

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: P296139

Luminaire Tested: **24RLN-LD5-80-RDP-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296139  
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-LD5-80-RDP-UNV-L83050-W2A1-U-3500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6686.0 lumens  
Efficiency: N/A  
Efficacy: 110.1 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

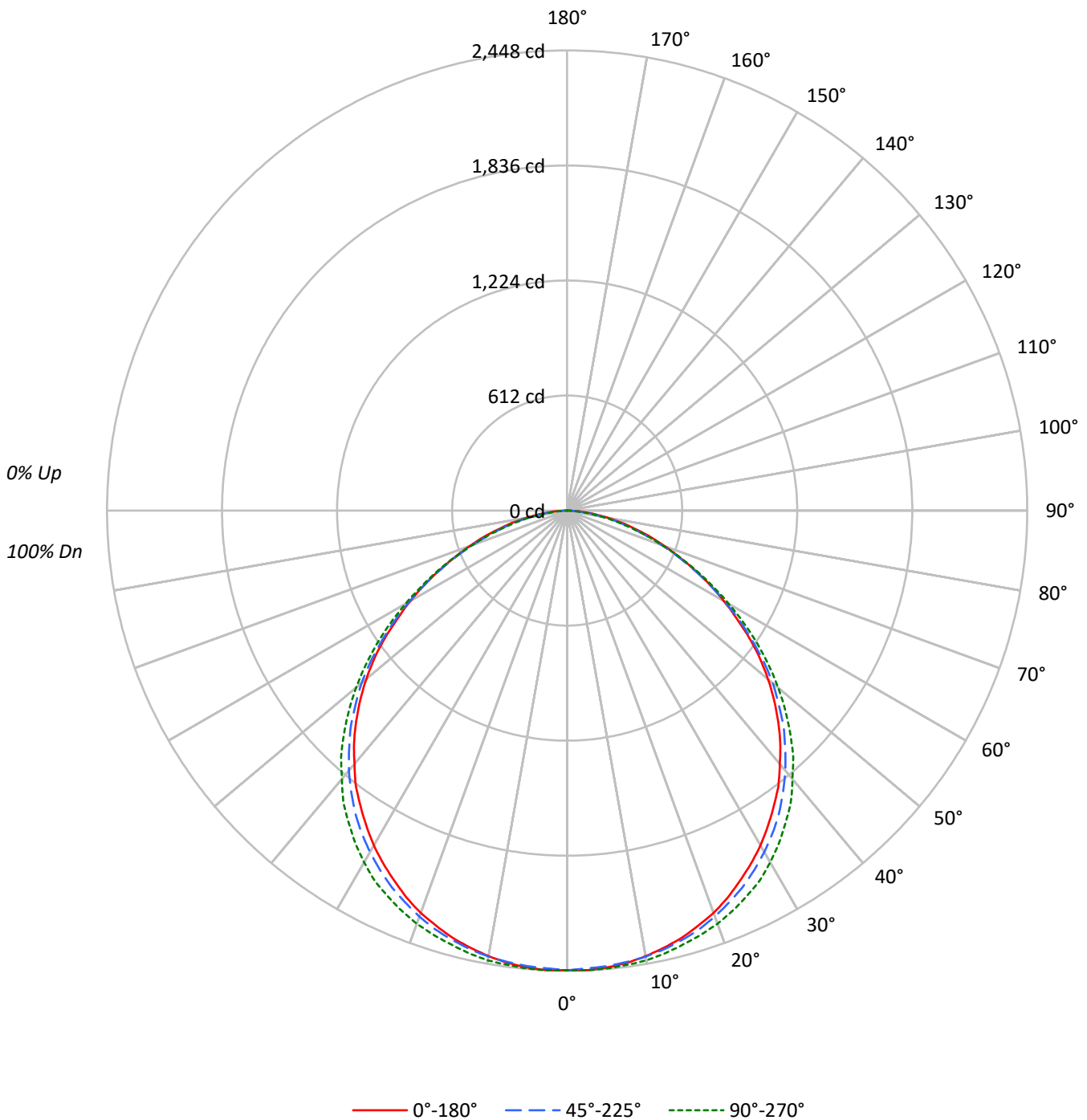
Input Watts (W): 60.729  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3290	3290	3290
5°	3296	3285	3302
10°	3289	3292	3320
15°	3279	3293	3328
20°	3261	3290	3349
25°	3227	3280	3359
30°	3196	3259	3357
35°	3150	3229	3329
40°	3092	3172	3274
45°	3021	3099	3195
50°	2920	2989	3069
55°	2779	2814	2898
60°	2594	2607	2676
65°	2382	2366	2422
70°	2165	2105	2115
75°	1925	1820	1807
80°	1671	1494	1454
85°	1371	1057	823



