

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: P159149

Luminaire Tested: **VST-E09-LED-E-U-SLR-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159149
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-E09-LED-E-U-SLR-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR RIGHT
Light Source: (189) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22089.9 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 225.7
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



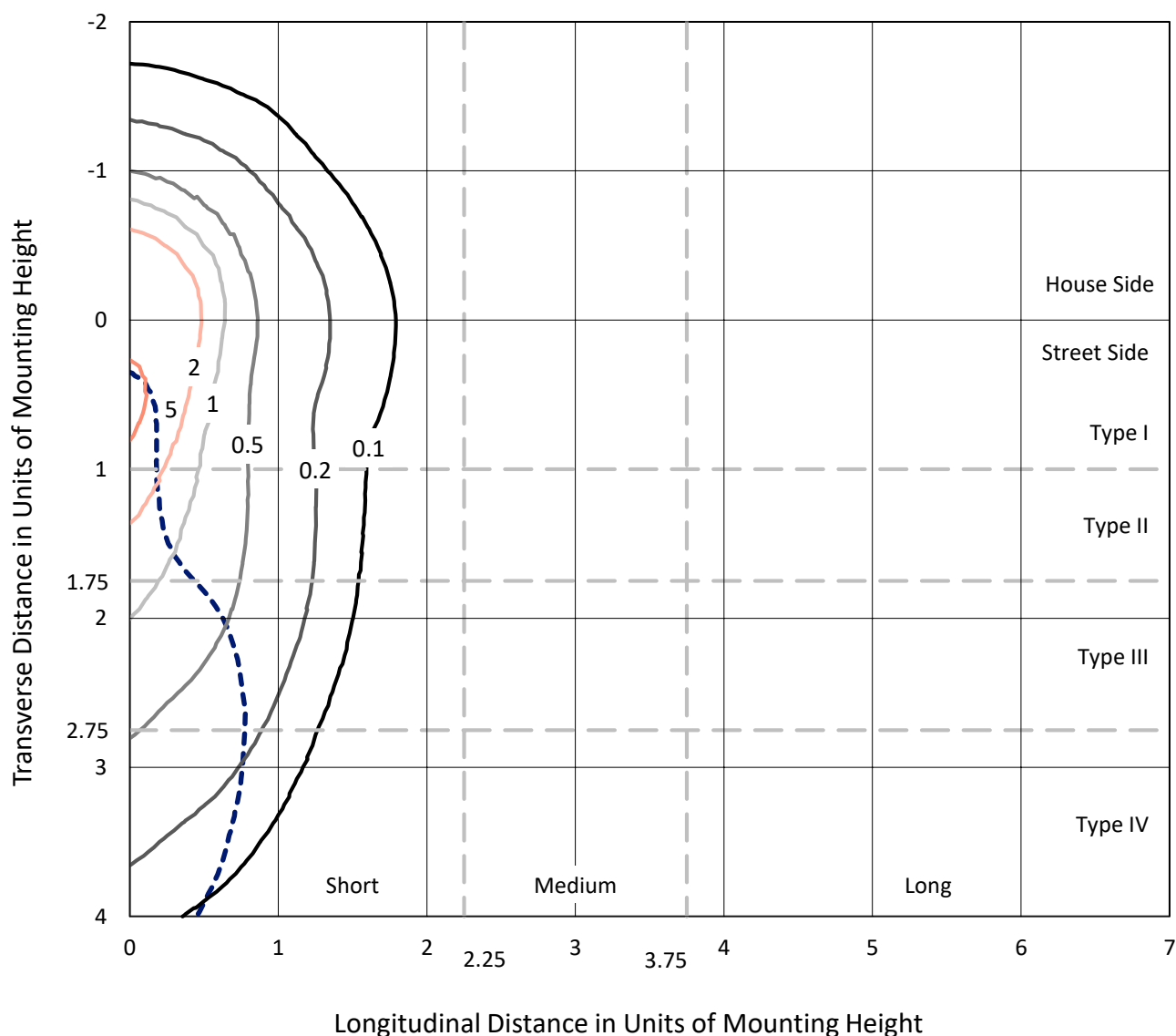
REPORT NUMBER: P159149

CATALOG NUMBER: VST-E09-LED-E-U-SLR-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

