

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: P557299

Luminaire Tested: **FUSL-12-4-LD4-2LO-40-UNV-80-85-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: P557299
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-LD4-2LO-40-UNV-80-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC 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

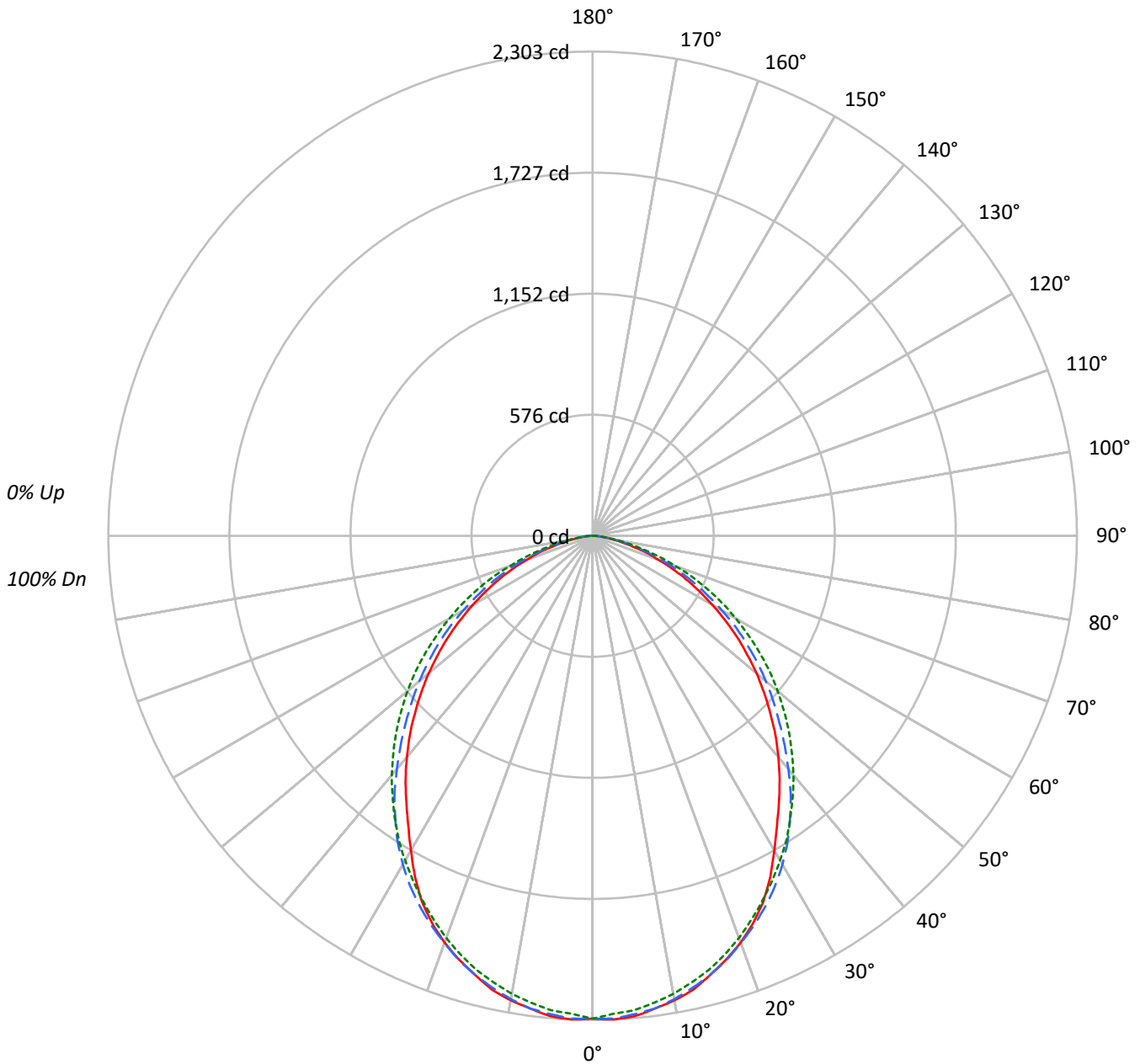
Lumens per Lamp: N/A
Luminaire Lumens: 5311.0 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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	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°	6181	6181	6181
5°	6197	6171	6119
10°	6131	6114	6045
15°	6023	6023	5954
20°	5895	5903	5827
25°	5701	5772	5680
30°	5368	5610	5541
35°	5073	5377	5386
40°	4826	5087	5220
45°	4550	4778	5024
50°	4259	4503	4810
55°	3929	4190	4550
60°	3538	3823	4231
65°	3124	3399	3848
70°	2603	2895	3270
75°	2046	2312	2560
80°	1463	1627	1805
85°	954	954	898



