

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: P558035

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-82-85-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: P558035
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-LD4-3LO-35-UNV-82-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

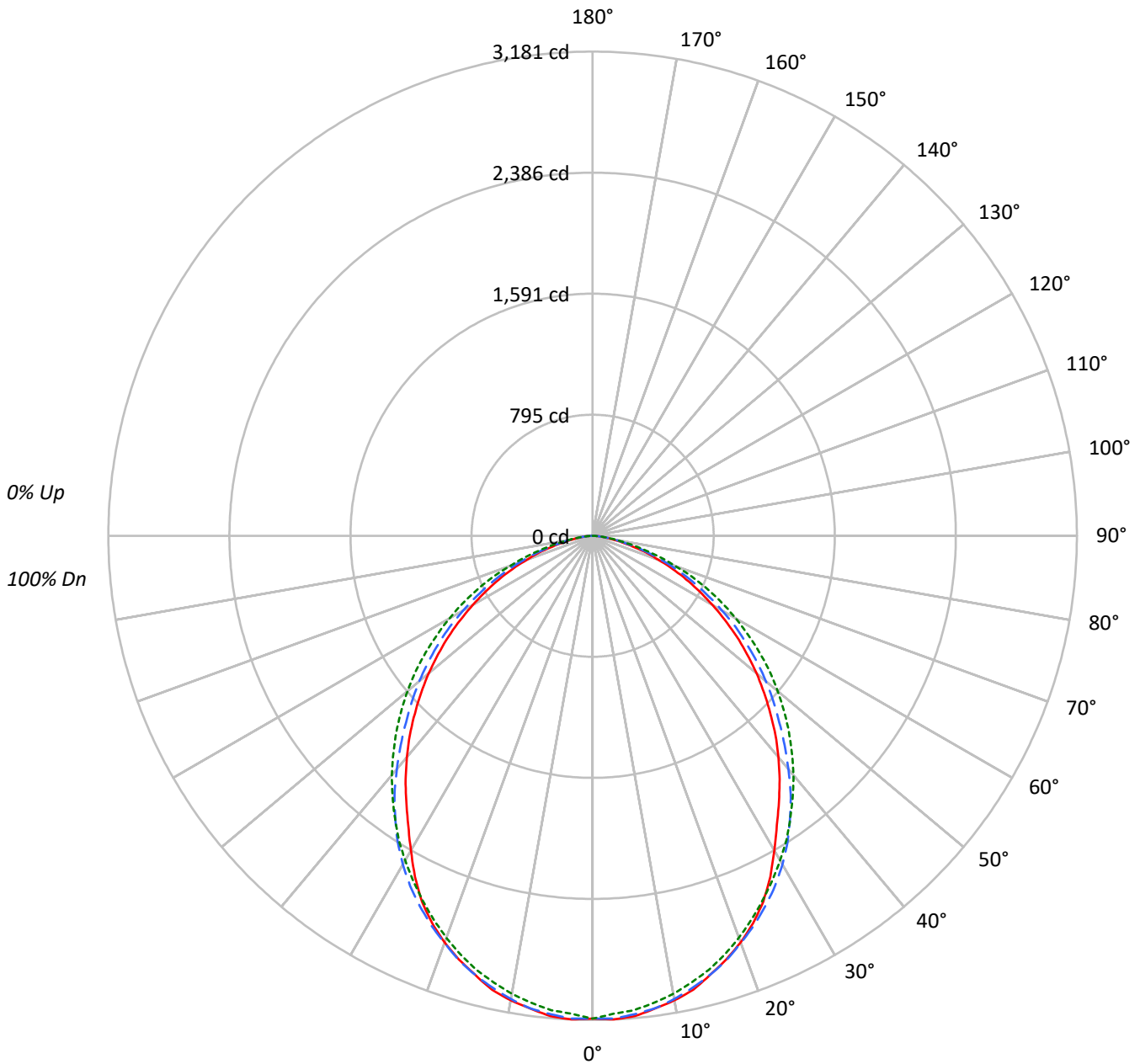
Lumens per Lamp: N/A
Luminaire Lumens: 7335.0 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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°	8536	8536	8536
5°	8559	8523	8450
10°	8468	8445	8348
15°	8318	8318	8223
20°	8142	8152	8048
25°	7874	7971	7845
30°	7415	7748	7653
35°	7006	7426	7438
40°	6666	7025	7209
45°	6284	6600	6938
50°	5882	6219	6643
55°	5426	5786	6283
60°	4886	5280	5844
65°	4315	4695	5316
70°	3596	3998	4516
75°	2826	3193	3535
80°	2021	2247	2493
85°	1318	1318	1241



