

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: P556280

Luminaire Tested: **FUSL-12-4-LD4-1HI-40-UNV-80-88-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: P556280
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-40-UNV-80-88-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

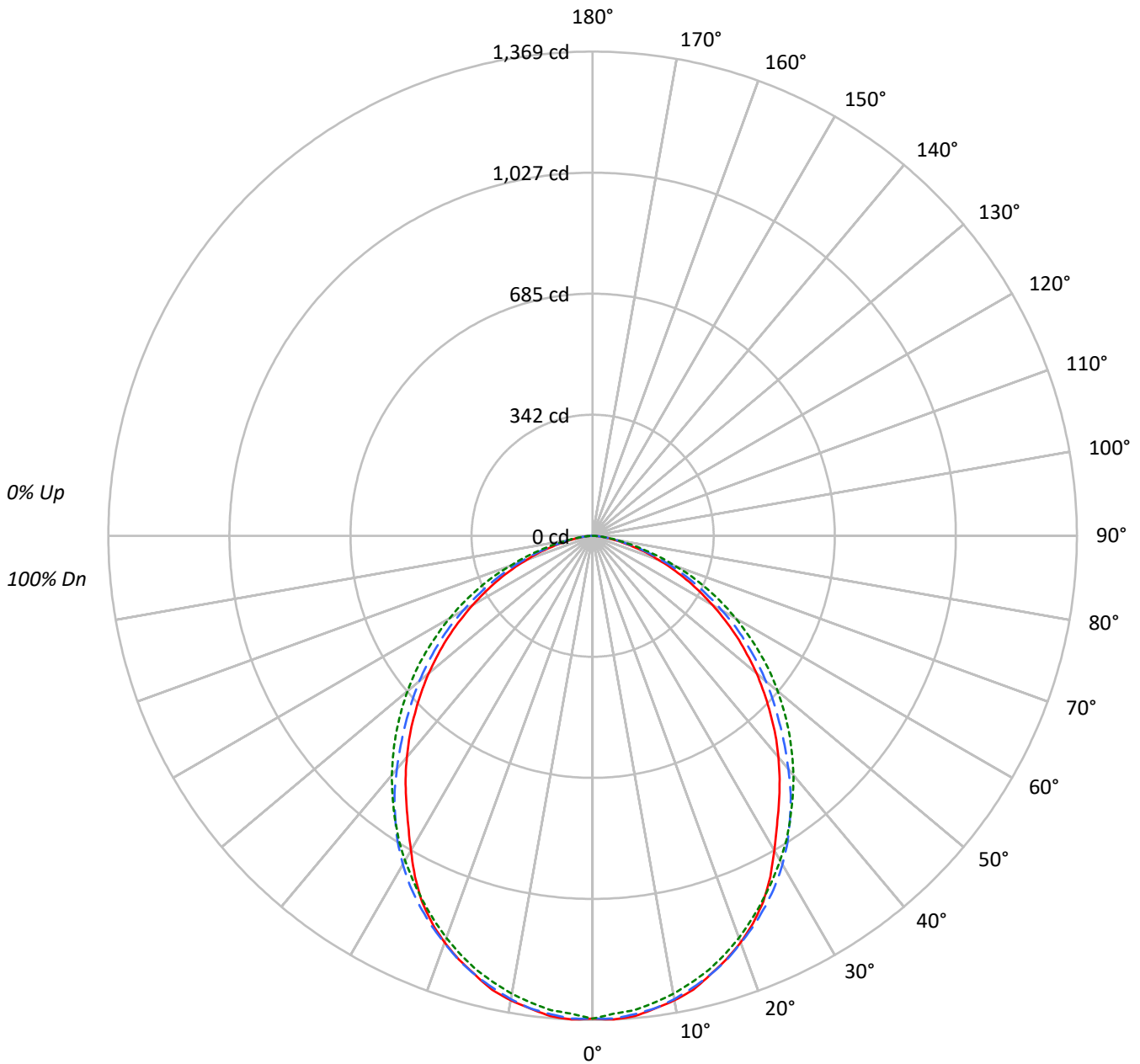
Lumens per Lamp: N/A
Luminaire Lumens: 3157.0 lumens
Efficiency: N/A
Efficacy: 73.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P556280

