

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: 767539

Luminaire Tested: **GSM-XX-400-HPS-XX-3V-SG-XX-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 767539
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GSM-XX-400-HPS-XX-3V-SG-XX-X
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-VERTICAL LAMP-TYPE III DISTRIBUTION
Light Source: 400 WATT HPS CLEAR E-18
Ballast/Driver: -

Summary

Lumens per Lamp: 50000 (1 lamp)
Luminaire Lumens: 32591.9 lumens
Efficiency: 65.2%
Efficacy: 81.5 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - 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

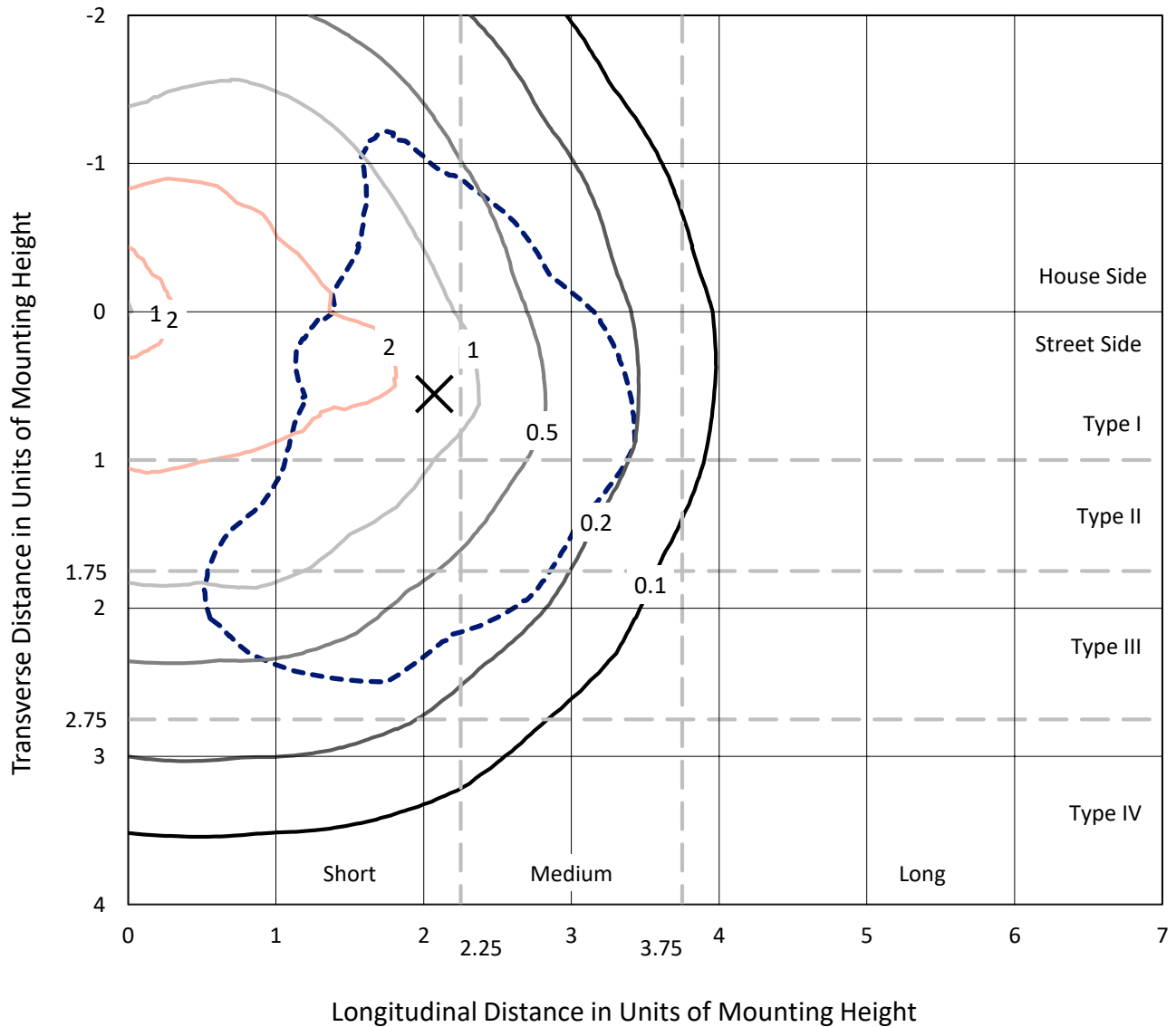


REPORT NUMBER: 767539

CATALOG NUMBER: GSM-XX-400-HPS-XX-3V-SG-XX-X

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

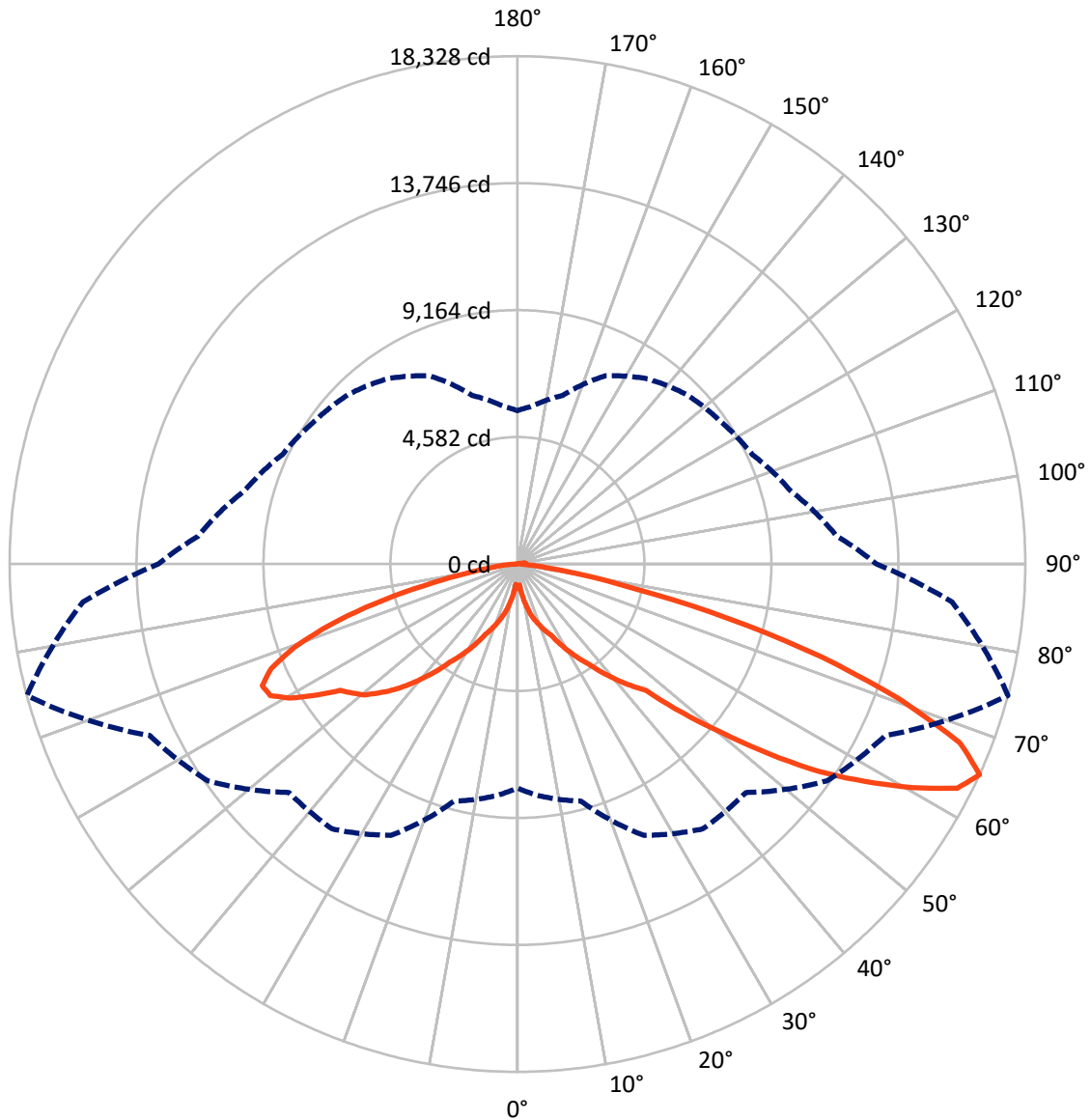


Based on 30 foot mounting height. Maximum calculated value = 2.8 fc
 Type III - Short - Cutoff

