

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: 766653

Luminaire Tested: **OVF40SXX2D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 766653
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: OVF40SXX2D
Description: 400 WATT HPS TYPE II ROADWAY
Light Source: 400W HPS CL E-18
Ballast/Driver: -

Summary

Lumens per Lamp: 50000 (1 lamp)
Luminaire Lumens: 37174.5 lumens
Efficiency: 74.3%
Efficacy: 92.9 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.4' x L: 2.5' x H: 0.58')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B5 - U0 - G4

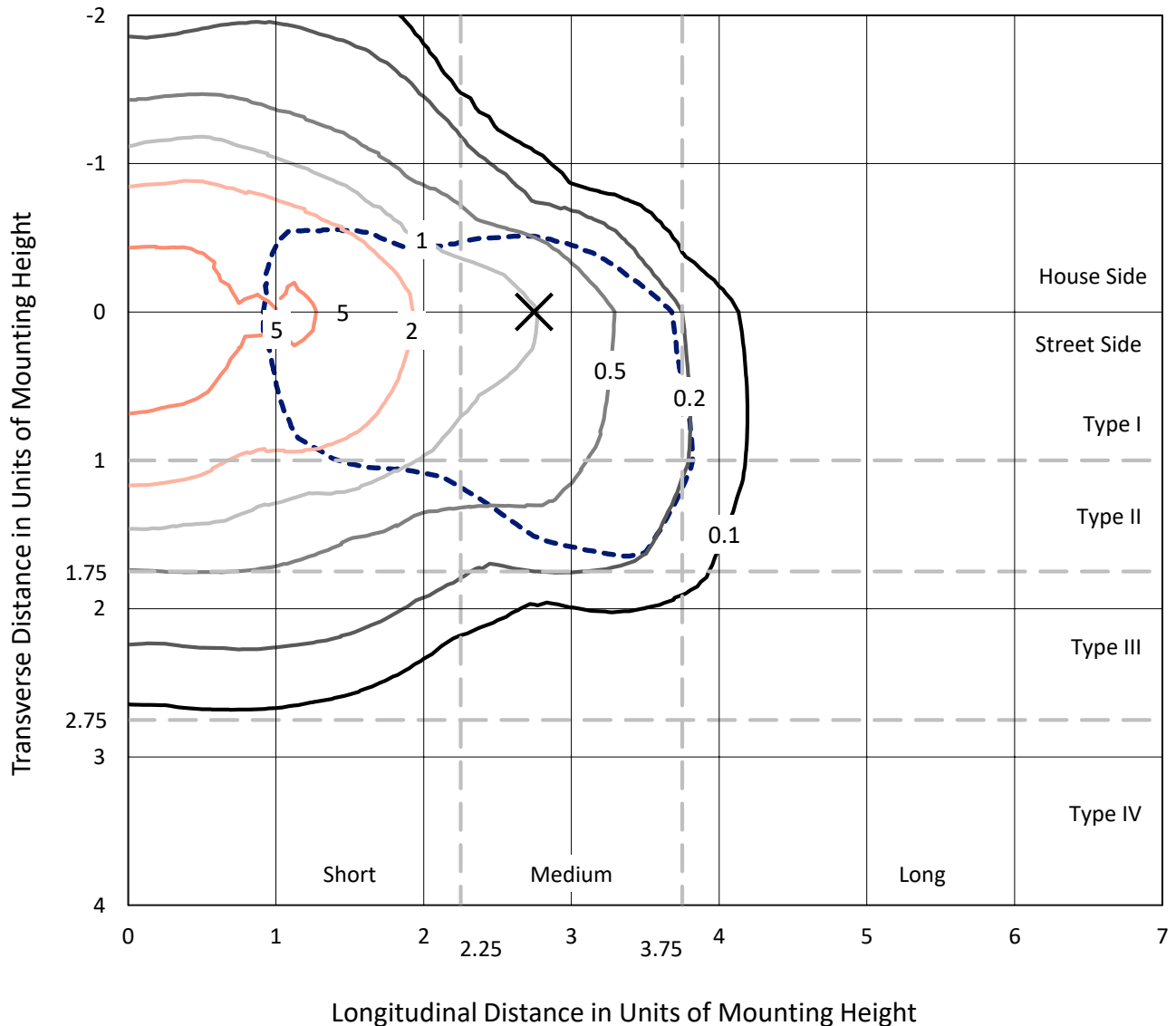
Input Watts (W): 400
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

