

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: P488419

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1STD-40-120-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: P488419
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-LD4-1STD-40-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

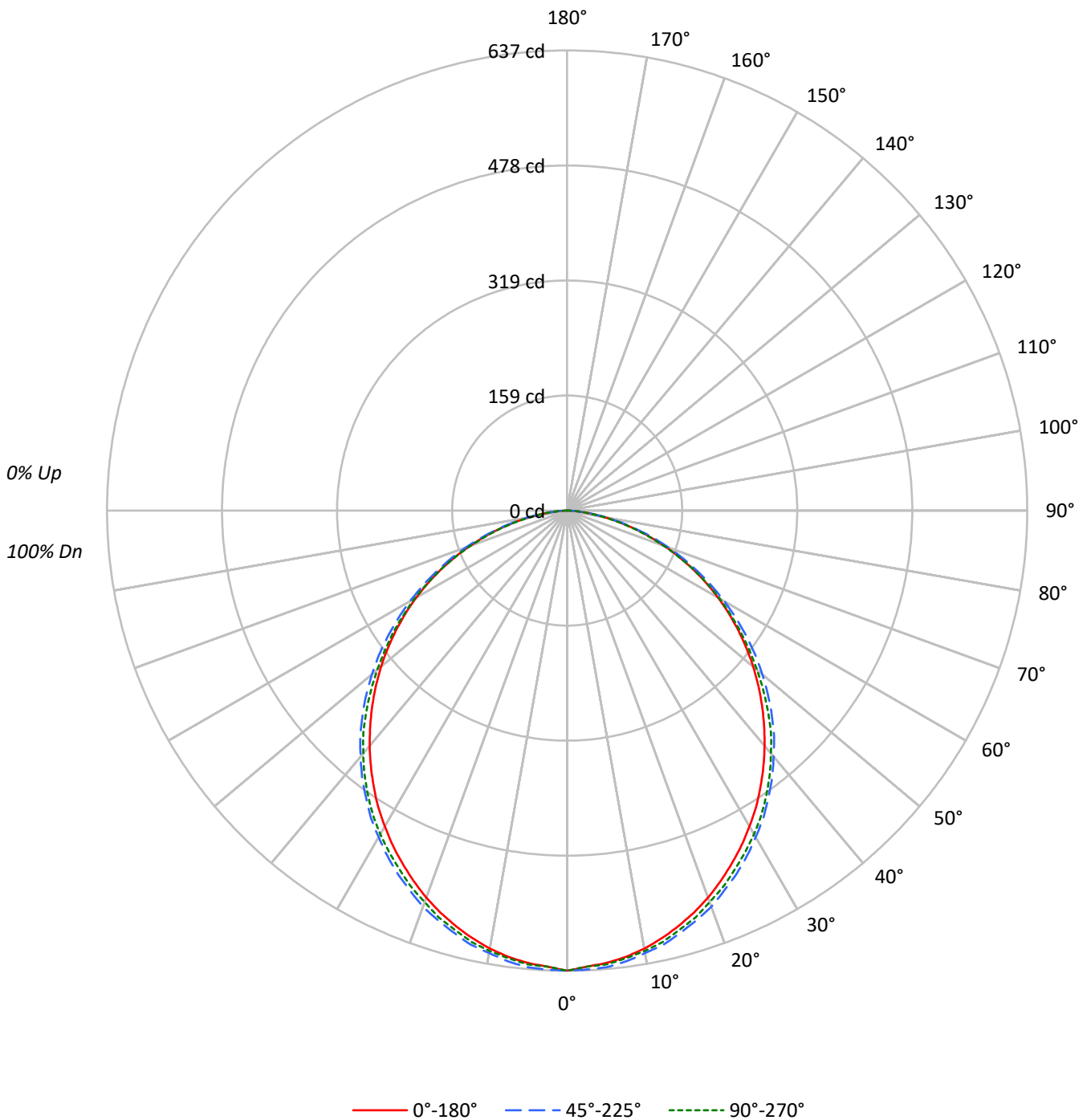
Lumens per Lamp: N/A
Luminaire Lumens: 1674.2 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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

