

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: P485665

Luminaire Tested: **ORLG-24-2-INS-89BC-LD4-2HI-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: P485665
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-LD4-2HI-27-120-EDD
Description: 2X2 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

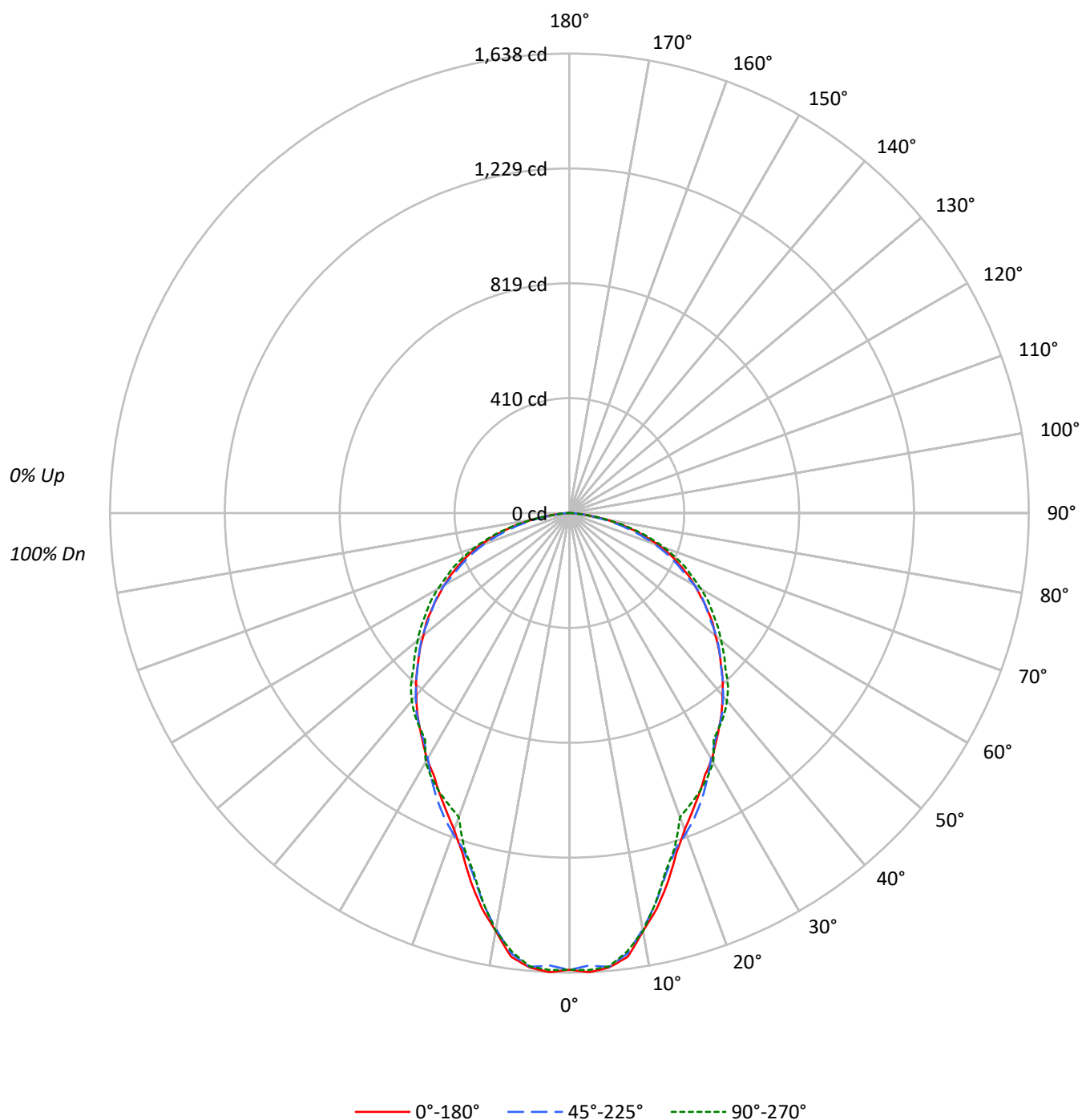
Lumens per Lamp: N/A
Luminaire Lumens: 3481.3 lumens
Efficiency: N/A
Efficacy: 79.1 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 44
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°	4380	4380	4380
5°	4393	4386	4381
10°	4133	4115	4131
15°	3787	3705	3684
20°	3440	3479	3302
25°	3263	3328	3257
30°	3151	3138	3185
35°	3059	3059	3059
40°	2982	2994	3069
45°	2909	2906	2996
50°	2846	2867	2956
55°	2816	2804	2931
60°	2779	2774	2916
65°	2744	2657	2900
70°	2691	2537	2824
75°	2491	2253	2614
80°	2021	1836	2072
85°	1281	1149	1124



