

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: P197524

Luminaire Tested: **TT-C4-LED-E1-CQ-LWR-LW-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197524
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115438)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-C4-LED-E1-CQ-LWR-LW-7060
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
CONCENTRATED DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (160) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6774.4 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B2 - U0 - G1

Input Watts (W): 58
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

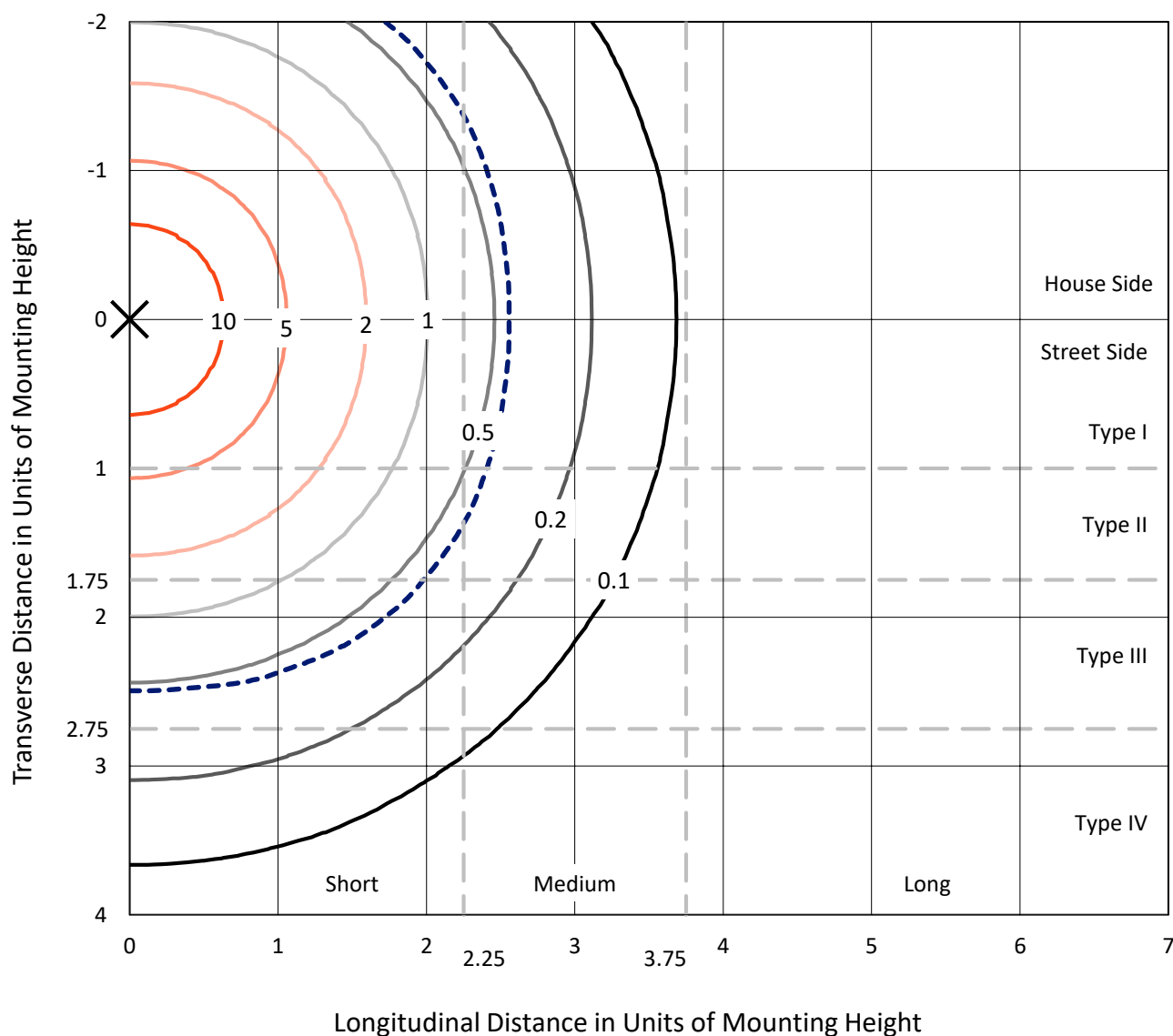


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

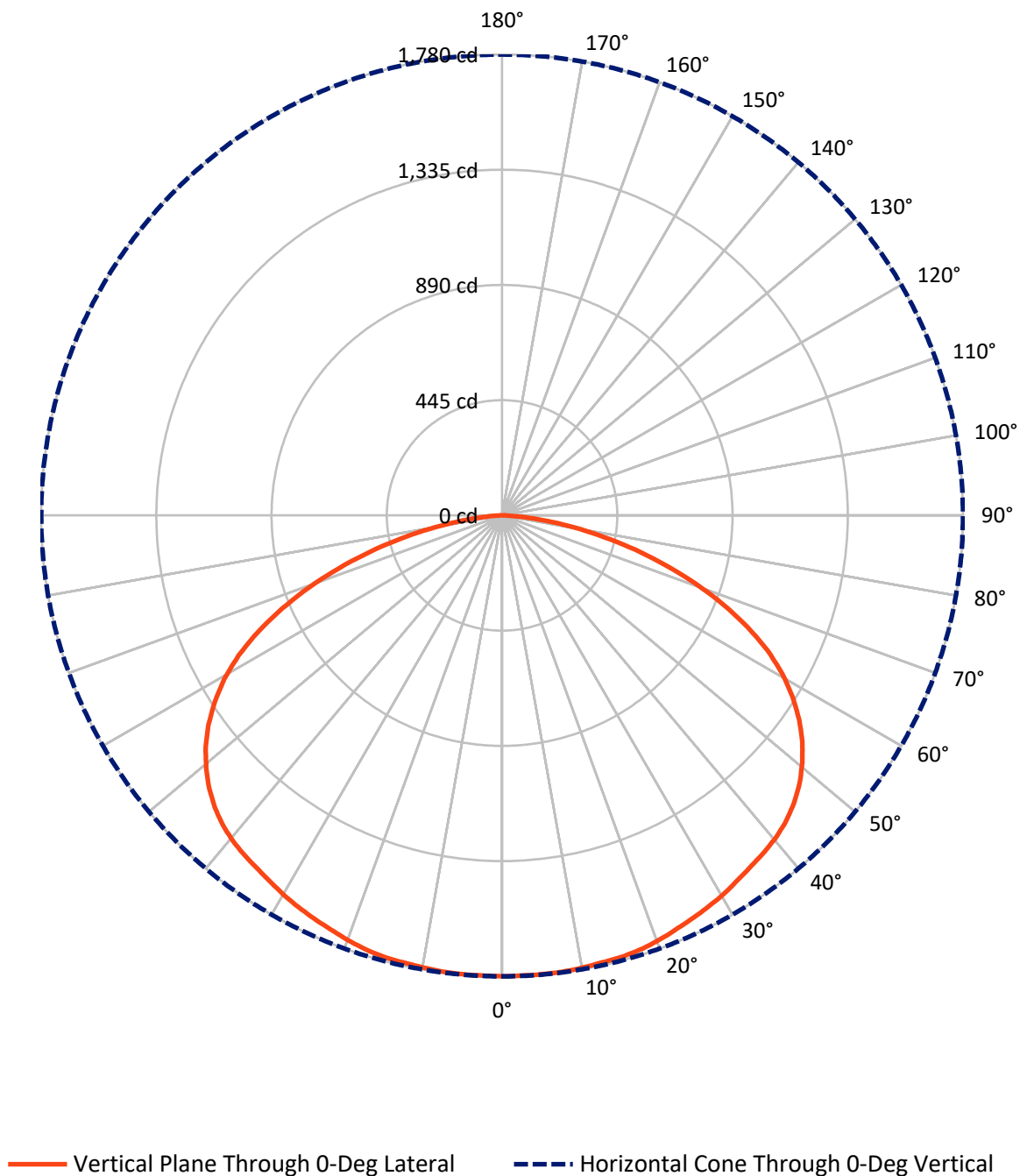


Based on 10 foot mounting height. Maximum calculated value = 17.8 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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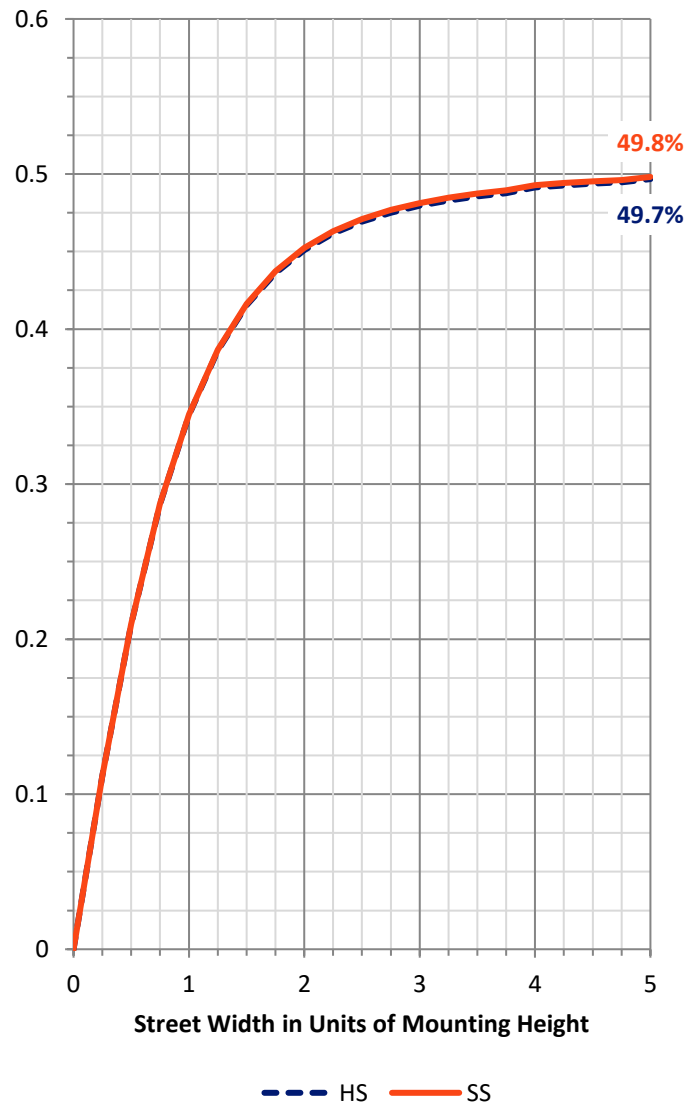
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3387.2	0.0	3387.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3387.2	0.0	3387.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	6774.4	0.0	6774.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.6	2.5
