

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: P130727

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P130727
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-DIMRF-LW
Description: METALUX TOP BAY LED LOW-BAY LUMINAIRE.
WIDE DISTRIBUTION WITH LUMAWATT WIRELESS SENSOR.
Light Source: (160) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7134.5 lumens
Efficiency: N/A
Efficacy: 92.7 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

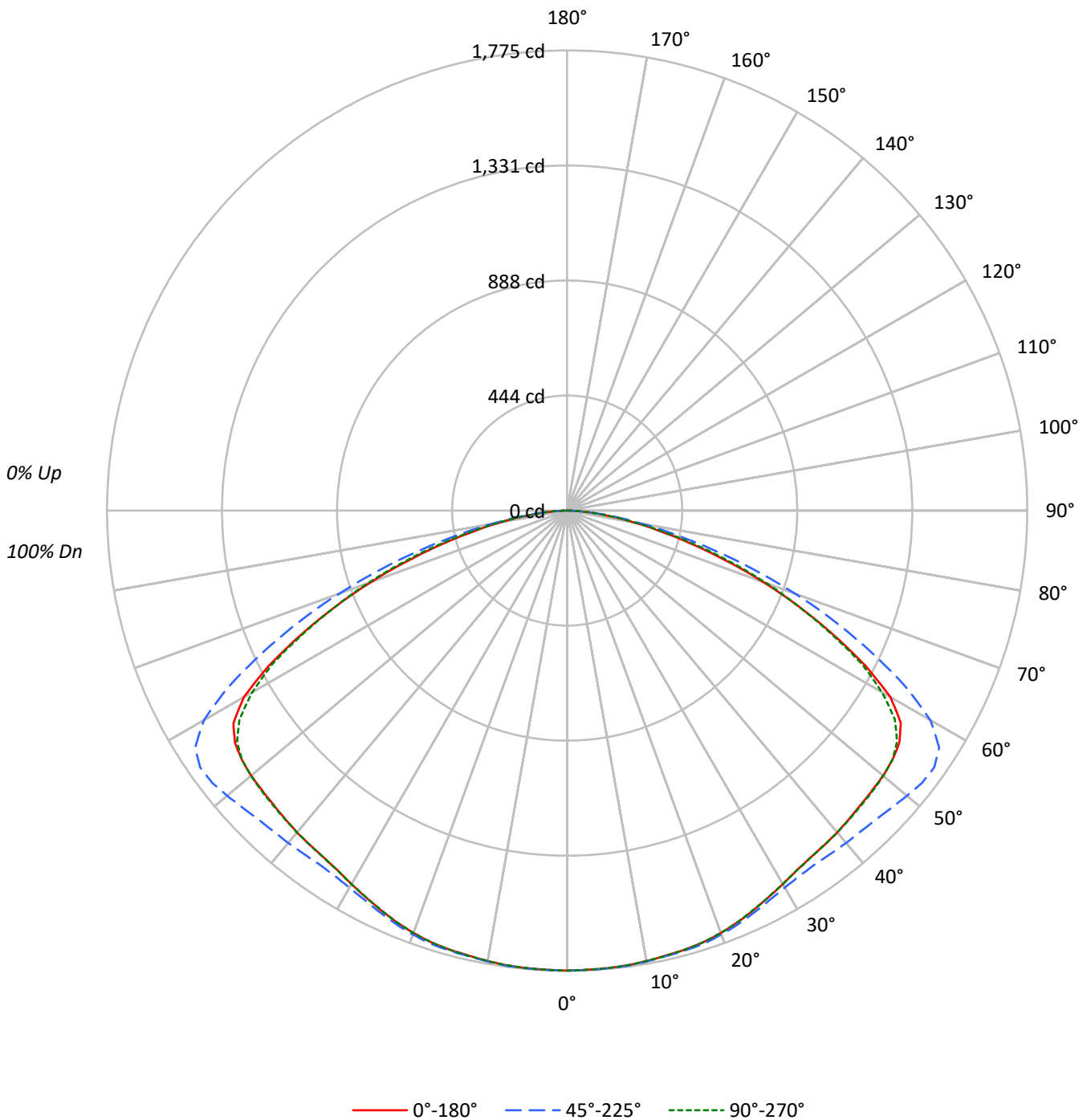
Input Watts (W): 77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	19217	19217	19217
5°	19260	19269	19260
10°	19401	19421	19401
15°	19656	19697	19656
20°	19980	20055	19980
25°	20317	20428	20306
30°	20799	20995	20799
35°	21608	22025	21622
40°	22910	23658	22910
45°	24550	25800	24593
50°	26804	28834	26820
55°	29531	32627	29338
60°	31187	35061	30385
65°	29015	33217	28777
70°	25465	29603	25876
75°	20819	24191	21635
80°	16239	18434	16588
85°	11518	12785	11741



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.0	2.4
10°-20°	496.8	7.0
20°-30°	788.5	11.1
30°-40°	1039.2	14.6
40°-50°	1275.8	17.9
50°-60°	1456.3	20.4
60°-70°	1198.1	16.8
70°-80°	587.9	8.2
80°-90°	123.1	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°	1454.2	20.4
0°-40°	2493.4	34.9
0°-60°	5225.5	73.2
0°-90°	7134.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7134.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1775	1775	1775	1775	1775	
5°	1772	1773	1773	1773	1772	169
15°	1753	1755	1757	1756	1753	496
25°	1700	1706	1710	1706	1700	786
35°	1635	1652	1666	1651	1636	1028
45°	1603	1644	1685	1648	1606	1242
55°	1564	1652	1728	1647	1554	1387
65°	1132	1222	1296	1220	1123	1118
75°	498	546	578	552	517	538
85°	93	101	103	100	94	114
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°	1774.6	1774.6	1774.6	1774.6	1774.6	1774.6	1774.6	1774.6	1774.6	1774.6	1774.6
2.5°	1772.7	1772.7	1772.7	1772.7	1773.6	1773.6	1773.6	1773.6	1773.6	1773.6	1772.7
5°	1771.8	1771.8	1771.8	1771.8	1772.7	1772.7	1772.7	1772.7	1772.7	1772.7	1772.7
7.5°	1769.0	1769.0	1769.9	1769.9	1769.9	1769.9	1769.9	1770.9	1770.9	1770.9	1770.9
10°	1764.4	1764.4	1764.4	1764.4	1765.3	1765.3	1766.2	1766.2	1766.2	1766.2	1766.2
12.5°	1757.9	1757.9	1758.8	1758.8	1758.8	1759.7	1760.7	1760.7	1760.7	1760.7	1760.7
