

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: P557580

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-81-96-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: P557580
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-40-UNV-81-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

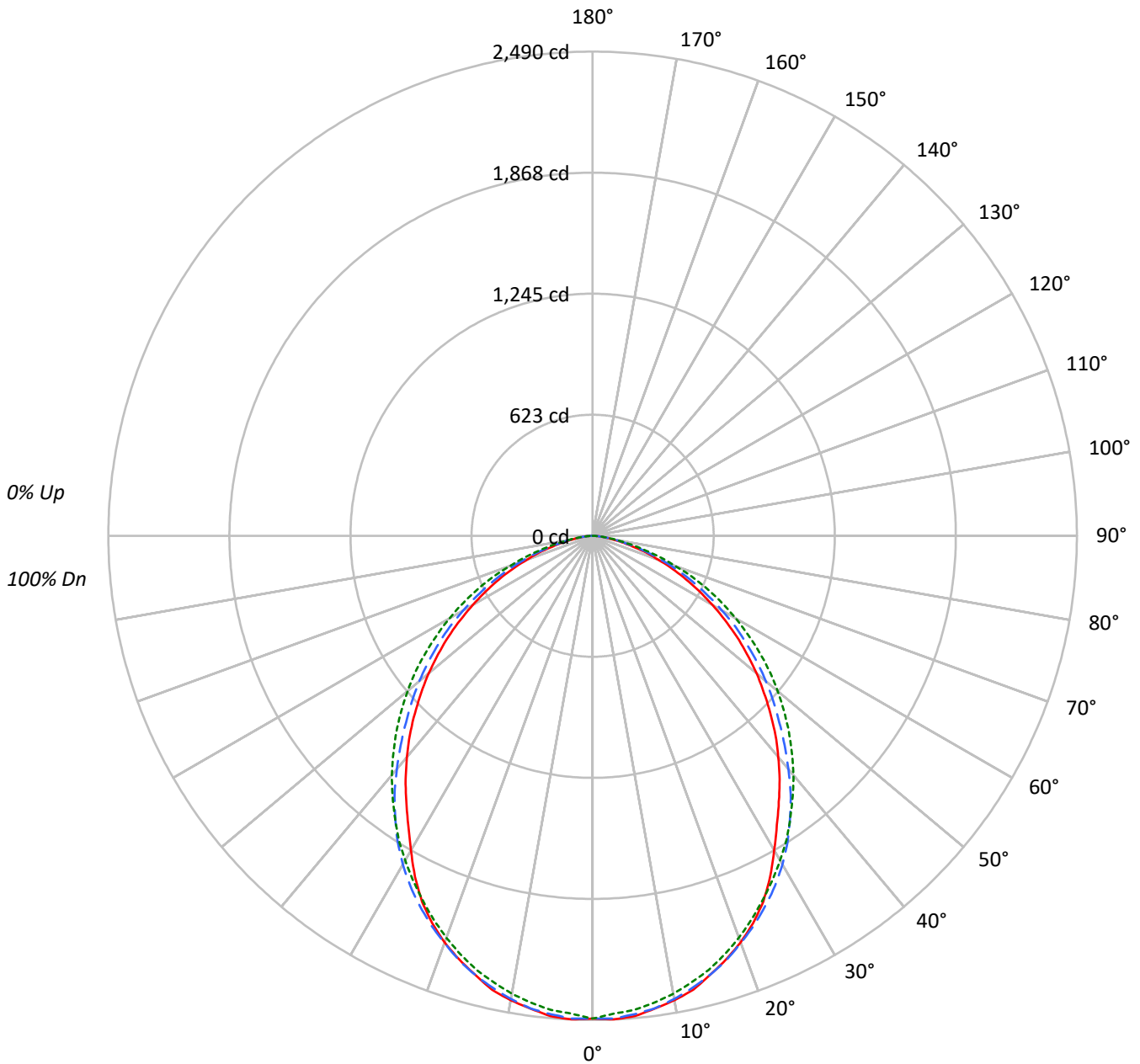
Lumens per Lamp: N/A
Luminaire Lumens: 5741.0 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (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°	6681	6681	6681
5°	6699	6671	6614
10°	6628	6610	6534
15°	6510	6510	6436
20°	6373	6381	6299
25°	6163	6239	6140
30°	5803	6064	5990
35°	5483	5813	5822
40°	5217	5498	5643
45°	4918	5165	5430
50°	4604	4868	5199
55°	4247	4529	4918
60°	3824	4132	4574
65°	3377	3675	4160
70°	2814	3129	3535
75°	2211	2499	2767
80°	1582	1759	1951
85°	1031	1031	973



