

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: P295869

Luminaire Tested: **24RLN-LD5-31-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295869  
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-5500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3223.0 lumens  
Efficiency: N/A  
Efficacy: 148.1 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

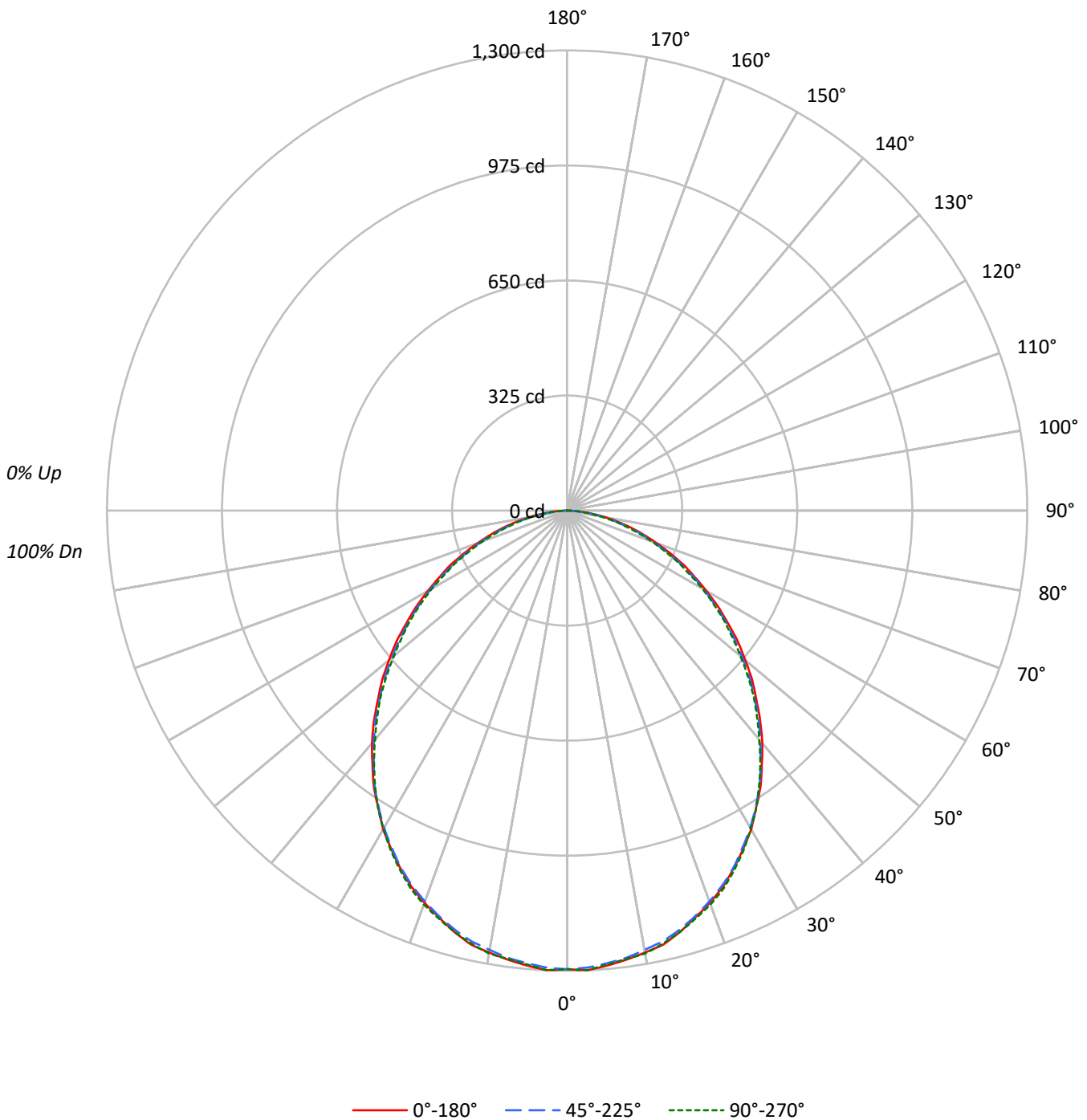
Input Watts (W): 21.762  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1743	1743	1743
5°	1743	1734	1739
10°	1732	1722	1736
15°	1716	1708	1716
20°	1688	1682	1696
25°	1655	1652	1661
30°	1615	1607	1612
35°	1564	1558	1554
40°	1507	1492	1483
45°	1438	1424	1419
50°	1373	1352	1336
55°	1300	1281	1268
60°	1223	1200	1186
65°	1155	1112	1102
70°	1059	1018	998
75°	973	913	875
80°	854	797	749
85°	690	642	546



