

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: P520577

Luminaire Tested: **4WSLA-200-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: P520577  
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-200-L950-UPL15-UNV-U  
Description: 4 FOOT, 2000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 90 CRI  
LEDS WITH 15% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

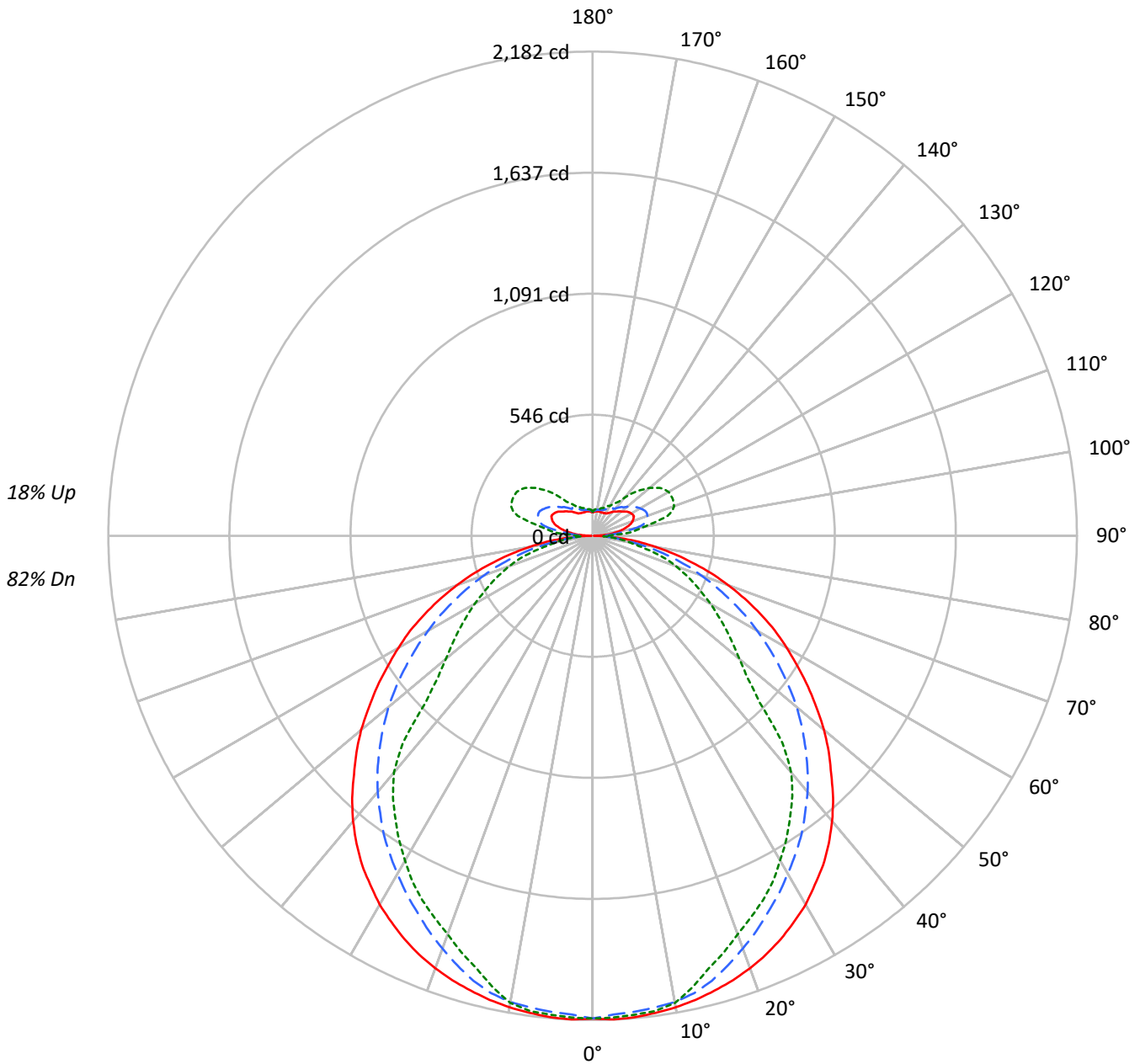
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7045.0 lumens  
Efficiency: N/A  
Efficacy: 92.3 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): 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					20					
RC	80					70					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	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°	11707	11707	11707
5°	11764	11633	11705
10°	11792	11659	11683
15°	11826	11567	11248
20°	11877	11334	10943
25°	11909	11109	10769
30°	11928	10927	10502
35°	11901	10784	10190
40°	11795	10586	9780
45°	11570	10327	8111
50°	11397	10049	7222
55°	11116	9647	6873
60°	10876	9214	6602
65°	10620	8709	6406
70°	10206	8159	6283
75°	9634	7478	5781
80°	8821	6292	5129
85°	7904	5446	5175



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.2	2.9
10°-20°	585.6	8.3
20°-30°	874.0	12.4
30°-40°	1041.4	14.8
40°-50°	1035.8	14.7
50°-60°	887.8	12.6
60°-70°	668.6	9.5
70°-80°	387.2	5.5
80°-90°	116.4	1.7
90°-100°	124.9	1.8
100°-110°	256.6	3.6
110°-120°	271.3	3.9
120°-130°	226.3	3.2
130°-140°	158.1	2.2
140°-150°	98.4	1.4
150°-160°	61.0	0.9
160°-170°	34.4	0.5
170°-180°	11.1	0.2
0°-30°	1665.8	23.6
0°-40°	2707.2	38.4
0°-60°	4630.8	65.7
0°-90°	5803.0	82.4
90°-120°	652.8	9.3
90°-150°	1135.6	16.1
90°-180°	1242.0	17.6
0°-180°	7045.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2175	2175	2175	2175	2175	
5°	2178	2171	2153	2169	2166	207
15°	2122	2120	2076	2041	2019	600
25°	2005	1977	1871	1824	1814	925
35°	1811	1763	1641	1577	1551	1131
45°	1520	1483	1357	1222	1066	1175
55°	1185	1167	1028	816	732	1059
65°	834	814	684	532	503	824
75°	463	448	360	287	278	491
85°	128	112	88	84	84	136
90°	7	31	53	66	71	13
95°	71	95	108	159	172	68
105°	166	172	247	331	351	172
115°	205	174	262	362	397	200
125°	190	168	227	333	375	169
135°	154	168	183	247	285	121
145°	126	146	159	170	181	80
155°	115	121	130	141	143	53
165°	112	117	121	126	126	32
175°	110	112	115	117	119	11
180°	108	108	108	108	108	



