

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: P197599

Luminaire Tested: **TT-C5-LED-E1-MQ-LWR-LW-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197599
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-7050
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
MEDIUM DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (160) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8462.6 lumens
Efficiency: N/A
Efficacy: 109.9 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

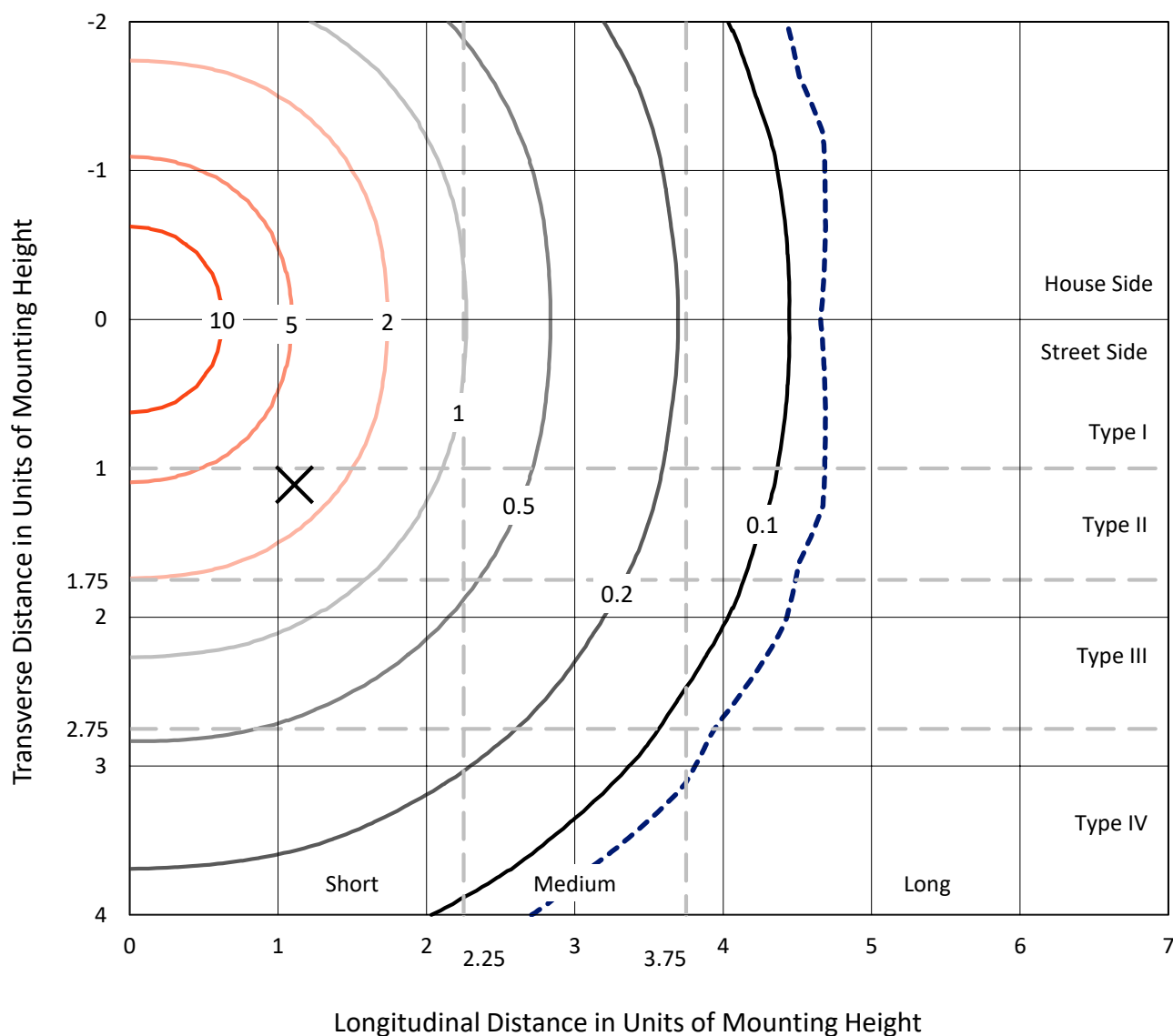


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

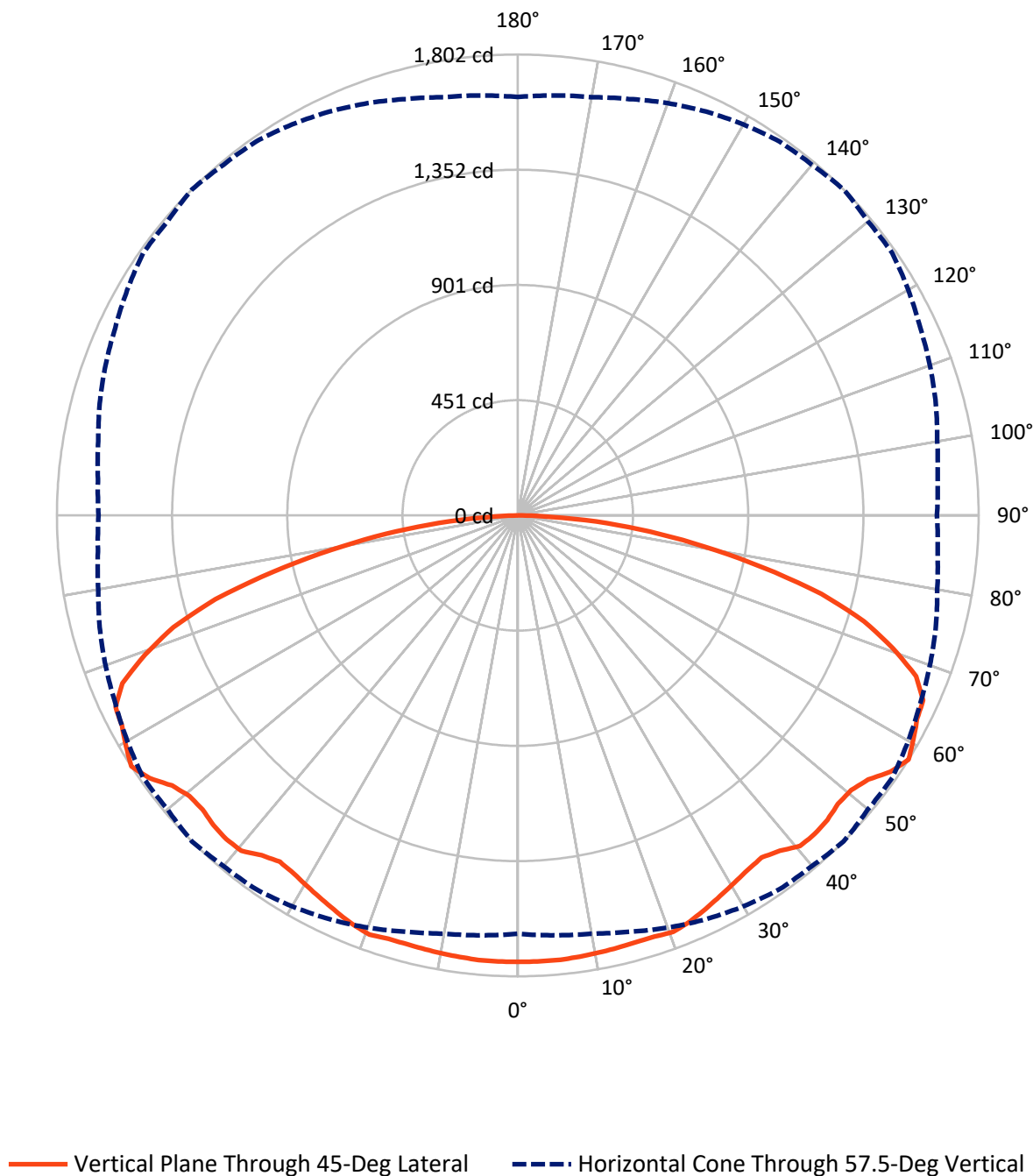


Based on 10 foot mounting height. Maximum calculated value = 17.5 fc
Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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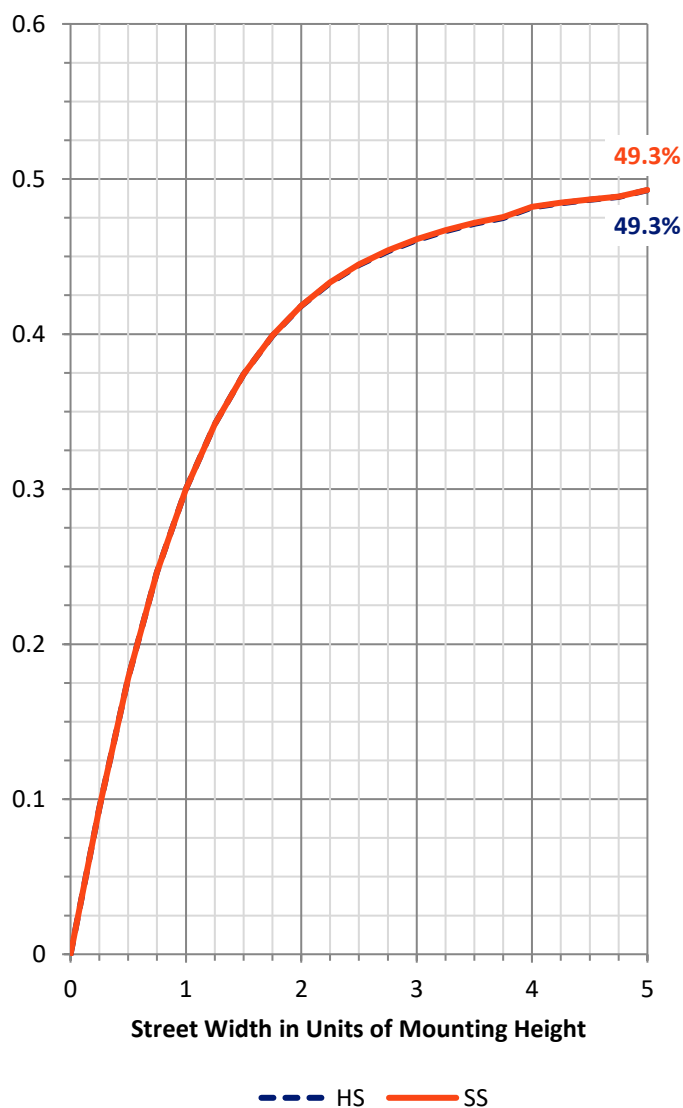
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4231.3	0.0	4231.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4231.3	0.0	4231.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	8462.6	0.0	8462.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.3	2.0
10°-20°	490.6	5.8
20°-30°	785.9	9.3
