

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: P556730

Luminaire Tested: **FUSL-12-4-LD4-1STD-35-UNV-80-94-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: P556730
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-LD4-1STD-35-UNV-80-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

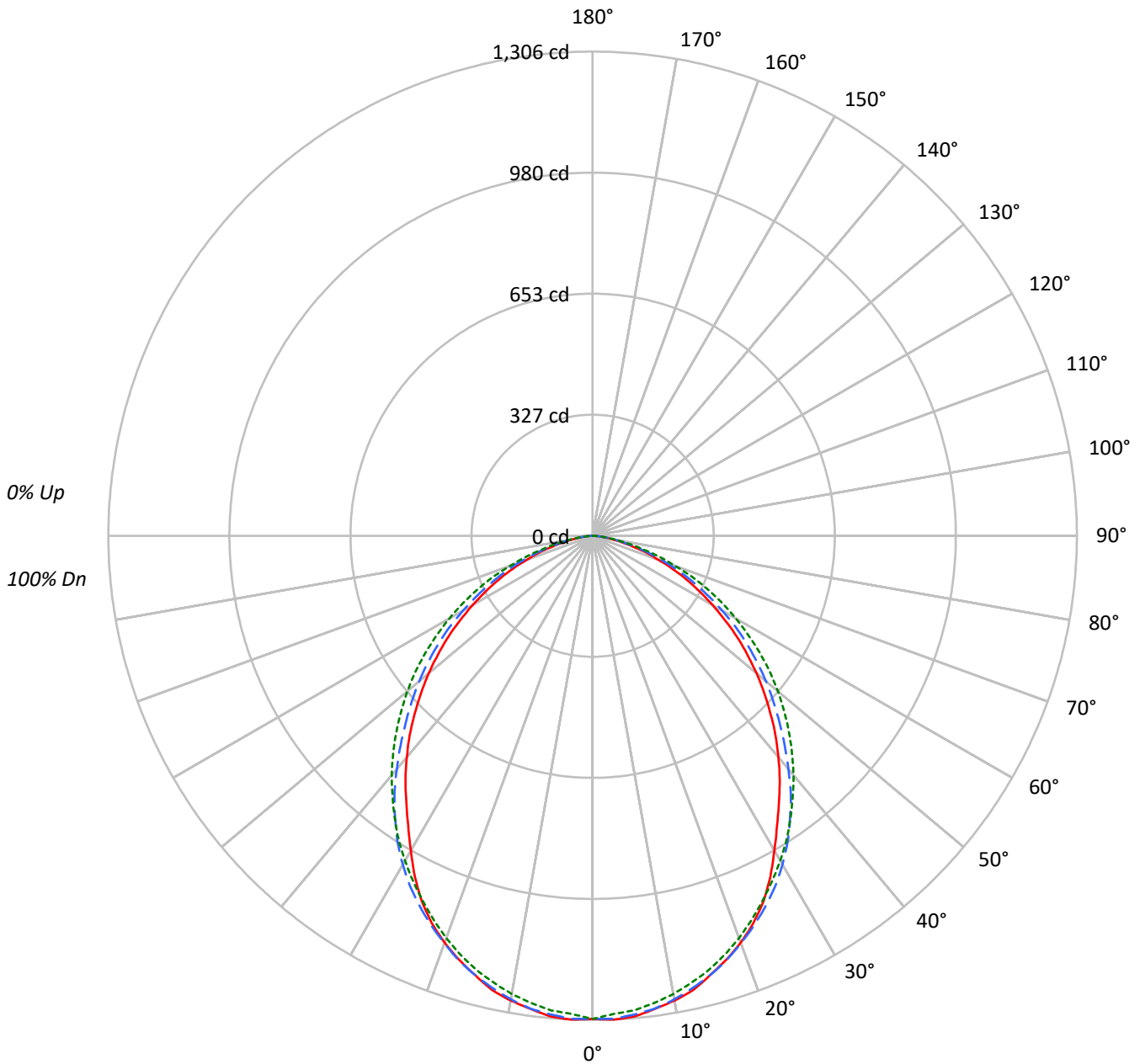
Lumens per Lamp: N/A
Luminaire Lumens: 3013.0 lumens
Efficiency: N/A
Efficacy: 90.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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					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			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3506	3506	3506
5°	3516	3501	3471
10°	3478	3469	3429
15°	3417	3417	3378
20°	3344	3349	3306
25°	3234	3274	3222
30°	3046	3182	3144
35°	2878	3051	3055
40°	2738	2886	2961
45°	2581	2711	2850
50°	2416	2555	2729
55°	2229	2377	2581
60°	2007	2169	2400
65°	1772	1929	2183
70°	1477	1642	1855
75°	1160	1311	1452
80°	831	924	1024
85°	540	540	509



