

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: P296227

Luminaire Tested: **24RLN-LD5-80-RDP-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296227  
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-L82765-W2A1-U-4000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6674.0 lumens  
Efficiency: N/A  
Efficacy: 108.6 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

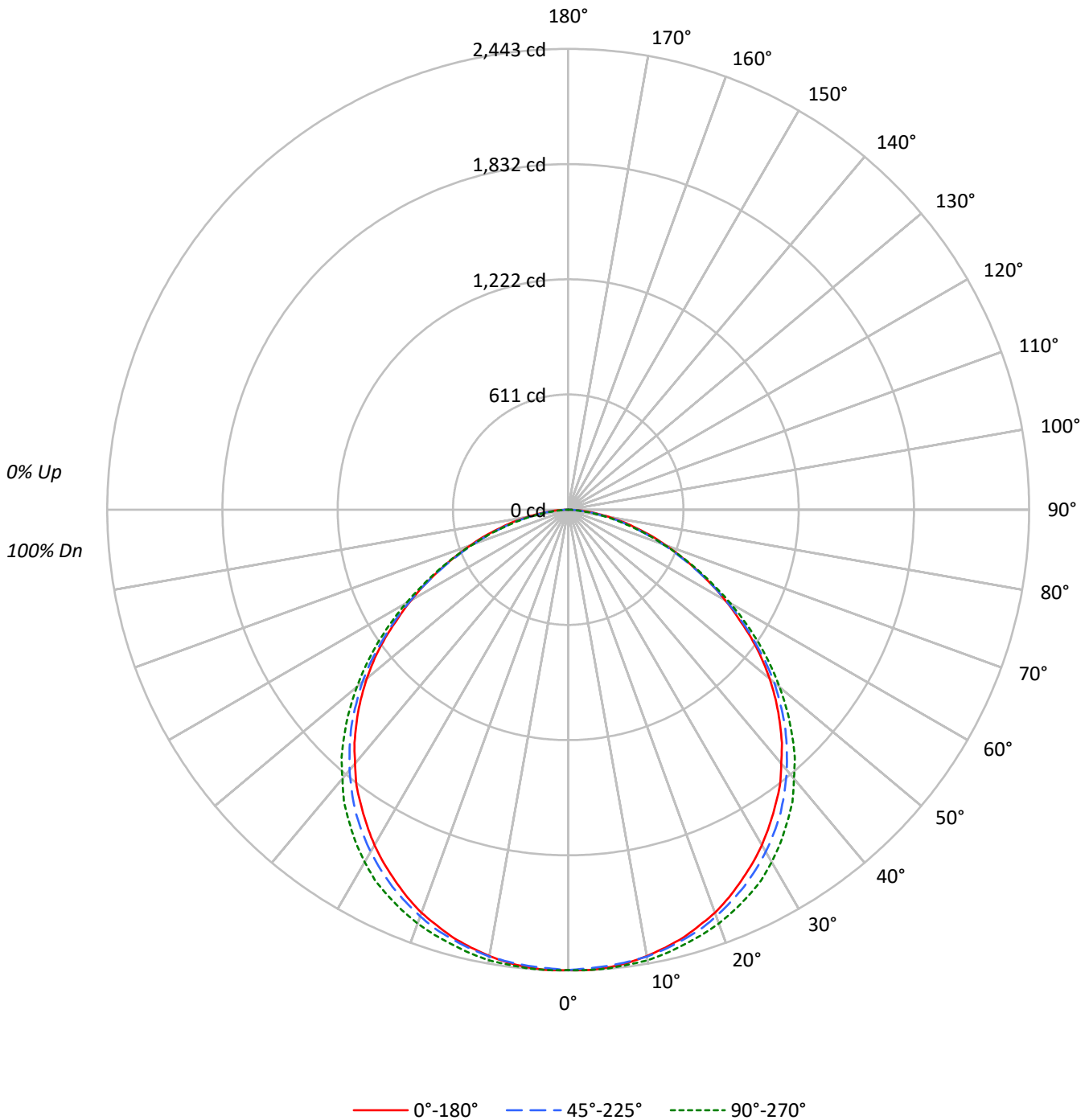
Input Watts (W): 61.473  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P296227

CATALOG NUMBER: 24RLN-LD5-80-RDP-UNV-L82765-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P296227

