

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: P485054

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3HI-30-120-EDD-90**

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: P485054
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-LD4-3HI-30-120-EDD-90
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

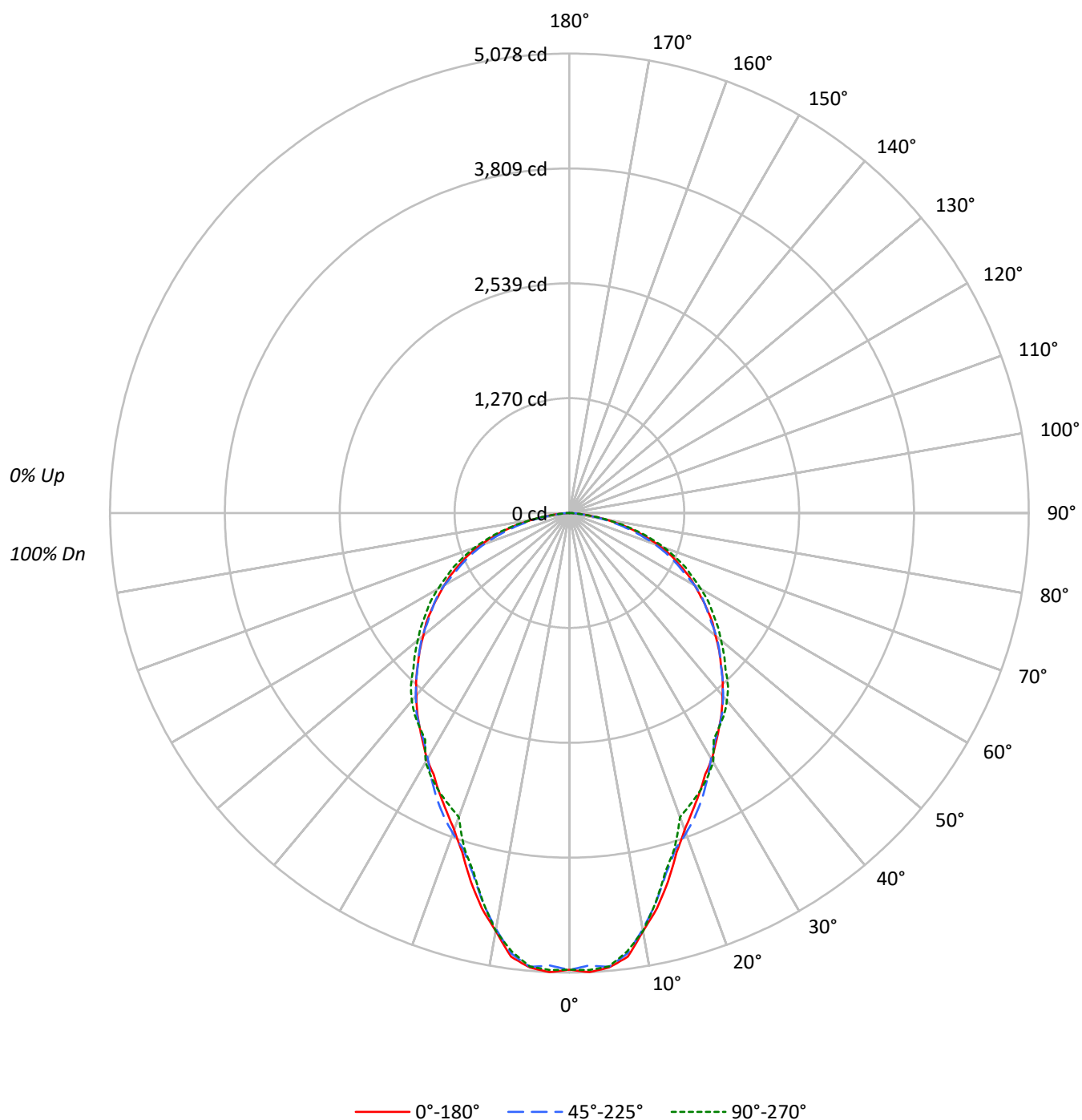
Lumens per Lamp: N/A
Luminaire Lumens: 10792.0 lumens
Efficiency: N/A
Efficacy: 81.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 132
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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	100	96	106	102	98	95		98	95	92		94	91	89		90	88	86
2	99	91	84	79	97	89	83	78		86	81	76		82	78	74		79	76	73
3	91	80	72	66	88	79	71	65		76	69	64		73	67	63		70	66	62
4	83	71	63	56	81	70	62	56		67	60	55		65	59	54		63	58	53
5	77	64	55	48	75	63	54	48		61	53	48		59	52	47		57	51	47
6	71	58	49	43	69	57	48	42		55	48	42		53	47	42		52	46	41
7	66	53	44	38	64	52	44	38		50	43	37		49	42	37		47	41	37
8	61	48	40	34	60	47	39	34		46	39	34		45	38	33		44	38	33
9	58	44	36	31	56	44	36	31		43	35	30		41	35	30		40	35	30
10	54	41	33	28	53	40	33	28		40	33	28		39	32	28		38	32	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13579	13579	13579
5°	13617	13596	13582
10°	12814	12756	12806
15°	11741	11485	11419
20°	10663	10784	10235
25°	10114	10316	10098
30°	9768	9728	9875
35°	9483	9483	9483
40°	9246	9283	9513
45°	9018	9008	9288
50°	8822	8887	9162
55°	8729	8692	9086
60°	8615	8601	9039
65°	8505	8238	8989
70°	8342	7866	8754
75°	7721	6985	8104
80°	6262	5693	6425
85°	3971	3566	3483



