

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: P488416

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1STD-35-120-EDD-90**

Issue Date: 3/11/2021

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: P488416
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-115-8)
Test Lab: INNOVATION CENTER
Issue Date: 3/11/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: CLM-12-2-INS-A19156-LD4-1STD-35-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

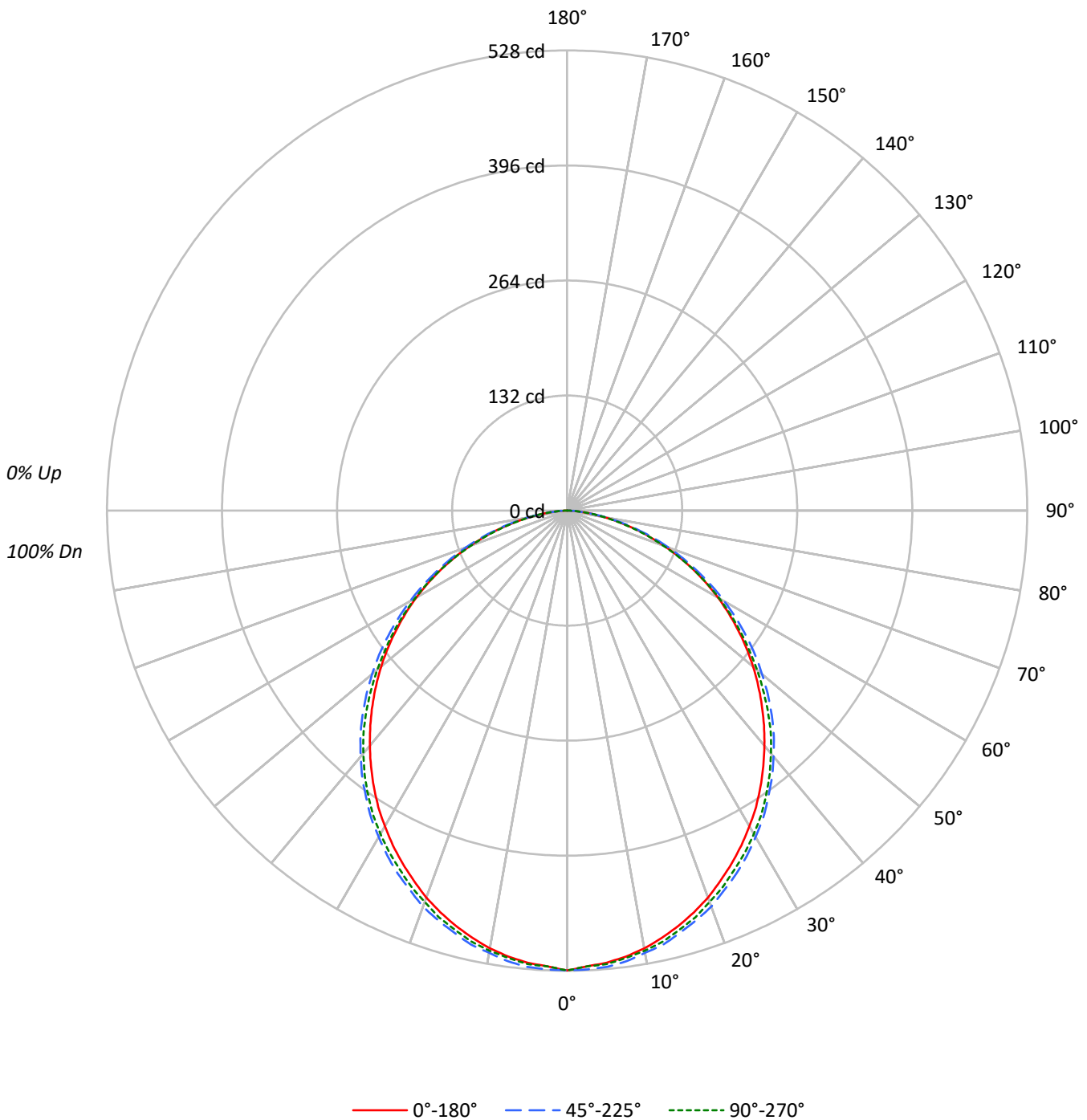
Lumens per Lamp: N/A
Luminaire Lumens: 1387.0 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	105	100	97	106	102	98	95	98	95	92		94	92	89		91	88	87	85
2	99	91	85	79	97	90	83	78	86	81	76		83	78	75		80	76	73	71
3	91	80	72	66	88	79	71	65	76	70	64		73	68	63		71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63	58	54	51
5	77	64	55	48	75	63	54	48	61	53	48		59	52	47		57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37		49	42	37		47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33		45	38	33		43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30		41	35	30		40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27		38	32	27		37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2840	2840	2840
5°	2813	2840	2822
10°	2787	2816	2802
15°	2749	2793	2774
20°	2706	2770	2737
25°	2653	2730	2698
30°	2599	2687	2663
35°	2541	2641	2617
40°	2474	2588	2556
45°	2405	2526	2479
50°	2333	2446	2382
55°	2248	2353	2281
60°	2153	2242	2172
65°	2029	2106	2030
70°	1866	1942	1846
75°	1643	1718	1618
80°	1336	1395	1320
85°	932	994	969



