

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: P197547

Luminaire Tested: **TT-C4-LED-E1-CQ-MS/DIM-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197547
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115423)
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-MS/DIM-7050
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
CONCENTRATED DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR
Light Source: (160) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7285.4 lumens
Efficiency: N/A
Efficacy: 125.6 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

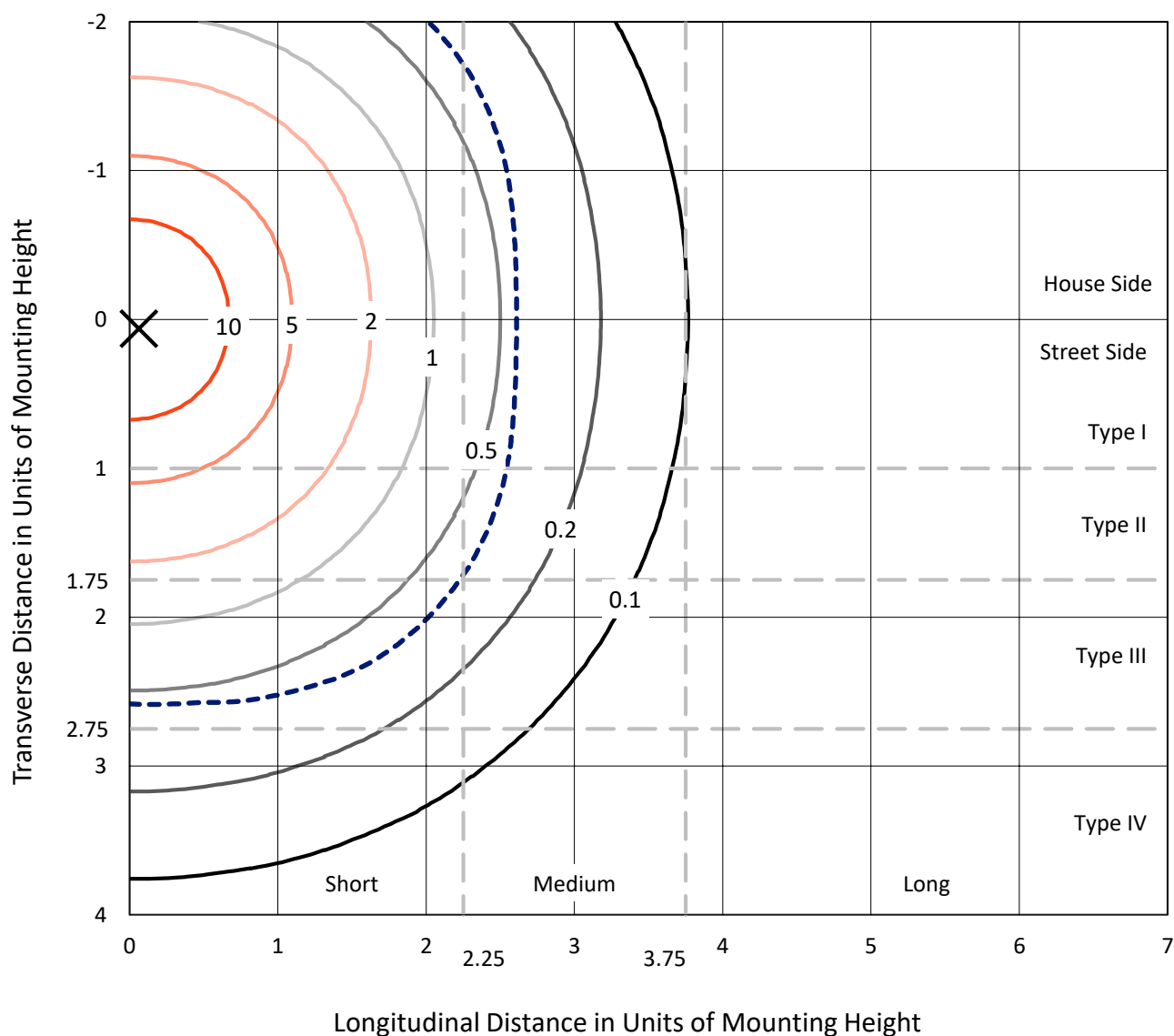


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

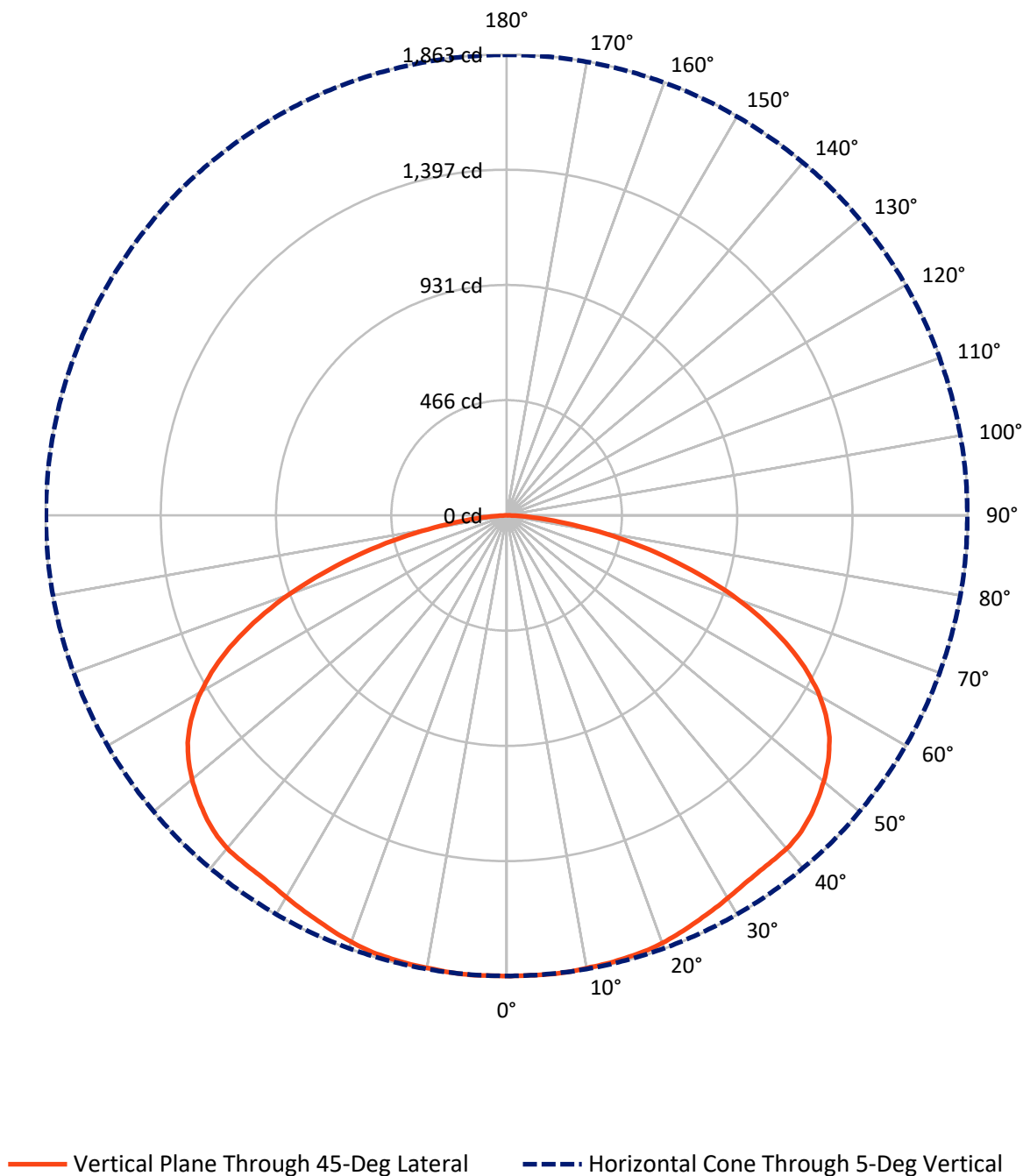


Based on 10 foot mounting height. Maximum calculated value = 18.6 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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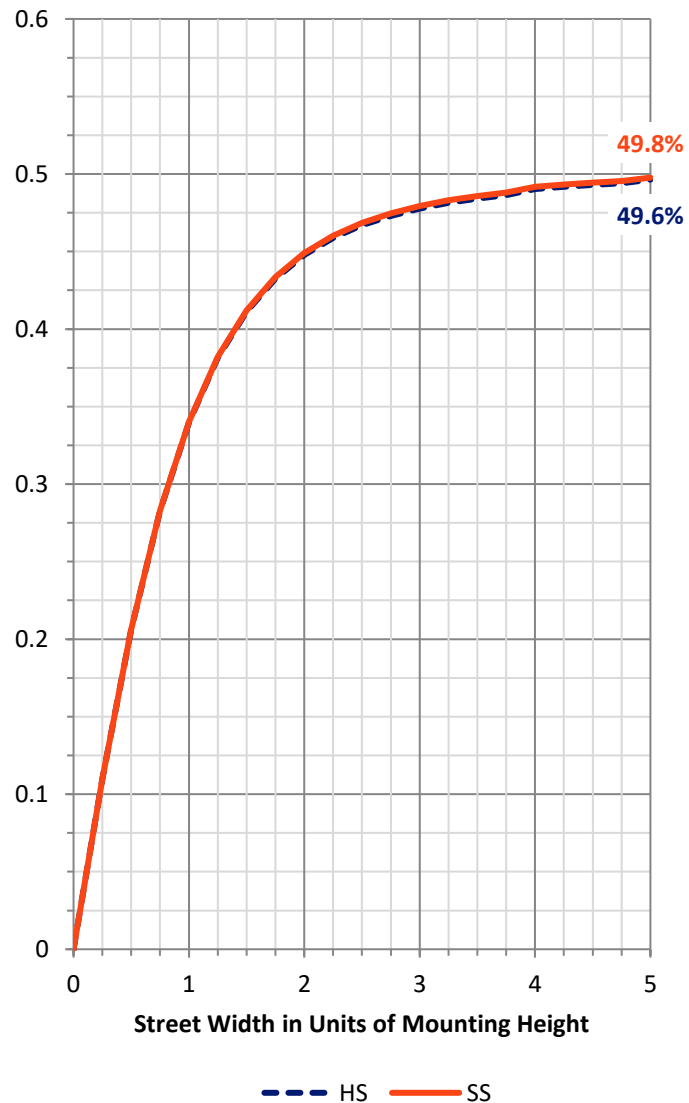
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3642.7	0.0	3642.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3642.7	0.0	3642.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	7285.4	0.0	7285.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.5	2.4
