

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: P295966

Luminaire Tested: **24RLN-LD5-42-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295966  
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-L93050-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: 3936.0 lumens  
Efficiency: N/A  
Efficacy: 129.8 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

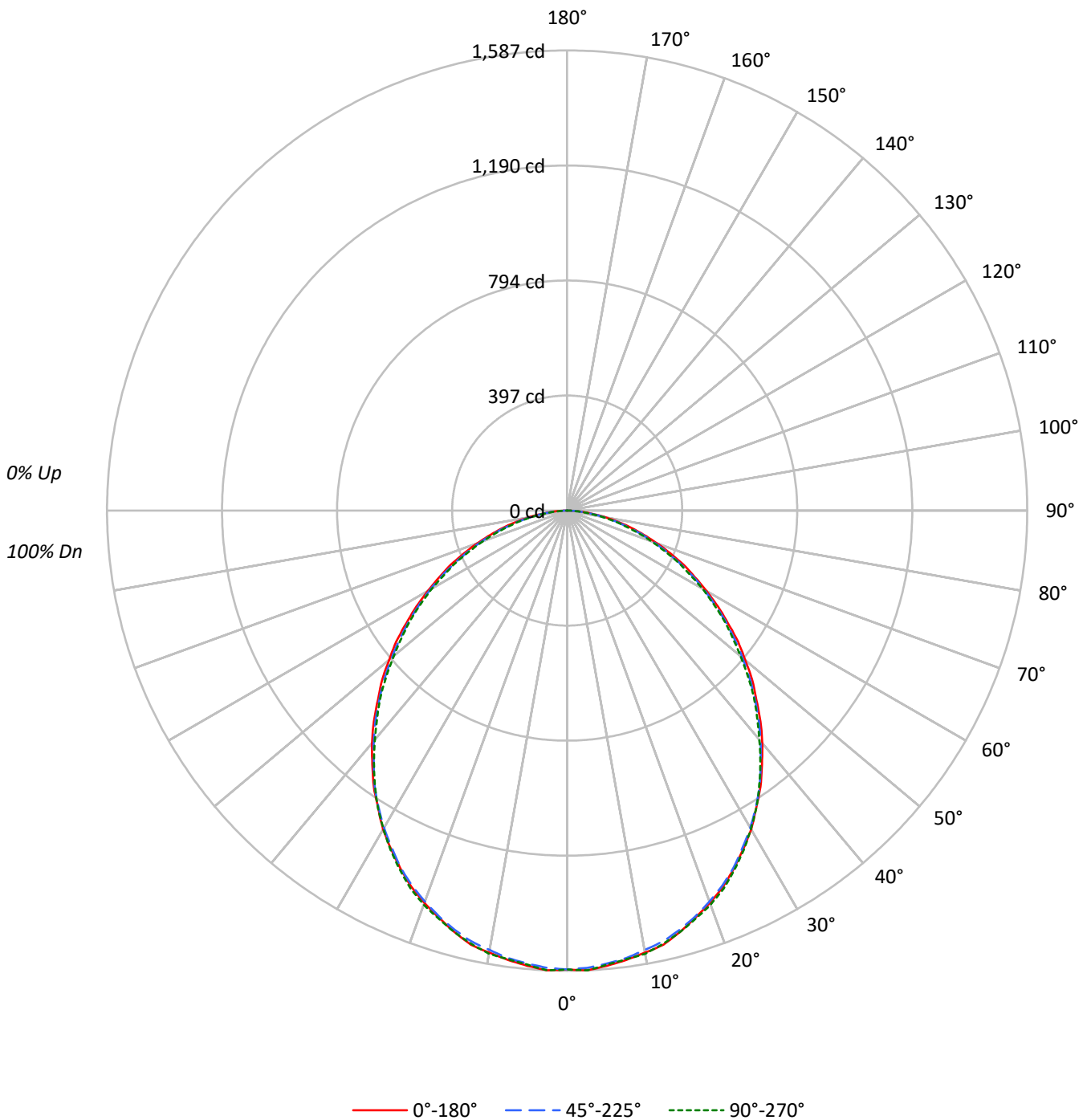
Input Watts (W): 30.318  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	72					72			
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61					61			
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52					52			
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46					46			
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40					40			
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36					36			
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