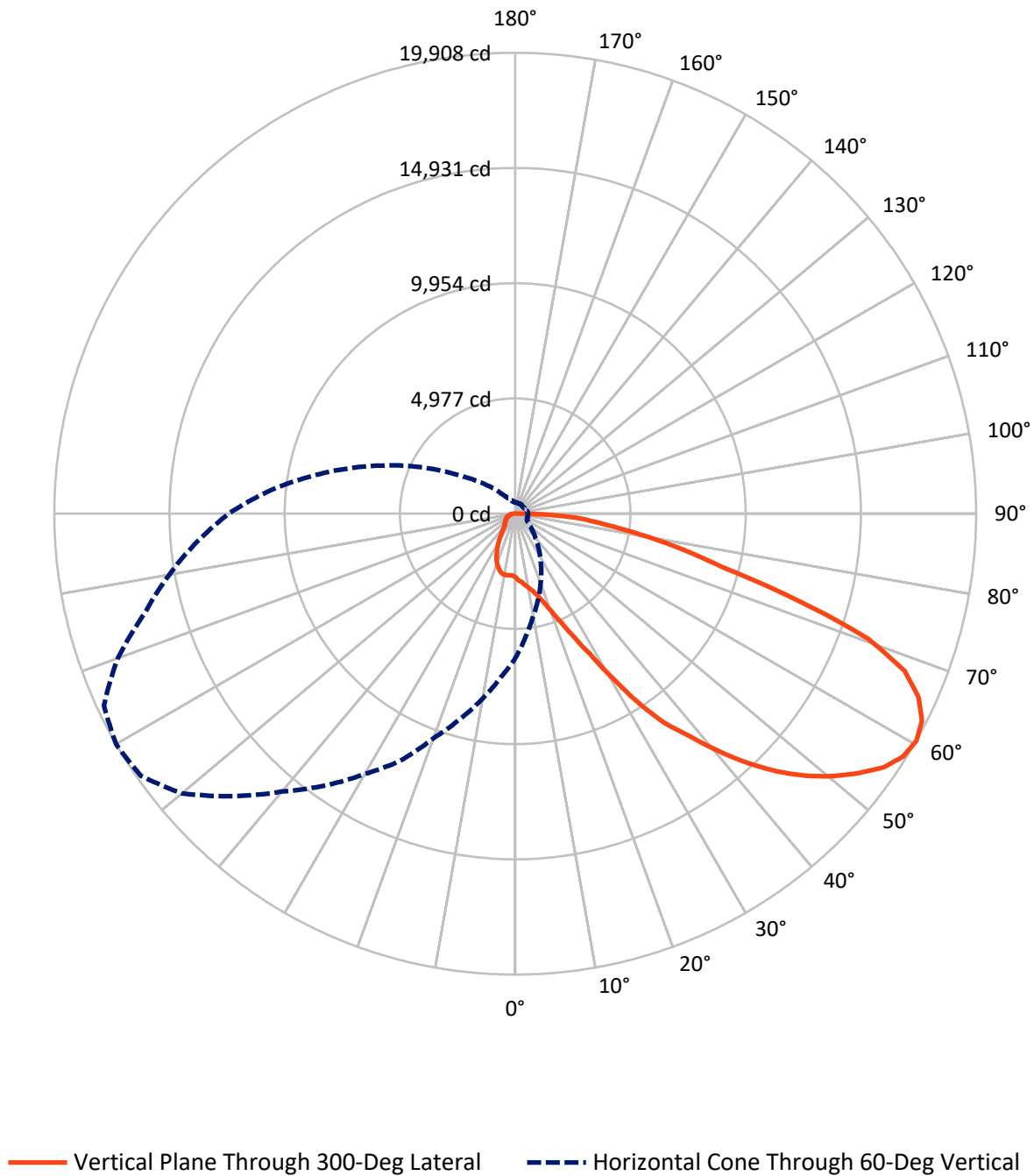


Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P159149

CATALOG NUMBER: VST-E09-LED-E-U-SLR-7030

Luminous Intensity Polar Plot



REPORT NUMBER: P159149

CATALOG NUMBER: VST-E09-LED-E-U-SLR-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4973.9	0.0	4973.9
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	17115.9	0.0	17115.9
	% Fixture	77.5	0.0	77.5
Total	Lumens	22089.9	0.0	22089.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.0	1.2
10°-20°	875.1	4.0
20°-30°	1660.6	7.5
30°-40°	2615.1	11.8
40°-50°	3650.0	16.5
50°-60°	4514.3	20.4
60°-70°	4679.3	21.2
70°-80°	2944.4	13.3
80°-90°	880.1	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°	22089.9	100.0
0°-180°	22089.9	100.0

Coefficient of Utilization



REPORT NUMBER: P159149

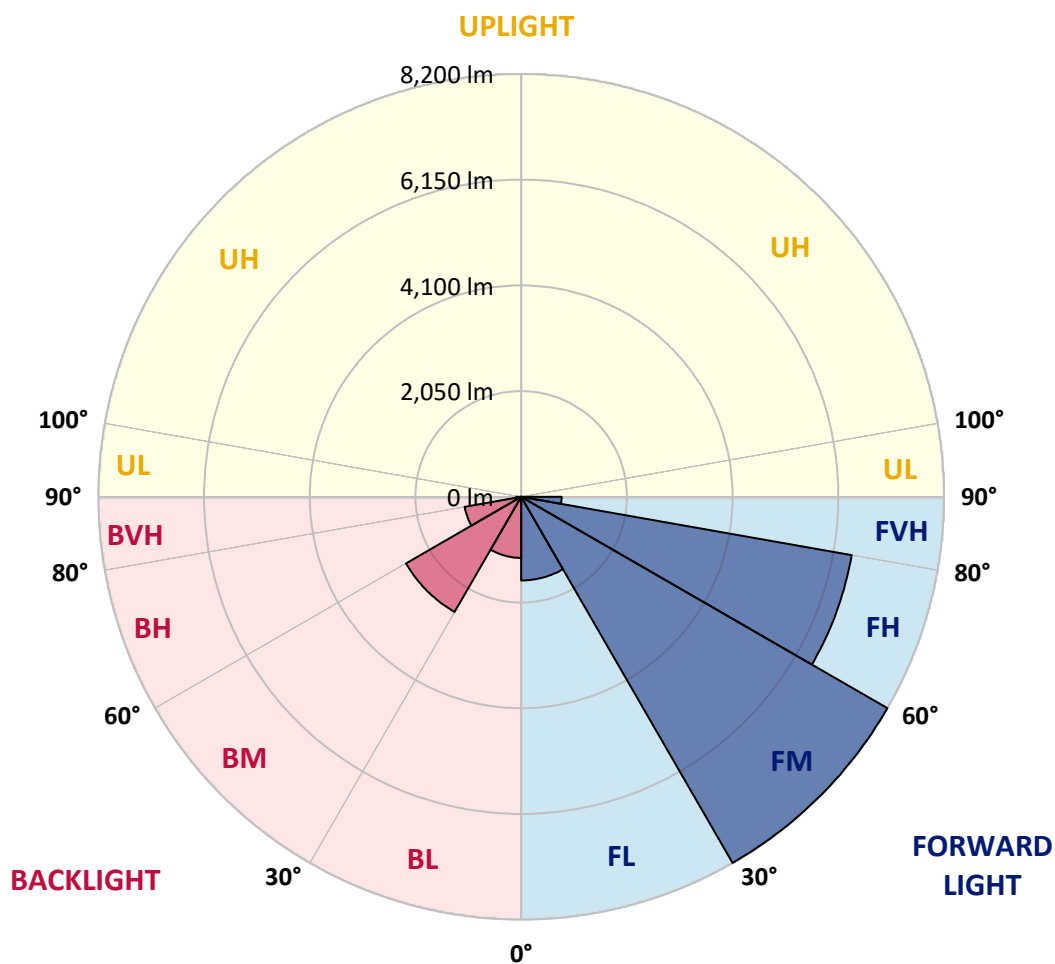
CATALOG NUMBER: VST-E09-LED-E-U-SLR-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1621.7	7.3			
FM	(30°-60°)	8200.1	37.1			
FH	(60°-80°)	6509.7	29.5			G3/7500
FVH	(80°-90°)	784.4	3.6			G5
BL	(0°-30°)	1185.0	5.4	B3/2500		
BM	(30°-60°)	2579.3	11.7	B3/5000		
BH	(60°-80°)	1113.9	5.0	B3/2500		G3/2500
BVH	(80°-90°)	95.7	0.4			G1/100
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





