

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: P557522

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-82-85-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: P557522
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-LD4-2STD-35-UNV-82-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

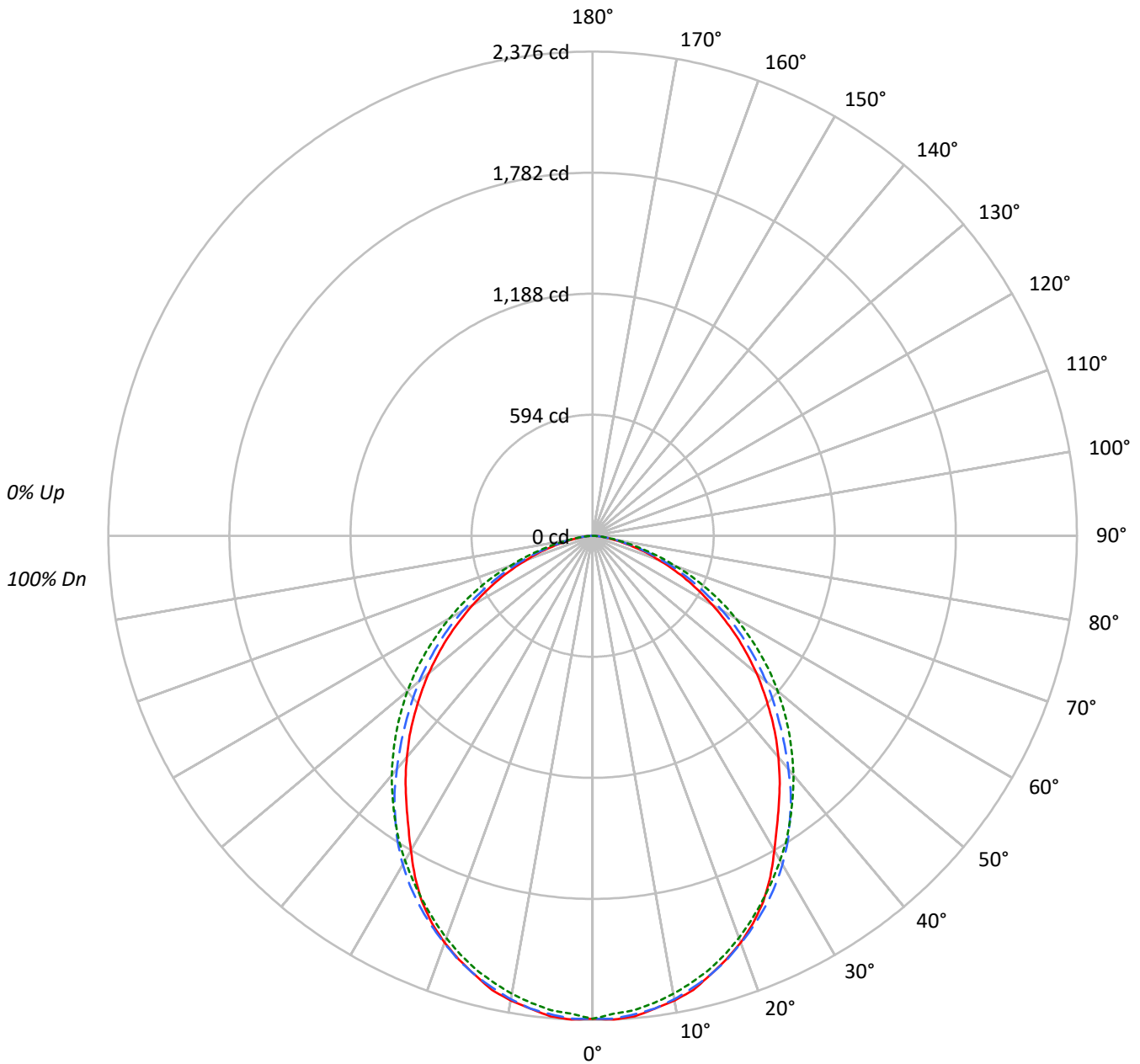
Lumens per Lamp: N/A
Luminaire Lumens: 5480.0 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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									
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°	6378	6378	6378
5°	6394	6367	6313
10°	6327	6309	6237
15°	6215	6215	6143
20°	6083	6091	6012
25°	5883	5956	5861
30°	5539	5788	5718
35°	5234	5548	5557
40°	4980	5249	5386
45°	4695	4931	5184
50°	4395	4647	4963
55°	4054	4323	4694
60°	3651	3944	4366
65°	3223	3507	3971
70°	2686	2987	3374
75°	2111	2385	2641
80°	1509	1678	1863
85°	985	985	926



