

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: P488424

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2HI-27-120-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: P488424
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-LD4-2HI-27-120-EDD-90
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

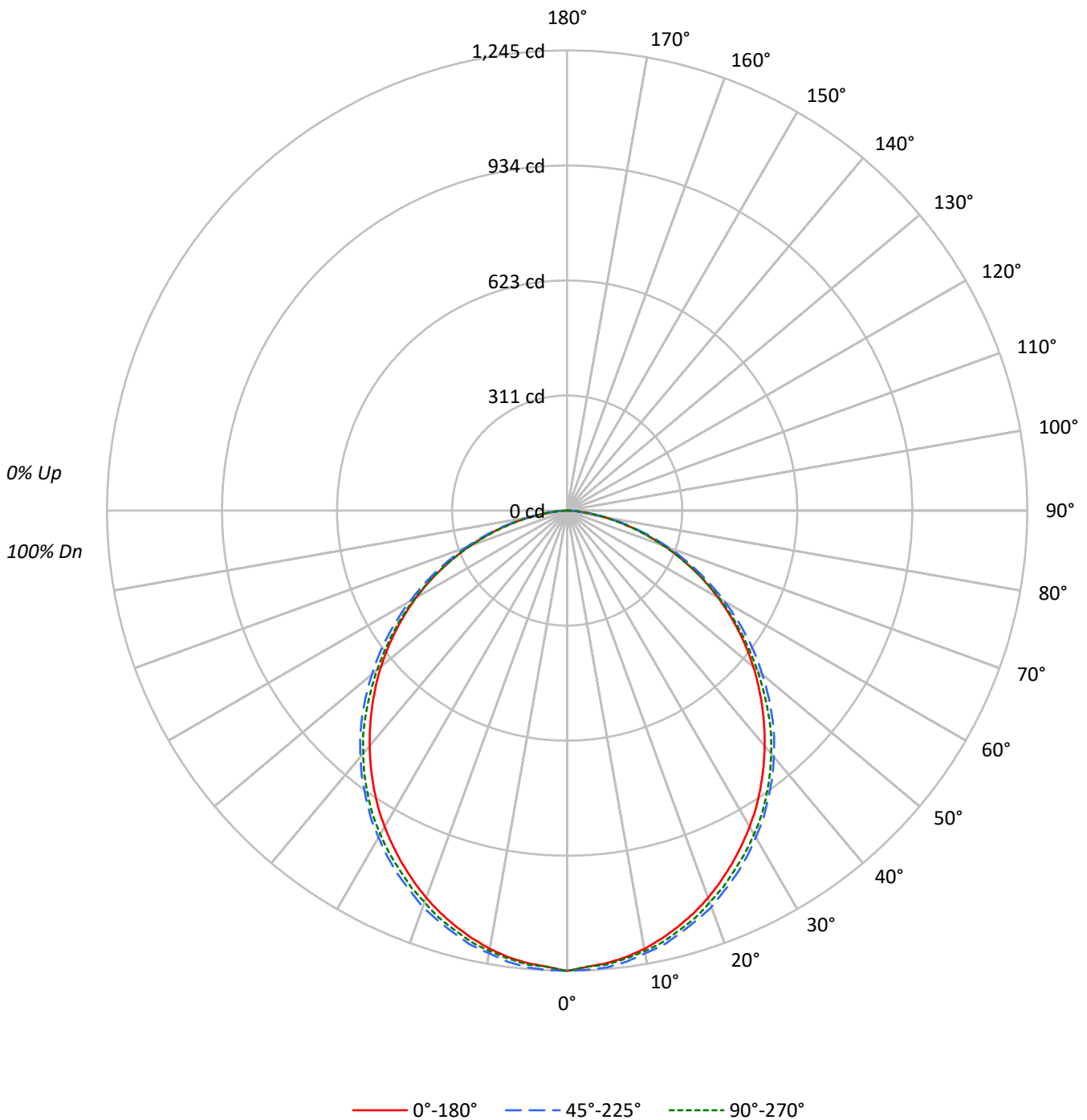
Lumens per Lamp: N/A
Luminaire Lumens: 3273.9 lumens
Efficiency: N/A
Efficacy: 75.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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°	6702	6702	6702
5°	6640	6702	6661
10°	6579	6646	6614
15°	6488	6593	6547
20°	6386	6538	6459
25°	6261	6443	6369
30°	6135	6343	6285
35°	5997	6234	6177
40°	5841	6110	6032
45°	5677	5963	5851
50°	5507	5773	5622
55°	5307	5555	5385
60°	5081	5292	5128
65°	4788	4972	4792
70°	4406	4584	4357
75°	3880	4055	3820
80°	3152	3288	3118
85°	2192	2340	2285



