

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: P554406

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-93-87-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: P554406
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-93-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

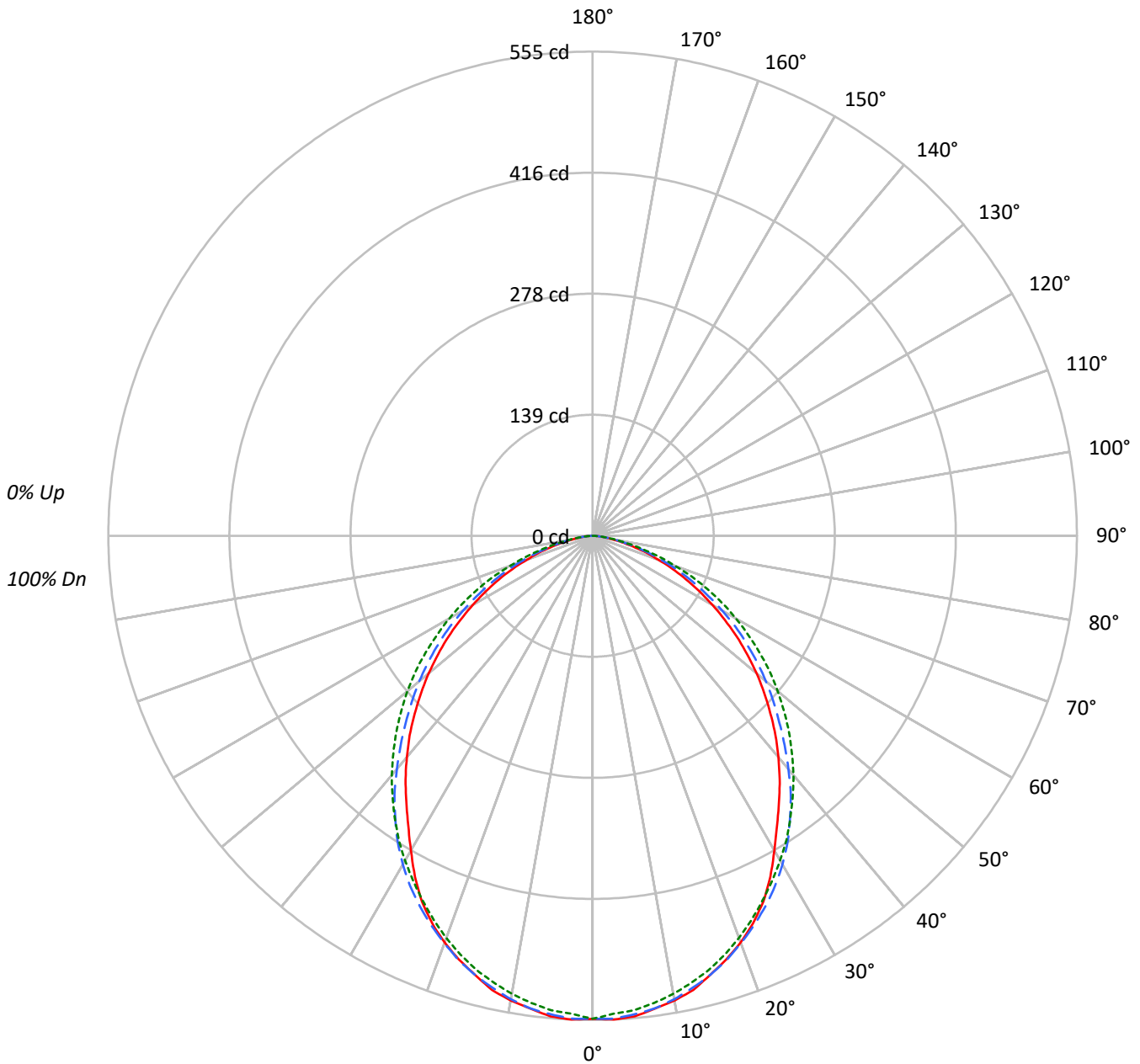
Lumens per Lamp: N/A
Luminaire Lumens: 1280.0 lumens
Efficiency: N/A
Efficacy: 77.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	2979	2979	2979
5°	2987	2975	2949
10°	2955	2947	2914
15°	2903	2903	2870
20°	2841	2845	2809
25°	2748	2782	2738
30°	2588	2704	2671
35°	2445	2592	2596
40°	2326	2452	2516
45°	2194	2303	2421
50°	2053	2170	2318
55°	1894	2019	2193
60°	1705	1843	2040
65°	1505	1639	1855
70°	1254	1396	1577
75°	986	1115	1233
80°	707	784	871
85°	457	457	432



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	4.1
10°-20°	146.4	11.4
20°-30°	214.0	16.7
30°-40°	242.9	19.0
40°-50°	234.5	18.3
50°-60°	193.4	15.1
60°-70°	128.8	10.1
70°-80°	57.6	4.5
80°-90°	10.3	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°	412.5	32.2
0°-40°	655.4	51.2
0°-60°	1083.3	84.6
0°-90°	1280.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1280.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	554	554	554	554	554	
5°	553	553	551	548	546	52
15°	521	522	521	519	515	147
25°	463	466	468	465	461	212
35°	372	377	394	397	395	233
45°	288	293	303	316	318	222
55°	202	205	215	227	234	180
65°	118	121	129	138	146	117
75°	47	50	54	56	59	52
85°	7	7	7	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	553.6	553.6	553.6	553.6	553.6
2.5°	555.1	555.3	554.0	550.6	548.5
5°	552.9	552.7	550.6	547.6	545.9
7.5°	546.8	547.2	546.5	542.3	540.0
10°	540.8	541.0	539.3	535.9	533.2
12.5°	533.2	532.9	530.6	528.9	524.4
15°	521.0	522.3	521.0	518.7	515.1
17.5°	509.3	509.3	510.2	506.1	503.4
20°	496.1	496.8	496.8	493.6	490.4
22.5°	480.8	482.7	483.4	480.0	476.2
25°	462.8	466.4	468.5	465.1	461.1
27.5°	440.9	446.4	452.8	450.2	445.7
30°	416.4	424.5	435.1	433.0	429.8
32.5°	393.2	401.3	416.0	415.1	413.4
35°	372.2	377.3	394.5	396.6	395.1
37.5°	352.2	356.9	373.0	377.9	376.6
40°	331.1	336.2	349.0	357.7	358.1
42.5°	310.3	315.2	325.6	338.1	338.1
45°	288.2	293.1	302.6	316.4	318.1
47.5°	266.5	271.6	280.9	294.8	297.5
50°	245.2	249.9	259.2	272.6	276.9
52.5°	223.1	228.2	237.3	249.7	255.8
55°	201.8	205.2	215.2	227.1	233.7
57.5°	179.7	182.9	194.2	204.4	211.2
60°	158.4	162.5	171.2	181.6	189.5
62.5°	138.0	142.3	149.7	158.9	167.8
65°	118.2	121.4	128.7	137.8	145.7
67.5°	99.1	101.9	109.1	115.5	123.8
70°	79.7	83.4	88.7	94.8	100.2
72.5°	64.2	65.7	70.2	74.6	80.2
75°	47.4	50.0	53.6	56.1	59.3
77.5°	34.0	35.5	37.6	39.8	42.7
80°	22.8	23.4	25.3	25.7	28.1
82.5°	13.8	14.2	14.7	14.9	15.7
85°	7.4	7.4	7.4	7.0	7.0
87.5°	4.3	4.3	3.6	3.0	2.1
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)