

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: P238804

Luminaire Tested: **22EN-LD2-43-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238804
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-118-11)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22EN-LD2-43-UNV-L850-CD1-U
Description: METALUX ENCOUNTER 2X2 LED TROFFER
STANDARD OPTION
Light Source: (168)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4970.8 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

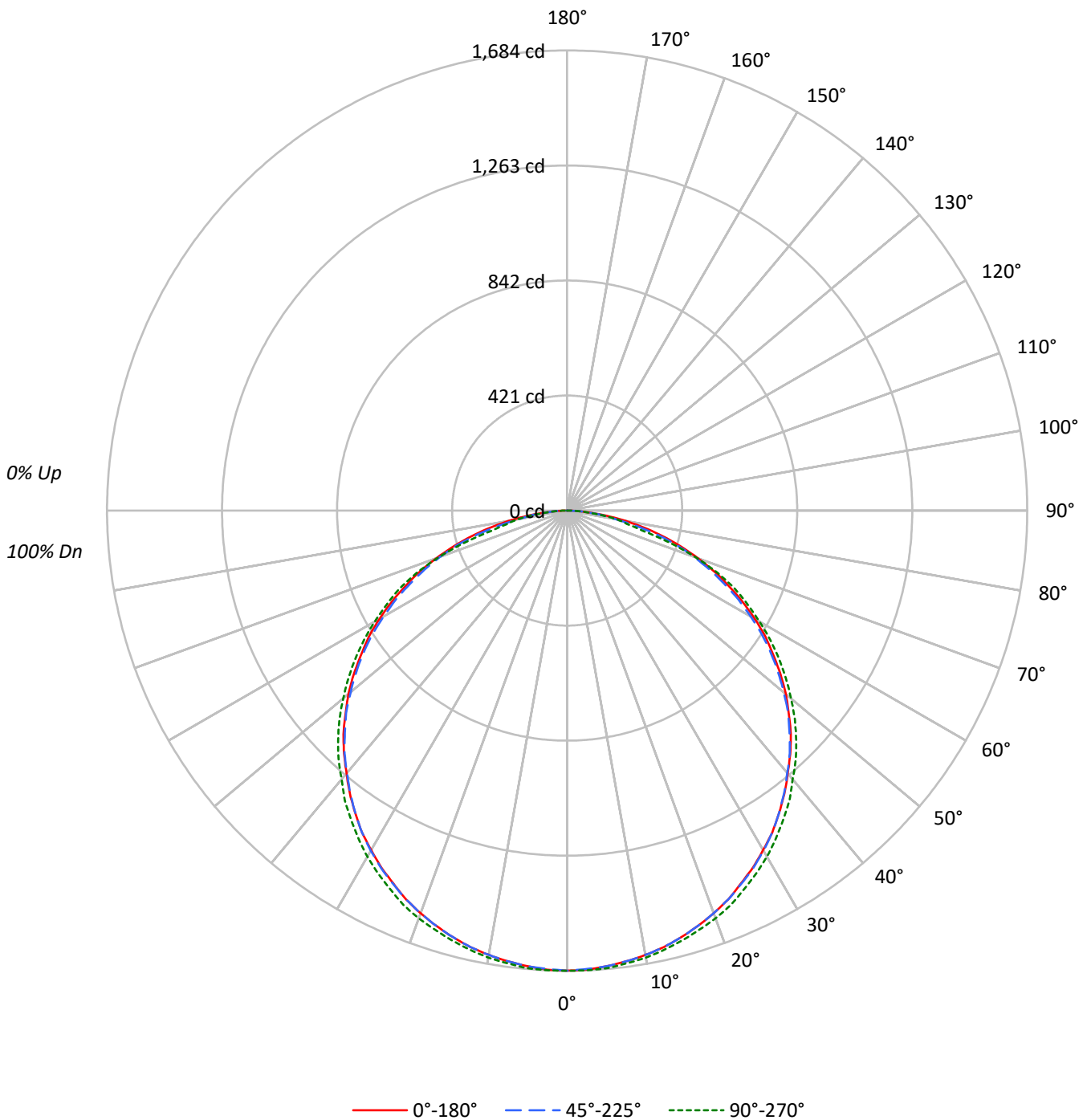
Input Watts (W): 38.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	99	95	106	101	98	94	97	94	91	93	91	88	90	88	86	83				83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69				69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58				58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49				49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42				42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37				37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33				33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29				29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26				26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24				24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5393	5393	5393
5°	5381	5381	5405
10°	5370	5370	5402
15°	5358	5358	5399
20°	5344	5344	5413
25°	5319	5328	5408
30°	5305	5315	5408
35°	5284	5284	5392
40°	5251	5240	5367
45°	5244	5210	5369
50°	5204	5154	5329
55°	5143	5088	5284
60°	5079	4966	5207
65°	4940	4807	5131
70°	4760	4619	4690
75°	4485	4205	3582
80°	3945	3296	3436
85°	2866	2774	2682



