

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: P159186

Luminaire Tested: **VST-F12-LED-E-U-SLR-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159186
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-F12-LED-E-U-SLR-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR RIGHT
Light Source: (84) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27316 lumens
Efficiency: N/A
Efficacy: 89.1 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 306.6
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



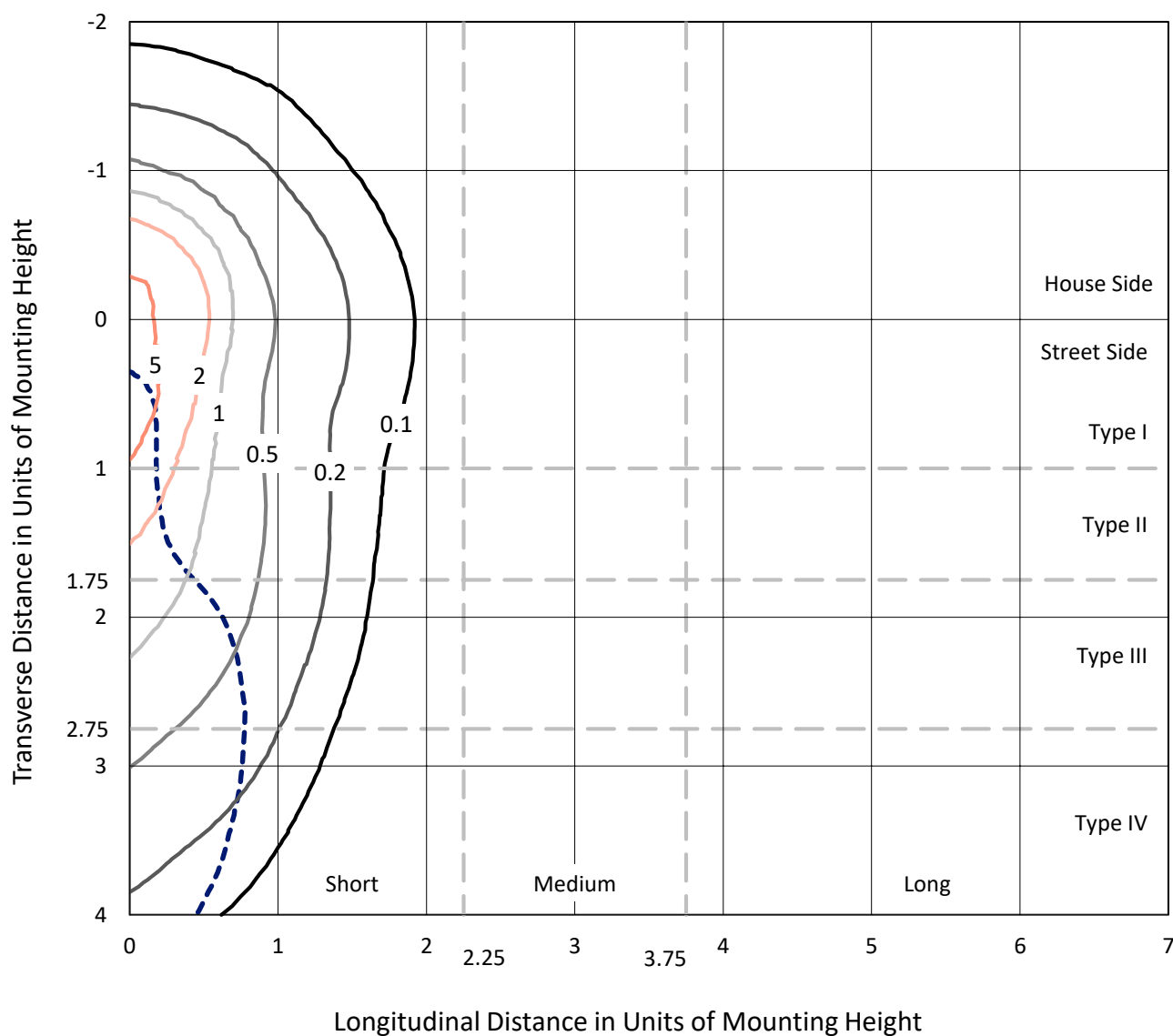
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

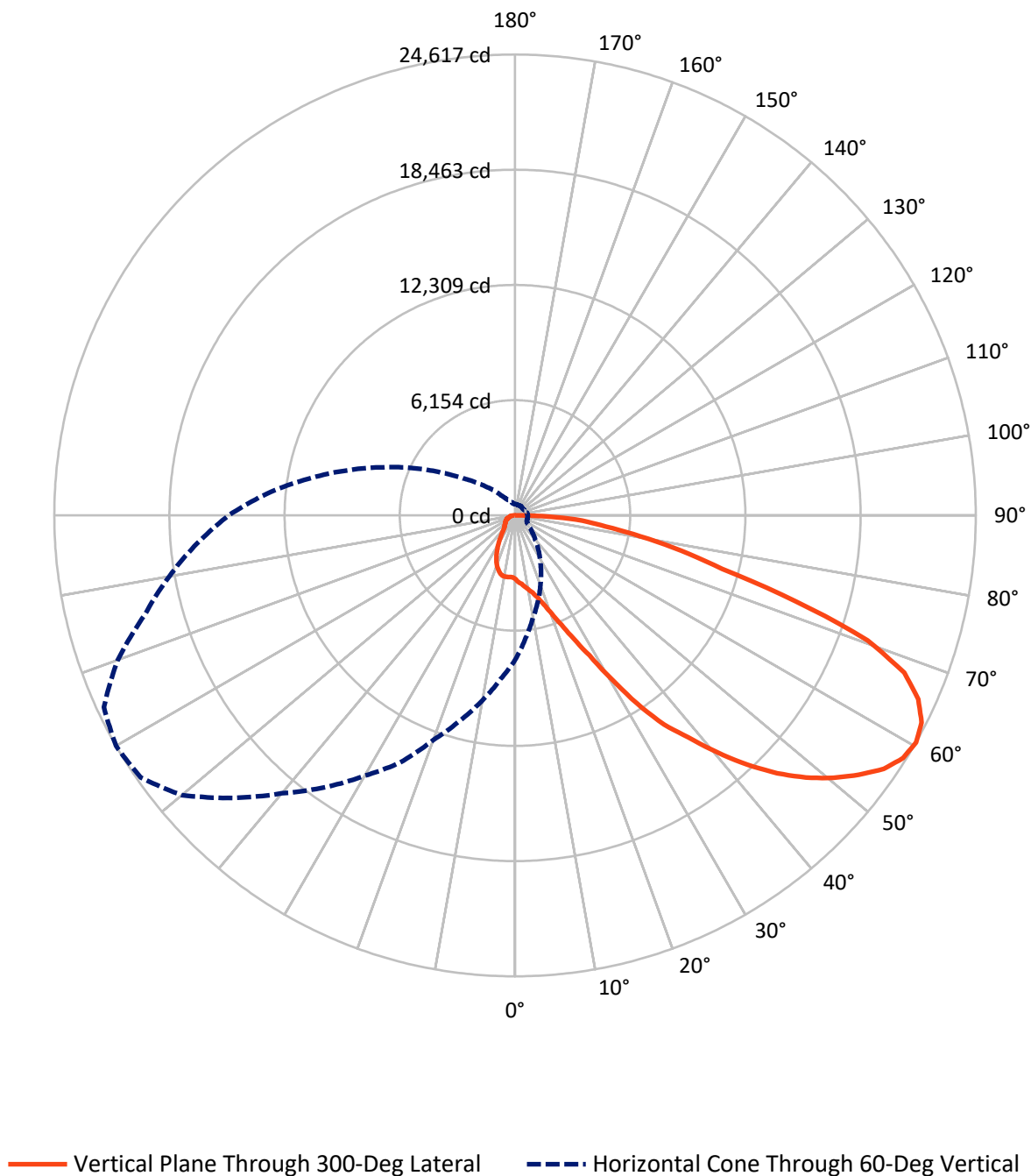


Based on 25 foot mounting height. Maximum calculated value = 8.2 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6150.7	0.0	6150.7
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	21165.3	0.0	21165.3
	% Fixture	77.5	0.0	77.5
Total	Lumens	27316.0	0.0	27316.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.2	1.2
10°-20°	1082.1	4.0
20°-30°	2053.4	7.5
30°-40°	3233.8	11.8
40°-50°	4513.6	16.5
50°-60°	5582.3	20.4
60°-70°	5786.3	21.2
70°-80°	3641.0	13.3
80°-90°	1088.4	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°	27316.0	100.0
0°-180°	27316.0	100.0

Coefficient of Utilization



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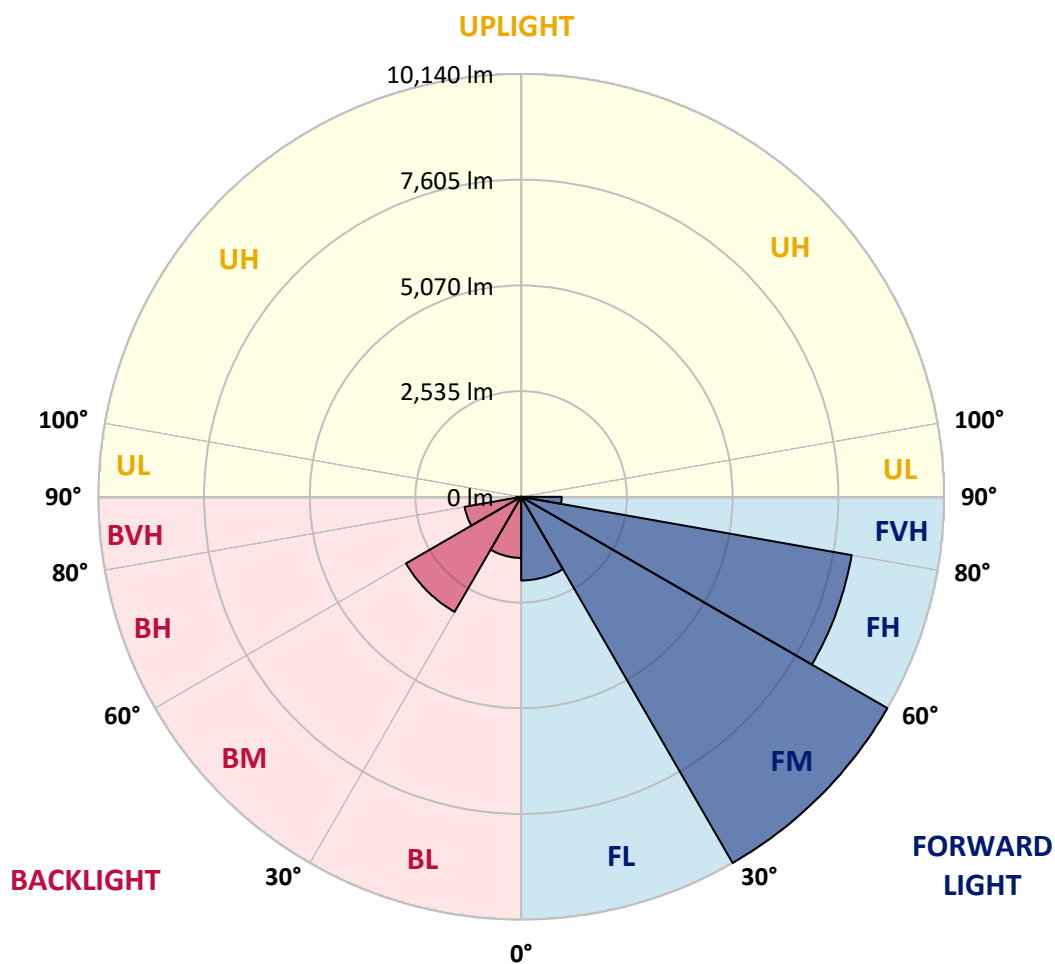
CATALOG NUMBER: VST-F12-LED-E-U-SLR-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2005.4	7.3			
FM	(30°-60°)	10140.1	37.1			
FH	(60°-80°)	8049.8	29.5			G4/12000
FVH	(80°-90°)	970.0	3.6			G5
BL	(0°-30°)	1465.3	5.4	B3/2500		
BM	(30°-60°)	3189.5	11.7	B3/5000		
BH	(60°-80°)	1377.5	5.0	B3/2500		G3/2500
BVH	(80°-90°)	118.4	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°	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1
2.5°	3598.4	3382.9	3386.9	3380.8	3380.8	3376.8	3380.8	3376.8	3372.7	3372.7	3374.7
5°	3645.1	3407.3	3407.3	3401.2	3397.1	3393.0	3397.1	3393.0	3391.0	3386.9	3389.0
7.5°	3689.9	3421.5	3413.4	3405.2	3395.1	3399.1	3399.1	3397.1	3399.1	3397.1	3401.2
10°	3763.0	3468.3	3447.9	3429.6	3427.6	3423.5	3423.5	3417.4	3417.4	3413.4	3415.4
12.5°	3950.1	3612.6	3590.2	3557.7	3551.6	3533.3	3523.2	3511.0	3490.6	3472.3	3458.1
15°	4265.2	3852.5	3809.8	3781.3	3769.1	3732.6	3675.6	3630.9	3571.9	3521.1	3468.3
17.5°	4651.5	4173.7	4122.9	4086.3	4025.3	3925.7	3830.1	3720.4	3606.5	3502.8	3407.3
20°	5192.2	4635.2	4535.6	4448.2	4295.7	4124.9	3946.0	3754.9	3580.1	3417.4	3277.2
22.5°	5924.1	5230.9	5045.9	4812.1	4529.5	4240.8	3956.2	3691.9	3458.1	3246.7	3059.6
25°	6765.8	5800.1	5466.7	5064.2	4631.1	4232.7	3858.6	3519.1	3246.7	2974.3	2771.0
27.5°	7385.8	6275.8	5783.8	5255.3	4702.3	4194.0	3734.6	3323.9	2994.6	2716.1	2470.1
