

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: P555540

Luminaire Tested: **FUSL-12-2-LD4-3HI-40-UNV-82-86-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: P555540
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-LD4-3HI-40-UNV-82-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

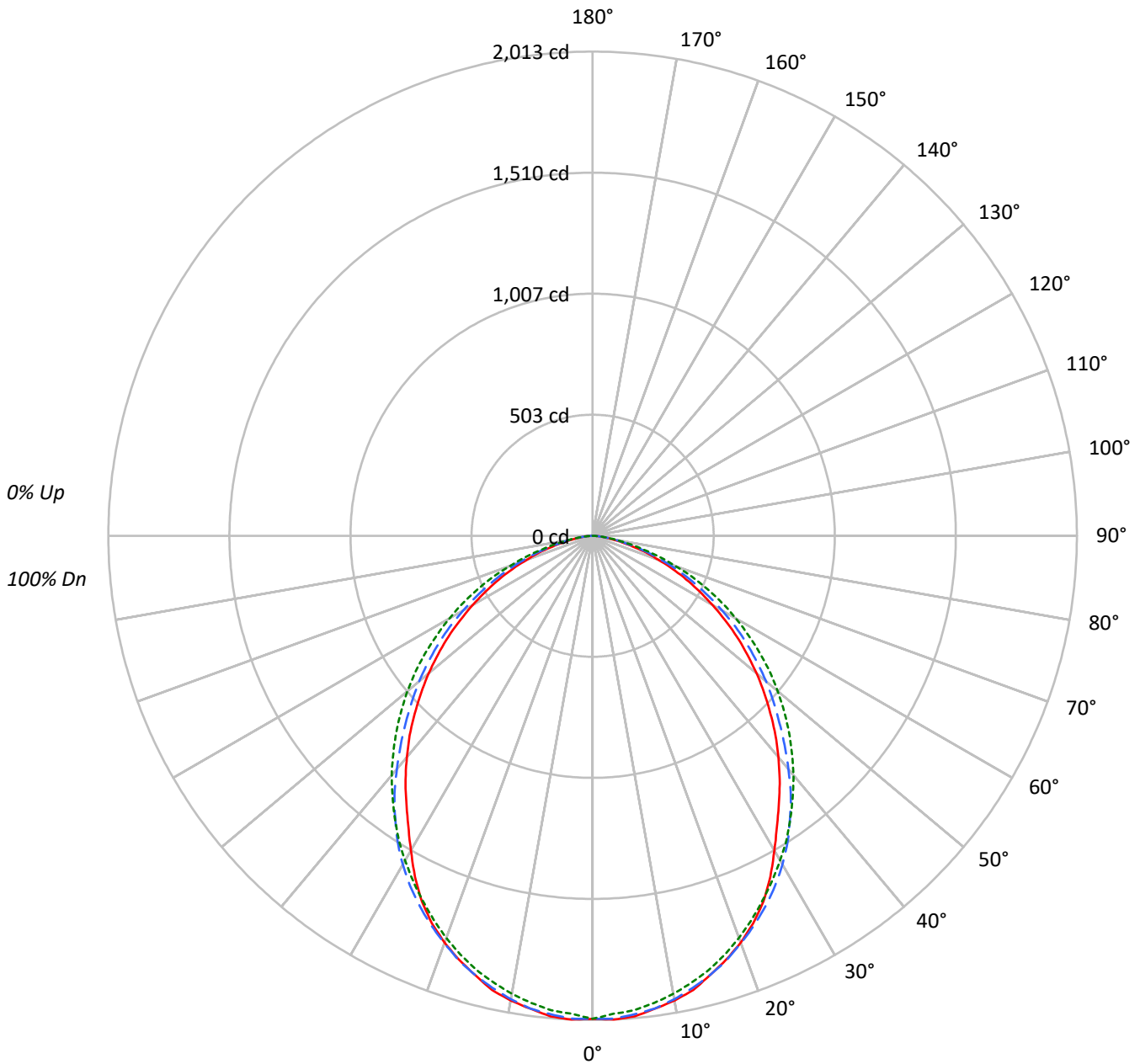
Lumens per Lamp: N/A
Luminaire Lumens: 4643.0 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 64.8
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					20					
RC	80					70					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	50	30	10	0		
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100		
	1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86	86	86	86		
	2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73	73	73	73	73	73		
	3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63	63	63	63	63	63		
	4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54	54	54	54	54	54		
	5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47	47	47	47	47	47		
	6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42	42	42	42	42	42		
	7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37	37	37	37	37	37		
	8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34	34	34	34	34	34		
	9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30	30	30	30	30	30		
	10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28	28	28	28	28	28		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10807	10807	10807
5°	10836	10790	10698
10°	10721	10691	10569
15°	10531	10531	10410
20°	10308	10321	10188
25°	9968	10092	9931
30°	9386	9808	9688
35°	8870	9402	9417
40°	8439	8894	9127
45°	7956	8355	8783
50°	7447	7873	8410
55°	6869	7325	7955
60°	6186	6684	7398
65°	5462	5943	6729
70°	4552	5062	5717
75°	3577	4042	4475
80°	2557	2845	3155
85°	1667	1667	1575



