

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: P520612

Luminaire Tested: **4WSLA-75-L850-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: P520612  
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-L850-UNV-U  
Description: 4 FOOT, 750 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 5000K, 80 CRI  
LEDS WITH NO UPLIGHT  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

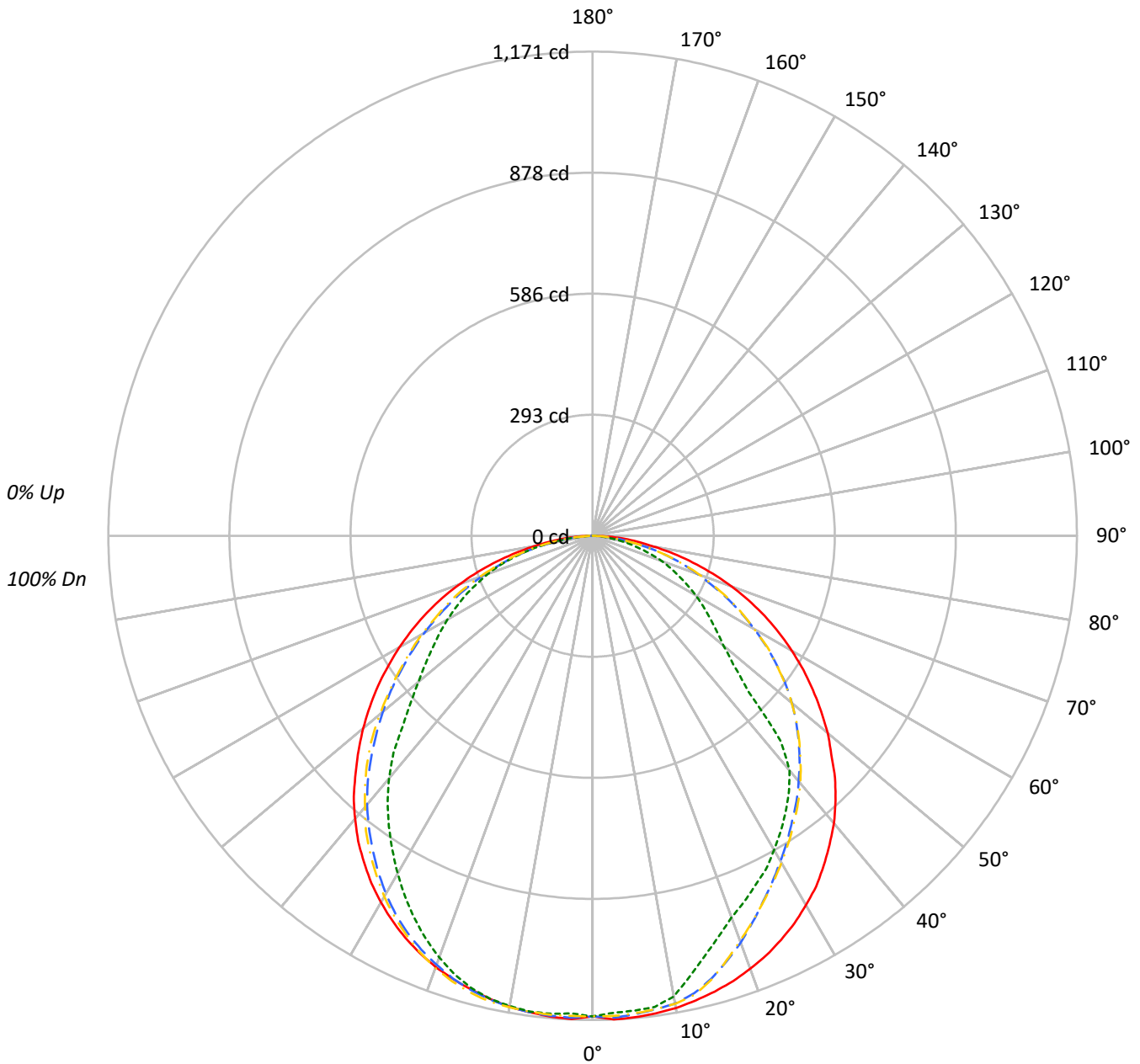
Lumens per Lamp: N/A  
Luminaire Lumens: 3118.0 lumens  
Efficiency: N/A  
Efficacy: 134.4 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')  
CIE Type: Direct

