

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: McGRAW-EDISON

Report Number: P164962

Luminaire Tested: **VTS-F07-LED-E1-SL2-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P164962  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33726)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: VTS-F07-LED-E1-SL2-HSS  
Description: VENTUS LED SITE LUMINAIRE  
(7) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD  
Light Source: (49) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

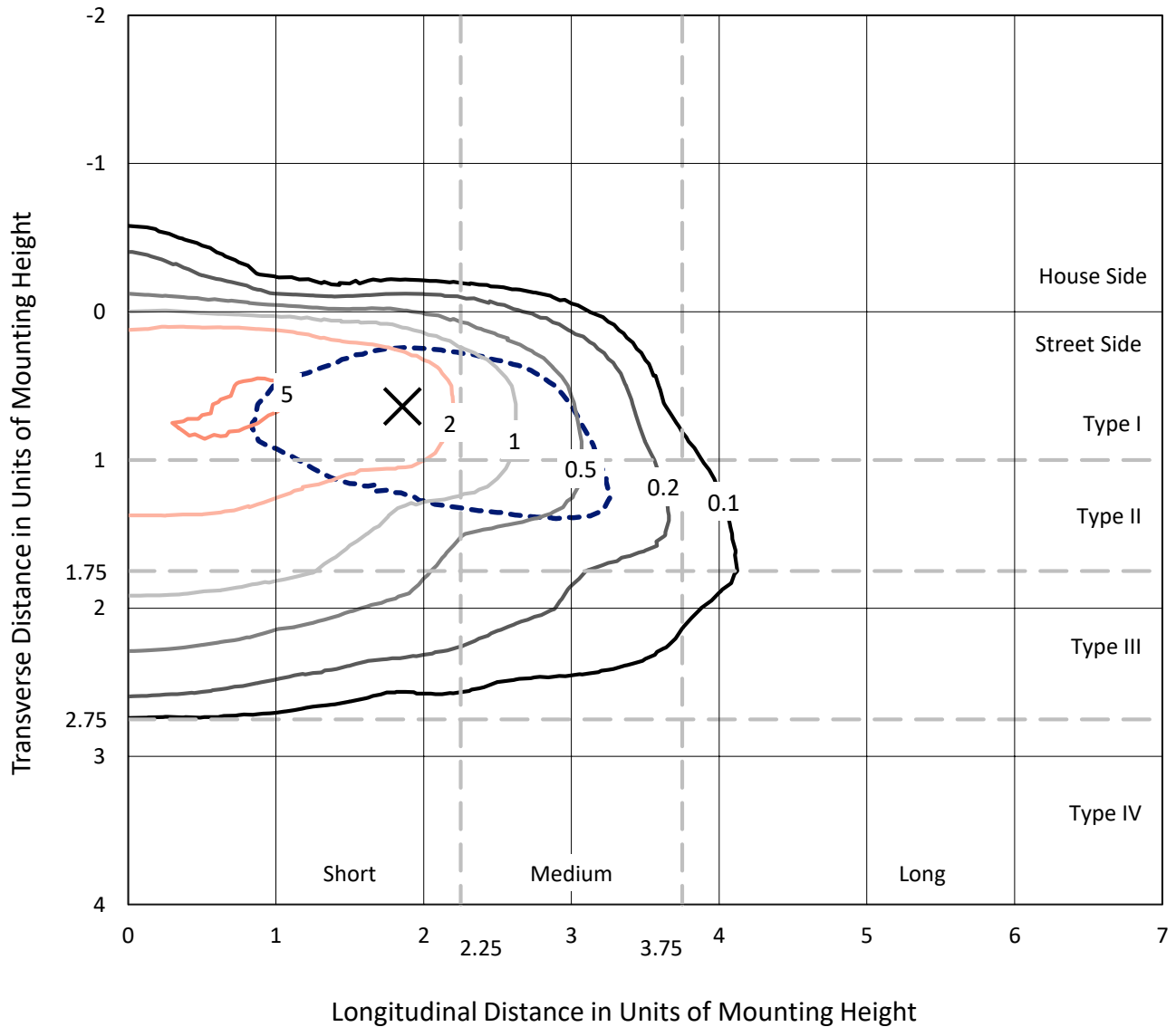
Lumens per Lamp: N/A  
Luminaire Lumens: 10469 lumens  
Efficiency: N/A  
Efficacy: 58.0 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.17' x L: 1' x H: 0.1')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B0 - U0 - G2  
  
Input Watts (W): 180.5  
Input Voltage (V): NR  
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: 25 FT

REPORT NUMBER: P164962

CATALOG NUMBER: VTS-F07-LED-E1-SL2-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

