

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: P159175

Luminaire Tested: **VST-F11-LED-E-U-SLR**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159175
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-F11-LED-E-U-SLR
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR RIGHT
Light Source: (77) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24402.6 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Luminous Opening: Rectangular (W 1.83' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

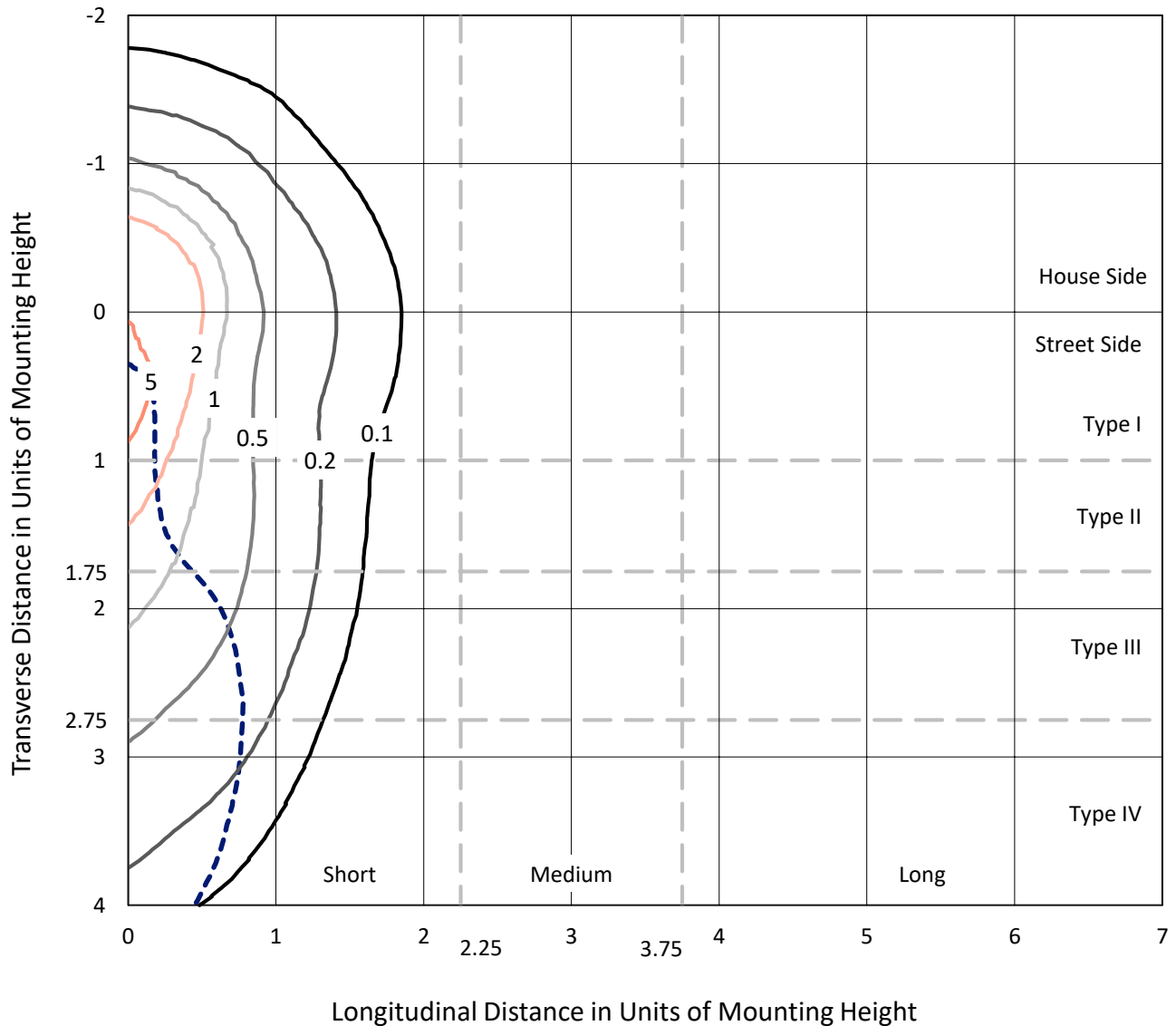
Input Watts (W): 282.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

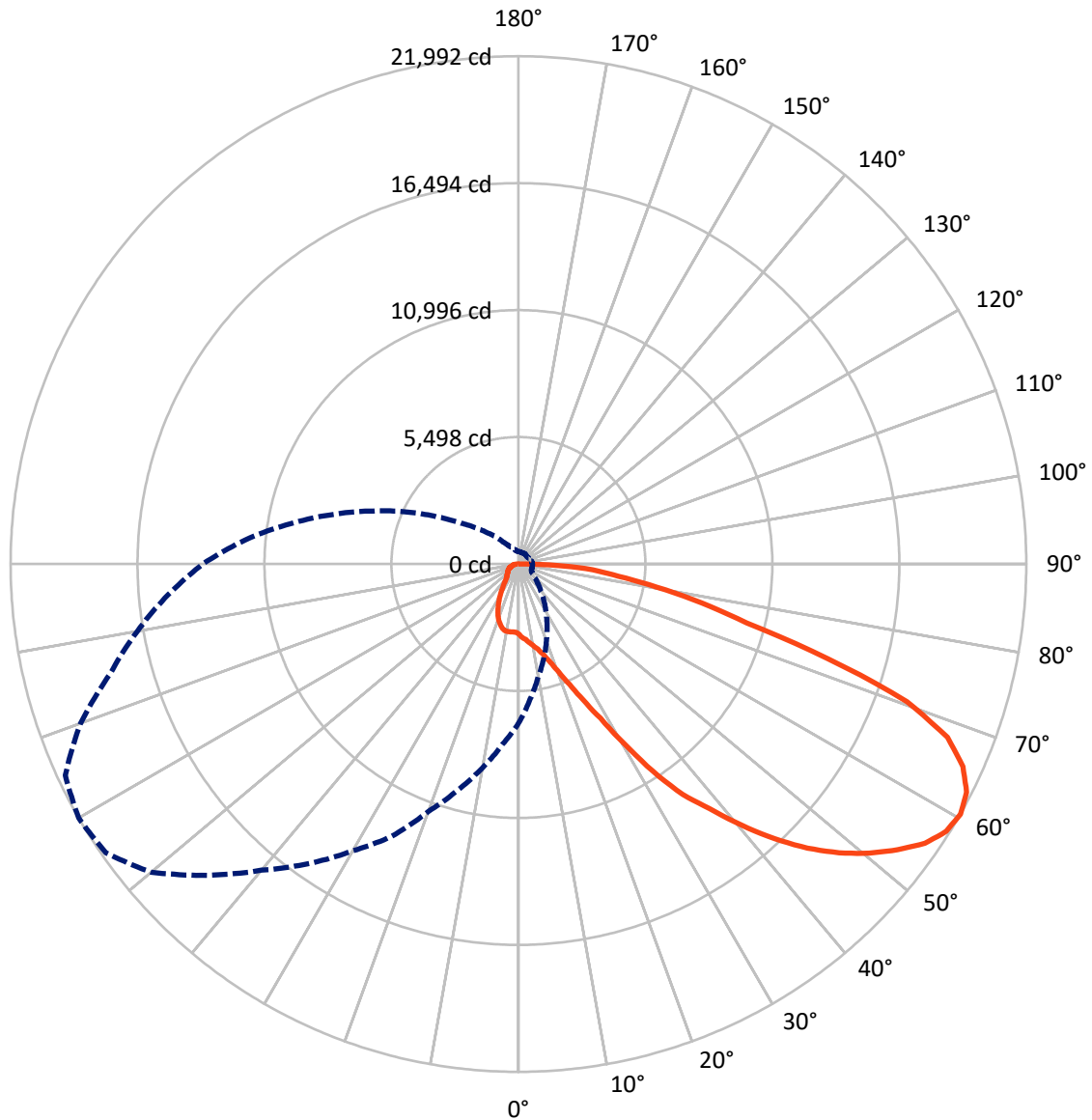
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 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	5494.7	0.0	5494.7
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	18907.9	0.0	18907.9
	% Fixture	77.5	0.0	77.5
Total	Lumens	24402.6	0.0	24402.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.4	1.2
10°-20°	966.7	4.0
20°-30°	1834.4	7.5
30°-40°	2888.9	11.8
40°-50°	4032.2	16.5
50°-60°	4986.9	20.4
60°-70°	5169.2	21.2
70°-80°	3252.6	13.3
80°-90°	972.3	4.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	24402.6	100.0
0°-180°	24402.6	100.0



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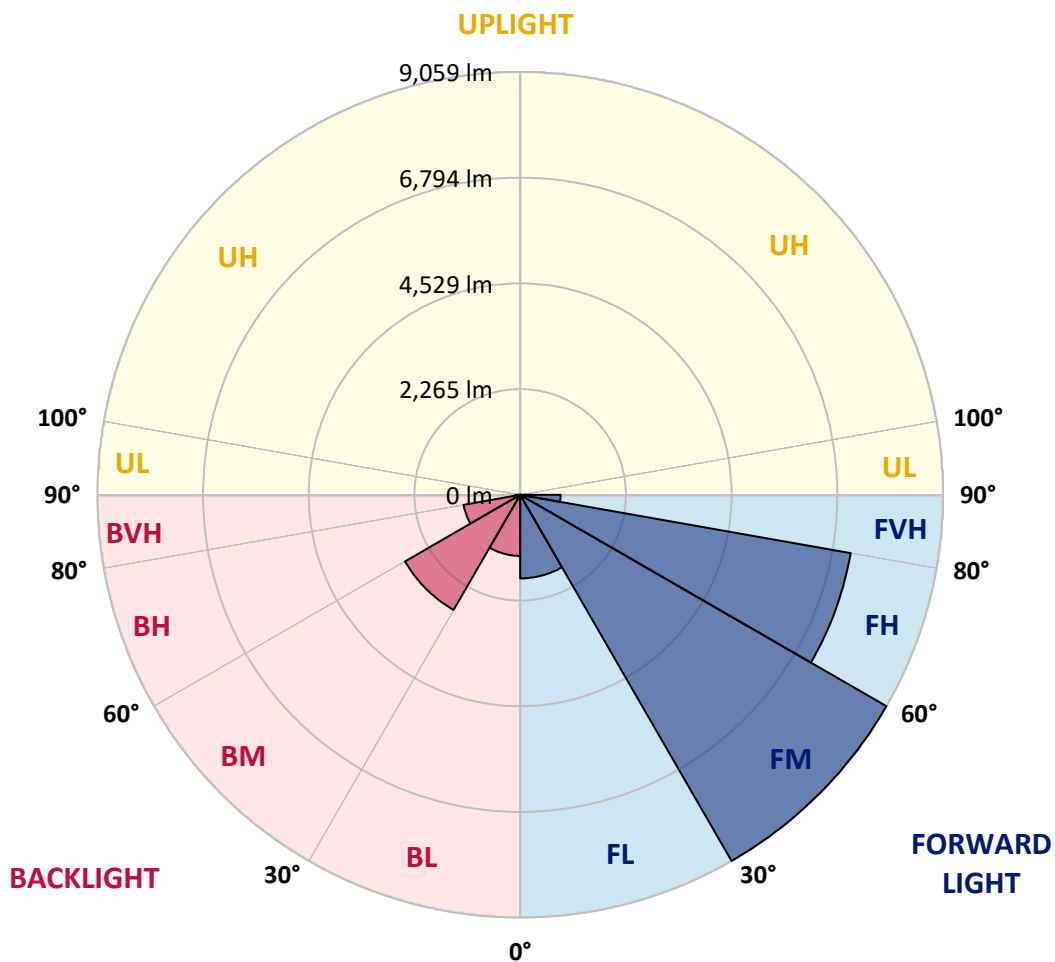
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1791.5	7.3			
FM	(30°-60°)	9058.6	37.1			
FH	(60°-80°)	7191.2	29.5			G3/7500
FVH	(80°-90°)	866.5	3.6			G5
BL	(0°-30°)	1309.0	5.4	B3/2500		
BM	(30°-60°)	2849.3	11.7	B3/5000		
BH	(60°-80°)	1230.6	5.0	B3/2500		G3/2500
BVH	(80°-90°)	105.8	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8
2.5°	3214.6	3022.1	3025.7	3020.3	3020.3	3016.6	3020.3	3016.6	3013.0	3013.0	3014.8
5°	3256.4	3043.9	3043.9	3038.4	3034.8	3031.2	3034.8	3031.2	3029.3	3025.7	3027.5
7.5°	3296.3	3056.6	3049.3	3042.1	3033.0	3036.6	3036.6	3034.8	3036.6	3034.8	3038.4
10°	3361.7	3098.4	3080.2	3063.9	3062.0	3058.4	3058.4	3053.0	3053.0	3049.3	3051.1
12.5°	3528.8	3227.3	3207.3	3178.3	3172.8	3156.5	3147.4	3136.5	3118.3	3102.0	3089.3
15°	3810.3	3441.6	3403.5	3378.0	3367.2	3334.5	3283.6	3243.7	3191.0	3145.6	3098.4
17.5°	4155.4	3728.6	3683.2	3650.5	3596.0	3507.0	3421.6	3323.6	3221.9	3129.2	3043.9
20°	4638.5	4140.8	4051.8	3973.7	3837.5	3685.0	3525.2	3354.4	3198.2	3053.0	2927.6
22.5°	5292.3	4673.0	4507.7	4298.8	4046.4	3788.5	3534.2	3298.1	3089.3	2900.4	2733.3
25°	6044.2	5181.5	4883.6	4524.0	4137.2	3781.2	3447.1	3143.8	2900.4	2657.0	2475.4
27.5°	6598.1	5606.5	5167.0	4694.8	4200.8	3746.7	3336.3	2969.4	2675.2	2426.4	2206.6
30°	6914.1	5849.8	5321.3	4767.4	4211.7	3688.6	3196.4	2771.5	2431.8	2135.8	1925.1
