

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: P159105

Luminaire Tested: **VST-F04-LED-E-U-SLR**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159105
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-F04-LED-E-U-SLR
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR RIGHT
Light Source: (28) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8873.7 lumens
Efficiency: N/A
Efficacy: 86.8 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): 102.2
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

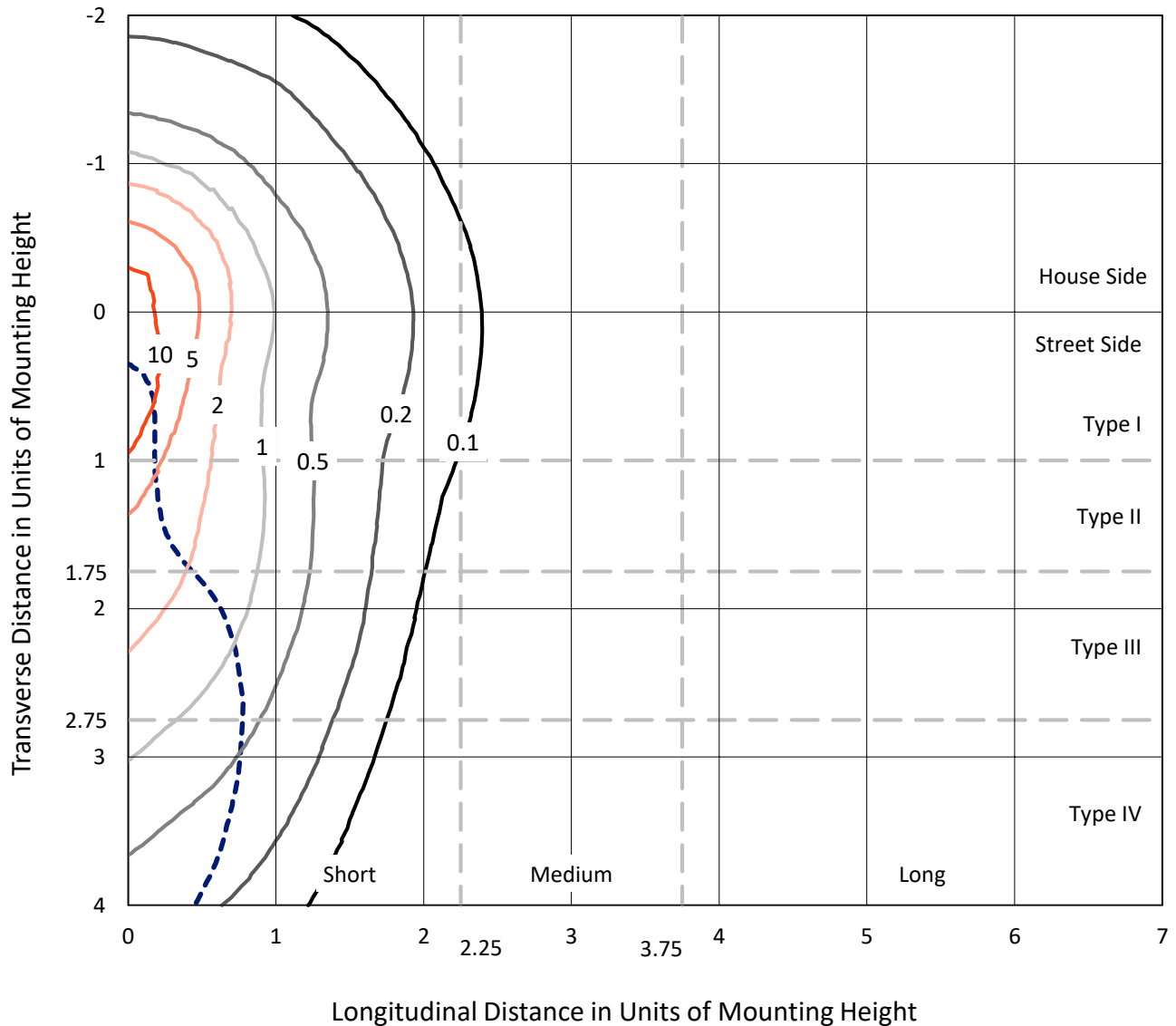


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Iso-Footcandle Lines of Horizontal Illumination

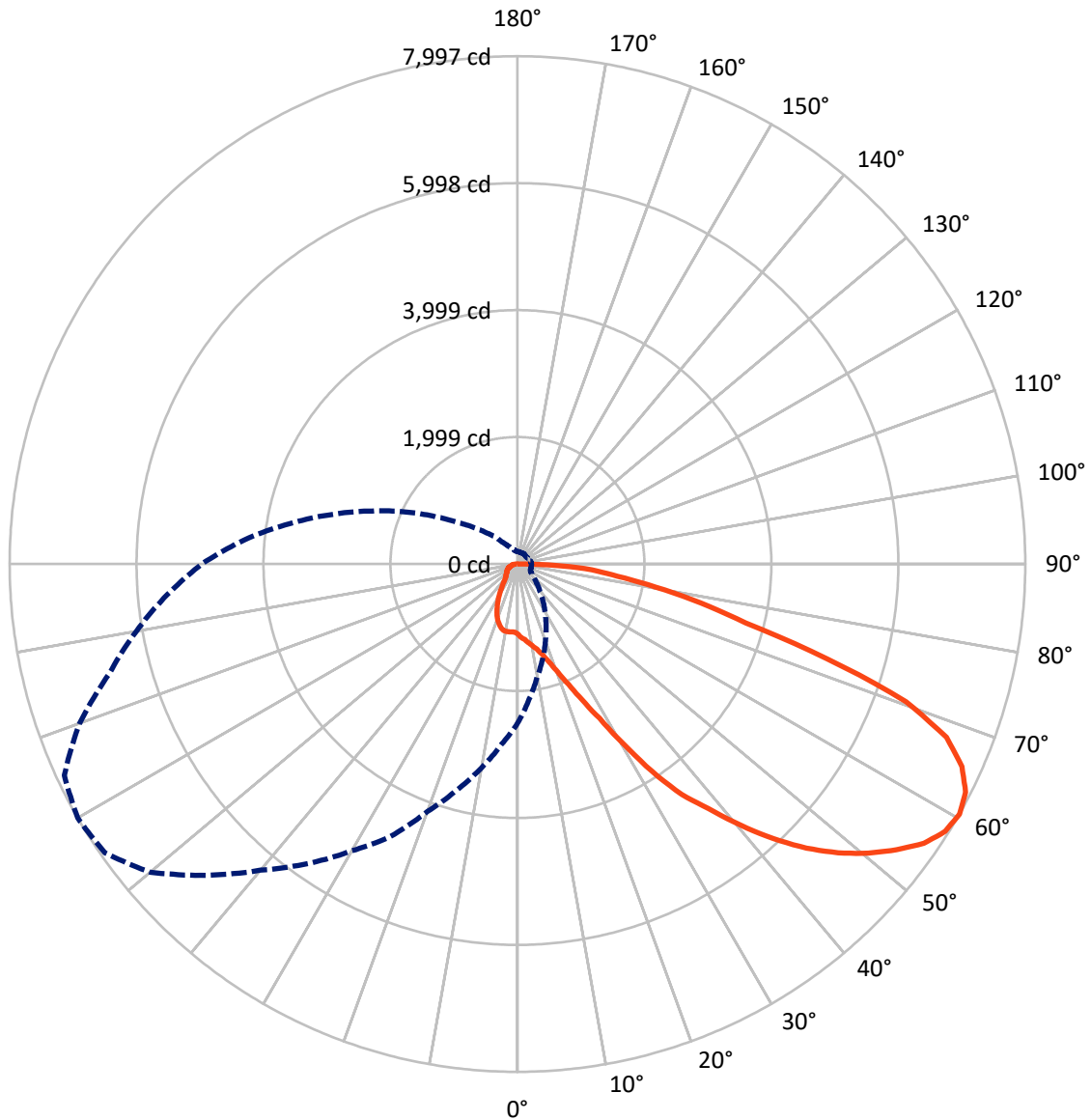
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 300-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1998.1	0.0	1998.1
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	6875.6	0.0	6875.6
	% Fixture	77.5	0.0	77.5
Total	Lumens	8873.7	0.0	8873.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.9	1.2
10°-20°	351.5	4.0
20°-30°	667.1	7.5
30°-40°	1050.5	11.8
40°-50°	1466.2	16.5
50°-60°	1813.4	20.4
60°-70°	1879.7	21.2
70°-80°	1182.8	13.3
80°-90°	353.6	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°	8873.7	100.0
0°-180°	8873.7	100.0



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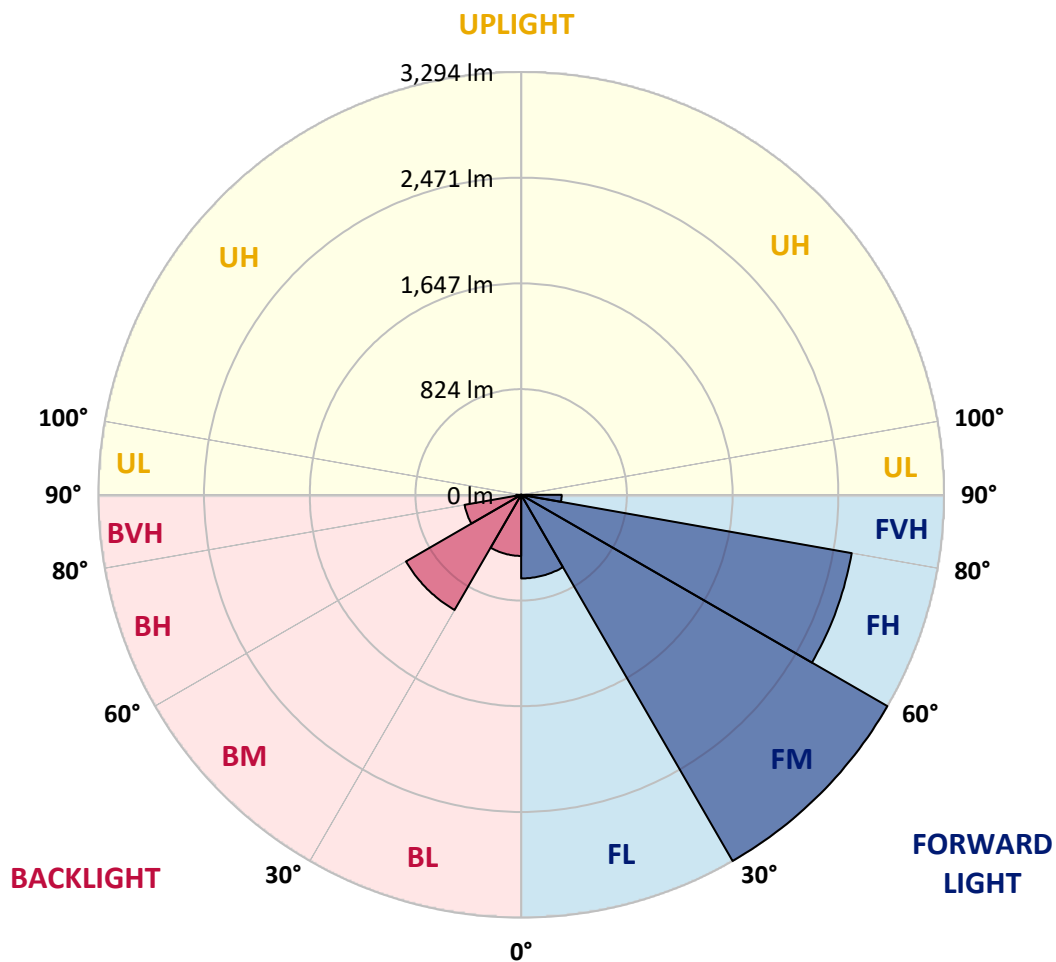
CATALOG NUMBER: VST-F04-LED-E-U-SLR

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	651.5	7.3			
FM (30°-60°)	3294.0	37.1			
FH (60°-80°)	2615.0	29.5			G2/5000
FVH (80°-90°)	315.1	3.6			G3/500
BL (0°-30°)	476.0	5.4	B1/500		
BM (30°-60°)	1036.1	11.7	B2/2500		
BH (60°-80°)	447.5	5.0	B1/500		G1/500
BVH (80°-90°)	38.5	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°	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6
2.5°	1168.9	1098.9	1100.3	1098.3	1098.3	1097.0	1098.3	1097.0	1095.6	1095.6	1096.3
5°	1184.1	1106.9	1106.9	1104.9	1103.6	1102.2	1103.6	1102.2	1101.6	1100.3	1100.9
7.5°	1198.7	1111.5	1108.8	1106.2	1102.9	1104.2	1104.2	1103.6	1104.2	1103.6	1104.9
10°	1222.4	1126.7	1120.1	1114.1	1113.5	1112.1	1112.1	1110.2	1110.2	1108.8	1109.5
12.5°	1283.2	1173.6	1166.3	1155.7	1153.8	1147.8	1144.5	1140.5	1133.9	1128.0	1123.4
15°	1385.6	1251.5	1237.6	1228.4	1224.4	1212.5	1194.0	1179.5	1160.4	1143.8	1126.7
17.5°	1511.0	1355.8	1339.3	1327.4	1307.6	1275.3	1244.2	1208.6	1171.6	1137.9	1106.9
20°	1686.7	1505.8	1473.4	1445.0	1395.5	1340.0	1281.9	1219.8	1163.0	1110.2	1064.6
22.5°	1924.5	1699.3	1639.2	1563.2	1471.4	1377.6	1285.2	1199.3	1123.4	1054.7	993.9
