

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: P557392

Luminaire Tested: **FUSL-12-4-LD4-2LO-50-UNV-82-84-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: P557392
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-LD4-2LO-50-UNV-82-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

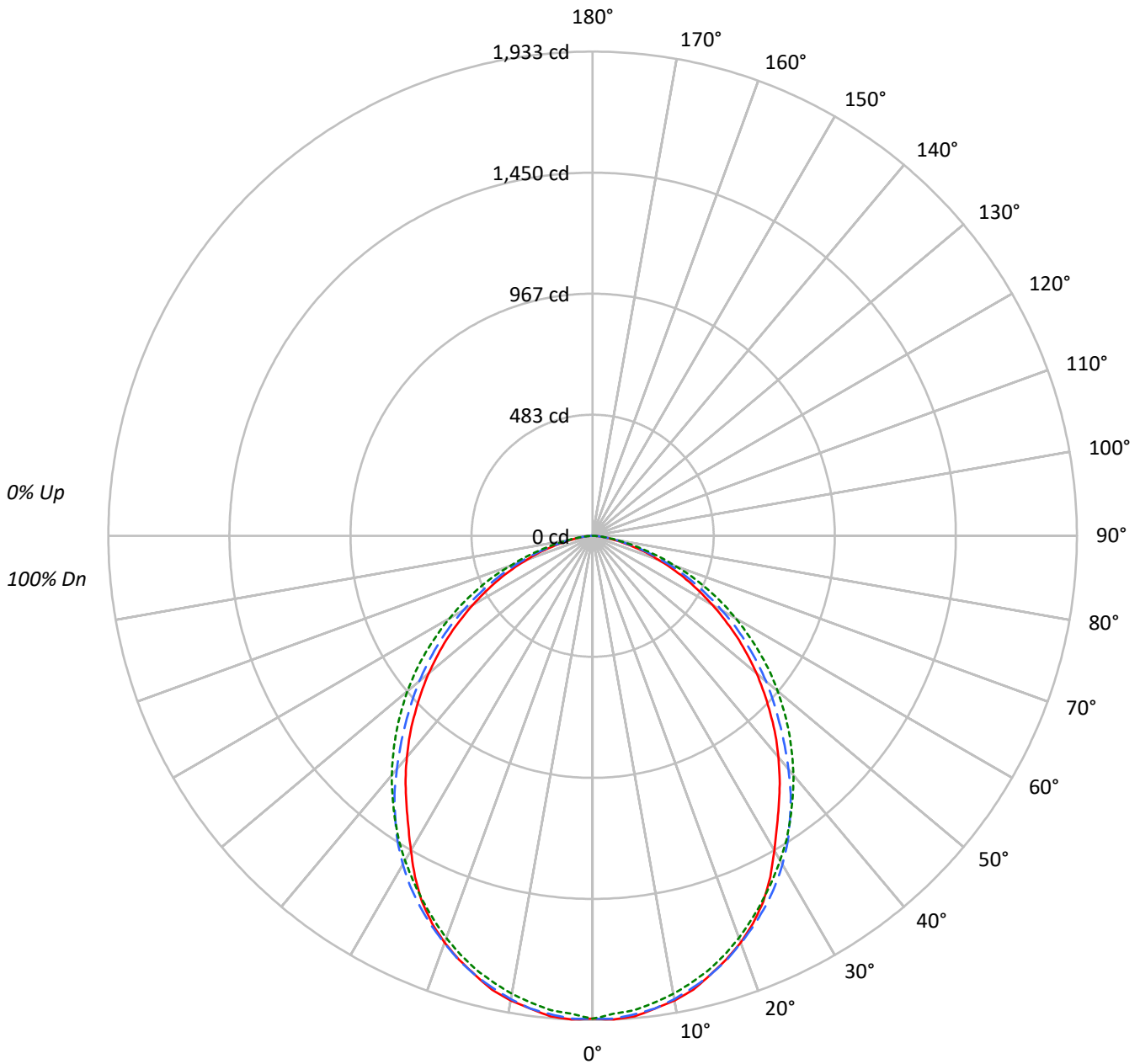
Lumens per Lamp: N/A
Luminaire Lumens: 4458.0 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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°	5188	5188	5188
5°	5202	5180	5136
10°	5147	5132	5074
15°	5055	5055	4998
20°	4948	4955	4891
25°	4785	4845	4768
30°	4506	4709	4651
35°	4258	4513	4521
40°	4051	4269	4382
45°	3819	4011	4217
50°	3575	3780	4037
55°	3298	3517	3819
60°	2970	3209	3552
65°	2622	2853	3231
70°	2186	2430	2745
75°	1718	1940	2148
80°	1229	1365	1516
85°	800	800	753



