

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: P238715

Luminaire Tested: **14EN-LD2-51-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238715
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-395-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-51-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
STANDARD OPTION
Light Source: (224)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4608.7 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1' x L: 3.83' x H: 0')
CIE Type: Direct

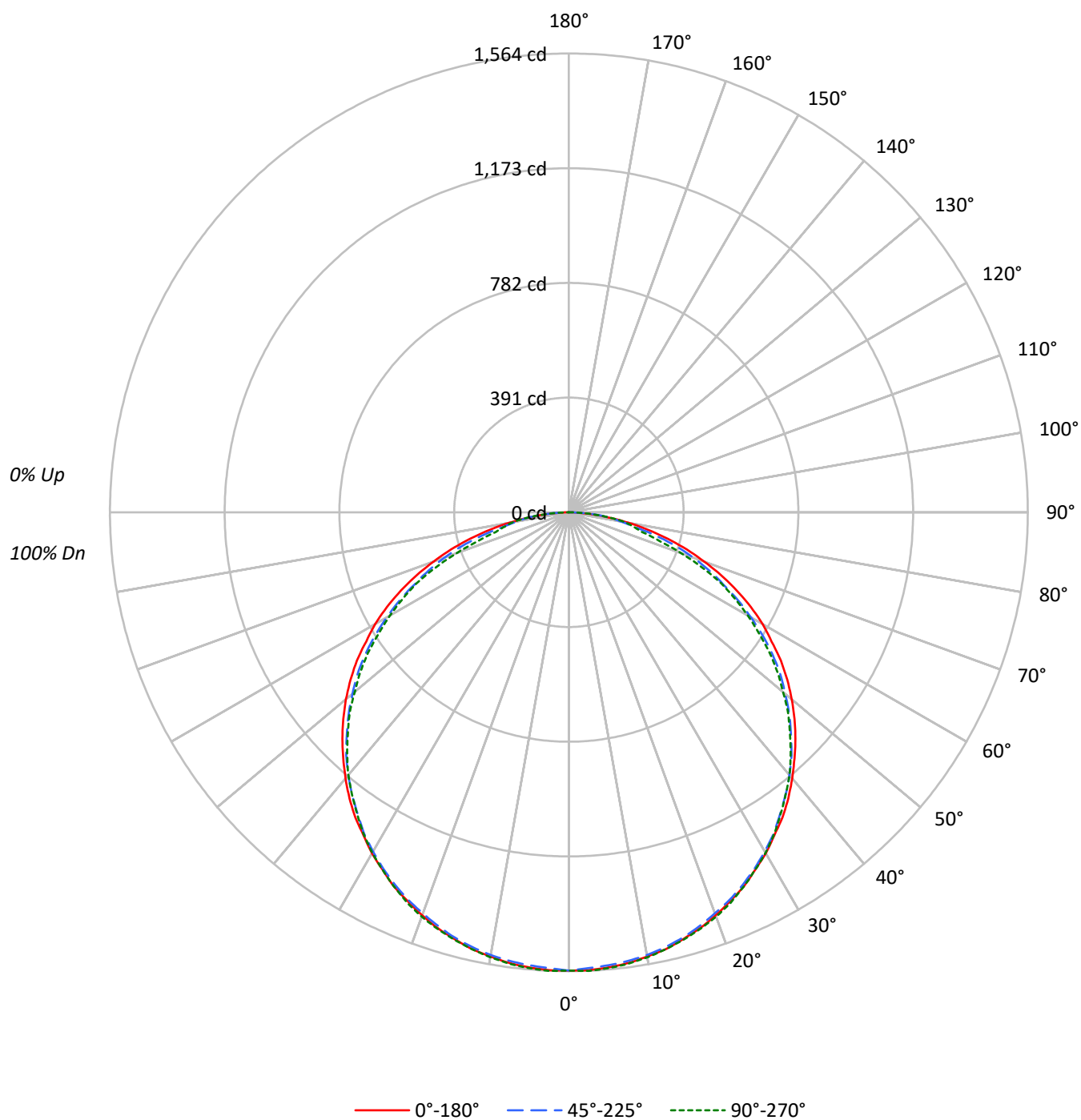
Input Watts (W): 44.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4386	4386	4386
5°	4389	4368	4396
10°	4384	4370	4391
15°	4378	4363	4385
20°	4369	4347	4383
25°	4364	4341	4364
30°	4353	4330	4345
35°	4352	4302	4310
40°	4341	4287	4287
45°	4335	4248	4228
50°	4332	4205	4162
55°	4318	4151	4092
60°	4283	4023	3955
65°	4193	3853	3804
70°	4021	3701	3341
75°	3780	3331	2802
80°	3349	2877	3152
85°	2590	2983	2826



