

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: P520520

Luminaire Tested: **4WSLA-150-L930-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: P520520
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-150-L930-UPL15-UNV-U
Description: 4 FOOT, 1500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 90 CRI
LEDS WITH 15% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

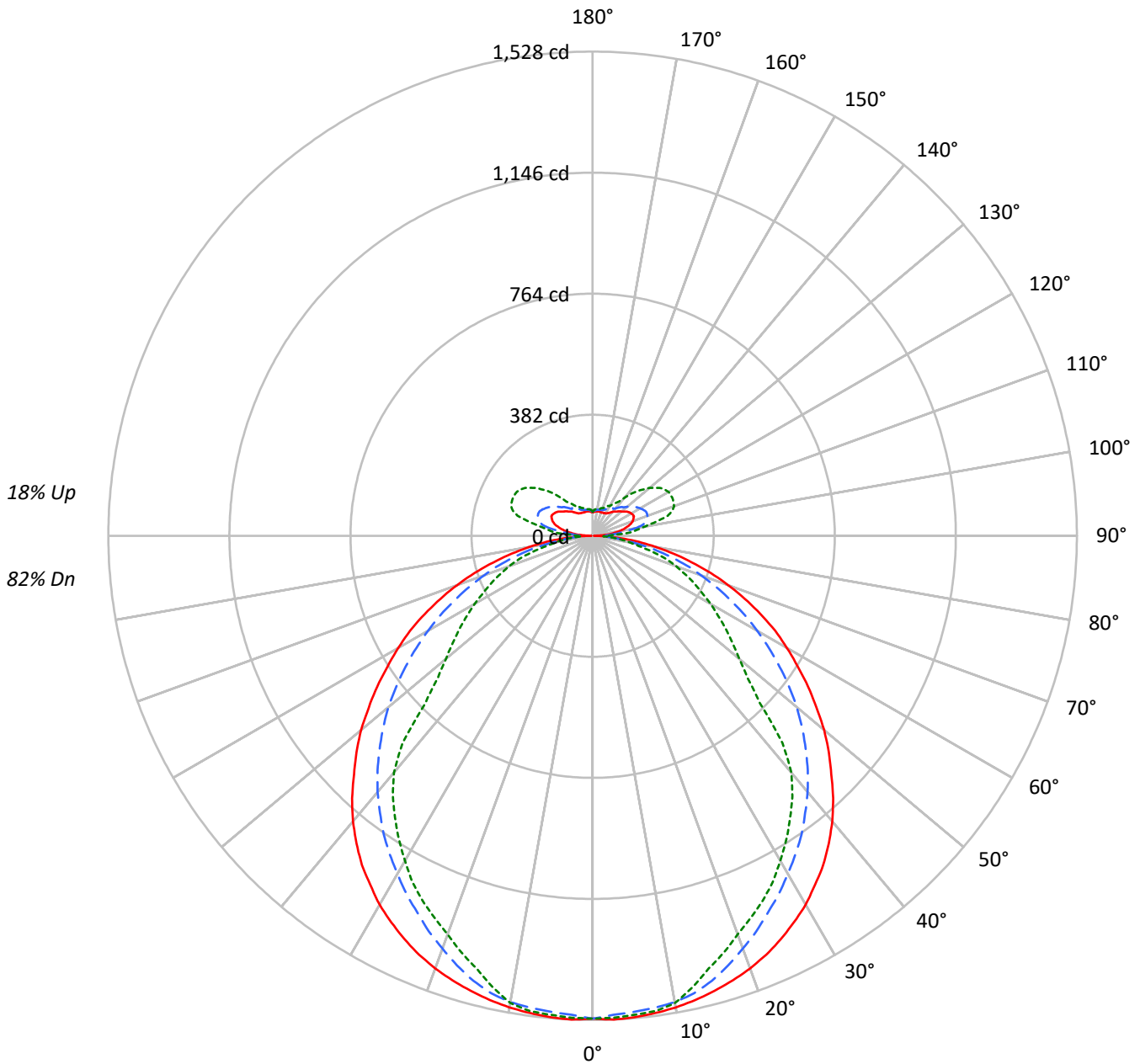
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4935.0 lumens
Efficiency: N/A
Efficacy: 103.5 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): 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	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°	8201	8201	8201
5°	8240	8149	8199
10°	8260	8167	8184
15°	8284	8103	7879
20°	8320	7939	7665
25°	8342	7782	7543
30°	8355	7654	7357
35°	8336	7554	7138
40°	8263	7416	6851
45°	8104	7234	5681
50°	7984	7039	5060
55°	7787	6758	4814
60°	7619	6454	4624
65°	7440	6101	4488
70°	7150	5715	4401
75°	6748	5238	4049
80°	6180	4407	3592
85°	5533	3816	3625



