

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: P229888

Luminaire Tested: **24RLN-LD5-42-UNV-L940-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229888  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36062)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-42-UNV-L940-CD1-SVPD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR  
Light Source: (252)4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3672.0 lumens  
Efficiency: N/A  
Efficacy: 117.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

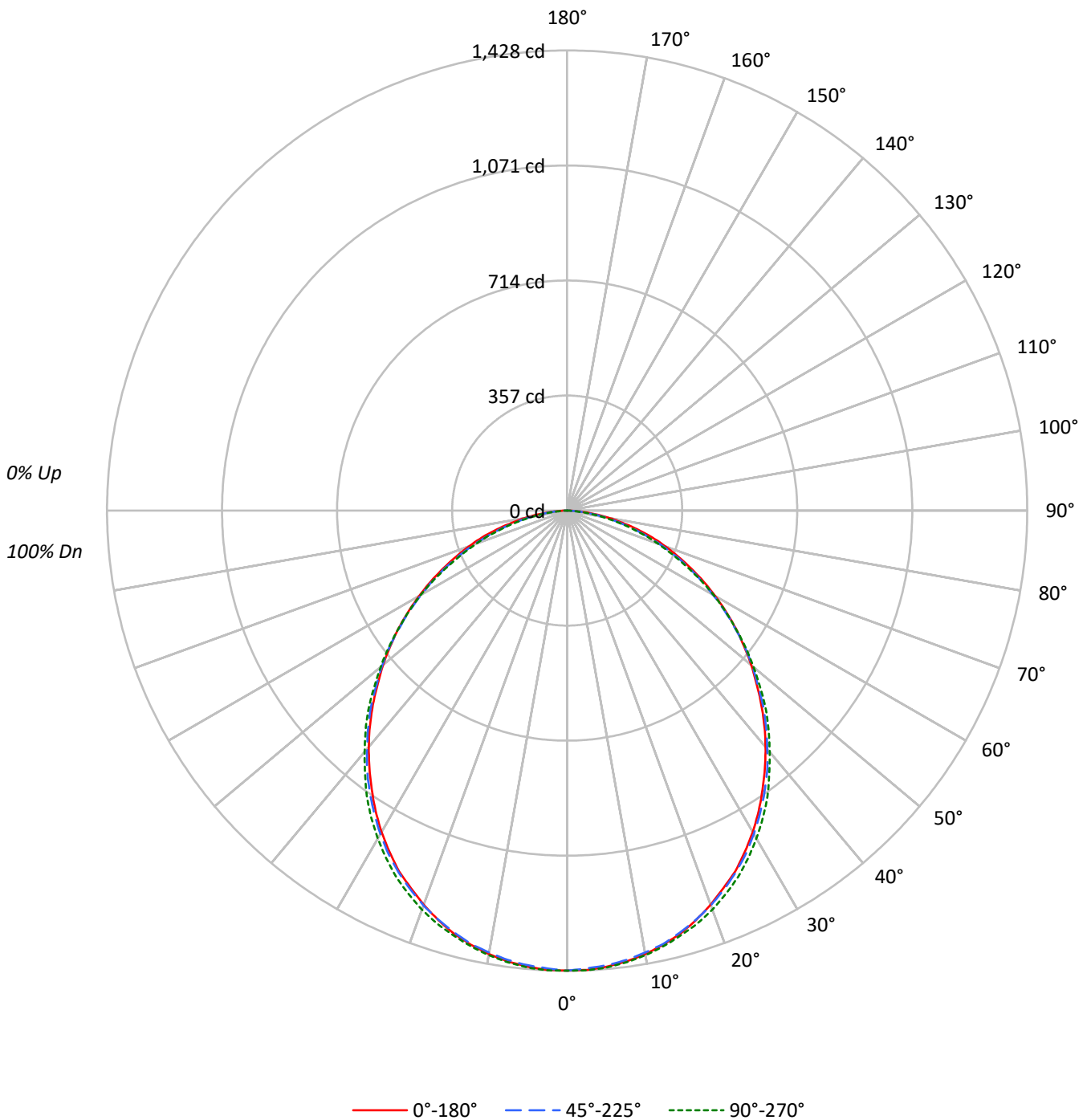
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	31	42	35	30	41	35	30	28
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26

