

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: P158948

Luminaire Tested: **VST-E11-LED-E-U-SLL-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158948
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-E11-LED-E-U-SLL-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (231) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24948.5 lumens
Efficiency: N/A
Efficacy: 92.5 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): 269.7
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



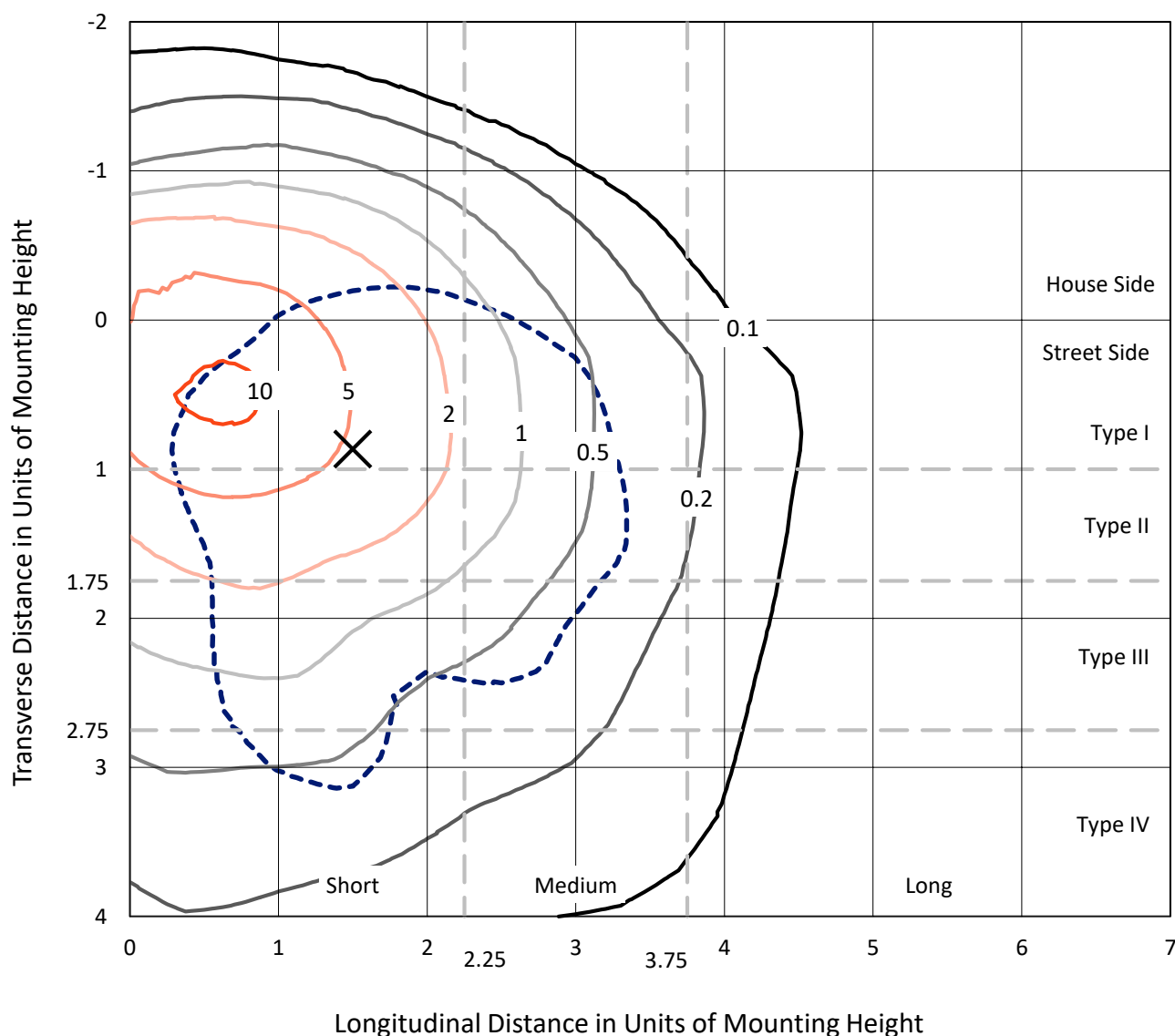
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

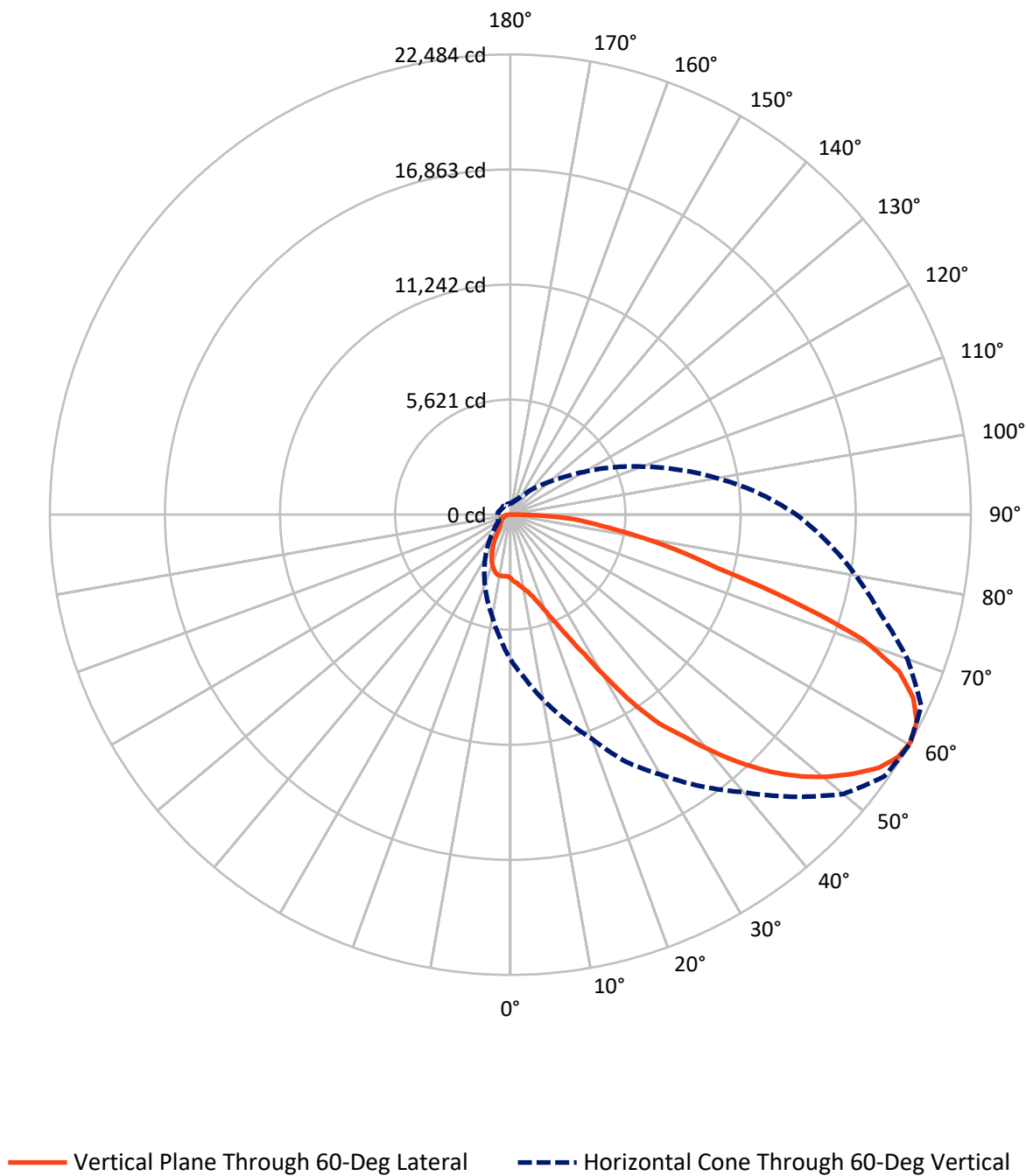


Based on 25 foot mounting height. Maximum calculated value = 11.4 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5617.6	0.0	5617.6
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	19330.8	0.0	19330.8
	% Fixture	77.5	0.0	77.5
Total	Lumens	24948.5	0.0	24948.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	306.1	1.2
10°-20°	988.3	4.0
20°-30°	1875.5	7.5
30°-40°	2953.5	11.8
40°-50°	4122.4	16.5
50°-60°	5098.4	20.4
60°-70°	5284.8	21.2
70°-80°	3325.4	13.3
80°-90°	994.0	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°	24948.5	100.0
0°-180°	24948.5	100.0

Coefficient of Utilization



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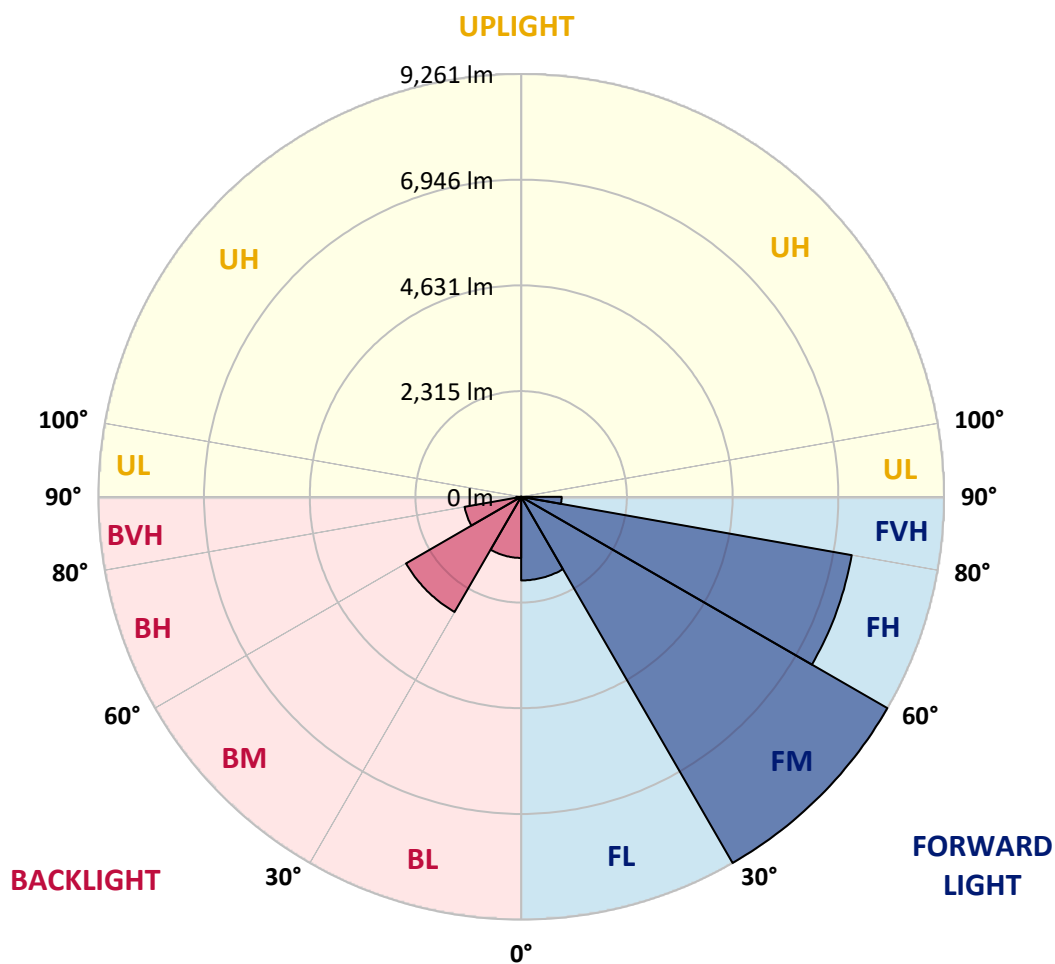
CATALOG NUMBER: VST-E11-LED-E-U-SLL-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1831.6	7.3			
FM	(30°-60°)	9261.3	37.1			
FH	(60°-80°)	7352.1	29.5			G3/7500
FVH	(80°-90°)	885.9	3.6			G5
BL	(0°-30°)	1338.3	5.4	B3/2500		
BM	(30°-60°)	2913.1	11.7	B3/5000		
BH	(60°-80°)	1258.1	5.0	B3/2500		G3/2500
BVH	(80°-90°)	108.1	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°	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7
2.5°	3286.5	3282.8	3282.8	3282.8	3280.9	3277.2	3282.8	3280.9	3271.6	3266.1	3271.6
5°	3329.2	3331.1	3336.6	3338.5	3338.5	3344.1	3358.9	3360.8	3358.9	3362.6	3371.9
7.5°	3370.1	3379.3	3384.9	3394.2	3405.3	3414.6	3440.6	3466.6	3483.3	3496.3	3500.0
10°	3436.9	3451.8	3468.5	3492.6	3518.6	3565.0	3587.3	3613.3	3630.0	3656.0	3661.6
12.5°	3607.7	3626.3	3637.4	3674.6	3708.0	3752.6	3784.1	3791.5	3830.5	3852.8	3878.8
15°	3895.5	3923.4	3962.4	3984.6	4021.8	4060.8	4088.6	4125.8	4131.3	4161.0	4181.5
17.5°	4248.3	4287.3	4367.1	4421.0	4469.3	4508.3	4564.0	4606.7	4616.0	4649.4	4606.7
20°	4742.2	4836.9	4849.9	4957.6	5000.3	5078.3	5189.7	5210.1	5264.0	5210.1	5178.6
22.5°	5410.7	5559.2	5600.0	5704.0	5756.0	5874.9	5908.3	6017.8	6055.0	6014.1	5928.7
25°	6179.4	6409.6	6528.4	6688.1	6714.1	6957.4	6983.3	7111.5	7042.8	6944.4	6946.2
27.5°	6745.7	7137.5	7443.8	7716.8	7908.0	8182.8	8396.4	8455.8	8390.8	8262.7	8218.1