30°	7739.6	6548.2	5956.6	5336.6	4714.5	4129.0	3578.0	3102.3	2722.2	2390.8	2155.0
32.5°	7967.3	6694.6	5974.9	5255.3	4568.1	3935.9	3340.2	2846.2	2433.5	2079.7	1829.7
35°	8158.4	6753.6	5889.5	5074.3	4291.6	3643.1	3035.2	2541.2	2104.1	1778.9	1522.7
37.5°	8235.6	6743.4	5753.3	4832.4	4021.2	3323.9	2724.2	2218.0	1827.7	1541.0	1321.4
40°	8221.4	6649.9	5568.3	4574.2	3704.1	2990.5	2394.9	1949.6	1632.5	1390.6	1230.0
42.5°	8125.8	6525.9	5363.0	4312.0	3413.4	2714.0	2171.2	1776.8	1520.7	1337.7	1197.4
45°	8005.9	6377.5	5176.0	4072.1	3183.6	2516.8	2041.1	1728.0	1506.4	1331.6	1181.2
47.5°	7843.2	6212.8	4986.9	3901.3	3061.7	2457.9	2039.1	1756.5	1518.6	1317.4	1152.7
50°	7666.4	6092.8	4883.2	3828.1	3047.4	2494.5	2110.2	1801.2	1526.8	1303.1	1114.1
52.5°	7542.4	6040.0	4881.2	3854.5	3122.7	2596.1	2193.6	1858.1	1557.3	1311.3	1105.9
55°	7389.9	6031.9	4934.0	3968.4	3287.3	2768.9	2325.7	1955.7	1620.3	1341.8	1112.0
57.5°	7400.1	6192.5	5139.4	4248.9	3584.1	3002.7	2494.5	2075.7	1681.3	1360.1	1101.9
60°	7721.3	6566.5	5543.9	4728.7	3972.4	3277.2	2667.3	2140.7	1677.2	1319.4	1053.1
62.5°	8384.0	7127.6	6149.8	5291.9	4366.8	3488.6	2730.3	2122.4	1616.2	1232.0	973.8
65°	9174.8	7784.3	6739.3	5728.9	4606.7	3537.4	2675.4	2020.8	1494.2	1118.1	878.2
67.5°	9965.7	8249.8	7078.8	5853.0	4509.2	3340.2	2472.1	1793.1	1286.9	963.6	770.5
70°	10250.3	8345.4	7052.4	5574.4	4066.0	2850.2	2035.0	1443.4	1032.8	788.8	648.5
72.5°	9823.4	7747.7	6269.7	4736.8	3305.6	2209.9	1492.2	1065.3	788.8	618.0	528.6
75°	8239.7	6239.2	4956.4	3567.9	2386.7	1563.4	1077.5	776.6	593.6	489.9	422.9
77.5°	5873.3	4344.5	3376.8	2344.0	1549.1	1083.6	772.5	583.5	471.7	392.4	343.6
80°	3689.9	2667.3	2057.4	1406.8	965.7	735.9	555.0	461.5	380.2	319.2	286.7
82.5°	2222.0	1553.2	1211.7	874.2	634.3	504.2	408.6	361.9	302.9	264.3	246.0
85°	1508.5	1142.5	794.9	516.4	382.2	296.8	278.5	250.1	225.7	189.1	183.0
87.5°	288.7	408.6	355.8	211.4	140.3	119.9	105.7	101.6	91.5	73.2	83.4
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1
2.5°	3362.6	3358.5	3350.4	3350.4	3344.3	3332.1	3330.0	3321.9	3311.7	3313.8	3311.7
5°	3374.7	3366.6	3356.5	3352.4	3344.3	3332.1	3326.0	3315.8	3305.6	3305.6	3305.6
7.5°	3389.0	3378.8	3370.7	3356.5	3340.2	3328.0	3311.7	3299.5	3293.4	3291.4	3293.4
10°	3401.2	3395.1	3382.9	3362.6	3340.2	3315.8	3299.5	3283.3	3267.0	3269.0	3271.1
12.5°	3427.6	3407.3	3374.7	3344.3	3309.7	3279.2	3250.7	3230.4	3210.1	3210.1	3212.1
15°	3409.3	3350.4	3305.6	3246.7	3208.0	3159.3	3126.7	3108.4	3096.2	3092.2	3094.2
17.5°	3301.6	3230.4	3163.3	3110.5	3057.6	3019.0	3004.7	2992.5	2976.3	2984.4	2976.3
20°	3138.9	3051.5	2956.0	2892.9	2829.9	2803.5	2779.1	2766.9	2756.7	2793.3	2793.3
