

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: P238776

Luminaire Tested: **14EN-LD2-47-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238776
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-L850-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
STANDARD OPTION
Light Source: (224)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5248.1 lumens
Efficiency: N/A
Efficacy: 126.5 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

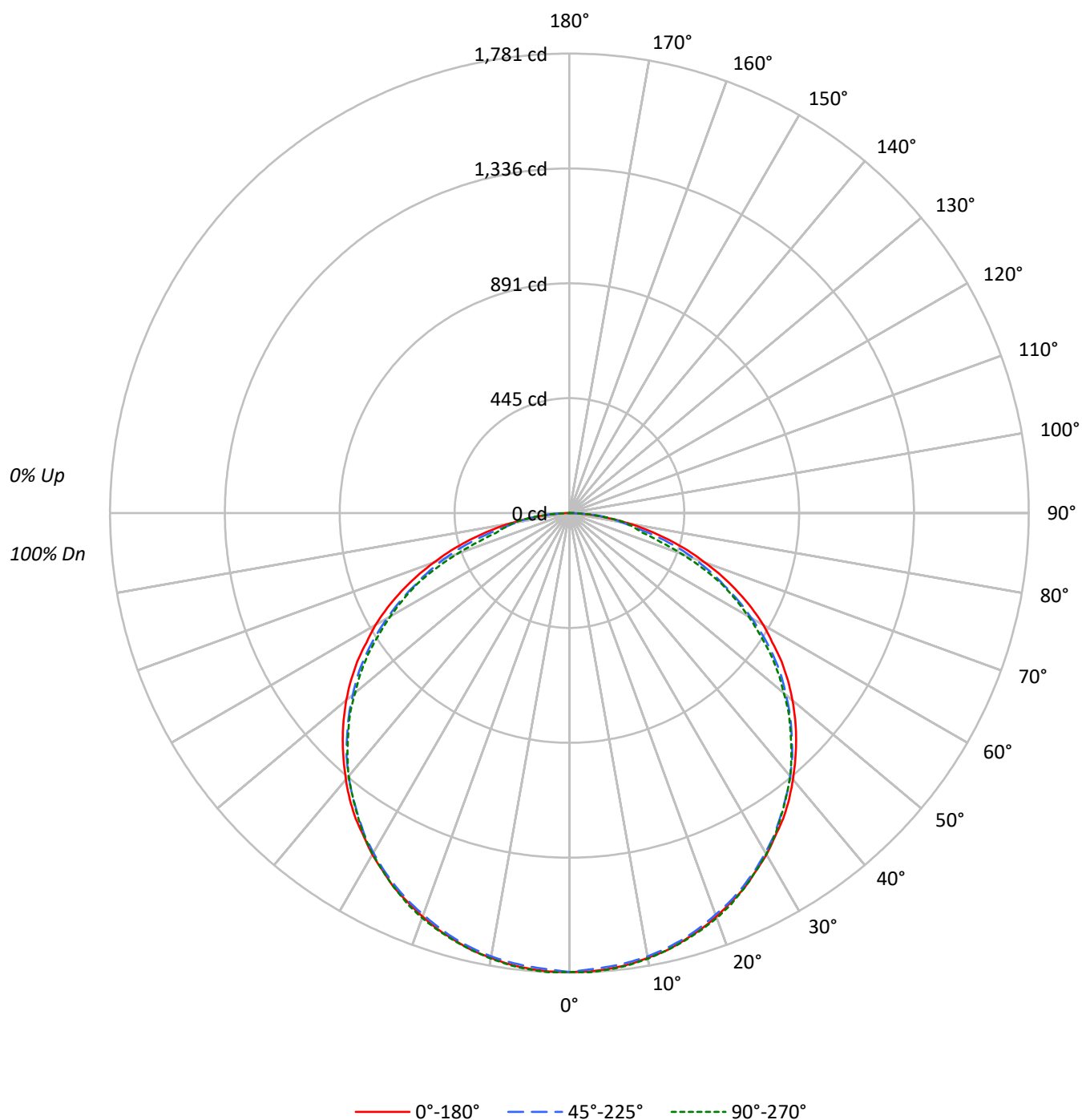
Input Watts (W): 41.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238776

