

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: P158946

Luminaire Tested: **VST-F10-LED-E-U-SLL-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158946
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-F10-LED-E-U-SLL-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (70) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22763.3 lumens
Efficiency: N/A
Efficacy: 88.0 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

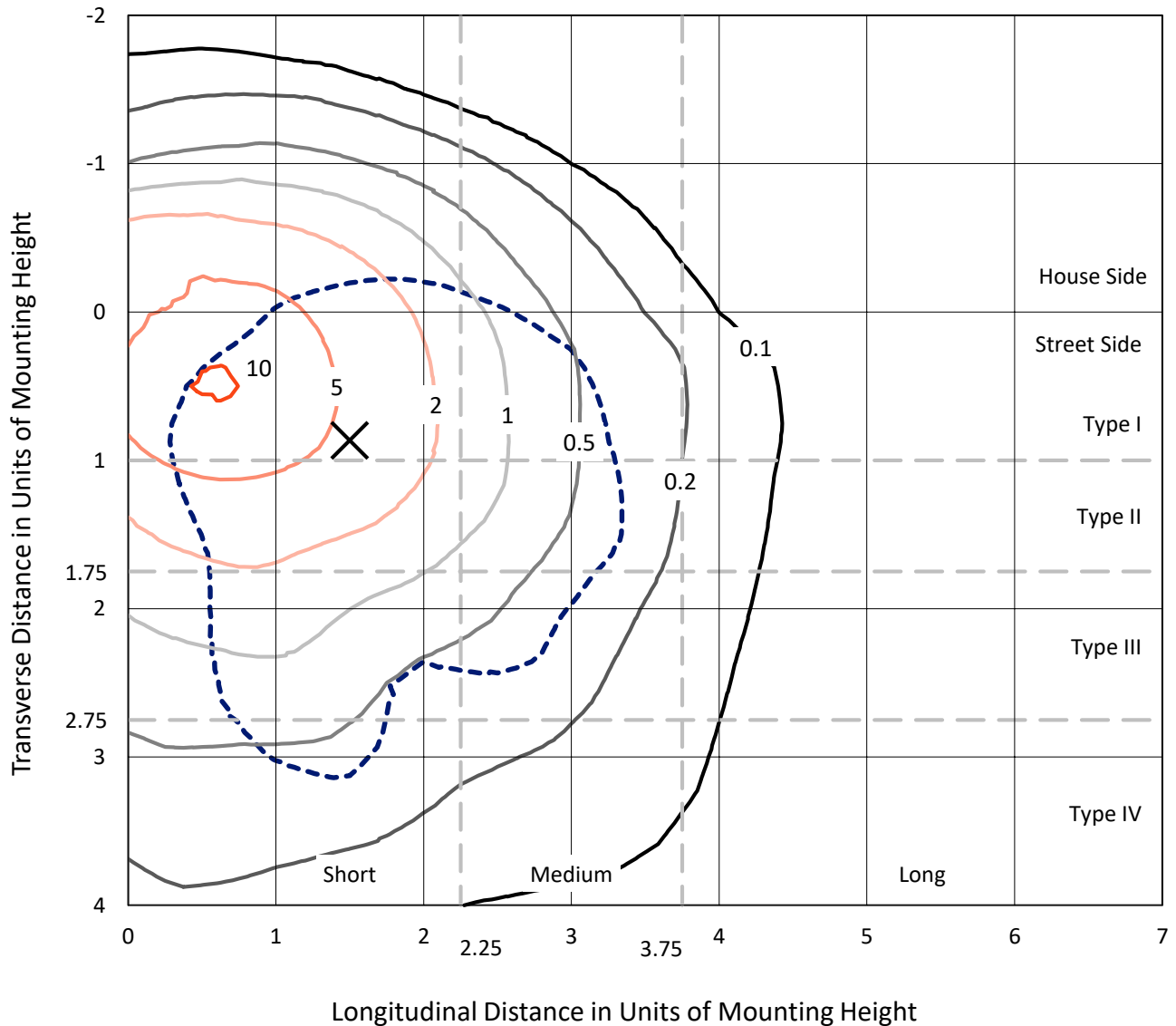
Input Watts (W): 258.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P158946
 CATALOG NUMBER: VST-F10-LED-E-U-SLL-7050

