

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: P184034

Luminaire Tested: **12EN-LD2-13-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P184034
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34514)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12EN-LD2-13-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 1X2 TROFFER

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

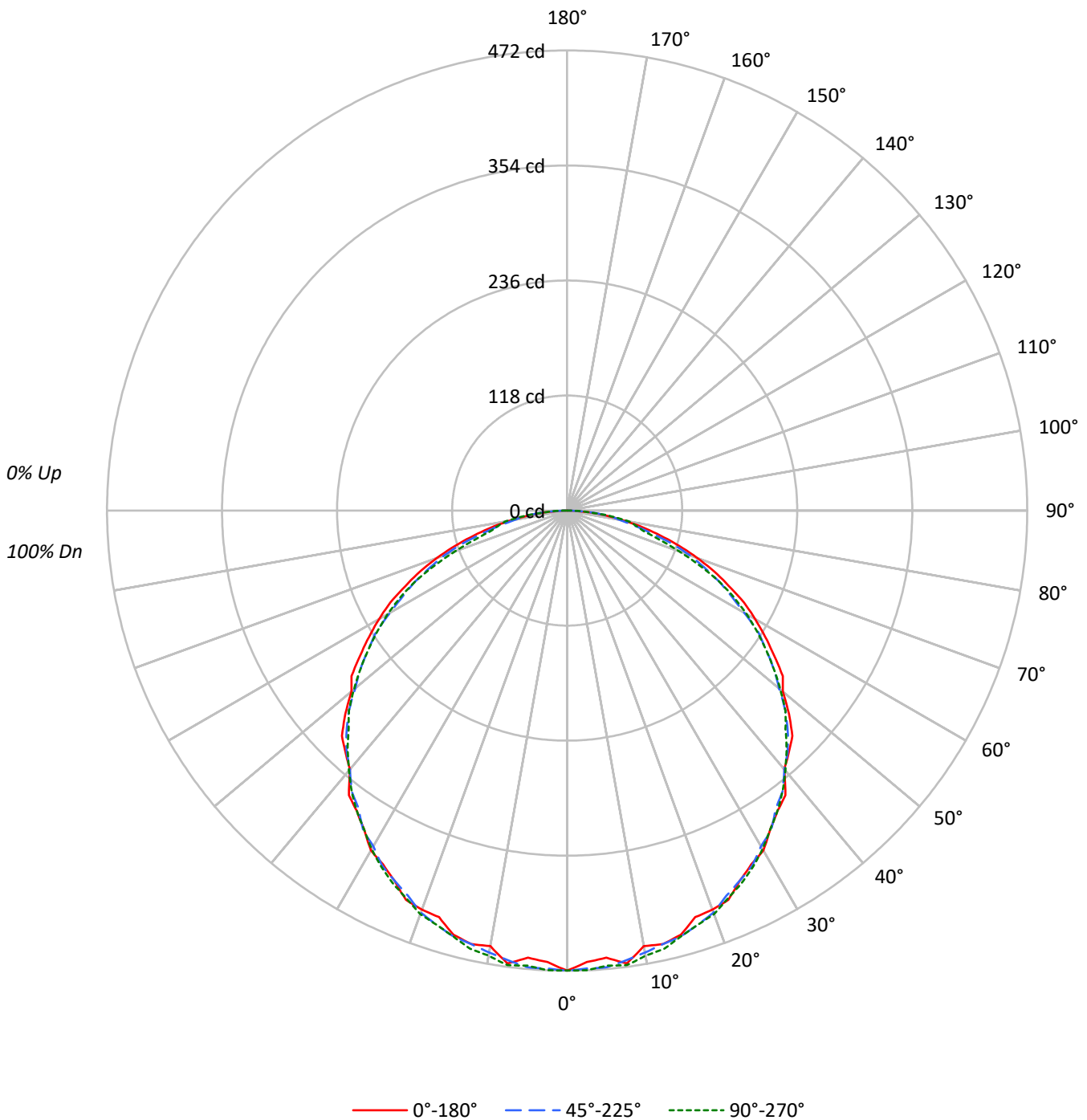
Lumens per Lamp: N/A
Luminaire Lumens: 1371.9 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 12.2
Input Voltage (V): NR
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	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	46	73	61	53	46	59	52	46	57	50	45	55	49	45	43
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	29	55	42	34	28	41	33	28	40	33	28	39	32	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2539	2539	2539
5°	2487	2540	2531
10°	2479	2516	2534
15°	2510	2518	2518
20°	2494	2513	2523
25°	2488	2488	2508
30°	2501	2471	2491
35°	2472	2450	2472
40°	2434	2434	2446
45°	2487	2436	2411
50°	2417	2376	2390
55°	2430	2337	2337
60°	2397	2255	2291
65°	2332	2185	2185
70°	2233	2102	1921
75°	2059	1853	1680
80°	1841	1686	1993
85°	1525	1729	1630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	3.3
10°-20°	127.4	9.3
20°-30°	193.9	14.1
30°-40°	234.9	17.1
40°-50°	246.4	18.0
50°-60°	225.4	16.4
60°-70°	172.2	12.6
70°-80°	96.8	7.1
80°-90°	30.2	2.2
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°	365.9	26.7
0°-40°	600.8	43.8
0°-60°	1072.6	78.2
0°-90°	1371.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1371.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	472	472	472	472	472	
