

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: P296167

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296167  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059-R2)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-42-RDP-UNV-L82765-W2A1-U-5500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3633.0 lumens  
Efficiency: N/A  
Efficacy: 121.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

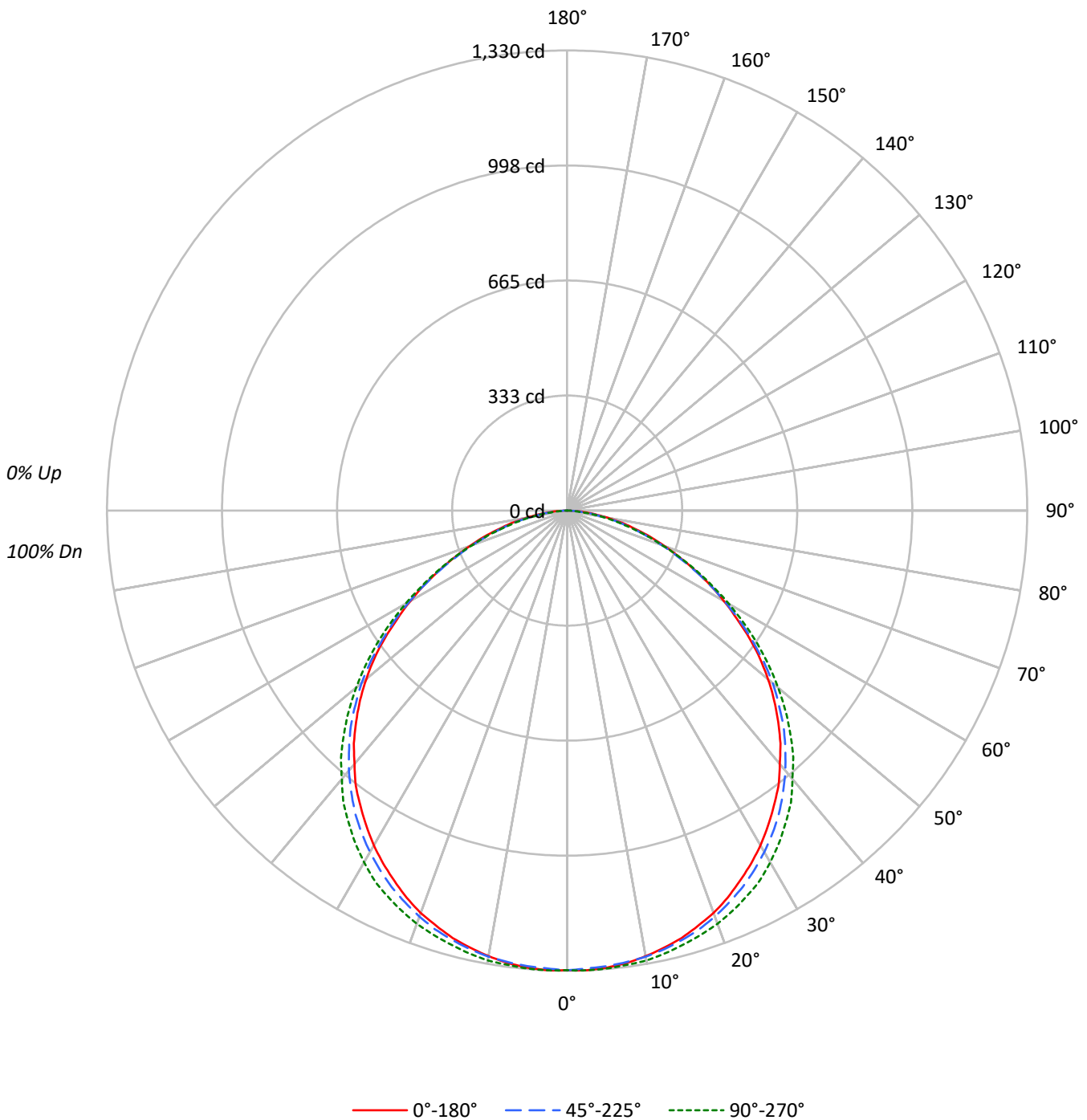
Input Watts (W): 29.946  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60					60			
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52					52			
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25					25			

