

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: P485047

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-2STD-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: P485047
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-40-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

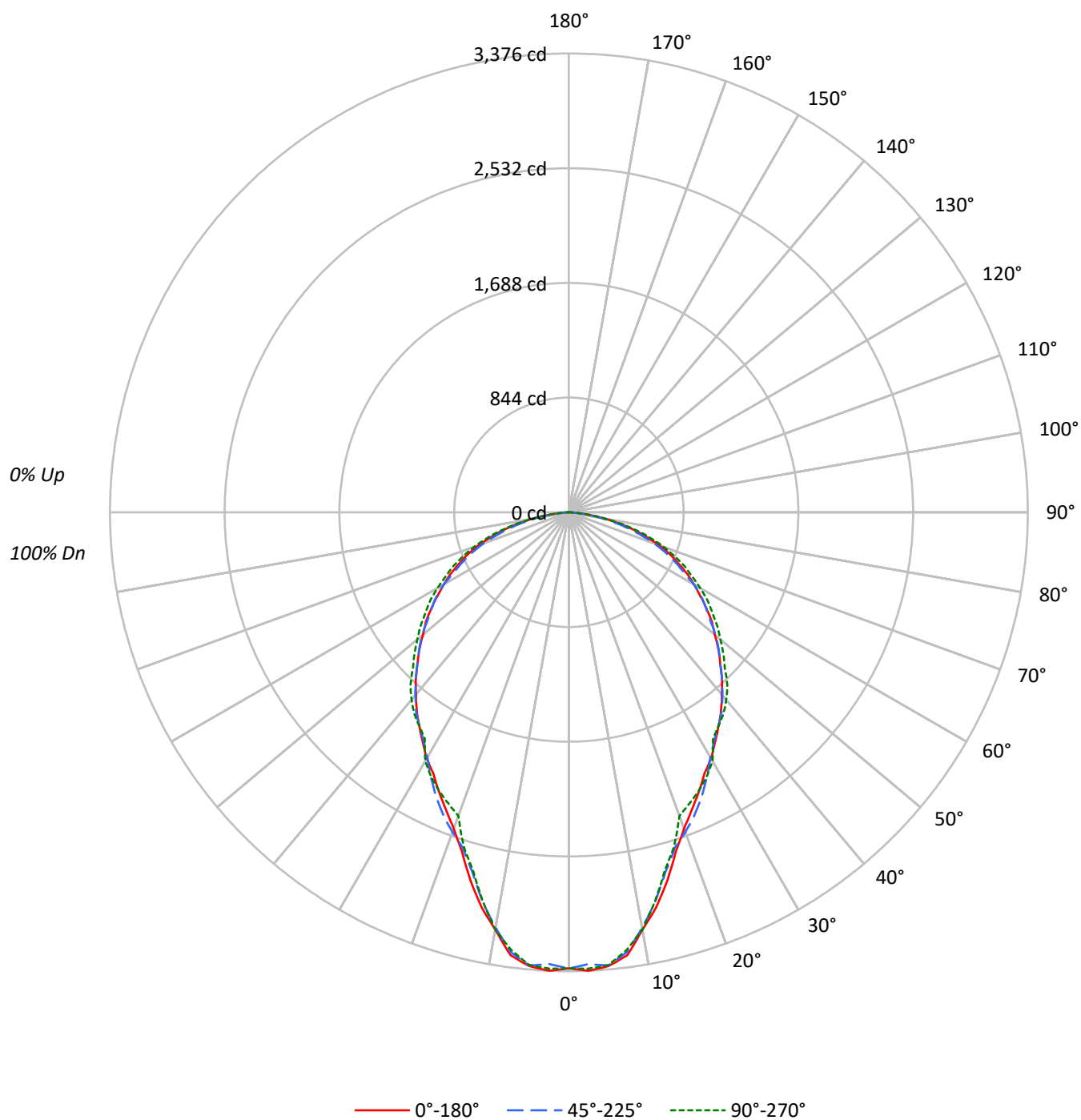
Lumens per Lamp: N/A
Luminaire Lumens: 7174.7 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	9028	9028	9028
5°	9053	9039	9029
10°	8519	8481	8514
15°	7806	7635	7592
20°	7089	7169	6804
25°	6724	6858	6713
30°	6494	6467	6565
35°	6304	6304	6304
40°	6147	6171	6324
45°	5995	5989	6175
50°	5865	5909	6091
55°	5803	5779	6040
60°	5727	5718	6009
65°	5654	5477	5976
70°	5545	5230	5820
75°	5133	4643	5387
80°	4164	3784	4271
85°	2640	2371	2316



