

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: P184499

Luminaire Tested: **312EN-LD2-33-UNV-L850-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184499
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-LD2-33-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: 3592.3 lumens
Efficiency: N/A
Efficacy: 127.8 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

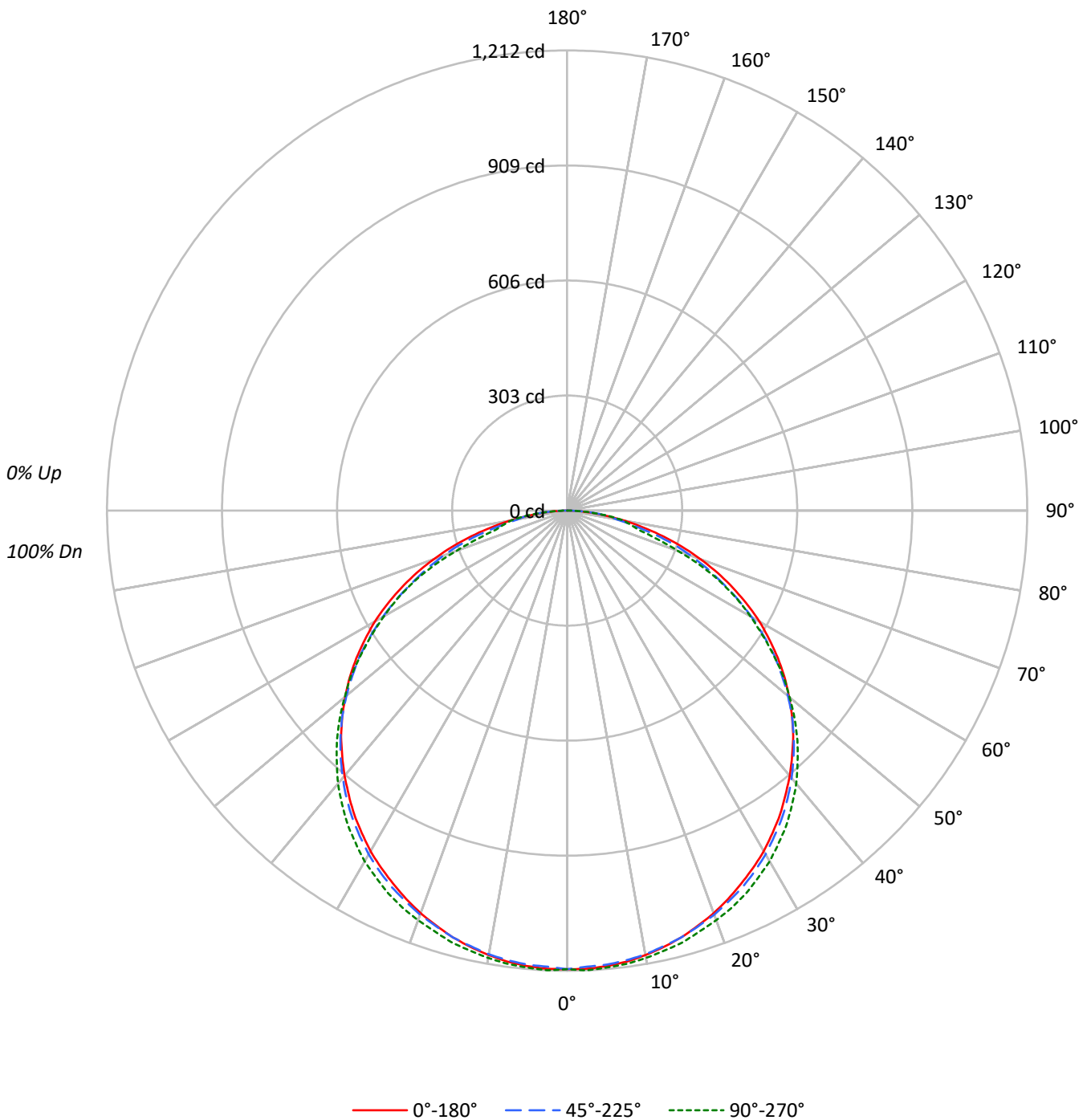
Input Watts (W): 28.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3251	3251	3251
5°	3253	3242	3263
10°	3248	3243	3269
15°	3241	3241	3279
20°	3232	3243	3288
25°	3219	3248	3305
30°	3218	3248	3315
35°	3212	3243	3313
40°	3203	3230	3298
45°	3205	3212	3264
50°	3193	3177	3201
55°	3179	3125	3115
60°	3147	3021	3001
65°	3069	2872	2848
70°	2939	2726	2452
75°	2718	2415	2013
80°	2369	2039	2311
85°	1794	2152	2093



