

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: P295867

Luminaire Tested: **24RLN-LD5-31-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295867  
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-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3149.0 lumens  
Efficiency: N/A  
Efficacy: 145.9 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

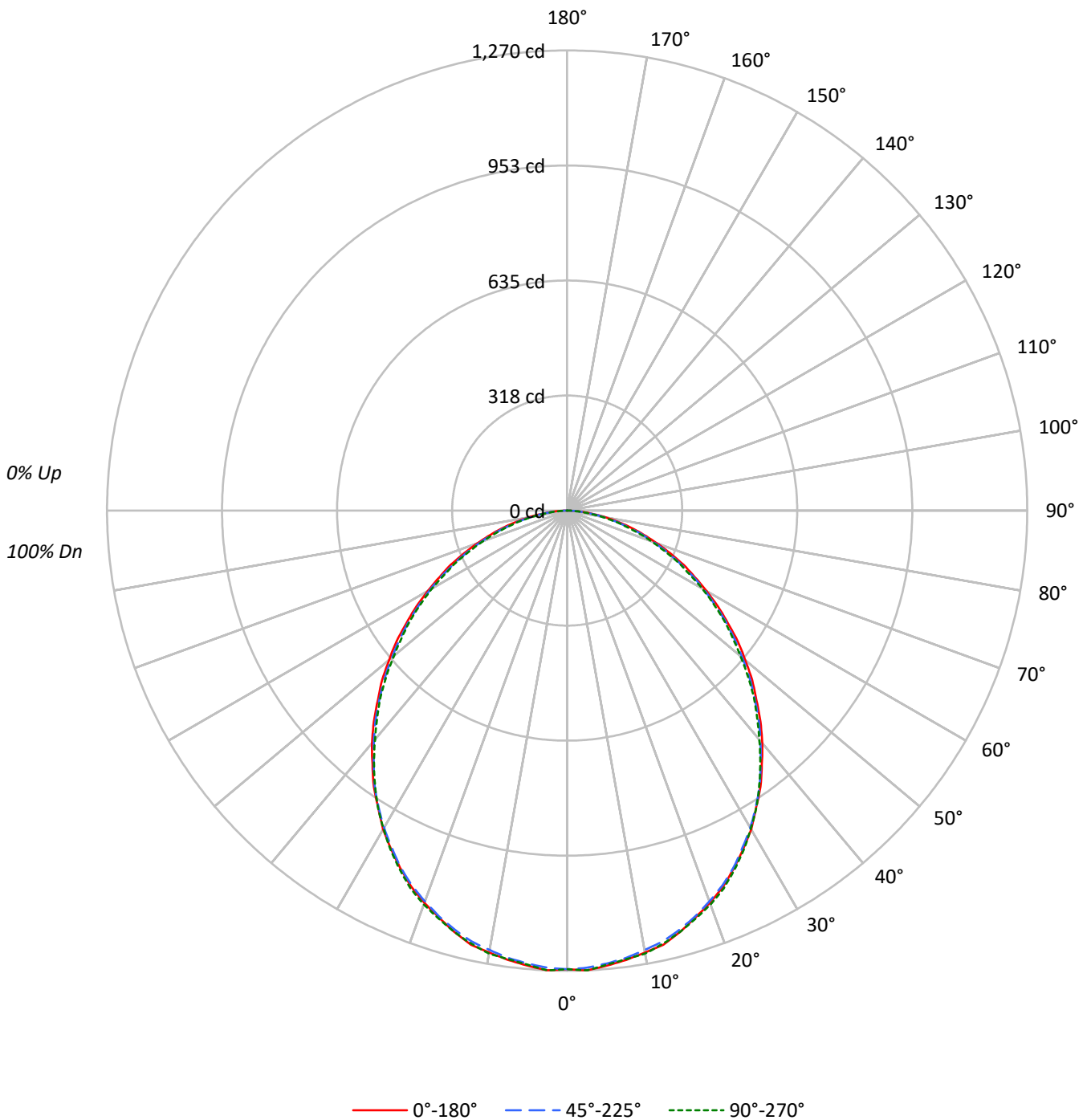
Input Watts (W): 21.576  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1703	1703	1703
5°	1703	1694	1699
10°	1692	1682	1696
15°	1677	1668	1677
20°	1649	1644	1657
25°	1617	1614	1623
30°	1578	1570	1575
35°	1529	1522	1519
40°	1472	1458	1449
45°	1405	1392	1386
50°	1342	1321	1306
55°	1270	1251	1239
60°	1195	1173	1159
65°	1129	1087	1077
70°	1035	995	975
75°	951	893	856
80°	834	779	732
85°	675	627	533



