

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: P556498

Luminaire Tested: **FUSL-12-4-LD4-1LO-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: P556498
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-LD4-1LO-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

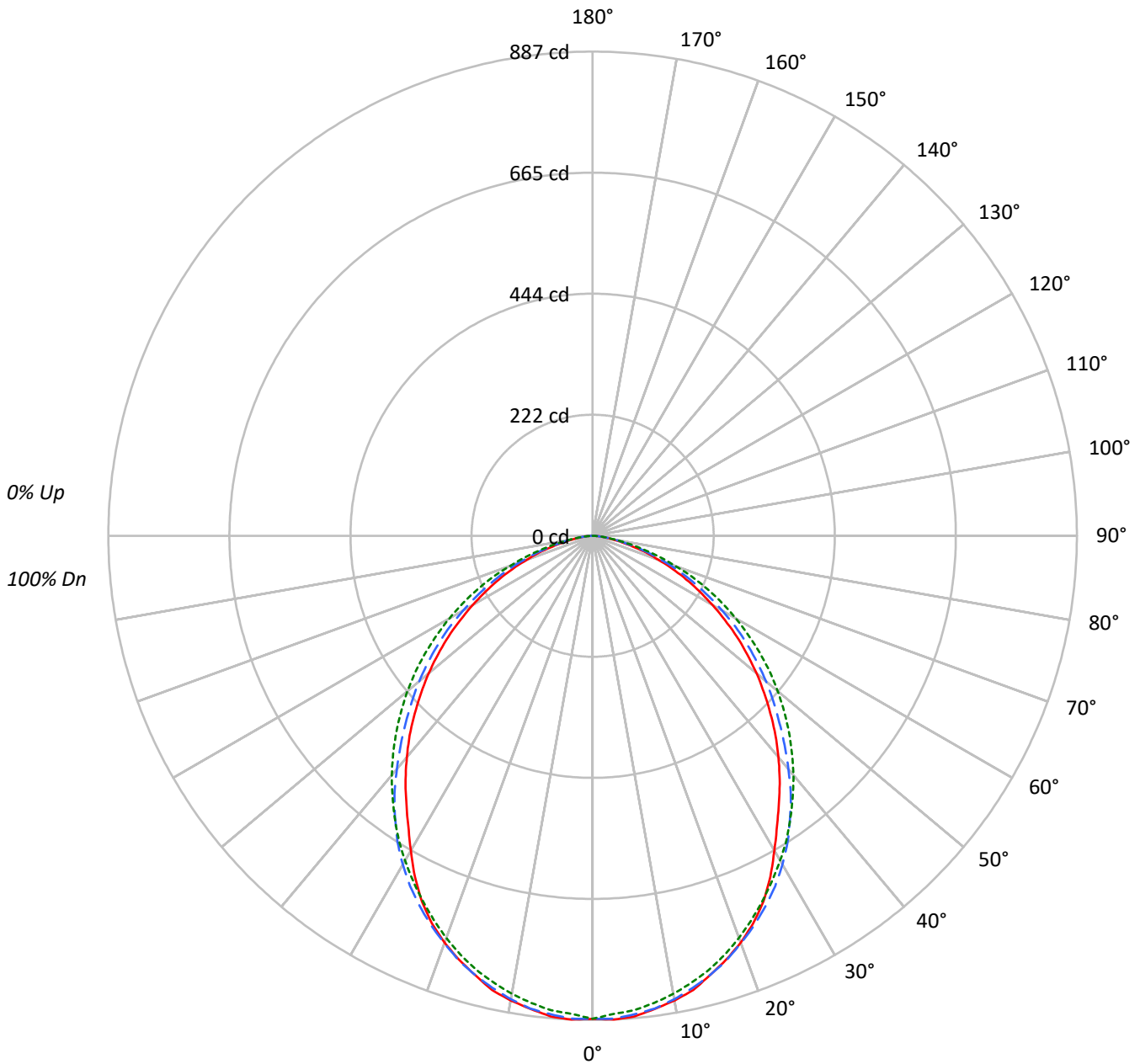
Lumens per Lamp: N/A
Luminaire Lumens: 2046.0 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	2381	2381	2381
5°	2387	2377	2357
10°	2362	2356	2329
15°	2320	2320	2294
20°	2271	2274	2245
25°	2196	2224	2188
30°	2068	2161	2135
35°	1954	2072	2075
40°	1859	1959	2011
45°	1753	1841	1935
50°	1641	1735	1853
55°	1514	1614	1753
60°	1363	1473	1630
65°	1203	1310	1483
70°	1003	1116	1260
75°	788	891	986
80°	564	628	696
85°	367	367	346



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.3	4.1
10°-20°	234.0	11.4
20°-30°	342.0	16.7
30°-40°	388.2	19.0
40°-50°	374.8	18.3
50°-60°	309.2	15.1
60°-70°	205.9	10.1
70°-80°	92.1	4.5
80°-90°	16.5	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°	659.4	32.2
0°-40°	1047.6	51.2
0°-60°	1731.5	84.6
0°-90°	2046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2046.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	885	885	885	885	885	
5°	884	884	880	875	873	84
15°	833	835	833	829	823	235
25°	740	746	749	743	737	339
35°	595	603	631	634	632	373
45°	461	468	484	506	508	355
55°	323	328	344	363	374	288
65°	189	194	206	220	233	187
75°	76	80	86	90	95	83
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	884.8	884.8	884.8	884.8	884.8
2.5°	887.2	887.6	885.5	880.1	876.7
5°	883.8	883.5	880.1	875.3	872.6
7.5°	874.0	874.6	873.6	866.8	863.1
10°	864.4	864.8	862.1	856.6	852.2
12.5°	852.2	851.9	848.1	845.4	838.3
15°	832.8	834.9	832.8	829.1	823.3
17.5°	814.1	814.1	815.5	809.0	804.6
20°	793.1	794.1	794.1	789.0	783.9
22.5°	768.6	771.6	772.7	767.2	761.1
25°	739.7	745.5	748.9	743.4	737.0
27.5°	704.7	713.5	723.7	719.6	712.5
30°	665.6	678.5	695.5	692.1	687.0
32.5°	628.5	641.5	664.9	663.5	660.8
35°	594.9	603.0	630.6	634.0	631.6
37.5°	562.9	570.4	596.2	604.1	602.0
40°	529.3	537.4	557.8	571.8	572.4
42.5°	496.0	503.8	520.4	540.5	540.5
45°	460.6	468.4	483.7	505.8	508.5
47.5°	425.9	434.1	449.0	471.1	475.6
50°	391.9	399.4	414.4	435.8	442.6
52.5°	356.6	364.7	379.4	399.1	408.9
55°	322.6	328.0	344.0	363.0	373.6
57.5°	287.2	292.3	310.4	326.7	337.6
60°	253.2	259.7	273.6	290.3	302.9
62.5°	220.6	227.4	239.3	253.9	268.2
65°	189.0	194.1	205.7	220.3	232.9
67.5°	158.4	162.8	174.4	184.6	197.8
70°	127.5	133.3	141.8	151.6	160.1
72.5°	102.7	105.0	112.2	119.3	128.2
75°	75.8	79.9	85.7	89.7	94.8
77.5°	54.4	56.8	60.2	63.6	68.3
80°	36.4	37.4	40.5	41.1	44.9
82.5°	22.1	22.8	23.5	23.8	25.2
85°	11.9	11.9	11.9	11.2	11.2
87.5°	6.8	6.8	5.8	4.8	3.4
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)