

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: STREETWORKS

Report Number: P158880

Luminaire Tested: **VST-E04-LED-E-U-SLL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158880
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33715)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E04-LED-E-U-SLL
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (84) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10749.1 lumens
Efficiency: N/A
Efficacy: 110.6 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: 28.75 FT

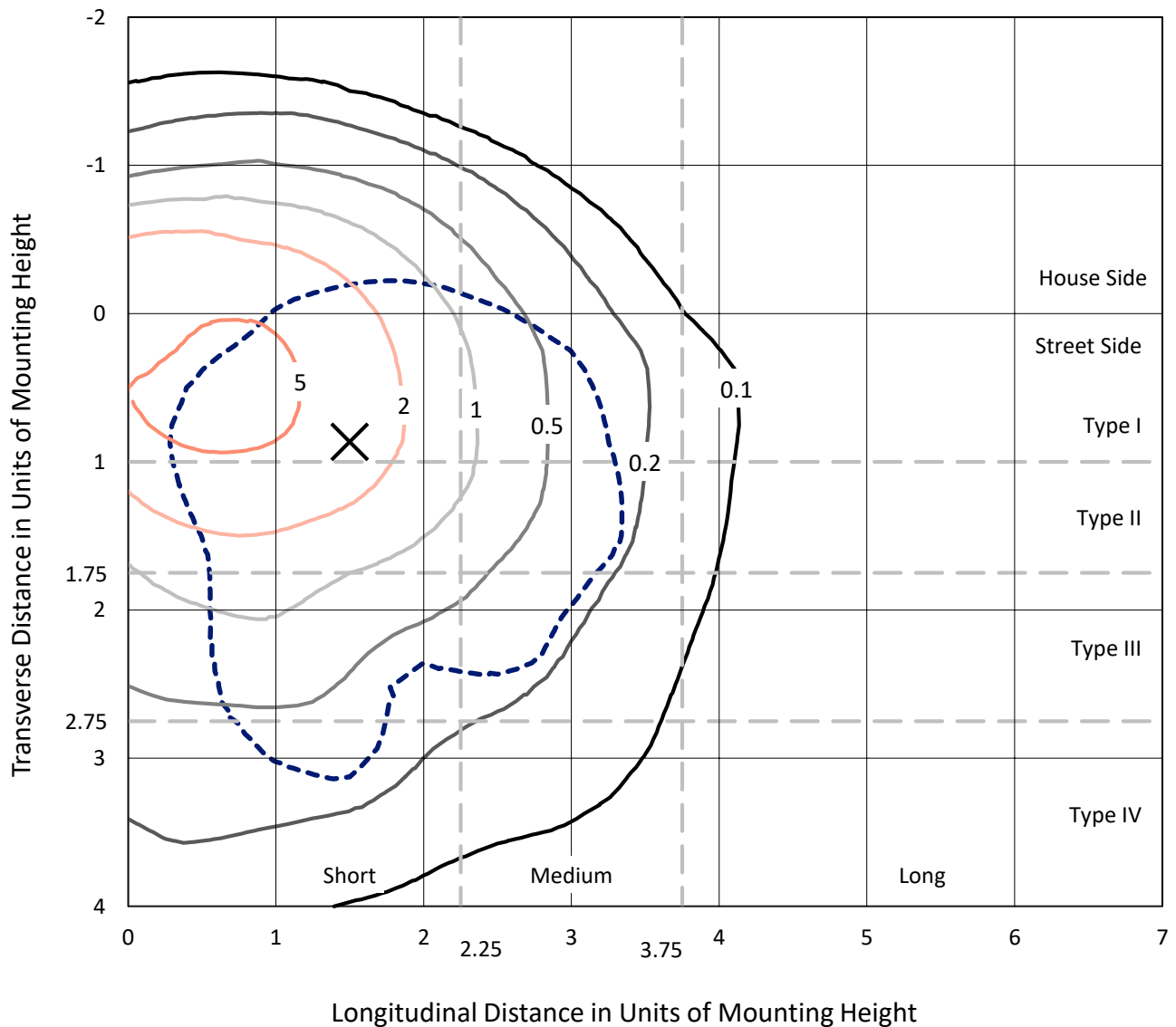


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

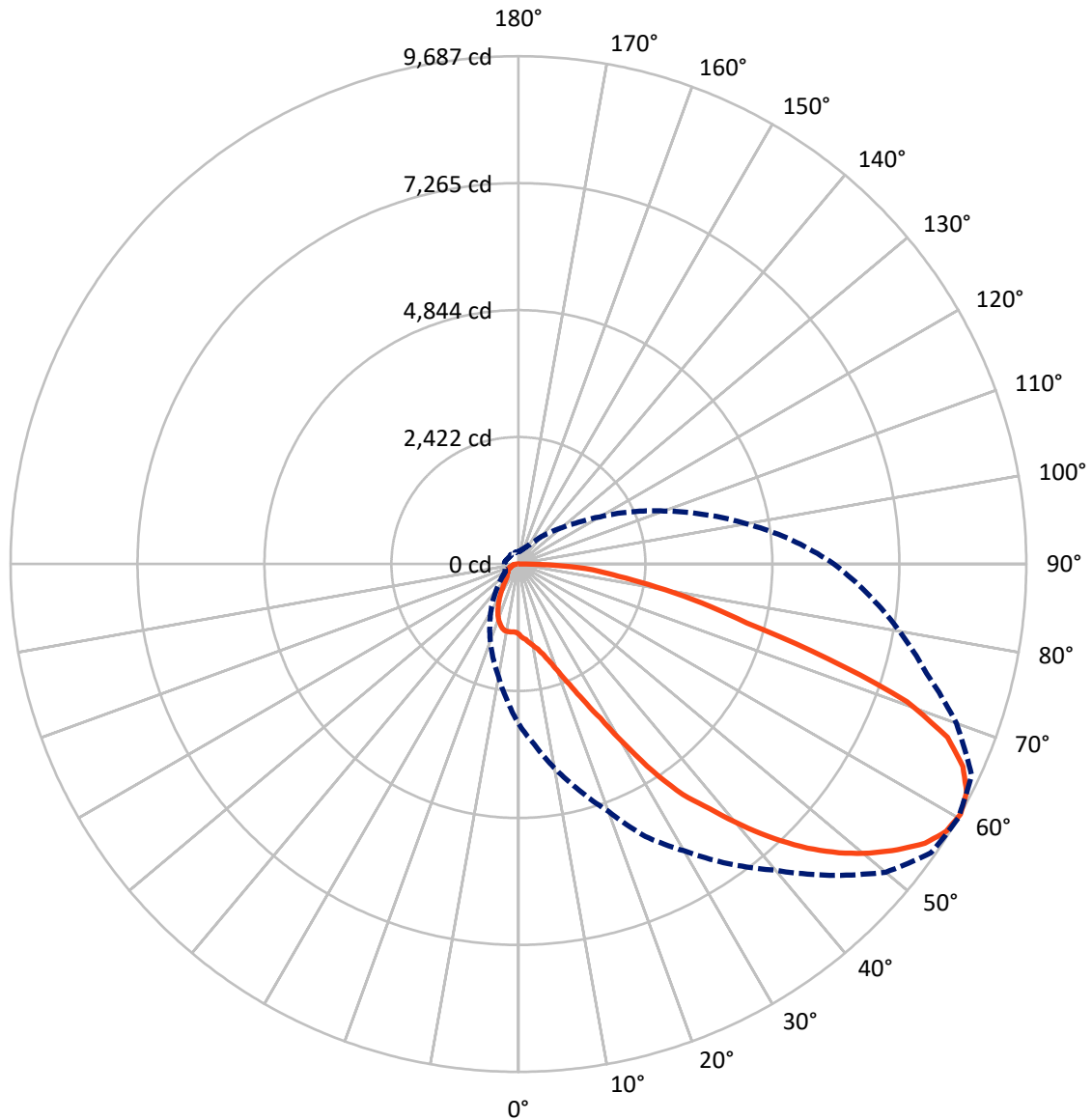


Based on 20 foot mounting height. Maximum calculated value = 7.7 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2420.4	0.0	2420.4
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	8328.8	0.0	8328.8
	% Fixture	77.5	0.0	77.5
Total	Lumens	10749.1	0.0	10749.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.2
10°-20°	425.8	4.0
20°-30°	808.0	7.5
30°-40°	1272.5	11.8
40°-50°	1776.1	16.5
50°-60°	2196.7	20.4
60°-70°	2277.0	21.2
70°-80°	1432.8	13.3
80°-90°	428.3	4.0
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°	10749.1	100.0
0°-180°	10749.1	100.0



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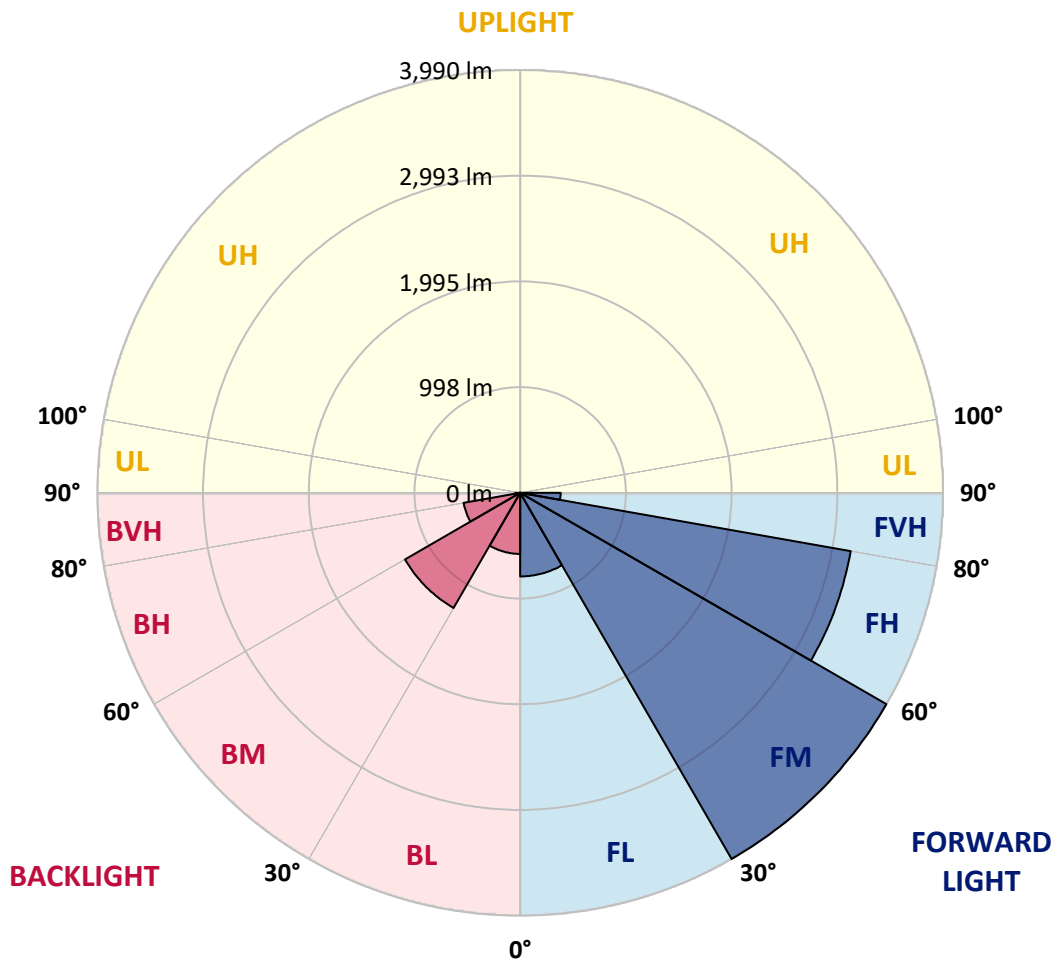
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	789.1	7.3			
FM (30°-60°)	3990.2	37.1			
FH (60°-80°)	3167.7	29.5			G2/5000
FVH (80°-90°)	381.7	3.6			G3/500
BL (0°-30°)	576.6	5.4	B2/1000		
BM (30°-60°)	1255.1	11.7	B2/2500		
BH (60°-80°)	542.1	5.0	B2/1000		G2/1000
BVH (80°-90°)	46.6	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8
2.5°	1416.0	1414.4	1414.4	1414.4	1413.6	1412.0	1414.4	1413.6	1409.6	1407.2	1409.6
5°	1434.4	1435.2	1437.6	1438.4	1438.4	1440.8	1447.2	1448.0	1447.2	1448.8	1452.8
7.5°	1452.0	1456.0	1458.4	1462.4	1467.2	1471.2	1482.4	1493.6	1500.8	1506.4	1508.0
10°	1480.8	1487.2	1494.4	1504.8	1516.0	1536.0	1545.6	1556.8	1564.0	1575.2	1577.6
12.5°	1554.4	1562.4	1567.2	1583.2	1597.6	1616.8	1630.4	1633.6	1650.4	1660.0	1671.2
15°	1678.4	1690.4	1707.2	1716.8	1732.8	1749.6	1761.6	1777.6	1780.0	1792.8	1801.6
17.5°	1830.4	1847.2	1881.6	1904.8	1925.6	1942.4	1966.4	1984.8	1988.8	2003.2	1984.8
20°	2043.2	2084.0	2089.6	2136.0	2154.4	2188.0	2236.0	2244.8	2268.0	2244.8	2231.2
22.5°	2331.2	2395.2	2412.8	2457.6	2480.0	2531.2	2545.6	2592.8	2608.8	2591.2	2554.4
25°	2662.4	2761.6	2812.8	2881.6	2892.8	2997.6	3008.8	3064.0	3034.4	2992.0	2992.8
27.5°	2906.4	3075.2	3207.2	3324.8	3407.2	3525.6	3617.6	3643.2	3615.2	3560.0	3540.8
