

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: P296119

Luminaire Tested: **24RLN-LD5-55-RDP-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296119  
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-LD5-55-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: 4601.0 lumens  
Efficiency: N/A  
Efficacy: 120.1 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

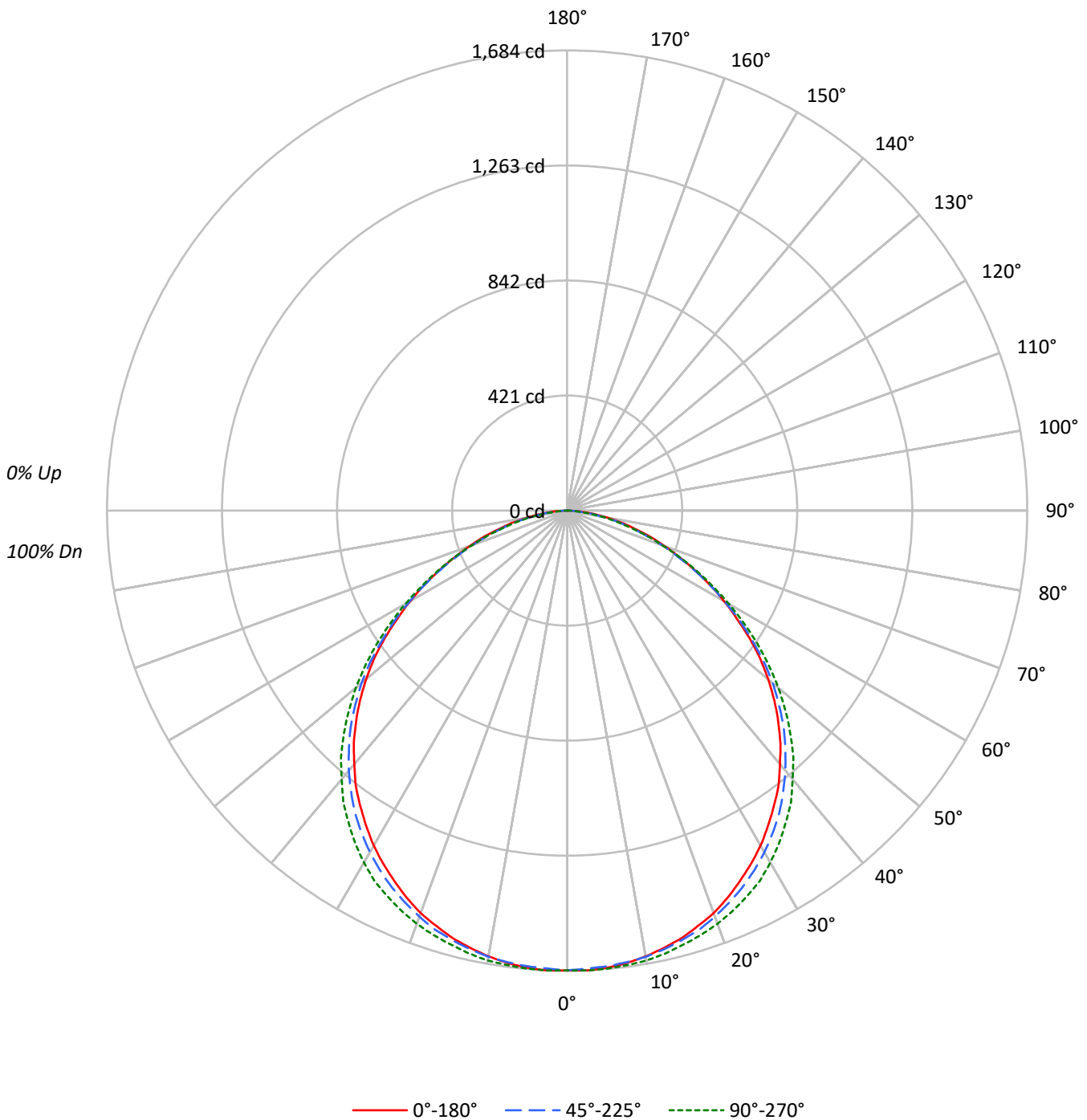
Input Watts (W): 38.316  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P296119

CATALOG NUMBER: 24RLN-LD5-55-RDP-UNV-L83050-W2A1-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P296119

