

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: P238709

Luminaire Tested: **14EN-LD2-47-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238709
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-LD2-47-UNV-L930-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
STANDARD OPTION
Light Source: (224)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3961.6 lumens
Efficiency: N/A
Efficacy: 95.5 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

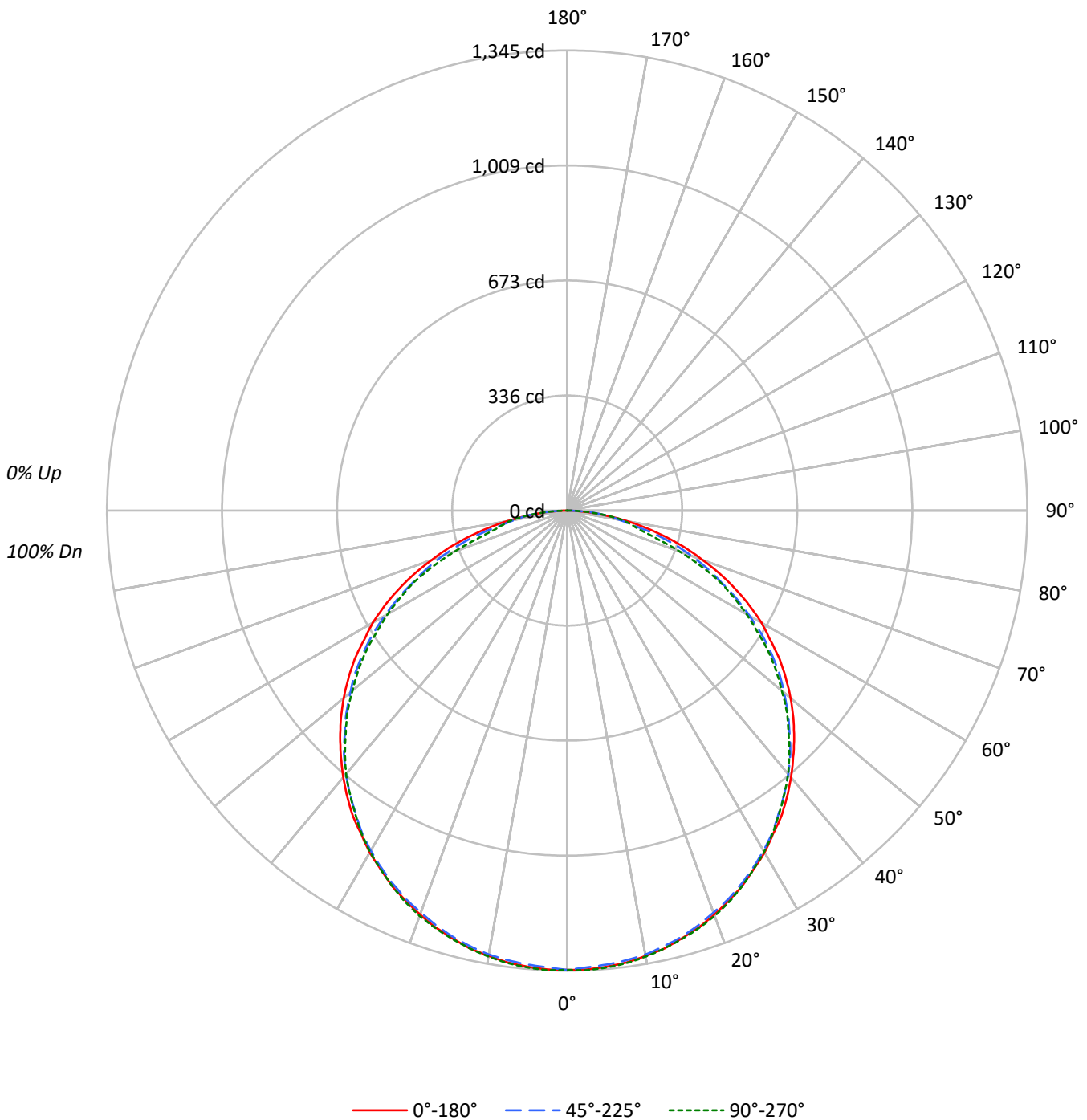
Input Watts (W): 41.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3770	3770	3770
5°	3773	3755	3778
10°	3769	3757	3775
15°	3763	3751	3769
20°	3755	3737	3768
25°	3751	3732	3751
30°	3742	3722	3735
35°	3741	3698	3705
40°	3732	3685	3685
45°	3726	3651	3635
50°	3724	3614	3578
55°	3712	3568	3517
60°	3682	3458	3399
65°	3605	3312	3270
70°	3456	3181	2872
75°	3249	2863	2409
80°	2878	2472	2710
85°	2226	2565	2429



