

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: P159156

Luminaire Tested: **VST-F09-LED-E-U-SLR-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159156
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-F09-LED-E-U-SLR-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR RIGHT
Light Source: (63) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20487 lumens
Efficiency: N/A
Efficacy: 87.3 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 - G4

Input Watts (W): 234.8
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



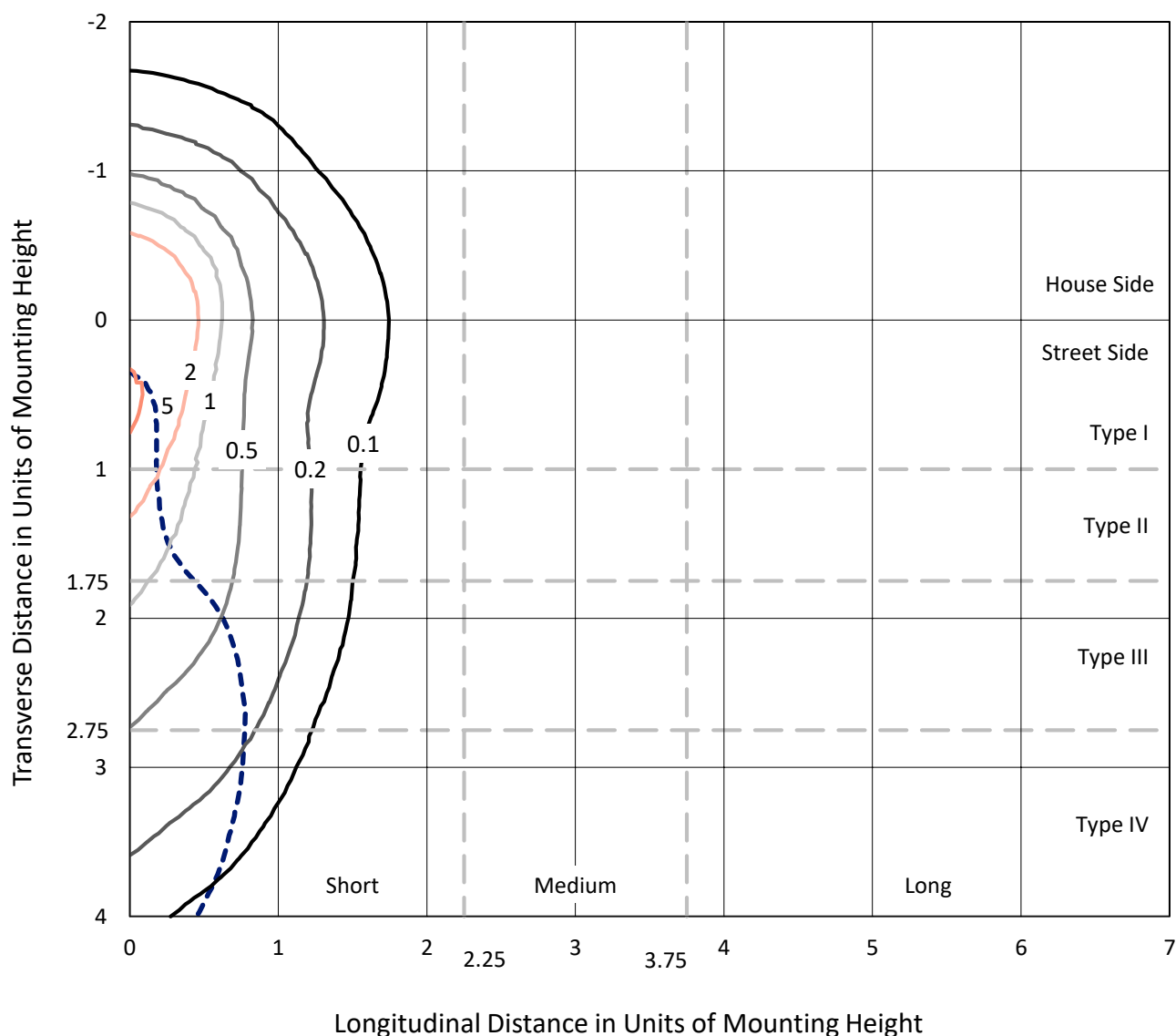
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

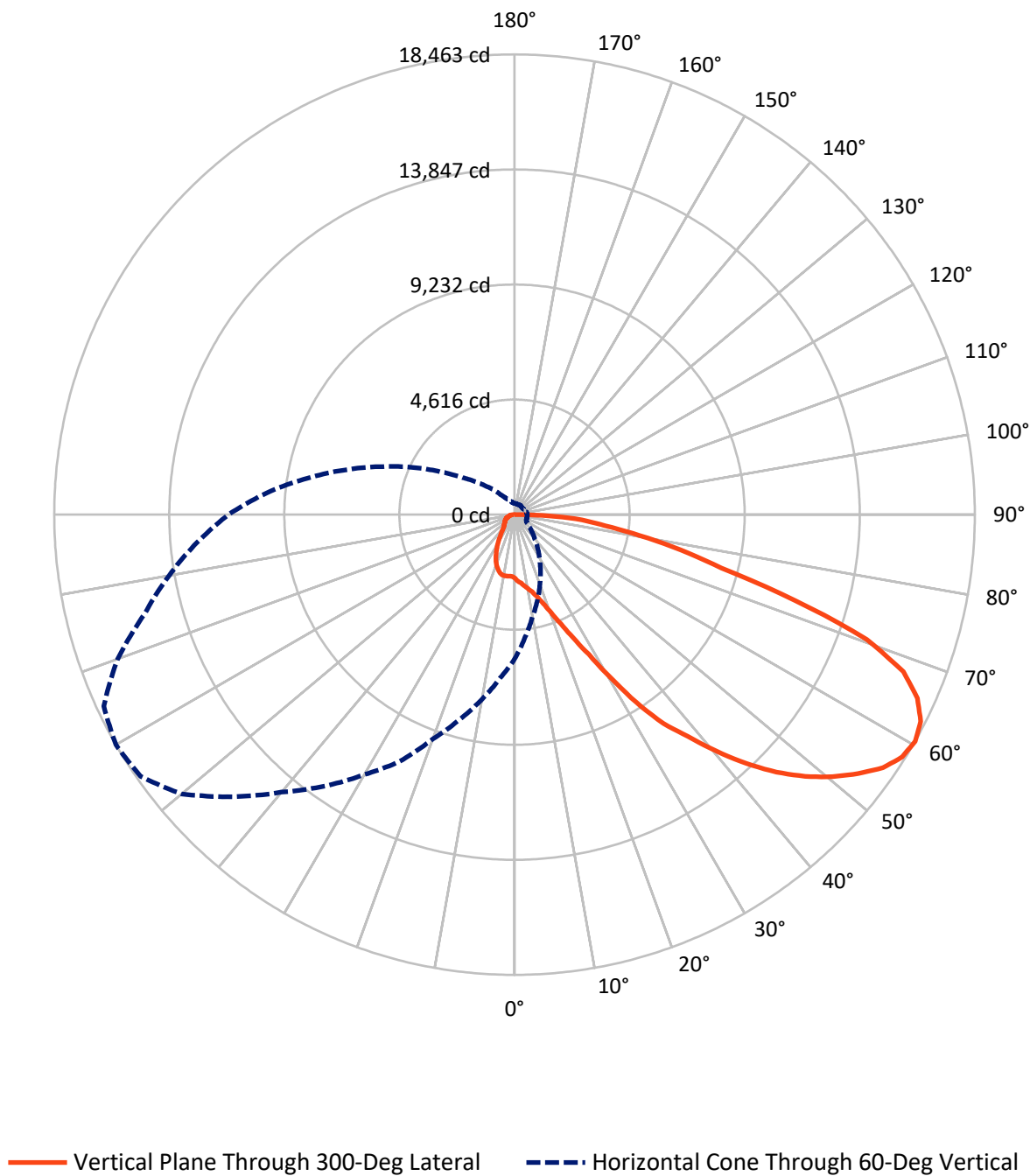


Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4613.0	0.0	4613.0
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	15873.9	0.0	15873.9
	% Fixture	77.5	0.0	77.5
Total	Lumens	20487.0	0.0	20487.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.4	1.2
10°-20°	811.6	4.0
20°-30°	1540.1	7.5
30°-40°	2425.3	11.8
40°-50°	3385.2	16.5
50°-60°	4186.7	20.4
60°-70°	4339.7	21.2
70°-80°	2730.7	13.3
80°-90°	816.3	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°	20487.0	100.0
0°-180°	20487.0	100.0

Coefficient of Utilization



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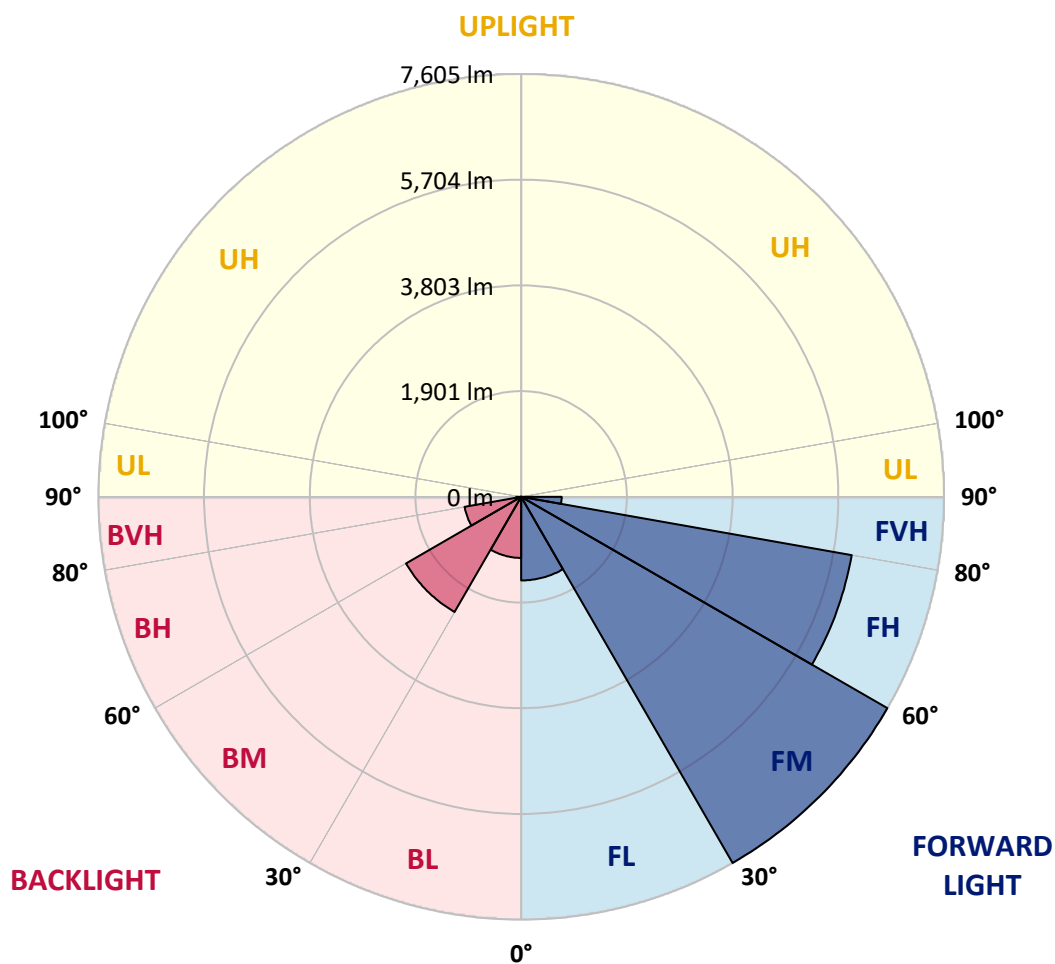
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1504.0	7.3			
FM	(30°-60°)	7605.1	37.1			
FH	(60°-80°)	6037.3	29.5			G3/7500
FVH	(80°-90°)	727.5	3.6			G4/750
BL	(0°-30°)	1099.0	5.4	B3/2500		
BM	(30°-60°)	2392.1	11.7	B2/2500		
BH	(60°-80°)	1033.1	5.0	B3/2500		G3/2500
BVH	(80°-90°)	88.8	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-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8
2.5°	2698.8	2537.2	2540.2	2535.6	2535.6	2532.6	2535.6	2532.6	2529.5	2529.5	2531.1
5°	2733.9	2555.5	2555.5	2550.9	2547.8	2544.8	2547.8	2544.8	2543.3	2540.2	2541.7
7.5°	2767.4	2566.1	2560.0	2553.9	2546.3	2549.4	2549.4	2547.8	2549.4	2547.8	2550.9
10°	2822.3	2601.2	2586.0	2572.2	2570.7	2567.7	2567.7	2563.1	2563.1	2560.0	2561.6
12.5°	2962.6	2709.5	2692.7	2668.3	2663.7	2650.0	2642.4	2633.2	2618.0	2604.2	2593.6
15°	3198.9	2889.4	2857.4	2836.0	2826.9	2799.4	2756.7	2723.2	2679.0	2640.8	2601.2
17.5°	3488.6	3130.3	3092.2	3064.7	3019.0	2944.3	2872.6	2790.3	2704.9	2627.1	2555.5
20°	3894.2	3476.4	3401.7	3336.1	3221.8	3093.7	2959.5	2816.2	2685.1	2563.1	2457.9
22.5°	4443.1	3923.1	3784.4	3609.1	3397.1	3180.6	2967.1	2768.9	2593.6	2435.0	2294.7
25°	5074.3	4350.1	4100.0	3798.1	3473.3	3174.5	2893.9	2639.3	2435.0	2230.7	2078.2
27.5°	5539.4	4706.9	4337.9	3941.4	3526.7	3145.5	2800.9	2492.9	2245.9	2037.0	1852.6
