

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: P520545

Luminaire Tested: **4WSLA-175-L930-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: P520545
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-L930-UPL8-UNV-U
Description: 4 FOOT, 1750 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 90 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

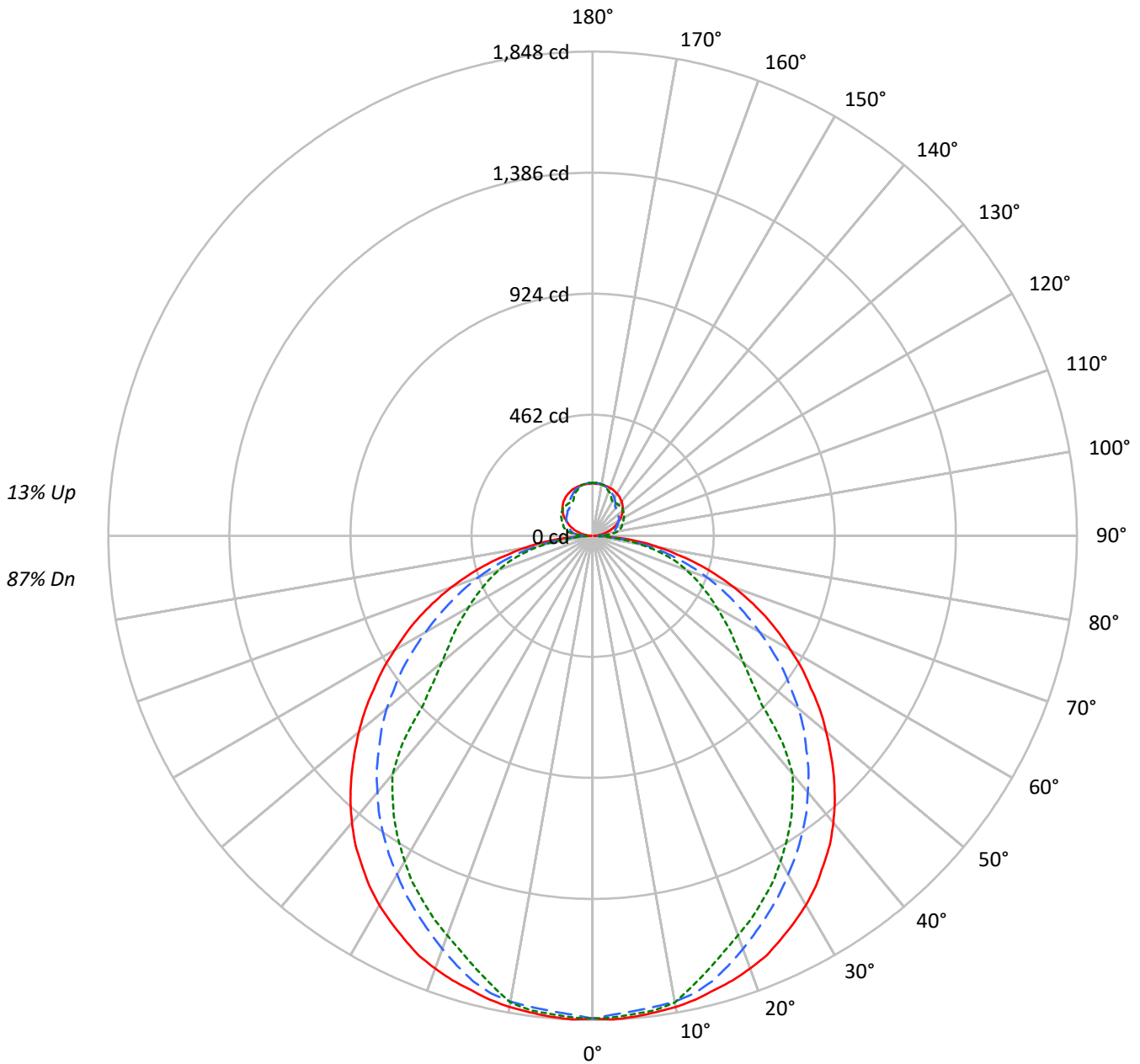
Lumens per Lamp: N/A
Luminaire Lumens: 5734.0 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	9916	9916	9916
5°	9954	9840	9897
10°	9982	9866	9881
15°	10000	9808	9542
20°	10066	9611	9292
25°	10091	9430	9115
30°	10115	9275	8913
35°	10085	9144	8674
40°	10039	8977	8344
45°	9908	8777	6961
50°	9744	8591	6281
55°	9552	8308	6045
60°	9388	7933	5878
65°	9251	7596	5875
70°	9010	7300	5965
75°	8601	6945	6010
80°	8052	6245	5588
85°	7367	4421	3767



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.4	3.0
10°-20°	495.9	8.6
20°-30°	741.0	12.9
30°-40°	884.5	15.4
40°-50°	884.6	15.4
50°-60°	765.6	13.4
60°-70°	587.6	10.2
70°-80°	360.1	6.3
80°-90°	101.4	1.8
90°-100°	57.3	1.0
100°-110°	90.9	1.6
110°-120°	106.3	1.9
120°-130°	114.8	2.0
130°-140°	113.1	2.0
140°-150°	100.1	1.7
150°-160°	82.3	1.4
160°-170°	55.1	1.0
170°-180°	19.2	0.3
0°-30°	1411.3	24.6
0°-40°	2295.8	40.0
0°-60°	3945.9	68.8
0°-90°	4994.9	87.1
90°-120°	254.5	4.4
90°-150°	582.4	10.2
90°-180°	739.0	12.9
0°-180°	5734.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1842	1842	1842	1842	1842	
5°	1842	1837	1821	1834	1832	175
15°	1795	1792	1760	1728	1713	508
25°	1699	1678	1588	1546	1535	784
35°	1535	1495	1392	1341	1320	961
45°	1302	1264	1153	1050	915	1004
55°	1018	994	885	708	644	913
65°	726	700	596	480	461	717
75°	414	392	334	289	289	436
85°	119	98	72	61	61	125
90°	5	19	29	37	40	8
95°	21	45	61	64	64	21
105°	61	64	90	106	111	64
115°	101	85	106	122	130	98
125°	135	109	122	140	146	120
135°	162	146	135	148	156	125
145°	180	172	151	148	154	112
155°	191	188	178	170	167	88
165°	196	199	194	194	194	56
175°	199	202	202	204	204	19
180°	202	202	202	202	202	



