

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: P239012

Luminaire Tested: **24ENA-LD2-45-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239012
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-LD2-45-UNV-L950-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)5000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4333.0 lumens
Efficiency: N/A
Efficacy: 114.0 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

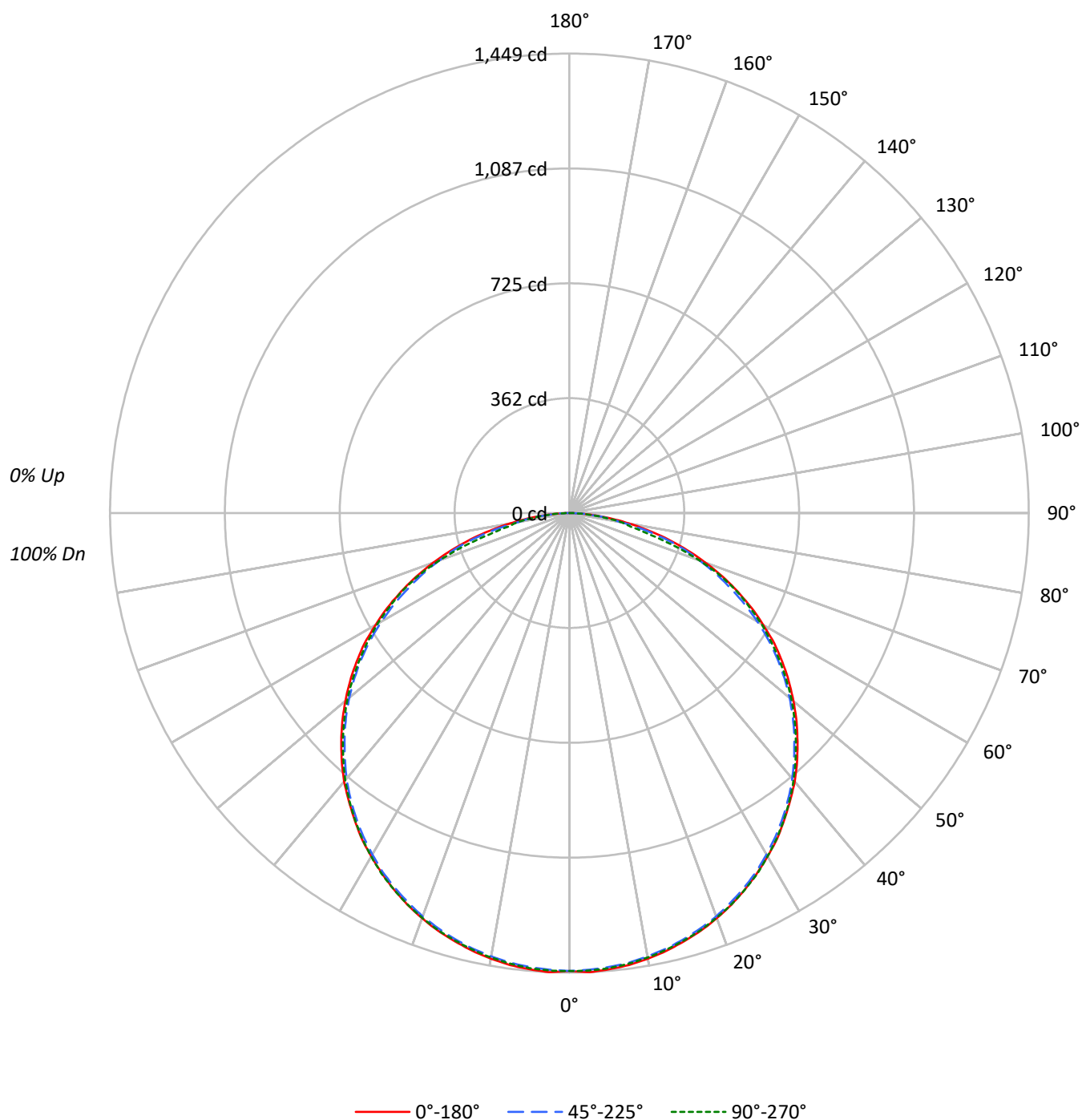
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2433	2433	2433
5°	2442	2430	2436
10°	2441	2429	2435
15°	2438	2427	2433
20°	2438	2427	2435
25°	2435	2424	2435
30°	2432	2418	2432
35°	2430	2413	2426
40°	2431	2405	2419
45°	2425	2390	2407
50°	2418	2375	2397
55°	2409	2351	2375
60°	2380	2306	2355
65°	2331	2234	2317
70°	2248	2154	2150
75°	2116	2021	1709
80°	1862	1581	1625
85°	1469	1382	1278