15°	1753.3	1753.3	1753.3	1754.2	1754.2	1755.1	1756.0	1756.0	1757.0	1757.0	1757.0
17.5°	1745.8	1746.8	1746.8	1746.8	1747.7	1748.6	1750.5	1750.5	1751.4	1751.4	1751.4
20°	1733.8	1733.8	1734.7	1735.6	1736.6	1737.5	1739.4	1740.3	1740.3	1740.3	1741.2
22.5°	1719.0	1719.0	1719.9	1720.8	1722.7	1723.6	1725.5	1726.4	1726.4	1726.4	1726.4
25°	1700.4	1701.4	1702.3	1703.2	1705.1	1706.9	1708.8	1710.6	1710.6	1709.7	1710.6
27.5°	1681.9	1682.8	1683.8	1685.6	1687.5	1689.3	1691.2	1693.0	1693.0	1693.0	1693.9
30°	1663.4	1664.3	1666.1	1668.0	1670.8	1672.6	1675.4	1678.2	1679.1	1679.1	1678.2
32.5°	1646.7	1647.6	1650.4	1653.2	1656.9	1660.6	1664.3	1667.1	1669.9	1669.9	1668.0
35°	1634.6	1635.6	1639.3	1643.9	1649.5	1654.1	1658.7	1662.4	1666.1	1666.1	1665.2
37.5°	1627.2	1628.2	1632.8	1638.3	1646.7	1653.2	1659.7	1664.3	1668.0	1668.9	1668.0
40°	1620.7	1621.7	1627.2	1634.6	1643.9	1653.2	1661.5	1668.0	1671.7	1673.6	1673.6
42.5°	1611.5	1613.3	1618.9	1629.1	1640.2	1651.3	1661.5	1670.8	1675.4	1677.3	1676.3
45°	1603.1	1605.0	1612.4	1624.4	1637.4	1651.3	1664.3	1675.4	1681.9	1684.7	1682.8
47.5°	1596.6	1599.4	1608.7	1622.6	1638.3	1656.0	1671.7	1684.7	1693.0	1696.7	1693.9
50°	1591.1	1594.8	1605.0	1621.7	1642.1	1664.3	1682.8	1697.7	1707.8	1711.6	1708.8
52.5°	1580.9	1587.4	1599.4	1619.8	1644.8	1669.9	1692.1	1709.7	1721.7	1725.5	1721.7
55°	1564.2	1570.7	1584.6	1607.8	1638.3	1666.1	1693.0	1712.5	1723.6	1728.2	1722.7
57.5°	1526.2	1532.7	1546.6	1573.5	1604.1	1635.6	1663.4	1684.7	1698.6	1701.4	1690.2
60°	1440.0	1444.7	1466.0	1492.9	1522.5	1553.1	1581.8	1605.9	1618.0	1618.9	1603.1
62.5°	1297.3	1304.7	1326.1	1354.8	1382.6	1407.6	1434.5	1459.5	1468.8	1472.5	1460.4
65°	1132.4	1142.6	1158.3	1184.3	1212.1	1232.5	1262.1	1283.4	1292.7	1296.4	1291.8
67.5°	968.4	977.6	986.0	1011.0	1036.0	1055.5	1084.2	1103.7	1111.1	1116.6	1113.9
70°	804.3	812.7	820.1	840.5	859.9	885.0	901.6	920.2	924.8	935.0	930.4
72.5°	645.0	651.4	658.9	678.3	690.4	717.2	724.7	740.4	748.7	751.5	746.9
75°	497.6	502.3	510.6	526.3	535.6	556.0	558.8	572.7	578.2	578.2	576.4
77.5°	368.8	372.5	381.8	391.1	400.3	414.2	411.4	420.7	424.4	426.3	424.4
80°	260.4	265.0	266.9	274.3	282.6	288.2	286.3	291.0	291.9	295.6	294.7
82.5°	166.8	171.4	168.7	173.3	178.8	182.6	183.5	183.5	183.5	186.3	185.3
85°	92.7	96.4	94.5	96.4	99.2	101.9	100.1	101.0	101.9	102.9	101.9
