

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: P145928

Luminaire Tested: **VPL-E04-LED-E1-CPL-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P145928
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-8030
Description: VALET LED LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° FORWARD THROW PERIMETER LEFT
Light Source: (84) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9093 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G3

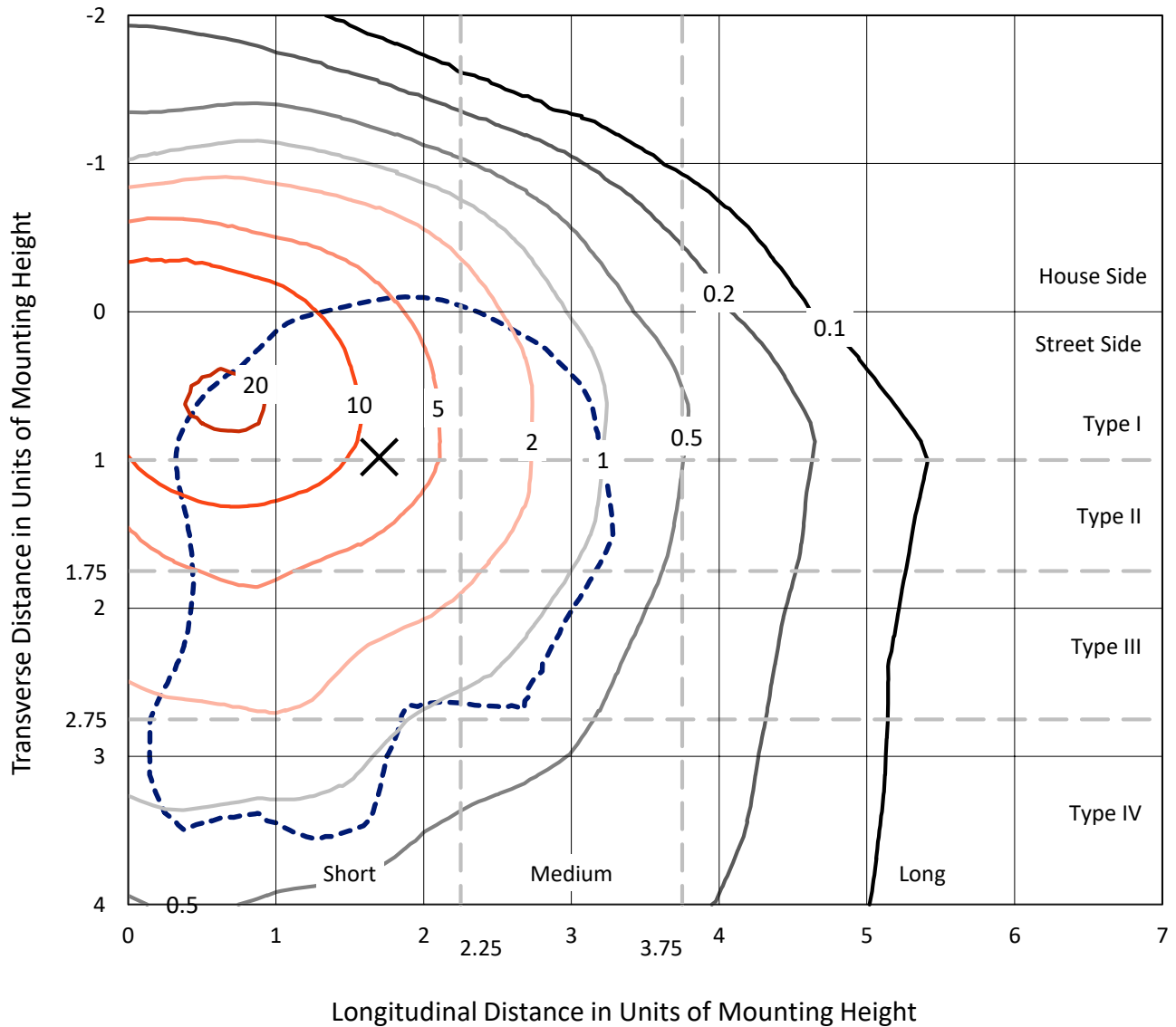
Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

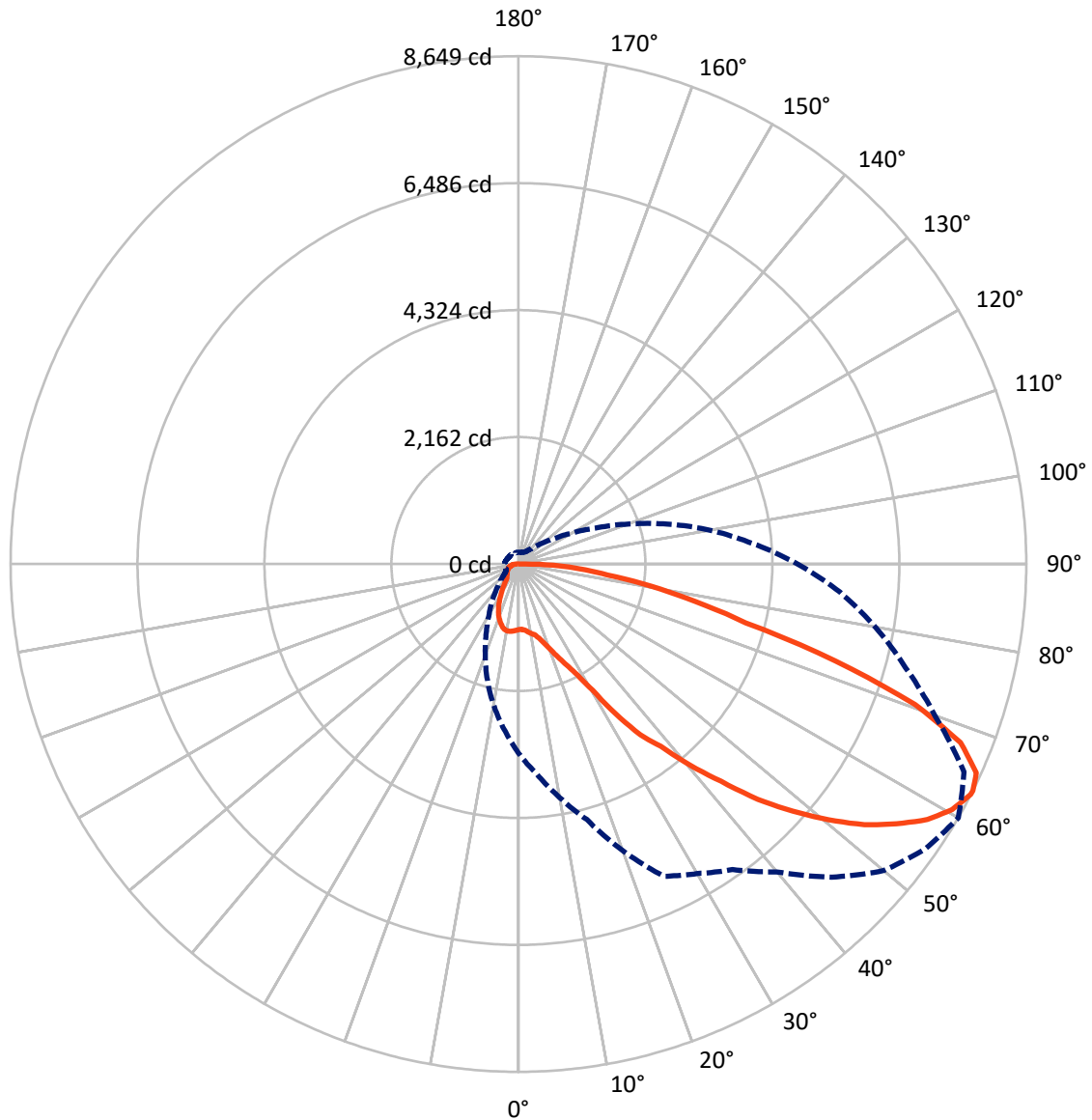
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 22.7 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1903.4	0.0	1903.4
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	7189.5	0.0	7189.5
	% Fixture	79.1	0.0	79.1
Total	Lumens	9093.0	0.0	9093.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.7	1.2
10°-20°	342.3	3.8
20°-30°	605.4	6.7
30°-40°	955.7	10.5
40°-50°	1405.3	15.5
50°-60°	1851.2	20.4
60°-70°	2063.4	22.7
70°-80°	1355.7	14.9
80°-90°	404.3	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°	9093.0	100.0
0°-180°	9093.0	100.0

Coefficient of Utilization



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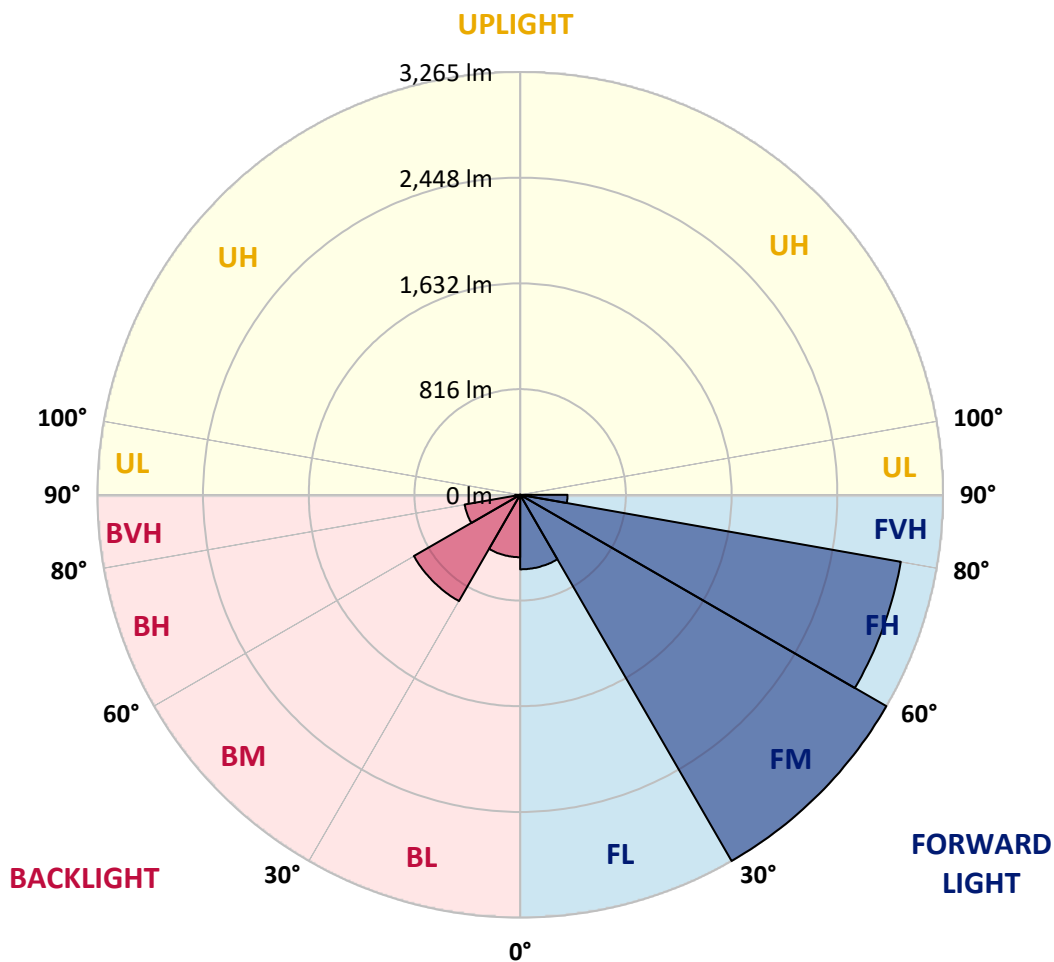
CATALOG NUMBER: VPL-E04-LED-E1-CPL-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	575.5	6.3			
FM	(30°-60°)	3264.6	35.9			
FH	(60°-80°)	2984.0	32.8			G2/5000
FVH	(80°-90°)	365.4	4.0			G3/500
BL	(0°-30°)	481.8	5.3	B1/500		
BM	(30°-60°)	947.7	10.4	B1/1000		
BH	(60°-80°)	435.0	4.8	B1/500		G1/500
BVH	(80°-90°)	38.9	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8
2.5°	1115.4	1116.1	1114.1	1113.4	1112.0	1112.7	1112.7	1111.4	1111.4	1112.0	1110.0
5°	1110.0	1111.4	1110.7	1112.0	1113.4	1115.4	1117.4	1119.5	1121.5	1124.2	1124.9
7.5°	1103.9	1108.0	1108.7	1112.7	1117.4	1122.8	1129.6	1137.0	1147.2	1149.9	1155.9
10°	1107.3	1114.7	1118.8	1126.9	1134.3	1144.5	1156.6	1164.0	1176.9	1181.6	1190.4
12.5°	1133.6	1139.1	1144.5	1153.9	1164.7	1177.5	1191.0	1202.5	1216.0	1220.7	1224.1
15°	1183.6	1189.0	1195.1	1204.5	1216.0	1231.6	1251.1	1265.3	1281.5	1293.7	1302.4
17.5°	1253.2	1253.2	1267.3	1270.0	1292.3	1316.0	1340.3	1367.9	1384.8	1394.9	1411.2
20°	1353.1	1353.1	1372.0	1380.8	1399.7	1430.1	1463.1	1493.5	1517.8	1538.1	1552.9
22.5°	1525.9	1518.5	1534.7	1532.7	1555.6	1600.9	1633.3	1650.2	1682.6	1694.7	1714.3
25°	1726.5	1752.8	1770.4	1770.4	1779.8	1826.4	1853.4	1866.2	1895.9	1887.2	1907.4
27.5°	1972.2	2043.1	2108.6	2135.6	2122.8	2174.1	2183.6	2195.7	2192.4	2171.4	2165.3
30°	2214.0	2338.9	2440.8	2502.9	2574.5	2673.8	2673.8	2690.0	2654.9	2596.8	2562.4
