

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: P488434

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2LO-20-120-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: P488434
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-LD4-2LO-20-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

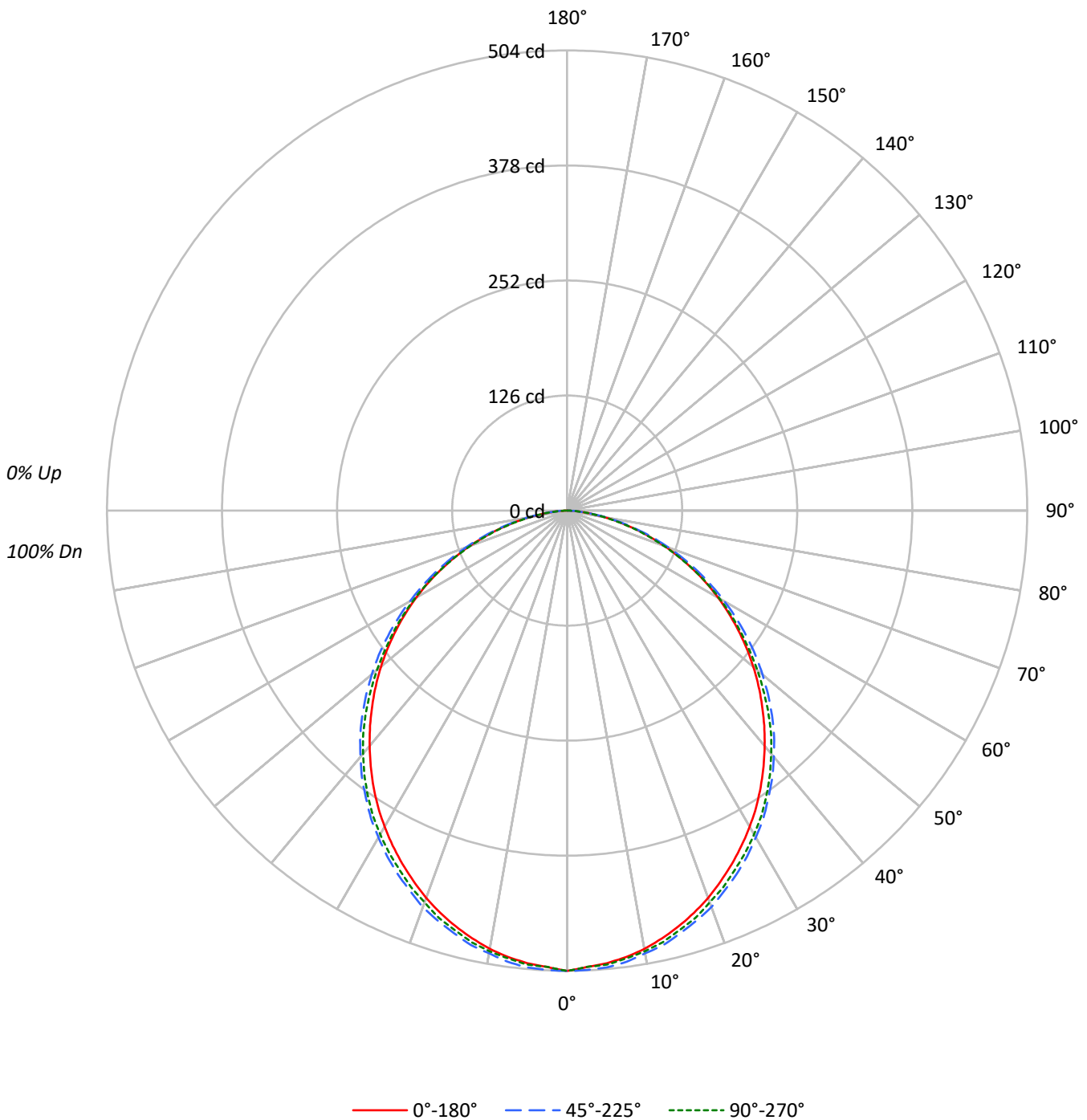
Lumens per Lamp: N/A
Luminaire Lumens: 1325.6 lumens
Efficiency: N/A
Efficacy: 56.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	2714	2714	2714
5°	2688	2714	2697
10°	2664	2691	2678
15°	2627	2669	2651
20°	2586	2647	2615
25°	2535	2609	2579
30°	2484	2568	2545
35°	2428	2524	2501
40°	2365	2474	2443
45°	2299	2414	2369
50°	2230	2338	2277
55°	2149	2249	2181
60°	2057	2142	2076
65°	1938	2013	1940
70°	1784	1855	1764
75°	1570	1643	1547
80°	1277	1333	1261
85°	889	945	926



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.5	3.6
10°-20°	134.6	10.2
20°-30°	200.7	15.1
30°-40°	237.8	17.9
40°-50°	240.7	18.2
50°-60°	210.2	15.9
60°-70°	153.6	11.6
70°-80°	81.7	6.2
80°-90°	18.9	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°	382.8	28.9
0°-40°	620.6	46.8
0°-60°	1071.4	80.8
0°-90°	1325.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1325.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	504	504	504	504	504	
5°	498	499	502	504	499	47
15°	472	475	479	482	476	133
25°	427	432	439	441	434	197
35°	370	375	384	387	381	231
45°	302	307	317	318	311	233
55°	229	234	240	236	232	205
65°	152	155	158	155	152	151
75°	76	77	79	76	74	80
85°	14	15	15	16	15	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	504.2	504.2	504.2	504.2	504.2
2.5°	500.3	501.9	503.6	504.3	500.2
5°	497.6	498.6	502.3	503.5	499.2
7.5°	493.3	494.8	498.4	498.9	494.8
10°	487.5	490.0	492.4	495.0	490.0
12.5°	479.9	483.4	487.5	487.9	484.1
15°	471.5	474.6	479.1	482.0	475.7
17.5°	462.0	465.1	470.9	471.4	467.6
20°	451.5	455.3	462.2	463.4	456.6
22.5°	439.5	444.6	450.4	451.5	446.5
25°	426.9	432.2	439.3	441.0	434.3
27.5°	413.8	418.8	426.9	428.0	422.4
30°	399.7	404.5	413.3	415.2	409.5
32.5°	385.4	390.2	399.9	401.6	396.0
35°	369.6	375.3	384.2	386.9	380.7
37.5°	353.4	359.0	369.1	371.5	364.8
40°	336.6	342.2	352.1	354.1	347.7
42.5°	319.5	325.1	335.7	336.0	330.6
45°	302.0	307.4	317.2	317.5	311.3
47.5°	284.3	289.7	298.5	297.5	291.6
50°	266.3	271.4	279.2	277.2	271.9
52.5°	247.7	252.7	260.0	256.7	251.7
55°	229.0	233.6	239.7	236.2	232.4
57.5°	210.1	214.8	219.5	216.0	212.6
60°	191.1	195.2	199.0	195.5	192.9
62.5°	171.8	175.3	178.6	175.2	172.8
65°	152.2	155.3	158.1	154.9	152.3
67.5°	132.8	135.4	138.0	134.7	132.0
70°	113.4	115.6	117.9	114.6	112.1
72.5°	94.2	96.2	98.2	95.0	92.8
75°	75.5	77.3	79.0	76.1	74.4
77.5°	57.7	59.2	60.4	58.5	56.9
80°	41.2	42.3	43.0	42.2	40.7
82.5°	26.5	27.3	27.6	27.6	26.6
85°	14.4	14.7	15.3	15.5	15.0
87.5°	5.6	5.9	6.1	6.6	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)