

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: P238683

Luminaire Tested: **14ENA-LD2-51-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238683
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: 14ENA-LD2-51-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4488.6 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 0.67' x L: 3.83' x H: 0')
CIE Type: Direct

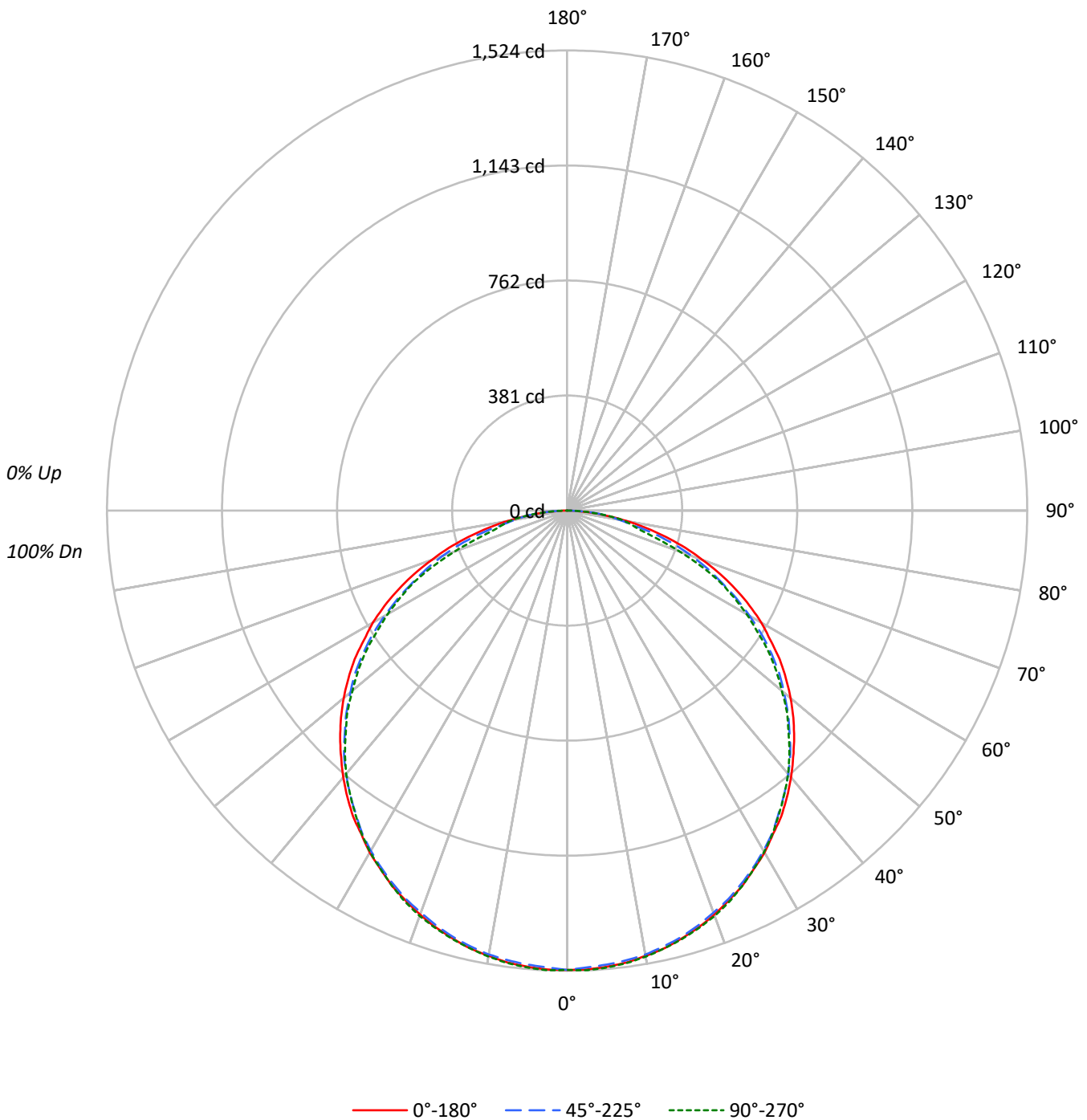
Input Watts (W): 44.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	6407	6407	6407
5°	6412	6381	6422
10°	6405	6384	6415
15°	6395	6375	6406
20°	6382	6351	6404
25°	6375	6342	6375
30°	6360	6325	6348
35°	6357	6284	6297
40°	6342	6263	6263
45°	6333	6206	6178
50°	6329	6142	6080
55°	6309	6065	5977
60°	6257	5877	5778
65°	6126	5629	5558
70°	5874	5406	4880
75°	5523	4866	4094
80°	4892	4201	4606
85°	3784	4359	4127



