

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: P271632

Luminaire Tested: **IST-AF-450-LED-E1-SL2-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271632  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35945)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: IST-AF-450-LED-E1-SL2-7027  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II W/SPILL CONTROL  
Light Source: (16) 2700K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

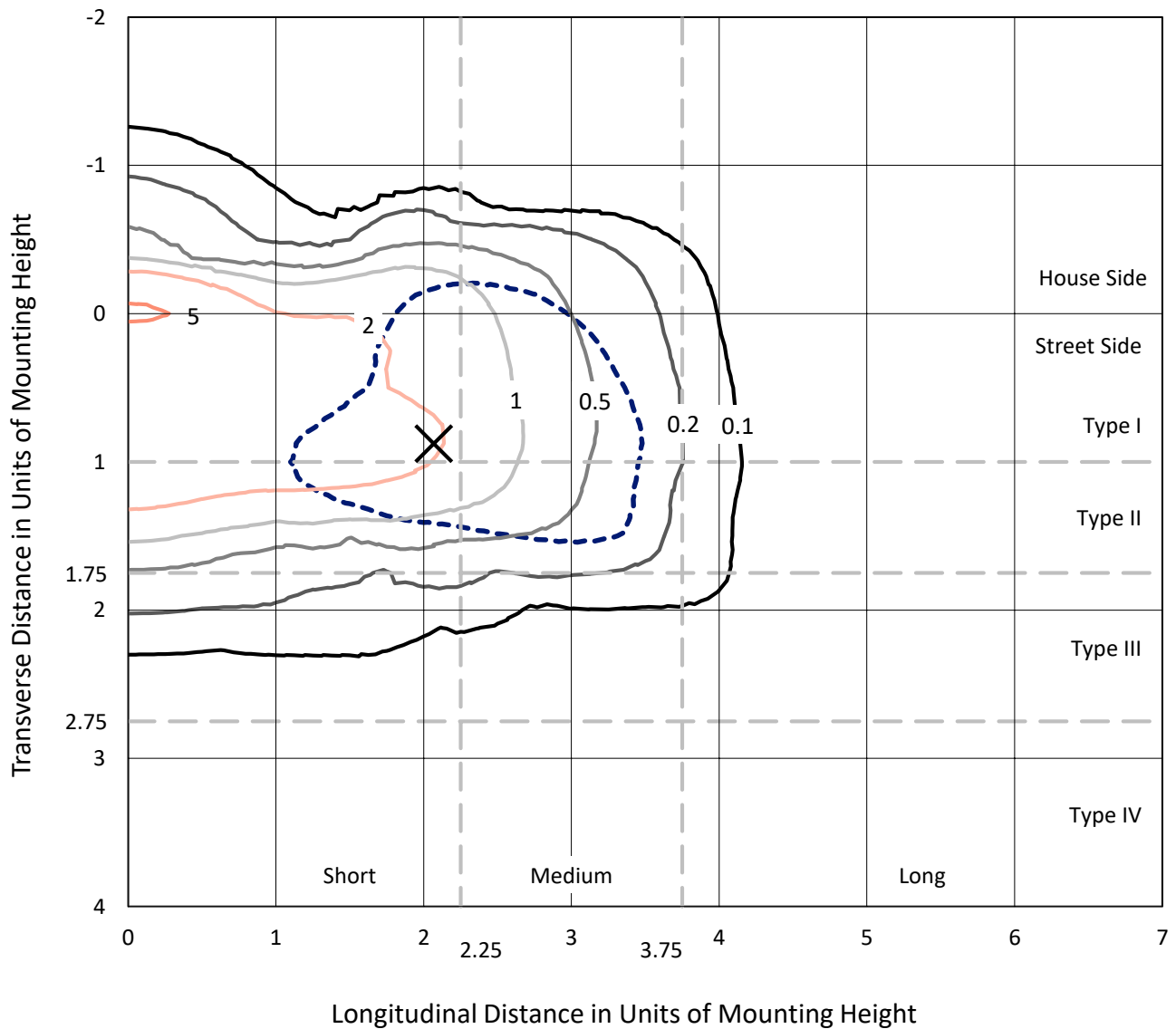
Lumens per Lamp: N/A  
Luminaire Lumens: 2632.6 lumens  
Efficiency: N/A  
Efficacy: 104.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U1 - G1  
  
Input Watts (W): 25.31  
Input Voltage (V): 120  
Input 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: P271632  
 CATALOG NUMBER: IST-AF-450-LED-E1-SL2-7027