30°	3045.6	3236.8	3426.4	3588.8	3780.8	3961.6	4149.6	4243.2	4259.2	4288.0	4172.0
32.5°	3135.2	3380.8	3606.4	3807.2	4004.0	4236.8	4488.8	4729.6	4932.0	5084.8	5012.8
35°	3210.4	3513.6	3802.4	4045.6	4278.4	4532.0	4786.4	5070.4	5405.6	5601.6	5642.4
37.5°	3240.8	3611.2	3964.8	4276.8	4604.0	4889.6	5142.4	5395.2	5747.2	6096.8	6204.8
40°	3235.2	3659.2	4061.6	4453.6	4854.4	5211.2	5507.2	5806.4	6218.4	6627.2	6803.2
42.5°	3197.6	3666.4	4123.2	4571.2	5028.0	5502.4	5880.8	6225.6	6620.8	7144.8	7393.6
45°	3150.4	3641.6	4136.0	4631.2	5156.8	5705.6	6184.0	6610.4	7073.6	7591.2	7892.0
47.5°	3086.4	3602.4	4120.0	4652.0	5214.4	5836.0	6398.4	6911.2	7420.8	8016.8	8398.4
50°	3016.8	3546.4	4087.2	4636.8	5228.8	5907.2	6520.8	7104.8	7700.0	8343.2	8825.6
52.5°	2968.0	3486.4	4057.6	4605.6	5214.4	5928.8	6565.6	7208.8	7871.2	8536.0	9112.0
55°	2908.0	3406.4	3978.4	4532.8	5161.6	5916.8	6560.8	7244.8	7918.4	8610.4	9268.0
57.5°	2912.0	3369.6	3911.2	4445.6	5053.6	5805.6	6470.4	7208.8	7844.0	8562.4	9273.6
60°	3038.4	3448.8	3946.4	4463.2	5021.6	5735.2	6316.8	6976.8	7625.6	8396.8	9144.0
62.5°	3299.2	3675.2	4127.2	4639.2	5201.6	5876.0	6247.2	6591.2	7167.2	8092.0	8923.2
65°	3610.4	3949.6	4341.6	4828.8	5459.2	6104.8	6208.0	6277.6	6568.8	7499.2	8508.8
67.5°	3921.6	4224.8	4532.8	4936.8	5605.6	6170.4	6048.0	5882.4	6039.2	6810.4	7694.4
70°	4033.6	4436.0	4638.4	4916.0	5494.4	6017.6	5789.6	5372.8	5427.2	6128.0	6774.4
72.5°	3865.6	4439.2	4506.4	4609.6	4999.2	5491.2	5250.4	4714.4	4703.2	5238.4	5760.8
75°	3242.4	4049.6	4048.8	4010.4	4098.4	4378.4	4253.6	3930.4	4067.2	4488.8	4660.8
77.5°	2311.2	3160.0	3200.0	2941.6	2935.2	3061.6	3136.8	3512.8	4008.8	4245.6	4191.2
80°	1452.0	2132.0	2304.0	1984.8	1916.8	2096.0	2560.8	3108.0	3718.4	3931.2	3748.0
82.5°	874.4	1373.6	1740.0	1559.2	1543.2	1869.6	2383.2	2596.0	2779.2	3005.6	2699.2
85°	593.6	915.2	1190.4	1226.4	1366.4	1704.0	1927.2	1832.8	1837.6	1778.4	1620.0
87.5°	113.6	249.6	408.0	497.6	552.0	741.6	806.4	730.4	771.2	564.0	616.8
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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CATALOG NUMBER: VST-E04-LED-E-U-SLL

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8
2.5°	1405.6	1405.6	1405.6	1401.6	1402.4	1396.8	1394.4	1394.4	1392.0	1392.0	1391.2
5°	1449.6	1444.8	1447.2	1446.4	1446.4	1438.4	1434.4	1434.4	1424.0	1424.8	1421.6
7.5°	1515.2	1514.4	1516.8	1512.0	1505.6	1499.2	1492.8	1489.6	1475.2	1466.4	1460.8
10°	1589.6	1588.8	1591.2	1590.4	1579.2	1567.2	1549.6	1536.8	1519.2	1505.6	1492.0
12.5°	1671.2	1670.4	1668.8	1661.6	1649.6	1630.4	1608.0	1586.4	1560.0	1542.4	1522.4
