

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: P238773

Luminaire Tested: **14EN-LD2-47-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238773
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-LD2-47-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
STANDARD OPTION
Light Source: (224)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4585.2 lumens
Efficiency: N/A
Efficacy: 110.5 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

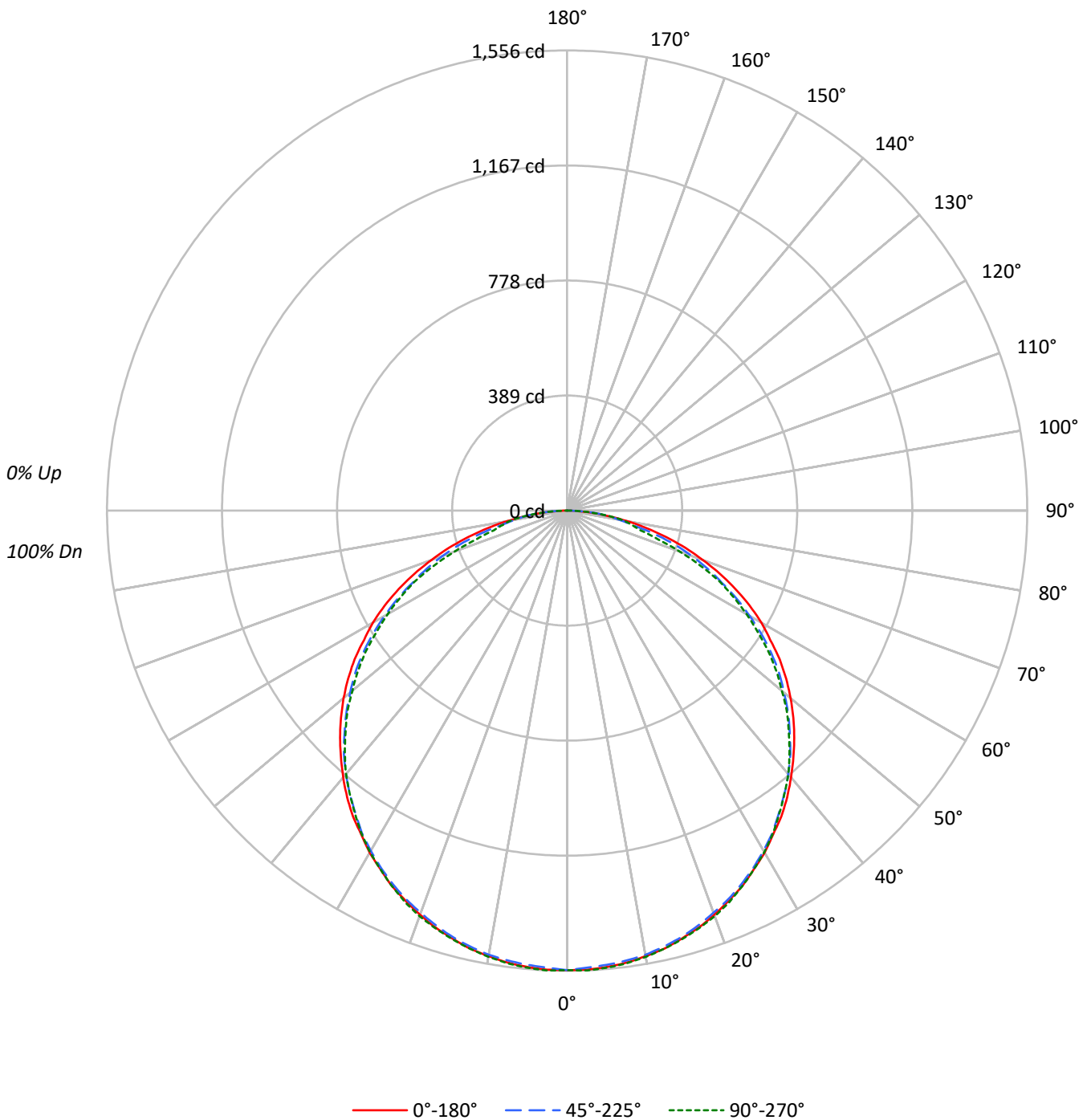
Input Watts (W): 41.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	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	40	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°	4363	4363	4363
5°	4366	4346	4373
10°	4362	4348	4368
15°	4355	4341	4362
20°	4347	4325	4361
25°	4341	4319	4341
30°	4331	4307	4323
35°	4329	4280	4288
40°	4319	4265	4265
45°	4313	4226	4207
50°	4310	4183	4141
55°	4296	4130	4071
60°	4261	4002	3935
65°	4172	3834	3785
70°	4001	3682	3324
75°	3761	3314	2788
80°	3333	2862	3135
85°	2577	2967	2813



