

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: P488400

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1LO-27-120-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: P488400  
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-LD4-1LO-27-120-EDD-90  
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

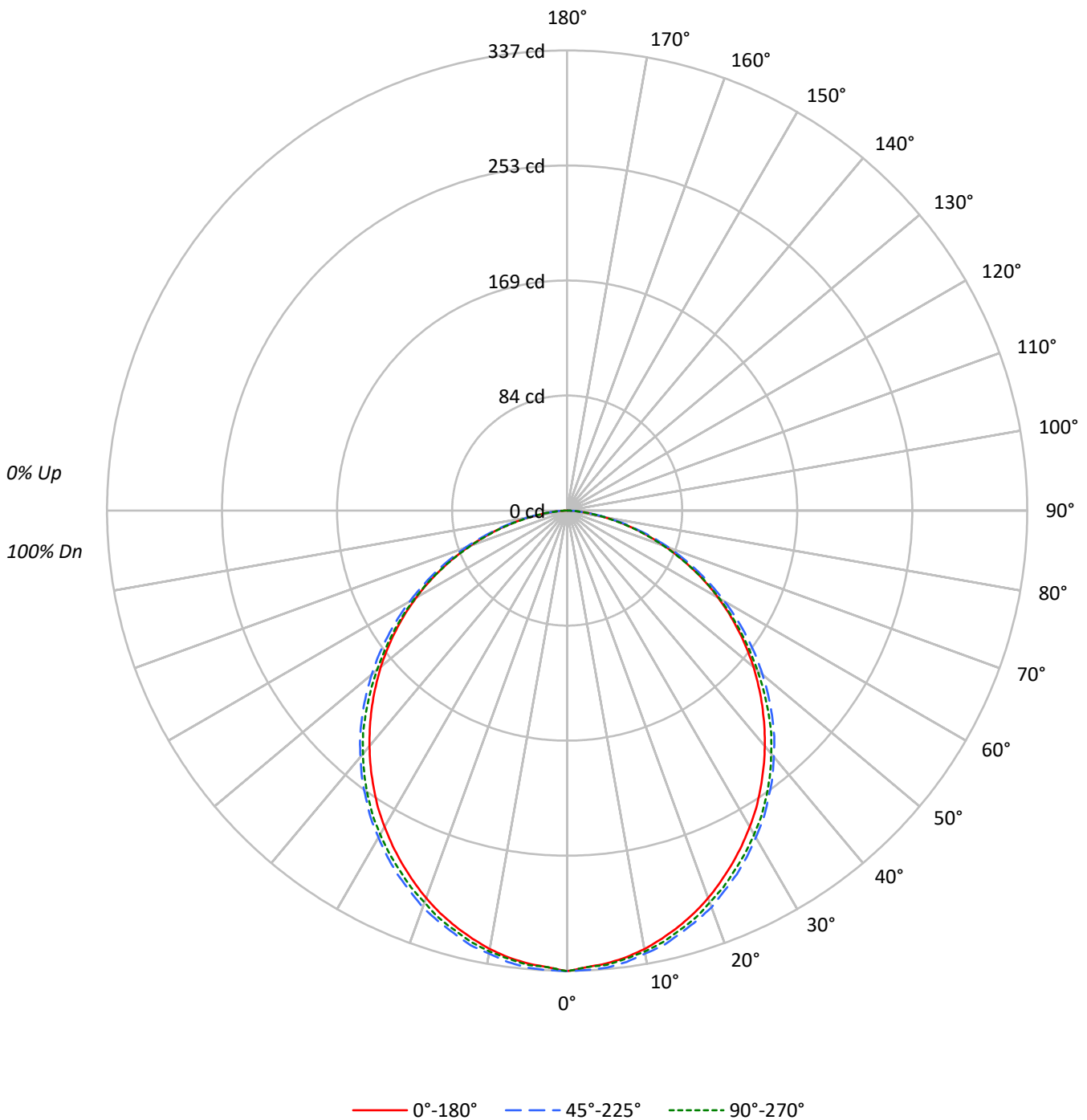
Lumens per Lamp: N/A  
Luminaire Lumens: 886.7 lumens  
Efficiency: N/A  
Efficacy: 75.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
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°	1815	1815	1815
5°	1798	1815	1804
10°	1782	1800	1791
15°	1757	1786	1773
20°	1730	1771	1749
25°	1696	1745	1725
30°	1662	1718	1702
35°	1624	1689	1673
40°	1582	1655	1634
45°	1537	1615	1585
50°	1491	1563	1522
55°	1437	1504	1458
60°	1376	1433	1389
65°	1296	1346	1298
70°	1193	1242	1180
75°	1050	1098	1036
80°	852	890	843
85°	593	636	618



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.8	3.6
10°-20°	90.0	10.2
20°-30°	134.3	15.1
30°-40°	159.1	17.9
40°-50°	161.0	18.2
50°-60°	140.6	15.9
60°-70°	102.7	11.6
70°-80°	54.7	6.2
80°-90°	12.6	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°	256.0	28.9
0°-40°	415.1	46.8
0°-60°	716.7	80.8
0°-90°	886.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	886.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	337	337	337	337	337	
5°	333	334	336	337	334	32
15°	315	318	320	322	318	89
25°	286	289	294	295	290	132
35°	247	251	257	259	255	155
45°	202	206	212	212	208	156
55°	153	156	160	158	155	137
65°	102	104	106	104	102	101
75°	50	52	53	51	50	54
85°	10	10	10	10	10	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	337.3	337.3	337.3	337.3	337.3
2.5°	334.6	335.7	336.8	337.3	334.6
5°	332.9	333.5	336.0	336.8	333.9
7.5°	330.0	330.9	333.4	333.7	331.0
10°	326.1	327.7	329.4	331.1	327.8
12.5°	321.0	323.3	326.1	326.4	323.8
15°	315.4	317.5	320.5	322.4	318.2
17.5°	309.1	311.1	315.0	315.3	312.8
20°	302.0	304.5	309.2	310.0	305.4
22.5°	294.0	297.4	301.3	302.0	298.7
25°	285.6	289.1	293.9	295.0	290.5
27.5°	276.8	280.2	285.5	286.3	282.6
30°	267.4	270.5	276.4	277.7	273.9
32.5°	257.8	261.0	267.5	268.6	264.9
35°	247.2	251.1	257.0	258.8	254.6
37.5°	236.4	240.1	246.9	248.5	244.0
40°	225.2	228.9	235.5	236.9	232.6
42.5°	213.7	217.4	224.5	224.8	221.2
45°	202.0	205.6	212.2	212.4	208.2
47.5°	190.1	193.8	199.7	199.0	195.1
50°	178.1	181.6	186.7	185.4	181.8
52.5°	165.7	169.0	173.9	171.7	168.4
55°	153.2	156.3	160.3	158.0	155.4
57.5°	140.6	143.7	146.8	144.5	142.2
60°	127.8	130.6	133.1	130.8	129.0
62.5°	114.9	117.3	119.5	117.2	115.6
65°	101.8	103.9	105.7	103.6	101.9
67.5°	88.8	90.6	92.3	90.1	88.3
70°	75.8	77.3	78.9	76.6	75.0
72.5°	63.0	64.3	65.7	63.5	62.1
75°	50.5	51.7	52.8	50.9	49.8
77.5°	38.6	39.6	40.4	39.1	38.1
80°	27.5	28.3	28.7	28.3	27.2
82.5°	17.7	18.2	18.5	18.4	17.8
85°	9.6	9.8	10.3	10.4	10.0
87.5°	3.7	4.0	4.1	4.4	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)