Iso-Footcandle Lines of Horizontal Illumination

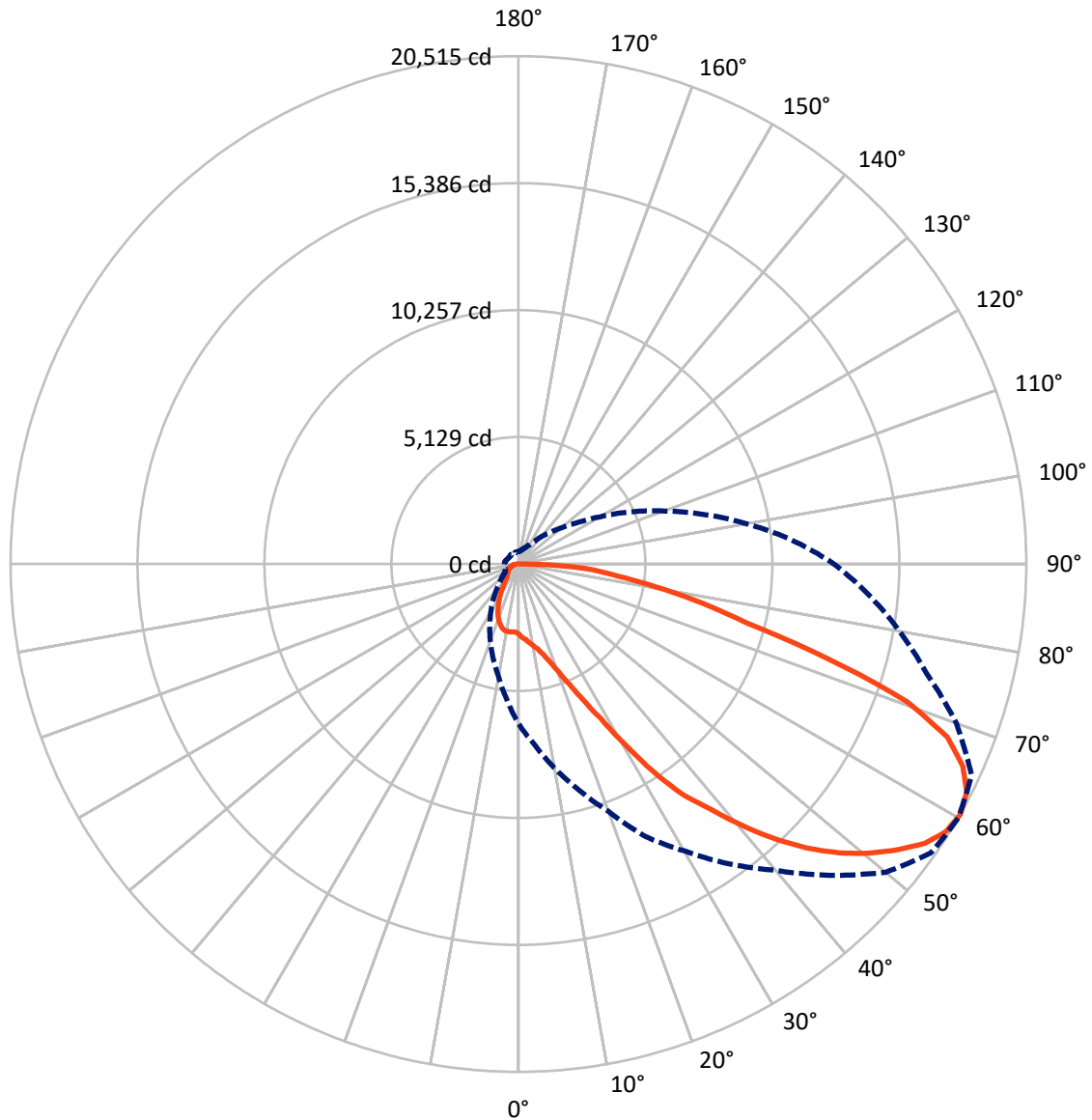
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.4 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P158946
CATALOG NUMBER: VST-F10-LED-E-U-SLL-7050

Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: P158946

CATALOG NUMBER: VST-F10-LED-E-U-SLL-7050

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5125.6	0.0	5125.6
	% Fixture	22.5	0.0	22.5
Street Side	Lumens	17637.7	0.0	17637.7
	% Fixture	77.5	0.0	77.5
Total	Lumens	22763.3	0.0	22763.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.3	1.2
10°-20°	901.8	4.0
20°-30°	1711.2	7.5
30°-40°	2694.8	11.8
40°-50°	3761.3	16.5
50°-60°	4651.9	20.4
60°-70°	4821.9	21.2
70°-80°	3034.1	13.3
80°-90°	907.0	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°	22763.3	100.0
0°-180°	22763.3	100.0



REPORT NUMBER: P158946

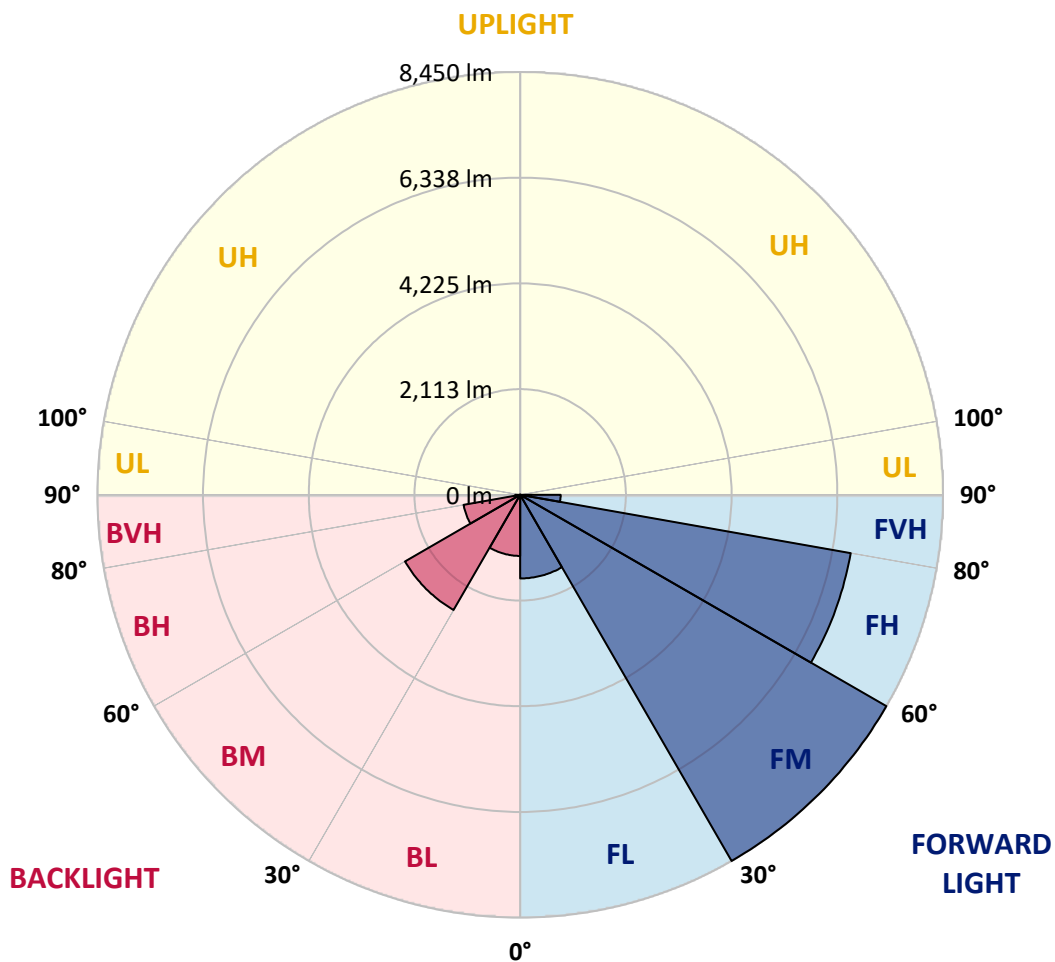
CATALOG NUMBER: VST-F10-LED-E-U-SLL-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1671.2	7.3			
FM	(30°-60°)	8450.1	37.1			
FH	(60°-80°)	6708.1	29.5			G3/7500
FVH	(80°-90°)	808.3	3.6			G5
BL	(0°-30°)	1221.1	5.4	B3/2500		
BM	(30°-60°)	2657.9	11.7	B3/5000		
BH	(60°-80°)	1147.9	5.0	B3/2500		G3/2500
BVH	(80°-90°)	98.7	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





