

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: P520707

Luminaire Tested: **8WSLA-175-L840-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: P520707  
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: 8WSLA-175-L840-UPL8-UNV-U  
Description: 8 FOOT, 3500 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 80 CRI  
LEDS WITH 8% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

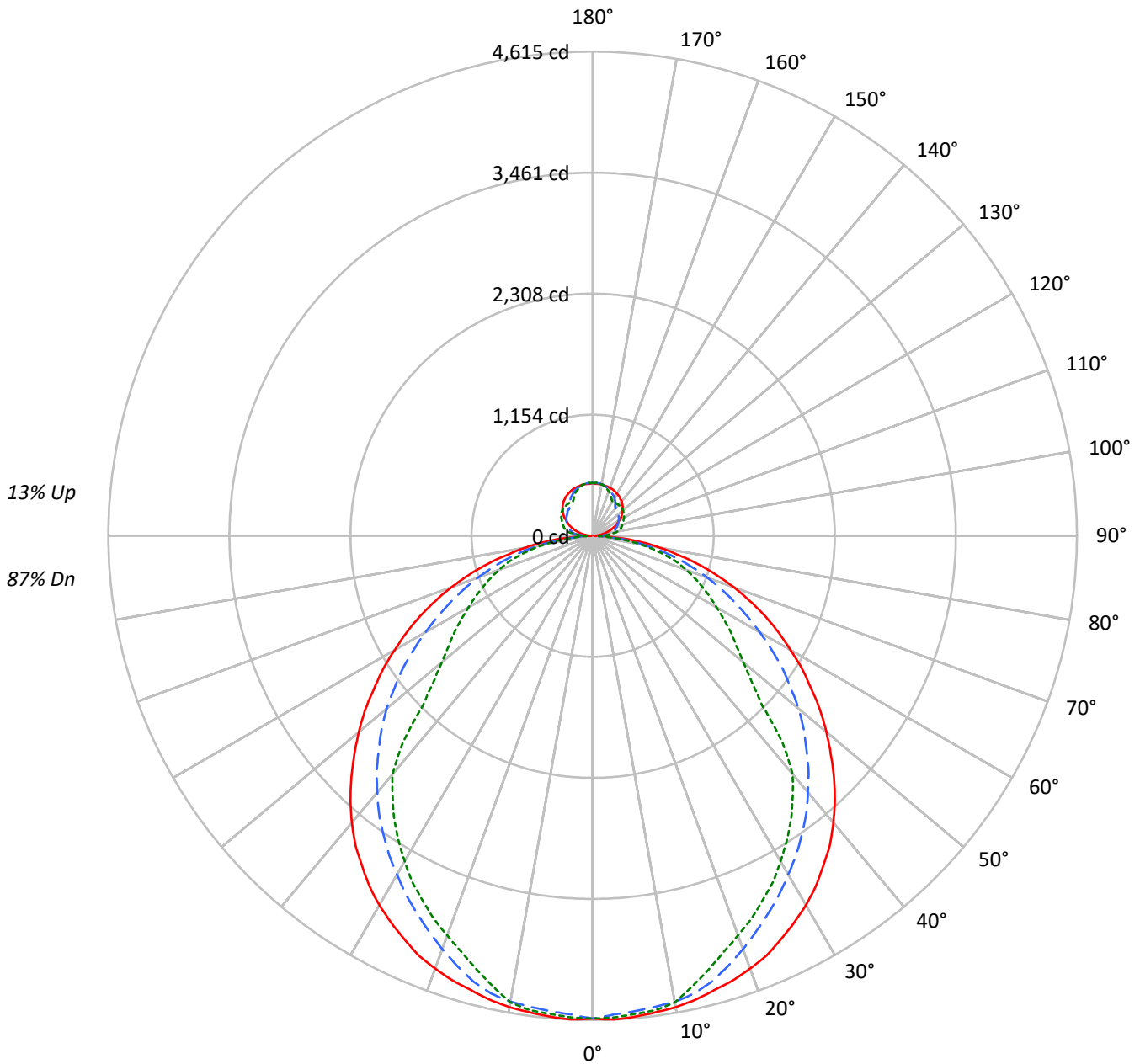
Lumens per Lamp: N/A  
Luminaire Lumens: 14322.0 lumens  
Efficiency: N/A  
Efficacy: 120.4 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 119  
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°	12384	12384	12384
5°	12431	12288	12360
10°	12466	12322	12340
15°	12489	12249	11917
20°	12572	12003	11605
25°	12602	11777	11383
30°	12633	11584	11131
35°	12595	11420	10833
40°	12537	11212	10421
45°	12373	10962	8694
50°	12170	10728	7845
55°	11929	10376	7549
60°	11725	9907	7341
65°	11552	9487	7337
70°	11253	9117	7450
75°	10740	8674	7505
80°	10056	7798	6978
85°	9201	5521	4702