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.4	2.9
10°-20°	410.2	8.3
20°-30°	612.2	12.4
30°-40°	729.5	14.8
40°-50°	725.6	14.7
50°-60°	621.9	12.6
60°-70°	468.4	9.5
70°-80°	271.2	5.5
80°-90°	81.5	1.7
90°-100°	87.5	1.8
100°-110°	179.7	3.6
110°-120°	190.0	3.9
120°-130°	158.5	3.2
130°-140°	110.7	2.2
140°-150°	68.9	1.4
150°-160°	42.7	0.9
160°-170°	24.1	0.5
170°-180°	7.8	0.2
0°-30°	1166.9	23.6
0°-40°	1896.4	38.4
0°-60°	3243.8	65.7
0°-90°	4064.9	82.4
90°-120°	457.3	9.3
90°-150°	795.5	16.1
90°-180°	870.0	17.6
0°-180°	4935.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1524	1524	1524	1524	1524	
5°	1525	1521	1508	1519	1518	145
15°	1487	1485	1454	1430	1414	420
25°	1405	1385	1310	1278	1270	648
35°	1269	1235	1150	1105	1086	792
45°	1065	1038	950	856	746	823
55°	830	818	720	572	513	742
65°	584	570	479	372	352	578
75°	324	314	252	201	195	344
85°	90	79	62	59	59	96
90°	5	22	37	46	50	9
95°	50	66	76	111	120	47
105°	116	120	173	232	246	120
115°	144	122	184	254	278	140
125°	133	118	159	233	263	118
135°	108	118	128	173	199	84
145°	88	102	111	119	127	56
155°	80	85	91	99	100	37
165°	79	82	85	88	88	22
175°	77	79	80	82	84	7
180°	76	76	76	76	76	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1523.8	1523.8	1523.8	1523.8	1523.8
2.5°	1528.4	1525.3	1513.0	1525.3	1522.2
5°	1525.3	1520.7	1508.3	1519.2	1517.6
7.5°	1519.2	1516.1	1502.2	1514.5	1513.0
10°	1511.4	1506.8	1494.4	1503.7	1497.5
12.5°	1500.6	1497.5	1479.0	1471.2	1458.9
15°	1486.7	1485.2	1454.2	1429.5	1414.1
17.5°	1471.2	1465.1	1421.8	1392.4	1378.5
20°	1452.7	1443.4	1386.2	1352.2	1338.3
22.5°	1431.1	1417.2	1350.7	1318.2	1304.3
25°	1404.8	1384.7	1310.5	1278.1	1270.3
27.5°	1375.4	1352.2	1273.4	1241.0	1231.7
30°	1344.5	1315.2	1231.7	1200.8	1183.8
32.5°	1305.9	1278.1	1191.5	1156.0	1137.4
35°	1268.8	1234.8	1149.8	1105.0	1086.4
37.5°	1224.0	1190.0	1101.9	1057.1	1035.4
40°	1176.1	1142.1	1055.5	1003.0	975.2
42.5°	1123.5	1092.6	1004.5	941.2	887.1
45°	1064.8	1038.5	950.4	856.2	746.4
47.5°	1010.7	986.0	896.3	774.3	661.4
50°	953.5	930.3	840.7	697.0	604.3
52.5°	890.2	873.2	780.4	630.5	556.4
55°	829.9	817.5	720.2	571.8	513.1
57.5°	766.5	754.2	659.9	516.2	469.8
60°	707.8	695.4	599.6	466.7	429.6
62.5°	649.1	632.1	540.9	418.8	387.9
65°	584.2	570.3	479.1	372.4	352.4
67.5°	519.3	506.9	421.9	329.2	315.3
70°	454.4	443.5	363.2	287.4	279.7
72.5°	391.0	377.1	310.6	245.7	242.6
75°	324.5	313.7	251.9	200.9	194.7
77.5°	261.2	251.9	197.8	153.0	148.4
80°	199.4	190.1	142.2	111.3	115.9
82.5°	146.8	134.5	95.8	86.5	91.2
85°	89.6	78.8	61.8	58.7	58.7
87.5°	30.9	29.4	27.8	32.5	34.0
90°	4.6	21.6	37.1	46.4	49.5
92.5°	26.3	38.6	51.0	60.3	63.4
95°	49.5	66.5	75.7	111.3	120.5
97.5°	68.0	88.1	98.9	131.4	140.6
100°	86.5	105.1	139.1	156.1	166.9
102.5°	102.0	115.9	163.8	197.8	204.0
105°	115.9	120.5	173.1	231.8	245.7



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CATALOG NUMBER: 4WSLA-150-L930-UPL15-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	139.1	123.6	185.5	251.9	276.6
115°	143.7	122.1	183.9	253.5	278.2
117.5°	143.7	122.1	179.3	253.5	278.2
120°	140.6	123.6	173.1	250.4	276.6
122.5°	137.5	120.5	166.9	244.2	270.4
125°	132.9	117.5	159.2	233.4	262.7
127.5°	125.2	120.5	151.5	219.5	248.8
130°	119.0	122.1	142.2	205.5	234.9
132.5°	114.4	119.0	132.9	190.1	216.4
135°	108.2	117.5	128.3	173.1	199.4
137.5°	103.5	112.8	120.5	157.6	179.3
140°	98.9	109.7	112.8	137.5	156.1
142.5°	92.7	105.1	106.6	128.3	136.0
145°	88.1	102.0	111.3	119.0	126.7
147.5°	83.5	95.8	108.2	109.7	117.5
150°	81.9	89.6	103.5	105.1	108.2
152.5°	80.4	86.5	95.8	105.1	106.6
155°	80.4	85.0	91.2	98.9	100.5
157.5°	78.8	85.0	88.1	94.3	95.8
160°	78.8	83.5	86.5	91.2	92.7
162.5°	78.8	83.5	85.0	89.6	91.2
165°	78.8	81.9	85.0	88.1	88.1
167.5°	78.8	81.9	83.5	86.5	86.5
170°	78.8	80.4	83.5	85.0	85.0
172.5°	77.3	80.4	81.9	85.0	85.0
175°	77.3	78.8	80.4	81.9	83.5
177.5°	74.2	78.8	80.4	81.9	80.4
180°	75.7	75.7	75.7	75.7	75.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	126.7	122.1	179.3	244.2	264.3
110°	134.5	123.6	183.9	248.8	273.5



(END OF REPORT)