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.3	4.1
10°-20°	607.5	11.4
20°-30°	887.8	16.7
30°-40°	1007.8	19.0
40°-50°	972.8	18.3
50°-60°	802.5	15.1
60°-70°	534.4	10.1
70°-80°	239.2	4.5
80°-90°	42.8	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°	1711.6	32.2
0°-40°	2719.3	51.2
0°-60°	4494.7	84.6
0°-90°	5311.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5311.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2297	2297	2297	2297	2297	
5°	2294	2293	2284	2272	2265	217
15°	2162	2167	2162	2152	2137	609
25°	1920	1935	1944	1930	1913	879
35°	1544	1565	1637	1646	1640	968
45°	1196	1216	1256	1313	1320	922
55°	837	852	893	942	970	747
65°	491	504	534	572	604	486
75°	197	207	222	233	246	215
85°	31	31	31	29	29	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2296.9	2296.9	2296.9	2296.9	2296.9
2.5°	2303.0	2303.9	2298.6	2284.5	2275.7
5°	2294.2	2293.3	2284.5	2272.2	2265.1
7.5°	2268.6	2270.4	2267.8	2250.1	2240.4
10°	2243.9	2244.8	2237.7	2223.6	2212.2
12.5°	2212.2	2211.3	2201.6	2194.5	2176.0
15°	2161.9	2167.2	2161.9	2152.2	2137.2
17.5°	2113.3	2113.3	2116.9	2100.1	2088.6
20°	2058.6	2061.3	2061.3	2048.0	2034.8
22.5°	1995.1	2003.0	2005.7	1991.6	1975.7
25°	1920.1	1935.1	1943.9	1929.8	1913.0
27.5°	1829.2	1852.1	1878.6	1868.0	1849.5
30°	1727.7	1761.3	1805.4	1796.6	1783.3
32.5°	1631.5	1665.1	1726.0	1722.4	1715.4
35°	1544.2	1565.4	1636.8	1645.7	1639.5
37.5°	1461.2	1480.7	1547.7	1568.0	1562.7
40°	1373.9	1395.1	1448.0	1484.2	1486.0
42.5°	1287.4	1307.7	1350.9	1403.0	1403.0
45°	1195.6	1215.9	1255.6	1313.0	1320.1
47.5°	1105.6	1126.8	1165.6	1223.0	1234.5
50°	1017.4	1036.8	1075.6	1131.2	1148.9
52.5°	925.6	946.8	984.8	1035.9	1061.5
55°	837.4	851.5	893.0	942.4	969.8
57.5°	745.6	758.9	805.6	848.0	876.2
60°	657.4	674.1	710.3	753.6	786.2
62.5°	572.7	590.3	621.2	659.1	696.2
65°	490.6	503.8	533.8	571.8	604.4
67.5°	411.2	422.7	452.7	479.1	513.6
70°	330.9	345.9	368.0	393.5	415.6
72.5°	266.5	272.7	291.2	309.7	332.7
75°	196.8	207.4	222.4	233.0	246.2
77.5°	141.2	147.4	156.2	165.0	177.4
80°	94.4	97.1	105.0	106.8	116.5
82.5°	57.4	59.1	60.9	61.8	65.3
85°	30.9	30.9	30.9	29.1	29.1
87.5°	17.6	17.6	15.0	12.4	8.8
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)