

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: P184501

Luminaire Tested: **312EN-LD2-38-UNV-L830-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184501
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-L830-CD1-U
Description: METALUX ENCOUNTER 300X1200 TROFFER

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

Summary

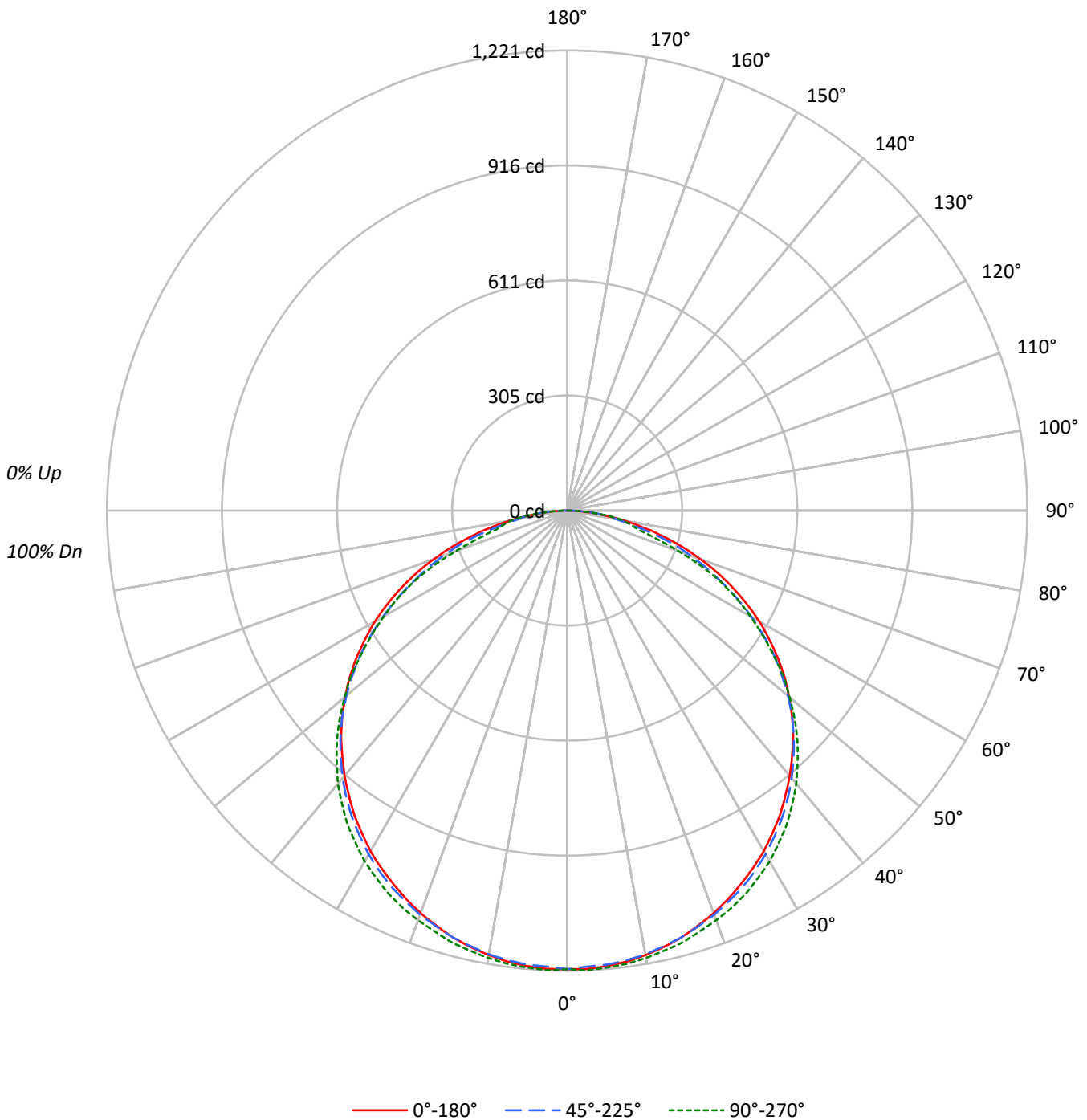
Lumens per Lamp: N/A
Luminaire Lumens: 3619.2 lumens
Efficiency: N/A
Efficacy: 110.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.41
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 32.8
Input Voltage (V): NR
Input Current (A_{in}): 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°	3275	3275	3275
5°	3277	3267	3288
10°	3272	3267	3294
15°	3266	3266	3304
20°	3256	3267	3312
25°	3243	3272	3330
30°	3242	3273	3339
35°	3236	3268	3338
40°	3227	3255	3323
45°	3229	3236	3288
50°	3217	3201	3225
55°	3203	3148	3139
60°	3170	3044	3023
65°	3093	2894	2869
70°	2961	2747	2471
75°	2738	2434	2027
80°	2388	2055	2328
85°	1806	2167	2109



