

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: P295836

Luminaire Tested: **24RLN-LD5-50-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295836  
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-L83050-W2A1-U-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5290.0 lumens  
Efficiency: N/A  
Efficacy: 144.4 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

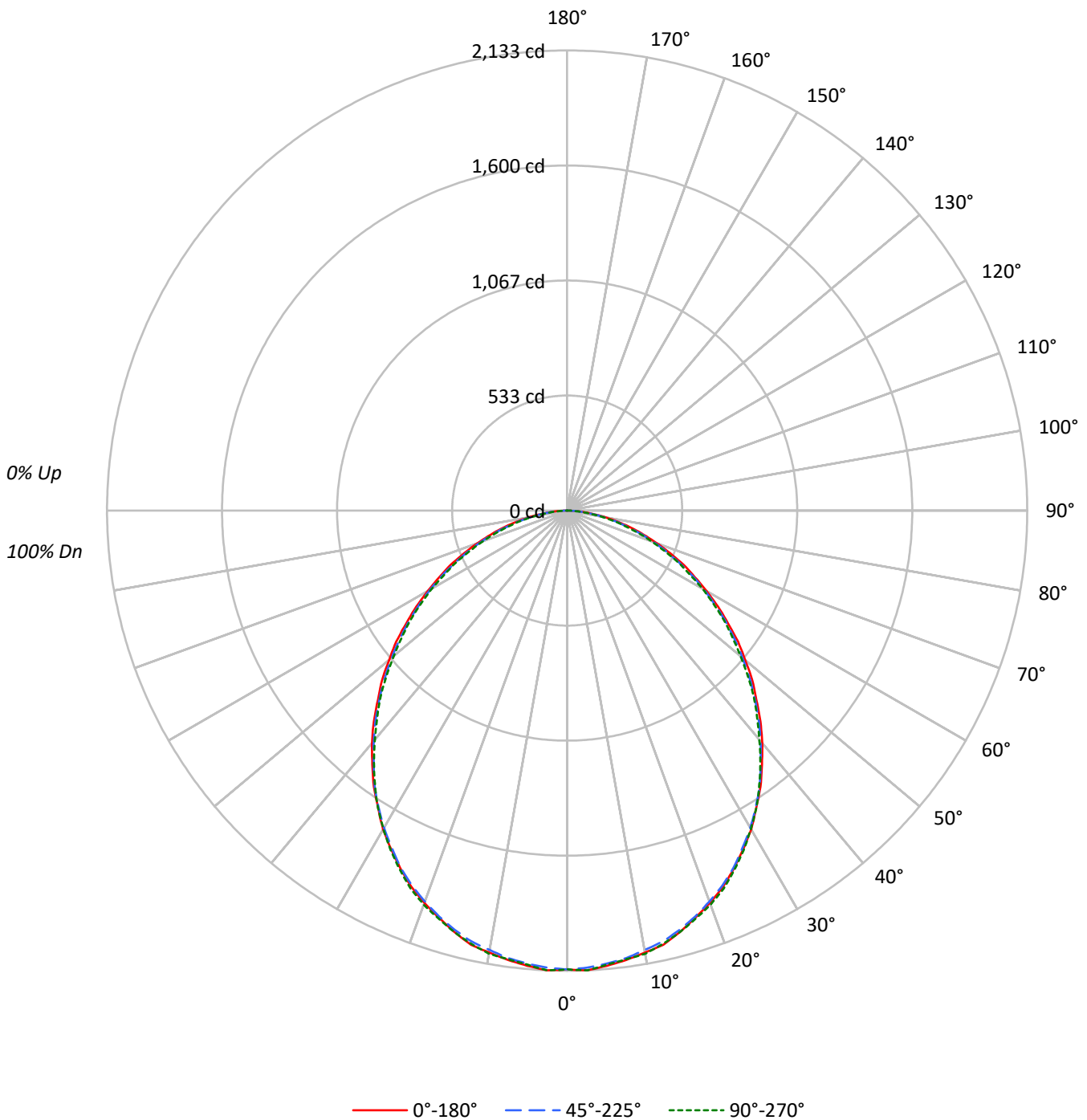
Input Watts (W): 36.642  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2861	2861	2861
5°	2860	2847	2854
10°	2842	2826	2849
15°	2817	2803	2817
20°	2771	2761	2783
25°	2716	2711	2726
30°	2651	2638	2646
35°	2568	2556	2551
40°	2473	2449	2434
45°	2361	2338	2328
50°	2254	2218	2193
55°	2134	2102	2082
60°	2007	1970	1947
65°	1896	1826	1809
70°	1739	1672	1638
75°	1597	1499	1437
80°	1402	1309	1230
85°	1133	1054	895