30°	7068.8	7512.5	7952.6	8329.5	8775.1	9194.8	9631.1	9848.4	9885.5	9952.3	9683.1
32.5°	7276.7	7846.8	8370.4	8836.4	9293.2	9833.5	10418.4	10977.3	11447.0	11801.7	11634.6
35°	7451.3	8155.0	8825.3	9389.7	9930.1	10518.7	11109.1	11768.3	12546.3	13001.2	13095.9
37.5°	7521.8	8381.5	9202.2	9926.3	10685.8	11348.6	11935.4	12522.1	13339.1	14150.5	14401.2
40°	7508.8	8492.9	9426.9	10336.7	11266.9	12095.1	12782.1	13476.5	14432.8	15381.6	15790.1
42.5°	7421.5	8509.6	9569.8	10609.6	11669.9	12770.9	13649.2	14449.5	15366.7	16582.9	17160.4
45°	7312.0	8452.1	9599.6	10748.9	11968.8	13242.6	14352.9	15342.6	16417.6	17619.0	18317.1
47.5°	7163.5	8361.1	9562.4	10797.2	12102.5	13545.2	14850.5	16040.7	17223.5	18606.8	19492.5
50°	7001.9	8231.1	9486.3	10761.9	12135.9	13710.5	15134.6	16490.1	17871.5	19364.4	20484.0
52.5°	6888.7	8091.8	9417.6	10689.5	12102.5	13760.6	15238.6	16731.4	18268.9	19811.8	21148.7
55°	6749.4	7906.2	9233.8	10520.5	11979.9	13732.7	15227.5	16815.0	18378.4	19984.5	21510.8
57.5°	6758.7	7820.8	9077.8	10318.1	11729.3	13474.7	15017.6	16731.4	18205.7	19873.1	21523.8
60°	7052.1	8004.6	9159.5	10359.0	11655.0	13311.3	14661.1	16193.0	17698.8	19488.8	21223.0
62.5°	7657.4	8530.0	9579.1	10767.5	12072.8	13638.0	14499.6	15298.0	16634.9	18781.3	20710.5
65°	8379.6	9166.9	10076.7	11207.5	12670.7	14169.1	14408.6	14570.2	15246.0	17405.5	19748.7
67.5°	9101.9	9805.7	10520.5	11458.2	13010.5	14321.3	14037.3	13652.9	14016.8	15806.8	17858.5
70°	9361.9	10295.8	10765.6	11409.9	12752.4	13966.7	13437.5	12470.1	12596.4	14222.9	15723.2
72.5°	8972.0	10303.3	10459.2	10698.8	11603.0	12744.9	12186.0	10942.0	10916.0	12158.2	13370.7
75°	7525.5	9399.0	9397.2	9308.0	9512.3	10162.2	9872.5	9122.4	9439.9	10418.4	10817.6
77.5°	5364.2	7334.3	7427.1	6827.4	6812.5	7105.9	7280.4	8153.1	9304.3	9853.9	9727.7
80°	3370.1	4948.3	5347.5	4606.7	4448.8	4864.8	5943.6	7213.6	8630.3	9124.2	8699.0
82.5°	2029.5	3188.1	4038.5	3618.9	3581.7	4339.3	5531.3	6025.3	6450.5	6975.9	6264.8
85°	1377.7	2124.2	2762.9	2846.4	3171.4	3954.9	4473.0	4253.9	4265.0	4127.6	3760.0
87.5°	263.7	579.3	947.0	1154.9	1281.2	1721.2	1871.6	1695.2	1789.9	1309.0	1431.6
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°	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7
2.5°	3262.4	3262.4	3262.4	3253.1	3254.9	3241.9	3236.4	3236.4	3230.8	3230.8	3228.9
5°	3364.5	3353.3	3358.9	3357.1	3357.1	3338.5	3329.2	3329.2	3305.1	3306.9	3299.5
7.5°	3516.7	3514.9	3520.5	3509.3	3494.5	3479.6	3464.8	3457.3	3423.9	3403.5	3390.5
10°	3689.4	3687.6	3693.1	3691.3	3665.3	3637.4	3596.6	3566.9	3526.0	3494.5	3462.9
12.5°	3878.8	3877.0	3873.2	3856.5	3828.7	3784.1	3732.1	3682.0	3620.7	3579.9	3533.5
