

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: P229361

Luminaire Tested: **24ALNG-LD5-45-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229361
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36066)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24ALNG-LD5-45-UNV-L830-CD1-U
Description: METALUX 2X4 ARCLINE LED TROFFER WITH CURVED LENS
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4325.0 lumens
Efficiency: N/A
Efficacy: 133.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

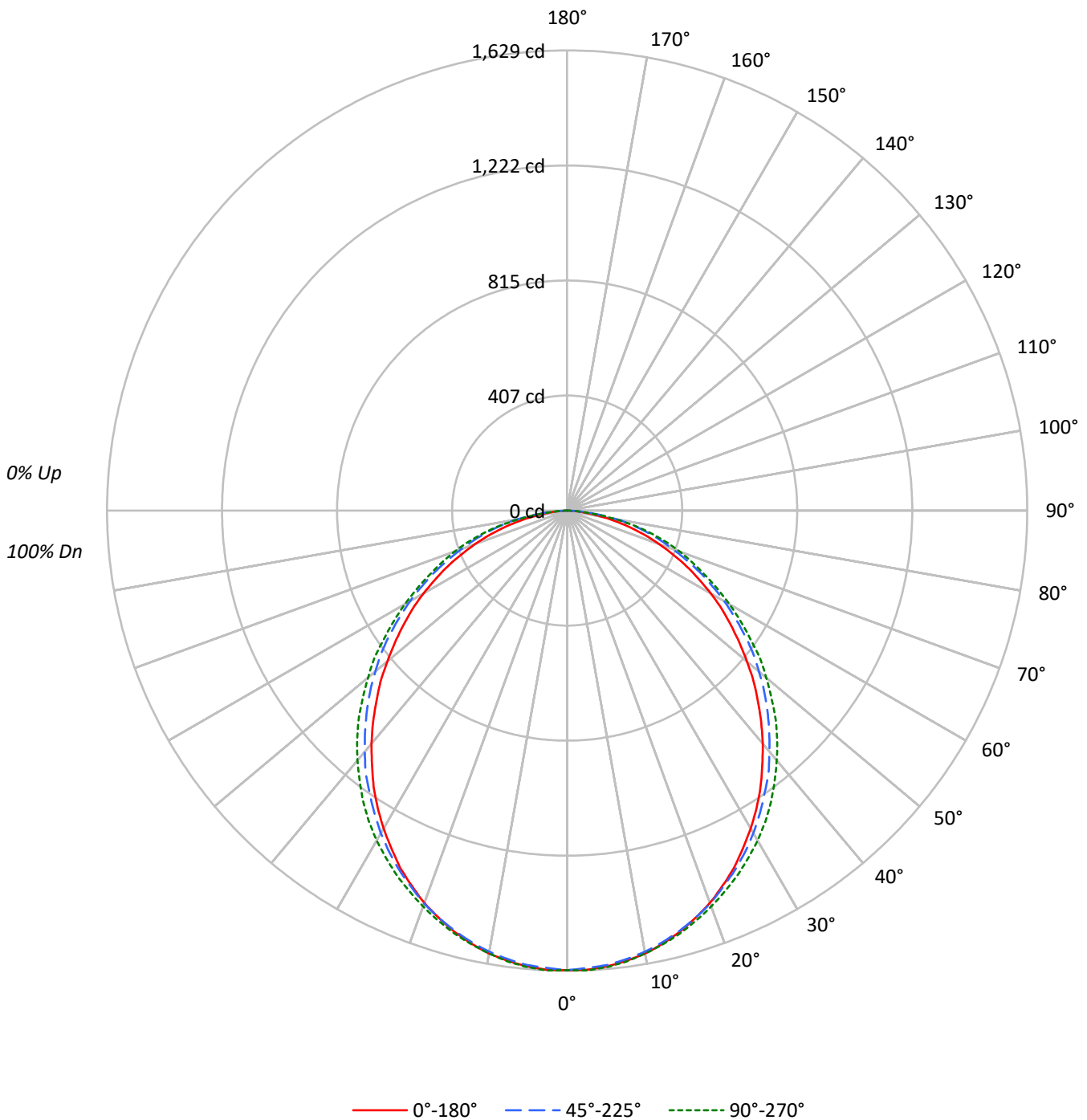
Input Watts (W): 32.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	54	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2492	2492	2492
5°	2490	2483	2494
10°	2476	2467	2476
15°	2447	2441	2456
20°	2410	2413	2431
25°	2360	2375	2409
30°	2298	2332	2385
35°	2233	2280	2354
40°	2155	2227	2309
45°	2070	2171	2262
50°	1980	2111	2191
55°	1889	2046	2113
60°	1800	1968	2031
65°	1690	1881	1947
70°	1552	1782	1895
75°	1362	1710	1802
80°	1100	1596	1512
85°	780	1053	844



