

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: P556185

Luminaire Tested: **FUSL-12-4-LD4-1HI-30-UNV-82-88-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: P556185
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-30-UNV-82-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

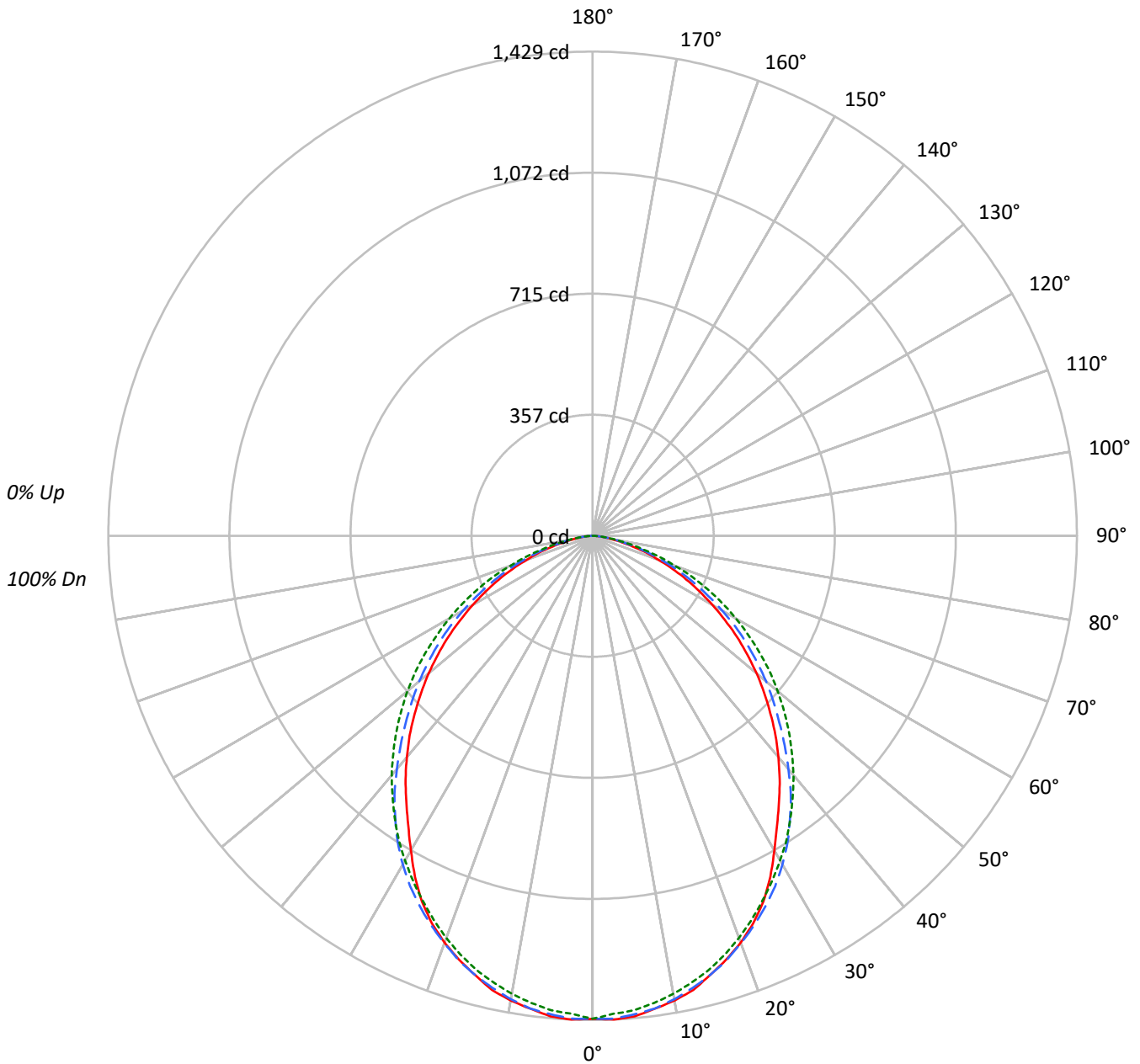
Lumens per Lamp: N/A
Luminaire Lumens: 3296.0 lumens
Efficiency: N/A
Efficacy: 76.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	3836	3836	3836
5°	3846	3830	3797
10°	3805	3795	3751
15°	3738	3738	3695
20°	3659	3663	3616
25°	3538	3582	3525
30°	3332	3481	3439
35°	3148	3337	3343
40°	2995	3157	3240
45°	2824	2966	3118
50°	2643	2794	2985
55°	2438	2600	2823
60°	2196	2372	2626
65°	1939	2110	2388
70°	1616	1797	2029
75°	1269	1435	1589
80°	908	1010	1120
85°	593	593	559