22.5°	2905.1	2799.4	2701.8	2624.6	2553.4	2525.0	2500.6	2486.3	2492.4	2537.2	2541.2
25°	2610.3	2482.3	2354.2	2307.4	2236.3	2213.9	2199.7	2197.7	2203.8	2248.5	2258.6
27.5°	2297.3	2163.1	2053.3	1945.6	1913.0	1894.7	1868.3	1898.8	1904.9	1953.7	1974.0
30°	1963.9	1819.5	1703.6	1632.5	1563.4	1573.5	1551.2	1587.8	1604.0	1654.8	1671.1
32.5°	1622.3	1486.1	1370.2	1299.1	1250.3	1256.4	1240.1	1272.6	1288.9	1349.9	1380.4
35°	1341.8	1225.9	1132.4	1071.4	1049.0	1026.7	1022.6	1026.7	1042.9	1089.7	1144.6
37.5°	1181.2	1085.6	1018.5	973.8	943.3	929.1	920.9	920.9	920.9	931.1	957.5
40°	1112.0	1026.7	967.7	925.0	904.7	896.5	890.4	884.3	874.2	870.1	872.1
42.5°	1081.5	984.0	920.9	888.4	876.2	876.2	876.2	872.1	862.0	851.8	841.7
45°	1051.1	945.3	882.3	860.0	853.9	855.9	855.9	855.9	847.8	835.6	817.3
47.5°	1012.4	902.6	839.6	825.4	825.4	831.5	833.5	833.5	825.4	813.2	799.0
50°	965.7	847.8	790.8	778.6	772.5	772.5	772.5	772.5	766.4	758.3	748.1
52.5°	941.3	817.3	758.3	746.1	746.1	740.0	738.0	731.9	725.8	719.7	705.4
55°	933.1	805.1	744.1	733.9	733.9	727.8	721.7	715.6	705.4	695.3	681.0
57.5°	910.8	778.6	725.8	717.6	717.6	713.6	707.5	701.4	691.2	677.0	658.7
60°	860.0	733.9	689.2	687.1	687.1	685.1	681.0	681.0	670.9	656.7	634.3
62.5°	794.9	687.1	644.5	644.5	642.4	640.4	632.3	630.2	618.0	599.7	579.4
65°	731.9	646.5	618.0	609.9	605.8	599.7	595.7	585.5	575.3	559.1	538.7
67.5°	652.6	585.5	567.2	559.1	550.9	544.8	538.7	532.6	520.4	508.2	492.0
70°	567.2	518.4	508.2	506.2	496.0	489.9	487.9	481.8	469.6	457.4	437.1
72.5°	485.9	457.4	449.3	449.3	437.1	429.0	424.9	422.9	414.7	404.6	386.3
75°	392.4	372.0	370.0	380.2	380.2	374.1	370.0	374.1	361.9	355.8	337.5
77.5°	321.2	311.0	304.9	309.0	321.2	315.1	307.0	307.0	307.0	296.8	290.7
80°	272.4	264.3	258.2	262.3	260.2	258.2	254.1	246.0	246.0	246.0	244.0
82.5°	246.0	244.0	221.6	221.6	213.5	207.4	203.3	199.2	195.2	195.2	205.3
85°	185.0	191.1	178.9	176.9	166.7	158.6	150.4	146.4	142.3	148.4	168.7
87.5°	89.5	89.5	85.4	95.6	87.4	83.4	77.3	73.2	77.3	95.6	113.8
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°	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1
2.5°	3307.7	3305.6	3303.6	3299.5	3291.4	3289.4	3285.3	3285.3	3283.3	3279.2	3283.3
5°	3301.6	3305.6	3305.6	3303.6	3297.5	3301.6	3301.6	3307.7	3307.7	3311.7	3321.9
7.5°	3293.4	3303.6	3311.7	3317.8	3326.0	3332.1	3344.3	3362.6	3370.7	3384.9	3391.0
10°	3277.2	3295.5	3309.7	3328.0	3348.3	3370.7	3389.0	3417.4	3427.6	3447.9	3458.1
12.5°	3230.4	3260.9	3285.3	3321.9	3356.5	3391.0	3423.5	3460.1	3478.4	3500.8	3515.0
15°	3116.6	3151.1	3185.7	3218.2	3279.2	3346.3	3399.1	3447.9	3474.4	3502.8	3517.1
17.5°	2980.4	3002.7	3031.2	3073.9	3132.8	3191.8	3277.2	3346.3	3386.9	3419.5	3423.5
20°	2821.8	2854.3	2874.6	2890.9	2937.7	2978.3	3069.8	3149.1	3201.9	3240.6	3250.7
