

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: FAIL-SAFE

Report Number: P520741

Luminaire Tested: **8WSLA-200-L940-UNV-U**

Issue Date: 5/3/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P520741
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-689-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 8WSLA-200-L940-UNV-U
Description: 8 FOOT, 4000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 90 CRI
LEDS WITH NO UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

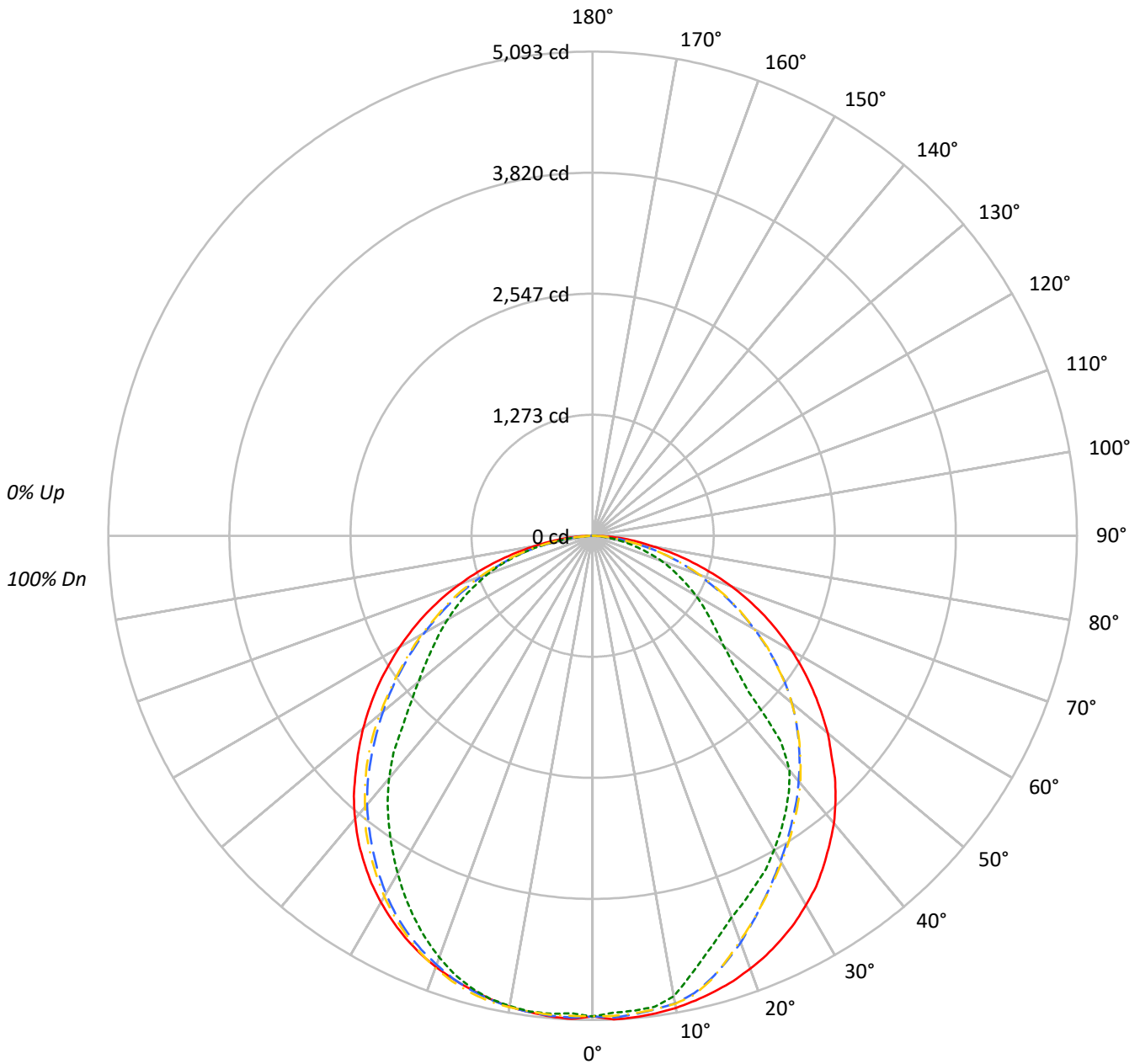
Lumens per Lamp: N/A
Luminaire Lumens: 13560.0 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 152.3
Input Voltage (V): NR
Input Current (A_{in}): 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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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84																			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70																			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60																			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44																			
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39																			
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34																			
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31																			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28																			
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13602	13602	13602	13602
5°	13735	13544	13713	13632
10°	13782	13441	13745	13723
15°	13825	12730	13765	13719
20°	13877	12231	13823	13512
25°	13921	12029	13849	13172
30°	13937	11855	13836	12740
35°	13915	11625	13772	12267
40°	13870	11317	13651	11698
45°	13715	8793	13406	10733
50°	13510	7527	13181	10013
55°	13270	7048	12926	9631
60°	13018	6728	12624	9472
65°	12709	6371	12277	9359
70°	12204	6059	11692	9217
75°	11362	5329	10827	8769
80°	10085	4454	9455	7438
85°	9544	3180	8373	4270



