

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: P485056

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3HI-35-120-EDD-90**

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: P485056
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-35-120-EDD-90
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

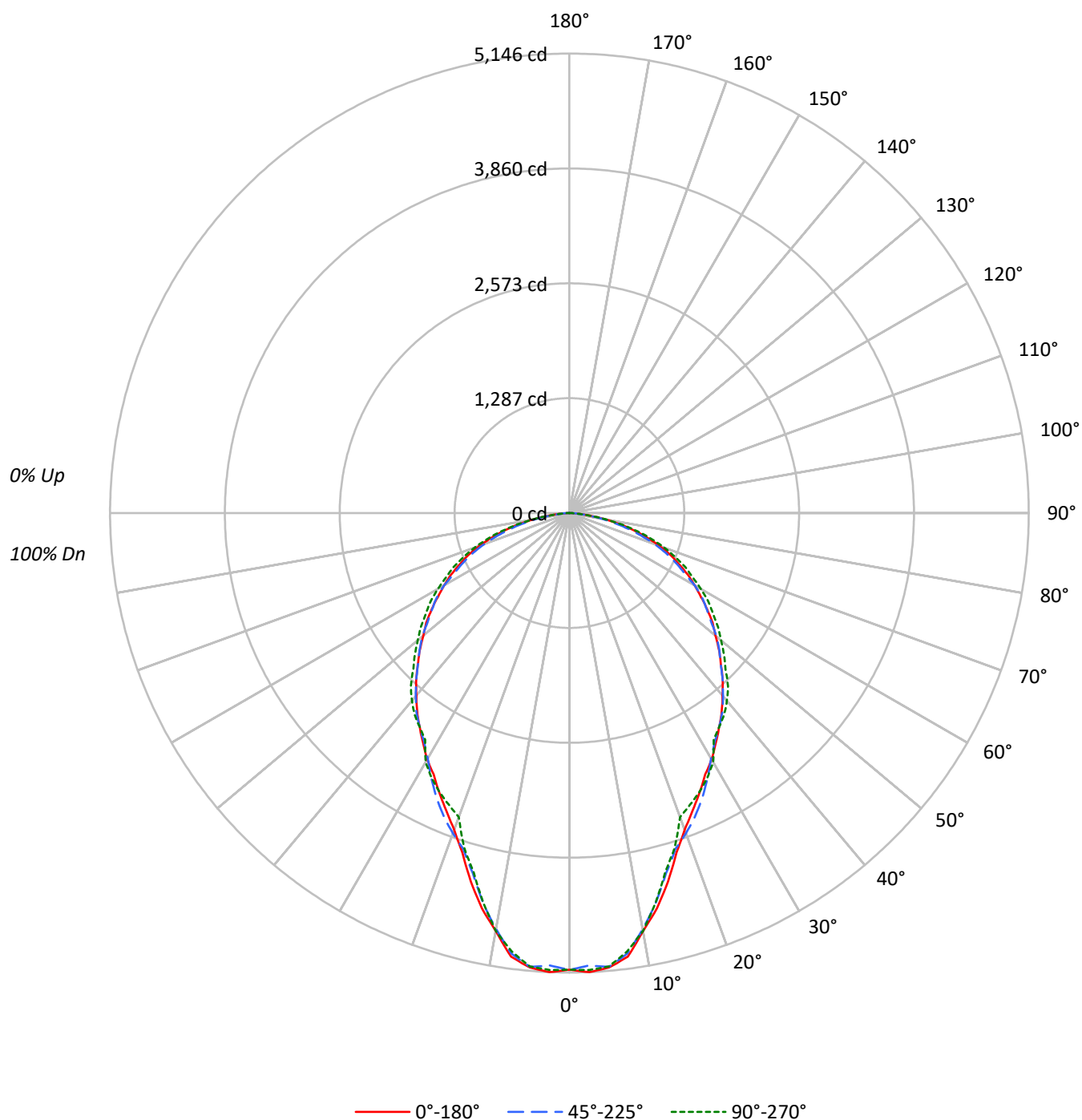
Lumens per Lamp: N/A
Luminaire Lumens: 10936.2 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P485056

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-3HI-35-120-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P485056

