

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: P554754

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-UNV-81-85-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: P554754
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-81-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

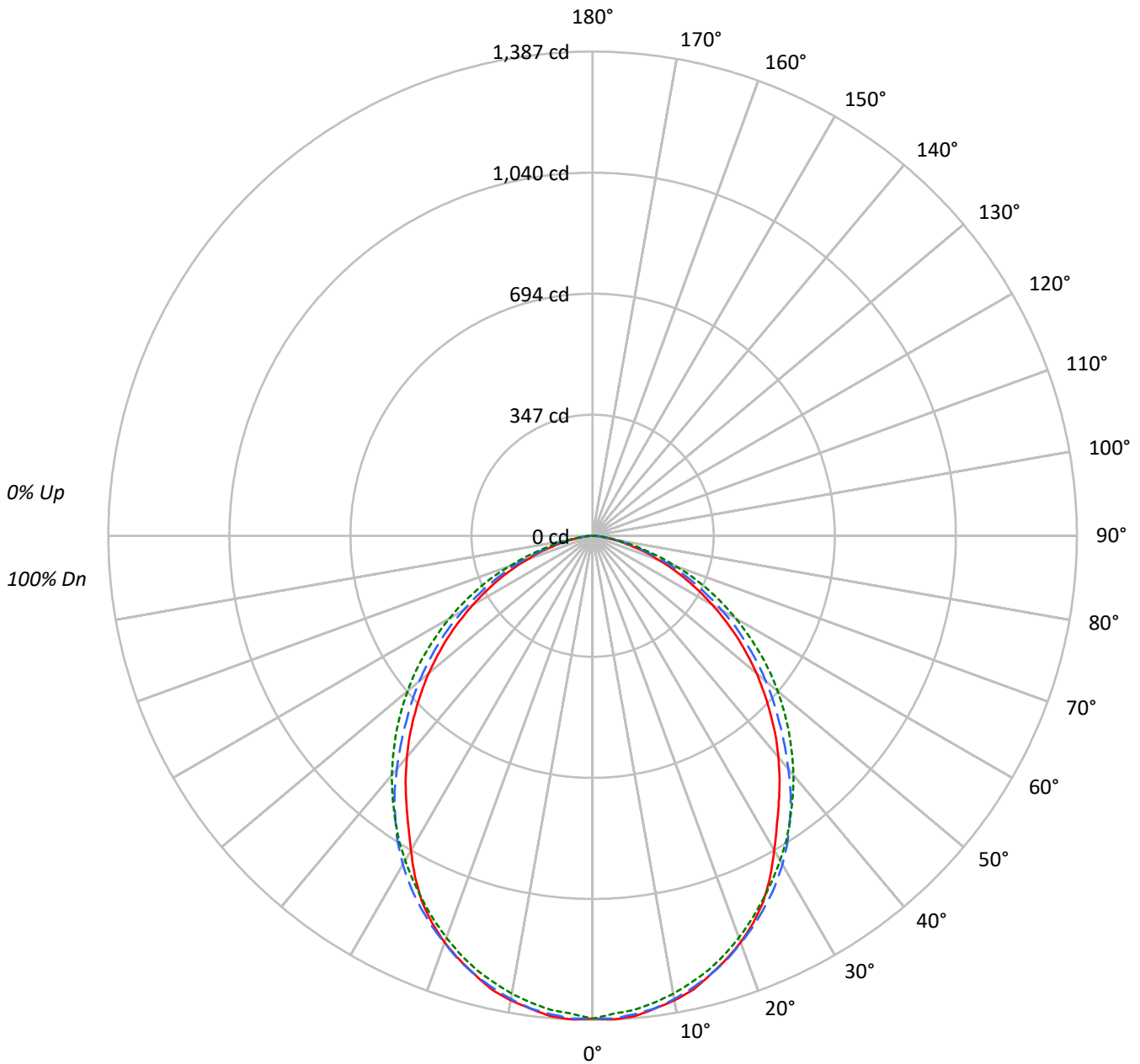
Lumens per Lamp: N/A
Luminaire Lumens: 3198.0 lumens
Efficiency: N/A
Efficacy: 74.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	7444	7444	7444
5°	7464	7432	7368
10°	7384	7364	7279
15°	7253	7253	7170
20°	7100	7109	7017
25°	6866	6951	6840
30°	6465	6756	6673
35°	6109	6476	6486
40°	5812	6126	6287
45°	5480	5755	6050
50°	5129	5423	5792
55°	4731	5045	5479
60°	4260	4604	5096
65°	3762	4094	4635
70°	3135	3487	3939
75°	2464	2784	3082
80°	1764	1959	2173
85°	1149	1149	1081