CATALOG NUMBER: 24RLN-LD5-55-RDP-UNV-L83050-W2A1-U-3500K

**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°	2264	2264	2264
5°	2268	2261	2273
10°	2263	2266	2284
15°	2256	2266	2290
20°	2244	2264	2304
25°	2221	2257	2311
30°	2199	2243	2310
35°	2167	2222	2291
40°	2128	2183	2253
45°	2079	2132	2199
50°	2009	2057	2112
55°	1912	1937	1994
60°	1785	1794	1841
65°	1639	1628	1667
70°	1490	1449	1456
75°	1325	1252	1243
80°	1150	1028	1001
85°	943	727	567



TEST NUMBER: P296119

CATALOG NUMBER: 24RLN-LD5-55-RDP-UNV-L83050-W2A1-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.6	3.5
10°-20°	460.0	10.0
20°-30°	702.2	15.3
30°-40°	846.6	18.4
40°-50°	863.3	18.8
50°-60°	738.8	16.1
60°-70°	508.9	11.1
70°-80°	260.9	5.7
80°-90°	60.7	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°	1321.8	28.7
0°-40°	2168.4	47.1
0°-60°	3770.5	81.9
0°-90°	4601.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4601.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1683	1683	1683	1683	1683	
5°	1679	1676	1674	1679	1683	160
15°	1620	1618	1627	1639	1644	457
25°	1496	1501	1520	1546	1557	690
35°	1320	1325	1353	1382	1395	826
45°	1093	1094	1121	1148	1156	842
55°	815	810	826	843	850	727
65°	515	503	511	515	524	512
75°	255	244	241	241	239	275
85°	61	54	47	42	37	71
90°	0	0	0	0	0	



TEST NUMBER: P296119

CATALOG NUMBER: 24RLN-LD5-55-RDP-UNV-L83050-W2A1-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1682.6	1682.6	1682.6	1682.6	1682.6
2.5°	1684.3	1680.9	1677.4	1680.9	1684.3
5°	1679.1	1675.6	1673.9	1679.1	1682.6
7.5°	1670.4	1666.9	1666.9	1673.9	1677.4
10°	1656.4	1654.7	1658.2	1665.1	1672.1
12.5°	1639.0	1639.0	1644.2	1652.9	1659.9
15°	1619.8	1618.0	1626.7	1639.0	1644.2
17.5°	1593.6	1595.3	1607.5	1621.5	1628.5
20°	1567.4	1569.1	1581.4	1600.6	1609.3
22.5°	1534.2	1537.7	1551.7	1576.1	1584.9
25°	1495.8	1501.1	1520.3	1546.5	1556.9
27.5°	1457.4	1462.7	1483.6	1513.3	1527.3
30°	1415.6	1422.5	1443.5	1474.9	1487.1
32.5°	1368.4	1373.7	1399.8	1431.3	1443.5
35°	1319.6	1324.8	1352.7	1382.4	1394.6
37.5°	1270.7	1270.7	1298.6	1333.5	1345.7
40°	1211.3	1213.1	1242.8	1275.9	1282.9
42.5°	1155.5	1155.5	1181.7	1213.1	1225.3
45°	1092.6	1094.4	1120.6	1148.5	1155.5
47.5°	1028.1	1028.1	1050.8	1076.9	1083.9
50°	960.0	956.5	982.7	1003.6	1008.9
52.5°	890.2	884.9	905.9	923.3	930.3
55°	815.1	809.9	825.6	843.0	850.0
57.5°	736.6	729.6	747.0	762.8	766.2
60°	663.3	652.8	666.8	675.5	684.2
62.5°	590.0	577.7	588.2	593.4	600.4
65°	514.9	502.7	511.4	514.9	523.6
67.5°	443.3	434.6	436.4	441.6	445.1
70°	378.8	368.3	368.3	368.3	370.0
72.5°	319.4	303.7	302.0	303.7	303.7
75°	254.8	244.4	240.9	240.9	239.1
77.5°	204.2	190.3	188.5	185.0	181.5
80°	148.4	136.1	132.7	130.9	129.2
82.5°	103.0	92.5	89.0	85.5	80.3
85°	61.1	54.1	47.1	41.9	36.7
87.5°	22.7	20.9	17.5	15.7	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)