

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: P485795

Luminaire Tested: **ORLG-24-2-INS-89BC-LD4-5STD-20-120-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: P485795
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-LD4-5STD-20-120-EDD
Description: 2X2 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

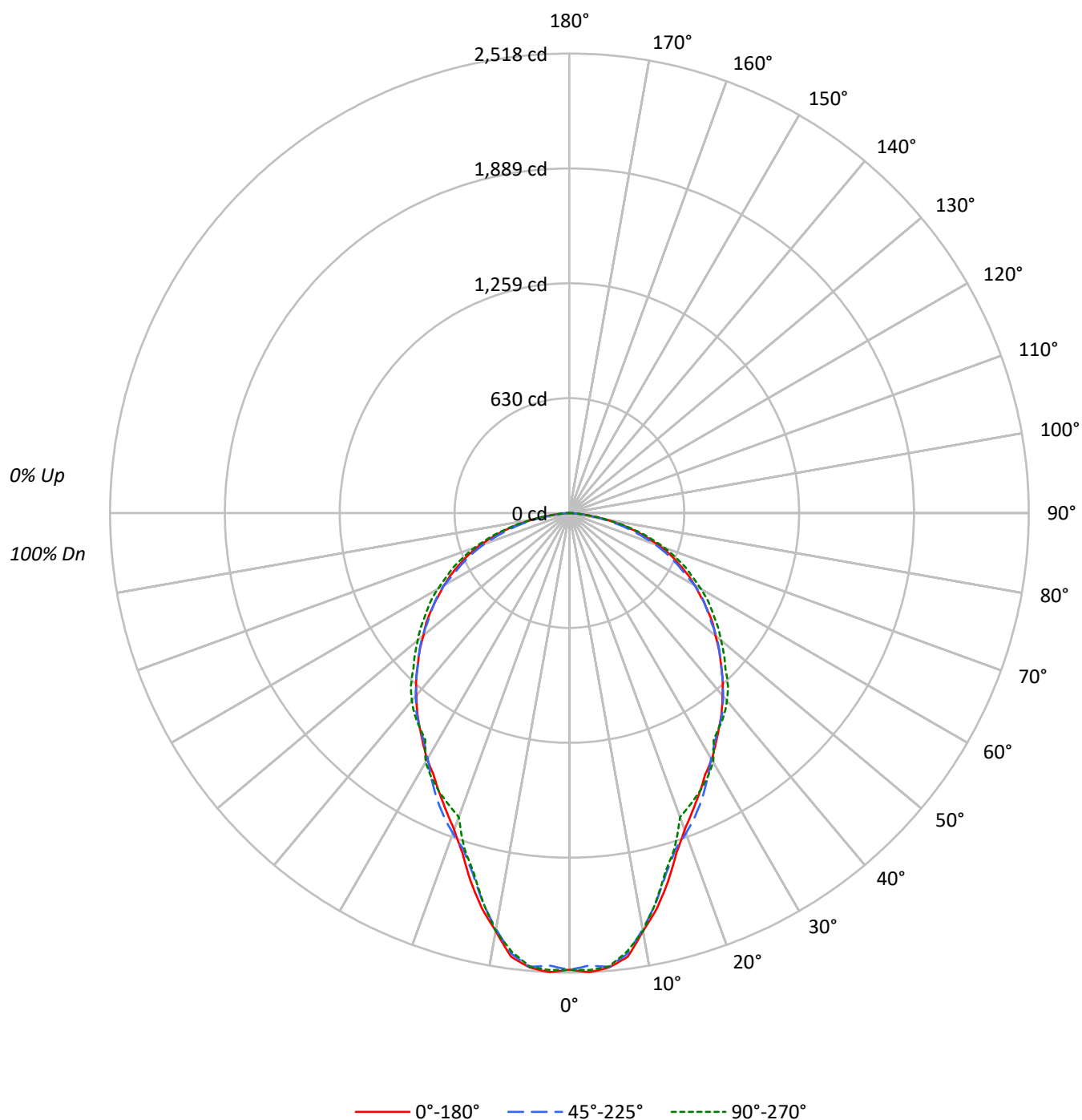
Lumens per Lamp: N/A
Luminaire Lumens: 5352.1 lumens
Efficiency: N/A
Efficacy: 64.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 83.2
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°	6734	6734	6734
5°	6753	6743	6736
10°	6355	6326	6351
15°	5823	5696	5663
20°	5288	5348	5076
25°	5016	5116	5008
30°	4845	4824	4897
35°	4703	4703	4703
40°	4585	4604	4718
45°	4472	4467	4606
50°	4375	4407	4544
55°	4329	4311	4506
60°	4273	4266	4483
65°	4218	4085	4458
70°	4137	3901	4342
75°	3829	3464	4018
80°	3106	2824	3186
85°	1970	1769	1729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.4	4.3
10°-20°	581.1	10.9
20°-30°	784.8	14.7
30°-40°	898.7	16.8
40°-50°	920.5	17.2
50°-60°	835.3	15.6
60°-70°	651.9	12.2
70°-80°	369.8	6.9
80°-90°	77.6	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°	1598.3	29.9
0°-40°	2497.0	46.7
0°-60°	4252.8	79.5
0°-90°	5352.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5352.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2503	2503	2503	2503	2503	
5°	2500	2471	2496	2501	2494	234
15°	2090	2097	2044	2055	2033	584
25°	1689	1711	1723	1681	1687	779
35°	1432	1434	1432	1433	1432	897
45°	1175	1184	1174	1222	1210	909
55°	923	921	919	951	960	825