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.8	4.1
10°-20°	656.7	11.4
20°-30°	959.7	16.7
30°-40°	1089.3	19.0
40°-50°	1051.6	18.3
50°-60°	867.5	15.1
60°-70°	577.7	10.1
70°-80°	258.5	4.5
80°-90°	46.3	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°	1850.2	32.2
0°-40°	2939.5	51.2
0°-60°	4858.6	84.6
0°-90°	5741.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5741.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2483	2483	2483	2483	2483	
5°	2480	2479	2470	2456	2448	235
15°	2337	2343	2337	2326	2310	659
25°	2076	2092	2101	2086	2068	950
35°	1669	1692	1769	1779	1772	1046
45°	1292	1314	1357	1419	1427	997
55°	905	920	965	1019	1048	808
65°	530	545	577	618	653	526
75°	213	224	240	252	266	233
85°	33	33	33	32	32	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2482.8	2482.8	2482.8	2482.8	2482.8
2.5°	2489.5	2490.5	2484.7	2469.5	2459.9
5°	2480.0	2479.0	2469.5	2456.1	2448.5
7.5°	2452.3	2454.2	2451.4	2432.3	2421.8
10°	2425.6	2426.6	2418.9	2403.7	2391.3
12.5°	2391.3	2390.3	2379.8	2372.2	2352.2
15°	2336.9	2342.6	2336.9	2326.4	2310.2
17.5°	2284.4	2284.4	2288.3	2270.1	2257.7
20°	2225.3	2228.2	2228.2	2213.9	2199.5
22.5°	2156.6	2165.2	2168.1	2152.8	2135.6
25°	2075.5	2091.8	2101.3	2086.0	2067.9
27.5°	1977.3	2002.1	2030.7	2019.3	1999.2
30°	1867.6	1903.9	1951.5	1942.0	1927.7
32.5°	1763.6	1799.9	1865.7	1861.9	1854.3
35°	1669.2	1692.1	1769.4	1778.9	1772.2
37.5°	1579.6	1600.5	1673.0	1695.0	1689.2
40°	1485.1	1508.0	1565.2	1604.4	1606.3
42.5°	1391.6	1413.6	1460.3	1516.6	1516.6
45°	1292.4	1314.4	1357.3	1419.3	1426.9
47.5°	1195.2	1218.0	1260.0	1322.0	1334.4
50°	1099.8	1120.8	1162.7	1222.8	1241.9
52.5°	1000.6	1023.5	1064.5	1119.8	1147.5
55°	905.2	920.5	965.3	1018.7	1048.3
57.5°	806.0	820.3	870.9	916.6	947.2
60°	710.6	728.7	767.8	814.6	849.9
62.5°	619.0	638.1	671.5	712.5	752.6
65°	530.3	544.6	577.1	618.1	653.4
67.5°	444.5	456.9	489.3	517.9	555.1
70°	357.7	373.9	397.7	425.4	449.3
72.5°	288.1	294.7	314.8	334.8	359.6
75°	212.7	224.2	240.4	251.8	266.1
77.5°	152.6	159.3	168.8	178.4	191.7
80°	102.1	104.9	113.5	115.4	125.9
82.5°	62.0	63.9	65.8	66.8	70.6
85°	33.4	33.4	33.4	31.5	31.5
87.5°	19.1	19.1	16.2	13.4	9.5
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)