22.5°	2579.9	2614.4	2649.0	2661.2	2697.8	2750.6	2801.4	2886.8	2962.1	3019.0	3053.5
25°	2303.4	2335.9	2382.7	2419.2	2427.4	2470.1	2520.9	2618.5	2695.7	2787.2	2827.9
27.5°	2026.9	2055.3	2106.2	2126.5	2150.9	2193.6	2234.2	2315.6	2396.9	2502.6	2547.3
30°	1703.6	1764.6	1823.6	1862.2	1882.5	1933.4	1961.8	2041.1	2116.3	2193.6	2258.6
32.5°	1427.2	1482.0	1549.1	1597.9	1622.3	1660.9	1705.7	1772.8	1831.7	1906.9	1982.2
35°	1173.0	1248.3	1293.0	1335.7	1398.7	1417.0	1461.7	1522.7	1557.3	1638.6	1724.0
37.5°	994.1	1038.9	1083.6	1126.3	1179.1	1203.5	1246.2	1297.0	1337.7	1386.5	1463.7
40°	884.3	908.7	941.3	969.7	1008.4	1038.9	1061.2	1103.9	1134.4	1183.2	1238.1
42.5°	833.5	839.6	843.7	864.0	884.3	904.7	929.1	947.4	984.0	1020.6	1055.1
45°	805.1	792.9	786.8	788.8	796.9	809.1	829.5	849.8	874.2	896.5	916.9
47.5°	780.7	764.4	746.1	735.9	738.0	742.0	758.3	774.6	786.8	805.1	813.2
50°	723.7	709.5	693.2	679.0	681.0	683.1	697.3	709.5	717.6	723.7	733.9
52.5°	687.1	666.8	652.6	638.4	636.3	642.4	654.6	666.8	670.9	674.9	677.0
55°	660.7	640.4	622.1	607.9	601.8	616.0	620.1	636.3	642.4	642.4	644.5
57.5°	640.4	616.0	597.7	583.5	573.3	583.5	593.6	611.9	614.0	609.9	609.9
60°	609.9	591.6	573.3	559.1	548.9	557.0	565.2	585.5	585.5	575.3	573.3
62.5°	557.0	546.9	534.7	528.6	526.5	534.7	540.8	557.0	550.9	538.7	534.7
65°	518.4	510.3	498.1	494.0	492.0	504.2	506.2	516.4	508.2	502.1	500.1
67.5°	471.7	465.6	459.5	457.4	451.3	451.3	455.4	461.5	457.4	457.4	459.5
70°	418.8	410.7	404.6	406.6	402.5	402.5	404.6	408.6	406.6	410.7	414.7
72.5°	370.0	359.8	357.8	357.8	353.7	355.8	355.8	357.8	361.9	363.9	374.1
75°	323.2	313.1	313.1	311.0	311.0	311.0	313.1	317.1	321.2	323.2	327.3
77.5°	280.6	274.5	276.5	274.5	274.5	274.5	274.5	280.6	282.6	284.6	290.7
80°	241.9	241.9	244.0	244.0	241.9	239.9	241.9	246.0	248.0	250.1	252.1
82.5°	219.6	221.6	221.6	221.6	211.4	207.4	213.5	217.5	221.6	223.6	227.7
85°	189.1	180.9	189.1	187.0	172.8	170.8	170.8	172.8	176.9	172.8	172.8
87.5°	122.0	109.8	115.9	115.9	101.6	83.4	105.7	113.8	101.6	107.7	107.7
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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CATALOG NUMBER: VST-F12-LED-E-U-SLR-7050

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1
2.5°	3289.4	3285.3	3287.3	3287.3	3291.4	3285.3	3293.4	3301.6	3303.6	3303.6	3305.6
5°	3332.1	3328.0	3342.2	3336.1	3350.4	3348.3	3358.5	3366.6	3370.7	3370.7	3370.7
7.5°	3399.1	3413.4	3421.5	3443.9	3445.9	3458.1	3468.3	3478.4	3474.4	3476.4	3474.4
10°	3474.4	3492.7	3513.0	3535.4	3537.4	3551.6	3567.9	3578.0	3574.0	3571.9	3565.8
12.5°	3539.4	3551.6	3576.0	3598.4	3610.6	3632.9	3649.2	3657.3	3657.3	3651.2	3645.1
