

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: P485767

Luminaire Tested: **ORLG-24-2-INS-89BC-LD4-4STD-40-120-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: P485767
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-40-120-EDD
Description: 2X2 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

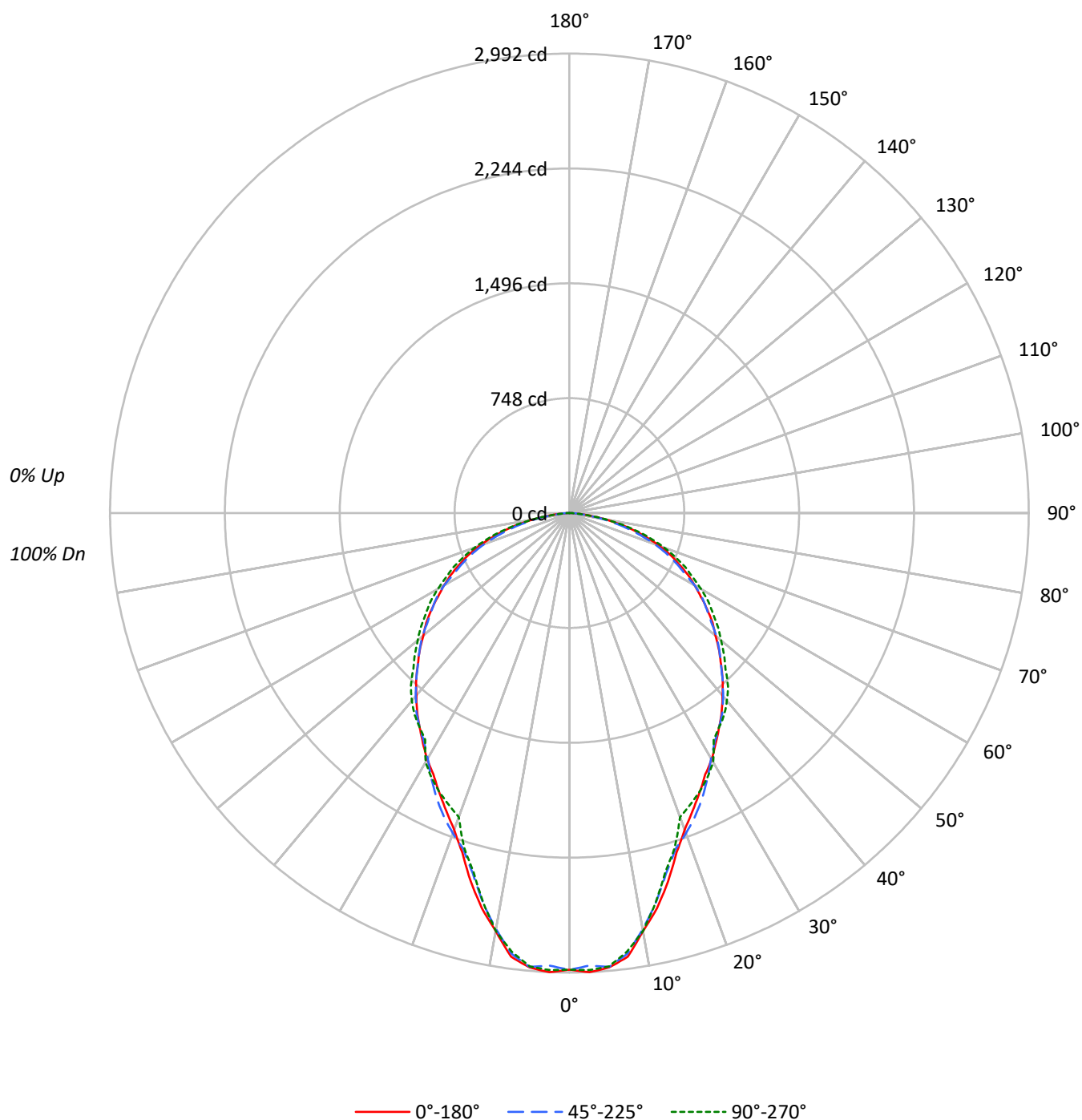
Lumens per Lamp: N/A
Luminaire Lumens: 6359.5 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	8002	8002	8002
5°	8024	8012	8003
10°	7551	7517	7547
15°	6919	6768	6729
20°	6284	6355	6031
25°	5960	6079	5951
30°	5756	5732	5819
35°	5588	5588	5588
40°	5448	5470	5606
45°	5314	5308	5473
50°	5198	5237	5399
55°	5144	5122	5354
60°	5077	5068	5327
65°	5012	4855	5297
70°	4915	4636	5159
75°	4550	4116	4775
80°	3690	3355	3786
85°	2340	2100	2053



