

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: P232317

Luminaire Tested: **24RDIA-40-UNV-L835-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232317  
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-L835-CD1-U  
Description: METALUX 2X4 OVATION LED TROFFER  
AIR VENTED VERSION  
Light Source: (392) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

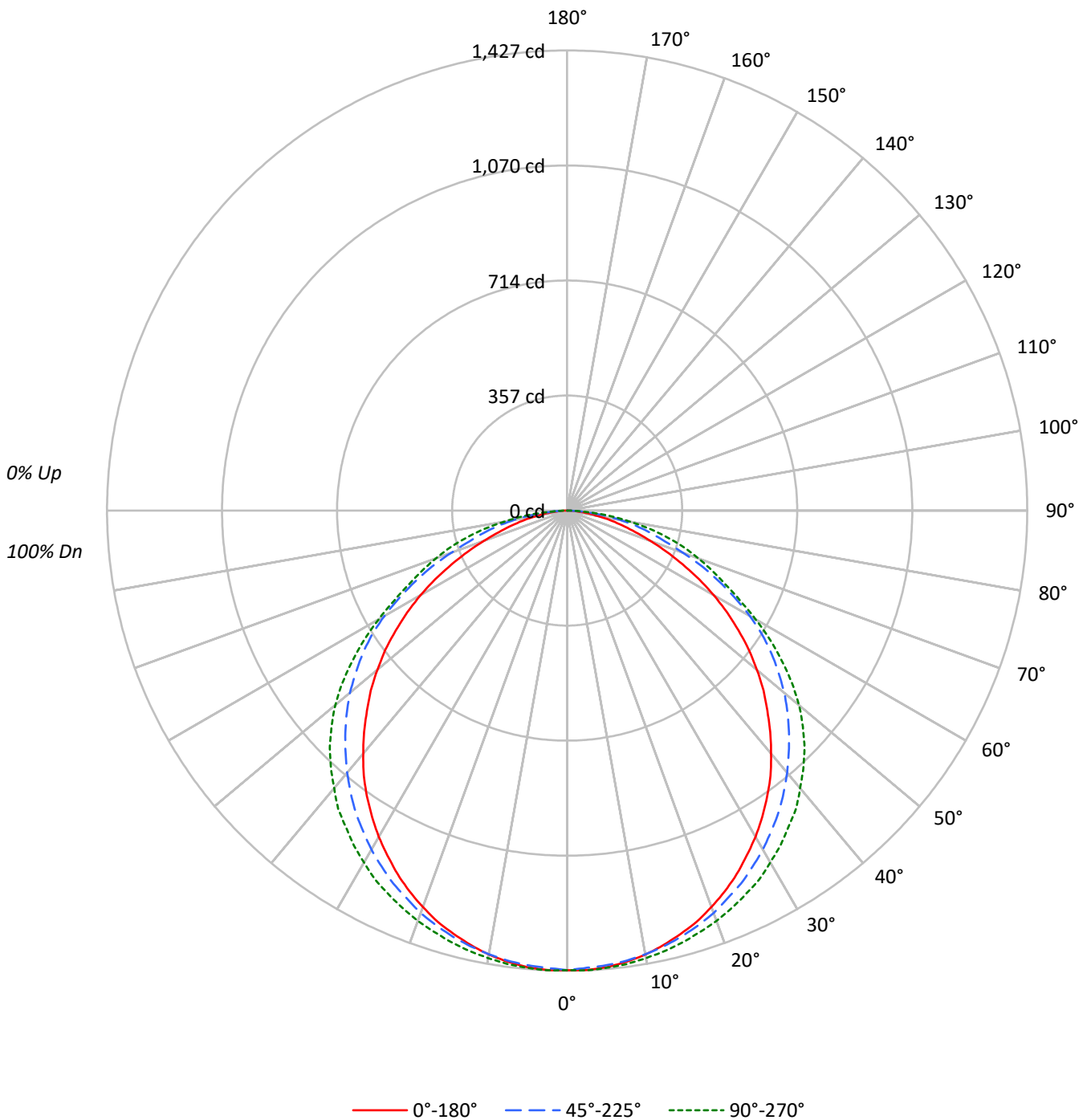
Lumens per Lamp: N/A  
Luminaire Lumens: 4088.0 lumens  
Efficiency: N/A  
Efficacy: 102.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.39  
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')  
CIE Type: Direct