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.3	3.2
10°-20°	457.1	9.2
20°-30°	697.8	14.0
30°-40°	849.9	17.1
40°-50°	894.6	18.0
50°-60°	823.7	16.6
60°-70°	641.1	12.9
70°-80°	355.8	7.2
80°-90°	91.4	1.8
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°	1314.2	26.4
0°-40°	2164.1	43.5
0°-60°	3882.4	78.1
0°-90°	4970.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4970.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1684	1684	1684	1684	1684	
5°	1674	1674	1674	1679	1681	159
15°	1616	1616	1616	1624	1628	456
25°	1505	1508	1508	1520	1530	695
35°	1352	1352	1352	1367	1379	846
45°	1158	1150	1150	1168	1186	892
55°	921	919	911	926	946	824
65°	652	644	634	654	677	646
75°	362	355	340	302	290	382
85°	78	73	76	73	73	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1683.9	1683.9	1683.9	1683.9	1683.9
2.5°	1681.4	1678.9	1678.9	1683.9	1683.9
5°	1673.8	1673.8	1673.8	1678.9	1681.4
7.5°	1663.8	1663.8	1663.8	1671.3	1671.3
10°	1651.2	1648.7	1651.2	1656.2	1661.3
12.5°	1636.1	1633.6	1636.1	1641.1	1646.2
15°	1616.0	1616.0	1616.0	1623.5	1628.5
17.5°	1593.3	1590.8	1593.3	1600.8	1608.4
20°	1568.1	1568.1	1568.1	1578.2	1588.3
22.5°	1540.4	1537.9	1540.4	1553.0	1563.1
25°	1505.2	1507.7	1507.7	1520.3	1530.4
27.5°	1472.5	1470.0	1475.0	1485.1	1497.6
30°	1434.7	1434.7	1437.2	1449.8	1462.4
32.5°	1397.0	1394.4	1397.0	1409.6	1422.1
35°	1351.7	1351.7	1351.7	1366.8	1379.3
37.5°	1306.4	1303.8	1303.8	1318.9	1336.6
40°	1256.0	1253.5	1253.5	1271.1	1283.7
42.5°	1208.2	1205.7	1205.7	1220.8	1238.4
45°	1157.8	1150.3	1150.3	1167.9	1185.5
47.5°	1100.0	1094.9	1097.4	1112.5	1130.2
50°	1044.6	1037.0	1034.5	1052.1	1069.7
52.5°	984.2	981.7	974.1	989.2	1009.3
55°	921.2	918.7	911.2	926.3	946.4
57.5°	860.8	853.3	845.7	858.3	881.0
60°	792.9	785.3	775.3	792.9	813.0
62.5°	724.9	714.8	707.3	722.4	745.0
65°	651.9	644.4	634.3	654.4	677.1
67.5°	584.0	576.4	563.8	581.4	596.5
70°	508.4	498.4	493.3	495.9	500.9
72.5°	435.5	430.4	422.9	402.7	397.7
75°	362.5	354.9	339.8	302.0	289.5
77.5°	289.5	284.4	256.7	224.0	224.0
80°	213.9	211.4	178.7	183.7	186.3
82.5°	146.0	141.0	130.9	128.4	128.4
85°	78.0	73.0	75.5	73.0	73.0
87.5°	30.2	30.2	32.7	30.2	30.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)