

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: METALUX

Report Number: P130718

Luminaire Tested: **TBLED-LD1-8-W-UNV-L840-CD1-DOS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P130718  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25252)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: TBLED-LD1-8-W-UNV-L840-CD1-DOS  
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.  
WIDE DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR.  
Light Source: (160) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7345.1 lumens  
Efficiency: N/A  
Efficacy: 95.4 lumens/watt  
Spacing Criteria (0/90/45): 1.42 / 1.42 / 1.71  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
CIE Type: Direct

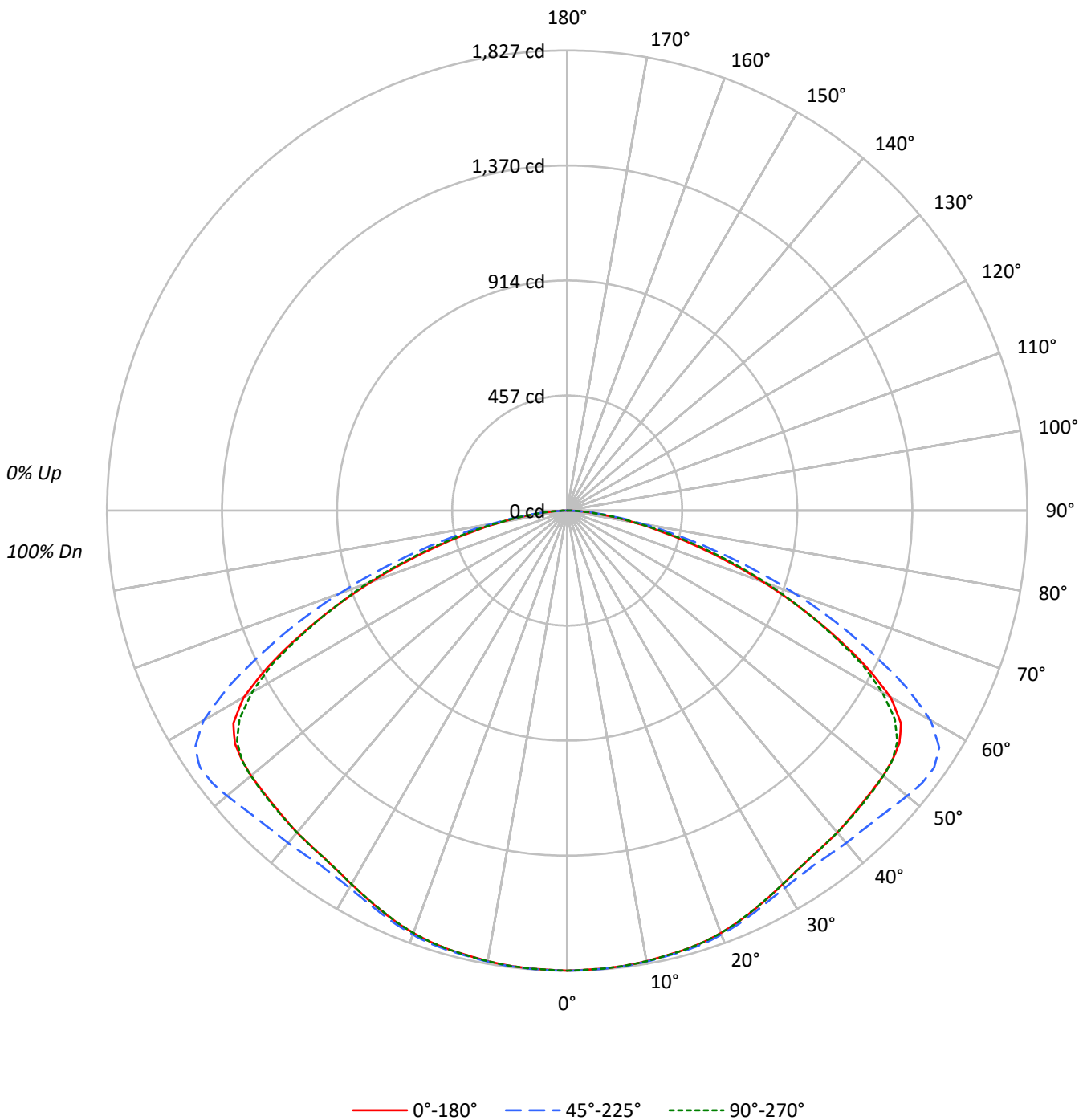
Input Watts (W): 77  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82				
2	97	88	81	74	94	86	79	73	82	77	72	79	74	70	76	72	68	66				
3	87	76	67	60	85	74	66	59	71	64	58	68	62	57	66	61	56	54				
4	79	66	57	49	77	65	56	49	62	55	48	60	53	48	58	52	47	45				
5	72	58	49	42	70	57	48	41	55	47	41	53	46	40	51	45	40	38				
6	66	52	42	36	64	51	42	35	49	41	35	47	40	35	46	39	34	32				
7	61	47	37	31	59	46	37	31	44	36	30	43	36	30	41	35	30	28				
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	24				
9	53	39	30	24	51	38	30	24	37	29	24	36	29	24	35	28	23	22				
10	49	35	27	22	48	35	27	21	34	26	21	33	26	21	32	26	21	19				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	19783	19783	19783
5°	19828	19838	19828
10°	19973	19995	19973
15°	20235	20278	20235
20°	20570	20646	20570
25°	20916	21031	20906
30°	21413	21615	21413
35°	22247	22675	22259
40°	23587	24356	23587
45°	25274	26561	25319
50°	27594	29685	27611
55°	30403	33590	30205
60°	32107	36096	31282
65°	29871	34199	29628
70°	26218	30477	26640
75°	21434	24907	22271
80°	16719	18976	17074
85°	11853	13158	12089



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.9	2.4
10°-20°	511.4	7.0
20°-30°	811.7	11.1
