

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: P520526

Luminaire Tested: **4WSLA-150-L940-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: P520526
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-L940-UPL15-UNV-U
Description: 4 FOOT, 1500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 90 CRI
LEDS WITH 15% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

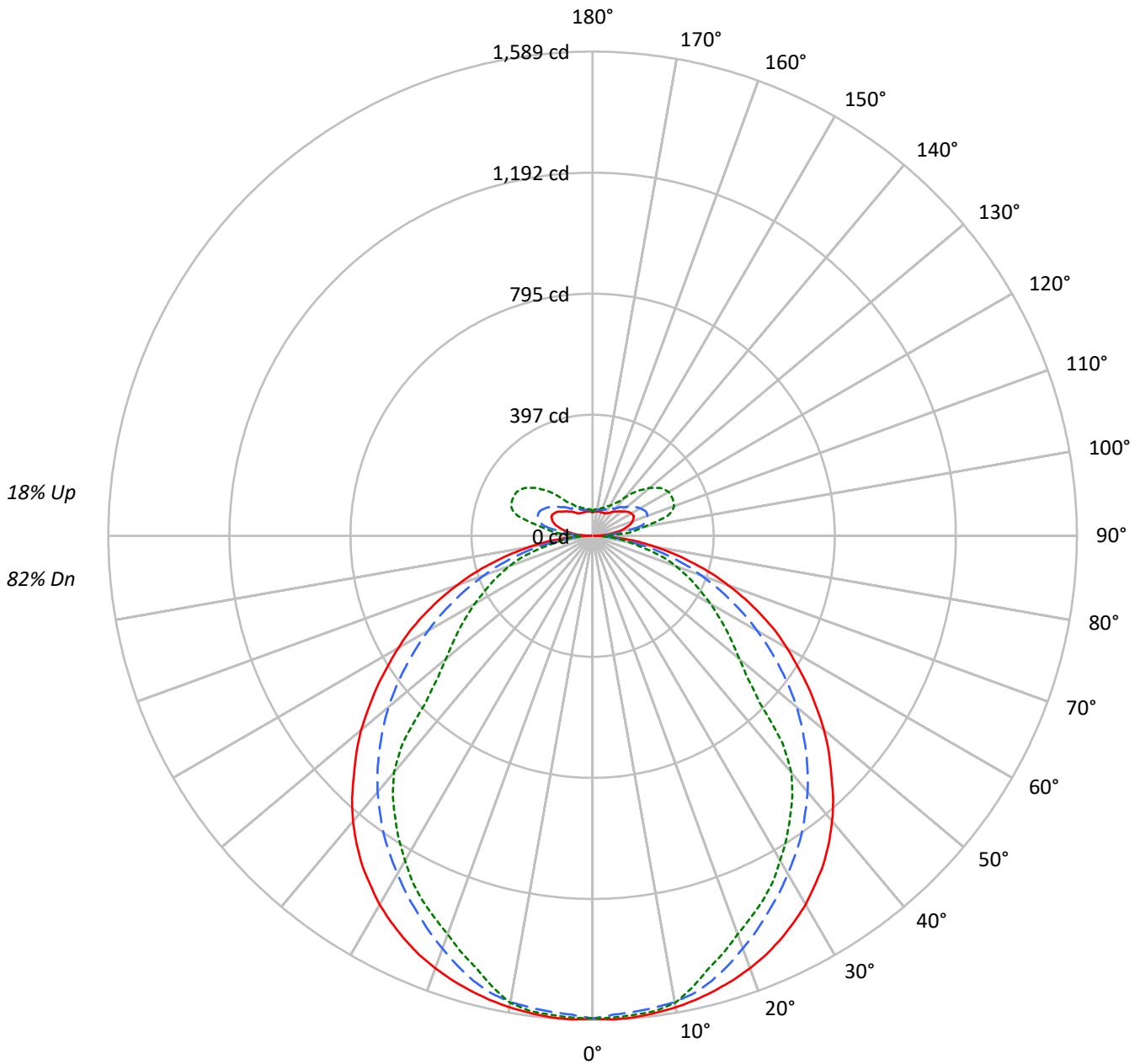
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5131.0 lumens
Efficiency: N/A
Efficacy: 107.6 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 (A_{in}): 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°	8527	8527	8527
5°	8568	8472	8525
10°	8588	8491	8509
15°	8612	8425	8192
20°	8651	8255	7970
25°	8674	8092	7843
30°	8687	7958	7649
35°	8667	7855	7422
40°	8591	7710	7123
45°	8426	7521	5907
50°	8301	7319	5261
55°	8097	7026	5006
60°	7921	6710	4808
65°	7735	6343	4666
70°	7434	5942	4576
75°	7016	5446	4211
80°	6425	4581	3735
85°	5755	3971	3773



