

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: P145932

Luminaire Tested: **VPL-E04-LED-E1-CPL-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P145932
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33704)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: VPL-E04-LED-E1-CPL-7060
Description: VALET LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° FORWARD THROW PERIMETER LEFT
Light Source: (84) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11055 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 97.2
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

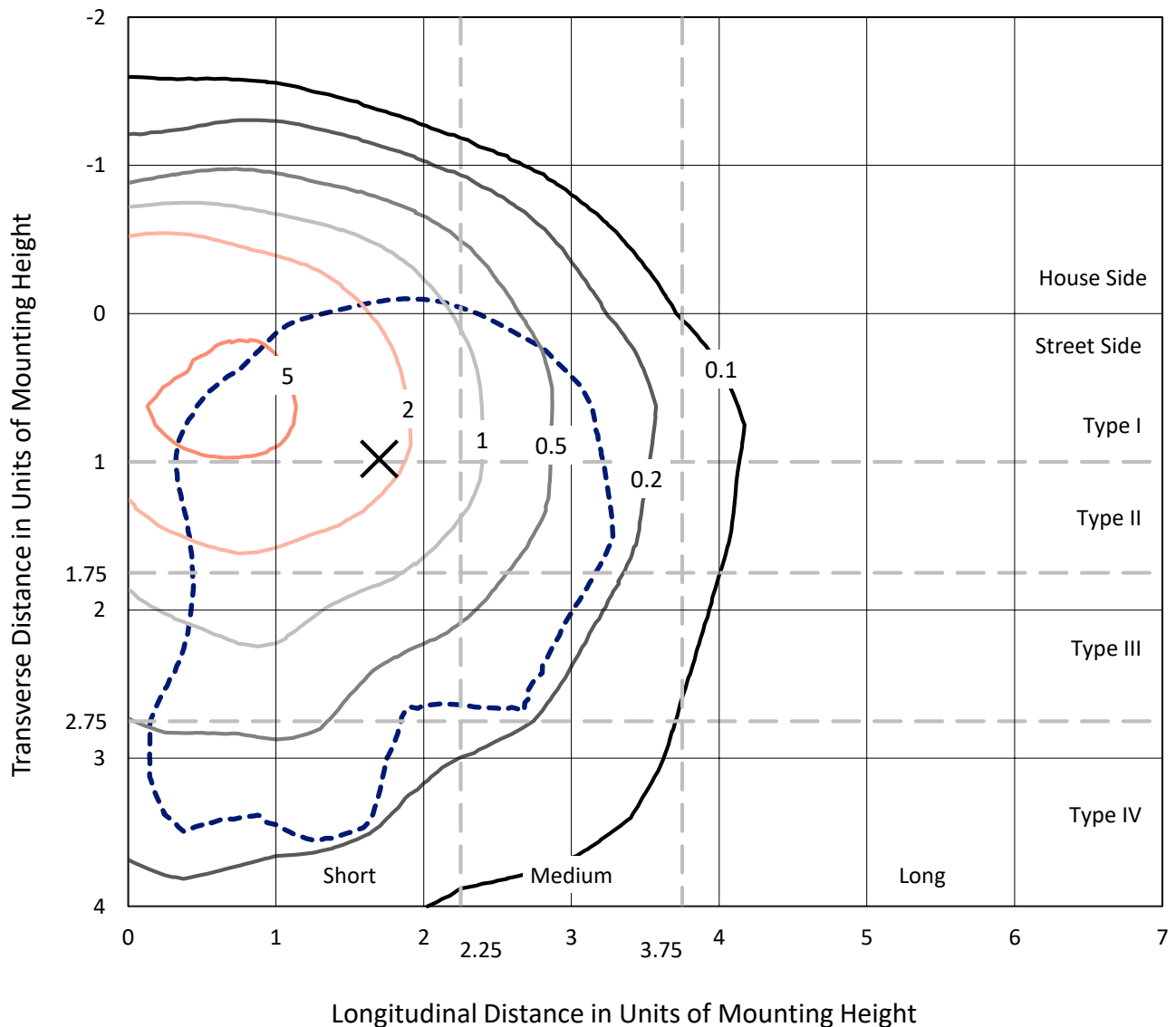


REPORT NUMBER: P145932

CATALOG NUMBER: VPL-E04-LED-E1-CPL-7060

Iso-Footcandle Lines of Horizontal Illumination

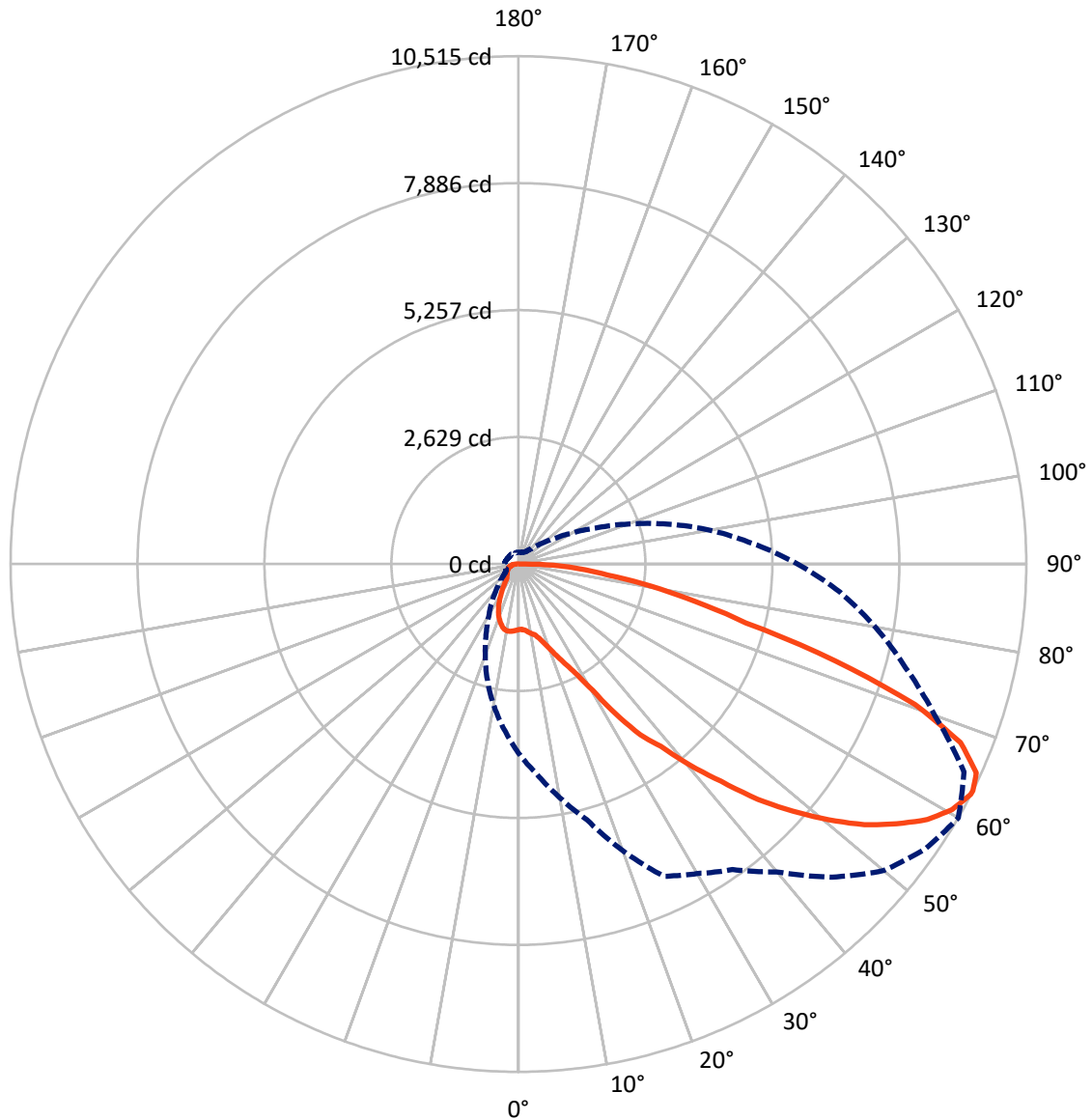
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.9 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P145932
CATALOG NUMBER: VPL-E04-LED-E1-CPL-7060

Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P145932

CATALOG NUMBER: VPL-E04-LED-E1-CPL-7060

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2314.1	0.0	2314.1
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	8740.9	0.0	8740.9
	% Fixture	79.1	0.0	79.1
Total	Lumens	11055.0	0.0	11055.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.4	1.2
10°-20°	416.2	3.8
20°-30°	736.0	6.7
30°-40°	1161.9	10.5
40°-50°	1708.6	15.5
50°-60°	2250.7	20.4
60°-70°	2508.6	22.7
70°-80°	1648.2	14.9
80°-90°	491.5	4.4
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°	11055.0	100.0
0°-180°	11055.0	100.0

