

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: P485041

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-2STD-27-120-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: P485041
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-27-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

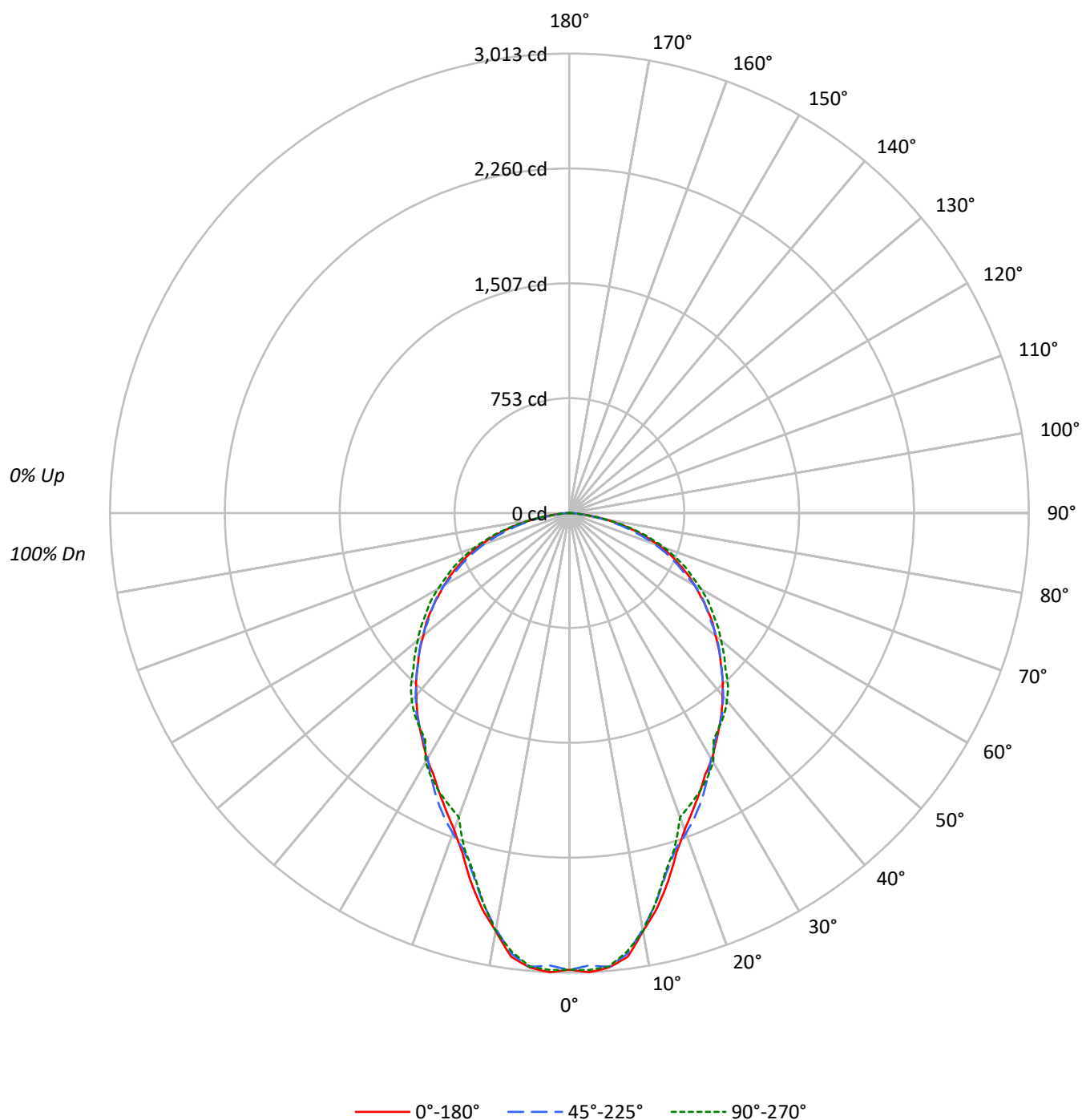
Lumens per Lamp: N/A
Luminaire Lumens: 6404.0 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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					10
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°	8058	8058	8058
5°	8080	8068	8059
10°	7604	7570	7599
15°	6967	6815	6776
20°	6328	6399	6074
25°	6001	6122	5992
30°	5797	5772	5859
35°	5627	5627	5627
40°	5487	5508	5645
45°	5351	5345	5511
50°	5235	5274	5437
55°	5180	5158	5392
60°	5112	5104	5364
65°	5047	4888	5335
70°	4950	4668	5194
75°	4582	4144	4809
80°	3716	3378	3812
85°	2356	2115	2069



