

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: P238923

Luminaire Tested: **24ENA-LD2-34-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238923
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-LD2-34-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3590.2 lumens
Efficiency: N/A
Efficacy: 125.1 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

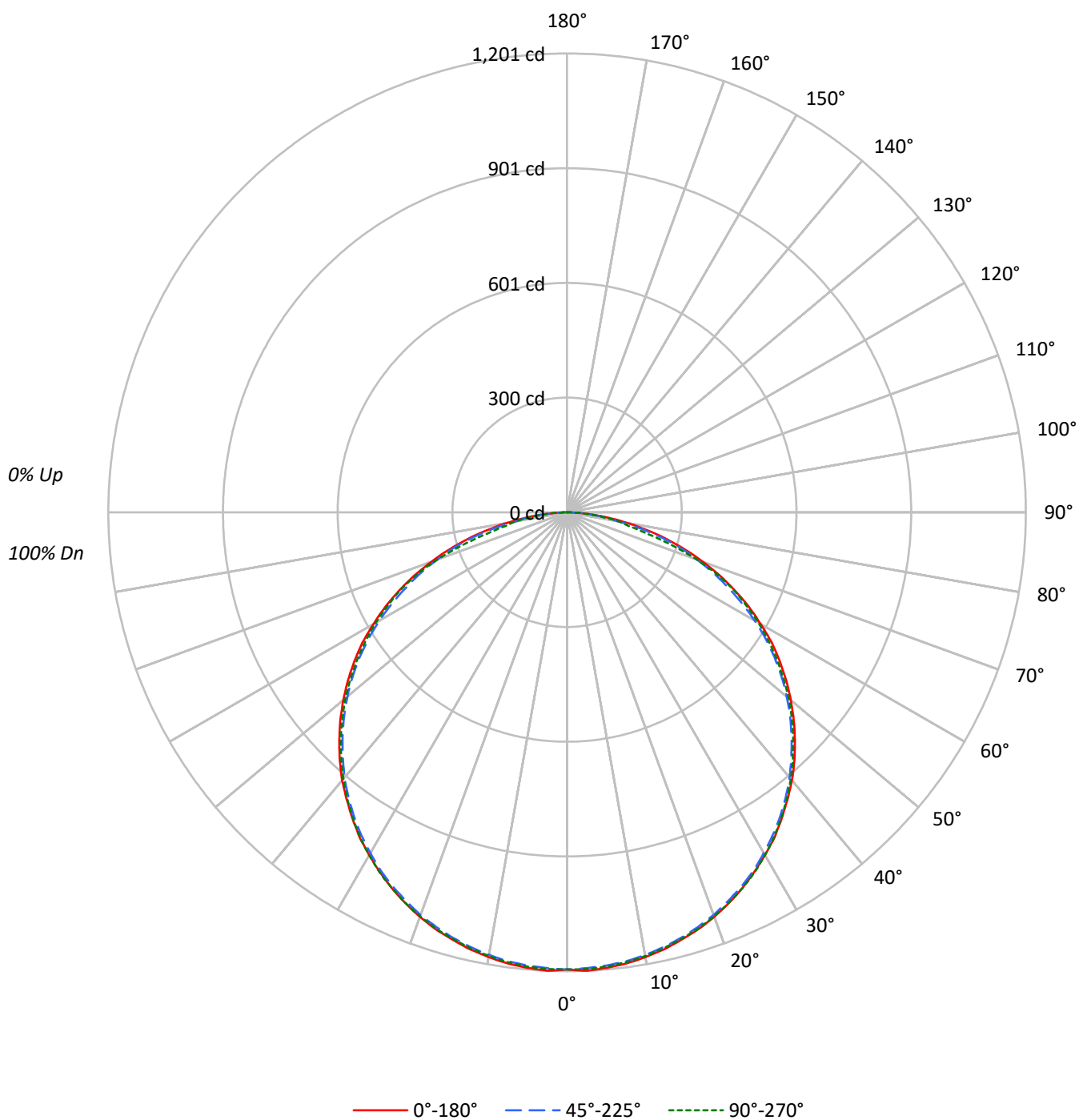
Input Watts (W): 28.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2016	2016	2016
5°	2024	2013	2018
10°	2022	2012	2017
15°	2020	2011	2016
20°	2020	2011	2017
25°	2018	2008	2018
30°	2015	2004	2015
35°	2013	2000	2010
40°	2014	1993	2004
45°	2009	1980	1995
50°	2004	1968	1986
55°	1996	1948	1968
60°	1972	1911	1951
65°	1932	1851	1920
70°	1863	1785	1781
75°	1753	1675	1416
80°	1543	1310	1347
85°	1218	1146	1059



