

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: P520473

Luminaire Tested: **4WSLA-100-L930-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: P520473
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-L930-UPL8-UNV-U
Description: 4 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 90 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

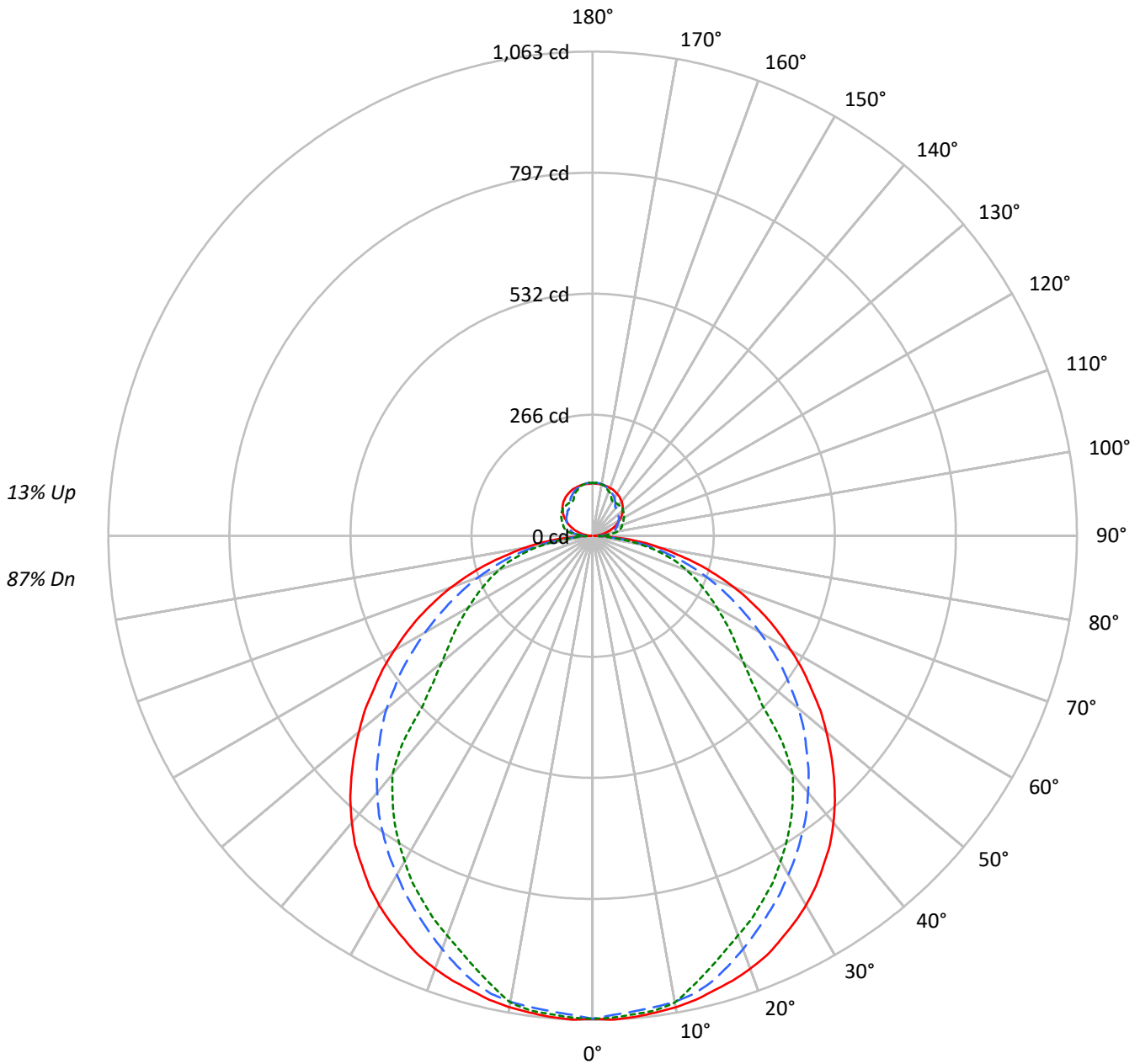
Lumens per Lamp: N/A
Luminaire Lumens: 3300.0 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

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

TEST NUMBER: P520473

CATALOG NUMBER: 4WSLA-100-L930-UPL8-UNV-U

Luminous Intensity Polar Plot





TEST NUMBER: P520473

CATALOG NUMBER: 4WSLA-100-L930-UPL8-UNV-U

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°	5707	5707	5707
5°	5729	5663	5696
10°	5745	5678	5686
15°	5755	5645	5492
20°	5793	5531	5348
25°	5808	5427	5246
30°	5822	5338	5129
35°	5804	5263	4992
40°	5778	5167	4802
45°	5702	5052	4007
50°	5608	4943	3615
55°	5498	4782	3478
60°	5403	4565	3383
65°	5323	4372	3381
70°	5187	4201	3434
75°	4949	3997	3458
80°	4634	3595	3214
85°	4242	2544	2167



