

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: P554854

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-93-87-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: P554854
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-50-UNV-93-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

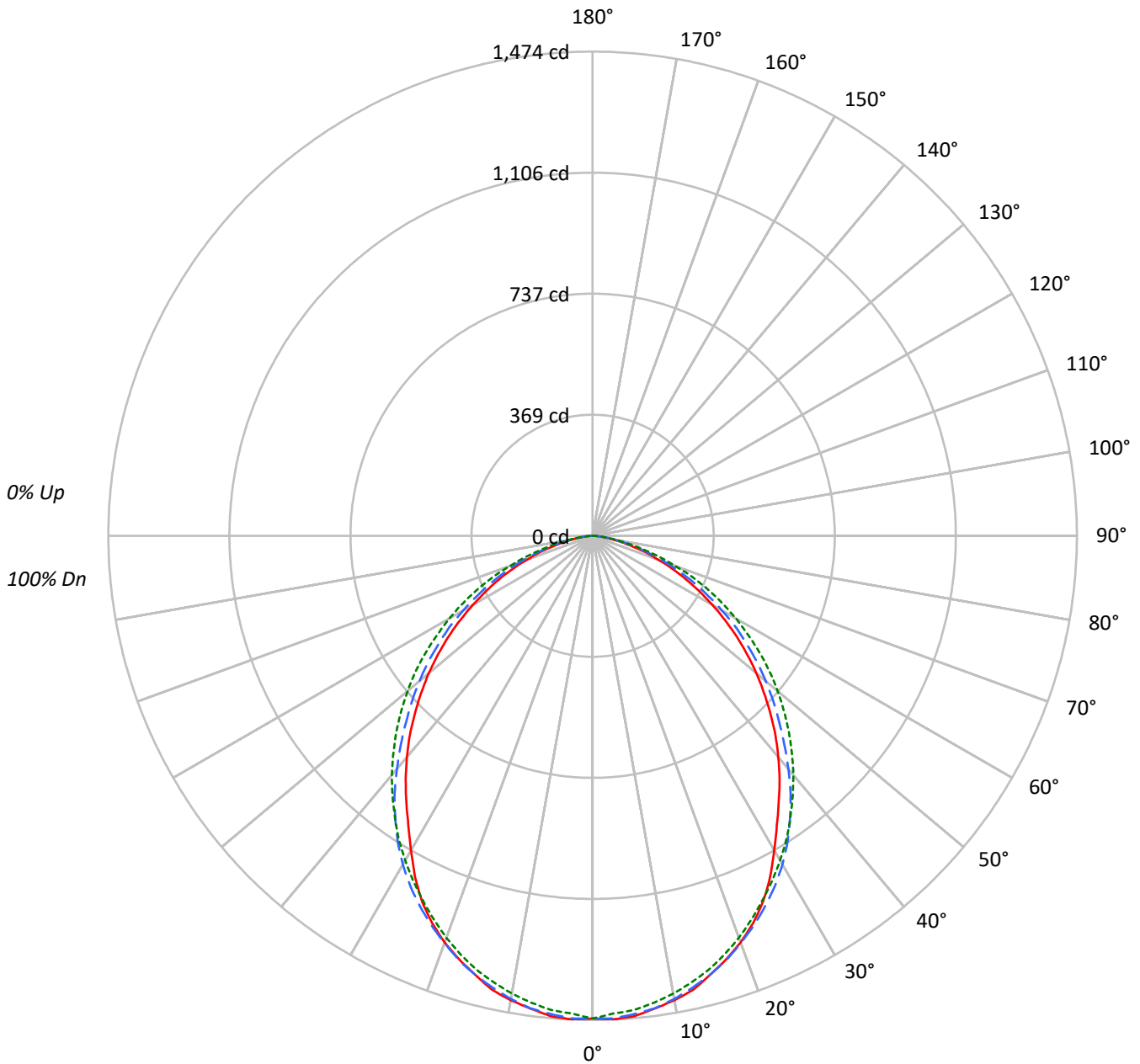
Lumens per Lamp: N/A
Luminaire Lumens: 3398.0 lumens
Efficiency: N/A
Efficacy: 78.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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				
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			
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°	7909	7909	7909
5°	7930	7896	7829
10°	7846	7824	7735
15°	7707	7707	7619
20°	7544	7553	7456
25°	7295	7386	7269
30°	6870	7178	7091
35°	6491	6881	6892
40°	6176	6509	6679
45°	5823	6115	6428
50°	5450	5762	6155
55°	5027	5361	5822
60°	4527	4892	5414
65°	3997	4350	4925
70°	3331	3704	4184
75°	2618	2959	3275
80°	1872	2083	2309
85°	1223	1223	1149



