

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: P238880

Luminaire Tested: **24EN-LD2-30-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238880
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-L850-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (224)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3459.8 lumens
Efficiency: N/A
Efficacy: 140.6 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

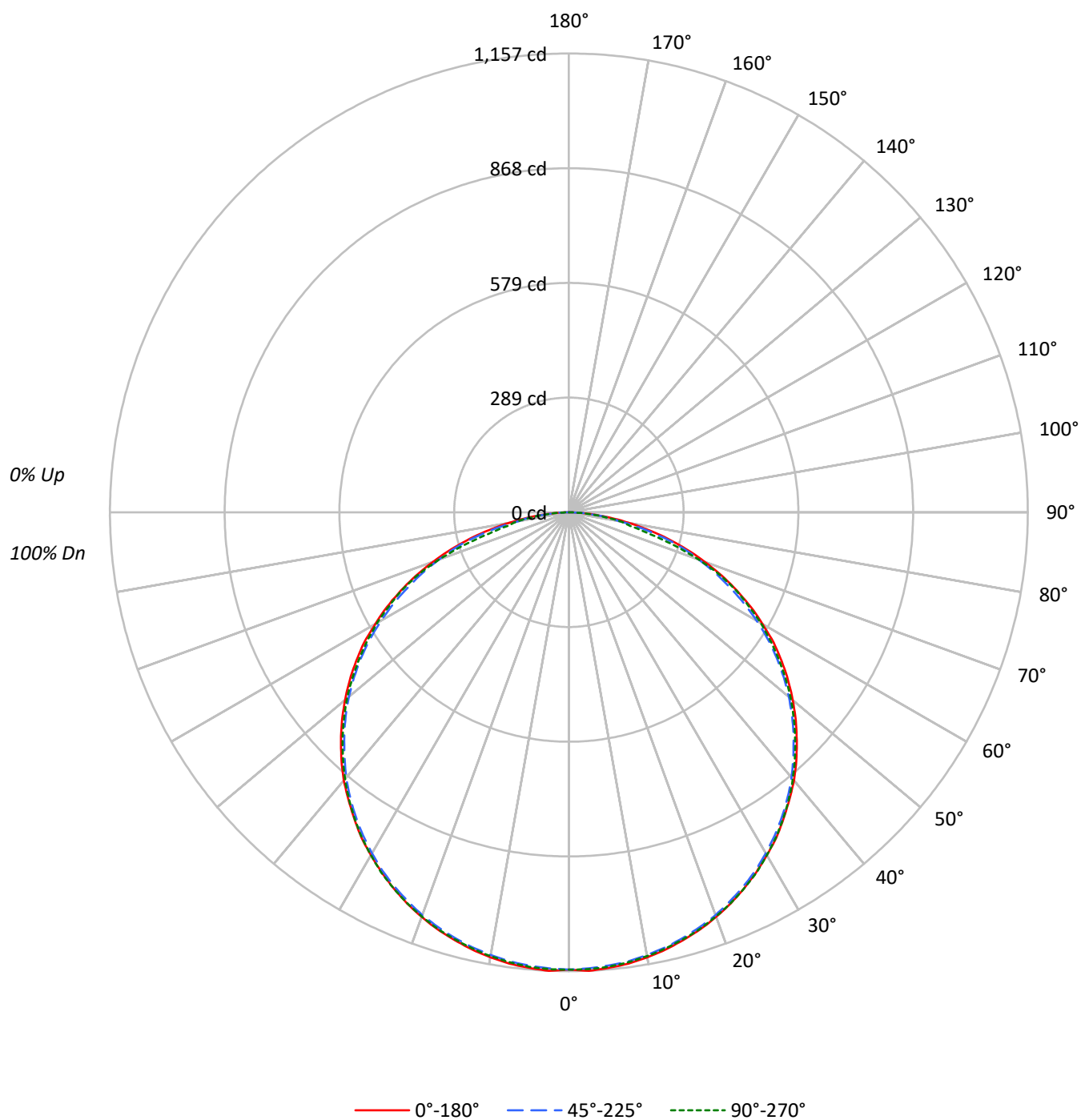
Input Watts (W): 24.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83		
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69		
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58		
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49		
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42		
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37		
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32		
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29		
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26		
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1766	1766	1766
5°	1773	1764	1768
10°	1772	1763	1767
15°	1770	1762	1766
20°	1770	1761	1767
25°	1768	1759	1768
30°	1766	1755	1766
35°	1764	1752	1761
40°	1765	1746	1756
45°	1760	1735	1747
50°	1755	1724	1740
55°	1749	1706	1724
60°	1727	1674	1710
65°	1692	1622	1682
70°	1631	1564	1560
75°	1536	1467	1240
80°	1352	1148	1179
85°	1067	1003	928



