

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: P520532

Luminaire Tested: **4WSLA-175-L830-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: P520532
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-175-L830-UPL15-UNV-U
Description: 4 FOOT, 1750 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 80 CRI
LEDS WITH 15% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

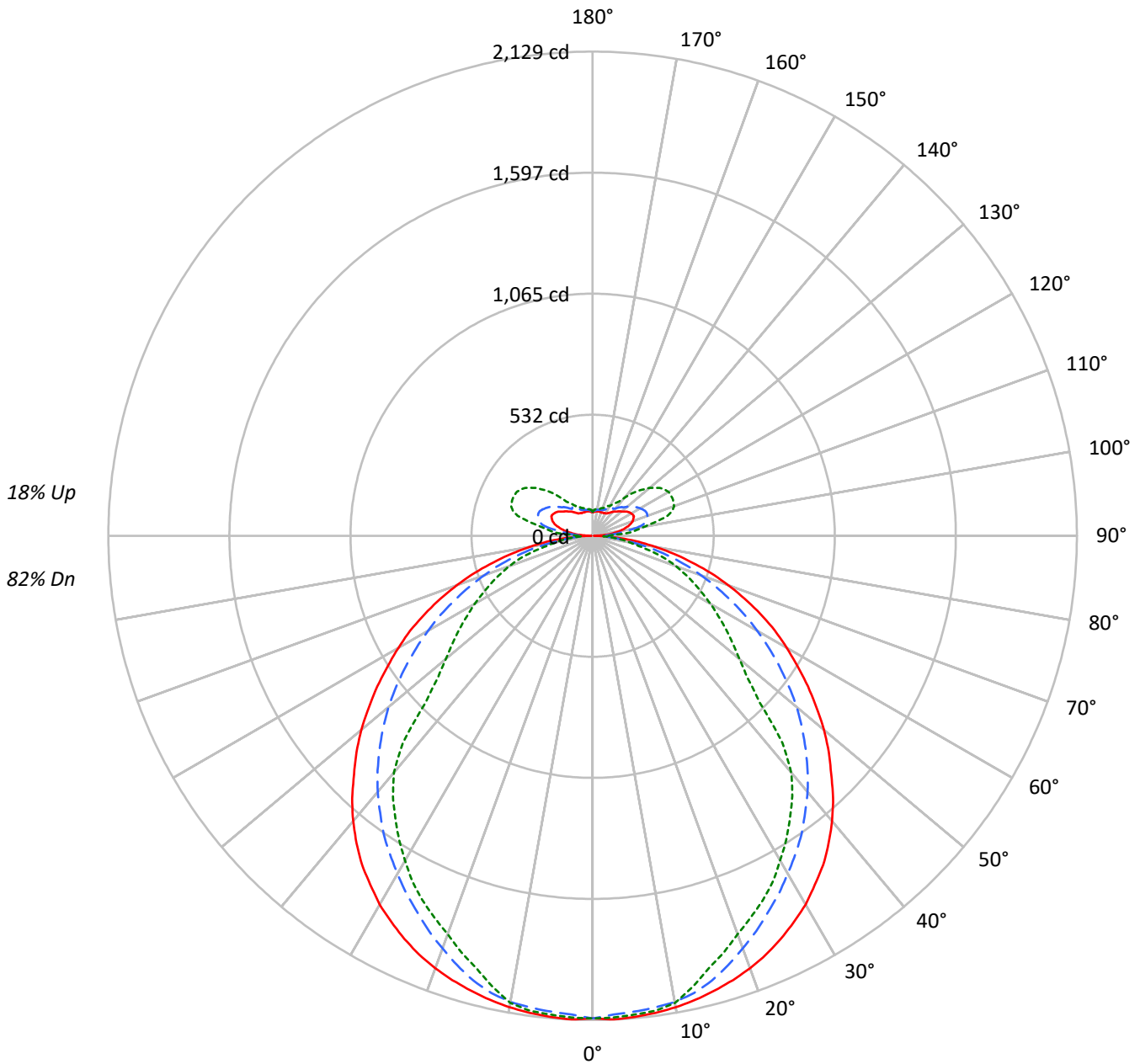
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6873.0 lumens
Efficiency: N/A
Efficacy: 115.5 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): 59.5
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

