

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: P556477

Luminaire Tested: **FUSL-12-4-LD4-1LO-35-UNV-80-96-EDD**

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: P556477
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-LD4-1LO-35-UNV-80-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

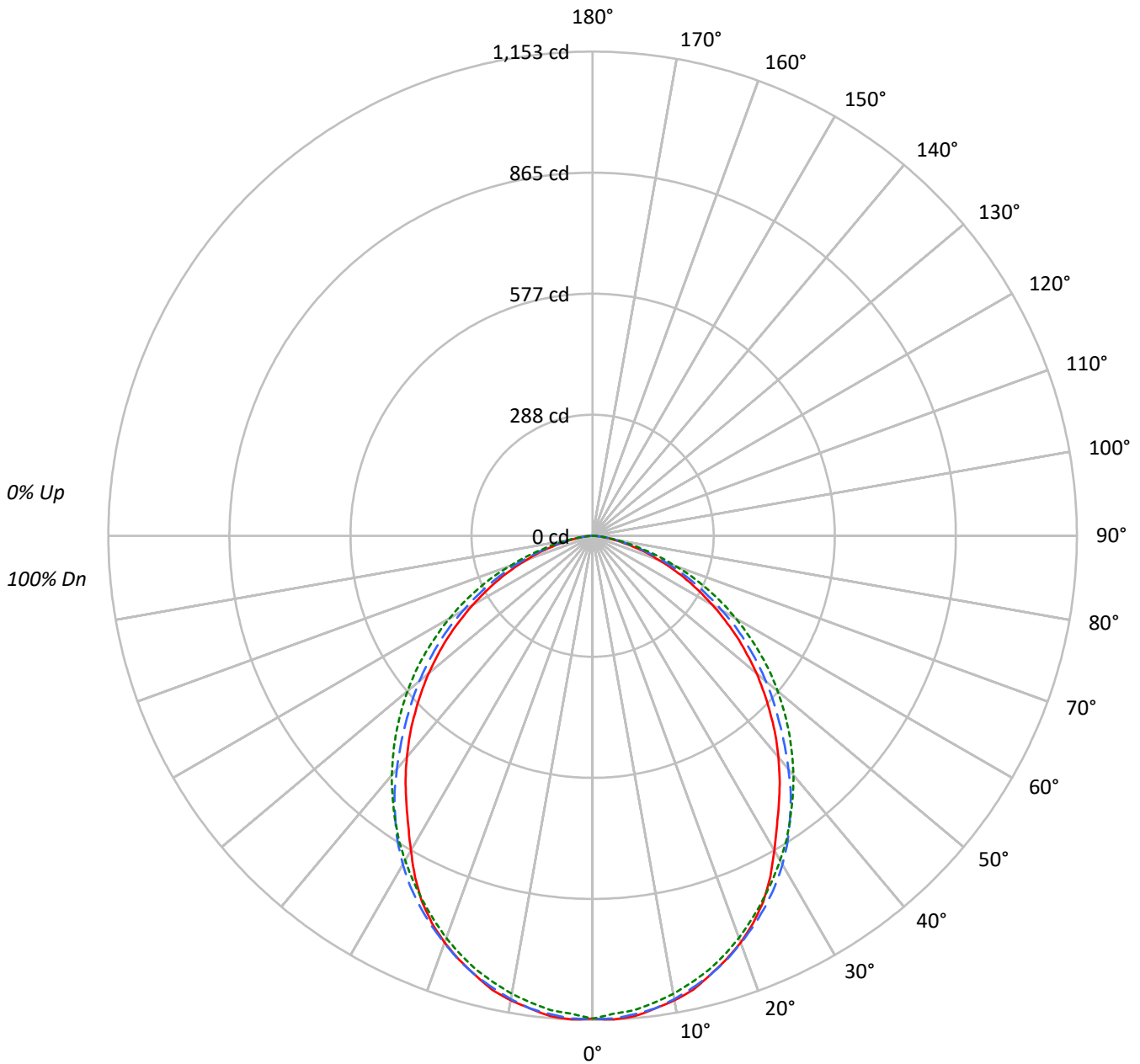
Lumens per Lamp: N/A
Luminaire Lumens: 2659.0 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	3094	3094	3094
5°	3103	3090	3063
10°	3070	3061	3026
15°	3015	3015	2981
20°	2952	2955	2917
25°	2854	2890	2844
30°	2688	2809	2774
35°	2540	2692	2696
40°	2416	2547	2614
45°	2278	2393	2515
50°	2133	2254	2408
55°	1967	2098	2278
60°	1771	1914	2118
65°	1564	1702	1927
70°	1304	1449	1637
75°	1024	1157	1282
80°	733	815	903
85°	479	479	451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.3	4.1
10°-20°	304.2	11.4
20°-30°	444.5	16.7
30°-40°	504.5	19.0
40°-50°	487.1	18.3
50°-60°	401.8	15.1
60°-70°	267.6	10.1
70°-80°	119.7	4.5
80°-90°	21.4	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°	856.9	32.2
0°-40°	1361.5	51.2
0°-60°	2250.3	84.6
0°-90°	2659.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2659.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1150	1150	1150	1150	1150	
5°	1149	1148	1144	1138	1134	109
15°	1082	1085	1082	1078	1070	305
25°	961	969	973	966	958	440
35°	773	784	820	824	821	484
45°	599	609	629	657	661	462
55°	419	426	447	472	486	374
65°	246	252	267	286	303	244
