

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: P556734

Luminaire Tested: **FUSL-12-4-LD4-1STD-35-UNV-80-97-EDD-90**

Issue Date: 7/16/2021

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: P556734
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSL-12-4-LD4-1STD-35-UNV-80-97-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

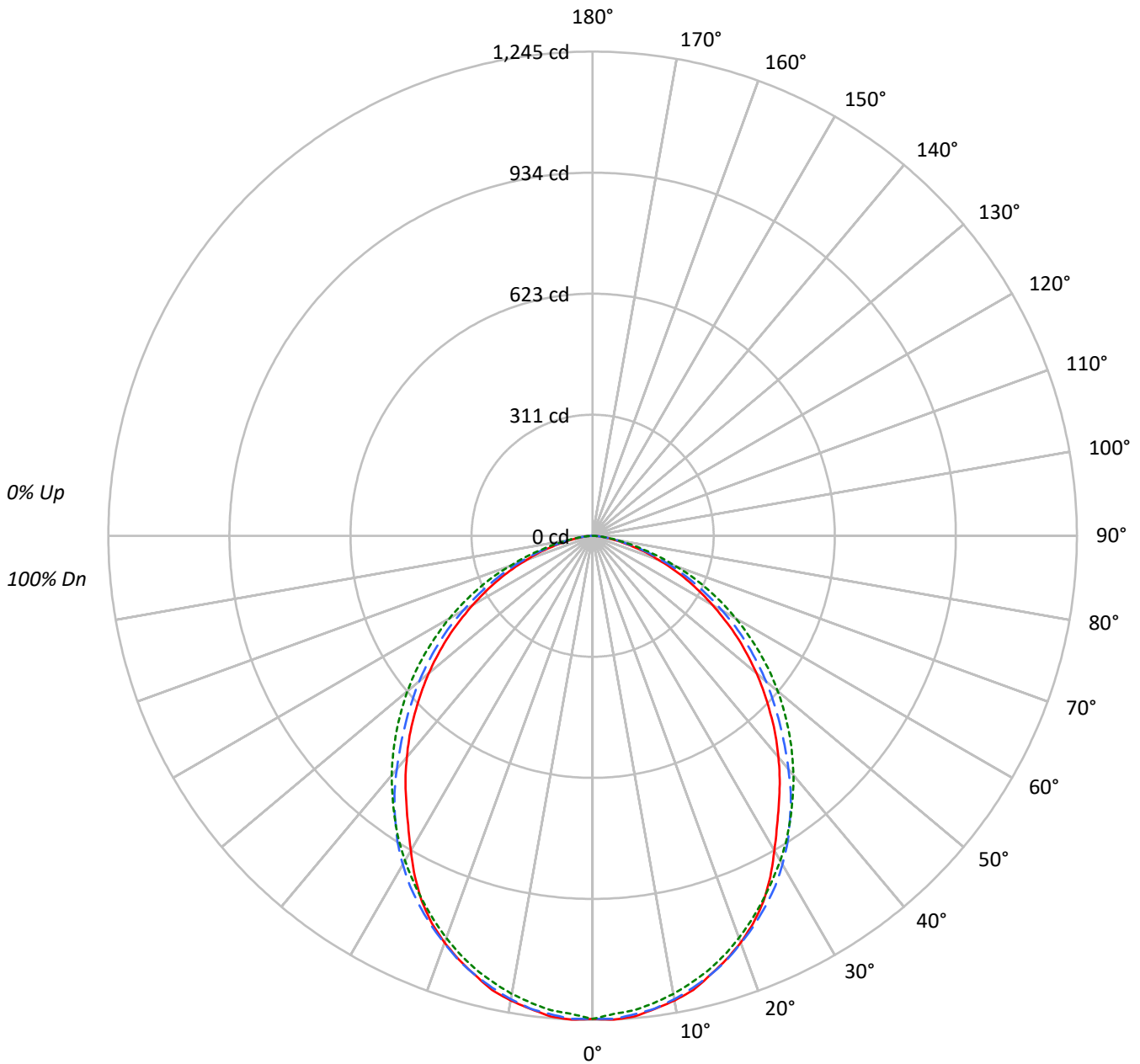
Lumens per Lamp: N/A
Luminaire Lumens: 2872.0 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3342	3342	3342
5°	3351	3337	3309
10°	3316	3307	3269
15°	3257	3257	3220
20°	3188	3192	3151
25°	3083	3121	3072
30°	2903	3034	2997
35°	2743	2908	2913
40°	2610	2751	2823
45°	2461	2584	2716
50°	2303	2435	2601
55°	2124	2266	2460
60°	1913	2067	2288
65°	1689	1838	2082
70°	1408	1566	1768
75°	1106	1250	1384
80°	792	880	976
85°	516	516	485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.9	4.1
10°-20°	328.5	11.4
20°-30°	480.1	16.7
30°-40°	544.9	19.0
40°-50°	526.1	18.3
50°-60°	434.0	15.1
60°-70°	289.0	10.1
70°-80°	129.3	4.5
80°-90°	23.1	0.8
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°	925.6	32.2
0°-40°	1470.5	51.2
0°-60°	2430.6	84.6
0°-90°	2872.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2872.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1242	1242	1242	1242	1242	
5°	1241	1240	1235	1229	1225	117
15°	1169	1172	1169	1164	1156	330
25°	1038	1046	1051	1044	1034	476
35°	835	846	885	890	887	523
45°	647	658	679	710	714	499
55°	453	460	483	510	524	404
