

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: P556885

Luminaire Tested: **FUSL-12-4-LD4-1STD-50-UNV-82-86-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: P556885
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-50-UNV-82-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

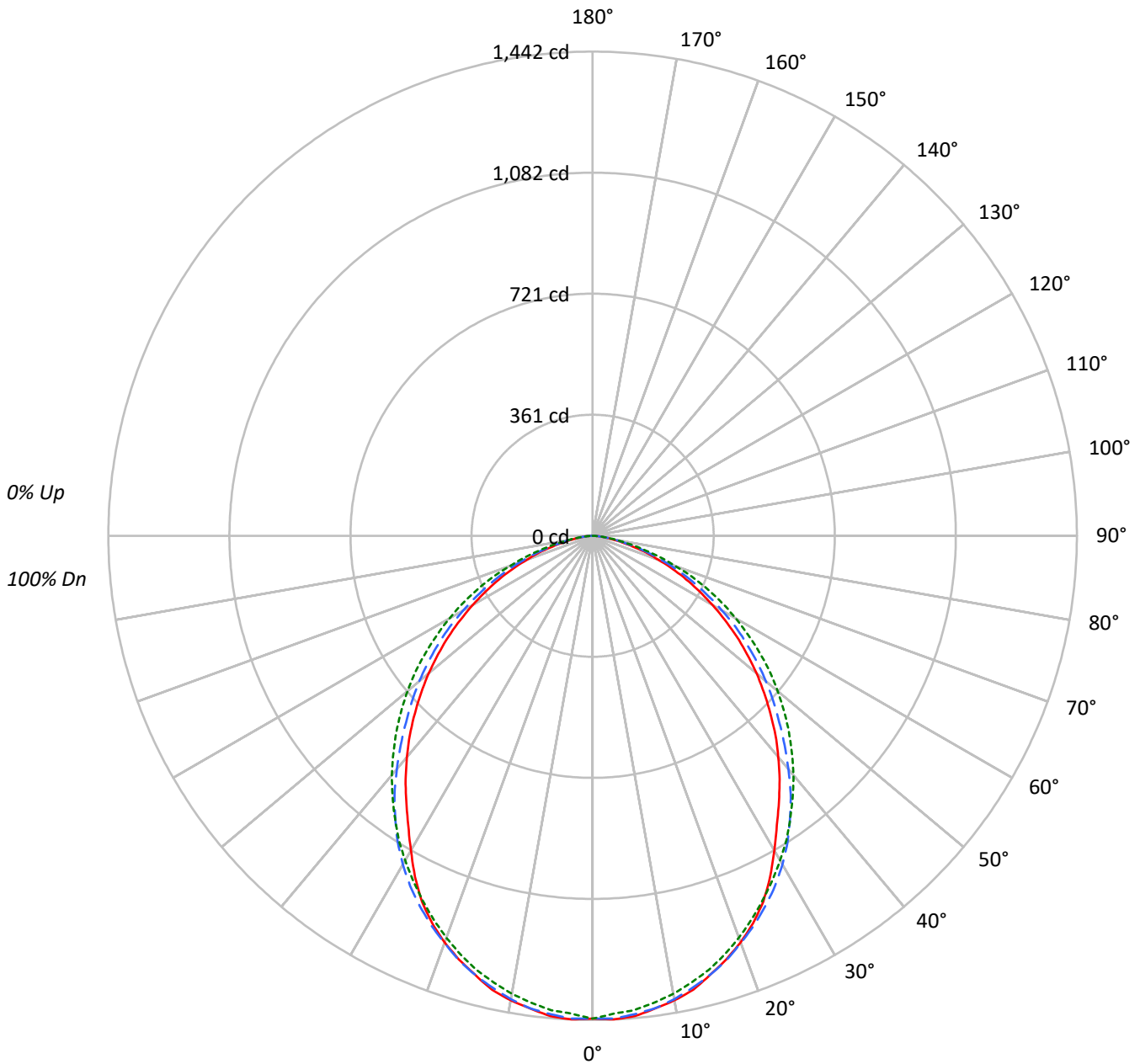
Lumens per Lamp: N/A
Luminaire Lumens: 3325.0 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	3870	3870	3870
5°	3880	3863	3831
10°	3839	3828	3784
15°	3771	3771	3728
20°	3691	3696	3648
25°	3569	3613	3556
30°	3361	3512	3469
35°	3176	3367	3372
40°	3021	3184	3268
45°	2849	2992	3145
50°	2667	2819	3011
55°	2460	2623	2848
60°	2215	2393	2649
65°	1956	2128	2409
70°	1630	1813	2047
75°	1281	1447	1602
80°	916	1018	1130
85°	596	596	562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.4	4.1
10°-20°	380.4	11.4
20°-30°	555.8	16.7
30°-40°	630.9	19.0
40°-50°	609.1	18.3
50°-60°	502.4	15.1
60°-70°	334.6	10.1
70°-80°	149.7	4.5
80°-90°	26.8	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°	1071.6	32.2
0°-40°	1702.5	51.2
0°-60°	2814.0	84.6
0°-90°	3325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3325.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1436	1436	1430	1422	1418	136
15°	1354	1357	1354	1347	1338	382
25°	1202	1212	1217	1208	1198	550
35°	967	980	1025	1030	1026	606
45°	748	761	786	822	826	578
55°	524	533	559	590	607	468
65°	307	315	334	358	378	305
