

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: INVUE

Report Number: P184483

Luminaire Tested: **312EN-LD2-18-UNV-L840-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34485)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: 312EN-LD2-18-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 300X1200 TROFFER

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

Summary

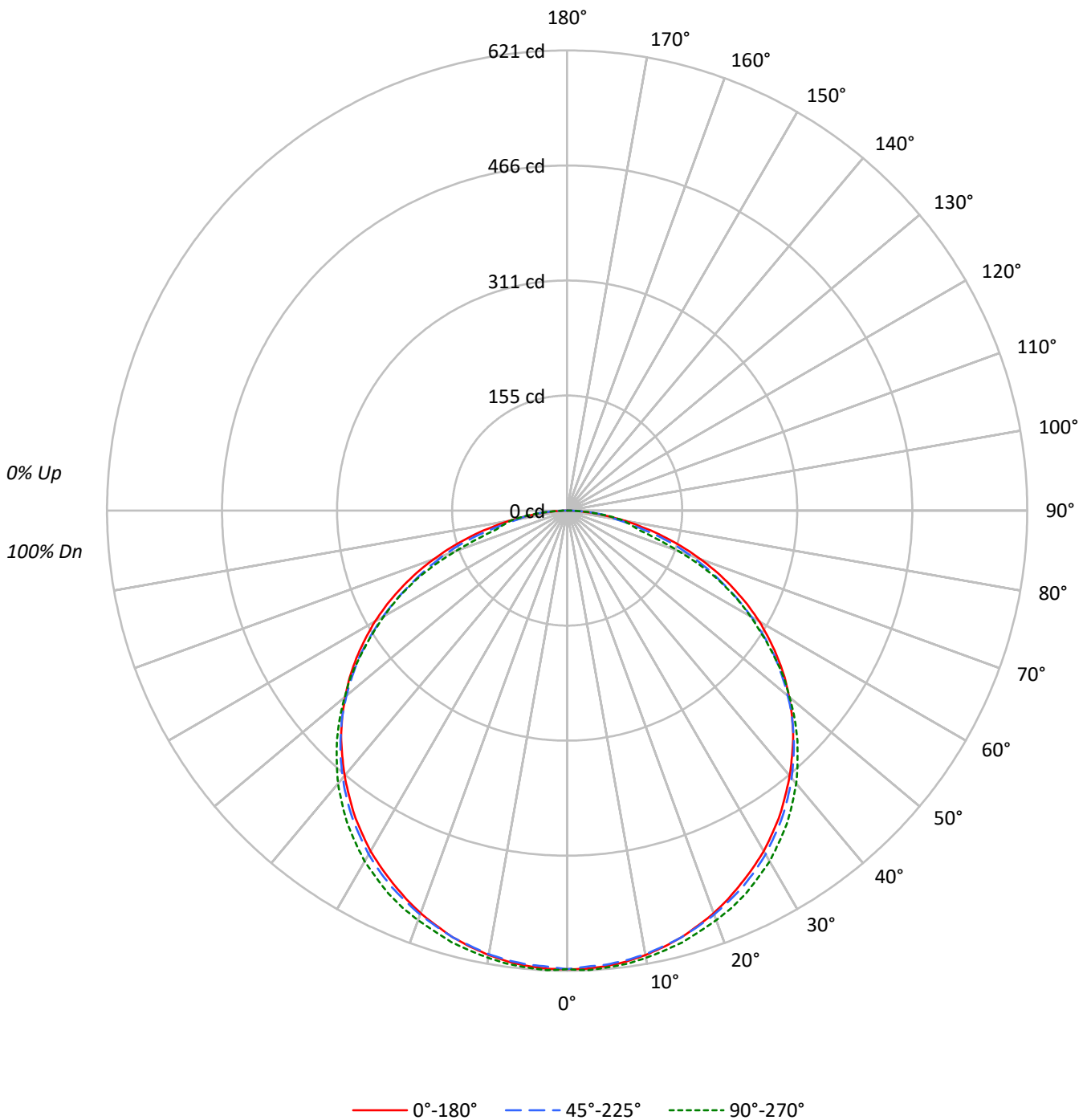
Lumens per Lamp: N/A
Luminaire Lumens: 1840.4 lumens
Efficiency: N/A
Efficacy: 115.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.41
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16
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	91	88		90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75		81	77	73		78	75	71	69
3	90	79	71	64	87	77	70	64	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	51	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	41	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	28	55	42	34	28	41	33	28		40	33	28		39	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°	1665	1665	1665
5°	1666	1661	1672
10°	1664	1661	1675
15°	1661	1661	1680
20°	1656	1662	1684
25°	1649	1664	1693
30°	1649	1664	1698
35°	1645	1662	1697
40°	1641	1655	1690
45°	1642	1646	1672
50°	1636	1628	1640
55°	1628	1601	1596
60°	1612	1548	1537
65°	1573	1472	1459
70°	1506	1397	1257
75°	1392	1237	1031
80°	1215	1044	1184
85°	920	1102	1071



