

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: P238777

Luminaire Tested: **14EN-LD2-51-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238777
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-395-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-51-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
STANDARD OPTION
Light Source: (224)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4962.5 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1' x L: 3.83' x H: 0')
CIE Type: Direct

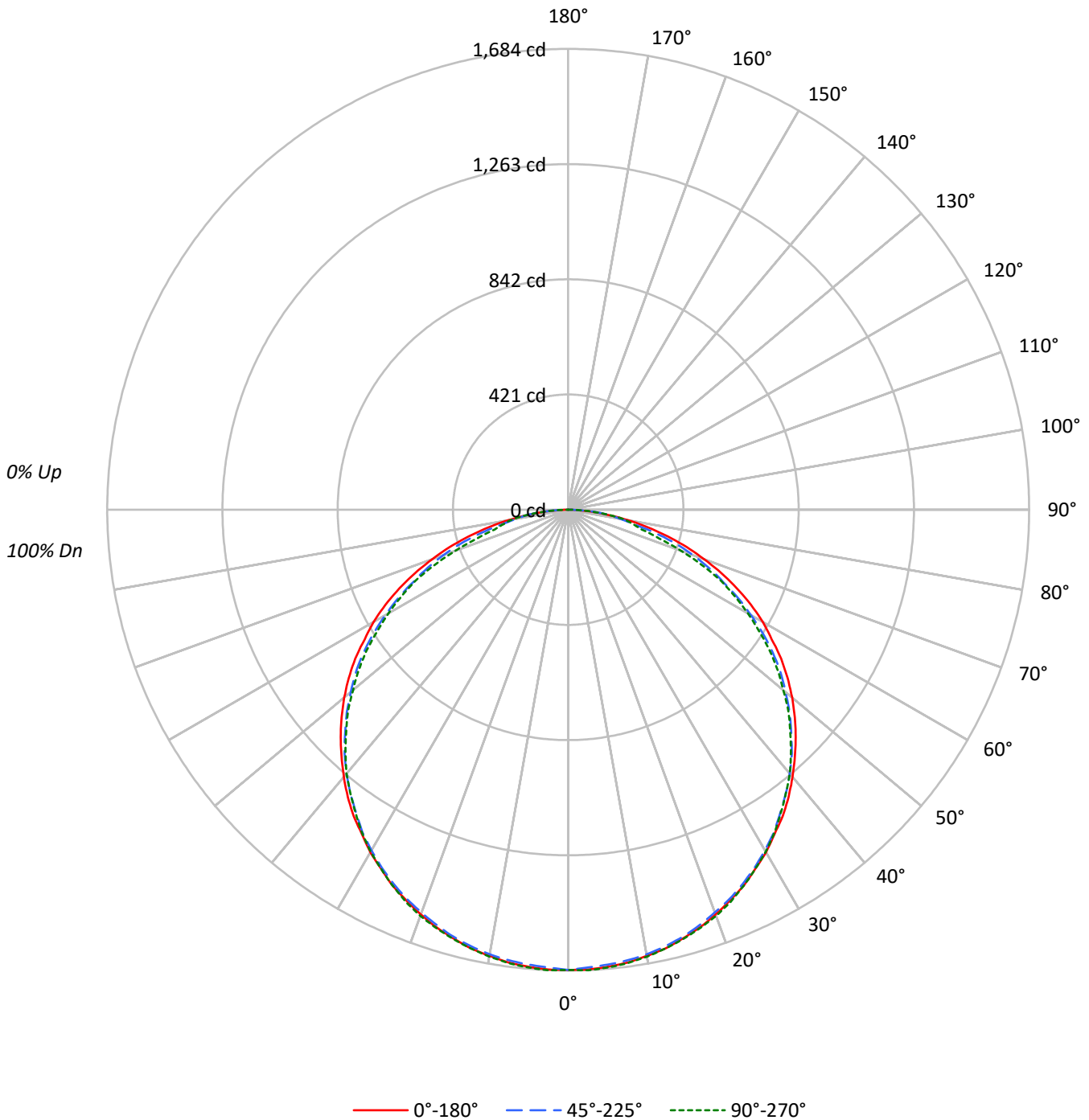
Input Watts (W): 44.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4722	4722	4722
5°	4726	4704	4733
10°	4721	4705	4728
15°	4714	4698	4721
20°	4704	4681	4720
25°	4699	4674	4699
30°	4687	4662	4679
35°	4686	4632	4641
40°	4674	4616	4616
45°	4668	4574	4553
50°	4665	4527	4482
55°	4650	4470	4406
60°	4612	4332	4259
65°	4515	4149	4097
70°	4330	3985	3598
75°	4071	3587	3017
80°	3606	3097	3394
85°	2790	3212	3045



