

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: P238679

Luminaire Tested: **14ENA-LD2-47-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238679
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: 14ENA-LD2-47-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 1X4 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: 4147.4 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 0.67' x L: 3.83' x H: 0')
CIE Type: Direct

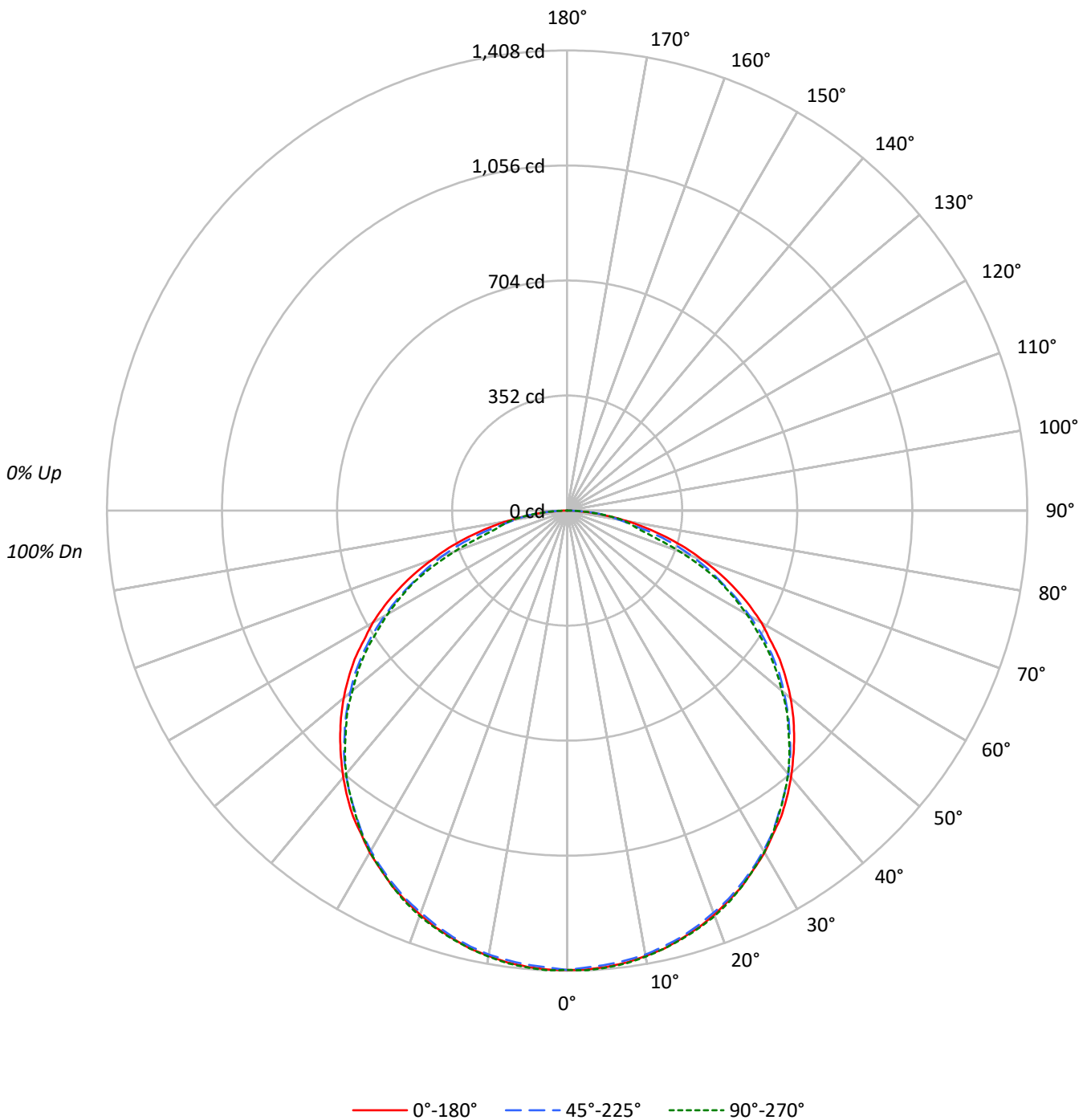
Input Watts (W): 41.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5920	5920	5920
5°	5924	5896	5934
10°	5918	5899	5927
15°	5909	5890	5919
20°	5897	5868	5917
25°	5890	5859	5890
30°	5876	5844	5865
35°	5874	5807	5818
40°	5860	5787	5787
45°	5852	5734	5708
50°	5848	5675	5618
55°	5829	5604	5523
60°	5781	5431	5338
65°	5660	5201	5136
70°	5427	4996	4510
75°	5103	4496	3782
80°	4521	3883	4254
85°	3499	4026	3813



