

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: P488440

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2LO-35-120-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: P488440
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-35-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

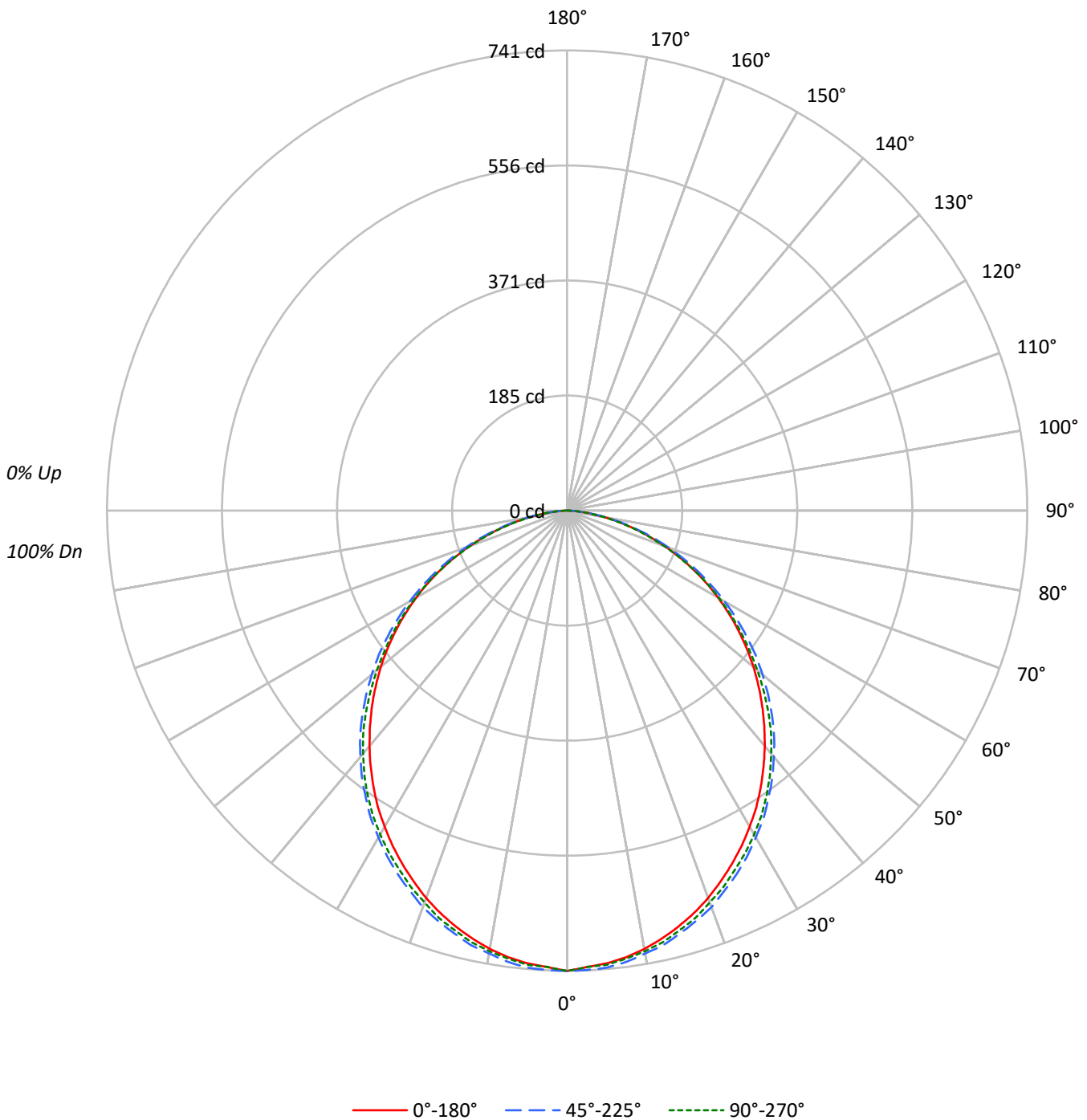
Lumens per Lamp: N/A
Luminaire Lumens: 1949.3 lumens
Efficiency: N/A
Efficacy: 83.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (A_{in}): 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°	3990	3990	3990
5°	3954	3991	3966
10°	3917	3957	3938
15°	3863	3925	3898
20°	3802	3892	3846
25°	3728	3836	3792
30°	3653	3777	3742
35°	3571	3712	3678
40°	3478	3638	3592
45°	3380	3551	3484
50°	3279	3437	3347
55°	3159	3308	3206
60°	3025	3151	3054
65°	2851	2960	2853
70°	2623	2729	2595
75°	2310	2414	2275
80°	1878	1959	1857
85°	1309	1396	1359



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.8	3.6
10°-20°	197.9	10.2
20°-30°	295.1	15.1
30°-40°	349.7	17.9
40°-50°	353.9	18.2
50°-60°	309.1	15.9
60°-70°	225.8	11.6
70°-80°	120.2	6.2
80°-90°	27.8	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°	562.8	28.9
0°-40°	912.6	46.8
0°-60°	1575.5	80.8
0°-90°	1949.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1949.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	741	741	741	741	741	
5°	732	733	739	740	734	69
15°	693	698	704	709	700	195
25°	628	636	646	648	639	289
35°	544	552	565	569	560	340
45°	444	452	466	467	458	343
55°	337	344	352	347	342	301
65°	224	228	232	228	224	222
75°	111	114	116	112	109	118
85°	21	22	23	23	22	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	741.4	741.4	741.4	741.4	741.4
2.5°	735.7	738.0	740.5	741.6	735.6
5°	731.8	733.2	738.7	740.4	734.1
7.5°	725.5	727.5	732.9	733.6	727.6
10°	716.8	720.5	724.1	727.9	720.6
12.5°	705.8	710.8	716.8	717.5	711.9
15°	693.3	698.0	704.5	708.8	699.6
17.5°	679.4	683.9	692.4	693.2	687.6
20°	663.9	669.4	679.6	681.4	671.5
22.5°	646.3	653.8	662.3	664.0	656.6
25°	627.8	635.5	646.0	648.4	638.6
27.5°	608.5	615.9	627.7	629.4	621.2
30°	587.8	594.7	607.7	610.6	602.2
32.5°	566.8	573.7	588.1	590.5	582.3
35°	543.5	552.0	565.0	568.9	559.8
37.5°	519.7	527.9	542.8	546.3	536.4
40°	495.0	503.2	517.8	520.7	511.2
42.5°	469.8	478.0	493.6	494.1	486.2
45°	444.1	452.0	466.5	466.9	457.7
47.5°	418.0	426.0	438.9	437.5	428.8
50°	391.6	399.2	410.5	407.6	399.8
52.5°	364.2	371.6	382.3	377.5	370.2
55°	336.7	343.5	352.5	347.4	341.7
57.5°	309.0	315.9	322.7	317.6	312.6
60°	281.0	287.1	292.7	287.4	283.7
62.5°	252.6	257.8	262.6	257.6	254.1
65°	223.9	228.4	232.4	227.8	224.0
67.5°	195.3	199.2	202.9	198.1	194.1
70°	166.7	170.0	173.4	168.5	164.9
72.5°	138.5	141.4	144.5	139.7	136.5
75°	111.1	113.6	116.1	111.9	109.4
77.5°	84.9	87.1	88.8	86.1	83.7
80°	60.6	62.2	63.2	62.1	59.9
82.5°	38.9	40.1	40.6	40.6	39.1
85°	21.2	21.6	22.6	22.8	22.0
87.5°	8.2	8.7	9.0	9.7	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)