

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: P158884

Luminaire Tested: **VST-F04-LED-E-U-SLL-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158884
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-SLL-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (28) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8104.8 lumens
Efficiency: N/A
Efficacy: 79.3 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): 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

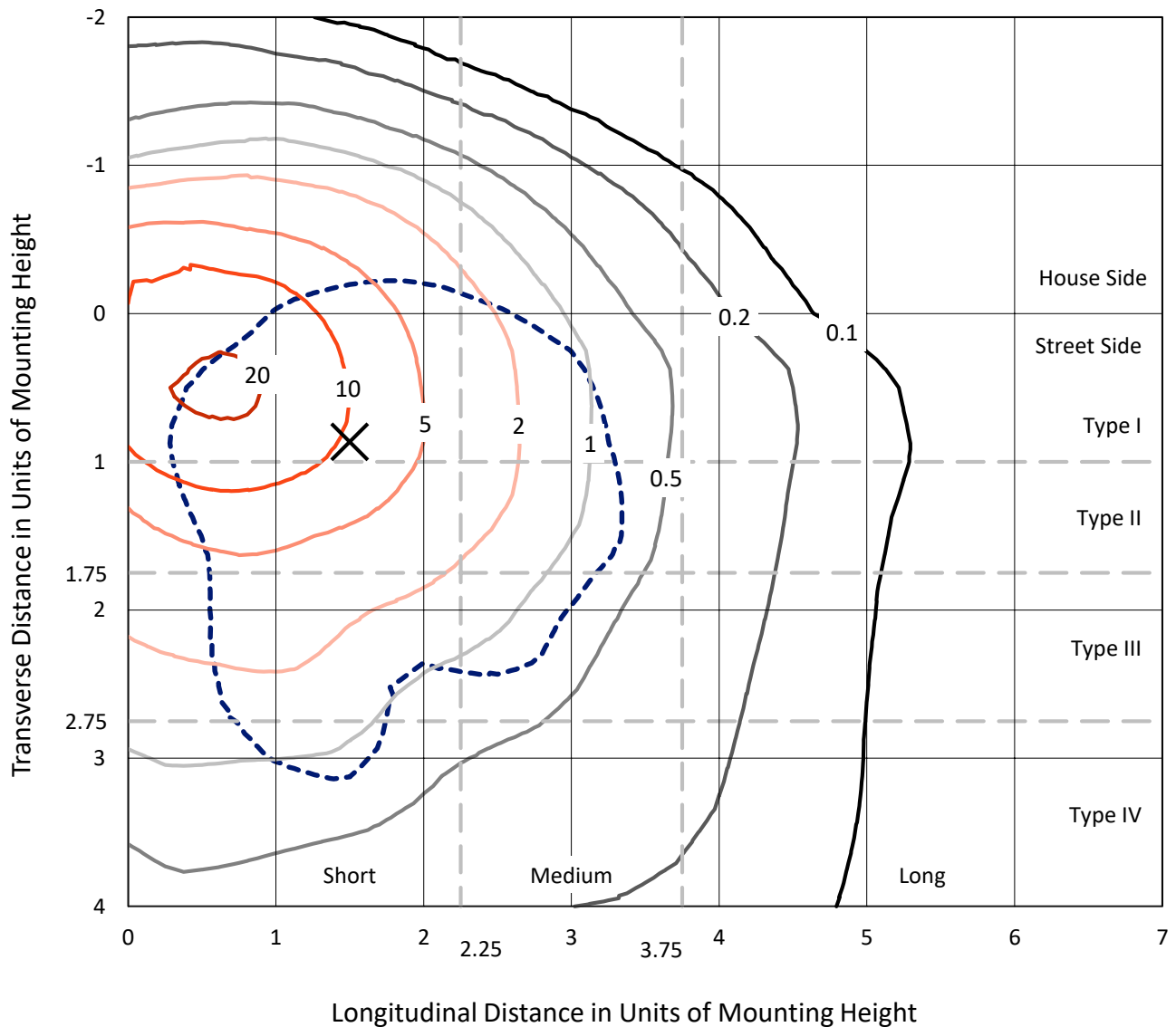


REPORT NUMBER: P158884

CATALOG NUMBER: VST-F04-LED-E-U-SLL-7030

Iso-Footcandle Lines of Horizontal Illumination

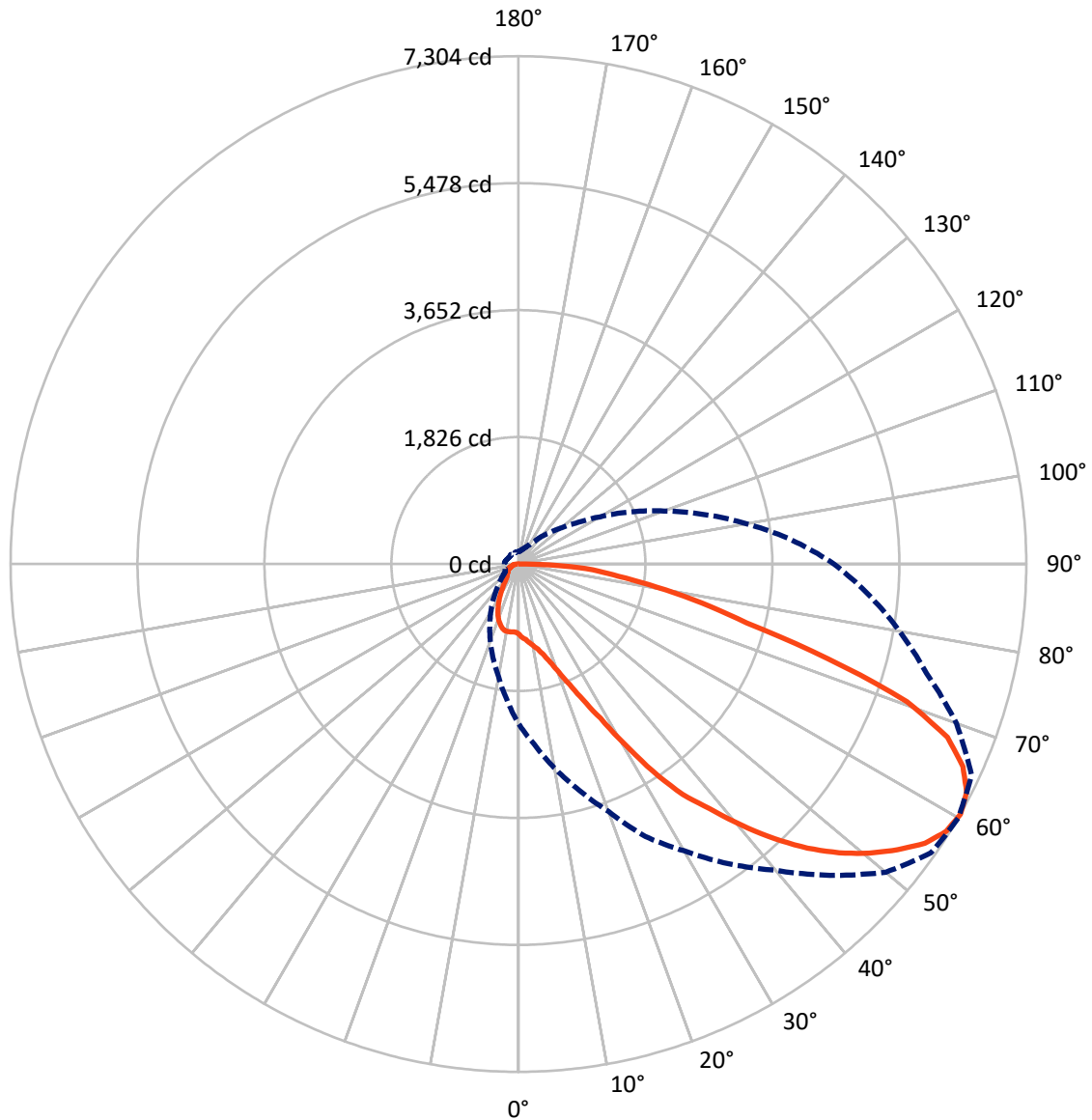
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 23.2 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P158884
CATALOG NUMBER: VST-F04-LED-E-U-SLL-7030

Luminous Intensity Polar Plot



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

REPORT NUMBER: P158884