32.5°	7117.5	5980.6	5337.7	4694.8	4080.9	3516.1	2983.9	2542.6	2173.9	1857.9	1634.5
35°	7288.2	6033.3	5261.4	4533.1	3833.9	3254.5	2711.5	2270.2	1879.7	1589.1	1360.3
37.5°	7357.2	6024.2	5139.7	4317.0	3592.4	2969.4	2433.6	1981.4	1632.7	1376.6	1180.5
40°	7344.5	5940.6	4974.4	4086.3	3309.0	2671.6	2139.4	1741.7	1458.4	1242.2	1098.8
42.5°	7259.2	5829.9	4791.0	3852.1	3049.3	2424.6	1939.7	1587.3	1358.5	1195.0	1069.7
45°	7152.0	5697.3	4623.9	3637.8	2844.1	2248.4	1823.4	1543.7	1345.8	1189.6	1055.2
47.5°	7006.7	5550.2	4455.0	3485.2	2735.1	2195.7	1821.6	1569.2	1356.7	1176.9	1029.8
50°	6848.7	5443.0	4362.4	3419.8	2722.4	2228.4	1885.2	1609.1	1363.9	1164.2	995.3
52.5°	6737.9	5395.8	4360.6	3443.4	2789.6	2319.2	1959.6	1660.0	1391.2	1171.4	988.0
55°	6601.7	5388.5	4407.8	3545.1	2936.7	2473.6	2077.7	1747.1	1447.5	1198.7	993.4
57.5°	6610.8	5532.0	4591.2	3795.8	3201.9	2682.5	2228.4	1854.3	1502.0	1215.0	984.4
60°	6897.8	5866.2	4952.7	4224.4	3548.8	2927.6	2382.8	1912.4	1498.3	1178.7	940.8
62.5°	7489.8	6367.4	5493.9	4727.5	3901.1	3116.5	2439.1	1896.1	1443.8	1100.6	869.9
65°	8196.3	6954.1	6020.6	5117.9	4115.4	3160.1	2390.1	1805.3	1334.9	998.9	784.6
67.5°	8902.8	7370.0	6323.9	5228.7	4028.2	2983.9	2208.4	1601.8	1149.6	860.9	688.3
70°	9157.1	7455.3	6300.2	4979.9	3632.3	2546.2	1818.0	1289.5	922.6	704.7	579.4
72.5°	8775.7	6921.4	5601.0	4231.6	2953.1	1974.2	1333.1	951.7	704.7	552.1	472.2
75°	7360.9	5573.8	4427.8	3187.4	2132.2	1396.6	962.6	693.8	530.3	437.7	377.8
77.5°	5246.9	3881.1	3016.6	2094.0	1383.9	968.0	690.1	521.2	421.3	350.5	306.9
80°	3296.3	2382.8	1837.9	1256.8	862.7	657.4	495.8	412.3	339.6	285.1	256.1
82.5°	1985.1	1387.5	1082.4	780.9	566.6	450.4	365.0	323.3	270.6	236.1	219.8
85°	1347.6	1020.7	710.1	461.3	341.4	265.2	248.8	223.4	201.6	168.9	163.5
87.5°	257.9	365.0	317.8	188.9	125.3	107.2	94.4	90.8	81.7	65.4	74.5
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°	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8
2.5°	3003.9	3000.3	2993.0	2993.0	2987.6	2976.7	2974.9	2967.6	2958.5	2960.3	2958.5
5°	3014.8	3007.6	2998.5	2994.8	2987.6	2976.7	2971.2	2962.1	2953.1	2953.1	2953.1
7.5°	3027.5	3018.4	3011.2	2998.5	2983.9	2973.0	2958.5	2947.6	2942.2	2940.4	2942.2
10°	3038.4	3033.0	3022.1	3003.9	2983.9	2962.1	2947.6	2933.1	2918.6	2920.4	2922.2
12.5°	3062.0	3043.9	3014.8	2987.6	2956.7	2929.5	2904.0	2885.9	2867.7	2867.7	2869.5
15°	3045.7	2993.0	2953.1	2900.4	2865.9	2822.3	2793.2	2776.9	2766.0	2762.4	2764.2
17.5°	2949.4	2885.9	2825.9	2778.7	2731.5	2697.0	2684.3	2673.4	2658.9	2666.1	2658.9
20°	2804.1	2726.0	2640.7	2584.4	2528.1	2504.5	2482.7	2471.8	2462.7	2495.4	2495.4
22.5°	2595.3	2500.8	2413.7	2344.7	2281.1	2255.7	2233.9	2221.2	2226.6	2266.6	2270.2