25°	2197.9	1884.2	1775.9	1645.1	1504.4	1375.0	1253.5	1143.2	1054.7	966.2	900.2
27.5°	2399.3	2038.7	1878.9	1707.2	1527.6	1362.4	1213.2	1079.8	972.8	882.3	802.4
30°	2514.2	2127.2	1935.0	1733.6	1531.5	1341.3	1162.3	1007.8	884.3	776.7	700.0
32.5°	2588.2	2174.8	1941.0	1707.2	1484.0	1278.6	1085.1	924.6	790.5	675.6	594.4
35°	2650.3	2193.9	1913.2	1648.4	1394.1	1183.5	986.0	825.5	683.5	577.9	494.7
37.5°	2675.4	2190.6	1869.0	1569.8	1306.3	1079.8	885.0	720.5	593.7	500.6	429.3
40°	2670.7	2160.2	1808.9	1485.9	1203.3	971.5	778.0	633.3	530.3	451.7	399.6
42.5°	2639.7	2119.9	1742.2	1400.8	1108.8	881.7	705.3	577.2	494.0	434.6	389.0
45°	2600.7	2071.7	1681.4	1322.8	1034.2	817.6	663.1	561.4	489.4	432.6	383.7
47.5°	2547.9	2018.2	1620.0	1267.3	994.6	798.4	662.4	570.6	493.3	428.0	374.5
50°	2490.4	1979.3	1586.3	1243.6	990.0	810.3	685.5	585.1	496.0	423.3	361.9
52.5°	2450.2	1962.1	1585.7	1252.2	1014.4	843.4	712.6	603.6	505.9	426.0	359.3
55°	2400.6	1959.5	1602.8	1289.1	1067.9	899.5	755.5	635.3	526.4	435.9	361.2
57.5°	2403.9	2011.6	1669.5	1380.3	1164.3	975.4	810.3	674.3	546.2	441.8	357.9
60°	2508.3	2133.2	1801.0	1536.1	1290.5	1064.6	866.5	695.4	544.8	428.6	342.1
62.5°	2723.6	2315.4	1997.8	1719.1	1418.6	1133.3	886.9	689.5	525.0	400.2	316.3
65°	2980.5	2528.7	2189.3	1861.1	1496.5	1149.1	869.1	656.5	485.4	363.2	285.3
67.5°	3237.4	2680.0	2299.6	1901.3	1464.8	1085.1	803.1	582.5	418.0	313.0	250.3
70°	3329.8	2711.0	2291.0	1810.9	1320.8	925.9	661.1	468.9	335.5	256.2	210.7
72.5°	3191.1	2516.9	2036.7	1538.8	1073.8	717.9	484.7	346.1	256.2	200.8	171.7
75°	2676.7	2026.8	1610.1	1159.0	775.3	507.9	350.0	252.3	192.8	159.2	137.4
77.5°	1908.0	1411.3	1097.0	761.5	503.2	352.0	251.0	189.5	153.2	127.5	111.6
80°	1198.7	866.5	668.3	457.0	313.7	239.1	180.3	149.9	123.5	103.7	93.1
82.5°	721.8	504.6	393.6	284.0	206.1	163.8	132.7	117.6	98.4	85.9	79.9
85°	490.0	371.2	258.2	167.7	124.2	96.4	90.5	81.2	73.3	61.4	59.4
87.5°	93.8	132.7	115.6	68.7	45.6	39.0	34.3	33.0	29.7	23.8	27.1
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°	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6
2.5°	1092.3	1091.0	1088.4	1088.4	1086.4	1082.4	1081.8	1079.1	1075.8	1076.5	1075.8
5°	1096.3	1093.7	1090.4	1089.0	1086.4	1082.4	1080.4	1077.1	1073.8	1073.8	1073.8
7.5°	1100.9	1097.6	1095.0	1090.4	1085.1	1081.1	1075.8	1071.9	1069.9	1069.2	1069.9
10°	1104.9	1102.9	1098.9	1092.3	1085.1	1077.1	1071.9	1066.6	1061.3	1062.0	1062.6
12.5°	1113.5	1106.9	1096.3	1086.4	1075.2	1065.3	1056.0	1049.4	1042.8	1042.8	1043.5
15°	1107.5	1088.4	1073.8	1054.7	1042.1	1026.3	1015.7	1009.8	1005.8	1004.5	1005.2
