

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: P488407

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1LO-40-120-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: P488407
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-40-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

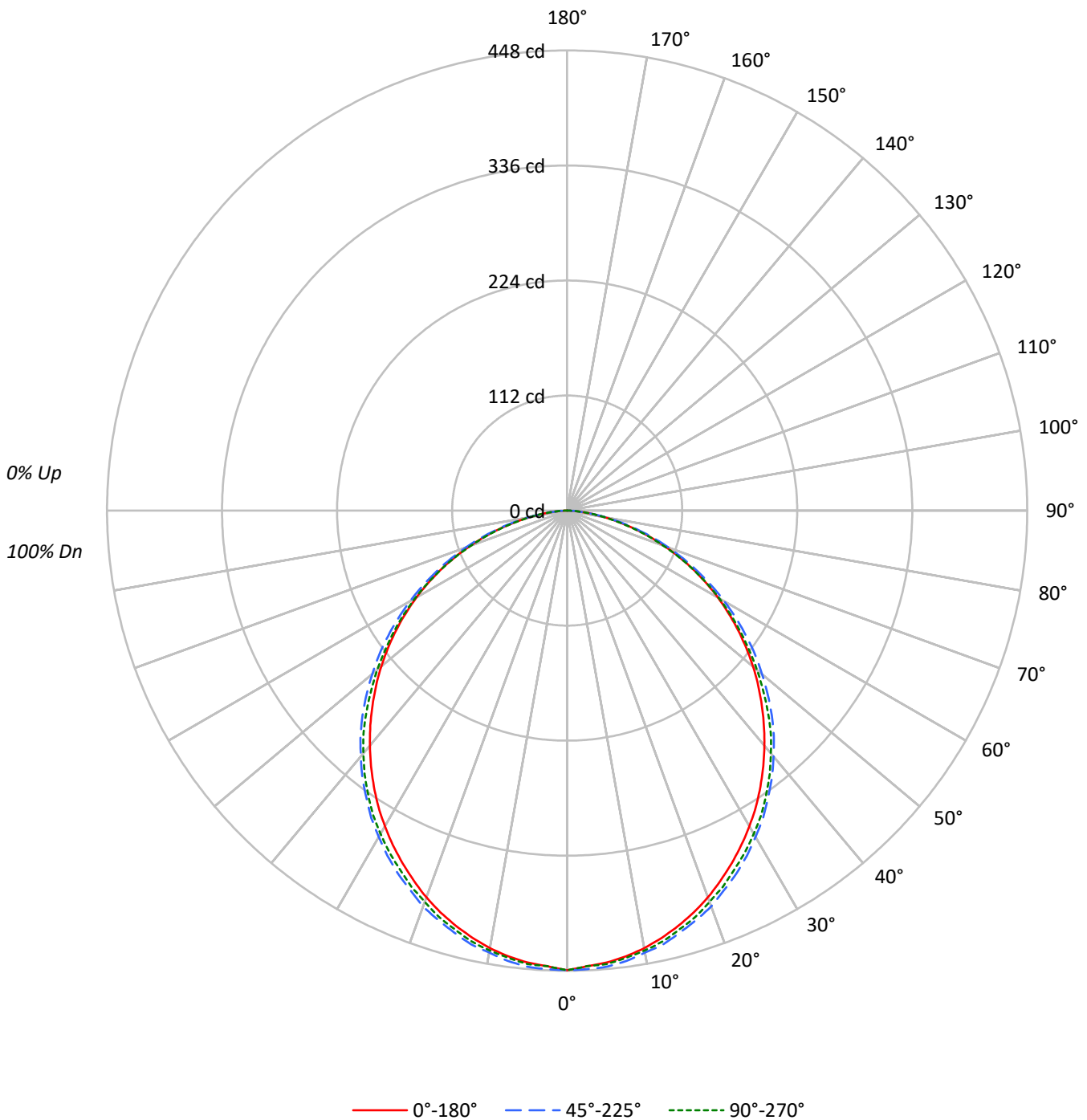
Lumens per Lamp: N/A
Luminaire Lumens: 1176.5 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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

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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°	2408	2408	2408
5°	2386	2408	2394
10°	2364	2388	2377
15°	2332	2369	2352
20°	2295	2349	2321
25°	2250	2315	2289
30°	2205	2279	2258
35°	2155	2240	2219
40°	2099	2196	2168
45°	2040	2143	2102
50°	1979	2075	2020
55°	1907	1996	1935
60°	1826	1902	1843
65°	1720	1787	1722
70°	1583	1648	1566
75°	1393	1458	1372
80°	1134	1181	1119
85°	790	840	821



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	3.6
10°-20°	119.4	10.2
20°-30°	178.1	15.1
30°-40°	211.1	17.9
40°-50°	213.6	18.2
50°-60°	186.5	15.9
60°-70°	136.3	11.6
70°-80°	72.5	6.2
80°-90°	16.8	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°	339.7	28.9
0°-40°	550.8	46.8
0°-60°	950.9	80.8
0°-90°	1176.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1176.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	442	442	446	447	443	42
15°	418	421	425	428	422	118
25°	379	384	390	391	385	175
35°	328	333	341	343	338	205
45°	268	273	282	282	276	207
55°	203	207	213	210	206	182
65°	135	138	140	138	135	134
75°	67	69	70	68	66	71
85°	13	13	14	14	13	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	447.5	447.5	447.5	447.5	447.5
2.5°	444.0	445.4	446.9	447.6	444.0
5°	441.7	442.5	445.8	446.8	443.1
7.5°	437.8	439.1	442.3	442.8	439.2
10°	432.6	434.9	437.0	439.3	434.9
12.5°	426.0	429.0	432.6	433.0	429.7
15°	418.5	421.2	425.2	427.8	422.2
17.5°	410.1	412.8	417.9	418.4	415.0
20°	400.7	404.0	410.2	411.3	405.3
22.5°	390.1	394.6	399.7	400.7	396.3
25°	378.9	383.6	389.9	391.4	385.4
27.5°	367.3	371.7	378.9	379.9	374.9
30°	354.8	359.0	366.8	368.5	363.4
32.5°	342.1	346.3	354.9	356.4	351.5
35°	328.0	333.1	341.0	343.4	337.8
37.5°	313.6	318.6	327.6	329.7	323.8
40°	298.8	303.7	312.5	314.3	308.6
42.5°	283.6	288.5	297.9	298.2	293.5
45°	268.0	272.8	281.6	281.8	276.2
47.5°	252.3	257.1	264.9	264.0	258.8
50°	236.3	240.9	247.8	246.0	241.3
52.5°	219.8	224.3	230.7	227.9	223.4
55°	203.2	207.3	212.7	209.7	206.2
57.5°	186.5	190.6	194.8	191.7	188.7
60°	169.6	173.3	176.7	173.5	171.2
62.5°	152.5	155.6	158.5	155.5	153.3
65°	135.1	137.9	140.3	137.5	135.2
67.5°	117.9	120.2	122.4	119.5	117.2
70°	100.6	102.6	104.7	101.7	99.5
72.5°	83.6	85.4	87.2	84.3	82.4
75°	67.0	68.6	70.1	67.5	66.0
77.5°	51.2	52.5	53.6	51.9	50.5
80°	36.6	37.5	38.1	37.5	36.1
82.5°	23.5	24.2	24.5	24.5	23.6
85°	12.8	13.0	13.6	13.8	13.3
87.5°	4.9	5.3	5.4	5.8	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)