

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: P184421

Luminaire Tested: **612EN-LD2-49-UNV-L830-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184421
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34470)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: 612EN-LD2-49-UNV-L830-CD1-U
Description: METALUX ENCOUNTER 600X1200 TROFFER

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

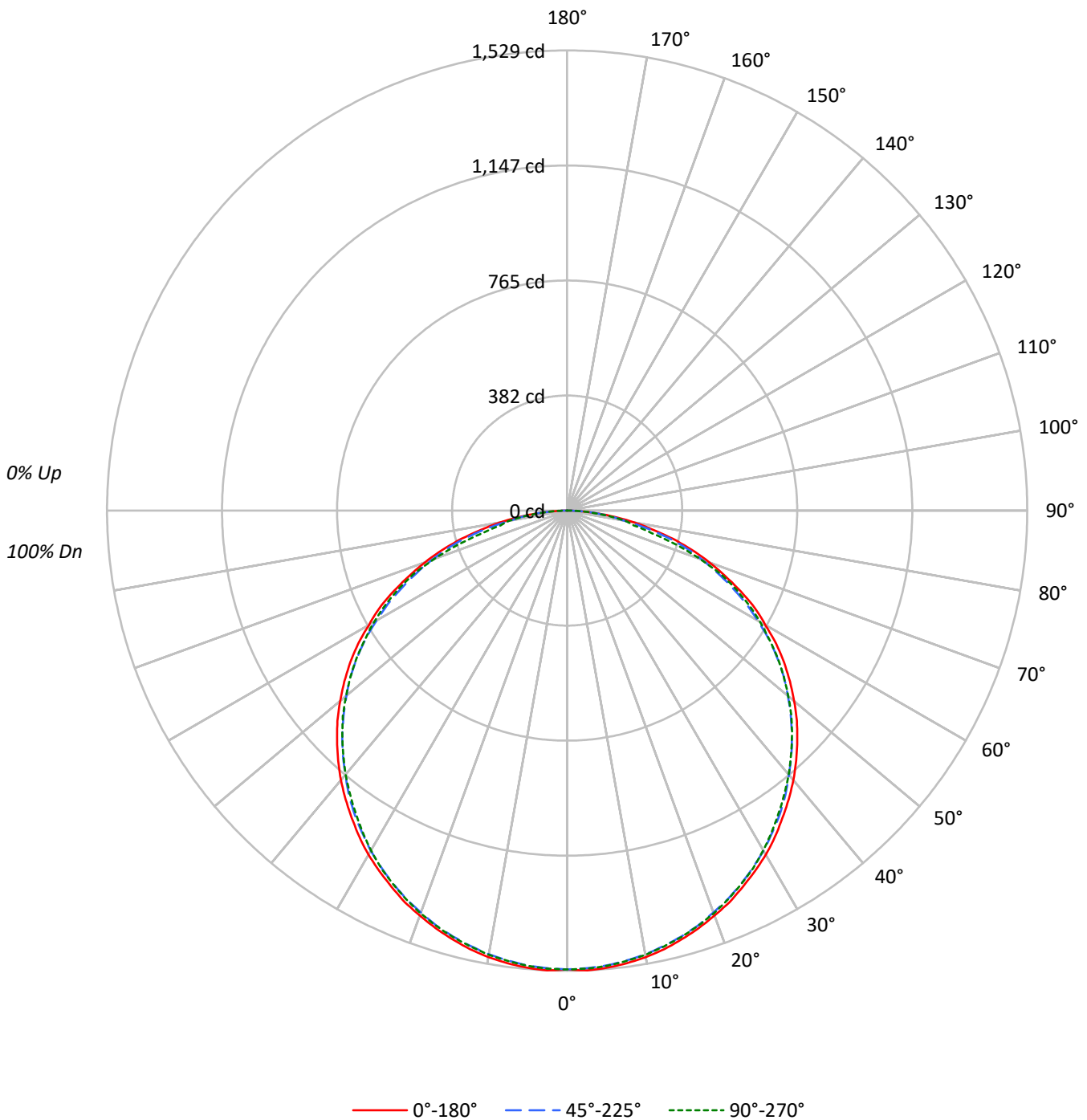
Lumens per Lamp: N/A
Luminaire Lumens: 4614.4 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.27 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 42.2
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	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2051	2051	2051
5°	2059	2049	2051
10°	2058	2046	2048
15°	2054	2041	2043
20°	2050	2035	2039
25°	2048	2030	2033
30°	2051	2028	2025
35°	2049	2024	2014
40°	2054	2014	2011
45°	2057	2011	2011
50°	2062	2004	2007
55°	2064	1999	2003
60°	2047	1970	1994
65°	2029	1927	1971
70°	1979	1877	1841
75°	1894	1791	1522
80°	1749	1465	1524
85°	1459	1389	1318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.3	3.1
10°-20°	414.1	9.0
20°-30°	631.7	13.7
30°-40°	771.7	16.7
40°-50°	819.7	17.8
50°-60°	766.4	16.6
60°-70°	608.6	13.2
70°-80°	355.0	7.7
80°-90°	103.0	2.2
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°	1190.0	25.8
0°-40°	1961.8	42.5
0°-60°	3547.9	76.9
0°-90°	4614.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4614.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1525	1525	1525	1525	1525	
5°	1525	1519	1517	1514	1519	145
15°	1474	1470	1465	1461	1467	416
25°	1380	1372	1368	1365	1369	637
