

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: P485008

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-1STD-35-120-EDD-90**

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: P485008
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-35-120-EDD-90
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

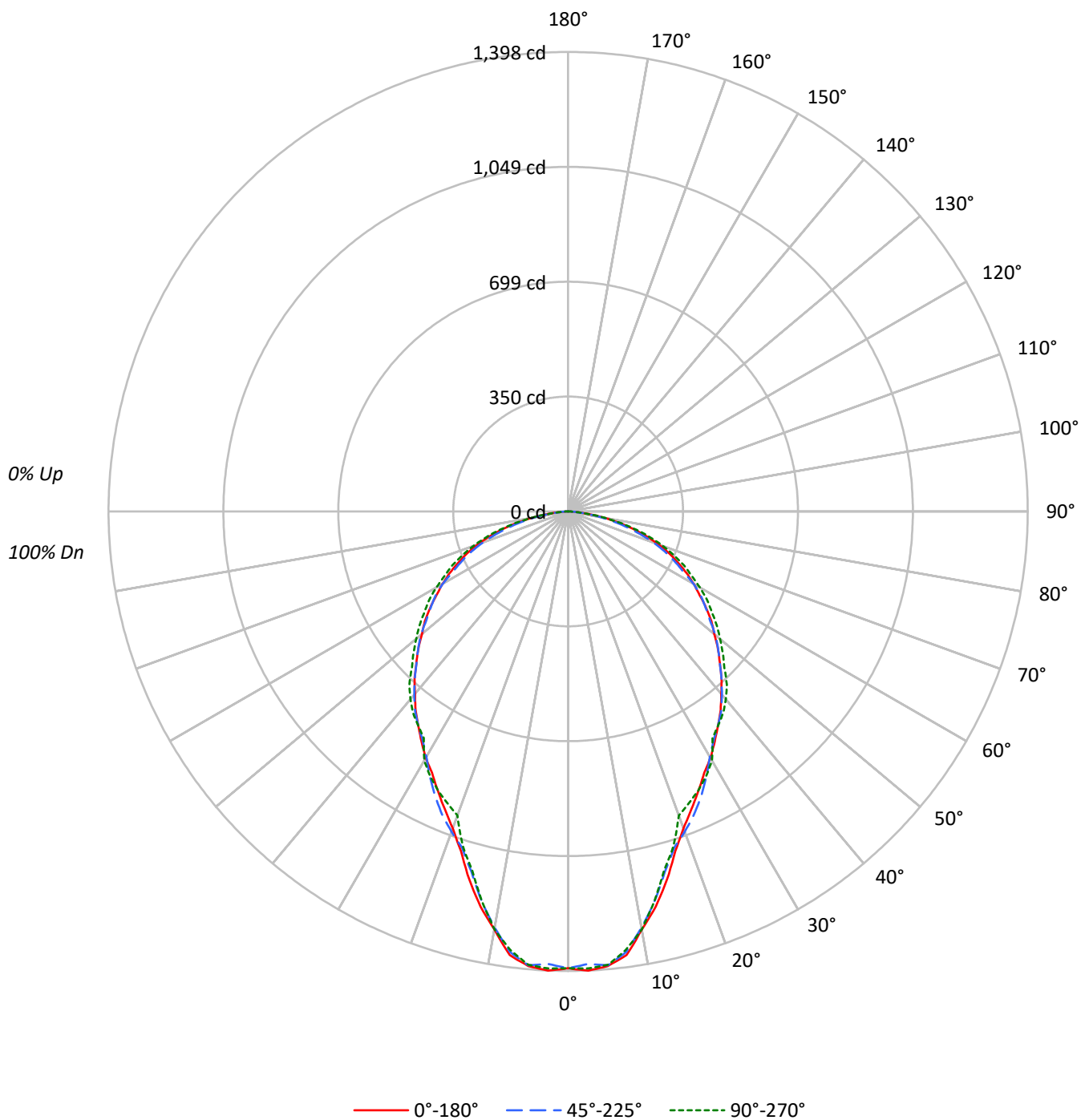
Lumens per Lamp: N/A
Luminaire Lumens: 2972.0 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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					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°	3740	3740	3740
5°	3750	3744	3740
10°	3529	3513	3527
15°	3233	3163	3145
20°	2937	2970	2819
25°	2785	2841	2781
30°	2690	2679	2719
35°	2611	2611	2611
40°	2546	2556	2620
45°	2484	2481	2558
50°	2429	2447	2523
55°	2404	2394	2502
60°	2372	2369	2489
65°	2342	2269	2476
70°	2297	2166	2411
75°	2126	1923	2231
80°	1725	1568	1770
85°	1093	982	960



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.1	4.3
10°-20°	322.7	10.9
20°-30°	435.8	14.7
30°-40°	499.0	16.8
40°-50°	511.2	17.2
50°-60°	463.8	15.6
60°-70°	362.0	12.2
70°-80°	205.3	6.9
80°-90°	43.1	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°	887.5	29.9
0°-40°	1386.6	46.7
0°-60°	2361.6	79.5
0°-90°	2972.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2972.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1388	1372	1386	1389	1385	130
15°	1161	1164	1135	1141	1129	324
25°	938	950	957	934	937	433
35°	795	796	795	796	795	498
45°	653	658	652	679	672	505
55°	512	512	510	528	533	458
65°	368	360	356	373	389	365
75°	204	189	185	196	215	214
85°	35	32	32	30	31	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1389.7	1389.7	1389.7	1389.7	1389.7
2.5°	1398.4	1387.5	1378.1	1393.3	1391.9
5°	1388.2	1372.3	1386.1	1389.0	1384.6
7.5°	1361.5	1351.4	1352.1	1346.3	1345.6
10°	1291.4	1297.2	1285.6	1295.7	1290.7
12.5°	1231.4	1235.0	1214.8	1219.1	1213.4
15°	1160.6	1164.2	1135.3	1141.1	1128.8
17.5°	1083.3	1096.3	1072.4	1079.7	1066.7
20°	1025.5	1036.3	1037.0	1025.5	984.3
22.5°	979.9	990.8	999.4	964.8	960.4
25°	938.0	950.3	956.8	933.7	936.6
27.5°	896.1	909.8	909.8	914.9	908.4
30°	865.8	871.5	862.1	880.9	875.1
32.5°	829.6	831.8	823.8	837.6	817.3
35°	794.9	796.4	794.9	795.7	794.9
37.5°	761.7	758.1	764.6	760.2	774.0
40°	724.8	724.8	727.7	734.9	745.8
42.5°	690.9	693.8	690.1	710.4	714.7
45°	652.6	657.6	651.8	678.6	672.1
47.5°	617.9	620.0	618.6	636.7	638.1
50°	580.3	583.2	584.6	600.5	602.7
52.5°	549.2	548.5	543.4	566.6	570.2
55°	512.4	511.6	510.2	528.3	533.3
57.5°	474.8	475.5	479.1	489.2	501.5
60°	440.8	437.2	440.1	452.4	462.5
62.5°	406.1	399.6	393.1	413.4	422.8
65°	367.8	359.9	356.3	372.9	388.8
67.5°	332.4	319.4	317.2	328.8	347.6
70°	292.0	276.1	275.3	284.0	306.4
72.5°	247.2	233.4	229.8	241.4	261.6
75°	204.5	189.3	185.0	195.8	214.6
77.5°	158.3	146.0	143.1	148.9	164.0
80°	111.3	104.1	101.2	103.3	114.2
82.5°	70.1	65.0	63.6	62.9	68.7
85°	35.4	31.8	31.8	29.6	31.1
87.5°	10.8	10.1	9.4	7.2	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)