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.2	3.2
10°-20°	314.1	9.1
20°-30°	480.6	13.9
30°-40°	587.5	17.0
40°-50°	620.8	17.9
50°-60°	575.2	16.6
60°-70°	450.6	13.0
70°-80°	254.8	7.4
80°-90°	67.1	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°	903.9	26.1
0°-40°	1491.4	43.1
0°-60°	2687.3	77.7
0°-90°	3459.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3459.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1153	1153	1153	1153	1153	
5°	1153	1149	1147	1146	1150	110
15°	1116	1112	1111	1110	1114	315
25°	1046	1042	1041	1041	1046	482
35°	943	939	937	937	942	591
45°	812	807	801	801	807	627
55°	655	648	639	640	646	585
65°	467	458	448	453	464	462
75°	260	252	248	221	210	273
85°	61	57	57	54	53	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1153.0	1153.0	1153.0	1153.0	1153.0
2.5°	1157.3	1152.3	1150.8	1149.4	1153.0
5°	1153.0	1149.4	1147.2	1146.5	1150.1
7.5°	1147.9	1143.6	1142.2	1140.7	1144.3
10°	1139.3	1134.9	1133.5	1132.8	1136.4
12.5°	1129.1	1124.1	1123.4	1122.6	1126.3
15°	1116.1	1111.8	1111.1	1110.3	1114.0
17.5°	1102.4	1098.1	1096.6	1095.9	1101.0
20°	1085.8	1081.4	1080.7	1080.0	1084.3
22.5°	1067.0	1062.6	1061.2	1061.9	1066.3
25°	1046.0	1041.7	1041.0	1041.0	1046.0
27.5°	1022.9	1018.5	1018.5	1018.5	1024.3
30°	998.3	994.7	992.5	993.2	998.3
32.5°	973.0	967.2	965.8	966.5	971.6
35°	943.4	939.0	936.9	936.9	941.9
37.5°	913.0	908.7	905.8	905.8	910.8
40°	882.6	876.1	873.2	871.8	878.3
42.5°	848.7	843.6	837.1	837.1	842.9
45°	812.5	806.7	801.0	801.0	806.7
47.5°	775.7	769.9	763.4	763.4	769.1
50°	736.6	730.8	723.6	723.6	730.1
52.5°	696.9	690.4	682.4	681.7	688.2
55°	654.9	647.7	639.0	640.5	645.5
57.5°	612.3	602.9	594.2	594.2	602.2
60°	563.8	555.9	546.5	547.9	558.1
62.5°	517.6	507.5	498.1	501.7	510.4
65°	467.0	458.3	447.5	453.2	464.1
67.5°	417.1	407.7	399.0	406.3	411.3
70°	364.3	355.7	349.2	349.2	348.4
72.5°	311.6	303.6	302.2	288.4	279.8
75°	259.5	252.3	247.9	221.2	209.6
77.5°	205.3	203.1	189.4	161.2	157.6
80°	153.3	154.7	130.1	130.8	133.7
82.5°	105.5	103.4	97.6	93.3	91.8
85°	60.7	57.1	57.1	54.2	52.8
87.5°	20.2	22.4	22.4	22.4	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)