

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: P488426

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2HI-30-120-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: P488426
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-LD4-2HI-30-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

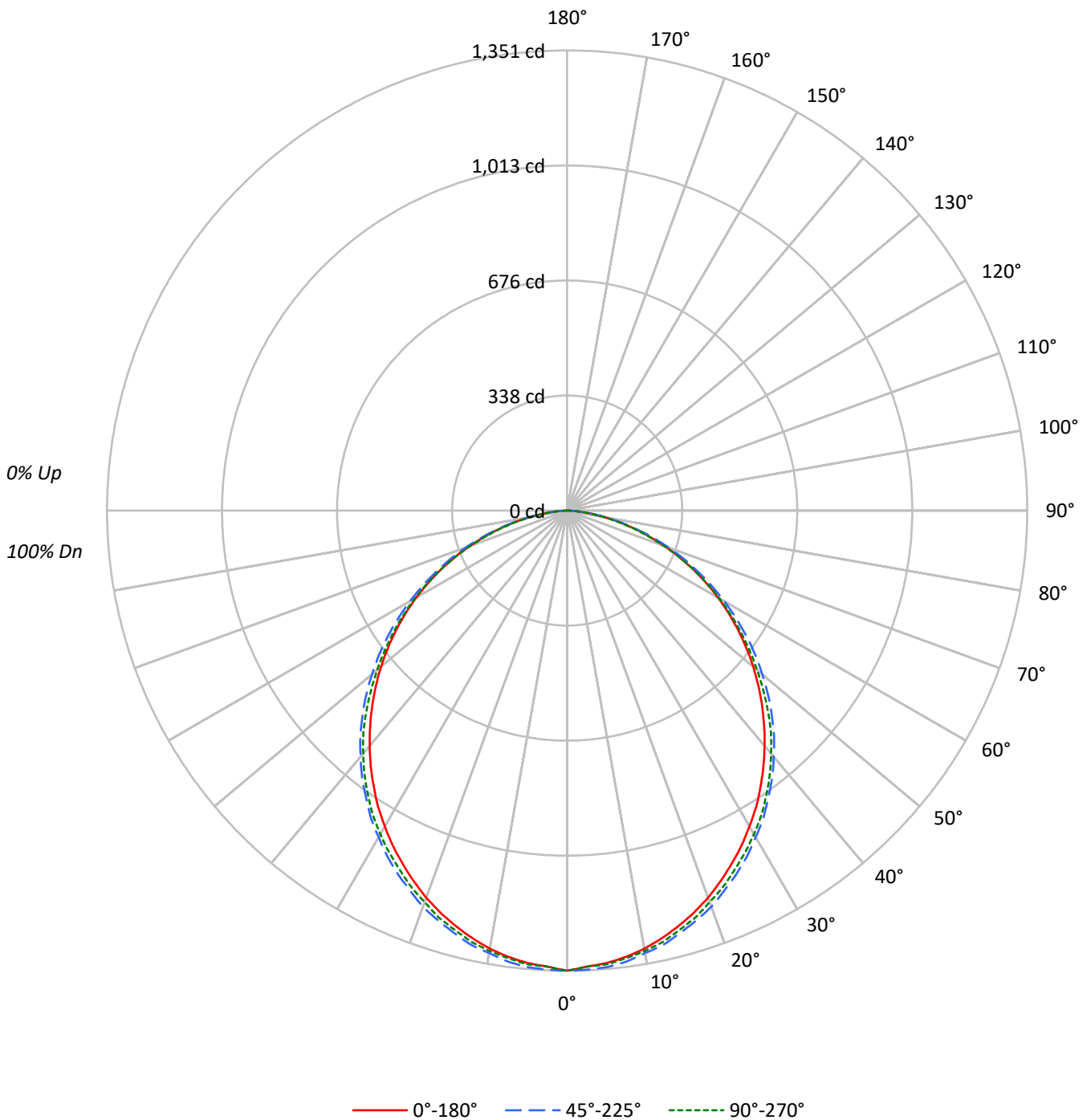
Lumens per Lamp: N/A
Luminaire Lumens: 3551.3 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (A_{in}): 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°	7270	7270	7270
5°	7203	7270	7225
10°	7137	7209	7174
15°	7038	7151	7101
20°	6927	7092	7006
25°	6792	6989	6909
30°	6655	6881	6817
35°	6505	6763	6700
40°	6336	6628	6544
45°	6158	6469	6347
50°	5973	6262	6098
55°	5757	6026	5841
60°	5511	5740	5563
65°	5195	5393	5197
70°	4779	4973	4725
75°	4209	4398	4144
80°	3419	3567	3381
85°	2384	2538	2476



