

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: McGRAW-EDISON

Report Number: P197598

Luminaire Tested: **TT-C5-LED-E1-MQ-LWR-LW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197598
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115393)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-C5-LED-E1-MQ-LWR-LW
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
MEDIUM DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (160) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

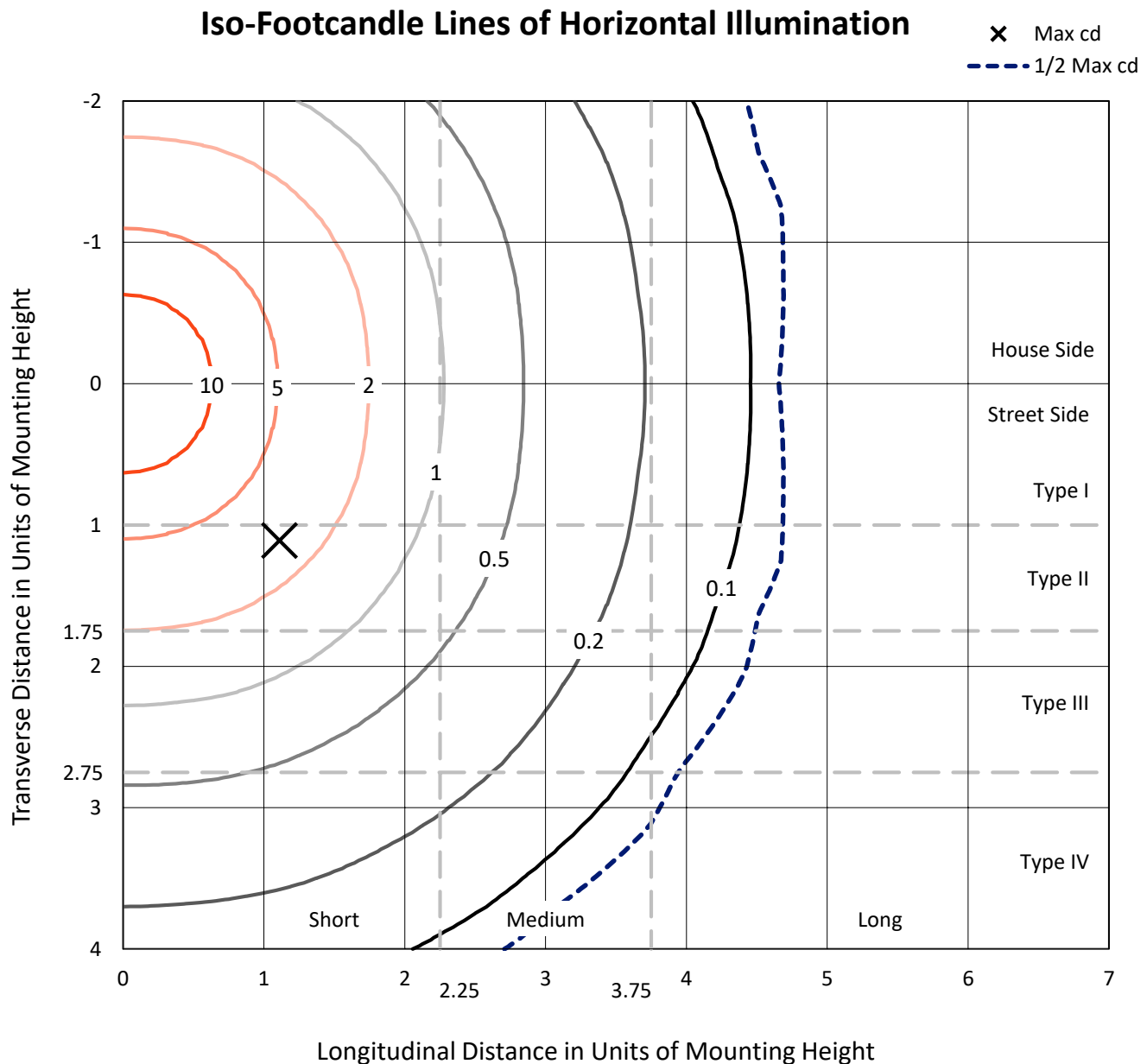
Lumens per Lamp: N/A
Luminaire Lumens: 8543.4 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G2

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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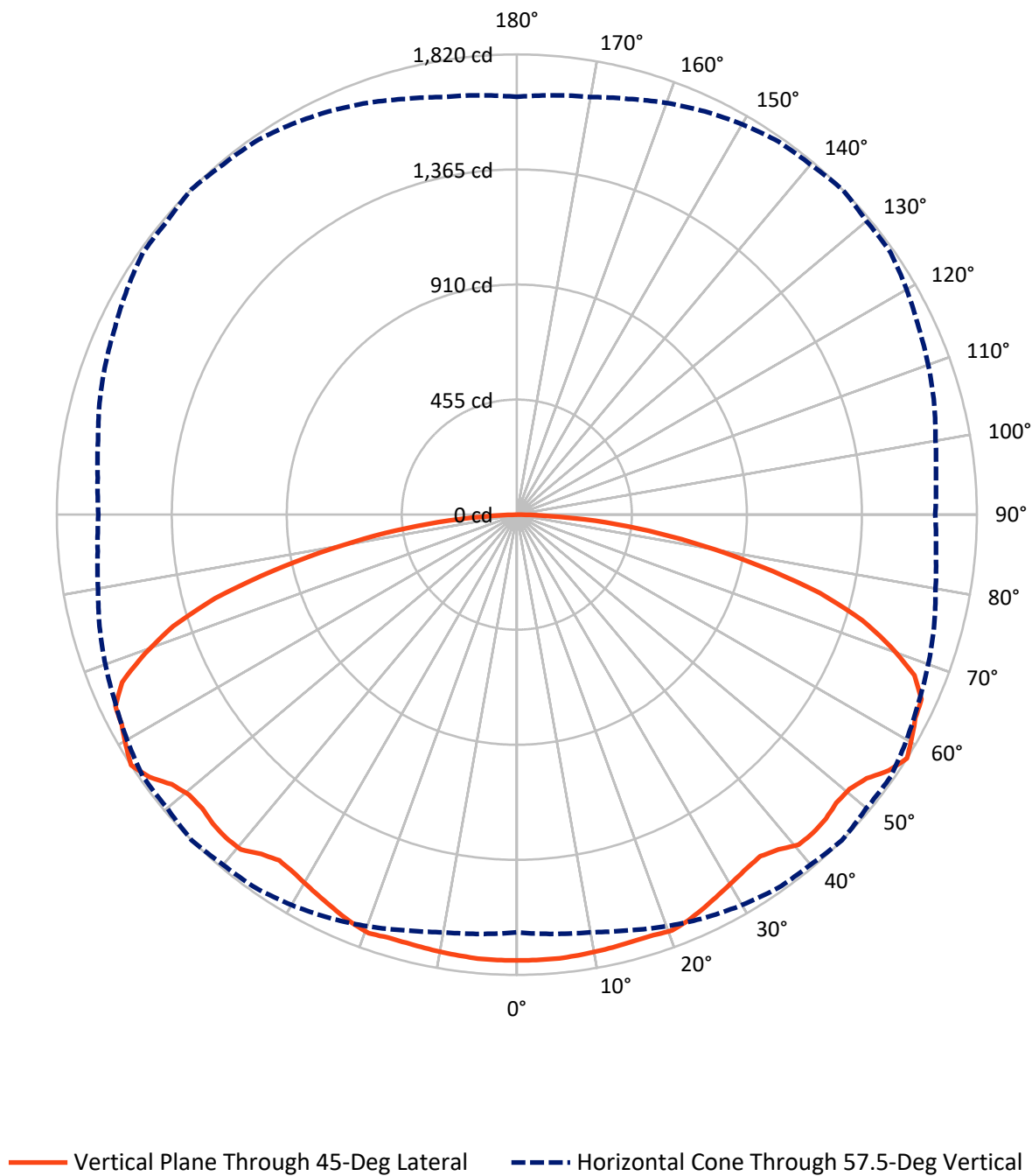


Based on 10 foot mounting height. Maximum calculated value = 17.6 fc
Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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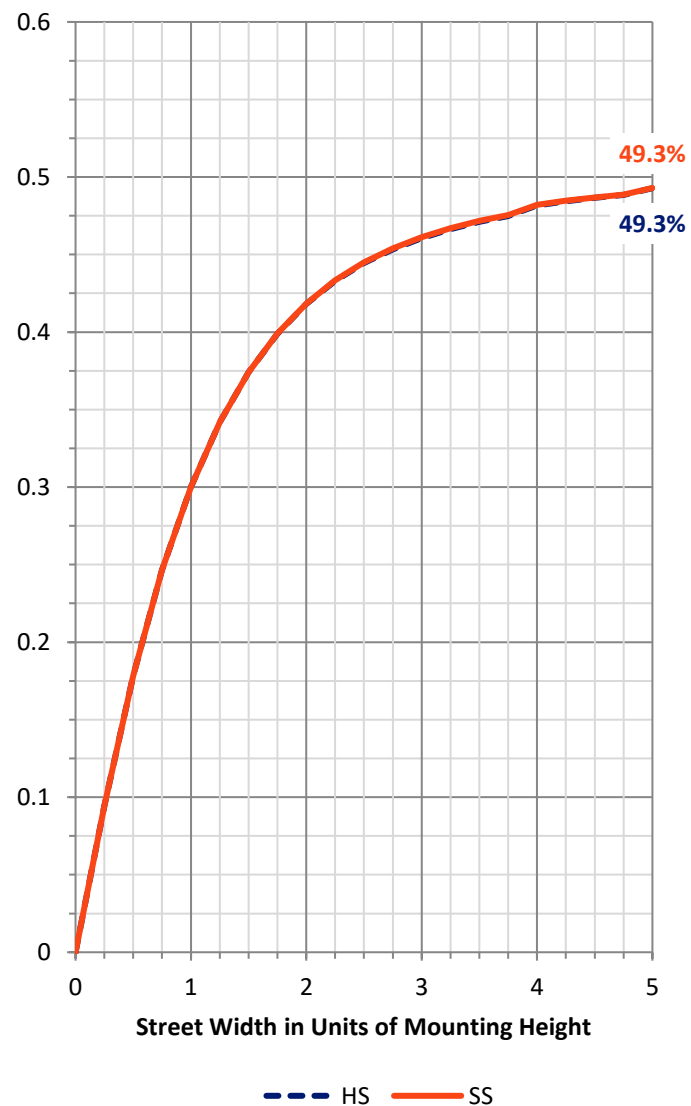
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4271.7	0.0	4271.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4271.7	0.0	4271.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	8543.4	0.0	8543.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.9	2.0