15°	3535.4	3553.7	3580.1	3612.6	3635.0	3667.5	3696.0	3714.3	3716.3	3710.2	3708.2
17.5°	3445.9	3472.3	3496.7	3541.5	3582.1	3626.8	3673.6	3700.0	3724.4	3738.7	3746.8
20°	3285.3	3317.8	3352.4	3411.3	3466.2	3525.2	3580.1	3618.7	3655.3	3698.0	3748.8
22.5°	3096.2	3145.0	3193.8	3269.0	3336.1	3403.2	3466.2	3513.0	3569.9	3643.1	3738.7
25°	2874.6	2925.5	2986.4	3073.9	3159.3	3256.8	3350.4	3443.9	3553.7	3679.7	3828.1
27.5°	2612.4	2669.3	2748.6	2854.3	2951.9	3051.5	3197.9	3346.3	3525.2	3687.8	3856.6
30°	2352.2	2425.3	2510.7	2616.4	2714.0	2856.3	3002.7	3185.7	3374.7	3557.7	3759.0
32.5°	2071.6	2163.1	2268.8	2356.2	2466.0	2610.3	2756.7	2951.9	3153.2	3368.7	3590.2
35°	1801.2	1888.6	1972.0	2069.6	2179.4	2315.6	2457.9	2644.9	2899.0	3128.8	3393.0
37.5°	1526.8	1608.1	1667.0	1744.3	1839.8	1990.3	2142.8	2358.3	2598.2	2880.7	3145.0
40°	1286.9	1354.0	1421.1	1482.0	1563.4	1705.7	1868.3	2079.7	2315.6	2590.0	2884.8
42.5°	1095.8	1146.6	1219.8	1293.0	1362.1	1484.1	1636.6	1843.9	2077.7	2358.3	2653.0
45°	935.2	969.7	1028.7	1089.7	1175.1	1276.7	1423.1	1634.5	1872.4	2155.0	2466.0
47.5°	819.3	835.6	876.2	939.2	1018.5	1118.1	1244.2	1435.3	1667.0	1951.7	2279.0
50°	740.0	758.3	778.6	831.5	902.6	1004.3	1108.0	1274.7	1486.1	1764.6	2089.9
52.5°	685.1	693.2	701.4	733.9	799.0	884.3	994.1	1120.2	1333.6	1600.0	1892.7
55°	652.6	654.6	660.7	677.0	725.8	805.1	900.6	1020.6	1187.3	1439.4	1738.2
57.5°	614.0	618.0	624.1	634.3	664.8	735.9	817.3	914.8	1053.1	1264.5	1551.2
60°	577.4	587.5	597.7	603.8	620.1	662.8	731.9	809.1	920.9	1079.5	1307.2
62.5°	538.7	550.9	559.1	565.2	571.3	597.7	648.5	699.3	768.5	872.1	1042.9
65°	504.2	512.3	518.4	522.5	526.5	534.7	557.0	577.4	597.7	660.7	784.7
67.5°	465.6	469.6	471.7	473.7	471.7	471.7	473.7	481.8	489.9	514.3	573.3
70°	420.8	426.9	426.9	429.0	429.0	422.9	422.9	422.9	422.9	429.0	461.5
72.5°	378.1	386.3	386.3	388.3	386.3	384.2	384.2	384.2	390.3	394.4	406.6
75°	337.5	345.6	343.6	345.6	347.6	347.6	351.7	353.7	359.8	361.9	370.0
77.5°	296.8	302.9	304.9	302.9	307.0	311.0	319.2	323.2	325.3	327.3	329.3
80°	258.2	262.3	260.2	254.1	264.3	270.4	282.6	296.8	292.7	294.8	298.8
82.5°	213.5	207.4	203.3	207.4	213.5	221.6	233.8	252.1	254.1	264.3	262.3
85°	164.7	146.4	144.3	154.5	152.5	162.6	183.0	197.2	209.4	219.6	209.4
87.5°	97.6	87.4	73.2	69.1	75.2	99.6	103.7	126.0	136.2	140.3	126.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159186

CATALOG NUMBER: VST-F12-LED-E-U-SLR-7050

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1
2.5°	3490.6	3500.8	3500.8	3504.9	3511.0	3513.0	3521.1	3535.4	3537.4	3537.4	3543.5
5°	3555.7	3565.8	3565.8	3574.0	3576.0	3586.2	3596.3	3612.6	3620.7	3618.7	3645.1
7.5°	3661.4	3653.3	3647.2	3659.4	3665.5	3677.7	3698.0	3712.2	3726.5	3748.8	3785.4
