

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: P520610

Luminaire Tested: **4WSLA-75-L840-UPL15-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: P520610
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-174-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/3/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 4WSLA-75-L840-UPL15-UNV-U
Description: 4 FOOT, 750 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 4000K, 80 CRI
LEDS WITH 15% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

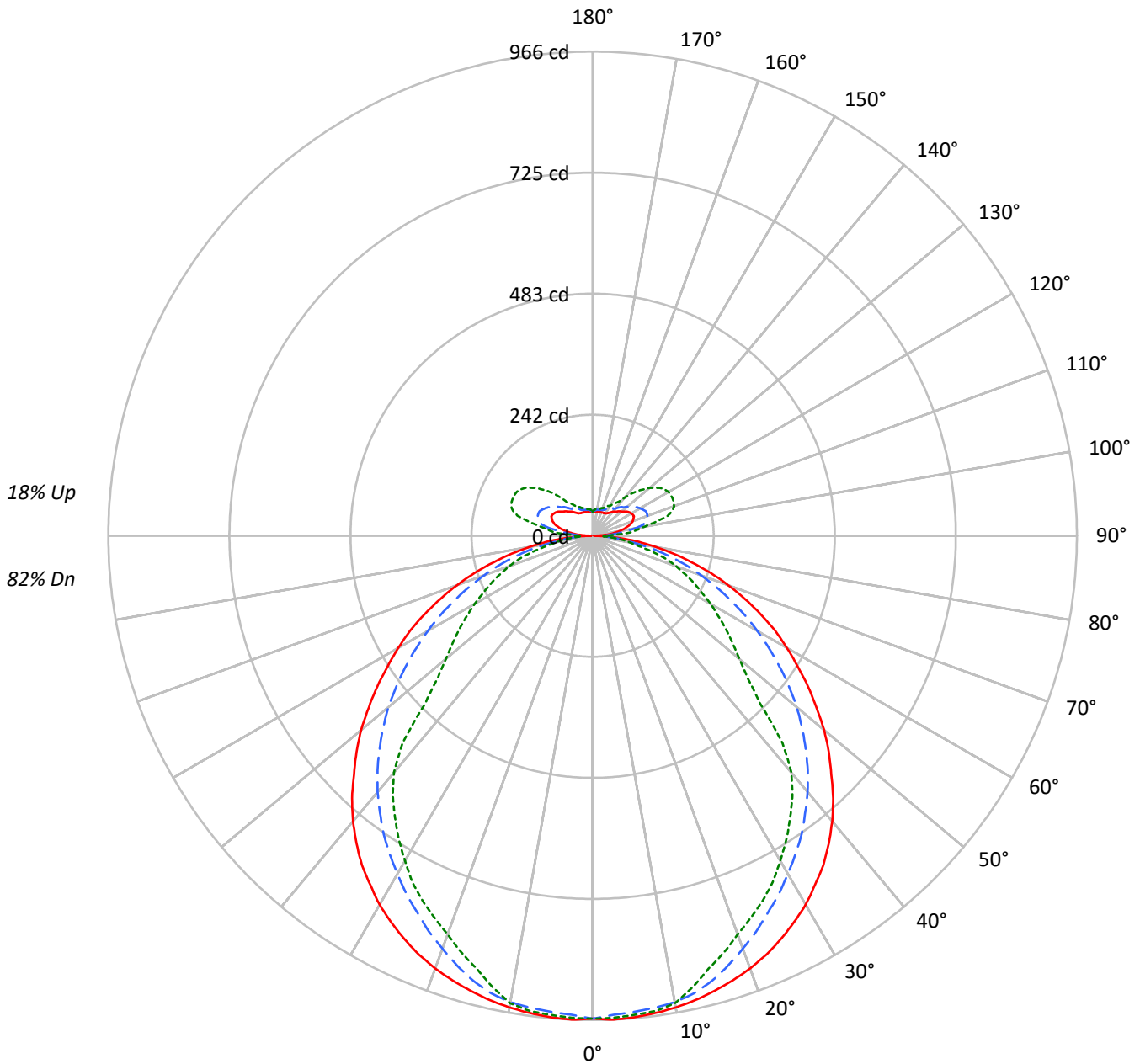
Lumens per Lamp: N/A
Luminaire Lumens: 3120.0 lumens
Efficiency: N/A
Efficacy: 134.5 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.16 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 23.2
Input Voltage (V): NR
Input Current (A_{in}): 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: P520610