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.3	3.6
10°-20°	332.3	10.2
20°-30°	495.7	15.1
30°-40°	587.4	17.9
40°-50°	594.3	18.2
50°-60°	519.1	15.9
60°-70°	379.3	11.6
70°-80°	201.8	6.2
80°-90°	46.6	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°	945.3	28.9
0°-40°	1532.7	46.8
0°-60°	2646.1	80.8
0°-90°	3273.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3273.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1245	1245	1245	1245	1245	
5°	1229	1231	1241	1244	1233	117
15°	1164	1172	1183	1190	1175	328
25°	1054	1067	1085	1089	1073	486
35°	913	927	949	956	940	571
45°	746	759	784	784	769	575
55°	566	577	592	584	574	506
65°	376	384	390	383	376	372
75°	187	191	195	188	184	198
85°	36	36	38	38	37	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1245.3	1245.3	1245.3	1245.3	1245.3
2.5°	1235.5	1239.6	1243.7	1245.5	1235.4
5°	1229.1	1231.4	1240.6	1243.5	1232.9
7.5°	1218.4	1221.9	1230.9	1232.2	1222.1
10°	1203.9	1210.1	1216.1	1222.6	1210.2
12.5°	1185.3	1193.8	1203.9	1205.1	1195.7
15°	1164.4	1172.2	1183.3	1190.4	1175.0
17.5°	1141.1	1148.6	1162.9	1164.2	1154.8
20°	1115.0	1124.4	1141.5	1144.5	1127.7
22.5°	1085.4	1098.0	1112.3	1115.1	1102.8
25°	1054.4	1067.4	1085.0	1089.1	1072.6
27.5°	1022.0	1034.4	1054.3	1057.1	1043.3
30°	987.2	998.9	1020.7	1025.5	1011.3
32.5°	951.9	963.6	987.7	991.8	978.0
35°	912.7	927.0	948.9	955.6	940.1
37.5°	872.8	886.7	911.6	917.5	900.9
40°	831.4	845.1	869.7	874.6	858.6
42.5°	789.1	802.9	829.1	829.8	816.6
45°	745.9	759.1	783.5	784.2	768.7
47.5°	702.0	715.4	737.2	734.7	720.2
50°	657.7	670.4	689.5	684.5	671.4
52.5°	611.7	624.1	642.1	634.1	621.7
55°	565.6	577.0	592.0	583.5	573.9
57.5°	519.0	530.5	542.1	533.4	525.1
60°	472.0	482.1	491.6	482.8	476.4
62.5°	424.3	433.0	441.1	432.7	426.7
65°	376.0	383.7	390.4	382.6	376.3
67.5°	328.0	334.5	340.7	332.7	326.0
70°	280.0	285.6	291.3	283.0	276.9
72.5°	232.6	237.6	242.6	234.6	229.3
75°	186.6	190.9	195.0	187.9	183.7
77.5°	142.6	146.2	149.1	144.5	140.5
80°	101.7	104.4	106.1	104.3	100.6
82.5°	65.4	67.3	68.2	68.1	65.7
85°	35.5	36.2	37.9	38.3	37.0
87.5°	13.8	14.7	15.1	16.2	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)