

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: METALUX

Report Number: P229649

Luminaire Tested: **22RLN-LD5-44-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229649  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36063)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22RLN-LD5-44-UNV-L830-CD1-SVPD1-U  
Description: METALUX 2X2 RLN LED TROFFER WITH SENSOR  
Light Source: (126)3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4083.0 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.21 / 1.29  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

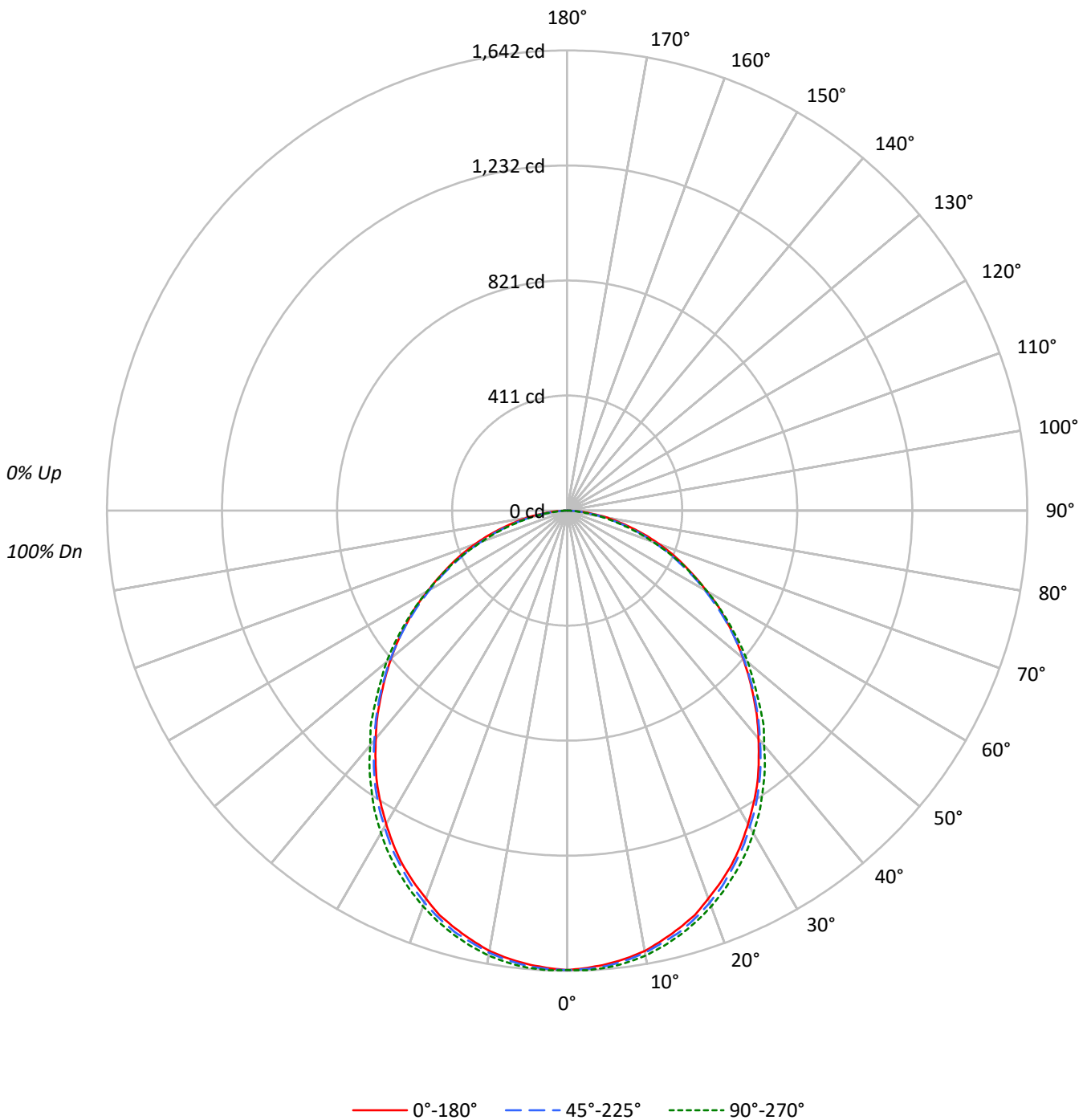
Input Watts (W): 39.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20																		
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	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	101	97	107	103	99	95	98	95	92	94	92	90	91	89	87	85																												
2	100	92	85	80	97	90	84	79	87	81	77	83	79	75	80	77	74	72																												
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61																												
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52																												
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46																												
6	72	58	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40																												
7	66	53	45	39	65	52	44	38	51	44	38	49	43	38	48	42	38	36																												
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32																												
9	58	45	37	31	57	44	36	31	43	36	31	42	35	31	41	35	31	29																												
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26																												

