

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: P485727

Luminaire Tested: **ORLG-24-2-INS-89BC-LD4-3STD-30-120-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: P485727
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-LD4-3STD-30-120-EDD
Description: 2X2 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

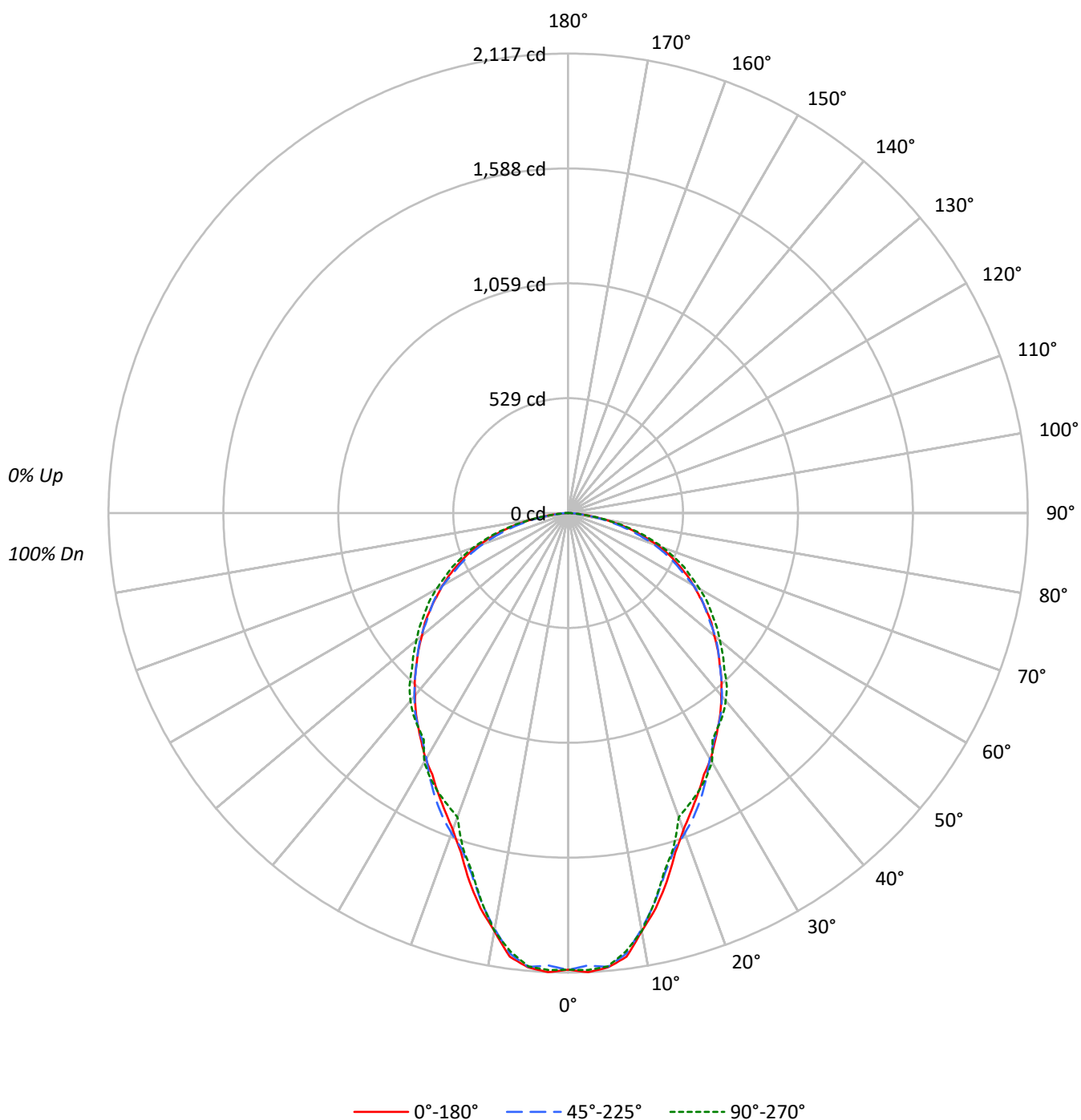
Lumens per Lamp: N/A
Luminaire Lumens: 4499.4 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
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°	5662	5662	5662
5°	5677	5668	5662
10°	5342	5318	5339
15°	4895	4788	4761
20°	4446	4496	4267
25°	4217	4301	4210
30°	4073	4056	4117
35°	3954	3954	3954
40°	3855	3870	3966
45°	3760	3755	3872
50°	3678	3705	3820
55°	3639	3624	3788
60°	3592	3586	3768
65°	3546	3435	3748
70°	3478	3279	3650
75°	3219	2912	3378
80°	2611	2374	2679
85°	1655	1485	1451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.4	4.3
10°-20°	488.5	10.9
20°-30°	659.7	14.7
30°-40°	755.5	16.8
40°-50°	773.9	17.2
50°-60°	702.2	15.6
60°-70°	548.0	12.2
70°-80°	310.8	6.9
80°-90°	65.2	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°	1343.7	29.9
0°-40°	2099.2	46.7
0°-60°	3575.3	79.5
0°-90°	4499.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4499.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2104	2104	2104	2104	2104	
5°	2102	2078	2098	2103	2096	196
15°	1757	1762	1719	1728	1709	491
25°	1420	1439	1448	1414	1418	655
35°	1204	1206	1204	1205	1204	754
45°	988	996	987	1027	1018	764
55°	776	775	772	800	807	693
