

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: P554648

Luminaire Tested: **FUSL-12-2-LD4-2HI-30-UNV-82-88-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: P554648
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-LD4-2HI-30-UNV-82-88-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC 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

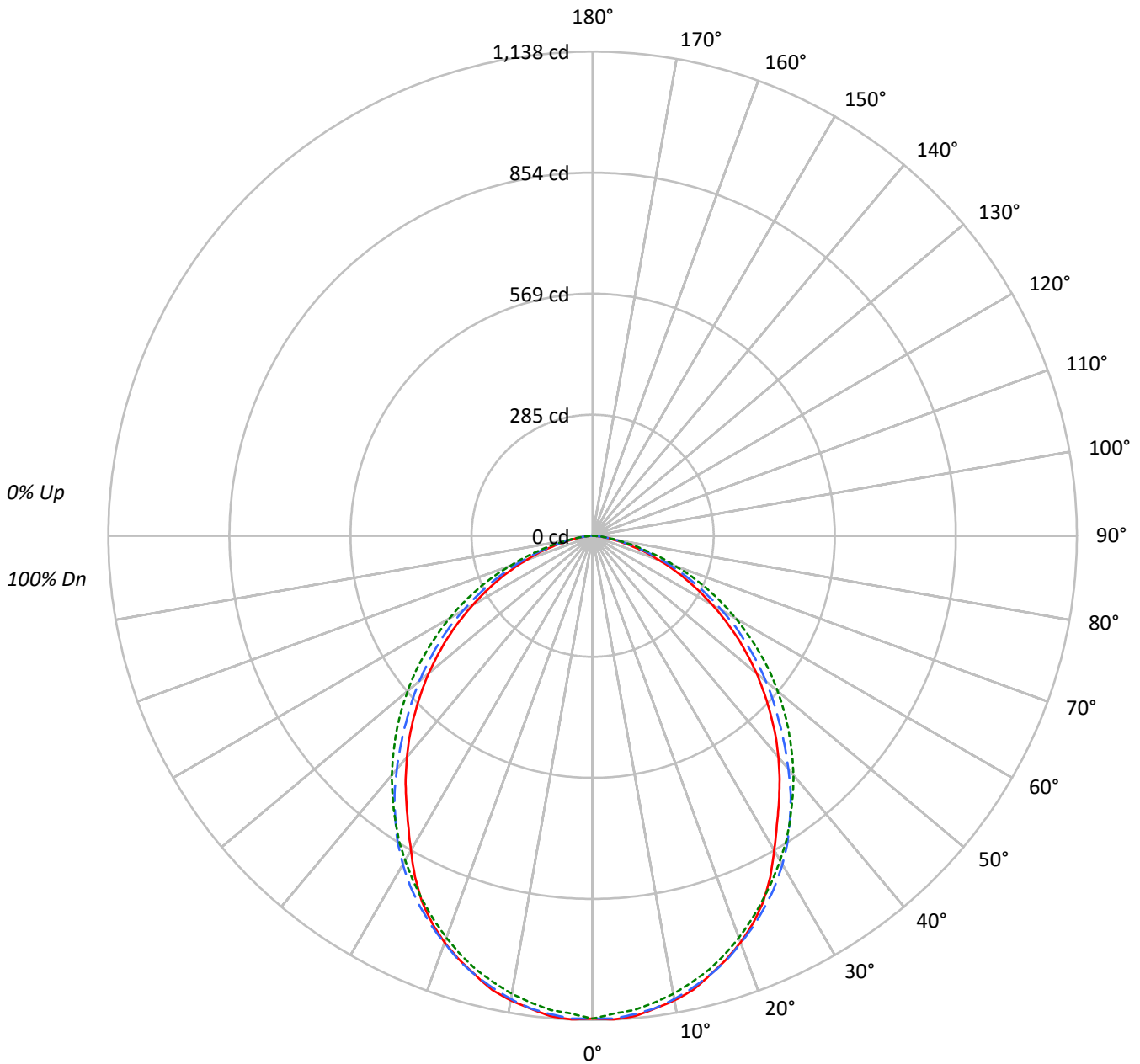
Lumens per Lamp: N/A
Luminaire Lumens: 2624.0 lumens
Efficiency: N/A
Efficacy: 60.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6107	6107	6107
5°	6124	6098	6046
10°	6059	6042	5973
15°	5951	5951	5883
20°	5825	5833	5758
25°	5634	5703	5613
30°	5305	5543	5476
35°	5012	5313	5322
40°	4769	5026	5158
45°	4496	4722	4964
50°	4209	4449	4752
55°	3882	4140	4495
60°	3496	3778	4181
65°	3087	3359	3803
70°	2573	2861	3231
75°	2021	2285	2529
80°	1444	1609	1782
85°	945	945	889