REPORT NUMBER: 767539

CATALOG NUMBER: GSM-XX-400-HPS-XX-3V-SG-XX-X

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: 767539

CATALOG NUMBER: GSM-XX-400-HPS-XX-3V-SG-XX-X

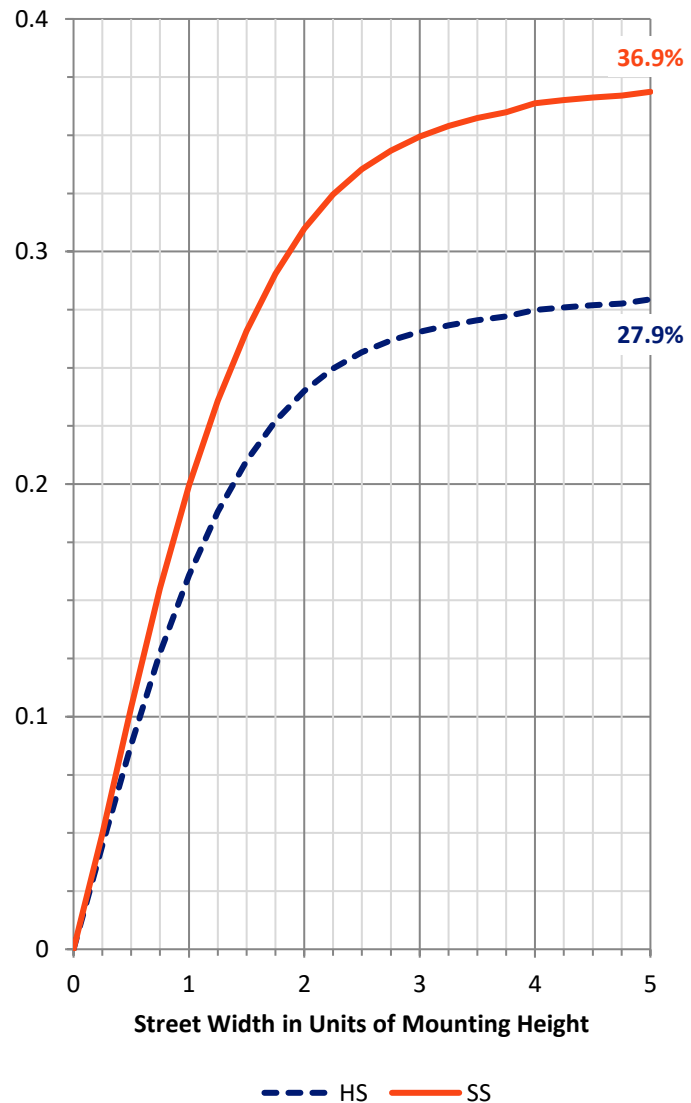
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14071.9	15.1	14087.0
	% Lamp	28.1	0.0	28.2
Street Side	Lumens	18443.1	61.8	18504.9
	% Lamp	36.9	0.1	37.0
Total	Lumens	32515.0	76.9	32591.9
	% Lamp	65.0	0.2	65.2

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	94.4	0.3	0.2
10°-20°	521.3	1.6	1.0
20°-30°	1370.2	4.2	2.7
30°-40°	2696.7	8.3	5.4
40°-50°	4532.6	13.9	9.1
50°-60°	7221.6	22.2	14.4
60°-70°	9894.4	30.4	19.8
70°-80°	5493.5	16.9	11.0
80°-90°	754.8	2.3	1.5
90°-100°	67.3	0.2	0.1
100°-110°	19.0	0.1	0.0
110°-120°	0.1	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°	32515.0	99.8	65.0
0°-180°	32591.9	100.0	65.2



