

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: P238803

Luminaire Tested: **22EN-LD2-43-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238803
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-LD2-43-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: 4568.1 lumens
Efficiency: N/A
Efficacy: 119.3 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

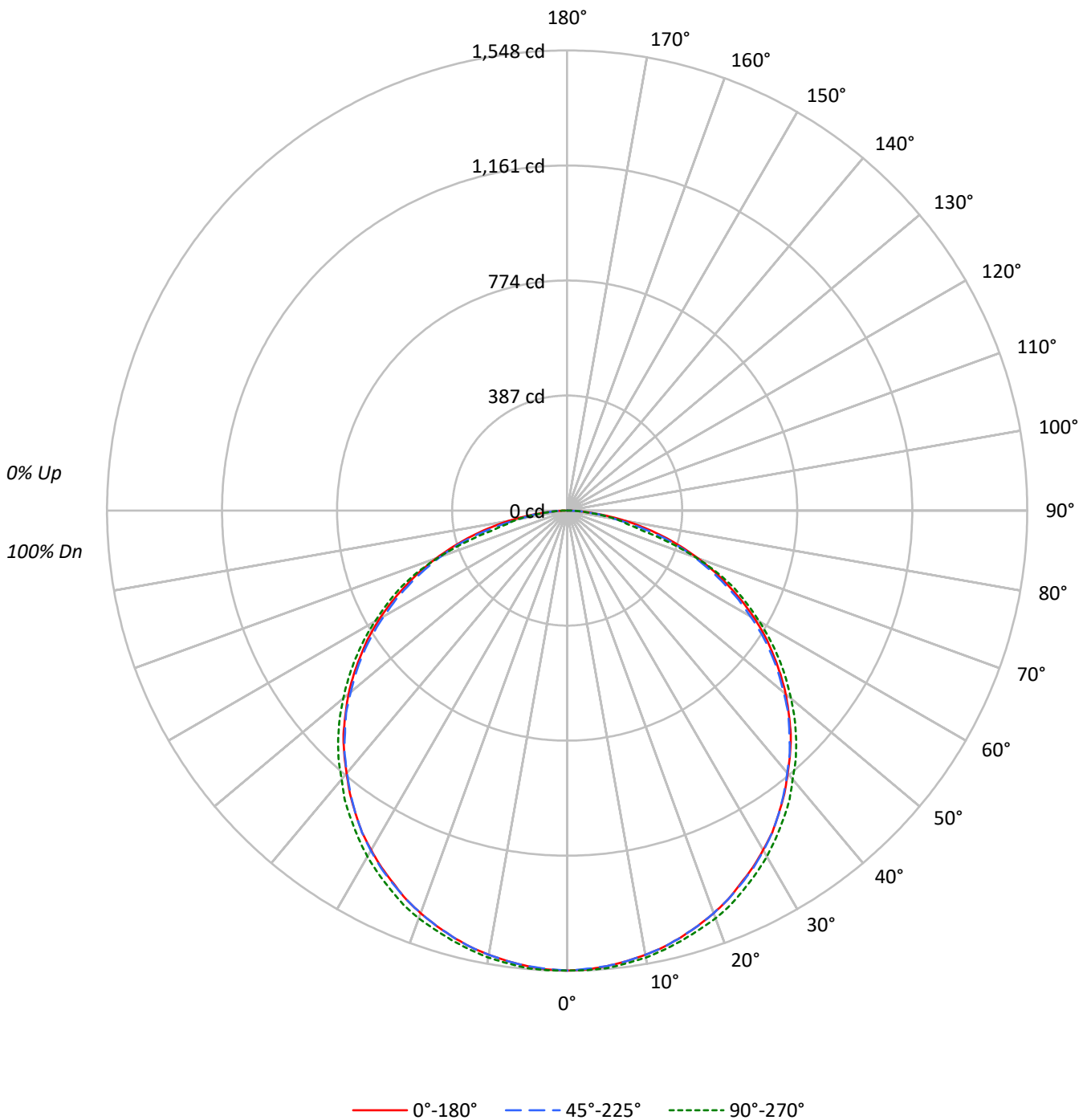
Input Watts (W): 38.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4956	4956	4956
5°	4945	4945	4967
10°	4934	4934	4965
15°	4923	4923	4962
20°	4911	4911	4974
25°	4888	4896	4970
30°	4876	4884	4970
35°	4856	4856	4956
40°	4826	4816	4932
45°	4819	4788	4934
50°	4782	4737	4898
55°	4727	4676	4856
60°	4667	4563	4785
65°	4540	4417	4715
70°	4376	4245	4310
75°	4122	3864	3291
80°	3626	3028	3157
85°	2635	2550	2466



