

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: P296317

Luminaire Tested: **24RLN-LD5-45-RDP-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296317  
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-L92765-W2A1-U-5700K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3554.0 lumens  
Efficiency: N/A  
Efficacy: 109.5 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

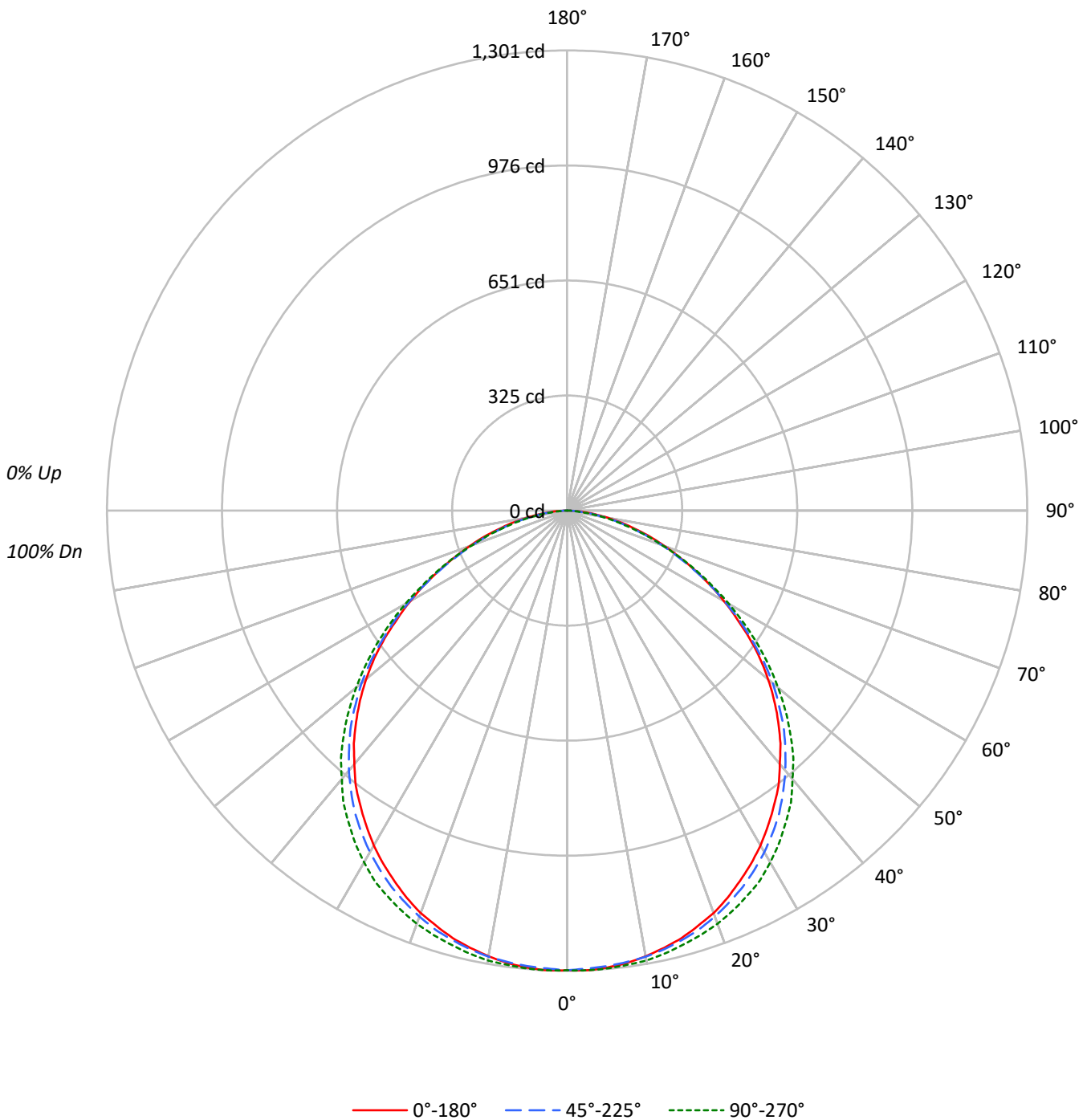
Input Watts (W): 32.457  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1749	1749	1749
5°	1752	1746	1755
10°	1748	1750	1765
15°	1743	1750	1769
20°	1734	1749	1780
25°	1715	1743	1785
30°	1699	1732	1785
35°	1674	1716	1770
40°	1643	1686	1741
45°	1606	1647	1698
50°	1552	1589	1631
55°	1477	1496	1540
60°	1379	1386	1422
65°	1266	1258	1288
70°	1151	1119	1124
75°	1023	967	960
80°	888	794	773
85°	729	562	437



