

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: P158885

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158885
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
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
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

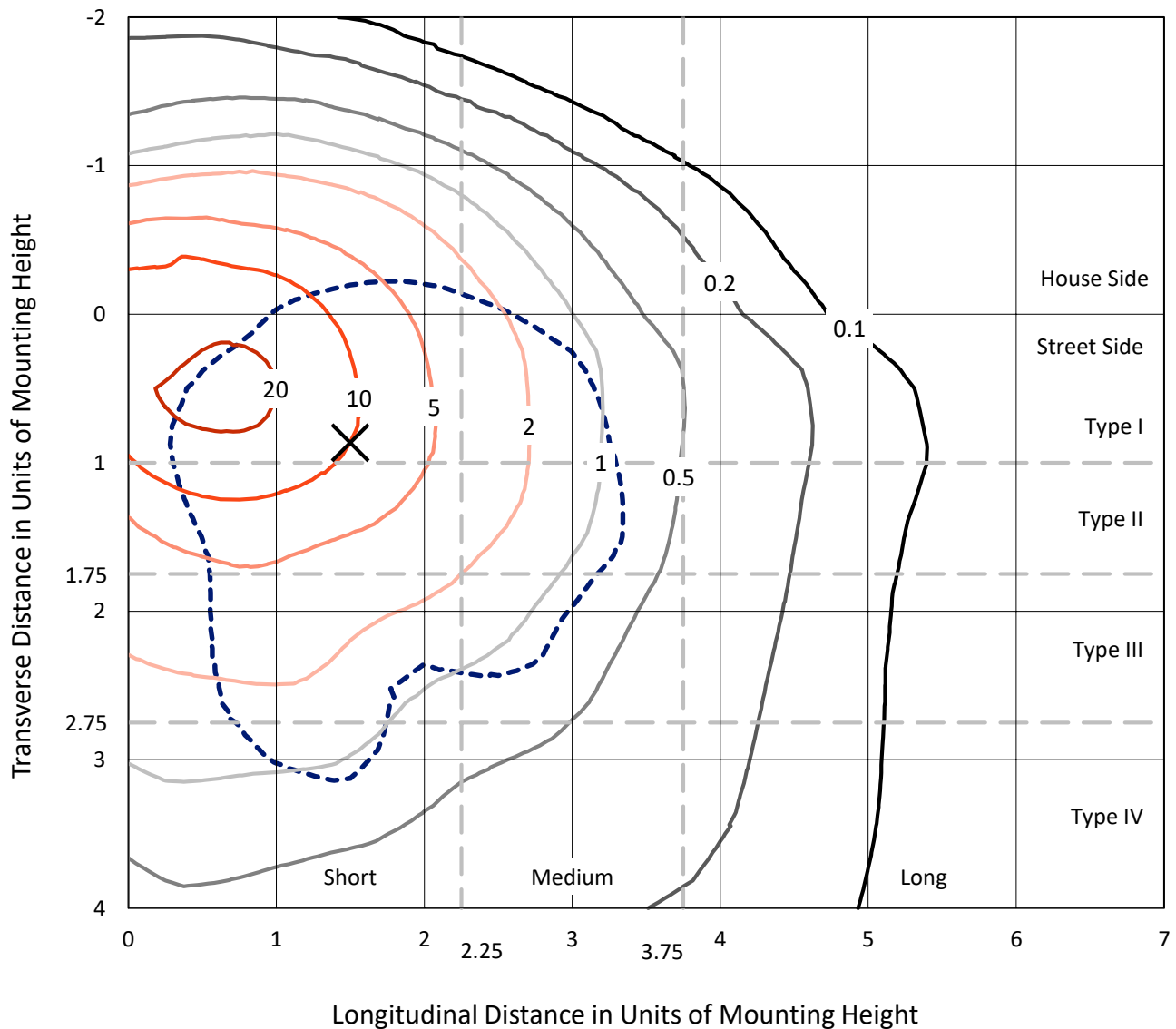


