

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: P558065

Luminaire Tested: **FUSL-12-4-LD4-3LO-40-UNV-80-84-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: P558065
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-LD4-3LO-40-UNV-80-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

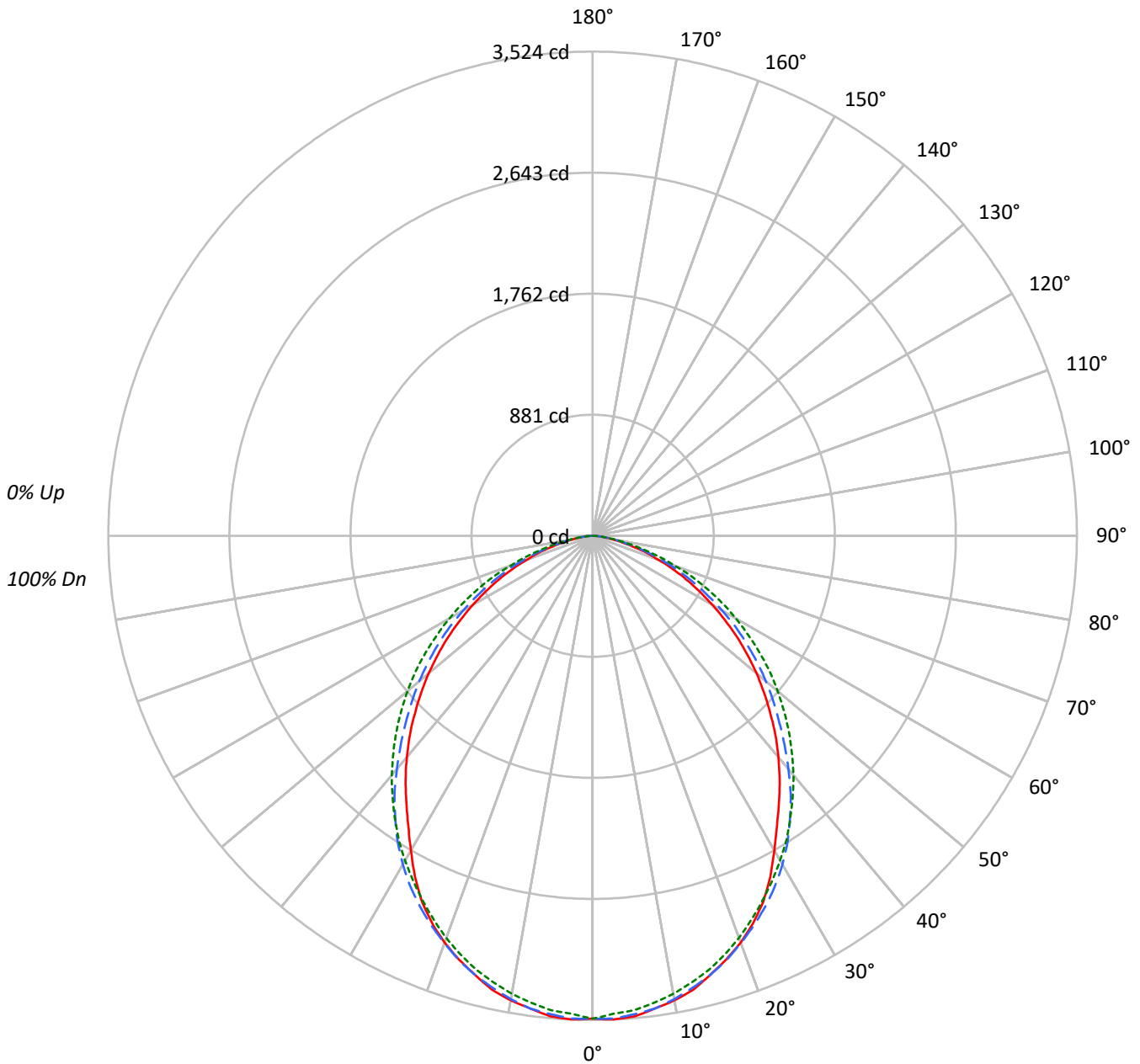
Lumens per Lamp: N/A
Luminaire Lumens: 8127.0 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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°	9458	9458	9458
5°	9483	9443	9363
10°	9383	9357	9250
15°	9216	9216	9111
20°	9021	9033	8917
25°	8724	8832	8692
30°	8215	8584	8479
35°	7762	8228	8242
40°	7385	7784	7987
45°	6963	7312	7687
50°	6517	6891	7360
55°	6012	6411	6962
60°	5414	5850	6475
65°	4780	5202	5889
70°	3984	4430	5004
75°	3131	3538	3917
80°	2239	2490	2762
85°	1460	1460	1377