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



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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°	2301	2301	2301
5°	2303	2294	2306
10°	2292	2291	2310
15°	2272	2287	2317
20°	2248	2282	2327
25°	2216	2273	2338
30°	2178	2264	2349
35°	2133	2253	2360
40°	2074	2236	2369
45°	2005	2222	2377
50°	1929	2208	2359
55°	1827	2179	2289
60°	1695	2115	2180
65°	1509	1987	2067
70°	1298	1803	2044
75°	1098	1672	2009
80°	893	1553	1832
85°	630	1204	1445



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.9	3.3
10°-20°	387.0	9.5
20°-30°	588.7	14.4
30°-40°	713.9	17.5
40°-50°	745.5	18.2
50°-60°	671.5	16.4
60°-70°	494.0	12.1
70°-80°	279.7	6.8
80°-90°	72.8	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°	1110.6	27.2
0°-40°	1824.5	44.6
0°-60°	3241.5	79.3
0°-90°	4088.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4088.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1425	1425	1425	1425	1425	
5°	1421	1418	1415	1421	1423	135
15°	1359	1361	1368	1381	1386	383
25°	1244	1252	1276	1303	1312	573
35°	1082	1100	1143	1182	1197	676
45°	878	911	973	1024	1041	678
55°	649	694	774	809	813	580
65°	395	465	520	535	541	393
75°	176	230	268	310	322	190
85°	34	47	65	74	78	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1425.1	1425.1	1425.1	1425.1	1425.1
2.5°	1426.1	1423.1	1419.1	1424.1	1427.1
5°	1421.1	1418.1	1415.1	1421.1	1423.1
7.5°	1411.1	1409.1	1408.1	1415.1	1418.1
10°	1398.1	1396.1	1397.1	1407.1	1409.1
12.5°	1380.1	1381.1	1384.1	1395.1	1399.1
15°	1359.1	1361.1	1368.1	1381.1	1386.1
17.5°	1337.1	1338.1	1349.1	1365.1	1370.1
20°	1308.1	1314.1	1328.1	1347.1	1354.1
22.5°	1278.1	1285.1	1301.1	1326.1	1334.1
25°	1244.1	1252.1	1276.1	1303.1	1312.1
27.5°	1206.1	1218.1	1245.1	1277.1	1290.1
30°	1168.1	1181.1	1214.1	1248.1	1260.1
32.5°	1126.1	1140.1	1178.1	1217.1	1231.1
35°	1082.1	1100.1	1143.1	1182.1	1197.1
37.5°	1036.1	1055.1	1103.1	1148.1	1166.1
40°	984.1	1008.1	1061.1	1109.1	1124.1
42.5°	932.1	961.1	1017.1	1068.1	1084.1
45°	878.0	911.0	973.1	1024.1	1041.1
47.5°	826.0	859.0	927.1	977.1	991.1
50°	768.0	808.0	879.0	927.1	939.1
52.5°	711.0	752.0	826.0	872.0	879.0
55°	649.0	694.0	774.0	809.0	813.0
57.5°	588.0	638.0	718.0	746.0	747.0
60°	525.0	580.0	655.0	675.0	675.0
62.5°	462.0	525.0	587.0	607.0	605.0
65°	395.0	465.0	520.0	535.0	541.0
67.5°	333.0	408.0	454.0	471.0	486.0
70°	275.0	349.0	382.0	417.0	433.0
72.5°	222.0	292.0	318.0	368.0	380.0
75°	176.0	230.0	268.0	310.0	322.0
77.5°	136.0	171.0	219.0	255.0	262.0
80°	96.0	118.0	167.0	192.0	197.0
82.5°	64.0	81.0	116.0	134.0	140.0
85°	34.0	47.0	65.0	74.0	78.0
87.5°	13.0	19.0	22.0	24.0	25.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)