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.1	3.2
10°-20°	365.2	9.2
20°-30°	556.6	14.0
30°-40°	677.8	17.1
40°-50°	712.6	18.0
50°-60°	654.1	16.5
60°-70°	502.6	12.7
70°-80°	280.5	7.1
80°-90°	85.2	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°	1048.9	26.5
0°-40°	1726.6	43.6
0°-60°	3093.4	78.1
0°-90°	3961.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3961.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1343	1343	1343	1343	1343	
5°	1338	1338	1332	1338	1340	127
15°	1294	1294	1290	1294	1296	366
25°	1211	1206	1204	1209	1211	558
35°	1091	1087	1079	1081	1081	682
45°	938	932	920	915	915	724
55°	758	752	729	716	718	676
65°	542	528	498	492	492	536
75°	300	285	264	228	222	316
85°	69	71	80	78	75	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1342.6	1342.6	1342.6	1342.6	1342.6
2.5°	1342.6	1342.6	1336.3	1342.6	1344.7
5°	1338.4	1338.4	1332.1	1338.4	1340.5
7.5°	1332.1	1332.1	1325.9	1330.0	1334.2
10°	1321.7	1321.7	1317.5	1321.7	1323.8
12.5°	1311.2	1309.1	1304.9	1309.1	1311.2
15°	1294.4	1294.4	1290.2	1294.4	1296.5
17.5°	1277.7	1275.6	1271.4	1277.7	1279.8
20°	1256.7	1254.6	1250.5	1256.7	1260.9
22.5°	1233.7	1231.6	1229.5	1235.8	1237.9
25°	1210.7	1206.5	1204.4	1208.6	1210.7
27.5°	1181.3	1179.2	1177.1	1179.2	1181.3
30°	1154.1	1149.9	1147.8	1147.8	1152.0
32.5°	1120.6	1118.5	1116.4	1118.5	1118.5
35°	1091.3	1087.1	1078.7	1080.8	1080.8
37.5°	1055.7	1049.4	1043.1	1043.1	1043.1
40°	1018.0	1013.8	1005.4	1003.3	1005.4
42.5°	978.2	974.0	965.6	959.3	961.4
45°	938.4	932.1	919.5	915.3	915.3
47.5°	896.5	890.2	875.5	869.2	871.3
50°	852.5	844.1	827.3	819.0	819.0
52.5°	806.4	798.0	781.3	770.8	770.8
55°	758.2	751.9	728.9	716.3	718.4
57.5°	703.8	697.5	674.4	659.8	659.8
60°	655.6	643.0	615.8	605.3	605.3
62.5°	601.1	586.5	559.2	546.7	548.8
65°	542.5	527.8	498.5	492.2	492.2
67.5°	483.8	471.3	444.0	433.6	423.1
70°	421.0	408.4	387.5	362.4	349.8
72.5°	362.4	347.7	328.8	291.1	278.6
75°	299.5	284.9	263.9	228.3	222.0
77.5°	238.8	226.2	196.9	188.5	192.7
80°	178.0	173.8	152.9	161.3	167.6
82.5°	119.4	117.3	121.5	125.7	125.7
85°	69.1	71.2	79.6	77.5	75.4
87.5°	29.3	35.6	33.5	33.5	33.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)