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	330.9	4.1
10°-20°	929.7	11.4
20°-30°	1358.5	16.7
30°-40°	1542.1	19.0
40°-50°	1488.6	18.3
50°-60°	1228.0	15.1
60°-70°	817.8	10.1
70°-80°	365.9	4.5
80°-90°	65.5	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°	2619.1	32.2
0°-40°	4161.2	51.2
0°-60°	6877.8	84.6
0°-90°	8127.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8127.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3515	3515	3515	3515	3515	
5°	3511	3509	3496	3477	3466	332
15°	3308	3316	3308	3293	3270	933
25°	2938	2961	2975	2953	2927	1346
35°	2363	2395	2505	2518	2509	1481
45°	1830	1861	1921	2009	2020	1412
55°	1281	1303	1366	1442	1484	1144
65°	751	771	817	875	925	744
75°	301	317	340	356	377	329
85°	47	47	47	45	45	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3514.7	3514.7	3514.7	3514.7	3514.7
2.5°	3524.2	3525.5	3517.4	3495.8	3482.3
5°	3510.7	3509.3	3495.8	3476.9	3466.1
7.5°	3471.5	3474.2	3470.2	3443.2	3428.3
10°	3433.7	3435.1	3424.3	3402.6	3385.1
12.5°	3385.1	3383.7	3368.9	3358.1	3329.7
15°	3308.1	3316.2	3308.1	3293.3	3270.3
17.5°	3233.9	3233.9	3239.3	3213.6	3196.1
20°	3150.1	3154.2	3154.2	3133.9	3113.7
22.5°	3052.9	3065.1	3069.1	3047.5	3023.2
25°	2938.2	2961.1	2974.6	2953.0	2927.4
27.5°	2799.1	2834.2	2874.7	2858.5	2830.1
30°	2643.8	2695.1	2762.6	2749.1	2728.9
32.5°	2496.6	2547.9	2641.1	2635.7	2624.9
35°	2362.9	2395.4	2504.7	2518.2	2508.8
37.5°	2236.0	2265.7	2368.3	2399.4	2391.3
40°	2102.3	2134.8	2215.8	2271.1	2273.8
42.5°	1970.0	2001.1	2067.2	2146.9	2146.9
45°	1829.6	1860.7	1921.4	2009.2	2020.0
47.5°	1691.9	1724.3	1783.7	1871.5	1889.0
50°	1556.8	1586.6	1646.0	1731.0	1758.0
52.5°	1416.4	1448.8	1506.9	1585.2	1624.4
55°	1281.4	1303.0	1366.5	1442.1	1483.9
57.5°	1141.0	1161.2	1232.8	1297.6	1340.8
60°	1005.9	1031.6	1087.0	1153.1	1203.1
62.5°	876.3	903.3	950.6	1008.6	1065.4
65°	750.7	771.0	816.9	875.0	924.9
67.5°	629.2	646.8	692.7	733.2	785.8
70°	506.3	529.3	563.1	602.2	636.0
72.5°	407.8	417.2	445.6	473.9	509.0
75°	301.1	317.3	340.3	356.5	376.7
77.5°	216.0	225.5	239.0	252.5	271.4
80°	144.5	148.5	160.7	163.4	178.2
82.5°	87.8	90.5	93.2	94.5	99.9
85°	47.3	47.3	47.3	44.6	44.6
87.5°	27.0	27.0	23.0	18.9	13.5
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)