

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: P184513

Luminaire Tested: **312EN-LD2-47-UNV-L840-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184513
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-LD2-47-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 300X1200 TROFFER

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

Summary

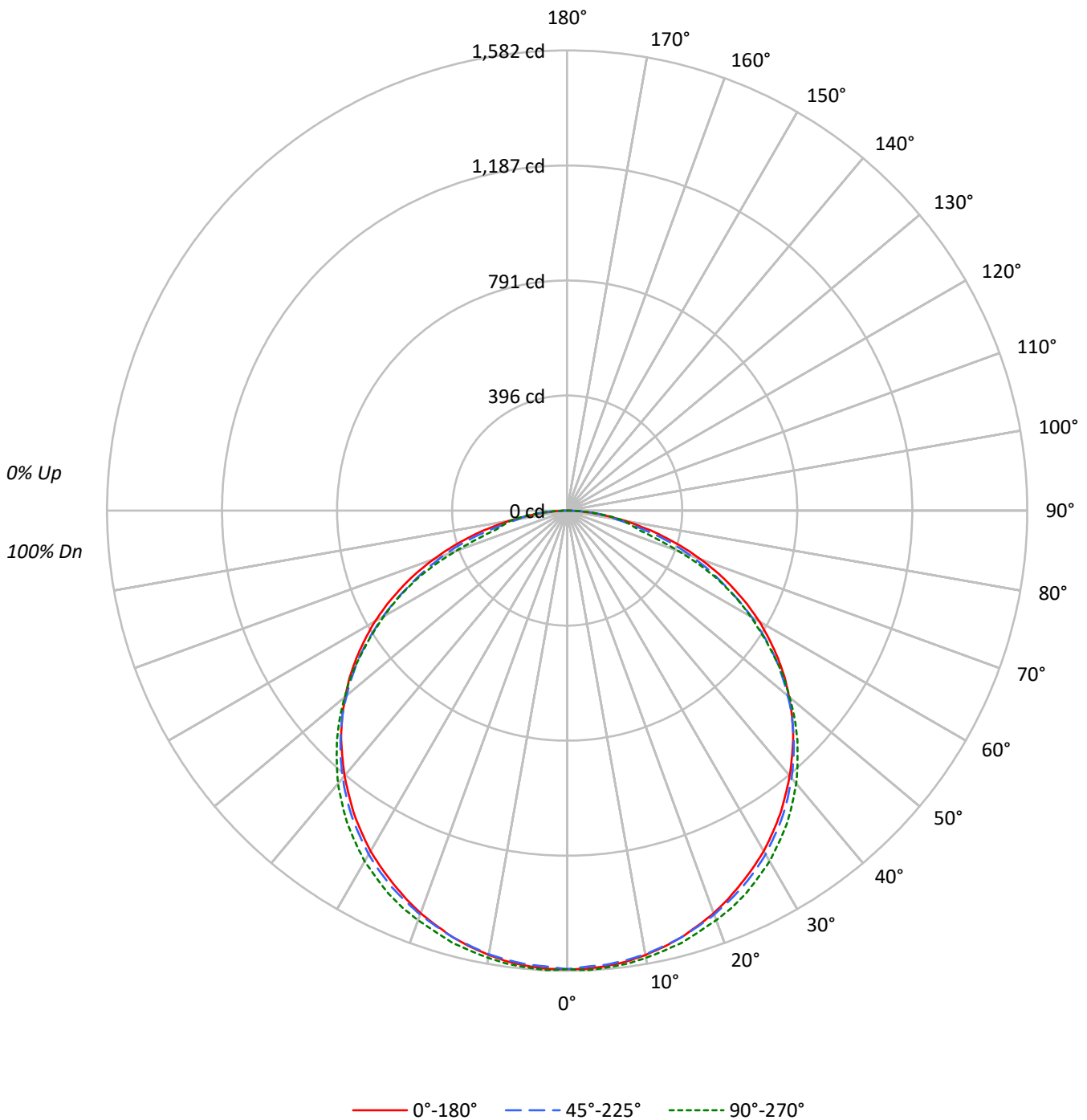
Lumens per Lamp: N/A
Luminaire Lumens: 4688.2 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.41
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.5
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°	4243	4243	4243
5°	4245	4232	4259
10°	4239	4232	4267
15°	4230	4230	4280
20°	4218	4233	4291
25°	4201	4238	4314
30°	4200	4240	4326
35°	4191	4233	4324
40°	4180	4216	4305
45°	4183	4192	4260
50°	4168	4146	4178
55°	4149	4077	4066
60°	4106	3943	3916
65°	4006	3748	3716
70°	3836	3559	3201
75°	3546	3152	2627
80°	3093	2662	3014
85°	2340	2810	2729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.4	3.2
10°-20°	430.2	9.2
20°-30°	659.7	14.1
30°-40°	808.0	17.2
40°-50°	851.9	18.2
50°-60°	778.1	16.6
60°-70°	591.2	12.6
70°-80°	322.8	6.9
80°-90°	96.9	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°	1239.3	26.4
0°-40°	2047.3	43.7
0°-60°	3677.3	78.4
0°-90°	4688.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4688.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1577	1577	1577	1577	1577	
5°	1572	1572	1566	1574	1577	149
15°	1518	1518	1518	1531	1536	428
25°	1415	1417	1428	1445	1453	653
35°	1276	1276	1289	1306	1316	798
45°	1099	1099	1102	1112	1119	847
