

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: P558255

Luminaire Tested: **FUSL-12-4-LD4-3STD-30-UNV-93-97-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: P558255
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-LD4-3STD-30-UNV-93-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND
3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

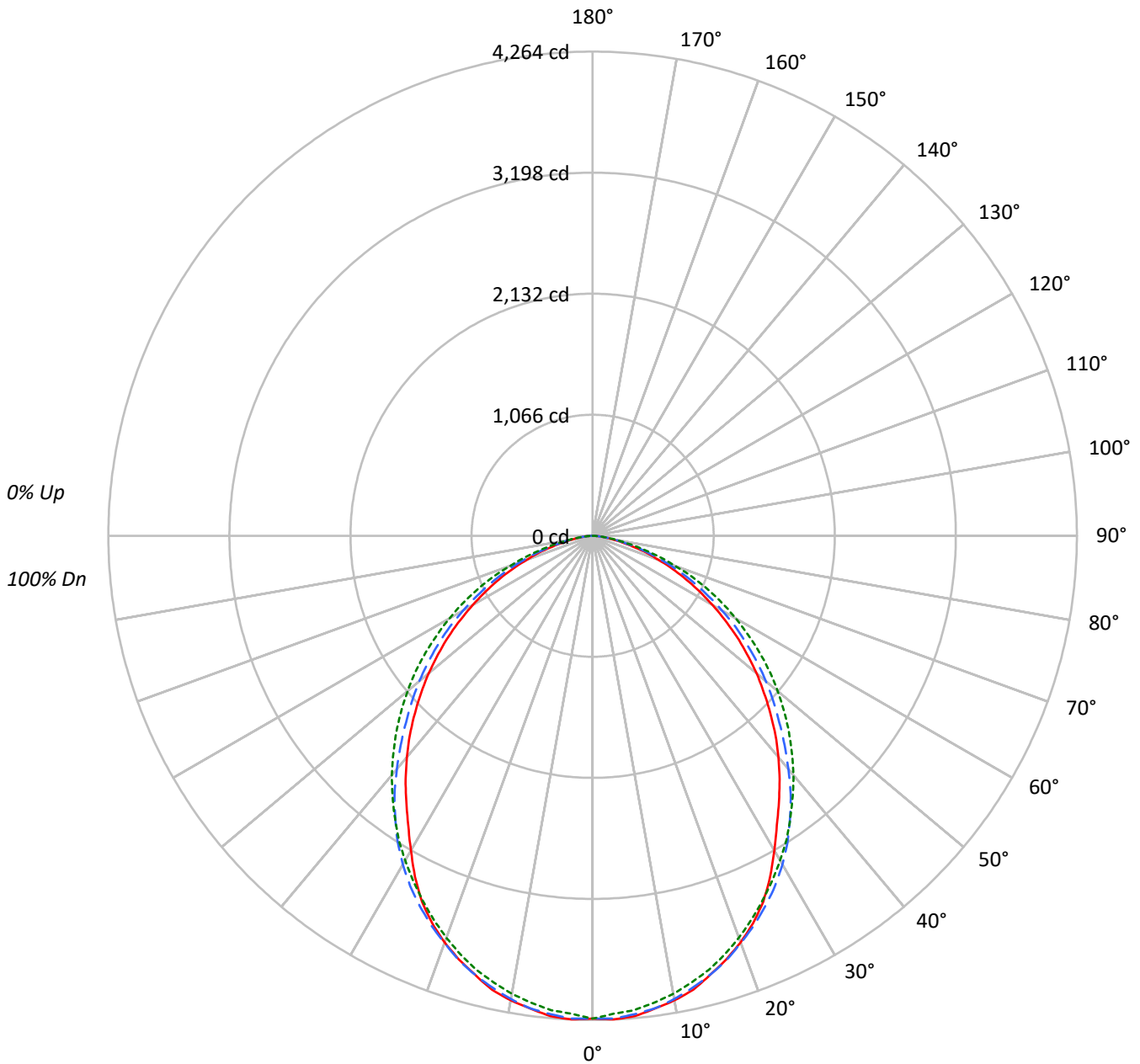
Lumens per Lamp: N/A
Luminaire Lumens: 9832.0 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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°	11442	11442	11442
5°	11473	11424	11327
10°	11351	11320	11190
15°	11150	11150	11022
20°	10913	10928	10787
25°	10554	10685	10515
30°	9939	10385	10258
35°	9391	9954	9971
40°	8935	9416	9663
45°	8423	8846	9300
50°	7885	8336	8904
55°	7273	7756	8423
60°	6550	7077	7833
65°	5783	6293	7125
70°	4820	5360	6054
75°	3788	4281	4739
80°	2709	3013	3341
85°	1766	1766	1664



