

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: P556755

Luminaire Tested: **FUSL-12-4-LD4-1STD-35-UNV-82-85-EDD**

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: P556755
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-35-UNV-82-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

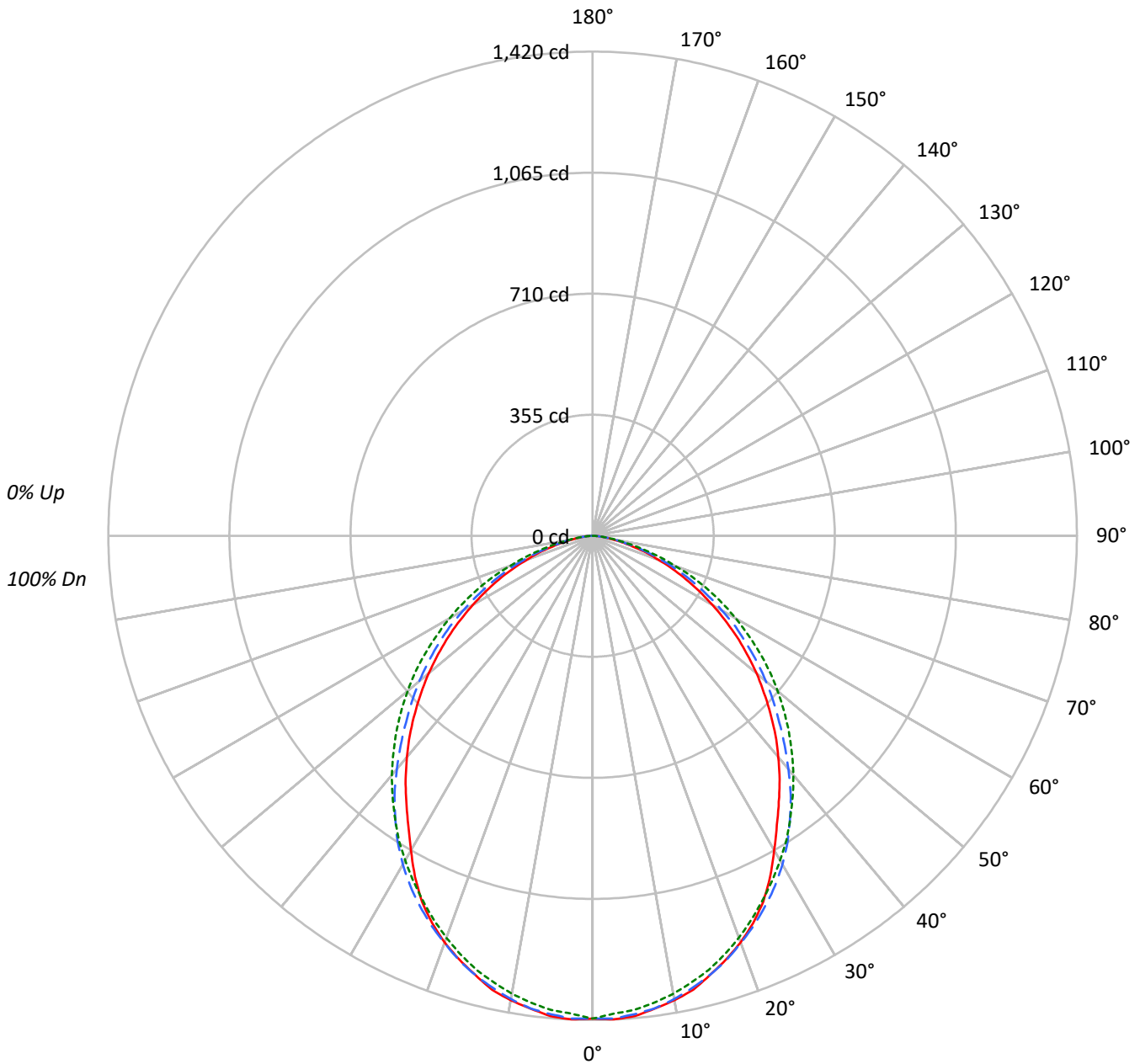
Lumens per Lamp: N/A
Luminaire Lumens: 3274.0 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (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°	3810	3810	3810
5°	3820	3804	3772
10°	3780	3769	3726
15°	3713	3713	3670
20°	3634	3639	3592
25°	3515	3558	3502
30°	3310	3458	3416
35°	3127	3315	3320
40°	2975	3136	3218
45°	2805	2946	3097
50°	2626	2776	2965
55°	2422	2583	2805
60°	2181	2357	2609
65°	1926	2096	2372
70°	1605	1784	2016
75°	1261	1425	1578
80°	902	1003	1113
85°	587	587	556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.3	4.1
10°-20°	374.5	11.4
20°-30°	547.3	16.7
30°-40°	621.2	19.0
40°-50°	599.7	18.3
50°-60°	494.7	15.1
60°-70°	329.4	10.1
70°-80°	147.4	4.5
80°-90°	26.4	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°	1055.1	32.2
0°-40°	1676.3	51.2
0°-60°	2770.8	84.6
0°-90°	3274.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3274.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1416	1416	1416	1416	1416	
5°	1414	1414	1408	1401	1396	134
15°	1333	1336	1333	1327	1318	376
25°	1184	1193	1198	1190	1179	542
35°	952	965	1009	1014	1011	596
45°	737	750	774	809	814	569