10°-20°	499.6	7.4
20°-30°	795.7	11.7
30°-40°	1043.2	15.4
40°-50°	1230.3	18.2
50°-60°	1274.2	18.8
60°-70°	1065.6	15.7
70°-80°	580.8	8.6
80°-90°	115.3	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°-90°	6774.4	100.0
0°-180°	6774.4	100.0

Coefficient of Utilization



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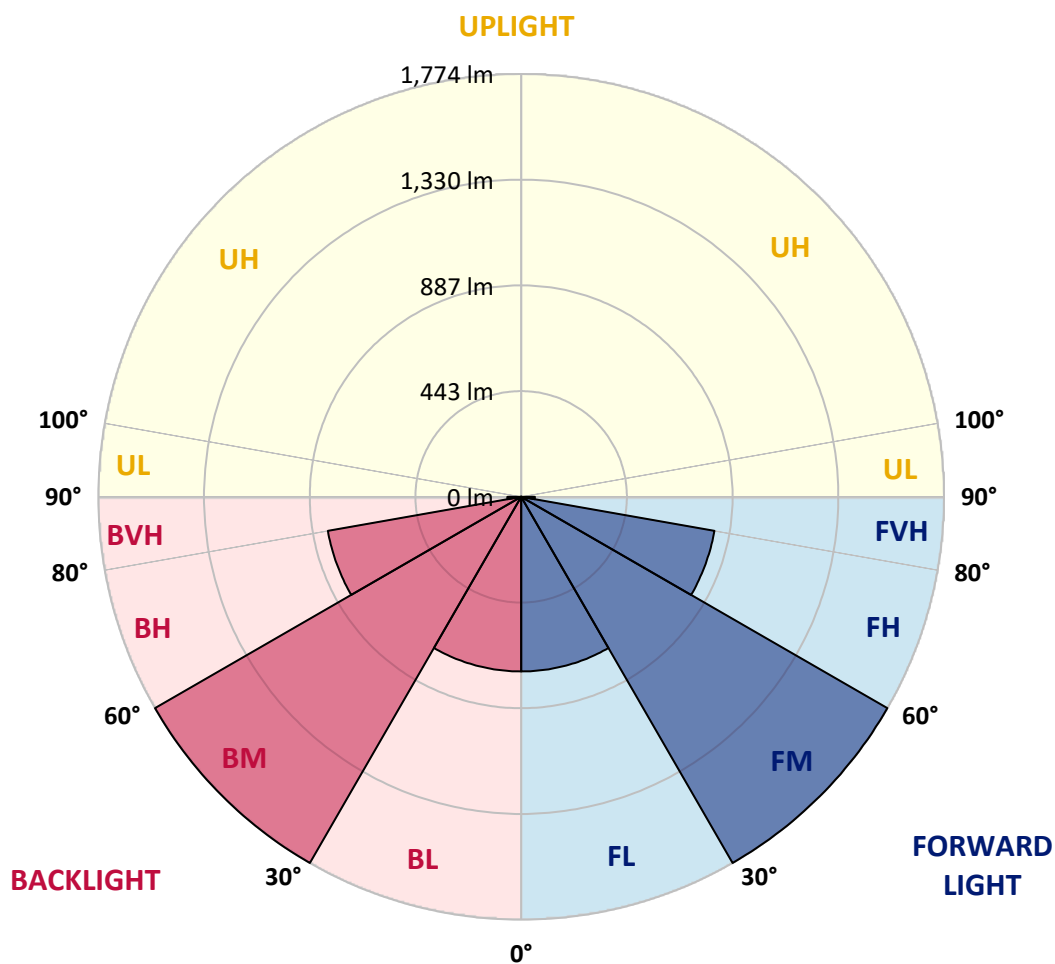
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	732.4	10.8			
FM	(30°-60°)	1773.9	26.2			
FH	(60°-80°)	823.2	12.2			G1/1800
FVH	(80°-90°)	57.6	0.9			G1/100
BL	(0°-30°)	732.4	10.8	B2/1000		
BM	(30°-60°)	1773.9	26.2	B2/2500		
BH	(60°-80°)	823.2	12.2	B2/1000		G1/1800
BVH	(80°-90°)	57.6	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1780.3	1780.3	1780.3	1780.3	1780.3	1780.3	1780.3	1780.3	1780.3	1780.3	1780.3
2.5°	1778.9	1780.3	1780.3	1780.3	1780.3	1780.3	1780.3	1780.3	1778.9	1780.3	1780.3
5°	1778.9	1778.9	1778.9	1778.9	1780.3	1778.9	1778.9	1778.9	1778.9	1778.9	1778.9
7.5°	1777.5	1776.1	1776.1	1776.1	1776.1	1776.1	1777.5	1777.5	1777.5	1777.5	1777.5
10°	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2
