

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: P556248

Luminaire Tested: **FUSL-12-4-LD4-1HI-35-UNV-82-88-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: P556248
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-LD4-1HI-35-UNV-82-88-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

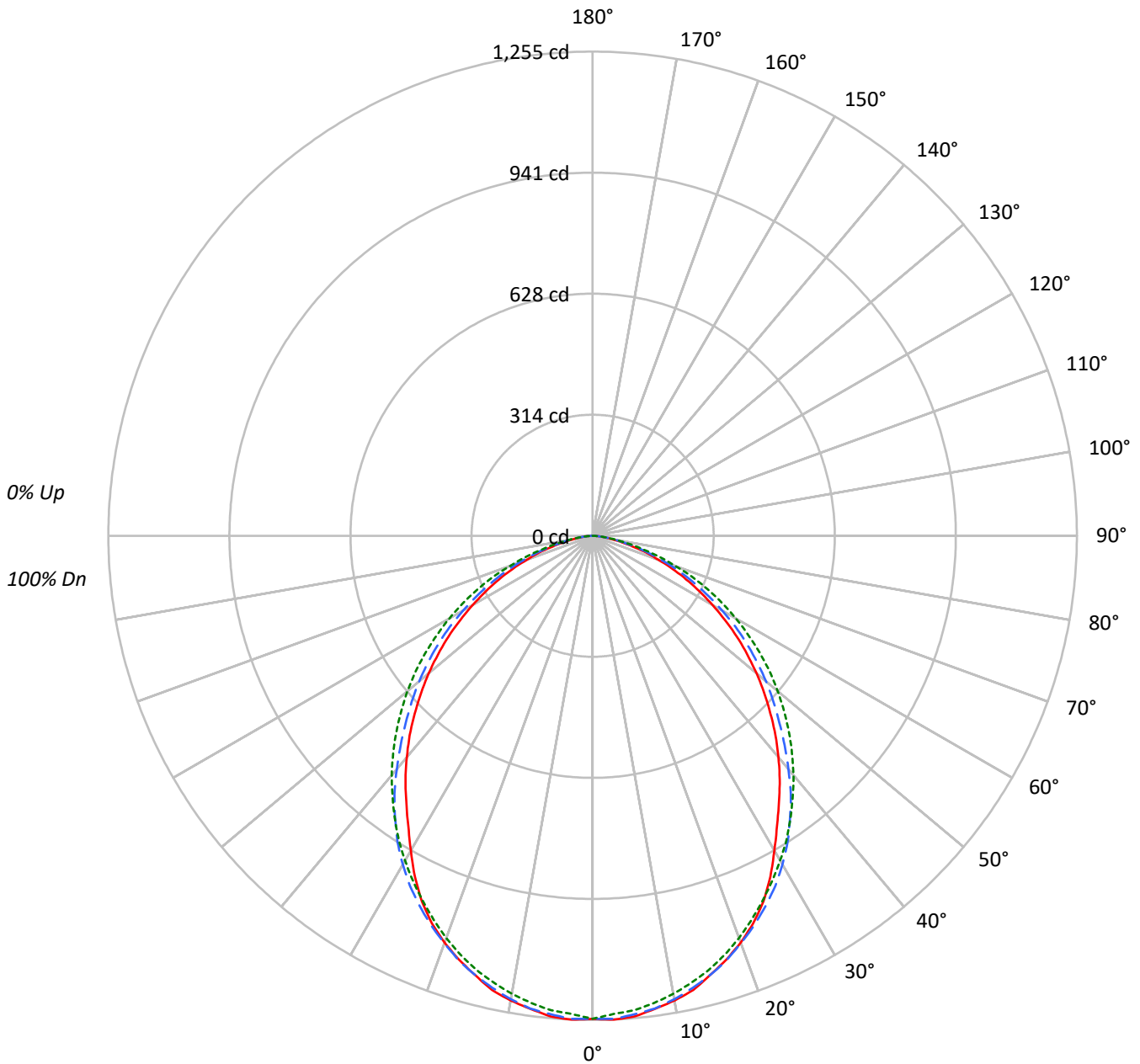
Lumens per Lamp: N/A
Luminaire Lumens: 2895.0 lumens
Efficiency: N/A
Efficacy: 67.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	3369	3369	3369
5°	3378	3364	3335
10°	3342	3333	3295
15°	3283	3283	3246
20°	3213	3218	3176
25°	3108	3146	3096
30°	2926	3058	3021
35°	2765	2931	2936
40°	2631	2773	2845
45°	2480	2605	2739
50°	2322	2454	2622
55°	2142	2284	2480
60°	1928	2084	2307
65°	1703	1853	2098
70°	1419	1578	1782
75°	1116	1260	1395
80°	798	886	984
85°	519	519	491