10°-20°	495.3	5.8
20°-30°	793.4	9.3
30°-40°	1044.4	12.2
40°-50°	1300.8	15.2
50°-60°	1532.3	17.9
60°-70°	1629.0	19.1
70°-80°	1221.6	14.3
80°-90°	358.7	4.2
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°-90°	8543.4	100.0
0°-180°	8543.4	100.0

Coefficient of Utilization



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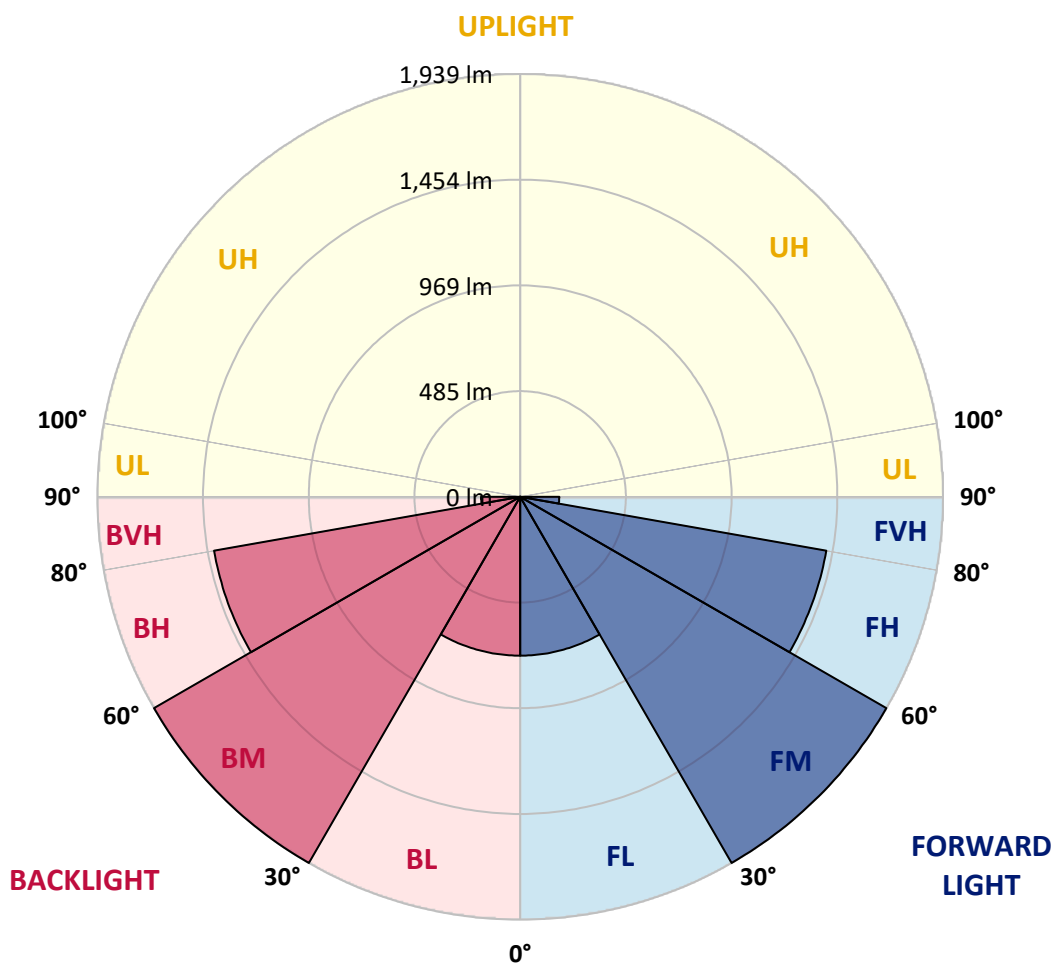
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	728.3	8.5			
FM	(30°-60°)	1938.7	22.7			
FH	(60°-80°)	1425.3	16.7			G1/1800
FVH	(80°-90°)	179.4	2.1			G2/225
BL	(0°-30°)	728.3	8.5	B2/1000		
BM	(30°-60°)	1938.7	22.7	B2/2500		
BH	(60°-80°)	1425.3	16.7	B3/2500		G1/1800
BVH	(80°-90°)	179.4	2.1			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1762.3	1762.3	1762.3	1762.3	1762.3	1762.3	1762.3	1762.3	1762.3	1762.3	1762.3
2.5°	1760.5	1760.5	1760.5	1762.3	1762.3	1762.3	1762.3	1762.3	1762.3	1762.3	1762.3
5°	1760.5	1760.5	1760.5	1760.5	1760.5	1760.5	1762.3	1762.3	1762.3	1762.3	1762.3
7.5°	1756.9	1756.9	1756.9	1756.9	1756.9	1758.7	1758.7	1758.7	1758.7	1758.7	1758.7
10°	1753.3	1753.3	1753.3	1753.3	1755.1	1755.1	1755.1	1755.1	1755.1	1755.1	1755.1
