

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: P296171

Luminaire Tested: **24RLN-LD5-45-RDP-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296171  
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-3000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3560.0 lumens  
Efficiency: N/A  
Efficacy: 113.6 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

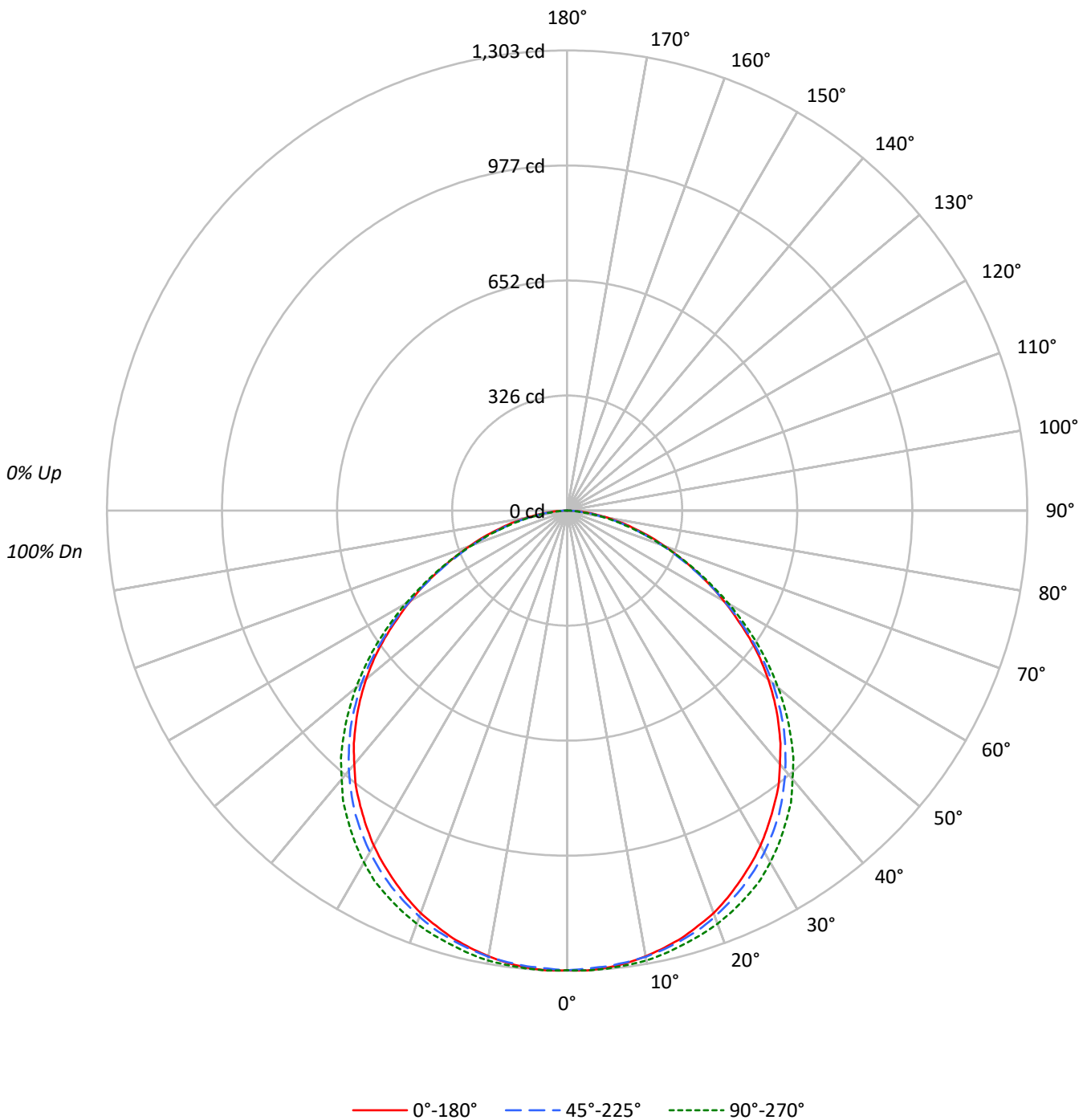
Input Watts (W): 31.341  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1752	1752	1752
5°	1755	1749	1758
10°	1751	1753	1768
15°	1746	1753	1772
20°	1737	1752	1783
25°	1718	1746	1788
30°	1702	1735	1788
35°	1677	1719	1772
40°	1646	1689	1743
45°	1609	1650	1701
50°	1555	1591	1634
55°	1479	1498	1543
60°	1381	1388	1425
65°	1268	1260	1290
70°	1153	1121	1126
75°	1025	969	962
80°	890	795	774
85°	730	563	438



