

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: P158286

Luminaire Tested: **VST-F10-LED-E-U-SL2-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P158286  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33712)  
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-SL2-7050  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL  
Light Source: (70) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25486.5 lumens  
Efficiency: N/A  
Efficacy: 98.5 lumens/watt  
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G4

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



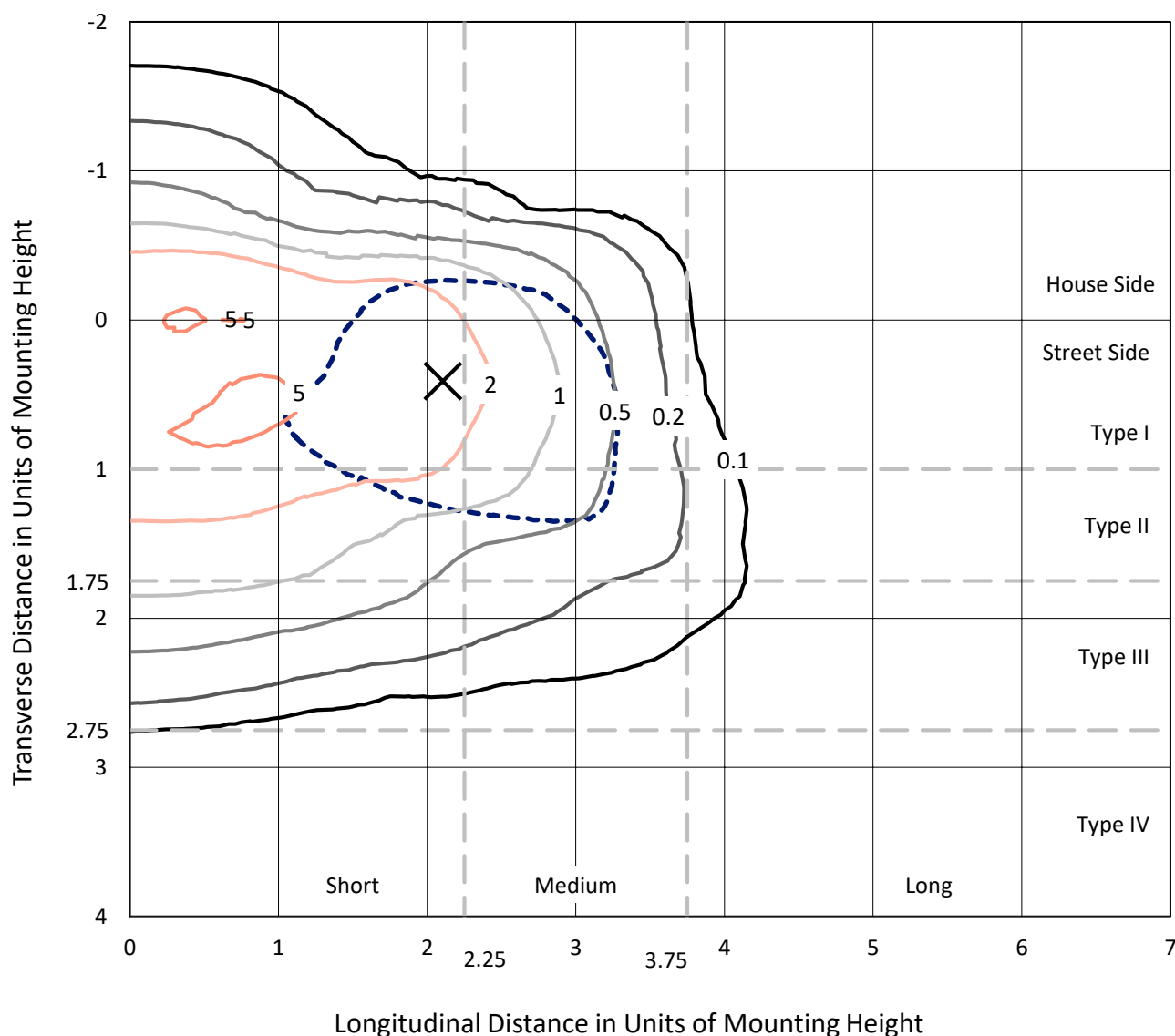
REPORT NUMBER: P158286

CATALOG NUMBER: VST-F10-LED-E-U-SL2-7050

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

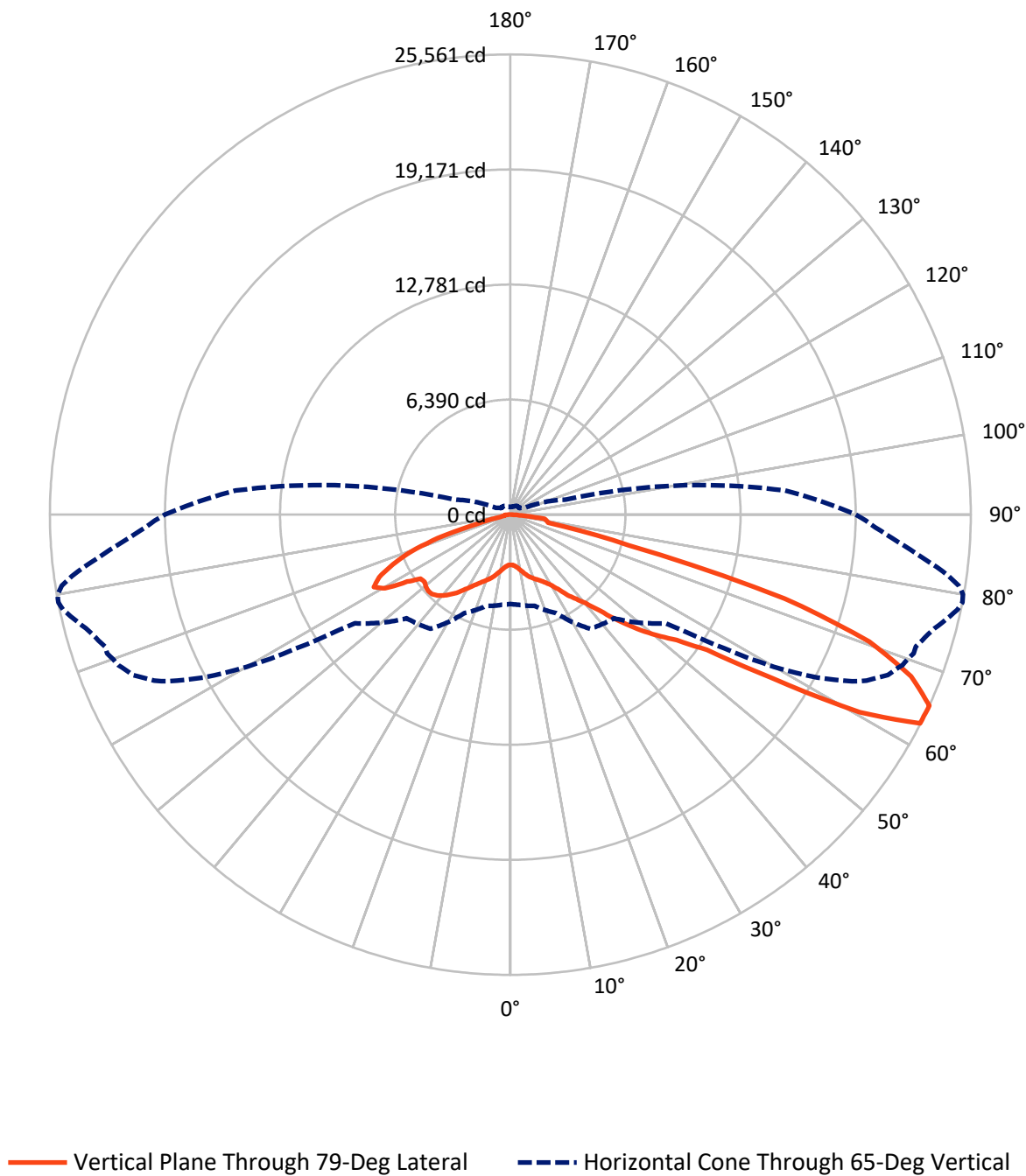


Based on 25 foot mounting height. Maximum calculated value = 5.8 fc  
 Type II - Short - Non-Cutoff

REPORT NUMBER: P158286

CATALOG NUMBER: VST-F10-LED-E-U-SL2-7050

