

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: P557059

Luminaire Tested: **FUSL-12-4-LD4-2HI-40-UNV-81-85-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: P557059
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-LD4-2HI-40-UNV-81-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

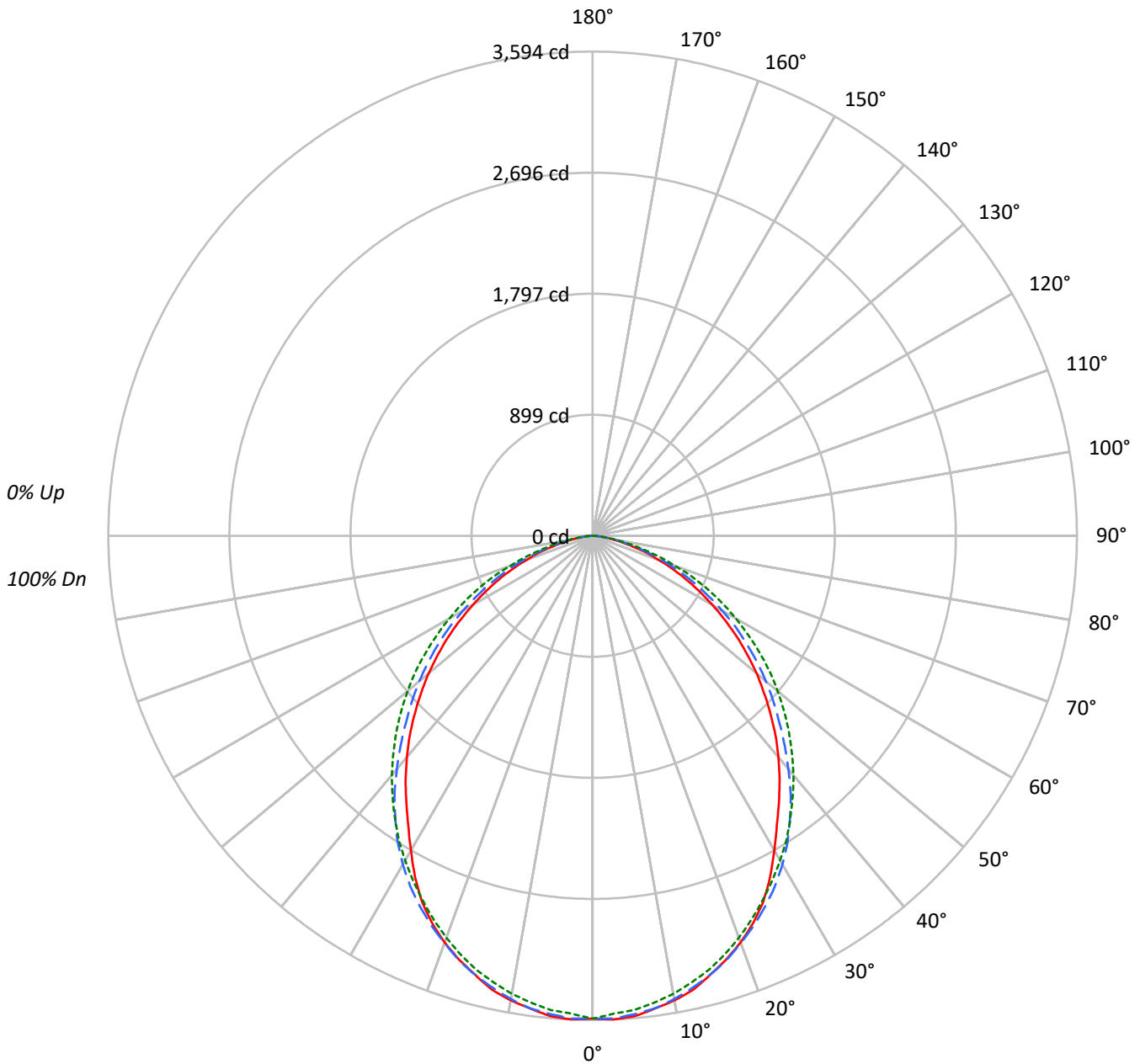
Lumens per Lamp: N/A
Luminaire Lumens: 8287.0 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
Input Voltage (V): NR
Input Current (Ain): 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°	9644	9644	9644
5°	9670	9629	9547
10°	9567	9541	9432
15°	9398	9398	9290
20°	9199	9210	9092
25°	8896	9006	8863
30°	8377	8753	8646
35°	7915	8390	8404
40°	7530	7937	8145
45°	7100	7456	7839
50°	6646	7026	7505
55°	6130	6537	7099
60°	5520	5965	6603
65°	4874	5304	6005
70°	4062	4517	5102
75°	3192	3608	3994
80°	2283	2538	2816
85°	1488	1488	1402



