

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: P520578

Luminaire Tested: **4WSLA-200-L950-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: P520578
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-200-L950-UPL8-UNV-U
Description: 4 FOOT, 2000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 90 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

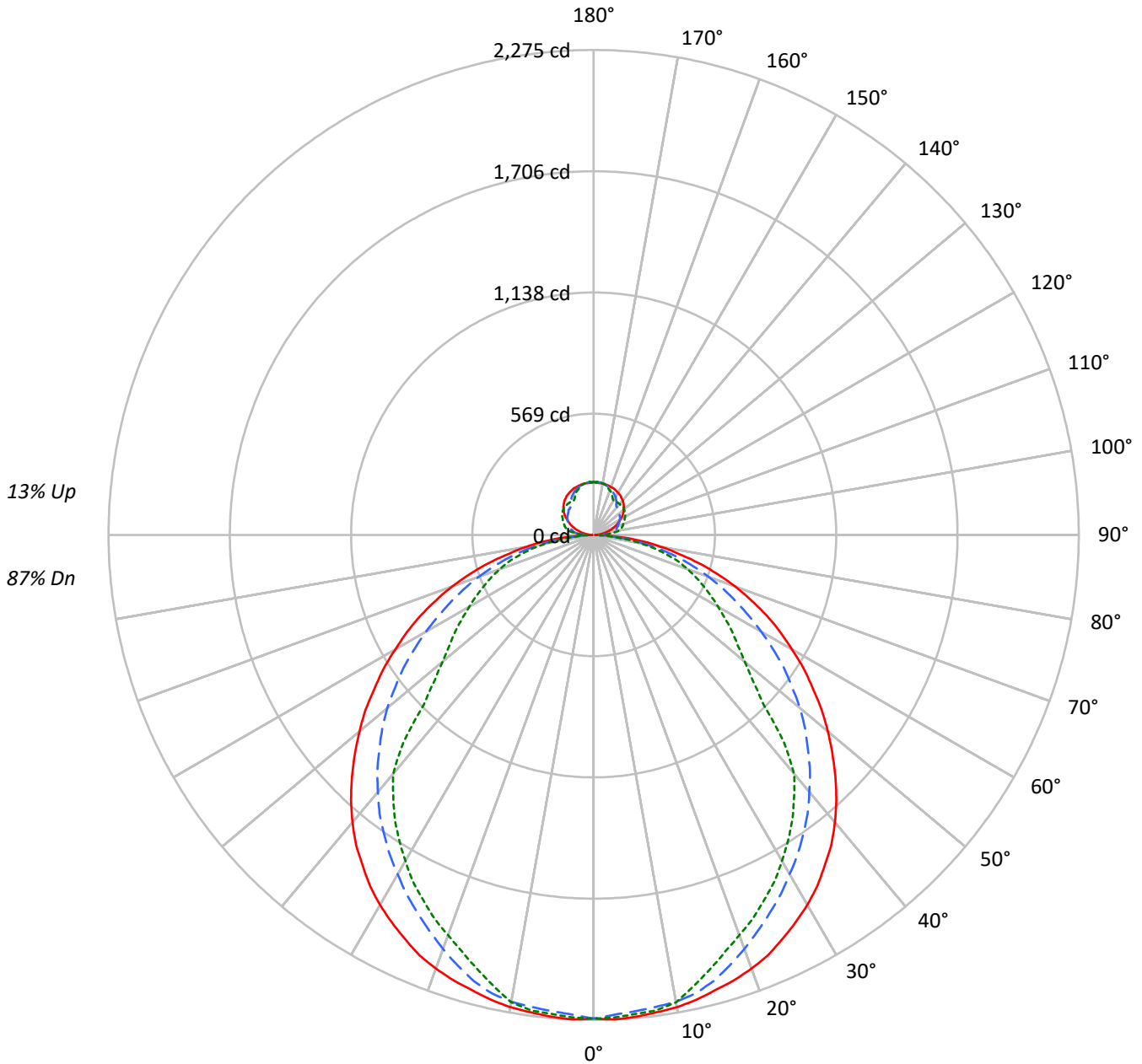
Lumens per Lamp: N/A
Luminaire Lumens: 7061.0 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 76.3
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°	12211	12211	12211
5°	12258	12116	12187
10°	12292	12150	12167
15°	12314	12078	11750
20°	12396	11836	11443
25°	12427	11612	11225
30°	12456	11422	10976
35°	12419	11261	10681
40°	12362	11055	10275
45°	12200	10809	8573
50°	11999	10578	7736
55°	11763	10231	7444
60°	11560	9768	7239
65°	11391	9354	7233
70°	11095	8990	7345
75°	10591	8553	7399
80°	9915	7689	6881
85°	9071	5440	4638



