

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: P558198

Luminaire Tested: **FUSL-12-4-LD4-3STD-30-UNV-80-87-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: P558198
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-LD4-3STD-30-UNV-80-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

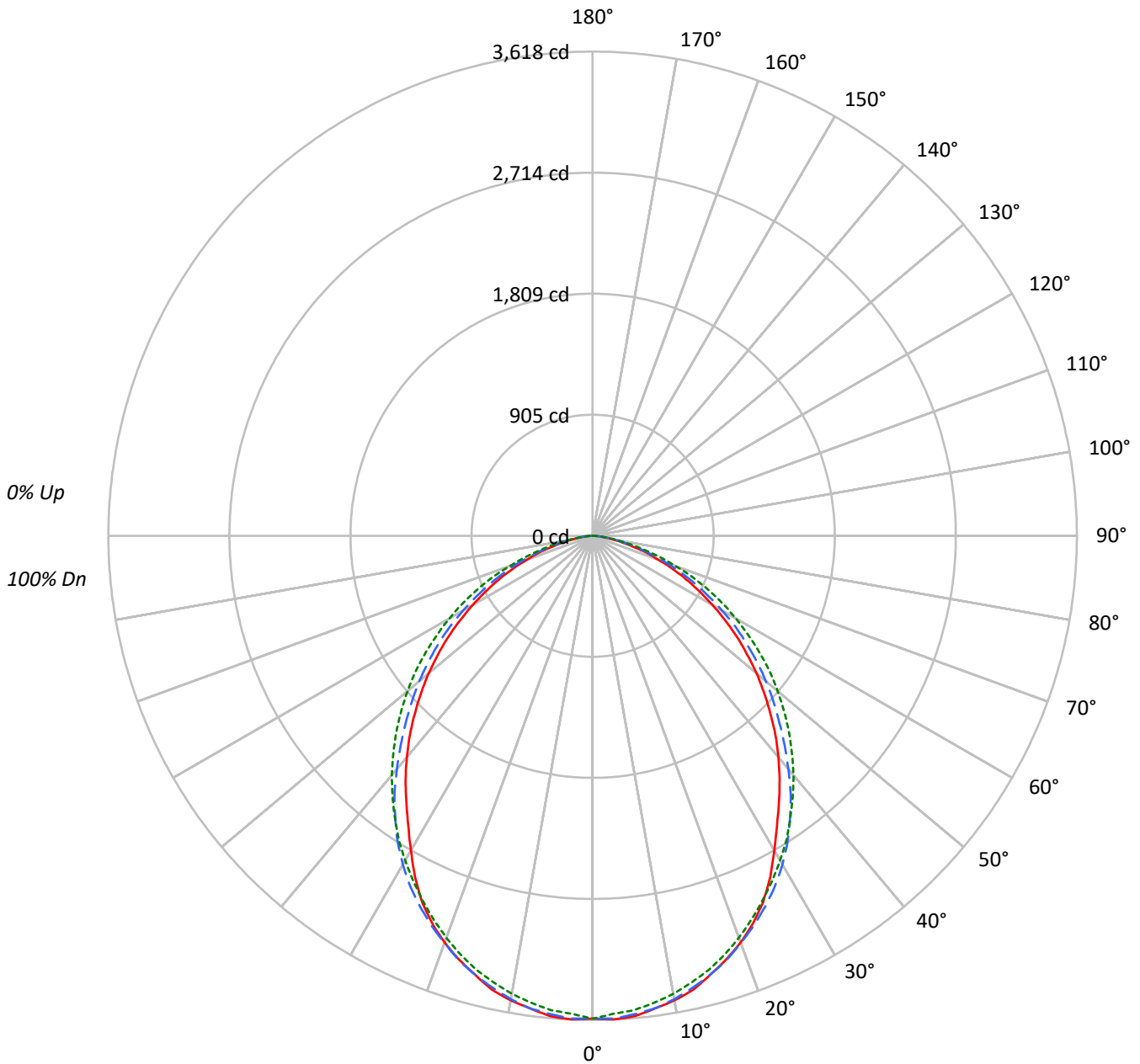
Lumens per Lamp: N/A
Luminaire Lumens: 8343.0 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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					20					
RC	80					70					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°	9709	9709	9709
5°	9735	9694	9612
10°	9632	9606	9496
15°	9461	9461	9353
20°	9261	9273	9153
25°	8956	9067	8923
30°	8433	8813	8705
35°	7969	8447	8461
40°	7581	7991	8200
45°	7148	7507	7892
50°	6691	7074	7556
55°	6172	6581	7147
60°	5558	6005	6647
65°	4907	5340	6046
70°	4090	4548	5137
75°	3214	3632	4021
80°	2298	2557	2836
85°	1497	1497	1411