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.2	4.3
10°-20°	378.0	10.9
20°-30°	510.5	14.7
30°-40°	584.6	16.8
40°-50°	598.8	17.2
50°-60°	543.3	15.6
60°-70°	424.0	12.2
70°-80°	240.5	6.9
80°-90°	50.5	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°	1039.6	29.9
0°-40°	1624.2	46.7
0°-60°	2766.3	79.5
0°-90°	3481.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3481.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1628	1628	1628	1628	1628	
5°	1626	1608	1624	1627	1622	152
15°	1360	1364	1330	1337	1322	380
25°	1099	1113	1121	1094	1097	507
35°	931	933	931	932	931	583
45°	764	770	764	795	787	591
55°	600	599	598	619	625	536
65°	431	422	417	437	455	427
75°	240	222	217	229	251	251
85°	42	37	37	35	36	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1627.8	1627.8	1627.8	1627.8	1627.8
2.5°	1638.0	1625.3	1614.3	1632.1	1630.4
5°	1626.1	1607.5	1623.6	1627.0	1621.9
7.5°	1594.8	1583.0	1583.8	1577.0	1576.2
10°	1512.7	1519.5	1505.9	1517.8	1511.9
12.5°	1442.4	1446.7	1423.0	1428.1	1421.3
15°	1359.5	1363.7	1329.9	1336.6	1322.2
17.5°	1268.9	1284.1	1256.2	1264.7	1249.4
20°	1201.2	1213.9	1214.7	1201.2	1152.9
22.5°	1147.9	1160.6	1170.7	1130.1	1125.0
25°	1098.8	1113.2	1120.8	1093.7	1097.1
27.5°	1049.7	1065.7	1065.7	1071.7	1064.1
30°	1014.1	1020.9	1009.9	1031.9	1025.1
32.5°	971.8	974.3	965.0	981.1	957.4
35°	931.2	932.8	931.2	932.0	931.2
37.5°	892.2	888.0	895.6	890.5	906.6
40°	849.0	849.0	852.4	860.9	873.6
42.5°	809.3	812.6	808.4	832.1	837.2
45°	764.4	770.3	763.5	794.9	787.2
47.5°	723.8	726.3	724.6	745.8	747.5
50°	679.7	683.1	684.8	703.4	706.0
52.5°	643.3	642.5	636.6	663.7	667.9
55°	600.2	599.3	597.6	618.8	624.7
57.5°	556.2	557.0	561.2	573.1	587.5
60°	516.4	512.1	515.5	529.9	541.8
62.5°	475.7	468.1	460.5	484.2	495.2
65°	430.9	421.6	417.3	436.8	455.4
67.5°	389.4	374.2	371.6	385.2	407.2
70°	342.0	323.4	322.5	332.7	358.9
72.5°	289.5	273.4	269.2	282.7	306.4
75°	239.6	221.8	216.7	229.4	251.4
77.5°	185.4	171.0	167.6	174.4	192.2
80°	130.4	121.9	118.5	121.1	133.7
82.5°	82.1	76.2	74.5	73.6	80.4
85°	41.5	37.2	37.2	34.7	36.4
87.5°	12.7	11.9	11.0	8.5	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)