

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: P488453

Luminaire Tested: **CLM-12-2-INS-A19156-LD4-2STD-35-120-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: P488453
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-35-120-EDD
Description: 1X2 CLM LED LUMINAIRE WITH A19156 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

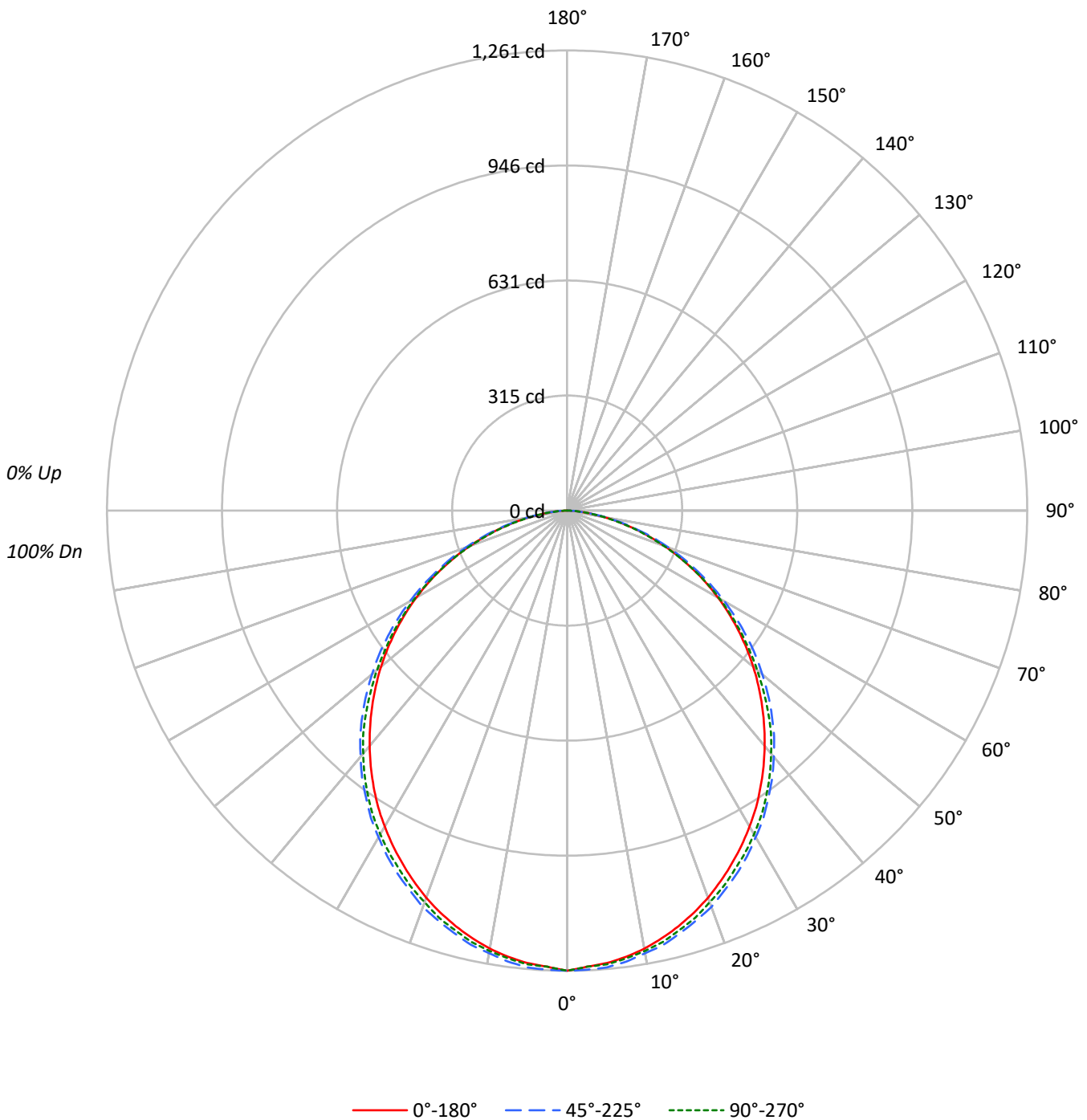
Lumens per Lamp: N/A
Luminaire Lumens: 3315.3 lumens
Efficiency: N/A
Efficacy: 99.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	6787	6787	6787
5°	6724	6787	6745
10°	6662	6730	6697
15°	6570	6676	6629
20°	6467	6620	6541
25°	6341	6525	6450
30°	6213	6423	6364
35°	6073	6313	6255
40°	5915	6187	6109
45°	5749	6039	5925
50°	5576	5846	5693
55°	5374	5625	5453
60°	5145	5358	5193
65°	4849	5034	4852
70°	4461	4642	4412
75°	3928	4107	3868
80°	3192	3332	3155
85°	2223	2371	2309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.8	3.6
10°-20°	336.5	10.2
20°-30°	501.9	15.1
30°-40°	594.8	17.9
40°-50°	601.9	18.2
50°-60°	525.6	15.9
60°-70°	384.1	11.6
70°-80°	204.4	6.2
80°-90°	47.2	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°	957.3	28.9
0°-40°	1552.1	46.8
0°-60°	2679.6	80.8
0°-90°	3315.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3315.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1261	1261	1261	1261	1261	
5°	1245	1247	1256	1259	1248	118
15°	1179	1187	1198	1205	1190	332
25°	1068	1081	1099	1103	1086	492
35°	924	939	961	968	952	578
45°	755	769	793	794	778	583
55°	573	584	600	591	581	512
