

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: P296145

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296145  
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-3500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2511.0 lumens  
Efficiency: N/A  
Efficacy: 117.9 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

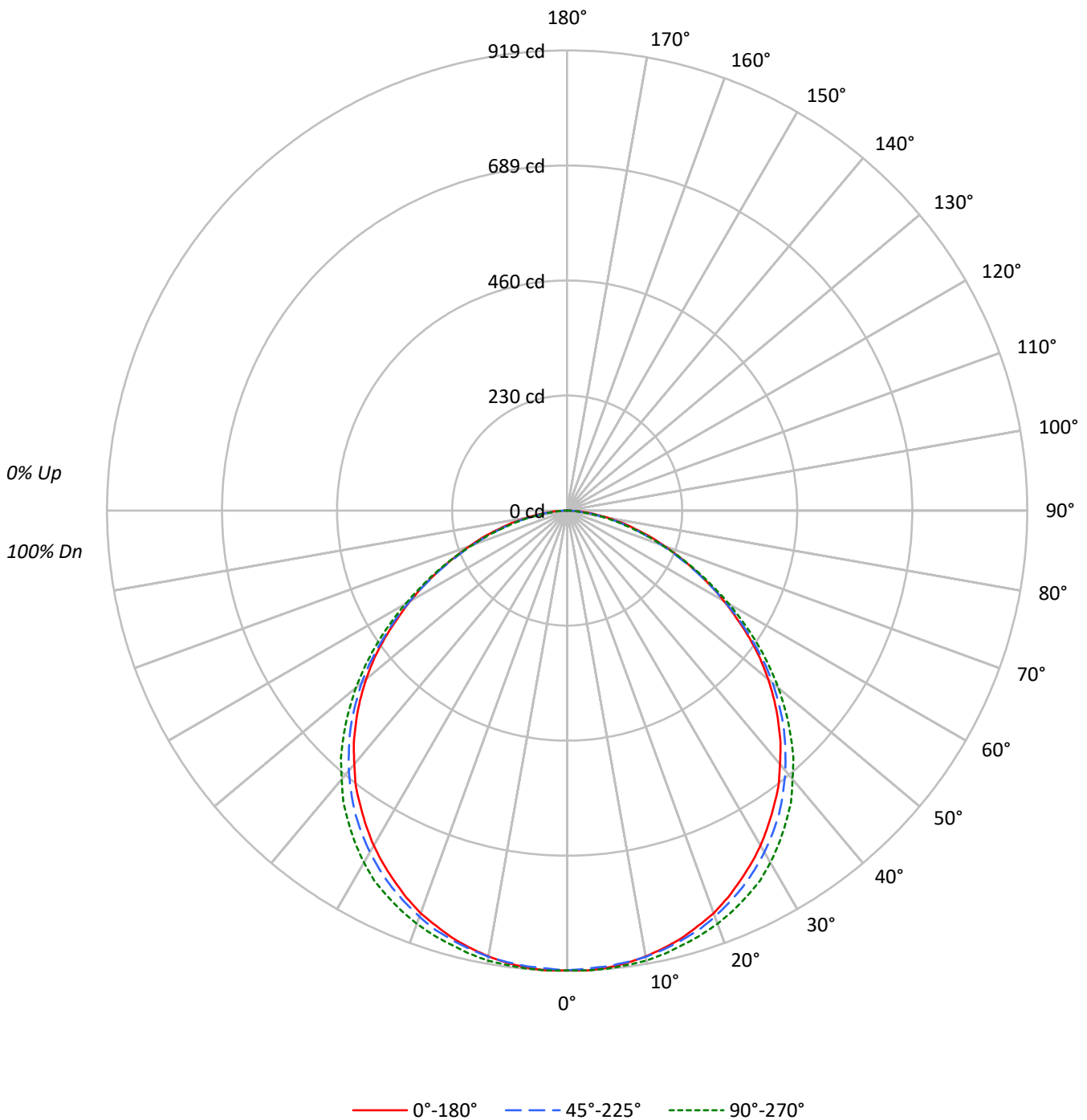
Input Watts (W): 21.297  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1236	1236	1236
5°	1238	1234	1240
10°	1235	1236	1247
15°	1231	1237	1250
20°	1225	1236	1258
25°	1212	1232	1261
30°	1200	1224	1261
35°	1183	1213	1250
40°	1161	1191	1230
45°	1135	1164	1200
50°	1097	1123	1153
55°	1044	1057	1088
60°	974	979	1005
65°	895	889	910
70°	813	791	794
75°	723	684	678
80°	628	561	546
85°	514	397	309



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.1	3.5
10°-20°	251.1	10.0
20°-30°	383.2	15.3
30°-40°	462.0	18.4
40°-50°	471.1	18.8
50°-60°	403.2	16.1
60°-70°	277.7	11.1
70°-80°	142.4	5.7
80°-90°	33.1	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°	721.4	28.7
0°-40°	1183.4	47.1
0°-60°	2057.7	81.9
0°-90°	2511.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2511.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	916	914	914	916	918	87
15°	884	883	888	894	897	249
25°	816	819	830	844	850	376
35°	720	723	738	754	761	451
45°	596	597	612	627	631	459
55°	445	442	451	460	464	397
65°	281	274	279	281	286	279
75°	139	133	132	132	130	150
85°	33	30	26	23	20	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	918.3	918.3	918.3	918.3	918.3
2.5°	919.2	917.3	915.4	917.3	919.2
5°	916.4	914.5	913.5	916.4	918.3
7.5°	911.6	909.7	909.7	913.5	915.4
10°	904.0	903.0	904.9	908.8	912.6
12.5°	894.5	894.5	897.3	902.1	905.9
15°	884.0	883.0	887.8	894.5	897.3
17.5°	869.7	870.7	877.3	884.9	888.8
20°	855.4	856.4	863.0	873.5	878.3
22.5°	837.3	839.2	846.8	860.2	864.9
25°	816.4	819.2	829.7	844.0	849.7
27.5°	795.4	798.3	809.7	825.9	833.5
30°	772.5	776.3	787.8	804.9	811.6
32.5°	746.8	749.7	764.0	781.1	787.8
35°	720.1	723.0	738.2	754.4	761.1
37.5°	693.5	693.5	708.7	727.8	734.4
40°	661.1	662.0	678.2	696.3	700.1
42.5°	630.6	630.6	644.9	662.0	668.7
45°	596.3	597.3	611.6	626.8	630.6
47.5°	561.1	561.1	573.5	587.7	591.5
50°	523.9	522.0	536.3	547.7	550.6
52.5°	485.8	483.0	494.4	503.9	507.7
55°	444.9	442.0	450.6	460.1	463.9
57.5°	402.0	398.2	407.7	416.3	418.2
60°	362.0	356.3	363.9	368.6	373.4
62.5°	322.0	315.3	321.0	323.9	327.7
65°	281.0	274.3	279.1	281.0	285.8
67.5°	242.0	237.2	238.1	241.0	242.9
70°	206.7	201.0	201.0	201.0	201.9
72.5°	174.3	165.7	164.8	165.7	165.7
75°	139.1	133.4	131.5	131.5	130.5
77.5°	111.5	103.8	102.9	101.0	99.1
80°	81.0	74.3	72.4	71.4	70.5
82.5°	56.2	50.5	48.6	46.7	43.8
85°	33.3	29.5	25.7	22.9	20.0
87.5°	12.4	11.4	9.5	8.6	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)