

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: P520749

Luminaire Tested: **8WSLA-50-L830-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: P520749  
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-50-L830-UPL8-UNV-U  
Description: 8 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 80 CRI  
LEDS WITH 8% UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

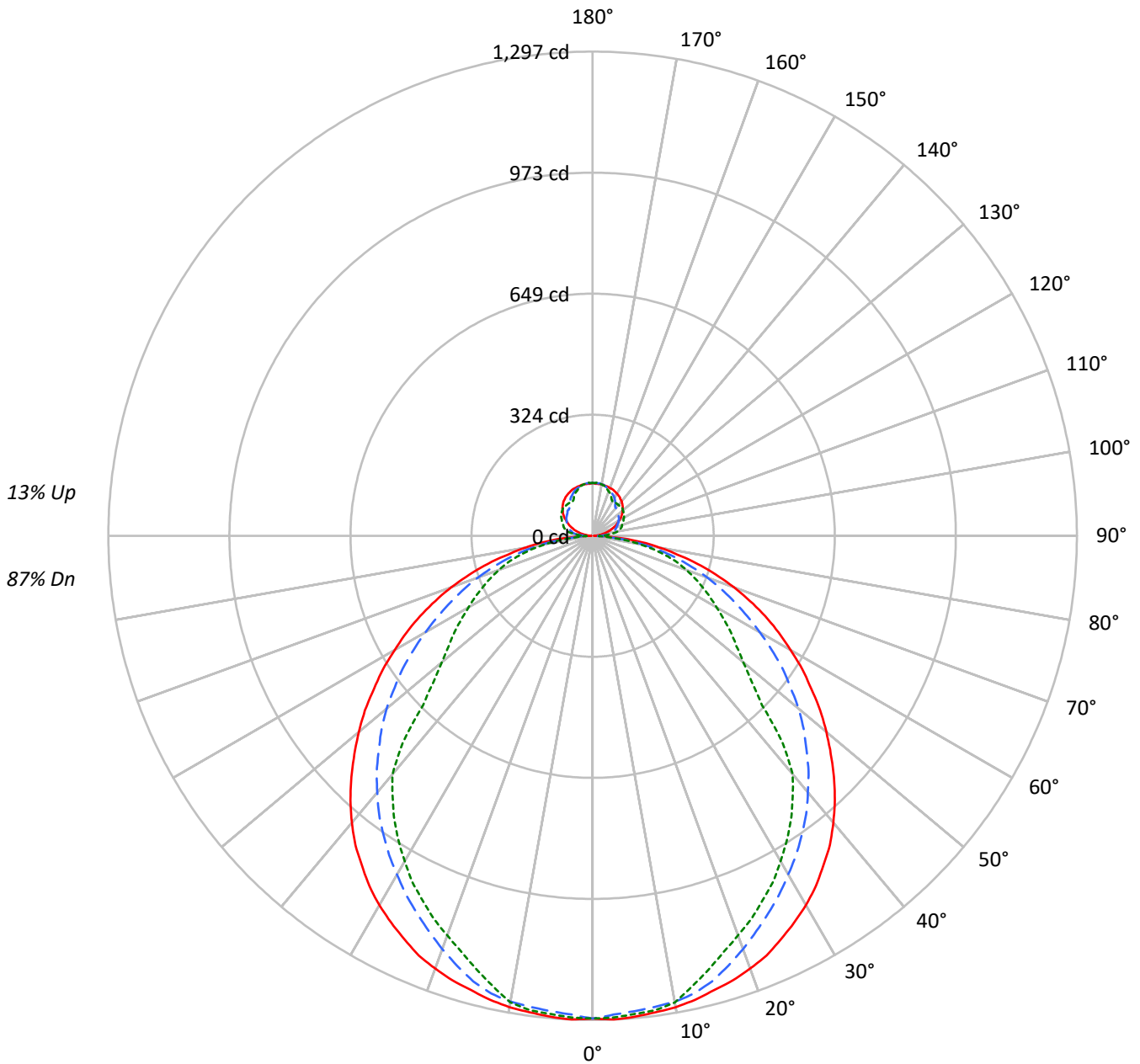
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4025.0 lumens  
Efficiency: N/A  
Efficacy: 132.0 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): 30.5  
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°	3480	3480	3480
5°	3494	3453	3474
10°	3504	3463	3468
15°	3510	3442	3349
20°	3533	3373	3261
25°	3542	3310	3199
30°	3550	3255	3128
35°	3540	3210	3044
40°	3523	3151	2929
45°	3477	3081	2443
50°	3420	3015	2205
55°	3353	2916	2122
60°	3295	2784	2063
65°	3247	2666	2062
70°	3163	2563	2094
75°	3018	2438	2109
80°	2827	2191	1960
85°	2584	1550	1321