30°-40°	1069.9	14.6
40°-50°	1313.5	17.9
50°-60°	1499.3	20.4
60°-70°	1233.4	16.8
70°-80°	605.2	8.2
80°-90°	126.7	1.7
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°	1497.1	20.4
0°-40°	2567.0	34.9
0°-60°	5379.7	73.2
0°-90°	7345.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7345.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1827	1827	1827	1827	1827	
5°	1824	1825	1825	1825	1824	174
15°	1805	1806	1809	1807	1805	511
25°	1751	1756	1760	1756	1750	809
35°	1683	1700	1715	1700	1684	1059
45°	1650	1693	1734	1696	1653	1279
55°	1610	1701	1779	1696	1600	1427
65°	1166	1258	1335	1256	1156	1151
75°	512	562	595	569	532	554
85°	95	104	106	103	97	118
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1826.9	1826.9	1826.9	1826.9	1826.9	1826.9	1826.9	1826.9	1826.9	1826.9	1826.9
2.5°	1825.0	1825.0	1825.0	1825.0	1826.0	1826.0	1826.0	1826.0	1826.0	1826.0	1825.0
5°	1824.1	1824.1	1824.1	1824.1	1825.0	1825.0	1825.0	1825.0	1825.0	1825.0	1825.0
7.5°	1821.2	1821.2	1822.2	1822.2	1822.2	1822.2	1822.2	1823.1	1823.1	1823.1	1823.1
10°	1816.4	1816.4	1816.4	1816.4	1817.4	1817.4	1818.4	1818.4	1818.4	1818.4	1818.4
12.5°	1809.8	1809.8	1810.7	1810.7	1810.7	1811.7	1812.6	1812.6	1812.6	1812.6	1812.6
15°	1805.0	1805.0	1805.0	1806.0	1806.0	1806.9	1807.9	1807.9	1808.8	1808.8	1808.8
17.5°	1797.4	1798.3	1798.3	1798.3	1799.3	1800.2	1802.1	1802.1	1803.1	1803.1	1803.1
20°	1785.0	1785.0	1785.9	1786.9	1787.8	1788.8	1790.7	1791.6	1791.6	1791.6	1792.6
22.5°	1769.7	1769.7	1770.7	1771.6	1773.5	1774.5	1776.4	1777.3	1777.3	1777.3	1777.3
25°	1750.6	1751.6	1752.5	1753.5	1755.4	1757.3	1759.2	1761.1	1761.1	1760.2	1761.1
27.5°	1731.5	1732.5	1733.4	1735.4	1737.3	1739.2	1741.1	1743.0	1743.0	1743.0	1743.9
30°	1712.5	1713.4	1715.3	1717.2	1720.1	1722.0	1724.9	1727.7	1728.7	1728.7	1727.7
32.5°	1695.3	1696.2	1699.1	1702.0	1705.8	1709.6	1713.4	1716.3	1719.1	1719.1	1717.2
35°	1682.9	1683.8	1687.7	1692.4	1698.1	1702.9	1707.7	1711.5	1715.3	1715.3	1714.4