REPORT NUMBER: P158946

CATALOG NUMBER: VST-F10-LED-E-U-SLL-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9
2.5°	2998.6	2995.3	2995.3	2995.3	2993.6	2990.2	2995.3	2993.6	2985.1	2980.0	2985.1
5°	3037.6	3039.3	3044.4	3046.1	3046.1	3051.2	3064.7	3066.4	3064.7	3068.1	3076.6
7.5°	3074.9	3083.4	3088.4	3096.9	3107.1	3115.5	3139.3	3163.0	3178.2	3190.1	3193.5
10°	3135.9	3149.4	3164.7	3186.7	3210.4	3252.8	3273.1	3296.8	3312.1	3335.8	3340.9
12.5°	3291.7	3308.7	3318.8	3352.7	3383.2	3423.9	3452.7	3459.5	3495.0	3515.4	3539.1
15°	3554.3	3579.7	3615.3	3635.6	3669.5	3705.1	3730.5	3764.4	3769.5	3796.6	3815.2
17.5°	3876.2	3911.8	3984.6	4033.8	4077.8	4113.4	4164.2	4203.2	4211.7	4242.2	4203.2
20°	4326.9	4413.3	4425.1	4523.4	4562.3	4633.5	4735.2	4753.8	4802.9	4753.8	4725.0
22.5°	4936.8	5072.3	5109.6	5204.4	5251.9	5360.3	5390.8	5490.7	5524.6	5487.4	5409.4
25°	5638.1	5848.2	5956.6	6102.3	6126.1	6348.0	6371.7	6488.6	6425.9	6336.1	6337.8
27.5°	6154.9	6512.3	6791.9	7040.9	7215.4	7466.1	7661.0	7715.2	7655.9	7539.0	7498.3
30°	6449.6	6854.5	7256.0	7600.0	8006.6	8389.4	8787.6	8985.8	9019.7	9080.7	8835.0
32.5°	6639.4	7159.5	7637.2	8062.5	8479.2	8972.2	9505.9	10015.8	10444.4	10768.0	10615.6
35°	6798.6	7440.7	8052.3	8567.3	9060.3	9597.4	10136.1	10737.5	11447.4	11862.4	11948.8
37.5°	6863.0	7647.4	8396.2	9056.9	9749.8	10354.7	10890.0	11425.4	12170.8	12911.1	13139.8
40°	6851.1	7749.0	8601.2	9431.3	10280.1	11035.7	11662.5	12296.1	13168.6	14034.3	14407.1
42.5°	6771.5	7764.3	8731.7	9680.4	10647.7	11652.4	12453.7	13183.9	14020.8	15130.5	15657.3
45°	6671.6	7711.8	8758.8	9807.4	10920.5	12082.7	13095.8	13998.8	14979.7	16075.8	16712.8
47.5°	6536.0	7628.8	8724.9	9851.5	11042.5	12358.8	13549.8	14635.8	15714.9	16977.1	17785.2
50°	6388.6	7510.2	8655.4	9819.3	11073.0	12509.6	13809.0	15045.8	16306.2	17668.3	18689.9
52.5°	6285.3	7383.1	8592.7	9753.2	11042.5	12555.4	13903.9	15266.0	16668.8	18076.6	19296.4
55°	6158.2	7213.7	8425.0	9599.1	10930.7	12529.9	13893.7	15342.2	16768.7	18234.1	19626.7
57.5°	6166.7	7135.8	8282.7	9414.4	10702.0	12294.5	13702.3	15266.0	16611.2	18132.5	19638.6
60°	6434.4	7303.5	8357.2	9451.7	10634.2	12145.4	13377.0	14774.7	16148.6	17781.8	19364.1
62.5°	6986.7	7782.9	8740.1	9824.4	11015.4	12443.5	13229.6	13958.1	15177.9	17136.3	18896.6
65°	7645.7	8364.0	9194.2	10225.9	11560.9	12928.1	13146.6	13294.0	13910.7	15881.0	18019.0
67.5°	8304.7	8946.8	9599.1	10454.6	11870.9	13067.0	12807.8	12457.1	12789.1	14422.3	16294.3
70°	8541.9	9394.1	9822.7	10410.6	11635.4	12743.4	12260.6	11377.9	11493.1	12977.2	14346.1
72.5°	8186.1	9400.8	9543.2	9761.7	10586.8	11628.7	11118.7	9983.6	9959.9	11093.3	12199.6
75°	6866.4	8575.8	8574.1	8492.8	8679.1	9272.1	9007.8	8323.4	8613.1	9505.9	9870.1
77.5°	4894.4	6691.9	6776.6	6229.4	6215.8	6483.5	6642.8	7439.0	8489.4	8990.9	8875.7
80°	3074.9	4514.9	4879.2	4203.2	4059.2	4438.7	5423.0	6581.8	7874.4	8325.1	7937.1
82.5°	1851.7	2908.9	3684.8	3301.9	3268.0	3959.2	5046.9	5497.5	5885.5	6364.9	5716.1
85°	1257.1	1938.1	2520.9	2597.1	2893.6	3608.5	4081.2	3881.3	3891.5	3766.1	3430.7
87.5°	240.6	528.6	864.0	1053.8	1169.0	1570.5	1707.7	1546.8	1633.2	1194.4	1306.2
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: P158946

