

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: P296011

Luminaire Tested: **24RLN-LD5-31-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296011  
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-6500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2942.0 lumens  
Efficiency: N/A  
Efficacy: 132.4 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

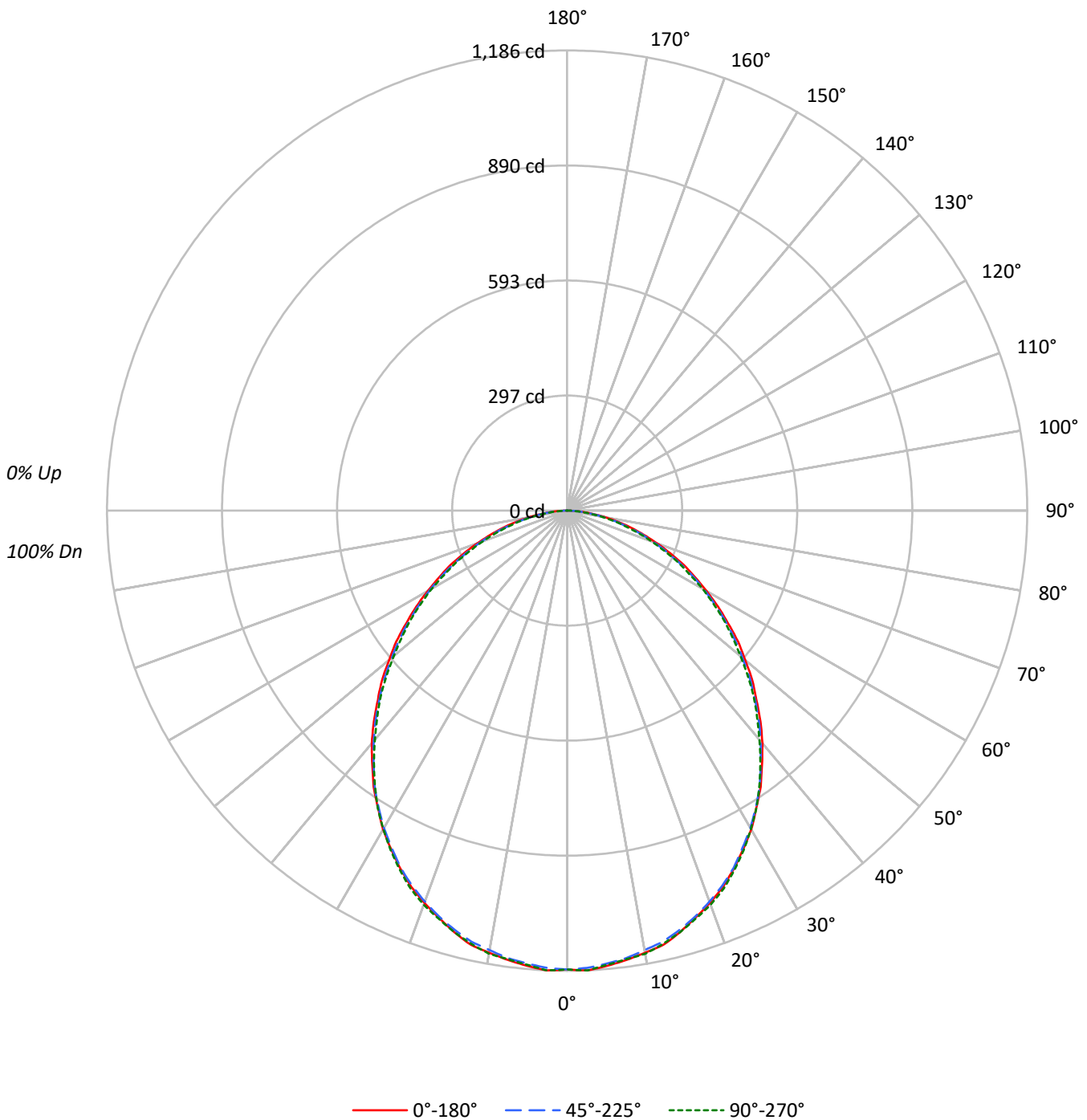
Input Watts (W): 22.227  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1591	1591	1591
5°	1591	1583	1587
10°	1581	1572	1585
15°	1567	1559	1567
20°	1541	1536	1548
25°	1511	1508	1516
30°	1475	1467	1472
35°	1428	1422	1419
40°	1375	1362	1354
45°	1313	1300	1295
50°	1254	1234	1220
55°	1187	1169	1158
60°	1116	1096	1083
65°	1054	1015	1006
70°	967	930	911
75°	888	834	800
80°	779	728	684
85°	630	587	499