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°	6255	6255	6255	6255
5°	6316	6229	6306	6269
10°	6338	6181	6321	6311
15°	6358	5854	6330	6310
20°	6382	5625	6357	6214
25°	6402	5532	6369	6058
30°	6409	5452	6363	5859
35°	6399	5346	6334	5641
40°	6379	5205	6277	5380
45°	6307	4044	6165	4936
50°	6213	3461	6061	4605
55°	6103	3241	5944	4429
60°	5987	3095	5806	4356
65°	5844	2930	5645	4304
70°	5613	2787	5377	4239
75°	5226	2450	4978	4032
80°	4640	2049	4348	3422
85°	4390	1463	3853	1964



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.4	3.5
10°-20°	315.0	10.1
20°-30°	470.7	15.1
30°-40°	560.3	18.0
40°-50°	560.0	18.0
50°-60°	481.9	15.5
60°-70°	362.7	11.6
70°-80°	206.7	6.6
80°-90°	50.3	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°	896.1	28.7
0°-40°	1456.4	46.7
0°-60°	2498.3	80.1
0°-90°	3118.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3118.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1162	1162	1162	1162	1162	
5°	1169	1153	1167	1160	1169	111
15°	1141	1051	1136	1132	1141	322
25°	1078	932	1072	1020	1078	497
35°	974	814	964	859	974	609
45°	829	531	810	648	829	638
55°	650	345	634	472	650	581
65°	459	230	443	338	459	453
75°	251	118	239	194	251	266
85°	71	24	62	32	71	77
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°	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3
2.5°	1171.0	1160.4	1166.7	1164.8	1154.8	1158.5	1162.3	1158.5	1169.8	1159.8	1166.7
5°	1169.1	1157.9	1161.7	1157.9	1152.9	1154.2	1159.8	1156.1	1167.3	1156.7	1165.4
7.5°	1165.4	1151.7	1155.4	1153.6	1149.2	1149.8	1155.4	1152.3	1162.3	1152.3	1162.3
10°	1159.8	1145.5	1148.6	1140.5	1131.1	1138.0	1149.2	1146.1	1156.7	1145.5	1156.7
12.5°	1151.1	1136.7	1133.6	1106.8	1090.0	1103.1	1137.3	1137.3	1147.3	1136.7	1148.6
15°	1141.1	1125.5	1108.7	1068.1	1050.7	1063.8	1111.2	1127.4	1136.1	1125.5	1137.3
17.5°	1129.2	1111.2	1078.7	1031.3	1015.1	1028.2	1076.9	1112.4	1123.6	1112.4	1123.0
20°	1114.3	1093.1	1046.9	992.7	982.1	993.9	1042.6	1094.3	1109.9	1096.2	1103.7
22.5°	1098.1	1072.5	1011.4	962.8	957.8	965.2	1009.5	1071.9	1092.5	1078.1	1083.1
25°	1078.1	1048.2	975.8	935.3	931.6	935.9	977.1	1045.7	1072.5	1057.5	1059.4
27.5°	1056.9	1024.5	942.2	912.2	908.5	910.4	944.7	1016.4	1049.4	1034.5	1031.3
30°	1031.3	996.4	908.5	881.1	877.3	884.2	913.5	986.4	1023.9	1008.9	999.5
32.5°	1005.8	965.9	875.5	854.3	846.8	853.0	881.1	955.3	995.8	980.2	964.6
35°	974.0	933.4	841.2	820.0	813.7	820.6	848.6	922.8	964.0	948.4	927.2
37.5°	940.9	899.2	810.0	790.7	779.4	787.5	815.6	889.2	931.0	914.7	888.6
40°	907.9	863.0	775.1	755.1	740.8	752.6	781.3	853.6	893.5	878.6	848.6
42.5°	869.2	826.8	740.8	712.7	672.2	710.2	744.5	818.1	854.9	840.5	804.4
45°	828.7	788.2	704.6	636.6	531.3	642.9	707.1	780.7	810.0	796.3	757.0
47.5°	782.5	748.3	667.8	564.3	462.0	570.5	669.1	745.1	767.6	752.6	709.0