17.5°	1072.5	1049.4	1027.6	1010.4	993.3	980.7	976.1	972.1	966.9	969.5	966.9
20°	1019.7	991.3	960.3	939.8	919.3	910.7	902.8	898.8	895.5	907.4	907.4
22.5°	943.7	909.4	877.7	852.6	829.5	820.2	812.3	807.7	809.7	824.2	825.5
25°	848.0	806.4	764.8	749.6	726.5	719.2	714.6	713.9	715.9	730.4	733.7
27.5°	746.3	702.7	667.0	632.0	621.5	615.5	606.9	616.8	618.8	634.7	641.3
30°	638.0	591.1	553.4	530.3	507.9	511.2	503.9	515.8	521.1	537.6	542.9
32.5°	527.0	482.8	445.1	422.0	406.2	408.1	402.9	413.4	418.7	438.5	448.4
35°	435.9	398.2	367.9	348.0	340.8	333.5	332.2	333.5	338.8	354.0	371.8
37.5°	383.7	352.7	330.9	316.3	306.4	301.8	299.2	299.2	299.2	302.5	311.1
40°	361.2	333.5	314.4	300.5	293.9	291.2	289.3	287.3	284.0	282.7	283.3
42.5°	351.3	319.6	299.2	288.6	284.6	284.6	284.6	283.3	280.0	276.7	273.4
45°	341.4	307.1	286.6	279.4	277.4	278.0	278.0	278.0	275.4	271.4	265.5
47.5°	328.9	293.2	272.8	268.1	268.1	270.1	270.8	270.8	268.1	264.2	259.5
50°	313.7	275.4	256.9	252.9	251.0	251.0	251.0	251.0	249.0	246.3	243.0
52.5°	305.8	265.5	246.3	242.4	242.4	240.4	239.7	237.8	235.8	233.8	229.2
55°	303.1	261.5	241.7	238.4	238.4	236.4	234.4	232.5	229.2	225.9	221.2
57.5°	295.9	252.9	235.8	233.1	233.1	231.8	229.8	227.8	224.5	219.9	214.0
60°	279.4	238.4	223.9	223.2	223.2	222.6	221.2	221.2	217.9	213.3	206.1
62.5°	258.2	223.2	209.4	209.4	208.7	208.0	205.4	204.7	200.8	194.8	188.2
65°	237.8	210.0	200.8	198.1	196.8	194.8	193.5	190.2	186.9	181.6	175.0
67.5°	212.0	190.2	184.3	181.6	179.0	177.0	175.0	173.0	169.1	165.1	159.8
70°	184.3	168.4	165.1	164.4	161.1	159.2	158.5	156.5	152.6	148.6	142.0
72.5°	157.8	148.6	146.0	146.0	142.0	139.3	138.0	137.4	134.7	131.4	125.5
75°	127.5	120.9	120.2	123.5	123.5	121.5	120.2	121.5	117.6	115.6	109.6
77.5°	104.3	101.0	99.1	100.4	104.3	102.4	99.7	99.7	99.7	96.4	94.4
80°	88.5	85.9	83.9	85.2	84.5	83.9	82.6	79.9	79.9	79.9	79.3
82.5°	79.9	79.3	72.0	72.0	69.3	67.4	66.0	64.7	63.4	63.4	66.7
85°	60.1	62.1	58.1	57.5	54.2	51.5	48.9	47.6	46.2	48.2	54.8
87.5°	29.1	29.1	27.7	31.0	28.4	27.1	25.1	23.8	25.1	31.0	37.0
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°	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6
2.5°	1074.5	1073.8	1073.2	1071.9	1069.2	1068.6	1067.2	1067.2	1066.6	1065.3	1066.6
5°	1072.5	1073.8	1073.8	1073.2	1071.2	1072.5	1072.5	1074.5	1074.5	1075.8	1079.1
7.5°	1069.9	1073.2	1075.8	1077.8	1080.4	1082.4	1086.4	1092.3	1095.0	1099.6	1101.6
10°	1064.6	1070.5	1075.2	1081.1	1087.7	1095.0	1100.9	1110.2	1113.5	1120.1	1123.4
12.5°	1049.4	1059.3	1067.2	1079.1	1090.4	1101.6	1112.1	1124.0	1130.0	1137.2	1141.9
