

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: P238896

Luminaire Tested: **24EN-LD2-49-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238896
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-L850-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5658.8 lumens
Efficiency: N/A
Efficacy: 134.1 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

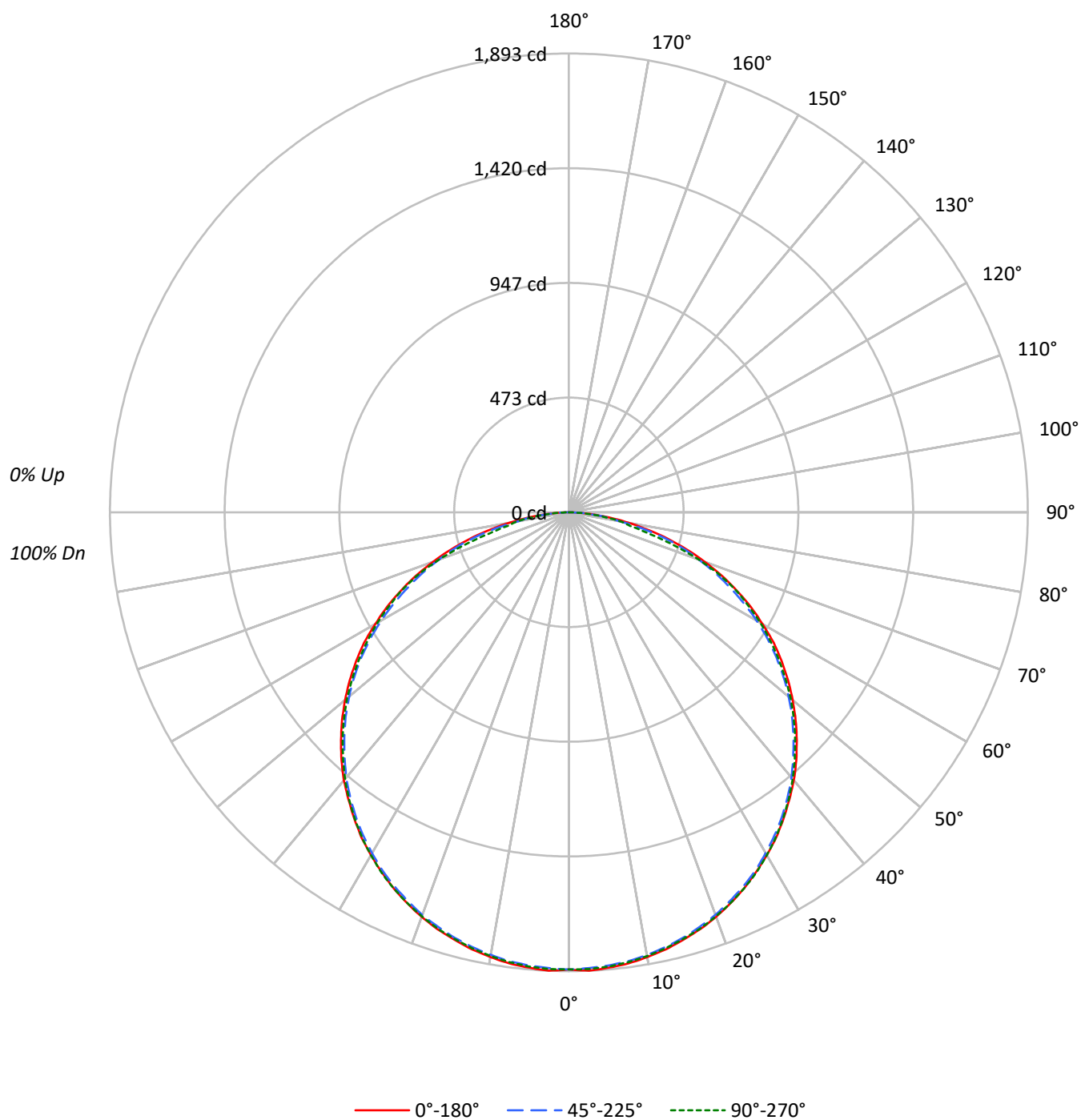
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2888	2888	2888
5°	2900	2885	2892
10°	2898	2883	2891
15°	2895	2882	2889
20°	2895	2881	2891
25°	2891	2877	2891
30°	2888	2871	2888
35°	2885	2865	2881
40°	2887	2856	2872
45°	2879	2838	2858
50°	2871	2820	2846
55°	2860	2791	2819
60°	2825	2738	2796
65°	2768	2653	2751
70°	2669	2557	2552
75°	2512	2400	2029
80°	2211	1877	1929
85°	1745	1641	1517



