

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: P295822

Luminaire Tested: **24RLN-LD5-36-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295822  
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-LD5-36-UNV-L83050-W2A1-U-5000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3893.0 lumens  
Efficiency: N/A  
Efficacy: 147.4 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

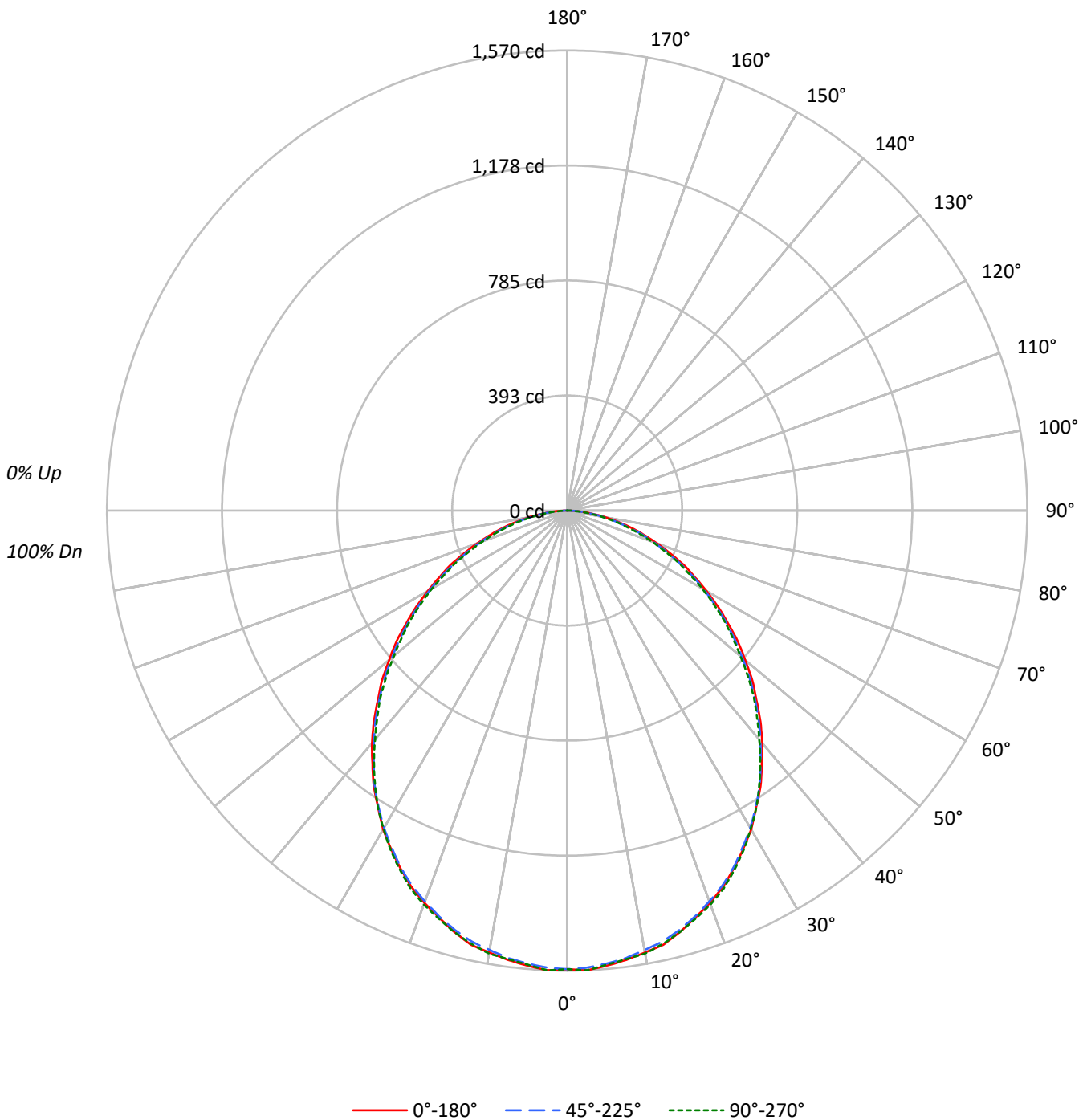
Input Watts (W): 26.412  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2106	2106	2106
5°	2105	2095	2100
10°	2092	2080	2097
15°	2073	2063	2073
20°	2039	2032	2048
25°	1999	1995	2006
30°	1951	1941	1947
35°	1890	1881	1877
40°	1820	1802	1791
45°	1737	1721	1713
50°	1659	1632	1614
55°	1570	1547	1532
60°	1477	1450	1433
65°	1395	1344	1331
70°	1280	1230	1205
75°	1175	1104	1058
80°	1031	963	905
85°	834	775	659



