

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: P485011

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-1STD-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: P485011
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-40-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

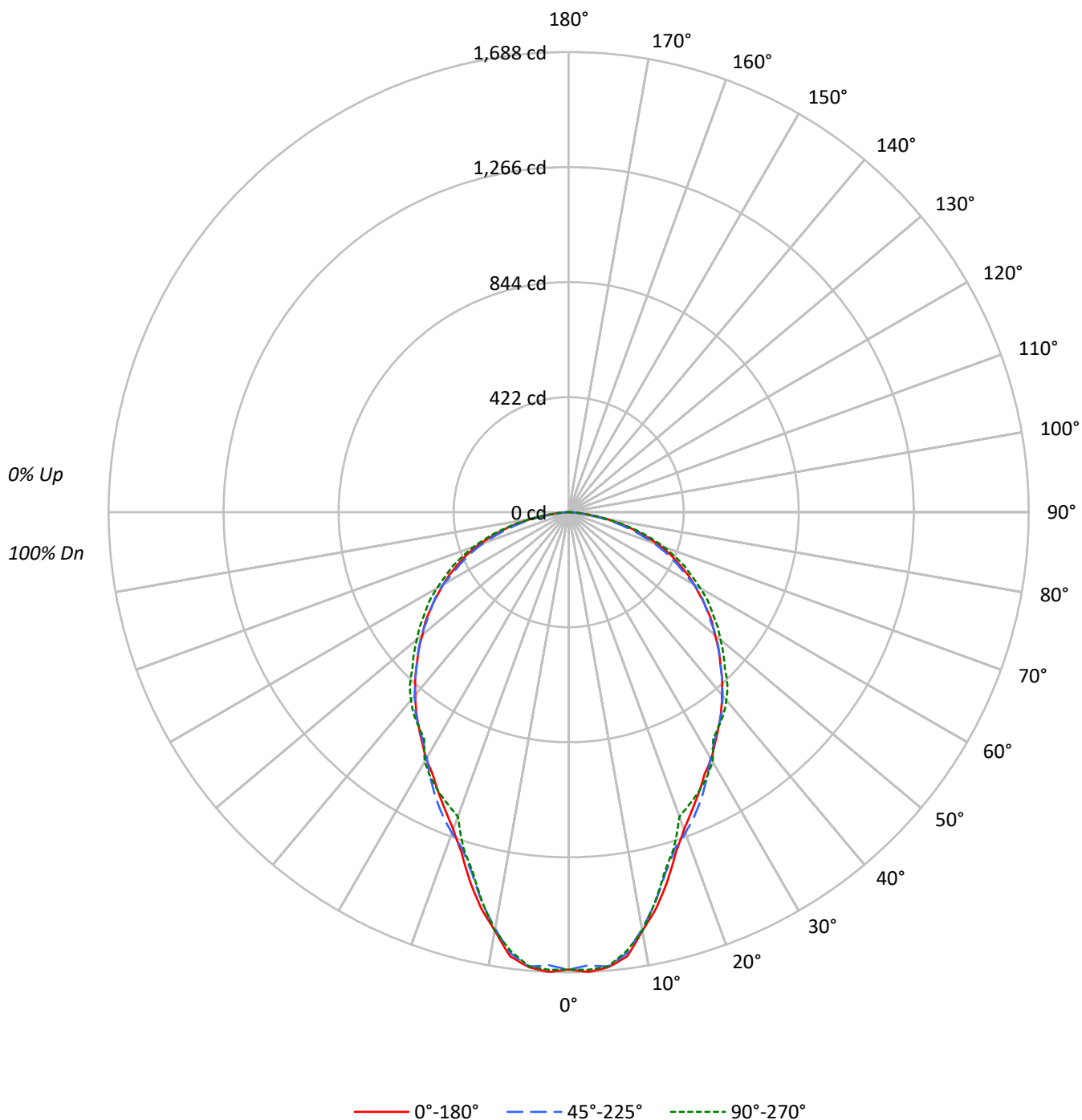
Lumens per Lamp: N/A
Luminaire Lumens: 3587.4 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	4514	4514	4514
5°	4526	4519	4515
10°	4259	4240	4257
15°	3903	3818	3796
20°	3545	3585	3402
25°	3362	3429	3357
30°	3247	3234	3283
35°	3152	3152	3152
40°	3073	3086	3162
45°	2998	2994	3087
50°	2933	2954	3046
55°	2902	2889	3020
60°	2864	2859	3005
65°	2827	2738	2988
70°	2773	2615	2910
75°	2567	2322	2694
80°	2081	1892	2135
85°	1318	1186	1158



