

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: P557637

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-81-86-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: P557637
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-50-UNV-81-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

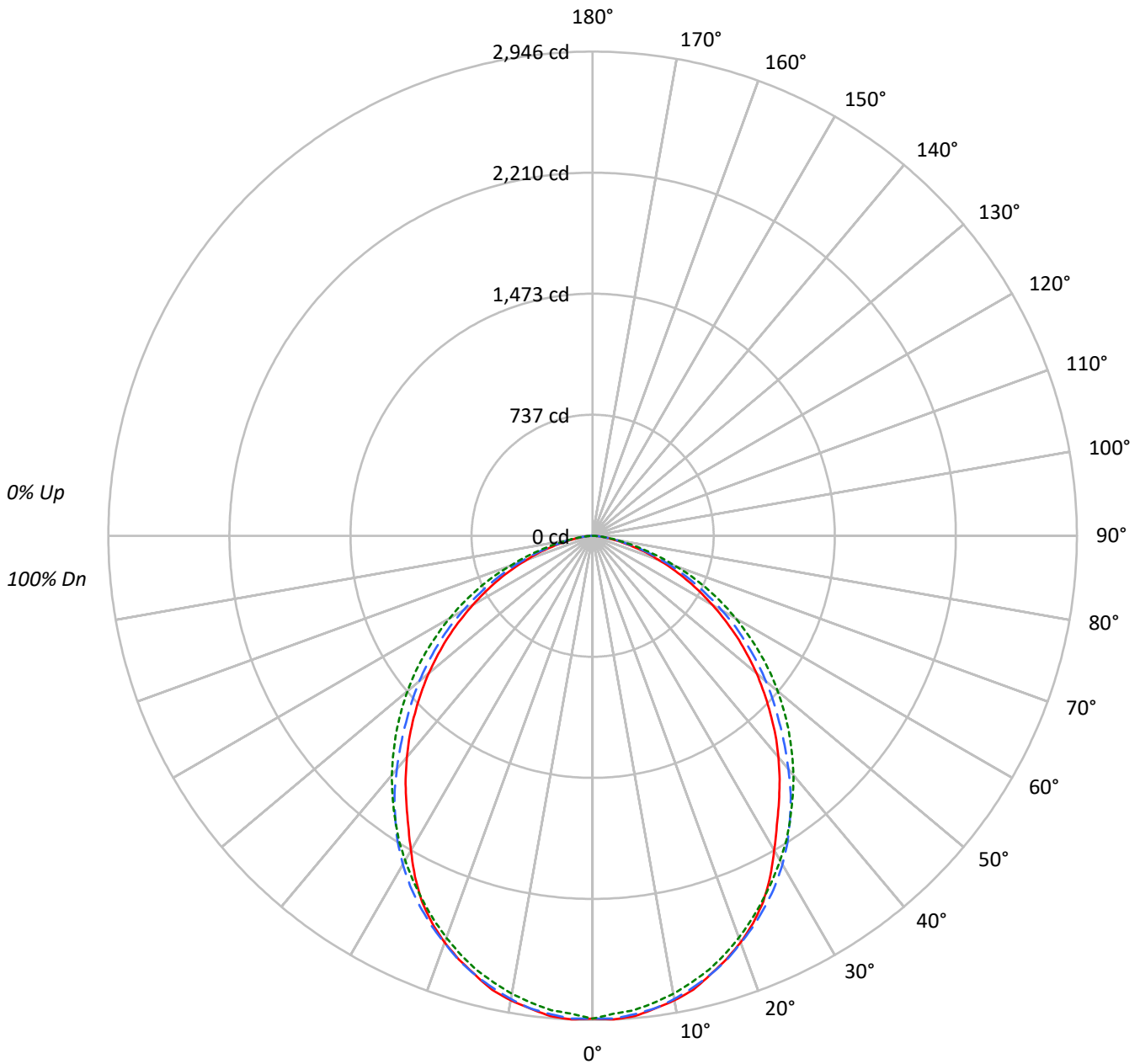
Lumens per Lamp: N/A
Luminaire Lumens: 6793.0 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	7906	7906	7906
5°	7927	7893	7826
10°	7843	7821	7731
15°	7703	7703	7615
20°	7540	7550	7453
25°	7292	7382	7265
30°	6866	7175	7087
35°	6488	6878	6889
40°	6173	6506	6676
45°	5820	6112	6425
50°	5448	5760	6152
55°	5025	5359	5819
60°	4525	4890	5412
65°	3996	4348	4923
70°	3330	3703	4183
75°	2617	2957	3274
80°	1872	2081	2309
85°	1220	1220	1149



