

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: P238955

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238955
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: 24ENA-LD2-74-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7443.1 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.67' x L: 3.83' x H: 0')
CIE Type: Direct

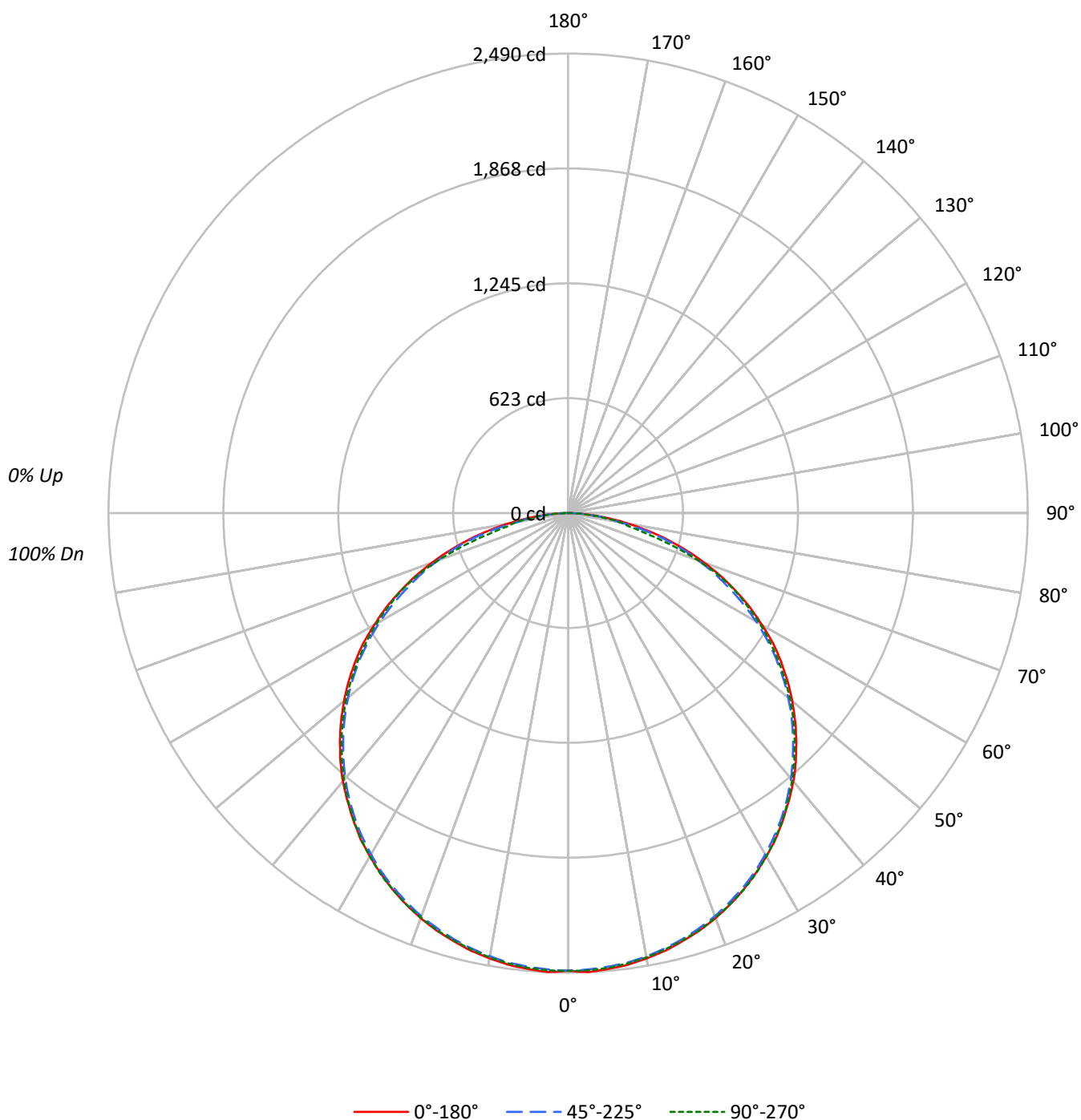
Input Watts (W): 63.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69		
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58		
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49		
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42		
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37		
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32		
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29		
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26		
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4179	4179	4179
5°	4195	4174	4185
10°	4193	4172	4182
15°	4188	4169	4180
20°	4188	4169	4183
25°	4183	4163	4183
30°	4178	4154	4178
35°	4174	4145	4168
40°	4176	4132	4156
45°	4165	4106	4135
50°	4154	4080	4117
55°	4139	4038	4079
60°	4087	3962	4046
65°	4005	3838	3980
70°	3861	3700	3693
75°	3634	3472	2936
80°	3199	2716	2791
85°	2525	2376	2194



