

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: P488415

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1STD-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: P488415
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-LD4-1STD-30-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

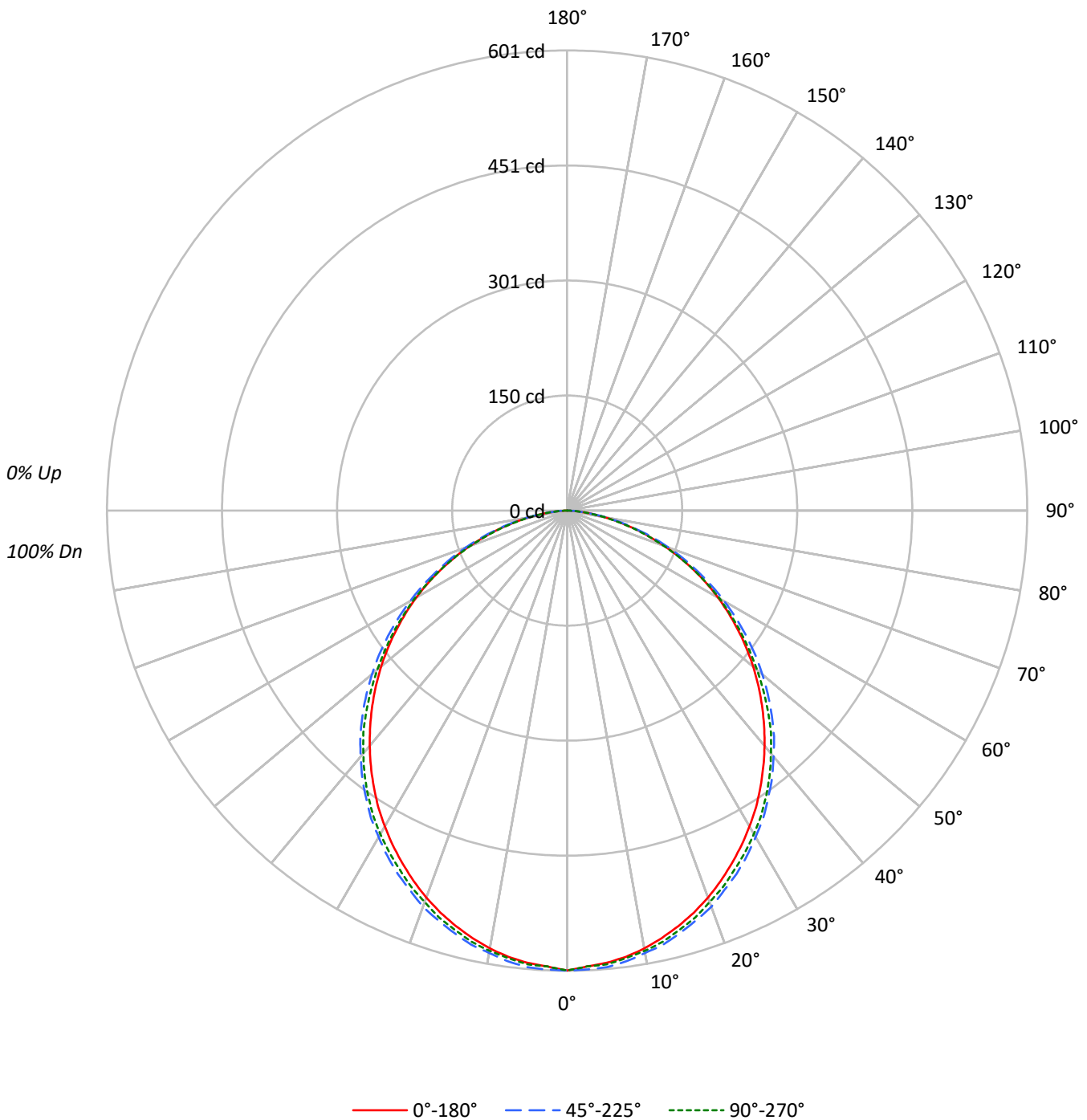
Lumens per Lamp: N/A
Luminaire Lumens: 1579.3 lumens
Efficiency: N/A
Efficacy: 95.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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°	3233	3233	3233
5°	3203	3233	3213
10°	3174	3206	3190
15°	3130	3180	3158
20°	3081	3153	3116
25°	3020	3108	3072
30°	2959	3060	3032
35°	2893	3008	2980
40°	2818	2947	2910
45°	2739	2877	2822
50°	2657	2785	2712
55°	2560	2680	2597
60°	2451	2552	2474
65°	2310	2398	2311
70°	2126	2211	2102
75°	1871	1957	1842
80°	1522	1587	1503
85°	1056	1130	1099



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	3.6
10°-20°	160.3	10.2
20°-30°	239.1	15.1
30°-40°	283.4	17.9
40°-50°	286.7	18.2
50°-60°	250.4	15.9
60°-70°	183.0	11.6
70°-80°	97.4	6.2
80°-90°	22.5	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°	456.0	28.9
0°-40°	739.4	46.8
0°-60°	1276.5	80.8
0°-90°	1579.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1579.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	601	601	601	601	601	
5°	593	594	598	600	595	56
15°	562	566	571	574	567	158
25°	509	515	523	525	517	234
35°	440	447	458	461	454	275
45°	360	366	378	378	371	278
55°	273	278	286	282	277	244
65°	181	185	188	185	182	179
75°	90	92	94	91	89	96
85°	17	18	18	18	18	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	600.7	600.7	600.7	600.7	600.7
2.5°	596.0	598.0	600.0	600.8	596.0
5°	592.9	594.0	598.5	599.8	594.8
7.5°	587.8	589.4	593.8	594.4	589.5
10°	580.7	583.7	586.6	589.8	583.8
12.5°	571.8	575.9	580.7	581.3	576.8
15°	561.7	565.5	570.8	574.2	566.8
17.5°	550.5	554.1	561.0	561.6	557.1
20°	537.9	542.4	550.6	552.1	544.0
22.5°	523.6	529.7	536.6	537.9	532.0
25°	508.6	514.9	523.4	525.4	517.4
27.5°	493.0	499.0	508.6	510.0	503.3
30°	476.2	481.9	492.4	494.7	487.9
32.5°	459.2	464.8	476.5	478.4	471.8
35°	440.3	447.2	457.8	461.0	453.5
37.5°	421.0	427.7	439.7	442.6	434.6
40°	401.1	407.7	419.5	421.9	414.2
42.5°	380.7	387.3	399.9	400.3	393.9
45°	359.8	366.2	378.0	378.3	370.8
47.5°	338.7	345.1	355.6	354.4	347.4
50°	317.3	323.4	332.6	330.2	323.9
52.5°	295.1	301.0	309.7	305.9	299.9
55°	272.8	278.3	285.6	281.5	276.8
57.5°	250.3	255.9	261.5	257.3	253.3
60°	227.7	232.6	237.1	232.9	229.8
62.5°	204.7	208.9	212.8	208.7	205.8
65°	181.4	185.1	188.3	184.6	181.5
67.5°	158.2	161.3	164.4	160.5	157.3
70°	135.1	137.8	140.5	136.5	133.6
72.5°	112.2	114.6	117.0	113.2	110.6
75°	90.0	92.1	94.1	90.6	88.6
77.5°	68.8	70.5	71.9	69.7	67.8
80°	49.1	50.4	51.2	50.3	48.5
82.5°	31.5	32.5	32.9	32.9	31.7
85°	17.1	17.5	18.3	18.5	17.8
87.5°	6.6	7.1	7.3	7.8	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)