

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: P556038

Luminaire Tested: **FUSL-12-2-LD4-3STD-40-UNV-81-87-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: P556038
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-LD4-3STD-40-UNV-81-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

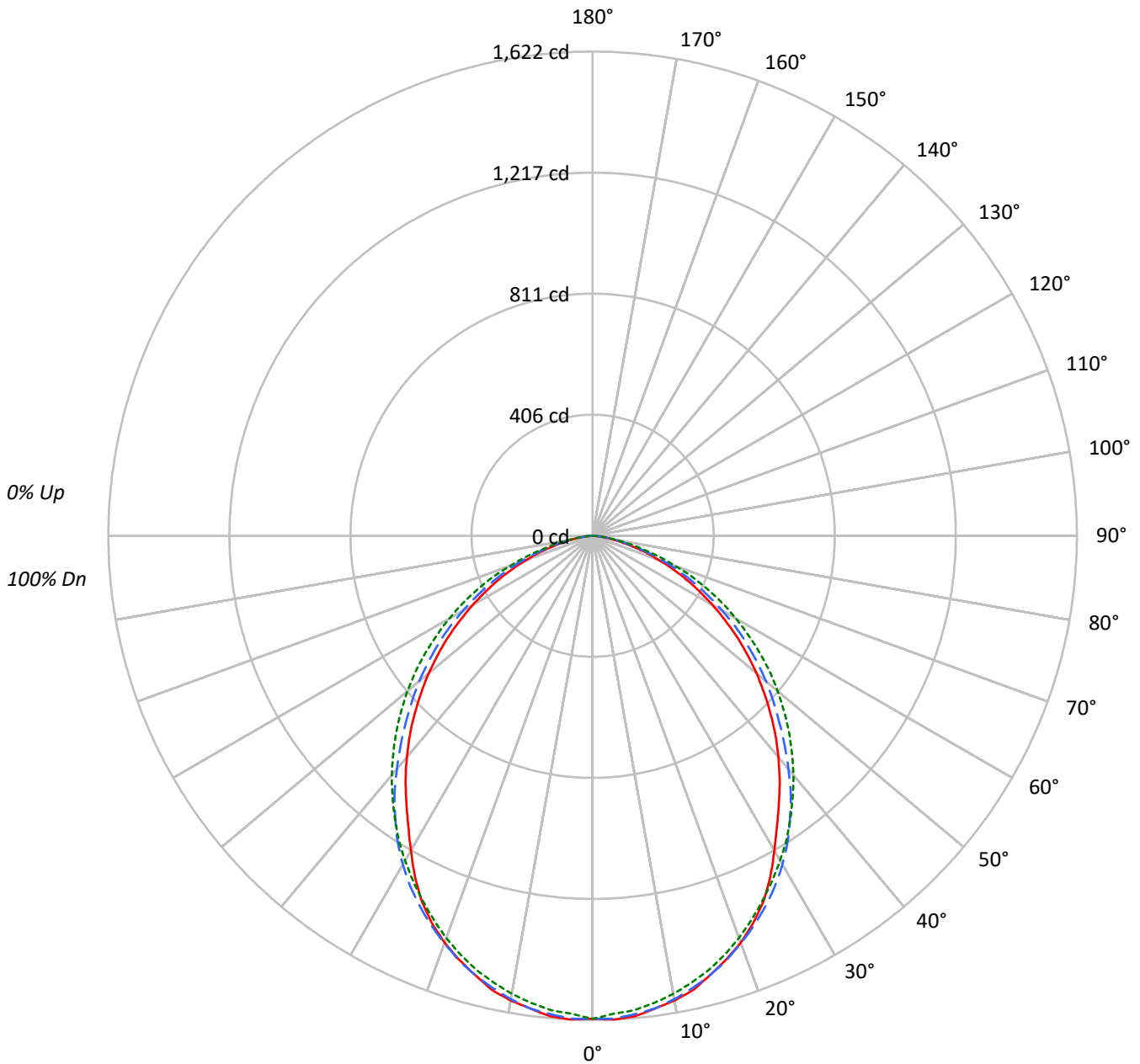
Lumens per Lamp: N/A
Luminaire Lumens: 3741.0 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
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°	8707	8707	8707
5°	8730	8694	8620
10°	8638	8614	8516
15°	8485	8485	8388
20°	8305	8316	8209
25°	8032	8131	8002
30°	7563	7903	7806
35°	7146	7575	7587
40°	6799	7166	7354
45°	6410	6732	7077
50°	6000	6344	6776
55°	5534	5902	6410
60°	4985	5385	5961
65°	4401	4788	5422
70°	3668	4079	4606
75°	2882	3256	3606
80°	2061	2294	2541
85°	1346	1346	1266



