

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: P485705

Luminaire Tested: **ORLG-24-2-INS-89BC-LD4-3HI-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: P485705
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-LD4-3HI-35-120-EDD
Description: 2X2 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

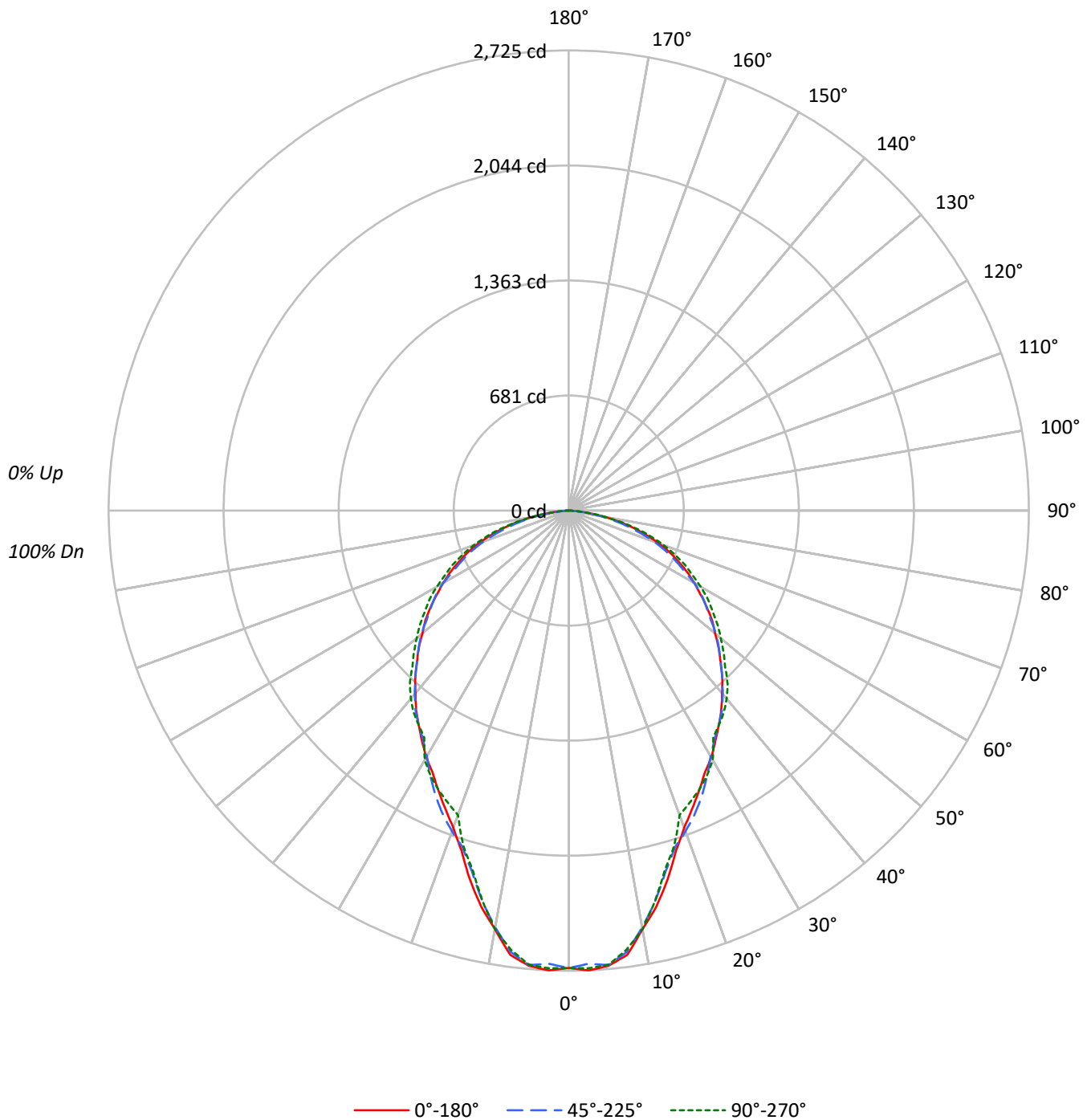
Lumens per Lamp: N/A
Luminaire Lumens: 5792.4 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 66
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°	7289	7289	7289
5°	7309	7297	7290
10°	6877	6847	6874
15°	6302	6164	6129
20°	5723	5788	5493
25°	5428	5537	5420
30°	5243	5221	5300
35°	5090	5090	5090
40°	4963	4982	5106
45°	4840	4835	4985
50°	4735	4770	4918
55°	4685	4665	4876
60°	4624	4617	4851
65°	4565	4422	4825
70°	4477	4222	4699
75°	4144	3749	4349
80°	3361	3056	3448
85°	2130	1914	1871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.6	4.3
10°-20°	628.9	10.9
20°-30°	849.3	14.7
30°-40°	972.6	16.8
40°-50°	996.3	17.2
50°-60°	904.0	15.6
60°-70°	705.5	12.2
70°-80°	400.2	6.9
80°-90°	84.0	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°	1729.8	29.9
0°-40°	2702.4	46.7
0°-60°	4602.7	79.5
0°-90°	5792.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5792.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2708	2708	2708	2708	2708	
5°	2706	2675	2701	2707	2699	253
15°	2262	2269	2213	2224	2200	632
25°	1828	1852	1865	1820	1825	844
35°	1549	1552	1549	1551	1549	971
45°	1272	1282	1270	1322	1310	983
55°	999	997	994	1030	1039	892