## Luminous Intensity Polar Plot



REPORT NUMBER: P158286

CATALOG NUMBER: VST-F10-LED-E-U-SL2-7050

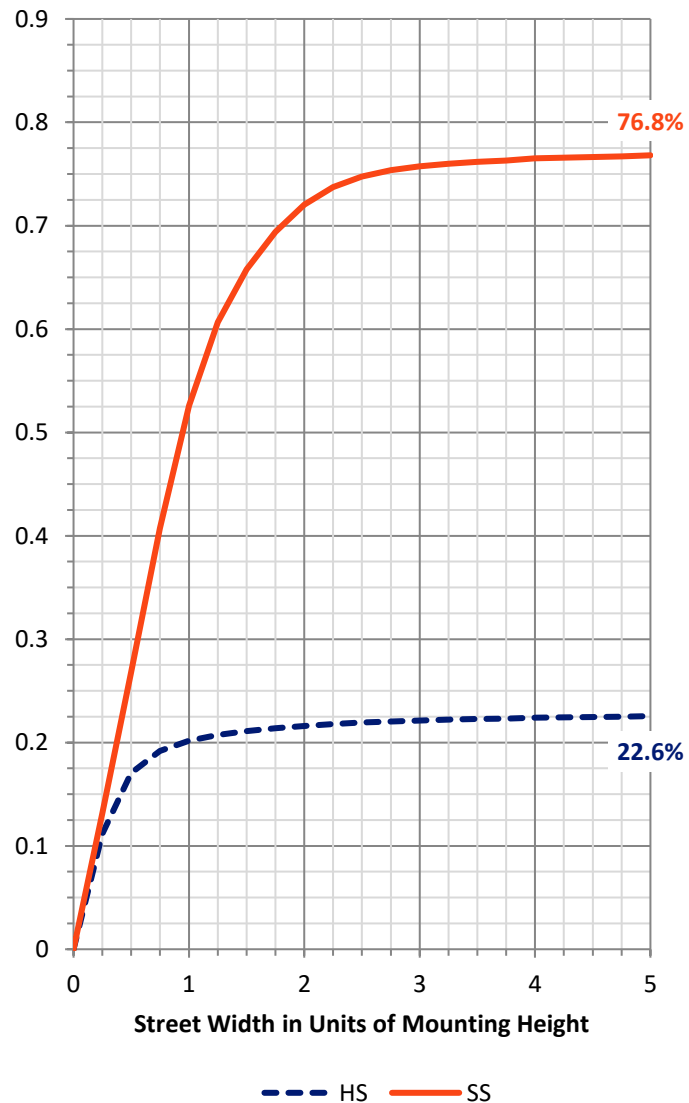
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5856.3   | 0.0    | 5856.3  |
|                    | % Fixture | 23.0     | 0.0    | 23.0    |
| <b>Street Side</b> | Lumens    | 19630.2  | 0.0    | 19630.2 |
|                    | % Fixture | 77.0     | 0.0    | 77.0    |
| <b>Total</b>       | Lumens    | 25486.5  | 0.0    | 25486.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 275.9   | 1.1       |
| 10°-20°   | 896.0   | 3.5       |
| 20°-30°   | 1544.7  | 6.1       |
| 30°-40°   | 2530.2  | 9.9       |
| 40°-50°   | 4237.2  | 16.6      |
| 50°-60°   | 5731.5  | 22.5      |
| 60°-70°   | 7058.3  | 27.7      |
| 70°-80°   | 2732.2  | 10.7      |
| 80°-90°   | 480.5   | 1.9       |
| 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°    | 25486.5 | 100.0     |
| 0°-180°   | 25486.5 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P158286

