

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: P520755

Luminaire Tested: **8WSLA-50-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: P520755
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-L840-UPL8-UNV-U
Description: 8 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 80 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

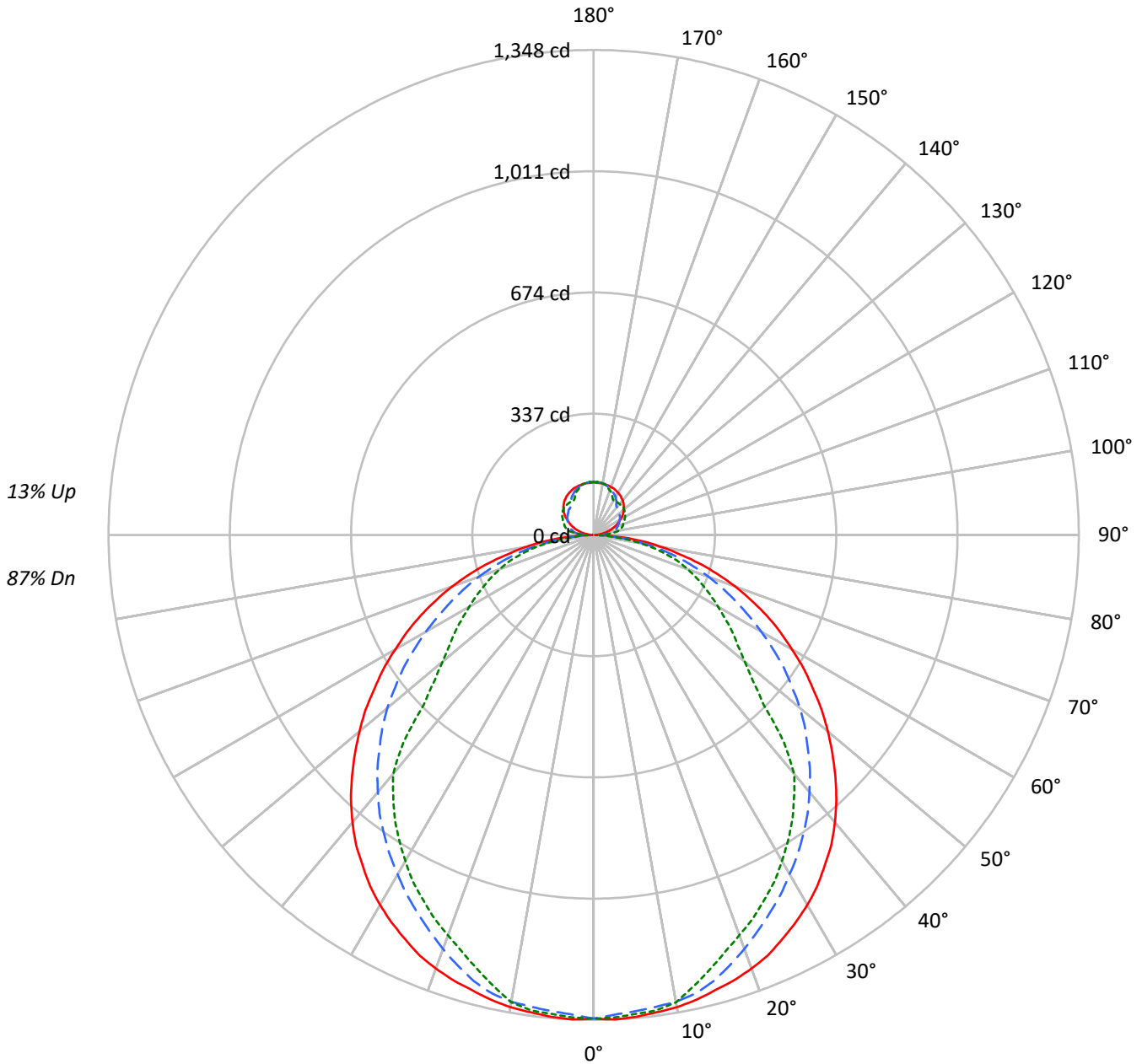
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4184.0 lumens
Efficiency: N/A
Efficacy: 137.2 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				20				20	
RC	80				70				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				87
1	106	101	97	93	102	98	94	90	91	88	85	85	83	80	79	78	76	73				73
2	96	88	82	76	92	85	79	74	80	75	70	74	70	67	70	66	64	61				61
3	88	78	70	63	84	75	68	62	70	64	59	66	61	56	62	58	54	51				51
4	80	69	60	54	77	67	59	53	62	56	50	59	53	48	55	50	46	44				44
5	74	61	53	46	71	60	51	45	56	49	44	53	47	42	50	45	40	38				38
6	68	55	47	40	66	54	46	40	51	44	38	48	42	37	45	40	36	33				33
7	63	50	42	36	61	49	41	35	46	39	34	43	37	33	41	36	32	30				30
8	59	46	37	32	57	44	37	31	42	35	30	40	34	29	38	32	28	26				26
9	55	42	34	28	53	41	33	28	39	32	27	37	31	26	35	30	26	24				24
10	52	39	31	26	50	38	30	25	36	29	25	34	28	24	32	27	23	22				22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3618	3618	3618
5°	3632	3590	3611
10°	3642	3600	3605
15°	3648	3578	3481
20°	3673	3507	3390
25°	3682	3440	3325
30°	3691	3384	3252
35°	3679	3336	3165
40°	3662	3275	3044
45°	3615	3202	2540
50°	3555	3134	2292
55°	3485	3031	2206
60°	3425	2894	2145
65°	3375	2771	2143
70°	3287	2663	2176
75°	3138	2534	2193
80°	2938	2278	2038
85°	2686	1612	1374



