

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: P556754

Luminaire Tested: **FUSL-12-4-LD4-1STD-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: P556754
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-LD4-1STD-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

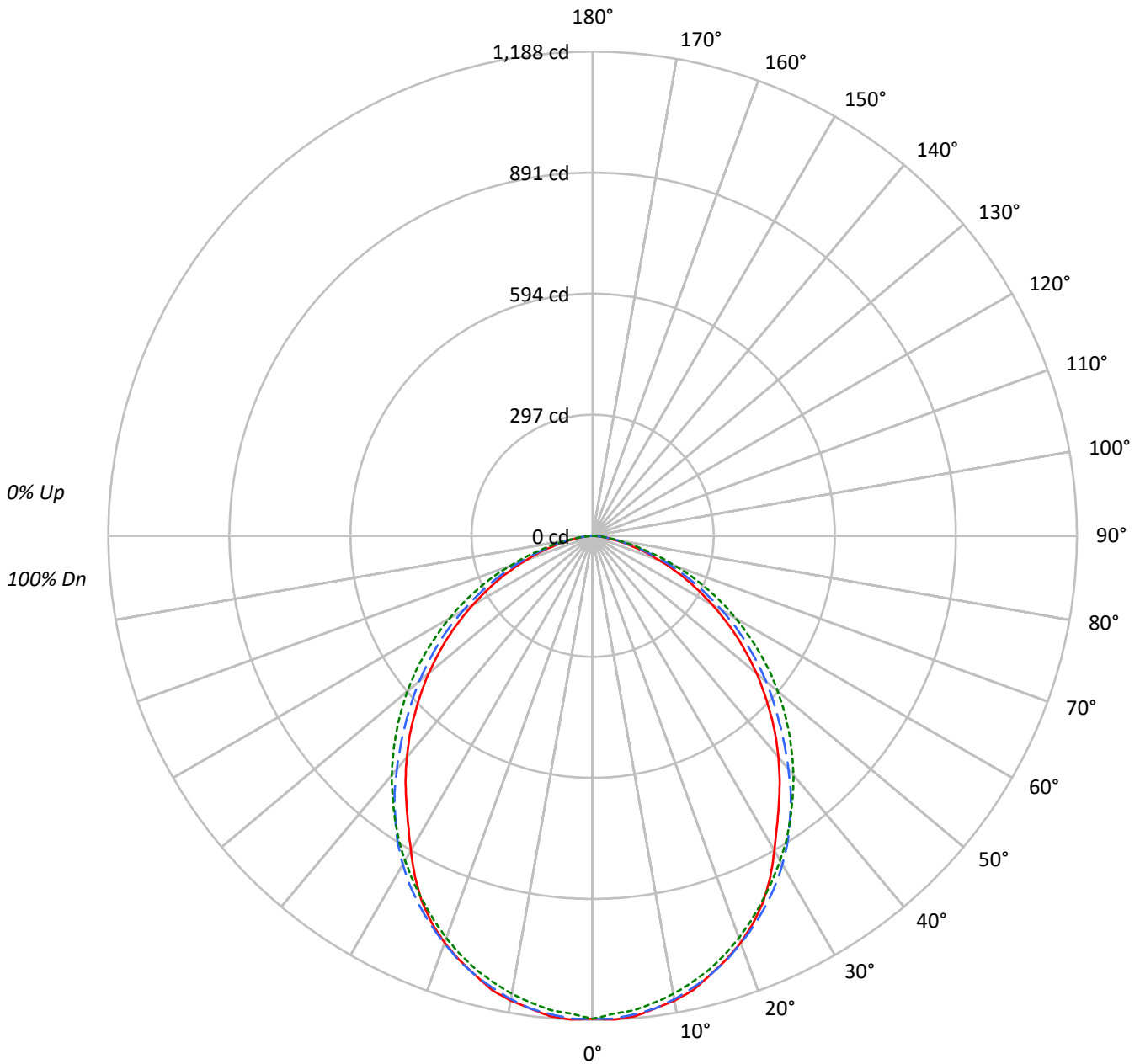
Lumens per Lamp: N/A
Luminaire Lumens: 2740.0 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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°	3189	3189	3189
5°	3197	3184	3157
10°	3163	3155	3119
15°	3107	3107	3072
20°	3042	3045	3006
25°	2941	2978	2931
30°	2770	2894	2859
35°	2617	2774	2779
40°	2490	2624	2693
45°	2347	2465	2592
50°	2197	2323	2481
55°	2027	2161	2347
60°	1826	1972	2183
65°	1612	1754	1985
70°	1343	1493	1687
75°	1055	1193	1320
80°	755	840	931
85°	491	491	463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.6	4.1
10°-20°	313.4	11.4
20°-30°	458.0	16.7
30°-40°	519.9	19.0
40°-50°	501.9	18.3
50°-60°	414.0	15.1
60°-70°	275.7	10.1
70°-80°	123.4	4.5
80°-90°	22.1	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°	883.0	32.2
0°-40°	1402.9	51.2
0°-60°	2318.8	84.6
0°-90°	2740.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2740.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1185	1185	1185	1185	1185	
5°	1184	1183	1179	1172	1169	112
15°	1115	1118	1115	1110	1103	314
25°	991	998	1003	996	987	454
35°	797	808	844	849	846	499
45°	617	627	648	677	681	476
55°	432	439	461	486	500	386
