

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: P184512

Luminaire Tested: **312EN-LD2-47-UNV-L835-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184512
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-L835-CD1-U
Description: METALUX ENCOUNTER 300X1200 TROFFER

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

Summary

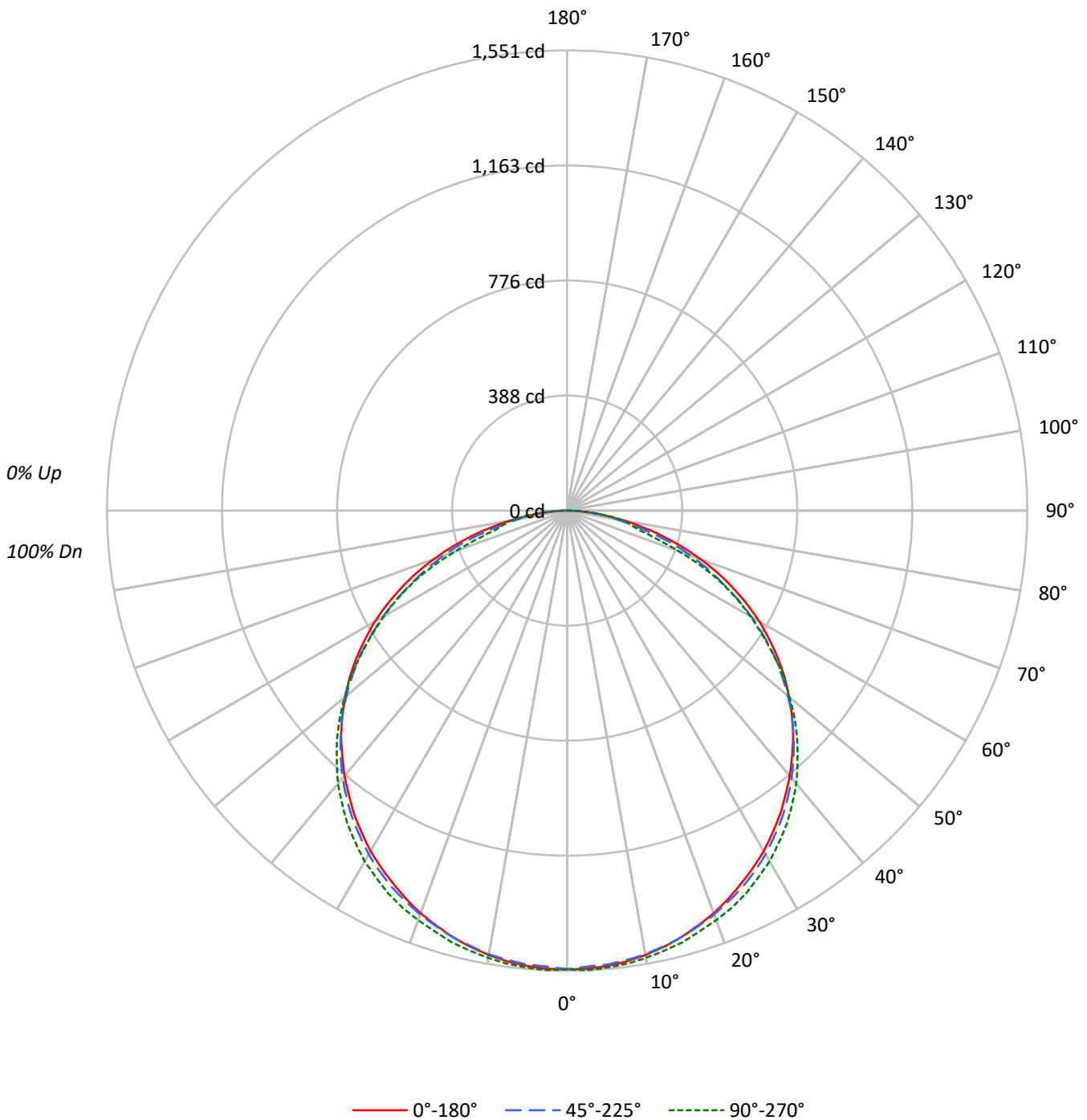
Lumens per Lamp: N/A
Luminaire Lumens: 4596.3 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.41
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	4159	4159	4159
5°	4162	4149	4175
10°	4156	4149	4183
15°	4147	4147	4196
20°	4135	4150	4206
25°	4119	4155	4229
30°	4118	4156	4241
35°	4109	4150	4239
40°	4098	4133	4220
45°	4101	4110	4176
50°	4086	4065	4096
55°	4068	3998	3986
60°	4026	3866	3839
65°	3927	3675	3643
70°	3762	3489	3138
75°	3477	3090	2575
80°	3033	2610	2955
85°	2294	2754	2677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.5	3.2
10°-20°	421.7	9.2
20°-30°	646.8	14.1
30°-40°	792.2	17.2
40°-50°	835.2	18.2
50°-60°	762.9	16.6
60°-70°	579.6	12.6
70°-80°	316.5	6.9
80°-90°	95.0	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°	1215.0	26.4
0°-40°	2007.2	43.7
0°-60°	3605.2	78.4
0°-90°	4596.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4596.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1546	1546	1546	1546	1546	
5°	1541	1541	1536	1543	1546	146
15°	1489	1489	1489	1501	1506	420
25°	1387	1390	1400	1417	1424	640
35°	1251	1251	1263	1281	1290	782
45°	1078	1078	1080	1090	1097	830
55°	867	864	852	845	850	774
