

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: P488456

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2STD-50-120-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: P488456  
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-LD4-2STD-50-120-EDD-90  
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

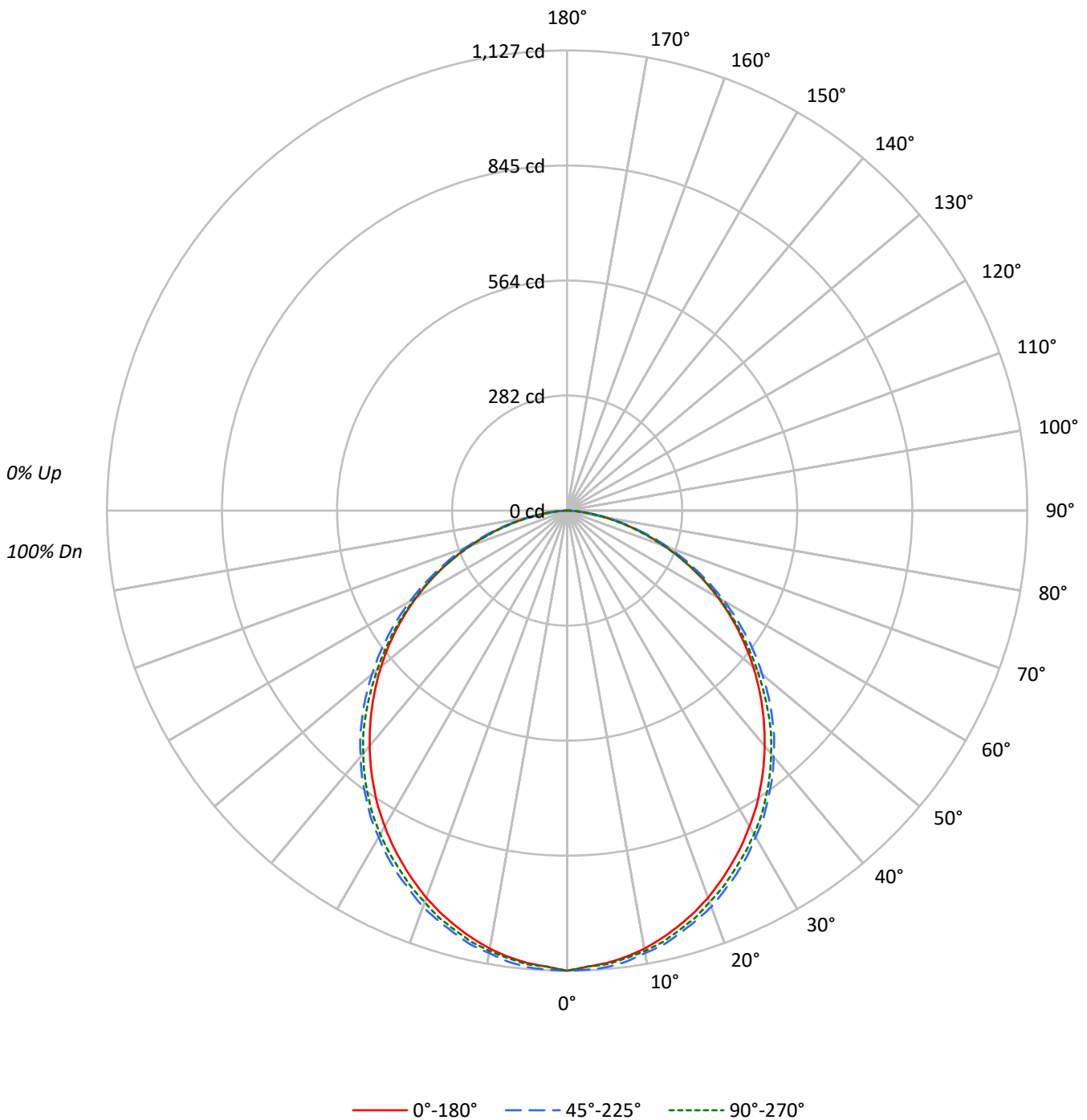
Lumens per Lamp: N/A  
Luminaire Lumens: 2962.6 lumens  
Efficiency: N/A  
Efficacy: 89.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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°	6065	6065	6065
5°	6009	6065	6028
10°	5954	6014	5985
15°	5871	5966	5924
20°	5779	5916	5845
25°	5666	5831	5764
30°	5551	5740	5688
35°	5427	5642	5589
40°	5285	5529	5459
45°	5138	5396	5294
50°	4983	5224	5087
55°	4802	5027	4873
60°	4597	4789	4640
65°	4332	4499	4336
70°	3987	4148	3942
75°	3510	3670	3456
80°	2851	2975	2820
85°	1988	2118	2069