10°-20°	523.6	7.2
20°-30°	835.6	11.5
30°-40°	1100.7	15.1
40°-50°	1309.3	18.0
50°-60°	1370.3	18.8
60°-70°	1165.3	16.0
70°-80°	662.2	9.1
80°-90°	140.8	1.9
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°	7285.4	100.0
0°-180°	7285.4	100.0

Coefficient of Utilization



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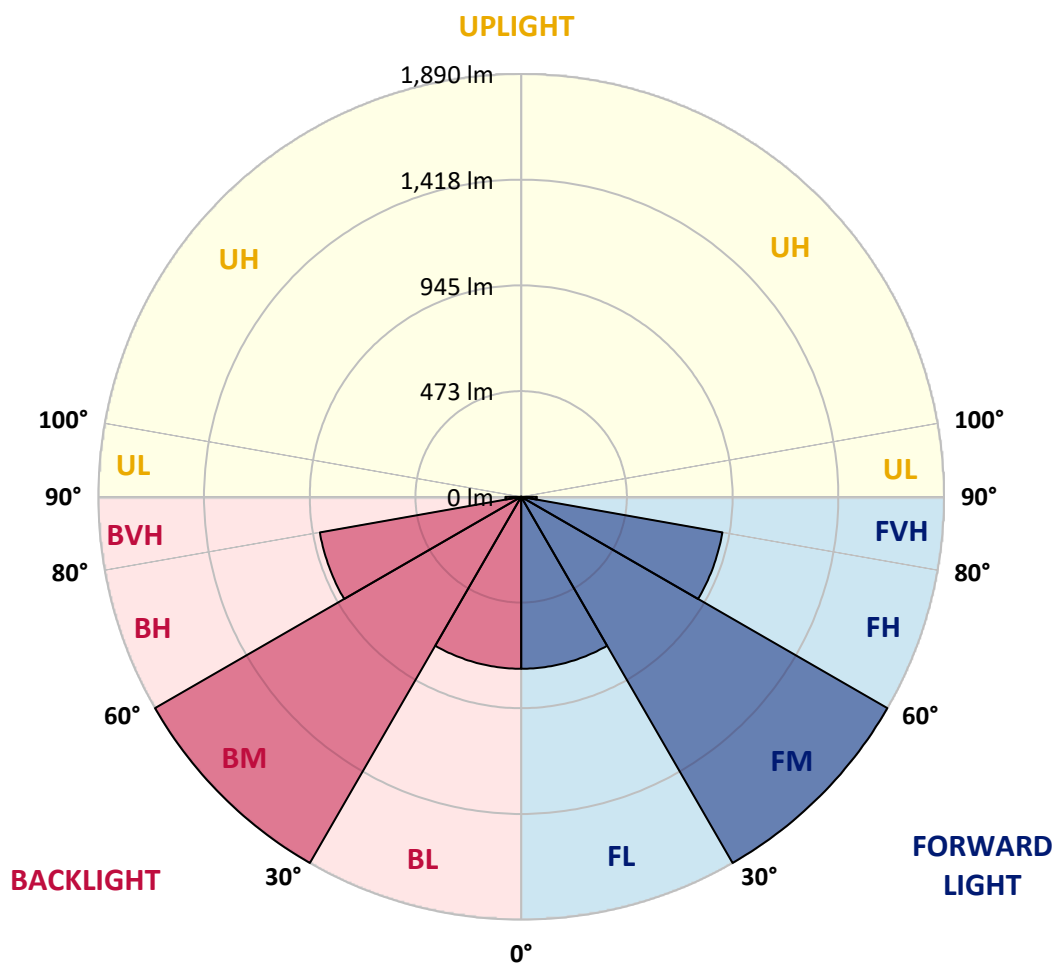
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	768.4	10.5			
FM	(30°-60°)	1890.1	25.9			
FH	(60°-80°)	913.8	12.5			G1/1800
FVH	(80°-90°)	70.4	1.0			G1/100
BL	(0°-30°)	768.4	10.5	B2/1000		
BM	(30°-60°)	1890.1	25.9	B2/2500		
BH	(60°-80°)	913.8	12.5	B2/1000		G1/1800
BVH	(80°-90°)	70.4	1.0			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°	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4
2.5°	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4
5°	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1862.8	1861.4
7.5°	1859.9	1859.9	1859.9	1859.9	1861.4	1859.9	1859.9	1861.4	1861.4	1861.4	1861.4
10°	1857.1	1855.6	1855.6	1857.1	1857.1	1857.1	1857.1	1857.1	1858.5	1857.1	1857.1
