

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: P554756

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-UNV-81-86-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: P554756
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-81-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

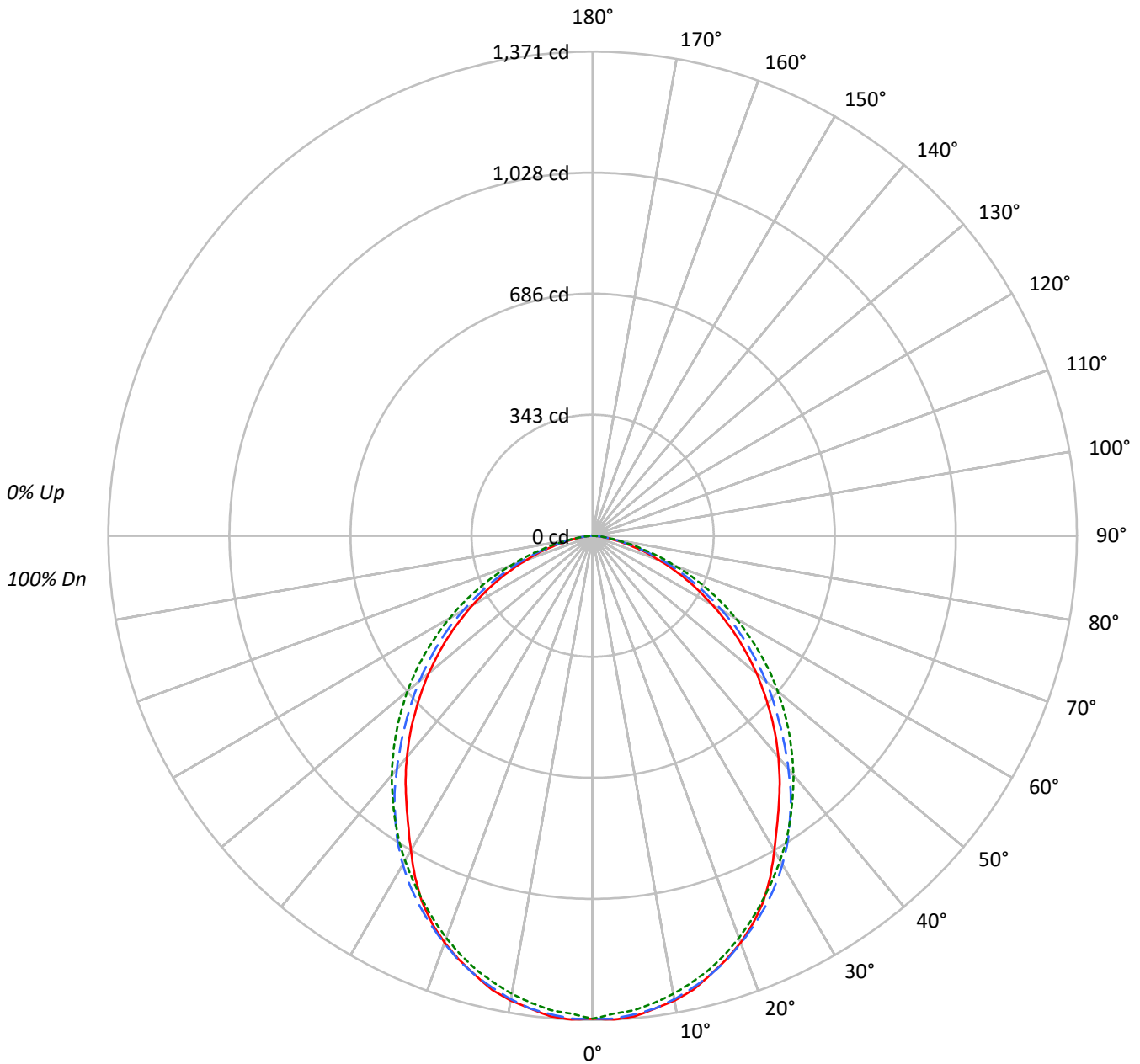
Lumens per Lamp: N/A
Luminaire Lumens: 3162.0 lumens
Efficiency: N/A
Efficacy: 73.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	7360	7360	7360
5°	7379	7348	7286
10°	7301	7281	7197
15°	7171	7171	7090
20°	7019	7029	6939
25°	6789	6872	6764
30°	6392	6680	6598
35°	6041	6403	6413
40°	5747	6057	6216
45°	5418	5690	5982
50°	5071	5362	5727
55°	4678	4989	5418
60°	4213	4552	5039
65°	3720	4047	4583
70°	3100	3448	3893
75°	2437	2753	3048
80°	1742	1937	2148
85°	1136	1136	1068



