

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: P239031

Luminaire Tested: **24ENA-LD2-70-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239031
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: 24ENA-LD2-70-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6166.8 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.67' x L: 3.83' x H: 0')
CIE Type: Direct

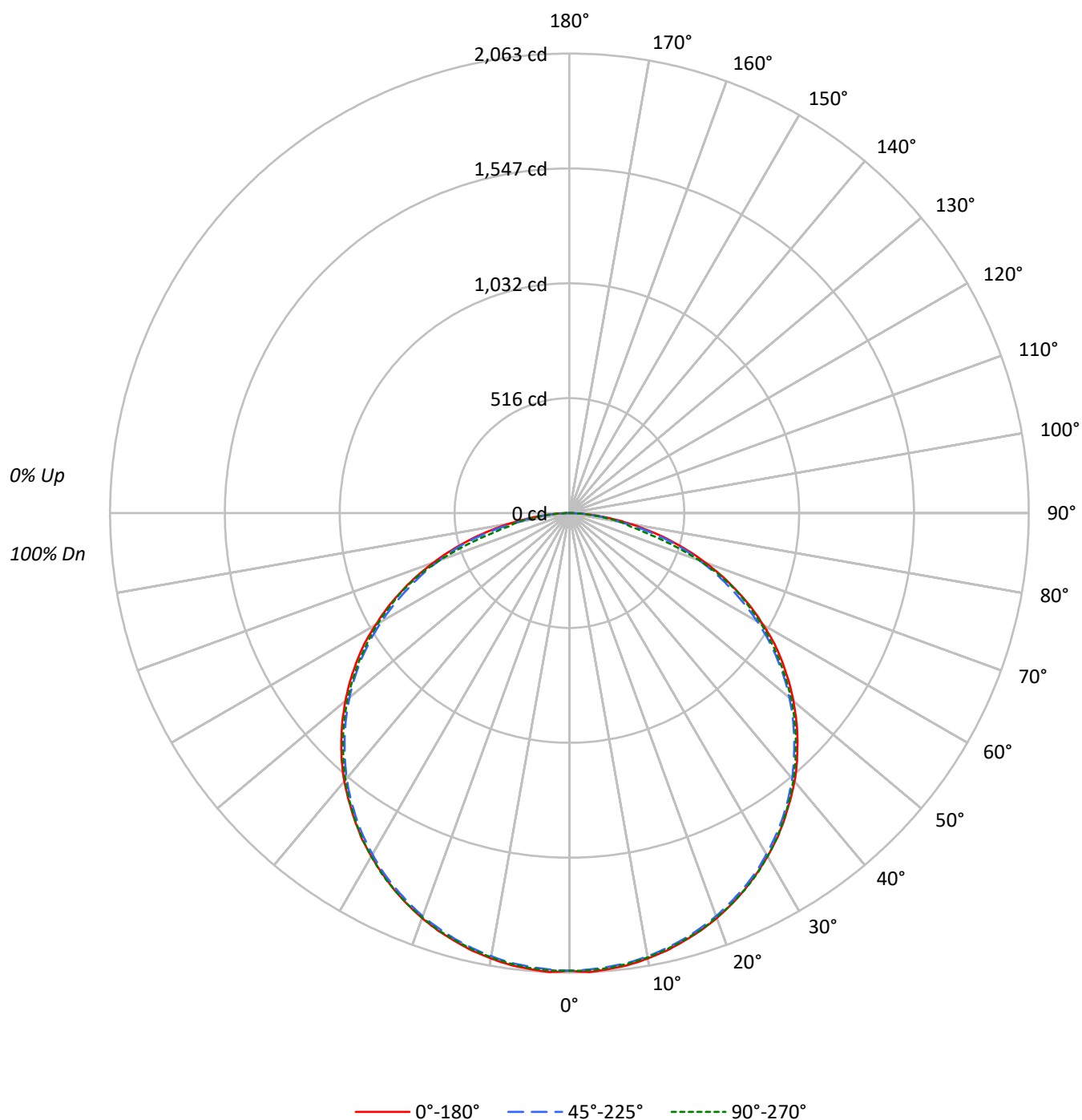
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	99	95	106	101	97	94		97	94	91		93	90	88		90	87	85
2	98	90	83	77	96	88	82	76		84	79	74		81	77	73		78	74	71
3	90	79	70	64	87	77	69	63		74	67	62		71	66	61		69	64	60
4	82	70	61	54	79	68	60	53		66	58	53		63	57	52		61	56	51
5	75	62	53	46	73	61	52	46		59	51	45		57	50	45		55	49	44
6	69	56	47	40	67	55	46	40		53	45	40		51	44	39		50	44	39
7	64	50	42	35	62	50	41	35		48	40	35		47	40	35		45	39	34
8	60	46	37	31	58	45	37	31		44	36	31		43	36	31		41	35	31
9	56	42	34	28	54	42	34	28		40	33	28		39	33	28		38	32	28
10	52	39	31	26	51	38	31	25		37	30	25		36	30	25		35	29	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3462	3462	3462
5°	3476	3458	3467
10°	3474	3456	3465
15°	3470	3454	3463
20°	3470	3454	3465
25°	3466	3449	3466
30°	3462	3442	3462
35°	3458	3435	3453
40°	3460	3423	3443
45°	3451	3401	3426
50°	3441	3381	3411
55°	3429	3346	3380
60°	3386	3282	3352
65°	3318	3180	3298
70°	3199	3065	3060
75°	3011	2877	2433
80°	2651	2250	2313
85°	2092	1968	1819



