

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: P520554

Luminaire Tested: **4WSLA-175-L950-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: P520554
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-L950-UPL8-UNV-U
Description: 4 FOOT, 1750 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 90 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

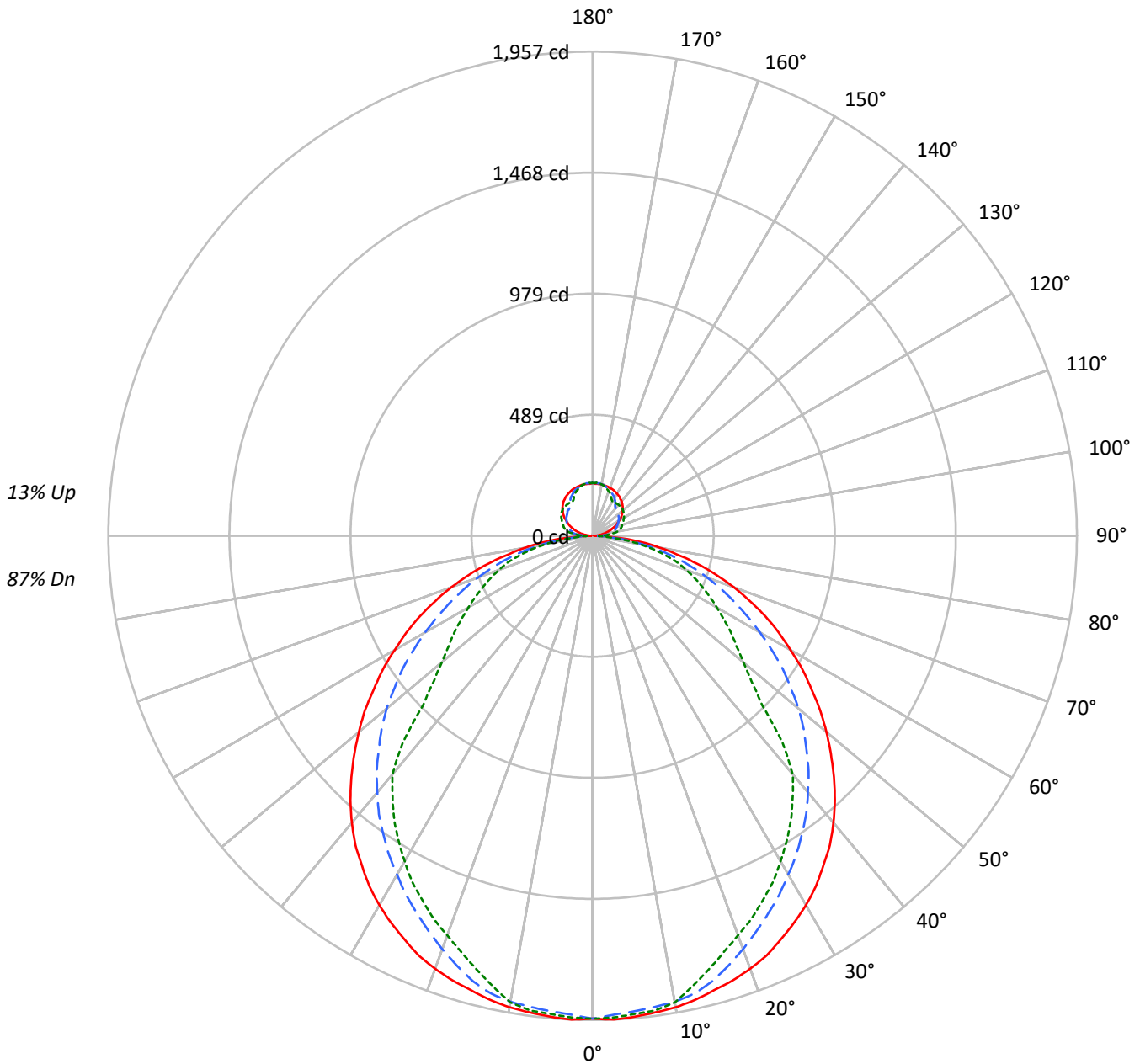
Lumens per Lamp: N/A
Luminaire Lumens: 6074.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	10504	10504	10504
5°	10544	10423	10484
10°	10574	10451	10467
15°	10593	10390	10108
20°	10664	10181	9843
25°	10690	9989	9656
30°	10716	9825	9442
35°	10683	9686	9188
40°	10634	9510	8839
45°	10494	9298	7374
50°	10322	9100	6654
55°	10119	8800	6403
60°	9945	8403	6227
65°	9799	8047	6222
70°	9545	7733	6319
75°	9110	7357	6365
80°	8529	6614	5920
85°	7805	4681	3989



