

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: P184504

Luminaire Tested: **312EN-LD2-38-UNV-L850-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184504
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-LD2-38-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: 4141.5 lumens
Efficiency: N/A
Efficacy: 126.3 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

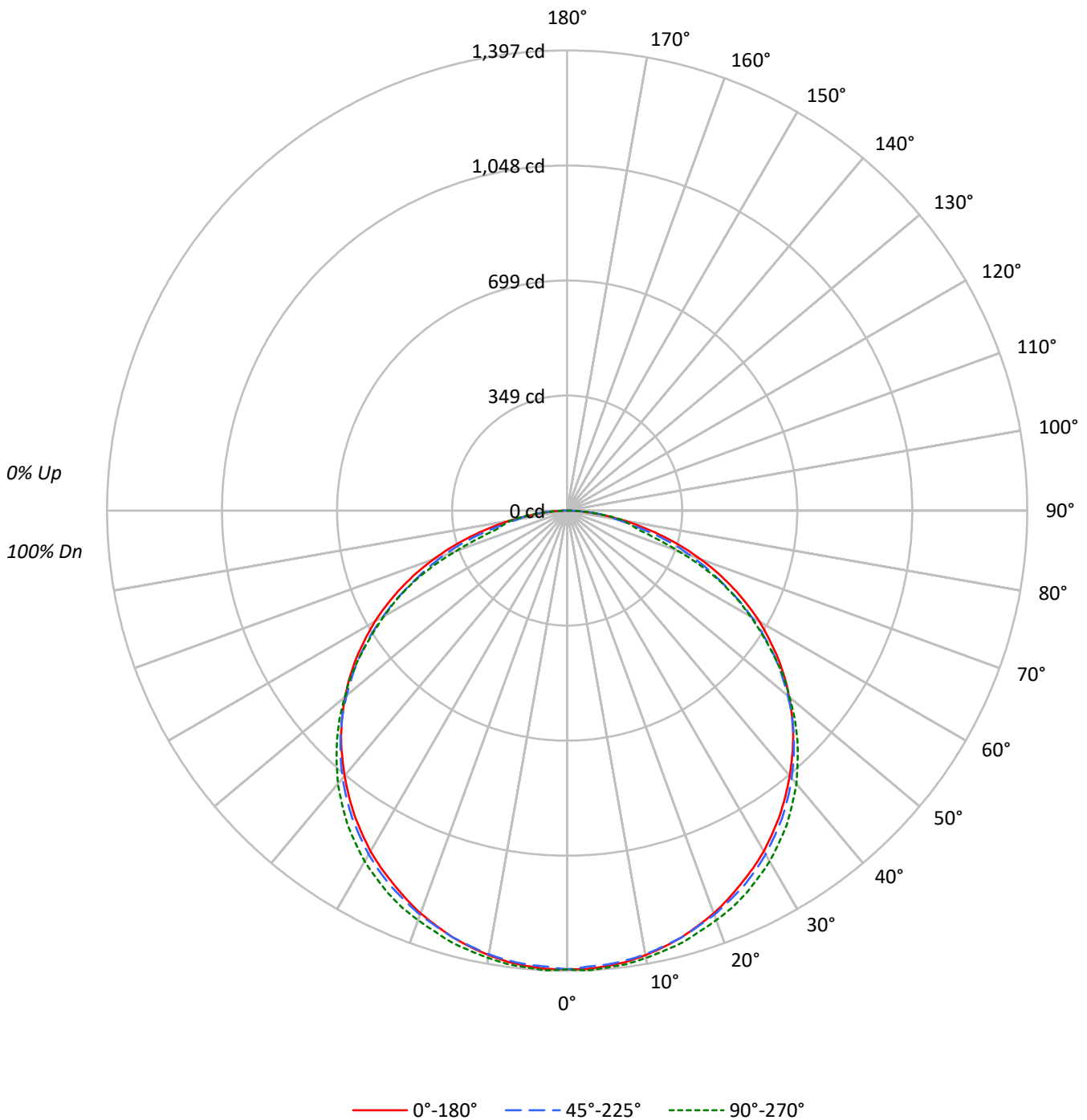
Input Watts (W): 32.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3748	3748	3748
5°	3750	3738	3762
10°	3745	3739	3769
15°	3737	3737	3780
20°	3726	3739	3790
25°	3711	3744	3811
30°	3710	3745	3821
35°	3703	3739	3820
40°	3693	3724	3803
45°	3695	3703	3763
50°	3682	3663	3691
55°	3665	3602	3592
60°	3627	3484	3460
65°	3539	3311	3283
70°	3389	3143	2827
75°	3133	2784	2321
80°	2732	2352	2664
85°	2069	2479	2411



