

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: P485081

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3STD-35-120-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: P485081
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-35-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

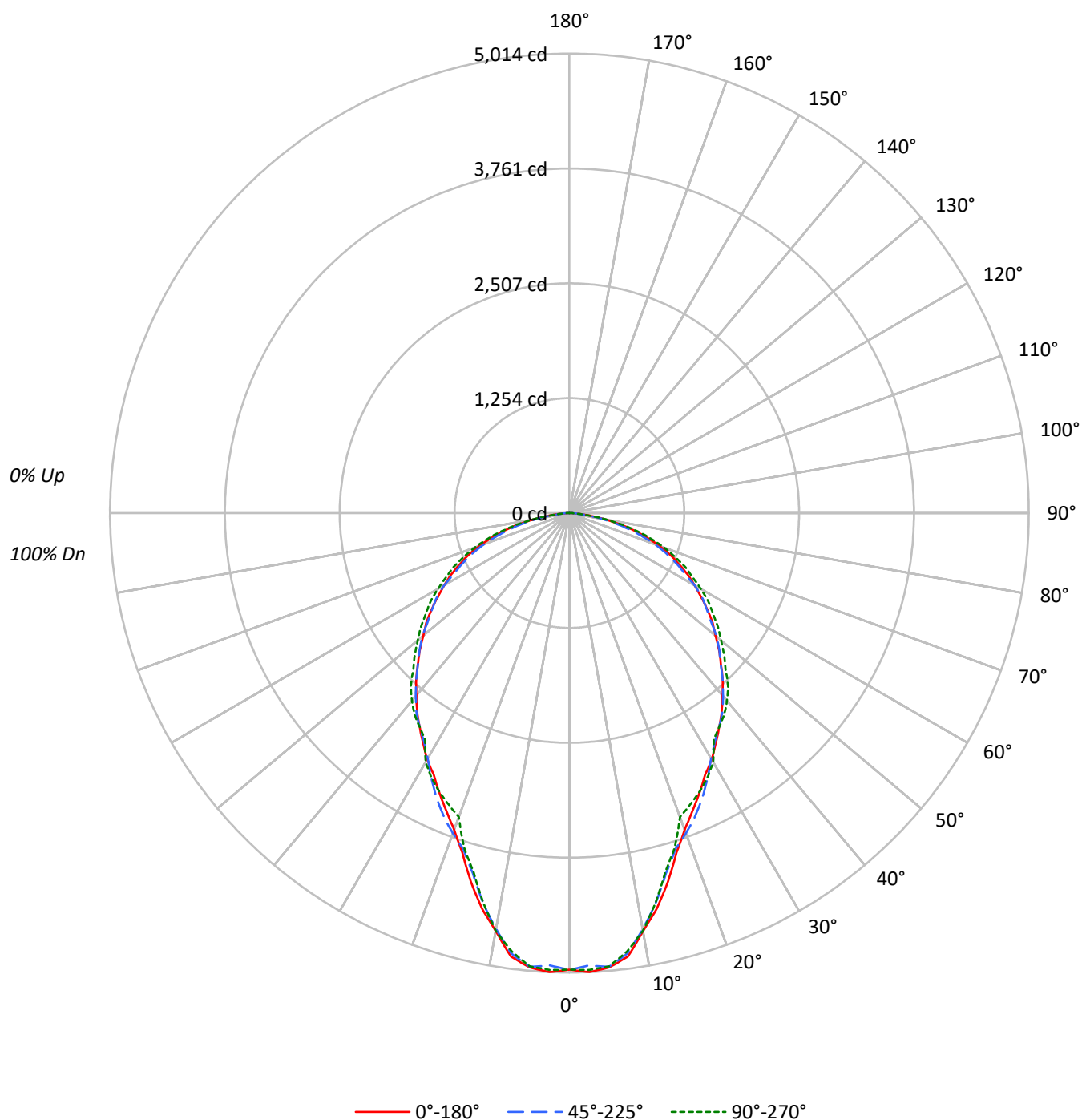
Lumens per Lamp: N/A
Luminaire Lumens: 10655.6 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	13408	13408	13408
5°	13445	13424	13410
10°	12652	12595	12645
15°	11592	11340	11275
20°	10529	10647	10106
25°	9986	10186	9970
30°	9645	9605	9750
35°	9363	9363	9363
40°	9129	9165	9393
45°	8904	8894	9170
50°	8710	8775	9046
55°	8618	8582	8971
60°	8506	8492	8924
65°	8397	8134	8876
70°	8236	7767	8644
75°	7623	6896	8001
80°	6183	5621	6344
85°	3921	3520	3440