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	3.2
10°-20°	325.9	9.1
20°-30°	498.7	13.9
30°-40°	609.6	17.0
40°-50°	644.2	17.9
50°-60°	596.9	16.6
60°-70°	467.6	13.0
70°-80°	264.4	7.4
80°-90°	69.6	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°	938.0	26.1
0°-40°	1547.6	43.1
0°-60°	2788.6	77.7
0°-90°	3590.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3590.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1196	1196	1196	1196	1196	
5°	1196	1193	1190	1190	1194	114
15°	1158	1154	1153	1152	1156	327
25°	1085	1081	1080	1080	1085	500
35°	979	974	972	972	977	613
45°	843	837	831	831	837	651
55°	680	672	663	665	670	607
65°	485	476	464	470	482	479
75°	269	262	257	230	218	283
85°	63	59	59	56	55	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1196.5	1196.5	1196.5	1196.5	1196.5
2.5°	1201.0	1195.7	1194.2	1192.7	1196.5
5°	1196.5	1192.7	1190.5	1189.7	1193.5
7.5°	1191.2	1186.7	1185.2	1183.7	1187.5
10°	1182.2	1177.7	1176.2	1175.5	1179.2
12.5°	1171.7	1166.5	1165.7	1165.0	1168.7
15°	1158.2	1153.7	1153.0	1152.2	1156.0
17.5°	1144.0	1139.5	1138.0	1137.2	1142.5
20°	1126.7	1122.2	1121.5	1120.7	1125.2
22.5°	1107.2	1102.7	1101.2	1101.9	1106.4
25°	1085.4	1080.9	1080.2	1080.2	1085.4
27.5°	1061.4	1056.9	1056.9	1056.9	1062.9
30°	1035.9	1032.2	1029.9	1030.7	1035.9
32.5°	1009.7	1003.7	1002.2	1002.9	1008.2
35°	978.9	974.4	972.2	972.2	977.4
37.5°	947.4	942.9	939.9	939.9	945.2
40°	915.9	909.2	906.2	904.7	911.4
42.5°	880.7	875.4	868.7	868.7	874.7
45°	843.2	837.1	831.1	831.1	837.1
47.5°	804.9	798.9	792.1	792.1	798.1
50°	764.4	758.4	750.9	750.9	757.6
52.5°	723.1	716.4	708.1	707.4	714.1
55°	679.6	672.1	663.1	664.6	669.9
57.5°	635.4	625.6	616.6	616.6	624.9
60°	585.1	576.9	567.1	568.6	579.1
62.5°	537.1	526.6	516.8	520.6	529.6
65°	484.6	475.6	464.3	470.3	481.6
67.5°	432.8	423.1	414.1	421.6	426.8
70°	378.1	369.1	362.3	362.3	361.6
72.5°	323.3	315.1	313.6	299.3	290.3
75°	269.3	261.8	257.3	229.5	217.5
77.5°	213.0	210.8	196.5	167.3	163.5
80°	159.0	160.5	135.0	135.8	138.8
82.5°	109.5	107.3	101.3	96.8	95.3
85°	63.0	59.3	59.3	56.3	54.8
87.5°	21.0	23.3	23.3	23.3	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)