

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: P484980

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-1HI-27-120-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: P484980
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-LD4-1HI-27-120-EDD-90
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

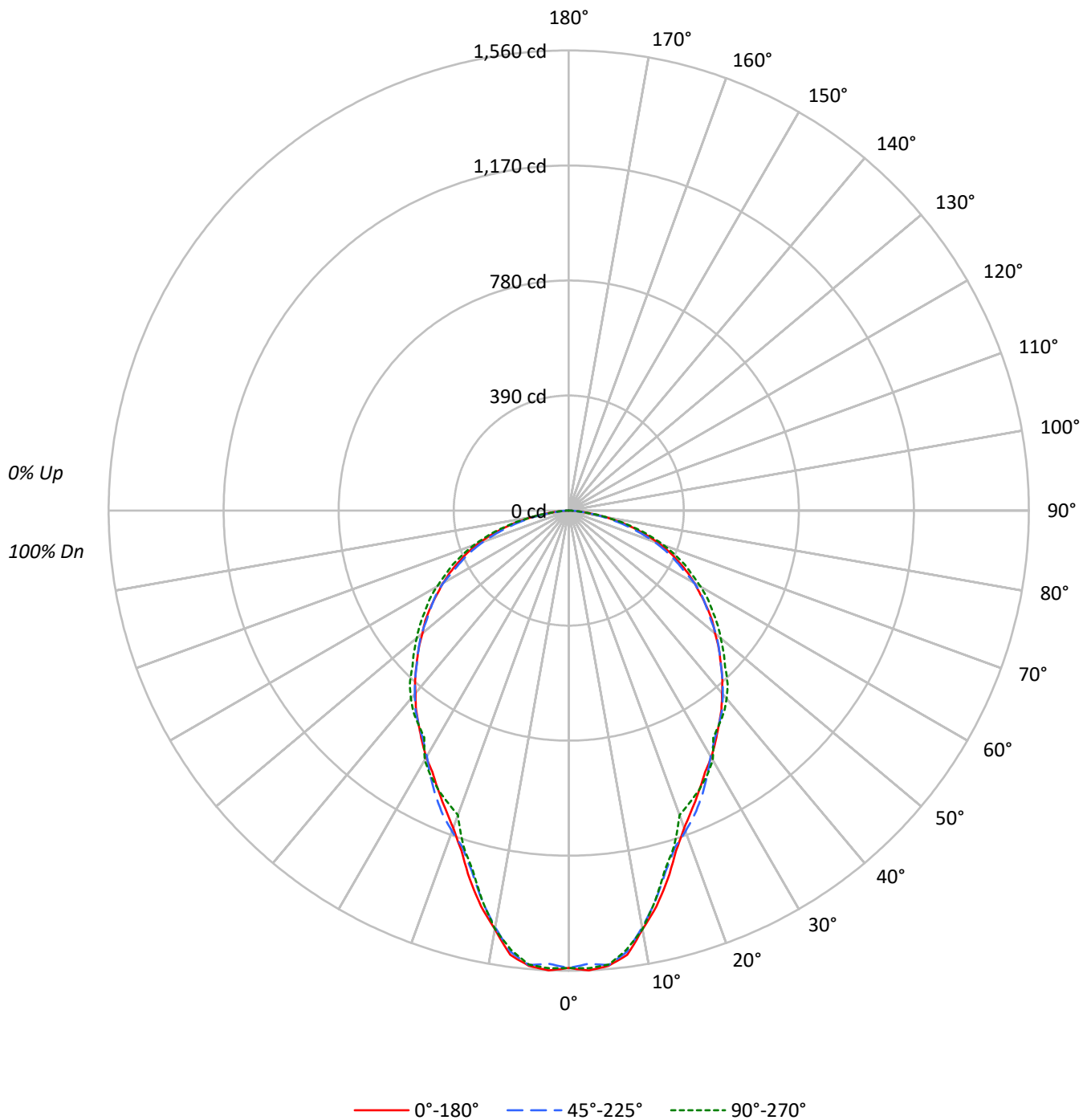
Lumens per Lamp: N/A
Luminaire Lumens: 3316.4 lumens
Efficiency: N/A
Efficacy: 75.4 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 44
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: P484980

