

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: P485015

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-2HI-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: P485015
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-LD4-2HI-20-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

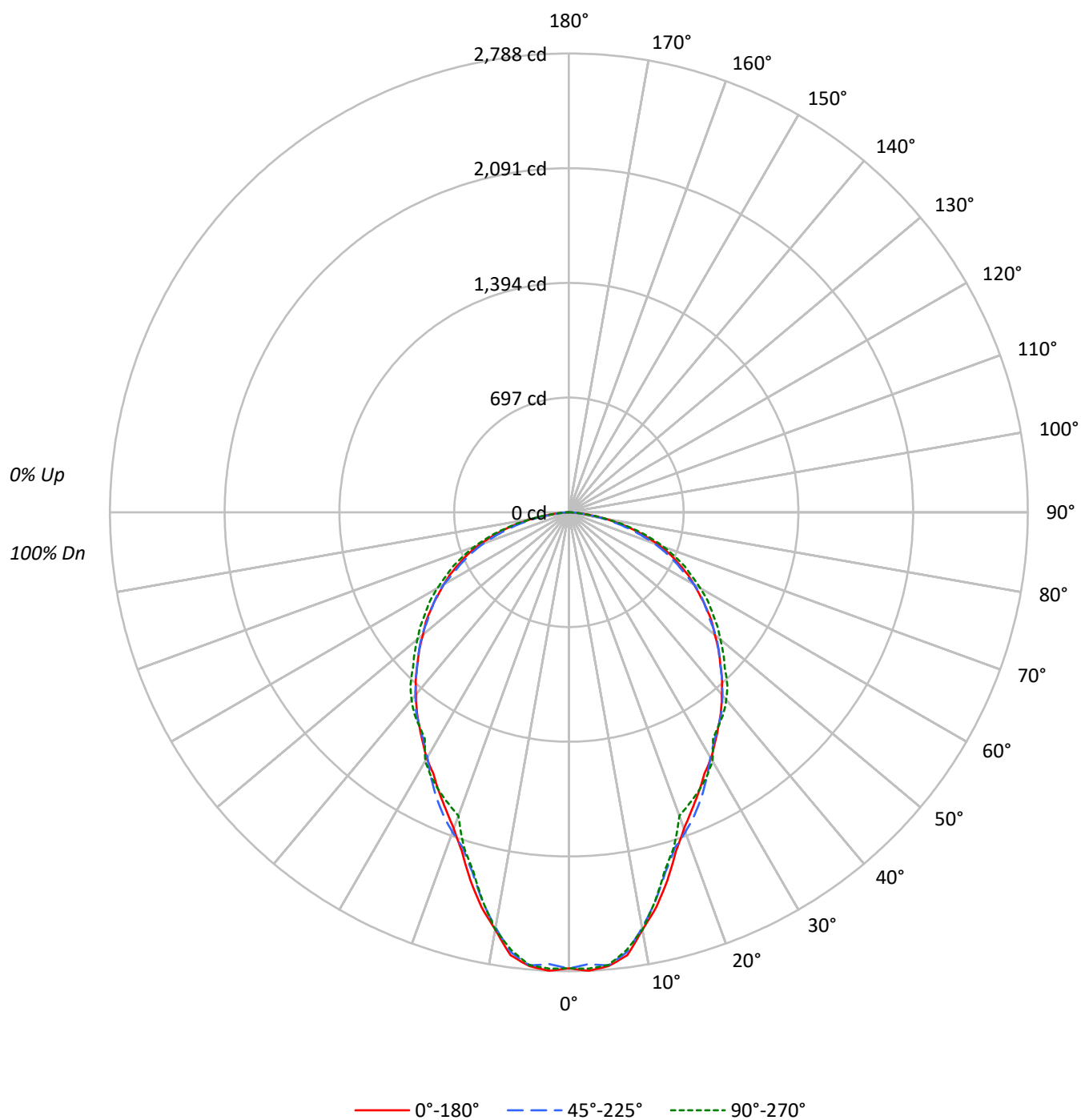
Lumens per Lamp: N/A
Luminaire Lumens: 5925.0 lumens
Efficiency: N/A
Efficacy: 67.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 88
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°	7455	7455	7455
5°	7476	7464	7457
10°	7035	7003	7031
15°	6446	6306	6269
20°	5855	5920	5619
25°	5552	5664	5544
30°	5363	5341	5421
35°	5206	5206	5206
40°	5076	5096	5223
45°	4951	4945	5099
50°	4843	4879	5030
55°	4792	4772	4988
60°	4730	4722	4963
65°	4669	4523	4935
70°	4579	4319	4806
75°	4239	3834	4449
80°	3439	3126	3527
85°	2180	1958	1914