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.1	4.3
10°-20°	695.3	10.9
20°-30°	939.0	14.7
30°-40°	1075.3	16.8
40°-50°	1101.5	17.2
50°-60°	999.4	15.6
60°-70°	780.0	12.2
70°-80°	442.4	6.9
80°-90°	92.9	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°	1912.5	29.9
0°-40°	2987.8	46.7
0°-60°	5088.7	79.5
0°-90°	6404.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6404.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2994	2994	2994	2994	2994	
5°	2991	2957	2987	2993	2984	279
15°	2501	2509	2446	2459	2432	699
25°	2021	2048	2062	2012	2018	933
35°	1713	1716	1713	1714	1713	1073
45°	1406	1417	1405	1462	1448	1087
55°	1104	1102	1099	1138	1149	987
65°	793	776	768	804	838	786
75°	441	408	399	422	462	461
85°	76	68	68	64	67	101
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2994.5	2994.5	2994.5	2994.5	2994.5
2.5°	3013.1	2989.8	2969.5	3002.2	2999.1
5°	2991.3	2957.1	2986.7	2992.9	2983.6
7.5°	2933.7	2911.9	2913.5	2901.0	2899.5
10°	2782.7	2795.1	2770.2	2792.0	2781.1
12.5°	2653.4	2661.2	2617.6	2627.0	2614.5
15°	2500.8	2508.6	2446.3	2458.8	2432.3
17.5°	2334.2	2362.2	2310.9	2326.4	2298.4
20°	2209.6	2233.0	2234.6	2209.6	2120.9
22.5°	2111.5	2134.9	2153.6	2078.8	2069.5
25°	2021.2	2047.7	2061.7	2011.9	2018.1
27.5°	1930.9	1960.5	1960.5	1971.4	1957.4
30°	1865.5	1878.0	1857.7	1898.2	1885.7
32.5°	1787.6	1792.3	1775.2	1804.8	1761.2
35°	1712.9	1716.0	1712.9	1714.5	1712.9
37.5°	1641.3	1633.5	1647.5	1638.2	1667.7
40°	1561.9	1561.9	1568.1	1583.7	1607.0
42.5°	1488.7	1494.9	1487.1	1530.7	1540.1
45°	1406.1	1417.0	1404.6	1462.2	1448.2
47.5°	1331.4	1336.1	1332.9	1371.9	1375.0
50°	1250.4	1256.6	1259.8	1294.0	1298.7
52.5°	1183.5	1181.9	1171.0	1220.8	1228.6
55°	1104.0	1102.5	1099.4	1138.3	1149.2
57.5°	1023.1	1024.6	1032.4	1054.2	1080.7
60°	949.9	942.1	948.3	974.8	996.6
62.5°	875.1	861.1	847.1	890.7	911.0
65°	792.6	775.5	767.7	803.5	837.8
67.5°	716.3	688.3	683.6	708.5	749.0
70°	629.1	594.8	593.3	612.0	660.2
72.5°	532.6	503.0	495.2	520.1	563.7
75°	440.7	408.0	398.6	422.0	462.5
77.5°	341.0	314.6	308.3	320.8	353.5
80°	239.8	224.2	218.0	222.7	246.0
82.5°	151.0	140.1	137.0	135.5	147.9
85°	76.3	68.5	68.5	63.8	67.0
87.5°	23.4	21.8	20.2	15.6	17.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)