

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: P296027

Luminaire Tested: **24RLN-LD5-42-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296027  
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-L92765-W2A1-U-5500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3956.0 lumens  
Efficiency: N/A  
Efficacy: 132.1 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

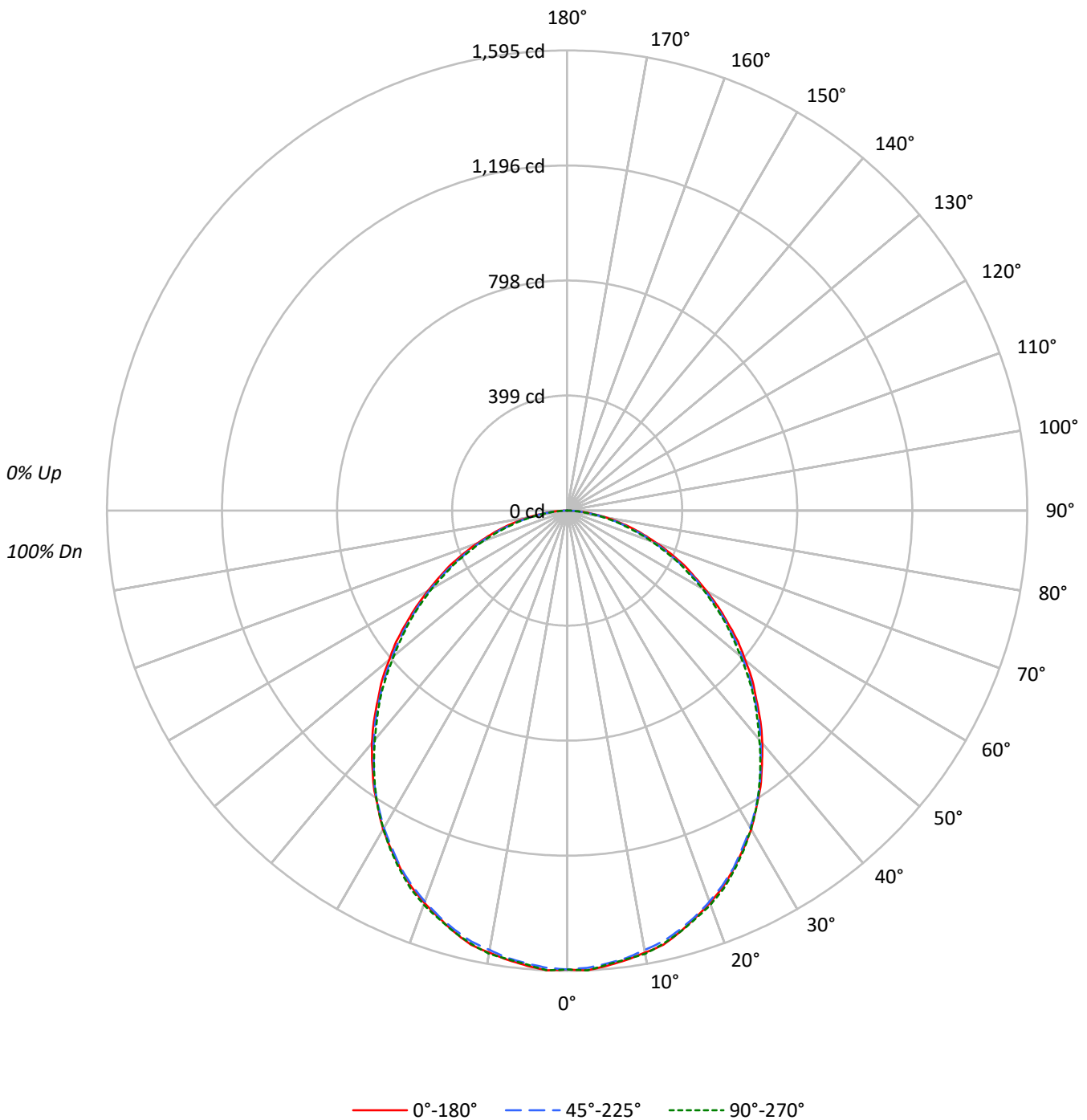
Input Watts (W): 29.946  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2140	2140	2140
5°	2139	2129	2134
10°	2125	2113	2131
15°	2107	2096	2107
20°	2072	2065	2081
25°	2031	2027	2039
30°	1983	1973	1979
35°	1920	1912	1908
40°	1849	1831	1820
45°	1765	1748	1741
50°	1686	1659	1640
55°	1596	1572	1557
60°	1501	1473	1456
65°	1418	1365	1353
70°	1300	1250	1225
75°	1194	1121	1075
80°	1048	979	920
85°	848	787	670