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

	0°	45°	90°
0°	2187	2187	2187
5°	2184	2177	2188
10°	2173	2166	2179
15°	2155	2149	2164
20°	2121	2125	2148
25°	2087	2093	2120
30°	2037	2049	2078
35°	1977	1996	2027
40°	1915	1931	1955
45°	1846	1864	1889
50°	1778	1786	1800
55°	1708	1699	1705
60°	1626	1601	1608
65°	1534	1500	1475
70°	1451	1372	1340
75°	1336	1218	1176
80°	1176	1031	969
85°	924	719	534



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.8	3.7
10°-20°	383.1	10.4
20°-30°	571.1	15.6
30°-40°	667.7	18.2
40°-50°	663.0	18.1
50°-60°	569.3	15.5
60°-70°	410.1	11.2
70°-80°	220.8	6.0
80°-90°	52.1	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°	1089.0	29.7
0°-40°	1756.7	47.8
0°-60°	2989.0	81.4
0°-90°	3672.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3672.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1428	1428	1428	1428	1428	
5°	1421	1420	1416	1421	1423	135
15°	1359	1355	1355	1363	1365	383
25°	1235	1230	1238	1251	1255	568
35°	1057	1056	1068	1079	1084	661
45°	852	850	861	868	872	658
55°	640	634	636	640	638	571
65°	423	416	414	410	407	420
75°	226	212	206	200	199	239
85°	53	48	41	33	30	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1427.7	1427.7	1427.7	1427.7	1427.7
2.5°	1426.6	1425.4	1421.9	1426.6	1427.7
5°	1420.7	1419.6	1416.1	1420.7	1423.1
7.5°	1411.4	1409.0	1406.7	1411.4	1413.7
10°	1397.3	1395.0	1392.7	1398.5	1400.9
12.5°	1379.8	1377.5	1377.5	1382.1	1384.5
15°	1358.8	1355.2	1355.2	1363.4	1364.6
17.5°	1331.9	1329.5	1330.7	1340.0	1343.6
20°	1301.5	1300.3	1303.8	1314.3	1317.8
22.5°	1267.5	1266.4	1272.2	1285.1	1287.4
25°	1234.8	1230.1	1238.3	1251.2	1254.7
27.5°	1193.9	1190.4	1200.9	1212.6	1216.1
30°	1151.8	1148.3	1158.8	1171.7	1175.2
32.5°	1106.2	1103.8	1114.4	1127.2	1130.7
35°	1057.1	1055.9	1067.6	1079.3	1084.0
37.5°	1008.0	1006.8	1019.7	1029.0	1030.2
40°	957.7	955.3	965.9	976.4	977.6
42.5°	906.2	902.7	914.4	922.6	926.1
45°	852.4	850.1	860.6	867.6	872.3
47.5°	797.5	797.5	803.3	811.5	812.7
50°	746.0	742.5	749.5	754.2	755.4
52.5°	692.2	688.7	694.6	695.7	698.1
55°	639.6	633.8	636.1	639.6	638.5
57.5°	584.7	575.3	580.0	580.0	582.3
60°	530.9	522.7	522.7	522.7	525.0
62.5°	477.1	468.9	468.9	467.7	466.6
65°	423.3	416.3	413.9	410.4	406.9
67.5°	371.8	363.7	359.0	354.3	350.8
70°	323.9	309.9	306.4	299.3	299.3
72.5°	276.0	261.9	254.9	250.2	249.1
75°	225.7	211.6	205.8	200.0	198.8
77.5°	176.6	167.2	157.9	153.2	150.8
80°	133.3	125.1	116.9	108.7	109.9
82.5°	91.2	83.0	77.2	70.2	67.8
85°	52.6	47.9	40.9	32.7	30.4
87.5°	22.2	16.4	11.7	11.7	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)