

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: P520518

Luminaire Tested: **4WSLA-150-L850-UPL8-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: P520518
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-174-3)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 4WSLA-150-L850-UPL8-UNV-U
Description: 4 FOOT, 1500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 80 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

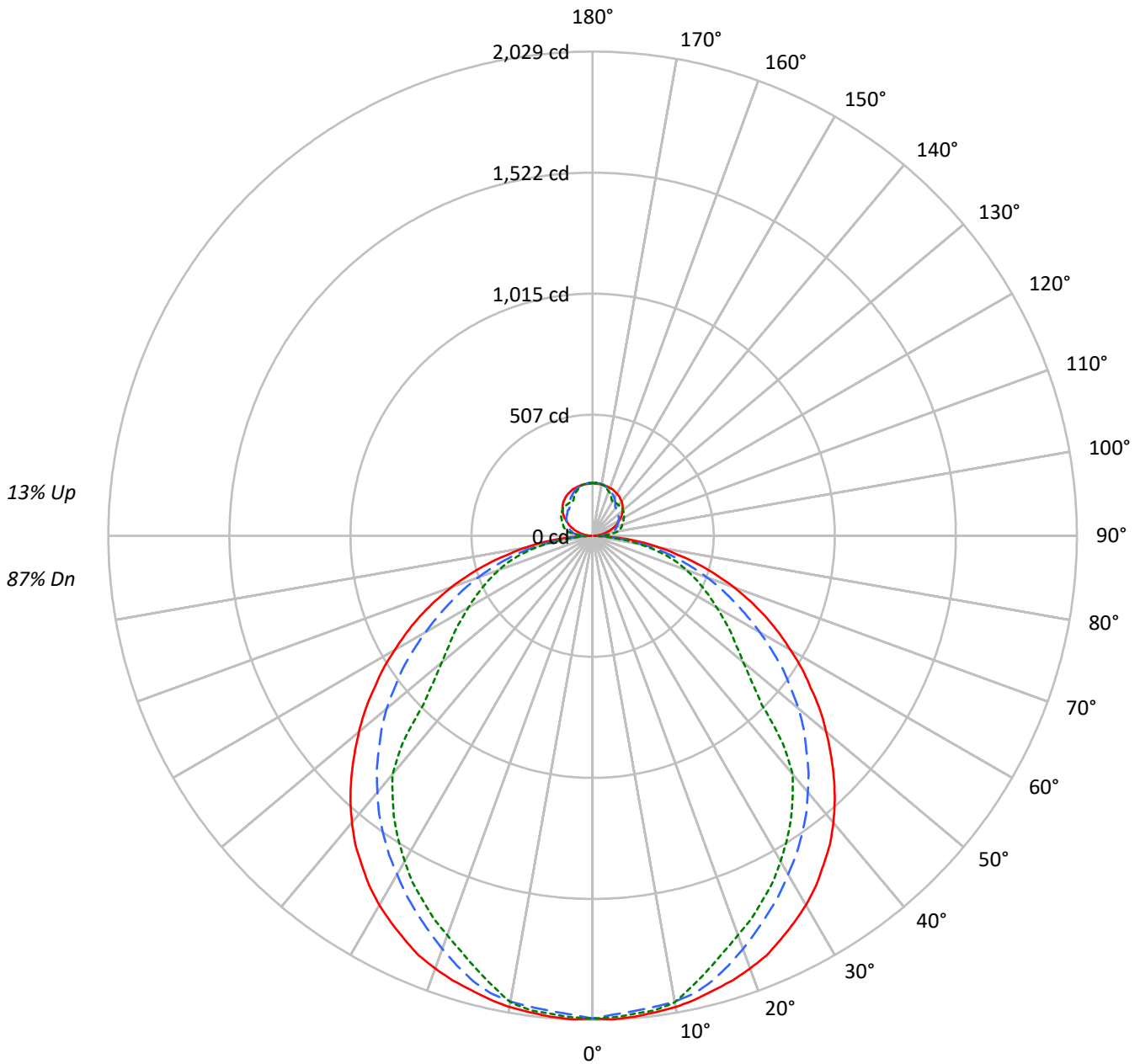
Lumens per Lamp: N/A
Luminaire Lumens: 6295.0 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 47.7
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: 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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	90	90	90	87																			
1	106	101	97	93	102	98	94	90	91	88	85	85	83	80	79	78	76	73																			
2	96	88	82	76	92	85	79	74	80	75	70	74	70	67	70	66	64	61																			
3	88	78	70	63	84	75	68	62	70	64	59	66	61	56	62	58	54	51																			
4	80	69	60	54	77	67	59	53	62	56	50	59	53	48	55	50	46	44																			
5	74	61	53	46	71	60	51	45	56	49	44	53	47	42	50	45	40	38																			
6	68	55	47	40	66	54	46	40	51	44	38	48	42	37	45	40	36	33																			
7	63	50	42	36	61	49	41	35	46	39	34	43	37	33	41	36	32	30																			
8	59	46	37	32	57	44	37	31	42	35	30	40	34	29	38	32	28	26																			
9	55	42	34	28	53	41	33	28	39	32	27	37	31	26	35	30	26	24																			
10	52	39	31	26	50	38	30	25	36	29	25	34	28	24	32	27	23	22																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10886	10886	10886
5°	10928	10802	10865
10°	10959	10832	10847
15°	10978	10768	10476
20°	11052	10552	10202
25°	11079	10352	10007
30°	11105	10183	9785
35°	11071	10039	9523
40°	11021	9856	9161
45°	10876	9636	7642
50°	10698	9430	6896
55°	10487	9121	6636
60°	10306	8709	6453
65°	10156	8339	6449
70°	9892	8014	6549
75°	9441	7625	6596
80°	8839	6856	6134
85°	8089	4854	4131



