

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: P485083

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3STD-40-120-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: P485083
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-40-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

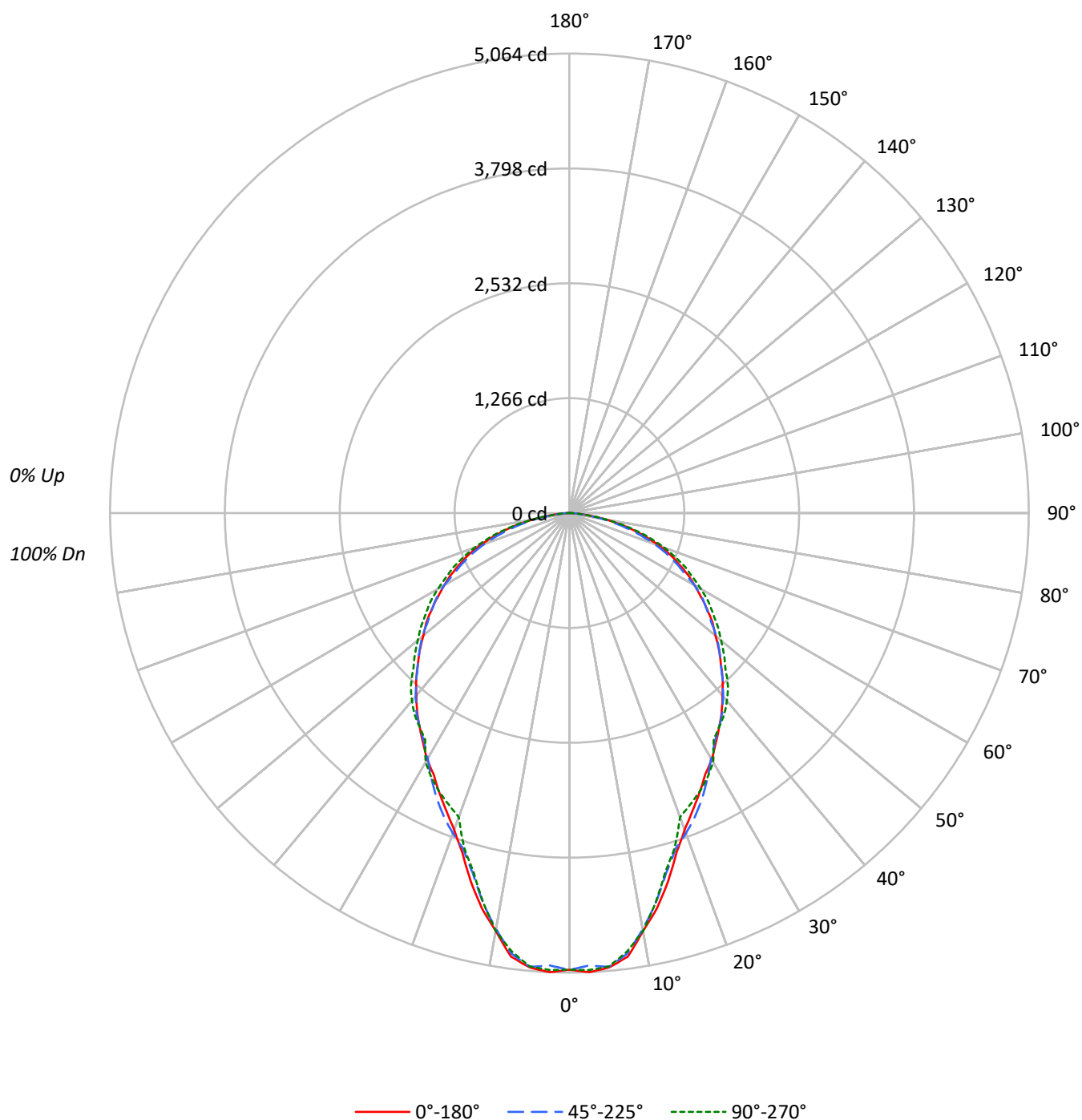
Lumens per Lamp: N/A
Luminaire Lumens: 10762.1 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	13542	13542	13542
5°	13579	13558	13544
10°	12778	12721	12771
15°	11708	11453	11388
20°	10634	10754	10207
25°	10085	10288	10070
30°	9741	9701	9847
35°	9456	9456	9456
40°	9220	9257	9487
45°	8993	8983	9262
50°	8797	8863	9137
55°	8705	8668	9061
60°	8591	8577	9014
65°	8481	8215	8965
70°	8318	7844	8730
75°	7700	6965	8081
80°	6245	5678	6408
85°	3958	3554	3473