15°	1012.4	1023.7	1034.9	1045.4	1065.3	1087.1	1104.2	1120.1	1128.7	1137.9	1142.5
17.5°	968.2	975.4	984.7	998.6	1017.7	1036.9	1064.6	1087.1	1100.3	1110.8	1112.1
20°	916.7	927.2	933.8	939.1	954.3	967.5	997.2	1023.0	1040.2	1052.7	1056.0
22.5°	838.1	849.3	860.5	864.5	876.4	893.5	910.1	937.8	962.2	980.7	992.0
25°	748.3	758.8	774.0	785.9	788.5	802.4	818.9	850.6	875.7	905.4	918.6
27.5°	658.4	667.7	684.2	690.8	698.7	712.6	725.8	752.2	778.6	813.0	827.5
30°	553.4	573.2	592.4	604.9	611.5	628.1	637.3	663.1	687.5	712.6	733.7
32.5°	463.6	481.4	503.2	519.1	527.0	539.6	554.1	575.9	595.0	619.5	643.9
35°	381.1	405.5	420.0	433.9	454.4	460.3	474.8	494.7	505.9	532.3	560.0
37.5°	322.9	337.5	352.0	365.9	383.0	391.0	404.8	421.3	434.6	450.4	475.5
40°	287.3	295.2	305.8	315.0	327.6	337.5	344.7	358.6	368.5	384.4	402.2
42.5°	270.8	272.8	274.1	280.7	287.3	293.9	301.8	307.8	319.6	331.5	342.8
45°	261.5	257.6	255.6	256.2	258.9	262.8	269.5	276.1	284.0	291.2	297.8
47.5°	253.6	248.3	242.4	239.1	239.7	241.1	246.3	251.6	255.6	261.5	264.2
50°	235.1	230.5	225.2	220.6	221.2	221.9	226.5	230.5	233.1	235.1	238.4
52.5°	223.2	216.6	212.0	207.4	206.7	208.7	212.7	216.6	217.9	219.3	219.9
55°	214.6	208.0	202.1	197.5	195.5	200.1	201.4	206.7	208.7	208.7	209.4
57.5°	208.0	200.1	194.2	189.5	186.2	189.5	192.8	198.8	199.4	198.1	198.1
60°	198.1	192.2	186.2	181.6	178.3	181.0	183.6	190.2	190.2	186.9	186.2
62.5°	181.0	177.7	173.7	171.7	171.0	173.7	175.7	181.0	179.0	175.0	173.7
65°	168.4	165.8	161.8	160.5	159.8	163.8	164.4	167.7	165.1	163.1	162.5
67.5°	153.2	151.2	149.3	148.6	146.6	146.6	147.9	149.9	148.6	148.6	149.3
70°	136.0	133.4	131.4	132.1	130.8	130.8	131.4	132.7	132.1	133.4	134.7
72.5°	120.2	116.9	116.2	116.2	114.9	115.6	115.6	116.2	117.6	118.2	121.5
75°	105.0	101.7	101.7	101.0	101.0	101.0	101.7	103.0	104.3	105.0	106.3
77.5°	91.1	89.2	89.8	89.2	89.2	89.2	89.2	91.1	91.8	92.5	94.4
80°	78.6	78.6	79.3	79.3	78.6	77.9	78.6	79.9	80.6	81.2	81.9
82.5°	71.3	72.0	72.0	72.0	68.7	67.4	69.3	70.7	72.0	72.6	74.0
85°	61.4	58.8	61.4	60.8	56.1	55.5	55.5	56.1	57.5	56.1	56.1
87.5°	39.6	35.7	37.6	37.6	33.0	27.1	34.3	37.0	33.0	35.0	35.0
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):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6
2.5°	1068.6	1067.2	1067.9	1067.9	1069.2	1067.2	1069.9	1072.5	1073.2	1073.2	1073.8
5°	1082.4	1081.1	1085.7	1083.7	1088.4	1087.7	1091.0	1093.7	1095.0	1095.0	1095.0
7.5°	1104.2	1108.8	1111.5	1118.8	1119.4	1123.4	1126.7	1130.0	1128.7	1129.3	1128.7
10°	1128.7	1134.6	1141.2	1148.5	1149.1	1153.8	1159.0	1162.3	1161.0	1160.4	1158.4
