

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: P557761

Luminaire Tested: **FUSL-12-4-LD4-3HI-35-UNV-81-84-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: P557761
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-81-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

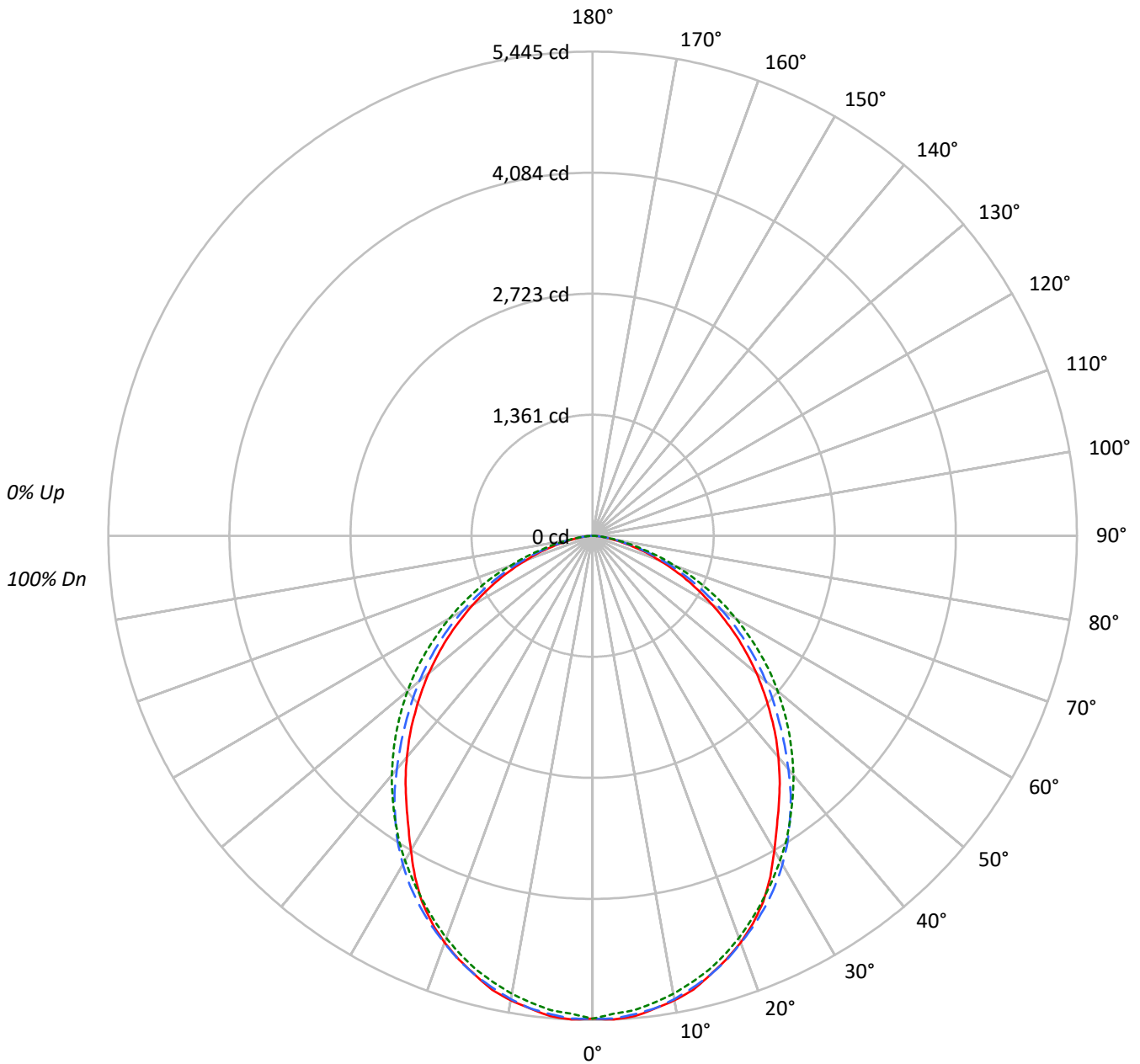
Lumens per Lamp: N/A
Luminaire Lumens: 12557.0 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	14614	14614	14614
5°	14652	14591	14467
10°	14497	14457	14292
15°	14240	14240	14077
20°	13938	13956	13777
25°	13479	13647	13430
30°	12693	13263	13102
35°	11994	12713	12734
40°	11411	12027	12342
45°	10758	11298	11878
50°	10070	10647	11372
55°	9289	9905	10757
60°	8365	9039	10005
65°	7386	8037	9100
70°	6156	6845	7731
75°	4837	5466	6052
80°	3459	3848	4268
85°	2254	2254	2124