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.3	4.1
10°-20°	427.9	11.4
20°-30°	625.4	16.7
30°-40°	709.9	19.0
40°-50°	685.3	18.3
50°-60°	565.3	15.1
60°-70°	376.4	10.1
70°-80°	168.4	4.5
80°-90°	30.1	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°	1205.6	32.2
0°-40°	1915.5	51.2
0°-60°	3166.0	84.6
0°-90°	3741.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3741.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1618	1618	1618	1618	1618	
5°	1616	1615	1609	1600	1596	153
15°	1523	1526	1523	1516	1505	429
25°	1352	1363	1369	1359	1348	619
35°	1088	1103	1153	1159	1155	682
45°	842	856	884	925	930	650
55°	590	600	629	664	683	526
65°	346	355	376	403	426	343
75°	139	146	157	164	173	152
85°	22	22	22	20	20	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1617.9	1617.9	1617.9	1617.9	1617.9
2.5°	1622.2	1622.9	1619.1	1609.2	1603.0
5°	1616.0	1615.4	1609.2	1600.5	1595.5
7.5°	1598.0	1599.2	1597.4	1584.9	1578.1
10°	1580.6	1581.2	1576.2	1566.3	1558.2
12.5°	1558.2	1557.6	1550.8	1545.8	1532.7
15°	1522.8	1526.5	1522.8	1516.0	1505.4
17.5°	1488.6	1488.6	1491.1	1479.3	1471.2
20°	1450.1	1451.9	1451.9	1442.6	1433.3
22.5°	1405.3	1410.9	1412.8	1402.8	1391.6
25°	1352.5	1363.1	1369.3	1359.3	1347.5
27.5°	1288.5	1304.6	1323.3	1315.8	1302.8
30°	1217.0	1240.6	1271.7	1265.5	1256.1
32.5°	1149.2	1172.9	1215.7	1213.3	1208.3
35°	1087.7	1102.6	1153.0	1159.2	1154.8
37.5°	1029.3	1043.0	1090.2	1104.5	1100.8
40°	967.7	982.7	1020.0	1045.4	1046.7
42.5°	906.8	921.1	951.6	988.3	988.3
45°	842.2	856.5	884.5	924.9	929.8
47.5°	778.8	793.7	821.1	861.5	869.5
50°	716.6	730.3	757.7	796.8	809.3
52.5°	652.0	666.9	693.6	729.7	747.7
55°	589.8	599.8	629.0	663.8	683.1
57.5°	525.2	534.5	567.5	597.3	617.2
60°	463.1	474.9	500.3	530.8	553.8
62.5°	403.4	415.8	437.6	464.3	490.4
65°	345.6	354.9	376.0	402.8	425.8
67.5°	289.6	297.7	318.9	337.5	361.7
70°	233.1	243.6	259.2	277.2	292.7
72.5°	187.7	192.1	205.1	218.2	234.3
75°	138.6	146.1	156.6	164.1	173.4
77.5°	99.4	103.8	110.0	116.2	124.9
80°	66.5	68.4	74.0	75.2	82.0
82.5°	40.4	41.6	42.9	43.5	46.0
85°	21.8	21.8	21.8	20.5	20.5
87.5°	12.4	12.4	10.6	8.7	6.2
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)