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.4	3.8
10°-20°	338.6	10.8
20°-30°	500.8	15.9
30°-40°	578.0	18.4
40°-50°	564.5	17.9
50°-60°	476.7	15.1
60°-70°	339.5	10.8
70°-80°	183.9	5.8
80°-90°	47.4	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°	958.9	30.4
0°-40°	1536.9	48.8
0°-60°	2578.1	81.9
0°-90°	3149.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3149.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1266	1266	1266	1266	1266	
5°	1261	1261	1255	1258	1258	120
15°	1204	1199	1198	1203	1204	339
25°	1089	1083	1087	1091	1093	501
35°	931	924	926	924	924	581
45°	739	732	731	728	728	571
55°	542	534	533	528	528	485
65°	354	347	341	337	338	350
75°	183	177	172	168	165	194
85°	44	43	41	36	34	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1265.8	1265.8	1265.8	1265.8	1265.8
2.5°	1269.9	1264.8	1262.8	1263.8	1269.9
5°	1260.7	1260.7	1254.6	1257.7	1257.7
7.5°	1250.6	1251.6	1245.5	1250.6	1248.5
10°	1238.4	1235.3	1231.3	1239.4	1241.4
12.5°	1227.2	1220.1	1218.1	1223.1	1224.2
15°	1203.8	1198.8	1197.7	1202.8	1203.8
17.5°	1177.4	1178.4	1174.4	1181.5	1180.5
20°	1152.0	1150.0	1148.0	1156.1	1157.1
22.5°	1123.6	1117.5	1119.5	1126.6	1128.7
25°	1089.0	1082.9	1087.0	1091.1	1093.1
27.5°	1052.5	1049.4	1048.4	1053.5	1055.5
30°	1015.9	1010.8	1010.8	1016.9	1013.9
32.5°	971.2	967.1	969.2	971.2	972.2
35°	930.6	923.5	926.5	923.5	924.5
37.5°	882.8	877.7	876.7	875.7	875.7
40°	838.1	834.1	830.0	830.0	824.9
42.5°	789.4	784.3	782.2	779.2	776.1
45°	738.6	732.5	731.4	728.4	728.4
47.5°	692.8	683.7	682.7	676.6	676.6
50°	641.0	634.9	630.9	626.8	623.8
52.5°	594.3	588.2	582.1	578.0	575.0
55°	541.5	534.4	533.3	528.3	528.3
57.5°	493.7	487.6	483.6	477.5	478.5
60°	443.9	437.9	435.8	430.7	430.7
62.5°	397.2	392.1	389.1	384.0	379.9
65°	354.5	347.4	341.3	337.3	338.3
67.5°	307.8	299.7	296.6	292.6	289.5
70°	263.1	258.0	253.0	247.9	247.9
72.5°	221.5	216.4	213.3	207.2	205.2
75°	182.9	176.8	171.7	167.6	164.6
77.5°	144.3	138.2	135.1	130.0	130.0
80°	107.7	103.6	100.6	98.5	94.5
82.5°	74.2	72.1	69.1	66.0	63.0
85°	43.7	42.7	40.6	35.6	34.5
87.5°	17.3	17.3	15.2	14.2	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)