

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: P520603

Luminaire Tested: **4WSLA-75-L830-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: P520603  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2002-689-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 4WSLA-75-L830-UNV-U  
Description: 4 FOOT, 750 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3000K, 80 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

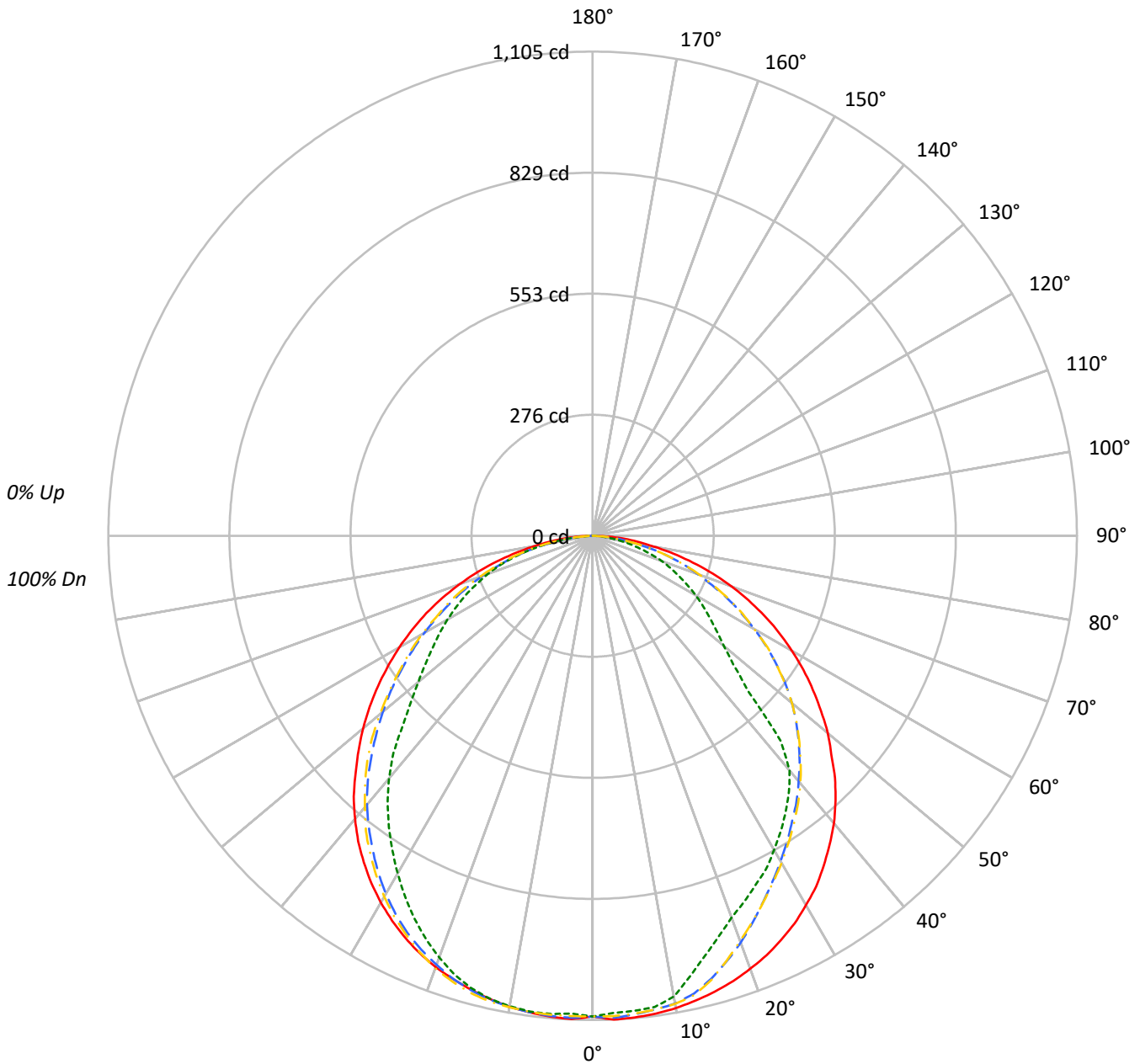
Lumens per Lamp: N/A  
Luminaire Lumens: 2943.0 lumens  
Efficiency: N/A  
Efficacy: 126.9 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')  
CIE Type: Direct

