

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: P184517

Luminaire Tested: **312EN-LD2-51-UNV-L835-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184517
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-LD2-51-UNV-L835-CD1-U
Description: METALUX ENCOUNTER 300X1200 TROFFER

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

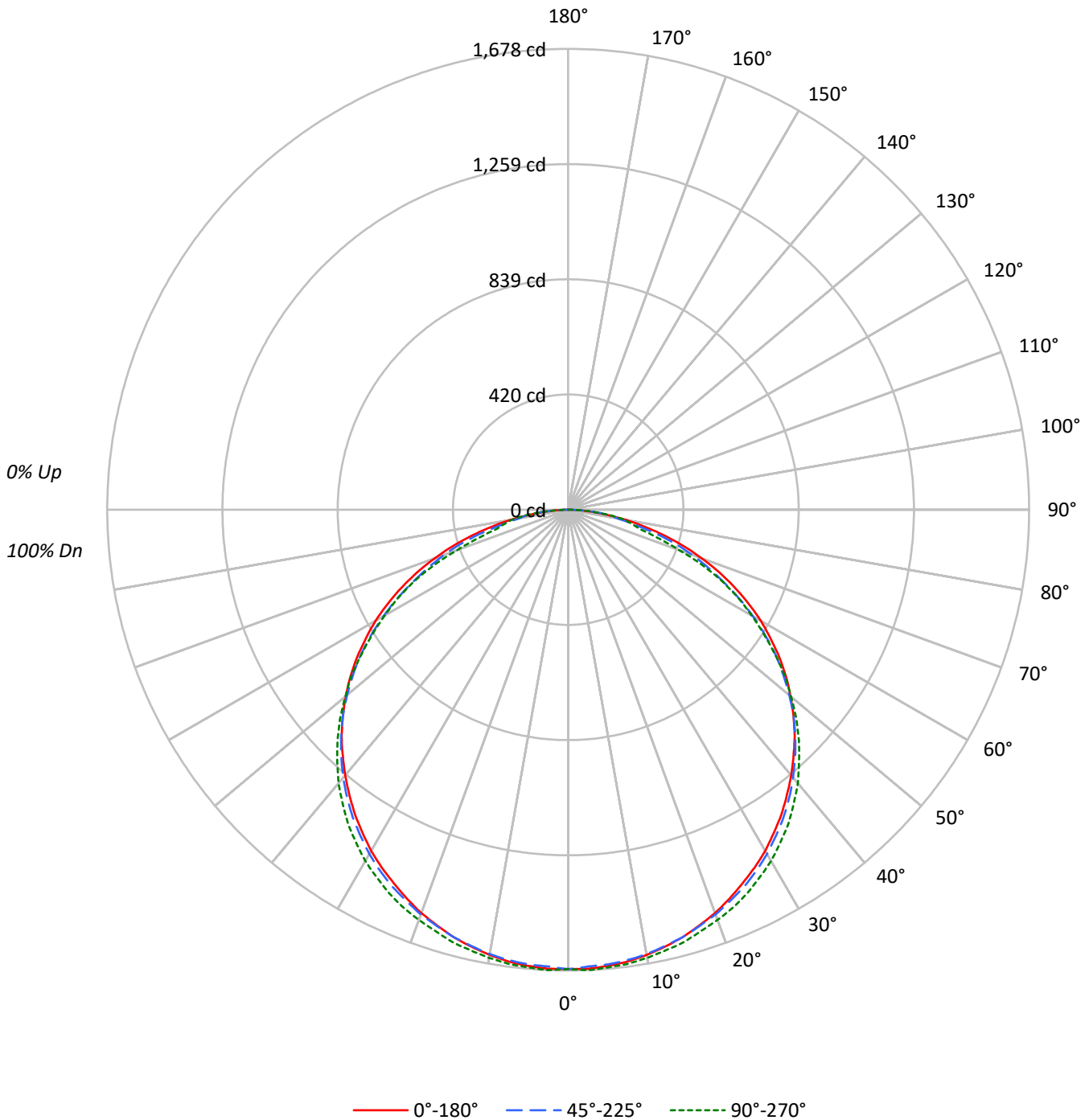
Lumens per Lamp: N/A
Luminaire Lumens: 4974.5 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.41
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 44.7
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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	41	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	55	42	34	28	41	33	28	40	33	28	39	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4501	4501	4501
5°	4504	4490	4519
10°	4498	4491	4527
15°	4489	4489	4541
20°	4476	4491	4552
25°	4458	4497	4577
30°	4456	4498	4590
35°	4447	4491	4588
40°	4436	4473	4567
45°	4438	4448	4520
50°	4422	4400	4433
55°	4402	4327	4314
60°	4357	4184	4155
65°	4250	3977	3943
70°	4071	3776	3396
75°	3763	3345	2787
80°	3282	2825	3199
85°	2482	2979	2896



