

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: P296284

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296284  
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-L92765-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: 2095.0 lumens  
Efficiency: N/A  
Efficacy: 99.7 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

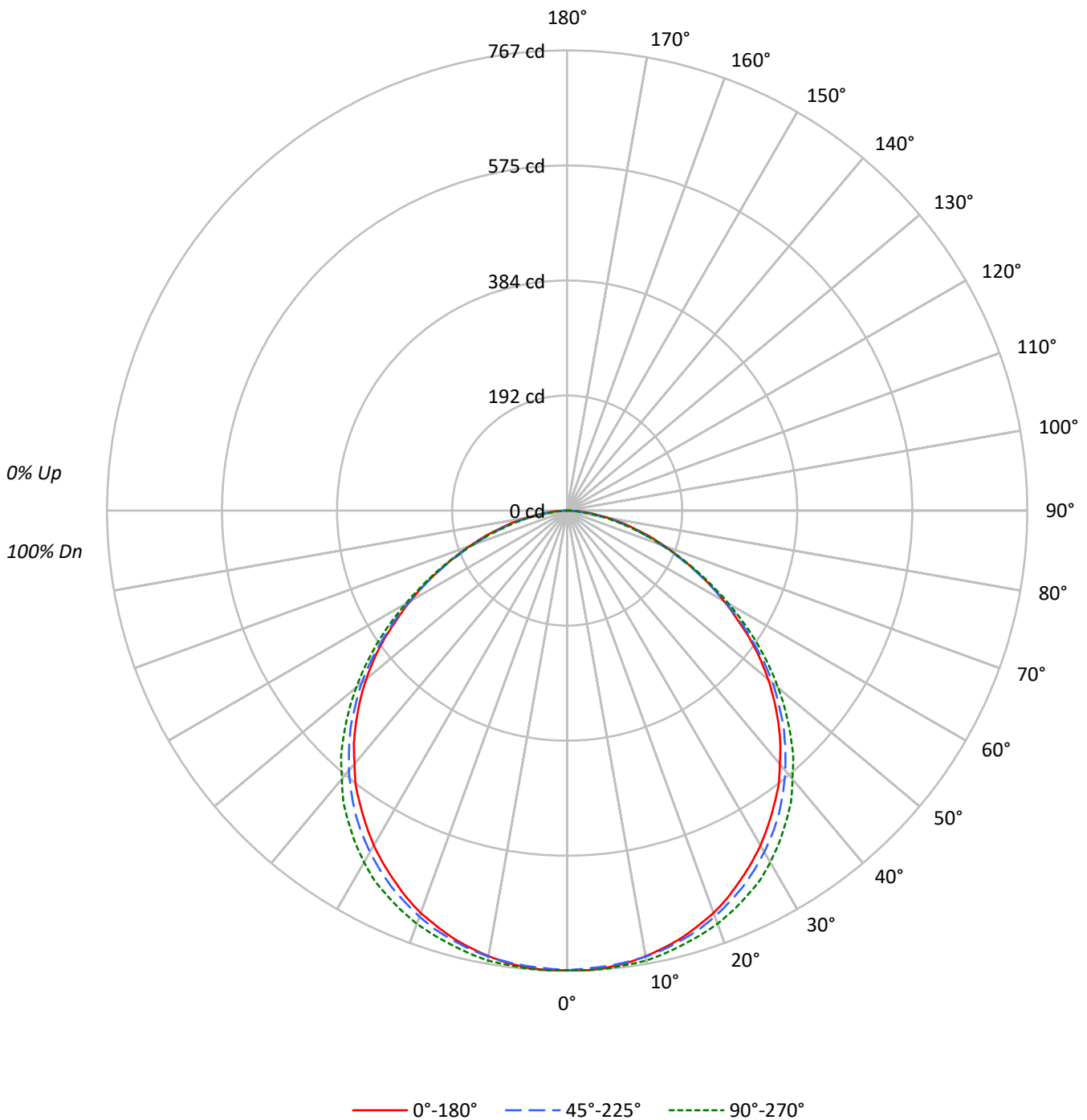
Input Watts (W): 21.018  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P296284