REPORT NUMBER: 767539

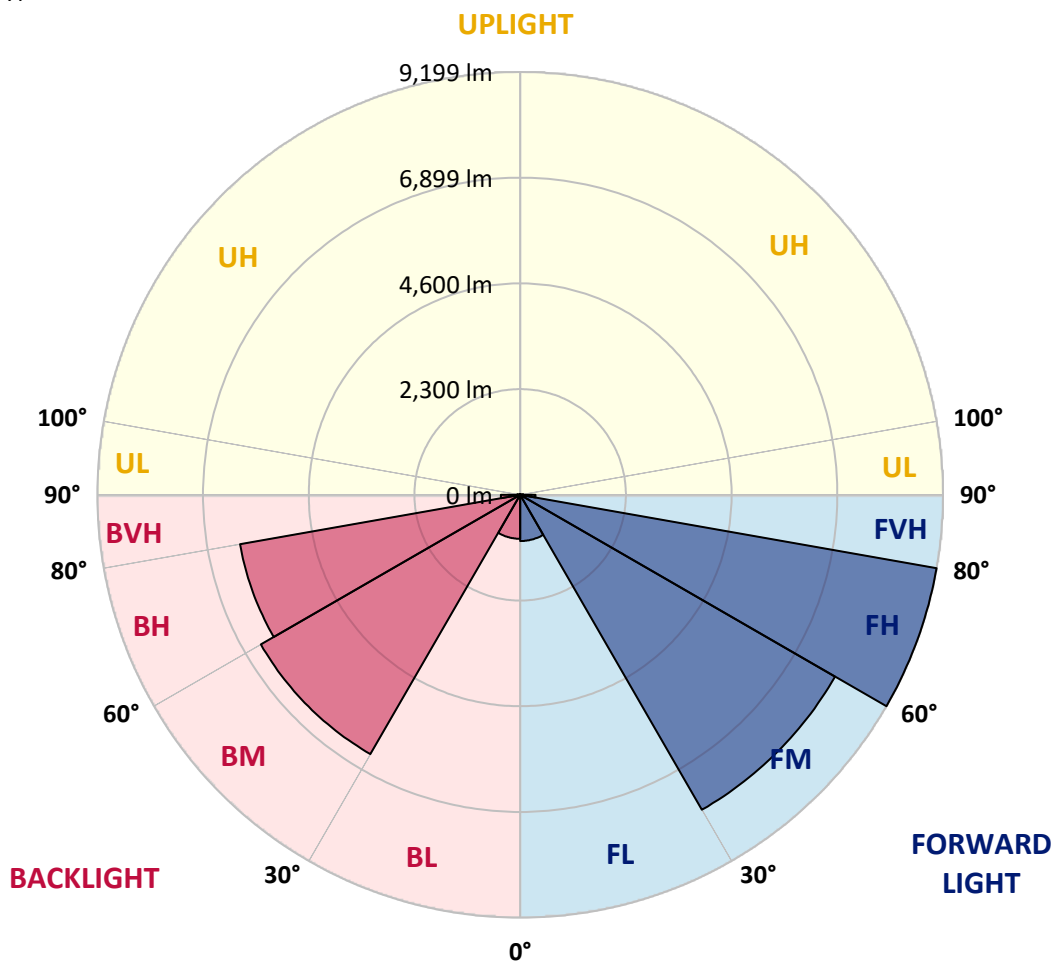
CATALOG NUMBER: GSM-XX-400-HPS-XX-3V-SG-XX-X

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1006.0	2.0			
FM	(30°-60°)	7911.1	15.8			
FH	(60°-80°)	9199.2	18.4			G4/12000
FVH	(80°-90°)	334.7	0.7			G3/500
BL	(0°-30°)	956.9	1.9	B2/1000		
BM	(30°-60°)	6513.7	13.0	B4/8500		
BH	(60°-80°)	6188.6	12.4	B5		G5
BVH	(80°-90°)	420.0	0.8			G3/500
UL	(90°-100°)	67.3	0.1		U3/500	
UH	(100°-180°)	15.1	0.0		U2/50	
Trapped Light		17408.1	34.8			

