

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: P485007

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-1STD-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: P485007
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-LD4-1STD-30-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

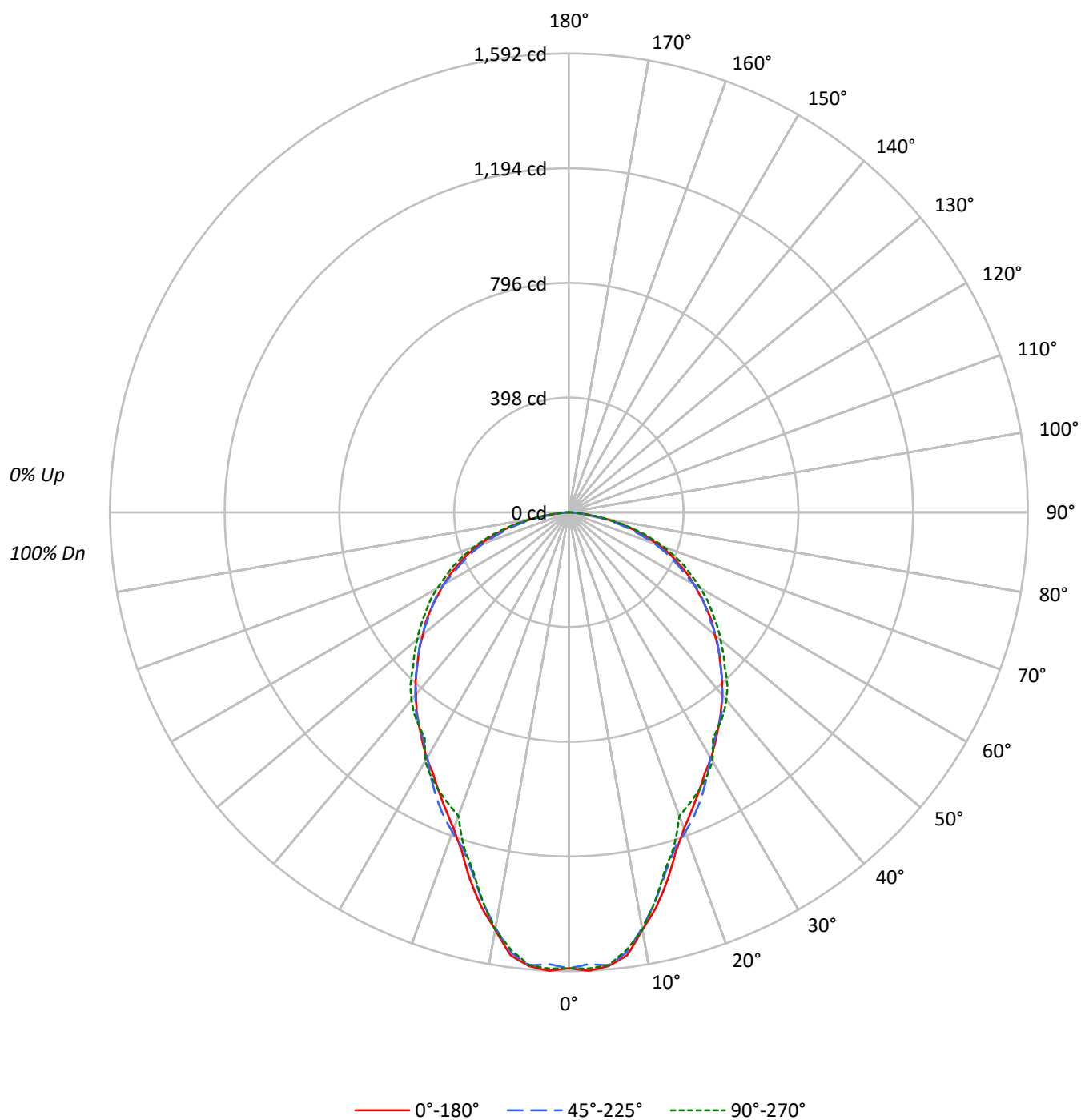
Lumens per Lamp: N/A
Luminaire Lumens: 3384.1 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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					10
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°	4258	4258	4258
5°	4270	4263	4259
10°	4018	4000	4016
15°	3682	3601	3581
20°	3344	3381	3209
25°	3171	3235	3166
30°	3063	3050	3096
35°	2974	2974	2974
40°	2899	2911	2983
45°	2828	2825	2912
50°	2766	2787	2873
55°	2737	2725	2849
60°	2702	2697	2834
65°	2667	2583	2819
70°	2615	2467	2745
75°	2421	2191	2541
80°	1963	1785	2015
85°	1244	1118	1093



