

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: P158949

Luminaire Tested: **VST-E11-LED-E-U-SLL-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158949
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-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (231) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26998.7 lumens
Efficiency: N/A
Efficacy: 100.1 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



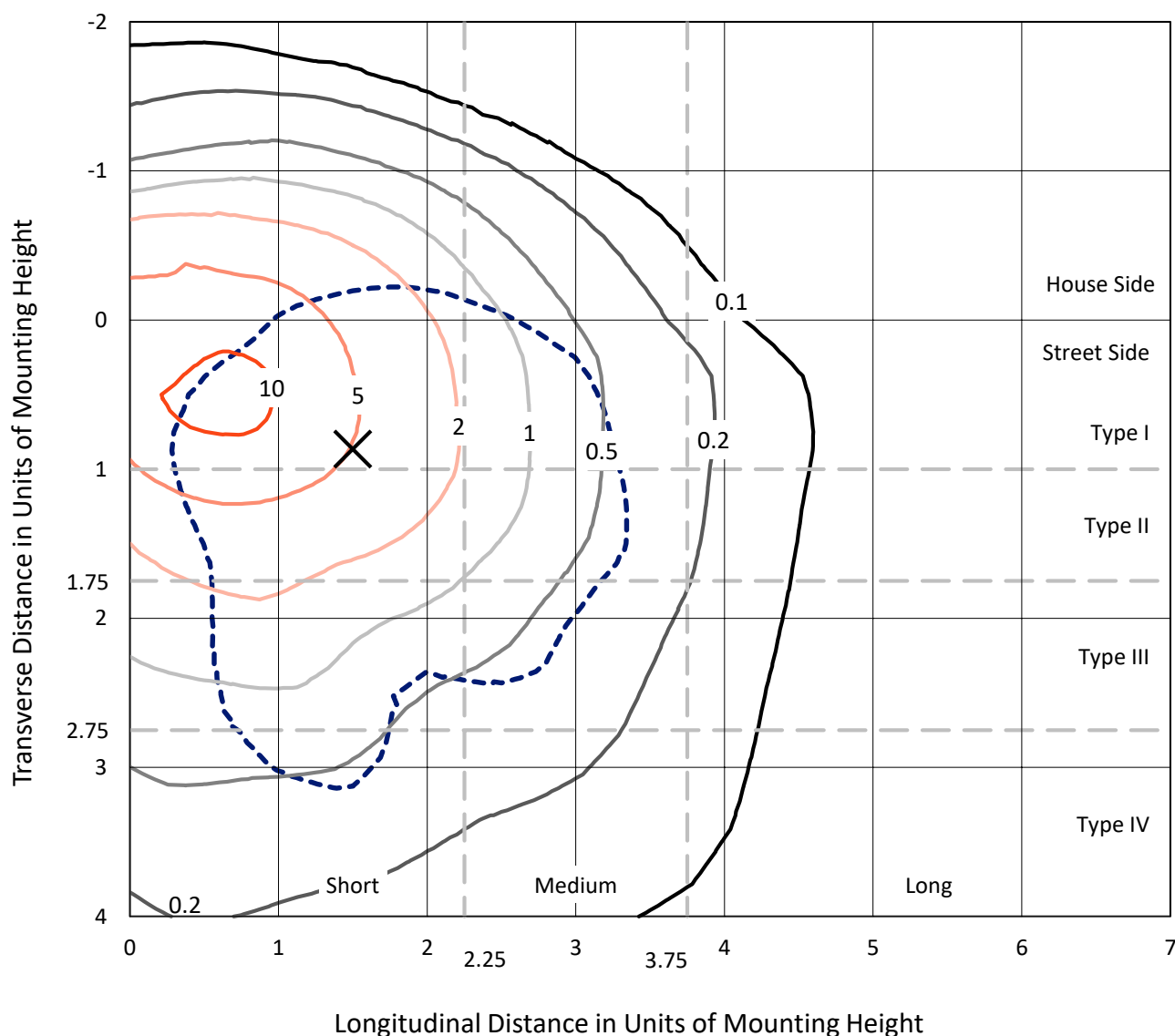
REPORT NUMBER: P158949

CATALOG NUMBER: VST-E11-LED-E-U-SLL-7030

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

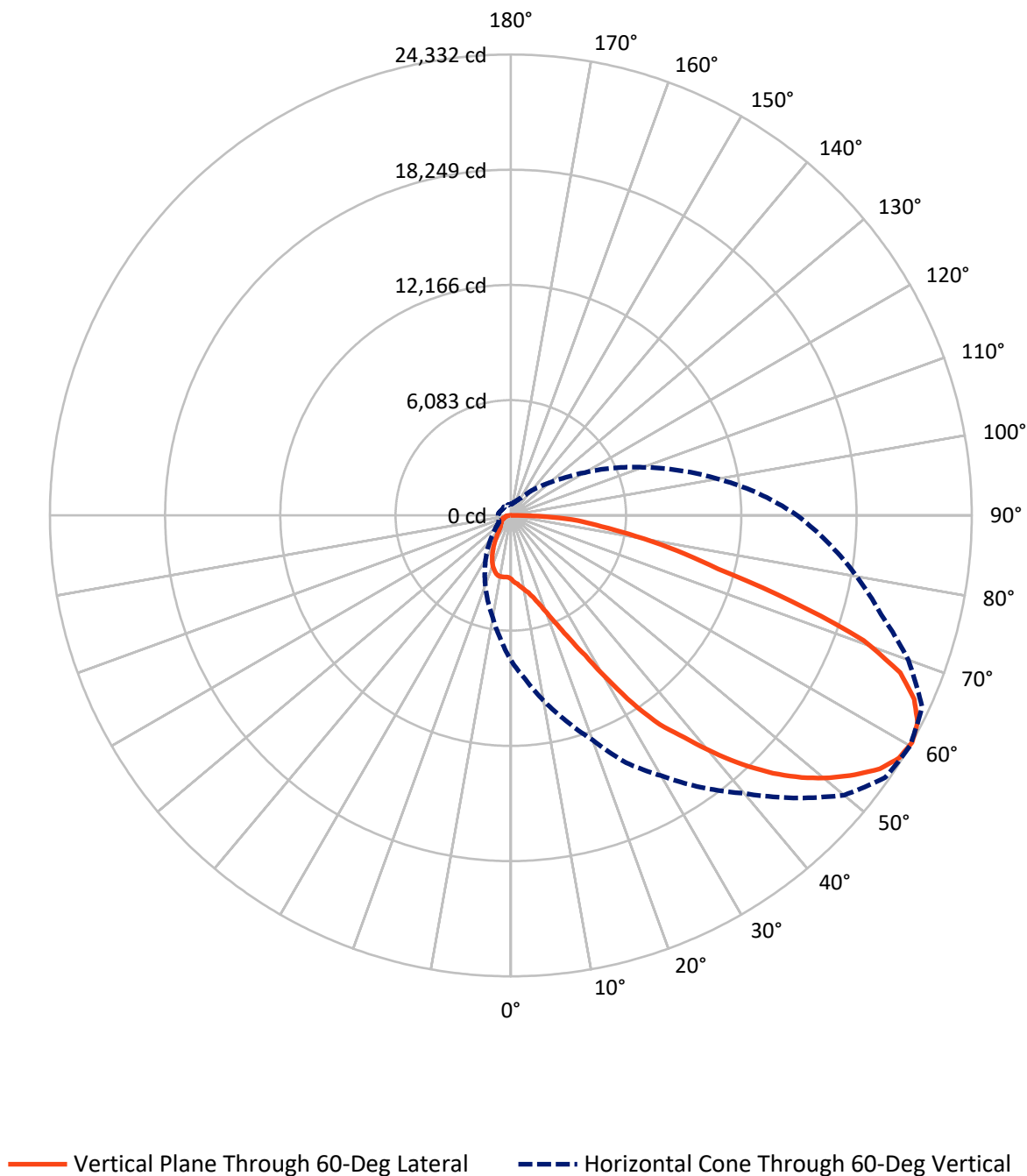


Based on 25 foot mounting height. Maximum calculated value = 12.4 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P158949

CATALOG NUMBER: VST-E11-LED-E-U-SLL-7030

Luminous Intensity Polar Plot



REPORT NUMBER: P158949

CATALOG NUMBER: VST-E11-LED-E-U-SLL-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6079.3	0.0	6079.3
