

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: P296147

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296147  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059-R2)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-31-RDP-UNV-L82765-W2A1-U-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2611.0 lumens  
Efficiency: N/A  
Efficacy: 121.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

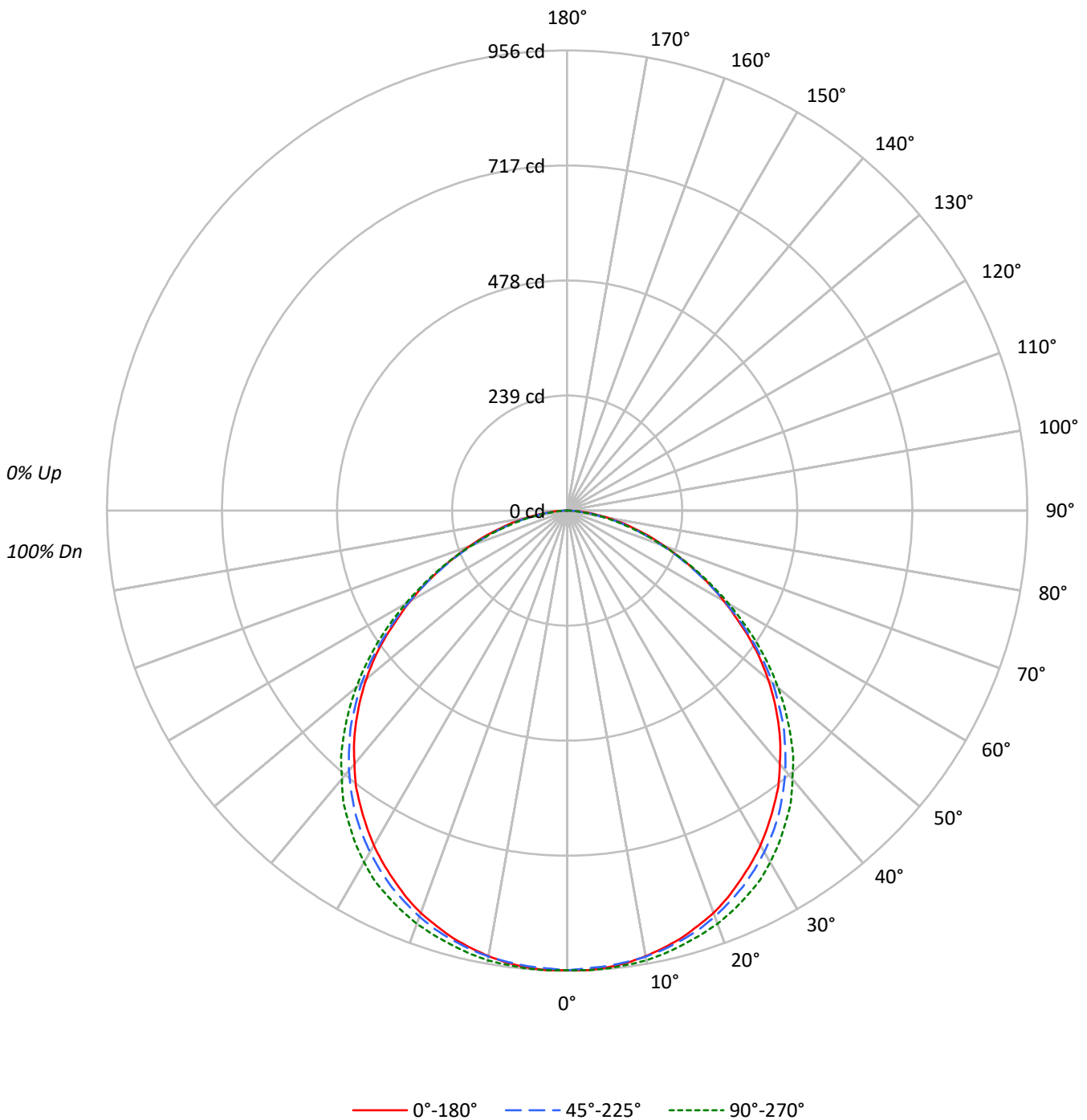
Input Watts (W): 21.576  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1285	1285	1285
5°	1287	1283	1290
10°	1284	1286	1296
15°	1280	1286	1300
20°	1274	1285	1308
25°	1260	1281	1312
30°	1248	1273	1311
35°	1230	1261	1300
40°	1207	1239	1279
45°	1180	1210	1248
50°	1140	1167	1198
55°	1085	1099	1132
60°	1013	1018	1045
65°	930	924	946
70°	845	822	826
75°	752	711	705
80°	652	583	568
85°	536	412	321



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.6	3.5
10°-20°	261.1	10.0
20°-30°	398.5	15.3
30°-40°	480.4	18.4
40°-50°	489.9	18.8
50°-60°	419.3	16.1
60°-70°	288.8	11.1
70°-80°	148.1	5.7
80°-90°	34.5	1.3
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°	750.1	28.7
0°-40°	1230.5	47.1
0°-60°	2139.7	81.9
0°-90°	2611.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2611.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	955	955	955	955	955	
5°	953	951	950	953	955	91
15°	919	918	923	930	933	259
25°	849	852	863	878	884	391
35°	749	752	768	784	791	468
45°	620	621	636	652	656	478
55°	463	460	468	478	482	413
65°	292	285	290	292	297	290
75°	145	139	137	137	136	156
85°	35	31	27	24	21	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	954.9	954.9	954.9	954.9	954.9
2.5°	955.8	953.9	951.9	953.9	955.8
5°	952.9	950.9	949.9	952.9	954.9
7.5°	947.9	945.9	945.9	949.9	951.9
10°	940.0	939.0	941.0	944.9	948.9
12.5°	930.1	930.1	933.1	938.0	942.0
15°	919.2	918.2	923.2	930.1	933.1
17.5°	904.3	905.3	912.3	920.2	924.1
20°	889.5	890.5	897.4	908.3	913.3
22.5°	870.7	872.6	880.6	894.4	899.4
25°	848.9	851.8	862.7	877.6	883.5
27.5°	827.1	830.0	841.9	858.8	866.7
30°	803.3	807.3	819.2	837.0	843.9
32.5°	776.6	779.5	794.4	812.2	819.2
35°	748.8	751.8	767.6	784.5	791.4
37.5°	721.1	721.1	736.9	756.8	763.7
40°	687.4	688.4	705.2	724.1	728.0
42.5°	655.7	655.7	670.6	688.4	695.3
45°	620.1	621.1	635.9	651.8	655.7
47.5°	583.4	583.4	596.3	611.1	615.1
50°	544.8	542.8	557.7	569.5	572.5
52.5°	505.2	502.2	514.1	524.0	527.9
55°	462.6	459.6	468.5	478.4	482.4
57.5°	418.0	414.0	423.9	432.9	434.8
60°	376.4	370.5	378.4	383.3	388.3
62.5°	334.8	327.9	333.8	336.8	340.7
65°	292.2	285.3	290.2	292.2	297.2
67.5°	251.6	246.6	247.6	250.6	252.6
70°	214.9	209.0	209.0	209.0	210.0
72.5°	181.3	172.3	171.4	172.3	172.3
75°	144.6	138.7	136.7	136.7	135.7
77.5°	115.9	108.0	107.0	105.0	103.0
80°	84.2	77.3	75.3	74.3	73.3
82.5°	58.4	52.5	50.5	48.5	45.6
85°	34.7	30.7	26.7	23.8	20.8
87.5°	12.9	11.9	9.9	8.9	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)