

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: P488389

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1HI-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: P488389
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-27-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

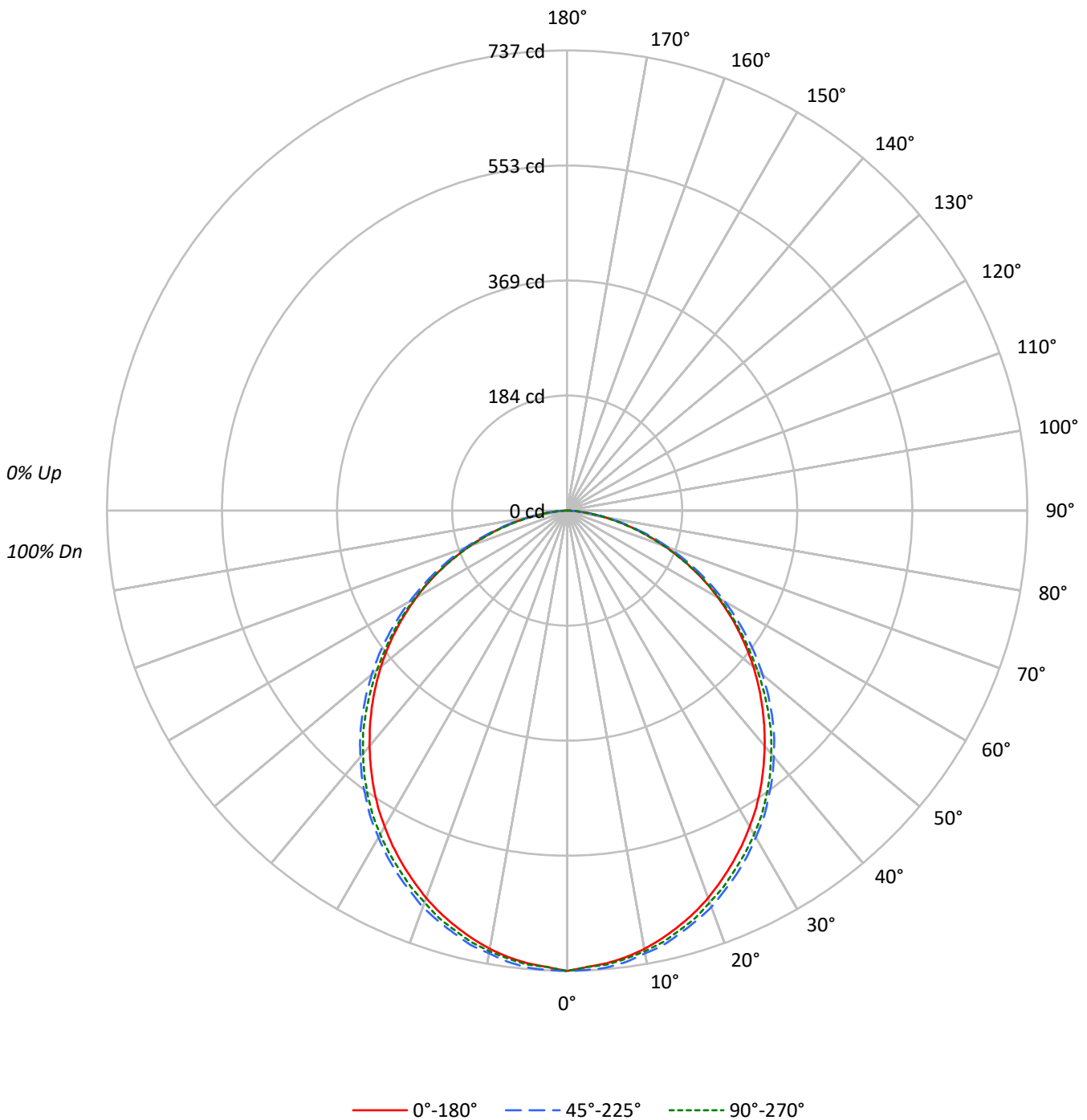
Lumens per Lamp: N/A
Luminaire Lumens: 1938.7 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	3969	3969	3969
5°	3932	3969	3944
10°	3896	3935	3917
15°	3842	3904	3877
20°	3782	3871	3825
25°	3708	3815	3772
30°	3633	3756	3722
35°	3551	3692	3658
40°	3459	3618	3573
45°	3362	3532	3465
50°	3261	3419	3329
55°	3142	3290	3188
60°	3009	3133	3037
65°	2836	2944	2837
70°	2609	2714	2581
75°	2298	2402	2262
80°	1866	1946	1844
85°	1303	1383	1352



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.4	3.6
10°-20°	196.8	10.2
20°-30°	293.5	15.1
30°-40°	347.8	17.9
40°-50°	352.0	18.2
50°-60°	307.4	15.9
60°-70°	224.6	11.6
70°-80°	119.5	6.2
80°-90°	27.6	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°	559.8	28.9
0°-40°	907.6	46.8
0°-60°	1567.0	80.8
0°-90°	1938.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1938.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	728	729	735	736	730	69
15°	690	694	701	705	696	194
25°	624	632	642	645	635	288
35°	540	549	562	566	557	338
45°	442	450	464	464	455	341
55°	335	342	351	346	340	299
65°	223	227	231	227	223	220
75°	110	113	116	111	109	117
85°	21	21	22	23	22	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	737.4	737.4	737.4	737.4	737.4
2.5°	731.7	734.0	736.5	737.6	731.6
5°	727.8	729.2	734.6	736.3	730.1
7.5°	721.5	723.6	728.9	729.7	723.7
10°	712.9	716.6	720.1	724.0	716.7
12.5°	701.9	706.9	712.9	713.6	708.1
15°	689.5	694.2	700.7	704.9	695.8
17.5°	675.7	680.2	688.6	689.4	683.9
20°	660.3	665.8	675.9	677.7	667.8
22.5°	642.8	650.2	658.7	660.4	653.1
25°	624.4	632.1	642.5	644.9	635.2
27.5°	605.2	612.6	624.3	626.0	617.8
30°	584.6	591.5	604.4	607.3	598.9
32.5°	563.7	570.6	584.9	587.3	579.1
35°	540.5	548.9	561.9	565.9	556.7
37.5°	516.8	525.1	539.8	543.3	533.5
40°	492.3	500.5	515.0	517.9	508.5
42.5°	467.3	475.4	490.9	491.4	483.6
45°	441.7	449.5	464.0	464.4	455.2
47.5°	415.7	423.6	436.5	435.1	426.5
50°	389.5	397.0	408.3	405.4	397.6
52.5°	362.3	369.6	380.2	375.5	368.2
55°	334.9	341.7	350.6	345.5	339.8
57.5°	307.3	314.2	321.0	315.8	310.9
60°	279.5	285.5	291.1	285.9	282.1
62.5°	251.2	256.4	261.2	256.2	252.7
65°	222.7	227.2	231.2	226.6	222.8
67.5°	194.2	198.1	201.8	197.0	193.1
70°	165.8	169.1	172.5	167.6	164.0
72.5°	137.8	140.7	143.7	138.9	135.8
75°	110.5	113.0	115.5	111.2	108.8
77.5°	84.4	86.6	88.3	85.6	83.2
80°	60.2	61.8	62.8	61.8	59.5
82.5°	38.7	39.9	40.4	40.3	38.9
85°	21.1	21.4	22.4	22.7	21.9
87.5°	8.1	8.7	8.9	9.6	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)