

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: LUMARK

Report Number: P303577

Luminaire Tested: **WPMLED10**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P303577  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1906-360-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: WPMLED10  
Description: MEDIUM LED WALL PACK - 40W, 4000K  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4699.8 lumens  
Efficiency: N/A  
Efficacy: 121.8 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.03' x L: 0.25' x H: 0.69')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U3 - G3

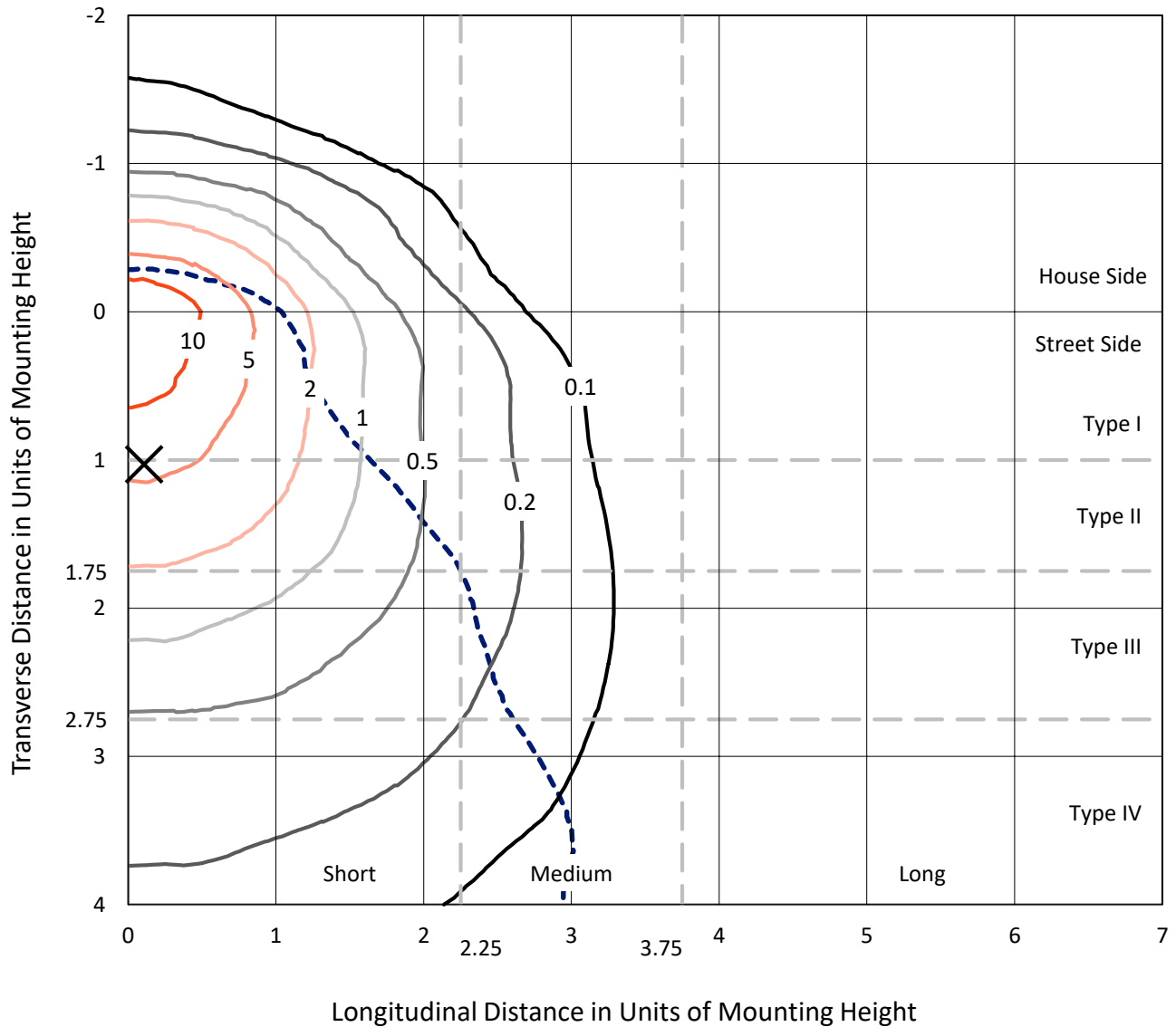
Input Watts (W): 38.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