CATALOG NUMBER: VST-F04-LED-E-U-SLL-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1824.9	0.0	1824.9
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	6279.8	0.0	6279.8
	% Fixture	77.5	0.0	77.5
Total	Lumens	8104.8	0.0	8104.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.4	1.2
10°-20°	321.1	4.0
20°-30°	609.3	7.5
30°-40°	959.5	11.8
40°-50°	1339.2	16.5
50°-60°	1656.3	20.4
60°-70°	1716.8	21.2
70°-80°	1080.3	13.3
80°-90°	322.9	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°	8104.8	100.0
0°-180°	8104.8	100.0



REPORT NUMBER: P158884

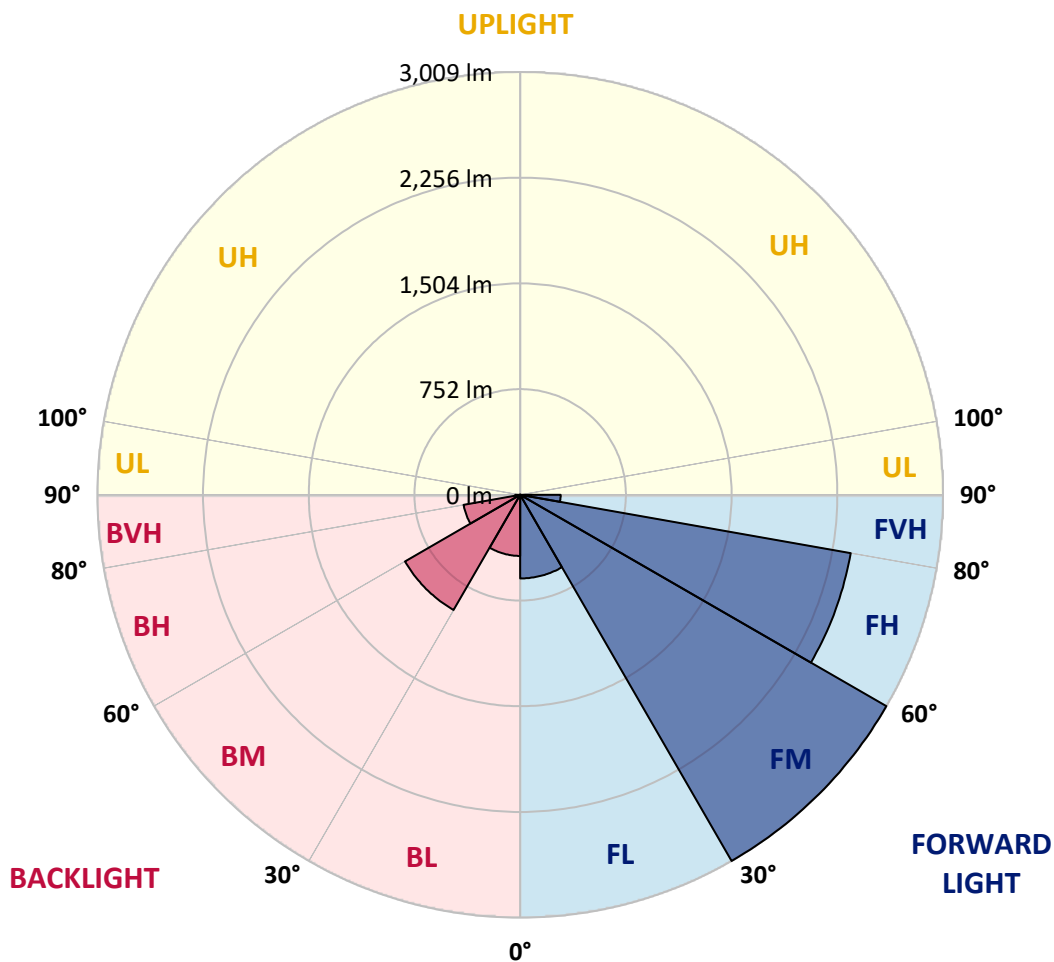
CATALOG NUMBER: VST-F04-LED-E-U-SLL-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	595.0	7.3			
FM	(30°-60°)	3008.6	37.1			
FH	(60°-80°)	2388.4	29.5			G2/5000
FVH	(80°-90°)	287.8	3.6			G3/500
BL	(0°-30°)	434.8	5.4	B1/500		
BM	(30°-60°)	946.3	11.7	B1/1000		
BH	(60°-80°)	408.7	5.0	B1/500		G1/500
BVH	(80°-90°)	35.1	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