TEST NUMBER: P520532
CATALOG NUMBER: 4WSLA-175-L830-UPL15-UNV-U

Luminous Intensity Polar Plot





TEST NUMBER: P520532

CATALOG NUMBER: 4WSLA-175-L830-UPL15-UNV-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	86	86	86	82
1	105	100	96	92	100	96	93	89	89	86	83	82	80	78	76	74	72	72	72	72	69
2	96	88	81	76	91	84	78	73	78	73	69	72	68	65	67	64	61	61	61	61	58
3	87	77	69	63	83	74	67	61	69	63	58	64	59	55	59	55	52	52	52	52	49
4	80	68	60	53	76	66	58	52	61	55	50	57	51	47	53	48	45	45	45	45	42
5	73	61	52	46	70	59	51	45	55	48	43	51	45	41	48	43	39	39	39	39	36
6	68	55	46	40	65	53	45	39	50	43	38	46	40	36	43	38	34	34	34	34	32
7	63	50	41	35	60	48	40	35	45	38	33	42	36	32	39	34	30	30	30	30	28
8	58	45	37	32	56	44	36	31	41	35	30	39	33	29	36	31	27	27	27	27	25
9	55	42	34	28	52	40	33	28	38	31	27	36	30	26	33	28	25	25	25	25	23
10	51	38	31	26	49	37	30	25	35	29	24	33	27	23	31	26	23	23	23	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11422	11422	11422
5°	11477	11349	11419
10°	11504	11374	11398
15°	11536	11285	10973
20°	11588	11057	10675
25°	11618	10839	10506
30°	11637	10660	10246
35°	11610	10521	9941
40°	11507	10328	9542
45°	11287	10075	7913
50°	11119	9804	7047
55°	10845	9411	6705
60°	10611	8989	6440
65°	10361	8497	6249
70°	9958	7959	6131
75°	9399	7295	5639
80°	8604	6137	5002
85°	7707	5317	5051



TEST NUMBER: P520532

CATALOG NUMBER: 4WSLA-175-L830-UPL15-UNV-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.1	2.9
10°-20°	571.3	8.3
20°-30°	852.7	12.4
30°-40°	1016.0	14.8
40°-50°	1010.5	14.7
50°-60°	866.1	12.6
60°-70°	652.3	9.5
70°-80°	377.8	5.5
80°-90°	113.5	1.7
90°-100°	121.9	1.8
100°-110°	250.3	3.6
110°-120°	264.7	3.9
120°-130°	220.8	3.2
130°-140°	154.2	2.2
140°-150°	96.0	1.4
150°-160°	59.5	0.9
160°-170°	33.5	0.5
170°-180°	10.8	0.2
0°-30°	1625.1	23.6
0°-40°	2641.1	38.4
0°-60°	4517.7	65.7
0°-90°	5661.3	82.4
90°-120°	636.9	9.3
90°-150°	1107.9	16.1
90°-180°	1212.0	17.6
0°-180°	6873.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2122	2122	2122	2122	2122	
5°	2124	2118	2101	2116	2114	202
15°	2070	2068	2025	1991	1969	585
25°	1956	1928	1825	1780	1769	902
35°	1767	1720	1601	1539	1513	1104
45°	1483	1446	1324	1192	1040	1146
55°	1156	1139	1003	796	715	1033
65°	814	794	667	519	491	804
75°	452	437	351	280	271	479
85°	125	110	86	82	82	133
90°	6	30	52	65	69	13
95°	69	92	106	155	168	66
105°	161	168	241	323	342	167
115°	200	170	256	353	387	195
125°	185	164	222	325	366	164
135°	151	164	179	241	278	118
145°	123	142	155	166	176	78
155°	112	118	127	138	140	52
165°	110	114	118	123	123	31
175°	108	110	112	114	116	10
180°	106	106	106	106	106	



