

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: P520464

Luminaire Tested: **4WSLA-100-L835-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: P520464
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-100-L835-UPL8-UNV-U
Description: 4 FOOT, 1000 LUMEN PER FOOT, WSLA LED LUMINAIRE WITH 3500K, 80 CRI
LEDS WITH 8% UPLIGHT
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

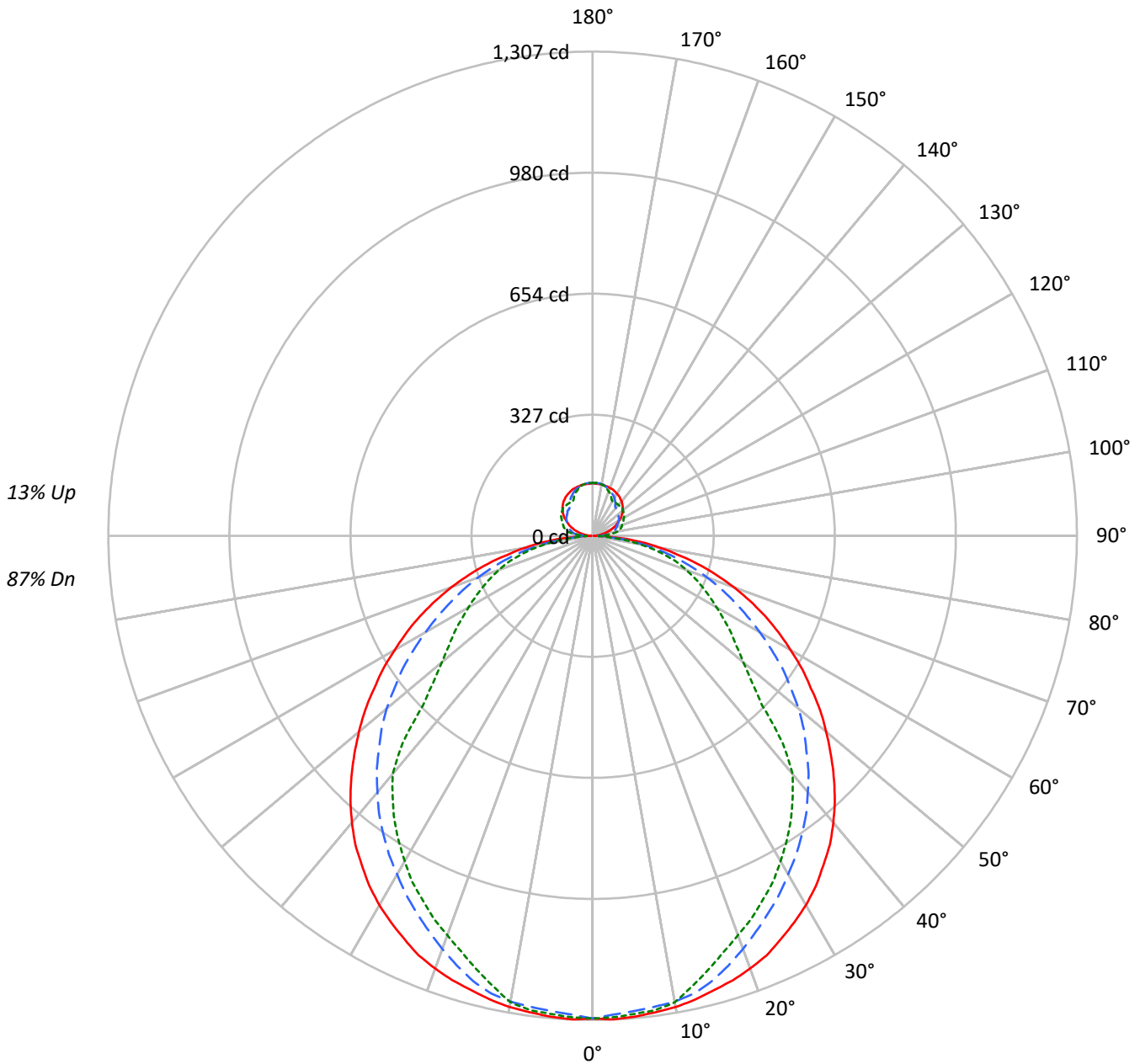
Lumens per Lamp: N/A
Luminaire Lumens: 4055.0 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.17 / 1.33
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 31.6
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

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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°	7013	7013	7013
5°	7039	6958	6999
10°	7059	6977	6988
15°	7072	6936	6748
20°	7119	6797	6572
25°	7136	6669	6446
30°	7154	6559	6303
35°	7132	6467	6134
40°	7099	6348	5901
45°	7006	6207	4923
50°	6891	6074	4443
55°	6755	5876	4275
60°	6639	5610	4157
65°	6542	5372	4154
70°	6373	5163	4219
75°	6082	4912	4250
80°	5693	4417	3952
85°	5212	3125	2661



