

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: P520606

Luminaire Tested: **4WSLA-75-L835-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: P520606  
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-L835-UNV-U  
Description: 4 FOOT, 750 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 80 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

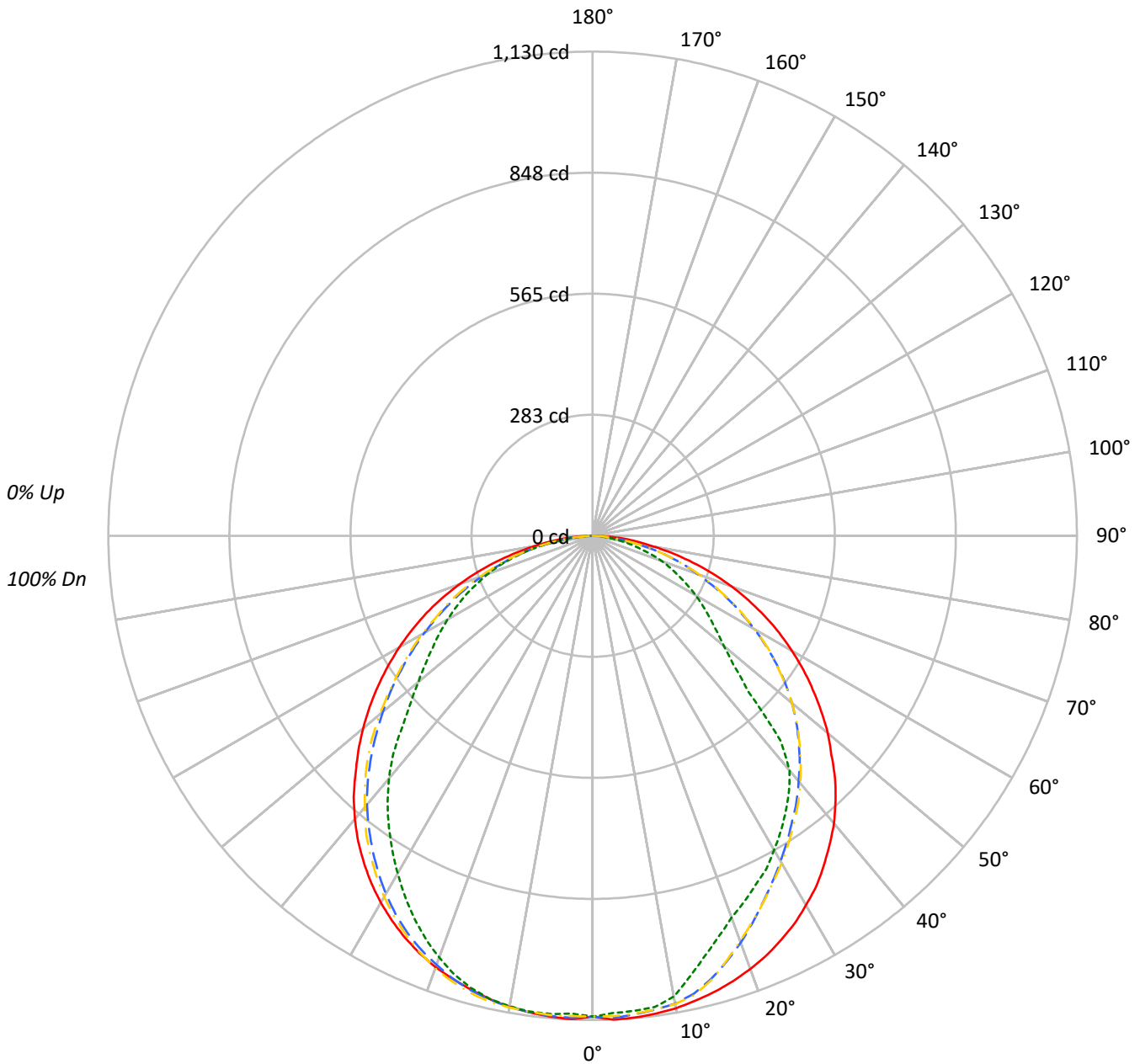
Lumens per Lamp: N/A  
Luminaire Lumens: 3010.0 lumens  
Efficiency: N/A  
Efficacy: 129.7 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P520606