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	20919.5	0.0	20919.5
	% Fixture	77.5	0.0	77.5
Total	Lumens	26998.7	0.0	26998.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.3	1.2
10°-20°	1069.6	4.0
20°-30°	2029.6	7.5
30°-40°	3196.2	11.8
40°-50°	4461.2	16.5
50°-60°	5517.4	20.4
60°-70°	5719.1	21.2
70°-80°	3598.7	13.3
80°-90°	1075.7	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°	26998.7	100.0
0°-180°	26998.7	100.0

Coefficient of Utilization



REPORT NUMBER: P158949

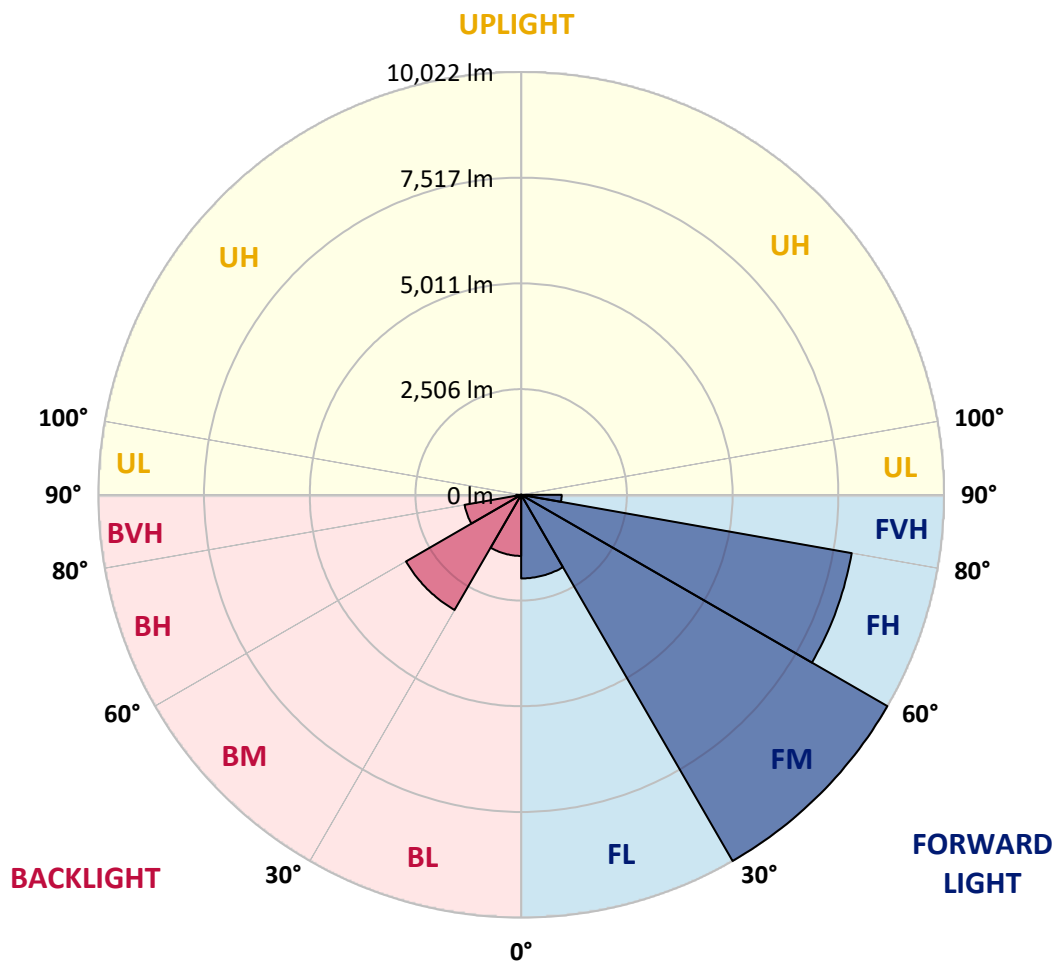
CATALOG NUMBER: VST-E11-LED-E-U-SLL-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1982.1	7.3			
FM	(30°-60°)	10022.4	37.1			
FH	(60°-80°)	7956.3	29.5			G4/12000
FVH	(80°-90°)	958.7	3.6			G5
BL	(0°-30°)	1448.3	5.4	B3/2500		
BM	(30°-60°)	3152.5	11.7	B3/5000		
BH	(60°-80°)	1361.5	5.0	B3/2500		G3/2500
BVH	(80°-90°)	117.0	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





