

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: P295907

Luminaire Tested: **24RLN-LD5-50-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295907  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-50-UNV-L82765-W2A1-U-6500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5217.0 lumens  
Efficiency: N/A  
Efficacy: 142.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

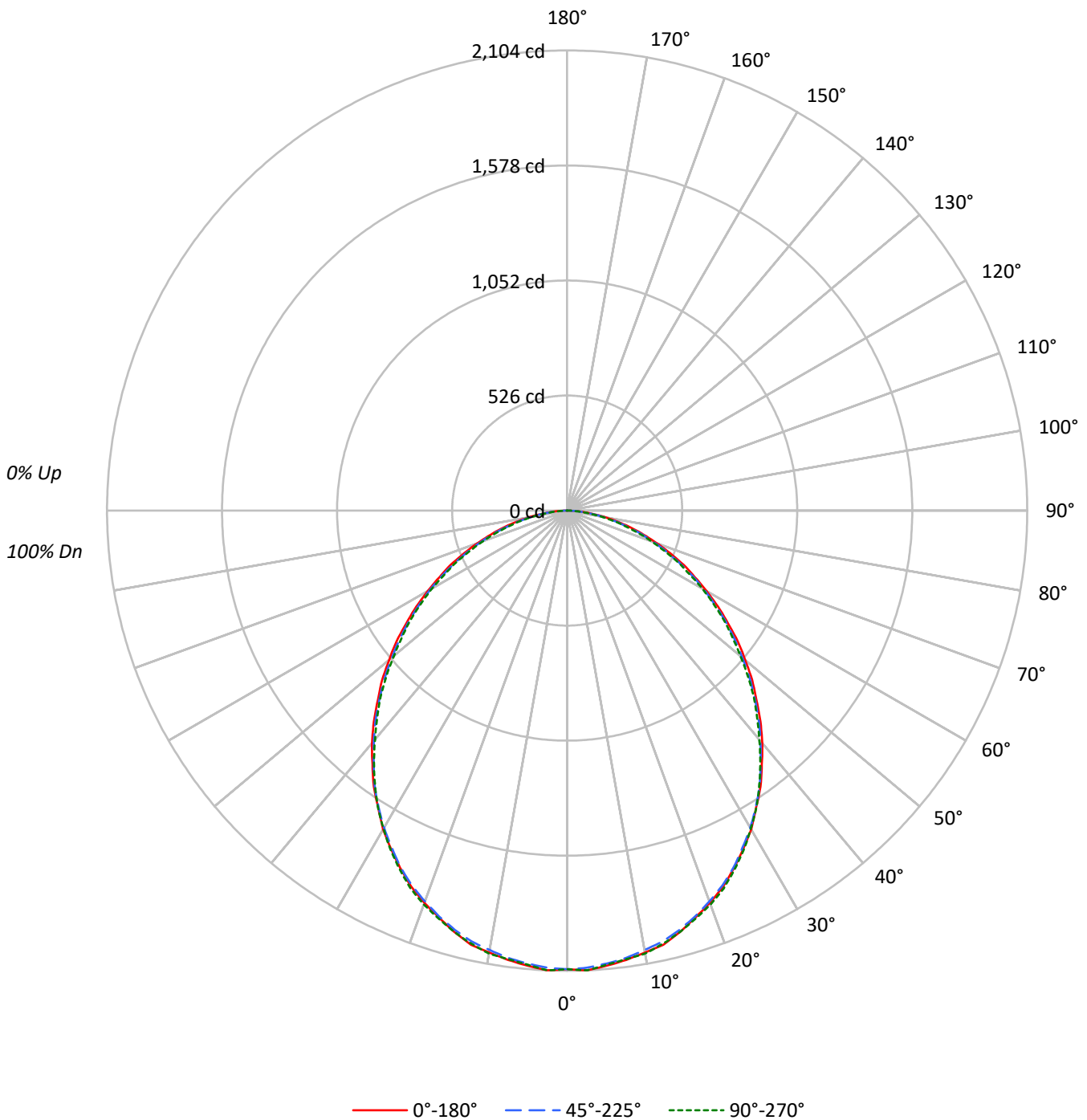
Input Watts (W): 36.549  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	74	72					72			
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61					61			
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52					52			
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46					46			
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40					40			
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36					36			
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

