

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: P238800

Luminaire Tested: **22EN-LD2-39-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238800
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-L850-CD1-U
Description: METALUX ENCOUNTER 2X2 LED TROFFER
STANDARD OPTION
Light Source: (168)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4416.6 lumens
Efficiency: N/A
Efficacy: 132.6 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

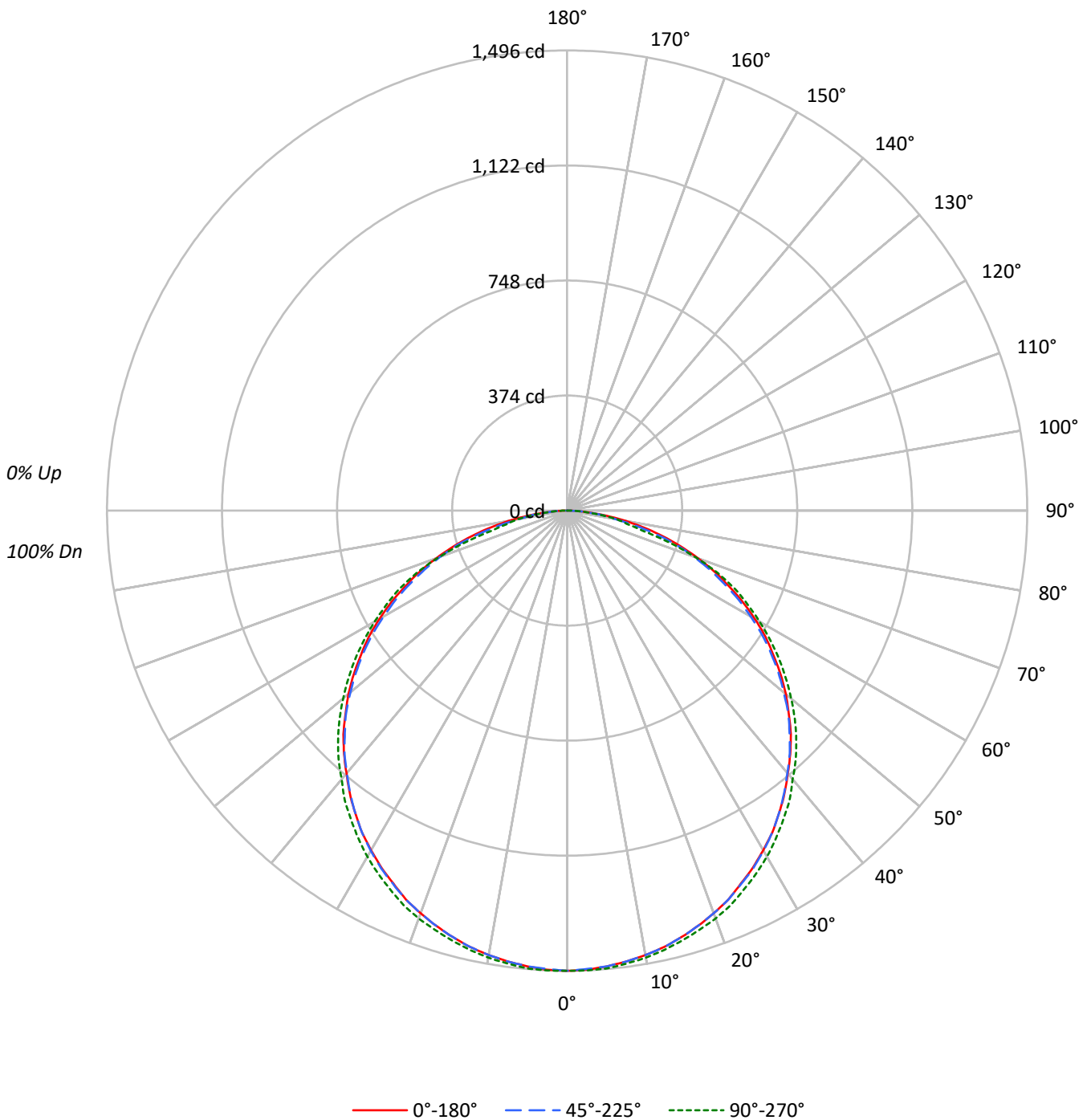
Input Watts (W): 33.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
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	98	94	97	94	91	93	91	88	90	88	86	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	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4792	4792	4792
5°	4781	4781	4803
10°	4771	4771	4800
15°	4760	4760	4797
20°	4748	4748	4809
25°	4726	4734	4805
30°	4714	4722	4805
35°	4695	4695	4792
40°	4665	4656	4768
45°	4659	4629	4771
50°	4624	4580	4736
55°	4570	4520	4695
60°	4512	4412	4627
65°	4389	4271	4559
70°	4230	4104	4168
75°	3984	3736	3182
80°	3506	2929	3052
85°	2546	2466	2385