12.5°	1149.8	1153.8	1161.7	1168.9	1172.9	1180.2	1185.5	1188.1	1188.1	1186.1	1184.1
15°	1148.5	1154.4	1163.0	1173.6	1180.8	1191.4	1200.6	1206.6	1207.2	1205.3	1204.6
17.5°	1119.4	1128.0	1135.9	1150.5	1163.7	1178.2	1193.4	1202.0	1209.9	1214.5	1217.2
20°	1067.2	1077.8	1089.0	1108.2	1126.0	1145.2	1163.0	1175.5	1187.4	1201.3	1217.8
22.5°	1005.8	1021.7	1037.5	1062.0	1083.7	1105.5	1126.0	1141.2	1159.7	1183.5	1214.5
25°	933.8	950.3	970.2	998.6	1026.3	1058.0	1088.4	1118.8	1154.4	1195.4	1243.6
27.5°	848.6	867.1	892.9	927.2	958.9	991.3	1038.8	1087.1	1145.2	1198.0	1252.8
30°	764.1	787.9	815.6	850.0	881.7	927.9	975.4	1034.9	1096.3	1155.7	1221.1
32.5°	673.0	702.7	737.0	765.4	801.1	848.0	895.5	958.9	1024.3	1094.3	1166.3
35°	585.1	613.5	640.6	672.3	708.0	752.2	798.4	859.2	941.8	1016.4	1102.2
37.5°	496.0	522.4	541.5	566.6	597.7	646.6	696.1	766.1	844.0	935.8	1021.7
40°	418.0	439.8	461.6	481.4	507.9	554.1	606.9	675.6	752.2	841.4	937.1
42.5°	356.0	372.5	396.3	420.0	442.5	482.1	531.6	599.0	674.9	766.1	861.8
45°	303.8	315.0	334.2	354.0	381.7	414.7	462.3	531.0	608.2	700.0	801.1
47.5°	266.1	271.4	284.6	305.1	330.9	363.2	404.2	466.3	541.5	634.0	740.3
50°	240.4	246.3	252.9	270.1	293.2	326.2	359.9	414.1	482.8	573.2	678.9
52.5°	222.6	225.2	227.8	238.4	259.5	287.3	322.9	363.9	433.2	519.8	614.9
55°	212.0	212.7	214.6	219.9	235.8	261.5	292.6	331.5	385.7	467.6	564.7
57.5°	199.4	200.8	202.7	206.1	216.0	239.1	265.5	297.2	342.1	410.8	503.9
60°	187.6	190.9	194.2	196.1	201.4	215.3	237.8	262.8	299.2	350.7	424.7
62.5°	175.0	179.0	181.6	183.6	185.6	194.2	210.7	227.2	249.6	283.3	338.8
65°	163.8	166.4	168.4	169.7	171.0	173.7	181.0	187.6	194.2	214.6	254.9
67.5°	151.2	152.6	153.2	153.9	153.2	153.2	153.9	156.5	159.2	167.1	186.2
70°	136.7	138.7	138.7	139.3	139.3	137.4	137.4	137.4	137.4	139.3	149.9
72.5°	122.8	125.5	125.5	126.1	125.5	124.8	124.8	124.8	126.8	128.1	132.1
75°	109.6	112.3	111.6	112.3	112.9	112.9	114.3	114.9	116.9	117.6	120.2
77.5°	96.4	98.4	99.1	98.4	99.7	101.0	103.7	105.0	105.7	106.3	107.0
80°	83.9	85.2	84.5	82.6	85.9	87.8	91.8	96.4	95.1	95.8	97.1
82.5°	69.3	67.4	66.0	67.4	69.3	72.0	75.9	81.9	82.6	85.9	85.2
85°	53.5	47.6	46.9	50.2	49.5	52.8	59.4	64.1	68.0	71.3	68.0
87.5°	31.7	28.4	23.8	22.5	24.4	32.4	33.7	40.9	44.2	45.6	40.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: VST-F04-LED-E-U-SLR

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6
2.5°	1133.9	1137.2	1137.2	1138.6	1140.5	1141.2	1143.8	1148.5	1149.1	1149.1	1151.1
5°	1155.1	1158.4	1158.4	1161.0	1161.7	1165.0	1168.3	1173.6	1176.2	1175.5	1184.1
7.5°	1189.4	1186.8	1184.8	1188.8	1190.7	1194.7	1201.3	1205.9	1210.5	1217.8	1229.7