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.2	4.1
10°-20°	377.0	11.4
20°-30°	551.0	16.7
30°-40°	625.4	19.0
40°-50°	603.7	18.3
50°-60°	498.0	15.1
60°-70°	331.7	10.1
70°-80°	148.4	4.5
80°-90°	26.6	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°	1062.2	32.2
0°-40°	1687.6	51.2
0°-60°	2789.4	84.6
0°-90°	3296.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3296.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1425	1425	1425	1425	1425	
5°	1424	1423	1418	1410	1406	135
15°	1342	1345	1342	1336	1326	378
25°	1192	1201	1206	1198	1187	546
35°	958	972	1016	1021	1018	600
45°	742	755	779	815	819	573
55°	520	528	554	585	602	464
65°	304	313	331	355	375	302
75°	122	129	138	145	153	134
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°	1425.4	1425.4	1425.4	1425.4	1425.4
2.5°	1429.3	1429.8	1426.5	1417.8	1412.3
5°	1423.8	1423.2	1417.8	1410.1	1405.7
7.5°	1407.9	1409.0	1407.4	1396.4	1390.4
10°	1392.6	1393.1	1388.7	1380.0	1372.9
12.5°	1372.9	1372.3	1366.3	1361.9	1350.4
15°	1341.7	1344.9	1341.7	1335.6	1326.3
17.5°	1311.5	1311.5	1313.7	1303.3	1296.2
20°	1277.6	1279.2	1279.2	1271.0	1262.8
22.5°	1238.2	1243.1	1244.7	1236.0	1226.1
25°	1191.6	1200.9	1206.4	1197.6	1187.2
27.5°	1135.2	1149.4	1165.9	1159.3	1147.8
30°	1072.2	1093.0	1120.4	1114.9	1106.7
32.5°	1012.5	1033.3	1071.1	1068.9	1064.6
35°	958.3	971.5	1015.8	1021.3	1017.5
37.5°	906.8	918.9	960.5	973.1	969.8
40°	852.6	865.8	898.6	921.1	922.2
42.5°	799.0	811.6	838.4	870.7	870.7
45°	742.0	754.6	779.3	814.8	819.2
47.5°	686.2	699.3	723.4	759.0	766.1
50°	631.4	643.4	667.5	702.0	713.0
52.5°	574.4	587.6	611.1	642.9	658.8
55°	519.7	528.4	554.2	584.8	601.8
57.5°	462.7	470.9	500.0	526.3	543.8
60°	408.0	418.4	440.8	467.7	487.9
62.5°	355.4	366.4	385.5	409.1	432.1
65°	304.5	312.7	331.3	354.9	375.1
67.5°	255.2	262.3	280.9	297.4	318.7
70°	205.4	214.7	228.4	244.2	257.9
72.5°	165.4	169.2	180.7	192.2	206.4
75°	122.1	128.7	138.0	144.6	152.8
77.5°	87.6	91.5	96.9	102.4	110.1
80°	58.6	60.2	65.2	66.3	72.3
82.5°	35.6	36.7	37.8	38.3	40.5
85°	19.2	19.2	19.2	18.1	18.1
87.5°	11.0	11.0	9.3	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)