Coefficient of Utilization



REPORT NUMBER: P145932

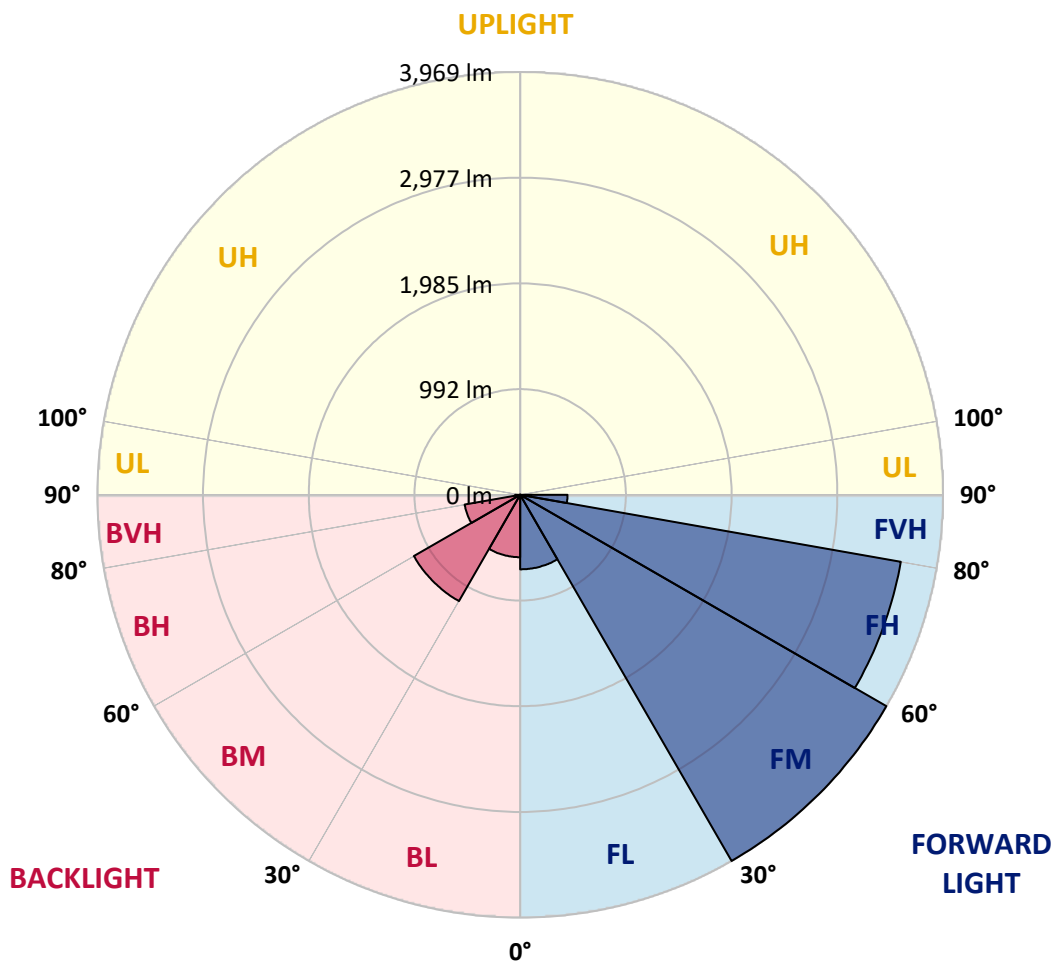
CATALOG NUMBER: VPL-E04-LED-E1-CPL-7060

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	699.7	6.3			
FM	(30°-60°)	3969.0	35.9			
FH	(60°-80°)	3627.9	32.8			G2/5000
FVH	(80°-90°)	444.2	4.0			G3/500
BL	(0°-30°)	585.8	5.3	B2/1000		
BM	(30°-60°)	1152.1	10.4	B2/2500		
BH	(60°-80°)	528.9	4.8	B2/1000		G2/1000
BVH	(80°-90°)	47.3	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





REPORT NUMBER: P145932

CATALOG NUMBER: VPL-E04-LED-E1-CPL-7060

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7
2.5°	1356.1	1356.9	1354.5	1353.6	1352.0	1352.8	1352.8	1351.2	1351.2	1352.0	1349.5
5°	1349.5	1351.2	1350.4	1352.0	1353.6	1356.1	1358.6	1361.0	1363.5	1366.8	1367.6
7.5°	1342.1	1347.1	1347.9	1352.8	1358.6	1365.1	1373.3	1382.4	1394.7	1398.0	1405.4
10°	1346.3	1355.3	1360.2	1370.1	1379.1	1391.4	1406.2	1415.2	1430.8	1436.5	1447.2
12.5°	1378.3	1384.8	1391.4	1402.9	1416.0	1431.6	1448.0	1462.0	1478.4	1484.2	1488.3
15°	1439.0	1445.6	1453.0	1464.5	1478.4	1497.3	1521.1	1538.3	1558.0	1572.8	1583.5
17.5°	1523.6	1523.6	1540.8	1544.1	1571.2	1599.9	1629.5	1663.1	1683.6	1695.9	1715.6
20°	1645.1	1645.1	1668.0	1678.7	1701.7	1738.6	1778.9	1815.8	1845.3	1870.0	1888.0
22.5°	1855.2	1846.2	1865.9	1863.4	1891.3	1946.3	1985.7	2006.2	2045.6	2060.4	2084.2
25°	2099.0	2131.0	2152.4	2152.4	2163.9	2220.5	2253.3	2268.9	2305.0	2294.4	2319.0
27.5°	2397.8	2484.0	2563.6	2596.5	2580.9	2643.2	2654.7	2669.5	2665.4	2640.0	2632.6
30°	2691.7	2843.5	2967.5	3043.0	3130.0	3250.7	3250.7	3270.4	3227.7	3157.1	3115.3
32.5°	2895.3	3090.6	3280.3	3437.0	3584.8	3769.5	3847.5	3955.8	3973.9	4001.0	3907.4
35°	3062.7	3336.9	3540.5	3776.1	3956.7	4143.8	4351.5	4539.5	4664.3	4643.7	4606.8
37.5°	3177.6	3529.8	3813.8	4090.5	4365.5	4579.7	4776.7	5022.2	5261.0	5308.7	5208.5
