

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: P485807

Luminaire Tested: **ORLG-24-2-INS-89BC-LD4-6HI-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: P485807
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-LD4-6HI-20-120-EDD
Description: 2X2 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

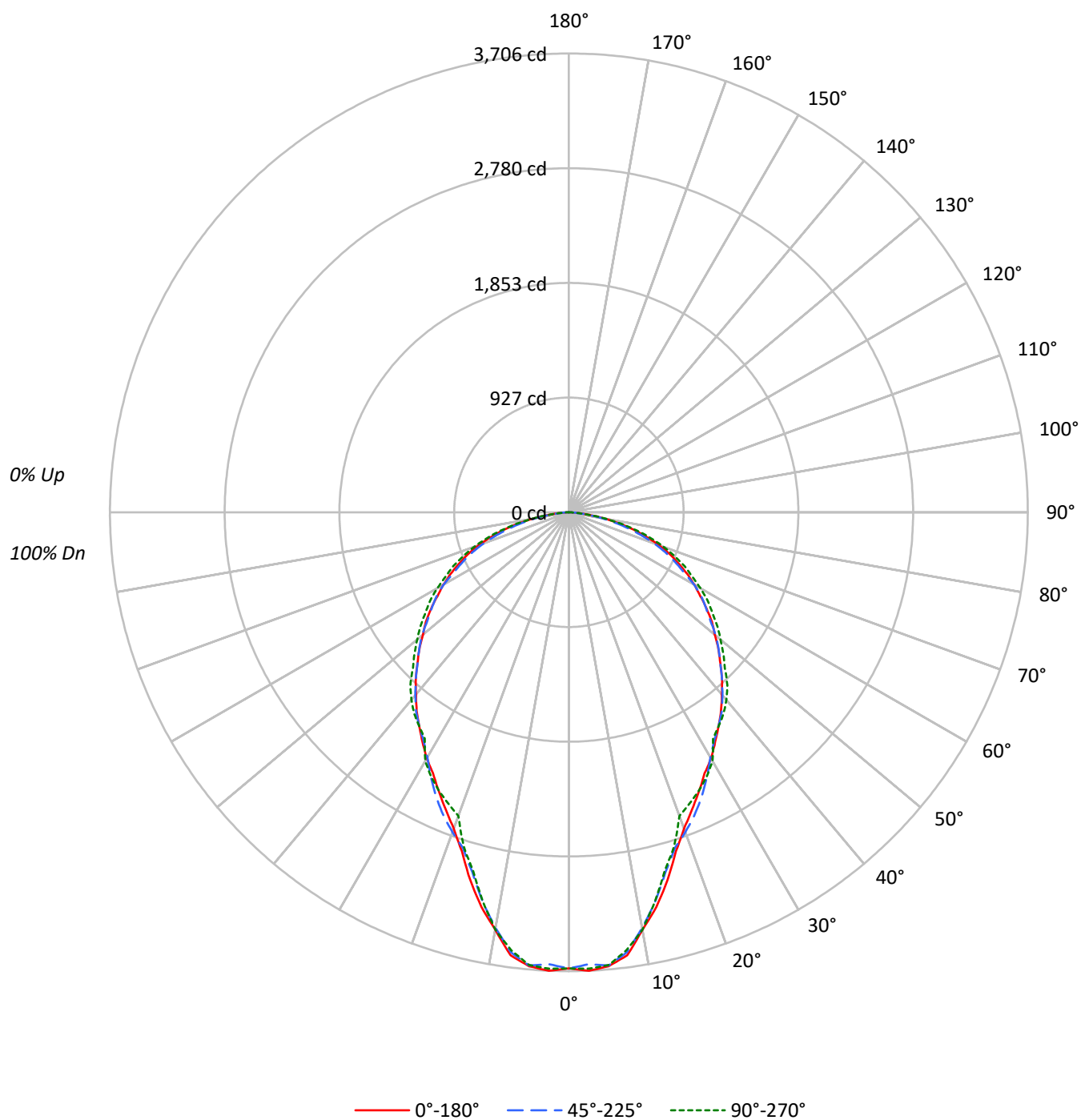
Lumens per Lamp: N/A
Luminaire Lumens: 7877.7 lumens
Efficiency: N/A
Efficacy: 59.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 132
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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CATALOG NUMBER: ORLG-24-2-INS-89BC-LD4-6HI-20-120-EDD