CATALOG NUMBER: VST-F10-LED-E-U-SLL-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9
2.5°	2976.6	2976.6	2976.6	2968.2	2969.8	2958.0	2952.9	2952.9	2947.8	2947.8	2946.1
5°	3069.8	3059.6	3064.7	3063.0	3063.0	3046.1	3037.6	3037.6	3015.6	3017.3	3010.5
7.5°	3208.7	3207.0	3212.1	3201.9	3188.4	3174.8	3161.3	3154.5	3124.0	3105.4	3093.5
10°	3366.3	3364.6	3369.7	3368.0	3344.3	3318.8	3281.6	3254.5	3217.2	3188.4	3159.6
12.5°	3539.1	3537.4	3534.0	3518.8	3493.3	3452.7	3405.2	3359.5	3303.6	3266.3	3224.0
15°	3808.5	3803.4	3783.0	3761.0	3733.9	3671.2	3588.2	3522.1	3447.6	3383.2	3313.8
17.5°	4206.6	4164.2	4160.8	4111.7	4038.9	3955.8	3877.9	3767.8	3661.1	3564.5	3469.6
20°	4755.5	4657.2	4630.1	4574.2	4477.6	4391.2	4221.8	4074.4	3928.7	3796.6	3676.3
22.5°	5353.5	5282.4	5216.3	5124.8	4992.7	4867.3	4652.1	4467.5	4281.1	4111.7	3977.9
25°	6188.7	6065.1	5946.5	5800.8	5617.8	5468.7	5223.1	5036.7	4792.8	4638.6	4445.5
27.5°	7267.9	7056.1	6856.2	6730.9	6409.0	6192.1	5878.7	5638.1	5343.4	5135.0	4906.3
30°	8672.4	8426.7	8130.2	7696.5	7313.7	6883.3	6495.4	6187.0	5873.6	5582.2	5317.9
32.5°	10413.9	9980.2	9511.0	8823.1	8194.6	7581.3	7064.6	6685.1	6364.9	6002.4	5629.7
35°	11886.2	11438.9	10773.1	9898.9	9123.0	8421.6	7803.3	7284.9	6866.4	6407.3	5914.3
37.5°	13048.4	12538.4	11913.3	10984.9	10164.9	9367.0	8718.1	8057.4	7508.5	6876.6	6253.1
40°	14380.0	13868.3	13180.5	12218.2	11247.5	10381.8	9621.1	8938.3	8264.1	7493.2	6691.9
42.5°	15540.4	15171.1	14474.8	13480.4	12404.6	11440.6	10608.8	9827.8	8946.8	8084.5	7135.8
45°	16750.1	16374.0	15713.3	14673.0	13529.5	12455.4	11460.9	10620.6	9580.4	8553.8	7467.8
47.5°	17819.1	17432.8	16765.3	15731.9	14517.2	13385.5	12291.1	11274.6	10066.6	8887.5	7684.7
50°	18839.0	18366.3	17754.7	16724.7	15426.9	14217.3	13029.7	11725.2	10444.4	9121.3	7832.1
52.5°	19775.8	19174.4	18595.0	17534.5	16131.7	14867.9	13543.0	12108.1	10676.5	9306.0	7932.0
55°	20307.8	19919.8	19226.9	18185.0	16633.2	15315.1	13868.3	12377.5	10906.9	9436.4	7974.4
57.5°	20472.1	20377.3	19796.2	18561.1	16928.0	15560.8	14088.6	12590.9	11061.1	9473.7	7915.1
60°	20341.7	20514.5	20196.0	18825.4	17061.8	15633.6	14197.0	12743.4	11088.2	9355.1	7735.5
62.5°	19923.2	20316.3	20275.6	18913.5	16992.3	15542.1	14185.1	12665.5	10834.1	8985.8	7332.3
65°	19235.4	19730.1	19904.6	18586.5	16601.0	15208.4	13883.6	12175.9	10127.6	8264.1	6656.3
67.5°	17941.1	18689.9	18859.3	17515.8	15577.7	14285.1	13014.5	11159.4	8819.8	7147.6	5600.9
70°	15347.3	16656.9	16885.6	15476.1	13773.4	12638.4	11560.9	9548.2	7344.1	5733.0	4298.1
72.5°	12252.1	13075.5	13543.0	12572.3	11305.1	10481.7	9665.1	7325.5	5541.6	4230.3	2958.0
75°	9578.7	9529.6	9948.1	9302.6	8557.2	8172.6	7559.3	5111.3	3711.9	2802.1	1872.0
77.5°	8189.5	7559.3	7083.2	6629.2	6187.0	6065.1	5477.2	3171.5	2293.9	1678.9	1119.8
80°	6807.1	5656.8	4787.7	4149.0	3991.4	4232.0	3584.8	1870.3	1358.7	964.0	703.1
82.5°	4863.9	4069.4	3312.1	2907.2	2637.8	3020.7	2114.3	1038.5	737.0	577.7	465.9
85°	3152.8	3013.9	2981.7	2849.6	2522.6	2382.0	1606.1	894.5	552.3	359.2	289.7
87.5°	1213.0	1555.2	1794.1	1922.9	2078.7	1851.7	836.9	308.3	303.3	186.4	140.6
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: P158946

