

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: P158887

Luminaire Tested: **VST-F04-LED-E-U-SLL-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158887
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-7060
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (28) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9105.3 lumens
Efficiency: N/A
Efficacy: 89.1 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

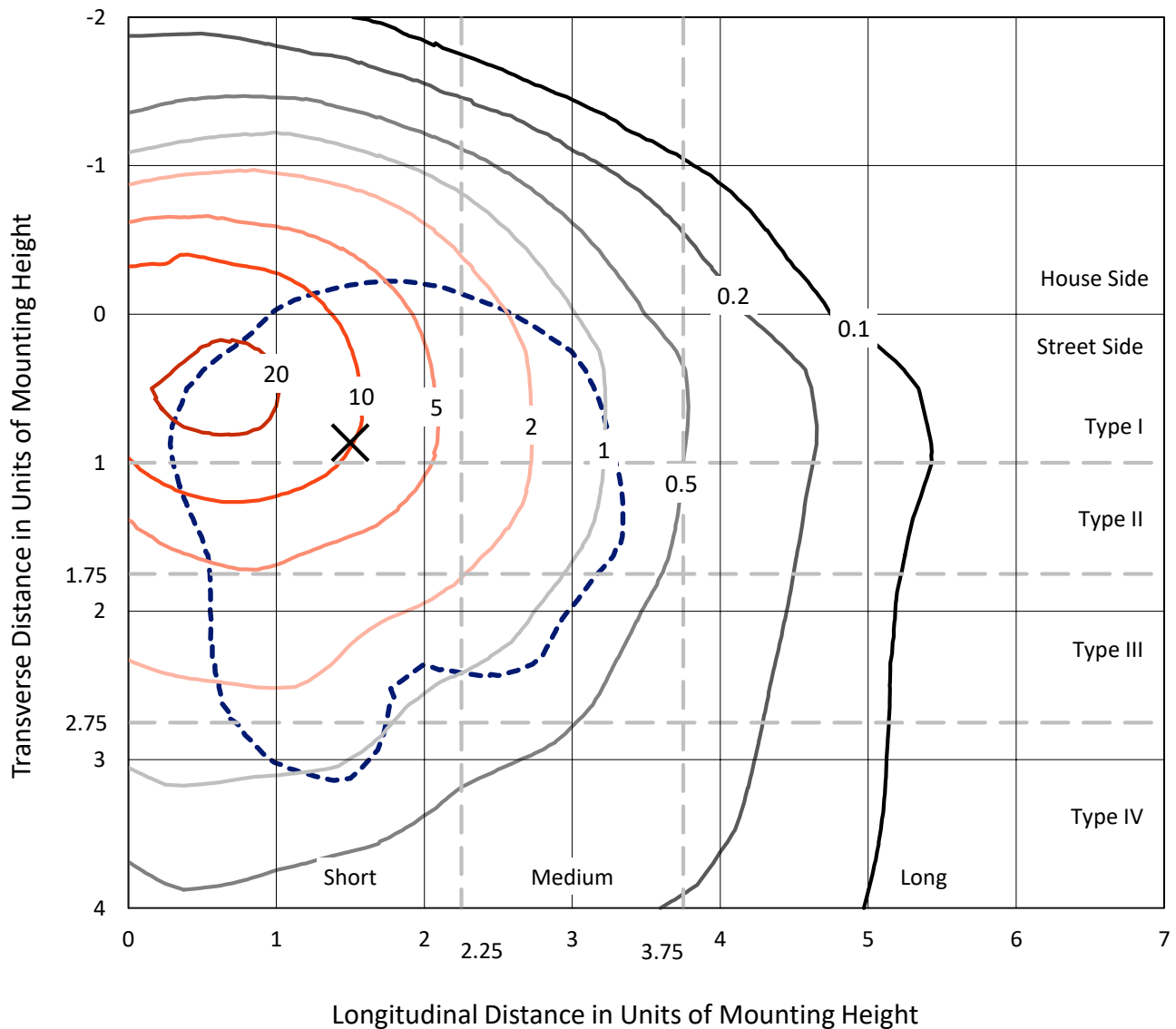


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

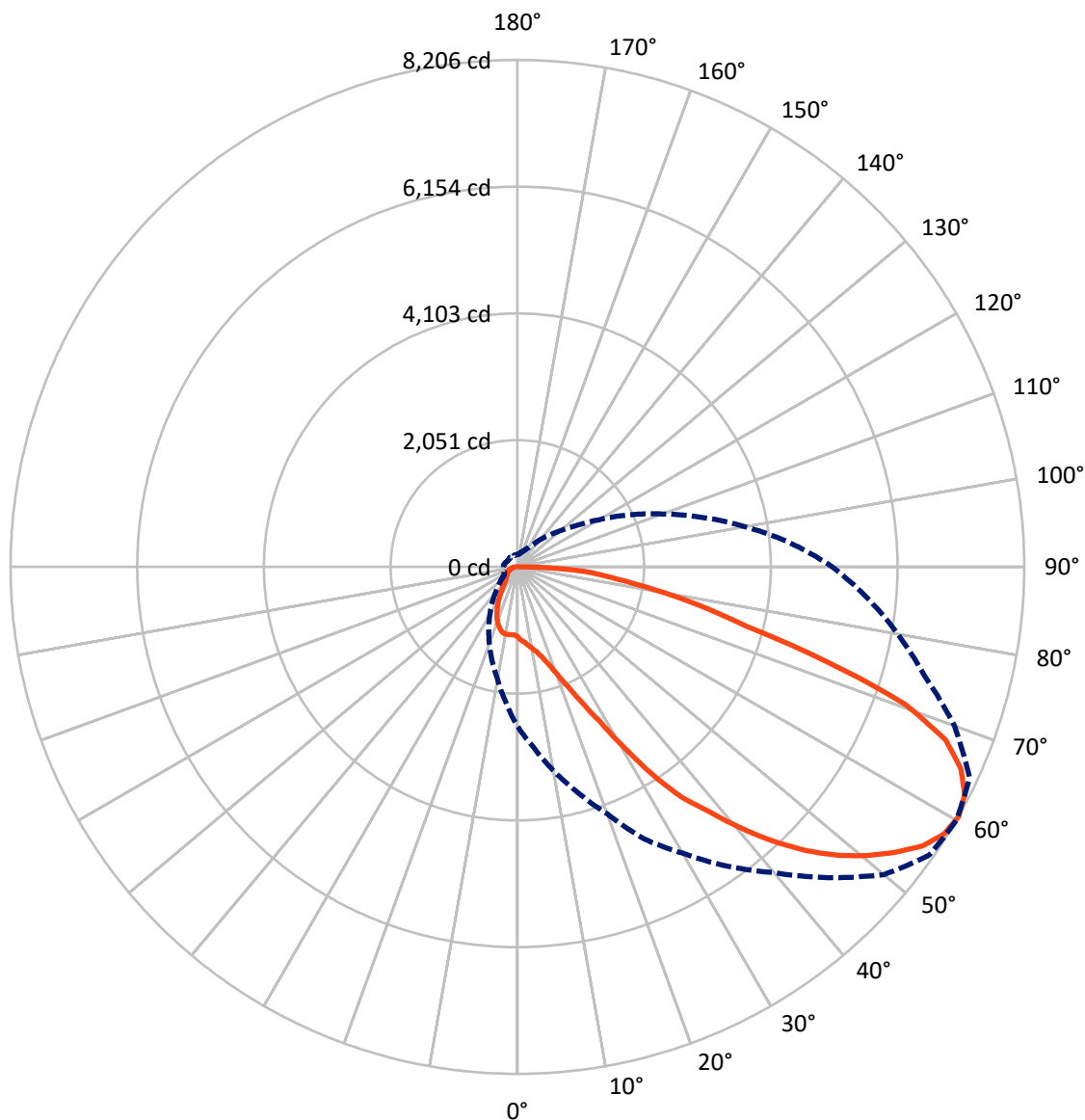


Based on 10 foot mounting height. Maximum calculated value = 26.1 fc
Type IV - Short - Non-Cutoff

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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	2050.2	0.0	2050.2
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	7055.1	0.0	7055.1
	% Fixture	77.5	0.0	77.5
Total	Lumens	9105.3	0.0	9105.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.7	1.2
10°-20°	360.7	4.0
20°-30°	684.5	7.5
30°-40°	1077.9	11.8
40°-50°	1504.5	16.5
50°-60°	1860.8	20.4
60°-70°	1928.8	21.2
70°-80°	1213.7	13.3
80°-90°	362.8	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°	9105.3	100.0
0°-180°	9105.3	100.0

Coefficient of Utilization



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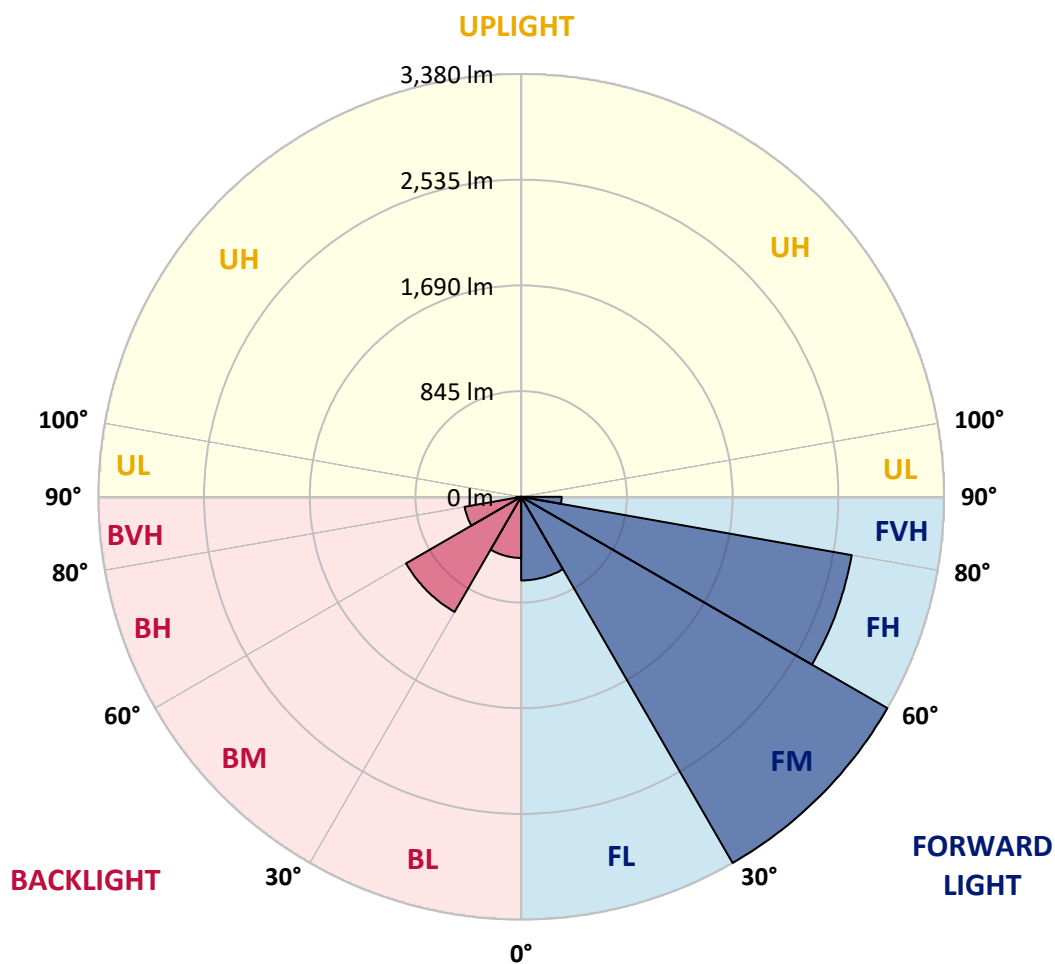
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	668.5	7.3			
FM	(30°-60°)	3380.0	37.1			
FH	(60°-80°)	2683.3	29.5			G2/5000
FVH	(80°-90°)	323.3	3.6			G3/500
BL	(0°-30°)	488.4	5.4	B1/500		
BM	(30°-60°)	1063.2	11.7	B2/2500		
BH	(60°-80°)	459.2	5.0	B1/500		G1/500
BVH	(80°-90°)	39.5	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°	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4
2.5°	1199.5	1198.1	1198.1	1198.1	1197.4	1196.1	1198.1	1197.4	1194.0	1192.0	1194.0
5°	1215.0	1215.7	1217.8	1218.4	1218.4	1220.5	1225.9	1226.6	1225.9	1227.2	1230.6
7.5°	1230.0	1233.3	1235.4	1238.8	1242.8	1246.2	1255.7	1265.2	1271.3	1276.0	1277.4
10°	1254.3	1259.8	1265.9	1274.7	1284.2	1301.1	1309.2	1318.7	1324.8	1334.3	1336.3
12.5°	1316.7	1323.5	1327.5	1341.1	1353.3	1369.6	1381.1	1383.8	1398.0	1406.1	1415.6
15°	1421.7	1431.9	1446.1	1454.3	1467.8	1482.0	1492.2	1505.8	1507.8	1518.6	1526.1
17.5°	1550.5	1564.7	1593.9	1613.5	1631.1	1645.4	1665.7	1681.3	1684.7	1696.9	1681.3
20°	1730.7	1765.3	1770.0	1809.4	1824.9	1853.4	1894.1	1901.5	1921.2	1901.5	1890.0
22.5°	1974.7	2028.9	2043.8	2081.8	2100.7	2144.1	2156.3	2196.3	2209.9	2194.9	2163.8
25°	2255.3	2339.3	2382.7	2440.9	2450.4	2539.2	2548.7	2595.4	2570.4	2534.5	2535.1
