

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: P484985

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-1HI-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: P484985
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-LD4-1HI-35-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

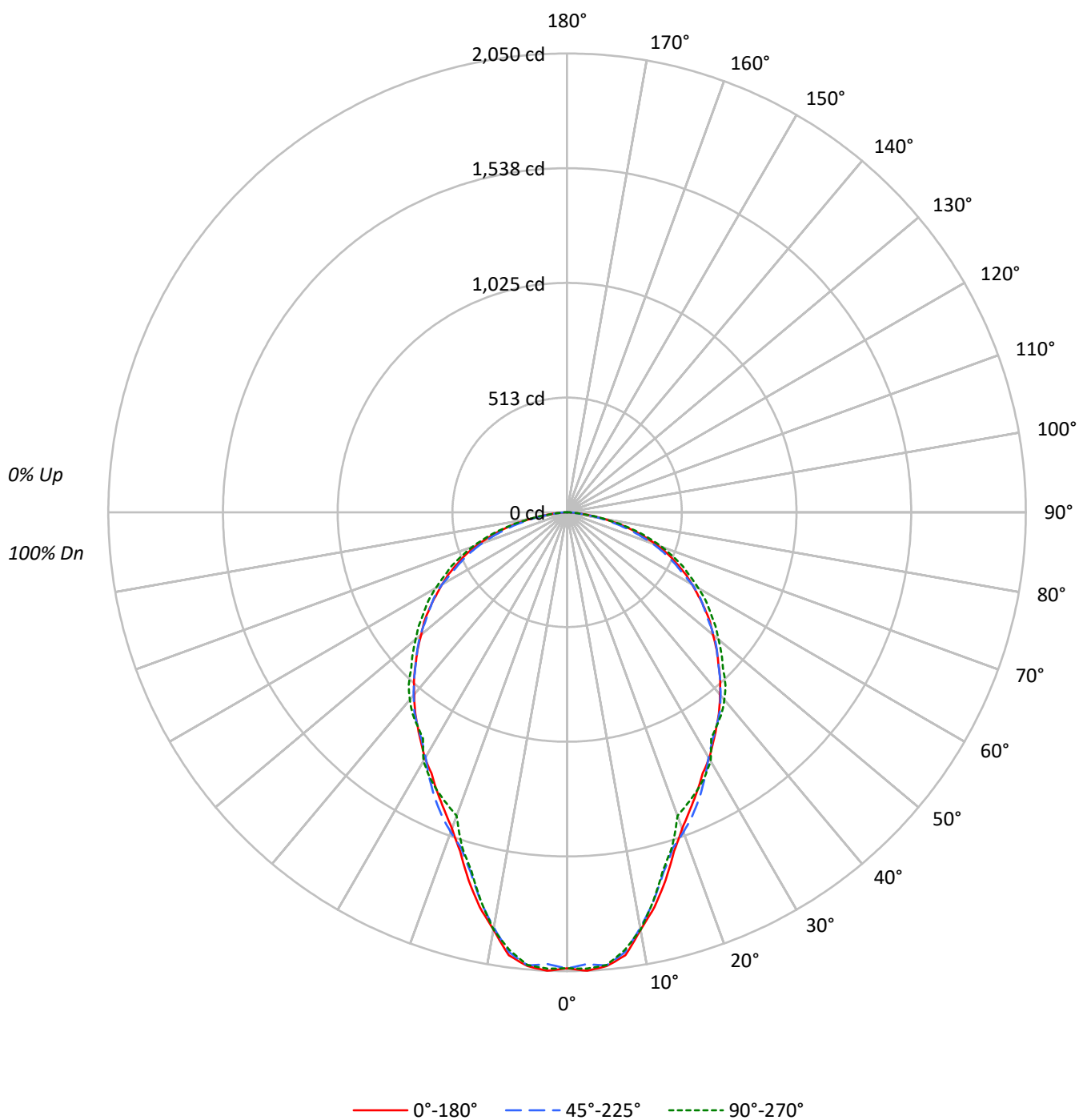
Lumens per Lamp: N/A
Luminaire Lumens: 4356.6 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 44
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°	5482	5482	5482
5°	5497	5488	5483
10°	5173	5150	5170
15°	4740	4636	4610
20°	4305	4353	4132
25°	4083	4165	4076
30°	3943	3927	3986
35°	3828	3828	3828
40°	3732	3747	3840
45°	3640	3636	3749
50°	3561	3588	3699
55°	3524	3509	3668
60°	3478	3472	3649
65°	3433	3326	3629
70°	3367	3175	3534
75°	3117	2820	3271
80°	2528	2298	2594
85°	1602	1439	1408



