

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: P488402

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1LO-30-120-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: P488402
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-30-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

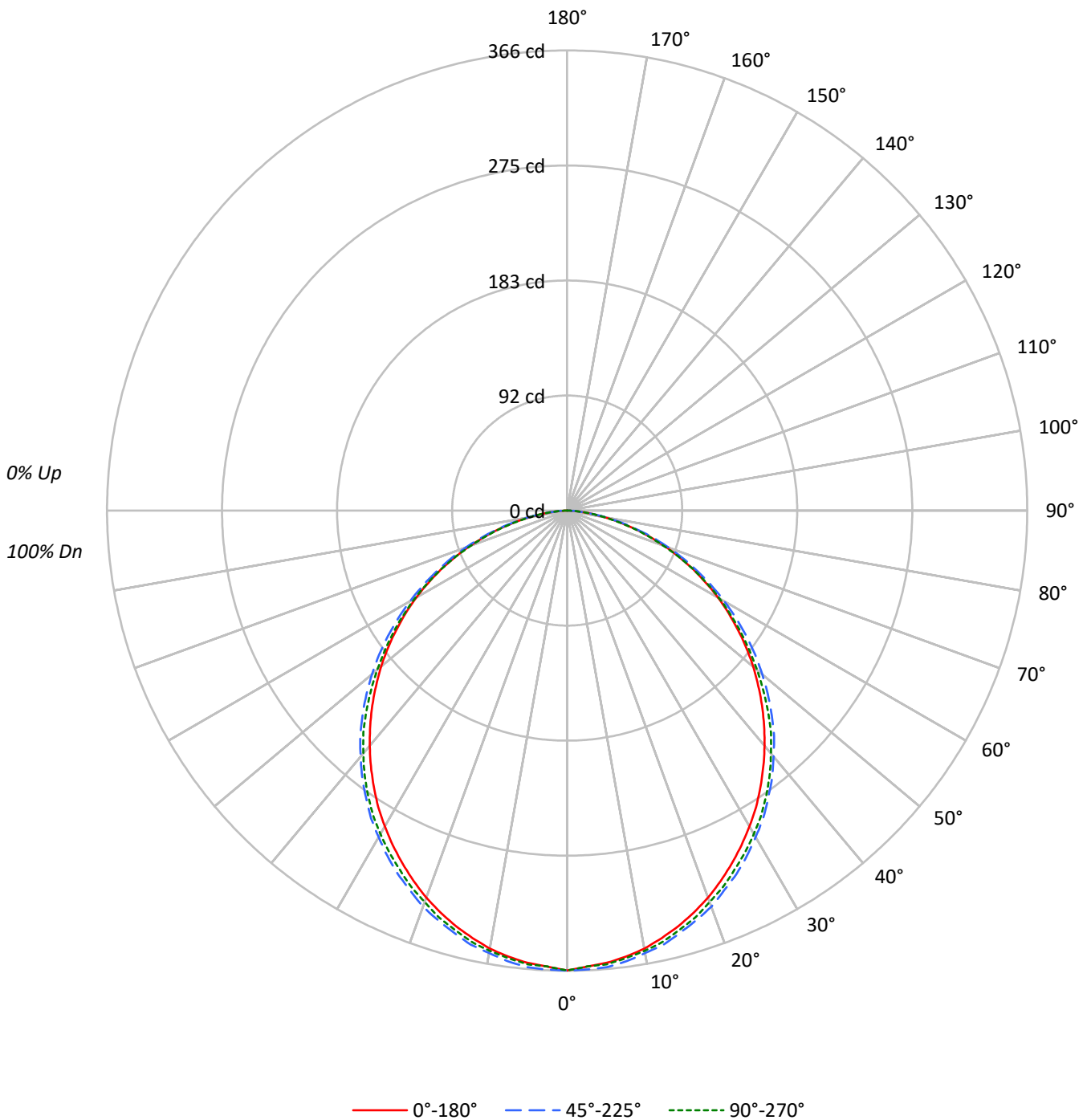
Lumens per Lamp: N/A
Luminaire Lumens: 961.8 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	1969	1969	1969
5°	1951	1969	1957
10°	1933	1953	1943
15°	1906	1937	1923
20°	1876	1920	1897
25°	1840	1893	1871
30°	1802	1864	1846
35°	1761	1832	1815
40°	1716	1795	1772
45°	1668	1752	1719
50°	1618	1696	1651
55°	1559	1632	1582
60°	1493	1554	1507
65°	1407	1461	1407
70°	1295	1347	1279
75°	1140	1192	1123
80°	927	967	914
85°	642	685	673



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.5	3.6
10°-20°	97.6	10.2
20°-30°	145.6	15.1
30°-40°	172.6	17.9
40°-50°	174.6	18.2
50°-60°	152.5	15.9
60°-70°	111.4	11.6
70°-80°	59.3	6.2
80°-90°	13.7	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°	277.7	28.9
0°-40°	450.3	46.8
0°-60°	777.4	80.8
0°-90°	961.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	961.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	366	366	366	366	366	
5°	361	362	364	365	362	34
15°	342	344	348	350	345	96
25°	310	314	319	320	315	143
35°	268	272	279	281	276	168
45°	219	223	230	230	226	169
55°	166	170	174	171	169	149
65°	110	113	115	112	110	109
75°	55	56	57	55	54	58
85°	10	11	11	11	11	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	365.8	365.8	365.8	365.8	365.8
2.5°	363.0	364.2	365.4	365.9	362.9
5°	361.1	361.8	364.5	365.3	362.2
7.5°	357.9	359.0	361.6	362.0	359.0
10°	353.7	355.5	357.3	359.2	355.5
12.5°	348.2	350.7	353.7	354.0	351.3
15°	342.1	344.4	347.6	349.7	345.2
17.5°	335.2	337.4	341.6	342.0	339.3
20°	327.6	330.3	335.3	336.2	331.3
22.5°	318.9	322.6	326.8	327.6	324.0
25°	309.8	313.6	318.8	319.9	315.1
27.5°	300.2	303.9	309.7	310.6	306.5
30°	290.0	293.5	299.9	301.3	297.1
32.5°	279.7	283.1	290.2	291.4	287.3
35°	268.1	272.3	278.8	280.7	276.2
37.5°	256.4	260.5	267.8	269.6	264.7
40°	244.2	248.3	255.5	256.9	252.2
42.5°	231.8	235.9	243.6	243.8	239.9
45°	219.1	223.0	230.2	230.4	225.8
47.5°	206.2	210.2	216.6	215.8	211.6
50°	193.2	196.9	202.5	201.1	197.2
52.5°	179.7	183.3	188.6	186.3	182.7
55°	166.1	169.5	173.9	171.4	168.6
57.5°	152.5	155.9	159.2	156.7	154.3
60°	138.7	141.6	144.4	141.8	140.0
62.5°	124.6	127.2	129.6	127.1	125.4
65°	110.5	112.7	114.7	112.4	110.5
67.5°	96.4	98.3	100.1	97.7	95.8
70°	82.3	83.9	85.6	83.1	81.3
72.5°	68.3	69.8	71.3	68.9	67.4
75°	54.8	56.1	57.3	55.2	54.0
77.5°	41.9	43.0	43.8	42.5	41.3
80°	29.9	30.7	31.2	30.6	29.5
82.5°	19.2	19.8	20.0	20.0	19.3
85°	10.4	10.6	11.1	11.2	10.9
87.5°	4.0	4.3	4.4	4.8	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)