15°	1798.4	1796.0	1786.4	1776.0	1763.2	1733.6	1694.4	1663.2	1628.0	1597.6	1564.8
17.5°	1986.4	1966.4	1964.8	1941.6	1907.2	1868.0	1831.2	1779.2	1728.8	1683.2	1638.4
20°	2245.6	2199.2	2186.4	2160.0	2114.4	2073.6	1993.6	1924.0	1855.2	1792.8	1736.0
22.5°	2528.0	2494.4	2463.2	2420.0	2357.6	2298.4	2196.8	2109.6	2021.6	1941.6	1878.4
25°	2922.4	2864.0	2808.0	2739.2	2652.8	2582.4	2466.4	2378.4	2263.2	2190.4	2099.2
27.5°	3432.0	3332.0	3237.6	3178.4	3026.4	2924.0	2776.0	2662.4	2523.2	2424.8	2316.8
30°	4095.2	3979.2	3839.2	3634.4	3453.6	3250.4	3067.2	2921.6	2773.6	2636.0	2511.2
32.5°	4917.6	4712.8	4491.2	4166.4	3869.6	3580.0	3336.0	3156.8	3005.6	2834.4	2658.4
35°	5612.8	5401.6	5087.2	4674.4	4308.0	3976.8	3684.8	3440.0	3242.4	3025.6	2792.8
37.5°	6161.6	5920.8	5625.6	5187.2	4800.0	4423.2	4116.8	3804.8	3545.6	3247.2	2952.8
40°	6790.4	6548.8	6224.0	5769.6	5311.2	4902.4	4543.2	4220.8	3902.4	3538.4	3160.0
42.5°	7338.4	7164.0	6835.2	6365.6	5857.6	5402.4	5009.6	4640.8	4224.8	3817.6	3369.6
45°	7909.6	7732.0	7420.0	6928.8	6388.8	5881.6	5412.0	5015.2	4524.0	4039.2	3526.4
47.5°	8414.4	8232.0	7916.8	7428.8	6855.2	6320.8	5804.0	5324.0	4753.6	4196.8	3628.8
50°	8896.0	8672.8	8384.0	7897.6	7284.8	6713.6	6152.8	5536.8	4932.0	4307.2	3698.4
52.5°	9338.4	9054.4	8780.8	8280.0	7617.6	7020.8	6395.2	5717.6	5041.6	4394.4	3745.6
55°	9589.6	9406.4	9079.2	8587.2	7854.4	7232.0	6548.8	5844.8	5150.4	4456.0	3765.6
57.5°	9667.2	9622.4	9348.0	8764.8	7993.6	7348.0	6652.8	5945.6	5223.2	4473.6	3737.6
60°	9605.6	9687.2	9536.8	8889.6	8056.8	7382.4	6704.0	6017.6	5236.0	4417.6	3652.8
62.5°	9408.0	9593.6	9574.4	8931.2	8024.0	7339.2	6698.4	5980.8	5116.0	4243.2	3462.4
65°	9083.2	9316.8	9399.2	8776.8	7839.2	7181.6	6556.0	5749.6	4782.4	3902.4	3143.2
67.5°	8472.0	8825.6	8905.6	8271.2	7356.0	6745.6	6145.6	5269.6	4164.8	3375.2	2644.8
70°	7247.2	7865.6	7973.6	7308.0	6504.0	5968.0	5459.2	4508.8	3468.0	2707.2	2029.6
72.5°	5785.6	6174.4	6395.2	5936.8	5338.4	4949.6	4564.0	3459.2	2616.8	1997.6	1396.8
75°	4523.2	4500.0	4697.6	4392.8	4040.8	3859.2	3569.6	2413.6	1752.8	1323.2	884.0
77.5°	3867.2	3569.6	3344.8	3130.4	2921.6	2864.0	2586.4	1497.6	1083.2	792.8	528.8
80°	3214.4	2671.2	2260.8	1959.2	1884.8	1998.4	1692.8	883.2	641.6	455.2	332.0
82.5°	2296.8	1921.6	1564.0	1372.8	1245.6	1426.4	998.4	490.4	348.0	272.8	220.0
85°	1488.8	1423.2	1408.0	1345.6	1191.2	1124.8	758.4	422.4	260.8	169.6	136.8
87.5°	572.8	734.4	847.2	908.0	981.6	874.4	395.2	145.6	143.2	88.0	66.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8
2.5°	1385.6	1382.4	1381.6	1379.2	1377.6	1377.6	1373.6	1300.8	1300.0	1300.0	1299.2
