

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: P556922

Luminaire Tested: **FUSL-12-4-LD4-2HI-30-UNV-80-94-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: P556922
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-30-UNV-80-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

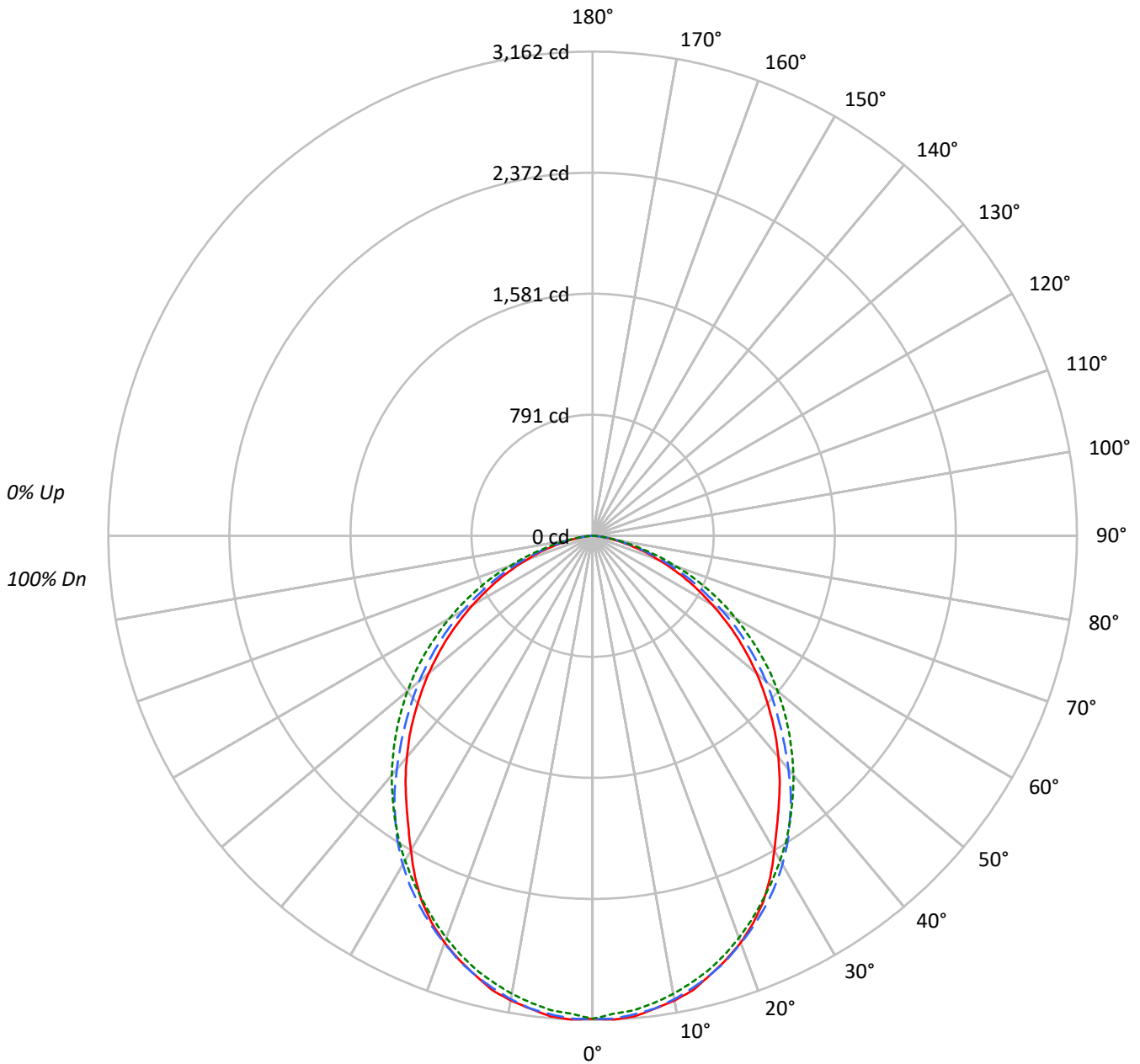
Lumens per Lamp: N/A
Luminaire Lumens: 7293.0 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8487	8487	8487
5°	8510	8474	8402
10°	8420	8397	8300
15°	8270	8270	8176
20°	8095	8106	8002
25°	7829	7926	7800
30°	7372	7703	7609
35°	6966	7384	7396
40°	6627	6985	7168
45°	6248	6562	6898
50°	5849	6184	6604
55°	5395	5753	6247
60°	4858	5250	5810
65°	4290	4668	5285
70°	3575	3976	4490
75°	2809	3174	3515
80°	2010	2235	2478
85°	1309	1309	1235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.0	4.1
10°-20°	834.2	11.4
20°-30°	1219.1	16.7
30°-40°	1383.8	19.0
40°-50°	1335.9	18.3
50°-60°	1102.0	15.1
60°-70°	733.8	10.1
70°-80°	328.4	4.5
80°-90°	58.7	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°	2350.3	32.2
0°-40°	3734.1	51.2
0°-60°	6172.0	84.6
0°-90°	7293.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7293.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3154	3154	3154	3154	3154	
5°	3150	3149	3137	3120	3110	298
15°	2969	2976	2969	2955	2935	837
25°	2637	2657	2669	2650	2627	1207
35°	2120	2150	2248	2260	2251	1329
45°	1642	1670	1724	1803	1813	1267
55°	1150	1169	1226	1294	1332	1026
65°	674	692	733	785	830	668
75°	270	285	305	320	338	295
