

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: P238943

Luminaire Tested: **24ENA-LD2-58-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238943
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-LD2-58-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5806.1 lumens
Efficiency: N/A
Efficacy: 123.5 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

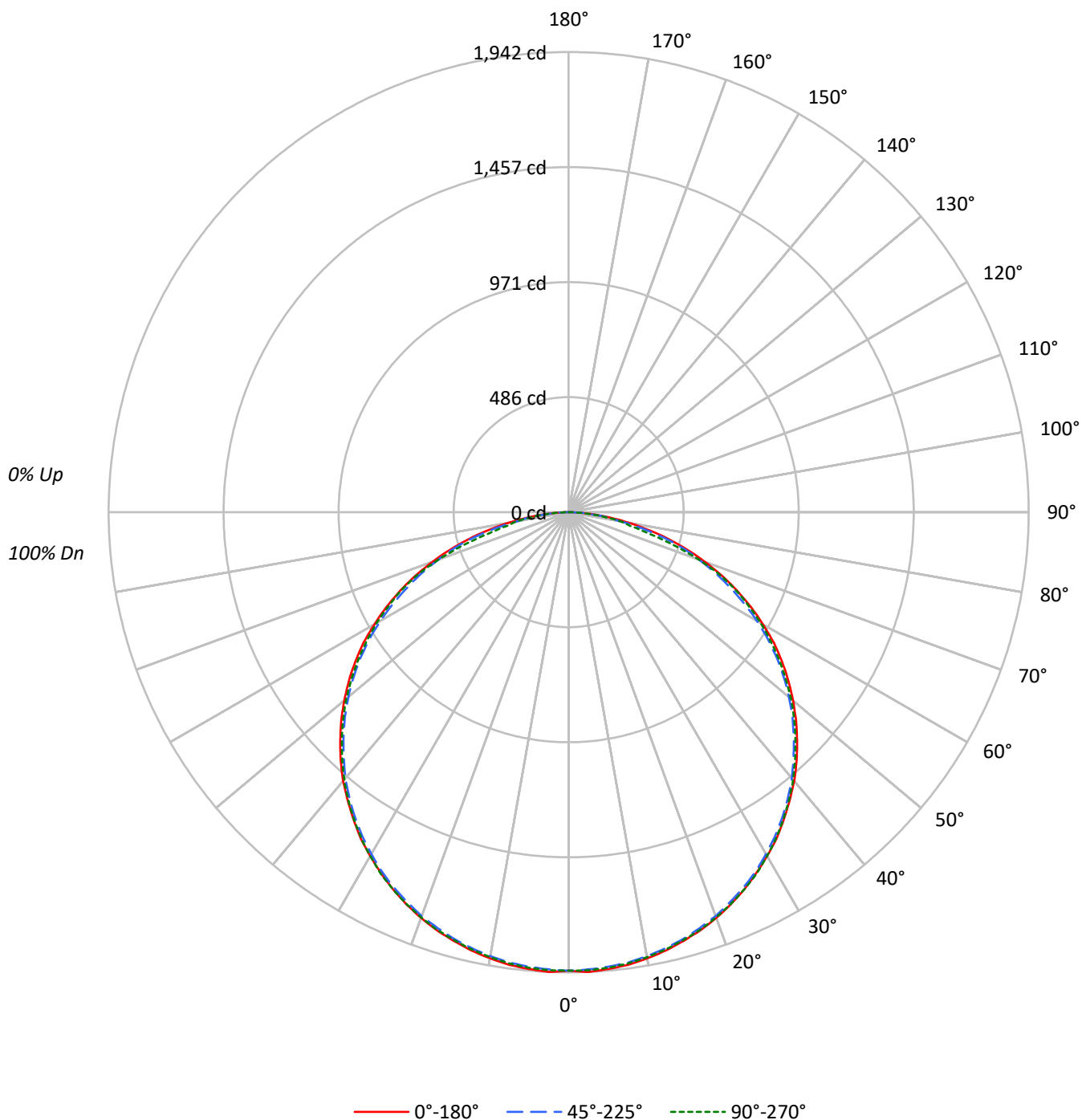
Input Watts (W): 47
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3260	3260	3260
5°	3272	3256	3264
10°	3271	3254	3262
15°	3267	3252	3261
20°	3267	3252	3263
25°	3263	3247	3263
30°	3259	3240	3259
35°	3256	3234	3251
40°	3258	3223	3242
45°	3249	3203	3226
50°	3240	3183	3212
55°	3228	3150	3182
60°	3188	3090	3156
65°	3124	2993	3105
70°	3012	2886	2880
75°	2835	2709	2290
80°	2495	2119	2177
85°	1970	1852	1713



