

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: P295956

Luminaire Tested: **24RLN-LD5-31-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295956  
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-L93050-W2A1-U-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2895.0 lumens  
Efficiency: N/A  
Efficacy: 130.8 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

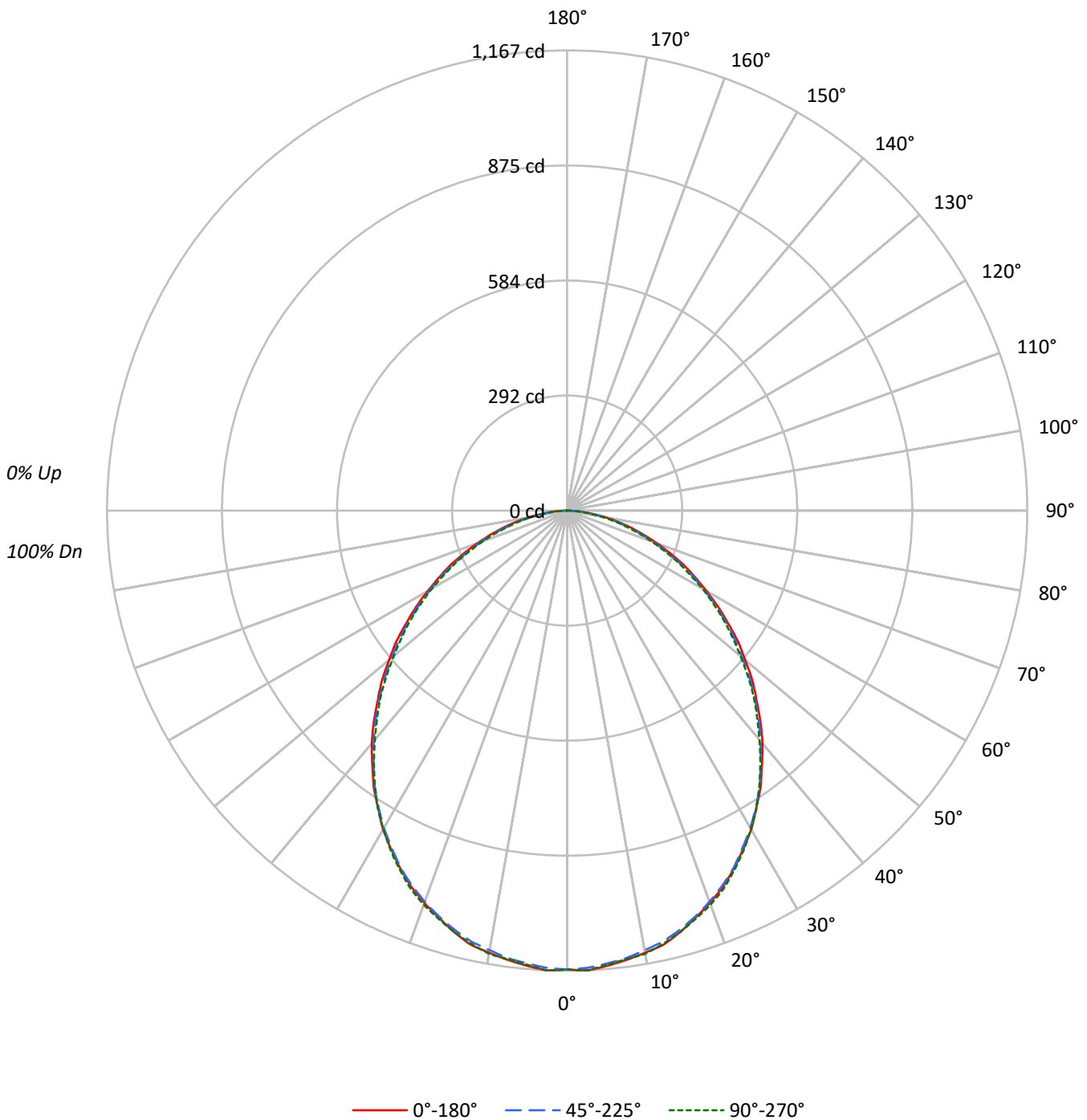
Input Watts (W): 22.134  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1566	1566	1566
5°	1565	1558	1562
10°	1555	1547	1559
15°	1542	1534	1542
20°	1516	1511	1523
25°	1486	1484	1492
30°	1451	1444	1448
35°	1405	1399	1396
40°	1353	1340	1332
45°	1292	1279	1274
50°	1234	1214	1200
55°	1168	1150	1139
60°	1098	1078	1066
65°	1038	999	990
70°	952	915	897
75°	874	820	787
80°	767	717	673
85°	621	577	491