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.8	3.0
10°-20°	610.7	8.6
20°-30°	912.4	12.9
30°-40°	1089.2	15.4
40°-50°	1089.3	15.4
50°-60°	942.7	13.4
60°-70°	723.6	10.2
70°-80°	443.4	6.3
80°-90°	124.8	1.8
90°-100°	70.5	1.0
100°-110°	112.0	1.6
110°-120°	130.9	1.9
120°-130°	141.3	2.0
130°-140°	139.3	2.0
140°-150°	123.2	1.7
150°-160°	101.4	1.4
160°-170°	67.9	1.0
170°-180°	23.6	0.3
0°-30°	1737.9	24.6
0°-40°	2827.1	40.0
0°-60°	4859.1	68.8
0°-90°	6150.9	87.1
90°-120°	313.4	4.4
90°-150°	717.2	10.2
90°-180°	910.0	12.9
0°-180°	7061.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2269	2269	2269	2269	2269	
5°	2269	2262	2243	2259	2256	216
15°	2210	2207	2168	2128	2109	625
25°	2093	2066	1956	1903	1890	965
35°	1890	1841	1714	1652	1626	1184
45°	1603	1557	1420	1293	1126	1236
55°	1254	1224	1090	872	793	1124
65°	894	862	734	591	568	884
75°	509	483	411	356	356	537
85°	147	121	88	75	75	154
90°	6	23	36	46	49	10
95°	26	56	75	78	78	26
105°	75	78	111	131	137	79
115°	124	104	131	150	160	121
125°	166	134	150	173	180	148
135°	199	180	166	183	193	154
145°	222	212	186	183	189	138
155°	235	232	219	209	206	108
165°	242	245	238	238	238	69
175°	245	248	248	251	251	23
180°	248	248	248	248	248	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2268.9	2268.9	2268.9	2268.9	2268.9
2.5°	2275.4	2268.9	2252.5	2268.9	2265.6
5°	2268.9	2262.3	2242.7	2259.1	2255.8
7.5°	2259.1	2252.5	2233.0	2252.5	2249.3
10°	2249.3	2242.7	2223.2	2236.2	2226.4
12.5°	2233.0	2226.4	2203.6	2187.3	2167.7
15°	2210.1	2206.8	2167.7	2128.5	2108.9
17.5°	2190.5	2180.7	2118.7	2073.0	2050.1
20°	2164.4	2148.1	2066.5	2014.2	1997.9
22.5°	2135.0	2108.9	2011.0	1962.0	1948.9
25°	2092.6	2066.5	1955.5	1903.2	1890.2
27.5°	2050.1	2017.5	1900.0	1847.7	1834.7
30°	2004.4	1958.7	1837.9	1789.0	1766.1
32.5°	1952.2	1906.5	1779.2	1723.7	1697.6
35°	1890.2	1841.2	1713.9	1651.9	1625.7
37.5°	1831.4	1779.2	1648.6	1580.0	1544.1
40°	1759.6	1707.4	1573.5	1498.4	1462.5
42.5°	1684.5	1635.5	1501.7	1410.3	1322.1
45°	1602.9	1557.2	1420.1	1292.8	1126.3
47.5°	1518.0	1478.8	1345.0	1172.0	1012.0
50°	1433.1	1394.0	1263.4	1057.7	923.9
52.5°	1348.3	1315.6	1172.0	963.0	852.0
55°	1253.6	1224.2	1090.4	871.6	793.3
57.5°	1168.7	1139.3	995.7	796.6	731.3
60°	1074.0	1047.9	907.5	721.5	672.5
62.5°	985.9	956.5	819.4	656.2	620.3
65°	894.5	861.8	734.5	590.9	568.0
67.5°	799.8	767.2	652.9	532.1	519.1
70°	705.1	679.0	571.3	473.4	466.8
72.5°	607.2	577.8	489.7	417.9	417.9
75°	509.3	483.2	411.3	355.8	355.8
77.5°	408.1	395.0	329.7	290.5	293.8
80°	319.9	303.6	248.1	222.0	222.0
82.5°	235.0	215.5	166.5	146.9	153.4
85°	146.9	120.8	88.1	75.1	75.1
87.5°	45.7	35.9	26.1	29.4	29.4
90°	6.5	22.9	35.9	45.7	49.0
92.5°	16.3	42.4	52.2	62.0	65.3
95°	26.1	55.5	75.1	78.3	78.3
97.5°	35.9	62.0	91.4	104.5	104.5
100°	49.0	65.3	97.9	117.5	120.8
102.5°	62.0	71.8	104.5	124.1	130.6
105°	75.1	78.3	111.0	130.6	137.1



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CATALOG NUMBER: 4WSLA-200-L950-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	111.0	97.9	124.1	146.9	153.4
115°	124.1	104.5	130.6	150.2	160.0
117.5°	133.8	114.3	137.1	156.7	163.2
120°	143.6	120.8	140.4	163.2	169.8
122.5°	156.7	127.3	146.9	166.5	176.3
125°	166.5	133.8	150.2	173.0	179.6
127.5°	176.3	146.9	153.4	176.3	182.8
130°	182.8	160.0	156.7	179.6	186.1
132.5°	192.6	169.8	160.0	182.8	189.3
135°	199.1	179.6	166.5	182.8	192.6
137.5°	205.7	189.3	166.5	182.8	189.3
140°	212.2	199.1	169.8	182.8	189.3
142.5°	215.5	205.7	173.0	182.8	189.3
145°	222.0	212.2	186.1	182.8	189.3
147.5°	225.3	218.7	195.9	182.8	189.3
150°	228.5	225.3	205.7	186.1	186.1
152.5°	231.8	228.5	212.2	199.1	192.6
155°	235.0	231.8	218.7	208.9	205.7
157.5°	238.3	238.3	225.3	218.7	215.5
160°	238.3	241.6	231.8	225.3	222.0
162.5°	241.6	244.8	235.0	231.8	228.5
165°	241.6	244.8	238.3	238.3	238.3
167.5°	244.8	248.1	244.8	241.6	241.6
170°	244.8	248.1	244.8	244.8	244.8
172.5°	244.8	248.1	248.1	248.1	248.1
175°	244.8	248.1	248.1	251.4	251.4
177.5°	244.8	248.1	248.1	248.1	248.1
180°	248.1	248.1	248.1	248.1	248.1



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	88.1	84.9	114.3	137.1	143.6
110°	97.9	91.4	120.8	140.4	146.9



(END OF REPORT)