

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: P520481

Luminaire Tested: **4WSLA-100-L950-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: P520481
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: 4WSLA-100-L950-UPL15-UNV-U
Description: 4 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 90 CRI
LEDS WITH 15% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

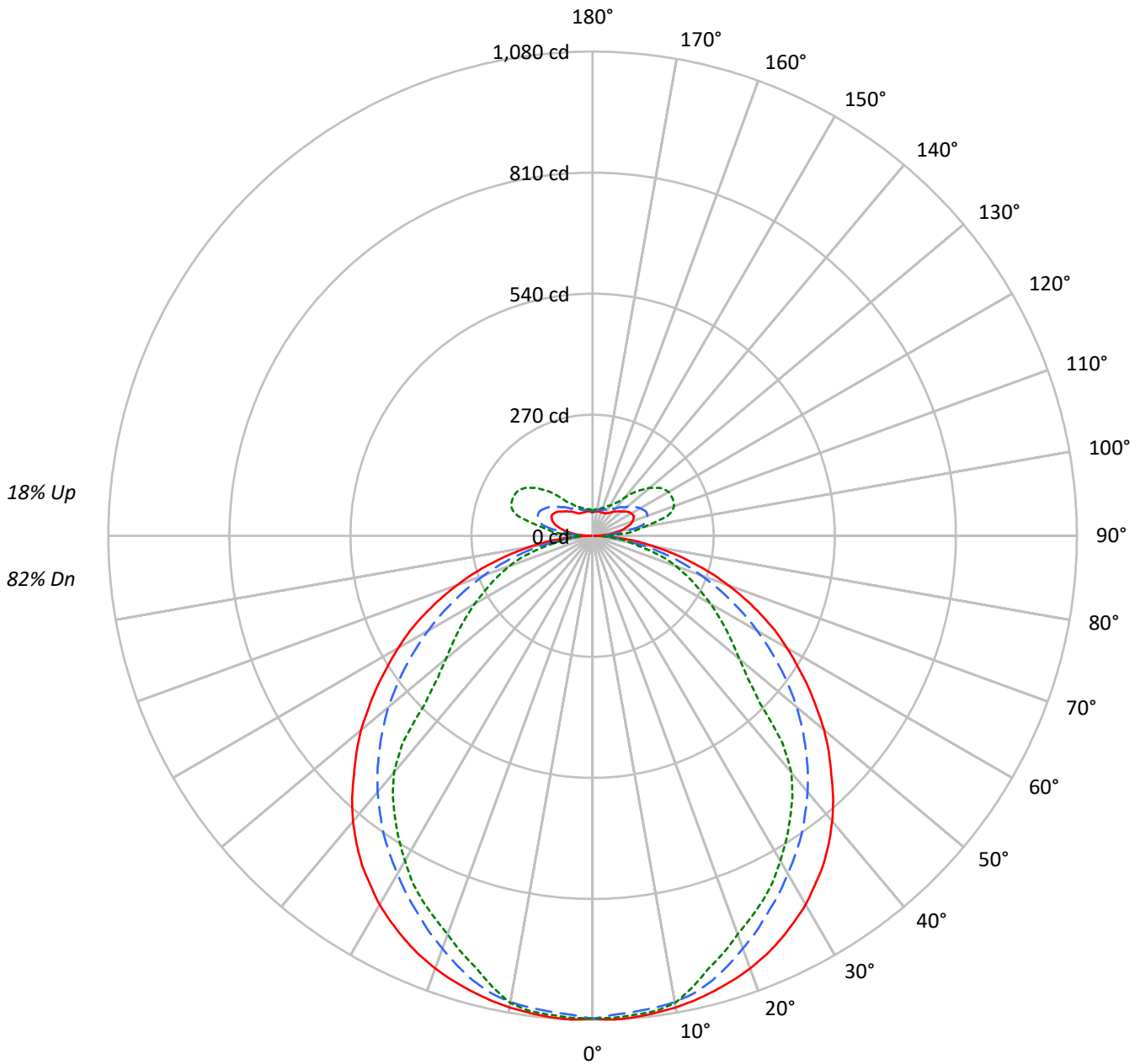
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3488.0 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 31.6
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°	5796	5796	5796
5°	5824	5760	5795
10°	5838	5772	5784
15°	5855	5727	5568
20°	5881	5612	5418
25°	5896	5501	5332
30°	5906	5410	5200
35°	5892	5340	5045
40°	5840	5241	4842
45°	5728	5113	4016
50°	5642	4975	3576
55°	5504	4776	3402
60°	5385	4562	3269
65°	5258	4312	3171
70°	5053	4039	3111
75°	4770	3701	2861
80°	4367	3115	2538
85°	3915	2699	2563



