

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: P238899

Luminaire Tested: **24EN-LD2-54-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238899
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-LD2-54-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5518.0 lumens
Efficiency: N/A
Efficacy: 128.3 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

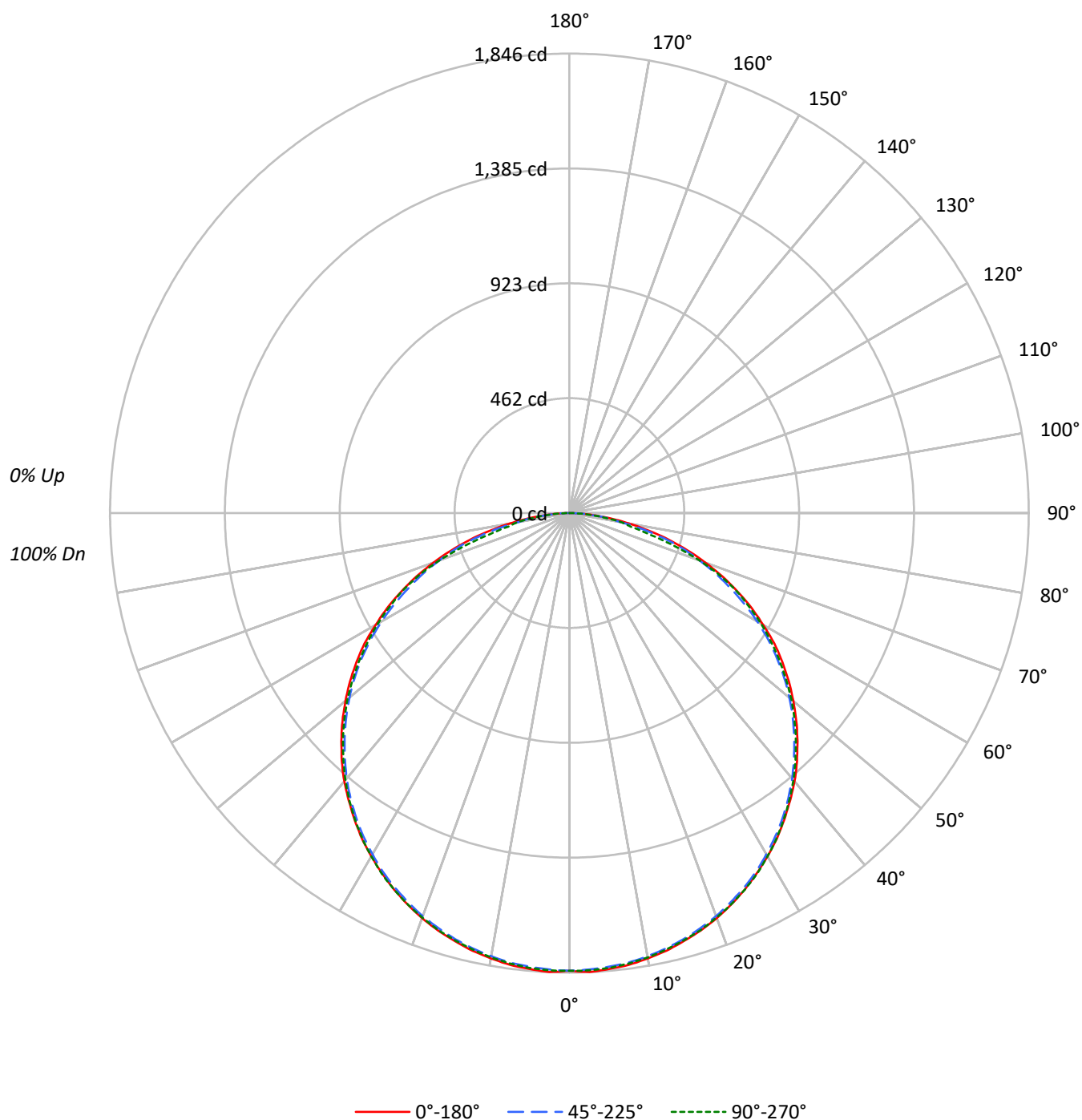
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	90	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	26	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2817	2817	2817
5°	2827	2813	2820
10°	2826	2812	2819
15°	2823	2810	2817
20°	2823	2809	2819
25°	2819	2806	2819
30°	2816	2800	2816
35°	2813	2794	2809
40°	2815	2785	2801
45°	2807	2767	2787
50°	2799	2750	2775
55°	2789	2722	2749
60°	2755	2670	2727
65°	2699	2587	2683
70°	2602	2494	2489
75°	2449	2340	1978
80°	2156	1830	1881
85°	1701	1601	1480



