

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: P485706

Luminaire Tested: **ORLG-24-2-INS-89BC-LD4-3HI-40-120-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: P485706
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-LD4-3HI-40-120-EDD-90
Description: 2X2 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

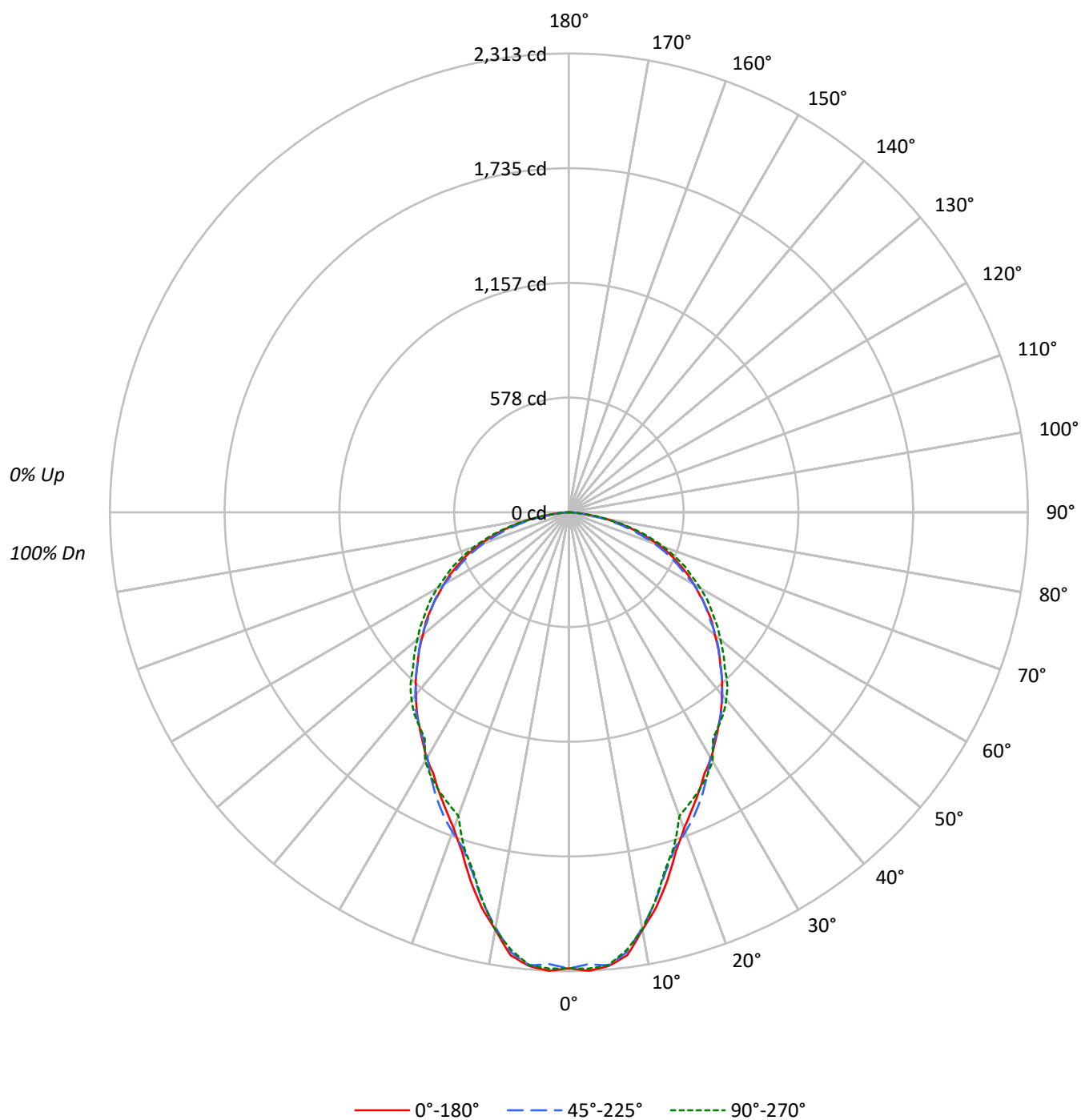
Lumens per Lamp: N/A
Luminaire Lumens: 4915.6 lumens
Efficiency: N/A
Efficacy: 74.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 66
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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	104	100	96	106	102	98	95	98	95	92		94	91	89		84
2	99	91	84	79	97	89	83	78	86	81	76		82	78	74		70
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		60
4	83	71	63	56	81	70	62	56	67	60	55		65	59	54		51
5	77	64	55	48	75	63	54	48	61	53	48		59	52	47		45
6	71	58	49	43	69	57	48	42	55	48	42		53	47	42		39
7	66	53	44	38	64	52	44	38	50	43	37		49	42	37		35
8	61	48	40	34	60	47	39	34	46	39	34		45	38	33		31
9	58	44	36	31	56	44	36	31	43	35	30		41	35	30		28
10	54	41	33	28	53	40	33	28	40	33	28		39	32	28		26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6185	6185	6185
5°	6202	6193	6186
10°	5836	5810	5833
15°	5348	5231	5201
20°	4857	4912	4662
25°	4607	4699	4600
30°	4449	4431	4498
35°	4319	4319	4319
40°	4212	4228	4333
45°	4107	4103	4230
50°	4018	4048	4173
55°	3976	3959	4138
60°	3924	3918	4117
65°	3874	3752	4095
70°	3799	3583	3987
75°	3517	3182	3691
80°	2853	2593	2927
85°	1809	1624	1587



