

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: P489053

Luminaire Tested: **CLM-24-2-INS-A19156-LD4-1LO-35-120-EDD**

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: P489053
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
Description: 2X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

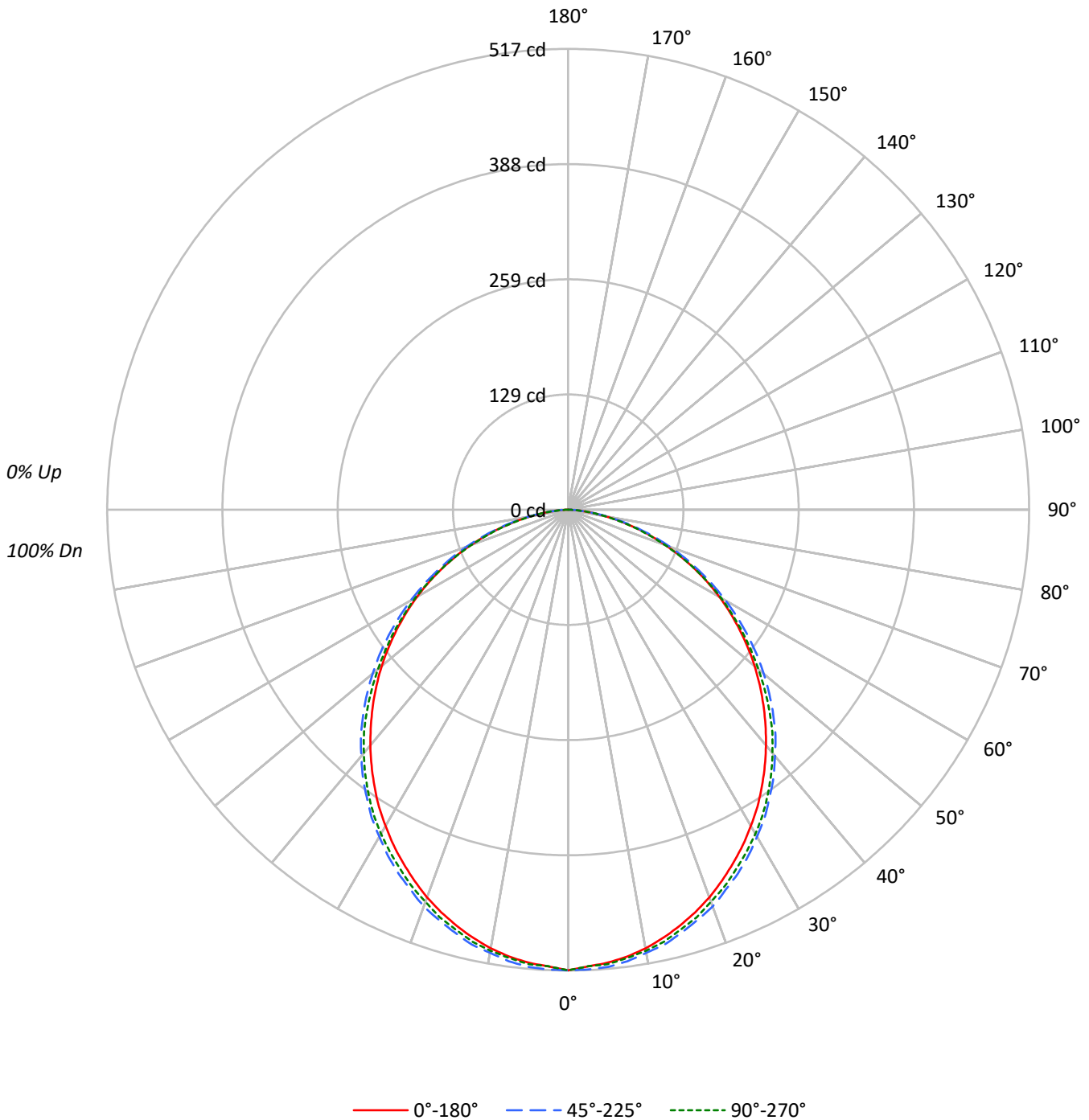
Lumens per Lamp: N/A
Luminaire Lumens: 1358.8 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1391	1391	1391
5°	1378	1391	1382
10°	1365	1379	1373
15°	1346	1368	1359
20°	1325	1357	1340
25°	1299	1337	1322
30°	1273	1316	1304
35°	1244	1294	1282
40°	1212	1268	1252
45°	1178	1238	1214
50°	1143	1198	1167
55°	1101	1153	1118
60°	1054	1098	1064
65°	994	1032	995
70°	914	951	904
75°	805	841	792
80°	654	682	646
85°	457	485	472



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.7	3.6
10°-20°	137.9	10.2
20°-30°	205.7	15.1
30°-40°	243.8	17.9
40°-50°	246.7	18.2
50°-60°	215.4	15.9
60°-70°	157.4	11.6
70°-80°	83.8	6.2
80°-90°	19.3	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°	392.3	28.9
0°-40°	636.1	46.8
0°-60°	1098.2	80.8
0°-90°	1358.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1358.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	517	517	517	517	517	
5°	510	511	515	516	512	48
15°	483	486	491	494	488	136
25°	438	443	450	452	445	202
35°	379	385	394	397	390	237
45°	310	315	325	326	319	239
55°	235	240	246	242	238	210
65°	156	159	162	159	156	154
75°	77	79	81	78	76	82
85°	15	15	16	16	15	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	516.8	516.8	516.8	516.8	516.8
2.5°	512.8	514.5	516.2	516.9	512.7
5°	510.1	511.1	514.9	516.1	511.7
7.5°	505.7	507.1	510.9	511.4	507.2
10°	499.7	502.2	504.7	507.4	502.3
12.5°	492.0	495.5	499.7	500.1	496.3
15°	483.3	486.5	491.1	494.1	487.7
17.5°	473.6	476.7	482.6	483.2	479.3
20°	462.8	466.7	473.8	475.0	468.1
22.5°	450.5	455.7	461.6	462.8	457.7
25°	437.6	443.0	450.3	452.0	445.2
27.5°	424.2	429.3	437.6	438.8	433.0
30°	409.7	414.6	423.6	425.6	419.8
32.5°	395.1	399.9	409.9	411.6	405.9
35°	378.8	384.7	393.8	396.6	390.2
37.5°	362.2	368.0	378.3	380.8	373.9
40°	345.1	350.8	360.9	363.0	356.4
42.5°	327.5	333.2	344.1	344.4	338.9
45°	309.6	315.1	325.2	325.5	319.1
47.5°	291.4	296.9	306.0	304.9	298.9
50°	273.0	278.2	286.2	284.1	278.7
52.5°	253.9	259.0	266.5	263.2	258.0
55°	234.7	239.5	245.7	242.2	238.2
57.5°	215.4	220.2	225.0	221.4	217.9
60°	195.9	200.1	204.0	200.4	197.7
62.5°	176.1	179.7	183.1	179.6	177.1
65°	156.1	159.2	162.0	158.8	156.2
67.5°	136.1	138.8	141.4	138.1	135.3
70°	116.2	118.5	120.9	117.4	114.9
72.5°	96.6	98.6	100.7	97.4	95.2
75°	77.4	79.2	80.9	78.0	76.2
77.5°	59.2	60.7	61.9	60.0	58.3
80°	42.2	43.3	44.0	43.3	41.7
82.5°	27.1	27.9	28.3	28.3	27.2
85°	14.8	15.0	15.7	15.9	15.3
87.5°	5.7	6.1	6.2	6.7	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)