

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: P485065

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3LO-27-120-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: P485065
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-LD4-3LO-27-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

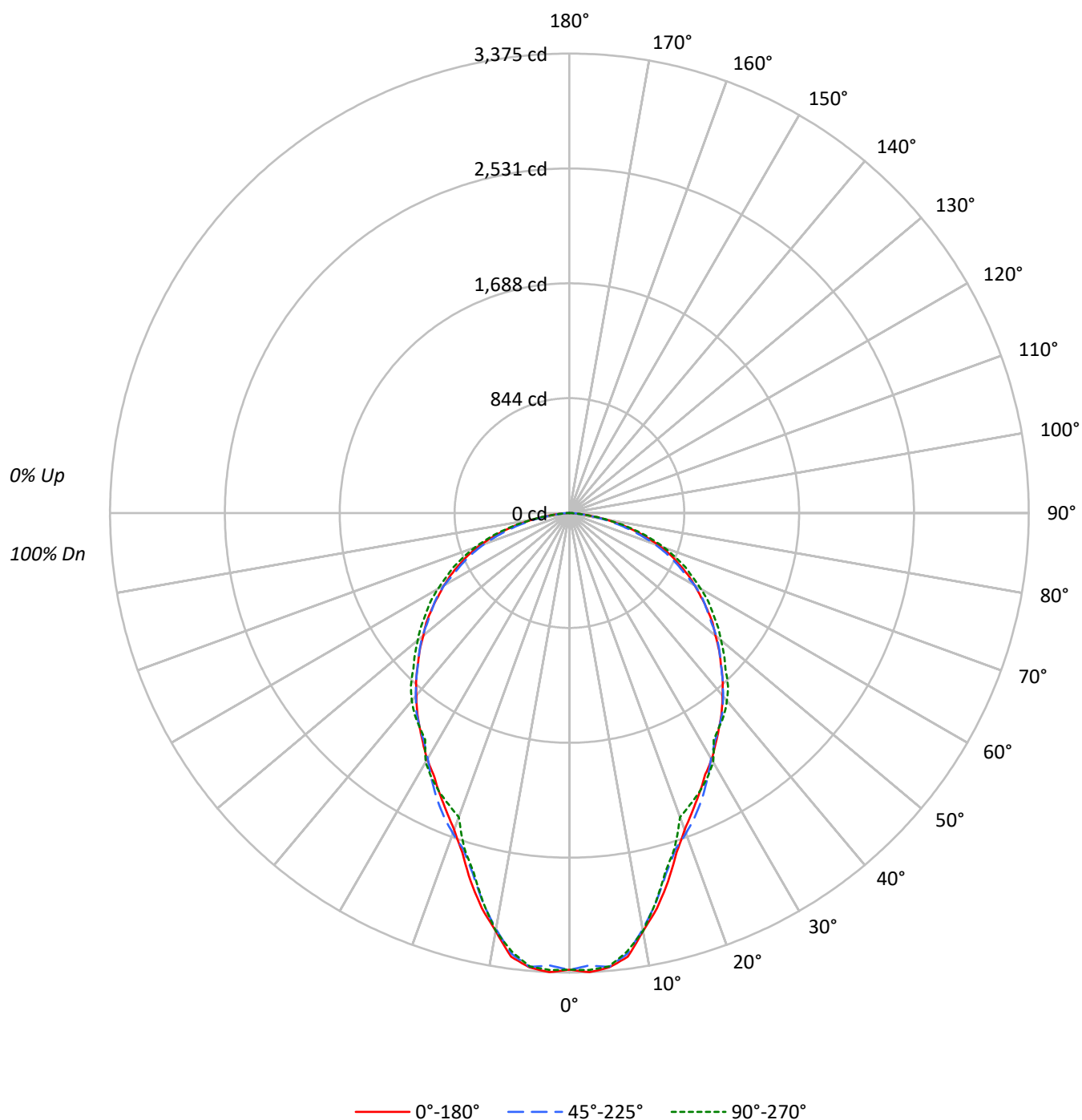
Lumens per Lamp: N/A
Luminaire Lumens: 7173.2 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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: P485065

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-3LO-27-120-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P485065

