

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: P239014

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239014
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-LD2-49-UNV-L935-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)3500K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4280.1 lumens
Efficiency: N/A
Efficacy: 101.4 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

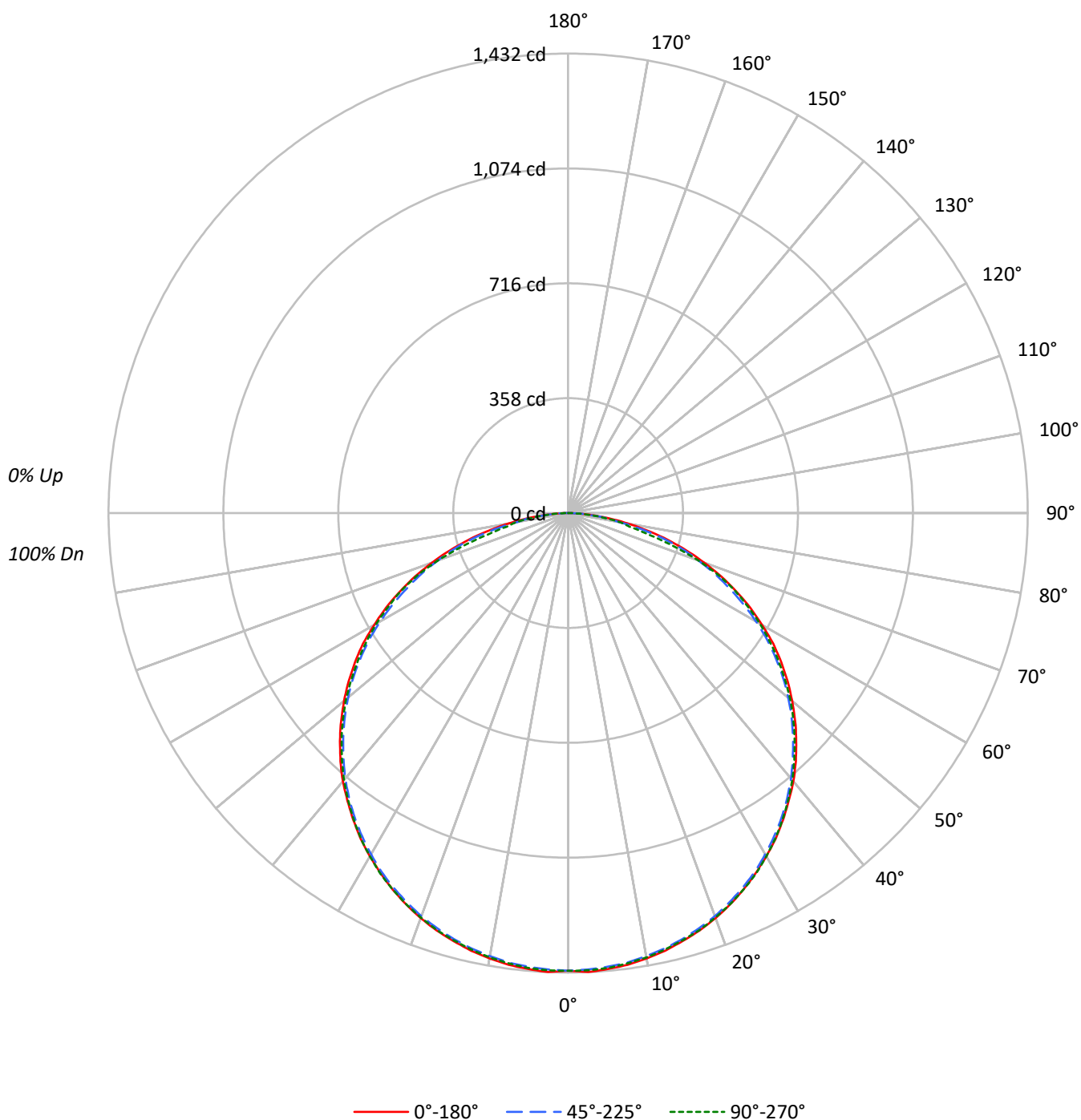
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	99	95	106	101	97	94		97	94	91		93	90	88		90	87	85
2	98	90	83	77	96	88	82	76		84	79	74		81	77	73		78	74	71
3	90	79	70	64	87	77	69	63		74	67	62		71	66	61		69	64	60
4	82	70	61	54	79	68	60	53		66	58	53		63	57	52		61	56	51
5	75	62	53	46	73	61	52	46		59	51	45		57	50	45		55	49	44
6	69	56	47	40	67	55	46	40		53	45	40		51	44	39		50	44	39
7	64	50	42	35	62	50	41	35		48	40	35		47	40	35		45	39	34
8	60	46	37	31	58	45	37	31		44	36	31		43	36	31		41	35	31
9	56	42	34	28	54	42	34	28		40	33	28		39	33	28		38	32	28
10	52	39	31	26	51	38	31	25		37	30	25		36	30	25		35	29	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2403	2403	2403
5°	2412	2400	2406
10°	2411	2399	2405
15°	2408	2397	2404
20°	2408	2397	2405
25°	2405	2394	2405
30°	2403	2389	2403
35°	2400	2384	2397
40°	2401	2376	2390
45°	2395	2361	2378
50°	2389	2346	2367
55°	2380	2322	2346
60°	2350	2278	2326
65°	2303	2207	2289
70°	2220	2128	2123
75°	2090	1996	1688
80°	1840	1562	1605
85°	1452	1365	1262



