

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: P485057

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3HI-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: P485057
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-12-4-INS-89BC-LD4-3HI-35-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

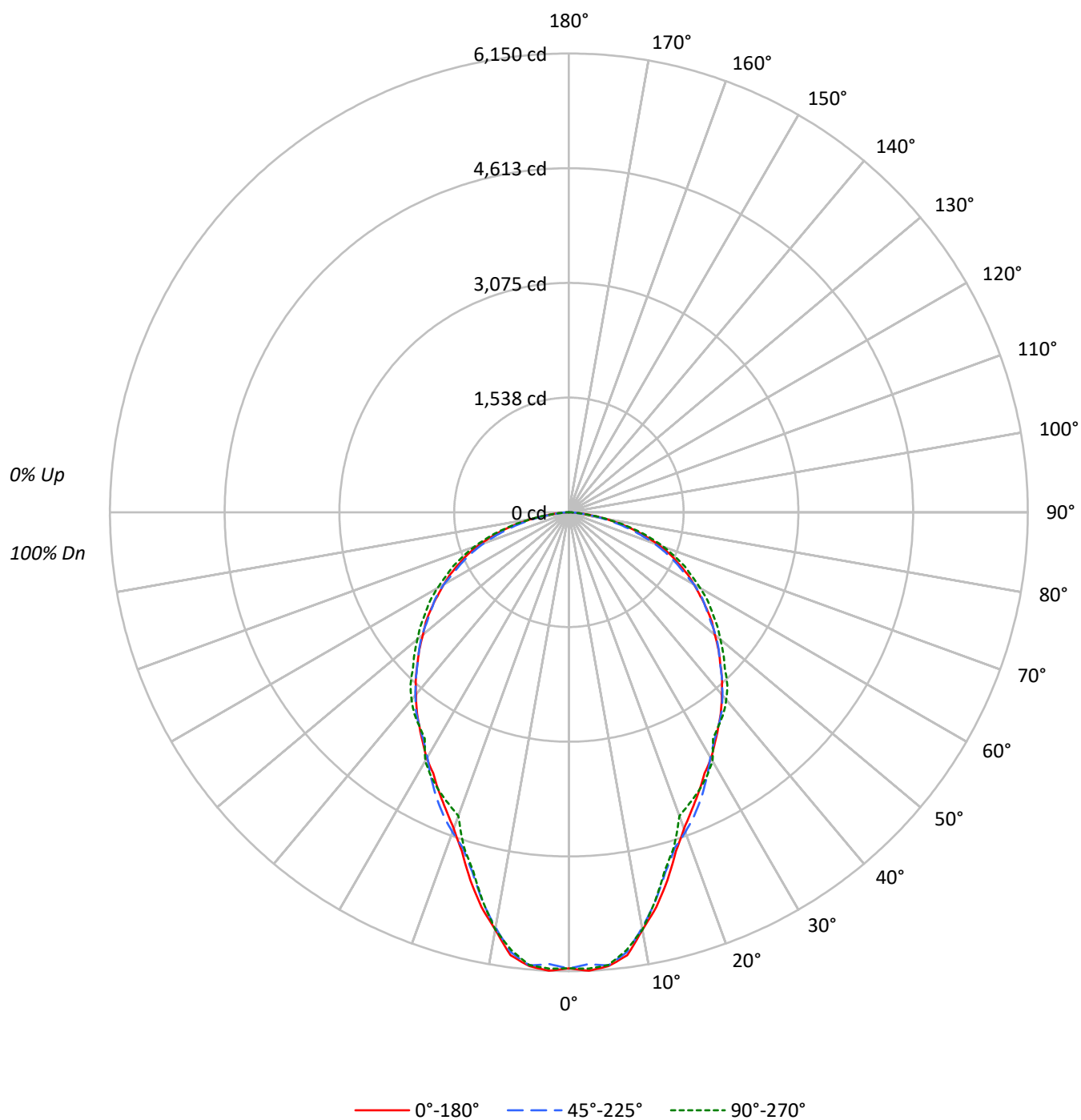
Lumens per Lamp: N/A
Luminaire Lumens: 13069.9 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 132
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°	16446	16446	16446
5°	16491	16466	16448
10°	15518	15449	15510
15°	14219	13909	13830
20°	12914	13060	12395
25°	12248	12493	12229
30°	11830	11781	11959
35°	11484	11484	11484
40°	11197	11242	11521
45°	10921	10909	11248
50°	10684	10763	11096
55°	10571	10526	11004
60°	10433	10416	10946
65°	10300	9976	10887
70°	10102	9526	10602
75°	9351	8459	9814
80°	7584	6894	7781
85°	4807	4316	4221



