

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: P485035

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-2LO-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: P485035
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-LD4-2LO-40-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

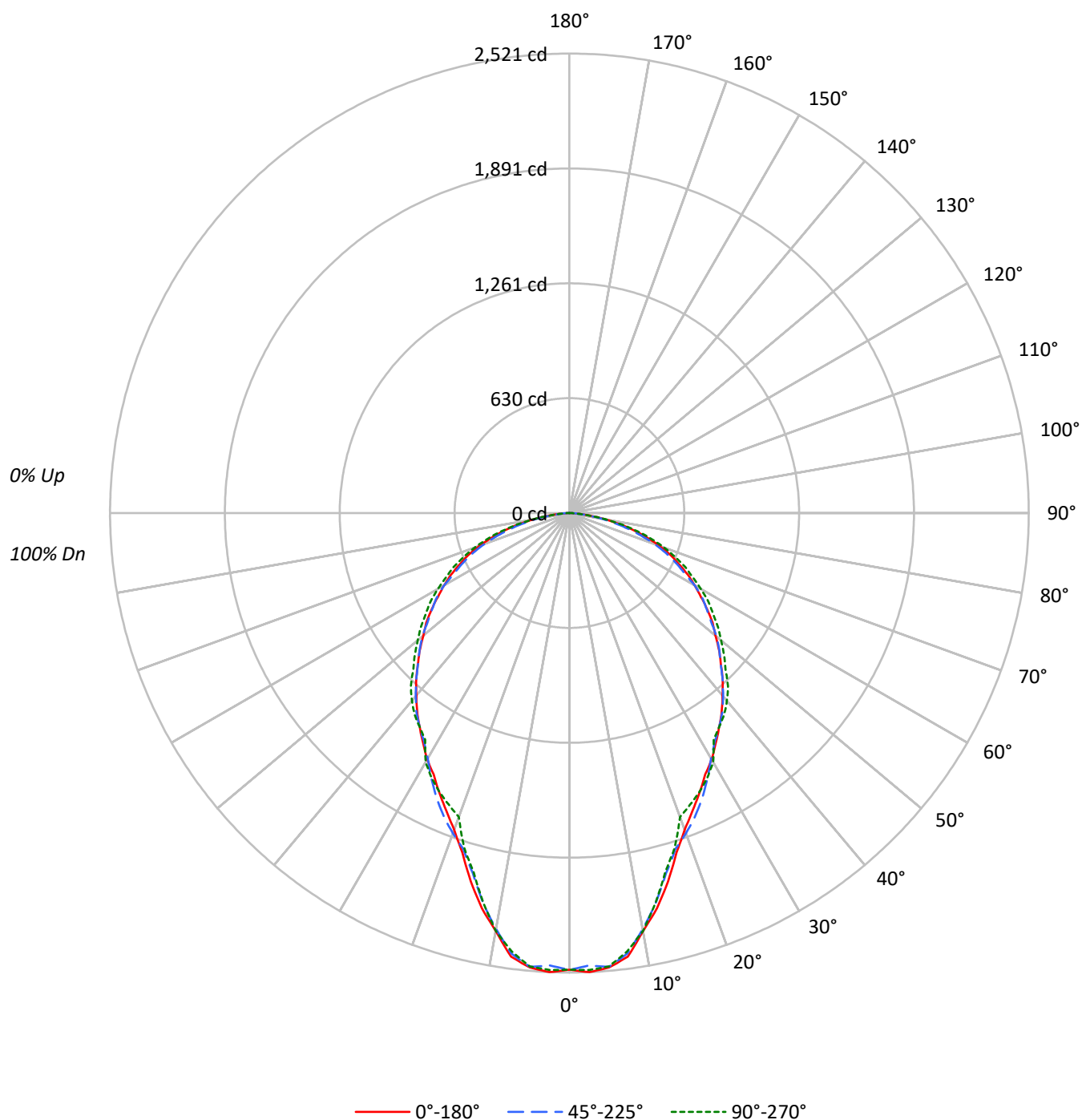
Lumens per Lamp: N/A
Luminaire Lumens: 5357.6 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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°	6741	6741	6741
5°	6760	6750	6743
10°	6361	6333	6358
15°	5829	5702	5669
20°	5294	5353	5081
25°	5021	5121	5013
30°	4850	4829	4902
35°	4708	4708	4708
40°	4590	4608	4723
45°	4477	4472	4611
50°	4379	4412	4549
55°	4333	4315	4510
60°	4277	4270	4487
65°	4222	4090	4463
70°	4141	3905	4346
75°	3833	3467	4023
80°	3109	2827	3189
85°	1970	1769	1729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.7	4.3
10°-20°	581.7	10.9
20°-30°	785.6	14.7
30°-40°	899.6	16.8
40°-50°	921.5	17.2
50°-60°	836.1	15.6
60°-70°	652.6	12.2
70°-80°	370.1	6.9
80°-90°	77.7	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°	1600.0	29.9
0°-40°	2499.6	46.7
0°-60°	4257.2	79.5
0°-90°	5357.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5357.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2505	2505	2505	2505	2505	
5°	2503	2474	2499	2504	2496	234
15°	2092	2099	2047	2057	2035	585
25°	1691	1713	1725	1683	1688	780
35°	1433	1436	1433	1434	1433	898
45°	1176	1186	1175	1223	1212	910
55°	924	922	920	952	961	825
65°	663	649	642	672	701	657