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.8	3.0
10°-20°	525.3	8.6
20°-30°	784.9	12.9
30°-40°	936.9	15.4
40°-50°	937.0	15.4
50°-60°	810.9	13.4
60°-70°	622.4	10.2
70°-80°	381.4	6.3
80°-90°	107.4	1.8
90°-100°	60.7	1.0
100°-110°	96.3	1.6
110°-120°	112.6	1.9
120°-130°	121.6	2.0
130°-140°	119.8	2.0
140°-150°	106.0	1.7
150°-160°	87.2	1.4
160°-170°	58.4	1.0
170°-180°	20.3	0.3
0°-30°	1495.0	24.6
0°-40°	2431.9	40.0
0°-60°	4179.9	68.8
0°-90°	5291.1	87.1
90°-120°	269.6	4.4
90°-150°	617.0	10.2
90°-180°	783.0	12.9
0°-180°	6074.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1952	1952	1952	1952	1952	
5°	1952	1946	1929	1943	1940	186
15°	1901	1898	1865	1831	1814	538
25°	1800	1778	1682	1637	1626	830
35°	1626	1584	1474	1421	1398	1018
45°	1379	1340	1222	1112	969	1063
55°	1078	1053	938	750	682	967
65°	770	741	632	508	489	760
75°	438	416	354	306	306	462
85°	126	104	76	65	65	132
90°	6	20	31	39	42	9
95°	22	48	65	67	67	22
105°	65	67	96	112	118	68
115°	107	90	112	129	138	104
125°	143	115	129	149	154	128
135°	171	154	143	157	166	132
145°	191	182	160	157	163	119
155°	202	199	188	180	177	93
165°	208	211	205	205	205	59
175°	211	213	213	216	216	20
180°	213	213	213	213	213	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1951.7	1951.7	1951.7	1951.7	1951.7
2.5°	1957.3	1951.7	1937.7	1951.7	1948.9
5°	1951.7	1946.1	1929.3	1943.3	1940.5
7.5°	1943.3	1937.7	1920.8	1937.7	1934.9
10°	1934.9	1929.3	1912.4	1923.6	1915.2
12.5°	1920.8	1915.2	1895.6	1881.5	1864.7
15°	1901.2	1898.4	1864.7	1831.0	1814.1
17.5°	1884.3	1875.9	1822.5	1783.2	1763.6
20°	1861.9	1847.8	1777.6	1732.7	1718.6
22.5°	1836.6	1814.1	1729.9	1687.7	1676.5
25°	1800.1	1777.6	1682.1	1637.2	1626.0
27.5°	1763.6	1735.5	1634.4	1589.5	1578.2
30°	1724.3	1684.9	1581.0	1538.9	1519.3
32.5°	1679.3	1640.0	1530.5	1482.7	1460.3
35°	1626.0	1583.8	1474.3	1421.0	1398.5
37.5°	1575.4	1530.5	1418.2	1359.2	1328.3
40°	1513.6	1468.7	1353.6	1289.0	1258.1
42.5°	1449.0	1406.9	1291.8	1213.2	1137.3
45°	1378.8	1339.5	1221.6	1112.1	968.8
47.5°	1305.8	1272.1	1157.0	1008.2	870.6
50°	1232.8	1199.1	1086.8	909.9	794.7
52.5°	1159.8	1131.7	1008.2	828.4	732.9
55°	1078.4	1053.1	937.9	749.8	682.4
57.5°	1005.3	980.1	856.5	685.2	629.0
60°	923.9	901.4	780.7	620.6	578.5
62.5°	848.1	822.8	704.9	564.5	533.6
65°	769.5	741.4	631.9	508.3	488.6
67.5°	688.0	659.9	561.6	457.7	446.5
70°	606.6	584.1	491.4	407.2	401.6
72.5°	522.3	497.1	421.2	359.5	359.5
75°	438.1	415.6	353.8	306.1	306.1
77.5°	351.0	339.8	283.6	249.9	252.7
80°	275.2	261.2	213.4	191.0	191.0
82.5°	202.2	185.3	143.2	126.4	132.0
85°	126.4	103.9	75.8	64.6	64.6
87.5°	39.3	30.9	22.5	25.3	25.3
90°	5.6	19.7	30.9	39.3	42.1
92.5°	14.0	36.5	44.9	53.4	56.2
95°	22.5	47.7	64.6	67.4	67.4
97.5°	30.9	53.4	78.6	89.9	89.9
100°	42.1	56.2	84.2	101.1	103.9
102.5°	53.4	61.8	89.9	106.7	112.3
105°	64.6	67.4	95.5	112.3	117.9



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CATALOG NUMBER: 4WSLA-175-L950-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	95.5	84.2	106.7	126.4	132.0
115°	106.7	89.9	112.3	129.2	137.6
117.5°	115.1	98.3	117.9	134.8	140.4
120°	123.6	103.9	120.8	140.4	146.0
122.5°	134.8	109.5	126.4	143.2	151.6
125°	143.2	115.1	129.2	148.8	154.5
127.5°	151.6	126.4	132.0	151.6	157.3
130°	157.3	137.6	134.8	154.5	160.1
132.5°	165.7	146.0	137.6	157.3	162.9
135°	171.3	154.5	143.2	157.3	165.7
137.5°	176.9	162.9	143.2	157.3	162.9
140°	182.5	171.3	146.0	157.3	162.9
142.5°	185.3	176.9	148.8	157.3	162.9
145°	191.0	182.5	160.1	157.3	162.9
147.5°	193.8	188.2	168.5	157.3	162.9
150°	196.6	193.8	176.9	160.1	160.1
152.5°	199.4	196.6	182.5	171.3	165.7
155°	202.2	199.4	188.2	179.7	176.9
157.5°	205.0	205.0	193.8	188.2	185.3
160°	205.0	207.8	199.4	193.8	191.0
162.5°	207.8	210.6	202.2	199.4	196.6
165°	207.8	210.6	205.0	205.0	205.0
167.5°	210.6	213.4	210.6	207.8	207.8
170°	210.6	213.4	210.6	210.6	210.6
172.5°	210.6	213.4	213.4	213.4	213.4
175°	210.6	213.4	213.4	216.2	216.2
177.5°	210.6	213.4	213.4	213.4	213.4
180°	213.4	213.4	213.4	213.4	213.4



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	75.8	73.0	98.3	117.9	123.6
110°	84.2	78.6	103.9	120.8	126.4



(END OF REPORT)