

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: P488404

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1LO-35-120-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: P488404
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-LD4-1LO-35-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

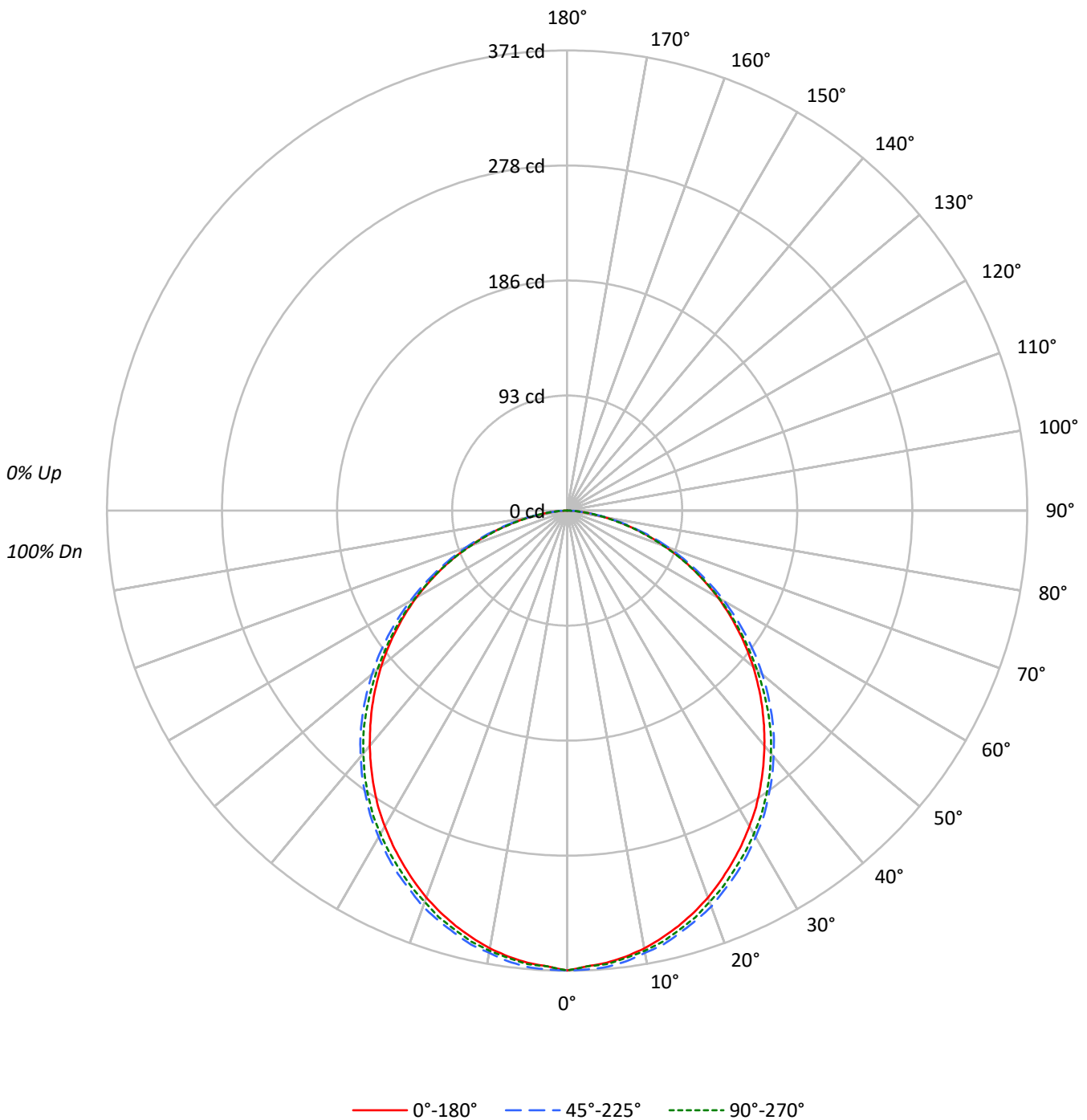
Lumens per Lamp: N/A
Luminaire Lumens: 974.7 lumens
Efficiency: N/A
Efficacy: 83.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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: P488404

