

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: P488427

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2HI-30-120-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: P488427
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
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

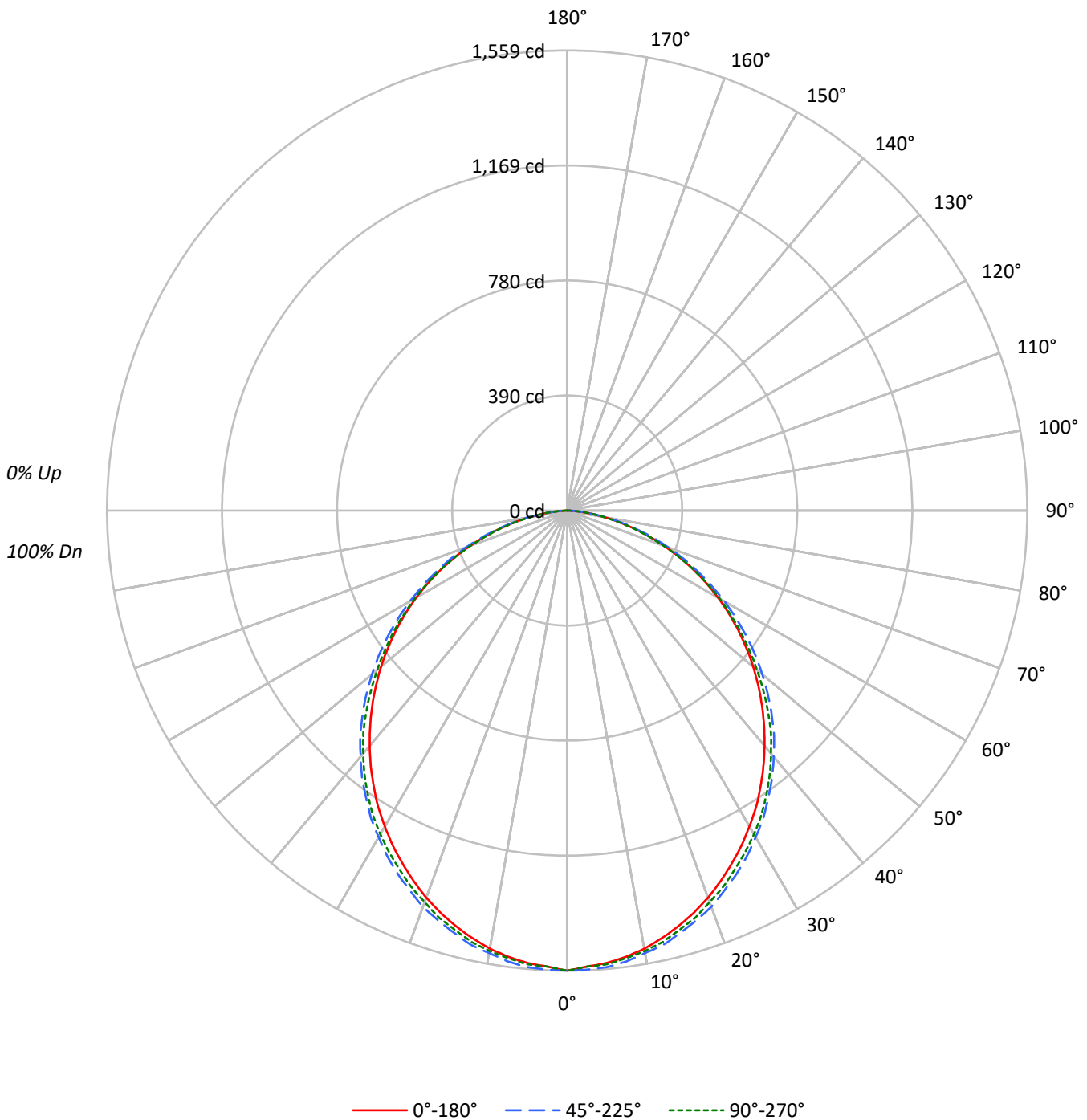
Lumens per Lamp: N/A
Luminaire Lumens: 4097.8 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P488427