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.5	3.2
10°-20°	329.6	9.2
20°-30°	505.5	14.1
30°-40°	619.1	17.2
40°-50°	652.7	18.2
50°-60°	596.2	16.6
60°-70°	453.0	12.6
70°-80°	247.3	6.9
80°-90°	74.3	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°	949.6	26.4
0°-40°	1568.7	43.7
0°-60°	2817.7	78.4
0°-90°	3592.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3592.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1208	1208	1208	1208	1208	
5°	1204	1204	1200	1206	1208	114
15°	1164	1164	1164	1173	1177	328
25°	1084	1086	1094	1107	1113	500
35°	978	978	987	1001	1009	611
45°	842	842	844	852	858	649
55°	678	676	666	660	664	605
65°	482	472	451	447	447	476
75°	261	252	232	199	194	276
85°	58	62	70	68	68	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1208.0	1208.0	1208.0	1208.0	1208.0
2.5°	1208.0	1208.0	1202.2	1208.0	1211.9
5°	1204.2	1204.2	1200.3	1206.1	1208.0
7.5°	1198.3	1198.3	1194.5	1200.3	1204.2
10°	1188.7	1188.7	1186.7	1192.5	1196.4
12.5°	1177.1	1177.1	1175.1	1182.9	1186.7
15°	1163.5	1163.5	1163.5	1173.2	1177.1
17.5°	1146.1	1148.0	1148.0	1157.7	1161.6
20°	1128.7	1130.6	1132.5	1144.1	1148.0
22.5°	1107.4	1107.4	1113.2	1126.7	1132.5
25°	1084.1	1086.1	1093.8	1107.4	1113.2
27.5°	1060.9	1062.8	1070.6	1084.1	1089.9
30°	1035.7	1037.7	1045.4	1059.0	1066.7
32.5°	1006.7	1008.6	1016.4	1031.9	1037.7
35°	977.7	977.7	987.3	1000.9	1008.6
37.5°	944.7	946.7	954.4	968.0	973.8
40°	911.8	913.8	919.6	931.2	938.9
42.5°	877.0	878.9	882.8	892.5	898.3
45°	842.1	842.1	844.1	851.8	857.6
47.5°	803.4	803.4	803.4	807.3	813.1
50°	762.8	762.8	758.9	760.8	764.7
52.5°	722.1	720.2	712.4	712.4	718.2
55°	677.6	675.6	666.0	660.2	664.0
57.5°	631.1	627.2	613.7	607.9	609.8
60°	584.7	578.8	561.4	553.7	557.6
62.5°	534.3	528.5	507.2	501.4	505.3
65°	482.0	472.4	451.1	447.2	447.2
67.5°	429.8	418.2	398.8	389.1	383.3
70°	373.6	362.0	346.5	323.3	311.7
72.5°	317.5	307.8	292.3	257.5	245.9
75°	261.4	251.7	232.3	199.4	193.6
77.5°	205.2	199.4	174.2	164.6	170.4
80°	152.9	152.9	131.6	143.3	149.1
82.5°	102.6	98.7	108.4	110.3	110.3
85°	58.1	62.0	69.7	67.8	67.8
87.5°	25.2	29.0	31.0	29.0	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)