

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: P488425

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2HI-27-120-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: P488425  
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  
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

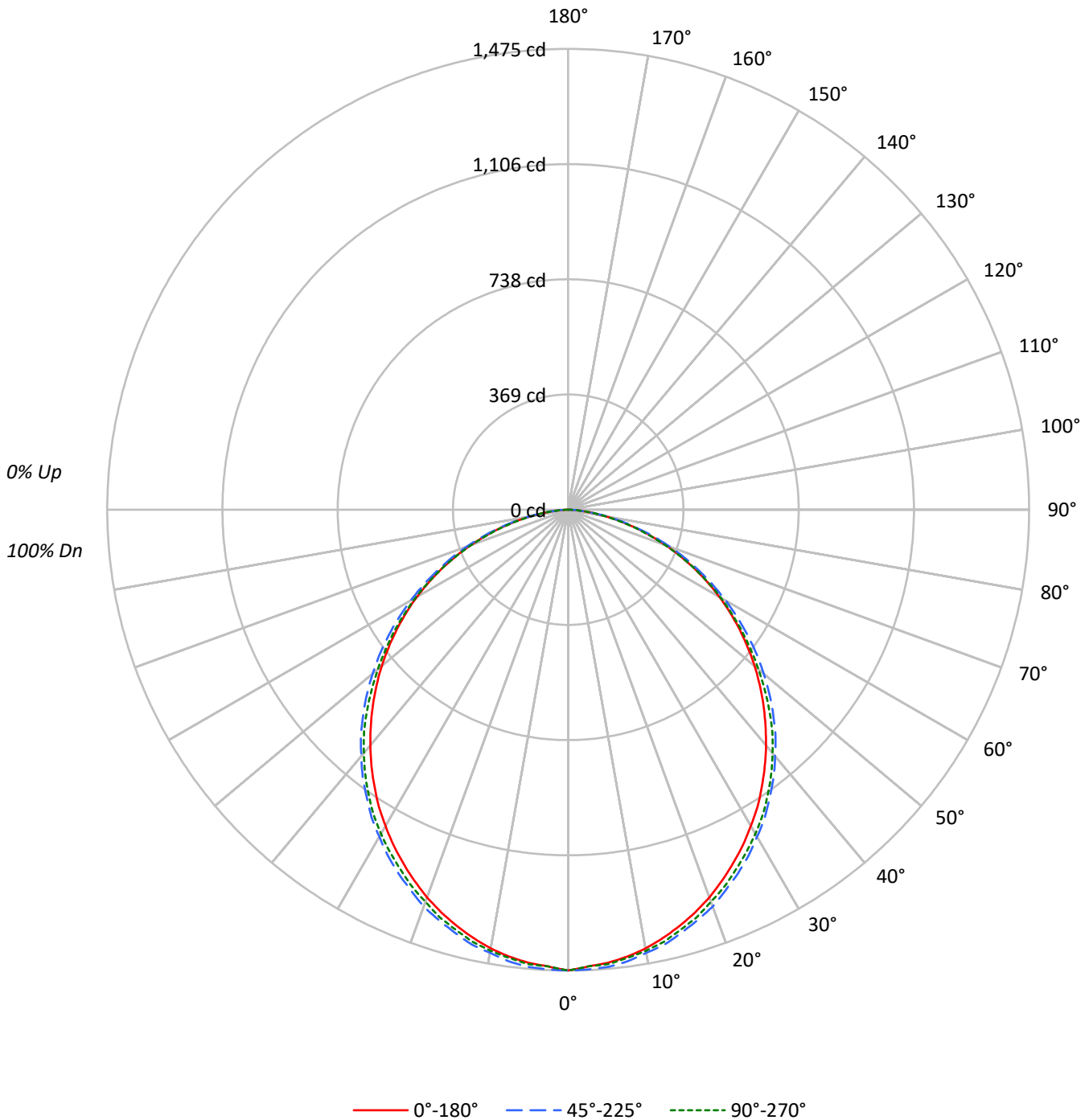
Lumens per Lamp: N/A  
Luminaire Lumens: 3877.3 lumens  
Efficiency: N/A  
Efficacy: 89.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	7937	7937	7937
5°	7864	7938	7889
10°	7792	7871	7833
15°	7684	7808	7753
20°	7563	7743	7649
25°	7416	7631	7543
30°	7266	7512	7443
35°	7102	7384	7315
40°	6917	7236	7144
45°	6724	7062	6929
50°	6522	6836	6658
55°	6285	6579	6377
60°	6017	6267	6073
65°	5671	5887	5675
70°	5218	5429	5160
75°	4596	4801	4525
80°	3735	3896	3691
85°	2600	2773	2705



