

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: P488446

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2STD-20-120-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: P488446
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-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

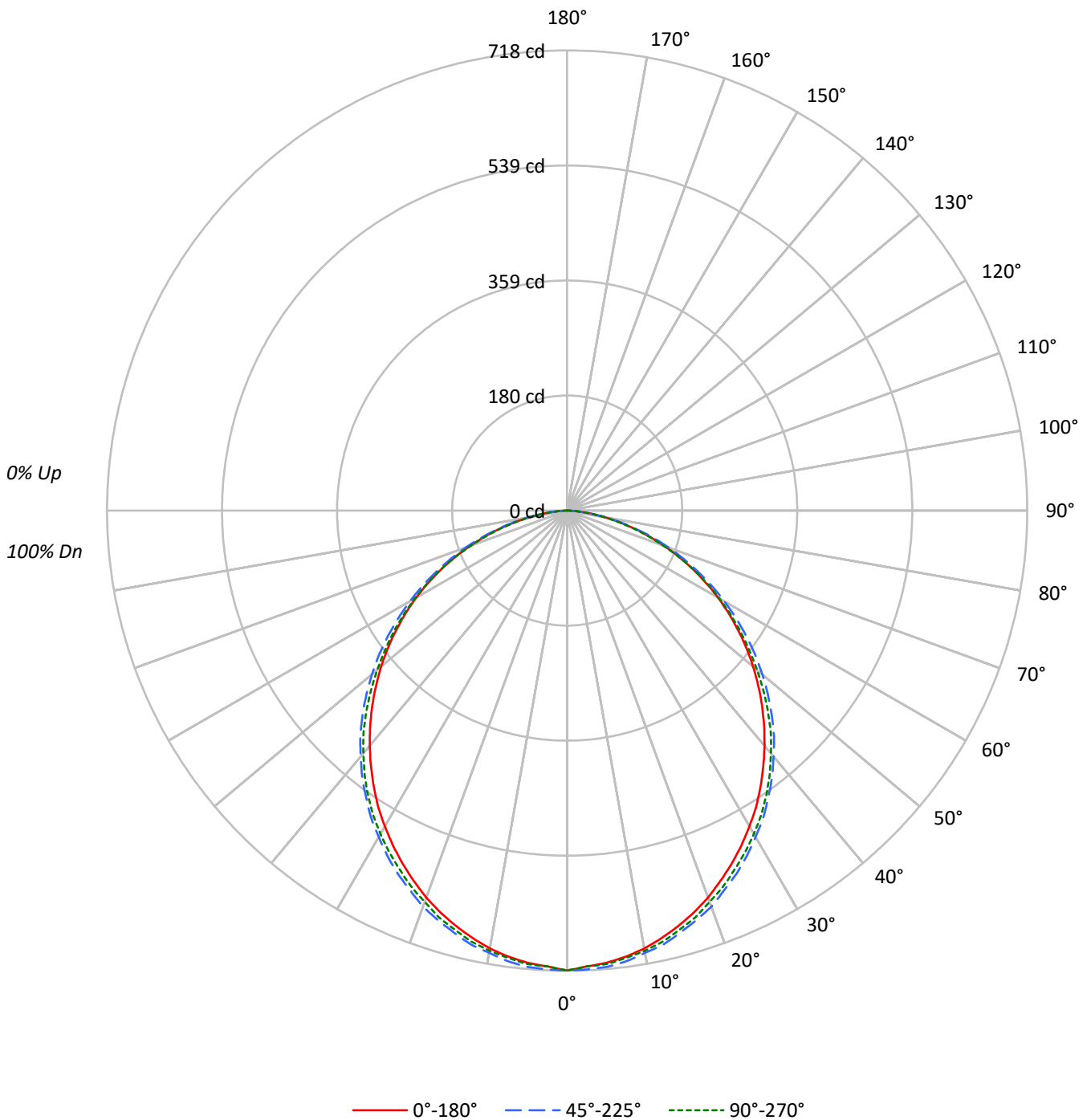
Lumens per Lamp: N/A
Luminaire Lumens: 1886.4 lumens
Efficiency: N/A
Efficacy: 56.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (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°	3862	3862	3862
5°	3826	3862	3838
10°	3791	3829	3811
15°	3738	3799	3772
20°	3680	3767	3722
25°	3608	3713	3670
30°	3535	3655	3621
35°	3455	3593	3559
40°	3365	3521	3476
45°	3271	3436	3371
50°	3172	3327	3239
55°	3058	3201	3103
60°	2928	3049	2955
65°	2758	2864	2761
70°	2538	2640	2510
75°	2235	2337	2202
80°	1816	1897	1795
85°	1266	1346	1315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.6	3.6
10°-20°	191.5	10.2
20°-30°	285.6	15.1
30°-40°	338.4	17.9
40°-50°	342.5	18.2
50°-60°	299.1	15.9
60°-70°	218.6	11.6
70°-80°	116.3	6.2
80°-90°	26.9	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°	544.7	28.9
0°-40°	883.1	46.8
0°-60°	1524.7	80.8
0°-90°	1886.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1886.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	708	710	715	716	710	67
15°	671	675	682	686	677	189
25°	608	615	625	628	618	280
35°	526	534	547	551	542	329
45°	430	437	452	452	443	332
55°	326	332	341	336	331	291
65°	217	221	225	220	217	214
75°	108	110	112	108	106	114
85°	20	21	22	22	21	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	717.5	717.5	717.5	717.5	717.5
2.5°	711.9	714.2	716.6	717.7	711.8
5°	708.2	709.5	714.8	716.5	710.4
7.5°	702.0	704.1	709.2	710.0	704.1
10°	693.7	697.3	700.7	704.4	697.3
12.5°	683.0	687.8	693.7	694.3	689.0
15°	670.9	675.4	681.8	685.9	677.0
17.5°	657.5	661.8	670.0	670.8	665.4
20°	642.5	647.8	657.7	659.4	649.8
22.5°	625.4	632.7	640.9	642.5	635.4
25°	607.6	615.0	625.2	627.5	618.0
27.5°	588.9	596.0	607.5	609.1	601.1
30°	568.8	575.6	588.1	590.9	582.7
32.5°	548.5	555.2	569.1	571.4	563.5
35°	525.9	534.1	546.8	550.6	541.7
37.5°	502.9	510.9	525.2	528.7	519.1
40°	479.0	487.0	501.1	503.9	494.7
42.5°	454.7	462.6	477.7	478.1	470.5
45°	429.8	437.4	451.5	451.8	442.9
47.5°	404.5	412.2	424.8	423.3	415.0
50°	378.9	386.3	397.3	394.4	386.9
52.5°	352.5	359.6	370.0	365.3	358.2
55°	325.9	332.4	341.1	336.2	330.7
57.5°	299.0	305.7	312.3	307.3	302.5
60°	272.0	277.8	283.3	278.2	274.5
62.5°	244.5	249.5	254.2	249.3	245.9
65°	216.6	221.1	224.9	220.5	216.8
67.5°	189.0	192.7	196.3	191.7	187.9
70°	161.3	164.5	167.8	163.0	159.5
72.5°	134.0	136.9	139.8	135.2	132.1
75°	107.5	110.0	112.4	108.2	105.9
77.5°	82.2	84.3	85.9	83.3	81.0
80°	58.6	60.2	61.2	60.1	57.9
82.5°	37.7	38.8	39.3	39.2	37.8
85°	20.5	20.9	21.8	22.1	21.3
87.5°	7.9	8.4	8.7	9.3	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)