32.5°	2381.4	2542.1	2698.1	2827.0	2948.6	3100.5	3164.6	3253.8	3268.6	3290.9	3213.9
35°	2519.1	2744.7	2912.1	3105.9	3254.4	3408.4	3579.2	3733.8	3836.4	3819.6	3789.2
37.5°	2613.7	2903.3	3136.9	3364.5	3590.7	3766.9	3928.9	4130.8	4327.3	4366.5	4284.1
40°	2679.8	3015.4	3336.8	3616.3	3900.6	4165.3	4362.4	4579.2	4887.0	5017.4	4949.8
42.5°	2711.6	3103.2	3461.7	3817.5	4177.4	4511.6	4758.8	5055.8	5421.1	5643.9	5569.7
45°	2725.1	3157.2	3563.0	3968.1	4400.2	4812.8	5131.5	5468.4	5879.6	6237.4	6250.9
47.5°	2721.7	3186.2	3632.5	4075.5	4575.1	5055.2	5482.6	5864.7	6330.6	6706.7	6846.5
50°	2712.2	3196.4	3674.4	4140.3	4685.2	5232.7	5714.2	6168.6	6689.1	7165.1	7377.8
52.5°	2711.6	3198.4	3695.3	4176.1	4750.0	5341.4	5859.3	6396.1	6966.6	7464.3	7795.8
55°	2727.8	3210.5	3718.3	4201.0	4785.1	5402.9	5941.0	6538.6	7087.5	7652.6	8080.7
57.5°	2793.3	3267.3	3773.0	4243.6	4824.3	5451.5	6004.5	6579.8	7123.3	7731.0	8246.1
60°	2937.1	3373.3	3868.2	4321.9	4926.2	5579.1	6064.6	6521.7	7055.8	7708.7	8269.8
62.5°	3161.3	3543.4	4001.2	4466.4	5133.5	5821.5	6089.6	6388.7	6889.0	7580.4	8167.8
63°	3218.6	3588.6	4036.3	4506.2	5193.6	5867.4	6087.5	6353.6	6843.1	7542.6	8121.9
65°	3458.3	3798.0	4199.7	4696.6	5467.0	6013.3	6013.9	6147.0	6608.8	7333.9	7933.5
67.5°	3818.9	4143.0	4453.6	4947.8	5769.5	6086.2	5795.9	5695.3	6103.7	6892.4	7455.5
70°	4059.3	4459.6	4633.8	5014.0	5810.7	5997.7	5450.8	5115.3	5454.2	6113.2	6613.5
72.5°	4065.3	4521.8	4572.4	4731.8	5425.2	5575.1	4856.7	4402.3	4606.2	5159.1	5422.5
75°	3631.2	4205.1	4101.1	4042.4	4417.8	4481.9	3928.3	3739.2	4000.5	4327.3	4195.6
77.5°	2699.4	3462.4	3251.1	3001.2	3137.6	3147.1	3164.6	3521.1	3841.8	3975.5	3783.8
80°	1675.2	2543.5	2381.4	1969.5	2022.2	2177.5	2643.4	3273.3	3624.4	3720.3	3336.8
82.5°	1010.1	1871.0	1784.5	1503.0	1569.1	1956.0	2471.2	2645.4	2763.6	2754.8	2358.4
85°	740.0	1270.7	1388.2	1409.1	1644.1	1899.3	1888.5	1759.6	1687.3	1484.7	1267.3
87.5°	232.9	655.6	777.8	906.8	993.2	939.9	924.3	798.8	571.9	483.4	531.4
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°	95°	100°	105°
0°	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8
2.5°	1110.0	1112.7	1114.1	1113.4	1114.1	1114.1	1118.1	1116.8	1118.1	1117.4	1121.5
5°	1126.9	1130.9	1134.3	1134.3	1135.0	1136.3	1141.8	1141.8	1144.5	1149.9	1152.6
7.5°	1160.0	1165.4	1166.1	1167.4	1171.5	1169.4	1172.8	1174.2	1176.2	1178.9	1182.3
10°	1194.4	1201.8	1201.8	1201.2	1201.8	1196.4	1198.5	1194.4	1195.1	1199.1	1203.2
12.5°	1232.9	1237.0	1234.3	1232.2	1232.2	1222.1	1220.7	1215.3	1212.6	1213.3	1214.7
15°	1309.9	1306.5	1305.8	1302.4	1290.3	1282.9	1277.5	1260.6	1251.8	1247.1	1239.0