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	3.6
10°-20°	360.5	10.2
20°-30°	537.7	15.1
30°-40°	637.2	17.9
40°-50°	644.7	18.2
50°-60°	563.1	15.9
60°-70°	411.5	11.6
70°-80°	218.9	6.2
80°-90°	50.6	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°	1025.4	28.9
0°-40°	1662.6	46.8
0°-60°	2870.3	80.8
0°-90°	3551.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3551.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1351	1351	1351	1351	1351	
5°	1333	1336	1346	1349	1337	126
15°	1263	1272	1284	1291	1274	356
25°	1144	1158	1177	1181	1164	527
35°	990	1006	1029	1036	1020	619
45°	809	823	850	851	834	624
55°	614	626	642	633	622	548
65°	408	416	424	415	408	404
75°	202	207	212	204	199	215
85°	39	39	41	42	40	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1350.8	1350.8	1350.8	1350.8	1350.8
2.5°	1340.2	1344.6	1349.1	1351.1	1340.1
5°	1333.2	1335.7	1345.7	1348.8	1337.4
7.5°	1321.7	1325.5	1335.2	1336.6	1325.6
10°	1305.9	1312.6	1319.1	1326.2	1312.8
12.5°	1285.8	1294.9	1305.9	1307.2	1297.0
15°	1263.1	1271.6	1283.5	1291.3	1274.5
17.5°	1237.8	1245.9	1261.4	1262.8	1252.7
20°	1209.5	1219.6	1238.2	1241.4	1223.3
22.5°	1177.4	1191.1	1206.5	1209.6	1196.3
25°	1143.8	1157.8	1177.0	1181.3	1163.5
27.5°	1108.6	1122.1	1143.6	1146.7	1131.7
30°	1070.9	1083.5	1107.2	1112.4	1097.0
32.5°	1032.6	1045.2	1071.4	1075.8	1060.9
35°	990.1	1005.6	1029.3	1036.5	1019.8
37.5°	946.7	961.8	988.8	995.3	977.3
40°	901.8	916.8	943.4	948.7	931.4
42.5°	856.0	870.9	899.3	900.2	885.8
45°	809.1	823.4	849.9	850.6	833.9
47.5°	761.5	776.0	799.7	797.0	781.2
50°	713.4	727.2	747.9	742.5	728.3
52.5°	663.6	676.9	696.5	687.8	674.4
55°	613.5	625.9	642.2	632.9	622.5
57.5°	562.9	575.5	588.0	578.6	569.6
60°	512.0	523.0	533.3	523.7	516.8
62.5°	460.2	469.6	478.5	469.4	462.9
65°	407.9	416.2	423.5	415.0	408.1
67.5°	355.8	362.8	369.6	360.8	353.7
70°	303.7	309.8	316.0	306.9	300.3
72.5°	252.3	257.7	263.2	254.5	248.7
75°	202.4	207.0	211.5	203.8	199.3
77.5°	154.7	158.6	161.7	156.8	152.4
80°	110.3	113.3	115.1	113.2	109.1
82.5°	70.9	73.0	74.0	73.9	71.2
85°	38.6	39.3	41.1	41.5	40.1
87.5°	14.9	15.9	16.3	17.6	16.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)