

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: P520645

Luminaire Tested: **8WSLA-100-L940-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: P520645
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-689-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 8WSLA-100-L940-UNV-U
Description: 8 FOOT, 2000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 90 CRI
LEDS WITH NO UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

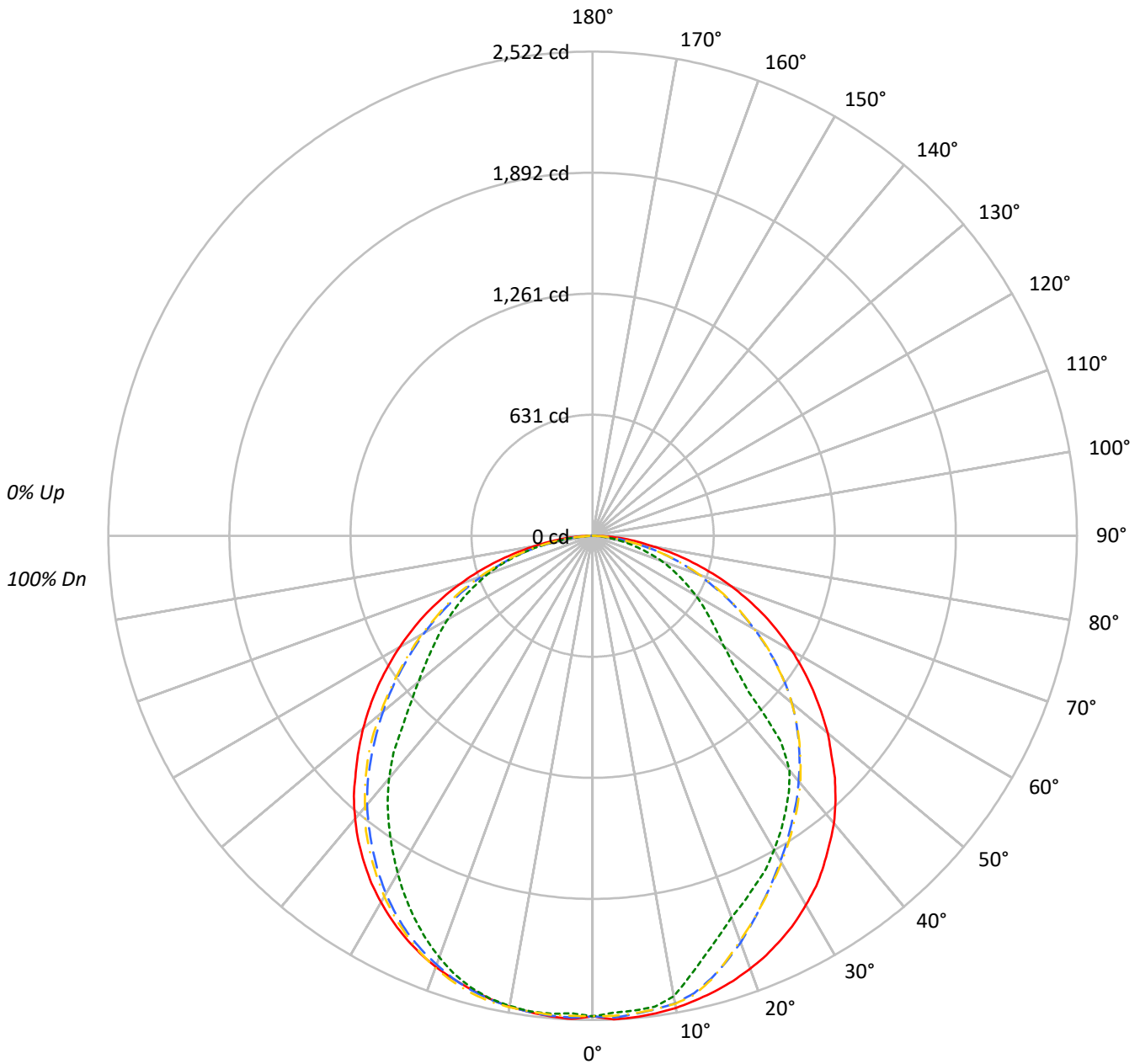
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6714.0 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 63.4
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84																			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70																			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60																			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44																			
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39																			
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34																			
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31																			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28																			
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	6735	6735	6735	6735
5°	6800	6706	6790	6750
10°	6824	6655	6806	6795
15°	6845	6303	6815	6793
20°	6871	6056	6844	6690
25°	6893	5956	6857	6522
30°	6901	5870	6851	6308
35°	6890	5756	6819	6074
40°	6867	5603	6759	5792
45°	6791	4354	6637	5314
50°	6689	3727	6526	4958
55°	6570	3490	6400	4769
60°	6446	3331	6251	4690
65°	6292	3154	6078	4634
70°	6043	3000	5789	4563
75°	5626	2639	5361	4342
80°	4993	2205	4682	3684
85°	4727	1575	4147	2115



