

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: P184492

Luminaire Tested: **312EN-LD2-28-UNV-L835-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184492
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-LD2-28-UNV-L835-CD1-U
Description: METALUX ENCOUNTER 300X1200 TROFFER

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

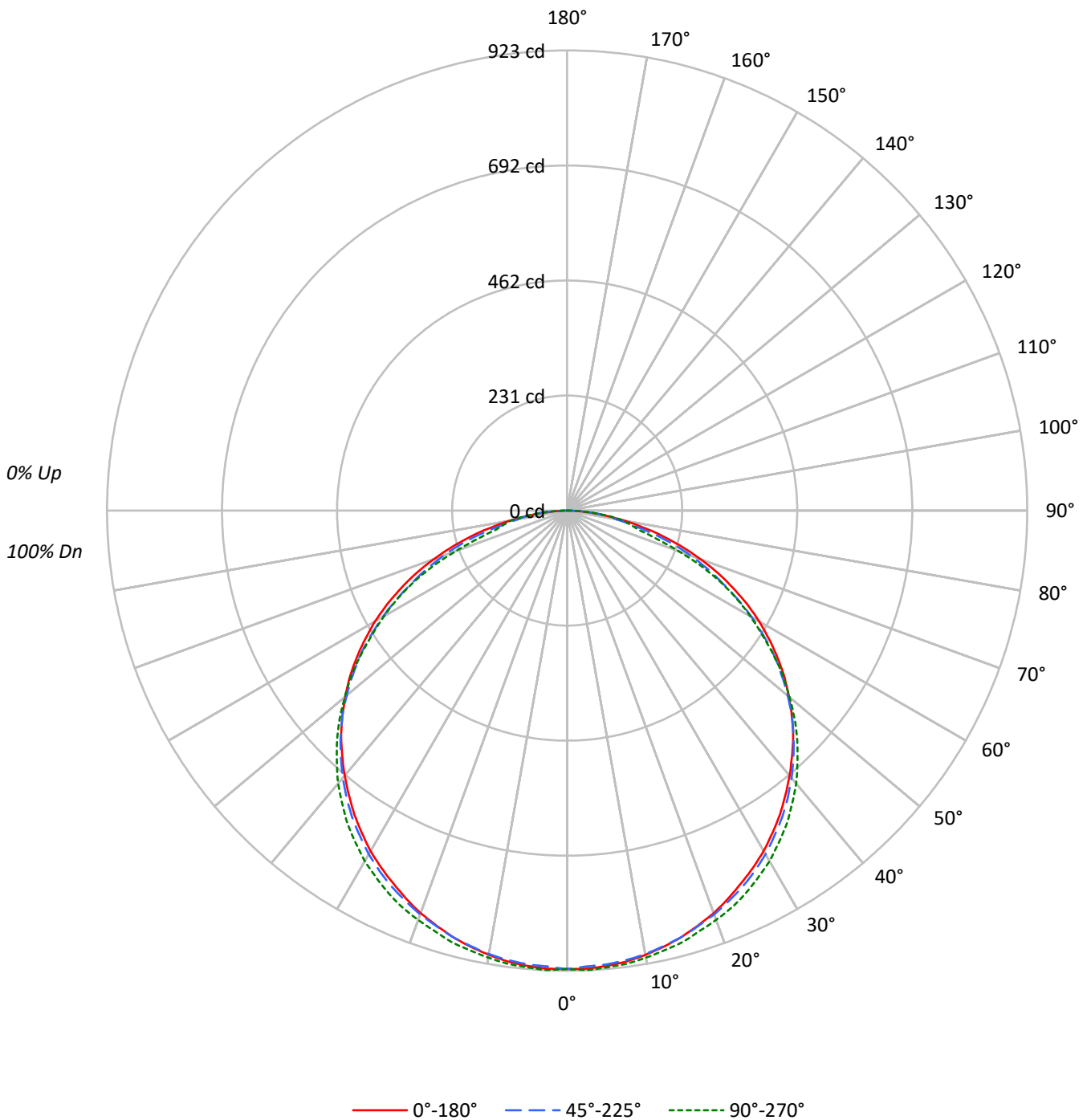
Lumens per Lamp: N/A
Luminaire Lumens: 2734.7 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.41
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.6
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°	2475	2475	2475
5°	2476	2468	2484
10°	2473	2469	2489
15°	2467	2467	2496
20°	2460	2469	2503
25°	2450	2472	2516
30°	2450	2473	2523
35°	2445	2469	2522
40°	2438	2459	2511
45°	2440	2445	2485
50°	2431	2418	2437
55°	2420	2379	2372
60°	2396	2300	2284
65°	2337	2187	2167
70°	2238	2076	1867
75°	2069	1839	1533
80°	1804	1553	1759
85°	1365	1639	1593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.2	3.2
10°-20°	250.9	9.2
20°-30°	384.8	14.1
30°-40°	471.3	17.2
40°-50°	496.9	18.2
50°-60°	453.9	16.6
60°-70°	344.8	12.6
70°-80°	188.3	6.9
80°-90°	56.5	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°	722.9	26.4
0°-40°	1194.2	43.7
0°-60°	2145.0	78.4
0°-90°	2734.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2734.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	920	920	920	920	920	
5°	917	917	914	918	920	87
15°	886	886	886	893	896	250
25°	825	827	833	843	847	381
35°	744	744	752	762	768	465