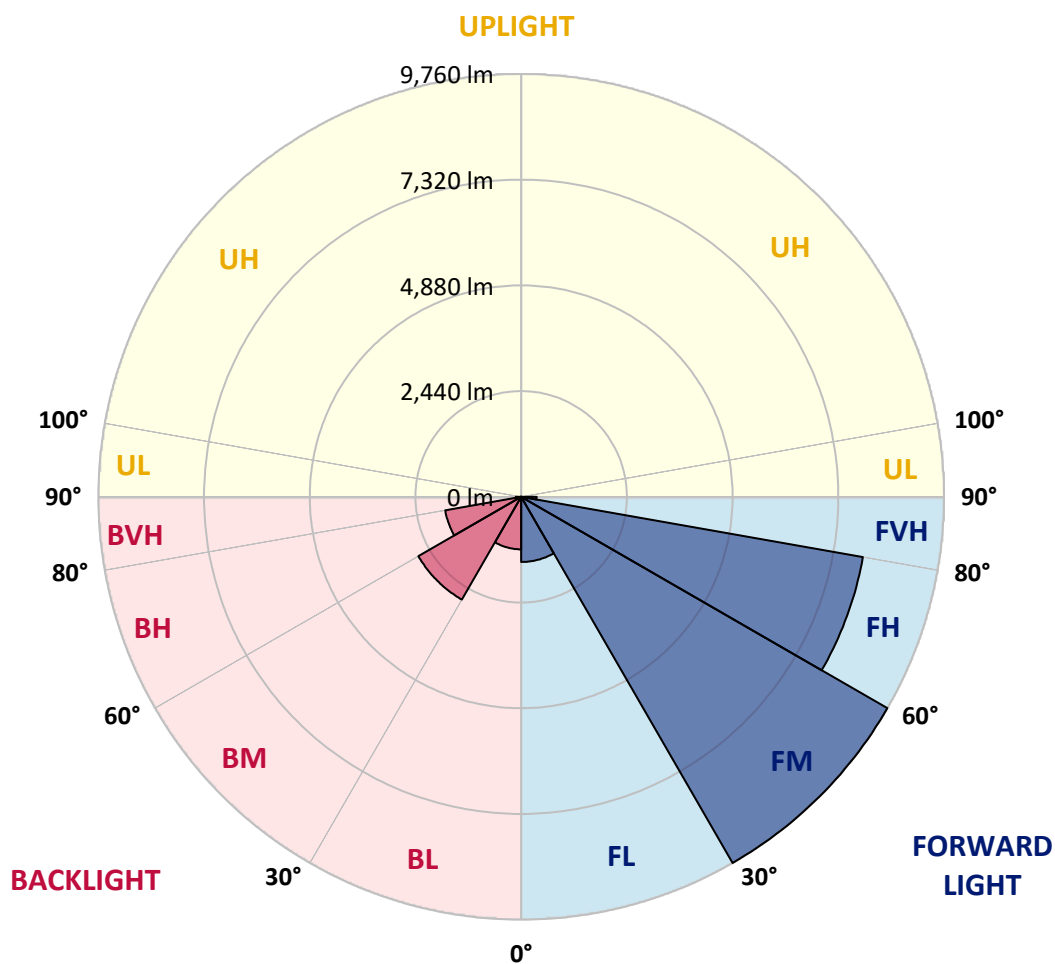
CATALOG NUMBER: VST-F10-LED-E-U-SL2-7050

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1504.7 | 5.9       |                         |      |          |
| FM   | (30°-60°)   | 9760.2 | 38.3      |                         |      |          |
| FH   | (60°-80°)   | 8008.8 | 31.4      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 356.5  | 1.4       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1212.0 | 4.8       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 2738.7 | 10.7      | B3/5000                 |      |          |
| BH   | (60°-80°)   | 1781.7 | 7.0       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 124.0  | 0.5       |                         |      | G2/225   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type II Short





