

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: P485009

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-1STD-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: P485009
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-12-4-INS-89BC-LD4-1STD-35-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

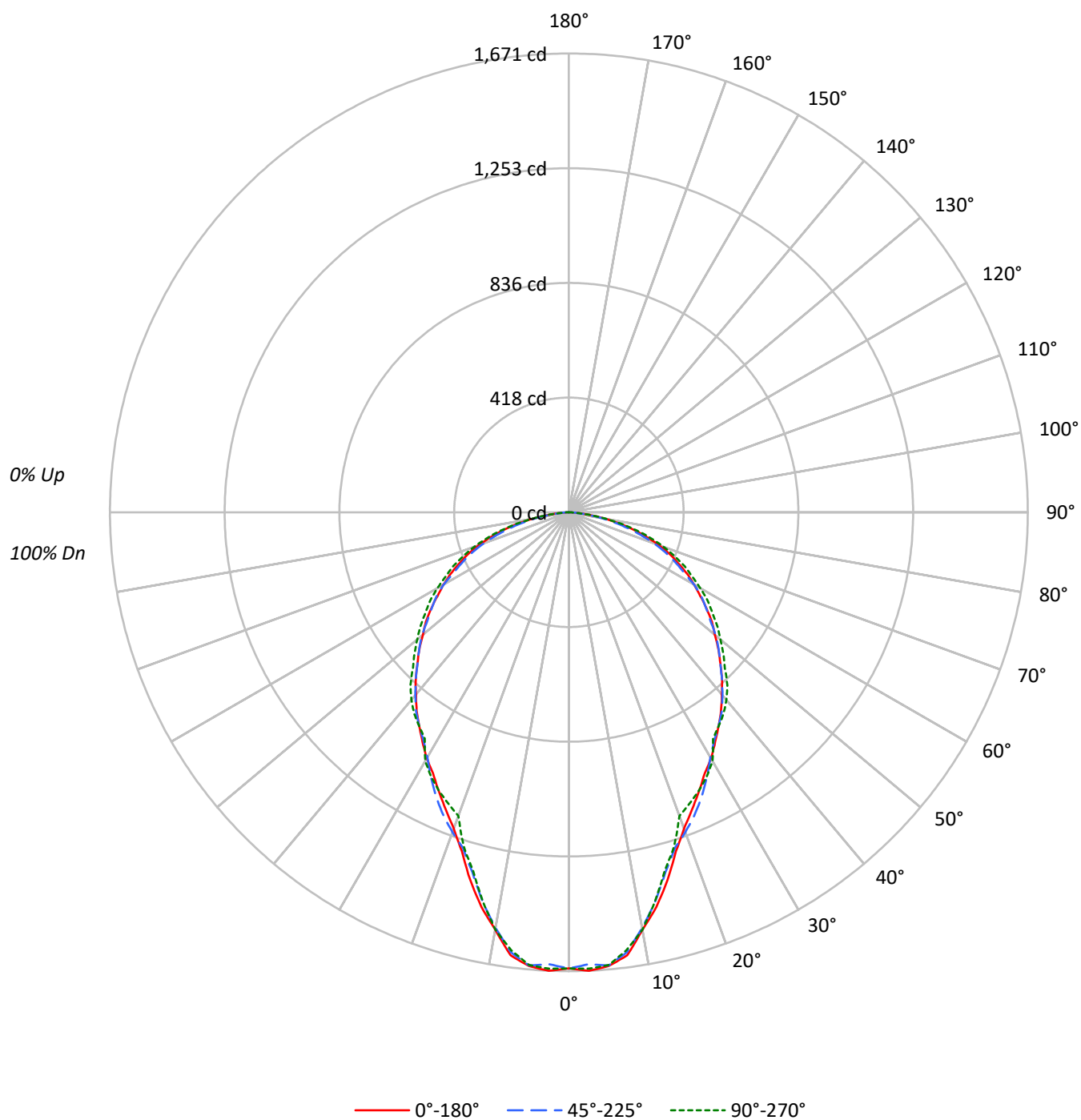
Lumens per Lamp: N/A
Luminaire Lumens: 3551.9 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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°	4469	4469	4469
5°	4482	4475	4470
10°	4217	4198	4215
15°	3864	3780	3758
20°	3509	3549	3369
25°	3328	3395	3323
30°	3215	3202	3250
35°	3121	3121	3121
40°	3043	3055	3131
45°	2968	2965	3057
50°	2903	2925	3015
55°	2873	2861	2990
60°	2835	2831	2975
65°	2799	2711	2959
70°	2745	2589	2881
75°	2541	2299	2667
80°	2061	1874	2115
85°	1306	1173	1145



