

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: P296108

Luminaire Tested: **24RLN-LD5-45-RDP-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296108  
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-L83050-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: 3563.0 lumens  
Efficiency: N/A  
Efficacy: 113.3 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

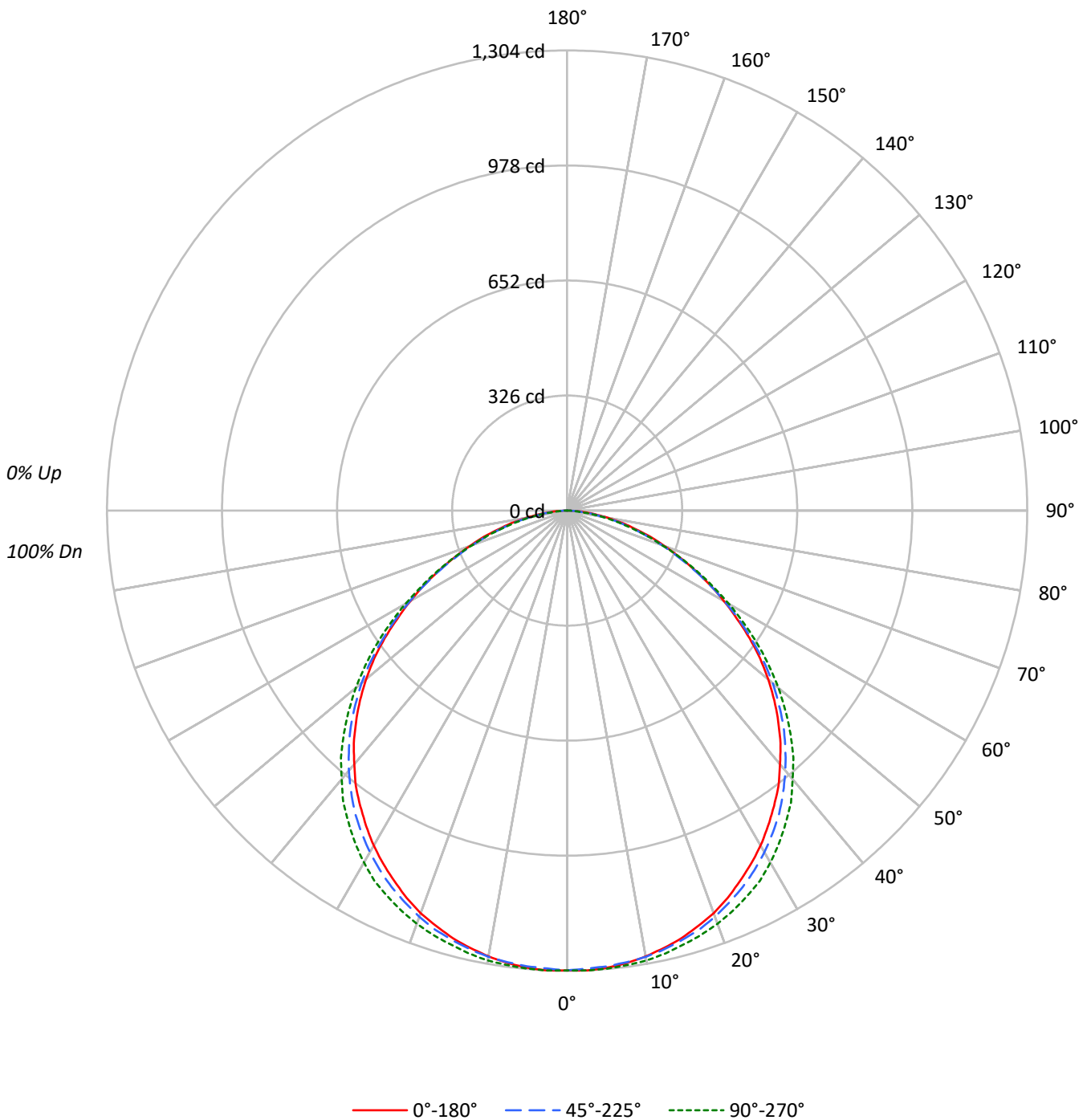
Input Watts (W): 31.434  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1753	1753	1753
5°	1756	1751	1760
10°	1752	1754	1769
15°	1747	1755	1774
20°	1738	1753	1784
25°	1720	1748	1790
30°	1703	1737	1789
35°	1679	1721	1774
40°	1648	1690	1745
45°	1610	1651	1703
50°	1556	1593	1635
55°	1481	1500	1544
60°	1382	1389	1426
65°	1269	1261	1291
70°	1154	1122	1127
75°	1026	970	963
80°	890	796	775
85°	730	563	438



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.6	3.5
10°-20°	356.2	10.0
20°-30°	543.8	15.3
30°-40°	655.6	18.4
40°-50°	668.5	18.8
50°-60°	572.1	16.1
60°-70°	394.1	11.1
70°-80°	202.0	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°	1023.6	28.7
0°-40°	1679.2	47.1
0°-60°	2919.8	81.9
0°-90°	3563.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3563.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1303	1303	1303	1303	1303	
5°	1300	1298	1296	1300	1303	124
15°	1254	1253	1260	1269	1273	354
25°	1158	1162	1177	1198	1206	534
35°	1022	1026	1048	1070	1080	639
45°	846	848	868	889	895	652
55°	631	627	639	653	658	563
65°	399	389	396	399	406	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°	1303.0	1303.0	1303.0	1303.0	1303.0
2.5°	1304.4	1301.7	1298.9	1301.7	1304.4
5°	1300.3	1297.6	1296.2	1300.3	1303.0
7.5°	1293.5	1290.8	1290.8	1296.2	1298.9
10°	1282.7	1281.4	1284.1	1289.5	1294.9
12.5°	1269.2	1269.2	1273.3	1280.0	1285.4
15°	1254.3	1253.0	1259.7	1269.2	1273.3
17.5°	1234.1	1235.4	1244.9	1255.7	1261.1
20°	1213.8	1215.1	1224.6	1239.5	1246.2
22.5°	1188.1	1190.8	1201.6	1220.6	1227.3
25°	1158.4	1162.4	1177.3	1197.6	1205.7
27.5°	1128.6	1132.7	1148.9	1171.9	1182.7
30°	1096.2	1101.6	1117.8	1142.2	1151.6
32.5°	1059.7	1063.8	1084.0	1108.4	1117.8
35°	1021.9	1025.9	1047.5	1070.5	1080.0
37.5°	984.0	984.0	1005.6	1032.7	1042.1
40°	938.1	939.4	962.4	988.1	993.5
42.5°	894.8	894.8	915.1	939.4	948.9
45°	846.1	847.5	867.8	889.4	894.8
47.5°	796.1	796.1	813.7	834.0	839.4
50°	743.4	740.7	761.0	777.2	781.3
52.5°	689.3	685.3	701.5	715.0	720.4
55°	631.2	627.2	639.3	652.9	658.3
57.5°	570.4	565.0	578.5	590.7	593.4
60°	513.6	505.5	516.3	523.1	529.9
62.5°	456.9	447.4	455.5	459.6	465.0
65°	398.7	389.3	396.0	398.7	405.5
67.5°	343.3	336.6	337.9	342.0	344.7
70°	293.3	285.2	285.2	285.2	286.6
72.5°	247.4	235.2	233.8	235.2	235.2
75°	197.3	189.2	186.5	186.5	185.2
77.5°	158.1	147.3	146.0	143.3	140.6
80°	114.9	105.4	102.7	101.4	100.0
82.5°	79.7	71.6	68.9	66.2	62.2
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)