

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: P488405

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1LO-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: P488405  
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  
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

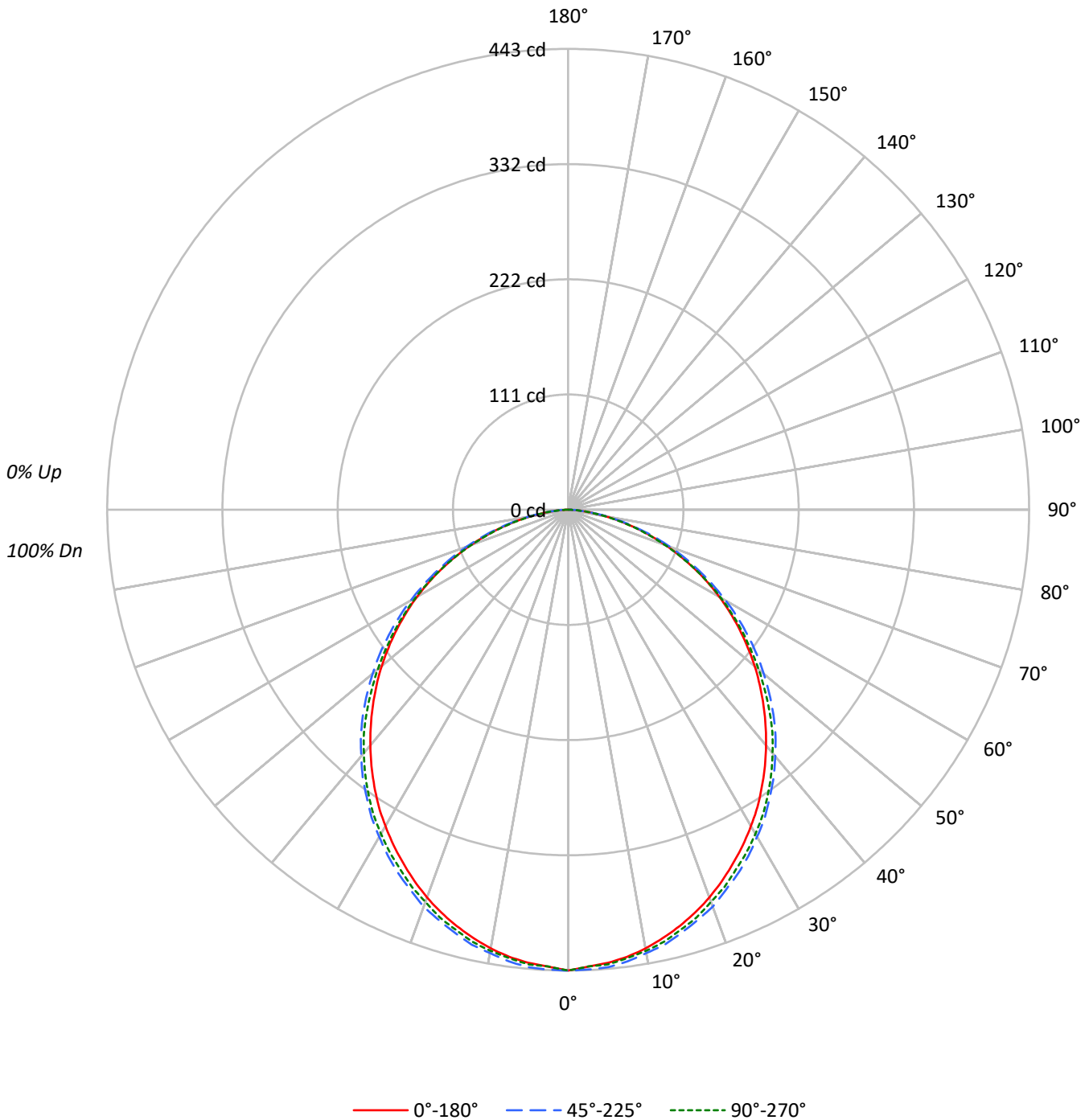
Lumens per Lamp: N/A  
Luminaire Lumens: 1164.8 lumens  
Efficiency: N/A  
Efficacy: 99.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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: P488405

