

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: P485791

Luminaire Tested: **ORLG-24-2-INS-89BC-LD4-5LO-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: P485791
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-24-2-INS-89BC-LD4-5LO-40-120-EDD
Description: 2X2 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

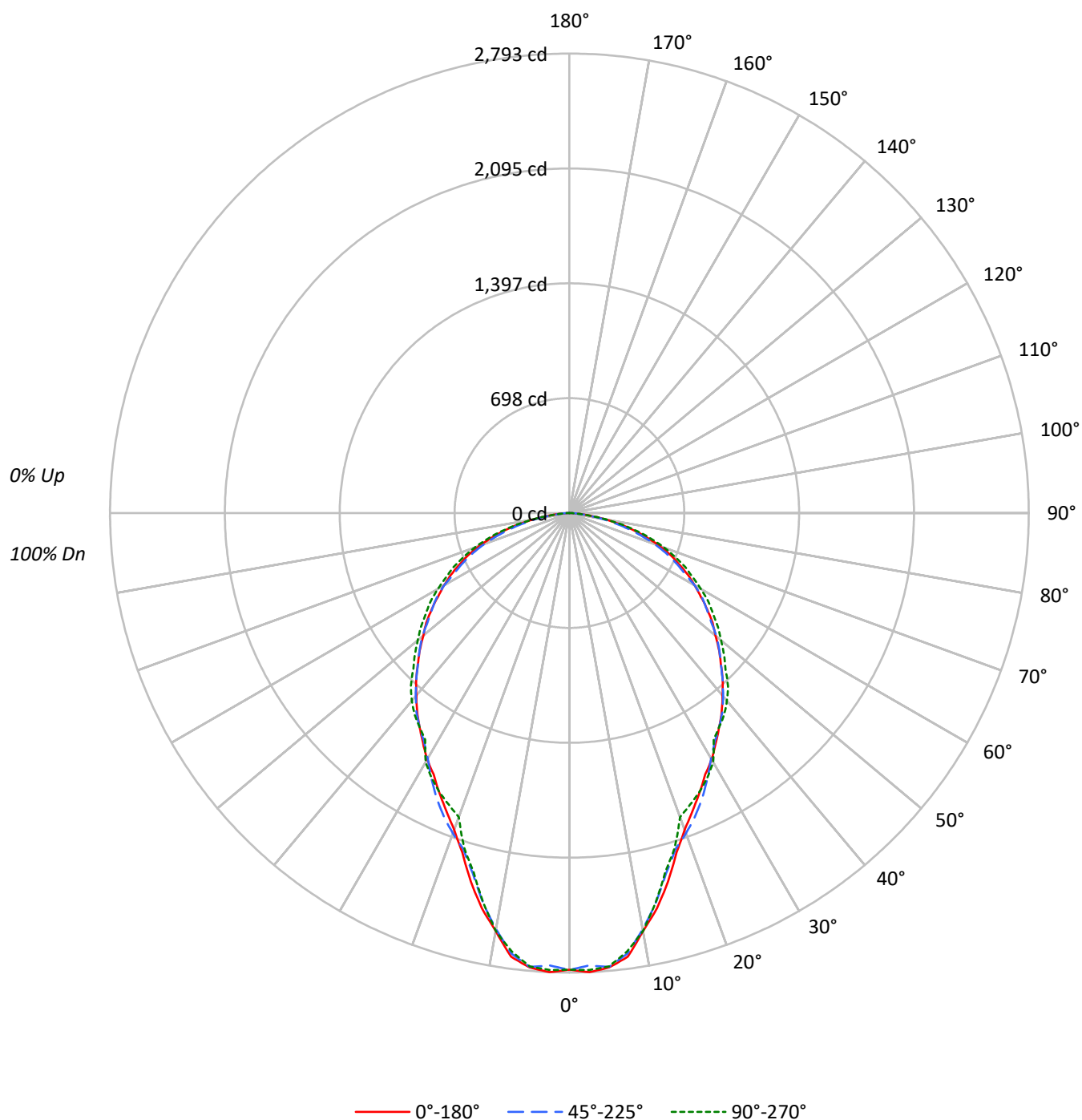
Lumens per Lamp: N/A
Luminaire Lumens: 5936.1 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 58.5
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°	7469	7469	7469
5°	7490	7478	7471
10°	7048	7016	7044
15°	6458	6317	6281
20°	5865	5932	5630
25°	5563	5674	5554
30°	5373	5351	5432
35°	5216	5216	5216
40°	5086	5106	5233
45°	4960	4955	5109
50°	4852	4888	5040
55°	4801	4781	4997
60°	4739	4731	4972
65°	4678	4531	4945
70°	4588	4327	4815
75°	4247	3842	4457
80°	3445	3132	3535
85°	2183	1961	1917



