

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: P485729

Luminaire Tested: **ORLG-24-2-INS-89BC-LD4-3STD-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: P485729
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-35-120-EDD
Description: 2X2 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

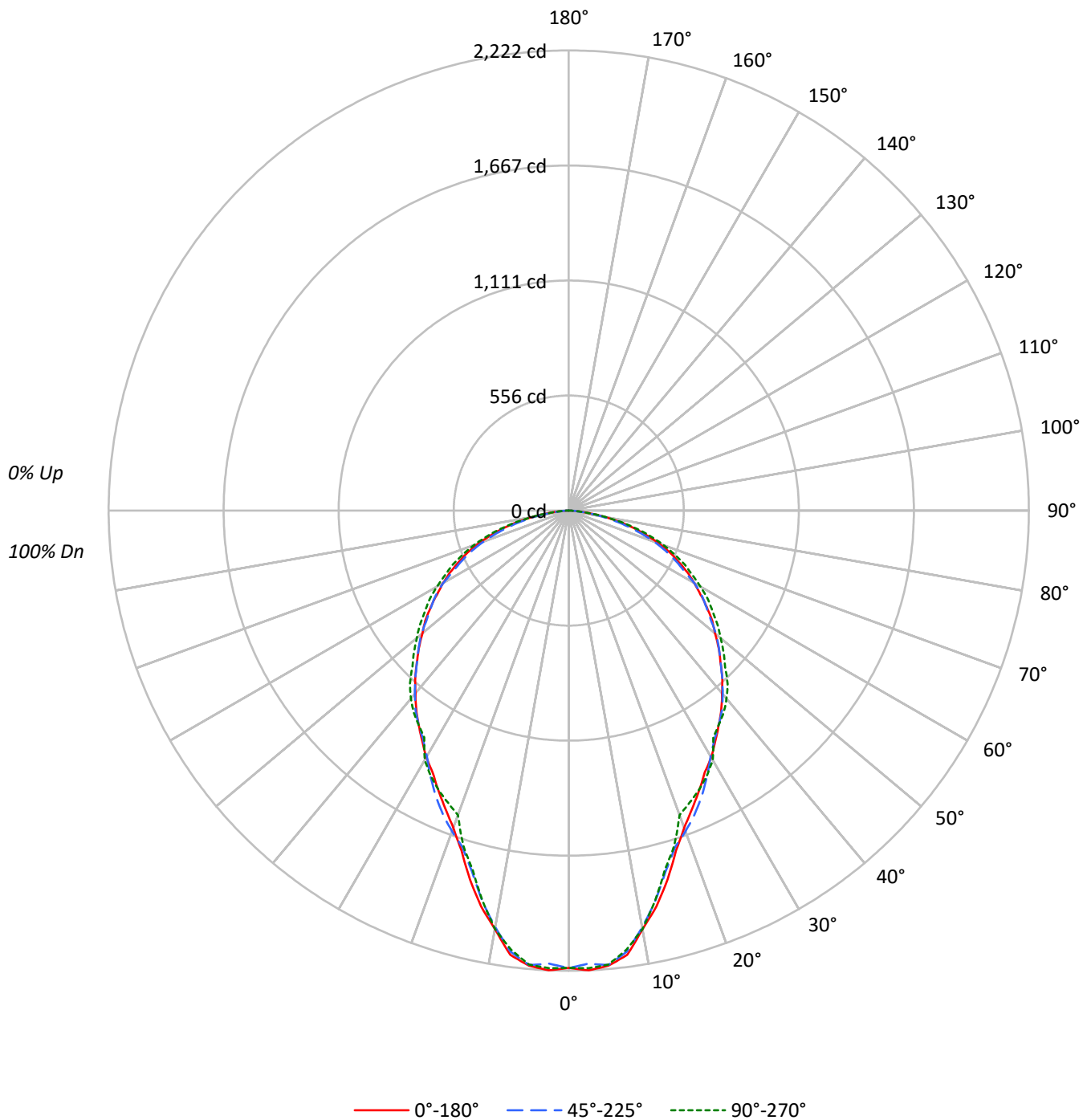
Lumens per Lamp: N/A
Luminaire Lumens: 4722.4 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	5942	5942	5942
5°	5959	5949	5943
10°	5607	5582	5604
15°	5137	5026	4997
20°	4666	4719	4479
25°	4426	4514	4419
30°	4274	4257	4321
35°	4149	4149	4149
40°	4046	4062	4163
45°	3946	3942	4064
50°	3860	3889	4009
55°	3819	3803	3976
60°	3770	3764	3955
65°	3722	3605	3934
70°	3650	3442	3831
75°	3379	3057	3545
80°	2740	2492	2811
85°	1738	1559	1525