15°	4174.0	4168.5	4146.2	4122.1	4092.3	4023.6	3932.7	3860.2	3778.5	3708.0	3631.9
17.5°	4610.4	4564.0	4560.3	4506.4	4426.6	4335.6	4250.2	4129.5	4012.5	3906.7	3802.7
20°	5212.0	5104.3	5074.6	5013.3	4907.5	4812.8	4627.1	4465.6	4305.9	4161.0	4029.2
22.5°	5867.4	5789.4	5717.0	5616.8	5471.9	5334.5	5098.7	4896.3	4692.1	4506.4	4359.7
25°	6782.8	6647.3	6517.3	6357.6	6157.1	5993.7	5724.5	5520.2	5252.8	5083.9	4872.2
27.5°	7965.6	7733.5	7514.4	7377.0	7024.2	6786.5	6443.0	6179.4	5856.3	5627.9	5377.2
30°	9504.9	9235.6	8910.7	8435.4	8015.7	7544.1	7118.9	6781.0	6437.5	6118.1	5828.4
32.5°	11413.6	10938.3	10424.0	9670.1	8981.2	8309.1	7742.8	7326.9	6975.9	6578.6	6170.1
35°	13027.2	12537.0	11807.3	10849.2	9998.8	9230.1	8552.3	7984.2	7525.5	7022.3	6482.0
37.5°	14300.9	13742.0	13056.9	12039.4	11140.7	10266.1	9555.0	8830.8	8229.2	7536.7	6853.4
40°	15760.3	15199.6	14445.7	13391.1	12327.2	11378.3	10544.7	9796.4	9057.4	8212.5	7334.3
42.5°	17032.2	16627.5	15864.3	14774.4	13595.3	12538.8	11627.2	10771.2	9805.7	8860.6	7820.8
45°	18358.0	17945.8	17221.6	16081.6	14828.2	13651.0	12561.1	11640.2	10500.1	9374.9	8184.7
47.5°	19529.6	19106.3	18374.7	17242.1	15910.7	14670.4	13470.9	12356.9	11033.0	9740.7	8422.4
50°	20647.4	20129.4	19459.1	18330.1	16907.8	15582.1	14280.5	12850.8	11447.0	9996.9	8583.9
52.5°	21674.2	21015.0	20380.0	19217.7	17680.3	16295.1	14843.1	13270.4	11701.4	10199.3	8693.4
55°	22257.2	21832.0	21072.6	19930.7	18229.9	16785.3	15199.6	13565.6	11953.9	10342.3	8739.9
57.5°	22437.3	22333.4	21696.5	20342.9	18552.9	17054.5	15441.0	13799.6	12122.9	10383.1	8674.9
60°	22294.4	22483.7	22134.7	20632.5	18699.6	17134.4	15559.8	13966.7	12152.6	10253.1	8478.1
62.5°	21835.7	22266.5	22221.9	20729.1	18623.5	17034.1	15546.8	13881.3	11874.1	9848.4	8036.1
65°	21081.9	21624.1	21815.3	20370.7	18194.6	16668.3	15216.3	13344.7	11099.8	9057.4	7295.3
67.5°	19663.3	20484.0	20669.7	19197.2	17073.1	15656.4	14263.8	12230.6	9666.4	7833.8	6138.5
70°	16820.6	18255.9	18506.5	16961.7	15095.6	13851.6	12670.7	10464.8	8049.1	6283.3	4710.7
72.5°	13428.2	14330.6	14843.1	13779.2	12390.3	11487.9	10592.9	8028.7	6073.5	4636.4	3241.9
75°	10498.2	10444.4	10903.0	10195.6	9378.6	8957.1	8285.0	5601.9	4068.2	3071.1	2051.7
77.5°	8975.7	8285.0	7763.2	7265.6	6781.0	6647.3	6003.0	3475.9	2514.1	1840.1	1227.3
80°	7460.5	6199.8	5247.3	4547.3	4374.6	4638.2	3928.9	2049.9	1489.1	1056.5	770.6
82.5°	5330.8	4460.0	3630.0	3186.2	2891.0	3310.6	2317.3	1138.2	807.7	633.2	510.6
85°	3455.5	3303.2	3267.9	3123.1	2764.7	2610.6	1760.2	980.4	605.3	393.6	317.5
87.5°	1329.5	1704.5	1966.3	2107.4	2278.3	2029.5	917.2	337.9	332.4	204.2	154.1
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°	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7