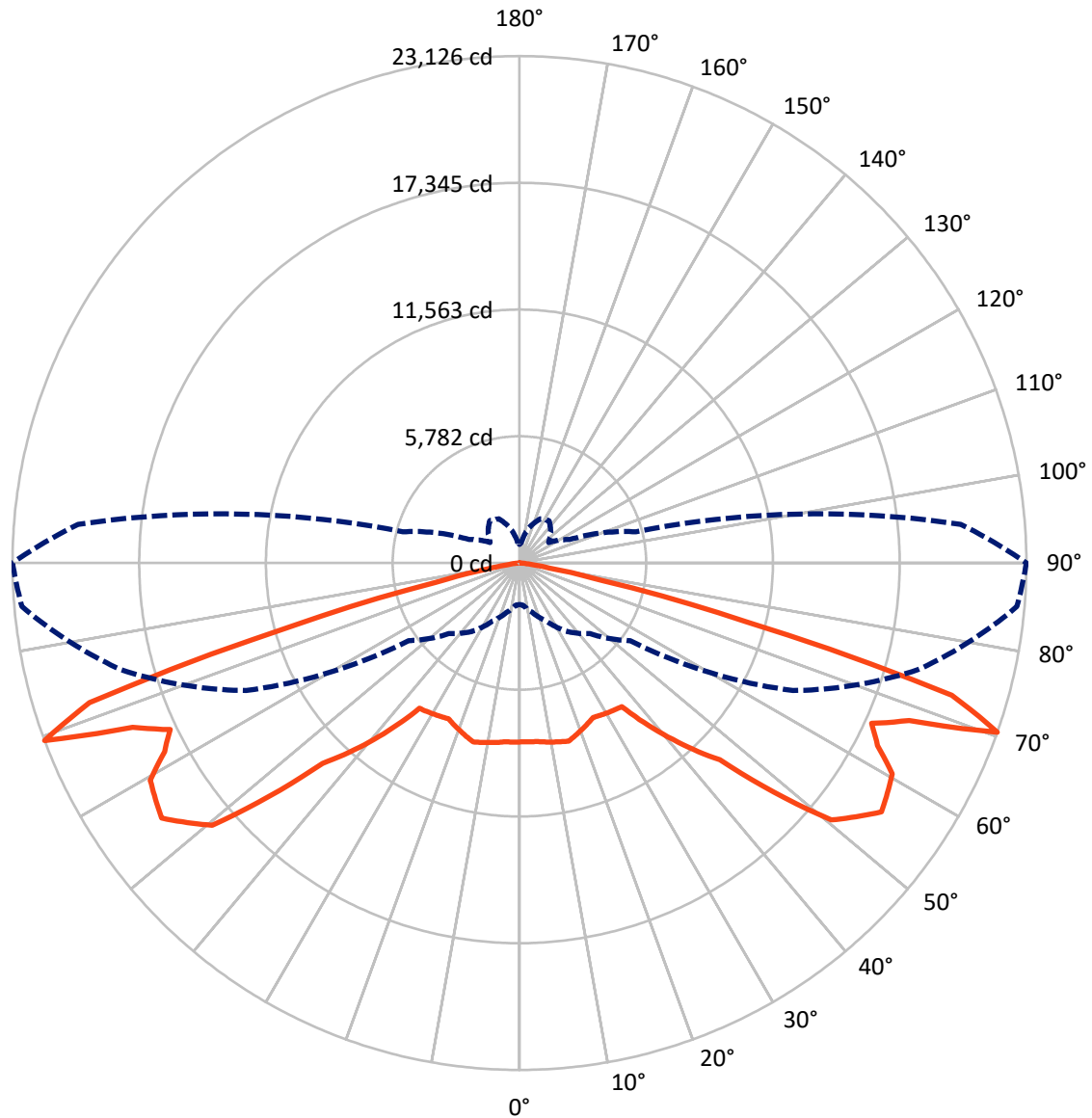
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.6 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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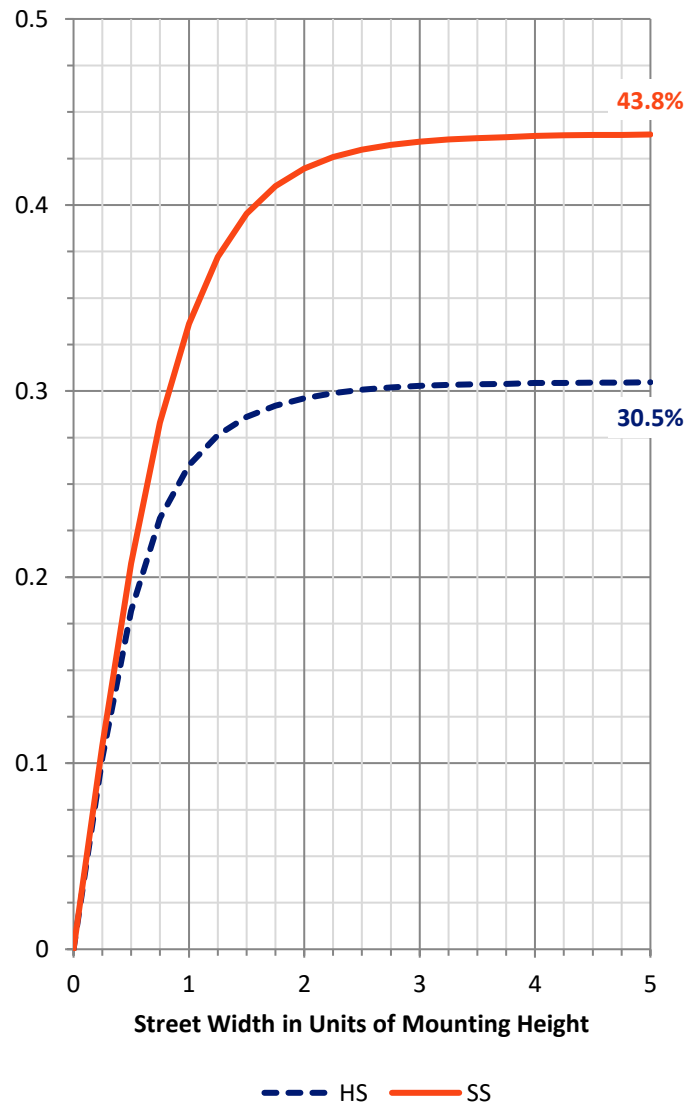
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15323.2	0.0	15323.2
	% Lamp	30.6	0.0	30.6
Street Side	Lumens	21851.3	0.0	21851.3
	% Lamp	43.7	0.0	43.7
Total	Lumens	37174.5	0.0	37174.5
	% Lamp	74.3	0.0	74.3

