

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: P520553

Luminaire Tested: **4WSLA-175-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: P520553
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-L950-UPL15-UNV-U
Description: 4 FOOT, 1750 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 90 CRI
LEDS WITH 15% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

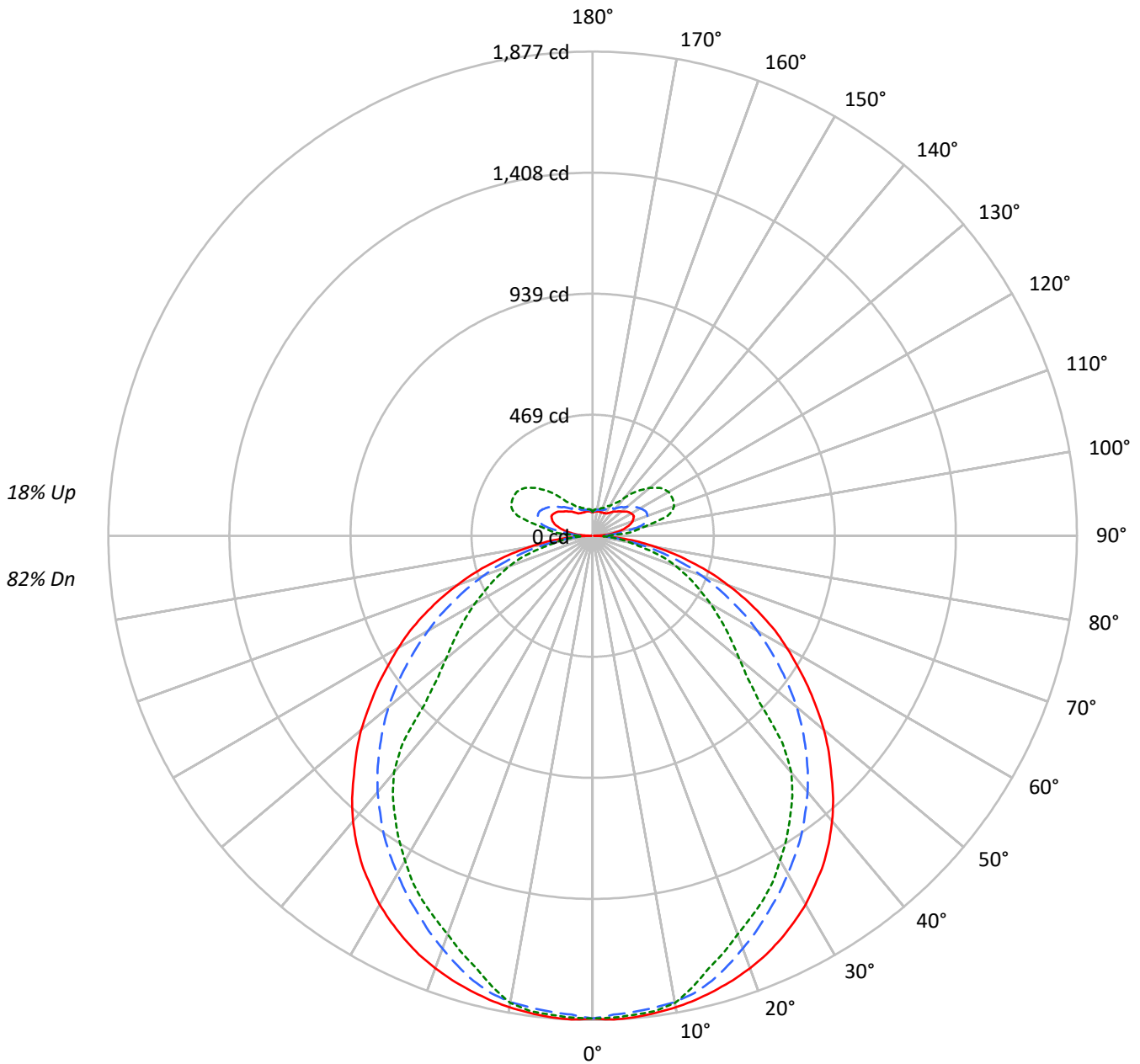
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6061.0 lumens
Efficiency: N/A
Efficacy: 101.9 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

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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	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°	10072	10072	10072
5°	10121	10008	10070
10°	10145	10030	10051
15°	10174	9952	9677
20°	10219	9751	9414
25°	10245	9558	9265
30°	10262	9401	9035
35°	10238	9278	8767
40°	10148	9108	8415
45°	9954	8885	6978
50°	9805	8645	6213
55°	9563	8299	5912
60°	9357	7927	5680
65°	9137	7493	5512
70°	8781	7018	5405
75°	8289	6434	4974
80°	7587	5411	4413
85°	6799	4687	4452



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.4	2.9
10°-20°	503.8	8.3
20°-30°	751.9	12.4
30°-40°	895.9	14.8
40°-50°	891.2	14.7
50°-60°	763.8	12.6
60°-70°	575.2	9.5
70°-80°	333.1	5.5
80°-90°	100.1	1.7
90°-100°	107.5	1.8
100°-110°	220.7	3.6
110°-120°	233.4	3.9
120°-130°	194.7	3.2
130°-140°	136.0	2.2
140°-150°	84.7	1.4
150°-160°	52.5	0.9
160°-170°	29.6	0.5
170°-180°	9.5	0.2
0°-30°	1433.1	23.6
0°-40°	2329.1	38.4
0°-60°	3984.0	65.7
0°-90°	4992.4	82.4
90°-120°	561.6	9.3
90°-150°	977.0	16.1
90°-180°	1069.0	17.6
0°-180°	6061.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1872	1872	1872	1872	1872	
5°	1873	1868	1852	1866	1864	178
15°	1826	1824	1786	1756	1737	516
25°	1725	1701	1610	1570	1560	795
35°	1558	1516	1412	1357	1334	973
45°	1308	1276	1167	1052	917	1011
55°	1019	1004	884	702	630	911
65°	718	700	588	457	433	709
75°	399	385	309	247	239	422
85°	110	97	76	72	72	117
90°	6	27	46	57	61	11
95°	61	82	93	137	148	58
105°	142	148	213	285	302	148
115°	176	150	226	311	342	172
125°	163	144	196	287	323	145
135°	133	144	158	213	245	104
145°	108	125	137	146	156	69
155°	99	104	112	122	123	46
165°	97	101	104	108	108	27
175°	95	97	99	101	102	9
180°	93	93	93	93	93	