REPORT NUMBER: P159149

CATALOG NUMBER: VST-E09-LED-E-U-SLR-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2
2.5°	2909.9	2735.7	2739.0	2734.0	2734.0	2730.7	2734.0	2730.7	2727.4	2727.4	2729.1
5°	2947.7	2755.4	2755.4	2750.5	2747.2	2743.9	2747.2	2743.9	2742.2	2739.0	2740.6
7.5°	2983.9	2766.9	2760.3	2753.8	2745.5	2748.8	2748.8	2747.2	2748.8	2747.2	2750.5
10°	3043.1	2804.7	2788.3	2773.5	2771.8	2768.5	2768.5	2763.6	2763.6	2760.3	2762.0
12.5°	3194.4	2921.4	2903.4	2877.1	2872.1	2857.3	2849.1	2839.2	2822.8	2808.0	2796.5
15°	3449.2	3115.4	3080.9	3057.9	3048.0	3018.4	2972.4	2936.2	2888.6	2847.5	2804.7
17.5°	3761.5	3375.2	3334.1	3304.5	3255.2	3174.6	3097.4	3008.6	2916.5	2832.7	2755.4
20°	4198.9	3748.4	3667.8	3597.1	3473.8	3335.7	3191.1	3036.5	2895.1	2763.6	2650.2
22.5°	4790.7	4230.1	4080.5	3891.4	3662.9	3429.4	3199.3	2985.6	2796.5	2625.5	2474.3
25°	5471.3	4690.4	4420.8	4095.3	3745.1	3422.9	3120.4	2845.8	2625.5	2405.2	2240.8
27.5°	5972.8	5075.1	4677.3	4249.8	3802.6	3391.6	3020.1	2688.0	2421.7	2196.4	1997.5
30°	6258.8	5295.4	4817.0	4315.6	3812.5	3339.0	2893.5	2508.8	2201.4	1933.4	1742.7
32.5°	6443.0	5413.8	4831.8	4249.8	3694.1	3182.8	2701.1	2301.6	1967.9	1681.8	1479.6
35°	6597.5	5461.5	4762.8	4103.5	3470.5	2946.1	2454.5	2055.0	1701.6	1438.5	1231.4
37.5°	6660.0	5453.2	4652.6	3907.9	3251.9	2688.0	2203.0	1793.6	1478.0	1246.2	1068.6
40°	6648.5	5377.6	4503.0	3699.1	2995.4	2418.4	1936.7	1576.6	1320.2	1124.5	994.6
42.5°	6571.2	5277.3	4337.0	3487.0	2760.3	2194.8	1755.8	1436.9	1229.7	1081.8	968.3
45°	6474.2	5157.3	4185.7	3293.0	2574.6	2035.3	1650.6	1397.4	1218.2	1076.8	955.2
47.5°	6342.7	5024.2	4032.8	3154.9	2475.9	1987.6	1649.0	1420.4	1228.1	1065.3	932.2
50°	6199.6	4927.2	3949.0	3095.7	2464.4	2017.2	1706.5	1456.6	1234.7	1053.8	900.9
52.5°	6099.4	4884.4	3947.3	3117.1	2525.2	2099.4	1773.9	1502.6	1259.3	1060.4	894.4
55°	5976.1	4877.8	3990.1	3209.1	2658.4	2239.2	1880.8	1581.6	1310.3	1085.1	899.3
57.5°	5984.3	5007.7	4156.1	3436.0	2898.4	2428.2	2017.2	1678.6	1359.6	1099.9	891.1
60°	6244.0	5310.2	4483.3	3824.0	3212.4	2650.2	2157.0	1731.2	1356.3	1067.0	851.6
62.5°	6780.0	5764.0	4973.2	4279.4	3531.4	2821.2	2207.9	1716.4	1307.0	996.3	787.5
65°	7419.5	6295.0	5450.0	4632.9	3725.4	2860.6	2163.5	1634.2	1208.4	904.2	710.2
67.5°	8059.0	6671.5	5724.5	4733.2	3646.5	2701.1	1999.1	1450.0	1040.7	779.3	623.1
70°	8289.2	6748.7	5703.1	4507.9	3288.1	2304.9	1645.7	1167.3	835.2	637.9	524.4
72.5°	7944.0	6265.4	5070.2	3830.6	2673.2	1787.1	1206.7	861.5	637.9	499.8	427.4
75°	6663.3	5045.5	4008.1	2885.3	1930.1	1264.3	871.3	628.0	480.1	396.2	342.0
77.5°	4749.6	3513.3	2730.7	1895.6	1252.8	876.3	624.7	471.8	381.4	317.3	277.8
80°	2983.9	2157.0	1663.8	1137.7	780.9	595.1	448.8	373.2	307.4	258.1	231.8
82.5°	1796.9	1256.0	979.8	706.9	512.9	407.7	330.5	292.6	245.0	213.7	198.9
85°	1219.9	923.9	642.8	417.6	309.1	240.0	225.2	202.2	182.5	152.9	148.0
87.5°	233.5	330.5	287.7	171.0	113.4	97.0	85.5	82.2	74.0	59.2	67.4
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: P159149

