

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: P557017

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-82-88-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: P557017
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-35-UNV-82-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

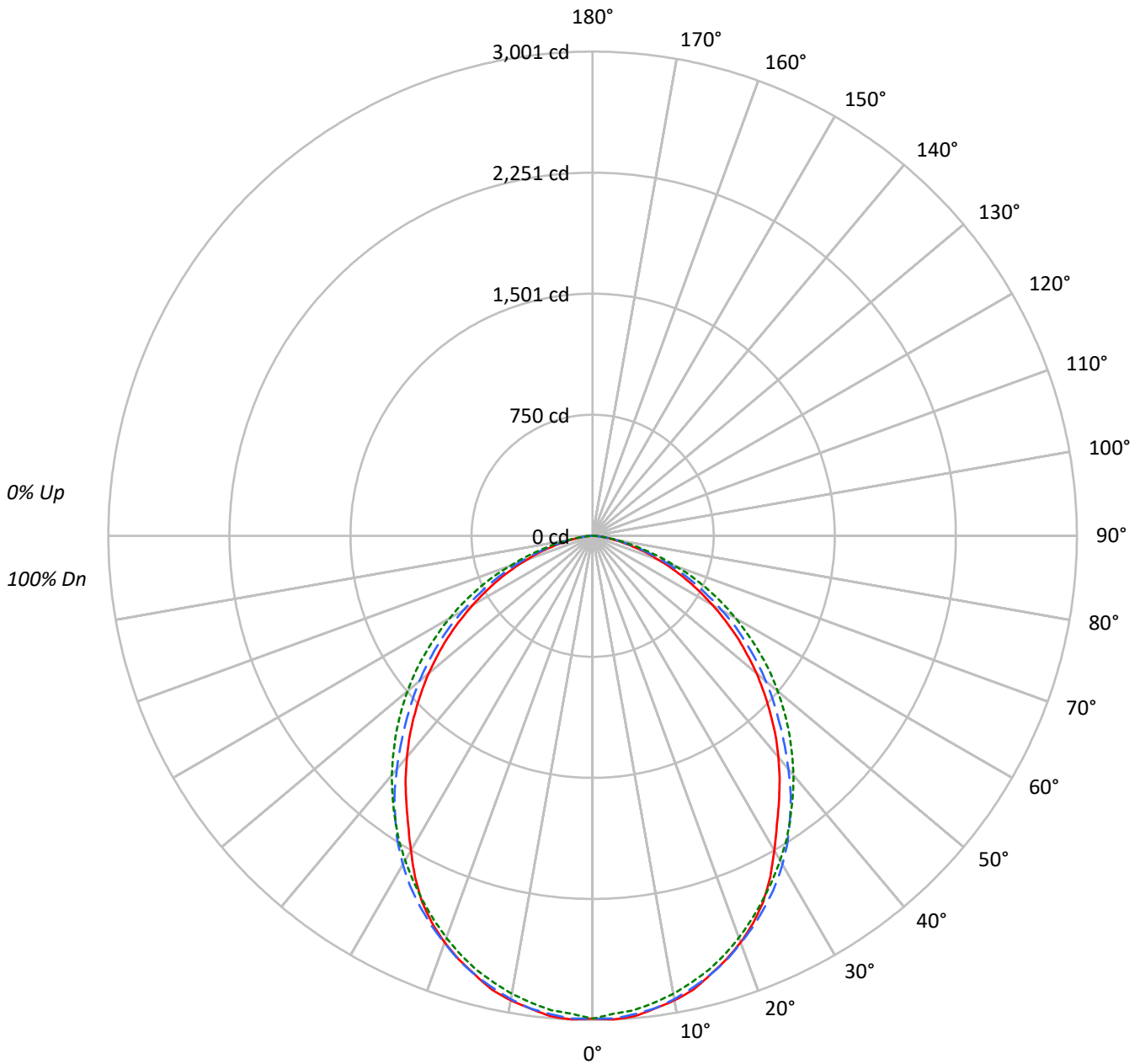
Lumens per Lamp: N/A
Luminaire Lumens: 6920.0 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8053	8053	8053
5°	8075	8041	7972
10°	7989	7967	7876
15°	7847	7847	7758
20°	7681	7691	7592
25°	7428	7520	7401
30°	6995	7309	7220
35°	6610	7006	7018
40°	6288	6628	6801
45°	5929	6226	6546
50°	5550	5867	6267
55°	5119	5459	5928
60°	4610	4981	5513
65°	4070	4429	5015
70°	3392	3772	4260
75°	2666	3012	3335
80°	1906	2120	2352
85°	1241	1241	1170



