

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: P232316

Luminaire Tested: **24RDIA-40-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232316
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-L830-CD1-U
Description: METALUX 2X4 OVATION LED TROFFER
AIR VENTED VERSION
Light Source: (392) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

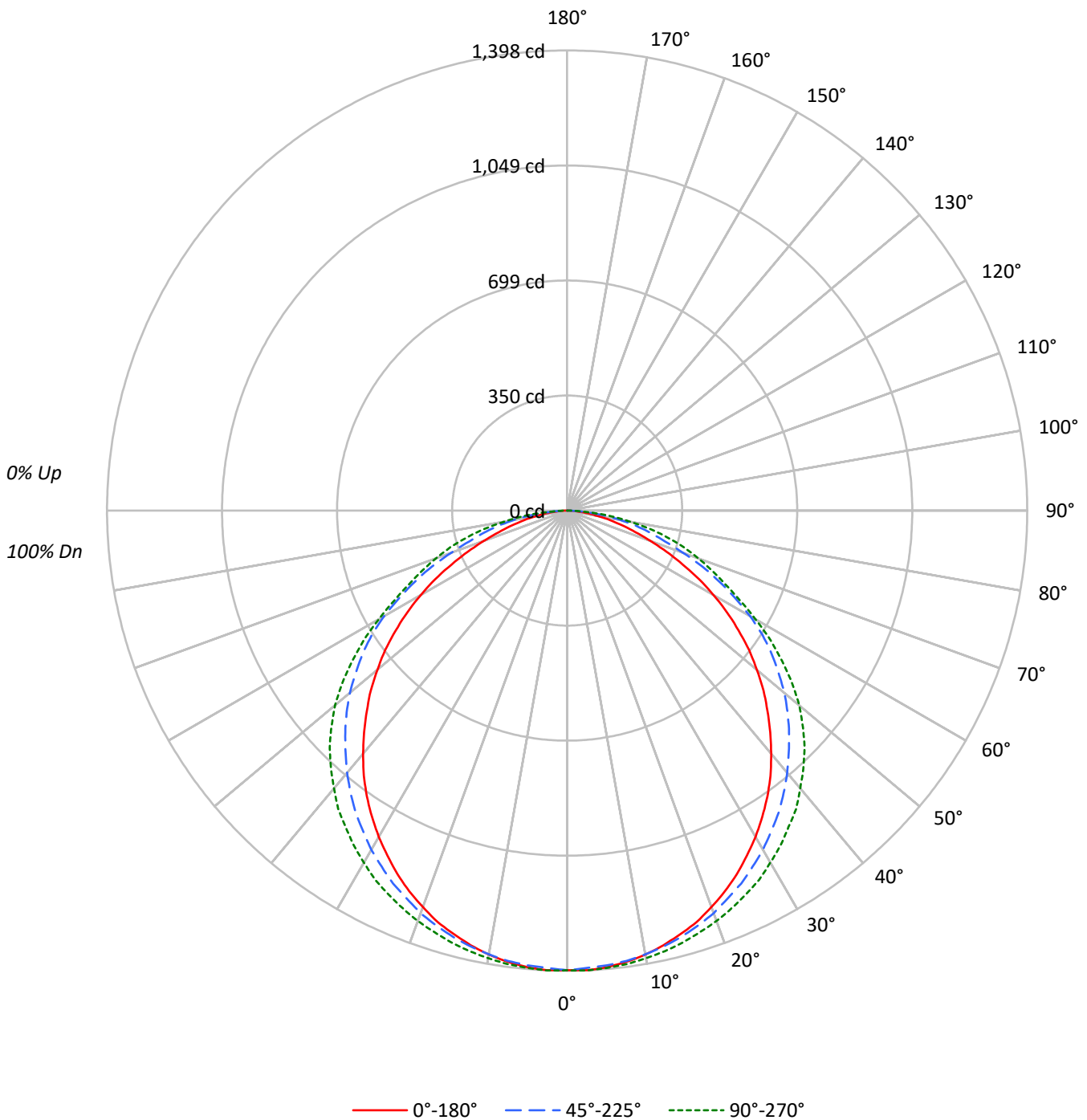
Lumens per Lamp: N/A
Luminaire Lumens: 4006.0 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.39
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P232316
CATALOG NUMBER: 24RDIA-40-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P232316