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.5	3.0
10°-20°	544.4	8.6
20°-30°	813.5	12.9
30°-40°	971.0	15.4
40°-50°	971.1	15.4
50°-60°	840.5	13.4
60°-70°	645.1	10.2
70°-80°	395.3	6.3
80°-90°	111.3	1.8
90°-100°	62.9	1.0
100°-110°	99.8	1.6
110°-120°	116.7	1.9
120°-130°	126.0	2.0
130°-140°	124.2	2.0
140°-150°	109.8	1.7
150°-160°	90.4	1.4
160°-170°	60.5	1.0
170°-180°	21.1	0.3
0°-30°	1549.4	24.6
0°-40°	2520.4	40.0
0°-60°	4332.0	68.8
0°-90°	5483.6	87.1
90°-120°	279.4	4.4
90°-150°	639.4	10.2
90°-180°	811.0	12.9
0°-180°	6295.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2023	2023	2023	2023	2023	
5°	2023	2017	1999	2014	2011	192
15°	1970	1967	1932	1898	1880	557
25°	1866	1842	1743	1697	1685	861
35°	1685	1642	1528	1473	1449	1055
45°	1429	1388	1266	1152	1004	1102
55°	1118	1091	972	777	707	1002
65°	798	768	655	527	506	788
75°	454	431	367	317	317	479
85°	131	108	79	67	67	137
90°	6	20	32	41	44	9
95°	23	50	67	70	70	23
105°	67	70	99	116	122	70
115°	111	93	116	134	143	108
125°	148	119	134	154	160	132
135°	178	160	148	163	172	137
145°	198	189	166	163	169	123
155°	210	207	195	186	183	97
165°	215	218	212	212	212	61
175°	218	221	221	224	224	21
180°	221	221	221	221	221	