65°	557	545	539	564	589	552
75°	310	287	280	296	325	324
85°	54	48	48	45	47	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2103.9	2103.9	2103.9	2103.9	2103.9
2.5°	2117.0	2100.6	2086.4	2109.4	2107.2
5°	2101.7	2077.6	2098.4	2102.8	2096.2
7.5°	2061.2	2045.9	2047.0	2038.2	2037.1
10°	1955.1	1963.8	1946.3	1961.7	1954.0
12.5°	1864.3	1869.8	1839.1	1845.7	1836.9
15°	1757.1	1762.5	1718.8	1727.5	1708.9
17.5°	1640.0	1659.7	1623.6	1634.5	1614.8
20°	1552.5	1568.9	1570.0	1552.5	1490.1
22.5°	1483.5	1500.0	1513.1	1460.6	1454.0
25°	1420.1	1438.7	1448.5	1413.5	1417.9
27.5°	1356.6	1377.4	1377.4	1385.1	1375.2
30°	1310.7	1319.4	1305.2	1333.7	1324.9
32.5°	1256.0	1259.3	1247.2	1268.0	1237.4
35°	1203.5	1205.7	1203.5	1204.6	1203.5
37.5°	1153.1	1147.7	1157.5	1151.0	1171.7
40°	1097.3	1097.3	1101.7	1112.7	1129.1
42.5°	1045.9	1050.3	1044.8	1075.5	1082.0
45°	987.9	995.6	986.8	1027.3	1017.5
47.5°	935.4	938.7	936.5	963.9	966.1
50°	878.5	882.9	885.1	909.2	912.4
52.5°	831.5	830.4	822.7	857.7	863.2
55°	775.7	774.6	772.4	799.8	807.4
57.5°	718.8	719.9	725.4	740.7	759.3
60°	667.4	661.9	666.3	684.9	700.2
62.5°	614.9	605.0	595.2	625.8	640.0
65°	556.9	544.8	539.4	564.5	588.6
67.5°	503.3	483.6	480.3	497.8	526.2
70°	442.0	417.9	416.8	430.0	463.9
72.5°	374.2	353.4	347.9	365.4	396.1
75°	309.6	286.6	280.1	296.5	324.9
77.5°	239.6	221.0	216.6	225.4	248.4
80°	168.5	157.5	153.2	156.5	172.9
82.5°	106.1	98.5	96.3	95.2	103.9
85°	53.6	48.1	48.1	44.9	47.0
87.5°	16.4	15.3	14.2	10.9	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)