

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: 766654

Luminaire Tested: **OVF40SXX3D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 766654
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: OVF40SXX3D
Description: 400W HIGH PRESSURE SODIUM TYPE III ROADWAY
Light Source: 400W HPS CL E-18
Ballast/Driver: -

Summary

Lumens per Lamp: 50000 (1 lamp)
Luminaire Lumens: 36932.6 lumens
Efficiency: 73.9%
Efficacy: 92.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.4' x L: 2.5' x H: 0.58')
IES Classification: Type III - Medium - Full Cutoff
BUG Rating: B4 - U0 - G4

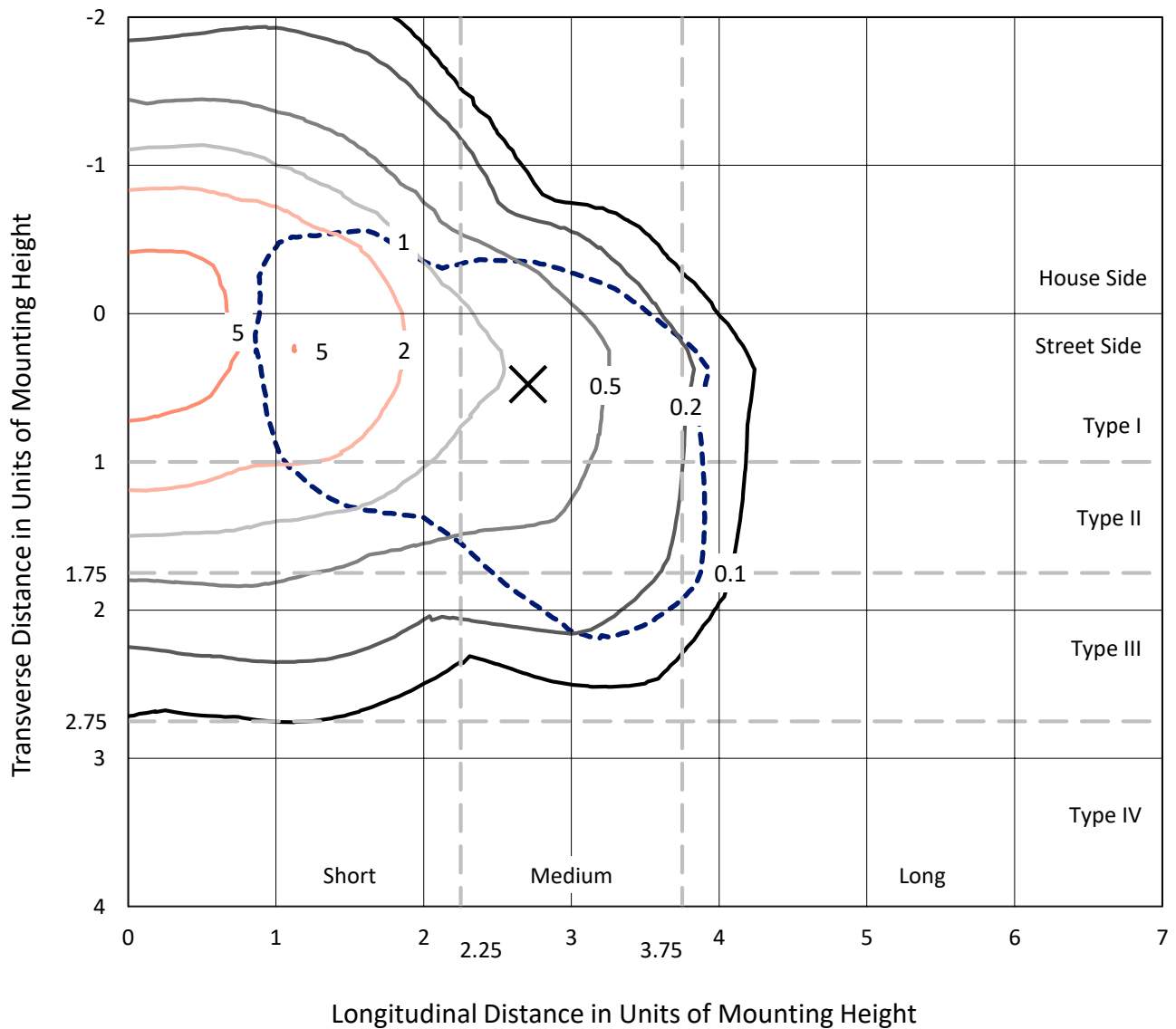
Input Watts (W): 400
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

