

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: P183159

Luminaire Tested: **12EN-LD2-39-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183159
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34480)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12EN-LD2-39-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 1X2 TROFFER

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3855.7 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.92' x L: 1.92' x H: 0')
CIE Type: Direct

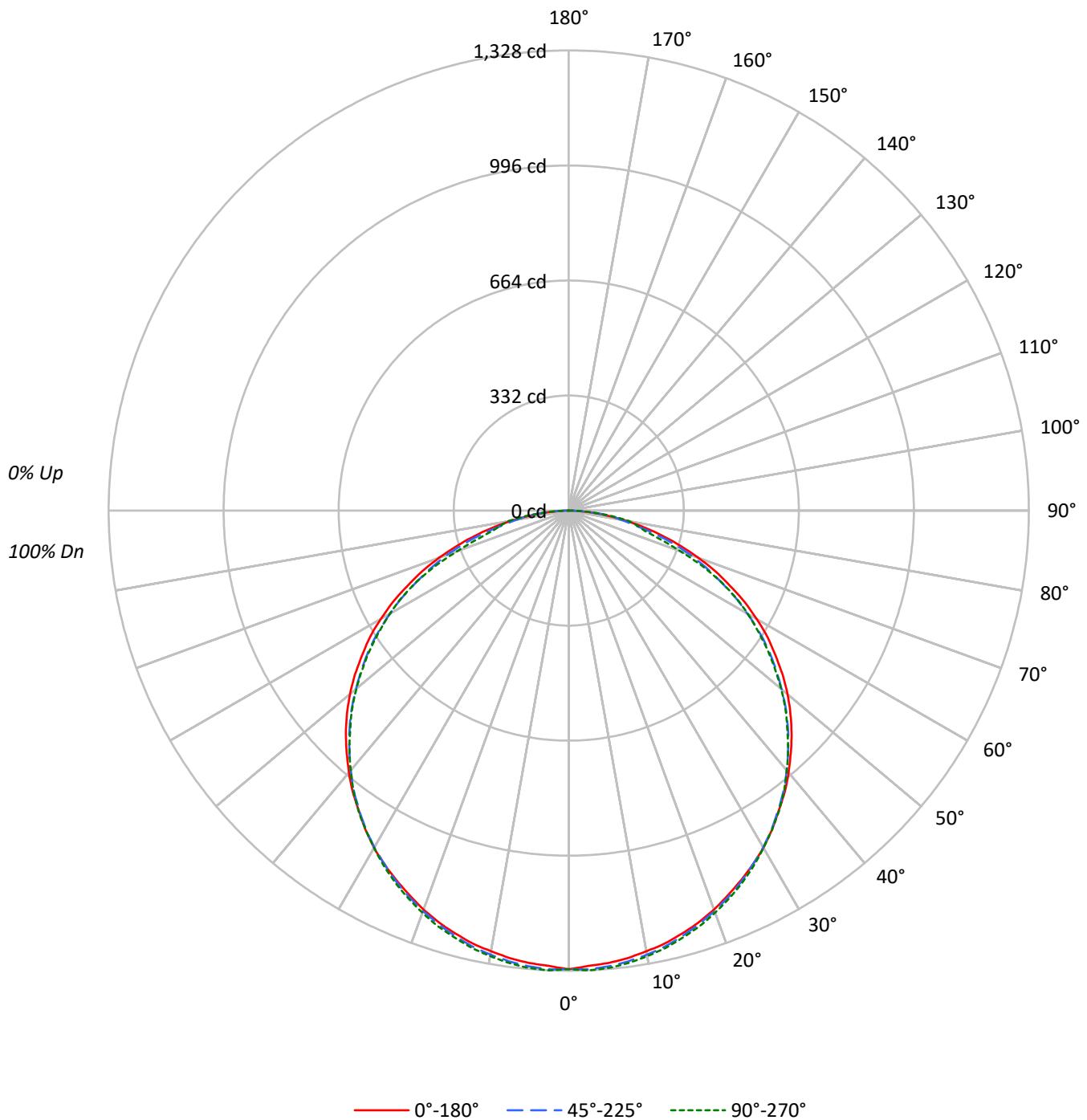
Input Watts (W): 35.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83		
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69		
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58		
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49		
5	75	62	53	46	73	61	53	46	59	52	46	57	50	45	55	49	45	43		
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37		
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33		
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29		
9	56	42	34	29	55	42	34	28	41	33	28	40	33	28	39	32	28	26		
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8108	8108	8108
5°	8060	8120	8149
10°	8033	8094	8123
15°	8016	8058	8088
20°	7989	8020	8052
25°	7956	7978	8010
30°	7951	7939	7951
35°	7899	7887	7911
40°	7894	7829	7829
45°	7882	7756	7728
50°	7857	7642	7627
55°	7774	7532	7481
60°	7674	7299	7320
65°	7445	6979	7002
70°	7124	6690	6114
75°	6592	6022	5373
80°	5910	5342	6248
85°	4752	5321	5321



