

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: P520476

Luminaire Tested: **4WSLA-100-L935-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: P520476
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-100-L935-UPL8-UNV-U
Description: 4 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 90 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

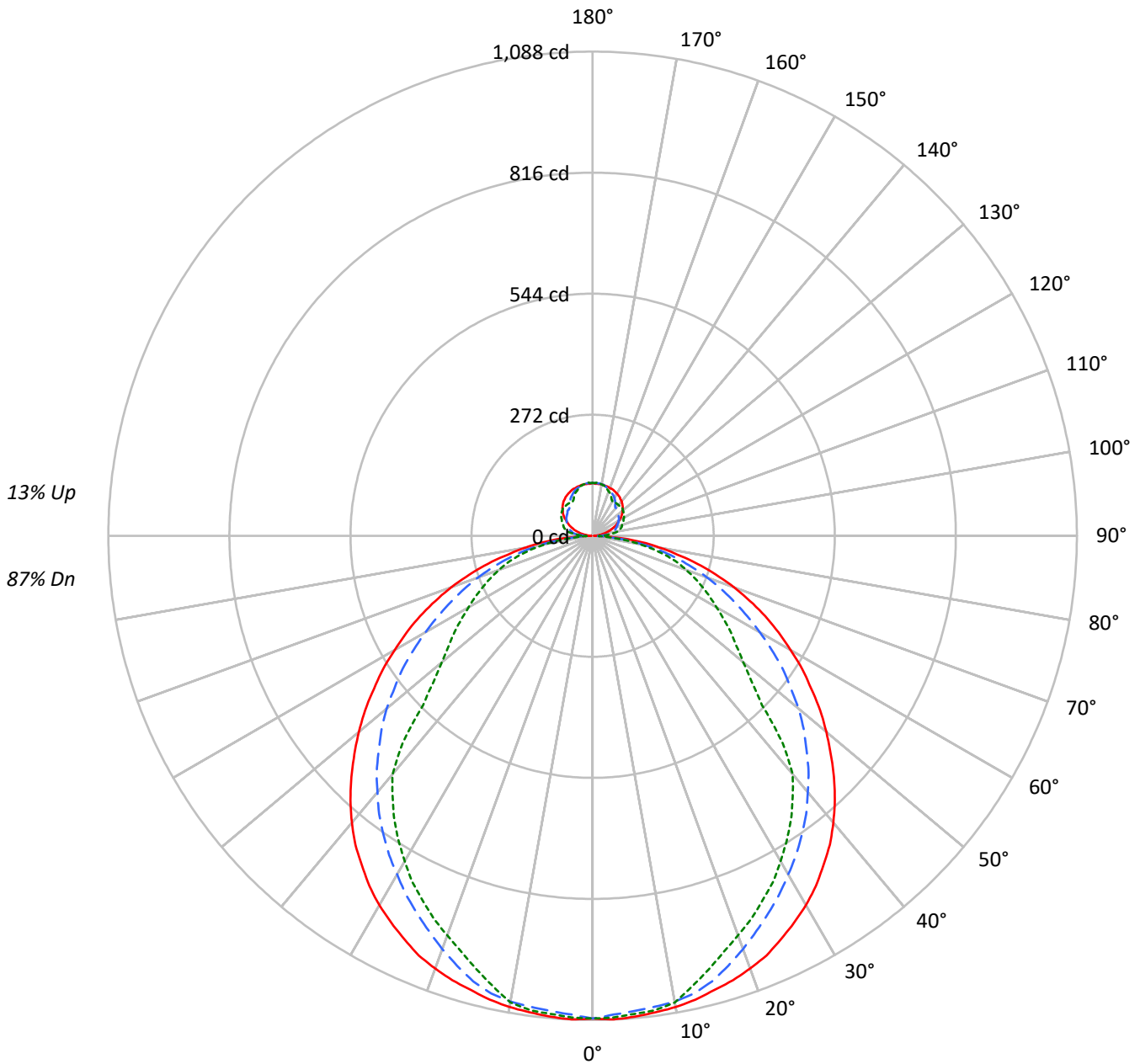
Lumens per Lamp: N/A
Luminaire Lumens: 3376.0 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 31.6
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				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°	5838	5838	5838
5°	5861	5793	5827
10°	5877	5809	5817
15°	5888	5775	5618
20°	5927	5659	5471
25°	5941	5552	5366
30°	5956	5461	5248
35°	5937	5384	5107
40°	5911	5285	4913
45°	5833	5168	4099
50°	5737	5057	3698
55°	5624	4891	3559
60°	5527	4670	3461
65°	5447	4472	3459
70°	5305	4297	3512
75°	5063	4090	3537
80°	4742	3676	3288
85°	4335	2600	2217



