

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: P520584

Luminaire Tested: **4WSLA-50-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: P520584
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-L835-UPL8-UNV-U
Description: 4 FOOT, 500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 80 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

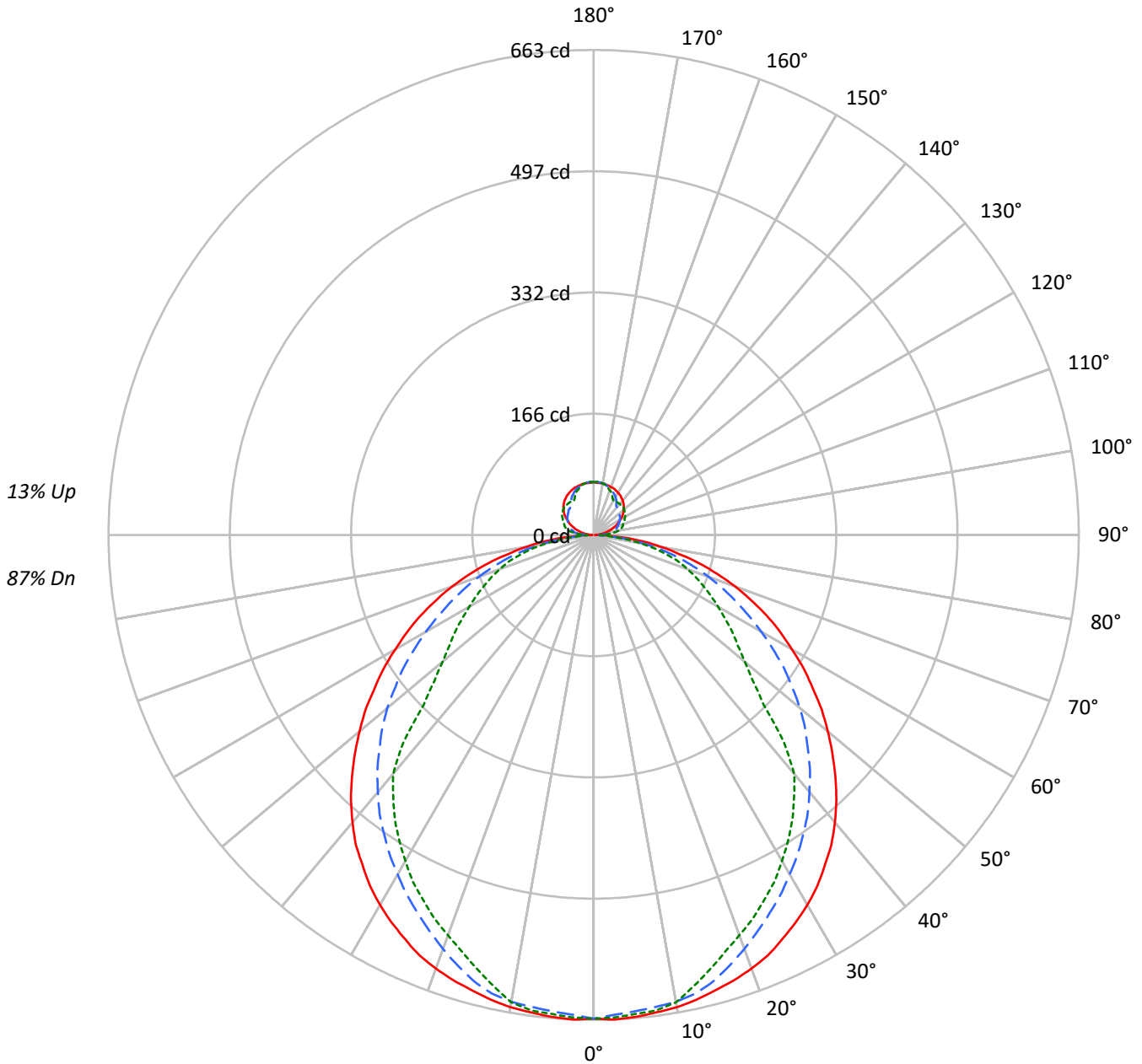
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2058.0 lumens
Efficiency: N/A
Efficacy: 131.9 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 (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°	3559	3559	3559
5°	3573	3532	3552
10°	3583	3541	3546
15°	3589	3520	3425
20°	3613	3450	3335
25°	3622	3384	3271
30°	3631	3329	3199
35°	3619	3282	3113
40°	3603	3222	2995
45°	3556	3150	2499
50°	3497	3083	2255
55°	3429	2982	2169
60°	3369	2847	2110
65°	3320	2727	2109
70°	3234	2620	2142
75°	3086	2493	2156
80°	2889	2241	2005
85°	2643	1587	1352