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.6	3.2
10°-20°	513.7	9.1
20°-30°	786.1	13.9
30°-40°	960.8	17.0
40°-50°	1015.3	17.9
50°-60°	940.8	16.6
60°-70°	737.0	13.0
70°-80°	416.7	7.4
80°-90°	109.7	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°	1478.4	26.1
0°-40°	2439.3	43.1
0°-60°	4395.4	77.7
0°-90°	5658.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5658.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1886	1886	1886	1886	1886	
5°	1886	1880	1876	1875	1881	179
15°	1826	1818	1817	1816	1822	516
25°	1711	1704	1703	1703	1711	789
35°	1543	1536	1532	1532	1541	966
45°	1329	1320	1310	1310	1320	1026
55°	1071	1059	1045	1048	1056	957
65°	764	750	732	741	759	755
75°	424	413	406	362	343	446
85°	99	93	93	89	86	117
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1885.9	1885.9	1885.9	1885.9	1885.9
2.5°	1892.9	1884.7	1882.3	1879.9	1885.9
5°	1885.9	1879.9	1876.4	1875.2	1881.1
7.5°	1877.6	1870.5	1868.1	1865.8	1871.7
10°	1863.4	1856.3	1853.9	1852.7	1858.7
12.5°	1846.8	1838.6	1837.4	1836.2	1842.1
15°	1825.6	1818.5	1817.3	1816.1	1822.0
17.5°	1803.1	1796.0	1793.6	1792.4	1800.7
20°	1775.9	1768.8	1767.6	1766.4	1773.5
22.5°	1745.2	1738.1	1735.7	1736.9	1744.0
25°	1710.9	1703.8	1702.6	1702.6	1710.9
27.5°	1673.0	1665.9	1665.9	1665.9	1675.4
30°	1632.8	1626.9	1623.4	1624.6	1632.8
32.5°	1591.4	1582.0	1579.6	1580.8	1589.1
35°	1543.0	1535.9	1532.3	1532.3	1540.6
37.5°	1493.3	1486.2	1481.5	1481.5	1489.8
40°	1443.7	1433.0	1428.3	1425.9	1436.6
42.5°	1388.1	1379.8	1369.2	1369.2	1378.6
45°	1329.0	1319.5	1310.0	1310.0	1319.5
47.5°	1268.7	1259.2	1248.6	1248.6	1258.0
50°	1204.8	1195.4	1183.5	1183.5	1194.2
52.5°	1139.8	1129.1	1116.1	1115.0	1125.6
55°	1071.2	1059.4	1045.2	1047.6	1055.8
57.5°	1001.5	986.1	971.9	971.9	984.9
60°	922.2	909.2	893.9	896.2	912.8
62.5°	846.6	830.0	814.6	820.6	834.7
65°	763.8	749.6	731.9	741.3	759.1
67.5°	682.2	666.8	652.7	664.5	672.8
70°	595.9	581.7	571.1	571.1	569.9
72.5°	509.6	496.6	494.2	471.8	457.6
75°	424.5	412.6	405.5	361.8	342.9
77.5°	335.8	332.2	309.8	263.7	257.8
80°	250.7	253.0	212.8	214.0	218.7
82.5°	172.6	169.1	159.6	152.5	150.2
85°	99.3	93.4	93.4	88.7	86.3
87.5°	33.1	36.7	36.7	36.7	37.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)