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	567.6	4.3
10°-20°	1419.1	10.9
20°-30°	1916.4	14.7
30°-40°	2194.6	16.8
40°-50°	2248.0	17.2
50°-60°	2039.7	15.6
60°-70°	1592.0	12.2
70°-80°	902.9	6.9
80°-90°	189.5	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°	3903.1	29.9
0°-40°	6097.7	46.7
0°-60°	10385.5	79.5
0°-90°	13069.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13069.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6111	6111	6111	6111	6111	
5°	6105	6035	6096	6108	6089	570
15°	5104	5120	4993	5018	4964	1426
25°	4125	4179	4208	4106	4119	1904
35°	3496	3502	3496	3499	3496	2190
45°	2870	2892	2867	2984	2956	2219
55°	2253	2250	2244	2323	2345	2014
65°	1618	1583	1567	1640	1710	1603
75°	899	833	814	861	944	941
85°	156	140	140	130	137	206
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6111.4	6111.4	6111.4	6111.4	6111.4
2.5°	6149.5	6101.8	6060.5	6127.3	6120.9
5°	6105.0	6035.1	6095.5	6108.2	6089.1
7.5°	5987.4	5942.9	5946.1	5920.7	5917.5
10°	5679.2	5704.6	5653.7	5698.2	5676.0
12.5°	5415.4	5431.3	5342.3	5361.4	5335.9
15°	5103.9	5119.8	4992.7	5018.1	4964.1
17.5°	4763.9	4821.1	4716.2	4748.0	4690.8
20°	4509.6	4557.3	4560.5	4509.6	4328.5
22.5°	4309.4	4357.1	4395.2	4242.7	4223.6
25°	4125.1	4179.1	4207.7	4106.0	4118.7
27.5°	3940.8	4001.2	4001.2	4023.4	3994.8
30°	3807.3	3832.7	3791.4	3874.0	3848.6
32.5°	3648.4	3657.9	3623.0	3683.4	3594.4
35°	3495.8	3502.2	3495.8	3499.0	3495.8
37.5°	3349.7	3333.8	3362.4	3343.3	3403.7
40°	3187.6	3187.6	3200.3	3232.1	3279.7
42.5°	3038.2	3050.9	3035.0	3124.0	3143.1
45°	2869.8	2892.0	2866.6	2984.2	2955.6
47.5°	2717.2	2726.8	2720.4	2799.9	2806.2
50°	2552.0	2564.7	2571.0	2641.0	2650.5
52.5°	2415.3	2412.1	2389.9	2491.6	2507.5
55°	2253.2	2250.1	2243.7	2323.1	2345.4
57.5°	2088.0	2091.2	2107.0	2151.5	2205.6
60°	1938.6	1922.7	1935.4	1989.5	2033.9
62.5°	1786.1	1757.5	1728.9	1817.8	1859.2
65°	1617.6	1582.7	1566.8	1639.9	1709.8
67.5°	1461.9	1404.7	1395.2	1446.0	1528.6
70°	1283.9	1214.0	1210.8	1249.0	1347.5
72.5°	1086.9	1026.5	1010.6	1061.5	1150.5
75°	899.4	832.6	813.6	861.2	943.9
77.5°	696.0	642.0	629.3	654.7	721.4
80°	489.4	457.6	444.9	454.5	502.1
82.5°	308.3	286.0	279.7	276.5	301.9
85°	155.7	139.8	139.8	130.3	136.7
87.5°	47.7	44.5	41.3	31.8	35.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)