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.3	3.0
10°-20°	361.8	8.6
20°-30°	540.7	12.9
30°-40°	645.4	15.4
40°-50°	645.5	15.4
50°-60°	558.6	13.4
60°-70°	428.8	10.2
70°-80°	262.7	6.3
80°-90°	74.0	1.8
90°-100°	41.8	1.0
100°-110°	66.4	1.6
110°-120°	77.6	1.9
120°-130°	83.7	2.0
130°-140°	82.5	2.0
140°-150°	73.0	1.7
150°-160°	60.1	1.4
160°-170°	40.2	1.0
170°-180°	14.0	0.3
0°-30°	1029.8	24.6
0°-40°	1675.2	40.0
0°-60°	2879.3	68.8
0°-90°	3644.7	87.1
90°-120°	185.7	4.4
90°-150°	425.0	10.2
90°-180°	539.0	12.9
0°-180°	4184.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1344	1344	1344	1344	1344	
5°	1344	1340	1329	1339	1337	128
15°	1310	1308	1284	1261	1250	370
25°	1240	1224	1159	1128	1120	572
35°	1120	1091	1016	979	963	701
45°	950	923	842	766	667	732
55°	743	725	646	516	470	666
65°	530	511	435	350	337	524
75°	302	286	244	211	211	318
85°	87	72	52	44	44	91
90°	4	14	21	27	29	6
95°	16	33	44	46	46	15
105°	44	46	66	77	81	47
115°	74	62	77	89	95	72
125°	99	79	89	102	106	88
135°	118	106	99	108	114	91
145°	132	126	110	108	112	82
155°	139	137	130	124	122	64
165°	143	145	141	141	141	41
175°	145	147	147	149	149	14
180°	147	147	147	147	147	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1344.4	1344.4	1344.4	1344.4	1344.4
2.5°	1348.3	1344.4	1334.7	1344.4	1342.5
5°	1344.4	1340.5	1328.9	1338.6	1336.7
7.5°	1338.6	1334.7	1323.1	1334.7	1332.8
10°	1332.8	1328.9	1317.3	1325.1	1319.3
12.5°	1323.1	1319.3	1305.7	1296.1	1284.5
15°	1309.6	1307.7	1284.5	1261.2	1249.6
17.5°	1298.0	1292.2	1255.4	1228.4	1214.8
20°	1282.5	1272.8	1224.5	1193.5	1183.9
22.5°	1265.1	1249.6	1191.6	1162.6	1154.8
25°	1240.0	1224.5	1158.7	1127.8	1120.0
27.5°	1214.8	1195.5	1125.8	1094.9	1087.1
30°	1187.7	1160.6	1089.1	1060.1	1046.5
32.5°	1156.8	1129.7	1054.3	1021.4	1005.9
35°	1120.0	1091.0	1015.6	978.8	963.3
37.5°	1085.2	1054.3	976.9	936.3	915.0
40°	1042.6	1011.7	932.4	887.9	866.6
42.5°	998.2	969.1	889.8	835.7	783.4
45°	949.8	922.7	841.5	766.0	667.4
