

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: P485074

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3STD-20-120-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: P485074
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-20-120-EDD-90
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

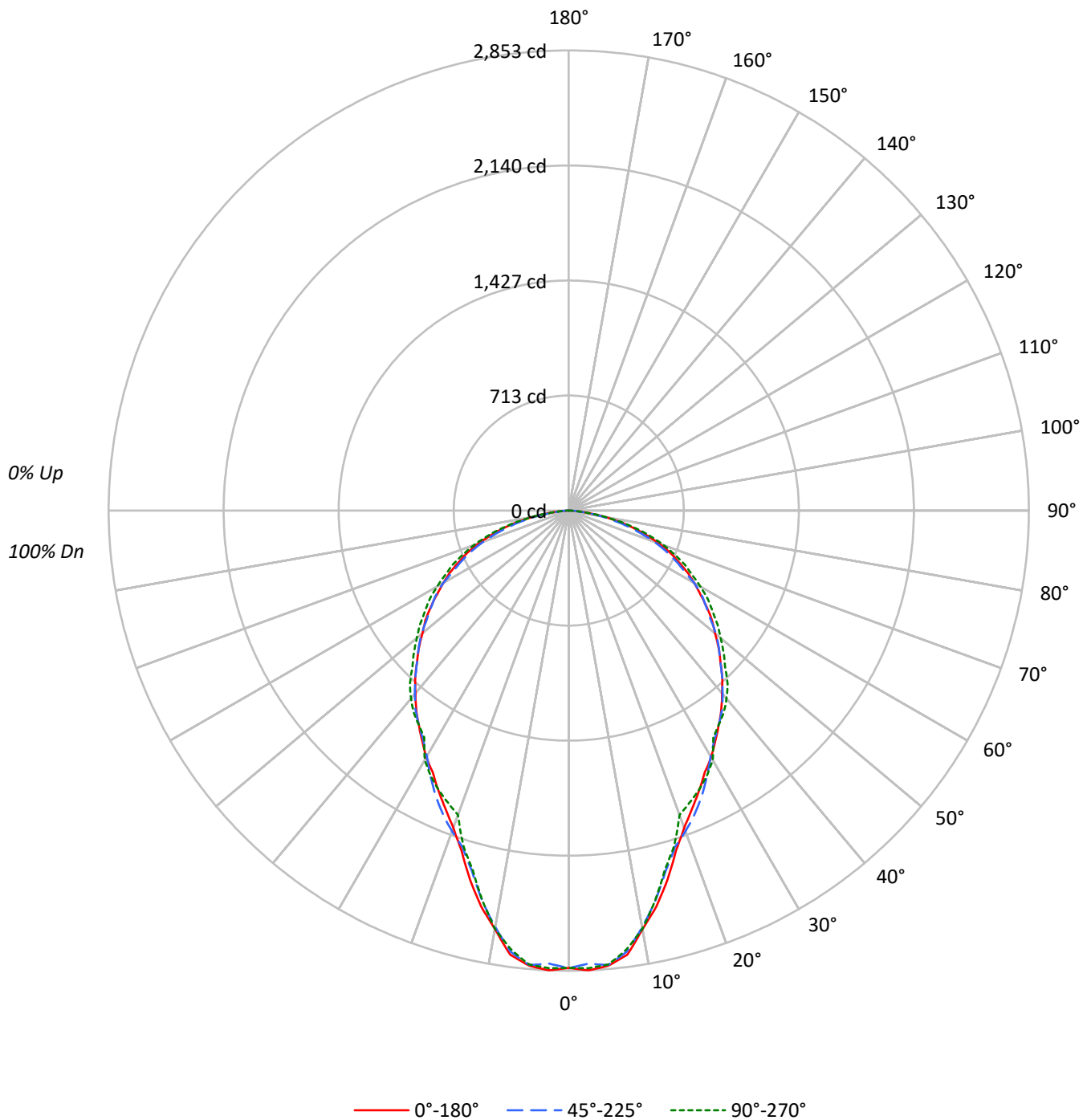
Lumens per Lamp: N/A
Luminaire Lumens: 6062.9 lumens
Efficiency: N/A
Efficacy: 60.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	7629	7629	7629
5°	7650	7638	7630
10°	7199	7167	7195
15°	6596	6452	6415
20°	5991	6058	5750
25°	5682	5796	5673
30°	5488	5465	5547
35°	5327	5327	5327
40°	5194	5215	5344
45°	5066	5061	5218
50°	4956	4993	5147
55°	4904	4883	5104
60°	4840	4832	5078
65°	4778	4628	5050
70°	4686	4419	4918
75°	4338	3924	4552
80°	3518	3199	3609
85°	2229	2004	1958



