

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: P296123

Luminaire Tested: **24RLN-LD5-60-RDP-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296123  
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-LD5-60-RDP-UNV-L83050-W2A1-U-3000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4720.0 lumens  
Efficiency: N/A  
Efficacy: 109.4 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

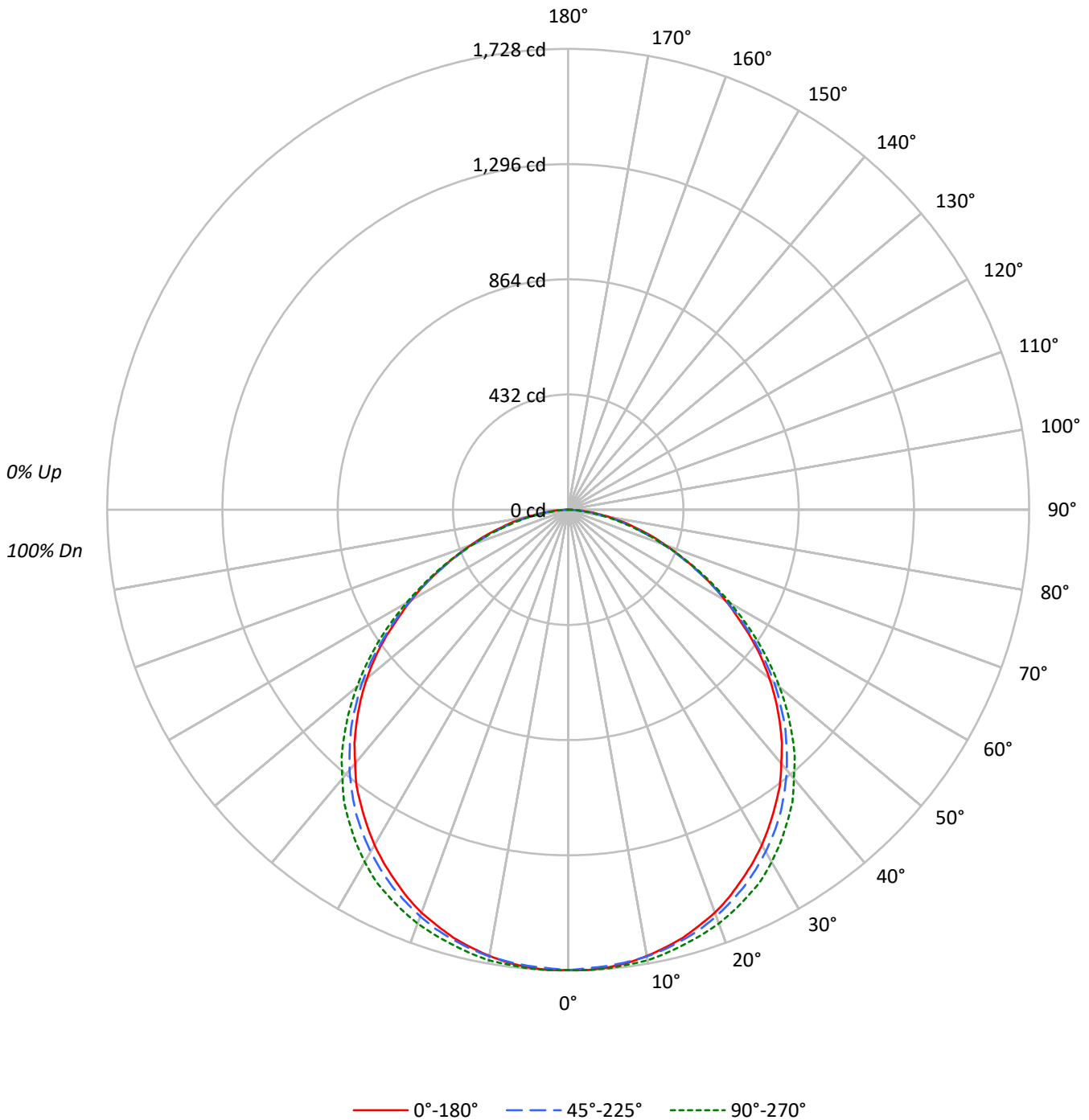
Input Watts (W): 43.152  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2322	2322	2322
5°	2326	2319	2331
10°	2322	2324	2344
15°	2315	2325	2349
20°	2302	2323	2364
25°	2278	2315	2371
30°	2256	2301	2370
35°	2224	2279	2350
40°	2183	2239	2312
45°	2133	2187	2256
50°	2061	2110	2166
55°	1962	1987	2046
60°	1831	1841	1889
65°	1682	1670	1710
70°	1529	1486	1493
75°	1359	1285	1275
80°	1179	1055	1027
85°	968	746	580



