

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: P557052

Luminaire Tested: **FUSL-12-4-LD4-2HI-40-UNV-80-96-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: P557052
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-LD4-2HI-40-UNV-80-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

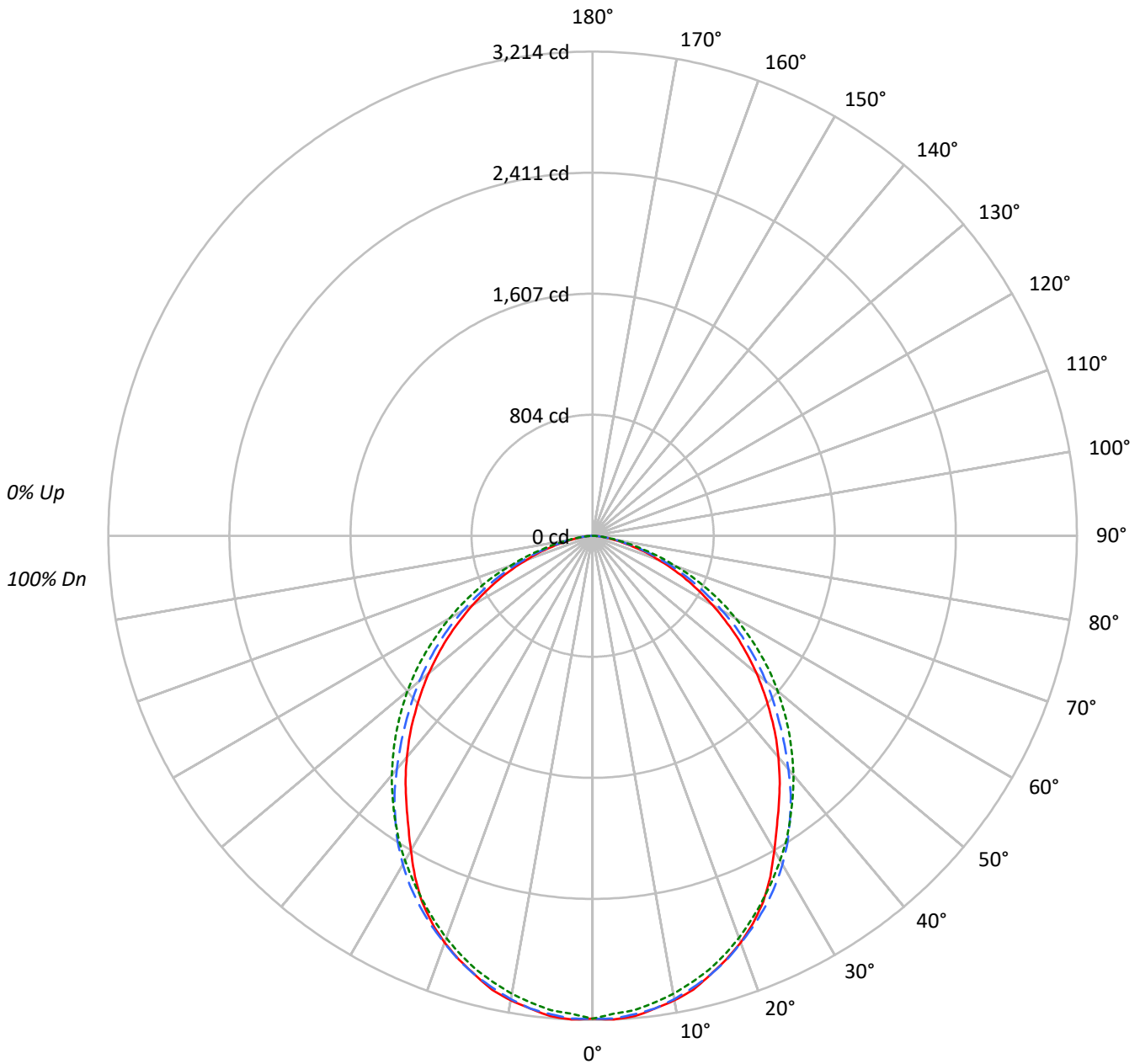
Lumens per Lamp: N/A
Luminaire Lumens: 7412.0 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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°	8626	8626	8626
5°	8649	8612	8539
10°	8557	8534	8436
15°	8405	8405	8309
20°	8227	8238	8132
25°	7956	8055	7927
30°	7492	7829	7733
35°	7080	7504	7517
40°	6735	7099	7285
45°	6350	6669	7011
50°	5944	6285	6713
55°	5483	5847	6350
60°	4937	5335	5905
65°	4360	4744	5372
70°	3633	4040	4563
75°	2855	3226	3572
80°	2042	2270	2520
85°	1331	1331	1254



