

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: P238973

Luminaire Tested: **24EN-LD2-49-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238973
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-L930-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4273.4 lumens
Efficiency: N/A
Efficacy: 101.3 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

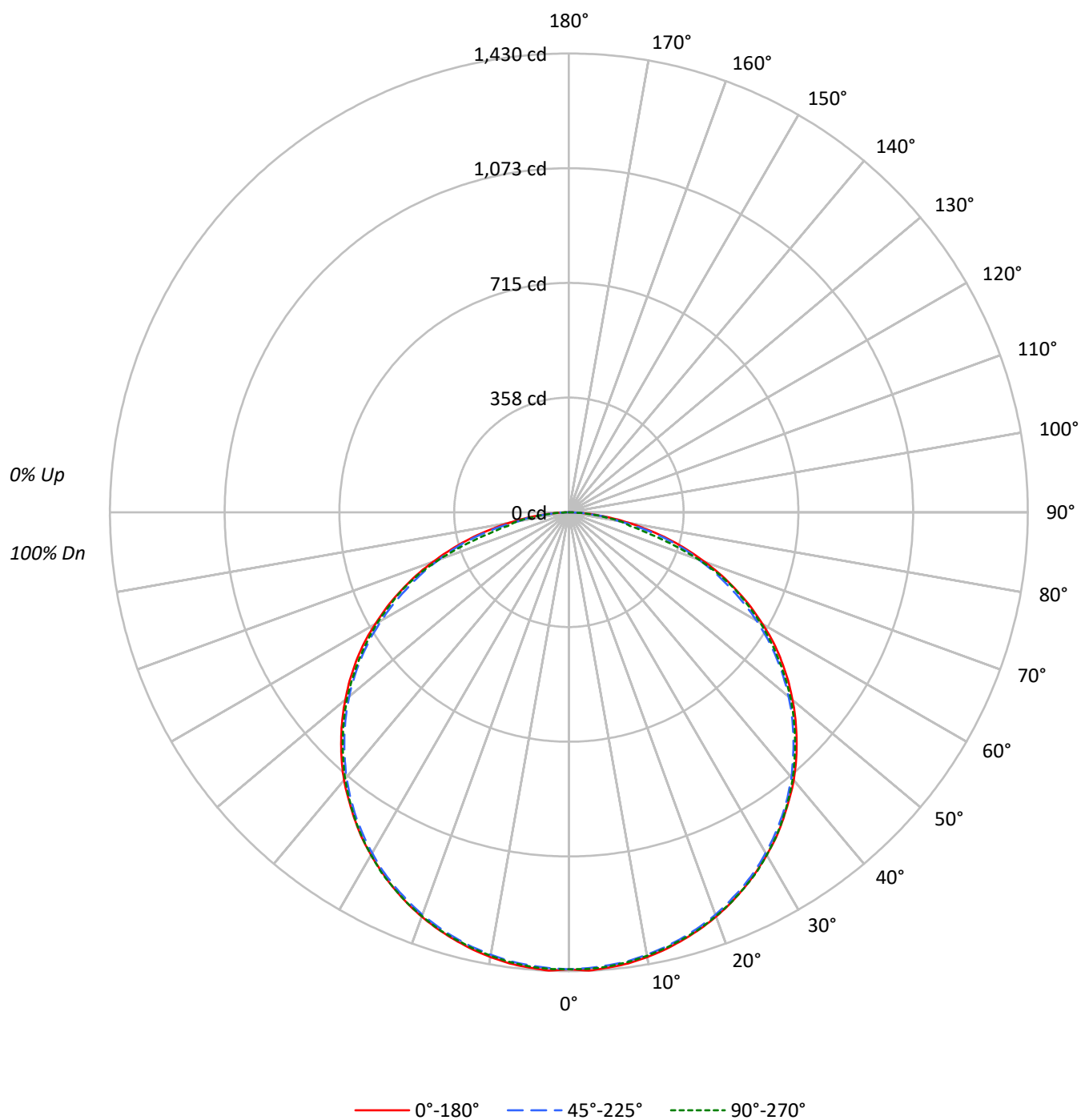
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	2181	2181	2181
5°	2190	2179	2184
10°	2189	2177	2183
15°	2186	2176	2182
20°	2186	2176	2183
25°	2183	2173	2183
30°	2181	2168	2181
35°	2179	2164	2175
40°	2180	2157	2169
45°	2174	2143	2158
50°	2168	2130	2149
55°	2160	2108	2129
60°	2133	2068	2111
65°	2090	2003	2077
70°	2015	1931	1927
75°	1897	1813	1532
80°	1670	1417	1457
85°	1318	1239	1146