REPORT NUMBER: P158949

CATALOG NUMBER: VST-E11-LED-E-U-SLL-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7
2.5°	3556.6	3552.6	3552.6	3552.6	3550.6	3546.5	3552.6	3550.6	3540.5	3534.5	3540.5
5°	3602.8	3604.8	3610.8	3612.8	3612.8	3618.9	3635.0	3637.0	3635.0	3639.0	3649.0
7.5°	3647.0	3657.1	3663.1	3673.1	3685.2	3695.2	3723.4	3751.5	3769.6	3783.6	3787.7
10°	3719.3	3735.4	3753.5	3779.6	3807.8	3858.0	3882.1	3910.2	3928.3	3956.5	3962.5
12.5°	3904.2	3924.3	3936.4	3976.5	4012.7	4060.9	4095.1	4103.1	4145.3	4169.4	4197.6
15°	4215.7	4245.8	4288.0	4312.1	4352.3	4394.5	4424.6	4464.8	4470.8	4503.0	4525.1
17.5°	4597.4	4639.6	4726.0	4784.3	4836.6	4878.8	4939.0	4985.2	4995.3	5031.5	4985.2
20°	5131.9	5234.4	5248.5	5365.0	5411.2	5495.6	5616.2	5638.3	5696.6	5638.3	5604.1
22.5°	5855.3	6016.1	6060.3	6172.8	6229.0	6357.6	6393.8	6512.4	6552.6	6508.4	6415.9
25°	6687.2	6936.3	7064.9	7237.8	7265.9	7529.1	7557.2	7695.9	7621.5	7515.0	7517.1
27.5°	7300.0	7724.0	8055.6	8350.9	8557.9	8855.3	9086.4	9150.7	9080.3	8941.7	8893.5
30°	7649.7	8129.9	8606.1	9014.0	9496.3	9950.4	10422.6	10657.7	10697.9	10770.2	10478.9
32.5°	7874.7	8491.6	9058.2	9562.6	10056.9	10641.6	11274.6	11879.4	12387.8	12771.6	12590.7
35°	8063.6	8825.2	9550.5	10161.4	10746.1	11383.1	12022.1	12735.4	13577.3	14069.6	14172.1
37.5°	8140.0	9070.3	9958.4	10742.1	11563.9	12281.3	12916.2	13551.2	14435.3	15313.4	15584.7
40°	8125.9	9190.9	10201.6	11186.2	12192.9	13089.0	13832.5	14584.0	15618.8	16645.6	17087.7
42.5°	8031.5	9208.9	10356.3	11481.5	12628.9	13820.5	14770.9	15636.9	16629.6	17945.7	18570.6
45°	7912.9	9146.7	10388.4	11632.2	12952.4	14330.8	15532.4	16603.4	17766.9	19066.9	19822.4
47.5°	7752.2	9048.2	10348.3	11684.5	13097.1	14658.4	16070.9	17359.0	18638.9	20135.9	21094.4
50°	7577.3	8907.5	10265.9	11646.3	13133.2	14837.2	16378.4	17845.2	19340.2	20955.7	22167.4
52.5°	7454.8	8756.8	10191.5	11567.9	13097.1	14891.4	16490.9	18106.4	19770.2	21440.0	22886.7
55°	7304.1	8555.9	9992.6	11385.1	12964.5	14861.3	16478.8	18196.9	19888.8	21626.9	23278.6
57.5°	7314.1	8463.5	9823.8	11166.1	12693.2	14582.0	16251.8	18106.4	19701.9	21506.3	23292.6
60°	7631.6	8662.4	9912.2	11210.3	12612.8	14405.2	15866.0	17523.7	19153.3	21090.4	22967.1
62.5°	8286.6	9231.0	10366.3	11652.3	13064.9	14758.8	15691.2	16555.2	18002.0	20324.8	22412.5
65°	9068.3	9920.3	10904.9	12128.6	13711.9	15333.5	15592.7	15767.5	16498.9	18835.8	21371.7
67.5°	9849.9	10611.5	11385.1	12399.8	14079.7	15498.3	15190.8	14774.9	15168.7	17105.8	19326.1
70°	10131.2	11142.0	11650.3	12347.6	13800.4	15114.5	14541.8	13494.9	13631.6	15391.8	17015.4
72.5°	9709.3	11150.0	11318.8	11578.0	12556.6	13792.3	13187.5	11841.2	11813.1	13157.4	14469.5
75°	8144.0	10171.4	10169.4	10073.0	10294.0	10997.3	10683.8	9872.0	10215.6	11274.6	11706.6
77.5°	5805.1	7937.0	8037.5	7388.5	7372.4	7689.9	7878.7	8823.1	10069.0	10663.7	10527.1
80°	3647.0	5355.0	5787.0	4985.2	4814.5	5264.6	6432.0	7806.4	9339.6	9874.0	9413.9
82.5°	2196.2	3450.1	4370.4	3916.3	3876.1	4695.9	5985.9	6520.4	6980.6	7549.2	6779.6
85°	1491.0	2298.7	2989.9	3080.4	3432.0	4280.0	4840.6	4603.5	4615.5	4466.8	4069.0
87.5°	285.3	626.9	1024.8	1249.8	1386.5	1862.7	2025.4	1834.6	1937.0	1416.6	1549.2
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: P158949