17.5°	1412.5	1414.5	1411.2	1407.8	1390.2	1365.2	1354.4	1336.2	1324.1	1311.9	1297.0
20°	1562.4	1548.9	1547.5	1536.7	1512.4	1477.3	1451.0	1421.3	1404.4	1386.8	1371.3
22.5°	1727.8	1713.6	1704.2	1683.3	1647.5	1602.9	1559.0	1521.2	1495.6	1482.7	1471.9
25°	1911.5	1903.4	1887.8	1834.5	1806.1	1754.8	1706.9	1669.8	1640.7	1629.9	1611.0
27.5°	2131.6	2137.7	2108.6	2058.7	2022.9	1950.6	1909.4	1845.3	1821.0	1781.8	1757.5
30°	2532.6	2493.5	2444.2	2367.9	2295.7	2198.4	2130.2	2063.4	2027.6	1974.9	1910.1
32.5°	3188.3	3039.0	2906.7	2744.7	2591.4	2467.2	2368.6	2284.2	2229.5	2142.4	2032.3
35°	3716.9	3573.1	3354.4	3118.7	2917.5	2758.2	2633.9	2554.3	2444.9	2305.8	2146.4
37.5°	4104.5	3939.1	3734.5	3554.2	3334.8	3157.2	2989.1	2823.7	2669.7	2459.1	2255.8
40°	4733.8	4509.6	4172.7	3960.0	3780.4	3540.0	3382.7	3159.9	2925.6	2654.2	2359.8
42.5°	5356.3	5059.2	4754.0	4509.6	4254.4	3993.8	3777.7	3478.6	3167.3	2815.6	2453.0
45°	6079.4	5715.5	5316.5	4974.8	4712.8	4406.3	4129.5	3762.2	3365.2	2947.9	2534.0
47.5°	6649.3	6288.7	5838.4	5494.0	5140.9	4795.2	4436.0	3983.0	3512.4	3055.9	2609.6
50°	7195.5	6847.8	6369.1	5946.4	5540.6	5123.4	4689.2	4139.6	3627.8	3140.3	2669.7
52.5°	7685.7	7376.5	6859.3	6354.2	5900.5	5419.8	4881.6	4286.1	3738.5	3227.4	2717.0
55°	8101.0	7811.3	7347.4	6718.8	6203.7	5671.6	5063.3	4419.8	3855.4	3318.6	2751.4
57.5°	8379.8	8212.4	7716.8	7039.6	6452.8	5886.3	5200.3	4554.2	3964.7	3375.3	2766.3
60°	8509.5	8487.2	8067.9	7329.2	6674.3	6053.8	5373.2	4696.6	4037.0	3400.9	2745.3
62.5°	8482.4	8641.8	8335.3	7527.7	6815.4	6158.4	5483.9	4758.1	4018.7	3338.8	2652.8
63°	8457.5	8648.5	8373.1	7547.3	6826.9	6168.6	5494.7	4750.7	4001.9	3311.1	2621.1
65°	8274.5	8568.9	8382.5	7512.2	6774.2	6139.5	5446.1	4633.8	3833.7	3136.9	2441.5
67.5°	7826.2	8121.2	8017.9	7125.3	6433.2	5827.6	5106.5	4236.2	3421.9	2766.9	2108.6
70°	6900.5	7164.5	7040.9	6255.7	5612.9	5183.5	4498.1	3523.2	2787.9	2224.1	1604.9
72.5°	5458.3	5643.9	5670.9	5047.1	4554.9	4296.9	3623.8	2657.6	2036.4	1548.9	1041.8
75°	4041.7	3998.5	4007.3	3658.9	3458.3	3349.6	2708.9	1823.0	1372.0	946.6	617.8
77.5°	3396.9	3086.3	2821.6	2725.1	2491.5	2423.9	1786.6	1118.8	800.8	566.5	351.8
80°	2762.2	2291.6	1906.7	1735.9	1644.8	1658.3	988.5	596.2	419.3	308.6	220.1
82.5°	1888.5	1530.7	1207.2	1048.6	1032.4	1047.9	513.8	292.4	221.5	177.6	138.4
85°	1116.8	1051.3	938.5	833.2	796.7	752.2	382.2	209.3	114.1	94.5	77.6
87.5°	482.8	592.8	607.0	604.3	562.4	451.7	140.4	54.0	47.9	24.3	19.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8
2.5°	1121.5	1122.2	1120.8	1122.2	1126.9	1126.9	1126.2	1127.6	1128.2	1132.3	1130.9
5°	1155.3	1155.9	1156.6	1161.3	1164.7	1168.8	1167.4	1168.8	1171.5	1172.1	1173.5