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.7	3.6
10°-20°	140.8	10.2
20°-30°	210.0	15.1
30°-40°	248.8	17.9
40°-50°	251.8	18.2
50°-60°	219.9	15.9
60°-70°	160.7	11.6
70°-80°	85.5	6.2
80°-90°	19.8	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°	400.5	28.9
0°-40°	649.3	46.8
0°-60°	1121.0	80.8
0°-90°	1387.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1387.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	528	528	528	528	528	
5°	521	522	526	527	522	49
15°	493	497	501	504	498	139
25°	447	452	460	461	454	206
35°	387	393	402	405	398	242
45°	316	322	332	332	326	244
55°	240	244	251	247	243	214
65°	159	162	165	162	159	158
75°	79	81	83	80	78	84
85°	15	15	16	16	16	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	527.6	527.6	527.6	527.6	527.6
2.5°	523.4	525.1	526.9	527.7	523.4
5°	520.7	521.7	525.6	526.8	522.3
7.5°	516.2	517.7	521.5	522.0	517.7
10°	510.0	512.7	515.2	517.9	512.7
12.5°	502.2	505.7	510.0	510.5	506.6
15°	493.3	496.6	501.3	504.3	497.8
17.5°	483.4	486.6	492.7	493.2	489.3
20°	472.4	476.3	483.6	484.9	477.8
22.5°	459.8	465.2	471.2	472.4	467.2
25°	446.7	452.2	459.7	461.4	454.4
27.5°	433.0	438.2	446.7	447.9	442.0
30°	418.2	423.2	432.4	434.5	428.5
32.5°	403.3	408.2	418.5	420.2	414.3
35°	386.7	392.7	402.0	404.8	398.3
37.5°	369.8	375.6	386.2	388.7	381.7
40°	352.2	358.0	368.4	370.5	363.8
42.5°	334.3	340.1	351.2	351.6	346.0
45°	316.0	321.6	331.9	332.2	325.7
47.5°	297.4	303.1	312.3	311.3	305.1
50°	278.6	284.0	292.1	290.0	284.5
52.5°	259.2	264.4	272.0	268.6	263.4
55°	239.6	244.4	250.8	247.2	243.1
57.5°	219.9	224.8	229.6	226.0	222.4
60°	200.0	204.3	208.3	204.5	201.8
62.5°	179.7	183.4	186.9	183.3	180.8
65°	159.3	162.5	165.4	162.1	159.4
67.5°	139.0	141.7	144.3	140.9	138.1
70°	118.6	121.0	123.4	119.9	117.3
72.5°	98.6	100.6	102.8	99.4	97.1
75°	79.0	80.9	82.6	79.6	77.8
77.5°	60.4	61.9	63.2	61.2	59.5
80°	43.1	44.2	45.0	44.2	42.6
82.5°	27.7	28.5	28.9	28.9	27.8
85°	15.1	15.3	16.1	16.2	15.7
87.5°	5.8	6.2	6.4	6.9	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)