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84																			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70																			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60																			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51																			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44																			
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39																			
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34																			
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31																			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28																			
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	5905	5905	5905	5905
5°	5962	5879	5952	5917
10°	5983	5834	5967	5957
15°	6001	5526	5975	5955
20°	6023	5309	6000	5865
25°	6043	5222	6011	5718
30°	6050	5146	6006	5530
35°	6040	5047	5978	5324
40°	6020	4912	5925	5077
45°	5954	3816	5819	4659
50°	5864	3267	5721	4346
55°	5760	3060	5611	4180
60°	5651	2920	5480	4112
65°	5517	2766	5330	4062
70°	5297	2629	5075	4002
75°	4932	2312	4700	3805
80°	4379	1934	4104	3230
85°	4143	1383	3637	1853



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.2	3.5
10°-20°	297.3	10.1
20°-30°	444.3	15.1
30°-40°	528.8	18.0
40°-50°	528.6	18.0
50°-60°	454.8	15.5
60°-70°	342.4	11.6
70°-80°	195.1	6.6
80°-90°	47.5	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	845.8	28.7
0°-40°	1374.6	46.7
0°-60°	2358.1	80.1
0°-90°	2943.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2943.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1097	1097	1097	1097	1097	
5°	1104	1088	1102	1095	1104	105
15°	1077	992	1072	1069	1077	304
25°	1018	879	1012	963	1018	469
35°	919	768	910	810	919	575
45°	782	501	764	612	782	602
55°	614	326	598	446	614	549
65°	433	217	418	319	433	428
75°	237	111	226	183	237	251
85°	67	22	59	30	67	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1097.1	1097.1	1097.1	1097.1	1097.1	1097.1	1097.1	1097.1	1097.1	1097.1	1097.1
2.5°	1105.3	1095.3	1101.2	1099.4	1090.0	1093.5	1097.1	1093.5	1104.1	1094.7	1101.2
5°	1103.5	1092.9	1096.5	1092.9	1088.2	1089.4	1094.7	1091.2	1101.8	1091.8	1100.0
7.5°	1100.0	1087.0	1090.6	1088.8	1084.7	1085.3	1090.6	1087.6	1097.1	1087.6	1097.1
10°	1094.7	1081.2	1084.1	1076.5	1067.6	1074.1	1084.7	1081.8	1091.8	1081.2	1091.8
12.5°	1086.5	1072.9	1070.0	1044.7	1028.8	1041.1	1073.5	1073.5	1082.9	1072.9	1084.1
15°	1077.0	1062.3	1046.4	1008.2	991.7	1004.1	1048.8	1064.1	1072.3	1062.3	1073.5
17.5°	1065.9	1048.8	1018.2	973.5	958.2	970.5	1016.4	1050.0	1060.6	1050.0	1060.0
20°	1051.7	1031.7	988.2	937.0	927.0	938.1	984.1	1032.9	1047.6	1034.7	1041.7
22.5°	1036.4	1012.3	954.6	908.7	904.0	911.1	952.9	1011.7	1031.1	1017.6	1022.3
25°	1017.6	989.3	921.1	882.8	879.3	883.4	922.3	987.0	1012.3	998.2	999.9
27.5°	997.6	967.0	889.3	861.0	857.5	859.3	891.6	959.3	990.5	976.4	973.5
30°	973.5	940.5	857.5	831.6	828.1	834.6	862.2	931.1	966.4	952.3	943.4
32.5°	949.3	911.7	826.3	806.3	799.2	805.1	831.6	901.7	939.9	925.2	910.5
35°	919.3	881.1	794.0	773.9	768.1	774.5	801.0	871.1	909.9	895.2	875.2
