

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: P520548

Luminaire Tested: **4WSLA-175-L935-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: P520548
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-175-L935-UPL8-UNV-U
Description: 4 FOOT, 1750 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 90 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

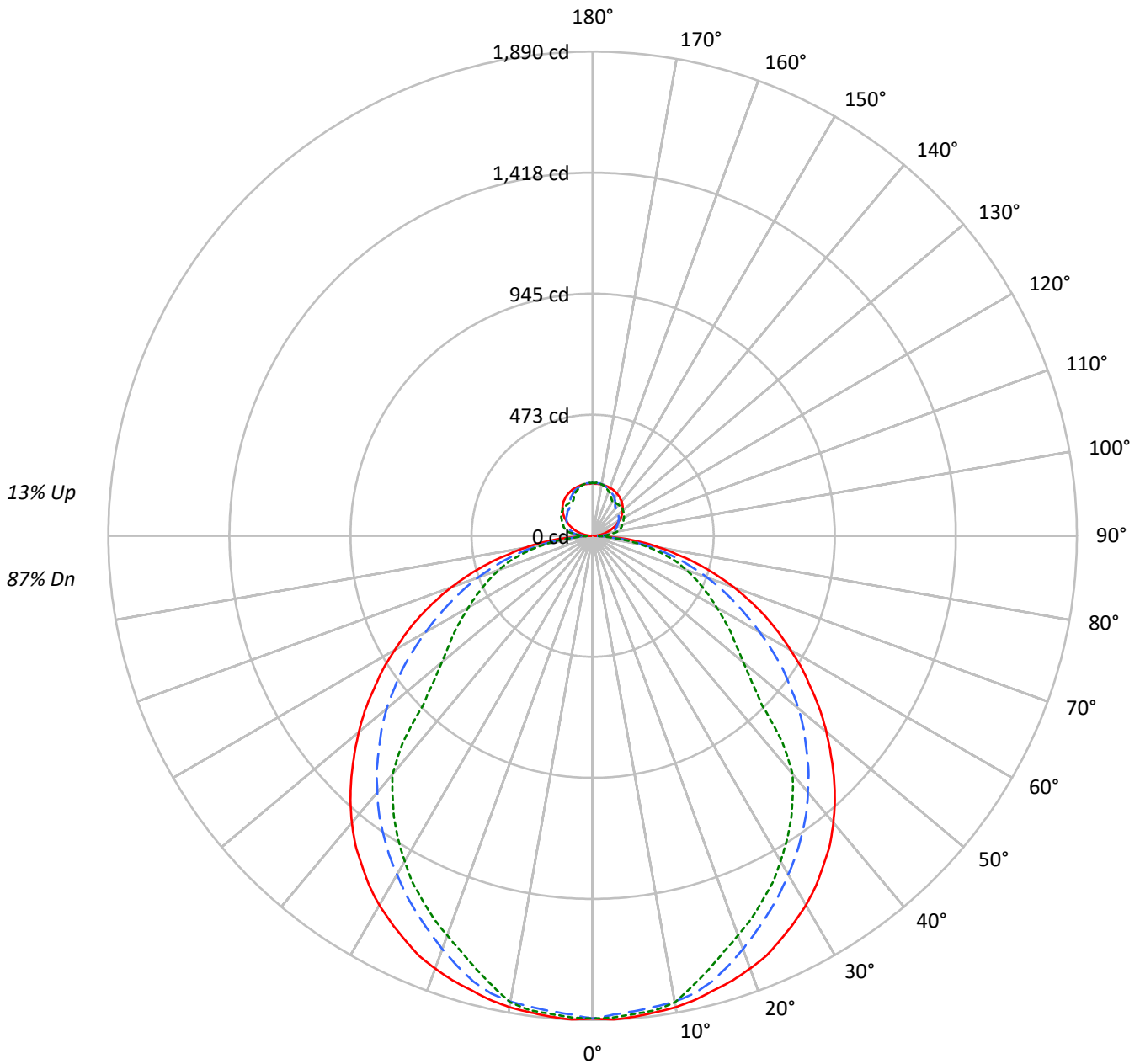
Lumens per Lamp: N/A
Luminaire Lumens: 5865.0 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 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	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°	10143	10143	10143
5°	10182	10064	10123
10°	10210	10092	10106
15°	10229	10032	9760
20°	10297	9830	9505
25°	10321	9645	9323
30°	10347	9487	9117
35°	10315	9353	8872
40°	10269	9183	8535
45°	10134	8977	7120
50°	9967	8786	6425
55°	9771	8498	6183
60°	9602	8114	6013
65°	9462	7769	6008
70°	9216	7467	6102
75°	8796	7105	6147
80°	8235	6388	5715
85°	7534	4520	3853



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.4	3.0
10°-20°	507.2	8.6
20°-30°	757.9	12.9
30°-40°	904.7	15.4
40°-50°	904.8	15.4
50°-60°	783.0	13.4
60°-70°	601.0	10.2
70°-80°	368.3	6.3
80°-90°	103.7	1.8
90°-100°	58.6	1.0
100°-110°	93.0	1.6
110°-120°	108.7	1.9
120°-130°	117.4	2.0
130°-140°	115.7	2.0
140°-150°	102.3	1.7
150°-160°	84.2	1.4
160°-170°	56.4	1.0
170°-180°	19.6	0.3
0°-30°	1443.5	24.6
0°-40°	2348.2	40.0
0°-60°	4036.1	68.8
0°-90°	5109.1	87.1
90°-120°	260.3	4.4
90°-150°	595.7	10.2
90°-180°	756.0	12.9
0°-180°	5865.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1885	1885	1885	1885	1885	
5°	1885	1879	1863	1876	1874	179
15°	1836	1833	1800	1768	1752	519
25°	1738	1716	1624	1581	1570	802
35°	1570	1529	1424	1372	1350	983
45°	1331	1293	1180	1074	936	1027
55°	1041	1017	906	724	659	933
65°	743	716	610	491	472	734
75°	423	401	342	296	296	446
85°	122	100	73	62	62	128
90°	5	19	30	38	41	9
95°	22	46	62	65	65	21
105°	62	65	92	108	114	65
115°	103	87	108	125	133	101
125°	138	111	125	144	149	123
135°	165	149	138	152	160	128
145°	184	176	155	152	157	115
155°	195	192	182	174	171	90
165°	201	203	198	198	198	57
175°	203	206	206	209	209	19
180°	206	206	206	206	206	



