

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: P184506

Luminaire Tested: **312EN-LD2-43-UNV-L830-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184506
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-L830-CD1-U
Description: METALUX ENCOUNTER 300X1200 TROFFER

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4087.8 lumens
Efficiency: N/A
Efficacy: 108.7 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

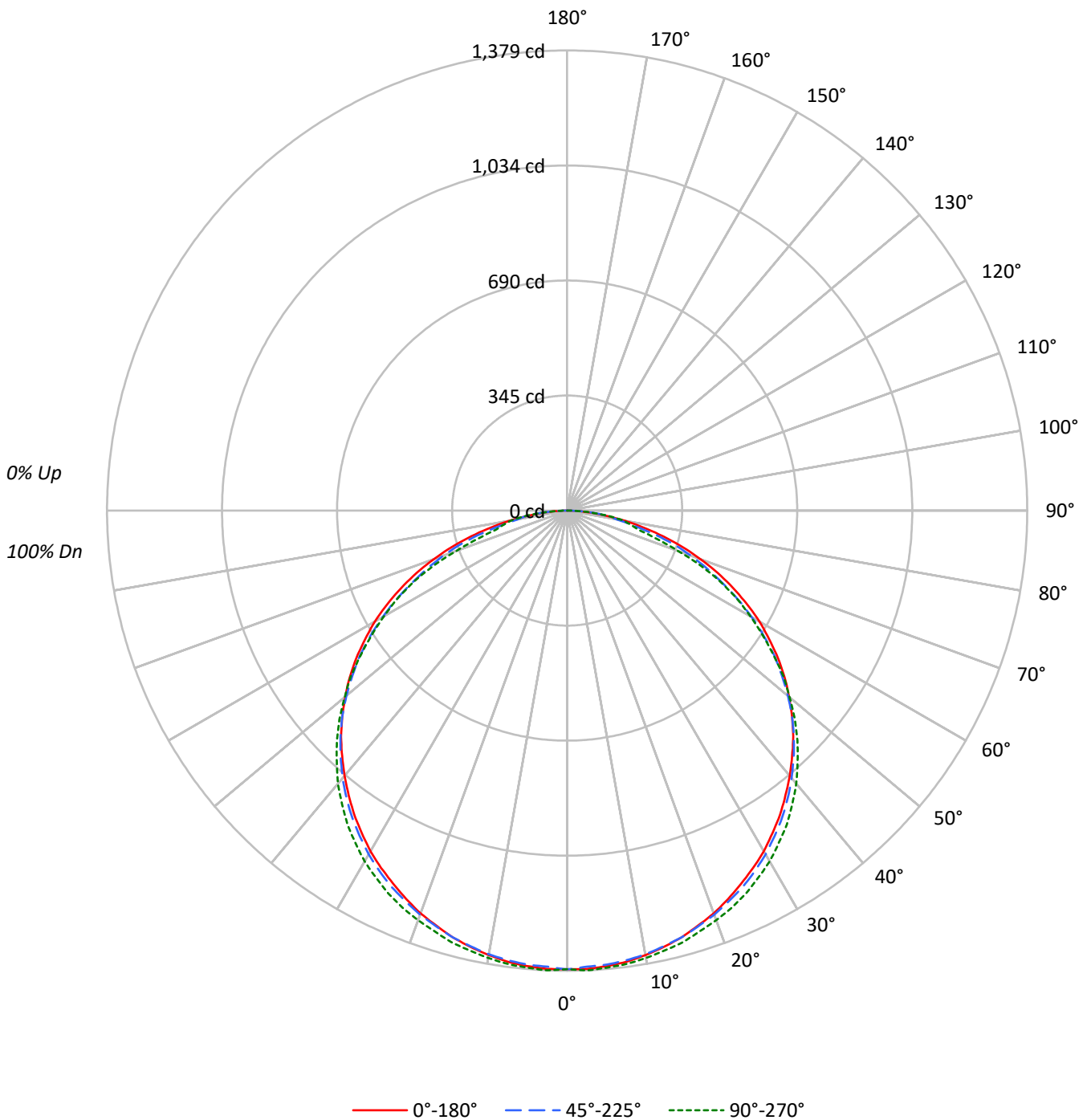
Input Watts (W): 37.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3699	3699	3699
5°	3702	3690	3713
10°	3696	3690	3720
15°	3689	3689	3731
20°	3678	3691	3741
25°	3663	3696	3761
30°	3662	3696	3772
35°	3655	3691	3771
40°	3645	3676	3753
45°	3647	3655	3714
50°	3634	3615	3643
55°	3618	3555	3545
60°	3581	3439	3415
65°	3493	3268	3240
70°	3345	3102	2791
75°	3092	2749	2290
80°	2696	2321	2628
85°	2041	2448	2381