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.3	3.0
10°-20°	350.7	8.6
20°-30°	524.0	12.9
30°-40°	625.5	15.4
40°-50°	625.6	15.4
50°-60°	541.4	13.4
60°-70°	415.5	10.2
70°-80°	254.6	6.3
80°-90°	71.7	1.8
90°-100°	40.5	1.0
100°-110°	64.3	1.6
110°-120°	75.2	1.9
120°-130°	81.2	2.0
130°-140°	80.0	2.0
140°-150°	70.8	1.7
150°-160°	58.2	1.4
160°-170°	39.0	1.0
170°-180°	13.6	0.3
0°-30°	998.0	24.6
0°-40°	1623.5	40.0
0°-60°	2790.5	68.8
0°-90°	3532.3	87.1
90°-120°	180.0	4.4
90°-150°	411.9	10.2
90°-180°	523.0	12.9
0°-180°	4055.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1303	1303	1303	1303	1303	
5°	1303	1299	1288	1297	1296	124
15°	1269	1267	1245	1222	1211	359
25°	1202	1187	1123	1093	1086	554
35°	1086	1057	984	949	934	680
45°	920	894	816	742	647	710
55°	720	703	626	501	456	645
65°	514	495	422	339	326	507
75°	292	278	236	204	204	309
85°	84	69	51	43	43	88
90°	4	13	21	26	28	6
95°	15	32	43	45	45	15
105°	43	45	64	75	79	45
115°	71	60	75	86	92	70
125°	96	77	86	99	103	85
135°	114	103	96	105	111	88
145°	128	122	107	105	109	80
155°	135	133	126	120	118	62
165°	139	141	137	137	137	39
175°	141	142	142	144	144	13
180°	142	142	142	142	142	



TEST NUMBER: P520464

CATALOG NUMBER: 4WSLA-100-L835-UPL8-UNV-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1303.0	1303.0	1303.0	1303.0	1303.0
2.5°	1306.7	1303.0	1293.6	1303.0	1301.1
5°	1303.0	1299.2	1288.0	1297.3	1295.5
7.5°	1297.3	1293.6	1282.3	1293.6	1291.7
10°	1291.7	1288.0	1276.7	1284.2	1278.6
12.5°	1282.3	1278.6	1265.5	1256.1	1244.8
15°	1269.2	1267.3	1244.8	1222.4	1211.1
17.5°	1258.0	1252.3	1216.7	1190.5	1177.4
20°	1243.0	1233.6	1186.7	1156.7	1147.4
22.5°	1226.1	1211.1	1154.9	1126.7	1119.2
25°	1201.7	1186.7	1123.0	1093.0	1085.5
27.5°	1177.4	1158.6	1091.1	1061.1	1053.6
30°	1151.1	1124.9	1055.5	1027.4	1014.3
32.5°	1121.1	1094.9	1021.8	989.9	974.9
35°	1085.5	1057.4	984.3	948.6	933.6
37.5°	1051.7	1021.8	946.8	907.4	886.8
40°	1010.5	980.5	903.6	860.5	839.9
42.5°	967.4	939.3	862.4	809.9	759.3
45°	920.5	894.3	815.5	742.4	646.8
47.5°	871.8	849.3	772.4	673.0	581.2
50°	823.0	800.5	725.5	607.4	530.6
52.5°	774.3	755.5	673.0	553.1	489.3
55°	719.9	703.0	626.2	500.6	455.6
57.5°	671.2	654.3	571.8	457.4	419.9
60°	616.8	601.8	521.2	414.3	386.2
62.5°	566.2	549.3	470.6	376.8	356.2
65°	513.7	494.9	421.8	339.3	326.2
67.5°	459.3	440.6	375.0	305.6	298.1
70°	405.0	390.0	328.1	271.8	268.1
72.5°	348.7	331.8	281.2	240.0	240.0
75°	292.5	277.5	236.2	204.4	204.4
77.5°	234.3	226.8	189.4	166.9	168.7
80°	183.7	174.4	142.5	127.5	127.5
82.5°	135.0	123.7	95.6	84.4	88.1
85°	84.4	69.4	50.6	43.1	43.1
87.5°	26.2	20.6	15.0	16.9	16.9
90°	3.7	13.1	20.6	26.2	28.1
92.5°	9.4	24.4	30.0	35.6	37.5
95°	15.0	31.9	43.1	45.0	45.0
97.5°	20.6	35.6	52.5	60.0	60.0
100°	28.1	37.5	56.2	67.5	69.4
102.5°	35.6	41.2	60.0	71.2	75.0
105°	43.1	45.0	63.7	75.0	78.7



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CATALOG NUMBER: 4WSLA-100-L835-UPL8-UNV-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	63.7	56.2	71.2	84.4	88.1
115°	71.2	60.0	75.0	86.2	91.9
117.5°	76.9	65.6	78.7	90.0	93.7
120°	82.5	69.4	80.6	93.7	97.5
122.5°	90.0	73.1	84.4	95.6	101.2
125°	95.6	76.9	86.2	99.4	103.1
127.5°	101.2	84.4	88.1	101.2	105.0
130°	105.0	91.9	90.0	103.1	106.9
132.5°	110.6	97.5	91.9	105.0	108.7
135°	114.4	103.1	95.6	105.0	110.6
137.5°	118.1	108.7	95.6	105.0	108.7
140°	121.9	114.4	97.5	105.0	108.7
142.5°	123.7	118.1	99.4	105.0	108.7
145°	127.5	121.9	106.9	105.0	108.7
147.5°	129.4	125.6	112.5	105.0	108.7
150°	131.2	129.4	118.1	106.9	106.9
152.5°	133.1	131.2	121.9	114.4	110.6
155°	135.0	133.1	125.6	120.0	118.1
157.5°	136.9	136.9	129.4	125.6	123.7
160°	136.9	138.7	133.1	129.4	127.5
162.5°	138.7	140.6	135.0	133.1	131.2
165°	138.7	140.6	136.9	136.9	136.9
167.5°	140.6	142.5	140.6	138.7	138.7
170°	140.6	142.5	140.6	140.6	140.6
172.5°	140.6	142.5	142.5	142.5	142.5
175°	140.6	142.5	142.5	144.4	144.4
177.5°	140.6	142.5	142.5	142.5	142.5
180°	142.5	142.5	142.5	142.5	142.5



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	50.6	48.7	65.6	78.7	82.5
110°	56.2	52.5	69.4	80.6	84.4



(END OF REPORT)