

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: P238933

Luminaire Tested: **24ENA-LD2-49-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238933
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-L830-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4822.4 lumens
Efficiency: N/A
Efficacy: 114.3 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

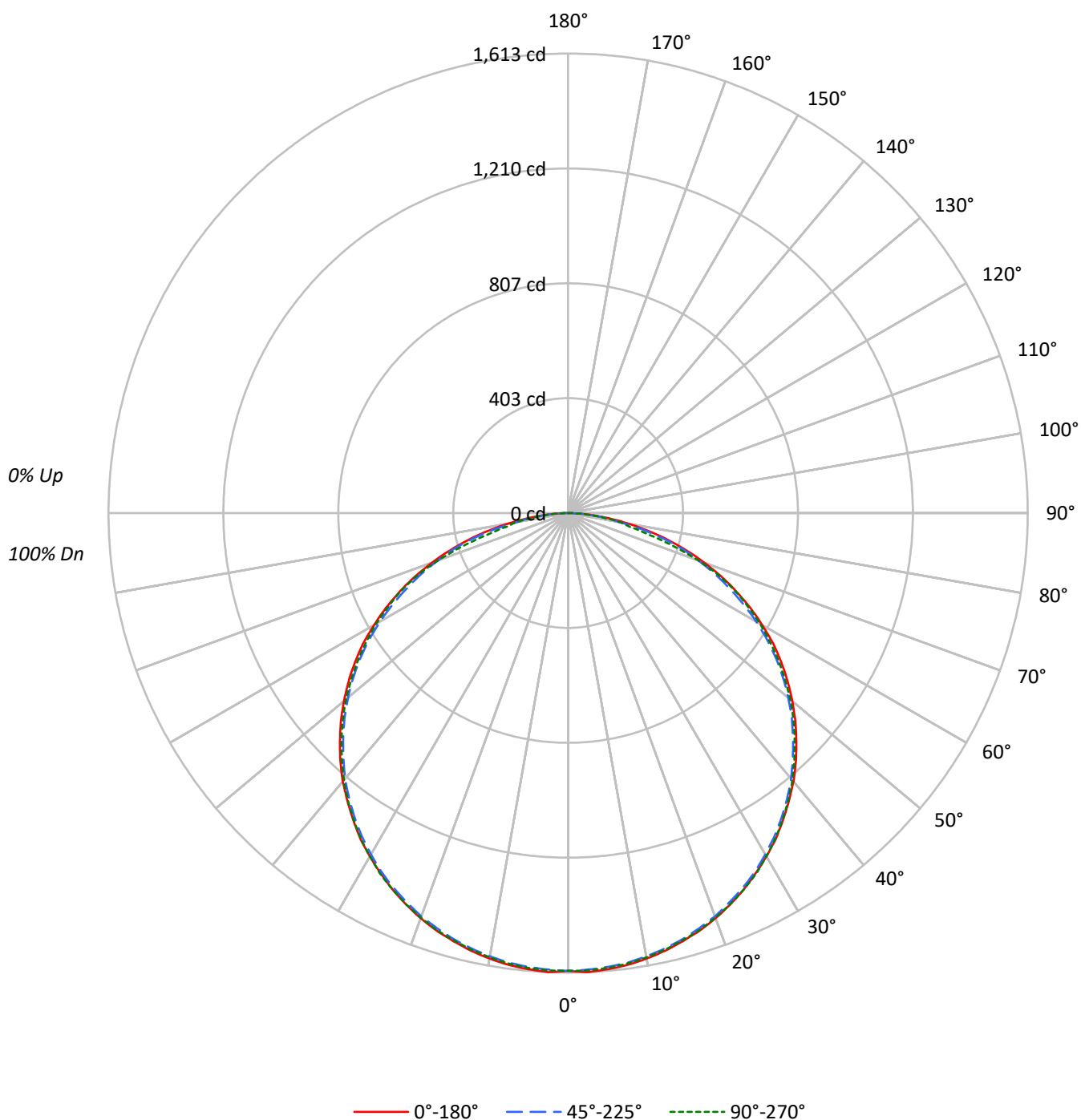
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2708	2708	2708
5°	2718	2704	2711
10°	2717	2703	2710
15°	2713	2701	2708
20°	2713	2701	2710
25°	2710	2697	2710
30°	2707	2691	2707
35°	2704	2686	2700
40°	2706	2677	2692
45°	2698	2660	2679
50°	2691	2644	2667
55°	2681	2616	2643
60°	2648	2567	2621
65°	2595	2486	2579
70°	2501	2397	2393
75°	2354	2250	1902
80°	2072	1760	1809
85°	1635	1539	1423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.2	3.2
10°-20°	437.8	9.1
20°-30°	669.9	13.9
30°-40°	818.8	17.0
40°-50°	865.3	17.9
50°-60°	801.7	16.6
60°-70°	628.1	13.0
70°-80°	355.1	7.4
80°-90°	93.5	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°	1259.9	26.1
0°-40°	2078.7	43.1
0°-60°	3745.7	77.7
0°-90°	4822.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4822.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1607	1607	1607	1607	1607	
5°	1607	1602	1599	1598	1603	153
15°	1556	1550	1549	1548	1553	439
25°	1458	1452	1451	1451	1458	672
35°	1315	1309	1306	1306	1313	823
45°	1132	1124	1116	1116	1124	874
55°	913	903	891	893	900	815
65°	651	639	624	632	647	644
