

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: P557779

Luminaire Tested: **FUSL-12-4-LD4-3HI-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: P557779
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-LD4-3HI-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

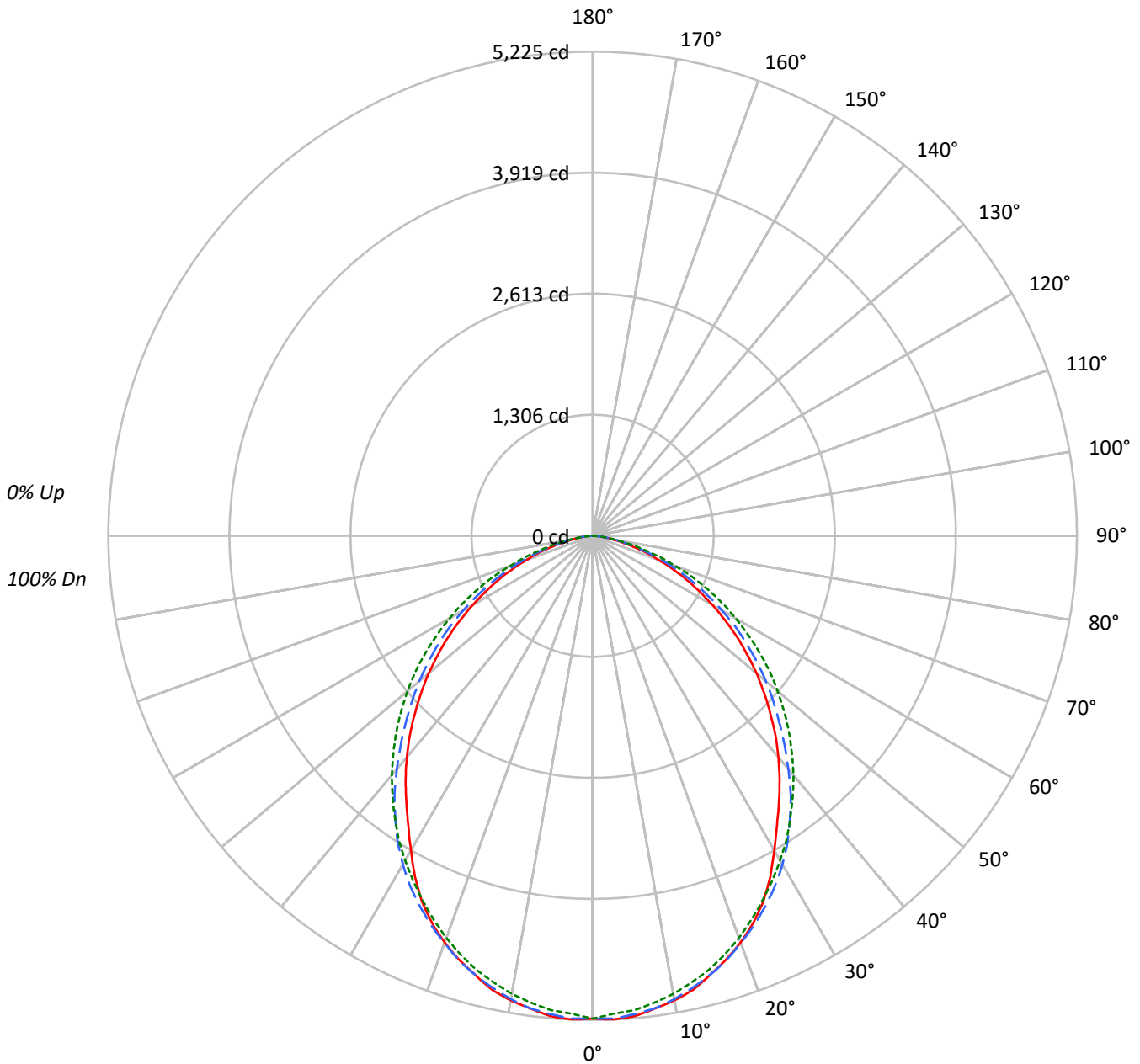
Lumens per Lamp: N/A
Luminaire Lumens: 12049.0 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14022	14022	14022
5°	14060	14000	13881
10°	13911	13872	13714
15°	13664	13664	13507
20°	13375	13392	13220
25°	12934	13094	12886
30°	12180	12727	12571
35°	11509	12199	12219
40°	10949	11540	11842
45°	10323	10841	11397
50°	9663	10216	10911
55°	8913	9505	10322
60°	8027	8673	9600
65°	7087	7712	8732
70°	5906	6568	7419
75°	4641	5245	5807
80°	3319	3691	4094
85°	2164	2164	2041



