

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: P296281

Luminaire Tested: **24RLN-LD5-80-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296281  
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-LD5-80-RDP-UNV-L93050-W2A1-U-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6245.0 lumens  
Efficiency: N/A  
Efficacy: 98.8 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

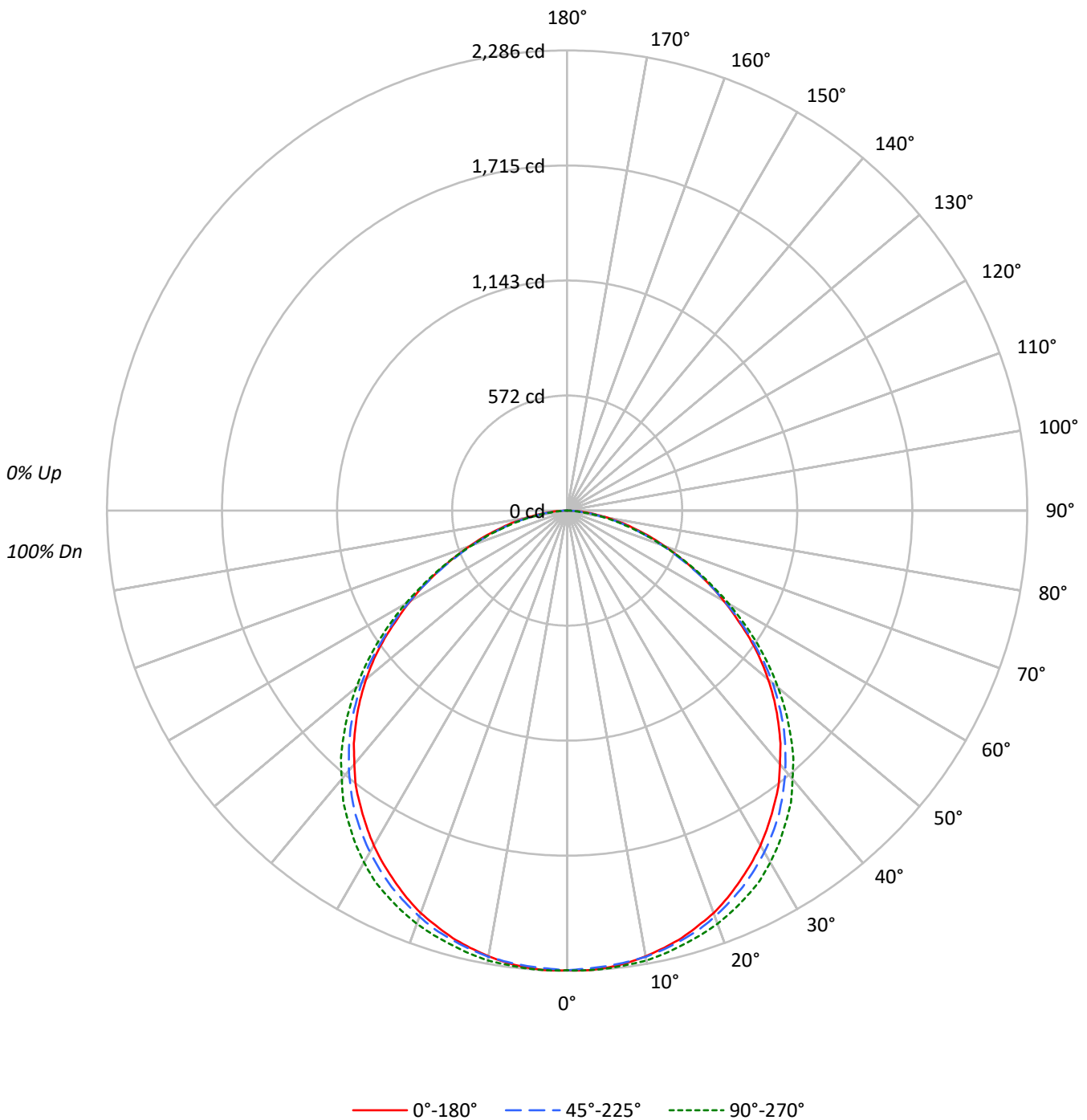
Input Watts (W): 63.24  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3073	3073	3073
5°	3078	3069	3085
10°	3072	3075	3101
15°	3062	3076	3109
20°	3046	3073	3128
25°	3014	3063	3137
30°	2985	3044	3136
35°	2942	3016	3109
40°	2888	2963	3058
45°	2822	2894	2984
50°	2727	2792	2866
55°	2595	2629	2707
60°	2423	2435	2499
65°	2225	2210	2263
70°	2022	1967	1976
75°	1798	1699	1687
80°	1561	1395	1358
85°	1280	988	769



