

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: P238879

Luminaire Tested: **24EN-LD2-30-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238879
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-234-34)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-30-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (224)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3179.6 lumens
Efficiency: N/A
Efficacy: 129.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

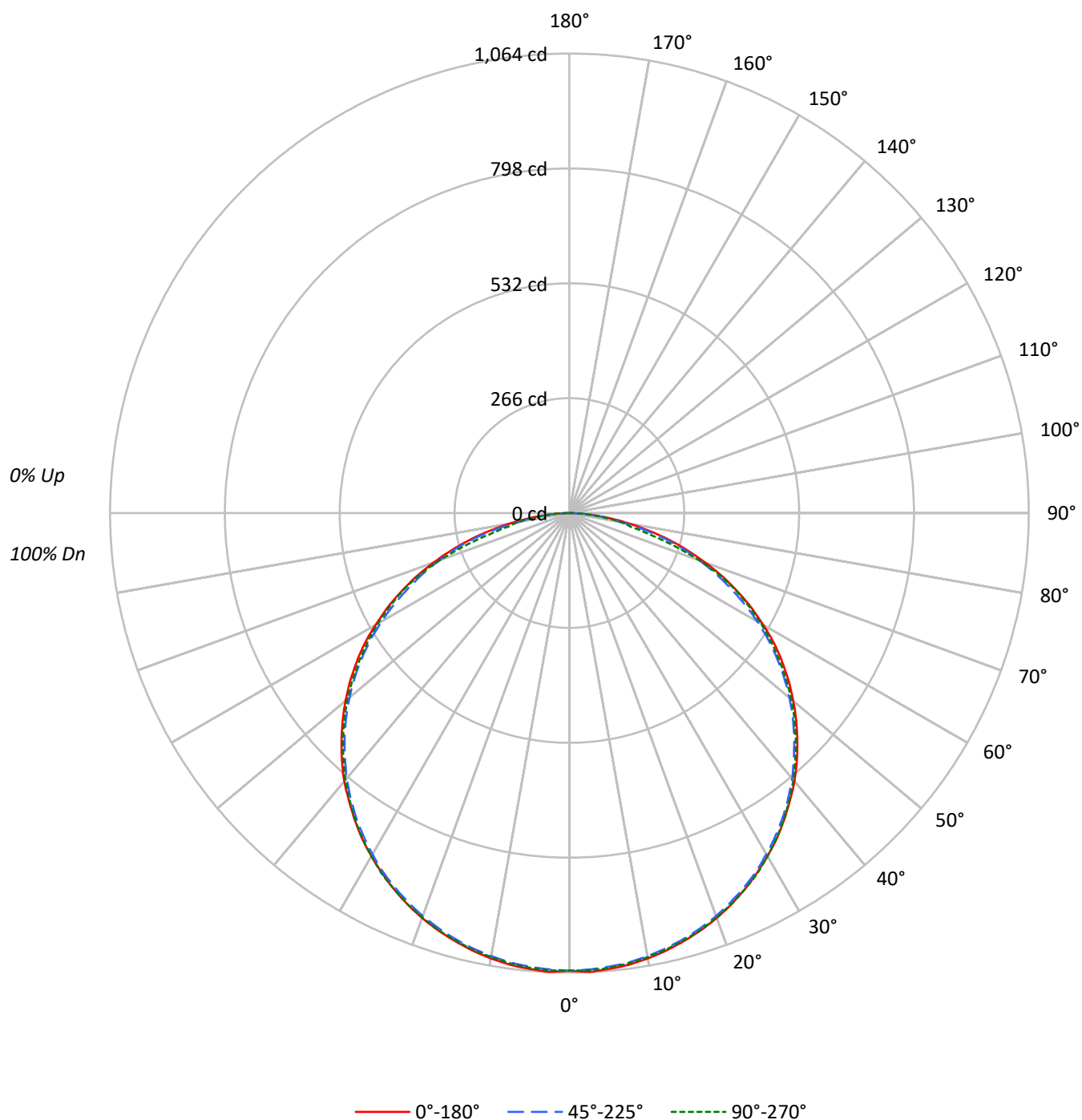
Input Watts (W): 24.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		90
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		78
3	90	79	70	64	87	77	69	63	74	67	62		71	66	61		69
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		41
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	25	37	30	25		36	30	25		35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1623	1623	1623
5°	1629	1621	1625
10°	1628	1620	1624
15°	1627	1619	1623
20°	1626	1619	1624
25°	1625	1617	1625
30°	1623	1613	1623
35°	1621	1610	1618
40°	1622	1605	1614
45°	1617	1594	1606
50°	1613	1585	1599
55°	1607	1568	1584
60°	1587	1538	1571
65°	1555	1490	1546
70°	1499	1437	1434
75°	1411	1349	1140
80°	1242	1055	1084
85°	981	923	852



