

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: P295870

Luminaire Tested: **24RLN-LD5-31-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295870  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-31-UNV-L82765-W2A1-U-5700K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3232.0 lumens  
Efficiency: N/A  
Efficacy: 148.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

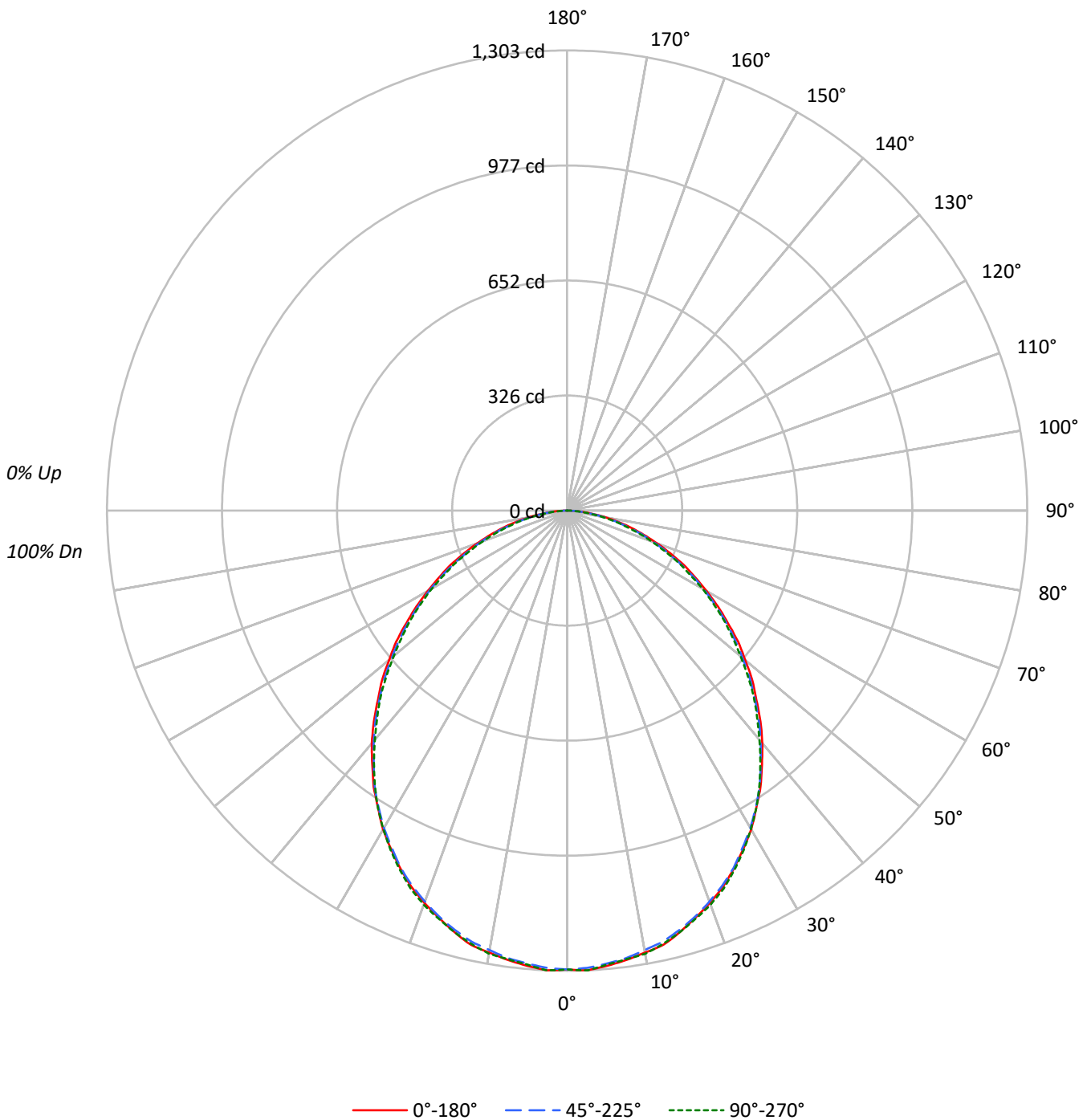
Input Watts (W): 21.762  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	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	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	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°	1748	1748	1748
5°	1748	1739	1743
10°	1736	1727	1741
15°	1721	1712	1721
20°	1693	1687	1700
25°	1659	1656	1666
30°	1620	1612	1617
35°	1569	1562	1558
40°	1511	1496	1487
45°	1442	1428	1423
50°	1377	1355	1340
55°	1304	1284	1272
60°	1226	1204	1190
65°	1159	1115	1105
70°	1063	1021	1001
75°	976	916	878
80°	856	800	752
85°	692	644	548



