

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: P184514

Luminaire Tested: **312EN-LD2-47-UNV-L850-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184514
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-L850-CD1-U
Description: METALUX ENCOUNTER 300X1200 TROFFER

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

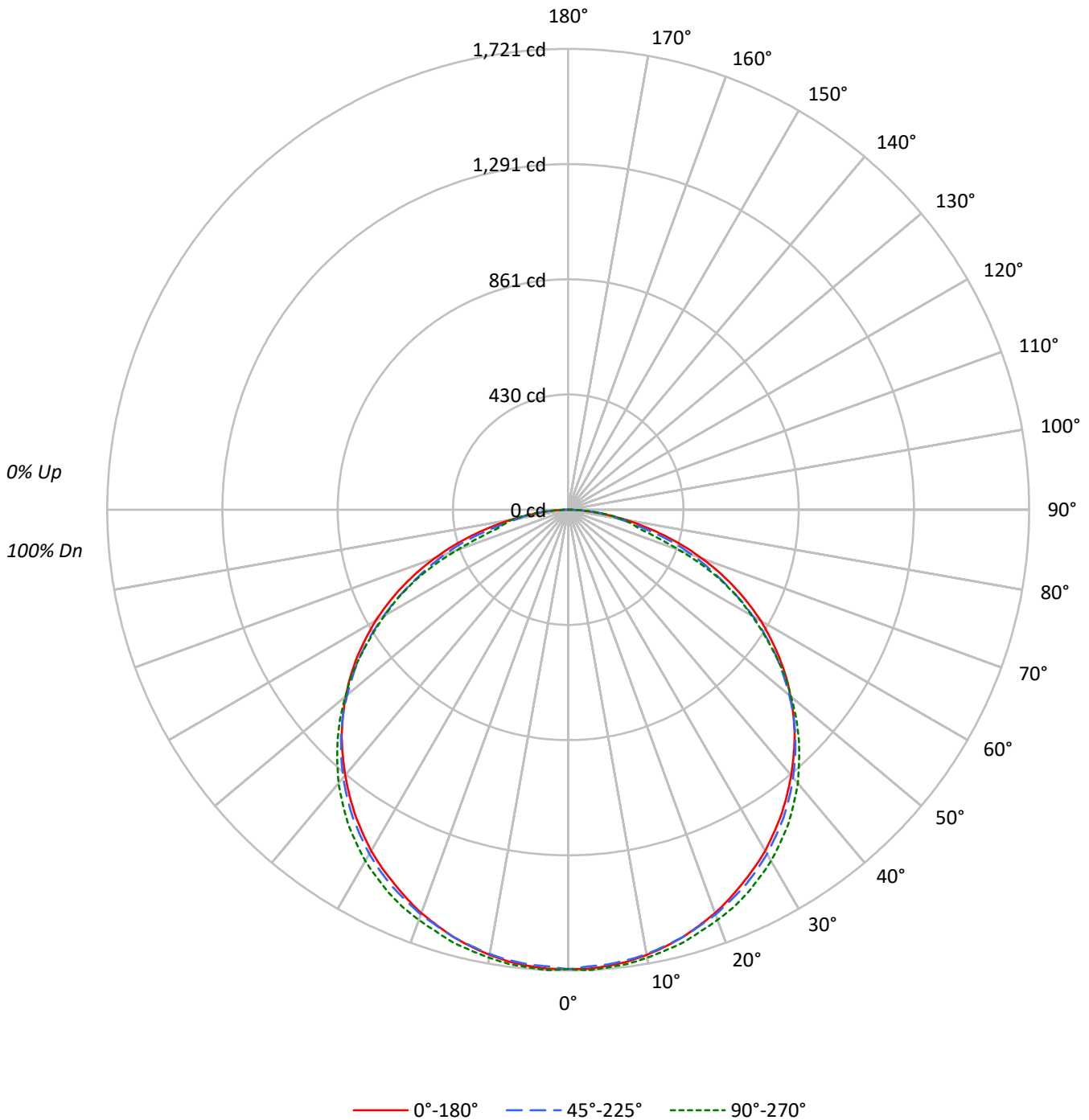
Lumens per Lamp: N/A
Luminaire Lumens: 5101.9 lumens
Efficiency: N/A
Efficacy: 122.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.41
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P184514
CATALOG NUMBER: 312EN-LD2-47-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P184514

