

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: P296141

Luminaire Tested: **24RLN-LD5-80-RDP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296141  
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-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7087.0 lumens  
Efficiency: N/A  
Efficacy: 111.2 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

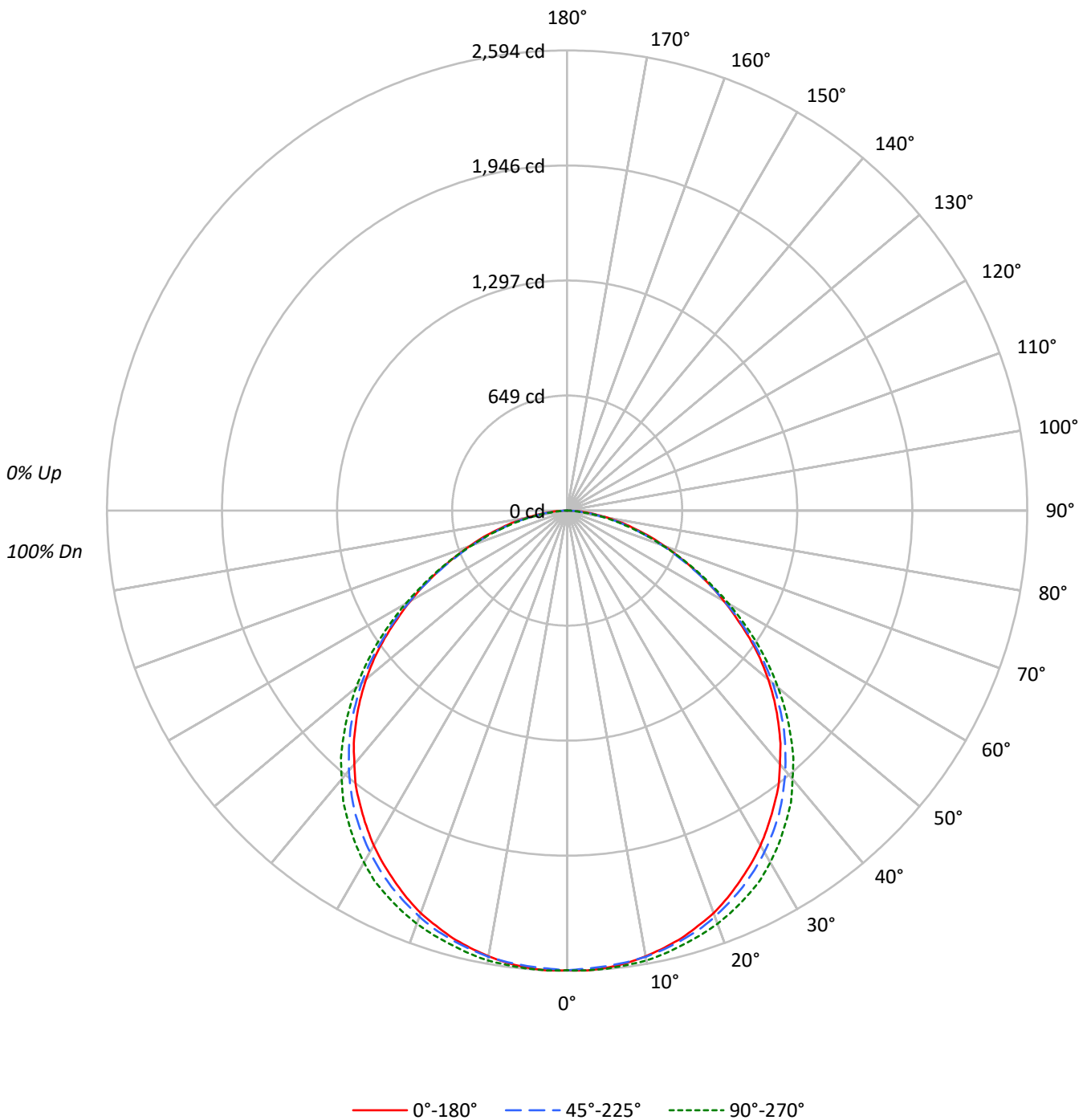
Input Watts (W): 63.705  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3487	3487	3487
5°	3493	3482	3500
10°	3486	3490	3519
15°	3475	3490	3528
20°	3457	3488	3549
25°	3421	3476	3560
30°	3388	3454	3559
35°	3338	3422	3528
40°	3277	3362	3471
45°	3202	3284	3387
50°	3095	3168	3253
55°	2945	2983	3071
60°	2749	2764	2836
65°	2525	2508	2568
70°	2295	2232	2242
75°	2040	1929	1915
80°	1771	1583	1542
85°	1453	1121	872



