

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: P557557

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-80-86-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: P557557
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-80-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

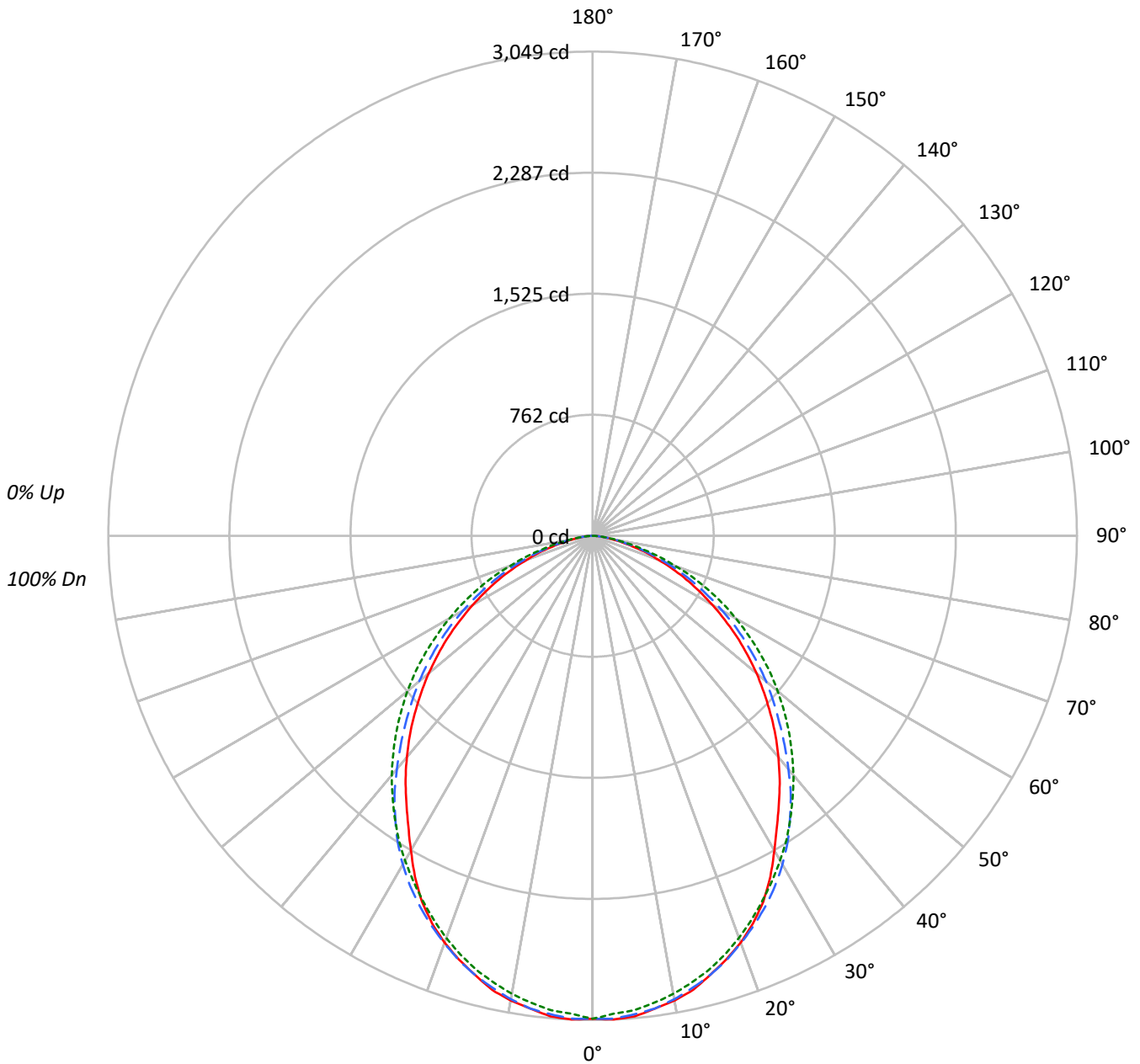
Lumens per Lamp: N/A
Luminaire Lumens: 7032.0 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8184	8184	8184
5°	8206	8171	8101
10°	8119	8096	8003
15°	7974	7974	7883
20°	7806	7816	7715
25°	7549	7642	7521
30°	7108	7428	7337
35°	6717	7119	7131
40°	6390	6735	6911
45°	6025	6327	6651
50°	5640	5962	6368
55°	5202	5547	6024
60°	4684	5062	5603
65°	4136	4500	5096
70°	3447	3833	4330
75°	2708	3061	3389
80°	1937	2154	2390
85°	1263	1263	1192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	286.3	4.1
10°-20°	804.4	11.4
20°-30°	1175.5	16.7
30°-40°	1334.3	19.0
40°-50°	1288.1	18.3
50°-60°	1062.6	15.1
60°-70°	707.6	10.1
70°-80°	316.6	4.5
80°-90°	56.7	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°	2266.2	32.2
0°-40°	3600.5	51.2
0°-60°	5951.1	84.6
0°-90°	7032.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7032.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3041	3041	3041	3041	3041	
5°	3038	3036	3025	3008	2999	288
15°	2862	2869	2862	2850	2830	807
25°	2542	2562	2574	2555	2533	1164
35°	2045	2073	2167	2179	2171	1281
45°	1583	1610	1662	1738	1748	1221
55°	1109	1127	1182	1248	1284	990
65°	650	667	707	757	800	644
75°	260	275	294	308	326	285
