

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: INVUE

Report Number: P401248

Luminaire Tested: **ENT-SA1C-722-U-T4FT**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401248  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1C-722-U-T4FT  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2200K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD  
THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3175 lumens  
Efficiency: N/A  
Efficacy: 95.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1

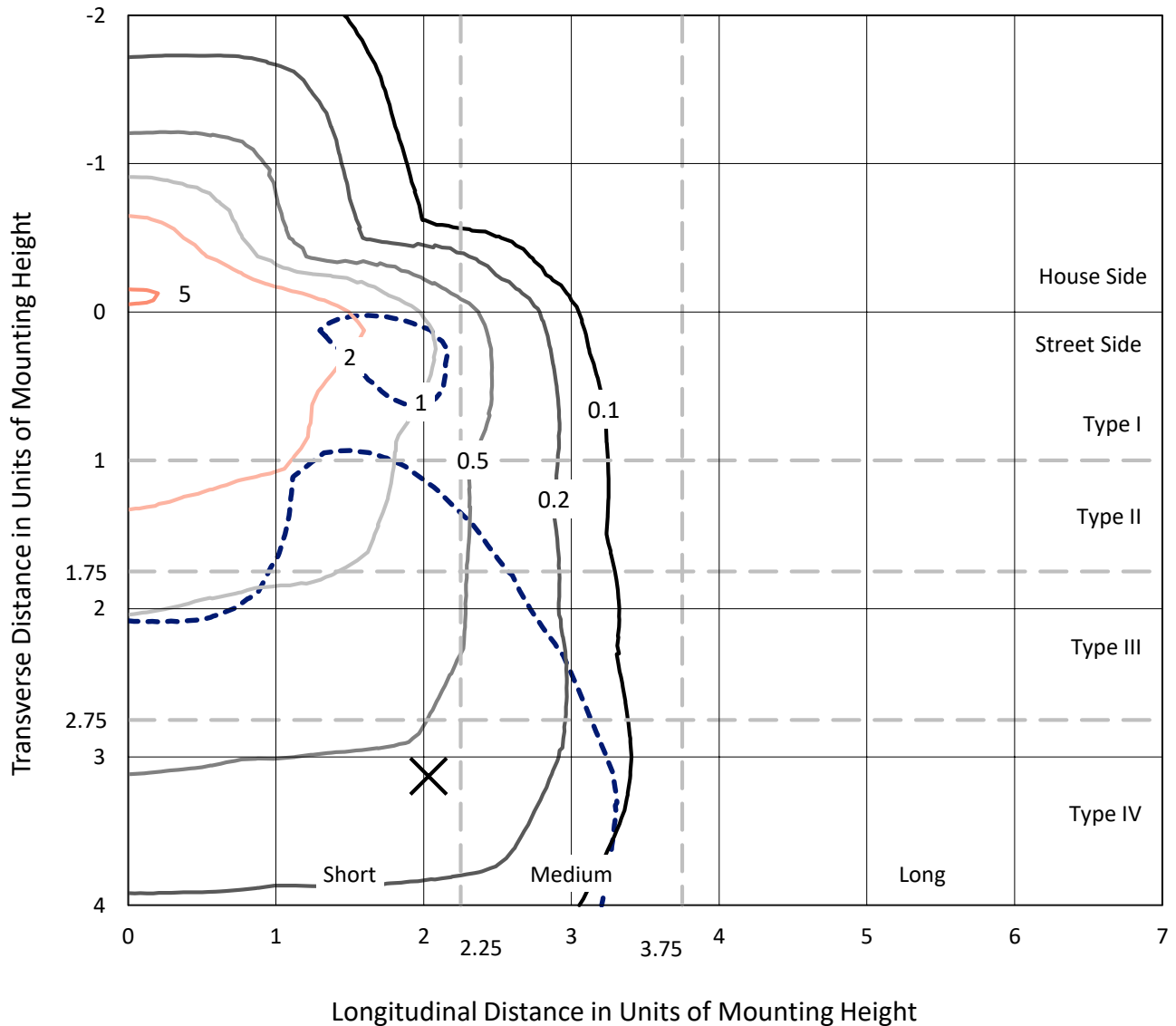
Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P401248  
 CATALOG NUMBER: ENT-SA1C-722-U-T4FT