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

	0°	45°	90°
0°	2822	2822	2822
5°	2821	2807	2814
10°	2803	2787	2810
15°	2778	2764	2778
20°	2733	2723	2745
25°	2678	2674	2689
30°	2615	2602	2610
35°	2532	2521	2516
40°	2439	2415	2400
45°	2328	2306	2296
50°	2223	2188	2163
55°	2104	2073	2053
60°	1979	1943	1920
65°	1870	1800	1784
70°	1715	1649	1616
75°	1575	1478	1418
80°	1382	1291	1213
85°	1118	1039	883



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.9	3.8
10°-20°	560.9	10.8
20°-30°	829.7	15.9
30°-40°	957.6	18.4
40°-50°	935.3	17.9
50°-60°	789.8	15.1
60°-70°	562.6	10.8
70°-80°	304.6	5.8
80°-90°	78.6	1.5
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°	1588.6	30.4
0°-40°	2546.2	48.8
0°-60°	4271.3	81.9
0°-90°	5217.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5217.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2097	2097	2097	2097	2097	
5°	2089	2089	2079	2084	2084	198
15°	1994	1986	1984	1993	1994	562
25°	1804	1794	1801	1808	1811	831
35°	1542	1530	1535	1530	1532	962
45°	1224	1214	1212	1207	1207	946
55°	897	885	884	875	875	804
65°	587	576	566	559	560	579
75°	303	293	284	278	273	321
85°	72	71	67	59	57	85
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2097.1	2097.1	2097.1	2097.1	2097.1
2.5°	2103.8	2095.4	2092.0	2093.7	2103.8
5°	2088.7	2088.7	2078.6	2083.6	2083.6
7.5°	2071.8	2073.5	2063.4	2071.8	2068.5
10°	2051.6	2046.6	2039.9	2053.3	2056.7
12.5°	2033.1	2021.3	2018.0	2026.4	2028.1
15°	1994.4	1986.0	1984.3	1992.7	1994.4
17.5°	1950.7	1952.3	1945.6	1957.4	1955.7
20°	1908.6	1905.2	1901.9	1915.3	1917.0
22.5°	1861.5	1851.4	1854.7	1866.5	1869.9
25°	1804.2	1794.1	1800.9	1807.6	1811.0
27.5°	1743.6	1738.6	1736.9	1745.3	1748.7
30°	1683.1	1674.6	1674.6	1684.7	1679.7
32.5°	1609.0	1602.3	1605.6	1609.0	1610.7
35°	1541.7	1529.9	1534.9	1529.9	1531.6
37.5°	1462.6	1454.2	1452.5	1450.8	1450.8
40°	1388.5	1381.8	1375.1	1375.1	1366.6
42.5°	1307.7	1299.3	1296.0	1290.9	1285.9
45°	1223.6	1213.5	1211.8	1206.7	1206.7
47.5°	1147.8	1132.7	1131.0	1120.9	1120.9
50°	1062.0	1051.9	1045.2	1038.4	1033.4
52.5°	984.6	974.5	964.4	957.7	952.6
55°	897.1	885.3	883.6	875.2	875.2
57.5°	818.0	807.9	801.1	791.0	792.7
60°	735.5	725.4	722.0	713.6	713.6
62.5°	658.1	649.7	644.6	636.2	629.5
65°	587.4	575.6	565.5	558.8	560.5
67.5°	510.0	496.5	491.5	484.7	479.7
70°	435.9	427.5	419.1	410.7	410.7
72.5°	366.9	358.5	353.4	343.3	340.0
75°	302.9	292.9	284.4	277.7	272.7
77.5°	239.0	228.9	223.8	215.4	215.4
80°	178.4	171.7	166.6	163.3	156.5
82.5°	122.9	119.5	114.4	109.4	104.3
85°	72.4	70.7	67.3	58.9	57.2
87.5°	28.6	28.6	25.2	23.6	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)