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.7	3.8
10°-20°	418.6	10.8
20°-30°	619.2	15.9
30°-40°	714.6	18.4
40°-50°	697.9	17.9
50°-60°	589.4	15.1
60°-70°	419.8	10.8
70°-80°	227.3	5.8
80°-90°	58.6	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°	1185.4	30.4
0°-40°	1900.0	48.8
0°-60°	3187.3	81.9
0°-90°	3893.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3893.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1565	1565	1565	1565	1565	
5°	1559	1559	1551	1555	1555	148
15°	1488	1482	1481	1487	1488	419
25°	1346	1339	1344	1349	1351	620
35°	1150	1142	1145	1142	1143	718
45°	913	906	904	900	900	706
55°	669	661	659	653	653	600
65°	438	430	422	417	418	432
75°	226	218	212	207	204	239
85°	54	53	50	44	43	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1564.9	1564.9	1564.9	1564.9	1564.9
2.5°	1569.9	1563.6	1561.1	1562.4	1569.9
5°	1558.6	1558.6	1551.1	1554.8	1554.8
7.5°	1546.0	1547.3	1539.8	1546.0	1543.5
10°	1531.0	1527.2	1522.2	1532.2	1534.7
12.5°	1517.2	1508.4	1505.8	1512.1	1513.4
15°	1488.3	1482.0	1480.7	1487.0	1488.3
17.5°	1455.6	1456.9	1451.8	1460.6	1459.4
20°	1424.2	1421.7	1419.2	1429.2	1430.5
22.5°	1389.0	1381.5	1384.0	1392.8	1395.3
25°	1346.3	1338.8	1343.8	1348.9	1351.4
27.5°	1301.1	1297.4	1296.1	1302.4	1304.9
30°	1255.9	1249.6	1249.6	1257.2	1253.4
32.5°	1200.7	1195.6	1198.1	1200.7	1201.9
35°	1150.4	1141.6	1145.4	1141.6	1142.9
37.5°	1091.4	1085.1	1083.9	1082.6	1082.6
40°	1036.1	1031.1	1026.1	1026.1	1019.8
42.5°	975.8	969.6	967.1	963.3	959.5
45°	913.1	905.5	904.3	900.5	900.5
47.5°	856.5	845.2	844.0	836.4	836.4
50°	792.5	784.9	779.9	774.9	771.1
52.5°	734.7	727.2	719.6	714.6	710.9
55°	669.4	660.6	659.4	653.1	653.1
57.5°	610.4	602.8	597.8	590.3	591.5
60°	548.8	541.3	538.8	532.5	532.5
62.5°	491.1	484.8	481.0	474.7	469.7
65°	438.3	429.5	422.0	417.0	418.2
67.5°	380.5	370.5	366.7	361.7	357.9
70°	325.3	319.0	312.7	306.4	306.4
72.5°	273.8	267.5	263.7	256.2	253.7
75°	226.1	218.5	212.3	207.2	203.5
77.5°	178.3	170.8	167.0	160.8	160.8
80°	133.1	128.1	124.3	121.8	116.8
82.5°	91.7	89.2	85.4	81.6	77.9
85°	54.0	52.7	50.2	44.0	42.7
87.5°	21.4	21.4	18.8	17.6	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)