12.5°	1852.8	1851.3	1852.8	1852.8	1852.8	1854.2	1854.2	1854.2	1855.6	1855.6	1854.2
15°	1848.5	1848.5	1848.5	1848.5	1848.5	1849.9	1849.9	1851.3	1851.3	1851.3	1851.3
17.5°	1842.7	1842.7	1842.7	1844.1	1844.1	1845.6	1845.6	1845.6	1847.0	1847.0	1847.0
20°	1832.7	1831.2	1832.7	1832.7	1834.1	1835.5	1835.5	1837.0	1837.0	1837.0	1837.0
22.5°	1818.3	1818.3	1819.7	1819.7	1821.2	1822.6	1822.6	1824.0	1824.0	1824.0	1824.0
25°	1803.9	1805.4	1805.4	1806.8	1806.8	1808.2	1809.7	1809.7	1809.7	1809.7	1809.7
27.5°	1789.6	1791.0	1791.0	1791.0	1792.4	1793.9	1795.3	1796.7	1798.2	1796.7	1796.7
30°	1773.8	1773.8	1775.2	1776.6	1778.1	1779.5	1782.4	1783.8	1785.3	1783.8	1783.8
32.5°	1756.5	1758.0	1759.4	1760.8	1763.7	1766.6	1769.5	1770.9	1772.3	1770.9	1770.9
35°	1743.6	1743.6	1746.5	1749.4	1752.2	1756.5	1759.4	1762.3	1765.2	1763.7	1762.3
37.5°	1730.7	1730.7	1733.6	1737.9	1743.6	1749.4	1755.1	1759.4	1760.8	1760.8	1759.4
40°	1714.9	1716.3	1719.2	1726.4	1735.0	1742.2	1749.4	1755.1	1758.0	1758.0	1755.1
42.5°	1697.6	1699.1	1703.4	1710.6	1720.6	1729.2	1737.9	1742.2	1746.5	1746.5	1743.6
45°	1673.2	1674.7	1680.4	1687.6	1697.6	1706.3	1716.3	1720.6	1726.4	1724.9	1723.5
47.5°	1641.6	1643.1	1648.8	1656.0	1666.0	1676.1	1686.2	1693.3	1697.6	1697.6	1696.2
