

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: P296032

Luminaire Tested: **24RLN-LD5-45-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296032
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-45-UNV-L92765-W2A1-U-3500K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (504) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3890.0 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

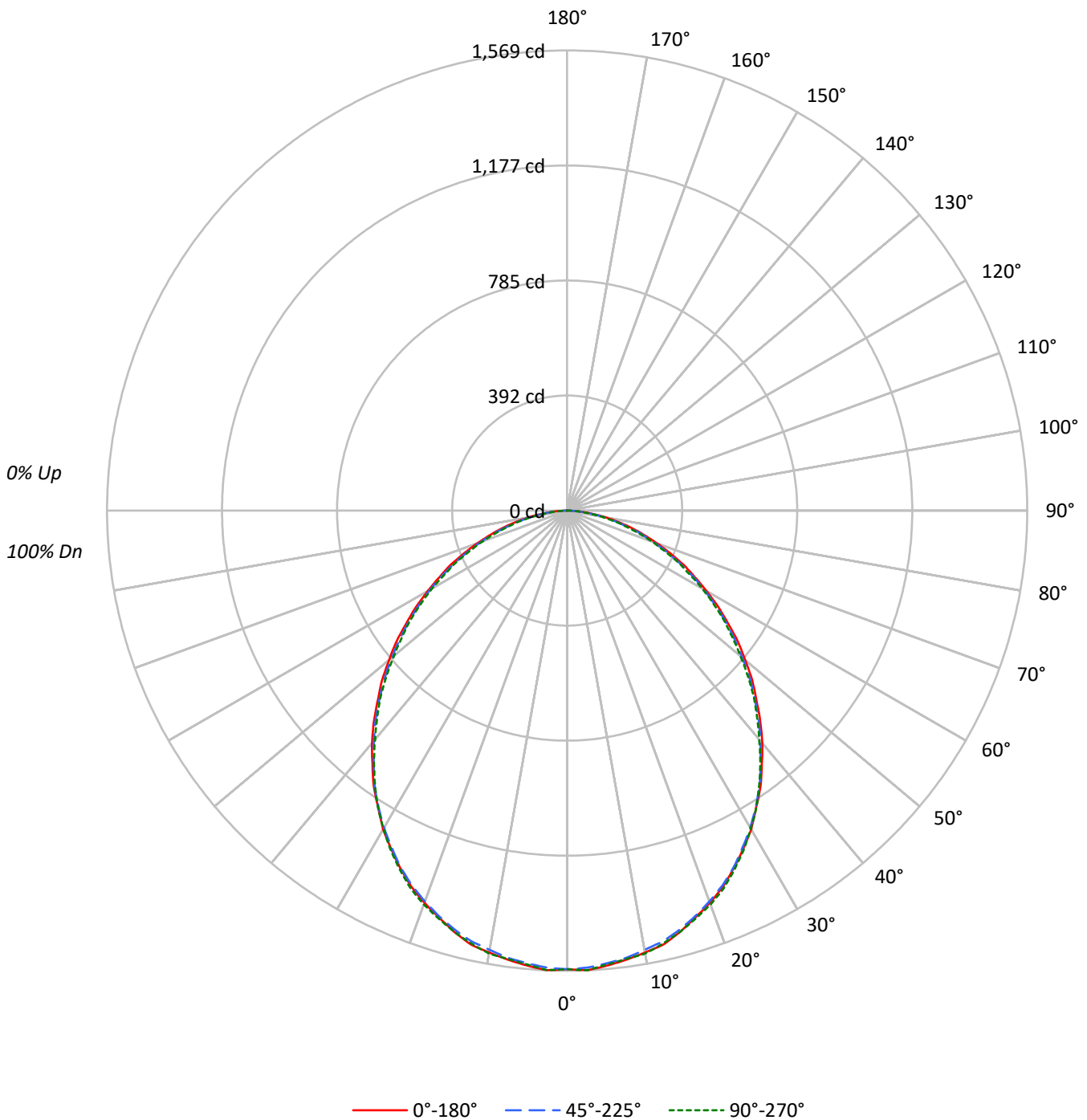
Input Watts (W): 31.62
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2104	2104	2104
5°	2103	2093	2098
10°	2090	2078	2095
15°	2071	2061	2071
20°	2038	2030	2047
25°	1997	1993	2005
30°	1950	1940	1946
35°	1888	1880	1876
40°	1818	1801	1790
45°	1736	1719	1712
50°	1658	1631	1613
55°	1569	1545	1531
60°	1476	1449	1432
65°	1394	1343	1330
70°	1279	1229	1205
75°	1174	1103	1057
80°	1031	962	904
85°	834	775	659



