

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: P238991

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238991
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-LD2-70-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6324.9 lumens
Efficiency: N/A
Efficacy: 105.1 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

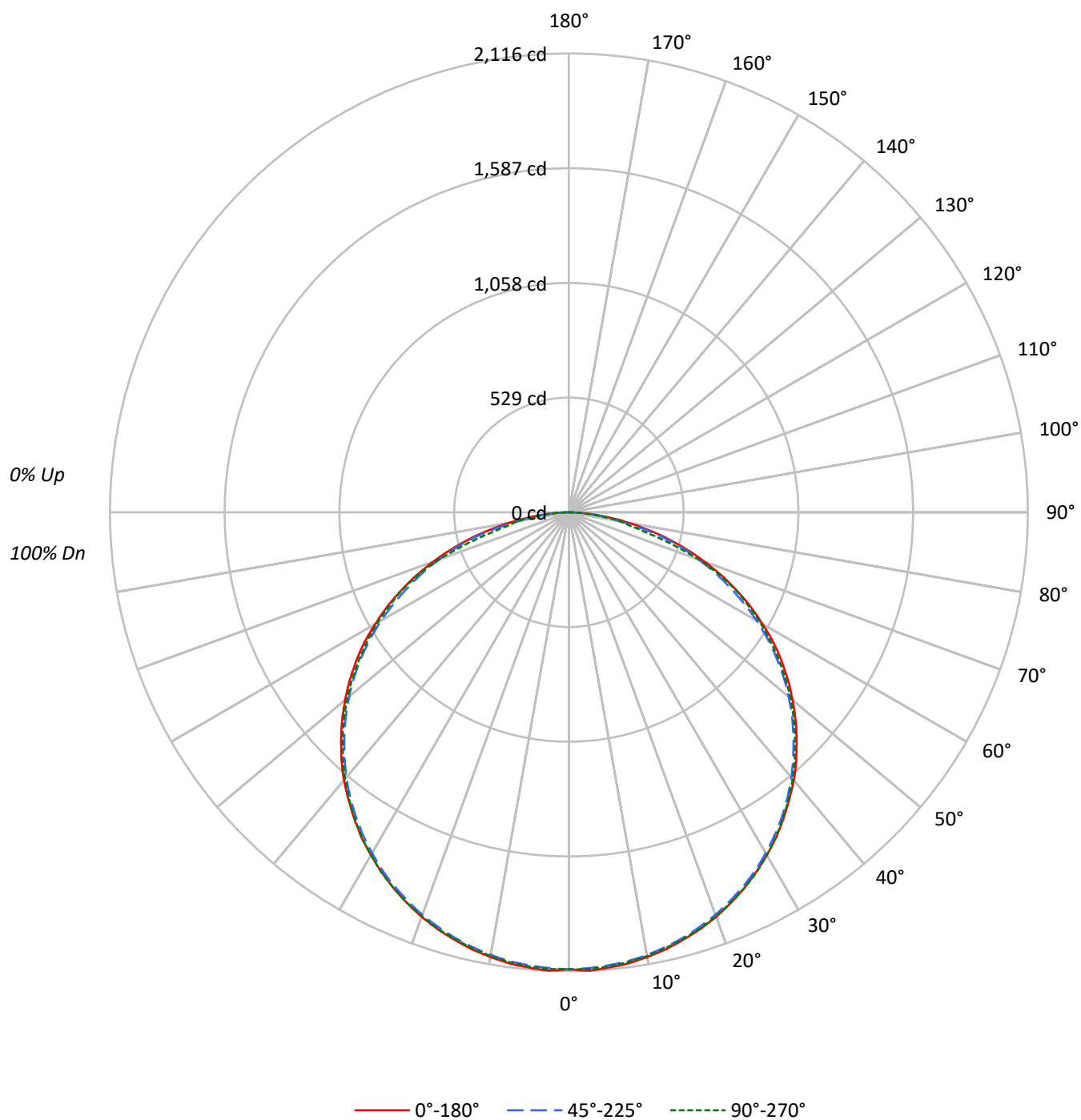
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	3228	3228	3228
5°	3241	3225	3233
10°	3239	3223	3231
15°	3235	3221	3229
20°	3235	3220	3231
25°	3232	3216	3232
30°	3228	3209	3228
35°	3225	3202	3220
40°	3226	3192	3210
45°	3217	3172	3194
50°	3209	3152	3180
55°	3197	3119	3151
60°	3158	3060	3125
65°	3094	2965	3075
70°	2983	2858	2853
75°	2807	2683	2268
80°	2471	2098	2157
85°	1951	1835	1696