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.0	3.2
10°-20°	675.7	9.1
20°-30°	1034.0	13.9
30°-40°	1263.8	17.0
40°-50°	1335.5	17.9
50°-60°	1237.4	16.6
60°-70°	969.4	13.0
70°-80°	548.1	7.4
80°-90°	144.3	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°	1944.6	26.1
0°-40°	3208.4	43.1
0°-60°	5781.3	77.7
0°-90°	7443.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7443.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2480	2480	2480	2480	2480	
5°	2480	2473	2468	2466	2474	236
15°	2401	2392	2390	2389	2396	678
25°	2250	2241	2239	2239	2250	1038
35°	2030	2020	2016	2016	2026	1271
45°	1748	1736	1723	1723	1736	1349
55°	1409	1393	1375	1378	1389	1258
65°	1005	986	963	975	998	993
75°	558	543	533	476	451	587
85°	131	123	123	117	114	154
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2480.5	2480.5	2480.5	2480.5	2480.5
2.5°	2489.8	2478.9	2475.8	2472.7	2480.5
5°	2480.5	2472.7	2468.1	2466.5	2474.3
7.5°	2469.6	2460.3	2457.2	2454.1	2461.8
10°	2450.9	2441.6	2438.5	2437.0	2444.7
12.5°	2429.2	2418.3	2416.7	2415.2	2423.0
15°	2401.2	2391.9	2390.3	2388.7	2396.5
17.5°	2371.6	2362.3	2359.2	2357.6	2368.5
20°	2335.9	2326.5	2325.0	2323.4	2332.8
22.5°	2295.4	2286.1	2283.0	2284.5	2293.9
25°	2250.3	2241.0	2239.4	2239.4	2250.3
27.5°	2200.6	2191.2	2191.2	2191.2	2203.7
30°	2147.7	2139.9	2135.2	2136.8	2147.7
32.5°	2093.3	2080.8	2077.7	2079.3	2090.1
35°	2029.5	2020.2	2015.5	2015.5	2026.4
37.5°	1964.2	1954.8	1948.6	1948.6	1959.5
40°	1898.9	1884.9	1878.6	1875.5	1889.5
42.5°	1825.8	1814.9	1800.9	1800.9	1813.3
45°	1748.0	1735.6	1723.1	1723.1	1735.6
47.5°	1668.7	1656.3	1642.3	1642.3	1654.7
50°	1584.7	1572.3	1556.7	1556.7	1570.7
52.5°	1499.2	1485.2	1468.1	1466.5	1480.5
55°	1409.0	1393.4	1374.8	1377.9	1388.8
57.5°	1317.2	1297.0	1278.3	1278.3	1295.5
60°	1213.0	1195.9	1175.7	1178.8	1200.6
62.5°	1113.5	1091.7	1071.5	1079.3	1098.0
65°	1004.6	986.0	962.7	975.1	998.4
67.5°	897.3	877.1	858.5	874.0	884.9
70°	783.8	765.1	751.1	751.1	749.6
72.5°	670.3	653.2	650.1	620.5	601.9
75°	558.3	542.8	533.4	475.9	451.0
77.5°	441.7	437.0	407.5	346.8	339.0
80°	329.7	332.8	279.9	281.5	287.7
82.5°	227.1	222.4	209.9	200.6	197.5
85°	130.6	122.9	122.9	116.6	113.5
87.5°	43.5	48.2	48.2	48.2	49.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)