

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: P238915

Luminaire Tested: **24EN-LD2-74-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238915
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-LD2-74-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7634.0 lumens
Efficiency: N/A
Efficacy: 120.0 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

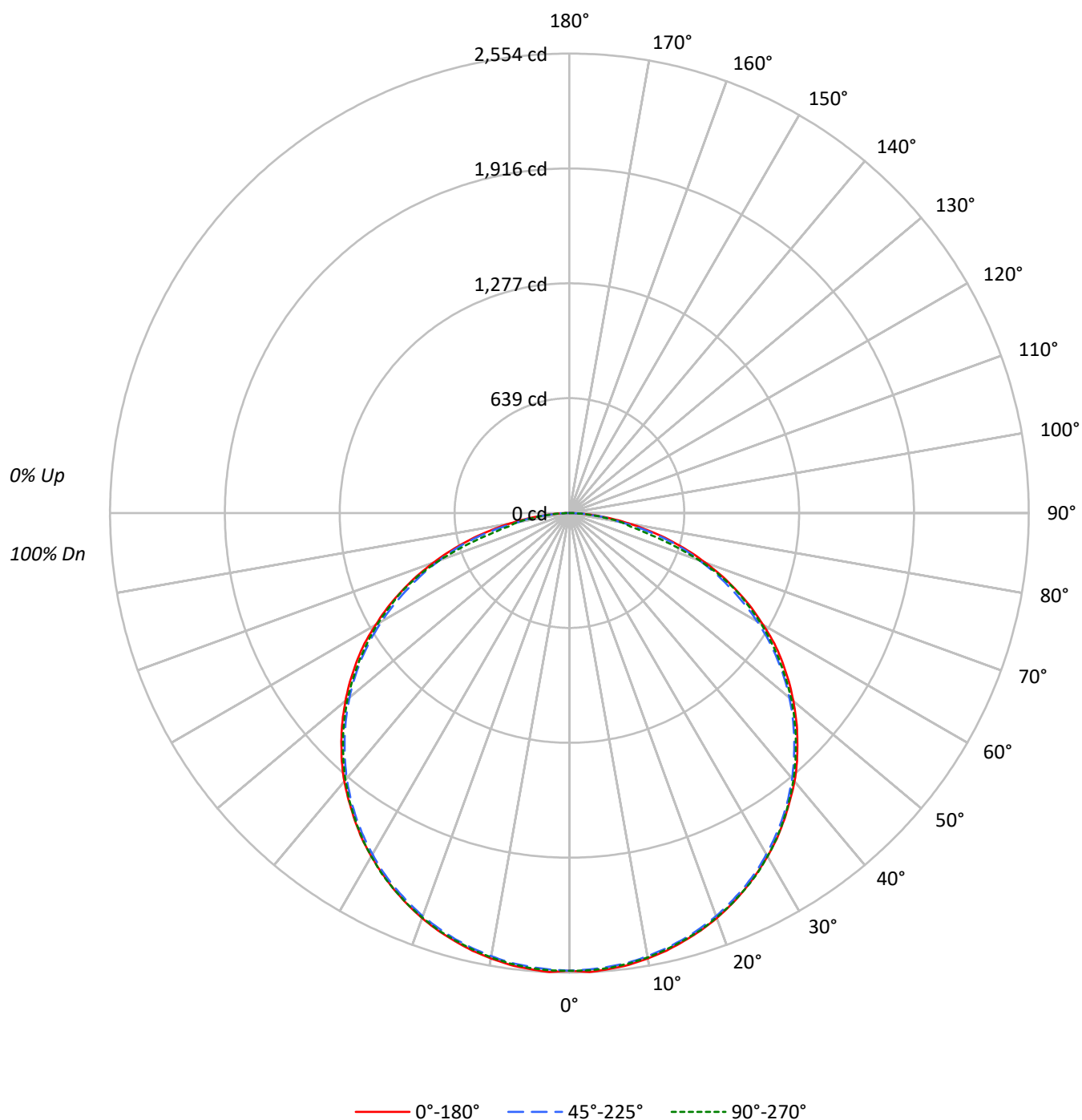
Input Watts (W): 63.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	109	104	99	95	106	101	97	94		97	94	91			93	90	88			90
2	98	90	83	77	96	88	82	76		84	79	74			81	77	73			78
3	90	79	70	64	87	77	69	63		74	67	62			71	66	61			69
4	82	70	61	54	79	68	60	53		66	58	53			63	57	52			61
5	75	62	53	46	73	61	52	46		59	51	45			57	50	45			55
6	69	56	47	40	67	55	46	40		53	45	40			51	44	39			50
7	64	50	42	35	62	50	41	35		48	40	35			47	40	35			45
8	60	46	37	31	58	45	37	31		44	36	31			43	36	31			41
9	56	42	34	28	54	42	34	28		40	33	28			39	33	28			38
10	52	39	31	26	51	38	31	25		37	30	25			36	30	25			35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3897	3897	3897
5°	3911	3892	3902
10°	3910	3890	3900
15°	3905	3887	3898
20°	3905	3887	3900
25°	3900	3882	3900
30°	3896	3873	3896
35°	3892	3865	3886
40°	3894	3852	3875
45°	3883	3828	3856
50°	3873	3804	3839
55°	3859	3765	3804
60°	3811	3694	3772
65°	3734	3578	3711
70°	3600	3450	3443
75°	3388	3238	2738
80°	2982	2532	2603
85°	2355	2214	2046