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	480.3	3.5
10°-20°	1369.9	10.1
20°-30°	2047.0	15.1
30°-40°	2436.6	18.0
40°-50°	2435.5	18.0
50°-60°	2095.7	15.5
60°-70°	1577.4	11.6
70°-80°	898.9	6.6
80°-90°	218.8	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3897.1	28.7
0°-40°	6333.7	46.7
0°-60°	10865.0	80.1
0°-90°	13560.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13560.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5055	5055	5055	5055	5055	
5°	5084	5014	5076	5047	5084	484
15°	4962	4569	4941	4925	4962	1402
25°	4689	4051	4664	4436	4689	2162
35°	4236	3539	4192	3734	4236	2650
45°	3604	2310	3523	2820	3604	2775
55°	2828	1502	2755	2053	2828	2529
65°	1996	1001	1928	1470	1996	1971
75°	1093	512	1041	843	1093	1157
85°	309	103	271	138	309	336
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	5054.7	5054.7	5054.7	5054.7	5054.7	5054.7	5054.7	5054.7	5054.7	5054.7	5054.7
2.5°	5092.7	5046.6	5073.7	5065.6	5022.2	5038.4	5054.7	5038.4	5087.3	5043.9	5073.7
5°	5084.5	5035.7	5052.0	5035.7	5014.0	5019.5	5043.9	5027.6	5076.4	5030.3	5068.3
7.5°	5068.3	5008.6	5024.9	5016.8	4997.8	5000.5	5024.9	5011.3	5054.7	5011.3	5054.7
10°	5043.9	4981.5	4995.1	4959.8	4919.1	4949.0	4997.8	4984.2	5030.3	4981.5	5030.3
12.5°	5005.9	4943.5	4930.0	4813.4	4740.2	4797.1	4946.2	4946.2	4989.6	4943.5	4995.1
15°	4962.5	4894.7	4821.5	4645.2	4569.3	4626.3	4832.4	4902.9	4940.8	4894.7	4946.2
17.5°	4911.0	4832.4	4691.3	4485.3	4414.7	4471.7	4683.2	4837.8	4886.6	4837.8	4883.9
20°	4845.9	4753.7	4553.0	4317.1	4271.0	4322.5	4534.1	4759.1	4826.9	4767.3	4799.8
22.5°	4775.4	4664.2	4398.5	4187.0	4165.3	4197.8	4390.3	4661.5	4751.0	4688.6	4710.3
25°	4688.6	4558.5	4243.9	4067.6	4051.4	4070.4	4249.3	4547.6	4664.2	4599.1	4607.3
27.5°	4596.4	4455.4	4097.5	3967.3	3951.0	3959.2	4108.3	4420.2	4563.9	4498.8	4485.3
30°	4485.3	4333.4	3951.0	3831.7	3815.4	3845.3	3972.7	4290.0	4452.7	4387.6	4347.0
32.5°	4374.1	4200.5	3807.3	3715.1	3682.6	3709.7	3831.7	4154.4	4330.7	4262.9	4195.1
35°	4235.8	4059.5	3658.2	3566.0	3538.8	3568.7	3690.7	4013.4	4192.4	4124.6	4032.4
37.5°	4092.0	3910.4	3522.6	3438.5	3389.7	3425.0	3547.0	3867.0	4048.7	3978.2	3864.3
40°	3948.3	3753.1	3370.7	3283.9	3221.6	3273.1	3397.8	3712.4	3886.0	3820.9	3690.7
42.5°	3780.2	3595.8	3221.6	3099.5	2923.3	3088.7	3237.8	3557.8	3717.8	3655.5	3498.2
45°	3603.9	3427.7	3064.3	2768.7	2310.4	2795.8	3075.1	3395.1	3522.6	3462.9	3292.1
47.5°	3403.3	3254.1	2904.3	2454.1	2009.4	2481.3	2909.7	3240.6	3338.2	3273.1	3083.3
50°	3227.0	3080.6	2736.2	2188.4	1797.9	2218.2	2733.5	3067.0	3148.4	3088.7	2877.2
52.5°	3026.3	2898.9	2554.5	1952.5	1640.6	1982.3	2549.1	2888.0	2953.1	2882.6	2671.1
55°	2828.4	2714.5	2361.9	1743.7	1502.3	1770.8	2356.5	2703.6	2755.1	2673.8	2454.1