27.5°	2461.9	2604.9	2716.7	2816.4	2886.2	2986.4	3064.4	3086.1	3062.3	3015.6	2999.3
30°	2579.9	2741.8	2902.4	3040.0	3202.6	3355.8	3515.0	3594.3	3607.9	3632.3	3534.0
32.5°	2655.8	2863.8	3054.9	3225.0	3391.7	3588.9	3802.4	4006.3	4177.8	4307.2	4246.2
35°	2719.5	2976.3	3220.9	3426.9	3624.1	3838.9	4054.4	4295.0	4579.0	4745.0	4779.5
37.5°	2745.2	3059.0	3358.5	3622.8	3899.9	4141.9	4356.0	4570.1	4868.3	5164.5	5255.9
40°	2740.5	3099.6	3440.5	3772.5	4112.0	4414.3	4665.0	4918.5	5267.5	5613.7	5762.8
42.5°	2708.6	3105.7	3492.7	3872.2	4259.1	4660.9	4981.5	5273.6	5608.3	6052.2	6262.9
45°	2668.6	3084.7	3503.5	3923.0	4368.2	4833.1	5238.3	5599.5	5991.9	6430.3	6685.1
47.5°	2614.4	3051.5	3490.0	3940.6	4417.0	4943.5	5419.9	5854.3	6286.0	6790.8	7114.1
50°	2555.5	3004.1	3462.2	3927.7	4429.2	5003.8	5523.6	6018.3	6522.5	7067.3	7476.0
52.5°	2514.1	2953.2	3437.1	3901.3	4417.0	5022.1	5561.6	6106.4	6667.5	7230.6	7718.6
55°	2463.3	2885.5	3370.0	3839.6	4372.3	5012.0	5557.5	6136.9	6707.5	7293.7	7850.7
57.5°	2466.7	2854.3	3313.1	3765.8	4280.8	4917.8	5480.9	6106.4	6644.5	7253.0	7855.4
60°	2573.8	2921.4	3342.9	3780.7	4253.7	4858.1	5350.8	5909.9	6459.5	7112.7	7745.7
62.5°	2794.7	3113.2	3496.1	3929.8	4406.1	4977.4	5291.9	5583.2	6071.2	6854.5	7558.6
65°	3058.3	3345.6	3677.7	4090.4	4624.4	5171.2	5258.6	5317.6	5564.3	6352.4	7207.6
67.5°	3321.9	3578.7	3839.6	4181.8	4748.4	5226.8	5123.1	4982.8	5115.7	5768.9	6517.7
70°	3416.8	3757.6	3929.1	4164.2	4654.2	5097.4	4904.2	4551.2	4597.2	5190.9	5738.4
72.5°	3274.5	3760.3	3817.3	3904.7	4234.7	4651.5	4447.5	3993.5	3984.0	4437.3	4879.8
75°	2746.6	3430.3	3429.6	3397.1	3471.7	3708.8	3603.1	3329.3	3445.2	3802.4	3948.1
77.5°	1957.8	2676.8	2710.6	2491.8	2486.3	2593.4	2657.1	2975.6	3395.8	3596.3	3550.3
80°	1230.0	1806.0	1951.7	1681.3	1623.7	1775.5	2169.2	2632.7	3149.8	3330.0	3174.8
82.5°	740.7	1163.5	1473.9	1320.8	1307.2	1583.7	2018.8	2199.0	2354.2	2546.0	2286.4
85°	502.8	775.2	1008.4	1038.9	1157.4	1443.4	1632.5	1552.5	1556.6	1506.4	1372.3
87.5°	96.2	211.4	345.6	421.5	467.6	628.2	683.1	618.7	653.3	477.8	522.5
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°	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4
2.5°	1190.6	1190.6	1190.6	1187.3	1187.9	1183.2	1181.2	1181.2	1179.1	1179.1	1178.5
5°	1227.9	1223.9	1225.9	1225.2	1225.2	1218.4	1215.0	1215.0	1206.2	1206.9	1204.2
7.5°	1283.5	1282.8	1284.8	1280.8	1275.4	1269.9	1264.5	1261.8	1249.6	1242.2	1237.4
10°	1346.5	1345.8	1347.9	1347.2	1337.7	1327.5	1312.6	1301.8	1286.9	1275.4	1263.8
12.5°	1415.6	1415.0	1413.6	1407.5	1397.3	1381.1	1362.1	1343.8	1321.4	1306.5	1289.6