12.5°	1749.8	1749.8	1748.0	1749.8	1749.8	1749.8	1751.6	1751.6	1751.6	1751.6	1751.6
15°	1742.6	1742.6	1744.4	1744.4	1746.2	1746.2	1746.2	1746.2	1748.0	1748.0	1748.0
17.5°	1739.0	1739.0	1740.8	1742.6	1742.6	1744.4	1746.2	1746.2	1748.0	1748.0	1748.0
20°	1744.4	1744.4	1744.4	1746.2	1748.0	1749.8	1751.6	1753.3	1753.3	1755.1	1753.3
22.5°	1733.7	1733.7	1733.7	1735.4	1735.4	1735.4	1737.2	1739.0	1739.0	1740.8	1739.0
25°	1714.0	1714.0	1715.8	1715.8	1717.6	1717.6	1719.3	1719.3	1719.3	1721.1	1721.1
27.5°	1694.3	1692.5	1696.1	1696.1	1697.9	1697.9	1699.7	1701.5	1701.5	1701.5	1703.2
30°	1672.8	1672.8	1674.6	1674.6	1676.4	1678.2	1680.0	1681.8	1681.8	1683.6	1683.6
32.5°	1649.6	1651.4	1653.2	1654.9	1656.7	1660.3	1662.1	1663.9	1665.7	1667.5	1665.7
35°	1633.5	1635.3	1637.0	1640.6	1646.0	1649.6	1653.2	1656.7	1658.5	1658.5	1658.5
37.5°	1637.0	1638.8	1642.4	1649.6	1658.5	1663.9	1671.0	1676.4	1678.2	1680.0	1680.0
40°	1656.7	1660.3	1665.7	1674.6	1685.4	1694.3	1705.0	1710.4	1714.0	1715.8	1714.0
42.5°	1654.9	1660.3	1665.7	1676.4	1688.9	1697.9	1708.6	1714.0	1717.6	1719.3	1717.6
45°	1649.6	1653.2	1658.5	1669.3	1678.2	1690.7	1701.5	1706.8	1712.2	1714.0	1712.2