TEST NUMBER: P520548

CATALOG NUMBER: 4WSLA-175-L935-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1884.6	1884.6	1884.6	1884.6	1884.6
2.5°	1890.0	1884.6	1871.0	1884.6	1881.9
5°	1884.6	1879.1	1862.9	1876.4	1873.7
7.5°	1876.4	1871.0	1854.7	1871.0	1868.3
10°	1868.3	1862.9	1846.6	1857.4	1849.3
12.5°	1854.7	1849.3	1830.3	1816.8	1800.5
15°	1835.8	1833.0	1800.5	1768.0	1751.7
17.5°	1819.5	1811.3	1759.8	1721.9	1702.9
20°	1797.8	1784.2	1716.4	1673.1	1659.5
22.5°	1773.4	1751.7	1670.3	1629.7	1618.8
25°	1738.1	1716.4	1624.2	1580.9	1570.0
27.5°	1702.9	1675.8	1578.2	1534.8	1523.9
30°	1664.9	1627.0	1526.6	1486.0	1467.0
32.5°	1621.5	1583.6	1477.8	1431.7	1410.0
35°	1570.0	1529.3	1423.6	1372.1	1350.4
37.5°	1521.2	1477.8	1369.4	1312.4	1282.6
40°	1461.6	1418.2	1307.0	1244.6	1214.8
42.5°	1399.2	1358.5	1247.3	1171.4	1098.2
45°	1331.4	1293.4	1179.5	1073.8	935.5
47.5°	1260.9	1228.4	1117.2	973.5	840.6
50°	1190.4	1157.9	1049.4	878.6	767.4
52.5°	1119.9	1092.8	973.5	799.9	707.7
55°	1041.3	1016.9	905.7	724.0	658.9
57.5°	970.8	946.3	827.0	661.6	607.4
60°	892.1	870.4	753.8	599.3	558.6
62.5°	818.9	794.5	680.6	545.0	515.2
65°	743.0	715.9	610.1	490.8	471.8
67.5°	664.3	637.2	542.3	442.0	431.1
70°	585.7	564.0	474.5	393.2	387.8
72.5°	504.4	480.0	406.7	347.1	347.1
75°	423.0	401.3	341.7	295.6	295.6
77.5°	339.0	328.1	273.9	241.3	244.0
80°	265.7	252.2	206.1	184.4	184.4
82.5°	195.2	179.0	138.3	122.0	127.4
85°	122.0	100.3	73.2	62.4	62.4
87.5°	38.0	29.8	21.7	24.4	24.4
90°	5.4	19.0	29.8	38.0	40.7
92.5°	13.6	35.3	43.4	51.5	54.2
95°	21.7	46.1	62.4	65.1	65.1
97.5°	29.8	51.5	75.9	86.8	86.8
100°	40.7	54.2	81.3	97.6	100.3
102.5°	51.5	59.7	86.8	103.0	108.5
105°	62.4	65.1	92.2	108.5	113.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	92.2	81.3	103.0	122.0	127.4
115°	103.0	86.8	108.5	124.7	132.9
117.5°	111.2	94.9	113.9	130.2	135.6
120°	119.3	100.3	116.6	135.6	141.0
122.5°	130.2	105.8	122.0	138.3	146.4
125°	138.3	111.2	124.7	143.7	149.1
127.5°	146.4	122.0	127.4	146.4	151.8
130°	151.8	132.9	130.2	149.1	154.6
132.5°	160.0	141.0	132.9	151.8	157.3
135°	165.4	149.1	138.3	151.8	160.0
137.5°	170.8	157.3	138.3	151.8	157.3
140°	176.3	165.4	141.0	151.8	157.3
142.5°	179.0	170.8	143.7	151.8	157.3
145°	184.4	176.3	154.6	151.8	157.3
147.5°	187.1	181.7	162.7	151.8	157.3
150°	189.8	187.1	170.8	154.6	154.6
152.5°	192.5	189.8	176.3	165.4	160.0
155°	195.2	192.5	181.7	173.5	170.8
157.5°	197.9	197.9	187.1	181.7	179.0
160°	197.9	200.7	192.5	187.1	184.4
162.5°	200.7	203.4	195.2	192.5	189.8
165°	200.7	203.4	197.9	197.9	197.9
167.5°	203.4	206.1	203.4	200.7	200.7
170°	203.4	206.1	203.4	203.4	203.4
172.5°	203.4	206.1	206.1	206.1	206.1
175°	203.4	206.1	206.1	208.8	208.8
177.5°	203.4	206.1	206.1	206.1	206.1
180°	206.1	206.1	206.1	206.1	206.1



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	73.2	70.5	94.9	113.9	119.3
110°	81.3	75.9	100.3	116.6	122.0



(END OF REPORT)