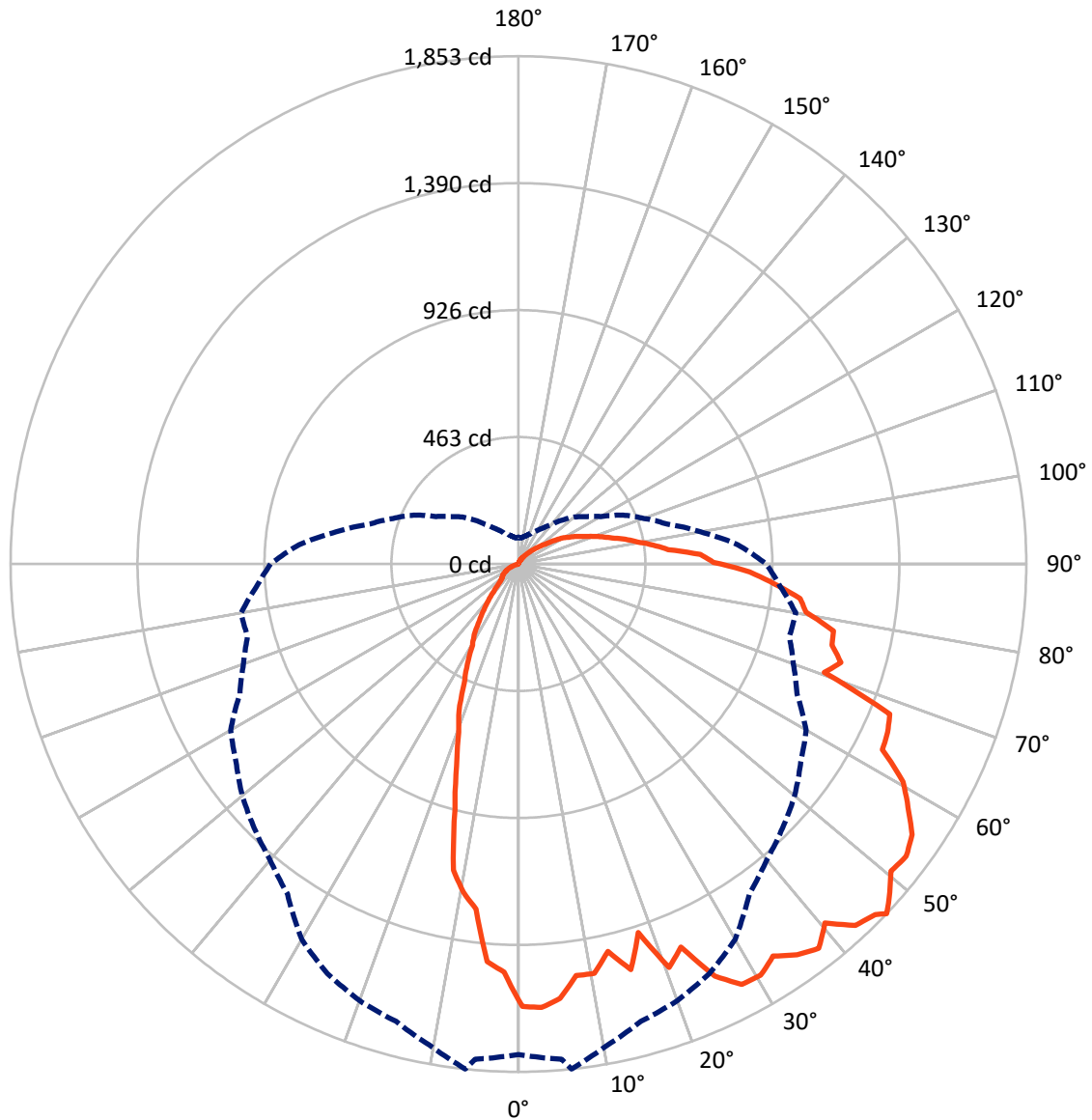
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.1 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 6-Deg Lateral      - - - Horizontal Cone Through 46-Deg Vertical

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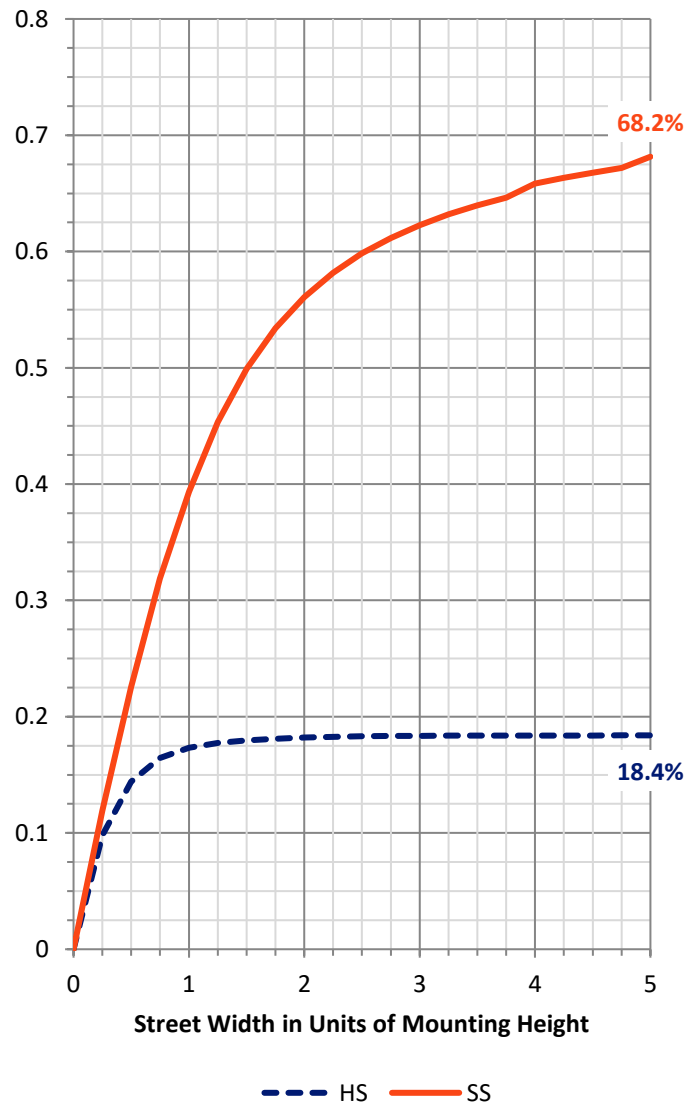
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	873.2	5.9	879.0
	% Fixture	18.6	0.1	18.7
<b>Street Side</b>	Lumens	3421.2	399.5	3820.8
	% Fixture	72.8	8.5	81.3
<b>Total</b>	Lumens	4294.4	405.4	4699.8
	% Fixture	91.4	8.6	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.6	3.1
10°-20°	374.5	8.0
20°-30°	523.9	11.1
30°-40°	624.3	13.3
40°-50°	663.2	14.1
50°-60°	645.1	13.7
60°-70°	567.1	12.1
70°-80°	440.5	9.4
80°-90°	312.3	6.6
90°-100°	183.1	3.9
100°-110°	106.0	2.3
110°-120°	62.2	1.3
120°-130°	32.3	0.7
130°-140°	14.3	0.3
140°-150°	5.4	0.1
150°-160°	1.7	0.0
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-90°	4294.4	91.4
0°-180°	4699.8	100.0