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

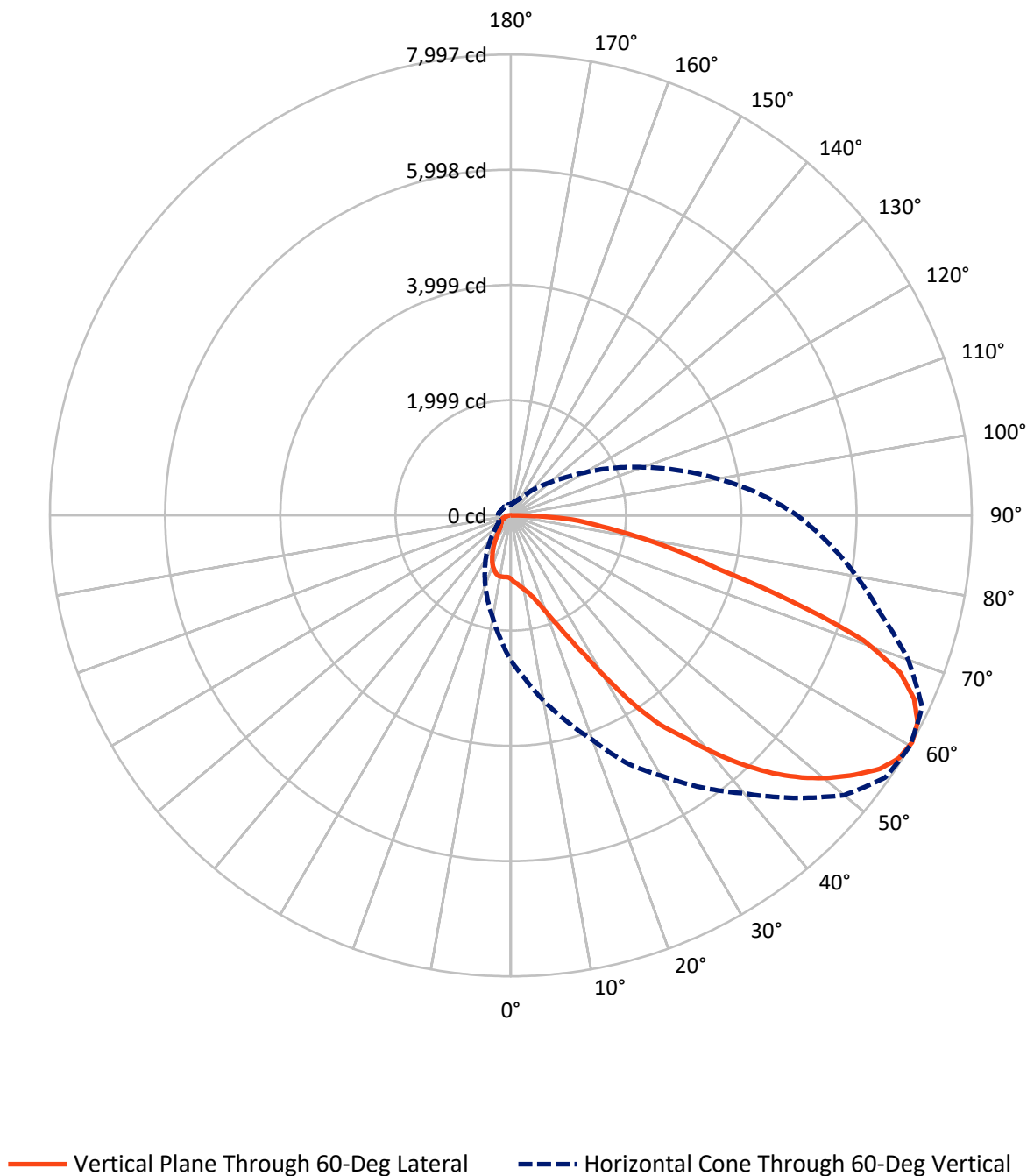


Based on 10 foot mounting height. Maximum calculated value = 25.4 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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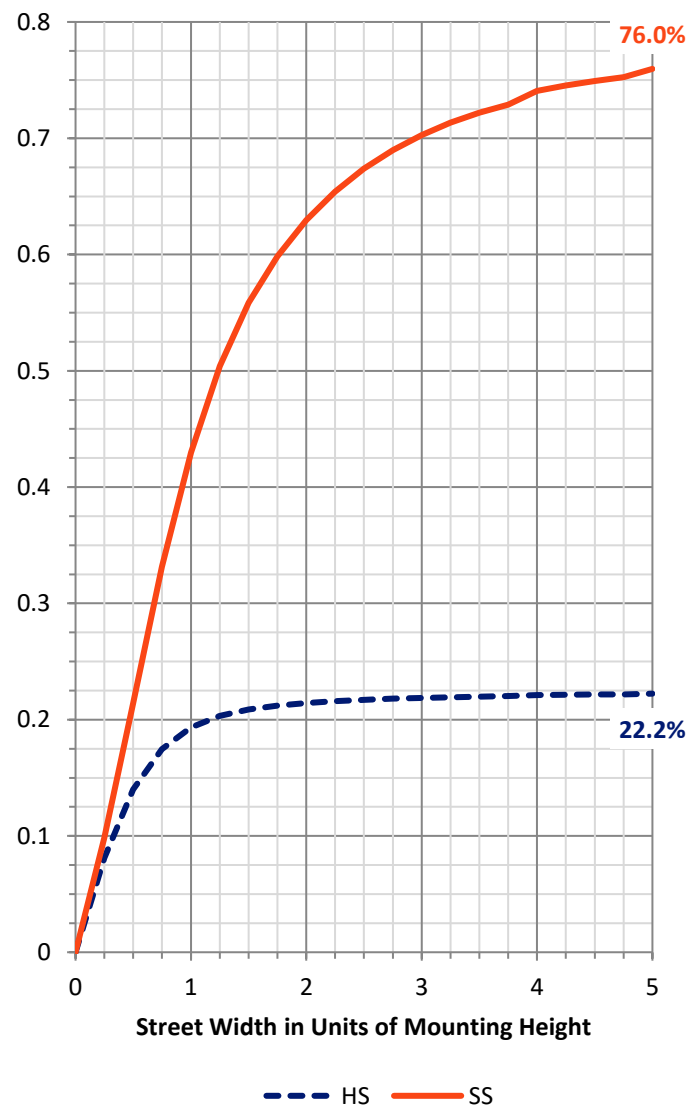
FLUX DISTRIBUTION:

		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

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

Coefficient of Utilization



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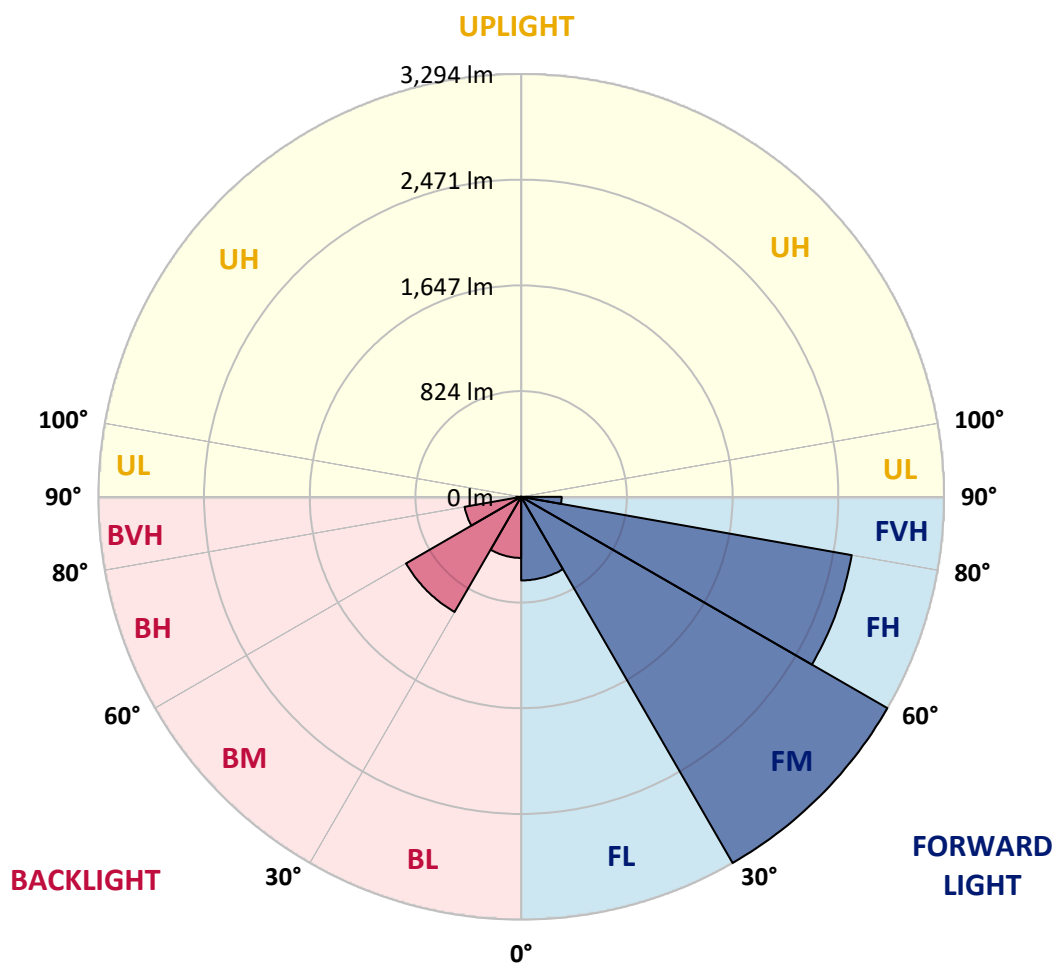
CATALOG NUMBER: VST-F04-LED-E-U-SLL

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	1167.6	1167.6	1167.6	1167.0	1165.6	1167.6	1167.0	1163.7	1161.7	1163.7
5°	1184.1	1184.8	1186.8	1187.4	1187.4	1189.4	1194.7	1195.4	1194.7	1196.0	1199.3
7.5°	1198.7	1202.0	1203.9	1207.2	1211.2	1214.5	1223.8	1233.0	1238.9	1243.6	1244.9
10°	1222.4	1227.7	1233.7	1242.2	1251.5	1268.0	1275.9	1285.2	1291.1	1300.4	1302.3
12.5°	1283.2	1289.8	1293.8	1307.0	1318.9	1334.7	1345.9	1348.6	1362.4	1370.4	1379.6
15°	1385.6	1395.5	1409.3	1417.3	1430.5	1444.3	1454.2	1467.5	1469.4	1480.0	1487.3
17.5°	1511.0	1524.9	1553.3	1572.5	1589.6	1603.5	1623.3	1638.5	1641.8	1653.7	1638.5
20°	1686.7	1720.4	1725.0	1763.3	1778.5	1806.2	1845.9	1853.1	1872.3	1853.1	1841.9
22.5°	1924.5	1977.3	1991.8	2028.8	2047.3	2089.6	2101.5	2140.4	2153.6	2139.1	2108.7
25°	2197.9	2279.8	2322.0	2378.8	2388.1	2474.6	2483.8	2529.4	2505.0	2470.0	2470.6
27.5°	2399.3	2538.7	2647.6	2744.7	2812.7	2910.5	2986.4	3007.6	2984.4	2938.9	2923.0
30°	2514.2	2672.1	2828.6	2962.6	3121.1	3270.4	3425.6	3502.9	3516.1	3539.9	3444.1
32.5°	2588.2	2790.9	2977.2	3142.9	3305.4	3497.6	3705.6	3904.4	4071.5	4197.6	4138.2
35°	2650.3	2900.6	3139.0	3339.7	3531.9	3741.3	3951.3	4185.7	4462.5	4624.3	4657.9
37.5°	2675.4	2981.1	3273.0	3530.6	3800.7	4036.5	4245.2	4453.9	4744.5	5033.1	5122.2
40°	2670.7	3020.8	3353.0	3676.6	4007.4	4302.0	4546.3	4793.3	5133.4	5470.9	5616.2
42.5°	2639.7	3026.7	3403.8	3773.6	4150.7	4542.4	4854.7	5139.4	5465.6	5898.2	6103.6
45°	2600.7	3006.2	3414.4	3823.2	4257.1	4710.1	5105.0	5457.0	5839.4	6266.7	6515.0
47.5°	2547.9	2973.9	3401.2	3840.3	4304.6	4817.8	5282.0	5705.4	6126.1	6618.1	6933.1
50°	2490.4	2927.6	3374.1	3827.8	4316.5	4876.5	5383.1	5865.2	6356.5	6887.5	7285.8
52.5°	2450.2	2878.1	3349.6	3802.0	4304.6	4894.4	5420.1	5951.0	6497.9	7046.7	7522.2
55°	2400.6	2812.1	3284.3	3741.9	4261.0	4884.5	5416.1	5980.8	6536.8	7108.1	7651.0
57.5°	2403.9	2781.7	3228.8	3670.0	4171.9	4792.7	5341.5	5951.0	6475.4	7068.5	7655.6
60°	2508.3	2847.1	3257.9	3684.5	4145.5	4734.6	5214.7	5759.5	6295.1	6931.8	7548.6
62.5°	2723.6	3034.0	3407.1	3829.8	4294.1	4850.8	5157.2	5441.2	5916.7	6680.1	7366.3
65°	2980.5	3260.5	3584.1	3986.3	4506.7	5039.7	5124.9	5182.3	5422.7	6190.8	7024.2
67.5°	3237.4	3487.7	3741.9	4075.5	4627.6	5093.8	4992.8	4856.1	4985.5	5622.2	6351.9
70°	3329.8	3662.0	3829.1	4058.3	4535.8	4967.7	4779.5	4435.4	4480.3	5058.8	5592.4
72.5°	3191.1	3664.7	3720.1	3805.3	4127.0	4533.1	4334.3	3891.9	3882.6	4324.4	4755.7
75°	2676.7	3343.0	3342.4	3310.7	3383.3	3614.5	3511.5	3244.6	3357.6	3705.6	3847.6
77.5°	1908.0	2608.7	2641.7	2428.4	2423.1	2527.4	2589.5	2899.9	3309.4	3504.8	3459.9
80°	1198.7	1760.0	1902.0	1638.5	1582.4	1730.3	2114.0	2565.7	3069.6	3245.3	3094.1
82.5°	721.8	1133.9	1436.4	1287.2	1274.0	1543.4	1967.4	2143.1	2294.3	2481.2	2228.3
85°	490.0	755.5	982.7	1012.4	1128.0	1406.7	1591.0	1513.0	1517.0	1468.1	1337.4
87.5°	93.8	206.1	336.8	410.8	455.7	612.2	665.7	603.0	636.6	465.6	509.2
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):

