

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: P158737

Luminaire Tested: **VST-F11-LED-E-U-SL4-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P158737  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33714)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VST-F11-LED-E-U-SL4-7060  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL  
Light Source: (77) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27030.4 lumens  
Efficiency: N/A  
Efficacy: 95.6 lumens/watt  
Luminous Opening: Rectangular (W 1.83' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Full Cutoff  
BUG Rating: B3 - U0 - G4

Input Watts (W): 282.7  
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



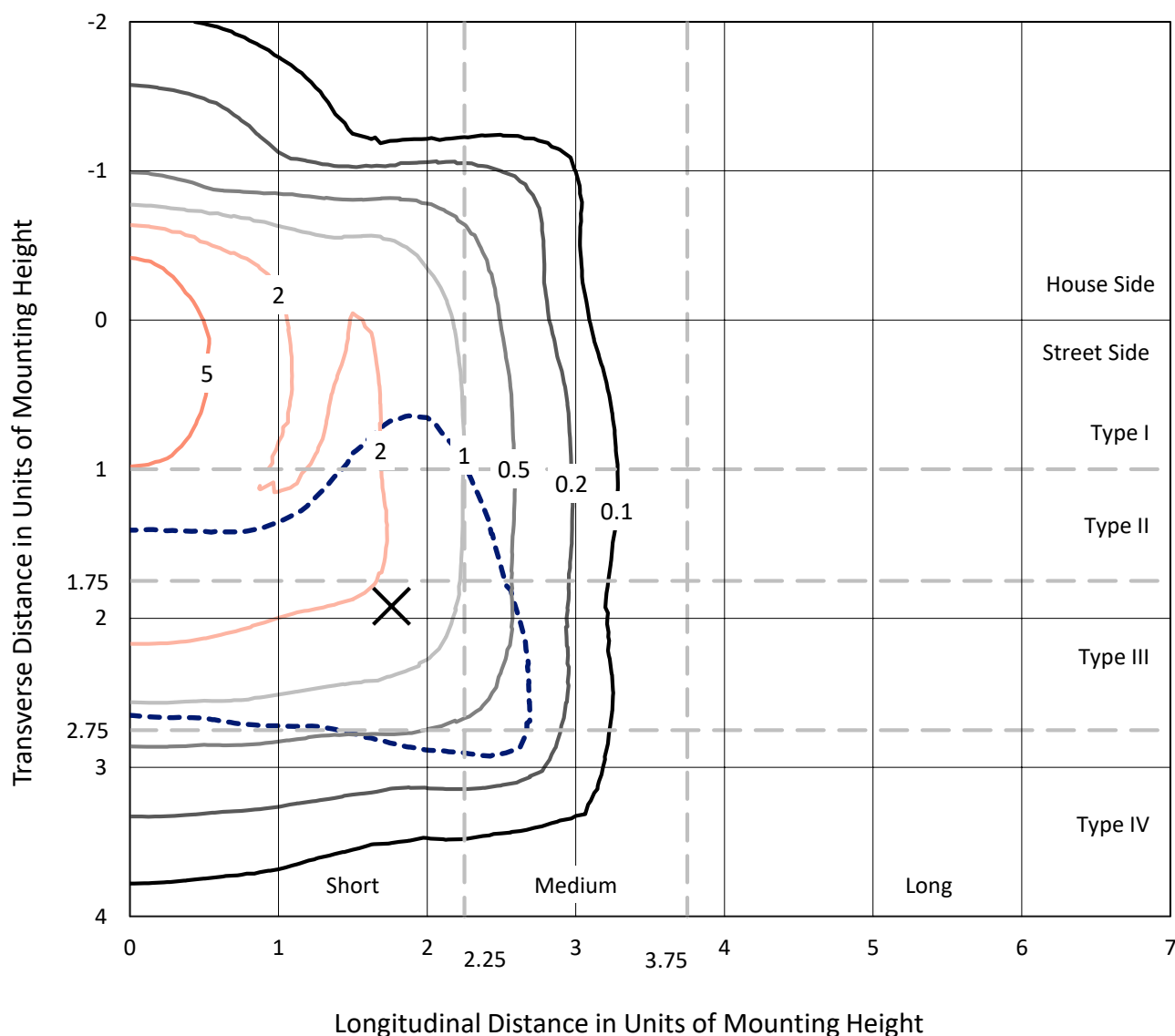
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

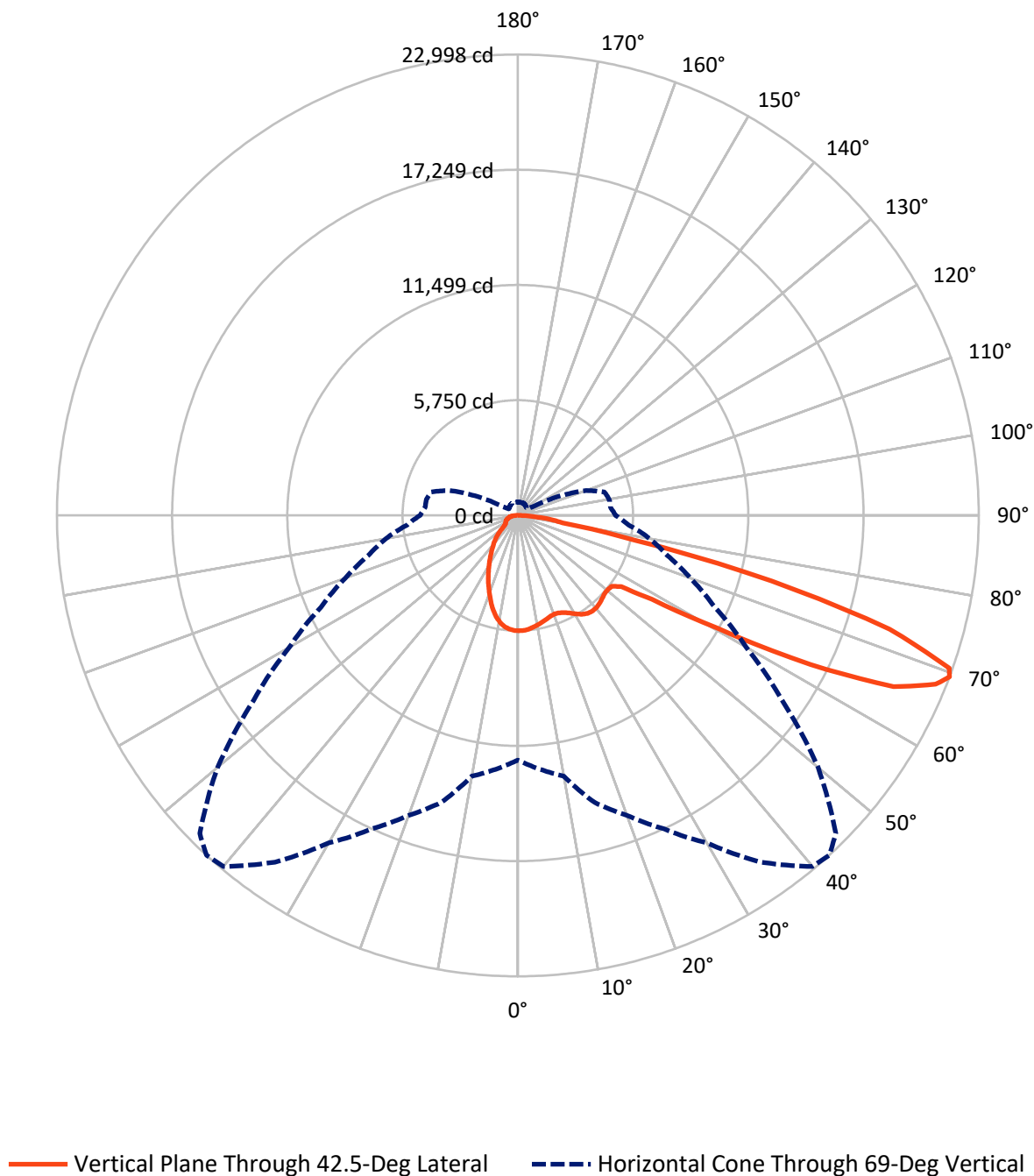


Based on 25 foot mounting height. Maximum calculated value = 9.2 fc  
 Type IV - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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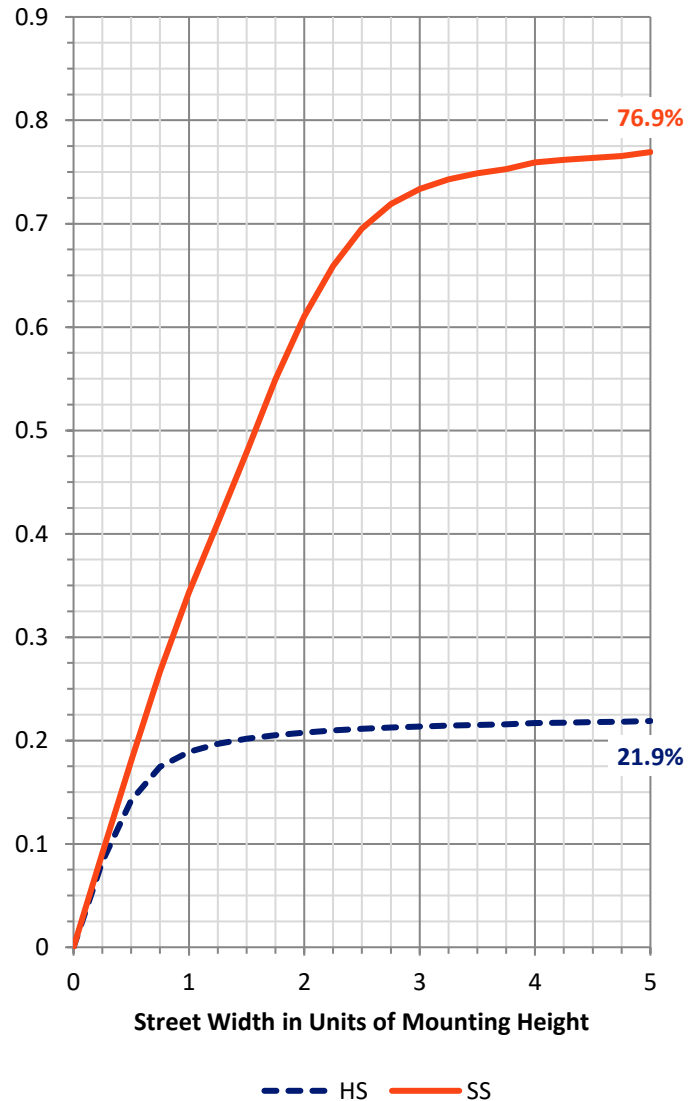
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6009.3   | 0.0    | 6009.3  |
|                    | % Fixture | 22.2     | 0.0    | 22.2    |
| <b>Street Side</b> | Lumens    | 21021.1  | 0.0    | 21021.1 |
|                    | % Fixture | 77.8     | 0.0    | 77.8    |
| <b>Total</b>       | Lumens    | 27030.4  | 0.0    | 27030.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 535.9   | 2.0       |
| 10°-20°   | 1444.2  | 5.3       |
| 20°-30°   | 2106.0  | 7.8       |
| 30°-40°   | 2684.7  | 9.9       |
| 40°-50°   | 3123.7  | 11.6      |
| 50°-60°   | 4752.8  | 17.6      |
| 60°-70°   | 8395.5  | 31.1      |
| 70°-80°   | 3464.5  | 12.8      |
| 80°-90°   | 523.1   | 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°    | 27030.4 | 100.0     |
| 0°-180°   | 27030.4 | 100.0     |

**Coefficient of Utilization**



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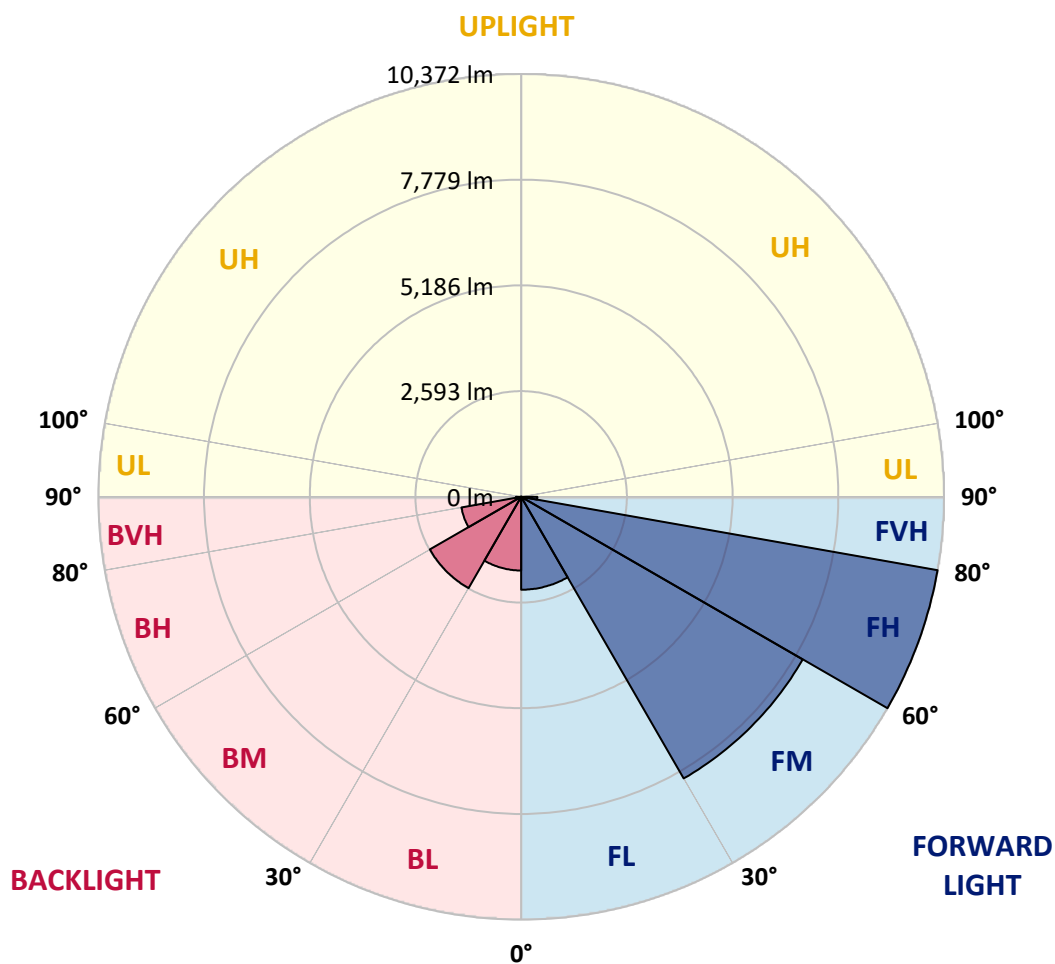
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2279.3  | 8.4       |                         |      |          |
| FM   | (30°-60°)   | 7974.7  | 29.5      |                         |      |          |
