

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: P485049

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-2STD-50-120-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: P485049
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-LD4-2STD-50-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

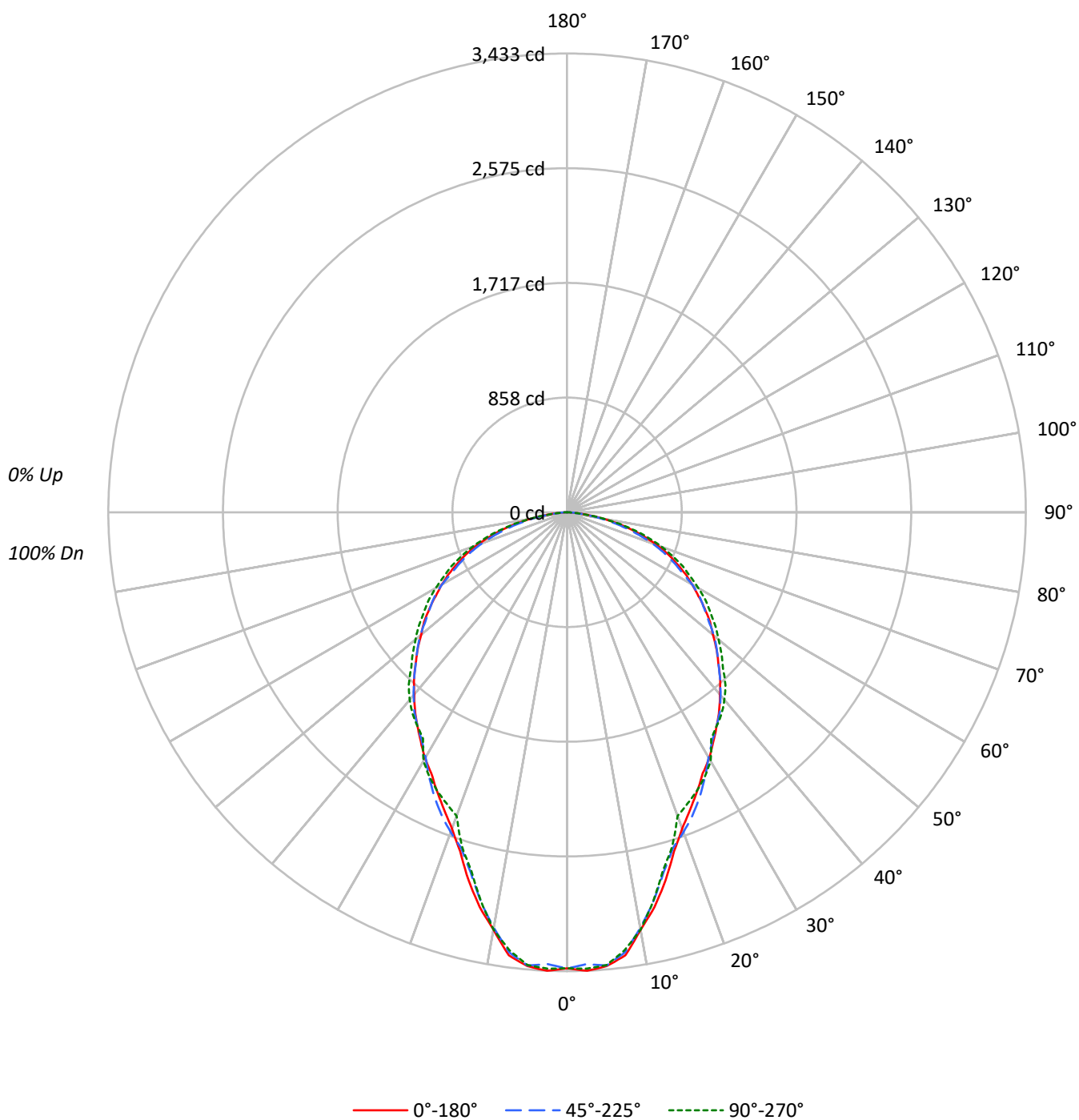
Lumens per Lamp: N/A
Luminaire Lumens: 7296.5 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	9181	9181	9181
5°	9206	9192	9183
10°	8663	8625	8658
15°	7938	7765	7721
20°	7210	7291	6920
25°	6838	6975	6827
30°	6605	6577	6676
35°	6411	6411	6411
40°	6251	6276	6432
45°	6097	6090	6279
50°	5964	6009	6195
55°	5902	5877	6143
60°	5825	5815	6111
65°	5750	5570	6078
70°	5640	5319	5919
75°	5220	4722	5478
80°	4234	3849	4344
85°	2683	2411	2356