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.6	3.8
10°-20°	568.8	10.8
20°-30°	841.4	15.9
30°-40°	971.0	18.4
40°-50°	948.4	17.9
50°-60°	800.8	15.1
60°-70°	570.4	10.8
70°-80°	308.8	5.8
80°-90°	79.7	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°	1610.8	30.4
0°-40°	2581.8	48.8
0°-60°	4331.0	81.9
0°-90°	5290.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5290.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2126	2126	2126	2126	2126	
5°	2118	2118	2108	2113	2113	201
15°	2022	2014	2012	2021	2022	570
25°	1830	1819	1826	1833	1836	842
35°	1563	1551	1556	1551	1553	976
45°	1241	1230	1229	1224	1224	959
55°	910	898	896	887	887	816
65°	596	584	573	567	568	587
75°	307	297	288	282	276	325
85°	73	72	68	60	58	86
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2126.4	2126.4	2126.4	2126.4	2126.4
2.5°	2133.3	2124.7	2121.3	2123.0	2133.3
5°	2117.9	2117.9	2107.7	2112.8	2112.8
7.5°	2100.8	2102.5	2092.3	2100.8	2097.4
10°	2080.4	2075.2	2068.4	2082.1	2085.5
12.5°	2061.6	2049.6	2046.2	2054.8	2056.5
15°	2022.3	2013.8	2012.1	2020.6	2022.3
17.5°	1978.0	1979.7	1972.8	1984.8	1983.1
20°	1935.3	1931.9	1928.5	1942.1	1943.8
22.5°	1887.5	1877.3	1880.7	1892.6	1896.0
25°	1829.5	1819.2	1826.1	1832.9	1836.3
27.5°	1768.0	1762.9	1761.2	1769.7	1773.2
30°	1706.6	1698.1	1698.1	1708.3	1703.2
32.5°	1631.5	1624.7	1628.1	1631.5	1633.2
35°	1563.2	1551.3	1556.4	1551.3	1553.0
37.5°	1483.0	1474.5	1472.8	1471.1	1471.1
40°	1407.9	1401.1	1394.3	1394.3	1385.8
42.5°	1326.0	1317.5	1314.1	1309.0	1303.8
45°	1240.7	1230.5	1228.8	1223.6	1223.6
47.5°	1163.9	1148.5	1146.8	1136.6	1136.6
50°	1076.9	1066.6	1059.8	1053.0	1047.9
52.5°	998.4	988.1	977.9	971.1	965.9
55°	909.6	897.7	896.0	887.4	887.4
57.5°	829.4	819.2	812.3	802.1	803.8
60°	745.8	735.5	732.1	723.6	723.6
62.5°	667.3	658.7	653.6	645.1	638.3
65°	595.6	583.7	573.4	566.6	568.3
67.5°	517.1	503.4	498.3	491.5	486.4
70°	442.0	433.5	424.9	416.4	416.4
72.5°	372.0	363.5	358.4	348.1	344.7
75°	307.2	296.9	288.4	281.6	276.5
77.5°	242.3	232.1	227.0	218.4	218.4
80°	180.9	174.1	169.0	165.5	158.7
82.5°	124.6	121.2	116.0	110.9	105.8
85°	73.4	71.7	68.3	59.7	58.0
87.5°	29.0	29.0	25.6	23.9	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)