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.4	3.2
10°-20°	420.1	9.2
20°-30°	641.3	14.0
30°-40°	781.1	17.1
40°-50°	822.1	18.0
50°-60°	756.9	16.6
60°-70°	589.2	12.9
70°-80°	327.0	7.2
80°-90°	84.0	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°	1207.7	26.4
0°-40°	1988.8	43.5
0°-60°	3567.8	78.1
0°-90°	4568.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4568.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1548	1548	1548	1548	1548	
5°	1538	1538	1538	1543	1545	146
15°	1485	1485	1485	1492	1497	419
25°	1383	1386	1386	1397	1406	638
35°	1242	1242	1242	1256	1268	777
45°	1064	1057	1057	1073	1090	819
55°	847	844	837	851	870	758
65°	599	592	583	601	622	594
75°	333	326	312	278	266	351
85°	72	67	69	67	67	90
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1547.5	1547.5	1547.5	1547.5	1547.5
2.5°	1545.2	1542.9	1542.9	1547.5	1547.5
5°	1538.2	1538.2	1538.2	1542.9	1545.2
7.5°	1529.0	1529.0	1529.0	1535.9	1535.9
10°	1517.4	1515.1	1517.4	1522.0	1526.7
12.5°	1503.5	1501.2	1503.5	1508.2	1512.8
15°	1485.0	1485.0	1485.0	1492.0	1496.6
17.5°	1464.2	1461.9	1464.2	1471.1	1478.1
20°	1441.1	1441.1	1441.1	1450.3	1459.6
22.5°	1415.6	1413.3	1415.6	1427.2	1436.5
25°	1383.2	1385.6	1385.6	1397.1	1406.4
27.5°	1353.2	1350.9	1355.5	1364.7	1376.3
30°	1318.5	1318.5	1320.8	1332.4	1343.9
32.5°	1283.8	1281.5	1283.8	1295.4	1306.9
35°	1242.1	1242.1	1242.1	1256.0	1267.6
37.5°	1200.5	1198.2	1198.2	1212.1	1228.3
40°	1154.3	1151.9	1151.9	1168.1	1179.7
42.5°	1110.3	1108.0	1108.0	1121.9	1138.1
45°	1064.0	1057.1	1057.1	1073.3	1089.5
47.5°	1010.8	1006.2	1008.5	1022.4	1038.6
50°	959.9	953.0	950.7	966.9	983.1
52.5°	904.4	902.1	895.2	909.1	927.6
55°	846.6	844.3	837.4	851.2	869.7
57.5°	791.1	784.1	777.2	788.8	809.6
60°	728.6	721.7	712.4	728.6	747.1
62.5°	666.2	656.9	650.0	663.9	684.7
65°	599.1	592.2	582.9	601.4	622.2
67.5°	536.6	529.7	518.1	534.3	548.2
70°	467.3	458.0	453.4	455.7	460.3
72.5°	400.2	395.5	388.6	370.1	365.5
75°	333.1	326.2	312.3	277.6	266.0
77.5°	266.0	261.4	235.9	205.9	205.9
80°	196.6	194.3	164.2	168.9	171.2
82.5°	134.2	129.5	120.3	118.0	118.0
85°	71.7	67.1	69.4	67.1	67.1
87.5°	27.8	27.8	30.1	27.8	27.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)