

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: P485039

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-2STD-20-120-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: P485039
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-20-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

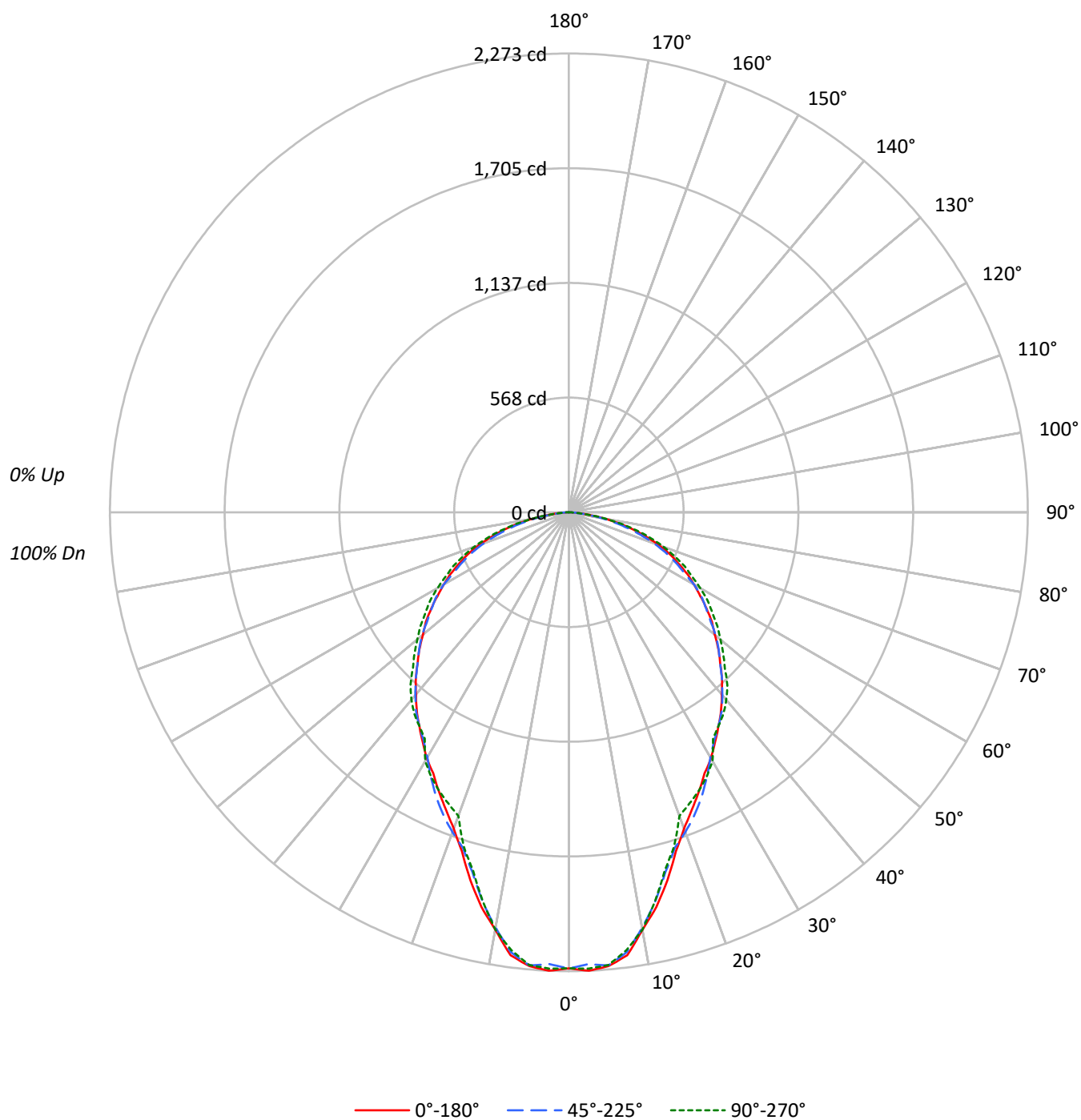
Lumens per Lamp: N/A
Luminaire Lumens: 4830.5 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	6078	6078	6078
5°	6095	6085	6079
10°	5735	5710	5732
15°	5255	5141	5111
20°	4773	4827	4581
25°	4527	4617	4520
30°	4372	4354	4420
35°	4244	4244	4244
40°	4138	4155	4258
45°	4036	4032	4157
50°	3949	3978	4101
55°	3907	3890	4067
60°	3856	3850	4046
65°	3807	3687	4024
70°	3733	3521	3918
75°	3456	3126	3627
80°	2803	2548	2876
85°	1778	1596	1559