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.0	3.2
10°-20°	380.0	9.2
20°-30°	582.8	14.1
30°-40°	713.8	17.2
40°-50°	752.5	18.2
50°-60°	687.4	16.6
60°-70°	522.3	12.6
70°-80°	285.2	6.9
80°-90°	85.6	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°	1094.8	26.4
0°-40°	1808.6	43.7
0°-60°	3248.5	78.4
0°-90°	4141.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4141.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1393	1393	1393	1393	1393	
5°	1388	1388	1384	1390	1393	132
15°	1341	1341	1341	1353	1357	379
25°	1250	1252	1261	1277	1283	577
35°	1127	1127	1138	1154	1163	705
45°	971	971	973	982	989	748
55°	781	779	768	761	766	698
65°	556	545	520	516	516	549
75°	301	290	268	230	223	318
85°	67	71	80	78	78	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1392.7	1392.7	1392.7	1392.7	1392.7
2.5°	1392.7	1392.7	1386.0	1392.7	1397.2
5°	1388.3	1388.3	1383.8	1390.5	1392.7
7.5°	1381.6	1381.6	1377.1	1383.8	1388.3
10°	1370.4	1370.4	1368.2	1374.9	1379.3
12.5°	1357.0	1357.0	1354.8	1363.7	1368.2
15°	1341.4	1341.4	1341.4	1352.6	1357.0
17.5°	1321.3	1323.5	1323.5	1334.7	1339.2
20°	1301.2	1303.5	1305.7	1319.1	1323.5
22.5°	1276.7	1276.7	1283.4	1299.0	1305.7
25°	1249.9	1252.1	1261.0	1276.7	1283.4
27.5°	1223.1	1225.3	1234.3	1249.9	1256.6
30°	1194.1	1196.3	1205.2	1220.9	1229.8
32.5°	1160.6	1162.8	1171.8	1189.6	1196.3
35°	1127.1	1127.1	1138.3	1153.9	1162.8
37.5°	1089.2	1091.4	1100.3	1116.0	1122.7
40°	1051.2	1053.5	1060.2	1073.6	1082.5
42.5°	1011.1	1013.3	1017.8	1028.9	1035.6
45°	970.9	970.9	973.1	982.1	988.8
47.5°	926.3	926.3	926.3	930.7	937.4
50°	879.4	879.4	874.9	877.2	881.6
52.5°	832.5	830.3	821.4	821.4	828.1
55°	781.2	778.9	767.8	761.1	765.6
57.5°	727.6	723.1	707.5	700.8	703.1
60°	674.0	667.4	647.3	638.3	642.8
62.5°	616.0	609.3	584.8	578.1	582.5
65°	555.8	544.6	520.0	515.6	515.6
67.5°	495.5	482.1	459.8	448.6	441.9
70°	430.8	417.4	399.5	372.7	359.3
72.5°	366.0	354.9	337.0	296.8	283.5
75°	301.3	290.2	267.8	229.9	223.2
77.5°	236.6	229.9	200.9	189.7	196.4
80°	176.3	176.3	151.8	165.2	171.9
82.5°	118.3	113.8	125.0	127.2	127.2
85°	67.0	71.4	80.3	78.1	78.1
87.5°	29.0	33.5	35.7	33.5	33.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)