

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: P238799

Luminaire Tested: **22EN-LD2-39-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238799
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-118-11)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22EN-LD2-39-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 2X2 LED TROFFER
STANDARD OPTION
Light Source: (168)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4058.2 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

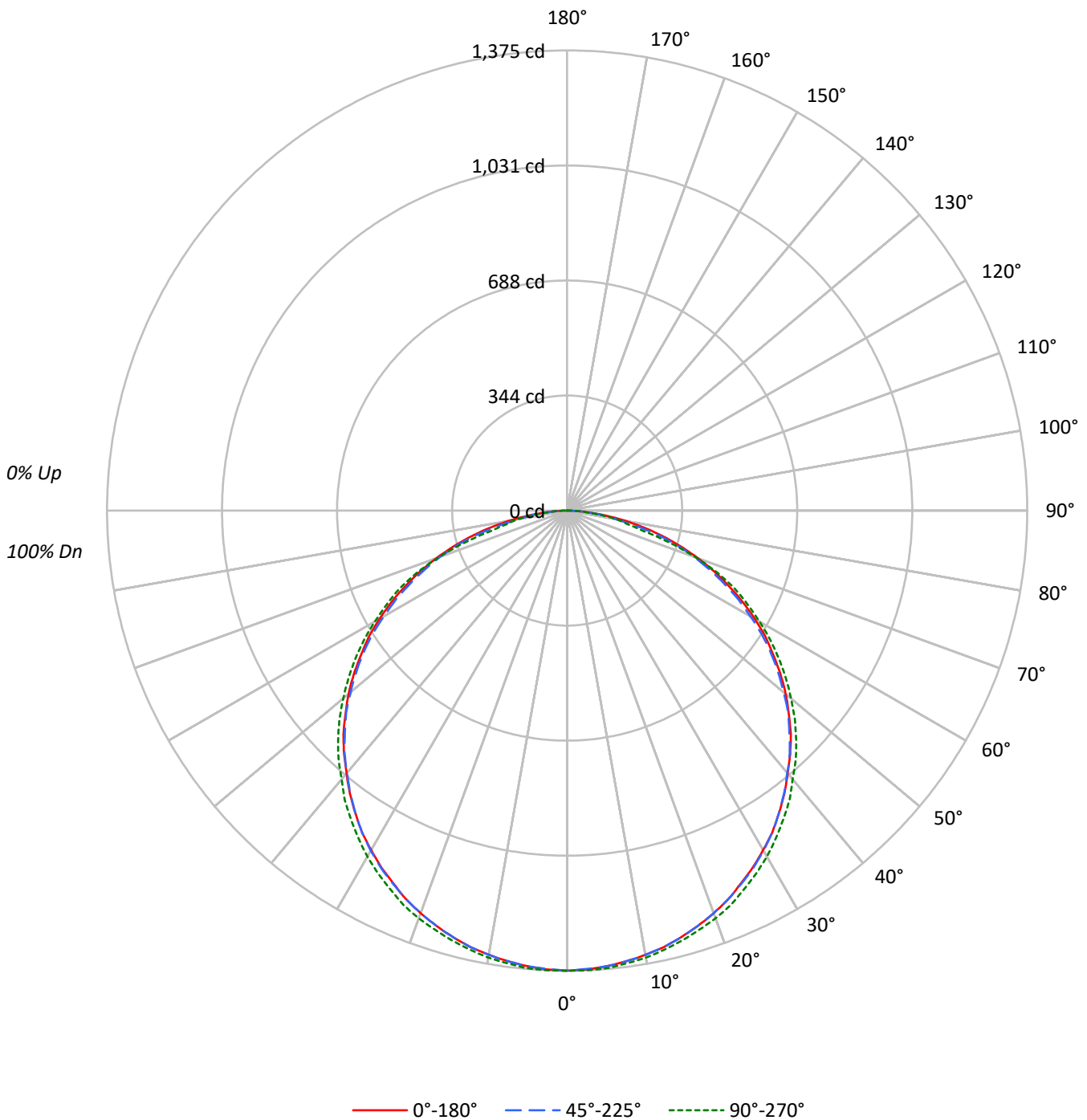
Input Watts (W): 33.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	99	95	106	101	98	94	97	94	91	93	91	88	90	88	86	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37					37			
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33					33			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4403	4403	4403
5°	4393	4393	4413
10°	4384	4384	4411
15°	4374	4374	4408
20°	4363	4363	4419
25°	4342	4349	4415
30°	4331	4339	4415
35°	4314	4314	4403
40°	4287	4278	4381
45°	4281	4253	4384
50°	4249	4208	4351
55°	4199	4153	4314
60°	4146	4054	4251
65°	4033	3924	4189
70°	3887	3772	3829
75°	3661	3432	2924
80°	3222	2691	2805
85°	2341	2263	2190