CATALOG NUMBER: VST-F10-LED-E-U-SLL-7050

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9
2.5°	2934.3	2927.5	2925.8	2920.7	2917.3	2917.3	2908.9	2754.7	2753.0	2753.0	2751.3
5°	2997.0	2988.5	2980.0	2978.3	2971.5	2971.5	2963.1	2808.9	2808.9	2808.9	2805.5
7.5°	3081.7	3064.7	3054.6	3049.5	3039.3	3044.4	3051.2	2895.3	2897.0	2895.3	2898.7
10°	3142.7	3132.5	3120.6	3117.2	3110.5	3115.5	3125.7	2971.5	2976.6	2978.3	2981.7
12.5°	3201.9	3185.0	3169.8	3164.7	3161.3	3174.8	3186.7	3037.6	3042.7	3047.8	3047.8
15°	3274.8	3246.0	3225.7	3213.8	3207.0	3220.6	3237.5	3090.1	3091.8	3096.9	3095.2
17.5°	3398.5	3356.1	3308.7	3300.2	3278.2	3283.3	3286.7	3122.3	3115.5	3103.7	3083.4
20°	3589.9	3525.5	3461.2	3434.0	3390.0	3371.4	3334.1	3124.0	3081.7	3046.1	3015.6
22.5°	3864.4	3769.5	3700.0	3654.3	3564.5	3501.8	3400.2	3115.5	3035.9	2974.9	2927.5
25°	4308.2	4194.7	4088.0	3972.8	3832.2	3706.8	3557.7	3190.1	3066.4	2961.4	2869.9
27.5°	4740.2	4560.7	4396.3	4223.5	4025.3	3837.3	3627.2	3213.8	3073.2	2937.7	2788.6
30°	5063.8	4802.9	4553.9	4301.4	4042.2	3798.3	3561.1	3132.5	2964.8	2812.3	2654.7
32.5°	5260.3	4921.5	4597.9	4284.5	3979.6	3705.1	3439.1	2991.9	2807.2	2627.6	2459.9
35°	5446.7	5026.5	4625.0	4255.7	3906.7	3601.8	3315.5	2827.5	2607.3	2415.9	2204.1
37.5°	5677.1	5136.7	4642.0	4203.2	3800.0	3451.0	3135.9	2620.9	2400.6	2165.1	1965.2
40°	5953.2	5250.2	4625.0	4098.2	3634.0	3252.8	2919.0	2404.0	2158.3	1929.6	1733.1
42.5°	6215.8	5350.1	4581.0	3957.5	3452.7	3046.1	2720.8	2210.9	1965.2	1731.4	1536.6
45°	6410.7	5434.8	4559.0	3859.3	3313.8	2905.5	2546.3	2055.0	1795.8	1560.3	1362.1
47.5°	6546.2	5485.7	4548.8	3805.1	3217.2	2759.8	2387.1	1899.1	1626.4	1389.2	1196.1
50°	6617.4	5484.0	4523.4	3745.8	3074.9	2585.3	2222.7	1741.6	1470.5	1238.4	1062.2
52.5°	6636.0	5453.5	4469.2	3637.3	2902.1	2410.8	2046.5	1577.3	1333.3	1111.4	933.5
55°	6593.6	5378.9	4355.7	3456.1	2717.4	2226.1	1885.6	1448.5	1199.5	989.4	850.5
57.5°	6473.4	5246.8	4142.2	3207.0	2522.6	2055.0	1700.9	1292.6	1053.8	877.6	762.4
60°	6249.7	4967.3	3808.5	2912.2	2275.2	1794.1	1446.8	1089.3	899.6	767.5	674.3
62.5°	5836.4	4528.5	3339.2	2505.6	1919.5	1455.3	1155.4	869.1	726.8	640.4	582.8
65°	5170.5	3867.7	2795.3	1973.7	1458.7	1058.8	858.9	653.9	550.6	498.1	481.1
67.5°	4220.1	2986.8	2033.0	1370.6	987.7	742.0	598.0	477.8	428.6	408.3	401.5
70°	3068.1	2034.7	1316.4	865.7	652.2	518.4	452.3	384.6	357.5	352.4	352.4
72.5°	1926.2	1236.7	806.4	593.0	494.7	420.1	386.3	338.8	328.7	325.3	320.2
75°	1130.0	750.5	570.9	486.2	423.5	376.1	347.3	308.3	301.6	299.9	294.8
77.5°	720.0	540.4	460.8	415.1	382.9	340.5	315.1	274.5	272.8	271.1	269.4
80°	516.7	449.0	403.2	367.6	335.4	296.5	281.2	249.0	245.7	244.0	247.3
82.5°	391.3	371.0	352.4	325.3	281.2	252.4	240.6	218.5	220.2	211.8	210.1
85°	269.4	266.0	264.3	252.4	220.2	194.8	186.4	174.5	183.0	174.5	164.3
87.5°	132.1	130.4	120.3	142.3	132.1	105.0	94.9	105.0	116.9	113.5	105.0
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: P158946