15°	1523.4	1521.3	1513.2	1504.4	1493.6	1468.5	1435.3	1408.9	1379.0	1353.3	1325.5
17.5°	1682.6	1665.7	1664.3	1644.7	1615.5	1582.3	1551.2	1507.1	1464.4	1425.8	1387.8
20°	1902.2	1862.9	1852.0	1829.7	1791.1	1756.5	1688.7	1629.8	1571.5	1518.6	1470.5
22.5°	2141.4	2112.9	2086.5	2049.9	1997.1	1946.9	1860.9	1787.0	1712.4	1644.7	1591.1
25°	2475.5	2426.0	2378.6	2320.3	2247.1	2187.5	2089.2	2014.7	1917.1	1855.4	1778.2
27.5°	2907.2	2822.5	2742.5	2692.3	2563.6	2476.8	2351.5	2255.3	2137.3	2054.0	1962.5
30°	3468.9	3370.7	3252.1	3078.6	2925.5	2753.3	2598.2	2474.8	2349.4	2232.9	2127.2
32.5°	4165.6	3992.1	3804.4	3529.3	3277.8	3032.5	2825.8	2674.0	2546.0	2401.0	2251.9
35°	4754.5	4575.6	4309.2	3959.6	3649.2	3368.7	3121.3	2913.9	2746.6	2562.9	2365.7
37.5°	5219.3	5015.4	4765.3	4394.0	4066.0	3746.8	3487.2	3223.0	3003.4	2750.6	2501.2
40°	5752.0	5547.3	5272.2	4887.3	4499.0	4152.7	3848.4	3575.3	3305.6	2997.3	2676.8
42.5°	6216.2	6068.4	5789.9	5392.1	4961.8	4576.2	4243.5	3931.1	3578.7	3233.8	2854.3
45°	6700.0	6549.6	6285.3	5869.2	5411.8	4982.2	4584.4	4248.3	3832.2	3421.5	2987.1
47.5°	7127.6	6973.1	6706.1	6292.8	5806.9	5354.2	4916.4	4509.8	4026.7	3555.0	3073.9
50°	7535.6	7346.5	7101.9	6689.9	6170.8	5686.9	5211.9	4690.1	4177.8	3648.5	3132.8
52.5°	7910.3	7669.8	7438.0	7013.8	6452.7	5947.1	5417.2	4843.2	4270.6	3722.4	3172.8
55°	8123.1	7967.9	7690.8	7274.0	6653.3	6126.1	5547.3	4951.0	4362.8	3774.6	3189.7
57.5°	8188.8	8150.9	7918.5	7424.4	6771.2	6224.3	5635.4	5036.4	4424.4	3789.5	3166.0
60°	8136.7	8205.8	8078.4	7530.2	6824.7	6253.5	5678.8	5097.4	4435.3	3742.0	3094.2
62.5°	7969.3	8126.5	8110.2	7565.4	6796.9	6216.9	5674.1	5066.2	4333.6	3594.3	2932.9
65°	7694.2	7892.0	7961.8	7434.6	6640.4	6083.4	5553.4	4870.3	4051.1	3305.6	2662.5
67.5°	7176.4	7476.0	7543.7	7006.3	6231.1	5714.0	5205.8	4463.7	3527.9	2859.0	2240.3
70°	6138.9	6662.8	6754.2	6190.4	5509.4	5055.3	4624.4	3819.3	2937.7	2293.2	1719.2
72.5°	4900.8	5230.2	5417.2	5028.9	4522.0	4192.7	3866.1	2930.2	2216.6	1692.1	1183.2
75°	3831.5	3811.8	3979.2	3721.0	3422.9	3269.0	3023.7	2044.5	1484.8	1120.9	748.8
77.5°	3275.8	3023.7	2833.3	2651.7	2474.8	2426.0	2190.9	1268.6	917.6	671.6	447.9
80°	2722.8	2262.7	1915.1	1659.6	1596.6	1692.8	1433.9	748.1	543.5	385.6	281.2
82.5°	1945.6	1627.7	1324.8	1162.9	1055.1	1208.3	845.7	415.4	294.8	231.1	186.4
85°	1261.1	1205.6	1192.7	1139.8	1009.0	952.8	642.4	357.8	220.9	143.7	115.9
87.5°	485.2	622.1	717.6	769.1	831.5	740.7	334.8	123.3	121.3	74.5	56.2
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°	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4
