

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: P238900

Luminaire Tested: **24EN-LD2-54-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238900
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-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: 6005.0 lumens
Efficiency: N/A
Efficacy: 139.7 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

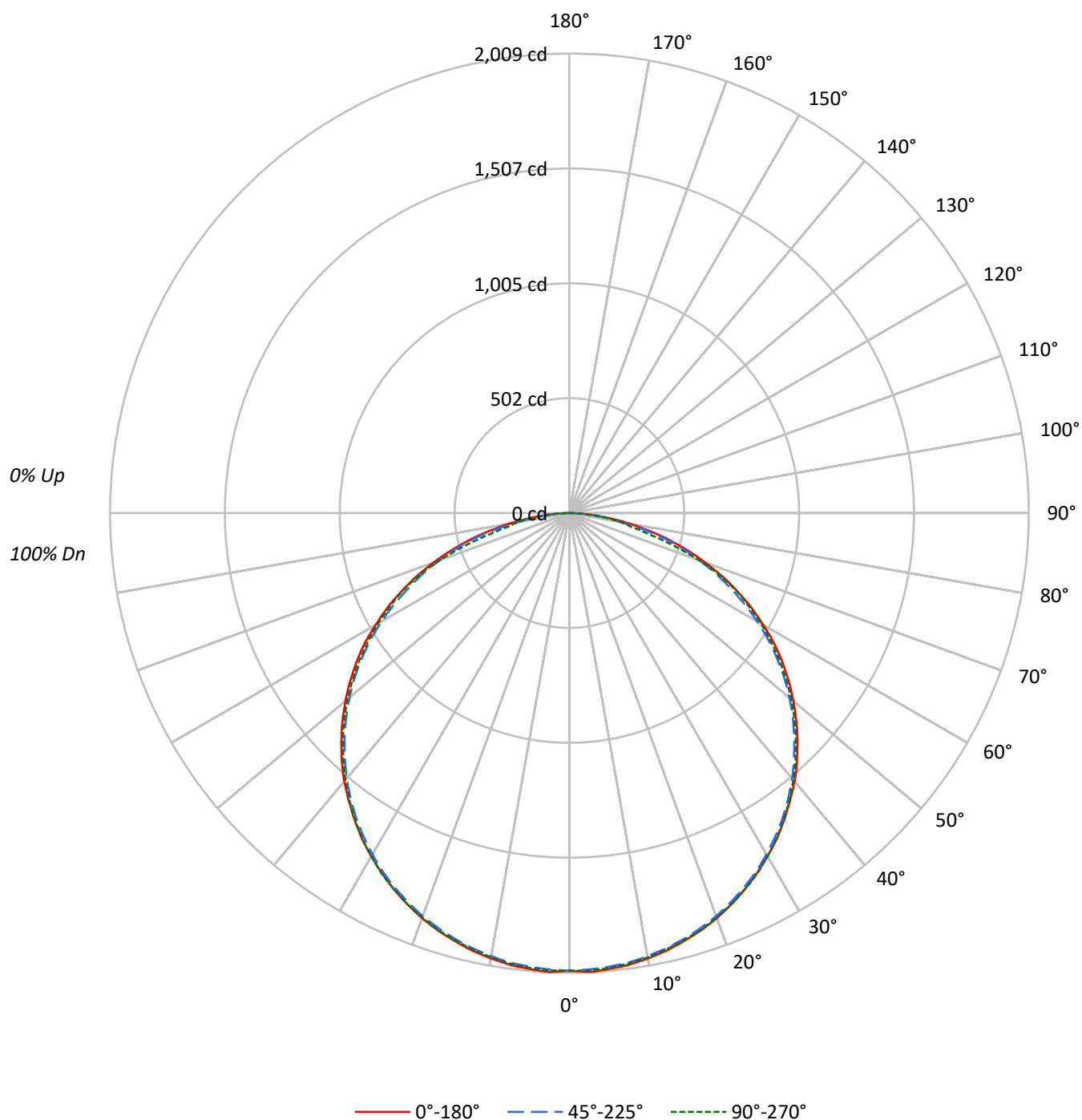
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69			
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26			
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3065	3065	3065
5°	3077	3061	3069
10°	3075	3060	3068
15°	3072	3058	3066
20°	3072	3057	3068
25°	3068	3053	3068
30°	3064	3047	3064
35°	3062	3040	3057
40°	3063	3030	3048
45°	3055	3011	3033
50°	3046	2993	3019
55°	3035	2962	2992
60°	2998	2905	2967
65°	2937	2815	2919
70°	2832	2714	2708
75°	2665	2547	2153
80°	2346	1992	2047
85°	1852	1742	1610