40°	3258.1	3666.1	4056.8	4396.7	4742.2	5064.0	5303.7	5567.2	5941.6	6100.0	6017.9
42.5°	3296.7	3772.8	4208.7	4641.3	5078.8	5485.1	5785.6	6146.8	6590.9	6861.8	6771.5
45°	3313.1	3838.5	4331.8	4824.3	5349.7	5851.3	6238.7	6648.3	7148.3	7583.3	7599.7
47.5°	3309.0	3873.8	4416.4	4954.9	5562.3	6146.0	6665.6	7130.2	7696.6	8153.8	8323.8
50°	3297.5	3886.1	4467.3	5033.7	5696.1	6361.9	6947.1	7499.6	8132.5	8711.2	8969.8
52.5°	3296.7	3888.5	4492.7	5077.2	5774.9	6494.0	7123.6	7776.2	8469.9	9074.9	9477.9
55°	3316.4	3903.3	4520.6	5107.5	5817.6	6568.7	7223.0	7949.4	8616.8	9303.9	9824.3
57.5°	3396.0	3972.3	4587.1	5159.3	5865.2	6627.8	7300.1	7999.5	8660.3	9399.1	10025.5
60°	3570.8	4101.1	4702.8	5254.5	5989.2	6783.0	7373.2	7928.9	8578.2	9372.0	10054.2
62.5°	3843.4	4308.0	4864.6	5430.2	6241.2	7077.7	7403.6	7767.2	8375.5	9216.1	9930.2
63°	3913.2	4363.0	4907.2	5478.6	6314.2	7133.5	7401.1	7724.5	8319.7	9170.1	9874.4
65°	4204.6	4617.5	5105.9	5710.1	6646.7	7310.8	7311.6	7473.3	8034.8	8916.4	9645.4
67.5°	4642.9	5036.9	5414.6	6015.4	7014.5	7399.5	7046.5	6924.2	7420.8	8379.6	9064.2
70°	4935.2	5421.9	5633.7	6095.9	7064.5	7291.9	6627.0	6219.0	6631.1	7432.3	8040.6
72.5°	4942.5	5497.5	5559.0	5752.8	6595.8	6778.0	5904.6	5352.2	5600.1	6272.4	6592.5
75°	4414.7	5112.5	4986.1	4914.6	5371.0	5449.0	4775.9	4546.1	4863.7	5261.0	5101.0
77.5°	3281.9	4209.5	3952.6	3648.8	3814.6	3826.1	3847.5	4280.9	4670.8	4833.4	4600.2
80°	2036.6	3092.3	2895.3	2394.5	2458.5	2647.4	3213.8	3979.6	4406.5	4523.1	4056.8
82.5°	1228.0	2274.7	2169.6	1827.3	1907.7	2378.1	3004.4	3216.2	3359.9	3349.2	2867.3
85°	899.7	1544.9	1687.7	1713.2	1998.9	2309.1	2296.0	2139.2	2051.4	1805.1	1540.8
87.5°	283.2	797.1	945.7	1102.4	1207.5	1142.7	1123.8	971.1	695.3	587.8	646.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P145932

