

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: P238765

Luminaire Tested: **14EN-LD2-38-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238765
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-395-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-38-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
STANDARD OPTION
Light Source: (224)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3722.1 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1' x L: 3.83' x H: 0')
CIE Type: Direct

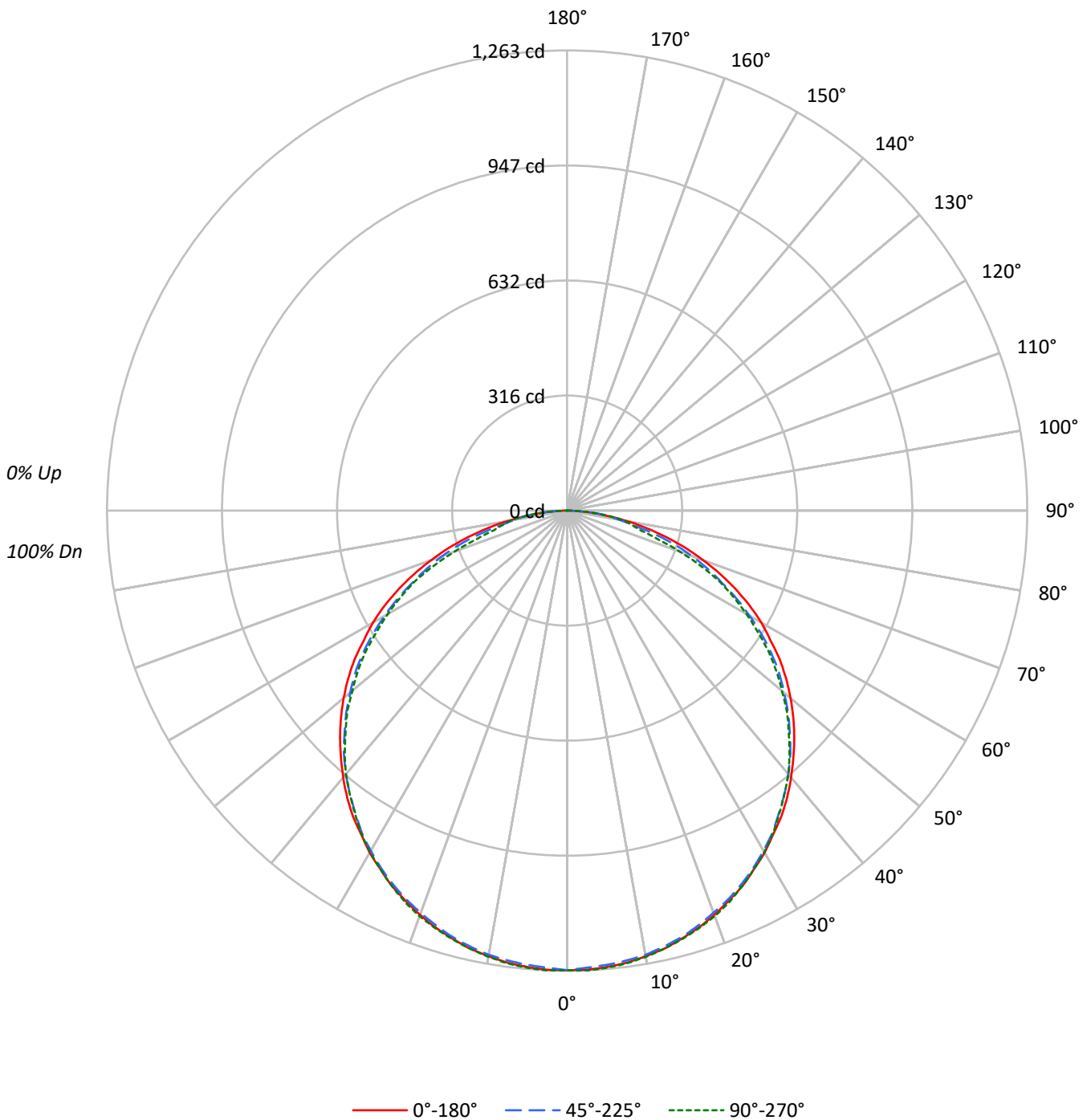
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3542	3542	3542
5°	3545	3528	3550
10°	3541	3529	3546
15°	3536	3524	3541
20°	3528	3511	3540
25°	3524	3506	3524
30°	3516	3497	3510
35°	3515	3474	3481
40°	3506	3462	3462
45°	3501	3431	3415
50°	3499	3396	3362
55°	3488	3352	3305
60°	3459	3249	3194
65°	3387	3112	3073
70°	3248	2989	2698
75°	3053	2691	2263
80°	2705	2324	2545
85°	2091	2410	2281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.4	3.2
10°-20°	343.1	9.2
20°-30°	522.9	14.0
30°-40°	636.8	17.1
40°-50°	669.6	18.0
50°-60°	614.6	16.5
60°-70°	472.2	12.7
70°-80°	263.5	7.1
80°-90°	80.0	2.1
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°	985.4	26.5
0°-40°	1622.2	43.6
0°-60°	2906.4	78.1
0°-90°	3722.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3722.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1261	1261	1261	1261	1261	
5°	1258	1258	1252	1258	1260	120
15°	1216	1216	1212	1216	1218	344
25°	1138	1134	1132	1136	1138	524
35°	1025	1021	1014	1015	1015	641