35°	1247	1240	1232	1223	1226	781
45°	1081	1072	1057	1052	1057	834
55°	880	871	852	848	854	785
65°	637	622	605	611	619	629
75°	364	351	345	306	293	384
85°	94	90	90	88	85	109
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1524.7	1524.7	1524.7	1524.7	1524.7
2.5°	1529.3	1523.2	1521.6	1518.6	1523.2
5°	1524.7	1518.6	1517.1	1514.0	1518.6
7.5°	1517.1	1511.0	1507.9	1504.9	1509.4
10°	1506.4	1500.3	1497.2	1494.2	1498.8
12.5°	1492.7	1485.1	1482.0	1479.0	1483.5
15°	1474.4	1469.8	1465.2	1460.7	1466.8
17.5°	1454.6	1448.5	1445.4	1442.4	1446.9
20°	1431.7	1427.1	1421.0	1419.5	1424.1
22.5°	1408.8	1399.7	1396.6	1392.0	1398.1
25°	1379.8	1372.2	1367.7	1364.6	1369.2
27.5°	1350.9	1343.3	1337.2	1334.1	1338.7
30°	1320.4	1311.2	1305.1	1299.0	1303.6
32.5°	1285.3	1276.2	1268.5	1262.4	1265.5
35°	1247.2	1239.6	1232.0	1222.8	1225.9
37.5°	1209.1	1201.5	1190.8	1183.2	1186.2
40°	1169.4	1161.8	1146.6	1142.0	1145.0
42.5°	1126.7	1117.6	1102.4	1097.8	1100.8
45°	1081.0	1071.9	1056.6	1052.0	1056.6
47.5°	1035.3	1024.6	1007.8	1004.8	1010.9
50°	985.0	974.3	957.5	956.0	959.0
52.5°	933.1	920.9	907.2	902.6	907.2
55°	879.7	870.6	852.3	847.7	853.8
57.5°	823.3	809.6	794.4	789.8	795.9
60°	760.8	748.6	731.9	730.3	741.0
62.5°	704.4	687.6	670.9	669.3	681.5
65°	637.3	622.1	605.3	611.4	619.0
67.5°	568.7	556.5	541.3	545.8	553.5
70°	503.1	487.9	477.2	474.2	468.1
72.5°	434.5	422.3	416.2	391.8	384.2
75°	364.4	350.7	344.6	306.5	292.7
77.5°	291.2	285.1	269.9	231.8	227.2
80°	225.7	222.6	189.1	192.1	196.7
82.5°	157.0	155.5	144.8	141.8	140.3
85°	94.5	90.0	90.0	88.4	85.4
87.5°	38.1	41.2	39.6	38.1	39.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)