CATALOG NUMBER: 4WSLA-75-L840-UPL15-UNV-U

Luminous Intensity Polar Plot





TEST NUMBER: P520610

CATALOG NUMBER: 4WSLA-75-L840-UPL15-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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	82																			
1	105	100	96	92	100	96	93	89	89	86	83	82	80	78	76	74	72	69																			
2	96	88	81	76	91	84	78	73	78	73	69	72	68	65	67	64	61	58																			
3	87	77	69	63	83	74	67	61	69	63	58	64	59	55	59	55	52	49																			
4	80	68	60	53	76	66	58	52	61	55	50	57	51	47	53	48	45	42																			
5	73	61	52	46	70	59	51	45	55	48	43	51	45	41	48	43	39	36																			
6	68	55	46	40	65	53	45	39	50	43	38	46	40	36	43	38	34	32																			
7	63	50	41	35	60	48	40	35	45	38	33	42	36	32	39	34	30	28																			
8	58	45	37	32	56	44	36	31	41	35	30	39	33	29	36	31	27	25																			
9	55	42	34	28	52	40	33	28	38	31	27	36	30	26	33	28	25	23																			
10	51	38	31	26	49	37	30	25	35	29	24	33	27	23	31	26	23	21																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5185	5185	5185
5°	5210	5152	5184
10°	5222	5163	5174
15°	5237	5123	4981
20°	5260	5019	4846
25°	5274	4920	4769
30°	5282	4839	4651
35°	5271	4776	4513
40°	5224	4688	4331
45°	5124	4574	3592
50°	5047	4450	3198
55°	4923	4272	3044
60°	4817	4081	2923
65°	4703	3857	2837
70°	4521	3613	2782
75°	4267	3313	2560
80°	3905	2786	2272
85°	3501	2414	2291



TEST NUMBER: P520610

CATALOG NUMBER: 4WSLA-75-L840-UPL15-UNV-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.3	2.9
10°-20°	259.4	8.3
20°-30°	387.1	12.4
30°-40°	461.2	14.8
40°-50°	458.7	14.7
50°-60°	393.2	12.6
60°-70°	296.1	9.5
70°-80°	171.5	5.5
80°-90°	51.5	1.7
90°-100°	55.3	1.8
100°-110°	113.6	3.6
110°-120°	120.1	3.9
120°-130°	100.2	3.2
130°-140°	70.0	2.2
140°-150°	43.6	1.4
150°-160°	27.0	0.9
160°-170°	15.2	0.5
170°-180°	4.9	0.2
<hr/>		
0°-30°	737.7	23.6
0°-40°	1198.9	38.4
0°-60°	2050.8	65.7
0°-90°	2569.9	82.4
90°-120°	289.1	9.3
90°-150°	502.9	16.1
90°-180°	550.0	17.6
0°-180°	3120.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	963	963	963	963	963	
5°	964	961	954	960	960	92
15°	940	939	919	904	894	266
25°	888	875	828	808	803	409
35°	802	781	727	699	687	501
45°	673	657	601	541	472	520
55°	525	517	455	362	324	469
65°	369	360	303	236	223	365
75°	205	198	159	127	123	217
85°	57	50	39	37	37	60
90°	3	14	23	29	31	6
95°	31	42	48	70	76	30
105°	73	76	109	147	155	76
115°	91	77	116	160	176	88
125°	84	74	101	148	166	75
135°	68	74	81	109	126	53
145°	56	64	70	75	80	35
155°	51	54	58	62	64	23
165°	50	52	54	56	56	14
175°	49	50	51	52	53	5
180°	48	48	48	48	48	