CATALOG NUMBER: VST-E09-LED-E-U-SLR-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2
2.5°	2719.2	2715.9	2709.4	2709.4	2704.4	2694.6	2692.9	2686.3	2678.1	2679.8	2678.1
5°	2729.1	2722.5	2714.3	2711.0	2704.4	2694.6	2689.6	2681.4	2673.2	2673.2	2673.2
7.5°	2740.6	2732.4	2725.8	2714.3	2701.1	2691.3	2678.1	2668.3	2663.3	2661.7	2663.3
10°	2750.5	2745.5	2735.7	2719.2	2701.1	2681.4	2668.3	2655.1	2642.0	2643.6	2645.2
12.5°	2771.8	2755.4	2729.1	2704.4	2676.5	2651.8	2628.8	2612.4	2595.9	2595.9	2597.6
15°	2757.0	2709.4	2673.2	2625.5	2594.3	2554.8	2528.5	2513.7	2503.9	2500.6	2502.2
17.5°	2669.9	2612.4	2558.1	2515.4	2472.6	2441.4	2429.9	2420.0	2406.9	2413.4	2406.9
20°	2538.4	2467.7	2390.4	2339.5	2288.5	2267.1	2247.4	2237.5	2229.3	2258.9	2258.9
22.5°	2349.3	2263.8	2184.9	2122.4	2064.9	2041.9	2022.2	2010.6	2015.6	2051.8	2055.0
25°	2110.9	2007.4	1903.8	1866.0	1808.4	1790.3	1778.8	1777.2	1782.1	1818.3	1826.5
27.5°	1857.8	1749.2	1660.5	1573.3	1547.0	1532.2	1510.9	1535.5	1540.5	1579.9	1596.4
30°	1588.1	1471.4	1377.7	1320.2	1264.3	1272.5	1254.4	1284.0	1297.1	1338.2	1351.4
32.5°	1311.9	1201.8	1108.1	1050.5	1011.1	1016.0	1002.9	1029.2	1042.3	1091.6	1116.3
35°	1085.1	991.4	915.7	866.4	848.3	830.2	826.9	830.2	843.4	881.2	925.6
37.5°	955.2	877.9	823.7	787.5	762.8	751.3	744.7	744.7	744.7	753.0	774.3
40°	899.3	830.2	782.6	748.0	731.6	725.0	720.1	715.2	706.9	703.6	705.3
42.5°	874.6	795.7	744.7	718.4	708.6	708.6	708.6	705.3	697.1	688.8	680.6
45°	850.0	764.5	713.5	695.4	690.5	692.1	692.1	692.1	685.6	675.7	660.9
47.5°	818.7	729.9	679.0	667.5	667.5	672.4	674.1	674.1	667.5	657.6	646.1
50°	780.9	685.6	639.5	629.7	624.7	624.7	624.7	624.7	619.8	613.2	605.0
52.5°	761.2	660.9	613.2	603.4	603.4	598.4	596.8	591.9	586.9	582.0	570.5
55°	754.6	651.0	601.7	593.5	593.5	588.6	583.6	578.7	570.5	562.3	550.8
57.5°	736.5	629.7	586.9	580.3	580.3	577.1	572.1	567.2	559.0	547.5	532.7
60°	695.4	593.5	557.3	555.7	555.7	554.0	550.8	550.8	542.5	531.0	512.9
62.5°	642.8	555.7	521.2	521.2	519.5	517.9	511.3	509.6	499.8	485.0	468.5
65°	591.9	522.8	499.8	493.2	489.9	485.0	481.7	473.5	465.3	452.1	435.7
67.5°	527.7	473.5	458.7	452.1	445.5	440.6	435.7	430.7	420.9	411.0	397.9
70°	458.7	419.2	411.0	409.4	401.1	396.2	394.6	389.6	379.8	369.9	353.5
72.5°	392.9	369.9	363.3	363.3	353.5	346.9	343.6	342.0	335.4	327.2	312.4
75°	317.3	300.9	299.2	307.4	307.4	302.5	299.2	302.5	292.6	287.7	272.9
77.5°	259.8	251.5	246.6	249.9	259.8	254.8	248.2	248.2	248.2	240.0	235.1
80°	220.3	213.7	208.8	212.1	210.4	208.8	205.5	198.9	198.9	198.9	197.3
82.5°	198.9	197.3	179.2	179.2	172.6	167.7	164.4	161.1	157.8	157.8	166.0
85°	149.6	154.5	144.7	143.0	134.8	128.2	121.7	118.4	115.1	120.0	136.5
87.5°	72.3	72.3	69.0	77.3	70.7	67.4	62.5	59.2	62.5	77.3	92.1
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: P159149

