

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: P238888

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238888
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-LD2-40-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: 4666.9 lumens
Efficiency: N/A
Efficacy: 137.7 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

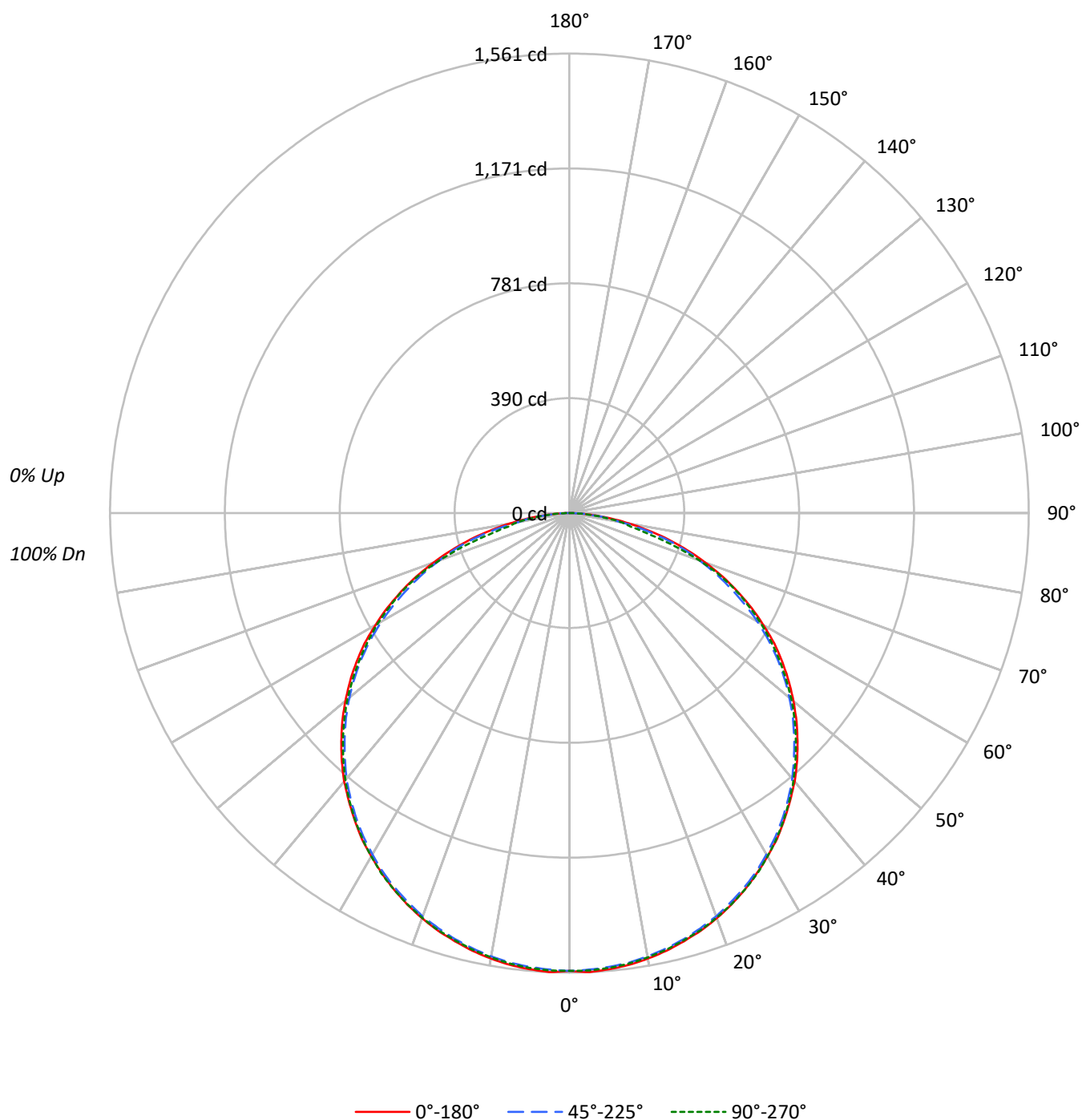
Input Watts (W): 33.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238888

CATALOG NUMBER: 24EN-LD2-40-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P238888

