

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: P520730

Luminaire Tested: **8WSLA-200-L840-UPL15-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: P520730
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-174-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 8WSLA-200-L840-UPL15-UNV-U
Description: 8 FOOT, 4000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 80 CRI
LEDS WITH 15% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

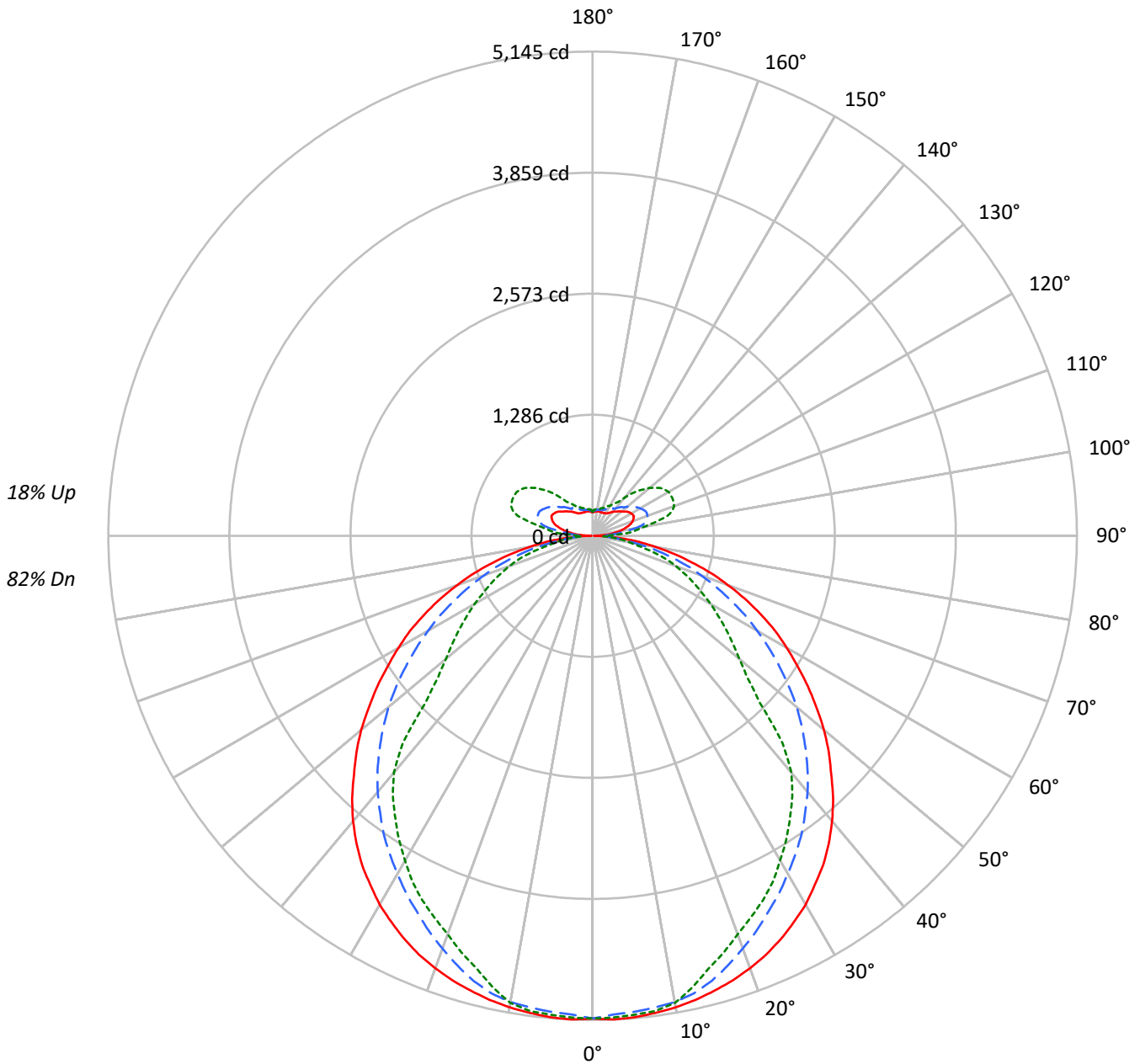
Lumens per Lamp: N/A
Luminaire Lumens: 16612.0 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Semi-Direct