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	298.7	4.1
10°-20°	839.1	11.4
20°-30°	1226.1	16.7
30°-40°	1391.8	19.0
40°-50°	1343.6	18.3
50°-60°	1108.3	15.1
60°-70°	738.1	10.1
70°-80°	330.3	4.5
80°-90°	59.1	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°	2363.8	32.2
0°-40°	3755.6	51.2
0°-60°	6207.5	84.6
0°-90°	7335.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7335.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3172	3172	3172	3172	3172	
5°	3168	3167	3155	3138	3128	300
15°	2986	2993	2986	2972	2952	842
25°	2652	2672	2685	2665	2642	1214
35°	2133	2162	2261	2273	2264	1336
45°	1651	1679	1734	1813	1823	1274
55°	1156	1176	1233	1302	1339	1032
65°	678	696	737	790	835	672
75°	272	286	307	322	340	297
85°	43	43	43	40	40	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3172.2	3172.2	3172.2	3172.2	3172.2
2.5°	3180.7	3181.9	3174.6	3155.1	3142.9
5°	3168.5	3167.3	3155.1	3138.1	3128.3
7.5°	3133.2	3135.6	3132.0	3107.6	3094.2
10°	3099.1	3100.3	3090.5	3071.0	3055.2
12.5°	3055.2	3054.0	3040.6	3030.8	3005.2
15°	2985.7	2993.1	2985.7	2972.3	2951.6
17.5°	2918.7	2918.7	2923.6	2900.4	2884.6
20°	2843.2	2846.8	2846.8	2828.5	2810.3
22.5°	2755.4	2766.4	2770.0	2750.5	2728.6
25°	2651.8	2672.5	2684.7	2665.2	2642.1
27.5°	2526.3	2558.0	2594.5	2579.9	2554.3
30°	2386.2	2432.5	2493.4	2481.2	2462.9
32.5°	2253.3	2299.6	2383.7	2378.8	2369.1
35°	2132.7	2161.9	2260.6	2272.8	2264.3
37.5°	2018.1	2044.9	2137.5	2165.6	2158.3
40°	1897.5	1926.7	1999.8	2049.8	2052.2
42.5°	1778.0	1806.1	1865.8	1937.7	1937.7
45°	1651.3	1679.3	1734.2	1813.4	1823.1
47.5°	1527.0	1556.2	1609.9	1689.1	1704.9
50°	1405.1	1431.9	1485.6	1562.3	1586.7
52.5°	1278.4	1307.6	1360.0	1430.7	1466.1
55°	1156.5	1176.0	1233.3	1301.5	1339.3
57.5°	1029.8	1048.1	1112.6	1171.1	1210.1
60°	907.9	931.1	981.0	1040.7	1085.8
62.5°	790.9	815.3	857.9	910.3	961.5
65°	677.6	695.9	737.3	789.7	834.8
67.5°	567.9	583.7	625.2	661.7	709.3
70°	457.0	477.7	508.2	543.5	574.0
72.5°	368.0	376.6	402.2	427.8	459.4
75°	271.8	286.4	307.1	321.7	340.0
77.5°	195.0	203.5	215.7	227.9	245.0
80°	130.4	134.1	145.0	147.5	160.9
82.5°	79.2	81.7	84.1	85.3	90.2
85°	42.7	42.7	42.7	40.2	40.2
87.5°	24.4	24.4	20.7	17.1	12.2
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)