| FH   | (60°-80°)   | 10371.5 | 38.4      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 395.6   | 1.5       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1806.7  | 6.7       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 2586.5  | 9.6       | B3/5000                 |      |          |
| BH   | (60°-80°)   | 1488.5  | 5.5       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 127.5   | 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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 10°     | 15°     | 20°     | 25°     | 30°     | 35°     | 40°     | 42.5°   | 45°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5756.6  | 5756.6  | 5756.6  | 5756.6  | 5756.6  | 5756.6  | 5756.6  | 5756.6  | 5756.6  | 5756.6  | 5756.6  |
| 2.5°  | 5737.9  | 5758.4  | 5751.0  | 5751.0  | 5756.6  | 5747.2  | 5747.2  | 5751.0  | 5741.6  | 5747.2  | 5745.4  |
| 5°    | 5717.4  | 5728.6  | 5724.9  | 5724.9  | 5724.9  | 5717.4  | 5713.7  | 5711.8  | 5698.8  | 5698.8  | 5693.2  |
| 7.5°  | 5672.7  | 5676.4  | 5682.0  | 5674.6  | 5672.7  | 5670.8  | 5657.8  | 5650.3  | 5635.4  | 5622.4  | 5626.1  |
| 10°   | 5613.1  | 5611.2  | 5620.5  | 5614.9  | 5607.5  | 5601.9  | 5590.7  | 5577.7  | 5560.9  | 5544.1  | 5542.2  |
| 12.5° | 5546.0  | 5544.1  | 5551.6  | 5547.8  | 5542.2  | 5531.1  | 5521.7  | 5499.4  | 5473.3  | 5452.8  | 5450.9  |
| 15°   | 5503.1  | 5497.5  | 5505.0  | 5497.5  | 5488.2  | 5477.0  | 5460.2  | 5432.3  | 5385.7  | 5365.2  | 5348.4  |
| 17.5° | 5544.1  | 5534.8  | 5538.5  | 5529.2  | 5516.2  | 5486.3  | 5447.2  | 5387.6  | 5320.5  | 5285.1  | 5259.0  |
| 20°   | 5687.6  | 5670.8  | 5674.6  | 5665.2  | 5635.4  | 5596.3  | 5521.7  | 5417.4  | 5303.7  | 5245.9  | 5204.9  |
| 22.5° | 5892.6  | 5879.6  | 5885.1  | 5875.8  | 5846.0  | 5786.4  | 5674.6  | 5525.5  | 5363.3  | 5279.5  | 5214.3  |
| 25°   | 6203.8  | 6215.0  | 6218.7  | 6175.9  | 6159.1  | 6049.1  | 5894.5  | 5687.6  | 5471.4  | 5372.7  | 5283.2  |
| 27.5° | 6554.2  | 6554.2  | 6570.9  | 6554.2  | 6520.6  | 6392.0  | 6174.0  | 5924.3  | 5646.6  | 5512.4  | 5404.3  |
| 30°   | 6895.2  | 6891.5  | 6923.1  | 6919.4  | 6865.4  | 6720.0  | 6472.2  | 6168.4  | 5851.6  | 5700.6  | 5562.7  |
| 32.5° | 7256.7  | 7267.9  | 7288.4  | 7281.0  | 7210.1  | 7008.9  | 6710.7  | 6380.9  | 6047.3  | 5881.4  | 5726.7  |
| 35°   | 7648.1  | 7653.7  | 7661.1  | 7657.4  | 7513.9  | 7260.5  | 6885.9  | 6516.9  | 6170.3  | 6006.3  | 5846.0  |