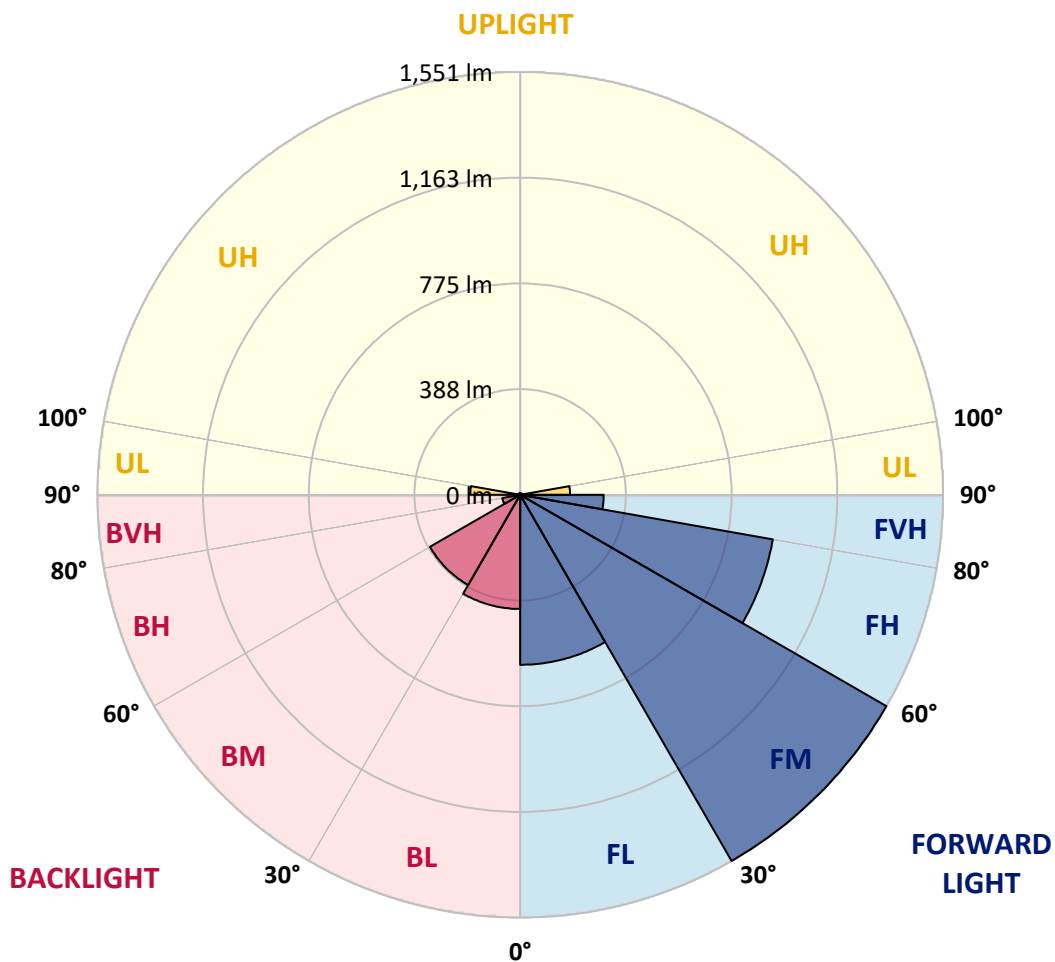
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	623.3	13.3			
FM	(30°-60°)	1550.7	33.0			
FH	(60°-80°)	940.9	20.0			G1/1800
FVH	(80°-90°)	306.3	6.5			G3/500
BL	(0°-30°)	418.7	8.9	B1/500		
BM	(30°-60°)	381.9	8.1	B1/1000		
BH	(60°-80°)	66.7	1.4	B0/110		G0/110
BVH	(80°-90°)	6.0	0.1			G0/10
UL	(90°-100°)	183.1	3.9		U3/500	
UH	(100°-180°)	5.9	0.1		U1/10	