7.5°	1186.3	1190.4	1195.8	1197.8	1203.9	1205.2	1211.3	1212.0	1213.3	1210.6	1207.9
10°	1207.9	1212.0	1218.7	1222.1	1232.9	1234.3	1239.0	1240.3	1243.0	1241.0	1239.0
12.5°	1218.7	1222.1	1229.5	1236.3	1251.1	1255.9	1264.0	1268.7	1272.1	1270.0	1263.3
15°	1241.0	1240.3	1244.4	1249.8	1263.3	1272.1	1283.5	1289.6	1293.7	1290.3	1281.5
17.5°	1292.3	1282.9	1282.9	1279.5	1289.6	1291.6	1296.4	1299.7	1298.4	1288.3	1274.1
20°	1363.2	1349.0	1340.3	1332.2	1328.8	1311.9	1303.1	1291.0	1280.2	1261.9	1245.7
22.5°	1455.0	1444.9	1424.7	1406.4	1380.8	1346.3	1309.2	1277.5	1253.8	1228.9	1201.2
25°	1594.1	1571.2	1542.1	1498.9	1465.8	1405.1	1343.0	1282.9	1232.2	1193.1	1146.5
27.5°	1725.1	1676.5	1621.8	1554.3	1493.5	1412.5	1333.5	1264.0	1197.8	1135.0	1081.7
30°	1834.5	1750.1	1661.0	1566.4	1480.0	1382.1	1290.3	1211.3	1136.3	1062.1	1011.4
32.5°	1916.9	1795.3	1676.5	1555.6	1449.0	1334.2	1228.9	1144.5	1059.4	981.1	922.3
35°	1991.1	1827.1	1671.8	1526.6	1400.3	1273.4	1160.0	1065.5	972.3	888.6	821.0
37.5°	2044.5	1837.9	1651.5	1484.7	1338.2	1199.1	1076.3	975.7	875.7	790.7	716.4
40°	2085.7	1832.5	1613.0	1420.6	1253.2	1108.7	988.5	883.2	783.2	698.1	620.5
42.5°	2113.4	1812.2	1555.0	1347.7	1182.3	1031.0	913.5	802.8	702.9	613.8	528.0
45°	2149.1	1804.1	1519.2	1293.0	1118.1	965.5	839.9	731.9	627.9	534.8	453.1
47.5°	2182.9	1799.4	1490.2	1247.8	1060.1	906.1	781.9	668.4	563.8	472.6	398.4
50°	2203.2	1792.0	1459.8	1193.1	995.2	845.3	726.5	611.7	506.4	419.3	353.1
52.5°	2209.2	1777.1	1419.9	1130.9	939.2	793.4	669.8	555.0	453.7	375.4	314.0
55°	2204.5	1748.1	1365.9	1080.3	881.8	736.0	612.4	501.0	409.2	335.6	286.3
57.5°	2181.5	1690.0	1296.4	1016.2	816.3	663.7	542.2	440.2	358.5	299.8	262.0
60°	2130.2	1606.3	1211.3	926.4	722.5	578.0	463.2	375.4	306.5	264.0	239.0
62.5°	2018.2	1485.4	1087.7	799.4	596.9	463.9	363.9	299.1	252.5	230.2	215.4
63°	1985.1	1443.6	1051.3	765.7	575.3	438.2	341.6	282.9	241.0	222.8	210.7
65°	1810.9	1250.5	888.6	615.8	445.6	332.2	260.6	222.1	199.9	193.1	189.7
67.5°	1484.1	973.0	625.2	413.2	299.1	229.6	192.4	177.6	169.5	168.8	170.8
70°	1048.6	645.5	386.9	264.7	205.9	173.5	159.3	152.6	148.5	149.9	153.9
72.5°	681.9	378.8	244.4	193.8	167.4	152.6	142.5	140.4	139.1	137.7	139.1
75°	360.6	237.0	185.0	162.0	146.5	134.4	127.6	124.9	125.6	125.6	125.6
77.5°	223.5	180.3	158.0	143.1	131.0	118.8	112.1	110.1	110.7	112.1	112.8
80°	171.5	157.3	139.1	128.3	110.7	100.6	97.2	96.6	97.9	97.9	99.9
82.5°	125.6	121.5	114.8	101.3	87.8	81.0	80.3	83.0	80.3	79.7	81.0
85°	73.6	68.9	74.9	64.1	58.7	54.7	57.4	62.8	65.5	62.1	60.8
87.5°	23.6	16.2	23.6	26.3	23.6	20.3	25.7	30.4	31.1	29.7	33.8