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.7	3.2
10°-20°	559.8	9.1
20°-30°	856.7	13.9
30°-40°	1047.1	17.0
40°-50°	1106.5	17.9
50°-60°	1025.2	16.6
60°-70°	803.2	13.0
70°-80°	454.1	7.4
80°-90°	119.6	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°	1611.2	26.1
0°-40°	2658.3	43.1
0°-60°	4789.9	77.7
0°-90°	6166.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6166.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2055	2055	2055	2055	2055	
5°	2055	2049	2045	2044	2050	195
15°	1989	1982	1980	1979	1986	562
25°	1864	1857	1855	1855	1864	860
35°	1682	1674	1670	1670	1679	1053
45°	1448	1438	1428	1428	1438	1118
55°	1167	1154	1139	1142	1151	1043
65°	832	817	798	808	827	823
75°	463	450	442	394	374	487
85°	108	102	102	97	94	128
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2055.1	2055.1	2055.1	2055.1	2055.1
2.5°	2062.9	2053.9	2051.3	2048.7	2055.1
5°	2055.1	2048.7	2044.8	2043.5	2050.0
7.5°	2046.1	2038.4	2035.8	2033.2	2039.7
10°	2030.7	2022.9	2020.4	2019.1	2025.5
12.5°	2012.6	2003.6	2002.3	2001.0	2007.5
15°	1989.4	1981.7	1980.4	1979.1	1985.6
17.5°	1964.9	1957.2	1954.6	1953.4	1962.4
20°	1935.3	1927.6	1926.3	1925.0	1932.7
22.5°	1901.8	1894.1	1891.5	1892.8	1900.5
25°	1864.4	1856.7	1855.4	1855.4	1864.4
27.5°	1823.2	1815.5	1815.5	1815.5	1825.8
30°	1779.4	1773.0	1769.1	1770.4	1779.4
32.5°	1734.3	1724.0	1721.4	1722.7	1731.7
35°	1681.5	1673.7	1669.9	1669.9	1678.9
37.5°	1627.4	1619.6	1614.5	1614.5	1623.5
40°	1573.2	1561.7	1556.5	1553.9	1565.5
42.5°	1512.7	1503.7	1492.1	1492.1	1502.4
45°	1448.3	1438.0	1427.6	1427.6	1438.0
47.5°	1382.6	1372.2	1360.6	1360.6	1371.0
50°	1313.0	1302.7	1289.8	1289.8	1301.4
52.5°	1242.1	1230.5	1216.3	1215.0	1226.6
55°	1167.4	1154.5	1139.0	1141.6	1150.6
57.5°	1091.4	1074.6	1059.1	1059.1	1073.3
60°	1005.0	990.8	974.1	976.7	994.7
62.5°	922.6	904.5	887.8	894.2	909.7
65°	832.4	816.9	797.6	807.9	827.2
67.5°	743.5	726.7	711.2	724.1	733.2
70°	649.4	633.9	622.3	622.3	621.1
72.5°	555.3	541.2	538.6	514.1	498.6
75°	462.6	449.7	442.0	394.3	373.7
77.5°	365.9	362.1	337.6	287.3	280.9
80°	273.2	275.7	231.9	233.2	238.4
82.5°	188.1	184.3	173.9	166.2	163.6
85°	108.2	101.8	101.8	96.6	94.1
87.5°	36.1	39.9	39.9	39.9	41.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)