

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: P239009

Luminaire Tested: **24ENA-LD2-45-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239009
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-LD2-45-UNV-L930-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3803.9 lumens
Efficiency: N/A
Efficacy: 100.1 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

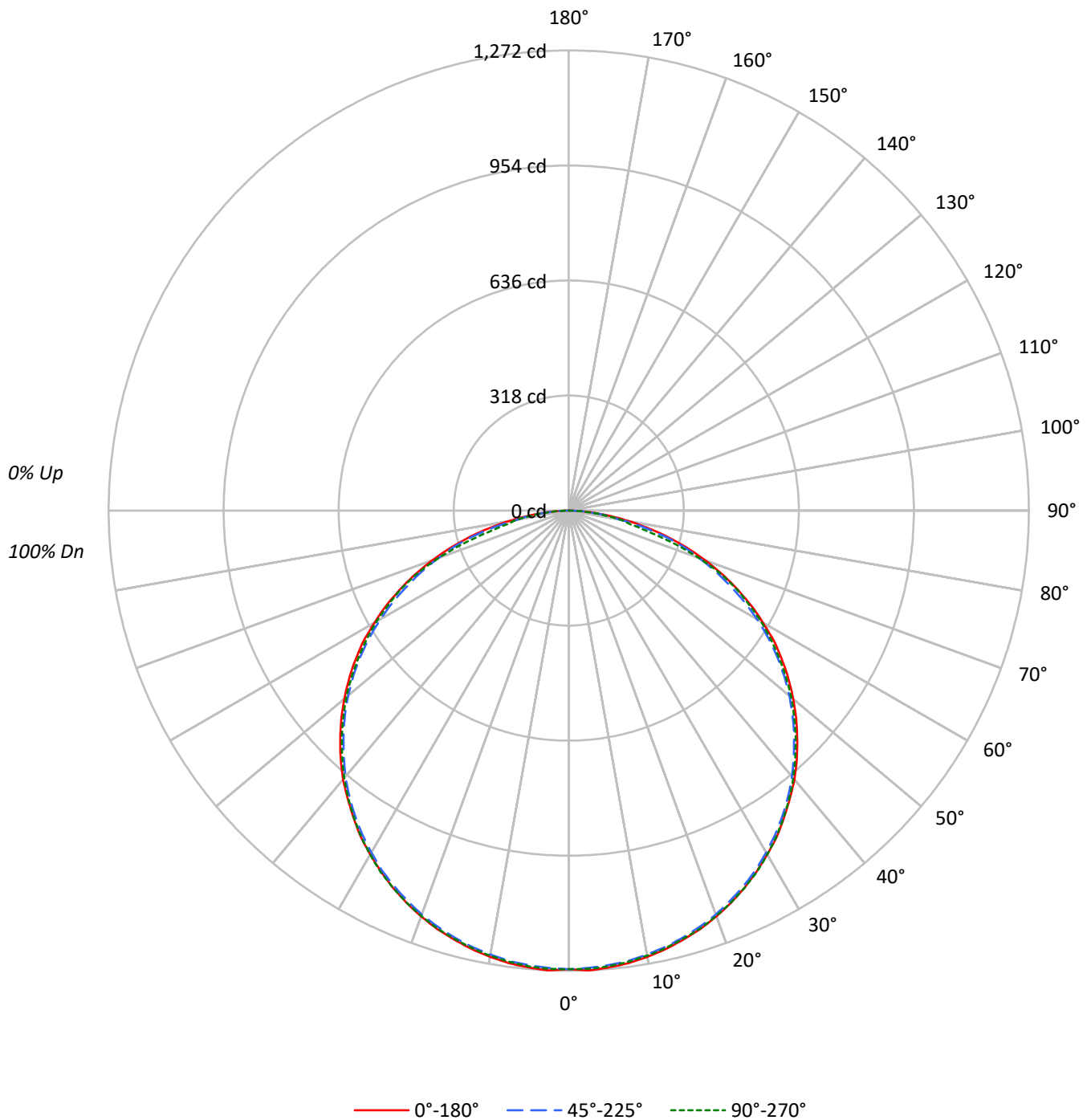
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83		
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69		
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58		
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49		
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42		
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37		
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32		
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29		
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26		
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2136	2136	2136
5°	2144	2133	2139
10°	2143	2132	2137
15°	2140	2131	2136
20°	2140	2130	2138
25°	2138	2128	2138
30°	2135	2123	2135
35°	2133	2118	2130
40°	2134	2112	2124
45°	2128	2098	2113
50°	2123	2085	2104
55°	2115	2064	2085
60°	2089	2025	2068
65°	2047	1961	2034
70°	1973	1891	1887
75°	1857	1774	1500
80°	1635	1388	1426
85°	1291	1214	1121