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.5	3.8
10°-20°	418.3	10.8
20°-30°	618.7	15.9
30°-40°	714.0	18.4
40°-50°	697.4	17.9
50°-60°	588.9	15.1
60°-70°	419.5	10.8
70°-80°	227.1	5.8
80°-90°	58.6	1.5
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°	1184.5	30.4
0°-40°	1898.5	48.8
0°-60°	3184.8	81.9
0°-90°	3890.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3890.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1564	1564	1564	1564	1564	
5°	1557	1557	1550	1554	1554	148
15°	1487	1481	1480	1486	1487	419
25°	1345	1338	1343	1348	1350	619
35°	1150	1141	1144	1141	1142	717
45°	912	905	904	900	900	705
55°	669	660	659	653	653	600
65°	438	429	422	417	418	432
75°	226	218	212	207	203	239
85°	54	53	50	44	43	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1563.7	1563.7	1563.7	1563.7	1563.7
2.5°	1568.7	1562.4	1559.9	1561.2	1568.7
5°	1557.4	1557.4	1549.9	1553.6	1553.6
7.5°	1544.8	1546.1	1538.6	1544.8	1542.3
10°	1529.8	1526.0	1521.0	1531.0	1533.6
12.5°	1516.0	1507.2	1504.7	1511.0	1512.2
15°	1487.1	1480.8	1479.6	1485.9	1487.1
17.5°	1454.5	1455.7	1450.7	1459.5	1458.3
20°	1423.1	1420.6	1418.1	1428.1	1429.4
22.5°	1388.0	1380.4	1383.0	1391.7	1394.3
25°	1345.3	1337.8	1342.8	1347.8	1350.3
27.5°	1300.1	1296.4	1295.1	1301.4	1303.9
30°	1255.0	1248.7	1248.7	1256.2	1252.4
32.5°	1199.7	1194.7	1197.2	1199.7	1201.0
35°	1149.5	1140.8	1144.5	1140.8	1142.0
37.5°	1090.6	1084.3	1083.0	1081.8	1081.8
40°	1035.3	1030.3	1025.3	1025.3	1019.0
42.5°	975.1	968.8	966.3	962.5	958.8
45°	912.3	904.8	903.6	899.8	899.8
47.5°	855.9	844.6	843.3	835.8	835.8
50°	791.9	784.3	779.3	774.3	770.5
52.5°	734.1	726.6	719.1	714.1	710.3
55°	668.9	660.1	658.8	652.6	652.6
57.5°	609.9	602.4	597.4	589.8	591.1
60°	548.4	540.9	538.4	532.1	532.1
62.5°	490.7	484.4	480.6	474.4	469.4
65°	438.0	429.2	421.7	416.6	417.9
67.5°	380.3	370.2	366.4	361.4	357.7
70°	325.0	318.8	312.5	306.2	306.2
72.5°	273.6	267.3	263.5	256.0	253.5
75°	225.9	218.4	212.1	207.1	203.3
77.5°	178.2	170.7	166.9	160.6	160.6
80°	133.0	128.0	124.2	121.7	116.7
82.5°	91.6	89.1	85.3	81.6	77.8
85°	54.0	52.7	50.2	43.9	42.7
87.5°	21.3	21.3	18.8	17.6	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)