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	339.7	4.1
10°-20°	954.4	11.4
20°-30°	1394.6	16.7
30°-40°	1583.1	19.0
40°-50°	1528.2	18.3
50°-60°	1260.7	15.1
60°-70°	839.5	10.1
70°-80°	375.7	4.5
80°-90°	67.2	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°	2688.7	32.2
0°-40°	4271.8	51.2
0°-60°	7060.6	84.6
0°-90°	8343.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8343.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3608	3608	3608	3608	3608	
5°	3604	3603	3589	3569	3558	341
15°	3396	3404	3396	3381	3357	957
25°	3016	3040	3054	3032	3005	1381
35°	2426	2459	2571	2585	2576	1520
45°	1878	1910	1972	2063	2074	1449
55°	1316	1338	1403	1480	1523	1174
65°	771	792	839	898	950	764
75°	309	326	349	366	387	338
85°	48	48	48	46	46	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3608.1	3608.1	3608.1	3608.1	3608.1
2.5°	3617.8	3619.2	3610.9	3588.7	3574.9
5°	3604.0	3602.6	3588.7	3569.3	3558.2
7.5°	3563.8	3566.5	3562.4	3534.7	3519.4
10°	3525.0	3526.3	3515.3	3493.1	3475.1
12.5°	3475.1	3473.7	3458.4	3447.3	3418.2
15°	3396.1	3404.4	3396.1	3380.8	3357.2
17.5°	3319.8	3319.8	3325.4	3299.0	3281.0
20°	3233.9	3238.0	3238.0	3217.2	3196.4
22.5°	3134.1	3146.5	3150.7	3128.5	3103.6
25°	3016.2	3039.8	3053.7	3031.5	3005.2
27.5°	2873.5	2909.5	2951.1	2934.5	2905.4
30°	2714.1	2766.7	2836.1	2822.2	2801.4
32.5°	2563.0	2615.7	2711.3	2705.8	2694.7
35°	2425.8	2459.0	2571.3	2585.2	2575.5
37.5°	2295.5	2325.9	2431.3	2463.2	2454.9
40°	2158.2	2191.5	2274.7	2331.5	2334.3
42.5°	2022.4	2054.3	2122.2	2204.0	2204.0
45°	1878.2	1910.1	1972.5	2062.6	2073.7
47.5°	1736.8	1770.1	1831.1	1921.2	1939.2
50°	1598.2	1628.7	1689.7	1777.0	1804.8
52.5°	1454.1	1487.3	1546.9	1627.3	1667.5
55°	1315.5	1337.6	1402.8	1480.4	1523.4
57.5°	1171.3	1192.1	1265.5	1332.1	1376.4
60°	1032.7	1059.0	1115.8	1183.8	1235.1
62.5°	899.6	927.3	975.8	1035.4	1093.7
65°	770.7	791.5	838.6	898.2	949.5
67.5°	645.9	664.0	711.1	752.7	806.7
70°	519.8	543.4	578.0	618.2	652.9
72.5°	418.6	428.3	457.4	486.5	522.6
75°	309.1	325.7	349.3	365.9	386.7
77.5°	221.8	231.5	245.3	259.2	278.6
80°	148.3	152.5	165.0	167.7	183.0
82.5°	90.1	92.9	95.6	97.0	102.6
85°	48.5	48.5	48.5	45.7	45.7
87.5°	27.7	27.7	23.6	19.4	13.9
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)