

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: P554564

Luminaire Tested: **FUSL-12-2-LD4-1STD-50-UNV-81-86-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: P554564
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-50-UNV-81-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

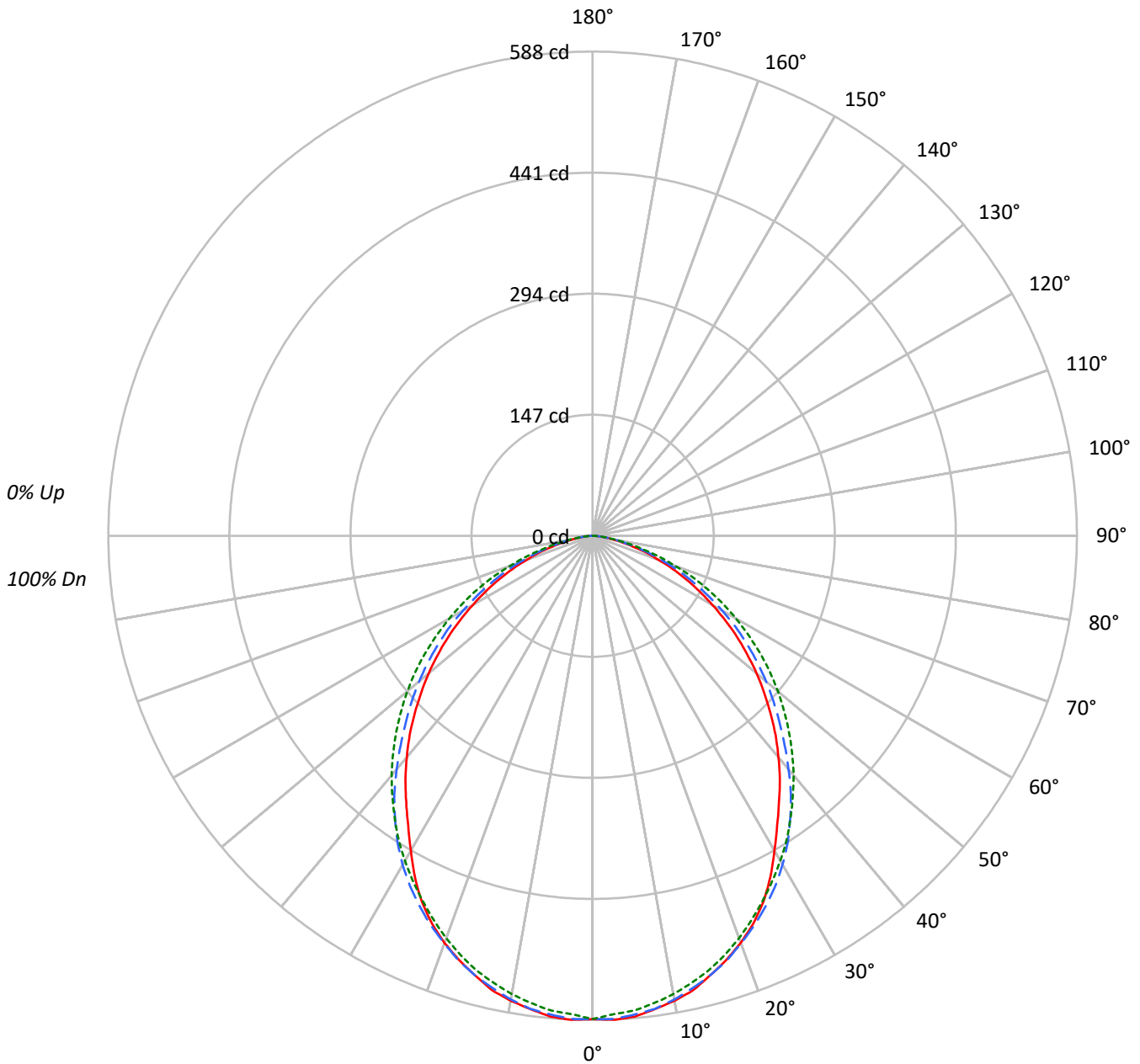
Lumens per Lamp: N/A
Luminaire Lumens: 1357.0 lumens
Efficiency: N/A
Efficacy: 81.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
Input Voltage (V): NR
Input Current (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°	3159	3159	3159
5°	3167	3153	3127
10°	3133	3125	3089
15°	3078	3078	3043
20°	3013	3017	2978
25°	2913	2950	2903
30°	2743	2867	2832
35°	2593	2748	2752
40°	2466	2599	2668
45°	2325	2442	2567
50°	2177	2301	2457
55°	2008	2141	2325
60°	1808	1954	2162
65°	1597	1737	1966
70°	1330	1479	1671
75°	1046	1181	1308
80°	747	831	924
85°	488	488	457