25°	2331.9	2217.5	2103.1	2061.3	1997.8	1977.8	1965.1	1963.3	1968.7	2008.7	2017.7
27.5°	2052.3	1932.4	1834.3	1738.1	1709.0	1692.7	1669.0	1696.3	1701.7	1745.3	1763.5
30°	1754.4	1625.5	1521.9	1458.4	1396.6	1405.7	1385.7	1418.4	1432.9	1478.4	1492.9
32.5°	1449.3	1327.6	1224.1	1160.5	1116.9	1122.4	1107.9	1136.9	1151.4	1205.9	1233.2
35°	1198.7	1095.1	1011.6	957.1	937.1	917.2	913.5	917.2	931.7	973.5	1022.5
37.5°	1055.2	969.8	909.9	869.9	842.7	830.0	822.7	822.7	822.7	831.8	855.4
40°	993.4	917.2	864.5	826.4	808.2	800.9	795.5	790.0	780.9	777.3	779.1
42.5°	966.2	879.0	822.7	793.7	782.8	782.8	782.8	779.1	770.0	761.0	751.9
45°	939.0	844.5	788.2	768.2	762.8	764.6	764.6	764.6	757.3	746.4	730.1
47.5°	904.4	806.4	750.1	737.4	737.4	742.8	744.6	744.6	737.4	726.5	713.7
50°	862.7	757.3	706.5	695.6	690.1	690.1	690.1	690.1	684.7	677.4	668.3
52.5°	840.9	730.1	677.4	666.5	666.5	661.1	659.3	653.8	648.4	642.9	630.2
55°	833.6	719.2	664.7	655.6	655.6	650.2	644.7	639.3	630.2	621.1	608.4
57.5°	813.6	695.6	648.4	641.1	641.1	637.5	632.0	626.6	617.5	604.8	588.4
60°	768.2	655.6	615.7	613.9	613.9	612.0	608.4	608.4	599.3	586.6	566.6
62.5°	710.1	613.9	575.7	575.7	573.9	572.1	564.8	563.0	552.1	535.8	517.6
65°	653.8	577.5	552.1	544.8	541.2	535.8	532.1	523.1	514.0	499.4	481.3
67.5°	583.0	523.1	506.7	499.4	492.2	486.7	481.3	475.8	464.9	454.0	439.5
70°	506.7	463.1	454.0	452.2	443.1	437.7	435.9	430.4	419.5	408.6	390.5
72.5°	434.1	408.6	401.4	401.4	390.5	383.2	379.6	377.8	370.5	361.4	345.1
75°	350.5	332.4	330.5	339.6	339.6	334.2	330.5	334.2	323.3	317.8	301.5
77.5°	287.0	277.9	272.4	276.1	287.0	281.5	274.2	274.2	274.2	265.2	259.7
80°	243.4	236.1	230.7	234.3	232.5	230.7	227.0	219.8	219.8	219.8	217.9
82.5°	219.8	217.9	198.0	198.0	190.7	185.2	181.6	178.0	174.4	174.4	183.4
85°	165.3	170.7	159.8	158.0	148.9	141.7	134.4	130.8	127.1	132.6	150.7
87.5°	79.9	79.9	76.3	85.4	78.1	74.5	69.0	65.4	69.0	85.4	101.7
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°	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8
2.5°	2954.9	2953.1	2951.3	2947.6	2940.4	2938.5	2934.9	2934.9	2933.1	2929.5	2933.1
5°	2949.4	2953.1	2953.1	2951.3	2945.8	2949.4	2949.4	2954.9	2954.9	2958.5	2967.6
7.5°	2942.2	2951.3	2958.5	2964.0	2971.2	2976.7	2987.6	3003.9	3011.2	3023.9	3029.3
10°	2927.6	2944.0	2956.7	2973.0	2991.2	3011.2	3027.5	3053.0	3062.0	3080.2	3089.3
12.5°	2885.9	2913.1	2934.9	2967.6	2998.5	3029.3	3058.4	3091.1	3107.4	3127.4	3140.1
15°	2784.2	2815.0	2845.9	2875.0	2929.5	2989.4	3036.6	3080.2	3103.8	3129.2	3141.9
17.5°	2662.5	2682.5	2707.9	2746.0	2798.7	2851.4	2927.6	2989.4	3025.7	3054.8	3058.4
20°	2520.8	2549.9	2568.0	2582.6	2624.3	2660.7	2742.4	2813.2	2860.4	2895.0	2904.0
