

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: P558108

Luminaire Tested: **FUSL-12-4-LD4-3LO-40-UNV-82-96-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: P558108
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-LD4-3LO-40-UNV-82-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

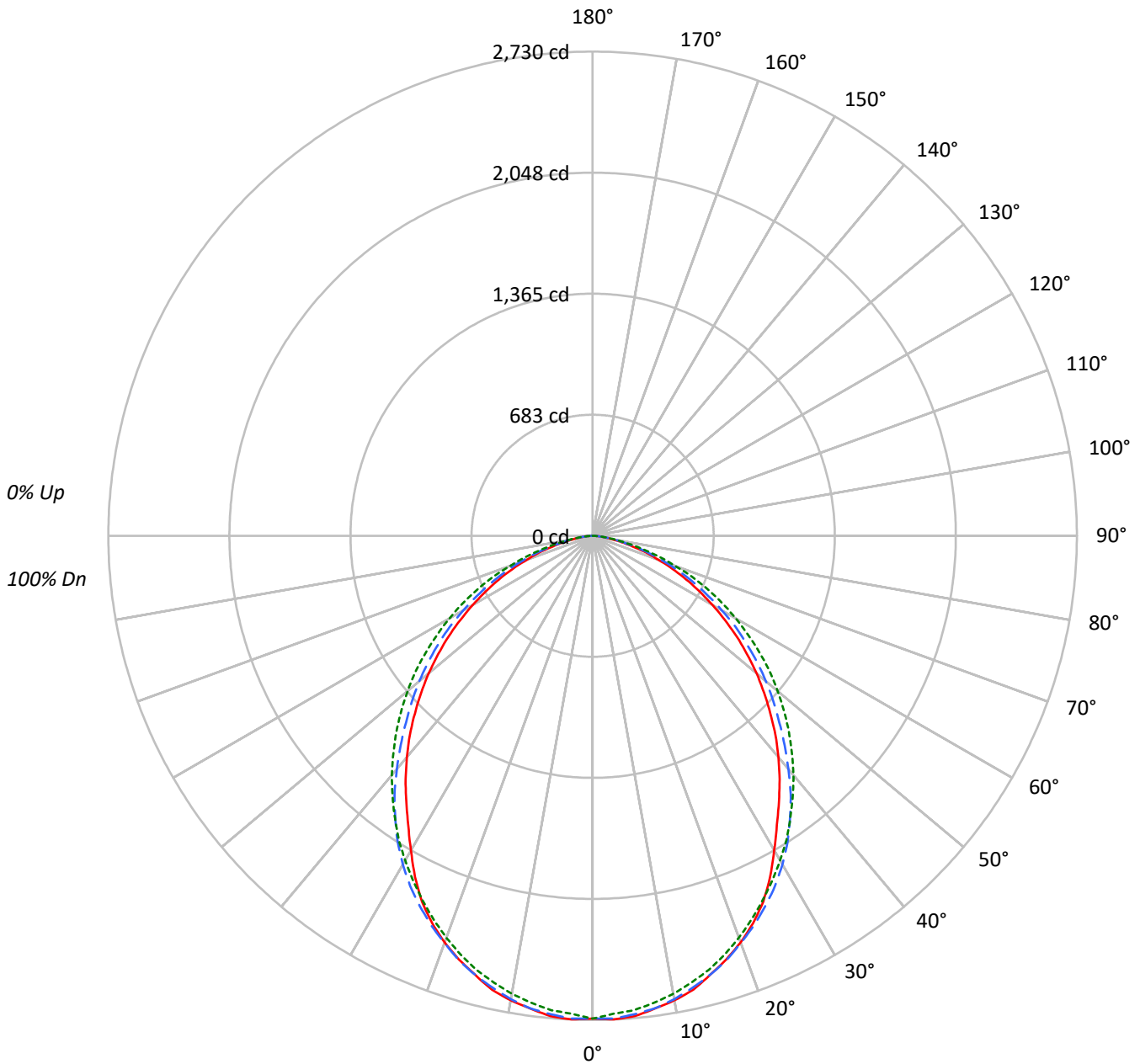
Lumens per Lamp: N/A
Luminaire Lumens: 6295.0 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7326	7326	7326
5°	7346	7314	7252
10°	7268	7248	7165
15°	7139	7139	7057
20°	6987	6997	6907
25°	6757	6841	6733
30°	6363	6649	6568
35°	6013	6373	6384
40°	5720	6029	6187
45°	5393	5664	5954
50°	5048	5337	5701
55°	4656	4966	5393
60°	4194	4531	5015
65°	3703	4029	4562
70°	3086	3431	3876
75°	2425	2741	3034
80°	1734	1929	2140
85°	1130	1130	1065



