

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: P485075

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3STD-20-120-EDD**

Issue Date: 3/1/2021

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: P485075
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35357)
Test Lab: INNOVATION CENTER
Issue Date: 3/1/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-12-4-INS-89BC-LD4-3STD-20-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

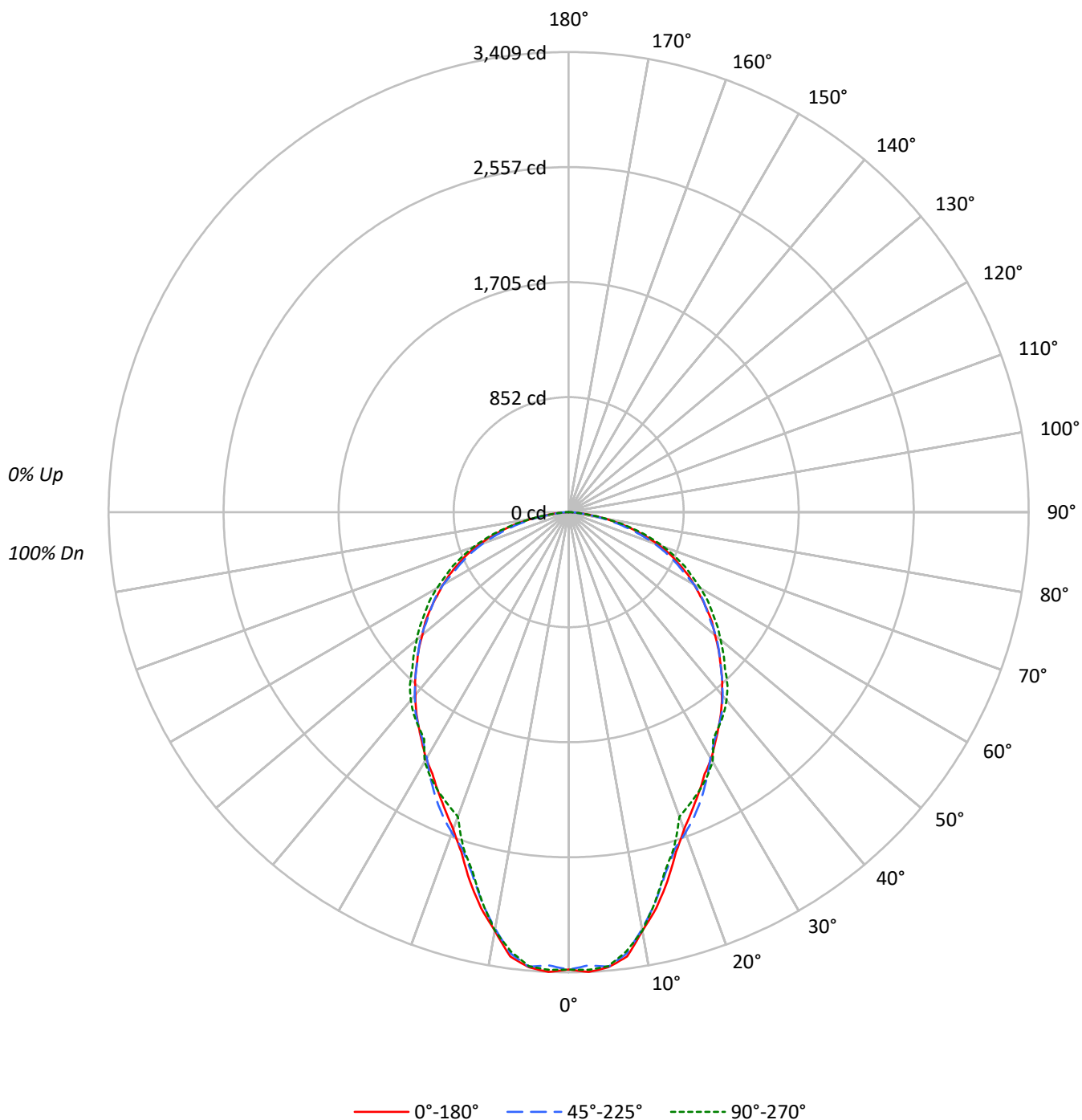
Lumens per Lamp: N/A
Luminaire Lumens: 7245.8 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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				20				
RC	80				70				50				30				10				0
RW	70	50	30	10	70	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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84			
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51			
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45			
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39			
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35			
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31			
9	58	44	36	31	56	44	36	31	43	35	30	41	35	30	40	35	30	28			
10	54	41	33	28	53	40	33	28	40	33	28	39	32	28	38	32	28	26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9117	9117	9117
5°	9143	9128	9119
10°	8603	8565	8598
15°	7883	7711	7667
20°	7159	7240	6872
25°	6790	6926	6780
30°	6559	6531	6630
35°	6367	6367	6367
40°	6208	6232	6387
45°	6055	6048	6236
50°	5923	5967	6152
55°	5861	5836	6100
60°	5784	5775	6069
65°	5710	5531	6036
70°	5600	5282	5877
75°	5184	4689	5441
80°	4204	3823	4314
85°	2665	2393	2340