50°	1602.9	1604.3	1610.0	1617.2	1630.1	1641.6	1651.7	1658.9	1666.0	1666.0	1664.6
52.5°	1554.0	1556.9	1561.2	1571.3	1585.6	1598.5	1611.5	1623.0	1627.3	1628.7	1627.3
55°	1493.7	1496.6	1502.3	1513.8	1529.6	1545.4	1559.8	1572.7	1578.4	1582.7	1579.9
57.5°	1423.3	1426.2	1433.4	1446.3	1463.5	1479.3	1498.0	1512.4	1516.7	1521.0	1519.6
60°	1340.0	1344.3	1351.5	1365.9	1383.1	1400.3	1417.6	1434.8	1439.1	1444.9	1442.0
62.5°	1242.4	1246.7	1253.8	1269.6	1288.3	1304.1	1324.2	1340.0	1344.3	1350.1	1348.6
65°	1130.3	1134.6	1141.8	1159.1	1176.3	1193.5	1212.2	1229.4	1233.7	1239.5	1238.0
67.5°	1002.5	1006.8	1014.0	1034.1	1051.3	1068.6	1084.4	1101.6	1104.5	1110.2	1108.8
70°	867.5	873.2	879.0	897.7	913.5	927.8	945.1	959.4	965.2	968.0	965.2
72.5°	732.5	736.8	742.5	755.5	767.0	779.9	797.1	807.2	811.5	812.9	812.9
75°	593.2	597.5	597.5	611.8	620.5	627.6	642.0	649.2	652.1	654.9	654.9
77.5°	461.0	458.2	461.0	466.8	472.5	478.3	486.9	491.2	494.1	499.8	496.9
80°	323.2	324.6	326.0	330.3	333.2	334.6	340.4	341.8	343.3	349.0	346.1
82.5°	208.3	205.4	208.3	206.8	209.7	205.4	208.3	212.6	209.7	212.6	214.0
85°	109.2	104.8	104.8	106.3	107.7	104.8	106.3	104.8	104.8	107.7	106.3