65°	265	272	289	309	327	263
75°	106	112	120	126	133	116
85°	17	17	17	16	16	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1242.1	1242.1	1242.1	1242.1	1242.1
2.5°	1245.4	1245.9	1243.0	1235.4	1230.6
5°	1240.6	1240.2	1235.4	1228.7	1224.9
7.5°	1226.8	1227.8	1226.3	1216.8	1211.5
10°	1213.4	1213.9	1210.1	1202.5	1196.3
12.5°	1196.3	1195.8	1190.5	1186.7	1176.7
15°	1169.1	1171.9	1169.1	1163.8	1155.7
17.5°	1142.8	1142.8	1144.7	1135.7	1129.5
20°	1113.2	1114.7	1114.7	1107.5	1100.3
22.5°	1078.9	1083.2	1084.6	1077.0	1068.4
25°	1038.3	1046.4	1051.2	1043.6	1034.5
27.5°	989.2	1001.6	1015.9	1010.2	1000.1
30°	934.3	952.4	976.3	971.5	964.4
32.5°	882.3	900.4	933.3	931.4	927.6
35°	835.0	846.5	885.1	889.9	886.6
37.5°	790.2	800.7	837.0	847.9	845.1
40°	742.9	754.4	783.0	802.6	803.5
42.5°	696.2	707.2	730.5	758.7	758.7
45°	646.6	657.5	679.0	710.0	713.8
47.5°	597.9	609.3	630.3	661.4	667.6
50°	550.2	560.7	581.7	611.7	621.3
52.5°	500.5	512.0	532.5	560.2	574.0
55°	452.8	460.5	482.9	509.6	524.4
57.5°	403.2	410.4	435.7	458.6	473.8
60°	355.5	364.6	384.1	407.5	425.2
62.5°	309.7	319.2	335.9	356.4	376.5
65°	265.3	272.5	288.7	309.2	326.9
67.5°	222.4	228.6	244.8	259.1	277.7
70°	178.9	187.0	199.0	212.8	224.7
72.5°	144.1	147.4	157.5	167.5	179.9
75°	106.4	112.1	120.2	126.0	133.1
77.5°	76.3	79.7	84.5	89.2	95.9
80°	51.1	52.5	56.8	57.7	63.0
82.5°	31.0	32.0	32.9	33.4	35.3
85°	16.7	16.7	16.7	15.7	15.7
87.5°	9.5	9.5	8.1	6.7	4.8
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







(END OF REPORT)