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.5	4.3
10°-20°	533.7	10.9
20°-30°	720.8	14.7
30°-40°	825.4	16.8
40°-50°	845.5	17.2
50°-60°	767.1	15.6
60°-70°	598.7	12.2
70°-80°	339.6	6.9
80°-90°	71.3	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°	1468.0	29.9
0°-40°	2293.4	46.7
0°-60°	3906.0	79.5
0°-90°	4915.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4915.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2298	2298	2298	2298	2298	
5°	2296	2270	2292	2297	2290	214
15°	1920	1926	1878	1887	1867	536
25°	1552	1572	1582	1544	1549	716
35°	1315	1317	1315	1316	1315	824
45°	1079	1088	1078	1122	1112	835
55°	847	846	844	874	882	757
65°	608	595	589	617	643	603
75°	338	313	306	324	355	354
85°	59	53	53	49	51	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2298.5	2298.5	2298.5	2298.5	2298.5
2.5°	2312.8	2294.9	2279.4	2304.5	2302.1
5°	2296.1	2269.8	2292.5	2297.3	2290.1
7.5°	2251.9	2235.1	2236.3	2226.8	2225.6
10°	2135.9	2145.5	2126.4	2143.1	2134.7
12.5°	2036.7	2042.7	2009.2	2016.4	2006.8
15°	1919.6	1925.6	1877.8	1887.3	1867.0
17.5°	1791.7	1813.2	1773.8	1785.7	1764.2
20°	1696.1	1714.0	1715.2	1696.1	1628.0
22.5°	1620.8	1638.7	1653.1	1595.7	1588.5
25°	1551.5	1571.8	1582.5	1544.3	1549.1
27.5°	1482.1	1504.8	1504.8	1513.2	1502.4
30°	1431.9	1441.5	1426.0	1457.0	1447.5
32.5°	1372.2	1375.7	1362.6	1385.3	1351.8
35°	1314.8	1317.2	1314.8	1316.0	1314.8
37.5°	1259.8	1253.8	1264.6	1257.4	1280.1
40°	1198.9	1198.9	1203.6	1215.6	1233.5
42.5°	1142.7	1147.5	1141.5	1174.9	1182.1
45°	1079.3	1087.7	1078.1	1122.4	1111.6
47.5°	1022.0	1025.5	1023.1	1053.0	1055.4
50°	959.8	964.6	967.0	993.3	996.9
52.5°	908.4	907.2	898.8	937.1	943.1
55°	847.4	846.2	843.9	873.7	882.1
57.5°	785.3	786.5	792.5	809.2	829.5
60°	729.1	723.1	727.9	748.2	765.0
62.5°	671.7	661.0	650.2	683.7	699.2
65°	608.4	595.2	589.3	616.8	643.1
67.5°	549.8	528.3	524.7	543.8	574.9
70°	482.9	456.6	455.4	469.7	506.8
72.5°	408.8	386.1	380.1	399.2	432.7
75°	338.3	313.2	306.0	323.9	355.0
77.5°	261.8	241.4	236.7	246.2	271.3
80°	184.1	172.1	167.3	170.9	188.9
82.5°	115.9	107.6	105.2	104.0	113.6
85°	58.6	52.6	52.6	49.0	51.4
87.5°	17.9	16.7	15.5	12.0	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)