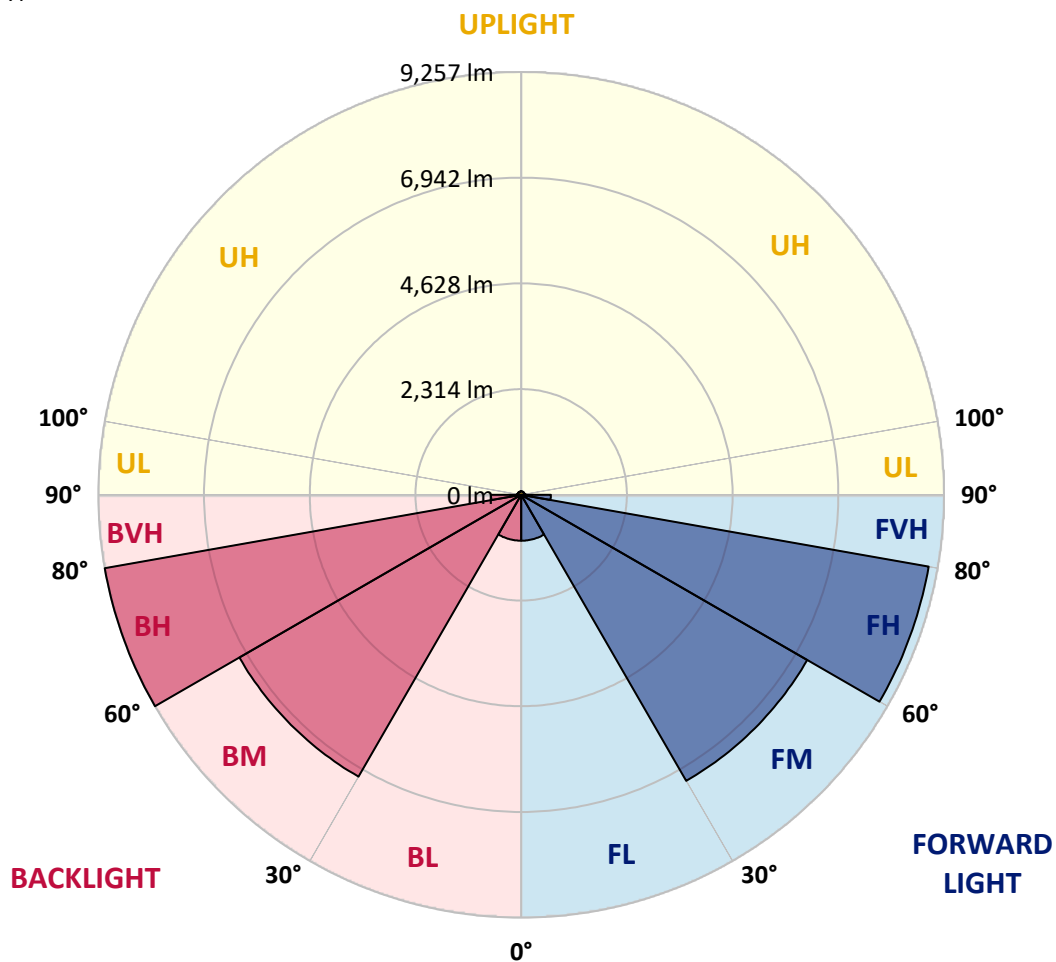
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1004.5	2.0			
FM	(30°-60°)	7230.7	14.5			
FH	(60°-80°)	9058.3	18.1			G4/12000
FVH	(80°-90°)	650.7	1.3			G4/750
BL	(0°-30°)	1003.2	2.0	B3/2500		
BM	(30°-60°)	7123.6	14.2	B4/8500		
BH	(60°-80°)	9256.7	18.5	B5		G4/12000
BVH	(80°-90°)	660.3	1.3			G4/750
UL	(90°-100°)	96.6	0.2		U3/500	
UH	(100°-180°)	76.0	0.2		U3/500	
Trapped Light		13888.4	27.8			

**BUG Rating: B5-U3-G4**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1544	1544	1544	1544	1544	1544	1544	1544	1544	1544	1544
5°	1255	1350	1304	1287	1403	1258	1350	1325	1407	1393	1389
15°	1369	1564	1614	1643	1598	1577	1611	1564	1624	1574	1568
25°	2975	3038	2965	2936	2985	2933	2953	2995	2957	2949	2993
35°	4364	4383	4457	4346	4459	4460	4425	4429	4441	4243	4402
45°	5552	5840	5811	6026	5774	6123	5733	5892	5680	5698	5665
50°	6234	6489	6738	6937	6586	6963	6674	6680	6277	6355	6486
55°	7250	7271	7583	7782	7978	7800	7901	7631	7036	7111	7087
60°	9012	9286	9670	10448	11311	11039	10389	9818	9087	9013	8938
62.5°	9613	9741	10497	11876	12723	12242	11600	10569	10060	9531	9478
65°	9527	9659	10509	12243	13754	12755	12002	10935	10203	9651	9575
67.5°	8881	9140	10158	11887	13810	12847	11845	10691	9859	9376	9344
70°	7615	8146	8967	10577	13000	11823	11060	9904	8983	8704	8532
72.5°	6663	6660	7679	9465	11743	10488	9600	8464	7860	7325	7233
75°	5090	5309	6330	7514	9776	8913	7737	6735	6322	6088	5893
77.5°	4013	3735	4230	5106	7616	6442	5754	4897	4315	4240	3963
80°	2163	2100	2676	3717	5040	4488	3899	3212	2759	2634	2711
82.5°	1016	1376	1547	1977	2604	2665	2552	1851	1481	1632	1401
