

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: P488451

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2STD-30-120-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: P488451
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-30-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

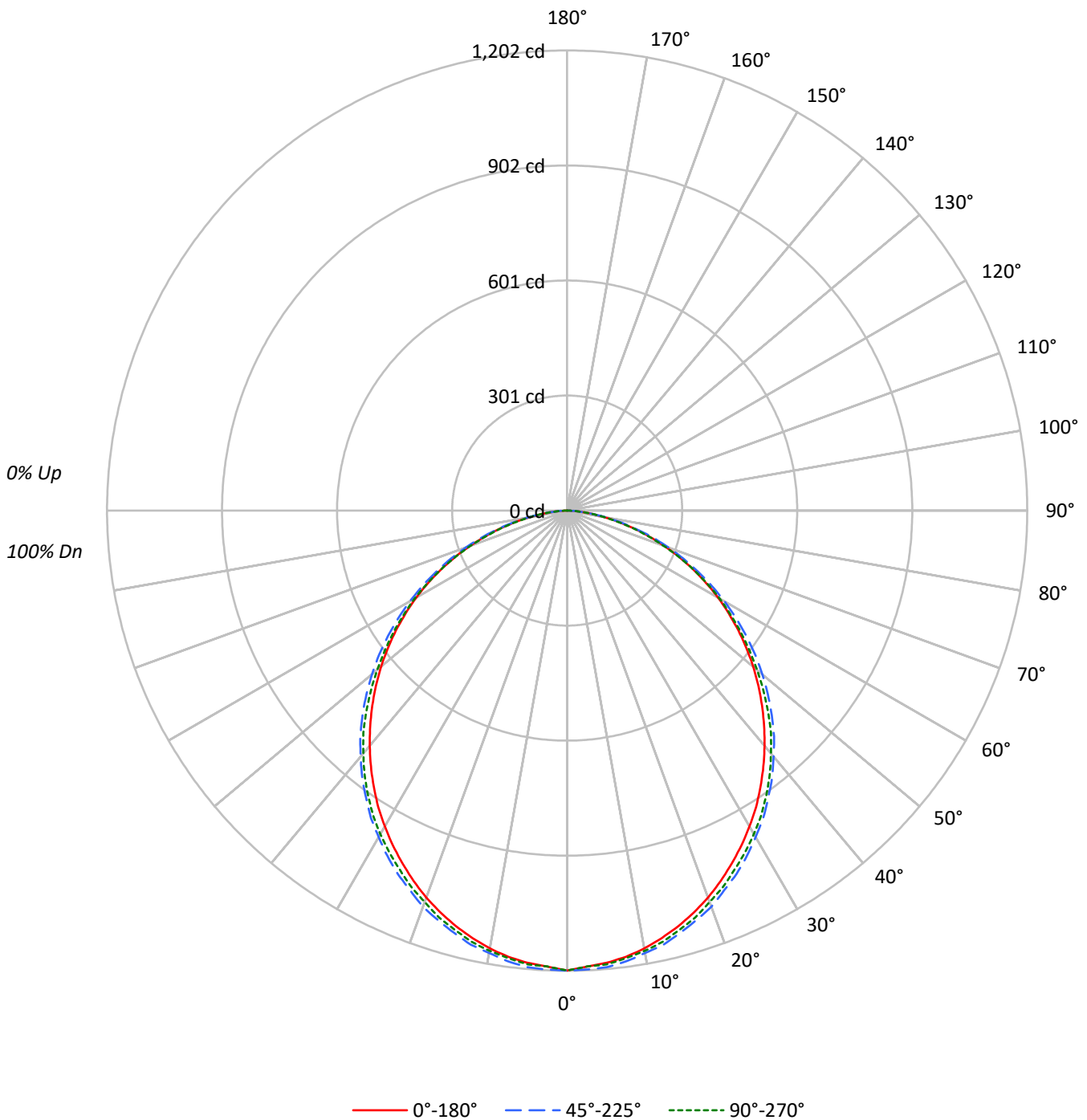
Lumens per Lamp: N/A
Luminaire Lumens: 3158.7 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (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°	6466	6466	6466
5°	6406	6467	6427
10°	6348	6412	6381
15°	6260	6361	6316
20°	6161	6308	6231
25°	6041	6217	6145
30°	5919	6120	6064
35°	5786	6016	5959
40°	5635	5895	5820
45°	5477	5753	5645
50°	5313	5570	5424
55°	5120	5360	5195
60°	4902	5105	4948
65°	4620	4797	4623
70°	4250	4422	4203
75°	3743	3911	3687
80°	3040	3174	3006
85°	2118	2260	2205