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.1	4.3
10°-20°	512.7	10.9
20°-30°	692.4	14.7
30°-40°	793.0	16.8
40°-50°	812.2	17.2
50°-60°	737.0	15.6
60°-70°	575.2	12.2
70°-80°	326.3	6.9
80°-90°	68.5	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°	1410.3	29.9
0°-40°	2203.2	46.7
0°-60°	3752.5	79.5
0°-90°	4722.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4722.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2208	2208	2208	2208	2208	
5°	2206	2181	2202	2207	2200	206
15°	1844	1850	1804	1813	1794	515
25°	1490	1510	1520	1484	1488	688
35°	1263	1265	1263	1264	1263	791
45°	1037	1045	1036	1078	1068	802
55°	814	813	811	839	847	728
65°	584	572	566	592	618	579
75°	325	301	294	311	341	340
85°	56	50	50	47	49	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2208.2	2208.2	2208.2	2208.2	2208.2
2.5°	2221.9	2204.7	2189.8	2213.9	2211.6
5°	2205.9	2180.6	2202.4	2207.0	2200.1
7.5°	2163.4	2147.3	2148.4	2139.3	2138.1
10°	2052.0	2061.2	2042.8	2058.9	2050.8
12.5°	1956.7	1962.4	1930.3	1937.2	1928.0
15°	1844.1	1849.9	1804.0	1813.1	1793.6
17.5°	1721.3	1742.0	1704.1	1715.5	1694.9
20°	1629.4	1646.6	1647.8	1629.4	1564.0
22.5°	1557.1	1574.3	1588.1	1533.0	1526.1
25°	1490.5	1510.0	1520.3	1483.6	1488.2
27.5°	1423.9	1445.7	1445.7	1453.7	1443.4
30°	1375.6	1384.8	1369.9	1399.8	1390.6
32.5°	1318.2	1321.7	1309.0	1330.9	1298.7
35°	1263.1	1265.4	1263.1	1264.3	1263.1
37.5°	1210.3	1204.6	1214.9	1208.0	1229.8
40°	1151.7	1151.7	1156.3	1167.8	1185.0
42.5°	1097.8	1102.4	1096.6	1128.8	1135.7
45°	1036.9	1044.9	1035.8	1078.2	1067.9
47.5°	981.8	985.2	982.9	1011.6	1013.9
50°	922.1	926.7	929.0	954.2	957.7
52.5°	872.7	871.5	863.5	900.3	906.0
55°	814.1	813.0	810.7	839.4	847.4
57.5°	754.4	755.6	761.3	777.4	796.9
60°	700.5	694.7	699.3	718.8	734.9
62.5°	645.3	635.0	624.7	656.8	671.7
65°	584.5	571.8	566.1	592.5	617.8
67.5°	528.2	507.5	504.1	522.5	552.3
70°	463.9	438.6	437.5	451.3	486.9
72.5°	392.7	370.9	365.2	383.5	415.7
75°	325.0	300.9	294.0	311.2	341.0
77.5°	251.5	232.0	227.4	236.5	260.7
80°	176.8	165.4	160.8	164.2	181.4
82.5°	111.4	103.3	101.0	99.9	109.1
85°	56.3	50.5	50.5	47.1	49.4
87.5°	17.2	16.1	14.9	11.5	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)