

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: P520569

Luminaire Tested: **4WSLA-200-L930-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: P520569  
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-L930-UPL8-UNV-U  
Description: 4 FOOT, 2000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 90 CRI  
LEDS WITH 8% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

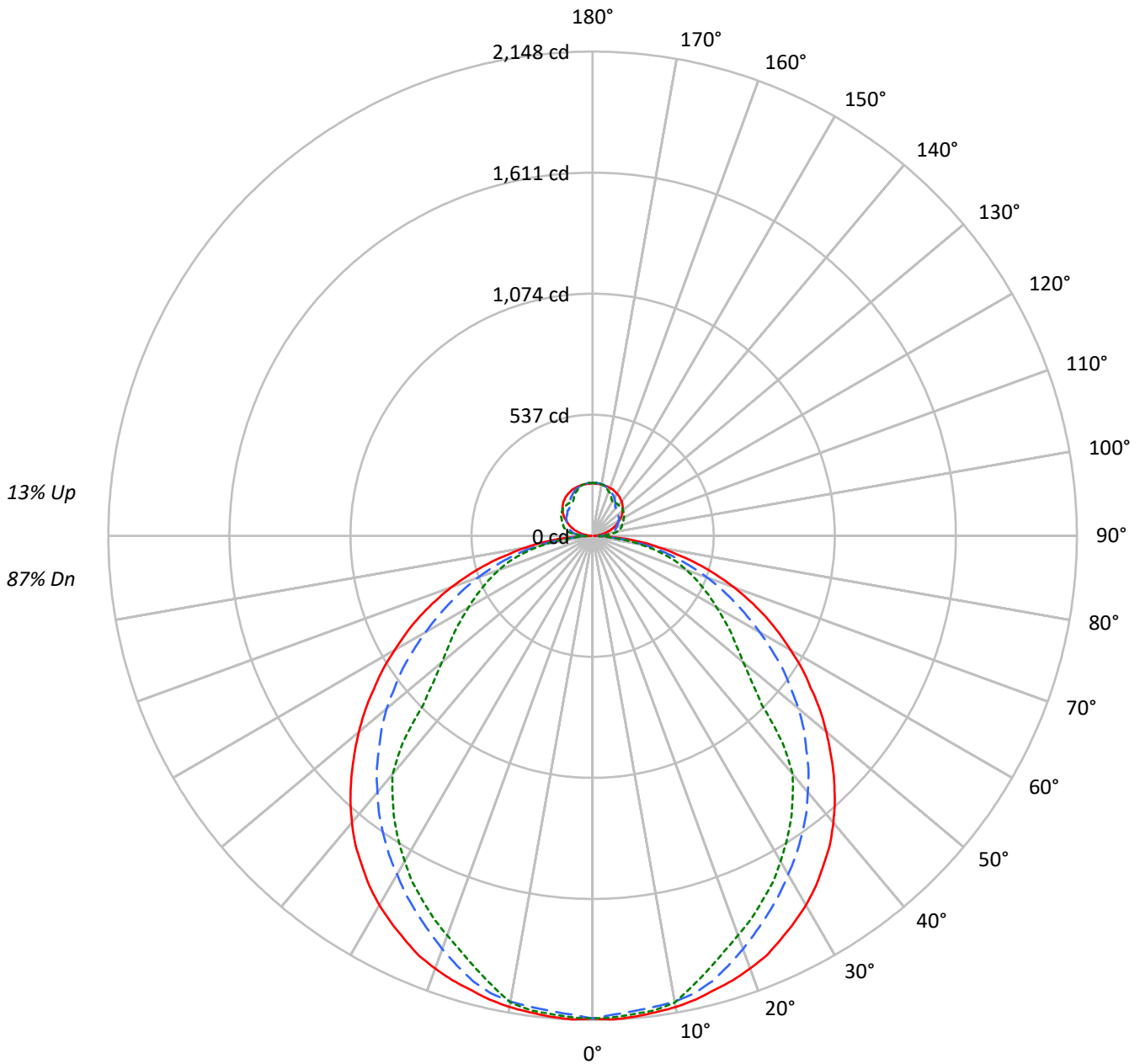
Lumens per Lamp: N/A  
Luminaire Lumens: 6665.0 lumens  
Efficiency: N/A  
Efficacy: 87.4 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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				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	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°	11526	11526	11526
5°	11570	11437	11504
10°	11603	11468	11485
15°	11624	11400	11091
20°	11701	11172	10801
25°	11729	10961	10595
30°	11758	10782	10360
35°	11722	10629	10083
40°	11669	10435	9699
45°	11516	10202	8092
50°	11327	9985	7302
55°	11103	9657	7026
60°	10912	9220	6833
65°	10752	8829	6828
70°	10474	8486	6935
75°	9996	8074	6985
80°	9360	7259	6493
85°	8565	5138	4378