87.5°	30.6	34.3	31.5	32.4	34.3	36.1	37.1	34.3	36.1	36.1	36.1
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°	1774.6	1774.6	1774.6	1774.6	1774.6	1774.6	1774.6	1774.6
2.5°	1772.7	1772.7	1772.7	1772.7	1772.7	1772.7	1772.7	1772.7
5°	1772.7	1772.7	1772.7	1772.7	1771.8	1771.8	1771.8	1771.8
7.5°	1769.9	1769.9	1769.9	1769.9	1769.0	1769.0	1769.0	1769.0
10°	1765.3	1765.3	1765.3	1764.4	1764.4	1764.4	1764.4	1764.4
12.5°	1760.7	1759.7	1759.7	1759.7	1759.7	1758.8	1758.8	1758.8
15°	1757.0	1756.0	1756.0	1755.1	1754.2	1754.2	1753.3	1753.3
17.5°	1750.5	1750.5	1749.5	1748.6	1747.7	1746.8	1746.8	1745.8
20°	1740.3	1739.4	1737.5	1736.6	1736.6	1735.6	1734.7	1733.8
22.5°	1725.5	1724.5	1723.6	1721.7	1720.8	1719.9	1719.0	1718.0
25°	1708.8	1707.8	1706.9	1705.1	1704.1	1702.3	1701.4	1699.5
27.5°	1692.1	1692.1	1689.3	1687.5	1685.6	1683.8	1682.8	1681.0
30°	1677.3	1676.3	1674.5	1670.8	1668.9	1666.1	1664.3	1663.4
32.5°	1666.1	1665.2	1661.5	1656.9	1653.2	1649.5	1648.5	1646.7
35°	1663.4	1659.7	1654.1	1648.5	1643.9	1639.3	1636.5	1635.6
37.5°	1666.1	1659.7	1653.2	1645.8	1639.3	1632.8	1629.1	1627.2
40°	1668.9	1662.4	1655.0	1644.8	1635.6	1628.2	1623.5	1620.7
42.5°	1670.8	1663.4	1654.1	1642.1	1630.9	1621.7	1616.1	1613.3
45°	1675.4	1667.1	1655.0	1640.2	1626.3	1616.1	1609.6	1605.9
47.5°	1685.6	1673.6	1658.7	1641.1	1624.4	1610.5	1603.1	1599.4
50°	1698.6	1683.8	1665.2	1643.9	1623.5	1605.9	1596.6	1592.0
52.5°	1710.6	1693.0	1670.8	1645.8	1619.8	1599.4	1585.5	1580.9
55°	1710.6	1689.3	1661.5	1632.8	1603.1	1579.0	1560.5	1554.0
57.5°	1674.5	1651.3	1617.0	1585.5	1553.1	1524.4	1504.9	1498.4
60°	1581.8	1561.4	1521.6	1491.0	1454.9	1423.4	1408.5	1403.0
62.5°	1440.0	1425.2	1389.1	1362.2	1323.3	1298.3	1280.7	1281.6
65°	1275.1	1262.1	1232.5	1208.4	1173.2	1153.7	1136.1	1123.1
67.5°	1101.8	1087.0	1062.9	1041.6	1012.8	998.9	979.5	967.4
70°	920.2	909.1	886.8	872.0	847.9	835.9	817.3	817.3
72.5°	738.6	733.0	717.2	704.3	685.7	674.6	659.8	662.6
75°	569.9	572.7	556.9	547.7	532.8	523.6	512.4	517.1
77.5°	427.2	423.5	412.4	406.8	393.8	390.1	379.0	382.7
80°	295.6	294.7	285.4	281.7	274.3	272.4	263.2	266.0
82.5°	186.3	186.3	182.6	178.8	176.1	174.2	167.7	169.6
85°	102.9	101.9	101.0	98.2	96.4	97.3	92.7	94.5
87.5°	36.1	35.2	35.2	33.4	31.5	34.3	30.6	31.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)