2.5°	1173.7	1171.0	1170.3	1168.3	1166.9	1166.9	1163.5	1101.9	1101.2	1101.2	1100.5
5°	1198.8	1195.4	1192.0	1191.3	1188.6	1188.6	1185.2	1123.6	1123.6	1123.6	1122.2
7.5°	1232.7	1225.9	1221.8	1219.8	1215.7	1217.8	1220.5	1158.1	1158.8	1158.1	1159.5
10°	1257.1	1253.0	1248.3	1246.9	1244.2	1246.2	1250.3	1188.6	1190.6	1191.3	1192.7
12.5°	1280.8	1274.0	1267.9	1265.9	1264.5	1269.9	1274.7	1215.0	1217.1	1219.1	1219.1
15°	1309.9	1298.4	1290.3	1285.5	1282.8	1288.2	1295.0	1236.1	1236.7	1238.8	1238.1
17.5°	1359.4	1342.4	1323.5	1320.1	1311.3	1313.3	1314.7	1248.9	1246.2	1241.5	1233.3
20°	1436.0	1410.2	1384.5	1373.6	1356.0	1348.5	1333.6	1249.6	1232.7	1218.4	1206.2
22.5°	1545.7	1507.8	1480.0	1461.7	1425.8	1400.7	1360.1	1246.2	1214.4	1190.0	1171.0
25°	1723.3	1677.9	1635.2	1589.1	1532.9	1482.7	1423.1	1276.0	1226.6	1184.6	1148.0
27.5°	1896.1	1824.3	1758.5	1689.4	1610.1	1534.9	1450.9	1285.5	1229.3	1175.1	1115.4
30°	2025.5	1921.2	1821.6	1720.6	1616.9	1519.3	1424.4	1253.0	1185.9	1124.9	1061.9
32.5°	2104.1	1968.6	1839.2	1713.8	1591.8	1482.0	1375.7	1196.7	1122.9	1051.1	984.0
35°	2178.7	2010.6	1850.0	1702.3	1562.7	1440.7	1326.2	1131.0	1042.9	966.3	881.6
37.5°	2270.8	2054.7	1856.8	1681.3	1520.0	1380.4	1254.3	1048.3	960.2	866.1	786.1
40°	2381.3	2100.1	1850.0	1639.3	1453.6	1301.1	1167.6	961.6	863.3	771.9	693.2
42.5°	2486.3	2140.1	1832.4	1583.0	1381.1	1218.4	1088.3	884.3	786.1	692.6	614.6
45°	2564.3	2173.9	1823.6	1543.7	1325.5	1162.2	1018.5	822.0	718.3	624.1	544.8
47.5°	2618.5	2194.3	1819.5	1522.0	1286.9	1103.9	954.8	759.7	650.6	555.7	478.4
50°	2646.9	2193.6	1809.4	1498.3	1230.0	1034.1	889.1	696.6	588.2	495.4	424.9
52.5°	2654.4	2181.4	1787.7	1454.9	1160.8	964.3	818.6	630.9	533.3	444.5	373.4
55°	2637.5	2151.6	1742.3	1382.4	1087.0	890.4	754.2	579.4	479.8	395.8	340.2
57.5°	2589.3	2098.7	1656.9	1282.8	1009.0	822.0	680.4	517.1	421.5	351.0	304.9
60°	2499.9	1986.9	1523.4	1164.9	910.1	717.6	578.7	435.7	359.8	307.0	269.7
62.5°	2334.5	1811.4	1335.7	1002.3	767.8	582.1	462.2	347.6	290.7	256.2	233.1
65°	2068.2	1547.1	1118.1	789.5	583.5	423.5	343.6	261.6	220.2	199.2	192.5
67.5°	1688.1	1194.7	813.2	548.2	395.1	296.8	239.2	191.1	171.4	163.3	160.6
70°	1227.2	813.9	526.5	346.3	260.9	207.4	180.9	153.8	143.0	141.0	141.0
72.5°	770.5	494.7	322.6	237.2	197.9	168.1	154.5	135.5	131.5	130.1	128.1
75°	452.0	300.2	228.4	194.5	169.4	150.4	138.9	123.3	120.6	119.9	117.9
77.5°	288.0	216.2	184.3	166.0	153.2	136.2	126.0	109.8	109.1	108.4	107.7
80°	206.7	179.6	161.3	147.1	134.2	118.6	112.5	99.6	98.3	97.6	98.9
82.5°	156.5	148.4	141.0	130.1	112.5	101.0	96.2	87.4	88.1	84.7	84.0
