

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: P520512

Luminaire Tested: **4WSLA-150-L835-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: P520512
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-150-L835-UPL8-UNV-U
Description: 4 FOOT, 1500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 80 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

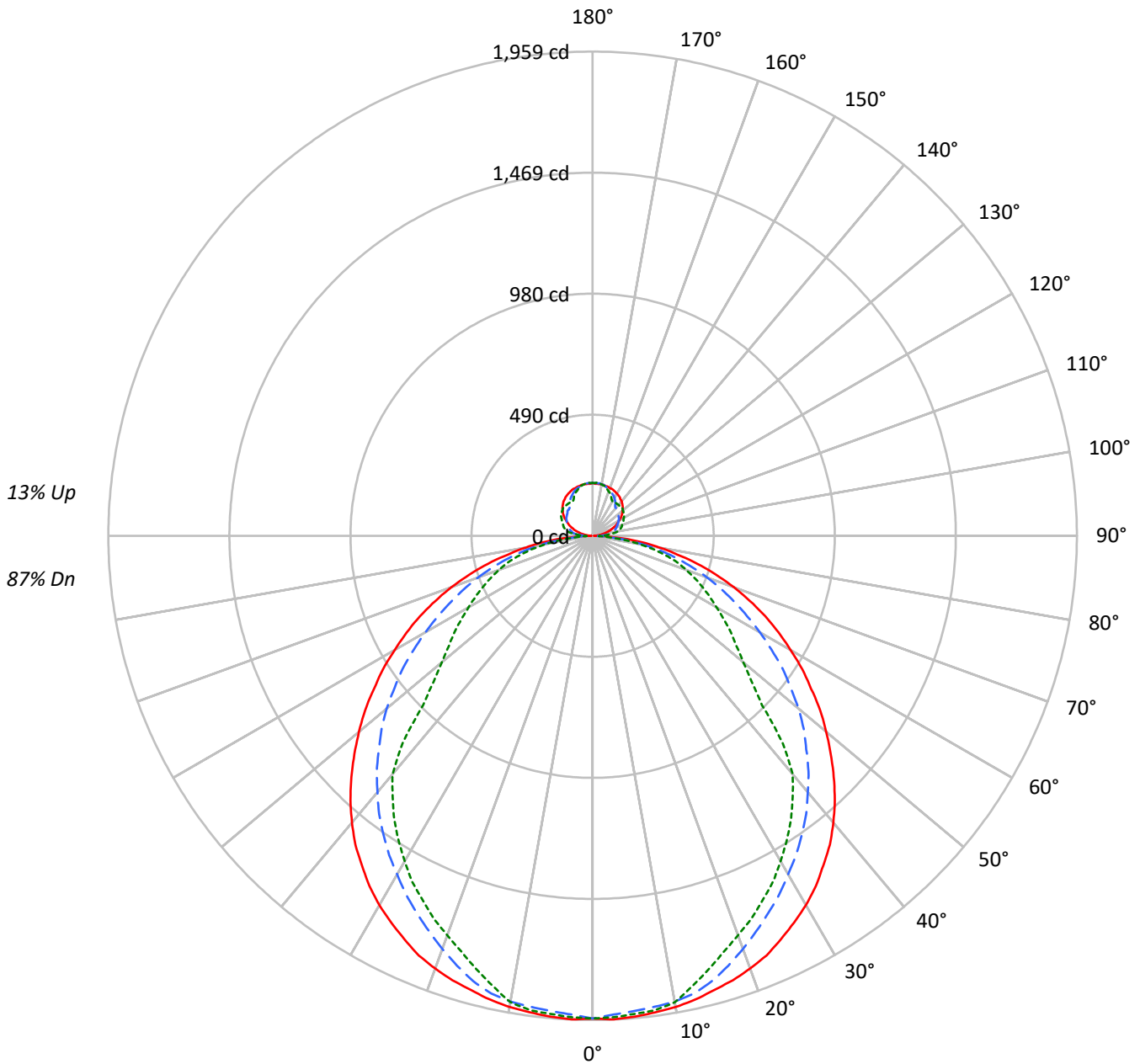
Lumens per Lamp: N/A
Luminaire Lumens: 6078.1 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 47.7
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°	10511	10511	10511
5°	10551	10430	10491
10°	10581	10458	10474
15°	10600	10396	10115
20°	10671	10188	9850
25°	10697	9995	9662
30°	10723	9832	9448
35°	10690	9693	9194
40°	10641	9516	8845
45°	10501	9304	7379
50°	10329	9105	6659
55°	10125	8807	6407
60°	9951	8409	6231
65°	9806	8052	6227
70°	9552	7739	6323
75°	9116	7363	6369
80°	8536	6620	5923
85°	7812	4687	3989