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.2	4.3
10°-20°	473.0	10.9
20°-30°	638.8	14.7
30°-40°	731.5	16.8
40°-50°	749.3	17.2
50°-60°	679.9	15.6
60°-70°	530.7	12.2
70°-80°	301.0	6.9
80°-90°	63.2	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°	1301.0	29.9
0°-40°	2032.6	46.7
0°-60°	3461.8	79.5
0°-90°	4356.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4356.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2037	2037	2037	2037	2037	
5°	2035	2012	2032	2036	2030	190
15°	1701	1707	1664	1673	1655	475
25°	1375	1393	1403	1369	1373	635
35°	1165	1167	1165	1166	1165	730
45°	957	964	956	995	985	740
55°	751	750	748	774	782	671
65°	539	528	522	547	570	534
75°	300	278	271	287	315	314
85°	52	47	47	43	46	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2037.1	2037.1	2037.1	2037.1	2037.1
2.5°	2049.8	2033.9	2020.2	2042.4	2040.3
5°	2035.0	2011.7	2031.8	2036.1	2029.7
7.5°	1995.8	1981.0	1982.0	1973.5	1972.5
10°	1893.0	1901.5	1884.6	1899.4	1892.0
12.5°	1805.1	1810.4	1780.8	1787.1	1778.6
15°	1701.3	1706.6	1664.2	1672.7	1654.7
17.5°	1588.0	1607.0	1572.1	1582.7	1563.6
20°	1503.2	1519.1	1520.2	1503.2	1442.8
22.5°	1436.5	1452.4	1465.1	1414.2	1407.9
25°	1375.0	1393.0	1402.6	1368.7	1372.9
27.5°	1313.6	1333.7	1333.7	1341.1	1331.6
30°	1269.1	1277.6	1263.8	1291.3	1282.9
32.5°	1216.1	1219.3	1207.6	1227.8	1198.1
35°	1165.3	1167.4	1165.3	1166.3	1165.3
37.5°	1116.5	1111.2	1120.8	1114.4	1134.6
40°	1062.5	1062.5	1066.8	1077.3	1093.2
42.5°	1012.7	1017.0	1011.7	1041.3	1047.7
45°	956.6	964.0	955.5	994.7	985.2
47.5°	905.7	908.9	906.8	933.3	935.4
50°	850.6	854.9	857.0	880.3	883.5
52.5°	805.1	804.0	796.6	830.5	835.8
55°	751.1	750.0	747.9	774.4	781.8
57.5°	696.0	697.0	702.3	717.2	735.2
60°	646.2	640.9	645.1	663.1	678.0
62.5°	595.3	585.8	576.3	605.9	619.7
65°	539.2	527.6	522.3	546.6	569.9
67.5°	487.3	468.2	465.1	482.0	509.5
70°	428.0	404.7	403.6	416.3	449.2
72.5°	362.3	342.2	336.9	353.8	383.5
75°	299.8	277.5	271.2	287.1	314.6
77.5°	232.0	214.0	209.7	218.2	240.5
80°	163.1	152.5	148.3	151.5	167.4
82.5°	102.8	95.3	93.2	92.2	100.6
85°	51.9	46.6	46.6	43.4	45.6
87.5°	15.9	14.8	13.8	10.6	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)