12.5°	1768.9	1768.9	1768.9	1768.9	1770.4	1770.4	1770.4	1770.4	1770.4	1770.4	1768.9
15°	1766.1	1766.1	1766.1	1766.1	1766.1	1766.1	1766.1	1766.1	1766.1	1766.1	1766.1
17.5°	1758.9	1758.9	1758.9	1758.9	1760.4	1760.4	1760.4	1760.4	1760.4	1760.4	1760.4
20°	1747.5	1747.5	1747.5	1747.5	1747.5	1749.0	1750.4	1750.4	1750.4	1750.4	1750.4
22.5°	1733.3	1733.3	1734.7	1734.7	1736.1	1736.1	1737.6	1737.6	1737.6	1737.6	1737.6
25°	1720.5	1720.5	1720.5	1721.9	1721.9	1721.9	1723.3	1724.7	1724.7	1724.7	1723.3
27.5°	1707.6	1707.6	1707.6	1709.1	1709.1	1709.1	1710.5	1710.5	1711.9	1710.5	1710.5
30°	1693.4	1692.0	1692.0	1693.4	1694.8	1694.8	1696.2	1696.2	1696.2	1696.2	1694.8
32.5°	1676.3	1676.3	1677.7	1679.1	1679.1	1680.6	1682.0	1682.0	1682.0	1683.4	1680.6
35°	1660.6	1662.0	1662.0	1663.4	1666.3	1667.7	1669.1	1670.6	1670.6	1670.6	1667.7
37.5°	1647.8	1649.2	1650.6	1653.5	1656.3	1659.2	1662.0	1664.9	1663.4	1663.4	1659.2
40°	1632.1	1633.5	1636.4	1639.2	1644.9	1647.8	1652.0	1654.9	1656.3	1654.9	1650.6
42.5°	1610.7	1612.1	1615.0	1619.3	1626.4	1632.1	1636.4	1640.6	1642.1	1640.6	1636.4
45°	1582.2	1583.6	1586.5	1592.2	1600.7	1606.4	1613.6	1617.8	1620.7	1620.7	1616.4
