

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: P488406

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1LO-40-120-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: P488406
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-LD4-1LO-40-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

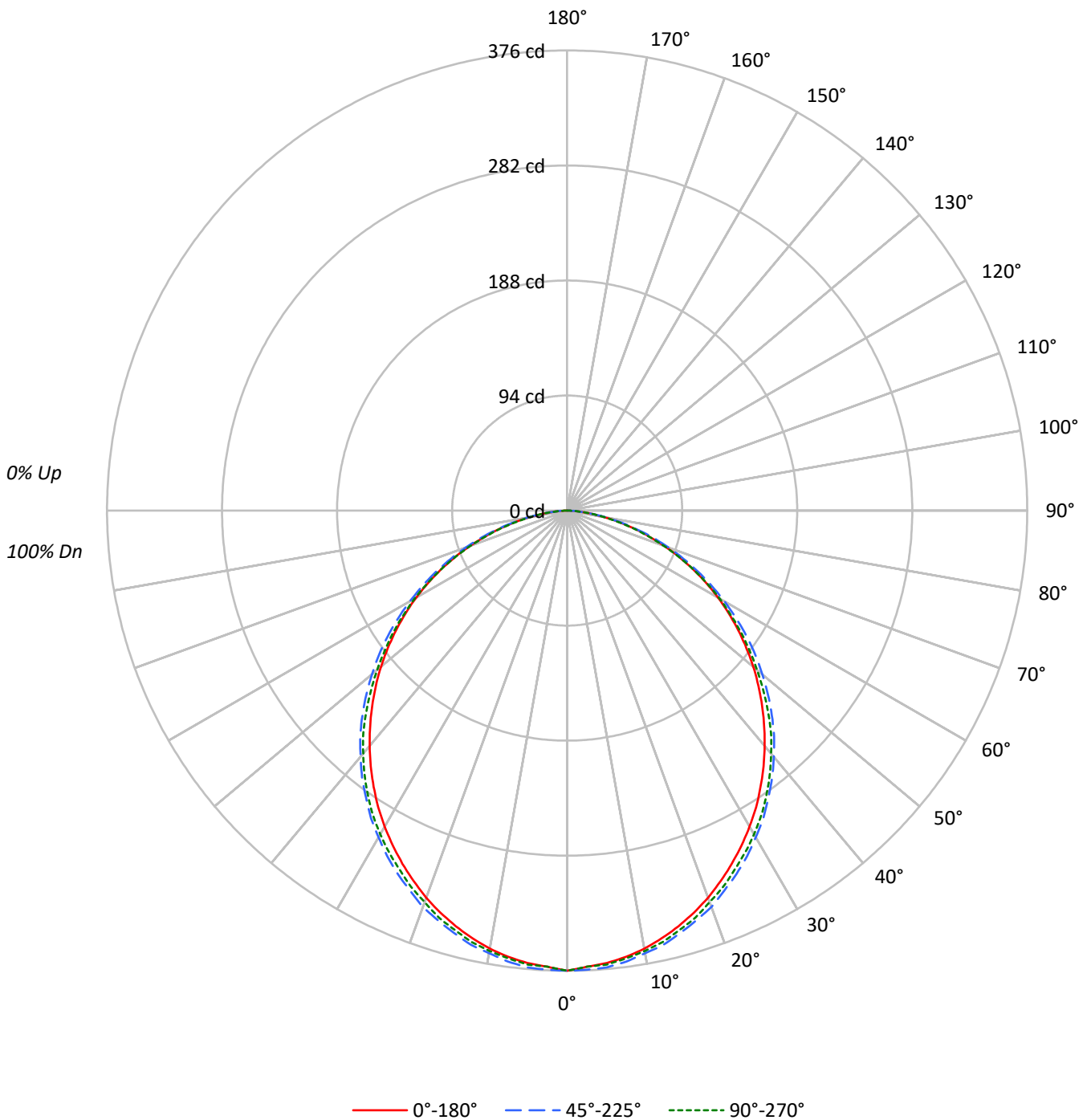
Lumens per Lamp: N/A
Luminaire Lumens: 988.5 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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°	2024	2024	2024
5°	2005	2024	2011
10°	1987	2007	1997
15°	1959	1991	1977
20°	1928	1974	1950
25°	1891	1945	1923
30°	1853	1915	1898
35°	1811	1882	1865
40°	1763	1845	1822
45°	1714	1801	1767
50°	1663	1743	1697
55°	1603	1678	1626
60°	1534	1597	1548
65°	1445	1501	1447
70°	1330	1383	1316
75°	1171	1225	1154
80°	951	992	942
85°	661	704	692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.4	3.6
10°-20°	100.3	10.2
20°-30°	149.7	15.1
30°-40°	177.3	17.9
40°-50°	179.5	18.2
50°-60°	156.7	15.9
60°-70°	114.5	11.6
70°-80°	60.9	6.2
80°-90°	14.1	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°	285.4	28.9
0°-40°	462.8	46.8
0°-60°	799.0	80.8
0°-90°	988.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	988.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	376	376	376	376	376	
5°	371	372	375	375	372	35
15°	352	354	357	359	355	99
25°	318	322	328	329	324	147
35°	276	280	286	288	284	172
45°	225	229	237	237	232	174
55°	171	174	179	176	173	153
65°	114	116	118	116	114	112
75°	56	58	59	57	56	60
85°	11	11	11	12	11	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	376.0	376.0	376.0	376.0	376.0
2.5°	373.1	374.3	375.5	376.1	373.0
5°	371.1	371.8	374.6	375.4	372.3
7.5°	367.9	368.9	371.6	372.0	369.0
10°	363.5	365.4	367.2	369.1	365.4
12.5°	357.9	360.4	363.5	363.8	361.0
15°	351.6	353.9	357.3	359.4	354.8
17.5°	344.5	346.8	351.1	351.5	348.7
20°	336.7	339.5	344.7	345.6	340.5
22.5°	327.7	331.5	335.8	336.7	333.0
25°	318.4	322.3	327.6	328.8	323.8
27.5°	308.6	312.3	318.3	319.2	315.0
30°	298.1	301.6	308.2	309.6	305.4
32.5°	287.4	290.9	298.2	299.4	295.3
35°	275.6	279.9	286.5	288.5	283.9
37.5°	263.5	267.7	275.2	277.0	272.0
40°	251.0	255.2	262.6	264.1	259.3
42.5°	238.3	242.4	250.3	250.6	246.6
45°	225.2	229.2	236.6	236.8	232.1
47.5°	212.0	216.0	222.6	221.8	217.5
50°	198.6	202.4	208.2	206.7	202.7
52.5°	184.7	188.4	193.9	191.4	187.7
55°	170.8	174.2	178.8	176.2	173.3
57.5°	156.7	160.2	163.7	161.0	158.5
60°	142.5	145.6	148.4	145.8	143.8
62.5°	128.1	130.7	133.2	130.6	128.8
65°	113.5	115.8	117.9	115.5	113.6
67.5°	99.0	101.0	102.9	100.4	98.4
70°	84.5	86.2	87.9	85.4	83.6
72.5°	70.2	71.7	73.3	70.8	69.2
75°	56.3	57.6	58.9	56.7	55.5
77.5°	43.1	44.1	45.0	43.6	42.4
80°	30.7	31.5	32.0	31.5	30.4
82.5°	19.7	20.3	20.6	20.6	19.8
85°	10.7	10.9	11.4	11.6	11.2
87.5°	4.2	4.4	4.5	4.9	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)