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.3	4.3
10°-20°	385.6	10.9
20°-30°	520.8	14.7
30°-40°	596.4	16.8
40°-50°	610.9	17.2
50°-60°	554.3	15.6
60°-70°	432.6	12.2
70°-80°	245.4	6.9
80°-90°	51.5	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°	1060.7	29.9
0°-40°	1657.1	46.7
0°-60°	2822.4	79.5
0°-90°	3551.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3551.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1661	1661	1661	1661	1661	
5°	1659	1640	1656	1660	1655	155
15°	1387	1391	1357	1364	1349	388
25°	1121	1136	1144	1116	1119	517
35°	950	952	950	951	950	595
45°	780	786	779	811	803	603
55°	612	612	610	631	637	547
65°	440	430	426	446	465	436
75°	244	226	221	234	256	256
85°	42	38	38	35	37	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1660.8	1660.8	1660.8	1660.8	1660.8
2.5°	1671.2	1658.2	1647.0	1665.2	1663.4
5°	1659.1	1640.1	1656.5	1660.0	1654.8
7.5°	1627.2	1615.1	1615.9	1609.0	1608.2
10°	1543.4	1550.3	1536.5	1548.6	1542.5
12.5°	1471.7	1476.0	1451.8	1457.0	1450.1
15°	1387.1	1391.4	1356.8	1363.7	1349.1
17.5°	1294.6	1310.2	1281.7	1290.3	1274.8
20°	1225.5	1238.5	1239.4	1225.5	1176.3
22.5°	1171.1	1184.1	1194.5	1153.0	1147.8
25°	1121.0	1135.7	1143.5	1115.9	1119.3
27.5°	1071.0	1087.4	1087.4	1093.4	1085.6
30°	1034.7	1041.6	1030.4	1052.8	1045.9
32.5°	991.5	994.1	984.6	1001.0	976.8
35°	950.0	951.8	950.0	950.9	950.0
37.5°	910.3	906.0	913.8	908.6	925.0
40°	866.3	866.3	869.7	878.4	891.3
42.5°	825.7	829.1	824.8	849.0	854.2
45°	779.9	785.9	779.0	811.0	803.2
47.5°	738.4	741.0	739.3	760.9	762.6
50°	693.5	697.0	698.7	717.7	720.3
52.5°	656.4	655.5	649.5	677.1	681.4
55°	612.3	611.5	609.8	631.3	637.4
57.5°	567.4	568.3	572.6	584.7	599.4
60°	526.8	522.5	526.0	540.7	552.7
62.5°	485.4	477.6	469.8	494.0	505.2
65°	439.6	430.1	425.8	445.7	464.7
67.5°	397.3	381.7	379.2	393.0	415.4
70°	348.9	329.9	329.1	339.4	366.2
72.5°	295.4	279.0	274.6	288.5	312.6
75°	244.4	226.3	221.1	234.1	256.5
77.5°	189.1	174.5	171.0	177.9	196.1
80°	133.0	124.4	120.9	123.5	136.5
82.5°	83.8	77.7	76.0	75.1	82.0
85°	42.3	38.0	38.0	35.4	37.1
87.5°	13.0	12.1	11.2	8.6	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)