

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: P557614

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-93-97-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: P557614
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-93-97-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

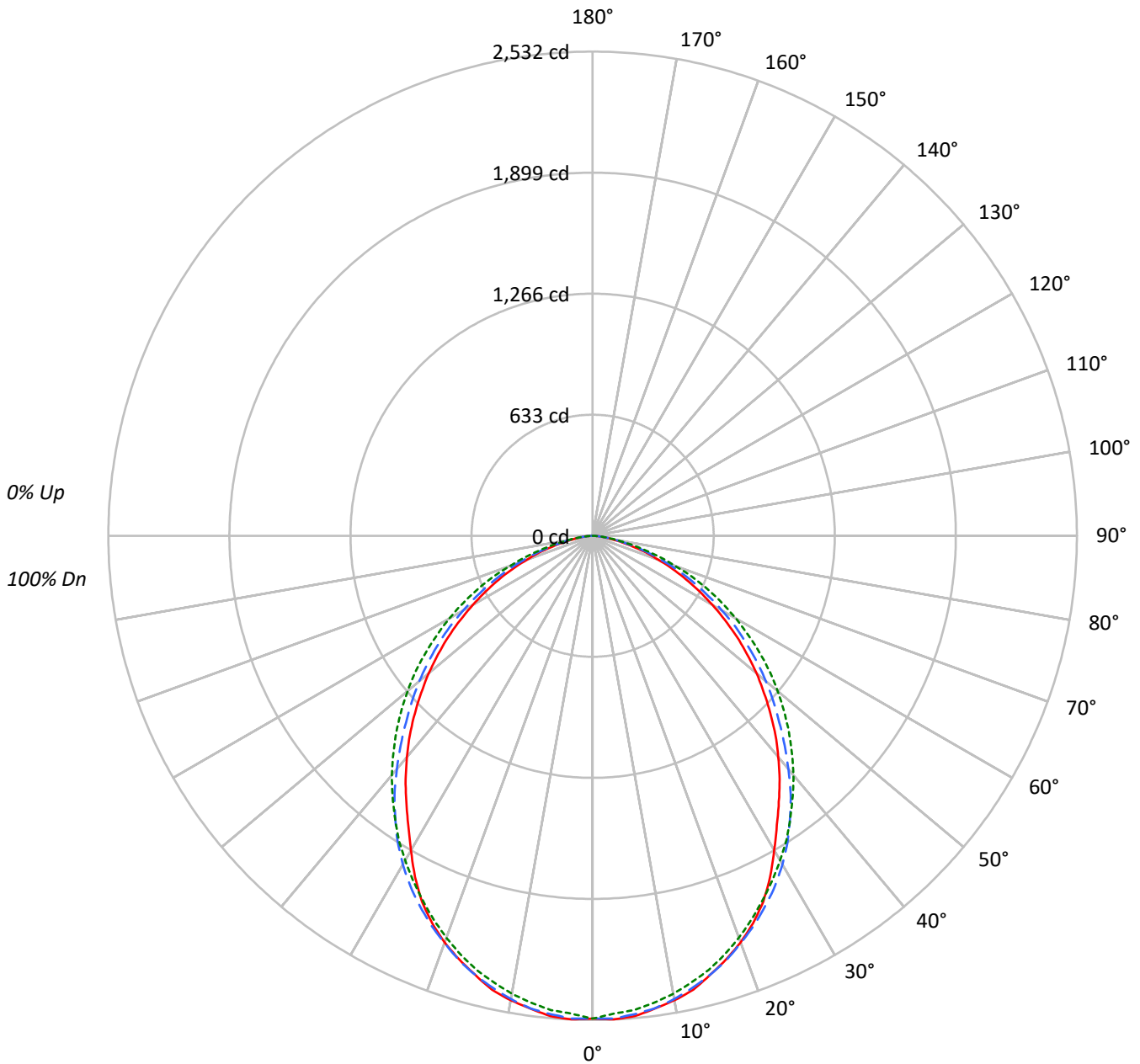
Lumens per Lamp: N/A
Luminaire Lumens: 5838.0 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (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°	6794	6794	6794
5°	6812	6783	6726
10°	6740	6721	6645
15°	6620	6620	6545
20°	6480	6489	6405
25°	6267	6345	6244
30°	5901	6166	6091
35°	5576	5911	5920
40°	5305	5591	5738
45°	5002	5253	5522
50°	4682	4950	5287
55°	4319	4605	5001
60°	3889	4202	4651
65°	3434	3736	4230
70°	2862	3183	3594
75°	2249	2541	2813
80°	1609	1788	1984
85°	1047	1047	988