2.5°	3215.9	3208.5	3206.7	3201.1	3197.4	3197.4	3188.1	3019.1	3017.3	3017.3	3015.4
5°	3284.6	3275.4	3266.1	3264.2	3256.8	3256.8	3247.5	3078.5	3078.5	3078.5	3074.8
7.5°	3377.5	3358.9	3347.8	3342.2	3331.1	3336.6	3344.1	3173.2	3175.1	3173.2	3177.0
10°	3444.3	3433.2	3420.2	3416.5	3409.0	3414.6	3425.8	3256.8	3262.4	3264.2	3267.9
12.5°	3509.3	3490.7	3474.0	3468.5	3464.8	3479.6	3492.6	3329.2	3334.8	3340.3	3340.3
15°	3589.2	3557.6	3535.3	3522.3	3514.9	3529.7	3548.3	3386.8	3388.6	3394.2	3392.3
17.5°	3724.7	3678.3	3626.3	3617.0	3592.9	3598.4	3602.2	3422.0	3414.6	3401.6	3379.3
20°	3934.5	3864.0	3793.4	3763.7	3715.4	3695.0	3654.1	3423.9	3377.5	3338.5	3305.1
22.5°	4235.3	4131.3	4055.2	4005.1	3906.7	3838.0	3726.6	3414.6	3327.3	3260.5	3208.5
25°	4721.8	4597.4	4480.4	4354.1	4200.0	4062.6	3899.2	3496.3	3360.8	3245.7	3145.4
27.5°	5195.3	4998.5	4818.3	4629.0	4411.7	4205.6	3975.4	3522.3	3368.2	3219.7	3056.3
30°	5549.9	5264.0	4991.0	4714.4	4430.3	4162.9	3903.0	3433.2	3249.4	3082.3	2909.6
32.5°	5765.3	5393.9	5039.3	4695.8	4361.6	4060.8	3769.3	3279.1	3076.7	2879.9	2696.0
35°	5969.5	5509.1	5069.0	4664.2	4281.7	3947.5	3633.7	3099.0	2857.6	2647.8	2415.7
37.5°	6222.1	5629.8	5087.6	4606.7	4164.8	3782.3	3436.9	2872.4	2631.1	2373.0	2153.9
40°	6524.7	5754.2	5069.0	4491.6	3982.8	3565.0	3199.2	2634.8	2365.5	2114.9	1899.5
42.5°	6812.5	5863.7	5020.7	4337.4	3784.1	3338.5	2982.0	2423.1	2153.9	1897.6	1684.1
45°	7026.1	5956.6	4996.6	4229.7	3631.9	3184.4	2790.7	2252.3	1968.2	1710.1	1492.9
47.5°	7174.6	6012.3	4985.5	4170.3	3526.0	3024.7	2616.2	2081.5	1782.5	1522.6	1310.9
50°	7252.6	6010.4	4957.6	4105.3	3370.1	2833.4	2436.1	1908.8	1611.7	1357.3	1164.2
52.5°	7273.0	5977.0	4898.2	3986.5	3180.7	2642.2	2243.0	1728.7	1461.3	1218.0	1023.1
55°	7226.6	5895.3	4773.8	3787.8	2978.3	2439.8	2066.6	1587.5	1314.6	1084.4	932.1
57.5°	7094.8	5750.4	4539.8	3514.9	2764.7	2252.3	1864.2	1416.7	1154.9	961.8	835.6
60°	6849.7	5444.1	4174.0	3191.8	2493.7	1966.3	1585.7	1193.9	986.0	841.1	739.0
62.5°	6396.6	4963.2	3659.7	2746.2	2103.7	1595.0	1266.3	952.5	796.6	701.9	638.7
65°	5666.9	4239.0	3063.7	2163.1	1598.7	1160.5	941.4	716.7	603.5	545.9	527.3
67.5°	4625.2	3273.5	2228.1	1502.1	1082.5	813.3	655.4	523.6	469.8	447.5	440.1
70°	3362.6	2230.0	1442.7	948.8	714.9	568.2	495.8	421.5	391.8	386.2	386.2
72.5°	2111.2	1355.4	883.8	649.9	542.2	460.5	423.3	371.4	360.2	356.5	350.9
75°	1238.5	822.6	625.7	532.9	464.2	412.2	380.6	337.9	330.5	328.7	323.1
77.5°	789.1	592.3	505.0	454.9	419.6	373.2	345.4	300.8	298.9	297.1	295.2
80°	566.3	492.0	441.9	402.9	367.6	324.9	308.2	272.9	269.2	267.4	271.1
82.5°	428.9	406.6	386.2	356.5	308.2	276.7	263.7	239.5	241.4	232.1	230.2
85°	295.2	291.5	289.7	276.7	241.4	213.5	204.2	191.2	200.5	191.2	180.1
