

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: P184426

Luminaire Tested: **612EN-LD2-54-UNV-L830-CD1-U**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P184426  
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-LD2-54-UNV-L830-CD1-U  
Description: METALUX ENCOUNTER 600X1200 TROFFER  
  
Light Source: EATON LED 3000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

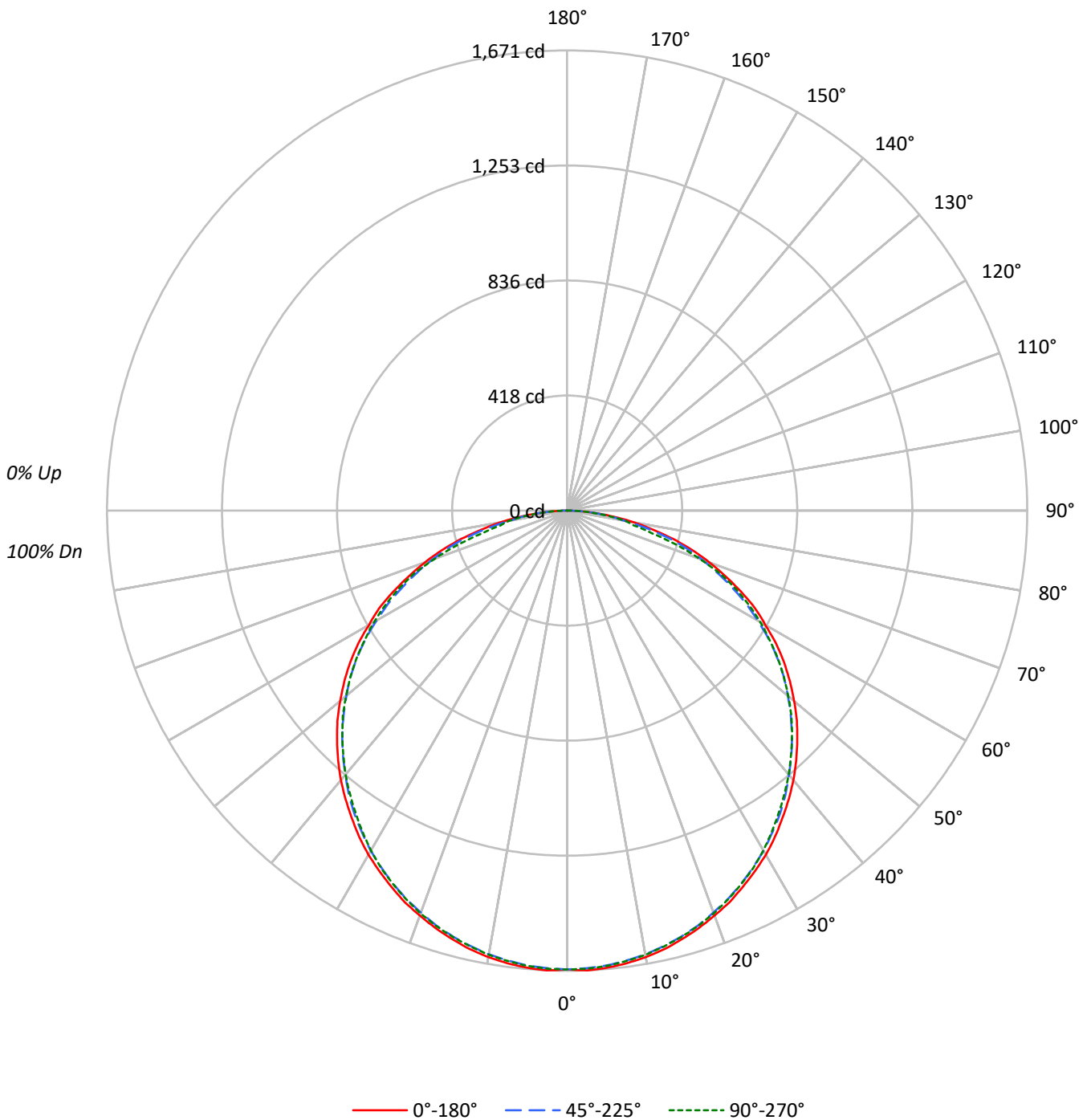
Lumens per Lamp: N/A  
Luminaire Lumens: 5043.2 lumens  
Efficiency: N/A  
Efficacy: 117.3 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.27 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 43  
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: P184426  
CATALOG NUMBER: 612EN-LD2-54-UNV-L830-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P184426

