

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: P556916

Luminaire Tested: **FUSL-12-4-LD4-2HI-30-UNV-80-86-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: P556916
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-30-UNV-80-86-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

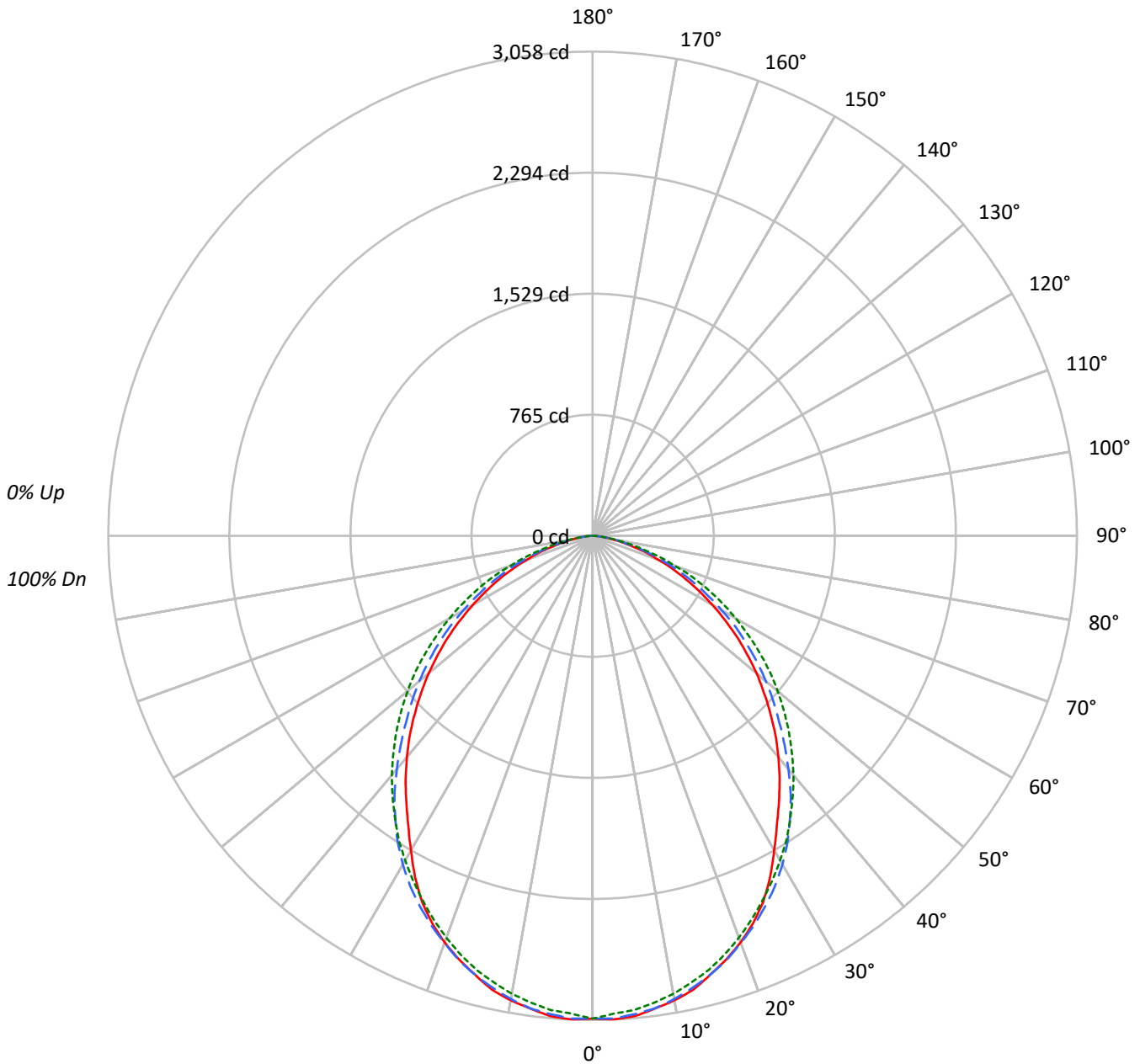
Lumens per Lamp: N/A
Luminaire Lumens: 7051.0 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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					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	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°	8206	8206	8206
5°	8228	8193	8123
10°	8140	8118	8025
15°	7996	7996	7904
20°	7827	7837	7736
25°	7569	7663	7541
30°	7127	7448	7357
35°	6735	7139	7150
40°	6407	6753	6930
45°	6041	6344	6669
50°	5655	5978	6386
55°	5216	5562	6040
60°	4697	5075	5618
65°	4147	4513	5110
70°	3456	3843	4342
75°	2716	3069	3398
80°	1942	2160	2396
85°	1266	1266	1195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.1	4.1
10°-20°	806.6	11.4
20°-30°	1178.7	16.7
30°-40°	1337.9	19.0
40°-50°	1291.5	18.3
50°-60°	1065.4	15.1
60°-70°	709.5	10.1
70°-80°	317.5	4.5
80°-90°	56.8	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°	2272.3	32.2
0°-40°	3610.2	51.2
0°-60°	5967.2	84.6
0°-90°	7051.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7051.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3049	3049	3049	3049	3049	
5°	3046	3045	3033	3017	3007	288
15°	2870	2877	2870	2857	2837	809
25°	2549	2569	2581	2562	2540	1167
35°	2050	2078	2173	2185	2177	1285
45°	1587	1614	1667	1743	1752	1225