87.5°	144.8	143.0	131.8	156.0	144.8	115.1	104.0	115.1	128.1	124.4	115.1
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: P158948

CATALOG NUMBER: VST-E11-LED-E-U-SLL-8030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7
2.5°	3008.0	3000.6	3006.1	3002.4	3002.4	3000.6	3004.3	2998.7	2995.0	2998.7	3000.6
5°	3067.4	3058.1	3060.0	3047.0	3052.5	3039.5	3043.3	3034.0	3024.7	3021.0	3021.0
7.5°	3167.7	3158.4	3147.2	3145.4	3125.0	3117.5	3104.5	3097.1	3091.5	3078.5	3071.1
10°	3258.6	3243.8	3230.8	3228.9	3208.5	3189.9	3173.2	3158.4	3149.1	3130.5	3121.2
12.5°	3332.9	3318.1	3297.6	3286.5	3266.1	3243.8	3232.7	3210.4	3197.4	3177.0	3160.2
15°	3375.6	3349.6	3319.9	3299.5	3269.8	3245.7	3228.9	3212.2	3199.2	3173.2	3149.1
17.5°	3355.2	3312.5	3271.6	3234.5	3193.7	3171.4	3147.2	3126.8	3123.1	3093.4	3056.3
20°	3269.8	3219.7	3165.8	3115.7	3061.8	3030.3	3000.6	2969.0	2959.7	2924.4	2876.2
22.5°	3165.8	3108.2	3047.0	2985.7	2917.0	2872.4	2827.9	2788.9	2757.3	2705.3	2636.6
25°	3060.0	2974.6	2885.4	2807.5	2727.6	2671.9	2625.5	2582.8	2545.6	2462.1	2391.5
27.5°	2920.7	2787.0	2696.0	2606.9	2510.4	2438.0	2386.0	2326.5	2285.7	2189.1	2114.9
30°	2742.5	2608.8	2478.8	2389.7	2293.1	2215.1	2148.3	2062.9	2003.5	1932.9	1864.2
32.5°	2517.8	2384.1	2252.3	2152.0	2072.2	1975.6	1892.1	1810.4	1741.7	1673.0	1619.1
35°	2244.8	2114.9	1990.5	1890.2	1801.1	1724.9	1645.1	1574.5	1496.6	1422.3	1390.7
37.5°	1957.0	1817.8	1680.4	1593.1	1522.6	1468.7	1394.4	1336.9	1266.3	1221.8	1184.6
40°	1706.4	1557.8	1427.9	1353.6	1297.9	1236.6	1175.3	1130.8	1080.6	1036.1	1008.2
42.5°	1494.7	1355.4	1244.0	1180.9	1114.1	1047.2	1000.8	963.7	932.1	898.7	865.3
45°	1299.7	1166.1	1073.2	995.2	939.5	885.7	854.1	837.4	818.8	798.4	776.1
47.5°	1136.3	1021.2	930.2	857.8	800.3	763.1	748.3	742.7	735.3	718.6	707.4
50°	1011.9	917.2	824.4	759.4	711.1	692.6	675.9	670.3	661.0	655.4	648.0
52.5°	908.0	807.7	729.7	670.3	640.6	633.2	625.7	618.3	616.5	612.7	609.0
55°	822.6	735.3	662.9	618.3	603.5	597.9	596.0	588.6	586.7	586.7	581.2
57.5°	746.4	672.2	607.2	579.3	570.0	564.5	560.7	557.0	557.0	560.7	558.9
60°	668.4	605.3	566.3	551.5	545.9	536.6	527.3	523.6	525.5	534.8	534.8
62.5°	592.3	545.9	521.8	516.2	510.6	503.2	492.0	488.3	492.0	503.2	508.8
65°	508.8	488.3	480.9	477.2	473.5	467.9	460.5	456.8	458.6	464.2	471.6
67.5°	432.6	430.8	430.8	432.6	430.8	428.9	425.2	419.6	417.8	417.8	421.5
70°	386.2	386.2	391.8	391.8	389.9	389.9	384.4	378.8	375.1	371.4	373.2
72.5°	350.9	350.9	352.8	354.6	352.8	352.8	345.4	341.6	332.4	330.5	326.8
75°	321.2	317.5	317.5	315.7	313.8	315.7	308.2	298.9	295.2	293.4	289.7
77.5°	291.5	284.1	280.4	276.7	278.5	276.7	271.1	265.5	259.9	258.1	256.2