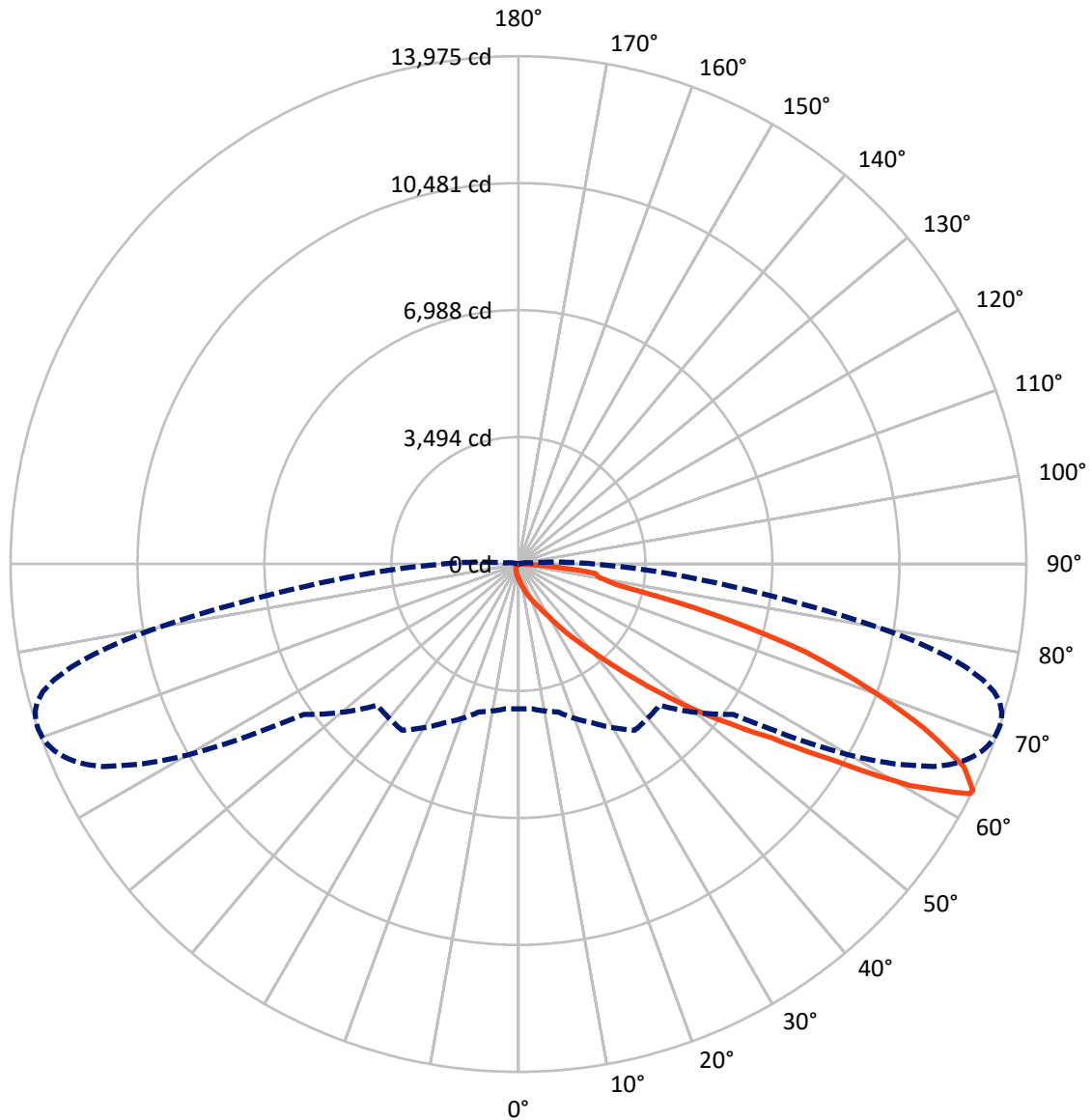


Based on 20 foot mounting height. Maximum calculated value = 5.5 fc  
 Type II - Short - Non-Cutoff

REPORT NUMBER: P164962

CATALOG NUMBER: VTS-F07-LED-E1-SL2-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P164962

CATALOG NUMBER: VTS-F07-LED-E1-SL2-HSS

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 222.3    | 0.0    | 222.3   |
|                    | % Fixture | 2.1      | 0.0    | 2.1     |
| <b>Street Side</b> | Lumens    | 10246.7  | 0.0    | 10246.7 |
|                    | % Fixture | 97.9     | 0.0    | 97.9    |
| <b>Total</b>       | Lumens    | 10469.0  | 0.0    | 10469.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 44.4    | 0.4       |
| 10°-20°   | 172.1   | 1.6       |
| 20°-30°   | 349.6   | 3.3       |
| 30°-40°   | 854.2   | 8.2       |
| 40°-50°   | 1910.4  | 18.2      |
| 50°-60°   | 2686.2  | 25.7      |
| 60°-70°   | 3158.8  | 30.2      |
| 70°-80°   | 1140.6  | 10.9      |
| 80°-90°   | 152.5   | 1.5       |
| 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°    | 10469.0 | 100.0     |
| 0°-180°   | 10469.0 | 100.0     |



