

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: P232307

Luminaire Tested: **24RDI-40-UNV-L850-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232307  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-078-2-R2)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RDI-40-UNV-L850-CD1-U  
Description: METALUX 2X4 OVATION LED TROFFER  
STANDARD VERISON  
Light Source: (392) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

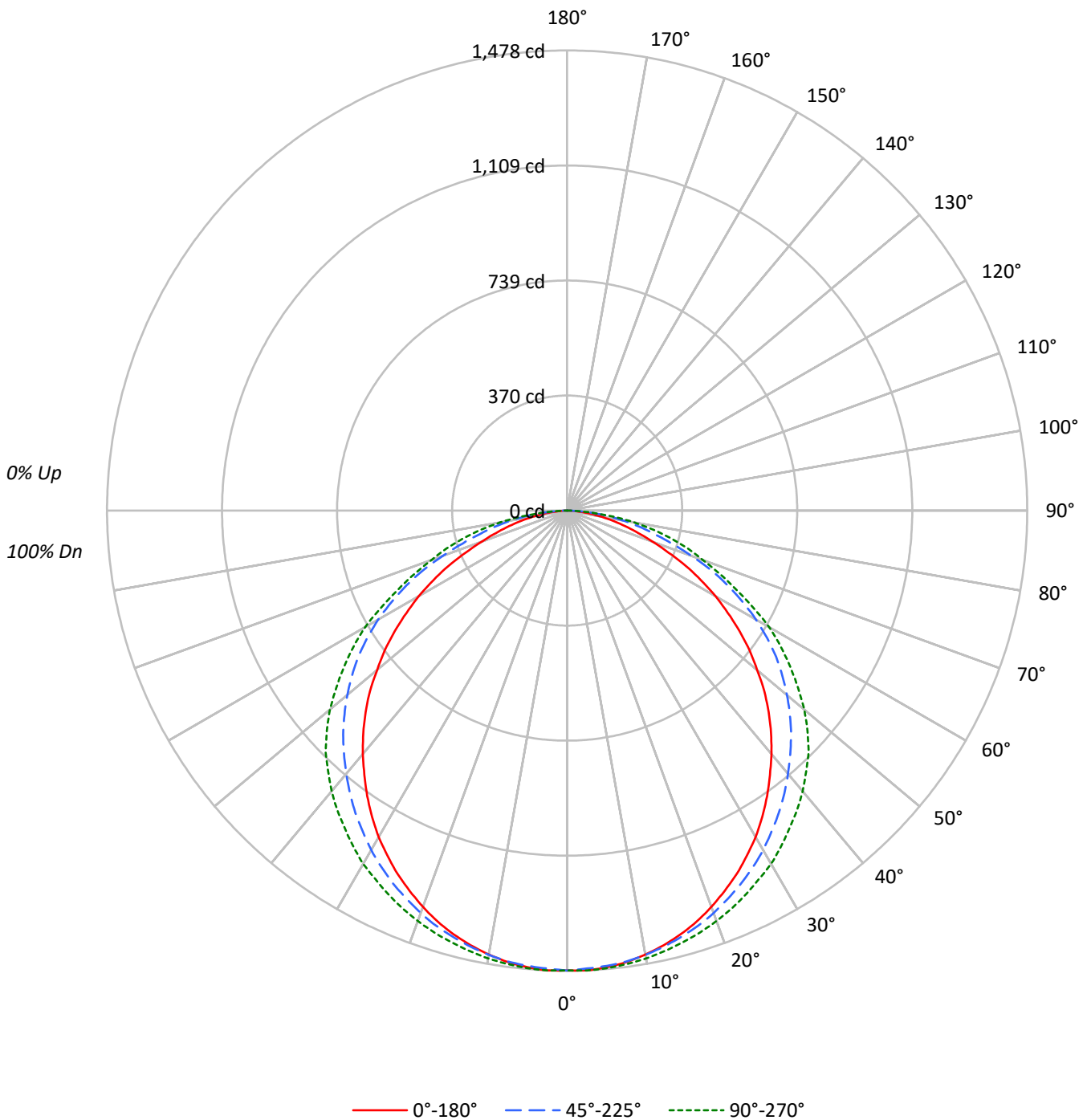
Lumens per Lamp: N/A  
Luminaire Lumens: 4302.0 lumens  
Efficiency: N/A  
Efficacy: 107.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.32 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 40  
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	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	80	75	82	77	73	79	75	72	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1988	1988	1988
5°	1988	1983	1993
10°	1978	1980	1996
15°	1963	1975	1999
20°	1940	1970	2009
25°	1913	1963	2019
30°	1881	1956	2036
35°	1839	1947	2046
40°	1793	1938	2067
45°	1742	1936	2088
50°	1668	1930	2081
55°	1586	1921	2052
60°	1481	1885	2017
65°	1341	1812	1902
70°	1148	1669	1822
75°	999	1501	1796
80°	830	1399	1676
85°	568	1087	1232



