

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: P488413

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1STD-27-120-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: P488413
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-27-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

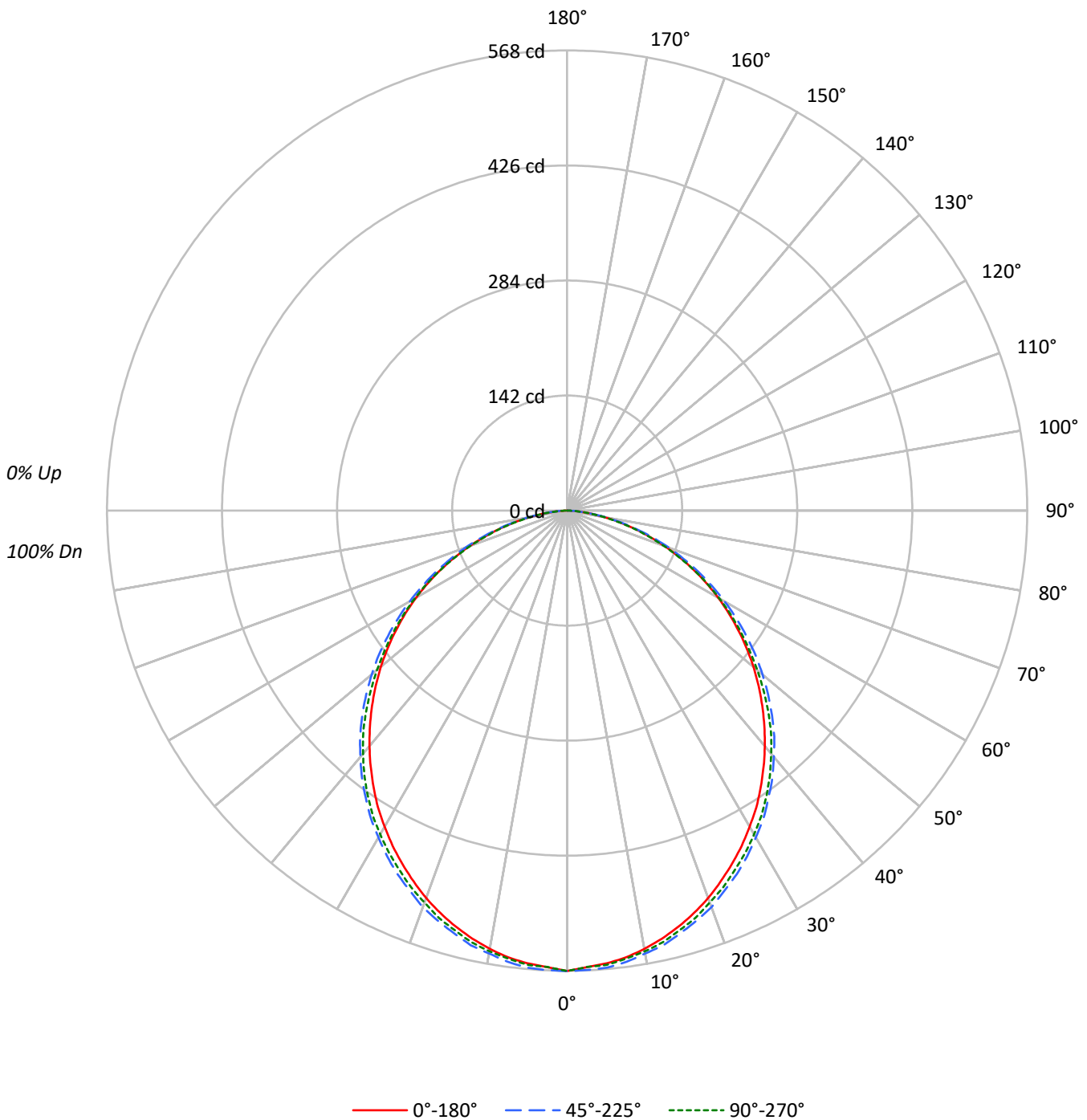
Lumens per Lamp: N/A
Luminaire Lumens: 1494.4 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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	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					100			
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85					85			
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60					60			
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51					51			
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45					45			
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39					39			
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	35	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3059	3059	3059
5°	3031	3059	3041
10°	3003	3034	3019
15°	2961	3009	2988
20°	2915	2984	2948
25°	2858	2941	2907
30°	2800	2895	2869
35°	2737	2846	2819
40°	2666	2789	2753
45°	2592	2722	2671
50°	2514	2635	2566
55°	2423	2535	2457
60°	2320	2415	2341
65°	2185	2269	2187
70°	2011	2093	1989
75°	1772	1851	1745
80°	1438	1500	1423
85°	1000	1068	1044



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.5	3.6
10°-20°	151.7	10.2
20°-30°	226.3	15.1
30°-40°	268.1	17.9
40°-50°	271.3	18.2
50°-60°	236.9	15.9
60°-70°	173.1	11.6
70°-80°	92.1	6.2
80°-90°	21.3	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°	431.5	28.9
0°-40°	699.6	46.8
0°-60°	1207.8	80.8
0°-90°	1494.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1494.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	568	568	568	568	568	
5°	561	562	566	568	563	53
15°	532	535	540	543	536	150
25°	481	487	495	497	490	222
35°	417	423	433	436	429	261
45°	340	346	358	358	351	263
55°	258	263	270	266	262	231
65°	172	175	178	175	172	170
75°	85	87	89	86	84	91
85°	16	16	17	18	17	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	568.4	568.4	568.4	568.4	568.4
2.5°	564.0	565.8	567.7	568.5	563.9
5°	561.0	562.1	566.3	567.6	562.8
7.5°	556.2	557.8	561.8	562.4	557.8
10°	549.5	552.4	555.1	558.1	552.4
12.5°	541.1	544.9	549.5	550.1	545.8
15°	531.5	535.1	540.1	543.4	536.3
17.5°	520.9	524.3	530.8	531.4	527.1
20°	509.0	513.2	521.0	522.4	514.8
22.5°	495.5	501.2	507.7	509.0	503.4
25°	481.3	487.2	495.3	497.1	489.6
27.5°	466.5	472.2	481.2	482.5	476.2
30°	450.6	456.0	465.9	468.1	461.6
32.5°	434.5	439.8	450.9	452.7	446.4
35°	416.6	423.1	433.2	436.2	429.1
37.5°	398.4	404.7	416.1	418.8	411.2
40°	379.5	385.8	397.0	399.2	391.9
42.5°	360.2	366.5	378.4	378.8	372.7
45°	340.5	346.5	357.6	357.9	350.9
47.5°	320.5	326.6	336.5	335.4	328.7
50°	300.2	306.0	314.7	312.5	306.5
52.5°	279.2	284.9	293.1	289.4	283.8
55°	258.2	263.4	270.2	266.3	261.9
57.5°	236.9	242.2	247.4	243.5	239.7
60°	215.5	220.1	224.4	220.4	217.5
62.5°	193.7	197.6	201.4	197.5	194.8
65°	171.6	175.1	178.2	174.6	171.7
67.5°	149.7	152.7	155.5	151.8	148.8
70°	127.8	130.3	133.0	129.2	126.4
72.5°	106.2	108.4	110.7	107.1	104.6
75°	85.2	87.1	89.0	85.8	83.9
77.5°	65.1	66.7	68.0	66.0	64.1
80°	46.4	47.7	48.4	47.6	45.9
82.5°	29.8	30.7	31.2	31.1	30.0
85°	16.2	16.5	17.3	17.5	16.9
87.5°	6.3	6.7	6.9	7.4	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)