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.8	4.1
10°-20°	791.6	11.4
20°-30°	1156.8	16.7
30°-40°	1313.1	19.0
40°-50°	1267.6	18.3
50°-60°	1045.6	15.1
60°-70°	696.3	10.1
70°-80°	311.6	4.5
80°-90°	55.7	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°	2230.1	32.2
0°-40°	3543.2	51.2
0°-60°	5856.4	84.6
0°-90°	6920.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6920.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2993	2993	2993	2993	2993	
5°	2989	2988	2977	2960	2951	283
15°	2817	2824	2817	2804	2785	794
25°	2502	2521	2533	2514	2493	1146
35°	2012	2040	2133	2144	2136	1261
45°	1558	1584	1636	1711	1720	1202
55°	1091	1110	1164	1228	1264	974
65°	639	656	696	745	788	634
75°	256	270	290	304	321	280
85°	40	40	40	38	38	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2992.7	2992.7	2992.7	2992.7	2992.7
2.5°	3000.8	3001.9	2995.0	2976.6	2965.1
5°	2989.3	2988.1	2976.6	2960.5	2951.3
7.5°	2955.9	2958.2	2954.8	2931.8	2919.1
10°	2923.7	2924.9	2915.7	2897.3	2882.3
12.5°	2882.3	2881.2	2868.6	2859.4	2835.2
15°	2816.8	2823.7	2816.8	2804.2	2784.6
17.5°	2753.6	2753.6	2758.2	2736.3	2721.4
20°	2682.3	2685.7	2685.7	2668.5	2651.3
22.5°	2599.5	2609.9	2613.3	2594.9	2574.2
25°	2501.8	2521.3	2532.8	2514.4	2492.6
27.5°	2383.4	2413.3	2447.8	2434.0	2409.8
30°	2251.2	2294.8	2352.3	2340.8	2323.6
32.5°	2125.8	2169.5	2248.9	2244.3	2235.1
35°	2012.0	2039.6	2132.7	2144.2	2136.2
37.5°	1903.9	1929.2	2016.6	2043.1	2036.2
40°	1790.1	1817.7	1886.7	1933.8	1936.1
42.5°	1677.4	1703.9	1760.2	1828.1	1828.1
45°	1557.9	1584.3	1636.1	1710.8	1720.0
47.5°	1440.6	1468.2	1518.8	1593.5	1608.5
50°	1325.6	1350.9	1401.5	1473.9	1496.9
52.5°	1206.1	1233.6	1283.1	1349.8	1383.1
55°	1091.1	1109.5	1163.5	1227.9	1263.5
57.5°	971.5	988.8	1049.7	1104.9	1141.7
60°	856.5	878.4	925.5	981.9	1024.4
62.5°	746.2	769.2	809.4	858.8	907.1
65°	639.2	656.5	695.6	745.0	787.6
67.5°	535.8	550.7	589.8	624.3	669.1
70°	431.1	450.7	479.4	512.8	541.5
72.5°	347.2	355.3	379.4	403.6	433.4
75°	256.4	270.2	289.7	303.5	320.8
77.5°	184.0	192.0	203.5	215.0	231.1
80°	123.0	126.5	136.8	139.1	151.8
82.5°	74.7	77.0	79.3	80.5	85.1
85°	40.2	40.2	40.2	37.9	37.9
87.5°	23.0	23.0	19.5	16.1	11.5
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)