	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°	1160.4	1160.4	1160.4	1157.1	1157.7	1153.1	1151.1	1151.1	1149.1	1149.1	1148.5
5°	1196.7	1192.7	1194.7	1194.0	1194.0	1187.4	1184.1	1184.1	1175.5	1176.2	1173.6
7.5°	1250.8	1250.2	1252.2	1248.2	1242.9	1237.6	1232.3	1229.7	1217.8	1210.5	1205.9
10°	1312.3	1311.6	1313.6	1312.9	1303.7	1293.8	1279.2	1268.7	1254.1	1242.9	1231.7
12.5°	1379.6	1379.0	1377.6	1371.7	1361.8	1345.9	1327.4	1309.6	1287.8	1273.3	1256.8
15°	1484.6	1482.6	1474.7	1466.1	1455.6	1431.1	1398.8	1373.0	1344.0	1318.9	1291.8
17.5°	1639.8	1623.3	1622.0	1602.8	1574.4	1542.1	1511.7	1468.8	1427.2	1389.5	1352.5
20°	1853.8	1815.5	1804.9	1783.1	1745.5	1711.8	1645.8	1588.3	1531.5	1480.0	1433.1
22.5°	2086.9	2059.2	2033.4	1997.8	1946.3	1897.4	1813.5	1741.5	1668.9	1602.8	1550.7
25°	2412.5	2364.3	2318.1	2261.3	2190.0	2131.8	2036.1	1963.4	1868.3	1808.2	1732.9
27.5°	2833.2	2750.6	2672.7	2623.8	2498.4	2413.8	2291.7	2197.9	2083.0	2001.7	1912.6
30°	3380.7	3284.9	3169.4	3000.3	2851.0	2683.3	2532.1	2411.9	2289.7	2176.1	2073.1
32.5°	4059.6	3890.5	3707.6	3439.5	3194.5	2955.4	2754.0	2606.0	2481.2	2339.9	2194.6
35°	4633.5	4459.2	4199.6	3858.8	3556.4	3282.9	3041.9	2839.8	2676.7	2497.7	2305.5
37.5°	5086.6	4887.8	4644.1	4282.2	3962.5	3651.5	3398.5	3141.0	2927.0	2680.6	2437.6
40°	5605.6	5406.2	5138.1	4762.9	4384.5	4047.1	3750.5	3484.4	3221.5	2921.0	2608.7
42.5°	6058.0	5914.1	5642.6	5255.0	4835.6	4459.8	4135.5	3831.1	3487.7	3151.5	2781.7
45°	6529.6	6383.0	6125.4	5719.9	5274.1	4855.4	4467.7	4140.2	3734.7	3334.5	2911.1
47.5°	6946.3	6795.7	6535.5	6132.7	5659.1	5218.0	4791.3	4395.1	3924.2	3464.6	2995.7
50°	7343.9	7159.6	6921.2	6519.7	6013.8	5542.2	5079.3	4570.8	4071.5	3555.7	3053.1
52.5°	7709.1	7474.6	7248.8	6835.3	6288.5	5795.8	5279.4	4720.0	4162.0	3627.7	3092.1
55°	7916.5	7765.2	7495.1	7088.9	6484.0	5970.2	5406.2	4825.0	4251.8	3678.5	3108.6
57.5°	7980.5	7943.5	7717.0	7235.6	6598.9	6066.0	5492.1	4908.2	4311.9	3693.1	3085.5
60°	7929.7	7997.0	7872.9	7338.6	6651.1	6094.4	5534.3	4967.7	4322.4	3646.8	3015.5
62.5°	7766.5	7919.8	7903.9	7372.9	6624.0	6058.7	5529.7	4937.3	4223.4	3502.9	2858.3
65°	7498.4	7691.3	7759.3	7245.5	6471.5	5928.6	5412.1	4746.4	3948.0	3221.5	2594.8
67.5°	6993.8	7285.8	7351.8	6828.1	6072.6	5568.7	5073.3	4350.2	3438.1	2786.3	2183.3
70°	5982.7	6493.2	6582.4	6032.9	5369.2	4926.7	4506.7	3722.1	2862.9	2234.9	1675.5
72.5°	4776.2	5097.1	5279.4	4901.0	4407.0	4086.0	3767.7	2855.7	2160.2	1649.1	1153.1
75°	3734.0	3714.9	3878.0	3626.4	3335.8	3185.9	2946.8	1992.5	1447.0	1092.3	729.8
77.5°	3192.5	2946.8	2761.2	2584.2	2411.9	2364.3	2135.1	1236.3	894.2	654.5	436.5
80°	2653.6	2205.1	1866.3	1617.4	1555.9	1649.7	1397.4	729.1	529.7	375.8	274.1
82.5°	1896.1	1586.3	1291.1	1133.3	1028.3	1177.5	824.2	404.8	287.3	225.2	181.6
85°	1229.0	1174.9	1162.3	1110.8	983.4	928.6	626.1	348.7	215.3	140.0	112.9
87.5°	472.9	606.3	699.4	749.6	810.3	721.8	326.2	120.2	118.2	72.6	54.8