CATALOG NUMBER: VST-E11-LED-E-U-SLL-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7
2.5°	3530.5	3530.5	3530.5	3520.4	3522.4	3508.4	3502.3	3502.3	3496.3	3496.3	3494.3
5°	3641.0	3628.9	3635.0	3632.9	3632.9	3612.8	3602.8	3602.8	3576.7	3578.7	3570.7
7.5°	3805.7	3803.7	3809.8	3797.7	3781.6	3765.6	3749.5	3741.4	3705.3	3683.2	3669.1
10°	3992.6	3990.6	3996.6	3994.6	3966.5	3936.4	3892.2	3860.0	3815.8	3781.6	3747.5
12.5°	4197.6	4195.6	4191.5	4173.5	4143.3	4095.1	4038.8	3984.6	3918.3	3874.1	3823.8
15°	4517.1	4511.0	4486.9	4460.8	4428.7	4354.3	4255.8	4177.5	4089.1	4012.7	3930.3
17.5°	4989.3	4939.0	4935.0	4876.7	4790.3	4691.9	4599.4	4468.8	4342.3	4227.7	4115.2
20°	5640.3	5523.8	5491.6	5425.3	5310.8	5208.3	5007.4	4832.5	4659.7	4503.0	4360.3
22.5°	6349.6	6265.2	6186.9	6078.3	5921.6	5772.9	5517.7	5298.7	5077.7	4876.7	4718.0
25°	7340.2	7193.5	7052.9	6880.1	6663.1	6486.2	6194.9	5973.9	5684.5	5501.7	5272.6
27.5°	8620.2	8369.0	8131.9	7983.2	7601.4	7344.3	6972.5	6687.2	6337.6	6090.4	5819.1
30°	10286.0	9994.6	9643.0	9128.6	8674.5	8164.1	7703.9	7338.2	6966.5	6620.9	6307.4
32.5°	12351.6	11837.2	11280.6	10464.8	9719.3	8991.9	8379.1	7929.0	7549.2	7119.2	6677.1
35°	14097.7	13567.3	12777.6	11740.8	10820.5	9988.6	9255.2	8640.3	8144.0	7599.4	7014.7
37.5°	15476.2	14871.4	14129.9	13028.8	12056.2	11109.8	10340.2	9556.6	8905.5	8156.0	7416.6
40°	17055.5	16448.7	15632.9	14491.6	13340.2	12313.4	11411.2	10601.4	9801.7	8887.4	7937.0
42.5°	18432.0	17993.9	17168.1	15988.6	14712.6	13569.3	12582.7	11656.4	10611.5	9588.7	8463.5
45°	19866.6	19420.6	18636.9	17403.2	16046.8	14772.9	13593.4	12596.7	11363.0	10145.3	8857.3
47.5°	21134.6	20676.4	19884.7	18659.0	17218.3	15876.0	14578.0	13372.4	11939.7	10541.2	9114.5
50°	22344.2	21783.6	21058.2	19836.5	18297.3	16862.6	15454.1	13906.9	12387.8	10818.5	9289.3
52.5°	23455.4	22742.1	22054.9	20797.0	19133.2	17634.2	16062.9	14361.0	12663.1	11037.5	9407.9
55°	24086.3	23626.2	22804.3	21568.6	19728.0	18164.7	16448.7	14680.5	12936.3	11192.2	9458.1
57.5°	24281.2	24168.7	23479.5	22014.7	20077.6	18456.1	16709.9	14933.6	13119.2	11236.4	9387.8
60°	24126.5	24331.5	23953.7	22328.1	20236.4	18542.5	16838.5	15114.5	13151.3	11095.7	9174.8
62.5°	23630.2	24096.4	24048.1	22432.6	20154.0	18434.0	16824.5	15022.1	12849.9	10657.7	8696.6
65°	22814.4	23401.1	23608.1	22044.8	19689.8	18038.1	16466.8	14441.3	12012.0	9801.7	7894.8
67.5°	21279.2	22167.4	22368.3	20774.9	18476.2	16943.0	15436.0	13235.7	10460.8	8477.5	6643.0
70°	18202.9	19756.1	20027.4	18355.6	16336.2	14989.9	13711.9	11324.8	8710.6	6799.7	5097.8
72.5°	14531.8	15508.3	16062.9	14911.5	13408.5	12432.0	11463.5	8688.5	6572.7	5017.4	3508.4
75°	11361.0	11302.7	11799.0	11033.5	10149.3	9693.2	8965.8	6062.3	4402.5	3323.5	2220.4
77.5°	9713.3	8965.8	8401.2	7862.7	7338.2	7193.5	6496.3	3761.5	2720.7	1991.3	1328.2
80°	8073.7	6709.3	5678.5	4920.9	4734.1	5019.4	4251.8	2218.3	1611.5	1143.3	833.9
82.5°	5768.9	4826.5	3928.3	3448.1	3128.6	3582.7	2507.7	1231.7	874.1	685.2	552.6
85°	3739.4	3574.7	3536.5	3379.8	2992.0	2825.2	1904.9	1060.9	655.1	426.0	343.6
87.5°	1438.7	1844.6	2127.9	2280.6	2465.5	2196.2	992.6	365.7	359.7	221.0	166.8
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: P158949

