

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: P554408

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-93-88-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: P554408
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-12-2-LD4-1STD-30-UNV-93-88-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

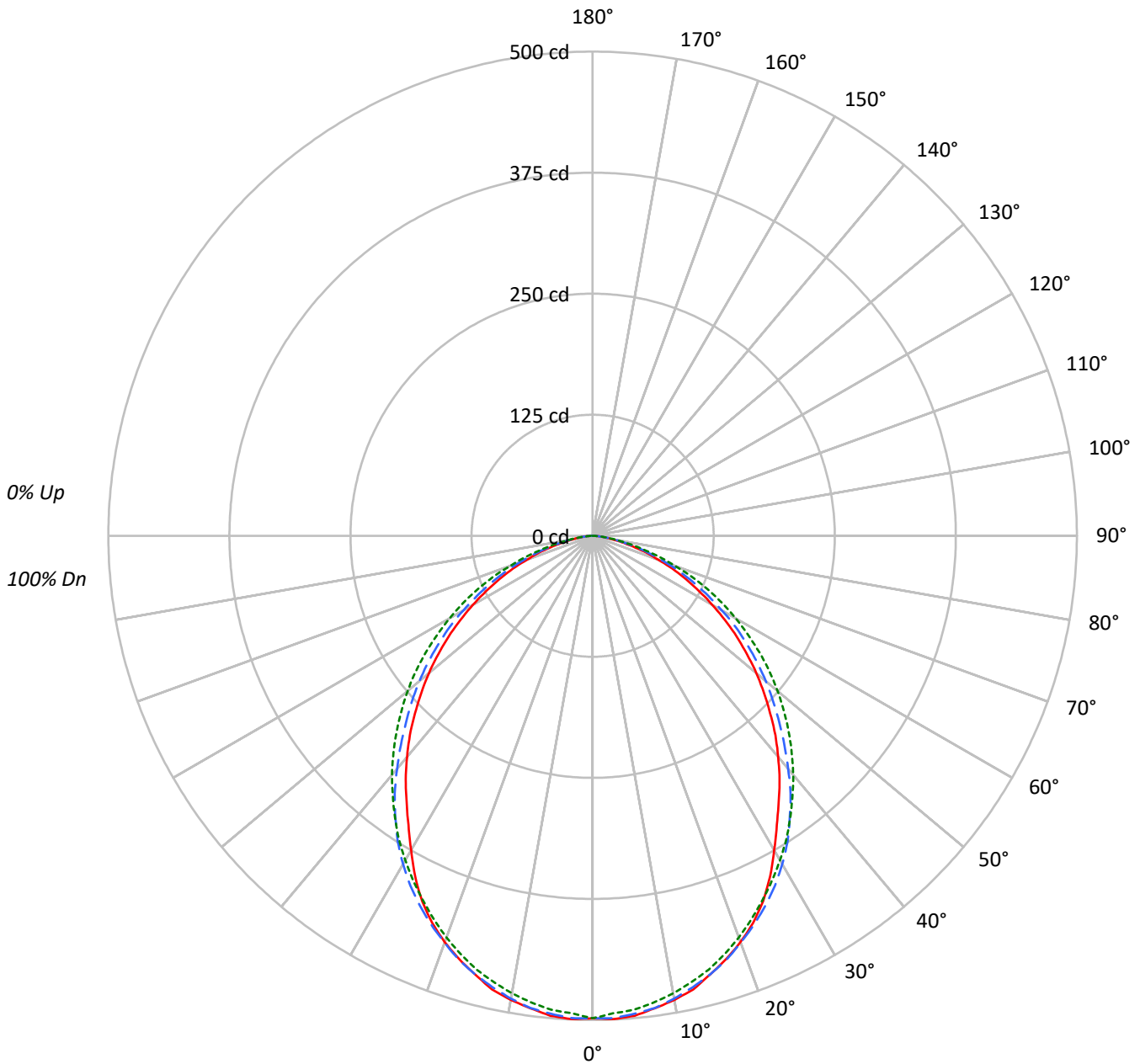
Lumens per Lamp: N/A
Luminaire Lumens: 1152.0 lumens
Efficiency: N/A
Efficacy: 69.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
Input Voltage (V): NR
Input Current (A_{in}): 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°	2681	2681	2681
5°	2688	2677	2654
10°	2660	2653	2622
15°	2613	2613	2583
20°	2557	2561	2528
25°	2473	2504	2464
30°	2329	2434	2404
35°	2200	2332	2336
40°	2094	2207	2264
45°	1974	2073	2179
50°	1848	1953	2087
55°	1704	1818	1973
60°	1535	1659	1835
65°	1355	1475	1670
70°	1130	1256	1418
75°	888	1002	1110
80°	635	707	784
85°	414	414	389



