

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: P296173

Luminaire Tested: **24RLN-LD5-45-RDP-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296173  
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-LD5-45-RDP-UNV-L82765-W2A1-U-4000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3764.0 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

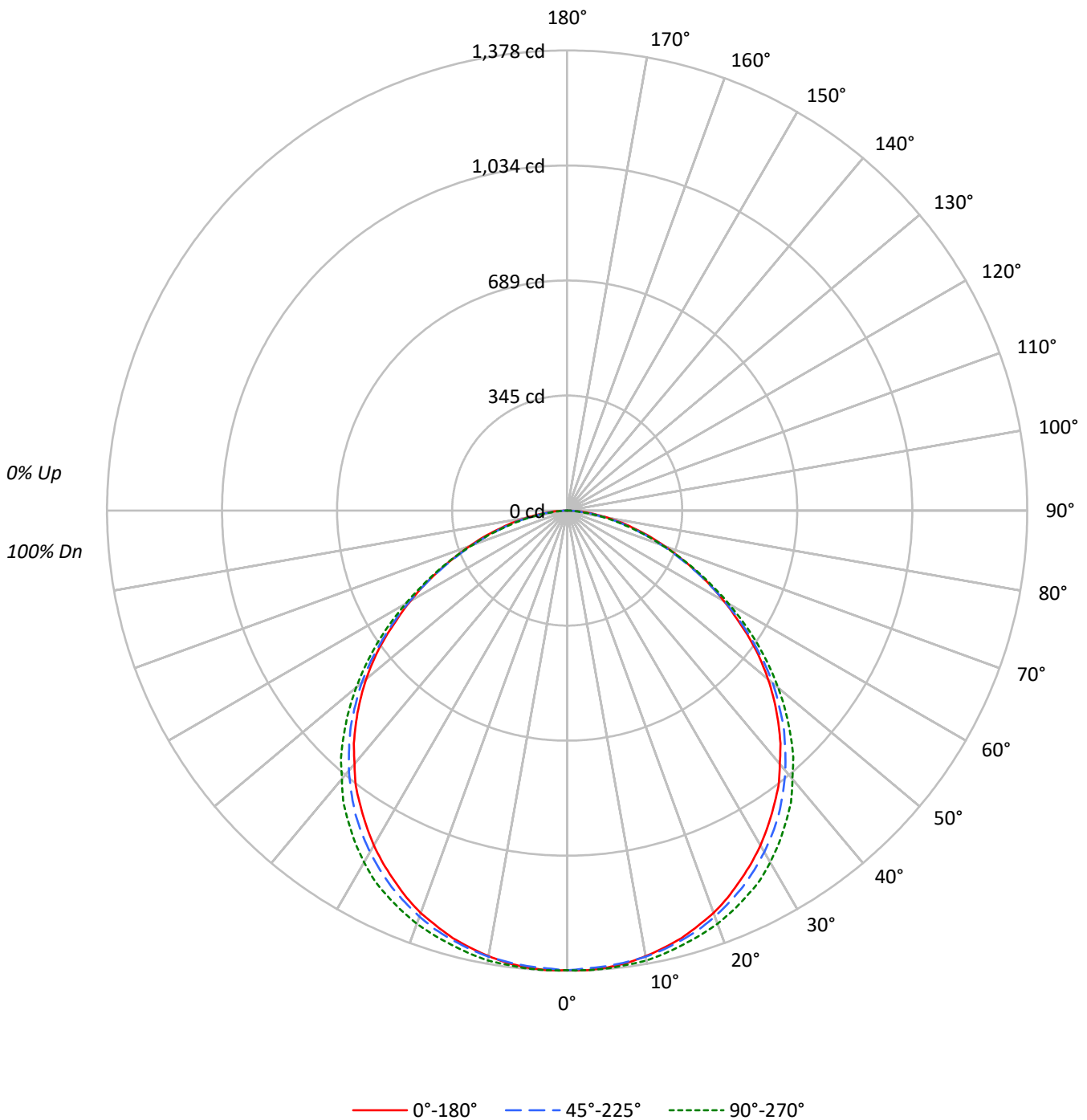
Input Watts (W): 31.899  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P296173

CATALOG NUMBER: 24RLN-LD5-45-RDP-UNV-L82765-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P296173