REPORT NUMBER: P158884

CATALOG NUMBER: VST-F04-LED-E-U-SLL-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9
2.5°	1067.7	1066.4	1066.4	1066.4	1065.8	1064.6	1066.4	1065.8	1062.8	1061.0	1062.8
5°	1081.5	1082.1	1083.9	1084.5	1084.5	1086.4	1091.2	1091.8	1091.2	1092.4	1095.4
7.5°	1094.8	1097.8	1099.6	1102.6	1106.3	1109.3	1117.7	1126.2	1131.6	1135.8	1137.0
10°	1116.5	1121.3	1126.8	1134.6	1143.1	1158.1	1165.4	1173.8	1179.2	1187.7	1189.5
12.5°	1172.0	1178.0	1181.7	1193.7	1204.6	1219.1	1229.3	1231.7	1244.4	1251.6	1260.1
15°	1265.5	1274.6	1287.2	1294.5	1306.5	1319.2	1328.2	1340.3	1342.1	1351.8	1358.4
17.5°	1380.1	1392.8	1418.7	1436.2	1451.9	1464.6	1482.7	1496.5	1499.5	1510.4	1496.5
20°	1540.6	1571.3	1575.5	1610.5	1624.4	1649.7	1685.9	1692.6	1710.1	1692.6	1682.3
22.5°	1757.7	1806.0	1819.2	1853.0	1869.9	1908.5	1919.4	1955.0	1967.0	1953.7	1926.0
25°	2007.4	2082.2	2120.8	2172.7	2181.2	2260.2	2268.6	2310.2	2287.9	2255.9	2256.6
27.5°	2191.4	2318.7	2418.2	2506.9	2569.0	2658.3	2727.6	2746.9	2725.8	2684.2	2669.7
30°	2296.4	2440.5	2583.5	2705.9	2850.7	2987.0	3128.8	3199.3	3211.4	3233.1	3145.7
32.5°	2363.9	2549.1	2719.2	2870.6	3019.0	3194.5	3384.5	3566.1	3718.7	3833.9	3779.6
35°	2420.6	2649.2	2867.0	3050.4	3225.9	3417.1	3608.9	3823.0	4075.8	4223.6	4254.3
37.5°	2443.5	2722.8	2989.4	3224.7	3471.4	3686.7	3877.3	4067.9	4333.4	4596.9	4678.4
40°	2439.3	2759.0	3062.4	3358.0	3660.2	3929.2	4152.4	4378.0	4688.6	4996.9	5129.6
42.5°	2411.0	2764.4	3108.9	3446.7	3791.1	4148.8	4434.1	4694.1	4992.0	5387.1	5574.7
45°	2375.4	2745.7	3118.5	3491.9	3888.2	4302.0	4662.7	4984.2	5333.4	5723.7	5950.5
47.5°	2327.1	2716.2	3106.5	3507.6	3931.6	4400.3	4824.4	5211.0	5595.2	6044.6	6332.3
50°	2274.6	2674.0	3081.7	3496.1	3942.5	4454.0	4916.6	5357.0	5805.7	6290.7	6654.4
52.5°	2237.9	2628.7	3059.4	3472.6	3931.6	4470.3	4950.4	5435.4	5934.8	6436.1	6870.4
55°	2192.6	2568.4	2999.7	3417.7	3891.8	4461.2	4946.8	5462.5	5970.4	6492.2	6988.0
57.5°	2195.6	2540.7	2949.0	3352.0	3810.4	4377.4	4878.6	5435.4	5914.3	6456.0	6992.2
60°	2290.9	2600.4	2975.6	3365.2	3786.3	4324.3	4762.8	5260.5	5749.7	6331.1	6894.5
62.5°	2487.6	2771.1	3111.9	3497.9	3922.0	4430.5	4710.3	4969.7	5404.0	6101.3	6728.0
65°	2722.2	2978.0	3273.5	3640.9	4116.2	4603.0	4680.8	4733.3	4952.8	5654.3	6415.6
67.5°	2956.9	3185.5	3417.7	3722.3	4226.6	4652.4	4560.2	4435.3	4553.5	5135.0	5801.5
70°	3041.3	3344.7	3497.3	3706.6	4142.7	4537.2	4365.3	4051.1	4092.1	4620.5	5107.9
72.5°	2914.6	3347.1	3397.8	3475.6	3769.4	4140.3	3958.8	3554.6	3546.2	3949.7	4343.6
75°	2444.7	3053.4	3052.8	3023.8	3090.2	3301.3	3207.2	2963.5	3066.6	3384.5	3514.2
77.5°	1742.6	2382.6	2412.8	2217.9	2213.1	2308.4	2365.1	2648.6	3022.6	3201.2	3160.1
80°	1094.8	1607.5	1737.2	1496.5	1445.3	1580.4	1930.8	2343.4	2803.6	2964.1	2826.0
82.5°	659.3	1035.7	1311.9	1175.6	1163.6	1409.7	1796.9	1957.4	2095.5	2266.2	2035.2
85°	447.6	690.1	897.6	924.7	1030.3	1284.8	1453.1	1381.9	1385.5	1340.9	1221.5
87.5°	85.7	188.2	307.6	375.2	416.2	559.2	608.0	550.7	581.5	425.3	465.1
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: P158884

