

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: P238927

Luminaire Tested: **24ENA-LD2-40-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238927
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-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4181.7 lumens
Efficiency: N/A
Efficacy: 123.4 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

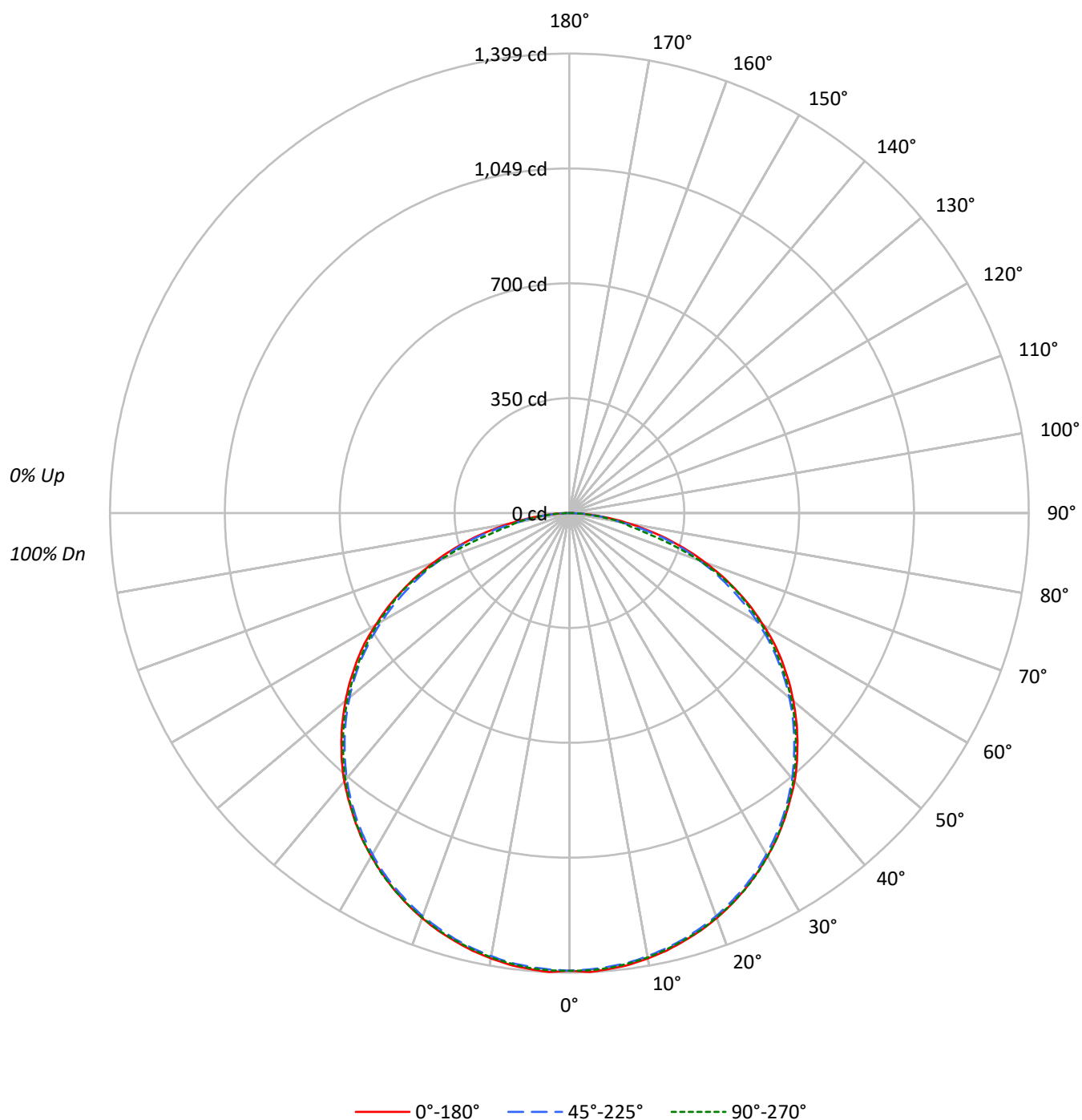
Input Watts (W): 33.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	2348	2348	2348
5°	2357	2345	2351
10°	2356	2344	2350
15°	2353	2342	2348
20°	2353	2342	2350
25°	2350	2339	2350
30°	2347	2334	2347
35°	2345	2329	2342
40°	2346	2321	2335
45°	2340	2307	2323
50°	2334	2292	2313
55°	2325	2269	2292
60°	2296	2226	2273
65°	2250	2156	2236
70°	2169	2079	2074
75°	2042	1951	1650
80°	1797	1526	1568
85°	1419	1334	1233