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
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°	9912	9912	9912
5°	9940	9924	9914
10°	9353	9312	9348
15°	8570	8384	8335
20°	7784	7872	7471
25°	7382	7530	7371
30°	7131	7101	7208
35°	6922	6922	6922
40°	6749	6776	6944
45°	6583	6575	6779
50°	6440	6488	6688
55°	6372	6345	6632
60°	6289	6279	6598
65°	6208	6013	6562
70°	6089	5742	6390
75°	5636	5099	5915
80°	4572	4156	4691
85°	2899	2603	2544



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.1	4.3
10°-20°	855.3	10.9
20°-30°	1155.1	14.7
30°-40°	1322.8	16.8
40°-50°	1354.9	17.2
50°-60°	1229.4	15.6
60°-70°	959.5	12.2
70°-80°	544.2	6.9
80°-90°	114.2	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°	2352.6	29.9
0°-40°	3675.3	46.7
0°-60°	6259.7	79.5
0°-90°	7877.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7877.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3684	3684	3684	3684	3684	
5°	3680	3638	3674	3682	3670	344
15°	3076	3086	3009	3025	2992	860
25°	2486	2519	2536	2475	2482	1147
35°	2107	2111	2107	2109	2107	1320
45°	1730	1743	1728	1799	1781	1337
55°	1358	1356	1352	1400	1414	1214
65°	975	954	944	988	1031	966
75°	542	502	490	519	569	567
85°	94	84	84	78	82	124
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3683.5	3683.5	3683.5	3683.5	3683.5
2.5°	3706.5	3677.8	3652.9	3693.1	3689.3
5°	3679.7	3637.6	3674.0	3681.6	3670.1
7.5°	3608.8	3582.0	3583.9	3568.6	3566.7
10°	3423.0	3438.4	3407.7	3434.5	3421.1
12.5°	3264.0	3273.6	3220.0	3231.5	3216.2
15°	3076.3	3085.9	3009.3	3024.6	2992.0
17.5°	2871.4	2905.8	2842.6	2861.8	2827.3
20°	2718.1	2746.9	2748.8	2718.1	2608.9
22.5°	2597.4	2626.2	2649.2	2557.2	2545.7
25°	2486.3	2518.9	2536.2	2474.9	2482.5
27.5°	2375.2	2411.6	2411.6	2425.1	2407.8
30°	2294.8	2310.1	2285.2	2335.0	2319.7
32.5°	2199.0	2204.8	2183.7	2220.1	2166.5
35°	2107.1	2110.9	2107.1	2109.0	2107.1
37.5°	2019.0	2009.4	2026.6	2015.1	2051.5
40°	1921.3	1921.3	1928.9	1948.1	1976.8
42.5°	1831.2	1838.9	1829.3	1883.0	1894.5
45°	1729.7	1743.1	1727.8	1798.7	1781.4
47.5°	1637.8	1643.5	1639.7	1687.6	1691.4
50°	1538.2	1545.8	1549.7	1591.8	1597.5
52.5°	1455.8	1453.9	1440.5	1501.8	1511.3
55°	1358.1	1356.2	1352.4	1400.2	1413.7
57.5°	1258.5	1260.4	1270.0	1296.8	1329.4
60°	1168.5	1158.9	1166.6	1199.1	1225.9
62.5°	1076.5	1059.3	1042.0	1095.7	1120.6
65°	975.0	953.9	944.4	988.4	1030.6
67.5°	881.1	846.7	840.9	871.6	921.4
70°	773.9	731.7	729.8	752.8	812.2
72.5°	655.1	618.7	609.1	639.8	693.4
75°	542.1	501.9	490.4	519.1	568.9
77.5°	419.5	386.9	379.3	394.6	434.8
80°	295.0	275.8	268.2	273.9	302.7
82.5°	185.8	172.4	168.6	166.7	182.0
85°	93.9	84.3	84.3	78.5	82.4
87.5°	28.7	26.8	24.9	19.2	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)