

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: P554688

Luminaire Tested: **FUSL-12-2-LD4-2HI-35-UNV-81-84-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: P554688
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-LD4-2HI-35-UNV-81-84-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

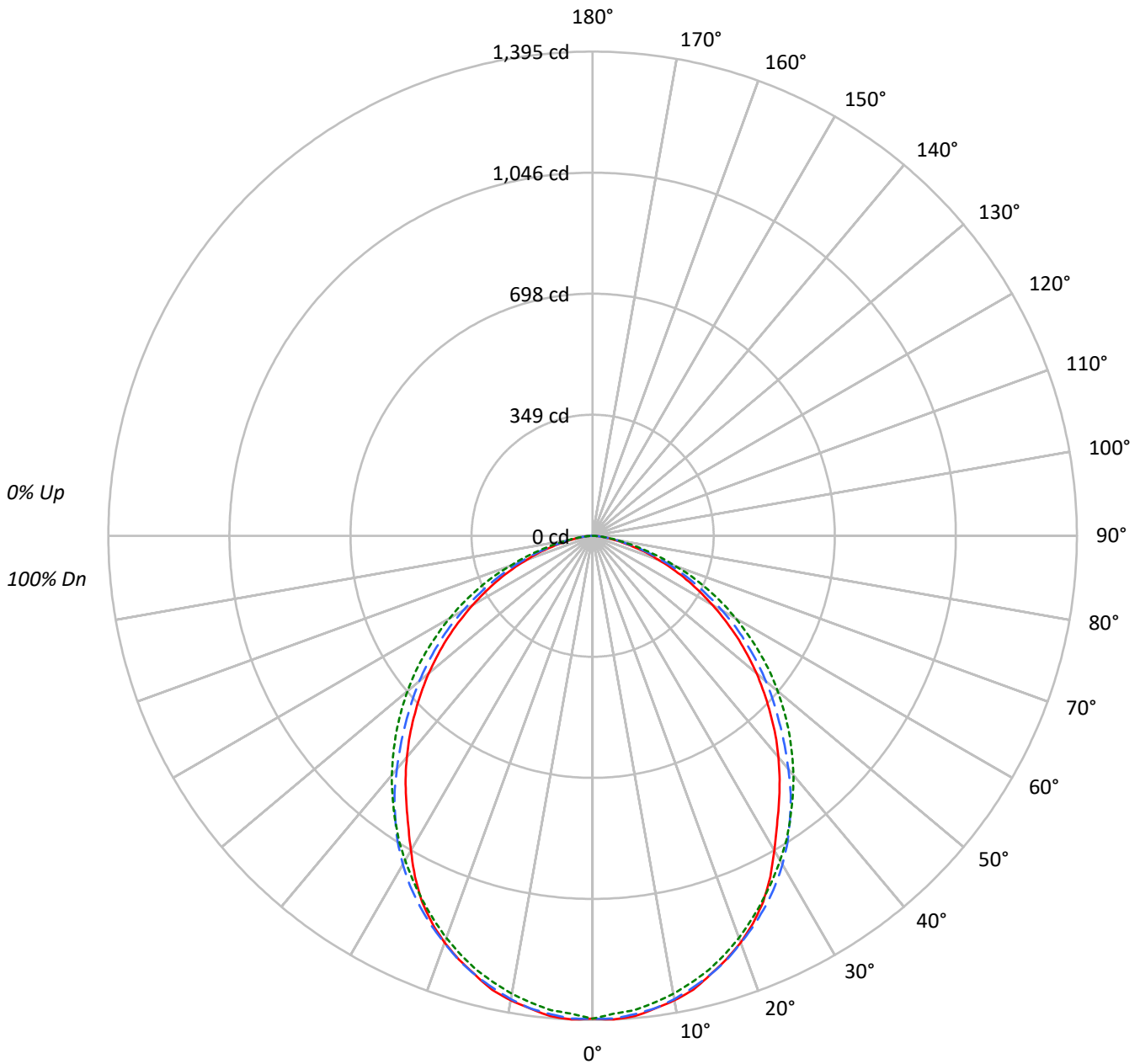
Lumens per Lamp: N/A
Luminaire Lumens: 3217.0 lumens
Efficiency: N/A
Efficacy: 74.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P554688