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5251	5251	5251
5°	5223	5244	5264
10°	5189	5209	5243
15°	5116	5158	5193
20°	5023	5073	5123
25°	4918	4955	5029
30°	4775	4821	4914
35°	4629	4670	4760
40°	4441	4476	4572
45°	4260	4288	4383
50°	4079	4100	4194
55°	3892	3880	3950
60°	3684	3630	3698
65°	3484	3356	3436
70°	3263	3086	3027
75°	2961	2727	2623
80°	2672	2324	2169
85°	2083	1620	1389



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.8	3.8
10°-20°	438.1	10.7
20°-30°	646.8	15.8
30°-40°	748.0	18.3
40°-50°	733.6	18.0
50°-60°	623.9	15.3
60°-70°	444.4	10.9
70°-80°	237.1	5.8
80°-90°	56.4	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°	1239.6	30.4
0°-40°	1987.6	48.7
0°-60°	3345.1	81.9
0°-90°	4083.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4083.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1640	1640	1640	1640	1640	
5°	1625	1627	1631	1635	1637	154
15°	1543	1545	1556	1564	1566	435
25°	1392	1394	1402	1417	1423	640
35°	1184	1180	1194	1213	1218	739
45°	940	938	947	964	968	726
55°	697	691	695	703	708	625
65°	460	445	443	445	453	456
75°	239	227	220	216	212	256
85°	57	50	44	38	38	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1639.5	1639.5	1639.5	1639.5	1639.5
2.5°	1633.2	1635.3	1637.4	1641.6	1641.6
5°	1624.8	1626.9	1631.1	1635.3	1637.4
7.5°	1612.2	1612.2	1618.5	1622.7	1626.9
10°	1595.5	1597.6	1601.8	1608.1	1612.2
12.5°	1570.3	1574.5	1578.7	1587.1	1591.3
15°	1543.0	1545.1	1555.6	1564.0	1566.1
17.5°	1513.6	1513.6	1524.1	1532.5	1536.7
20°	1473.7	1477.9	1488.4	1498.9	1503.1
22.5°	1433.8	1438.0	1448.5	1459.0	1465.3
25°	1391.8	1393.9	1402.3	1417.0	1423.3
27.5°	1343.5	1347.7	1356.1	1370.8	1379.2
30°	1291.1	1295.3	1303.7	1320.4	1328.8
32.5°	1238.6	1242.8	1251.2	1268.0	1276.4
35°	1184.0	1179.8	1194.5	1213.4	1217.6
37.5°	1123.1	1125.2	1133.6	1150.4	1158.8
40°	1062.2	1062.2	1070.6	1089.5	1093.7
42.5°	1003.5	1001.4	1009.8	1026.5	1037.0
45°	940.5	938.4	946.8	963.6	967.8
47.5°	879.6	875.4	883.8	898.5	902.7
50°	818.7	814.5	822.9	835.5	841.8
52.5°	759.9	751.5	757.8	768.3	774.6
55°	697.0	690.7	694.9	703.3	707.5
57.5°	640.3	627.7	629.8	638.2	642.4
60°	575.2	564.7	566.8	575.2	577.3
62.5°	516.4	505.9	505.9	508.0	512.2
65°	459.7	445.0	442.9	445.0	453.4
67.5°	405.2	390.5	386.3	386.3	388.4
70°	348.5	333.8	329.6	327.5	323.3
72.5°	296.0	277.1	275.0	268.7	270.8
75°	239.3	226.7	220.4	216.2	212.0
77.5°	188.9	178.4	170.0	163.7	163.7
80°	144.9	130.2	126.0	117.6	117.6
82.5°	96.6	90.3	81.9	75.6	73.5
85°	56.7	50.4	44.1	37.8	37.8
87.5°	21.0	16.8	14.7	14.7	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)