47.5°	1637.0	1637.0	1638.8	1649.6	1662.1	1678.2	1687.1	1696.1	1701.5	1701.5	1701.5
50°	1620.9	1628.1	1631.7	1646.0	1658.5	1672.8	1688.9	1701.5	1703.2	1705.0	1703.2
52.5°	1620.9	1622.7	1635.3	1644.2	1669.3	1690.7	1706.8	1719.3	1730.1	1731.9	1731.9
55°	1649.6	1653.2	1660.3	1681.8	1701.5	1733.7	1760.5	1771.2	1778.4	1785.5	1778.4
57.5°	1651.4	1663.9	1676.4	1701.5	1731.9	1758.7	1782.0	1801.6	1807.0	1819.5	1805.2
60°	1629.9	1633.5	1646.0	1676.4	1715.8	1744.4	1765.9	1783.8	1801.6	1794.5	1801.6
62.5°	1595.9	1604.8	1622.7	1646.0	1678.2	1712.2	1744.4	1749.8	1776.6	1769.4	1780.2
65°	1569.1	1576.2	1594.1	1628.1	1667.5	1688.9	1724.7	1746.2	1744.4	1758.7	1742.6
67.5°	1502.9	1508.2	1524.3	1558.3	1595.9	1628.1	1638.8	1672.8	1676.4	1696.1	1678.2
70°	1393.7	1406.3	1429.5	1461.7	1492.1	1519.0	1538.6	1556.5	1567.3	1570.9	1567.3
72.5°	1257.8	1277.4	1295.3	1325.7	1356.2	1374.0	1386.6	1411.6	1418.8	1429.5	1425.9
75°	1118.2	1118.2	1136.1	1159.4	1182.6	1193.3	1200.5	1216.6	1225.5	1238.1	1227.3
77.5°	926.8	937.5	953.6	973.3	969.7	975.1	975.1	984.0	980.4	989.4	996.5
80°	726.4	737.1	751.4	765.7	764.0	751.4	760.4	749.6	746.1	747.9	753.2
82.5°	518.8	526.0	538.5	547.5	547.5	538.5	542.1	531.4	534.9	526.0	533.2