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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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°	1143.8	1141.2	1140.5	1138.6	1137.2	1137.2	1133.9	1073.8	1073.2	1073.2	1072.5
5°	1168.3	1165.0	1161.7	1161.0	1158.4	1158.4	1155.1	1095.0	1095.0	1095.0	1093.7
7.5°	1201.3	1194.7	1190.7	1188.8	1184.8	1186.8	1189.4	1128.7	1129.3	1128.7	1130.0
10°	1225.1	1221.1	1216.5	1215.2	1212.5	1214.5	1218.5	1158.4	1160.4	1161.0	1162.3
12.5°	1248.2	1241.6	1235.6	1233.7	1232.3	1237.6	1242.2	1184.1	1186.1	1188.1	1188.1
15°	1276.6	1265.4	1257.4	1252.8	1250.2	1255.5	1262.1	1204.6	1205.3	1207.2	1206.6
17.5°	1324.8	1308.3	1289.8	1286.5	1277.9	1279.9	1281.2	1217.2	1214.5	1209.9	1202.0
20°	1399.4	1374.3	1349.2	1338.7	1321.5	1314.2	1299.7	1217.8	1201.3	1187.4	1175.5
22.5°	1506.4	1469.4	1442.4	1424.5	1389.5	1365.1	1325.5	1214.5	1183.5	1159.7	1141.2
25°	1679.4	1635.2	1593.6	1548.7	1493.9	1445.0	1386.9	1243.6	1195.4	1154.4	1118.8
27.5°	1847.9	1777.9	1713.8	1646.4	1569.2	1495.9	1414.0	1252.8	1198.0	1145.2	1087.1
30°	1974.0	1872.3	1775.2	1676.8	1575.8	1480.7	1388.2	1221.1	1155.7	1096.3	1034.9
32.5°	2050.6	1918.5	1792.4	1670.2	1551.3	1444.3	1340.7	1166.3	1094.3	1024.3	958.9
35°	2123.3	1959.5	1802.9	1659.0	1522.9	1404.1	1292.4	1102.2	1016.4	941.8	859.2
37.5°	2213.1	2002.4	1809.6	1638.5	1481.3	1345.3	1222.4	1021.7	935.8	844.0	766.1
40°	2320.7	2046.6	1802.9	1597.6	1416.6	1268.0	1137.9	937.1	841.4	752.2	675.6
42.5°	2423.1	2085.6	1785.8	1542.7	1345.9	1187.4	1060.6	861.8	766.1	674.9	599.0
45°	2499.0	2118.6	1777.2	1504.4	1291.8	1132.6	992.6	801.1	700.0	608.2	531.0
47.5°	2551.9	2138.4	1773.2	1483.3	1254.1	1075.8	930.5	740.3	634.0	541.5	466.3
50°	2579.6	2137.8	1763.3	1460.2	1198.7	1007.8	866.5	678.9	573.2	482.8	414.1
52.5°	2586.9	2125.9	1742.2	1417.9	1131.3	939.8	797.8	614.9	519.8	433.2	363.9
55°	2570.4	2096.8	1697.9	1347.3	1059.3	867.8	735.0	564.7	467.6	385.7	331.5
57.5°	2523.5	2045.3	1614.7	1250.2	983.4	801.1	663.1	503.9	410.8	342.1	297.2
60°	2436.3	1936.4	1484.6	1135.3	886.9	699.4	564.0	424.7	350.7	299.2	262.8
62.5°	2275.1	1765.3	1301.7	976.8	748.3	567.3	450.4	338.8	283.3	249.6	227.2
65°	2015.6	1507.7	1089.7	769.4	568.6	412.8	334.8	254.9	214.6	194.2	187.6
67.5°	1645.1	1164.3	792.5	534.3	385.0	289.3	233.1	186.2	167.1	159.2	156.5
70°	1196.0	793.2	513.1	337.5	254.3	202.1	176.3	149.9	139.3	137.4	137.4
72.5°	750.9	482.1	314.4	231.1	192.8	163.8	150.6	132.1	128.1	126.8	124.8
75°	440.5	292.6	222.6	189.5	165.1	146.6	135.4	120.2	117.6	116.9	114.9
77.5°	280.7	210.7	179.6	161.8	149.3	132.7	122.8	107.0	106.3	105.7	105.0
80°	201.4	175.0	157.2	143.3	130.8	115.6	109.6	97.1	95.8	95.1	96.4
82.5°	152.6	144.6	137.4	126.8	109.6	98.4	93.8	85.2	85.9	82.6	81.9
85°	105.0	103.7	103.0	98.4	85.9	75.9	72.6	68.0	71.3	68.0	64.1
87.5°	51.5	50.9	46.9	55.5	51.5	40.9	37.0	40.9	45.6	44.2	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



