

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: P295866

Luminaire Tested: **24RLN-LD5-31-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295866  
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-4000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3094.0 lumens  
Efficiency: N/A  
Efficacy: 144.0 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

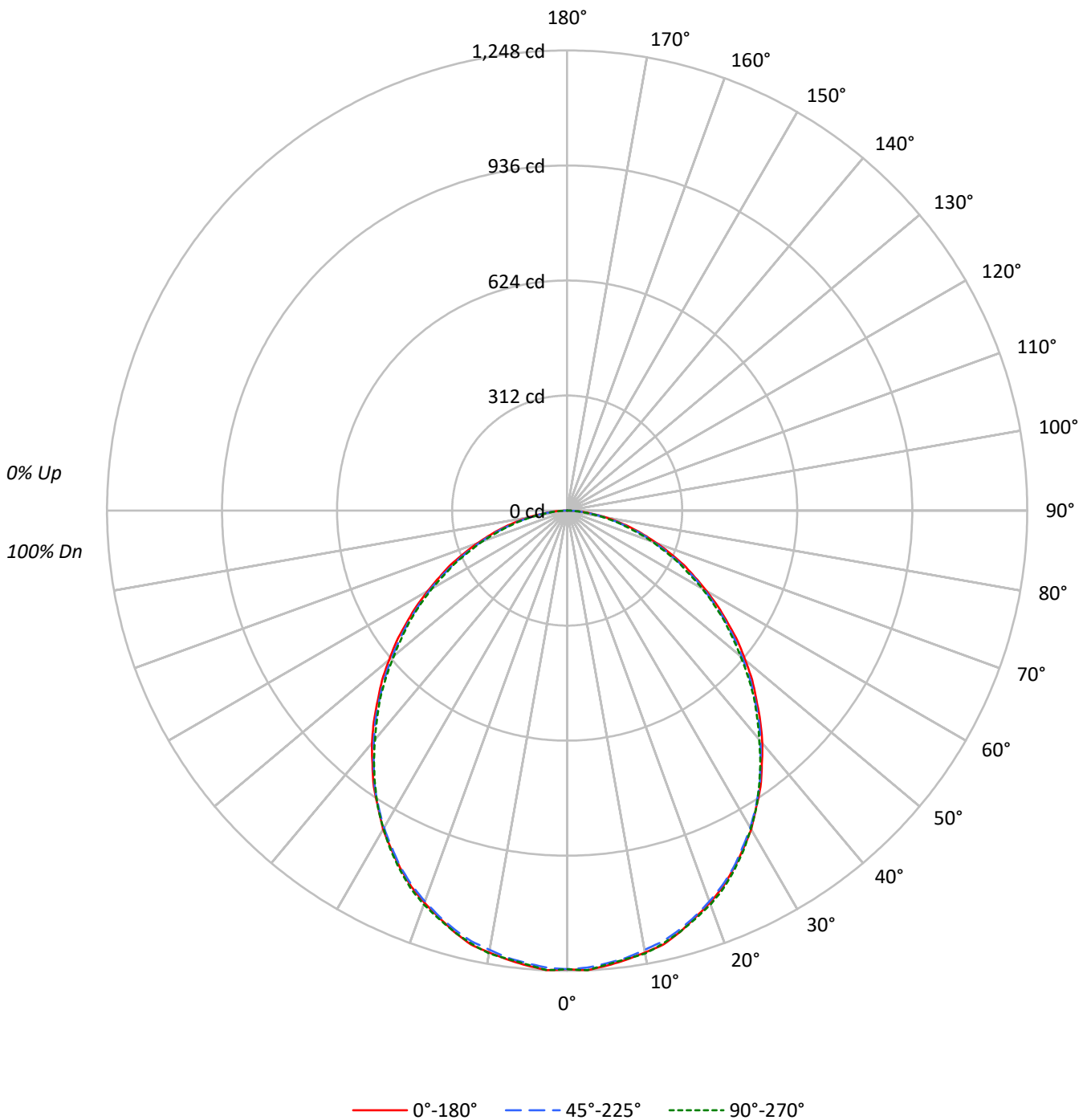
Input Watts (W): 21.483  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1673	1673	1673
5°	1673	1665	1669
10°	1662	1653	1666
15°	1648	1639	1648
20°	1621	1615	1628
25°	1589	1586	1594
30°	1551	1543	1548
35°	1502	1495	1492
40°	1446	1432	1424
45°	1381	1368	1362
50°	1318	1298	1283
55°	1248	1229	1217
60°	1174	1152	1139
65°	1109	1068	1058
70°	1017	978	958
75°	934	877	841
80°	820	766	719
85°	662	616	523



