

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: P184508

Luminaire Tested: **312EN-LD2-43-UNV-L840-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184508
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-LD2-43-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: 4298.5 lumens
Efficiency: N/A
Efficacy: 114.3 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

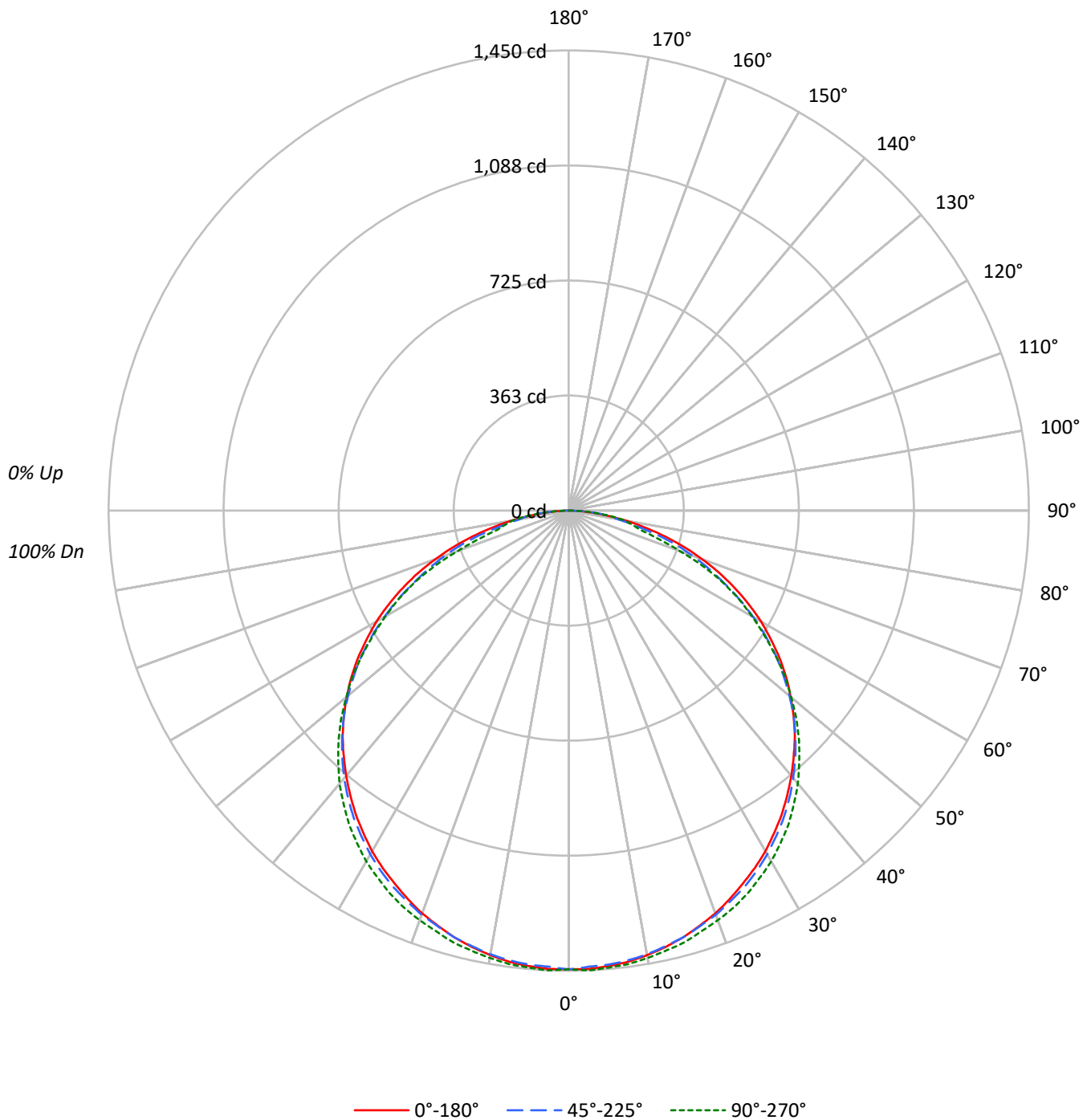
Input Watts (W): 37.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P184508