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.0	4.3
10°-20°	367.4	10.9
20°-30°	496.2	14.7
30°-40°	568.2	16.8
40°-50°	582.1	17.2
50°-60°	528.1	15.6
60°-70°	412.2	12.2
70°-80°	233.8	6.9
80°-90°	49.1	1.4
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°	1010.6	29.9
0°-40°	1578.9	46.7
0°-60°	2689.1	79.5
0°-90°	3384.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3384.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1582	1582	1582	1582	1582	
5°	1581	1563	1578	1582	1577	148
15°	1322	1326	1293	1299	1285	369
25°	1068	1082	1090	1063	1066	493
35°	905	907	905	906	905	567
45°	743	749	742	773	765	575
55°	583	583	581	602	607	521
65°	419	410	406	425	443	415
75°	233	216	211	223	244	244
85°	40	36	36	34	35	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1582.4	1582.4	1582.4	1582.4	1582.4
2.5°	1592.3	1579.9	1569.2	1586.5	1584.8
5°	1580.7	1562.6	1578.3	1581.6	1576.6
7.5°	1550.3	1538.8	1539.6	1533.0	1532.2
10°	1470.5	1477.1	1463.9	1475.4	1469.6
12.5°	1402.2	1406.3	1383.2	1388.2	1381.6
15°	1321.5	1325.6	1292.7	1299.3	1285.3
17.5°	1233.5	1248.3	1221.1	1229.4	1214.6
20°	1167.7	1180.0	1180.8	1167.7	1120.7
22.5°	1115.8	1128.2	1138.0	1098.5	1093.6
25°	1068.1	1082.1	1089.5	1063.1	1066.4
27.5°	1020.4	1036.0	1036.0	1041.8	1034.3
30°	985.8	992.4	981.7	1003.1	996.5
32.5°	944.7	947.1	938.1	953.7	930.7
35°	905.2	906.8	905.2	906.0	905.2
37.5°	867.3	863.2	870.6	865.7	881.3
40°	825.3	825.3	828.6	836.9	849.2
42.5°	786.7	790.0	785.8	808.9	813.8
45°	743.1	748.8	742.2	772.7	765.3
47.5°	703.6	706.0	704.4	724.9	726.6
50°	660.8	664.1	665.7	683.8	686.3
52.5°	625.4	624.6	618.8	645.1	649.2
55°	583.4	582.6	580.9	601.5	607.3
57.5°	540.6	541.4	545.6	557.1	571.1
60°	502.0	497.8	501.1	515.1	526.6
62.5°	462.5	455.0	447.6	470.7	481.4
65°	418.8	409.8	405.7	424.6	442.7
67.5°	378.5	363.7	361.2	374.4	395.8
70°	332.4	314.3	313.5	323.4	348.9
72.5°	281.4	265.8	261.7	274.8	297.9
75°	232.9	215.6	210.7	223.0	244.4
77.5°	180.2	166.2	162.9	169.5	186.8
80°	126.7	118.5	115.2	117.7	130.0
82.5°	79.8	74.1	72.4	71.6	78.2
85°	40.3	36.2	36.2	33.7	35.4
87.5°	12.3	11.5	10.7	8.2	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)