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	4.1
10°-20°	155.2	11.4
20°-30°	226.8	16.7
30°-40°	257.5	19.0
40°-50°	248.6	18.3
50°-60°	205.0	15.1
60°-70°	136.5	10.1
70°-80°	61.1	4.5
80°-90°	10.9	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°	437.3	32.2
0°-40°	694.8	51.2
0°-60°	1148.4	84.6
0°-90°	1357.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1357.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	587	587	587	587	587	
5°	586	586	584	581	579	55
15°	552	554	552	550	546	156
25°	491	494	497	493	489	225
35°	395	400	418	420	419	247
45°	306	311	321	336	337	236
55°	214	218	228	241	248	191
65°	125	129	136	146	154	124
75°	50	53	57	60	63	55
85°	8	8	8	7	7	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	586.9	586.9	586.9	586.9	586.9
2.5°	588.4	588.7	587.3	583.7	581.5
5°	586.2	586.0	583.7	580.6	578.8
7.5°	579.7	580.1	579.4	574.9	572.4
10°	573.3	573.6	571.8	568.2	565.2
12.5°	565.2	565.0	562.5	560.7	556.0
15°	552.4	553.7	552.4	549.9	546.1
17.5°	540.0	540.0	540.9	536.6	533.7
20°	526.0	526.7	526.7	523.3	519.9
22.5°	509.8	511.8	512.5	508.9	504.8
25°	490.6	494.4	496.7	493.1	488.8
27.5°	467.4	473.2	480.0	477.3	472.6
30°	441.4	450.0	461.3	459.0	455.7
32.5°	416.9	425.4	441.0	440.1	438.3
35°	394.6	400.0	418.2	420.5	418.9
37.5°	373.4	378.3	395.5	400.6	399.3
40°	351.0	356.4	370.0	379.2	379.7
42.5°	328.9	334.1	345.2	358.5	358.5
45°	305.5	310.7	320.8	335.5	337.3
47.5°	282.5	287.9	297.8	312.5	315.4
50°	260.0	264.9	274.8	289.0	293.5
52.5°	236.5	241.9	251.6	264.7	271.2
55°	214.0	217.6	228.2	240.8	247.8
57.5°	190.5	193.9	205.8	216.7	223.9
60°	168.0	172.2	181.5	192.5	200.9
62.5°	146.3	150.8	158.7	168.4	177.9
65°	125.4	128.7	136.4	146.1	154.4
67.5°	105.1	108.0	115.7	122.4	131.2
70°	84.5	88.4	94.0	100.6	106.2
72.5°	68.1	69.7	74.4	79.1	85.0
75°	50.3	53.0	56.8	59.5	62.9
77.5°	36.1	37.7	39.9	42.2	45.3
80°	24.1	24.8	26.8	27.3	29.8
82.5°	14.7	15.1	15.6	15.8	16.7
85°	7.9	7.9	7.9	7.4	7.4
87.5°	4.5	4.5	3.8	3.2	2.3
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)