REPORT NUMBER: P158885

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

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°	1069.9	1067.2	1069.2	1067.9	1067.9	1067.2	1068.6	1066.6	1065.3	1066.6	1067.2
5°	1091.0	1087.7	1088.4	1083.7	1085.7	1081.1	1082.4	1079.1	1075.8	1074.5	1074.5
7.5°	1126.7	1123.4	1119.4	1118.8	1111.5	1108.8	1104.2	1101.6	1099.6	1095.0	1092.3
10°	1159.0	1153.8	1149.1	1148.5	1141.2	1134.6	1128.7	1123.4	1120.1	1113.5	1110.2
12.5°	1185.5	1180.2	1172.9	1168.9	1161.7	1153.8	1149.8	1141.9	1137.2	1130.0	1124.0
15°	1200.6	1191.4	1180.8	1173.6	1163.0	1154.4	1148.5	1142.5	1137.9	1128.7	1120.1
17.5°	1193.4	1178.2	1163.7	1150.5	1135.9	1128.0	1119.4	1112.1	1110.8	1100.3	1087.1
20°	1163.0	1145.2	1126.0	1108.2	1089.0	1077.8	1067.2	1056.0	1052.7	1040.2	1023.0
22.5°	1126.0	1105.5	1083.7	1062.0	1037.5	1021.7	1005.8	992.0	980.7	962.2	937.8
25°	1088.4	1058.0	1026.3	998.6	970.2	950.3	933.8	918.6	905.4	875.7	850.6
27.5°	1038.8	991.3	958.9	927.2	892.9	867.1	848.6	827.5	813.0	778.6	752.2
30°	975.4	927.9	881.7	850.0	815.6	787.9	764.1	733.7	712.6	687.5	663.1
32.5°	895.5	848.0	801.1	765.4	737.0	702.7	673.0	643.9	619.5	595.0	575.9
35°	798.4	752.2	708.0	672.3	640.6	613.5	585.1	560.0	532.3	505.9	494.7
37.5°	696.1	646.6	597.7	566.6	541.5	522.4	496.0	475.5	450.4	434.6	421.3
40°	606.9	554.1	507.9	481.4	461.6	439.8	418.0	402.2	384.4	368.5	358.6
42.5°	531.6	482.1	442.5	420.0	396.3	372.5	356.0	342.8	331.5	319.6	307.8
45°	462.3	414.7	381.7	354.0	334.2	315.0	303.8	297.8	291.2	284.0	276.1
47.5°	404.2	363.2	330.9	305.1	284.6	271.4	266.1	264.2	261.5	255.6	251.6
50°	359.9	326.2	293.2	270.1	252.9	246.3	240.4	238.4	235.1	233.1	230.5
52.5°	322.9	287.3	259.5	238.4	227.8	225.2	222.6	219.9	219.3	217.9	216.6
55°	292.6	261.5	235.8	219.9	214.6	212.7	212.0	209.4	208.7	208.7	206.7
57.5°	265.5	239.1	216.0	206.1	202.7	200.8	199.4	198.1	198.1	199.4	198.8
60°	237.8	215.3	201.4	196.1	194.2	190.9	187.6	186.2	186.9	190.2	190.2
62.5°	210.7	194.2	185.6	183.6	181.6	179.0	175.0	173.7	175.0	179.0	181.0
65°	181.0	173.7	171.0	169.7	168.4	166.4	163.8	162.5	163.1	165.1	167.7
67.5°	153.9	153.2	153.2	153.9	153.2	152.6	151.2	149.3	148.6	148.6	149.9
70°	137.4	137.4	139.3	139.3	138.7	138.7	136.7	134.7	133.4	132.1	132.7
72.5°	124.8	124.8	125.5	126.1	125.5	125.5	122.8	121.5	118.2	117.6	116.2
75°	114.3	112.9	112.9	112.3	111.6	112.3	109.6	106.3	105.0	104.3	103.0
77.5°	103.7	101.0	99.7	98.4	99.1	98.4	96.4	94.4	92.5	91.8	91.1
80°	91.8	87.8	85.9	82.6	84.5	85.2	83.9	81.9	81.2	80.6	79.9
82.5°	75.9	72.0	69.3	67.4	66.0	67.4	69.3	74.0	72.6	72.0	70.7
85°	59.4	52.8	49.5	50.2	46.9	47.6	53.5	56.1	56.1	57.5	56.1
87.5°	33.7	32.4	24.4	22.5	23.8	28.4	31.7	35.0	35.0	33.0	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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CATALOG NUMBER: VST-F04-LED-E-U-SLL