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.3	3.8
10°-20°	332.7	10.8
20°-30°	492.1	15.9
30°-40°	567.9	18.4
40°-50°	554.7	17.9
50°-60°	468.4	15.1
60°-70°	333.6	10.8
70°-80°	180.6	5.8
80°-90°	46.6	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°	942.1	30.4
0°-40°	1510.0	48.8
0°-60°	2533.1	81.9
0°-90°	3094.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3094.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1244	1244	1244	1244	1244	
5°	1239	1239	1233	1236	1236	118
15°	1183	1178	1177	1182	1183	333
25°	1070	1064	1068	1072	1074	493
35°	914	907	910	907	908	571
45°	726	720	719	716	716	561
55°	532	525	524	519	519	477
65°	348	341	335	331	332	343
75°	180	174	169	165	162	190
85°	43	42	40	35	34	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1243.7	1243.7	1243.7	1243.7	1243.7
2.5°	1247.7	1242.7	1240.7	1241.7	1247.7
5°	1238.7	1238.7	1232.7	1235.7	1235.7
7.5°	1228.7	1229.7	1223.7	1228.7	1226.7
10°	1216.7	1213.8	1209.8	1217.7	1219.7
12.5°	1205.8	1198.8	1196.8	1201.8	1202.8
15°	1182.8	1177.8	1176.8	1181.8	1182.8
17.5°	1156.9	1157.9	1153.9	1160.9	1159.9
20°	1131.9	1129.9	1127.9	1135.9	1136.9
22.5°	1104.0	1098.0	1100.0	1107.0	1108.9
25°	1070.0	1064.0	1068.0	1072.0	1074.0
27.5°	1034.1	1031.1	1030.1	1035.1	1037.1
30°	998.2	993.2	993.2	999.2	996.2
32.5°	954.2	950.2	952.2	954.2	955.2
35°	914.3	907.3	910.3	907.3	908.3
37.5°	867.4	862.4	861.4	860.4	860.4
40°	823.5	819.5	815.5	815.5	810.5
42.5°	775.6	770.6	768.6	765.6	762.6
45°	725.7	719.7	718.7	715.7	715.7
47.5°	680.7	671.8	670.8	664.8	664.8
50°	629.8	623.8	619.9	615.9	612.9
52.5°	583.9	577.9	571.9	567.9	565.0
55°	532.0	525.0	524.0	519.0	519.0
57.5°	485.1	479.1	475.1	469.1	470.1
60°	436.2	430.2	428.2	423.2	423.2
62.5°	390.3	385.3	382.3	377.3	373.3
65°	348.4	341.4	335.4	331.4	332.4
67.5°	302.4	294.5	291.5	287.5	284.5
70°	258.5	253.5	248.5	243.5	243.5
72.5°	217.6	212.6	209.6	203.6	201.6
75°	179.7	173.7	168.7	164.7	161.7
77.5°	141.7	135.7	132.8	127.8	127.8
80°	105.8	101.8	98.8	96.8	92.8
82.5°	72.9	70.9	67.9	64.9	61.9
85°	42.9	41.9	39.9	34.9	33.9
87.5°	17.0	17.0	15.0	14.0	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)