

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: P485077

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3STD-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: P485077
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-LD4-3STD-27-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

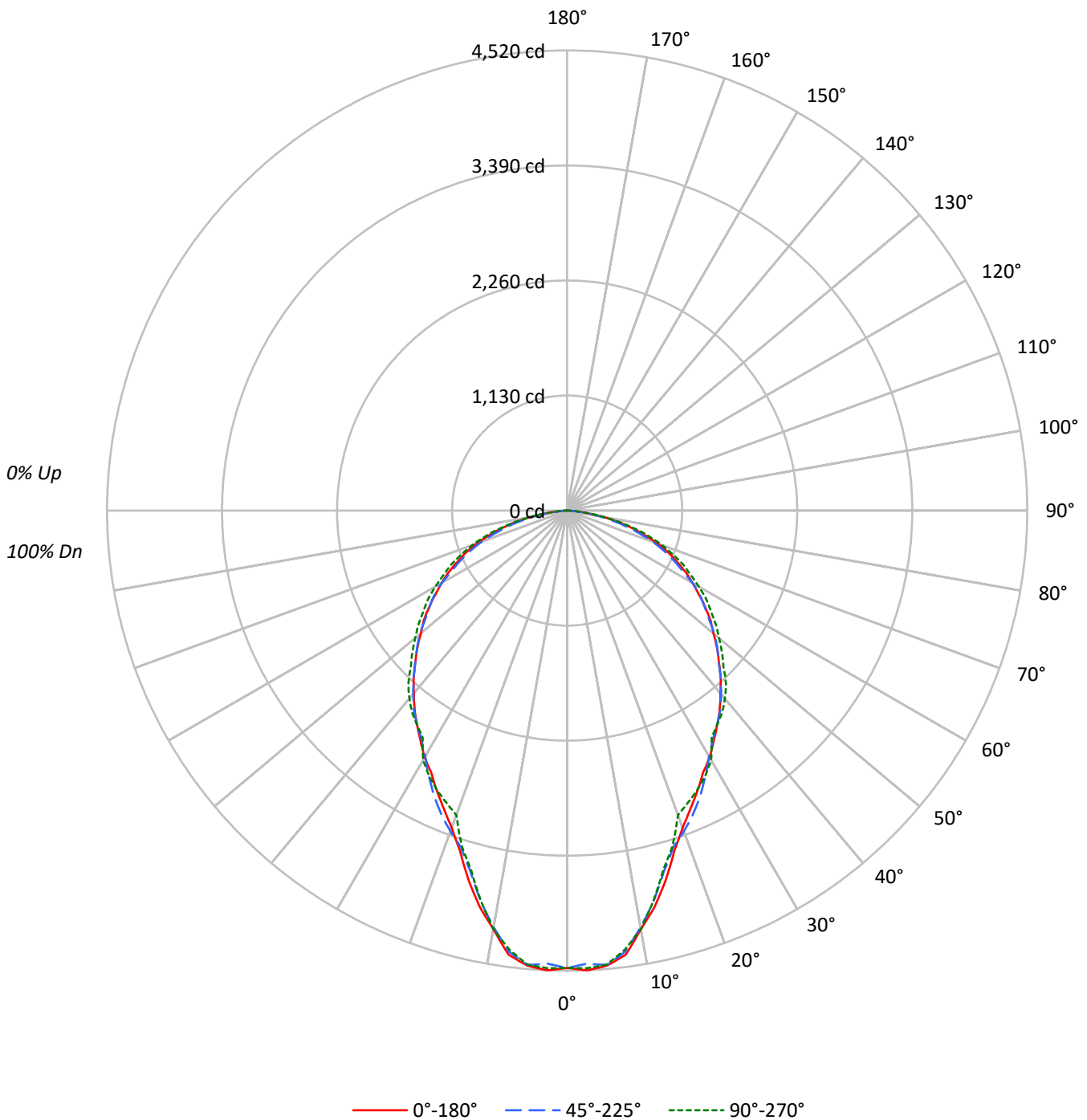
Lumens per Lamp: N/A
Luminaire Lumens: 9606.1 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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: P485077

