

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: P184493

Luminaire Tested: **312EN-LD2-28-UNV-L840-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184493
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-L840-CD1-U
Description: METALUX ENCOUNTER 300X1200 TROFFER

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

Summary

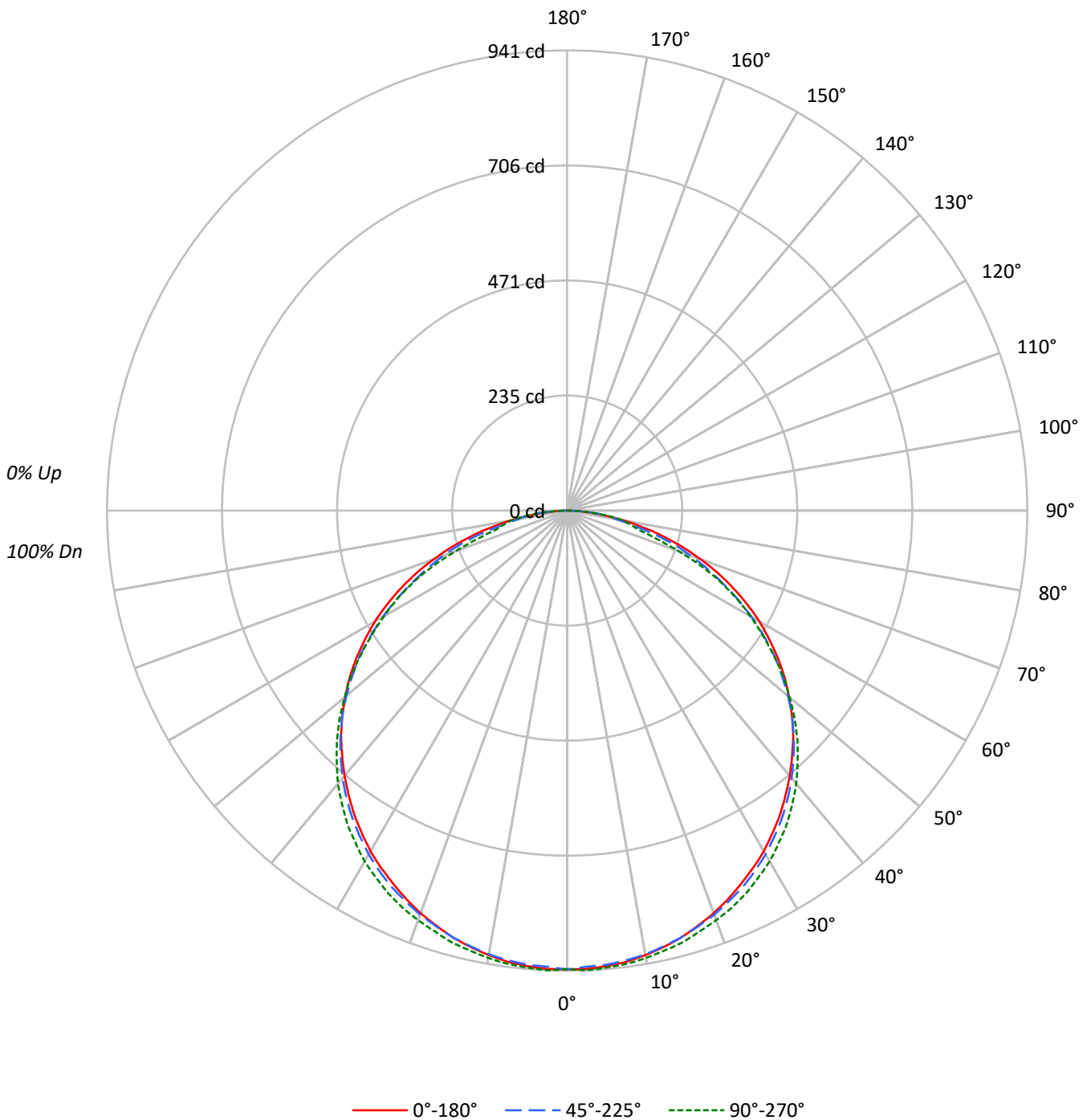
Lumens per Lamp: N/A
Luminaire Lumens: 2789.3 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.41
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P184493
CATALOG NUMBER: 312EN-LD2-28-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P184493