30°-40°	1034.5	12.2
40°-50°	1288.5	15.2
50°-60°	1517.8	17.9
60°-70°	1613.6	19.1
70°-80°	1210.0	14.3
80°-90°	355.3	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°	8462.6	100.0
0°-180°	8462.6	100.0

Coefficient of Utilization



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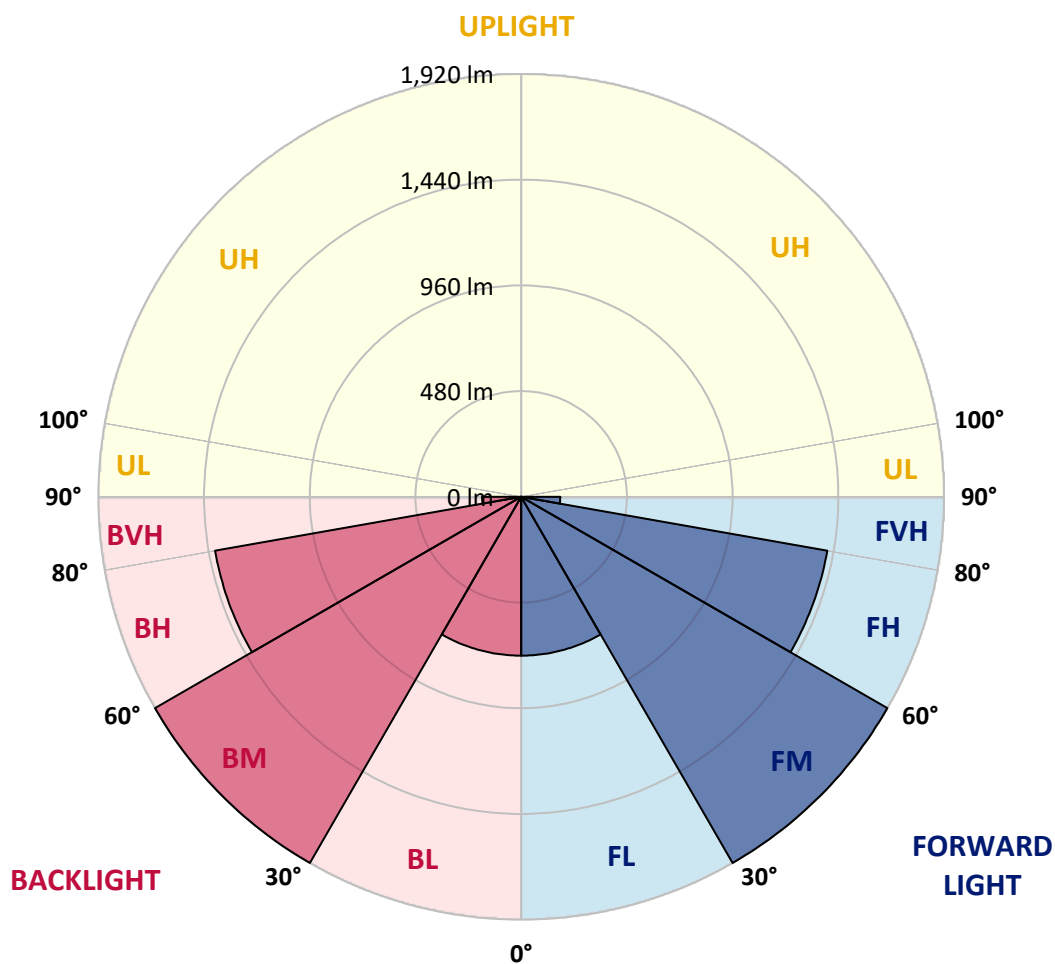
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	721.4	8.5			
FM	(30°-60°)	1920.4	22.7			
FH	(60°-80°)	1411.8	16.7			G1/1800
FVH	(80°-90°)	177.7	2.1			G2/225
BL	(0°-30°)	721.4	8.5	B2/1000		
BM	(30°-60°)	1920.4	22.7	B2/2500		
BH	(60°-80°)	1411.8	16.7	B3/2500		G1/1800
BVH	(80°-90°)	177.7	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°	1745.6	1745.6	1745.6	1745.6	1745.6	1745.6	1745.6	1745.6	1745.6	1745.6	1745.6
2.5°	1743.8	1743.8	1743.8	1745.6	1745.6	1745.6	1745.6	1745.6	1745.6	1745.6	1745.6
5°	1743.8	1743.8	1743.8	1743.8	1743.8	1743.8	1745.6	1745.6	1745.6	1745.6	1745.6
7.5°	1740.3	1740.3	1740.3	1740.3	1740.3	1742.1	1742.1	1742.1	1742.1	1742.1	1742.1
10°	1736.8	1736.8	1736.8	1736.8	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5	1738.5
12.5°	1733.2	1733.2	1731.4	1733.2	1733.2	1733.2	1735.0	1735.0	1735.0	1735.0	1735.0