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.9	3.6
10°-20°	393.6	10.2
20°-30°	587.0	15.1
30°-40°	695.6	17.9
40°-50°	703.9	18.2
50°-60°	614.7	15.9
60°-70°	449.2	11.6
70°-80°	239.0	6.2
80°-90°	55.2	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°	1119.5	28.9
0°-40°	1815.2	46.8
0°-60°	3133.8	80.8
0°-90°	3877.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3877.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1475	1475	1475	1475	1475	
5°	1456	1458	1469	1473	1460	138
15°	1379	1388	1401	1410	1392	389
25°	1249	1264	1285	1290	1270	575
35°	1081	1098	1124	1132	1113	676
45°	883	899	928	929	910	681
55°	670	683	701	691	680	599
65°	445	454	462	453	446	441
75°	221	226	231	222	218	235
85°	42	43	45	45	44	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1474.8	1474.8	1474.8	1474.8	1474.8
2.5°	1463.3	1468.0	1472.9	1475.1	1463.1
5°	1455.6	1458.3	1469.3	1472.6	1460.2
7.5°	1443.0	1447.1	1457.7	1459.3	1447.3
10°	1425.8	1433.1	1440.2	1447.9	1433.3
12.5°	1403.8	1413.8	1425.8	1427.2	1416.1
15°	1379.1	1388.3	1401.3	1409.8	1391.5
17.5°	1351.4	1360.3	1377.2	1378.8	1367.7
20°	1320.5	1331.6	1351.9	1355.4	1335.6
22.5°	1285.5	1300.4	1317.3	1320.7	1306.1
25°	1248.8	1264.1	1285.0	1289.8	1270.3
27.5°	1210.3	1225.1	1248.6	1252.0	1235.5
30°	1169.2	1183.0	1208.8	1214.5	1197.7
32.5°	1127.4	1141.2	1169.8	1174.5	1158.3
35°	1081.0	1097.9	1123.8	1131.7	1113.4
37.5°	1033.6	1050.1	1079.6	1086.7	1067.0
40°	984.6	1000.9	1030.0	1035.8	1016.9
42.5°	934.5	950.8	981.9	982.8	967.1
45°	883.4	899.0	927.9	928.7	910.4
47.5°	831.4	847.3	873.1	870.2	852.9
50°	778.9	793.9	816.5	810.7	795.2
52.5°	724.5	739.1	760.4	750.9	736.3
55°	669.8	683.3	701.1	691.0	679.6
57.5°	614.6	628.3	642.0	631.7	621.8
60°	559.0	571.0	582.2	571.8	564.2
62.5°	502.5	512.7	522.4	512.4	505.4
65°	445.3	454.4	462.3	453.1	445.6
67.5°	388.4	396.1	403.5	394.0	386.1
70°	331.6	338.2	345.0	335.1	327.9
72.5°	275.5	281.3	287.3	277.8	271.5
75°	221.0	226.0	230.9	222.5	217.6
77.5°	168.9	173.2	176.6	171.2	166.4
80°	120.5	123.7	125.7	123.5	119.1
82.5°	77.4	79.7	80.8	80.7	77.7
85°	42.1	42.9	44.9	45.3	43.8
87.5°	16.3	17.4	17.8	19.2	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)