

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: P238891

Luminaire Tested: **24EN-LD2-45-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238891
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-234-34)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-45-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (224)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4748.3 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

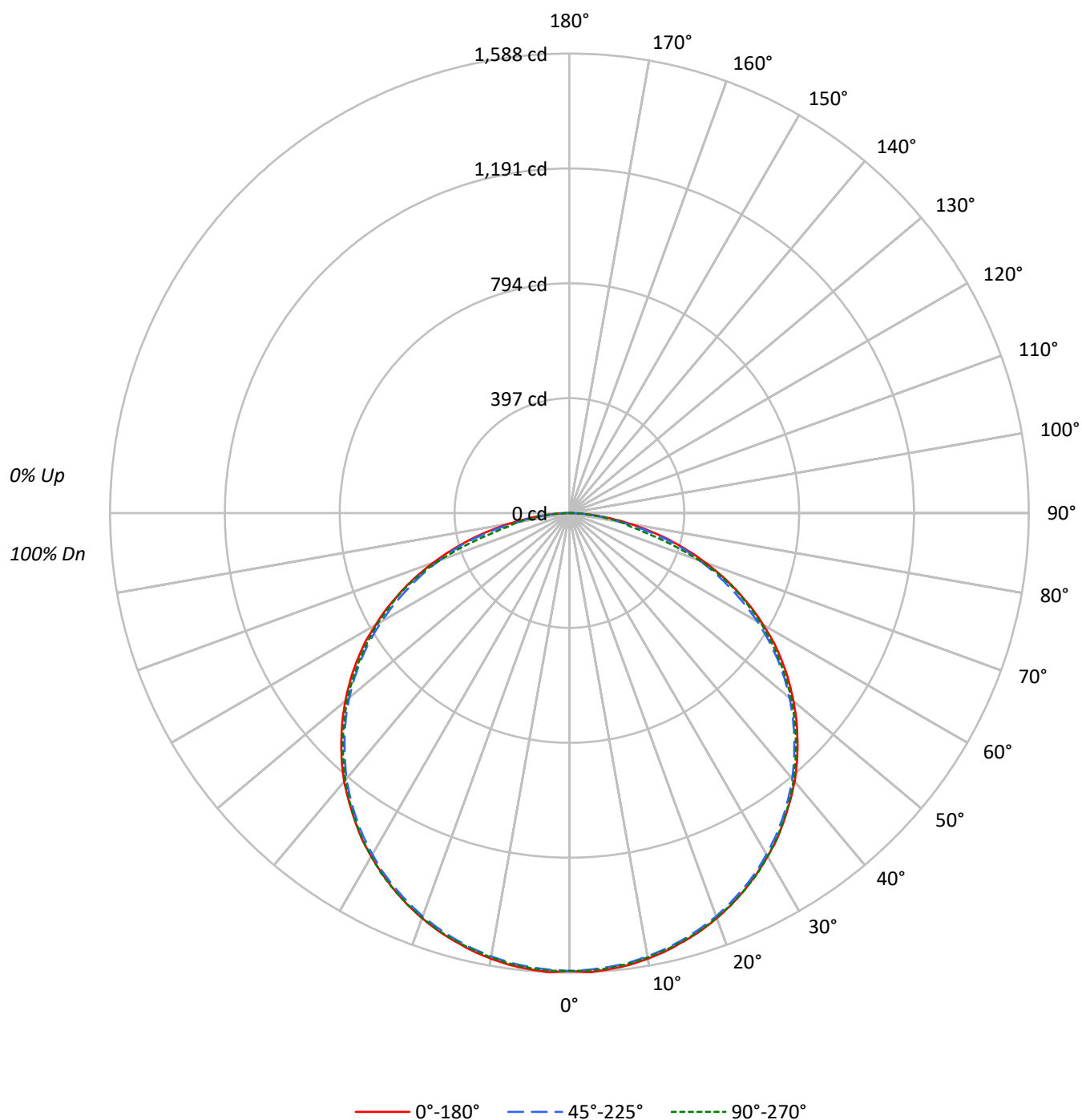
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	90	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	26	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2424	2424	2424
5°	2433	2421	2427
10°	2432	2419	2426
15°	2429	2418	2424
20°	2429	2417	2426
25°	2426	2414	2426
30°	2423	2409	2423
35°	2421	2404	2417
40°	2422	2396	2410
45°	2415	2381	2398
50°	2409	2366	2388
55°	2400	2342	2366
60°	2370	2297	2346
65°	2323	2226	2308
70°	2239	2146	2141
75°	2108	2014	1703
80°	1855	1575	1619
85°	1464	1378	1272