15°	1726.1	1726.1	1727.9	1727.9	1729.7	1729.7	1729.7	1729.7	1731.4	1731.4	1731.4
17.5°	1722.6	1722.6	1724.3	1726.1	1726.1	1727.9	1729.7	1729.7	1731.4	1731.4	1731.4
20°	1727.9	1727.9	1727.9	1729.7	1731.4	1733.2	1735.0	1736.8	1736.8	1738.5	1736.8
22.5°	1717.3	1717.3	1717.3	1719.0	1719.0	1719.0	1720.8	1722.6	1722.6	1724.3	1722.6
25°	1697.8	1697.8	1699.5	1699.5	1701.3	1701.3	1703.1	1703.1	1703.1	1704.9	1704.9
27.5°	1678.3	1676.5	1680.0	1680.0	1681.8	1681.8	1683.6	1685.4	1685.4	1685.4	1687.1
30°	1657.0	1657.0	1658.8	1658.8	1660.5	1662.3	1664.1	1665.9	1665.9	1667.6	1667.6
32.5°	1634.0	1635.7	1637.5	1639.3	1641.1	1644.6	1646.4	1648.1	1649.9	1651.7	1649.9
35°	1618.0	1619.8	1621.6	1625.1	1630.4	1634.0	1637.5	1641.1	1642.8	1642.8	1642.8
37.5°	1621.6	1623.3	1626.9	1634.0	1642.8	1648.1	1655.2	1660.5	1662.3	1664.1	1664.1
40°	1641.1	1644.6	1649.9	1658.8	1669.4	1678.3	1688.9	1694.2	1697.8	1699.5	1697.8
42.5°	1639.3	1644.6	1649.9	1660.5	1673.0	1681.8	1692.4	1697.8	1701.3	1703.1	1701.3
45°	1634.0	1637.5	1642.8	1653.5	1662.3	1674.7	1685.4	1690.7	1696.0	1697.8	1696.0
47.5°	1621.6	1621.6	1623.3	1634.0	1646.4	1662.3	1671.2	1680.0	1685.4	1685.4	1685.4
