

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: P238925

Luminaire Tested: **24ENA-LD2-40-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238925
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-LD2-40-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3976.8 lumens
Efficiency: N/A
Efficacy: 117.3 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

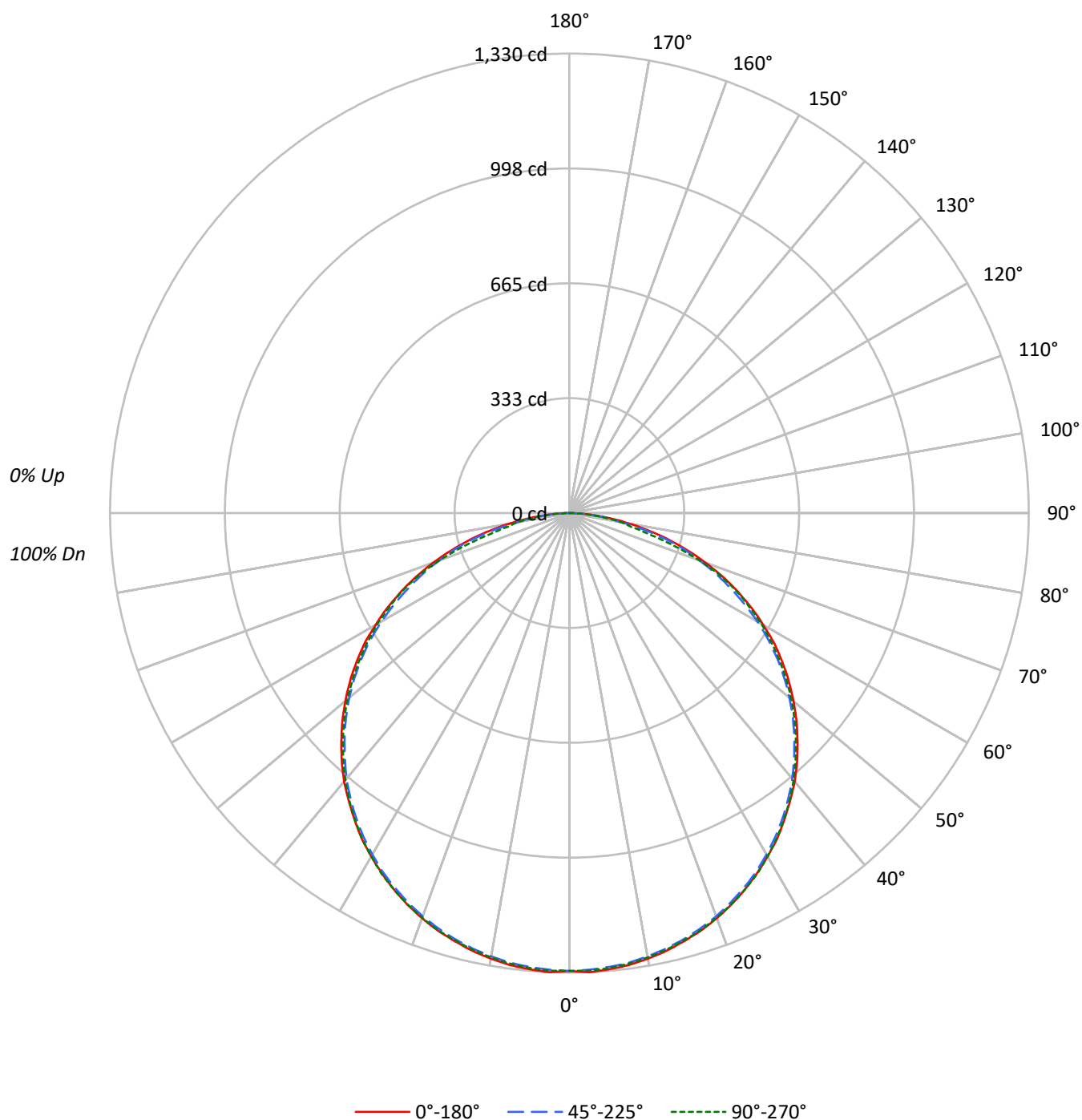
Input Watts (W): 33.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2233	2233	2233
5°	2241	2230	2236
10°	2240	2229	2235
15°	2238	2228	2233
20°	2238	2227	2235
25°	2235	2224	2235
30°	2232	2220	2232
35°	2230	2215	2227
40°	2231	2207	2220
45°	2225	2194	2209
50°	2219	2180	2200
55°	2211	2157	2180
60°	2184	2117	2162
65°	2140	2050	2126
70°	2063	1977	1973
75°	1942	1855	1569
80°	1710	1451	1491
85°	1349	1268	1173