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	780.8	2.1	1.6
10°-20°	2300.3	6.2	4.6
20°-30°	3650.7	9.8	7.3
30°-40°	4893.6	13.2	9.8
40°-50°	6677.4	18.0	13.4
50°-60°	8210.9	22.1	16.4
60°-70°	7105.7	19.1	14.2
70°-80°	3622.3	9.7	7.2
80°-90°	168.3	0.5	0.3
90°-100°	0.0	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°	37174.5	100.0	74.3
0°-180°	37174.5	100.0	74.3

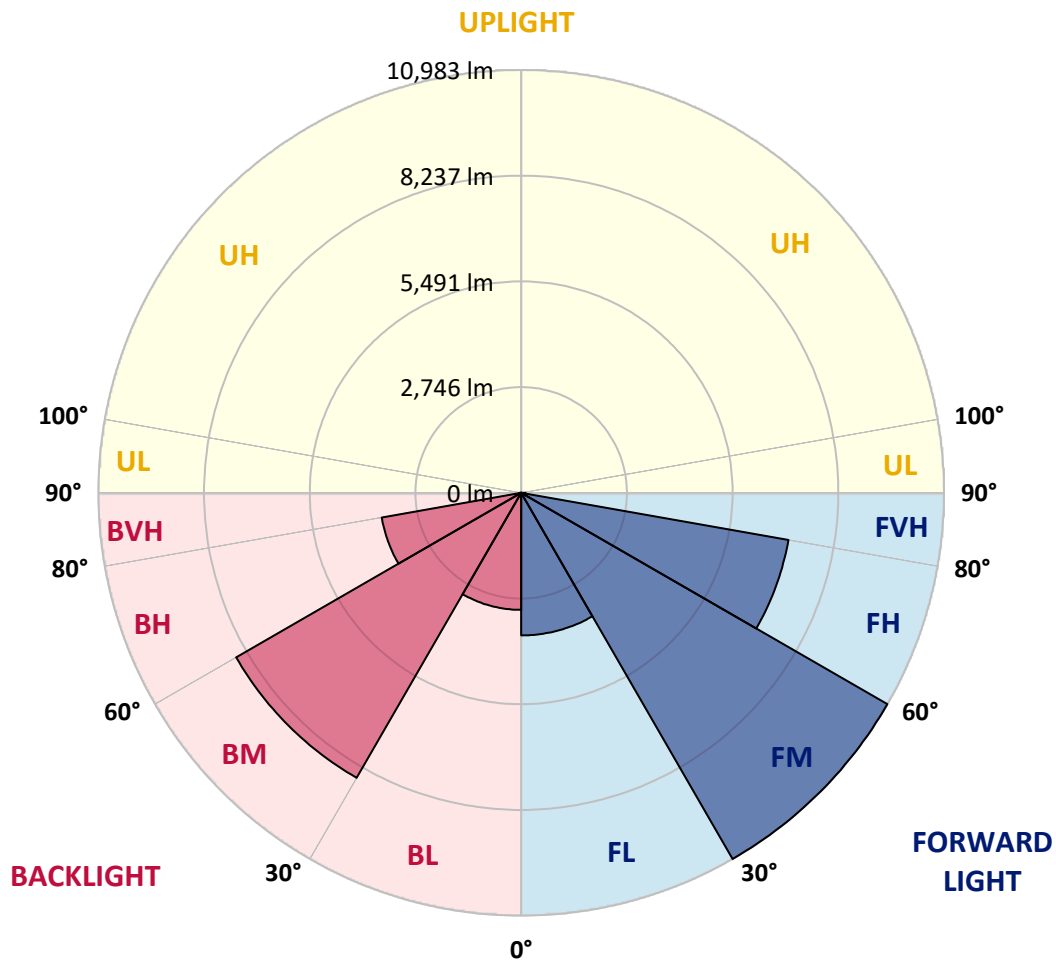


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3703.4	7.4			
FM (30°-60°)	10982.6	22.0			
FH (60°-80°)	7049.1	14.1			G3/7500
FVH (80°-90°)	114.8	0.2			G2/225
BL (0°-30°)	3039.8	6.1	B4/5000		
BM (30°-60°)	8548.9	17.1	B5		
BH (60°-80°)	3678.9	7.4	B4/5000		G4/5000
BVH (80°-90°)	53.5	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	
Trapped Light	12825.5	25.7			

BUG Rating: B5-U0-G4
 Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8162	8162	8162	8162	8162	8162	8162	8162	8162	8162	8162
5°	8662	8550	8684	8614	8664	8592	8340	8440	8304	8247	8182
15°	9435	9401	9427	9418	9363	9220	9033	8927	8733	8501	8429
25°	8803	8862	8978	8988	9004	8980	8913	8678	8249	7919	7806
35°	7918	7844	7832	8093	8899	9097	8948	8838	8517	8223	8043
45°	7100	7167	7226	7289	7666	8023	8585	9548	11207	12966	12811
50°	6514	6549	6654	7034	6831	7799	9833	13166	16226	18256	18424
55°	5143	5244	5311	6079	6215	8089	12150	17004	19315	19883	20042
60°	3602	3724	4234	5062	5625	7080	11787	15597	17743	19030	19541
62.5°	3324	3188	3686	4568	5444	6576	10712	15143	17105	18294	18334
65°	2845	2738	3324	4198	5045	5981	8998	13793	15768	17363	17650
67.5°	2378	2434	2854	3629	4598	5569	7483	12920	15722	18760	19173
70°	1895	1932	2346	2930	3818	4556	6170	13760	18818	22784	23126