### Iso-Footcandle Lines of Horizontal Illumination

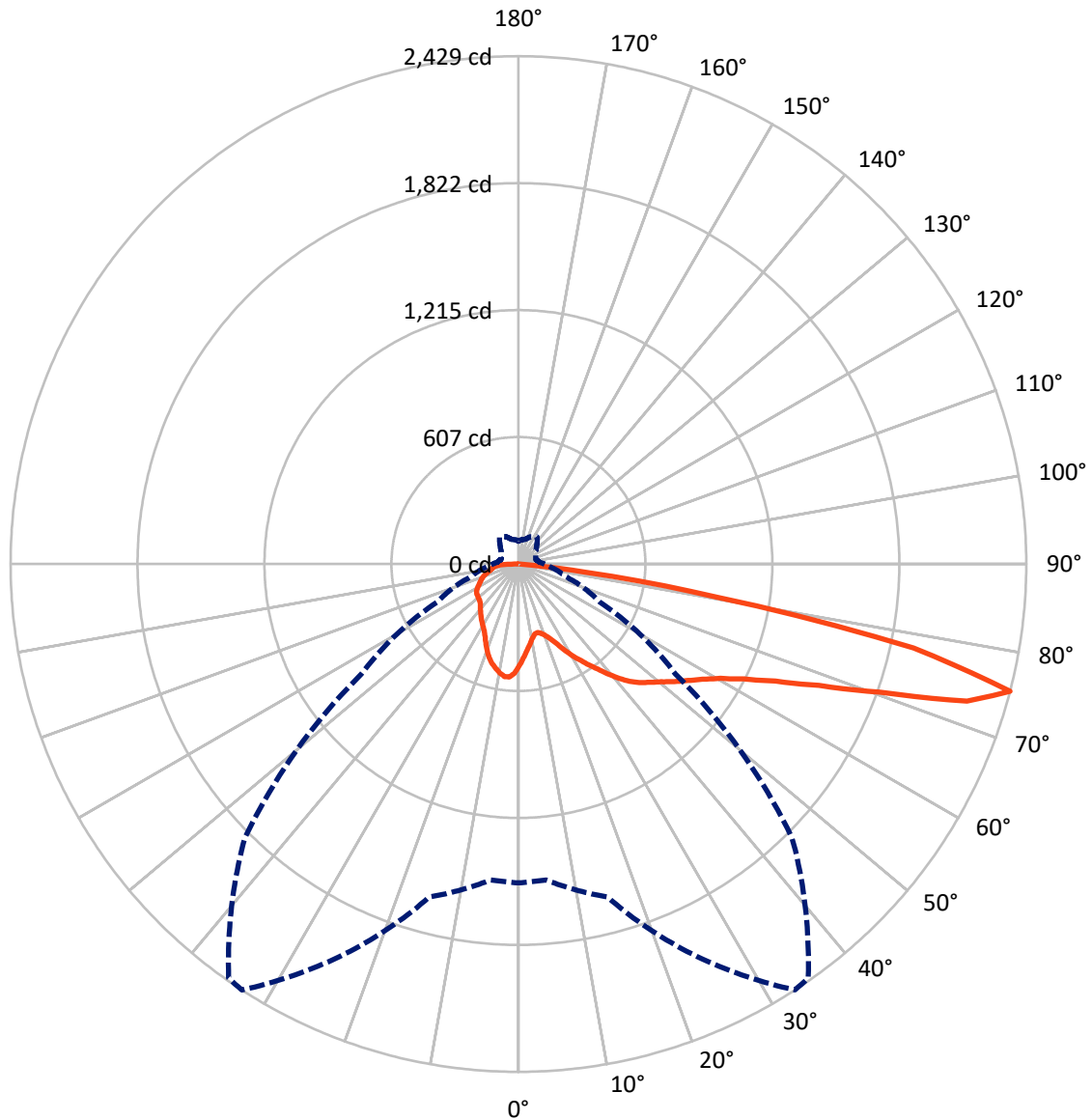
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.2 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P401248  
CATALOG NUMBER: ENT-SA1C-722-U-T4FT

### Luminous Intensity Polar Plot



— Vertical Plane Through 33-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P401248

CATALOG NUMBER: ENT-SA1C-722-U-T4FT

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 771.3    | 0.0    | 771.3  |
|                    | % Fixture | 24.3     | 0.0    | 24.3   |
| <b>Street Side</b> | Lumens    | 2403.7   | 0.0    | 2403.7 |
|                    | % Fixture | 75.7     | 0.0    | 75.7   |
| <b>Total</b>       | Lumens    | 3175.0   | 0.0    | 3175.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 45.4   | 1.4       |
| 10°-20°   | 127.8  | 4.0       |
| 20°-30°   | 212.5  | 6.7       |
| 30°-40°   | 317.1  | 10.0      |
| 40°-50°   | 443.0  | 14.0      |
| 50°-60°   | 591.3  | 18.6      |
| 60°-70°   | 733.1  | 23.1      |
| 70°-80°   | 633.9  | 20.0      |
| 80°-90°   | 70.9   | 2.2       |
| 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°    | 3175.0 | 100.0     |
| 0°-180°   | 3175.0 | 100.0     |



