

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: P296034

Luminaire Tested: **24RLN-LD5-45-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296034  
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-L92765-W2A1-U-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4120.0 lumens  
Efficiency: N/A  
Efficacy: 128.4 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

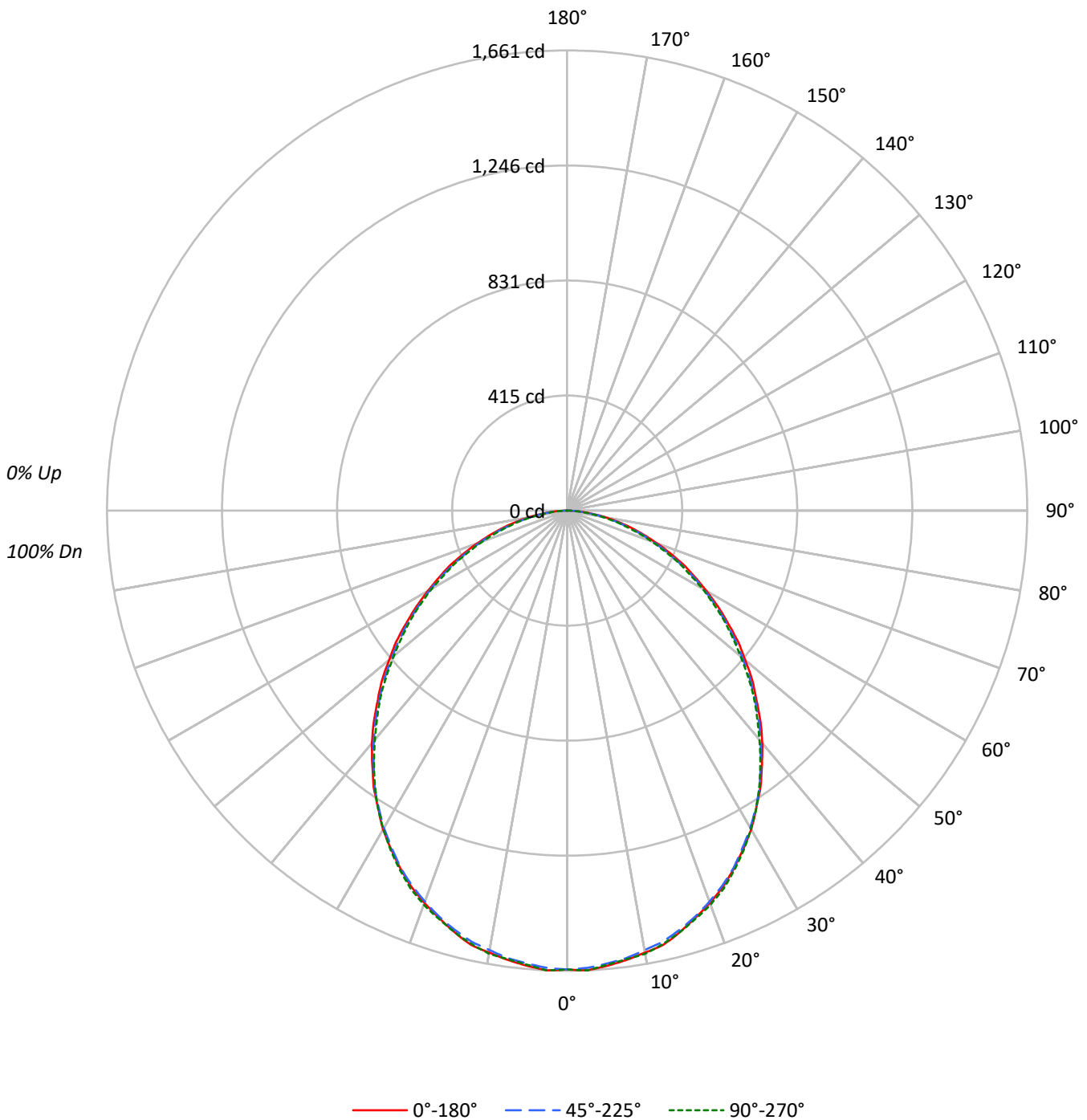
Input Watts (W): 32.085  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2228	2228	2228
5°	2228	2217	2222
10°	2214	2201	2219
15°	2194	2183	2194
20°	2158	2150	2168
25°	2115	2111	2123
30°	2065	2055	2061
35°	2000	1991	1987
40°	1926	1907	1896
45°	1839	1821	1813
50°	1756	1728	1708
55°	1662	1637	1621
60°	1563	1534	1517
65°	1477	1422	1409
70°	1354	1302	1276
75°	1243	1168	1119
80°	1092	1020	958
85°	883	821	698