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.9	3.0
10°-20°	525.6	8.6
20°-30°	785.4	12.9
30°-40°	937.6	15.4
40°-50°	937.7	15.4
50°-60°	811.5	13.4
60°-70°	622.9	10.2
70°-80°	381.7	6.3
80°-90°	107.5	1.8
90°-100°	60.7	1.0
100°-110°	96.4	1.6
110°-120°	112.7	1.9
120°-130°	121.7	2.0
130°-140°	119.9	2.0
140°-150°	106.1	1.7
150°-160°	87.3	1.4
160°-170°	58.4	1.0
170°-180°	20.3	0.3
0°-30°	1495.9	24.6
0°-40°	2433.5	40.0
0°-60°	4182.7	68.8
0°-90°	5294.6	87.1
90°-120°	269.8	4.4
90°-150°	617.4	10.2
90°-180°	783.0	12.9
0°-180°	6078.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1953	1953	1953	1953	1953	
5°	1953	1947	1930	1945	1942	186
15°	1902	1900	1866	1832	1815	538
25°	1801	1779	1683	1638	1627	831
35°	1627	1585	1475	1422	1399	1019
45°	1380	1340	1222	1113	970	1064
55°	1079	1054	939	750	683	967
65°	770	742	632	509	489	761
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	155	128
135°	171	155	143	157	166	132
145°	191	183	160	157	163	119
155°	202	200	188	180	177	93
165°	208	211	205	205	205	59
175°	211	214	214	216	216	20
180°	214	214	214	214	214	



TEST NUMBER: P520512

CATALOG NUMBER: 4WSLA-150-L835-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1953.0	1953.0	1953.0	1953.0	1953.0
2.5°	1958.6	1953.0	1939.0	1953.0	1950.2
5°	1953.0	1947.4	1930.5	1944.6	1941.8
7.5°	1944.6	1939.0	1922.1	1939.0	1936.1
10°	1936.1	1930.5	1913.7	1924.9	1916.5
12.5°	1922.1	1916.5	1896.8	1882.8	1865.9
15°	1902.4	1899.6	1865.9	1832.2	1815.3
17.5°	1885.6	1877.1	1823.7	1784.4	1764.7
20°	1863.1	1849.0	1778.8	1733.8	1719.8
22.5°	1837.8	1815.3	1731.0	1688.9	1677.6
25°	1801.3	1778.8	1683.2	1638.3	1627.0
27.5°	1764.7	1736.6	1635.5	1590.5	1579.3
30°	1725.4	1686.0	1582.1	1539.9	1520.3
32.5°	1680.4	1641.1	1531.5	1483.7	1461.2
35°	1627.0	1584.9	1475.3	1421.9	1399.4
37.5°	1576.5	1531.5	1419.1	1360.1	1329.2
40°	1514.6	1469.7	1354.5	1289.8	1258.9
42.5°	1450.0	1407.8	1292.6	1214.0	1138.1
45°	1379.7	1340.4	1222.4	1112.8	969.5
47.5°	1306.7	1273.0	1157.8	1008.8	871.1
50°	1233.6	1199.9	1087.5	910.5	795.3
52.5°	1160.6	1132.5	1008.8	829.0	733.4
55°	1079.1	1053.8	938.6	750.3	682.8
57.5°	1006.0	980.7	857.1	685.7	629.5
60°	924.5	902.0	781.2	621.0	578.9
62.5°	848.6	823.4	705.3	564.8	533.9
65°	770.0	741.9	632.3	508.6	489.0
67.5°	688.5	660.4	562.0	458.0	446.8
70°	607.0	584.5	491.8	407.5	401.8
72.5°	522.7	497.4	421.5	359.7	359.7
75°	438.4	415.9	354.1	306.3	306.3
77.5°	351.3	340.0	283.8	250.1	252.9
80°	275.4	261.3	213.6	191.1	191.1
82.5°	202.3	185.5	143.3	126.5	132.1
85°	126.5	104.0	75.9	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	42.2
92.5°	14.1	36.5	45.0	53.4	56.2
95°	22.5	47.8	64.6	67.4	67.4
97.5°	30.9	53.4	78.7	89.9	89.9
100°	42.2	56.2	84.3	101.2	104.0
102.5°	53.4	61.8	89.9	106.8	112.4
105°	64.6	67.4	95.5	112.4	118.0



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CATALOG NUMBER: 4WSLA-150-L835-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	95.5	84.3	106.8	126.5	132.1
115°	106.8	89.9	112.4	129.3	137.7
117.5°	115.2	98.4	118.0	134.9	140.5
120°	123.6	104.0	120.8	140.5	146.1
122.5°	134.9	109.6	126.5	143.3	151.7
125°	143.3	115.2	129.3	148.9	154.6
127.5°	151.7	126.5	132.1	151.7	157.4
130°	157.4	137.7	134.9	154.6	160.2
132.5°	165.8	146.1	137.7	157.4	163.0
135°	171.4	154.6	143.3	157.4	165.8
137.5°	177.0	163.0	143.3	157.4	163.0
140°	182.7	171.4	146.1	157.4	163.0
142.5°	185.5	177.0	148.9	157.4	163.0
145°	191.1	182.7	160.2	157.4	163.0
147.5°	193.9	188.3	168.6	157.4	163.0
150°	196.7	193.9	177.0	160.2	160.2
152.5°	199.5	196.7	182.7	171.4	165.8
155°	202.3	199.5	188.3	179.8	177.0
157.5°	205.1	205.1	193.9	188.3	185.5
160°	205.1	207.9	199.5	193.9	191.1
162.5°	207.9	210.8	202.3	199.5	196.7
165°	207.9	210.8	205.1	205.1	205.1
167.5°	210.8	213.6	210.8	207.9	207.9
170°	210.8	213.6	210.8	210.8	210.8
172.5°	210.8	213.6	213.6	213.6	213.6
175°	210.8	213.6	213.6	216.4	216.4
177.5°	210.8	213.6	213.6	213.6	213.6
180°	213.6	213.6	213.6	213.6	213.6



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	75.9	73.1	98.4	118.0	123.6
110°	84.3	78.7	104.0	120.8	126.5



(END OF REPORT)