REPORT NUMBER: P164962

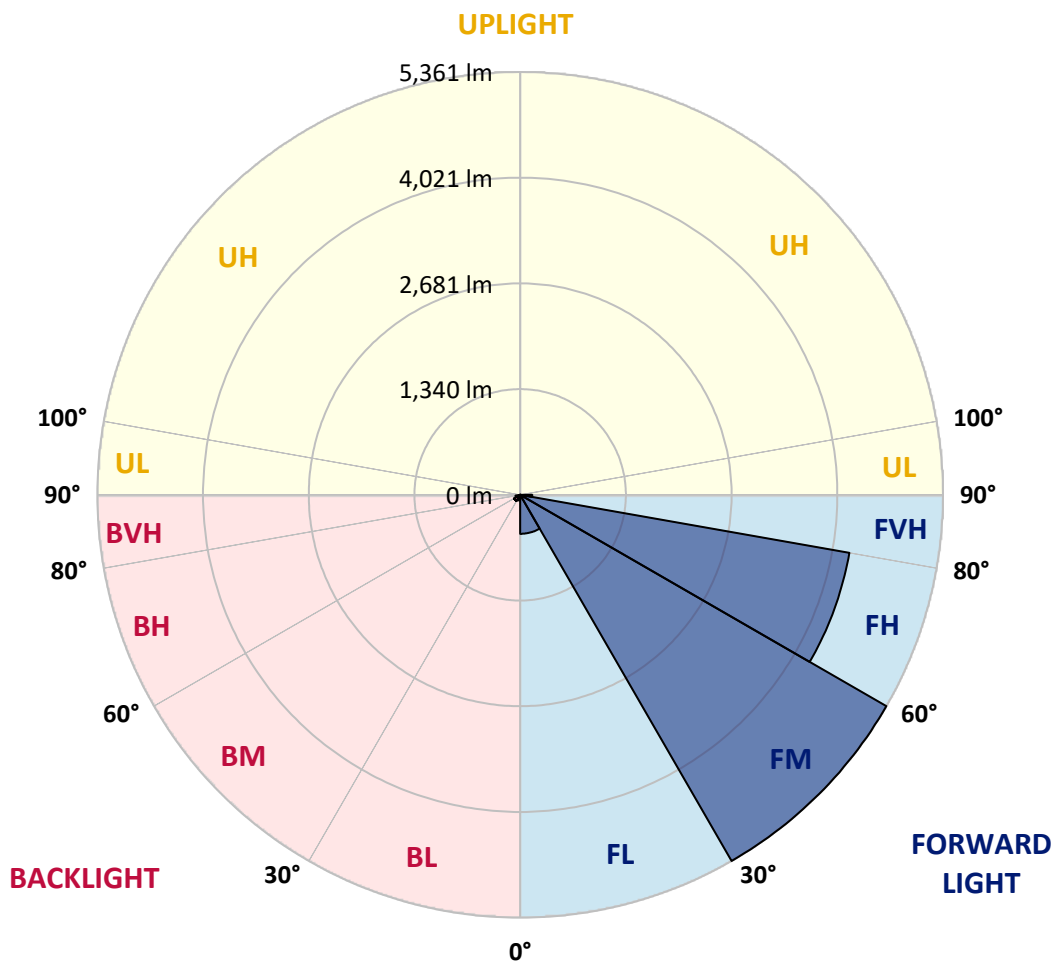
CATALOG NUMBER: VTS-F07-LED-E1-SL2-HSS

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 494.7  | 4.7       |                         |      |         |
| FM (30°-60°)   | 5361.3 | 51.2      |                         |      |         |
| FH (60°-80°)   | 4238.5 | 40.5      |                         |      | G2/5000 |
| FVH (80°-90°)  | 152.2  | 1.5       |                         |      | G2/225  |
| BL (0°-30°)    | 71.5   | 0.7       | B0/110                  |      |         |
| BM (30°-60°)   | 89.5   | 0.9       | B0/220                  |      |         |
| BH (60°-80°)   | 60.9   | 0.6       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 0.3    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G2**