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.2	3.8
10°-20°	346.5	10.8
20°-30°	512.6	15.9
30°-40°	591.6	18.4
40°-50°	577.8	17.9
50°-60°	487.9	15.1
60°-70°	347.5	10.8
70°-80°	188.2	5.8
80°-90°	48.6	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°	981.4	30.4
0°-40°	1573.0	48.8
0°-60°	2638.7	81.9
0°-90°	3223.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3223.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1296	1296	1296	1296	1296	
5°	1290	1290	1284	1287	1287	122
15°	1232	1227	1226	1231	1232	347
25°	1115	1108	1113	1117	1119	513
35°	952	945	948	945	946	594
45°	756	750	749	746	746	584
55°	554	547	546	541	541	497
65°	363	356	349	345	346	358
75°	187	181	176	172	168	198
85°	45	44	42	36	35	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1295.6	1295.6	1295.6	1295.6	1295.6
2.5°	1299.7	1294.5	1292.4	1293.5	1299.7
5°	1290.4	1290.4	1284.1	1287.2	1287.2
7.5°	1280.0	1281.0	1274.8	1280.0	1277.9
10°	1267.5	1264.4	1260.2	1268.5	1270.6
12.5°	1256.0	1248.8	1246.7	1251.9	1252.9
15°	1232.1	1226.9	1225.9	1231.1	1232.1
17.5°	1205.1	1206.1	1202.0	1209.3	1208.2
20°	1179.1	1177.0	1174.9	1183.3	1184.3
22.5°	1150.0	1143.7	1145.8	1153.1	1155.2
25°	1114.6	1108.4	1112.6	1116.7	1118.8
27.5°	1077.2	1074.1	1073.0	1078.2	1080.3
30°	1039.8	1034.6	1034.6	1040.8	1037.7
32.5°	994.0	989.9	991.9	994.0	995.1
35°	952.4	945.2	948.3	945.2	946.2
37.5°	903.6	898.4	897.3	896.3	896.3
40°	857.8	853.7	849.5	849.5	844.3
42.5°	807.9	802.7	800.6	797.5	794.4
45°	755.9	749.7	748.6	745.5	745.5
47.5°	709.1	699.8	698.7	692.5	692.5
50°	656.1	649.9	645.7	641.5	638.4
52.5°	608.3	602.0	595.8	591.6	588.5
55°	554.2	546.9	545.9	540.7	540.7
57.5°	505.3	499.1	494.9	488.7	489.7
60°	454.4	448.1	446.1	440.9	440.9
62.5°	406.6	401.4	398.2	393.0	388.9
65°	362.9	355.6	349.4	345.2	346.2
67.5°	315.1	306.7	303.6	299.5	296.3
70°	269.3	264.1	258.9	253.7	253.7
72.5°	226.7	221.5	218.4	212.1	210.0
75°	187.2	180.9	175.7	171.6	168.4
77.5°	147.6	141.4	138.3	133.1	133.1
80°	110.2	106.1	102.9	100.9	96.7
82.5°	75.9	73.8	70.7	67.6	64.5
85°	44.7	43.7	41.6	36.4	35.4
87.5°	17.7	17.7	15.6	14.6	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)