30°	5804.7	4911.2	4467.5	4002.4	3535.9	3096.7	2683.5	2326.7	2041.6	1793.1	1616.2
32.5°	5975.4	5021.0	4481.2	3941.4	3426.1	2951.9	2505.1	2134.6	1825.1	1559.8	1372.3
35°	6118.8	5065.2	4417.2	3805.7	3218.7	2732.3	2276.4	1905.9	1578.1	1334.1	1142.0
37.5°	6176.7	5057.5	4315.0	3624.3	3015.9	2492.9	2043.1	1663.5	1370.7	1155.7	991.1
40°	6166.0	4987.4	4176.3	3430.7	2778.1	2242.9	1796.1	1462.2	1224.4	1042.9	922.5
42.5°	6094.4	4894.4	4022.3	3234.0	2560.0	2035.5	1628.4	1332.6	1140.5	1003.3	898.1
45°	6004.4	4783.1	3882.0	3054.0	2387.7	1887.6	1530.8	1296.0	1129.8	998.7	885.9
47.5°	5882.4	4659.6	3740.2	2926.0	2296.3	1843.4	1529.3	1317.4	1139.0	988.0	864.5
50°	5749.8	4569.6	3662.4	2871.1	2285.6	1870.9	1582.7	1350.9	1145.1	977.4	835.6
52.5°	5656.8	4530.0	3660.9	2890.9	2342.0	1947.1	1645.2	1393.6	1167.9	983.5	829.5
55°	5542.4	4523.9	3700.5	2976.3	2465.5	2076.7	1744.3	1466.8	1215.2	1006.3	834.0
57.5°	5550.0	4644.3	3854.5	3186.7	2688.1	2252.0	1870.9	1556.8	1261.0	1020.0	826.4
60°	5790.9	4924.9	4158.0	3546.5	2979.3	2457.9	2000.5	1605.5	1257.9	989.6	789.8
62.5°	6288.0	5345.7	4612.3	3968.9	3275.1	2616.4	2047.7	1591.8	1212.2	924.0	730.3
65°	6881.1	5838.2	5054.5	4296.7	3455.1	2653.0	2006.6	1515.6	1120.7	838.6	658.7
67.5°	7474.3	6187.4	5309.1	4389.7	3381.9	2505.1	1854.1	1344.8	965.2	722.7	577.9
70°	7687.7	6259.0	5289.3	4180.8	3049.5	2137.7	1526.3	1082.6	774.6	591.6	486.4
72.5°	7367.5	5810.8	4702.3	3552.6	2479.2	1657.4	1119.2	799.0	591.6	463.5	396.4
75°	6179.8	4679.4	3717.3	2675.9	1790.0	1172.5	808.1	582.4	445.2	367.5	317.1
77.5°	4405.0	3258.4	2532.6	1758.0	1161.8	812.7	579.4	437.6	353.7	294.3	257.7
80°	2767.4	2000.5	1543.0	1055.1	724.2	552.0	416.3	346.1	285.1	239.4	215.0
82.5°	1666.5	1164.9	908.7	655.6	475.7	378.1	306.5	271.4	227.2	198.2	184.5
85°	1131.4	856.9	596.2	387.3	286.7	222.6	208.9	187.5	169.2	141.8	137.2
87.5°	216.5	306.5	266.8	158.6	105.2	90.0	79.3	76.2	68.6	54.9	62.5
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°	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8
2.5°	2521.9	2518.9	2512.8	2512.8	2508.2	2499.0	2497.5	2491.4	2483.8	2485.3	2483.8
5°	2531.1	2525.0	2517.3	2514.3	2508.2	2499.0	2494.5	2486.8	2479.2	2479.2	2479.2
7.5°	2541.7	2534.1	2528.0	2517.3	2505.1	2496.0	2483.8	2474.6	2470.1	2468.5	2470.1
10°	2550.9	2546.3	2537.2	2521.9	2505.1	2486.8	2474.6	2462.4	2450.3	2451.8	2453.3
12.5°	2570.7	2555.5	2531.1	2508.2	2482.3	2459.4	2438.1	2422.8	2407.6	2407.6	2409.1
15°	2557.0	2512.8	2479.2	2435.0	2406.0	2369.4	2345.0	2331.3	2322.2	2319.1	2320.6
17.5°	2476.2	2422.8	2372.5	2332.8	2293.2	2264.2	2253.6	2244.4	2232.2	2238.3	2232.2
20°	2354.2	2288.6	2217.0	2169.7	2122.4	2102.6	2084.3	2075.2	2067.5	2095.0	2095.0
22.5°	2178.8	2099.6	2026.4	1968.4	1915.1	1893.7	1875.4	1864.8	1869.3	1902.9	1905.9