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.0	3.2
10°-20°	693.0	9.1
20°-30°	1060.5	13.9
30°-40°	1296.2	17.0
40°-50°	1369.7	17.9
50°-60°	1269.1	16.6
60°-70°	994.3	13.0
70°-80°	562.1	7.4
80°-90°	148.0	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°	1994.5	26.1
0°-40°	3290.7	43.1
0°-60°	5929.6	77.7
0°-90°	7634.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7634.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2544	2544	2544	2544	2544	
5°	2544	2536	2531	2530	2538	242
15°	2463	2453	2452	2450	2458	696
25°	2308	2298	2297	2297	2308	1064
35°	2082	2072	2067	2067	2078	1303
45°	1793	1780	1767	1767	1780	1384
55°	1445	1429	1410	1413	1424	1291
65°	1030	1011	987	1000	1024	1019
75°	573	557	547	488	463	602
85°	134	126	126	120	116	158
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2544.1	2544.1	2544.1	2544.1	2544.1
2.5°	2553.7	2542.5	2539.3	2536.1	2544.1
5°	2544.1	2536.1	2531.3	2529.7	2537.7
7.5°	2532.9	2523.4	2520.2	2517.0	2525.0
10°	2513.8	2504.2	2501.0	2499.4	2507.4
12.5°	2491.5	2480.3	2478.7	2477.1	2485.1
15°	2462.8	2453.2	2451.6	2450.0	2458.0
17.5°	2432.4	2422.9	2419.7	2418.1	2429.3
20°	2395.8	2386.2	2384.6	2383.0	2392.6
22.5°	2354.3	2344.7	2341.5	2343.1	2352.7
25°	2308.0	2298.5	2296.9	2296.9	2308.0
27.5°	2257.0	2247.4	2247.4	2247.4	2260.2
30°	2202.8	2194.8	2190.0	2191.6	2202.8
32.5°	2146.9	2134.2	2131.0	2132.6	2143.7
35°	2081.5	2072.0	2067.2	2067.2	2078.3
37.5°	2014.5	2005.0	1998.6	1998.6	2009.8
40°	1947.6	1933.2	1926.8	1923.6	1938.0
42.5°	1872.6	1861.4	1847.1	1847.1	1859.8
45°	1792.8	1780.1	1767.3	1767.3	1780.1
47.5°	1711.5	1698.7	1684.4	1684.4	1697.1
50°	1625.4	1612.6	1596.6	1596.6	1611.0
52.5°	1537.6	1523.3	1505.7	1504.1	1518.5
55°	1445.1	1429.2	1410.0	1413.2	1424.4
57.5°	1351.0	1330.3	1311.1	1311.1	1328.7
60°	1244.1	1226.6	1205.9	1209.0	1231.4
62.5°	1142.1	1119.7	1099.0	1107.0	1126.1
65°	1030.4	1011.3	987.3	1000.1	1024.0
67.5°	920.3	899.6	880.5	896.4	907.6
70°	803.9	784.8	770.4	770.4	768.8
72.5°	687.5	669.9	666.7	636.4	617.3
75°	572.6	556.7	547.1	488.1	462.6
77.5°	453.0	448.2	417.9	355.7	347.7
80°	338.1	341.3	287.1	288.7	295.1
82.5°	232.9	228.1	215.3	205.8	202.6
85°	134.0	126.0	126.0	119.6	116.4
87.5°	44.7	49.4	49.4	49.4	51.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)