

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: P488452

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2STD-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: P488452
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-35-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

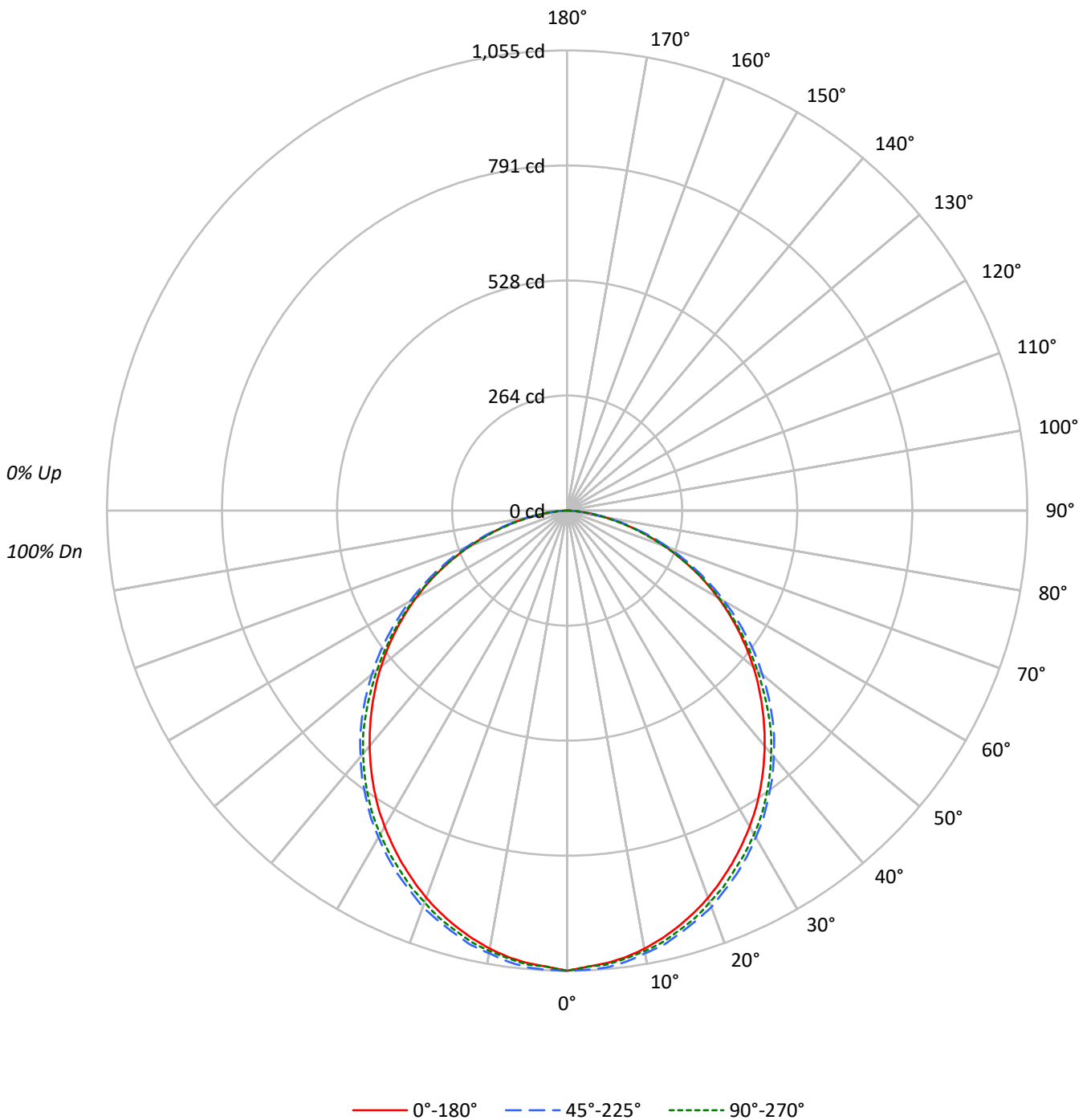
Lumens per Lamp: N/A
Luminaire Lumens: 2774.1 lumens
Efficiency: N/A
Efficacy: 83.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	5679	5679	5679
5°	5626	5679	5644
10°	5575	5631	5604
15°	5498	5586	5547
20°	5411	5540	5473
25°	5306	5460	5397
30°	5198	5375	5326
35°	5081	5283	5234
40°	4950	5177	5112
45°	4810	5053	4958
50°	4666	4891	4763
55°	4496	4707	4562
60°	4304	4483	4345
65°	4057	4213	4060
70°	3733	3884	3692
75°	3288	3435	3238
80°	2672	2786	2641
85°	1859	1982	1933