CATALOG NUMBER: CLM-12-2-INS-A19156-LD4-2HI-30-120-EDD

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°	8389	8389	8389
5°	8311	8389	8337
10°	8235	8318	8278
15°	8121	8252	8194
20°	7993	8183	8084
25°	7837	8065	7972
30°	7679	7940	7867
35°	7506	7803	7731
40°	7311	7647	7550
45°	7106	7464	7324
50°	6893	7226	7037
55°	6642	6953	6740
60°	6359	6623	6419
65°	5993	6222	5997
70°	5514	5737	5452
75°	4855	5076	4781
80°	3945	4116	3902
85°	2748	2927	2859



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.8	3.6
10°-20°	416.0	10.2
20°-30°	620.4	15.1
30°-40°	735.2	17.9
40°-50°	743.9	18.2
50°-60°	649.7	15.9
60°-70°	474.8	11.6
70°-80°	252.6	6.2
80°-90°	58.4	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°	1183.2	28.9
0°-40°	1918.4	46.8
0°-60°	3312.0	80.8
0°-90°	4097.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4097.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1559	1559	1559	1559	1559	
5°	1538	1541	1553	1556	1543	146
15°	1458	1467	1481	1490	1471	411
25°	1320	1336	1358	1363	1342	608
35°	1142	1160	1188	1196	1177	714
45°	934	950	981	982	962	720
55°	708	722	741	730	718	633
65°	471	480	489	479	471	466
75°	234	239	244	235	230	248
85°	44	45	47	48	46	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1558.7	1558.7	1558.7	1558.7	1558.7
2.5°	1546.5	1551.5	1556.7	1559.0	1546.3
5°	1538.4	1541.3	1552.8	1556.4	1543.2
7.5°	1525.0	1529.4	1540.6	1542.3	1529.6
10°	1506.9	1514.6	1522.1	1530.2	1514.8
12.5°	1483.6	1494.2	1506.9	1508.3	1496.6
15°	1457.5	1467.2	1481.0	1490.0	1470.6
17.5°	1428.3	1437.7	1455.5	1457.2	1445.5
20°	1395.6	1407.3	1428.7	1432.5	1411.5
22.5°	1358.6	1374.3	1392.2	1395.8	1380.3
25°	1319.8	1336.0	1358.1	1363.1	1342.5
27.5°	1279.2	1294.8	1319.6	1323.2	1305.8
30°	1235.7	1250.3	1277.6	1283.6	1265.9
32.5°	1191.5	1206.1	1236.3	1241.3	1224.1
35°	1142.4	1160.3	1187.7	1196.0	1176.7
37.5°	1092.4	1109.8	1141.0	1148.5	1127.7
40°	1040.6	1057.8	1088.5	1094.7	1074.7
42.5°	987.7	1004.9	1037.7	1038.7	1022.1
45°	933.6	950.2	980.7	981.5	962.2
47.5°	878.7	895.4	922.7	919.6	901.4
50°	823.2	839.1	863.0	856.8	840.4
52.5°	765.7	781.1	803.7	793.6	778.2
55°	707.9	722.2	741.0	730.3	718.3
57.5°	649.6	664.0	678.5	667.6	657.2
60°	590.8	603.5	615.3	604.3	596.3
62.5°	531.0	541.9	552.1	541.6	534.1
65°	470.6	480.2	488.6	478.9	470.9
67.5°	410.5	418.7	426.4	416.4	408.1
70°	350.4	357.4	364.6	354.2	346.5
72.5°	291.2	297.3	303.7	293.6	287.0
75°	233.5	238.9	244.1	235.1	229.9
77.5°	178.5	183.0	186.6	180.9	175.9
80°	127.3	130.7	132.8	130.6	125.9
82.5°	81.8	84.3	85.4	85.3	82.2
85°	44.5	45.3	47.4	47.9	46.3
87.5°	17.2	18.4	18.8	20.3	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)