10°	3750.9	3738.7	3732.6	3740.7	3744.8	3759.0	3771.2	3791.5	3826.1	3860.6	3905.4
12.5°	3824.0	3809.8	3793.5	3797.6	3803.7	3822.0	3842.3	3868.8	3919.6	3964.3	4031.4
15°	3885.0	3864.7	3848.4	3856.6	3870.8	3895.2	3929.8	3976.5	4059.9	4137.1	4226.6
17.5°	3944.0	3939.9	3933.8	3960.2	3970.4	4027.3	4078.2	4163.5	4277.4	4393.3	4521.4
20°	4000.9	4045.6	4068.0	4120.9	4153.4	4230.6	4307.9	4411.6	4555.9	4714.5	4889.3
22.5°	4080.2	4202.2	4277.4	4385.1	4440.0	4523.4	4637.2	4773.4	4934.0	5137.3	5361.0
25°	4269.3	4448.2	4598.6	4767.3	4905.6	5033.7	5169.9	5334.5	5566.3	5751.3	6044.1
27.5°	4352.6	4604.7	4830.4	5068.2	5275.6	5472.8	5688.3	5887.5	6162.0	6412.0	6765.8
30°	4273.3	4557.9	4850.7	5161.7	5464.7	5763.5	6076.6	6381.5	6698.7	7048.3	7424.4
32.5°	4127.0	4446.1	4775.5	5141.4	5517.5	5905.8	6312.4	6755.6	7202.9	7637.9	8022.1
35°	3978.5	4322.1	4688.1	5106.8	5550.0	6031.9	6536.0	7097.1	7688.7	8239.7	8741.8
37.5°	3763.0	4141.2	4560.0	5043.8	5570.4	6164.0	6812.5	7503.7	8251.9	9010.2	9668.9
40°	3502.8	3903.3	4360.7	4917.8	5550.0	6300.2	7143.9	8030.3	8991.9	9916.9	10726.0
42.5°	3265.0	3655.3	4143.2	4749.0	5497.2	6420.2	7459.0	8562.9	9701.4	10736.2	11793.3
45°	3055.6	3486.6	3976.5	4631.1	5470.8	6521.8	7692.8	8961.4	10264.5	11496.5	12744.8
47.5°	2864.5	3311.7	3860.6	4566.1	5458.6	6582.8	7855.4	9221.6	10665.0	12080.0	13529.5
50°	2667.3	3102.3	3689.9	4494.9	5428.1	6580.8	7940.8	9398.5	10945.6	12533.3	14070.3
52.5°	2455.8	2892.9	3482.5	4364.8	5363.0	6544.2	7963.2	9518.4	11167.2	12811.8	14529.7
55°	2262.7	2671.3	3260.9	4147.3	5226.8	6454.7	7912.4	9569.2	11323.7	13088.3	14853.0
57.5°	2041.1	2466.0	3027.1	3848.4	4970.6	6296.1	7768.0	9498.1	11368.4	13273.3	15109.1
60°	1736.2	2152.9	2730.3	3494.7	4570.1	5960.7	7499.7	9282.6	11226.1	13305.9	15292.1
62.5°	1386.5	1746.3	2303.4	3006.8	4007.0	5434.2	7003.6	8798.7	10782.9	13000.9	15198.6
65°	1030.7	1270.6	1750.4	2368.4	3354.4	4641.3	6204.7	7987.6	9916.9	12153.2	14611.0
67.5°	717.6	890.4	1185.2	1644.7	2439.6	3584.1	5064.2	6721.0	8577.1	10583.7	13391.2
70°	542.8	622.1	782.7	1038.9	1579.6	2441.6	3681.7	5157.7	6879.6	8813.0	11457.9
72.5°	463.5	504.2	593.6	711.5	967.7	1484.1	2311.5	3549.6	5076.4	6649.9	8790.6
75°	416.8	451.3	508.2	583.5	685.1	900.6	1356.0	2246.4	3362.6	4454.3	6133.5
77.5°	378.1	408.6	459.5	498.1	553.0	648.5	864.0	1343.8	2014.7	2752.7	3805.7
80°	337.5	355.8	402.5	441.2	483.8	538.7	620.1	843.7	1156.8	1630.5	2244.4
82.5°	288.7	302.9	337.5	390.3	422.9	445.2	469.6	559.1	693.2	884.3	1246.2
85°	223.6	233.8	264.3	302.9	317.1	319.2	323.2	347.6	431.0	662.8	1073.4
87.5°	113.8	126.0	158.6	170.8	144.3	156.5	158.6	168.7	223.6	363.9	370.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P159186
CATALOG NUMBER: VST-F12-LED-E-U-SLR-7050

REPORT N
CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	0°
2.5°	3543.5	3549.6	3563.8	3561.8	3571.9	3571.9	3571.9	3582.1	3576.0	3582.1	3592.3	2.5°
5°	3645.1	3655.3	3675.6	3675.6	3677.7	3671.6	3683.8	3691.9	3681.7	3677.7	3679.7	5°
7.5°	3793.5	3809.8	3826.1	3842.3	3854.5	3848.4	3850.5	3832.2	3828.1	3813.9	3795.6	7.5°
10°	3937.9	3982.6	4013.1	4041.6	4043.6	4037.5	4039.5	4009.0	4002.9	3974.5	3956.2	10°
12.5°	4086.3	4143.2	4192.0	4222.5	4240.8	4244.9	4246.9	4246.9	4218.4	4194.0	4151.3	12.5°
15°	4305.9	4405.5	4480.7	4513.2	4539.6	4564.0	4570.1	4578.3	4555.9	4523.4	4517.3	15°
17.5°	4653.5	4747.0	4846.6	4934.0	4993.0	4997.1	5047.9	5043.8	5090.6	5054.0	5043.8	17.5°
20°	5066.2	5269.5	5373.2	5489.1	5556.1	5588.7	5706.6	5670.0	5704.5	5763.5	5704.5	20°
22.5°	5582.6	5840.8	5991.2	6149.8	6259.5	6338.8	6424.2	6491.3	6584.8	6629.6	6588.9	22.5°
25°	6267.7	6562.5	6741.4	6960.9	7135.8	7278.1	7426.5	7605.4	7603.4	7711.1	7786.3	25°
27.5°	7054.4	7430.5	7690.8	8077.0	8227.5	8467.4	8721.5	8998.0	9046.8	9187.0	9258.2	27.5°
30°	7794.5	8260.0	8776.4	9235.8	9756.3	10112.0	10406.8	10602.0	10896.8	10823.6	10782.9	30°
32.5°	8477.5	9097.6	9833.5	10587.8	11413.2	11976.3	12496.7	12738.7	12921.6	12533.3	12019.0	32.5°
35°	9363.9	10106.0	10947.6	11878.7	12927.7	13726.7	14263.4	14338.6	14234.9	13736.9	12885.0	35°
37.5°	10461.7	11240.4	12197.9	13181.9	14295.9	15046.1	15658.0	15767.8	15493.4	14604.9	13710.4	37.5°
40°	11545.3	12458.1	13497.0	14661.9	15816.6	16642.0	17255.9	17288.5	16841.2	15802.4	14755.4	40°
42.5°	12730.5	13728.7	14885.5	16176.4	17369.8	18205.3	18648.5	18788.8	18156.6	16825.0	15820.7	42.5°
45°	13753.1	14946.5	16235.4	17607.7	18855.9	19648.8	20100.1	20055.4	19291.0	17975.6	16798.5	45°
47.5°	14749.3	16062.6	17420.6	18878.3	20118.4	20919.4	21382.9	21342.2	20372.5	18857.9	17562.9	47.5°
50°	15635.7	17060.8	18512.3	20069.6	21305.6	22039.6	22606.8	22427.9	21202.0	19567.4	18054.9	50°
52.5°	16251.7	17841.4	19358.0	21041.4	22314.0	23009.3	23731.0	23155.7	21691.9	20002.5	18319.2	52.5°
55°	16642.0	18378.2	19959.8	21822.0	23072.3	23903.8	24369.3	23552.1	21881.0	20122.5	18410.7	55°
57.5°	16906.3	18672.9	20313.6	22273.3	23755.4	24452.7	24566.5	23566.3	21759.0	19933.4	18319.2	57.5°
60°	17036.4	18760.4	20474.2	22590.5	24235.2	24617.4	24410.0	23237.0	21338.2	19378.4	17729.6	60°
62.5°	17022.2	18650.6	20390.8	22696.2	24330.7	24379.5	23907.9	22675.9	20563.6	18213.5	16749.7	62.5°
65°	16660.3	18250.1	19921.2	22303.8	23885.5	23676.1	23082.5	21622.8	19057.2	16692.8	15952.8	65°
67.5°	15617.4	17142.1	18693.3	21019.0	22631.1	22427.9	21529.3	19553.2	17306.8	15347.0	14948.5	67.5°
70°	13873.1	15166.0	16528.1	18571.3	20262.7	19988.3	18416.8	17215.3	15572.6	13791.7	13653.5	70°