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.6	3.5
10°-20°	624.4	10.0
20°-30°	953.1	15.3
30°-40°	1149.0	18.4
40°-50°	1171.7	18.8
50°-60°	1002.8	16.1
60°-70°	690.8	11.1
70°-80°	354.1	5.7
80°-90°	82.4	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°	1794.1	28.7
0°-40°	2943.1	47.1
0°-60°	5117.7	81.9
0°-90°	6245.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6245.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2284	2284	2284	2284	2284	
5°	2279	2274	2272	2279	2284	217
15°	2198	2196	2208	2225	2232	620
25°	2030	2037	2064	2099	2113	936
35°	1791	1798	1836	1876	1893	1120
45°	1483	1485	1521	1559	1568	1143
55°	1106	1099	1121	1144	1154	987
65°	699	682	694	699	711	695
75°	346	332	327	327	325	373
85°	83	73	64	57	50	96
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2283.8	2283.8	2283.8	2283.8	2283.8
2.5°	2286.2	2281.5	2276.7	2281.5	2286.2
5°	2279.1	2274.3	2272.0	2279.1	2283.8
7.5°	2267.2	2262.5	2262.5	2272.0	2276.7
10°	2248.3	2245.9	2250.7	2260.1	2269.6
12.5°	2224.6	2224.6	2231.7	2243.5	2253.0
15°	2198.5	2196.2	2208.0	2224.6	2231.7
17.5°	2163.0	2165.4	2181.9	2200.9	2210.4
20°	2127.5	2129.8	2146.4	2172.5	2184.3
22.5°	2082.4	2087.2	2106.1	2139.3	2151.2
25°	2030.3	2037.4	2063.5	2099.0	2113.2
27.5°	1978.2	1985.3	2013.7	2054.0	2073.0
30°	1921.3	1930.8	1959.3	2001.9	2018.5
32.5°	1857.4	1864.5	1900.0	1942.7	1959.3
35°	1791.0	1798.2	1836.1	1876.3	1892.9
37.5°	1724.7	1724.7	1762.6	1810.0	1826.6
40°	1644.2	1646.5	1686.8	1731.8	1741.3
42.5°	1568.3	1568.3	1603.9	1646.5	1663.1
45°	1483.1	1485.4	1521.0	1558.9	1568.3
47.5°	1395.4	1395.4	1426.2	1461.7	1471.2
50°	1303.0	1298.3	1333.8	1362.2	1369.3
52.5°	1208.2	1201.1	1229.6	1253.3	1262.7
55°	1106.4	1099.3	1120.6	1144.3	1153.8
57.5°	999.8	990.3	1014.0	1035.3	1040.0
60°	900.3	886.0	905.0	916.8	928.7
62.5°	800.8	784.2	798.4	805.5	815.0
65°	698.9	682.3	694.1	698.9	710.7
67.5°	601.8	589.9	592.3	599.4	604.1
70°	514.1	499.9	499.9	499.9	502.3
72.5°	433.5	412.2	409.9	412.2	412.2
75°	345.9	331.7	326.9	326.9	324.6
77.5°	277.2	258.2	255.9	251.1	246.4
80°	201.4	184.8	180.1	177.7	175.3
82.5°	139.8	125.6	120.8	116.1	109.0
85°	82.9	73.4	64.0	56.9	49.8
87.5°	30.8	28.4	23.7	21.3	21.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)