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.2	3.2
10°-20°	500.9	9.1
20°-30°	766.5	13.9
30°-40°	936.9	17.0
40°-50°	990.1	17.9
50°-60°	917.3	16.6
60°-70°	718.7	13.0
70°-80°	406.3	7.4
80°-90°	107.0	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°	1441.7	26.1
0°-40°	2378.6	43.1
0°-60°	4286.0	77.7
0°-90°	5518.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5518.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1839	1839	1839	1839	1839	
5°	1839	1833	1830	1828	1834	175
15°	1780	1773	1772	1771	1777	503
25°	1668	1661	1660	1660	1668	769
35°	1505	1498	1494	1494	1502	942
45°	1296	1287	1277	1277	1287	1000
55°	1045	1033	1019	1022	1030	933
65°	745	731	714	723	740	736
75°	414	402	396	353	334	435
85°	97	91	91	86	84	114
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1838.9	1838.9	1838.9	1838.9	1838.9
2.5°	1845.8	1837.8	1835.5	1833.2	1838.9
5°	1838.9	1833.2	1829.7	1828.5	1834.3
7.5°	1830.9	1823.9	1821.6	1819.3	1825.1
10°	1817.0	1810.1	1807.8	1806.6	1812.4
12.5°	1800.9	1792.8	1791.7	1790.5	1796.3
15°	1780.1	1773.2	1772.1	1770.9	1776.7
17.5°	1758.2	1751.3	1749.0	1747.8	1755.9
20°	1731.7	1724.8	1723.6	1722.5	1729.4
22.5°	1701.7	1694.8	1692.5	1693.7	1700.6
25°	1668.3	1661.4	1660.2	1660.2	1668.3
27.5°	1631.4	1624.5	1624.5	1624.5	1633.7
30°	1592.2	1586.4	1583.0	1584.1	1592.2
32.5°	1551.8	1542.6	1540.3	1541.5	1549.5
35°	1504.6	1497.7	1494.2	1494.2	1502.3
37.5°	1456.2	1449.2	1444.6	1444.6	1452.7
40°	1407.7	1397.4	1392.7	1390.4	1400.8
42.5°	1353.5	1345.5	1335.1	1335.1	1344.3
45°	1295.9	1286.7	1277.4	1277.4	1286.7
47.5°	1237.1	1227.9	1217.5	1217.5	1226.7
50°	1174.8	1165.6	1154.1	1154.1	1164.5
52.5°	1111.4	1101.0	1088.4	1087.2	1097.6
55°	1044.6	1033.0	1019.2	1021.5	1029.6
57.5°	976.5	961.5	947.7	947.7	960.4
60°	899.3	886.6	871.6	873.9	890.1
62.5°	825.5	809.4	794.4	800.1	814.0
65°	744.8	731.0	713.7	722.9	740.2
67.5°	665.2	650.3	636.4	647.9	656.0
70°	581.1	567.2	556.9	556.9	555.7
72.5°	496.9	484.2	481.9	460.0	446.2
75°	413.9	402.4	395.5	352.8	334.3
77.5°	327.4	324.0	302.1	257.1	251.3
80°	244.4	246.7	207.5	208.7	213.3
82.5°	168.3	164.9	155.6	148.7	146.4
85°	96.8	91.1	91.1	86.5	84.2
87.5°	32.3	35.7	35.7	35.7	36.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)