CATALOG NUMBER: VST-E11-LED-E-U-SLL-7030

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7
2.5°	3480.2	3472.2	3470.2	3464.2	3460.1	3460.1	3450.1	3267.2	3265.2	3265.2	3263.2
5°	3554.6	3544.5	3534.5	3532.5	3524.4	3524.4	3514.4	3331.5	3331.5	3331.5	3327.5
7.5°	3655.0	3635.0	3622.9	3616.9	3604.8	3610.8	3618.9	3434.0	3436.0	3434.0	3438.0
10°	3727.4	3715.3	3701.3	3697.2	3689.2	3695.2	3707.3	3524.4	3530.5	3532.5	3536.5
12.5°	3797.7	3777.6	3759.5	3753.5	3749.5	3765.6	3779.6	3602.8	3608.8	3614.9	3614.9
15°	3884.1	3850.0	3825.8	3811.8	3803.7	3819.8	3839.9	3665.1	3667.1	3673.1	3671.1
17.5°	4030.8	3980.6	3924.3	3914.3	3888.1	3894.2	3898.2	3703.3	3695.2	3681.2	3657.1
20°	4257.9	4181.5	4105.1	4073.0	4020.8	3998.6	3954.4	3705.3	3655.0	3612.8	3576.7
22.5°	4583.4	4470.8	4388.5	4334.2	4227.7	4153.4	4032.8	3695.2	3600.8	3528.5	3472.2
25°	5109.8	4975.2	4848.6	4712.0	4545.2	4396.5	4219.7	3783.6	3637.0	3512.4	3403.9
27.5°	5622.2	5409.2	5214.3	5009.4	4774.3	4551.2	4302.1	3811.8	3645.0	3484.2	3307.4
30°	6006.0	5696.6	5401.2	5101.8	4794.4	4505.0	4223.7	3715.3	3516.4	3335.6	3148.7
32.5°	6239.1	5837.2	5453.4	5081.7	4720.0	4394.5	4079.0	3548.5	3329.5	3116.5	2917.6
35°	6460.1	5961.8	5485.6	5047.5	4633.6	4271.9	3932.3	3353.6	3092.4	2865.4	2614.2
37.5°	6733.4	6092.4	5505.7	4985.2	4507.0	4093.1	3719.3	3108.5	2847.3	2568.0	2330.9
40°	7060.9	6227.0	5485.6	4860.7	4310.1	3858.0	3462.1	2851.3	2559.9	2288.7	2055.6
42.5°	7372.4	6345.6	5433.3	4693.9	4095.1	3612.8	3227.0	2622.2	2330.9	2053.6	1822.5
45°	7603.5	6446.1	5407.2	4577.3	3930.3	3446.1	3020.1	2437.4	2129.9	1850.6	1615.5
47.5°	7764.2	6506.3	5395.2	4513.0	3815.8	3273.3	2831.2	2252.5	1929.0	1647.7	1418.6
50°	7848.6	6504.3	5365.0	4442.7	3647.0	3066.3	2636.3	2065.6	1744.1	1468.9	1259.9
52.5°	7870.7	6468.2	5300.7	4314.1	3442.1	2859.3	2427.3	1870.7	1581.4	1318.1	1107.2
55°	7820.5	6379.8	5166.1	4099.1	3223.0	2640.3	2236.4	1718.0	1422.6	1173.5	1008.7
57.5°	7677.8	6223.0	4912.9	3803.7	2992.0	2437.4	2017.4	1533.1	1249.8	1040.9	904.2
60°	7412.6	5891.5	4517.1	3454.1	2698.6	2127.9	1716.0	1292.0	1067.0	910.2	799.7
62.5°	6922.3	5371.0	3960.5	2971.9	2276.6	1726.0	1370.4	1030.8	862.0	759.5	691.2
65°	6132.6	4587.4	3315.5	2340.9	1730.1	1255.9	1018.8	775.6	653.0	590.8	570.7
67.5°	5005.3	3542.5	2411.2	1625.6	1171.5	880.1	709.3	566.6	508.4	484.3	476.2
70°	3639.0	2413.3	1561.3	1026.8	773.6	614.9	536.5	456.1	424.0	417.9	417.9
72.5°	2284.7	1466.8	956.5	703.3	586.7	498.3	458.1	401.9	389.8	385.8	379.8
75°	1340.3	890.2	677.2	576.7	502.3	446.1	411.9	365.7	357.7	355.7	349.6
77.5°	854.0	641.0	546.5	492.3	454.1	403.9	373.7	325.5	323.5	321.5	319.5
80°	612.9	532.5	478.2	436.0	397.9	351.6	333.6	295.4	291.4	289.3	293.4
82.5°	464.2	440.1	417.9	385.8	333.6	299.4	285.3	259.2	261.2	251.2	249.2
85°	319.5	315.5	313.5	299.4	261.2	231.1	221.0	207.0	217.0	207.0	194.9
87.5°	156.7	154.7	142.7	168.8	156.7	124.6	112.5	124.6	138.6	134.6	124.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P158949

