

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: P488390

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1HI-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: P488390
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-LD4-1HI-30-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

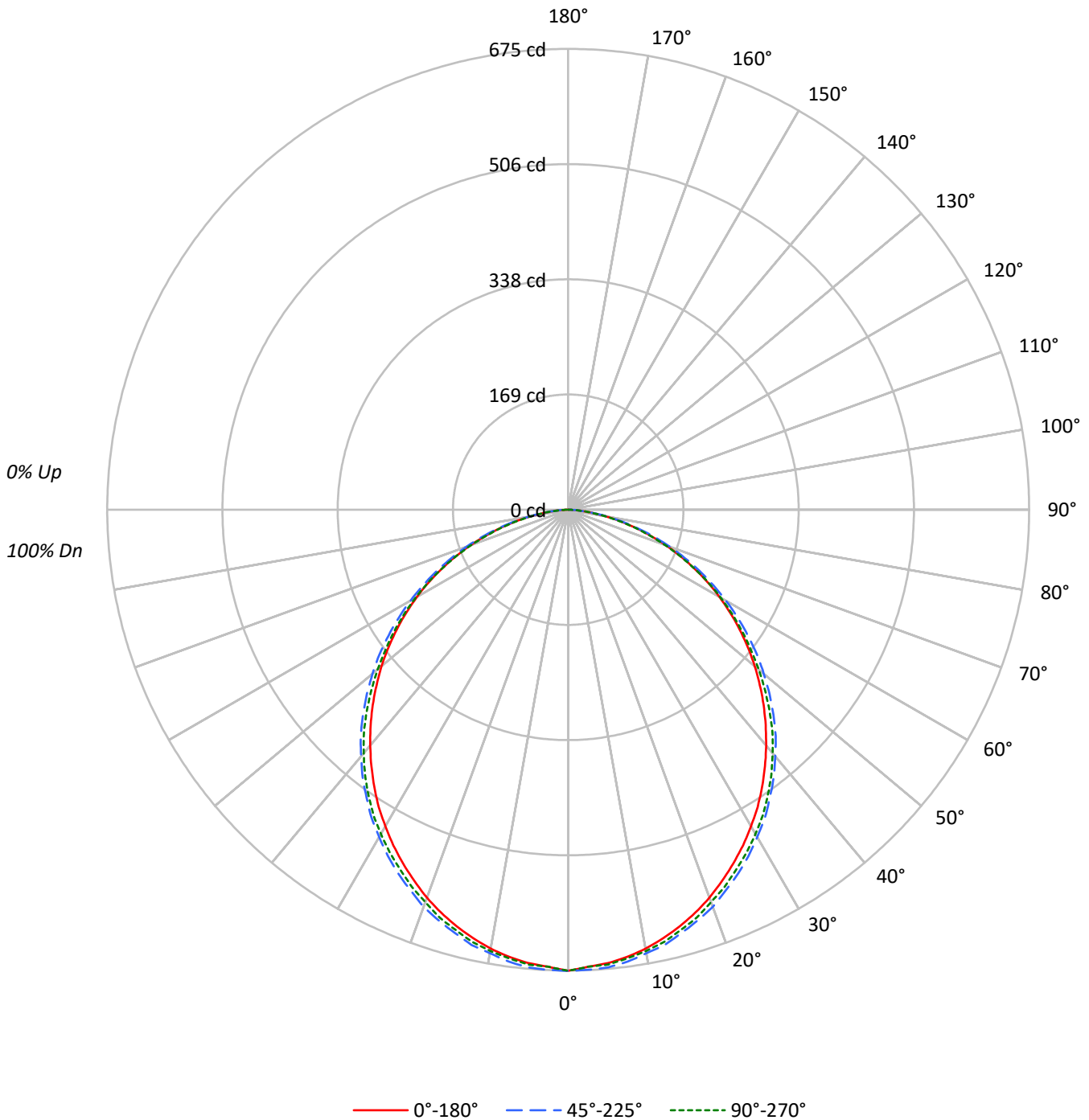
Lumens per Lamp: N/A
Luminaire Lumens: 1775.7 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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°	3635	3635	3635
5°	3601	3635	3613
10°	3569	3605	3587
15°	3519	3576	3551
20°	3464	3546	3503
25°	3396	3495	3455
30°	3327	3440	3409
35°	3253	3382	3350
40°	3168	3314	3272
45°	3080	3235	3173
50°	2987	3131	3049
55°	2878	3013	2920
60°	2756	2870	2781
65°	2597	2696	2599
70°	2390	2486	2364
75°	2104	2200	2071
80°	1711	1785	1689
85°	1192	1266	1241



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.6	3.6
10°-20°	180.3	10.2
20°-30°	268.8	15.1
30°-40°	318.6	17.9
40°-50°	322.4	18.2
50°-60°	281.5	15.9
60°-70°	205.7	11.6
70°-80°	109.5	6.2
80°-90°	25.3	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°	512.7	28.9
0°-40°	831.3	46.8
0°-60°	1435.2	80.8
0°-90°	1775.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1775.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	675	675	675	675	675	
5°	667	668	673	674	669	63
15°	632	636	642	646	637	178
25°	572	579	588	591	582	263
35°	495	503	515	518	510	310
45°	405	412	425	425	417	312
55°	307	313	321	316	311	274
65°	204	208	212	208	204	202
75°	101	104	106	102	100	108
85°	19	20	20	21	20	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	675.4	675.4	675.4	675.4	675.4
2.5°	670.1	672.3	674.6	675.6	670.1
5°	666.6	667.9	672.9	674.4	668.7
7.5°	660.8	662.7	667.6	668.3	662.8
10°	653.0	656.3	659.6	663.1	656.4
12.5°	642.9	647.5	653.0	653.6	648.5
15°	631.6	635.8	641.8	645.6	637.3
17.5°	618.9	623.0	630.7	631.4	626.4
20°	604.8	609.8	619.1	620.7	611.7
22.5°	588.7	595.5	603.3	604.8	598.1
25°	571.9	578.9	588.5	590.7	581.8
27.5°	554.3	561.1	571.8	573.4	565.8
30°	535.4	541.8	553.6	556.2	548.5
32.5°	516.3	522.6	535.7	537.9	530.5
35°	495.1	502.8	514.7	518.3	509.9
37.5°	473.4	480.9	494.4	497.7	488.7
40°	450.9	458.4	471.7	474.4	465.7
42.5°	428.0	435.5	449.7	450.1	442.9
45°	404.6	411.7	425.0	425.3	416.9
47.5°	380.8	388.0	399.8	398.5	390.6
50°	356.7	363.6	373.9	371.3	364.2
52.5°	331.8	338.5	348.3	343.9	337.2
55°	306.7	312.9	321.1	316.5	311.2
57.5°	281.5	287.7	294.0	289.3	284.8
60°	256.0	261.5	266.6	261.8	258.4
62.5°	230.1	234.8	239.3	234.7	231.4
65°	203.9	208.1	211.7	207.5	204.1
67.5°	177.9	181.4	184.8	180.4	176.8
70°	151.9	154.9	158.0	153.5	150.2
72.5°	126.2	128.8	131.6	127.2	124.3
75°	101.2	103.5	105.8	101.9	99.6
77.5°	77.3	79.3	80.9	78.4	76.2
80°	55.2	56.6	57.6	56.6	54.5
82.5°	35.5	36.5	37.0	36.9	35.6
85°	19.3	19.6	20.5	20.8	20.1
87.5°	7.5	8.0	8.2	8.8	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)