

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: P295888

Luminaire Tested: **24RLN-LD5-42-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295888  
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-L82765-W2A1-U-5700K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4393.0 lumens  
Efficiency: N/A  
Efficacy: 146.7 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

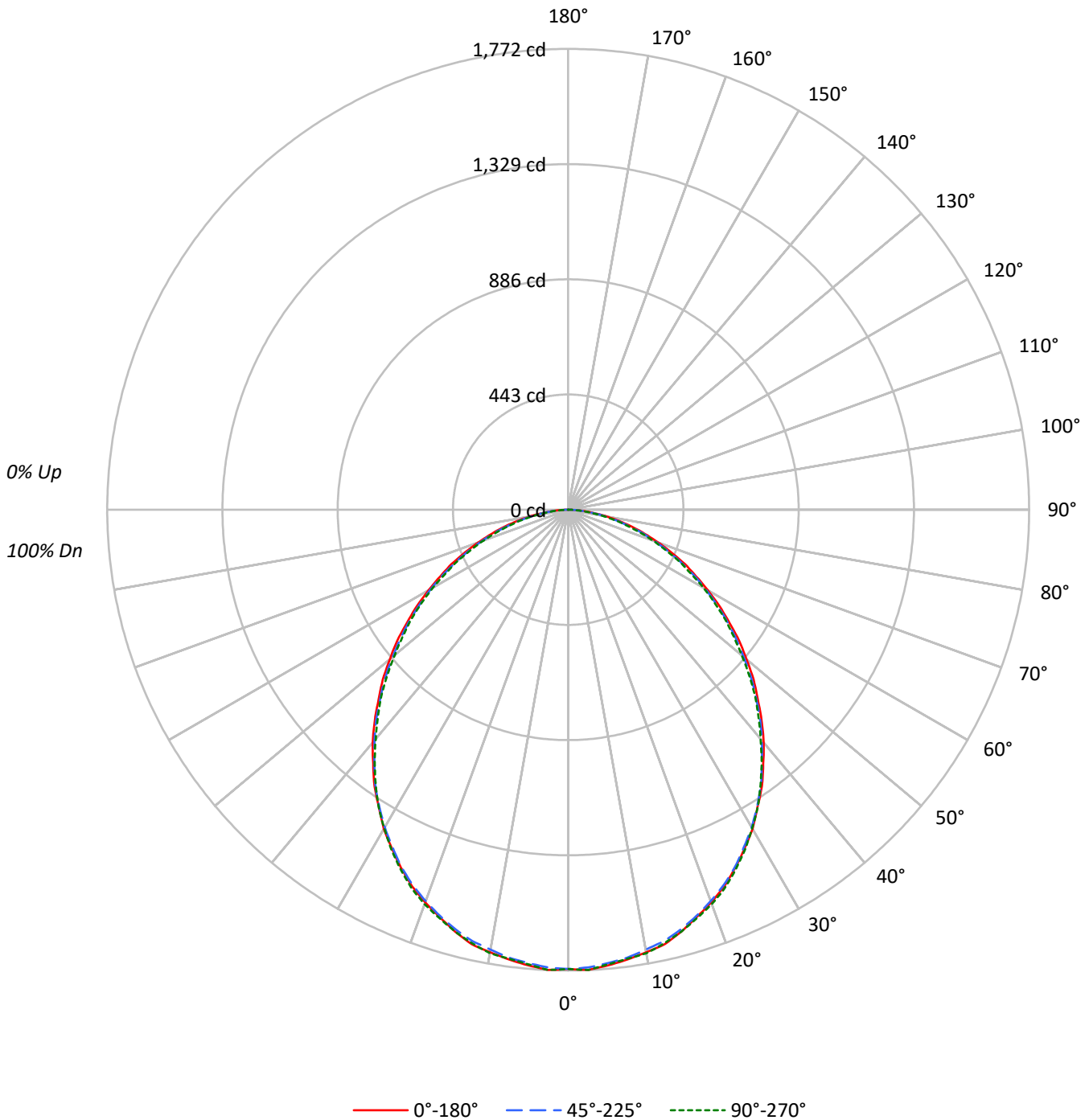
Input Watts (W): 29.946  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2376	2376	2376
5°	2375	2364	2370
10°	2360	2347	2366
15°	2339	2327	2339
20°	2301	2293	2311
25°	2256	2251	2264
30°	2202	2191	2197
35°	2132	2123	2118
40°	2054	2034	2021
45°	1960	1942	1933
50°	1872	1842	1822
55°	1772	1745	1729
60°	1667	1636	1617
65°	1575	1516	1502
70°	1444	1388	1360
75°	1326	1245	1194
80°	1164	1087	1021
85°	940	875	744