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.3	4.1
10°-20°	720.1	11.4
20°-30°	1052.3	16.7
30°-40°	1194.5	19.0
40°-50°	1153.1	18.3
50°-60°	951.2	15.1
60°-70°	633.4	10.1
70°-80°	283.5	4.5
80°-90°	50.7	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°	2028.7	32.2
0°-40°	3223.2	51.2
0°-60°	5327.4	84.6
0°-90°	6295.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6295.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2722	2722	2722	2722	2722	
5°	2719	2718	2708	2693	2685	257
15°	2562	2569	2562	2551	2533	722
25°	2276	2294	2304	2287	2268	1042
35°	1830	1855	1940	1951	1943	1147
45°	1417	1441	1488	1556	1565	1093
55°	992	1009	1058	1117	1149	886
65°	582	597	633	678	716	577
75°	233	246	264	276	292	255
85°	37	37	37	34	34	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2722.4	2722.4	2722.4	2722.4	2722.4
2.5°	2729.7	2730.8	2724.5	2707.8	2697.3
5°	2719.3	2718.2	2707.8	2693.1	2684.8
7.5°	2689.0	2691.0	2687.9	2667.0	2655.5
10°	2659.7	2660.7	2652.4	2635.6	2622.0
12.5°	2622.0	2621.0	2609.5	2601.1	2579.1
15°	2562.4	2568.7	2562.4	2550.9	2533.1
17.5°	2504.9	2504.9	2509.1	2489.2	2475.6
20°	2440.0	2443.2	2443.2	2427.5	2411.8
22.5°	2364.7	2374.1	2377.3	2360.6	2341.7
25°	2275.8	2293.6	2304.1	2287.3	2267.5
27.5°	2168.1	2195.3	2226.7	2214.1	2192.2
30°	2047.8	2087.6	2139.9	2129.4	2113.7
32.5°	1933.8	1973.6	2045.7	2041.6	2033.2
35°	1830.3	1855.4	1940.1	1950.6	1943.2
37.5°	1732.0	1755.0	1834.5	1858.5	1852.3
40°	1628.4	1653.5	1716.3	1759.2	1761.3
42.5°	1525.9	1550.0	1601.2	1662.9	1662.9
45°	1417.2	1441.2	1488.3	1556.3	1564.6
47.5°	1310.5	1335.6	1381.6	1449.6	1463.2
50°	1205.9	1228.9	1274.9	1340.8	1361.7
52.5°	1097.1	1122.2	1167.2	1227.9	1258.2
55°	992.5	1009.3	1058.4	1117.0	1149.4
57.5°	883.8	899.5	954.9	1005.1	1038.6
60°	779.2	799.1	841.9	893.2	931.9
62.5°	678.8	699.7	736.3	781.3	825.2
65°	581.5	597.2	632.8	677.7	716.4
67.5°	487.4	501.0	536.5	567.9	608.7
70°	392.2	410.0	436.1	466.5	492.6
72.5°	315.9	323.2	345.1	367.1	394.3
75°	233.2	245.8	263.6	276.1	291.8
77.5°	167.3	174.7	185.1	195.6	210.2
80°	111.9	115.0	124.5	126.6	138.1
82.5°	68.0	70.1	72.2	73.2	77.4
85°	36.6	36.6	36.6	34.5	34.5
87.5°	20.9	20.9	17.8	14.6	10.5
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)