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: P145928

CATALOG NUMBER: VPL-E04-LED-E1-CPL-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8
2.5°	1130.3	1135.0	1130.3	1132.3	1131.6	1130.3	1132.3	1129.6	1128.2	1132.3	1131.6
5°	1172.8	1173.5	1167.4	1168.1	1167.4	1162.0	1162.0	1159.3	1155.9	1156.6	1155.3
7.5°	1207.2	1205.9	1201.2	1199.1	1193.1	1189.0	1186.3	1182.3	1179.6	1176.9	1175.5
10°	1233.6	1230.2	1226.8	1220.7	1214.7	1211.3	1203.9	1197.8	1195.8	1191.7	1189.0
12.5°	1256.5	1250.5	1245.1	1237.6	1230.2	1224.8	1216.0	1211.3	1207.9	1202.5	1198.5
15°	1269.4	1257.9	1247.8	1236.3	1228.2	1220.1	1209.9	1207.9	1203.2	1197.8	1190.4
17.5°	1253.8	1237.6	1218.7	1206.6	1194.4	1182.3	1172.1	1172.1	1170.1	1164.0	1151.2
20°	1222.1	1197.8	1175.5	1155.9	1143.8	1126.2	1120.1	1110.7	1103.9	1093.1	1076.9
22.5°	1170.1	1144.5	1115.4	1095.8	1074.9	1055.3	1043.2	1028.3	1022.9	1005.4	983.8
25°	1112.0	1074.9	1043.8	1018.2	989.2	966.2	949.3	929.1	915.6	898.7	871.7
27.5°	1043.2	1004.7	969.6	941.2	910.8	879.1	848.0	824.4	800.1	780.5	765.0
30°	968.9	929.1	885.9	852.8	817.7	777.8	752.2	720.4	701.5	679.9	659.7
32.5°	871.7	836.6	785.9	747.4	704.2	673.2	652.2	621.9	599.6	581.3	569.9
35°	765.0	712.3	661.7	632.7	602.9	578.0	548.9	525.3	510.4	491.5	481.4
37.5°	648.9	587.4	544.2	518.5	488.2	476.0	457.8	443.6	430.1	417.3	409.2
40°	544.9	488.2	449.0	427.4	407.1	393.6	382.2	376.1	367.3	357.2	351.1
42.5°	458.5	413.2	374.7	354.5	338.9	337.6	330.2	325.4	322.1	316.0	306.5
45°	390.9	349.7	316.7	300.5	293.7	294.4	294.4	290.3	290.3	288.3	282.2
47.5°	345.7	308.6	284.3	273.5	270.8	271.4	269.4	268.1	268.7	268.1	264.7
50°	310.6	278.9	258.6	254.5	253.9	253.2	250.5	248.5	247.8	249.1	248.5
52.5°	274.8	248.5	237.0	235.6	236.3	236.3	235.6	235.0	236.3	237.7	235.6
55°	254.5	235.6	228.2	228.2	228.2	228.2	227.5	226.9	228.9	230.9	227.5
57.5°	235.6	222.1	219.4	219.4	219.4	218.1	218.1	218.8	221.5	225.5	221.5
60°	221.5	214.7	214.7	215.4	214.7	212.0	210.0	210.0	213.4	218.8	215.4
62.5°	208.0	204.6	205.9	205.3	203.9	200.5	197.8	197.8	201.9	207.3	208.6
63°	204.6	201.9	203.2	202.6	201.2	198.5	195.8	195.8	199.2	204.6	206.6
65°	189.7	190.4	191.1	191.8	191.1	190.4	187.0	185.7	188.4	192.4	195.1
67.5°	172.2	173.5	174.9	178.3	176.9	176.9	174.9	173.5	174.2	176.2	178.3
70°	156.0	157.3	159.3	160.7	161.4	162.0	160.7	158.7	159.3	160.0	161.4
72.5°	140.4	141.8	143.1	145.8	145.8	145.8	144.5	143.1	143.8	145.2	146.5
75°	126.3	126.9	128.3	130.3	131.0	129.6	129.6	128.3	129.0	131.0	132.3
77.5°	112.1	110.7	111.4	112.8	114.8	114.8	115.5	114.8	116.1	117.5	118.8
80°	95.9	94.5	93.2	93.9	96.6	99.9	103.3	103.3	105.3	106.0	108.0
82.5°	76.3	74.9	74.3	76.3	75.6	80.3	87.8	91.8	94.5	97.2	98.6
