

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: P296106

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296106  
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-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: 3704.0 lumens  
Efficiency: N/A  
Efficacy: 121.4 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

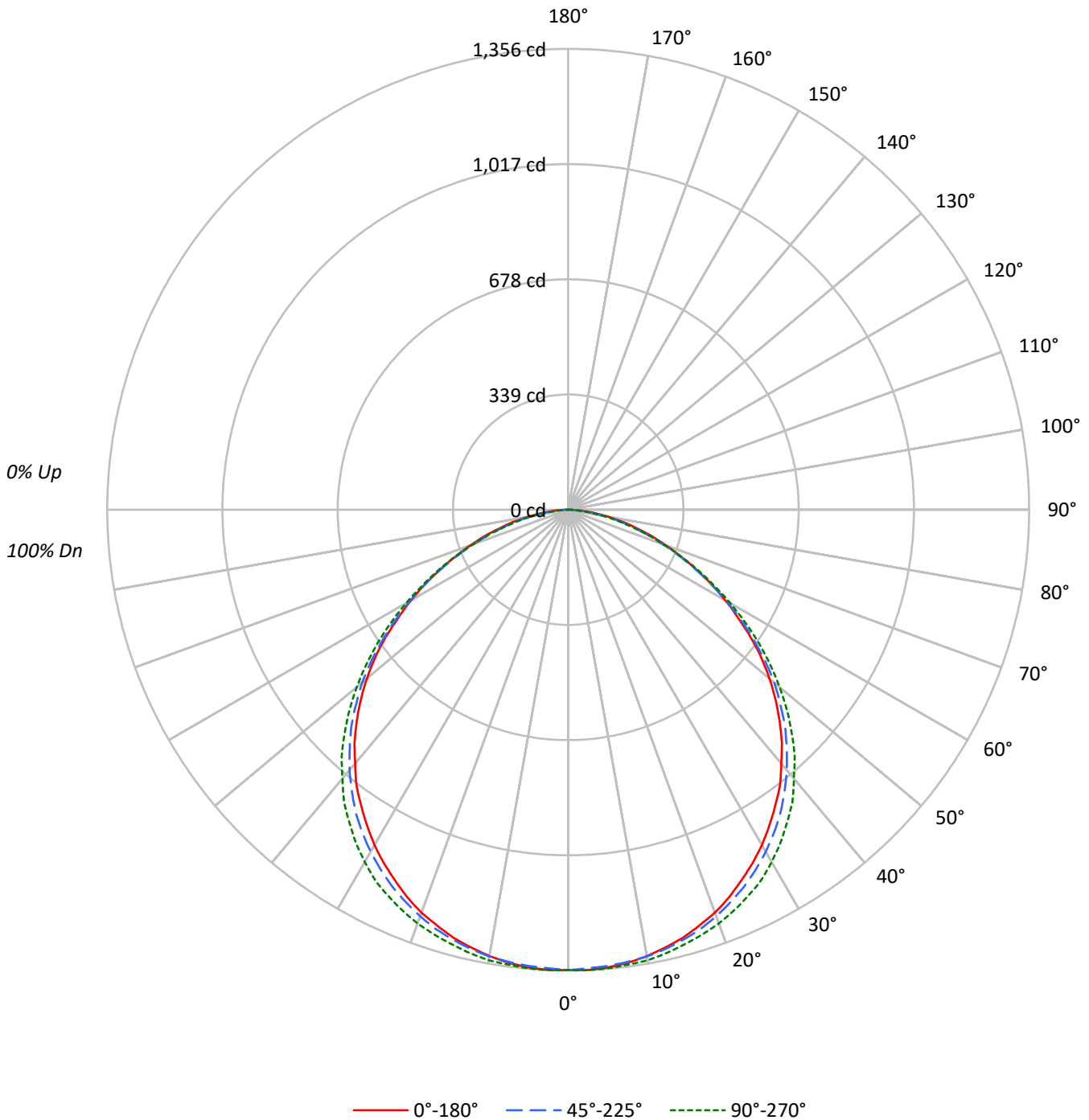
Input Watts (W): 30.504  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1823	1823	1823
5°	1826	1820	1830
10°	1822	1824	1839
15°	1816	1824	1844
20°	1807	1823	1855
25°	1788	1817	1861
30°	1771	1805	1860
35°	1745	1789	1844
40°	1713	1757	1814
45°	1674	1717	1770
50°	1618	1656	1700
55°	1539	1559	1605
60°	1437	1445	1482
65°	1320	1311	1342
70°	1199	1166	1172
75°	1067	1008	1001
80°	925	828	806
85°	760	585	455