TEST NUMBER: P520545

CATALOG NUMBER: 4WSLA-175-L930-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1842.5	1842.5	1842.5	1842.5	1842.5
2.5°	1847.8	1842.5	1829.2	1842.5	1839.8
5°	1842.5	1837.2	1821.3	1834.5	1831.9
7.5°	1834.5	1829.2	1813.3	1829.2	1826.6
10°	1826.6	1821.3	1805.4	1816.0	1808.0
12.5°	1813.3	1808.0	1789.4	1776.2	1760.3
15°	1794.8	1792.1	1760.3	1728.5	1712.6
17.5°	1778.8	1770.9	1720.5	1683.4	1664.8
20°	1757.6	1744.4	1678.1	1635.7	1622.4
22.5°	1733.8	1712.6	1633.0	1593.3	1582.7
25°	1699.3	1678.1	1588.0	1545.6	1534.9
27.5°	1664.8	1638.3	1542.9	1500.5	1489.9
30°	1627.7	1590.6	1492.5	1452.8	1434.2
32.5°	1585.3	1548.2	1444.8	1399.7	1378.5
35°	1534.9	1495.2	1391.8	1341.4	1320.2
37.5°	1487.2	1444.8	1338.8	1283.1	1253.9
40°	1428.9	1386.5	1277.8	1216.8	1187.7
42.5°	1367.9	1328.2	1219.5	1145.2	1073.7
45°	1301.7	1264.5	1153.2	1049.8	914.6
47.5°	1232.7	1200.9	1092.2	951.7	821.8
50°	1163.8	1132.0	1026.0	858.9	750.2
52.5°	1094.9	1068.4	951.7	782.1	691.9
55°	1018.0	994.1	885.4	707.8	644.2
57.5°	949.1	925.2	808.6	646.9	593.8
60°	872.2	851.0	737.0	585.9	546.1
62.5°	800.6	776.8	665.4	532.9	503.7
65°	726.4	699.9	596.5	479.8	461.3
67.5°	649.5	623.0	530.2	432.1	421.5
70°	572.6	551.4	463.9	384.4	379.1
72.5°	493.1	469.2	397.7	339.3	339.3
75°	413.6	392.4	334.0	289.0	289.0
77.5°	331.4	320.8	267.8	235.9	238.6
80°	259.8	246.5	201.5	180.3	180.3
82.5°	190.9	175.0	135.2	119.3	124.6
85°	119.3	98.1	71.6	61.0	61.0
87.5°	37.1	29.2	21.2	23.9	23.9
90°	5.3	18.6	29.2	37.1	39.8
92.5°	13.3	34.5	42.4	50.4	53.0
95°	21.2	45.1	61.0	63.6	63.6
97.5°	29.2	50.4	74.2	84.8	84.8
100°	39.8	53.0	79.5	95.4	98.1
102.5°	50.4	58.3	84.8	100.7	106.0
105°	61.0	63.6	90.1	106.0	111.3



TEST NUMBER: P520545

CATALOG NUMBER: 4WSLA-175-L930-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	90.1	79.5	100.7	119.3	124.6
115°	100.7	84.8	106.0	121.9	129.9
117.5°	108.7	92.8	111.3	127.2	132.6
120°	116.6	98.1	114.0	132.6	137.9
122.5°	127.2	103.4	119.3	135.2	143.2
125°	135.2	108.7	121.9	140.5	145.8
127.5°	143.2	119.3	124.6	143.2	148.5
130°	148.5	129.9	127.2	145.8	151.1
132.5°	156.4	137.9	129.9	148.5	153.8
135°	161.7	145.8	135.2	148.5	156.4
137.5°	167.0	153.8	135.2	148.5	153.8
140°	172.3	161.7	137.9	148.5	153.8
142.5°	175.0	167.0	140.5	148.5	153.8
145°	180.3	172.3	151.1	148.5	153.8
147.5°	182.9	177.6	159.1	148.5	153.8
150°	185.6	182.9	167.0	151.1	151.1
152.5°	188.2	185.6	172.3	161.7	156.4
155°	190.9	188.2	177.6	169.7	167.0
157.5°	193.5	193.5	182.9	177.6	175.0
160°	193.5	196.2	188.2	182.9	180.3
162.5°	196.2	198.8	190.9	188.2	185.6
165°	196.2	198.8	193.5	193.5	193.5
167.5°	198.8	201.5	198.8	196.2	196.2
170°	198.8	201.5	198.8	198.8	198.8
172.5°	198.8	201.5	201.5	201.5	201.5
175°	198.8	201.5	201.5	204.1	204.1
177.5°	198.8	201.5	201.5	201.5	201.5
180°	201.5	201.5	201.5	201.5	201.5



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	71.6	68.9	92.8	111.3	116.6
110°	79.5	74.2	98.1	114.0	119.3



(END OF REPORT)