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.6	3.8
10°-20°	347.5	10.8
20°-30°	514.0	15.9
30°-40°	593.3	18.4
40°-50°	579.4	17.9
50°-60°	489.3	15.1
60°-70°	348.5	10.8
70°-80°	188.7	5.8
80°-90°	48.7	1.5
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°	984.1	30.4
0°-40°	1577.4	48.8
0°-60°	2646.1	81.9
0°-90°	3232.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3232.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1299	1299	1299	1299	1299	
5°	1294	1294	1288	1291	1291	123
15°	1236	1230	1229	1234	1236	348
25°	1118	1112	1116	1120	1122	515
35°	955	948	951	948	949	596
45°	758	752	751	748	748	586
55°	556	548	547	542	542	498
65°	364	357	350	346	347	359
75°	188	181	176	172	169	199
85°	45	44	42	36	36	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1299.2	1299.2	1299.2	1299.2	1299.2
2.5°	1303.3	1298.1	1296.0	1297.1	1303.3
5°	1294.0	1294.0	1287.7	1290.8	1290.8
7.5°	1283.5	1284.6	1278.3	1283.5	1281.4
10°	1271.0	1267.9	1263.7	1272.1	1274.1
12.5°	1259.6	1252.3	1250.2	1255.4	1256.4
15°	1235.6	1230.4	1229.3	1234.5	1235.6
17.5°	1208.5	1209.5	1205.3	1212.6	1211.6
20°	1182.4	1180.3	1178.2	1186.6	1187.6
22.5°	1153.2	1146.9	1149.0	1156.3	1158.4
25°	1117.7	1111.5	1115.7	1119.8	1121.9
27.5°	1080.2	1077.1	1076.0	1081.3	1083.3
30°	1042.7	1037.5	1037.5	1043.7	1040.6
32.5°	996.8	992.6	994.7	996.8	997.8
35°	955.1	947.8	950.9	947.8	948.8
37.5°	906.1	900.9	899.8	898.8	898.8
40°	860.2	856.0	851.9	851.9	846.7
42.5°	810.2	804.9	802.9	799.7	796.6
45°	758.0	751.8	750.7	747.6	747.6
47.5°	711.1	701.7	700.7	694.4	694.4
50°	657.9	651.7	647.5	643.3	640.2
52.5°	610.0	603.7	597.5	593.3	590.2
55°	555.7	548.4	547.4	542.2	542.2
57.5°	506.7	500.5	496.3	490.1	491.1
60°	455.6	449.4	447.3	442.1	442.1
62.5°	407.7	402.5	399.3	394.1	390.0
65°	363.9	356.6	350.3	346.2	347.2
67.5°	315.9	307.6	304.5	300.3	297.2
70°	270.1	264.8	259.6	254.4	254.4
72.5°	227.3	222.1	219.0	212.7	210.6
75°	187.7	181.4	176.2	172.0	168.9
77.5°	148.1	141.8	138.7	133.5	133.5
80°	110.5	106.4	103.2	101.1	97.0
82.5°	76.1	74.0	70.9	67.8	64.6
85°	44.8	43.8	41.7	36.5	35.5
87.5°	17.7	17.7	15.6	14.6	13.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)