

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: P485763

Luminaire Tested: **ORLG-24-2-INS-89BC-LD4-4STD-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: P485763
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-24-2-INS-89BC-LD4-4STD-30-120-EDD
Description: 2X2 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

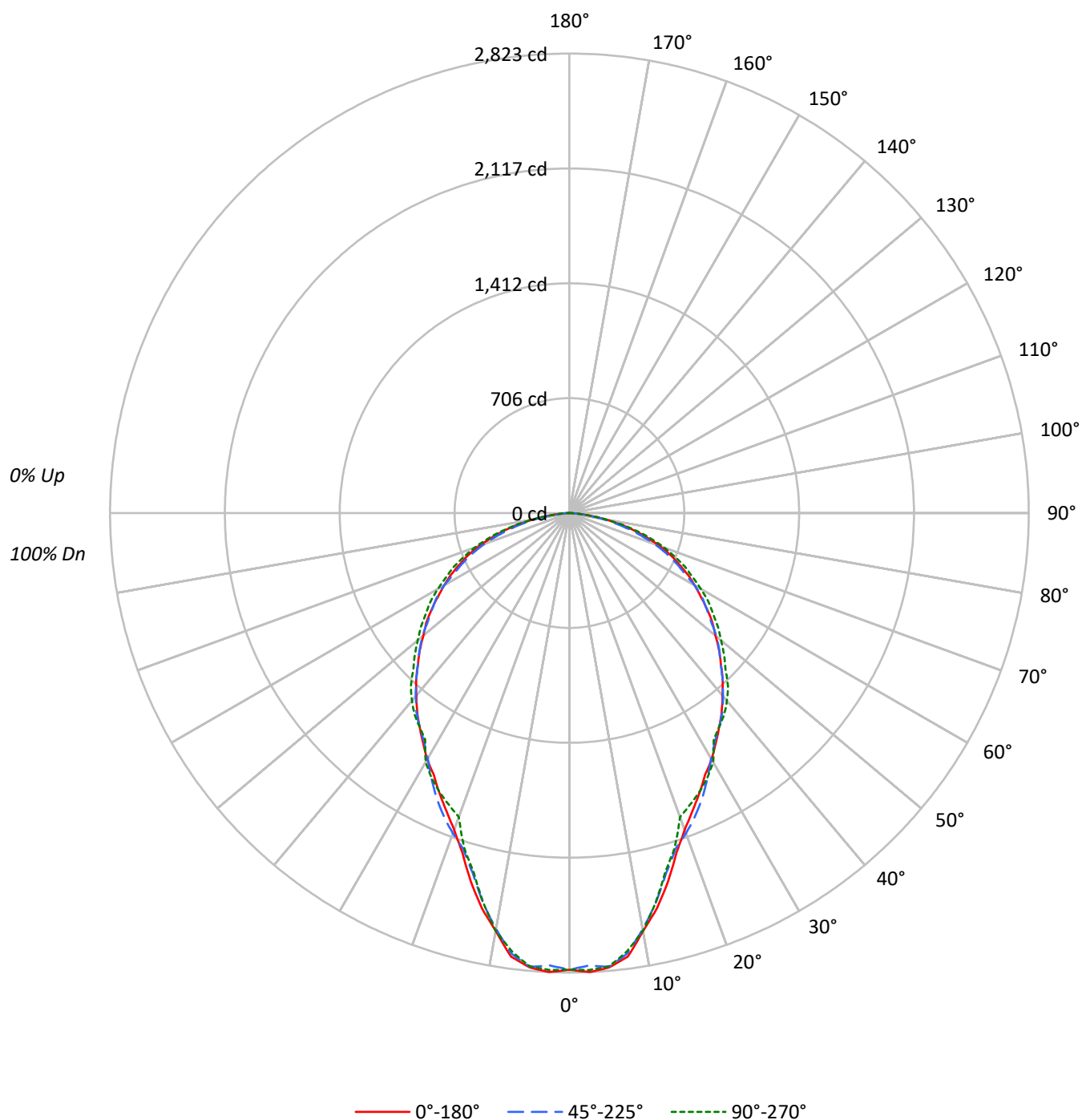
Lumens per Lamp: N/A
Luminaire Lumens: 5999.1 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	7548	7548	7548
5°	7569	7558	7550
10°	7123	7091	7119
15°	6527	6384	6348
20°	5928	5995	5690
25°	5622	5735	5613
30°	5430	5408	5489
35°	5271	5271	5271
40°	5140	5160	5288
45°	5013	5007	5163
50°	4904	4940	5093
55°	4852	4832	5050
60°	4789	4781	5025
65°	4728	4579	4997
70°	4637	4373	4866
75°	4292	3882	4504
80°	3481	3164	3572
85°	2208	1982	1936