**BUG Rating: B1-U3-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	6°	10°	15°	20°	25°	30°	35°	40°	45°
0°	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0
2.5°	1662.9	1641.1	1619.7	1606.3	1570.2	1535.4	1566.4	1558.0	1572.6	1561.9	1616.4
5°	1647.4	1619.4	1591.4	1581.6	1579.5	1599.4	1655.4	1640.5	1647.7	1639.7	1701.0
7.5°	1576.2	1540.2	1516.0	1520.5	1533.6	1491.6	1511.6	1533.6	1527.9	1487.7	1582.8
10°	1565.5	1535.7	1519.0	1550.3	1516.3	1504.1	1555.6	1498.7	1522.0	1493.7	1524.7
12.5°	1482.1	1455.5	1449.9	1465.4	1422.5	1439.5	1450.2	1474.3	1474.0	1536.6	1540.4
15°	1543.7	1519.6	1535.4	1524.7	1518.1	1482.1	1488.6	1418.6	1414.1	1435.3	1487.4
17.5°	1429.3	1413.2	1414.1	1377.2	1356.9	1356.6	1406.4	1458.5	1519.3	1427.5	1426.9
20°	1556.5	1563.4	1570.8	1554.2	1518.1	1466.6	1448.7	1374.8	1356.6	1418.9	1529.4
22.5°	1521.7	1524.4	1518.1	1490.1	1436.2	1430.5	1488.0	1521.7	1449.0	1337.0	1389.4
25°	1649.2	1653.1	1665.6	1650.7	1603.6	1558.6	1508.9	1433.5	1433.2	1483.0	1392.4
27.5°	1731.4	1714.7	1736.5	1673.3	1600.3	1559.8	1588.4	1579.2	1462.1	1387.9	1470.1
30°	1713.2	1717.4	1741.2	1718.9	1693.9	1673.6	1651.3	1565.2	1529.1	1488.9	1388.5
32.5°	1673.0	1680.2	1705.8	1670.0	1642.0	1617.9	1637.3	1626.2	1556.2	1485.9	1476.7
35°	1718.0	1723.4	1751.4	1704.9	1651.0	1609.9	1611.1	1587.2	1530.3	1515.1	1460.6
37.5°	1721.3	1735.0	1779.7	1739.7	1697.7	1661.4	1627.1	1569.9	1512.4	1475.5	1472.2
40°	1666.5	1682.3	1722.2	1669.7	1619.7	1614.0	1625.1	1584.5	1492.8	1459.4	1426.7
42.5°	1749.3	1762.7	1802.3	1724.3	1643.5	1604.8	1597.9	1564.0	1477.9	1434.1	1395.7
45°	1771.9	1792.2	1824.9	1758.5	1704.0	1668.2	1636.1	1555.0	1467.8	1418.0	1373.6
46°	1789.2	1813.9	1852.7	1791.6	1726.9	1695.1	1648.3	1581.3	1469.0	1409.4	1362.6
47.5°	1756.4	1782.9	1820.2	1774.3	1734.1	1708.2	1687.0	1607.8	1494.0	1407.3	1340.6
50°	1702.8	1722.2	1761.2	1720.4	1674.5	1666.8	1674.2	1638.5	1520.5	1435.3	1324.5
52.5°	1711.1	1729.6	1771.6	1740.9	1695.7	1678.1	1644.7	1587.5	1499.0	1445.1	1335.2
55°	1710.6	1711.1	1742.7	1674.2	1571.4	1571.7	1600.9	1586.6	1495.5	1428.7	1314.9
57.5°	1611.9	1623.9	1676.3	1661.7	1602.4	1590.5	1590.8	1554.5	1467.2	1404.6	1295.9
60°	1569.0	1563.1	1612.5	1592.9	1532.7	1539.3	1531.8	1468.7	1398.4	1380.5	1278.0
62.5°	1446.9	1440.4	1490.4	1484.7	1461.8	1469.0	1476.4	1482.7	1399.5	1321.2	1220.5
65°	1441.5	1431.1	1480.6	1448.4	1391.5	1378.4	1379.0	1354.9	1314.3	1301.2	1187.1
67.5°	1416.2	1416.8	1460.9	1448.7	1394.5	1370.1	1345.9	1312.0	1249.1	1213.9	1132.6
70°	1152.6	1141.3	1183.9	1197.3	1230.0	1285.4	1259.2	1213.7	1182.4	1154.1	1071.6
72.5°	1205.6	1191.3	1230.3	1237.5	1259.8	1263.1	1270.0	1299.4	1160.6	1052.8	958.1
75°	1157.3	1152.3	1181.2	1153.8	1102.5	1097.2	1091.2	1085.3	1038.5	989.6	873.1
77.5°	1157.6	1148.4	1174.9	1139.5	1083.5	1063.8	1031.9	983.4	931.8	924.1	853.8
80°	1038.5	1045.0	1063.5	1063.2	1066.2	1094.8	1052.8	975.6	892.5	837.1	770.1
82.5°	1028.7	1021.2	1035.2	1017.6	984.9	967.3	920.5	912.5	871.4	792.1	682.8
85°	932.4	928.6	939.0	935.1	918.7	938.1	905.0	836.8	771.0	713.2	625.3
87.5°	837.4	835.9	844.6	823.7	799.6	785.6	751.9	734.0	700.1	645.3	558.9
90°	709.9	706.6	711.1	698.3	681.9	676.2	667.3	657.5	601.8	546.1	477.2
92.5°	665.8	678.9	664.3	663.4	648.8	635.7	599.7	543.7	497.2	458.2	413.8
95°	547.8	547.8	548.7	542.5	530.3	520.7	504.3	476.6	440.9	414.7	366.7
97.5°	499.0	499.3	496.3	491.5	477.2	465.6	449.8	427.2	398.6	365.5	313.1
100°	442.1	443.6	441.5	443.9	434.6	431.1	414.7	384.9	348.8	311.9	265.4
102.5°	404.6	403.1	400.4	396.8	385.2	372.4	355.7	333.6	307.1	272.9	227.9
105°	358.7	360.5	354.5	354.5	346.5	337.2	322.9	299.4	270.2	235.3	199.6
107.5°	326.8	326.2	320.5	319.1	312.5	299.7	286.9	262.7	236.5	207.9	173.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	6°	10°	15°	20°	25°	30°	35°	40°	45°
110°	293.1	294.6	288.7	288.1	279.7	268.1	254.4	231.8	207.0	180.5	151.9
112.5°	262.2	263.0	256.8	256.5	249.3	238.3	227.9	207.0	185.6	161.2	136.7
115°	239.5	240.7	233.9	233.9	227.0	214.8	203.5	181.4	161.2	139.4	118.3
117.5°	214.2	213.0	207.6	207.9	200.8	188.3	179.3	160.0	140.9	121.8	103.7
120°	192.7	193.3	187.1	186.5	178.4	167.4	156.7	140.6	124.8	108.4	91.8
122.5°	164.4	164.4	158.5	158.5	151.3	140.9	132.0	115.9	104.0	91.2	78.1
125°	135.2	135.8	129.9	130.2	123.9	115.3	110.2	98.9	89.4	78.6	68.2
127.5°	115.3	116.5	111.7	112.6	107.8	100.4	96.2	85.5	77.8	67.0	58.1
130°	98.0	98.3	95.0	95.0	91.2	85.5	81.9	73.6	66.4	58.1	49.2
132.5°	84.3	84.3	80.7	81.0	77.2	71.8	69.1	61.7	55.7	48.6	42.3
135°	70.3	70.3	67.6	67.6	64.0	59.3	57.2	51.2	46.2	41.1	35.2
137.5°	57.2	57.5	54.8	55.1	52.7	49.2	47.7	42.6	38.7	33.7	28.9
140°	47.4	46.8	45.3	45.3	43.2	40.2	39.6	35.5	32.2	27.7	24.1
142.5°	38.7	38.7	37.2	37.8	35.7	33.1	32.5	29.2	26.2	23.2	20.0
145°	31.6	31.6	30.7	30.7	29.2	26.8	26.5	23.8	21.7	18.8	16.7
147.5°	25.9	25.9	25.0	25.3	23.8	22.3	21.7	19.4	17.6	15.5	13.7
150°	21.7	21.2	20.6	20.6	19.4	17.9	17.9	15.8	14.6	12.8	11.0
152.5°	17.6	17.3	17.0	17.0	15.8	14.9	14.3	13.1	11.9	10.1	8.6
155°	14.0	14.0	13.7	13.4	12.8	11.6	11.3	10.1	8.9	7.7	6.3
157.5°	11.0	11.0	10.7	10.7	9.8	8.9	8.9	7.7	6.6	5.4	4.5
160°	8.6	8.3	8.0	8.0	7.4	6.6	6.3	5.4	4.5	3.6	2.7
162.5°	6.3	6.0	6.0	5.7	5.1	4.5	4.2	3.3	2.7	2.1	1.8
165°	3.6	3.6	3.6	3.3	3.0	2.4	2.4	1.8	1.2	1.2	1.5
167.5°	1.5	1.5	1.5	1.2	0.9	0.9	1.2	1.2	1.2	1.2	1.5
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):**

