

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: P554758

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-UNV-81-87-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: P554758
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-40-UNV-81-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

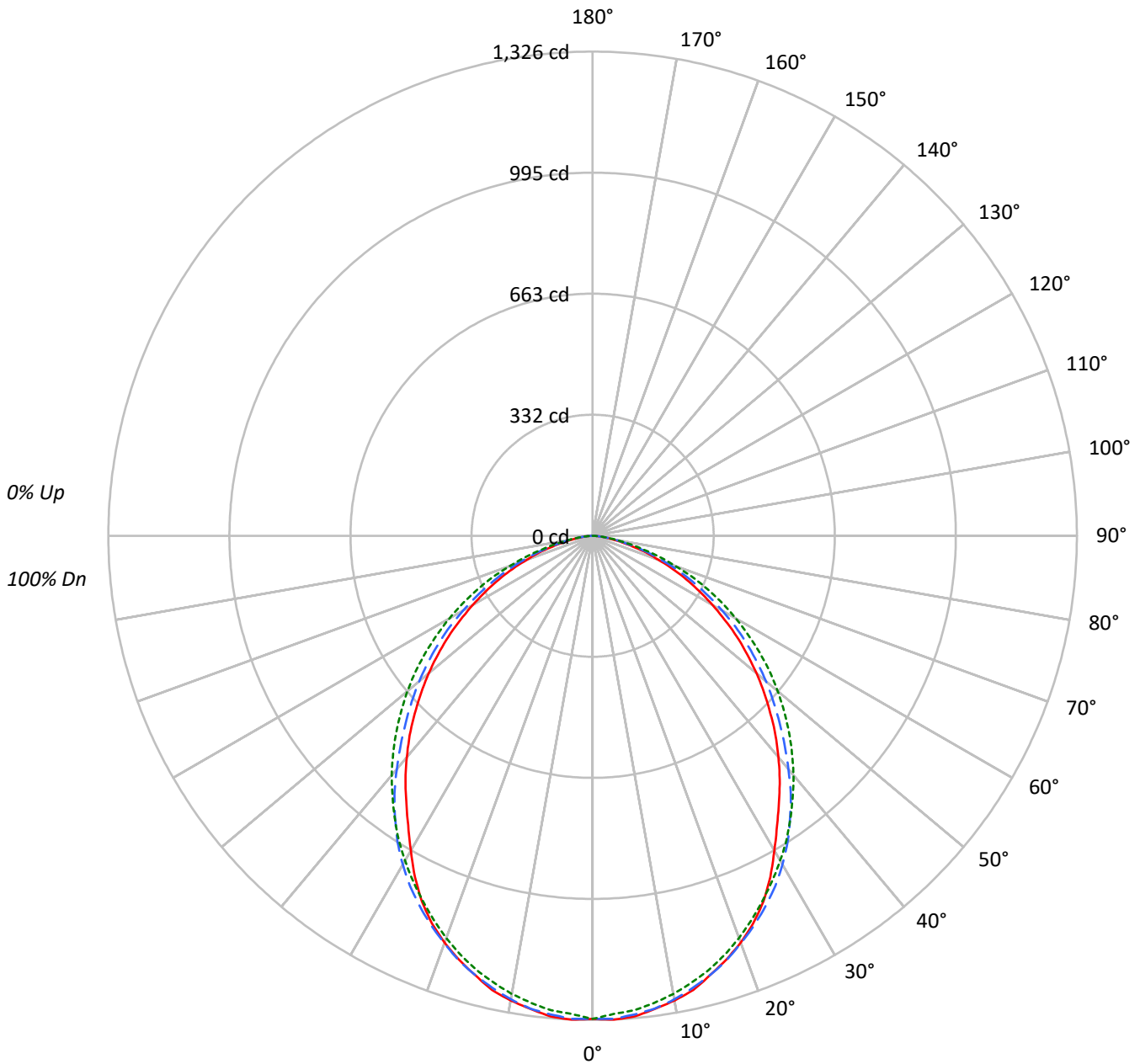
Lumens per Lamp: N/A
Luminaire Lumens: 3059.0 lumens
Efficiency: N/A
Efficacy: 70.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (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°	7120	7120	7120
5°	7139	7109	7048
10°	7063	7044	6963
15°	6938	6938	6858
20°	6791	6800	6712
25°	6567	6649	6543
30°	6184	6463	6383
35°	5843	6194	6204
40°	5559	5859	6013
45°	5242	5504	5787
50°	4906	5187	5540
55°	4525	4826	5241
60°	4075	4404	4874
65°	3599	3916	4433
70°	2999	3334	3767
75°	2356	2664	2949
80°	1686	1875	2080
85°	1099	1099	1037