5°	1415.2	1411.2	1407.2	1406.4	1403.2	1403.2	1399.2	1326.4	1326.4	1326.4	1324.8
7.5°	1455.2	1447.2	1442.4	1440.0	1435.2	1437.6	1440.8	1367.2	1368.0	1367.2	1368.8
10°	1484.0	1479.2	1473.6	1472.0	1468.8	1471.2	1476.0	1403.2	1405.6	1406.4	1408.0
12.5°	1512.0	1504.0	1496.8	1494.4	1492.8	1499.2	1504.8	1434.4	1436.8	1439.2	1439.2
15°	1546.4	1532.8	1523.2	1517.6	1514.4	1520.8	1528.8	1459.2	1460.0	1462.4	1461.6
17.5°	1604.8	1584.8	1562.4	1558.4	1548.0	1550.4	1552.0	1474.4	1471.2	1465.6	1456.0
20°	1695.2	1664.8	1634.4	1621.6	1600.8	1592.0	1574.4	1475.2	1455.2	1438.4	1424.0
22.5°	1824.8	1780.0	1747.2	1725.6	1683.2	1653.6	1605.6	1471.2	1433.6	1404.8	1382.4
25°	2034.4	1980.8	1930.4	1876.0	1809.6	1750.4	1680.0	1506.4	1448.0	1398.4	1355.2
27.5°	2238.4	2153.6	2076.0	1994.4	1900.8	1812.0	1712.8	1517.6	1451.2	1387.2	1316.8
30°	2391.2	2268.0	2150.4	2031.2	1908.8	1793.6	1681.6	1479.2	1400.0	1328.0	1253.6
32.5°	2484.0	2324.0	2171.2	2023.2	1879.2	1749.6	1624.0	1412.8	1325.6	1240.8	1161.6
35°	2572.0	2373.6	2184.0	2009.6	1844.8	1700.8	1565.6	1335.2	1231.2	1140.8	1040.8
37.5°	2680.8	2425.6	2192.0	1984.8	1794.4	1629.6	1480.8	1237.6	1133.6	1022.4	928.0
40°	2811.2	2479.2	2184.0	1935.2	1716.0	1536.0	1378.4	1135.2	1019.2	911.2	818.4
42.5°	2935.2	2526.4	2163.2	1868.8	1630.4	1438.4	1284.8	1044.0	928.0	817.6	725.6
45°	3027.2	2566.4	2152.8	1822.4	1564.8	1372.0	1202.4	970.4	848.0	736.8	643.2
47.5°	3091.2	2590.4	2148.0	1796.8	1519.2	1303.2	1127.2	896.8	768.0	656.0	564.8
50°	3124.8	2589.6	2136.0	1768.8	1452.0	1220.8	1049.6	822.4	694.4	584.8	501.6
52.5°	3133.6	2575.2	2110.4	1717.6	1370.4	1138.4	966.4	744.8	629.6	524.8	440.8
55°	3113.6	2540.0	2056.8	1632.0	1283.2	1051.2	890.4	684.0	566.4	467.2	401.6
57.5°	3056.8	2477.6	1956.0	1514.4	1191.2	970.4	803.2	610.4	497.6	414.4	360.0
60°	2951.2	2345.6	1798.4	1375.2	1074.4	847.2	683.2	514.4	424.8	362.4	318.4
62.5°	2756.0	2138.4	1576.8	1183.2	906.4	687.2	545.6	410.4	343.2	302.4	275.2
65°	2441.6	1826.4	1320.0	932.0	688.8	500.0	405.6	308.8	260.0	235.2	227.2
67.5°	1992.8	1410.4	960.0	647.2	466.4	350.4	282.4	225.6	202.4	192.8	189.6
70°	1448.8	960.8	621.6	408.8	308.0	244.8	213.6	181.6	168.8	166.4	166.4
72.5°	909.6	584.0	380.8	280.0	233.6	198.4	182.4	160.0	155.2	153.6	151.2
75°	533.6	354.4	269.6	229.6	200.0	177.6	164.0	145.6	142.4	141.6	139.2
77.5°	340.0	255.2	217.6	196.0	180.8	160.8	148.8	129.6	128.8	128.0	127.2
80°	244.0	212.0	190.4	173.6	158.4	140.0	132.8	117.6	116.0	115.2	116.8
82.5°	184.8	175.2	166.4	153.6	132.8	119.2	113.6	103.2	104.0	100.0	99.2
85°	127.2	125.6	124.8	119.2	104.0	92.0	88.0	82.4	86.4	82.4	77.6
87.5°	62.4	61.6	56.8	67.2	62.4	49.6	44.8	49.6	55.2	53.6	49.6