CATALOG NUMBER: VPL-E04-LED-E1-CPL-7060

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7
2.5°	1349.5	1352.8	1354.5	1353.6	1354.5	1354.5	1359.4	1357.7	1359.4	1358.6	1363.5
5°	1370.1	1375.0	1379.1	1379.1	1379.9	1381.5	1388.1	1388.1	1391.4	1398.0	1401.2
7.5°	1410.3	1416.8	1417.7	1419.3	1424.2	1421.8	1425.9	1427.5	1430.0	1433.3	1437.4
10°	1452.1	1461.2	1461.2	1460.4	1461.2	1454.6	1457.1	1452.1	1453.0	1457.9	1462.8
12.5°	1498.9	1503.9	1500.6	1498.1	1498.1	1485.8	1484.2	1477.6	1474.3	1475.1	1476.8
15°	1592.5	1588.4	1587.6	1583.5	1568.7	1559.7	1553.1	1532.6	1521.9	1516.2	1506.3
17.5°	1717.3	1719.8	1715.6	1711.5	1690.2	1659.8	1646.7	1624.5	1609.8	1595.0	1576.9
20°	1899.5	1883.1	1881.5	1868.3	1838.8	1796.1	1764.1	1728.0	1707.4	1686.1	1667.2
22.5°	2100.6	2083.4	2071.9	2046.5	2003.0	1948.8	1895.4	1849.5	1818.3	1802.7	1789.5
25°	2323.9	2314.1	2295.2	2230.3	2195.9	2133.5	2075.2	2030.0	1994.7	1981.6	1958.6
27.5°	2591.5	2598.9	2563.6	2502.9	2459.4	2371.5	2321.5	2243.5	2213.9	2166.3	2136.8
30°	3079.1	3031.5	2971.6	2878.8	2791.0	2672.8	2589.9	2508.6	2465.1	2401.1	2322.3
32.5°	3876.2	3694.8	3533.9	3336.9	3150.6	2999.5	2879.7	2777.1	2710.6	2604.7	2470.9
35°	4519.0	4344.1	4078.2	3791.7	3547.0	3353.3	3202.3	3105.4	2972.4	2803.3	2609.6
37.5°	4990.2	4789.0	4540.3	4321.1	4054.3	3838.5	3634.1	3432.9	3245.8	2989.7	2742.6
40°	5755.2	5482.7	5073.1	4814.5	4596.1	4303.9	4112.6	3841.7	3556.9	3226.9	2869.0
42.5°	6512.1	6150.9	5779.8	5482.7	5172.4	4855.5	4592.8	4229.2	3850.8	3423.1	2982.3
45°	7391.2	6948.8	6463.6	6048.3	5729.8	5357.1	5020.5	4574.0	4091.3	3584.0	3080.8
47.5°	8084.1	7645.7	7098.2	6679.5	6250.2	5829.9	5393.2	4842.4	4270.2	3715.3	3172.7
50°	8748.2	8325.4	7743.4	7229.5	6736.2	6228.9	5701.0	5032.8	4410.6	3817.9	3245.8
52.5°	9344.1	8968.2	8339.4	7725.3	7173.7	6589.2	5935.0	5211.0	4545.2	3923.8	3303.2
55°	9849.0	9496.8	8932.9	8168.6	7542.3	6895.4	6155.8	5373.5	4687.2	4034.6	3345.1
57.5°	10188.0	9984.4	9381.9	8558.5	7845.2	7156.5	6322.5	5536.9	4820.2	4103.6	3363.2
60°	10345.6	10318.5	9808.7	8910.7	8114.4	7360.0	6532.6	5710.1	4908.1	4134.8	3337.7
62.5°	10312.8	10506.5	10133.8	9152.0	8286.0	7487.3	6667.2	5784.8	4885.9	4059.3	3225.3
63°	10282.4	10514.7	10179.8	9175.8	8300.0	7499.6	6680.4	5775.7	4865.4	4025.6	3186.7
65°	10059.9	10417.8	10191.3	9133.2	8235.9	7464.3	6621.3	5633.7	4661.0	3813.8	2968.3
67.5°	9514.9	9873.6	9748.0	8662.8	7821.4	7085.1	6208.3	5150.2	4160.2	3364.0	2563.6
70°	8389.4	8710.4	8560.2	7605.5	6824.0	6301.9	5468.7	4283.4	3389.4	2704.0	1951.2
72.5°	6636.0	6861.8	6894.6	6136.1	5537.7	5224.1	4405.7	3231.0	2475.8	1883.1	1266.6
75°	4913.8	4861.3	4871.9	4448.4	4204.6	4072.4	3293.4	2216.4	1668.0	1150.9	751.1
77.5°	4129.9	3752.3	3430.5	3313.1	3029.1	2947.0	2172.1	1360.2	973.6	688.7	427.7
80°	3358.2	2786.1	2318.2	2110.5	1999.7	2016.1	1201.8	724.8	509.8	375.1	267.6
82.5°	2296.0	1860.9	1467.7	1274.8	1255.1	1274.0	624.7	355.4	269.3	215.9	168.3
85°	1357.7	1278.1	1141.0	1013.0	968.6	914.5	464.6	254.5	138.7	114.9	94.4
87.5°	586.9	720.7	738.0	734.7	683.8	549.2	170.7	65.7	58.3	29.6	23.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P145932