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.9	4.3
10°-20°	792.2	10.9
20°-30°	1069.9	14.7
30°-40°	1225.2	16.8
40°-50°	1255.0	17.2
50°-60°	1138.7	15.6
60°-70°	888.8	12.2
70°-80°	504.1	6.9
80°-90°	105.8	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°	2179.0	29.9
0°-40°	3404.2	46.7
0°-60°	5797.9	79.5
0°-90°	7296.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7296.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3412	3412	3412	3412	3412	
5°	3408	3369	3403	3410	3399	318
15°	2849	2858	2787	2802	2771	796
25°	2303	2333	2349	2292	2299	1063
35°	1952	1955	1952	1953	1952	1223
45°	1602	1614	1600	1666	1650	1239
55°	1258	1256	1253	1297	1309	1124
65°	903	884	875	916	954	895
75°	502	465	454	481	527	525
85°	87	78	78	73	76	115
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3411.8	3411.8	3411.8	3411.8	3411.8
2.5°	3433.1	3406.5	3383.4	3420.7	3417.1
5°	3408.2	3369.2	3402.9	3410.0	3399.4
7.5°	3342.6	3317.8	3319.5	3305.3	3303.6
10°	3170.5	3184.7	3156.3	3181.1	3168.7
12.5°	3023.2	3032.1	2982.4	2993.1	2978.9
15°	2849.4	2858.2	2787.3	2801.5	2771.3
17.5°	2659.5	2691.5	2632.9	2650.7	2618.7
20°	2517.6	2544.2	2546.0	2517.6	2416.5
22.5°	2405.8	2432.4	2453.7	2368.6	2357.9
25°	2302.9	2333.1	2349.0	2292.3	2299.4
27.5°	2200.0	2233.7	2233.7	2246.1	2230.2
30°	2125.5	2139.7	2116.6	2162.7	2148.6
32.5°	2036.8	2042.1	2022.6	2056.3	2006.6
35°	1951.6	1955.2	1951.6	1953.4	1951.6
37.5°	1870.0	1861.1	1877.1	1866.5	1900.2
40°	1779.5	1779.5	1786.6	1804.4	1831.0
42.5°	1696.1	1703.2	1694.4	1744.0	1754.7
45°	1602.1	1614.5	1600.3	1666.0	1650.0
47.5°	1516.9	1522.3	1518.7	1563.1	1566.6
50°	1424.7	1431.8	1435.3	1474.4	1479.7
52.5°	1348.4	1346.6	1334.2	1391.0	1399.8
55°	1257.9	1256.1	1252.6	1296.9	1309.4
57.5°	1165.6	1167.4	1176.3	1201.1	1231.3
60°	1082.3	1073.4	1080.5	1110.6	1135.5
62.5°	997.1	981.1	965.2	1014.8	1037.9
65°	903.1	883.6	874.7	915.5	954.5
67.5°	816.1	784.2	778.9	807.3	853.4
70°	716.8	677.7	676.0	697.3	752.3
72.5°	606.8	573.1	564.2	592.6	642.3
75°	502.1	464.8	454.2	480.8	526.9
77.5°	388.5	358.4	351.3	365.5	402.7
80°	273.2	255.5	248.4	253.7	280.3
82.5°	172.1	159.7	156.1	154.4	168.5
85°	86.9	78.1	78.1	72.7	76.3
87.5°	26.6	24.8	23.1	17.7	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)