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: P158880

CATALOG NUMBER: VST-E04-LED-E-U-SLL

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8
2.5°	1296.0	1292.8	1295.2	1293.6	1293.6	1292.8	1294.4	1292.0	1290.4	1292.0	1292.8
5°	1321.6	1317.6	1318.4	1312.8	1315.2	1309.6	1311.2	1307.2	1303.2	1301.6	1301.6
7.5°	1364.8	1360.8	1356.0	1355.2	1346.4	1343.2	1337.6	1334.4	1332.0	1326.4	1323.2
10°	1404.0	1397.6	1392.0	1391.2	1382.4	1374.4	1367.2	1360.8	1356.8	1348.8	1344.8
12.5°	1436.0	1429.6	1420.8	1416.0	1407.2	1397.6	1392.8	1383.2	1377.6	1368.8	1361.6
15°	1454.4	1443.2	1430.4	1421.6	1408.8	1398.4	1391.2	1384.0	1378.4	1367.2	1356.8
17.5°	1445.6	1427.2	1409.6	1393.6	1376.0	1366.4	1356.0	1347.2	1345.6	1332.8	1316.8
20°	1408.8	1387.2	1364.0	1342.4	1319.2	1305.6	1292.8	1279.2	1275.2	1260.0	1239.2
22.5°	1364.0	1339.2	1312.8	1286.4	1256.8	1237.6	1218.4	1201.6	1188.0	1165.6	1136.0
25°	1318.4	1281.6	1243.2	1209.6	1175.2	1151.2	1131.2	1112.8	1096.8	1060.8	1030.4
27.5°	1258.4	1200.8	1161.6	1123.2	1081.6	1050.4	1028.0	1002.4	984.8	943.2	911.2
30°	1181.6	1124.0	1068.0	1029.6	988.0	954.4	925.6	888.8	863.2	832.8	803.2
32.5°	1084.8	1027.2	970.4	927.2	892.8	851.2	815.2	780.0	750.4	720.8	697.6
35°	967.2	911.2	857.6	814.4	776.0	743.2	708.8	678.4	644.8	612.8	599.2
37.5°	843.2	783.2	724.0	686.4	656.0	632.8	600.8	576.0	545.6	526.4	510.4
40°	735.2	671.2	615.2	583.2	559.2	532.8	506.4	487.2	465.6	446.4	434.4
42.5°	644.0	584.0	536.0	508.8	480.0	451.2	431.2	415.2	401.6	387.2	372.8
45°	560.0	502.4	462.4	428.8	404.8	381.6	368.0	360.8	352.8	344.0	334.4
47.5°	489.6	440.0	400.8	369.6	344.8	328.8	322.4	320.0	316.8	309.6	304.8
50°	436.0	395.2	355.2	327.2	306.4	298.4	291.2	288.8	284.8	282.4	279.2
52.5°	391.2	348.0	314.4	288.8	276.0	272.8	269.6	266.4	265.6	264.0	262.4
55°	354.4	316.8	285.6	266.4	260.0	257.6	256.8	253.6	252.8	252.8	250.4
57.5°	321.6	289.6	261.6	249.6	245.6	243.2	241.6	240.0	240.0	241.6	240.8
60°	288.0	260.8	244.0	237.6	235.2	231.2	227.2	225.6	226.4	230.4	230.4
62.5°	255.2	235.2	224.8	222.4	220.0	216.8	212.0	210.4	212.0	216.8	219.2
65°	219.2	210.4	207.2	205.6	204.0	201.6	198.4	196.8	197.6	200.0	203.2
67.5°	186.4	185.6	185.6	186.4	185.6	184.8	183.2	180.8	180.0	180.0	181.6
70°	166.4	166.4	168.8	168.8	168.0	168.0	165.6	163.2	161.6	160.0	160.8
72.5°	151.2	151.2	152.0	152.8	152.0	152.0	148.8	147.2	143.2	142.4	140.8
75°	138.4	136.8	136.8	136.0	135.2	136.0	132.8	128.8	127.2	126.4	124.8
77.5°	125.6	122.4	120.8	119.2	120.0	119.2	116.8	114.4	112.0	111.2	110.4
80°	111.2	106.4	104.0	100.0	102.4	103.2	101.6	99.2	98.4	97.6	96.8
