

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: P239011

Luminaire Tested: **24ENA-LD2-45-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239011
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-234-34)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24ENA-LD2-45-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4087.9 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.67' x L: 3.83' x H: 0')
CIE Type: Direct

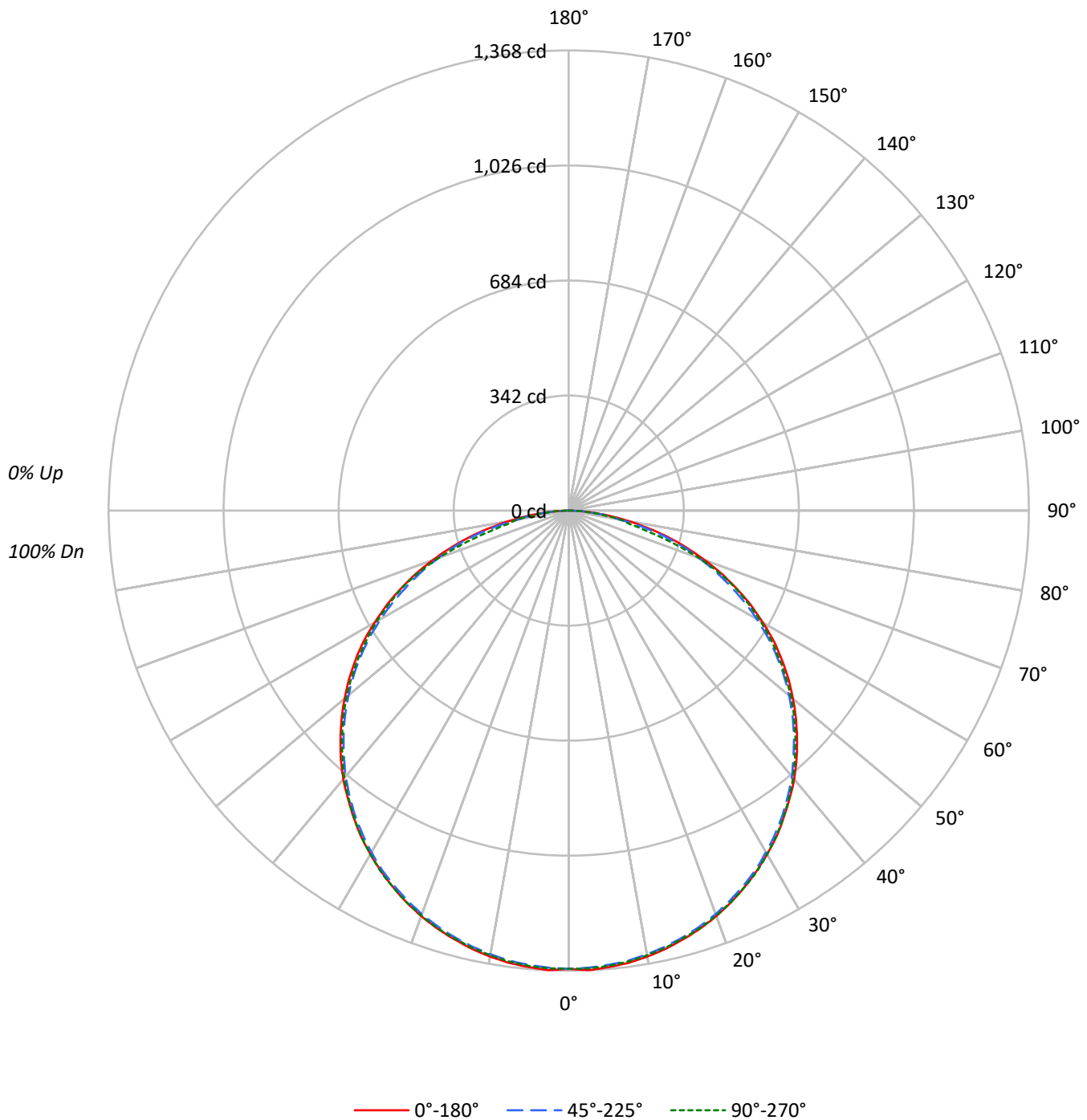
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	109	104	99	95	106	101	97	94		97	94	91			93	90	88			90
2	98	90	83	77	96	88	82	76		84	79	74			81	77	73			78
3	90	79	70	64	87	77	69	63		74	67	62			71	66	61			69
4	82	70	61	54	79	68	60	53		66	58	53			63	57	52			61
5	75	62	53	46	73	61	52	46		59	51	45			57	50	45			55
6	69	56	47	40	67	55	46	40		53	45	40			51	44	39			50
7	64	50	42	35	62	50	41	35		48	40	35			47	40	35			45
8	60	46	37	31	58	45	37	31		44	36	31			43	36	31			41
9	56	42	34	28	54	42	34	28		40	33	28			39	33	28			38
10	52	39	31	26	51	38	31	25		37	30	25			36	30	25			35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2295	2295	2295
5°	2304	2292	2298
10°	2303	2291	2297
15°	2300	2290	2296
20°	2300	2289	2297
25°	2297	2286	2297
30°	2295	2281	2295
35°	2292	2277	2289
40°	2294	2269	2282
45°	2287	2255	2271
50°	2281	2241	2261
55°	2273	2218	2240
60°	2245	2176	2222
65°	2200	2108	2186
70°	2121	2032	2028
75°	1996	1907	1612
80°	1757	1491	1533
85°	1386	1305	1206