CATALOG NUMBER: VPL-E04-LED-E1-CPL-7060

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7
2.5°	1363.5	1364.3	1362.7	1364.3	1370.1	1370.1	1369.2	1370.9	1371.7	1376.6	1375.0
5°	1404.5	1405.4	1406.2	1411.9	1416.0	1421.0	1419.3	1421.0	1424.2	1425.1	1426.7
7.5°	1442.3	1447.2	1453.8	1456.2	1463.6	1465.3	1472.7	1473.5	1475.1	1471.8	1468.6
10°	1468.6	1473.5	1481.7	1485.8	1498.9	1500.6	1506.3	1508.0	1511.2	1508.8	1506.3
12.5°	1481.7	1485.8	1494.8	1503.0	1521.1	1526.8	1536.7	1542.4	1546.5	1544.1	1535.9
15°	1508.8	1508.0	1512.9	1519.5	1535.9	1546.5	1560.5	1567.9	1572.8	1568.7	1558.0
17.5°	1571.2	1559.7	1559.7	1555.6	1567.9	1570.4	1576.1	1580.2	1578.6	1566.2	1549.0
20°	1657.4	1640.1	1629.5	1619.6	1615.5	1595.0	1584.3	1569.5	1556.4	1534.2	1514.5
22.5°	1769.0	1756.7	1732.1	1709.9	1678.7	1636.8	1591.7	1553.1	1524.4	1494.0	1460.4
25°	1938.1	1910.2	1874.9	1822.4	1782.1	1708.3	1632.7	1559.7	1498.1	1450.5	1393.9
27.5°	2097.4	2038.3	1971.8	1889.7	1815.8	1717.3	1621.2	1536.7	1456.2	1379.9	1315.1
30°	2230.3	2127.7	2019.4	1904.5	1799.4	1680.4	1568.7	1472.7	1381.5	1291.3	1229.7
32.5°	2330.5	2182.7	2038.3	1891.3	1761.6	1622.1	1494.0	1391.4	1288.0	1192.7	1121.3
35°	2420.8	2221.3	2032.5	1856.0	1702.5	1548.2	1410.3	1295.4	1182.1	1080.3	998.2
37.5°	2485.6	2234.4	2007.9	1805.1	1627.0	1457.9	1308.5	1186.2	1064.7	961.3	871.0
40°	2535.7	2227.9	1961.1	1727.1	1523.6	1347.9	1201.8	1073.7	952.2	848.8	754.4
42.5°	2569.4	2203.3	1890.5	1638.5	1437.4	1253.5	1110.7	976.0	854.5	746.2	641.9
45°	2612.9	2193.4	1847.0	1572.0	1359.4	1173.9	1021.2	889.8	763.4	650.1	550.8
47.5°	2653.9	2187.7	1811.7	1517.0	1288.8	1101.6	950.6	812.7	685.4	574.6	484.3
50°	2678.5	2178.6	1774.8	1450.5	1210.0	1027.7	883.3	743.7	615.7	509.8	429.3
52.5°	2685.9	2160.6	1726.3	1375.0	1141.9	964.5	814.3	674.8	551.6	456.4	381.7
55°	2680.2	2125.3	1660.6	1313.4	1072.1	894.8	744.5	609.1	497.5	408.0	348.1
57.5°	2652.3	2054.7	1576.1	1235.4	992.4	806.9	659.2	535.2	435.9	364.5	318.5
60°	2589.9	1952.9	1472.7	1126.3	878.3	702.7	563.1	456.4	372.7	321.0	290.6
62.5°	2453.6	1805.9	1322.4	971.9	725.7	563.9	442.5	363.7	307.0	279.9	261.9
63°	2413.4	1755.1	1278.1	930.9	699.4	532.8	415.4	344.0	293.1	270.9	256.1
65°	2201.6	1520.3	1080.3	748.6	541.8	403.9	316.9	270.1	243.0	234.8	230.7
67.5°	1804.3	1182.9	760.1	502.4	363.7	279.1	234.0	215.9	206.0	205.2	207.7
70°	1274.8	784.8	470.4	321.8	250.4	211.0	193.7	185.5	180.6	182.2	187.2
72.5°	829.1	460.5	297.2	235.6	203.6	185.5	173.2	170.7	169.1	167.5	169.1
75°	438.4	288.1	224.9	197.0	178.1	163.4	155.1	151.9	152.7	152.7	152.7
77.5°	271.7	219.2	192.1	174.0	159.3	144.5	136.3	133.8	134.6	136.3	137.1
80°	208.5	191.3	169.1	156.0	134.6	122.3	118.2	117.4	119.0	119.0	121.5
82.5°	152.7	147.8	139.6	123.1	106.7	98.5	97.7	101.0	97.7	96.9	98.5
85°	89.5	83.7	91.1	78.0	71.4	66.5	69.8	76.3	79.6	75.5	73.9
87.5°	28.7	19.7	28.7	32.0	28.7	24.6	31.2	36.9	37.8	36.1	41.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P145932