55°	884	882	869	862	867	790
65°	629	616	589	584	584	622
75°	341	328	303	260	253	360
85°	76	81	91	88	88	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1576.6	1576.6	1576.6	1576.6	1576.6
2.5°	1576.6	1576.6	1569.0	1576.6	1581.6
5°	1571.5	1571.5	1566.5	1574.1	1576.6
7.5°	1564.0	1564.0	1558.9	1566.5	1571.5
10°	1551.3	1551.3	1548.8	1556.4	1561.4
12.5°	1536.2	1536.2	1533.6	1543.7	1548.8
15°	1518.5	1518.5	1518.5	1531.1	1536.2
17.5°	1495.7	1498.3	1498.3	1510.9	1515.9
20°	1473.0	1475.5	1478.0	1493.2	1498.3
22.5°	1445.2	1445.2	1452.8	1470.5	1478.0
25°	1414.9	1417.4	1427.5	1445.2	1452.8
27.5°	1384.6	1387.1	1397.2	1414.9	1422.5
30°	1351.7	1354.2	1364.4	1382.0	1392.1
32.5°	1313.8	1316.3	1326.5	1346.7	1354.2
35°	1275.9	1275.9	1288.6	1306.2	1316.3
37.5°	1233.0	1235.5	1245.6	1263.3	1270.9
40°	1190.0	1192.5	1200.1	1215.3	1225.4
42.5°	1144.5	1147.1	1152.1	1164.8	1172.3
45°	1099.1	1099.1	1101.6	1111.7	1119.3
47.5°	1048.5	1048.5	1048.5	1053.6	1061.2
50°	995.5	995.5	990.4	992.9	998.0
52.5°	942.4	939.9	929.8	929.8	937.4
55°	884.3	881.8	869.1	861.6	866.6
57.5°	823.7	818.6	800.9	793.3	795.9
60°	763.0	755.4	732.7	722.6	727.7
62.5°	697.3	689.8	662.0	654.4	659.4
65°	629.1	616.5	588.7	583.6	583.6
67.5°	560.9	545.7	520.5	507.8	500.3
70°	487.6	472.5	452.3	421.9	406.8
72.5°	414.4	401.7	381.5	336.0	320.9
75°	341.1	328.5	303.2	260.2	252.7
77.5°	267.8	260.2	227.4	214.8	222.3
80°	199.6	199.6	171.8	187.0	194.5
82.5°	133.9	128.9	141.5	144.0	144.0
85°	75.8	80.9	91.0	88.4	88.4
87.5°	32.8	37.9	40.4	37.9	37.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)