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.8	3.3
10°-20°	401.0	9.3
20°-30°	610.0	14.2
30°-40°	741.2	17.2
40°-50°	779.4	18.1
50°-60°	711.1	16.5
60°-70°	535.5	12.4
70°-80°	304.1	7.1
80°-90°	79.8	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°	1150.9	26.8
0°-40°	1892.1	44.0
0°-60°	3382.6	78.6
0°-90°	4302.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4302.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1477	1477	1477	1477	1477	
5°	1472	1470	1468	1473	1475	140
15°	1409	1411	1418	1431	1435	397
25°	1288	1298	1322	1350	1360	593
35°	1119	1140	1186	1230	1245	700
45°	916	946	1018	1074	1097	705
55°	676	729	819	862	875	604
65°	421	490	569	590	598	415
75°	192	253	289	334	346	206
85°	37	56	70	82	80	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1477.4	1477.4	1477.4	1477.4	1477.4
2.5°	1478.5	1476.4	1472.2	1476.4	1478.5
5°	1472.2	1470.1	1468.0	1473.2	1475.3
7.5°	1462.7	1461.7	1460.6	1466.9	1469.0
10°	1448.0	1448.0	1449.1	1457.5	1460.6
12.5°	1430.2	1430.2	1434.4	1444.9	1449.1
15°	1409.2	1411.3	1417.6	1431.2	1435.4
17.5°	1384.0	1388.2	1398.7	1414.4	1420.7
20°	1354.6	1359.8	1375.6	1395.5	1402.9
22.5°	1322.0	1331.5	1349.3	1374.5	1382.9
25°	1288.4	1297.9	1322.0	1350.4	1359.8
27.5°	1249.6	1261.1	1291.6	1323.1	1334.6
30°	1210.7	1221.2	1259.0	1295.8	1310.5
32.5°	1166.6	1181.3	1222.3	1263.2	1279.0
35°	1119.4	1140.4	1185.5	1229.6	1245.4
37.5°	1070.0	1095.2	1145.6	1195.0	1212.8
40°	1020.7	1049.0	1103.6	1156.1	1177.1
42.5°	969.2	998.6	1060.6	1117.3	1136.2
45°	915.7	946.1	1017.5	1074.2	1097.3
47.5°	859.0	895.7	970.3	1029.1	1046.9
50°	797.0	841.1	922.0	978.7	994.4
52.5°	739.2	784.4	871.6	926.2	934.6
55°	676.2	728.7	819.1	862.1	874.7
57.5°	612.2	671.0	761.3	801.2	813.8
60°	550.2	610.1	700.4	737.1	749.7
62.5°	484.1	554.4	636.3	671.0	673.1
65°	421.1	490.4	569.1	590.1	597.5
67.5°	352.8	432.6	501.9	519.8	530.3
70°	291.9	373.8	424.2	453.6	463.1
72.5°	240.5	312.9	352.8	394.8	407.4
75°	192.2	253.1	288.8	333.9	345.5
77.5°	149.1	196.4	236.3	276.2	282.5
80°	107.1	135.5	180.6	211.1	216.3
82.5°	71.4	89.3	128.1	144.9	148.1
85°	36.8	55.7	70.4	81.9	79.8
87.5°	13.7	21.0	24.2	27.3	24.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)