85°	107.7	106.4	105.7	101.0	88.1	77.9	74.5	69.8	73.2	69.8	65.7
87.5°	52.9	52.2	48.1	56.9	52.9	42.0	37.9	42.0	46.8	45.4	42.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P158887

CATALOG NUMBER: VST-F04-LED-E-U-SLL-7060

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4
2.5°	1097.8	1095.1	1097.1	1095.8	1095.8	1095.1	1096.5	1094.4	1093.1	1094.4	1095.1
5°	1119.5	1116.1	1116.8	1112.0	1114.1	1109.3	1110.7	1107.3	1103.9	1102.6	1102.6
7.5°	1156.1	1152.7	1148.6	1148.0	1140.5	1137.8	1133.0	1130.3	1128.3	1123.6	1120.9
10°	1189.3	1183.9	1179.1	1178.5	1171.0	1164.2	1158.1	1152.7	1149.3	1142.5	1139.1
12.5°	1216.4	1211.0	1203.5	1199.5	1192.0	1183.9	1179.8	1171.7	1166.9	1159.5	1153.4
15°	1232.0	1222.5	1211.7	1204.2	1193.4	1184.6	1178.5	1172.4	1167.6	1158.1	1149.3
17.5°	1224.5	1208.9	1194.0	1180.5	1165.6	1157.4	1148.6	1141.2	1139.8	1129.0	1115.4
20°	1193.4	1175.1	1155.4	1137.1	1117.5	1105.9	1095.1	1083.6	1080.2	1067.3	1049.7
22.5°	1155.4	1134.4	1112.0	1089.7	1064.6	1048.3	1032.1	1017.8	1006.3	987.4	962.3
25°	1116.8	1085.6	1053.1	1024.6	995.5	975.2	958.2	942.6	929.1	898.6	872.8
27.5°	1066.0	1017.2	984.0	951.4	916.2	889.8	870.8	849.1	834.2	799.0	771.9
30°	1000.9	952.1	904.7	872.1	836.9	808.4	784.1	752.9	731.2	705.4	680.4
32.5°	918.9	870.1	822.0	785.4	756.3	721.0	690.5	660.7	635.6	610.6	590.9
35°	819.3	771.9	726.5	689.9	657.3	629.5	600.4	574.7	546.2	519.1	507.6
37.5°	714.3	663.4	613.3	581.4	555.7	536.0	508.9	487.9	462.2	445.9	432.3
40°	622.8	568.6	521.1	494.0	473.7	451.3	429.0	412.7	394.4	378.1	368.0
42.5°	545.5	494.7	454.0	431.0	406.6	382.2	365.3	351.7	340.2	328.0	315.8
45°	474.4	425.6	391.7	363.2	342.9	323.2	311.7	305.6	298.8	291.4	283.3
47.5°	414.7	372.7	339.5	313.1	292.1	278.5	273.1	271.1	268.4	262.3	258.2
50°	369.3	334.8	300.9	277.2	259.5	252.8	246.7	244.6	241.2	239.2	236.5
52.5°	331.4	294.8	266.3	244.6	233.8	231.1	228.4	225.7	225.0	223.6	222.3
55°	300.2	268.4	241.9	225.7	220.2	218.2	217.5	214.8	214.1	214.1	212.1
57.5°	272.4	245.3	221.6	211.4	208.0	206.0	204.7	203.3	203.3	204.7	204.0
60°	244.0	220.9	206.7	201.3	199.2	195.8	192.5	191.1	191.8	195.2	195.2
62.5°	216.2	199.2	190.4	188.4	186.4	183.6	179.6	178.2	179.6	183.6	185.7
65°	185.7	178.2	175.5	174.2	172.8	170.8	168.1	166.7	167.4	169.4	172.1
67.5°	157.9	157.2	157.2	157.9	157.2	156.5	155.2	153.2	152.5	152.5	153.8
70°	141.0	141.0	143.0	143.0	142.3	142.3	140.3	138.2	136.9	135.5	136.2
72.5°	128.1	128.1	128.8	129.4	128.8	128.8	126.0	124.7	121.3	120.6	119.3
75°	117.2	115.9	115.9	115.2	114.5	115.2	112.5	109.1	107.7	107.1	105.7
77.5°	106.4	103.7	102.3	101.0	101.6	101.0	98.9	96.9	94.9	94.2	93.5