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	468.7	4.3
10°-20°	1171.7	10.9
20°-30°	1582.4	14.7
30°-40°	1812.1	16.8
40°-50°	1856.2	17.2
50°-60°	1684.2	15.6
60°-70°	1314.5	12.2
70°-80°	745.6	6.9
80°-90°	156.5	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°	3222.9	29.9
0°-40°	5035.0	46.7
0°-60°	8575.4	79.5
0°-90°	10792.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10792.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5046	5046	5046	5046	5046	
5°	5041	4983	5033	5044	5028	471
15°	4214	4228	4122	4144	4099	1178
25°	3406	3451	3474	3390	3401	1572
35°	2887	2892	2887	2889	2887	1808
45°	2370	2388	2367	2464	2440	1832
55°	1860	1858	1853	1918	1937	1663
65°	1336	1307	1294	1354	1412	1324
75°	743	688	672	711	779	777
85°	129	116	116	108	113	170
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5046.3	5046.3	5046.3	5046.3	5046.3
2.5°	5077.7	5038.4	5004.3	5059.4	5054.1
5°	5041.0	4983.3	5033.1	5043.6	5027.9
7.5°	4943.9	4907.2	4909.8	4888.8	4886.2
10°	4689.4	4710.4	4668.4	4705.1	4686.7
12.5°	4471.6	4484.7	4411.2	4426.9	4406.0
15°	4214.4	4227.5	4122.5	4143.5	4098.9
17.5°	3933.6	3980.8	3894.2	3920.5	3873.3
20°	3723.7	3763.0	3765.7	3723.7	3574.1
22.5°	3558.4	3597.7	3629.2	3503.2	3487.5
25°	3406.2	3450.8	3474.4	3390.4	3400.9
27.5°	3254.0	3303.8	3303.8	3322.2	3298.6
30°	3143.7	3164.7	3130.6	3198.8	3177.9
32.5°	3012.5	3020.4	2991.5	3041.4	2967.9
35°	2886.6	2891.8	2886.6	2889.2	2886.6
37.5°	2765.9	2752.7	2776.4	2760.6	2810.5
40°	2632.0	2632.0	2642.5	2668.8	2708.1
42.5°	2508.7	2519.2	2506.1	2579.5	2595.3
45°	2369.6	2388.0	2367.0	2464.1	2440.5
47.5°	2243.7	2251.5	2246.3	2311.9	2317.1
50°	2107.2	2117.7	2122.9	2180.7	2188.5
52.5°	1994.4	1991.7	1973.4	2057.3	2070.5
55°	1860.5	1857.9	1852.7	1918.3	1936.6
57.5°	1724.1	1726.7	1739.8	1776.6	1821.2
60°	1600.7	1587.6	1598.1	1642.7	1679.5
62.5°	1474.8	1451.2	1427.5	1501.0	1535.1
65°	1335.7	1306.8	1293.7	1354.1	1411.8
67.5°	1207.1	1159.9	1152.0	1194.0	1262.2
70°	1060.2	1002.4	999.8	1031.3	1112.6
72.5°	897.5	847.6	834.5	876.5	949.9
75°	742.6	687.5	671.8	711.1	779.4
77.5°	574.7	530.1	519.6	540.6	595.7
80°	404.1	377.9	367.4	375.3	414.6
82.5°	254.5	236.2	230.9	228.3	249.3
85°	128.6	115.5	115.5	107.6	112.8
87.5°	39.4	36.7	34.1	26.2	28.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)