

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: P557523

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-82-85-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: P557523
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
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

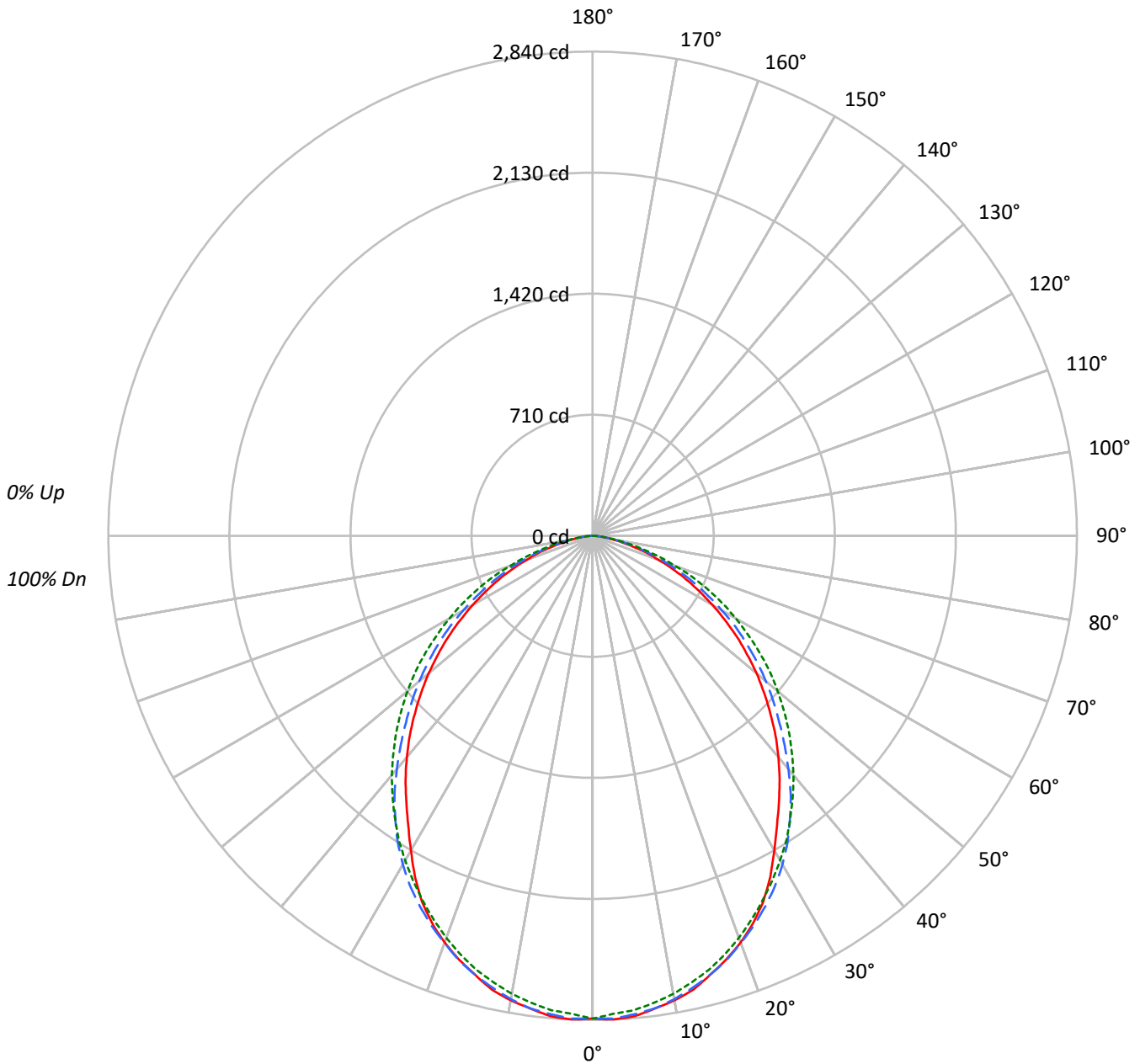
Lumens per Lamp: N/A
Luminaire Lumens: 6549.0 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	7622	7622	7622
5°	7642	7609	7545
10°	7561	7540	7454
15°	7427	7427	7342
20°	7269	7279	7185
25°	7030	7117	7004
30°	6620	6917	6833
35°	6255	6631	6641
40°	5951	6272	6437
45°	5611	5892	6195
50°	5252	5553	5931
55°	4845	5166	5610
60°	4363	4714	5218
65°	3852	4192	4746
70°	3210	3570	4032
75°	2522	2851	3157
80°	1804	2007	2225
85°	1176	1176	1108