65°	617	604	577	572	572	610
75°	334	322	297	255	248	353
85°	74	79	89	87	87	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1545.7	1545.7	1545.7	1545.7	1545.7
2.5°	1545.7	1545.7	1538.2	1545.7	1550.6
5°	1540.7	1540.7	1535.8	1543.2	1545.7
7.5°	1533.3	1533.3	1528.3	1535.8	1540.7
10°	1520.9	1520.9	1518.4	1525.9	1530.8
12.5°	1506.0	1506.0	1503.6	1513.5	1518.4
15°	1488.7	1488.7	1488.7	1501.1	1506.0
17.5°	1466.4	1468.9	1468.9	1481.3	1486.2
20°	1444.1	1446.6	1449.1	1463.9	1468.9
22.5°	1416.9	1416.9	1424.3	1441.6	1449.1
25°	1387.1	1389.6	1399.5	1416.9	1424.3
27.5°	1357.4	1359.9	1369.8	1387.1	1394.6
30°	1325.2	1327.7	1337.6	1354.9	1364.8
32.5°	1288.1	1290.5	1300.4	1320.3	1327.7
35°	1250.9	1250.9	1263.3	1280.6	1290.5
37.5°	1208.8	1211.3	1221.2	1238.5	1246.0
40°	1166.7	1169.2	1176.6	1191.5	1201.4
42.5°	1122.1	1124.6	1129.5	1141.9	1149.3
45°	1077.5	1077.5	1080.0	1089.9	1097.3
47.5°	1028.0	1028.0	1028.0	1032.9	1040.4
50°	976.0	976.0	971.0	973.5	978.4
52.5°	923.9	921.5	911.6	911.6	919.0
55°	867.0	864.5	852.1	844.7	849.6
57.5°	807.5	802.6	785.2	777.8	780.3
60°	748.1	740.6	718.3	708.4	713.4
62.5°	683.7	676.2	649.0	641.6	646.5
65°	616.8	604.4	577.1	572.2	572.2
67.5°	549.9	535.0	510.3	497.9	490.5
70°	478.1	463.2	443.4	413.7	398.8
72.5°	406.2	393.8	374.0	329.4	314.6
75°	334.4	322.0	297.2	255.1	247.7
77.5°	262.6	255.1	222.9	210.5	218.0
80°	195.7	195.7	168.4	183.3	190.7
82.5°	131.3	126.3	138.7	141.2	141.2
85°	74.3	79.3	89.2	86.7	86.7
87.5°	32.2	37.2	39.6	37.2	37.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)