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.1	3.6
10°-20°	300.7	10.2
20°-30°	448.5	15.1
30°-40°	531.5	17.9
40°-50°	537.8	18.2
50°-60°	469.7	15.9
60°-70°	343.3	11.6
70°-80°	182.6	6.2
80°-90°	42.2	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°	855.4	28.9
0°-40°	1387.0	46.8
0°-60°	2394.5	80.8
0°-90°	2962.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2962.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1127	1127	1127	1127	1127	
5°	1112	1114	1123	1125	1116	105
15°	1054	1061	1071	1077	1063	297
25°	954	966	982	986	971	440
35°	826	839	859	865	851	517
45°	675	687	709	710	696	521
55°	512	522	536	528	519	457
65°	340	347	353	346	340	337
75°	169	173	176	170	166	179
85°	32	33	34	35	34	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1126.9	1126.9	1126.9	1126.9	1126.9
2.5°	1118.1	1121.7	1125.5	1127.1	1117.9
5°	1112.2	1114.3	1122.6	1125.2	1115.7
7.5°	1102.6	1105.7	1113.8	1115.0	1105.9
10°	1089.4	1095.1	1100.5	1106.3	1095.2
12.5°	1072.6	1080.3	1089.4	1090.5	1082.0
15°	1053.7	1060.8	1070.7	1077.2	1063.2
17.5°	1032.6	1039.4	1052.3	1053.5	1045.0
20°	1009.0	1017.4	1032.9	1035.6	1020.5
22.5°	982.2	993.6	1006.5	1009.1	998.0
25°	954.2	965.9	981.9	985.5	970.6
27.5°	924.8	936.1	954.0	956.6	944.1
30°	893.3	903.9	923.6	928.0	915.2
32.5°	861.4	872.0	893.8	897.5	885.0
35°	826.0	838.9	858.7	864.7	850.7
37.5°	789.8	802.4	824.9	830.3	815.3
40°	752.3	764.8	787.0	791.4	777.0
42.5°	714.1	726.5	750.2	750.9	739.0
45°	675.0	686.9	709.0	709.6	695.6
47.5°	635.3	647.4	667.1	664.9	651.7
50°	595.1	606.6	623.9	619.4	607.6
52.5°	553.6	564.7	581.0	573.8	562.6
55°	511.8	522.1	535.7	528.0	519.3
57.5°	469.6	480.1	490.5	482.7	475.1
60°	427.1	436.3	444.9	436.9	431.1
62.5°	383.9	391.8	399.2	391.6	386.1
65°	340.2	347.2	353.3	346.2	340.5
67.5°	296.8	302.7	308.3	301.0	295.0
70°	253.4	258.4	263.6	256.1	250.5
72.5°	210.5	215.0	219.6	212.3	207.5
75°	168.8	172.7	176.5	170.0	166.2
77.5°	129.0	132.3	134.9	130.8	127.2
80°	92.0	94.5	96.0	94.4	91.0
82.5°	59.2	60.9	61.8	61.6	59.4
85°	32.2	32.8	34.3	34.6	33.5
87.5°	12.4	13.3	13.6	14.7	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)