85°	41	41	41	39	39	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3041.2	3041.2	3041.2	3041.2	3041.2
2.5°	3049.3	3050.5	3043.5	3024.8	3013.1
5°	3037.7	3036.5	3024.8	3008.4	2999.1
7.5°	3003.8	3006.1	3002.6	2979.2	2966.4
10°	2971.1	2972.2	2962.9	2944.2	2929.0
12.5°	2929.0	2927.8	2915.0	2905.6	2881.1
15°	2862.4	2869.4	2862.4	2849.6	2829.7
17.5°	2798.1	2798.1	2802.8	2780.6	2765.4
20°	2725.7	2729.2	2729.2	2711.7	2694.2
22.5°	2641.6	2652.1	2655.6	2636.9	2615.9
25°	2542.3	2562.1	2573.8	2555.1	2532.9
27.5°	2421.9	2452.3	2487.4	2473.4	2448.8
30°	2287.6	2332.0	2390.4	2378.7	2361.2
32.5°	2160.2	2204.6	2285.3	2280.6	2271.2
35°	2044.6	2072.6	2167.2	2178.9	2170.8
37.5°	1934.8	1960.5	2049.2	2076.1	2069.1
40°	1819.1	1847.1	1917.2	1965.1	1967.5
42.5°	1704.6	1731.5	1788.7	1857.6	1857.6
45°	1583.1	1610.0	1662.5	1738.5	1747.8
47.5°	1463.9	1492.0	1543.4	1619.3	1634.5
50°	1347.1	1372.8	1424.2	1497.8	1521.2
52.5°	1225.6	1253.6	1303.9	1371.6	1405.5
55°	1108.7	1127.4	1182.3	1247.8	1284.0
57.5°	987.2	1004.8	1066.7	1122.8	1160.1
60°	870.4	892.6	940.5	997.8	1041.0
62.5°	758.2	781.6	822.5	872.7	921.8
65°	649.6	667.1	706.8	757.1	800.3
67.5°	544.4	559.6	599.4	634.4	680.0
70°	438.1	458.0	487.2	521.1	550.3
72.5°	352.8	361.0	385.5	410.1	440.5
75°	260.5	274.6	294.4	308.4	326.0
77.5°	186.9	195.1	206.8	218.5	234.8
80°	125.0	128.5	139.0	141.4	154.2
82.5°	75.9	78.3	80.6	81.8	86.5
85°	40.9	40.9	40.9	38.6	38.6
87.5°	23.4	23.4	19.9	16.4	11.7
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)