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	231.9	3.5
10°-20°	668.5	10.0
20°-30°	1020.4	15.3
30°-40°	1230.2	18.4
40°-50°	1254.5	18.8
50°-60°	1073.6	16.1
60°-70°	739.6	11.1
70°-80°	379.1	5.7
80°-90°	88.2	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°	1920.8	28.7
0°-40°	3151.0	47.1
0°-60°	5479.1	81.9
0°-90°	6686.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6686.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2445	2445	2445	2445	2445	
5°	2440	2435	2432	2440	2445	232
15°	2354	2351	2364	2382	2389	664
25°	2174	2181	2209	2247	2262	1002
35°	1918	1925	1966	2009	2027	1200
45°	1588	1590	1628	1669	1679	1223
55°	1184	1177	1200	1225	1235	1057
65°	748	730	743	748	761	744
75°	370	355	350	350	348	399
85°	89	79	68	61	53	103
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2445.1	2445.1	2445.1	2445.1	2445.1
2.5°	2447.6	2442.6	2437.5	2442.6	2447.6
5°	2440.0	2434.9	2432.4	2440.0	2445.1
7.5°	2427.3	2422.3	2422.3	2432.4	2437.5
10°	2407.0	2404.5	2409.6	2419.7	2429.9
12.5°	2381.7	2381.7	2389.3	2402.0	2412.1
15°	2353.8	2351.2	2363.9	2381.7	2389.3
17.5°	2315.7	2318.3	2336.0	2356.3	2366.5
20°	2277.7	2280.2	2298.0	2325.9	2338.6
22.5°	2229.5	2234.6	2254.9	2290.4	2303.1
25°	2173.7	2181.3	2209.2	2247.3	2262.5
27.5°	2117.9	2125.5	2155.9	2199.1	2219.4
30°	2057.0	2067.2	2097.6	2143.3	2161.0
32.5°	1988.5	1996.2	2034.2	2079.9	2097.6
35°	1917.5	1925.1	1965.7	2008.8	2026.6
37.5°	1846.5	1846.5	1887.1	1937.8	1955.6
40°	1760.3	1762.8	1805.9	1854.1	1864.3
42.5°	1679.1	1679.1	1717.1	1762.8	1780.6
45°	1587.8	1590.3	1628.4	1669.0	1679.1
47.5°	1493.9	1493.9	1526.9	1565.0	1575.1
50°	1395.0	1390.0	1428.0	1458.4	1466.0
52.5°	1293.6	1286.0	1316.4	1341.8	1351.9
55°	1184.5	1176.9	1199.7	1225.1	1235.2
57.5°	1070.4	1060.2	1085.6	1108.4	1113.5
60°	963.8	948.6	968.9	981.6	994.3
62.5°	857.3	839.6	854.8	862.4	872.5
65°	748.2	730.5	743.2	748.2	760.9
67.5°	644.2	631.6	634.1	641.7	646.8
70°	550.4	535.2	535.2	535.2	537.7
72.5°	464.2	441.3	438.8	441.3	441.3
75°	370.3	355.1	350.0	350.0	347.5
77.5°	296.8	276.5	273.9	268.9	263.8
80°	215.6	197.8	192.8	190.2	187.7
82.5°	149.6	134.4	129.4	124.3	116.7
85°	88.8	78.6	68.5	60.9	53.3
87.5°	33.0	30.4	25.4	22.8	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)