CATALOG NUMBER: 312EN-LD2-43-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P184508

CATALOG NUMBER: 312EN-LD2-43-UNV-L840-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	3890	3890	3890
5°	3892	3880	3905
10°	3887	3880	3912
15°	3879	3879	3924
20°	3868	3881	3934
25°	3852	3886	3955
30°	3851	3887	3966
35°	3843	3881	3965
40°	3833	3866	3947
45°	3835	3844	3905
50°	3821	3802	3831
55°	3804	3739	3728
60°	3765	3616	3591
65°	3673	3437	3407
70°	3518	3263	2935
75°	3251	2890	2409
80°	2836	2441	2765
85°	2146	2575	2504



TEST NUMBER: P184508

CATALOG NUMBER: 312EN-LD2-43-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.0	3.2
10°-20°	394.4	9.2
20°-30°	604.9	14.1
30°-40°	740.8	17.2
40°-50°	781.0	18.2
50°-60°	713.4	16.6
60°-70°	542.1	12.6
70°-80°	296.0	6.9
80°-90°	88.8	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°	1136.3	26.4
0°-40°	1877.2	43.7
0°-60°	3371.6	78.4
0°-90°	4298.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4298.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1446	1446	1446	1446	1446	
5°	1441	1441	1436	1443	1446	137
15°	1392	1392	1392	1404	1408	393
25°	1297	1300	1309	1325	1332	599
35°	1170	1170	1181	1198	1207	732
45°	1008	1008	1010	1019	1026	777
55°	811	808	797	790	795	724
65°	577	565	540	535	535	570
75°	313	301	278	239	232	330
85°	70	74	83	81	81	85
90°	0	0	0	0	0	



TEST NUMBER: P184508

CATALOG NUMBER: 312EN-LD2-43-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1445.5	1445.5	1445.5	1445.5	1445.5
2.5°	1445.5	1445.5	1438.6	1445.5	1450.2
5°	1440.9	1440.9	1436.3	1443.2	1445.5
7.5°	1434.0	1434.0	1429.3	1436.3	1440.9
10°	1422.4	1422.4	1420.1	1427.0	1431.6
12.5°	1408.5	1408.5	1406.2	1415.4	1420.1
15°	1392.3	1392.3	1392.3	1403.8	1408.5
17.5°	1371.4	1373.7	1373.7	1385.3	1389.9
20°	1350.6	1352.9	1355.2	1369.1	1373.7
22.5°	1325.1	1325.1	1332.0	1348.2	1355.2
25°	1297.3	1299.6	1308.9	1325.1	1332.0
27.5°	1269.5	1271.8	1281.1	1297.3	1304.2
30°	1239.4	1241.7	1250.9	1267.2	1276.4
32.5°	1204.6	1206.9	1216.2	1234.7	1241.7
35°	1169.9	1169.9	1181.4	1197.7	1206.9
37.5°	1130.5	1132.8	1142.1	1158.3	1165.2
40°	1091.1	1093.4	1100.4	1114.3	1123.5
42.5°	1049.4	1051.7	1056.4	1067.9	1074.9
45°	1007.7	1007.7	1010.0	1019.3	1026.2
47.5°	961.4	961.4	961.4	966.0	973.0
50°	912.7	912.7	908.1	910.4	915.0
52.5°	864.1	861.8	852.5	852.5	859.4
55°	810.8	808.5	796.9	789.9	794.6
57.5°	755.2	750.6	734.4	727.4	729.7
60°	699.6	692.7	671.8	662.5	667.2
62.5°	639.4	632.4	606.9	600.0	604.6
65°	576.8	565.2	539.8	535.1	535.1
67.5°	514.3	500.4	477.2	465.6	458.7
70°	447.1	433.2	414.7	386.9	373.0
72.5°	379.9	368.3	349.8	308.1	294.2
75°	312.7	301.2	278.0	238.6	231.7
77.5°	245.6	238.6	208.5	196.9	203.9
80°	183.0	183.0	157.5	171.4	178.4
82.5°	122.8	118.1	129.7	132.0	132.0
85°	69.5	74.1	83.4	81.1	81.1
87.5°	30.1	34.7	37.1	34.7	34.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)