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-3HI-35-120-EDD-90

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°	13761	13761	13761
5°	13799	13777	13763
10°	12985	12927	12978
15°	11898	11638	11572
20°	10806	10928	10372
25°	10249	10454	10233
30°	9899	9858	10006
35°	9609	9609	9609
40°	9369	9407	9640
45°	9138	9128	9412
50°	8940	9006	9285
55°	8846	8808	9207
60°	8730	8716	9160
65°	8618	8348	9110
70°	8452	7972	8871
75°	7825	7078	8212
80°	6346	5769	6512
85°	4023	3612	3529



TEST NUMBER: P485056

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-3HI-35-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	475.0	4.3
10°-20°	1187.4	10.9
20°-30°	1603.6	14.7
30°-40°	1836.3	16.8
40°-50°	1881.0	17.2
50°-60°	1706.7	15.6
60°-70°	1332.1	12.2
70°-80°	755.5	6.9
80°-90°	158.6	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°	3265.9	29.9
0°-40°	5102.3	46.7
0°-60°	8690.0	79.5
0°-90°	10936.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10936.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5114	5114	5114	5114	5114	
5°	5108	5050	5100	5111	5095	477
15°	4271	4284	4178	4199	4154	1194
25°	3452	3497	3521	3436	3446	1593
35°	2925	2930	2925	2928	2925	1832
45°	2401	2420	2399	2497	2473	1857
55°	1885	1883	1877	1944	1962	1685
65°	1354	1324	1311	1372	1431	1341
75°	753	697	681	721	790	787
85°	130	117	117	109	114	172
90°	0	0	0	0	0	



TEST NUMBER: P485056

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-3HI-35-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5113.7	5113.7	5113.7	5113.7	5113.7
2.5°	5145.6	5105.7	5071.1	5127.0	5121.7
5°	5108.4	5049.9	5100.4	5111.0	5095.1
7.5°	5010.0	4972.7	4975.4	4954.1	4951.5
10°	4752.0	4773.3	4730.7	4768.0	4749.4
12.5°	4531.3	4544.6	4470.1	4486.1	4464.8
15°	4270.7	4284.0	4177.6	4198.9	4153.7
17.5°	3986.2	4034.0	3946.3	3972.9	3925.0
20°	3773.4	3813.3	3816.0	3773.4	3621.9
22.5°	3605.9	3645.8	3677.7	3550.1	3534.1
25°	3451.7	3496.9	3520.8	3435.7	3446.3
27.5°	3297.4	3348.0	3348.0	3366.6	3342.6
30°	3185.7	3207.0	3172.4	3241.6	3220.3
32.5°	3052.8	3060.8	3031.5	3082.0	3007.6
35°	2925.1	2930.5	2925.1	2927.8	2925.1
37.5°	2802.8	2789.5	2813.5	2797.5	2848.0
40°	2667.2	2667.2	2677.8	2704.4	2744.3
42.5°	2542.2	2552.8	2539.6	2614.0	2630.0
45°	2401.3	2419.9	2398.6	2497.0	2473.1
47.5°	2273.6	2281.6	2276.3	2342.8	2348.1
50°	2135.4	2146.0	2151.3	2209.8	2217.8
52.5°	2021.0	2018.3	1999.7	2084.8	2098.1
55°	1885.4	1882.7	1877.4	1943.9	1962.5
57.5°	1747.1	1749.8	1763.1	1800.3	1845.5
60°	1622.1	1608.8	1619.5	1664.7	1701.9
62.5°	1494.5	1470.5	1446.6	1521.1	1555.6
65°	1353.5	1324.3	1311.0	1372.2	1430.7
67.5°	1223.2	1175.4	1167.4	1209.9	1279.1
70°	1074.3	1015.8	1013.2	1045.1	1127.5
72.5°	909.5	858.9	845.6	888.2	962.6
75°	752.6	696.7	680.8	720.6	789.8
77.5°	582.4	537.2	526.5	547.8	603.6
80°	409.5	382.9	372.3	380.3	420.2
82.5°	257.9	239.3	234.0	231.4	252.6
85°	130.3	117.0	117.0	109.0	114.3
87.5°	39.9	37.2	34.6	26.6	29.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)