CATALOG NUMBER: VST-E09-LED-E-U-SLR-7030

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2
2.5°	2674.8	2673.2	2671.5	2668.3	2661.7	2660.0	2656.8	2656.8	2655.1	2651.8	2655.1
5°	2669.9	2673.2	2673.2	2671.5	2666.6	2669.9	2669.9	2674.8	2674.8	2678.1	2686.3
7.5°	2663.3	2671.5	2678.1	2683.1	2689.6	2694.6	2704.4	2719.2	2725.8	2737.3	2742.2
10°	2650.2	2665.0	2676.5	2691.3	2707.7	2725.8	2740.6	2763.6	2771.8	2788.3	2796.5
12.5°	2612.4	2637.0	2656.8	2686.3	2714.3	2742.2	2768.5	2798.1	2812.9	2831.0	2842.5
15°	2520.3	2548.2	2576.2	2602.5	2651.8	2706.1	2748.8	2788.3	2809.6	2832.7	2844.2
17.5°	2410.1	2428.2	2451.2	2485.8	2533.5	2581.1	2650.2	2706.1	2739.0	2765.3	2768.5
20°	2281.9	2308.2	2324.7	2337.8	2375.6	2408.5	2482.5	2546.6	2589.3	2620.6	2628.8
22.5°	2086.3	2114.2	2142.2	2152.0	2181.6	2224.4	2265.5	2334.5	2395.4	2441.4	2469.3
25°	1862.7	1889.0	1926.8	1956.4	1963.0	1997.5	2038.6	2117.5	2180.0	2254.0	2286.8
27.5°	1639.1	1662.1	1703.2	1719.7	1739.4	1773.9	1806.8	1872.6	1938.3	2023.8	2060.0
30°	1377.7	1427.0	1474.7	1505.9	1522.4	1563.5	1586.5	1650.6	1711.4	1773.9	1826.5
32.5°	1154.1	1198.5	1252.8	1292.2	1311.9	1343.2	1379.3	1433.6	1481.3	1542.1	1602.9
35°	948.6	1009.4	1045.6	1080.1	1131.1	1145.9	1182.1	1231.4	1259.3	1325.1	1394.1
37.5°	803.9	840.1	876.3	910.8	953.5	973.3	1007.8	1048.9	1081.8	1121.2	1183.7
40°	715.2	734.9	761.2	784.2	815.4	840.1	858.2	892.7	917.4	956.8	1001.2
42.5°	674.1	679.0	682.3	698.7	715.2	731.6	751.3	766.1	795.7	825.3	853.3
45°	651.0	641.2	636.2	637.9	644.5	654.3	670.8	687.2	706.9	725.0	741.5
47.5°	631.3	618.2	603.4	595.1	596.8	600.1	613.2	626.4	636.2	651.0	657.6
50°	585.3	573.8	560.6	549.1	550.8	552.4	563.9	573.8	580.3	585.3	593.5
52.5°	555.7	539.2	527.7	516.2	514.6	519.5	529.4	539.2	542.5	545.8	547.5
55°	534.3	517.9	503.1	491.6	486.6	498.1	501.4	514.6	519.5	519.5	521.2
57.5°	517.9	498.1	483.3	471.8	463.6	471.8	480.1	494.9	496.5	493.2	493.2
60°	493.2	478.4	463.6	452.1	443.9	450.5	457.0	473.5	473.5	465.3	463.6
62.5°	450.5	442.2	432.4	427.4	425.8	432.4	437.3	450.5	445.5	435.7	432.4
65°	419.2	412.7	402.8	399.5	397.9	407.7	409.4	417.6	411.0	406.1	404.4
67.5°	381.4	376.5	371.6	369.9	365.0	365.0	368.3	373.2	369.9	369.9	371.6
70°	338.7	332.1	327.2	328.8	325.5	325.5	327.2	330.5	328.8	332.1	335.4
72.5°	299.2	291.0	289.3	289.3	286.1	287.7	287.7	289.3	292.6	294.3	302.5
75°	261.4	253.2	253.2	251.5	251.5	251.5	253.2	256.5	259.8	261.4	264.7
77.5°	226.9	221.9	223.6	221.9	221.9	221.9	221.9	226.9	228.5	230.2	235.1
80°	195.6	195.6	197.3	197.3	195.6	194.0	195.6	198.9	200.6	202.2	203.9
82.5°	177.6	179.2	179.2	179.2	171.0	167.7	172.6	175.9	179.2	180.8	184.1
85°	152.9	146.3	152.9	151.3	139.7	138.1	138.1	139.7	143.0	139.7	139.7
87.5°	98.6	88.8	93.7	93.7	82.2	67.4	85.5	92.1	82.2	87.1	87.1
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: P159149