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.3	3.2
10°-20°	358.5	9.3
20°-30°	544.1	14.1
30°-40°	660.6	17.1
40°-50°	692.5	18.0
50°-60°	633.5	16.4
60°-70°	485.1	12.6
70°-80°	272.3	7.1
80°-90°	83.9	2.2
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°	1027.8	26.7
0°-40°	1688.5	43.8
0°-60°	3014.5	78.2
0°-90°	3855.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3855.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1324	1324	1324	1324	1324	
5°	1311	1314	1320	1324	1325	125
15°	1264	1266	1270	1274	1275	357
25°	1177	1177	1180	1182	1185	543
35°	1056	1056	1055	1055	1058	662
45°	910	905	895	892	892	701
55°	728	723	705	697	700	651
65°	514	502	481	485	483	509
75°	278	269	254	230	227	296
85°	68	69	76	76	76	80
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1323.5	1323.5	1323.5	1323.5	1323.5
2.5°	1315.5	1318.7	1325.1	1328.3	1328.3
5°	1310.6	1313.9	1320.3	1323.5	1325.1
7.5°	1302.6	1305.8	1312.2	1317.1	1317.1
10°	1291.3	1294.5	1301.0	1305.8	1305.8
12.5°	1280.0	1281.7	1288.1	1291.3	1292.9
15°	1263.9	1265.5	1270.4	1273.6	1275.2
17.5°	1246.2	1246.2	1251.1	1254.3	1257.5
20°	1225.3	1226.9	1230.1	1233.3	1235.0
22.5°	1201.1	1202.8	1206.0	1209.2	1210.8
25°	1177.0	1177.0	1180.2	1181.8	1185.0
27.5°	1151.2	1151.2	1151.2	1152.8	1156.1
30°	1123.9	1122.2	1122.2	1120.6	1123.9
32.5°	1091.7	1091.7	1090.0	1088.4	1091.7
35°	1056.2	1056.2	1054.6	1054.6	1057.8
37.5°	1024.0	1022.4	1019.2	1016.0	1020.8
40°	987.0	985.4	978.9	975.7	978.9
42.5°	948.4	945.1	937.1	933.9	937.1
45°	909.7	904.9	895.2	892.0	892.0
47.5°	867.9	863.0	850.1	845.3	848.5
50°	824.4	817.9	801.8	798.6	800.2
52.5°	777.7	769.6	753.5	750.3	750.3
55°	727.8	722.9	705.2	697.2	700.4
57.5°	681.1	671.4	652.1	642.4	647.3
60°	626.3	615.1	595.7	590.9	597.4
62.5°	573.2	560.3	541.0	537.8	542.6
65°	513.6	502.4	481.4	484.6	483.0
67.5°	458.9	446.0	428.3	420.2	415.4
70°	397.7	386.4	373.5	351.0	341.3
72.5°	338.1	328.5	315.6	285.0	278.5
75°	278.5	268.9	254.4	230.2	227.0
77.5°	222.2	215.8	194.8	194.8	202.9
80°	167.5	164.2	151.4	169.1	177.1
82.5°	112.7	109.5	122.4	128.8	127.2
85°	67.6	69.2	75.7	75.7	75.7
87.5°	29.0	32.2	33.8	33.8	35.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)