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.9	4.1
10°-20°	131.8	11.4
20°-30°	192.6	16.7
30°-40°	218.6	19.0
40°-50°	211.0	18.3
50°-60°	174.1	15.1
60°-70°	115.9	10.1
70°-80°	51.9	4.5
80°-90°	9.3	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°	371.3	32.2
0°-40°	589.8	51.2
0°-60°	974.9	84.6
0°-90°	1152.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1152.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	498	498	498	498	498	
5°	498	497	496	493	491	47
15°	469	470	469	467	464	132
25°	416	420	422	419	415	191
35°	335	340	355	357	356	210
45°	259	264	272	285	286	200
55°	182	185	194	204	210	162
65°	106	109	116	124	131	106
75°	43	45	48	50	53	47
85°	7	7	7	6	6	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	498.2	498.2	498.2	498.2	498.2
2.5°	499.6	499.7	498.6	495.5	493.6
5°	497.6	497.4	495.5	492.9	491.3
7.5°	492.1	492.5	491.9	488.1	486.0
10°	486.7	486.9	485.4	482.3	479.8
12.5°	479.8	479.6	477.5	476.0	472.0
15°	468.9	470.1	468.9	466.8	463.6
17.5°	458.4	458.4	459.2	455.5	453.0
20°	446.5	447.1	447.1	444.2	441.4
22.5°	432.8	434.5	435.0	432.0	428.5
25°	416.5	419.7	421.7	418.6	415.0
27.5°	396.8	401.7	407.5	405.2	401.2
30°	374.8	382.0	391.6	389.7	386.8
32.5°	353.9	361.2	374.4	373.6	372.1
35°	334.9	339.5	355.0	357.0	355.6
37.5°	317.0	321.2	335.7	340.1	339.0
40°	298.0	302.6	314.1	321.9	322.3
42.5°	279.3	283.7	293.0	304.3	304.3
45°	259.3	263.7	272.4	284.8	286.3
47.5°	239.8	244.4	252.8	265.3	267.8
50°	220.7	224.9	233.3	245.4	249.2
52.5°	200.8	205.4	213.6	224.7	230.3
55°	181.6	184.7	193.7	204.4	210.3
57.5°	161.7	164.6	174.7	183.9	190.1
60°	142.6	146.2	154.1	163.5	170.5
62.5°	124.2	128.0	134.7	143.0	151.0
65°	106.4	109.3	115.8	124.0	131.1
67.5°	89.2	91.7	98.2	103.9	111.4
70°	71.8	75.0	79.8	85.4	90.1
72.5°	57.8	59.1	63.2	67.2	72.2
75°	42.7	45.0	48.2	50.5	53.4
77.5°	30.6	32.0	33.9	35.8	38.5
80°	20.5	21.1	22.8	23.2	25.3
82.5°	12.4	12.8	13.2	13.4	14.2
85°	6.7	6.7	6.7	6.3	6.3
87.5°	3.8	3.8	3.3	2.7	1.9
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)