

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: P184509

Luminaire Tested: **312EN-LD2-43-UNV-L850-CD1-U**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P184509  
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-LD2-43-UNV-L850-CD1-U  
Description: METALUX ENCOUNTER 300X1200 TROFFER  
  
Light Source: EATON LED 5000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

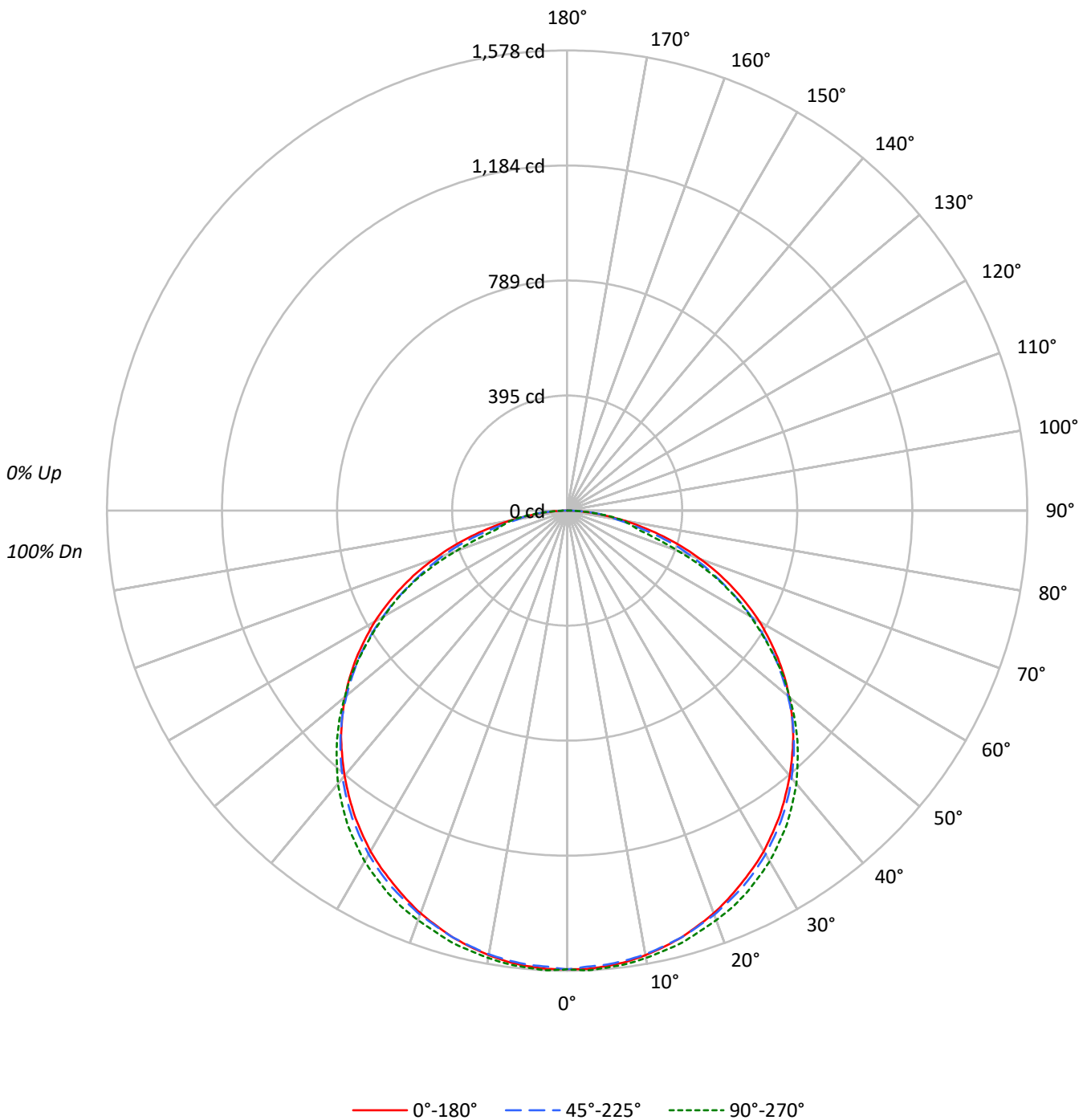
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4677.8 lumens  
Efficiency: N/A  
Efficacy: 124.4 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): 37.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	4233	4233	4233
5°	4236	4222	4249
10°	4230	4223	4257
15°	4221	4221	4270
20°	4209	4223	4281
25°	4192	4229	4304
30°	4191	4230	4316
35°	4182	4224	4315
40°	4171	4207	4295
45°	4173	4183	4250
50°	4158	4137	4169
55°	4139	4069	4057
60°	4097	3935	3907
65°	3997	3740	3708
70°	3828	3551	3194
75°	3538	3145	2621
80°	3087	2656	3008
85°	2334	2803	2723