CATALOG NUMBER: 14EN-LD2-47-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P238776

CATALOG NUMBER: 14EN-LD2-47-UNV-L850-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4994	4994	4994
5°	4998	4974	5005
10°	4992	4976	5000
15°	4985	4969	4993
20°	4975	4950	4991
25°	4969	4943	4969
30°	4957	4930	4948
35°	4955	4898	4908
40°	4943	4882	4882
45°	4936	4837	4815
50°	4933	4788	4739
55°	4917	4727	4659
60°	4877	4581	4503
65°	4775	4388	4333
70°	4579	4214	3805
75°	4305	3793	3191
80°	3815	3276	3590
85°	2951	3396	3219



TEST NUMBER: P238776

CATALOG NUMBER: 14EN-LD2-47-UNV-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.4	3.2
10°-20°	483.7	9.2
20°-30°	737.3	14.0
30°-40°	897.9	17.1
40°-50°	944.0	18.0
50°-60°	866.6	16.5
60°-70°	665.8	12.7
70°-80°	371.6	7.1
80°-90°	112.8	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°	1389.5	26.5
0°-40°	2287.3	43.6
0°-60°	4097.9	78.1
0°-90°	5248.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5248.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1779	1779	1779	1779	1779	
5°	1773	1773	1765	1773	1776	169
15°	1715	1715	1709	1715	1718	484
25°	1604	1598	1596	1601	1604	739
35°	1446	1440	1429	1432	1432	904
45°	1243	1235	1218	1213	1213	959
55°	1004	996	966	949	952	896
65°	719	699	660	652	652	710
75°	397	377	350	302	294	419
85°	92	94	105	103	100	111
90°	0	0	0	0	0	



TEST NUMBER: P238776

CATALOG NUMBER: 14EN-LD2-47-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1778.6	1778.6	1778.6	1778.6	1778.6
2.5°	1778.6	1778.6	1770.3	1778.6	1781.4
5°	1773.0	1773.0	1764.7	1773.0	1775.8
7.5°	1764.7	1764.7	1756.4	1761.9	1767.5
10°	1750.8	1750.8	1745.3	1750.8	1753.6
12.5°	1737.0	1734.2	1728.7	1734.2	1737.0
15°	1714.8	1714.8	1709.2	1714.8	1717.6
17.5°	1692.6	1689.8	1684.3	1692.6	1695.4
20°	1664.8	1662.1	1656.5	1664.8	1670.4
22.5°	1634.3	1631.5	1628.8	1637.1	1639.9
25°	1603.8	1598.2	1595.5	1601.0	1603.8
27.5°	1564.9	1562.2	1559.4	1562.2	1564.9
30°	1528.9	1523.3	1520.5	1520.5	1526.1
32.5°	1484.5	1481.7	1478.9	1481.7	1481.7
35°	1445.6	1440.1	1429.0	1431.8	1431.8
37.5°	1398.5	1390.1	1381.8	1381.8	1381.8
40°	1348.5	1343.0	1331.9	1329.1	1331.9
42.5°	1295.8	1290.2	1279.1	1270.8	1273.6
45°	1243.1	1234.8	1218.1	1212.6	1212.6
47.5°	1187.6	1179.3	1159.8	1151.5	1154.3
50°	1129.3	1118.2	1096.0	1084.9	1084.9
52.5°	1068.3	1057.2	1035.0	1021.1	1021.1
55°	1004.4	996.1	965.6	949.0	951.7
57.5°	932.3	924.0	893.5	874.0	874.0
60°	868.5	851.8	815.8	801.9	801.9
62.5°	796.3	776.9	740.9	724.2	727.0
65°	718.7	699.2	660.4	652.1	652.1
67.5°	641.0	624.3	588.2	574.4	560.5
70°	557.7	541.1	513.3	480.0	463.4
72.5°	480.0	460.6	435.6	385.7	369.0
75°	396.8	377.4	349.6	302.4	294.1
77.5°	316.3	299.7	260.8	249.7	255.3
80°	235.9	230.3	202.6	213.7	222.0
82.5°	158.2	155.4	160.9	166.5	166.5
85°	91.6	94.3	105.4	102.7	99.9
87.5°	38.8	47.2	44.4	44.4	44.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)