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.7	3.5
10°-20°	471.9	10.0
20°-30°	720.4	15.3
30°-40°	868.4	18.4
40°-50°	885.6	18.8
50°-60°	757.9	16.1
60°-70°	522.1	11.1
70°-80°	267.7	5.7
80°-90°	62.3	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°	1356.0	28.7
0°-40°	2224.4	47.1
0°-60°	3868.0	81.9
0°-90°	4720.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4720.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1726	1726	1726	1726	1726	
5°	1722	1719	1717	1722	1726	164
15°	1662	1660	1669	1681	1687	469
25°	1534	1540	1560	1586	1597	708
35°	1354	1359	1388	1418	1431	847
45°	1121	1123	1150	1178	1185	864
55°	836	831	847	865	872	746
65°	528	516	525	528	537	525
75°	261	251	247	247	245	282
85°	63	56	48	43	38	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1726.1	1726.1	1726.1	1726.1	1726.1
2.5°	1727.9	1724.3	1720.8	1724.3	1727.9
5°	1722.5	1719.0	1717.2	1722.5	1726.1
7.5°	1713.6	1710.0	1710.0	1717.2	1720.8
10°	1699.3	1697.5	1701.1	1708.2	1715.4
12.5°	1681.4	1681.4	1686.7	1695.7	1702.8
15°	1661.7	1659.9	1668.8	1681.4	1686.7
17.5°	1634.8	1636.6	1649.1	1663.5	1670.6
20°	1607.9	1609.7	1622.3	1642.0	1650.9
22.5°	1573.9	1577.5	1591.8	1616.9	1625.8
25°	1534.5	1539.9	1559.6	1586.5	1597.2
27.5°	1495.1	1500.5	1522.0	1552.4	1566.8
30°	1452.2	1459.3	1480.8	1513.0	1525.6
32.5°	1403.8	1409.2	1436.0	1468.3	1480.8
35°	1353.7	1359.1	1387.7	1418.1	1430.7
37.5°	1303.5	1303.5	1332.2	1368.0	1380.5
40°	1242.7	1244.5	1274.9	1308.9	1316.1
42.5°	1185.4	1185.4	1212.2	1244.5	1257.0
45°	1120.9	1122.7	1149.6	1178.2	1185.4
47.5°	1054.7	1054.7	1077.9	1104.8	1112.0
50°	984.8	981.2	1008.1	1029.6	1035.0
52.5°	913.2	907.8	929.3	947.2	954.4
55°	836.2	830.8	846.9	864.9	872.0
57.5°	755.6	748.5	766.4	782.5	786.1
60°	680.4	669.7	684.0	693.0	701.9
62.5°	605.2	592.7	603.4	608.8	616.0
65°	528.2	515.7	524.6	528.2	537.2
67.5°	454.8	445.9	447.6	453.0	456.6
70°	388.6	377.8	377.8	377.8	379.6
72.5°	327.7	311.6	309.8	311.6	311.6
75°	261.4	250.7	247.1	247.1	245.3
77.5°	209.5	195.2	193.4	189.8	186.2
80°	152.2	139.7	136.1	134.3	132.5
82.5°	105.6	94.9	91.3	87.7	82.4
85°	62.7	55.5	48.3	43.0	37.6
87.5°	23.3	21.5	17.9	16.1	16.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)