

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: P296114

Luminaire Tested: **24RLN-LD5-50-RDP-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296114  
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-LD5-50-RDP-UNV-L83050-W2A1-U-3500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4139.0 lumens  
Efficiency: N/A  
Efficacy: 118.4 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

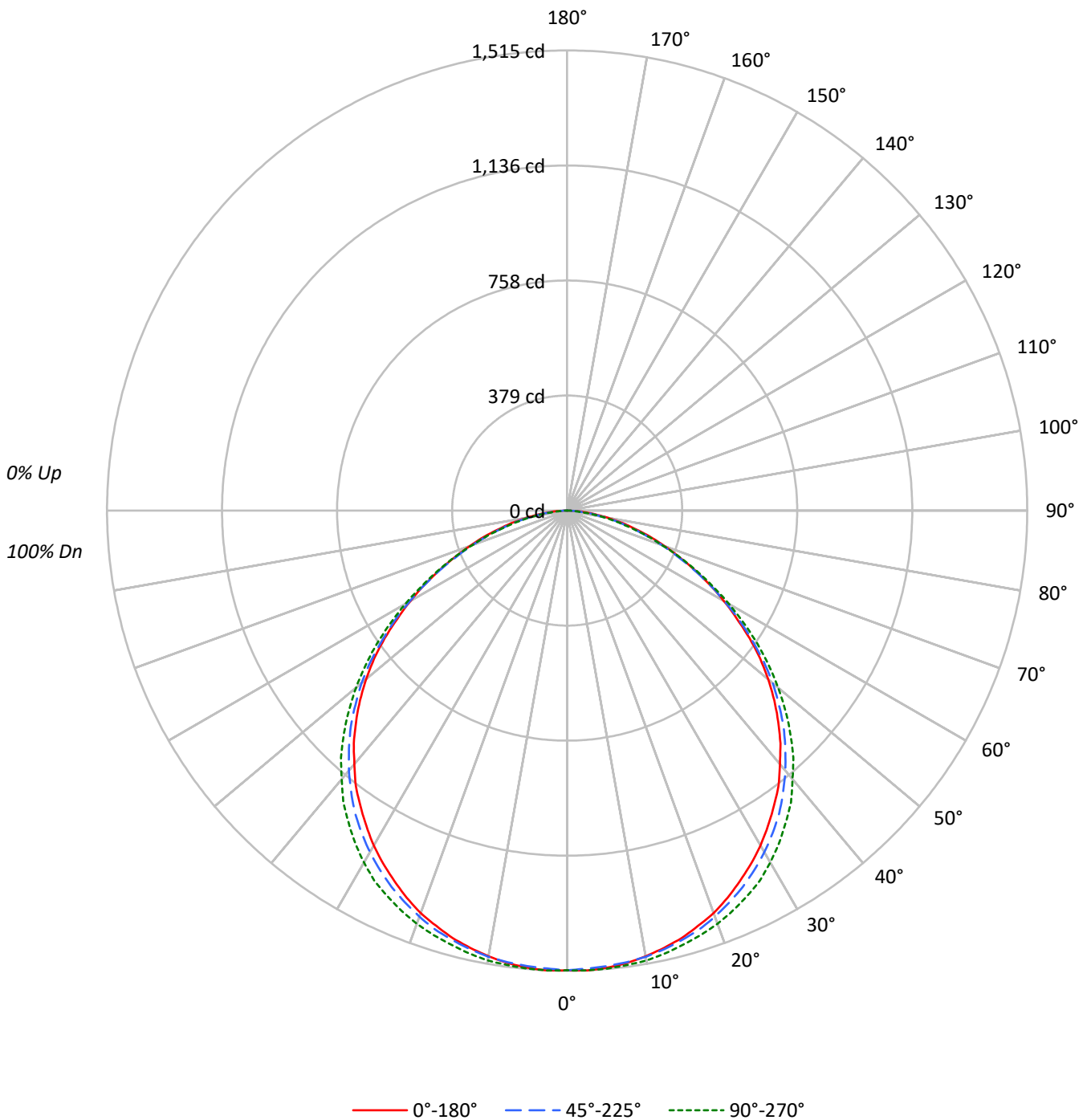
Input Watts (W): 34.968  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2037	2037	2037
5°	2040	2034	2044
10°	2036	2038	2055
15°	2030	2038	2060
20°	2019	2037	2073
25°	1998	2030	2079
30°	1978	2017	2078
35°	1950	1999	2061
40°	1914	1964	2027
45°	1870	1918	1978
50°	1808	1850	1900
55°	1720	1742	1794
60°	1606	1614	1656
65°	1475	1465	1500
70°	1340	1303	1310
75°	1192	1127	1118
80°	1034	924	900
85°	849	655	509