### Iso-Footcandle Lines of Horizontal Illumination

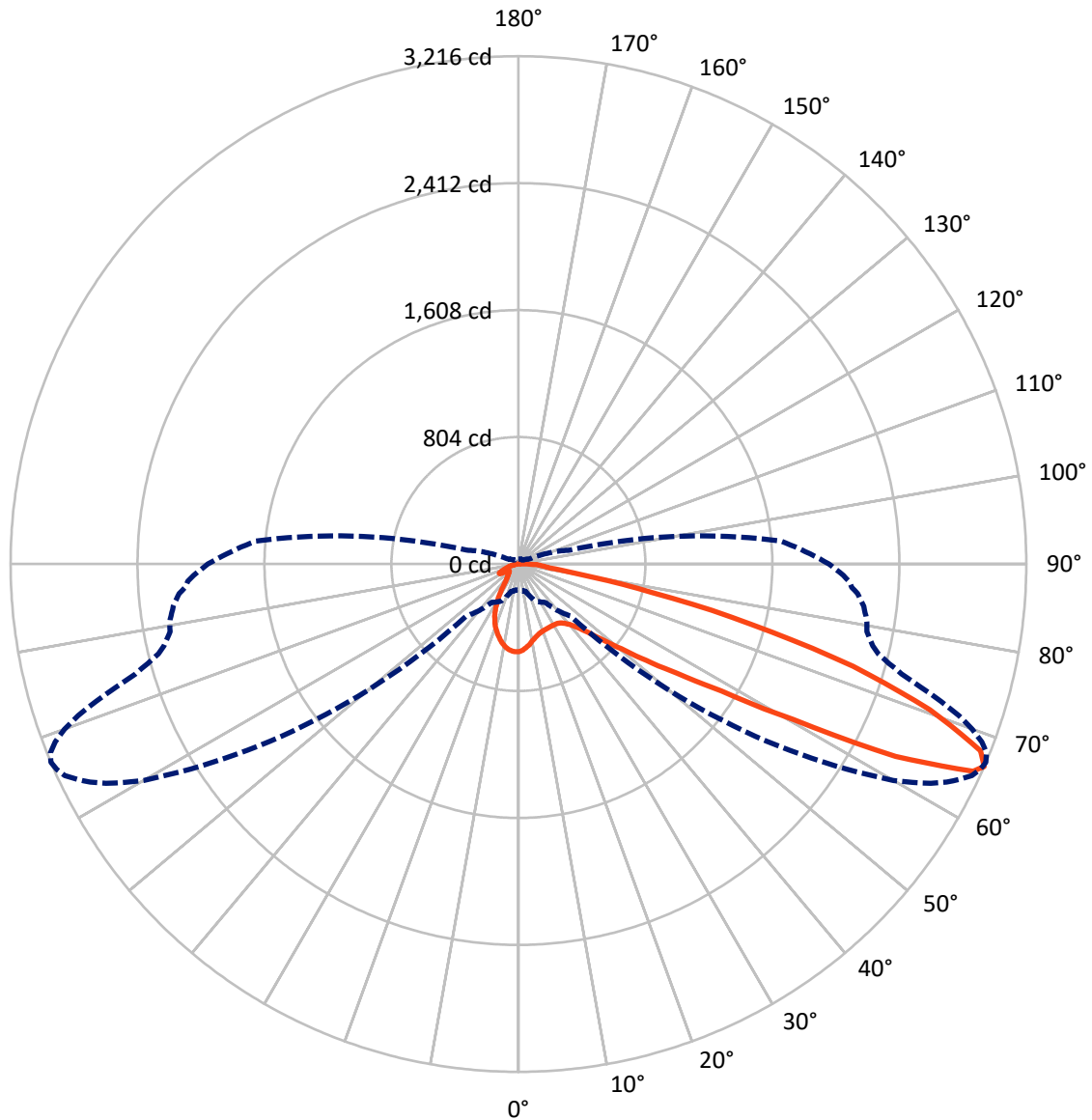
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.5 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P271632  
CATALOG NUMBER: IST-AF-450-LED-E1-SL2-7027

### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P271632

CATALOG NUMBER: IST-AF-450-LED-E1-SL2-7027

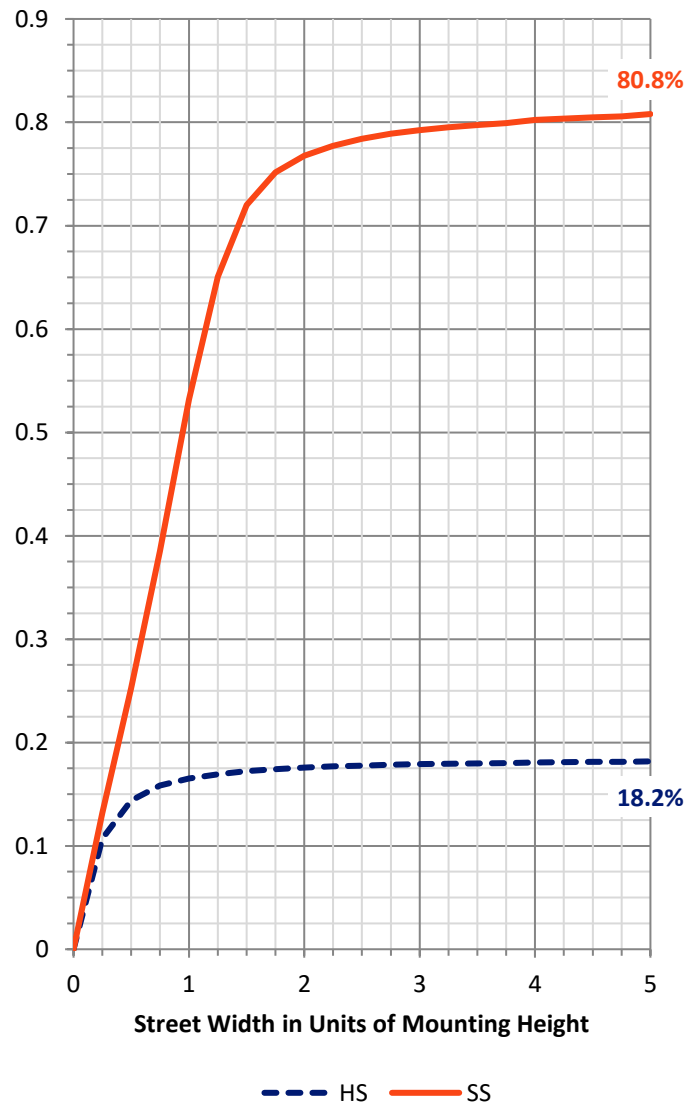
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 486.1    | 0.2    | 486.3  |
|                    | % Fixture | 18.5     | 0.0    | 18.5   |
| <b>Street Side</b> | Lumens    | 2145.6   | 0.8    | 2146.3 |
|                    | % Fixture | 81.5     | 0.0    | 81.5   |
| <b>Total</b>       | Lumens    | 2631.7   | 1.0    | 2632.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 48.0   | 1.8       |
| 10°-20°   | 114.4  | 4.3       |
| 20°-30°   | 156.8  | 6.0       |
| 30°-40°   | 224.1  | 8.5       |
| 40°-50°   | 363.3  | 13.8      |
| 50°-60°   | 575.6  | 21.9      |
| 60°-70°   | 729.4  | 27.7      |
| 70°-80°   | 362.6  | 13.8      |
| 80°-90°   | 57.4   | 2.2       |
| 90°-100°  | 1.0    | 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°    | 2631.7 | 100.0     |
| 0°-180°   | 2632.6 | 100.0     |