10°	1218.5	1214.5	1212.5	1215.2	1216.5	1221.1	1225.1	1231.7	1242.9	1254.1	1268.7
12.5°	1242.2	1237.6	1232.3	1233.7	1235.6	1241.6	1248.2	1256.8	1273.3	1287.8	1309.6
15°	1262.1	1255.5	1250.2	1252.8	1257.4	1265.4	1276.6	1291.8	1318.9	1344.0	1373.0
17.5°	1281.2	1279.9	1277.9	1286.5	1289.8	1308.3	1324.8	1352.5	1389.5	1427.2	1468.8
20°	1299.7	1314.2	1321.5	1338.7	1349.2	1374.3	1399.4	1433.1	1480.0	1531.5	1588.3
22.5°	1325.5	1365.1	1389.5	1424.5	1442.4	1469.4	1506.4	1550.7	1602.8	1668.9	1741.5
25°	1386.9	1445.0	1493.9	1548.7	1593.6	1635.2	1679.4	1732.9	1808.2	1868.3	1963.4
27.5°	1414.0	1495.9	1569.2	1646.4	1713.8	1777.9	1847.9	1912.6	2001.7	2083.0	2197.9
30°	1388.2	1480.7	1575.8	1676.8	1775.2	1872.3	1974.0	2073.1	2176.1	2289.7	2411.9
32.5°	1340.7	1444.3	1551.3	1670.2	1792.4	1918.5	2050.6	2194.6	2339.9	2481.2	2606.0
35°	1292.4	1404.1	1522.9	1659.0	1802.9	1959.5	2123.3	2305.5	2497.7	2676.7	2839.8
37.5°	1222.4	1345.3	1481.3	1638.5	1809.6	2002.4	2213.1	2437.6	2680.6	2927.0	3141.0
40°	1137.9	1268.0	1416.6	1597.6	1802.9	2046.6	2320.7	2608.7	2921.0	3221.5	3484.4
42.5°	1060.6	1187.4	1345.9	1542.7	1785.8	2085.6	2423.1	2781.7	3151.5	3487.7	3831.1
45°	992.6	1132.6	1291.8	1504.4	1777.2	2118.6	2499.0	2911.1	3334.5	3734.7	4140.2
47.5°	930.5	1075.8	1254.1	1483.3	1773.2	2138.4	2551.9	2995.7	3464.6	3924.2	4395.1
50°	866.5	1007.8	1198.7	1460.2	1763.3	2137.8	2579.6	3053.1	3555.7	4071.5	4570.8
52.5°	797.8	939.8	1131.3	1417.9	1742.2	2125.9	2586.9	3092.1	3627.7	4162.0	4720.0
55°	735.0	867.8	1059.3	1347.3	1697.9	2096.8	2570.4	3108.6	3678.5	4251.8	4825.0
57.5°	663.1	801.1	983.4	1250.2	1614.7	2045.3	2523.5	3085.5	3693.1	4311.9	4908.2
60°	564.0	699.4	886.9	1135.3	1484.6	1936.4	2436.3	3015.5	3646.8	4322.4	4967.7
62.5°	450.4	567.3	748.3	976.8	1301.7	1765.3	2275.1	2858.3	3502.9	4223.4	4937.3
65°	334.8	412.8	568.6	769.4	1089.7	1507.7	2015.6	2594.8	3221.5	3948.0	4746.4
67.5°	233.1	289.3	385.0	534.3	792.5	1164.3	1645.1	2183.3	2786.3	3438.1	4350.2
70°	176.3	202.1	254.3	337.5	513.1	793.2	1196.0	1675.5	2234.9	2862.9	3722.1
72.5°	150.6	163.8	192.8	231.1	314.4	482.1	750.9	1153.1	1649.1	2160.2	2855.7
75°	135.4	146.6	165.1	189.5	222.6	292.6	440.5	729.8	1092.3	1447.0	1992.5
77.5°	122.8	132.7	149.3	161.8	179.6	210.7	280.7	436.5	654.5	894.2	1236.3
80°	109.6	115.6	130.8	143.3	157.2	175.0	201.4	274.1	375.8	529.7	729.1
82.5°	93.8	98.4	109.6	126.8	137.4	144.6	152.6	181.6	225.2	287.3	404.8
85°	72.6	75.9	85.9	98.4	103.0	103.7	105.0	112.9	140.0	215.3	348.7
87.5°	37.0	40.9	51.5	55.5	46.9	50.9	51.5	54.8	72.6	118.2	120.2
