

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: P557776

Luminaire Tested: **FUSL-12-4-LD4-3HI-35-UNV-82-84-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: P557776
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-82-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

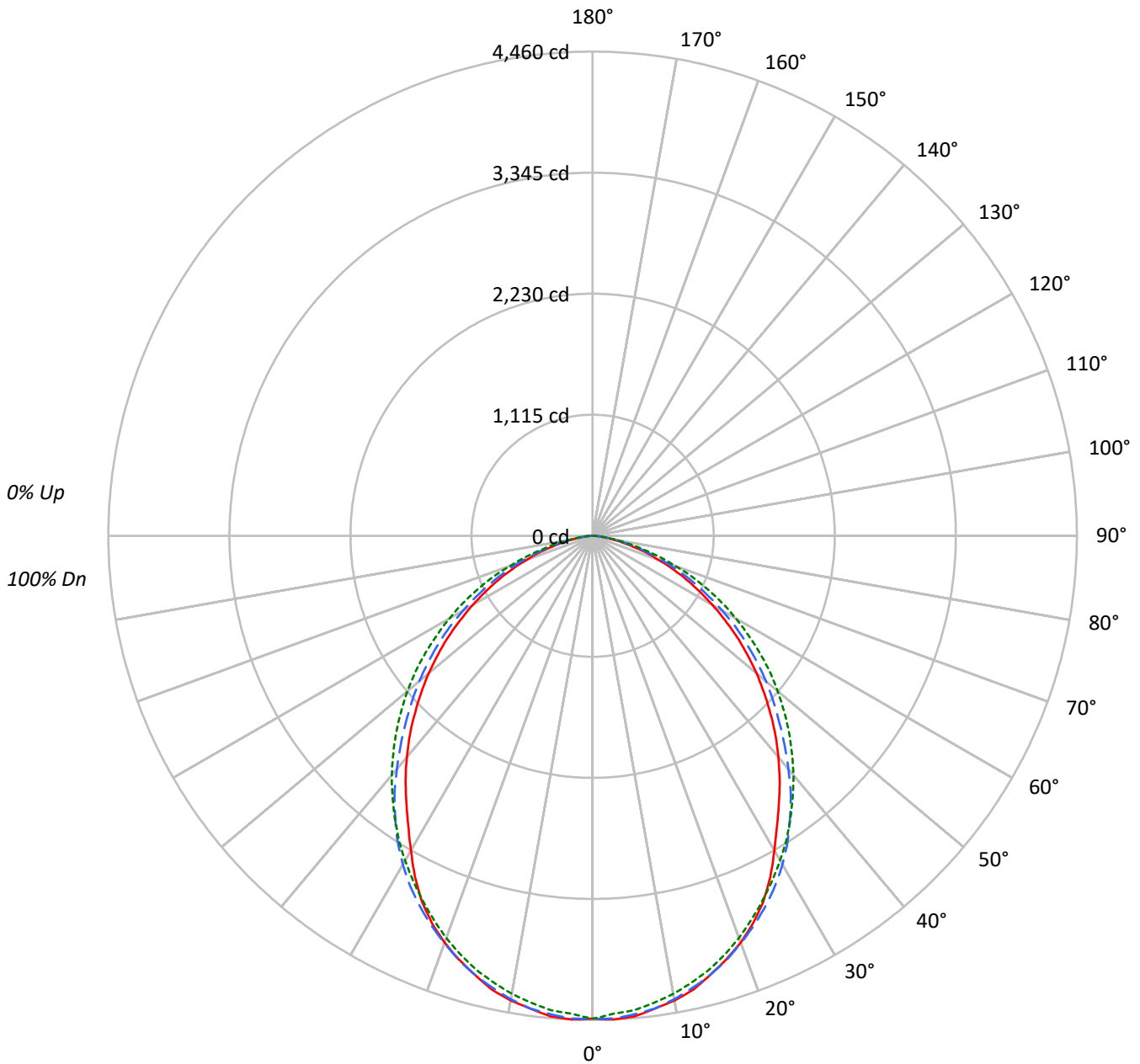
Lumens per Lamp: N/A
Luminaire Lumens: 10286.0 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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									
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°	11971	11971	11971
5°	12002	11952	11850
10°	11875	11842	11707
15°	11665	11665	11531
20°	11417	11432	11285
25°	11041	11178	11001
30°	10397	10865	10732
35°	9825	10414	10431
40°	9347	9851	10110
45°	8812	9255	9729
50°	8249	8721	9315
55°	7609	8114	8811
60°	6852	7404	8195
65°	6050	6583	7454
70°	5043	5607	6333
75°	3962	4478	4957
80°	2834	3152	3496
85°	1846	1846	1741



