

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: P485061

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3HI-50-120-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: P485061
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-LD4-3HI-50-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

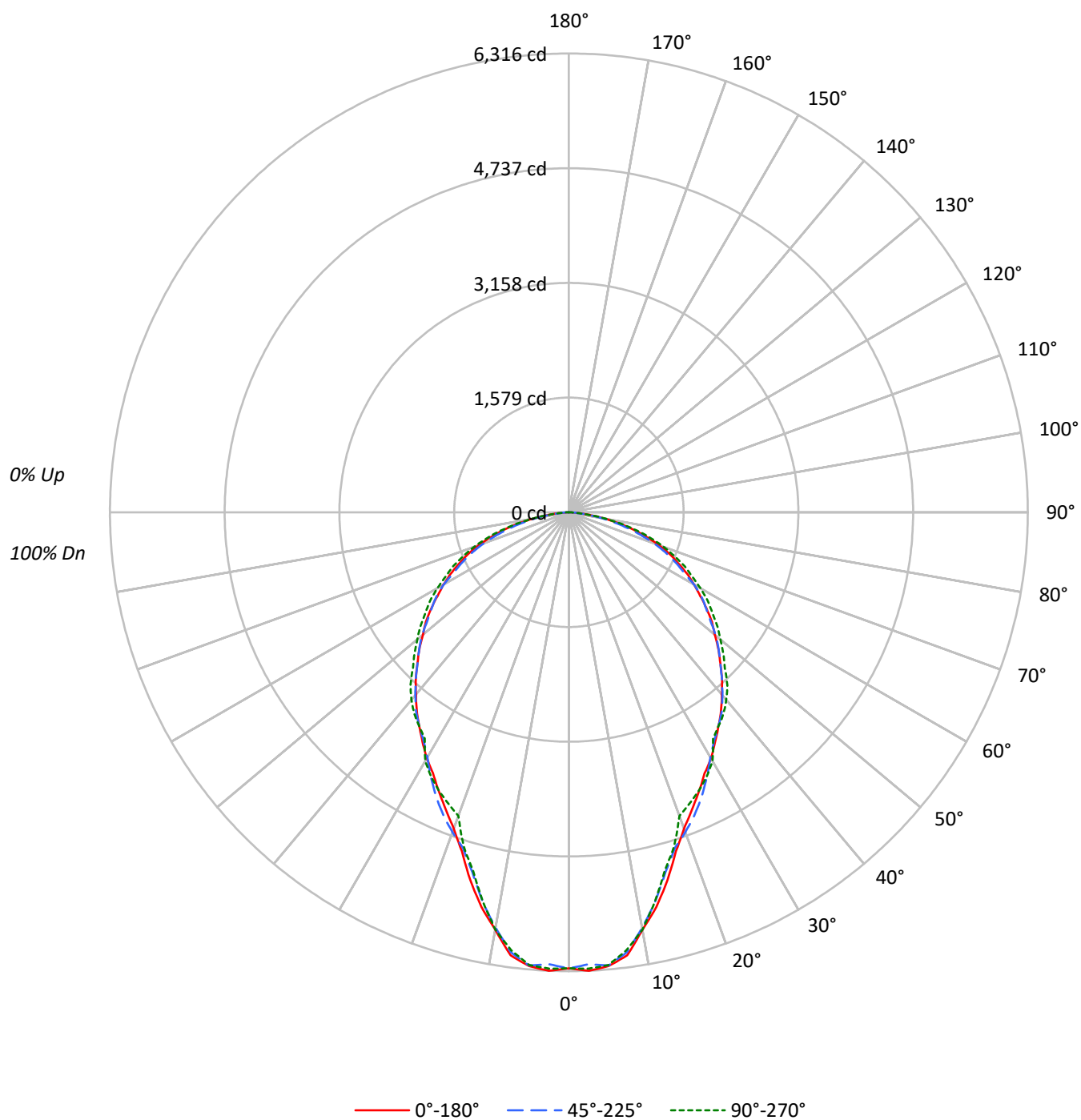
Lumens per Lamp: N/A
Luminaire Lumens: 13424.5 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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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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°	16892	16892	16892
5°	16939	16912	16894
10°	15939	15868	15930
15°	14605	14287	14205
20°	13265	13414	12732
25°	12580	12832	12561
30°	12151	12101	12283
35°	11796	11796	11796
40°	11501	11547	11834
45°	11217	11205	11553
50°	10973	11055	11397
55°	10858	10812	11302
60°	10717	10699	11243
65°	10579	10247	11182
70°	10376	9785	10889
75°	9605	8689	10080
80°	7790	7082	7993
85°	4937	4434	4335