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.7	3.0
10°-20°	292.0	8.6
20°-30°	436.3	12.9
30°-40°	520.8	15.4
40°-50°	520.8	15.4
50°-60°	450.7	13.4
60°-70°	346.0	10.2
70°-80°	212.0	6.3
80°-90°	59.7	1.8
90°-100°	33.7	1.0
100°-110°	53.5	1.6
110°-120°	62.6	1.9
120°-130°	67.6	2.0
130°-140°	66.6	2.0
140°-150°	58.9	1.7
150°-160°	48.5	1.4
160°-170°	32.4	1.0
170°-180°	11.3	0.3
0°-30°	830.9	24.6
0°-40°	1351.7	40.0
0°-60°	2323.2	68.8
0°-90°	2940.8	87.1
90°-120°	149.9	4.4
90°-150°	342.9	10.2
90°-180°	435.0	12.9
0°-180°	3376.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1085	1082	1072	1080	1078	103
15°	1057	1055	1036	1018	1008	299
25°	1000	988	935	910	904	462
35°	904	880	819	790	777	566
45°	766	744	679	618	538	591
55°	599	585	521	417	379	537
65°	428	412	351	282	272	422
75°	244	231	197	170	170	257
85°	70	58	42	36	36	73
90°	3	11	17	22	23	5
95°	12	26	36	38	38	12
105°	36	38	53	62	66	38
115°	59	50	62	72	76	58
125°	80	64	72	83	86	71
135°	95	86	80	87	92	73
145°	106	102	89	87	90	66
155°	112	111	105	100	98	52
165°	116	117	114	114	114	33
175°	117	119	119	120	120	11
180°	119	119	119	119	119	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1084.8	1084.8	1084.8	1084.8	1084.8
2.5°	1087.9	1084.8	1077.0	1084.8	1083.2
5°	1084.8	1081.7	1072.3	1080.1	1078.5
7.5°	1080.1	1077.0	1067.6	1077.0	1075.4
10°	1075.4	1072.3	1062.9	1069.2	1064.5
12.5°	1067.6	1064.5	1053.6	1045.8	1036.4
15°	1056.7	1055.1	1036.4	1017.7	1008.3
17.5°	1047.3	1042.6	1013.0	991.1	980.2
20°	1034.8	1027.0	988.0	963.0	955.2
22.5°	1020.8	1008.3	961.5	938.1	931.8
25°	1000.5	988.0	934.9	910.0	903.7
27.5°	980.2	964.6	908.4	883.4	877.2
30°	958.4	936.5	878.8	855.3	844.4
32.5°	933.4	911.5	850.7	824.1	811.6
35°	903.7	880.3	819.4	789.8	777.3
37.5°	875.6	850.7	788.2	755.4	738.3
40°	841.3	816.3	752.3	716.4	699.3
42.5°	805.4	782.0	718.0	674.3	632.1
45°	766.4	744.5	679.0	618.1	538.5
47.5°	725.8	707.1	643.1	560.3	483.9
50°	685.2	666.5	604.0	505.7	441.7
52.5°	644.6	629.0	560.3	460.4	407.4
55°	599.4	585.3	521.3	416.7	379.3
57.5°	558.8	544.7	476.1	380.8	349.6
60°	513.5	501.0	433.9	344.9	321.5
62.5°	471.4	457.3	391.8	313.7	296.6
65°	427.7	412.1	351.2	282.5	271.6
67.5°	382.4	366.8	312.2	254.4	248.2
70°	337.1	324.7	273.1	226.3	223.2
72.5°	290.3	276.3	234.1	199.8	199.8
75°	243.5	231.0	196.7	170.1	170.1
77.5°	195.1	188.9	157.6	138.9	140.5
80°	153.0	145.2	118.6	106.1	106.1
82.5°	112.4	103.0	79.6	70.2	73.4
85°	70.2	57.8	42.1	35.9	35.9
87.5°	21.9	17.2	12.5	14.0	14.0
90°	3.1	10.9	17.2	21.9	23.4
92.5°	7.8	20.3	25.0	29.7	31.2
95°	12.5	26.5	35.9	37.5	37.5
97.5°	17.2	29.7	43.7	49.9	49.9
100°	23.4	31.2	46.8	56.2	57.8
102.5°	29.7	34.3	49.9	59.3	62.4
105°	35.9	37.5	53.1	62.4	65.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	53.1	46.8	59.3	70.2	73.4
115°	59.3	49.9	62.4	71.8	76.5
117.5°	64.0	54.6	65.6	74.9	78.0
120°	68.7	57.8	67.1	78.0	81.2
122.5°	74.9	60.9	70.2	79.6	84.3
125°	79.6	64.0	71.8	82.7	85.8
127.5°	84.3	70.2	73.4	84.3	87.4
130°	87.4	76.5	74.9	85.8	89.0
132.5°	92.1	81.2	76.5	87.4	90.5
135°	95.2	85.8	79.6	87.4	92.1
137.5°	98.3	90.5	79.6	87.4	90.5
140°	101.5	95.2	81.2	87.4	90.5
142.5°	103.0	98.3	82.7	87.4	90.5
145°	106.1	101.5	89.0	87.4	90.5
147.5°	107.7	104.6	93.7	87.4	90.5
150°	109.3	107.7	98.3	89.0	89.0
152.5°	110.8	109.3	101.5	95.2	92.1
155°	112.4	110.8	104.6	99.9	98.3
157.5°	113.9	113.9	107.7	104.6	103.0
160°	113.9	115.5	110.8	107.7	106.1
162.5°	115.5	117.1	112.4	110.8	109.3
165°	115.5	117.1	113.9	113.9	113.9
167.5°	117.1	118.6	117.1	115.5	115.5
170°	117.1	118.6	117.1	117.1	117.1
172.5°	117.1	118.6	118.6	118.6	118.6
175°	117.1	118.6	118.6	120.2	120.2
177.5°	117.1	118.6	118.6	118.6	118.6
180°	118.6	118.6	118.6	118.6	118.6



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	42.1	40.6	54.6	65.6	68.7
110°	46.8	43.7	57.8	67.1	70.2



(END OF REPORT)