45°	641	641	643	648	653	494
55°	516	514	507	503	506	461
65°	367	360	343	340	340	363
75°	199	192	177	152	147	210
85°	44	47	53	52	52	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	919.6	919.6	919.6	919.6	919.6
2.5°	919.6	919.6	915.2	919.6	922.6
5°	916.7	916.7	913.7	918.1	919.6
7.5°	912.3	912.3	909.3	913.7	916.7
10°	904.9	904.9	903.4	907.8	910.8
12.5°	896.0	896.0	894.6	900.5	903.4
15°	885.7	885.7	885.7	893.1	896.0
17.5°	872.5	873.9	873.9	881.3	884.3
20°	859.2	860.7	862.1	871.0	873.9
22.5°	843.0	843.0	847.4	857.7	862.1
25°	825.3	826.8	832.7	843.0	847.4
27.5°	807.6	809.1	815.0	825.3	829.7
30°	788.5	789.9	795.8	806.1	812.0
32.5°	766.4	767.8	773.7	785.5	789.9
35°	744.2	744.2	751.6	761.9	767.8
37.5°	719.2	720.7	726.6	736.9	741.3
40°	694.1	695.6	700.0	708.9	714.8
42.5°	667.6	669.1	672.0	679.4	683.8
45°	641.1	641.1	642.6	648.5	652.9
47.5°	611.6	611.6	611.6	614.6	619.0
50°	580.7	580.7	577.7	579.2	582.1
52.5°	549.7	548.2	542.3	542.3	546.8
55°	515.8	514.3	507.0	502.6	505.5
57.5°	480.4	477.5	467.2	462.8	464.2
60°	445.1	440.7	427.4	421.5	424.4
62.5°	406.8	402.3	386.1	381.7	384.6
65°	367.0	359.6	343.4	340.4	340.4
67.5°	327.2	318.3	303.6	296.2	291.8
70°	284.4	275.6	263.8	246.1	237.3
72.5°	241.7	234.3	222.5	196.0	187.2
75°	199.0	191.6	176.9	151.8	147.4
77.5°	156.2	151.8	132.6	125.3	129.7
80°	116.4	116.4	100.2	109.1	113.5
82.5°	78.1	75.2	82.5	84.0	84.0
85°	44.2	47.2	53.1	51.6	51.6
87.5°	19.2	22.1	23.6	22.1	22.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)