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.9	4.1
10°-20°	331.2	11.4
20°-30°	483.9	16.7
30°-40°	549.3	19.0
40°-50°	530.3	18.3
50°-60°	437.5	15.1
60°-70°	291.3	10.1
70°-80°	130.3	4.5
80°-90°	23.3	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°	933.0	32.2
0°-40°	1482.3	51.2
0°-60°	2450.0	84.6
0°-90°	2895.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2895.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1252	1252	1252	1252	1252	
5°	1251	1250	1245	1238	1235	118
15°	1178	1181	1178	1173	1165	332
25°	1047	1055	1060	1052	1043	479
35°	842	853	892	897	894	527
45°	652	663	684	716	720	503
55°	456	464	487	514	529	407
65°	267	275	291	312	330	265
75°	107	113	121	127	134	117
85°	17	17	17	16	16	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1252.0	1252.0	1252.0	1252.0	1252.0
2.5°	1255.4	1255.9	1253.0	1245.3	1240.5
5°	1250.6	1250.1	1245.3	1238.5	1234.7
7.5°	1236.6	1237.6	1236.1	1226.5	1221.2
10°	1223.2	1223.6	1219.8	1212.1	1205.8
12.5°	1205.8	1205.4	1200.1	1196.2	1186.1
15°	1178.4	1181.3	1178.4	1173.1	1165.0
17.5°	1152.0	1152.0	1153.9	1144.8	1138.5
20°	1122.1	1123.6	1123.6	1116.4	1109.2
22.5°	1087.5	1091.8	1093.3	1085.6	1076.9
25°	1046.6	1054.8	1059.6	1051.9	1042.8
27.5°	997.1	1009.6	1024.0	1018.3	1008.2
30°	941.8	960.1	984.1	979.3	972.1
32.5°	889.3	907.6	940.8	938.9	935.0
35°	841.7	853.3	892.2	897.0	893.7
37.5°	796.5	807.1	843.7	854.7	851.8
40°	748.9	760.4	789.3	809.0	810.0
42.5°	701.8	712.8	736.4	764.8	764.8
45°	651.7	662.8	684.4	715.7	719.6
47.5°	602.7	614.2	635.4	666.6	672.9
50°	554.6	565.2	586.3	616.6	626.2
52.5°	504.6	516.1	536.8	564.7	578.6
55°	456.5	464.2	486.8	513.7	528.6
57.5°	406.4	413.7	439.1	462.2	477.6
60°	358.3	367.5	387.2	410.8	428.6
62.5°	312.2	321.8	338.6	359.3	379.5
65°	267.4	274.6	291.0	311.7	329.5
67.5°	224.1	230.4	246.7	261.2	279.9
70°	180.4	188.5	200.6	214.5	226.5
72.5°	145.3	148.6	158.7	168.8	181.3
75°	107.3	113.0	121.2	127.0	134.2
77.5°	77.0	80.3	85.1	89.9	96.7
80°	51.5	52.9	57.2	58.2	63.5
82.5°	31.3	32.2	33.2	33.7	35.6
85°	16.8	16.8	16.8	15.9	15.9
87.5°	9.6	9.6	8.2	6.7	4.8
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)