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.5	3.2
10°-20°	406.2	9.2
20°-30°	620.0	14.0
30°-40°	755.2	17.1
40°-50°	794.9	18.0
50°-60°	731.8	16.6
60°-70°	569.6	12.9
70°-80°	316.2	7.2
80°-90°	81.2	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°	1167.7	26.4
0°-40°	1922.9	43.5
0°-60°	3449.6	78.1
0°-90°	4416.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4416.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1496	1496	1496	1496	1496	
5°	1487	1487	1487	1492	1494	141
15°	1436	1436	1436	1442	1447	405
25°	1337	1340	1340	1351	1360	617
35°	1201	1201	1201	1214	1226	752
45°	1029	1022	1022	1038	1053	792
55°	818	816	810	823	841	732
65°	579	572	564	582	602	574
75°	322	315	302	268	257	339
85°	69	65	67	65	65	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1496.2	1496.2	1496.2	1496.2	1496.2
2.5°	1494.0	1491.7	1491.7	1496.2	1496.2
5°	1487.2	1487.2	1487.2	1491.7	1494.0
7.5°	1478.3	1478.3	1478.3	1485.0	1485.0
10°	1467.1	1464.9	1467.1	1471.6	1476.1
12.5°	1453.7	1451.5	1453.7	1458.2	1462.6
15°	1435.8	1435.8	1435.8	1442.5	1447.0
17.5°	1415.7	1413.4	1415.7	1422.4	1429.1
20°	1393.3	1393.3	1393.3	1402.3	1411.2
22.5°	1368.7	1366.5	1368.7	1379.9	1388.8
25°	1337.4	1339.6	1339.6	1350.8	1359.8
27.5°	1308.3	1306.1	1310.6	1319.5	1330.7
30°	1274.8	1274.8	1277.0	1288.2	1299.4
32.5°	1241.2	1239.0	1241.2	1252.4	1263.6
35°	1201.0	1201.0	1201.0	1214.4	1225.6
37.5°	1160.7	1158.5	1158.5	1171.9	1187.6
40°	1116.0	1113.8	1113.8	1129.4	1140.6
42.5°	1073.5	1071.3	1071.3	1084.7	1100.3
45°	1028.8	1022.1	1022.1	1037.7	1053.4
47.5°	977.3	972.9	975.1	988.5	1004.2
50°	928.1	921.4	919.2	934.8	950.5
52.5°	874.5	872.2	865.5	878.9	896.8
55°	818.5	816.3	809.6	823.0	840.9
57.5°	764.9	758.2	751.4	762.6	782.8
60°	704.5	697.8	688.8	704.5	722.4
62.5°	644.1	635.2	628.4	641.9	662.0
65°	579.2	572.5	563.6	581.5	601.6
67.5°	518.9	512.1	501.0	516.6	530.0
70°	451.8	442.8	438.3	440.6	445.1
72.5°	386.9	382.4	375.7	357.8	353.4
75°	322.0	315.3	301.9	268.4	257.2
77.5°	257.2	252.7	228.1	199.0	199.0
80°	190.1	187.9	158.8	163.3	165.5
82.5°	129.7	125.2	116.3	114.1	114.1
85°	69.3	64.9	67.1	64.9	64.9
87.5°	26.8	26.8	29.1	26.8	26.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)