

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: P488399

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1LO-20-120-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: P488399
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-20-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

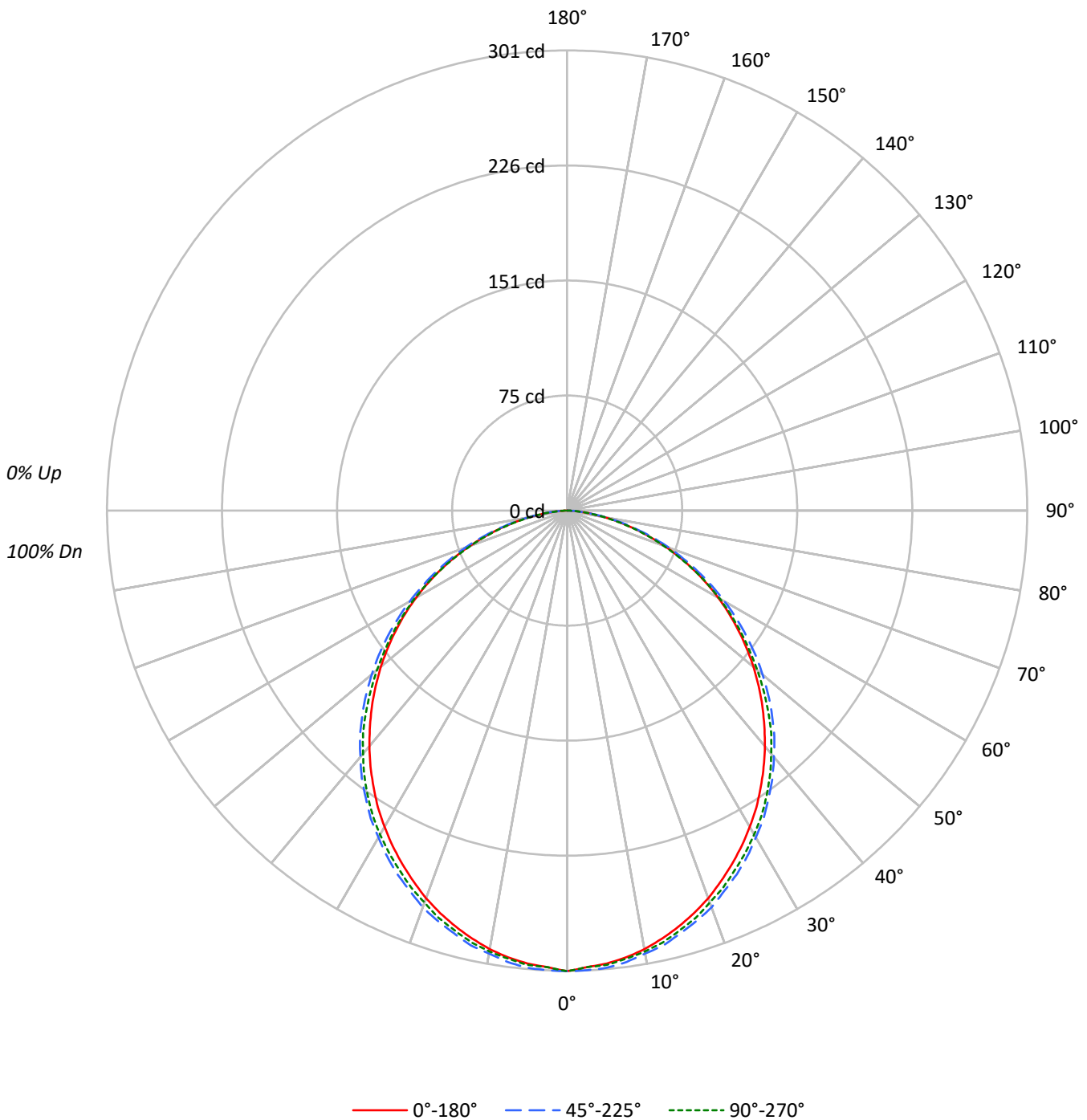
Lumens per Lamp: N/A
Luminaire Lumens: 792.1 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
Input Voltage (V): NR
Input Current (A_{in}): 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°	1622	1622	1622
5°	1607	1622	1612
10°	1592	1608	1600
15°	1570	1595	1584
20°	1545	1582	1562
25°	1515	1559	1541
30°	1485	1534	1521
35°	1451	1509	1495
40°	1414	1478	1459
45°	1374	1443	1416
50°	1332	1397	1360
55°	1284	1344	1302
60°	1229	1280	1241
65°	1159	1203	1159
70°	1065	1109	1054
75°	938	981	923
80°	762	797	753
85°	531	568	550



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.4	3.6
10°-20°	80.4	10.2
20°-30°	119.9	15.1
30°-40°	142.1	17.9
40°-50°	143.8	18.2
50°-60°	125.6	15.9
60°-70°	91.8	11.6
70°-80°	48.8	6.2
80°-90°	11.3	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°	228.7	28.9
0°-40°	370.8	46.8
0°-60°	640.2	80.8
0°-90°	792.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	792.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	301	301	301	301	301	
5°	297	298	300	301	298	28
15°	282	284	286	288	284	79
25°	255	258	262	264	260	118
35°	221	224	230	231	228	138
45°	180	184	190	190	186	139
55°	137	140	143	141	139	122
65°	91	93	94	93	91	90
75°	45	46	47	46	44	48
85°	9	9	9	9	9	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	301.3	301.3	301.3	301.3	301.3
2.5°	298.9	299.9	300.9	301.3	298.9
5°	297.4	297.9	300.2	300.8	298.3
7.5°	294.8	295.6	297.8	298.1	295.7
10°	291.3	292.8	294.2	295.8	292.8
12.5°	286.8	288.8	291.3	291.6	289.3
15°	281.7	283.6	286.3	288.0	284.3
17.5°	276.1	277.9	281.4	281.7	279.4
20°	269.8	272.0	276.2	276.9	272.8
22.5°	262.6	265.7	269.1	269.8	266.8
25°	255.1	258.3	262.5	263.5	259.5
27.5°	247.3	250.3	255.1	255.8	252.4
30°	238.9	241.7	246.9	248.1	244.7
32.5°	230.3	233.1	239.0	239.9	236.6
35°	220.8	224.3	229.6	231.2	227.5
37.5°	211.2	214.5	220.6	222.0	218.0
40°	201.2	204.5	210.4	211.6	207.7
42.5°	190.9	194.2	200.6	200.8	197.6
45°	180.5	183.7	189.6	189.7	186.0
47.5°	169.9	173.1	178.4	177.8	174.2
50°	159.1	162.2	166.8	165.6	162.4
52.5°	148.0	151.0	155.4	153.4	150.4
55°	136.8	139.6	143.2	141.2	138.8
57.5°	125.6	128.4	131.1	129.0	127.0
60°	114.2	116.6	118.9	116.8	115.3
62.5°	102.6	104.8	106.7	104.7	103.2
65°	91.0	92.8	94.5	92.6	91.0
67.5°	79.4	80.9	82.4	80.5	78.9
70°	67.7	69.1	70.5	68.5	67.0
72.5°	56.3	57.5	58.7	56.8	55.5
75°	45.1	46.2	47.2	45.5	44.4
77.5°	34.5	35.4	36.1	35.0	34.0
80°	24.6	25.3	25.7	25.2	24.3
82.5°	15.8	16.3	16.5	16.5	15.9
85°	8.6	8.8	9.2	9.3	8.9
87.5°	3.3	3.5	3.6	3.9	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)