80°	94.2	90.1	88.1	84.7	86.7	87.4	86.1	84.0	83.4	82.7	82.0
82.5°	77.9	73.9	71.2	69.1	67.8	69.1	71.2	75.9	74.5	73.9	72.5
85°	61.0	54.2	50.8	51.5	48.1	48.8	54.9	57.6	57.6	59.0	57.6
87.5°	34.6	33.2	25.1	23.0	24.4	29.1	32.5	35.9	35.9	33.9	37.9
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-SLL-7060

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4
2.5°	1095.1	1096.5	1097.1	1099.8	1101.2	1101.9	1102.6	1103.9	1104.6	1103.9	1107.3
5°	1100.5	1100.5	1099.2	1101.2	1101.9	1101.9	1100.5	1101.9	1101.9	1101.9	1105.3
7.5°	1114.8	1110.7	1108.7	1105.9	1103.9	1101.2	1097.8	1097.8	1097.1	1097.8	1099.8
10°	1129.7	1123.6	1116.1	1109.3	1103.2	1098.5	1092.4	1090.4	1089.7	1089.0	1094.4
12.5°	1141.2	1130.3	1118.8	1107.3	1095.1	1087.0	1076.8	1070.7	1070.0	1070.0	1076.8
15°	1133.0	1115.4	1093.1	1072.7	1061.9	1050.4	1038.9	1031.4	1030.7	1032.1	1036.1
17.5°	1092.4	1063.9	1044.3	1024.6	1010.4	1000.9	993.5	992.1	994.8	992.1	997.5
20°	1023.3	992.8	979.2	963.6	958.2	951.4	940.6	931.1	931.1	918.9	922.3
22.5°	933.8	916.9	899.3	887.1	883.0	871.5	860.0	847.1	845.7	830.8	828.8
25°	840.3	823.4	809.1	806.4	794.2	778.6	767.8	752.9	749.5	734.6	732.6
27.5°	744.7	731.2	717.0	708.8	702.1	685.1	675.6	658.0	651.2	635.0	632.9
30°	653.9	644.5	627.5	620.7	607.9	588.2	567.9	557.0	551.6	534.7	529.3
32.5°	568.6	553.6	540.8	532.6	516.4	494.0	475.7	460.1	450.0	429.6	424.2
35°	487.2	472.3	466.2	445.2	431.0	416.1	391.0	381.5	363.2	347.6	342.2
37.5°	415.4	401.2	393.0	375.4	361.2	346.3	331.4	319.2	310.4	307.0	307.0
40°	353.7	346.3	336.1	323.2	313.8	302.9	294.8	290.7	290.0	291.4	294.8
42.5°	309.7	301.6	294.8	288.0	281.2	279.9	277.8	280.6	283.9	287.3	290.7
45°	276.5	269.7	265.6	262.9	262.3	264.3	268.4	272.4	278.5	282.6	285.3
47.5°	252.8	247.3	246.0	245.3	248.7	254.8	260.2	266.3	271.1	275.1	277.8
50°	232.4	227.7	227.0	226.3	231.1	236.5	241.2	249.4	252.8	255.5	257.5
52.5°	218.2	214.1	212.1	212.8	217.5	222.3	229.0	235.1	239.9	241.9	244.0
55°	206.7	205.3	200.6	202.6	207.4	213.5	220.2	227.0	231.8	235.1	238.5
57.5°	197.9	194.5	191.1	194.5	199.2	205.3	213.5	219.6	225.7	230.4	233.8
60°	188.4	185.7	183.0	186.4	191.1	197.2	203.3	211.4	218.9	223.6	227.0
62.5°	180.3	178.2	175.5	176.2	178.2	182.3	185.7	193.1	199.9	206.0	210.1
65°	168.7	168.1	164.0	164.7	166.0	170.1	172.8	179.6	186.4	191.8	195.2
67.5°	151.8	150.4	150.4	152.5	153.2	155.2	157.2	164.0	169.4	173.5	177.5
70°	134.9	134.2	134.2	135.5	134.9	136.9	139.6	145.7	152.5	156.5	160.6
72.5°	118.6	118.6	117.9	119.3	119.3	119.9	123.3	128.8	134.9	138.2	141.0
75°	104.4	103.7	103.7	103.7	104.4	104.4	107.7	112.5	118.6	120.6	124.7
