

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: P489052

Luminaire Tested: **CLM-24-2-INS-A19156-LD4-1LO-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: P489052
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-35-120-EDD-90
Description: 2X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

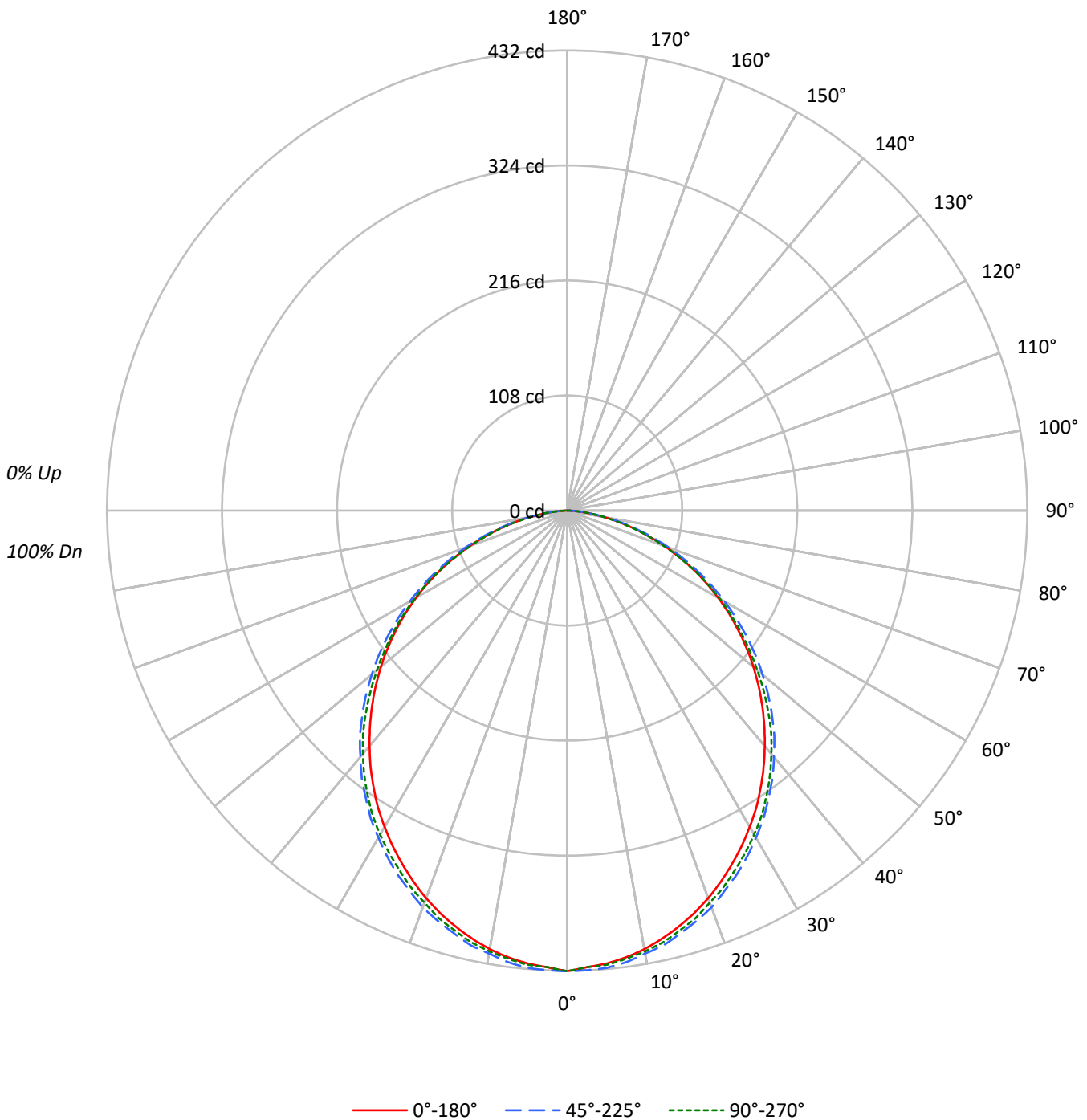
Lumens per Lamp: N/A
Luminaire Lumens: 1137.0 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1164	1164	1164
5°	1153	1164	1157
10°	1142	1154	1148
15°	1127	1145	1137
20°	1109	1135	1122
25°	1087	1119	1106
30°	1065	1102	1091
35°	1041	1083	1073
40°	1014	1061	1048
45°	986	1036	1016
50°	956	1002	976
55°	921	965	935
60°	882	919	891
65°	832	863	832
70°	765	796	757
75°	674	704	663
80°	547	572	541
85°	380	408	395



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.7	3.6
10°-20°	115.4	10.2
20°-30°	172.1	15.1
30°-40°	204.0	17.9
40°-50°	206.4	18.2
50°-60°	180.3	15.9
60°-70°	131.7	11.6
70°-80°	70.1	6.2
80°-90°	16.2	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°	328.3	28.9
0°-40°	532.3	46.8
0°-60°	919.0	80.8
0°-90°	1137.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1137.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	432	432	432	432	432	
5°	427	428	431	432	428	40
15°	404	407	411	413	408	114
25°	366	371	377	378	372	169
35°	317	322	330	332	326	198
45°	259	264	272	272	267	200
55°	196	200	206	203	199	176
65°	131	133	136	133	131	129
75°	65	66	68	65	64	69
85°	12	13	13	13	13	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	432.5	432.5	432.5	432.5	432.5
2.5°	429.1	430.5	431.9	432.6	429.0
5°	426.8	427.7	430.9	431.8	428.2
7.5°	423.1	424.4	427.5	427.9	424.4
10°	418.1	420.3	422.3	424.6	420.3
12.5°	411.7	414.6	418.1	418.5	415.3
15°	404.4	407.1	410.9	413.4	408.1
17.5°	396.3	398.9	403.9	404.3	401.1
20°	387.2	390.5	396.4	397.5	391.7
22.5°	377.0	381.3	386.3	387.3	383.0
25°	366.2	370.7	376.8	378.2	372.5
27.5°	354.9	359.3	366.1	367.1	362.3
30°	342.9	346.9	354.5	356.1	351.2
32.5°	330.6	334.7	343.0	344.4	339.7
35°	317.0	321.9	329.6	331.9	326.5
37.5°	303.1	307.9	316.6	318.7	312.9
40°	288.7	293.5	302.0	303.7	298.2
42.5°	274.0	278.8	287.9	288.2	283.6
45°	259.0	263.6	272.1	272.3	267.0
47.5°	243.8	248.5	256.0	255.2	250.1
50°	228.4	232.8	239.4	237.7	233.2
52.5°	212.5	216.7	223.0	220.2	215.9
55°	196.4	200.4	205.6	202.6	199.3
57.5°	180.2	184.2	188.3	185.2	182.4
60°	163.9	167.4	170.7	167.7	165.5
62.5°	147.3	150.4	153.2	150.3	148.2
65°	130.6	133.2	135.6	132.9	130.7
67.5°	113.9	116.2	118.3	115.5	113.2
70°	97.2	99.2	101.2	98.3	96.2
72.5°	80.8	82.5	84.3	81.5	79.6
75°	64.8	66.3	67.7	65.2	63.8
77.5°	49.5	50.8	51.8	50.2	48.8
80°	35.3	36.3	36.9	36.2	34.9
82.5°	22.7	23.4	23.7	23.7	22.8
85°	12.3	12.6	13.2	13.3	12.8
87.5°	4.8	5.1	5.2	5.6	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)