

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: P488444

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2LO-50-120-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: P488444
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-LD4-2LO-50-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

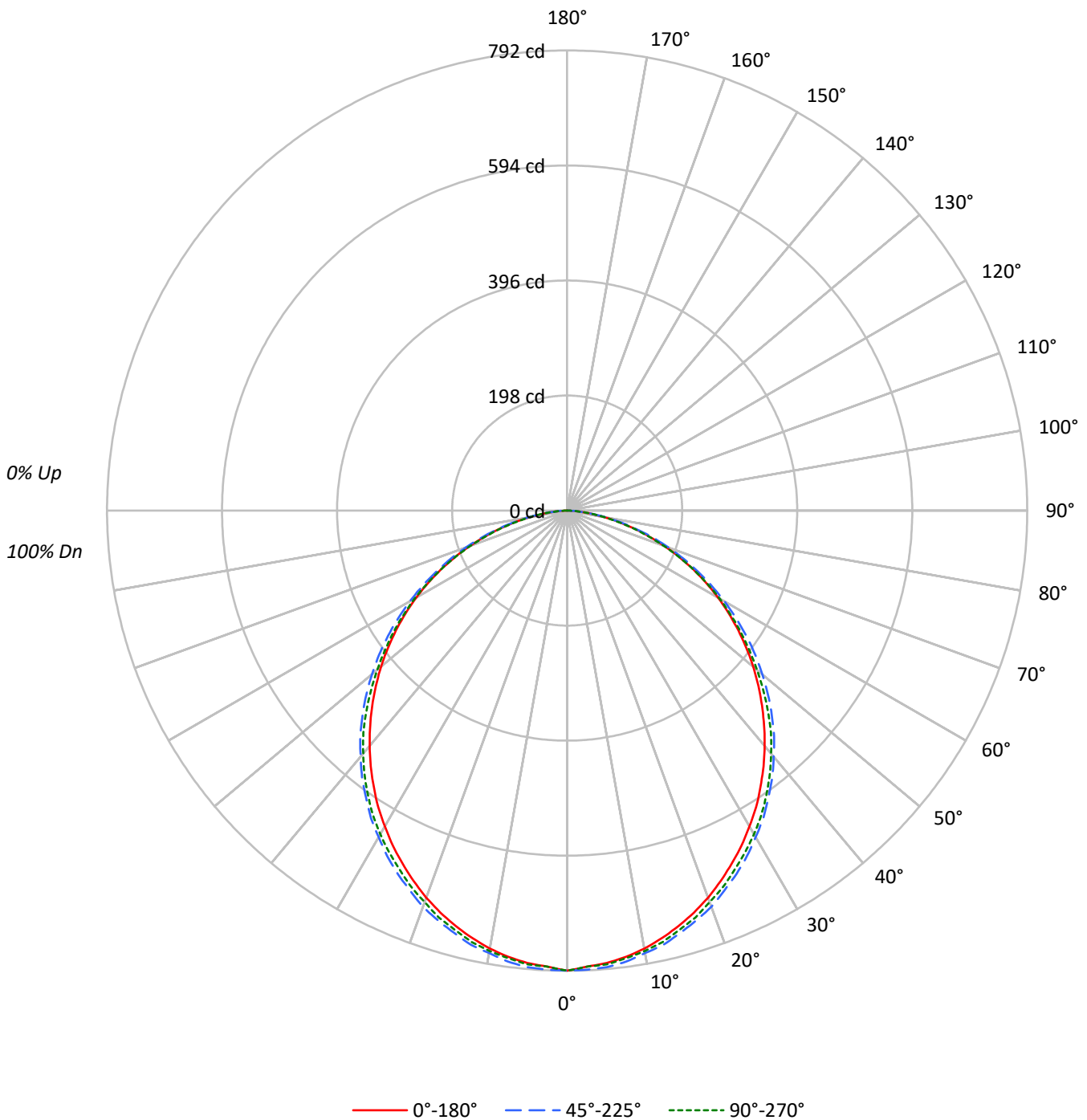
Lumens per Lamp: N/A
Luminaire Lumens: 2081.8 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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: P488444

CATALOG NUMBER: CLM-12-2-INS-A19156-LD4-2LO-50-120-EDD-90

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°	4261	4261	4261
5°	4222	4262	4236
10°	4183	4226	4206
15°	4125	4192	4163
20°	4061	4157	4107
25°	3982	4097	4050
30°	3901	4033	3997
35°	3813	3964	3928
40°	3714	3885	3836
45°	3610	3792	3720
50°	3502	3671	3574
55°	3374	3533	3424
60°	3230	3365	3260
65°	3045	3161	3047
70°	2801	2914	2771
75°	2466	2578	2429
80°	2005	2092	1980
85°	1396	1488	1451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.6	3.6
10°-20°	211.3	10.2
20°-30°	315.2	15.1
30°-40°	373.5	17.9
40°-50°	377.9	18.2
50°-60°	330.1	15.9
60°-70°	241.2	11.6
70°-80°	128.3	6.2
80°-90°	29.7	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°	601.1	28.9
0°-40°	974.6	46.8
0°-60°	1682.6	80.8
0°-90°	2081.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2081.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	792	792	792	792	792	
5°	782	783	789	791	784	74
15°	740	745	752	757	747	209
25°	670	679	690	692	682	309
35°	580	590	603	608	598	363
45°	474	483	498	499	489	366
55°	360	367	376	371	365	321
65°	239	244	248	243	239	237
75°	119	121	124	120	117	126
85°	23	23	24	24	24	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	791.8	791.8	791.8	791.8	791.8
2.5°	785.7	788.2	790.9	792.0	785.6
5°	781.5	783.0	788.9	790.7	784.0
7.5°	774.8	777.0	782.7	783.5	777.1
10°	765.5	769.5	773.3	777.4	769.6
12.5°	753.7	759.1	765.5	766.3	760.3
15°	740.4	745.4	752.4	756.9	747.1
17.5°	725.6	730.4	739.5	740.3	734.3
20°	709.0	715.0	725.8	727.7	717.1
22.5°	690.2	698.2	707.3	709.1	701.3
25°	670.5	678.7	690.0	692.5	682.0
27.5°	649.9	657.8	670.4	672.2	663.4
30°	627.7	635.2	649.0	652.1	643.1
32.5°	605.3	612.7	628.1	630.6	621.9
35°	580.4	589.5	603.4	607.6	597.8
37.5°	555.0	563.8	579.7	583.4	572.9
40°	528.7	537.4	553.0	556.1	546.0
42.5°	501.8	510.5	527.2	527.7	519.3
45°	474.3	482.7	498.2	498.6	488.8
47.5°	446.4	454.9	468.8	467.2	458.0
50°	418.2	426.3	438.4	435.3	426.9
52.5°	389.0	396.8	408.3	403.2	395.3
55°	359.6	366.9	376.5	371.0	364.9
57.5°	330.0	337.3	344.7	339.2	333.9
60°	300.1	306.6	312.6	307.0	302.9
62.5°	269.8	275.3	280.5	275.1	271.3
65°	239.1	244.0	248.2	243.3	239.3
67.5°	208.6	212.7	216.6	211.5	207.3
70°	178.0	181.6	185.2	179.9	176.1
72.5°	147.9	151.1	154.3	149.2	145.8
75°	118.6	121.4	124.0	119.5	116.8
77.5°	90.7	93.0	94.8	91.9	89.3
80°	64.7	66.4	67.5	66.3	63.9
82.5°	41.6	42.8	43.4	43.3	41.7
85°	22.6	23.0	24.1	24.3	23.5
87.5°	8.7	9.3	9.6	10.3	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)