

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: P556257

Luminaire Tested: **FUSL-12-4-LD4-1HI-35-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: P556257
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-93-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

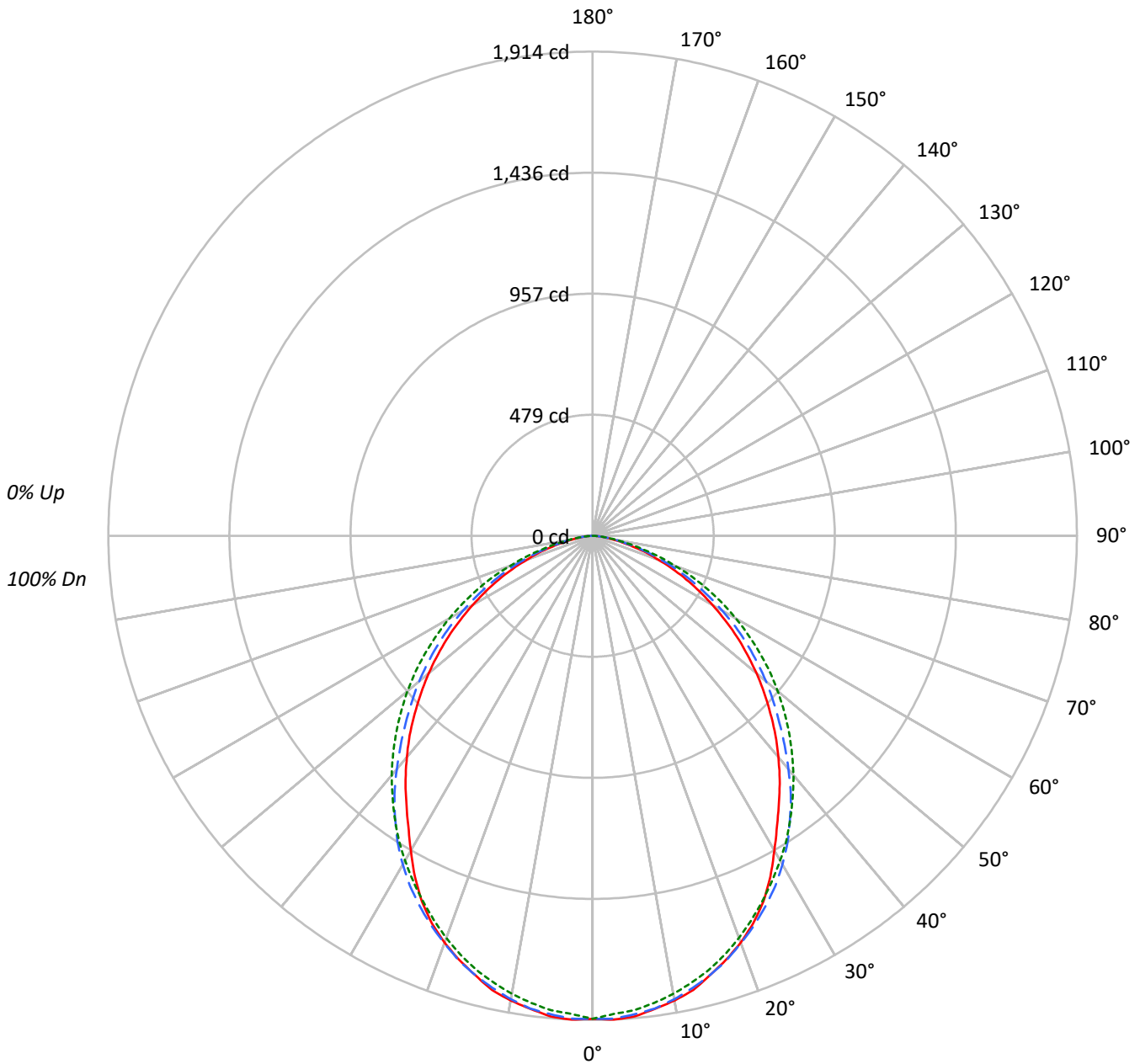
Lumens per Lamp: N/A
Luminaire Lumens: 4415.0 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P556257