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	435.7	3.0
10°-20°	1238.6	8.6
20°-30°	1850.7	12.9
30°-40°	2209.2	15.4
40°-50°	2209.4	15.4
50°-60°	1912.2	13.4
60°-70°	1467.7	10.2
70°-80°	899.3	6.3
80°-90°	253.2	1.8
90°-100°	143.1	1.0
100°-110°	227.1	1.6
110°-120°	265.5	1.9
120°-130°	286.7	2.0
130°-140°	282.5	2.0
140°-150°	249.9	1.7
150°-160°	205.7	1.4
160°-170°	137.6	1.0
170°-180°	47.9	0.3
0°-30°	3525.0	24.6
0°-40°	5734.2	40.0
0°-60°	9855.8	68.8
0°-90°	12476.0	87.1
90°-120°	635.7	4.4
90°-150°	1454.8	10.2
90°-180°	1846.0	12.9
0°-180°	14322.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4602	4602	4602	4602	4602	
5°	4602	4589	4549	4582	4576	438
15°	4483	4476	4397	4317	4278	1268
25°	4244	4192	3966	3860	3834	1958
35°	3834	3735	3476	3350	3298	2401
45°	3251	3158	2880	2622	2284	2507
55°	2543	2483	2212	1768	1609	2279
65°	1814	1748	1490	1198	1152	1792
75°	1033	980	834	722	722	1090
85°	298	245	179	152	152	312
90°	13	46	73	93	99	21
95°	53	113	152	159	159	52
105°	152	159	225	265	278	160
115°	252	212	265	305	324	246
125°	338	272	305	351	364	301
135°	404	364	338	371	391	312
145°	450	430	377	371	384	281
155°	477	470	444	424	417	220
165°	490	497	483	483	483	139
175°	497	503	503	510	510	47
180°	503	503	503	503	503	