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

### Luminous Intensity Polar Plot





TEST NUMBER: P488405

CATALOG NUMBER: CLM-12-2-INS-A19156-LD4-1LO-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°	2384	2384	2384
5°	2363	2385	2370
10°	2341	2365	2353
15°	2308	2346	2329
20°	2272	2326	2298
25°	2227	2292	2266
30°	2183	2257	2236
35°	2133	2218	2198
40°	2078	2174	2146
45°	2020	2122	2082
50°	1959	2054	2000
55°	1888	1976	1916
60°	1807	1883	1824
65°	1704	1769	1705
70°	1567	1630	1550
75°	1381	1443	1360
80°	1122	1172	1110
85°	778	834	815



TEST NUMBER: P488405

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

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.7	3.6
10°-20°	118.2	10.2
20°-30°	176.4	15.1
30°-40°	209.0	17.9
40°-50°	211.5	18.2
50°-60°	184.7	15.9
60°-70°	134.9	11.6
70°-80°	71.8	6.2
80°-90°	16.6	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°	336.3	28.9
0°-40°	545.3	46.8
0°-60°	941.4	80.8
0°-90°	1164.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1164.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	443	443	443	443	443	
5°	437	438	441	442	439	41
15°	414	417	421	424	418	117
25°	375	380	386	388	382	173
35°	325	330	338	340	334	203
45°	265	270	279	279	274	205
55°	201	205	211	208	204	180
65°	134	136	139	136	134	132
75°	66	68	69	67	65	71
85°	13	13	14	14	13	16
90°	0	0	0	0	0	



TEST NUMBER: P488405

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

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	443.0	443.0	443.0	443.0	443.0
2.5°	439.6	441.0	442.5	443.1	439.5
5°	437.3	438.1	441.4	442.4	438.7
7.5°	433.5	434.7	437.9	438.4	434.8
10°	428.3	430.5	432.7	435.0	430.6
12.5°	421.7	424.7	428.3	428.7	425.4
15°	414.3	417.1	421.0	423.5	418.0
17.5°	406.0	408.7	413.7	414.2	410.9
20°	396.7	400.0	406.1	407.2	401.2
22.5°	386.2	390.7	395.7	396.7	392.4
25°	375.1	379.8	386.0	387.5	381.6
27.5°	363.6	368.0	375.1	376.1	371.2
30°	351.2	355.4	363.1	364.9	359.8
32.5°	338.7	342.8	351.4	352.9	348.0
35°	324.7	329.8	337.6	340.0	334.5
37.5°	310.5	315.5	324.3	326.4	320.5
40°	295.8	300.7	309.4	311.2	305.5
42.5°	280.7	285.6	295.0	295.2	290.5
45°	265.4	270.1	278.8	279.0	273.5
47.5°	249.8	254.5	262.3	261.4	256.2
50°	234.0	238.5	245.3	243.5	238.9
52.5°	217.6	222.0	228.4	225.6	221.2
55°	201.2	205.3	210.6	207.6	204.2
57.5°	184.6	188.8	192.9	189.8	186.8
60°	167.9	171.5	174.9	171.8	169.5
62.5°	150.9	154.0	156.9	153.9	151.8
65°	133.8	136.5	138.9	136.1	133.9
67.5°	116.7	119.0	121.2	118.4	116.0
70°	99.6	101.6	103.6	100.7	98.5
72.5°	82.8	84.5	86.3	83.5	81.6
75°	66.4	67.9	69.4	66.8	65.4
77.5°	50.7	52.0	53.0	51.4	50.0
80°	36.2	37.2	37.8	37.1	35.8
82.5°	23.3	24.0	24.3	24.2	23.4
85°	12.6	12.9	13.5	13.6	13.2
87.5°	4.9	5.2	5.4	5.8	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)