72.5°	1306	1343	1665	2143	2553	2887	4606	15965	19913	20156	20628
75°	726	745	966	1271	1309	1396	2898	12750	14263	11500	10697
77.5°	272	284	389	517	447	606	1903	6190	5906	4694	3910
80°	95	98	116	154	203	317	1019	2156	1970	1638	1389
82.5°	49	49	61	79	98	147	353	592	661	588	545
85°	18	17	23	29	34	50	118	221	244	220	209
87.5°	0	0	3	2	5	11	27	63	72	56	46
90°	0	0	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0	0	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
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°	8162	8162	8162	8162	8162	8162	8162	8162	8162	8162
5°	8145	8064	7971	7904	7777	7747	7799	7730	7664	7637
15°	8336	8125	7744	7347	7110	6878	6741	6620	6506	6471
25°	7829	8185	8244	7844	7171	6517	6225	5960	5651	5699
35°	7877	7622	7716	7637	7138	6549	5560	5041	4699	4627
45°	12373	11947	9919	8037	6428	5628	4884	3977	3579	3391
50°	17549	16218	12608	8406	6094	4907	4330	3416	3040	2799
55°	20008	16360	10079	6599	4978	4015	3541	2855	2430	2381
60°	19623	13079	7930	5456	4026	3208	2686	2269	1851	1886
62.5°	17575	10045	6408	4760	3721	2985	2515	1989	1563	1593
65°	16081	9451	5528	4191	3466	2858	2405	1868	1383	1346
67.5°	18621	8322	4905	3843	3275	2703	2428	1825	1178	1105
70°	20214	5505	2530	1627	2018	2353	2219	1647	945	845
72.5°	13893	3066	1374	856	638	1007	1287	1088	731	623
75°	5961	2153	1019	676	444	455	580	482	432	391
77.5°	2376	1184	694	507	288	287	284	240	237	229
80°	990	673	391	285	165	165	142	124	124	122
82.5°	433	324	171	127	76	85	67	73	60	58
85°	159	107	46	35	17	32	21	29	21	21
87.5°	21	5	0	0	0	3	2	3	5	0
90°	0	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0	0
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
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)