REPORT NUMBER: P401248

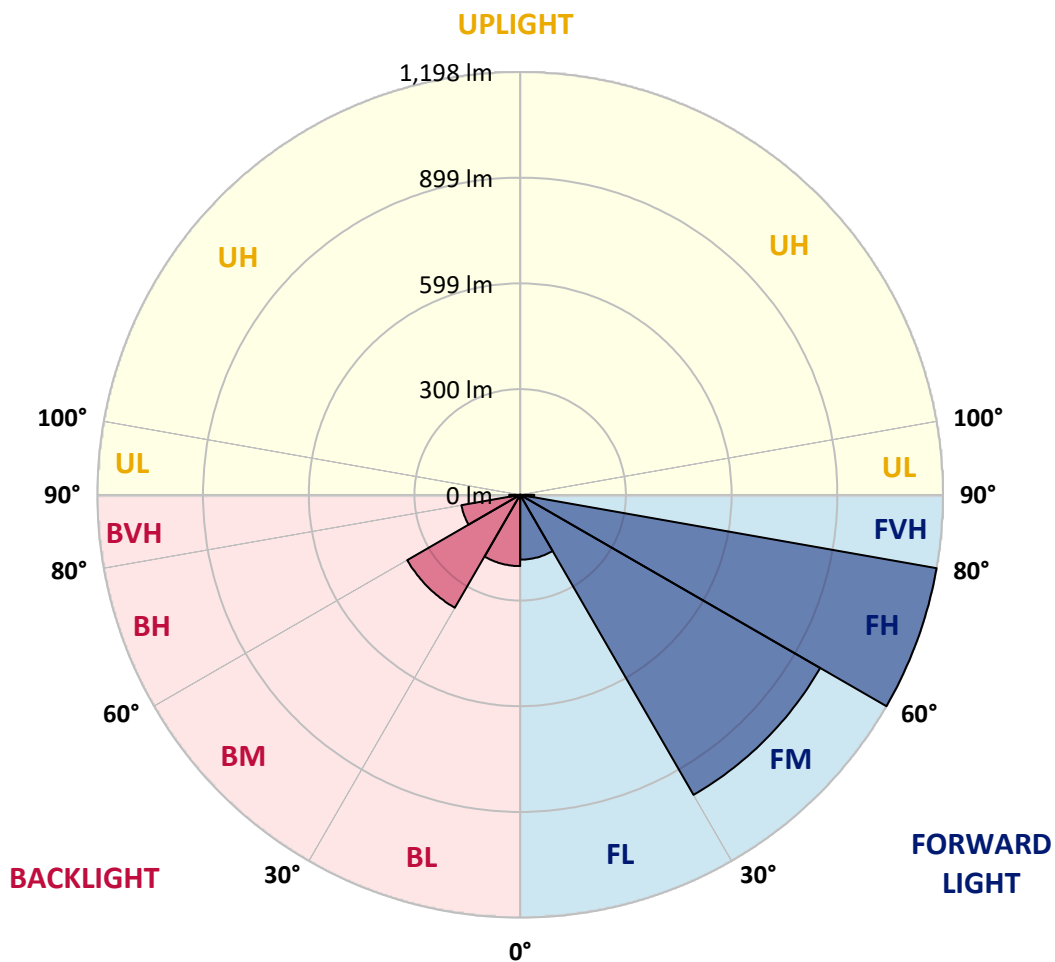
CATALOG NUMBER: ENT-SA1C-722-U-T4FT

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 183.8  | 5.8       |                         |      |         |
| FM   | (30°-60°)   | 981.7  | 30.9      |                         |      |         |
| FH   | (60°-80°)   | 1198.1 | 37.7      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 40.1   | 1.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 202.0  | 6.4       | B1/500                  |      |         |
| BM   | (30°-60°)   | 369.6  | 11.6      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 168.9  | 5.3       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 30.8   | 1.0       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type IV Short