| 37.5° | 8039.4  | 8033.8  | 8024.5  | 7944.4  | 7780.4  | 7428.2  | 6992.1  | 6595.2  | 6231.8  | 6054.7  | 5888.9  |
| 40°   | 8389.8  | 8358.1  | 8328.3  | 8203.4  | 7951.8  | 7523.2  | 7033.1  | 6613.8  | 6226.2  | 6043.5  | 5881.4  |
| 42.5° | 8581.7  | 8546.3  | 8484.8  | 8328.3  | 8022.7  | 7532.5  | 7005.1  | 6557.9  | 6168.4  | 5987.6  | 5827.4  |
| 45°   | 8617.1  | 8591.0  | 8531.4  | 8356.2  | 8005.9  | 7472.9  | 6919.4  | 6466.6  | 6082.7  | 5901.9  | 5751.0  |
| 47.5° | 8533.3  | 8512.8  | 8455.0  | 8281.7  | 7933.2  | 7383.4  | 6820.7  | 6369.7  | 5998.8  | 5829.2  | 5683.9  |
| 50°   | 8404.7  | 8386.0  | 8341.3  | 8182.9  | 7851.2  | 7322.0  | 6770.3  | 6319.4  | 5970.9  | 5816.2  | 5682.0  |
| 52.5° | 8613.4  | 8628.3  | 8497.9  | 8324.6  | 7938.8  | 7376.0  | 6826.2  | 6371.5  | 6021.2  | 5868.4  | 5728.6  |
| 55°   | 11857.9 | 11837.4 | 11052.8 | 10395.0 | 9219.1  | 8153.1  | 7357.4  | 6785.2  | 6410.7  | 6257.9  | 6127.4  |
| 57.5° | 15408.0 | 15337.2 | 15014.8 | 14399.8 | 13136.3 | 11449.8 | 9916.0  | 8611.5  | 8097.2  | 7877.3  | 7892.2  |
| 60°   | 16567.1 | 16593.2 | 16524.2 | 16306.2 | 15853.4 | 14975.6 | 13809.0 | 12828.8 | 11863.5 | 11392.0 | 11446.0 |
| 62.5° | 17210.0 | 17256.6 | 17316.3 | 17267.8 | 17120.6 | 16917.5 | 16770.2 | 16859.7 | 16725.5 | 16386.3 | 16116.1 |
| 65°   | 17299.5 | 17394.5 | 17592.1 | 17748.6 | 17825.0 | 18017.0 | 18467.9 | 19548.8 | 20536.5 | 20601.7 | 20126.5 |
| 67.5° | 15529.1 | 15791.9 | 16220.5 | 16945.4 | 17566.0 | 18248.0 | 19336.4 | 20980.0 | 22437.3 | 22485.8 | 22042.3 |
| 69°   | 12210.1 | 12715.1 | 13216.4 | 14835.9 | 15926.0 | 17262.2 | 18872.3 | 21117.9 | 22864.1 | 22998.3 | 22439.2 |
| 70°   | 9783.7  | 10083.8 | 10516.1 | 12143.0 | 13771.8 | 15475.1 | 17808.2 | 20663.2 | 22571.5 | 22841.7 | 22224.9 |
| 72.5° | 5874.0  | 5989.5  | 6138.6  | 6721.9  | 7560.5  | 9077.4  | 12171.0 | 16846.6 | 19040.1 | 19401.6 | 18617.0 |
| 75°   | 3797.9  | 3790.5  | 3803.5  | 3965.7  | 4014.1  | 4304.8  | 5279.5  | 8667.4  | 12420.7 | 13076.6 | 12137.4 |
| 77.5° | 2860.6  | 2886.7  | 2845.7  | 2860.6  | 2847.5  | 2925.8  | 2955.6  | 3102.8  | 4903.0  | 6039.8  | 5400.6  |
| 80°   | 2525.1  | 2538.2  | 2540.0  | 2532.6  | 2441.3  | 2433.8  | 2482.3  | 2398.4  | 2228.8  | 2262.4  | 2167.3  |