CATALOG NUMBER: VST-F10-LED-E-U-SLL-7050

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9
2.5°	2744.5	2737.7	2742.8	2739.4	2739.4	2737.7	2741.1	2736.1	2732.7	2736.1	2737.7
5°	2798.7	2790.3	2792.0	2780.1	2785.2	2773.3	2776.7	2768.2	2759.8	2756.4	2756.4
7.5°	2890.2	2881.8	2871.6	2869.9	2851.3	2844.5	2832.6	2825.8	2820.8	2808.9	2802.1
10°	2973.2	2959.7	2947.8	2946.1	2927.5	2910.6	2895.3	2881.8	2873.3	2856.3	2847.9
12.5°	3041.0	3027.4	3008.8	2998.6	2980.0	2959.7	2949.5	2929.2	2917.3	2898.7	2883.4
15°	3080.0	3056.2	3029.1	3010.5	2983.4	2961.4	2946.1	2930.9	2919.0	2895.3	2873.3
17.5°	3061.3	3022.4	2985.1	2951.2	2913.9	2893.6	2871.6	2853.0	2849.6	2822.5	2788.6
20°	2983.4	2937.7	2888.5	2842.8	2793.7	2764.9	2737.7	2708.9	2700.5	2668.3	2624.2
22.5°	2888.5	2836.0	2780.1	2724.2	2661.5	2620.9	2580.2	2544.6	2515.8	2468.4	2405.7
25°	2792.0	2714.0	2632.7	2561.6	2488.7	2437.9	2395.5	2356.6	2322.7	2246.4	2182.1
27.5°	2664.9	2542.9	2459.9	2378.6	2290.5	2224.4	2177.0	2122.8	2085.5	1997.4	1929.6
30°	2502.3	2380.3	2261.7	2180.4	2092.3	2021.1	1960.1	1882.2	1828.0	1763.6	1700.9
32.5°	2297.3	2175.3	2055.0	1963.5	1890.7	1802.6	1726.3	1651.8	1589.1	1526.4	1477.3
35°	2048.2	1929.6	1816.1	1724.6	1643.3	1573.9	1501.0	1436.6	1365.5	1297.7	1268.9
37.5°	1785.6	1658.6	1533.2	1453.6	1389.2	1340.1	1272.3	1219.8	1155.4	1114.8	1080.9
40°	1556.9	1421.4	1302.8	1235.0	1184.2	1128.3	1072.4	1031.7	986.0	945.3	919.9
42.5°	1363.8	1236.7	1135.1	1077.5	1016.5	955.5	913.1	879.3	850.5	820.0	789.5
45°	1185.9	1063.9	979.2	908.1	857.2	808.1	779.3	764.1	747.1	728.5	708.2
47.5°	1036.8	931.8	848.8	782.7	730.2	696.3	682.7	677.7	670.9	655.6	645.5
50°	923.3	836.9	752.2	692.9	648.9	631.9	616.7	611.6	603.1	598.0	591.3
52.5°	828.4	737.0	665.8	611.6	584.5	577.7	570.9	564.2	562.5	559.1	555.7
55°	750.5	670.9	604.8	564.2	550.6	545.5	543.8	537.0	535.4	535.4	530.3
57.5°	681.0	613.3	554.0	528.6	520.1	515.0	511.6	508.2	508.2	511.6	509.9
60°	609.9	552.3	516.7	503.2	498.1	489.6	481.1	477.8	479.4	487.9	487.9
62.5°	540.4	498.1	476.1	471.0	465.9	459.1	449.0	445.6	449.0	459.1	464.2
65°	464.2	445.6	438.8	435.4	432.0	426.9	420.1	416.8	418.5	423.5	430.3
67.5°	394.7	393.0	393.0	394.7	393.0	391.3	388.0	382.9	381.2	381.2	384.6
70°	352.4	352.4	357.5	357.5	355.8	355.8	350.7	345.6	342.2	338.8	340.5
72.5°	320.2	320.2	321.9	323.6	321.9	321.9	315.1	311.7	303.3	301.6	298.2
75°	293.1	289.7	289.7	288.0	286.3	288.0	281.2	272.8	269.4	267.7	264.3
77.5°	266.0	259.2	255.8	252.4	254.1	252.4	247.3	242.3	237.2	235.5	233.8
80°	235.5	225.3	220.2	211.8	216.9	218.5	215.2	210.1	208.4	206.7	205.0
82.5°	194.8	184.7	177.9	172.8	169.4	172.8	177.9	189.7	186.4	184.7	181.3
85°	152.5	135.5	127.1	128.8	120.3	122.0	137.2	144.0	144.0	147.4	144.0
87.5°	86.4	83.0	62.7	57.6	61.0	72.8	81.3	89.8	89.8	84.7	94.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P158946

