

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: P238775

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238775
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-L840-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
STANDARD OPTION
Light Source: (224)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4822.6 lumens
Efficiency: N/A
Efficacy: 116.2 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

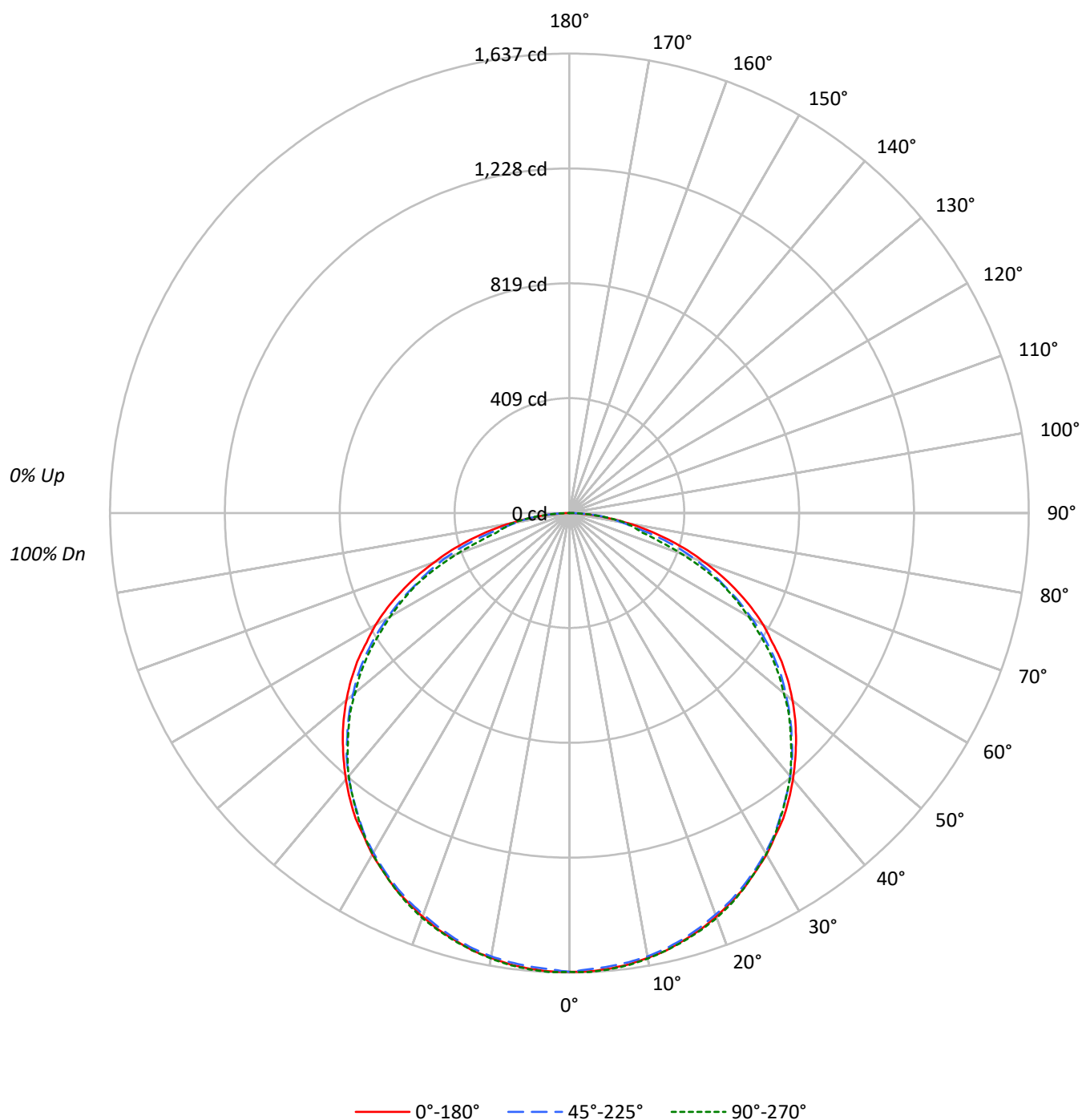
Input Watts (W): 41.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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	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°	4589	4589	4589
5°	4593	4571	4600
10°	4587	4573	4595
15°	4581	4566	4588
20°	4571	4549	4587
25°	4566	4542	4566
30°	4555	4531	4547
35°	4554	4501	4510
40°	4542	4486	4486
45°	4536	4445	4425
50°	4533	4399	4355
55°	4519	4344	4282
60°	4482	4210	4138
65°	4388	4032	3981
70°	4208	3873	3496
75°	3956	3486	2933
80°	3504	3009	3299
85°	2710	3122	2958