CATALOG NUMBER: FUSL-12-2-LD4-2HI-35-UNV-81-84-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°	7488	7488	7488
5°	7508	7476	7412
10°	7428	7408	7323
15°	7296	7296	7213
20°	7142	7151	7059
25°	6906	6992	6881
30°	6504	6796	6713
35°	6146	6514	6525
40°	5847	6162	6324
45°	5512	5789	6086
50°	5160	5455	5827
55°	4759	5075	5512
60°	4286	4632	5126
65°	3785	4118	4662
70°	3153	3508	3961
75°	2479	2801	3100
80°	1773	1971	2188
85°	1155	1155	1087



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.0	4.1
10°-20°	368.0	11.4
20°-30°	537.8	16.7
30°-40°	610.4	19.0
40°-50°	589.3	18.3
50°-60°	486.1	15.1
60°-70°	323.7	10.1
70°-80°	144.9	4.5
80°-90°	25.9	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°	1036.7	32.2
0°-40°	1647.2	51.2
0°-60°	2722.5	84.6
0°-90°	3217.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3217.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1391	1391	1391	1391	1391	
5°	1390	1389	1384	1376	1372	132
15°	1310	1313	1310	1304	1294	369
25°	1163	1172	1178	1169	1159	533
35°	935	948	992	997	993	586
45°	724	736	761	795	800	559
55°	507	516	541	571	587	453
65°	297	305	323	346	366	295
75°	119	126	135	141	149	130
85°	19	19	19	18	18	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1391.3	1391.3	1391.3	1391.3	1391.3
2.5°	1395.0	1395.5	1392.3	1383.8	1378.4
5°	1389.7	1389.1	1383.8	1376.3	1372.0
7.5°	1374.2	1375.2	1373.6	1362.9	1357.1
10°	1359.2	1359.7	1355.5	1346.9	1340.0
12.5°	1340.0	1339.4	1333.5	1329.3	1318.0
15°	1309.5	1312.7	1309.5	1303.6	1294.5
17.5°	1280.1	1280.1	1282.2	1272.1	1265.1
20°	1247.0	1248.6	1248.6	1240.5	1232.5
22.5°	1208.5	1213.3	1214.9	1206.3	1196.7
25°	1163.0	1172.1	1177.5	1168.9	1158.8
27.5°	1108.0	1121.9	1137.9	1131.5	1120.3
30°	1046.5	1066.8	1093.6	1088.2	1080.2
32.5°	988.3	1008.6	1045.5	1043.3	1039.0
35°	935.4	948.2	991.5	996.8	993.1
37.5°	885.1	896.9	937.5	949.8	946.6
40°	832.2	845.0	877.1	899.0	900.1
42.5°	779.8	792.1	818.3	849.8	849.8
45°	724.2	736.5	760.6	795.3	799.6
47.5°	669.7	682.5	706.1	740.8	747.7
50°	616.3	628.0	651.5	685.2	695.9
52.5°	560.7	573.5	596.5	627.5	643.0
55°	507.2	515.8	540.9	570.8	587.4
57.5°	451.6	459.7	488.0	513.6	530.7
60°	398.2	408.3	430.3	456.5	476.2
62.5°	346.9	357.6	376.3	399.3	421.7
65°	297.2	305.2	323.4	346.3	366.1
67.5°	249.1	256.0	274.2	290.2	311.1
70°	200.4	209.5	222.9	238.4	251.7
72.5°	161.4	165.2	176.4	187.6	201.5
75°	119.2	125.6	134.7	141.1	149.1
77.5°	85.5	89.3	94.6	99.9	107.4
80°	57.2	58.8	63.6	64.7	70.6
82.5°	34.7	35.8	36.9	37.4	39.6
85°	18.7	18.7	18.7	17.6	17.6
87.5°	10.7	10.7	9.1	7.5	5.3
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)