

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: P296183

Luminaire Tested: **24RLN-LD5-50-RDP-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296183  
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-L82765-W2A1-U-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4204.0 lumens  
Efficiency: N/A  
Efficacy: 118.0 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

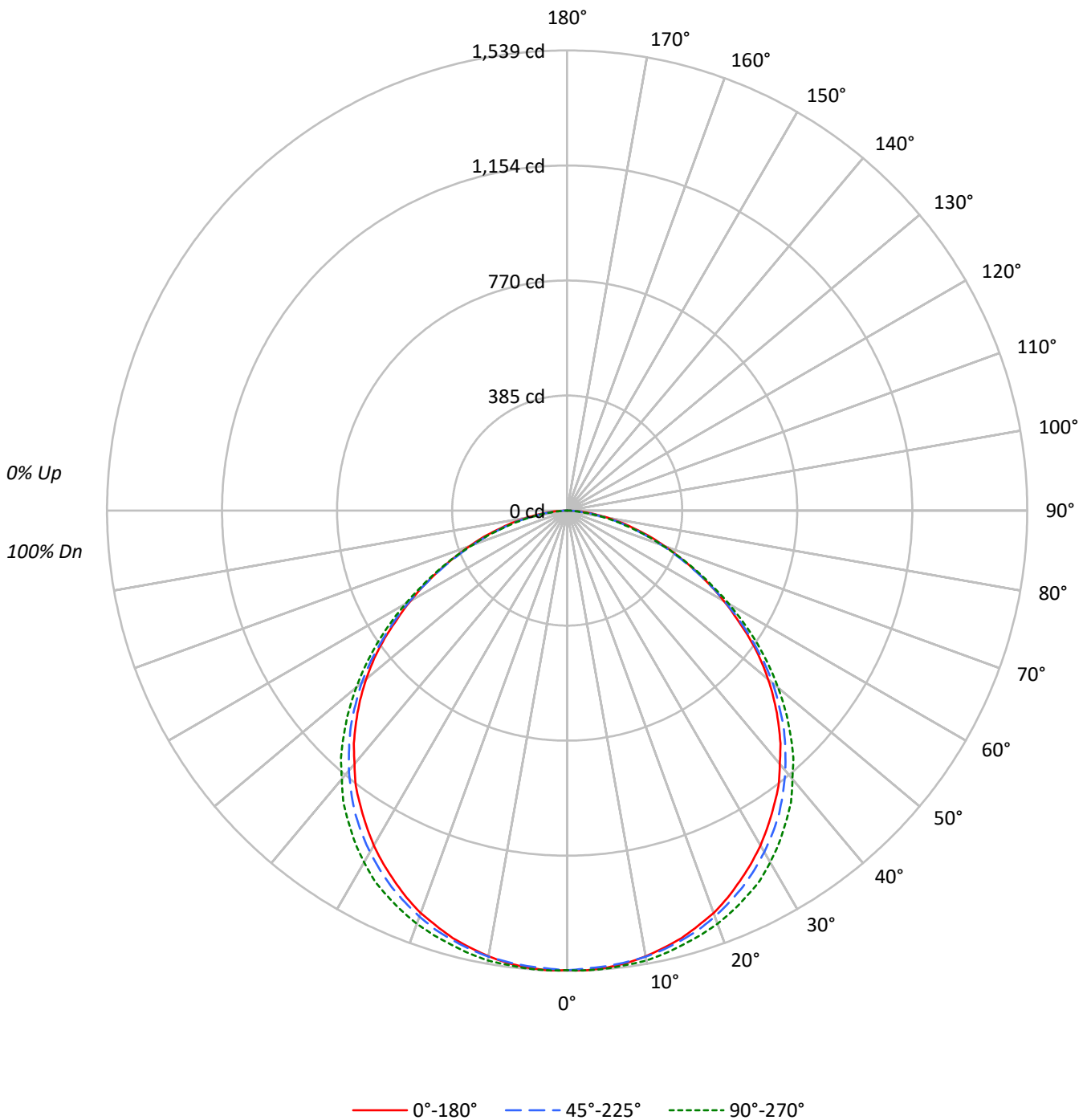
Input Watts (W): 35.619  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2069	2069	2069
5°	2072	2066	2076
10°	2068	2070	2087
15°	2062	2070	2093
20°	2051	2069	2105
25°	2029	2062	2112
30°	2009	2049	2111
35°	1980	2030	2093
40°	1944	1994	2059
45°	1900	1948	2009
50°	1836	1879	1930
55°	1747	1770	1822
60°	1631	1639	1682
65°	1498	1488	1523
70°	1362	1324	1330
75°	1210	1144	1136
80°	1051	939	914
85°	861	665	517



