

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: P485000

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-1LO-50-120-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: P485000
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-LD4-1LO-50-120-EDD-90
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

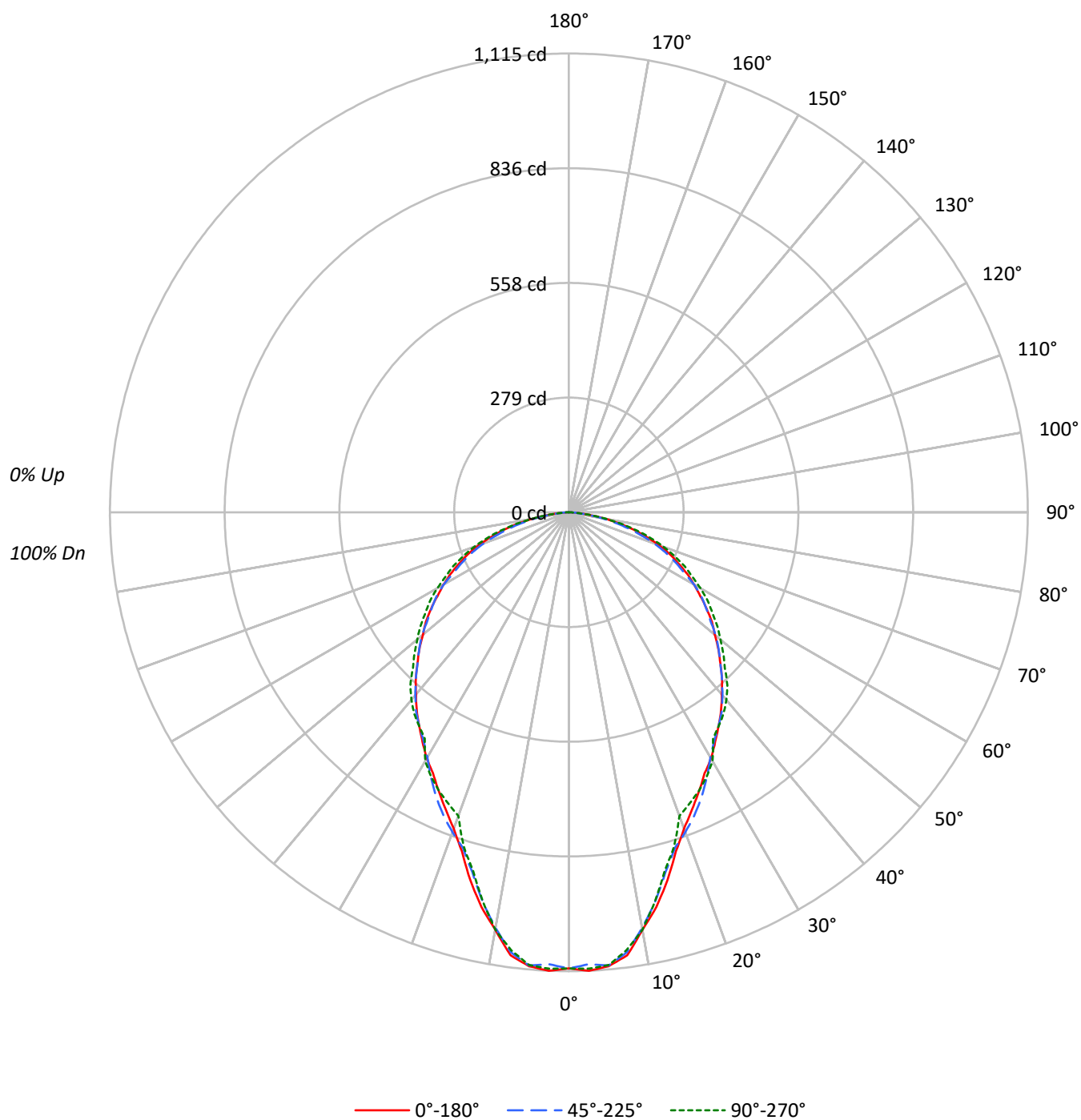
Lumens per Lamp: N/A
Luminaire Lumens: 2370.1 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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: P485000