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.6	4.1
10°-20°	349.9	11.4
20°-30°	511.3	16.7
30°-40°	580.4	19.0
40°-50°	560.3	18.3
50°-60°	462.2	15.1
60°-70°	307.8	10.1
70°-80°	137.7	4.5
80°-90°	24.7	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°	985.8	32.2
0°-40°	1566.3	51.2
0°-60°	2588.8	84.6
0°-90°	3059.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3059.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1321	1321	1316	1309	1305	125
15°	1245	1248	1245	1240	1231	351
25°	1106	1115	1120	1112	1102	506
35°	889	902	943	948	944	557
45°	689	700	723	756	760	531
55°	482	490	514	543	559	430
65°	283	290	308	329	348	280
75°	113	119	128	134	142	124
85°	18	18	18	17	17	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1322.9	1322.9	1322.9	1322.9	1322.9
2.5°	1326.5	1327.0	1324.0	1315.8	1310.7
5°	1321.4	1320.9	1315.8	1308.7	1304.6
7.5°	1306.7	1307.7	1306.2	1296.0	1290.4
10°	1292.4	1293.0	1288.9	1280.8	1274.1
12.5°	1274.1	1273.6	1268.0	1264.0	1253.3
15°	1245.2	1248.2	1245.2	1239.6	1230.9
17.5°	1217.2	1217.2	1219.3	1209.6	1203.0
20°	1185.7	1187.2	1187.2	1179.6	1172.0
22.5°	1149.1	1153.7	1155.2	1147.1	1137.9
25°	1105.9	1114.6	1119.6	1111.5	1101.9
27.5°	1053.6	1066.8	1082.0	1075.9	1065.3
30°	995.1	1014.4	1039.9	1034.8	1027.1
32.5°	939.7	959.0	994.1	992.1	988.0
35°	889.4	901.6	942.8	947.9	944.3
37.5°	841.6	852.8	891.4	903.1	900.1
40°	791.3	803.5	834.0	854.9	855.9
42.5°	741.5	753.2	778.1	808.1	808.1
45°	688.7	700.3	723.2	756.3	760.3
47.5°	636.8	649.0	671.4	704.4	711.0
50°	586.0	597.2	619.5	651.6	661.7
52.5°	533.1	545.3	567.2	596.7	611.4
55°	482.3	490.4	514.3	542.8	558.6
57.5°	429.5	437.1	464.0	488.4	504.7
60°	378.6	388.3	409.1	434.0	452.8
62.5°	329.8	340.0	357.8	379.7	401.0
65°	282.6	290.2	307.5	329.3	348.1
67.5°	236.8	243.4	260.7	276.0	295.8
70°	190.6	199.2	211.9	226.7	239.4
72.5°	153.5	157.0	167.7	178.4	191.6
75°	113.3	119.4	128.1	134.2	141.8
77.5°	81.3	84.9	90.0	95.0	102.2
80°	54.4	55.9	60.5	61.5	67.1
82.5°	33.0	34.1	35.1	35.6	37.6
85°	17.8	17.8	17.8	16.8	16.8
87.5°	10.2	10.2	8.6	7.1	5.1
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)