CATALOG NUMBER: FUSL-12-4-LD4-1HI-35-UNV-93-84-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P556257

CATALOG NUMBER: FUSL-12-4-LD4-1HI-35-UNV-93-84-EDD

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°	5138	5138	5138
5°	5152	5130	5086
10°	5097	5083	5025
15°	5007	5007	4949
20°	4901	4907	4844
25°	4739	4798	4722
30°	4463	4663	4607
35°	4217	4470	4477
40°	4012	4228	4339
45°	3782	3972	4176
50°	3541	3743	3998
55°	3266	3483	3782
60°	2941	3178	3518
65°	2597	2826	3200
70°	2164	2407	2718
75°	1701	1921	2128
80°	1216	1353	1500
85°	794	794	747



TEST NUMBER: P556257

CATALOG NUMBER: FUSL-12-4-LD4-1HI-35-UNV-93-84-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.8	4.1
10°-20°	505.0	11.4
20°-30°	738.0	16.7
30°-40°	837.7	19.0
40°-50°	808.7	18.3
50°-60°	667.1	15.1
60°-70°	444.2	10.1
70°-80°	198.8	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°	1422.8	32.2
0°-40°	2260.6	51.2
0°-60°	3736.4	84.6
0°-90°	4415.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4415.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1909	1909	1909	1909	1909	
5°	1907	1906	1899	1889	1883	181
15°	1797	1802	1797	1789	1777	507
25°	1596	1609	1616	1604	1590	731
35°	1284	1301	1361	1368	1363	804
45°	994	1011	1044	1092	1097	767
55°	696	708	742	783	806	621
65°	408	419	444	475	502	404
75°	164	172	185	194	205	179
85°	26	26	26	24	24	35
90°	0	0	0	0	0	



TEST NUMBER: P556257

CATALOG NUMBER: FUSL-12-4-LD4-1HI-35-UNV-93-84-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1909.4	1909.4	1909.4	1909.4	1909.4
2.5°	1914.5	1915.2	1910.8	1899.1	1891.8
5°	1907.2	1906.4	1899.1	1888.8	1883.0
7.5°	1885.9	1887.4	1885.2	1870.5	1862.4
10°	1865.4	1866.1	1860.2	1848.5	1839.0
12.5°	1839.0	1838.2	1830.2	1824.3	1808.9
15°	1797.1	1801.5	1797.1	1789.1	1776.6
17.5°	1756.8	1756.8	1759.7	1745.8	1736.3
20°	1711.3	1713.5	1713.5	1702.5	1691.5
22.5°	1658.5	1665.1	1667.3	1655.6	1642.4
25°	1596.2	1608.6	1616.0	1604.2	1590.3
27.5°	1520.6	1539.7	1561.7	1552.9	1537.5
30°	1436.2	1464.1	1500.8	1493.5	1482.5
32.5°	1356.3	1384.2	1434.8	1431.8	1426.0
35°	1283.7	1301.3	1360.7	1368.0	1362.9
37.5°	1214.7	1230.9	1286.6	1303.5	1299.1
40°	1142.1	1159.7	1203.7	1233.8	1235.3
42.5°	1070.2	1087.1	1123.0	1166.3	1166.3
45°	993.9	1010.8	1043.8	1091.5	1097.4
47.5°	919.1	936.7	969.0	1016.7	1026.2
50°	845.8	861.9	894.2	940.4	955.1
52.5°	769.5	787.1	818.6	861.2	882.4
55°	696.1	707.9	742.3	783.4	806.1
57.5°	619.8	630.8	669.7	704.9	728.4
60°	546.5	560.4	590.5	626.4	653.6
62.5°	476.1	490.7	516.4	547.9	578.8
65°	407.8	418.8	443.8	475.3	502.5
67.5°	341.8	351.4	376.3	398.3	426.9
70°	275.1	287.5	305.9	327.2	345.5
72.5°	221.5	226.7	242.1	257.5	276.5
75°	163.6	172.4	184.8	193.7	204.7
77.5°	117.4	122.5	129.8	137.2	147.4
80°	78.5	80.7	87.3	88.8	96.8
82.5°	47.7	49.1	50.6	51.3	54.3
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)