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	490.6	4.1
10°-20°	1378.3	11.4
20°-30°	2014.1	16.7
30°-40°	2286.3	19.0
40°-50°	2207.0	18.3
50°-60°	1820.7	15.1
60°-70°	1212.4	10.1
70°-80°	542.5	4.5
80°-90°	97.1	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°	3883.0	32.2
0°-40°	6169.3	51.2
0°-60°	10197.0	84.6
0°-90°	12049.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12049.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5211	5211	5211	5211	5211	
5°	5205	5203	5183	5155	5139	493
15°	4905	4917	4905	4883	4848	1383
25°	4356	4390	4410	4378	4340	1995
35°	3503	3551	3714	3734	3720	2195
45°	2712	2759	2849	2979	2995	2093
55°	1900	1932	2026	2138	2200	1696
65°	1113	1143	1211	1297	1371	1104
75°	446	470	504	528	558	488
85°	70	70	70	66	66	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5210.9	5210.9	5210.9	5210.9	5210.9
2.5°	5224.9	5226.9	5214.9	5182.9	5162.8
5°	5204.9	5202.9	5182.9	5154.8	5138.8
7.5°	5146.8	5150.8	5144.8	5104.8	5082.8
10°	5090.8	5092.8	5076.8	5044.7	5018.7
12.5°	5018.7	5016.7	4994.7	4978.7	4936.6
15°	4904.6	4916.6	4904.6	4882.6	4848.5
17.5°	4794.5	4794.5	4802.5	4764.5	4738.4
20°	4670.4	4676.4	4676.4	4646.4	4616.3
22.5°	4526.2	4544.3	4550.3	4518.2	4482.2
25°	4356.1	4390.1	4410.1	4378.1	4340.1
27.5°	4149.9	4201.9	4262.0	4238.0	4195.9
30°	3919.7	3995.7	4095.8	4075.8	4045.8
32.5°	3701.5	3777.5	3915.7	3907.7	3891.6
35°	3503.3	3551.3	3713.5	3733.5	3719.5
37.5°	3315.1	3359.1	3511.3	3557.3	3545.3
40°	3116.9	3165.0	3285.1	3367.2	3371.2
42.5°	2920.7	2966.8	3064.9	3183.0	3183.0
45°	2712.5	2758.6	2848.7	2978.8	2994.8
47.5°	2508.3	2556.4	2644.5	2774.6	2800.6
50°	2308.2	2352.2	2440.3	2566.4	2606.4
52.5°	2100.0	2148.0	2234.1	2350.2	2408.3
55°	1899.8	1931.8	2025.9	2138.0	2200.1
57.5°	1691.6	1721.6	1827.7	1923.8	1987.9
60°	1491.4	1529.4	1611.5	1709.6	1783.7
62.5°	1299.2	1339.3	1409.3	1495.4	1579.5
65°	1113.0	1143.1	1211.1	1297.2	1371.3
67.5°	932.9	958.9	1027.0	1087.0	1165.1
70°	750.7	784.7	834.8	892.8	942.9
72.5°	604.6	618.6	660.6	702.7	754.7
75°	446.4	470.4	504.5	528.5	558.5
77.5°	320.3	334.3	354.3	374.4	402.4
80°	214.2	220.2	238.2	242.2	264.2
82.5°	130.1	134.1	138.1	140.1	148.1
85°	70.1	70.1	70.1	66.1	66.1
87.5°	40.0	40.0	34.0	28.0	20.0
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)