CATALOG NUMBER: 24EN-LD2-40-UNV-L850-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	90	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	26	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2382	2382	2382
5°	2391	2379	2385
10°	2390	2378	2384
15°	2387	2376	2383
20°	2387	2376	2384
25°	2385	2373	2385
30°	2382	2368	2382
35°	2379	2363	2376
40°	2380	2355	2369
45°	2374	2340	2357
50°	2368	2326	2347
55°	2359	2302	2325
60°	2330	2258	2306
65°	2283	2188	2269
70°	2201	2109	2105
75°	2072	1979	1674
80°	1823	1548	1591
85°	1439	1353	1251



TEST NUMBER: P238888

CATALOG NUMBER: 24EN-LD2-40-UNV-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.3	3.2
10°-20°	423.7	9.1
20°-30°	648.3	13.9
30°-40°	792.4	17.0
40°-50°	837.4	17.9
50°-60°	775.8	16.6
60°-70°	607.8	13.0
70°-80°	343.7	7.4
80°-90°	90.5	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°	1219.3	26.1
0°-40°	2011.7	43.1
0°-60°	3624.9	77.7
0°-90°	4666.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4666.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1555	1555	1555	1555	1555	
5°	1555	1550	1548	1546	1551	148
15°	1506	1500	1499	1498	1503	425
25°	1411	1405	1404	1404	1411	651
35°	1272	1267	1264	1264	1271	797
45°	1096	1088	1080	1080	1088	846
55°	883	874	862	864	871	789
65°	630	618	604	611	626	623
75°	350	340	334	298	283	368
85°	82	77	77	73	71	97
90°	0	0	0	0	0	



TEST NUMBER: P238888

CATALOG NUMBER: 24EN-LD2-40-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1555.3	1555.3	1555.3	1555.3	1555.3
2.5°	1561.1	1554.3	1552.4	1550.4	1555.3
5°	1555.3	1550.4	1547.5	1546.5	1551.4
7.5°	1548.5	1542.6	1540.7	1538.7	1543.6
10°	1536.8	1530.9	1529.0	1528.0	1532.9
12.5°	1523.1	1516.3	1515.3	1514.3	1519.2
15°	1505.6	1499.7	1498.7	1497.8	1502.6
17.5°	1487.0	1481.2	1479.2	1478.3	1485.1
20°	1464.6	1458.8	1457.8	1456.8	1462.7
22.5°	1439.3	1433.4	1431.5	1432.4	1438.3
25°	1411.0	1405.1	1404.2	1404.2	1411.0
27.5°	1379.8	1373.9	1373.9	1373.9	1381.7
30°	1346.6	1341.7	1338.8	1339.8	1346.6
32.5°	1312.5	1304.7	1302.7	1303.7	1310.5
35°	1272.5	1266.7	1263.7	1263.7	1270.6
37.5°	1231.6	1225.7	1221.8	1221.8	1228.6
40°	1190.6	1181.8	1177.9	1176.0	1184.8
42.5°	1144.8	1138.0	1129.2	1129.2	1137.0
45°	1096.0	1088.2	1080.4	1080.4	1088.2
47.5°	1046.3	1038.5	1029.7	1029.7	1037.5
50°	993.6	985.8	976.1	976.1	984.9
52.5°	940.0	931.2	920.5	919.5	928.3
55°	883.4	873.7	862.0	863.9	870.8
57.5°	825.9	813.2	801.5	801.5	812.3
60°	760.6	749.9	737.2	739.1	752.8
62.5°	698.2	684.5	671.8	676.7	688.4
65°	629.9	618.2	603.6	611.4	626.0
67.5°	562.6	550.0	538.3	548.0	554.8
70°	491.5	479.8	471.0	471.0	470.0
72.5°	420.3	409.5	407.6	389.1	377.4
75°	350.1	340.3	334.5	298.4	282.8
77.5°	276.9	274.0	255.5	217.4	212.6
80°	206.7	208.7	175.5	176.5	180.4
82.5°	142.4	139.4	131.6	125.8	123.8
85°	81.9	77.0	77.0	73.1	71.2
87.5°	27.3	30.2	30.2	30.2	31.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)