

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: P232319

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232319
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-L850-CD1-U
Description: METALUX 2X4 OVATION LED TROFFER
AIR VENTED VERSION
Light Source: (392) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

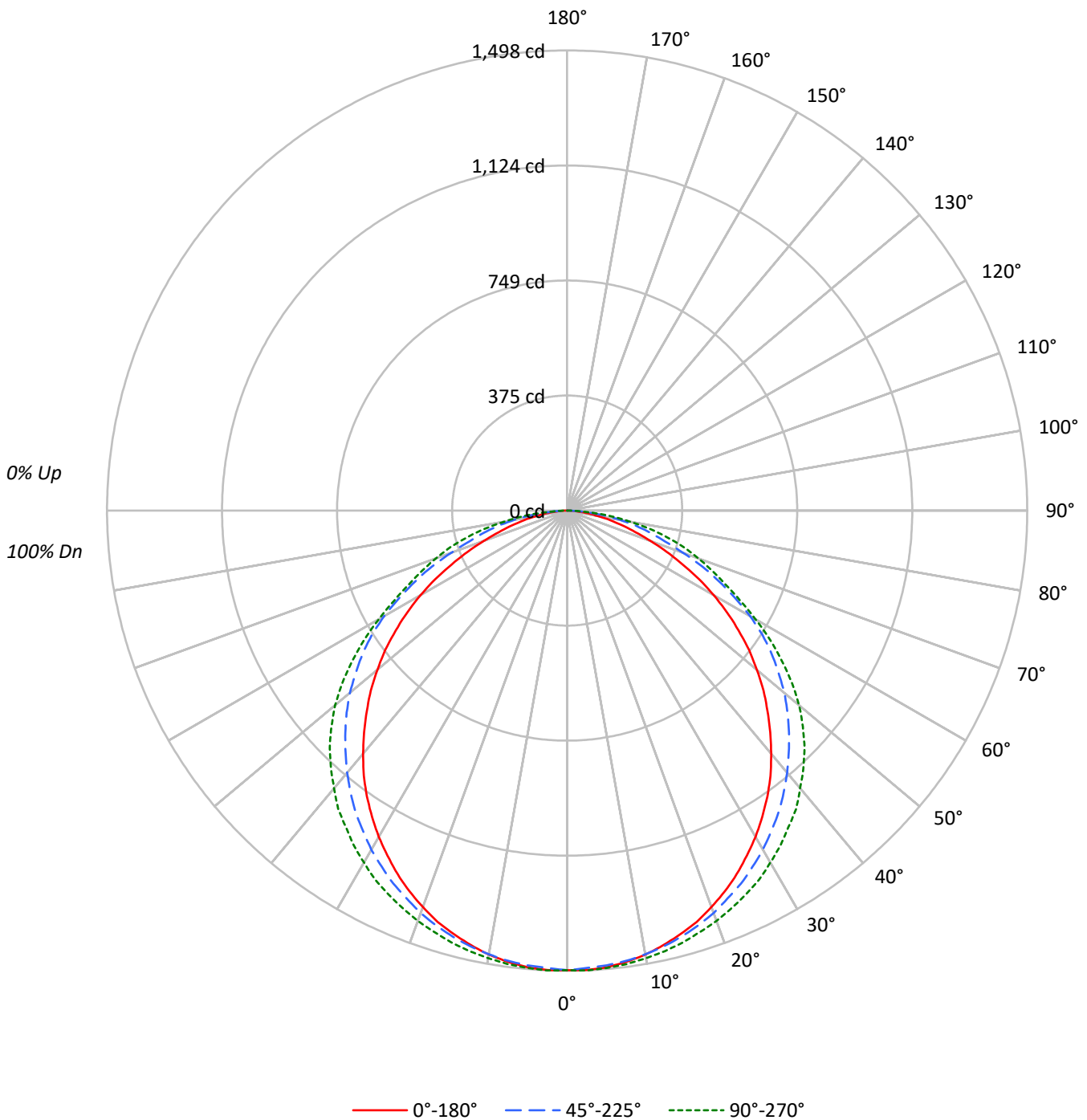
Lumens per Lamp: N/A
Luminaire Lumens: 4292.0 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.39
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')
CIE Type: Direct