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.4	3.6
10°-20°	281.6	10.2
20°-30°	420.0	15.1
30°-40°	497.7	17.9
40°-50°	503.6	18.2
50°-60°	439.8	15.9
60°-70°	321.4	11.6
70°-80°	171.0	6.2
80°-90°	39.5	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°	801.0	28.9
0°-40°	1298.7	46.8
0°-60°	2242.1	80.8
0°-90°	2774.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2774.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1055	1055	1055	1055	1055	
5°	1041	1043	1051	1054	1045	99
15°	987	993	1003	1009	996	278
25°	894	904	919	923	909	412
35°	773	786	804	810	797	484
45°	632	643	664	664	651	488
55°	479	489	502	494	486	428
65°	319	325	331	324	319	315
75°	158	162	165	159	156	168
85°	30	31	32	32	31	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1055.2	1055.2	1055.2	1055.2	1055.2
2.5°	1046.9	1050.3	1053.8	1055.4	1046.8
5°	1041.4	1043.4	1051.2	1053.6	1044.7
7.5°	1032.4	1035.4	1043.0	1044.1	1035.5
10°	1020.1	1025.4	1030.4	1035.9	1025.5
12.5°	1004.4	1011.5	1020.1	1021.1	1013.2
15°	986.7	993.3	1002.6	1008.7	995.6
17.5°	966.9	973.3	985.4	986.5	978.5
20°	944.8	952.7	967.2	969.7	955.6
22.5°	919.7	930.4	942.5	944.9	934.5
25°	893.5	904.4	919.4	922.8	908.8
27.5°	866.0	876.5	893.3	895.8	884.0
30°	836.5	846.4	864.9	868.9	857.0
32.5°	806.6	816.5	836.9	840.4	828.7
35°	773.4	785.5	804.1	809.7	796.6
37.5°	739.5	751.3	772.4	777.5	763.4
40°	704.5	716.1	736.9	741.1	727.6
42.5°	668.6	680.3	702.5	703.2	691.9
45°	632.0	643.2	663.9	664.5	651.4
47.5°	594.9	606.2	624.7	622.6	610.3
50°	557.3	568.0	584.2	580.0	568.9
52.5°	518.3	528.8	544.1	537.3	526.8
55°	479.2	488.9	501.6	494.4	486.2
57.5°	439.7	449.5	459.3	451.9	444.9
60°	399.9	408.5	416.5	409.1	403.7
62.5°	359.5	366.9	373.8	366.6	361.6
65°	318.6	325.1	330.8	324.2	318.8
67.5°	277.9	283.4	288.7	281.9	276.3
70°	237.2	242.0	246.8	239.8	234.6
72.5°	197.1	201.3	205.6	198.8	194.3
75°	158.1	161.7	165.2	159.2	155.7
77.5°	120.8	123.9	126.3	122.5	119.1
80°	86.2	88.5	89.9	88.4	85.2
82.5°	55.4	57.1	57.8	57.7	55.6
85°	30.1	30.7	32.1	32.4	31.3
87.5°	11.7	12.4	12.8	13.7	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)