

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: P184423

Luminaire Tested: **612EN-LD2-49-UNV-L840-CD1-U**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P184423  
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-L840-CD1-U  
Description: METALUX ENCOUNTER 600X1200 TROFFER  
  
Light Source: EATON LED 4000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

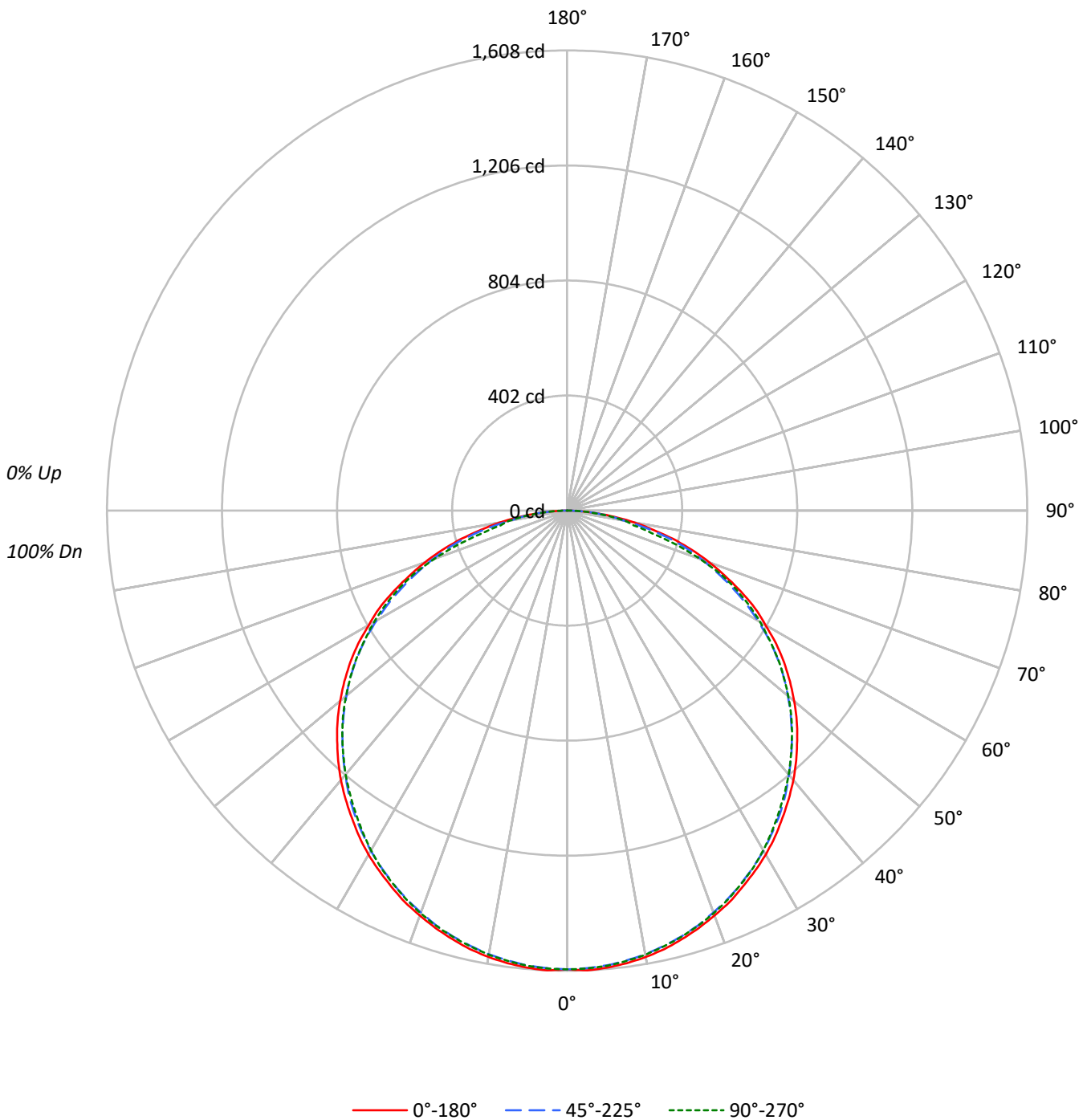
Lumens per Lamp: N/A  
Luminaire Lumens: 4852.3 lumens  
Efficiency: N/A  
Efficacy: 115.0 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.27 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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°	2157	2157	2157
5°	2165	2155	2157
10°	2164	2151	2153
15°	2160	2146	2148
20°	2156	2140	2144
25°	2154	2135	2138
30°	2157	2132	2130
35°	2154	2128	2117
40°	2160	2118	2115
45°	2163	2114	2114
50°	2168	2108	2111
55°	2170	2102	2106
60°	2153	2071	2097
65°	2134	2026	2072
70°	2081	1974	1936
75°	1992	1883	1600
80°	1839	1540	1602
85°	1535	1460	1386