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.7	4.3
10°-20°	786.7	10.9
20°-30°	1062.5	14.7
30°-40°	1216.7	16.8
40°-50°	1246.3	17.2
50°-60°	1130.8	15.6
60°-70°	882.6	12.2
70°-80°	500.6	6.9
80°-90°	105.1	1.5
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°	2163.9	29.9
0°-40°	3380.5	46.7
0°-60°	5757.6	79.5
0°-90°	7245.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7245.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3388	3388	3388	3388	3388	
5°	3385	3346	3379	3386	3376	316
15°	2830	2838	2768	2782	2752	791
25°	2287	2317	2333	2276	2283	1055
35°	1938	1942	1938	1940	1938	1214
45°	1591	1603	1589	1654	1638	1230
55°	1249	1247	1244	1288	1300	1116
65°	897	877	869	909	948	889
75°	499	462	451	478	523	522
85°	86	78	78	72	76	114
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3388.1	3388.1	3388.1	3388.1	3388.1
2.5°	3409.2	3382.8	3359.9	3396.9	3393.4
5°	3384.6	3345.8	3379.3	3386.3	3375.7
7.5°	3319.4	3294.7	3296.5	3282.4	3280.6
10°	3148.5	3162.6	3134.4	3159.0	3146.7
12.5°	3002.2	3011.0	2961.7	2972.3	2958.2
15°	2829.6	2838.4	2767.9	2782.0	2752.0
17.5°	2641.0	2672.8	2614.6	2632.2	2600.5
20°	2500.1	2526.5	2528.3	2500.1	2399.7
22.5°	2389.1	2415.5	2436.7	2352.1	2341.5
25°	2286.9	2316.9	2332.7	2276.3	2283.4
27.5°	2184.7	2218.2	2218.2	2230.5	2214.7
30°	2110.7	2124.8	2101.9	2147.7	2133.6
32.5°	2022.6	2027.9	2008.5	2042.0	1992.7
35°	1938.1	1941.6	1938.1	1939.8	1938.1
37.5°	1857.0	1848.2	1864.1	1853.5	1887.0
40°	1767.2	1767.2	1774.2	1791.8	1818.3
42.5°	1684.3	1691.4	1682.6	1731.9	1742.5
45°	1591.0	1603.3	1589.2	1654.4	1638.5
47.5°	1506.4	1511.7	1508.2	1552.2	1555.7
50°	1414.8	1421.8	1425.4	1464.1	1469.4
52.5°	1339.0	1337.3	1324.9	1381.3	1390.1
55°	1249.2	1247.4	1243.9	1287.9	1300.3
57.5°	1157.5	1159.3	1168.1	1192.8	1222.7
60°	1074.7	1065.9	1073.0	1102.9	1127.6
62.5°	990.2	974.3	958.5	1007.8	1030.7
65°	896.8	877.4	868.6	909.1	947.9
67.5°	810.5	778.7	773.5	801.7	847.5
70°	711.8	673.0	671.3	692.4	747.0
72.5°	602.6	569.1	560.3	588.5	637.8
75°	498.6	461.6	451.0	477.5	523.3
77.5°	385.8	355.9	348.9	362.9	399.9
80°	271.3	253.7	246.7	251.9	278.4
82.5°	170.9	158.6	155.0	153.3	167.4
85°	86.3	77.5	77.5	72.2	75.8
87.5°	26.4	24.7	22.9	17.6	19.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)