

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: P554021

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-93-86-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: P554021
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-LD4-1HI-40-UNV-93-86-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

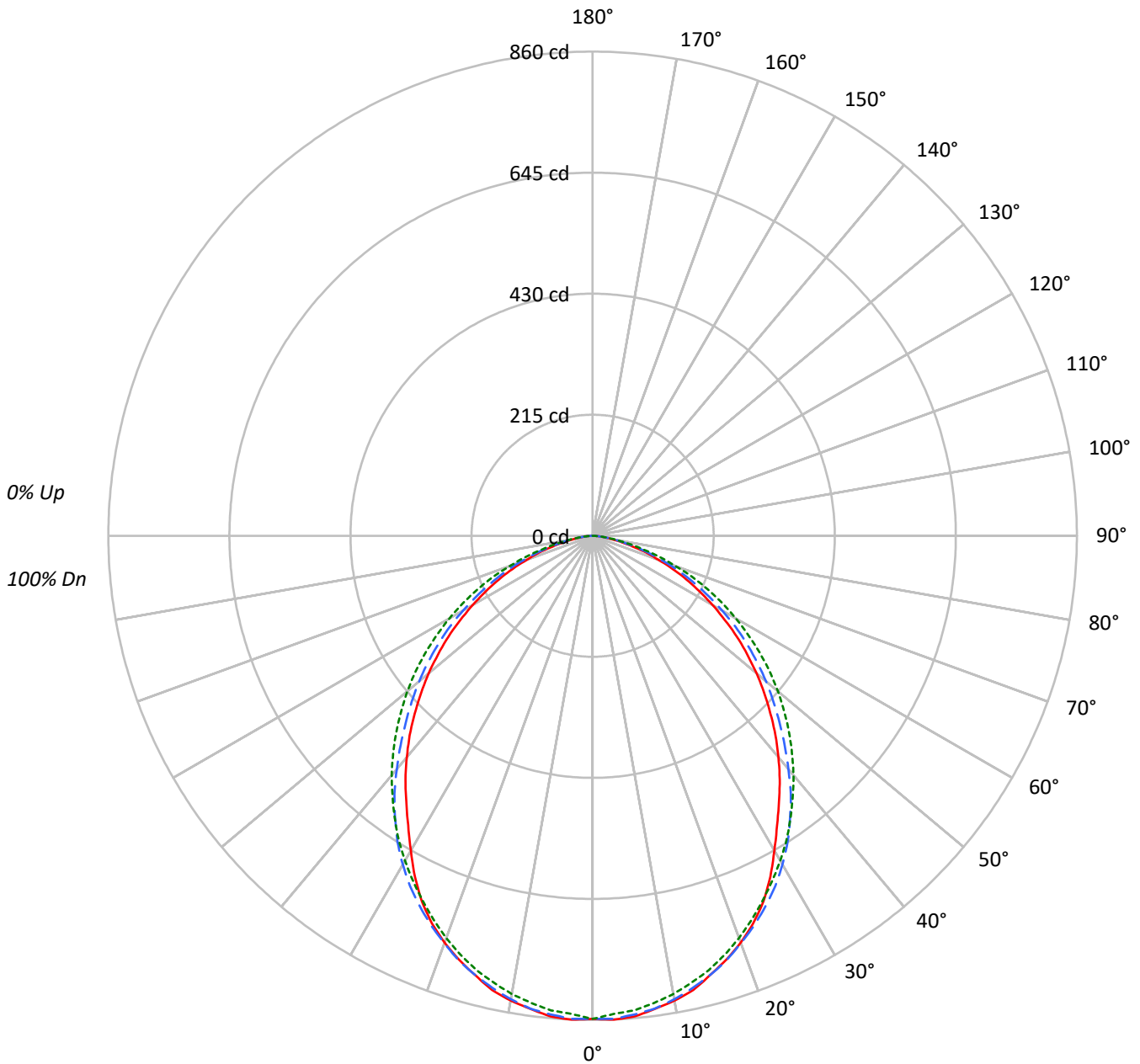
Lumens per Lamp: N/A
Luminaire Lumens: 1984.0 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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									
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°	4618	4618	4618
5°	4630	4611	4572
10°	4581	4568	4516
15°	4500	4500	4449
20°	4404	4410	4353
25°	4260	4312	4244
30°	4011	4191	4140
35°	3790	4018	4024
40°	3606	3800	3900
45°	3399	3570	3753
50°	3183	3364	3594
55°	2935	3130	3400
60°	2644	2857	3161
65°	2334	2539	2876
70°	1945	2164	2444
75°	1528	1728	1913
80°	1094	1215	1348
85°	710	710	673



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	4.1
10°-20°	227.0	11.4
20°-30°	331.7	16.7
30°-40°	376.5	19.0
40°-50°	363.4	18.3
50°-60°	299.8	15.1
60°-70°	199.6	10.1
70°-80°	89.3	4.5
80°-90°	16.0	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°	639.4	32.2
0°-40°	1015.9	51.2
0°-60°	1679.1	84.6
0°-90°	1984.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1984.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	858	858	858	858	858	
5°	857	857	853	849	846	81
15°	808	810	808	804	798	228
25°	717	723	726	721	715	328
35°	577	585	612	615	612	361
45°	447	454	469	490	493	345
55°	313	318	334	352	362	279
65°	183	188	199	214	226	182
75°	74	78	83	87	92	80
85°	12	12	12	11	11	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	858.0	858.0	858.0	858.0	858.0
2.5°	860.3	860.7	858.7	853.4	850.1
5°	857.0	856.7	853.4	848.8	846.2
7.5°	847.5	848.1	847.2	840.6	836.9
10°	838.3	838.6	835.9	830.7	826.4
12.5°	826.4	826.1	822.4	819.8	812.9
15°	807.6	809.6	807.6	804.0	798.4
17.5°	789.5	789.5	790.8	784.5	780.2
20°	769.0	770.0	770.0	765.1	760.1
22.5°	745.3	748.3	749.3	744.0	738.0
25°	717.3	722.9	726.2	720.9	714.6
27.5°	683.3	691.9	701.8	697.8	690.9
30°	645.4	657.9	674.4	671.1	666.2
32.5°	609.5	622.0	644.8	643.4	640.8
35°	576.9	584.8	611.5	614.8	612.5
37.5°	545.9	553.1	578.2	585.8	583.8
40°	513.2	521.1	540.9	554.4	555.1
42.5°	480.9	488.5	504.7	524.1	524.1
45°	446.6	454.2	469.1	490.5	493.1
47.5°	413.0	420.9	435.4	456.9	461.2
50°	380.1	387.3	401.8	422.6	429.2
52.5°	345.8	353.7	367.9	387.0	396.5
55°	312.8	318.1	333.6	352.0	362.3
57.5°	278.5	283.5	301.0	316.8	327.3
60°	245.6	251.8	265.4	281.5	293.7
62.5°	213.9	220.5	232.1	246.2	260.1
65°	183.3	188.2	199.4	213.6	225.8
67.5°	153.6	157.9	169.1	179.0	191.8
70°	123.6	129.2	137.5	147.0	155.3
72.5°	99.5	101.9	108.8	115.7	124.3
75°	73.5	77.5	83.1	87.0	92.0
77.5°	52.7	55.0	58.3	61.6	66.3
80°	35.3	36.3	39.2	39.9	43.5
82.5°	21.4	22.1	22.7	23.1	24.4
85°	11.5	11.5	11.5	10.9	10.9
87.5°	6.6	6.6	5.6	4.6	3.3
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)