| 82.5° | 1440.5  | 1438.7  | 1455.4  | 1582.2  | 1634.3  | 1805.8  | 1876.6  | 1915.7  | 1768.5  | 1658.6  | 1500.2  |
| 85°   | 933.6   | 941.1   | 959.7   | 998.9   | 959.7   | 974.6   | 957.9   | 991.4   | 909.4   | 844.2   | 754.7   |
| 87.5° | 382.0   | 382.0   | 406.3   | 441.7   | 411.8   | 404.4   | 346.6   | 342.9   | 290.7   | 262.8   | 205.0   |
| 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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**CANDELA DISTRIBUTION (continued):**

|       | 50°     | 55°     | 60°     | 65°     | 70°     | 75°     | 80°     | 85°    | 90°    | 95°    | 100°   |
|-------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|
| 0°    | 5756.6  | 5756.6  | 5756.6  | 5756.6  | 5756.6  | 5756.6  | 5756.6  | 5756.6 | 5756.6 | 5756.6 | 5756.6 |
| 2.5°  | 5734.2  | 5745.4  | 5739.8  | 5747.2  | 5741.6  | 5741.6  | 5734.2  | 5732.3 | 5737.9 | 5730.5 | 5732.3 |
| 5°    | 5683.9  | 5685.7  | 5676.4  | 5680.2  | 5669.0  | 5665.2  | 5659.7  | 5644.7 | 5654.1 | 5644.7 | 5648.5 |
| 7.5°  | 5611.2  | 5605.6  | 5592.6  | 5573.9  | 5560.9  | 5555.3  | 5544.1  | 5523.6 | 5527.3 | 5510.6 | 5519.9 |
| 10°   | 5518.0  | 5499.4  | 5477.0  | 5449.1  | 5430.4  | 5413.7  | 5389.4  | 5365.2 | 5352.2 | 5337.3 | 5335.4 |
| 12.5° | 5413.7  | 5391.3  | 5361.5  | 5318.6  | 5277.6  | 5249.7  | 5212.4  | 5169.5 | 5156.5 | 5132.3 | 5119.2 |
| 15°   | 5300.0  | 5264.6  | 5229.2  | 5180.7  | 5136.0  | 5093.1  | 5042.8  | 4988.8 | 4953.4 | 4916.1 | 4888.1 |
| 17.5° | 5197.5  | 5156.5  | 5109.9  | 5063.3  | 5014.9  | 4962.7  | 4899.3  | 4832.2 | 4780.0 | 4711.1 | 4655.2 |
| 20°   | 5117.4  | 5065.2  | 5018.6  | 4970.1  | 4916.1  | 4852.7  | 4776.3  | 4690.6 | 4603.0 | 4526.6 | 4461.4 |
| 22.5° | 5085.7  | 5003.7  | 4947.8  | 4899.3  | 4845.3  | 4770.7  | 4677.6  | 4576.9 | 4470.7 | 4364.5 | 4278.7 |
| 25°   | 5111.8  | 4990.6  | 4903.0  | 4845.3  | 4798.7  | 4722.3  | 4617.9  | 4494.9 | 4371.9 | 4245.2 | 4129.7 |
| 27.5° | 5188.2  | 5033.5  | 4906.8  | 4815.5  | 4761.4  | 4685.0  | 4575.1  | 4444.6 | 4299.2 | 4157.6 | 4016.0 |
| 30°   | 5307.4  | 5106.2  | 4945.9  | 4817.3  | 4733.5  | 4645.9  | 4530.3  | 4379.4 | 4232.2 | 4070.0 | 3915.4 |
| 32.5° | 5423.0  | 5182.6  | 4990.6  | 4824.8  | 4696.2  | 4582.5  | 4453.9  | 4304.8 | 4146.4 | 3976.9 | 3816.6 |
