

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: P238909

Luminaire Tested: **24EN-LD2-70-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238909
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-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: 6812.0 lumens
Efficiency: N/A
Efficacy: 113.2 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

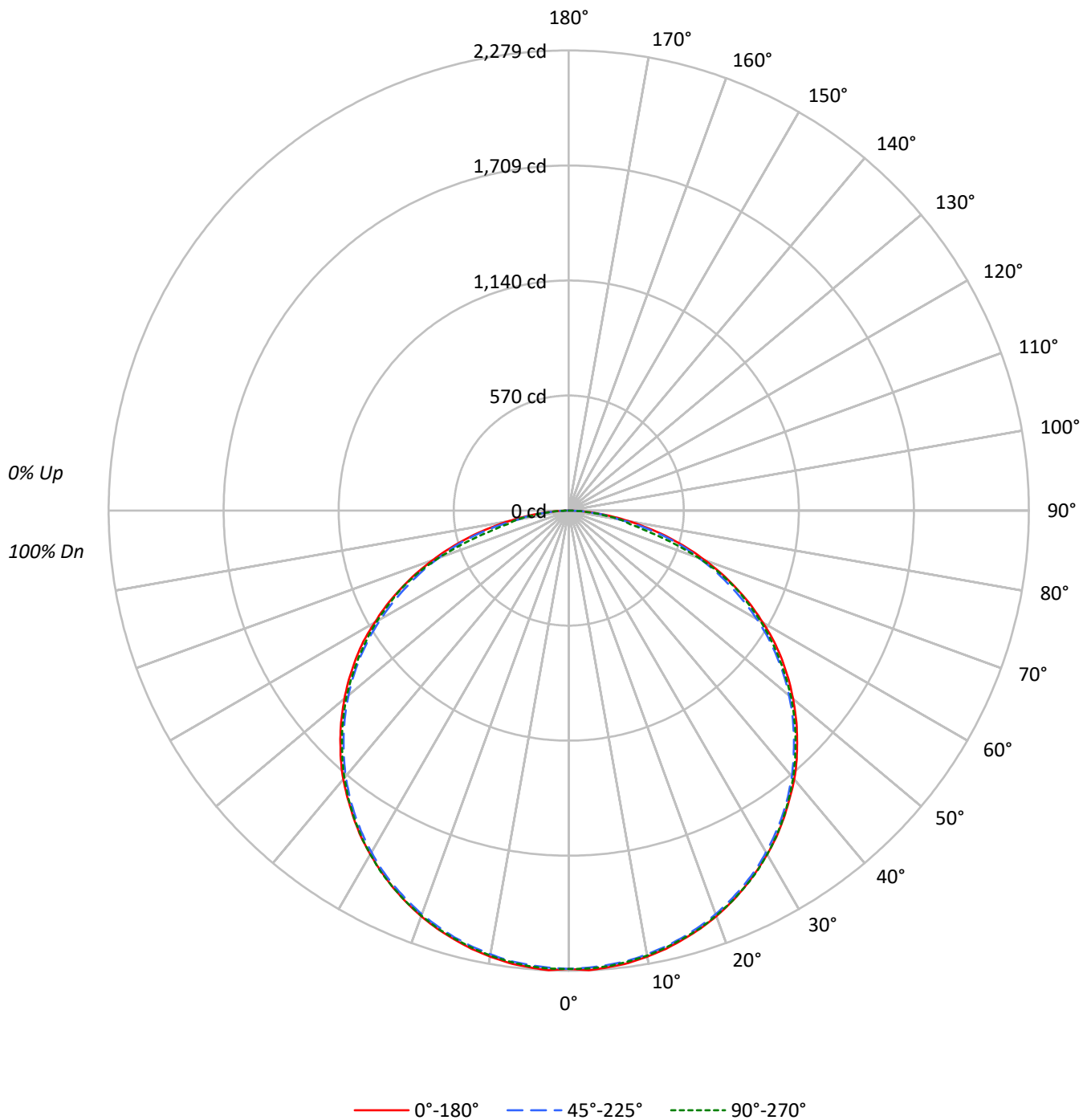
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3477	3477	3477
5°	3490	3473	3482
10°	3489	3471	3480
15°	3485	3469	3478
20°	3484	3468	3480
25°	3480	3464	3480
30°	3476	3456	3476
35°	3473	3449	3468
40°	3475	3438	3458
45°	3465	3416	3441
50°	3456	3395	3425
55°	3443	3360	3394
60°	3401	3296	3366
65°	3332	3193	3312
70°	3212	3079	3072
75°	3024	2889	2443
80°	2661	2260	2322
85°	2102	1975	1826



