

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: P488430

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2HI-40-120-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: P488430
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-40-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

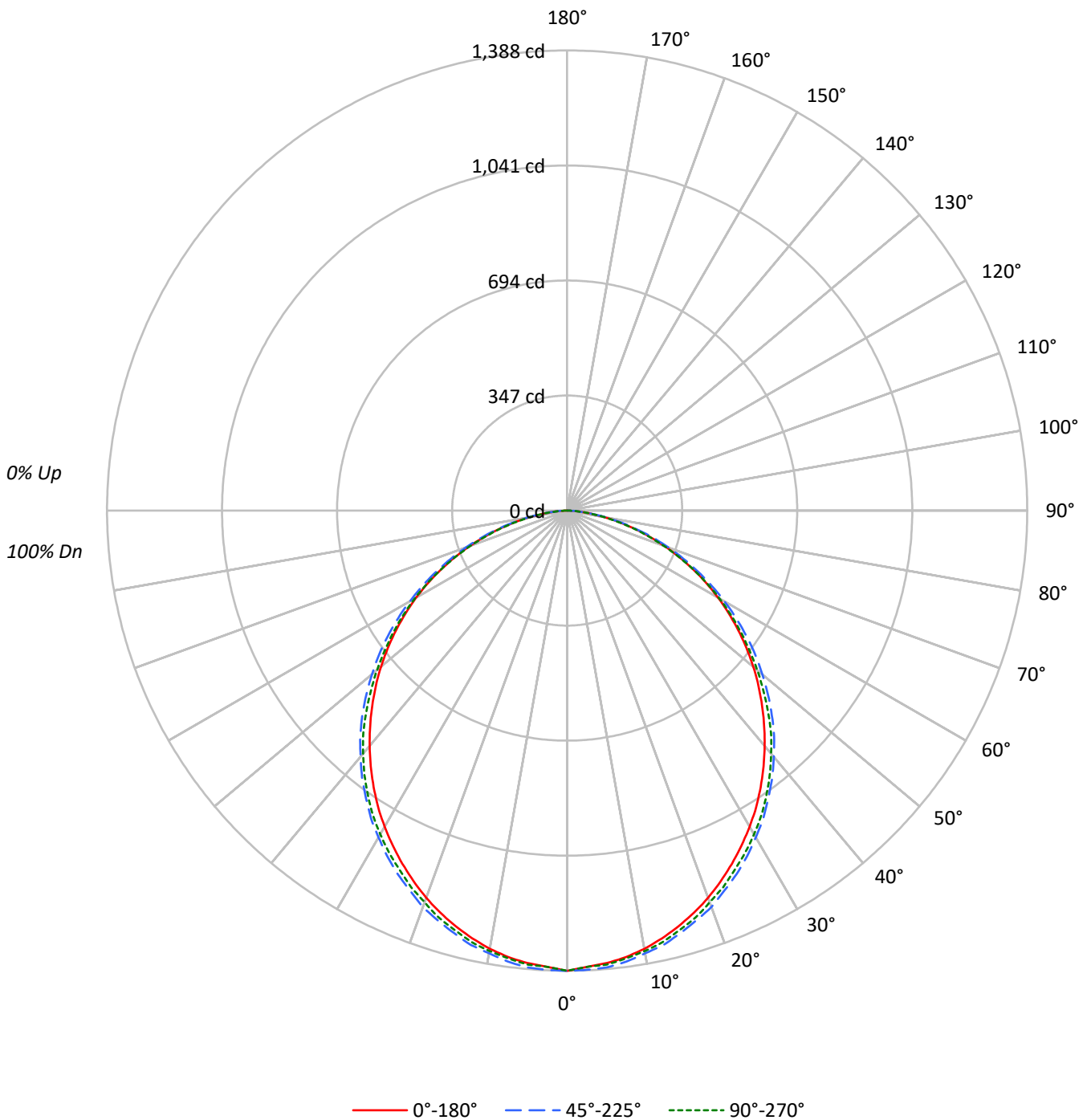
Lumens per Lamp: N/A
Luminaire Lumens: 3649.9 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (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	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					100			
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85					85			
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60					60			
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51					51			
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45					45			
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39					39			
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	35	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7472	7472	7472
5°	7403	7472	7426
10°	7335	7409	7373
15°	7233	7350	7299
20°	7120	7289	7200
25°	6981	7184	7101
30°	6840	7072	7007
35°	6686	6951	6886
40°	6512	6811	6726
45°	6330	6648	6523
50°	6139	6435	6267
55°	5916	6193	6003
60°	5664	5900	5717
65°	5338	5542	5342
70°	4911	5109	4858
75°	4325	4521	4259
80°	3515	3667	3474
85°	2445	2606	2544