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-1LO-50-120-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P485000

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-1LO-50-120-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°	2982	2982	2982
5°	2991	2986	2983
10°	2814	2802	2813
15°	2578	2522	2508
20°	2342	2368	2248
25°	2221	2265	2218
30°	2145	2136	2169
35°	2082	2082	2082
40°	2030	2038	2089
45°	1980	1978	2040
50°	1937	1952	2012
55°	1917	1909	1995
60°	1892	1889	1985
65°	1868	1809	1975
70°	1832	1728	1923
75°	1696	1534	1780
80°	1376	1251	1412
85°	871	784	766



TEST NUMBER: P485000

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-1LO-50-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.9	4.3
10°-20°	257.3	10.9
20°-30°	347.5	14.7
30°-40°	398.0	16.8
40°-50°	407.6	17.2
50°-60°	369.9	15.6
60°-70°	288.7	12.2
70°-80°	163.7	6.9
80°-90°	34.4	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°	707.8	29.9
0°-40°	1105.8	46.7
0°-60°	1883.3	79.5
0°-90°	2370.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2370.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1108	1108	1108	1108	1108	
5°	1107	1094	1105	1108	1104	103
15°	926	928	905	910	900	259
25°	748	758	763	745	747	345
35°	634	635	634	634	634	397
45°	520	524	520	541	536	402
55°	409	408	407	421	425	365
65°	293	287	284	297	310	291
75°	163	151	148	156	171	171
85°	28	25	25	24	25	37
90°	0	0	0	0	0	



TEST NUMBER: P485000

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-1LO-50-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1108.2	1108.2	1108.2	1108.2	1108.2
2.5°	1115.2	1106.5	1099.0	1111.1	1110.0
5°	1107.1	1094.4	1105.4	1107.7	1104.2
7.5°	1085.8	1077.7	1078.3	1073.7	1073.1
10°	1029.9	1034.5	1025.3	1033.3	1029.3
12.5°	982.0	984.9	968.8	972.2	967.6
15°	925.5	928.4	905.4	910.0	900.2
17.5°	863.9	874.3	855.2	861.0	850.6
20°	817.8	826.4	827.0	817.8	784.9
22.5°	781.5	790.1	797.0	769.4	765.9
25°	748.0	757.8	763.0	744.6	746.9
27.5°	714.6	725.6	725.6	729.6	724.4
30°	690.4	695.0	687.5	702.5	697.9
32.5°	661.6	663.3	657.0	667.9	651.8
35°	633.9	635.1	633.9	634.5	633.9
37.5°	607.4	604.5	609.7	606.3	617.2
40°	578.0	578.0	580.3	586.1	594.7
42.5°	550.9	553.3	550.4	566.5	570.0
45°	520.4	524.4	519.8	541.2	536.0
47.5°	492.7	494.5	493.3	507.7	508.9
50°	462.8	465.1	466.2	478.9	480.6
52.5°	438.0	437.4	433.4	451.8	454.7
55°	408.6	408.0	406.9	421.3	425.3
57.5°	378.6	379.2	382.1	390.2	400.0
60°	351.5	348.7	351.0	360.8	368.8
62.5°	323.9	318.7	313.5	329.6	337.1
65°	293.3	287.0	284.1	297.4	310.1
67.5°	265.1	254.7	253.0	262.2	277.2
70°	232.8	220.1	219.6	226.5	244.4
72.5°	197.1	186.1	183.3	192.5	208.6
75°	163.1	151.0	147.5	156.2	171.2
77.5°	126.2	116.4	114.1	118.7	130.8
80°	88.8	83.0	80.7	82.4	91.1
82.5°	55.9	51.9	50.7	50.1	54.7
85°	28.2	25.4	25.4	23.6	24.8
87.5°	8.6	8.1	7.5	5.8	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)