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.1	4.1
10°-20°	531.1	11.4
20°-30°	776.1	16.7
30°-40°	881.0	19.0
40°-50°	850.5	18.3
50°-60°	701.6	15.1
60°-70°	467.2	10.1
70°-80°	209.1	4.5
80°-90°	37.4	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°	1496.3	32.2
0°-40°	2377.3	51.2
0°-60°	3929.3	84.6
0°-90°	4643.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4643.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2008	2008	2008	2008	2008	
5°	2006	2005	1997	1986	1980	190
15°	1890	1895	1890	1882	1868	533
25°	1679	1692	1699	1687	1672	769
35°	1350	1368	1431	1439	1433	846
45°	1045	1063	1098	1148	1154	806
55°	732	744	781	824	848	653
65°	429	440	467	500	528	425
75°	172	181	194	204	215	188
85°	27	27	27	26	26	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2008.0	2008.0	2008.0	2008.0	2008.0
2.5°	2013.4	2014.1	2009.5	1997.2	1989.5
5°	2005.7	2004.9	1997.2	1986.4	1980.2
7.5°	1983.3	1984.8	1982.5	1967.1	1958.6
10°	1961.7	1962.5	1956.3	1944.0	1933.9
12.5°	1933.9	1933.2	1924.7	1918.5	1902.3
15°	1890.0	1894.6	1890.0	1881.5	1868.4
17.5°	1847.5	1847.5	1850.6	1836.0	1825.9
20°	1799.7	1802.0	1802.0	1790.4	1778.9
22.5°	1744.2	1751.1	1753.4	1741.1	1727.2
25°	1678.6	1691.7	1699.4	1687.1	1672.4
27.5°	1599.1	1619.2	1642.3	1633.1	1616.9
30°	1510.4	1539.7	1578.3	1570.6	1559.0
32.5°	1426.3	1455.6	1508.9	1505.8	1499.6
35°	1350.0	1368.5	1431.0	1438.7	1433.3
37.5°	1277.5	1294.4	1353.1	1370.8	1366.2
40°	1201.1	1219.6	1265.9	1297.5	1299.1
42.5°	1125.5	1143.2	1181.0	1226.5	1226.5
45°	1045.3	1063.0	1097.7	1147.9	1154.0
47.5°	966.6	985.1	1019.0	1069.2	1079.2
50°	889.4	906.4	940.3	988.9	1004.4
52.5°	809.2	827.7	860.9	905.6	928.0
55°	732.1	744.4	780.7	823.9	847.8
57.5°	651.8	663.4	704.3	741.3	766.0
60°	574.7	589.4	621.0	658.8	687.3
62.5°	500.6	516.1	543.1	576.2	608.6
65°	428.9	440.5	466.7	499.9	528.4
67.5°	359.5	369.5	395.7	418.9	449.0
70°	289.3	302.4	321.7	344.0	363.3
72.5°	233.0	238.4	254.6	270.8	290.8
75°	172.0	181.3	194.4	203.7	215.2
77.5°	123.4	128.8	136.5	144.3	155.1
80°	82.5	84.9	91.8	93.3	101.8
82.5°	50.1	51.7	53.2	54.0	57.1
85°	27.0	27.0	27.0	25.5	25.5
87.5°	15.4	15.4	13.1	10.8	7.7
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)