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.9	3.2
10°-20°	431.1	9.1
20°-30°	659.6	13.9
30°-40°	806.2	17.0
40°-50°	852.0	17.9
50°-60°	789.4	16.6
60°-70°	618.4	13.0
70°-80°	349.6	7.4
80°-90°	92.1	1.9
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°	1240.6	26.1
0°-40°	2046.8	43.1
0°-60°	3688.2	77.7
0°-90°	4748.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4748.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1582	1582	1582	1582	1582	
5°	1582	1578	1574	1574	1578	150
15°	1532	1526	1525	1524	1529	433
25°	1436	1430	1429	1429	1436	662
35°	1295	1289	1286	1286	1293	811
45°	1115	1107	1099	1099	1107	861
55°	899	889	877	879	886	803
65°	641	629	614	622	637	634
75°	356	346	340	304	288	375
85°	83	78	78	74	72	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1582.4	1582.4	1582.4	1582.4	1582.4
2.5°	1588.4	1581.4	1579.4	1577.5	1582.4
5°	1582.4	1577.5	1574.5	1573.5	1578.4
7.5°	1575.5	1569.5	1567.5	1565.5	1570.5
10°	1563.6	1557.6	1555.6	1554.6	1559.6
12.5°	1549.7	1542.7	1541.7	1540.7	1545.7
15°	1531.8	1525.9	1524.9	1523.9	1528.8
17.5°	1513.0	1507.0	1505.0	1504.0	1511.0
20°	1490.1	1484.2	1483.2	1482.2	1488.2
22.5°	1464.4	1458.4	1456.4	1457.4	1463.4
25°	1435.6	1429.6	1428.6	1428.6	1435.6
27.5°	1403.8	1397.9	1397.9	1397.9	1405.8
30°	1370.1	1365.1	1362.2	1363.2	1370.1
32.5°	1335.4	1327.4	1325.5	1326.4	1333.4
35°	1294.7	1288.7	1285.8	1285.8	1292.7
37.5°	1253.0	1247.1	1243.1	1243.1	1250.1
40°	1211.4	1202.4	1198.5	1196.5	1205.4
42.5°	1164.7	1157.8	1148.9	1148.9	1156.8
45°	1115.1	1107.2	1099.3	1099.3	1107.2
47.5°	1064.5	1056.6	1047.7	1047.7	1055.6
50°	1011.0	1003.0	993.1	993.1	1002.0
52.5°	956.4	947.5	936.6	935.6	944.5
55°	898.9	888.9	877.0	879.0	886.0
57.5°	840.3	827.4	815.5	815.5	826.4
60°	773.8	762.9	750.0	752.0	765.9
62.5°	710.3	696.5	683.6	688.5	700.4
65°	640.9	629.0	614.1	622.1	636.9
67.5°	572.4	559.5	547.6	557.6	564.5
70°	500.0	488.1	479.2	479.2	478.2
72.5°	427.6	416.7	414.7	395.9	383.9
75°	356.2	346.2	340.3	303.6	287.7
77.5°	281.8	278.8	259.9	221.2	216.3
80°	210.3	212.3	178.6	179.6	183.5
82.5°	144.8	141.9	133.9	128.0	126.0
85°	83.3	78.4	78.4	74.4	72.4
87.5°	27.8	30.8	30.8	30.8	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)