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.0	3.2
10°-20°	379.6	9.1
20°-30°	580.9	13.9
30°-40°	710.0	17.0
40°-50°	750.3	17.9
50°-60°	695.2	16.6
60°-70°	544.6	13.0
70°-80°	307.9	7.4
80°-90°	81.1	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°	1092.5	26.1
0°-40°	1802.6	43.1
0°-60°	3248.1	77.7
0°-90°	4181.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4181.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1394	1394	1394	1394	1394	
5°	1394	1389	1387	1386	1390	133
15°	1349	1344	1343	1342	1346	381
25°	1264	1259	1258	1258	1264	583
35°	1140	1135	1132	1132	1138	714
45°	982	975	968	968	975	758
55°	792	783	772	774	780	707
65°	564	554	541	548	561	558
75°	314	305	300	267	253	330
85°	73	69	69	66	64	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1393.6	1393.6	1393.6	1393.6	1393.6
2.5°	1398.8	1392.7	1391.0	1389.2	1393.6
5°	1393.6	1389.2	1386.6	1385.7	1390.1
7.5°	1387.5	1382.2	1380.5	1378.7	1383.1
10°	1377.0	1371.7	1370.0	1369.1	1373.5
12.5°	1364.8	1358.6	1357.8	1356.9	1361.3
15°	1349.0	1343.8	1342.9	1342.0	1346.4
17.5°	1332.4	1327.2	1325.4	1324.6	1330.7
20°	1312.3	1307.1	1306.2	1305.3	1310.6
22.5°	1289.6	1284.4	1282.6	1283.5	1288.7
25°	1264.3	1259.0	1258.2	1258.2	1264.3
27.5°	1236.3	1231.1	1231.1	1231.1	1238.1
30°	1206.6	1202.2	1199.6	1200.5	1206.6
32.5°	1176.0	1169.0	1167.3	1168.2	1174.3
35°	1140.2	1135.0	1132.3	1132.3	1138.5
37.5°	1103.5	1098.3	1094.8	1094.8	1100.9
40°	1066.8	1059.0	1055.5	1053.7	1061.6
42.5°	1025.8	1019.6	1011.8	1011.8	1018.8
45°	982.1	975.1	968.1	968.1	975.1
47.5°	937.5	930.5	922.7	922.7	929.6
50°	890.3	883.3	874.6	874.6	882.5
52.5°	842.3	834.4	824.8	823.9	831.8
55°	791.6	782.9	772.4	774.1	780.2
57.5°	740.0	728.7	718.2	718.2	727.8
60°	681.5	671.9	660.5	662.3	674.5
62.5°	625.6	613.4	602.0	606.4	616.8
65°	564.4	553.9	540.8	547.8	560.9
67.5°	504.1	492.8	482.3	491.0	497.1
70°	440.4	429.9	422.0	422.0	421.1
72.5°	376.6	367.0	365.2	348.6	338.1
75°	313.7	304.9	299.7	267.4	253.4
77.5°	248.1	245.5	228.9	194.8	190.5
80°	185.2	187.0	157.3	158.1	161.6
82.5°	127.6	124.9	118.0	112.7	111.0
85°	73.4	69.0	69.0	65.5	63.8
87.5°	24.5	27.1	27.1	27.1	28.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)