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.3	3.5
10°-20°	355.3	10.0
20°-30°	542.4	15.3
30°-40°	653.9	18.4
40°-50°	666.8	18.8
50°-60°	570.7	16.1
60°-70°	393.1	11.1
70°-80°	201.5	5.7
80°-90°	46.9	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°	1021.0	28.7
0°-40°	1674.9	47.1
0°-60°	2912.4	81.9
0°-90°	3554.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3554.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1300	1300	1300	1300	1300	
5°	1297	1294	1293	1297	1300	123
15°	1251	1250	1257	1266	1270	353
25°	1155	1160	1174	1194	1203	533
35°	1019	1023	1045	1068	1077	638
45°	844	845	866	887	892	650
55°	630	626	638	651	657	562
65°	398	388	395	398	404	395
75°	197	189	186	186	185	212
85°	47	42	36	32	28	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1299.7	1299.7	1299.7	1299.7	1299.7
2.5°	1301.1	1298.4	1295.7	1298.4	1301.1
5°	1297.0	1294.3	1293.0	1297.0	1299.7
7.5°	1290.3	1287.6	1287.6	1293.0	1295.7
10°	1279.5	1278.1	1280.8	1286.2	1291.6
12.5°	1266.0	1266.0	1270.0	1276.8	1282.2
15°	1251.2	1249.8	1256.6	1266.0	1270.0
17.5°	1231.0	1232.3	1241.7	1252.5	1257.9
20°	1210.7	1212.1	1221.5	1236.3	1243.1
22.5°	1185.1	1187.8	1198.6	1217.5	1224.2
25°	1155.4	1159.5	1174.3	1194.5	1202.6
27.5°	1125.8	1129.8	1146.0	1168.9	1179.7
30°	1093.4	1098.8	1115.0	1139.3	1148.7
32.5°	1057.0	1061.1	1081.3	1105.6	1115.0
35°	1019.3	1023.3	1044.9	1067.8	1077.3
37.5°	981.5	981.5	1003.1	1030.1	1039.5
40°	935.7	937.0	960.0	985.6	991.0
42.5°	892.5	892.5	912.8	937.0	946.5
45°	844.0	845.4	865.6	887.1	892.5
47.5°	794.1	794.1	811.6	831.9	837.3
50°	741.5	738.8	759.1	775.2	779.3
52.5°	687.6	683.6	699.7	713.2	718.6
55°	629.6	625.6	637.7	651.2	656.6
57.5°	569.0	563.6	577.1	589.2	591.9
60°	512.3	504.2	515.0	521.8	528.5
62.5°	455.7	446.3	454.4	458.4	463.8
65°	397.7	388.3	395.0	397.7	404.5
67.5°	342.5	335.7	337.1	341.1	343.8
70°	292.6	284.5	284.5	284.5	285.8
72.5°	246.7	234.6	233.2	234.6	234.6
75°	196.8	188.8	186.1	186.1	184.7
77.5°	157.7	147.0	145.6	142.9	140.2
80°	114.6	105.2	102.5	101.1	99.8
82.5°	79.5	71.5	68.8	66.1	62.0
85°	47.2	41.8	36.4	32.4	28.3
87.5°	17.5	16.2	13.5	12.1	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)