75°	362	352	346	308	292	380
85°	85	80	80	76	74	100
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1607.1	1607.1	1607.1	1607.1	1607.1
2.5°	1613.2	1606.1	1604.1	1602.1	1607.1
5°	1607.1	1602.1	1599.0	1598.0	1603.1
7.5°	1600.1	1594.0	1592.0	1590.0	1595.0
10°	1588.0	1581.9	1579.9	1578.9	1583.9
12.5°	1573.9	1566.8	1565.8	1564.8	1569.8
15°	1555.7	1549.7	1548.7	1547.7	1552.7
17.5°	1536.6	1530.5	1528.5	1527.5	1534.6
20°	1513.4	1507.4	1506.4	1505.3	1511.4
22.5°	1487.2	1481.2	1479.1	1480.2	1486.2
25°	1458.0	1451.9	1450.9	1450.9	1458.0
27.5°	1425.7	1419.7	1419.7	1419.7	1427.8
30°	1391.5	1386.4	1383.4	1384.4	1391.5
32.5°	1356.2	1348.2	1346.1	1347.2	1354.2
35°	1314.9	1308.9	1305.8	1305.8	1312.9
37.5°	1272.6	1266.5	1262.5	1262.5	1269.6
40°	1230.3	1221.2	1217.2	1215.2	1224.2
42.5°	1182.9	1175.9	1166.8	1166.8	1174.9
45°	1132.5	1124.5	1116.4	1116.4	1124.5
47.5°	1081.1	1073.1	1064.0	1064.0	1072.1
50°	1026.7	1018.7	1008.6	1008.6	1017.7
52.5°	971.3	962.3	951.2	950.2	959.2
55°	912.9	902.8	890.7	892.7	899.8
57.5°	853.4	840.3	828.2	828.2	839.3
60°	785.9	774.8	761.7	763.8	777.9
62.5°	721.4	707.3	694.2	699.3	711.4
65°	650.9	638.8	623.7	631.8	646.9
67.5°	581.4	568.3	556.2	566.3	573.3
70°	507.8	495.7	486.7	486.7	485.7
72.5°	434.3	423.2	421.2	402.0	389.9
75°	361.7	351.6	345.6	308.3	292.2
77.5°	286.2	283.1	264.0	224.7	219.7
80°	213.6	215.6	181.4	182.4	186.4
82.5°	147.1	144.1	136.0	130.0	128.0
85°	84.6	79.6	79.6	75.6	73.6
87.5°	28.2	31.2	31.2	31.2	32.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)