

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: P557484

Luminaire Tested: **FUSL-12-4-LD4-2STD-30-UNV-93-96-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: P557484
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-LD4-2STD-30-UNV-93-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

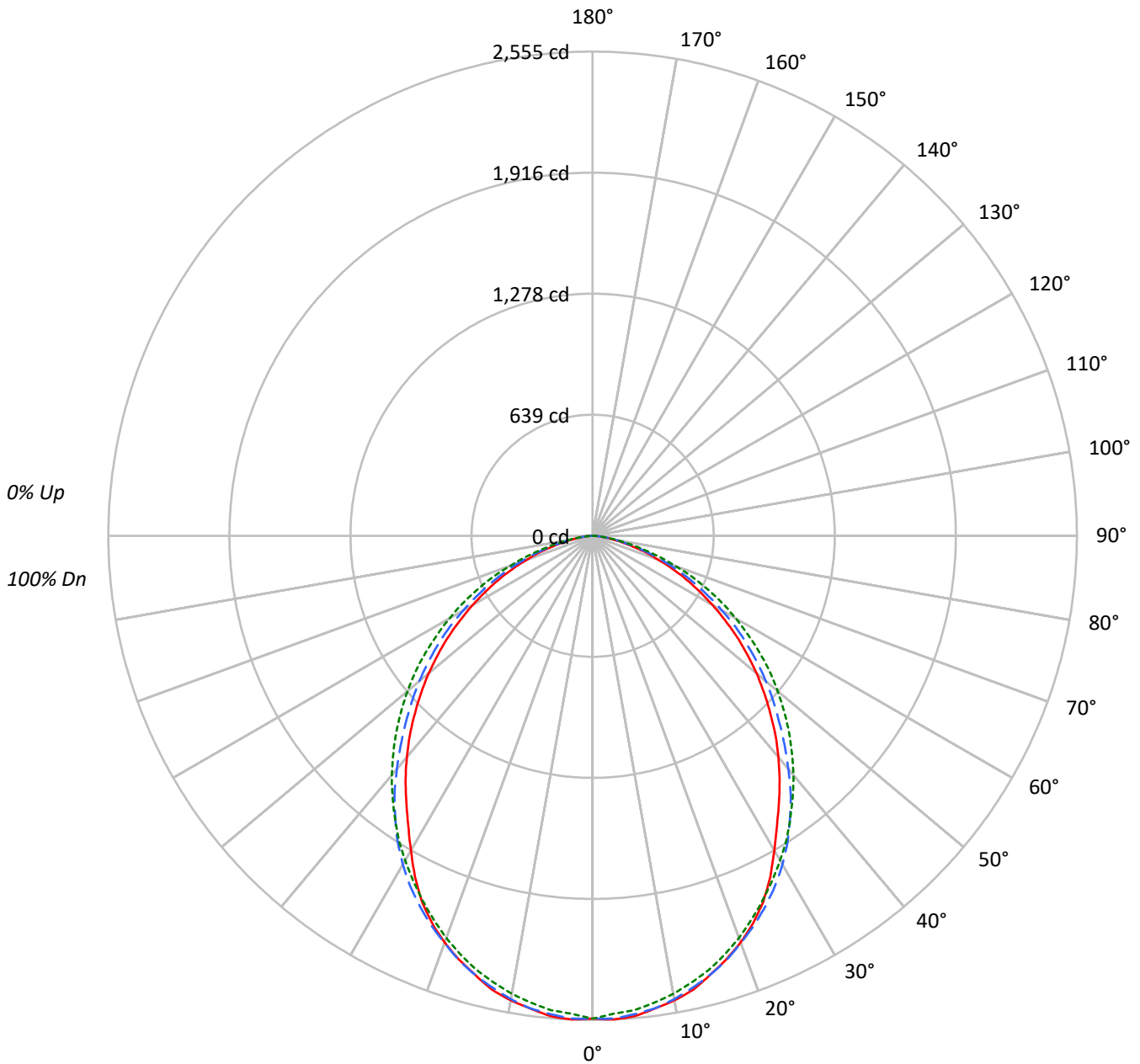
Lumens per Lamp: N/A
Luminaire Lumens: 5892.0 lumens
Efficiency: N/A
Efficacy: 88.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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	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°	6857	6857	6857
5°	6875	6846	6788
10°	6802	6783	6706
15°	6682	6682	6605
20°	6540	6549	6464
25°	6325	6403	6301
30°	5956	6224	6147
35°	5628	5965	5975
40°	5354	5643	5791
45°	5048	5301	5573
50°	4725	4996	5336
55°	4358	4648	5047
60°	3925	4241	4694
65°	3466	3771	4270
70°	2888	3212	3628
75°	2270	2565	2839
80°	1623	1805	2002
85°	1059	1059	997