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.6	3.2
10°-20°	456.4	9.2
20°-30°	700.0	14.1
30°-40°	857.3	17.2
40°-50°	903.9	18.2
50°-60°	825.6	16.6
60°-70°	627.3	12.6
70°-80°	342.5	6.9
80°-90°	102.8	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°	1315.0	26.4
0°-40°	2172.3	43.7
0°-60°	3901.8	78.4
0°-90°	4974.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4974.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1673	1673	1673	1673	1673	
5°	1668	1668	1662	1670	1673	159
15°	1611	1611	1611	1625	1630	455
25°	1501	1504	1515	1533	1542	693
35°	1354	1354	1367	1386	1397	847
45°	1166	1166	1169	1180	1188	899
55°	938	936	922	914	920	838
65°	668	654	625	619	619	660
75°	362	348	322	276	268	382
85°	80	86	96	94	94	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1672.8	1672.8	1672.8	1672.8	1672.8
2.5°	1672.8	1672.8	1664.8	1672.8	1678.2
5°	1667.5	1667.5	1662.1	1670.2	1672.8
7.5°	1659.4	1659.4	1654.1	1662.1	1667.5
10°	1646.0	1646.0	1643.4	1651.4	1656.8
12.5°	1629.9	1629.9	1627.3	1638.0	1643.4
15°	1611.2	1611.2	1611.2	1624.6	1629.9
17.5°	1587.1	1589.7	1589.7	1603.1	1608.5
20°	1562.9	1565.6	1568.3	1584.4	1589.7
22.5°	1533.4	1533.4	1541.5	1560.2	1568.3
25°	1501.3	1504.0	1514.7	1533.4	1541.5
27.5°	1469.1	1471.8	1482.5	1501.3	1509.3
30°	1434.2	1436.9	1447.7	1466.4	1477.1
32.5°	1394.0	1396.7	1407.4	1428.9	1436.9
35°	1353.8	1353.8	1367.2	1386.0	1396.7
37.5°	1308.2	1310.9	1321.7	1340.4	1348.5
40°	1262.7	1265.4	1273.4	1289.5	1300.2
42.5°	1214.4	1217.1	1222.5	1235.9	1243.9
45°	1166.2	1166.2	1168.8	1179.6	1187.6
47.5°	1112.5	1112.5	1112.5	1117.9	1126.0
50°	1056.3	1056.3	1050.9	1053.6	1058.9
52.5°	1000.0	997.3	986.5	986.5	994.6
55°	938.3	935.6	922.2	914.2	919.5
57.5°	874.0	868.6	849.8	841.8	844.5
60°	809.6	801.6	777.4	766.7	772.1
62.5°	739.9	731.9	702.4	694.3	699.7
65°	667.5	654.1	624.6	619.3	619.3
67.5°	595.1	579.1	552.3	538.8	530.8
70°	517.4	501.3	479.9	447.7	431.6
72.5°	439.7	426.3	404.8	356.6	340.5
75°	361.9	348.5	321.7	276.1	268.1
77.5°	284.2	276.1	241.3	227.9	235.9
80°	211.8	211.8	182.3	198.4	206.4
82.5°	142.1	136.7	150.1	152.8	152.8
85°	80.4	85.8	96.5	93.8	93.8
87.5°	34.9	40.2	42.9	40.2	40.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)