TEST NUMBER: P520553

CATALOG NUMBER: 4WSLA-175-L950-UPL15-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1871.5	1871.5	1871.5	1871.5	1871.5
2.5°	1877.2	1873.4	1858.2	1873.4	1869.6
5°	1873.4	1867.7	1852.5	1865.8	1863.9
7.5°	1865.8	1862.0	1844.9	1860.1	1858.2
10°	1856.3	1850.6	1835.4	1846.8	1839.2
12.5°	1843.0	1839.2	1816.4	1806.9	1791.8
15°	1825.9	1824.0	1786.1	1755.7	1736.7
17.5°	1806.9	1799.3	1746.2	1710.1	1693.1
20°	1784.2	1772.8	1702.5	1660.8	1643.7
22.5°	1757.6	1740.5	1658.9	1619.0	1601.9
25°	1725.3	1700.6	1609.5	1569.7	1560.2
27.5°	1689.3	1660.8	1564.0	1524.1	1512.7
30°	1651.3	1615.2	1512.7	1474.8	1453.9
32.5°	1603.8	1569.7	1463.4	1419.7	1397.0
35°	1558.3	1516.5	1412.1	1357.1	1334.3
37.5°	1503.2	1461.5	1353.3	1298.3	1271.7
40°	1444.4	1402.7	1296.4	1231.8	1197.7
42.5°	1379.9	1341.9	1233.7	1155.9	1089.5
45°	1307.8	1275.5	1167.3	1051.5	916.8
47.5°	1241.3	1211.0	1100.9	950.9	812.4
50°	1171.1	1142.6	1032.5	856.0	742.1
52.5°	1093.3	1072.4	958.5	774.4	683.3
55°	1019.2	1004.1	884.5	702.3	630.1
57.5°	941.4	926.2	810.5	633.9	577.0
60°	869.3	854.1	736.4	573.2	527.7
62.5°	797.2	776.3	664.3	514.4	476.4
65°	717.5	700.4	588.4	457.4	432.8
67.5°	637.7	622.6	518.2	404.3	387.2
70°	558.0	544.7	446.0	353.0	343.5
72.5°	480.2	463.1	381.5	301.8	298.0
75°	398.6	385.3	309.4	246.7	239.2
77.5°	320.8	309.4	242.9	187.9	182.2
80°	244.8	233.5	174.6	136.7	142.4
82.5°	180.3	165.1	117.7	106.3	112.0
85°	110.1	96.8	75.9	72.1	72.1
87.5°	38.0	36.1	34.2	39.9	41.8
90°	5.7	26.6	45.6	56.9	60.7
92.5°	32.3	47.5	62.6	74.0	77.8
95°	60.7	81.6	93.0	136.7	148.0
97.5°	83.5	108.2	121.5	161.3	172.7
100°	106.3	129.1	170.8	191.7	205.0
102.5°	125.3	142.4	201.2	242.9	250.5
105°	142.4	148.0	212.6	284.7	301.8



TEST NUMBER: P520553

CATALOG NUMBER: 4WSLA-175-L950-UPL15-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.8	151.8	227.8	309.4	339.7
115°	176.5	149.9	225.9	311.3	341.6
117.5°	176.5	149.9	220.2	311.3	341.6
120°	172.7	151.8	212.6	307.5	339.7
122.5°	168.9	148.0	205.0	299.9	332.2
125°	163.2	144.3	195.5	286.6	322.7
127.5°	153.7	148.0	186.0	269.5	305.6
130°	146.1	149.9	174.6	252.4	288.5
132.5°	140.5	146.1	163.2	233.5	265.7
135°	132.9	144.3	157.5	212.6	244.8
137.5°	127.2	138.6	148.0	193.6	220.2
140°	121.5	134.8	138.6	168.9	191.7
142.5°	113.9	129.1	131.0	157.5	167.0
145°	108.2	125.3	136.7	146.1	155.6
147.5°	102.5	117.7	132.9	134.8	144.3
150°	100.6	110.1	127.2	129.1	132.9
152.5°	98.7	106.3	117.7	129.1	131.0
155°	98.7	104.4	112.0	121.5	123.4
157.5°	96.8	104.4	108.2	115.8	117.7
160°	96.8	102.5	106.3	112.0	113.9
162.5°	96.8	102.5	104.4	110.1	112.0
165°	96.8	100.6	104.4	108.2	108.2
167.5°	96.8	100.6	102.5	106.3	106.3
170°	96.8	98.7	102.5	104.4	104.4
172.5°	94.9	98.7	100.6	104.4	104.4
175°	94.9	96.8	98.7	100.6	102.5
177.5°	91.1	96.8	98.7	100.6	98.7
180°	93.0	93.0	93.0	93.0	93.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	155.6	149.9	220.2	299.9	324.6
110°	165.1	151.8	225.9	305.6	336.0



(END OF REPORT)