87.5°	34.5	33.0	34.5	33.0	34.5	33.0	34.5	35.9	34.5	34.5	35.9
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°	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4
2.5°	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4
5°	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4	1861.4
7.5°	1859.9	1859.9	1859.9	1859.9	1859.9	1859.9	1858.5	1859.9
10°	1857.1	1857.1	1857.1	1857.1	1855.6	1855.6	1855.6	1855.6
12.5°	1854.2	1854.2	1852.8	1852.8	1852.8	1852.8	1851.3	1851.3
15°	1851.3	1849.9	1849.9	1848.5	1848.5	1848.5	1847.0	1848.5
17.5°	1847.0	1845.6	1845.6	1844.1	1844.1	1842.7	1842.7	1842.7
20°	1837.0	1835.5	1835.5	1834.1	1834.1	1832.7	1831.2	1831.2
22.5°	1822.6	1822.6	1822.6	1821.2	1819.7	1819.7	1818.3	1818.3
25°	1809.7	1808.2	1808.2	1806.8	1805.4	1805.4	1803.9	1803.9
27.5°	1796.7	1795.3	1793.9	1791.0	1791.0	1789.6	1788.1	1786.7
30°	1782.4	1779.5	1776.6	1775.2	1773.8	1770.9	1769.5	1768.0
32.5°	1768.0	1765.2	1762.3	1759.4	1755.1	1753.7	1750.8	1750.8
35°	1759.4	1755.1	1750.8	1745.0	1740.7	1736.4	1733.6	1732.1
37.5°	1755.1	1749.4	1742.2	1735.0	1727.8	1722.1	1717.8	1717.8
40°	1749.4	1742.2	1733.6	1723.5	1714.9	1707.7	1703.4	1702.0