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.1	3.2
10°-20°	388.6	9.1
20°-30°	594.6	13.9
30°-40°	726.7	17.0
40°-50°	768.0	17.9
50°-60°	711.5	16.6
60°-70°	557.5	13.0
70°-80°	315.2	7.4
80°-90°	83.0	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°	1118.2	26.1
0°-40°	1845.0	43.1
0°-60°	3324.5	77.7
0°-90°	4280.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4280.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1426	1426	1426	1426	1426	
5°	1426	1422	1419	1418	1423	136
15°	1381	1375	1374	1374	1378	390
25°	1294	1289	1288	1288	1294	597
35°	1167	1162	1159	1159	1165	731
45°	1005	998	991	991	998	776
55°	810	801	790	792	799	724
65°	578	567	554	561	574	571
75°	321	312	307	274	259	338
85°	75	71	71	67	65	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1426.4	1426.4	1426.4	1426.4	1426.4
2.5°	1431.7	1425.5	1423.7	1421.9	1426.4
5°	1426.4	1421.9	1419.2	1418.3	1422.8
7.5°	1420.1	1414.7	1413.0	1411.2	1415.6
10°	1409.4	1404.0	1402.2	1401.3	1405.8
12.5°	1396.9	1390.6	1389.7	1388.8	1393.3
15°	1380.8	1375.4	1374.5	1373.6	1378.1
17.5°	1363.8	1358.4	1356.6	1355.7	1362.0
20°	1343.2	1337.8	1336.9	1336.0	1341.4
22.5°	1320.0	1314.6	1312.8	1313.7	1319.1
25°	1294.0	1288.7	1287.8	1287.8	1294.0
27.5°	1265.4	1260.0	1260.0	1260.0	1267.2
30°	1235.0	1230.5	1227.8	1228.7	1235.0
32.5°	1203.7	1196.5	1194.8	1195.6	1201.9
35°	1167.0	1161.7	1159.0	1159.0	1165.2
37.5°	1129.5	1124.1	1120.5	1120.5	1126.8
40°	1091.9	1083.9	1080.3	1078.5	1086.5
42.5°	1049.9	1043.6	1035.6	1035.6	1042.7
45°	1005.2	998.0	990.9	990.9	998.0
47.5°	959.6	952.4	944.4	944.4	951.5
50°	911.3	904.1	895.2	895.2	903.2
52.5°	862.1	854.0	844.2	843.3	851.4
55°	810.2	801.3	790.5	792.3	798.6
57.5°	757.5	745.8	735.1	735.1	744.9
60°	697.5	687.7	676.1	677.9	690.4
62.5°	640.3	627.8	616.2	620.6	631.4
65°	577.7	567.0	553.6	560.7	574.1
67.5°	516.0	504.4	493.6	502.6	508.8
70°	450.7	440.0	431.9	431.9	431.0
72.5°	385.4	375.6	373.8	356.8	346.1
75°	321.0	312.1	306.7	273.6	259.3
77.5°	254.0	251.3	234.3	199.4	195.0
80°	189.6	191.4	161.0	161.9	165.4
82.5°	130.6	127.9	120.7	115.4	113.6
85°	75.1	70.6	70.6	67.1	65.3
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)