CATALOG NUMBER: VST-F04-LED-E-U-SLL-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9
2.5°	1059.8	1059.8	1059.8	1056.8	1057.4	1053.2	1051.4	1051.4	1049.6	1049.6	1049.0
5°	1093.0	1089.4	1091.2	1090.6	1090.6	1084.5	1081.5	1081.5	1073.7	1074.3	1071.9
7.5°	1142.5	1141.8	1143.7	1140.0	1135.2	1130.4	1125.6	1123.1	1112.3	1105.7	1101.4
10°	1198.5	1197.9	1199.8	1199.2	1190.7	1181.7	1168.4	1158.7	1145.5	1135.2	1125.0
12.5°	1260.1	1259.5	1258.3	1252.8	1243.8	1229.3	1212.4	1196.1	1176.2	1163.0	1147.9
15°	1356.0	1354.2	1346.9	1339.1	1329.4	1307.1	1277.6	1254.0	1227.5	1204.6	1179.8
17.5°	1497.7	1482.7	1481.4	1464.0	1438.0	1408.5	1380.7	1341.5	1303.5	1269.1	1235.3
20°	1693.2	1658.2	1648.5	1628.6	1594.2	1563.5	1503.2	1450.7	1398.8	1351.8	1308.9
22.5°	1906.1	1880.8	1857.2	1824.7	1777.6	1733.0	1656.4	1590.6	1524.3	1464.0	1416.3
25°	2203.5	2159.4	2117.2	2065.3	2000.2	1947.1	1859.6	1793.3	1706.4	1651.5	1582.8
27.5°	2587.7	2512.3	2441.1	2396.5	2281.9	2204.7	2093.1	2007.4	1902.5	1828.3	1746.9
30°	3087.8	3000.3	2894.7	2740.3	2604.0	2450.8	2312.6	2202.9	2091.3	1987.5	1893.4
32.5°	3707.8	3553.4	3386.3	3141.4	2917.7	2699.3	2515.3	2380.2	2266.2	2137.1	2004.4
35°	4232.0	4072.8	3835.7	3524.5	3248.2	2998.5	2778.3	2593.7	2444.7	2281.3	2105.8
37.5°	4645.8	4464.2	4241.7	3911.1	3619.2	3335.1	3104.0	2868.8	2673.4	2448.4	2226.4
40°	5119.9	4937.8	4692.9	4350.2	4004.6	3696.4	3425.5	3182.5	2942.4	2667.9	2382.6
42.5°	5533.1	5401.6	5153.7	4799.6	4416.6	4073.4	3777.2	3499.1	3185.5	2878.4	2540.7
45°	5963.8	5829.9	5594.6	5224.3	4817.1	4434.7	4080.6	3781.4	3411.1	3045.5	2658.9
47.5°	6344.4	6206.9	5969.2	5601.3	5168.8	4765.8	4376.2	4014.3	3584.2	3164.4	2736.1
50°	6707.5	6539.2	6321.5	5954.7	5492.7	5062.0	4639.2	4174.7	3718.7	3247.6	2788.6
52.5°	7041.1	6827.0	6620.7	6243.1	5743.6	5293.6	4821.9	4311.0	3801.3	3313.3	2824.2
55°	7230.5	7092.4	6845.7	6474.7	5922.2	5452.9	4937.8	4406.9	3883.4	3359.8	2839.2
57.5°	7289.0	7255.2	7048.3	6608.6	6027.1	5540.3	5016.2	4482.9	3938.3	3373.1	2818.1
60°	7242.6	7304.1	7190.7	6702.7	6074.8	5566.3	5054.8	4537.2	3947.9	3330.8	2754.2
62.5°	7093.6	7233.5	7219.0	6734.1	6050.0	5533.7	5050.5	4509.5	3857.4	3199.3	2610.6
65°	6848.7	7024.8	7086.9	6617.6	5910.7	5414.9	4943.2	4335.2	3605.9	2942.4	2370.0
67.5°	6387.8	6654.4	6714.8	6236.4	5546.4	5086.1	4633.7	3973.2	3140.2	2544.9	1994.2
70°	5464.3	5930.6	6012.0	5510.2	4904.0	4499.8	4116.2	3399.6	2614.8	2041.2	1530.3
72.5°	4362.3	4655.5	4821.9	4476.3	4025.1	3732.0	3441.2	2608.2	1973.1	1506.2	1053.2
75°	3410.5	3393.0	3542.0	3312.1	3046.7	2909.8	2691.5	1819.8	1321.6	997.7	666.5
77.5°	2915.8	2691.5	2522.0	2360.3	2202.9	2159.4	1950.1	1129.2	816.7	597.8	398.7
80°	2423.6	2014.1	1704.6	1477.2	1421.1	1506.8	1276.4	665.9	483.8	343.2	250.3
82.5°	1731.8	1448.9	1179.2	1035.1	939.2	1075.5	752.8	369.8	262.4	205.7	165.9
85°	1122.5	1073.1	1061.6	1014.6	898.2	848.1	571.8	318.5	196.6	127.9	103.1
87.5°	431.9	553.7	638.8	684.6	740.1	659.3	298.0	109.8	108.0	66.4	50.1
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: P158884

