

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: P488429

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2HI-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: P488429
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-35-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

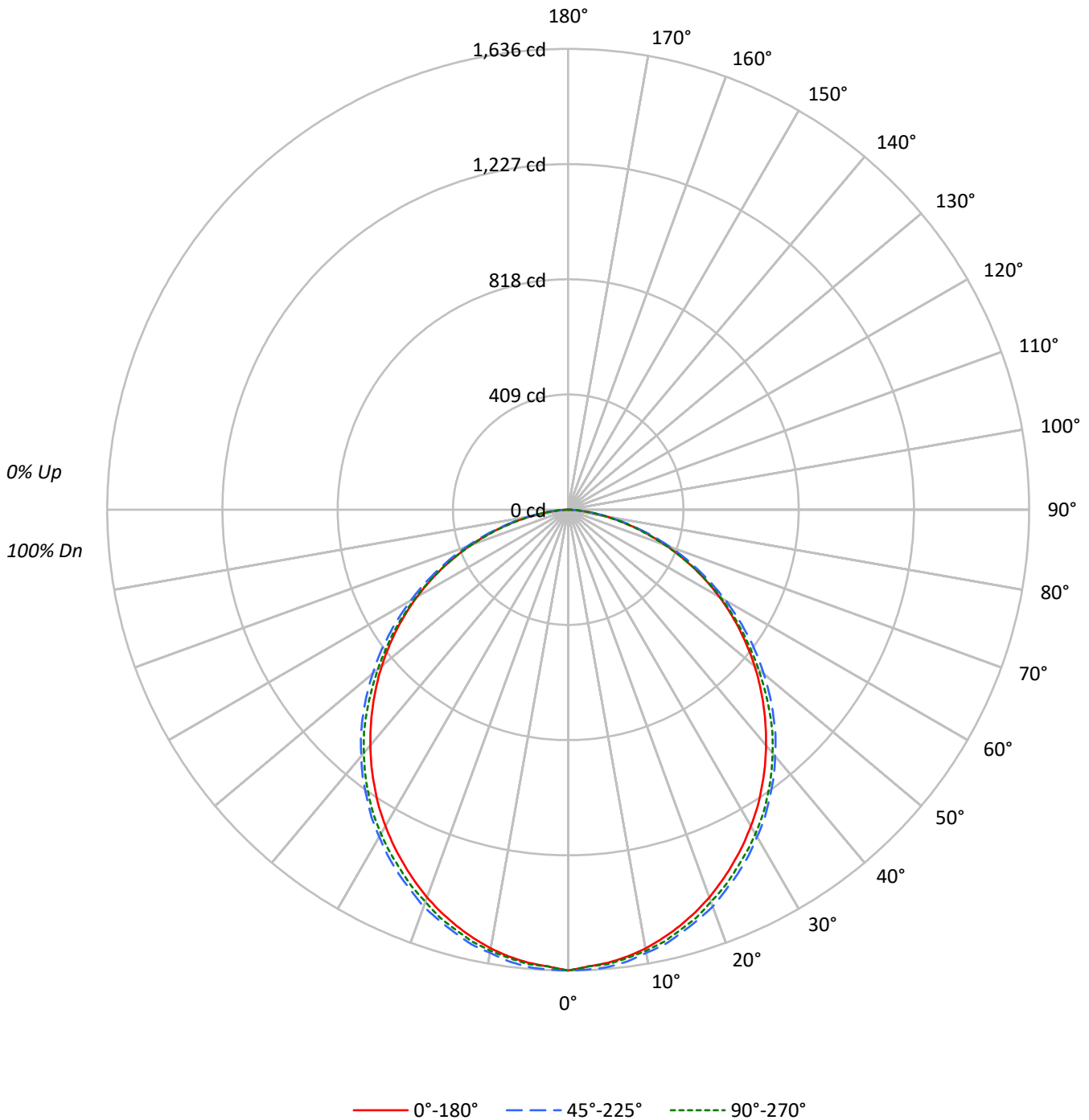
Lumens per Lamp: N/A
Luminaire Lumens: 4300.9 lumens
Efficiency: N/A
Efficacy: 99.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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	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°	8804	8804	8804
5°	8723	8805	8750
10°	8643	8731	8689
15°	8523	8661	8600
20°	8389	8589	8485
25°	8226	8464	8368
30°	8060	8333	8257
35°	7878	8190	8114
40°	7673	8027	7925
45°	7458	7834	7687
50°	7234	7583	7385
55°	6972	7297	7074
60°	6675	6951	6737
65°	6290	6532	6295
70°	5788	6021	5723
75°	5097	5327	5018
80°	4141	4320	4094
85°	2884	3075	3001