5°	460	468	470	474	468	44
15°	450	450	452	452	452	126
25°	419	421	419	422	422	194
35°	376	374	373	376	376	236
45°	327	322	320	317	317	249
55°	259	256	249	249	249	231
65°	183	178	172	170	172	181
75°	99	96	89	82	81	105
85°	25	25	28	26	26	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	471.8	471.8	471.8	471.8	471.8
2.5°	463.6	470.2	470.2	473.5	471.8
5°	460.3	468.5	470.2	473.5	468.5
7.5°	468.5	466.9	465.2	468.5	470.2
10°	453.7	460.3	460.3	468.5	463.6
12.5°	455.3	457.0	455.3	455.3	460.3
15°	450.4	450.4	452.0	452.0	452.0
17.5°	437.2	443.8	445.4	447.1	445.4
20°	435.5	437.2	438.8	440.5	440.5
22.5°	432.2	428.9	427.3	433.9	430.6
25°	419.0	420.7	419.0	422.3	422.3
27.5°	409.1	409.1	410.8	409.1	412.4
30°	402.5	400.9	397.6	400.9	400.9
32.5°	387.7	389.3	389.3	387.7	387.7
35°	376.2	374.5	372.9	376.2	376.2
37.5°	367.9	359.7	363.0	361.3	363.0
40°	346.5	351.4	346.5	346.5	348.1
42.5°	336.6	334.9	334.9	333.3	333.3
45°	326.7	321.7	320.1	316.8	316.8
47.5°	308.5	308.5	303.6	300.3	303.6
50°	288.7	290.4	283.8	282.1	285.4
52.5°	278.8	273.9	267.3	268.9	267.3
55°	259.0	255.7	249.1	249.1	249.1
57.5°	240.9	239.2	232.6	231.0	231.0
60°	222.7	219.4	209.5	211.2	212.8
62.5°	204.6	199.6	189.7	193.0	193.0
65°	183.1	178.2	171.6	169.9	171.6
67.5°	163.3	156.7	151.8	150.1	146.8
70°	141.9	138.6	133.6	123.7	122.1
72.5°	120.4	115.5	112.2	100.6	99.0
75°	99.0	95.7	89.1	82.5	80.8
77.5°	79.2	77.5	69.3	69.3	72.6
80°	59.4	57.7	54.4	61.0	64.3
82.5°	41.2	39.6	44.5	46.2	46.2
85°	24.7	24.7	28.0	26.4	26.4
87.5°	9.9	11.5	11.5	13.2	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)