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.5	3.5
10°-20°	413.8	10.0
20°-30°	631.7	15.3
30°-40°	761.5	18.4
40°-50°	776.6	18.8
50°-60°	664.6	16.1
60°-70°	457.8	11.1
70°-80°	234.7	5.7
80°-90°	54.6	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°	1189.1	28.7
0°-40°	1950.6	47.1
0°-60°	3391.9	81.9
0°-90°	4139.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4139.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1514	1514	1514	1514	1514	
5°	1510	1507	1506	1510	1514	144
15°	1457	1456	1463	1474	1479	411
25°	1346	1350	1368	1391	1401	621
35°	1187	1192	1217	1244	1255	743
45°	983	984	1008	1033	1040	757
55°	733	729	743	758	765	654
65°	463	452	460	463	471	460
75°	229	220	217	217	215	247
85°	55	49	42	38	33	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1513.6	1513.6	1513.6	1513.6	1513.6
2.5°	1515.2	1512.1	1508.9	1512.1	1515.2
5°	1510.5	1507.4	1505.8	1510.5	1513.6
7.5°	1502.7	1499.5	1499.5	1505.8	1508.9
10°	1490.1	1488.5	1491.7	1497.9	1504.2
12.5°	1474.4	1474.4	1479.1	1487.0	1493.2
15°	1457.1	1455.6	1463.4	1474.4	1479.1
17.5°	1433.6	1435.1	1446.1	1458.7	1465.0
20°	1410.0	1411.6	1422.6	1439.8	1447.7
22.5°	1380.2	1383.3	1395.9	1417.9	1425.7
25°	1345.6	1350.3	1367.6	1391.2	1400.6
27.5°	1311.1	1315.8	1334.6	1361.3	1373.9
30°	1273.4	1279.7	1298.5	1326.8	1337.8
32.5°	1231.0	1235.7	1259.3	1287.5	1298.5
35°	1187.1	1191.8	1216.9	1243.6	1254.6
37.5°	1143.1	1143.1	1168.2	1199.6	1210.6
40°	1089.7	1091.3	1118.0	1147.8	1154.1
42.5°	1039.5	1039.5	1063.0	1091.3	1102.3
45°	982.9	984.5	1008.1	1033.2	1039.5
47.5°	924.8	924.8	945.2	968.8	975.1
50°	863.6	860.5	884.0	902.9	907.6
52.5°	800.8	796.1	814.9	830.6	836.9
55°	733.3	728.6	742.7	758.4	764.7
57.5°	662.6	656.3	672.0	686.2	689.3
60°	596.7	587.2	599.8	607.7	615.5
62.5°	530.7	519.7	529.1	533.9	540.1
65°	463.2	452.2	460.1	463.2	471.1
67.5°	398.8	391.0	392.5	397.3	400.4
70°	340.7	331.3	331.3	331.3	332.9
72.5°	287.3	273.2	271.6	273.2	273.2
75°	229.2	219.8	216.7	216.7	215.1
77.5°	183.7	171.1	169.6	166.4	163.3
80°	133.5	122.5	119.3	117.8	116.2
82.5°	92.6	83.2	80.1	76.9	72.2
85°	55.0	48.7	42.4	37.7	33.0
87.5°	20.4	18.8	15.7	14.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)