

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: P232320

Luminaire Tested: **24RDIA-50-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232320
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-078-8-R2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RDIA-50-UNV-L830-CD1-U
Description: METALUX 2X4 OVATION LED TROFFER
AIR VENTED VERSION
Light Source: (392) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

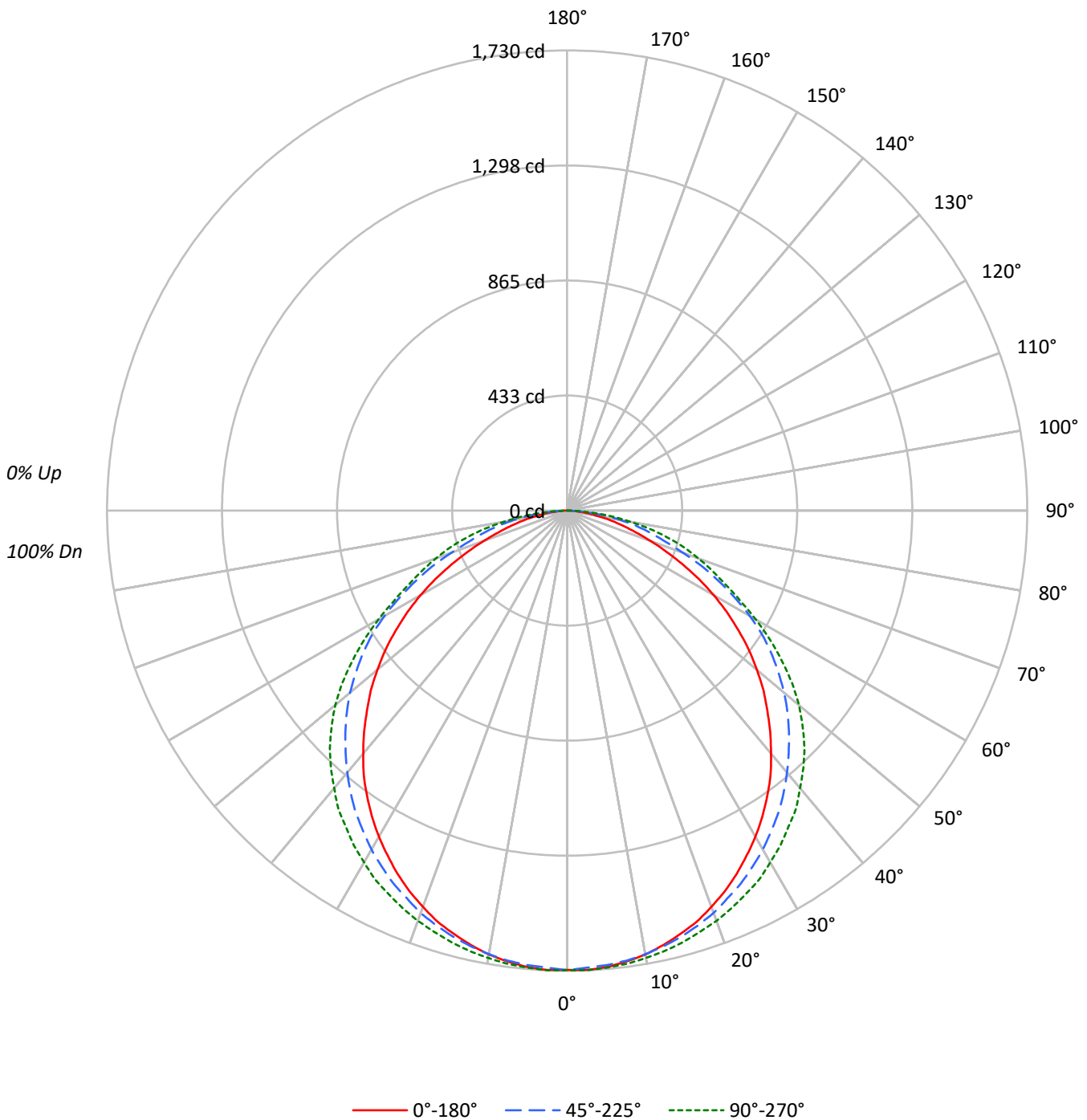
Lumens per Lamp: N/A
Luminaire Lumens: 4955.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.39
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 50.3
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: P232320
CATALOG NUMBER: 24RDIA-50-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P232320