25°	1957.8	1861.7	1765.6	1730.6	1677.2	1660.4	1649.8	1648.2	1652.8	1686.4	1694.0
27.5°	1723.0	1622.3	1540.0	1459.2	1434.8	1421.1	1401.2	1424.1	1428.7	1465.3	1480.5
30°	1472.9	1364.6	1277.7	1224.4	1172.5	1180.1	1163.4	1190.8	1203.0	1241.1	1253.3
32.5°	1216.7	1114.6	1027.7	974.3	937.7	942.3	930.1	954.5	966.7	1012.4	1035.3
35°	1006.3	919.4	849.3	803.5	786.8	770.0	766.9	770.0	782.2	817.3	858.4
37.5°	885.9	814.2	763.9	730.3	707.5	696.8	690.7	690.7	690.7	698.3	718.2
40°	834.0	770.0	725.8	693.8	678.5	672.4	667.8	663.3	655.6	652.6	654.1
42.5°	811.2	738.0	690.7	666.3	657.2	657.2	657.2	654.1	646.5	638.9	631.2
45°	788.3	709.0	661.7	645.0	640.4	641.9	641.9	641.9	635.8	626.7	612.9
47.5°	759.3	677.0	629.7	619.0	619.0	623.6	625.1	625.1	619.0	609.9	599.2
50°	724.2	635.8	593.1	584.0	579.4	579.4	579.4	579.4	574.8	568.7	561.1
52.5°	706.0	612.9	568.7	559.6	559.6	555.0	553.5	548.9	544.3	539.8	529.1
55°	699.9	603.8	558.1	550.4	550.4	545.9	541.3	536.7	529.1	521.5	510.8
57.5°	683.1	584.0	544.3	538.2	538.2	535.2	530.6	526.0	518.4	507.7	494.0
60°	645.0	550.4	516.9	515.4	515.4	513.8	510.8	510.8	503.2	492.5	475.7
62.5°	596.2	515.4	483.3	483.3	481.8	480.3	474.2	472.7	463.5	449.8	434.5
65°	548.9	484.9	463.5	457.4	454.4	449.8	446.7	439.1	431.5	419.3	404.1
67.5°	489.4	439.1	425.4	419.3	413.2	408.6	404.1	399.5	390.3	381.2	369.0
70°	425.4	388.8	381.2	379.7	372.0	367.5	365.9	361.4	352.2	343.1	327.8
72.5°	364.4	343.1	337.0	337.0	327.8	321.7	318.7	317.1	311.0	303.4	289.7
75°	294.3	279.0	277.5	285.1	285.1	280.6	277.5	280.6	271.4	266.8	253.1
77.5°	240.9	233.3	228.7	231.8	240.9	236.3	230.2	230.2	230.2	222.6	218.0
80°	204.3	198.2	193.6	196.7	195.2	193.6	190.6	184.5	184.5	184.5	183.0
82.5°	184.5	183.0	166.2	166.2	160.1	155.5	152.5	149.4	146.4	146.4	154.0
85°	138.8	143.3	134.2	132.7	125.0	118.9	112.8	109.8	106.7	111.3	126.6
87.5°	67.1	67.1	64.0	71.7	65.6	62.5	57.9	54.9	57.9	71.7	85.4
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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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8
2.5°	2480.7	2479.2	2477.7	2474.6	2468.5	2467.0	2464.0	2464.0	2462.4	2459.4	2462.4
5°	2476.2	2479.2	2479.2	2477.7	2473.1	2476.2	2476.2	2480.7	2480.7	2483.8	2491.4
7.5°	2470.1	2477.7	2483.8	2488.4	2494.5	2499.0	2508.2	2521.9	2528.0	2538.7	2543.3
10°	2457.9	2471.6	2482.3	2496.0	2511.2	2528.0	2541.7	2563.1	2570.7	2586.0	2593.6
12.5°	2422.8	2445.7	2464.0	2491.4	2517.3	2543.3	2567.7	2595.1	2608.8	2625.6	2636.3
15°	2337.4	2363.3	2389.3	2413.7	2459.4	2509.7	2549.4	2586.0	2605.8	2627.1	2637.8
17.5°	2235.3	2252.0	2273.4	2305.4	2349.6	2393.8	2457.9	2509.7	2540.2	2564.6	2567.7