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

	0°	45°	90°
0°	2129	2129	2129
5°	2128	2118	2123
10°	2115	2103	2120
15°	2096	2085	2096
20°	2062	2055	2071
25°	2021	2017	2028
30°	1973	1963	1969
35°	1910	1902	1898
40°	1840	1822	1811
45°	1756	1740	1732
50°	1677	1650	1632
55°	1588	1564	1549
60°	1493	1466	1449
65°	1411	1358	1346
70°	1294	1244	1219
75°	1188	1116	1069
80°	1043	974	915
85°	843	784	667



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	149.3	3.8
10°-20°	423.2	10.8
20°-30°	626.0	15.9
30°-40°	722.5	18.4
40°-50°	705.6	17.9
50°-60°	595.9	15.1
60°-70°	424.4	10.8
70°-80°	229.8	5.8
80°-90°	59.3	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°	1198.5	30.4
0°-40°	1921.0	48.8
0°-60°	3222.5	81.9
0°-90°	3936.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3936.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1582	1582	1582	1582	1582	
5°	1576	1576	1568	1572	1572	150
15°	1505	1498	1497	1503	1505	424
25°	1361	1354	1359	1364	1366	627
35°	1163	1154	1158	1154	1156	726
45°	923	916	914	910	910	714
55°	677	668	667	660	660	607
65°	443	434	427	422	423	437
75°	229	221	215	210	206	242
85°	55	53	51	44	43	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1582.2	1582.2	1582.2	1582.2	1582.2
2.5°	1587.2	1580.9	1578.4	1579.6	1587.2
5°	1575.8	1575.8	1568.2	1572.0	1572.0
7.5°	1563.1	1564.4	1556.8	1563.1	1560.6
10°	1547.9	1544.1	1539.0	1549.1	1551.7
12.5°	1533.9	1525.0	1522.5	1528.8	1530.1
15°	1504.7	1498.4	1497.1	1503.4	1504.7
17.5°	1471.7	1473.0	1467.9	1476.8	1475.5
20°	1439.9	1437.4	1434.9	1445.0	1446.3
22.5°	1404.4	1396.8	1399.3	1408.2	1410.7
25°	1361.2	1353.6	1358.7	1363.8	1366.3
27.5°	1315.5	1311.7	1310.4	1316.8	1319.3
30°	1269.8	1263.4	1263.4	1271.1	1267.3
32.5°	1213.9	1208.8	1211.4	1213.9	1215.2
35°	1163.1	1154.2	1158.0	1154.2	1155.5
37.5°	1103.4	1097.1	1095.8	1094.6	1094.6
40°	1047.6	1042.5	1037.4	1037.4	1031.1
42.5°	986.6	980.3	977.7	973.9	970.1
45°	923.1	915.5	914.2	910.4	910.4
47.5°	866.0	854.6	853.3	845.7	845.7
50°	801.2	793.6	788.5	783.5	779.7
52.5°	742.8	735.2	727.6	722.5	718.7
55°	676.8	667.9	666.6	660.3	660.3
57.5°	617.1	609.5	604.4	596.8	598.1
60°	554.9	547.3	544.7	538.4	538.4
62.5°	496.5	490.1	486.3	480.0	474.9
65°	443.2	434.3	426.6	421.6	422.8
67.5°	384.7	374.6	370.8	365.7	361.9
70°	328.9	322.5	316.2	309.8	309.8
72.5°	276.8	270.5	266.7	259.0	256.5
75°	228.6	220.9	214.6	209.5	205.7
77.5°	180.3	172.7	168.9	162.5	162.5
80°	134.6	129.5	125.7	123.2	118.1
82.5°	92.7	90.2	86.3	82.5	78.7
85°	54.6	53.3	50.8	44.4	43.2
87.5°	21.6	21.6	19.0	17.8	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)