REPORT NUMBER: P271632

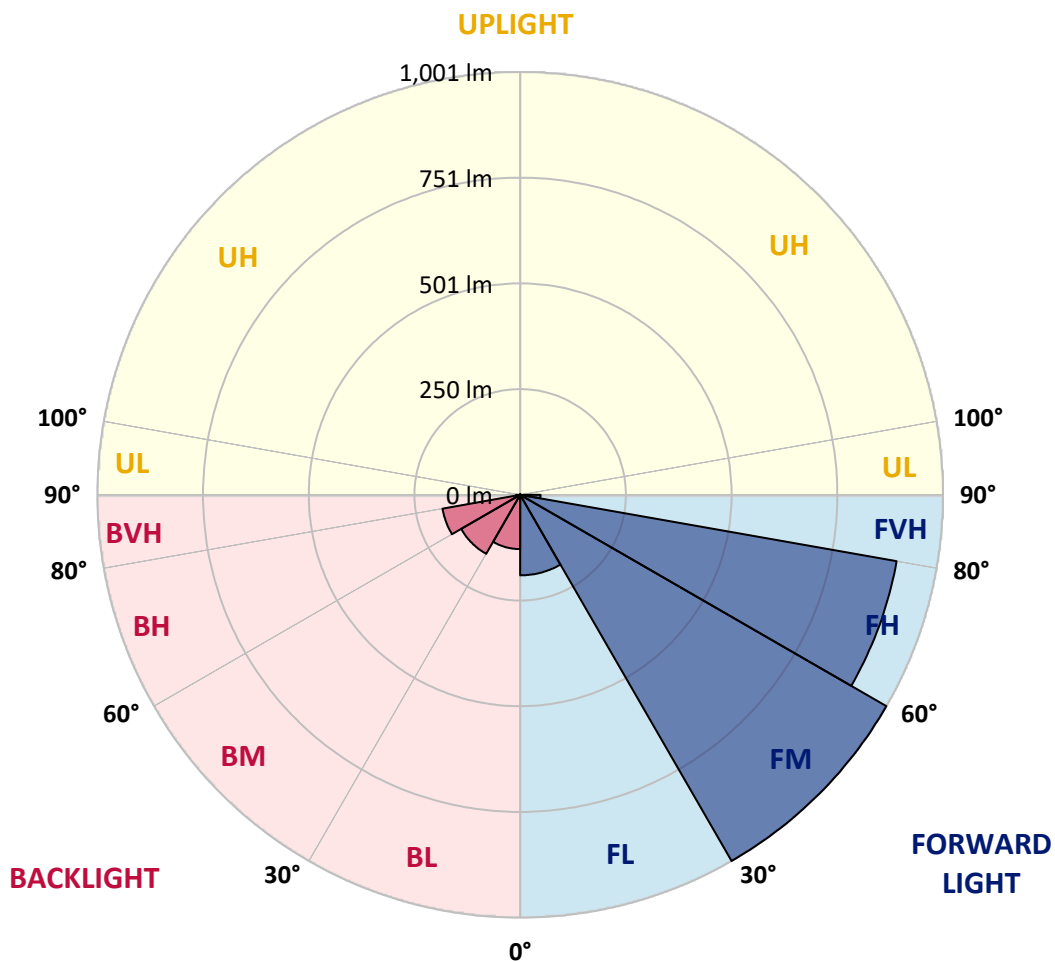
CATALOG NUMBER: IST-AF-450-LED-E1-SL2-7027

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |       |         |
|----------------|--------|-----------|-------------------------|-------|---------|
|                |        |           | B                       | U     | G       |
| FL (0°-30°)    | 190.7  | 7.2       |                         |       |         |
| FM (30°-60°)   | 1001.5 | 38.0      |                         |       |         |
| FH (60°-80°)   | 905.2  | 34.4      |                         |       | G1/1800 |
| FVH (80°-90°)  | 48.2   | 1.8       |                         |       | G1/100  |
| BL (0°-30°)    | 128.5  | 4.9       | B1/500                  |       |         |
| BM (30°-60°)   | 161.5  | 6.1       | B0/220                  |       |         |
| BH (60°-80°)   | 186.8  | 7.1       | B1/500                  |       | G1/500  |
| BVH (80°-90°)  | 9.3    | 0.4       |                         |       | G0/10   |
| UL (90°-100°)  | 1.0    | 0.0       |                         | U1/10 |         |
| UH (100°-180°) | 0.2    | 0.0       |                         | U1/10 |         |

