

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: P520529

Luminaire Tested: **4WSLA-150-L950-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: P520529
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-L950-UPL15-UNV-U
Description: 4 FOOT, 1500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 90 CRI
LEDS WITH 15% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

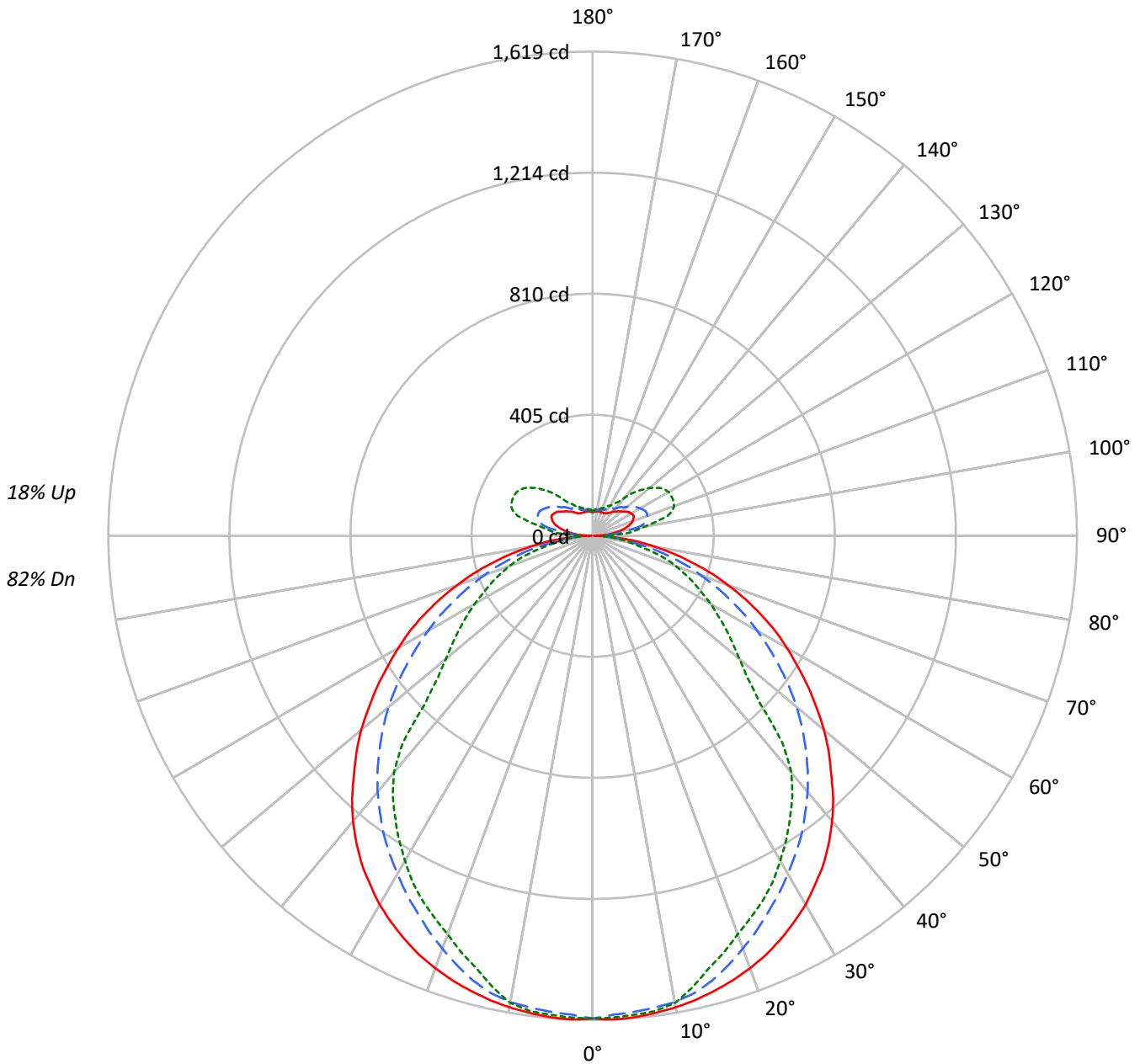
Lumens per Lamp: N/A
Luminaire Lumens: 5228.0 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 47.7
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P520529

CATALOG NUMBER: 4WSLA-150-L950-UPL15-UNV-U

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°	8688	8688	8688
5°	8730	8633	8686
10°	8751	8652	8670
15°	8776	8584	8347
20°	8814	8411	8120
25°	8837	8244	7992
30°	8851	8109	7794
35°	8831	8003	7562
40°	8753	7856	7258
45°	8585	7664	6019
50°	8457	7457	5359
55°	8250	7158	5100
60°	8071	6837	4899
65°	7882	6463	4754
70°	7574	6054	4663
75°	7149	5550	4290
80°	6546	4668	3806
85°	5866	4045	3841