CATALOG NUMBER: VST-E11-LED-E-U-SLL-7030

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7
2.5°	3255.2	3247.1	3253.2	3249.2	3249.2	3247.1	3251.2	3245.1	3241.1	3245.1	3247.1
5°	3319.5	3309.4	3311.4	3297.4	3303.4	3289.3	3293.4	3283.3	3273.3	3269.2	3269.2
7.5°	3428.0	3417.9	3405.9	3403.9	3381.8	3373.7	3359.7	3351.6	3345.6	3331.5	3323.5
10°	3526.4	3510.4	3496.3	3494.3	3472.2	3452.1	3434.0	3417.9	3407.9	3387.8	3377.8
12.5°	3606.8	3590.7	3568.6	3556.6	3534.5	3510.4	3498.3	3474.2	3460.1	3438.0	3419.9
15°	3653.0	3624.9	3592.8	3570.7	3538.5	3512.4	3494.3	3476.2	3462.1	3434.0	3407.9
17.5°	3630.9	3584.7	3540.5	3500.3	3456.1	3432.0	3405.9	3383.8	3379.8	3347.6	3307.4
20°	3538.5	3484.2	3426.0	3371.7	3313.5	3279.3	3247.1	3213.0	3202.9	3164.8	3112.5
22.5°	3426.0	3363.7	3297.4	3231.1	3156.7	3108.5	3060.3	3018.1	2983.9	2927.7	2853.3
25°	3311.4	3219.0	3122.6	3038.2	2951.8	2891.5	2841.3	2795.0	2754.8	2664.4	2588.1
27.5°	3160.7	3016.1	2917.6	2821.2	2716.7	2638.3	2582.0	2517.7	2473.5	2369.0	2288.7
30°	2967.8	2823.2	2682.5	2586.1	2481.6	2397.2	2324.8	2232.4	2168.1	2091.8	2017.4
32.5°	2724.7	2580.0	2437.4	2328.9	2242.5	2138.0	2047.5	1959.1	1884.8	1810.4	1752.2
35°	2429.3	2288.7	2154.0	2045.5	1949.1	1866.7	1780.3	1703.9	1619.6	1539.2	1505.0
37.5°	2117.9	1967.2	1818.5	1724.0	1647.7	1589.4	1509.0	1446.7	1370.4	1322.2	1282.0
40°	1846.6	1685.9	1545.2	1464.8	1404.6	1338.2	1271.9	1223.7	1169.5	1121.2	1091.1
42.5°	1617.5	1466.8	1346.3	1278.0	1205.6	1133.3	1083.1	1042.9	1008.7	972.5	936.4
45°	1406.6	1261.9	1161.4	1077.0	1016.7	958.5	924.3	906.2	886.1	864.0	839.9
47.5°	1229.7	1105.2	1006.7	928.3	866.0	825.9	809.8	803.7	795.7	777.6	765.6
50°	1095.1	992.6	892.2	821.8	769.6	749.5	731.4	725.4	715.3	709.3	701.3
52.5°	982.6	874.1	789.7	725.4	693.2	685.2	677.2	669.1	667.1	663.1	659.1
55°	890.2	795.7	717.3	669.1	653.0	647.0	645.0	637.0	635.0	635.0	628.9
57.5°	807.8	727.4	657.1	626.9	616.9	610.8	606.8	602.8	602.8	606.8	604.8
60°	723.4	655.1	612.9	596.8	590.8	580.7	570.7	566.6	568.7	578.7	578.7
62.5°	641.0	590.8	564.6	558.6	552.6	544.5	532.5	528.5	532.5	544.5	550.6
65°	550.6	528.5	520.4	516.4	512.4	506.4	498.3	494.3	496.3	502.3	510.4
67.5°	468.2	466.2	466.2	468.2	466.2	464.2	460.1	454.1	452.1	452.1	456.1
70°	417.9	417.9	424.0	424.0	422.0	422.0	415.9	409.9	405.9	401.9	403.9
72.5°	379.8	379.8	381.8	383.8	381.8	381.8	373.7	369.7	359.7	357.7	353.6
75°	347.6	343.6	343.6	341.6	339.6	341.6	333.6	323.5	319.5	317.5	313.5
77.5°	315.5	307.4	303.4	299.4	301.4	299.4	293.4	287.3	281.3	279.3	277.3
80°	279.3	267.2	261.2	251.2	257.2	259.2	255.2	249.2	247.2	245.1	243.1
82.5°	231.1	219.0	211.0	205.0	200.9	205.0	211.0	225.0	221.0	219.0	215.0
85°	180.8	160.7	150.7	152.7	142.7	144.7	162.8	170.8	170.8	174.8	170.8
87.5°	102.5	98.5	74.3	68.3	72.3	86.4	96.4	106.5	106.5	100.5	112.5
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: P158949