85°	381	360	516	831	1115	870	971	827	594	470	441
87.5°	164	193	313	392	473	513	479	353	291	189	217
90°	50	51	72	96	167	127	182	154	122	75	60
95°	19	38	72	118	81	67	129	90	61	25	25
105°	17	24	25	38	25	17	24	38	35	14	10
115°	3	3	4	4	4	4	4	4	4	4	4
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°	1544	1544	1544	1544	1544	1544	1544	1544	1544	1544
5°	1360	1339	1479	1510	1490	1588	1461	1545	1556	1714
15°	1531	1557	1584	1514	1589	1696	1618	1589	1632	1659
25°	2918	2861	2867	2817	2907	3002	2996	3034	3021	2967
35°	4304	4463	4315	4212	4296	4328	4240	4260	4215	4342
45°	5541	5744	5729	5570	5594	5939	5767	5576	5573	5424
50°	6103	6571	6432	6579	6545	6794	6657	6468	6194	5928
55°	6870	7386	7545	7530	7801	7901	7853	7494	7285	7306
60°	9127	9208	9848	9872	10949	11781	10569	9823	9626	9574
62.5°	9667	10131	10616	10991	12364	13610	11649	10838	10334	10306
65°	9709	10188	10836	11191	13219	14584	12091	10998	10511	10437
67.5°	9467	9762	10643	10954	13131	14784	11682	10643	10260	10142
70°	8430	9051	9702	10270	12224	13846	10868	9909	9408	9429
72.5°	7197	7526	8102	8792	11023	12353	9278	8498	8018	8041
75°	5842	5807	6860	7100	9361	10739	7922	6584	6493	6173
77.5°	3983	4393	4619	5626	6924	8302	5568	5007	4733	4748
80°	2551	2524	2878	3384	4677	5026	3272	2886	2670	2658
82.5°	1431	1518	1865	2124	2707	2968	2140	1902	1514	1194
85°	476	653	843	1040	995	1001	776	619	456	440
87.5°	227	288	383	452	424	444	449	324	217	181
90°	75	136	134	206	178	180	182	117	83	81
95°	31	82	118	138	90	110	148	72	56	36
105°	14	43	43	26	18	28	46	38	18	11
115°	4	6	7	7	6	6	6	4	3	3
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)