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	400.3	4.1
10°-20°	1124.7	11.4
20°-30°	1643.5	16.7
30°-40°	1865.6	19.0
40°-50°	1800.9	18.3
50°-60°	1485.7	15.1
60°-70°	989.3	10.1
70°-80°	442.7	4.5
80°-90°	79.2	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°	3168.6	32.2
0°-40°	5034.2	51.2
0°-60°	8320.8	84.6
0°-90°	9832.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9832.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4252	4252	4252	4252	4252	
5°	4247	4246	4229	4206	4193	402
15°	4002	4012	4002	3984	3956	1128
25°	3555	3582	3599	3572	3542	1628
35°	2859	2898	3030	3046	3035	1791
45°	2213	2251	2324	2431	2444	1708
55°	1550	1576	1653	1745	1795	1384
65°	908	933	988	1058	1119	901
75°	364	384	412	431	456	398
85°	57	57	57	54	54	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4252.1	4252.1	4252.1	4252.1	4252.1
2.5°	4263.5	4265.2	4255.4	4229.2	4212.9
5°	4247.2	4245.6	4229.2	4206.3	4193.3
7.5°	4199.8	4203.1	4198.2	4165.5	4147.5
10°	4154.1	4155.7	4142.6	4116.5	4095.3
12.5°	4095.3	4093.6	4075.7	4062.6	4028.3
15°	4002.2	4012.0	4002.2	3984.2	3956.4
17.5°	3912.3	3912.3	3918.8	3887.8	3866.6
20°	3811.0	3815.9	3815.9	3791.4	3766.9
22.5°	3693.4	3708.1	3713.0	3686.9	3657.5
25°	3554.6	3582.3	3598.7	3572.5	3541.5
27.5°	3386.3	3428.8	3477.8	3458.2	3423.9
30°	3198.5	3260.5	3342.2	3325.9	3301.4
32.5°	3020.4	3082.5	3195.2	3188.7	3175.6
35°	2858.7	2897.9	3030.2	3046.5	3035.1
37.5°	2705.1	2741.1	2865.2	2902.8	2893.0
40°	2543.4	2582.6	2680.6	2747.6	2750.9
42.5°	2383.3	2420.9	2500.9	2597.3	2597.3
45°	2213.4	2251.0	2324.5	2430.7	2443.8
47.5°	2046.8	2086.0	2157.9	2264.1	2285.3
50°	1883.5	1919.4	1991.3	2094.2	2126.9
52.5°	1713.6	1752.8	1823.0	1917.8	1965.1
55°	1550.2	1576.4	1653.1	1744.6	1795.3
57.5°	1380.3	1404.8	1491.4	1569.8	1622.1
60°	1217.0	1248.0	1315.0	1395.0	1455.5
62.5°	1060.2	1092.8	1150.0	1220.2	1288.9
65°	908.2	932.7	988.3	1058.5	1119.0
67.5°	761.2	782.5	838.0	887.0	950.7
70°	612.6	640.3	681.2	728.6	769.4
72.5°	493.3	504.8	539.1	573.4	615.8
75°	364.3	383.9	411.7	431.3	455.8
77.5°	261.4	272.8	289.1	305.5	328.3
80°	174.8	179.7	194.4	197.7	215.6
82.5°	106.2	109.4	112.7	114.3	120.9
85°	57.2	57.2	57.2	53.9	53.9
87.5°	32.7	32.7	27.8	22.9	16.3
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)