CATALOG NUMBER: VPL-E04-LED-E1-CPL-7060

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7
2.5°	1374.2	1379.9	1374.2	1376.6	1375.8	1374.2	1376.6	1373.3	1371.7	1376.6	1375.8
5°	1425.9	1426.7	1419.3	1420.1	1419.3	1412.7	1412.7	1409.5	1405.4	1406.2	1404.5
7.5°	1467.7	1466.1	1460.4	1457.9	1450.5	1445.6	1442.3	1437.4	1434.1	1430.8	1429.2
10°	1499.8	1495.7	1491.5	1484.2	1476.8	1472.7	1463.6	1456.2	1453.8	1448.9	1445.6
12.5°	1527.7	1520.3	1513.7	1504.7	1495.7	1489.1	1478.4	1472.7	1468.6	1462.0	1457.1
15°	1543.3	1529.3	1517.0	1503.0	1493.2	1483.3	1471.0	1468.6	1462.8	1456.2	1447.2
17.5°	1524.4	1504.7	1481.7	1466.9	1452.1	1437.4	1425.1	1425.1	1422.6	1415.2	1399.6
20°	1485.8	1456.2	1429.2	1405.4	1390.6	1369.2	1361.8	1350.4	1342.1	1329.0	1309.3
22.5°	1422.6	1391.4	1356.1	1332.3	1306.8	1283.0	1268.3	1250.2	1243.6	1222.3	1196.0
25°	1352.0	1306.8	1269.1	1237.9	1202.6	1174.7	1154.2	1129.5	1113.1	1092.6	1059.8
27.5°	1268.3	1221.5	1178.8	1144.3	1107.4	1068.8	1031.0	1002.3	972.7	948.9	930.1
30°	1178.0	1129.5	1077.0	1036.8	994.1	945.7	914.5	875.9	852.9	826.6	802.0
32.5°	1059.8	1017.1	955.5	908.7	856.2	818.4	793.0	756.0	728.9	706.8	692.8
35°	930.1	866.0	804.5	769.2	733.0	702.7	667.4	638.6	620.6	597.6	585.3
37.5°	788.9	714.2	661.6	630.4	593.5	578.7	556.6	539.3	522.9	507.3	497.5
40°	662.5	593.5	545.9	519.6	495.0	478.6	464.6	457.2	446.6	434.2	426.9
42.5°	557.4	502.4	455.6	431.0	412.1	410.4	401.4	395.7	391.6	384.2	372.7
45°	475.3	425.2	385.0	365.3	357.1	357.9	357.9	353.0	353.0	350.5	343.1
47.5°	420.3	375.1	345.6	332.5	329.2	330.0	327.5	325.9	326.7	325.9	321.8
50°	377.6	339.0	314.4	309.5	308.7	307.8	304.5	302.1	301.3	302.9	302.1
52.5°	334.1	302.1	288.1	286.5	287.3	287.3	286.5	285.7	287.3	289.0	286.5
55°	309.5	286.5	277.5	277.5	277.5	277.5	276.6	275.8	278.3	280.7	276.6
57.5°	286.5	270.1	266.8	266.8	266.8	265.1	265.1	266.0	269.3	274.2	269.3
60°	269.3	261.0	261.0	261.9	261.0	257.8	255.3	255.3	259.4	266.0	261.9
62.5°	252.8	248.7	250.4	249.5	247.9	243.8	240.5	240.5	245.4	252.0	253.7
63°	248.7	245.4	247.1	246.3	244.6	241.3	238.1	238.1	242.2	248.7	251.2
65°	230.7	231.5	232.3	233.1	232.3	231.5	227.4	225.7	229.0	234.0	237.2
67.5°	209.3	211.0	212.6	216.7	215.1	215.1	212.6	211.0	211.8	214.3	216.7
70°	189.6	191.3	193.7	195.4	196.2	197.0	195.4	192.9	193.7	194.5	196.2
72.5°	170.7	172.4	174.0	177.3	177.3	177.3	175.7	174.0	174.8	176.5	178.1
75°	153.5	154.3	156.0	158.4	159.3	157.6	157.6	156.0	156.8	159.3	160.9
77.5°	136.3	134.6	135.4	137.1	139.6	139.6	140.4	139.6	141.2	142.8	144.5
80°	116.6	114.9	113.3	114.1	117.4	121.5	125.6	125.6	128.1	128.9	131.3
82.5°	92.8	91.1	90.3	92.8	91.9	97.7	106.7	111.6	114.9	118.2	119.8
85°	72.2	68.1	69.8	69.8	68.1	77.2	85.4	91.9	92.8	97.7	98.5
87.5°	42.7	41.0	39.4	37.8	43.5	52.5	59.9	62.4	64.0	66.5	69.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P145932