CATALOG NUMBER: 4WSLA-75-L835-UNV-U

### Luminous Intensity Polar Plot





TEST NUMBER: P520606

CATALOG NUMBER: 4WSLA-75-L835-UNV-U

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	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°	6039	6039	6039	6039
5°	6097	6013	6088	6052
10°	6119	5967	6102	6092
15°	6138	5651	6111	6091
20°	6161	5430	6137	5999
25°	6181	5340	6148	5848
30°	6187	5263	6142	5656
35°	6177	5161	6114	5446
40°	6157	5024	6060	5193
45°	6089	3904	5951	4765
50°	5997	3342	5852	4445
55°	5891	3129	5739	4276
60°	5779	2987	5605	4205
65°	5642	2828	5450	4155
70°	5418	2691	5191	4091
75°	5045	2366	4806	3893
80°	4479	1977	4197	3301
85°	4236	1414	3717	1896



TEST NUMBER: P520606

CATALOG NUMBER: 4WSLA-75-L835-UNV-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.6	3.5
10°-20°	304.1	10.1
20°-30°	454.4	15.1
30°-40°	540.9	18.0
40°-50°	540.6	18.0
50°-60°	465.2	15.5
60°-70°	350.1	11.6
70°-80°	199.5	6.6
80°-90°	48.6	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°	865.1	28.7
0°-40°	1405.9	46.7
0°-60°	2411.8	80.1
0°-90°	3010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3010.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1122	1122	1122	1122	1122	
5°	1129	1113	1127	1120	1129	107
15°	1102	1014	1097	1093	1102	311
25°	1041	899	1035	985	1041	480
35°	940	786	931	829	940	588
45°	800	513	782	626	800	616
55°	628	334	612	456	628	561
65°	443	222	428	326	443	437
75°	243	114	231	187	243	257
85°	69	23	60	31	69	75
90°	0	0	0	0	0	



TEST NUMBER: P520606

CATALOG NUMBER: 4WSLA-75-L835-UNV-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1122.0	1122.0	1122.0	1122.0	1122.0	1122.0	1122.0	1122.0	1122.0	1122.0	1122.0
2.5°	1130.5	1120.2	1126.2	1124.4	1114.8	1118.4	1122.0	1118.4	1129.3	1119.6	1126.2
5°	1128.6	1117.8	1121.4	1117.8	1113.0	1114.2	1119.6	1116.0	1126.8	1116.6	1125.0
7.5°	1125.0	1111.8	1115.4	1113.6	1109.4	1110.0	1115.4	1112.4	1122.0	1112.4	1122.0
10°	1119.6	1105.8	1108.8	1101.0	1091.9	1098.6	1109.4	1106.4	1116.6	1105.8	1116.6
12.5°	1111.2	1097.3	1094.3	1068.5	1052.2	1064.8	1098.0	1098.0	1107.6	1097.3	1108.8
15°	1101.6	1086.5	1070.3	1031.1	1014.3	1026.9	1072.7	1088.3	1096.7	1086.5	1098.0
17.5°	1090.1	1072.7	1041.4	995.6	980.0	992.6	1039.6	1073.9	1084.7	1073.9	1084.1
20°	1075.7	1055.2	1010.7	958.3	948.1	959.5	1006.5	1056.4	1071.5	1058.2	1065.4
22.5°	1060.0	1035.3	976.4	929.4	924.6	931.8	974.6	1034.7	1054.6	1040.8	1045.6
25°	1040.8	1011.9	942.0	902.9	899.3	903.5	943.3	1009.5	1035.3	1020.9	1022.7
27.5°	1020.3	989.0	909.5	880.6	877.0	878.8	911.9	981.2	1013.1	998.6	995.6
30°	995.6	961.9	877.0	850.6	846.9	853.6	881.9	952.3	988.4	973.9	964.9
32.5°	970.9	932.4	845.1	824.7	817.4	823.5	850.6	922.2	961.3	946.3	931.2
35°	940.2	901.1	812.0	791.6	785.5	792.2	819.2	890.9	930.6	915.6	895.1
37.5°	908.3	868.0	781.9	763.3	752.4	760.3	787.3	858.4	898.7	883.1	857.8
40°	876.4	833.1	748.2	729.0	715.1	726.5	754.2	824.1	862.6	848.1	819.2
42.5°	839.1	798.2	715.1	688.0	648.9	685.6	718.7	789.8	825.3	811.4	776.5
45°	800.0	760.9	680.2	614.6	512.9	620.6	682.6	753.6	781.9	768.7	730.8
47.5°	755.4	722.3	644.7	544.8	446.0	550.8	645.9	719.3	741.0	726.5	684.4
50°	716.3	683.8	607.4	485.8	399.1	492.4	606.8	680.8	698.9	685.6	638.7
52.5°	671.8	643.5	567.0	433.4	364.2	440.0	565.8	641.1	655.5	639.9	592.9
55°	627.8	602.5	524.3	387.1	333.5	393.1	523.1	600.1	611.6	593.5	544.8
57.5°	583.3	560.4	480.4	345.5	305.2	352.1	483.4	558.0	565.8	543.0	498.4
60°	536.9	517.7	435.8	308.8	277.5	314.2	434.6	515.9	520.7	496.0	453.3
62.5°	490.6	473.1	391.3	275.1	249.2	278.7	394.3	471.3	474.3	450.9	406.9
65°	443.0	426.8	347.9	239.6	222.1	245.6	350.9	425.0	428.0	401.5	361.8
67.5°	393.7	380.4	301.6	212.5	196.2	214.3	307.6	378.0	379.8	353.9	317.8
70°	344.3	332.9	260.6	183.0	171.0	183.6	264.9	326.3	329.9	302.2	273.3
72.5°	293.7	284.7	220.9	152.3	141.5	152.3	223.3	278.7	281.1	258.2	229.9
75°	242.6	236.0	180.6	122.2	113.8	121.6	181.8	231.1	231.1	209.5	187.2
77.5°	193.2	188.4	138.4	93.9	87.9	92.7	139.0	183.0	181.8	164.9	147.5
80°	144.5	140.9	99.3	68.0	63.8	66.2	99.3	135.4	135.4	123.4	102.3
82.5°	103.5	99.3	65.6	44.5	42.1	43.3	64.4	94.5	96.3	87.3	69.2
85°	68.6	59.0	35.5	24.7	22.9	23.5	33.7	54.8	60.2	50.6	36.1
87.5°	30.1	19.9	9.0	3.6	1.8	2.4	7.2	17.5	22.9	15.0	4.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P520606

