

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: P296200

Luminaire Tested: **24RLN-LD5-60-RDP-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296200
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-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: 4986.0 lumens
Efficiency: N/A
Efficacy: 114.1 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

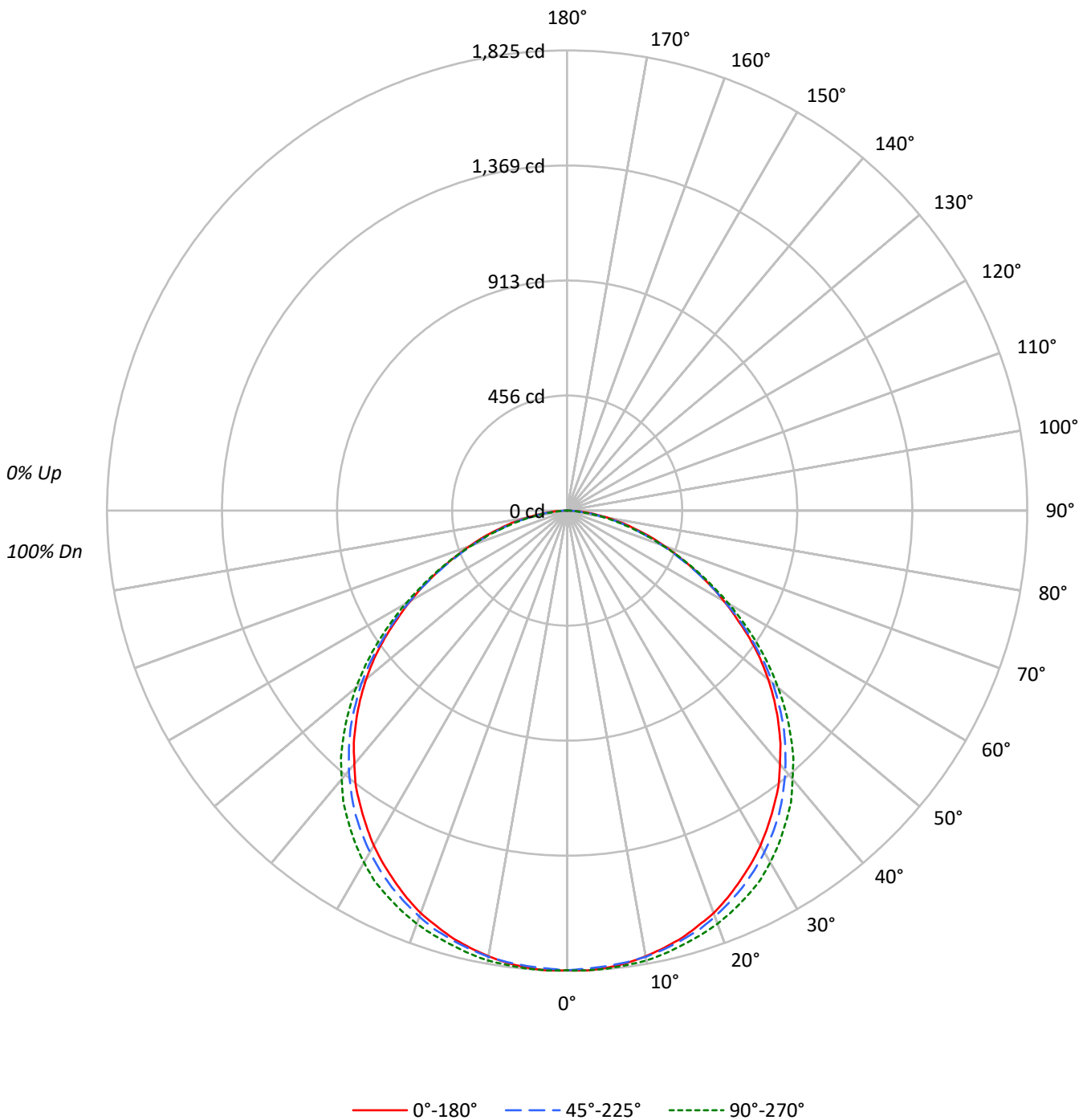
Input Watts (W): 43.71
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P296200

CATALOG NUMBER: 24RLN-LD5-60-RDP-UNV-L82765-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P296200