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.3	4.3
10°-20°	658.3	10.9
20°-30°	889.0	14.7
30°-40°	1018.0	16.8
40°-50°	1042.8	17.2
50°-60°	946.2	15.6
60°-70°	738.5	12.2
70°-80°	418.9	6.9
80°-90°	87.9	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°	1810.6	29.9
0°-40°	2828.6	46.7
0°-60°	4817.6	79.5
0°-90°	6062.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6062.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2835	2835	2835	2835	2835	
5°	2832	2800	2828	2834	2825	265
15°	2368	2375	2316	2328	2303	662
25°	1914	1939	1952	1905	1911	883
35°	1622	1625	1622	1623	1622	1016
45°	1331	1342	1330	1384	1371	1029
55°	1045	1044	1041	1078	1088	934
65°	750	734	727	761	793	744
75°	417	386	377	400	438	436
85°	72	65	65	60	63	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2835.0	2835.0	2835.0	2835.0	2835.0
2.5°	2852.7	2830.5	2811.4	2842.3	2839.4
5°	2832.0	2799.6	2827.6	2833.5	2824.6
7.5°	2777.5	2756.8	2758.3	2746.5	2745.0
10°	2634.5	2646.3	2622.7	2643.3	2633.0
12.5°	2512.1	2519.5	2478.2	2487.0	2475.2
15°	2367.6	2375.0	2316.0	2327.8	2302.8
17.5°	2209.9	2236.4	2187.8	2202.5	2176.0
20°	2091.9	2114.1	2115.5	2091.9	2007.9
22.5°	1999.1	2021.2	2038.9	1968.1	1959.3
25°	1913.6	1938.6	1951.9	1904.7	1910.6
27.5°	1828.1	1856.1	1856.1	1866.4	1853.1
30°	1766.1	1777.9	1758.8	1797.1	1785.3
32.5°	1692.4	1696.8	1680.6	1708.6	1667.4
35°	1621.7	1624.6	1621.7	1623.1	1621.7
37.5°	1553.8	1546.5	1559.7	1550.9	1578.9
40°	1478.7	1478.7	1484.6	1499.3	1521.4
42.5°	1409.4	1415.3	1407.9	1449.2	1458.0
45°	1331.2	1341.6	1329.8	1384.3	1371.0
47.5°	1260.5	1264.9	1261.9	1298.8	1301.8
50°	1183.8	1189.7	1192.7	1225.1	1229.5
52.5°	1120.4	1118.9	1108.6	1155.8	1163.2
55°	1045.2	1043.8	1040.8	1077.7	1088.0
57.5°	968.6	970.0	977.4	998.1	1023.1
60°	899.3	891.9	897.8	922.9	943.5
62.5°	828.5	815.3	802.0	843.3	862.4
65°	750.4	734.2	726.8	760.7	793.1
67.5°	678.2	651.6	647.2	670.8	709.1
70°	595.6	563.2	561.7	579.4	625.1
72.5°	504.2	476.2	468.8	492.4	533.7
75°	417.2	386.3	377.4	399.5	437.8
77.5°	322.9	297.8	291.9	303.7	334.7
80°	227.0	212.3	206.4	210.8	232.9
82.5°	143.0	132.7	129.7	128.3	140.1
85°	72.2	64.9	64.9	60.4	63.4
87.5°	22.1	20.6	19.2	14.7	16.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)