

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: P238974

Luminaire Tested: **24EN-LD2-49-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238974
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-LD2-49-UNV-L935-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)3500K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4389.8 lumens
Efficiency: N/A
Efficacy: 104.0 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

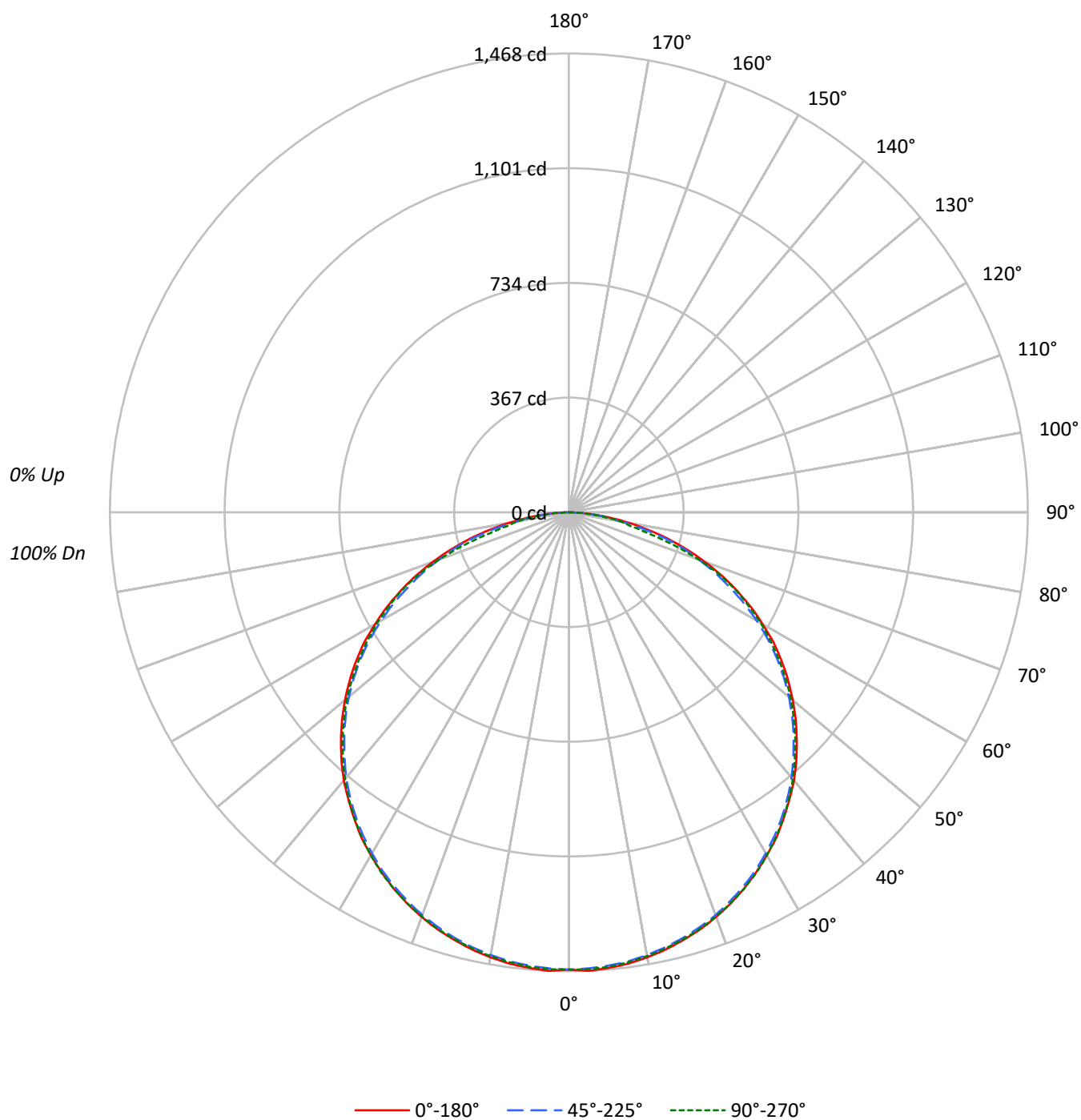
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	2241	2241	2241
5°	2249	2238	2244
10°	2248	2237	2242
15°	2246	2235	2241
20°	2245	2235	2242
25°	2243	2232	2243
30°	2240	2227	2240
35°	2238	2223	2235
40°	2239	2215	2228
45°	2233	2201	2217
50°	2227	2188	2207
55°	2219	2165	2187
60°	2191	2124	2169
65°	2147	2058	2134
70°	2070	1984	1980
75°	1949	1862	1574
80°	1715	1456	1497
85°	1353	1274	1177



