

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: P296005

Luminaire Tested: **24RLN-LD5-31-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296005  
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-L92765-W2A1-U-3500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2652.0 lumens  
Efficiency: N/A  
Efficacy: 124.5 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

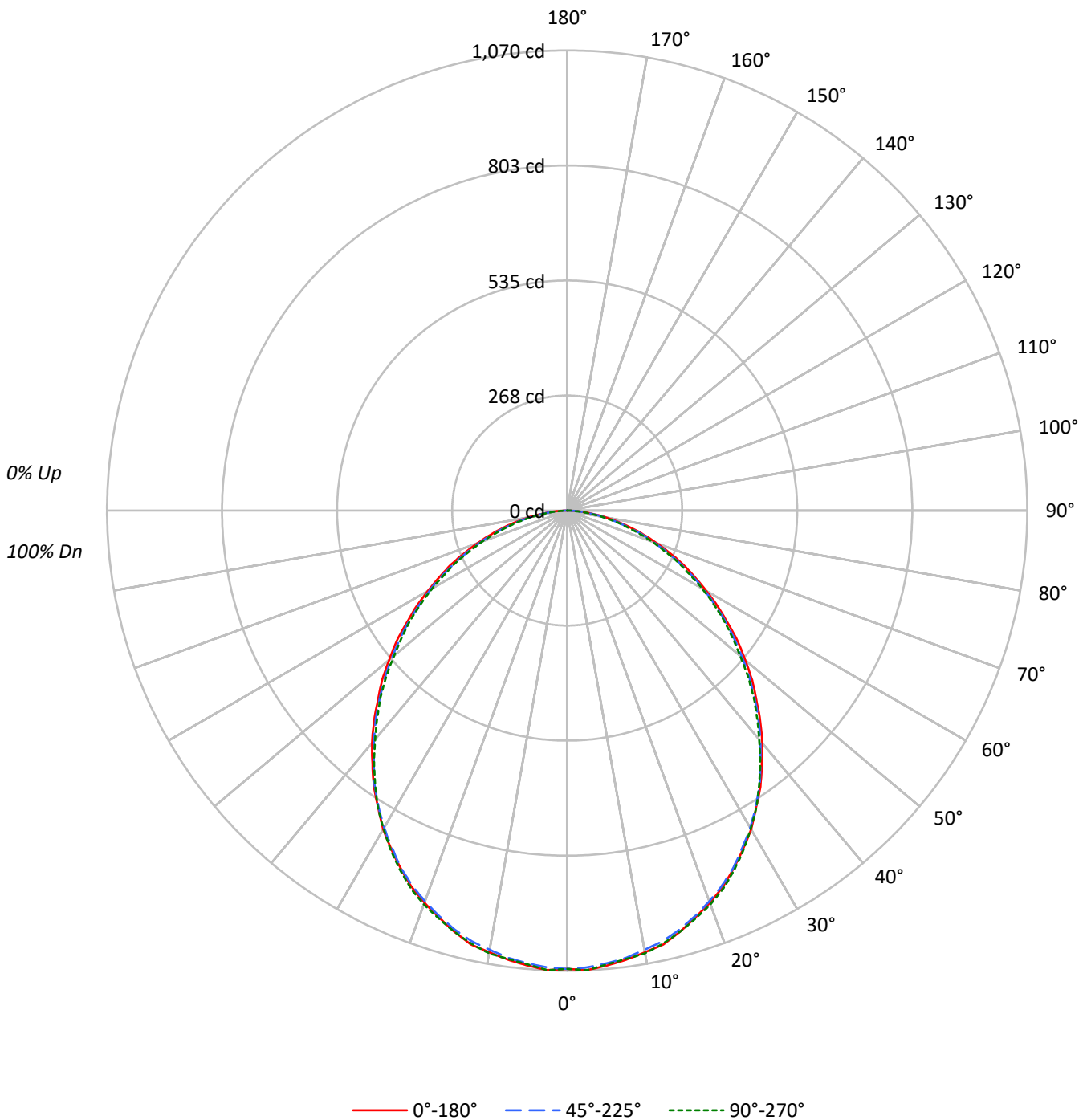
Input Watts (W): 21.297  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1434	1434	1434
5°	1434	1427	1431
10°	1425	1417	1428
15°	1412	1405	1412
20°	1389	1384	1395
25°	1362	1359	1367
30°	1329	1323	1326
35°	1287	1282	1279
40°	1240	1228	1220
45°	1184	1172	1167
50°	1130	1112	1100
55°	1070	1054	1044
60°	1006	988	976
65°	951	915	907
70°	872	838	821
75°	801	752	721
80°	703	656	617
85°	568	528	449