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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	82																			
1	105	100	96	92	100	96	93	89	89	86	83	82	80	78	76	74	72	69																			
2	96	88	81	76	91	84	78	73	78	73	69	72	68	65	67	64	61	58																			
3	87	77	69	63	83	74	67	61	69	63	58	64	59	55	59	55	52	49																			
4	80	68	60	53	76	66	58	52	61	55	50	57	51	47	53	48	45	42																			
5	73	61	52	46	70	59	51	45	55	48	43	51	45	41	48	43	39	36																			
6	68	55	46	40	65	53	45	39	50	43	38	46	40	36	43	38	34	32																			
7	63	50	41	35	60	48	40	35	45	38	33	42	36	32	39	34	30	28																			
8	58	45	37	32	56	44	36	31	41	35	30	39	33	29	36	31	27	25																			
9	55	42	34	28	52	40	33	28	38	31	27	36	30	26	33	28	25	23																			
10	51	38	31	26	49	37	30	25	35	29	24	33	27	23	31	26	23	21																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13803	13803	13803
5°	13870	13715	13799
10°	13902	13746	13774
15°	13942	13638	13261
20°	14003	13363	12901
25°	14041	13098	12697
30°	14063	12883	12382
35°	14031	12715	12014
40°	13907	12481	11531
45°	13640	12175	9562
50°	13437	11848	8515
55°	13106	11373	8103
60°	12823	10863	7783
65°	12521	10269	7552
70°	12033	9619	7408
75°	11359	8817	6815
80°	10400	7417	6047
85°	9315	6425	6104



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	486.1	2.9
10°-20°	1380.9	8.3
20°-30°	2060.9	12.4
30°-40°	2455.6	14.8
40°-50°	2442.5	14.7
50°-60°	2093.3	12.6
60°-70°	1576.5	9.5
70°-80°	913.1	5.5
80°-90°	274.4	1.7
90°-100°	294.6	1.8
100°-110°	605.0	3.6
110°-120°	639.7	3.9
120°-130°	533.7	3.2
130°-140°	372.8	2.2
140°-150°	232.0	1.4
150°-160°	143.8	0.9
160°-170°	81.0	0.5
170°-180°	26.1	0.2
0°-30°	3927.9	23.6
0°-40°	6383.5	38.4
0°-60°	10919.3	65.7
0°-90°	13683.3	82.4
90°-120°	1539.3	9.3
90°-150°	2677.8	16.1
90°-180°	2929.0	17.6
0°-180°	16612.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5129	5129	5129	5129	5129	
5°	5134	5119	5077	5114	5108	489
15°	5004	4999	4895	4812	4760	1414
25°	4729	4661	4411	4302	4276	2180
35°	4271	4156	3870	3720	3657	2668
45°	3584	3496	3199	2882	2513	2771
55°	2794	2752	2424	1925	1727	2497
65°	1966	1920	1613	1254	1186	1944
75°	1092	1056	848	676	656	1157
85°	302	265	208	198	198	322
90°	16	73	125	156	166	31
95°	166	224	255	375	406	159
105°	390	406	583	780	827	405
115°	484	411	619	853	936	471
125°	447	395	536	786	884	397
135°	364	395	432	583	671	284
145°	296	343	375	401	427	188
155°	270	286	307	333	338	125
165°	265	276	286	296	296	75
175°	260	265	270	276	281	25
180°	255	255	255	255	255	