REPORT NUMBER: P158286

CATALOG NUMBER: VST-F10-LED-E-U-SL2-7050

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 55°     | 56°     | 57°     | 58°     | 59°     |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0°    | 2788.6 | 2788.6 | 2788.6 | 2788.6 | 2788.6 | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  |
| 2.5°  | 2793.7 | 2785.2 | 2793.7 | 2800.4 | 2805.5 | 2812.3  | 2810.6  | 2808.9  | 2807.2  | 2808.9  | 2808.9  |
| 5°    | 2817.4 | 2815.7 | 2824.2 | 2830.9 | 2842.8 | 2851.3  | 2861.4  | 2861.4  | 2861.4  | 2859.7  | 2863.1  |
| 7.5°  | 2893.6 | 2891.9 | 2900.4 | 2907.2 | 2917.3 | 2934.3  | 2947.8  | 2954.6  | 2952.9  | 2952.9  | 2952.9  |
| 10°   | 3019.0 | 3012.2 | 3012.2 | 3012.2 | 3025.8 | 3037.6  | 3068.1  | 3071.5  | 3078.3  | 3074.9  | 3076.6  |
| 12.5° | 3141.0 | 3142.7 | 3137.6 | 3132.5 | 3134.2 | 3157.9  | 3201.9  | 3210.4  | 3212.1  | 3217.2  | 3220.6  |
| 15°   | 3251.1 | 3249.4 | 3237.5 | 3225.7 | 3240.9 | 3281.6  | 3339.2  | 3354.4  | 3354.4  | 3364.6  | 3371.4  |
| 17.5° | 3352.7 | 3349.3 | 3327.3 | 3307.0 | 3322.2 | 3391.7  | 3481.5  | 3491.6  | 3506.9  | 3512.0  | 3518.8  |
| 20°   | 3473.0 | 3466.2 | 3440.8 | 3386.6 | 3386.6 | 3481.5  | 3600.1  | 3610.2  | 3623.8  | 3627.2  | 3639.0  |
| 22.5° | 3640.7 | 3623.8 | 3569.6 | 3471.3 | 3444.2 | 3554.3  | 3700.0  | 3705.1  | 3715.3  | 3728.8  | 3739.0  |
| 25°   | 3830.5 | 3833.9 | 3745.8 | 3574.7 | 3515.4 | 3630.6  | 3796.6  | 3805.1  | 3823.7  | 3833.9  | 3845.7  |
| 27.5° | 4027.0 | 4032.1 | 3933.8 | 3720.4 | 3620.4 | 3735.6  | 3927.0  | 3937.2  | 3959.2  | 3971.1  | 3989.7  |
| 30°   | 4250.6 | 4257.4 | 4162.5 | 3947.4 | 3794.9 | 3889.8  | 4120.2  | 4147.3  | 4165.9  | 4181.2  | 4211.7  |
| 32.5° | 4787.7 | 4747.0 | 4680.9 | 4452.2 | 4211.7 | 4204.9  | 4431.9  | 4462.4  | 4487.8  | 4520.0  | 4548.8  |
| 35°   | 5463.6 | 5489.1 | 5522.9 | 5368.8 | 5157.0 | 5002.8  | 5021.5  | 5004.5  | 5028.2  | 5075.7  | 5104.5  |
| 37.5° | 5999.0 | 6054.9 | 6202.3 | 6302.2 | 6293.8 | 6263.3  | 5978.7  | 5978.7  | 5993.9  | 5968.5  | 5965.1  |
| 40°   | 6419.1 | 6454.7 | 6756.3 | 7144.2 | 7471.2 | 7632.2  | 7406.8  | 7374.6  | 7391.6  | 7261.1  | 7266.2  |
| 42.5° | 6636.0 | 6688.5 | 7122.2 | 7803.3 | 8452.1 | 8968.8  | 8899.4  | 8877.4  | 8826.5  | 8794.3  | 8774.0  |
| 45°   | 6746.1 | 6808.8 | 7325.5 | 8260.7 | 9206.0 | 10004.0 | 10363.1 | 10359.7 | 10314.0 | 10276.7 | 10259.8 |
| 47.5° | 6690.2 | 6744.4 | 7295.0 | 8399.6 | 9602.4 | 10671.5 | 11466.0 | 11515.1 | 11501.6 | 11555.8 | 11577.8 |
| 50°   | 6324.3 | 6393.7 | 6946.0 | 8099.7 | 9436.4 | 10934.1 | 12230.1 | 12321.6 | 12445.2 | 12523.2 | 12626.5 |
| 52.5° | 5993.9 | 6051.5 | 6549.6 | 7613.5 | 8890.9 | 10720.6 | 12690.9 | 12878.9 | 13048.4 | 13207.6 | 13331.3 |
| 55°   | 5648.3 | 5705.9 | 6143.0 | 7108.7 | 8340.3 | 10090.4 | 12901.0 | 13175.4 | 13439.7 | 13709.1 | 13956.4 |
| 57.5° | 5517.9 | 5578.8 | 5904.1 | 6717.3 | 7889.7 | 9465.2  | 13004.3 | 13454.9 | 13885.3 | 14342.7 | 14817.0 |
| 60°   | 5856.7 | 5910.9 | 6158.2 | 6727.5 | 7545.7 | 8840.1  | 12795.9 | 13504.1 | 14244.4 | 14998.3 | 15726.8 |
| 62.5° | 5753.3 | 5782.1 | 6090.5 | 6973.1 | 7984.5 | 8223.4  | 11892.9 | 12828.1 | 13903.9 | 15008.5 | 16124.9 |
| 65°   | 4963.9 | 5019.8 | 5251.9 | 6027.8 | 7738.9 | 8140.4  | 10517.3 | 11457.5 | 12726.5 | 14032.7 | 15528.6 |
| 67.5° | 3561.1 | 3483.2 | 3662.8 | 4342.1 | 6004.1 | 8126.8  | 8968.8  | 9665.1  | 10659.6 | 11660.8 | 12887.4 |
| 70°   | 1617.9 | 1580.6 | 1721.3 | 2258.3 | 3622.1 | 6422.5  | 7583.0  | 7818.5  | 8187.8  | 8862.1  | 9690.5  |
| 72.5° | 638.7  | 637.0  | 728.5  | 933.5  | 1712.8 | 4133.7  | 6376.8  | 6512.3  | 6642.8  | 6935.9  | 7293.3  |
| 75°   | 418.5  | 418.5  | 445.6  | 503.2  | 843.7  | 1995.7  | 5394.2  | 5517.9  | 5717.8  | 5800.8  | 5953.2  |
| 77.5° | 315.1  | 316.8  | 328.7  | 342.2  | 465.9  | 1050.4  | 3806.8  | 4245.5  | 4584.4  | 4836.8  | 5021.5  |
| 80°   | 223.6  | 233.8  | 255.8  | 264.3  | 303.3  | 598.0   | 2151.6  | 2468.4  | 2851.3  | 3259.5  | 3772.9  |
| 82.5° | 167.7  | 179.6  | 216.9  | 227.0  | 240.6  | 340.5   | 970.7   | 1101.2  | 1285.9  | 1667.0  | 2397.2  |
| 85°   | 77.9   | 86.4   | 149.1  | 162.6  | 174.5  | 196.5   | 493.0   | 550.6   | 625.1   | 684.4   | 797.9   |
| 87.5° | 11.9   | 8.5    | 25.4   | 35.6   | 55.9   | 57.6    | 169.4   | 201.6   | 218.5   | 262.6   | 272.8   |
| 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: P158286