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°	1067.2	1068.6	1069.2	1071.9	1073.2	1073.8	1074.5	1075.8	1076.5	1075.8	1079.1
5°	1072.5	1072.5	1071.2	1073.2	1073.8	1073.8	1072.5	1073.8	1073.8	1073.8	1077.1
7.5°	1086.4	1082.4	1080.4	1077.8	1075.8	1073.2	1069.9	1069.9	1069.2	1069.9	1071.9
10°	1100.9	1095.0	1087.7	1081.1	1075.2	1070.5	1064.6	1062.6	1062.0	1061.3	1066.6
12.5°	1112.1	1101.6	1090.4	1079.1	1067.2	1059.3	1049.4	1043.5	1042.8	1042.8	1049.4
15°	1104.2	1087.1	1065.3	1045.4	1034.9	1023.7	1012.4	1005.2	1004.5	1005.8	1009.8
17.5°	1064.6	1036.9	1017.7	998.6	984.7	975.4	968.2	966.9	969.5	966.9	972.1
20°	997.2	967.5	954.3	939.1	933.8	927.2	916.7	907.4	907.4	895.5	898.8
22.5°	910.1	893.5	876.4	864.5	860.5	849.3	838.1	825.5	824.2	809.7	807.7
25°	818.9	802.4	788.5	785.9	774.0	758.8	748.3	733.7	730.4	715.9	713.9
27.5°	725.8	712.6	698.7	690.8	684.2	667.7	658.4	641.3	634.7	618.8	616.8
30°	637.3	628.1	611.5	604.9	592.4	573.2	553.4	542.9	537.6	521.1	515.8
32.5°	554.1	539.6	527.0	519.1	503.2	481.4	463.6	448.4	438.5	418.7	413.4
35°	474.8	460.3	454.4	433.9	420.0	405.5	381.1	371.8	354.0	338.8	333.5
37.5°	404.8	391.0	383.0	365.9	352.0	337.5	322.9	311.1	302.5	299.2	299.2
40°	344.7	337.5	327.6	315.0	305.8	295.2	287.3	283.3	282.7	284.0	287.3
42.5°	301.8	293.9	287.3	280.7	274.1	272.8	270.8	273.4	276.7	280.0	283.3
45°	269.5	262.8	258.9	256.2	255.6	257.6	261.5	265.5	271.4	275.4	278.0
47.5°	246.3	241.1	239.7	239.1	242.4	248.3	253.6	259.5	264.2	268.1	270.8
50°	226.5	221.9	221.2	220.6	225.2	230.5	235.1	243.0	246.3	249.0	251.0
52.5°	212.7	208.7	206.7	207.4	212.0	216.6	223.2	229.2	233.8	235.8	237.8
55°	201.4	200.1	195.5	197.5	202.1	208.0	214.6	221.2	225.9	229.2	232.5
57.5°	192.8	189.5	186.2	189.5	194.2	200.1	208.0	214.0	219.9	224.5	227.8
60°	183.6	181.0	178.3	181.6	186.2	192.2	198.1	206.1	213.3	217.9	221.2
62.5°	175.7	173.7	171.0	171.7	173.7	177.7	181.0	188.2	194.8	200.8	204.7
65°	164.4	163.8	159.8	160.5	161.8	165.8	168.4	175.0	181.6	186.9	190.2
67.5°	147.9	146.6	146.6	148.6	149.3	151.2	153.2	159.8	165.1	169.1	173.0
70°	131.4	130.8	130.8	132.1	131.4	133.4	136.0	142.0	148.6	152.6	156.5
72.5°	115.6	115.6	114.9	116.2	116.2	116.9	120.2	125.5	131.4	134.7	137.4
75°	101.7	101.0	101.0	101.0	101.7	101.7	105.0	109.6	115.6	117.6	121.5
77.5°	89.2	89.2	89.2	89.2	89.8	89.2	91.1	94.4	96.4	99.7	99.7
80°	78.6	77.9	78.6	79.3	79.3	78.6	78.6	79.3	79.9	79.9	79.9
82.5°	69.3	67.4	68.7	72.0	72.0	72.0	71.3	66.7	63.4	63.4	64.7
85°	55.5	55.5	56.1	60.8	61.4	58.8	61.4	54.8	48.2	46.2	47.6
87.5°	34.3	27.1	33.0	37.6	37.6	35.7	39.6	37.0	31.0	25.1	23.8
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°	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°	1081.8	1082.4	1086.4	1088.4	1088.4	1091.0	1092.3	1096.3	1095.6	1095.6	1097.0	2.5°
5°	1080.4	1082.4	1086.4	1089.0	1090.4	1093.7	1096.3	1100.9	1100.3	1101.6	1102.2	5°
7.5°	1075.8	1081.1	1085.1	1090.4	1095.0	1097.6	1100.9	1104.9	1103.6	1104.2	1103.6	7.5°
10°	1071.9	1077.1	1085.1	1092.3	1098.9	1102.9	1104.9	1109.5	1108.8	1110.2	1110.2	10°
12.5°	1056.0	1065.3	1075.2	1086.4	1096.3	1106.9	1113.5	1123.4	1128.0	1133.9	1140.5	12.5°
15°	1015.7	1026.3	1042.1	1054.7	1073.8	1088.4	1107.5	1126.7	1143.8	1160.4	1179.5	15°
17.5°	976.1	980.7	993.3	1010.4	1027.6	1049.4	1072.5	1106.9	1137.9	1171.6	1208.6	17.5°
20°	902.8	910.7	919.3	939.8	960.3	991.3	1019.7	1064.6	1110.2	1163.0	1219.8	20°
22.5°	812.3	820.2	829.5	852.6	877.7	909.4	943.7	993.9	1054.7	1123.4	1199.3	22.5°
25°	714.6	719.2	726.5	749.6	764.8	806.4	848.0	900.2	966.2	1054.7	1143.2	25°
27.5°	606.9	615.5	621.5	632.0	667.0	702.7	746.3	802.4	882.3	972.8	1079.8	27.5°
30°	503.9	511.2	507.9	530.3	553.4	591.1	638.0	700.0	776.7	884.3	1007.8	30°
32.5°	402.9	408.1	406.2	422.0	445.1	482.8	527.0	594.4	675.6	790.5	924.6	32.5°
35°	332.2	333.5	340.8	348.0	367.9	398.2	435.9	494.7	577.9	683.5	825.5	35°
37.5°	299.2	301.8	306.4	316.3	330.9	352.7	383.7	429.3	500.6	593.7	720.5	37.5°
40°	289.3	291.2	293.9	300.5	314.4	333.5	361.2	399.6	451.7	530.3	633.3	40°
42.5°	284.6	284.6	284.6	288.6	299.2	319.6	351.3	389.0	434.6	494.0	577.2	42.5°
45°	278.0	278.0	277.4	279.4	286.6	307.1	341.4	383.7	432.6	489.4	561.4	45°
47.5°	270.8	270.1	268.1	268.1	272.8	293.2	328.9	374.5	428.0	493.3	570.6	47.5°
50°	251.0	251.0	251.0	252.9	256.9	275.4	313.7	361.9	423.3	496.0	585.1	50°
52.5°	239.7	240.4	242.4	242.4	246.3	265.5	305.8	359.3	426.0	505.9	603.6	52.5°
55°	234.4	236.4	238.4	238.4	241.7	261.5	303.1	361.2	435.9	526.4	635.3	55°
57.5°	229.8	231.8	233.1	233.1	235.8	252.9	295.9	357.9	441.8	546.2	674.3	57.5°
60°	221.2	222.6	223.2	223.2	223.9	238.4	279.4	342.1	428.6	544.8	695.4	60°
62.5°	205.4	208.0	208.7	209.4	209.4	223.2	258.2	316.3	400.2	525.0	689.5	62.5°
65°	193.5	194.8	196.8	198.1	200.8	210.0	237.8	285.3	363.2	485.4	656.5	65°
67.5°	175.0	177.0	179.0	181.6	184.3	190.2	212.0	250.3	313.0	418.0	582.5	67.5°
70°	158.5	159.2	161.1	164.4	165.1	168.4	184.3	210.7	256.2	335.5	468.9	70°
72.5°	138.0	139.3	142.0	146.0	146.0	148.6	157.8	171.7	200.8	256.2	346.1	72.5°
75°	120.2	121.5	123.5	123.5	120.2	120.9	127.5	137.4	159.2	192.8	252.3	75°
77.5°	99.7	102.4	104.3	100.4	99.1	101.0	104.3	111.6	127.5	153.2	189.5	77.5°
80°	82.6	83.9	84.5	85.2	83.9	85.9	88.5	93.1	103.7	123.5	149.9	80°
82.5°	66.0	67.4	69.3	72.0	72.0	79.3	79.9	79.9	85.9	98.4	117.6	82.5°
85°	48.9	51.5	54.2	57.5	58.1	62.1	60.1	59.4	61.4	73.3	81.2	85°
87.5°	25.1	27.1	28.4	31.0	27.7	29.1	29.1	27.1	23.8	29.7	33.0	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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NUMBER: VST-F04-LED-E-U-SLL