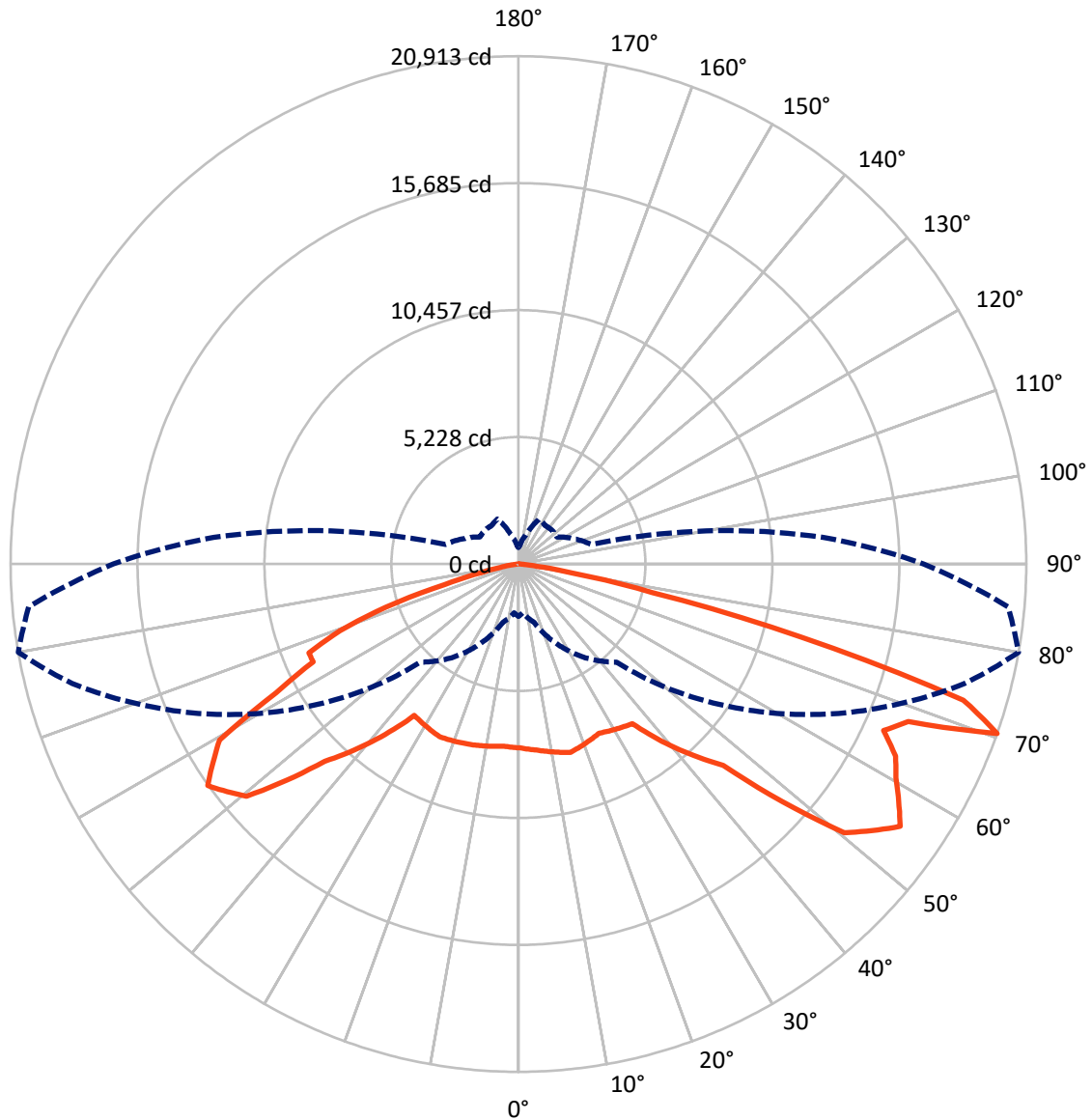
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.3 fc
 Type III - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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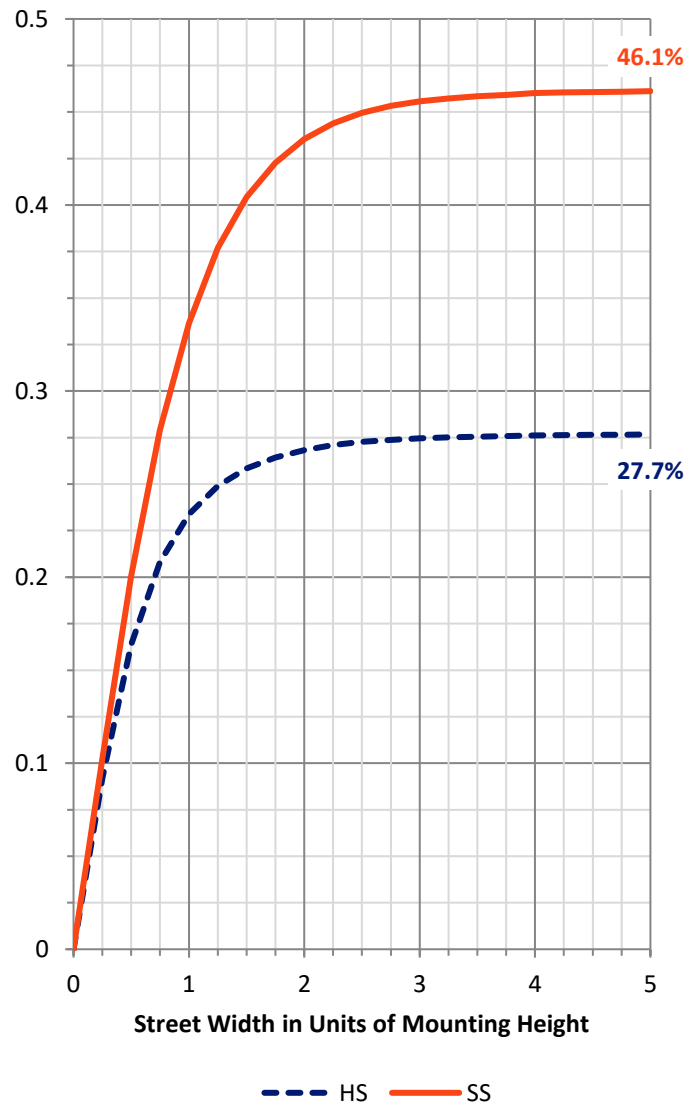
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13915.6	0.0	13915.6
	% Lamp	27.8	0.0	27.8
Street Side	Lumens	23017.0	0.0	23017.0
	% Lamp	46.0	0.0	46.0
Total	Lumens	36932.6	0.0	36932.6
	% Lamp	73.9	0.0	73.9