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	3.2
10°-20°	382.3	9.2
20°-30°	582.7	14.0
30°-40°	709.5	17.1
40°-50°	746.0	18.0
50°-60°	684.8	16.5
60°-70°	526.1	12.7
70°-80°	293.7	7.1
80°-90°	89.2	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°	1098.0	26.5
0°-40°	1807.6	43.6
0°-60°	3238.4	78.1
0°-90°	4147.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4147.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1406	1406	1406	1406	1406	
5°	1401	1401	1395	1401	1403	133
15°	1355	1355	1351	1355	1357	383
25°	1267	1263	1261	1265	1267	584
35°	1142	1138	1129	1132	1132	714
45°	982	976	963	958	958	758
55°	794	787	763	750	752	708
65°	568	553	522	515	515	561
75°	314	298	276	239	232	331
85°	72	75	83	81	79	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1405.6	1405.6	1405.6	1405.6	1405.6
2.5°	1405.6	1405.6	1399.0	1405.6	1407.8
5°	1401.2	1401.2	1394.6	1401.2	1403.4
7.5°	1394.6	1394.6	1388.0	1392.4	1396.8
10°	1383.6	1383.6	1379.3	1383.6	1385.8
12.5°	1372.7	1370.5	1366.1	1370.5	1372.7
15°	1355.1	1355.1	1350.8	1355.1	1357.3
17.5°	1337.6	1335.4	1331.0	1337.6	1339.8
20°	1315.7	1313.5	1309.1	1315.7	1320.1
22.5°	1291.5	1289.4	1287.2	1293.7	1295.9
25°	1267.4	1263.0	1260.8	1265.2	1267.4
27.5°	1236.7	1234.5	1232.3	1234.5	1236.7
30°	1208.2	1203.8	1201.6	1201.6	1206.0
32.5°	1173.1	1170.9	1168.8	1170.9	1170.9
35°	1142.4	1138.1	1129.3	1131.5	1131.5
37.5°	1105.2	1098.6	1092.0	1092.0	1092.0
40°	1065.7	1061.3	1052.5	1050.3	1052.5
42.5°	1024.0	1019.6	1010.9	1004.3	1006.5
45°	982.4	975.8	962.6	958.2	958.2
47.5°	938.5	931.9	916.6	910.0	912.2
50°	892.5	883.7	866.1	857.4	857.4
52.5°	844.2	835.4	817.9	806.9	806.9
55°	793.8	787.2	763.1	749.9	752.1
57.5°	736.8	730.2	706.1	690.7	690.7
60°	686.3	673.2	644.7	633.7	633.7
62.5°	629.3	614.0	585.5	572.3	574.5
65°	567.9	552.6	521.9	515.3	515.3
67.5°	506.5	493.4	464.9	453.9	442.9
70°	440.7	427.6	405.7	379.4	366.2
72.5°	379.4	364.0	344.3	304.8	291.6
75°	313.6	298.2	276.3	239.0	232.4
77.5°	250.0	236.8	206.1	197.4	201.7
80°	186.4	182.0	160.1	168.8	175.4
82.5°	125.0	122.8	127.2	131.6	131.6
85°	72.4	74.6	83.3	81.1	78.9
87.5°	30.7	37.3	35.1	35.1	35.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)