

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: P489056

Luminaire Tested: **CLM-24-2-INS-A19156-LD4-1LO-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: P489056
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-24-2-INS-A19156-LD4-1LO-50-120-EDD-90
Description: 2X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

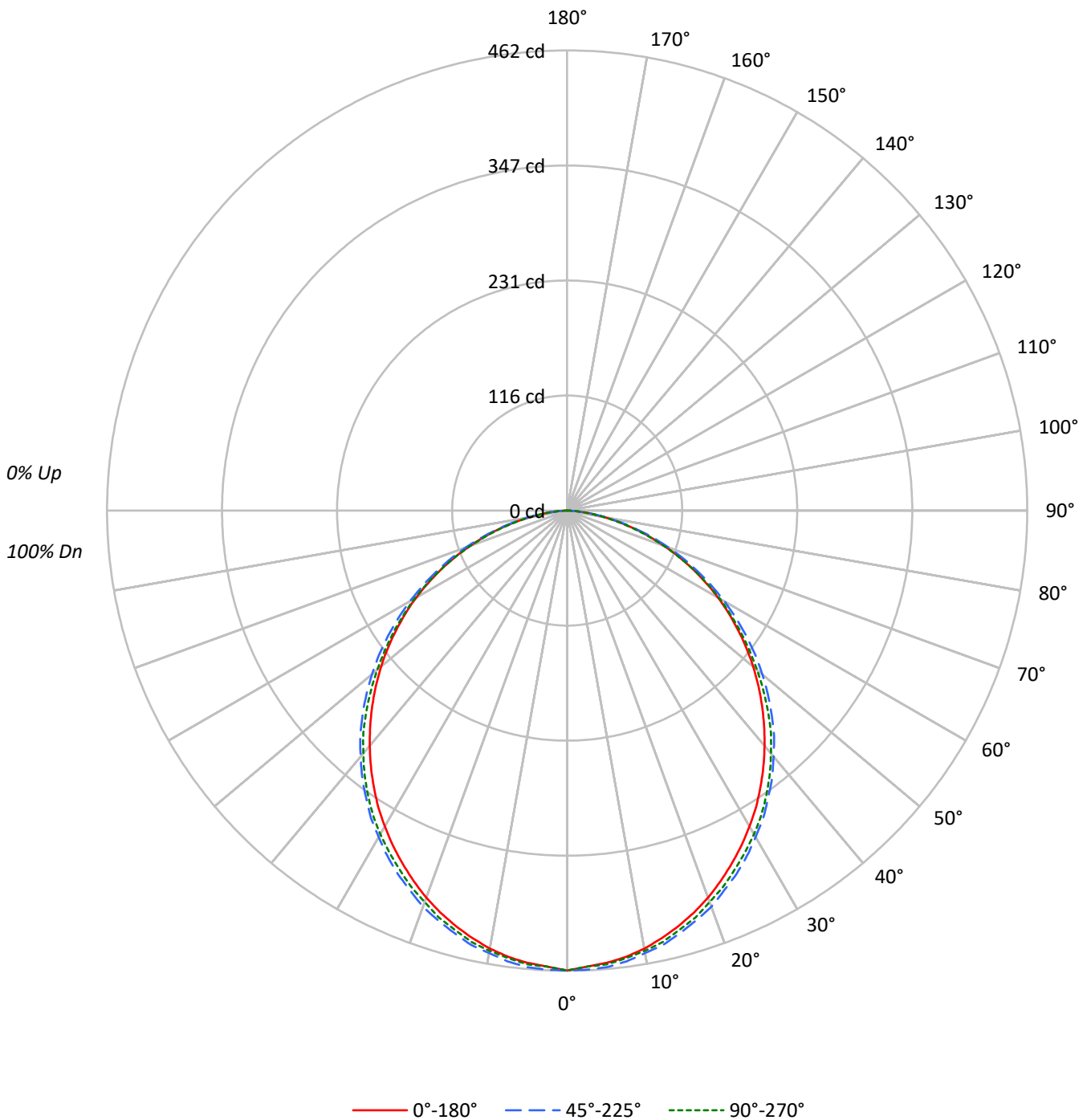
Lumens per Lamp: N/A
Luminaire Lumens: 1214.2 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1243	1243	1243
5°	1231	1243	1235
10°	1220	1232	1226
15°	1203	1222	1214
20°	1184	1212	1198
25°	1161	1195	1181
30°	1138	1176	1166
35°	1112	1156	1146
40°	1083	1133	1118
45°	1053	1106	1085
50°	1021	1070	1042
55°	984	1030	998
60°	942	981	951
65°	888	922	888
70°	817	850	808
75°	719	752	708
80°	584	611	578
85°	408	435	423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	3.6
10°-20°	123.3	10.2
20°-30°	183.8	15.1
30°-40°	217.8	17.9
40°-50°	220.4	18.2
50°-60°	192.5	15.9
60°-70°	140.7	11.6
70°-80°	74.8	6.2
80°-90°	17.3	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°	350.6	28.9
0°-40°	568.4	46.8
0°-60°	981.4	80.8
0°-90°	1214.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1214.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	462	462	462	462	462	
5°	456	457	460	461	457	43
15°	432	435	439	442	436	122
25°	391	396	402	404	398	180
35°	338	344	352	354	349	212
45°	277	282	291	291	285	213
55°	210	214	220	216	213	188
65°	139	142	145	142	140	138
75°	69	71	72	70	68	74
85°	13	13	14	14	14	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	461.8	461.8	461.8	461.8	461.8
2.5°	458.2	459.7	461.3	461.9	458.2
5°	455.8	456.7	460.1	461.2	457.3
7.5°	451.9	453.2	456.5	457.0	453.2
10°	446.5	448.8	451.0	453.4	448.8
12.5°	439.6	442.7	446.5	446.9	443.5
15°	431.9	434.7	438.8	441.5	435.8
17.5°	423.2	426.0	431.3	431.8	428.3
20°	413.5	417.0	423.3	424.5	418.2
22.5°	402.6	407.2	412.5	413.6	409.0
25°	391.1	395.9	402.4	403.9	397.8
27.5°	379.0	383.6	391.0	392.1	386.9
30°	366.1	370.5	378.5	380.3	375.1
32.5°	353.0	357.4	366.3	367.8	362.7
35°	338.5	343.8	351.9	354.4	348.7
37.5°	323.7	328.8	338.1	340.3	334.1
40°	308.3	313.4	322.5	324.4	318.4
42.5°	292.7	297.8	307.5	307.8	302.9
45°	276.6	281.5	290.6	290.8	285.1
47.5°	260.4	265.3	273.4	272.5	267.1
50°	243.9	248.6	255.7	253.9	249.0
52.5°	226.9	231.4	238.1	235.2	230.6
55°	209.7	214.0	219.6	216.4	212.8
57.5°	192.5	196.8	201.0	197.8	194.7
60°	175.1	178.8	182.3	179.0	176.7
62.5°	157.3	160.6	163.6	160.5	158.3
65°	139.4	142.3	144.8	141.9	139.5
67.5°	121.6	124.0	126.4	123.4	120.9
70°	103.8	105.9	108.0	104.9	102.7
72.5°	86.3	88.1	90.0	87.0	85.0
75°	69.2	70.8	72.3	69.7	68.1
77.5°	52.9	54.2	55.3	53.6	52.1
80°	37.7	38.7	39.4	38.7	37.3
82.5°	24.3	25.0	25.3	25.3	24.3
85°	13.2	13.4	14.1	14.2	13.7
87.5°	5.1	5.4	5.6	6.0	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)