

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: P520602

Luminaire Tested: **4WSLA-50-L950-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: P520602
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-50-L950-UPL8-UNV-U
Description: 4 FOOT, 500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 90 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

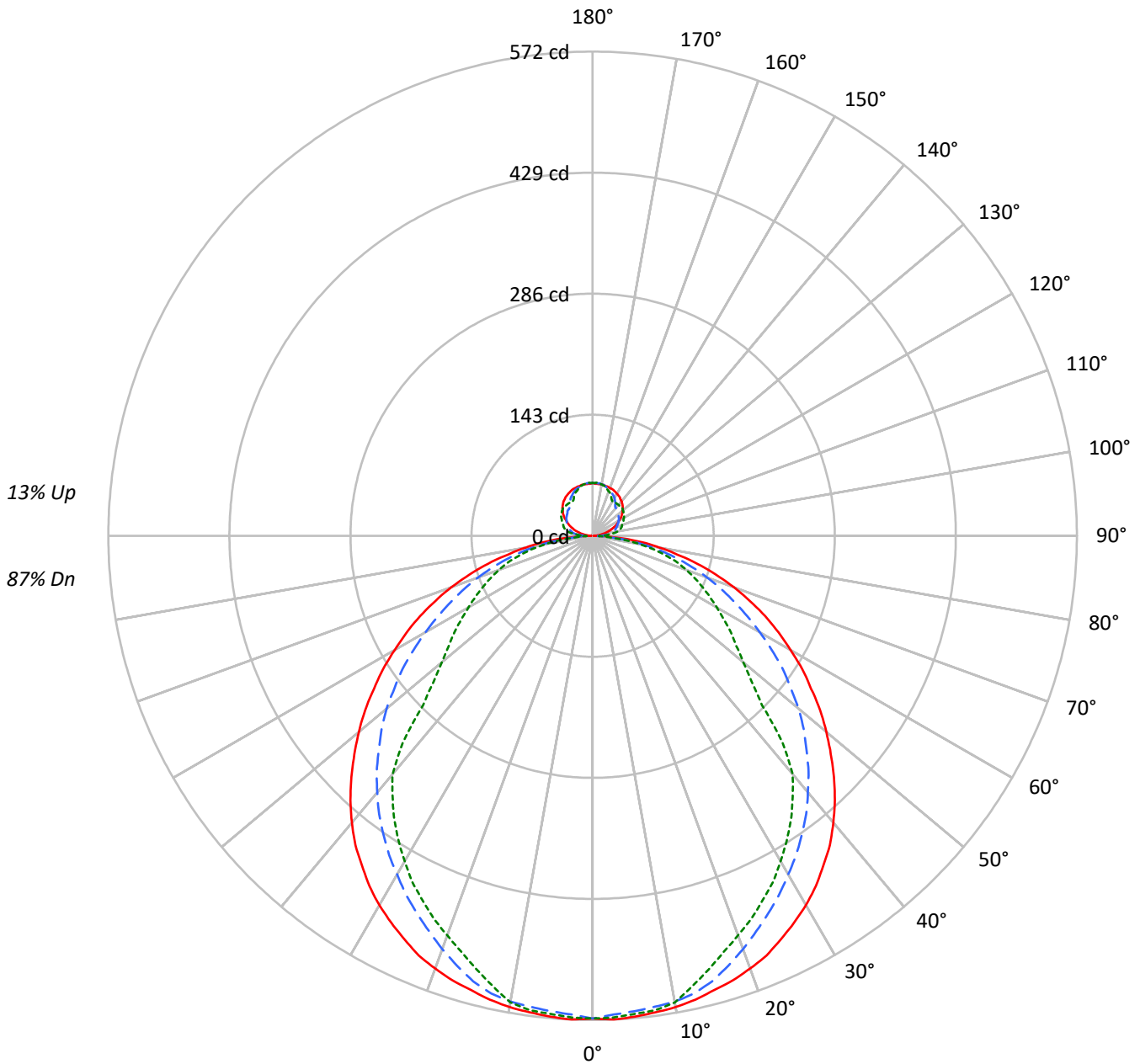
Lumens per Lamp: N/A
Luminaire Lumens: 1775.0 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 15.6
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

TEST NUMBER: P520602

CATALOG NUMBER: 4WSLA-50-L950-UPL8-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	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°	3069	3069	3069
5°	3081	3046	3064
10°	3090	3054	3059
15°	3096	3036	2954
20°	3116	2975	2876
25°	3124	2919	2822
30°	3132	2871	2759
35°	3122	2830	2685
40°	3107	2779	2583
45°	3067	2717	2155
50°	3017	2659	1944
55°	2957	2572	1871
60°	2906	2455	1820
65°	2864	2351	1819
70°	2790	2260	1847
75°	2662	2150	1861
80°	2492	1934	1729
85°	2279	1371	1167