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0
2.5°	1577.1	1576.2	1548.2	1532.7	1537.8	1546.1	1550.3	1560.7	1585.1	1614.6	1615.8
5°	1657.5	1643.8	1596.8	1558.3	1532.1	1511.6	1513.3	1530.6	1574.1	1620.3	1589.0
7.5°	1625.9	1688.5	1659.0	1587.8	1562.5	1538.7	1523.2	1530.9	1592.6	1630.7	1539.6
10°	1536.9	1541.9	1570.8	1628.0	1616.7	1583.0	1541.6	1519.3	1601.2	1610.8	1510.1
12.5°	1511.6	1512.4	1481.5	1534.8	1664.4	1588.1	1530.6	1476.7	1579.8	1535.7	1434.7
15°	1536.6	1513.9	1463.0	1471.9	1557.4	1613.7	1520.8	1455.5	1567.3	1488.3	1371.2
17.5°	1436.8	1496.1	1485.9	1447.8	1466.9	1600.6	1509.2	1436.8	1553.0	1433.5	1345.9
20°	1394.2	1401.6	1460.6	1443.6	1416.2	1519.6	1512.7	1407.0	1516.9	1368.0	1340.6
22.5°	1479.4	1384.1	1357.2	1463.6	1382.9	1439.5	1514.5	1368.0	1466.6	1317.3	1325.4
25°	1335.8	1439.8	1315.8	1350.4	1408.8	1376.9	1492.8	1333.7	1415.0	1278.9	1244.9
27.5°	1367.1	1307.2	1385.2	1261.0	1407.6	1317.3	1452.6	1299.4	1355.5	1253.6	1163.9
30°	1423.1	1300.0	1326.0	1271.1	1324.2	1298.0	1400.1	1260.1	1282.2	1213.4	1098.4
32.5°	1354.0	1374.8	1244.6	1297.1	1232.4	1286.6	1340.0	1223.8	1224.1	1158.2	1049.5
35°	1421.9	1320.6	1290.8	1257.4	1200.8	1253.9	1303.6	1201.4	1177.3	1113.9	1013.2
37.5°	1412.1	1339.4	1319.7	1204.7	1205.3	1224.7	1256.5	1168.7	1141.0	1059.6	956.9
40°	1416.2	1343.2	1275.3	1200.2	1179.4	1170.2	1205.3	1121.0	1085.6	1002.1	886.3
42.5°	1378.7	1334.3	1257.1	1188.6	1141.3	1115.9	1139.8	1062.6	1020.9	928.0	801.4
45°	1331.6	1287.8	1228.0	1139.8	1088.8	1047.1	1059.9	991.4	939.3	838.6	712.0
46°	1315.2	1257.7	1211.9	1121.3	1067.4	1023.0	1027.2	959.8	903.8	803.7	675.0
47.5°	1281.6	1219.0	1175.5	1087.3	1031.0	989.9	991.1	914.3	860.0	749.2	628.3
50°	1259.5	1169.6	1105.8	1038.2	966.7	923.2	917.5	836.2	774.2	662.2	546.1
52.5°	1234.8	1127.9	1064.4	983.4	900.9	854.7	847.2	772.5	707.5	594.3	474.0
55°	1209.5	1105.5	998.9	922.3	846.0	797.8	782.6	709.6	642.9	520.7	405.4
57.5°	1192.5	1062.0	956.0	872.3	793.0	739.7	731.3	660.7	582.1	461.2	344.4
60°	1166.9	1030.1	911.9	815.7	738.5	676.8	662.2	589.5	502.3	369.1	282.4
62.5°	1116.8	992.3	872.9	757.0	676.5	623.2	603.5	526.1	422.4	305.3	233.0
65°	1079.9	962.5	828.8	700.4	614.6	568.1	552.0	473.7	356.6	244.6	197.8
67.5°	1026.0	900.6	799.3	659.0	558.0	512.4	490.6	408.1	291.9	197.2	171.6
70°	990.8	855.9	727.8	615.2	503.5	451.9	418.6	332.2	224.6	165.0	149.2
72.5°	874.0	779.3	664.3	553.8	452.2	387.9	347.7	260.4	169.5	135.5	129.0
75°	814.2	718.5	608.6	505.8	408.1	330.4	280.6	195.1	131.7	112.0	109.0
77.5°	754.0	653.6	553.8	455.8	354.8	278.5	219.6	146.3	101.3	91.8	87.0
80°	704.8	596.4	488.3	398.3	311.0	227.6	170.7	107.8	77.2	72.7	67.6
82.5°	609.5	525.5	430.8	339.9	259.5	186.8	130.5	81.0	59.3	55.7	50.6
85°	545.5	454.9	363.1	288.4	212.1	149.2	100.1	60.5	44.1	41.4	36.3
87.5°	476.3	395.3	311.9	236.5	177.0	119.5	77.5	45.9	32.5	30.4	26.8
90°	413.5	341.7	270.8	199.3	143.9	99.8	60.5	34.3	25.0	22.9	21.2
92.5°	364.6	299.1	233.6	169.2	123.6	81.9	49.2	27.1	20.6	18.5	17.0
95°	314.3	265.4	204.1	147.2	104.9	68.2	40.2	22.3	17.6	15.8	14.6
97.5°	267.5	224.0	174.6	124.2	87.3	55.7	33.7	19.7	16.1	14.9	12.8
100°	225.2	184.4	143.0	104.0	71.8	46.5	28.6	18.2	15.8	14.3	11.9
102.5°	188.6	154.6	117.4	83.1	59.3	39.0	25.0	17.0	15.8	13.7	10.7
105°	165.6	132.0	99.5	68.8	49.5	33.4	22.3	16.4	15.8	13.4	9.8
107.5°	143.6	115.9	85.8	59.6	43.2	29.5	20.6	15.8	15.2	12.8	8.9