50°	742.0	708.3	629.2	503.2	413.4	510.1	628.5	705.2	723.9	710.2	661.6
52.5°	695.9	666.6	587.4	449.0	377.2	455.8	586.1	664.1	679.0	662.8	614.2
55°	650.4	624.2	543.1	400.9	345.4	407.2	541.9	621.7	633.5	614.8	564.3
57.5°	604.2	580.5	497.6	357.9	316.1	364.8	500.7	578.0	586.1	562.4	516.3
60°	556.2	536.2	451.4	319.9	287.5	325.5	450.2	534.4	539.4	513.8	469.5
62.5°	508.2	490.1	405.3	285.0	258.1	288.7	408.4	488.2	491.4	467.0	421.5
65°	458.9	442.1	360.4	248.2	230.1	254.4	363.5	440.2	443.3	415.9	374.8
67.5°	407.8	394.1	312.4	220.1	203.3	222.0	318.6	391.6	393.5	366.6	329.2
70°	356.7	344.8	270.0	189.6	177.1	190.2	274.4	338.0	341.7	313.0	283.1
72.5°	304.3	294.9	228.8	157.8	146.5	157.8	231.3	288.7	291.2	267.5	238.2
75°	251.3	244.4	187.1	126.6	117.8	126.0	188.3	239.4	239.4	217.0	193.9
77.5°	200.2	195.2	143.4	97.3	91.0	96.0	144.0	189.6	188.3	170.9	152.8
80°	149.7	145.9	102.9	70.5	66.1	68.6	102.9	140.3	140.3	127.8	106.0
82.5°	107.2	102.9	68.0	46.1	43.6	44.9	66.7	97.9	99.8	90.4	71.7
85°	71.1	61.1	36.8	25.6	23.7	24.3	34.9	56.7	62.4	52.4	37.4
87.5°	31.2	20.6	9.4	3.7	1.9	2.5	7.5	18.1	23.7	15.6	5.0
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°	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3
2.5°	1166.0	1156.1	1159.8	1162.3	1159.8	1171.0
5°	1164.8	1160.4	1159.8	1162.9	1157.9	1169.1
7.5°	1162.9	1160.4	1159.8	1161.0	1154.8	1165.4
10°	1158.5	1154.8	1156.1	1157.9	1149.8	1159.8
12.5°	1150.4	1146.7	1147.3	1153.6	1142.3	1151.1
15°	1136.7	1132.4	1136.7	1143.6	1133.6	1141.1
17.5°	1118.6	1111.8	1119.3	1129.9	1122.4	1129.2
20°	1095.6	1085.0	1093.1	1112.4	1105.5	1114.3
22.5°	1067.5	1054.4	1062.5	1090.6	1088.7	1098.1
25°	1035.7	1020.1	1031.3	1065.6	1069.4	1078.1
27.5°	1000.2	982.7	997.7	1038.2	1046.9	1056.9
30°	961.5	942.8	960.3	1007.6	1020.7	1031.3
32.5°	921.6	901.0	921.0	973.4	992.1	1005.8
35°	879.8	858.6	881.1	937.8	960.3	974.0
37.5°	834.9	814.3	838.7	900.4	927.2	940.9
40°	788.8	765.7	793.1	856.1	891.7	907.9
42.5°	741.4	712.7	746.4	814.3	853.0	869.2
45°	688.4	648.5	694.0	770.1	810.6	828.7
47.5°	635.4	595.5	641.6	722.7	766.3	782.5
50°	584.3	550.0	586.8	670.9	721.4	742.0
52.5°	537.5	509.4	540.6	620.4	675.3	695.9
55°	493.8	472.0	497.6	570.5	626.7	650.4
57.5°	452.7	439.0	456.4	523.2	581.8	604.2
60°	414.0	404.7	417.2	476.4	528.8	556.2
62.5°	376.0	371.0	380.4	427.1	479.5	508.2
65°	339.2	338.0	342.9	384.1	427.8	458.9
67.5°	302.4	301.8	304.9	338.6	377.2	407.8
70°	265.6	269.4	267.5	289.3	326.7	356.7
72.5°	228.2	233.8	230.7	244.4	280.6	304.3
75°	186.4	193.9	187.7	203.3	225.7	251.3
77.5°	143.4	151.5	144.0	157.8	182.1	200.2
80°	102.9	110.4	104.1	114.7	135.9	149.7
82.5°	64.8	70.5	65.5	76.1	97.3	107.2
85°	28.7	31.8	33.0	41.2	59.9	71.1
87.5°	1.2	0.6	1.2	8.1	21.2	31.2
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)