50°	1605.6	1612.7	1616.2	1630.4	1642.8	1657.0	1673.0	1685.4	1687.1	1688.9	1687.1
52.5°	1605.6	1607.4	1619.8	1628.6	1653.5	1674.7	1690.7	1703.1	1713.7	1715.5	1715.5
55°	1634.0	1637.5	1644.6	1665.9	1685.4	1717.3	1743.8	1754.5	1761.6	1768.7	1761.6
57.5°	1635.7	1648.1	1660.5	1685.4	1715.5	1742.1	1765.1	1784.6	1789.9	1802.3	1788.1
60°	1614.5	1618.0	1630.4	1660.5	1699.5	1727.9	1749.2	1766.9	1784.6	1777.5	1784.6
62.5°	1580.8	1589.7	1607.4	1630.4	1662.3	1696.0	1727.9	1733.2	1759.8	1752.7	1763.3
65°	1554.2	1561.3	1579.0	1612.7	1651.7	1673.0	1708.4	1729.7	1727.9	1742.1	1726.1
67.5°	1488.6	1494.0	1509.9	1543.6	1580.8	1612.7	1623.3	1657.0	1660.5	1680.0	1662.3
70°	1380.5	1392.9	1416.0	1447.9	1478.0	1504.6	1524.1	1541.8	1552.4	1556.0	1552.4
72.5°	1245.9	1265.3	1283.1	1313.2	1343.3	1361.0	1373.5	1398.3	1405.4	1416.0	1412.4
75°	1107.6	1107.6	1125.3	1148.4	1171.4	1182.1	1189.1	1205.1	1214.0	1226.4	1215.7
77.5°	918.0	928.6	944.6	964.1	960.5	965.8	965.8	974.7	971.2	980.0	987.1
80°	719.5	730.1	744.3	758.5	756.7	744.3	753.2	742.5	739.0	740.8	746.1
82.5°	513.9	521.0	533.4	542.3	542.3	533.4	537.0	526.3	529.9	521.0	528.1
85°	294.2	303.0	311.9	320.8	320.8	315.5	320.8	306.6	308.4	308.4	308.4
