

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: P238885

Luminaire Tested: **24EN-LD2-40-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238885
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: 24EN-LD2-40-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (224)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4078.8 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

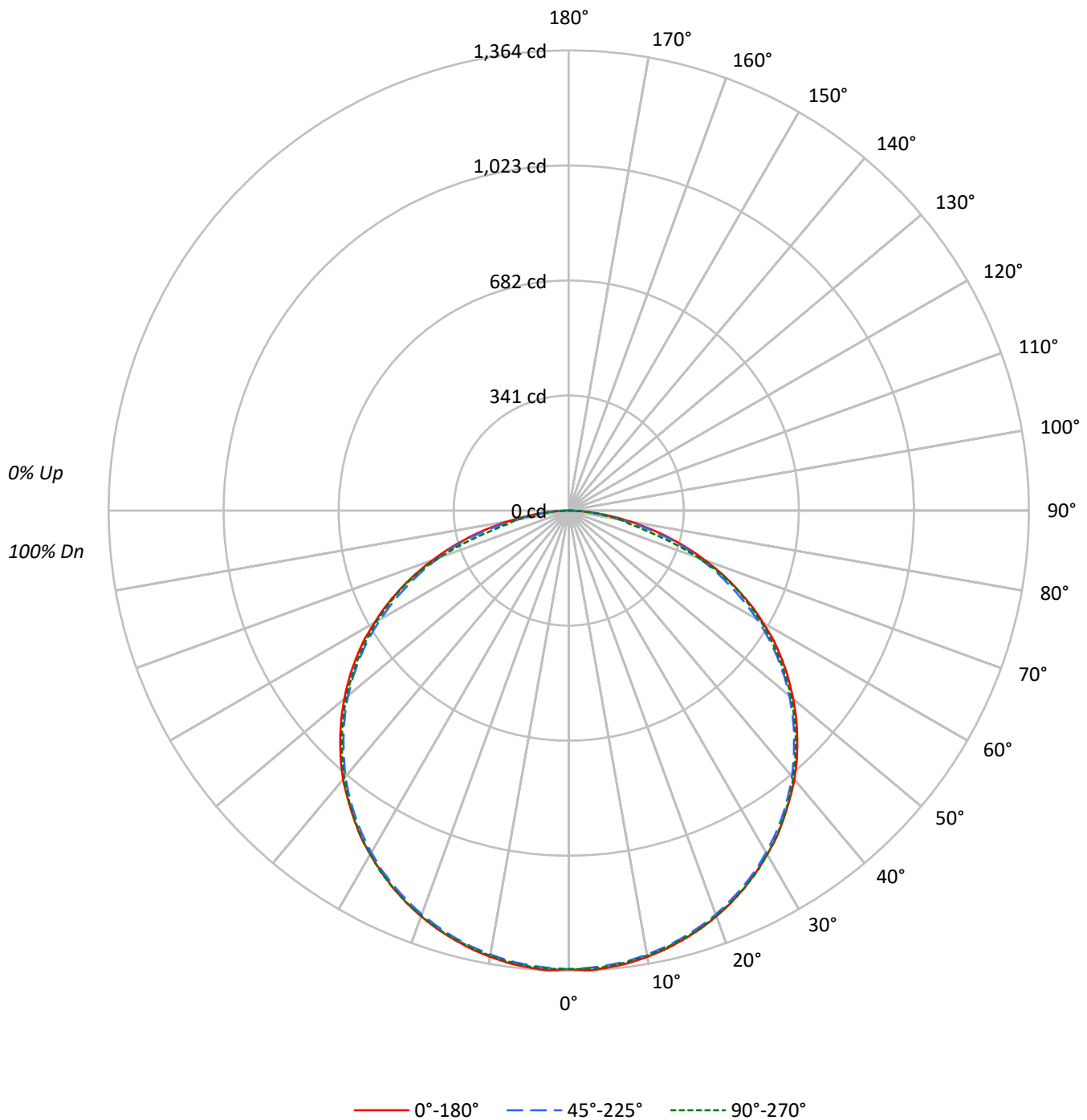
Input Watts (W): 33.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2082	2082	2082
5°	2090	2079	2085
10°	2089	2078	2084
15°	2086	2077	2082
20°	2086	2077	2084
25°	2084	2074	2084
30°	2081	2069	2081
35°	2080	2065	2076
40°	2081	2058	2070
45°	2075	2045	2060
50°	2069	2033	2051
55°	2062	2012	2032
60°	2036	1974	2015
65°	1995	1912	1983
70°	1923	1843	1840
75°	1810	1730	1462
80°	1594	1353	1391
85°	1258	1183	1093



