

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: P485031

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-2LO-30-120-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: P485031
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-LD4-2LO-30-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

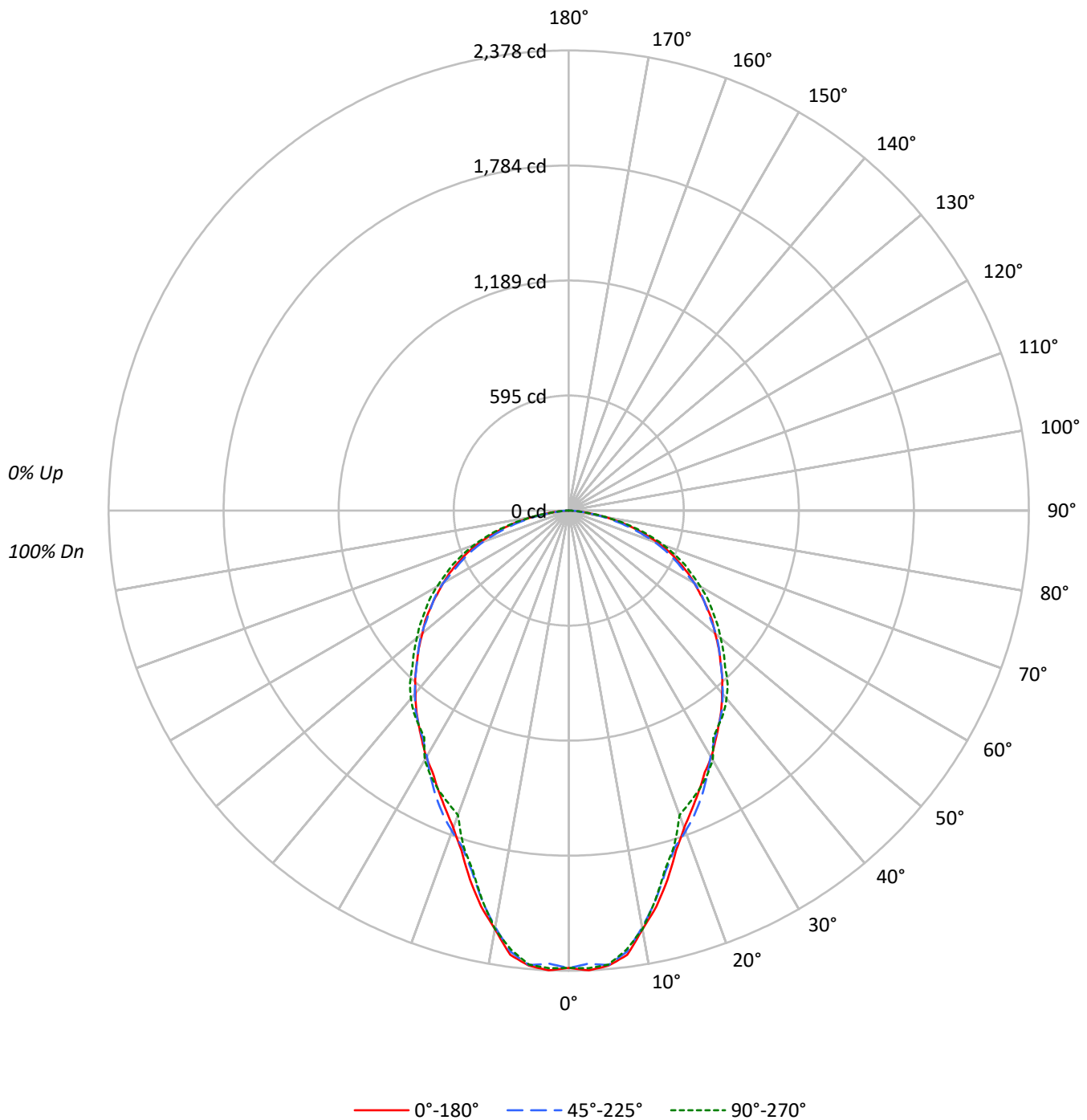
Lumens per Lamp: N/A
Luminaire Lumens: 5054.0 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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