80°	258.1	247.0	241.4	232.1	237.7	239.5	235.8	230.2	228.4	226.5	224.7
82.5°	213.5	202.4	195.0	189.4	185.7	189.4	195.0	208.0	204.2	202.4	198.7
85°	167.1	148.5	139.3	141.1	131.8	133.7	150.4	157.8	157.8	161.5	157.8
87.5°	94.7	91.0	68.7	63.1	66.8	79.8	89.1	98.4	98.4	92.8	104.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: VST-E11-LED-E-U-SLL-8030

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7
2.5°	3000.6	3004.3	3006.1	3013.6	3017.3	3019.1	3021.0	3024.7	3026.6	3024.7	3034.0
5°	3015.4	3015.4	3011.7	3017.3	3019.1	3019.1	3015.4	3019.1	3019.1	3019.1	3028.4
7.5°	3054.4	3043.3	3037.7	3030.3	3024.7	3017.3	3008.0	3008.0	3006.1	3008.0	3013.6
10°	3095.3	3078.5	3058.1	3039.5	3022.8	3009.8	2993.1	2987.6	2985.7	2983.8	2998.7
12.5°	3126.8	3097.1	3065.5	3034.0	3000.6	2978.3	2950.4	2933.7	2931.9	2931.9	2950.4
15°	3104.5	3056.3	2995.0	2939.3	2909.6	2878.0	2846.4	2826.0	2824.2	2827.9	2839.0
17.5°	2993.1	2915.1	2861.3	2807.5	2768.5	2742.5	2722.0	2718.3	2725.8	2718.3	2733.2
20°	2803.7	2720.2	2683.0	2640.3	2625.5	2606.9	2577.2	2551.2	2551.2	2517.8	2527.1
22.5°	2558.6	2512.2	2463.9	2430.5	2419.4	2387.8	2356.3	2321.0	2317.3	2276.4	2270.8
25°	2302.4	2256.0	2217.0	2209.6	2176.1	2133.4	2103.7	2062.9	2053.6	2012.7	2007.2
27.5°	2040.6	2003.5	1964.5	1942.2	1923.6	1877.2	1851.2	1802.9	1784.4	1739.8	1734.2
30°	1791.8	1765.8	1719.4	1700.8	1665.5	1611.7	1556.0	1526.3	1511.4	1465.0	1450.1
32.5°	1557.8	1517.0	1481.7	1459.4	1414.9	1353.6	1303.5	1260.8	1232.9	1177.2	1162.3
35°	1335.0	1294.2	1277.5	1219.9	1180.9	1140.1	1071.4	1045.4	995.2	952.5	937.7
37.5°	1138.2	1099.2	1076.9	1028.7	989.7	948.8	908.0	874.5	850.4	841.1	841.1
40°	969.2	948.8	921.0	885.7	859.7	830.0	807.7	796.6	794.7	798.4	807.7
42.5°	848.5	826.3	807.7	789.1	770.6	766.9	761.3	768.7	778.0	787.3	796.6
45°	757.6	739.0	727.9	720.4	718.6	724.1	735.3	746.4	763.1	774.3	781.7
47.5°	692.6	677.7	674.0	672.2	681.4	698.1	713.0	729.7	742.7	753.9	761.3
50°	636.9	623.9	622.0	620.2	633.2	648.0	661.0	683.3	692.6	700.0	705.6
52.5°	597.9	586.7	581.2	583.0	596.0	609.0	627.6	644.3	657.3	662.9	668.4
55°	566.3	562.6	549.6	555.2	568.2	584.9	603.5	622.0	635.0	644.3	653.6
57.5°	542.2	532.9	523.6	532.9	545.9	562.6	584.9	601.6	618.3	631.3	640.6
60°	516.2	508.8	501.3	510.6	523.6	540.3	557.0	579.3	599.7	612.7	622.0
62.5°	493.9	488.3	480.9	482.8	488.3	499.5	508.8	529.2	547.8	564.5	575.6
65°	462.3	460.5	449.3	451.2	454.9	466.1	473.5	492.0	510.6	525.5	534.8
67.5°	415.9	412.2	412.2	417.8	419.6	425.2	430.8	449.3	464.2	475.3	486.5
70°	369.5	367.6	367.6	371.4	369.5	375.1	382.5	399.2	417.8	428.9	440.1
72.5°	324.9	324.9	323.1	326.8	326.8	328.7	337.9	352.8	369.5	378.8	386.2
75°	285.9	284.1	284.1	284.1	285.9	285.9	295.2	308.2	324.9	330.5	341.6