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: P159105
 CATALOG NUMBER: VST-F04-LED-E-U-SLR

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	0°
2.5°	1151.1	1153.1	1157.7	1157.1	1160.4	1160.4	1160.4	1163.7	1161.7	1163.7	1167.0	2.5°
5°	1184.1	1187.4	1194.0	1194.0	1194.7	1192.7	1196.7	1199.3	1196.0	1194.7	1195.4	5°
7.5°	1232.3	1237.6	1242.9	1248.2	1252.2	1250.2	1250.8	1244.9	1243.6	1238.9	1233.0	7.5°
10°	1279.2	1293.8	1303.7	1312.9	1313.6	1311.6	1312.3	1302.3	1300.4	1291.1	1285.2	10°
12.5°	1327.4	1345.9	1361.8	1371.7	1377.6	1379.0	1379.6	1379.6	1370.4	1362.4	1348.6	12.5°
15°	1398.8	1431.1	1455.6	1466.1	1474.7	1482.6	1484.6	1487.3	1480.0	1469.4	1467.5	15°
17.5°	1511.7	1542.1	1574.4	1602.8	1622.0	1623.3	1639.8	1638.5	1653.7	1641.8	1638.5	17.5°
20°	1645.8	1711.8	1745.5	1783.1	1804.9	1815.5	1853.8	1841.9	1853.1	1872.3	1853.1	20°
22.5°	1813.5	1897.4	1946.3	1997.8	2033.4	2059.2	2086.9	2108.7	2139.1	2153.6	2140.4	22.5°
25°	2036.1	2131.8	2190.0	2261.3	2318.1	2364.3	2412.5	2470.6	2470.0	2505.0	2529.4	25°
27.5°	2291.7	2413.8	2498.4	2623.8	2672.7	2750.6	2833.2	2923.0	2938.9	2984.4	3007.6	27.5°
30°	2532.1	2683.3	2851.0	3000.3	3169.4	3284.9	3380.7	3444.1	3539.9	3516.1	3502.9	30°
32.5°	2754.0	2955.4	3194.5	3439.5	3707.6	3890.5	4059.6	4138.2	4197.6	4071.5	3904.4	32.5°
35°	3041.9	3282.9	3556.4	3858.8	4199.6	4459.2	4633.5	4657.9	4624.3	4462.5	4185.7	35°
37.5°	3398.5	3651.5	3962.5	4282.2	4644.1	4887.8	5086.6	5122.2	5033.1	4744.5	4453.9	37.5°
40°	3750.5	4047.1	4384.5	4762.9	5138.1	5406.2	5605.6	5616.2	5470.9	5133.4	4793.3	40°
42.5°	4135.5	4459.8	4835.6	5255.0	5642.6	5914.1	6058.0	6103.6	5898.2	5465.6	5139.4	42.5°
45°	4467.7	4855.4	5274.1	5719.9	6125.4	6383.0	6529.6	6515.0	6266.7	5839.4	5457.0	45°
47.5°	4791.3	5218.0	5659.1	6132.7	6535.5	6795.7	6946.3	6933.1	6618.1	6126.1	5705.4	47.5°
50°	5079.3	5542.2	6013.8	6519.7	6921.2	7159.6	7343.9	7285.8	6887.5	6356.5	5865.2	50°
52.5°	5279.4	5795.8	6288.5	6835.3	7248.8	7474.6	7709.1	7522.2	7046.7	6497.9	5951.0	52.5°
55°	5406.2	5970.2	6484.0	7088.9	7495.1	7765.2	7916.5	7651.0	7108.1	6536.8	5980.8	55°
57.5°	5492.1	6066.0	6598.9	7235.6	7717.0	7943.5	7980.5	7655.6	7068.5	6475.4	5951.0	57.5°
60°	5534.3	6094.4	6651.1	7338.6	7872.9	7997.0	7929.7	7548.6	6931.8	6295.1	5759.5	60°
62.5°	5529.7	6058.7	6624.0	7372.9	7903.9	7919.8	7766.5	7366.3	6680.1	5916.7	5441.2	62.5°
65°	5412.1	5928.6	6471.5	7245.5	7759.3	7691.3	7498.4	7024.2	6190.8	5422.7	5182.3	65°
67.5°	5073.3	5568.7	6072.6	6828.1	7351.8	7285.8	6993.8	6351.9	5622.2	4985.5	4856.1	67.5°
70°	4506.7	4926.7	5369.2	6032.9	6582.4	6493.2	5982.7	5592.4	5058.8	4480.3	4435.4	70°