Type II Short





REPORT NUMBER: P164962

CATALOG NUMBER: VTS-F07-LED-E1-SL2-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 56°    | 57°    | 58°    | 59°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 401.6  | 401.6  | 401.6  | 401.6  | 401.6  | 401.6  | 401.6  | 401.6  | 401.6  | 401.6  | 401.6  |
| 2.5°  | 525.3  | 530.9  | 527.1  | 517.7  | 506.2  | 491.1  | 477.7  | 477.7  | 475.8  | 470.0  | 472.0  |
| 5°    | 688.9  | 690.9  | 683.3  | 660.4  | 639.5  | 607.1  | 570.9  | 567.1  | 563.3  | 557.6  | 555.8  |
| 7.5°  | 848.9  | 856.4  | 848.9  | 824.0  | 782.2  | 732.7  | 675.6  | 670.0  | 658.5  | 658.5  | 650.9  |
| 10°   | 1012.5 | 1012.5 | 1004.9 | 976.4  | 938.2  | 867.8  | 795.5  | 786.0  | 772.7  | 768.9  | 757.5  |
| 12.5° | 1128.6 | 1128.6 | 1124.8 | 1109.6 | 1079.1 | 1016.4 | 928.7  | 919.3  | 902.2  | 896.4  | 883.1  |
| 15°   | 1174.2 | 1174.2 | 1176.2 | 1189.5 | 1191.4 | 1162.9 | 1071.5 | 1063.9 | 1046.7 | 1031.5 | 1025.8 |
| 17.5° | 1202.8 | 1200.9 | 1200.9 | 1220.0 | 1254.2 | 1273.3 | 1214.2 | 1206.6 | 1187.6 | 1180.0 | 1160.9 |
| 20°   | 1265.6 | 1261.8 | 1250.4 | 1250.4 | 1282.8 | 1349.3 | 1349.3 | 1347.5 | 1326.6 | 1320.8 | 1311.3 |
| 22.5° | 1358.9 | 1355.1 | 1320.8 | 1292.2 | 1307.5 | 1391.3 | 1469.3 | 1465.5 | 1457.8 | 1450.2 | 1444.6 |
| 25°   | 1511.1 | 1497.8 | 1438.8 | 1355.1 | 1341.8 | 1431.3 | 1560.6 | 1570.2 | 1575.8 | 1575.8 | 1579.7 |
| 27.5° | 1741.5 | 1724.4 | 1619.6 | 1463.6 | 1404.6 | 1495.9 | 1661.5 | 1680.6 | 1697.7 | 1701.5 | 1718.6 |
| 30°   | 2061.1 | 2030.7 | 1880.4 | 1652.0 | 1516.9 | 1591.1 | 1810.0 | 1830.9 | 1855.6 | 1863.3 | 1889.9 |
| 32.5° | 2586.4 | 2569.3 | 2424.7 | 2082.1 | 1792.8 | 1777.6 | 2017.5 | 2044.0 | 2076.4 | 2089.7 | 2122.0 |
| 35°   | 3385.8 | 3389.7 | 3271.7 | 2963.3 | 2563.7 | 2354.2 | 2388.6 | 2411.3 | 2422.8 | 2462.8 | 2479.9 |
| 37.5° | 3928.2 | 3937.7 | 3964.4 | 3842.6 | 3557.1 | 3343.9 | 3075.5 | 3100.4 | 3041.3 | 3047.0 | 3048.9 |
| 40°   | 4225.1 | 4255.5 | 4411.7 | 4529.7 | 4506.8 | 4383.1 | 4168.0 | 4181.3 | 4071.0 | 4046.2 | 3926.3 |
| 42.5° | 4423.0 | 4463.0 | 4712.4 | 5077.7 | 5264.3 | 5376.6 | 5327.1 | 5321.4 | 5235.7 | 5203.3 | 5102.5 |
| 45°   | 4546.8 | 4583.0 | 4897.0 | 5435.5 | 5865.7 | 6193.0 | 6328.1 | 6343.4 | 6271.0 | 6238.7 | 6155.0 |
| 47.5° | 4541.0 | 4583.0 | 4919.7 | 5568.8 | 6202.6 | 6725.9 | 7106.6 | 7125.6 | 7169.4 | 7140.8 | 7146.5 |
| 50°   | 4289.9 | 4329.8 | 4668.6 | 5342.3 | 6103.6 | 6969.5 | 7666.1 | 7727.0 | 7797.4 | 7845.0 | 7867.9 |
| 52.5° | 3985.3 | 4013.9 | 4314.6 | 4954.1 | 5681.0 | 6868.6 | 7997.2 | 8101.9 | 8206.6 | 8296.1 | 8358.9 |
| 55°   | 3873.0 | 3905.3 | 4141.3 | 4672.4 | 5342.3 | 6446.1 | 8151.4 | 8305.6 | 8454.1 | 8600.6 | 8720.5 |
| 57.5° | 3932.0 | 3962.4 | 4131.9 | 4539.1 | 5140.6 | 6000.8 | 8195.2 | 8435.0 | 8678.6 | 8916.5 | 9152.5 |
| 60°   | 4149.0 | 4181.3 | 4326.0 | 4662.8 | 5087.3 | 5743.9 | 8023.9 | 8421.7 | 8827.0 | 9241.9 | 9632.1 |
| 62.5° | 4063.3 | 4076.6 | 4289.9 | 4879.9 | 5467.9 | 5525.0 | 7401.6 | 7957.4 | 8575.9 | 9215.4 | 9845.2 |
| 63°   | 3981.5 | 3996.8 | 4213.7 | 4820.8 | 5584.0 | 5492.6 | 7209.4 | 7795.5 | 8448.3 | 9137.2 | 9822.5 |
| 65°   | 3610.4 | 3612.2 | 3777.9 | 4257.5 | 5454.6 | 5549.7 | 6353.0 | 6912.5 | 7662.3 | 8488.3 | 9354.3 |
| 67.5° | 2694.9 | 2681.7 | 2841.5 | 3206.9 | 4282.2 | 5551.7 | 5452.6 | 5766.8 | 6288.2 | 7021.0 | 7797.4 |
| 70°   | 955.4  | 934.5  | 1193.3 | 1699.5 | 2668.2 | 4541.0 | 4685.7 | 4706.6 | 4851.3 | 5247.2 | 5734.4 |
| 72.5° | 310.2  | 316.0  | 380.6  | 622.4  | 1229.5 | 3056.6 | 4242.2 | 4177.5 | 4139.5 | 4137.5 | 4202.3 |
| 75°   | 123.7  | 125.6  | 152.2  | 276.0  | 552.0  | 1473.1 | 3715.1 | 3751.2 | 3764.6 | 3783.5 | 3804.6 |
| 77.5° | 58.9   | 64.7   | 85.6   | 154.2  | 274.0  | 728.9  | 2658.8 | 2965.2 | 3140.2 | 3275.5 | 3357.3 |
| 80°   | 20.9   | 24.7   | 47.6   | 95.1   | 127.5  | 334.9  | 1400.8 | 1690.0 | 1947.0 | 2278.2 | 2563.7 |
| 82.5° | 0.0    | 0.0    | 9.5    | 66.6   | 70.4   | 135.1  | 574.7  | 673.7  | 770.8  | 999.1  | 1282.8 |
| 85°   | 0.0    | 0.0    | 0.0    | 19.1   | 20.9   | 22.9   | 194.2  | 234.2  | 262.7  | 306.4  | 354.0  |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 1.8    | 5.7    | 11.4   | 28.5   | 43.8   |
| 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: P164962

