

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: P520611

Luminaire Tested: **4WSLA-75-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: P520611  
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-75-L840-UPL8-UNV-U  
Description: 4 FOOT, 750 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**

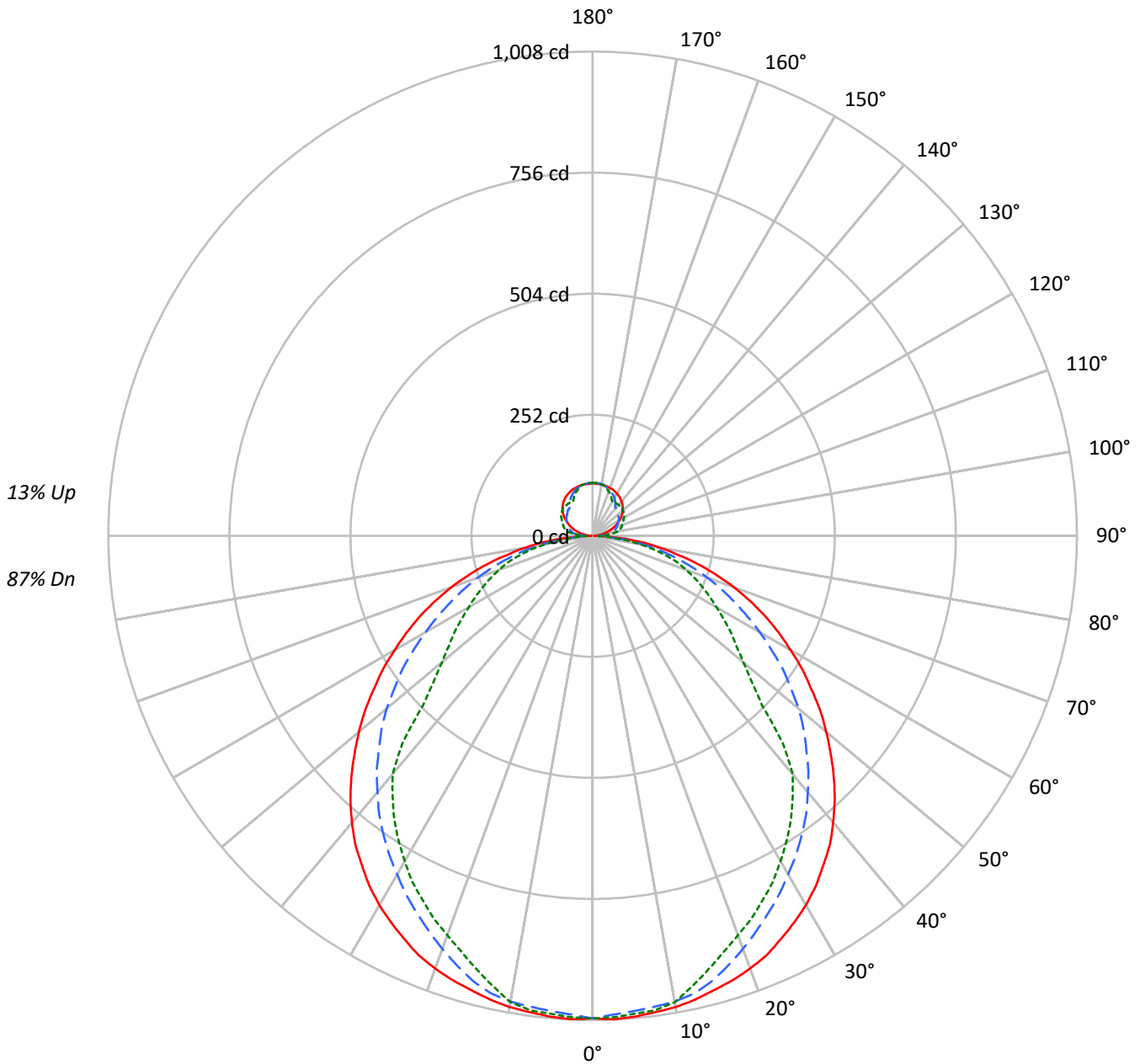
Lumens per Lamp: N/A  
Luminaire Lumens: 3127.0 lumens  
Efficiency: N/A  
Efficacy: 134.8 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 23.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	5408	5408	5408
5°	5428	5366	5397
10°	5444	5380	5388
15°	5454	5349	5204
20°	5490	5241	5068
25°	5503	5143	4971
30°	5517	5058	4860
35°	5500	4987	4731
40°	5474	4895	4551
45°	5403	4787	3796
50°	5314	4685	3425
55°	5210	4531	3296
60°	5119	4326	3205
65°	5044	4143	3204
70°	4914	3981	3253
75°	4689	3789	3277
80°	4392	3406	3047
85°	4020	2408	2056