77.5°	91.5	91.5	91.5	91.5	92.2	91.5	93.5	96.9	98.9	102.3	102.3
80°	80.6	80.0	80.6	81.3	81.3	80.6	80.6	81.3	82.0	82.0	82.0
82.5°	71.2	69.1	70.5	73.9	73.9	73.9	73.2	68.4	65.1	65.1	66.4
85°	56.9	56.9	57.6	62.3	63.0	60.3	63.0	56.2	49.5	47.4	48.8
87.5°	35.2	27.8	33.9	38.6	38.6	36.6	40.7	37.9	31.9	25.8	24.4
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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REPORT N
CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	0°
2.5°	1110.0	1110.7	1114.8	1116.8	1116.8	1119.5	1120.9	1124.9	1124.2	1124.2	1125.6	2.5°
5°	1108.7	1110.7	1114.8	1117.5	1118.8	1122.2	1124.9	1129.7	1129.0	1130.3	1131.0	5°
7.5°	1103.9	1109.3	1113.4	1118.8	1123.6	1126.3	1129.7	1133.7	1132.4	1133.0	1132.4	7.5°
10°	1099.8	1105.3	1113.4	1120.9	1127.6	1131.7	1133.7	1138.5	1137.8	1139.1	1139.1	10°
12.5°	1083.6	1093.1	1103.2	1114.8	1124.9	1135.8	1142.5	1152.7	1157.4	1163.5	1170.3	12.5°
15°	1042.2	1053.1	1069.3	1082.2	1101.9	1116.8	1136.4	1156.1	1173.7	1190.6	1210.3	15°
17.5°	1001.6	1006.3	1019.2	1036.8	1054.4	1076.8	1100.5	1135.8	1167.6	1202.2	1240.1	17.5°
20°	926.4	934.5	943.3	964.3	985.3	1017.2	1046.3	1092.4	1139.1	1193.4	1251.6	20°
22.5°	833.5	841.7	851.1	874.9	900.6	933.1	968.4	1019.9	1082.2	1152.7	1230.6	22.5°
25°	733.2	738.0	745.4	769.1	784.7	827.4	870.1	923.7	991.4	1082.2	1173.0	25°
27.5°	622.8	631.6	637.7	648.5	684.4	721.0	765.8	823.4	905.4	998.2	1108.0	27.5°
30°	517.1	524.5	521.1	544.2	567.9	606.5	654.6	718.3	796.9	907.4	1034.1	30°
32.5°	413.4	418.8	416.8	433.0	456.7	495.4	540.8	609.9	693.2	811.2	948.7	32.5°
35°	340.9	342.2	349.7	357.1	377.5	408.6	447.3	507.6	593.0	701.4	847.1	35°
37.5°	307.0	309.7	314.4	324.6	339.5	361.9	393.7	440.5	513.7	609.2	739.3	37.5°
40°	296.8	298.8	301.6	308.3	322.6	342.2	370.7	410.0	463.5	544.2	649.9	40°
42.5°	292.1	292.1	292.1	296.1	307.0	328.0	360.5	399.1	445.9	506.9	592.3	42.5°
45°	285.3	285.3	284.6	286.7	294.1	315.1	350.4	393.7	443.9	502.1	576.0	45°
47.5°	277.8	277.2	275.1	275.1	279.9	300.9	337.5	384.2	439.1	506.2	585.5	47.5°
50°	257.5	257.5	257.5	259.5	263.6	282.6	321.9	371.4	434.4	508.9	600.4	50°
52.5°	246.0	246.7	248.7	248.7	252.8	272.4	313.8	368.6	437.1	519.1	619.4	52.5°
55°	240.6	242.6	244.6	244.6	248.0	268.4	311.0	370.7	447.3	540.1	651.9	55°
57.5°	235.8	237.9	239.2	239.2	241.9	259.5	303.6	367.3	453.4	560.4	691.9	57.5°
60°	227.0	228.4	229.0	229.0	229.7	244.6	286.7	351.0	439.8	559.1	713.6	60°
62.5°	210.8	213.5	214.1	214.8	214.8	229.0	265.0	324.6	410.7	538.7	707.5	62.5°
65°	198.6	199.9	201.9	203.3	206.0	215.5	244.0	292.7	372.7	498.1	673.6	65°