77.5°	250.7	250.7	250.7	250.7	252.5	250.7	256.2	265.5	271.1	280.4	280.4
80°	221.0	219.1	221.0	222.8	222.8	221.0	221.0	222.8	224.7	224.7	224.7
82.5°	195.0	189.4	193.1	202.4	202.4	202.4	200.5	187.5	178.3	178.3	182.0
85°	156.0	156.0	157.8	170.8	172.7	165.3	172.7	154.1	135.5	130.0	133.7
87.5°	96.6	76.1	92.8	105.8	105.8	100.3	111.4	104.0	87.3	70.6	66.8
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-E11-LED-E-U-SLL-8030

REPORT N
CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	0°
2.5°	3041.4	3043.3	3054.4	3060.0	3060.0	3067.4	3071.1	3082.3	3080.4	3080.4	3084.1	2.5°
5°	3037.7	3043.3	3054.4	3061.8	3065.5	3074.8	3082.3	3095.3	3093.4	3097.1	3099.0	5°
7.5°	3024.7	3039.5	3050.7	3065.5	3078.5	3086.0	3095.3	3106.4	3102.7	3104.5	3102.7	7.5°
10°	3013.6	3028.4	3050.7	3071.1	3089.7	3100.8	3106.4	3119.4	3117.5	3121.2	3121.2	10°
12.5°	2969.0	2995.0	3022.8	3054.4	3082.3	3112.0	3130.5	3158.4	3171.4	3188.1	3206.7	12.5°
15°	2855.7	2885.4	2930.0	2965.3	3019.1	3060.0	3113.8	3167.7	3215.9	3262.4	3316.2	15°
17.5°	2744.3	2757.3	2792.6	2840.9	2889.1	2950.4	3015.4	3112.0	3199.2	3293.9	3397.9	17.5°
20°	2538.2	2560.5	2584.6	2642.2	2699.8	2787.0	2866.9	2993.1	3121.2	3269.8	3429.5	20°
22.5°	2283.8	2306.1	2332.1	2397.1	2467.7	2556.8	2653.3	2794.5	2965.3	3158.4	3371.9	22.5°
25°	2009.0	2022.0	2042.5	2107.4	2150.2	2267.1	2384.1	2530.8	2716.5	2965.3	3214.1	25°
27.5°	1706.4	1730.5	1747.2	1776.9	1875.3	1975.6	2098.2	2256.0	2480.7	2735.0	3035.8	27.5°
30°	1416.7	1437.1	1427.9	1491.0	1556.0	1661.8	1793.6	1968.2	2183.6	2486.2	2833.4	30°
32.5°	1132.6	1147.5	1141.9	1186.5	1251.5	1357.3	1481.7	1671.1	1899.5	2222.6	2599.5	32.5°
35°	934.0	937.7	958.1	978.5	1034.2	1119.6	1225.5	1390.7	1624.7	1921.8	2321.0	35°
37.5°	841.1	848.5	861.5	889.4	930.2	991.5	1078.8	1206.9	1407.4	1669.2	2025.7	37.5°
40°	813.3	818.8	826.3	844.8	883.8	937.7	1015.7	1123.4	1270.0	1491.0	1780.7	40°
42.5°	800.3	800.3	800.3	811.4	841.1	898.7	987.8	1093.6	1221.8	1388.9	1622.8	42.5°
45°	781.7	781.7	779.8	785.4	805.8	863.4	960.0	1078.8	1216.2	1375.9	1578.3	45°
47.5°	761.3	759.4	753.9	753.9	766.9	824.4	924.7	1052.8	1203.2	1387.0	1604.3	47.5°
50°	705.6	705.6	705.6	711.1	722.3	774.3	882.0	1017.5	1190.2	1394.4	1645.1	50°
52.5°	674.0	675.9	681.4	681.4	692.6	746.4	859.7	1010.1	1197.6	1422.3	1697.1	52.5°
55°	659.2	664.7	670.3	670.3	679.6	735.3	852.3	1015.7	1225.5	1479.9	1786.2	55°
57.5°	646.2	651.7	655.4	655.4	662.9	711.1	831.8	1006.4	1242.2	1535.6	1895.8	57.5°
60°	622.0	625.7	627.6	627.6	629.4	670.3	785.4	961.8	1205.1	1531.8	1955.2	60°
62.5°	577.5	584.9	586.7	588.6	588.6	627.6	726.0	889.4	1125.2	1476.1	1938.5	62.5°
65°	544.0	547.8	553.3	557.0	564.5	590.5	668.4	802.1	1021.2	1364.7	1845.6	65°