CATALOG NUMBER: 612EN-LD2-54-UNV-L830-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	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°	2242	2242	2242
5°	2251	2239	2242
10°	2249	2236	2238
15°	2245	2231	2233
20°	2240	2224	2229
25°	2239	2219	2222
30°	2242	2216	2214
35°	2239	2212	2201
40°	2245	2201	2198
45°	2248	2197	2197
50°	2253	2191	2194
55°	2255	2185	2189
60°	2238	2153	2179
65°	2217	2106	2154
70°	2163	2052	2013
75°	2071	1958	1663
80°	1911	1601	1666
85°	1595	1518	1440



TEST NUMBER: P184426

CATALOG NUMBER: 612EN-LD2-54-UNV-L830-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.7	3.1
10°-20°	452.6	9.0
20°-30°	690.4	13.7
30°-40°	843.4	16.7
40°-50°	895.8	17.8
50°-60°	837.6	16.6
60°-70°	665.1	13.2
70°-80°	388.0	7.7
80°-90°	112.6	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°	1300.6	25.8
0°-40°	2144.1	42.5
0°-60°	3877.5	76.9
0°-90°	5043.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5043.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1666	1666	1666	1666	1666	
5°	1666	1660	1658	1655	1660	158
15°	1611	1606	1601	1596	1603	455
25°	1508	1500	1495	1491	1496	696
35°	1363	1355	1346	1336	1340	854
45°	1182	1172	1155	1150	1155	912
55°	962	952	932	926	933	858
65°	696	680	662	668	677	688
75°	398	383	377	335	320	419
85°	103	98	98	97	93	120
90°	0	0	0	0	0	



TEST NUMBER: P184426

CATALOG NUMBER: 612EN-LD2-54-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1666.4	1666.4	1666.4	1666.4	1666.4
2.5°	1671.4	1664.7	1663.1	1659.7	1664.7
5°	1666.4	1659.7	1658.1	1654.7	1659.7
7.5°	1658.1	1651.4	1648.1	1644.7	1649.7
10°	1646.4	1639.7	1636.4	1633.1	1638.1
12.5°	1631.4	1623.1	1619.7	1616.4	1621.4
15°	1611.4	1606.4	1601.4	1596.4	1603.1
17.5°	1589.7	1583.1	1579.7	1576.4	1581.4
20°	1564.7	1559.7	1553.1	1551.4	1556.4
22.5°	1539.7	1529.7	1526.4	1521.4	1528.1
25°	1508.1	1499.7	1494.7	1491.4	1496.4
27.5°	1476.4	1468.1	1461.4	1458.1	1463.1
30°	1443.1	1433.1	1426.4	1419.8	1424.8
32.5°	1404.8	1394.8	1386.4	1379.8	1383.1
35°	1363.1	1354.8	1346.4	1336.4	1339.8
37.5°	1321.4	1313.1	1301.4	1293.1	1296.4
40°	1278.1	1269.8	1253.1	1248.1	1251.5
42.5°	1231.5	1221.5	1204.8	1199.8	1203.1
45°	1181.5	1171.5	1154.8	1149.8	1154.8
47.5°	1131.5	1119.8	1101.5	1098.1	1104.8
50°	1076.5	1064.8	1046.5	1044.8	1048.2
52.5°	1019.8	1006.5	991.5	986.5	991.5
55°	961.5	951.5	931.5	926.5	933.2
57.5°	899.8	884.8	868.2	863.2	869.9
60°	831.5	818.2	799.9	798.2	809.9
62.5°	769.9	751.5	733.2	731.5	744.9
65°	696.5	679.9	661.6	668.2	676.6
67.5°	621.6	608.2	591.6	596.6	604.9
70°	549.9	533.2	521.6	518.2	511.6
72.5°	474.9	461.6	454.9	428.3	419.9
75°	398.3	383.3	376.6	334.9	319.9
77.5°	318.3	311.6	294.9	253.3	248.3
80°	246.6	243.3	206.6	210.0	215.0
82.5°	171.6	170.0	158.3	155.0	153.3
85°	103.3	98.3	98.3	96.7	93.3
87.5°	41.7	45.0	43.3	41.7	43.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)