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.1	4.1
10°-20°	626.9	11.4
20°-30°	916.1	16.7
30°-40°	1039.8	19.0
40°-50°	1003.8	18.3
50°-60°	828.0	15.1
60°-70°	551.4	10.1
70°-80°	246.8	4.5
80°-90°	44.1	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°	1766.0	32.2
0°-40°	2805.9	51.2
0°-60°	4637.7	84.6
0°-90°	5480.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5480.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2370	2370	2370	2370	2370	
5°	2367	2366	2357	2344	2337	224
15°	2231	2236	2231	2221	2205	629
25°	1981	1997	2006	1991	1974	907
35°	1593	1615	1689	1698	1692	998
45°	1234	1255	1296	1355	1362	952
55°	864	879	921	972	1001	771
65°	506	520	551	590	624	502
75°	203	214	229	240	254	222
85°	32	32	32	30	30	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2370.0	2370.0	2370.0	2370.0	2370.0
2.5°	2376.3	2377.2	2371.8	2357.2	2348.1
5°	2367.2	2366.3	2357.2	2344.5	2337.2
7.5°	2340.8	2342.6	2339.9	2321.7	2311.7
10°	2315.3	2316.2	2309.0	2294.4	2282.6
12.5°	2282.6	2281.6	2271.6	2264.3	2245.2
15°	2230.7	2236.1	2230.7	2220.6	2205.2
17.5°	2180.6	2180.6	2184.2	2166.9	2155.1
20°	2124.1	2126.9	2126.9	2113.2	2099.5
22.5°	2058.6	2066.8	2069.5	2054.9	2038.5
25°	1981.2	1996.7	2005.8	1991.2	1973.9
27.5°	1887.4	1911.1	1938.4	1927.5	1908.3
30°	1782.7	1817.3	1862.8	1853.7	1840.1
32.5°	1683.5	1718.1	1780.9	1777.2	1770.0
35°	1593.3	1615.2	1688.9	1698.0	1691.7
37.5°	1507.7	1527.8	1597.0	1617.9	1612.4
40°	1417.6	1439.5	1494.1	1531.4	1533.2
42.5°	1328.4	1349.3	1393.9	1447.7	1447.7
45°	1233.7	1254.6	1295.6	1354.8	1362.1
47.5°	1140.8	1162.7	1202.7	1261.9	1273.8
50°	1049.8	1069.8	1109.9	1167.2	1185.4
52.5°	955.1	976.9	1016.1	1068.9	1095.3
55°	864.0	878.6	921.4	972.4	1000.6
57.5°	769.3	783.0	831.3	875.0	904.1
60°	678.3	695.6	732.9	777.5	811.2
62.5°	590.9	609.1	641.0	680.1	718.4
65°	506.2	519.9	550.8	590.0	623.7
67.5°	424.3	436.1	467.1	494.4	529.9
70°	341.4	356.9	379.7	406.1	428.8
72.5°	275.0	281.3	300.5	319.6	343.2
75°	203.0	214.0	229.4	240.4	254.0
77.5°	145.7	152.0	161.2	170.3	183.0
80°	97.4	100.2	108.3	110.2	120.2
82.5°	59.2	61.0	62.8	63.7	67.4
85°	31.9	31.9	31.9	30.0	30.0
87.5°	18.2	18.2	15.5	12.7	9.1
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)