72.5°	3767.7	4086.0	4407.0	4901.0	5279.4	5097.1	4776.2	4755.7	4324.4	3882.6	3891.9	72.5°
75°	2946.8	3185.9	3335.8	3626.4	3878.0	3714.9	3734.0	3847.6	3705.6	3357.6	3244.6	75°
77.5°	2135.1	2364.3	2411.9	2584.2	2761.2	2946.8	3192.5	3459.9	3504.8	3309.4	2899.9	77.5°
80°	1397.4	1649.7	1555.9	1617.4	1866.3	2205.1	2653.6	3094.1	3245.3	3069.6	2565.7	80°
82.5°	824.2	1177.5	1028.3	1133.3	1291.1	1586.3	1896.1	2228.3	2481.2	2294.3	2143.1	82.5°
85°	626.1	928.6	983.4	1110.8	1162.3	1174.9	1229.0	1337.4	1468.1	1517.0	1513.0	85°
87.5°	326.2	721.8	810.3	749.6	699.4	606.3	472.9	509.2	465.6	636.6	603.0	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°



IUMBER: P159105

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DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6
1167.6	1165.6	1167.0	1167.6	1167.6	1167.6	1168.9
1194.7	1189.4	1187.4	1187.4	1186.8	1184.8	1184.1
1223.8	1214.5	1211.2	1207.2	1203.9	1202.0	1198.7
1275.9	1268.0	1251.5	1242.2	1233.7	1227.7	1222.4
1345.9	1334.7	1318.9	1307.0	1293.8	1289.8	1283.2
1454.2	1444.3	1430.5	1417.3	1409.3	1395.5	1385.6
1623.3	1603.5	1589.6	1572.5	1553.3	1524.9	1511.0
1845.9	1806.2	1778.5	1763.3	1725.0	1720.4	1686.7
2101.5	2089.6	2047.3	2028.8	1991.8	1977.3	1924.5
2483.8	2474.6	2388.1	2378.8	2322.0	2279.8	2197.9
2986.4	2910.5	2812.7	2744.7	2647.6	2538.7	2399.3
3425.6	3270.4	3121.1	2962.6	2828.6	2672.1	2514.2
3705.6	3497.6	3305.4	3142.9	2977.2	2790.9	2588.2
3951.3	3741.3	3531.9	3339.7	3139.0	2900.6	2650.3
4245.2	4036.5	3800.7	3530.6	3273.0	2981.1	2675.4
4546.3	4302.0	4007.4	3676.6	3353.0	3020.8	2670.7
4854.7	4542.4	4150.7	3773.6	3403.8	3026.7	2639.7
5105.0	4710.1	4257.1	3823.2	3414.4	3006.2	2600.7
5282.0	4817.8	4304.6	3840.3	3401.2	2973.9	2547.9
5383.1	4876.5	4316.5	3827.8	3374.1	2927.6	2490.4
5420.1	4894.4	4304.6	3802.0	3349.6	2878.1	2450.2
5416.1	4884.5	4261.0	3741.9	3284.3	2812.1	2400.6
5341.5	4792.7	4171.9	3670.0	3228.8	2781.7	2403.9
5214.7	4734.6	4145.5	3684.5	3257.9	2847.1	2508.3
5157.2	4850.8	4294.1	3829.8	3407.1	3034.0	2723.6
5124.9	5039.7	4506.7	3986.3	3584.1	3260.5	2980.5
4992.8	5093.8	4627.6	4075.5	3741.9	3487.7	3237.4
4779.5	4967.7	4535.8	4058.3	3829.1	3662.0	3329.8
4334.3	4533.1	4127.0	3805.3	3720.1	3664.7	3191.1
3511.5	3614.5	3383.3	3310.7	3342.4	3343.0	2676.7
2589.5	2527.4	2423.1	2428.4	2641.7	2608.7	1908.0
2114.0	1730.3	1582.4	1638.5	1902.0	1760.0	1198.7
1967.4	1543.4	1274.0	1287.2	1436.4	1133.9	721.8
1591.0	1406.7	1128.0	1012.4	982.7	755.5	490.0
665.7	612.2	455.7	410.8	336.8	206.1	93.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)