67.5°	492.0	497.6	503.2	510.6	518.0	534.8	596.0	703.7	880.1	1175.3	1637.7	67.5°
70°	445.6	447.5	453.1	462.3	464.2	473.5	518.0	592.3	720.4	943.2	1318.3	70°
72.5°	388.1	391.8	399.2	410.3	410.3	417.8	443.8	482.8	564.5	720.4	973.0	72.5°
75°	337.9	341.6	347.2	347.2	337.9	339.8	358.4	386.2	447.5	542.2	709.3	75°
77.5°	280.4	287.8	293.4	282.2	278.5	284.1	293.4	313.8	358.4	430.8	532.9	77.5°
80°	232.1	235.8	237.7	239.5	235.8	241.4	248.8	261.8	291.5	347.2	421.5	80°
82.5°	185.7	189.4	195.0	202.4	202.4	222.8	224.7	224.7	241.4	276.7	330.5	82.5°
85°	137.4	144.8	152.3	161.5	163.4	174.5	169.0	167.1	172.7	206.1	228.4	85°
87.5°	70.6	76.1	79.8	87.3	78.0	81.7	81.7	76.1	66.8	83.6	92.8	87.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90°



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NUMBER: VST-E11-LED-E-U-SLL-8030

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
3102.7	3102.7	3102.7	3102.7	3102.7	3102.7	3102.7
3087.8	3084.1	3087.8	3087.8	3093.4	3089.7	3286.5
3102.7	3099.0	3102.7	3106.4	3112.0	3112.0	3329.2
3104.5	3104.5	3100.8	3110.1	3117.5	3125.0	3370.1
3126.8	3126.8	3130.5	3132.4	3149.1	3167.7	3436.9
3217.8	3227.1	3243.8	3249.4	3279.1	3299.5	3607.7
3357.1	3409.0	3442.5	3453.6	3479.6	3518.6	3895.5
3498.2	3585.4	3676.4	3732.1	3765.5	3812.0	4248.3
3604.0	3767.4	3923.4	4062.6	4142.5	4233.5	4742.2
3613.3	3873.2	4136.9	4395.0	4608.5	4777.5	5410.7
3524.2	3865.8	4229.7	4625.2	4992.9	5297.4	6179.4
3410.9	3830.5	4294.7	4799.8	5282.5	5731.9	6745.7
3267.9	3771.1	4305.9	4874.0	5440.4	5980.7	7068.8
3050.7	3594.7	4172.2	4799.8	5457.1	6114.4	7276.7
2772.2	3327.3	3919.7	4634.5	5379.1	6168.2	7451.3
2488.1	3035.8	3672.7	4413.6	5254.7	6158.9	7521.8
2187.3	2731.3	3383.1	4177.8	5085.7	6073.5	7508.8
1983.0	2478.8	3117.5	3938.2	4898.2	5960.3	7421.5
1864.2	2298.7	2907.7	3719.1	4727.4	5824.7	7312.0
1862.4	2244.8	2796.3	3563.2	4554.7	5674.3	7163.5
1927.3	2278.3	2783.3	3496.3	4460.0	5564.8	7001.9
2003.5	2371.1	2852.0	3520.5	4458.1	5516.5	6888.7
2124.2	2528.9	3002.4	3624.4	4506.4	5509.1	6749.4
2278.3	2742.5	3273.5	3880.7	4693.9	5655.8	6758.7
2436.1	2993.1	3628.1	4318.9	5063.4	5997.4	7052.1
2493.7	3186.2	3988.4	4833.2	5616.8	6509.9	7657.4
2443.5	3230.8	4207.5	5232.4	6155.2	7109.6	8379.6
2257.8	3050.7	4118.3	5345.7	6465.3	7534.8	9101.9
1858.6	2603.2	3713.6	5091.3	6441.2	7622.1	9361.9
1362.9	2018.3	3019.1	4326.3	5726.3	7076.2	8972.0
984.1	1427.9	2179.9	3258.6	4526.8	5698.5	7525.5
705.6	989.7	1414.9	2140.9	3084.1	3967.9	5364.2
506.9	672.2	882.0	1284.9	1879.1	2436.1	3370.1
373.2	460.5	579.3	798.4	1106.6	1418.6	2029.5
254.4	271.1	349.1	471.6	726.0	1043.5	1377.7
96.6	109.6	128.1	193.1	324.9	373.2	263.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)