CATALOG NUMBER: VTS-F07-LED-E1-SL2-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 60°     | 61°     | 62°     | 64°     | 65°     | 66°     | 67°     | 68°     | 69°     | 70°     | 71°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 401.6   | 401.6   | 401.6   | 401.6   | 401.6   | 401.6   | 401.6   | 401.6   | 401.6   | 401.6   | 401.6   |
| 2.5°  | 468.2   | 466.3   | 466.3   | 462.5   | 460.6   | 456.7   | 454.9   | 449.1   | 447.3   | 447.3   | 447.3   |
| 5°    | 553.8   | 546.2   | 542.4   | 532.9   | 527.1   | 525.3   | 515.8   | 512.0   | 506.2   | 508.2   | 498.6   |
| 7.5°  | 648.9   | 635.7   | 630.0   | 616.6   | 612.9   | 599.5   | 595.7   | 586.2   | 580.5   | 569.1   | 565.3   |
| 10°   | 753.7   | 736.5   | 727.1   | 706.0   | 700.4   | 690.9   | 679.5   | 668.0   | 658.5   | 647.1   | 641.4   |
| 12.5° | 873.6   | 858.4   | 850.7   | 822.2   | 808.9   | 795.5   | 780.4   | 765.1   | 749.8   | 740.4   | 727.1   |
| 15°   | 1014.4  | 989.7   | 982.0   | 955.4   | 932.6   | 915.5   | 894.5   | 875.5   | 864.0   | 845.1   | 831.7   |
| 17.5° | 1153.3  | 1128.6  | 1122.9  | 1082.9  | 1058.2  | 1046.7  | 1024.0  | 999.1   | 978.2   | 959.3   | 938.2   |
| 20°   | 1292.2  | 1275.1  | 1259.9  | 1221.8  | 1195.3  | 1176.2  | 1145.7  | 1120.9  | 1103.8  | 1077.3  | 1050.6  |
| 22.5° | 1431.3  | 1414.0  | 1402.7  | 1362.7  | 1338.0  | 1311.3  | 1284.7  | 1258.0  | 1233.3  | 1200.9  | 1170.5  |
| 25°   | 1574.0  | 1562.6  | 1556.8  | 1520.7  | 1497.8  | 1473.1  | 1446.4  | 1416.0  | 1385.5  | 1349.3  | 1317.1  |
| 27.5° | 1722.4  | 1726.2  | 1714.8  | 1707.1  | 1682.4  | 1665.3  | 1623.5  | 1602.5  | 1579.7  | 1535.9  | 1495.9  |
| 30°   | 1910.8  | 1922.2  | 1918.4  | 1924.2  | 1908.9  | 1897.5  | 1865.1  | 1838.5  | 1811.8  | 1770.0  | 1724.4  |
| 32.5° | 2148.7  | 2164.0  | 2171.5  | 2192.5  | 2184.9  | 2181.1  | 2171.5  | 2133.5  | 2114.4  | 2042.2  | 2023.1  |
| 35°   | 2516.0  | 2508.4  | 2540.8  | 2557.9  | 2550.2  | 2546.5  | 2535.1  | 2514.2  | 2491.3  | 2439.9  | 2392.4  |
| 37.5° | 2993.7  | 3001.3  | 3012.8  | 2978.6  | 2955.7  | 2953.8  | 2919.5  | 2898.6  | 2866.2  | 2809.1  | 2752.0  |
| 40°   | 3869.2  | 3821.7  | 3768.4  | 3623.7  | 3560.9  | 3524.8  | 3423.9  | 3395.3  | 3340.1  | 3262.1  | 3203.1  |
| 42.5° | 5007.3  | 4959.7  | 4799.9  | 4558.2  | 4428.8  | 4249.9  | 4168.0  | 4067.1  | 3989.1  | 3861.7  | 3793.1  |
| 45°   | 6137.9  | 6000.8  | 5981.7  | 5700.1  | 5540.2  | 5304.2  | 5157.7  | 4988.3  | 4811.3  | 4643.9  | 4522.0  |
| 47.5° | 7091.4  | 7060.8  | 6967.7  | 6796.3  | 6647.9  | 6449.9  | 6261.5  | 6000.8  | 5818.1  | 5580.2  | 5361.3  |
| 50°   | 7854.5  | 7852.6  | 7818.3  | 7719.4  | 7595.7  | 7435.9  | 7270.3  | 7049.5  | 6842.1  | 6550.8  | 6316.8  |
| 52.5° | 8425.5  | 8455.9  | 8467.4  | 8436.9  | 8389.4  | 8248.5  | 8164.8  | 7980.1  | 7805.0  | 7557.6  | 7304.5  |
| 55°   | 8844.1  | 8956.5  | 9013.6  | 9078.3  | 9065.0  | 9015.5  | 9011.7  | 8891.8  | 8811.9  | 8615.8  | 8436.9  |
| 57.5° | 9361.9  | 9546.5  | 9723.4  | 10037.6 | 10048.9 | 10159.4 | 10216.5 | 10273.6 | 10288.7 | 10210.7 | 10151.7 |
| 60°   | 10020.3 | 10397.2 | 10732.2 | 11388.8 | 11560.1 | 11830.3 | 12005.4 | 12195.8 | 12357.5 | 12370.9 | 12367.1 |
| 62.5° | 10484.7 | 11065.2 | 11605.8 | 12580.2 | 12913.3 | 13225.4 | 13459.5 | 13644.1 | 13756.4 | 13870.6 | 13923.8 |
| 63°   | 10498.1 | 11133.8 | 11708.5 | 12713.4 | 13063.6 | 13360.5 | 13583.2 | 13754.5 | 13872.5 | 13940.9 | 13975.3 |
| 65°   | 10176.5 | 10947.2 | 11632.4 | 12633.5 | 12962.7 | 13261.6 | 13377.6 | 13490.0 | 13547.1 | 13573.6 | 13472.7 |
| 67.5° | 8625.4  | 9379.0  | 10178.3 | 11297.4 | 11579.1 | 11936.9 | 12032.1 | 12089.2 | 12115.8 | 12110.1 | 12024.5 |
| 70°   | 6449.9  | 7081.9  | 7970.6  | 9249.6  | 9622.6  | 9972.8  | 10189.8 | 10283.0 | 10313.4 | 10304.0 | 10176.5 |
| 72.5° | 4503.0  | 4874.1  | 5606.8  | 7030.5  | 7538.6  | 7987.7  | 8256.1  | 8395.0  | 8423.6  | 8366.5  | 8248.5  |
| 75°   | 3781.7  | 3800.7  | 3966.3  | 4744.6  | 5220.5  | 5700.1  | 6002.7  | 6090.3  | 6033.2  | 5859.9  | 5559.3  |
| 77.5° | 3376.2  | 3418.2  | 3418.2  | 3534.2  | 3627.5  | 3760.8  | 3789.3  | 3576.1  | 3328.7  | 3009.0  | 2750.2  |
| 80°   | 2832.0  | 2978.6  | 3081.3  | 3166.9  | 3176.4  | 3149.8  | 3079.3  | 2959.5  | 2769.1  | 2525.5  | 2255.3  |
| 82.5° | 1720.5  | 2009.8  | 2127.8  | 2569.3  | 2786.2  | 2932.8  | 2921.5  | 2761.5  | 2616.9  | 2363.8  | 2133.5  |
| 85°   | 434.0   | 468.2   | 508.2   | 660.4   | 740.4   | 904.0   | 1006.8  | 1054.4  | 1071.5  | 984.0   | 890.7   |
| 87.5° | 41.8    | 28.5    | 47.6    | 36.2    | 51.4    | 38.0    | 51.4    | 47.6    | 58.9    | 62.8    | 68.5    |
| 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: P164962