47.5°	899.5	876.3	797.0	694.5	599.7
50°	849.2	826.0	748.6	626.8	547.4
52.5°	798.9	779.6	694.5	570.7	504.9
55°	742.8	725.4	646.1	516.5	470.1
57.5°	692.5	675.1	590.0	472.0	433.3
60°	636.4	620.9	537.8	427.5	398.5
62.5°	584.2	566.8	485.5	388.8	367.5
65°	530.0	510.7	435.2	350.1	336.6
67.5°	473.9	454.6	386.9	315.3	307.6
70°	417.8	402.4	338.5	280.5	276.6
72.5°	359.8	342.4	290.2	247.6	247.6
75°	301.8	286.3	243.7	210.9	210.9
77.5°	241.8	234.1	195.4	172.2	174.1
80°	189.6	179.9	147.0	131.5	131.5
82.5°	139.3	127.7	98.7	87.0	90.9
85°	87.0	71.6	52.2	44.5	44.5
87.5°	27.1	21.3	15.5	17.4	17.4
90°	3.9	13.5	21.3	27.1	29.0
92.5°	9.7	25.1	31.0	36.8	38.7
95°	15.5	32.9	44.5	46.4	46.4
97.5°	21.3	36.8	54.2	61.9	61.9
100°	29.0	38.7	58.0	69.6	71.6
102.5°	36.8	42.6	61.9	73.5	77.4
105°	44.5	46.4	65.8	77.4	81.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	65.8	58.0	73.5	87.0	90.9
115°	73.5	61.9	77.4	89.0	94.8
117.5°	79.3	67.7	81.2	92.9	96.7
120°	85.1	71.6	83.2	96.7	100.6
122.5°	92.9	75.4	87.0	98.7	104.5
125°	98.7	79.3	89.0	102.5	106.4
127.5°	104.5	87.0	90.9	104.5	108.3
130°	108.3	94.8	92.9	106.4	110.3
132.5°	114.1	100.6	94.8	108.3	112.2
135°	118.0	106.4	98.7	108.3	114.1
137.5°	121.9	112.2	98.7	108.3	112.2
140°	125.7	118.0	100.6	108.3	112.2
142.5°	127.7	121.9	102.5	108.3	112.2
145°	131.5	125.7	110.3	108.3	112.2
147.5°	133.5	129.6	116.1	108.3	112.2
150°	135.4	133.5	121.9	110.3	110.3
152.5°	137.3	135.4	125.7	118.0	114.1
155°	139.3	137.3	129.6	123.8	121.9
157.5°	141.2	141.2	133.5	129.6	127.7
160°	141.2	143.1	137.3	133.5	131.5
162.5°	143.1	145.1	139.3	137.3	135.4
165°	143.1	145.1	141.2	141.2	141.2
167.5°	145.1	147.0	145.1	143.1	143.1
170°	145.1	147.0	145.1	145.1	145.1
172.5°	145.1	147.0	147.0	147.0	147.0
175°	145.1	147.0	147.0	148.9	148.9
177.5°	145.1	147.0	147.0	147.0	147.0
180°	147.0	147.0	147.0	147.0	147.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	52.2	50.3	67.7	81.2	85.1
110°	58.0	54.2	71.6	83.2	87.0



(END OF REPORT)