TEST NUMBER: P520532

CATALOG NUMBER: 4WSLA-175-L830-UPL15-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2122.2	2122.2	2122.2	2122.2	2122.2
2.5°	2128.6	2124.3	2107.1	2124.3	2120.0
5°	2124.3	2117.9	2100.7	2115.7	2113.6
7.5°	2115.7	2111.4	2092.1	2109.3	2107.1
10°	2105.0	2098.5	2081.3	2094.2	2085.6
12.5°	2089.9	2085.6	2059.8	2049.0	2031.8
15°	2070.5	2068.4	2025.3	1990.9	1969.4
17.5°	2049.0	2040.4	1980.1	1939.2	1919.9
20°	2023.2	2010.3	1930.6	1883.3	1863.9
22.5°	1993.1	1973.7	1881.1	1835.9	1816.6
25°	1956.5	1928.5	1825.2	1780.0	1769.2
27.5°	1915.6	1883.3	1773.5	1728.3	1715.4
30°	1872.5	1831.6	1715.4	1672.4	1648.7
32.5°	1818.7	1780.0	1659.4	1609.9	1584.1
35°	1767.1	1719.7	1601.3	1538.9	1513.1
37.5°	1704.6	1657.3	1534.6	1472.2	1442.1
40°	1637.9	1590.6	1470.0	1396.9	1358.1
42.5°	1564.7	1521.7	1399.0	1310.8	1235.4
45°	1483.0	1446.4	1323.7	1192.4	1039.6
47.5°	1407.6	1373.2	1248.3	1078.3	921.2
50°	1328.0	1295.7	1170.9	970.7	841.6
52.5°	1239.7	1216.1	1086.9	878.1	774.8
55°	1155.8	1138.6	1003.0	796.4	714.6
57.5°	1067.6	1050.3	919.0	718.9	654.3
60°	985.8	968.5	835.1	650.0	598.3
62.5°	904.0	880.3	753.3	583.3	540.2
65°	813.6	794.2	667.2	518.7	490.7
67.5°	723.2	706.0	587.6	458.4	439.1
70°	632.8	617.7	505.8	400.3	389.6
72.5°	544.5	525.2	432.6	342.2	337.9
75°	452.0	436.9	350.8	279.8	271.2
77.5°	363.7	350.8	275.5	213.1	206.6
80°	277.6	264.7	198.0	155.0	161.4
82.5°	204.5	187.3	133.4	120.5	127.0
85°	124.8	109.8	86.1	81.8	81.8
87.5°	43.0	40.9	38.7	45.2	47.4
90°	6.5	30.1	51.7	64.6	68.9
92.5°	36.6	53.8	71.0	83.9	88.2
95°	68.9	92.5	105.5	155.0	167.9
97.5°	94.7	122.7	137.7	182.9	195.9
100°	120.5	146.4	193.7	217.4	232.5
102.5°	142.1	161.4	228.1	275.5	284.1
105°	161.4	167.9	241.1	322.8	342.2



TEST NUMBER: P520532

CATALOG NUMBER: 4WSLA-175-L830-UPL15-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	193.7	172.2	258.3	350.8	385.3
115°	200.2	170.0	256.1	353.0	387.4
117.5°	200.2	170.0	249.7	353.0	387.4
120°	195.9	172.2	241.1	348.7	385.3
122.5°	191.6	167.9	232.5	340.1	376.7
125°	185.1	163.6	221.7	325.0	365.9
127.5°	174.3	167.9	210.9	305.6	346.5
130°	165.7	170.0	198.0	286.3	327.2
132.5°	159.3	165.7	185.1	264.7	301.3
135°	150.7	163.6	178.6	241.1	277.6
137.5°	144.2	157.1	167.9	219.5	249.7
140°	137.7	152.8	157.1	191.6	217.4
142.5°	129.1	146.4	148.5	178.6	189.4
145°	122.7	142.1	155.0	165.7	176.5
147.5°	116.2	133.4	150.7	152.8	163.6
150°	114.1	124.8	144.2	146.4	150.7
152.5°	111.9	120.5	133.4	146.4	148.5
155°	111.9	118.4	127.0	137.7	139.9
157.5°	109.8	118.4	122.7	131.3	133.4
160°	109.8	116.2	120.5	127.0	129.1
162.5°	109.8	116.2	118.4	124.8	127.0
165°	109.8	114.1	118.4	122.7	122.7
167.5°	109.8	114.1	116.2	120.5	120.5
170°	109.8	111.9	116.2	118.4	118.4
172.5°	107.6	111.9	114.1	118.4	118.4
175°	107.6	109.8	111.9	114.1	116.2
177.5°	103.3	109.8	111.9	114.1	111.9
180°	105.5	105.5	105.5	105.5	105.5



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	176.5	170.0	249.7	340.1	368.0
110°	187.3	172.2	256.1	346.5	381.0



(END OF REPORT)