

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: P238949

Luminaire Tested: **24ENA-LD2-70-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238949
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-L830-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6641.7 lumens
Efficiency: N/A
Efficacy: 110.3 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

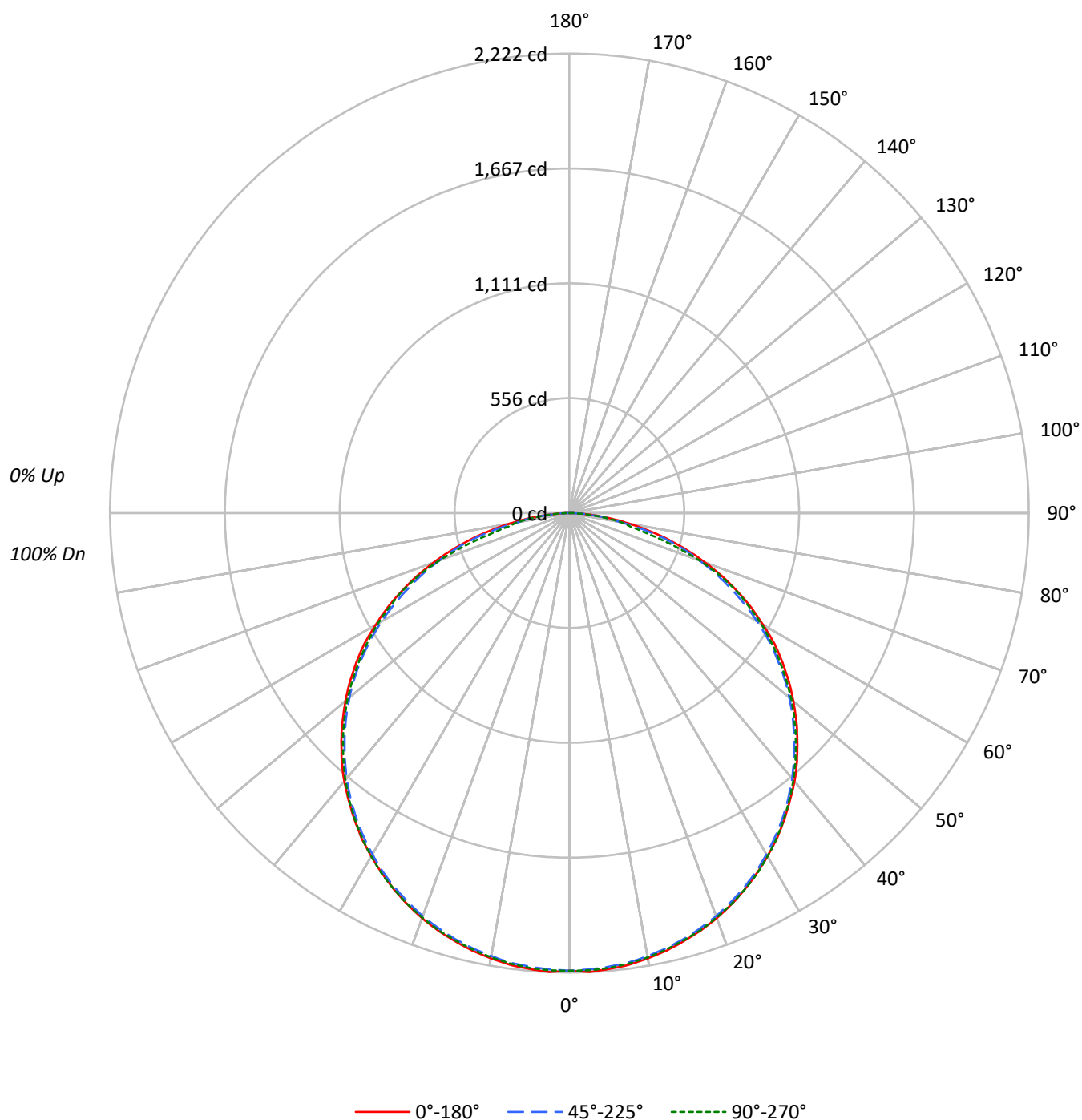
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3729	3729	3729
5°	3743	3725	3734
10°	3741	3722	3732
15°	3737	3720	3730
20°	3737	3720	3732
25°	3733	3715	3733
30°	3728	3707	3728
35°	3725	3699	3719
40°	3727	3687	3708
45°	3716	3664	3690
50°	3706	3641	3674
55°	3693	3603	3640
60°	3647	3535	3610
65°	3574	3424	3552
70°	3445	3302	3295
75°	3243	3099	2619
80°	2854	2424	2491
85°	2254	2119	1958