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.6	3.2
10°-20°	545.1	9.1
20°-30°	834.2	13.9
30°-40°	1019.6	17.0
40°-50°	1077.5	17.9
50°-60°	998.3	16.6
60°-70°	782.1	13.0
70°-80°	442.2	7.4
80°-90°	116.4	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°	1568.9	26.1
0°-40°	2588.5	43.1
0°-60°	4664.2	77.7
0°-90°	6005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6005.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2001	2001	2001	2001	2001	
5°	2001	1995	1991	1990	1996	190
15°	1937	1930	1928	1927	1934	547
25°	1816	1808	1807	1807	1816	837
35°	1637	1630	1626	1626	1635	1025
45°	1410	1400	1390	1390	1400	1088
55°	1137	1124	1109	1112	1120	1015
65°	810	796	777	787	806	801
75°	450	438	430	384	364	474
85°	105	99	99	94	92	124
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2001.2	2001.2	2001.2	2001.2	2001.2
2.5°	2008.7	2000.0	1997.5	1994.9	2001.2
5°	2001.2	1994.9	1991.2	1989.9	1996.2
7.5°	1992.4	1984.9	1982.4	1979.9	1986.2
10°	1977.4	1969.9	1967.3	1966.1	1972.4
12.5°	1959.8	1951.0	1949.8	1948.5	1954.8
15°	1937.2	1929.7	1928.4	1927.2	1933.5
17.5°	1913.4	1905.9	1903.4	1902.1	1910.9
20°	1884.5	1877.0	1875.8	1874.5	1882.0
22.5°	1851.9	1844.4	1841.9	1843.1	1850.7
25°	1815.5	1808.0	1806.7	1806.7	1815.5
27.5°	1775.4	1767.8	1767.8	1767.8	1777.9
30°	1732.7	1726.4	1722.7	1723.9	1732.7
32.5°	1688.8	1678.8	1676.3	1677.5	1686.3
35°	1637.4	1629.8	1626.1	1626.1	1634.9
37.5°	1584.7	1577.1	1572.1	1572.1	1580.9
40°	1532.0	1520.7	1515.7	1513.1	1524.4
42.5°	1473.0	1464.2	1452.9	1452.9	1463.0
45°	1410.3	1400.2	1390.2	1390.2	1400.2
47.5°	1346.3	1336.2	1324.9	1324.9	1335.0
50°	1278.5	1268.5	1255.9	1255.9	1267.2
52.5°	1209.5	1198.2	1184.4	1183.2	1194.5
55°	1136.7	1124.2	1109.1	1111.6	1120.4
57.5°	1062.7	1046.4	1031.3	1031.3	1045.2
60°	978.7	964.9	948.5	951.0	968.6
62.5°	898.4	880.8	864.5	870.8	885.8
65°	810.5	795.5	776.6	786.7	805.5
67.5°	724.0	707.6	692.6	705.1	713.9
70°	632.4	617.3	606.0	606.0	604.8
72.5°	540.8	527.0	524.5	500.6	485.6
75°	450.4	437.9	430.4	383.9	363.9
77.5°	356.3	352.6	328.7	279.8	273.5
80°	266.0	268.5	225.8	227.1	232.1
82.5°	183.2	179.4	169.4	161.9	159.3
85°	105.4	99.1	99.1	94.1	91.6
87.5°	35.1	38.9	38.9	38.9	40.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)