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.8	3.5
10°-20°	420.3	10.0
20°-30°	641.6	15.3
30°-40°	773.5	18.4
40°-50°	788.8	18.8
50°-60°	675.1	16.1
60°-70°	465.0	11.1
70°-80°	238.4	5.7
80°-90°	55.5	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°	1207.7	28.7
0°-40°	1981.3	47.1
0°-60°	3445.1	81.9
0°-90°	4204.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4204.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1534	1531	1529	1534	1537	146
15°	1480	1478	1486	1498	1502	417
25°	1367	1372	1389	1413	1423	630
35°	1206	1210	1236	1263	1274	754
45°	998	1000	1024	1049	1056	769
55°	745	740	754	770	777	664
65°	470	459	467	470	478	468
75°	233	223	220	220	218	251
85°	56	49	43	38	34	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1537.4	1537.4	1537.4	1537.4	1537.4
2.5°	1539.0	1535.8	1532.6	1535.8	1539.0
5°	1534.2	1531.0	1529.4	1534.2	1537.4
7.5°	1526.3	1523.1	1523.1	1529.4	1532.6
10°	1513.5	1511.9	1515.1	1521.5	1527.8
12.5°	1497.5	1497.5	1502.3	1510.3	1516.7
15°	1480.0	1478.4	1486.4	1497.5	1502.3
17.5°	1456.1	1457.7	1468.8	1481.6	1488.0
20°	1432.2	1433.8	1444.9	1462.5	1470.4
22.5°	1401.9	1405.0	1417.8	1440.1	1448.1
25°	1366.8	1371.6	1389.1	1413.0	1422.6
27.5°	1331.7	1336.5	1355.6	1382.7	1395.5
30°	1293.4	1299.8	1318.9	1347.6	1358.8
32.5°	1250.3	1255.1	1279.1	1307.8	1318.9
35°	1205.7	1210.5	1236.0	1263.1	1274.3
37.5°	1161.0	1161.0	1186.6	1218.5	1229.6
40°	1106.8	1108.4	1135.5	1165.8	1172.2
42.5°	1055.8	1055.8	1079.7	1108.4	1119.6
45°	998.4	1000.0	1023.9	1049.4	1055.8
47.5°	939.4	939.4	960.1	984.0	990.4
50°	877.2	874.0	897.9	917.0	921.8
52.5°	813.4	808.6	827.7	843.7	850.0
55°	744.8	740.0	754.4	770.3	776.7
57.5°	673.0	666.6	682.6	696.9	700.1
60°	606.0	596.5	609.2	617.2	625.2
62.5°	539.1	527.9	537.5	542.2	548.6
65°	470.5	459.3	467.3	470.5	478.4
67.5°	405.1	397.1	398.7	403.5	406.7
70°	346.1	336.5	336.5	336.5	338.1
72.5°	291.9	277.5	275.9	277.5	277.5
75°	232.8	223.3	220.1	220.1	218.5
77.5°	186.6	173.8	172.2	169.1	165.9
80°	135.6	124.4	121.2	119.6	118.0
82.5°	94.1	84.5	81.3	78.1	73.4
85°	55.8	49.4	43.1	38.3	33.5
87.5°	20.7	19.1	15.9	14.4	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)