

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: P238910

Luminaire Tested: **24EN-LD2-70-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238910
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-LD2-70-UNV-L835-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)3500K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7023.0 lumens
Efficiency: N/A
Efficacy: 116.7 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

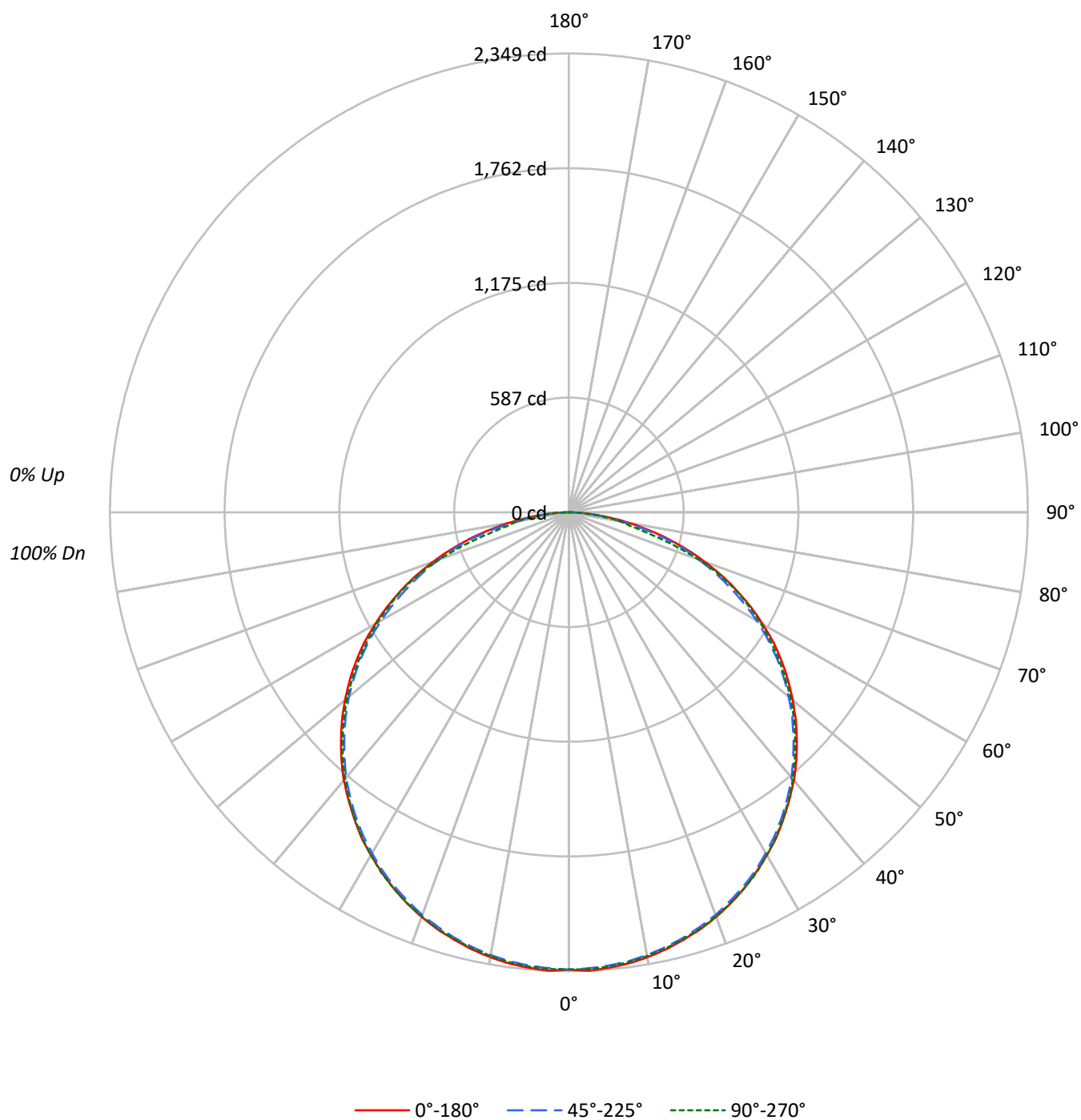
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3585	3585	3585
5°	3598	3580	3589
10°	3597	3578	3588
15°	3592	3576	3585
20°	3592	3576	3588
25°	3588	3571	3588
30°	3584	3563	3584
35°	3580	3556	3575
40°	3582	3544	3565
45°	3572	3522	3547
50°	3563	3500	3532
55°	3550	3464	3499
60°	3506	3398	3470
65°	3435	3292	3414
70°	3312	3174	3167
75°	3117	2978	2518
80°	2744	2329	2395
85°	2167	2037	1882