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.8	3.2
10°-20°	370.3	9.1
20°-30°	566.6	13.9
30°-40°	692.6	17.0
40°-50°	731.8	17.9
50°-60°	678.1	16.6
60°-70°	531.2	13.0
70°-80°	300.3	7.4
80°-90°	79.1	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°	1065.6	26.1
0°-40°	1758.2	43.1
0°-60°	3168.1	77.7
0°-90°	4078.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4078.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1359	1359	1359	1359	1359	
5°	1359	1355	1352	1352	1356	129
15°	1316	1311	1310	1309	1313	372
25°	1233	1228	1227	1227	1233	569
35°	1112	1107	1104	1104	1110	696
45°	958	951	944	944	951	739
55°	772	764	753	755	761	690
65°	550	540	528	534	547	544
75°	306	297	292	261	247	322
85°	72	67	67	64	62	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1359.3	1359.3	1359.3	1359.3	1359.3
2.5°	1364.4	1358.4	1356.7	1355.0	1359.3
5°	1359.3	1355.0	1352.5	1351.6	1355.9
7.5°	1353.3	1348.2	1346.5	1344.8	1349.1
10°	1343.1	1338.0	1336.3	1335.4	1339.7
12.5°	1331.2	1325.2	1324.4	1323.5	1327.8
15°	1315.8	1310.7	1309.9	1309.0	1313.3
17.5°	1299.6	1294.5	1292.8	1292.0	1297.9
20°	1280.0	1274.9	1274.1	1273.2	1278.3
22.5°	1257.9	1252.8	1251.1	1251.9	1257.0
25°	1233.2	1228.1	1227.2	1227.2	1233.2
27.5°	1205.9	1200.8	1200.8	1200.8	1207.6
30°	1176.9	1172.7	1170.1	1171.0	1176.9
32.5°	1147.1	1140.3	1138.6	1139.4	1145.4
35°	1112.2	1107.0	1104.5	1104.5	1110.4
37.5°	1076.4	1071.2	1067.8	1067.8	1073.8
40°	1040.6	1032.9	1029.5	1027.8	1035.5
42.5°	1000.5	994.5	986.9	986.9	993.7
45°	957.9	951.1	944.3	944.3	951.1
47.5°	914.4	907.6	899.9	899.9	906.8
50°	868.4	861.6	853.1	853.1	860.7
52.5°	821.5	813.9	804.5	803.6	811.3
55°	772.1	763.6	753.4	755.1	761.0
57.5°	721.8	710.8	700.5	700.5	709.9
60°	664.7	655.4	644.3	646.0	657.9
62.5°	610.2	598.3	587.2	591.4	601.7
65°	550.5	540.3	527.5	534.3	547.1
67.5°	491.7	480.7	470.4	478.9	484.9
70°	429.5	419.3	411.6	411.6	410.8
72.5°	367.3	357.9	356.2	340.0	329.8
75°	305.9	297.4	292.3	260.8	247.1
77.5°	242.0	239.5	223.3	190.0	185.8
80°	180.7	182.4	153.4	154.3	157.7
82.5°	124.4	121.9	115.1	109.9	108.2
85°	71.6	67.3	67.3	63.9	62.2
87.5°	23.9	26.4	26.4	26.4	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)