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-1HI-27-120-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P484980

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-1HI-27-120-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°	4173	4173	4173
5°	4185	4178	4174
10°	3938	3920	3935
15°	3608	3529	3509
20°	3277	3314	3145
25°	3108	3170	3103
30°	3002	2989	3035
35°	2914	2914	2914
40°	2841	2853	2923
45°	2771	2768	2854
50°	2711	2731	2815
55°	2682	2671	2792
60°	2647	2643	2778
65°	2614	2532	2762
70°	2563	2417	2690
75°	2373	2146	2490
80°	1925	1750	1974
85°	1220	1096	1071



TEST NUMBER: P484980

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-1HI-27-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.0	4.3
10°-20°	360.1	10.9
20°-30°	486.3	14.7
30°-40°	556.9	16.8
40°-50°	570.4	17.2
50°-60°	517.6	15.6
60°-70°	403.9	12.2
70°-80°	229.1	6.9
80°-90°	48.1	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°	990.4	29.9
0°-40°	1547.3	46.7
0°-60°	2635.2	79.5
0°-90°	3316.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3316.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1551	1551	1551	1551	1551	
5°	1549	1531	1547	1550	1545	145
15°	1295	1299	1267	1273	1260	362
25°	1047	1060	1068	1042	1045	483
35°	887	889	887	888	887	556
45°	728	734	727	757	750	563
55°	572	571	569	590	595	511
65°	410	402	398	416	434	407
75°	228	211	206	218	240	239
85°	40	36	36	33	35	52
90°	0	0	0	0	0	



TEST NUMBER: P484980

CATALOG NUMBER: ORLG-12-4-INS-89BC-LD4-1HI-27-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1550.7	1550.7	1550.7	1550.7	1550.7
2.5°	1560.4	1548.3	1537.8	1554.8	1553.1
5°	1549.1	1531.4	1546.7	1549.9	1545.1
7.5°	1519.3	1508.0	1508.8	1502.3	1501.5
10°	1441.0	1447.5	1434.6	1445.9	1440.2
12.5°	1374.1	1378.2	1355.6	1360.4	1354.0
15°	1295.1	1299.1	1266.9	1273.3	1259.6
17.5°	1208.8	1223.3	1196.7	1204.8	1190.3
20°	1144.3	1156.4	1157.2	1144.3	1098.3
22.5°	1093.5	1105.6	1115.3	1076.6	1071.7
25°	1046.7	1060.4	1067.7	1041.9	1045.1
27.5°	999.9	1015.3	1015.3	1020.9	1013.7
30°	966.1	972.5	962.0	983.0	976.6
32.5°	925.8	928.2	919.3	934.6	912.0
35°	887.0	888.7	887.0	887.9	887.0
37.5°	850.0	845.9	853.2	848.3	863.7
40°	808.8	808.8	812.1	820.1	832.2
42.5°	770.9	774.2	770.1	792.7	797.5
45°	728.2	733.8	727.4	757.2	750.0
47.5°	689.5	691.9	690.3	710.4	712.1
50°	647.5	650.8	652.4	670.1	672.5
52.5°	612.9	612.1	606.4	632.2	636.3
55°	571.7	570.9	569.3	589.5	595.1
57.5°	529.8	530.6	534.6	545.9	559.6
60°	491.9	487.9	491.1	504.8	516.1
62.5°	453.2	445.9	438.7	461.3	471.7
65°	410.5	401.6	397.6	416.1	433.8
67.5°	370.9	356.4	354.0	366.9	387.9
70°	325.8	308.0	307.2	316.9	341.9
72.5°	275.8	260.5	256.4	269.3	291.9
75°	228.2	211.3	206.4	218.5	239.5
77.5°	176.6	162.9	159.7	166.1	183.1
80°	124.2	116.1	112.9	115.3	127.4
82.5°	78.2	72.6	71.0	70.2	76.6
85°	39.5	35.5	35.5	33.1	34.7
87.5°	12.1	11.3	10.5	8.1	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)