CATALOG NUMBER: 24RLN-LD5-31-RDP-UNV-L92765-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P296284

CATALOG NUMBER: 24RLN-LD5-31-RDP-UNV-L92765-W2A1-U-3000K

**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°	1031	1031	1031
5°	1033	1029	1035
10°	1030	1032	1040
15°	1027	1032	1043
20°	1022	1031	1049
25°	1011	1028	1052
30°	1001	1021	1052
35°	987	1012	1043
40°	969	994	1026
45°	947	971	1001
50°	915	937	962
55°	871	882	908
60°	813	817	838
65°	747	741	759
70°	679	660	663
75°	603	570	566
80°	524	468	456
85°	429	332	258



TEST NUMBER: P296284

CATALOG NUMBER: 24RLN-LD5-31-RDP-UNV-L92765-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.7	3.5
10°-20°	209.5	10.0
20°-30°	319.7	15.3
30°-40°	385.5	18.4
40°-50°	393.1	18.8
50°-60°	336.4	16.1
60°-70°	231.7	11.1
70°-80°	118.8	5.7
80°-90°	27.6	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°	601.9	28.7
0°-40°	987.3	47.1
0°-60°	1716.8	81.9
0°-90°	2095.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2095.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	766	766	766	766	766	
5°	765	763	762	765	766	73
15°	738	737	741	746	749	208
25°	681	684	692	704	709	314
35°	601	603	616	630	635	376
45°	498	498	510	523	526	383
55°	371	369	376	384	387	331
65°	234	229	233	234	238	233
75°	116	111	110	110	109	125
85°	28	25	22	19	17	32
90°	0	0	0	0	0	



TEST NUMBER: P296284

CATALOG NUMBER: 24RLN-LD5-31-RDP-UNV-L92765-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	766.1	766.1	766.1	766.1	766.1
2.5°	766.9	765.4	763.8	765.4	766.9
5°	764.6	763.0	762.2	764.6	766.1
7.5°	760.6	759.0	759.0	762.2	763.8
10°	754.2	753.4	755.0	758.2	761.4
12.5°	746.3	746.3	748.7	752.6	755.8
15°	737.5	736.7	740.7	746.3	748.7
17.5°	725.6	726.4	732.0	738.3	741.5
20°	713.7	714.5	720.1	728.8	732.8
22.5°	698.6	700.2	706.5	717.7	721.6
25°	681.1	683.5	692.2	704.2	708.9
27.5°	663.6	666.0	675.5	689.1	695.4
30°	644.6	647.7	657.3	671.6	677.1
32.5°	623.1	625.5	637.4	651.7	657.3
35°	600.8	603.2	615.9	629.5	635.0
37.5°	578.6	578.6	591.3	607.2	612.8
40°	551.6	552.4	565.9	581.0	584.1
42.5°	526.1	526.1	538.1	552.4	557.9
45°	497.5	498.3	510.2	523.0	526.1
47.5°	468.1	468.1	478.4	490.4	493.5
50°	437.1	435.5	447.5	457.0	459.4
52.5°	405.3	402.9	412.5	420.4	423.6
55°	371.2	368.8	375.9	383.9	387.0
57.5°	335.4	332.2	340.2	347.3	348.9
60°	302.0	297.2	303.6	307.6	311.5
62.5°	268.6	263.1	267.8	270.2	273.4
65°	234.5	228.9	232.9	234.5	238.4
67.5°	201.9	197.9	198.7	201.1	202.7
70°	172.5	167.7	167.7	167.7	168.5
72.5°	145.4	138.3	137.5	138.3	138.3
75°	116.0	111.3	109.7	109.7	108.9
77.5°	93.0	86.6	85.8	84.2	82.7
80°	67.6	62.0	60.4	59.6	58.8
82.5°	46.9	42.1	40.5	38.9	36.6
85°	27.8	24.6	21.5	19.1	16.7
87.5°	10.3	9.5	7.9	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)