TEST NUMBER: P488419

CATALOG NUMBER: CLM-12-2-INS-A19156-LD4-1STD-40-120-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P488419

CATALOG NUMBER: CLM-12-2-INS-A19156-LD4-1STD-40-120-EDD

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	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°	3427	3427	3427
5°	3395	3427	3406
10°	3364	3399	3382
15°	3318	3372	3348
20°	3266	3343	3303
25°	3202	3295	3257
30°	3137	3244	3214
35°	3067	3188	3159
40°	2987	3124	3085
45°	2903	3050	2992
50°	2816	2952	2874
55°	2714	2840	2754
60°	2598	2706	2622
65°	2449	2542	2450
70°	2253	2345	2228
75°	1984	2073	1953
80°	1612	1683	1593
85°	1124	1198	1167



TEST NUMBER: P488419

CATALOG NUMBER: CLM-12-2-INS-A19156-LD4-1STD-40-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.0	3.6
10°-20°	170.0	10.2
20°-30°	253.5	15.1
30°-40°	300.4	17.9
40°-50°	303.9	18.2
50°-60°	265.4	15.9
60°-70°	194.0	11.6
70°-80°	103.2	6.2
80°-90°	23.9	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°	483.4	28.9
0°-40°	783.8	46.8
0°-60°	1353.2	80.8
0°-90°	1674.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1674.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	637	637	637	637	637	
5°	628	630	634	636	630	60
15°	596	600	605	609	601	168
25°	539	546	555	557	548	248
35°	467	474	485	489	481	292
45°	381	388	401	401	393	294
55°	289	295	303	298	294	259
65°	192	196	200	196	192	190
75°	95	98	100	96	94	101
85°	18	18	19	20	19	23
90°	0	0	0	0	0	



TEST NUMBER: P488419

CATALOG NUMBER: CLM-12-2-INS-A19156-LD4-1STD-40-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	636.8	636.8	636.8	636.8	636.8
2.5°	631.8	633.9	636.0	636.9	631.8
5°	628.5	629.7	634.4	635.9	630.5
7.5°	623.1	624.9	629.4	630.1	624.9
10°	615.6	618.8	621.9	625.2	618.9
12.5°	606.2	610.5	615.6	616.2	611.5
15°	595.5	599.5	605.1	608.7	600.8
17.5°	583.5	587.4	594.7	595.3	590.6
20°	570.2	575.0	583.7	585.3	576.7
22.5°	555.1	561.5	568.8	570.3	564.0
25°	539.2	545.8	554.9	556.9	548.5
27.5°	522.6	529.0	539.1	540.6	533.5
30°	504.8	510.8	522.0	524.4	517.2
32.5°	486.8	492.8	505.1	507.2	500.1
35°	466.8	474.1	485.3	488.7	480.8
37.5°	446.3	453.4	466.2	469.2	460.7
40°	425.2	432.2	444.7	447.3	439.1
42.5°	403.5	410.6	424.0	424.4	417.6
45°	381.4	388.2	400.7	401.0	393.1
47.5°	359.0	365.8	377.0	375.7	368.3
50°	336.3	342.8	352.6	350.1	343.3
52.5°	312.8	319.1	328.4	324.2	317.9
55°	289.2	295.0	302.7	298.4	293.5
57.5°	265.4	271.3	277.2	272.8	268.5
60°	241.4	246.5	251.4	246.9	243.6
62.5°	217.0	221.4	225.6	221.3	218.2
65°	192.3	196.2	199.6	195.7	192.4
67.5°	167.7	171.0	174.2	170.1	166.7
70°	143.2	146.0	149.0	144.7	141.6
72.5°	119.0	121.5	124.1	120.0	117.2
75°	95.4	97.6	99.7	96.1	93.9
77.5°	72.9	74.8	76.2	73.9	71.9
80°	52.0	53.4	54.3	53.3	51.4
82.5°	33.4	34.4	34.9	34.8	33.6
85°	18.2	18.5	19.4	19.6	18.9
87.5°	7.0	7.5	7.7	8.3	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)