**BUG Rating: B1-U1-G1**

Type II Short





REPORT NUMBER: P271632

CATALOG NUMBER: IST-AF-450-LED-E1-SL2-7027

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 60°    | 61°    | 62°    | 63°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  |
| 2.5°   | 515.0  | 516.2  | 522.9  | 526.5  | 531.5  | 533.1  | 539.2  | 541.5  | 543.5  | 543.0  | 543.0  |
| 5°     | 468.6  | 472.3  | 475.5  | 482.6  | 490.0  | 499.2  | 510.7  | 519.3  | 520.8  | 522.9  | 524.1  |
| 7.5°   | 433.5  | 435.9  | 441.3  | 446.5  | 456.1  | 468.6  | 484.9  | 496.0  | 498.4  | 499.2  | 502.0  |
| 10°    | 408.5  | 410.2  | 414.8  | 421.7  | 432.7  | 445.0  | 462.0  | 473.5  | 477.0  | 478.5  | 481.0  |
| 12.5°  | 389.1  | 391.6  | 396.0  | 403.1  | 414.8  | 427.5  | 445.4  | 456.9  | 459.2  | 461.2  | 464.7  |
| 15°    | 377.0  | 378.5  | 382.5  | 390.4  | 401.0  | 413.7  | 431.2  | 445.0  | 446.5  | 448.5  | 451.7  |
| 17.5°  | 374.5  | 375.7  | 378.2  | 384.0  | 392.4  | 404.7  | 422.5  | 433.9  | 436.7  | 439.5  | 442.7  |
| 20°    | 384.0  | 384.8  | 385.6  | 386.5  | 391.2  | 399.0  | 416.5  | 428.7  | 431.2  | 433.5  | 437.5  |
| 22.5°  | 404.7  | 405.9  | 403.9  | 401.0  | 397.5  | 399.0  | 413.7  | 426.3  | 428.0  | 430.4  | 433.5  |
| 25°    | 440.2  | 439.0  | 433.2  | 428.7  | 416.2  | 405.9  | 414.5  | 425.2  | 427.1  | 429.6  | 433.2  |
| 27.5°  | 482.2  | 480.5  | 477.0  | 465.1  | 444.2  | 423.2  | 419.3  | 427.1  | 428.3  | 430.4  | 433.5  |
| 30°    | 527.2  | 527.7  | 524.5  | 511.5  | 484.5  | 449.3  | 430.0  | 431.9  | 432.7  | 434.3  | 436.3  |
| 32.5°  | 568.0  | 573.8  | 573.5  | 572.7  | 534.3  | 484.5  | 450.5  | 442.7  | 441.3  | 442.7  | 443.4  |
| 35°    | 615.1  | 616.2  | 627.4  | 632.9  | 601.7  | 536.0  | 480.5  | 463.2  | 458.5  | 458.9  | 458.0  |
| 37.5°  | 665.6  | 667.4  | 686.2  | 695.7  | 671.7  | 594.5  | 520.5  | 493.6  | 489.3  | 484.9  | 481.7  |
| 40°    | 739.2  | 745.5  | 755.5  | 766.2  | 754.3  | 673.2  | 573.1  | 536.7  | 525.7  | 524.9  | 518.5  |
| 42.5°  | 849.2  | 847.2  | 842.5  | 851.1  | 837.0  | 761.4  | 636.8  | 597.6  | 589.4  | 578.3  | 569.5  |
| 45°    | 957.1  | 961.5  | 941.0  | 944.9  | 945.7  | 863.5  | 729.0  | 674.0  | 669.7  | 656.6  | 647.0  |
| 47.5°  | 1030.0 | 1025.2 | 997.6  | 1017.7 | 1067.2 | 982.5  | 835.7  | 778.0  | 768.9  | 762.2  | 756.2  |
| 50°    | 1033.9 | 1030.0 | 1012.2 | 1047.7 | 1153.3 | 1194.0 | 984.5  | 917.2  | 904.1  | 892.4  | 888.7  |
| 52.5°  | 937.4  | 931.9  | 937.8  | 1010.2 | 1184.7 | 1371.4 | 1194.5 | 1090.1 | 1079.4 | 1069.5 | 1055.7 |
| 55°    | 765.4  | 771.6  | 799.9  | 903.8  | 1136.7 | 1497.0 | 1607.9 | 1357.1 | 1311.2 | 1310.8 | 1276.9 |
| 57.5°  | 571.5  | 565.2  | 586.1  | 683.9  | 1015.7 | 1541.9 | 1987.6 | 1925.4 | 1823.0 | 1753.9 | 1670.4 |
| 60°    | 385.6  | 387.2  | 406.7  | 456.9  | 706.9  | 1493.2 | 2241.9 | 2458.2 | 2422.2 | 2407.5 | 2385.1 |
| 62.5°  | 267.3  | 269.7  | 287.5  | 334.6  | 413.3  | 1201.2 | 2316.2 | 2756.9 | 2821.4 | 2874.8 | 2861.7 |
| 65°    | 187.0  | 187.5  | 205.4  | 278.0  | 309.6  | 617.0  | 2152.1 | 2796.4 | 2892.5 | 2984.3 | 3066.5 |
| 66°    | 164.9  | 165.4  | 180.0  | 258.7  | 297.0  | 465.5  | 2009.7 | 2741.4 | 2851.0 | 2957.8 | 3042.8 |
| 67.5°  | 141.2  | 143.5  | 155.0  | 219.9  | 284.9  | 359.1  | 1660.1 | 2577.2 | 2692.0 | 2809.4 | 2921.7 |
| 70°    | 96.8   | 97.6   | 108.0  | 178.4  | 266.5  | 315.2  | 946.2  | 2012.0 | 2170.7 | 2377.2 | 2496.6 |
| 72.5°  | 69.2   | 68.5   | 69.6   | 110.3  | 273.7  | 313.3  | 497.2  | 1324.2 | 1546.2 | 1727.4 | 1856.7 |
| 75°    | 61.7   | 59.7   | 54.5   | 68.5   | 199.7  | 342.2  | 333.0  | 779.5  | 948.5  | 1113.4 | 1245.9 |
| 77.5°  | 55.0   | 51.8   | 49.0   | 52.6   | 98.8   | 322.3  | 299.0  | 446.5  | 532.8  | 655.9  | 757.8  |
| 80°    | 42.0   | 40.0   | 41.5   | 45.5   | 59.3   | 296.6  | 297.0  | 297.0  | 320.3  | 360.7  | 401.0  |
| 82.5°  | 27.7   | 25.3   | 28.8   | 37.5   | 44.6   | 223.5  | 307.0  | 262.2  | 257.9  | 256.3  | 259.1  |
| 85°    | 17.3   | 15.0   | 20.2   | 28.0   | 34.5   | 116.7  | 314.9  | 276.9  | 256.6  | 237.3  | 218.0  |
| 87.5°  | 6.3    | 7.2    | 10.3   | 16.2   | 22.5   | 50.7   | 276.0  | 244.0  | 230.1  | 206.1  | 183.5  |
| 90°    | 1.5    | 1.2    | 2.0    | 4.7    | 5.1    | 9.5    | 42.3   | 67.6   | 40.3   | 20.2   | 16.2   |
| 92.5°  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 95°    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 97.5°  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 100°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 102.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 105°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 107.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P271632

CATALOG NUMBER: IST-AF-450-LED-E1-SL2-7027

**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 5°  | 15° | 25° | 35° | 45° | 55° | 60° | 61° | 62° | 63° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 110°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 135°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |





