

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: P557529

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-82-88-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: P557529
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-35-UNV-82-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

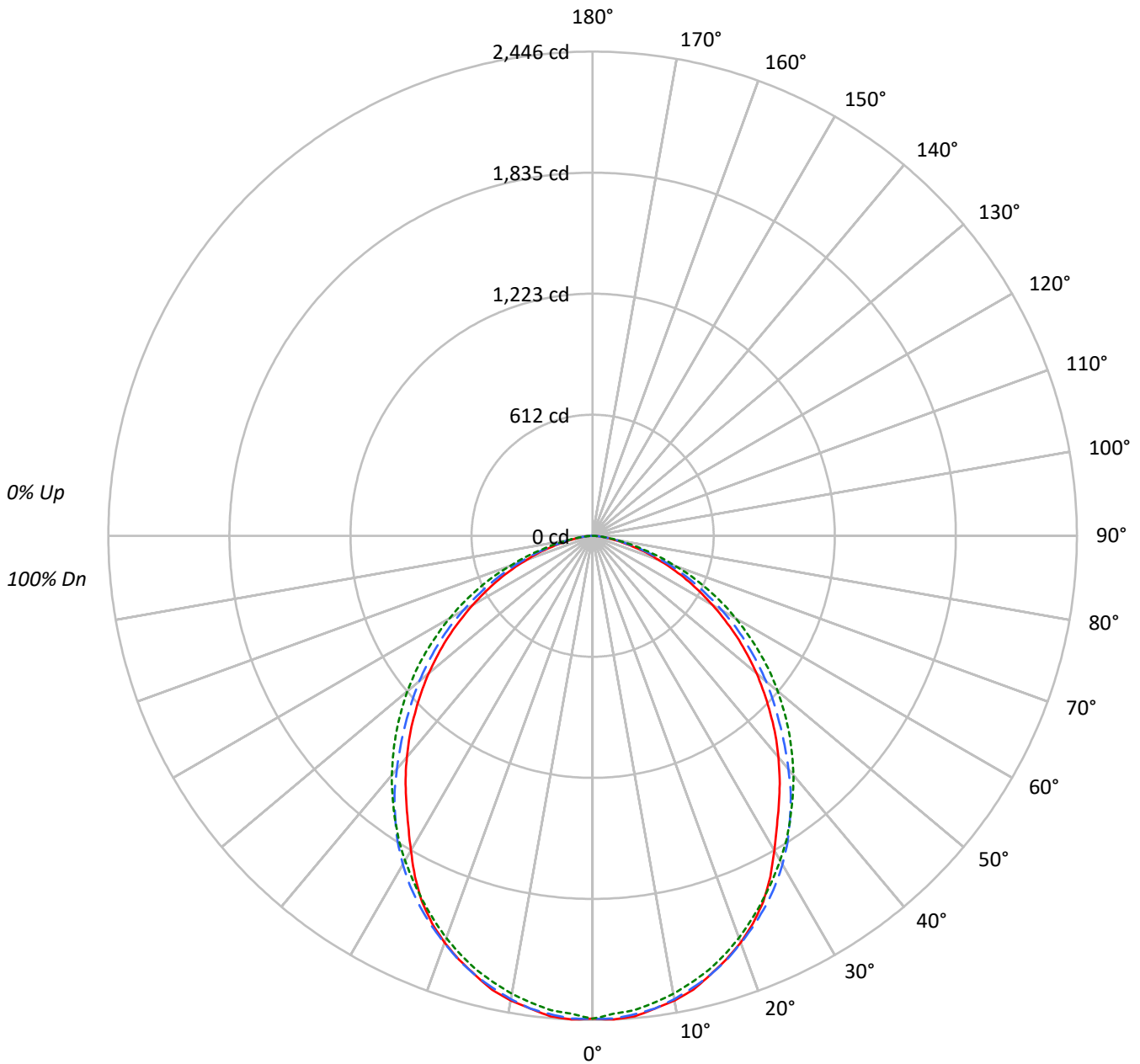
Lumens per Lamp: N/A
Luminaire Lumens: 5641.0 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (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°	6565	6565	6565
5°	6582	6555	6499
10°	6513	6495	6420
15°	6397	6397	6324
20°	6261	6269	6189
25°	6055	6130	6033
30°	5702	5959	5885
35°	5388	5711	5721
40°	5126	5403	5544
45°	4833	5076	5336
50°	4524	4783	5109
55°	4173	4450	4832
60°	3758	4061	4494
65°	3318	3610	4088
70°	2766	3075	3473
75°	2173	2456	2719
80°	1554	1728	1917
85°	1013	1013	954