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.7	3.2
10°-20°	444.5	9.2
20°-30°	677.5	14.0
30°-40°	825.1	17.1
40°-50°	867.5	18.0
50°-60°	796.3	16.5
60°-70°	611.8	12.7
70°-80°	341.5	7.1
80°-90°	103.7	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°	1276.8	26.5
0°-40°	2101.9	43.6
0°-60°	3765.7	78.1
0°-90°	4822.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4822.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1634	1634	1634	1634	1634	
5°	1629	1629	1622	1629	1632	155
15°	1576	1576	1571	1576	1578	445
25°	1474	1469	1466	1471	1474	679
35°	1328	1323	1313	1316	1316	830
45°	1142	1135	1119	1114	1114	881
55°	923	915	887	872	875	823
65°	660	642	607	599	599	652
75°	365	347	321	278	270	385
85°	84	87	97	94	92	102
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1634.4	1634.4	1634.4	1634.4	1634.4
2.5°	1634.4	1634.4	1626.7	1634.4	1636.9
5°	1629.3	1629.3	1621.6	1629.3	1631.8
7.5°	1621.6	1621.6	1614.0	1619.1	1624.2
10°	1608.9	1608.9	1603.8	1608.9	1611.4
12.5°	1596.1	1593.6	1588.5	1593.6	1596.1
15°	1575.7	1575.7	1570.6	1575.7	1578.3
17.5°	1555.3	1552.8	1547.7	1555.3	1557.9
20°	1529.8	1527.3	1522.2	1529.8	1534.9
22.5°	1501.8	1499.2	1496.7	1504.3	1506.9
25°	1473.8	1468.7	1466.1	1471.2	1473.8
27.5°	1438.1	1435.5	1433.0	1435.5	1438.1
30°	1404.9	1399.8	1397.3	1397.3	1402.4
32.5°	1364.1	1361.6	1359.0	1361.6	1361.6
35°	1328.4	1323.3	1313.1	1315.7	1315.7
37.5°	1285.1	1277.4	1269.8	1269.8	1269.8
40°	1239.2	1234.1	1223.9	1221.3	1223.9
42.5°	1190.7	1185.6	1175.4	1167.8	1170.3
45°	1142.3	1134.6	1119.3	1114.2	1114.2
47.5°	1091.3	1083.6	1065.8	1058.1	1060.7
50°	1037.7	1027.5	1007.1	996.9	996.9
52.5°	981.7	971.5	951.1	938.3	938.3
55°	923.0	915.4	887.3	872.0	874.6
57.5°	856.7	849.1	821.0	803.2	803.2
60°	798.1	782.8	749.6	736.9	736.9
62.5°	731.8	713.9	680.8	665.5	668.0
65°	660.4	642.5	606.8	599.2	599.2
67.5°	589.0	573.7	540.5	527.8	515.0
70°	512.5	497.2	471.7	441.1	425.8
72.5°	441.1	423.3	400.3	354.4	339.1
75°	364.6	346.8	321.3	277.9	270.3
77.5°	290.7	275.4	239.7	229.5	234.6
80°	216.7	211.6	186.1	196.3	204.0
82.5°	145.3	142.8	147.9	153.0	153.0
85°	84.1	86.7	96.9	94.3	91.8
87.5°	35.7	43.3	40.8	40.8	40.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)