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.9	3.2
10°-20°	387.9	9.1
20°-30°	593.6	13.9
30°-40°	725.6	17.0
40°-50°	766.8	17.9
50°-60°	710.4	16.6
60°-70°	556.6	13.0
70°-80°	314.7	7.4
80°-90°	82.9	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°	1116.5	26.1
0°-40°	1842.1	43.1
0°-60°	3319.3	77.7
0°-90°	4273.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4273.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1424	1424	1424	1424	1424	
5°	1424	1420	1417	1416	1421	135
15°	1379	1373	1372	1372	1376	389
25°	1292	1287	1286	1286	1292	596
35°	1165	1160	1157	1157	1163	730
45°	1004	996	989	989	996	774
55°	809	800	789	791	797	722
65°	577	566	553	560	573	570
75°	320	312	306	273	259	337
85°	75	70	70	67	65	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1424.1	1424.1	1424.1	1424.1	1424.1
2.5°	1429.5	1423.3	1421.5	1419.7	1424.1
5°	1424.1	1419.7	1417.0	1416.1	1420.6
7.5°	1417.9	1412.5	1410.8	1409.0	1413.4
10°	1407.2	1401.8	1400.0	1399.1	1403.6
12.5°	1394.7	1388.4	1387.5	1386.6	1391.1
15°	1378.6	1373.3	1372.4	1371.5	1375.9
17.5°	1361.6	1356.3	1354.5	1353.6	1359.9
20°	1341.1	1335.8	1334.9	1334.0	1339.3
22.5°	1317.9	1312.5	1310.8	1311.6	1317.0
25°	1292.0	1286.6	1285.8	1285.8	1292.0
27.5°	1263.4	1258.1	1258.1	1258.1	1265.2
30°	1233.1	1228.6	1225.9	1226.8	1233.1
32.5°	1201.8	1194.7	1192.9	1193.8	1200.0
35°	1165.2	1159.9	1157.2	1157.2	1163.4
37.5°	1127.7	1122.4	1118.8	1118.8	1125.0
40°	1090.2	1082.2	1078.6	1076.8	1084.9
42.5°	1048.2	1042.0	1034.0	1034.0	1041.1
45°	1003.6	996.5	989.3	989.3	996.5
47.5°	958.1	950.9	942.9	942.9	950.0
50°	909.8	902.7	893.8	893.8	901.8
52.5°	860.7	852.7	842.9	842.0	850.0
55°	809.0	800.0	789.3	791.1	797.3
57.5°	756.3	744.7	733.9	733.9	743.8
60°	696.4	686.6	675.0	676.8	689.3
62.5°	639.3	626.8	615.2	619.7	630.4
65°	576.8	566.1	552.7	559.8	573.2
67.5°	515.2	503.6	492.9	501.8	508.1
70°	450.0	439.3	431.3	431.3	430.4
72.5°	384.8	375.0	373.2	356.3	345.5
75°	320.5	311.6	306.3	273.2	258.9
77.5°	253.6	250.9	233.9	199.1	194.6
80°	189.3	191.1	160.7	161.6	165.2
82.5°	130.4	127.7	120.5	115.2	113.4
85°	75.0	70.5	70.5	67.0	65.2
87.5°	25.0	27.7	27.7	27.7	28.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)