CATALOG NUMBER: VPL-E04-LED-E1-CPL-7060

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7
2.5°	1369.2	1375.8	1374.2	1373.3	1374.2	1373.3	1370.9	1371.7	1370.1	1370.9	1369.2
5°	1395.5	1398.8	1396.3	1392.2	1392.2	1386.5	1382.4	1379.1	1375.0	1373.3	1370.1
7.5°	1421.0	1418.5	1415.2	1407.8	1403.7	1396.3	1390.6	1384.0	1379.9	1375.0	1369.2
10°	1436.5	1431.6	1425.1	1416.0	1404.5	1398.0	1389.8	1379.9	1375.0	1372.5	1366.8
12.5°	1443.9	1430.8	1420.1	1403.7	1387.3	1375.0	1366.0	1356.1	1353.6	1350.4	1346.3
15°	1426.7	1407.8	1380.7	1358.6	1337.2	1320.0	1312.6	1301.9	1299.5	1298.6	1297.8
17.5°	1368.4	1339.7	1313.4	1283.9	1265.0	1249.4	1242.8	1240.4	1236.3	1234.6	1235.4
20°	1274.8	1250.2	1223.9	1214.1	1191.9	1187.8	1178.0	1171.4	1164.0	1161.6	1157.4
22.5°	1165.7	1135.3	1118.9	1111.5	1102.4	1081.1	1076.2	1069.6	1059.8	1052.4	1050.7
25°	1038.4	1013.8	1013.0	995.7	988.3	976.9	963.7	955.5	949.8	940.7	934.2
27.5°	908.7	899.7	884.1	871.0	866.0	859.5	839.8	835.7	829.1	821.7	814.3
30°	788.0	781.5	766.7	754.4	747.0	733.9	715.0	716.6	703.5	693.6	687.1
32.5°	670.7	665.7	651.8	648.5	624.7	618.1	598.4	583.6	570.5	560.7	552.5
35°	564.8	551.6	552.5	537.7	524.5	504.8	484.3	465.4	454.8	449.8	442.5
37.5°	488.4	476.1	463.8	447.4	432.6	418.7	406.3	400.6	394.0	395.7	396.5
40°	419.5	410.4	401.4	389.9	380.9	375.1	371.9	371.9	372.7	376.8	380.1
42.5°	370.2	362.8	357.9	353.8	355.4	355.4	357.9	362.0	366.1	371.9	375.1
45°	337.4	333.3	331.6	333.3	338.2	342.3	348.1	354.6	361.2	366.9	369.4
47.5°	317.7	315.2	315.2	319.3	326.7	333.3	342.3	348.9	356.3	361.2	362.8
50°	296.3	295.5	295.5	298.8	305.4	313.6	322.6	329.2	335.7	339.8	341.5
52.5°	284.0	281.6	280.7	284.8	290.6	298.8	307.8	314.4	319.3	322.6	323.4
55°	273.4	270.9	269.3	274.2	280.7	288.1	298.8	306.2	311.1	315.2	318.5
57.5°	264.3	261.9	260.2	266.0	272.5	281.6	290.6	298.8	305.4	310.3	313.6
60°	256.9	253.7	252.0	258.6	265.1	274.2	283.2	292.2	301.3	307.0	308.7
62.5°	247.9	245.4	243.0	247.1	250.4	256.9	265.1	274.2	282.4	288.1	288.1
63°	245.4	244.6	241.3	244.6	247.9	253.7	261.9	270.1	278.3	284.8	284.0
65°	234.8	234.8	233.1	236.4	239.7	245.4	252.0	261.0	268.4	273.4	274.2
67.5°	217.5	218.4	220.0	223.3	229.8	235.6	243.0	251.2	257.8	261.0	262.7
70°	197.8	199.5	202.8	207.7	213.4	218.4	223.3	231.5	237.2	240.5	242.2
72.5°	179.0	183.1	185.5	189.6	192.9	197.8	201.9	210.1	215.1	217.5	221.6
75°	161.7	165.0	166.6	169.1	172.4	174.0	179.0	182.2	188.8	192.1	197.0
77.5°	145.3	146.9	149.4	153.5	154.3	156.8	158.4	163.4	166.6	169.9	174.0
80°	130.5	132.2	135.4	137.9	138.7	140.4	141.2	140.4	139.6	137.1	140.4
82.5°	117.4	119.0	123.1	125.6	128.1	128.1	127.2	118.2	114.1	115.7	118.2
85°	96.9	98.5	102.6	107.5	108.4	107.5	108.4	99.3	93.6	91.1	93.6
87.5°	60.7	59.1	73.1	79.6	74.7	76.3	77.2	72.2	67.3	57.5	59.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P145932
 CATALOG NUMBER: VPL-E04-LED-E1-CPL-7060