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.8	4.3
10°-20°	524.5	10.9
20°-30°	708.3	14.7
30°-40°	811.1	16.8
40°-50°	830.8	17.2
50°-60°	753.9	15.6
60°-70°	588.4	12.2
70°-80°	333.7	6.9
80°-90°	70.0	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°	1442.6	29.9
0°-40°	2253.7	46.7
0°-60°	3838.4	79.5
0°-90°	4830.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4830.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2259	2259	2259	2259	2259	
5°	2256	2230	2253	2258	2250	211
15°	1886	1892	1845	1855	1835	527
25°	1525	1545	1555	1518	1522	704
35°	1292	1294	1292	1293	1292	809
45°	1061	1069	1060	1103	1092	820
55°	833	832	829	859	867	744
65°	598	585	579	606	632	593
75°	332	308	301	318	349	348
85°	58	52	52	48	50	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2258.7	2258.7	2258.7	2258.7	2258.7
2.5°	2272.8	2255.2	2239.9	2264.6	2262.2
5°	2256.4	2230.5	2252.8	2257.5	2250.5
7.5°	2212.9	2196.4	2197.6	2188.2	2187.1
10°	2099.0	2108.4	2089.6	2106.0	2097.8
12.5°	2001.5	2007.3	1974.5	1981.5	1972.1
15°	1886.4	1892.2	1845.3	1854.6	1834.7
17.5°	1760.7	1781.8	1743.1	1754.8	1733.7
20°	1666.7	1684.3	1685.5	1666.7	1599.8
22.5°	1592.7	1610.3	1624.4	1568.1	1561.0
25°	1524.6	1544.6	1555.1	1517.5	1522.2
27.5°	1456.5	1478.8	1478.8	1487.0	1476.4
30°	1407.1	1416.5	1401.3	1431.8	1422.4
32.5°	1348.4	1351.9	1339.0	1361.3	1328.4
35°	1292.0	1294.4	1292.0	1293.2	1292.0
37.5°	1238.0	1232.1	1242.7	1235.6	1258.0
40°	1178.1	1178.1	1182.8	1194.5	1212.2
42.5°	1122.9	1127.6	1121.7	1154.6	1161.7
45°	1060.6	1068.9	1059.5	1102.9	1092.4
47.5°	1004.3	1007.8	1005.4	1034.8	1037.1
50°	943.2	947.9	950.2	976.1	979.6
52.5°	892.7	891.5	883.3	920.9	926.7
55°	832.8	831.6	829.2	858.6	866.8
57.5°	771.7	772.9	778.7	795.2	815.2
60°	716.5	710.6	715.3	735.3	751.7
62.5°	660.1	649.5	639.0	671.9	687.1
65°	597.9	584.9	579.1	606.1	631.9
67.5°	540.3	519.2	515.6	534.4	565.0
70°	474.5	448.7	447.5	461.6	498.0
72.5°	401.7	379.4	373.5	392.3	425.2
75°	332.4	307.7	300.7	318.3	348.8
77.5°	257.2	237.3	232.6	242.0	266.6
80°	180.9	169.1	164.4	168.0	185.6
82.5°	113.9	105.7	103.4	102.2	111.6
85°	57.6	51.7	51.7	48.2	50.5
87.5°	17.6	16.4	15.3	11.7	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)