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.8	4.1
10°-20°	847.9	11.4
20°-30°	1239.0	16.7
30°-40°	1406.4	19.0
40°-50°	1357.7	18.3
50°-60°	1120.0	15.1
60°-70°	745.8	10.1
70°-80°	333.7	4.5
80°-90°	59.7	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°	2388.7	32.2
0°-40°	3795.1	51.2
0°-60°	6272.7	84.6
0°-90°	7412.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7412.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3206	3206	3206	3206	3206	
5°	3202	3201	3188	3171	3161	303
15°	3017	3024	3017	3004	2983	851
25°	2680	2701	2713	2693	2670	1227
35°	2155	2185	2284	2297	2288	1350
45°	1669	1697	1752	1832	1842	1287
55°	1169	1188	1246	1315	1353	1043
65°	685	703	745	798	844	679
75°	275	289	310	325	344	300
85°	43	43	43	41	41	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3205.5	3205.5	3205.5	3205.5	3205.5
2.5°	3214.1	3215.4	3208.0	3188.3	3175.9
5°	3201.8	3200.6	3188.3	3171.0	3161.2
7.5°	3166.1	3168.6	3164.9	3140.2	3126.7
10°	3131.6	3132.8	3123.0	3103.3	3087.3
12.5°	3087.3	3086.0	3072.5	3062.6	3036.8
15°	3017.1	3024.5	3017.1	3003.5	2982.6
17.5°	2949.4	2949.4	2954.3	2930.9	2914.9
20°	2873.0	2876.7	2876.7	2858.2	2839.8
22.5°	2784.3	2795.4	2799.1	2779.4	2757.2
25°	2679.7	2700.6	2712.9	2693.2	2669.8
27.5°	2552.8	2584.8	2621.8	2607.0	2581.1
30°	2411.2	2458.0	2519.6	2507.3	2488.8
32.5°	2277.0	2323.8	2408.7	2403.8	2394.0
35°	2155.1	2184.6	2284.4	2296.7	2288.1
37.5°	2039.3	2066.4	2160.0	2188.3	2180.9
40°	1917.4	1946.9	2020.8	2071.3	2073.8
42.5°	1796.7	1825.0	1885.4	1958.0	1958.0
45°	1668.6	1697.0	1752.4	1832.4	1842.3
47.5°	1543.0	1572.6	1626.8	1706.8	1722.8
50°	1419.9	1447.0	1501.2	1578.7	1603.4
52.5°	1291.8	1321.4	1374.3	1445.7	1481.5
55°	1168.7	1188.4	1246.2	1315.2	1353.4
57.5°	1040.6	1059.1	1124.3	1183.4	1222.8
60°	917.4	940.8	991.3	1051.7	1097.2
62.5°	799.2	823.8	867.0	919.9	971.6
65°	684.7	703.2	745.0	798.0	843.6
67.5°	573.9	589.9	631.7	668.7	716.7
70°	461.8	482.7	513.5	549.2	580.0
72.5°	371.9	380.5	406.4	432.2	464.3
75°	274.6	289.4	310.3	325.1	343.6
77.5°	197.0	205.7	218.0	230.3	247.5
80°	131.8	135.5	146.5	149.0	162.6
82.5°	80.0	82.5	85.0	86.2	91.1
85°	43.1	43.1	43.1	40.6	40.6
87.5°	24.6	24.6	20.9	17.2	12.3
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)