TEST NUMBER: P520529

CATALOG NUMBER: 4WSLA-150-L950-UPL15-UNV-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.0	2.9
10°-20°	434.6	8.3
20°-30°	648.6	12.4
30°-40°	772.8	14.8
40°-50°	768.7	14.7
50°-60°	658.8	12.6
60°-70°	496.2	9.5
70°-80°	287.4	5.5
80°-90°	86.4	1.7
90°-100°	92.7	1.8
100°-110°	190.4	3.6
110°-120°	201.3	3.9
120°-130°	167.9	3.2
130°-140°	117.3	2.2
140°-150°	73.0	1.4
150°-160°	45.3	0.9
160°-170°	25.5	0.5
170°-180°	8.2	0.2
0°-30°	1236.2	23.6
0°-40°	2009.0	38.4
0°-60°	3436.4	65.7
0°-90°	4306.3	82.4
90°-120°	484.4	9.3
90°-150°	842.7	16.1
90°-180°	922.0	17.6
0°-180°	5228.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1614	1614	1614	1614	1614	
5°	1616	1611	1598	1609	1608	154
15°	1575	1573	1541	1514	1498	445
25°	1488	1467	1388	1354	1346	686
35°	1344	1308	1218	1171	1151	840
45°	1128	1100	1007	907	791	872
55°	879	866	763	606	544	786
65°	619	604	508	395	373	612
75°	344	332	267	213	206	364
85°	95	84	66	62	62	101
90°	5	23	39	49	52	10
95°	52	70	80	118	128	50
105°	123	128	183	246	260	127
115°	152	129	195	268	295	148
125°	141	124	169	247	278	125
135°	115	124	136	183	211	89
145°	93	108	118	126	134	59
155°	85	90	97	105	106	39
165°	84	87	90	93	93	24
175°	82	84	85	87	88	8
180°	80	80	80	80	80	



TEST NUMBER: P520529

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1614.3	1614.3	1614.3	1614.3	1614.3
2.5°	1619.2	1615.9	1602.8	1615.9	1612.6
5°	1615.9	1611.0	1597.9	1609.3	1607.7
7.5°	1609.3	1606.1	1591.3	1604.4	1602.8
10°	1601.2	1596.3	1583.2	1593.0	1586.4
12.5°	1589.7	1586.4	1566.8	1558.6	1545.5
15°	1575.0	1573.3	1540.6	1514.4	1498.0
17.5°	1558.6	1552.0	1506.2	1475.1	1460.4
20°	1539.0	1529.1	1468.6	1432.5	1417.8
22.5°	1516.0	1501.3	1430.9	1396.5	1381.8
25°	1488.2	1466.9	1388.3	1353.9	1345.8
27.5°	1457.1	1432.5	1349.0	1314.7	1304.8
30°	1424.3	1393.2	1304.8	1272.1	1254.1
32.5°	1383.4	1353.9	1262.3	1224.6	1205.0
35°	1344.1	1308.1	1218.1	1170.6	1150.9
37.5°	1296.6	1260.6	1167.3	1119.8	1096.9
40°	1245.9	1209.9	1118.2	1062.5	1033.1
42.5°	1190.2	1157.5	1064.2	997.0	939.7
45°	1128.0	1100.2	1006.9	907.0	790.8
47.5°	1070.7	1044.5	949.6	820.2	700.7
50°	1010.1	985.6	890.6	738.4	640.1
52.5°	943.0	925.0	826.8	668.0	589.4
55°	879.2	866.1	762.9	605.8	543.5
57.5°	812.0	798.9	699.1	546.8	497.7
60°	749.8	736.7	635.2	494.4	455.1
62.5°	687.6	669.6	573.0	443.7	410.9
65°	618.9	604.1	507.5	394.6	373.3
67.5°	550.1	537.0	447.0	348.7	334.0
70°	481.3	469.9	384.7	304.5	296.3
72.5°	414.2	399.5	329.1	260.3	257.0
75°	343.8	332.3	266.9	212.8	206.3
77.5°	276.7	266.9	209.6	162.1	157.2
80°	211.2	201.4	150.6	117.9	122.8
82.5°	155.5	142.4	101.5	91.7	96.6
85°	95.0	83.5	65.5	62.2	62.2
87.5°	32.7	31.1	29.5	34.4	36.0
90°	4.9	22.9	39.3	49.1	52.4
92.5°	27.8	40.9	54.0	63.9	67.1
95°	52.4	70.4	80.2	117.9	127.7
97.5°	72.0	93.3	104.8	139.2	149.0
100°	91.7	111.3	147.3	165.4	176.8
102.5°	108.1	122.8	173.5	209.6	216.1
105°	122.8	127.7	183.4	245.6	260.3



TEST NUMBER: P520529

CATALOG NUMBER: 4WSLA-150-L950-UPL15-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	147.3	131.0	196.5	266.9	293.1
115°	152.3	129.3	194.8	268.5	294.7
117.5°	152.3	129.3	189.9	268.5	294.7
120°	149.0	131.0	183.4	265.2	293.1
122.5°	145.7	127.7	176.8	258.7	286.5
125°	140.8	124.4	168.6	247.2	278.3
127.5°	132.6	127.7	160.4	232.5	263.6
130°	126.1	129.3	150.6	217.7	248.9
132.5°	121.2	126.1	140.8	201.4	229.2
135°	114.6	124.4	135.9	183.4	211.2
137.5°	109.7	119.5	127.7	167.0	189.9
140°	104.8	116.2	119.5	145.7	165.4
142.5°	98.2	111.3	113.0	135.9	144.1
145°	93.3	108.1	117.9	126.1	134.2
147.5°	88.4	101.5	114.6	116.2	124.4
150°	86.8	95.0	109.7	111.3	114.6
152.5°	85.1	91.7	101.5	111.3	113.0
155°	85.1	90.0	96.6	104.8	106.4
157.5°	83.5	90.0	93.3	99.9	101.5
160°	83.5	88.4	91.7	96.6	98.2
162.5°	83.5	88.4	90.0	95.0	96.6
165°	83.5	86.8	90.0	93.3	93.3
167.5°	83.5	86.8	88.4	91.7	91.7
170°	83.5	85.1	88.4	90.0	90.0
172.5°	81.9	85.1	86.8	90.0	90.0
175°	81.9	83.5	85.1	86.8	88.4
177.5°	78.6	83.5	85.1	86.8	85.1
180°	80.2	80.2	80.2	80.2	80.2



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	134.2	129.3	189.9	258.7	280.0
110°	142.4	131.0	194.8	263.6	289.8



(END OF REPORT)