

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: P296117

Luminaire Tested: **24RLN-LD5-50-RDP-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296117  
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-5000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4387.0 lumens  
Efficiency: N/A  
Efficacy: 119.7 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

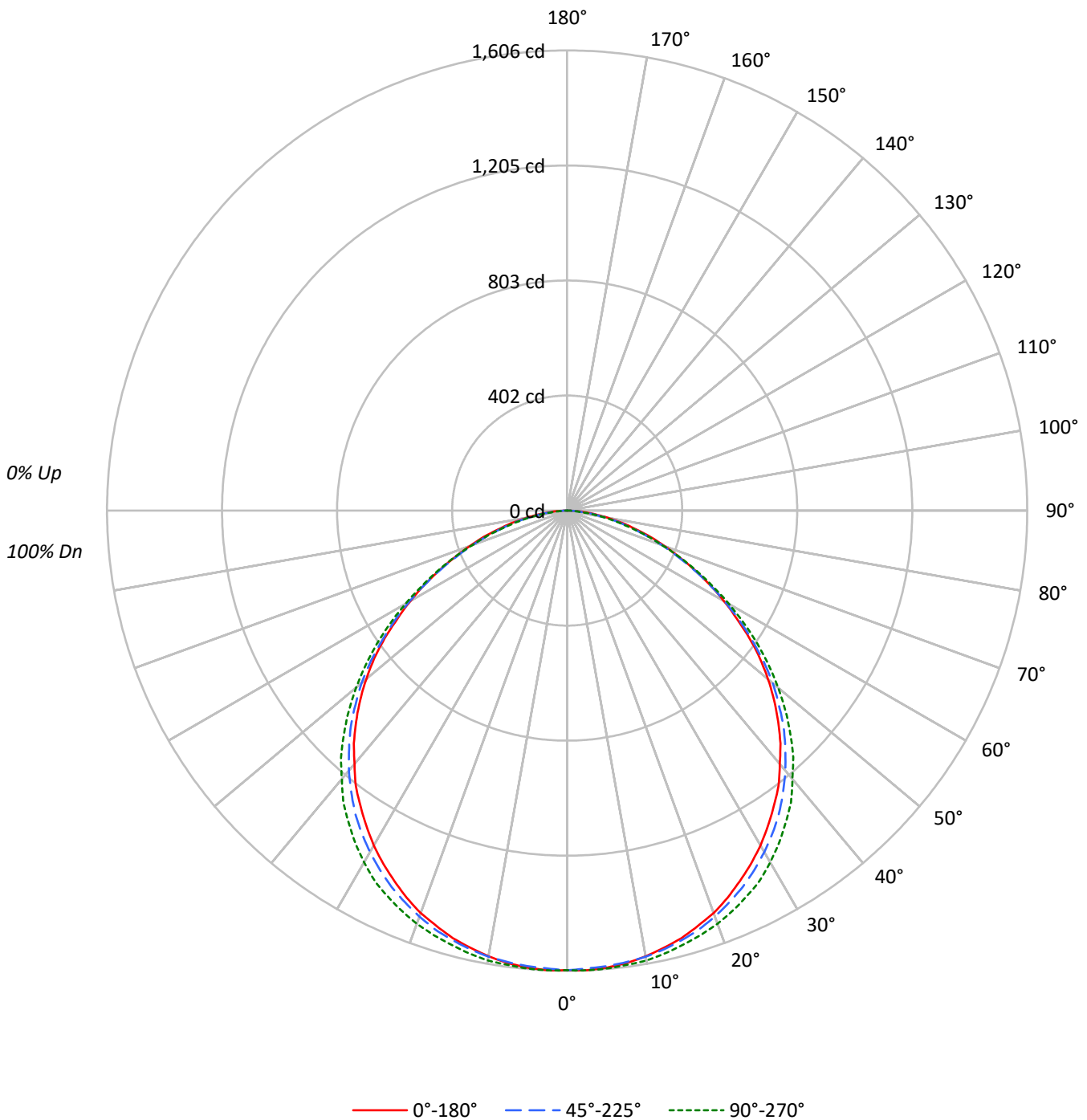
Input Watts (W): 36.642  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2159	2159	2159
5°	2162	2156	2167
10°	2158	2160	2178
15°	2151	2161	2184
20°	2140	2159	2197
25°	2117	2152	2204
30°	2097	2138	2203
35°	2067	2119	2184
40°	2029	2081	2148
45°	1982	2033	2096
50°	1916	1961	2013
55°	1823	1847	1901
60°	1702	1711	1756
65°	1563	1552	1590
70°	1421	1382	1388
75°	1263	1194	1185
80°	1096	980	955
85°	898	693	539