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.7	3.6
10°-20°	370.5	10.2
20°-30°	552.6	15.1
30°-40°	654.8	17.9
40°-50°	662.6	18.2
50°-60°	578.7	15.9
60°-70°	422.9	11.6
70°-80°	225.0	6.2
80°-90°	52.0	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°	1053.9	28.9
0°-40°	1708.7	46.8
0°-60°	2950.0	80.8
0°-90°	3649.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3649.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1370	1373	1383	1386	1375	130
15°	1298	1307	1319	1327	1310	366
25°	1176	1190	1210	1214	1196	542
35°	1018	1034	1058	1065	1048	636
45°	832	846	874	874	857	642
55°	630	643	660	650	640	564
65°	419	428	435	427	420	415
75°	208	213	217	209	205	221
85°	40	40	42	43	41	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1388.3	1388.3	1388.3	1388.3	1388.3
2.5°	1377.4	1381.9	1386.6	1388.6	1377.3
5°	1370.2	1372.8	1383.1	1386.3	1374.6
7.5°	1358.4	1362.3	1372.2	1373.7	1362.4
10°	1342.2	1349.1	1355.7	1363.0	1349.2
12.5°	1321.5	1330.9	1342.2	1343.5	1333.0
15°	1298.2	1306.9	1319.2	1327.1	1309.9
17.5°	1272.1	1280.5	1296.4	1297.9	1287.5
20°	1243.1	1253.5	1272.6	1275.9	1257.2
22.5°	1210.1	1224.1	1240.0	1243.2	1229.5
25°	1175.5	1190.0	1209.7	1214.1	1195.8
27.5°	1139.4	1153.2	1175.4	1178.6	1163.1
30°	1100.6	1113.6	1137.9	1143.3	1127.5
32.5°	1061.3	1074.3	1101.2	1105.7	1090.3
35°	1017.6	1033.5	1057.9	1065.3	1048.1
37.5°	973.0	988.5	1016.3	1022.9	1004.4
40°	926.9	942.2	969.5	975.0	957.3
42.5°	879.7	895.1	924.3	925.1	910.4
45°	831.6	846.3	873.5	874.2	857.0
47.5°	782.7	797.6	821.9	819.1	802.9
50°	733.2	747.4	768.6	763.1	748.5
52.5°	682.0	695.7	715.8	706.9	693.1
55°	630.5	643.2	660.0	650.5	639.8
57.5°	578.6	591.4	604.3	594.6	585.4
60°	526.2	537.5	548.1	538.2	531.1
62.5°	473.0	482.7	491.8	482.4	475.7
65°	419.2	427.7	435.2	426.6	419.5
67.5°	365.7	372.9	379.8	370.9	363.5
70°	312.1	318.4	324.7	315.5	308.7
72.5°	259.3	264.8	270.5	261.5	255.6
75°	208.0	212.8	217.4	209.4	204.8
77.5°	159.0	163.0	166.2	161.1	156.6
80°	113.4	116.4	118.3	116.3	112.1
82.5°	72.9	75.1	76.1	75.9	73.2
85°	39.6	40.4	42.2	42.7	41.2
87.5°	15.3	16.3	16.8	18.1	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)