

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: P184486

Luminaire Tested: **312EN-LD2-25-UNV-L830-CD1-U**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P184486  
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-LD2-25-UNV-L830-CD1-U  
Description: METALUX ENCOUNTER 300X1200 TROFFER  
  
Light Source: EATON LED 3000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

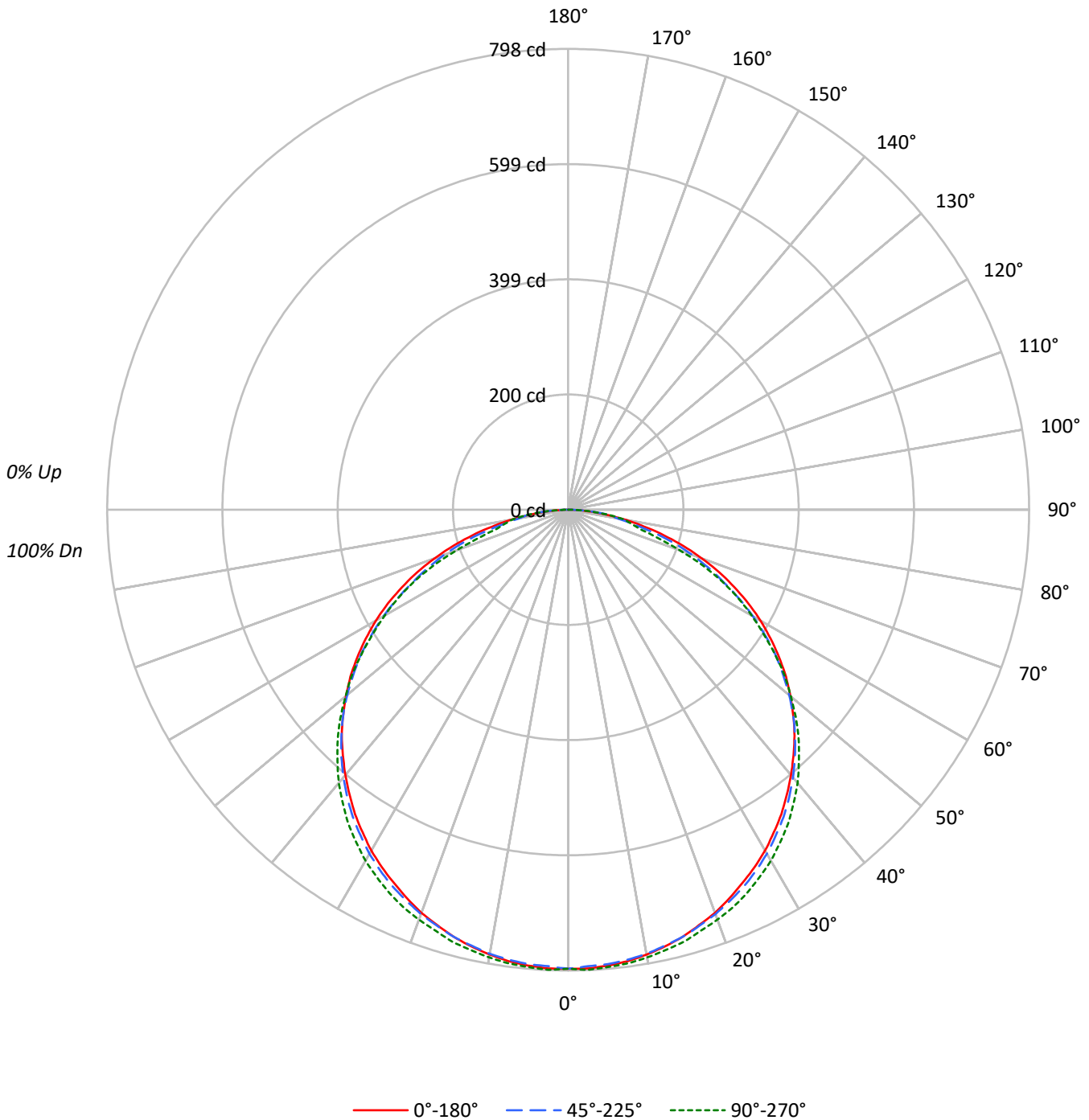
Lumens per Lamp: N/A  
Luminaire Lumens: 2364.1 lumens  
Efficiency: N/A  
Efficacy: 113.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.41  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 20.9  
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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	41	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	55	42	34	28	41	33	28	40	33	28	39	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2139	2139	2139
5°	2140	2134	2148
10°	2138	2134	2152
15°	2133	2133	2158
20°	2127	2134	2164
25°	2119	2137	2175
30°	2118	2138	2181
35°	2114	2135	2181
40°	2108	2126	2171
45°	2109	2114	2148
50°	2102	2091	2107
55°	2092	2056	2050
60°	2071	1989	1975
65°	2020	1890	1874
70°	1935	1795	1614
75°	1788	1590	1325
80°	1559	1342	1520
85°	1179	1417	1377