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.6	4.1
10°-20°	777.1	11.4
20°-30°	1135.5	16.7
30°-40°	1289.0	19.0
40°-50°	1244.3	18.3
50°-60°	1026.4	15.1
60°-70°	683.5	10.1
70°-80°	305.9	4.5
80°-90°	54.7	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°	2189.2	32.2
0°-40°	3478.1	51.2
0°-60°	5748.9	84.6
0°-90°	6793.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6793.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2938	2938	2938	2938	2938	
5°	2934	2933	2922	2906	2897	278
15°	2765	2772	2765	2753	2734	780
25°	2456	2475	2486	2468	2447	1125
35°	1975	2002	2094	2105	2097	1238
45°	1529	1555	1606	1679	1688	1180
55°	1071	1089	1142	1205	1240	956
65°	628	644	683	731	773	622
75°	252	265	284	298	315	275
85°	40	40	40	37	37	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2937.8	2937.8	2937.8	2937.8	2937.8
2.5°	2945.7	2946.8	2940.1	2922.0	2910.7
5°	2934.4	2933.3	2922.0	2906.2	2897.2
7.5°	2901.7	2903.9	2900.6	2878.0	2865.6
10°	2870.1	2871.2	2862.2	2844.1	2829.4
12.5°	2829.4	2828.3	2815.9	2806.9	2783.2
15°	2765.1	2771.9	2765.1	2752.7	2733.5
17.5°	2703.0	2703.0	2707.6	2686.1	2671.4
20°	2633.1	2636.5	2636.5	2619.5	2602.6
22.5°	2551.8	2562.0	2565.4	2547.3	2527.0
25°	2455.9	2475.1	2486.3	2468.3	2446.8
27.5°	2339.6	2369.0	2402.8	2389.3	2365.6
30°	2209.8	2252.7	2309.2	2297.9	2280.9
32.5°	2086.8	2129.7	2207.6	2203.1	2194.0
35°	1975.1	2002.2	2093.6	2104.9	2097.0
37.5°	1869.0	1893.8	1979.6	2005.6	1998.8
40°	1757.3	1784.3	1852.1	1898.3	1900.6
42.5°	1646.7	1672.6	1727.9	1794.5	1794.5
45°	1529.3	1555.2	1606.0	1679.4	1688.4
47.5°	1414.2	1441.2	1490.9	1564.3	1578.9
50°	1301.3	1326.1	1375.8	1446.9	1469.5
52.5°	1183.9	1211.0	1259.5	1325.0	1357.7
55°	1071.1	1089.1	1142.2	1205.4	1240.4
57.5°	953.7	970.6	1030.4	1084.6	1120.7
60°	840.8	862.3	908.5	963.8	1005.6
62.5°	732.5	755.0	794.5	843.1	890.5
65°	627.5	644.4	682.8	731.3	773.1
67.5°	525.9	540.6	579.0	612.8	656.9
70°	423.2	442.4	470.6	503.4	531.6
72.5°	340.8	348.7	372.4	396.1	425.5
75°	251.7	265.2	284.4	298.0	314.9
77.5°	180.6	188.5	199.8	211.1	226.9
80°	120.8	124.1	134.3	136.6	149.0
82.5°	73.4	75.6	77.9	79.0	83.5
85°	39.5	39.5	39.5	37.2	37.2
87.5°	22.6	22.6	19.2	15.8	11.3
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)