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.8	3.5
10°-20°	678.3	10.1
20°-30°	1013.5	15.1
30°-40°	1206.4	18.0
40°-50°	1205.9	18.0
50°-60°	1037.7	15.5
60°-70°	781.0	11.6
70°-80°	445.1	6.6
80°-90°	108.3	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1929.6	28.7
0°-40°	3136.0	46.7
0°-60°	5379.6	80.1
0°-90°	6714.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6714.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2503	2503	2503	2503	2503	
5°	2518	2483	2514	2499	2518	240
15°	2457	2262	2446	2438	2457	694
25°	2322	2006	2309	2197	2322	1070
35°	2097	1752	2076	1849	2097	1312
45°	1784	1144	1744	1396	1784	1374
55°	1400	744	1364	1016	1400	1252
65°	988	495	955	728	988	976
75°	541	254	516	418	541	573
85°	153	51	134	68	153	167
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	2502.8	2502.8	2502.8	2502.8	2502.8	2502.8	2502.8	2502.8	2502.8	2502.8	2502.8
2.5°	2521.6	2498.7	2512.2	2508.1	2486.6	2494.7	2502.8	2494.7	2518.9	2497.4	2512.2
5°	2517.5	2493.4	2501.4	2493.4	2482.6	2485.3	2497.4	2489.3	2513.5	2490.7	2509.5
7.5°	2509.5	2479.9	2488.0	2484.0	2474.6	2475.9	2488.0	2481.3	2502.8	2481.3	2502.8
10°	2497.4	2466.5	2473.2	2455.8	2435.6	2450.4	2474.6	2467.8	2490.7	2466.5	2490.7
12.5°	2478.6	2447.7	2441.0	2383.3	2347.0	2375.2	2449.1	2449.1	2470.5	2447.7	2473.2
15°	2457.1	2423.5	2387.3	2300.0	2262.4	2290.6	2392.7	2427.6	2446.4	2423.5	2449.1
17.5°	2431.6	2392.7	2322.8	2220.8	2185.9	2214.1	2318.8	2395.3	2419.5	2395.3	2418.2
20°	2399.4	2353.7	2254.4	2137.5	2114.7	2140.2	2245.0	2356.4	2390.0	2360.4	2376.5
22.5°	2364.5	2309.4	2177.8	2073.1	2062.4	2078.5	2173.8	2308.1	2352.4	2321.5	2332.2
25°	2321.5	2257.0	2101.3	2014.0	2006.0	2015.4	2104.0	2251.7	2309.4	2277.2	2281.2
27.5°	2275.8	2206.0	2028.8	1964.3	1956.3	1960.3	2034.2	2188.6	2259.7	2227.5	2220.8
30°	2220.8	2145.6	1956.3	1897.2	1889.2	1903.9	1967.0	2124.1	2204.7	2172.5	2152.3
32.5°	2165.7	2079.8	1885.1	1839.5	1823.4	1836.8	1897.2	2057.0	2144.3	2110.7	2077.1
35°	2097.3	2010.0	1811.3	1765.6	1752.2	1767.0	1827.4	1987.2	2075.8	2042.2	1996.6
37.5°	2026.1	1936.1	1744.1	1702.5	1678.4	1695.8	1756.2	1914.7	2004.6	1969.7	1913.3
40°	1954.9	1858.3	1669.0	1626.0	1595.1	1620.6	1682.4	1838.1	1924.1	1891.8	1827.4
42.5°	1871.7	1780.4	1595.1	1534.7	1447.4	1529.3	1603.2	1761.6	1840.8	1809.9	1732.1
45°	1784.4	1697.1	1517.2	1370.9	1144.0	1384.3	1522.6	1681.0	1744.1	1714.6	1630.0
47.5°	1685.1	1611.2	1438.0	1215.1	994.9	1228.6	1440.7	1604.5	1652.8	1620.6	1526.6
50°	1597.8	1525.3	1354.8	1083.5	890.2	1098.3	1353.4	1518.6	1558.9	1529.3	1424.6
52.5°	1498.4	1435.3	1264.8	966.7	812.3	981.5	1262.1	1430.0	1462.2	1427.3	1322.5
55°	1400.4	1344.0	1169.5	863.3	743.8	876.8	1166.8	1338.7	1364.2	1323.9	1215.1