CATALOG NUMBER: VST-E09-LED-E-U-SLR-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2
2.5°	2660.0	2656.8	2658.4	2658.4	2661.7	2656.8	2663.3	2669.9	2671.5	2671.5	2673.2
5°	2694.6	2691.3	2702.8	2697.9	2709.4	2707.7	2715.9	2722.5	2725.8	2725.8	2725.8
7.5°	2748.8	2760.3	2766.9	2785.0	2786.6	2796.5	2804.7	2812.9	2809.6	2811.3	2809.6
10°	2809.6	2824.4	2840.9	2859.0	2860.6	2872.1	2885.3	2893.5	2890.2	2888.6	2883.6
12.5°	2862.3	2872.1	2891.8	2909.9	2919.8	2937.9	2951.0	2957.6	2957.6	2952.7	2947.7
15°	2859.0	2873.8	2895.1	2921.4	2939.5	2965.8	2988.8	3003.6	3005.3	3000.4	2998.7
17.5°	2786.6	2808.0	2827.7	2863.9	2896.8	2933.0	2970.8	2992.1	3011.9	3023.4	3029.9
20°	2656.8	2683.1	2711.0	2758.7	2803.1	2850.7	2895.1	2926.4	2956.0	2990.5	3031.6
22.5°	2503.9	2543.3	2582.8	2643.6	2697.9	2752.1	2803.1	2840.9	2886.9	2946.1	3023.4
25°	2324.7	2365.8	2415.1	2485.8	2554.8	2633.7	2709.4	2785.0	2873.8	2975.7	3095.7
27.5°	2112.6	2158.6	2222.7	2308.2	2387.1	2467.7	2586.1	2706.1	2850.7	2982.3	3118.7
30°	1902.1	1961.3	2030.4	2115.9	2194.8	2309.9	2428.2	2576.2	2729.1	2877.1	3039.8
32.5°	1675.3	1749.2	1834.7	1905.4	1994.2	2110.9	2229.3	2387.1	2549.9	2724.2	2903.4
35°	1456.6	1527.3	1594.7	1673.6	1762.4	1872.6	1987.6	2138.9	2344.4	2530.2	2743.9
37.5°	1234.7	1300.4	1348.1	1410.6	1487.8	1609.5	1732.8	1907.1	2101.1	2329.6	2543.3
40°	1040.7	1094.9	1149.2	1198.5	1264.3	1379.3	1510.9	1681.8	1872.6	2094.5	2332.9
42.5°	886.1	927.2	986.4	1045.6	1101.5	1200.1	1323.4	1491.1	1680.2	1907.1	2145.5
45°	756.3	784.2	831.9	881.2	950.2	1032.5	1150.8	1321.8	1514.2	1742.7	1994.2
47.5°	662.5	675.7	708.6	759.5	823.7	904.2	1006.1	1160.7	1348.1	1578.3	1843.0
50°	598.4	613.2	629.7	672.4	729.9	812.2	896.0	1030.8	1201.8	1427.0	1690.1
52.5°	554.0	560.6	567.2	593.5	646.1	715.2	803.9	905.9	1078.5	1293.9	1530.6
55°	527.7	529.4	534.3	547.5	586.9	651.0	728.3	825.3	960.1	1164.0	1405.6
57.5°	496.5	499.8	504.7	512.9	537.6	595.1	660.9	739.8	851.6	1022.6	1254.4
60°	466.9	475.1	483.3	488.3	501.4	536.0	591.9	654.3	744.7	873.0	1057.1
62.5°	435.7	445.5	452.1	457.0	462.0	483.3	524.4	565.5	621.4	705.3	843.4
65°	407.7	414.3	419.2	422.5	425.8	432.4	450.5	466.9	483.3	534.3	634.6
67.5°	376.5	379.8	381.4	383.1	381.4	381.4	383.1	389.6	396.2	415.9	463.6
70°	340.3	345.2	345.2	346.9	346.9	342.0	342.0	342.0	342.0	346.9	373.2
72.5°	305.8	312.4	312.4	314.0	312.4	310.7	310.7	310.7	315.7	318.9	328.8
75°	272.9	279.5	277.8	279.5	281.1	281.1	284.4	286.1	291.0	292.6	299.2
77.5°	240.0	245.0	246.6	245.0	248.2	251.5	258.1	261.4	263.0	264.7	266.3
80°	208.8	212.1	210.4	205.5	213.7	218.7	228.5	240.0	236.7	238.4	241.7
82.5°	172.6	167.7	164.4	167.7	172.6	179.2	189.1	203.9	205.5	213.7	212.1
85°	133.2	118.4	116.7	124.9	123.3	131.5	148.0	159.5	169.3	177.6	169.3
87.5°	78.9	70.7	59.2	55.9	60.8	80.6	83.8	101.9	110.2	113.4	101.9
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: P159149

