

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: P184503

Luminaire Tested: **312EN-LD2-38-UNV-L840-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184503
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-L840-CD1-U
Description: METALUX ENCOUNTER 300X1200 TROFFER

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

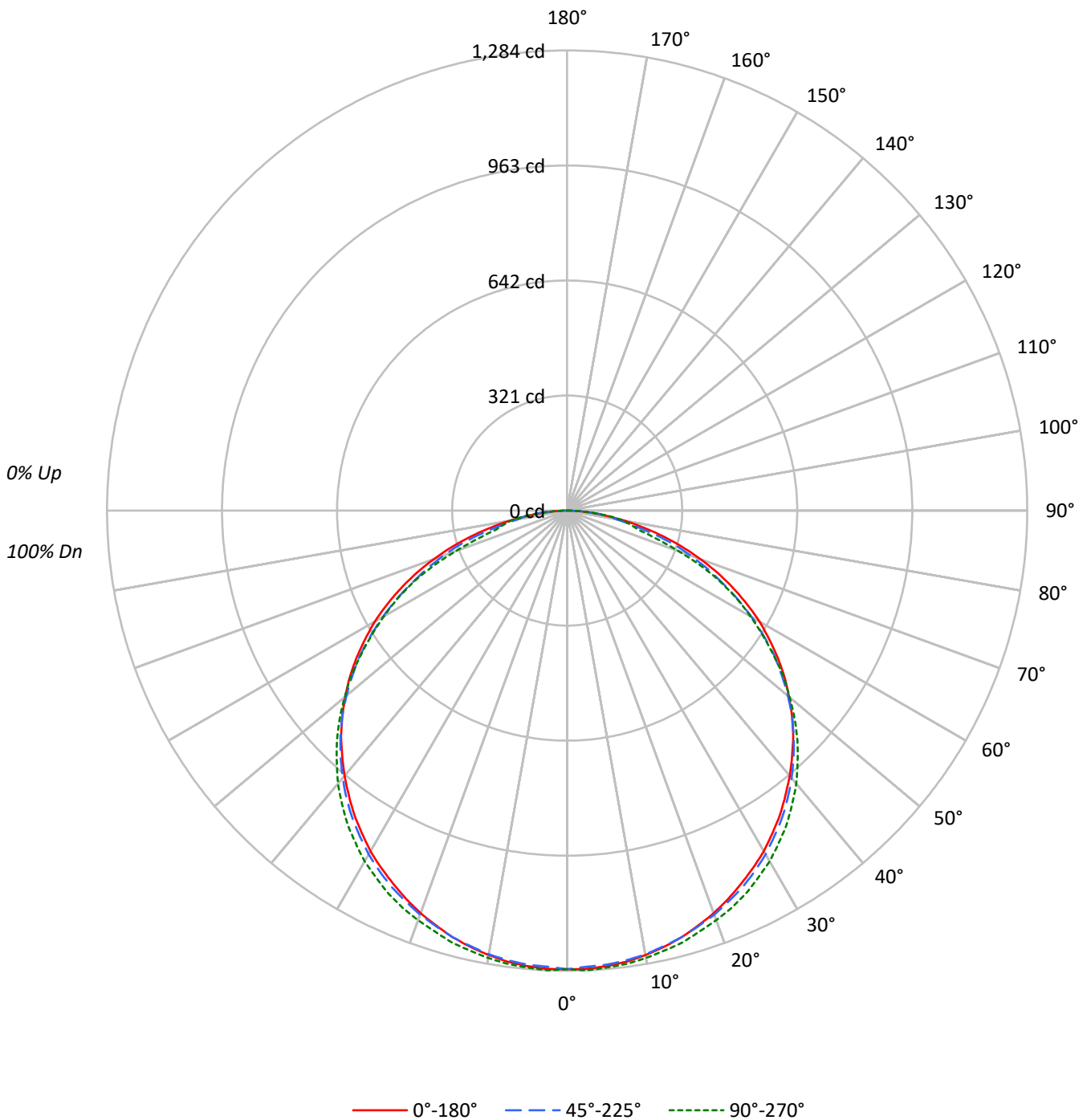
Lumens per Lamp: N/A
Luminaire Lumens: 3805.7 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.41
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	3444	3444	3444
5°	3446	3435	3457
10°	3441	3435	3463
15°	3434	3434	3474
20°	3424	3436	3483
25°	3410	3441	3502
30°	3410	3441	3512
35°	3402	3436	3510
40°	3393	3422	3494
45°	3395	3403	3458
50°	3383	3366	3391
55°	3368	3310	3301
60°	3334	3201	3179
65°	3252	3043	3017
70°	3114	2888	2598
75°	2879	2559	2132
80°	2510	2162	2447
85°	1899	2279	2217