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.8	4.3
10°-20°	1156.9	10.9
20°-30°	1562.4	14.7
30°-40°	1789.2	16.8
40°-50°	1832.7	17.2
50°-60°	1662.9	15.6
60°-70°	1297.9	12.2
70°-80°	736.1	6.9
80°-90°	154.5	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°	3182.1	29.9
0°-40°	4971.4	46.7
0°-60°	8467.0	79.5
0°-90°	10655.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10655.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4982	4982	4982	4982	4982	
5°	4977	4920	4970	4980	4964	465
15°	4161	4174	4070	4091	4047	1163
25°	3363	3407	3430	3348	3358	1552
35°	2850	2855	2850	2853	2850	1785
45°	2340	2358	2337	2433	2410	1809
55°	1837	1834	1829	1894	1912	1642
65°	1319	1290	1277	1337	1394	1307
75°	733	679	663	702	770	767
85°	127	114	114	106	111	168
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4982.5	4982.5	4982.5	4982.5	4982.5
2.5°	5013.6	4974.7	4941.0	4995.4	4990.2
5°	4977.3	4920.3	4969.5	4979.9	4964.3
7.5°	4881.4	4845.1	4847.7	4827.0	4824.4
10°	4630.1	4650.8	4609.4	4645.6	4627.5
12.5°	4415.0	4428.0	4355.5	4371.0	4350.3
15°	4161.1	4174.1	4070.4	4091.2	4047.1
17.5°	3883.9	3930.5	3845.0	3870.9	3824.3
20°	3676.6	3715.5	3718.1	3676.6	3528.9
22.5°	3513.4	3552.2	3583.3	3459.0	3443.4
25°	3363.1	3407.1	3430.5	3347.6	3357.9
27.5°	3212.8	3262.1	3262.1	3280.2	3256.9
30°	3104.0	3124.7	3091.0	3158.4	3137.7
32.5°	2974.5	2982.2	2953.7	3003.0	2930.4
35°	2850.1	2855.3	2850.1	2852.7	2850.1
37.5°	2730.9	2717.9	2741.3	2725.7	2774.9
40°	2598.8	2598.8	2609.1	2635.0	2673.9
42.5°	2477.0	2487.3	2474.4	2546.9	2562.5
45°	2339.7	2357.8	2337.1	2432.9	2409.6
47.5°	2215.3	2223.1	2217.9	2282.7	2287.8
50°	2080.6	2090.9	2096.1	2153.1	2160.9
52.5°	1969.2	1966.6	1948.4	2031.3	2044.3
55°	1837.0	1834.4	1829.2	1894.0	1912.1
57.5°	1702.3	1704.9	1717.8	1754.1	1798.1
60°	1580.5	1567.5	1577.9	1622.0	1658.2
62.5°	1456.1	1432.8	1409.5	1482.0	1515.7
65°	1318.8	1290.3	1277.4	1337.0	1394.0
67.5°	1191.9	1145.2	1137.4	1178.9	1246.3
70°	1046.8	989.8	987.2	1018.3	1098.6
72.5°	886.1	836.9	823.9	865.4	937.9
75°	733.2	678.8	663.3	702.2	769.5
77.5°	567.4	523.4	513.0	533.7	588.2
80°	399.0	373.1	362.7	370.5	409.4
82.5°	251.3	233.2	228.0	225.4	246.1
85°	127.0	114.0	114.0	106.2	111.4
87.5°	38.9	36.3	33.7	25.9	28.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)