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Luminous Intensity Polar Plot





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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°	6359	6359	6359
5°	6377	6367	6360
10°	6001	5974	5997
15°	5498	5378	5348
20°	4994	5050	4793
25°	4736	4831	4729
30°	4575	4556	4624
35°	4441	4441	4441
40°	4330	4347	4455
45°	4223	4219	4349
50°	4131	4162	4291
55°	4088	4070	4255
60°	4034	4028	4233
65°	3983	3858	4210
70°	3906	3684	4100
75°	3616	3271	3795
80°	2934	2665	3009
85°	1859	1670	1630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.5	4.3
10°-20°	548.7	10.9
20°-30°	741.1	14.7
30°-40°	848.6	16.8
40°-50°	869.3	17.2
50°-60°	788.7	15.6
60°-70°	615.6	12.2
70°-80°	349.2	6.9
80°-90°	73.3	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°	1509.3	29.9
0°-40°	2357.9	46.7
0°-60°	4015.9	79.5
0°-90°	5054.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5054.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2363	2363	2363	2363	2363	
5°	2361	2334	2357	2362	2355	221
15°	1974	1980	1931	1940	1920	552
25°	1595	1616	1627	1588	1593	736
35°	1352	1354	1352	1353	1352	847
45°	1110	1118	1108	1154	1143	858
55°	871	870	868	898	907	779
65°	626	612	606	634	661	620
75°	348	322	315	333	365	364
85°	60	54	54	50	53	80
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2363.2	2363.2	2363.2	2363.2	2363.2
2.5°	2378.0	2359.5	2343.5	2369.4	2366.9
5°	2360.8	2333.7	2357.1	2362.0	2354.6
7.5°	2315.3	2298.1	2299.3	2289.5	2288.2
10°	2196.1	2205.9	2186.2	2203.4	2194.8
12.5°	2094.1	2100.2	2065.8	2073.2	2063.4
15°	1973.6	1979.8	1930.6	1940.5	1919.6
17.5°	1842.1	1864.3	1823.7	1836.0	1813.9
20°	1743.8	1762.3	1763.5	1743.8	1673.8
22.5°	1666.4	1684.8	1699.6	1640.6	1633.2
25°	1595.1	1616.0	1627.1	1587.8	1592.7
27.5°	1523.9	1547.2	1547.2	1555.8	1544.7
30°	1472.2	1482.1	1466.1	1498.1	1488.2
32.5°	1410.8	1414.5	1401.0	1424.3	1389.9
35°	1351.8	1354.3	1351.8	1353.0	1351.8
37.5°	1295.3	1289.1	1300.2	1292.8	1316.2
40°	1232.6	1232.6	1237.5	1249.8	1268.2
42.5°	1174.8	1179.8	1173.6	1208.0	1215.4
45°	1109.7	1118.3	1108.5	1154.0	1142.9
47.5°	1050.7	1054.4	1052.0	1082.7	1085.1
50°	986.8	991.7	994.2	1021.2	1024.9
52.5°	934.0	932.7	924.1	963.5	969.6
55°	871.3	870.1	867.6	898.3	906.9
57.5°	807.4	808.6	814.8	832.0	852.9
60°	749.6	743.5	748.4	769.3	786.5
62.5°	690.7	679.6	668.5	702.9	718.9
65°	625.5	612.0	605.9	634.1	661.2
67.5°	565.3	543.2	539.5	559.2	591.1
70°	496.5	469.4	468.2	483.0	521.1
72.5°	420.3	396.9	390.8	410.5	444.9
75°	347.8	322.0	314.6	333.0	365.0
77.5°	269.1	248.2	243.3	253.2	279.0
80°	189.3	177.0	172.0	175.7	194.2
82.5°	119.2	110.6	108.1	106.9	116.7
85°	60.2	54.1	54.1	50.4	52.8
87.5°	18.4	17.2	16.0	12.3	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)