65°	253	260	275	295	312	251
75°	102	107	115	120	127	111
85°	16	16	16	15	15	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1185.0	1185.0	1185.0	1185.0	1185.0
2.5°	1188.2	1188.6	1185.9	1178.6	1174.1
5°	1183.6	1183.2	1178.6	1172.2	1168.6
7.5°	1170.4	1171.3	1170.0	1160.9	1155.8
10°	1157.7	1158.1	1154.5	1147.2	1141.3
12.5°	1141.3	1140.8	1135.8	1132.2	1122.6
15°	1115.3	1118.1	1115.3	1110.3	1102.6
17.5°	1090.3	1090.3	1092.1	1083.5	1077.5
20°	1062.1	1063.4	1063.4	1056.6	1049.8
22.5°	1029.3	1033.4	1034.8	1027.5	1019.3
25°	990.6	998.3	1002.9	995.6	987.0
27.5°	943.7	955.5	969.2	963.7	954.2
30°	891.4	908.7	931.4	926.9	920.0
32.5°	841.7	859.0	890.4	888.6	885.0
35°	796.7	807.6	844.5	849.0	845.8
37.5°	753.9	763.9	798.5	809.0	806.2
40°	708.8	719.7	747.0	765.7	766.6
42.5°	664.2	674.7	697.0	723.8	723.8
45°	616.8	627.3	647.8	677.4	681.0
47.5°	570.4	581.3	601.4	631.0	636.9
50°	524.9	534.9	554.9	583.6	592.7
52.5°	477.5	488.5	508.0	534.4	547.6
55°	432.0	439.3	460.7	486.2	500.3
57.5°	384.7	391.5	415.6	437.5	452.0
60°	339.2	347.8	366.5	388.8	405.6
62.5°	295.4	304.6	320.5	340.1	359.2
65°	253.1	259.9	275.4	295.0	311.8
67.5°	212.1	218.1	233.5	247.2	264.9
70°	170.7	178.5	189.8	203.0	214.4
72.5°	137.5	140.7	150.2	159.8	171.6
75°	101.5	107.0	114.7	120.2	127.0
77.5°	72.8	76.0	80.6	85.1	91.5
80°	48.7	50.1	54.2	55.1	60.1
82.5°	29.6	30.5	31.4	31.9	33.7
85°	15.9	15.9	15.9	15.0	15.0
87.5°	9.1	9.1	7.7	6.4	4.6
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)