

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: P556241

Luminaire Tested: **FUSL-12-4-LD4-1HI-35-UNV-82-84-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: P556241
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-LD4-1HI-35-UNV-82-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

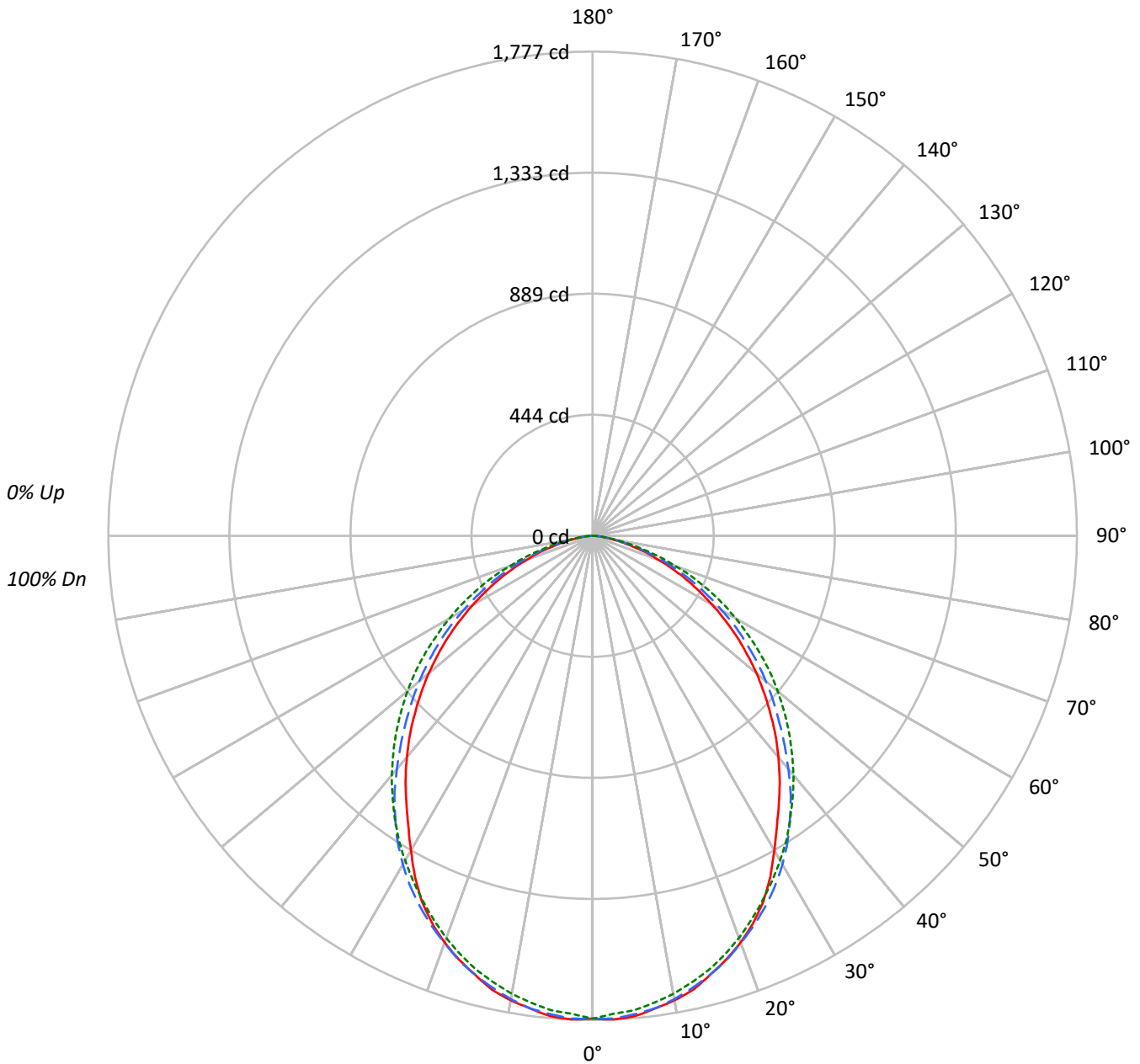
Lumens per Lamp: N/A
Luminaire Lumens: 4098.0 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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