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	467.4	4.3
10°-20°	1168.5	10.9
20°-30°	1578.1	14.7
30°-40°	1807.1	16.8
40°-50°	1851.0	17.2
50°-60°	1679.6	15.6
60°-70°	1310.9	12.2
70°-80°	743.5	6.9
80°-90°	156.1	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°	3213.9	29.9
0°-40°	5021.1	46.7
0°-60°	8551.7	79.5
0°-90°	10762.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10762.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5032	5032	5032	5032	5032	
5°	5027	4970	5019	5030	5014	470
15°	4203	4216	4111	4132	4088	1175
25°	3397	3441	3465	3381	3392	1567
35°	2879	2884	2879	2881	2879	1803
45°	2363	2381	2360	2457	2434	1827
55°	1855	1853	1848	1913	1931	1658
65°	1332	1303	1290	1350	1408	1320
75°	741	686	670	709	777	775
85°	128	115	115	107	112	169
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5032.3	5032.3	5032.3	5032.3	5032.3
2.5°	5063.7	5024.4	4990.4	5045.4	5040.1
5°	5027.0	4969.5	5019.2	5029.7	5014.0
7.5°	4930.2	4893.6	4896.2	4875.3	4872.6
10°	4676.4	4697.3	4655.4	4692.1	4673.8
12.5°	4459.2	4472.3	4399.0	4414.7	4393.7
15°	4202.7	4215.8	4111.1	4132.1	4087.6
17.5°	3922.7	3969.8	3883.5	3909.6	3862.5
20°	3713.4	3752.6	3755.2	3713.4	3564.2
22.5°	3548.5	3587.7	3619.2	3493.5	3477.8
25°	3396.7	3441.2	3464.8	3381.0	3391.5
27.5°	3244.9	3294.7	3294.7	3313.0	3289.4
30°	3135.0	3156.0	3121.9	3190.0	3169.0
32.5°	3004.2	3012.0	2983.2	3033.0	2959.7
35°	2878.6	2883.8	2878.6	2881.2	2878.6
37.5°	2758.2	2745.1	2768.7	2753.0	2802.7
40°	2624.7	2624.7	2635.2	2661.4	2700.6
42.5°	2501.7	2512.2	2499.1	2572.4	2588.1
45°	2363.0	2381.4	2360.4	2457.3	2433.7
47.5°	2237.4	2245.3	2240.1	2305.5	2310.7
50°	2101.4	2111.8	2117.1	2174.6	2182.5
52.5°	1988.8	1986.2	1967.9	2051.6	2064.7
55°	1855.4	1852.8	1847.5	1912.9	1931.3
57.5°	1719.3	1721.9	1735.0	1771.6	1816.1
60°	1596.3	1583.2	1593.7	1638.2	1674.8
62.5°	1470.7	1447.1	1423.6	1496.9	1530.9
65°	1332.0	1303.2	1290.1	1350.3	1407.9
67.5°	1203.8	1156.7	1148.8	1190.7	1258.7
70°	1057.2	999.6	997.0	1028.4	1109.6
72.5°	895.0	845.3	832.2	874.0	947.3
75°	740.6	685.6	669.9	709.2	777.2
77.5°	573.1	528.6	518.1	539.1	594.0
80°	403.0	376.8	366.4	374.2	413.5
82.5°	253.8	235.5	230.3	227.7	248.6
85°	128.2	115.1	115.1	107.3	112.5
87.5°	39.3	36.6	34.0	26.2	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)