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.5	4.3
10°-20°	651.4	10.9
20°-30°	879.6	14.7
30°-40°	1007.3	16.8
40°-50°	1031.8	17.2
50°-60°	936.2	15.6
60°-70°	730.7	12.2
70°-80°	414.5	6.9
80°-90°	87.0	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°	1791.5	29.9
0°-40°	2798.9	46.7
0°-60°	4766.9	79.5
0°-90°	5999.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5999.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2805	2805	2805	2805	2805	
5°	2802	2770	2798	2804	2795	262
15°	2343	2350	2292	2303	2278	655
25°	1893	1918	1931	1885	1890	874
35°	1605	1608	1605	1606	1605	1005
45°	1317	1327	1316	1370	1357	1018
55°	1034	1033	1030	1066	1076	924
65°	742	726	719	753	785	736
75°	413	382	373	395	433	432
85°	72	64	64	60	63	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2805.1	2805.1	2805.1	2805.1	2805.1
2.5°	2822.6	2800.8	2781.8	2812.4	2809.5
5°	2802.2	2770.1	2797.8	2803.7	2794.9
7.5°	2748.2	2727.8	2729.3	2717.6	2716.1
10°	2606.7	2618.4	2595.1	2615.5	2605.3
12.5°	2485.7	2493.0	2452.1	2460.9	2449.2
15°	2342.7	2350.0	2291.7	2303.3	2278.5
17.5°	2186.6	2212.9	2164.7	2179.3	2153.1
20°	2069.9	2091.8	2093.3	2069.9	1986.8
22.5°	1978.0	1999.9	2017.4	1947.4	1938.6
25°	1893.4	1918.2	1931.4	1884.7	1890.5
27.5°	1808.8	1836.5	1836.5	1846.7	1833.6
30°	1747.6	1759.2	1740.3	1778.2	1766.5
32.5°	1674.6	1679.0	1662.9	1690.7	1649.8
35°	1604.6	1607.5	1604.6	1606.1	1604.6
37.5°	1537.5	1530.2	1543.3	1534.6	1562.3
40°	1463.1	1463.1	1468.9	1483.5	1505.4
42.5°	1394.5	1400.4	1393.1	1433.9	1442.7
45°	1317.2	1327.4	1315.8	1369.7	1356.6
47.5°	1247.2	1251.6	1248.7	1285.1	1288.1
50°	1171.4	1177.2	1180.1	1212.2	1216.6
52.5°	1108.6	1107.2	1097.0	1143.6	1150.9
55°	1034.2	1032.8	1029.9	1066.3	1076.5
57.5°	958.4	959.8	967.1	987.6	1012.4
60°	889.8	882.5	888.4	913.2	933.6
62.5°	819.8	806.7	793.5	834.4	853.4
65°	742.5	726.4	719.2	752.7	784.8
67.5°	671.0	644.8	640.4	663.7	701.6
70°	589.3	557.2	555.8	573.3	618.5
72.5°	498.9	471.2	463.9	487.2	528.1
75°	412.8	382.2	373.4	395.3	433.2
77.5°	319.5	294.7	288.8	300.5	331.1
80°	224.6	210.1	204.2	208.6	230.5
82.5°	141.5	131.3	128.4	126.9	138.6
85°	71.5	64.2	64.2	59.8	62.7
87.5°	21.9	20.4	19.0	14.6	16.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)