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	0°
2.5°	1370.9	1365.1	1366.0	1367.6	1367.6	1370.1	1366.8	1362.7	1365.1	1361.0	1360.2	2.5°
5°	1370.1	1362.7	1362.7	1364.3	1362.7	1364.3	1361.8	1357.7	1360.2	1355.3	1354.5	5°
7.5°	1366.8	1362.7	1364.3	1366.0	1363.5	1364.3	1363.5	1357.7	1358.6	1356.1	1350.4	7.5°
10°	1365.1	1362.7	1366.0	1370.9	1370.9	1371.7	1369.2	1362.7	1358.6	1356.1	1351.2	10°
12.5°	1347.9	1351.2	1357.7	1369.2	1373.3	1379.9	1383.2	1379.9	1381.5	1378.3	1376.6	12.5°
15°	1298.6	1306.8	1317.5	1334.8	1347.1	1361.8	1379.9	1388.1	1403.7	1416.0	1424.2	15°
17.5°	1239.5	1245.3	1256.8	1276.5	1292.1	1321.6	1346.3	1374.2	1404.5	1437.4	1466.1	17.5°
20°	1166.5	1162.4	1180.4	1201.8	1228.9	1261.7	1297.8	1339.7	1389.8	1442.3	1492.4	20°
22.5°	1058.9	1058.9	1077.8	1103.3	1136.1	1173.9	1223.9	1269.1	1334.8	1411.1	1485.0	22.5°
25°	935.8	938.3	951.4	980.1	1003.1	1057.3	1104.1	1162.4	1241.2	1324.9	1423.4	25°
27.5°	804.5	820.9	817.6	848.0	878.3	931.7	995.7	1054.8	1142.7	1232.1	1344.6	27.5°
30°	685.4	683.0	682.2	718.3	748.6	797.1	849.6	924.3	1013.0	1127.9	1257.6	30°
32.5°	537.7	546.7	553.3	574.6	607.5	652.6	709.2	787.2	893.9	1009.7	1155.8	32.5°
35°	444.1	446.6	455.6	467.9	496.6	534.4	593.5	662.5	756.0	875.9	1031.0	35°
37.5°	398.1	400.6	410.4	421.9	442.5	470.4	510.6	563.9	650.1	761.8	906.3	37.5°
40°	383.4	385.8	391.6	402.2	421.1	444.9	476.9	518.0	580.4	667.4	793.8	40°
42.5°	376.8	376.8	377.6	385.8	404.7	432.6	467.1	504.0	550.0	615.7	718.3	42.5°
45°	369.4	369.4	368.6	374.3	389.1	421.1	463.0	508.1	558.2	614.8	695.3	45°
47.5°	362.8	361.2	359.5	362.0	374.3	407.2	455.6	510.6	574.6	645.2	726.5	47.5°
50°	339.8	339.8	339.0	339.8	351.3	385.8	441.6	508.1	589.4	680.5	779.0	50°
52.5°	323.4	324.2	325.1	325.1	334.1	369.4	431.0	508.9	605.8	715.0	839.8	52.5°
55°	319.3	321.0	321.0	319.3	326.7	358.7	421.1	506.5	617.3	753.6	904.6	55°
57.5°	314.4	315.2	316.0	314.4	319.3	347.2	407.2	495.0	614.0	768.3	953.0	57.5°
60°	307.8	304.5	303.7	301.3	304.5	326.7	382.5	470.4	594.3	761.8	969.5	60°
62.5°	289.8	287.3	284.8	282.4	284.8	301.3	355.4	440.0	561.5	735.5	956.3	62.5°
63°	285.7	284.0	281.6	279.1	279.1	297.2	346.4	432.6	553.3	728.1	951.4	63°
65°	274.2	273.4	271.7	269.3	268.4	282.4	325.9	398.9	514.7	695.3	920.2	65°
67.5°	261.0	261.0	260.2	256.9	252.8	261.0	291.4	348.9	447.4	610.7	843.0	67.5°
70°	242.2	242.2	241.3	239.7	234.8	240.5	260.2	298.0	368.6	499.1	706.8	70°
72.5°	223.3	223.3	225.7	224.9	225.7	226.6	236.4	256.9	299.6	388.3	534.4	72.5°
75°	198.7	202.8	203.6	205.2	206.0	205.2	210.1	222.5	247.1	298.0	389.9	75°
77.5°	178.1	183.9	183.1	181.4	180.6	181.4	180.6	186.3	204.4	236.4	289.0	77.5°
80°	146.9	152.7	152.7	151.9	150.2	151.9	150.2	156.0	170.7	198.7	229.8	80°
82.5°	120.7	124.8	127.2	128.9	127.2	133.8	133.8	132.2	143.7	168.3	193.7	82.5°
85°	96.9	101.0	103.4	106.7	108.4	106.7	105.9	104.3	110.8	130.5	147.8	85°
87.5°	61.6	64.8	64.8	65.7	65.7	68.1	63.2	57.5	52.5	74.7	78.0	87.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90°



NUMBER: P145932

NUMBER: VPL-E04-LED-E1-CPL-7060

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
1357.7	1357.7	1357.7	1357.7	1357.7	1357.7	1357.7
1357.7	1357.7	1358.6	1356.1	1358.6	1358.6	1356.1
1352.0	1350.4	1350.4	1349.5	1351.2	1350.4	1349.5
1347.1	1347.1	1343.8	1341.3	1340.5	1343.8	1342.1
1345.4	1343.8	1343.0	1341.3	1342.1	1344.6	1346.3
1375.0	1369.2	1370.9	1370.1	1370.9	1373.3	1378.3
1429.2	1429.2	1433.3	1424.2	1428.3	1432.4	1439.0
1489.9	1504.7	1512.1	1511.2	1512.9	1516.2	1523.6
1541.6	1588.4	1621.2	1629.5	1651.6	1656.5	1645.1
1564.6	1648.3	1722.2	1771.5	1826.5	1848.6	1855.2
1517.8	1638.5	1760.0	1873.3	1981.6	2044.0	2099.0
1469.4	1612.2	1773.9	1943.0	2119.5	2278.8	2397.8
1402.1	1590.9	1809.2	2037.4	2271.4	2493.0	2691.7
1328.2	1556.4	1812.5	2090.0	2378.9	2654.7	2895.3
1222.3	1476.0	1760.0	2081.8	2416.7	2762.3	3062.7
1100.8	1347.9	1666.4	2034.2	2414.2	2817.3	3177.6
971.1	1223.9	1558.9	1952.9	2382.2	2834.5	3258.1
873.4	1123.8	1452.1	1875.7	2334.6	2823.0	3296.7
823.3	1037.6	1365.1	1800.2	2281.2	2795.1	3313.1
833.2	1014.6	1313.4	1737.8	2233.6	2764.7	3309.0
888.2	1049.1	1312.6	1714.8	2203.3	2736.8	3297.5
971.1	1127.1	1360.2	1741.9	2219.7	2734.4	3296.7
1064.7	1236.3	1475.1	1815.0	2289.4	2778.7	3316.4
1155.0	1369.2	1622.9	1978.3	2421.6	2889.5	3396.0
1208.3	1490.7	1812.5	2209.0	2625.2	3084.1	3570.8
1220.7	1563.8	1980.8	2435.6	2904.3	3365.6	3843.4
1219.8	1571.2	2009.5	2482.4	2960.9	3430.5	3913.2
1201.0	1585.9	2086.7	2636.7	3188.3	3708.8	4204.6
1141.9	1559.7	2129.4	2780.3	3414.1	4015.8	4642.9
1006.4	1439.8	2079.3	2827.1	3548.7	4219.3	4935.2
788.0	1187.8	1795.3	2584.1	3366.4	4037.1	4942.5
554.1	839.8	1381.5	2122.0	2751.6	3411.6	4414.7
385.8	544.2	897.2	1427.5	1985.7	2488.9	3281.9
282.4	362.0	537.7	853.7	1205.1	1555.6	2036.6
217.5	261.0	344.0	515.5	680.5	871.0	1228.0
152.7	172.4	212.6	318.5	456.4	623.1	899.7
66.5	78.0	102.6	188.0	308.7	297.2	283.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)