CATALOG NUMBER: 24RDIA-50-UNV-L830-CD1-U

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	104	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2789	2789	2789
5°	2792	2780	2796
10°	2778	2776	2800
15°	2754	2772	2808
20°	2724	2766	2820
25°	2686	2755	2833
30°	2640	2744	2847
35°	2585	2731	2860
40°	2514	2711	2872
45°	2430	2693	2881
50°	2338	2676	2859
55°	2215	2641	2774
60°	2055	2564	2642
65°	1829	2408	2505
70°	1573	2186	2478
75°	1331	2027	2435
80°	1082	1882	2220
85°	763	1460	1751



TEST NUMBER: P232320

CATALOG NUMBER: 24RDIA-50-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.5	3.3
10°-20°	469.0	9.5
20°-30°	713.6	14.4
30°-40°	865.3	17.5
40°-50°	903.6	18.2
50°-60°	813.9	16.4
60°-70°	598.8	12.1
70°-80°	339.0	6.8
80°-90°	88.2	1.8
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°	1346.1	27.2
0°-40°	2211.4	44.6
0°-60°	3928.9	79.3
0°-90°	4955.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4955.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1727	1727	1727	1727	1727	
5°	1722	1719	1715	1722	1725	163
15°	1647	1650	1658	1674	1680	465
25°	1508	1518	1547	1579	1590	694
35°	1312	1333	1386	1433	1451	820
45°	1064	1104	1179	1241	1262	821
55°	787	841	938	981	986	703
65°	479	564	630	648	656	476
75°	213	279	325	376	390	230
85°	41	57	79	90	94	52
90°	0	0	0	0	0	



TEST NUMBER: P232320

CATALOG NUMBER: 24RDIA-50-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1727.3	1727.3	1727.3	1727.3	1727.3
2.5°	1728.5	1724.9	1720.0	1726.1	1729.7
5°	1722.5	1718.8	1715.2	1722.5	1724.9
7.5°	1710.3	1707.9	1706.7	1715.2	1718.8
10°	1694.6	1692.2	1693.4	1705.5	1707.9
12.5°	1672.8	1674.0	1677.6	1691.0	1695.8
15°	1647.3	1649.7	1658.2	1674.0	1680.0
17.5°	1620.6	1621.9	1635.2	1654.6	1660.6
20°	1585.5	1592.8	1609.7	1632.8	1641.3
22.5°	1549.1	1557.6	1577.0	1607.3	1617.0
25°	1507.9	1517.6	1546.7	1579.4	1590.3
27.5°	1461.9	1476.4	1509.1	1547.9	1563.7
30°	1415.8	1431.5	1471.6	1512.8	1527.3
32.5°	1364.9	1381.9	1427.9	1475.2	1492.2
35°	1311.5	1333.4	1385.5	1432.8	1450.9
37.5°	1255.8	1278.8	1337.0	1391.5	1413.4
40°	1192.8	1221.8	1286.1	1344.3	1362.5
42.5°	1129.7	1164.9	1232.8	1294.6	1314.0
45°	1064.3	1104.3	1179.4	1241.2	1261.8
47.5°	1001.2	1041.2	1123.7	1184.3	1201.2
50°	930.9	979.4	1065.5	1123.7	1138.2
52.5°	861.8	911.5	1001.2	1057.0	1065.5
55°	786.7	841.2	938.2	980.6	985.5
57.5°	712.7	773.4	870.3	904.3	905.5
60°	636.4	703.0	794.0	818.2	818.2
62.5°	560.0	636.4	711.5	735.8	733.4
65°	478.8	563.7	630.3	648.5	655.8
67.5°	403.6	494.6	550.3	570.9	589.1
70°	333.3	423.0	463.0	505.5	524.9
72.5°	269.1	353.9	385.5	446.1	460.6
75°	213.3	278.8	324.9	375.8	390.3
77.5°	164.9	207.3	265.5	309.1	317.6
80°	116.4	143.0	202.4	232.7	238.8
82.5°	77.6	98.2	140.6	162.4	169.7
85°	41.2	57.0	78.8	89.7	94.5
87.5°	15.8	23.0	26.7	29.1	30.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)