BUG Rating: B5-U3-G5

Type III Short





REPORT NUMBER: 767539

CATALOG NUMBER: GSM-XX-400-HPS-XX-3V-SG-XX-X

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	884	884	884	884	884	884	884	884	884	884	884
5°	780	780	791	801	796	775	775	765	760	739	739
15°	1852	1852	1894	1909	1914	1935	1951	1925	1956	1883	1899
25°	2924	2919	2919	2950	2960	2945	2960	2872	2861	2773	2788
35°	4297	4391	4344	4318	4438	4443	4625	4615	4443	4448	4552
45°	5338	5567	5520	5650	5816	6342	6383	6628	6508	6472	6331
50°	5983	6139	6258	6316	6773	7299	7606	7783	9562	8267	7866
55°	6742	6737	6904	7481	7788	8506	9463	9671	13224	10941	8990
60°	7991	8110	8319	9661	9999	10561	12002	12938	16387	14671	11575
62.5°	8272	8584	8896	10613	11201	11471	13224	14249	17813	15784	12683
65°	8084	8386	8860	10805	11669	11659	13641	14645	18328	15742	12954
67.5°	7408	7647	8256	10035	11222	11164	13037	13885	17225	14244	12038
70°	6368	6617	7236	8693	10009	10181	11601	12637	14639	11965	10467
72.5°	5306	5603	6118	7465	8589	8672	9728	10082	11487	9645	8901
75°	3912	4058	4604	5660	6669	6805	7419	7070	7897	7372	6982
77.5°	2247	2310	2908	3548	4271	4401	5031	4562	4396	4474	4250
80°	1113	1077	1259	1701	2117	2393	2893	2565	2372	2247	2320
82.5°	655	541	572	812	843	1046	1269	962	1040	905	1035
85°	385	302	281	333	375	385	463	307	297	343	432
87.5°	114	120	125	140	140	120	130	125	182	140	109
90°	104	99	73	62	99	68	88	99	198	135	88
95°	62	68	52	57	140	83	88	114	297	177	104
105°	0	0	0	0	0	0	0	0	0	5	0
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



REPORT NUMBER: 767539

CATALOG NUMBER: GSM-XX-400-HPS-XX-3V-SG-XX-X

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	884	884	884	884	884	884	884	884	884	884
5°	739	739	754	754	754	760	760	760	760	760
15°	1836	1826	1925	1930	1951	1899	1873	1753	1644	1592
25°	2752	2788	2825	2830	2840	2840	2825	2554	2523	2456
35°	4313	4292	4214	4250	4157	4204	4183	3959	3709	3725
45°	6076	6363	5754	5723	5239	5301	4937	4739	4370	4193
50°	7606	7268	6331	6389	5931	5832	5603	5202	4292	4089
55°	9224	7856	7289	7013	6773	6586	6534	5780	4713	4568
60°	11185	9526	8802	8480	8095	7700	7221	5858	5005	4901
62.5°	11601	10103	9333	8969	8605	8131	7387	6087	5369	5234
65°	11565	10202	9354	8958	8646	8163	7491	6295	5707	5535
67.5°	10727	9656	8667	8391	8095	7538	6945	5873	5338	5171
70°	9411	8605	7455	7289	6961	6279	5749	4895	4386	4141
72.5°	7866	7122	5915	5806	5530	4911	4417	3714	3314	3184
75°	6113	5353	4412	4183	4120	3683	3225	2674	2596	2528
77.5°	3767	3434	2939	2757	2908	2679	2388	2164	2123	2102
80°	2117	1899	1899	1795	1873	1748	1670	1649	1582	1561
82.5°	1108	999	1368	1394	1436	1467	1394	1197	999	988
85°	593	624	1098	1004	916	905	910	843	687	624
87.5°	109	78	88	73	62	68	62	52	52	52
90°	62	36	31	26	26	31	31	31	31	31
95°	68	21	16	16	16	21	21	21	21	21
105°	0	0	0	0	0	0	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)