

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: P485765

Luminaire Tested: **ORLG-24-2-INS-89BC-LD4-4STD-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: P485765
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-35-120-EDD
Description: 2X2 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

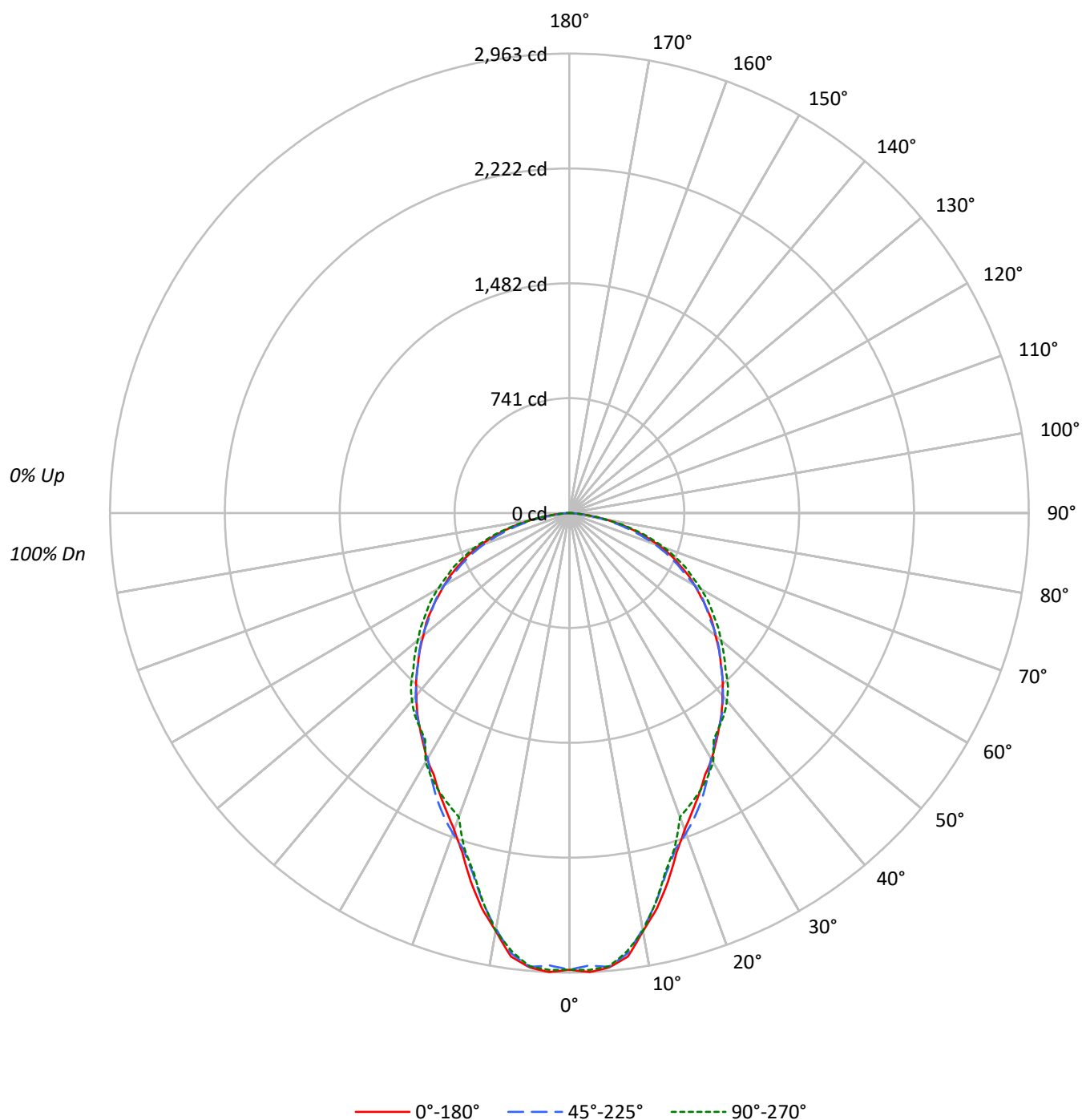
Lumens per Lamp: N/A
Luminaire Lumens: 6296.6 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	7923	7923	7923
5°	7945	7933	7924
10°	7476	7443	7472
15°	6850	6701	6662
20°	6222	6292	5972
25°	5901	6019	5892
30°	5699	5676	5761
35°	5533	5533	5533
40°	5395	5416	5551
45°	5262	5256	5419
50°	5147	5185	5346
55°	5093	5071	5301
60°	5026	5018	5274
65°	4962	4806	5245
70°	4867	4589	5108
75°	4505	4076	4728
80°	3654	3321	3749
85°	2316	2081	2032