CATALOG NUMBER: 24RLN-LD5-45-RDP-UNV-L82765-W2A1-U-4000K

**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	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°	1852	1852	1852
5°	1855	1850	1859
10°	1851	1853	1869
15°	1846	1854	1874
20°	1836	1852	1885
25°	1817	1846	1891
30°	1799	1835	1890
35°	1773	1818	1874
40°	1741	1786	1843
45°	1701	1744	1799
50°	1644	1683	1728
55°	1564	1584	1631
60°	1460	1468	1506
65°	1341	1332	1364
70°	1219	1185	1191
75°	1084	1025	1017
80°	941	841	819
85°	772	596	463



TEST NUMBER: P296173

CATALOG NUMBER: 24RLN-LD5-45-RDP-UNV-L82765-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.5	3.5
10°-20°	376.3	10.0
20°-30°	574.5	15.3
30°-40°	692.5	18.4
40°-50°	706.2	18.8
50°-60°	604.4	16.1
60°-70°	416.3	11.1
70°-80°	213.4	5.7
80°-90°	49.7	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°	1081.3	28.7
0°-40°	1773.9	47.1
0°-60°	3084.5	81.9
0°-90°	3764.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3764.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1376	1376	1376	1376	1376	
5°	1374	1371	1369	1374	1376	131
15°	1325	1324	1331	1341	1345	374
25°	1224	1228	1244	1265	1274	564
35°	1080	1084	1107	1131	1141	675
45°	894	895	917	940	945	689
55°	667	663	675	690	695	595
65°	421	411	418	421	428	419
75°	208	200	197	197	196	225
85°	50	44	39	34	30	58
90°	0	0	0	0	0	



TEST NUMBER: P296173

CATALOG NUMBER: 24RLN-LD5-45-RDP-UNV-L82765-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1376.5	1376.5	1376.5	1376.5	1376.5
2.5°	1377.9	1375.1	1372.2	1375.1	1377.9
5°	1373.7	1370.8	1369.4	1373.7	1376.5
7.5°	1366.5	1363.7	1363.7	1369.4	1372.2
10°	1355.1	1353.7	1356.5	1362.2	1367.9
12.5°	1340.8	1340.8	1345.1	1352.2	1357.9
15°	1325.1	1323.7	1330.8	1340.8	1345.1
17.5°	1303.7	1305.1	1315.1	1326.5	1332.2
20°	1282.3	1283.7	1293.7	1309.4	1316.5
22.5°	1255.1	1258.0	1269.4	1289.4	1296.5
25°	1223.7	1228.0	1243.7	1265.1	1273.7
27.5°	1192.3	1196.6	1213.7	1238.0	1249.4
30°	1158.0	1163.7	1180.9	1206.6	1216.6
32.5°	1119.5	1123.8	1145.2	1170.9	1180.9
35°	1079.5	1083.8	1106.6	1130.9	1140.9
37.5°	1039.5	1039.5	1062.4	1090.9	1100.9
40°	991.0	992.4	1016.7	1043.8	1049.5
42.5°	945.3	945.3	966.7	992.4	1002.4
45°	893.9	895.3	916.7	939.6	945.3
47.5°	841.0	841.0	859.6	881.0	886.7
50°	785.4	782.5	803.9	821.1	825.3
52.5°	728.2	724.0	741.1	755.4	761.1
55°	666.8	662.6	675.4	689.7	695.4
57.5°	602.6	596.9	611.1	624.0	626.9
60°	542.6	534.0	545.5	552.6	559.7
62.5°	482.6	472.6	481.2	485.5	491.2
65°	421.2	411.2	418.4	421.2	428.4
67.5°	362.7	355.6	357.0	361.3	364.1
70°	309.9	301.3	301.3	301.3	302.7
72.5°	261.3	248.5	247.0	248.5	248.5
75°	208.5	199.9	197.1	197.1	195.6
77.5°	167.1	155.6	154.2	151.4	148.5
80°	121.4	111.4	108.5	107.1	105.7
82.5°	84.2	75.7	72.8	70.0	65.7
85°	50.0	44.3	38.6	34.3	30.0
87.5°	18.6	17.1	14.3	12.9	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)