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.9	3.2
10°-20°	424.8	9.2
20°-30°	647.5	14.0
30°-40°	788.5	17.1
40°-50°	829.0	18.0
50°-60°	761.0	16.5
60°-70°	584.6	12.7
70°-80°	326.3	7.1
80°-90°	99.1	2.1
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°	1220.2	26.5
0°-40°	2008.6	43.6
0°-60°	3598.7	78.1
0°-90°	4608.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4608.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1562	1562	1562	1562	1562	
5°	1557	1557	1550	1557	1560	148
15°	1506	1506	1501	1506	1508	425
25°	1408	1404	1401	1406	1408	649
35°	1270	1265	1255	1257	1257	793
45°	1092	1084	1070	1065	1065	842
55°	882	875	848	833	836	787
65°	631	614	580	573	573	624
75°	348	331	307	266	258	368
85°	80	83	93	90	88	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1561.9	1561.9	1561.9	1561.9	1561.9
2.5°	1561.9	1561.9	1554.6	1561.9	1564.3
5°	1557.0	1557.0	1549.7	1557.0	1559.5
7.5°	1549.7	1549.7	1542.4	1547.3	1552.2
10°	1537.5	1537.5	1532.7	1537.5	1540.0
12.5°	1525.3	1522.9	1518.0	1522.9	1525.3
15°	1505.9	1505.9	1501.0	1505.9	1508.3
17.5°	1486.4	1483.9	1479.1	1486.4	1488.8
20°	1462.0	1459.6	1454.7	1462.0	1466.9
22.5°	1435.2	1432.8	1430.3	1437.6	1440.1
25°	1408.4	1403.5	1401.1	1406.0	1408.4
27.5°	1374.3	1371.8	1369.4	1371.8	1374.3
30°	1342.6	1337.7	1335.3	1335.3	1340.2
32.5°	1303.6	1301.2	1298.7	1301.2	1301.2
35°	1269.5	1264.6	1254.9	1257.3	1257.3
37.5°	1228.1	1220.8	1213.5	1213.5	1213.5
40°	1184.2	1179.3	1169.6	1167.2	1169.6
42.5°	1137.9	1133.0	1123.3	1116.0	1118.4
45°	1091.6	1084.3	1069.7	1064.8	1064.8
47.5°	1042.9	1035.6	1018.5	1011.2	1013.7
50°	991.7	982.0	962.5	952.7	952.7
52.5°	938.1	928.4	908.9	896.7	896.7
55°	882.1	874.8	848.0	833.3	835.8
57.5°	818.7	811.4	784.6	767.5	767.5
60°	762.7	748.1	716.4	704.2	704.2
62.5°	699.3	682.3	650.6	636.0	638.4
65°	631.1	614.0	579.9	572.6	572.6
67.5°	562.9	548.2	516.6	504.4	492.2
70°	489.8	475.1	450.8	421.5	406.9
72.5°	421.5	404.5	382.6	338.7	324.1
75°	348.4	331.4	307.0	265.6	258.3
77.5°	277.8	263.2	229.0	219.3	224.2
80°	207.1	202.2	177.9	187.6	194.9
82.5°	138.9	136.5	141.3	146.2	146.2
85°	80.4	82.8	92.6	90.2	87.7
87.5°	34.1	41.4	39.0	39.0	39.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)