CATALOG NUMBER: 4WSLA-75-L835-UNV-U

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1122.0	1122.0	1122.0	1122.0	1122.0	1122.0
2.5°	1125.6	1116.0	1119.6	1122.0	1119.6	1130.5
5°	1124.4	1120.2	1119.6	1122.6	1117.8	1128.6
7.5°	1122.6	1120.2	1119.6	1120.8	1114.8	1125.0
10°	1118.4	1114.8	1116.0	1117.8	1110.0	1119.6
12.5°	1110.6	1107.0	1107.6	1113.6	1102.8	1111.2
15°	1097.3	1093.1	1097.3	1104.0	1094.3	1101.6
17.5°	1079.9	1073.3	1080.5	1090.7	1083.5	1090.1
20°	1057.6	1047.4	1055.2	1073.9	1067.3	1075.7
22.5°	1030.5	1017.9	1025.7	1052.8	1051.0	1060.0
25°	999.8	984.8	995.6	1028.7	1032.3	1040.8
27.5°	965.5	948.7	963.1	1002.2	1010.7	1020.3
30°	928.2	910.1	927.0	972.7	985.4	995.6
32.5°	889.7	869.8	889.1	939.6	957.7	970.9
35°	849.3	828.9	850.6	905.3	927.0	940.2
37.5°	806.0	786.1	809.6	869.2	895.1	908.3
40°	761.5	739.2	765.7	826.5	860.8	876.4
42.5°	715.7	688.0	720.5	786.1	823.5	839.1
45°	664.5	626.0	670.0	743.4	782.5	800.0
47.5°	613.4	574.9	619.4	697.7	739.8	755.4
50°	564.0	530.9	566.4	647.7	696.5	716.3
52.5°	518.9	491.8	521.9	598.9	651.9	671.8
55°	476.7	455.7	480.4	550.8	605.0	627.8
57.5°	437.0	423.8	440.6	505.0	561.6	583.3
60°	399.7	390.7	402.7	459.9	510.5	536.9
62.5°	363.0	358.2	367.2	412.3	462.9	490.6
65°	327.5	326.3	331.1	370.8	412.9	443.0
67.5°	291.9	291.3	294.4	326.9	364.2	393.7
70°	256.4	260.0	258.2	279.3	315.4	344.3
72.5°	220.3	225.7	222.7	236.0	270.9	293.7
75°	180.0	187.2	181.2	196.2	217.9	242.6
77.5°	138.4	146.3	139.0	152.3	175.8	193.2
80°	99.3	106.5	100.5	110.8	131.2	144.5
82.5°	62.6	68.0	63.2	73.4	93.9	103.5
85°	27.7	30.7	31.9	39.7	57.8	68.6
87.5°	1.2	0.6	1.2	7.8	20.5	30.1
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)