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	583.0	4.3
10°-20°	1457.6	10.9
20°-30°	1968.4	14.7
30°-40°	2254.2	16.8
40°-50°	2309.0	17.2
50°-60°	2095.1	15.6
60°-70°	1635.2	12.2
70°-80°	927.4	6.9
80°-90°	194.7	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°	4009.0	29.9
0°-40°	6263.2	46.7
0°-60°	10667.2	79.5
0°-90°	13424.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13424.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6277	6277	6277	6277	6277	
5°	6271	6199	6261	6274	6254	586
15°	5242	5259	5128	5154	5099	1465
25°	4237	4292	4322	4217	4230	1955
35°	3591	3597	3591	3594	3591	2249
45°	2948	2970	2944	3065	3036	2279
55°	2314	2311	2305	2386	2409	2068
65°	1662	1626	1609	1684	1756	1647
75°	924	855	836	885	970	966
85°	160	144	144	134	140	211
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6277.2	6277.2	6277.2	6277.2	6277.2
2.5°	6316.4	6267.4	6225.0	6293.5	6287.0
5°	6270.7	6198.8	6260.9	6273.9	6254.3
7.5°	6149.9	6104.2	6107.4	6081.3	6078.1
10°	5833.2	5859.4	5807.1	5852.8	5830.0
12.5°	5562.3	5578.6	5487.2	5506.8	5480.7
15°	5242.4	5258.7	5128.2	5154.3	5098.8
17.5°	4893.1	4951.9	4844.2	4876.8	4818.1
20°	4632.0	4681.0	4684.2	4632.0	4445.9
22.5°	4426.3	4475.3	4514.5	4357.8	4338.2
25°	4237.0	4292.5	4321.9	4217.4	4230.5
27.5°	4047.7	4109.7	4109.7	4132.6	4103.2
30°	3910.6	3936.7	3894.3	3979.1	3953.0
32.5°	3747.4	3757.2	3721.3	3783.3	3691.9
35°	3590.7	3597.2	3590.7	3594.0	3590.7
37.5°	3440.5	3424.2	3453.6	3434.0	3496.0
40°	3274.1	3274.1	3287.1	3319.8	3368.7
42.5°	3120.6	3133.7	3117.4	3208.8	3228.4
45°	2947.6	2970.5	2944.4	3065.1	3035.8
47.5°	2790.9	2800.7	2794.2	2875.8	2882.3
50°	2621.2	2634.3	2640.8	2712.6	2722.4
52.5°	2480.8	2477.6	2454.7	2559.2	2575.5
55°	2314.4	2311.1	2304.6	2386.2	2409.0
57.5°	2144.6	2147.9	2164.2	2209.9	2265.4
60°	1991.2	1974.9	1987.9	2043.4	2089.1
62.5°	1834.5	1805.1	1775.8	1867.2	1909.6
65°	1661.5	1625.6	1609.3	1684.4	1756.2
67.5°	1501.6	1442.8	1433.0	1485.2	1570.1
70°	1318.8	1247.0	1243.7	1282.9	1384.0
72.5°	1116.4	1054.4	1038.0	1090.3	1181.7
75°	923.8	855.2	835.7	884.6	969.5
77.5°	714.9	659.4	646.3	672.4	741.0
80°	502.7	470.1	457.0	466.8	515.8
82.5°	316.6	293.8	287.3	284.0	310.1
85°	159.9	143.6	143.6	133.8	140.4
87.5°	49.0	45.7	42.4	32.6	35.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)