

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: P232318

Luminaire Tested: **24RDIA-40-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232318
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-078-8-R2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RDIA-40-UNV-L840-CD1-U
Description: METALUX 2X4 OVATION LED TROFFER
AIR VENTED VERSION
Light Source: (392) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

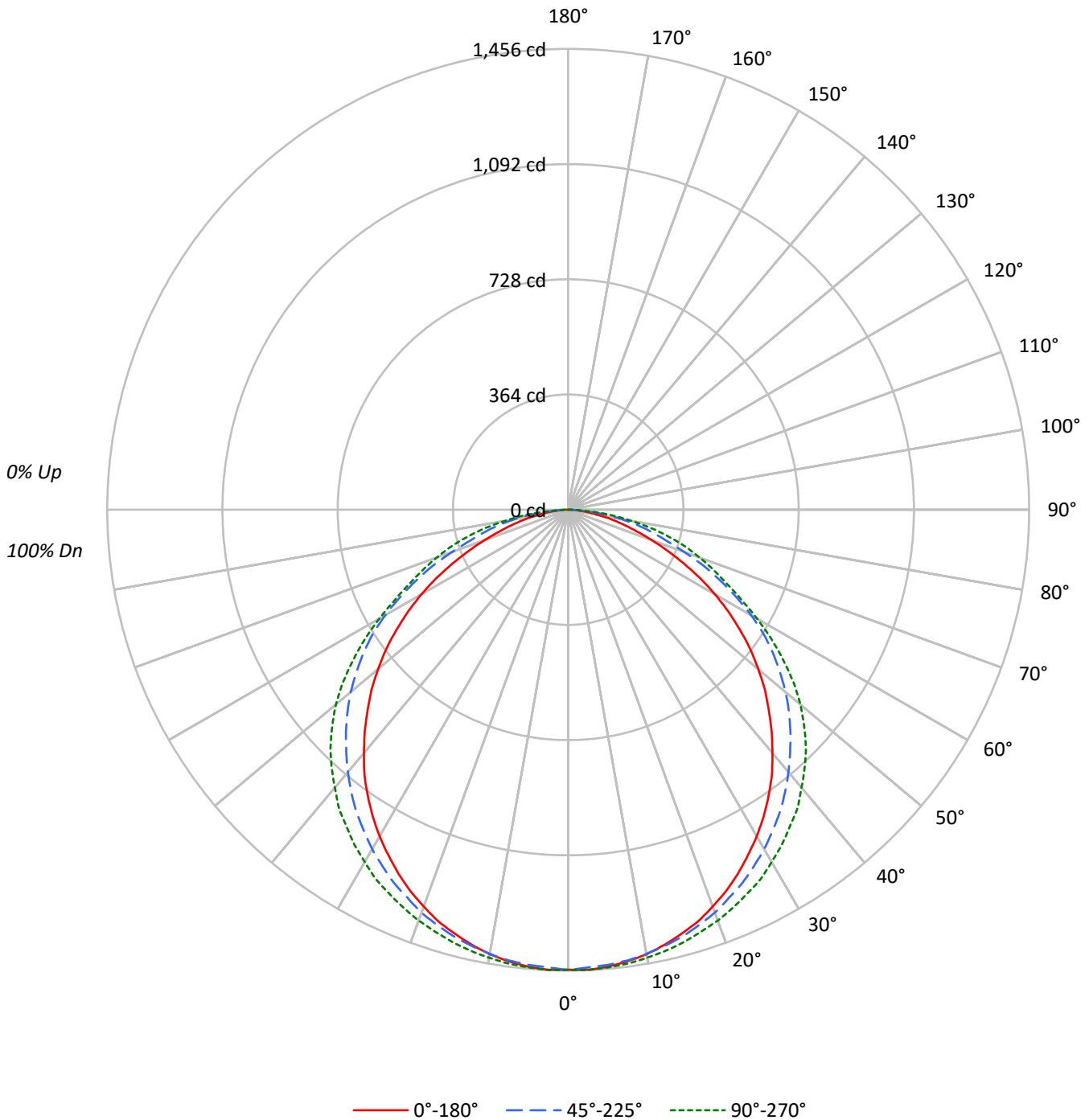
Lumens per Lamp: N/A
Luminaire Lumens: 4170.0 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.39
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')
CIE Type: Direct