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.2	2.9
10°-20°	426.5	8.3
20°-30°	636.5	12.4
30°-40°	758.5	14.8
40°-50°	754.4	14.7
50°-60°	646.6	12.6
60°-70°	486.9	9.5
70°-80°	282.0	5.5
80°-90°	84.7	1.7
90°-100°	91.0	1.8
100°-110°	186.9	3.6
110°-120°	197.6	3.9
120°-130°	164.8	3.2
130°-140°	115.1	2.2
140°-150°	71.7	1.4
150°-160°	44.4	0.9
160°-170°	25.0	0.5
170°-180°	8.1	0.2
0°-30°	1213.2	23.6
0°-40°	1971.7	38.4
0°-60°	3372.7	65.7
0°-90°	4226.4	82.4
90°-120°	475.4	9.3
90°-150°	827.1	16.1
90°-180°	905.0	17.6
0°-180°	5131.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1584	1584	1584	1584	1584	
5°	1586	1581	1568	1580	1578	151
15°	1546	1544	1512	1486	1470	437
25°	1461	1440	1363	1329	1321	673
35°	1319	1284	1196	1149	1130	824
45°	1107	1080	988	890	776	856
55°	863	850	749	594	534	771
65°	607	593	498	387	366	600
75°	337	326	262	209	202	357
85°	93	82	64	61	61	99
90°	5	22	39	48	51	9
95°	51	69	79	116	125	49
105°	120	125	180	241	256	125
115°	149	127	191	264	289	145
125°	138	122	166	243	273	123
135°	112	122	133	180	207	88
145°	92	106	116	124	132	58
155°	84	88	95	103	104	39
165°	82	85	88	92	92	23
175°	80	82	84	85	87	8
180°	79	79	79	79	79	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1584.3	1584.3	1584.3	1584.3	1584.3
2.5°	1589.1	1585.9	1573.1	1585.9	1582.7
5°	1585.9	1581.1	1568.2	1579.5	1577.9
7.5°	1579.5	1576.3	1561.8	1574.7	1573.1
10°	1571.5	1566.6	1553.8	1563.4	1557.0
12.5°	1560.2	1557.0	1537.7	1529.7	1516.8
15°	1545.7	1544.1	1512.0	1486.3	1470.2
17.5°	1529.7	1523.3	1478.3	1447.7	1433.3
20°	1510.4	1500.8	1441.3	1406.0	1391.5
22.5°	1487.9	1473.4	1404.3	1370.6	1356.1
25°	1460.6	1439.7	1362.6	1328.8	1320.8
27.5°	1430.1	1406.0	1324.0	1290.3	1280.6
30°	1397.9	1367.4	1280.6	1248.5	1230.8
32.5°	1357.8	1328.8	1238.8	1201.9	1182.6
35°	1319.2	1283.8	1195.5	1148.9	1129.6
37.5°	1272.6	1237.2	1145.7	1099.1	1076.6
40°	1222.8	1187.4	1097.4	1042.8	1013.9
42.5°	1168.1	1136.0	1044.4	978.5	922.3
45°	1107.1	1079.8	988.2	890.2	776.1
47.5°	1050.9	1025.1	931.9	805.0	687.7
50°	991.4	967.3	874.1	724.7	628.3
52.5°	925.5	907.8	811.4	655.6	578.5
55°	862.9	850.0	748.8	594.5	533.5
57.5°	797.0	784.1	686.1	536.7	488.5
60°	735.9	723.1	623.4	485.3	446.7
62.5°	674.9	657.2	562.4	435.4	403.3
65°	607.4	592.9	498.1	387.2	366.4
67.5°	539.9	527.0	438.7	342.2	327.8
70°	472.4	461.2	377.6	298.9	290.8
72.5°	406.5	392.1	323.0	255.5	252.3
75°	337.4	326.2	261.9	208.9	202.5
77.5°	271.6	261.9	205.7	159.1	154.3
80°	207.3	197.6	147.8	115.7	120.5
82.5°	152.6	139.8	99.6	90.0	94.8
85°	93.2	81.9	64.3	61.1	61.1
87.5°	32.1	30.5	28.9	33.7	35.3
90°	4.8	22.5	38.6	48.2	51.4
92.5°	27.3	40.2	53.0	62.7	65.9
95°	51.4	69.1	78.7	115.7	125.3
97.5°	70.7	91.6	102.8	136.6	146.2
100°	90.0	109.3	144.6	162.3	173.5
102.5°	106.0	120.5	170.3	205.7	212.1
105°	120.5	125.3	180.0	241.0	255.5



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CATALOG NUMBER: 4WSLA-150-L940-UPL15-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	144.6	128.5	192.8	261.9	287.6
115°	149.4	126.9	191.2	263.5	289.2
117.5°	149.4	126.9	186.4	263.5	289.2
120°	146.2	128.5	180.0	260.3	287.6
122.5°	143.0	125.3	173.5	253.9	281.2
125°	138.2	122.1	165.5	242.6	273.2
127.5°	130.2	125.3	157.5	228.2	258.7
130°	123.7	126.9	147.8	213.7	244.2
132.5°	118.9	123.7	138.2	197.6	225.0
135°	112.5	122.1	133.4	180.0	207.3
137.5°	107.7	117.3	125.3	163.9	186.4
140°	102.8	114.1	117.3	143.0	162.3
142.5°	96.4	109.3	110.9	133.4	141.4
145°	91.6	106.0	115.7	123.7	131.8
147.5°	86.8	99.6	112.5	114.1	122.1
150°	85.2	93.2	107.7	109.3	112.5
152.5°	83.6	90.0	99.6	109.3	110.9
155°	83.6	88.4	94.8	102.8	104.4
157.5°	81.9	88.4	91.6	98.0	99.6
160°	81.9	86.8	90.0	94.8	96.4
162.5°	81.9	86.8	88.4	93.2	94.8
165°	81.9	85.2	88.4	91.6	91.6
167.5°	81.9	85.2	86.8	90.0	90.0
170°	81.9	83.6	86.8	88.4	88.4
172.5°	80.3	83.6	85.2	88.4	88.4
175°	80.3	81.9	83.6	85.2	86.8
177.5°	77.1	81.9	83.6	85.2	83.6
180°	78.7	78.7	78.7	78.7	78.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	131.8	126.9	186.4	253.9	274.8
110°	139.8	128.5	191.2	258.7	284.4



(END OF REPORT)