

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: P554020

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-93-86-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: P554020
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-LD4-1HI-40-UNV-93-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

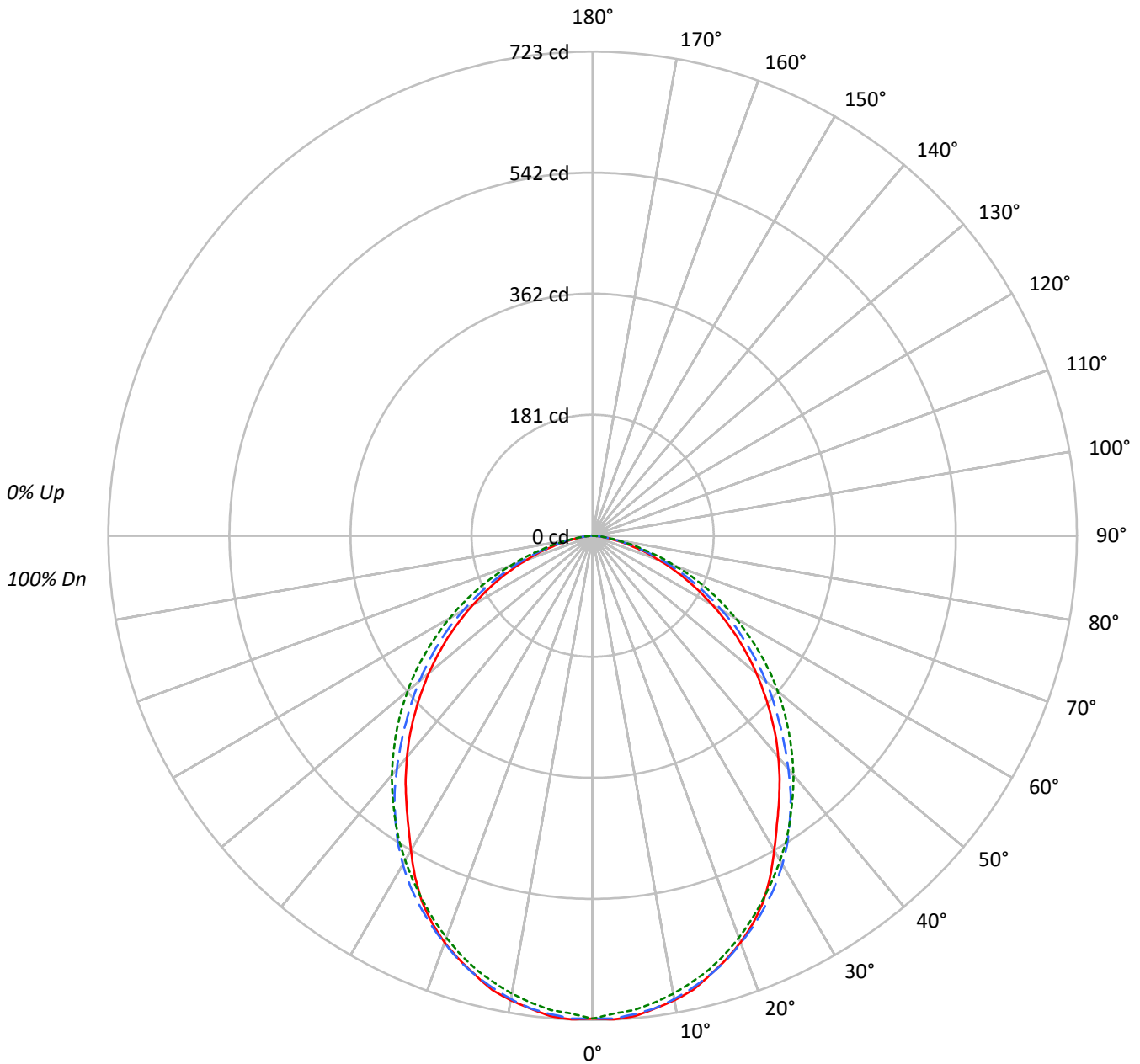
Lumens per Lamp: N/A
Luminaire Lumens: 1667.0 lumens
Efficiency: N/A
Efficacy: 77.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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°	3880	3880	3880
5°	3890	3874	3841
10°	3849	3839	3794
15°	3781	3781	3738
20°	3701	3706	3658
25°	3579	3623	3566
30°	3370	3522	3478
35°	3185	3376	3381
40°	3029	3193	3277
45°	2856	3000	3153
50°	2673	2827	3019
55°	2466	2630	2856
60°	2221	2400	2657
65°	1961	2134	2416
70°	1635	1817	2052
75°	1285	1451	1607
80°	917	1023	1134
85°	599	599	562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.9	4.1
10°-20°	190.7	11.4
20°-30°	278.7	16.7
30°-40°	316.3	19.0
40°-50°	305.4	18.3
50°-60°	251.9	15.1
60°-70°	167.7	10.1
70°-80°	75.1	4.5
80°-90°	13.4	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°	537.2	32.2
0°-40°	853.5	51.2
0°-60°	1410.8	84.6
0°-90°	1667.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1667.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	721	721	721	721	721	
5°	720	720	717	713	711	68
15°	679	680	679	676	671	191
25°	603	607	610	606	600	276
35°	485	491	514	516	515	304
45°	375	382	394	412	414	290
55°	263	267	280	296	304	235
65°	154	158	168	180	190	153
75°	62	65	70	73	77	68
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	720.9	720.9	720.9	720.9	720.9
2.5°	722.9	723.2	721.5	717.1	714.3
5°	720.1	719.8	717.1	713.2	711.0
7.5°	712.1	712.6	711.8	706.3	703.2
10°	704.3	704.6	702.4	697.9	694.3
12.5°	694.3	694.1	691.0	688.8	683.0
15°	678.6	680.2	678.6	675.5	670.8
17.5°	663.3	663.3	664.4	659.2	655.6
20°	646.2	647.0	647.0	642.8	638.7
22.5°	626.2	628.7	629.5	625.1	620.1
25°	602.7	607.4	610.1	605.7	600.5
27.5°	574.1	581.3	589.7	586.3	580.5
30°	542.3	552.8	566.7	563.9	559.7
32.5°	512.1	522.6	541.7	540.6	538.4
35°	484.7	491.3	513.8	516.5	514.6
37.5°	458.7	464.7	485.8	492.2	490.5
40°	431.2	437.9	454.5	465.9	466.4
42.5°	404.1	410.5	424.0	440.4	440.4
45°	375.3	381.7	394.1	412.1	414.3
47.5°	347.0	353.7	365.9	383.9	387.5
50°	319.3	325.4	337.6	355.1	360.6
52.5°	290.5	297.2	309.1	325.2	333.2
55°	262.8	267.3	280.3	295.8	304.4
57.5°	234.0	238.2	252.9	266.2	275.0
60°	206.3	211.6	223.0	236.5	246.8
62.5°	179.7	185.3	195.0	206.9	218.5
65°	154.0	158.1	167.6	179.5	189.7
67.5°	129.1	132.7	142.1	150.4	161.2
70°	103.9	108.6	115.5	123.5	130.4
72.5°	83.6	85.6	91.4	97.2	104.4
75°	61.8	65.1	69.8	73.1	77.3
77.5°	44.3	46.3	49.0	51.8	55.7
80°	29.6	30.5	33.0	33.5	36.6
82.5°	18.0	18.6	19.1	19.4	20.5
85°	9.7	9.7	9.7	9.1	9.1
87.5°	5.5	5.5	4.7	3.9	2.8
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)