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.0	3.2
10°-20°	618.4	9.1
20°-30°	946.3	13.9
30°-40°	1156.6	17.0
40°-50°	1222.3	17.9
50°-60°	1132.5	16.6
60°-70°	887.2	13.0
70°-80°	501.6	7.4
80°-90°	132.1	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°	1779.7	26.1
0°-40°	2936.4	43.1
0°-60°	5291.1	77.7
0°-90°	6812.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6812.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2270	2270	2270	2270	2270	
5°	2270	2263	2259	2257	2264	216
15°	2198	2189	2188	2186	2193	621
25°	2060	2051	2050	2050	2060	950
35°	1857	1849	1845	1845	1855	1163
45°	1600	1588	1577	1577	1588	1235
55°	1290	1275	1258	1261	1271	1152
65°	920	902	881	892	914	909
75°	511	497	488	436	413	537
85°	120	112	112	107	104	141
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2270.2	2270.2	2270.2	2270.2	2270.2
2.5°	2278.7	2268.7	2265.9	2263.0	2270.2
5°	2270.2	2263.0	2258.8	2257.4	2264.5
7.5°	2260.2	2251.7	2248.8	2246.0	2253.1
10°	2243.1	2234.6	2231.7	2230.3	2237.4
12.5°	2223.2	2213.2	2211.8	2210.4	2217.5
15°	2197.6	2189.0	2187.6	2186.2	2193.3
17.5°	2170.5	2162.0	2159.1	2157.7	2167.7
20°	2137.8	2129.3	2127.8	2126.4	2134.9
22.5°	2100.8	2092.2	2089.4	2090.8	2099.4
25°	2059.5	2051.0	2049.5	2049.5	2059.5
27.5°	2014.0	2005.4	2005.4	2005.4	2016.8
30°	1965.6	1958.5	1954.2	1955.6	1965.6
32.5°	1915.8	1904.4	1901.5	1902.9	1912.9
35°	1857.4	1848.9	1844.6	1844.6	1854.6
37.5°	1797.6	1789.1	1783.4	1783.4	1793.4
40°	1737.8	1725.0	1719.3	1716.5	1729.3
42.5°	1671.0	1661.0	1648.2	1648.2	1659.6
45°	1599.8	1588.4	1577.0	1577.0	1588.4
47.5°	1527.2	1515.8	1503.0	1503.0	1514.4
50°	1450.3	1439.0	1424.7	1424.7	1437.5
52.5°	1372.1	1359.2	1343.6	1342.2	1355.0
55°	1289.5	1275.3	1258.2	1261.0	1271.0
57.5°	1205.5	1187.0	1170.0	1170.0	1185.6
60°	1110.2	1094.5	1076.0	1078.9	1098.8
62.5°	1019.1	999.2	980.7	987.8	1004.8
65°	919.5	902.4	881.0	892.4	913.8
67.5°	821.2	802.7	785.7	799.9	809.9
70°	717.3	700.3	687.5	687.5	686.0
72.5°	613.4	597.8	594.9	567.9	550.8
75°	511.0	496.7	488.2	435.5	412.8
77.5°	404.2	399.9	372.9	317.4	310.3
80°	301.7	304.6	256.2	257.6	263.3
82.5°	207.8	203.5	192.1	183.6	180.8
85°	119.6	112.4	112.4	106.7	103.9
87.5°	39.9	44.1	44.1	44.1	45.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)