CATALOG NUMBER: VST-F04-LED-E-U-SLL-7030

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9
2.5°	1044.7	1042.3	1041.7	1039.9	1038.7	1038.7	1035.7	980.8	980.2	980.2	979.6
5°	1067.1	1064.0	1061.0	1060.4	1058.0	1058.0	1055.0	1000.1	1000.1	1000.1	998.9
7.5°	1097.2	1091.2	1087.6	1085.8	1082.1	1083.9	1086.4	1030.9	1031.5	1030.9	1032.1
10°	1118.9	1115.3	1111.1	1109.9	1107.5	1109.3	1112.9	1058.0	1059.8	1060.4	1061.6
12.5°	1140.0	1134.0	1128.6	1126.8	1125.6	1130.4	1134.6	1081.5	1083.3	1085.1	1085.1
15°	1166.0	1155.7	1148.5	1144.3	1141.8	1146.7	1152.7	1100.2	1100.8	1102.6	1102.0
17.5°	1210.0	1194.9	1178.0	1175.0	1167.2	1169.0	1170.2	1111.7	1109.3	1105.1	1097.8
20°	1278.2	1255.2	1232.3	1222.7	1207.0	1200.4	1187.1	1112.3	1097.2	1084.5	1073.7
22.5°	1375.9	1342.1	1317.4	1301.1	1269.1	1246.8	1210.6	1109.3	1080.9	1059.2	1042.3
25°	1533.9	1493.5	1455.5	1414.5	1364.4	1319.8	1266.7	1135.8	1091.8	1054.4	1021.8
27.5°	1687.7	1623.8	1565.3	1503.8	1433.2	1366.2	1291.4	1144.3	1094.2	1045.9	992.9
30°	1802.9	1710.1	1621.4	1531.5	1439.2	1352.4	1267.9	1115.3	1055.6	1001.3	945.2
32.5°	1872.9	1752.3	1637.1	1525.5	1416.9	1319.2	1224.5	1065.2	999.5	935.6	875.8
35°	1939.3	1789.7	1646.7	1515.2	1391.0	1282.4	1180.5	1006.7	928.3	860.2	784.8
37.5°	2021.3	1828.9	1652.8	1496.5	1353.0	1228.7	1116.5	933.1	854.7	770.9	699.7
40°	2119.6	1869.3	1646.7	1459.1	1293.9	1158.1	1039.3	855.9	768.5	687.0	617.1
42.5°	2213.1	1904.9	1631.0	1409.1	1229.3	1084.5	968.7	787.2	699.7	616.5	547.1
45°	2282.5	1935.0	1623.2	1374.1	1179.8	1034.5	906.6	731.7	639.4	555.5	485.0
47.5°	2330.7	1953.1	1619.6	1354.8	1145.5	982.6	849.9	676.2	579.1	494.6	425.9
50°	2356.1	1952.5	1610.5	1333.7	1094.8	920.5	791.4	620.1	523.6	440.9	378.2
52.5°	2362.7	1941.7	1591.2	1295.1	1033.3	858.3	728.7	561.6	474.7	395.7	332.4
55°	2347.6	1915.1	1550.8	1230.5	967.5	792.6	671.4	515.7	427.1	352.3	302.8
57.5°	2304.8	1868.1	1474.8	1141.8	898.2	731.7	605.6	460.2	375.2	312.5	271.4
60°	2225.2	1768.6	1356.0	1036.9	810.1	638.8	515.1	387.9	320.3	273.2	240.1
62.5°	2078.0	1612.3	1188.9	892.1	683.4	518.1	411.4	309.4	258.8	228.0	207.5
65°	1841.0	1377.1	995.3	702.7	519.4	377.0	305.8	232.8	196.0	177.3	171.3
67.5°	1502.6	1063.4	723.8	488.0	351.7	264.2	212.9	170.1	152.6	145.4	143.0
70°	1092.4	724.4	468.7	308.2	232.2	184.6	161.1	136.9	127.3	125.5	125.5
72.5°	685.8	440.3	287.1	211.1	176.1	149.6	137.5	120.6	117.0	115.8	114.0
75°	402.3	267.2	203.3	173.1	150.8	133.9	123.7	109.8	107.4	106.8	105.0
77.5°	256.4	192.4	164.1	147.8	136.3	121.2	112.2	97.7	97.1	96.5	95.9
80°	184.0	159.8	143.6	130.9	119.4	105.6	100.1	88.7	87.5	86.9	88.1
82.5°	139.3	132.1	125.5	115.8	100.1	89.9	85.7	77.8	78.4	75.4	74.8
85°	95.9	94.7	94.1	89.9	78.4	69.4	66.4	62.1	65.1	62.1	58.5
87.5°	47.0	46.4	42.8	50.7	47.0	37.4	33.8	37.4	41.6	40.4	37.4
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: P158884

