

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: P485693

Luminaire Tested: **ORLG-24-2-INS-89BC-LD4-2STD-35-120-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: P485693
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-LD4-2STD-35-120-EDD
Description: 2X2 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

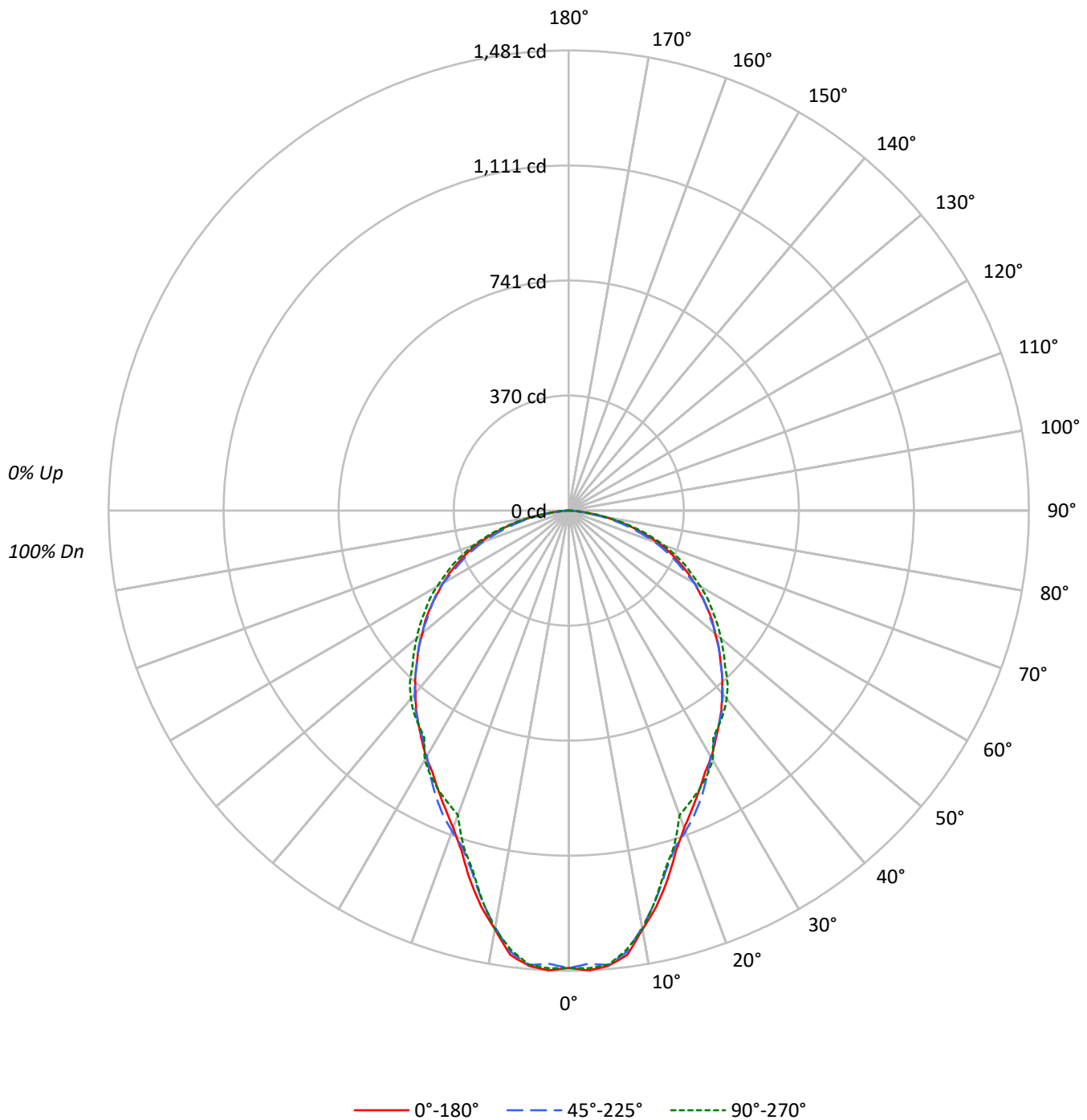
Lumens per Lamp: N/A
Luminaire Lumens: 3148.3 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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					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°	3961	3961	3961
5°	3972	3966	3962
10°	3738	3721	3736
15°	3425	3351	3331
20°	3111	3146	2986
25°	2950	3010	2946
30°	2850	2838	2881
35°	2766	2766	2766
40°	2697	2708	2775
45°	2631	2628	2709
50°	2573	2593	2673
55°	2547	2536	2651
60°	2513	2509	2637
65°	2481	2403	2623
70°	2434	2295	2554
75°	2252	2038	2364
80°	1827	1661	1875
85°	1158	1041	1016