CATALOG NUMBER: 24RLN-LD5-60-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	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°	2453	2453	2453
5°	2458	2450	2463
10°	2452	2455	2476
15°	2445	2456	2482
20°	2432	2454	2497
25°	2407	2446	2505
30°	2383	2430	2504
35°	2349	2408	2482
40°	2306	2365	2442
45°	2253	2311	2383
50°	2178	2229	2289
55°	2072	2099	2161
60°	1934	1945	1995
65°	1777	1764	1806
70°	1615	1570	1578
75°	1436	1357	1347
80°	1246	1114	1085
85°	1022	789	613



TEST NUMBER: P296200

CATALOG NUMBER: 24RLN-LD5-60-RDP-UNV-L82765-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.9	3.5
10°-20°	498.5	10.0
20°-30°	761.0	15.3
30°-40°	917.4	18.4
40°-50°	935.5	18.8
50°-60°	800.7	16.1
60°-70°	551.5	11.1
70°-80°	282.7	5.7
80°-90°	65.8	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°	1432.4	28.7
0°-40°	2349.8	47.1
0°-60°	4086.0	81.9
0°-90°	4986.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4986.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1823	1823	1823	1823	1823	
5°	1820	1816	1814	1820	1823	173
15°	1755	1753	1763	1776	1782	495
25°	1621	1627	1648	1676	1687	748
35°	1430	1436	1466	1498	1511	895
45°	1184	1186	1214	1245	1252	912
55°	883	878	895	914	921	788
65°	558	545	554	558	567	554
75°	276	265	261	261	259	298
85°	66	59	51	45	40	77
90°	0	0	0	0	0	



TEST NUMBER: P296200

CATALOG NUMBER: 24RLN-LD5-60-RDP-UNV-L82765-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1823.4	1823.4	1823.4	1823.4	1823.4
2.5°	1825.3	1821.5	1817.7	1821.5	1825.3
5°	1819.6	1815.8	1813.9	1819.6	1823.4
7.5°	1810.2	1806.4	1806.4	1813.9	1817.7
10°	1795.0	1793.1	1796.9	1804.5	1812.1
12.5°	1776.1	1776.1	1781.8	1791.2	1798.8
15°	1755.3	1753.4	1762.9	1776.1	1781.8
17.5°	1726.9	1728.8	1742.1	1757.2	1764.8
20°	1698.6	1700.5	1713.7	1734.5	1744.0
22.5°	1662.6	1666.4	1681.5	1708.0	1717.5
25°	1621.0	1626.7	1647.5	1675.9	1687.2
27.5°	1579.4	1585.1	1607.8	1639.9	1655.1
30°	1534.0	1541.6	1564.3	1598.3	1611.6
32.5°	1482.9	1488.6	1517.0	1551.0	1564.3
35°	1430.0	1435.6	1465.9	1498.1	1511.3
37.5°	1377.0	1377.0	1407.3	1445.1	1458.3
40°	1312.7	1314.6	1346.7	1382.7	1390.2
42.5°	1252.2	1252.2	1280.5	1314.6	1327.8
45°	1184.1	1186.0	1214.3	1244.6	1252.2
47.5°	1114.1	1114.1	1138.7	1167.1	1174.6
50°	1040.3	1036.5	1064.9	1087.6	1093.3
52.5°	964.7	959.0	981.7	1000.6	1008.2
55°	883.3	877.7	894.7	913.6	921.2
57.5°	798.2	790.6	809.6	826.6	830.4
60°	718.8	707.4	722.6	732.0	741.5
62.5°	639.3	626.1	637.4	643.1	650.7
65°	558.0	544.7	554.2	558.0	567.4
67.5°	480.4	471.0	472.9	478.5	482.3
70°	410.5	399.1	399.1	399.1	401.0
72.5°	346.1	329.1	327.2	329.1	329.1
75°	276.2	264.8	261.0	261.0	259.1
77.5°	221.3	206.2	204.3	200.5	196.7
80°	160.8	147.5	143.8	141.9	140.0
82.5°	111.6	100.2	96.5	92.7	87.0
85°	66.2	58.6	51.1	45.4	39.7
87.5°	24.6	22.7	18.9	17.0	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)