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.7	3.2
10°-20°	168.9	9.2
20°-30°	259.0	14.1
30°-40°	317.2	17.2
40°-50°	334.4	18.2
50°-60°	305.4	16.6
60°-70°	232.1	12.6
70°-80°	126.7	6.9
80°-90°	38.0	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°	486.5	26.4
0°-40°	803.7	43.7
0°-60°	1443.5	78.4
0°-90°	1840.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1840.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	619	619	619	619	619	
5°	617	617	615	618	619	59
15°	596	596	596	601	603	168
25°	555	556	560	567	570	256
35°	501	501	506	513	517	313
45°	431	431	432	436	439	332
55°	347	346	341	338	340	310
65°	247	242	231	229	229	244
75°	134	129	119	102	99	141
85°	30	32	36	35	35	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	618.9	618.9	618.9	618.9	618.9
2.5°	618.9	618.9	615.9	618.9	620.9
5°	616.9	616.9	614.9	617.9	618.9
7.5°	613.9	613.9	612.0	614.9	616.9
10°	609.0	609.0	608.0	611.0	612.9
12.5°	603.0	603.0	602.0	606.0	608.0
15°	596.1	596.1	596.1	601.0	603.0
17.5°	587.2	588.2	588.2	593.1	595.1
20°	578.2	579.2	580.2	586.2	588.2
22.5°	567.3	567.3	570.3	577.2	580.2
25°	555.4	556.4	560.4	567.3	570.3
27.5°	543.5	544.5	548.5	555.4	558.4
30°	530.6	531.6	535.6	542.5	546.5
32.5°	515.7	516.7	520.7	528.6	531.6
35°	500.9	500.9	505.8	512.8	516.7
37.5°	484.0	485.0	489.0	495.9	498.9
40°	467.1	468.1	471.1	477.1	481.0
42.5°	449.3	450.3	452.3	457.2	460.2
45°	431.4	431.4	432.4	436.4	439.4
47.5°	411.6	411.6	411.6	413.6	416.6
50°	390.8	390.8	388.8	389.8	391.8
52.5°	369.9	369.0	365.0	365.0	368.0
55°	347.1	346.1	341.2	338.2	340.2
57.5°	323.3	321.4	314.4	311.4	312.4
60°	299.5	296.6	287.6	283.7	285.6
62.5°	273.7	270.8	259.9	256.9	258.9
65°	247.0	242.0	231.1	229.1	229.1
67.5°	220.2	214.2	204.3	199.4	196.4
70°	191.4	185.5	177.5	165.6	159.7
72.5°	162.7	157.7	149.8	131.9	126.0
75°	133.9	128.9	119.0	102.2	99.2
77.5°	105.1	102.2	89.3	84.3	87.3
80°	78.4	78.4	67.4	73.4	76.4
82.5°	52.6	50.6	55.5	56.5	56.5
85°	29.8	31.7	35.7	34.7	34.7
87.5°	12.9	14.9	15.9	14.9	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)