20°	2116.3	2140.7	2156.0	2168.2	2203.2	2233.7	2302.4	2361.8	2401.5	2430.4	2438.1
22.5°	1934.9	1960.8	1986.7	1995.9	2023.3	2063.0	2101.1	2165.1	2221.5	2264.2	2290.2
25°	1727.5	1751.9	1787.0	1814.4	1820.5	1852.6	1890.7	1963.9	2021.8	2090.4	2120.9
27.5°	1520.2	1541.5	1579.6	1594.9	1613.2	1645.2	1675.7	1736.7	1797.7	1877.0	1910.5
30°	1277.7	1323.5	1367.7	1396.7	1411.9	1450.0	1471.4	1530.8	1587.3	1645.2	1694.0
32.5°	1070.4	1111.5	1161.8	1198.4	1216.7	1245.7	1279.3	1329.6	1373.8	1430.2	1486.6
35°	879.8	936.2	969.7	1001.8	1049.0	1062.7	1096.3	1142.0	1167.9	1228.9	1293.0
37.5°	745.6	779.1	812.7	844.7	884.3	902.6	934.7	972.8	1003.3	1039.9	1097.8
40°	663.3	681.6	706.0	727.3	756.3	779.1	795.9	827.9	850.8	887.4	928.6
42.5°	625.1	629.7	632.8	648.0	663.3	678.5	696.8	710.5	738.0	765.4	791.3
45°	603.8	594.6	590.1	591.6	597.7	606.8	622.1	637.3	655.6	672.4	687.7
47.5°	585.5	573.3	559.6	552.0	553.5	556.5	568.7	580.9	590.1	603.8	609.9
50°	542.8	532.1	519.9	509.3	510.8	512.3	523.0	532.1	538.2	542.8	550.4
52.5°	515.4	500.1	489.4	478.8	477.2	481.8	491.0	500.1	503.2	506.2	507.7
55°	495.5	480.3	466.6	455.9	451.3	462.0	465.0	477.2	481.8	481.8	483.3
57.5°	480.3	462.0	448.3	437.6	430.0	437.6	445.2	458.9	460.5	457.4	457.4
60°	457.4	443.7	430.0	419.3	411.7	417.8	423.9	439.1	439.1	431.5	430.0
62.5°	417.8	410.2	401.0	396.4	394.9	401.0	405.6	417.8	413.2	404.1	401.0
65°	388.8	382.7	373.6	370.5	369.0	378.1	379.7	387.3	381.2	376.6	375.1
67.5°	353.7	349.2	344.6	343.1	338.5	338.5	341.5	346.1	343.1	343.1	344.6
70°	314.1	308.0	303.4	304.9	301.9	301.9	303.4	306.5	304.9	308.0	311.0
72.5°	277.5	269.9	268.4	268.4	265.3	266.8	266.8	268.4	271.4	272.9	280.6
75°	242.4	234.8	234.8	233.3	233.3	233.3	234.8	237.9	240.9	242.4	245.5
77.5°	210.4	205.8	207.4	205.8	205.8	205.8	205.8	210.4	211.9	213.5	218.0
80°	181.4	181.4	183.0	183.0	181.4	179.9	181.4	184.5	186.0	187.5	189.1
82.5°	164.7	166.2	166.2	166.2	158.6	155.5	160.1	163.1	166.2	167.7	170.8
85°	141.8	135.7	141.8	140.3	129.6	128.1	128.1	129.6	132.7	129.6	129.6
87.5°	91.5	82.3	86.9	86.9	76.2	62.5	79.3	85.4	76.2	80.8	80.8
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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CATALOG NUMBER: VST-F09-LED-E-U-SLR-7050

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8
2.5°	2467.0	2464.0	2465.5	2465.5	2468.5	2464.0	2470.1	2476.2	2477.7	2477.7	2479.2
5°	2499.0	2496.0	2506.7	2502.1	2512.8	2511.2	2518.9	2525.0	2528.0	2528.0	2528.0
7.5°	2549.4	2560.0	2566.1	2582.9	2584.4	2593.6	2601.2	2608.8	2605.8	2607.3	2605.8
10°	2605.8	2619.5	2634.7	2651.5	2653.0	2663.7	2675.9	2683.5	2680.5	2679.0	2674.4
12.5°	2654.6	2663.7	2682.0	2698.8	2707.9	2724.7	2736.9	2743.0	2743.0	2738.4	2733.9