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.7	3.2
10°-20°	574.2	9.1
20°-30°	878.6	13.9
30°-40°	1074.0	17.0
40°-50°	1134.9	17.9
50°-60°	1051.5	16.6
60°-70°	823.8	13.0
70°-80°	465.7	7.4
80°-90°	122.6	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°	1652.5	26.1
0°-40°	2726.4	43.1
0°-60°	4912.8	77.7
0°-90°	6324.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6324.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2108	2108	2108	2108	2108	
5°	2108	2101	2097	2096	2103	200
15°	2040	2032	2031	2030	2036	576
25°	1912	1904	1903	1903	1912	882
35°	1725	1717	1713	1713	1722	1080
45°	1485	1475	1464	1464	1475	1146
55°	1197	1184	1168	1171	1180	1069
65°	854	838	818	829	848	844
75°	474	461	453	404	383	499
85°	111	104	104	99	96	131
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2107.8	2107.8	2107.8	2107.8	2107.8
2.5°	2115.8	2106.5	2103.9	2101.2	2107.8
5°	2107.8	2101.2	2097.3	2095.9	2102.6
7.5°	2098.6	2090.7	2088.0	2085.4	2092.0
10°	2082.7	2074.8	2072.2	2070.8	2077.4
12.5°	2064.2	2055.0	2053.7	2052.3	2058.9
15°	2040.4	2032.5	2031.2	2029.9	2036.5
17.5°	2015.3	2007.4	2004.8	2003.4	2012.7
20°	1984.9	1977.0	1975.7	1974.4	1982.3
22.5°	1950.6	1942.6	1940.0	1941.3	1949.3
25°	1912.3	1904.3	1903.0	1903.0	1912.3
27.5°	1870.0	1862.0	1862.0	1862.0	1872.6
30°	1825.0	1818.4	1814.5	1815.8	1825.0
32.5°	1778.8	1768.2	1765.6	1766.9	1776.1
35°	1724.6	1716.7	1712.7	1712.7	1722.0
37.5°	1669.1	1661.2	1655.9	1655.9	1665.1
40°	1613.6	1601.7	1596.4	1593.8	1605.7
42.5°	1551.5	1542.2	1530.3	1530.3	1540.9
45°	1485.4	1474.8	1464.3	1464.3	1474.8
47.5°	1418.0	1407.4	1395.5	1395.5	1406.1
50°	1346.6	1336.1	1322.9	1322.9	1334.7
52.5°	1274.0	1262.1	1247.5	1246.2	1258.1
55°	1197.3	1184.1	1168.2	1170.9	1180.1
57.5°	1119.3	1102.2	1086.3	1086.3	1100.8
60°	1030.8	1016.3	999.1	1001.7	1020.2
62.5°	946.2	927.7	910.5	917.1	933.0
65°	853.7	837.8	818.0	828.6	848.4
67.5°	762.5	745.3	729.5	742.7	752.0
70°	666.1	650.2	638.3	638.3	637.0
72.5°	569.6	555.0	552.4	527.3	511.4
75°	474.4	461.2	453.3	404.4	383.2
77.5°	375.3	371.3	346.2	294.7	288.1
80°	280.2	282.8	237.9	239.2	244.5
82.5°	192.9	189.0	178.4	170.5	167.8
85°	111.0	104.4	104.4	99.1	96.5
87.5°	37.0	41.0	41.0	41.0	42.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)