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.4	4.1
10°-20°	388.7	11.4
20°-30°	568.0	16.7
30°-40°	644.8	19.0
40°-50°	622.4	18.3
50°-60°	513.4	15.1
60°-70°	341.9	10.1
70°-80°	153.0	4.5
80°-90°	27.4	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°	1095.1	32.2
0°-40°	1739.8	51.2
0°-60°	2875.7	84.6
0°-90°	3398.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3398.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1470	1470	1470	1470	1470	
5°	1468	1467	1462	1454	1449	139
15°	1383	1387	1383	1377	1367	390
25°	1228	1238	1244	1235	1224	563
35°	988	1002	1047	1053	1049	619
45°	765	778	803	840	845	590
55°	536	545	571	603	620	478
65°	314	322	342	366	387	311
75°	126	133	142	149	158	138
85°	20	20	20	19	19	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1469.5	1469.5	1469.5	1469.5	1469.5
2.5°	1473.5	1474.1	1470.7	1461.6	1456.0
5°	1467.9	1467.3	1461.6	1453.7	1449.2
7.5°	1451.5	1452.6	1450.9	1439.6	1433.4
10°	1435.7	1436.2	1431.7	1422.7	1415.3
12.5°	1415.3	1414.8	1408.6	1404.1	1392.2
15°	1383.2	1386.6	1383.2	1377.0	1367.4
17.5°	1352.1	1352.1	1354.4	1343.7	1336.3
20°	1317.1	1318.8	1318.8	1310.3	1301.9
22.5°	1276.5	1281.5	1283.2	1274.2	1264.0
25°	1228.5	1238.1	1243.7	1234.7	1224.0
27.5°	1170.3	1185.0	1201.9	1195.2	1183.3
30°	1105.4	1126.9	1155.1	1149.4	1141.0
32.5°	1043.9	1065.3	1104.3	1102.0	1097.5
35°	988.0	1001.5	1047.3	1052.9	1049.0
37.5°	934.9	947.3	990.2	1003.2	999.8
40°	879.0	892.6	926.4	949.6	950.7
42.5°	823.7	836.7	864.3	897.6	897.6
45°	765.0	778.0	803.4	840.1	844.6
47.5°	707.4	720.9	745.8	782.5	789.8
50°	650.9	663.4	688.2	723.8	735.1
52.5°	592.2	605.8	630.0	662.8	679.2
55°	535.8	544.8	571.3	602.9	620.5
57.5°	477.1	485.5	515.4	542.5	560.6
60°	420.6	431.3	454.5	482.1	503.0
62.5°	366.4	377.7	397.4	421.7	445.4
65°	313.9	322.4	341.6	365.8	386.7
67.5°	263.1	270.4	289.6	306.6	328.6
70°	211.7	221.3	235.4	251.8	265.9
72.5°	170.5	174.4	186.3	198.2	212.8
75°	125.9	132.7	142.3	149.0	157.5
77.5°	90.3	94.3	99.9	105.6	113.5
80°	60.4	62.1	67.2	68.3	74.5
82.5°	36.7	37.8	39.0	39.5	41.8
85°	19.8	19.8	19.8	18.6	18.6
87.5°	11.3	11.3	9.6	7.9	5.6
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)