37.5°	888.1	848.7	764.5	746.3	735.7	743.3	769.8	839.3	878.7	863.4	838.7
40°	856.9	814.6	731.6	712.7	699.2	710.4	737.5	805.7	843.4	829.3	801.0
42.5°	820.4	780.4	699.2	672.7	634.5	670.4	702.7	772.2	806.9	793.4	759.2
45°	782.2	743.9	665.1	600.9	501.4	606.8	667.4	736.9	764.5	751.6	714.5
47.5°	738.6	706.3	630.3	532.6	436.1	538.5	631.5	703.3	724.5	710.4	669.2
50°	700.4	668.6	593.8	475.0	390.2	481.4	593.3	665.6	683.3	670.4	624.4
52.5°	656.8	629.2	554.4	423.8	356.1	430.2	553.2	626.8	640.9	625.6	579.7
55°	613.9	589.1	512.6	378.4	326.1	384.3	511.4	586.8	598.0	580.3	532.6
57.5°	570.3	547.9	469.7	337.8	298.4	344.3	472.6	545.6	553.2	530.9	487.3
60°	525.0	506.2	426.1	301.9	271.3	307.2	424.9	504.4	509.1	485.0	443.2
62.5°	479.7	462.6	382.6	269.0	243.7	272.5	385.5	460.8	463.8	440.8	397.9
65°	433.2	417.3	340.2	234.2	217.2	240.1	343.1	415.5	418.5	392.6	353.7
67.5°	384.9	372.0	294.9	207.8	191.9	209.5	300.7	369.6	371.4	346.1	310.8
70°	336.6	325.5	254.8	178.9	167.1	179.5	259.0	319.0	322.5	295.5	267.2
72.5°	287.2	278.4	216.0	148.9	138.3	148.9	218.4	272.5	274.9	252.5	224.8
75°	237.2	230.7	176.6	119.5	111.2	118.9	177.7	226.0	226.0	204.8	183.0
77.5°	188.9	184.2	135.4	91.8	85.9	90.6	136.0	178.9	177.7	161.3	144.2
80°	141.3	137.7	97.1	66.5	62.4	64.7	97.1	132.4	132.4	120.7	100.1
82.5°	101.2	97.1	64.2	43.6	41.2	42.4	63.0	92.4	94.2	85.3	67.7
85°	67.1	57.7	34.7	24.1	22.4	23.0	33.0	53.6	58.9	49.4	35.3
87.5°	29.4	19.4	8.8	3.5	1.8	2.4	7.1	17.1	22.4	14.7	4.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1097.1	1097.1	1097.1	1097.1	1097.1	1097.1
2.5°	1100.6	1091.2	1094.7	1097.1	1094.7	1105.3
5°	1099.4	1095.3	1094.7	1097.6	1092.9	1103.5
7.5°	1097.6	1095.3	1094.7	1095.9	1090.0	1100.0
10°	1093.5	1090.0	1091.2	1092.9	1085.3	1094.7
12.5°	1085.9	1082.3	1082.9	1088.8	1078.2	1086.5
15°	1072.9	1068.8	1072.9	1079.4	1070.0	1077.0
17.5°	1055.9	1049.4	1056.4	1066.4	1059.4	1065.9
20°	1034.1	1024.1	1031.7	1050.0	1043.5	1051.7
22.5°	1007.6	995.2	1002.9	1029.4	1027.6	1036.4
25°	977.6	962.9	973.5	1005.8	1009.4	1017.6
27.5°	944.0	927.6	941.7	979.9	988.2	997.6
30°	907.5	889.9	906.4	951.1	963.5	973.5
32.5°	869.9	850.5	869.3	918.7	936.4	949.3
35°	830.4	810.4	831.6	885.2	906.4	919.3
37.5°	788.1	768.6	791.6	849.9	875.2	888.1
40°	744.5	722.7	748.6	808.1	841.6	856.9
42.5°	699.8	672.7	704.5	768.6	805.1	820.4
45°	649.8	612.1	655.1	726.9	765.1	782.2
47.5°	599.7	562.1	605.6	682.1	723.3	738.6
50°	551.5	519.1	553.8	633.3	680.9	700.4
52.5°	507.3	480.8	510.3	585.6	637.4	656.8
55°	466.1	445.5	469.7	538.5	591.5	613.9
57.5°	427.3	414.3	430.8	493.8	549.1	570.3
60°	390.8	382.0	393.7	449.7	499.1	525.0
62.5°	354.9	350.2	359.0	403.2	452.6	479.7
65°	320.2	319.0	323.7	362.5	403.7	433.2
67.5°	285.4	284.9	287.8	319.6	356.1	384.9
70°	250.7	254.3	252.5	273.1	308.4	336.6
72.5°	215.4	220.7	217.8	230.7	264.8	287.2
75°	176.0	183.0	177.2	191.9	213.1	237.2
77.5°	135.4	143.0	136.0	148.9	171.9	188.9
80°	97.1	104.2	98.3	108.3	128.3	141.3
82.5°	61.2	66.5	61.8	71.8	91.8	101.2
85°	27.1	30.0	31.2	38.8	56.5	67.1
87.5°	1.2	0.6	1.2	7.7	20.0	29.4
90°	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°









(END OF REPORT)