72.5°	11598.2	12578.1	13566.1	15086.8	16251.7	15690.6	14702.5	14639.5	13312.0	11951.9	11980.4	72.5°
75°	9071.2	9807.1	10268.6	11163.1	11937.7	11435.5	11494.5	11844.2	11407.1	10335.7	9988.0	75°
77.5°	6572.6	7278.1	7424.4	7955.1	8499.9	9071.2	9827.4	10650.8	10789.0	10187.3	8926.8	77.5°
80°	4301.8	5078.4	4789.7	4978.8	5745.2	6788.1	8168.5	9524.5	9990.1	9449.3	7898.1	80°
82.5°	2537.2	3624.8	3165.4	3488.6	3974.5	4883.2	5836.7	6859.3	7637.9	7062.6	6597.0	82.5°
85°	1927.3	2858.4	3027.1	3419.5	3578.0	3616.7	3783.4	4116.8	4519.3	4669.8	4657.6	85°
87.5°	1004.3	2222.0	2494.5	2307.4	2152.9	1866.3	1455.6	1567.4	1433.3	1959.8	1856.1	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: P159186

NUMBER: VST-F12-LED-E-U-SLR-7050

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
3397.1	3397.1	3397.1	3397.1	3397.1	3397.1	3397.1
3594.3	3588.2	3592.3	3594.3	3594.3	3594.3	3598.4
3677.7	3661.4	3655.3	3655.3	3653.3	3647.2	3645.1
3767.1	3738.7	3728.5	3716.3	3706.1	3700.0	3689.9
3927.7	3903.3	3852.5	3824.0	3797.6	3779.3	3763.0
4143.2	4108.7	4059.9	4023.3	3982.6	3970.4	3950.1
4476.6	4446.1	4403.4	4362.8	4338.4	4295.7	4265.2
4997.1	4936.1	4893.4	4840.5	4781.6	4694.2	4651.5
5682.2	5560.2	5474.8	5428.1	5310.1	5295.9	5192.2
6468.9	6432.4	6302.2	6245.3	6131.5	6086.7	5924.1
7646.0	7617.6	7351.3	7322.8	7148.0	7017.9	6765.8
9193.1	8959.3	8658.5	8449.1	8150.2	7814.8	7385.8
10545.1	10067.3	9607.9	9120.0	8707.3	8225.4	7739.6
11407.1	10766.7	10175.1	9675.0	9164.7	8591.4	7967.3
12163.3	11516.8	10872.4	10280.8	9662.8	8928.9	8158.4
13068.0	12425.6	11699.8	10868.3	10075.5	9176.9	8235.6
13995.0	13242.8	12336.1	11317.6	10321.4	9298.9	8221.4
14944.4	13982.8	12777.3	11616.5	10478.0	9317.2	8125.8
15714.9	14499.2	13104.6	11768.9	10510.5	9254.1	8005.9
16259.8	14830.6	13251.0	11821.8	10469.9	9154.5	7843.2
16570.8	15011.5	13287.6	11783.2	10386.5	9012.2	7666.4
16684.7	15066.4	13251.0	11703.9	10311.3	8859.7	7542.4
16672.5	15035.9	13116.8	11518.9	10110.0	8656.4	7389.9
16442.8	14753.3	12842.3	11297.3	9939.2	8562.9	7400.1
16052.4	14574.4	12761.0	11342.0	10028.7	8764.2	7721.3
15875.6	14932.2	13218.4	11789.3	10488.2	9339.5	8384.0
15775.9	15513.7	13873.1	12271.1	11033.0	10036.8	9174.8
15369.3	15680.4	14245.1	12545.5	11518.9	10736.2	9965.7
14712.7	15292.1	13962.5	12492.7	11787.2	11272.9	10250.3
13342.5	13954.4	12704.1	11714.0	11451.8	11281.0	9823.4
10809.4	11126.5	10415.0	10191.3	10288.9	10291.0	8239.7
7971.3	7780.2	7459.0	7475.3	8131.9	8030.3	5873.3
6507.6	5326.4	4871.0	5043.8	5855.0	5417.9	3689.9
6056.3	4751.1	3921.6	3962.3	4421.7	3490.6	2222.0
4897.5	4330.3	3472.3	3116.6	3025.1	2325.7	1508.5
2049.2	1884.6	1402.8	1264.5	1036.8	634.3	288.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)