

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: P295968

Luminaire Tested: **24RLN-LD5-45-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295968  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-45-UNV-L93050-W2A1-U-3000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3538.0 lumens  
Efficiency: N/A  
Efficacy: 109.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

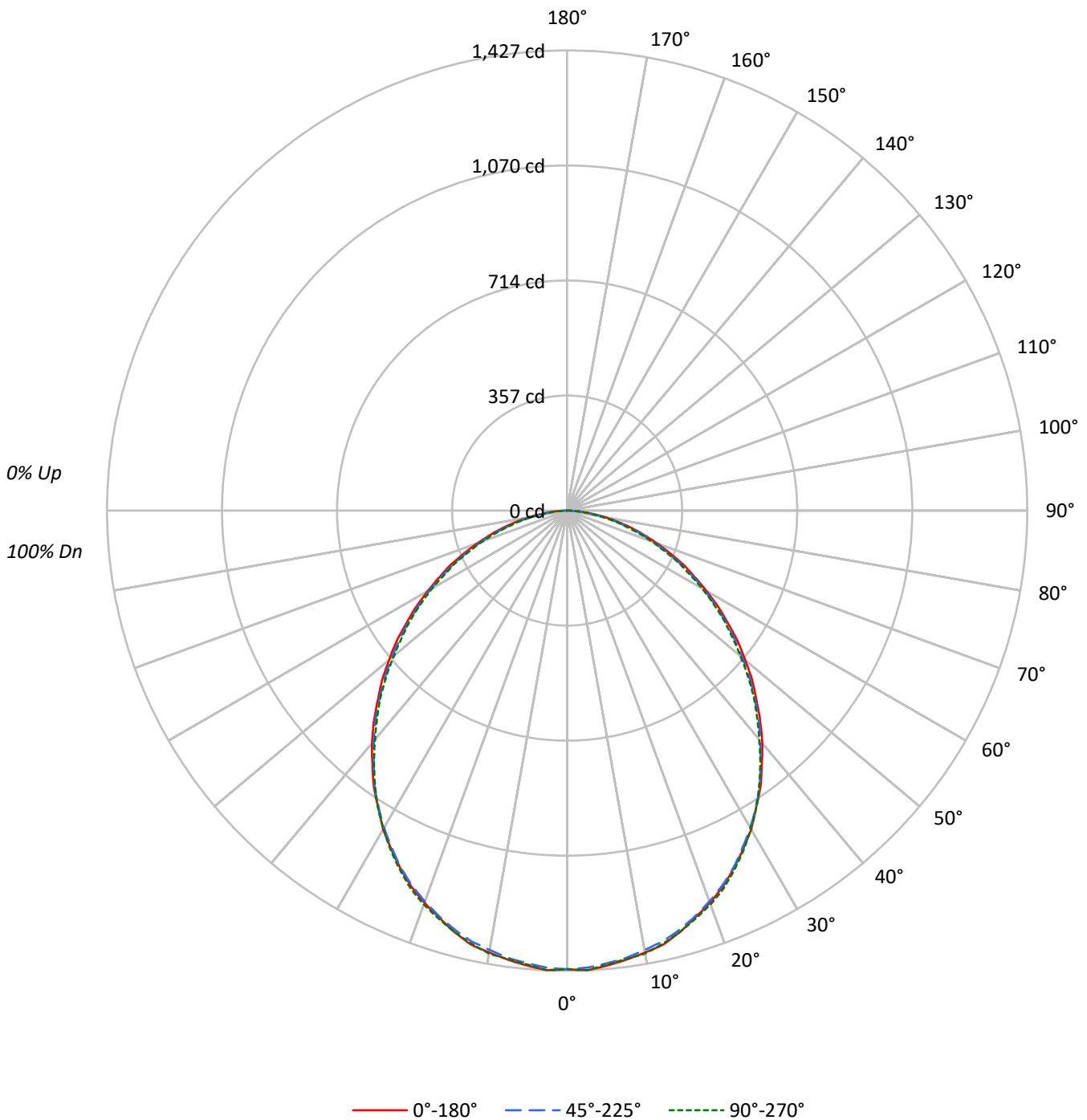
Input Watts (W): 32.271  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1914	1914	1914
5°	1913	1904	1908
10°	1901	1890	1906
15°	1884	1874	1884
20°	1853	1847	1861
25°	1817	1813	1823
30°	1773	1764	1770
35°	1717	1710	1706
40°	1654	1638	1628
45°	1579	1564	1557
50°	1508	1484	1467
55°	1427	1406	1392
60°	1342	1318	1302
65°	1268	1221	1210
70°	1163	1118	1096
75°	1068	1003	961
80°	938	876	822
85°	758	706	599