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.6	3.8
10°-20°	316.3	10.8
20°-30°	467.9	15.9
30°-40°	540.0	18.4
40°-50°	527.4	17.9
50°-60°	445.4	15.1
60°-70°	317.2	10.8
70°-80°	171.8	5.8
80°-90°	44.3	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°	895.8	30.4
0°-40°	1435.9	48.8
0°-60°	2408.7	81.9
0°-90°	2942.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2942.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1183	1183	1183	1183	1183	
5°	1178	1178	1172	1175	1175	112
15°	1125	1120	1119	1124	1125	317
25°	1018	1012	1016	1019	1021	468
35°	869	863	866	863	864	543
45°	690	684	683	680	680	534
55°	506	499	498	494	494	454
65°	331	325	319	315	316	327
75°	171	165	160	157	154	181
85°	41	40	38	33	32	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1182.6	1182.6	1182.6	1182.6	1182.6
2.5°	1186.4	1181.7	1179.8	1180.7	1186.4
5°	1177.9	1177.9	1172.2	1175.0	1175.0
7.5°	1168.4	1169.3	1163.6	1168.4	1166.5
10°	1157.0	1154.1	1150.3	1157.9	1159.8
12.5°	1146.5	1139.9	1138.0	1142.7	1143.7
15°	1124.7	1120.0	1119.0	1123.8	1124.7
17.5°	1100.0	1101.0	1097.2	1103.8	1102.9
20°	1076.3	1074.4	1072.5	1080.1	1081.0
22.5°	1049.7	1044.0	1045.9	1052.6	1054.5
25°	1017.5	1011.8	1015.6	1019.4	1021.3
27.5°	983.3	980.4	979.5	984.2	986.1
30°	949.1	944.4	944.4	950.1	947.2
32.5°	907.4	903.6	905.5	907.4	908.3
35°	869.4	862.7	865.6	862.7	863.7
37.5°	824.8	820.0	819.1	818.1	818.1
40°	783.0	779.2	775.4	775.4	770.7
42.5°	737.5	732.7	730.8	728.0	725.1
45°	690.0	684.3	683.4	680.5	680.5
47.5°	647.3	638.8	637.8	632.1	632.1
50°	598.9	593.2	589.4	585.6	582.8
52.5°	555.2	549.5	543.8	540.0	537.2
55°	505.9	499.2	498.3	493.5	493.5
57.5°	461.3	455.6	451.8	446.1	447.0
60°	414.8	409.1	407.2	402.4	402.4
62.5°	371.1	366.4	363.5	358.8	355.0
65°	331.2	324.6	318.9	315.1	316.1
67.5°	287.6	280.0	277.1	273.3	270.5
70°	245.8	241.1	236.3	231.6	231.6
72.5°	206.9	202.2	199.3	193.6	191.7
75°	170.8	165.1	160.4	156.6	153.8
77.5°	134.8	129.1	126.2	121.5	121.5
80°	100.6	96.8	94.0	92.1	88.3
82.5°	69.3	67.4	64.5	61.7	58.8
85°	40.8	39.9	38.0	33.2	32.3
87.5°	16.1	16.1	14.2	13.3	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)