22.5°	2304.7	2335.6	2366.4	2377.3	2410.0	2457.3	2502.7	2578.9	2646.1	2697.0	2727.9
25°	2057.7	2086.8	2128.5	2161.2	2168.5	2206.6	2252.0	2339.2	2408.2	2489.9	2526.3
27.5°	1810.7	1836.1	1881.5	1899.7	1921.5	1959.6	1996.0	2068.6	2141.2	2235.7	2275.6
30°	1521.9	1576.4	1629.1	1663.6	1681.8	1727.2	1752.6	1823.4	1890.6	1959.6	2017.7
32.5°	1274.9	1324.0	1383.9	1427.5	1449.3	1483.8	1523.8	1583.7	1636.4	1703.6	1770.8
35°	1047.9	1115.1	1155.1	1193.2	1249.5	1265.9	1305.8	1360.3	1391.2	1463.8	1540.1
37.5°	888.1	928.1	968.0	1006.1	1053.4	1075.2	1113.3	1158.7	1195.0	1238.6	1307.6
40°	790.0	811.8	840.9	866.3	900.8	928.1	948.0	986.2	1013.4	1057.0	1106.0
42.5°	744.6	750.1	753.7	771.9	790.0	808.2	830.0	846.3	879.0	911.7	942.6
45°	719.2	708.3	702.9	704.7	711.9	722.8	741.0	759.2	780.9	800.9	819.1
47.5°	697.4	682.9	666.5	657.4	659.3	662.9	677.4	692.0	702.9	719.2	726.5
50°	646.6	633.8	619.3	606.6	608.4	610.2	622.9	633.8	641.1	646.6	655.6
52.5°	613.9	595.7	583.0	570.3	568.5	573.9	584.8	595.7	599.3	603.0	604.8
55°	590.3	572.1	555.7	543.0	537.6	550.3	553.9	568.5	573.9	573.9	575.7
57.5°	572.1	550.3	533.9	521.2	512.2	521.2	530.3	546.7	548.5	544.8	544.8
60°	544.8	528.5	512.2	499.4	490.4	497.6	504.9	523.1	523.1	514.0	512.2
62.5°	497.6	488.5	477.6	472.2	470.4	477.6	483.1	497.6	492.2	481.3	477.6
65°	463.1	455.9	445.0	441.3	439.5	450.4	452.2	461.3	454.0	448.6	446.8
67.5°	421.3	415.9	410.5	408.6	403.2	403.2	406.8	412.3	408.6	408.6	410.5
70°	374.1	366.9	361.4	363.2	359.6	359.6	361.4	365.0	363.2	366.9	370.5
72.5°	330.5	321.5	319.6	319.6	316.0	317.8	317.8	319.6	323.3	325.1	334.2
75°	288.8	279.7	279.7	277.9	277.9	277.9	279.7	283.3	287.0	288.8	292.4
77.5°	250.6	245.2	247.0	245.2	245.2	245.2	245.2	250.6	252.4	254.3	259.7
80°	216.1	216.1	217.9	217.9	216.1	214.3	216.1	219.8	221.6	223.4	225.2
82.5°	196.1	198.0	198.0	198.0	188.9	185.2	190.7	194.3	198.0	199.8	203.4
85°	168.9	161.6	168.9	167.1	154.4	152.6	152.6	154.4	158.0	154.4	154.4
87.5°	109.0	98.1	103.5	103.5	90.8	74.5	94.4	101.7	90.8	96.3	96.3
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-F11-LED-E-U-SLR

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8
2.5°	2938.5	2934.9	2936.7	2936.7	2940.4	2934.9	2942.2	2949.4	2951.3	2951.3	2953.1
5°	2976.7	2973.0	2985.8	2980.3	2993.0	2991.2	3000.3	3007.6	3011.2	3011.2	3011.2
7.5°	3036.6	3049.3	3056.6	3076.6	3078.4	3089.3	3098.4	3107.4	3103.8	3105.6	3103.8
10°	3103.8	3120.2	3138.3	3158.3	3160.1	3172.8	3187.4	3196.4	3192.8	3191.0	3185.5
12.5°	3161.9	3172.8	3194.6	3214.6	3225.5	3245.5	3260.0	3267.3	3267.3	3261.8	3256.4
15°	3158.3	3174.6	3198.2	3227.3	3247.3	3276.3	3301.8	3318.1	3319.9	3314.5	3312.7