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	149.1	3.2
10°-20°	429.2	9.2
20°-30°	658.3	14.1
30°-40°	806.2	17.2
40°-50°	850.0	18.2
50°-60°	776.4	16.6
60°-70°	589.9	12.6
70°-80°	322.1	6.9
80°-90°	96.7	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°	1236.6	26.4
0°-40°	2042.8	43.7
0°-60°	3669.1	78.4
0°-90°	4677.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4677.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1573	1573	1573	1573	1573	
5°	1568	1568	1563	1571	1573	149
15°	1515	1515	1515	1528	1533	428
25°	1412	1414	1424	1442	1450	652
35°	1273	1273	1286	1303	1313	796
45°	1097	1097	1099	1109	1117	845
55°	882	880	867	860	865	788
65°	628	615	587	582	582	620
75°	340	328	302	260	252	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°	1573.1	1573.1	1573.1	1573.1	1573.1
2.5°	1573.1	1573.1	1565.5	1573.1	1578.1
5°	1568.0	1568.0	1563.0	1570.6	1573.1
7.5°	1560.5	1560.5	1555.4	1563.0	1568.0
10°	1547.9	1547.9	1545.4	1552.9	1558.0
12.5°	1532.7	1532.7	1530.2	1540.3	1545.4
15°	1515.1	1515.1	1515.1	1527.7	1532.7
17.5°	1492.4	1494.9	1494.9	1507.5	1512.6
20°	1469.7	1472.2	1474.8	1489.9	1494.9
22.5°	1442.0	1442.0	1449.6	1467.2	1474.8
25°	1411.7	1414.3	1424.3	1442.0	1449.6
27.5°	1381.5	1384.0	1394.1	1411.7	1419.3
30°	1348.7	1351.2	1361.3	1379.0	1389.1
32.5°	1310.9	1313.4	1323.5	1343.7	1351.2
35°	1273.1	1273.1	1285.7	1303.3	1313.4
37.5°	1230.2	1232.8	1242.8	1260.5	1268.0
40°	1187.4	1189.9	1197.5	1212.6	1222.7
42.5°	1142.0	1144.5	1149.6	1162.2	1169.7
45°	1096.6	1096.6	1099.1	1109.2	1116.8
47.5°	1046.2	1046.2	1046.2	1051.2	1058.8
50°	993.3	993.3	988.2	990.7	995.8
52.5°	940.3	937.8	927.7	927.7	935.3
55°	882.3	879.8	867.2	859.7	864.7
57.5°	821.8	816.8	799.1	791.6	794.1
60°	761.3	753.8	731.1	721.0	726.0
62.5°	695.8	688.2	660.5	652.9	658.0
65°	627.7	615.1	587.4	582.3	582.3
67.5°	559.7	544.5	519.3	506.7	499.2
70°	486.5	471.4	451.3	421.0	405.9
72.5°	413.4	400.8	380.7	335.3	320.2
75°	340.3	327.7	302.5	259.7	252.1
77.5°	267.2	259.7	226.9	214.3	221.8
80°	199.2	199.2	171.4	186.6	194.1
82.5°	133.6	128.6	141.2	143.7	143.7
85°	75.6	80.7	90.8	88.2	88.2
87.5°	32.8	37.8	40.3	37.8	37.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)