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	729.7	2.0	1.5
10°-20°	2203.8	6.0	4.4
20°-30°	3590.0	9.7	7.2
30°-40°	4860.2	13.2	9.7
40°-50°	6526.6	17.7	13.1
50°-60°	8058.2	21.8	16.1
60°-70°	7032.8	19.0	14.1
70°-80°	3909.3	10.6	7.8
80°-90°	207.2	0.6	0.4
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°	36932.6	100.0	73.9
0°-180°	36932.6	100.0	73.9

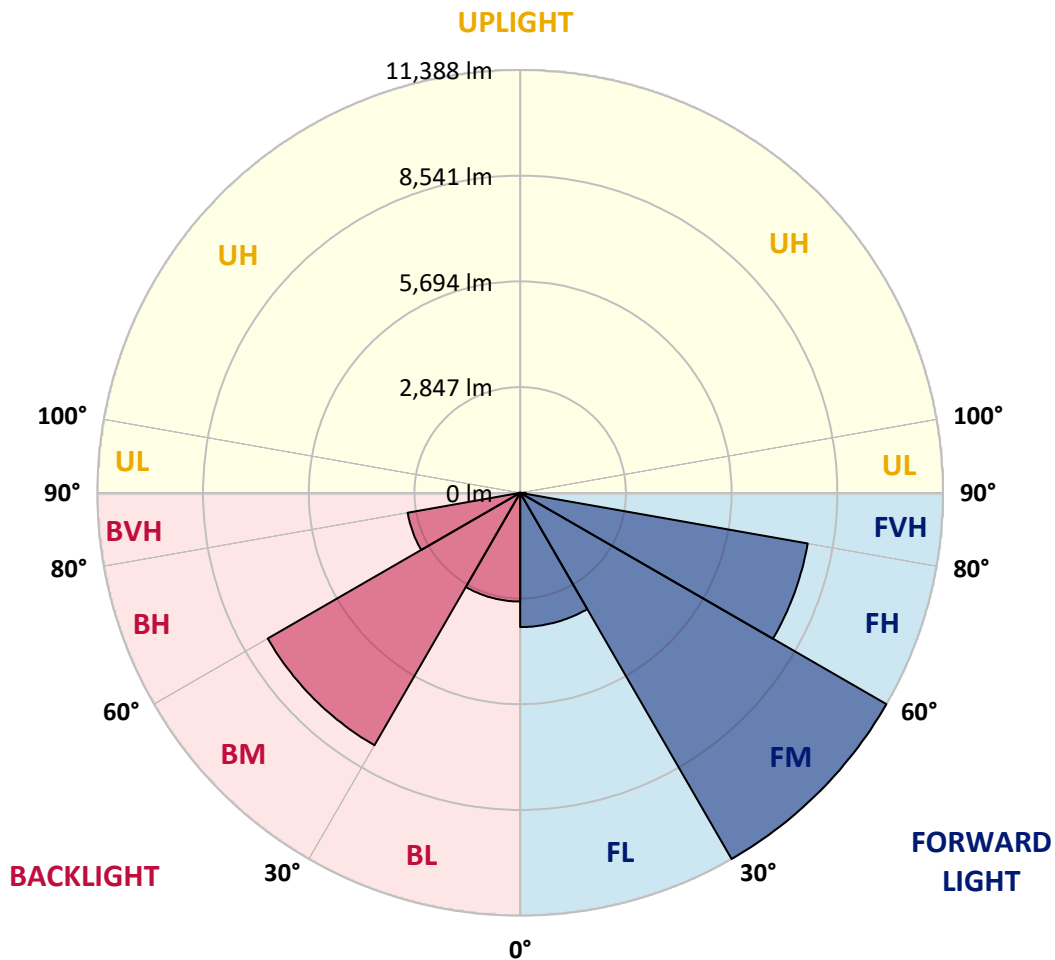


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3614.5	7.2			
FM	(30°-60°)	11387.7	22.8			
FH	(60°-80°)	7863.6	15.7			G4/12000
FVH	(80°-90°)	151.2	0.3			G2/225
BL	(0°-30°)	2928.5	5.9	B4/5000		
BM	(30°-60°)	7850.0	15.7	B4/8500		
BH	(60°-80°)	3078.5	6.2	B4/5000		G4/5000
BVH	(80°-90°)	56.0	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		13067.4	26.1			

BUG Rating: B4-U0-G4
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	80°	85°
0°	7573	7573	7573	7573	7573	7573	7573	7573	7573	7573	7573
5°	8098	8055	8096	7980	8021	7962	7863	7799	7728	7693	7651
15°	9242	9203	9241	9119	9047	8838	8637	8391	8194	8046	7944
25°	9169	9129	9178	9133	9039	9003	8846	8458	7892	7718	7527
35°	8559	8464	8461	8434	9133	9378	9184	8933	8360	8072	7834
45°	7655	7678	7654	7878	8501	8785	8927	9781	11248	11829	11750
50°	6703	6874	7094	7593	7985	8430	10526	13452	16776	17398	16689
55°	5686	5662	5909	6740	7359	9709	13203	17502	19416	19075	18273
60°	4151	4192	4685	5864	6900	9517	13818	16208	17639	17861	17932
62.5°	3431	3512	4255	5404	6335	8862	13500	15674	17456	17430	17276
65°	2887	2985	3687	4910	5892	7762	11635	14460	16417	16527	16232
67.5°	2396	2506	3065	4214	5500	6700	10120	13926	16205	17316	16806