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.4	3.2
10°-20°	216.9	9.2
20°-30°	332.7	14.1
30°-40°	407.4	17.2
40°-50°	429.6	18.2
50°-60°	392.3	16.6
60°-70°	298.1	12.6
70°-80°	162.8	6.9
80°-90°	48.9	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°	624.9	26.4
0°-40°	1032.4	43.7
0°-60°	1854.3	78.4
0°-90°	2364.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2364.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	795	795	795	795	795	
5°	792	792	790	794	795	75
15°	766	766	766	772	775	216
25°	714	715	720	729	733	329
35°	643	643	650	659	664	402
45°	554	554	556	561	564	427
55°	446	445	438	434	437	398
65°	317	311	297	294	294	314
75°	172	166	153	131	127	182
85°	38	41	46	45	45	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	795.0	795.0	795.0	795.0	795.0
2.5°	795.0	795.0	791.2	795.0	797.5
5°	792.4	792.4	789.9	793.7	795.0
7.5°	788.6	788.6	786.1	789.9	792.4
10°	782.3	782.3	781.0	784.8	787.4
12.5°	774.6	774.6	773.3	778.4	781.0
15°	765.7	765.7	765.7	772.1	774.6
17.5°	754.2	755.5	755.5	761.9	764.4
20°	742.8	744.0	745.3	753.0	755.5
22.5°	728.7	728.7	732.6	741.5	745.3
25°	713.5	714.7	719.8	728.7	732.6
27.5°	698.2	699.4	704.5	713.5	717.3
30°	681.6	682.9	688.0	696.9	702.0
32.5°	662.5	663.8	668.9	679.1	682.9
35°	643.4	643.4	649.8	658.7	663.8
37.5°	621.7	623.0	628.1	637.0	640.8
40°	600.1	601.3	605.2	612.8	617.9
42.5°	577.1	578.4	581.0	587.3	591.2
45°	554.2	554.2	555.5	560.6	564.4
47.5°	528.7	528.7	528.7	531.3	535.1
50°	502.0	502.0	499.4	500.7	503.2
52.5°	475.2	473.9	468.8	468.8	472.7
55°	445.9	444.6	438.3	434.4	437.0
57.5°	415.3	412.8	403.9	400.0	401.3
60°	384.8	380.9	369.5	364.4	366.9
62.5°	351.6	347.8	333.8	330.0	332.5
65°	317.2	310.9	296.9	294.3	294.3
67.5°	282.8	275.2	262.5	256.1	252.3
70°	245.9	238.2	228.1	212.8	205.1
72.5°	208.9	202.6	192.4	169.4	161.8
75°	172.0	165.6	152.9	131.2	127.4
77.5°	135.0	131.2	114.7	108.3	112.1
80°	100.6	100.6	86.6	94.3	98.1
82.5°	67.5	65.0	71.3	72.6	72.6
85°	38.2	40.8	45.9	44.6	44.6
87.5°	16.6	19.1	20.4	19.1	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)