

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: P238928

Luminaire Tested: **24ENA-LD2-40-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238928
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: 24ENA-LD2-40-UNV-L850-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4550.3 lumens
Efficiency: N/A
Efficacy: 134.2 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.67' x L: 3.83' x H: 0')
CIE Type: Direct

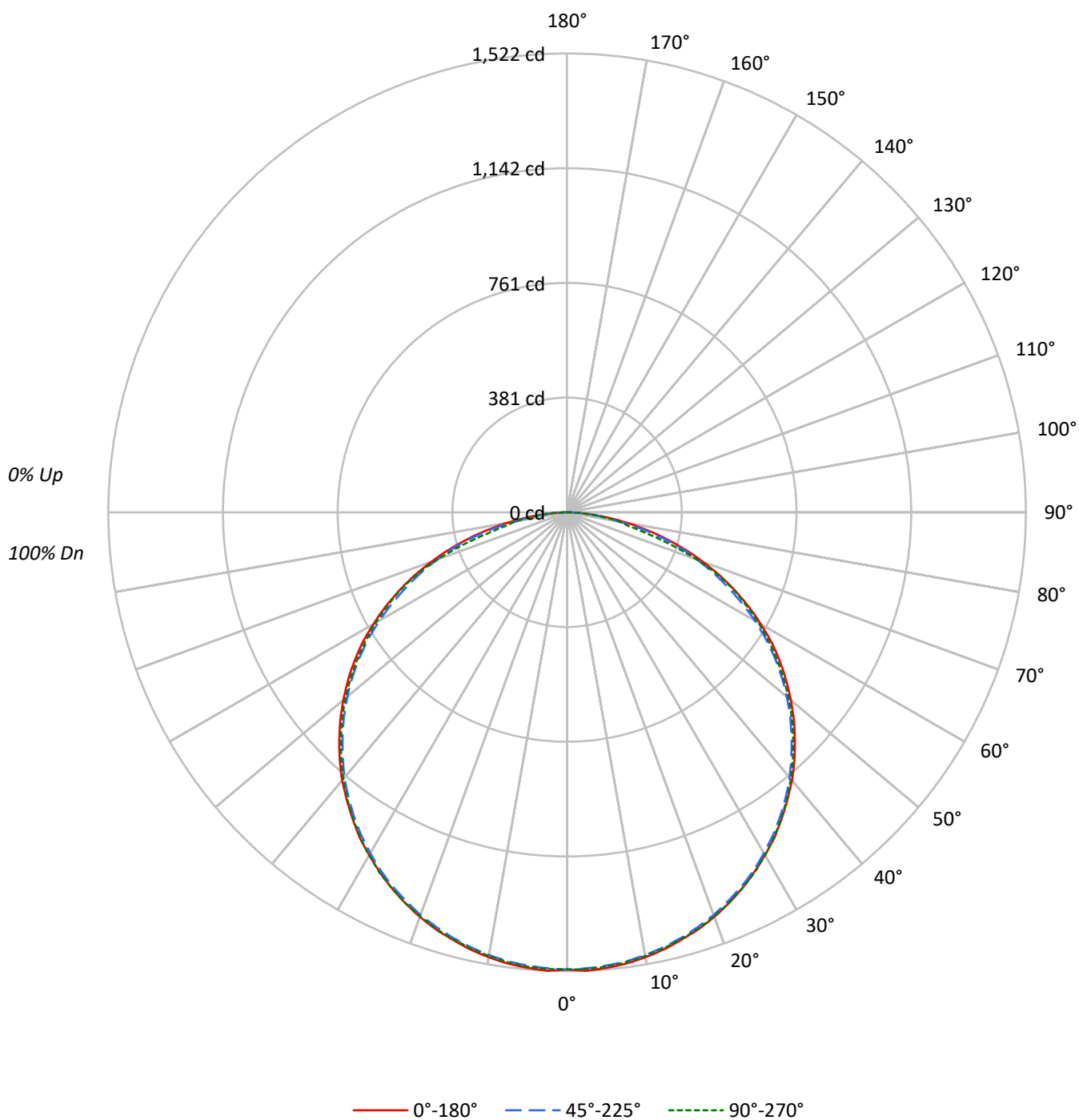
Input Watts (W): 33.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2555	2555	2555
5°	2565	2552	2558
10°	2563	2550	2557
15°	2560	2549	2555
20°	2560	2548	2557
25°	2557	2545	2557
30°	2554	2540	2554
35°	2552	2534	2548
40°	2553	2526	2540
45°	2546	2510	2528
50°	2539	2494	2517
55°	2530	2469	2494
60°	2499	2422	2473
65°	2449	2346	2433
70°	2361	2262	2258
75°	2222	2123	1795
80°	1956	1660	1707
85°	1545	1452	1342