CATALOG NUMBER: VST-F04-LED-E-U-SLL-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9
2.5°	977.2	974.8	976.6	975.4	975.4	974.8	976.0	974.2	973.0	974.2	974.8
5°	996.5	993.5	994.1	989.8	991.7	987.4	988.6	985.6	982.6	981.4	981.4
7.5°	1029.1	1026.0	1022.4	1021.8	1015.2	1012.8	1008.5	1006.1	1004.3	1000.1	997.7
10°	1058.6	1053.8	1049.6	1049.0	1042.3	1036.3	1030.9	1026.0	1023.0	1017.0	1014.0
12.5°	1082.7	1077.9	1071.3	1067.7	1061.0	1053.8	1050.2	1042.9	1038.7	1032.1	1026.6
15°	1096.6	1088.2	1078.5	1071.9	1062.2	1054.4	1049.0	1043.5	1039.3	1030.9	1023.0
17.5°	1090.0	1076.1	1062.8	1050.8	1037.5	1030.3	1022.4	1015.8	1014.6	1004.9	992.9
20°	1062.2	1045.9	1028.4	1012.2	994.7	984.4	974.8	964.5	961.5	950.0	934.3
22.5°	1028.4	1009.7	989.8	969.9	947.6	933.1	918.7	906.0	895.7	878.9	856.5
25°	994.1	966.3	937.4	912.0	886.1	868.0	852.9	839.0	827.0	799.8	776.9
27.5°	948.8	905.4	875.8	846.9	815.5	792.0	775.1	755.8	742.5	711.2	687.0
30°	890.9	847.5	805.3	776.3	744.9	719.6	697.9	670.1	650.8	627.9	605.6
32.5°	817.9	774.5	731.7	699.1	673.2	641.8	614.7	588.1	565.8	543.5	526.0
35°	729.3	687.0	646.6	614.1	585.1	560.4	534.4	511.5	486.2	462.0	451.8
37.5°	635.8	590.5	545.9	517.5	494.6	477.1	453.0	434.3	411.4	396.9	384.8
40°	554.3	506.1	463.9	439.7	421.6	401.7	381.8	367.3	351.1	336.6	327.5
42.5°	485.6	440.3	404.1	383.6	361.9	340.2	325.1	313.1	302.8	291.9	281.1
45°	422.2	378.8	348.6	323.3	305.2	287.7	277.5	272.0	266.0	259.4	252.1
47.5°	369.2	331.8	302.2	278.7	260.0	247.9	243.1	241.3	238.9	233.4	229.8
50°	328.7	298.0	267.8	246.7	231.0	225.0	219.6	217.8	214.7	212.9	210.5
52.5°	295.0	262.4	237.1	217.8	208.1	205.7	203.3	200.9	200.3	199.1	197.8
55°	267.2	238.9	215.3	200.9	196.0	194.2	193.6	191.2	190.6	190.6	188.8
57.5°	242.5	218.4	197.2	188.2	185.2	183.4	182.2	181.0	181.0	182.2	181.6
60°	217.2	196.6	184.0	179.1	177.3	174.3	171.3	170.1	170.7	173.7	173.7
62.5°	192.4	177.3	169.5	167.7	165.9	163.5	159.8	158.6	159.8	163.5	165.3
65°	165.3	158.6	156.2	155.0	153.8	152.0	149.6	148.4	149.0	150.8	153.2
67.5°	140.5	139.9	139.9	140.5	139.9	139.3	138.1	136.3	135.7	135.7	136.9
70°	125.5	125.5	127.3	127.3	126.7	126.7	124.9	123.1	121.8	120.6	121.2
72.5°	114.0	114.0	114.6	115.2	114.6	114.6	112.2	111.0	108.0	107.4	106.2
75°	104.4	103.1	103.1	102.5	101.9	102.5	100.1	97.1	95.9	95.3	94.1
77.5°	94.7	92.3	91.1	89.9	90.5	89.9	88.1	86.3	84.4	83.8	83.2
80°	83.8	80.2	78.4	75.4	77.2	77.8	76.6	74.8	74.2	73.6	73.0
82.5°	69.4	65.7	63.3	61.5	60.3	61.5	63.3	67.6	66.4	65.7	64.5
85°	54.3	48.3	45.2	45.8	42.8	43.4	48.9	51.3	51.3	52.5	51.3
87.5°	30.8	29.6	22.3	20.5	21.7	25.9	29.0	32.0	32.0	30.2	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: P158884