CATALOG NUMBER: VST-F10-LED-E-U-SLL-7050

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9
2.5°	2737.7	2741.1	2742.8	2749.6	2753.0	2754.7	2756.4	2759.8	2761.5	2759.8	2768.2
5°	2751.3	2751.3	2747.9	2753.0	2754.7	2754.7	2751.3	2754.7	2754.7	2754.7	2763.2
7.5°	2786.9	2776.7	2771.6	2764.9	2759.8	2753.0	2744.5	2744.5	2742.8	2744.5	2749.6
10°	2824.2	2808.9	2790.3	2773.3	2758.1	2746.2	2731.0	2725.9	2724.2	2722.5	2736.1
12.5°	2853.0	2825.8	2797.0	2768.2	2737.7	2717.4	2692.0	2676.8	2675.1	2675.1	2692.0
15°	2832.6	2788.6	2732.7	2681.8	2654.7	2625.9	2597.1	2578.5	2576.8	2580.2	2590.4
17.5°	2731.0	2659.8	2610.7	2561.6	2526.0	2502.3	2483.6	2480.2	2487.0	2480.2	2493.8
20°	2558.2	2481.9	2448.0	2409.1	2395.5	2378.6	2351.5	2327.8	2327.8	2297.3	2305.7
22.5°	2334.5	2292.2	2248.1	2217.6	2207.5	2178.7	2149.9	2117.7	2114.3	2077.0	2071.9
25°	2100.7	2058.4	2022.8	2016.0	1985.5	1946.6	1919.5	1882.2	1873.7	1836.5	1831.4
27.5°	1861.9	1828.0	1792.4	1772.1	1755.1	1712.8	1689.1	1645.0	1628.1	1587.4	1582.3
30°	1634.9	1611.1	1568.8	1551.8	1519.7	1470.5	1419.7	1392.6	1379.0	1336.7	1323.1
32.5°	1421.4	1384.1	1351.9	1331.6	1290.9	1235.0	1189.3	1150.3	1124.9	1074.1	1060.5
35°	1218.1	1180.8	1165.6	1113.1	1077.5	1040.2	977.5	953.8	908.1	869.1	855.5
37.5°	1038.5	1002.9	982.6	938.6	903.0	865.7	828.4	797.9	775.9	767.5	767.5
40°	884.3	865.7	840.3	808.1	784.4	757.3	737.0	726.8	725.1	728.5	737.0
42.5°	774.2	753.9	737.0	720.0	703.1	699.7	694.6	701.4	709.8	718.3	726.8
45°	691.2	674.3	664.1	657.3	655.6	660.7	670.9	681.0	696.3	706.5	713.2
47.5°	631.9	618.4	615.0	613.3	621.8	637.0	650.6	665.8	677.7	687.8	694.6
50°	581.1	569.2	567.5	565.8	577.7	591.3	603.1	623.4	631.9	638.7	643.8
52.5°	545.5	535.4	530.3	532.0	543.8	555.7	572.6	587.9	599.7	604.8	609.9
55°	516.7	513.3	501.5	506.6	518.4	533.7	550.6	567.5	579.4	587.9	596.3
57.5°	494.7	486.2	477.8	486.2	498.1	513.3	533.7	548.9	564.2	576.0	584.5
60°	471.0	464.2	457.4	465.9	477.8	493.0	508.2	528.6	547.2	559.1	567.5
62.5°	450.6	445.6	438.8	440.5	445.6	455.7	464.2	482.8	499.8	515.0	525.2
65°	421.8	420.1	410.0	411.7	415.1	425.2	432.0	449.0	465.9	479.4	487.9
67.5°	379.5	376.1	376.1	381.2	382.9	388.0	393.0	410.0	423.5	433.7	443.9
70°	337.1	335.4	335.4	338.8	337.1	342.2	349.0	364.2	381.2	391.3	401.5
72.5°	296.5	296.5	294.8	298.2	298.2	299.9	308.3	321.9	337.1	345.6	352.4
75°	260.9	259.2	259.2	259.2	260.9	260.9	269.4	281.2	296.5	301.6	311.7
77.5°	228.7	228.7	228.7	228.7	230.4	228.7	233.8	242.3	247.3	255.8	255.8
80°	201.6	199.9	201.6	203.3	203.3	201.6	201.6	203.3	205.0	205.0	205.0
82.5°	177.9	172.8	176.2	184.7	184.7	184.7	183.0	171.1	162.6	162.6	166.0
85°	142.3	142.3	144.0	155.9	157.6	150.8	157.6	140.6	123.7	118.6	122.0
87.5°	88.1	69.5	84.7	96.6	96.6	91.5	101.6	94.9	79.6	64.4	61.0
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: P158946
 CATALOG NUMBER: VST-F10-LED-E-U-SLL-7050

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°	
0°	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	0°
2.5°	2775.0	2776.7	2786.9	2792.0	2792.0	2798.7	2802.1	2812.3	2810.6	2810.6	2814.0	2.5°
5°	2771.6	2776.7	2786.9	2793.7	2797.0	2805.5	2812.3	2824.2	2822.5	2825.8	2827.5	5°
7.5°	2759.8	2773.3	2783.5	2797.0	2808.9	2815.7	2824.2	2834.3	2830.9	2832.6	2830.9	7.5°
10°	2749.6	2763.2	2783.5	2802.1	2819.1	2829.2	2834.3	2846.2	2844.5	2847.9	2847.9	10°
12.5°	2708.9	2732.7	2758.1	2786.9	2812.3	2839.4	2856.3	2881.8	2893.6	2908.9	2925.8	12.5°
15°	2605.6	2632.7	2673.4	2705.6	2754.7	2792.0	2841.1	2890.2	2934.3	2976.6	3025.8	15°
17.5°	2504.0	2515.8	2548.0	2592.1	2636.1	2692.0	2751.3	2839.4	2919.0	3005.4	3100.3	17.5°
20°	2315.9	2336.2	2358.3	2410.8	2463.3	2542.9	2615.8	2731.0	2847.9	2983.4	3129.1	20°
22.5°	2083.8	2104.1	2127.9	2187.1	2251.5	2332.8	2420.9	2549.7	2705.6	2881.8	3076.6	22.5°
25°	1833.1	1844.9	1863.6	1922.9	1961.8	2068.6	2175.3	2309.1	2478.5	2705.6	2932.6	25°
27.5°	1556.9	1578.9	1594.2	1621.3	1711.1	1802.6	1914.4	2058.4	2263.4	2495.5	2769.9	27.5°
30°	1292.6	1311.3	1302.8	1360.4	1419.7	1516.3	1636.6	1795.8	1992.3	2268.5	2585.3	30°
32.5°	1033.4	1047.0	1041.9	1082.6	1141.9	1238.4	1351.9	1524.7	1733.1	2027.9	2371.8	32.5°
35°	852.2	855.5	874.2	892.8	943.6	1021.6	1118.1	1268.9	1482.4	1753.4	2117.7	35°
37.5°	767.5	774.2	786.1	811.5	848.8	904.7	984.3	1101.2	1284.2	1523.0	1848.3	37.5°
40°	742.0	747.1	753.9	770.8	806.4	855.5	926.7	1025.0	1158.8	1360.4	1624.7	40°
42.5°	730.2	730.2	730.2	740.3	767.5	820.0	901.3	997.9	1114.8	1267.2	1480.7	42.5°
45°	713.2	713.2	711.5	716.6	735.3	787.8	875.9	984.3	1109.7	1255.4	1440.0	45°
47.5°	694.6	692.9	687.8	687.8	699.7	752.2	843.7	960.6	1097.8	1265.5	1463.7	47.5°
50°	643.8	643.8	643.8	648.9	659.0	706.5	804.7	928.4	1086.0	1272.3	1501.0	50°
52.5°	615.0	616.7	621.8	621.8	631.9	681.0	784.4	921.6	1092.7	1297.7	1548.5	52.5°
55°	601.4	606.5	611.6	611.6	620.1	670.9	777.6	926.7	1118.1	1350.2	1629.8	55°
57.5°	589.6	594.6	598.0	598.0	604.8	648.9	759.0	918.2	1133.4	1401.1	1729.7	57.5°
60°	567.5	570.9	572.6	572.6	574.3	611.6	716.6	877.6	1099.5	1397.7	1783.9	60°
62.5°	526.9	533.7	535.4	537.0	537.0	572.6	662.4	811.5	1026.7	1346.9	1768.7	62.5°
65°	496.4	499.8	504.9	508.2	515.0	538.7	609.9	731.9	931.8	1245.2	1684.0	65°
67.5°	449.0	454.0	459.1	465.9	472.7	487.9	543.8	642.1	803.0	1072.4	1494.2	67.5°
70°	406.6	408.3	413.4	421.8	423.5	432.0	472.7	540.4	657.3	860.6	1202.8	70°
72.5°	354.1	357.5	364.2	374.4	374.4	381.2	404.9	440.5	515.0	657.3	887.7	72.5°
75°	308.3	311.7	316.8	316.8	308.3	310.0	327.0	352.4	408.3	494.7	647.2	75°
77.5°	255.8	262.6	267.7	257.5	254.1	259.2	267.7	286.3	327.0	393.0	486.2	77.5°
80°	211.8	215.2	216.9	218.5	215.2	220.2	227.0	238.9	266.0	316.8	384.6	80°
82.5°	169.4	172.8	177.9	184.7	184.7	203.3	205.0	205.0	220.2	252.4	301.6	82.5°
85°	125.4	132.1	138.9	147.4	149.1	159.3	154.2	152.5	157.6	188.1	208.4	85°
87.5°	64.4	69.5	72.8	79.6	71.2	74.5	74.5	69.5	61.0	76.2	84.7	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°