15°	2651.5	2665.2	2685.1	2709.5	2726.2	2750.6	2772.0	2785.7	2787.2	2782.6	2781.1
17.5°	2584.4	2604.2	2622.5	2656.1	2686.6	2720.1	2755.2	2775.0	2793.3	2804.0	2810.1
20°	2464.0	2488.4	2514.3	2558.5	2599.7	2643.9	2685.1	2714.0	2741.5	2773.5	2811.6
22.5°	2322.2	2358.8	2395.4	2451.8	2502.1	2552.4	2599.7	2634.7	2677.4	2732.3	2804.0
25°	2156.0	2194.1	2239.8	2305.4	2369.4	2442.6	2512.8	2582.9	2665.2	2759.8	2871.1
27.5°	1959.3	2002.0	2061.4	2140.7	2213.9	2288.6	2398.4	2509.7	2643.9	2765.9	2892.4
30°	1764.1	1819.0	1883.0	1962.3	2035.5	2142.3	2252.0	2389.3	2531.1	2668.3	2819.2
32.5°	1553.7	1622.3	1701.6	1767.2	1849.5	1957.8	2067.5	2213.9	2364.9	2526.5	2692.7
35°	1350.9	1416.5	1479.0	1552.2	1634.5	1736.7	1843.4	1983.7	2174.3	2346.6	2544.8
37.5°	1145.1	1206.1	1250.3	1308.2	1379.9	1492.7	1607.1	1768.7	1948.6	2160.6	2358.8
40°	965.2	1015.5	1065.8	1111.5	1172.5	1279.3	1401.2	1559.8	1736.7	1942.5	2163.6
42.5°	821.8	860.0	914.8	969.7	1021.6	1113.1	1227.4	1382.9	1558.3	1768.7	1989.8
45°	701.4	727.3	771.5	817.3	881.3	957.5	1067.3	1225.9	1404.3	1616.2	1849.5
47.5°	614.5	626.7	657.2	704.4	763.9	838.6	933.1	1076.5	1250.3	1463.7	1709.2
50°	555.0	568.7	584.0	623.6	677.0	753.2	831.0	956.0	1114.6	1323.5	1567.4
52.5°	513.8	519.9	526.0	550.4	599.2	663.3	745.6	840.1	1000.2	1200.0	1419.5
55°	489.4	491.0	495.5	507.7	544.3	603.8	675.5	765.4	890.4	1079.5	1303.6
57.5°	460.5	463.5	468.1	475.7	498.6	552.0	612.9	686.1	789.8	948.4	1163.4
60°	433.0	440.6	448.3	452.8	465.0	497.1	548.9	606.8	690.7	809.6	980.4
62.5°	404.1	413.2	419.3	423.9	428.5	448.3	486.4	524.5	576.4	654.1	782.2
65°	378.1	384.2	388.8	391.9	394.9	401.0	417.8	433.0	448.3	495.5	588.5
67.5°	349.2	352.2	353.7	355.3	353.7	353.7	355.3	361.4	367.5	385.8	430.0
70°	315.6	320.2	320.2	321.7	321.7	317.1	317.1	317.1	317.1	321.7	346.1
72.5°	283.6	289.7	289.7	291.2	289.7	288.2	288.2	288.2	292.7	295.8	304.9
75°	253.1	259.2	257.7	259.2	260.7	260.7	263.8	265.3	269.9	271.4	277.5
77.5°	222.6	227.2	228.7	227.2	230.2	233.3	239.4	242.4	244.0	245.5	247.0
80°	193.6	196.7	195.2	190.6	198.2	202.8	211.9	222.6	219.6	221.1	224.1
82.5°	160.1	155.5	152.5	155.5	160.1	166.2	175.3	189.1	190.6	198.2	196.7
85°	123.5	109.8	108.3	115.9	114.4	122.0	137.2	147.9	157.0	164.7	157.0
87.5°	73.2	65.6	54.9	51.8	56.4	74.7	77.8	94.5	102.2	105.2	94.5
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: P159156

CATALOG NUMBER: VST-F09-LED-E-U-SLR-7050

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8
2.5°	2618.0	2625.6	2625.6	2628.6	2633.2	2634.7	2640.8	2651.5	2653.0	2653.0	2657.6
5°	2666.8	2674.4	2674.4	2680.5	2682.0	2689.6	2697.3	2709.5	2715.6	2714.0	2733.9
7.5°	2746.0	2740.0	2735.4	2744.5	2749.1	2758.2	2773.5	2784.2	2794.8	2811.6	2839.1