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.8	3.8
10°-20°	311.3	10.8
20°-30°	460.4	15.9
30°-40°	531.4	18.4
40°-50°	519.0	17.9
50°-60°	438.3	15.1
60°-70°	312.2	10.8
70°-80°	169.0	5.8
80°-90°	43.6	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°	881.5	30.4
0°-40°	1412.9	48.8
0°-60°	2370.2	81.9
0°-90°	2895.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2895.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1164	1164	1164	1164	1164	
5°	1159	1159	1153	1156	1156	110
15°	1107	1102	1101	1106	1107	312
25°	1001	996	999	1003	1005	461
35°	856	849	852	849	850	534
45°	679	673	672	670	670	525
55°	498	491	490	486	486	446
65°	326	319	314	310	311	321
75°	168	162	158	154	151	178
85°	40	39	37	33	32	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1163.7	1163.7	1163.7	1163.7	1163.7
2.5°	1167.4	1162.8	1160.9	1161.8	1167.4
5°	1159.0	1159.0	1153.4	1156.2	1156.2
7.5°	1149.7	1150.6	1145.0	1149.7	1147.8
10°	1138.5	1135.7	1132.0	1139.4	1141.3
12.5°	1128.2	1121.7	1119.8	1124.5	1125.4
15°	1106.7	1102.1	1101.1	1105.8	1106.7
17.5°	1082.5	1083.4	1079.7	1086.2	1085.3
20°	1059.1	1057.2	1055.4	1062.8	1063.8
22.5°	1033.0	1027.4	1029.2	1035.8	1037.6
25°	1001.2	995.6	999.3	1003.1	1004.9
27.5°	967.6	964.8	963.8	968.5	970.4
30°	934.0	929.3	929.3	934.9	932.1
32.5°	892.9	889.1	891.0	892.9	893.8
35°	855.5	849.0	851.8	849.0	849.9
37.5°	811.6	806.9	806.0	805.1	805.1
40°	770.5	766.8	763.0	763.0	758.4
42.5°	725.7	721.0	719.1	716.3	713.5
45°	679.0	673.4	672.4	669.6	669.6
47.5°	637.0	628.6	627.6	622.0	622.0
50°	589.3	583.7	580.0	576.3	573.4
52.5°	546.4	540.8	535.2	531.4	528.6
55°	497.8	491.3	490.3	485.7	485.7
57.5°	453.9	448.3	444.6	439.0	439.9
60°	408.1	402.5	400.7	396.0	396.0
62.5°	365.2	360.5	357.7	353.0	349.3
65°	326.0	319.4	313.8	310.1	311.0
67.5°	283.0	275.5	272.7	269.0	266.2
70°	241.9	237.2	232.6	227.9	227.9
72.5°	203.6	198.9	196.1	190.5	188.7
75°	168.1	162.5	157.8	154.1	151.3
77.5°	132.6	127.0	124.2	119.5	119.5
80°	99.0	95.3	92.5	90.6	86.9
82.5°	68.2	66.3	63.5	60.7	57.9
85°	40.2	39.2	37.4	32.7	31.8
87.5°	15.9	15.9	14.0	13.1	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)