85°	59.4	56.0	57.4	57.4	56.0	63.5	70.2	75.6	76.3	80.3	81.0
87.5°	35.1	33.8	32.4	31.1	35.8	43.2	49.3	51.3	52.7	54.7	56.7
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: P145928

CATALOG NUMBER: VPL-E04-LED-E1-CPL-8030

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8
2.5°	1126.2	1131.6	1130.3	1129.6	1130.3	1129.6	1127.6	1128.2	1126.9	1127.6	1126.2
5°	1147.8	1150.5	1148.5	1145.1	1145.1	1140.4	1137.0	1134.3	1130.9	1129.6	1126.9
7.5°	1168.8	1166.7	1164.0	1158.0	1154.6	1148.5	1143.8	1138.4	1135.0	1130.9	1126.2
10°	1181.6	1177.5	1172.1	1164.7	1155.3	1149.9	1143.1	1135.0	1130.9	1128.9	1124.2
12.5°	1187.7	1176.9	1168.1	1154.6	1141.1	1130.9	1123.5	1115.4	1113.4	1110.7	1107.3
15°	1173.5	1158.0	1135.7	1117.4	1099.9	1085.7	1079.6	1070.9	1068.8	1068.2	1067.5
17.5°	1125.5	1101.9	1080.3	1056.0	1040.5	1027.6	1022.2	1020.2	1016.8	1015.5	1016.2
20°	1048.6	1028.3	1006.7	998.6	980.4	977.0	968.9	963.5	957.4	955.4	952.0
22.5°	958.8	933.8	920.3	914.2	906.8	889.2	885.2	879.8	871.7	865.6	864.2
25°	854.1	833.9	833.2	819.0	812.9	803.5	792.7	785.9	781.2	773.8	768.4
27.5°	747.4	740.0	727.2	716.4	712.3	706.9	690.7	687.3	681.9	675.9	669.8
30°	648.2	642.8	630.6	620.5	614.4	603.6	588.1	589.4	578.6	570.5	565.1
32.5°	551.6	547.6	536.1	533.4	513.8	508.4	492.2	480.1	469.3	461.2	454.4
35°	464.5	453.7	454.4	442.3	431.4	415.2	398.4	382.8	374.1	370.0	363.9
37.5°	401.7	391.6	381.5	368.0	355.8	344.3	334.2	329.5	324.1	325.4	326.1
40°	345.0	337.6	330.2	320.7	313.3	308.6	305.9	305.9	306.5	309.9	312.6
42.5°	304.5	298.4	294.4	291.0	292.4	292.4	294.4	297.8	301.1	305.9	308.6
45°	277.5	274.1	272.8	274.1	278.2	281.6	286.3	291.7	297.1	301.8	303.8
47.5°	261.3	259.3	259.3	262.6	268.7	274.1	281.6	287.0	293.0	297.1	298.4
50°	243.7	243.1	243.1	245.8	251.2	257.9	265.4	270.8	276.2	279.5	280.9
52.5°	233.6	231.6	230.9	234.3	239.0	245.8	253.2	258.6	262.6	265.4	266.0
55°	224.8	222.8	221.5	225.5	230.9	237.0	245.8	251.8	255.9	259.3	262.0
57.5°	217.4	215.4	214.0	218.8	224.2	231.6	239.0	245.8	251.2	255.2	257.9
60°	211.3	208.6	207.3	212.7	218.1	225.5	232.9	240.4	247.8	252.5	253.9
62.5°	203.9	201.9	199.9	203.2	205.9	211.3	218.1	225.5	232.3	237.0	237.0
63°	201.9	201.2	198.5	201.2	203.9	208.6	215.4	222.1	228.9	234.3	233.6
65°	193.1	193.1	191.8	194.5	197.2	201.9	207.3	214.7	220.8	224.8	225.5
67.5°	178.9	179.6	181.0	183.7	189.1	193.8	199.9	206.6	212.0	214.7	216.1
70°	162.7	164.1	166.8	170.8	175.6	179.6	183.7	190.4	195.1	197.8	199.2
72.5°	147.2	150.6	152.6	156.0	158.7	162.7	166.1	172.8	176.9	178.9	182.3
75°	133.0	135.7	137.1	139.1	141.8	143.1	147.2	149.9	155.3	158.0	162.0