TEST NUMBER: P520610

CATALOG NUMBER: 4WSLA-75-L840-UPL15-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	963.4	963.4	963.4	963.4	963.4
2.5°	966.3	964.3	956.5	964.3	962.4
5°	964.3	961.4	953.6	960.4	959.5
7.5°	960.4	958.5	949.7	957.5	956.5
10°	955.6	952.6	944.8	950.7	946.8
12.5°	948.7	946.8	935.0	930.1	922.3
15°	939.9	938.9	919.4	903.8	894.0
17.5°	930.1	926.2	898.9	880.3	871.5
20°	918.4	912.6	876.4	854.9	846.1
22.5°	904.7	896.0	853.9	833.4	824.6
25°	888.1	875.4	828.5	808.0	803.1
27.5°	869.6	854.9	805.1	784.6	778.7
30°	850.0	831.5	778.7	759.2	748.4
32.5°	825.6	808.0	753.3	730.8	719.1
35°	802.2	780.7	726.9	698.6	686.9
37.5°	773.8	752.3	696.6	668.3	654.6
40°	743.5	722.0	667.3	634.1	616.5
42.5°	710.3	690.8	635.1	595.0	560.8
45°	673.2	656.6	600.9	541.3	471.9
47.5°	639.0	623.4	566.7	489.5	418.2
50°	602.8	588.2	531.5	440.6	382.0
52.5°	562.8	552.0	493.4	398.6	351.7
55°	524.7	516.9	455.3	361.5	324.4
57.5°	484.6	476.8	417.2	326.3	297.0
60°	447.5	439.7	379.1	295.1	271.6
62.5°	410.4	399.6	342.0	264.8	245.2
65°	369.3	360.5	302.9	235.5	222.8
67.5°	328.3	320.5	266.7	208.1	199.3
70°	287.3	280.4	229.6	181.7	176.8
72.5°	247.2	238.4	196.4	155.4	153.4
75°	205.2	198.3	159.3	127.0	123.1
77.5°	165.1	159.3	125.1	96.7	93.8
80°	126.0	120.2	89.9	70.3	73.3
82.5°	92.8	85.0	60.6	54.7	57.6
85°	56.7	49.8	39.1	37.1	37.1
87.5°	19.5	18.6	17.6	20.5	21.5
90°	2.9	13.7	23.4	29.3	31.3
92.5°	16.6	24.4	32.2	38.1	40.1
95°	31.3	42.0	47.9	70.3	76.2
97.5°	43.0	55.7	62.5	83.0	88.9
100°	54.7	66.4	87.9	98.7	105.5
102.5°	64.5	73.3	103.6	125.1	129.0
105°	73.3	76.2	109.4	146.6	155.4



TEST NUMBER: P520610

CATALOG NUMBER: 4WSLA-75-L840-UPL15-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	87.9	78.2	117.2	159.3	174.9
115°	90.9	77.2	116.3	160.2	175.9
117.5°	90.9	77.2	113.3	160.2	175.9
120°	88.9	78.2	109.4	158.3	174.9
122.5°	87.0	76.2	105.5	154.4	171.0
125°	84.0	74.3	100.6	147.5	166.1
127.5°	79.1	76.2	95.8	138.7	157.3
130°	75.2	77.2	89.9	129.9	148.5
132.5°	72.3	75.2	84.0	120.2	136.8
135°	68.4	74.3	81.1	109.4	126.0
137.5°	65.5	71.3	76.2	99.7	113.3
140°	62.5	69.4	71.3	87.0	98.7
142.5°	58.6	66.4	67.4	81.1	86.0
145°	55.7	64.5	70.3	75.2	80.1
147.5°	52.8	60.6	68.4	69.4	74.3
150°	51.8	56.7	65.5	66.4	68.4
152.5°	50.8	54.7	60.6	66.4	67.4
155°	50.8	53.7	57.6	62.5	63.5
157.5°	49.8	53.7	55.7	59.6	60.6
160°	49.8	52.8	54.7	57.6	58.6
162.5°	49.8	52.8	53.7	56.7	57.6
165°	49.8	51.8	53.7	55.7	55.7
167.5°	49.8	51.8	52.8	54.7	54.7
170°	49.8	50.8	52.8	53.7	53.7
172.5°	48.9	50.8	51.8	53.7	53.7
175°	48.9	49.8	50.8	51.8	52.8
177.5°	46.9	49.8	50.8	51.8	50.8
180°	47.9	47.9	47.9	47.9	47.9



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	80.1	77.2	113.3	154.4	167.1
110°	85.0	78.2	116.3	157.3	172.9



(END OF REPORT)