

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: P488447

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2STD-20-120-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: P488447
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-LD4-2STD-20-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

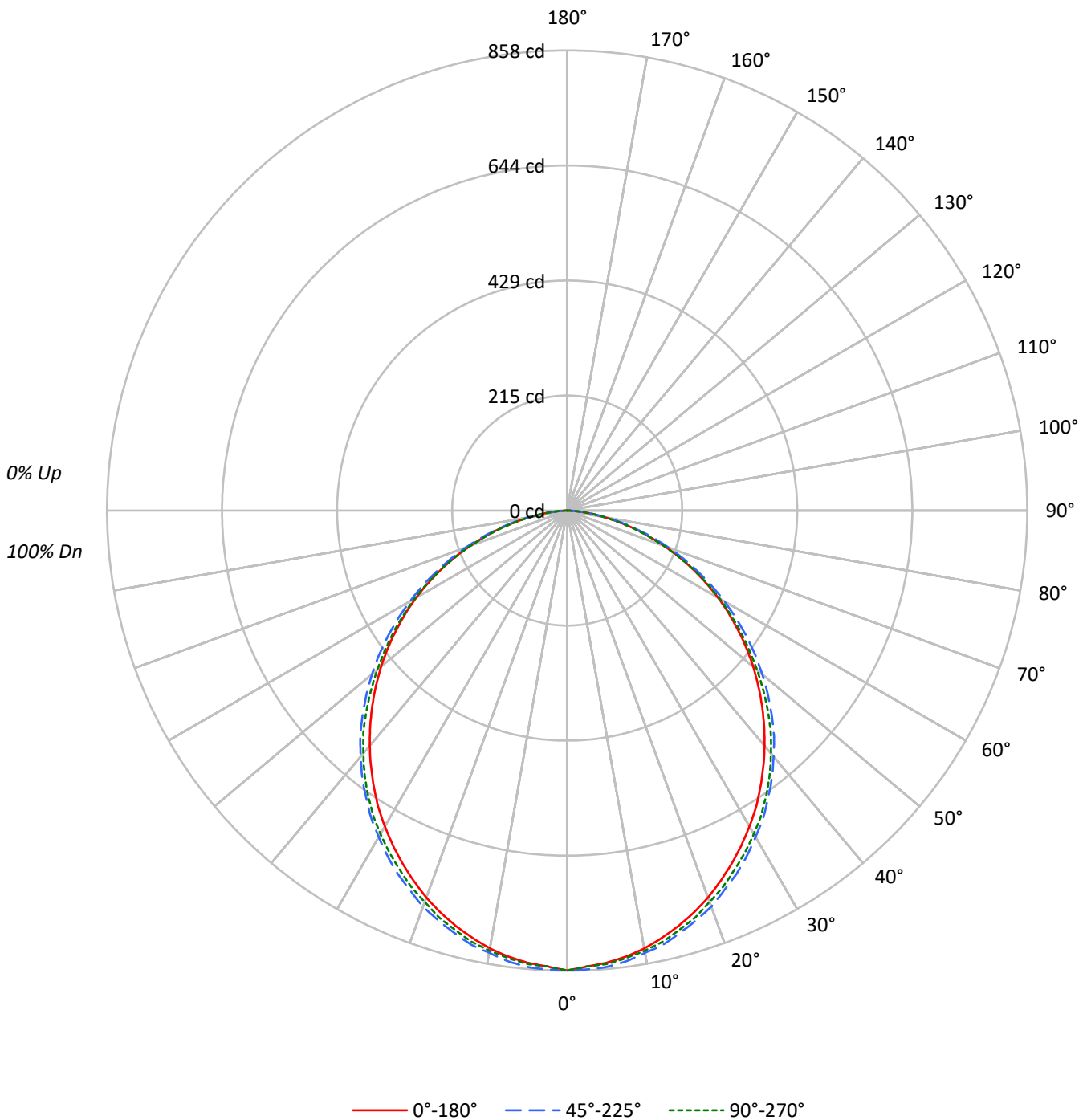
Lumens per Lamp: N/A
Luminaire Lumens: 2254.4 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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°	4615	4615	4615
5°	4572	4615	4587
10°	4530	4576	4555
15°	4467	4540	4508
20°	4397	4502	4448
25°	4312	4437	4386
30°	4225	4368	4328
35°	4129	4293	4254
40°	4022	4208	4154
45°	3909	4106	4029
50°	3792	3975	3871
55°	3654	3826	3708
60°	3498	3644	3532
65°	3297	3423	3300
70°	3034	3157	3001
75°	2672	2793	2630
80°	2170	2266	2145
85°	1513	1612	1575



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	3.6
10°-20°	228.9	10.2
20°-30°	341.3	15.1
30°-40°	404.5	17.9
40°-50°	409.3	18.2
50°-60°	357.4	15.9
60°-70°	261.2	11.6
70°-80°	139.0	6.2
80°-90°	32.1	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°	650.9	28.9
0°-40°	1055.4	46.8
0°-60°	1822.1	80.8
0°-90°	2254.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2254.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	858	858	858	858	858	
5°	846	848	854	856	849	80
15°	802	807	815	820	809	226
25°	726	735	747	750	739	335
35°	628	638	653	658	647	393
45°	514	523	540	540	529	396
55°	389	397	408	402	395	348
65°	259	264	269	264	259	256
75°	128	131	134	129	126	137
85°	24	25	26	26	26	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	857.5	857.5	857.5	857.5	857.5
2.5°	850.8	853.6	856.4	857.7	850.7
5°	846.3	847.9	854.3	856.2	849.0
7.5°	839.0	841.4	847.6	848.5	841.5
10°	829.0	833.3	837.4	841.9	833.4
12.5°	816.2	822.0	829.0	829.8	823.4
15°	801.8	807.2	814.8	819.7	809.1
17.5°	785.8	790.9	800.8	801.7	795.2
20°	767.8	774.2	786.0	788.1	776.6
22.5°	747.4	756.1	765.9	767.9	759.4
25°	726.1	735.0	747.2	749.9	738.6
27.5°	703.7	712.3	726.0	727.9	718.4
30°	679.8	687.8	702.8	706.2	696.4
32.5°	655.5	663.5	680.2	682.9	673.5
35°	628.5	638.3	653.4	658.0	647.4
37.5°	601.0	610.6	627.7	631.8	620.4
40°	572.5	582.0	598.9	602.2	591.3
42.5°	543.4	552.8	570.9	571.4	562.3
45°	513.6	522.7	539.5	540.0	529.3
47.5°	483.4	492.6	507.6	505.9	495.9
50°	452.9	461.6	474.8	471.4	462.3
52.5°	421.2	429.7	442.1	436.6	428.1
55°	389.4	397.3	407.7	401.8	395.2
57.5°	357.4	365.3	373.3	367.3	361.6
60°	325.0	332.0	338.5	332.4	328.1
62.5°	292.1	298.1	303.8	298.0	293.8
65°	258.9	264.2	268.8	263.5	259.1
67.5°	225.9	230.3	234.6	229.1	224.5
70°	192.8	196.6	200.6	194.9	190.7
72.5°	160.2	163.6	167.1	161.5	157.9
75°	128.5	131.4	134.3	129.4	126.5
77.5°	98.2	100.7	102.7	99.5	96.8
80°	70.0	71.9	73.1	71.8	69.2
82.5°	45.0	46.4	47.0	46.9	45.2
85°	24.5	24.9	26.1	26.4	25.5
87.5°	9.5	10.1	10.4	11.2	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)