

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: P554657

Luminaire Tested: **FUSL-12-2-LD4-2HI-30-UNV-93-84-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: P554657
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-30-UNV-93-84-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

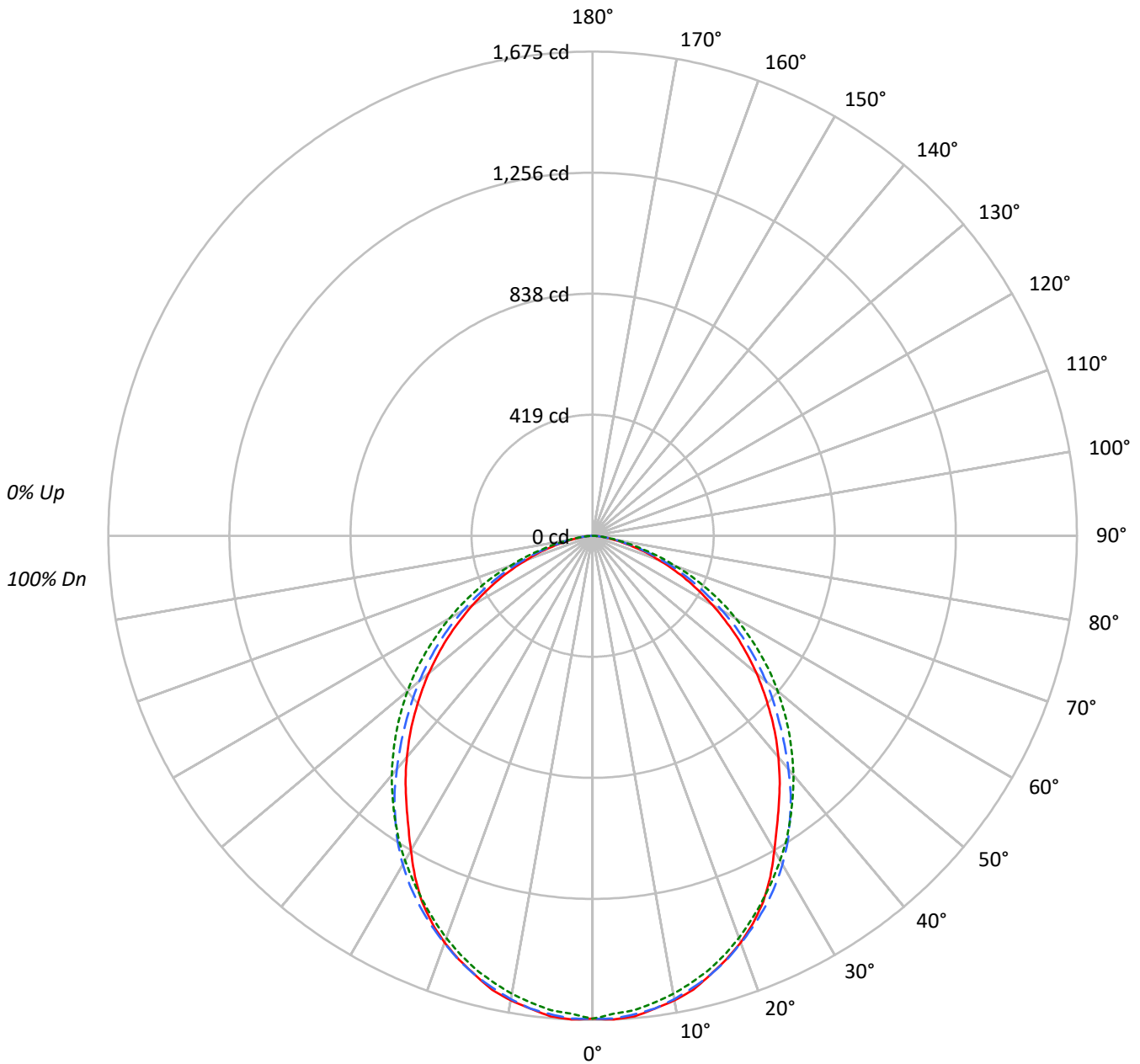
Lumens per Lamp: N/A
Luminaire Lumens: 3863.0 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (A_{in}): 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°	8991	8991	8991
5°	9015	8977	8901
10°	8919	8895	8793
15°	8761	8761	8661
20°	8576	8587	8476
25°	8293	8396	8263
30°	7810	8161	8061
35°	7380	7822	7835
40°	7021	7399	7593
45°	6619	6951	7308
50°	6196	6551	6996
55°	5715	6094	6619
60°	5147	5562	6156
65°	4544	4945	5598
70°	3788	4211	4757
75°	2976	3362	3724
80°	2129	2368	2625
85°	1389	1389	1309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.3	4.1
10°-20°	441.9	11.4
20°-30°	645.7	16.7
30°-40°	733.0	19.0
40°-50°	707.6	18.3
50°-60°	583.7	15.1
60°-70°	388.7	10.1
70°-80°	173.9	4.5
80°-90°	31.1	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°	1244.9	32.2
0°-40°	1977.9	51.2
0°-60°	3269.2	84.6
0°-90°	3863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3863.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1671	1671	1671	1671	1671	
5°	1669	1668	1662	1653	1648	158
15°	1572	1576	1572	1565	1554	443
25°	1397	1408	1414	1404	1392	640
35°	1123	1139	1191	1197	1192	704
45°	870	884	913	955	960	671
55°	609	619	650	686	705	544