CATALOG NUMBER: 24RLN-LD5-80-RDP-UNV-L82765-W2A1-U-4000K

**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°	3284	3284	3284
5°	3290	3279	3296
10°	3283	3286	3314
15°	3273	3287	3322
20°	3255	3284	3342
25°	3221	3274	3353
30°	3190	3253	3351
35°	3144	3223	3323
40°	3086	3166	3269
45°	3016	3093	3189
50°	2915	2984	3063
55°	2774	2809	2892
60°	2589	2603	2671
65°	2378	2362	2418
70°	2161	2102	2112
75°	1922	1816	1803
80°	1667	1491	1452
85°	1368	1056	821



TEST NUMBER: P296227

CATALOG NUMBER: 24RLN-LD5-80-RDP-UNV-L82765-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	231.5	3.5
10°-20°	667.3	10.0
20°-30°	1018.6	15.3
30°-40°	1228.0	18.4
40°-50°	1252.3	18.8
50°-60°	1071.7	16.1
60°-70°	738.2	11.1
70°-80°	378.4	5.7
80°-90°	88.1	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°	1917.3	28.7
0°-40°	3145.3	47.1
0°-60°	5469.3	81.9
0°-90°	6674.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6674.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2441	2441	2441	2441	2441	
5°	2436	2431	2428	2436	2441	231
15°	2350	2347	2360	2377	2385	663
25°	2170	2177	2205	2243	2258	1001
35°	1914	1922	1962	2005	2023	1197
45°	1585	1588	1626	1666	1676	1221
55°	1182	1175	1198	1223	1233	1055
65°	747	729	742	747	760	742
75°	370	354	349	349	347	398
85°	89	78	68	61	53	103
90°	0	0	0	0	0	



TEST NUMBER: P296227

CATALOG NUMBER: 24RLN-LD5-80-RDP-UNV-L82765-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2440.7	2440.7	2440.7	2440.7	2440.7
2.5°	2443.2	2438.2	2433.1	2438.2	2443.2
5°	2435.6	2430.6	2428.0	2435.6	2440.7
7.5°	2423.0	2417.9	2417.9	2428.0	2433.1
10°	2402.7	2400.2	2405.3	2415.4	2425.5
12.5°	2377.4	2377.4	2385.0	2397.7	2407.8
15°	2349.6	2347.0	2359.7	2377.4	2385.0
17.5°	2311.6	2314.1	2331.8	2352.1	2362.2
20°	2273.6	2276.1	2293.9	2321.7	2334.4
22.5°	2225.5	2230.6	2250.8	2286.3	2298.9
25°	2169.8	2177.4	2205.2	2243.2	2258.4
27.5°	2114.1	2121.7	2152.1	2195.1	2215.4
30°	2053.3	2063.5	2093.8	2139.4	2157.1
32.5°	1985.0	1992.6	2030.5	2076.1	2093.8
35°	1914.1	1921.7	1962.2	2005.2	2023.0
37.5°	1843.2	1843.2	1883.7	1934.3	1952.1
40°	1757.1	1759.6	1802.7	1850.8	1860.9
42.5°	1676.1	1676.1	1714.1	1759.6	1777.4
45°	1584.9	1587.5	1625.5	1666.0	1676.1
47.5°	1491.3	1491.3	1524.2	1562.2	1572.3
50°	1392.5	1387.5	1425.4	1455.8	1463.4
52.5°	1291.2	1283.6	1314.0	1339.4	1349.5
55°	1182.4	1174.8	1197.6	1222.9	1233.0
57.5°	1068.4	1058.3	1083.6	1106.4	1111.5
60°	962.1	946.9	967.2	979.8	992.5
62.5°	855.8	838.0	853.2	860.8	871.0
65°	746.9	729.2	741.8	746.9	759.6
67.5°	643.1	630.4	633.0	640.6	645.6
70°	549.4	534.2	534.2	534.2	536.8
72.5°	463.3	440.5	438.0	440.5	440.5
75°	369.7	354.5	349.4	349.4	346.9
77.5°	296.2	276.0	273.4	268.4	263.3
80°	215.2	197.5	192.4	189.9	187.4
82.5°	149.4	134.2	129.1	124.1	116.5
85°	88.6	78.5	68.4	60.8	53.2
87.5°	32.9	30.4	25.3	22.8	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)