CATALOG NUMBER: VST-F10-LED-E-U-SL2-7050

**CANDELA DISTRIBUTION (continued):**

|       | 60°     | 61°     | 62°     | 64°     | 65°     | 66°     | 67°     | 68°     | 69°     | 70°     | 71°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  |
| 2.5°  | 2808.9  | 2810.6  | 2812.3  | 2808.9  | 2810.6  | 2810.6  | 2807.2  | 2805.5  | 2805.5  | 2805.5  | 2807.2  |
| 5°    | 2863.1  | 2866.5  | 2863.1  | 2864.8  | 2871.6  | 2869.9  | 2866.5  | 2864.8  | 2871.6  | 2873.3  | 2868.2  |
| 7.5°  | 2959.7  | 2961.4  | 2954.6  | 2963.1  | 2966.5  | 2968.2  | 2968.2  | 2971.5  | 2971.5  | 2976.6  | 2971.5  |
| 10°   | 3083.4  | 3083.4  | 3095.2  | 3093.5  | 3095.2  | 3098.6  | 3100.3  | 3107.1  | 3112.2  | 3112.2  | 3115.5  |
| 12.5° | 3225.7  | 3227.4  | 3239.2  | 3240.9  | 3247.7  | 3249.4  | 3259.5  | 3252.8  | 3269.7  | 3269.7  | 3274.8  |
| 15°   | 3373.1  | 3384.9  | 3386.6  | 3403.5  | 3406.9  | 3408.6  | 3422.2  | 3422.2  | 3434.0  | 3435.7  | 3439.1  |
| 17.5° | 3518.8  | 3528.9  | 3535.7  | 3549.2  | 3561.1  | 3566.2  | 3571.3  | 3581.4  | 3589.9  | 3593.3  | 3601.8  |
| 20°   | 3644.1  | 3654.3  | 3661.1  | 3674.6  | 3684.8  | 3693.2  | 3698.3  | 3710.2  | 3718.7  | 3722.1  | 3733.9  |
| 22.5° | 3749.2  | 3755.9  | 3767.8  | 3786.4  | 3789.8  | 3800.0  | 3815.2  | 3823.7  | 3827.1  | 3837.3  | 3850.8  |
| 25°   | 3861.0  | 3871.1  | 3877.9  | 3894.9  | 3908.4  | 3925.3  | 3938.9  | 3952.5  | 3955.8  | 3969.4  | 3981.3  |
| 27.5° | 4010.1  | 4020.2  | 4021.9  | 4055.8  | 4069.4  | 4093.1  | 4108.3  | 4128.6  | 4138.8  | 4150.7  | 4174.4  |
| 30°   | 4230.3  | 4254.0  | 4264.2  | 4303.1  | 4309.9  | 4337.0  | 4364.1  | 4370.9  | 4386.2  | 4387.9  | 4426.8  |
| 32.5° | 4567.4  | 4601.3  | 4614.9  | 4655.5  | 4665.7  | 4691.1  | 4706.4  | 4741.9  | 4743.6  | 4760.6  | 4769.0  |
| 35°   | 5119.7  | 5111.3  | 5163.8  | 5173.9  | 5204.4  | 5226.5  | 5241.7  | 5241.7  | 5273.9  | 5275.6  | 5285.8  |
| 37.5° | 5873.6  | 5856.7  | 5870.2  | 5809.2  | 5824.5  | 5797.4  | 5792.3  | 5799.1  | 5785.5  | 5788.9  | 5787.2  |
| 40°   | 7079.9  | 7003.6  | 6924.0  | 6735.9  | 6695.3  | 6617.4  | 6556.4  | 6507.2  | 6459.8  | 6409.0  | 6375.1  |
| 42.5° | 8592.7  | 8482.6  | 8364.0  | 8062.5  | 7921.9  | 7771.1  | 7623.7  | 7539.0  | 7369.6  | 7266.2  | 7210.3  |
| 45°   | 10178.5 | 10049.7 | 9883.7  | 9632.9  | 9433.0  | 9272.1  | 9002.7  | 8875.7  | 8613.1  | 8482.6  | 8306.4  |
| 47.5° | 11477.9 | 11479.6 | 11345.7 | 11091.6 | 10878.1 | 10771.4 | 10603.7 | 10358.0 | 10059.9 | 9892.1  | 9578.7  |
| 50°   | 12614.7 | 12613.0 | 12604.5 | 12452.0 | 12302.9 | 12186.0 | 12038.6 | 11816.7 | 11572.7 | 11383.0 | 11023.8 |
| 52.5° | 13454.9 | 13566.8 | 13614.2 | 13612.5 | 13593.9 | 13539.7 | 13427.8 | 13236.4 | 12989.1 | 12882.3 | 12596.0 |
| 55°   | 14149.6 | 14393.5 | 14520.6 | 14798.4 | 14823.8 | 14913.6 | 14815.4 | 14817.0 | 14671.3 | 14681.5 | 14590.0 |
| 57.5° | 15201.6 | 15647.2 | 15903.0 | 16518.0 | 16826.3 | 17199.0 | 17133.0 | 17444.7 | 17558.2 | 17702.2 | 17893.6 |
| 60°   | 16396.0 | 17227.8 | 17834.3 | 19057.5 | 19555.6 | 20158.7 | 20490.8 | 20844.8 | 21102.3 | 21366.6 | 21561.5 |
| 62.5° | 17249.8 | 18342.6 | 19338.7 | 21082.0 | 21729.2 | 22364.5 | 22782.9 | 23211.6 | 23501.3 | 23691.0 | 23831.6 |
| 65°   | 16900.9 | 18108.8 | 19286.2 | 21114.2 | 21819.0 | 22279.8 | 22777.9 | 23025.2 | 23314.9 | 23472.5 | 23674.1 |
| 67.5° | 14361.3 | 15572.6 | 16834.8 | 18991.4 | 19728.4 | 20365.4 | 20753.4 | 21073.5 | 21307.3 | 21507.2 | 21739.3 |
| 70°   | 10679.9 | 12004.8 | 13309.3 | 15674.3 | 16604.4 | 17524.3 | 17981.7 | 18378.2 | 18622.1 | 18823.7 | 19079.5 |
| 72.5° | 7686.4  | 8516.5  | 9331.4  | 11979.3 | 12909.4 | 14098.7 | 14573.1 | 15013.6 | 15330.4 | 15320.2 | 15591.3 |
| 75°   | 6119.3  | 6456.4  | 6819.0  | 8186.1  | 8853.6  | 9856.6  | 10122.6 | 10369.9 | 10220.8 | 9934.5  | 9917.6  |
| 77.5° | 5094.3  | 5233.2  | 5355.2  | 5783.8  | 5882.1  | 6121.0  | 5988.8  | 5851.6  | 5409.4  | 5036.7  | 4840.2  |
| 80°   | 4135.4  | 4409.9  | 4589.5  | 4894.4  | 5019.8  | 5090.9  | 5109.6  | 5062.1  | 4899.5  | 4674.2  | 4315.0  |
| 82.5° | 3074.9  | 3596.7  | 3952.5  | 4552.2  | 4772.4  | 4818.2  | 4906.3  | 4852.0  | 4745.3  | 4562.3  | 4304.8  |
| 85°   | 901.3   | 1019.9  | 1169.0  | 1585.7  | 1858.5  | 2090.6  | 2327.8  | 2444.7  | 2517.5  | 2415.9  | 2149.9  |
| 87.5° | 316.8   | 357.5   | 399.8   | 550.6   | 586.2   | 708.2   | 694.6   | 820.0   | 825.1   | 860.6   | 823.4   |
| 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: P158286