REPORT NUMBER: P401248

CATALOG NUMBER: ENT-SA1C-722-U-T4FT

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 33°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 486.5  | 486.5  | 486.5  | 486.5  | 486.5  | 486.5  | 486.5  | 486.5  | 486.5  | 486.5  | 486.5  |
| 2.5°  | 441.2  | 442.2  | 445.0  | 448.3  | 450.2  | 450.2  | 455.4  | 461.5  | 469.1  | 475.7  | 482.7  |
| 5°    | 404.5  | 405.9  | 408.2  | 412.5  | 417.7  | 418.6  | 429.0  | 439.8  | 453.5  | 468.1  | 482.3  |
| 7.5°  | 368.2  | 371.0  | 375.7  | 381.4  | 389.4  | 391.3  | 405.9  | 420.5  | 439.4  | 461.5  | 484.6  |
| 10°   | 340.4  | 342.3  | 344.6  | 352.6  | 362.5  | 365.8  | 385.1  | 403.5  | 429.5  | 456.8  | 487.4  |
| 12.5° | 332.8  | 332.8  | 332.8  | 336.6  | 344.6  | 347.4  | 367.7  | 391.3  | 420.5  | 453.5  | 491.7  |
| 15°   | 343.7  | 343.2  | 338.0  | 335.2  | 339.9  | 342.3  | 359.7  | 382.8  | 415.8  | 454.4  | 499.7  |
| 17.5° | 368.2  | 366.8  | 354.5  | 345.1  | 348.4  | 349.8  | 361.1  | 380.9  | 414.4  | 458.2  | 511.5  |
| 20°   | 400.2  | 396.9  | 378.1  | 363.9  | 363.5  | 364.4  | 372.9  | 386.6  | 416.7  | 464.8  | 524.2  |
| 22.5° | 442.7  | 440.8  | 413.0  | 391.3  | 387.5  | 387.5  | 391.3  | 399.8  | 422.9  | 472.4  | 541.7  |
| 25°   | 497.3  | 492.2  | 458.7  | 429.5  | 421.0  | 418.6  | 418.1  | 418.1  | 433.7  | 483.7  | 563.3  |
| 27.5° | 553.4  | 547.3  | 513.4  | 473.8  | 462.5  | 458.2  | 450.7  | 445.0  | 447.8  | 495.9  | 589.3  |
| 30°   | 603.9  | 595.4  | 566.6  | 525.6  | 508.7  | 502.1  | 488.4  | 476.6  | 469.1  | 512.9  | 623.7  |
| 32.5° | 631.7  | 628.4  | 608.6  | 571.4  | 552.0  | 549.2  | 526.6  | 511.0  | 497.8  | 535.1  | 669.9  |
| 35°   | 668.9  | 664.7  | 652.0  | 621.3  | 598.2  | 591.2  | 574.2  | 555.8  | 534.6  | 564.8  | 728.3  |
| 37.5° | 703.4  | 701.0  | 696.3  | 675.1  | 650.6  | 643.5  | 627.9  | 608.6  | 579.8  | 608.6  | 793.9  |
| 40°   | 738.2  | 735.4  | 733.5  | 726.0  | 708.5  | 703.8  | 696.3  | 673.7  | 635.0  | 656.7  | 858.5  |
| 42.5° | 789.2  | 783.0  | 763.2  | 762.8  | 764.2  | 767.9  | 768.4  | 743.4  | 695.3  | 716.6  | 915.0  |