77.5°	119.5	120.9	122.9	126.3	126.9	129.0	130.3	134.4	137.1	139.8	143.1
80°	107.4	108.7	111.4	113.4	114.1	115.5	116.1	115.5	114.8	112.8	115.5
82.5°	96.6	97.9	101.3	103.3	105.3	105.3	104.7	97.2	93.9	95.2	97.2
85°	79.7	81.0	84.4	88.5	89.1	88.5	89.1	81.7	77.0	74.9	77.0
87.5°	50.0	48.6	60.1	65.5	61.4	62.8	63.5	59.4	55.4	47.3	49.3
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: P145928
 CATALOG NUMBER: VPL-E04-LED-E1-CPL-8030

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	0°
2.5°	1127.6	1122.8	1123.5	1124.9	1124.9	1126.9	1124.2	1120.8	1122.8	1119.5	1118.8	2.5°
5°	1126.9	1120.8	1120.8	1122.2	1120.8	1122.2	1120.1	1116.8	1118.8	1114.7	1114.1	5°
7.5°	1124.2	1120.8	1122.2	1123.5	1121.5	1122.2	1121.5	1116.8	1117.4	1115.4	1110.7	7.5°
10°	1122.8	1120.8	1123.5	1127.6	1127.6	1128.2	1126.2	1120.8	1117.4	1115.4	1111.4	10°
12.5°	1108.7	1111.4	1116.8	1126.2	1129.6	1135.0	1137.7	1135.0	1136.3	1133.6	1132.3	12.5°
15°	1068.2	1074.9	1083.7	1097.9	1108.0	1120.1	1135.0	1141.8	1154.6	1164.7	1171.5	15°
17.5°	1019.5	1024.3	1033.7	1049.9	1062.8	1087.1	1107.3	1130.3	1155.3	1182.3	1205.9	17.5°
20°	959.4	956.1	970.9	988.5	1010.8	1037.8	1067.5	1101.9	1143.1	1186.3	1227.5	20°
22.5°	871.0	871.0	886.5	907.5	934.5	965.5	1006.7	1043.8	1097.9	1160.7	1221.4	22.5°
25°	769.7	771.7	782.5	806.2	825.1	869.6	908.1	956.1	1020.9	1089.8	1170.8	25°
27.5°	661.7	675.2	672.5	697.5	722.5	766.3	819.0	867.6	939.9	1013.5	1106.0	27.5°
30°	563.8	561.8	561.1	590.8	615.8	655.6	698.8	760.3	833.2	927.7	1034.4	30°
32.5°	442.3	449.7	455.1	472.6	499.6	536.8	583.4	647.5	735.3	830.5	950.7	32.5°
35°	365.3	367.3	374.7	384.9	408.5	439.6	488.2	544.9	621.9	720.4	848.0	35°
37.5°	327.5	329.5	337.6	347.0	363.9	386.9	420.0	463.9	534.8	626.6	745.4	37.5°
40°	315.3	317.3	322.1	330.8	346.4	366.0	392.3	426.0	477.4	548.9	652.9	40°
42.5°	309.9	309.9	310.6	317.3	332.9	355.8	384.2	414.6	452.4	506.4	590.8	42.5°
45°	303.8	303.8	303.2	307.9	320.0	346.4	380.8	417.9	459.1	505.7	571.9	45°
47.5°	298.4	297.1	295.7	297.8	307.9	334.9	374.7	420.0	472.6	530.7	597.5	47.5°
50°	279.5	279.5	278.9	279.5	289.0	317.3	363.3	417.9	484.8	559.7	640.8	50°
52.5°	266.0	266.7	267.4	267.4	274.8	303.8	354.5	418.6	498.3	588.1	690.7	52.5°
55°	262.6	264.0	264.0	262.6	268.7	295.1	346.4	416.6	507.7	619.8	744.1	55°
57.5°	258.6	259.3	259.9	258.6	262.6	285.6	334.9	407.1	505.0	632.0	783.9	57.5°
60°	253.2	250.5	249.8	247.8	250.5	268.7	314.6	386.9	488.8	626.6	797.4	60°
62.5°	238.3	236.3	234.3	232.3	234.3	247.8	292.4	361.9	461.8	605.0	786.6	62.5°
63°	235.0	233.6	231.6	229.6	229.6	244.4	284.9	355.8	455.1	598.9	782.5	63°
65°	225.5	224.8	223.5	221.5	220.8	232.3	268.1	328.1	423.3	571.9	756.9	65°