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
1103.6	1103.6	1103.6	1103.6	1103.6	1103.6	1103.6
1098.3	1097.0	1098.3	1098.3	1100.3	1098.9	1168.9
1103.6	1102.2	1103.6	1104.9	1106.9	1106.9	1184.1
1104.2	1104.2	1102.9	1106.2	1108.8	1111.5	1198.7
1112.1	1112.1	1113.5	1114.1	1120.1	1126.7	1222.4
1144.5	1147.8	1153.8	1155.7	1166.3	1173.6	1283.2
1194.0	1212.5	1224.4	1228.4	1237.6	1251.5	1385.6
1244.2	1275.3	1307.6	1327.4	1339.3	1355.8	1511.0
1281.9	1340.0	1395.5	1445.0	1473.4	1505.8	1686.7
1285.2	1377.6	1471.4	1563.2	1639.2	1699.3	1924.5
1253.5	1375.0	1504.4	1645.1	1775.9	1884.2	2197.9
1213.2	1362.4	1527.6	1707.2	1878.9	2038.7	2399.3
1162.3	1341.3	1531.5	1733.6	1935.0	2127.2	2514.2
1085.1	1278.6	1484.0	1707.2	1941.0	2174.8	2588.2
986.0	1183.5	1394.1	1648.4	1913.2	2193.9	2650.3
885.0	1079.8	1306.3	1569.8	1869.0	2190.6	2675.4
778.0	971.5	1203.3	1485.9	1808.9	2160.2	2670.7
705.3	881.7	1108.8	1400.8	1742.2	2119.9	2639.7
663.1	817.6	1034.2	1322.8	1681.4	2071.7	2600.7
662.4	798.4	994.6	1267.3	1620.0	2018.2	2547.9
685.5	810.3	990.0	1243.6	1586.3	1979.3	2490.4
712.6	843.4	1014.4	1252.2	1585.7	1962.1	2450.2
755.5	899.5	1067.9	1289.1	1602.8	1959.5	2400.6
810.3	975.4	1164.3	1380.3	1669.5	2011.6	2403.9
866.5	1064.6	1290.5	1536.1	1801.0	2133.2	2508.3
886.9	1133.3	1418.6	1719.1	1997.8	2315.4	2723.6
869.1	1149.1	1496.5	1861.1	2189.3	2528.7	2980.5
803.1	1085.1	1464.8	1901.3	2299.6	2680.0	3237.4
661.1	925.9	1320.8	1810.9	2291.0	2711.0	3329.8
484.7	717.9	1073.8	1538.8	2036.7	2516.9	3191.1
350.0	507.9	775.3	1159.0	1610.1	2026.8	2676.7
251.0	352.0	503.2	761.5	1097.0	1411.3	1908.0
180.3	239.1	313.7	457.0	668.3	866.5	1198.7
132.7	163.8	206.1	284.0	393.6	504.6	721.8
90.5	96.4	124.2	167.7	258.2	371.2	490.0
34.3	39.0	45.6	68.7	115.6	132.7	93.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)