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.1	3.2
10°-20°	422.6	9.2
20°-30°	644.2	14.0
30°-40°	784.5	17.1
40°-50°	824.8	18.0
50°-60°	757.1	16.5
60°-70°	581.7	12.7
70°-80°	324.7	7.1
80°-90°	98.6	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°	1214.0	26.5
0°-40°	1998.4	43.6
0°-60°	3580.3	78.1
0°-90°	4585.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4585.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1554	1554	1554	1554	1554	
5°	1549	1549	1542	1549	1552	147
15°	1498	1498	1493	1498	1501	423
25°	1401	1396	1394	1399	1401	645
35°	1263	1258	1248	1251	1251	789
45°	1086	1079	1064	1059	1059	838
55°	878	870	844	829	832	783
65°	628	611	577	570	570	620
75°	347	330	306	264	257	366
85°	80	82	92	90	87	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1553.9	1553.9	1553.9	1553.9	1553.9
2.5°	1553.9	1553.9	1546.7	1553.9	1556.4
5°	1549.1	1549.1	1541.8	1549.1	1551.5
7.5°	1541.8	1541.8	1534.6	1539.4	1544.3
10°	1529.7	1529.7	1524.9	1529.7	1532.1
12.5°	1517.6	1515.2	1510.3	1515.2	1517.6
15°	1498.2	1498.2	1493.3	1498.2	1500.6
17.5°	1478.8	1476.4	1471.5	1478.8	1481.2
20°	1454.6	1452.1	1447.3	1454.6	1459.4
22.5°	1427.9	1425.5	1423.0	1430.3	1432.7
25°	1401.2	1396.4	1393.9	1398.8	1401.2
27.5°	1367.3	1364.9	1362.4	1364.9	1367.3
30°	1335.8	1330.9	1328.5	1328.5	1333.3
32.5°	1297.0	1294.6	1292.1	1294.6	1294.6
35°	1263.0	1258.2	1248.5	1250.9	1250.9
37.5°	1221.8	1214.6	1207.3	1207.3	1207.3
40°	1178.2	1173.3	1163.6	1161.2	1163.6
42.5°	1132.1	1127.3	1117.6	1110.3	1112.7
45°	1086.1	1078.8	1064.2	1059.4	1059.4
47.5°	1037.6	1030.3	1013.3	1006.1	1008.5
50°	986.7	977.0	957.6	947.9	947.9
52.5°	933.3	923.6	904.2	892.1	892.1
55°	877.6	870.3	843.6	829.1	831.5
57.5°	814.5	807.3	780.6	763.6	763.6
60°	758.8	744.2	712.7	700.6	700.6
62.5°	695.8	678.8	647.3	632.7	635.2
65°	627.9	610.9	577.0	569.7	569.7
67.5°	560.0	545.5	513.9	501.8	489.7
70°	487.3	472.7	448.5	419.4	404.9
72.5°	419.4	402.4	380.6	337.0	322.4
75°	346.7	329.7	305.5	264.2	257.0
77.5°	276.4	261.8	227.9	218.2	223.0
80°	206.1	201.2	177.0	186.7	193.9
82.5°	138.2	135.8	140.6	145.5	145.5
85°	80.0	82.4	92.1	89.7	87.3
87.5°	33.9	41.2	38.8	38.8	38.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)