| 35°   | 5505.0  | 5232.9  | 5007.4  | 4808.0  | 4638.4  | 4496.8  | 4358.9  | 4209.8 | 4055.1 | 3881.8 | 3717.8 |
| 37.5° | 5544.1  | 5260.8  | 5009.3  | 4763.3  | 4562.0  | 4405.5  | 4258.2  | 4111.0 | 3965.7 | 3801.7 | 3647.0 |
| 40°   | 5542.2  | 5259.0  | 4983.2  | 4705.5  | 4470.7  | 4304.8  | 4159.5  | 4016.0 | 3879.9 | 3736.5 | 3596.7 |
| 42.5° | 5501.2  | 5229.2  | 4945.9  | 4649.6  | 4405.5  | 4221.0  | 4070.0  | 3932.1 | 3816.6 | 3689.9 | 3572.5 |
| 45°   | 5437.9  | 5178.9  | 4906.8  | 4623.5  | 4386.8  | 4202.3  | 4042.1  | 3907.9 | 3805.4 | 3689.9 | 3589.2 |
| 47.5° | 5389.4  | 5150.9  | 4912.4  | 4670.1  | 4444.6  | 4252.7  | 4083.1  | 3935.9 | 3848.3 | 3755.1 | 3684.3 |
| 50°   | 5396.9  | 5163.9  | 4931.0  | 4698.1  | 4485.6  | 4291.8  | 4127.8  | 3993.6 | 3930.3 | 3906.0 | 3889.3 |
| 52.5° | 5436.0  | 5184.4  | 4986.9  | 4847.1  | 4774.5  | 4629.1  | 4532.2  | 4448.3 | 4494.9 | 4403.6 | 4295.5 |
| 55°   | 5935.5  | 5853.5  | 6045.4  | 6226.2  | 6455.4  | 6541.1  | 6459.1  | 6444.2 | 6518.8 | 6209.4 | 5499.4 |
| 57.5° | 7998.4  | 8210.9  | 8507.2  | 8663.7  | 8853.8  | 8803.5  | 8613.4  | 8455.0 | 8268.6 | 7907.1 | 7021.9 |
| 60°   | 11507.5 | 11347.3 | 11213.1 | 10834.8 | 10525.4 | 10163.9 | 9761.4  | 9416.6 | 9086.7 | 8566.8 | 7608.9 |
| 62.5° | 15122.8 | 14010.3 | 13080.4 | 12182.1 | 11459.1 | 10859.0 | 10275.7 | 9757.6 | 9258.2 | 8533.3 | 7502.7 |
| 65°   | 18249.9 | 15907.4 | 14161.2 | 12843.7 | 11787.1 | 10875.8 | 10126.6 | 9411.0 | 8775.5 | 7925.7 | 6906.4 |
| 67.5° | 19655.0 | 16719.9 | 14179.9 | 12292.1 | 10829.2 | 9591.8  | 8622.7  | 7541.9 | 6830.0 | 6285.8 | 5711.8 |
| 69°   | 19550.7 | 16099.3 | 13168.0 | 10844.1 | 9163.2  | 7720.8  | 6680.9  | 5553.4 | 4871.4 | 4640.3 | 4627.2 |
| 70°   | 19055.0 | 15048.3 | 11986.5 | 9668.2  | 7745.0  | 6311.9  | 5314.9  | 4303.0 | 3667.5 | 3509.1 | 3790.5 |
| 72.5° | 15557.1 | 10633.5 | 7512.0  | 5736.1  | 4411.1  | 3486.7  | 2843.8  | 2256.8 | 1802.1 | 1561.7 | 1613.8 |
| 75°   | 8786.7  | 4923.5  | 3183.0  | 2405.9  | 2033.2  | 1680.9  | 1442.4  | 1230.0 | 1112.5 | 903.8  | 715.6  |
| 77.5° | 3194.2  | 2113.3  | 1680.9  | 1453.6  | 1030.6  | 710.0   | 594.5   | 519.9  | 471.5  | 471.5  | 449.1  |
| 80°   | 2020.1  | 1591.5  | 1110.7  | 760.3   | 562.8   | 490.1   | 428.6   | 376.4  | 346.6  | 339.2  | 346.6  |