37.5°	1675.3	1676.2	1681.0	1686.7	1695.3	1702.0	1708.6	1713.4	1717.2	1718.2	1717.2
40°	1668.6	1669.5	1675.3	1682.9	1692.4	1702.0	1710.6	1717.2	1721.0	1723.0	1723.0
42.5°	1659.0	1660.9	1666.7	1677.2	1688.6	1700.1	1710.6	1720.1	1724.9	1726.8	1725.8
45°	1650.4	1652.4	1660.0	1672.4	1685.7	1700.1	1713.4	1724.9	1731.5	1734.4	1732.5
47.5°	1643.8	1646.6	1656.2	1670.5	1686.7	1704.8	1721.0	1734.4	1743.0	1746.8	1743.9
50°	1638.0	1641.9	1652.4	1669.5	1690.5	1713.4	1732.5	1747.8	1758.3	1762.1	1759.2
52.5°	1627.6	1634.2	1646.6	1667.6	1693.4	1719.1	1742.0	1760.2	1772.6	1776.4	1772.6
55°	1610.4	1617.1	1631.4	1655.2	1686.7	1715.3	1743.0	1763.0	1774.5	1779.2	1773.5
57.5°	1571.3	1577.9	1592.3	1619.9	1651.4	1683.8	1712.5	1734.4	1748.7	1751.6	1740.1
60°	1482.5	1487.3	1509.3	1536.9	1567.4	1598.9	1628.5	1653.3	1665.7	1666.7	1650.4
62.5°	1335.6	1343.3	1365.2	1394.8	1423.4	1449.2	1476.8	1502.6	1512.1	1515.9	1503.5
65°	1165.8	1176.3	1192.5	1219.2	1247.9	1268.8	1299.4	1321.3	1330.9	1334.7	1329.9
67.5°	996.9	1006.5	1015.1	1040.8	1066.6	1086.6	1116.2	1136.2	1143.9	1149.6	1146.7
70°	828.1	836.7	844.3	865.3	885.3	911.1	928.3	947.3	952.1	962.6	957.8
72.5°	664.0	670.7	678.3	698.3	710.7	738.4	746.0	762.3	770.8	773.7	768.9
75°	512.3	517.1	525.7	541.9	551.4	572.4	575.3	589.6	595.3	595.3	593.4
77.5°	379.7	383.5	393.1	402.6	412.1	426.4	423.6	433.1	436.9	438.8	436.9
80°	268.1	272.8	274.8	282.4	291.0	296.7	294.8	299.6	300.5	304.3	303.4
82.5°	171.7	176.5	173.6	178.4	184.1	187.9	188.9	188.9	188.9	191.8	190.8
85°	95.4	99.2	97.3	99.2	102.1	104.9	103.0	104.0	104.9	105.9	104.9
87.5°	31.5	35.3	32.4	33.4	35.3	37.2	38.2	35.3	37.2	37.2	37.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1826.9	1826.9	1826.9	1826.9	1826.9	1826.9	1826.9	1826.9
2.5°	1825.0	1825.0	1825.0	1825.0	1825.0	1825.0	1825.0	1825.0
5°	1825.0	1825.0	1825.0	1825.0	1824.1	1824.1	1824.1	1824.1
7.5°	1822.2	1822.2	1822.2	1822.2	1821.2	1821.2	1821.2	1821.2
