

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: P488417

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

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: P488417  
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  
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

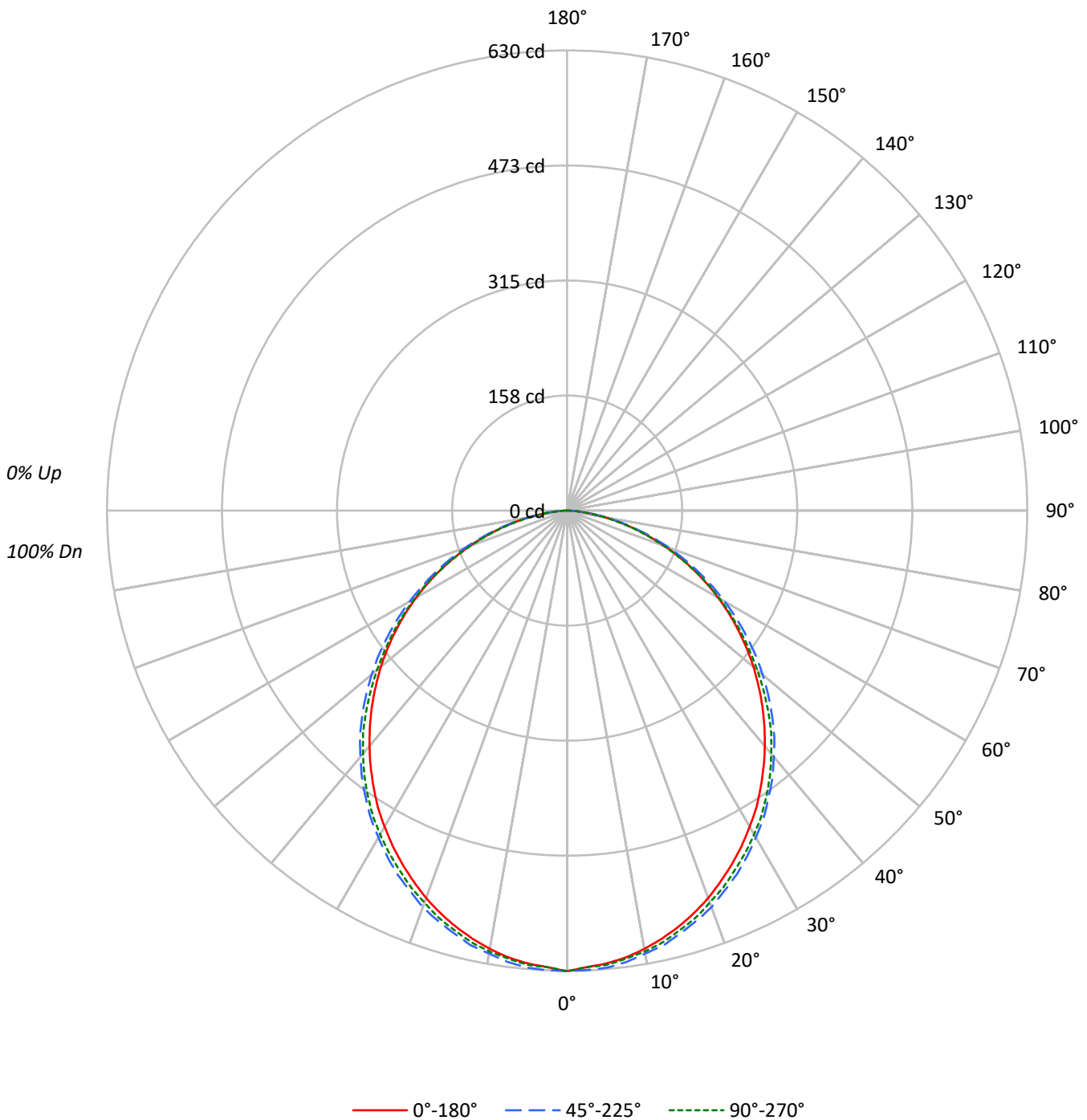
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1657.6 lumens  
Efficiency: N/A  
Efficacy: 99.9 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°	3393	3393	3393
5°	3362	3393	3373
10°	3331	3365	3349
15°	3285	3338	3315
20°	3233	3310	3270
25°	3170	3263	3225
30°	3106	3212	3182
35°	3036	3157	3127
40°	2957	3093	3054
45°	2875	3019	2962
50°	2788	2923	2846
55°	2686	2812	2726
60°	2573	2679	2596
65°	2425	2518	2426
70°	2231	2321	2206
75°	1965	2052	1934
80°	1596	1664	1578
85°	1112	1186	1155



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.4	3.6
10°-20°	168.3	10.2
20°-30°	251.0	15.1
30°-40°	297.4	17.9
40°-50°	300.9	18.2
50°-60°	262.8	15.9
60°-70°	192.0	11.6
70°-80°	102.2	6.2
80°-90°	23.6	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°	478.6	28.9
0°-40°	776.0	46.8
0°-60°	1339.7	80.8
0°-90°	1657.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1657.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	630	630	630	630	630	
5°	622	624	628	630	624	59
15°	590	594	599	603	595	166
25°	534	540	549	551	543	246
35°	462	469	480	484	476	289
45°	378	384	397	397	389	291
55°	286	292	300	295	290	256
65°	190	194	198	194	190	188
75°	94	97	99	95	93	100
85°	18	18	19	19	19	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	630.5	630.5	630.5	630.5	630.5
2.5°	625.6	627.6	629.7	630.6	625.5
5°	622.3	623.5	628.1	629.6	624.3
7.5°	616.9	618.7	623.2	623.9	618.7
10°	609.5	612.7	615.7	619.0	612.8
12.5°	600.1	604.4	609.5	610.1	605.4
15°	589.6	593.5	599.1	602.7	594.9
17.5°	577.7	581.6	588.8	589.4	584.7
20°	564.5	569.3	577.9	579.5	571.0
22.5°	549.6	555.9	563.2	564.6	558.4
25°	533.9	540.4	549.4	551.4	543.1
27.5°	517.4	523.7	533.8	535.2	528.2
30°	499.8	505.7	516.8	519.2	512.1
32.5°	482.0	487.9	500.1	502.1	495.2
35°	462.1	469.4	480.5	483.8	476.0
37.5°	441.9	448.9	461.5	464.6	456.2
40°	420.9	427.9	440.3	442.8	434.7
42.5°	399.5	406.5	419.8	420.2	413.5
45°	377.7	384.4	396.7	397.0	389.2
47.5°	355.4	362.2	373.3	372.0	364.6
50°	333.0	339.4	349.1	346.6	339.9
52.5°	309.7	316.0	325.1	321.0	314.8
55°	286.3	292.1	299.7	295.4	290.5
57.5°	262.8	268.6	274.5	270.1	265.8
60°	239.0	244.1	248.9	244.4	241.2
62.5°	214.8	219.2	223.3	219.1	216.1
65°	190.4	194.2	197.7	193.7	190.5
67.5°	166.1	169.3	172.5	168.4	165.1
70°	141.8	144.6	147.5	143.3	140.2
72.5°	117.8	120.3	122.8	118.8	116.1
75°	94.5	96.6	98.7	95.1	93.0
77.5°	72.2	74.0	75.5	73.2	71.1
80°	51.5	52.9	53.7	52.8	50.9
82.5°	33.1	34.1	34.6	34.5	33.2
85°	18.0	18.3	19.2	19.4	18.7
87.5°	7.0	7.4	7.6	8.2	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)