

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: P485079

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3STD-30-120-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: P485079
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-30-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

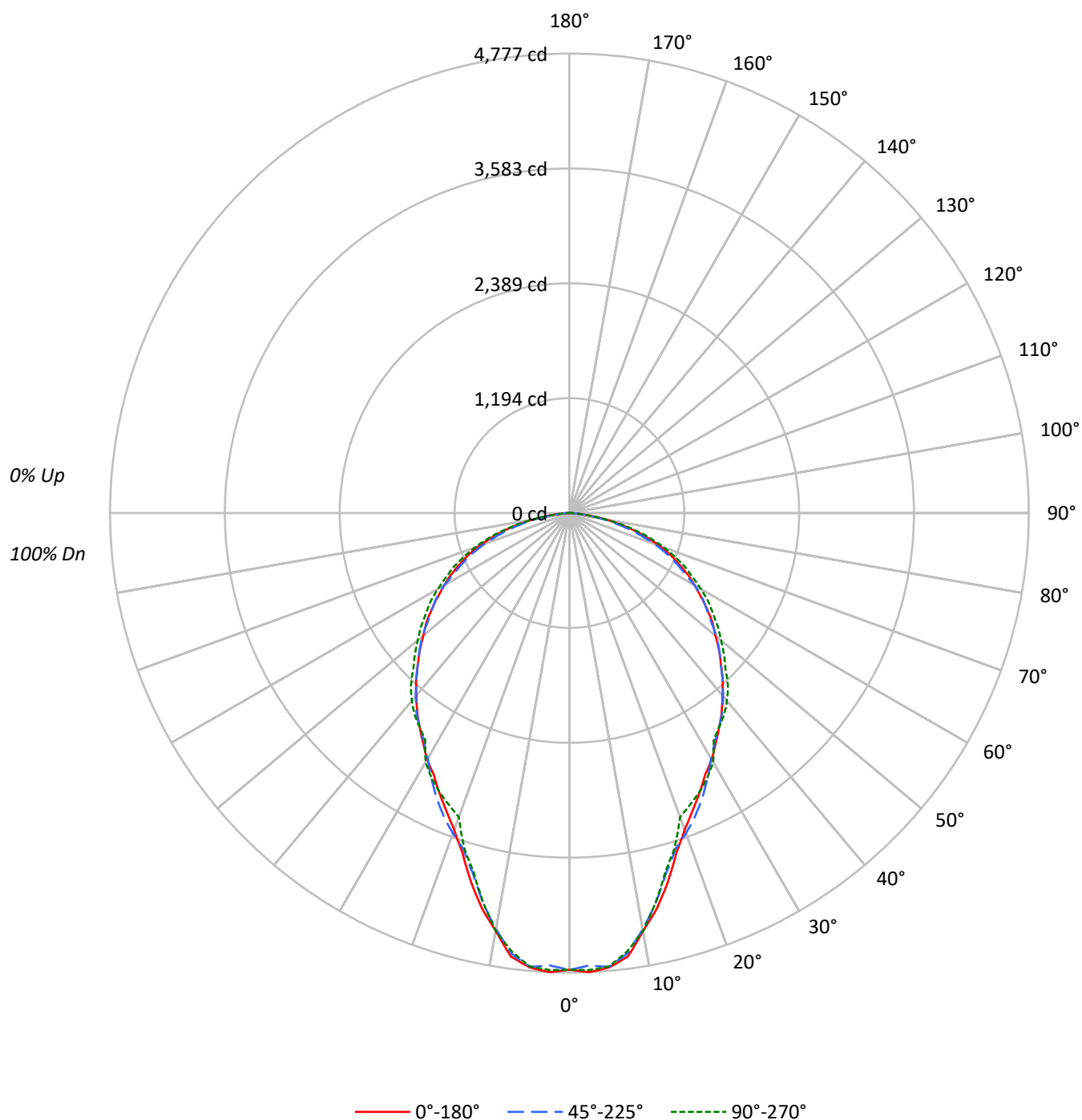
Lumens per Lamp: N/A
Luminaire Lumens: 10152.2 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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			
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°	12774	12774	12774
5°	12810	12790	12776
10°	12054	12000	12047
15°	11045	10804	10742
20°	10031	10144	9628
25°	9514	9704	9499
30°	9189	9151	9289
35°	8920	8920	8920
40°	8698	8733	8949
45°	8483	8474	8737
50°	8299	8361	8619
55°	8211	8176	8547
60°	8104	8091	8503
65°	8001	7749	8457
70°	7847	7400	8235
75°	7263	6571	7623
80°	5892	5356	6044
85°	3736	3353	3276