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	3.2
10°-20°	332.1	9.2
20°-30°	509.3	14.1
30°-40°	623.8	17.2
40°-50°	657.6	18.2
50°-60°	600.7	16.6
60°-70°	456.4	12.6
70°-80°	249.2	6.9
80°-90°	74.8	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°	956.7	26.4
0°-40°	1580.5	43.7
0°-60°	2838.8	78.4
0°-90°	3619.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3619.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1213	1213	1209	1215	1217	115
15°	1172	1172	1172	1182	1186	331
25°	1092	1094	1102	1116	1122	504
35°	985	985	995	1008	1016	616
45°	848	848	850	858	864	654
55°	683	681	671	665	669	610
65°	486	476	454	451	451	480
75°	263	254	234	201	195	278
85°	58	62	70	68	68	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1217.1	1217.1	1217.1	1217.1	1217.1
2.5°	1217.1	1217.1	1211.2	1217.1	1221.0
5°	1213.2	1213.2	1209.3	1215.1	1217.1
7.5°	1207.3	1207.3	1203.4	1209.3	1213.2
10°	1197.6	1197.6	1195.6	1201.5	1205.4
12.5°	1185.9	1185.9	1183.9	1191.7	1195.6
15°	1172.2	1172.2	1172.2	1182.0	1185.9
17.5°	1154.7	1156.6	1156.6	1166.4	1170.3
20°	1137.1	1139.1	1141.0	1152.7	1156.6
22.5°	1115.7	1115.7	1121.5	1135.2	1141.0
25°	1092.2	1094.2	1102.0	1115.7	1121.5
27.5°	1068.8	1070.8	1078.6	1092.2	1098.1
30°	1043.5	1045.4	1053.2	1066.9	1074.7
32.5°	1014.2	1016.2	1024.0	1039.6	1045.4
35°	985.0	985.0	994.7	1008.4	1016.2
37.5°	951.8	953.8	961.6	975.2	981.1
40°	918.7	920.6	926.5	938.2	946.0
42.5°	883.5	885.5	889.4	899.2	905.0
45°	848.4	848.4	850.4	858.2	864.0
47.5°	809.4	809.4	809.4	813.3	819.2
50°	768.5	768.5	764.6	766.5	770.4
52.5°	727.5	725.6	717.8	717.8	723.6
55°	682.7	680.7	671.0	665.1	669.0
57.5°	635.8	631.9	618.3	612.4	614.4
60°	589.0	583.2	565.6	557.8	561.7
62.5°	538.3	532.5	511.0	505.2	509.1
65°	485.7	475.9	454.5	450.6	450.6
67.5°	433.0	421.3	401.8	392.0	386.2
70°	376.4	364.7	349.1	325.7	314.0
72.5°	319.9	310.1	294.5	259.4	247.7
75°	263.3	253.6	234.1	200.9	195.0
77.5°	206.7	200.9	175.5	165.8	171.6
80°	154.1	154.1	132.6	144.3	150.2
82.5°	103.4	99.5	109.2	111.2	111.2
85°	58.5	62.4	70.2	68.3	68.3
87.5°	25.4	29.3	31.2	29.3	29.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)