57.5°	1301.1	1250.0	1071.5	770.7	680.7	785.5	1078.2	1244.7	1262.1	1211.1	1111.7
60°	1197.7	1154.7	972.1	688.8	619.0	700.9	969.4	1150.7	1161.4	1106.4	1011.0
62.5°	1094.3	1055.3	872.7	613.6	555.9	621.7	879.5	1051.3	1058.0	1005.7	907.7
65°	988.2	952.0	776.1	534.4	495.4	547.8	782.8	947.9	954.6	895.6	807.0
67.5°	878.1	848.6	672.7	474.0	437.7	478.0	686.1	843.2	847.2	789.5	708.9
70°	768.0	742.5	581.4	408.2	381.3	409.5	590.8	727.7	735.8	674.0	609.6
72.5°	655.2	635.1	492.8	339.7	315.5	339.7	498.1	621.7	627.0	576.0	512.9
75°	541.1	526.3	402.8	272.6	253.8	271.2	405.5	515.6	515.6	467.3	417.6
77.5°	431.0	420.3	308.8	209.5	196.0	206.8	310.2	408.2	405.5	367.9	329.0
80°	322.2	314.2	221.5	151.7	142.3	147.7	221.5	302.1	302.1	275.2	228.3
82.5°	230.9	221.5	146.4	99.4	94.0	96.7	143.7	210.8	214.8	194.7	154.4
85°	153.1	131.6	79.2	55.0	51.0	52.4	75.2	122.2	134.3	112.8	80.6
87.5°	67.1	44.3	20.1	8.1	4.0	5.4	16.1	38.9	51.0	33.6	10.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2502.8	2502.8	2502.8	2502.8	2502.8	2502.8
2.5°	2510.8	2489.3	2497.4	2502.8	2497.4	2521.6
5°	2508.1	2498.7	2497.4	2504.1	2493.4	2517.5
7.5°	2504.1	2498.7	2497.4	2500.1	2486.6	2509.5
10°	2494.7	2486.6	2489.3	2493.4	2475.9	2497.4
12.5°	2477.2	2469.2	2470.5	2484.0	2459.8	2478.6
15°	2447.7	2438.3	2447.7	2462.5	2441.0	2457.1
17.5°	2408.8	2394.0	2410.1	2432.9	2416.8	2431.6
20°	2359.1	2336.3	2353.7	2395.3	2380.6	2399.4
22.5°	2298.7	2270.5	2287.9	2348.3	2344.3	2364.5
25°	2230.2	2196.6	2220.8	2294.6	2302.7	2321.5
27.5°	2153.7	2116.1	2148.3	2235.6	2254.4	2275.8
30°	2070.4	2030.1	2067.7	2169.8	2198.0	2220.8
32.5°	1984.5	1940.2	1983.1	2095.9	2136.2	2165.7
35°	1894.5	1848.9	1897.2	2019.4	2067.7	2097.3
37.5°	1797.8	1753.5	1805.9	1938.8	1996.6	2026.1
40°	1698.5	1648.8	1707.9	1843.5	1920.0	1954.9
42.5°	1596.4	1534.7	1607.2	1753.5	1836.8	1871.7
45°	1482.3	1396.4	1494.4	1658.2	1745.5	1784.4
47.5°	1368.2	1282.3	1381.6	1556.2	1650.2	1685.1
50°	1258.1	1184.2	1263.5	1444.7	1553.5	1597.8
52.5°	1157.4	1097.0	1164.1	1336.0	1454.1	1498.4
55°	1063.4	1016.4	1071.5	1228.6	1349.4	1400.4
57.5°	974.8	945.2	982.8	1126.5	1252.7	1301.1
60°	891.5	871.4	898.3	1025.8	1138.6	1197.7
62.5°	809.6	798.9	819.0	919.7	1032.5	1094.3
65°	730.4	727.7	738.5	827.1	921.1	988.2
67.5°	651.2	649.9	656.6	729.1	812.3	878.1
70°	572.0	580.0	576.0	623.0	703.6	768.0
72.5°	491.4	503.5	496.8	526.3	604.2	655.2
75°	401.5	417.6	404.1	437.7	486.1	541.1
77.5°	308.8	326.3	310.2	339.7	392.1	431.0
80°	221.5	237.7	224.2	247.1	292.7	322.2
82.5°	139.6	151.7	141.0	163.8	209.5	230.9
85°	61.8	68.5	71.2	88.6	128.9	153.1
87.5°	2.7	1.3	2.7	17.5	45.7	67.1
90°	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270° - · - · 135°-315°









(END OF REPORT)