TEST NUMBER: P520473

CATALOG NUMBER: 4WSLA-100-L930-UPL8-UNV-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.4	3.0
10°-20°	285.4	8.6
20°-30°	426.4	12.9
30°-40°	509.0	15.4
40°-50°	509.1	15.4
50°-60°	440.6	13.4
60°-70°	338.2	10.2
70°-80°	207.2	6.3
80°-90°	58.3	1.8
90°-100°	33.0	1.0
100°-110°	52.3	1.6
110°-120°	61.2	1.9
120°-130°	66.1	2.0
130°-140°	65.1	2.0
140°-150°	57.6	1.7
150°-160°	47.4	1.4
160°-170°	31.7	1.0
170°-180°	11.0	0.3
0°-30°	812.2	24.6
0°-40°	1321.3	40.0
0°-60°	2270.9	68.8
0°-90°	2874.7	87.1
90°-120°	146.5	4.4
90°-150°	335.2	10.2
90°-180°	425.0	12.9
0°-180°	3300.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1060	1057	1048	1056	1054	101
15°	1033	1031	1013	995	986	292
25°	978	966	914	890	883	451
35°	883	860	801	772	760	553
45°	749	728	664	604	526	578
55°	586	572	510	407	371	525
65°	418	403	343	276	266	413
75°	238	226	192	166	166	251
85°	69	56	41	35	35	72
90°	3	11	17	21	23	5
95°	12	26	35	37	37	12
105°	35	37	52	61	64	37
115°	58	49	61	70	75	57
125°	78	63	70	81	84	69
135°	93	84	78	85	90	72
145°	104	99	87	85	88	65
155°	110	108	102	98	96	51
165°	113	114	111	111	111	32
175°	114	116	116	118	118	11
180°	116	116	116	116	116	



TEST NUMBER: P520473

CATALOG NUMBER: 4WSLA-100-L930-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1060.4	1060.4	1060.4	1060.4	1060.4
2.5°	1063.4	1060.4	1052.7	1060.4	1058.8
5°	1060.4	1057.3	1048.2	1055.8	1054.3
7.5°	1055.8	1052.7	1043.6	1052.7	1051.2
10°	1051.2	1048.2	1039.0	1045.1	1040.5
12.5°	1043.6	1040.5	1029.9	1022.2	1013.1
15°	1032.9	1031.4	1013.1	994.8	985.6
17.5°	1023.8	1019.2	990.2	968.8	958.1
20°	1011.5	1003.9	965.8	941.4	933.7
22.5°	997.8	985.6	939.8	917.0	910.8
25°	978.0	965.8	913.9	889.5	883.4
27.5°	958.1	942.9	888.0	863.6	857.4
30°	936.8	915.4	859.0	836.1	825.4
32.5°	912.4	891.0	831.5	805.6	793.4
35°	883.4	860.5	801.0	772.0	759.8
37.5°	855.9	831.5	770.5	738.4	721.7
40°	822.4	797.9	735.4	700.3	683.5
42.5°	787.3	764.4	701.8	659.1	617.9
45°	749.1	727.8	663.7	604.2	526.4
47.5°	709.5	691.1	628.6	547.7	473.0
50°	669.8	651.5	590.4	494.3	431.8
52.5°	630.1	614.9	547.7	450.1	398.2
55°	585.9	572.1	509.6	407.4	370.7
57.5°	546.2	532.5	465.3	372.3	341.8
60°	502.0	489.8	424.1	337.2	314.3
62.5°	460.8	447.0	383.0	306.7	289.9
65°	418.0	402.8	343.3	276.2	265.5
67.5°	373.8	358.5	305.1	248.7	242.6
70°	329.6	317.3	267.0	221.2	218.2
72.5°	283.8	270.1	228.9	195.3	195.3
75°	238.0	225.8	192.2	166.3	166.3
77.5°	190.7	184.6	154.1	135.8	137.3
80°	149.5	141.9	116.0	103.7	103.7
82.5°	109.9	100.7	77.8	68.7	71.7
85°	68.7	56.5	41.2	35.1	35.1
87.5°	21.4	16.8	12.2	13.7	13.7
90°	3.1	10.7	16.8	21.4	22.9
92.5°	7.6	19.8	24.4	29.0	30.5
95°	12.2	25.9	35.1	36.6	36.6
97.5°	16.8	29.0	42.7	48.8	48.8
100°	22.9	30.5	45.8	54.9	56.5
102.5°	29.0	33.6	48.8	58.0	61.0
105°	35.1	36.6	51.9	61.0	64.1



TEST NUMBER: P520473

CATALOG NUMBER: 4WSLA-100-L930-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	51.9	45.8	58.0	68.7	71.7
115°	58.0	48.8	61.0	70.2	74.8
117.5°	62.6	53.4	64.1	73.2	76.3
120°	67.1	56.5	65.6	76.3	79.3
122.5°	73.2	59.5	68.7	77.8	82.4
125°	77.8	62.6	70.2	80.9	83.9
127.5°	82.4	68.7	71.7	82.4	85.4
130°	85.4	74.8	73.2	83.9	87.0
132.5°	90.0	79.3	74.8	85.4	88.5
135°	93.1	83.9	77.8	85.4	90.0
137.5°	96.1	88.5	77.8	85.4	88.5
140°	99.2	93.1	79.3	85.4	88.5
142.5°	100.7	96.1	80.9	85.4	88.5
145°	103.7	99.2	87.0	85.4	88.5
147.5°	105.3	102.2	91.5	85.4	88.5
150°	106.8	105.3	96.1	87.0	87.0
152.5°	108.3	106.8	99.2	93.1	90.0
155°	109.9	108.3	102.2	97.6	96.1
157.5°	111.4	111.4	105.3	102.2	100.7
160°	111.4	112.9	108.3	105.3	103.7
162.5°	112.9	114.4	109.9	108.3	106.8
165°	112.9	114.4	111.4	111.4	111.4
167.5°	114.4	116.0	114.4	112.9	112.9
170°	114.4	116.0	114.4	114.4	114.4
172.5°	114.4	116.0	116.0	116.0	116.0
175°	114.4	116.0	116.0	117.5	117.5
177.5°	114.4	116.0	116.0	116.0	116.0
180°	116.0	116.0	116.0	116.0	116.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	41.2	39.7	53.4	64.1	67.1
110°	45.8	42.7	56.5	65.6	68.7



(END OF REPORT)