10°	2813.1	2804.0	2799.4	2805.5	2808.6	2819.2	2828.4	2843.6	2869.6	2895.5	2929.0
12.5°	2868.0	2857.4	2845.2	2848.2	2852.8	2866.5	2881.8	2901.6	2939.7	2973.2	3023.6
15°	2913.8	2898.5	2886.3	2892.4	2903.1	2921.4	2947.3	2982.4	3044.9	3102.8	3169.9
17.5°	2958.0	2954.9	2950.4	2970.2	2977.8	3020.5	3058.6	3122.7	3208.0	3295.0	3391.0
20°	3000.7	3034.2	3051.0	3090.6	3115.0	3173.0	3230.9	3308.7	3416.9	3535.9	3667.0
22.5°	3060.1	3151.6	3208.0	3288.9	3330.0	3392.5	3477.9	3580.1	3700.5	3853.0	4020.7
25°	3201.9	3336.1	3449.0	3575.5	3679.2	3775.2	3877.4	4000.9	4174.7	4313.5	4533.0
27.5°	3264.5	3453.5	3622.8	3801.2	3956.7	4104.6	4266.2	4415.6	4621.5	4809.0	5074.3
30°	3205.0	3418.5	3638.0	3871.3	4098.5	4322.6	4557.4	4786.1	5024.0	5286.3	5568.3
32.5°	3095.2	3334.6	3581.6	3856.1	4138.1	4429.4	4734.3	5066.7	5402.1	5728.4	6016.6
35°	2983.9	3241.6	3516.0	3830.1	4162.5	4523.9	4902.0	5322.9	5766.6	6179.8	6556.4
37.5°	2822.3	3105.9	3420.0	3782.9	4177.8	4623.0	5109.4	5627.8	6188.9	6757.6	7251.6
40°	2627.1	2927.5	3270.6	3688.3	4162.5	4725.2	5357.9	6022.7	6743.9	7437.7	8044.5
42.5°	2448.7	2741.5	3107.4	3561.8	4122.9	4815.1	5594.3	6422.2	7276.0	8052.1	8845.0
45°	2291.7	2614.9	2982.4	3473.3	4103.1	4891.4	5769.6	6721.0	7698.4	8622.4	9558.6
47.5°	2148.4	2483.8	2895.5	3424.6	4093.9	4937.1	5891.6	6916.2	7998.8	9060.0	10147.1
50°	2000.5	2326.7	2767.4	3371.2	4071.0	4935.6	5955.6	7048.9	8209.2	9400.0	10552.7
52.5°	1841.9	2169.7	2611.9	3273.6	4022.3	4908.1	5972.4	7138.8	8375.4	9608.9	10897.3
55°	1697.0	2003.5	2445.7	3110.5	3920.1	4841.0	5934.3	7176.9	8492.8	9816.3	11139.7
57.5°	1530.8	1849.5	2270.3	2886.3	3728.0	4722.1	5826.0	7123.6	8526.3	9955.0	11331.8
60°	1302.1	1614.7	2047.7	2621.0	3427.6	4470.5	5624.8	6961.9	8419.6	9979.4	11469.1
62.5°	1039.9	1309.7	1727.5	2255.1	3005.3	4075.6	5252.7	6599.1	8087.2	9750.7	11398.9
65°	773.0	953.0	1312.8	1776.3	2515.8	3481.0	4653.5	5990.7	7437.7	9114.9	10958.3
67.5°	538.2	667.8	888.9	1233.5	1829.7	2688.1	3798.1	5040.8	6432.9	7937.8	10043.4
70°	407.1	466.6	587.0	779.1	1184.7	1831.2	2761.3	3868.3	5159.7	6609.7	8593.4
72.5°	347.6	378.1	445.2	533.7	725.8	1113.1	1733.6	2662.2	3807.3	4987.4	6593.0
75°	312.6	338.5	381.2	437.6	513.8	675.5	1017.0	1684.8	2521.9	3340.7	4600.1
77.5°	283.6	306.5	344.6	373.6	414.7	486.4	648.0	1007.9	1511.0	2064.5	2854.3
80°	253.1	266.8	301.9	330.9	362.9	404.1	465.0	632.8	867.6	1222.8	1683.3
82.5°	216.5	227.2	253.1	292.7	317.1	333.9	352.2	419.3	519.9	663.3	934.7
85°	167.7	175.3	198.2	227.2	237.9	239.4	242.4	260.7	323.2	497.1	805.1
87.5°	85.4	94.5	118.9	128.1	108.3	117.4	118.9	126.6	167.7	272.9	277.5
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: P159156