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.6	3.8
10°-20°	472.3	10.8
20°-30°	698.7	15.9
30°-40°	806.4	18.4
40°-50°	787.6	17.9
50°-60°	665.1	15.1
60°-70°	473.7	10.8
70°-80°	256.5	5.8
80°-90°	66.2	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°	1337.6	30.4
0°-40°	2144.0	48.8
0°-60°	3596.6	81.9
0°-90°	4393.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4393.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1766	1766	1766	1766	1766	
5°	1759	1759	1750	1754	1754	167
15°	1679	1672	1671	1678	1679	473
25°	1519	1511	1516	1522	1525	699
35°	1298	1288	1292	1288	1290	810
45°	1030	1022	1020	1016	1016	797
55°	755	746	744	737	737	677
65°	495	485	476	470	472	488
75°	255	247	240	234	230	270
85°	61	60	57	50	48	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1765.9	1765.9	1765.9	1765.9	1765.9
2.5°	1771.5	1764.4	1761.6	1763.0	1771.5
5°	1758.8	1758.8	1750.3	1754.5	1754.5
7.5°	1744.6	1746.0	1737.5	1744.6	1741.8
10°	1727.6	1723.3	1717.7	1729.0	1731.8
12.5°	1712.0	1702.1	1699.3	1706.3	1707.8
15°	1679.4	1672.3	1670.9	1678.0	1679.4
17.5°	1642.6	1644.0	1638.3	1648.2	1646.8
20°	1607.1	1604.3	1601.5	1612.8	1614.2
22.5°	1567.4	1558.9	1561.8	1571.7	1574.5
25°	1519.3	1510.8	1516.4	1522.1	1524.9
27.5°	1468.2	1464.0	1462.6	1469.7	1472.5
30°	1417.2	1410.1	1410.1	1418.6	1414.4
32.5°	1354.9	1349.2	1352.0	1354.9	1356.3
35°	1298.2	1288.3	1292.5	1288.3	1289.7
37.5°	1231.6	1224.5	1223.1	1221.6	1221.6
40°	1169.2	1163.5	1157.9	1157.9	1150.8
42.5°	1101.2	1094.1	1091.3	1087.0	1082.8
45°	1030.3	1021.8	1020.4	1016.1	1016.1
47.5°	966.5	953.8	952.4	943.9	943.9
50°	894.3	885.8	880.1	874.4	870.2
52.5°	829.1	820.6	812.1	806.4	802.1
55°	755.4	745.5	744.0	737.0	737.0
57.5°	688.8	680.3	674.6	666.1	667.5
60°	619.3	610.8	608.0	600.9	600.9
62.5°	554.1	547.0	542.8	535.7	530.0
65°	494.6	484.7	476.2	470.5	471.9
67.5°	429.4	418.1	413.8	408.2	403.9
70°	367.1	360.0	352.9	345.8	345.8
72.5°	309.0	301.9	297.6	289.1	286.3
75°	255.1	246.6	239.5	233.8	229.6
77.5°	201.2	192.7	188.5	181.4	181.4
80°	150.2	144.6	140.3	137.5	131.8
82.5°	103.5	100.6	96.4	92.1	87.9
85°	60.9	59.5	56.7	49.6	48.2
87.5°	24.1	24.1	21.3	19.8	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)