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CATALOG NUMBER: 8WSLA-200-L840-UPL15-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5129.3	5129.3	5129.3	5129.3	5129.3
2.5°	5144.9	5134.5	5092.9	5134.5	5124.1
5°	5134.5	5118.9	5077.3	5113.7	5108.5
7.5°	5113.7	5103.3	5056.5	5098.1	5092.9
10°	5087.7	5072.1	5030.5	5061.7	5040.9
12.5°	5051.3	5040.9	4978.5	4952.5	4910.8
15°	5004.5	4999.3	4895.2	4812.0	4760.0
17.5°	4952.5	4931.6	4786.0	4687.1	4640.3
20°	4890.0	4858.8	4666.3	4551.9	4505.1
22.5°	4817.2	4770.4	4546.7	4437.4	4390.6
25°	4728.8	4661.1	4411.4	4302.2	4276.2
27.5°	4629.9	4551.9	4286.6	4177.3	4146.1
30°	4525.9	4427.0	4146.1	4042.1	3984.9
32.5°	4395.8	4302.2	4010.9	3891.2	3828.8
35°	4271.0	4156.5	3870.4	3719.5	3657.1
37.5°	4120.1	4005.7	3709.1	3558.3	3485.4
40°	3958.8	3844.4	3553.1	3376.2	3282.6
42.5°	3782.0	3677.9	3381.4	3168.1	2986.0
45°	3584.3	3495.8	3199.3	2882.0	2512.6
47.5°	3402.2	3319.0	3017.2	2606.3	2226.5
50°	3209.7	3131.7	2830.0	2346.2	2034.0
52.5°	2996.4	2939.2	2627.1	2122.5	1872.8
55°	2793.6	2751.9	2424.2	1924.8	1727.1
57.5°	2580.3	2538.7	2221.3	1737.5	1581.5
60°	2382.6	2341.0	2018.4	1571.1	1446.2
62.5°	2184.9	2127.7	1820.8	1409.8	1305.7
65°	1966.4	1919.6	1612.7	1253.7	1186.1
67.5°	1747.9	1706.3	1420.2	1108.1	1061.2
70°	1529.4	1493.0	1222.5	967.6	941.6
72.5°	1316.1	1269.3	1045.6	827.1	816.7
75°	1092.5	1056.0	848.0	676.3	655.5
77.5°	879.2	848.0	665.9	515.0	499.4
80°	671.1	639.9	478.6	374.6	390.2
82.5°	494.2	452.6	322.5	291.3	306.9
85°	301.7	265.3	208.1	197.7	197.7
87.5°	104.0	98.8	93.6	109.2	114.4
90°	15.6	72.8	124.9	156.1	166.5
92.5°	88.4	130.1	171.7	202.9	213.3
95°	166.5	223.7	254.9	374.6	405.8
97.5°	228.9	296.5	332.9	442.2	473.4
100°	291.3	353.7	468.2	525.4	561.8
102.5°	343.3	390.2	551.4	665.9	686.7
105°	390.2	405.8	582.6	780.3	827.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	468.2	416.2	624.3	848.0	931.2
115°	483.8	411.0	619.1	853.2	936.4
117.5°	483.8	411.0	603.4	853.2	936.4
120°	473.4	416.2	582.6	842.7	931.2
122.5°	463.0	405.8	561.8	821.9	910.4
125°	447.4	395.4	535.8	785.5	884.4
127.5°	421.4	405.8	509.8	738.7	837.5
130°	400.6	411.0	478.6	691.9	790.7
132.5°	385.0	400.6	447.4	639.9	728.3
135°	364.2	395.4	431.8	582.6	671.1
137.5°	348.5	379.8	405.8	530.6	603.4
140°	332.9	369.4	379.8	463.0	525.4
142.5°	312.1	353.7	358.9	431.8	457.8
145°	296.5	343.3	374.6	400.6	426.6
147.5°	280.9	322.5	364.2	369.4	395.4
150°	275.7	301.7	348.5	353.7	364.2
152.5°	270.5	291.3	322.5	353.7	358.9
155°	270.5	286.1	306.9	332.9	338.1
157.5°	265.3	286.1	296.5	317.3	322.5
160°	265.3	280.9	291.3	306.9	312.1
162.5°	265.3	280.9	286.1	301.7	306.9
165°	265.3	275.7	286.1	296.5	296.5
167.5°	265.3	275.7	280.9	291.3	291.3
170°	265.3	270.5	280.9	286.1	286.1
172.5°	260.1	270.5	275.7	286.1	286.1
175°	260.1	265.3	270.5	275.7	280.9
177.5°	249.7	265.3	270.5	275.7	270.5
180°	254.9	254.9	254.9	254.9	254.9



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	426.6	411.0	603.4	821.9	889.6
110°	452.6	416.2	619.1	837.5	920.8



(END OF REPORT)