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

	0°	45°	90°
0°	1788	1788	1788
5°	1791	1785	1794
10°	1787	1789	1804
15°	1782	1789	1808
20°	1772	1788	1819
25°	1753	1782	1825
30°	1737	1771	1824
35°	1711	1754	1809
40°	1680	1724	1779
45°	1642	1684	1736
50°	1587	1624	1667
55°	1510	1529	1574
60°	1409	1417	1454
65°	1294	1286	1316
70°	1177	1144	1149
75°	1046	989	981
80°	907	811	790
85°	744	574	446



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.0	3.5
10°-20°	363.2	10.0
20°-30°	554.5	15.3
30°-40°	668.4	18.4
40°-50°	681.7	18.8
50°-60°	583.4	16.1
60°-70°	401.9	11.1
70°-80°	206.0	5.7
80°-90°	47.9	1.3
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°	1043.7	28.7
0°-40°	1712.1	47.1
0°-60°	2977.2	81.9
0°-90°	3633.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3633.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1329	1329	1329	1329	1329	
5°	1326	1323	1322	1326	1329	126
15°	1279	1278	1284	1294	1298	361
25°	1181	1185	1200	1221	1229	545
35°	1042	1046	1068	1092	1101	652
45°	863	864	885	907	912	665
55°	644	640	652	666	671	574
65°	407	397	404	407	414	404
75°	201	193	190	190	189	217
85°	48	43	37	33	29	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1328.6	1328.6	1328.6	1328.6	1328.6
2.5°	1330.0	1327.2	1324.5	1327.2	1330.0
5°	1325.8	1323.1	1321.7	1325.8	1328.6
7.5°	1319.0	1316.2	1316.2	1321.7	1324.5
10°	1307.9	1306.6	1309.3	1314.8	1320.3
12.5°	1294.1	1294.1	1298.3	1305.2	1310.7
15°	1279.0	1277.6	1284.5	1294.1	1298.3
17.5°	1258.3	1259.7	1269.3	1280.4	1285.9
20°	1237.6	1239.0	1248.7	1263.8	1270.7
22.5°	1211.5	1214.2	1225.2	1244.5	1251.4
25°	1181.1	1185.3	1200.4	1221.1	1229.4
27.5°	1150.8	1154.9	1171.5	1194.9	1205.9
30°	1117.7	1123.2	1139.8	1164.6	1174.2
32.5°	1080.5	1084.7	1105.3	1130.1	1139.8
35°	1041.9	1046.1	1068.1	1091.5	1101.2
37.5°	1003.3	1003.3	1025.4	1053.0	1062.6
40°	956.5	957.9	981.3	1007.5	1013.0
42.5°	912.4	912.4	933.1	957.9	967.5
45°	862.8	864.1	884.8	906.9	912.4
47.5°	811.8	811.8	829.7	850.4	855.9
50°	758.0	755.3	775.9	792.5	796.6
52.5°	702.9	698.8	715.3	729.1	734.6
55°	643.6	639.5	651.9	665.7	671.2
57.5°	581.6	576.1	589.9	602.3	605.0
60°	523.7	515.5	526.5	533.4	540.3
62.5°	465.8	456.2	464.5	468.6	474.1
65°	406.6	396.9	403.8	406.6	413.5
67.5°	350.1	343.2	344.6	348.7	351.4
70°	299.1	290.8	290.8	290.8	292.2
72.5°	252.2	239.8	238.4	239.8	239.8
75°	201.2	193.0	190.2	190.2	188.8
77.5°	161.3	150.2	148.8	146.1	143.3
80°	117.1	107.5	104.7	103.4	102.0
82.5°	81.3	73.0	70.3	67.5	63.4
85°	48.2	42.7	37.2	33.1	28.9
87.5°	17.9	16.5	13.8	12.4	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)