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.3	4.3
10°-20°	643.3	10.9
20°-30°	868.8	14.7
30°-40°	994.9	16.8
40°-50°	1019.1	17.2
50°-60°	924.7	15.6
60°-70°	721.7	12.2
70°-80°	409.3	6.9
80°-90°	85.9	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°	1769.4	29.9
0°-40°	2764.3	46.7
0°-60°	4708.1	79.5
0°-90°	5925.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5925.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2770	2770	2770	2770	2770	
5°	2768	2736	2763	2769	2760	259
15°	2314	2321	2263	2275	2250	647
25°	1870	1894	1908	1861	1867	863
35°	1585	1588	1585	1586	1585	993
45°	1301	1311	1300	1353	1340	1006
55°	1022	1020	1017	1053	1063	913
65°	733	718	710	743	775	727
75°	408	378	369	390	428	427
85°	71	63	63	59	62	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2770.5	2770.5	2770.5	2770.5	2770.5
2.5°	2787.8	2766.2	2747.4	2777.7	2774.8
5°	2767.6	2735.9	2763.3	2769.0	2760.4
7.5°	2714.3	2694.1	2695.6	2684.0	2682.6
10°	2574.5	2586.1	2563.0	2583.2	2573.1
12.5°	2455.0	2462.2	2421.8	2430.5	2418.9
15°	2313.8	2321.0	2263.4	2274.9	2250.4
17.5°	2159.6	2185.6	2138.0	2152.4	2126.5
20°	2044.4	2066.0	2067.4	2044.4	1962.2
22.5°	1953.6	1975.2	1992.5	1923.3	1914.7
25°	1870.0	1894.5	1907.5	1861.4	1867.2
27.5°	1786.5	1813.9	1813.9	1823.9	1811.0
30°	1726.0	1737.5	1718.8	1756.2	1744.7
32.5°	1653.9	1658.3	1642.4	1669.8	1629.4
35°	1584.8	1587.7	1584.8	1586.2	1584.8
37.5°	1518.5	1511.3	1524.3	1515.6	1543.0
40°	1445.0	1445.0	1450.8	1465.2	1486.8
42.5°	1377.3	1383.1	1375.9	1416.2	1424.9
45°	1301.0	1311.0	1299.5	1352.8	1339.9
47.5°	1231.8	1236.1	1233.2	1269.3	1272.1
50°	1156.9	1162.7	1165.5	1197.2	1201.6
52.5°	1094.9	1093.5	1083.4	1129.5	1136.7
55°	1021.5	1020.0	1017.1	1053.2	1063.2
57.5°	946.5	948.0	955.2	975.4	999.9
60°	878.8	871.6	877.4	901.9	922.1
62.5°	809.7	796.7	783.7	824.1	842.8
65°	733.3	717.5	710.3	743.4	775.1
67.5°	662.7	636.8	632.5	655.5	693.0
70°	582.0	550.4	548.9	566.2	610.9
72.5°	492.7	465.3	458.1	481.2	521.5
75°	407.7	377.5	368.8	390.4	427.9
77.5°	315.5	291.0	285.3	296.8	327.0
80°	221.9	207.5	201.7	206.0	227.6
82.5°	139.7	129.7	126.8	125.3	136.9
85°	70.6	63.4	63.4	59.1	62.0
87.5°	21.6	20.2	18.7	14.4	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)