CATALOG NUMBER: CLM-12-2-INS-A19156-LD4-1LO-35-120-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P488404

CATALOG NUMBER: CLM-12-2-INS-A19156-LD4-1LO-35-120-EDD-90

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°	1995	1995	1995
5°	1977	1996	1983
10°	1959	1979	1969
15°	1932	1963	1949
20°	1901	1946	1923
25°	1864	1918	1896
30°	1826	1889	1871
35°	1785	1856	1839
40°	1739	1819	1796
45°	1690	1776	1742
50°	1639	1719	1674
55°	1580	1654	1603
60°	1512	1576	1526
65°	1425	1480	1426
70°	1312	1364	1297
75°	1154	1208	1137
80°	939	979	927
85°	655	698	679



TEST NUMBER: P488404

CATALOG NUMBER: CLM-12-2-INS-A19156-LD4-1LO-35-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.9	3.6
10°-20°	98.9	10.2
20°-30°	147.6	15.1
30°-40°	174.9	17.9
40°-50°	176.9	18.2
50°-60°	154.5	15.9
60°-70°	112.9	11.6
70°-80°	60.1	6.2
80°-90°	13.9	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°	281.4	28.9
0°-40°	456.3	46.8
0°-60°	787.8	80.8
0°-90°	974.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	974.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	371	371	371	371	371	
5°	366	367	369	370	367	35
15°	347	349	352	354	350	98
25°	314	318	323	324	319	145
35°	272	276	282	284	280	170
45°	222	226	233	234	229	171
55°	168	172	176	174	171	151
65°	112	114	116	114	112	111
75°	56	57	58	56	55	59
85°	11	11	11	11	11	13
90°	0	0	0	0	0	



TEST NUMBER: P488404

CATALOG NUMBER: CLM-12-2-INS-A19156-LD4-1LO-35-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	370.7	370.7	370.7	370.7	370.7
2.5°	367.8	369.0	370.3	370.8	367.8
5°	365.9	366.6	369.4	370.2	367.1
7.5°	362.7	363.8	366.5	366.8	363.8
10°	358.4	360.3	362.1	364.0	360.3
12.5°	352.9	355.4	358.4	358.8	356.0
15°	346.7	349.0	352.3	354.4	349.8
17.5°	339.7	342.0	346.2	346.6	343.8
20°	332.0	334.7	339.8	340.7	335.7
22.5°	323.2	326.9	331.1	332.0	328.3
25°	313.9	317.8	323.0	324.2	319.3
27.5°	304.3	308.0	313.9	314.7	310.6
30°	293.9	297.4	303.9	305.3	301.1
32.5°	283.4	286.9	294.1	295.3	291.2
35°	271.7	276.0	282.5	284.5	279.9
37.5°	259.8	264.0	271.4	273.2	268.2
40°	247.5	251.6	258.9	260.4	255.6
42.5°	234.9	239.0	246.8	247.1	243.1
45°	222.1	226.0	233.3	233.5	228.9
47.5°	209.0	213.0	219.5	218.7	214.4
50°	195.8	199.6	205.3	203.8	199.9
52.5°	182.1	185.8	191.2	188.8	185.1
55°	168.4	171.8	176.3	173.7	170.8
57.5°	154.5	157.9	161.4	158.8	156.3
60°	140.5	143.5	146.4	143.7	141.8
62.5°	126.3	128.9	131.3	128.8	127.0
65°	111.9	114.2	116.2	113.9	112.0
67.5°	97.6	99.6	101.4	99.0	97.1
70°	83.4	85.0	86.7	84.2	82.4
72.5°	69.3	70.7	72.2	69.8	68.3
75°	55.5	56.8	58.1	55.9	54.7
77.5°	42.5	43.5	44.4	43.0	41.8
80°	30.3	31.1	31.6	31.1	29.9
82.5°	19.5	20.0	20.3	20.3	19.5
85°	10.6	10.8	11.3	11.4	11.0
87.5°	4.1	4.4	4.5	4.8	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)