| 82.5° | 1261.6  | 974.6   | 622.4   | 477.1   | 400.7   | 359.7   | 313.1   | 273.9  | 249.7  | 244.1  | 255.3  |
| 85°   | 622.4   | 482.7   | 378.3   | 337.3   | 316.8   | 294.4   | 259.0   | 221.8  | 214.3  | 229.2  | 268.4  |
| 87.5° | 186.4   | 165.9   | 136.0   | 141.6   | 149.1   | 145.4   | 115.5   | 100.6  | 95.0   | 124.9  | 195.7  |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    | 0.0    | 0.0    | 0.0    |





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**CANDELA DISTRIBUTION (continued):**

|       | 105°   | 110°   | 115°   | 120°   | 125°   | 130°   | 135°   | 140°   | 145°   | 150°   | 155°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5756.6 | 5756.6 | 5756.6 | 5756.6 | 5756.6 | 5756.6 | 5756.6 | 5756.6 | 5756.6 | 5756.6 | 5756.6 |
| 2.5°  | 5736.1 | 5734.2 | 5737.9 | 5732.3 | 5736.1 | 5737.9 | 5734.2 | 5751.0 | 5739.8 | 5741.6 | 5749.1 |
| 5°    | 5652.2 | 5648.5 | 5663.4 | 5659.7 | 5667.1 | 5674.6 | 5670.8 | 5695.1 | 5685.7 | 5693.2 | 5708.1 |
| 7.5°  | 5512.4 | 5519.9 | 5521.7 | 5521.7 | 5536.7 | 5560.9 | 5566.5 | 5581.4 | 5581.4 | 5601.9 | 5616.8 |
| 10°   | 5326.1 | 5327.9 | 5339.1 | 5337.3 | 5355.9 | 5382.0 | 5385.7 | 5411.8 | 5421.1 | 5454.7 | 5475.2 |
| 12.5° | 5109.9 | 5100.6 | 5098.7 | 5096.9 | 5121.1 | 5149.0 | 5152.8 | 5197.5 | 5216.1 | 5245.9 | 5279.5 |
| 15°   | 4867.6 | 4843.4 | 4836.0 | 4850.9 | 4845.3 | 4862.0 | 4878.8 | 4903.0 | 4929.1 | 4988.8 | 5018.6 |
| 17.5° | 4631.0 | 4582.5 | 4569.5 | 4552.7 | 4535.9 | 4535.9 | 4543.4 | 4573.2 | 4627.2 | 4658.9 | 4726.0 |
| 20°   | 4388.7 | 4330.9 | 4284.3 | 4239.6 | 4200.5 | 4185.6 | 4187.4 | 4224.7 | 4263.8 | 4316.0 | 4379.4 |
| 22.5° | 4185.6 | 4098.0 | 4017.8 | 3958.2 | 3878.1 | 3876.2 | 3865.0 | 3876.2 | 3919.1 | 3932.1 | 3967.5 |
| 25°   | 4010.4 | 3893.0 | 3784.9 | 3688.0 | 3609.7 | 3568.7 | 3557.5 | 3553.8 | 3533.3 | 3527.7 | 3501.6 |
| 27.5° | 3874.4 | 3732.7 | 3593.0 | 3475.6 | 3378.6 | 3322.7 | 3251.9 | 3201.6 | 3128.9 | 3110.3 | 3063.7 |
| 30°   | 3762.5 | 3609.7 | 3456.9 | 3304.1 | 3194.2 | 3093.5 | 2974.3 | 2886.7 | 2774.9 | 2702.2 | 2638.8 |
| 32.5° | 3654.5 | 3499.8 | 3345.1 | 3194.2 | 3024.6 | 2868.0 | 2711.5 | 2575.4 | 2450.6 | 2338.8 | 2245.6 |
| 35°   | 3565.0 | 3417.8 | 3261.2 | 3078.6 | 2862.4 | 2636.9 | 2448.7 | 2294.1 | 2122.6 | 2005.2 | 1887.8 |