CATALOG NUMBER: VTS-F07-LED-E1-SL2-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 72°     | 73°     | 74°     | 75°     | 76°     | 77°     | 78°     | 79°     | 80°     | 81°    | 82°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| 0°    | 401.6   | 401.6   | 401.6   | 401.6   | 401.6   | 401.6   | 401.6   | 401.6   | 401.6   | 401.6  | 401.6  |
| 2.5°  | 443.5   | 441.5   | 439.6   | 437.8   | 435.8   | 434.0   | 430.2   | 430.2   | 426.4   | 424.4  | 422.5  |
| 5°    | 492.9   | 489.1   | 487.3   | 483.4   | 477.7   | 473.9   | 468.2   | 460.6   | 454.9   | 452.9  | 449.1  |
| 7.5°  | 555.8   | 546.2   | 542.4   | 536.7   | 529.1   | 517.7   | 510.0   | 504.4   | 494.9   | 489.1  | 477.7  |
| 10°   | 626.2   | 616.6   | 605.3   | 593.8   | 582.4   | 569.1   | 559.5   | 552.0   | 536.7   | 529.1  | 515.8  |
| 12.5° | 715.6   | 698.5   | 685.1   | 670.0   | 654.7   | 639.5   | 628.0   | 605.3   | 591.9   | 574.7  | 563.3  |
| 15°   | 806.9   | 791.7   | 776.5   | 757.5   | 734.6   | 709.9   | 698.5   | 677.5   | 660.4   | 633.8  | 618.5  |
| 17.5° | 917.3   | 888.8   | 866.0   | 843.1   | 822.2   | 799.3   | 776.5   | 744.2   | 719.4   | 696.6  | 666.2  |
| 20°   | 1025.8  | 991.6   | 966.8   | 936.4   | 906.0   | 869.8   | 843.1   | 820.2   | 786.0   | 755.6  | 723.3  |
| 22.5° | 1141.9  | 1107.7  | 1067.7  | 1037.3  | 995.4   | 966.8   | 930.7   | 892.6   | 858.4   | 818.4  | 778.4  |
| 25°   | 1282.8  | 1246.6  | 1200.9  | 1160.9  | 1113.3  | 1073.4  | 1029.6  | 985.8   | 944.0   | 898.4  | 846.9  |
| 27.5° | 1456.0  | 1417.9  | 1368.4  | 1320.8  | 1258.0  | 1208.6  | 1166.7  | 1107.7  | 1054.4  | 997.3  | 938.2  |
| 30°   | 1674.8  | 1632.9  | 1572.0  | 1503.5  | 1440.7  | 1385.5  | 1326.6  | 1248.5  | 1189.5  | 1120.9 | 1044.9 |
| 32.5° | 1960.4  | 1910.8  | 1829.0  | 1764.2  | 1686.2  | 1613.9  | 1532.0  | 1454.0  | 1370.4  | 1280.9 | 1193.3 |
| 35°   | 2320.0  | 2274.4  | 2179.1  | 2084.0  | 1998.4  | 1912.7  | 1810.0  | 1720.5  | 1602.5  | 1494.0 | 1381.7 |
| 37.5° | 2693.1  | 2611.2  | 2523.7  | 2420.9  | 2314.2  | 2211.5  | 2085.9  | 1962.2  | 1827.1  | 1709.1 | 1568.2 |
| 40°   | 3119.3  | 3020.4  | 2948.0  | 2837.7  | 2687.3  | 2540.8  | 2424.7  | 2270.6  | 2101.1  | 1943.1 | 1777.6 |
| 42.5° | 3703.7  | 3593.3  | 3463.9  | 3296.4  | 3187.9  | 3016.6  | 2866.2  | 2683.5  | 2460.8  | 2283.8 | 2084.0 |
| 45°   | 4379.3  | 4228.9  | 4103.3  | 3941.5  | 3810.2  | 3597.1  | 3422.0  | 3178.4  | 2955.7  | 2723.5 | 2479.9 |
| 47.5° | 5150.1  | 4963.5  | 4780.8  | 4621.0  | 4411.7  | 4202.3  | 3979.7  | 3720.8  | 3435.3  | 3180.2 | 2891.0 |
| 50°   | 6035.0  | 5770.5  | 5517.4  | 5311.9  | 5024.4  | 4782.8  | 4541.0  | 4249.9  | 3933.9  | 3640.8 | 3311.5 |
| 52.5° | 7019.0  | 6712.6  | 6377.7  | 6061.7  | 5728.6  | 5418.4  | 5127.2  | 4792.3  | 4440.2  | 4082.4 | 3715.1 |
| 55°   | 8206.6  | 7976.3  | 7582.4  | 7180.8  | 6735.4  | 6320.6  | 5945.6  | 5530.8  | 5102.5  | 4632.4 | 4246.1 |
| 57.5° | 10066.1 | 9953.8  | 9624.5  | 9223.0  | 8642.5  | 8138.1  | 7502.5  | 6994.3  | 6373.9  | 5726.8 | 5228.1 |
| 60°   | 12586.0 | 12446.9 | 12262.3 | 11936.9 | 11476.3 | 10791.2 | 10090.8 | 9301.0  | 8357.0  | 7460.6 | 6609.9 |
| 62.5° | 13929.6 | 13880.0 | 13729.8 | 13505.1 | 13075.1 | 12534.5 | 11828.5 | 10960.5 | 9894.8  | 8806.1 | 7721.3 |
| 63°   | 13969.5 | 13906.7 | 13777.3 | 13548.9 | 13170.2 | 12646.9 | 11954.0 | 11110.9 | 10068.0 | 8958.4 | 7850.7 |
| 65°   | 13429.1 | 13404.3 | 13272.9 | 13023.6 | 12764.9 | 12365.1 | 11828.5 | 11103.3 | 10227.8 | 9179.2 | 8077.2 |
| 67.5° | 11910.3 | 11836.0 | 11634.3 | 11558.2 | 11377.4 | 11099.4 | 10690.3 | 10191.6 | 9565.6  | 8741.4 | 7789.8 |
| 70°   | 10073.6 | 9963.2  | 9710.1  | 9575.0  | 9354.3  | 9179.2  | 8929.9  | 8573.9  | 8187.6  | 7612.8 | 6903.0 |
| 72.5° | 8126.7  | 7898.3  | 7666.1  | 7314.1  | 7005.7  | 6693.6  | 6417.6  | 6166.4  | 5741.9  | 5509.7 | 4971.2 |
| 75°   | 5277.5  | 4862.6  | 4465.0  | 3932.0  | 3452.4  | 3028.0  | 2615.0  | 2405.7  | 1969.8  | 1792.8 | 1539.7 |
| 77.5° | 2504.6  | 2272.4  | 1960.4  | 1718.6  | 1410.2  | 1151.5  | 940.2   | 706.0   | 553.8   | 434.0  | 331.1  |
| 80°   | 2021.1  | 1825.1  | 1636.8  | 1417.9  | 1185.7  | 945.9   | 725.1   | 542.4   | 384.4   | 266.4  | 188.4  |
| 82.5° | 1802.4  | 1589.1  | 1356.9  | 1206.6  | 1048.7  | 858.4   | 704.2   | 574.7   | 424.4   | 310.2  | 211.3  |
| 85°   | 700.4   | 590.0   | 454.9   | 371.1   | 289.3   | 237.9   | 215.1   | 148.4   | 116.2   | 91.3   | 70.4   |
| 87.5° | 60.9    | 49.5    | 40.0    | 26.7    | 28.5    | 15.3    | 17.1    | 11.4    | 9.5     | 9.5    | 7.6    |
| 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: P164962