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°	2416	2416	2416
5°	2418	2408	2422
10°	2406	2405	2425
15°	2385	2401	2432
20°	2360	2396	2443
25°	2327	2387	2454
30°	2286	2377	2466
35°	2239	2365	2477
40°	2178	2348	2487
45°	2105	2333	2496
50°	2026	2318	2476
55°	1918	2288	2403
60°	1780	2221	2289
65°	1584	2086	2170
70°	1363	1893	2146
75°	1153	1755	2109
80°	937	1630	1923
85°	661	1263	1517



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.6	3.3
10°-20°	406.3	9.5
20°-30°	618.1	14.4
30°-40°	749.5	17.5
40°-50°	782.7	18.2
50°-60°	705.0	16.4
60°-70°	518.7	12.1
70°-80°	293.6	6.8
80°-90°	76.4	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°	1166.0	27.2
0°-40°	1915.5	44.6
0°-60°	3403.2	79.3
0°-90°	4292.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4292.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1496	1496	1496	1496	1496	
5°	1492	1489	1486	1492	1494	142
15°	1427	1429	1436	1450	1455	403
25°	1306	1314	1340	1368	1378	601
35°	1136	1155	1200	1241	1257	710
45°	922	956	1022	1075	1093	712
55°	681	729	813	849	854	609
65°	415	488	546	562	568	413
75°	185	242	281	326	338	199
85°	36	49	68	78	82	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1496.2	1496.2	1496.2	1496.2	1496.2
2.5°	1497.2	1494.1	1489.9	1495.1	1498.3
5°	1492.0	1488.8	1485.7	1492.0	1494.1
7.5°	1481.5	1479.4	1478.3	1485.7	1488.8
10°	1467.8	1465.7	1466.8	1477.3	1479.4
12.5°	1448.9	1450.0	1453.1	1464.7	1468.9
15°	1426.9	1429.0	1436.3	1450.0	1455.2
17.5°	1403.8	1404.8	1416.4	1433.2	1438.4
20°	1373.3	1379.6	1394.3	1414.3	1421.6
22.5°	1341.8	1349.2	1366.0	1392.2	1400.6
25°	1306.1	1314.5	1339.7	1368.1	1377.5
27.5°	1266.3	1278.9	1307.2	1340.8	1354.4
30°	1226.4	1240.0	1274.7	1310.3	1322.9
32.5°	1182.3	1197.0	1236.9	1277.8	1292.5
35°	1136.1	1155.0	1200.1	1241.1	1256.8
37.5°	1087.8	1107.7	1158.1	1205.4	1224.3
40°	1033.2	1058.4	1114.0	1164.4	1180.2
42.5°	978.6	1009.0	1067.8	1121.4	1138.2
45°	921.9	956.5	1021.6	1075.2	1093.0
47.5°	867.3	901.9	973.3	1025.8	1040.5
50°	806.4	848.4	922.9	973.3	985.9
52.5°	746.5	789.6	867.3	915.6	922.9
55°	681.4	728.7	812.7	849.4	853.6
57.5°	617.4	669.9	753.9	783.3	784.3
60°	551.2	609.0	687.7	708.7	708.7
62.5°	485.1	551.2	616.3	637.3	635.2
65°	414.7	488.2	546.0	561.7	568.0
67.5°	349.6	428.4	476.7	494.5	510.3
70°	288.7	366.4	401.1	437.8	454.6
72.5°	233.1	306.6	333.9	386.4	399.0
75°	184.8	241.5	281.4	325.5	338.1
77.5°	142.8	179.5	229.9	267.7	275.1
80°	100.8	123.9	175.3	201.6	206.8
82.5°	67.2	85.0	121.8	140.7	147.0
85°	35.7	49.3	68.2	77.7	81.9
87.5°	13.6	19.9	23.1	25.2	26.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)