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.1	3.0
10°-20°	270.4	8.6
20°-30°	404.1	12.9
30°-40°	482.3	15.4
40°-50°	482.4	15.4
50°-60°	417.5	13.4
60°-70°	320.4	10.2
70°-80°	196.4	6.3
80°-90°	55.3	1.8
90°-100°	31.3	1.0
100°-110°	49.6	1.6
110°-120°	58.0	1.9
120°-130°	62.6	2.0
130°-140°	61.7	2.0
140°-150°	54.6	1.7
150°-160°	44.9	1.4
160°-170°	30.0	1.0
170°-180°	10.5	0.3
0°-30°	769.6	24.6
0°-40°	1252.0	40.0
0°-60°	2151.9	68.8
0°-90°	2724.0	87.1
90°-120°	138.8	4.4
90°-150°	317.7	10.2
90°-180°	403.0	12.9
0°-180°	3127.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1005	1005	1005	1005	1005	
5°	1005	1002	993	1000	999	96
15°	979	977	960	943	934	277
25°	927	915	866	843	837	428
35°	837	815	759	732	720	524
45°	710	690	629	572	499	547
55°	555	542	483	386	351	498
65°	396	382	325	262	252	391
75°	226	214	182	158	158	238
85°	65	54	39	33	33	68
90°	3	10	16	20	22	5
95°	12	25	33	35	35	11
105°	33	35	49	58	61	35
115°	55	46	58	66	71	54
125°	74	59	66	77	80	66
135°	88	80	74	81	85	68
145°	98	94	82	81	84	61
155°	104	103	97	92	91	48
165°	107	108	106	106	106	30
175°	108	110	110	111	111	10
180°	110	110	110	110	110	



TEST NUMBER: P520611

CATALOG NUMBER: 4WSLA-75-L840-UPL8-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1004.8	1004.8	1004.8	1004.8	1004.8
2.5°	1007.7	1004.8	997.6	1004.8	1003.3
5°	1004.8	1001.9	993.2	1000.4	999.0
7.5°	1000.4	997.6	988.9	997.6	996.1
10°	996.1	993.2	984.5	990.3	986.0
12.5°	988.9	986.0	975.9	968.6	960.0
15°	978.8	977.3	960.0	942.6	933.9
17.5°	970.1	965.7	938.3	918.0	907.9
20°	958.5	951.3	915.1	892.0	884.8
22.5°	945.5	933.9	890.6	868.9	863.1
25°	926.7	915.1	866.0	842.9	837.1
27.5°	907.9	893.5	841.4	818.3	812.5
30°	887.7	867.4	813.9	792.3	782.1
32.5°	864.5	844.3	787.9	763.3	751.8
35°	837.1	815.4	759.0	731.5	720.0
37.5°	811.1	787.9	730.1	699.7	683.8
40°	779.2	756.1	696.8	663.6	647.7
42.5°	746.0	724.3	665.0	624.6	585.5
45°	709.9	689.6	628.9	572.5	498.8
47.5°	672.3	654.9	595.6	519.0	448.2
50°	634.7	617.3	559.5	468.4	409.1
52.5°	597.1	582.6	519.0	426.5	377.3
55°	555.2	542.1	482.9	386.0	351.3
57.5°	517.6	504.6	440.9	352.8	323.8
60°	475.6	464.1	401.9	319.5	297.8
62.5°	436.6	423.6	362.9	290.6	274.7
65°	396.1	381.7	325.3	261.7	251.6
67.5°	354.2	339.7	289.1	235.7	229.9
70°	312.3	300.7	253.0	209.6	206.7
72.5°	268.9	255.9	216.9	185.1	185.1
75°	225.5	214.0	182.2	157.6	157.6
77.5°	180.7	174.9	146.0	128.7	130.1
80°	141.7	134.5	109.9	98.3	98.3
82.5°	104.1	95.4	73.7	65.1	67.9
85°	65.1	53.5	39.0	33.3	33.3
87.5°	20.2	15.9	11.6	13.0	13.0
90°	2.9	10.1	15.9	20.2	21.7
92.5°	7.2	18.8	23.1	27.5	28.9
95°	11.6	24.6	33.3	34.7	34.7
97.5°	15.9	27.5	40.5	46.3	46.3
100°	21.7	28.9	43.4	52.0	53.5
102.5°	27.5	31.8	46.3	54.9	57.8
105°	33.3	34.7	49.2	57.8	60.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	49.2	43.4	54.9	65.1	67.9
115°	54.9	46.3	57.8	66.5	70.8
117.5°	59.3	50.6	60.7	69.4	72.3
120°	63.6	53.5	62.2	72.3	75.2
122.5°	69.4	56.4	65.1	73.7	78.1
125°	73.7	59.3	66.5	76.6	79.5
127.5°	78.1	65.1	67.9	78.1	81.0
130°	81.0	70.8	69.4	79.5	82.4
132.5°	85.3	75.2	70.8	81.0	83.9
135°	88.2	79.5	73.7	81.0	85.3
137.5°	91.1	83.9	73.7	81.0	83.9
140°	94.0	88.2	75.2	81.0	83.9
142.5°	95.4	91.1	76.6	81.0	83.9
145°	98.3	94.0	82.4	81.0	83.9
147.5°	99.8	96.9	86.7	81.0	83.9
150°	101.2	99.8	91.1	82.4	82.4
152.5°	102.6	101.2	94.0	88.2	85.3
155°	104.1	102.6	96.9	92.5	91.1
157.5°	105.5	105.5	99.8	96.9	95.4
160°	105.5	107.0	102.6	99.8	98.3
162.5°	107.0	108.4	104.1	102.6	101.2
165°	107.0	108.4	105.5	105.5	105.5
167.5°	108.4	109.9	108.4	107.0	107.0
170°	108.4	109.9	108.4	108.4	108.4
172.5°	108.4	109.9	109.9	109.9	109.9
175°	108.4	109.9	109.9	111.3	111.3
177.5°	108.4	109.9	109.9	109.9	109.9
180°	109.9	109.9	109.9	109.9	109.9



Report Generated By 670246072 / DESKTOP-MV3F9LC







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







107.5°	39.0	37.6	50.6	60.7	63.6
110°	43.4	40.5	53.5	62.2	65.1



(END OF REPORT)