82.5°	92.0	87.2	84.0	81.6	80.0	81.6	84.0	89.6	88.0	87.2	85.6
85°	72.0	64.0	60.0	60.8	56.8	57.6	64.8	68.0	68.0	69.6	68.0
87.5°	40.8	39.2	29.6	27.2	28.8	34.4	38.4	42.4	42.4	40.0	44.8
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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CATALOG NUMBER: VST-E04-LED-E-U-SLL

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8
2.5°	1292.8	1294.4	1295.2	1298.4	1300.0	1300.8	1301.6	1303.2	1304.0	1303.2	1307.2
5°	1299.2	1299.2	1297.6	1300.0	1300.8	1300.8	1299.2	1300.8	1300.8	1300.8	1304.8
7.5°	1316.0	1311.2	1308.8	1305.6	1303.2	1300.0	1296.0	1296.0	1295.2	1296.0	1298.4
10°	1333.6	1326.4	1317.6	1309.6	1302.4	1296.8	1289.6	1287.2	1286.4	1285.6	1292.0
12.5°	1347.2	1334.4	1320.8	1307.2	1292.8	1283.2	1271.2	1264.0	1263.2	1263.2	1271.2
15°	1337.6	1316.8	1290.4	1266.4	1253.6	1240.0	1226.4	1217.6	1216.8	1218.4	1223.2
17.5°	1289.6	1256.0	1232.8	1209.6	1192.8	1181.6	1172.8	1171.2	1174.4	1171.2	1177.6
20°	1208.0	1172.0	1156.0	1137.6	1131.2	1123.2	1110.4	1099.2	1099.2	1084.8	1088.8
22.5°	1102.4	1082.4	1061.6	1047.2	1042.4	1028.8	1015.2	1000.0	998.4	980.8	978.4
25°	992.0	972.0	955.2	952.0	937.6	919.2	906.4	888.8	884.8	867.2	864.8
27.5°	879.2	863.2	846.4	836.8	828.8	808.8	797.6	776.8	768.8	749.6	747.2
30°	772.0	760.8	740.8	732.8	717.6	694.4	670.4	657.6	651.2	631.2	624.8
32.5°	671.2	653.6	638.4	628.8	609.6	583.2	561.6	543.2	531.2	507.2	500.8
35°	575.2	557.6	550.4	525.6	508.8	491.2	461.6	450.4	428.8	410.4	404.0
37.5°	490.4	473.6	464.0	443.2	426.4	408.8	391.2	376.8	366.4	362.4	362.4
40°	417.6	408.8	396.8	381.6	370.4	357.6	348.0	343.2	342.4	344.0	348.0
42.5°	365.6	356.0	348.0	340.0	332.0	330.4	328.0	331.2	335.2	339.2	343.2
45°	326.4	318.4	313.6	310.4	309.6	312.0	316.8	321.6	328.8	333.6	336.8
47.5°	298.4	292.0	290.4	289.6	293.6	300.8	307.2	314.4	320.0	324.8	328.0
50°	274.4	268.8	268.0	267.2	272.8	279.2	284.8	294.4	298.4	301.6	304.0
52.5°	257.6	252.8	250.4	251.2	256.8	262.4	270.4	277.6	283.2	285.6	288.0
55°	244.0	242.4	236.8	239.2	244.8	252.0	260.0	268.0	273.6	277.6	281.6
57.5°	233.6	229.6	225.6	229.6	235.2	242.4	252.0	259.2	266.4	272.0	276.0
60°	222.4	219.2	216.0	220.0	225.6	232.8	240.0	249.6	258.4	264.0	268.0
62.5°	212.8	210.4	207.2	208.0	210.4	215.2	219.2	228.0	236.0	243.2	248.0
65°	199.2	198.4	193.6	194.4	196.0	200.8	204.0	212.0	220.0	226.4	230.4
67.5°	179.2	177.6	177.6	180.0	180.8	183.2	185.6	193.6	200.0	204.8	209.6
70°	159.2	158.4	158.4	160.0	159.2	161.6	164.8	172.0	180.0	184.8	189.6
72.5°	140.0	140.0	139.2	140.8	140.8	141.6	145.6	152.0	159.2	163.2	166.4
75°	123.2	122.4	122.4	122.4	123.2	123.2	127.2	132.8	140.0	142.4	147.2