65°	717	701	694	727	758	711
75°	399	369	361	382	418	417
85°	69	62	62	58	61	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2708.5	2708.5	2708.5	2708.5	2708.5
2.5°	2725.4	2704.3	2685.9	2715.5	2712.7
5°	2705.7	2674.7	2701.4	2707.1	2698.6
7.5°	2653.5	2633.8	2635.2	2624.0	2622.6
10°	2516.9	2528.2	2505.7	2525.4	2515.5
12.5°	2400.0	2407.1	2367.6	2376.1	2364.8
15°	2262.0	2269.0	2212.7	2224.0	2200.0
17.5°	2111.3	2136.6	2090.2	2104.2	2078.9
20°	1998.6	2019.7	2021.1	1998.6	1918.3
22.5°	1909.9	1931.0	1947.9	1880.3	1871.9
25°	1828.2	1852.1	1864.8	1819.7	1825.4
27.5°	1746.5	1773.3	1773.3	1783.1	1770.4
30°	1687.3	1698.6	1680.3	1716.9	1705.7
32.5°	1616.9	1621.1	1605.7	1632.4	1593.0
35°	1549.3	1552.1	1549.3	1550.7	1549.3
37.5°	1484.5	1477.5	1490.2	1481.7	1508.5
40°	1412.7	1412.7	1418.3	1432.4	1453.5
42.5°	1346.5	1352.1	1345.1	1384.5	1393.0
45°	1271.8	1281.7	1270.4	1322.5	1309.9
47.5°	1204.2	1208.5	1205.6	1240.9	1243.7
50°	1131.0	1136.6	1139.4	1170.4	1174.7
52.5°	1070.4	1069.0	1059.2	1104.2	1111.3
55°	998.6	997.2	994.4	1029.6	1039.4
57.5°	925.4	926.8	933.8	953.5	977.5
60°	859.2	852.1	857.8	881.7	901.4
62.5°	791.6	778.9	766.2	805.6	824.0
65°	716.9	701.4	694.4	726.8	757.8
67.5°	647.9	622.5	618.3	640.9	677.5
70°	569.0	538.0	536.6	553.5	597.2
72.5°	481.7	454.9	447.9	470.4	509.9
75°	398.6	369.0	360.6	381.7	418.3
77.5°	308.5	284.5	278.9	290.1	319.7
80°	216.9	202.8	197.2	201.4	222.5
82.5°	136.6	126.8	123.9	122.5	133.8
85°	69.0	62.0	62.0	57.7	60.6
87.5°	21.1	19.7	18.3	14.1	15.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)