TEST NUMBER: P556241

CATALOG NUMBER: FUSL-12-4-LD4-1HI-35-UNV-82-84-EDD

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°	4769	4769	4769
5°	4782	4762	4721
10°	4731	4718	4664
15°	4647	4647	4594
20°	4549	4555	4496
25°	4399	4453	4383
30°	4142	4328	4276
35°	3914	4149	4156
40°	3724	3925	4028
45°	3511	3687	3876
50°	3286	3475	3711
55°	3031	3232	3511
60°	2730	2950	3265
65°	2411	2623	2970
70°	2009	2234	2523
75°	1578	1784	1975
80°	1130	1255	1393
85°	735	735	695



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.9	4.1
10°-20°	468.8	11.4
20°-30°	685.0	16.7
30°-40°	777.6	19.0
40°-50°	750.6	18.3
50°-60°	619.2	15.1
60°-70°	412.4	10.1
70°-80°	184.5	4.5
80°-90°	33.0	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°	1320.7	32.2
0°-40°	2098.2	51.2
0°-60°	3468.1	84.6
0°-90°	4098.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4098.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1772	1772	1772	1772	1772	
5°	1770	1770	1763	1753	1748	168
15°	1668	1672	1668	1661	1649	470
25°	1482	1493	1500	1489	1476	678
35°	1192	1208	1263	1270	1265	747
45°	923	938	969	1013	1019	712
55°	646	657	689	727	748	577
65°	379	389	412	441	466	375
75°	152	160	172	180	190	166
85°	24	24	24	22	22	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1772.3	1772.3	1772.3	1772.3	1772.3
2.5°	1777.0	1777.7	1773.6	1762.7	1755.9
5°	1770.2	1769.6	1762.7	1753.2	1747.8
7.5°	1750.5	1751.9	1749.8	1736.2	1728.7
10°	1731.4	1732.1	1726.7	1715.8	1706.9
12.5°	1706.9	1706.2	1698.7	1693.3	1679.0
15°	1668.1	1672.2	1668.1	1660.6	1649.0
17.5°	1630.7	1630.7	1633.4	1620.4	1611.6
20°	1588.4	1590.5	1590.5	1580.3	1570.1
22.5°	1539.4	1545.6	1547.6	1536.7	1524.4
25°	1481.6	1493.1	1499.9	1489.0	1476.1
27.5°	1411.4	1429.1	1449.6	1441.4	1427.1
30°	1333.1	1359.0	1393.0	1386.2	1376.0
32.5°	1258.9	1284.8	1331.8	1329.0	1323.6
35°	1191.5	1207.8	1263.0	1269.8	1265.0
37.5°	1127.5	1142.5	1194.2	1209.9	1205.8
40°	1060.1	1076.4	1117.3	1145.2	1146.6
42.5°	993.4	1009.0	1042.4	1082.6	1082.6
45°	922.6	938.2	968.9	1013.1	1018.6
47.5°	853.1	869.5	899.4	943.7	952.5
50°	785.0	800.0	830.0	872.9	886.5
52.5°	714.2	730.6	759.8	799.3	819.1
55°	646.1	657.0	689.0	727.2	748.3
57.5°	575.3	585.5	621.6	654.3	676.1
60°	507.2	520.2	548.1	581.5	606.6
62.5°	441.9	455.5	479.3	508.6	537.2
65°	378.6	388.8	411.9	441.2	466.4
67.5°	317.3	326.1	349.3	369.7	396.3
70°	255.3	266.9	283.9	303.7	320.7
72.5°	205.6	210.4	224.7	239.0	256.7
75°	151.8	160.0	171.6	179.7	190.0
77.5°	108.9	113.7	120.5	127.3	136.9
80°	72.9	74.9	81.0	82.4	89.9
82.5°	44.3	45.6	47.0	47.7	50.4
85°	23.8	23.8	23.8	22.5	22.5
87.5°	13.6	13.6	11.6	9.5	6.8
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)