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	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2347	2347	2347
5°	2349	2340	2353
10°	2338	2336	2356
15°	2317	2333	2363
20°	2293	2328	2373
25°	2261	2319	2384
30°	2221	2309	2396
35°	2176	2298	2407
40°	2116	2281	2417
45°	2045	2266	2425
50°	1968	2252	2406
55°	1864	2223	2335
60°	1730	2158	2224
65°	1539	2027	2108
70°	1324	1840	2085
75°	1120	1706	2049
80°	910	1584	1869
85°	643	1228	1475



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.6	3.3
10°-20°	394.7	9.5
20°-30°	600.5	14.4
30°-40°	728.2	17.5
40°-50°	760.4	18.2
50°-60°	685.0	16.4
60°-70°	504.0	12.1
70°-80°	285.3	6.8
80°-90°	74.3	1.8
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°	1132.9	27.2
0°-40°	1861.1	44.6
0°-60°	3306.5	79.3
0°-90°	4170.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4170.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1454	1454	1454	1454	1454	
5°	1450	1446	1444	1450	1452	138
15°	1386	1388	1396	1409	1414	391
25°	1269	1277	1302	1329	1338	584
35°	1104	1122	1166	1206	1221	690
45°	896	929	993	1045	1062	691
55°	662	708	790	825	829	591
65°	403	474	530	546	552	401
75°	180	235	273	316	328	193
85°	35	48	66	76	80	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1453.7	1453.7	1453.7	1453.7	1453.7
2.5°	1454.7	1451.6	1447.5	1452.6	1455.7
5°	1449.6	1446.5	1443.5	1449.6	1451.6
7.5°	1439.4	1437.3	1436.3	1443.5	1446.5
10°	1426.1	1424.1	1425.1	1435.3	1437.3
12.5°	1407.8	1408.8	1411.8	1423.1	1427.1
15°	1386.3	1388.4	1395.5	1408.8	1413.9
17.5°	1363.9	1364.9	1376.1	1392.5	1397.6
20°	1334.3	1340.4	1354.7	1374.1	1381.2
22.5°	1303.7	1310.8	1327.2	1352.7	1360.8
25°	1269.0	1277.2	1301.7	1329.2	1338.4
27.5°	1230.3	1242.5	1270.0	1302.7	1315.9
30°	1191.5	1204.8	1238.4	1273.1	1285.3
32.5°	1148.6	1162.9	1201.7	1241.5	1255.8
35°	1103.8	1122.1	1166.0	1205.8	1221.1
37.5°	1056.8	1076.2	1125.2	1171.1	1189.5
40°	1003.8	1028.3	1082.3	1131.3	1146.6
42.5°	950.7	980.3	1037.5	1089.5	1105.8
45°	895.7	929.3	992.6	1044.6	1061.9
47.5°	842.6	876.3	945.6	996.7	1010.9
50°	783.4	824.3	896.7	945.6	957.9
52.5°	725.3	767.1	842.6	889.5	896.7
55°	662.1	708.0	789.6	825.3	829.4
57.5°	599.8	650.8	732.4	761.0	762.0
60°	535.6	591.7	668.2	688.6	688.6
62.5°	471.3	535.6	598.8	619.2	617.2
65°	402.9	474.4	530.5	545.8	551.9
67.5°	339.7	416.2	463.1	480.5	495.8
70°	280.5	356.0	389.7	425.4	441.7
72.5°	226.5	297.9	324.4	375.4	387.6
75°	179.5	234.6	273.4	316.2	328.5
77.5°	138.7	174.4	223.4	260.1	267.3
80°	97.9	120.4	170.4	195.9	201.0
82.5°	65.3	82.6	118.3	136.7	142.8
85°	34.7	47.9	66.3	75.5	79.6
87.5°	13.3	19.4	22.4	24.5	25.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)