CATALOG NUMBER: VST-E11-LED-E-U-SLL-7030

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7
2.5°	3247.1	3251.2	3253.2	3261.2	3265.2	3267.2	3269.2	3273.3	3275.3	3273.3	3283.3
5°	3263.2	3263.2	3259.2	3265.2	3267.2	3267.2	3263.2	3267.2	3267.2	3267.2	3277.3
7.5°	3305.4	3293.4	3287.3	3279.3	3273.3	3265.2	3255.2	3255.2	3253.2	3255.2	3261.2
10°	3349.6	3331.5	3309.4	3289.3	3271.3	3257.2	3239.1	3233.1	3231.1	3229.1	3245.1
12.5°	3383.8	3351.6	3317.5	3283.3	3247.1	3223.0	3192.9	3174.8	3172.8	3172.8	3192.9
15°	3359.7	3307.4	3241.1	3180.8	3148.7	3114.5	3080.4	3058.3	3056.3	3060.3	3072.3
17.5°	3239.1	3154.7	3096.4	3038.2	2996.0	2967.8	2945.7	2941.7	2949.8	2941.7	2957.8
20°	3034.1	2943.7	2903.5	2857.3	2841.3	2821.2	2789.0	2760.9	2760.9	2724.7	2734.8
22.5°	2768.9	2718.7	2666.4	2630.3	2618.2	2584.1	2549.9	2511.7	2507.7	2463.5	2457.5
25°	2491.6	2441.4	2399.2	2391.2	2355.0	2308.8	2276.6	2232.4	2222.4	2178.2	2172.1
27.5°	2208.3	2168.1	2125.9	2101.8	2081.7	2031.5	2003.3	1951.1	1931.0	1882.8	1876.8
30°	1939.0	1910.9	1860.7	1840.6	1802.4	1744.1	1683.9	1651.7	1635.6	1585.4	1569.3
32.5°	1685.9	1641.7	1603.5	1579.4	1531.1	1464.8	1410.6	1364.4	1334.2	1273.9	1257.9
35°	1444.7	1400.5	1382.4	1320.2	1278.0	1233.8	1159.4	1131.3	1077.0	1030.8	1014.7
37.5°	1231.7	1189.5	1165.4	1113.2	1071.0	1026.8	982.6	946.4	920.3	910.2	910.2
40°	1048.9	1026.8	996.6	958.5	930.3	898.2	874.1	862.0	860.0	864.0	874.1
42.5°	918.3	894.2	874.1	854.0	833.9	829.9	823.8	831.9	841.9	852.0	862.0
45°	819.8	799.7	787.7	779.6	777.6	783.7	795.7	807.8	825.9	837.9	845.9
47.5°	749.5	733.4	729.4	727.4	737.4	755.5	771.6	789.7	803.7	815.8	823.8
50°	689.2	675.1	673.1	671.1	685.2	701.3	715.3	739.4	749.5	757.5	763.6
52.5°	647.0	635.0	628.9	630.9	645.0	659.1	679.2	697.3	711.3	717.3	723.4
55°	612.9	608.8	594.8	600.8	614.9	633.0	653.0	673.1	687.2	697.3	707.3
57.5°	586.7	576.7	566.6	576.7	590.8	608.8	633.0	651.0	669.1	683.2	693.2
60°	558.6	550.6	542.5	552.6	566.6	584.7	602.8	626.9	649.0	663.1	673.1
62.5°	534.5	528.5	520.4	522.4	528.5	540.5	550.6	572.7	592.8	610.8	622.9
65°	500.3	498.3	486.3	488.3	492.3	504.4	512.4	532.5	552.6	568.7	578.7
67.5°	450.1	446.1	446.1	452.1	454.1	460.1	466.2	486.3	502.3	514.4	526.5
70°	399.9	397.9	397.9	401.9	399.9	405.9	413.9	432.0	452.1	464.2	476.2
72.5°	351.6	351.6	349.6	353.6	353.6	355.7	365.7	381.8	399.9	409.9	417.9
75°	309.4	307.4	307.4	307.4	309.4	309.4	319.5	333.6	351.6	357.7	369.7
77.5°	271.3	271.3	271.3	271.3	273.3	271.3	277.3	287.3	293.4	303.4	303.4
80°	239.1	237.1	239.1	241.1	241.1	239.1	239.1	241.1	243.1	243.1	243.1
82.5°	211.0	205.0	209.0	219.0	219.0	219.0	217.0	202.9	192.9	192.9	196.9
85°	168.8	168.8	170.8	184.9	186.9	178.8	186.9	166.8	146.7	140.7	144.7
87.5°	104.5	82.4	100.5	114.5	114.5	108.5	120.6	112.5	94.4	76.4	72.3
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: P158949
CATALOG NUMBER: VST-E11-LED-E-U-SLL-7030