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.3	3.2
10°-20°	527.1	9.1
20°-30°	806.6	13.9
30°-40°	985.9	17.0
40°-50°	1041.8	17.9
50°-60°	965.2	16.6
60°-70°	756.2	13.0
70°-80°	427.5	7.4
80°-90°	112.6	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°	1516.9	26.1
0°-40°	2502.8	43.1
0°-60°	4509.8	77.7
0°-90°	5806.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5806.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1935	1935	1935	1935	1935	
5°	1935	1929	1925	1924	1930	184
15°	1873	1866	1865	1863	1869	529
25°	1755	1748	1747	1747	1755	809
35°	1583	1576	1572	1572	1581	991
45°	1364	1354	1344	1344	1354	1052
55°	1099	1087	1072	1075	1083	982
65°	784	769	751	761	779	775
75°	436	423	416	371	352	458
85°	102	96	96	91	89	120
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1934.9	1934.9	1934.9	1934.9	1934.9
2.5°	1942.2	1933.7	1931.3	1928.9	1934.9
5°	1934.9	1928.9	1925.2	1924.0	1930.1
7.5°	1926.5	1919.2	1916.7	1914.3	1920.4
10°	1911.9	1904.6	1902.2	1901.0	1907.0
12.5°	1894.9	1886.4	1885.2	1884.0	1890.1
15°	1873.1	1865.8	1864.6	1863.4	1869.4
17.5°	1850.0	1842.7	1840.3	1839.1	1847.6
20°	1822.1	1814.8	1813.6	1812.4	1819.7
22.5°	1790.6	1783.3	1780.9	1782.1	1789.4
25°	1755.4	1748.1	1746.9	1746.9	1755.4
27.5°	1716.6	1709.3	1709.3	1709.3	1719.0
30°	1675.3	1669.3	1665.6	1666.8	1675.3
32.5°	1632.9	1623.2	1620.7	1622.0	1630.4
35°	1583.1	1575.9	1572.2	1572.2	1580.7
37.5°	1532.2	1524.9	1520.1	1520.1	1528.5
40°	1481.2	1470.3	1465.5	1463.0	1474.0
42.5°	1424.2	1415.7	1404.8	1404.8	1414.5
45°	1363.6	1353.9	1344.1	1344.1	1353.9
47.5°	1301.7	1292.0	1281.1	1281.1	1290.8
50°	1236.2	1226.5	1214.3	1214.3	1225.3
52.5°	1169.5	1158.5	1145.2	1144.0	1154.9
55°	1099.1	1087.0	1072.4	1074.8	1083.3
57.5°	1027.5	1011.8	997.2	997.2	1010.5
60°	946.2	932.9	917.1	919.6	936.5
62.5°	868.6	851.6	835.8	841.9	856.5
65°	783.7	769.1	750.9	760.6	778.8
67.5°	700.0	684.2	669.6	681.8	690.3
70°	611.4	596.9	585.9	585.9	584.7
72.5°	522.9	509.5	507.1	484.0	469.5
75°	435.5	423.4	416.1	371.2	351.8
77.5°	344.5	340.9	317.8	270.5	264.5
80°	257.2	259.6	218.4	219.6	224.4
82.5°	177.1	173.5	163.8	156.5	154.1
85°	101.9	95.8	95.8	91.0	88.6
87.5°	34.0	37.6	37.6	37.6	38.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)