

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: P184519

Luminaire Tested: **312EN-LD2-51-UNV-L850-CD1-U**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P184519
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-LD2-51-UNV-L850-CD1-U
Description: METALUX ENCOUNTER 300X1200 TROFFER

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

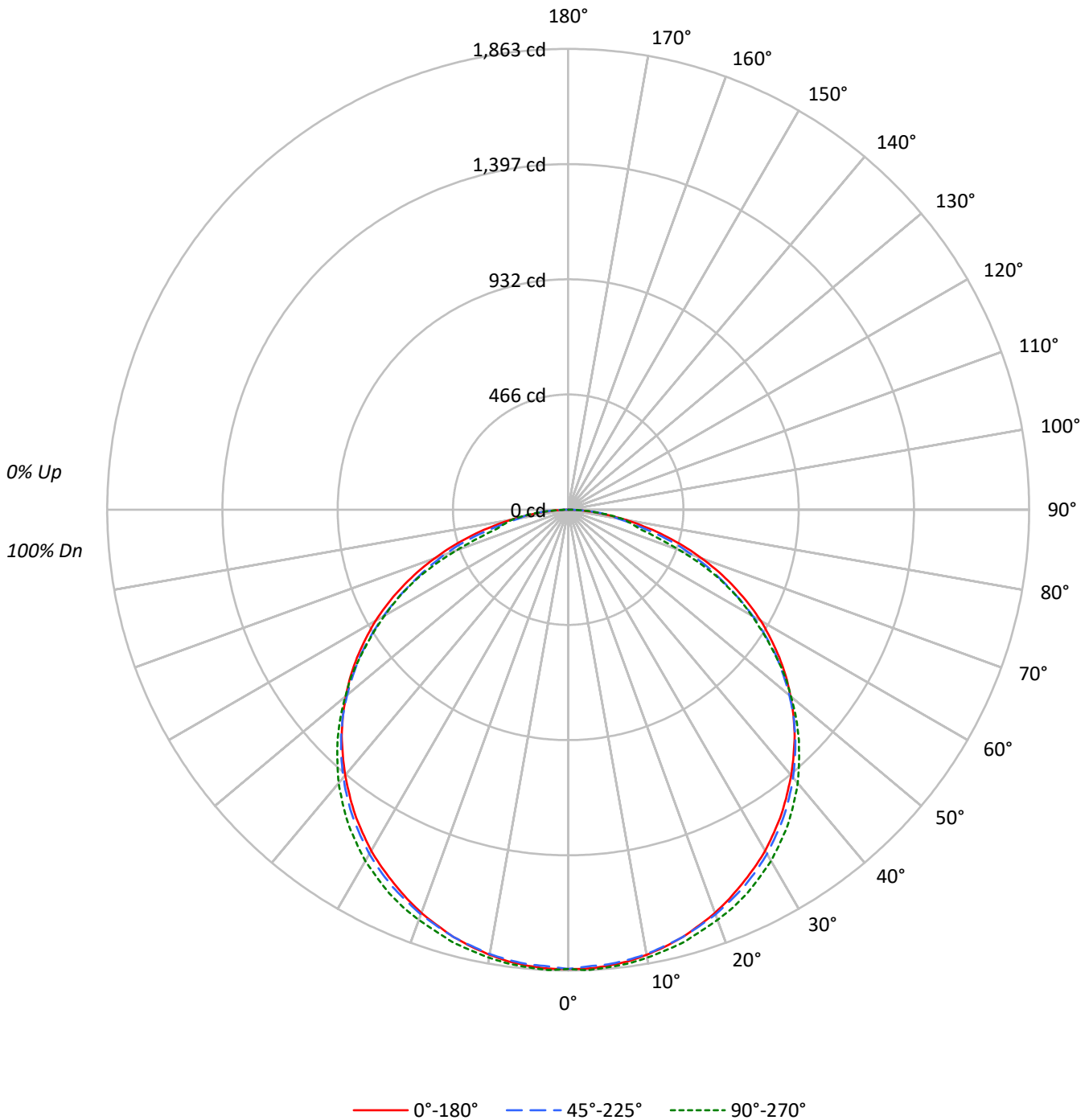
Lumens per Lamp: N/A
Luminaire Lumens: 5521.7 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.41
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 44.7
Input Voltage (V): NR
Input Current (A_{in}): 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	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°	4997	4997	4997
5°	5000	4984	5016
10°	4993	4984	5025
15°	4982	4982	5040
20°	4968	4985	5053
25°	4948	4992	5080
30°	4947	4993	5095
35°	4936	4985	5093
40°	4924	4965	5070
45°	4926	4937	5017
50°	4908	4883	4921
55°	4886	4803	4789
60°	4837	4645	4612
65°	4718	4415	4377
70°	4519	4191	3770
75°	4177	3713	3094
80°	3643	3135	3550
85°	2757	3307	3217