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.0	3.2
10°-20°	413.7	9.2
20°-30°	630.6	14.0
30°-40°	767.9	17.1
40°-50°	807.4	18.0
50°-60°	741.2	16.5
60°-70°	569.4	12.7
70°-80°	317.8	7.1
80°-90°	96.5	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°	1188.4	26.5
0°-40°	1956.3	43.6
0°-60°	3504.9	78.1
0°-90°	4488.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4488.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1521	1521	1521	1521	1521	
5°	1516	1516	1509	1516	1519	144
15°	1467	1467	1462	1467	1469	414
25°	1372	1367	1365	1369	1372	632
35°	1236	1232	1222	1225	1225	773
45°	1063	1056	1042	1037	1037	820
55°	859	852	826	812	814	766
65°	615	598	565	558	558	607
75°	339	323	299	259	252	359
85°	78	81	90	88	85	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1521.2	1521.2	1521.2	1521.2	1521.2
2.5°	1521.2	1521.2	1514.1	1521.2	1523.6
5°	1516.5	1516.5	1509.3	1516.5	1518.8
7.5°	1509.3	1509.3	1502.2	1507.0	1511.7
10°	1497.5	1497.5	1492.7	1497.5	1499.9
12.5°	1485.6	1483.2	1478.5	1483.2	1485.6
15°	1466.6	1466.6	1461.9	1466.6	1469.0
17.5°	1447.6	1445.3	1440.5	1447.6	1450.0
20°	1423.9	1421.5	1416.8	1423.9	1428.7
22.5°	1397.8	1395.4	1393.1	1400.2	1402.6
25°	1371.7	1367.0	1364.6	1369.3	1371.7
27.5°	1338.5	1336.1	1333.7	1336.1	1338.5
30°	1307.6	1302.9	1300.5	1300.5	1305.3
32.5°	1269.7	1267.3	1264.9	1267.3	1267.3
35°	1236.4	1231.7	1222.2	1224.6	1224.6
37.5°	1196.1	1189.0	1181.8	1181.8	1181.8
40°	1153.4	1148.6	1139.1	1136.8	1139.1
42.5°	1108.3	1103.5	1094.0	1086.9	1089.3
45°	1063.2	1056.1	1041.8	1037.1	1037.1
47.5°	1015.7	1008.6	992.0	984.9	987.2
50°	965.9	956.4	937.4	927.9	927.9
52.5°	913.7	904.2	885.2	873.3	873.3
55°	859.1	852.0	825.9	811.6	814.0
57.5°	797.4	790.3	764.2	747.6	747.6
60°	742.8	728.6	697.7	685.9	685.9
62.5°	681.1	664.5	633.6	619.4	621.8
65°	614.7	598.0	564.8	557.7	557.7
67.5°	548.2	534.0	503.1	491.3	479.4
70°	477.0	462.8	439.0	410.6	396.3
72.5°	410.6	393.9	372.6	329.9	315.6
75°	339.4	322.8	299.0	258.7	251.6
77.5°	270.5	256.3	223.1	213.6	218.3
80°	201.7	197.0	173.2	182.7	189.9
82.5°	135.3	132.9	137.6	142.4	142.4
85°	78.3	80.7	90.2	87.8	85.4
87.5°	33.2	40.3	38.0	38.0	38.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)