

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: P556587

Luminaire Tested: **FUSL-12-4-LD4-1LO-40-UNV-93-94-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: P556587
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-40-UNV-93-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

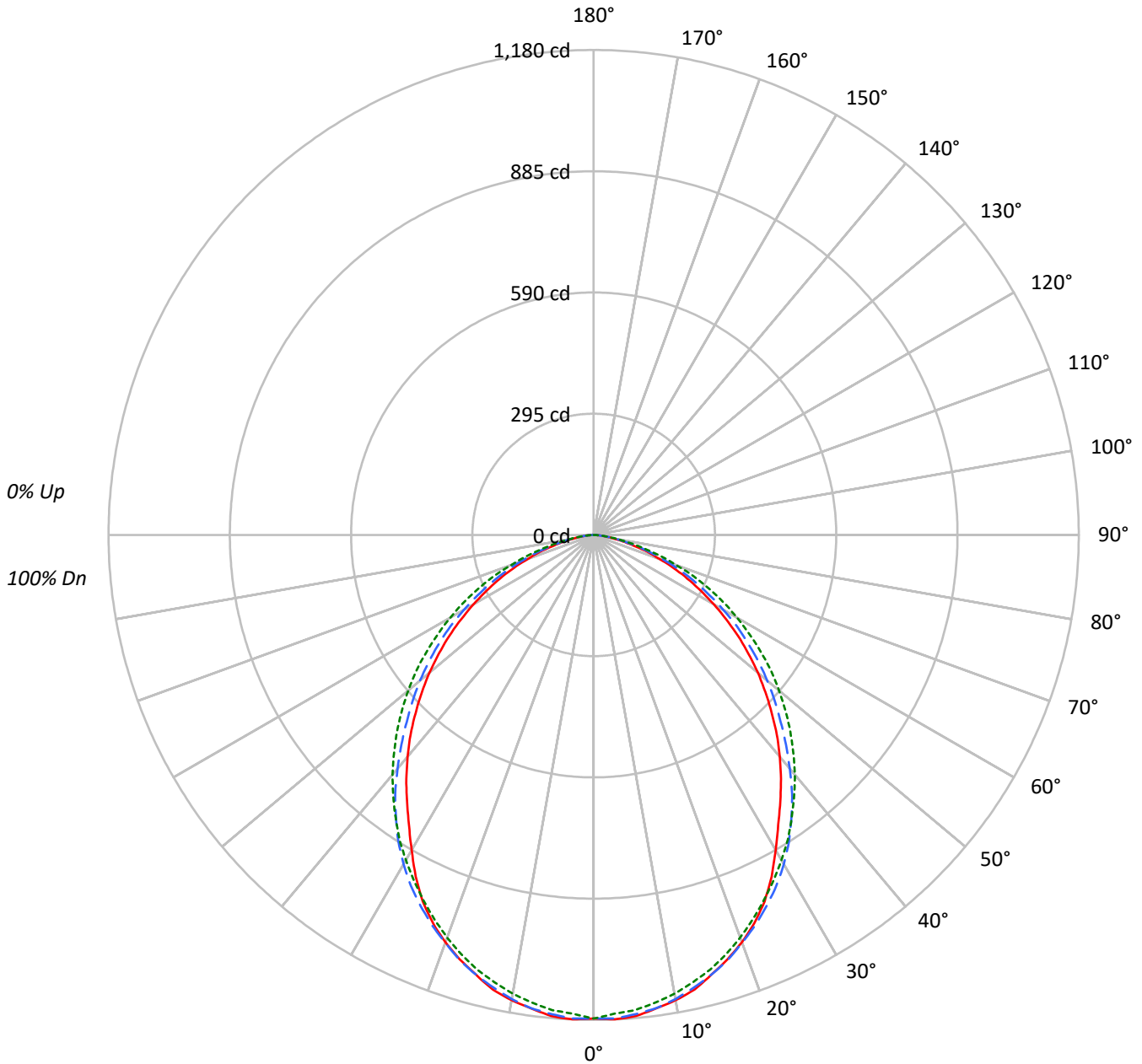
Lumens per Lamp: N/A
Luminaire Lumens: 2721.0 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	3167	3167	3167
5°	3175	3162	3135
10°	3141	3133	3097
15°	3086	3086	3050
20°	3020	3024	2985
25°	2921	2957	2910
30°	2751	2874	2839
35°	2599	2755	2759
40°	2473	2606	2674
45°	2331	2448	2574
50°	2182	2307	2464
55°	2013	2146	2331
60°	1813	1958	2168
65°	1601	1741	1972
70°	1334	1483	1675
75°	1048	1184	1311
80°	750	834	925
85°	488	488	460