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	3.2
10°-20°	373.2	9.2
20°-30°	569.7	14.0
30°-40°	693.9	17.1
40°-50°	730.4	18.0
50°-60°	672.5	16.6
60°-70°	523.4	12.9
70°-80°	290.5	7.2
80°-90°	74.7	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°	1072.9	26.4
0°-40°	1766.8	43.5
0°-60°	3169.6	78.1
0°-90°	4058.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4058.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1375	1375	1375	1375	1375	
5°	1366	1366	1366	1371	1373	130
15°	1319	1319	1319	1325	1330	372
25°	1229	1231	1231	1241	1249	567
35°	1104	1104	1104	1116	1126	691
45°	945	939	939	954	968	728
55°	752	750	744	756	773	673
65°	532	526	518	534	553	528
75°	296	290	277	247	236	312
85°	64	60	62	60	60	80
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1374.8	1374.8	1374.8	1374.8	1374.8
2.5°	1372.7	1370.7	1370.7	1374.8	1374.8
5°	1366.5	1366.5	1366.5	1370.7	1372.7
7.5°	1358.3	1358.3	1358.3	1364.5	1364.5
10°	1348.0	1346.0	1348.0	1352.2	1356.3
12.5°	1335.7	1333.7	1335.7	1339.8	1343.9
15°	1319.3	1319.3	1319.3	1325.4	1329.6
17.5°	1300.8	1298.7	1300.8	1307.0	1313.1
20°	1280.2	1280.2	1280.2	1288.5	1296.7
22.5°	1257.6	1255.6	1257.6	1267.9	1276.1
25°	1228.9	1230.9	1230.9	1241.2	1249.4
27.5°	1202.1	1200.1	1204.2	1212.4	1222.7
30°	1171.3	1171.3	1173.4	1183.7	1193.9
32.5°	1140.5	1138.4	1140.5	1150.8	1161.0
35°	1103.5	1103.5	1103.5	1115.8	1126.1
37.5°	1066.5	1064.5	1064.5	1076.8	1091.2
40°	1025.4	1023.4	1023.4	1037.8	1048.0
42.5°	986.4	984.3	984.3	996.7	1011.0
45°	945.3	939.1	939.1	953.5	967.9
47.5°	898.0	893.9	896.0	908.3	922.7
50°	852.8	846.6	844.6	859.0	873.4
52.5°	803.5	801.4	795.3	807.6	824.0
55°	752.1	750.1	743.9	756.2	772.7
57.5°	702.8	696.6	690.5	700.7	719.2
60°	647.3	641.1	632.9	647.3	663.7
62.5°	591.8	583.6	577.4	589.8	608.3
65°	532.2	526.1	517.8	534.3	552.8
67.5°	476.7	470.6	460.3	474.7	487.0
70°	415.1	406.9	402.8	404.8	408.9
72.5°	355.5	351.4	345.2	328.8	324.7
75°	295.9	289.7	277.4	246.6	236.3
77.5°	236.3	232.2	209.6	182.9	182.9
80°	174.7	172.6	145.9	150.0	152.1
82.5°	119.2	115.1	106.9	104.8	104.8
85°	63.7	59.6	61.6	59.6	59.6
87.5°	24.7	24.7	26.7	24.7	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)