CATALOG NUMBER: VST-F09-LED-E-U-SLR-7050

REPORT N
CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	0°
2.5°	2657.6	2662.2	2672.9	2671.3	2679.0	2679.0	2679.0	2686.6	2682.0	2686.6	2694.2	2.5°
5°	2733.9	2741.5	2756.7	2756.7	2758.2	2753.7	2762.8	2768.9	2761.3	2758.2	2759.8	5°
7.5°	2845.2	2857.4	2869.6	2881.8	2890.9	2886.3	2887.9	2874.1	2871.1	2860.4	2846.7	7.5°
10°	2953.4	2987.0	3009.8	3031.2	3032.7	3028.1	3029.7	3006.8	3002.2	2980.9	2967.1	10°
12.5°	3064.7	3107.4	3144.0	3166.9	3180.6	3183.6	3185.2	3185.2	3163.8	3145.5	3113.5	12.5°
15°	3229.4	3304.1	3360.5	3384.9	3404.7	3423.0	3427.6	3433.7	3416.9	3392.5	3388.0	15°
17.5°	3490.1	3560.3	3635.0	3700.5	3744.8	3747.8	3785.9	3782.9	3817.9	3790.5	3782.9	17.5°
20°	3799.6	3952.1	4029.9	4116.8	4167.1	4191.5	4279.9	4252.5	4278.4	4322.6	4278.4	20°
22.5°	4186.9	4380.6	4493.4	4612.3	4694.7	4754.1	4818.2	4868.5	4938.6	4972.2	4941.7	22.5°
25°	4700.8	4921.8	5056.0	5220.7	5351.8	5458.6	5569.9	5704.0	5702.5	5783.3	5839.7	25°
27.5°	5290.8	5572.9	5768.1	6057.8	6170.6	6350.5	6541.1	6748.5	6785.1	6890.3	6943.6	27.5°
30°	5845.8	6195.0	6582.3	6926.9	7317.2	7584.0	7805.1	7951.5	8172.6	8117.7	8087.2	30°
32.5°	6358.1	6823.2	7375.1	7940.8	8559.9	8982.2	9372.6	9554.0	9691.2	9400.0	9014.2	32.5°
35°	7022.9	7579.5	8210.7	8909.0	9695.8	10295.0	10697.5	10754.0	10676.2	10302.6	9663.8	35°
37.5°	7846.3	8430.3	9148.4	9886.4	10721.9	11284.6	11743.5	11825.9	11620.0	10953.7	10282.8	37.5°
40°	8659.0	9343.6	10122.7	10996.4	11862.4	12481.5	12942.0	12966.4	12630.9	11851.8	11066.5	40°
42.5°	9547.9	10296.5	11164.1	12132.3	13027.3	13654.0	13986.4	14091.6	13617.4	12618.7	11865.5	42.5°
45°	10314.8	11209.9	12176.5	13205.7	14141.9	14736.6	15075.1	15041.5	14468.2	13481.7	12598.9	45°
47.5°	11062.0	12046.9	13065.5	14158.7	15088.8	15689.5	16037.2	16006.7	15279.4	14143.5	13172.2	47.5°
50°	11726.7	12795.6	13884.2	15052.2	15979.2	16529.7	16955.1	16820.9	15901.5	14675.6	13541.2	50°
52.5°	12188.7	13381.1	14518.5	15781.0	16735.5	17257.0	17798.2	17366.7	16268.9	15001.9	13739.4	52.5°
55°	12481.5	13783.6	14969.9	16366.5	17304.2	17927.8	18277.0	17664.1	16410.7	15091.8	13808.0	55°
57.5°	12679.7	14004.7	15235.2	16705.0	17816.5	18339.5	18424.9	17674.7	16319.3	14950.0	13739.4	57.5°
60°	12777.3	14070.3	15355.6	16942.9	18176.4	18463.0	18307.5	17427.7	16003.6	14533.8	13297.2	60°
62.5°	12766.6	13987.9	15293.1	17022.2	18248.0	18284.6	17930.9	17006.9	15422.7	13660.1	12562.3	62.5°
65°	12495.2	13687.6	14940.9	16727.9	17914.1	17757.1	17311.9	16217.1	14292.9	12519.6	11964.6	65°
67.5°	11713.0	12856.6	14019.9	15764.2	16973.4	16820.9	16147.0	14664.9	12980.1	11510.2	11211.4	67.5°
70°	10404.8	11374.5	12396.1	13928.5	15197.0	14991.2	13812.6	12911.5	11679.5	10343.8	10240.1	70°