65°	357	366	388	416	440	354
75°	143	151	162	169	179	156
85°	22	22	22	21	21	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1670.6	1670.6	1670.6	1670.6	1670.6
2.5°	1675.1	1675.8	1671.9	1661.7	1655.2
5°	1668.7	1668.1	1661.7	1652.7	1647.5
7.5°	1650.1	1651.4	1649.5	1636.6	1629.6
10°	1632.1	1632.8	1627.6	1617.4	1609.0
12.5°	1609.0	1608.4	1601.3	1596.2	1582.7
15°	1572.4	1576.3	1572.4	1565.4	1554.5
17.5°	1537.1	1537.1	1539.7	1527.5	1519.2
20°	1497.4	1499.3	1499.3	1489.7	1480.0
22.5°	1451.1	1456.9	1458.8	1448.6	1437.0
25°	1396.6	1407.5	1413.9	1403.7	1391.5
27.5°	1330.5	1347.2	1366.4	1358.7	1345.2
30°	1256.7	1281.1	1313.2	1306.7	1297.1
32.5°	1186.7	1211.1	1255.4	1252.8	1247.7
35°	1123.2	1138.6	1190.6	1197.0	1192.5
37.5°	1062.8	1077.0	1125.7	1140.5	1136.7
40°	999.3	1014.7	1053.2	1079.5	1080.8
42.5°	936.4	951.2	982.6	1020.5	1020.5
45°	869.7	884.4	913.3	955.0	960.2
47.5°	804.2	819.6	847.8	889.6	897.9
50°	740.0	754.1	782.4	822.8	835.6
52.5°	673.3	688.7	716.3	753.5	772.1
55°	609.1	619.4	649.5	685.5	705.4
57.5°	542.3	552.0	586.0	616.8	637.3
60°	478.2	490.3	516.7	548.1	571.9
62.5°	416.5	429.4	451.8	479.4	506.4
65°	356.8	366.5	388.3	415.9	439.6
67.5°	299.1	307.4	329.3	348.5	373.5
70°	240.7	251.6	267.6	286.3	302.3
72.5°	193.8	198.3	211.8	225.3	242.0
75°	143.1	150.8	161.7	169.4	179.1
77.5°	102.7	107.2	113.6	120.0	129.0
80°	68.7	70.6	76.4	77.7	84.7
82.5°	41.7	43.0	44.3	44.9	47.5
85°	22.5	22.5	22.5	21.2	21.2
87.5°	12.8	12.8	10.9	9.0	6.4
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)