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-3LO-27-120-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20
RC	80					70					50					30					10
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°	9026	9026	9026
5°	9051	9037	9027
10°	8517	8479	8512
15°	7804	7634	7590
20°	7088	7168	6803
25°	6722	6857	6712
30°	6493	6466	6563
35°	6303	6303	6303
40°	6145	6170	6323
45°	5994	5987	6173
50°	5863	5907	6090
55°	5802	5777	6039
60°	5726	5717	6008
65°	5653	5475	5975
70°	5545	5228	5818
75°	5132	4642	5386
80°	4162	3784	4271
85°	2640	2368	2316



TEST NUMBER: P485065

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-3LO-27-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.5	4.3
10°-20°	778.8	10.9
20°-30°	1051.8	14.7
30°-40°	1204.5	16.8
40°-50°	1233.8	17.2
50°-60°	1119.5	15.6
60°-70°	873.7	12.2
70°-80°	495.6	6.9
80°-90°	104.0	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°	2142.2	29.9
0°-40°	3346.6	46.7
0°-60°	5699.9	79.5
0°-90°	7173.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7173.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3354	3354	3354	3354	3354	
5°	3351	3312	3345	3352	3342	313
15°	2801	2810	2740	2754	2724	783
25°	2264	2294	2309	2254	2260	1045
35°	1919	1922	1919	1920	1919	1202
45°	1575	1587	1573	1638	1622	1218
55°	1237	1235	1231	1275	1287	1105
65°	888	869	860	900	938	880
75°	494	457	446	473	518	516
85°	86	77	77	72	75	113
90°	0	0	0	0	0	



TEST NUMBER: P485065

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-3LO-27-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3354.1	3354.1	3354.1	3354.1	3354.1
2.5°	3375.1	3348.9	3326.2	3362.9	3359.4
5°	3350.6	3312.3	3345.4	3352.4	3341.9
7.5°	3286.1	3261.7	3263.4	3249.5	3247.7
10°	3116.9	3130.9	3103.0	3127.4	3115.2
12.5°	2972.1	2980.9	2932.0	2942.5	2928.5
15°	2801.2	2809.9	2740.2	2754.1	2724.5
17.5°	2614.6	2646.0	2588.4	2605.9	2574.5
20°	2475.0	2501.2	2503.0	2475.0	2375.6
22.5°	2365.2	2391.3	2412.3	2328.5	2318.1
25°	2264.0	2293.6	2309.3	2253.5	2260.5
27.5°	2162.8	2196.0	2196.0	2208.2	2192.5
30°	2089.6	2103.5	2080.9	2126.2	2112.2
32.5°	2002.4	2007.6	1988.4	2021.5	1972.7
35°	1918.6	1922.1	1918.6	1920.4	1918.6
37.5°	1838.4	1829.7	1845.4	1834.9	1868.1
40°	1749.4	1749.4	1756.4	1773.9	1800.0
42.5°	1667.5	1674.4	1665.7	1714.6	1725.0
45°	1575.0	1587.2	1573.3	1637.8	1622.1
47.5°	1491.3	1496.5	1493.0	1536.7	1540.1
50°	1400.6	1407.6	1411.1	1449.4	1454.7
52.5°	1325.6	1323.9	1311.7	1367.5	1376.2
55°	1236.6	1234.9	1231.4	1275.0	1287.2
57.5°	1146.0	1147.7	1156.4	1180.8	1210.5
60°	1064.0	1055.3	1062.2	1091.9	1116.3
62.5°	980.2	964.6	948.9	997.7	1020.4
65°	887.8	868.6	859.9	900.0	938.4
67.5°	802.3	770.9	765.7	793.6	839.0
70°	704.7	666.3	664.5	685.5	739.5
72.5°	596.5	563.4	554.7	582.6	631.4
75°	493.6	457.0	446.5	472.7	518.0
77.5°	382.0	352.3	345.4	359.3	395.9
80°	268.6	251.2	244.2	249.4	275.6
82.5°	169.2	157.0	153.5	151.7	165.7
85°	85.5	76.7	76.7	71.5	75.0
87.5°	26.2	24.4	22.7	17.4	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)