

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: P488398

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-1LO-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: P488398
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-20-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

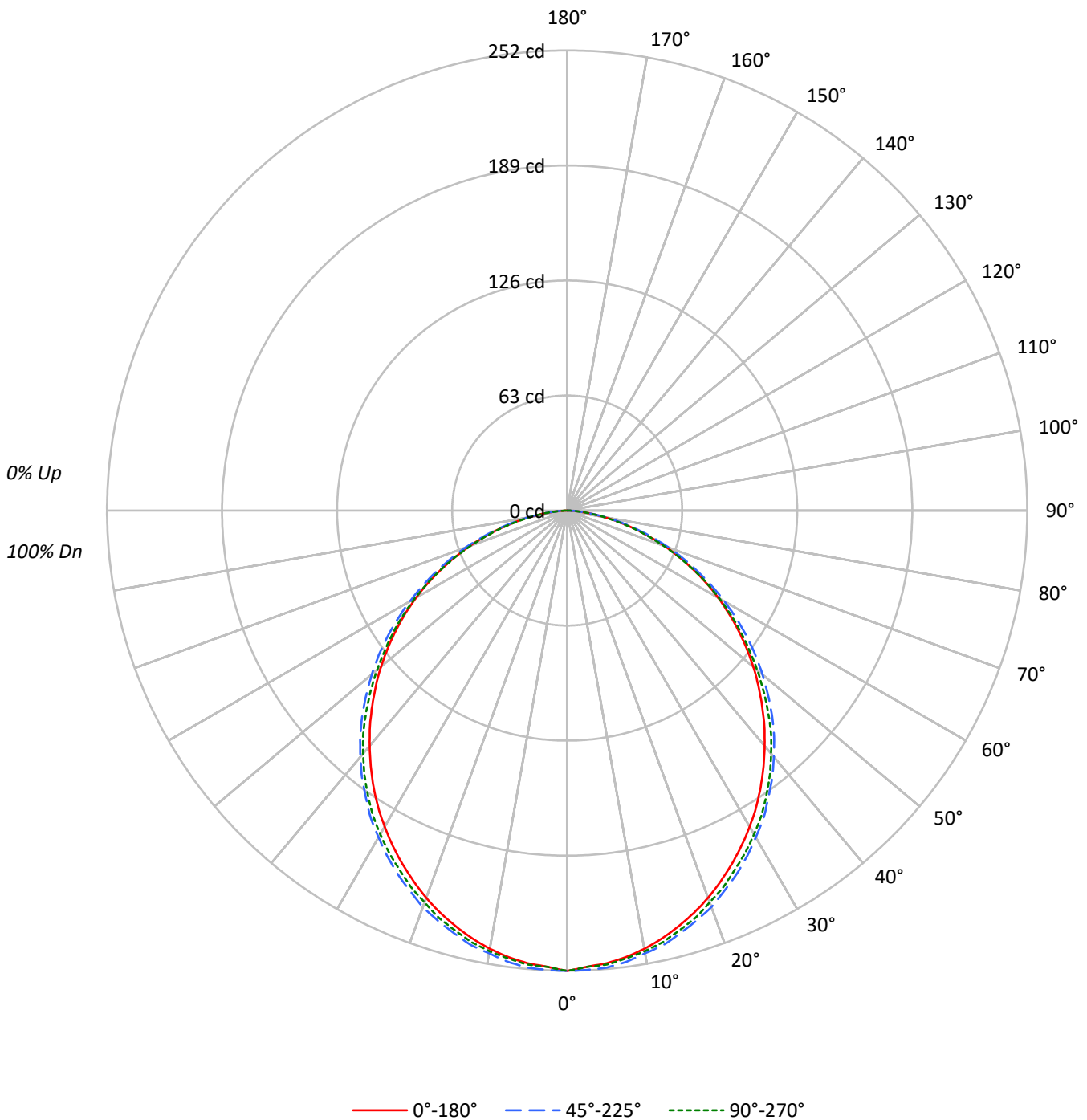
Lumens per Lamp: N/A
Luminaire Lumens: 662.8 lumens
Efficiency: N/A
Efficacy: 56.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	1357	1357	1357
5°	1344	1357	1348
10°	1332	1345	1339
15°	1313	1335	1326
20°	1293	1324	1308
25°	1268	1305	1289
30°	1242	1284	1272
35°	1214	1262	1250
40°	1182	1237	1221
45°	1149	1207	1184
50°	1114	1169	1138
55°	1074	1125	1090
60°	1029	1071	1039
65°	969	1006	970
70°	892	928	883
75°	786	821	774
80°	638	666	632
85°	445	475	463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.7	3.6
10°-20°	67.3	10.2
20°-30°	100.3	15.1
30°-40°	118.9	17.9
40°-50°	120.3	18.2
50°-60°	105.1	15.9
60°-70°	76.8	11.6
70°-80°	40.9	6.2
80°-90°	9.4	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°	191.4	28.9
0°-40°	310.3	46.8
0°-60°	535.7	80.8
0°-90°	662.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	662.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	252	252	252	252	252	
5°	249	249	251	252	250	24
15°	236	237	240	241	238	66
25°	214	216	220	220	217	98
35°	185	188	192	194	190	116
45°	151	154	159	159	156	116
55°	114	117	120	118	116	102
65°	76	78	79	78	76	75
75°	38	39	40	38	37	40
85°	7	7	8	8	8	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	252.1	252.1	252.1	252.1	252.1
2.5°	250.1	250.9	251.8	252.2	250.1
5°	248.8	249.3	251.2	251.7	249.6
7.5°	246.7	247.4	249.2	249.5	247.4
10°	243.7	245.0	246.2	247.5	245.0
12.5°	240.0	241.7	243.7	244.0	242.1
15°	235.7	237.3	239.6	241.0	237.9
17.5°	231.0	232.5	235.4	235.7	233.8
20°	225.7	227.6	231.1	231.7	228.3
22.5°	219.7	222.3	225.2	225.8	223.3
25°	213.5	216.1	219.7	220.5	217.1
27.5°	206.9	209.4	213.4	214.0	211.2
30°	199.9	202.2	206.6	207.6	204.7
32.5°	192.7	195.1	200.0	200.8	198.0
35°	184.8	187.7	192.1	193.5	190.3
37.5°	176.7	179.5	184.5	185.8	182.4
40°	168.3	171.1	176.1	177.1	173.8
42.5°	159.8	162.5	167.8	168.0	165.3
45°	151.0	153.7	158.6	158.8	155.6
47.5°	142.1	144.8	149.2	148.7	145.8
50°	133.1	135.7	139.6	138.6	135.9
52.5°	123.8	126.3	130.0	128.4	125.9
55°	114.5	116.8	119.9	118.1	116.2
57.5°	105.1	107.4	109.7	108.0	106.3
60°	95.6	97.6	99.5	97.7	96.5
62.5°	85.9	87.7	89.3	87.6	86.4
65°	76.1	77.7	79.0	77.5	76.2
67.5°	66.4	67.7	69.0	67.3	66.0
70°	56.7	57.8	59.0	57.3	56.1
72.5°	47.1	48.1	49.1	47.5	46.4
75°	37.8	38.6	39.5	38.0	37.2
77.5°	28.9	29.6	30.2	29.3	28.4
80°	20.6	21.1	21.5	21.1	20.4
82.5°	13.2	13.6	13.8	13.8	13.3
85°	7.2	7.3	7.7	7.7	7.5
87.5°	2.8	3.0	3.0	3.3	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)