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	440.9	4.3
10°-20°	1102.3	10.9
20°-30°	1488.6	14.7
30°-40°	1704.7	16.8
40°-50°	1746.1	17.2
50°-60°	1584.4	15.6
60°-70°	1236.6	12.2
70°-80°	701.4	6.9
80°-90°	147.2	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°	3031.8	29.9
0°-40°	4736.5	46.7
0°-60°	8067.0	79.5
0°-90°	10152.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10152.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4747	4747	4747	4747	4747	
5°	4742	4688	4735	4745	4730	443
15°	3964	3977	3878	3898	3856	1108
25°	3204	3246	3268	3189	3199	1479
35°	2715	2720	2715	2718	2715	1701
45°	2229	2246	2227	2318	2296	1723
55°	1750	1748	1743	1804	1822	1564
65°	1256	1229	1217	1274	1328	1245
75°	699	647	632	669	733	731
85°	121	109	109	101	106	160
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4747.1	4747.1	4747.1	4747.1	4747.1
2.5°	4776.7	4739.7	4707.6	4759.4	4754.5
5°	4742.1	4687.8	4734.7	4744.6	4729.8
7.5°	4650.8	4616.3	4618.7	4599.0	4596.5
10°	4411.4	4431.1	4391.6	4426.2	4408.9
12.5°	4206.5	4218.8	4149.7	4164.5	4144.8
15°	3964.5	3976.9	3878.1	3897.9	3855.9
17.5°	3700.4	3744.8	3663.4	3688.1	3643.6
20°	3502.9	3539.9	3542.4	3502.9	3362.2
22.5°	3347.4	3384.4	3414.1	3295.6	3280.7
25°	3204.2	3246.2	3268.4	3189.4	3199.3
27.5°	3061.0	3107.9	3107.9	3125.2	3103.0
30°	2957.4	2977.1	2945.0	3009.2	2989.5
32.5°	2833.9	2841.3	2814.2	2861.1	2792.0
35°	2715.4	2720.4	2715.4	2717.9	2715.4
37.5°	2601.9	2589.5	2611.8	2596.9	2643.9
40°	2476.0	2476.0	2485.9	2510.5	2547.6
42.5°	2360.0	2369.8	2357.5	2426.6	2441.4
45°	2229.1	2246.4	2226.7	2318.0	2295.8
47.5°	2110.6	2118.0	2113.1	2174.8	2179.8
50°	1982.3	1992.1	1997.1	2051.4	2058.8
52.5°	1876.1	1873.7	1856.4	1935.4	1947.7
55°	1750.2	1747.8	1742.8	1804.5	1821.8
57.5°	1621.9	1624.3	1636.7	1671.2	1713.2
60°	1505.8	1493.5	1503.4	1545.3	1579.9
62.5°	1387.3	1365.1	1342.9	1412.0	1444.1
65°	1256.5	1229.4	1217.0	1273.8	1328.1
67.5°	1135.5	1091.1	1083.7	1123.2	1187.4
70°	997.3	943.0	940.5	970.2	1046.7
72.5°	844.3	797.4	785.0	824.5	893.6
75°	698.6	646.8	632.0	669.0	733.2
77.5°	540.6	498.7	488.8	508.5	560.4
80°	380.2	355.5	345.6	353.0	390.0
82.5°	239.5	222.2	217.2	214.8	234.5
85°	121.0	108.6	108.6	101.2	106.1
87.5°	37.0	34.6	32.1	24.7	27.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)