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.7	3.0
10°-20°	576.4	8.6
20°-30°	861.3	12.9
30°-40°	1028.1	15.4
40°-50°	1028.2	15.4
50°-60°	889.9	13.4
60°-70°	683.0	10.2
70°-80°	418.5	6.3
80°-90°	117.8	1.8
90°-100°	66.6	1.0
100°-110°	105.7	1.6
110°-120°	123.6	1.9
120°-130°	133.4	2.0
130°-140°	131.5	2.0
140°-150°	116.3	1.7
150°-160°	95.7	1.4
160°-170°	64.0	1.0
170°-180°	22.3	0.3
0°-30°	1640.4	24.6
0°-40°	2668.5	40.0
0°-60°	4586.6	68.8
0°-90°	5805.9	87.1
90°-120°	295.9	4.4
90°-150°	677.0	10.2
90°-180°	859.0	12.9
0°-180°	6665.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2142	2142	2142	2142	2142	
5°	2142	2136	2117	2132	2129	204
15°	2086	2083	2046	2009	1991	590
25°	1975	1951	1846	1796	1784	911
35°	1784	1738	1618	1559	1535	1117
45°	1513	1470	1340	1220	1063	1167
55°	1183	1156	1029	823	749	1061
65°	844	814	693	558	536	834
75°	481	456	388	336	336	507
85°	139	114	83	71	71	145
90°	6	22	34	43	46	10
95°	25	52	71	74	74	24
105°	71	74	105	123	129	74
115°	117	99	123	142	151	114
125°	157	126	142	163	170	140
135°	188	170	157	173	182	145
145°	210	200	176	173	179	131
155°	222	219	206	197	194	102
165°	228	231	225	225	225	65
175°	231	234	234	237	237	22
180°	234	234	234	234	234	



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CATALOG NUMBER: 4WSLA-200-L930-UPL8-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2141.6	2141.6	2141.6	2141.6	2141.6
2.5°	2147.8	2141.6	2126.2	2141.6	2138.5
5°	2141.6	2135.5	2117.0	2132.4	2129.3
7.5°	2132.4	2126.2	2107.7	2126.2	2123.1
10°	2123.1	2117.0	2098.5	2110.8	2101.6
12.5°	2107.7	2101.6	2080.0	2064.6	2046.1
15°	2086.2	2083.1	2046.1	2009.1	1990.6
17.5°	2067.7	2058.4	1999.9	1956.7	1935.2
20°	2043.0	2027.6	1950.6	1901.3	1885.9
22.5°	2015.3	1990.6	1898.2	1852.0	1839.6
25°	1975.2	1950.6	1845.8	1796.5	1784.2
27.5°	1935.2	1904.3	1793.4	1744.1	1731.8
30°	1892.0	1848.9	1734.9	1688.6	1667.1
32.5°	1842.7	1799.6	1679.4	1627.0	1602.4
35°	1784.2	1737.9	1617.8	1559.2	1534.6
37.5°	1728.7	1679.4	1556.1	1491.4	1457.5
40°	1660.9	1611.6	1485.3	1414.4	1380.5
42.5°	1590.0	1543.8	1417.5	1331.2	1248.0
45°	1513.0	1469.9	1340.4	1220.3	1063.1
47.5°	1432.9	1395.9	1269.6	1106.2	955.3
50°	1352.8	1315.8	1192.5	998.4	872.1
52.5°	1272.6	1241.8	1106.2	909.0	804.3
55°	1183.3	1155.6	1029.2	822.8	748.8
57.5°	1103.2	1075.4	939.8	751.9	690.2
60°	1013.8	989.2	856.6	681.0	634.8
62.5°	930.6	902.9	773.4	619.4	585.5
65°	844.3	813.5	693.3	557.7	536.2
67.5°	755.0	724.1	616.3	502.3	490.0
70°	665.6	640.9	539.3	446.8	440.7
72.5°	573.2	545.4	462.2	394.4	394.4
75°	480.7	456.1	388.3	335.9	335.9
77.5°	385.2	372.9	311.2	274.3	277.3
80°	302.0	286.6	234.2	209.5	209.5
82.5°	221.9	203.4	157.2	138.7	144.8
85°	138.7	114.0	83.2	70.9	70.9
87.5°	43.1	33.9	24.7	27.7	27.7
90°	6.2	21.6	33.9	43.1	46.2
92.5°	15.4	40.1	49.3	58.5	61.6
95°	24.7	52.4	70.9	74.0	74.0
97.5°	33.9	58.5	86.3	98.6	98.6
100°	46.2	61.6	92.4	110.9	114.0
102.5°	58.5	67.8	98.6	117.1	123.3
105°	70.9	74.0	104.8	123.3	129.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	104.8	92.4	117.1	138.7	144.8
115°	117.1	98.6	123.3	141.7	151.0
117.5°	126.3	107.9	129.4	147.9	154.1
120°	135.6	114.0	132.5	154.1	160.2
122.5°	147.9	120.2	138.7	157.2	166.4
125°	157.2	126.3	141.7	163.3	169.5
127.5°	166.4	138.7	144.8	166.4	172.6
130°	172.6	151.0	147.9	169.5	175.6
132.5°	181.8	160.2	151.0	172.6	178.7
135°	188.0	169.5	157.2	172.6	181.8
137.5°	194.1	178.7	157.2	172.6	178.7
140°	200.3	188.0	160.2	172.6	178.7
142.5°	203.4	194.1	163.3	172.6	178.7
145°	209.5	200.3	175.6	172.6	178.7
147.5°	212.6	206.5	184.9	172.6	178.7
150°	215.7	212.6	194.1	175.6	175.6
152.5°	218.8	215.7	200.3	188.0	181.8
155°	221.9	218.8	206.5	197.2	194.1
157.5°	224.9	224.9	212.6	206.5	203.4
160°	224.9	228.0	218.8	212.6	209.5
162.5°	228.0	231.1	221.9	218.8	215.7
165°	228.0	231.1	224.9	224.9	224.9
167.5°	231.1	234.2	231.1	228.0	228.0
170°	231.1	234.2	231.1	231.1	231.1
172.5°	231.1	234.2	234.2	234.2	234.2
175°	231.1	234.2	234.2	237.3	237.3
177.5°	231.1	234.2	234.2	234.2	234.2
180°	234.2	234.2	234.2	234.2	234.2



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	83.2	80.1	107.9	129.4	135.6
110°	92.4	86.3	114.0	132.5	138.7



(END OF REPORT)