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.5	3.5
10°-20°	370.3	10.0
20°-30°	565.3	15.3
30°-40°	681.5	18.4
40°-50°	695.0	18.8
50°-60°	594.8	16.1
60°-70°	409.7	11.1
70°-80°	210.0	5.7
80°-90°	48.9	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°	1064.1	28.7
0°-40°	1745.6	47.1
0°-60°	3035.4	81.9
0°-90°	3704.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3704.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1355	1355	1355	1355	1355	
5°	1352	1349	1348	1352	1355	128
15°	1304	1303	1310	1319	1324	368
25°	1204	1208	1224	1245	1253	555
35°	1062	1066	1089	1113	1123	665
45°	880	881	902	925	930	678
55°	656	652	665	679	684	585
65°	414	405	412	414	422	412
75°	205	197	194	194	192	221
85°	49	44	38	34	30	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1354.6	1354.6	1354.6	1354.6	1354.6
2.5°	1356.0	1353.2	1350.4	1353.2	1356.0
5°	1351.8	1348.9	1347.5	1351.8	1354.6
7.5°	1344.7	1341.9	1341.9	1347.5	1350.4
10°	1333.5	1332.1	1334.9	1340.5	1346.1
12.5°	1319.4	1319.4	1323.7	1330.7	1336.3
15°	1304.0	1302.6	1309.6	1319.4	1323.7
17.5°	1282.9	1284.3	1294.1	1305.4	1311.0
20°	1261.8	1263.2	1273.1	1288.5	1295.6
22.5°	1235.1	1237.9	1249.2	1268.9	1275.9
25°	1204.2	1208.4	1223.9	1245.0	1253.4
27.5°	1173.3	1177.5	1194.4	1218.3	1229.5
30°	1139.6	1145.2	1162.1	1187.4	1197.2
32.5°	1101.6	1105.9	1126.9	1152.2	1162.1
35°	1062.3	1066.5	1089.0	1112.9	1122.7
37.5°	1023.0	1023.0	1045.4	1073.5	1083.4
40°	975.2	976.6	1000.5	1027.2	1032.8
42.5°	930.2	930.2	951.3	976.6	986.4
45°	879.6	881.0	902.1	924.6	930.2
47.5°	827.6	827.6	845.9	867.0	872.6
50°	772.8	770.0	791.1	808.0	812.2
52.5°	716.6	712.4	729.3	743.3	748.9
55°	656.2	652.0	664.6	678.7	684.3
57.5°	593.0	587.4	601.4	614.1	616.9
60°	534.0	525.5	536.8	543.8	550.8
62.5°	474.9	465.1	473.5	477.8	483.4
65°	414.5	404.7	411.7	414.5	421.5
67.5°	356.9	349.9	351.3	355.5	358.3
70°	304.9	296.5	296.5	296.5	297.9
72.5°	257.1	244.5	243.1	244.5	244.5
75°	205.2	196.7	193.9	193.9	192.5
77.5°	164.4	153.2	151.8	148.9	146.1
80°	119.4	109.6	106.8	105.4	104.0
82.5°	82.9	74.5	71.7	68.9	64.6
85°	49.2	43.6	37.9	33.7	29.5
87.5°	18.3	16.9	14.1	12.6	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)