TEST NUMBER: P520518

CATALOG NUMBER: 4WSLA-150-L850-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2022.7	2022.7	2022.7	2022.7	2022.7
2.5°	2028.6	2022.7	2008.2	2022.7	2019.8
5°	2022.7	2016.9	1999.4	2014.0	2011.1
7.5°	2014.0	2008.2	1990.7	2008.2	2005.3
10°	2005.3	1999.4	1982.0	1993.6	1984.9
12.5°	1990.7	1984.9	1964.5	1950.0	1932.5
15°	1970.3	1967.4	1932.5	1897.6	1880.1
17.5°	1952.9	1944.2	1888.9	1848.1	1827.7
20°	1929.6	1915.0	1842.3	1795.7	1781.2
22.5°	1903.4	1880.1	1792.8	1749.2	1737.5
25°	1865.6	1842.3	1743.3	1696.8	1685.1
27.5°	1827.7	1798.6	1693.9	1647.3	1635.6
30°	1787.0	1746.2	1638.6	1594.9	1574.5
32.5°	1740.4	1699.7	1586.2	1536.7	1513.4
35°	1685.1	1641.5	1528.0	1472.7	1449.4
37.5°	1632.7	1586.2	1469.8	1408.6	1376.6
40°	1568.7	1522.1	1402.8	1335.9	1303.9
42.5°	1501.8	1458.1	1338.8	1257.3	1178.7
45°	1429.0	1388.3	1266.0	1152.5	1004.1
47.5°	1353.3	1318.4	1199.1	1044.8	902.2
50°	1277.7	1242.7	1126.3	943.0	823.6
52.5°	1202.0	1172.9	1044.8	858.6	759.6
55°	1117.6	1091.4	972.1	777.1	707.2
57.5°	1041.9	1015.7	887.7	710.1	651.9
60°	957.5	934.2	809.1	643.2	599.5
62.5°	878.9	852.7	730.5	585.0	553.0
65°	797.5	768.3	654.8	526.8	506.4
67.5°	713.0	683.9	582.1	474.4	462.8
70°	628.6	605.4	509.3	422.0	416.2
72.5°	541.3	515.1	436.6	372.5	372.5
75°	454.0	430.7	366.7	317.2	317.2
77.5°	363.8	352.2	294.0	259.0	261.9
80°	285.2	270.7	221.2	197.9	197.9
82.5°	209.5	192.1	148.4	131.0	136.8
85°	131.0	107.7	78.6	66.9	66.9
87.5°	40.7	32.0	23.3	26.2	26.2
90°	5.8	20.4	32.0	40.7	43.7
92.5°	14.6	37.8	46.6	55.3	58.2
95°	23.3	49.5	66.9	69.8	69.8
97.5°	32.0	55.3	81.5	93.1	93.1
100°	43.7	58.2	87.3	104.8	107.7
102.5°	55.3	64.0	93.1	110.6	116.4
105°	66.9	69.8	99.0	116.4	122.2



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CATALOG NUMBER: 4WSLA-150-L850-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	99.0	87.3	110.6	131.0	136.8
115°	110.6	93.1	116.4	133.9	142.6
117.5°	119.3	101.9	122.2	139.7	145.5
120°	128.1	107.7	125.1	145.5	151.3
122.5°	139.7	113.5	131.0	148.4	157.2
125°	148.4	119.3	133.9	154.3	160.1
127.5°	157.2	131.0	136.8	157.2	163.0
130°	163.0	142.6	139.7	160.1	165.9
132.5°	171.7	151.3	142.6	163.0	168.8
135°	177.5	160.1	148.4	163.0	171.7
137.5°	183.4	168.8	148.4	163.0	168.8
140°	189.2	177.5	151.3	163.0	168.8
142.5°	192.1	183.4	154.3	163.0	168.8
145°	197.9	189.2	165.9	163.0	168.8
147.5°	200.8	195.0	174.6	163.0	168.8
150°	203.7	200.8	183.4	165.9	165.9
152.5°	206.6	203.7	189.2	177.5	171.7
155°	209.5	206.6	195.0	186.3	183.4
157.5°	212.5	212.5	200.8	195.0	192.1
160°	212.5	215.4	206.6	200.8	197.9
162.5°	215.4	218.3	209.5	206.6	203.7
165°	215.4	218.3	212.5	212.5	212.5
167.5°	218.3	221.2	218.3	215.4	215.4
170°	218.3	221.2	218.3	218.3	218.3
172.5°	218.3	221.2	221.2	221.2	221.2
175°	218.3	221.2	221.2	224.1	224.1
177.5°	218.3	221.2	221.2	221.2	221.2
180°	221.2	221.2	221.2	221.2	221.2



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	78.6	75.7	101.9	122.2	128.1
110°	87.3	81.5	107.7	125.1	131.0



(END OF REPORT)