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.8	4.1
10°-20°	361.7	11.4
20°-30°	528.6	16.7
30°-40°	600.0	19.0
40°-50°	579.2	18.3
50°-60°	477.8	15.1
60°-70°	318.2	10.1
70°-80°	142.4	4.5
80°-90°	25.5	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°	1019.0	32.2
0°-40°	1619.0	51.2
0°-60°	2676.0	84.6
0°-90°	3162.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3162.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1368	1368	1368	1368	1368	
5°	1366	1365	1360	1353	1349	129
15°	1287	1290	1287	1281	1272	363
25°	1143	1152	1157	1149	1139	524
35°	919	932	974	980	976	576
45°	712	724	748	782	786	549
55°	499	507	532	561	577	445
65°	292	300	318	340	360	290
75°	117	124	132	139	147	128
85°	18	18	18	17	17	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1367.5	1367.5	1367.5	1367.5	1367.5
2.5°	1371.2	1371.7	1368.5	1360.1	1354.9
5°	1365.9	1365.4	1360.1	1352.8	1348.6
7.5°	1350.7	1351.7	1350.1	1339.6	1333.9
10°	1336.0	1336.5	1332.3	1323.9	1317.0
12.5°	1317.0	1316.5	1310.7	1306.5	1295.5
15°	1287.1	1290.3	1287.1	1281.3	1272.4
17.5°	1258.2	1258.2	1260.3	1250.3	1243.5
20°	1225.6	1227.2	1227.2	1219.3	1211.5
22.5°	1187.8	1192.5	1194.1	1185.7	1176.3
25°	1143.2	1152.1	1157.3	1148.9	1139.0
27.5°	1089.0	1102.7	1118.5	1112.2	1101.1
30°	1028.6	1048.6	1074.9	1069.6	1061.7
32.5°	971.4	991.3	1027.6	1025.5	1021.3
35°	919.4	932.0	974.5	979.8	976.1
37.5°	870.0	881.5	921.5	933.5	930.4
40°	818.0	830.6	862.1	883.6	884.7
42.5°	766.5	778.6	804.3	835.3	835.3
45°	711.8	723.9	747.6	781.7	785.9
47.5°	658.3	670.9	694.0	728.1	735.0
50°	605.7	617.3	640.4	673.5	684.0
52.5°	551.1	563.7	586.3	616.8	632.0
55°	498.6	507.0	531.7	561.1	577.4
57.5°	443.9	451.8	479.6	504.9	521.7
60°	391.4	401.4	422.9	448.6	468.1
62.5°	341.0	351.5	369.8	392.4	414.5
65°	292.1	300.0	317.8	340.4	359.9
67.5°	244.8	251.6	269.5	285.3	305.8
70°	197.0	205.9	219.1	234.3	247.4
72.5°	158.7	162.3	173.4	184.4	198.1
75°	117.2	123.5	132.4	138.7	146.6
77.5°	84.1	87.7	93.0	98.2	105.6
80°	56.2	57.8	62.5	63.6	69.3
82.5°	34.1	35.2	36.2	36.8	38.9
85°	18.4	18.4	18.4	17.3	17.3
87.5°	10.5	10.5	8.9	7.4	5.3
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)