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.1	3.5
10°-20°	438.6	10.0
20°-30°	669.5	15.3
30°-40°	807.2	18.4
40°-50°	823.1	18.8
50°-60°	704.5	16.1
60°-70°	485.3	11.1
70°-80°	248.8	5.7
80°-90°	57.9	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°	1260.3	28.7
0°-40°	2067.5	47.1
0°-60°	3595.1	81.9
0°-90°	4387.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4387.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1604	1604	1604	1604	1604	
5°	1601	1598	1596	1601	1604	152
15°	1544	1543	1551	1563	1568	436
25°	1426	1431	1450	1474	1484	658
35°	1258	1263	1290	1318	1330	787
45°	1042	1044	1068	1095	1102	803
55°	777	772	787	804	810	693
65°	491	479	488	491	499	488
75°	243	233	230	230	228	262
85°	58	52	45	40	35	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1604.3	1604.3	1604.3	1604.3	1604.3
2.5°	1606.0	1602.7	1599.3	1602.7	1606.0
5°	1601.0	1597.7	1596.0	1601.0	1604.3
7.5°	1592.7	1589.4	1589.4	1596.0	1599.3
10°	1579.4	1577.7	1581.0	1587.7	1594.4
12.5°	1562.7	1562.7	1567.7	1576.1	1582.7
15°	1544.4	1542.8	1551.1	1562.7	1567.7
17.5°	1519.5	1521.1	1532.8	1546.1	1552.8
20°	1494.5	1496.2	1507.8	1526.1	1534.4
22.5°	1462.9	1466.2	1479.5	1502.8	1511.1
25°	1426.3	1431.3	1449.6	1474.5	1484.5
27.5°	1389.7	1394.6	1414.6	1442.9	1456.2
30°	1349.7	1356.4	1376.3	1406.3	1417.9
32.5°	1304.8	1309.8	1334.7	1364.7	1376.3
35°	1258.2	1263.2	1289.8	1318.1	1329.7
37.5°	1211.6	1211.6	1238.2	1271.5	1283.1
40°	1155.0	1156.7	1185.0	1216.6	1223.2
42.5°	1101.7	1101.7	1126.7	1156.7	1168.3
45°	1041.8	1043.5	1068.5	1095.1	1101.7
47.5°	980.2	980.2	1001.9	1026.8	1033.5
50°	915.3	912.0	937.0	956.9	961.9
52.5°	848.8	843.8	863.7	880.4	887.0
55°	777.2	772.2	787.2	803.8	810.5
57.5°	702.3	695.7	712.3	727.3	730.6
60°	632.4	622.4	635.7	644.1	652.4
62.5°	562.5	550.9	560.9	565.8	572.5
65°	491.0	479.3	487.6	491.0	499.3
67.5°	422.7	414.4	416.1	421.1	424.4
70°	361.1	351.2	351.2	351.2	352.8
72.5°	304.6	289.6	287.9	289.6	289.6
75°	243.0	233.0	229.7	229.7	228.0
77.5°	194.7	181.4	179.7	176.4	173.1
80°	141.5	129.8	126.5	124.8	123.2
82.5°	98.2	88.2	84.9	81.5	76.6
85°	58.2	51.6	44.9	39.9	34.9
87.5°	21.6	20.0	16.6	15.0	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)