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.8	4.3
10°-20°	389.5	10.9
20°-30°	526.0	14.7
30°-40°	602.4	16.8
40°-50°	617.0	17.2
50°-60°	559.9	15.6
60°-70°	437.0	12.2
70°-80°	247.8	6.9
80°-90°	52.0	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°	1071.3	29.9
0°-40°	1673.7	46.7
0°-60°	2850.6	79.5
0°-90°	3587.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3587.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1677	1677	1677	1677	1677	
5°	1676	1656	1673	1677	1671	157
15°	1401	1405	1370	1377	1362	392
25°	1132	1147	1155	1127	1130	522
35°	960	961	960	960	960	601
45°	788	794	787	819	811	609
55°	618	618	616	638	644	553
65°	444	434	430	450	469	440
75°	247	228	223	236	259	258
85°	43	38	38	36	38	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1677.4	1677.4	1677.4	1677.4	1677.4
2.5°	1687.9	1674.8	1663.5	1681.8	1680.1
5°	1675.7	1656.5	1673.1	1676.6	1671.3
7.5°	1643.4	1631.2	1632.1	1625.1	1624.2
10°	1558.8	1565.8	1551.8	1564.0	1557.9
12.5°	1486.4	1490.8	1466.3	1471.6	1464.6
15°	1400.9	1405.3	1370.4	1377.4	1362.5
17.5°	1307.6	1323.3	1294.5	1303.2	1287.5
20°	1237.8	1250.9	1251.8	1237.8	1188.1
22.5°	1182.8	1195.9	1206.4	1164.5	1159.3
25°	1132.2	1147.1	1154.9	1127.0	1130.5
27.5°	1081.7	1098.2	1098.2	1104.3	1096.5
30°	1045.0	1052.0	1040.7	1063.3	1056.4
32.5°	1001.4	1004.0	994.4	1011.0	986.6
35°	959.5	961.3	959.5	960.4	959.5
37.5°	919.4	915.0	922.9	917.7	934.2
40°	874.9	874.9	878.4	887.1	900.2
42.5°	833.9	837.4	833.0	857.5	862.7
45°	787.7	793.8	786.8	819.1	811.2
47.5°	745.8	748.4	746.7	768.5	770.2
50°	700.5	703.9	705.7	724.9	727.5
52.5°	663.0	662.1	656.0	683.9	688.2
55°	618.5	617.6	615.8	637.7	643.8
57.5°	573.1	574.0	578.3	590.5	605.4
60°	532.1	527.7	531.2	546.1	558.3
62.5°	490.2	482.4	474.5	499.0	510.3
65°	444.0	434.4	430.0	450.1	469.3
67.5°	401.3	385.6	382.9	396.9	419.6
70°	352.4	333.2	332.3	342.8	369.9
72.5°	298.3	281.8	277.4	291.3	315.8
75°	246.9	228.5	223.3	236.4	259.1
77.5°	191.0	176.2	172.7	179.7	198.0
80°	134.3	125.6	122.1	124.7	137.8
82.5°	84.6	78.5	76.8	75.9	82.9
85°	42.7	38.4	38.4	35.8	37.5
87.5°	13.1	12.2	11.3	8.7	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)