CATALOG NUMBER: VTS-F07-LED-E1-SL2-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 83°    | 84°    | 85°    | 86°    | 87°    | 88°    | 89°    | 90°    | 95°   | 105°  | 115°  |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 0°    | 401.6  | 401.6  | 401.6  | 401.6  | 401.6  | 401.6  | 401.6  | 401.6  | 401.6 | 401.6 | 401.6 |
| 2.5°  | 420.6  | 418.7  | 416.8  | 412.9  | 412.9  | 409.2  | 407.3  | 405.4  | 395.8 | 374.9 | 357.8 |
| 5°    | 441.5  | 437.8  | 434.0  | 428.2  | 424.4  | 418.7  | 414.9  | 409.2  | 388.2 | 348.3 | 314.0 |
| 7.5°  | 472.0  | 464.4  | 458.7  | 447.3  | 441.5  | 434.0  | 428.2  | 418.7  | 384.4 | 323.5 | 276.0 |
| 10°   | 508.2  | 494.9  | 485.3  | 472.0  | 460.6  | 451.1  | 441.5  | 428.2  | 380.6 | 296.9 | 241.7 |
| 12.5° | 552.0  | 536.7  | 517.7  | 502.4  | 487.3  | 473.9  | 460.6  | 443.5  | 374.9 | 274.0 | 215.1 |
| 15°   | 595.7  | 572.9  | 559.5  | 538.6  | 517.7  | 498.6  | 479.6  | 464.4  | 376.9 | 249.3 | 192.2 |
| 17.5° | 645.1  | 622.4  | 593.8  | 570.9  | 548.2  | 523.4  | 500.5  | 470.0  | 367.3 | 230.3 | 175.1 |
| 20°   | 692.7  | 660.4  | 633.8  | 605.3  | 572.9  | 542.4  | 513.8  | 487.3  | 359.7 | 211.3 | 159.8 |
| 22.5° | 744.2  | 706.0  | 671.8  | 635.7  | 595.7  | 561.5  | 527.1  | 492.9  | 346.4 | 194.2 | 146.5 |
| 25°   | 806.9  | 763.1  | 713.7  | 670.0  | 628.0  | 586.2  | 542.4  | 500.5  | 333.1 | 178.9 | 137.1 |
| 27.5° | 883.1  | 826.0  | 776.5  | 721.3  | 662.4  | 609.1  | 561.5  | 515.8  | 319.8 | 167.5 | 127.5 |
| 30°   | 980.2  | 913.5  | 843.1  | 772.7  | 709.9  | 648.9  | 582.4  | 525.3  | 306.4 | 156.0 | 118.0 |
| 32.5° | 1109.6 | 1025.8 | 940.2  | 858.4  | 774.6  | 696.6  | 626.2  | 552.0  | 298.8 | 146.5 | 108.5 |
| 35°   | 1280.9 | 1172.4 | 1067.7 | 964.9  | 864.0  | 768.9  | 677.5  | 593.8  | 298.8 | 135.1 | 97.1  |
| 37.5° | 1442.6 | 1317.1 | 1183.8 | 1056.2 | 936.4  | 826.0  | 717.5  | 616.6  | 283.6 | 125.6 | 87.6  |
| 40°   | 1617.7 | 1467.3 | 1311.3 | 1160.9 | 1016.4 | 879.3  | 755.6  | 639.5  | 270.2 | 114.2 | 78.0  |
| 42.5° | 1886.0 | 1695.8 | 1492.2 | 1317.1 | 1143.8 | 974.4  | 820.2  | 683.3  | 253.1 | 102.7 | 68.5  |
| 45°   | 2238.2 | 1996.4 | 1756.7 | 1543.5 | 1322.7 | 1115.3 | 932.6  | 763.1  | 249.3 | 93.3  | 58.9  |
| 47.5° | 2615.0 | 2329.5 | 2047.8 | 1775.7 | 1516.9 | 1275.1 | 1056.2 | 852.6  | 249.3 | 83.8  | 51.4  |
| 50°   | 2989.9 | 2632.2 | 2331.5 | 2015.5 | 1724.4 | 1438.8 | 1178.0 | 945.9  | 251.3 | 76.2  | 41.8  |
| 52.5° | 3328.7 | 2946.2 | 2609.3 | 2243.9 | 1922.2 | 1591.1 | 1307.5 | 1037.3 | 247.4 | 66.6  | 34.2  |
| 55°   | 3798.8 | 3349.7 | 2959.5 | 2556.0 | 2179.1 | 1806.2 | 1484.5 | 1174.2 | 249.3 | 58.9  | 28.5  |
| 57.5° | 4664.8 | 4137.5 | 3667.5 | 3138.4 | 2704.4 | 2222.9 | 1832.8 | 1456.0 | 272.2 | 49.5  | 20.9  |
| 60°   | 5907.5 | 5222.4 | 4562.0 | 3916.8 | 3364.9 | 2792.0 | 2285.7 | 1842.4 | 319.8 | 40.0  | 15.3  |
| 62.5° | 6743.0 | 5846.6 | 5058.8 | 4347.0 | 3705.5 | 3106.0 | 2554.1 | 2049.7 | 352.0 | 32.4  | 9.5   |
| 63°   | 6828.7 | 5901.9 | 5110.1 | 4375.5 | 3720.8 | 3121.3 | 2565.5 | 2065.0 | 354.0 | 30.4  | 9.5   |
| 65°   | 6990.5 | 5997.0 | 5138.6 | 4381.2 | 3705.5 | 3100.4 | 2557.9 | 2063.1 | 357.8 | 24.7  | 7.6   |
| 67.5° | 6805.9 | 5850.4 | 4973.1 | 4217.5 | 3572.3 | 2976.6 | 2462.8 | 1986.9 | 355.9 | 17.1  | 5.7   |
| 70°   | 6086.4 | 5294.8 | 4523.9 | 3819.7 | 3233.5 | 2694.9 | 2242.0 | 1811.8 | 327.3 | 11.4  | 3.8   |
| 72.5° | 4468.8 | 3930.1 | 3332.6 | 2824.4 | 2436.1 | 2023.1 | 1726.2 | 1360.8 | 253.1 | 7.6   | 1.8   |
| 75°   | 1324.6 | 1206.6 | 1014.4 | 894.5  | 789.8  | 652.8  | 580.5  | 452.9  | 129.4 | 3.8   | 0.0   |
| 77.5° | 264.5  | 239.8  | 215.1  | 196.0  | 184.6  | 158.0  | 150.4  | 123.7  | 53.3  | 1.8   | 0.0   |
| 80°   | 138.9  | 114.2  | 97.1   | 85.6   | 74.2   | 60.9   | 51.4   | 41.8   | 9.5   | 0.0   | 0.0   |
| 82.5° | 133.3  | 89.5   | 64.7   | 53.3   | 45.7   | 36.2   | 28.5   | 20.9   | 5.7   | 0.0   | 0.0   |
| 85°   | 49.5   | 38.0   | 28.5   | 22.9   | 19.1   | 17.1   | 13.3   | 11.4   | 0.0   | 0.0   | 0.0   |
| 87.5° | 7.6    | 5.7    | 5.7    | 3.8    | 3.8    | 1.8    | 1.8    | 1.8    | 0.0   | 0.0   | 0.0   |
| 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: P164962