CATALOG NUMBER: VST-F10-LED-E-U-SL2-7050

**CANDELA DISTRIBUTION (continued):**

|       | 72°     | 73°     | 74°     | 75°     | 76°     | 77°     | 78°     | 79°     | 80°     | 81°     | 82°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  |
| 2.5°  | 2805.5  | 2805.5  | 2805.5  | 2807.2  | 2807.2  | 2807.2  | 2803.8  | 2802.1  | 2803.8  | 2807.2  | 2807.2  |
| 5°    | 2871.6  | 2873.3  | 2876.7  | 2869.9  | 2871.6  | 2876.7  | 2873.3  | 2871.6  | 2873.3  | 2876.7  | 2873.3  |
| 7.5°  | 2978.3  | 2980.0  | 2976.6  | 2983.4  | 2983.4  | 2986.8  | 2991.9  | 2986.8  | 2988.5  | 2990.2  | 2991.9  |
| 10°   | 3117.2  | 3118.9  | 3122.3  | 3127.4  | 3129.1  | 3132.5  | 3135.9  | 3141.0  | 3141.0  | 3137.6  | 3146.0  |
| 12.5° | 3283.3  | 3281.6  | 3285.0  | 3291.7  | 3295.1  | 3300.2  | 3310.4  | 3310.4  | 3317.1  | 3315.5  | 3323.9  |
| 15°   | 3445.9  | 3454.4  | 3456.1  | 3467.9  | 3473.0  | 3481.5  | 3493.3  | 3500.1  | 3500.1  | 3510.3  | 3513.7  |
| 17.5° | 3608.5  | 3615.3  | 3622.1  | 3632.3  | 3639.0  | 3644.1  | 3657.7  | 3666.1  | 3664.4  | 3683.1  | 3683.1  |
| 20°   | 3733.9  | 3747.5  | 3755.9  | 3762.7  | 3774.6  | 3783.0  | 3793.2  | 3803.4  | 3810.1  | 3822.0  | 3825.4  |
| 22.5° | 3855.9  | 3864.4  | 3876.2  | 3884.7  | 3898.2  | 3908.4  | 3920.3  | 3928.7  | 3940.6  | 3955.8  | 3960.9  |
| 25°   | 3991.4  | 4005.0  | 4018.5  | 4030.4  | 4040.6  | 4052.4  | 4072.7  | 4091.4  | 4108.3  | 4121.9  | 4127.0  |
| 27.5° | 4179.5  | 4194.7  | 4215.0  | 4223.5  | 4238.8  | 4248.9  | 4279.4  | 4303.1  | 4311.6  | 4335.3  | 4342.1  |
| 30°   | 4433.6  | 4450.5  | 4470.9  | 4481.0  | 4508.1  | 4521.7  | 4553.9  | 4579.3  | 4587.8  | 4616.6  | 4621.6  |
| 32.5° | 4801.2  | 4811.4  | 4852.0  | 4850.4  | 4887.6  | 4926.6  | 4945.2  | 4965.6  | 5002.8  | 5018.1  | 5023.2  |
| 35°   | 5311.2  | 5334.9  | 5363.7  | 5362.0  | 5409.4  | 5431.4  | 5468.7  | 5490.7  | 5517.9  | 5516.2  | 5545.0  |
| 37.5° | 5804.2  | 5812.6  | 5822.8  | 5844.8  | 5878.7  | 5909.2  | 5922.8  | 5944.8  | 5965.1  | 5995.6  | 6032.9  |
| 40°   | 6341.2  | 6361.5  | 6363.2  | 6375.1  | 6392.0  | 6431.0  | 6456.4  | 6480.1  | 6549.6  | 6593.6  | 6615.7  |
| 42.5° | 7145.9  | 7140.8  | 7107.0  | 7129.0  | 7139.2  | 7198.4  | 7217.1  | 7289.9  | 7367.9  | 7461.0  | 7486.5  |
| 45°   | 8181.1  | 8113.3  | 8093.0  | 8084.5  | 8138.7  | 8169.2  | 8245.4  | 8381.0  | 8462.3  | 8550.4  | 8592.7  |
| 47.5° | 9455.1  | 9243.3  | 9143.3  | 9121.3  | 9177.2  | 9307.7  | 9333.1  | 9466.9  | 9573.6  | 9638.0  | 9680.4  |
| 50°   | 10730.8 | 10564.7 | 10354.7 | 10283.5 | 10268.3 | 10388.5 | 10417.3 | 10529.1 | 10637.6 | 10656.2 | 10634.2 |
| 52.5° | 12333.4 | 12062.4 | 11715.1 | 11589.7 | 11489.7 | 11498.2 | 11521.9 | 11569.4 | 11638.8 | 11610.0 | 11550.7 |
| 55°   | 14383.3 | 14075.0 | 13903.9 | 13666.7 | 13515.9 | 13488.8 | 13385.5 | 13243.2 | 13238.1 | 13256.7 | 13078.8 |
| 57.5° | 17797.1 | 17668.3 | 17741.2 | 17715.7 | 17566.7 | 17656.4 | 17190.6 | 17058.4 | 16953.4 | 16770.4 | 16606.1 |
| 60°   | 21734.3 | 21866.4 | 22017.2 | 22364.5 | 22349.2 | 22698.2 | 22374.7 | 22293.3 | 22195.1 | 21630.9 | 21354.8 |
| 62.5° | 24077.3 | 24129.8 | 24351.7 | 24675.3 | 24993.8 | 25327.6 | 25478.3 | 25530.9 | 25325.9 | 24865.1 | 24289.0 |
| 65°   | 23669.0 | 23901.1 | 24116.2 | 24395.8 | 24722.7 | 25056.5 | 25375.0 | 25561.4 | 25513.9 | 25209.0 | 24575.4 |
| 67.5° | 21813.9 | 22057.8 | 22373.0 | 22666.0 | 23018.4 | 23308.1 | 23657.1 | 23999.3 | 24009.5 | 23857.0 | 23416.6 |
| 70°   | 19106.6 | 19389.6 | 19714.8 | 19879.2 | 20260.4 | 20522.9 | 20812.6 | 21151.5 | 21261.6 | 21280.2 | 20766.9 |
| 72.5° | 15533.7 | 15652.3 | 15811.5 | 15725.1 | 15801.3 | 15969.1 | 15891.1 | 15918.2 | 15499.8 | 15577.7 | 14944.1 |
| 75°   | 9460.1  | 9351.7  | 8870.6  | 8431.8  | 7896.4  | 7484.8  | 7583.0  | 6796.9  | 6022.7  | 5983.7  | 5424.7  |
| 77.5° | 4797.8  | 4625.0  | 4326.9  | 4016.8  | 3562.8  | 3042.7  | 2609.0  | 2141.4  | 1746.7  | 1521.3  | 1306.2  |
| 80°   | 4086.3  | 3964.3  | 3800.0  | 3574.7  | 3244.3  | 2859.7  | 2407.4  | 2051.6  | 1721.3  | 1377.3  | 1102.9  |
| 82.5° | 3910.1  | 3537.4  | 3298.5  | 3110.5  | 2753.0  | 2397.2  | 2149.9  | 1905.9  | 1672.1  | 1460.4  | 1157.1  |
| 85°   | 1939.8  | 1716.2  | 1451.9  | 1287.6  | 991.1   | 775.9   | 726.8   | 598.0   | 557.4   | 430.3   | 362.5   |
| 87.5° | 652.2   | 533.7   | 398.1   | 335.4   | 267.7   | 218.5   | 215.2   | 191.4   | 189.7   | 172.8   | 159.3   |
| 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: P158286