IUMBER: P158946

NUMBER: VST-F10-LED-E-U-SLL-7050

DISTRIBUTION (continued):

330°	335°	340°	345°	350°	355°	360°
2830.9	2830.9	2830.9	2830.9	2830.9	2830.9	2830.9
2817.4	2814.0	2817.4	2817.4	2822.5	2819.1	2998.6
2830.9	2827.5	2830.9	2834.3	2839.4	2839.4	3037.6
2832.6	2832.6	2829.2	2837.7	2844.5	2851.3	3074.9
2853.0	2853.0	2856.3	2858.0	2873.3	2890.2	3135.9
2936.0	2944.4	2959.7	2964.8	2991.9	3010.5	3291.7
3063.0	3110.5	3141.0	3151.1	3174.8	3210.4	3554.3
3191.8	3271.4	3354.4	3405.2	3435.7	3478.1	3876.2
3288.3	3437.4	3579.7	3706.8	3779.7	3862.7	4326.9
3296.8	3534.0	3774.6	4010.1	4204.9	4359.1	4936.8
3215.5	3527.2	3859.3	4220.1	4555.6	4833.4	5638.1
3112.2	3495.0	3918.6	4379.4	4819.9	5229.8	6154.9
2981.7	3440.8	3928.7	4447.1	4963.9	5456.9	6449.6
2783.5	3279.9	3806.8	4379.4	4979.1	5578.8	6639.4
2529.4	3035.9	3576.4	4228.6	4908.0	5628.0	6798.6
2270.2	2769.9	3351.0	4027.0	4794.4	5619.5	6863.0
1995.7	2492.1	3086.7	3811.8	4640.3	5541.6	6851.1
1809.4	2261.7	2844.5	3593.3	4469.2	5438.2	6771.5
1700.9	2097.4	2653.0	3393.4	4313.3	5314.6	6671.6
1699.2	2048.2	2551.4	3251.1	4155.8	5177.3	6536.0
1758.5	2078.7	2539.5	3190.1	4069.4	5077.4	6388.6
1828.0	2163.4	2602.2	3212.1	4067.7	5033.3	6285.3
1938.1	2307.4	2739.4	3307.0	4111.7	5026.5	6158.2
2078.7	2502.3	2986.8	3540.8	4282.8	5160.4	6166.7
2222.7	2731.0	3310.4	3940.6	4620.0	5472.1	6434.4
2275.2	2907.2	3639.0	4409.9	5124.8	5939.7	6986.7
2229.5	2947.8	3838.9	4774.1	5616.1	6486.9	7645.7
2060.1	2783.5	3757.6	4877.5	5899.0	6874.9	8304.7
1695.8	2375.2	3388.3	4645.4	5877.0	6954.5	8541.9
1243.5	1841.5	2754.7	3947.4	5224.8	6456.4	8186.1
897.9	1302.8	1988.9	2973.2	4130.3	5199.4	6866.4
643.8	903.0	1290.9	1953.4	2814.0	3620.4	4894.4
462.5	613.3	804.7	1172.4	1714.5	2222.7	3074.9
340.5	420.1	528.6	728.5	1009.7	1294.3	1851.7
232.1	247.3	318.5	430.3	662.4	952.1	1257.1
88.1	100.0	116.9	176.2	296.5	340.5	240.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)