

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: P238913

Luminaire Tested: **24EN-LD2-74-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238913
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-L830-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7259.0 lumens
Efficiency: N/A
Efficacy: 114.1 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

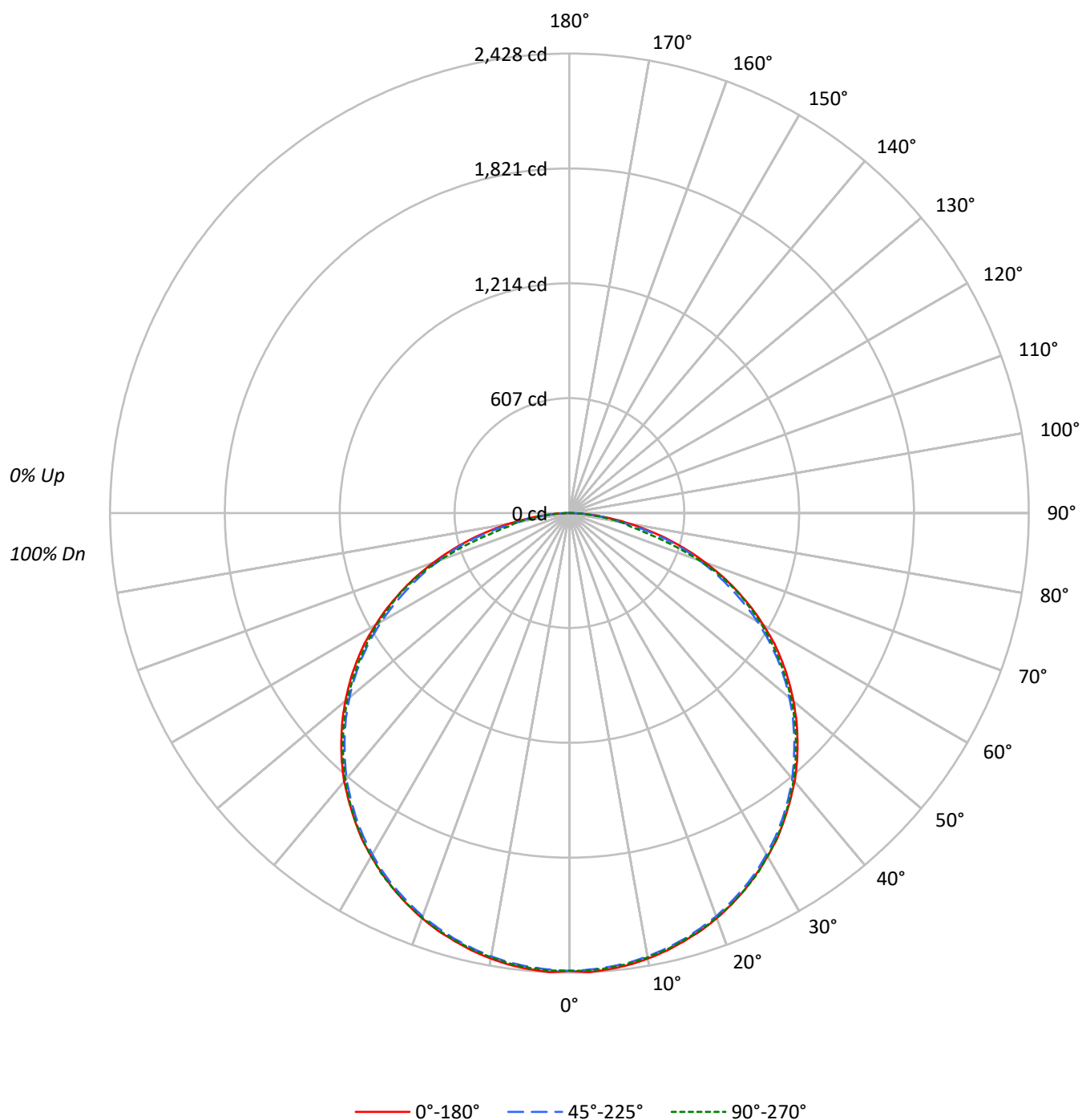
Input Watts (W): 63.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3705	3705	3705
5°	3719	3701	3710
10°	3718	3699	3708
15°	3713	3696	3706
20°	3713	3696	3708
25°	3709	3691	3709
30°	3704	3683	3704
35°	3701	3675	3695
40°	3703	3663	3684
45°	3693	3640	3666
50°	3683	3618	3650
55°	3669	3580	3617
60°	3624	3512	3587
65°	3551	3402	3529
70°	3423	3281	3274
75°	3222	3078	2603
80°	2836	2408	2475
85°	2239	2105	1945