| 45°   | 855.6  | 838.7  | 794.3  | 792.9  | 809.4  | 819.3  | 843.4  | 822.2  | 758.0  | 777.8  | 978.2  |
| 47.5° | 889.6  | 872.1  | 826.4  | 823.6  | 845.3  | 859.9  | 919.3  | 898.5  | 823.1  | 846.7  | 1043.7 |
| 50°   | 906.1  | 894.8  | 854.7  | 863.6  | 885.8  | 899.9  | 991.4  | 974.9  | 890.5  | 921.2  | 1126.2 |
| 52.5° | 929.2  | 910.3  | 882.0  | 900.9  | 933.9  | 948.5  | 1056.0 | 1053.2 | 947.6  | 1002.2 | 1216.7 |
| 55°   | 921.2  | 911.3  | 916.4  | 941.9  | 983.4  | 1005.1 | 1121.0 | 1121.0 | 1005.5 | 1089.0 | 1306.3 |
| 57.5° | 927.8  | 921.2  | 964.1  | 986.7  | 1039.0 | 1070.1 | 1199.3 | 1178.5 | 1054.6 | 1161.6 | 1366.6 |
| 60°   | 983.9  | 965.0  | 998.5  | 1043.3 | 1110.7 | 1140.8 | 1288.9 | 1238.9 | 1094.6 | 1224.3 | 1377.5 |
| 62.5° | 1082.9 | 1067.8 | 1071.1 | 1122.5 | 1209.7 | 1244.5 | 1377.5 | 1292.2 | 1121.5 | 1250.7 | 1336.9 |
| 65°   | 1246.9 | 1239.8 | 1199.3 | 1230.4 | 1350.6 | 1382.2 | 1488.3 | 1338.4 | 1114.0 | 1230.9 | 1229.9 |
| 67.5° | 1467.5 | 1439.2 | 1384.6 | 1412.4 | 1551.0 | 1583.0 | 1621.7 | 1355.8 | 1064.9 | 1112.6 | 988.6  |
| 70°   | 1650.4 | 1626.9 | 1601.9 | 1675.0 | 1834.3 | 1851.7 | 1760.8 | 1339.3 | 945.7  | 870.7  | 662.8  |
| 72.5° | 1766.9 | 1749.9 | 1773.0 | 1988.0 | 2243.0 | 2210.0 | 1897.9 | 1223.8 | 737.8  | 533.2  | 331.4  |
| 75°   | 1525.0 | 1517.0 | 1649.0 | 2085.1 | 2429.2 | 2417.0 | 1850.3 | 916.0  | 428.0  | 234.8  | 150.9  |
| 77.5° | 767.0  | 854.2  | 993.3  | 1479.3 | 1932.8 | 1935.2 | 1348.3 | 440.3  | 180.1  | 131.5  | 103.7  |
| 80°   | 215.9  | 218.7  | 331.4  | 610.0  | 965.0  | 1028.2 | 510.1  | 149.4  | 102.8  | 98.1   | 77.3   |
| 82.5° | 51.4   | 47.6   | 84.9   | 180.6  | 323.9  | 337.1  | 153.2  | 53.7   | 57.5   | 61.3   | 47.6   |
| 85°   | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.9    | 5.7    | 5.7    | 13.7   | 17.4   | 13.7   |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.5    | 0.5    | 0.5    | 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    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P401248

