

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: P296003

Luminaire Tested: **24RLN-LD5-31-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296003  
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-2700K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2429.0 lumens  
Efficiency: N/A  
Efficacy: 115.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

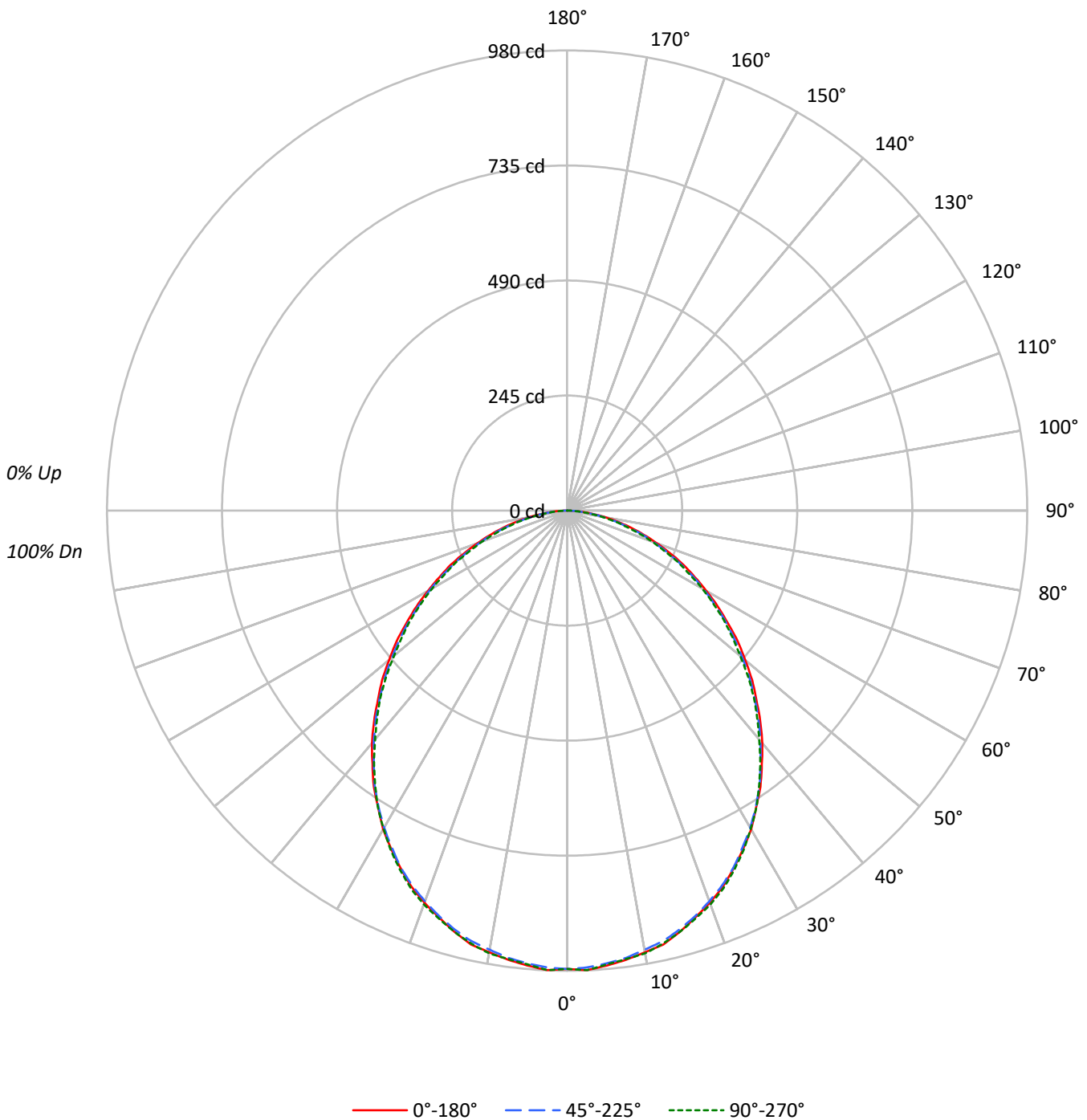
Input Watts (W): 21.111  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1314	1314	1314
5°	1313	1307	1310
10°	1305	1298	1308
15°	1293	1287	1293
20°	1272	1268	1278
25°	1247	1245	1252
30°	1217	1211	1215
35°	1179	1174	1171
40°	1136	1124	1118
45°	1084	1074	1069
50°	1035	1019	1007
55°	980	965	956
60°	921	905	894
65°	871	838	831
70°	799	768	752
75°	734	688	660
80°	644	601	565
85°	520	483	411



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.1	3.8
10°-20°	261.2	10.8
20°-30°	386.3	15.9
30°-40°	445.9	18.4
40°-50°	435.5	17.9
50°-60°	367.7	15.1
60°-70°	261.9	10.8
70°-80°	141.8	5.8
80°-90°	36.6	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°	739.6	30.4
0°-40°	1185.5	48.8
0°-60°	1988.7	81.9
0°-90°	2429.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2429.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	976	976	976	976	976	
5°	972	972	968	970	970	92
15°	929	925	924	928	929	262
25°	840	835	838	842	843	387
35°	718	712	715	712	713	448
45°	570	565	564	562	562	441
55°	418	412	411	408	408	374
65°	274	268	263	260	261	270
75°	141	136	132	129	127	149
85°	34	33	31	27	27	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	976.4	976.4	976.4	976.4	976.4
2.5°	979.5	975.6	974.0	974.8	979.5
5°	972.5	972.5	967.8	970.1	970.1
7.5°	964.6	965.4	960.7	964.6	963.1
10°	955.2	952.9	949.7	956.0	957.6
12.5°	946.6	941.1	939.6	943.5	944.3
15°	928.6	924.7	923.9	927.8	928.6
17.5°	908.2	909.0	905.9	911.3	910.6
20°	888.6	887.1	885.5	891.8	892.5
22.5°	866.7	862.0	863.5	869.0	870.6
25°	840.0	835.3	838.5	841.6	843.2
27.5°	811.8	809.5	808.7	812.6	814.2
30°	783.6	779.7	779.7	784.4	782.1
32.5°	749.1	746.0	747.6	749.1	749.9
35°	717.8	712.3	714.7	712.3	713.1
37.5°	681.0	677.0	676.3	675.5	675.5
40°	646.5	643.4	640.2	640.2	636.3
42.5°	608.9	605.0	603.4	601.0	598.7
45°	569.7	565.0	564.2	561.9	561.9
47.5°	534.4	527.4	526.6	521.9	521.9
50°	494.5	489.8	486.6	483.5	481.1
52.5°	458.4	453.7	449.0	445.9	443.5
55°	417.7	412.2	411.4	407.5	407.5
57.5°	380.8	376.1	373.0	368.3	369.1
60°	342.4	337.7	336.2	332.3	332.3
62.5°	306.4	302.5	300.1	296.2	293.1
65°	273.5	268.0	263.3	260.2	260.9
67.5°	237.4	231.2	228.8	225.7	223.3
70°	203.0	199.0	195.1	191.2	191.2
72.5°	170.8	166.9	164.6	159.9	158.3
75°	141.1	136.3	132.4	129.3	126.9
77.5°	111.3	106.6	104.2	100.3	100.3
80°	83.1	79.9	77.6	76.0	72.9
82.5°	57.2	55.6	53.3	50.9	48.6
85°	33.7	32.9	31.3	27.4	26.6
87.5°	13.3	13.3	11.8	11.0	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)