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.4	3.0
10°-20°	348.1	8.6
20°-30°	520.1	12.9
30°-40°	620.9	15.4
40°-50°	620.9	15.4
50°-60°	537.4	13.4
60°-70°	412.5	10.2
70°-80°	252.7	6.3
80°-90°	71.1	1.8
90°-100°	40.2	1.0
100°-110°	63.8	1.6
110°-120°	74.6	1.9
120°-130°	80.6	2.0
130°-140°	79.4	2.0
140°-150°	70.2	1.7
150°-160°	57.8	1.4
160°-170°	38.7	1.0
170°-180°	13.5	0.3
0°-30°	990.6	24.6
0°-40°	1611.5	40.0
0°-60°	2769.9	68.8
0°-90°	3506.2	87.1
90°-120°	178.7	4.4
90°-150°	408.8	10.2
90°-180°	519.0	12.9
0°-180°	4025.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1293	1293	1293	1293	1293	
5°	1293	1290	1278	1288	1286	123
15°	1260	1258	1236	1213	1202	356
25°	1193	1178	1115	1085	1078	550
35°	1078	1050	977	942	927	675
45°	914	888	810	737	642	705
55°	715	698	622	497	452	641
65°	510	491	419	337	324	504
75°	290	275	234	203	203	306
85°	84	69	50	43	43	88
90°	4	13	20	26	28	6
95°	15	32	43	45	45	15
105°	43	45	63	74	78	45
115°	71	60	74	86	91	69
125°	95	76	86	99	102	85
135°	114	102	95	104	110	88
145°	126	121	106	104	108	79
155°	134	132	125	119	117	62
165°	138	140	136	136	136	39
175°	140	141	141	143	143	13
180°	141	141	141	141	141	



TEST NUMBER: P520749

CATALOG NUMBER: 8WSLA-50-L830-UPL8-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1293.3	1293.3	1293.3	1293.3	1293.3
2.5°	1297.0	1293.3	1284.0	1293.3	1291.5
5°	1293.3	1289.6	1278.4	1287.7	1285.9
7.5°	1287.7	1284.0	1272.9	1284.0	1282.2
10°	1282.2	1278.4	1267.3	1274.7	1269.1
12.5°	1272.9	1269.1	1256.1	1246.8	1235.6
15°	1259.8	1258.0	1235.6	1213.3	1202.1
17.5°	1248.7	1243.1	1207.7	1181.7	1168.6
20°	1233.8	1224.5	1178.0	1148.2	1138.9
22.5°	1217.0	1202.1	1146.3	1118.4	1111.0
25°	1192.8	1178.0	1114.7	1084.9	1077.5
27.5°	1168.6	1150.0	1083.0	1053.3	1045.8
30°	1142.6	1116.5	1047.7	1019.8	1006.7
32.5°	1112.8	1086.8	1014.2	982.6	967.7
35°	1077.5	1049.5	977.0	941.6	926.7
37.5°	1044.0	1014.2	939.8	900.7	880.2
40°	1003.0	973.3	897.0	854.2	833.7
42.5°	960.2	932.3	856.0	803.9	753.7
45°	913.7	887.7	809.5	736.9	642.0
47.5°	865.3	843.0	766.7	668.1	576.9
50°	816.9	794.6	720.2	602.9	526.6
52.5°	768.6	749.9	668.1	549.0	485.7
55°	714.6	697.8	621.5	496.9	452.2
57.5°	666.2	649.5	567.6	454.1	416.8
60°	612.2	597.3	517.3	411.3	383.3
62.5°	562.0	545.2	467.1	374.0	353.6
65°	509.9	491.3	418.7	336.8	323.8
67.5°	455.9	437.3	372.2	303.3	295.9
70°	402.0	387.1	325.7	269.8	266.1
72.5°	346.1	329.4	279.1	238.2	238.2
75°	290.3	275.4	234.5	202.8	202.8
77.5°	232.6	225.2	188.0	165.6	167.5
80°	182.4	173.1	141.4	126.5	126.5
82.5°	134.0	122.8	94.9	83.7	87.5
85°	83.7	68.9	50.2	42.8	42.8
87.5°	26.1	20.5	14.9	16.7	16.7
90°	3.7	13.0	20.5	26.1	27.9
92.5°	9.3	24.2	29.8	35.4	37.2
95°	14.9	31.6	42.8	44.7	44.7
97.5°	20.5	35.4	52.1	59.5	59.5
100°	27.9	37.2	55.8	67.0	68.9
102.5°	35.4	40.9	59.5	70.7	74.4
105°	42.8	44.7	63.3	74.4	78.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	63.3	55.8	70.7	83.7	87.5
115°	70.7	59.5	74.4	85.6	91.2
117.5°	76.3	65.1	78.2	89.3	93.0
120°	81.9	68.9	80.0	93.0	96.8
122.5°	89.3	72.6	83.7	94.9	100.5
125°	94.9	76.3	85.6	98.6	102.3
127.5°	100.5	83.7	87.5	100.5	104.2
130°	104.2	91.2	89.3	102.3	106.1
132.5°	109.8	96.8	91.2	104.2	107.9
135°	113.5	102.3	94.9	104.2	109.8
137.5°	117.2	107.9	94.9	104.2	107.9
140°	121.0	113.5	96.8	104.2	107.9
142.5°	122.8	117.2	98.6	104.2	107.9
145°	126.5	121.0	106.1	104.2	107.9
147.5°	128.4	124.7	111.7	104.2	107.9
150°	130.3	128.4	117.2	106.1	106.1
152.5°	132.1	130.3	121.0	113.5	109.8
155°	134.0	132.1	124.7	119.1	117.2
157.5°	135.8	135.8	128.4	124.7	122.8
160°	135.8	137.7	132.1	128.4	126.5
162.5°	137.7	139.6	134.0	132.1	130.3
165°	137.7	139.6	135.8	135.8	135.8
167.5°	139.6	141.4	139.6	137.7	137.7
170°	139.6	141.4	139.6	139.6	139.6
172.5°	139.6	141.4	141.4	141.4	141.4
175°	139.6	141.4	141.4	143.3	143.3
177.5°	139.6	141.4	141.4	141.4	141.4
180°	141.4	141.4	141.4	141.4	141.4



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	50.2	48.4	65.1	78.2	81.9
110°	55.8	52.1	68.9	80.0	83.7



(END OF REPORT)