17.5°	3078.4	3102.0	3123.8	3163.7	3200.1	3240.0	3281.8	3305.4	3327.2	3339.9	3347.2
20°	2934.9	2964.0	2994.8	3047.5	3096.5	3149.2	3198.2	3232.8	3265.4	3303.6	3349.0
22.5°	2766.0	2809.6	2853.2	2920.4	2980.3	3040.2	3096.5	3138.3	3189.2	3254.5	3339.9
25°	2568.0	2613.4	2667.9	2746.0	2822.3	2909.5	2993.0	3076.6	3174.6	3287.2	3419.8
27.5°	2333.8	2384.6	2455.4	2549.9	2637.1	2726.0	2856.8	2989.4	3149.2	3294.5	3445.2
30°	2101.3	2166.7	2243.0	2337.4	2424.6	2551.7	2682.5	2845.9	3014.8	3178.3	3358.1
32.5°	1850.7	1932.4	2026.8	2104.9	2203.0	2331.9	2462.7	2637.1	2816.9	3009.4	3207.3
35°	1609.1	1687.2	1761.7	1848.8	1946.9	2068.6	2195.7	2362.8	2589.8	2795.1	3031.2
37.5°	1363.9	1436.6	1489.2	1558.3	1643.6	1778.0	1914.2	2106.7	2321.0	2573.5	2809.6
40°	1149.6	1209.6	1269.5	1324.0	1396.6	1523.8	1669.0	1857.9	2068.6	2313.8	2577.1
42.5°	978.9	1024.3	1089.7	1155.1	1216.8	1325.8	1462.0	1647.3	1856.1	2106.7	2370.1
45°	835.4	866.3	919.0	973.5	1049.7	1140.5	1271.3	1460.2	1672.7	1925.1	2203.0
47.5°	731.9	746.4	782.8	839.1	909.9	998.9	1111.5	1282.2	1489.2	1743.5	2035.9
50°	661.1	677.4	695.6	742.8	806.4	897.2	989.8	1138.7	1327.6	1576.4	1867.0
52.5°	612.0	619.3	626.6	655.6	713.7	790.0	888.1	1000.7	1191.4	1429.3	1690.8
55°	583.0	584.8	590.3	604.8	648.4	719.2	804.6	911.7	1060.6	1285.8	1552.8
57.5°	548.5	552.1	557.6	566.6	593.9	657.4	730.1	817.3	940.8	1129.6	1385.7
60°	515.8	524.9	533.9	539.4	553.9	592.1	653.8	722.8	822.7	964.4	1167.8
62.5°	481.3	492.2	499.4	504.9	510.3	533.9	579.4	624.8	686.5	779.1	931.7
65°	450.4	457.7	463.1	466.8	470.4	477.6	497.6	515.8	533.9	590.3	701.0
67.5°	415.9	419.5	421.3	423.2	421.3	421.3	423.2	430.4	437.7	459.5	512.2
70°	375.9	381.4	381.4	383.2	383.2	377.8	377.8	377.8	377.8	383.2	412.3
72.5°	337.8	345.1	345.1	346.9	345.1	343.3	343.3	343.3	348.7	352.3	363.2
75°	301.5	308.7	306.9	308.7	310.6	310.6	314.2	316.0	321.5	323.3	330.5
77.5°	265.2	270.6	272.4	270.6	274.2	277.9	285.1	288.8	290.6	292.4	294.2
80°	230.7	234.3	232.5	227.0	236.1	241.5	252.4	265.2	261.5	263.3	267.0
82.5°	190.7	185.2	181.6	185.2	190.7	198.0	208.9	225.2	227.0	236.1	234.3
85°	147.1	130.8	128.9	138.0	136.2	145.3	163.5	176.2	187.1	196.1	187.1
87.5°	87.2	78.1	65.4	61.7	67.2	89.0	92.6	112.6	121.7	125.3	112.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159175

CATALOG NUMBER: VST-F11-LED-E-U-SLR

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8
2.5°	3118.3	3127.4	3127.4	3131.1	3136.5	3138.3	3145.6	3158.3	3160.1	3160.1	3165.6
5°	3176.5	3185.5	3185.5	3192.8	3194.6	3203.7	3212.8	3227.3	3234.6	3232.8	3256.4
7.5°	3270.9	3263.6	3258.2	3269.1	3274.5	3285.4	3303.6	3316.3	3329.0	3349.0	3381.7
10°	3350.8	3339.9	3334.5	3341.7	3345.4	3358.1	3369.0	3387.1	3418.0	3448.9	3488.8
