

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: P238779

Luminaire Tested: **14EN-LD2-51-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238779
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-LD2-51-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: 5219.4 lumens
Efficiency: N/A
Efficacy: 116.8 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

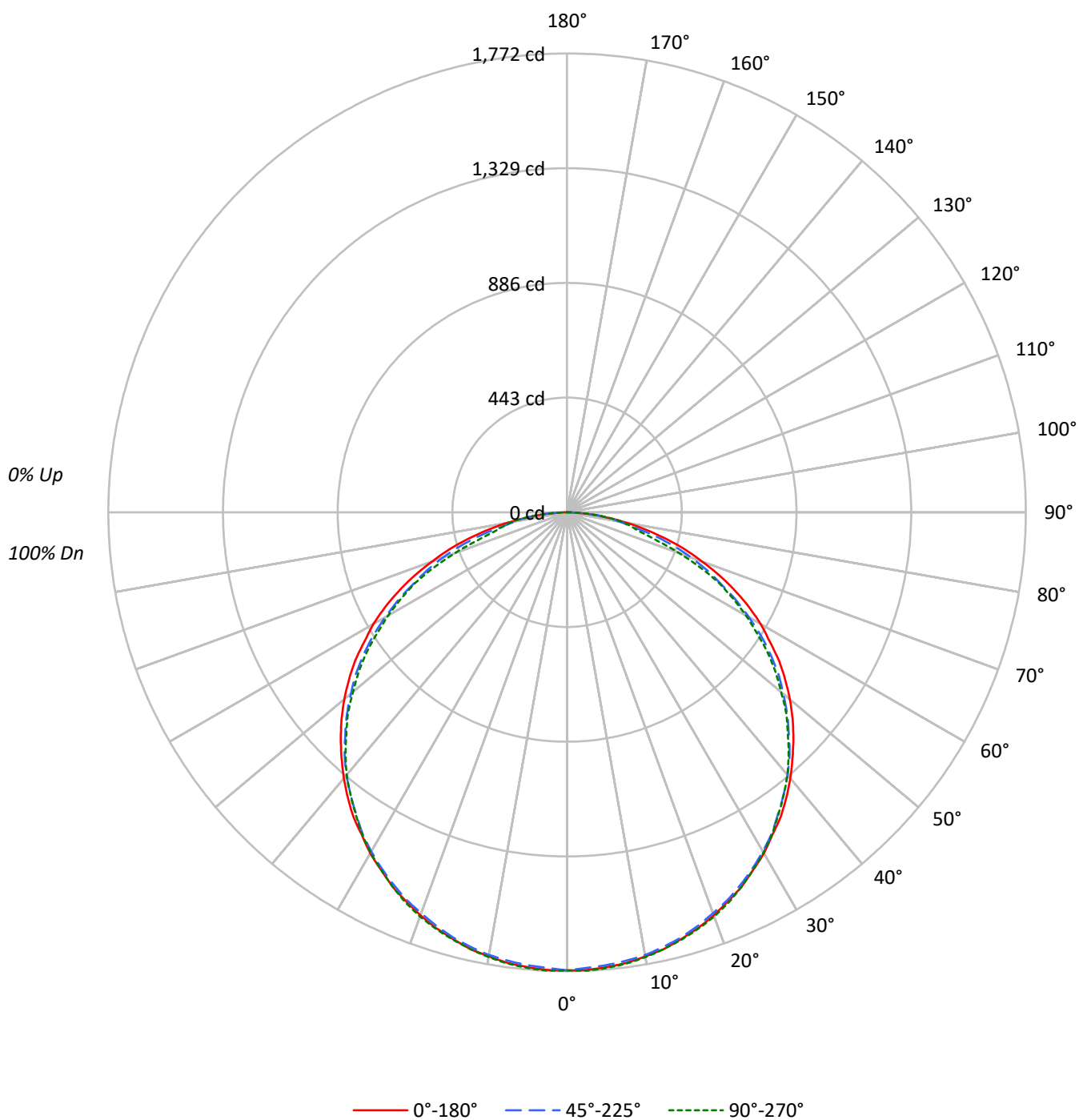
Input Watts (W): 44.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	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°	4967	4967	4967
5°	4970	4947	4978
10°	4965	4949	4973
15°	4958	4942	4966
20°	4948	4923	4964
25°	4942	4916	4942
30°	4930	4903	4921
35°	4928	4872	4881
40°	4916	4855	4855
45°	4909	4811	4789
50°	4906	4762	4714
55°	4890	4701	4634
60°	4851	4556	4479
65°	4749	4364	4309
70°	4554	4191	3783
75°	4281	3772	3173
80°	3794	3257	3570
85°	2935	3380	3199