REPORT N
CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	0°
2.5°	3291.3	3293.4	3305.4	3311.4	3311.4	3319.5	3323.5	3335.6	3333.5	3333.5	3337.6	2.5°
5°	3287.3	3293.4	3305.4	3313.5	3317.5	3327.5	3335.6	3349.6	3347.6	3351.6	3353.6	5°
7.5°	3273.3	3289.3	3301.4	3317.5	3331.5	3339.6	3349.6	3361.7	3357.7	3359.7	3357.7	7.5°
10°	3261.2	3277.3	3301.4	3323.5	3343.6	3355.6	3361.7	3375.7	3373.7	3377.8	3377.8	10°
12.5°	3213.0	3241.1	3271.3	3305.4	3335.6	3367.7	3387.8	3417.9	3432.0	3450.1	3470.2	12.5°
15°	3090.4	3122.6	3170.8	3209.0	3267.2	3311.4	3369.7	3428.0	3480.2	3530.5	3588.7	15°
17.5°	2969.8	2983.9	3022.1	3074.3	3126.6	3192.9	3263.2	3367.7	3462.1	3564.6	3677.1	17.5°
20°	2746.8	2770.9	2797.0	2859.3	2921.6	3016.1	3102.5	3239.1	3377.8	3538.5	3711.3	20°
22.5°	2471.5	2495.6	2523.8	2594.1	2670.5	2766.9	2871.4	3024.1	3209.0	3417.9	3649.0	22.5°
25°	2174.1	2188.2	2210.3	2280.6	2326.9	2453.4	2580.0	2738.8	2939.7	3209.0	3478.2	25°
27.5°	1846.6	1872.7	1890.8	1923.0	2029.5	2138.0	2270.6	2441.4	2684.5	2959.8	3285.3	27.5°
30°	1533.1	1555.3	1545.2	1613.5	1683.9	1798.4	1941.1	2129.9	2363.0	2690.5	3066.3	30°
32.5°	1225.7	1241.8	1235.8	1284.0	1354.3	1468.9	1603.5	1808.4	2055.6	2405.2	2813.1	32.5°
35°	1010.7	1014.7	1036.8	1058.9	1119.2	1211.7	1326.2	1505.0	1758.2	2079.7	2511.7	35°
37.5°	910.2	918.3	932.3	962.5	1006.7	1073.0	1167.4	1306.1	1523.1	1806.4	2192.2	37.5°
40°	880.1	886.1	894.2	914.3	956.5	1014.7	1099.1	1215.7	1374.4	1613.5	1927.0	40°
42.5°	866.0	866.0	866.0	878.1	910.2	972.5	1069.0	1183.5	1322.2	1503.0	1756.2	42.5°
45°	845.9	845.9	843.9	850.0	872.1	934.4	1038.8	1167.4	1316.1	1488.9	1708.0	45°
47.5°	823.8	821.8	815.8	815.8	829.9	892.2	1000.7	1139.3	1302.1	1501.0	1736.1	47.5°
50°	763.6	763.6	763.6	769.6	781.6	837.9	954.5	1101.1	1288.0	1509.0	1780.3	50°
52.5°	729.4	731.4	737.4	737.4	749.5	807.8	930.3	1093.1	1296.0	1539.2	1836.6	52.5°
55°	713.3	719.4	725.4	725.4	735.4	795.7	922.3	1099.1	1326.2	1601.5	1933.0	55°
57.5°	699.3	705.3	709.3	709.3	717.3	769.6	900.2	1089.1	1344.3	1661.7	2051.6	57.5°
60°	673.1	677.2	679.2	679.2	681.2	725.4	850.0	1040.9	1304.1	1657.7	2115.9	60°
62.5°	624.9	633.0	635.0	637.0	637.0	679.2	785.7	962.5	1217.7	1597.4	2097.8	62.5°
65°	588.7	592.8	598.8	602.8	610.8	639.0	723.4	868.0	1105.2	1476.9	1997.3	65°
67.5°	532.5	538.5	544.5	552.6	560.6	578.7	645.0	761.6	952.4	1271.9	1772.3	67.5°
70°	482.2	484.3	490.3	500.3	502.3	512.4	560.6	641.0	779.6	1020.8	1426.7	70°
72.5°	420.0	424.0	432.0	444.1	444.1	452.1	480.2	522.4	610.8	779.6	1052.9	72.5°
75°	365.7	369.7	375.8	375.8	365.7	367.7	387.8	417.9	484.3	586.7	767.6	75°
77.5°	303.4	311.5	317.5	305.4	301.4	307.4	317.5	339.6	387.8	466.2	576.7	77.5°
80°	251.2	255.2	257.2	259.2	255.2	261.2	269.3	283.3	315.5	375.8	456.1	80°
82.5°	200.9	205.0	211.0	219.0	219.0	241.1	243.1	243.1	261.2	299.4	357.7	82.5°
85°	148.7	156.7	164.8	174.8	176.8	188.9	182.9	180.8	186.9	223.0	247.2	85°
87.5°	76.4	82.4	86.4	94.4	84.4	88.4	88.4	82.4	72.3	90.4	100.5	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: P158949

NUMBER: VST-E11-LED-E-U-SLL-7030

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
3357.7	3357.7	3357.7	3357.7	3357.7	3357.7	3357.7
3341.6	3337.6	3341.6	3341.6	3347.6	3343.6	3556.6
3357.7	3353.6	3357.7	3361.7	3367.7	3367.7	3602.8
3359.7	3359.7	3355.6	3365.7	3373.7	3381.8	3647.0
3383.8	3383.8	3387.8	3389.8	3407.9	3428.0	3719.3
3482.2	3492.3	3510.4	3516.4	3548.5	3570.7	3904.2
3632.9	3689.2	3725.4	3737.4	3765.6	3807.8	4215.7
3785.7	3880.1	3978.6	4038.8	4075.0	4125.2	4597.4
3900.2	4077.0	4245.8	4396.5	4482.9	4581.4	5131.9
3910.2	4191.5	4476.9	4756.2	4987.3	5170.1	5855.3
3813.8	4183.5	4577.3	5005.3	5403.2	5732.7	6687.2
3691.2	4145.3	4647.7	5194.2	5716.7	6202.9	7300.0
3536.5	4081.0	4659.7	5274.6	5887.5	6472.2	7649.7
3301.4	3890.1	4515.1	5194.2	5905.5	6616.9	7874.7
3000.0	3600.8	4241.8	5015.4	5821.1	6675.1	8063.6
2692.6	3285.3	3974.5	4776.3	5686.5	6665.1	8140.0
2367.0	2955.8	3661.1	4521.1	5503.7	6572.7	8125.9
2146.0	2682.5	3373.7	4261.9	5300.7	6450.1	8031.5
2017.4	2487.6	3146.7	4024.8	5115.9	6303.4	7912.9
2015.4	2429.3	3026.1	3856.0	4929.0	6140.6	7752.2
2085.7	2465.5	3012.0	3783.6	4826.5	6022.1	7577.3
2168.1	2566.0	3086.4	3809.8	4824.5	5969.8	7454.8
2298.7	2736.8	3249.2	3922.3	4876.7	5961.8	7304.1
2465.5	2967.8	3542.5	4199.6	5079.7	6120.5	7314.1
2636.3	3239.1	3926.3	4673.8	5479.6	6490.3	7631.6
2698.6	3448.1	4316.1	5230.4	6078.3	7044.9	8286.6
2644.3	3496.3	4553.2	5662.4	6661.1	7693.9	9068.3
2443.4	3301.4	4456.8	5785.0	6996.6	8154.0	9849.9
2011.4	2817.1	4018.7	5509.7	6970.5	8248.5	10131.2
1474.9	2184.2	3267.2	4681.8	6196.9	7657.7	9709.3
1065.0	1545.2	2359.0	3526.4	4898.8	6166.8	8144.0
763.6	1071.0	1531.1	2316.8	3337.6	4294.0	5805.1
548.6	727.4	954.5	1390.5	2033.5	2636.3	3647.0
403.9	498.3	626.9	864.0	1197.6	1535.2	2196.2
275.3	293.4	377.8	510.4	785.7	1129.3	1491.0
104.5	118.6	138.6	209.0	351.6	403.9	285.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)