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	511.3	4.1
10°-20°	1436.4	11.4
20°-30°	2099.1	16.7
30°-40°	2382.7	19.0
40°-50°	2300.1	18.3
50°-60°	1897.4	15.1
60°-70°	1263.5	10.1
70°-80°	565.4	4.5
80°-90°	101.1	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°	4046.8	32.2
0°-40°	6429.4	51.2
0°-60°	10626.9	84.6
0°-90°	12557.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12557.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5431	5431	5431	5431	5431	
5°	5424	5422	5401	5372	5356	513
15°	5111	5124	5111	5088	5053	1441
25°	4540	4575	4596	4563	4523	2079
35°	3651	3701	3870	3891	3876	2288
45°	2827	2875	2969	3104	3121	2181
55°	1980	2013	2111	2228	2293	1767
65°	1160	1191	1262	1352	1429	1150
75°	465	490	526	551	582	509
85°	73	73	73	69	69	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5430.6	5430.6	5430.6	5430.6	5430.6
2.5°	5445.2	5447.3	5434.8	5401.4	5380.5
5°	5424.3	5422.2	5401.4	5372.2	5355.5
7.5°	5363.8	5368.0	5361.7	5320.0	5297.1
10°	5305.4	5307.5	5290.8	5257.4	5230.3
12.5°	5230.3	5228.2	5205.3	5188.6	5144.8
15°	5111.4	5123.9	5111.4	5088.4	5053.0
17.5°	4996.6	4996.6	5005.0	4965.3	4938.2
20°	4867.3	4873.5	4873.5	4842.2	4811.0
22.5°	4717.1	4735.8	4742.1	4708.7	4671.2
25°	4539.7	4575.2	4596.1	4562.7	4523.0
27.5°	4324.9	4379.1	4441.7	4416.6	4372.8
30°	4084.9	4164.2	4268.5	4247.7	4216.4
32.5°	3857.5	3936.8	4080.8	4072.4	4055.7
35°	3651.0	3701.1	3870.0	3890.9	3876.3
37.5°	3454.9	3500.8	3659.3	3707.3	3694.8
40°	3248.3	3298.4	3423.6	3509.1	3513.3
42.5°	3043.9	3091.9	3194.1	3317.2	3317.2
45°	2826.9	2874.9	2968.8	3104.4	3121.1
47.5°	2614.1	2664.2	2756.0	2891.6	2918.7
50°	2405.5	2451.4	2543.2	2674.6	2716.3
52.5°	2188.5	2238.6	2328.3	2449.3	2509.8
55°	1979.9	2013.3	2111.3	2228.1	2292.8
57.5°	1762.9	1794.2	1904.8	2004.9	2071.7
60°	1554.3	1593.9	1679.5	1781.7	1858.9
62.5°	1354.0	1395.7	1468.7	1558.4	1646.1
65°	1160.0	1191.3	1262.2	1351.9	1429.1
67.5°	972.2	999.3	1070.3	1132.8	1214.2
70°	782.4	817.8	870.0	930.5	982.6
72.5°	630.1	644.7	688.5	732.3	786.5
75°	465.2	490.3	525.7	550.8	582.1
77.5°	333.8	348.4	369.3	390.1	419.3
80°	223.2	229.5	248.3	252.4	275.4
82.5°	135.6	139.8	144.0	146.0	154.4
85°	73.0	73.0	73.0	68.8	68.8
87.5°	41.7	41.7	35.5	29.2	20.9
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)