75°	369	341	334	353	387	386
85°	64	57	57	53	56	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2505.2	2505.2	2505.2	2505.2	2505.2
2.5°	2520.8	2501.3	2484.3	2511.7	2509.1
5°	2502.6	2473.9	2498.7	2503.9	2496.1
7.5°	2454.4	2436.1	2437.4	2427.0	2425.7
10°	2328.0	2338.4	2317.6	2335.8	2326.7
12.5°	2219.9	2226.4	2189.9	2197.7	2187.3
15°	2092.2	2098.7	2046.6	2057.0	2034.9
17.5°	1952.8	1976.3	1933.3	1946.3	1922.8
20°	1848.6	1868.1	1869.4	1848.6	1774.3
22.5°	1766.5	1786.1	1801.7	1739.2	1731.3
25°	1691.0	1713.1	1724.8	1683.1	1688.4
27.5°	1615.4	1640.2	1640.2	1649.3	1637.5
30°	1560.7	1571.1	1554.2	1588.0	1577.6
32.5°	1495.5	1499.5	1485.1	1509.9	1473.4
35°	1433.0	1435.6	1433.0	1434.3	1433.0
37.5°	1373.1	1366.6	1378.3	1370.5	1395.2
40°	1306.6	1306.6	1311.9	1324.9	1344.4
42.5°	1245.4	1250.6	1244.1	1280.6	1288.4
45°	1176.4	1185.5	1175.1	1223.3	1211.5
47.5°	1113.8	1117.8	1115.1	1147.7	1150.3
50°	1046.1	1051.3	1053.9	1082.6	1086.5
52.5°	990.1	988.8	979.7	1021.3	1027.9
55°	923.6	922.3	919.7	952.3	961.4
57.5°	855.9	857.2	863.7	882.0	904.1
60°	794.7	788.2	793.4	815.5	833.8
62.5°	732.1	720.4	708.7	745.2	762.1
65°	663.1	648.8	642.3	672.2	700.9
67.5°	599.3	575.8	571.9	592.7	626.6
70°	526.3	497.6	496.3	512.0	552.4
72.5°	445.5	420.8	414.3	435.1	471.6
75°	368.7	341.3	333.5	353.0	386.9
77.5°	285.3	263.2	257.9	268.4	295.7
80°	200.6	187.6	182.4	186.3	205.8
82.5°	126.4	117.2	114.6	113.3	123.8
85°	63.8	57.3	57.3	53.4	56.0
87.5°	19.5	18.2	16.9	13.0	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)