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.5	3.5
10°-20°	355.9	10.0
20°-30°	543.3	15.3
30°-40°	655.0	18.4
40°-50°	668.0	18.8
50°-60°	571.7	16.1
60°-70°	393.8	11.1
70°-80°	201.9	5.7
80°-90°	47.0	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°	1022.7	28.7
0°-40°	1677.8	47.1
0°-60°	2917.4	81.9
0°-90°	3560.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3560.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1302	1302	1302	1302	1302	
5°	1299	1296	1295	1299	1302	123
15°	1253	1252	1259	1268	1272	353
25°	1157	1162	1176	1197	1205	534
35°	1021	1025	1047	1070	1079	639
45°	845	847	867	889	894	651
55°	631	627	639	652	658	563
65°	398	389	396	398	405	396
75°	197	189	186	186	185	213
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°	1301.9	1301.9	1301.9	1301.9	1301.9
2.5°	1303.3	1300.6	1297.9	1300.6	1303.3
5°	1299.2	1296.5	1295.2	1299.2	1301.9
7.5°	1292.5	1289.8	1289.8	1295.2	1297.9
10°	1281.6	1280.3	1283.0	1288.4	1293.8
12.5°	1268.1	1268.1	1272.2	1278.9	1284.3
15°	1253.3	1251.9	1258.7	1268.1	1272.2
17.5°	1233.0	1234.4	1243.8	1254.6	1260.0
20°	1212.8	1214.1	1223.6	1238.4	1245.2
22.5°	1187.1	1189.8	1200.6	1219.5	1226.3
25°	1157.4	1161.5	1176.3	1196.6	1204.7
27.5°	1127.7	1131.7	1147.9	1170.9	1181.7
30°	1095.3	1100.7	1116.9	1141.2	1150.6
32.5°	1058.8	1062.9	1083.1	1107.4	1116.9
35°	1021.0	1025.0	1046.7	1069.6	1079.1
37.5°	983.2	983.2	1004.8	1031.8	1041.3
40°	937.3	938.6	961.6	987.2	992.6
42.5°	894.0	894.0	914.3	938.6	948.1
45°	845.4	846.8	867.0	888.6	894.0
47.5°	795.5	795.5	813.0	833.3	838.7
50°	742.8	740.1	760.3	776.6	780.6
52.5°	688.8	684.7	700.9	714.4	719.8
55°	630.7	626.6	638.8	652.3	657.7
57.5°	569.9	564.5	578.0	590.2	592.9
60°	513.2	505.1	515.9	522.7	529.4
62.5°	456.5	447.0	455.1	459.2	464.6
65°	398.4	389.0	395.7	398.4	405.2
67.5°	343.0	336.3	337.6	341.7	344.4
70°	293.1	285.0	285.0	285.0	286.3
72.5°	247.1	235.0	233.6	235.0	235.0
75°	197.2	189.1	186.4	186.4	185.0
77.5°	158.0	147.2	145.9	143.2	140.5
80°	114.8	105.3	102.6	101.3	99.9
82.5°	79.7	71.6	68.9	66.2	62.1
85°	47.3	41.9	36.5	32.4	28.4
87.5°	17.6	16.2	13.5	12.2	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)