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.7	4.1
10°-20°	645.3	11.4
20°-30°	943.0	16.7
30°-40°	1070.4	19.0
40°-50°	1033.3	18.3
50°-60°	852.4	15.1
60°-70°	567.6	10.1
70°-80°	254.0	4.5
80°-90°	45.4	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°	1817.9	32.2
0°-40°	2888.3	51.2
0°-60°	4773.9	84.6
0°-90°	5641.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5641.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2440	2440	2440	2440	2440	
5°	2437	2436	2426	2413	2406	231
15°	2296	2302	2296	2286	2270	647
25°	2039	2055	2065	2050	2032	934
35°	1640	1663	1738	1748	1741	1028
45°	1270	1292	1334	1395	1402	980
55°	889	904	948	1001	1030	794
65°	521	535	567	607	642	517
75°	209	220	236	247	262	229
85°	33	33	33	31	31	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2439.6	2439.6	2439.6	2439.6	2439.6
2.5°	2446.1	2447.1	2441.5	2426.5	2417.1
5°	2436.8	2435.8	2426.5	2413.3	2405.8
7.5°	2409.6	2411.5	2408.7	2389.9	2379.6
10°	2383.4	2384.3	2376.8	2361.8	2349.6
12.5°	2349.6	2348.7	2338.4	2330.9	2311.2
15°	2296.2	2301.8	2296.2	2285.9	2269.9
17.5°	2244.6	2244.6	2248.4	2230.6	2218.4
20°	2186.5	2189.3	2189.3	2175.3	2161.2
22.5°	2119.1	2127.5	2130.3	2115.3	2098.4
25°	2039.4	2055.3	2064.7	2049.7	2031.9
27.5°	1942.9	1967.2	1995.3	1984.1	1964.4
30°	1835.1	1870.7	1917.6	1908.2	1894.1
32.5°	1732.9	1768.5	1833.2	1829.5	1822.0
35°	1640.1	1662.6	1738.5	1747.9	1741.4
37.5°	1552.0	1572.7	1643.9	1665.4	1659.8
40°	1459.3	1481.7	1538.0	1576.4	1578.3
42.5°	1367.4	1389.0	1434.9	1490.2	1490.2
45°	1269.9	1291.5	1333.7	1394.6	1402.1
47.5°	1174.3	1196.8	1238.1	1299.0	1311.2
50°	1080.6	1101.2	1142.5	1201.5	1220.3
52.5°	983.1	1005.6	1045.9	1100.3	1127.5
55°	889.4	904.4	948.5	1001.0	1030.0
57.5°	792.0	806.0	855.7	900.7	930.7
60°	698.2	716.0	754.5	800.4	835.1
62.5°	608.3	627.0	659.8	700.1	739.5
65°	521.1	535.2	567.0	607.3	642.0
67.5°	436.7	448.9	480.8	508.9	545.5
70°	351.5	367.4	390.8	418.0	441.4
72.5°	283.0	289.6	309.3	329.0	353.3
75°	209.0	220.2	236.2	247.4	261.5
77.5°	150.0	156.5	165.9	175.3	188.4
80°	100.3	103.1	111.5	113.4	123.7
82.5°	60.9	62.8	64.7	65.6	69.4
85°	32.8	32.8	32.8	30.9	30.9
87.5°	18.7	18.7	15.9	13.1	9.4
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)