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.6	3.8
10°-20°	285.1	10.8
20°-30°	421.8	15.9
30°-40°	486.8	18.4
40°-50°	475.4	17.9
50°-60°	401.5	15.1
60°-70°	286.0	10.8
70°-80°	154.8	5.8
80°-90°	39.9	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°	807.5	30.4
0°-40°	1294.3	48.8
0°-60°	2171.2	81.9
0°-90°	2652.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2652.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1066	1066	1066	1066	1066	
5°	1062	1062	1057	1059	1059	101
15°	1014	1010	1009	1013	1014	286
25°	917	912	915	919	921	422
35°	784	778	780	778	779	489
45°	622	617	616	613	613	481
55°	456	450	449	445	445	409
65°	299	293	288	284	285	294
75°	154	149	145	141	139	163
85°	37	36	34	30	29	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1066.0	1066.0	1066.0	1066.0	1066.0
2.5°	1069.5	1065.2	1063.5	1064.3	1069.5
5°	1061.8	1061.8	1056.6	1059.2	1059.2
7.5°	1053.2	1054.1	1048.9	1053.2	1051.5
10°	1042.9	1040.4	1036.9	1043.8	1045.5
12.5°	1033.5	1027.5	1025.8	1030.1	1031.0
15°	1013.8	1009.6	1008.7	1013.0	1013.8
17.5°	991.6	992.5	989.0	995.0	994.2
20°	970.2	968.5	966.8	973.6	974.5
22.5°	946.3	941.1	942.8	948.8	950.5
25°	917.2	912.0	915.4	918.9	920.6
27.5°	886.4	883.8	882.9	887.2	888.9
30°	855.6	851.3	851.3	856.4	853.8
32.5°	817.9	814.5	816.2	817.9	818.8
35°	783.7	777.7	780.3	777.7	778.6
37.5°	743.5	739.2	738.3	737.5	737.5
40°	705.8	702.4	699.0	699.0	694.7
42.5°	664.8	660.5	658.8	656.2	653.6
45°	622.0	616.9	616.0	613.4	613.4
47.5°	583.5	575.8	574.9	569.8	569.8
50°	539.9	534.7	531.3	527.9	525.3
52.5°	500.5	495.4	490.2	486.8	484.2
55°	456.0	450.0	449.2	444.9	444.9
57.5°	415.8	410.7	407.2	402.1	403.0
60°	373.9	368.7	367.0	362.8	362.8
62.5°	334.5	330.2	327.7	323.4	320.0
65°	298.6	292.6	287.5	284.0	284.9
67.5°	259.2	252.4	249.8	246.4	243.8
70°	221.6	217.3	213.0	208.8	208.8
72.5°	186.5	182.2	179.7	174.5	172.8
75°	154.0	148.9	144.6	141.2	138.6
77.5°	121.5	116.4	113.8	109.5	109.5
80°	90.7	87.3	84.7	83.0	79.6
82.5°	62.5	60.7	58.2	55.6	53.0
85°	36.8	35.9	34.2	29.9	29.1
87.5°	14.5	14.5	12.8	12.0	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)