| 37.5° | 3507.2 | 3373.1 | 3216.5 | 2964.9 | 2687.3 | 2445.0 | 2230.7 | 2042.5 | 1867.3 | 1690.3 | 1557.9 |
| 40°   | 3481.1 | 3363.7 | 3168.1 | 2860.6 | 2534.5 | 2266.1 | 2029.4 | 1820.7 | 1597.1 | 1397.7 | 1256.0 |
| 42.5° | 3479.3 | 3360.0 | 3101.0 | 2745.0 | 2407.7 | 2115.1 | 1852.4 | 1602.7 | 1354.8 | 1149.8 | 1010.1 |
| 45°   | 3512.8 | 3354.4 | 3030.2 | 2648.1 | 2295.9 | 1990.3 | 1677.2 | 1373.4 | 1095.8 | 943.0  | 868.4  |
| 47.5° | 3602.3 | 3363.7 | 2972.4 | 2558.7 | 2189.7 | 1839.3 | 1475.9 | 1121.9 | 892.6  | 821.8  | 821.8  |
| 50°   | 3762.5 | 3417.8 | 2957.5 | 2495.3 | 2083.5 | 1664.2 | 1230.0 | 905.7  | 790.2  | 790.2  | 812.5  |
| 52.5° | 4008.5 | 3531.5 | 2983.6 | 2450.6 | 1951.2 | 1433.1 | 969.1  | 780.8  | 758.5  | 779.0  | 808.8  |
| 55°   | 4575.1 | 3732.7 | 3019.0 | 2374.2 | 1749.9 | 1136.8 | 799.5  | 738.0  | 747.3  | 771.5  | 799.5  |
| 57.5° | 5614.9 | 4163.2 | 3056.2 | 2206.5 | 1425.6 | 875.9  | 724.9  | 721.2  | 738.0  | 760.3  | 784.6  |
| 60°   | 6298.9 | 4711.1 | 3151.3 | 1953.0 | 1079.0 | 723.1  | 687.7  | 710.0  | 730.5  | 749.2  | 767.8  |
| 62.5° | 6298.9 | 4865.8 | 3222.1 | 1669.8 | 810.7  | 657.8  | 663.4  | 698.8  | 723.1  | 732.4  | 743.6  |
| 65°   | 5896.3 | 4582.5 | 2981.7 | 1360.4 | 659.7  | 620.6  | 641.1  | 676.5  | 698.8  | 706.3  | 715.6  |
| 67.5° | 5152.8 | 4047.7 | 2512.1 | 1025.0 | 588.9  | 588.9  | 615.0  | 641.1  | 659.7  | 674.6  | 689.5  |
| 69°   | 4480.0 | 3632.1 | 2212.1 | 868.4  | 560.9  | 564.7  | 590.8  | 613.1  | 635.5  | 654.1  | 672.7  |
| 70°   | 3995.5 | 3320.9 | 2003.3 | 788.3  | 544.2  | 546.0  | 572.1  | 596.3  | 616.8  | 637.3  | 659.7  |
| 72.5° | 2139.4 | 2294.1 | 1522.5 | 646.7  | 501.3  | 506.9  | 531.1  | 553.5  | 572.1  | 592.6  | 613.1  |
| 75°   | 728.7  | 985.8  | 969.1  | 529.3  | 452.8  | 467.8  | 482.7  | 503.2  | 527.4  | 540.4  | 551.6  |
| 77.5° | 426.8  | 441.7  | 516.2  | 430.5  | 408.1  | 415.6  | 432.3  | 449.1  | 469.6  | 482.7  | 492.0  |
| 80°   | 357.8  | 355.9  | 357.8  | 350.4  | 355.9  | 372.7  | 383.9  | 406.3  | 424.9  | 428.6  | 426.8  |
| 82.5° | 290.7  | 305.6  | 307.5  | 303.8  | 320.5  | 333.6  | 342.9  | 355.9  | 354.1  | 357.8  | 365.3  |
| 85°   | 259.0  | 257.2  | 270.2  | 272.1  | 272.1  | 262.8  | 264.6  | 264.6  | 264.6  | 270.2  | 272.1  |