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.6	3.6
10°-20°	435.3	10.1
20°-30°	648.6	15.0
30°-40°	765.2	17.7
40°-50°	772.6	17.9
50°-60°	678.5	15.7
60°-70°	506.0	11.7
70°-80°	294.7	6.8
80°-90°	70.4	1.6
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°	1237.5	28.6
0°-40°	2002.8	46.3
0°-60°	3453.8	79.9
0°-90°	4325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4325.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1627	1627	1627	1627	1627	
5°	1620	1618	1615	1620	1622	154
15°	1543	1542	1539	1547	1549	435
25°	1397	1398	1405	1421	1426	642
35°	1194	1201	1219	1248	1259	746
45°	956	970	1002	1032	1044	737
55°	707	729	766	790	791	634
65°	466	486	519	535	537	461
75°	230	258	289	303	304	245
85°	44	65	60	50	48	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1626.9	1626.9	1626.9	1626.9	1626.9
2.5°	1626.9	1625.7	1620.9	1625.7	1629.3
5°	1619.7	1618.5	1615.0	1619.7	1622.1
7.5°	1607.8	1606.6	1601.8	1609.0	1610.2
10°	1592.2	1589.8	1586.2	1591.0	1592.2
12.5°	1569.4	1568.2	1564.6	1570.6	1571.8
15°	1543.0	1541.8	1539.4	1546.6	1549.0
17.5°	1511.8	1513.0	1511.8	1520.2	1521.4
20°	1478.3	1479.5	1480.7	1490.3	1491.5
22.5°	1437.5	1438.7	1442.3	1455.5	1459.1
25°	1396.7	1397.9	1405.1	1420.7	1425.5
27.5°	1347.6	1352.4	1363.2	1382.4	1387.2
30°	1299.6	1304.4	1318.8	1341.6	1348.8
32.5°	1248.1	1252.9	1269.7	1294.8	1305.6
35°	1194.1	1201.3	1219.3	1248.1	1258.9
37.5°	1134.2	1147.4	1171.4	1198.9	1206.1
40°	1077.8	1087.4	1113.8	1147.4	1154.6
42.5°	1016.7	1029.9	1058.7	1092.2	1100.6
45°	955.5	969.9	1002.3	1032.3	1044.3
47.5°	895.6	911.2	946.0	977.1	980.7
50°	830.9	850.0	886.0	916.0	919.6
52.5°	768.5	791.3	829.7	853.6	862.0
55°	707.4	728.9	766.1	790.1	791.3
57.5°	649.8	667.8	703.8	724.2	727.7
60°	587.5	605.5	642.6	659.4	663.0
62.5°	525.1	544.3	580.3	597.1	599.5
65°	466.4	485.6	519.1	534.7	537.1
67.5°	404.0	428.0	456.8	477.2	479.6
70°	346.5	370.5	398.0	418.4	423.2
72.5°	288.9	316.5	344.1	359.7	365.7
75°	230.2	257.8	288.9	303.3	304.5
77.5°	176.2	202.6	235.0	243.4	239.8
80°	124.7	153.5	181.0	179.8	171.4
82.5°	79.1	106.7	117.5	110.3	105.5
85°	44.4	64.7	59.9	50.4	48.0
87.5°	18.0	19.2	14.4	9.6	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)