47.5°	1546.6	1548.0	1552.3	1558.0	1566.5	1573.6	1582.2	1587.9	1590.8	1593.6	1589.3
50°	1502.4	1503.8	1509.5	1516.6	1523.8	1533.7	1543.7	1552.3	1556.5	1558.0	1556.5
52.5°	1452.5	1453.9	1459.6	1466.7	1476.7	1488.1	1499.5	1509.5	1515.2	1518.1	1515.2
55°	1392.6	1395.5	1399.7	1409.7	1421.1	1431.1	1445.4	1456.8	1463.9	1465.3	1463.9
57.5°	1322.8	1327.1	1331.3	1342.7	1354.1	1368.4	1379.8	1391.2	1399.7	1401.2	1401.2
60°	1244.4	1247.2	1251.5	1262.9	1275.7	1285.7	1301.4	1312.8	1319.9	1319.9	1321.3
62.5°	1151.7	1154.6	1161.7	1170.3	1184.5	1194.5	1207.3	1218.7	1225.8	1228.7	1227.3
65°	1043.4	1046.2	1050.5	1061.9	1073.3	1084.7	1097.6	1107.5	1114.7	1116.1	1114.7
67.5°	923.7	926.5	929.4	943.6	955.0	959.3	975.0	983.5	987.8	989.2	989.2
70°	796.8	798.2	802.5	809.6	822.5	826.7	836.7	843.8	846.7	852.4	848.1
72.5°	664.2	667.1	677.1	678.5	688.5	694.2	697.0	697.0	704.1	704.1	705.6
75°	533.1	534.5	538.8	540.2	547.4	547.4	545.9	548.8	554.5	554.5	555.9
77.5°	403.4	403.4	410.5	404.8	407.7	402.0	404.8	402.0	406.2	404.8	406.2
80°	282.2	282.2	286.5	280.8	282.2	276.5	278.0	276.5	276.5	278.0	278.0
82.5°	173.9	175.3	178.2	173.9	173.9	169.6	171.0	172.5	172.5	171.0	169.6