87.5°	72.7	79.7	83.3	88.6	85.1	93.9	99.2	90.4	92.2	88.6	93.9
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°	1745.6	1745.6	1745.6	1745.6	1745.6	1745.6	1745.6	1745.6
2.5°	1745.6	1743.8	1745.6	1745.6	1745.6	1745.6	1743.8	1743.8
5°	1745.6	1745.6	1745.6	1743.8	1743.8	1743.8	1743.8	1743.8
7.5°	1742.1	1742.1	1742.1	1740.3	1740.3	1740.3	1740.3	1740.3
10°	1738.5	1738.5	1736.8	1736.8	1736.8	1736.8	1736.8	1736.8
12.5°	1735.0	1735.0	1733.2	1733.2	1733.2	1733.2	1733.2	1731.4
15°	1731.4	1731.4	1729.7	1729.7	1727.9	1727.9	1726.1	1726.1
17.5°	1731.4	1729.7	1727.9	1726.1	1726.1	1724.3	1722.6	1722.6
20°	1736.8	1735.0	1733.2	1731.4	1729.7	1727.9	1727.9	1726.1
22.5°	1722.6	1720.8	1719.0	1719.0	1717.3	1717.3	1717.3	1715.5
25°	1704.9	1703.1	1703.1	1699.5	1699.5	1697.8	1697.8	1696.0
27.5°	1685.4	1683.6	1683.6	1681.8	1680.0	1678.3	1676.5	1676.5
30°	1665.9	1664.1	1664.1	1662.3	1658.8	1658.8	1657.0	1655.2
32.5°	1648.1	1648.1	1646.4	1642.8	1639.3	1637.5	1634.0	1634.0
35°	1642.8	1639.3	1635.7	1630.4	1625.1	1621.6	1619.8	1618.0
37.5°	1662.3	1657.0	1648.1	1642.8	1635.7	1628.6	1625.1	1621.6
40°	1696.0	1687.1	1678.3	1669.4	1658.8	1649.9	1642.8	1641.1
