

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: P556285

Luminaire Tested: **FUSL-12-4-LD4-1HI-40-UNV-80-96-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: P556285
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-40-UNV-80-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND
4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

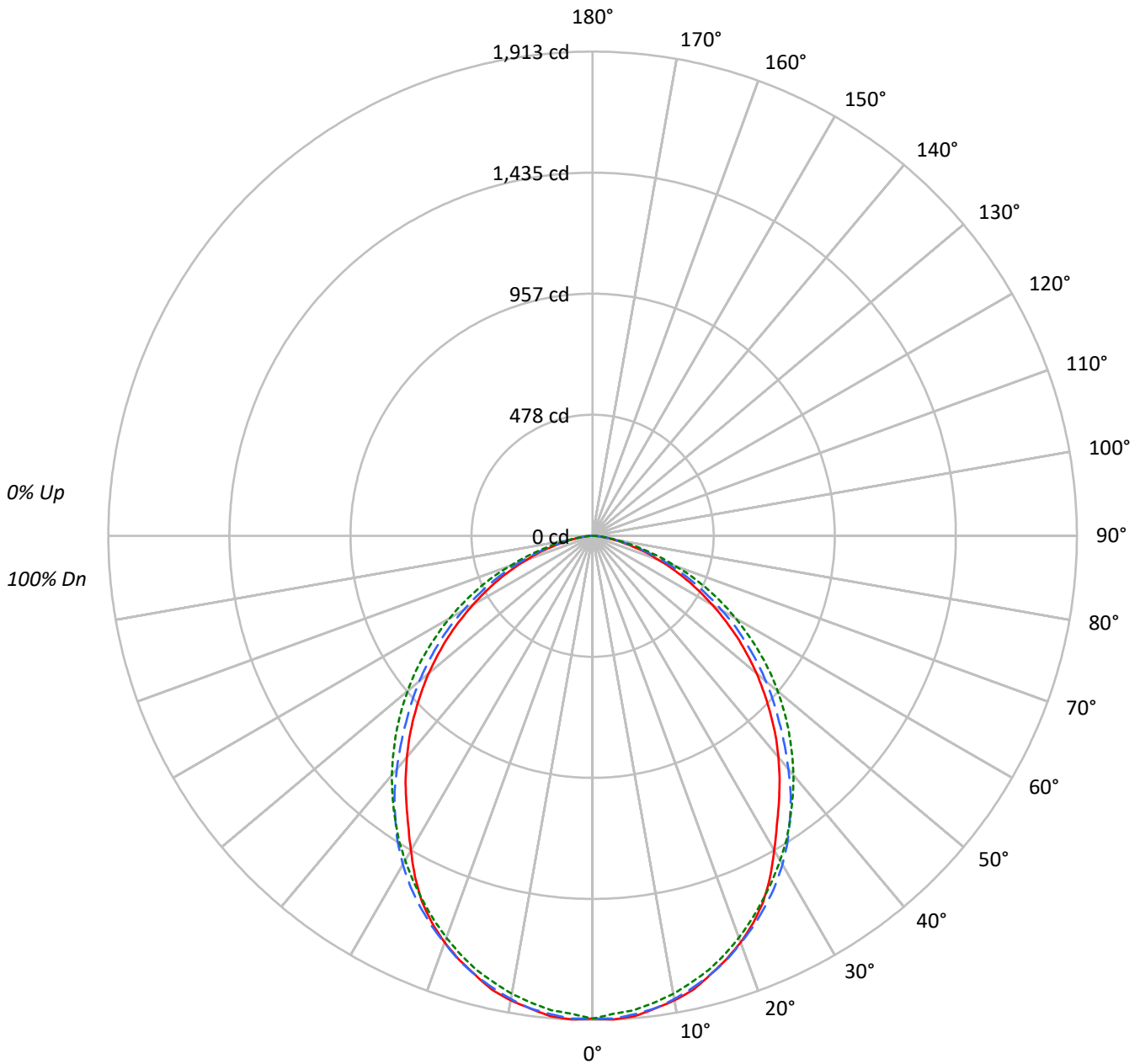
Lumens per Lamp: N/A
Luminaire Lumens: 4411.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P556285

