

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: P556882

Luminaire Tested: **FUSL-12-4-LD4-1STD-50-UNV-82-85-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: P556882
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-12-4-LD4-1STD-50-UNV-82-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

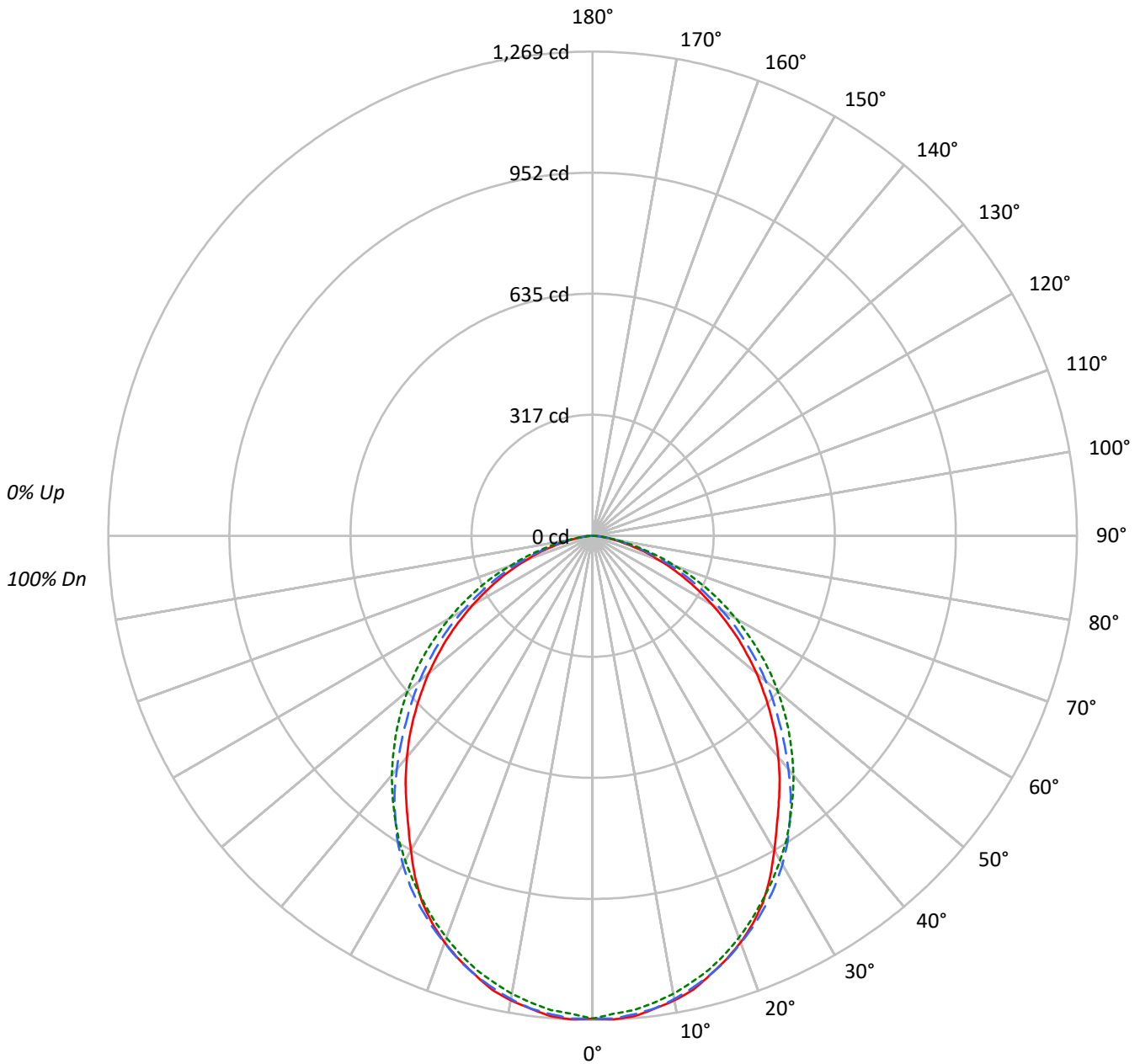
Lumens per Lamp: N/A
Luminaire Lumens: 2926.0 lumens
Efficiency: N/A
Efficacy: 87.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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°	3405	3405	3405
5°	3414	3400	3371
10°	3378	3369	3330
15°	3318	3318	3280
20°	3248	3252	3210
25°	3141	3180	3129
30°	2958	3090	3053
35°	2795	2962	2967
40°	2659	2803	2876
45°	2507	2633	2768
50°	2346	2481	2650
55°	2164	2308	2507
60°	1949	2106	2331
65°	1721	1873	2120
70°	1434	1595	1802
75°	1127	1274	1410
80°	806	897	995
85°	525	525	494