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.7	3.2
10°-20°	602.9	9.1
20°-30°	922.6	13.9
30°-40°	1127.7	17.0
40°-50°	1191.7	17.9
50°-60°	1104.2	16.6
60°-70°	865.1	13.0
70°-80°	489.1	7.4
80°-90°	128.8	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°	1735.2	26.1
0°-40°	2863.0	43.1
0°-60°	5158.8	77.7
0°-90°	6641.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6641.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2213	2213	2213	2213	2213	
5°	2213	2206	2202	2201	2208	210
15°	2143	2134	2133	2132	2138	605
25°	2008	2000	1998	1998	2008	926
35°	1811	1803	1798	1798	1808	1134
45°	1560	1549	1538	1538	1549	1204
55°	1257	1243	1227	1230	1239	1123
65°	896	880	859	870	891	886
75°	498	484	476	425	402	524
85°	117	110	110	104	101	137
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2213.4	2213.4	2213.4	2213.4	2213.4
2.5°	2221.7	2212.0	2209.2	2206.5	2213.4
5°	2213.4	2206.5	2202.3	2200.9	2207.9
7.5°	2203.7	2195.4	2192.6	2189.8	2196.8
10°	2187.0	2178.7	2175.9	2174.5	2181.5
12.5°	2167.6	2157.9	2156.5	2155.1	2162.1
15°	2142.6	2134.3	2132.9	2131.5	2138.5
17.5°	2116.3	2107.9	2105.2	2103.8	2113.5
20°	2084.3	2076.0	2074.6	2073.2	2081.6
22.5°	2048.3	2039.9	2037.2	2038.6	2046.9
25°	2008.0	1999.7	1998.3	1998.3	2008.0
27.5°	1963.6	1955.3	1955.3	1955.3	1966.4
30°	1916.4	1909.5	1905.3	1906.7	1916.4
32.5°	1867.9	1856.8	1854.0	1855.4	1865.1
35°	1811.0	1802.6	1798.5	1798.5	1808.2
37.5°	1752.7	1744.4	1738.8	1738.8	1748.5
40°	1694.4	1681.9	1676.4	1673.6	1686.1
42.5°	1629.2	1619.5	1607.0	1607.0	1618.1
45°	1559.8	1548.7	1537.6	1537.6	1548.7
47.5°	1489.0	1477.9	1465.4	1465.4	1476.5
50°	1414.1	1403.0	1389.1	1389.1	1401.6
52.5°	1337.8	1325.3	1310.0	1308.6	1321.1
55°	1257.3	1243.4	1226.7	1229.5	1239.2
57.5°	1175.4	1157.4	1140.7	1140.7	1156.0
60°	1082.4	1067.2	1049.1	1051.9	1071.3
62.5°	993.6	974.2	956.1	963.1	979.7
65°	896.5	879.8	859.0	870.1	890.9
67.5°	800.7	782.7	766.0	779.9	789.6
70°	699.4	682.8	670.3	670.3	668.9
72.5°	598.1	582.8	580.1	553.7	537.0
75°	498.2	484.3	476.0	424.6	402.4
77.5°	394.1	389.9	363.6	309.5	302.5
80°	294.2	297.0	249.8	251.2	256.7
82.5°	202.6	198.4	187.3	179.0	176.2
85°	116.6	109.6	109.6	104.1	101.3
87.5°	38.9	43.0	43.0	43.0	44.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)