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

Luminous Intensity Polar Plot





TEST NUMBER: P485077

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

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45					45			
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39					39			
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31					31			
9	58	44	36	31	56	44	36	31	43	35	30	41	35	30	40	35	30	28					28			
10	54	41	33	28	53	40	33	28	40	33	28	39	32	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12087	12087	12087
5°	12121	12102	12089
10°	11406	11355	11399
15°	10451	10223	10164
20°	9492	9599	9111
25°	9002	9182	8988
30°	8695	8659	8789
35°	8441	8441	8441
40°	8230	8263	8468
45°	8027	8018	8267
50°	7852	7911	8156
55°	7770	7737	8087
60°	7668	7656	8045
65°	7570	7332	8002
70°	7425	7002	7792
75°	6873	6217	7212
80°	5574	5067	5720
85°	3535	3174	3100



TEST NUMBER: P485077

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	417.2	4.3
10°-20°	1043.0	10.9
20°-30°	1408.5	14.7
30°-40°	1613.0	16.8
40°-50°	1652.2	17.2
50°-60°	1499.2	15.6
60°-70°	1170.1	12.2
70°-80°	663.6	6.9
80°-90°	139.3	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°	2868.7	29.9
0°-40°	4481.7	46.7
0°-60°	7633.1	79.5
0°-90°	9606.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9606.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4492	4492	4492	4492	4492	
5°	4487	4436	4480	4489	4475	419
15°	3751	3763	3670	3688	3648	1048
25°	3032	3072	3093	3018	3027	1399
35°	2569	2574	2569	2572	2569	1610
45°	2109	2126	2107	2193	2172	1631
55°	1656	1654	1649	1708	1724	1480
65°	1189	1163	1152	1205	1257	1178
75°	661	612	598	633	694	691
85°	114	103	103	96	100	151
90°	0	0	0	0	0	



TEST NUMBER: P485077

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4491.7	4491.7	4491.7	4491.7	4491.7
2.5°	4519.8	4484.7	4454.4	4503.4	4498.7
5°	4487.1	4435.7	4480.1	4489.4	4475.4
7.5°	4400.6	4367.9	4370.3	4351.6	4349.2
10°	4174.1	4192.8	4155.4	4188.1	4171.7
12.5°	3980.2	3991.9	3926.5	3940.5	3921.8
15°	3751.3	3763.0	3669.5	3688.2	3648.5
17.5°	3501.4	3543.4	3466.3	3489.7	3447.6
20°	3314.5	3349.5	3351.9	3314.5	3181.4
22.5°	3167.3	3202.4	3230.4	3118.3	3104.3
25°	3031.9	3071.6	3092.6	3017.8	3027.2
27.5°	2896.4	2940.8	2940.8	2957.1	2936.1
30°	2798.3	2817.0	2786.6	2847.3	2828.6
32.5°	2681.5	2688.5	2662.8	2707.2	2641.8
35°	2569.4	2574.0	2569.4	2571.7	2569.4
37.5°	2461.9	2450.2	2471.3	2457.3	2501.6
40°	2342.8	2342.8	2352.1	2375.5	2410.5
42.5°	2233.0	2242.4	2230.7	2296.1	2310.1
45°	2109.2	2125.6	2106.9	2193.3	2172.3
47.5°	1997.1	2004.1	1999.4	2057.8	2062.5
50°	1875.6	1885.0	1889.7	1941.0	1948.1
52.5°	1775.2	1772.9	1756.5	1831.3	1842.9
55°	1656.1	1653.7	1649.1	1707.5	1723.8
57.5°	1534.6	1537.0	1548.6	1581.3	1621.0
60°	1424.8	1413.2	1422.5	1462.2	1494.9
62.5°	1312.7	1291.7	1270.7	1336.1	1366.4
65°	1188.9	1163.2	1151.5	1205.3	1256.7
67.5°	1074.5	1032.4	1025.4	1062.8	1123.5
70°	943.7	892.3	889.9	918.0	990.4
72.5°	798.8	754.5	742.8	780.2	845.6
75°	661.0	612.0	598.0	633.0	693.7
77.5°	511.5	471.8	462.5	481.2	530.2
80°	359.7	336.4	327.0	334.0	369.1
82.5°	226.6	210.2	205.5	203.2	221.9
85°	114.5	102.8	102.8	95.8	100.4
87.5°	35.0	32.7	30.4	23.4	25.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)