

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: P555152

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-82-84-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: P555152  
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-LD4-2STD-30-UNV-82-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

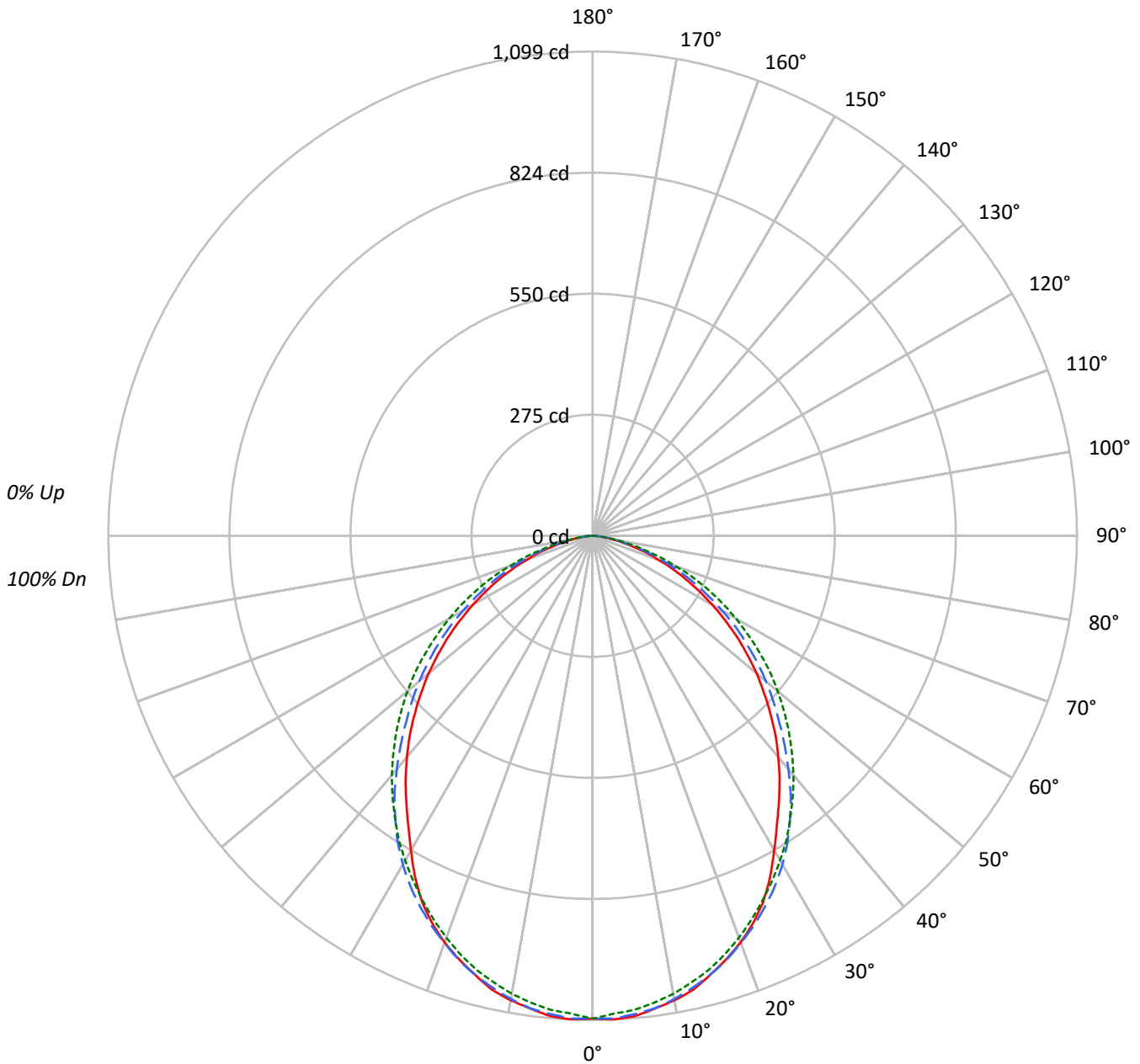
Lumens per Lamp: N/A  
Luminaire Lumens: 2534.0 lumens  
Efficiency: N/A  
Efficacy: 76.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	5898	5898	5898
5°	5914	5889	5838
10°	5851	5835	5768
15°	5747	5747	5682
20°	5625	5633	5560
25°	5440	5508	5421
30°	5123	5353	5288
35°	4841	5131	5139
40°	4605	4854	4981
45°	4342	4560	4794
50°	4064	4297	4590
55°	3749	3998	4342
60°	3377	3648	4038
65°	2981	3244	3673
70°	2485	2763	3120
75°	1953	2206	2443
80°	1395	1553	1723
85°	908	908	858