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.1	3.6
10°-20°	436.6	10.2
20°-30°	651.2	15.1
30°-40°	771.6	17.9
40°-50°	780.8	18.2
50°-60°	681.9	15.9
60°-70°	498.3	11.6
70°-80°	265.1	6.2
80°-90°	61.3	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°	1241.8	28.9
0°-40°	2013.5	46.8
0°-60°	3476.2	80.8
0°-90°	4300.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4300.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1636	1636	1636	1636	1636	
5°	1615	1618	1630	1634	1620	153
15°	1530	1540	1554	1564	1544	431
25°	1385	1402	1425	1431	1409	638
35°	1199	1218	1247	1255	1235	750
45°	980	997	1029	1030	1010	756
55°	743	758	778	766	754	664
65°	494	504	513	503	494	489
75°	245	251	256	247	241	261
85°	47	48	50	50	49	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1635.9	1635.9	1635.9	1635.9	1635.9
2.5°	1623.1	1628.4	1633.9	1636.3	1623.0
5°	1614.6	1617.7	1629.8	1633.5	1619.7
7.5°	1600.6	1605.2	1617.0	1618.7	1605.4
10°	1581.5	1589.7	1597.6	1606.1	1589.9
12.5°	1557.2	1568.2	1581.5	1583.1	1570.8
15°	1529.7	1540.0	1554.4	1563.8	1543.5
17.5°	1499.0	1508.9	1527.7	1529.4	1517.1
20°	1464.8	1477.1	1499.6	1503.5	1481.5
22.5°	1425.9	1442.5	1461.2	1465.0	1448.8
25°	1385.2	1402.2	1425.4	1430.7	1409.1
27.5°	1342.6	1358.9	1385.0	1388.8	1370.5
30°	1296.9	1312.2	1340.9	1347.2	1328.6
32.5°	1250.5	1265.9	1297.6	1302.9	1284.8
35°	1199.1	1217.8	1246.6	1255.3	1235.0
37.5°	1146.6	1164.8	1197.5	1205.4	1183.6
40°	1092.2	1110.3	1142.5	1149.0	1128.0
42.5°	1036.6	1054.7	1089.1	1090.2	1072.8
45°	979.9	997.3	1029.3	1030.2	1009.9
47.5°	922.3	939.8	968.5	965.2	946.1
50°	864.0	880.7	905.7	899.3	882.0
52.5°	803.6	819.8	843.5	833.0	816.8
55°	743.0	758.0	777.7	766.5	753.9
57.5°	681.8	696.9	712.1	700.7	689.8
60°	620.1	633.4	645.8	634.2	625.9
62.5°	557.3	568.8	579.5	568.4	560.6
65°	493.9	504.0	512.9	502.6	494.3
67.5°	430.9	439.4	447.6	437.0	428.3
70°	367.8	375.1	382.6	371.7	363.7
72.5°	305.6	312.1	318.7	308.2	301.2
75°	245.1	250.7	256.2	246.8	241.3
77.5°	187.3	192.1	195.8	189.9	184.6
80°	133.6	137.2	139.4	137.0	132.1
82.5°	85.9	88.5	89.7	89.5	86.2
85°	46.7	47.6	49.8	50.3	48.6
87.5°	18.1	19.3	19.8	21.3	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)