CATALOG NUMBER: FUSL-12-4-LD4-1HI-40-UNV-80-96-EDD

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°	5133	5133	5133
5°	5147	5125	5082
10°	5093	5078	5020
15°	5002	5002	4945
20°	4896	4903	4840
25°	4735	4794	4717
30°	4459	4659	4602
35°	4213	4466	4473
40°	4008	4225	4335
45°	3779	3969	4172
50°	3538	3740	3995
55°	3263	3480	3779
60°	2939	3175	3514
65°	2595	2823	3196
70°	2162	2404	2716
75°	1699	1920	2126
80°	1215	1351	1499
85°	794	794	747



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.6	4.1
10°-20°	504.6	11.4
20°-30°	737.4	16.7
30°-40°	837.0	19.0
40°-50°	808.0	18.3
50°-60°	666.5	15.1
60°-70°	443.8	10.1
70°-80°	198.6	4.5
80°-90°	35.6	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°	1421.5	32.2
0°-40°	2258.5	51.2
0°-60°	3733.0	84.6
0°-90°	4411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4411.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1908	1908	1908	1908	1908	
5°	1905	1905	1897	1887	1881	180
15°	1796	1800	1796	1788	1775	506
25°	1595	1607	1614	1603	1589	730
35°	1282	1300	1360	1367	1362	804
45°	993	1010	1043	1090	1096	766
55°	696	707	742	783	805	621
65°	408	418	443	475	502	404
75°	163	172	185	194	204	179
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°	1907.6	1907.6	1907.6	1907.6	1907.6
2.5°	1912.8	1913.5	1909.1	1897.4	1890.1
5°	1905.4	1904.7	1897.4	1887.1	1881.3
7.5°	1884.2	1885.7	1883.5	1868.8	1860.7
10°	1863.7	1864.4	1858.5	1846.8	1837.3
12.5°	1837.3	1836.6	1828.5	1822.6	1807.2
15°	1795.5	1799.9	1795.5	1787.5	1775.0
17.5°	1755.2	1755.2	1758.1	1744.2	1734.7
20°	1709.8	1712.0	1712.0	1701.0	1690.0
22.5°	1657.0	1663.6	1665.8	1654.1	1640.9
25°	1594.7	1607.2	1614.5	1602.8	1588.8
27.5°	1519.2	1538.3	1560.3	1551.5	1536.1
30°	1434.9	1462.8	1499.4	1492.1	1481.1
32.5°	1355.1	1382.9	1433.5	1430.5	1424.7
35°	1282.5	1300.1	1359.5	1366.8	1361.7
37.5°	1213.6	1229.7	1285.4	1302.3	1297.9
40°	1141.1	1158.7	1202.6	1232.7	1234.1
42.5°	1069.2	1086.1	1122.0	1165.3	1165.3
45°	993.0	1009.9	1042.9	1090.5	1096.4
47.5°	918.3	935.9	968.1	1015.7	1025.3
50°	845.0	861.1	893.4	939.5	954.2
52.5°	768.8	786.4	817.9	860.4	881.6
55°	695.5	707.2	741.7	782.7	805.4
57.5°	619.3	630.3	669.1	704.3	727.7
60°	546.0	559.9	590.0	625.9	653.0
62.5°	475.6	490.3	515.9	547.4	578.2
65°	407.5	418.5	443.4	474.9	502.0
67.5°	341.5	351.0	376.0	397.9	426.5
70°	274.8	287.3	305.6	326.9	345.2
72.5°	221.3	226.5	241.8	257.2	276.3
75°	163.4	172.2	184.7	193.5	204.5
77.5°	117.3	122.4	129.7	137.0	147.3
80°	78.4	80.6	87.2	88.7	96.7
82.5°	47.6	49.1	50.6	51.3	54.2
85°	25.7	25.7	25.7	24.2	24.2
87.5°	14.7	14.7	12.5	10.3	7.3
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)