

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: P296233

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296233  
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-3000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2000.0 lumens  
Efficiency: N/A  
Efficacy: 92.3 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

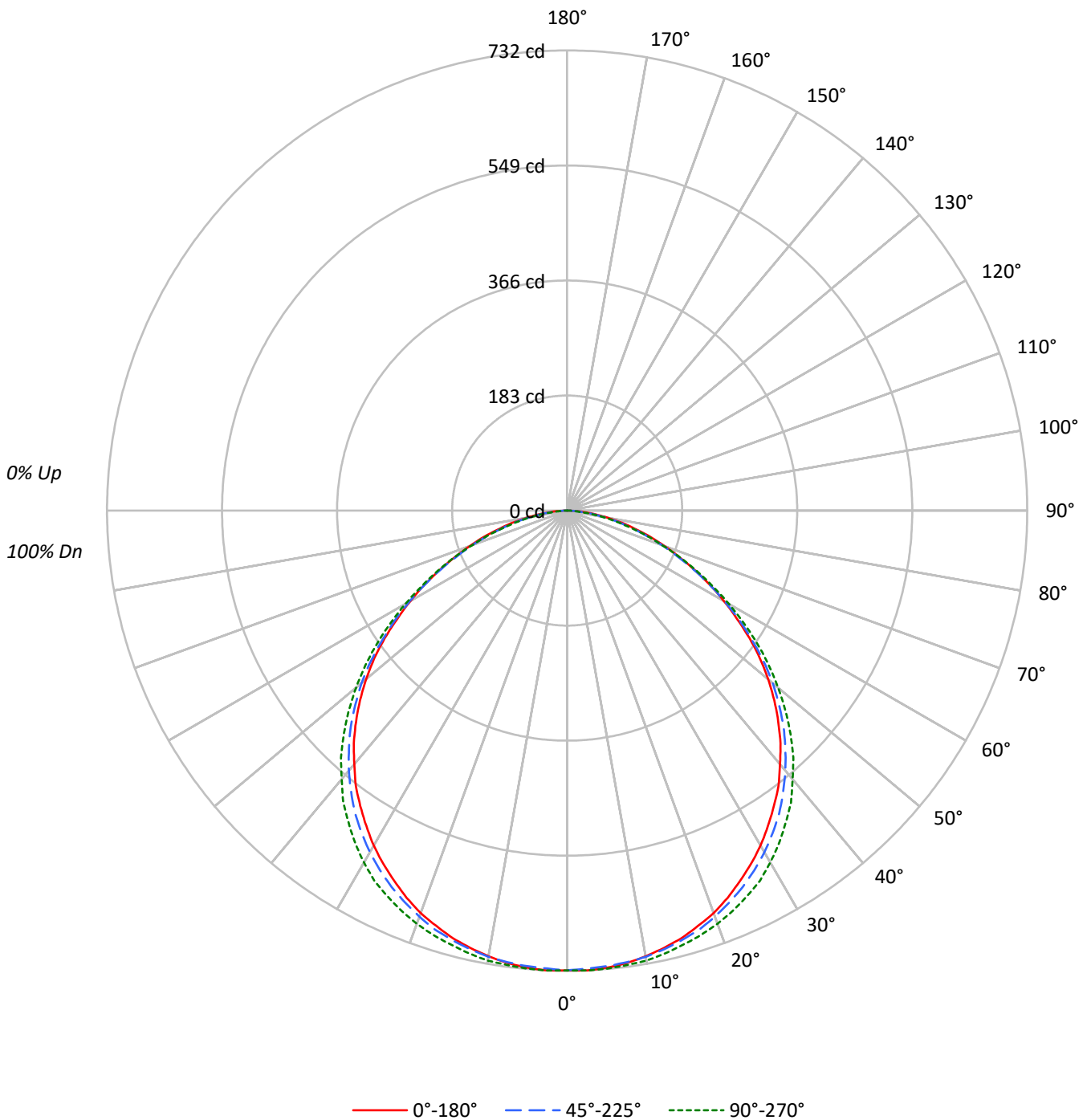
Input Watts (W): 21.669  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	984	984	984
5°	986	983	988
10°	984	985	993
15°	981	985	996
20°	976	984	1002
25°	965	981	1005
30°	956	975	1004
35°	942	966	996
40°	925	949	980
45°	904	927	956
50°	873	894	918
55°	831	842	867
60°	776	780	800
65°	713	708	725
70°	648	630	633
75°	576	544	540
80°	500	447	435
85°	411	316	245



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.4	3.5
10°-20°	200.0	10.0
20°-30°	305.2	15.3
30°-40°	368.0	18.4
40°-50°	375.3	18.8
50°-60°	321.2	16.1
60°-70°	221.2	11.1
70°-80°	113.4	5.7
80°-90°	26.4	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°	574.6	28.7
0°-40°	942.6	47.1
0°-60°	1639.0	81.9
0°-90°	2000.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2000.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	731	731	731	731	731	
5°	730	728	728	730	731	69
15°	704	703	707	712	715	199
25°	650	652	661	672	677	300
35°	574	576	588	601	606	359
45°	475	476	487	499	502	366
55°	354	352	359	366	370	316
65°	224	218	222	224	228	222
75°	111	106	105	105	104	119
85°	27	24	20	18	16	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	731.4	731.4	731.4	731.4	731.4
2.5°	732.2	730.6	729.1	730.6	732.2
5°	729.9	728.4	727.6	729.9	731.4
7.5°	726.1	724.6	724.6	727.6	729.1
10°	720.0	719.3	720.8	723.8	726.9
12.5°	712.4	712.4	714.7	718.5	721.5
15°	704.1	703.3	707.1	712.4	714.7
17.5°	692.7	693.5	698.8	704.9	707.9
20°	681.3	682.1	687.4	695.7	699.5
22.5°	666.9	668.4	674.5	685.1	688.9
25°	650.2	652.5	660.8	672.2	676.8
27.5°	633.5	635.8	644.9	657.8	663.9
30°	615.3	618.4	627.5	641.1	646.4
32.5°	594.8	597.1	608.5	622.2	627.5
35°	573.6	575.9	588.0	600.9	606.2
37.5°	552.3	552.3	564.5	579.7	585.0
40°	526.6	527.3	540.2	554.6	557.7
42.5°	502.3	502.3	513.7	527.3	532.6
45°	475.0	475.7	487.1	499.2	502.3
47.5°	446.9	446.9	456.8	468.1	471.2
50°	417.3	415.8	427.2	436.3	438.5
52.5°	386.9	384.7	393.8	401.4	404.4
55°	354.3	352.0	358.9	366.5	369.5
57.5°	320.2	317.1	324.7	331.6	333.1
60°	288.3	283.8	289.8	293.6	297.4
62.5°	256.4	251.1	255.7	258.0	261.0
65°	223.8	218.5	222.3	223.8	227.6
67.5°	192.7	188.9	189.7	192.0	193.5
70°	164.6	160.1	160.1	160.1	160.8
72.5°	138.8	132.0	131.3	132.0	132.0
75°	110.8	106.2	104.7	104.7	103.9
77.5°	88.8	82.7	81.9	80.4	78.9
80°	64.5	59.2	57.7	56.9	56.1
82.5°	44.8	40.2	38.7	37.2	34.9
85°	26.6	23.5	20.5	18.2	15.9
87.5°	9.9	9.1	7.6	6.8	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)