65°	381	388	395	388	381	377
75°	189	193	198	190	186	201
85°	36	37	38	39	37	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1261.0	1261.0	1261.0	1261.0	1261.0
2.5°	1251.2	1255.2	1259.4	1261.3	1251.0
5°	1244.6	1247.0	1256.3	1259.2	1248.5
7.5°	1233.8	1237.4	1246.4	1247.8	1237.5
10°	1219.1	1225.4	1231.5	1238.0	1225.5
12.5°	1200.3	1208.9	1219.1	1220.3	1210.8
15°	1179.2	1187.1	1198.2	1205.4	1189.8
17.5°	1155.5	1163.1	1177.6	1178.9	1169.4
20°	1129.1	1138.6	1155.9	1158.9	1142.0
22.5°	1099.2	1111.9	1126.4	1129.2	1116.8
25°	1067.8	1080.9	1098.8	1102.8	1086.2
27.5°	1034.9	1047.5	1067.6	1070.5	1056.5
30°	999.7	1011.5	1033.6	1038.5	1024.1
32.5°	964.0	975.8	1000.2	1004.3	990.4
35°	924.3	938.7	960.9	967.6	952.0
37.5°	883.8	897.9	923.1	929.1	912.3
40°	841.9	855.8	880.7	885.7	869.5
42.5°	799.1	813.0	839.5	840.3	826.9
45°	755.3	768.7	793.4	794.1	778.4
47.5°	710.9	724.5	746.5	744.0	729.3
50°	666.0	678.9	698.2	693.2	679.9
52.5°	619.5	632.0	650.2	642.1	629.6
55°	572.7	584.3	599.5	590.8	581.1
57.5°	525.5	537.2	548.9	540.1	531.7
60°	478.0	488.2	497.8	488.9	482.4
62.5°	429.6	438.4	446.7	438.2	432.1
65°	380.8	388.5	395.3	387.5	381.0
67.5°	332.1	338.7	345.0	336.9	330.2
70°	283.5	289.2	295.0	286.5	280.4
72.5°	235.6	240.6	245.7	237.5	232.2
75°	188.9	193.3	197.5	190.2	186.0
77.5°	144.4	148.1	151.0	146.4	142.3
80°	103.0	105.8	107.5	105.6	101.8
82.5°	66.2	68.2	69.1	69.0	66.5
85°	36.0	36.7	38.4	38.8	37.4
87.5°	13.9	14.8	15.2	16.4	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)