CATALOG NUMBER: VST-F10-LED-E-U-SL2-7050

**CANDELA DISTRIBUTION (continued):**

|       | 83°     | 84°     | 85°     | 86°     | 87°     | 88°     | 89°     | 90°     | 95°     | 105°   | 115°   |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| 0°    | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6  | 2788.6 | 2788.6 |
| 2.5°  | 2805.5  | 2808.9  | 2808.9  | 2805.5  | 2807.2  | 2803.8  | 2805.5  | 2807.2  | 2802.1  | 2800.4 | 2795.3 |
| 5°    | 2875.0  | 2873.3  | 2873.3  | 2875.0  | 2880.1  | 2881.8  | 2873.3  | 2876.7  | 2878.4  | 2869.9 | 2851.3 |
| 7.5°  | 2990.2  | 2990.2  | 2995.3  | 2993.6  | 3003.7  | 3000.3  | 2998.6  | 2998.6  | 2998.6  | 2981.7 | 2951.2 |
| 10°   | 3146.0  | 3146.0  | 3151.1  | 3157.9  | 3159.6  | 3156.2  | 3156.2  | 3157.9  | 3166.4  | 3132.5 | 3085.0 |
| 12.5° | 3320.5  | 3329.0  | 3327.3  | 3327.3  | 3347.6  | 3342.6  | 3335.8  | 3342.6  | 3351.0  | 3303.6 | 3235.8 |
| 15°   | 3515.4  | 3520.4  | 3523.8  | 3535.7  | 3532.3  | 3544.2  | 3547.6  | 3544.2  | 3552.6  | 3491.6 | 3378.1 |
| 17.5° | 3691.6  | 3701.7  | 3705.1  | 3718.7  | 3718.7  | 3720.4  | 3733.9  | 3728.8  | 3730.5  | 3661.1 | 3498.4 |
| 20°   | 3837.3  | 3847.4  | 3852.5  | 3867.7  | 3871.1  | 3877.9  | 3883.0  | 3886.4  | 3894.9  | 3811.8 | 3596.7 |
| 22.5° | 3982.9  | 3991.4  | 3999.9  | 4010.1  | 4023.6  | 4032.1  | 4038.9  | 4042.2  | 4057.5  | 3960.9 | 3689.9 |
| 25°   | 4145.6  | 4164.2  | 4172.7  | 4189.6  | 4203.2  | 4216.7  | 4226.9  | 4228.6  | 4254.0  | 4133.7 | 3766.1 |
| 27.5° | 4362.4  | 4387.9  | 4401.4  | 4428.5  | 4442.1  | 4455.6  | 4452.2  | 4472.6  | 4508.1  | 4331.9 | 3825.4 |
| 30°   | 4647.1  | 4679.2  | 4687.7  | 4714.8  | 4736.8  | 4750.4  | 4765.6  | 4782.6  | 4806.3  | 4552.2 | 3854.2 |
| 32.5° | 5043.5  | 5092.6  | 5104.5  | 5119.7  | 5151.9  | 5175.6  | 5185.8  | 5212.9  | 5219.7  | 4760.6 | 3845.7 |
| 35°   | 5587.3  | 5565.3  | 5622.9  | 5636.4  | 5682.2  | 5700.8  | 5712.7  | 5748.3  | 5721.1  | 4987.6 | 3789.8 |
| 37.5° | 6078.6  | 6071.8  | 6127.7  | 6158.2  | 6217.5  | 6204.0  | 6232.8  | 6256.5  | 6159.9  | 5148.5 | 3686.5 |
| 40°   | 6678.3  | 6669.9  | 6747.8  | 6758.0  | 6849.5  | 6829.1  | 6841.0  | 6859.6  | 6644.5  | 5260.3 | 3498.4 |
| 42.5° | 7515.3  | 7518.6  | 7601.7  | 7611.8  | 7623.7  | 7661.0  | 7600.0  | 7603.4  | 7159.5  | 5290.8 | 3188.4 |
| 45°   | 8618.1  | 8677.4  | 8626.6  | 8628.3  | 8624.9  | 8553.8  | 8477.5  | 8387.7  | 7694.8  | 5185.8 | 2788.6 |
| 47.5° | 9687.2  | 9646.5  | 9582.1  | 9522.8  | 9473.7  | 9361.9  | 9250.1  | 9097.6  | 8157.3  | 4936.8 | 2343.0 |
| 50°   | 10602.0 | 10510.5 | 10452.9 | 10288.6 | 10171.7 | 10026.0 | 9870.1  | 9695.6  | 8536.8  | 4577.6 | 1926.2 |
| 52.5° | 11452.5 | 11357.6 | 11142.4 | 10971.3 | 10803.6 | 10610.5 | 10429.2 | 10224.2 | 8872.3  | 4167.6 | 1607.7 |
| 55°   | 12865.4 | 12782.4 | 12567.2 | 12253.8 | 12047.1 | 11781.1 | 11542.3 | 11264.4 | 9551.6  | 3835.6 | 1397.7 |
| 57.5° | 16153.7 | 16082.6 | 15630.2 | 15432.0 | 15159.3 | 14491.8 | 14393.5 | 13959.8 | 11372.8 | 3796.6 | 1274.0 |
| 60°   | 20783.8 | 20478.9 | 20102.8 | 19560.7 | 18922.0 | 18701.7 | 18210.4 | 17632.7 | 14303.7 | 3903.3 | 1174.0 |
| 62.5° | 23626.6 | 22932.0 | 22379.7 | 21754.6 | 21166.7 | 20661.9 | 20124.8 | 19553.9 | 15803.0 | 3762.7 | 1050.4 |
| 65°   | 23840.1 | 23023.5 | 22293.3 | 21559.8 | 20899.0 | 20270.5 | 19748.7 | 19177.8 | 15315.1 | 3234.1 | 889.4  |
| 67.5° | 22664.4 | 21803.7 | 21007.5 | 20175.6 | 19508.2 | 18940.6 | 18276.5 | 17727.6 | 13939.5 | 2517.5 | 740.3  |
| 70°   | 20240.0 | 19484.4 | 18798.3 | 17902.1 | 17348.1 | 16656.9 | 16235.1 | 15548.9 | 12150.5 | 1716.2 | 611.6  |
| 72.5° | 14578.2 | 14008.9 | 13785.3 | 13160.2 | 12435.1 | 12028.5 | 11833.6 | 11167.8 | 8979.0  | 1065.6 | 499.8  |
| 75°   | 4924.9  | 5065.5  | 4743.6  | 4250.6  | 4491.2  | 4120.2  | 4271.0  | 3954.1  | 3798.3  | 611.6  | 420.1  |
| 77.5° | 1092.7  | 1026.7  | 948.7   | 881.0   | 875.9   | 823.4   | 872.5   | 825.1   | 882.7   | 389.7  | 371.0  |
| 80°   | 862.3   | 681.0   | 579.4   | 528.6   | 501.5   | 486.2   | 474.4   | 460.8   | 420.1   | 332.1  | 342.2  |
| 82.5° | 931.8   | 703.1   | 515.0   | 411.7   | 352.4   | 330.4   | 325.3   | 311.7   | 308.3   | 321.9  | 345.6  |
| 85°   | 298.2   | 249.0   | 211.8   | 199.9   | 184.7   | 176.2   | 172.8   | 167.7   | 203.3   | 350.7  | 332.1  |
| 87.5° | 155.9   | 137.2   | 122.0   | 116.9   | 101.6   | 94.9    | 93.2    | 94.9    | 142.3   | 350.7  | 240.6  |
| 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: P158286