| 87.5° | 259.0  | 216.2  | 167.7  | 150.9  | 158.4  | 149.1  | 141.6  | 139.8  | 154.7  | 169.6  | 165.9  |
| 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):**

|       | 160°   | 165°   | 170°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|
| 0°    | 5756.6 | 5756.6 | 5756.6 | 5756.6 | 5756.6 |
| 2.5°  | 5752.8 | 5758.4 | 5754.7 | 5754.7 | 5758.4 |
| 5°    | 5713.7 | 5723.0 | 5719.3 | 5723.0 | 5723.0 |
| 7.5°  | 5624.2 | 5637.3 | 5646.6 | 5655.9 | 5650.3 |
| 10°   | 5495.7 | 5518.0 | 5532.9 | 5544.1 | 5538.5 |
| 12.5° | 5303.7 | 5324.2 | 5355.9 | 5374.5 | 5359.6 |
| 15°   | 5040.9 | 5098.7 | 5117.4 | 5143.4 | 5128.5 |
| 17.5° | 4767.0 | 4802.4 | 4824.8 | 4849.0 | 4863.9 |
| 20°   | 4401.7 | 4429.7 | 4459.5 | 4470.7 | 4453.9 |
| 22.5° | 3961.9 | 3976.9 | 3971.3 | 3988.0 | 3954.5 |
| 25°   | 3479.3 | 3488.6 | 3483.0 | 3497.9 | 3470.0 |
| 27.5° | 3022.7 | 3020.8 | 3022.7 | 3004.1 | 2985.4 |
| 30°   | 2582.9 | 2566.1 | 2558.7 | 2530.7 | 2525.1 |
| 32.5° | 2189.7 | 2131.9 | 2102.1 | 2061.1 | 2051.8 |
| 35°   | 1796.5 | 1714.5 | 1660.4 | 1613.8 | 1593.3 |
| 37.5° | 1444.3 | 1345.5 | 1282.1 | 1241.1 | 1235.5 |
| 40°   | 1142.4 | 1051.1 | 1006.3 | 984.0  | 980.2  |
| 42.5° | 931.8  | 892.6  | 881.5  | 881.5  | 881.5  |
| 45°   | 849.8  | 847.9  | 857.2  | 864.7  | 866.6  |
| 47.5° | 833.0  | 844.2  | 857.2  | 868.4  | 872.1  |
| 50°   | 833.0  | 844.2  | 853.5  | 864.7  | 868.4  |
| 52.5° | 829.3  | 838.6  | 842.3  | 849.8  | 853.5  |
| 55°   | 818.1  | 823.7  | 823.7  | 827.4  | 831.2  |
| 57.5° | 799.5  | 803.2  | 797.6  | 801.3  | 810.7  |
| 60°   | 780.8  | 784.6  | 775.2  | 784.6  | 790.2  |
| 62.5° | 760.3  | 762.2  | 758.5  | 765.9  | 765.9  |
| 65°   | 726.8  | 723.1  | 728.7  | 734.2  | 736.1  |
| 67.5° | 693.2  | 683.9  | 689.5  | 691.4  | 695.1  |
| 69°   | 667.2  | 661.6  | 663.4  | 667.2  | 670.9  |
| 70°   | 648.5  | 644.8  | 648.5  | 654.1  | 659.7  |
| 72.5° | 601.9  | 603.8  | 616.8  | 628.0  | 639.2  |
| 75°   | 559.1  | 572.1  | 588.9  | 613.1  | 626.2  |
| 77.5° | 506.9  | 516.2  | 529.3  | 555.3  | 579.6  |
| 80°   | 437.9  | 443.5  | 445.4  | 454.7  | 452.8  |
| 82.5° | 355.9  | 350.4  | 346.6  | 342.9  | 341.0  |
| 85°   | 255.3  | 253.4  | 238.5  | 227.4  | 227.4  |
| 87.5° | 152.8  | 145.4  | 137.9  | 128.6  | 123.0  |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)