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.5	3.2
10°-20°	481.1	9.2
20°-30°	733.3	14.0
30°-40°	892.9	17.1
40°-50°	938.9	18.0
50°-60°	861.8	16.5
60°-70°	662.1	12.7
70°-80°	369.6	7.1
80°-90°	112.2	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°	1381.8	26.5
0°-40°	2274.8	43.6
0°-60°	4075.5	78.1
0°-90°	5219.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5219.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1769	1769	1769	1769	1769	
5°	1763	1763	1755	1763	1766	168
15°	1705	1705	1700	1705	1708	482
25°	1595	1590	1587	1592	1595	735
35°	1438	1432	1421	1424	1424	899
45°	1236	1228	1211	1206	1206	954
55°	999	991	960	944	946	891
65°	715	695	657	648	648	706
75°	395	375	348	301	292	417
85°	91	94	105	102	99	110
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1768.9	1768.9	1768.9	1768.9	1768.9
2.5°	1768.9	1768.9	1760.6	1768.9	1771.6
5°	1763.3	1763.3	1755.1	1763.3	1766.1
7.5°	1755.1	1755.1	1746.8	1752.3	1757.8
10°	1741.3	1741.3	1735.7	1741.3	1744.0
12.5°	1727.5	1724.7	1719.2	1724.7	1727.5
15°	1705.4	1705.4	1699.9	1705.4	1708.1
17.5°	1683.3	1680.6	1675.0	1683.3	1686.1
20°	1655.7	1653.0	1647.4	1655.7	1661.2
22.5°	1625.4	1622.6	1619.8	1628.1	1630.9
25°	1595.0	1589.5	1586.7	1592.2	1595.0
27.5°	1556.4	1553.6	1550.9	1553.6	1556.4
30°	1520.5	1515.0	1512.2	1512.2	1517.7
32.5°	1476.3	1473.6	1470.8	1473.6	1473.6
35°	1437.7	1432.2	1421.2	1423.9	1423.9
37.5°	1390.8	1382.5	1374.2	1374.2	1374.2
40°	1341.1	1335.6	1324.6	1321.8	1324.6
42.5°	1288.7	1283.2	1272.1	1263.9	1266.6
45°	1236.3	1228.0	1211.4	1205.9	1205.9
47.5°	1181.1	1172.8	1153.5	1145.2	1148.0
50°	1123.1	1112.1	1090.0	1079.0	1079.0
52.5°	1062.4	1051.4	1029.3	1015.5	1015.5
55°	998.9	990.7	960.3	943.8	946.5
57.5°	927.2	918.9	888.6	869.3	869.3
60°	863.7	847.2	811.3	797.5	797.5
62.5°	792.0	772.7	736.8	720.2	723.0
65°	714.7	695.4	656.8	648.5	648.5
67.5°	637.5	620.9	585.0	571.2	557.4
70°	554.7	538.1	510.5	477.4	460.8
72.5°	477.4	458.1	433.2	383.6	367.0
75°	394.6	375.3	347.7	300.8	292.5
77.5°	314.6	298.0	259.4	248.4	253.9
80°	234.6	229.0	201.4	212.5	220.8
82.5°	157.3	154.5	160.1	165.6	165.6
85°	91.1	93.8	104.9	102.1	99.3
87.5°	38.6	46.9	44.2	44.2	44.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)