REPORT NUMBER: P271632

CATALOG NUMBER: IST-AF-450-LED-E1-SL2-7027

**CANDELA DISTRIBUTION (continued):**

|        | 64°    | 65°    | 66°    | 67°    | 68°    | 69°    | 70°    | 71°    | 72°    | 73°    | 74°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  |
| 2.5°   | 543.5  | 545.5  | 546.2  | 545.5  | 545.8  | 548.2  | 547.3  | 548.7  | 548.7  | 549.4  | 549.4  |
| 5°     | 525.7  | 527.2  | 530.4  | 530.0  | 533.1  | 534.3  | 535.6  | 537.2  | 539.2  | 540.3  | 542.7  |
| 7.5°   | 504.7  | 507.8  | 510.7  | 512.2  | 514.2  | 518.1  | 519.3  | 522.9  | 526.0  | 529.2  | 531.5  |
| 10°    | 484.5  | 488.9  | 492.0  | 493.2  | 497.6  | 499.5  | 503.9  | 506.6  | 510.7  | 514.5  | 518.1  |
| 12.5°  | 467.5  | 471.5  | 473.0  | 477.0  | 481.0  | 484.9  | 486.9  | 492.0  | 496.0  | 501.2  | 505.8  |
| 15°    | 454.8  | 458.9  | 462.0  | 464.7  | 468.6  | 472.7  | 475.8  | 481.0  | 485.7  | 490.8  | 495.2  |
| 17.5°  | 447.0  | 449.3  | 453.3  | 455.7  | 460.4  | 465.1  | 468.6  | 474.7  | 479.8  | 484.2  | 490.0  |
| 20°    | 441.0  | 443.9  | 447.4  | 450.9  | 455.2  | 461.2  | 464.3  | 470.7  | 476.2  | 481.3  | 486.9  |
| 22.5°  | 437.8  | 440.6  | 444.2  | 447.7  | 452.5  | 457.2  | 462.4  | 467.8  | 473.9  | 479.3  | 484.9  |
| 25°    | 436.7  | 439.0  | 442.1  | 445.8  | 450.9  | 456.1  | 460.4  | 466.7  | 471.9  | 477.8  | 484.5  |
| 27.5°  | 437.0  | 438.6  | 442.1  | 445.4  | 450.5  | 455.2  | 459.7  | 466.0  | 471.9  | 477.4  | 484.2  |
| 30°    | 438.6  | 439.8  | 443.4  | 446.2  | 450.5  | 455.2  | 459.2  | 466.0  | 471.1  | 477.0  | 484.2  |
| 32.5°  | 444.2  | 445.8  | 447.4  | 449.3  | 453.3  | 456.9  | 461.5  | 467.5  | 472.3  | 478.2  | 484.2  |
| 35°    | 457.2  | 456.1  | 457.2  | 458.0  | 460.8  | 464.3  | 467.8  | 473.0  | 477.4  | 482.6  | 488.9  |
| 37.5°  | 477.8  | 475.5  | 476.2  | 475.8  | 475.8  | 478.2  | 481.7  | 485.4  | 488.9  | 494.0  | 500.4  |
| 40°    | 515.8  | 509.9  | 508.2  | 503.9  | 502.7  | 504.7  | 507.0  | 507.5  | 511.9  | 518.5  | 521.3  |
| 42.5°  | 564.9  | 556.9  | 558.0  | 551.0  | 549.0  | 546.6  | 549.9  | 547.8  | 550.6  | 555.0  | 560.8  |
| 45°    | 642.4  | 634.8  | 626.8  | 615.5  | 617.9  | 609.1  | 606.7  | 607.5  | 607.2  | 608.7  | 615.9  |
| 47.5°  | 734.9  | 725.0  | 719.9  | 715.5  | 707.2  | 702.0  | 695.4  | 685.5  | 687.8  | 691.0  | 697.4  |
| 50°    | 870.2  | 867.0  | 857.2  | 842.9  | 840.9  | 833.4  | 831.4  | 822.7  | 819.5  | 819.2  | 818.7  |
| 52.5°  | 1050.9 | 1030.4 | 1026.4 | 1013.0 | 1002.7 | 995.5  | 993.2  | 980.9  | 968.6  | 975.8  | 975.0  |
| 55°    | 1271.2 | 1254.2 | 1232.5 | 1220.5 | 1212.4 | 1195.4 | 1191.0 | 1175.5 | 1168.3 | 1164.5 | 1154.5 |
| 57.5°  | 1641.5 | 1581.7 | 1537.0 | 1514.9 | 1483.6 | 1452.0 | 1440.9 | 1409.4 | 1384.7 | 1367.4 | 1368.6 |
| 60°    | 2286.9 | 2180.5 | 2055.2 | 1999.0 | 1868.9 | 1849.9 | 1760.5 | 1738.8 | 1685.0 | 1649.4 | 1628.8 |
| 62.5°  | 2852.6 | 2823.7 | 2763.5 | 2681.7 | 2551.2 | 2400.9 | 2333.3 | 2198.8 | 2093.6 | 2047.7 | 1984.0 |
| 65°    | 3122.8 | 3163.5 | 3180.1 | 3164.7 | 3112.4 | 3020.7 | 2940.1 | 2808.7 | 2632.2 | 2532.6 | 2408.7 |
| 66°    | 3108.9 | 3169.4 | 3199.9 | 3215.8 | 3196.7 | 3142.5 | 3057.9 | 2949.9 | 2813.4 | 2661.6 | 2522.7 |
| 67.5°  | 3007.6 | 3066.5 | 3108.9 | 3157.1 | 3157.1 | 3140.1 | 3105.7 | 3033.8 | 2937.2 | 2804.7 | 2680.1 |
| 70°    | 2593.9 | 2673.9 | 2748.5 | 2763.2 | 2804.3 | 2791.7 | 2819.0 | 2773.1 | 2750.1 | 2694.7 | 2627.9 |
| 72.5°  | 2020.7 | 2087.6 | 2151.7 | 2215.8 | 2205.1 | 2191.2 | 2188.5 | 2198.0 | 2151.4 | 2167.9 | 2150.5 |
| 75°    | 1344.0 | 1459.2 | 1524.7 | 1518.5 | 1522.8 | 1526.4 | 1497.0 | 1431.8 | 1482.5 | 1418.3 | 1439.7 |
| 77.5°  | 816.8  | 870.2  | 888.0  | 868.2  | 842.5  | 809.2  | 755.8  | 724.7  | 679.8  | 683.5  | 653.9  |
| 80°    | 428.3  | 435.0  | 420.9  | 380.9  | 359.1  | 339.4  | 278.5  | 251.2  | 225.8  | 216.3  | 195.0  |
| 82.5°  | 245.7  | 229.3  | 212.0  | 198.5  | 172.8  | 155.5  | 131.7  | 116.7  | 100.5  | 86.2   | 81.0   |
| 85°    | 199.0  | 177.1  | 161.0  | 146.0  | 128.5  | 113.2  | 93.3   | 78.0   | 66.0   | 57.3   | 55.3   |
| 87.5°  | 164.1  | 149.1  | 132.5  | 118.3  | 101.3  | 85.4   | 66.0   | 51.5   | 40.7   | 32.8   | 30.5   |
| 90°    | 14.6   | 19.8   | 14.2   | 7.9    | 11.9   | 6.3    | 3.5    | 4.0    | 3.1    | 3.1    | 3.5    |
| 92.5°  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 95°    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 97.5°  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 100°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 102.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 105°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 107.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P271632