72.5°	8698.6	9433.5	10174.6	11315.1	12188.7	11767.9	11026.9	10979.6	9984.0	8963.9	8985.3	72.5°
75°	6803.4	7355.3	7701.4	8372.3	8953.3	8576.6	8620.9	8883.1	8555.3	7751.8	7491.0	75°
77.5°	4929.5	5458.6	5568.3	5966.3	6374.9	6803.4	7370.6	7988.1	8091.8	7640.5	6695.1	77.5°
80°	3226.3	3808.8	3592.3	3734.1	4308.9	5091.1	6126.4	7143.4	7492.6	7087.0	5923.6	80°
82.5°	1902.9	2718.6	2374.0	2616.4	2980.9	3662.4	4377.5	5144.5	5728.4	5296.9	4947.8	82.5°
85°	1445.4	2143.8	2270.3	2564.6	2683.5	2712.5	2837.5	3087.6	3389.5	3502.3	3493.2	85°
87.5°	753.2	1666.5	1870.9	1730.6	1614.7	1399.7	1091.7	1175.6	1074.9	1469.8	1392.1	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°



NUMBER: P159156

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DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
2547.8	2547.8	2547.8	2547.8	2547.8	2547.8	2547.8
2695.7	2691.2	2694.2	2695.7	2695.7	2695.7	2698.8
2758.2	2746.0	2741.5	2741.5	2740.0	2735.4	2733.9
2825.3	2804.0	2796.4	2787.2	2779.6	2775.0	2767.4
2945.8	2927.5	2889.4	2868.0	2848.2	2834.5	2822.3
3107.4	3081.5	3044.9	3017.5	2987.0	2977.8	2962.6
3357.5	3334.6	3302.6	3272.1	3253.8	3221.8	3198.9
3747.8	3702.1	3670.0	3630.4	3586.2	3520.6	3488.6
4261.6	4170.2	4106.1	4071.0	3982.6	3971.9	3894.2
4851.7	4824.3	4726.7	4684.0	4598.6	4565.1	4443.1
5734.5	5713.2	5513.4	5492.1	5361.0	5263.4	5074.3
6894.9	6719.5	6493.9	6336.8	6112.7	5861.1	5539.4
7908.8	7550.5	7205.9	6840.0	6530.4	6169.1	5804.7
8555.3	8075.0	7631.3	7256.2	6873.5	6443.5	5975.4
9122.5	8637.6	8154.3	7710.6	7247.1	6696.6	6118.8
9801.0	9319.2	8774.9	8151.2	7556.6	6882.7	6176.7
10496.3	9932.1	9252.1	8488.2	7741.1	6974.1	6166.0
11208.3	10487.1	9583.0	8712.3	7858.5	6987.9	6094.4
11786.2	10874.4	9828.4	8826.7	7882.9	6940.6	6004.4
12194.8	11122.9	9938.2	8866.3	7852.4	6865.9	5882.4
12428.1	11258.7	9965.7	8837.4	7789.9	6759.2	5749.8
12513.5	11299.8	9938.2	8777.9	7733.5	6644.8	5656.8
12504.4	11276.9	9837.6	8639.2	7582.5	6492.3	5542.4
12332.1	11065.0	9631.8	8473.0	7454.4	6422.2	5550.0
12039.3	10930.8	9570.8	8506.5	7521.5	6573.1	5790.9
11906.7	11199.2	9913.8	8841.9	7866.1	7004.6	6288.0
11832.0	11635.3	10404.8	9203.3	8274.7	7527.6	6881.1
11527.0	11760.3	10683.8	9409.1	8639.2	8052.1	7474.3
11034.5	11469.1	10471.9	9369.5	8840.4	8454.7	7687.7
10006.8	10465.8	9528.1	8785.5	8588.8	8460.8	7367.5
8107.0	8344.9	7811.2	7643.5	7716.7	7718.2	6179.8
5978.5	5835.2	5594.3	5606.5	6098.9	6022.7	4405.0
4880.7	3994.8	3653.3	3782.9	4391.2	4063.4	2767.4
4542.2	3563.3	2941.2	2971.7	3316.3	2618.0	1666.5
3673.1	3247.7	2604.2	2337.4	2268.8	1744.3	1131.4
1536.9	1413.4	1052.1	948.4	777.6	475.7	216.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)