REPORT NUMBER: P303577  
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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	125.7	100.4	75.4	53.3	39.0	26.5	19.1	15.5	14.9	12.2	8.3
112.5°	112.0	87.6	66.1	48.0	35.2	23.5	17.9	14.9	14.0	11.3	7.4
115°	97.4	77.2	58.4	42.9	31.6	20.6	16.7	14.0	13.1	10.4	6.9
117.5°	86.1	68.2	52.4	38.1	27.1	18.2	15.2	13.1	11.9	9.5	6.3
120°	75.1	58.4	45.3	32.8	22.3	16.1	13.4	11.6	10.4	8.3	5.4
122.5°	64.6	51.2	40.2	28.6	19.1	14.3	11.6	10.4	9.5	7.4	4.8
125°	57.2	45.3	35.5	23.8	16.7	12.5	10.1	9.2	8.3	6.6	4.2
127.5°	48.3	38.7	29.5	20.3	14.0	10.7	8.6	8.0	7.1	5.7	3.6
130°	41.1	32.5	24.4	17.0	12.5	9.2	7.4	6.6	6.0	4.8	3.0
132.5°	35.5	27.7	20.9	14.6	10.7	7.4	6.0	5.4	4.8	3.9	2.4
135°	29.2	23.5	17.9	12.5	8.9	6.0	4.8	4.5	3.9	3.0	2.1
137.5°	24.4	19.4	14.9	10.7	7.4	4.8	3.9	3.6	3.0	2.4	1.8
140°	20.3	15.8	12.5	8.6	5.7	3.3	3.3	2.7	2.4	2.1	1.5
142.5°	17.0	13.1	10.4	7.1	4.5	2.7	2.7	2.1	2.1	1.8	1.5
145°	14.0	11.0	8.6	5.4	3.0	2.1	2.4	2.1	1.8	1.8	1.5
147.5°	11.3	8.6	6.6	3.9	2.1	2.1	2.1	1.8	1.8	1.5	1.2
150°	8.9	6.6	4.8	2.7	1.8	1.8	1.8	1.5	1.5	1.5	1.2
152.5°	6.9	4.8	3.0	1.8	1.8	1.8	1.8	1.5	1.5	1.2	0.9
155°	4.8	3.3	2.1	1.5	1.5	1.5	1.5	1.5	1.2	1.2	0.9
157.5°	3.3	2.1	1.5	1.5	1.5	1.5	1.5	1.2	1.2	1.2	0.9
160°	2.1	1.5	1.5	1.5	1.5	1.5	1.5	1.2	1.2	1.2	0.9
162.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.2	1.2	1.2	0.9
165°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.2	1.2	1.2
167.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.2	1.2	0.9
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P303577  
 CATALOG NUMBER: WPMLED10