42.5°	1737.9	1730.7	1719.2	1710.6	1699.1	1691.9	1686.2	1684.7
45°	1717.8	1710.6	1700.5	1689.0	1677.5	1668.9	1663.2	1661.7
47.5°	1691.9	1683.3	1671.8	1660.3	1648.8	1638.8	1633.0	1631.6
50°	1658.9	1650.3	1638.8	1627.3	1614.3	1604.3	1597.1	1597.1
52.5°	1621.5	1611.5	1598.5	1585.6	1571.3	1561.2	1554.0	1552.6
55°	1572.7	1561.2	1548.3	1533.9	1518.1	1506.6	1498.0	1496.6
57.5°	1512.4	1499.4	1485.1	1469.3	1453.5	1440.6	1430.5	1429.1
60°	1436.2	1421.9	1407.5	1391.7	1374.5	1360.1	1350.1	1347.2
62.5°	1342.9	1327.1	1311.3	1296.9	1278.3	1263.9	1253.8	1251.0
65°	1232.3	1219.4	1203.6	1186.3	1166.2	1151.9	1141.8	1140.4
67.5°	1103.0	1090.1	1074.3	1058.5	1038.4	1025.5	1015.4	1012.6
70°	960.9	949.4	936.4	920.6	903.4	890.5	880.4	879.0
72.5°	810.0	800.0	788.5	777.0	759.8	749.7	741.1	739.7
75°	654.9	644.9	636.3	627.6	614.7	607.5	598.9	598.9
77.5°	496.9	494.1	488.3	478.3	471.1	465.3	461.0	458.2
80°	347.6	344.7	341.8	336.1	331.8	330.3	327.5	324.6
82.5°	212.6	211.1	212.6	209.7	208.3	208.3	206.8	203.9
85°	107.7	109.2	107.7	106.3	106.3	106.3	106.3	104.8
87.5°	34.5	35.9	34.5	33.0	33.0	33.0	33.0	31.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)