12.5°	3416.2	3403.5	3388.9	3392.6	3398.0	3414.4	3432.5	3456.1	3501.5	3541.5	3601.4
15°	3470.7	3452.5	3438.0	3445.2	3458.0	3479.8	3510.6	3552.4	3626.9	3695.9	3775.8
17.5°	3523.3	3519.7	3514.3	3537.9	3547.0	3597.8	3643.2	3719.5	3821.2	3924.7	4039.1
20°	3574.2	3614.1	3634.1	3681.3	3710.4	3779.4	3848.4	3941.1	4070.0	4211.7	4367.9
22.5°	3645.0	3754.0	3821.2	3917.4	3966.5	4040.9	4142.6	4264.3	4407.8	4589.4	4789.2
25°	3813.9	3973.7	4108.1	4258.9	4382.4	4496.8	4618.5	4765.6	4972.6	5137.9	5399.4
27.5°	3888.4	4113.6	4315.2	4527.7	4712.9	4889.1	5081.6	5259.6	5504.8	5728.2	6044.2
30°	3817.6	4071.8	4333.3	4611.2	4881.8	5148.8	5428.5	5700.9	5984.2	6296.6	6632.6
32.5°	3686.8	3971.9	4266.1	4593.1	4929.0	5275.9	5639.2	6035.1	6434.6	6823.3	7166.5
35°	3554.2	3861.1	4188.1	4562.2	4958.1	5388.5	5838.9	6340.2	6868.7	7360.9	7809.5
37.5°	3361.7	3699.5	4073.6	4505.9	4976.3	5506.6	6085.9	6703.4	7371.8	8049.2	8637.6
40°	3129.2	3487.0	3895.7	4393.3	4958.1	5628.3	6382.0	7173.8	8032.9	8859.2	9582.0
42.5°	2916.7	3265.4	3701.3	4242.5	4910.9	5735.4	6663.5	7649.6	8666.7	9591.1	10535.5
45°	2729.7	3114.7	3552.4	4137.2	4887.3	5826.2	6872.3	8005.6	9169.8	10270.4	11385.5
47.5°	2559.0	2958.5	3448.9	4079.1	4876.4	5880.7	7017.6	8238.1	9527.5	10791.6	12086.5
50°	2382.8	2771.5	3296.3	4015.5	4849.1	5878.9	7093.9	8396.1	9778.2	11196.6	12569.6
52.5°	2193.9	2584.4	3111.1	3899.3	4791.0	5846.2	7113.9	8503.2	9976.1	11445.4	12980.1
55°	2021.4	2386.4	2913.1	3705.0	4669.3	5766.3	7068.5	8548.6	10116.0	11692.4	13268.8
57.5°	1823.4	2203.0	2704.3	3438.0	4440.5	5624.6	6939.5	8485.1	10155.9	11857.7	13497.7
60°	1551.0	1923.3	2439.1	3122.0	4082.7	5325.0	6699.8	8292.6	10028.8	11886.7	13661.1
62.5°	1238.6	1560.1	2057.7	2686.1	3579.6	4854.6	6256.7	7860.3	9632.9	11614.3	13577.6
65°	920.8	1135.1	1563.7	2115.8	2996.7	4146.3	5542.9	7135.7	8859.2	10857.0	13052.7
67.5°	641.1	795.5	1058.8	1469.3	2179.4	3201.9	4524.0	6004.2	7662.4	9454.9	11963.0
70°	484.9	555.7	699.2	928.1	1411.2	2181.2	3289.1	4607.6	6145.9	7873.0	10235.8
72.5°	414.1	450.4	530.3	635.7	864.5	1325.8	2065.0	3171.0	4534.9	5940.6	7853.1
75°	372.3	403.2	454.0	521.2	612.0	804.6	1211.4	2006.9	3003.9	3979.2	5479.3
77.5°	337.8	365.0	410.5	445.0	494.0	579.4	771.9	1200.5	1799.8	2459.1	3399.8
80°	301.5	317.8	359.6	394.1	432.2	481.3	553.9	753.7	1033.4	1456.6	2005.0
82.5°	257.9	270.6	301.5	348.7	377.8	397.7	419.5	499.4	619.3	790.0	1113.3
85°	199.8	208.9	236.1	270.6	283.3	285.1	288.8	310.6	385.0	592.1	958.9
87.5°	101.7	112.6	141.7	152.6	128.9	139.8	141.7	150.7	199.8	325.1	330.5
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: P159175
 CATALOG NUMBER: VST-F11-LED-E-U-SLR