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.3	3.2
10°-20°	375.1	9.2
20°-30°	575.3	14.1
30°-40°	704.5	17.2
40°-50°	742.8	18.2
50°-60°	678.4	16.6
60°-70°	515.5	12.6
70°-80°	281.5	6.9
80°-90°	84.5	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°	1080.6	26.4
0°-40°	1785.2	43.7
0°-60°	3206.4	78.4
0°-90°	4087.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4087.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1375	1375	1375	1375	1375	
5°	1370	1370	1366	1372	1375	130
15°	1324	1324	1324	1335	1339	374
25°	1234	1236	1245	1260	1267	569
35°	1112	1112	1124	1139	1148	696
45°	958	958	960	969	976	738
55°	771	769	758	751	756	689
65°	548	538	513	509	509	542
75°	297	286	264	227	220	314
85°	66	70	79	77	77	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1374.7	1374.7	1374.7	1374.7	1374.7
2.5°	1374.7	1374.7	1368.1	1374.7	1379.1
5°	1370.3	1370.3	1365.9	1372.5	1374.7
7.5°	1363.7	1363.7	1359.3	1365.9	1370.3
10°	1352.6	1352.6	1350.4	1357.1	1361.5
12.5°	1339.4	1339.4	1337.2	1346.0	1350.4
15°	1324.0	1324.0	1324.0	1335.0	1339.4
17.5°	1304.2	1306.4	1306.4	1317.4	1321.8
20°	1284.4	1286.6	1288.8	1302.0	1306.4
22.5°	1260.1	1260.1	1266.7	1282.2	1288.8
25°	1233.7	1235.9	1244.7	1260.1	1266.7
27.5°	1207.2	1209.5	1218.3	1233.7	1240.3
30°	1178.6	1180.8	1189.6	1205.0	1213.9
32.5°	1145.6	1147.8	1156.6	1174.2	1180.8
35°	1112.5	1112.5	1123.5	1139.0	1147.8
37.5°	1075.1	1077.3	1086.1	1101.5	1108.1
40°	1037.6	1039.8	1046.4	1059.6	1068.5
42.5°	998.0	1000.2	1004.6	1015.6	1022.2
45°	958.3	958.3	960.5	969.3	975.9
47.5°	914.2	914.2	914.2	918.7	925.3
50°	868.0	868.0	863.6	865.8	870.2
52.5°	821.7	819.5	810.7	810.7	817.3
55°	771.1	768.8	757.8	751.2	755.6
57.5°	718.2	713.8	698.4	691.7	693.9
60°	665.3	658.7	638.9	630.1	634.5
62.5°	608.0	601.4	577.2	570.6	575.0
65°	548.5	537.5	513.3	508.9	508.9
67.5°	489.1	475.8	453.8	442.8	436.2
70°	425.2	412.0	394.3	367.9	354.7
72.5°	361.3	350.3	332.7	293.0	279.8
75°	297.4	286.4	264.4	226.9	220.3
77.5°	233.5	226.9	198.3	187.3	193.9
80°	174.0	174.0	149.8	163.0	169.6
82.5°	116.8	112.4	123.4	125.6	125.6
85°	66.1	70.5	79.3	77.1	77.1
87.5°	28.6	33.0	35.2	33.0	33.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)