

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: P489065

Luminaire Tested: **CLM-24-2-INS-A19156-LD4-1STD-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: P489065
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-24-2-INS-A19156-LD4-1STD-35-120-EDD
Description: 2X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

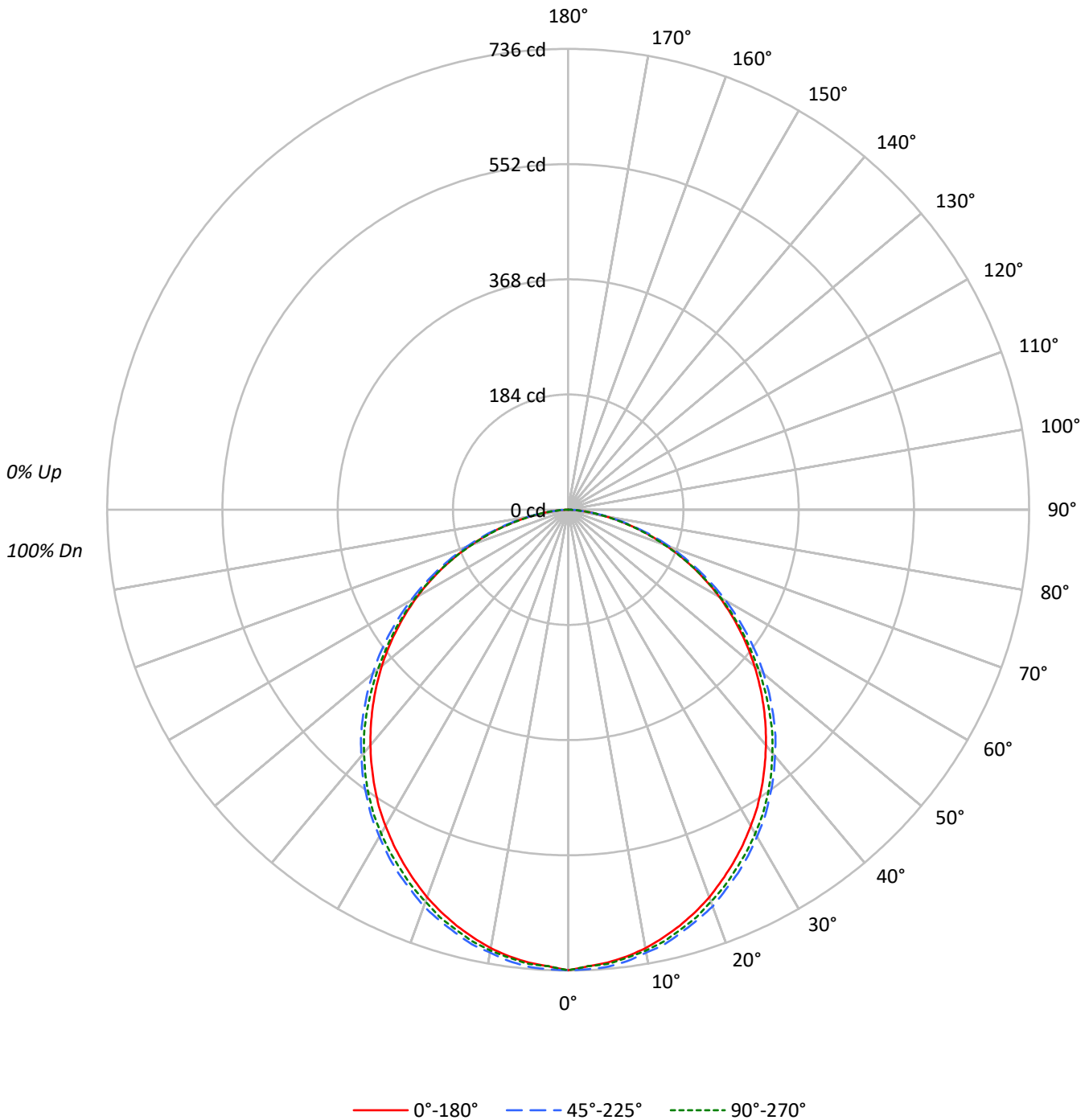
Lumens per Lamp: N/A
Luminaire Lumens: 1933.7 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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: P489065