85°	85.5	85.5	88.4	86.9	85.5	82.7	84.1	85.5	85.5	84.1	84.1
87.5°	22.8	22.8	24.2	24.2	22.8	21.4	22.8	24.2	24.2	24.2	22.8
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°	1780.3	1780.3	1780.3	1780.3	1780.3	1780.3	1780.3	1780.3
2.5°	1778.9	1778.9	1780.3	1778.9	1780.3	1778.9	1780.3	1780.3
5°	1778.9	1778.9	1778.9	1778.9	1778.9	1778.9	1778.9	1778.9
7.5°	1776.1	1777.5	1776.1	1776.1	1776.1	1777.5	1776.1	1777.5
10°	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2	1773.2
12.5°	1768.9	1768.9	1768.9	1768.9	1768.9	1768.9	1768.9	1767.5
15°	1766.1	1764.7	1764.7	1764.7	1763.2	1763.2	1763.2	1763.2
17.5°	1760.4	1758.9	1757.5	1757.5	1757.5	1757.5	1756.1	1756.1
20°	1750.4	1749.0	1747.5	1747.5	1746.1	1746.1	1744.7	1744.7
22.5°	1736.1	1736.1	1734.7	1733.3	1733.3	1731.9	1731.9	1730.4
25°	1723.3	1721.9	1720.5	1719.0	1717.6	1717.6	1716.2	1714.8
27.5°	1709.1	1706.2	1704.8	1703.4	1701.9	1700.5	1699.1	1697.7
30°	1693.4	1690.5	1687.7	1686.3	1683.4	1680.6	1679.1	1677.7
32.5°	1677.7	1674.9	1670.6	1666.3	1663.4	1660.6	1657.7	1656.3
35°	1664.9	1659.2	1654.9	1649.2	1644.9	1640.6	1639.2	1637.8
37.5°	1654.9	1649.2	1642.1	1636.4	1632.1	1626.4	1623.5	1620.7