65°	662	648	642	672	700	656
75°	368	341	333	353	386	385
85°	64	57	57	53	56	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2502.6	2502.6	2502.6	2502.6	2502.6
2.5°	2518.2	2498.7	2481.8	2509.1	2506.5
5°	2500.0	2471.4	2496.1	2501.3	2493.5
7.5°	2451.8	2433.6	2434.9	2424.5	2423.2
10°	2325.6	2336.0	2315.2	2333.4	2324.3
12.5°	2217.6	2224.1	2187.7	2195.5	2185.1
15°	2090.1	2096.6	2044.5	2054.9	2032.8
17.5°	1950.8	1974.2	1931.3	1944.3	1920.9
20°	1846.7	1866.2	1867.5	1846.7	1772.5
22.5°	1764.7	1784.2	1799.8	1737.4	1729.6
25°	1689.2	1711.3	1723.1	1681.4	1686.6
27.5°	1613.7	1638.5	1638.5	1647.6	1635.9
30°	1559.1	1569.5	1552.6	1586.4	1576.0
32.5°	1494.0	1497.9	1483.6	1508.3	1471.9
35°	1431.5	1434.1	1431.5	1432.8	1431.5
37.5°	1371.7	1365.2	1376.9	1369.1	1393.8
40°	1305.3	1305.3	1310.5	1323.5	1343.0
42.5°	1244.1	1249.3	1242.8	1279.3	1287.1
45°	1175.2	1184.3	1173.9	1222.0	1210.3
47.5°	1112.7	1116.6	1114.0	1146.5	1149.1
50°	1045.0	1050.2	1052.8	1081.5	1085.4
52.5°	989.1	987.8	978.7	1020.3	1026.8
55°	922.7	921.4	918.8	951.3	960.4
57.5°	855.0	856.3	862.8	881.0	903.2
60°	793.9	787.3	792.6	814.7	832.9
62.5°	731.4	719.7	708.0	744.4	761.3
65°	662.4	648.1	641.6	671.5	700.2
67.5°	598.6	575.2	571.3	592.1	626.0
70°	525.8	497.1	495.8	511.5	551.8
72.5°	445.1	420.4	413.8	434.7	471.1
75°	368.3	341.0	333.2	352.7	386.5
77.5°	285.0	262.9	257.7	268.1	295.4
80°	200.4	187.4	182.2	186.1	205.6
82.5°	126.2	117.1	114.5	113.2	123.6
85°	63.8	57.3	57.3	53.4	56.0
87.5°	19.5	18.2	16.9	13.0	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)