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.5	4.3
10°-20°	683.7	10.9
20°-30°	923.3	14.7
30°-40°	1057.3	16.8
40°-50°	1083.0	17.2
50°-60°	982.7	15.6
60°-70°	766.9	12.2
70°-80°	435.0	6.9
80°-90°	91.3	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°	1880.4	29.9
0°-40°	2937.7	46.7
0°-60°	5003.3	79.5
0°-90°	6296.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6296.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2944	2944	2944	2944	2944	
5°	2941	2908	2937	2943	2934	275
15°	2459	2466	2405	2418	2392	687
25°	1987	2013	2027	1978	1984	917
35°	1684	1687	1684	1686	1684	1055
45°	1383	1393	1381	1438	1424	1069
55°	1086	1084	1081	1119	1130	970
65°	779	762	755	790	824	772
75°	433	401	392	415	455	453
85°	75	67	67	63	66	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2944.2	2944.2	2944.2	2944.2	2944.2
2.5°	2962.6	2939.6	2919.7	2951.9	2948.8
5°	2941.2	2907.5	2936.6	2942.7	2933.5
7.5°	2884.5	2863.1	2864.6	2852.4	2850.8
10°	2736.0	2748.3	2723.8	2745.2	2734.5
12.5°	2608.9	2616.6	2573.7	2582.9	2570.7
15°	2458.9	2466.5	2405.3	2417.6	2391.5
17.5°	2295.1	2322.6	2272.1	2287.4	2259.9
20°	2172.6	2195.5	2197.1	2172.6	2085.3
22.5°	2076.1	2099.1	2117.5	2044.0	2034.8
25°	1987.3	2013.4	2027.1	1978.1	1984.3
27.5°	1898.5	1927.6	1927.6	1938.3	1924.5
30°	1834.2	1846.5	1826.6	1866.4	1854.1
32.5°	1757.7	1762.3	1745.4	1774.5	1731.6
35°	1684.2	1687.2	1684.2	1685.7	1684.2
37.5°	1613.7	1606.1	1619.9	1610.7	1639.8
40°	1535.7	1535.7	1541.8	1557.1	1580.1
42.5°	1463.7	1469.8	1462.2	1505.0	1514.2
45°	1382.6	1393.3	1381.0	1437.7	1423.9
47.5°	1309.1	1313.7	1310.6	1348.9	1351.9
50°	1229.4	1235.6	1238.6	1272.3	1276.9
52.5°	1163.6	1162.1	1151.4	1200.4	1208.0
55°	1085.5	1084.0	1080.9	1119.2	1129.9
57.5°	1005.9	1007.4	1015.1	1036.5	1062.6
60°	933.9	926.3	932.4	958.4	979.9
62.5°	860.5	846.7	832.9	875.8	895.7
65°	779.3	762.5	754.8	790.0	823.7
67.5°	704.3	676.7	672.1	696.6	736.4
70°	618.6	584.9	583.3	601.7	649.2
72.5°	523.6	494.5	486.9	511.4	554.2
75°	433.3	401.1	392.0	414.9	454.7
77.5°	335.3	309.3	303.2	315.4	347.6
80°	235.8	220.5	214.3	218.9	241.9
82.5°	148.5	137.8	134.7	133.2	145.5
85°	75.0	67.4	67.4	62.8	65.8
87.5°	23.0	21.4	19.9	15.3	16.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)