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	4.1
10°-20°	510.0	11.4
20°-30°	745.2	16.7
30°-40°	845.9	19.0
40°-50°	816.6	18.3
50°-60°	673.6	15.1
60°-70°	448.6	10.1
70°-80°	200.7	4.5
80°-90°	35.9	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°	1436.7	32.2
0°-40°	2282.6	51.2
0°-60°	3772.8	84.6
0°-90°	4458.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4458.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1928	1928	1928	1928	1928	
5°	1926	1925	1918	1907	1901	182
15°	1815	1819	1815	1806	1794	512
25°	1612	1624	1632	1620	1606	738
35°	1296	1314	1374	1381	1376	812
45°	1004	1021	1054	1102	1108	774
55°	703	715	750	791	814	627
65°	412	423	448	480	507	408
75°	165	174	187	196	207	181
85°	26	26	26	24	24	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1928.0	1928.0	1928.0	1928.0	1928.0
2.5°	1933.2	1933.9	1929.5	1917.6	1910.2
5°	1925.7	1925.0	1917.6	1907.2	1901.3
7.5°	1904.3	1905.7	1903.5	1888.7	1880.6
10°	1883.5	1884.3	1878.3	1866.5	1856.9
12.5°	1856.9	1856.1	1848.0	1842.1	1826.5
15°	1814.6	1819.1	1814.6	1806.5	1793.9
17.5°	1773.9	1773.9	1776.9	1762.8	1753.2
20°	1728.0	1730.2	1730.2	1719.1	1708.0
22.5°	1674.7	1681.3	1683.5	1671.7	1658.4
25°	1611.7	1624.3	1631.7	1619.9	1605.8
27.5°	1535.4	1554.7	1576.9	1568.0	1552.4
30°	1450.2	1478.4	1515.4	1508.0	1496.9
32.5°	1369.5	1397.6	1448.8	1445.8	1439.9
35°	1296.2	1314.0	1373.9	1381.4	1376.2
37.5°	1226.6	1242.8	1299.1	1316.2	1311.7
40°	1153.2	1171.0	1215.4	1245.8	1247.3
42.5°	1080.6	1097.7	1134.0	1177.7	1177.7
45°	1003.6	1020.6	1054.0	1102.1	1108.0
47.5°	928.1	945.8	978.4	1026.6	1036.2
50°	854.0	870.3	902.9	949.5	964.4
52.5°	777.0	794.7	826.6	869.5	891.0
55°	702.9	714.7	749.6	791.0	814.0
57.5°	625.9	637.0	676.2	711.8	735.5
60°	551.8	565.9	596.2	632.5	659.9
62.5°	480.7	495.5	521.4	553.3	584.4
65°	411.8	422.9	448.1	480.0	507.4
67.5°	345.2	354.8	380.0	402.2	431.1
70°	277.8	290.3	308.9	330.3	348.9
72.5°	223.7	228.9	244.4	260.0	279.2
75°	165.2	174.1	186.6	195.5	206.6
77.5°	118.5	123.7	131.1	138.5	148.9
80°	79.3	81.5	88.1	89.6	97.8
82.5°	48.1	49.6	51.1	51.8	54.8
85°	25.9	25.9	25.9	24.4	24.4
87.5°	14.8	14.8	12.6	10.4	7.4
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)