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.7	3.1
10°-20°	435.4	9.0
20°-30°	664.3	13.7
30°-40°	811.5	16.7
40°-50°	861.9	17.8
50°-60°	805.9	16.6
60°-70°	639.9	13.2
70°-80°	373.3	7.7
80°-90°	108.3	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°	1251.4	25.8
0°-40°	2062.9	42.5
0°-60°	3730.7	76.9
0°-90°	4852.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4852.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1603	1603	1603	1603	1603	
5°	1603	1597	1595	1592	1597	152
15°	1550	1546	1541	1536	1542	438
25°	1451	1443	1438	1435	1440	670
35°	1312	1304	1296	1286	1289	822
45°	1137	1127	1111	1106	1111	877
55°	925	916	896	891	898	826
65°	670	654	636	643	651	662
75°	383	369	362	322	308	403
85°	99	95	95	93	90	115
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1603.3	1603.3	1603.3	1603.3	1603.3
2.5°	1608.1	1601.7	1600.1	1596.9	1601.7
5°	1603.3	1596.9	1595.3	1592.1	1596.9
7.5°	1595.3	1588.9	1585.7	1582.4	1587.3
10°	1584.0	1577.6	1574.4	1571.2	1576.0
12.5°	1569.6	1561.6	1558.4	1555.2	1560.0
15°	1550.4	1545.6	1540.8	1535.9	1542.4
17.5°	1529.5	1523.1	1519.9	1516.7	1521.5
20°	1505.5	1500.7	1494.3	1492.7	1497.5
22.5°	1481.4	1471.8	1468.6	1463.8	1470.2
25°	1451.0	1443.0	1438.1	1434.9	1439.8
27.5°	1420.5	1412.5	1406.1	1402.9	1407.7
30°	1388.4	1378.8	1372.4	1366.0	1370.8
32.5°	1351.6	1342.0	1333.9	1327.5	1330.7
35°	1311.5	1303.5	1295.5	1285.8	1289.0
37.5°	1271.4	1263.4	1252.2	1244.2	1247.4
40°	1229.7	1221.7	1205.7	1200.9	1204.1
42.5°	1184.8	1175.2	1159.2	1154.4	1157.6
45°	1136.7	1127.1	1111.1	1106.3	1111.1
47.5°	1088.6	1077.4	1059.8	1056.6	1063.0
50°	1035.7	1024.5	1006.9	1005.3	1008.5
52.5°	981.2	968.4	954.0	949.1	954.0
55°	925.1	915.5	896.2	891.4	897.8
57.5°	865.8	851.3	835.3	830.5	836.9
60°	800.0	787.2	769.6	768.0	779.2
62.5°	740.7	723.1	705.4	703.8	716.7
65°	670.2	654.1	636.5	642.9	650.9
67.5°	598.0	585.2	569.2	574.0	582.0
70°	529.1	513.1	501.8	498.6	492.2
72.5°	456.9	444.1	437.7	412.0	404.0
75°	383.2	368.8	362.3	322.3	307.8
77.5°	306.2	299.8	283.8	243.7	238.9
80°	237.3	234.1	198.8	202.0	206.8
82.5°	165.1	163.5	152.3	149.1	147.5
85°	99.4	94.6	94.6	93.0	89.8
87.5°	40.1	43.3	41.7	40.1	41.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)