55°	1112	1130	1186	1251	1288	992
65°	651	669	709	759	802	646
75°	261	275	295	309	327	286
85°	41	41	41	39	39	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3049.4	3049.4	3049.4	3049.4	3049.4
2.5°	3057.6	3058.7	3051.7	3033.0	3021.3
5°	3045.9	3044.7	3033.0	3016.6	3007.2
7.5°	3011.9	3014.2	3010.7	2987.3	2974.4
10°	2979.1	2980.3	2970.9	2952.1	2936.9
12.5°	2936.9	2935.7	2922.9	2913.5	2888.9
15°	2870.1	2877.2	2870.1	2857.3	2837.3
17.5°	2805.7	2805.7	2810.4	2788.1	2772.9
20°	2733.1	2736.6	2736.6	2719.0	2701.4
22.5°	2648.7	2659.3	2662.8	2644.0	2623.0
25°	2549.2	2569.1	2580.8	2562.0	2539.8
27.5°	2428.5	2458.9	2494.1	2480.0	2455.4
30°	2293.8	2338.3	2396.9	2385.1	2367.6
32.5°	2166.1	2210.6	2291.4	2286.7	2277.4
35°	2050.1	2078.2	2173.1	2184.8	2176.6
37.5°	1940.0	1965.8	2054.8	2081.7	2074.7
40°	1824.0	1852.1	1922.4	1970.4	1972.8
42.5°	1709.2	1736.1	1793.5	1862.7	1862.7
45°	1587.4	1614.3	1667.0	1743.2	1752.5
47.5°	1467.9	1496.0	1547.5	1623.7	1638.9
50°	1350.7	1376.5	1428.0	1501.8	1525.3
52.5°	1228.9	1257.0	1307.4	1375.3	1409.3
55°	1111.7	1130.5	1185.5	1251.1	1287.5
57.5°	989.9	1007.5	1069.6	1125.8	1163.3
60°	872.8	895.0	943.0	1000.4	1043.8
62.5°	760.3	783.7	824.7	875.1	924.3
65°	651.3	668.9	708.7	759.1	802.5
67.5°	545.9	561.1	601.0	636.1	681.8
70°	439.3	459.2	488.5	522.5	551.8
72.5°	353.8	362.0	386.6	411.2	441.6
75°	261.2	275.3	295.2	309.3	326.8
77.5°	187.4	195.6	207.4	219.1	235.5
80°	125.3	128.9	139.4	141.7	154.6
82.5°	76.1	78.5	80.8	82.0	86.7
85°	41.0	41.0	41.0	38.7	38.7
87.5°	23.4	23.4	19.9	16.4	11.7
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)