42.5°	1697.8	1692.4	1683.6	1673.0	1660.5	1649.9	1642.8	1641.1
45°	1692.4	1685.4	1674.7	1662.3	1653.5	1641.1	1635.7	1634.0
47.5°	1680.0	1673.0	1662.3	1644.6	1632.2	1623.3	1621.6	1621.6
50°	1687.1	1673.0	1655.2	1644.6	1632.2	1618.0	1612.7	1609.2
52.5°	1703.1	1688.9	1678.3	1655.2	1628.6	1616.2	1609.2	1603.8
55°	1754.5	1747.4	1715.5	1683.6	1664.1	1648.1	1641.1	1637.5
57.5°	1788.1	1763.3	1736.8	1715.5	1692.4	1665.9	1648.1	1639.3
60°	1770.4	1743.8	1731.4	1703.1	1655.2	1626.9	1616.2	1610.9
62.5°	1731.4	1731.4	1697.8	1653.5	1635.7	1610.9	1591.4	1584.3
65°	1729.7	1706.6	1673.0	1657.0	1614.5	1577.3	1557.8	1554.2
67.5°	1655.2	1623.3	1614.5	1579.0	1543.6	1509.9	1495.7	1488.6
70°	1541.8	1531.2	1504.6	1481.6	1449.7	1414.2	1394.7	1387.6
72.5°	1398.3	1380.5	1368.1	1348.6	1318.5	1274.2	1258.3	1249.4
75°	1203.3	1194.5	1194.5	1173.2	1144.8	1118.3	1116.5	1112.9
77.5°	967.6	971.2	980.0	957.0	965.8	951.7	939.3	930.4
80°	735.5	751.4	753.2	758.5	763.8	744.3	735.5	724.8
82.5°	522.8	531.7	542.3	544.1	547.6	533.4	526.3	515.7
85°	308.4	313.7	322.5	322.5	322.5	310.1	306.6	297.7
87.5°	90.4	90.4	95.7	90.4	90.4	90.4	81.5	86.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)