CATALOG NUMBER: 24RDIA-40-UNV-L830-CD1-U

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°	2255	2255	2255
5°	2257	2248	2260
10°	2246	2245	2264
15°	2226	2241	2270
20°	2202	2236	2280
25°	2172	2228	2291
30°	2134	2218	2302
35°	2090	2208	2312
40°	2032	2192	2322
45°	1965	2177	2329
50°	1890	2164	2311
55°	1790	2135	2243
60°	1661	2073	2136
65°	1479	1947	2026
70°	1272	1767	2003
75°	1076	1638	1969
80°	875	1522	1795
85°	617	1180	1415



TEST NUMBER: P232316

CATALOG NUMBER: 24RDIA-40-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.2	3.3
10°-20°	379.2	9.5
20°-30°	576.9	14.4
30°-40°	699.6	17.5
40°-50°	730.5	18.2
50°-60°	658.0	16.4
60°-70°	484.2	12.1
70°-80°	274.1	6.8
80°-90°	71.3	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°	1088.3	27.2
0°-40°	1787.9	44.6
0°-60°	3176.4	79.3
0°-90°	4006.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4006.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1396	1396	1396	1396	1396	
5°	1393	1390	1387	1393	1394	132
15°	1332	1334	1341	1353	1358	376
25°	1219	1227	1250	1277	1286	561
35°	1060	1078	1120	1158	1173	663
45°	860	893	954	1004	1020	664
55°	636	680	758	793	797	568
65°	387	456	510	524	530	385
75°	172	225	263	304	316	186
85°	33	46	64	72	76	42
90°	0	0	0	0	0	



TEST NUMBER: P232316

CATALOG NUMBER: 24RDIA-40-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1396.5	1396.5	1396.5	1396.5	1396.5
2.5°	1397.5	1394.5	1390.6	1395.5	1398.5
5°	1392.6	1389.6	1386.7	1392.6	1394.5
7.5°	1382.8	1380.8	1379.8	1386.7	1389.6
10°	1370.0	1368.1	1369.1	1378.9	1380.8
12.5°	1352.4	1353.4	1356.3	1367.1	1371.0
15°	1331.8	1333.8	1340.6	1353.4	1358.3
17.5°	1310.3	1311.2	1322.0	1337.7	1342.6
20°	1281.8	1287.7	1301.4	1320.1	1326.9
22.5°	1252.4	1259.3	1275.0	1299.5	1307.3
25°	1219.1	1227.0	1250.5	1276.9	1285.8
27.5°	1181.9	1193.6	1220.1	1251.5	1264.2
30°	1144.6	1157.4	1189.7	1223.0	1234.8
32.5°	1103.5	1117.2	1154.4	1192.7	1206.4
35°	1060.4	1078.0	1120.1	1158.4	1173.1
37.5°	1015.3	1033.9	1080.9	1125.0	1142.7
40°	964.3	987.8	1039.8	1086.8	1101.5
42.5°	913.4	941.8	996.7	1046.6	1062.3
45°	860.4	892.8	953.5	1003.5	1020.2
47.5°	809.5	841.8	908.5	957.5	971.2
50°	752.6	791.8	861.4	908.5	920.2
52.5°	696.8	737.0	809.5	854.6	861.4
55°	636.0	680.1	758.5	792.8	796.7
57.5°	576.2	625.2	703.6	731.1	732.1
60°	514.5	568.4	641.9	661.5	661.5
62.5°	452.8	514.5	575.3	594.9	592.9
65°	387.1	455.7	509.6	524.3	530.2
67.5°	326.3	399.8	444.9	461.6	476.3
70°	269.5	342.0	374.4	408.7	424.3
72.5°	217.6	286.2	311.6	360.6	372.4
75°	172.5	225.4	262.6	303.8	315.6
77.5°	133.3	167.6	214.6	249.9	256.8
80°	94.1	115.6	163.7	188.2	193.1
82.5°	62.7	79.4	113.7	131.3	137.2
85°	33.3	46.1	63.7	72.5	76.4
87.5°	12.7	18.6	21.6	23.5	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)