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.3	3.8
10°-20°	443.0	10.8
20°-30°	655.3	15.9
30°-40°	756.3	18.4
40°-50°	738.6	17.9
50°-60°	623.7	15.1
60°-70°	444.3	10.8
70°-80°	240.5	5.8
80°-90°	62.1	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°	1254.5	30.4
0°-40°	2010.8	48.8
0°-60°	3373.1	81.9
0°-90°	4120.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4120.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1656	1656	1656	1656	1656	
5°	1650	1650	1642	1646	1646	157
15°	1575	1568	1567	1574	1575	444
25°	1425	1417	1422	1428	1430	656
35°	1218	1208	1212	1208	1210	760
45°	966	958	957	953	953	747
55°	708	699	698	691	691	635
65°	464	455	447	441	443	457
75°	239	231	225	219	215	253
85°	57	56	53	46	45	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1656.1	1656.1	1656.1	1656.1	1656.1
2.5°	1661.4	1654.8	1652.1	1653.5	1661.4
5°	1649.5	1649.5	1641.5	1645.5	1645.5
7.5°	1636.2	1637.5	1629.5	1636.2	1633.5
10°	1620.2	1616.2	1610.9	1621.6	1624.2
12.5°	1605.6	1596.3	1593.7	1600.3	1601.6
15°	1575.0	1568.4	1567.1	1573.7	1575.0
17.5°	1540.5	1541.8	1536.5	1545.8	1544.5
20°	1507.3	1504.6	1501.9	1512.6	1513.9
22.5°	1470.0	1462.1	1464.7	1474.0	1476.7
25°	1424.9	1416.9	1422.2	1427.5	1430.2
27.5°	1377.0	1373.0	1371.7	1378.3	1381.0
30°	1329.2	1322.5	1322.5	1330.5	1326.5
32.5°	1270.7	1265.4	1268.0	1270.7	1272.0
35°	1217.5	1208.2	1212.2	1208.2	1209.5
37.5°	1155.0	1148.4	1147.1	1145.7	1145.7
40°	1096.5	1091.2	1085.9	1085.9	1079.3
42.5°	1032.8	1026.1	1023.4	1019.5	1015.5
45°	966.3	958.3	957.0	953.0	953.0
47.5°	906.5	894.5	893.2	885.2	885.2
50°	838.7	830.7	825.4	820.1	816.1
52.5°	777.6	769.6	761.6	756.3	752.3
55°	708.4	699.1	697.8	691.2	691.2
57.5°	646.0	638.0	632.7	624.7	626.0
60°	580.8	572.9	570.2	563.6	563.6
62.5°	519.7	513.1	509.1	502.4	497.1
65°	463.9	454.6	446.6	441.3	442.6
67.5°	402.7	392.1	388.1	382.8	378.8
70°	344.3	337.6	331.0	324.3	324.3
72.5°	289.8	283.1	279.1	271.1	268.5
75°	239.2	231.3	224.6	219.3	215.3
77.5°	188.7	180.8	176.8	170.1	170.1
80°	140.9	135.6	131.6	128.9	123.6
82.5°	97.0	94.4	90.4	86.4	82.4
85°	57.2	55.8	53.2	46.5	45.2
87.5°	22.6	22.6	19.9	18.6	17.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)