

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: P296146

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296146  
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-4000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2566.0 lumens  
Efficiency: N/A  
Efficacy: 119.4 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

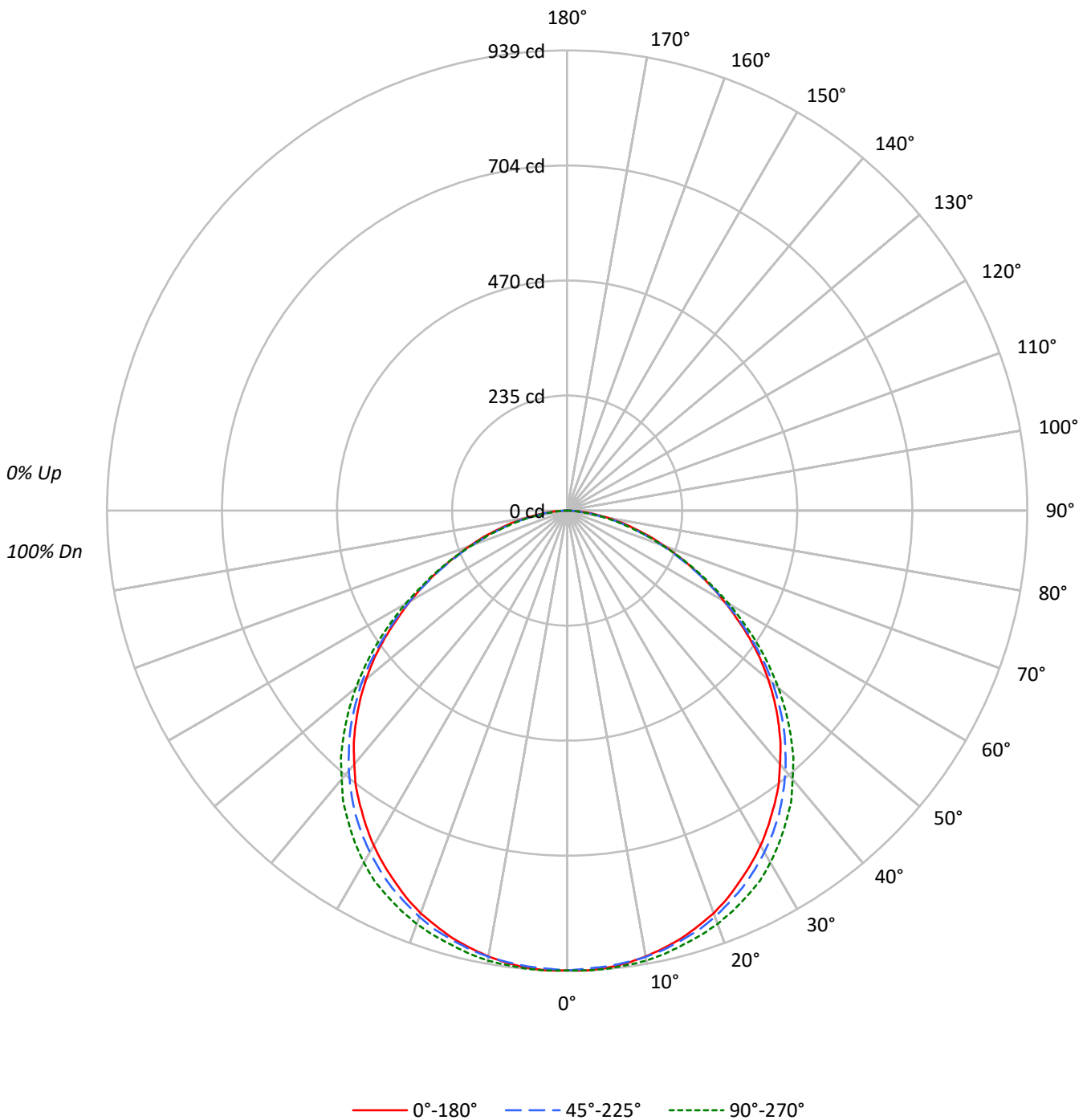
Input Watts (W): 21.483  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1263	1263	1263
5°	1265	1261	1267
10°	1262	1264	1274
15°	1258	1264	1277
20°	1252	1263	1285
25°	1238	1259	1289
30°	1227	1251	1289
35°	1209	1239	1278
40°	1187	1217	1257
45°	1160	1189	1226
50°	1121	1147	1178
55°	1066	1080	1112
60°	995	1001	1027
65°	914	908	930
70°	831	808	812
75°	739	698	693
80°	641	573	558
85°	526	406	315



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.0	3.5
10°-20°	256.6	10.0
20°-30°	391.6	15.3
30°-40°	472.1	18.4
40°-50°	481.4	18.8
50°-60°	412.0	16.1
60°-70°	283.8	11.1
70°-80°	145.5	5.7
80°-90°	33.9	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°	737.2	28.7
0°-40°	1209.3	47.1
0°-60°	2102.8	81.9
0°-90°	2566.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2566.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	936	934	934	936	938	89
15°	903	902	907	914	917	255
25°	834	837	848	862	868	385
35°	736	739	754	771	778	460
45°	609	610	625	640	644	470
55°	455	452	460	470	474	406
65°	287	280	285	287	292	285
75°	142	136	134	134	133	153
85°	34	30	26	23	20	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	938.4	938.4	938.4	938.4	938.4
2.5°	939.4	937.4	935.5	937.4	939.4
5°	936.4	934.5	933.5	936.4	938.4
7.5°	931.6	929.6	929.6	933.5	935.5
10°	923.8	922.8	924.8	928.7	932.6
12.5°	914.1	914.1	917.0	921.8	925.7
15°	903.4	902.4	907.2	914.1	917.0
17.5°	888.8	889.7	896.5	904.3	908.2
20°	874.1	875.1	881.9	892.6	897.5
22.5°	855.7	857.6	865.4	879.0	883.9
25°	834.2	837.2	847.9	862.5	868.3
27.5°	812.8	815.7	827.4	844.0	851.8
30°	789.5	793.4	805.0	822.6	829.4
32.5°	763.2	766.1	780.7	798.2	805.0
35°	735.9	738.8	754.4	771.0	777.8
37.5°	708.7	708.7	724.2	743.7	750.5
40°	675.6	676.5	693.1	711.6	715.5
42.5°	644.4	644.4	659.0	676.5	683.4
45°	609.4	610.3	624.9	640.5	644.4
47.5°	573.4	573.4	586.0	600.6	604.5
50°	535.4	533.4	548.0	559.7	562.6
52.5°	496.5	493.5	505.2	514.9	518.8
55°	454.6	451.7	460.4	470.2	474.1
57.5°	410.8	406.9	416.6	425.4	427.3
60°	369.9	364.1	371.9	376.7	381.6
62.5°	329.0	322.2	328.0	331.0	334.9
65°	287.2	280.4	285.2	287.2	292.0
67.5°	247.3	242.4	243.4	246.3	248.2
70°	211.2	205.4	205.4	205.4	206.4
72.5°	178.1	169.4	168.4	169.4	169.4
75°	142.1	136.3	134.3	134.3	133.4
77.5°	113.9	106.1	105.1	103.2	101.2
80°	82.7	75.9	74.0	73.0	72.0
82.5°	57.4	51.6	49.6	47.7	44.8
85°	34.1	30.2	26.3	23.4	20.4
87.5°	12.7	11.7	9.7	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)