67.5°	214.7	214.7	214.0	211.3	208.0	214.7	239.7	287.0	368.0	502.3	693.4	67.5°
70°	199.2	199.2	198.5	197.2	193.1	197.8	214.0	245.1	303.2	410.5	581.3	70°
72.5°	183.7	183.7	185.7	185.0	185.7	186.4	194.5	211.3	246.4	319.4	439.6	72.5°
75°	163.4	166.8	167.4	168.8	169.5	168.8	172.8	183.0	203.2	245.1	320.7	75°
77.5°	146.5	151.2	150.6	149.2	148.5	149.2	148.5	153.3	168.1	194.5	237.7	77.5°
80°	120.9	125.6	125.6	124.9	123.6	124.9	123.6	128.3	140.4	163.4	189.1	80°
82.5°	99.3	102.6	104.7	106.0	104.7	110.1	110.1	108.7	118.2	138.4	159.3	82.5°
85°	79.7	83.0	85.1	87.8	89.1	87.8	87.1	85.7	91.2	107.4	121.5	85°
87.5°	50.6	53.3	53.3	54.0	54.0	56.0	52.0	47.3	43.2	61.4	64.1	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: P145928

NUMBER: VPL-E04-LED-E1-CPL-8030

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
1116.8	1116.8	1116.8	1116.8	1116.8	1116.8	1116.8
1116.8	1116.8	1117.4	1115.4	1117.4	1117.4	1115.4
1112.0	1110.7	1110.7	1110.0	1111.4	1110.7	1110.0
1108.0	1108.0	1105.3	1103.3	1102.6	1105.3	1103.9
1106.6	1105.3	1104.6	1103.3	1103.9	1106.0	1107.3
1130.9	1126.2	1127.6	1126.9	1127.6	1129.6	1133.6
1175.5	1175.5	1178.9	1171.5	1174.8	1178.2	1183.6
1225.5	1237.6	1243.7	1243.0	1244.4	1247.1	1253.2
1268.0	1306.5	1333.5	1340.3	1358.5	1362.5	1353.1
1286.9	1355.8	1416.6	1457.1	1502.3	1520.5	1525.9
1248.4	1347.7	1447.6	1540.8	1629.9	1681.2	1726.5
1208.6	1326.1	1459.1	1598.2	1743.3	1874.3	1972.2
1153.2	1308.5	1488.1	1675.8	1868.3	2050.6	2214.0
1092.5	1280.2	1490.8	1719.0	1956.7	2183.6	2381.4
1005.4	1214.0	1447.6	1712.3	1987.8	2272.0	2519.1
905.4	1108.7	1370.6	1673.1	1985.7	2317.3	2613.7
798.8	1006.7	1282.2	1606.3	1959.4	2331.4	2679.8
718.4	924.3	1194.4	1542.8	1920.2	2322.0	2711.6
677.2	853.4	1122.8	1480.7	1876.4	2299.0	2725.1
685.3	834.5	1080.3	1429.4	1837.2	2274.0	2721.7
730.6	862.9	1079.6	1410.5	1812.2	2251.1	2712.2
798.8	927.0	1118.8	1432.8	1825.7	2249.1	2711.6
875.7	1016.8	1213.3	1492.9	1883.1	2285.5	2727.8
950.0	1126.2	1334.9	1627.2	1991.8	2376.7	2793.3
993.9	1226.2	1490.8	1816.9	2159.3	2536.7	2937.1
1004.0	1286.2	1629.2	2003.3	2388.8	2768.3	3161.3
1003.3	1292.3	1652.9	2041.8	2435.4	2821.6	3218.6
987.8	1304.5	1716.3	2168.7	2622.4	3050.5	3458.3
939.2	1282.9	1751.4	2286.9	2808.1	3303.0	3818.9
827.8	1184.3	1710.3	2325.4	2918.9	3470.5	4059.3
648.2	977.0	1476.6	2125.5	2769.0	3320.6	4065.3
455.8	690.7	1136.3	1745.4	2263.2	2806.1	3631.2
317.3	447.7	738.0	1174.2	1633.3	2047.2	2699.4
232.3	297.8	442.3	702.2	991.2	1279.5	1675.2
178.9	214.7	282.9	424.0	559.7	716.4	1010.1
125.6	141.8	174.9	262.0	375.4	512.5	740.0
54.7	64.1	84.4	154.6	253.9	244.4	232.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)