77.5°	108.0	108.0	108.0	108.0	108.8	108.0	110.4	114.4	116.8	120.8	120.8
80°	95.2	94.4	95.2	96.0	96.0	95.2	95.2	96.0	96.8	96.8	96.8
82.5°	84.0	81.6	83.2	87.2	87.2	87.2	86.4	80.8	76.8	76.8	78.4
85°	67.2	67.2	68.0	73.6	74.4	71.2	74.4	66.4	58.4	56.0	57.6
87.5°	41.6	32.8	40.0	45.6	45.6	43.2	48.0	44.8	37.6	30.4	28.8
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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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	0°
2.5°	1310.4	1311.2	1316.0	1318.4	1318.4	1321.6	1323.2	1328.0	1327.2	1327.2	1328.8	2.5°
5°	1308.8	1311.2	1316.0	1319.2	1320.8	1324.8	1328.0	1333.6	1332.8	1334.4	1335.2	5°
7.5°	1303.2	1309.6	1314.4	1320.8	1326.4	1329.6	1333.6	1338.4	1336.8	1337.6	1336.8	7.5°
10°	1298.4	1304.8	1314.4	1323.2	1331.2	1336.0	1338.4	1344.0	1343.2	1344.8	1344.8	10°
12.5°	1279.2	1290.4	1302.4	1316.0	1328.0	1340.8	1348.8	1360.8	1366.4	1373.6	1381.6	12.5°
15°	1230.4	1243.2	1262.4	1277.6	1300.8	1318.4	1341.6	1364.8	1385.6	1405.6	1428.8	15°
17.5°	1182.4	1188.0	1203.2	1224.0	1244.8	1271.2	1299.2	1340.8	1378.4	1419.2	1464.0	17.5°
20°	1093.6	1103.2	1113.6	1138.4	1163.2	1200.8	1235.2	1289.6	1344.8	1408.8	1477.6	20°
22.5°	984.0	993.6	1004.8	1032.8	1063.2	1101.6	1143.2	1204.0	1277.6	1360.8	1452.8	22.5°
25°	865.6	871.2	880.0	908.0	926.4	976.8	1027.2	1090.4	1170.4	1277.6	1384.8	25°
27.5°	735.2	745.6	752.8	765.6	808.0	851.2	904.0	972.0	1068.8	1178.4	1308.0	27.5°
30°	610.4	619.2	615.2	642.4	670.4	716.0	772.8	848.0	940.8	1071.2	1220.8	30°
32.5°	488.0	494.4	492.0	511.2	539.2	584.8	638.4	720.0	818.4	957.6	1120.0	32.5°
35°	402.4	404.0	412.8	421.6	445.6	482.4	528.0	599.2	700.0	828.0	1000.0	35°
37.5°	362.4	365.6	371.2	383.2	400.8	427.2	464.8	520.0	606.4	719.2	872.8	37.5°
40°	350.4	352.8	356.0	364.0	380.8	404.0	437.6	484.0	547.2	642.4	767.2	40°
42.5°	344.8	344.8	344.8	349.6	362.4	387.2	425.6	471.2	526.4	598.4	699.2	42.5°
45°	336.8	336.8	336.0	338.4	347.2	372.0	413.6	464.8	524.0	592.8	680.0	45°
47.5°	328.0	327.2	324.8	324.8	330.4	355.2	398.4	453.6	518.4	597.6	691.2	47.5°
50°	304.0	304.0	304.0	306.4	311.2	333.6	380.0	438.4	512.8	600.8	708.8	50°
52.5°	290.4	291.2	293.6	293.6	298.4	321.6	370.4	435.2	516.0	612.8	731.2	52.5°
55°	284.0	286.4	288.8	288.8	292.8	316.8	367.2	437.6	528.0	637.6	769.6	55°
57.5°	278.4	280.8	282.4	282.4	285.6	306.4	358.4	433.6	535.2	661.6	816.8	57.5°
60°	268.0	269.6	270.4	270.4	271.2	288.8	338.4	414.4	519.2	660.0	842.4	60°
62.5°	248.8	252.0	252.8	253.6	253.6	270.4	312.8	383.2	484.8	636.0	835.2	62.5°
65°	234.4	236.0	238.4	240.0	243.2	254.4	288.0	345.6	440.0	588.0	795.2	65°