CATALOG NUMBER: 312EN-LD2-47-UNV-L850-CD1-U

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°	4617	4617	4617
5°	4620	4605	4635
10°	4613	4606	4643
15°	4604	4604	4657
20°	4590	4606	4669
25°	4572	4613	4694
30°	4571	4613	4708
35°	4561	4607	4706
40°	4549	4588	4684
45°	4552	4562	4635
50°	4535	4512	4547
55°	4515	4437	4425
60°	4469	4292	4262
65°	4359	4079	4044
70°	4175	3873	3483
75°	3859	3430	2859
80°	3366	2898	3281
85°	2547	3057	2970



TEST NUMBER: P184514

CATALOG NUMBER: 312EN-LD2-47-UNV-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.6	3.2
10°-20°	468.1	9.2
20°-30°	718.0	14.1
30°-40°	879.3	17.2
40°-50°	927.0	18.2
50°-60°	846.8	16.6
60°-70°	643.4	12.6
70°-80°	351.3	6.9
80°-90°	105.5	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°	1348.7	26.4
0°-40°	2228.0	43.7
0°-60°	4001.8	78.4
0°-90°	5101.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5101.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1716	1716	1716	1716	1716	
5°	1710	1710	1705	1713	1716	163
15°	1652	1652	1652	1666	1672	466
25°	1540	1542	1554	1573	1581	711
35°	1388	1388	1402	1422	1432	868
45°	1196	1196	1199	1210	1218	922
55°	962	960	946	938	943	859
65°	685	671	641	635	635	677
75°	371	357	330	283	275	392
85°	82	88	99	96	96	101
90°	0	0	0	0	0	



TEST NUMBER: P184514

CATALOG NUMBER: 312EN-LD2-47-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1715.7	1715.7	1715.7	1715.7	1715.7
2.5°	1715.7	1715.7	1707.4	1715.7	1721.2
5°	1710.2	1710.2	1704.7	1712.9	1715.7
7.5°	1701.9	1701.9	1696.4	1704.7	1710.2
10°	1688.2	1688.2	1685.5	1693.7	1699.2
12.5°	1671.7	1671.7	1669.0	1680.0	1685.5
15°	1652.5	1652.5	1652.5	1666.2	1671.7
17.5°	1627.7	1630.5	1630.5	1644.2	1649.7
20°	1603.0	1605.7	1608.5	1625.0	1630.5
22.5°	1572.7	1572.7	1581.0	1600.2	1608.5
25°	1539.7	1542.5	1553.5	1572.7	1581.0
27.5°	1506.7	1509.5	1520.5	1539.7	1548.0
30°	1471.0	1473.7	1484.7	1504.0	1515.0
32.5°	1429.7	1432.5	1443.5	1465.5	1473.7
35°	1388.5	1388.5	1402.3	1421.5	1432.5
37.5°	1341.8	1344.5	1355.5	1374.8	1383.0
40°	1295.0	1297.8	1306.0	1322.5	1333.5
42.5°	1245.5	1248.3	1253.8	1267.5	1275.8
45°	1196.0	1196.0	1198.8	1209.8	1218.0
47.5°	1141.0	1141.0	1141.0	1146.5	1154.8
50°	1083.3	1083.3	1077.8	1080.6	1086.1
52.5°	1025.6	1022.8	1011.8	1011.8	1020.1
55°	962.3	959.6	945.8	937.6	943.1
57.5°	896.3	890.8	871.6	863.3	866.1
60°	830.4	822.1	797.4	786.4	791.9
62.5°	758.9	750.6	720.4	712.1	717.6
65°	684.6	670.9	640.6	635.1	635.1
67.5°	610.4	593.9	566.4	552.7	544.4
70°	530.7	514.2	492.2	459.2	442.7
72.5°	450.9	437.2	415.2	365.7	349.2
75°	371.2	357.4	329.9	283.2	275.0
77.5°	291.4	283.2	247.5	233.7	242.0
80°	217.2	217.2	187.0	203.5	211.7
82.5°	145.7	140.2	154.0	156.7	156.7
85°	82.5	88.0	99.0	96.2	96.2
87.5°	35.7	41.2	44.0	41.2	41.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)