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.0	3.8
10°-20°	425.4	10.8
20°-30°	629.2	15.9
30°-40°	726.1	18.4
40°-50°	709.2	17.9
50°-60°	598.9	15.1
60°-70°	426.6	10.8
70°-80°	231.0	5.8
80°-90°	59.6	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°	1204.6	30.4
0°-40°	1930.7	48.8
0°-60°	3238.9	81.9
0°-90°	3956.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3956.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1584	1584	1576	1580	1580	150
15°	1512	1506	1505	1511	1512	426
25°	1368	1360	1366	1371	1373	630
35°	1169	1160	1164	1160	1161	730
45°	928	920	919	915	915	717
55°	680	671	670	664	664	610
65°	445	436	429	424	425	439
75°	230	222	216	211	207	243
85°	55	54	51	45	43	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1590.2	1590.2	1590.2	1590.2	1590.2
2.5°	1595.3	1588.9	1586.4	1587.6	1595.3
5°	1583.8	1583.8	1576.2	1580.0	1580.0
7.5°	1571.1	1572.3	1564.7	1571.1	1568.5
10°	1555.7	1551.9	1546.8	1557.0	1559.6
12.5°	1541.7	1532.8	1530.2	1536.6	1537.9
15°	1512.3	1506.0	1504.7	1511.1	1512.3
17.5°	1479.2	1480.4	1475.3	1484.3	1483.0
20°	1447.3	1444.7	1442.2	1452.4	1453.6
22.5°	1411.5	1403.9	1406.4	1415.4	1417.9
25°	1368.1	1360.5	1365.6	1370.7	1373.2
27.5°	1322.2	1318.4	1317.1	1323.5	1326.0
30°	1276.2	1269.9	1269.9	1277.5	1273.7
32.5°	1220.1	1215.0	1217.5	1220.1	1221.4
35°	1169.0	1160.1	1163.9	1160.1	1161.4
37.5°	1109.1	1102.7	1101.4	1100.1	1100.1
40°	1052.9	1047.8	1042.7	1042.7	1036.3
42.5°	991.6	985.3	982.7	978.9	975.1
45°	927.8	920.2	918.9	915.1	915.1
47.5°	870.4	858.9	857.6	850.0	850.0
50°	805.3	797.7	792.5	787.4	783.6
52.5°	746.6	738.9	731.3	726.2	722.4
55°	680.2	671.3	670.0	663.6	663.6
57.5°	620.3	612.6	607.5	599.8	601.1
60°	557.7	550.1	547.5	541.1	541.1
62.5°	499.0	492.6	488.8	482.4	477.3
65°	445.4	436.5	428.8	423.7	425.0
67.5°	386.7	376.5	372.7	367.6	363.7
70°	330.5	324.2	317.8	311.4	311.4
72.5°	278.2	271.8	268.0	260.4	257.8
75°	229.7	222.1	215.7	210.6	206.8
77.5°	181.2	173.6	169.7	163.4	163.4
80°	135.3	130.2	126.3	123.8	118.7
82.5°	93.2	90.6	86.8	83.0	79.1
85°	54.9	53.6	51.0	44.7	43.4
87.5°	21.7	21.7	19.1	17.9	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)