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	245.8	3.5
10°-20°	708.6	10.0
20°-30°	1081.6	15.3
30°-40°	1304.0	18.4
40°-50°	1329.7	18.8
50°-60°	1138.0	16.1
60°-70°	783.9	11.1
70°-80°	401.9	5.7
80°-90°	93.5	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°	2036.0	28.7
0°-40°	3339.9	47.1
0°-60°	5807.7	81.9
0°-90°	7087.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7087.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2592	2592	2592	2592	2592	
5°	2586	2581	2578	2586	2592	246
15°	2495	2492	2506	2524	2533	704
25°	2304	2312	2342	2382	2398	1063
35°	2032	2041	2084	2129	2148	1272
45°	1683	1686	1726	1769	1780	1297
55°	1256	1248	1272	1299	1309	1120
65°	793	774	788	793	807	788
75°	392	376	371	371	368	423
85°	94	83	73	64	56	109
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2591.7	2591.7	2591.7	2591.7	2591.7
2.5°	2594.4	2589.1	2583.7	2589.1	2594.4
5°	2586.4	2581.0	2578.3	2586.4	2591.7
7.5°	2572.9	2567.5	2567.5	2578.3	2583.7
10°	2551.4	2548.7	2554.1	2564.9	2575.6
12.5°	2524.5	2524.5	2532.6	2546.0	2556.8
15°	2495.0	2492.3	2505.7	2524.5	2532.6
17.5°	2454.6	2457.3	2476.1	2497.6	2508.4
20°	2414.3	2417.0	2435.8	2465.4	2478.8
22.5°	2363.2	2368.6	2390.1	2427.7	2441.2
25°	2304.1	2312.1	2341.7	2382.0	2398.2
27.5°	2244.9	2253.0	2285.3	2331.0	2352.5
30°	2180.4	2191.2	2223.4	2271.8	2290.6
32.5°	2107.8	2115.9	2156.2	2204.6	2223.4
35°	2032.5	2040.6	2083.6	2129.3	2148.1
37.5°	1957.2	1957.2	2000.3	2054.0	2072.9
40°	1865.8	1868.5	1914.2	1965.3	1976.1
42.5°	1779.8	1779.8	1820.1	1868.5	1887.3
45°	1683.0	1685.7	1726.0	1769.1	1779.8
47.5°	1583.5	1583.5	1618.5	1658.8	1669.6
50°	1478.7	1473.3	1513.6	1545.9	1554.0
52.5°	1371.2	1363.1	1395.3	1422.2	1433.0
55°	1255.5	1247.5	1271.7	1298.6	1309.3
57.5°	1134.6	1123.8	1150.7	1174.9	1180.3
60°	1021.6	1005.5	1027.0	1040.5	1053.9
62.5°	908.7	889.9	906.0	914.1	924.9
65°	793.1	774.3	787.7	793.1	806.6
67.5°	682.9	669.4	672.1	680.2	685.6
70°	583.4	567.3	567.3	567.3	570.0
72.5°	492.0	467.8	465.1	467.8	467.8
75°	392.5	376.4	371.0	371.0	368.3
77.5°	314.6	293.0	290.4	285.0	279.6
80°	228.5	209.7	204.3	201.6	199.0
82.5°	158.6	142.5	137.1	131.7	123.7
85°	94.1	83.3	72.6	64.5	56.5
87.5°	35.0	32.3	26.9	24.2	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)