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.6	3.2
10°-20°	398.5	9.1
20°-30°	609.8	13.9
30°-40°	745.4	17.0
40°-50°	787.7	17.9
50°-60°	729.8	16.6
60°-70°	571.8	13.0
70°-80°	323.2	7.4
80°-90°	85.1	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°	1146.9	26.1
0°-40°	1892.3	43.1
0°-60°	3409.7	77.7
0°-90°	4389.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4389.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1463	1463	1463	1463	1463	
5°	1463	1458	1456	1455	1459	139
15°	1416	1411	1410	1409	1413	400
25°	1327	1322	1321	1321	1327	612
35°	1197	1192	1189	1189	1195	749
45°	1031	1024	1016	1016	1024	796
55°	831	822	811	813	819	742
65°	592	582	568	575	589	586
75°	329	320	315	281	266	346
85°	77	72	72	69	67	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1462.9	1462.9	1462.9	1462.9	1462.9
2.5°	1468.4	1462.0	1460.2	1458.4	1462.9
5°	1462.9	1458.4	1455.6	1454.7	1459.3
7.5°	1456.5	1451.0	1449.2	1447.4	1451.9
10°	1445.5	1440.0	1438.2	1437.3	1441.8
12.5°	1432.7	1426.3	1425.3	1424.4	1429.0
15°	1416.2	1410.7	1409.7	1408.8	1413.4
17.5°	1398.7	1393.2	1391.4	1390.5	1396.9
20°	1377.6	1372.1	1371.2	1370.3	1375.8
22.5°	1353.8	1348.3	1346.5	1347.4	1352.9
25°	1327.2	1321.7	1320.8	1320.8	1327.2
27.5°	1297.8	1292.3	1292.3	1292.3	1299.7
30°	1266.7	1262.1	1259.3	1260.2	1266.7
32.5°	1234.6	1227.2	1225.4	1226.3	1232.7
35°	1197.0	1191.5	1188.7	1188.7	1195.1
37.5°	1158.4	1152.9	1149.3	1149.3	1155.7
40°	1119.9	1111.7	1108.0	1106.1	1114.4
42.5°	1076.8	1070.4	1062.1	1062.1	1069.5
45°	1030.9	1023.6	1016.3	1016.3	1023.6
47.5°	984.2	976.8	968.6	968.6	975.9
50°	934.6	927.3	918.1	918.1	926.4
52.5°	884.2	875.9	865.8	864.9	873.2
55°	831.0	821.8	810.8	812.6	819.1
57.5°	776.9	764.9	753.9	753.9	764.0
60°	715.4	705.3	693.4	695.2	708.1
62.5°	656.7	643.9	632.0	636.5	647.5
65°	592.5	581.5	567.8	575.1	588.8
67.5°	529.2	517.3	506.3	515.5	521.9
70°	462.3	451.3	443.0	443.0	442.1
72.5°	395.3	385.2	383.4	366.0	355.0
75°	329.3	320.1	314.6	280.7	266.0
77.5°	260.5	257.7	240.3	204.5	200.0
80°	194.4	196.3	165.1	166.0	169.7
82.5°	133.9	131.2	123.8	118.3	116.5
85°	77.0	72.5	72.5	68.8	67.0
87.5°	25.7	28.4	28.4	28.4	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)