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	4.1
10°-20°	365.8	11.4
20°-30°	534.6	16.7
30°-40°	606.8	19.0
40°-50°	585.8	18.3
50°-60°	483.2	15.1
60°-70°	321.8	10.1
70°-80°	144.0	4.5
80°-90°	25.7	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°	1030.6	32.2
0°-40°	1637.4	51.2
0°-60°	2706.4	84.6
0°-90°	3198.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3198.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1383	1383	1383	1383	1383	
5°	1382	1381	1376	1368	1364	131
15°	1302	1305	1302	1296	1287	367
25°	1156	1165	1170	1162	1152	529
35°	930	943	986	991	987	583
45°	720	732	756	791	795	555
55°	504	513	538	568	584	450
65°	295	303	322	344	364	293
75°	118	125	134	140	148	130
85°	19	19	19	18	18	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1383.1	<i>1383.1</i>	1383.1	1383.1	1383.1
2.5°	<i>1386.8</i>	<i>1387.3</i>	<i>1384.1</i>	<i>1375.6</i>	<i>1370.3</i>
5°	1381.5	<i>1380.9</i>	1375.6	1368.2	1363.9
7.5°	1366.0	<i>1367.1</i>	1365.5	1354.9	1349.0
10°	1351.2	<i>1351.7</i>	1347.5	1339.0	1332.0
12.5°	1332.0	<i>1331.5</i>	1325.7	1321.4	1310.3
15°	1301.8	<i>1304.9</i>	1301.8	1295.9	1286.9
17.5°	1272.5	<i>1272.5</i>	1274.7	1264.6	1257.7
20°	1239.6	<i>1241.2</i>	1241.2	1233.2	1225.2
22.5°	1201.3	<i>1206.1</i>	1207.7	1199.2	1189.6
25°	1156.2	<i>1165.2</i>	1170.5	1162.0	1151.9
27.5°	1101.4	<i>1115.3</i>	1131.2	1124.8	1113.7
30°	1040.3	<i>1060.5</i>	1087.1	1081.8	1073.8
32.5°	982.4	<i>1002.6</i>	1039.3	1037.2	1032.9
35°	929.8	<i>942.6</i>	985.6	990.9	987.2
37.5°	879.9	<i>891.6</i>	932.0	944.2	941.0
40°	827.3	<i>840.0</i>	871.9	893.7	894.8
42.5°	775.2	<i>787.4</i>	813.5	844.8	844.8
45°	720.0	<i>732.2</i>	756.1	790.6	794.9
47.5°	665.8	<i>678.5</i>	701.9	736.4	743.3
50°	612.6	<i>624.3</i>	647.7	681.2	691.8
52.5°	557.4	<i>570.1</i>	593.0	623.8	639.2
55°	504.2	<i>512.7</i>	537.7	567.5	583.9
57.5°	449.0	<i>456.9</i>	485.1	510.6	527.6
60°	395.8	<i>405.9</i>	427.7	453.8	473.4
62.5°	344.8	<i>355.5</i>	374.1	396.9	419.2
65°	295.4	<i>303.4</i>	321.5	344.3	364.0
67.5°	247.6	<i>254.5</i>	272.6	288.5	309.2
70°	199.2	<i>208.3</i>	221.6	237.0	250.3
72.5°	160.5	<i>164.2</i>	175.3	186.5	200.3
75°	118.5	<i>124.9</i>	133.9	140.3	148.2
77.5°	85.0	<i>88.7</i>	94.0	99.4	106.8
80°	56.9	<i>58.4</i>	63.2	64.3	70.1
82.5°	34.5	<i>35.6</i>	36.7	37.2	39.3
85°	18.6	<i>18.6</i>	18.6	17.5	17.5
87.5°	10.6	<i>10.6</i>	9.0	7.4	5.3
90°	0.0	<i>0.0</i>	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)