CATALOG NUMBER: ENT-SA1C-722-U-T4FT

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 486.5  | 486.5 | 486.5 | 486.5 | 486.5 | 486.5 | 486.5 | 486.5 | 486.5 | 486.5 | 486.5 |
| 2.5°  | 486.0  | 490.7 | 498.3 | 504.9 | 510.5 | 514.8 | 521.4 | 522.3 | 524.2 | 525.2 | 526.1 |
| 5°    | 490.3  | 499.2 | 513.4 | 525.6 | 534.1 | 536.5 | 542.1 | 541.7 | 542.1 | 542.1 | 541.7 |
| 7.5°  | 495.9  | 508.2 | 528.0 | 541.7 | 546.4 | 545.0 | 543.5 | 538.4 | 534.1 | 532.2 | 529.9 |
| 10°   | 503.0  | 517.1 | 540.2 | 550.1 | 547.8 | 540.2 | 531.3 | 521.9 | 514.3 | 510.5 | 509.6 |
| 12.5° | 510.1  | 528.5 | 550.1 | 553.0 | 543.5 | 529.9 | 514.8 | 504.4 | 494.5 | 489.3 | 489.3 |
| 15°   | 521.9  | 542.1 | 558.2 | 552.5 | 535.5 | 518.1 | 497.3 | 483.2 | 471.9 | 464.8 | 464.3 |
| 17.5° | 536.0  | 557.7 | 566.6 | 550.1 | 525.6 | 501.1 | 476.1 | 457.7 | 443.1 | 436.1 | 431.8 |
| 20°   | 553.4  | 573.7 | 570.9 | 542.6 | 511.0 | 480.8 | 449.7 | 427.6 | 412.5 | 404.9 | 403.5 |
| 22.5° | 573.2  | 590.2 | 572.3 | 530.3 | 491.2 | 452.6 | 418.6 | 396.5 | 386.6 | 380.9 | 381.4 |
| 25°   | 597.3  | 610.5 | 572.8 | 515.7 | 462.9 | 415.3 | 385.6 | 375.3 | 373.8 | 371.5 | 372.4 |
| 27.5° | 627.5  | 631.7 | 570.9 | 495.9 | 426.6 | 376.2 | 358.8 | 363.0 | 366.8 | 365.4 | 366.3 |
| 30°   | 663.3  | 657.2 | 566.6 | 467.2 | 381.8 | 340.4 | 341.3 | 350.7 | 355.9 | 354.5 | 355.0 |
| 32.5° | 705.2  | 682.6 | 558.6 | 432.3 | 339.4 | 318.7 | 326.2 | 335.7 | 340.8 | 340.8 | 341.3 |
| 35°   | 752.4  | 713.3 | 543.1 | 387.0 | 309.7 | 305.5 | 312.1 | 319.6 | 322.9 | 321.0 | 322.5 |
| 37.5° | 801.9  | 739.7 | 518.1 | 336.6 | 287.6 | 295.1 | 298.9 | 300.8 | 300.3 | 297.5 | 296.1 |
| 40°   | 848.1  | 760.4 | 473.3 | 286.6 | 269.2 | 284.3 | 286.2 | 281.0 | 274.8 | 269.7 | 266.4 |
| 42.5° | 883.4  | 771.2 | 411.1 | 250.3 | 251.7 | 272.0 | 273.4 | 263.1 | 251.3 | 243.3 | 241.4 |
| 45°   | 919.7  | 775.0 | 349.3 | 221.1 | 232.9 | 259.8 | 263.5 | 249.4 | 233.4 | 223.9 | 222.5 |
| 47.5° | 961.2  | 784.4 | 288.5 | 200.8 | 216.9 | 251.3 | 257.4 | 240.0 | 222.0 | 207.9 | 205.5 |
| 50°   | 1016.9 | 802.4 | 242.8 | 185.3 | 205.5 | 247.0 | 255.5 | 232.4 | 209.8 | 194.2 | 192.3 |
| 52.5° | 1087.6 | 828.8 | 200.4 | 173.0 | 196.6 | 240.4 | 252.7 | 224.9 | 200.8 | 182.0 | 179.1 |
| 55°   | 1148.4 | 838.7 | 173.0 | 162.6 | 187.2 | 232.4 | 250.3 | 222.0 | 190.9 | 169.7 | 166.4 |
| 57.5° | 1176.2 | 810.4 | 153.7 | 152.3 | 177.3 | 222.5 | 245.6 | 212.6 | 180.1 | 163.6 | 160.8 |
| 60°   | 1163.5 | 740.1 | 139.1 | 142.8 | 165.9 | 209.8 | 233.4 | 203.2 | 172.5 | 158.9 | 156.0 |
| 62.5° | 1106.9 | 659.0 | 128.2 | 133.9 | 153.2 | 193.8 | 219.2 | 194.7 | 165.9 | 153.7 | 149.9 |
| 65°   | 1007.4 | 569.9 | 120.2 | 125.9 | 141.9 | 178.2 | 207.9 | 184.8 | 158.4 | 146.1 | 142.8 |
| 67.5° | 822.2  | 453.5 | 111.7 | 117.9 | 132.5 | 165.5 | 197.5 | 176.8 | 149.9 | 141.9 | 139.1 |
| 70°   | 544.0  | 305.0 | 103.7 | 109.8 | 123.0 | 153.2 | 186.7 | 168.3 | 141.9 | 136.7 | 132.9 |
| 72.5° | 249.9  | 164.1 | 95.2  | 101.4 | 112.2 | 139.5 | 173.0 | 155.6 | 131.1 | 127.8 | 122.1 |
| 75°   | 123.5  | 100.9 | 84.9  | 90.5  | 99.0  | 123.0 | 157.0 | 144.7 | 121.2 | 115.5 | 108.9 |
| 77.5° | 90.0   | 75.4  | 73.1  | 78.7  | 85.8  | 108.9 | 140.0 | 133.4 | 111.3 | 103.2 | 99.5  |
| 80°   | 66.9   | 58.5  | 61.3  | 66.9  | 73.5  | 98.5  | 131.1 | 124.9 | 102.8 | 94.8  | 91.9  |
| 82.5° | 41.0   | 39.1  | 47.1  | 53.7  | 61.8  | 90.5  | 124.9 | 114.1 | 92.4  | 84.9  | 81.6  |
| 85°   | 11.8   | 14.1  | 24.0  | 34.9  | 43.8  | 73.1  | 116.4 | 99.9  | 77.8  | 65.1  | 62.7  |
| 87.5° | 0.0    | 1.4   | 7.5   | 16.0  | 25.9  | 48.6  | 89.6  | 78.3  | 59.4  | 48.1  | 46.2  |
| 90°   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)