70°	2155	2018	2486	3565	4688	5719	10065	14550	19016	20913	20244
72.5°	1673	1631	1882	2636	3223	3933	10691	17580	19985	19159	19906
75°	1071	1012	1146	1592	1699	1964	10779	15953	13203	11990	12540
77.5°	510	467	505	723	656	801	7245	8141	6309	5648	5474
80°	131	169	142	203	259	488	2503	2628	2301	2285	1932
82.5°	61	73	81	99	150	218	624	714	740	766	684
85°	21	31	35	37	53	79	177	232	259	282	255
87.5°	0	6	6	2	5	17	41	58	75	81	66
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7573	7573	7573	7573	7573	7573	7573	7573	7573	7573	7573
5°	7612	7570	7478	7420	7330	7260	7187	7158	7159	7107	7203
15°	7837	7761	7609	7306	7008	6788	6688	6561	6468	6363	6367
25°	7467	7559	8076	8165	7718	7104	6425	6050	5792	5551	5451
35°	7623	7510	7616	7742	7321	6700	6234	5358	4894	4540	4520
45°	11681	11521	11258	9349	7393	5862	5015	4432	3698	3400	3300
50°	15397	14433	15024	10527	7643	5616	4502	3870	3132	2871	2714
55°	16904	16565	14863	8159	5903	4647	3892	3225	2700	2317	2491
60°	17830	16254	12308	6967	5268	4031	3232	2703	2160	1870	1816
62.5°	16301	13584	9010	5606	4618	3736	3014	2466	1943	1590	1532
65°	14244	11901	6825	5082	4165	3472	2828	2332	1752	1343	1267
67.5°	14854	13023	5720	4835	3686	3254	2649	2303	1583	1081	977
70°	16678	12592	3101	2471	1937	1964	1928	2045	1277	797	675
72.5°	14738	9323	2149	1216	994	748	730	1244	923	600	479
75°	8078	4862	1456	1050	885	581	496	658	507	380	345
77.5°	3217	2164	919	800	704	394	311	331	285	243	226
80°	1169	948	537	502	423	232	180	165	145	133	122
82.5°	467	429	240	241	189	110	92	79	69	63	58
85°	169	157	64	70	56	31	29	26	23	20	18
87.5°	24	21	0	0	5	9	9	3	3	3	0
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

(END OF REPORT)