

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: P488391

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1HI-30-120-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: P488391
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-30-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

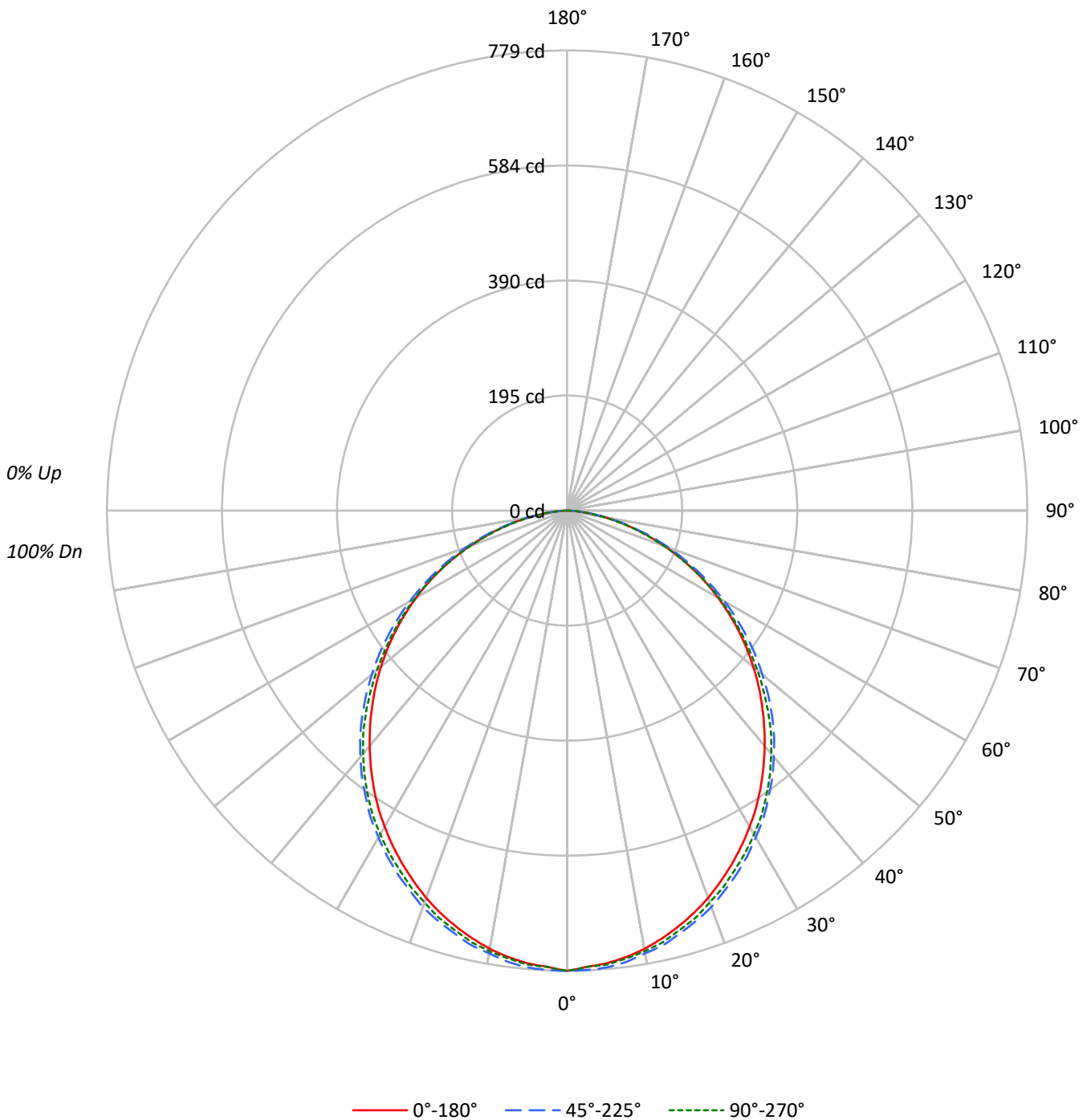
Lumens per Lamp: N/A
Luminaire Lumens: 2048.9 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	4194	4194	4194
5°	4156	4195	4169
10°	4117	4159	4139
15°	4060	4126	4097
20°	3997	4092	4042
25°	3919	4033	3986
30°	3839	3970	3933
35°	3753	3902	3866
40°	3655	3824	3776
45°	3553	3732	3662
50°	3446	3613	3518
55°	3321	3476	3369
60°	3180	3312	3210
65°	2996	3111	2999
70°	2757	2869	2727
75°	2429	2537	2391
80°	1974	2058	1949
85°	1371	1463	1426



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.4	3.6
10°-20°	208.0	10.2
20°-30°	310.2	15.1
30°-40°	367.6	17.9
40°-50°	372.0	18.2
50°-60°	324.8	15.9
60°-70°	237.4	11.6
70°-80°	126.3	6.2
80°-90°	29.2	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°	591.6	28.9
0°-40°	959.2	46.8
0°-60°	1656.0	80.8
0°-90°	2048.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2048.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	779	779	779	779	779	
5°	769	771	776	778	772	73
15°	729	734	740	745	735	205
25°	660	668	679	682	671	304
35°	571	580	594	598	588	357
45°	467	475	490	491	481	360
55°	354	361	370	365	359	316
65°	235	240	244	239	236	233
75°	117	119	122	118	115	124
85°	22	23	24	24	23	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	779.3	779.3	779.3	779.3	779.3
2.5°	773.2	775.8	778.4	779.5	773.2
5°	769.2	770.6	776.4	778.2	771.6
7.5°	762.5	764.7	770.3	771.1	764.8
10°	753.4	757.3	761.1	765.1	757.4
12.5°	741.8	747.1	753.4	754.2	748.3
15°	728.7	733.6	740.5	745.0	735.3
17.5°	714.1	718.8	727.8	728.6	722.7
20°	697.8	703.7	714.4	716.2	705.8
22.5°	679.3	687.2	696.1	697.9	690.2
25°	659.9	668.0	679.1	681.6	671.3
27.5°	639.6	647.4	659.8	661.6	652.9
30°	617.8	625.1	638.8	641.8	632.9
32.5°	595.7	603.0	618.2	620.7	612.1
35°	571.2	580.2	593.9	598.0	588.4
37.5°	546.2	554.9	570.5	574.2	563.8
40°	520.3	528.9	544.3	547.3	537.4
42.5°	493.8	502.4	518.8	519.3	511.1
45°	466.8	475.1	490.3	490.8	481.1
47.5°	439.4	447.7	461.4	459.8	450.7
50°	411.6	419.5	431.5	428.4	420.2
52.5°	382.8	390.6	401.8	396.8	389.1
55°	353.9	361.1	370.5	365.1	359.1
57.5°	324.8	332.0	339.2	333.8	328.6
60°	295.4	301.7	307.7	302.1	298.2
62.5°	265.5	271.0	276.1	270.8	267.1
65°	235.3	240.1	244.3	239.4	235.5
67.5°	205.3	209.3	213.2	208.2	204.0
70°	175.2	178.7	182.3	177.1	173.3
72.5°	145.6	148.7	151.8	146.8	143.5
75°	116.8	119.4	122.0	117.6	115.0
77.5°	89.2	91.5	93.3	90.5	87.9
80°	63.7	65.4	66.4	65.3	62.9
82.5°	40.9	42.1	42.7	42.6	41.1
85°	22.2	22.7	23.7	24.0	23.1
87.5°	8.6	9.2	9.4	10.1	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)