67.5°	212.0	214.4	216.8	220.0	223.2	230.4	256.8	303.2	379.2	506.4	705.6	67.5°
70°	192.0	192.8	195.2	199.2	200.0	204.0	223.2	255.2	310.4	406.4	568.0	70°
72.5°	167.2	168.8	172.0	176.8	176.8	180.0	191.2	208.0	243.2	310.4	419.2	72.5°
75°	145.6	147.2	149.6	149.6	145.6	146.4	154.4	166.4	192.8	233.6	305.6	75°
77.5°	120.8	124.0	126.4	121.6	120.0	122.4	126.4	135.2	154.4	185.6	229.6	77.5°
80°	100.0	101.6	102.4	103.2	101.6	104.0	107.2	112.8	125.6	149.6	181.6	80°
82.5°	80.0	81.6	84.0	87.2	87.2	96.0	96.8	96.8	104.0	119.2	142.4	82.5°
85°	59.2	62.4	65.6	69.6	70.4	75.2	72.8	72.0	74.4	88.8	98.4	85°
87.5°	30.4	32.8	34.4	37.6	33.6	35.2	35.2	32.8	28.8	36.0	40.0	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°



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DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
1336.8	1336.8	1336.8	1336.8	1336.8	1336.8	1336.8
1330.4	1328.8	1330.4	1330.4	1332.8	1331.2	1416.0
1336.8	1335.2	1336.8	1338.4	1340.8	1340.8	1434.4
1337.6	1337.6	1336.0	1340.0	1343.2	1346.4	1452.0
1347.2	1347.2	1348.8	1349.6	1356.8	1364.8	1480.8
1386.4	1390.4	1397.6	1400.0	1412.8	1421.6	1554.4
1446.4	1468.8	1483.2	1488.0	1499.2	1516.0	1678.4
1507.2	1544.8	1584.0	1608.0	1622.4	1642.4	1830.4
1552.8	1623.2	1690.4	1750.4	1784.8	1824.0	2043.2
1556.8	1668.8	1782.4	1893.6	1985.6	2058.4	2331.2
1518.4	1665.6	1822.4	1992.8	2151.2	2282.4	2662.4
1469.6	1650.4	1850.4	2068.0	2276.0	2469.6	2906.4
1408.0	1624.8	1855.2	2100.0	2344.0	2576.8	3045.6
1314.4	1548.8	1797.6	2068.0	2351.2	2634.4	3135.2
1194.4	1433.6	1688.8	1996.8	2317.6	2657.6	3210.4
1072.0	1308.0	1582.4	1901.6	2264.0	2653.6	3240.8
942.4	1176.8	1457.6	1800.0	2191.2	2616.8	3235.2
854.4	1068.0	1343.2	1696.8	2110.4	2568.0	3197.6
803.2	990.4	1252.8	1602.4	2036.8	2509.6	3150.4
802.4	967.2	1204.8	1535.2	1962.4	2444.8	3086.4
830.4	981.6	1199.2	1506.4	1921.6	2397.6	3016.8
863.2	1021.6	1228.8	1516.8	1920.8	2376.8	2968.0
915.2	1089.6	1293.6	1561.6	1941.6	2373.6	2908.0
981.6	1181.6	1410.4	1672.0	2022.4	2436.8	2912.0
1049.6	1289.6	1563.2	1860.8	2181.6	2584.0	3038.4
1074.4	1372.8	1718.4	2082.4	2420.0	2804.8	3299.2
1052.8	1392.0	1812.8	2254.4	2652.0	3063.2	3610.4
972.8	1314.4	1774.4	2303.2	2785.6	3246.4	3921.6
800.8	1121.6	1600.0	2193.6	2775.2	3284.0	4033.6
587.2	869.6	1300.8	1864.0	2467.2	3048.8	3865.6
424.0	615.2	939.2	1404.0	1950.4	2455.2	3242.4
304.0	426.4	609.6	922.4	1328.8	1709.6	2311.2
218.4	289.6	380.0	553.6	809.6	1049.6	1452.0
160.8	198.4	249.6	344.0	476.8	611.2	874.4
109.6	116.8	150.4	203.2	312.8	449.6	593.6
41.6	47.2	55.2	83.2	140.0	160.8	113.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)