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.9	4.1
10°-20°	674.0	11.4
20°-30°	984.9	16.7
30°-40°	1118.0	19.0
40°-50°	1079.2	18.3
50°-60°	890.3	15.1
60°-70°	592.9	10.1
70°-80°	265.3	4.5
80°-90°	47.5	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°	1898.8	32.2
0°-40°	3016.8	51.2
0°-60°	4986.4	84.6
0°-90°	5892.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5892.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2548	2548	2548	2548	2548	
5°	2545	2544	2534	2521	2513	241
15°	2398	2404	2398	2388	2371	676
25°	2130	2147	2157	2141	2122	975
35°	1713	1737	1816	1826	1819	1073
45°	1326	1349	1393	1457	1464	1023
55°	929	945	991	1046	1076	829
65°	544	559	592	634	671	540
75°	218	230	247	258	273	239
85°	34	34	34	32	32	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2548.1	2548.1	2548.1	2548.1	2548.1
2.5°	2555.0	2556.0	2550.1	2534.4	2524.6
5°	2545.2	2544.2	2534.4	2520.7	2512.9
7.5°	2516.8	2518.8	2515.8	2496.3	2485.5
10°	2489.4	2490.4	2482.5	2466.9	2454.2
12.5°	2454.2	2453.2	2442.4	2434.6	2414.0
15°	2398.4	2404.2	2398.4	2387.6	2371.0
17.5°	2344.5	2344.5	2348.4	2329.8	2317.1
20°	2283.8	2286.8	2286.8	2272.1	2257.4
22.5°	2213.3	2222.2	2225.1	2209.4	2191.8
25°	2130.1	2146.8	2156.6	2140.9	2122.3
27.5°	2029.3	2054.8	2084.1	2072.4	2051.8
30°	1916.7	1953.9	2002.9	1993.1	1978.4
32.5°	1810.0	1847.2	1914.8	1910.9	1903.0
35°	1713.1	1736.6	1815.9	1825.7	1818.8
37.5°	1621.1	1642.6	1717.0	1739.5	1733.7
40°	1524.2	1547.7	1606.4	1646.5	1648.5
42.5°	1428.2	1450.8	1498.7	1556.5	1556.5
45°	1326.4	1349.0	1393.0	1456.6	1464.5
47.5°	1226.6	1250.1	1293.2	1356.8	1369.5
50°	1128.7	1150.2	1193.3	1255.0	1274.6
52.5°	1026.9	1050.4	1092.5	1149.3	1177.6
55°	929.0	944.7	990.7	1045.5	1075.8
57.5°	827.2	841.9	893.8	940.7	972.1
60°	729.3	747.9	788.0	836.0	872.2
62.5°	635.3	654.9	689.2	731.3	772.4
65°	544.3	559.0	592.2	634.3	670.6
67.5°	456.2	468.9	502.2	531.6	569.7
70°	367.1	383.7	408.2	436.6	461.1
72.5°	295.6	302.5	323.0	343.6	369.1
75°	218.3	230.0	246.7	258.4	273.1
77.5°	156.6	163.5	173.3	183.1	196.8
80°	104.7	107.7	116.5	118.4	129.2
82.5°	63.6	65.6	67.5	68.5	72.4
85°	34.3	34.3	34.3	32.3	32.3
87.5°	19.6	19.6	16.6	13.7	9.8
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)