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	0°
2.5°	3165.6	3171.0	3183.7	3181.9	3191.0	3191.0	3191.0	3200.1	3194.6	3200.1	3209.1	2.5°
5°	3256.4	3265.4	3283.6	3283.6	3285.4	3280.0	3290.9	3298.1	3289.1	3285.4	3287.2	5°
7.5°	3388.9	3403.5	3418.0	3432.5	3443.4	3438.0	3439.8	3423.5	3419.8	3407.1	3390.8	7.5°
10°	3517.9	3557.8	3585.1	3610.5	3612.3	3606.9	3608.7	3581.5	3576.0	3550.6	3534.2	10°
12.5°	3650.5	3701.3	3744.9	3772.2	3788.5	3792.1	3793.9	3793.9	3768.5	3746.7	3708.6	12.5°
15°	3846.6	3935.6	4002.8	4031.9	4055.5	4077.3	4082.7	4090.0	4070.0	4040.9	4035.5	15°
17.5°	4157.2	4240.7	4329.7	4407.8	4460.5	4464.1	4509.5	4505.9	4547.7	4515.0	4505.9	17.5°
20°	4525.9	4707.5	4800.1	4903.6	4963.6	4992.6	5097.9	5065.3	5096.1	5148.8	5096.1	20°
22.5°	4987.2	5217.8	5352.2	5493.9	5591.9	5662.8	5739.0	5799.0	5882.5	5922.5	5886.2	22.5°
25°	5599.2	5862.5	6022.4	6218.5	6374.7	6501.8	6634.4	6794.2	6792.4	6888.7	6955.9	25°
27.5°	6302.1	6638.0	6870.5	7215.6	7350.0	7564.3	7791.3	8038.3	8081.9	8207.2	8270.8	27.5°
30°	6963.1	7379.0	7840.3	8250.8	8715.7	9033.6	9296.9	9471.2	9734.6	9669.2	9632.9	30°
32.5°	7573.4	8127.3	8784.7	9458.5	10195.9	10699.0	11163.9	11380.0	11543.5	11196.6	10737.1	32.5°
35°	8365.2	9028.1	9780.0	10611.8	11548.9	12262.7	12742.1	12809.3	12716.7	12271.8	11510.8	35°
37.5°	9345.9	10041.5	10896.9	11775.9	12771.2	13441.4	13988.0	14086.1	13840.9	13047.3	12248.1	37.5°
40°	10313.9	11129.4	12057.5	13098.1	14129.7	14867.0	15415.5	15444.6	15045.0	14117.0	13181.7	40°
42.5°	11372.8	12264.5	13297.9	14451.1	15517.2	16263.7	16659.6	16784.9	16220.1	15030.5	14133.3	42.5°
45°	12286.3	13352.4	14503.8	15729.7	16844.8	17553.1	17956.3	17916.4	17233.5	16058.4	15006.9	45°
47.5°	13176.2	14349.4	15562.6	16864.8	17972.7	18688.2	19102.3	19066.0	18199.7	16846.7	15689.8	47.5°
50°	13968.0	15241.2	16537.9	17929.1	19033.3	19688.9	20195.6	20035.8	18940.7	17480.5	16129.3	50°
52.5°	14518.3	15938.6	17293.4	18797.2	19934.1	20555.2	21200.0	20686.0	19378.4	17869.1	16365.4	52.5°
55°	14867.0	16418.0	17831.0	19494.6	20611.5	21354.3	21770.2	21040.2	19547.3	17976.3	16447.1	55°
57.5°	15103.1	16681.4	18147.0	19897.8	21221.8	21844.7	21946.4	21052.9	19438.3	17807.4	16365.4	57.5°
60°	15219.4	16759.5	18290.5	20181.1	21650.4	21991.8	21806.6	20758.6	19062.4	17311.6	15838.7	60°
62.5°	15206.7	16661.4	18216.0	20275.6	21735.7	21779.3	21358.0	20257.4	18370.4	16270.9	14963.3	62.5°
65°	14883.4	16303.6	17796.5	19925.0	21338.0	21150.9	20620.6	19316.6	17024.6	14912.4	14251.4	65°
67.5°	13951.7	15313.8	16699.5	18777.2	20217.4	20035.8	19233.1	17467.8	15460.9	13710.2	13354.2	67.5°
70°	12393.4	13548.5	14765.3	16590.6	18101.6	17856.4	16452.5	15379.2	13911.7	12320.8	12197.3	70°