10°	1817.4	1817.4	1817.4	1816.4	1816.4	1816.4	1816.4	1816.4
12.5°	1812.6	1811.7	1811.7	1811.7	1811.7	1810.7	1810.7	1810.7
15°	1808.8	1807.9	1807.9	1806.9	1806.0	1806.0	1805.0	1805.0
17.5°	1802.1	1802.1	1801.2	1800.2	1799.3	1798.3	1798.3	1797.4
20°	1791.6	1790.7	1788.8	1787.8	1787.8	1786.9	1785.9	1785.0
22.5°	1776.4	1775.4	1774.5	1772.6	1771.6	1770.7	1769.7	1768.7
25°	1759.2	1758.3	1757.3	1755.4	1754.4	1752.5	1751.6	1749.7
27.5°	1742.0	1742.0	1739.2	1737.3	1735.4	1733.4	1732.5	1730.6
30°	1726.8	1725.8	1723.9	1720.1	1718.2	1715.3	1713.4	1712.5
32.5°	1715.3	1714.4	1710.6	1705.8	1702.0	1698.1	1697.2	1695.3
35°	1712.5	1708.6	1702.9	1697.2	1692.4	1687.7	1684.8	1683.8
37.5°	1715.3	1708.6	1702.0	1694.3	1687.7	1681.0	1677.2	1675.3
40°	1718.2	1711.5	1703.9	1693.4	1683.8	1676.2	1671.4	1668.6
42.5°	1720.1	1712.5	1702.9	1690.5	1679.1	1669.5	1663.8	1660.9
45°	1724.9	1716.3	1703.9	1688.6	1674.3	1663.8	1657.1	1653.3
47.5°	1735.4	1723.0	1707.7	1689.6	1672.4	1658.1	1650.4	1646.6
50°	1748.7	1733.4	1714.4	1692.4	1671.4	1653.3	1643.8	1639.0
52.5°	1761.1	1743.0	1720.1	1694.3	1667.6	1646.6	1632.3	1627.6
55°	1761.1	1739.2	1710.6	1681.0	1650.4	1625.6	1606.6	1599.9
57.5°	1723.9	1700.1	1664.8	1632.3	1598.9	1569.4	1549.3	1542.6
60°	1628.5	1607.5	1566.5	1535.0	1497.8	1465.4	1450.1	1444.4
62.5°	1482.5	1467.3	1430.1	1402.4	1362.3	1336.6	1318.5	1319.4
65°	1312.7	1299.4	1268.8	1244.0	1207.8	1187.8	1169.6	1156.3
67.5°	1134.3	1119.1	1094.3	1072.3	1042.7	1028.4	1008.4	996.0
70°	947.3	935.9	913.0	897.7	872.9	860.5	841.4	841.4
72.5°	760.4	754.6	738.4	725.1	706.0	694.5	679.3	682.1
75°	586.7	589.6	573.4	563.8	548.6	539.0	527.6	532.3
77.5°	439.8	436.0	424.5	418.8	405.5	401.6	390.2	394.0
80°	304.3	303.4	293.8	290.0	282.4	280.5	270.9	273.8
82.5°	191.8	191.8	187.9	184.1	181.3	179.4	172.7	174.6
85°	105.9	104.9	104.0	101.1	99.2	100.2	95.4	97.3
87.5°	37.2	36.3	36.3	34.3	32.4	35.3	31.5	32.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)