CATALOG NUMBER: VTS-F07-LED-E1-SL2-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 401.6 | 401.6 | 401.6 | 401.6 | 401.6 | 401.6 | 401.6 |
| 2.5°  | 340.7 | 325.5 | 317.8 | 308.4 | 308.4 | 306.4 | 310.2 |
| 5°    | 283.6 | 262.7 | 247.4 | 236.0 | 237.9 | 232.2 | 234.2 |
| 7.5°  | 239.8 | 218.9 | 205.5 | 198.0 | 196.0 | 194.2 | 194.2 |
| 10°   | 207.5 | 188.4 | 176.9 | 171.3 | 169.4 | 169.4 | 169.4 |
| 12.5° | 184.6 | 165.6 | 156.0 | 152.2 | 152.2 | 150.4 | 150.4 |
| 15°   | 165.6 | 150.4 | 140.9 | 137.1 | 137.1 | 135.1 | 137.1 |
| 17.5° | 150.4 | 135.1 | 127.5 | 123.7 | 123.7 | 121.8 | 121.8 |
| 20°   | 137.1 | 123.7 | 116.2 | 110.4 | 110.4 | 108.5 | 110.4 |
| 22.5° | 125.6 | 112.3 | 102.7 | 98.9  | 97.1  | 95.1  | 97.1  |
| 25°   | 114.2 | 100.9 | 91.3  | 85.6  | 83.8  | 83.8  | 81.8  |
| 27.5° | 104.7 | 91.3  | 80.0  | 74.2  | 72.3  | 72.3  | 70.4  |
| 30°   | 95.1  | 80.0  | 68.5  | 62.8  | 60.9  | 60.9  | 60.9  |
| 32.5° | 85.6  | 68.5  | 58.9  | 53.3  | 51.4  | 51.4  | 51.4  |
| 35°   | 76.2  | 58.9  | 49.5  | 43.8  | 41.8  | 41.8  | 41.8  |
| 37.5° | 64.7  | 49.5  | 38.0  | 34.2  | 32.4  | 30.4  | 30.4  |
| 40°   | 55.2  | 38.0  | 28.5  | 24.7  | 20.9  | 20.9  | 20.9  |
| 42.5° | 45.7  | 30.4  | 20.9  | 15.3  | 13.3  | 11.4  | 13.3  |
| 45°   | 38.0  | 22.9  | 13.3  | 7.6   | 5.7   | 5.7   | 5.7   |
| 47.5° | 30.4  | 15.3  | 5.7   | 1.8   | 1.8   | 1.8   | 1.8   |
| 50°   | 22.9  | 9.5   | 1.8   | 0.0   | 0.0   | 1.8   | 1.8   |
| 52.5° | 17.1  | 5.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 55°   | 9.5   | 1.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 57.5° | 5.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60°   | 3.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 62.5° | 1.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 63°   | 1.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 65°   | 1.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 67.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)