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.3	3.2
10°-20°	349.2	9.2
20°-30°	535.6	14.1
30°-40°	655.9	17.2
40°-50°	691.5	18.2
50°-60°	631.6	16.6
60°-70°	479.9	12.6
70°-80°	262.1	6.9
80°-90°	78.7	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°	1006.0	26.4
0°-40°	1661.9	43.7
0°-60°	2985.1	78.4
0°-90°	3805.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3805.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1280	1280	1280	1280	1280	
5°	1276	1276	1272	1278	1280	121
15°	1233	1233	1233	1243	1247	348
25°	1148	1151	1159	1173	1179	530
35°	1036	1036	1046	1060	1069	648
45°	892	892	894	902	909	688
55°	718	716	706	699	704	641
65°	511	500	478	474	474	505
75°	277	267	246	211	205	293
85°	62	66	74	72	72	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1279.8	1279.8	1279.8	1279.8	1279.8
2.5°	1279.8	1279.8	1273.7	1279.8	1283.9
5°	1275.7	1275.7	1271.6	1277.8	1279.8
7.5°	1269.6	1269.6	1265.5	1271.6	1275.7
10°	1259.3	1259.3	1257.2	1263.4	1267.5
12.5°	1247.0	1247.0	1244.9	1253.1	1257.2
15°	1232.6	1232.6	1232.6	1242.9	1247.0
17.5°	1214.2	1216.2	1216.2	1226.5	1230.6
20°	1195.7	1197.8	1199.8	1212.1	1216.2
22.5°	1173.2	1173.2	1179.3	1193.7	1199.8
25°	1148.5	1150.6	1158.8	1173.2	1179.3
27.5°	1123.9	1126.0	1134.2	1148.5	1154.7
30°	1097.3	1099.3	1107.5	1121.9	1130.1
32.5°	1066.5	1068.6	1076.8	1093.2	1099.3
35°	1035.7	1035.7	1046.0	1060.4	1068.6
37.5°	1000.9	1002.9	1011.1	1025.5	1031.6
40°	966.0	968.1	974.2	986.5	994.7
42.5°	929.1	931.1	935.2	945.5	951.7
45°	892.2	892.2	894.2	902.4	908.6
47.5°	851.2	851.2	851.2	855.3	861.4
50°	808.1	808.1	804.0	806.0	810.1
52.5°	765.0	763.0	754.8	754.8	760.9
55°	717.8	715.8	705.5	699.4	703.5
57.5°	668.6	664.5	650.2	644.0	646.1
60°	619.4	613.2	594.8	586.6	590.7
62.5°	566.1	559.9	537.4	531.2	535.3
65°	510.7	500.4	477.9	473.8	473.8
67.5°	455.3	443.0	422.5	412.2	406.1
70°	395.8	383.5	367.1	342.5	330.2
72.5°	336.4	326.1	309.7	272.8	260.5
75°	276.9	266.6	246.1	211.3	205.1
77.5°	217.4	211.3	184.6	174.3	180.5
80°	162.0	162.0	139.5	151.8	157.9
82.5°	108.7	104.6	114.9	116.9	116.9
85°	61.5	65.6	73.8	71.8	71.8
87.5°	26.7	30.8	32.8	30.8	30.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)