CATALOG NUMBER: FUSL-12-4-LD4-1HI-40-UNV-80-88-EDD-90

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°	3674	3674	3674
5°	3684	3668	3637
10°	3645	3635	3593
15°	3580	3580	3539
20°	3504	3509	3464
25°	3389	3431	3377
30°	3191	3335	3294
35°	3015	3196	3202
40°	2869	3023	3103
45°	2705	2841	2986
50°	2532	2677	2859
55°	2335	2490	2704
60°	2103	2272	2515
65°	1857	2020	2288
70°	1548	1721	1943
75°	1216	1375	1521
80°	869	967	1072
85°	568	568	534



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.5	4.1
10°-20°	361.1	11.4
20°-30°	527.7	16.7
30°-40°	599.0	19.0
40°-50°	578.3	18.3
50°-60°	477.0	15.1
60°-70°	317.7	10.1
70°-80°	142.2	4.5
80°-90°	25.4	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°	1017.4	32.2
0°-40°	1616.4	51.2
0°-60°	2671.8	84.6
0°-90°	3157.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3157.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1365	1365	1365	1365	1365	
5°	1364	1363	1358	1351	1346	129
15°	1285	1288	1285	1279	1270	362
25°	1141	1150	1156	1147	1137	523
35°	918	930	973	978	975	575
45°	711	723	746	780	785	548
55°	498	506	531	560	576	444
65°	292	300	317	340	359	289
75°	117	123	132	138	146	128
85°	18	18	18	17	17	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1365.3	1365.3	1365.3	1365.3	1365.3
2.5°	1369.0	1369.5	1366.4	1358.0	1352.7
5°	1363.7	1363.2	1358.0	1350.6	1346.4
7.5°	1348.5	1349.6	1348.0	1337.5	1331.8
10°	1333.8	1334.4	1330.2	1321.8	1315.0
12.5°	1315.0	1314.4	1308.7	1304.5	1293.5
15°	1285.1	1288.2	1285.1	1279.3	1270.4
17.5°	1256.2	1256.2	1258.3	1248.4	1241.5
20°	1223.7	1225.3	1225.3	1217.4	1209.5
22.5°	1185.9	1190.7	1192.2	1183.8	1174.4
25°	1141.4	1150.3	1155.5	1147.1	1137.2
27.5°	1087.3	1101.0	1116.7	1110.4	1099.4
30°	1027.0	1046.9	1073.2	1067.9	1060.1
32.5°	969.8	989.8	1026.0	1023.9	1019.7
35°	917.9	930.5	973.0	978.2	974.6
37.5°	868.6	880.1	920.0	932.1	928.9
40°	816.7	829.3	860.7	882.2	883.3
42.5°	765.3	777.3	803.0	834.0	834.0
45°	710.7	722.8	746.4	780.5	784.7
47.5°	657.2	669.8	692.9	727.0	733.8
50°	604.8	616.3	639.4	672.4	682.9
52.5°	550.2	562.8	585.4	615.8	631.0
55°	497.8	506.2	530.8	560.2	576.4
57.5°	443.2	451.1	478.9	504.1	520.8
60°	390.8	400.7	422.2	447.9	467.3
62.5°	340.4	350.9	369.3	391.8	413.8
65°	291.6	299.5	317.3	339.9	359.3
67.5°	244.4	251.2	269.1	284.8	305.3
70°	196.7	205.6	218.7	233.9	247.0
72.5°	158.4	162.1	173.1	184.1	197.7
75°	117.0	123.3	132.2	138.5	146.3
77.5°	83.9	87.6	92.8	98.1	105.4
80°	56.1	57.7	62.4	63.5	69.2
82.5°	34.1	35.1	36.2	36.7	38.8
85°	18.4	18.4	18.4	17.3	17.3
87.5°	10.5	10.5	8.9	7.3	5.2
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)