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.0	3.2
10°-20°	371.1	9.1
20°-30°	567.9	13.9
30°-40°	694.1	17.0
40°-50°	733.5	17.9
50°-60°	679.6	16.6
60°-70°	532.4	13.0
70°-80°	301.0	7.4
80°-90°	79.3	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°	1068.0	26.1
0°-40°	1762.1	43.1
0°-60°	3175.2	77.7
0°-90°	4087.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4087.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1362	1358	1356	1355	1359	130
15°	1319	1314	1313	1312	1316	373
25°	1236	1231	1230	1230	1236	570
35°	1115	1110	1107	1107	1113	698
45°	960	953	946	946	953	741
55°	774	765	755	757	763	691
65°	552	542	529	536	548	546
75°	307	298	293	261	248	323
85°	72	68	68	64	62	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1362.3	1362.3	1362.3	1362.3	1362.3
2.5°	1367.5	1361.5	1359.8	1358.1	1362.3
5°	1362.3	1358.1	1355.5	1354.7	1358.9
7.5°	1356.4	1351.2	1349.5	1347.8	1352.1
10°	1346.1	1341.0	1339.3	1338.4	1342.7
12.5°	1334.2	1328.2	1327.3	1326.5	1330.7
15°	1318.8	1313.7	1312.8	1311.9	1316.2
17.5°	1302.6	1297.4	1295.7	1294.9	1300.8
20°	1282.9	1277.8	1276.9	1276.1	1281.2
22.5°	1260.7	1255.6	1253.9	1254.7	1259.8
25°	1235.9	1230.8	1229.9	1229.9	1235.9
27.5°	1208.6	1203.5	1203.5	1203.5	1210.3
30°	1179.6	1175.3	1172.7	1173.6	1179.6
32.5°	1149.7	1142.8	1141.1	1142.0	1148.0
35°	1114.6	1109.5	1107.0	1107.0	1112.9
37.5°	1078.8	1073.6	1070.2	1070.2	1076.2
40°	1042.9	1035.2	1031.8	1030.1	1037.8
42.5°	1002.8	996.8	989.1	989.1	995.9
45°	960.0	953.2	946.4	946.4	953.2
47.5°	916.5	909.6	902.0	902.0	908.8
50°	870.4	863.5	855.0	855.0	862.7
52.5°	823.4	815.7	806.3	805.4	813.1
55°	773.8	765.3	755.1	756.8	762.7
57.5°	723.4	712.3	702.1	702.1	711.5
60°	666.2	656.8	645.7	647.4	659.4
62.5°	611.6	599.6	588.5	592.8	603.0
65°	551.8	541.5	528.7	535.5	548.4
67.5°	492.8	481.7	471.5	480.0	486.0
70°	430.5	420.2	412.5	412.5	411.7
72.5°	368.1	358.7	357.0	340.8	330.5
75°	306.6	298.1	293.0	261.4	247.7
77.5°	242.6	240.0	223.8	190.5	186.2
80°	181.1	182.8	153.7	154.6	158.0
82.5°	124.7	122.1	115.3	110.2	108.5
85°	71.7	67.5	67.5	64.1	62.4
87.5°	23.9	26.5	26.5	26.5	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)