CATALOG NUMBER: CLM-24-2-INS-A19156-LD4-1STD-35-120-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P489065

CATALOG NUMBER: CLM-24-2-INS-A19156-LD4-1STD-35-120-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	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°	1979	1979	1979
5°	1961	1979	1967
10°	1943	1963	1953
15°	1916	1947	1933
20°	1886	1931	1907
25°	1849	1903	1881
30°	1812	1873	1856
35°	1771	1841	1824
40°	1725	1805	1781
45°	1677	1761	1728
50°	1626	1705	1660
55°	1567	1641	1590
60°	1500	1563	1514
65°	1414	1468	1415
70°	1301	1353	1286
75°	1146	1198	1128
80°	931	972	921
85°	648	692	673



TEST NUMBER: P489065

CATALOG NUMBER: CLM-24-2-INS-A19156-LD4-1STD-35-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.3	3.6
10°-20°	196.3	10.2
20°-30°	292.8	15.1
30°-40°	346.9	17.9
40°-50°	351.1	18.2
50°-60°	306.6	15.9
60°-70°	224.0	11.6
70°-80°	119.2	6.2
80°-90°	27.6	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°	558.3	28.9
0°-40°	905.3	46.8
0°-60°	1562.9	80.8
0°-90°	1933.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1933.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	736	736	736	736	736	
5°	726	727	733	734	728	69
15°	688	692	699	703	694	194
25°	623	630	641	643	634	287
35°	539	548	560	564	555	337
45°	441	448	463	463	454	340
55°	334	341	350	345	339	299
65°	222	227	231	226	222	220
75°	110	113	115	111	108	117
85°	21	21	22	23	22	27
90°	0	0	0	0	0	



TEST NUMBER: P489065

CATALOG NUMBER: CLM-24-2-INS-A19156-LD4-1STD-35-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	735.5	735.5	735.5	735.5	735.5
2.5°	729.8	732.1	734.6	735.7	729.7
5°	725.9	727.3	732.8	734.4	728.2
7.5°	719.6	721.7	727.0	727.8	721.8
10°	711.1	714.7	718.3	722.1	714.8
12.5°	700.1	705.1	711.1	711.8	706.2
15°	687.8	692.4	698.9	703.1	694.0
17.5°	674.0	678.4	686.8	687.6	682.1
20°	658.6	664.1	674.2	676.0	666.1
22.5°	641.1	648.5	657.0	658.6	651.4
25°	622.8	630.4	640.9	643.2	633.5
27.5°	603.6	611.0	622.7	624.4	616.2
30°	583.1	590.0	602.9	605.7	597.3
32.5°	562.2	569.1	583.4	585.8	577.6
35°	539.1	547.5	560.5	564.4	555.3
37.5°	515.5	523.7	538.4	541.9	532.1
40°	491.1	499.2	513.7	516.6	507.1
42.5°	466.1	474.2	489.7	490.1	482.3
45°	440.6	448.4	462.8	463.2	454.0
47.5°	414.7	422.5	435.4	434.0	425.4
50°	388.4	396.0	407.2	404.3	396.6
52.5°	361.3	368.6	379.3	374.5	367.2
55°	334.0	340.8	349.7	344.6	338.9
57.5°	306.5	313.3	320.2	315.0	310.1
60°	278.8	284.8	290.4	285.1	281.4
62.5°	250.6	255.7	260.5	255.6	252.0
65°	222.1	226.6	230.6	226.0	222.2
67.5°	193.7	197.6	201.2	196.5	192.6
70°	165.4	168.7	172.0	167.1	163.5
72.5°	137.4	140.3	143.3	138.6	135.4
75°	110.2	112.7	115.2	111.0	108.5
77.5°	84.2	86.4	88.0	85.4	83.0
80°	60.1	61.7	62.7	61.6	59.4
82.5°	38.6	39.8	40.3	40.2	38.8
85°	21.0	21.4	22.4	22.6	21.8
87.5°	8.1	8.7	8.9	9.6	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)