

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: P295823

Luminaire Tested: **24RLN-LD5-42-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295823  
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-LD5-42-UNV-L83050-W2A1-U-3000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3982.0 lumens  
Efficiency: N/A  
Efficacy: 137.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

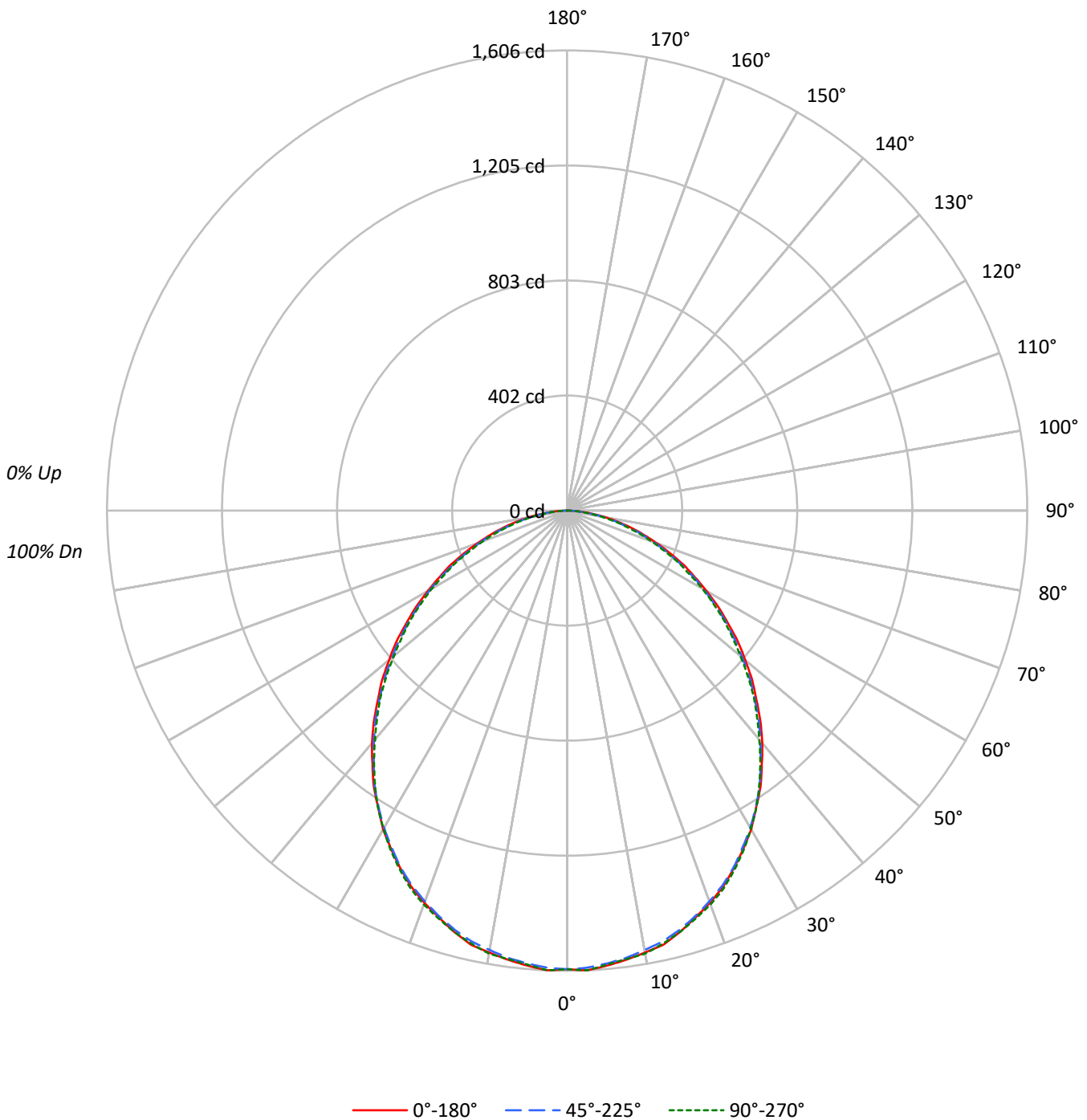
Input Watts (W): 29.016  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2154	2154	2154
5°	2153	2143	2148
10°	2140	2127	2145
15°	2120	2110	2120
20°	2086	2078	2095
25°	2044	2041	2052
30°	1996	1986	1992
35°	1933	1924	1920
40°	1861	1843	1832
45°	1777	1760	1753
50°	1697	1670	1651
55°	1606	1582	1567
60°	1511	1483	1466
65°	1427	1374	1362
70°	1309	1258	1233
75°	1202	1129	1082
80°	1055	986	926
85°	852	794	675