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.1	3.2
10°-20°	345.3	9.1
20°-30°	528.4	13.9
30°-40°	645.9	17.0
40°-50°	682.5	17.9
50°-60°	632.4	16.6
60°-70°	495.4	13.0
70°-80°	280.1	7.4
80°-90°	73.8	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°	993.8	26.1
0°-40°	1639.7	43.1
0°-60°	2954.6	77.7
0°-90°	3803.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3803.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1268	1268	1268	1268	1268	
5°	1268	1264	1261	1260	1264	121
15°	1227	1222	1222	1221	1225	347
25°	1150	1145	1144	1144	1150	530
35°	1037	1032	1030	1030	1036	649
45°	893	887	881	881	887	689
55°	720	712	703	704	710	643
65°	513	504	492	498	510	508
75°	285	277	273	243	230	300
85°	67	63	63	60	58	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1267.7	1267.7	1267.7	1267.7	1267.7
2.5°	1272.4	1266.9	1265.3	1263.7	1267.7
5°	1267.7	1263.7	1261.3	1260.5	1264.5
7.5°	1262.1	1257.3	1255.8	1254.2	1258.1
10°	1252.6	1247.8	1246.2	1245.4	1249.4
12.5°	1241.4	1235.9	1235.1	1234.3	1238.3
15°	1227.1	1222.4	1221.6	1220.8	1224.8
17.5°	1212.0	1207.3	1205.7	1204.9	1210.5
20°	1193.8	1189.0	1188.2	1187.4	1192.2
22.5°	1173.1	1168.3	1166.7	1167.5	1172.3
25°	1150.0	1145.3	1144.5	1144.5	1150.0
27.5°	1124.6	1119.8	1119.8	1119.8	1126.2
30°	1097.6	1093.6	1091.2	1092.0	1097.6
32.5°	1069.8	1063.4	1061.8	1062.6	1068.2
35°	1037.2	1032.4	1030.0	1030.0	1035.6
37.5°	1003.8	999.0	995.9	995.9	1001.4
40°	970.4	963.3	960.1	958.5	965.7
42.5°	933.1	927.5	920.4	920.4	926.7
45°	893.3	887.0	880.6	880.6	887.0
47.5°	852.8	846.4	839.3	839.3	845.6
50°	809.9	803.5	795.6	795.6	802.7
52.5°	766.2	759.0	750.3	749.5	756.6
55°	720.1	712.1	702.6	704.2	709.7
57.5°	673.2	662.8	653.3	653.3	662.1
60°	619.9	611.2	600.9	602.4	613.6
62.5°	569.1	557.9	547.6	551.6	561.1
65°	513.4	503.9	492.0	498.3	510.2
67.5°	458.6	448.3	438.7	446.7	452.2
70°	400.6	391.0	383.9	383.9	383.1
72.5°	342.6	333.8	332.2	317.1	307.6
75°	285.3	277.4	272.6	243.2	230.5
77.5°	225.7	223.3	208.2	177.2	173.3
80°	168.5	170.1	143.1	143.9	147.0
82.5°	116.0	113.7	107.3	102.5	100.9
85°	66.8	62.8	62.8	59.6	58.0
87.5°	22.3	24.6	24.6	24.6	25.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)