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.8	4.3
10°-20°	644.5	10.9
20°-30°	870.4	14.7
30°-40°	996.7	16.8
40°-50°	1021.0	17.2
50°-60°	926.4	15.6
60°-70°	723.1	12.2
70°-80°	410.1	6.9
80°-90°	86.1	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°	1772.7	29.9
0°-40°	2769.5	46.7
0°-60°	4716.9	79.5
0°-90°	5936.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5936.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2776	2776	2776	2776	2776	
5°	2773	2741	2768	2774	2766	259
15°	2318	2325	2268	2279	2255	648
25°	1874	1898	1911	1865	1871	865
35°	1588	1591	1588	1589	1588	995
45°	1303	1314	1302	1355	1342	1008
55°	1023	1022	1019	1055	1065	915
65°	735	719	712	745	777	728
75°	408	378	370	391	429	427
85°	71	64	64	59	62	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2775.7	2775.7	2775.7	2775.7	2775.7
2.5°	2793.0	2771.3	2752.6	2782.9	2780.0
5°	2772.8	2741.0	2768.5	2774.2	2765.6
7.5°	2719.4	2699.2	2700.6	2689.1	2687.6
10°	2579.4	2590.9	2567.8	2588.0	2577.9
12.5°	2459.6	2466.8	2426.4	2435.0	2423.5
15°	2318.1	2325.3	2267.6	2279.1	2254.6
17.5°	2163.7	2189.6	2142.0	2156.4	2130.5
20°	2048.2	2069.8	2071.3	2048.2	1965.9
22.5°	1957.3	1978.9	1996.2	1926.9	1918.3
25°	1873.5	1898.1	1911.1	1864.9	1870.7
27.5°	1789.8	1817.2	1817.2	1827.4	1814.4
30°	1729.2	1740.7	1722.0	1759.5	1748.0
32.5°	1657.0	1661.4	1645.5	1672.9	1632.5
35°	1587.7	1590.6	1587.7	1589.2	1587.7
37.5°	1521.4	1514.1	1527.1	1518.5	1545.9
40°	1447.7	1447.7	1453.5	1467.9	1489.6
42.5°	1379.9	1385.7	1378.5	1418.9	1427.5
45°	1303.4	1313.5	1302.0	1355.4	1342.4
47.5°	1234.1	1238.4	1235.6	1271.6	1274.5
50°	1159.1	1164.8	1167.7	1199.5	1203.8
52.5°	1097.0	1095.5	1085.4	1131.6	1138.8
55°	1023.4	1021.9	1019.0	1055.1	1065.2
57.5°	948.3	949.8	957.0	977.2	1001.7
60°	880.5	873.3	879.0	903.6	923.8
62.5°	811.2	798.2	785.2	825.6	844.4
65°	734.7	718.8	711.6	744.8	776.6
67.5°	664.0	638.0	633.7	656.8	694.3
70°	583.1	551.4	549.9	567.3	612.0
72.5°	493.6	466.2	459.0	482.1	522.5
75°	408.5	378.2	369.5	391.2	428.7
77.5°	316.1	291.6	285.8	297.3	327.7
80°	222.3	207.9	202.1	206.4	228.1
82.5°	140.0	129.9	127.0	125.6	137.1
85°	70.7	63.5	63.5	59.2	62.1
87.5°	21.7	20.2	18.8	14.4	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)