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.2	4.3
10°-20°	690.5	10.9
20°-30°	932.5	14.7
30°-40°	1067.8	16.8
40°-50°	1093.8	17.2
50°-60°	992.5	15.6
60°-70°	774.6	12.2
70°-80°	439.4	6.9
80°-90°	92.2	1.4
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°	1899.2	29.9
0°-40°	2967.0	46.7
0°-60°	5053.3	79.5
0°-90°	6359.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6359.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2974	2974	2974	2974	2974	
5°	2971	2936	2966	2972	2963	277
15°	2484	2491	2429	2442	2415	694
25°	2007	2034	2047	1998	2004	926
35°	1701	1704	1701	1702	1701	1066
45°	1396	1407	1395	1452	1438	1080
55°	1096	1095	1092	1130	1141	980
65°	787	770	762	798	832	780
75°	438	405	396	419	459	458
85°	76	68	68	63	66	100
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2973.6	2973.6	2973.6	2973.6	2973.6
2.5°	2992.2	2969.0	2948.9	2981.4	2978.3
5°	2970.6	2936.5	2965.9	2972.1	2962.8
7.5°	2913.3	2891.7	2893.2	2880.9	2879.3
10°	2763.3	2775.7	2751.0	2772.6	2761.8
12.5°	2635.0	2642.7	2599.4	2608.7	2596.3
15°	2483.5	2491.2	2429.3	2441.7	2415.4
17.5°	2318.0	2345.8	2294.8	2310.3	2282.4
20°	2194.3	2217.5	2219.0	2194.3	2106.1
22.5°	2096.9	2120.1	2138.6	2064.4	2055.1
25°	2007.2	2033.5	2047.4	1997.9	2004.1
27.5°	1917.5	1946.9	1946.9	1957.7	1943.8
30°	1852.5	1864.9	1844.8	1885.0	1872.6
32.5°	1775.2	1779.9	1762.9	1792.2	1748.9
35°	1701.0	1704.1	1701.0	1702.5	1701.0
37.5°	1629.9	1622.1	1636.0	1626.8	1656.2
40°	1551.0	1551.0	1557.2	1572.6	1595.8
42.5°	1478.3	1484.5	1476.8	1520.1	1529.3
45°	1396.4	1407.2	1394.8	1452.0	1438.1
47.5°	1322.1	1326.8	1323.7	1362.3	1365.4
50°	1241.7	1247.9	1251.0	1285.0	1289.7
52.5°	1175.2	1173.7	1162.9	1212.3	1220.1
55°	1096.4	1094.8	1091.7	1130.4	1141.2
57.5°	1016.0	1017.5	1025.2	1046.9	1073.2
60°	943.3	935.5	941.7	968.0	989.7
62.5°	869.1	855.1	841.2	884.5	904.6
65°	787.1	770.1	762.4	797.9	831.9
67.5°	711.3	683.5	678.9	703.6	743.8
70°	624.7	590.7	589.2	607.7	655.7
72.5°	528.9	499.5	491.7	516.5	559.8
75°	437.6	405.1	395.9	419.1	459.3
77.5°	338.7	312.4	306.2	318.6	351.0
80°	238.1	222.7	216.5	221.1	244.3
82.5°	150.0	139.2	136.1	134.5	146.9
85°	75.8	68.0	68.0	63.4	66.5
87.5°	23.2	21.6	20.1	15.5	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)