85°	297.0	305.9	314.9	323.8	323.8	318.5	323.8	309.5	311.3	311.3	311.3
87.5°	73.4	80.5	84.1	89.5	85.9	94.8	100.2	91.2	93.0	89.5	94.8
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°	1762.3	1762.3	1762.3	1762.3	1762.3	1762.3	1762.3	1762.3
2.5°	1762.3	1760.5	1762.3	1762.3	1762.3	1762.3	1760.5	1760.5
5°	1762.3	1762.3	1762.3	1760.5	1760.5	1760.5	1760.5	1760.5
7.5°	1758.7	1758.7	1758.7	1756.9	1756.9	1756.9	1756.9	1756.9
10°	1755.1	1755.1	1753.3	1753.3	1753.3	1753.3	1753.3	1753.3
12.5°	1751.6	1751.6	1749.8	1749.8	1749.8	1749.8	1749.8	1748.0
15°	1748.0	1748.0	1746.2	1746.2	1744.4	1744.4	1742.6	1742.6
17.5°	1748.0	1746.2	1744.4	1742.6	1742.6	1740.8	1739.0	1739.0
20°	1753.3	1751.6	1749.8	1748.0	1746.2	1744.4	1744.4	1742.6
22.5°	1739.0	1737.2	1735.4	1735.4	1733.7	1733.7	1733.7	1731.9
25°	1721.1	1719.3	1719.3	1715.8	1715.8	1714.0	1714.0	1712.2
27.5°	1701.5	1699.7	1699.7	1697.9	1696.1	1694.3	1692.5	1692.5
30°	1681.8	1680.0	1680.0	1678.2	1674.6	1674.6	1672.8	1671.0
32.5°	1663.9	1663.9	1662.1	1658.5	1654.9	1653.2	1649.6	1649.6
35°	1658.5	1654.9	1651.4	1646.0	1640.6	1637.0	1635.3	1633.5
37.5°	1678.2	1672.8	1663.9	1658.5	1651.4	1644.2	1640.6	1637.0
40°	1712.2	1703.2	1694.3	1685.4	1674.6	1665.7	1658.5	1656.7