CATALOG NUMBER: VST-E09-LED-E-U-SLR-7030

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2
2.5°	2822.8	2831.0	2831.0	2834.3	2839.2	2840.9	2847.5	2859.0	2860.6	2860.6	2865.5
5°	2875.4	2883.6	2883.6	2890.2	2891.8	2900.1	2908.3	2921.4	2928.0	2926.4	2947.7
7.5°	2960.9	2954.3	2949.4	2959.3	2964.2	2974.1	2990.5	3002.0	3013.5	3031.6	3061.2
10°	3033.2	3023.4	3018.4	3025.0	3028.3	3039.8	3049.7	3066.1	3094.1	3122.0	3158.2
12.5°	3092.4	3080.9	3067.8	3071.0	3076.0	3090.8	3107.2	3128.6	3169.7	3205.9	3260.1
15°	3141.7	3125.3	3112.1	3118.7	3130.2	3150.0	3177.9	3215.7	3283.1	3345.6	3417.9
17.5°	3189.4	3186.1	3181.2	3202.6	3210.8	3256.8	3297.9	3367.0	3459.0	3552.8	3656.3
20°	3235.5	3271.6	3289.7	3332.5	3358.8	3421.2	3483.7	3567.5	3684.3	3812.5	3953.9
22.5°	3299.6	3398.2	3459.0	3546.2	3590.6	3658.0	3750.0	3860.2	3990.1	4154.5	4335.3
25°	3452.5	3597.1	3718.8	3855.3	3967.0	4070.6	4180.8	4313.9	4501.4	4651.0	4887.7
27.5°	3519.9	3723.7	3906.2	4098.6	4266.3	4425.7	4600.0	4761.1	4983.1	5185.3	5471.3
30°	3455.8	3685.9	3922.7	4174.2	4419.2	4660.8	4914.0	5160.6	5417.1	5699.9	6004.0
32.5°	3337.4	3595.5	3861.8	4157.8	4461.9	4775.9	5104.7	5463.1	5824.8	6176.6	6487.3
35°	3217.4	3495.2	3791.1	4129.8	4488.2	4877.8	5285.6	5739.3	6217.7	6663.3	7069.3
37.5°	3043.1	3348.9	3687.6	4078.8	4504.6	4984.7	5509.1	6068.1	6673.1	7286.3	7819.0
40°	2832.7	3156.5	3526.4	3976.9	4488.2	5094.9	5777.1	6493.9	7271.5	8019.6	8673.9
42.5°	2640.3	2956.0	3350.5	3840.5	4445.5	5191.8	6031.9	6924.7	7845.3	8682.1	9537.0
45°	2471.0	2819.5	3215.7	3745.1	4424.1	5274.1	6221.0	7246.9	8300.7	9297.0	10306.4
47.5°	2316.4	2678.1	3122.0	3692.5	4414.2	5323.4	6352.5	7457.3	8624.6	9768.8	10941.0
50°	2157.0	2508.8	2983.9	3635.0	4389.6	5321.7	6421.6	7600.4	8851.5	10135.4	11378.3
52.5°	1986.0	2339.5	2816.2	3529.7	4337.0	5292.1	6439.7	7697.4	9030.7	10360.7	11749.9
55°	1829.8	2160.3	2637.0	3353.8	4226.8	5219.8	6398.6	7738.5	9157.3	10584.3	12011.3
57.5°	1650.6	1994.2	2448.0	3112.1	4019.7	5091.6	6281.8	7680.9	9193.4	10733.9	12218.4
60°	1404.0	1741.0	2207.9	2826.1	3695.8	4820.3	6064.8	7506.6	9078.3	10760.2	12366.4
62.5°	1121.2	1412.2	1862.7	2431.5	3240.4	4394.5	5663.7	7115.4	8719.9	10513.6	12290.8
65°	833.5	1027.5	1415.5	1915.3	2712.7	3753.3	5017.6	6459.4	8019.6	9828.0	11815.6
67.5°	580.3	720.1	958.5	1330.0	1972.8	2898.4	4095.3	5435.2	6936.2	8558.8	10829.2
70°	439.0	503.1	633.0	840.1	1277.4	1974.5	2977.3	4170.9	5563.4	7126.9	9265.8
72.5°	374.8	407.7	480.1	575.4	782.6	1200.1	1869.3	2870.5	4105.1	5377.6	7108.8
75°	337.0	365.0	411.0	471.8	554.0	728.3	1096.6	1816.7	2719.2	3602.1	4960.0
77.5°	305.8	330.5	371.6	402.8	447.2	524.4	698.7	1086.7	1629.2	2226.0	3077.6
80°	272.9	287.7	325.5	356.8	391.3	435.7	501.4	682.3	935.5	1318.5	1815.0
82.5°	233.5	245.0	272.9	315.7	342.0	360.0	379.8	452.1	560.6	715.2	1007.8
85°	180.8	189.1	213.7	245.0	256.5	258.1	261.4	281.1	348.5	536.0	868.0
87.5°	92.1	101.9	128.2	138.1	116.7	126.6	128.2	136.5	180.8	294.3	299.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P159149
CATALOG NUMBER: VST-E09-LED-E-U-SLR-7030

REPORT N
CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	0°
2.5°	2865.5	2870.5	2882.0	2880.3	2888.6	2888.6	2888.6	2896.8	2891.8	2896.8	2905.0	2.5°
5°	2947.7	2956.0	2972.4	2972.4	2974.1	2969.1	2979.0	2985.6	2977.3	2974.1	2975.7	5°
7.5°	3067.8	3080.9	3094.1	3107.2	3117.1	3112.1	3113.8	3099.0	3095.7	3084.2	3069.4	7.5°
10°	3184.5	3220.7	3245.3	3268.3	3270.0	3265.0	3266.7	3242.0	3237.1	3214.1	3199.3	10°
12.5°	3304.5	3350.5	3390.0	3414.7	3429.4	3432.7	3434.4	3434.4	3411.4	3391.6	3357.1	12.5°
15°	3482.1	3562.6	3623.4	3649.7	3671.1	3690.8	3695.8	3702.4	3684.3	3658.0	3653.0	15°
17.5°	3763.2	3838.8	3919.4	3990.1	4037.7	4041.0	4082.1	4078.8	4116.7	4087.1	4078.8	17.5°
20°	4096.9	4261.3	4345.2	4438.9	4493.1	4519.4	4614.8	4585.2	4613.1	4660.8	4613.1	20°
22.5°	4514.5	4723.3	4845.0	4973.2	5062.0	5126.1	5195.1	5249.4	5325.0	5361.2	5328.3	22.5°
25°	5068.5	5306.9	5451.6	5629.2	5770.5	5885.6	6005.6	6150.3	6148.7	6235.8	6296.6	25°
27.5°	5704.8	6008.9	6219.4	6531.7	6653.4	6847.4	7052.9	7276.5	7315.9	7429.4	7486.9	27.5°
30°	6303.2	6679.7	7097.3	7468.8	7889.7	8177.4	8415.8	8573.6	8812.0	8752.8	8719.9	30°
32.5°	6855.6	7357.0	7952.2	8562.1	9229.6	9685.0	10105.9	10301.5	10449.5	10135.4	9719.5	32.5°
35°	7572.4	8172.5	8853.1	9606.1	10454.4	11100.5	11534.5	11595.3	11511.5	11108.7	10419.9	35°
37.5°	8460.2	9089.8	9864.2	10659.9	11560.8	12167.5	12662.3	12751.1	12529.2	11810.7	11087.3	37.5°
40°	9336.4	10074.6	10914.7	11856.7	12790.6	13458.0	13954.5	13980.8	13619.1	12779.0	11932.4	40°
42.5°	10294.9	11102.1	12037.6	13081.6	14046.6	14722.3	15080.7	15194.1	14682.8	13606.0	12793.8	42.5°
45°	11121.9	12086.9	13129.2	14238.9	15248.4	15889.6	16254.5	16218.4	15600.2	14536.5	13584.6	45°
47.5°	11927.4	12989.5	14087.7	15266.5	16269.3	16917.1	17291.9	17259.0	16474.8	15250.0	14202.8	47.5°
50°	12644.2	13796.7	14970.5	16229.9	17229.4	17822.9	18281.6	18136.9	17145.6	15823.8	14600.6	50°
52.5°	13142.4	14428.0	15654.5	17015.7	18044.9	18607.1	19190.8	18725.5	17541.8	16175.6	14814.4	52.5°
55°	13458.0	14862.0	16141.1	17647.0	18658.1	19330.5	19707.0	19046.1	17694.7	16272.6	14888.3	55°
57.5°	13671.8	15100.4	16427.2	18012.0	19210.5	19774.4	19866.5	19057.6	17596.1	16119.7	14814.4	57.5°
60°	13777.0	15171.1	16557.0	18268.5	19598.5	19907.6	19739.9	18791.3	17255.7	15670.9	14337.6	60°
62.5°	13765.5	15082.3	16489.6	18354.0	19675.8	19715.2	19333.8	18337.5	16629.4	14728.9	13545.2	62.5°
65°	13472.8	14758.5	16109.9	18036.7	19315.7	19146.4	18666.3	17485.9	15411.1	13499.1	12900.7	65°
67.5°	12629.4	13862.5	15116.9	16997.6	18301.3	18136.9	17410.3	15812.3	13995.6	12410.8	12088.6	67.5°
70°	11218.9	12264.5	13366.0	15018.2	16386.1	16164.1	14893.3	13921.7	12593.3	11153.1	11041.3	70°
72.5°	9379.2	10171.6	10970.6	12200.4	13142.4	12688.6	11889.6	11838.7	10765.1	9665.3	9688.3	72.5°
75°	7335.7	7930.8	8304.0	9027.4	9653.7	9247.7	9295.3	9578.1	9224.7	8358.3	8077.1	75°
77.5°	5315.2	5885.6	6004.0	6433.1	6873.7	7335.7	7947.2	8613.1	8724.9	8238.2	7218.9	77.5°
80°	3478.8	4106.8	3873.3	4026.2	4646.0	5489.4	6605.7	7702.3	8078.8	7641.5	6387.1	80°
82.5°	2051.8	2931.3	2559.8	2821.2	3214.1	3949.0	4720.0	5547.0	6176.6	5711.4	5334.9	82.5°
85°	1558.5	2311.5	2448.0	2765.3	2893.5	2924.7	3059.5	3329.2	3654.7	3776.3	3766.5	85°
87.5°	812.2	1796.9	2017.2	1866.0	1741.0	1509.2	1177.1	1267.5	1159.0	1584.8	1501.0	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°