45°	882	876	864	860	860	680
55°	712	706	685	673	675	635
65°	510	496	468	462	462	504
75°	281	268	248	214	209	297
85°	65	67	75	73	71	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1261.4	1261.4	1261.4	1261.4	1261.4
2.5°	1261.4	1261.4	1255.5	1261.4	1263.4
5°	1257.5	1257.5	1251.6	1257.5	1259.5
7.5°	1251.6	1251.6	1245.7	1249.6	1253.6
10°	1241.8	1241.8	1237.8	1241.8	1243.7
12.5°	1231.9	1229.9	1226.0	1229.9	1231.9
15°	1216.2	1216.2	1212.2	1216.2	1218.1
17.5°	1200.4	1198.5	1194.5	1200.4	1202.4
20°	1180.7	1178.8	1174.8	1180.7	1184.7
22.5°	1159.1	1157.1	1155.2	1161.1	1163.0
25°	1137.5	1133.5	1131.5	1135.5	1137.5
27.5°	1109.9	1107.9	1106.0	1107.9	1109.9
30°	1084.3	1080.4	1078.4	1078.4	1082.4
32.5°	1052.8	1050.9	1048.9	1050.9	1050.9
35°	1025.3	1021.3	1013.5	1015.4	1015.4
37.5°	991.8	985.9	980.0	980.0	980.0
40°	956.4	952.5	944.6	942.6	944.6
42.5°	919.0	915.1	907.2	901.3	903.3
45°	881.6	875.7	863.9	860.0	860.0
47.5°	842.3	836.4	822.6	816.7	818.7
50°	800.9	793.1	777.3	769.5	769.5
52.5°	757.6	749.8	734.0	724.2	724.2
55°	712.4	706.5	684.8	673.0	675.0
57.5°	661.2	655.3	633.7	619.9	619.9
60°	616.0	604.1	578.6	568.7	568.7
62.5°	564.8	551.0	525.4	513.6	515.6
65°	509.7	495.9	468.4	462.5	462.5
67.5°	454.6	442.8	417.2	407.4	397.5
70°	395.6	383.7	364.1	340.4	328.6
72.5°	340.4	326.7	309.0	273.5	261.7
75°	281.4	267.6	248.0	214.5	208.6
77.5°	224.3	212.5	185.0	177.1	181.0
80°	167.3	163.3	143.7	151.5	157.4
82.5°	112.2	110.2	114.1	118.1	118.1
85°	64.9	66.9	74.8	72.8	70.8
87.5°	27.6	33.5	31.5	31.5	31.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)