

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: P488395

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1HI-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: P488395
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-LD4-1HI-40-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

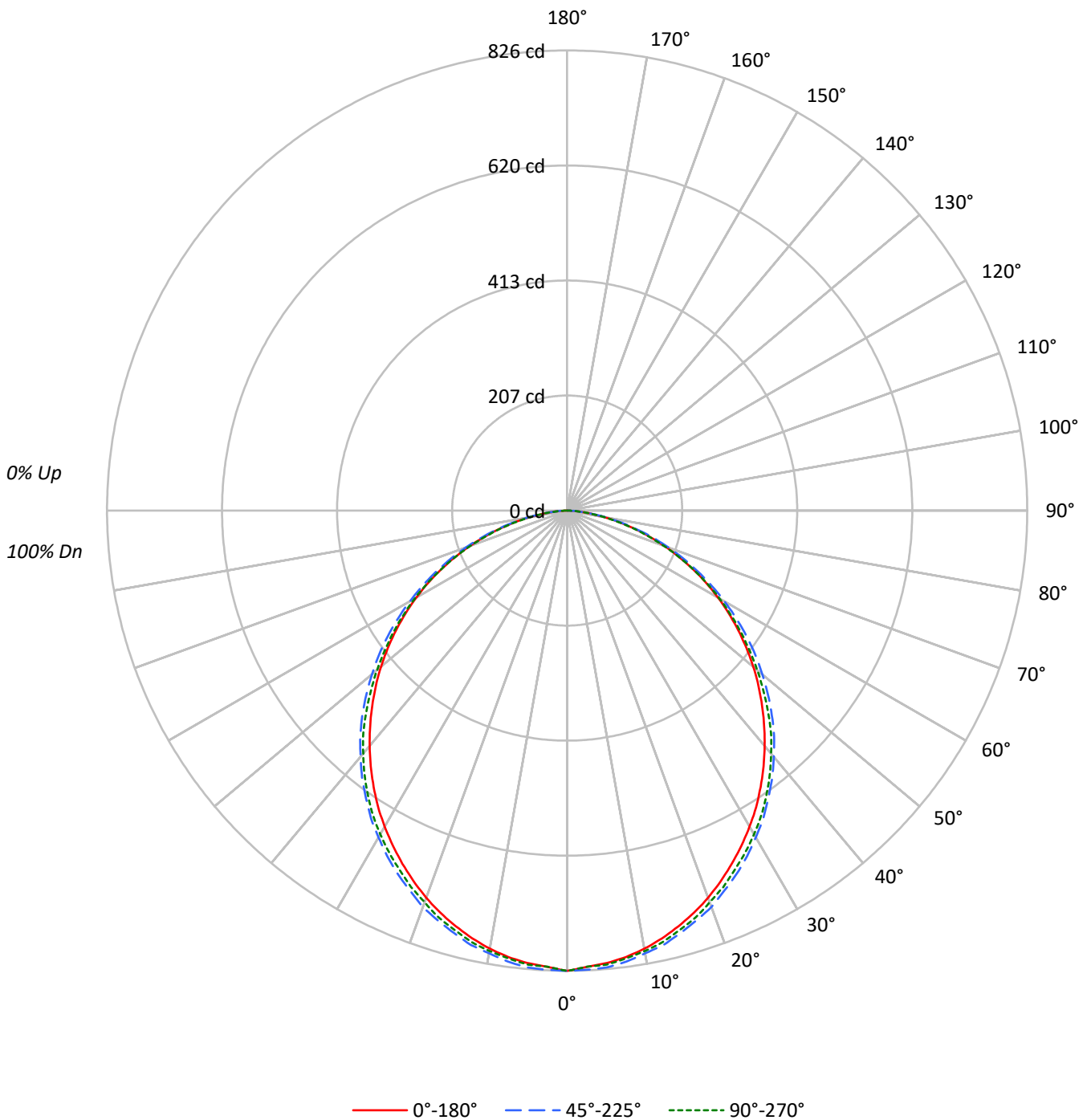
Lumens per Lamp: N/A
Luminaire Lumens: 2172.0 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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°	4447	4447	4447
5°	4405	4447	4419
10°	4365	4409	4388
15°	4304	4374	4343
20°	4237	4337	4285
25°	4154	4274	4226
30°	4070	4208	4170
35°	3978	4137	4098
40°	3875	4054	4002
45°	3766	3956	3882
50°	3653	3830	3729
55°	3521	3686	3572
60°	3370	3510	3402
65°	3176	3298	3179
70°	2924	3040	2891
75°	2574	2691	2535
80°	2092	2182	2067
85°	1457	1550	1513



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.8	3.6
10°-20°	220.5	10.2
20°-30°	328.8	15.1
30°-40°	389.7	17.9
40°-50°	394.3	18.2
50°-60°	344.4	15.9
60°-70°	251.6	11.6
70°-80°	133.9	6.2
80°-90°	31.0	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°	627.1	28.9
0°-40°	1016.8	46.8
0°-60°	1755.5	80.8
0°-90°	2172.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2172.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	826	826	826	826	826	
5°	815	817	823	825	818	77
15°	772	778	785	790	780	218
25°	700	708	720	722	712	322
35°	606	615	630	634	624	379
45°	495	504	520	520	510	382
55°	375	383	393	387	381	335
65°	249	254	259	254	250	247
75°	124	127	129	125	122	132
85°	24	24	25	25	24	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	826.2	826.2	826.2	826.2	826.2
2.5°	819.7	822.4	825.1	826.3	819.6
5°	815.4	816.9	823.1	824.9	818.0
7.5°	808.3	810.7	816.6	817.5	810.7
10°	798.7	802.8	806.8	811.1	802.9
12.5°	786.4	792.0	798.7	799.5	793.3
15°	772.5	777.7	785.0	789.7	779.5
17.5°	757.0	762.0	771.5	772.4	766.2
20°	739.7	745.9	757.3	759.3	748.2
22.5°	720.1	728.5	737.9	739.8	731.6
25°	699.5	708.1	719.8	722.5	711.6
27.5°	678.0	686.3	699.4	701.3	692.1
30°	654.9	662.7	677.2	680.3	671.0
32.5°	631.5	639.3	655.3	658.0	648.8
35°	605.5	615.0	629.6	633.9	623.7
37.5°	579.0	588.2	604.8	608.7	597.7
40°	551.6	560.7	577.0	580.2	569.6
42.5°	523.5	532.6	550.0	550.5	541.8
45°	494.8	503.6	519.8	520.2	510.0
47.5°	465.8	474.6	489.1	487.4	477.8
50°	436.3	444.8	457.4	454.1	445.4
52.5°	405.8	414.0	426.0	420.7	412.5
55°	375.2	382.8	392.8	387.1	380.7
57.5°	344.3	352.0	359.6	353.9	348.3
60°	313.1	319.9	326.1	320.3	316.1
62.5°	281.5	287.2	292.7	287.1	283.1
65°	249.4	254.5	259.0	253.8	249.6
67.5°	217.6	221.9	226.0	220.7	216.3
70°	185.8	189.5	193.2	187.7	183.7
72.5°	154.3	157.6	161.0	155.6	152.1
75°	123.8	126.6	129.4	124.6	121.9
77.5°	94.6	97.0	98.9	95.9	93.2
80°	67.5	69.3	70.4	69.2	66.7
82.5°	43.4	44.7	45.3	45.2	43.6
85°	23.6	24.0	25.1	25.4	24.5
87.5°	9.1	9.7	10.0	10.8	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)