42.5°	1714.0	1708.6	1699.7	1688.9	1676.4	1665.7	1658.5	1656.7
45°	1708.6	1701.5	1690.7	1678.2	1669.3	1656.7	1651.4	1649.6
47.5°	1696.1	1688.9	1678.2	1660.3	1647.8	1638.8	1637.0	1637.0
50°	1703.2	1688.9	1671.0	1660.3	1647.8	1633.5	1628.1	1624.5
52.5°	1719.3	1705.0	1694.3	1671.0	1644.2	1631.7	1624.5	1619.2
55°	1771.2	1764.1	1731.9	1699.7	1680.0	1663.9	1656.7	1653.2
57.5°	1805.2	1780.2	1753.3	1731.9	1708.6	1681.8	1663.9	1654.9
60°	1787.3	1760.5	1748.0	1719.3	1671.0	1642.4	1631.7	1626.3
62.5°	1748.0	1748.0	1714.0	1669.3	1651.4	1626.3	1606.6	1599.5
65°	1746.2	1722.9	1688.9	1672.8	1629.9	1592.3	1572.6	1569.1
67.5°	1671.0	1638.8	1629.9	1594.1	1558.3	1524.3	1510.0	1502.9
70°	1556.5	1545.8	1519.0	1495.7	1463.5	1427.7	1408.0	1400.9
72.5°	1411.6	1393.7	1381.2	1361.5	1331.1	1286.4	1270.3	1261.3
75°	1214.8	1205.9	1205.9	1184.4	1155.8	1128.9	1127.1	1123.6
77.5°	976.9	980.4	989.4	966.1	975.1	960.8	948.2	939.3
80°	742.5	758.6	760.4	765.7	771.1	751.4	742.5	731.8
82.5°	527.8	536.7	547.5	549.3	552.8	538.5	531.4	520.6
85°	311.3	316.7	325.6	325.6	325.6	313.1	309.5	300.6
87.5°	91.2	91.2	96.6	91.2	91.2	91.2	82.3	87.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)