40°	1644.9	1637.8	1629.2	1622.1	1616.4	1609.3	1606.4	1603.6
42.5°	1630.7	1622.1	1613.6	1605.0	1596.5	1589.3	1585.0	1582.2
45°	1610.7	1602.2	1592.2	1580.8	1572.2	1563.7	1559.4	1556.5
47.5°	1583.6	1575.1	1563.7	1553.7	1543.7	1535.2	1529.5	1526.6
50°	1550.8	1542.3	1530.9	1519.5	1509.5	1499.5	1495.2	1491.0
52.5°	1509.5	1502.4	1489.5	1481.0	1469.6	1459.6	1455.3	1452.5
55°	1458.2	1451.1	1438.2	1429.7	1418.3	1409.7	1404.0	1399.7
57.5°	1395.5	1389.8	1375.5	1367.0	1355.6	1347.0	1342.7	1339.9
60°	1318.5	1312.8	1298.5	1290.0	1280.0	1270.0	1267.2	1264.3
62.5°	1223.0	1220.1	1208.7	1198.8	1188.8	1178.8	1176.0	1174.5
65°	1111.8	1109.0	1099.0	1090.4	1081.9	1073.3	1070.5	1067.6
67.5°	985.0	983.5	975.0	967.8	962.1	953.6	952.2	949.3
70°	849.5	846.7	839.6	833.9	829.6	822.5	821.0	818.2
72.5°	708.4	707.0	702.7	695.6	695.6	685.6	684.2	682.8
75°	553.1	560.2	554.5	551.6	551.6	545.9	545.9	544.5
77.5°	404.8	411.9	416.2	410.5	416.2	410.5	410.5	409.1
80°	276.5	282.2	286.5	282.2	289.4	285.1	285.1	290.8
82.5°	168.2	173.9	176.8	175.3	179.6	178.2	176.8	181.0
85°	82.7	85.5	86.9	86.9	88.4	85.5	88.4	89.8
87.5°	21.4	22.8	24.2	22.8	24.2	24.2	24.2	25.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)