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.7	4.3
10°-20°	341.8	10.9
20°-30°	461.6	14.7
30°-40°	528.6	16.8
40°-50°	541.5	17.2
50°-60°	491.3	15.6
60°-70°	383.5	12.2
70°-80°	217.5	6.9
80°-90°	45.7	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°	940.2	29.9
0°-40°	1468.8	46.7
0°-60°	2501.7	79.5
0°-90°	3148.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3148.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1472	1472	1472	1472	1472	
5°	1471	1454	1468	1471	1467	137
15°	1229	1233	1203	1209	1196	344
25°	994	1007	1014	989	992	459
35°	842	844	842	843	842	527
45°	691	697	690	719	712	534
55°	543	542	540	560	565	485
65°	390	381	377	395	412	386
75°	217	201	196	208	227	227
85°	38	34	34	31	33	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1472.1	1472.1	1472.1	1472.1	1472.1
2.5°	1481.3	1469.8	1459.9	1475.9	1474.4
5°	1470.6	1453.7	1468.3	1471.4	1466.8
7.5°	1442.3	1431.5	1432.3	1426.2	1425.4
10°	1368.0	1374.1	1361.9	1372.6	1367.2
12.5°	1304.5	1308.3	1286.9	1291.5	1285.3
15°	1229.4	1233.3	1202.7	1208.8	1195.8
17.5°	1147.5	1161.3	1136.1	1143.7	1129.9
20°	1086.3	1097.8	1098.5	1086.3	1042.7
22.5°	1038.1	1049.5	1058.7	1022.0	1017.4
25°	993.7	1006.7	1013.6	989.1	992.1
27.5°	949.3	963.8	963.8	969.2	962.3
30°	917.1	923.2	913.3	933.2	927.1
32.5°	878.8	881.1	872.7	887.3	865.8
35°	842.1	843.6	842.1	842.9	842.1
37.5°	806.9	803.0	809.9	805.3	819.9
40°	767.8	767.8	770.9	778.5	790.0
42.5°	731.8	734.9	731.1	752.5	757.1
45°	691.3	696.6	690.5	718.8	711.9
47.5°	654.5	656.8	655.3	674.4	676.0
50°	614.7	617.8	619.3	636.2	638.5
52.5°	581.8	581.0	575.7	600.2	604.0
55°	542.8	542.0	540.5	559.6	565.0
57.5°	503.0	503.7	507.5	518.3	531.3
60°	467.0	463.1	466.2	479.2	489.9
62.5°	430.2	423.3	416.4	437.9	447.8
65°	389.7	381.2	377.4	395.0	411.9
67.5°	352.1	338.4	336.1	348.3	368.2
70°	309.3	292.4	291.7	300.9	324.6
72.5°	261.8	247.3	243.4	255.7	277.1
75°	216.6	200.6	196.0	207.5	227.4
77.5°	167.7	154.6	151.6	157.7	173.8
80°	117.9	110.2	107.2	109.5	121.0
82.5°	74.3	68.9	67.4	66.6	72.7
85°	37.5	33.7	33.7	31.4	32.9
87.5°	11.5	10.7	10.0	7.7	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)