75°	123	130	139	146	154	135
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°	1438.0	1438.0	1438.0	1438.0	1438.0
2.5°	1441.8	1442.4	1439.1	1430.2	1424.7
5°	1436.3	1435.8	1430.2	1422.5	1418.1
7.5°	1420.3	1421.4	1419.7	1408.7	1402.6
10°	1404.8	1405.4	1401.0	1392.1	1384.9
12.5°	1384.9	1384.4	1378.3	1373.9	1362.3
15°	1353.5	1356.8	1353.5	1347.4	1338.0
17.5°	1323.1	1323.1	1325.3	1314.8	1307.6
20°	1288.8	1290.5	1290.5	1282.2	1273.9
22.5°	1249.0	1254.0	1255.7	1246.8	1236.9
25°	1202.1	1211.5	1217.0	1208.2	1197.7
27.5°	1145.2	1159.6	1176.1	1169.5	1157.9
30°	1081.7	1102.7	1130.3	1124.7	1116.5
32.5°	1021.4	1042.4	1080.6	1078.3	1073.9
35°	966.8	980.0	1024.8	1030.3	1026.4
37.5°	914.8	927.0	969.0	981.7	978.4
40°	860.1	873.4	906.5	929.2	930.3
42.5°	806.0	818.7	845.8	878.4	878.4
45°	748.5	761.2	786.1	822.0	826.4
47.5°	692.2	705.5	729.8	765.7	772.9
50°	637.0	649.1	673.4	708.2	719.3
52.5°	579.5	592.8	616.5	648.6	664.6
55°	524.3	533.1	559.1	590.0	607.1
57.5°	466.8	475.1	504.4	530.9	548.6
60°	411.6	422.1	444.7	471.8	492.2
62.5°	358.5	369.6	388.9	412.7	435.9
65°	307.2	315.4	334.2	358.0	378.4
67.5°	257.4	264.6	283.4	300.0	321.5
70°	207.2	216.6	230.4	246.4	260.2
72.5°	166.8	170.7	182.3	193.9	208.3
75°	123.2	129.8	139.2	145.8	154.1
77.5°	88.4	92.3	97.8	103.3	111.0
80°	59.1	60.8	65.7	66.8	72.9
82.5°	35.9	37.0	38.1	38.7	40.9
85°	19.3	19.3	19.3	18.2	18.2
87.5°	11.0	11.0	9.4	7.7	5.5
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)