67.5°	179.6	181.6	183.6	186.4	189.1	195.2	217.5	256.8	321.2	429.0	597.7	67.5°
70°	162.6	163.3	165.3	168.7	169.4	172.8	189.1	216.2	262.9	344.3	481.1	70°
72.5°	141.6	143.0	145.7	149.8	149.8	152.5	162.0	176.2	206.0	262.9	355.1	72.5°
75°	123.3	124.7	126.7	126.7	123.3	124.0	130.8	141.0	163.3	197.9	258.9	75°
77.5°	102.3	105.0	107.1	103.0	101.6	103.7	107.1	114.5	130.8	157.2	194.5	77.5°
80°	84.7	86.1	86.7	87.4	86.1	88.1	90.8	95.6	106.4	126.7	153.8	80°
82.5°	67.8	69.1	71.2	73.9	73.9	81.3	82.0	82.0	88.1	101.0	120.6	82.5°
85°	50.1	52.9	55.6	59.0	59.6	63.7	61.7	61.0	63.0	75.2	83.4	85°
87.5°	25.8	27.8	29.1	31.9	28.5	29.8	29.8	27.8	24.4	30.5	33.9	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: P158887

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DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
1132.4	1132.4	1132.4	1132.4	1132.4	1132.4	1132.4
1126.9	1125.6	1126.9	1126.9	1129.0	1127.6	1199.5
1132.4	1131.0	1132.4	1133.7	1135.8	1135.8	1215.0
1133.0	1133.0	1131.7	1135.1	1137.8	1140.5	1230.0
1141.2	1141.2	1142.5	1143.2	1149.3	1156.1	1254.3
1174.4	1177.8	1183.9	1185.9	1196.7	1204.2	1316.7
1225.2	1244.2	1256.4	1260.4	1269.9	1284.2	1421.7
1276.7	1308.6	1341.8	1362.1	1374.3	1391.2	1550.5
1315.3	1375.0	1431.9	1482.7	1511.9	1545.1	1730.7
1318.7	1413.6	1509.8	1604.0	1682.0	1743.6	1974.7
1286.2	1410.9	1543.7	1688.1	1822.2	1933.4	2255.3
1244.9	1398.0	1567.4	1751.8	1927.9	2091.9	2461.9
1192.7	1376.3	1571.5	1778.9	1985.5	2182.7	2579.9
1113.4	1312.0	1522.7	1751.8	1991.6	2231.5	2655.8
1011.7	1214.4	1430.5	1691.4	1963.2	2251.2	2719.5
908.1	1108.0	1340.4	1610.8	1917.8	2247.8	2745.2
798.3	996.8	1234.7	1524.7	1856.1	2216.6	2740.5
723.7	904.7	1137.8	1437.3	1787.7	2175.3	2708.6
680.4	838.9	1061.2	1357.4	1725.3	2125.8	2668.6
679.7	819.3	1020.6	1300.4	1662.3	2070.9	2614.4
703.4	831.5	1015.8	1276.0	1627.7	2030.9	2555.5
731.2	865.4	1040.9	1284.8	1627.1	2013.3	2514.1
775.2	923.0	1095.8	1322.8	1644.7	2010.6	2463.3
831.5	1000.9	1194.7	1416.3	1713.1	2064.2	2466.7
889.1	1092.4	1324.1	1576.2	1848.0	2188.8	2573.8
910.1	1162.9	1455.6	1764.0	2049.9	2375.9	2794.7
891.8	1179.1	1535.6	1909.6	2246.4	2594.8	3058.3
824.0	1113.4	1503.1	1951.0	2359.6	2749.9	3321.9
678.3	950.1	1355.3	1858.1	2350.8	2781.8	3416.8
497.4	736.6	1101.9	1578.9	2089.9	2582.6	3274.5
359.2	521.1	795.6	1189.3	1652.1	2079.7	2746.6
257.5	361.2	516.4	781.3	1125.6	1448.2	1957.8
185.0	245.3	321.9	468.9	685.8	889.1	1230.0
136.2	168.1	211.4	291.4	403.9	517.7	740.7
92.8	98.9	127.4	172.1	265.0	380.8	502.8
35.2	40.0	46.8	70.5	118.6	136.2	96.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)