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.4	3.2
10°-20°	288.7	9.1
20°-30°	441.7	13.9
30°-40°	539.9	17.0
40°-50°	570.5	17.9
50°-60°	528.6	16.6
60°-70°	414.1	13.0
70°-80°	234.1	7.4
80°-90°	61.7	1.9
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°	830.7	26.1
0°-40°	1370.6	43.1
0°-60°	2469.7	77.7
0°-90°	3179.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3179.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1060	1056	1054	1054	1057	101
15°	1026	1022	1021	1020	1024	290
25°	961	957	957	957	961	443
35°	867	863	861	861	866	543
45°	747	741	736	736	741	576
55°	602	595	587	589	593	538
65°	429	421	411	416	426	424
75°	238	232	228	203	193	251
85°	56	52	52	50	48	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1059.6	1059.6	1059.6	1059.6	1059.6
2.5°	1063.6	1059.0	1057.6	1056.3	1059.6
5°	1059.6	1056.3	1054.3	1053.7	1057.0
7.5°	1055.0	1051.0	1049.7	1048.3	1051.7
10°	1047.0	1043.0	1041.7	1041.0	1044.4
12.5°	1037.7	1033.1	1032.4	1031.7	1035.1
15°	1025.8	1021.8	1021.1	1020.4	1023.8
17.5°	1013.1	1009.1	1007.8	1007.2	1011.8
20°	997.8	993.9	993.2	992.5	996.5
22.5°	980.6	976.6	975.3	975.9	979.9
25°	961.3	957.3	956.7	956.7	961.3
27.5°	940.1	936.1	936.1	936.1	941.4
30°	917.5	914.1	912.1	912.8	917.5
32.5°	894.2	888.9	887.6	888.2	892.9
35°	867.0	863.0	861.0	861.0	865.6
37.5°	839.1	835.1	832.4	832.4	837.1
40°	811.2	805.2	802.5	801.2	807.2
42.5°	779.9	775.3	769.3	769.3	774.6
45°	746.7	741.4	736.1	736.1	741.4
47.5°	712.8	707.5	701.6	701.6	706.9
50°	677.0	671.7	665.0	665.0	671.0
52.5°	640.4	634.5	627.1	626.5	632.5
55°	601.9	595.3	587.3	588.6	593.3
57.5°	562.7	554.1	546.1	546.1	553.4
60°	518.2	510.9	502.2	503.6	512.9
62.5°	475.7	466.4	457.7	461.1	469.0
65°	429.2	421.2	411.2	416.5	426.5
67.5°	383.3	374.7	366.7	373.4	378.0
70°	334.8	326.9	320.9	320.9	320.2
72.5°	286.3	279.0	277.7	265.1	257.1
75°	238.5	231.9	227.9	203.3	192.7
77.5°	188.7	186.7	174.1	148.1	144.8
80°	140.8	142.2	119.6	120.2	122.9
82.5°	97.0	95.0	89.7	85.7	84.4
85°	55.8	52.5	52.5	49.8	48.5
87.5°	18.6	20.6	20.6	20.6	21.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)