CATALOG NUMBER: VST-F04-LED-E-U-SLL-7030

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9
2.5°	974.8	976.0	976.6	979.0	980.2	980.8	981.4	982.6	983.2	982.6	985.6
5°	979.6	979.6	978.4	980.2	980.8	980.8	979.6	980.8	980.8	980.8	983.8
7.5°	992.3	988.6	986.8	984.4	982.6	980.2	977.2	977.2	976.6	977.2	979.0
10°	1005.5	1000.1	993.5	987.4	982.0	977.8	972.3	970.5	969.9	969.3	974.2
12.5°	1015.8	1006.1	995.9	985.6	974.8	967.5	958.5	953.0	952.4	952.4	958.5
15°	1008.5	992.9	973.0	954.9	945.2	935.0	924.7	918.1	917.5	918.7	922.3
17.5°	972.3	947.0	929.5	912.0	899.4	890.9	884.3	883.1	885.5	883.1	887.9
20°	910.8	883.7	871.6	857.7	852.9	846.9	837.2	828.8	828.8	817.9	820.9
22.5°	831.2	816.1	800.4	789.6	786.0	775.7	765.5	754.0	752.8	739.5	737.7
25°	748.0	732.9	720.2	717.8	706.9	693.1	683.4	670.1	667.1	653.9	652.1
27.5°	662.9	650.8	638.2	630.9	624.9	609.8	601.4	585.7	579.7	565.2	563.4
30°	582.1	573.6	558.6	552.5	541.1	523.6	505.5	495.8	491.0	475.9	471.1
32.5°	506.1	492.8	481.3	474.1	459.6	439.7	423.4	409.6	400.5	382.4	377.6
35°	433.7	420.4	415.0	396.3	383.6	370.4	348.0	339.6	323.3	309.4	304.6
37.5°	369.8	357.1	349.9	334.2	321.5	308.2	295.0	284.1	276.3	273.2	273.2
40°	314.9	308.2	299.2	287.7	279.3	269.6	262.4	258.8	258.2	259.4	262.4
42.5°	275.7	268.4	262.4	256.4	250.3	249.1	247.3	249.7	252.7	255.8	258.8
45°	246.1	240.1	236.5	234.0	233.4	235.2	238.9	242.5	247.9	251.5	253.9
47.5°	225.0	220.2	219.0	218.4	221.4	226.8	231.6	237.1	241.3	244.9	247.3
50°	206.9	202.7	202.1	201.5	205.7	210.5	214.7	222.0	225.0	227.4	229.2
52.5°	194.2	190.6	188.8	189.4	193.6	197.8	203.9	209.3	213.5	215.3	217.2
55°	184.0	182.8	178.5	180.4	184.6	190.0	196.0	202.1	206.3	209.3	212.3
57.5°	176.1	173.1	170.1	173.1	177.3	182.8	190.0	195.4	200.9	205.1	208.1
60°	167.7	165.3	162.9	165.9	170.1	175.5	181.0	188.2	194.8	199.1	202.1
62.5°	160.4	158.6	156.2	156.8	158.6	162.3	165.3	171.9	177.9	183.4	187.0
65°	150.2	149.6	146.0	146.6	147.8	151.4	153.8	159.8	165.9	170.7	173.7
67.5°	135.1	133.9	133.9	135.7	136.3	138.1	139.9	146.0	150.8	154.4	158.0
70°	120.0	119.4	119.4	120.6	120.0	121.8	124.3	129.7	135.7	139.3	143.0
72.5°	105.6	105.6	105.0	106.2	106.2	106.8	109.8	114.6	120.0	123.1	125.5
75°	92.9	92.3	92.3	92.3	92.9	92.9	95.9	100.1	105.6	107.4	111.0
77.5°	81.4	81.4	81.4	81.4	82.0	81.4	83.2	86.3	88.1	91.1	91.1
80°	71.8	71.2	71.8	72.4	72.4	71.8	71.8	72.4	73.0	73.0	73.0
82.5°	63.3	61.5	62.7	65.7	65.7	65.7	65.1	60.9	57.9	57.9	59.1
85°	50.7	50.7	51.3	55.5	56.1	53.7	56.1	50.1	44.0	42.2	43.4
87.5°	31.4	24.7	30.2	34.4	34.4	32.6	36.2	33.8	28.4	22.9	21.7
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: P158884
 CATALOG NUMBER: VST-F04-LED-E-U-SLL-7030