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.8	4.1
10°-20°	311.3	11.4
20°-30°	454.9	16.7
30°-40°	516.3	19.0
40°-50°	498.4	18.3
50°-60°	411.1	15.1
60°-70°	273.8	10.1
70°-80°	122.5	4.5
80°-90°	21.9	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°	876.9	32.2
0°-40°	1393.2	51.2
0°-60°	2302.8	84.6
0°-90°	2721.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2721.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1175	1175	1170	1164	1160	111
15°	1108	1110	1108	1103	1095	312
25°	984	991	996	989	980	451
35°	791	802	839	843	840	496
45°	613	623	643	673	676	473
55°	429	436	458	483	497	383
65°	251	258	274	293	310	249
75°	101	106	114	119	126	110
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°	1176.8	1176.8	1176.8	1176.8	1176.8
2.5°	1179.9	1180.4	1177.7	1170.4	1165.9
5°	1175.4	1175.0	1170.4	1164.1	1160.5
7.5°	1162.3	1163.2	1161.8	1152.8	1147.8
10°	1149.6	1150.1	1146.5	1139.2	1133.4
12.5°	1133.4	1132.9	1127.9	1124.3	1114.8
15°	1107.6	1110.3	1107.6	1102.6	1094.9
17.5°	1082.7	1082.7	1084.5	1075.9	1070.1
20°	1054.7	1056.1	1056.1	1049.3	1042.5
22.5°	1022.2	1026.2	1027.6	1020.3	1012.2
25°	983.7	991.4	995.9	988.7	980.1
27.5°	937.2	948.9	962.5	957.1	947.6
30°	885.2	902.4	925.0	920.4	913.7
32.5°	835.9	853.1	884.3	882.5	878.8
35°	791.1	802.0	838.6	843.1	840.0
37.5°	748.6	758.6	792.9	803.3	800.6
40°	703.9	714.7	741.9	760.4	761.3
42.5°	659.6	670.0	692.1	718.8	718.8
45°	612.6	623.0	643.3	672.7	676.3
47.5°	566.5	577.3	597.2	626.6	632.5
50°	521.2	531.2	551.1	579.6	588.6
52.5°	474.2	485.1	504.5	530.7	543.9
55°	429.0	436.3	457.5	482.8	496.8
57.5°	382.0	388.8	412.7	434.4	448.9
60°	336.8	345.4	363.9	386.1	402.8
62.5°	293.4	302.4	318.3	337.7	356.7
65°	251.4	258.1	273.5	292.9	309.7
67.5°	210.7	216.5	231.9	245.5	263.1
70°	169.5	177.2	188.5	201.6	212.9
72.5°	136.5	139.7	149.2	158.7	170.4
75°	100.8	106.2	113.9	119.3	126.1
77.5°	72.3	75.5	80.0	84.5	90.9
80°	48.4	49.7	53.8	54.7	59.7
82.5°	29.4	30.3	31.2	31.6	33.5
85°	15.8	15.8	15.8	14.9	14.9
87.5°	9.0	9.0	7.7	6.3	4.5
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)