55°	516	525	550	581	598	461
65°	302	311	329	352	373	300
75°	121	128	137	144	152	133
85°	19	19	19	18	18	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1419.7	1420.3	1417.0	1408.3	1402.9
5°	1414.3	1413.7	1408.3	1400.7	1396.3
7.5°	1398.5	1399.6	1398.0	1387.1	1381.1
10°	1383.3	1383.8	1379.5	1370.8	1363.7
12.5°	1363.7	1363.2	1357.2	1352.8	1341.4
15°	1332.7	1336.0	1332.7	1326.7	1317.5
17.5°	1302.8	1302.8	1305.0	1294.6	1287.5
20°	1269.1	1270.7	1270.7	1262.5	1254.4
22.5°	1229.9	1234.8	1236.4	1227.7	1217.9
25°	1183.7	1192.9	1198.3	1189.6	1179.3
27.5°	1127.6	1141.8	1158.1	1151.6	1140.1
30°	1065.1	1085.7	1112.9	1107.5	1099.3
32.5°	1005.8	1026.4	1064.0	1061.8	1057.5
35°	951.9	965.0	1009.0	1014.5	1010.7
37.5°	900.8	912.8	954.1	966.6	963.3
40°	846.9	860.0	892.6	914.9	916.0
42.5°	793.6	806.1	832.8	864.9	864.9
45°	737.1	749.6	774.1	809.4	813.8
47.5°	681.6	694.6	718.6	753.9	761.0
50°	627.2	639.1	663.1	697.4	708.2
52.5°	570.6	583.7	607.1	638.6	654.4
55°	516.2	524.9	550.5	580.9	597.8
57.5°	459.6	467.8	496.6	522.7	540.1
60°	405.2	415.6	437.9	464.5	484.7
62.5°	353.0	363.9	382.9	406.3	429.2
65°	302.4	310.6	329.1	352.5	372.6
67.5°	253.5	260.6	279.1	295.4	316.6
70°	204.0	213.2	226.8	242.6	256.2
72.5°	164.3	168.1	179.5	190.9	205.1
75°	121.3	127.8	137.1	143.6	151.8
77.5°	87.0	90.8	96.3	101.7	109.3
80°	58.2	59.8	64.7	65.8	71.8
82.5°	35.4	36.4	37.5	38.1	40.3
85°	19.0	19.0	19.0	18.0	18.0
87.5°	10.9	10.9	9.2	7.6	5.4
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)