CATALOG NUMBER: VST-F10-LED-E-U-SL2-7050

**CANDELA DISTRIBUTION (continued):**

|       | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2788.6 | 2788.6 | 2788.6 | 2788.6 | 2788.6 | 2788.6 | 2788.6 |
| 2.5°  | 2790.3 | 2788.6 | 2785.2 | 2783.5 | 2781.8 | 2773.3 | 2780.1 |
| 5°    | 2842.8 | 2825.8 | 2810.6 | 2792.0 | 2781.8 | 2773.3 | 2773.3 |
| 7.5°  | 2922.4 | 2875.0 | 2836.0 | 2793.7 | 2764.9 | 2742.8 | 2739.4 |
| 10°   | 3022.4 | 2930.9 | 2841.1 | 2764.9 | 2710.6 | 2670.0 | 2664.9 |
| 12.5° | 3117.2 | 2978.3 | 2836.0 | 2710.6 | 2625.9 | 2568.3 | 2564.9 |
| 15°   | 3205.3 | 3003.7 | 2797.0 | 2612.4 | 2485.3 | 2409.1 | 2400.6 |
| 17.5° | 3274.8 | 2988.5 | 2708.9 | 2475.2 | 2302.4 | 2212.6 | 2207.5 |
| 20°   | 3290.0 | 2927.5 | 2583.6 | 2305.7 | 2122.8 | 2027.9 | 2005.9 |
| 22.5° | 3276.5 | 2817.4 | 2427.7 | 2119.4 | 1909.3 | 1814.4 | 1802.6 |
| 25°   | 3235.8 | 2683.5 | 2234.6 | 1902.5 | 1707.7 | 1611.1 | 1587.4 |
| 27.5° | 3163.0 | 2526.0 | 2026.2 | 1692.5 | 1499.3 | 1406.1 | 1382.4 |
| 30°   | 3054.6 | 2336.2 | 1804.3 | 1495.9 | 1296.0 | 1221.5 | 1197.8 |
| 32.5° | 2903.8 | 2105.8 | 1585.7 | 1294.3 | 1128.3 | 1069.0 | 1058.8 |
| 35°   | 2695.4 | 1841.5 | 1357.0 | 1128.3 | 1006.3 | 970.7  | 965.7  |
| 37.5° | 2429.4 | 1577.3 | 1165.6 | 1009.7 | 921.6  | 899.6  | 896.2  |
| 40°   | 2082.1 | 1306.2 | 1030.0 | 925.0  | 860.6  | 842.0  | 838.6  |
| 42.5° | 1724.6 | 1102.9 | 930.1  | 857.2  | 804.7  | 787.8  | 782.7  |
| 45°   | 1411.2 | 965.7  | 855.5  | 801.3  | 752.2  | 733.6  | 731.9  |
| 47.5° | 1177.4 | 886.0  | 794.6  | 750.5  | 701.4  | 679.4  | 681.0  |
| 50°   | 1006.3 | 813.2  | 743.7  | 706.5  | 650.6  | 630.2  | 631.9  |
| 52.5° | 889.4  | 740.3  | 696.3  | 653.9  | 606.5  | 586.2  | 586.2  |
| 55°   | 797.9  | 681.0  | 650.6  | 604.8  | 567.5  | 548.9  | 547.2  |
| 57.5° | 723.4  | 633.6  | 606.5  | 569.2  | 532.0  | 509.9  | 509.9  |
| 60°   | 677.7  | 599.7  | 577.7  | 543.8  | 499.8  | 476.1  | 474.4  |
| 62.5° | 650.6  | 589.6  | 570.9  | 523.5  | 474.4  | 450.6  | 445.6  |
| 65°   | 630.2  | 613.3  | 589.6  | 511.6  | 454.0  | 428.6  | 423.5  |
| 67.5° | 631.9  | 669.2  | 635.3  | 518.4  | 447.3  | 410.0  | 403.2  |
| 70°   | 642.1  | 713.2  | 667.5  | 533.7  | 476.1  | 401.5  | 386.3  |
| 72.5° | 591.3  | 645.5  | 601.4  | 508.2  | 464.2  | 386.3  | 367.6  |
| 75°   | 493.0  | 471.0  | 432.0  | 413.4  | 416.8  | 350.7  | 343.9  |
| 77.5° | 399.8  | 350.7  | 313.4  | 328.7  | 350.7  | 299.9  | 293.1  |
| 80°   | 347.3  | 284.6  | 266.0  | 291.4  | 318.5  | 255.8  | 238.9  |
| 82.5° | 325.3  | 240.6  | 228.7  | 303.3  | 333.7  | 220.2  | 193.1  |
| 85°   | 286.3  | 196.5  | 179.6  | 357.5  | 333.7  | 166.0  | 154.2  |
| 87.5° | 191.4  | 116.9  | 111.8  | 262.6  | 228.7  | 115.2  | 93.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)