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	418.8	4.1
10°-20°	1176.6	11.4
20°-30°	1719.4	16.7
30°-40°	1951.7	19.0
40°-50°	1884.1	18.3
50°-60°	1554.3	15.1
60°-70°	1035.0	10.1
70°-80°	463.2	4.5
80°-90°	82.9	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°	3314.9	32.2
0°-40°	5266.6	51.2
0°-60°	8705.0	84.6
0°-90°	10286.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10286.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4448	4448	4448	4448	4448	
5°	4443	4442	4424	4401	4387	421
15°	4187	4197	4187	4168	4139	1180
25°	3719	3748	3765	3738	3705	1703
35°	2991	3032	3170	3187	3175	1874
45°	2316	2355	2432	2543	2557	1787
55°	1622	1649	1730	1825	1878	1448
65°	950	976	1034	1107	1171	942
75°	381	402	431	451	477	417
85°	60	60	60	56	56	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4448.4	4448.4	4448.4	4448.4	4448.4
2.5°	4460.4	4462.1	4451.8	4424.5	4407.4
5°	4443.3	4441.6	4424.5	4400.6	4386.9
7.5°	4393.7	4397.2	4392.0	4357.9	4339.1
10°	4345.9	4347.6	4333.9	4306.6	4284.4
12.5°	4284.4	4282.7	4263.9	4250.2	4214.3
15°	4187.0	4197.2	4187.0	4168.2	4139.1
17.5°	4093.0	4093.0	4099.8	4067.3	4045.1
20°	3987.0	3992.1	3992.1	3966.5	3940.9
22.5°	3864.0	3879.3	3884.5	3857.1	3826.4
25°	3718.7	3747.8	3764.8	3737.5	3705.0
27.5°	3542.7	3587.1	3638.4	3617.9	3582.0
30°	3346.1	3411.1	3496.5	3479.4	3453.8
32.5°	3159.9	3224.8	3342.7	3335.9	3322.2
35°	2990.7	3031.7	3170.1	3187.2	3175.3
37.5°	2830.0	2867.6	2997.5	3036.8	3026.6
40°	2660.9	2701.9	2804.4	2874.5	2877.9
42.5°	2493.4	2532.7	2616.4	2717.3	2717.3
45°	2315.6	2355.0	2431.9	2542.9	2556.6
47.5°	2141.3	2182.3	2257.5	2368.6	2390.8
50°	1970.4	2008.0	2083.2	2190.9	2225.1
52.5°	1792.7	1833.7	1907.2	2006.3	2055.9
55°	1621.8	1649.1	1729.5	1825.2	1878.1
57.5°	1444.1	1469.7	1560.3	1642.3	1697.0
60°	1273.2	1305.6	1375.7	1459.5	1522.7
62.5°	1109.1	1143.3	1203.1	1276.6	1348.4
65°	950.2	975.8	1033.9	1107.4	1170.6
67.5°	796.4	818.6	876.7	928.0	994.6
70°	640.9	669.9	712.6	762.2	804.9
72.5°	516.1	528.1	564.0	599.8	644.3
75°	381.1	401.6	430.7	451.2	476.8
77.5°	273.4	285.4	302.5	319.6	343.5
80°	182.9	188.0	203.4	206.8	225.6
82.5°	111.1	114.5	117.9	119.6	126.5
85°	59.8	59.8	59.8	56.4	56.4
87.5°	34.2	34.2	29.1	23.9	17.1
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)