CATALOG NUMBER: 312EN-LD2-28-UNV-L840-CD1-U

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°	2524	2524	2524
5°	2526	2518	2534
10°	2522	2518	2538
15°	2517	2517	2546
20°	2510	2518	2553
25°	2499	2522	2567
30°	2499	2522	2574
35°	2494	2518	2573
40°	2487	2508	2561
45°	2488	2494	2534
50°	2480	2467	2486
55°	2468	2426	2419
60°	2443	2346	2330
65°	2383	2230	2211
70°	2282	2117	1904
75°	2110	1876	1563
80°	1841	1584	1793
85°	1392	1670	1624



TEST NUMBER: P184493

CATALOG NUMBER: 312EN-LD2-28-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.9	3.2
10°-20°	255.9	9.2
20°-30°	392.5	14.1
30°-40°	480.7	17.2
40°-50°	506.8	18.2
50°-60°	462.9	16.6
60°-70°	351.7	12.6
70°-80°	192.1	6.9
80°-90°	57.7	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°	737.4	26.4
0°-40°	1218.1	43.7
0°-60°	2187.9	78.4
0°-90°	2789.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2789.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	935	935	932	936	938	89
15°	903	903	903	911	914	255
25°	842	843	849	860	864	388
35°	759	759	767	777	783	475
45°	654	654	655	661	666	504
55°	526	525	517	513	516	470
65°	374	367	350	347	347	370
75°	203	195	180	155	150	214
85°	45	48	54	53	53	55
90°	0	0	0	0	0	



TEST NUMBER: P184493

CATALOG NUMBER: 312EN-LD2-28-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	938.0	938.0	938.0	938.0	938.0
2.5°	938.0	938.0	933.5	938.0	941.0
5°	935.0	935.0	932.0	936.5	938.0
7.5°	930.5	930.5	927.5	932.0	935.0
10°	923.0	923.0	921.5	926.0	929.0
12.5°	914.0	914.0	912.5	918.5	921.5
15°	903.4	903.4	903.4	911.0	914.0
17.5°	889.9	891.4	891.4	898.9	901.9
20°	876.4	877.9	879.4	888.4	891.4
22.5°	859.8	859.8	864.4	874.9	879.4
25°	841.8	843.3	849.3	859.8	864.4
27.5°	823.8	825.3	831.3	841.8	846.3
30°	804.2	805.7	811.7	822.3	828.3
32.5°	781.7	783.2	789.2	801.2	805.7
35°	759.1	759.1	766.6	777.2	783.2
37.5°	733.6	735.1	741.1	751.6	756.1
40°	708.0	709.5	714.0	723.1	729.1
42.5°	681.0	682.5	685.5	693.0	697.5
45°	653.9	653.9	655.4	661.4	665.9
47.5°	623.8	623.8	623.8	626.8	631.4
50°	592.3	592.3	589.3	590.8	593.8
52.5°	560.7	559.2	553.2	553.2	557.7
55°	526.1	524.6	517.1	512.6	515.6
57.5°	490.1	487.0	476.5	472.0	473.5
60°	454.0	449.5	435.9	429.9	432.9
62.5°	414.9	410.4	393.8	389.3	392.3
65°	374.3	366.8	350.3	347.2	347.2
67.5°	333.7	324.7	309.7	302.1	297.6
70°	290.1	281.1	269.1	251.0	242.0
72.5°	246.5	239.0	227.0	199.9	190.9
75°	202.9	195.4	180.4	154.8	150.3
77.5°	159.3	154.8	135.3	127.8	132.3
80°	118.8	118.8	102.2	111.2	115.7
82.5°	79.7	76.7	84.2	85.7	85.7
85°	45.1	48.1	54.1	52.6	52.6
87.5°	19.5	22.5	24.1	22.5	22.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)