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.7	4.1
10°-20°	344.7	11.4
20°-30°	503.7	16.7
30°-40°	571.7	19.0
40°-50°	551.9	18.3
50°-60°	455.3	15.1
60°-70°	303.2	10.1
70°-80°	135.7	4.5
80°-90°	24.3	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°	971.0	32.2
0°-40°	1542.7	51.2
0°-60°	2549.9	84.6
0°-90°	3013.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3013.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1303	1303	1303	1303	1303	
5°	1302	1301	1296	1289	1285	123
15°	1226	1230	1226	1221	1212	346
25°	1089	1098	1103	1095	1085	499
35°	876	888	929	934	930	549
45°	678	690	712	745	749	523
55°	475	483	507	535	550	424
65°	278	286	303	324	343	276
75°	112	118	126	132	140	122
85°	18	18	18	16	16	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1303.0	1303.0	1303.0	1303.0	1303.0
2.5°	1306.5	1307.0	1304.0	1296.0	1291.0
5°	1301.5	1301.0	1296.0	1289.0	1285.0
7.5°	1287.0	1288.0	1286.5	1276.5	1271.0
10°	1273.0	1273.5	1269.5	1261.5	1255.0
12.5°	1255.0	1254.5	1249.0	1245.0	1234.5
15°	1226.5	1229.5	1226.5	1220.9	1212.4
17.5°	1198.9	1198.9	1200.9	1191.4	1184.9
20°	1167.9	1169.4	1169.4	1161.9	1154.4
22.5°	1131.8	1136.3	1137.8	1129.8	1120.8
25°	1089.3	1097.8	1102.8	1094.8	1085.3
27.5°	1037.7	1050.7	1065.8	1059.8	1049.2
30°	980.2	999.2	1024.2	1019.2	1011.7
32.5°	925.6	944.6	979.2	977.2	973.2
35°	876.0	888.1	928.6	933.6	930.1
37.5°	829.0	840.0	878.0	889.6	886.6
40°	779.4	791.4	821.5	842.0	843.0
42.5°	730.4	741.9	766.4	795.9	795.9
45°	678.3	689.8	712.3	744.9	748.9
47.5°	627.2	639.3	661.3	693.8	700.3
50°	577.2	588.2	610.2	641.8	651.8
52.5°	525.1	537.1	558.7	587.7	602.2
55°	475.1	483.1	506.6	534.6	550.2
57.5°	423.0	430.5	457.0	481.1	497.1
60°	372.9	382.5	403.0	427.5	446.0
62.5°	324.9	334.9	352.4	373.9	395.0
65°	278.3	285.8	302.9	324.4	342.9
67.5°	233.3	239.8	256.8	271.8	291.3
70°	187.7	196.2	208.7	223.3	235.8
72.5°	151.2	154.7	165.2	175.7	188.7
75°	111.6	117.6	126.1	132.2	139.7
77.5°	80.1	83.6	88.6	93.6	100.6
80°	53.6	55.1	59.6	60.6	66.1
82.5°	32.5	33.5	34.5	35.0	37.0
85°	17.5	17.5	17.5	16.5	16.5
87.5°	10.0	10.0	8.5	7.0	5.0
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)