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.7	4.1
10°-20°	667.8	11.4
20°-30°	975.9	16.7
30°-40°	1107.7	19.0
40°-50°	1069.4	18.3
50°-60°	882.2	15.1
60°-70°	587.4	10.1
70°-80°	262.9	4.5
80°-90°	47.0	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°	1881.4	32.2
0°-40°	2989.2	51.2
0°-60°	4940.7	84.6
0°-90°	5838.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5838.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2525	2525	2525	2525	2525	
5°	2522	2521	2511	2498	2490	239
15°	2376	2382	2376	2366	2349	670
25°	2111	2127	2137	2121	2103	967
35°	1697	1721	1799	1809	1802	1064
45°	1314	1337	1380	1443	1451	1014
55°	920	936	982	1036	1066	822
65°	539	554	587	628	664	535
75°	216	228	244	256	271	237
85°	34	34	34	32	32	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2524.8	2524.8	2524.8	2524.8	2524.8
2.5°	2531.6	2532.5	2526.7	2511.2	2501.5
5°	2521.9	2520.9	2511.2	2497.6	2489.9
7.5°	2493.7	2495.7	2492.8	2473.4	2462.7
10°	2466.6	2467.6	2459.8	2444.3	2431.7
12.5°	2431.7	2430.7	2420.0	2412.3	2391.9
15°	2376.4	2382.2	2376.4	2365.7	2349.2
17.5°	2323.0	2323.0	2326.9	2308.5	2295.9
20°	2262.9	2265.8	2265.8	2251.3	2236.7
22.5°	2193.1	2201.8	2204.7	2189.2	2171.7
25°	2110.6	2127.1	2136.8	2121.3	2102.9
27.5°	2010.7	2035.9	2065.0	2053.4	2033.0
30°	1899.2	1936.0	1984.5	1974.8	1960.3
32.5°	1793.4	1830.3	1897.2	1893.3	1885.6
35°	1697.4	1720.7	1799.3	1809.0	1802.2
37.5°	1606.2	1627.6	1701.3	1723.6	1717.8
40°	1510.2	1533.5	1591.7	1631.5	1633.4
42.5°	1415.2	1437.5	1485.0	1542.2	1542.2
45°	1314.3	1336.6	1380.2	1443.3	1451.0
47.5°	1215.3	1238.6	1281.3	1344.4	1357.0
50°	1118.4	1139.7	1182.4	1243.5	1262.9
52.5°	1017.5	1040.8	1082.5	1138.7	1166.9
55°	920.5	936.0	981.6	1035.9	1066.0
57.5°	819.6	834.2	885.6	932.1	963.2
60°	722.6	741.0	780.8	828.3	864.2
62.5°	629.5	648.9	682.8	724.6	765.3
65°	539.3	553.8	586.8	628.5	664.4
67.5°	452.0	464.6	497.6	526.7	564.5
70°	363.7	380.2	404.5	432.6	456.8
72.5°	292.9	299.7	320.1	340.5	365.7
75°	216.3	227.9	244.4	256.1	270.6
77.5°	155.2	162.0	171.7	181.4	195.0
80°	103.8	106.7	115.4	117.4	128.0
82.5°	63.0	65.0	66.9	67.9	71.8
85°	33.9	33.9	33.9	32.0	32.0
87.5°	19.4	19.4	16.5	13.6	9.7
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)