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.7	4.1
10°-20°	749.1	11.4
20°-30°	1094.7	16.7
30°-40°	1242.7	19.0
40°-50°	1199.6	18.3
50°-60°	989.6	15.1
60°-70°	659.0	10.1
70°-80°	294.9	4.5
80°-90°	52.8	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°	2110.6	32.2
0°-40°	3353.2	51.2
0°-60°	5542.4	84.6
0°-90°	6549.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6549.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2832	2832	2832	2832	2832	
5°	2829	2828	2817	2802	2793	268
15°	2666	2672	2666	2654	2635	752
25°	2368	2386	2397	2380	2359	1084
35°	1904	1930	2018	2029	2022	1193
45°	1474	1499	1548	1619	1628	1138
55°	1033	1050	1101	1162	1196	922
65°	605	621	658	705	745	600
75°	243	256	274	287	304	265
85°	38	38	38	36	36	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2832.3	2832.3	2832.3	2832.3	2832.3
2.5°	2839.9	2841.0	2834.4	2817.0	2806.2
5°	2829.0	2827.9	2817.0	2801.8	2793.1
7.5°	2797.5	2799.6	2796.4	2774.6	2762.6
10°	2767.0	2768.1	2759.4	2742.0	2727.8
12.5°	2727.8	2726.7	2714.8	2706.1	2683.2
15°	2665.8	2672.3	2665.8	2653.8	2635.3
17.5°	2606.0	2606.0	2610.3	2589.6	2575.5
20°	2538.5	2541.8	2541.8	2525.4	2509.1
22.5°	2460.1	2469.9	2473.2	2455.8	2436.2
25°	2367.7	2386.2	2397.0	2379.6	2359.0
27.5°	2255.6	2283.9	2316.5	2303.5	2280.6
30°	2130.5	2171.8	2226.2	2215.3	2199.0
32.5°	2011.9	2053.2	2128.3	2123.9	2115.2
35°	1904.1	1930.3	2018.4	2029.3	2021.7
37.5°	1801.9	1825.8	1908.5	1933.5	1927.0
40°	1694.1	1720.3	1785.5	1830.2	1832.3
42.5°	1587.5	1612.5	1665.9	1730.0	1730.0
45°	1474.3	1499.4	1548.3	1619.1	1627.8
47.5°	1363.4	1389.5	1437.4	1508.1	1522.2
50°	1254.6	1278.5	1326.4	1394.9	1416.7
52.5°	1141.4	1167.5	1214.3	1277.4	1309.0
55°	1032.6	1050.0	1101.1	1162.1	1195.8
57.5°	919.4	935.7	993.4	1045.6	1080.5
60°	810.6	831.3	875.9	929.2	969.5
62.5°	706.2	727.9	766.0	812.8	858.5
65°	605.0	621.3	658.3	705.1	745.3
67.5°	507.0	521.2	558.2	590.8	633.3
70°	408.0	426.5	453.7	485.3	512.5
72.5°	328.6	336.2	359.1	381.9	410.2
75°	242.6	255.7	274.2	287.3	303.6
77.5°	174.1	181.7	192.6	203.5	218.7
80°	116.4	119.7	129.5	131.7	143.6
82.5°	70.7	72.9	75.1	76.2	80.5
85°	38.1	38.1	38.1	35.9	35.9
87.5°	21.8	21.8	18.5	15.2	10.9
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)