

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: P554509

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-81-96-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: P554509
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-LD4-1STD-40-UNV-81-96-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC 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

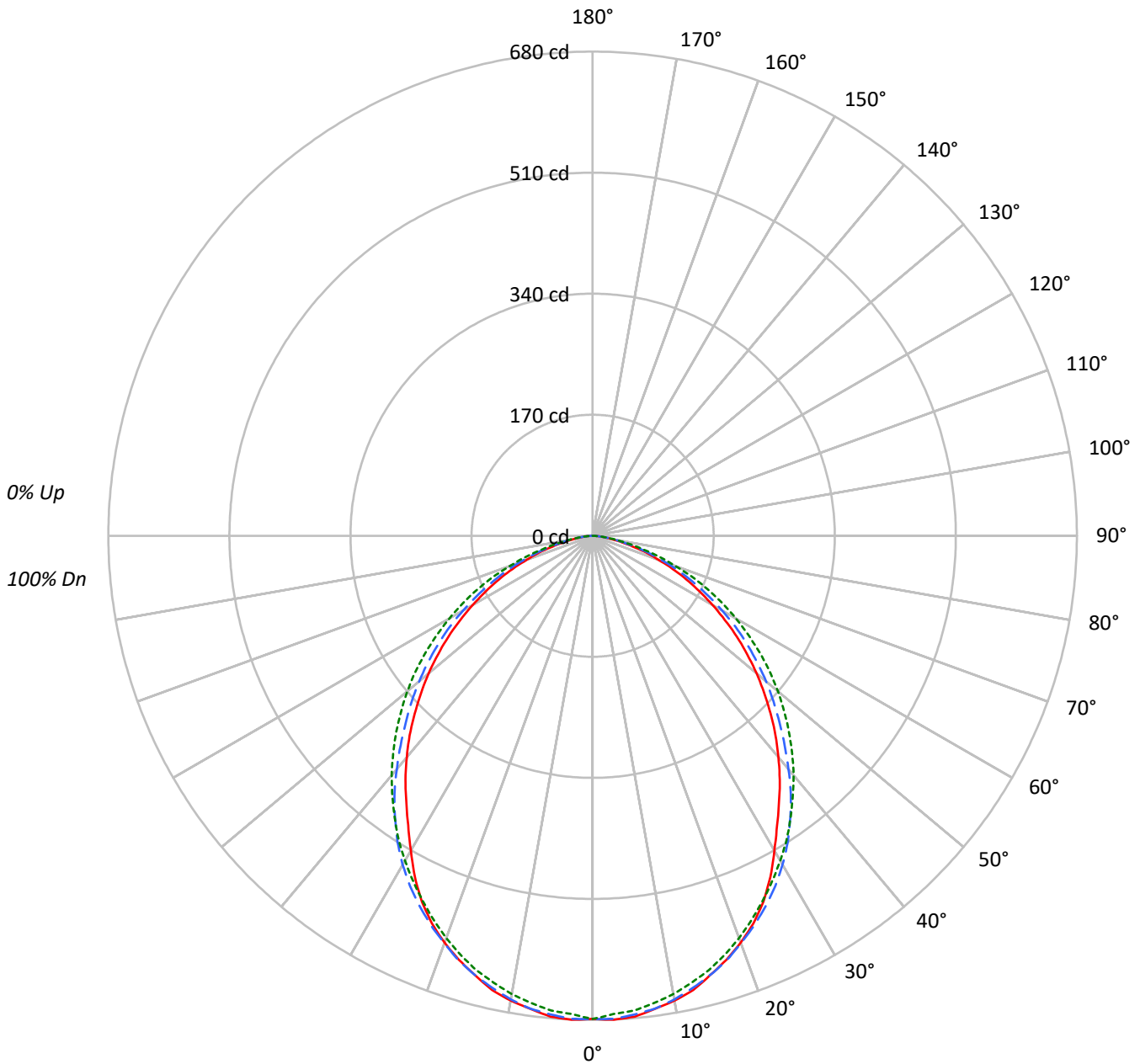
Lumens per Lamp: N/A
Luminaire Lumens: 1569.0 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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									
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°	3652	3652	3652
5°	3662	3646	3615
10°	3623	3613	3571
15°	3559	3559	3518
20°	3483	3488	3443
25°	3368	3410	3356
30°	3172	3315	3274
35°	2997	3177	3182
40°	2852	3006	3084
45°	2688	2823	2968
50°	2517	2661	2842
55°	2321	2475	2688
60°	2090	2258	2500
65°	1845	2008	2274
70°	1539	1710	1932
75°	1208	1366	1512
80°	865	961	1066
85°	562	562	531



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	4.1
10°-20°	179.5	11.4
20°-30°	262.3	16.7
30°-40°	297.7	19.0
40°-50°	287.4	18.3
50°-60°	237.1	15.1
60°-70°	157.9	10.1
70°-80°	70.6	4.5
80°-90°	12.6	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°	505.6	32.2
0°-40°	803.4	51.2
0°-60°	1327.8	84.6
0°-90°	1569.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1569.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	679	679	679	679	679	
5°	678	678	675	671	669	64
15°	639	640	639	636	631	180
25°	567	572	574	570	565	260
35°	456	462	484	486	484	286
45°	353	359	371	388	390	273
55°	247	252	264	278	286	221
65°	145	149	158	169	179	144
75°	58	61	66	69	73	64
85°	9	9	9	9	9	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	678.6	678.6	678.6	678.6	678.6
2.5°	680.4	680.6	679.1	674.9	672.3
5°	677.8	677.5	674.9	671.3	669.2
7.5°	670.2	670.7	669.9	664.7	661.9
10°	662.9	663.2	661.1	656.9	653.5
12.5°	653.5	653.3	650.4	648.3	642.8
15°	638.7	640.2	638.7	635.8	631.4
17.5°	624.3	624.3	625.4	620.4	617.0
20°	608.2	609.0	609.0	605.0	601.1
22.5°	589.4	591.7	592.5	588.4	583.7
25°	567.2	571.7	574.3	570.1	565.2
27.5°	540.4	547.2	555.0	551.9	546.4
30°	510.4	520.3	533.4	530.7	526.8
32.5°	482.0	491.9	509.9	508.8	506.8
35°	456.2	462.4	483.6	486.2	484.3
37.5°	431.7	437.4	457.2	463.2	461.7
40°	405.9	412.1	427.8	438.5	439.0
42.5°	380.3	386.3	399.1	414.5	414.5
45°	353.2	359.2	370.9	387.9	390.0
47.5°	326.6	332.9	344.4	361.3	364.7
50°	300.6	306.3	317.8	334.2	339.4
52.5°	273.5	279.7	290.9	306.0	313.6
55°	247.4	251.6	263.8	278.4	286.5
57.5°	220.3	224.2	238.0	250.5	258.9
60°	194.2	199.2	209.8	222.6	232.3
62.5°	169.2	174.4	183.5	194.7	205.7
65°	144.9	148.8	157.7	168.9	178.6
67.5°	121.5	124.9	133.7	141.5	151.7
70°	97.8	102.2	108.7	116.3	122.8
72.5°	78.7	80.6	86.0	91.5	98.3
75°	58.1	61.3	65.7	68.8	72.7
77.5°	41.7	43.5	46.1	48.7	52.4
80°	27.9	28.7	31.0	31.5	34.4
82.5°	16.9	17.5	18.0	18.2	19.3
85°	9.1	9.1	9.1	8.6	8.6
87.5°	5.2	5.2	4.4	3.6	2.6
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)