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.2	4.1
10°-20°	289.9	11.4
20°-30°	423.6	16.7
30°-40°	480.8	19.0
40°-50°	464.2	18.3
50°-60°	382.9	15.1
60°-70°	255.0	10.1
70°-80°	114.1	4.5
80°-90°	20.4	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°	816.6	32.2
0°-40°	1297.5	51.2
0°-60°	2144.5	84.6
0°-90°	2534.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2534.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1096	1096	1096	1096	1096	
5°	1095	1094	1090	1084	1081	104
15°	1032	1034	1032	1027	1020	291
25°	916	923	928	921	913	420
35°	737	747	781	785	782	462
45°	570	580	599	626	630	440
55°	400	406	426	450	463	357
65°	234	240	255	273	288	232
75°	94	99	106	111	118	103
85°	15	15	15	14	14	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1095.9	1095.9	1095.9	1095.9	1095.9
2.5°	1098.8	1099.3	1096.7	1090.0	1085.8
5°	1094.6	1094.2	1090.0	1084.1	1080.7
7.5°	1082.4	1083.3	1082.0	1073.6	1068.9
10°	1070.6	1071.0	1067.7	1060.9	1055.5
12.5°	1055.5	1055.1	1050.4	1047.1	1038.2
15°	1031.5	1034.0	1031.5	1026.8	1019.7
17.5°	1008.3	1008.3	1010.0	1002.0	996.5
20°	982.2	983.5	983.5	977.2	970.8
22.5°	951.9	955.7	957.0	950.2	942.6
25°	916.1	923.3	927.5	920.7	912.8
27.5°	872.8	883.7	896.3	891.3	882.4
30°	824.3	840.3	861.4	857.2	850.9
32.5°	778.4	794.4	823.5	821.8	818.4
35°	736.8	746.9	781.0	785.2	782.2
37.5°	697.2	706.5	738.5	748.1	745.6
40°	655.5	665.6	690.9	708.1	709.0
42.5°	614.3	623.9	644.6	669.4	669.4
45°	570.5	580.2	599.1	626.5	629.8
47.5°	527.5	537.6	556.2	583.5	589.0
50°	485.4	494.7	513.2	539.7	548.2
52.5°	441.6	451.7	469.8	494.3	506.5
55°	399.5	406.3	426.1	449.6	462.7
57.5°	355.8	362.1	384.4	404.6	418.1
60°	313.7	321.7	338.9	359.5	375.1
62.5°	273.2	281.7	296.4	314.5	332.2
65°	234.1	240.4	254.7	272.8	288.4
67.5°	196.2	201.7	216.0	228.6	245.0
70°	157.9	165.0	175.6	187.8	198.3
72.5°	127.1	130.1	138.9	147.8	158.7
75°	93.9	98.9	106.1	111.1	117.5
77.5°	67.4	70.3	74.5	78.7	84.6
80°	45.0	46.3	50.1	50.9	55.6
82.5°	27.4	28.2	29.0	29.5	31.2
85°	14.7	14.7	14.7	13.9	13.9
87.5°	8.4	8.4	7.2	5.9	4.2
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)