TEST NUMBER: P520602

CATALOG NUMBER: 4WSLA-50-L950-UPL8-UNV-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.0	3.0
10°-20°	153.5	8.6
20°-30°	229.4	12.9
30°-40°	273.8	15.4
40°-50°	273.8	15.4
50°-60°	237.0	13.4
60°-70°	181.9	10.2
70°-80°	111.5	6.3
80°-90°	31.4	1.8
90°-100°	17.7	1.0
100°-110°	28.2	1.6
110°-120°	32.9	1.9
120°-130°	35.5	2.0
130°-140°	35.0	2.0
140°-150°	31.0	1.7
150°-160°	25.5	1.4
160°-170°	17.1	1.0
170°-180°	5.9	0.3
0°-30°	436.9	24.6
0°-40°	710.7	40.0
0°-60°	1221.5	68.8
0°-90°	1546.2	87.1
90°-120°	78.8	4.4
90°-150°	180.3	10.2
90°-180°	229.0	12.9
0°-180°	1775.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	570	569	564	568	567	54
15°	556	555	545	535	530	157
25°	526	520	492	478	475	243
35°	475	463	431	415	409	298
45°	403	391	357	325	283	311
55°	315	308	274	219	199	282
65°	225	217	185	148	143	222
75°	128	122	103	90	90	135
85°	37	30	22	19	19	39
90°	2	6	9	12	12	3
95°	7	14	19	20	20	6
105°	19	20	28	33	34	20
115°	31	26	33	38	40	30
125°	42	34	38	44	45	37
135°	50	45	42	46	48	39
145°	56	53	47	46	48	35
155°	59	58	55	52	52	27
165°	61	62	60	60	60	17
175°	62	62	62	63	63	6
180°	62	62	62	62	62	



TEST NUMBER: P520602

CATALOG NUMBER: 4WSLA-50-L950-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	570.3	570.3	570.3	570.3	570.3
2.5°	572.0	570.3	566.2	570.3	569.5
5°	570.3	568.7	563.8	567.9	567.1
7.5°	567.9	566.2	561.3	566.2	565.4
10°	565.4	563.8	558.9	562.1	559.7
12.5°	561.3	559.7	553.9	549.8	544.9
15°	555.6	554.8	544.9	535.1	530.1
17.5°	550.7	548.2	532.6	521.1	515.4
20°	544.1	540.0	519.5	506.3	502.2
22.5°	536.7	530.1	505.5	493.2	489.9
25°	526.0	519.5	491.6	478.4	475.2
27.5°	515.4	507.2	477.6	464.5	461.2
30°	503.9	492.4	462.0	449.7	444.0
32.5°	490.7	479.3	447.3	433.3	426.7
35°	475.2	462.8	430.8	415.2	408.7
37.5°	460.4	447.3	414.4	397.2	388.2
40°	442.3	429.2	395.6	376.7	367.6
42.5°	423.5	411.1	377.5	354.5	332.4
45°	402.9	391.4	357.0	325.0	283.1
47.5°	381.6	371.8	338.1	294.6	254.4
50°	360.3	350.4	317.6	265.9	232.2
52.5°	338.9	330.7	294.6	242.1	214.2
55°	315.1	307.7	274.1	219.1	199.4
57.5°	293.8	286.4	250.3	200.2	183.8
60°	270.0	263.4	228.1	181.4	169.1
62.5°	247.8	240.4	206.0	164.9	155.9
65°	224.9	216.7	184.6	148.5	142.8
67.5°	201.1	192.9	164.1	133.8	130.5
70°	177.3	170.7	143.6	119.0	117.4
72.5°	152.6	145.3	123.1	105.0	105.0
75°	128.0	121.5	103.4	89.5	89.5
77.5°	102.6	99.3	82.9	73.0	73.9
80°	80.4	76.3	62.4	55.8	55.8
82.5°	59.1	54.2	41.9	36.9	38.6
85°	36.9	30.4	22.2	18.9	18.9
87.5°	11.5	9.0	6.6	7.4	7.4
90°	1.6	5.7	9.0	11.5	12.3
92.5°	4.1	10.7	13.1	15.6	16.4
95°	6.6	14.0	18.9	19.7	19.7
97.5°	9.0	15.6	23.0	26.3	26.3
100°	12.3	16.4	24.6	29.5	30.4
102.5°	15.6	18.1	26.3	31.2	32.8
105°	18.9	19.7	27.9	32.8	34.5



TEST NUMBER: P520602

CATALOG NUMBER: 4WSLA-50-L950-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	27.9	24.6	31.2	36.9	38.6
115°	31.2	26.3	32.8	37.7	40.2
117.5°	33.6	28.7	34.5	39.4	41.0
120°	36.1	30.4	35.3	41.0	42.7
122.5°	39.4	32.0	36.9	41.9	44.3
125°	41.9	33.6	37.7	43.5	45.1
127.5°	44.3	36.9	38.6	44.3	46.0
130°	46.0	40.2	39.4	45.1	46.8
132.5°	48.4	42.7	40.2	46.0	47.6
135°	50.1	45.1	41.9	46.0	48.4
137.5°	51.7	47.6	41.9	46.0	47.6
140°	53.3	50.1	42.7	46.0	47.6
142.5°	54.2	51.7	43.5	46.0	47.6
145°	55.8	53.3	46.8	46.0	47.6
147.5°	56.6	55.0	49.2	46.0	47.6
150°	57.4	56.6	51.7	46.8	46.8
152.5°	58.3	57.4	53.3	50.1	48.4
155°	59.1	58.3	55.0	52.5	51.7
157.5°	59.9	59.9	56.6	55.0	54.2
160°	59.9	60.7	58.3	56.6	55.8
162.5°	60.7	61.5	59.1	58.3	57.4
165°	60.7	61.5	59.9	59.9	59.9
167.5°	61.5	62.4	61.5	60.7	60.7
170°	61.5	62.4	61.5	61.5	61.5
172.5°	61.5	62.4	62.4	62.4	62.4
175°	61.5	62.4	62.4	63.2	63.2
177.5°	61.5	62.4	62.4	62.4	62.4
180°	62.4	62.4	62.4	62.4	62.4



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	22.2	21.3	28.7	34.5	36.1
110°	24.6	23.0	30.4	35.3	36.9



(END OF REPORT)