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.7	3.2
10°-20°	637.6	9.1
20°-30°	975.6	13.9
30°-40°	1192.5	17.0
40°-50°	1260.1	17.9
50°-60°	1167.5	16.6
60°-70°	914.7	13.0
70°-80°	517.1	7.4
80°-90°	136.2	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°	1834.8	26.1
0°-40°	3027.3	43.1
0°-60°	5455.0	77.7
0°-90°	7023.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7023.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2340	2340	2340	2340	2340	
5°	2340	2333	2329	2327	2335	223
15°	2266	2257	2255	2254	2261	640
25°	2123	2114	2113	2113	2123	979
35°	1915	1906	1902	1902	1912	1199
45°	1649	1638	1626	1626	1638	1273
55°	1329	1315	1297	1300	1310	1187
65°	948	930	908	920	942	937
75°	527	512	503	449	426	554
85°	123	116	116	110	107	145
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2340.5	2340.5	2340.5	2340.5	2340.5
2.5°	2349.3	2339.0	2336.1	2333.1	2340.5
5°	2340.5	2333.1	2328.7	2327.3	2334.6
7.5°	2330.2	2321.4	2318.5	2315.5	2322.9
10°	2312.6	2303.8	2300.9	2299.4	2306.7
12.5°	2292.1	2281.8	2280.3	2278.8	2286.2
15°	2265.6	2256.8	2255.4	2253.9	2261.2
17.5°	2237.8	2229.0	2226.0	2224.6	2234.8
20°	2204.0	2195.2	2193.7	2192.3	2201.1
22.5°	2165.9	2157.1	2154.1	2155.6	2164.4
25°	2123.3	2114.5	2113.0	2113.0	2123.3
27.5°	2076.3	2067.5	2067.5	2067.5	2079.3
30°	2026.5	2019.1	2014.7	2016.2	2026.5
32.5°	1975.1	1963.4	1960.4	1961.9	1972.2
35°	1914.9	1906.1	1901.7	1901.7	1912.0
37.5°	1853.3	1844.5	1838.6	1838.6	1848.9
40°	1791.7	1778.5	1772.6	1769.7	1782.9
42.5°	1722.7	1712.4	1699.2	1699.2	1711.0
45°	1649.3	1637.6	1625.9	1625.9	1637.6
47.5°	1574.5	1562.8	1549.6	1549.6	1561.3
50°	1495.3	1483.5	1468.9	1468.9	1482.1
52.5°	1414.6	1401.4	1385.2	1383.7	1396.9
55°	1329.4	1314.8	1297.2	1300.1	1310.4
57.5°	1242.9	1223.8	1206.2	1206.2	1222.3
60°	1144.6	1128.4	1109.3	1112.3	1132.8
62.5°	1050.6	1030.1	1011.0	1018.4	1036.0
65°	947.9	930.3	908.3	920.0	942.1
67.5°	846.7	827.6	810.0	824.7	834.9
70°	739.6	722.0	708.7	708.7	707.3
72.5°	632.4	616.3	613.4	585.5	567.9
75°	526.8	512.1	503.3	449.0	425.5
77.5°	416.7	412.3	384.5	327.2	319.9
80°	311.1	314.0	264.1	265.6	271.5
82.5°	214.2	209.8	198.1	189.3	186.4
85°	123.3	115.9	115.9	110.1	107.1
87.5°	41.1	45.5	45.5	45.5	47.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)