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.2	3.2
10°-20°	457.4	9.2
20°-30°	697.2	14.0
30°-40°	849.0	17.1
40°-50°	892.7	18.0
50°-60°	819.4	16.5
60°-70°	629.5	12.7
70°-80°	351.4	7.1
80°-90°	106.7	2.1
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°	1313.8	26.5
0°-40°	2162.8	43.6
0°-60°	3874.9	78.1
0°-90°	4962.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4962.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1682	1682	1682	1682	1682	
5°	1677	1677	1669	1677	1679	159
15°	1622	1622	1616	1622	1624	458
25°	1516	1511	1509	1514	1516	699
35°	1367	1362	1351	1354	1354	854
45°	1175	1168	1152	1147	1147	907
55°	950	942	913	897	900	847
65°	680	661	624	617	617	671
75°	375	357	331	286	278	396
85°	87	89	100	97	94	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1681.8	1681.8	1681.8	1681.8	1681.8
2.5°	1681.8	1681.8	1673.9	1681.8	1684.4
5°	1676.6	1676.6	1668.7	1676.6	1679.2
7.5°	1668.7	1668.7	1660.8	1666.1	1671.3
10°	1655.6	1655.6	1650.3	1655.6	1658.2
12.5°	1642.4	1639.8	1634.6	1639.8	1642.4
15°	1621.5	1621.5	1616.2	1621.5	1624.1
17.5°	1600.5	1597.8	1592.6	1600.5	1603.1
20°	1574.2	1571.6	1566.4	1574.2	1579.5
22.5°	1545.4	1542.7	1540.1	1548.0	1550.6
25°	1516.5	1511.3	1508.6	1513.9	1516.5
27.5°	1479.8	1477.2	1474.5	1477.2	1479.8
30°	1445.7	1440.4	1437.8	1437.8	1443.0
32.5°	1403.7	1401.1	1398.4	1401.1	1401.1
35°	1367.0	1361.7	1351.2	1353.8	1353.8
37.5°	1322.4	1314.5	1306.6	1306.6	1306.6
40°	1275.1	1269.9	1259.4	1256.8	1259.4
42.5°	1225.3	1220.0	1209.5	1201.7	1204.3
45°	1175.4	1167.6	1151.8	1146.6	1146.6
47.5°	1122.9	1115.1	1096.7	1088.8	1091.5
50°	1067.9	1057.4	1036.4	1025.9	1025.9
52.5°	1010.1	999.6	978.6	965.5	965.5
55°	949.8	941.9	913.1	897.3	899.9
57.5°	881.6	873.7	844.8	826.5	826.5
60°	821.2	805.5	771.4	758.3	758.3
62.5°	753.0	734.6	700.5	684.8	687.4
65°	679.5	661.2	624.4	616.6	616.6
67.5°	606.1	590.3	556.2	543.1	530.0
70°	527.4	511.6	485.4	453.9	438.2
72.5°	453.9	435.5	411.9	364.7	349.0
75°	375.2	356.8	330.6	286.0	278.1
77.5°	299.1	283.4	246.6	236.1	241.4
80°	223.0	217.8	191.5	202.0	209.9
82.5°	149.6	146.9	152.2	157.4	157.4
85°	86.6	89.2	99.7	97.1	94.5
87.5°	36.7	44.6	42.0	42.0	42.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)