TEST NUMBER: P520577

CATALOG NUMBER: 4WSLA-200-L950-UPL15-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2175.3	2175.3	2175.3	2175.3	2175.3
2.5°	2181.9	2177.5	2159.9	2177.5	2173.1
5°	2177.5	2170.9	2153.2	2168.7	2166.5
7.5°	2168.7	2164.3	2144.4	2162.1	2159.9
10°	2157.7	2151.0	2133.4	2146.6	2137.8
12.5°	2142.2	2137.8	2111.3	2100.3	2082.6
15°	2122.4	2120.1	2076.0	2040.7	2018.7
17.5°	2100.3	2091.5	2029.7	1987.8	1967.9
20°	2073.8	2060.6	1978.9	1930.4	1910.6
22.5°	2042.9	2023.1	1928.2	1881.9	1862.0
25°	2005.4	1976.7	1870.8	1824.5	1813.5
27.5°	1963.5	1930.4	1817.9	1771.6	1758.3
30°	1919.4	1877.5	1758.3	1714.2	1689.9
32.5°	1864.2	1824.5	1701.0	1650.2	1623.8
35°	1811.3	1762.7	1641.4	1577.4	1550.9
37.5°	1747.3	1698.8	1573.0	1509.0	1478.1
40°	1678.9	1630.4	1506.8	1431.8	1392.1
42.5°	1603.9	1559.8	1434.0	1343.6	1266.4
45°	1520.1	1482.6	1356.8	1222.2	1065.6
47.5°	1442.8	1407.5	1279.6	1105.3	944.2
50°	1361.2	1328.1	1200.2	995.0	862.6
52.5°	1270.8	1246.5	1114.1	900.1	794.2
55°	1184.7	1167.1	1028.1	816.3	732.5
57.5°	1094.3	1076.6	942.0	736.9	670.7
60°	1010.4	992.8	856.0	666.3	613.3
62.5°	926.6	902.3	772.2	597.9	553.8
65°	833.9	814.1	683.9	531.7	503.0
67.5°	741.3	723.6	602.3	469.9	450.1
70°	648.6	633.2	518.5	410.4	399.3
72.5°	558.2	538.3	443.4	350.8	346.4
75°	463.3	447.9	359.6	286.8	278.0
77.5°	372.8	359.6	282.4	218.4	211.8
80°	284.6	271.4	203.0	158.8	165.5
82.5°	209.6	191.9	136.8	123.5	130.2
85°	128.0	112.5	88.2	83.8	83.8
87.5°	44.1	41.9	39.7	46.3	48.5
90°	6.6	30.9	52.9	66.2	70.6
92.5°	37.5	55.2	72.8	86.0	90.5
95°	70.6	94.9	108.1	158.8	172.1
97.5°	97.1	125.8	141.2	187.5	200.8
100°	123.5	150.0	198.6	222.8	238.3
102.5°	145.6	165.5	233.9	282.4	291.2
105°	165.5	172.1	247.1	330.9	350.8



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CATALOG NUMBER: 4WSLA-200-L950-UPL15-UNV-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	198.6	176.5	264.7	359.6	394.9
115°	205.2	174.3	262.5	361.8	397.1
117.5°	205.2	174.3	255.9	361.8	397.1
120°	200.8	176.5	247.1	357.4	394.9
122.5°	196.4	172.1	238.3	348.6	386.1
125°	189.7	167.7	227.2	333.1	375.1
127.5°	178.7	172.1	216.2	313.3	355.2
130°	169.9	174.3	203.0	293.4	335.3
132.5°	163.3	169.9	189.7	271.4	308.9
135°	154.4	167.7	183.1	247.1	284.6
137.5°	147.8	161.1	172.1	225.0	255.9
140°	141.2	156.6	161.1	196.4	222.8
142.5°	132.4	150.0	152.2	183.1	194.1
145°	125.8	145.6	158.8	169.9	180.9
147.5°	119.1	136.8	154.4	156.6	167.7
150°	116.9	128.0	147.8	150.0	154.4
152.5°	114.7	123.5	136.8	150.0	152.2
155°	114.7	121.3	130.2	141.2	143.4
157.5°	112.5	121.3	125.8	134.6	136.8
160°	112.5	119.1	123.5	130.2	132.4
162.5°	112.5	119.1	121.3	128.0	130.2
165°	112.5	116.9	121.3	125.8	125.8
167.5°	112.5	116.9	119.1	123.5	123.5
170°	112.5	114.7	119.1	121.3	121.3
172.5°	110.3	114.7	116.9	121.3	121.3
175°	110.3	112.5	114.7	116.9	119.1
177.5°	105.9	112.5	114.7	116.9	114.7
180°	108.1	108.1	108.1	108.1	108.1



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	180.9	174.3	255.9	348.6	377.3
110°	191.9	176.5	262.5	355.2	390.5



(END OF REPORT)