85°	42	42	42	40	40	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3154.0	3154.0	3154.0	3154.0	3154.0
2.5°	3162.5	3163.7	3156.5	3137.1	3125.0
5°	3150.4	3149.2	3137.1	3120.1	3110.4
7.5°	3115.3	3117.7	3114.0	3089.8	3076.5
10°	3081.3	3082.5	3072.9	3053.5	3037.7
12.5°	3037.7	3036.5	3023.2	3013.5	2988.0
15°	2968.6	2975.9	2968.6	2955.3	2934.7
17.5°	2902.0	2902.0	2906.8	2883.8	2868.1
20°	2826.9	2830.5	2830.5	2812.3	2794.2
22.5°	2739.6	2750.5	2754.2	2734.8	2713.0
25°	2636.6	2657.2	2669.4	2650.0	2626.9
27.5°	2511.8	2543.3	2579.7	2565.2	2539.7
30°	2372.5	2418.5	2479.1	2467.0	2448.8
32.5°	2240.4	2286.5	2370.1	2365.2	2355.5
35°	2120.5	2149.5	2247.7	2259.8	2251.3
37.5°	2006.6	2033.2	2125.3	2153.2	2145.9
40°	1886.6	1915.7	1988.4	2038.1	2040.5
42.5°	1767.9	1795.7	1855.1	1926.6	1926.6
45°	1641.8	1669.7	1724.2	1803.0	1812.7
47.5°	1518.3	1547.3	1600.6	1679.4	1695.2
50°	1397.1	1423.7	1477.1	1553.4	1577.6
52.5°	1271.1	1300.1	1352.2	1422.5	1457.7
55°	1149.9	1169.3	1226.2	1294.1	1331.6
57.5°	1023.9	1042.1	1106.3	1164.4	1203.2
60°	902.7	925.7	975.4	1034.8	1079.6
62.5°	786.4	810.6	853.0	905.1	956.0
65°	673.7	691.9	733.1	785.2	830.0
67.5°	564.6	580.4	621.6	657.9	705.2
70°	454.4	475.0	505.3	540.4	570.7
72.5°	365.9	374.4	399.9	425.3	456.8
75°	270.2	284.7	305.3	319.9	338.1
77.5°	193.9	202.4	214.5	226.6	243.6
80°	129.7	133.3	144.2	146.6	159.9
82.5°	78.8	81.2	83.6	84.8	89.7
85°	42.4	42.4	42.4	40.0	40.0
87.5°	24.2	24.2	20.6	17.0	12.1
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)