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.6	4.3
10°-20°	779.0	10.9
20°-30°	1052.0	14.7
30°-40°	1204.7	16.8
40°-50°	1234.0	17.2
50°-60°	1119.7	15.6
60°-70°	873.9	12.2
70°-80°	495.7	6.9
80°-90°	104.0	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°	2142.6	29.9
0°-40°	3347.3	46.7
0°-60°	5701.1	79.5
0°-90°	7174.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7174.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3355	3355	3355	3355	3355	
5°	3351	3313	3346	3353	3343	313
15°	2802	2810	2741	2755	2725	783
25°	2264	2294	2310	2254	2261	1045
35°	1919	1922	1919	1921	1919	1202
45°	1575	1588	1574	1638	1622	1218
55°	1237	1235	1232	1275	1288	1105
65°	888	869	860	900	939	880
75°	494	457	447	473	518	516
85°	86	77	77	72	75	113
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3354.8	3354.8	3354.8	3354.8	3354.8
2.5°	3375.8	3349.6	3326.9	3363.6	3360.1
5°	3351.3	3313.0	3346.1	3353.1	3342.6
7.5°	3286.8	3262.4	3264.1	3250.2	3248.4
10°	3117.6	3131.5	3103.6	3128.0	3115.8
12.5°	2972.8	2981.5	2932.6	2943.1	2929.2
15°	2801.8	2810.5	2740.7	2754.7	2725.0
17.5°	2615.1	2646.5	2589.0	2606.4	2575.0
20°	2475.6	2501.7	2503.5	2475.6	2376.1
22.5°	2365.7	2391.8	2412.8	2329.0	2318.5
25°	2264.5	2294.1	2309.8	2254.0	2261.0
27.5°	2163.3	2196.4	2196.4	2208.6	2192.9
30°	2090.0	2104.0	2081.3	2126.6	2112.7
32.5°	2002.8	2008.0	1988.8	2022.0	1973.1
35°	1919.0	1922.5	1919.0	1920.8	1919.0
37.5°	1838.8	1830.1	1845.8	1835.3	1868.4
40°	1749.8	1749.8	1756.8	1774.2	1800.4
42.5°	1667.8	1674.8	1666.1	1714.9	1725.4
45°	1575.4	1587.6	1573.6	1638.2	1622.5
47.5°	1491.6	1496.9	1493.4	1537.0	1540.5
50°	1400.9	1407.9	1411.4	1449.7	1455.0
52.5°	1325.9	1324.1	1311.9	1367.8	1376.5
55°	1236.9	1235.2	1231.7	1275.3	1287.5
57.5°	1146.2	1147.9	1156.7	1181.1	1210.7
60°	1064.2	1055.5	1062.5	1092.1	1116.5
62.5°	980.5	964.8	949.1	997.9	1020.6
65°	888.0	868.8	860.1	900.2	938.6
67.5°	802.5	771.1	765.9	793.8	839.1
70°	704.8	666.4	664.7	685.6	739.7
72.5°	596.6	563.5	554.8	582.7	631.5
75°	493.7	457.1	446.6	472.8	518.1
77.5°	382.1	352.4	345.4	359.4	396.0
80°	268.7	251.2	244.2	249.5	275.6
82.5°	169.2	157.0	153.5	151.8	165.7
85°	85.5	76.8	76.8	71.5	75.0
87.5°	26.2	24.4	22.7	17.4	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)