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.6	3.2
10°-20°	413.1	9.1
20°-30°	632.1	13.9
30°-40°	772.6	17.0
40°-50°	816.4	17.9
50°-60°	756.5	16.6
60°-70°	592.7	13.0
70°-80°	335.1	7.4
80°-90°	88.2	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°	1188.8	26.1
0°-40°	1961.4	43.1
0°-60°	3534.3	77.7
0°-90°	4550.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4550.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1516	1516	1516	1516	1516	
5°	1516	1512	1509	1508	1513	144
15°	1468	1462	1461	1460	1465	415
25°	1376	1370	1369	1369	1376	634
35°	1241	1235	1232	1232	1239	777
45°	1069	1061	1053	1053	1061	825
55°	861	852	840	842	849	769
65°	614	603	588	596	610	607
75°	341	332	326	291	276	359
85°	80	75	75	71	69	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1516.4	1516.4	1516.4	1516.4	1516.4
2.5°	1522.1	1515.5	1513.6	1511.7	1516.4
5°	1516.4	1511.7	1508.8	1507.9	1512.6
7.5°	1509.8	1504.1	1502.2	1500.3	1505.0
10°	1498.3	1492.6	1490.7	1489.8	1494.5
12.5°	1485.0	1478.4	1477.4	1476.5	1481.2
15°	1467.9	1462.2	1461.3	1460.3	1465.1
17.5°	1449.9	1444.2	1442.3	1441.3	1448.0
20°	1428.0	1422.3	1421.3	1420.4	1426.1
22.5°	1403.3	1397.6	1395.7	1396.6	1402.3
25°	1375.7	1370.0	1369.1	1369.1	1375.7
27.5°	1345.3	1339.6	1339.6	1339.6	1347.2
30°	1313.0	1308.2	1305.4	1306.3	1313.0
32.5°	1279.7	1272.1	1270.2	1271.1	1277.8
35°	1240.7	1235.0	1232.1	1232.1	1238.8
37.5°	1200.8	1195.1	1191.3	1191.3	1197.9
40°	1160.8	1152.3	1148.5	1146.6	1155.1
42.5°	1116.2	1109.5	1100.9	1100.9	1108.6
45°	1068.6	1061.0	1053.4	1053.4	1061.0
47.5°	1020.1	1012.5	1004.0	1004.0	1011.6
50°	968.8	961.2	951.7	951.7	960.2
52.5°	916.5	907.9	897.5	896.5	905.1
55°	861.4	851.9	840.4	842.3	849.0
57.5°	805.3	792.9	781.5	781.5	792.0
60°	741.6	731.1	718.8	720.7	734.0
62.5°	680.7	667.4	655.1	659.8	671.2
65°	614.2	602.8	588.5	596.1	610.4
67.5°	548.6	536.2	524.8	534.3	541.0
70°	479.2	467.8	459.2	459.2	458.3
72.5°	409.8	399.3	397.4	379.3	367.9
75°	341.3	331.8	326.1	290.9	275.7
77.5°	270.0	267.2	249.1	212.0	207.3
80°	201.6	203.5	171.1	172.1	175.9
82.5°	138.8	136.0	128.3	122.6	120.7
85°	79.9	75.1	75.1	71.3	69.4
87.5°	26.6	29.5	29.5	29.5	30.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)