**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0	1614.0
2.5°	1670.6	1626.5	1607.8	1580.7	1628.3	1563.1	1554.7	1553.0	1537.8	1524.4	1494.3
5°	1590.5	1526.2	1504.7	1466.0	1500.5	1425.2	1404.0	1400.1	1415.0	1449.3	1471.9
7.5°	1535.7	1451.7	1395.1	1382.0	1480.6	1458.2	1403.1	1372.7	1359.6	1337.0	1283.4
10°	1477.3	1393.9	1414.1	1405.8	1404.9	1305.4	1248.5	1296.8	1336.1	1330.7	1307.2
12.5°	1416.2	1443.9	1376.6	1266.7	1280.4	1314.6	1279.8	1254.5	1163.3	1129.6	1089.4
15°	1412.4	1376.6	1258.0	1245.8	1306.6	1203.8	1103.7	1109.4	1130.8	1121.3	1046.8
17.5°	1403.1	1257.7	1243.7	1220.5	1148.1	1083.5	1099.9	1022.4	957.8	928.9	894.6
20°	1294.7	1215.4	1205.9	1084.7	1098.7	1031.3	939.6	904.7	847.8	767.1	730.8
22.5°	1207.7	1205.0	1085.9	1033.1	998.6	904.4	839.5	738.2	714.7	676.8	632.1
25°	1170.2	1105.5	1018.5	949.1	886.6	787.1	685.5	680.1	615.2	569.0	573.2
27.5°	1132.6	1020.6	957.8	841.0	778.7	658.1	644.7	566.9	562.4	516.0	463.8
30°	1042.1	956.6	854.7	753.4	656.3	627.1	538.9	537.4	463.8	450.4	404.3
32.5°	948.2	891.9	760.5	646.4	626.5	530.9	507.0	440.3	410.5	377.1	345.9
35°	884.2	799.3	684.0	583.6	543.1	494.8	427.2	387.0	354.2	322.6	308.3
37.5°	832.3	726.0	605.9	548.4	483.2	423.3	373.9	337.2	302.1	286.6	258.0
40°	760.5	659.9	558.9	490.6	439.4	375.7	327.4	290.5	263.3	241.0	211.5
42.5°	682.2	584.2	500.8	429.9	370.9	318.5	281.2	248.5	219.9	191.3	172.8
45°	593.4	514.8	451.9	377.1	320.8	281.5	245.8	207.3	173.4	157.9	136.4
46°	561.8	486.5	421.5	346.2	301.2	266.3	227.0	189.2	161.8	142.7	124.8
47.5°	512.4	441.8	387.6	308.3	279.4	244.9	202.9	165.9	141.5	123.6	109.3
50°	442.7	384.9	322.6	272.9	241.6	208.2	165.3	135.5	114.4	102.8	92.1
52.5°	376.8	327.1	275.9	233.0	205.6	165.6	135.2	110.8	95.9	87.3	80.4
55°	320.5	277.9	236.2	202.3	166.5	136.4	111.7	92.3	82.2	76.0	70.9
57.5°	274.4	240.7	207.0	174.0	136.4	112.6	92.1	78.3	70.0	65.8	62.3
60°	230.6	210.6	180.2	140.0	110.8	92.3	75.1	66.1	60.5	56.3	54.5
62.5°	194.5	183.2	151.9	114.4	90.6	75.1	60.8	54.8	50.6	47.4	46.8
65°	168.9	157.6	124.2	93.2	73.6	59.6	49.2	44.7	41.4	39.6	38.4
67.5°	148.7	132.0	101.6	75.7	58.4	45.9	38.7	34.6	31.9	31.0	29.8
70°	129.9	109.6	83.7	60.2	45.3	35.5	29.8	25.9	23.8	21.7	21.4
72.5°	109.9	89.1	66.7	48.6	35.2	27.4	21.2	17.6	15.5	13.7	13.1
75°	89.4	70.6	51.5	37.2	25.9	19.4	13.1	9.2	6.3	1.5	0.3
77.5°	70.0	55.1	38.7	27.1	17.3	11.0	5.1	0.6	0.0	0.0	0.0
80°	52.7	40.8	28.9	18.8	10.4	4.8	1.2	0.0	0.0	0.0	0.0
82.5°	39.6	29.8	20.3	13.1	7.1	3.3	0.6	0.0	0.0	0.0	0.0
85°	29.2	22.0	14.9	9.5	5.1	2.1	0.3	0.0	0.0	0.0	0.0
87.5°	21.2	16.4	11.3	7.1	3.6	1.5	0.3	0.0	0.0	0.0	0.0
90°	16.7	13.1	8.9	5.7	3.0	1.2	0.3	0.0	0.0	0.0	0.0
92.5°	14.0	10.7	7.4	5.1	2.4	1.2	0.3	0.0	0.0	0.0	0.0
95°	12.2	9.2	6.3	3.9	2.1	1.2	0.3	0.0	0.0	0.0	0.0
97.5°	10.1	7.7	5.4	3.3	1.5	0.9	0.3	0.0	0.0	0.0	0.0
100°	8.9	6.6	4.5	2.7	1.2	0.6	0.3	0.0	0.0	0.0	0.0
102.5°	8.0	6.0	3.9	2.1	0.9	0.6	0.0	0.0	0.0	0.0	0.0
105°	6.9	5.1	3.3	1.8	0.9	0.6	0.0	0.0	0.0	0.0	0.0
107.5°	6.3	4.5	2.7	1.5	0.9	0.6	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P303577  
 CATALOG NUMBER: WPMLED10

REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	5.7	3.9	2.4	1.2	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0°
112.5°	5.1	3.3	1.8	1.2	0.6	0.3	0.0	0.0	0.0	0.0	0.0	2.5°
115°	4.5	2.7	1.5	0.9	0.6	0.3	0.0	0.0	0.0	0.0	0.0	5°
117.5°	4.2	2.4	1.5	0.9	0.6	0.3	0.0	0.0	0.0	0.0	0.0	7.5°
120°	3.6	2.1	1.2	0.9	0.6	0.3	0.0	0.0	0.0	0.0	0.0	10°
122.5°	3.0	1.8	1.2	0.9	0.6	0.3	0.0	0.0	0.0	0.0	0.0	12.5°
125°	2.7	1.5	1.2	0.9	0.3	0.3	0.0	0.0	0.0	0.0	0.0	15°
127.5°	2.1	1.5	1.2	0.9	0.3	0.3	0.0	0.0	0.0	0.0	0.0	17.5°
130°	1.8	1.5	0.9	0.6	0.3	0.3	0.0	0.0	0.0	0.0	0.0	20°
132.5°	1.8	1.2	0.9	0.6	0.3	0.3	0.0	0.0	0.0	0.0	0.0	22.5°
135°	1.5	1.2	0.9	0.6	0.3	0.3	0.0	0.0	0.0	0.0	0.0	25°
137.5°	1.5	1.2	0.9	0.6	0.3	0.3	0.0	0.0	0.0	0.0	0.0	27.5°
140°	1.5	1.2	0.9	0.6	0.3	0.3	0.0	0.0	0.0	0.0	0.0	30°
142.5°	1.2	0.9	0.9	0.6	0.3	0.3	0.3	0.0	0.0	0.0	0.0	32.5°
145°	1.2	0.9	0.6	0.6	0.3	0.3	0.3	0.0	0.0	0.0	0.0	35°
147.5°	1.2	0.9	0.6	0.6	0.3	0.3	0.3	0.0	0.0	0.0	0.0	37.5°
150°	0.9	0.9	0.6	0.6	0.3	0.3	0.3	0.0	0.0	0.0	0.0	40°
152.5°	0.9	0.6	0.6	0.6	0.3	0.3	0.3	0.0	0.0	0.0	0.0	42.5°
155°	0.9	0.9	0.6	0.6	0.3	0.3	0.3	0.0	0.0	0.0	0.0	45°
157.5°	0.9	0.6	0.6	0.6	0.3	0.3	0.3	0.0	0.0	0.0	0.0	46°
160°	0.9	0.9	0.6	0.6	0.3	0.3	0.3	0.0	0.0	0.0	0.0	47.5°
162.5°	0.9	0.9	0.9	0.6	0.3	0.3	0.3	0.3	0.0	0.0	0.0	50°
165°	1.2	0.9	0.9	0.6	0.6	0.3	0.3	0.3	0.3	0.0	0.0	52.5°
167.5°	0.9	0.9	0.9	0.6	0.3	0.3	0.3	0.3	0.0	0.0	0.0	55°
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°



NUMBER: P303577  
NUMBER: WPMLED10

REPORT NUMBER: P  
CATALOG NUMBER:

**DISTRIBUTION (continued):**

160°	165°	170°	175°	180°
1614.0	1614.0	1614.0	1614.0	1614.0
1497.6	1505.9	1531.8	1479.1	1499.9
1486.2	1473.1	1485.6	1446.9	1459.1
1286.6	1296.2	1296.5	1261.3	1278.9
1272.6	1267.3	1249.7	1205.0	1201.1
1132.3	1139.8	1172.5	1134.4	1137.4
979.5	962.5	961.9	916.3	921.7
877.0	845.4	817.1	759.6	767.1
723.9	695.0	674.7	646.1	653.9
591.0	580.3	585.7	577.6	587.8
546.4	520.7	501.1	470.4	476.6
447.2	454.9	428.7	404.8	404.3
382.8	372.1	358.7	335.7	339.3
326.2	326.2	316.4	301.2	300.6
290.8	276.8	261.3	249.6	253.5
243.1	227.6	215.7	207.0	210.0
199.0	185.3	179.0	171.3	174.0
164.4	154.0	140.6	132.3	132.9
126.0	118.6	109.3	103.1	106.1
<i>116.2</i>	<i>106.6</i>	<i>100.4</i>	<i>95.0</i>	<i>98.0</i>
102.5	96.5	90.6	86.4	88.2
88.5	85.2	80.7	78.3	79.8
78.6	75.7	73.6	72.4	74.5
70.0	69.1	69.7	69.7	72.4
63.2	64.0	64.9	63.8	65.8
56.6	56.6	55.1	54.2	55.7
48.0	47.7	48.3	49.2	50.9
39.6	41.4	41.7	41.4	42.3
31.9	32.8	32.2	31.9	32.5
23.5	22.6	22.9	22.9	23.2
12.8	11.6	10.1	7.7	6.9
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0

**CANDELA DISTRIBUTION:**

	160°
110°	0.0
112.5°	0.0
115°	0.0
117.5°	0.0
120°	0.0
122.5°	0.0
125°	0.0
127.5°	0.0
130°	0.0
132.5°	0.0
135°	0.0
137.5°	0.0
140°	0.0
142.5°	0.0
145°	0.0
147.5°	0.0
150°	0.0
152.5°	0.0
155°	0.0
157.5°	0.0
160°	0.0
162.5°	0.0
165°	0.0
167.5°	0.0
170°	0.0
172.5°	0.0
175°	0.0
177.5°	0.0
180°	0.0