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	337.4	4.1
10°-20°	948.0	11.4
20°-30°	1385.3	16.7
30°-40°	1572.4	19.0
40°-50°	1517.9	18.3
50°-60°	1252.2	15.1
60°-70°	833.9	10.1
70°-80°	373.1	4.5
80°-90°	66.8	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°	2670.7	32.2
0°-40°	4243.1	51.2
0°-60°	7013.2	84.6
0°-90°	8287.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8287.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3584	3584	3584	3584	3584	
5°	3580	3578	3565	3545	3534	339
15°	3373	3382	3373	3358	3335	951
25°	2996	3019	3033	3011	2985	1372
35°	2410	2442	2554	2568	2558	1510
45°	1866	1897	1959	2049	2060	1439
55°	1307	1329	1393	1470	1513	1166
65°	766	786	833	892	943	759
75°	307	324	347	364	384	336
85°	48	48	48	45	45	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3583.9	3583.9	3583.9	3583.9	3583.9
2.5°	3593.6	3594.9	3586.7	3564.6	3550.9
5°	3579.8	3578.4	3564.6	3545.4	3534.3
7.5°	3539.9	3542.6	3538.5	3510.9	3495.8
10°	3501.3	3502.7	3491.7	3469.6	3451.7
12.5°	3451.7	3450.4	3435.2	3424.2	3395.3
15°	3373.3	3381.5	3373.3	3358.1	3334.7
17.5°	3297.5	3297.5	3303.0	3276.9	3259.0
20°	3212.2	3216.3	3216.3	3195.6	3175.0
22.5°	3113.0	3125.4	3129.6	3107.5	3082.7
25°	2996.0	3019.4	3033.2	3011.1	2985.0
27.5°	2854.2	2890.0	2931.3	2914.8	2885.9
30°	2695.9	2748.2	2817.0	2803.2	2782.6
32.5°	2545.8	2598.1	2693.1	2687.6	2676.6
35°	2409.5	2442.5	2554.0	2567.8	2558.2
37.5°	2280.0	2310.3	2415.0	2446.6	2438.4
40°	2143.7	2176.8	2259.4	2315.8	2318.6
42.5°	2008.8	2040.5	2107.9	2189.2	2189.2
45°	1865.6	1897.3	1959.2	2048.7	2059.8
47.5°	1725.2	1758.2	1818.8	1908.3	1926.2
50°	1587.5	1617.8	1678.4	1765.1	1792.6
52.5°	1444.3	1477.3	1536.6	1616.4	1656.3
55°	1306.6	1328.7	1393.4	1470.5	1513.1
57.5°	1163.4	1184.1	1257.1	1323.1	1367.2
60°	1025.7	1051.9	1108.4	1175.8	1226.8
62.5°	893.6	921.1	969.3	1028.5	1086.3
65°	765.5	786.2	833.0	892.2	943.1
67.5°	641.6	659.5	706.3	747.6	801.3
70°	516.3	539.7	574.1	614.1	648.5
72.5°	415.8	425.4	454.4	483.3	519.1
75°	307.0	323.6	347.0	363.5	384.1
77.5°	220.3	229.9	243.7	257.5	276.7
80°	147.3	151.5	163.8	166.6	181.7
82.5°	89.5	92.2	95.0	96.4	101.9
85°	48.2	48.2	48.2	45.4	45.4
87.5°	27.5	27.5	23.4	19.3	13.8
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)