72.5°	10361.2	11236.5	12119.2	13477.7	14518.3	14017.1	13134.4	13078.1	11892.2	10677.2	10702.6	72.5°
75°	8103.7	8761.1	9173.4	9972.5	10664.5	10215.9	10268.5	10580.9	10190.4	9233.3	8922.8	75°
77.5°	5871.6	6501.8	6632.6	7106.6	7593.3	8103.7	8779.3	9514.8	9638.3	9100.8	7974.7	77.5°
80°	3843.0	4536.8	4278.9	4447.8	5132.5	6064.1	7297.3	8508.7	8924.6	8441.5	7055.8	80°
82.5°	2266.6	3238.2	2827.8	3116.5	3550.6	4362.4	5214.2	6127.7	6823.3	6309.3	5893.4	82.5°
85°	1721.7	2553.5	2704.3	3054.8	3196.4	3230.9	3379.9	3677.7	4037.3	4171.7	4160.8	85°
87.5°	897.2	1985.1	2228.4	2061.3	1923.3	1667.2	1300.4	1400.3	1280.4	1750.8	1658.1	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: P159175

NUMBER: VST-F11-LED-E-U-SLR

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
3034.8	3034.8	3034.8	3034.8	3034.8	3034.8	3034.8
3211.0	3205.5	3209.1	3211.0	3211.0	3211.0	3214.6
3285.4	3270.9	3265.4	3265.4	3263.6	3258.2	3256.4
3365.3	3339.9	3330.8	3319.9	3310.9	3305.4	3296.3
3508.8	3487.0	3441.6	3416.2	3392.6	3376.2	3361.7
3701.3	3670.4	3626.9	3594.2	3557.8	3547.0	3528.8
3999.2	3971.9	3933.8	3897.5	3875.7	3837.5	3810.3
4464.1	4409.6	4371.5	4324.3	4271.6	4193.5	4155.4
5076.2	4967.2	4890.9	4849.1	4743.8	4731.1	4638.5
5779.0	5746.3	5630.1	5579.2	5477.5	5437.6	5292.3
6830.6	6805.1	6567.2	6541.8	6385.6	6269.4	6044.2
8212.7	8003.8	7735.0	7547.9	7281.0	6981.3	6598.1
9420.4	8993.6	8583.1	8147.3	7778.6	7348.2	6914.1
10190.4	9618.4	9089.9	8643.1	8187.2	7675.1	7117.5
10866.1	10288.5	9712.8	9184.3	8632.2	7976.6	7288.2
11674.2	11100.3	10452.0	9709.2	9000.9	8198.1	7357.2
12502.4	11830.4	11020.4	10110.5	9220.6	8307.1	7344.5
13350.6	12491.5	11414.5	10377.5	9360.5	8323.4	7259.2
14038.9	12952.8	11706.9	10513.7	9389.5	8267.1	7152.0
14525.6	13248.8	11837.7	10560.9	9353.2	8178.1	7006.7
14803.5	13410.5	11870.4	10526.4	9278.7	8051.0	6848.7
14905.2	13459.5	11837.7	10455.6	9211.5	7914.8	6737.9
14894.3	13432.3	11717.8	10290.3	9031.7	7733.2	6601.7
14689.1	13179.8	11472.7	10092.4	8879.2	7649.6	6610.8
14340.4	13020.0	11400.0	10132.3	8959.1	7829.4	6897.8
14182.4	13339.7	11808.6	10531.9	9369.5	8343.4	7489.8
14093.4	13859.1	12393.4	10962.3	9856.3	8966.4	8196.3
13730.1	14008.0	12725.8	11207.5	10290.3	9591.1	8902.8
13143.5	13661.1	12473.4	11160.3	10530.1	10070.6	9157.1
11919.4	12466.1	11349.2	10464.7	10230.4	10077.8	8775.7
9656.5	9939.8	9304.2	9104.4	9191.6	9193.4	7360.9
7121.1	6950.4	6663.5	6678.0	7264.6	7173.8	5246.9
5813.5	4758.3	4351.5	4505.9	5230.5	4840.1	3296.3
5410.3	4244.4	3503.4	3539.7	3950.1	3118.3	1985.1
4375.1	3868.4	3102.0	2784.2	2702.4	2077.7	1347.6
1830.7	1683.6	1253.1	1129.6	926.2	566.6	257.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)