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.8	3.2
10°-20°	393.4	9.1
20°-30°	601.9	13.9
30°-40°	735.7	17.0
40°-50°	777.4	17.9
50°-60°	720.3	16.6
60°-70°	564.3	13.0
70°-80°	319.1	7.4
80°-90°	84.0	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°	1132.0	26.1
0°-40°	1867.8	43.1
0°-60°	3365.5	77.7
0°-90°	4333.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4333.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1444	1444	1444	1444	1444	
5°	1444	1440	1437	1436	1440	137
15°	1398	1392	1392	1391	1395	395
25°	1310	1305	1304	1304	1310	604
35°	1182	1176	1173	1173	1180	740
45°	1018	1010	1003	1003	1010	785
55°	820	811	800	802	808	733
65°	585	574	560	568	581	578
75°	325	316	310	277	262	342
85°	76	72	72	68	66	90
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1444.0	1444.0	1444.0	1444.0	1444.0
2.5°	1449.4	1443.1	1441.3	1439.5	1444.0
5°	1444.0	1439.5	1436.8	1435.8	1440.4
7.5°	1437.7	1432.2	1430.4	1428.6	1433.1
10°	1426.8	1421.4	1419.6	1418.6	1423.2
12.5°	1414.1	1407.8	1406.9	1406.0	1410.5
15°	1397.8	1392.4	1391.5	1390.6	1395.1
17.5°	1380.6	1375.2	1373.4	1372.5	1378.8
20°	1359.8	1354.4	1353.5	1352.6	1358.0
22.5°	1336.3	1330.8	1329.0	1329.9	1335.4
25°	1310.0	1304.6	1303.7	1303.7	1310.0
27.5°	1281.0	1275.6	1275.6	1275.6	1282.8
30°	1250.3	1245.7	1243.0	1243.9	1250.3
32.5°	1218.6	1211.3	1209.5	1210.4	1216.8
35°	1181.5	1176.0	1173.3	1173.3	1179.6
37.5°	1143.4	1138.0	1134.4	1134.4	1140.7
40°	1105.4	1097.3	1093.6	1091.8	1100.0
42.5°	1062.9	1056.5	1048.4	1048.4	1055.6
45°	1017.6	1010.3	1003.1	1003.1	1010.3
47.5°	971.4	964.2	956.0	956.0	963.3
50°	922.5	915.3	906.2	906.2	914.4
52.5°	872.7	864.6	854.6	853.7	861.9
55°	820.2	811.2	800.3	802.1	808.5
57.5°	766.8	755.0	744.2	744.2	754.1
60°	706.2	696.2	684.4	686.2	698.9
62.5°	648.2	635.5	623.8	628.3	639.2
65°	584.8	574.0	560.4	567.6	581.2
67.5°	522.4	510.6	499.7	508.8	515.1
70°	456.3	445.4	437.3	437.3	436.4
72.5°	390.2	380.2	378.4	361.2	350.4
75°	325.0	316.0	310.5	277.0	262.5
77.5°	257.1	254.4	237.2	201.9	197.4
80°	191.9	193.7	163.0	163.9	167.5
82.5°	132.2	129.5	122.2	116.8	115.0
85°	76.0	71.5	71.5	67.9	66.1
87.5°	25.3	28.1	28.1	28.1	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)