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.5	3.2
10°-20°	361.0	9.1
20°-30°	552.4	13.9
30°-40°	675.3	17.0
40°-50°	713.6	17.9
50°-60°	661.1	16.6
60°-70°	518.0	13.0
70°-80°	292.8	7.4
80°-90°	77.1	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°	1039.0	26.1
0°-40°	1714.3	43.1
0°-60°	3088.9	77.7
0°-90°	3976.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3976.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1325	1325	1325	1325	1325	
5°	1325	1321	1319	1318	1322	126
15°	1283	1278	1277	1276	1280	362
25°	1202	1197	1196	1196	1202	554
35°	1084	1079	1077	1077	1083	679
45°	934	927	921	921	927	721
55°	753	744	734	736	742	672
65°	537	527	514	521	533	531
75°	298	290	285	254	241	314
85°	70	66	66	62	61	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1325.3	1325.3	1325.3	1325.3	1325.3
2.5°	1330.3	1324.5	1322.8	1321.2	1325.3
5°	1325.3	1321.2	1318.7	1317.8	1322.0
7.5°	1319.5	1314.5	1312.9	1311.2	1315.3
10°	1309.5	1304.5	1302.9	1302.0	1306.2
12.5°	1297.9	1292.1	1291.2	1290.4	1294.6
15°	1282.9	1278.0	1277.1	1276.3	1280.4
17.5°	1267.1	1262.2	1260.5	1259.7	1265.5
20°	1248.0	1243.1	1242.2	1241.4	1246.4
22.5°	1226.4	1221.4	1219.8	1220.6	1225.6
25°	1202.3	1197.4	1196.5	1196.5	1202.3
27.5°	1175.7	1170.8	1170.8	1170.8	1177.4
30°	1147.5	1143.3	1140.9	1141.7	1147.5
32.5°	1118.4	1111.8	1110.1	1110.9	1116.8
35°	1084.3	1079.4	1076.9	1076.9	1082.7
37.5°	1049.4	1044.5	1041.1	1041.1	1047.0
40°	1014.6	1007.1	1003.7	1002.1	1009.6
42.5°	975.5	969.7	962.2	962.2	968.9
45°	934.0	927.3	920.7	920.7	927.3
47.5°	891.6	884.9	877.4	877.4	884.1
50°	846.7	840.1	831.7	831.7	839.2
52.5°	801.0	793.5	784.4	783.6	791.0
55°	752.8	744.5	734.5	736.2	742.0
57.5°	703.8	693.0	683.0	683.0	692.2
60°	648.1	639.0	628.2	629.8	641.5
62.5°	594.9	583.3	572.5	576.7	586.6
65°	536.8	526.8	514.3	521.0	533.4
67.5°	479.4	468.6	458.7	467.0	472.8
70°	418.8	408.8	401.3	401.3	400.5
72.5°	358.1	349.0	347.3	331.5	321.6
75°	298.3	290.0	285.0	254.3	241.0
77.5°	236.0	233.5	217.7	185.3	181.1
80°	176.2	177.8	149.6	150.4	153.7
82.5°	121.3	118.8	112.2	107.2	105.5
85°	69.8	65.6	65.6	62.3	60.7
87.5°	23.3	25.8	25.8	25.8	26.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)