75°	98	104	111	117	123	108
85°	16	16	16	15	15	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1149.9	1149.9	1149.9	1149.9	1149.9
2.5°	1153.0	1153.5	1150.8	1143.8	1139.3
5°	1148.6	1148.2	1143.8	1137.6	1134.0
7.5°	1135.8	1136.7	1135.4	1126.5	1121.7
10°	1123.4	1123.9	1120.3	1113.3	1107.5
12.5°	1107.5	1107.1	1102.2	1098.7	1089.4
15°	1082.4	1085.0	1082.4	1077.5	1070.0
17.5°	1058.1	1058.1	1059.8	1051.4	1045.7
20°	1030.7	1032.0	1032.0	1025.4	1018.7
22.5°	998.9	1002.8	1004.2	997.1	989.1
25°	961.3	968.8	973.2	966.2	957.8
27.5°	915.8	927.3	940.5	935.2	926.0
30°	865.0	881.8	903.9	899.5	892.8
32.5°	816.8	833.6	864.1	862.4	858.8
35°	773.1	783.7	819.5	823.9	820.8
37.5°	731.6	741.3	774.9	785.0	782.4
40°	687.8	698.5	725.0	743.1	744.0
42.5°	644.6	654.7	676.4	702.4	702.4
45°	598.6	608.8	628.7	657.4	660.9
47.5°	553.5	564.2	583.6	612.3	618.0
50°	509.4	519.1	538.5	566.4	575.2
52.5°	463.4	474.0	493.0	518.6	531.5
55°	419.2	426.3	447.1	471.8	485.5
57.5°	373.3	379.9	403.3	424.5	438.7
60°	329.1	337.5	355.6	377.3	393.6
62.5°	286.7	295.5	311.0	330.0	348.6
65°	245.6	252.3	267.3	286.3	302.6
67.5°	205.9	211.6	226.6	239.9	257.1
70°	165.7	173.2	184.2	197.0	208.1
72.5°	133.4	136.5	145.8	155.1	166.6
75°	98.5	103.8	111.3	116.6	123.3
77.5°	70.7	73.8	78.2	82.6	88.8
80°	47.3	48.6	52.6	53.5	58.3
82.5°	28.7	29.6	30.5	30.9	32.7
85°	15.5	15.5	15.5	14.6	14.6
87.5°	8.8	8.8	7.5	6.2	4.4
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)