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.1	2.9
10°-20°	289.9	8.3
20°-30°	432.7	12.4
30°-40°	515.6	14.8
40°-50°	512.8	14.7
50°-60°	439.5	12.6
60°-70°	331.0	9.5
70°-80°	191.7	5.5
80°-90°	57.6	1.7
90°-100°	61.9	1.8
100°-110°	127.0	3.6
110°-120°	134.3	3.9
120°-130°	112.1	3.2
130°-140°	78.3	2.2
140°-150°	48.7	1.4
150°-160°	30.2	0.9
160°-170°	17.0	0.5
170°-180°	5.5	0.2
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0°-30°	824.7	23.6
0°-40°	1340.3	38.4
0°-60°	2292.7	65.7
0°-90°	2873.1	82.4
90°-120°	323.2	9.3
90°-150°	562.2	16.1
90°-180°	615.0	17.6
0°-180°	3488.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1077	1077	1077	1077	1077	
5°	1078	1075	1066	1074	1073	103
15°	1051	1050	1028	1010	999	297
25°	993	979	926	903	898	458
35°	897	873	813	781	768	560
45°	753	734	672	605	528	582
55°	587	578	509	404	363	524
65°	413	403	339	263	249	408
75°	229	222	178	142	138	243
85°	63	56	44	42	42	68
90°	3	15	26	33	35	6
95°	35	47	54	79	85	33
105°	82	85	122	164	174	85
115°	102	86	130	179	197	99
125°	94	83	112	165	186	83
135°	76	83	91	122	141	60
145°	62	72	79	84	90	40
155°	57	60	64	70	71	26
165°	56	58	60	62	62	16
175°	55	56	57	58	59	5
180°	54	54	54	54	54	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1077.0	1077.0	1077.0	1077.0	1077.0
2.5°	1080.3	1078.1	1069.4	1078.1	1075.9
5°	1078.1	1074.8	1066.1	1073.7	1072.6
7.5°	1073.7	1071.5	1061.7	1070.4	1069.4
10°	1068.3	1065.0	1056.2	1062.8	1058.4
12.5°	1060.6	1058.4	1045.3	1039.9	1031.1
15°	1050.8	1049.7	1027.8	1010.4	999.4
17.5°	1039.9	1035.5	1004.9	984.2	974.3
20°	1026.8	1020.2	979.8	955.8	945.9
22.5°	1011.5	1001.6	954.7	931.7	921.9
25°	992.9	978.7	926.3	903.3	897.9
27.5°	972.1	955.8	900.0	877.1	870.6
30°	950.3	929.5	870.6	848.7	836.7
32.5°	923.0	903.3	842.2	817.0	803.9
35°	896.8	872.7	812.7	781.0	767.9
37.5°	865.1	841.1	778.8	747.1	731.8
40°	831.2	807.2	746.0	708.9	689.2
42.5°	794.1	772.2	710.0	665.2	627.0
45°	752.6	734.0	671.8	605.1	527.6
47.5°	714.4	696.9	633.5	547.2	467.5
50°	673.9	657.6	594.2	492.6	427.1
52.5°	629.2	617.1	551.6	445.7	393.2
55°	586.6	577.8	509.0	404.1	362.6
57.5°	541.8	533.0	466.4	364.8	332.1
60°	500.3	491.5	423.8	329.9	303.7
62.5°	458.8	446.7	382.3	296.0	274.2
65°	412.9	403.1	338.6	263.2	249.0
67.5°	367.0	358.3	298.2	232.7	222.8
70°	321.1	313.5	256.7	203.2	197.7
72.5°	276.3	266.5	219.6	173.7	171.5
75°	229.4	221.7	178.0	142.0	137.6
77.5°	184.6	178.0	139.8	108.1	104.9
80°	140.9	134.4	100.5	78.6	81.9
82.5°	103.8	95.0	67.7	61.2	64.4
85°	63.4	55.7	43.7	41.5	41.5
87.5°	21.8	20.8	19.7	22.9	24.0
90°	3.3	15.3	26.2	32.8	35.0
92.5°	18.6	27.3	36.0	42.6	44.8
95°	35.0	47.0	53.5	78.6	85.2
97.5°	48.1	62.3	69.9	92.8	99.4
100°	61.2	74.3	98.3	110.3	118.0
102.5°	72.1	81.9	115.8	139.8	144.2
105°	81.9	85.2	122.3	163.8	173.7



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CATALOG NUMBER: 4WSLA-100-L950-UPL15-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	98.3	87.4	131.1	178.0	195.5
115°	101.6	86.3	130.0	179.1	196.6
117.5°	101.6	86.3	126.7	179.1	196.6
120°	99.4	87.4	122.3	177.0	195.5
122.5°	97.2	85.2	118.0	172.6	191.2
125°	93.9	83.0	112.5	164.9	185.7
127.5°	88.5	85.2	107.0	155.1	175.9
130°	84.1	86.3	100.5	145.3	166.0
132.5°	80.8	84.1	93.9	134.4	152.9
135°	76.5	83.0	90.7	122.3	140.9
137.5°	73.2	79.7	85.2	111.4	126.7
140°	69.9	77.6	79.7	97.2	110.3
142.5°	65.5	74.3	75.4	90.7	96.1
145°	62.3	72.1	78.6	84.1	89.6
147.5°	59.0	67.7	76.5	77.6	83.0
150°	57.9	63.4	73.2	74.3	76.5
152.5°	56.8	61.2	67.7	74.3	75.4
155°	56.8	60.1	64.4	69.9	71.0
157.5°	55.7	60.1	62.3	66.6	67.7
160°	55.7	59.0	61.2	64.4	65.5
162.5°	55.7	59.0	60.1	63.4	64.4
165°	55.7	57.9	60.1	62.3	62.3
167.5°	55.7	57.9	59.0	61.2	61.2
170°	55.7	56.8	59.0	60.1	60.1
172.5°	54.6	56.8	57.9	60.1	60.1
175°	54.6	55.7	56.8	57.9	59.0
177.5°	52.4	55.7	56.8	57.9	56.8
180°	53.5	53.5	53.5	53.5	53.5



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	89.6	86.3	126.7	172.6	186.8
110°	95.0	87.4	130.0	175.9	193.3



(END OF REPORT)