NUMBER: P159149

NUMBER: VST-E09-LED-E-U-SLR-7030

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
2747.2	2747.2	2747.2	2747.2	2747.2	2747.2	2747.2
2906.6	2901.7	2905.0	2906.6	2906.6	2906.6	2909.9
2974.1	2960.9	2956.0	2956.0	2954.3	2949.4	2947.7
3046.4	3023.4	3015.2	3005.3	2997.1	2992.1	2983.9
3176.3	3156.5	3115.4	3092.4	3071.0	3056.3	3043.1
3350.5	3322.6	3283.1	3253.5	3220.7	3210.8	3194.4
3620.2	3595.5	3561.0	3528.1	3508.4	3473.8	3449.2
4041.0	3991.7	3957.2	3914.4	3866.8	3796.1	3761.5
4595.1	4496.4	4427.4	4389.6	4294.2	4282.7	4198.9
5231.3	5201.7	5096.5	5050.5	4958.4	4922.2	4790.7
6183.2	6160.2	5944.8	5921.8	5780.4	5675.2	5471.3
7434.3	7245.2	7001.9	6832.6	6590.9	6319.7	5972.8
8527.6	8141.2	7769.7	7375.1	7041.4	6651.7	6258.8
9224.7	8706.8	8228.4	7823.9	7411.3	6947.7	6443.0
9836.2	9313.4	8792.3	8313.9	7814.1	7220.6	6597.5
10567.8	10048.3	9461.4	8789.0	8147.8	7421.2	6660.0
11317.5	10709.2	9976.0	9152.3	8346.7	7519.8	6648.5
12085.3	11307.6	10332.7	9394.0	8473.3	7534.6	6571.2
12708.4	11725.2	10597.4	9517.3	8499.6	7483.6	6474.2
13149.0	11993.2	10715.8	9560.0	8466.8	7403.1	6342.7
13400.5	12139.5	10745.4	9528.8	8399.4	7288.0	6199.6
13492.6	12183.9	10715.8	9464.7	8338.5	7164.7	6099.4
13482.7	12159.3	10607.3	9315.1	8175.8	7000.3	5976.1
13296.9	11930.7	10385.3	9135.9	8037.7	6924.7	5984.3
12981.3	11786.1	10319.6	9172.0	8110.0	7087.4	6244.0
12838.2	12075.4	10689.5	9533.7	8481.6	7552.7	6780.0
12757.7	12545.6	11218.9	9923.4	8922.2	8116.6	7419.5
12428.9	12680.4	11519.7	10145.3	9315.1	8682.1	8059.0
11897.8	12366.4	11291.2	10102.6	9532.1	9116.1	8289.2
10789.8	11284.6	10273.5	9472.9	9260.8	9122.7	7944.0
8741.3	8997.8	8422.4	8241.5	8320.4	8322.1	6663.3
6446.2	6291.7	6031.9	6045.1	6576.1	6493.9	4749.6
5262.5	4307.4	3939.1	4078.8	4734.8	4381.3	2983.9
4897.6	3842.1	3171.3	3204.2	3575.8	2822.8	1796.9
3960.5	3501.8	2808.0	2520.3	2446.3	1880.8	1219.9
1657.2	1524.0	1134.4	1022.6	838.5	512.9	233.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)