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.8	4.1
10°-20°	300.2	11.4
20°-30°	438.6	16.7
30°-40°	497.9	19.0
40°-50°	480.6	18.3
50°-60°	396.5	15.1
60°-70°	264.0	10.1
70°-80°	118.2	4.5
80°-90°	21.1	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°	845.6	32.2
0°-40°	1343.5	51.2
0°-60°	2220.7	84.6
0°-90°	2624.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2624.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1135	1135	1135	1135	1135	
5°	1134	1133	1129	1123	1119	107
15°	1068	1071	1068	1063	1056	301
25°	949	956	960	954	945	434
35°	763	773	809	813	810	478
45°	591	601	620	649	652	456
55°	414	421	441	466	479	369
65°	242	249	264	282	299	240
75°	97	102	110	115	122	106
85°	15	15	15	14	14	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1134.8	1134.8	1134.8	1134.8	1134.8
2.5°	1137.9	1138.3	1135.7	1128.7	1124.3
5°	1133.5	1133.1	1128.7	1122.6	1119.1
7.5°	1120.9	1121.7	1120.4	1111.7	1106.9
10°	1108.7	1109.1	1105.6	1098.6	1093.0
12.5°	1093.0	1092.5	1087.7	1084.2	1075.1
15°	1068.1	1070.7	1068.1	1063.3	1055.9
17.5°	1044.1	1044.1	1045.9	1037.6	1031.9
20°	1017.1	1018.4	1018.4	1011.9	1005.3
22.5°	985.7	989.6	990.9	984.0	976.1
25°	948.7	956.1	960.4	953.5	945.2
27.5°	903.8	915.1	928.2	922.9	913.8
30°	853.6	870.2	892.0	887.6	881.1
32.5°	806.1	822.7	852.7	851.0	847.5
35°	762.9	773.4	808.7	813.1	810.0
37.5°	722.0	731.5	764.7	774.7	772.1
40°	678.8	689.3	715.4	733.3	734.2
42.5°	636.1	646.1	667.5	693.2	693.2
45°	590.7	600.8	620.4	648.7	652.2
47.5°	546.3	556.7	575.9	604.2	609.9
50°	502.7	512.3	531.4	558.9	567.6
52.5°	457.3	467.8	486.5	511.8	524.5
55°	413.7	420.7	441.2	465.6	479.1
57.5°	368.4	374.9	398.0	419.0	432.9
60°	324.8	333.1	351.0	372.3	388.4
62.5°	282.9	291.7	306.9	325.7	344.0
65°	242.4	248.9	263.8	282.5	298.6
67.5°	203.2	208.8	223.6	236.7	253.7
70°	163.5	170.9	181.8	194.4	205.3
72.5°	131.7	134.7	143.9	153.0	164.4
75°	97.2	102.5	109.9	115.1	121.6
77.5°	69.8	72.8	77.2	81.5	87.6
80°	46.6	48.0	51.9	52.8	57.5
82.5°	28.3	29.2	30.1	30.5	32.3
85°	15.3	15.3	15.3	14.4	14.4
87.5°	8.7	8.7	7.4	6.1	4.4
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)