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.2	3.8
10°-20°	380.4	10.8
20°-30°	562.7	15.9
30°-40°	649.4	18.4
40°-50°	634.3	17.9
50°-60°	535.6	15.1
60°-70°	381.5	10.8
70°-80°	206.6	5.8
80°-90°	53.3	1.5
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°	1077.3	30.4
0°-40°	1726.7	48.8
0°-60°	2896.6	81.9
0°-90°	3538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3538.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1422	1422	1422	1422	1422	
5°	1416	1416	1410	1413	1413	134
15°	1353	1347	1346	1351	1353	381
25°	1224	1217	1221	1226	1228	563
35°	1046	1038	1041	1038	1039	652
45°	830	823	822	818	818	642
55°	608	600	599	594	594	545
65°	398	390	384	379	380	393
75°	206	199	193	188	185	217
85°	49	48	46	40	39	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1422.2	1422.2	1422.2	1422.2	1422.2
2.5°	1426.7	1421.0	1418.8	1419.9	1426.7
5°	1416.5	1416.5	1409.6	1413.0	1413.0
7.5°	1405.1	1406.2	1399.3	1405.1	1402.8
10°	1391.4	1387.9	1383.4	1392.5	1394.8
12.5°	1378.8	1370.8	1368.5	1374.2	1375.4
15°	1352.6	1346.8	1345.7	1351.4	1352.6
17.5°	1322.9	1324.0	1319.4	1327.4	1326.3
20°	1294.3	1292.1	1289.8	1298.9	1300.0
22.5°	1262.4	1255.5	1257.8	1265.8	1268.1
25°	1223.6	1216.7	1221.3	1225.9	1228.1
27.5°	1182.5	1179.1	1177.9	1183.6	1185.9
30°	1141.4	1135.7	1135.7	1142.5	1139.1
32.5°	1091.2	1086.6	1088.9	1091.2	1092.3
35°	1045.5	1037.5	1041.0	1037.5	1038.7
37.5°	991.9	986.2	985.0	983.9	983.9
40°	941.6	937.1	932.5	932.5	926.8
42.5°	886.9	881.2	878.9	875.4	872.0
45°	829.8	822.9	821.8	818.4	818.4
47.5°	778.4	768.2	767.0	760.2	760.2
50°	720.2	713.4	708.8	704.2	700.8
52.5°	667.7	660.9	654.0	649.5	646.0
55°	608.4	600.4	599.2	593.5	593.5
57.5°	554.7	547.9	543.3	536.5	537.6
60°	498.8	491.9	489.7	484.0	484.0
62.5°	446.3	440.6	437.2	431.4	426.9
65°	398.3	390.4	383.5	378.9	380.1
67.5°	345.8	336.7	333.3	328.7	325.3
70°	295.6	289.9	284.2	278.5	278.5
72.5°	248.8	243.1	239.7	232.8	230.6
75°	205.5	198.6	192.9	188.3	184.9
77.5°	162.1	155.2	151.8	146.1	146.1
80°	121.0	116.4	113.0	110.7	106.1
82.5°	83.3	81.0	77.6	74.2	70.8
85°	49.1	47.9	45.7	39.9	38.8
87.5°	19.4	19.4	17.1	16.0	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)