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.2	3.6
10°-20°	320.7	10.2
20°-30°	478.2	15.1
30°-40°	566.7	17.9
40°-50°	573.4	18.2
50°-60°	500.8	15.9
60°-70°	366.0	11.6
70°-80°	194.7	6.2
80°-90°	45.0	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°	912.0	28.9
0°-40°	1478.8	46.8
0°-60°	2553.0	80.8
0°-90°	3158.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3158.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1202	1202	1202	1202	1202	
5°	1186	1188	1197	1200	1190	112
15°	1124	1131	1142	1148	1134	317
25°	1017	1030	1047	1051	1035	469
35°	881	894	916	922	907	551
45°	720	732	756	757	742	555
55°	546	557	571	563	554	488
65°	363	370	377	369	363	359
75°	180	184	188	181	177	191
85°	34	35	37	37	36	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1201.5	1201.5	1201.5	1201.5	1201.5
2.5°	1192.1	1195.9	1200.0	1201.7	1191.9
5°	1185.8	1188.1	1197.0	1199.7	1189.6
7.5°	1175.5	1178.9	1187.6	1188.8	1179.1
10°	1161.5	1167.5	1173.3	1179.6	1167.7
12.5°	1143.6	1151.8	1161.5	1162.7	1153.6
15°	1123.5	1131.0	1141.6	1148.5	1133.6
17.5°	1100.9	1108.2	1122.0	1123.2	1114.2
20°	1075.8	1084.8	1101.3	1104.2	1088.0
22.5°	1047.2	1059.4	1073.1	1075.9	1064.0
25°	1017.3	1029.8	1046.9	1050.7	1034.8
27.5°	986.0	998.0	1017.2	1019.9	1006.6
30°	952.5	963.7	984.8	989.4	975.8
32.5°	918.4	929.7	953.0	956.9	943.6
35°	880.6	894.4	915.6	921.9	907.0
37.5°	842.1	855.5	879.5	885.3	869.2
40°	802.1	815.4	839.1	843.8	828.4
42.5°	761.3	774.6	799.9	800.6	787.9
45°	719.6	732.4	755.9	756.6	741.7
47.5°	677.3	690.2	711.3	708.9	694.9
50°	634.5	646.8	665.2	660.4	647.8
52.5°	590.2	602.1	619.5	611.7	599.9
55°	545.7	556.7	571.2	562.9	553.7
57.5°	500.7	511.9	523.0	514.6	506.6
60°	455.4	465.2	474.3	465.8	459.7
62.5°	409.3	417.7	425.6	417.5	411.7
65°	362.8	370.2	376.7	369.1	363.0
67.5°	316.4	322.7	328.7	321.0	314.6
70°	270.1	275.5	281.0	273.0	267.1
72.5°	224.4	229.2	234.1	226.3	221.2
75°	180.0	184.1	188.1	181.3	177.3
77.5°	137.6	141.1	143.8	139.4	135.6
80°	98.1	100.8	102.4	100.6	97.0
82.5°	63.1	65.0	65.8	65.7	63.3
85°	34.3	34.9	36.6	36.9	35.7
87.5°	13.3	14.1	14.5	15.6	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)