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	0°
2.5°	988.0	988.6	992.3	994.1	994.1	996.5	997.7	1001.3	1000.7	1000.7	1001.9	2.5°
5°	986.8	988.6	992.3	994.7	995.9	998.9	1001.3	1005.5	1004.9	1006.1	1006.7	5°
7.5°	982.6	987.4	991.0	995.9	1000.1	1002.5	1005.5	1009.1	1007.9	1008.5	1007.9	7.5°
10°	979.0	983.8	991.0	997.7	1003.7	1007.3	1009.1	1013.4	1012.8	1014.0	1014.0	10°
12.5°	964.5	973.0	982.0	992.3	1001.3	1011.0	1017.0	1026.0	1030.3	1035.7	1041.7	12.5°
15°	927.7	937.4	951.8	963.3	980.8	994.1	1011.6	1029.1	1044.7	1059.8	1077.3	15°
17.5°	891.5	895.7	907.2	922.9	938.6	958.5	979.6	1011.0	1039.3	1070.1	1103.8	17.5°
20°	824.6	831.8	839.6	858.3	877.0	905.4	931.3	972.3	1014.0	1062.2	1114.1	20°
22.5°	741.9	749.2	757.6	778.7	801.6	830.6	862.0	907.8	963.3	1026.0	1095.4	22.5°
25°	652.7	656.9	663.5	684.6	698.5	736.5	774.5	822.2	882.5	963.3	1044.1	25°
27.5°	554.3	562.2	567.6	577.3	609.2	641.8	681.6	732.9	805.9	888.5	986.2	27.5°
30°	460.2	466.9	463.9	484.4	505.5	539.9	582.7	639.4	709.4	807.7	920.5	30°
32.5°	367.9	372.8	371.0	385.4	406.6	440.9	481.3	542.9	617.1	722.0	844.5	32.5°
35°	303.4	304.6	311.2	317.9	336.0	363.7	398.1	451.8	527.8	624.3	754.0	35°
37.5°	273.2	275.7	279.9	288.9	302.2	322.1	350.5	392.1	457.2	542.3	658.1	37.5°
40°	264.2	266.0	268.4	274.5	287.1	304.6	329.9	364.9	412.6	484.4	578.5	40°
42.5°	260.0	260.0	260.0	263.6	273.2	291.9	320.9	355.3	396.9	451.2	527.2	42.5°
45°	253.9	253.9	253.3	255.2	261.8	280.5	311.9	350.5	395.1	447.0	512.7	45°
47.5°	247.3	246.7	244.9	244.9	249.1	267.8	300.4	342.0	390.9	450.6	521.2	47.5°
50°	229.2	229.2	229.2	231.0	234.6	251.5	286.5	330.6	386.6	453.0	534.4	50°
52.5°	219.0	219.6	221.4	221.4	225.0	242.5	279.3	328.1	389.1	462.0	551.3	52.5°
55°	214.1	215.9	217.8	217.8	220.8	238.9	276.9	329.9	398.1	480.7	580.3	55°
57.5°	209.9	211.7	212.9	212.9	215.3	231.0	270.2	326.9	403.5	498.8	615.9	57.5°
60°	202.1	203.3	203.9	203.9	204.5	217.8	255.2	312.5	391.5	497.6	635.2	60°
62.5°	187.6	190.0	190.6	191.2	191.2	203.9	235.8	288.9	365.5	479.5	629.7	62.5°
65°	176.7	177.9	179.8	181.0	183.4	191.8	217.2	260.6	331.8	443.3	599.6	65°
67.5°	159.8	161.7	163.5	165.9	168.3	173.7	193.6	228.6	285.9	381.8	532.0	67.5°
70°	144.8	145.4	147.2	150.2	150.8	153.8	168.3	192.4	234.0	306.4	428.3	70°
72.5°	126.1	127.3	129.7	133.3	133.3	135.7	144.2	156.8	183.4	234.0	316.1	72.5°
75°	109.8	111.0	112.8	112.8	109.8	110.4	116.4	125.5	145.4	176.1	230.4	75°
77.5°	91.1	93.5	95.3	91.7	90.5	92.3	95.3	101.9	116.4	139.9	173.1	77.5°
80°	75.4	76.6	77.2	77.8	76.6	78.4	80.8	85.1	94.7	112.8	136.9	80°
82.5°	60.3	61.5	63.3	65.7	65.7	72.4	73.0	73.0	78.4	89.9	107.4	82.5°
85°	44.6	47.0	49.5	52.5	53.1	56.7	54.9	54.3	56.1	67.0	74.2	85°
87.5°	22.9	24.7	25.9	28.4	25.3	26.5	26.5	24.7	21.7	27.1	30.2	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: P158884

NUMBER: VST-F04-LED-E-U-SLL-7030

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9
1003.1	1001.9	1003.1	1003.1	1004.9	1003.7	1067.7
1007.9	1006.7	1007.9	1009.1	1011.0	1011.0	1081.5
1008.5	1008.5	1007.3	1010.4	1012.8	1015.2	1094.8
1015.8	1015.8	1017.0	1017.6	1023.0	1029.1	1116.5
1045.3	1048.4	1053.8	1055.6	1065.2	1071.9	1172.0
1090.6	1107.5	1118.3	1121.9	1130.4	1143.1	1265.5
1136.4	1164.8	1194.3	1212.4	1223.3	1238.4	1380.1
1170.8	1223.9	1274.6	1319.8	1345.7	1375.3	1540.6
1173.8	1258.3	1343.9	1427.8	1497.1	1552.0	1757.7
1144.9	1255.9	1374.1	1502.6	1622.0	1720.9	2007.4
1108.1	1244.4	1395.2	1559.3	1716.1	1862.1	2191.4
1061.6	1225.1	1398.8	1583.4	1767.4	1942.9	2296.4
991.0	1167.8	1355.4	1559.3	1772.8	1986.3	2363.9
900.6	1080.9	1273.3	1505.6	1747.5	2003.8	2420.6
808.3	986.2	1193.1	1433.8	1707.0	2000.8	2443.5
710.6	887.3	1099.0	1357.2	1652.2	1973.1	2439.3
644.2	805.3	1012.8	1279.4	1591.2	1936.3	2411.0
605.6	746.8	944.6	1208.2	1535.7	1892.2	2375.4
605.0	729.3	908.4	1157.5	1479.6	1843.4	2327.1
626.1	740.1	904.2	1135.8	1448.9	1807.8	2274.6
650.8	770.3	926.5	1143.7	1448.3	1792.1	2237.9
690.1	821.6	975.4	1177.4	1464.0	1789.7	2192.6
740.1	890.9	1063.4	1260.7	1524.9	1837.3	2195.6
791.4	972.3	1178.6	1403.0	1644.9	1948.3	2290.9
810.1	1035.1	1295.7	1570.1	1824.7	2114.8	2487.6
793.8	1049.6	1366.8	1699.8	1999.6	2309.6	2722.2
733.5	991.0	1337.9	1736.6	2100.3	2447.8	2956.9
603.8	845.7	1206.4	1654.0	2092.5	2476.1	3041.3
442.7	655.7	980.8	1405.4	1860.3	2298.8	2914.6
319.7	463.9	708.2	1058.6	1470.6	1851.2	2444.7
229.2	321.5	459.6	695.5	1001.9	1289.0	1742.6
164.7	218.4	286.5	417.4	610.4	791.4	1094.8
121.2	149.6	188.2	259.4	359.5	460.8	659.3
82.6	88.1	113.4	153.2	235.8	339.0	447.6
31.4	35.6	41.6	62.7	105.6	121.2	85.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)