

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: P238687

Luminaire Tested: **14EN-LD2-18-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238687
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-LD2-18-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: 1671.6 lumens
Efficiency: N/A
Efficacy: 104.5 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

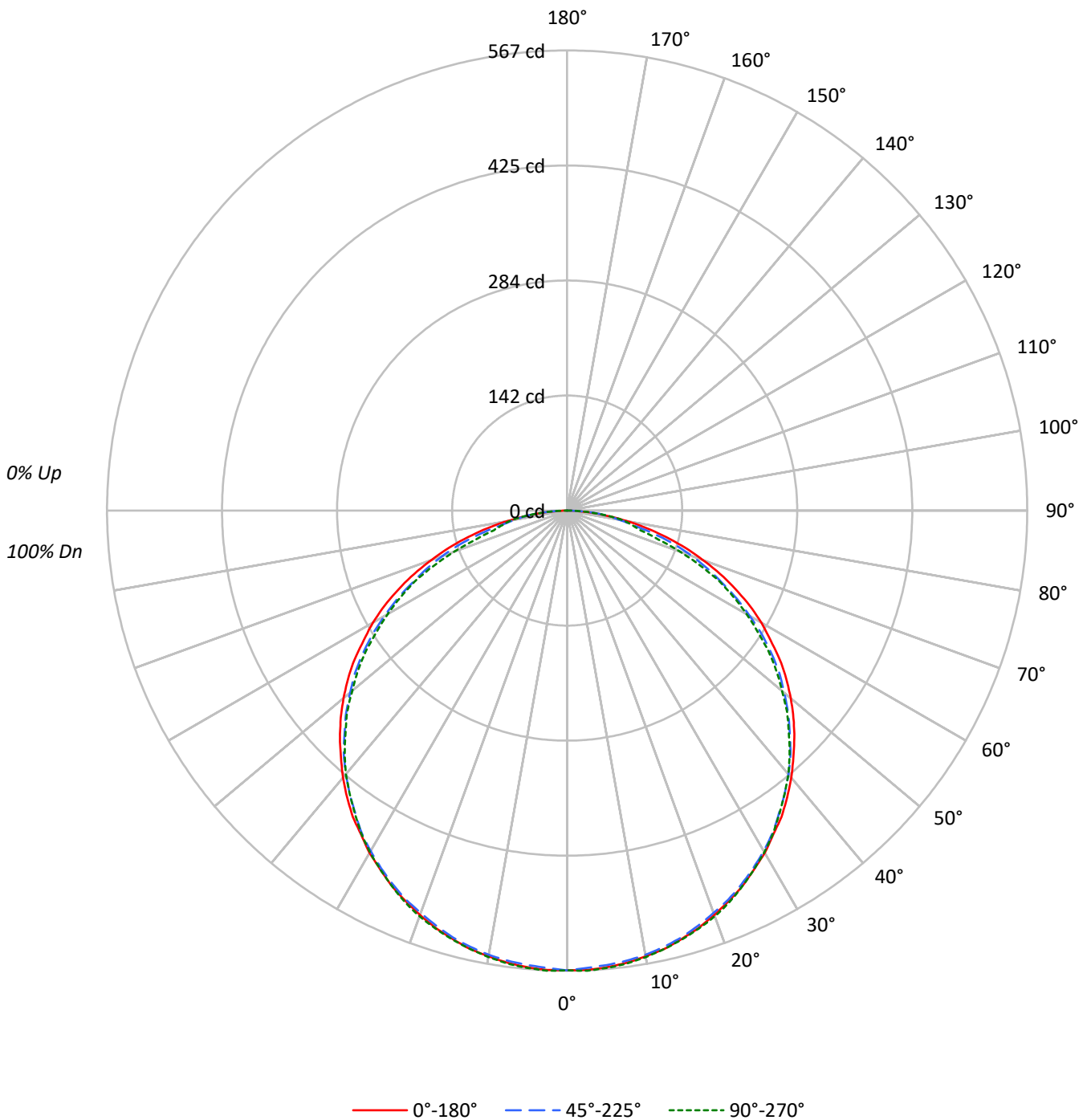
Input Watts (W): 16
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1591	1591	1591
5°	1592	1584	1594
10°	1590	1585	1593
15°	1588	1583	1590
20°	1585	1577	1590
25°	1583	1575	1583
30°	1579	1570	1576
35°	1579	1560	1563
40°	1574	1555	1555
45°	1572	1541	1534
50°	1571	1525	1510
55°	1566	1506	1484
60°	1553	1459	1434
65°	1521	1397	1380
70°	1458	1342	1212
75°	1371	1209	1017
80°	1214	1043	1143
85°	941	1083	1025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	3.2
10°-20°	154.1	9.2
20°-30°	234.9	14.0
30°-40°	286.0	17.1
40°-50°	300.7	18.0
50°-60°	276.0	16.5
60°-70°	212.1	12.7
70°-80°	118.4	7.1
80°-90°	35.9	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°	442.6	26.5
0°-40°	728.6	43.6
0°-60°	1305.3	78.1
0°-90°	1671.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1671.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	566	566	566	566	566	
5°	565	565	562	565	566	54
15°	546	546	544	546	547	154
25°	511	509	508	510	511	235
35°	460	459	455	456	456	288
45°	396	393	388	386	386	305
55°	320	317	308	302	303	285
65°	229	223	210	208	208	226
75°	126	120	111	96	94	134
85°	29	30	34	33	32	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	566.5	566.5	566.5	566.5	566.5
2.5°	566.5	566.5	563.9	566.5	567.4
5°	564.8	564.8	562.1	564.8	565.6
7.5°	562.1	562.1	559.4	561.2	563.0
10°	557.7	557.7	555.9	557.7	558.6
12.5°	553.3	552.4	550.6	552.4	553.3
15°	546.2	546.2	544.4	546.2	547.1
17.5°	539.1	538.2	536.5	539.1	540.0
20°	530.3	529.4	527.6	530.3	532.1
22.5°	520.6	519.7	518.8	521.4	522.3
25°	510.8	509.1	508.2	510.0	510.8
27.5°	498.5	497.6	496.7	497.6	498.5
30°	487.0	485.2	484.3	484.3	486.1
32.5°	472.8	472.0	471.1	472.0	472.0
35°	460.5	458.7	455.2	456.0	456.0
37.5°	445.4	442.8	440.1	440.1	440.1
40°	429.5	427.8	424.2	423.3	424.2
42.5°	412.7	411.0	407.4	404.8	405.7
45°	395.9	393.3	388.0	386.2	386.2
47.5°	378.3	375.6	369.4	366.8	367.7
50°	359.7	356.2	349.1	345.6	345.6
52.5°	340.3	336.7	329.7	325.2	325.2
55°	319.9	317.3	307.6	302.3	303.1
57.5°	297.0	294.3	284.6	278.4	278.4
60°	276.6	271.3	259.8	255.4	255.4
62.5°	253.7	247.5	236.0	230.7	231.6
65°	228.9	222.7	210.3	207.7	207.7
67.5°	204.2	198.9	187.4	182.9	178.5
70°	177.6	172.3	163.5	152.9	147.6
72.5°	152.9	146.7	138.8	122.8	117.5
75°	126.4	120.2	111.4	96.3	93.7
77.5°	100.8	95.5	83.1	79.5	81.3
80°	75.1	73.4	64.5	68.1	70.7
82.5°	50.4	49.5	51.3	53.0	53.0
85°	29.2	30.0	33.6	32.7	31.8
87.5°	12.4	15.0	14.1	14.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)