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.1	4.1
10°-20°	334.7	11.4
20°-30°	489.1	16.7
30°-40°	555.2	19.0
40°-50°	536.0	18.3
50°-60°	442.1	15.1
60°-70°	294.4	10.1
70°-80°	131.7	4.5
80°-90°	23.6	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°	943.0	32.2
0°-40°	1498.2	51.2
0°-60°	2476.3	84.6
0°-90°	2926.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2926.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1265	1265	1265	1265	1265	
5°	1264	1264	1259	1252	1248	120
15°	1191	1194	1191	1186	1177	336
25°	1058	1066	1071	1063	1054	484
35°	851	862	902	907	903	533
45°	659	670	692	723	727	508
55°	461	469	492	519	534	412
65°	270	278	294	315	333	268
75°	108	114	122	128	136	119
85°	17	17	17	16	16	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1265.4	1265.4	1265.4	1265.4	1265.4
2.5°	1268.8	1269.3	1266.4	1258.6	1253.8
5°	1264.0	1263.5	1258.6	1251.8	1247.9
7.5°	1249.9	1250.8	1249.4	1239.7	1234.3
10°	1236.3	1236.7	1232.8	1225.1	1218.8
12.5°	1218.8	1218.3	1212.9	1209.0	1198.8
15°	1191.0	1194.0	1191.0	1185.7	1177.4
17.5°	1164.3	1164.3	1166.2	1157.0	1150.7
20°	1134.2	1135.6	1135.6	1128.3	1121.0
22.5°	1099.2	1103.5	1105.0	1097.2	1088.5
25°	1057.8	1066.1	1071.0	1063.2	1053.9
27.5°	1007.8	1020.4	1035.0	1029.2	1018.9
30°	951.9	970.3	994.6	989.8	982.5
32.5°	898.9	917.3	950.9	948.9	945.1
35°	850.7	862.4	901.8	906.6	903.2
37.5°	805.0	815.7	852.7	863.9	861.0
40°	756.9	768.6	797.8	817.7	818.7
42.5°	709.3	720.5	744.3	773.0	773.0
45°	658.7	669.9	691.8	723.4	727.3
47.5°	609.1	620.8	642.2	673.8	680.1
50°	560.5	571.2	592.6	623.2	633.0
52.5°	510.0	521.6	542.5	570.7	584.8
55°	461.3	469.1	492.0	519.2	534.3
57.5°	410.8	418.1	443.8	467.2	482.7
60°	362.2	371.4	391.3	415.2	433.1
62.5°	315.5	325.2	342.2	363.1	383.6
65°	270.3	277.6	294.1	315.0	333.0
67.5°	226.5	232.9	249.4	264.0	282.9
70°	182.3	190.6	202.7	216.8	229.0
72.5°	146.8	150.2	160.4	170.6	183.3
75°	108.4	114.2	122.5	128.3	135.6
77.5°	77.8	81.2	86.0	90.9	97.7
80°	52.0	53.5	57.9	58.8	64.2
82.5°	31.6	32.6	33.5	34.0	36.0
85°	17.0	17.0	17.0	16.0	16.0
87.5°	9.7	9.7	8.3	6.8	4.9
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)