57.5°	2627.7	2524.6	2164.0	1556.6	1374.9	1586.4	2177.5	2513.8	2549.1	2446.0	2245.3
60°	2418.9	2332.1	1963.3	1391.1	1250.1	1415.5	1957.9	2324.0	2345.7	2234.5	2042.0
62.5°	2210.1	2131.4	1762.6	1239.3	1122.7	1255.5	1776.2	2123.3	2136.9	2031.1	1833.1
65°	1995.9	1922.6	1567.4	1079.3	1000.6	1106.4	1581.0	1914.5	1928.1	1808.7	1629.8
67.5°	1773.5	1713.8	1358.6	957.3	884.0	965.4	1385.7	1703.0	1711.1	1594.5	1431.8
70°	1551.1	1499.6	1174.2	824.4	770.1	827.1	1193.2	1469.8	1486.0	1361.3	1231.1
72.5°	1323.3	1282.7	995.2	686.1	637.3	686.1	1006.1	1255.5	1266.4	1163.3	1035.9
75°	1092.8	1063.0	813.5	550.5	512.5	547.8	819.0	1041.3	1041.3	943.7	843.4
77.5°	870.5	848.8	623.7	423.0	395.9	417.6	626.4	824.4	819.0	743.0	664.4
80°	650.8	634.6	447.4	306.4	287.4	298.3	447.4	610.1	610.1	555.9	461.0
82.5°	466.4	447.4	295.6	200.7	189.8	195.2	290.2	425.7	433.9	393.2	311.9
85°	309.1	265.8	160.0	111.2	103.0	105.8	151.9	246.8	271.2	227.8	162.7
87.5°	135.6	89.5	40.7	16.3	8.1	10.8	32.5	78.6	103.0	67.8	21.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	5054.7	5054.7	5054.7	5054.7	5054.7	5054.7
2.5°	5071.0	5027.6	5043.9	5054.7	5043.9	5092.7
5°	5065.6	5046.6	5043.9	5057.4	5035.7	5084.5
7.5°	5057.4	5046.6	5043.9	5049.3	5022.2	5068.3
10°	5038.4	5022.2	5027.6	5035.7	5000.5	5043.9
12.5°	5003.2	4986.9	4989.6	5016.8	4967.9	5005.9
15°	4943.5	4924.6	4943.5	4973.4	4930.0	4962.5
17.5°	4864.9	4835.1	4867.6	4913.7	4881.2	4911.0
20°	4764.6	4718.5	4753.7	4837.8	4807.9	4845.9
22.5°	4642.5	4585.6	4620.8	4742.9	4734.7	4775.4
25°	4504.2	4436.4	4485.3	4634.4	4650.7	4688.6
27.5°	4349.7	4273.7	4338.8	4515.1	4553.0	4596.4
30°	4181.5	4100.2	4176.1	4382.2	4439.2	4485.3
32.5°	4008.0	3918.5	4005.3	4233.1	4314.4	4374.1
35°	3826.3	3734.1	3831.7	4078.5	4176.1	4235.8
37.5°	3631.0	3541.6	3647.3	3915.8	4032.4	4092.0
40°	3430.4	3330.0	3449.4	3723.2	3877.8	3948.3
42.5°	3224.3	3099.5	3246.0	3541.6	3709.7	3780.2
45°	2993.8	2820.2	3018.2	3349.0	3525.3	3603.9
47.5°	2763.3	2589.7	2790.4	3142.9	3332.8	3403.3
50°	2540.9	2391.8	2551.8	2917.9	3137.5	3227.0
52.5°	2337.5	2215.5	2351.1	2698.2	2936.8	3026.3
55°	2147.7	2052.8	2164.0	2481.3	2725.3	2828.4
57.5°	1968.7	1909.1	1985.0	2275.2	2530.1	2627.7
60°	1800.6	1759.9	1814.2	2071.8	2299.6	2418.9
62.5°	1635.2	1613.5	1654.2	1857.6	2085.3	2210.1
65°	1475.2	1469.8	1491.5	1670.4	1860.3	1995.9
67.5°	1315.2	1312.5	1326.1	1472.5	1640.6	1773.5
70°	1155.2	1171.5	1163.3	1258.3	1421.0	1551.1
72.5°	992.5	1016.9	1003.4	1063.0	1220.3	1323.3
75°	810.8	843.4	816.2	884.0	981.7	1092.8
77.5°	623.7	659.0	626.4	686.1	791.8	870.5
80°	447.4	480.0	452.9	499.0	591.2	650.8
82.5°	282.0	306.4	284.7	330.8	423.0	466.4
85°	124.7	138.3	143.7	179.0	260.3	309.1
87.5°	5.4	2.7	5.4	35.3	92.2	135.6
90°	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270° - · - · 135°-315°









(END OF REPORT)