

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: P296236

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296236  
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-L93050-W2A1-U-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2401.0 lumens  
Efficiency: N/A  
Efficacy: 108.5 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

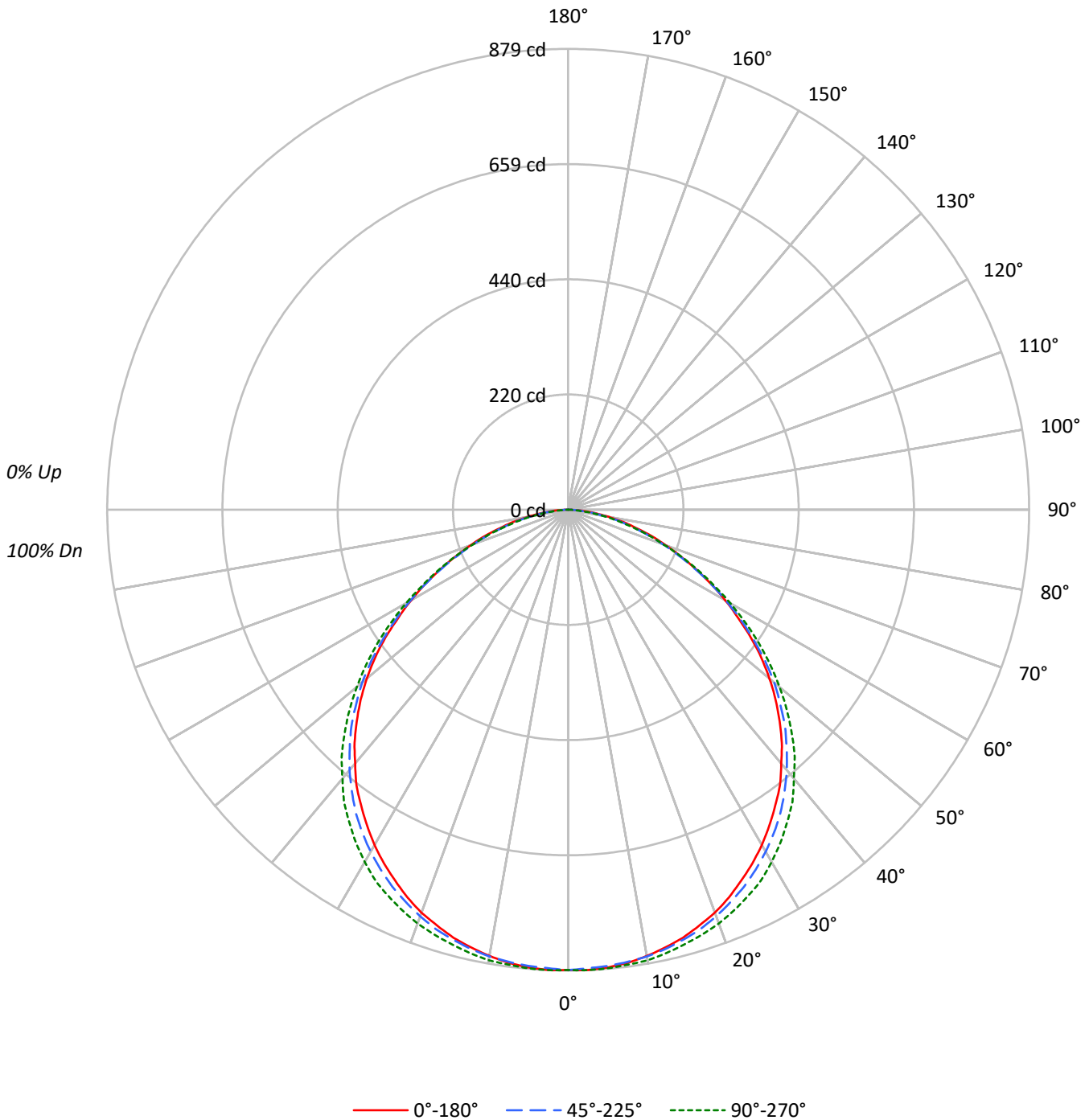
Input Watts (W): 22.134  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60					60			
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52					52			
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25					25			

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

	0°	45°	90°
0°	1181	1181	1181
5°	1183	1180	1186
10°	1181	1182	1192
15°	1177	1182	1195
20°	1171	1182	1202
25°	1159	1178	1206
30°	1148	1170	1206
35°	1131	1159	1195
40°	1110	1139	1176
45°	1085	1113	1147
50°	1049	1073	1102
55°	998	1011	1041
60°	931	936	961
65°	855	850	870
70°	778	756	760
75°	691	653	649
80°	600	536	522
85°	492	380	295



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.3	3.5
10°-20°	240.1	10.0
20°-30°	366.4	15.3
30°-40°	441.8	18.4
40°-50°	450.5	18.8
50°-60°	385.5	16.1
60°-70°	265.6	11.1
70°-80°	136.1	5.7
80°-90°	31.7	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°	689.8	28.7
0°-40°	1131.5	47.1
0°-60°	1967.6	81.9
0°-90°	2401.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2401.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	878	878	878	878	878	
5°	876	874	874	876	878	83
15°	845	844	849	855	858	238
25°	781	783	793	807	812	360
35°	689	691	706	721	728	431
45°	570	571	585	599	603	439
55°	425	423	431	440	444	379
65°	269	262	267	269	273	267
75°	133	128	126	126	125	143
85°	32	28	25	22	19	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	878.1	878.1	878.1	878.1	878.1
2.5°	879.0	877.1	875.3	877.1	879.0
5°	876.2	874.4	873.5	876.2	878.1
7.5°	871.7	869.9	869.9	873.5	875.3
10°	864.4	863.5	865.3	868.9	872.6
12.5°	855.3	855.3	858.0	862.6	866.2
15°	845.3	844.4	848.9	855.3	858.0
17.5°	831.6	832.5	838.9	846.2	849.8
20°	817.9	818.8	825.2	835.2	839.8
22.5°	800.6	802.5	809.7	822.5	827.0
25°	780.6	783.3	793.3	807.0	812.5
27.5°	760.6	763.3	774.2	789.7	797.0
30°	738.7	742.3	753.3	769.7	776.0
32.5°	714.1	716.8	730.5	746.9	753.3
35°	688.6	691.3	705.9	721.4	727.8
37.5°	663.1	663.1	677.7	695.9	702.3
40°	632.1	633.0	648.5	665.8	669.5
42.5°	603.0	603.0	616.6	633.0	639.4
45°	570.2	571.1	584.8	599.3	603.0
47.5°	536.5	536.5	548.3	562.0	565.6
50°	501.0	499.1	512.8	523.7	526.5
52.5°	464.5	461.8	472.7	481.8	485.5
55°	425.4	422.6	430.8	439.9	443.6
57.5°	384.4	380.7	389.8	398.0	399.9
60°	346.1	340.7	347.9	352.5	357.1
62.5°	307.9	301.5	307.0	309.7	313.3
65°	268.7	262.3	266.9	268.7	273.3
67.5°	231.4	226.8	227.7	230.4	232.3
70°	197.7	192.2	192.2	192.2	193.1
72.5°	166.7	158.5	157.6	158.5	158.5
75°	133.0	127.5	125.7	125.7	124.8
77.5°	106.6	99.3	98.4	96.5	94.7
80°	77.4	71.0	69.2	68.3	67.4
82.5°	53.7	48.3	46.5	44.6	41.9
85°	31.9	28.2	24.6	21.9	19.1
87.5°	11.8	10.9	9.1	8.2	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)