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	3.0
10°-20°	178.0	8.6
20°-30°	265.9	12.9
30°-40°	317.5	15.4
40°-50°	317.5	15.4
50°-60°	274.8	13.4
60°-70°	210.9	10.2
70°-80°	129.2	6.3
80°-90°	36.4	1.8
90°-100°	20.6	1.0
100°-110°	32.6	1.6
110°-120°	38.2	1.9
120°-130°	41.2	2.0
130°-140°	40.6	2.0
140°-150°	35.9	1.7
150°-160°	29.6	1.4
160°-170°	19.8	1.0
170°-180°	6.9	0.3
0°-30°	506.5	24.6
0°-40°	824.0	40.0
0°-60°	1416.2	68.8
0°-90°	1792.7	87.1
90°-120°	91.4	4.4
90°-150°	209.0	10.2
90°-180°	265.0	12.9
0°-180°	2058.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	661	661	661	661	661	
5°	661	659	654	658	658	63
15°	644	643	632	620	615	182
25°	610	602	570	555	551	281
35°	551	537	500	482	474	345
45°	467	454	414	377	328	360
55°	365	357	318	254	231	328
65°	261	251	214	172	166	257
75°	148	141	120	104	104	157
85°	43	35	26	22	22	45
90°	2	7	10	13	14	3
95°	8	16	22	23	23	8
105°	22	23	32	38	40	23
115°	36	30	38	44	47	35
125°	48	39	44	50	52	43
135°	58	52	48	53	56	45
145°	65	62	54	53	55	40
155°	68	68	64	61	60	32
165°	70	71	70	70	70	20
175°	71	72	72	73	73	7
180°	72	72	72	72	72	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	661.3	661.3	661.3	661.3	661.3
2.5°	663.2	661.3	656.5	661.3	660.3
5°	661.3	659.4	653.7	658.4	657.5
7.5°	658.4	656.5	650.8	656.5	655.6
10°	655.6	653.7	648.0	651.8	648.9
12.5°	650.8	648.9	642.3	637.5	631.8
15°	644.2	643.2	631.8	620.4	614.7
17.5°	638.4	635.6	617.5	604.2	597.5
20°	630.8	626.1	602.3	587.1	582.3
22.5°	622.3	614.7	586.1	571.8	568.0
25°	609.9	602.3	569.9	554.7	550.9
27.5°	597.5	588.0	553.8	538.5	534.7
30°	584.2	570.9	535.7	521.4	514.8
32.5°	569.0	555.7	518.6	502.4	494.8
35°	550.9	536.6	499.5	481.5	473.8
37.5°	533.8	518.6	480.5	460.5	450.1
40°	512.9	497.6	458.6	436.7	426.3
42.5°	491.0	476.7	437.7	411.0	385.4
45°	467.2	453.9	413.9	376.8	328.3
47.5°	442.4	431.0	392.0	341.6	295.0
50°	417.7	406.3	368.2	308.3	269.3
52.5°	393.0	383.4	341.6	280.7	248.3
55°	365.4	356.8	317.8	254.0	231.2
57.5°	340.6	332.1	290.2	232.2	213.1
60°	313.0	305.4	264.5	210.3	196.0
62.5°	287.3	278.8	238.8	191.2	180.8
65°	260.7	251.2	214.1	172.2	165.6
67.5°	233.1	223.6	190.3	155.1	151.3
70°	205.5	197.9	166.5	138.0	136.1
72.5°	177.0	168.4	142.7	121.8	121.8
75°	148.4	140.8	119.9	103.7	103.7
77.5°	118.9	115.1	96.1	84.7	85.6
80°	93.2	88.5	72.3	64.7	64.7
82.5°	68.5	62.8	48.5	42.8	44.7
85°	42.8	35.2	25.7	21.9	21.9
87.5°	13.3	10.5	7.6	8.6	8.6
90°	1.9	6.7	10.5	13.3	14.3
92.5°	4.8	12.4	15.2	18.1	19.0
95°	7.6	16.2	21.9	22.8	22.8
97.5°	10.5	18.1	26.6	30.4	30.4
100°	14.3	19.0	28.5	34.3	35.2
102.5°	18.1	20.9	30.4	36.2	38.1
105°	21.9	22.8	32.4	38.1	40.0



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CATALOG NUMBER: 4WSLA-50-L835-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	32.4	28.5	36.2	42.8	44.7
115°	36.2	30.4	38.1	43.8	46.6
117.5°	39.0	33.3	40.0	45.7	47.6
120°	41.9	35.2	40.9	47.6	49.5
122.5°	45.7	37.1	42.8	48.5	51.4
125°	48.5	39.0	43.8	50.4	52.3
127.5°	51.4	42.8	44.7	51.4	53.3
130°	53.3	46.6	45.7	52.3	54.2
132.5°	56.1	49.5	46.6	53.3	55.2
135°	58.0	52.3	48.5	53.3	56.1
137.5°	59.9	55.2	48.5	53.3	55.2
140°	61.8	58.0	49.5	53.3	55.2
142.5°	62.8	59.9	50.4	53.3	55.2
145°	64.7	61.8	54.2	53.3	55.2
147.5°	65.7	63.7	57.1	53.3	55.2
150°	66.6	65.7	59.9	54.2	54.2
152.5°	67.6	66.6	61.8	58.0	56.1
155°	68.5	67.6	63.7	60.9	59.9
157.5°	69.5	69.5	65.7	63.7	62.8
160°	69.5	70.4	67.6	65.7	64.7
162.5°	70.4	71.4	68.5	67.6	66.6
165°	70.4	71.4	69.5	69.5	69.5
167.5°	71.4	72.3	71.4	70.4	70.4
170°	71.4	72.3	71.4	71.4	71.4
172.5°	71.4	72.3	72.3	72.3	72.3
175°	71.4	72.3	72.3	73.3	73.3
177.5°	71.4	72.3	72.3	72.3	72.3
180°	72.3	72.3	72.3	72.3	72.3



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	25.7	24.7	33.3	40.0	41.9
110°	28.5	26.6	35.2	40.9	42.8



(END OF REPORT)