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.1	3.2
10°-20°	659.0	9.1
20°-30°	1008.4	13.9
30°-40°	1232.5	17.0
40°-50°	1302.5	17.9
50°-60°	1206.8	16.6
60°-70°	945.5	13.0
70°-80°	534.5	7.4
80°-90°	140.7	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°	1896.5	26.1
0°-40°	3129.0	43.1
0°-60°	5638.3	77.7
0°-90°	7259.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7259.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2419	2419	2419	2419	2419	
5°	2419	2412	2407	2406	2413	230
15°	2342	2333	2331	2330	2337	662
25°	2195	2186	2184	2184	2195	1012
35°	1979	1970	1966	1966	1976	1239
45°	1705	1693	1680	1680	1693	1316
55°	1374	1359	1341	1344	1354	1227
65°	980	962	939	951	974	969
75°	544	529	520	464	440	573
85°	127	120	120	114	111	150
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2419.1	2419.1	2419.1	2419.1	2419.1
2.5°	2428.2	2417.6	2414.6	2411.5	2419.1
5°	2419.1	2411.5	2407.0	2405.5	2413.1
7.5°	2408.5	2399.4	2396.4	2393.3	2400.9
10°	2390.3	2381.2	2378.2	2376.7	2384.2
12.5°	2369.1	2358.5	2356.9	2355.4	2363.0
15°	2341.8	2332.7	2331.2	2329.6	2337.2
17.5°	2313.0	2303.9	2300.8	2299.3	2309.9
20°	2278.1	2269.0	2267.5	2265.9	2275.0
22.5°	2238.6	2229.5	2226.5	2228.0	2237.1
25°	2194.7	2185.6	2184.0	2184.0	2194.7
27.5°	2146.1	2137.0	2137.0	2137.0	2149.2
30°	2094.6	2087.0	2082.4	2083.9	2094.6
32.5°	2041.5	2029.3	2026.3	2027.8	2038.4
35°	1979.3	1970.2	1965.6	1965.6	1976.3
37.5°	1915.6	1906.5	1900.4	1900.4	1911.0
40°	1851.9	1838.2	1832.2	1829.1	1842.8
42.5°	1780.6	1770.0	1756.3	1756.3	1768.5
45°	1704.8	1692.6	1680.5	1680.5	1692.6
47.5°	1627.4	1615.3	1601.6	1601.6	1613.8
50°	1545.5	1533.4	1518.2	1518.2	1531.9
52.5°	1462.1	1448.4	1431.8	1430.2	1443.9
55°	1374.1	1359.0	1340.8	1343.8	1354.4
57.5°	1284.6	1264.9	1246.7	1246.7	1263.4
60°	1183.0	1166.3	1146.6	1149.7	1170.9
62.5°	1086.0	1064.7	1045.0	1052.6	1070.8
65°	979.8	961.6	938.8	951.0	973.7
67.5°	875.1	855.4	837.2	852.4	863.0
70°	764.4	746.2	732.6	732.6	731.0
72.5°	653.7	637.0	634.0	605.2	587.0
75°	544.5	529.3	520.2	464.1	439.8
77.5°	430.7	426.2	397.4	338.2	330.6
80°	321.5	324.6	273.0	274.5	280.6
82.5°	221.4	216.9	204.8	195.7	192.6
85°	127.4	119.8	119.8	113.8	110.7
87.5°	42.5	47.0	47.0	47.0	48.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)