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.0	3.2
10°-20°	506.6	9.2
20°-30°	777.0	14.1
30°-40°	951.7	17.2
40°-50°	1003.3	18.2
50°-60°	916.4	16.6
60°-70°	696.3	12.6
70°-80°	380.2	6.9
80°-90°	114.1	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°	1459.6	26.4
0°-40°	2411.3	43.7
0°-60°	4331.0	78.4
0°-90°	5521.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5521.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1857	1857	1857	1857	1857	
5°	1851	1851	1845	1854	1857	176
15°	1788	1788	1788	1803	1809	505
25°	1666	1669	1681	1702	1711	769
35°	1503	1503	1518	1538	1550	940
45°	1294	1294	1297	1309	1318	997
55°	1042	1038	1024	1015	1021	930
65°	741	726	693	687	687	732
75°	402	387	357	306	298	424
85°	89	95	107	104	104	110
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1856.9	1856.9	1856.9	1856.9	1856.9
2.5°	1856.9	1856.9	1847.9	1856.9	1862.8
5°	1850.9	1850.9	1845.0	1853.9	1856.9
7.5°	1842.0	1842.0	1836.0	1845.0	1850.9
10°	1827.1	1827.1	1824.1	1833.1	1839.0
12.5°	1809.2	1809.2	1806.3	1818.2	1824.1
15°	1788.4	1788.4	1788.4	1803.3	1809.2
17.5°	1761.6	1764.6	1764.6	1779.5	1785.4
20°	1734.9	1737.8	1740.8	1758.7	1764.6
22.5°	1702.1	1702.1	1711.0	1731.9	1740.8
25°	1666.4	1669.4	1681.3	1702.1	1711.0
27.5°	1630.7	1633.7	1645.6	1666.4	1675.3
30°	1592.0	1595.0	1606.9	1627.7	1639.6
32.5°	1547.4	1550.4	1562.3	1586.1	1595.0
35°	1502.7	1502.7	1517.6	1538.5	1550.4
37.5°	1452.2	1455.1	1467.0	1487.9	1496.8
40°	1401.6	1404.5	1413.5	1431.3	1443.2
42.5°	1348.0	1351.0	1356.9	1371.8	1380.7
45°	1294.4	1294.4	1297.4	1309.3	1318.2
47.5°	1234.9	1234.9	1234.9	1240.9	1249.8
50°	1172.4	1172.4	1166.5	1169.5	1175.4
52.5°	1109.9	1107.0	1095.1	1095.1	1104.0
55°	1041.5	1038.5	1023.7	1014.7	1020.7
57.5°	970.1	964.1	943.3	934.4	937.4
60°	898.7	889.7	863.0	851.1	857.0
62.5°	821.3	812.4	779.6	770.7	776.7
65°	741.0	726.1	693.3	687.4	687.4
67.5°	660.6	642.8	613.0	598.1	589.2
70°	574.3	556.5	532.7	496.9	479.1
72.5°	488.0	473.1	449.3	395.8	377.9
75°	401.7	386.8	357.1	306.5	297.6
77.5°	315.4	306.5	267.8	252.9	261.9
80°	235.1	235.1	202.3	220.2	229.1
82.5°	157.7	151.8	166.6	169.6	169.6
85°	89.3	95.2	107.1	104.2	104.2
87.5°	38.7	44.6	47.6	44.6	44.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)