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.0	3.8
10°-20°	428.2	10.8
20°-30°	633.3	15.9
30°-40°	730.9	18.4
40°-50°	713.9	17.9
50°-60°	602.8	15.1
60°-70°	429.4	10.8
70°-80°	232.5	5.8
80°-90°	60.0	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°	1212.5	30.4
0°-40°	1943.4	48.8
0°-60°	3260.1	81.9
0°-90°	3982.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3982.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1601	1601	1601	1601	1601	
5°	1594	1594	1586	1590	1590	151
15°	1522	1516	1515	1521	1522	429
25°	1377	1369	1375	1380	1382	634
35°	1177	1168	1172	1168	1169	734
45°	934	926	925	921	921	722
55°	685	676	674	668	668	614
65°	448	439	432	426	428	442
75°	231	224	217	212	208	245
85°	55	54	51	45	44	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1600.7	1600.7	1600.7	1600.7	1600.7
2.5°	1605.8	1599.4	1596.8	1598.1	1605.8
5°	1594.2	1594.2	1586.5	1590.4	1590.4
7.5°	1581.4	1582.7	1575.0	1581.4	1578.8
10°	1566.0	1562.1	1557.0	1567.3	1569.8
12.5°	1551.8	1542.8	1540.3	1546.7	1548.0
15°	1522.3	1515.9	1514.6	1521.0	1522.3
17.5°	1488.9	1490.2	1485.0	1494.0	1492.7
20°	1456.8	1454.2	1451.6	1461.9	1463.2
22.5°	1420.8	1413.1	1415.7	1424.7	1427.2
25°	1377.1	1369.4	1374.6	1379.7	1382.3
27.5°	1330.9	1327.0	1325.7	1332.2	1334.7
30°	1284.6	1278.2	1278.2	1285.9	1282.1
32.5°	1228.1	1223.0	1225.5	1228.1	1229.4
35°	1176.7	1167.7	1171.6	1167.7	1169.0
37.5°	1116.3	1109.9	1108.6	1107.4	1107.4
40°	1059.8	1054.7	1049.5	1049.5	1043.1
42.5°	998.2	991.7	989.2	985.3	981.5
45°	933.9	926.2	924.9	921.1	921.1
47.5°	876.1	864.6	863.3	855.6	855.6
50°	810.6	802.9	797.8	792.6	788.8
52.5°	751.5	743.8	736.1	731.0	727.1
55°	684.7	675.7	674.4	668.0	668.0
57.5°	624.3	616.6	611.5	603.8	605.1
60°	561.4	553.7	551.1	544.7	544.7
62.5°	502.3	495.9	492.0	485.6	480.5
65°	448.3	439.3	431.6	426.5	427.8
67.5°	389.2	379.0	375.1	370.0	366.1
70°	332.7	326.3	319.9	313.5	313.5
72.5°	280.0	273.6	269.8	262.1	259.5
75°	231.2	223.5	217.1	212.0	208.1
77.5°	182.4	174.7	170.9	164.4	164.4
80°	136.2	131.0	127.2	124.6	119.5
82.5°	93.8	91.2	87.4	83.5	79.6
85°	55.2	54.0	51.4	45.0	43.7
87.5°	21.8	21.8	19.3	18.0	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)