TEST NUMBER: P520707

CATALOG NUMBER: 8WSLA-175-L840-UPL8-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4602.0	4602.0	4602.0	4602.0	4602.0
2.5°	4615.2	4602.0	4568.9	4602.0	4595.4
5°	4602.0	4588.8	4549.0	4582.1	4575.5
7.5°	4582.1	4568.9	4529.2	4568.9	4562.3
10°	4562.3	4549.0	4509.3	4535.8	4515.9
12.5°	4529.2	4515.9	4469.6	4436.5	4396.7
15°	4482.8	4476.2	4396.7	4317.3	4277.5
17.5°	4443.1	4423.2	4297.4	4204.7	4158.4
20°	4390.1	4357.0	4191.5	4085.5	4052.4
22.5°	4330.5	4277.5	4078.9	3979.6	3953.1
25°	4244.4	4191.5	3966.3	3860.4	3833.9
27.5°	4158.4	4092.1	3853.8	3747.8	3721.3
30°	4065.6	3972.9	3727.9	3628.6	3582.3
32.5°	3959.7	3867.0	3608.8	3496.2	3443.2
35°	3833.9	3734.6	3476.3	3350.5	3297.5
37.5°	3714.7	3608.8	3343.9	3204.8	3132.0
40°	3569.0	3463.1	3191.6	3039.3	2966.5
42.5°	3416.7	3317.4	3045.9	2860.5	2681.7
45°	3251.2	3158.5	2880.4	2622.1	2284.4
47.5°	3079.0	2999.6	2728.1	2377.1	2052.7
50°	2906.9	2827.4	2562.6	2145.4	1873.9
52.5°	2734.7	2668.5	2377.1	1953.4	1728.2
55°	2542.7	2483.1	2211.6	1768.0	1609.0
57.5°	2370.5	2310.9	2019.6	1615.7	1483.2
60°	2178.5	2125.5	1840.8	1463.4	1364.0
62.5°	1999.7	1940.1	1662.0	1330.9	1258.1
65°	1814.3	1748.1	1489.9	1198.5	1152.2
67.5°	1622.3	1556.1	1324.3	1079.3	1052.8
70°	1430.3	1377.3	1158.8	960.1	946.9
72.5°	1231.6	1172.0	993.2	847.6	847.6
75°	1033.0	980.0	834.3	721.8	721.8
77.5°	827.7	801.2	668.8	589.3	595.9
80°	648.9	615.8	503.2	450.3	450.3
82.5°	476.8	437.0	337.7	298.0	311.2
85°	298.0	245.0	178.8	152.3	152.3
87.5°	92.7	72.8	53.0	59.6	59.6
90°	13.2	46.4	72.8	92.7	99.3
92.5°	33.1	86.1	105.9	125.8	132.4
95°	53.0	112.6	152.3	158.9	158.9
97.5°	72.8	125.8	185.4	211.9	211.9
100°	99.3	132.4	198.6	238.4	245.0
102.5°	125.8	145.7	211.9	251.6	264.9
105°	152.3	158.9	225.1	264.9	278.1



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CATALOG NUMBER: 8WSLA-175-L840-UPL8-UNV-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	225.1	198.6	251.6	298.0	311.2
115°	251.6	211.9	264.9	304.6	324.5
117.5°	271.5	231.8	278.1	317.8	331.1
120°	291.3	245.0	284.7	331.1	344.3
122.5°	317.8	258.2	298.0	337.7	357.6
125°	337.7	271.5	304.6	350.9	364.2
127.5°	357.6	298.0	311.2	357.6	370.8
130°	370.8	324.5	317.8	364.2	377.4
132.5°	390.7	344.3	324.5	370.8	384.1
135°	403.9	364.2	337.7	370.8	390.7
137.5°	417.2	384.1	337.7	370.8	384.1
140°	430.4	403.9	344.3	370.8	384.1
142.5°	437.0	417.2	350.9	370.8	384.1
145°	450.3	430.4	377.4	370.8	384.1
147.5°	456.9	443.6	397.3	370.8	384.1
150°	463.5	456.9	417.2	377.4	377.4
152.5°	470.1	463.5	430.4	403.9	390.7
155°	476.8	470.1	443.6	423.8	417.2
157.5°	483.4	483.4	456.9	443.6	437.0
160°	483.4	490.0	470.1	456.9	450.3
162.5°	490.0	496.6	476.8	470.1	463.5
165°	490.0	496.6	483.4	483.4	483.4
167.5°	496.6	503.2	496.6	490.0	490.0
170°	496.6	503.2	496.6	496.6	496.6
172.5°	496.6	503.2	503.2	503.2	503.2
175°	496.6	503.2	503.2	509.9	509.9
177.5°	496.6	503.2	503.2	503.2	503.2
180°	503.2	503.2	503.2	503.2	503.2



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	178.8	172.2	231.8	278.1	291.3
110°	198.6	185.4	245.0	284.7	298.0



(END OF REPORT)