CATALOG NUMBER: IST-AF-450-LED-E1-SL2-7027

**CANDELA DISTRIBUTION (continued):**

|        | 64° | 65° | 66° | 67° | 68° | 69° | 70° | 71° | 72° | 73° | 74° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 110°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 135°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P271632

CATALOG NUMBER: IST-AF-450-LED-E1-SL2-7027

**CANDELA DISTRIBUTION (continued):**

|        | 75°    | 76°    | 77°    | 78°    | 79°    | 80°    | 81°    | 82°    | 83°    | 84°    | 85°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  |
| 2.5°   | 550.6  | 550.6  | 551.4  | 552.2  | 552.5  | 552.5  | 552.5  | 553.4  | 553.7  | 552.5  | 553.7  |
| 5°     | 543.8  | 545.8  | 547.3  | 548.7  | 549.0  | 550.2  | 551.4  | 552.2  | 553.4  | 553.4  | 554.2  |
| 7.5°   | 534.9  | 538.4  | 540.3  | 542.3  | 544.2  | 546.2  | 548.7  | 550.2  | 551.0  | 552.5  | 553.7  |
| 10°    | 523.4  | 527.7  | 531.5  | 534.9  | 537.5  | 541.5  | 544.6  | 547.0  | 550.6  | 551.0  | 553.7  |
| 12.5°  | 511.0  | 517.3  | 520.5  | 526.5  | 530.4  | 536.4  | 539.5  | 543.0  | 547.0  | 549.0  | 552.2  |
| 15°    | 502.3  | 507.8  | 513.8  | 519.3  | 525.7  | 532.8  | 536.7  | 541.5  | 547.0  | 551.4  | 555.3  |
| 17.5°  | 495.7  | 503.1  | 509.9  | 517.0  | 524.9  | 532.3  | 538.4  | 543.5  | 550.6  | 553.0  | 556.9  |
| 20°    | 493.6  | 502.0  | 508.7  | 516.2  | 524.5  | 534.3  | 541.5  | 547.0  | 554.2  | 558.0  | 561.7  |
| 22.5°  | 492.8  | 500.7  | 508.7  | 517.7  | 526.9  | 537.2  | 544.6  | 551.8  | 558.8  | 562.5  | 565.2  |
| 25°    | 492.0  | 500.4  | 509.1  | 519.3  | 529.2  | 539.9  | 548.7  | 555.3  | 562.1  | 565.7  | 568.0  |
| 27.5°  | 492.0  | 500.7  | 510.2  | 520.5  | 531.2  | 543.0  | 551.4  | 557.7  | 563.7  | 566.8  | 567.5  |
| 30°    | 491.6  | 500.7  | 509.9  | 521.3  | 532.8  | 545.0  | 554.2  | 560.0  | 565.2  | 567.2  | 566.4  |
| 32.5°  | 492.5  | 502.0  | 511.9  | 523.4  | 535.2  | 547.0  | 556.5  | 563.2  | 566.0  | 565.7  | 565.2  |
| 35°    | 496.4  | 505.0  | 516.5  | 528.0  | 540.3  | 551.4  | 560.5  | 565.2  | 567.5  | 566.8  | 564.9  |
| 37.5°  | 507.0  | 515.8  | 527.2  | 539.9  | 549.4  | 562.1  | 570.3  | 573.8  | 574.3  | 572.0  | 567.2  |
| 40°    | 529.2  | 537.9  | 548.2  | 562.1  | 573.5  | 582.2  | 590.2  | 594.0  | 591.7  | 587.3  | 582.2  |
| 42.5°  | 564.5  | 575.5  | 587.9  | 598.8  | 612.3  | 624.1  | 626.1  | 628.5  | 624.5  | 616.2  | 609.9  |
| 45°    | 621.0  | 627.7  | 643.5  | 651.8  | 669.2  | 675.2  | 679.5  | 680.7  | 672.0  | 665.3  | 654.2  |
| 47.5°  | 702.5  | 715.5  | 726.5  | 734.5  | 747.2  | 755.0  | 763.8  | 759.9  | 753.0  | 741.6  | 727.0  |
| 50°    | 830.7  | 838.9  | 853.2  | 867.4  | 880.9  | 886.4  | 886.4  | 882.5  | 878.1  | 855.9  | 838.1  |
| 52.5°  | 988.0  | 988.9  | 1009.3 | 1026.4 | 1037.9 | 1029.5 | 1039.5 | 1029.5 | 1026.9 | 1011.4 | 996.7  |
| 55°    | 1170.4 | 1162.9 | 1187.8 | 1202.8 | 1213.1 | 1223.0 | 1221.0 | 1219.8 | 1209.6 | 1192.1 | 1174.4 |
| 57.5°  | 1343.7 | 1365.3 | 1377.2 | 1399.4 | 1404.5 | 1411.2 | 1408.5 | 1404.5 | 1398.6 | 1388.7 | 1380.9 |
| 60°    | 1593.6 | 1608.2 | 1618.9 | 1623.2 | 1637.9 | 1639.9 | 1649.7 | 1633.6 | 1637.5 | 1626.0 | 1601.0 |
| 62.5°  | 1933.7 | 1917.9 | 1926.2 | 1926.2 | 1921.9 | 1906.5 | 1914.7 | 1921.1 | 1910.4 | 1900.9 | 1897.0 |
| 65°    | 2314.7 | 2263.5 | 2214.6 | 2206.2 | 2183.7 | 2178.6 | 2172.3 | 2156.4 | 2149.7 | 2133.1 | 2119.7 |
| 66°    | 2428.6 | 2349.4 | 2303.2 | 2274.7 | 2247.4 | 2241.5 | 2232.7 | 2216.2 | 2202.7 | 2179.4 | 2156.8 |
| 67.5°  | 2556.4 | 2454.3 | 2384.7 | 2344.4 | 2310.7 | 2288.5 | 2271.2 | 2247.4 | 2226.1 | 2191.2 | 2155.2 |
| 70°    | 2548.0 | 2463.8 | 2379.9 | 2318.6 | 2268.0 | 2222.5 | 2195.5 | 2144.5 | 2101.0 | 2051.2 | 2010.0 |
| 72.5°  | 2141.0 | 2126.0 | 2077.3 | 2042.9 | 1980.9 | 1956.7 | 1885.5 | 1853.0 | 1792.9 | 1728.5 | 1708.7 |
| 75°    | 1488.4 | 1429.5 | 1404.5 | 1390.7 | 1363.4 | 1288.3 | 1239.2 | 1249.9 | 1179.5 | 1116.6 | 1080.6 |
| 77.5°  | 650.6  | 662.5  | 593.7  | 562.9  | 539.2  | 498.4  | 460.4  | 434.3  | 419.3  | 409.4  | 364.7  |
| 80°    | 180.0  | 157.0  | 155.0  | 144.0  | 141.7  | 126.2  | 128.2  | 117.0  | 109.5  | 108.0  | 104.5  |
| 82.5°  | 78.7   | 77.2   | 74.8   | 73.6   | 72.3   | 70.8   | 68.8   | 68.5   | 66.0   | 64.0   | 64.5   |
| 85°    | 52.2   | 51.8   | 50.7   | 49.5   | 47.5   | 44.6   | 42.7   | 41.1   | 41.5   | 39.5   | 39.2   |
| 87.5°  | 30.5   | 29.6   | 29.3   | 27.7   | 27.3   | 25.0   | 25.3   | 23.4   | 23.0   | 22.5   | 21.4   |
| 90°    | 4.3    | 4.7    | 5.9    | 5.5    | 4.0    | 7.5    | 6.3    | 5.5    | 5.9    | 4.7    | 4.7    |
| 92.5°  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 95°    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 97.5°  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 100°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 102.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 105°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 107.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P271632  
 CATALOG NUMBER: IST-AF-450-LED-E1-SL2-7027

REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

|        | 75° | 76° | 77° | 78° | 79° | 80° | 81° | 82° | 83° | 84° | 85° |        |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| 110°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0°     |
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5°   |
| 115°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5°     |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.5°   |
| 120°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10°    |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5°  |
| 125°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15°    |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 17.5°  |
| 130°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20°    |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 22.5°  |
| 135°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25°    |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.5°  |
| 140°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30°    |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 32.5°  |
| 145°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 35°    |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 37.5°  |
| 150°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 40°    |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 42.5°  |
| 155°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 45°    |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 47.5°  |
| 160°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50°    |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 52.5°  |
| 165°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 55°    |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 57.5°  |
| 170°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60°    |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 62.5°  |
| 175°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 65°    |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 66°    |
| 180°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 67.5°  |
|        |     |     |     |     |     |     |     |     |     |     |     | 70°    |
|        |     |     |     |     |     |     |     |     |     |     |     | 72.5°  |
|        |     |     |     |     |     |     |     |     |     |     |     | 75°    |
|        |     |     |     |     |     |     |     |     |     |     |     | 77.5°  |
|        |     |     |     |     |     |     |     |     |     |     |     | 80°    |
|        |     |     |     |     |     |     |     |     |     |     |     | 82.5°  |
|        |     |     |     |     |     |     |     |     |     |     |     | 85°    |
|        |     |     |     |     |     |     |     |     |     |     |     | 87.5°  |
|        |     |     |     |     |     |     |     |     |     |     |     | 90°    |
|        |     |     |     |     |     |     |     |     |     |     |     | 92.5°  |
|        |     |     |     |     |     |     |     |     |     |     |     | 95°    |
|        |     |     |     |     |     |     |     |     |     |     |     | 97.5°  |
|        |     |     |     |     |     |     |     |     |     |     |     | 100°   |
|        |     |     |     |     |     |     |     |     |     |     |     | 102.5° |
|        |     |     |     |     |     |     |     |     |     |     |     | 105°   |
|        |     |     |     |     |     |     |     |     |     |     |     | 107.5° |

NUMBER: P271632  
 NUMBER: IST-AF-450-LED-E1-SL2-7027

REPORT NUMBER: P  
 CATALOG NUMBER:

| <u>DISTRIBUTION (continued):</u> |        |        |        |        |        |       |       |       |       |       | <u>CANDELA DISTRIBUTION</u> |     |
|----------------------------------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-----------------------------|-----|
| 86°                              | 87°    | 88°    | 89°    | 90°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 86°                         | 86° |
| 554.2                            | 554.2  | 554.2  | 554.2  | 554.2  | 554.2  | 554.2 | 554.2 | 554.2 | 554.2 | 554.2 | 110°                        | 0.0 |
| 555.0                            | 555.7  | 556.1  | 555.7  | 556.5  | 556.1  | 556.5 | 556.1 | 554.2 | 553.7 | 553.4 | 112.5°                      | 0.0 |
| 555.7                            | 557.3  | 557.7  | 558.0  | 557.3  | 558.0  | 556.5 | 550.2 | 543.0 | 535.2 | 528.8 | 115°                        | 0.0 |
| 556.5                            | 558.5  | 559.6  | 559.6  | 560.0  | 559.3  | 553.4 | 539.5 | 522.9 | 506.3 | 493.6 | 117.5°                      | 0.0 |
| 556.1                            | 558.8  | 560.0  | 560.5  | 560.5  | 558.8  | 544.6 | 522.5 | 497.2 | 471.9 | 446.2 | 120°                        | 0.0 |
| 555.0                            | 557.3  | 559.3  | 559.3  | 559.6  | 554.2  | 532.0 | 500.4 | 464.3 | 426.3 | 392.0 | 122.5°                      | 0.0 |
| 557.3                            | 559.6  | 559.6  | 559.6  | 559.3  | 549.9  | 518.5 | 472.7 | 424.4 | 373.0 | 322.0 | 125°                        | 0.0 |
| 560.8                            | 562.1  | 561.4  | 561.4  | 559.6  | 545.5  | 503.5 | 445.4 | 382.0 | 314.0 | 242.8 | 127.5°                      | 0.0 |
| 564.0                            | 564.9  | 564.5  | 562.5  | 560.5  | 540.7  | 488.0 | 416.5 | 331.5 | 242.8 | 172.0 | 130°                        | 0.0 |
| 567.2                            | 568.0  | 566.0  | 562.9  | 560.0  | 534.3  | 469.5 | 379.7 | 274.2 | 166.2 | 113.9 | 132.5°                      | 0.0 |
| 567.5                            | 568.4  | 564.9  | 560.5  | 556.5  | 524.9  | 447.0 | 340.5 | 211.2 | 107.5 | 89.0  | 135°                        | 0.0 |
| 567.2                            | 566.4  | 560.5  | 555.0  | 550.6  | 513.4  | 422.0 | 291.9 | 140.9 | 81.0  | 77.5  | 137.5°                      | 0.0 |
| 564.5                            | 560.8  | 556.1  | 549.9  | 543.5  | 500.7  | 397.1 | 237.7 | 89.0  | 70.3  | 70.3  | 140°                        | 0.0 |
| 560.5                            | 556.9  | 551.0  | 542.7  | 535.6  | 488.5  | 368.7 | 182.4 | 71.1  | 64.9  | 65.7  | 142.5°                      | 0.0 |
| 558.8                            | 555.0  | 546.2  | 537.5  | 528.5  | 477.4  | 338.6 | 122.6 | 64.0  | 61.4  | 61.7  | 145°                        | 0.0 |
| 562.1                            | 555.3  | 546.6  | 536.7  | 526.0  | 467.8  | 307.3 | 85.4  | 60.5  | 57.3  | 58.1  | 147.5°                      | 0.0 |
| 572.7                            | 566.4  | 556.1  | 543.5  | 532.0  | 462.4  | 274.2 | 70.8  | 57.0  | 54.2  | 54.2  | 150°                        | 0.0 |
| 598.5                            | 590.2  | 576.4  | 561.4  | 547.3  | 466.0  | 244.5 | 64.5  | 54.2  | 51.5  | 51.5  | 152.5°                      | 0.0 |
| 640.0                            | 630.1  | 613.8  | 596.8  | 578.7  | 483.4  | 210.8 | 62.2  | 52.2  | 48.3  | 47.5  | 155°                        | 0.0 |
| 711.2                            | 698.2  | 676.7  | 656.6  | 634.8  | 513.4  | 176.8 | 60.5  | 49.9  | 46.4  | 44.6  | 157.5°                      | 0.0 |
| 823.0                            | 803.7  | 778.4  | 751.9  | 725.4  | 568.4  | 149.8 | 58.9  | 48.3  | 44.6  | 43.1  | 160°                        | 0.0 |
| 967.0                            | 954.0  | 922.4  | 887.5  | 855.9  | 678.0  | 134.5 | 57.7  | 47.1  | 42.7  | 41.5  | 162.5°                      | 0.0 |
| 1150.5                           | 1129.3 | 1104.4 | 1073.0 | 1035.5 | 820.0  | 132.9 | 57.3  | 45.8  | 41.1  | 40.3  | 165°                        | 0.0 |
| 1344.4                           | 1336.0 | 1293.8 | 1274.4 | 1233.6 | 1009.0 | 161.8 | 58.1  | 45.1  | 40.0  | 38.8  | 167.5°                      | 0.0 |
| 1565.6                           | 1568.7 | 1529.2 | 1507.7 | 1474.2 | 1248.7 | 257.5 | 60.5  | 45.1  | 38.8  | 37.5  | 170°                        | 0.0 |
| 1854.6                           | 1859.9 | 1813.0 | 1787.8 | 1759.3 | 1517.2 | 404.7 | 64.5  | 46.4  | 37.5  | 36.4  | 172.5°                      | 0.0 |
| 2091.5                           | 2063.9 | 2033.9 | 1989.6 | 1953.5 | 1667.2 | 389.7 | 71.5  | 47.9  | 36.4  | 35.2  | 175°                        | 0.0 |
| 2116.0                           | 2096.4 | 2058.4 | 2010.5 | 1966.6 | 1668.0 | 340.2 | 74.0  | 48.3  | 36.0  | 34.9  | 177.5°                      | 0.0 |
| 2112.9                           | 2077.7 | 2034.6 | 1994.2 | 1951.2 | 1625.2 | 263.0 | 77.2  | 49.5  | 35.2  | 34.0  | 180°                        | 0.0 |
| 1966.6                           | 1917.2 | 1875.2 | 1819.4 | 1774.3 | 1454.4 | 161.8 | 76.7  | 47.9  | 32.8  | 32.0  |                             |     |
| 1621.7                           | 1596.4 | 1546.5 | 1501.9 | 1454.7 | 1177.0 | 110.7 | 68.5  | 42.3  | 29.6  | 30.0  |                             |     |
| 1049.0                           | 1020.0 | 969.5  | 944.2  | 917.7  | 753.0  | 86.2  | 55.8  | 36.0  | 26.5  | 27.7  |                             |     |
| 350.1                            | 338.6  | 320.0  | 330.3  | 314.9  | 293.5  | 63.3  | 42.3  | 28.8  | 23.0  | 24.5  |                             |     |
| 104.8                            | 102.5  | 106.0  | 99.7   | 105.6  | 89.4   | 41.5  | 29.6  | 22.2  | 19.8  | 21.8  |                             |     |
| 62.2                             | 61.4   | 61.4   | 61.4   | 59.7   | 55.8   | 27.3  | 20.6  | 17.0  | 16.6  | 18.1  |                             |     |
| 38.0                             | 37.2   | 37.5   | 37.2   | 38.0   | 34.0   | 18.5  | 14.2  | 12.7  | 12.3  | 14.6  |                             |     |
| 21.8                             | 21.8   | 22.2   | 21.4   | 21.8   | 21.0   | 13.0  | 9.2   | 8.4   | 7.9   | 10.7  |                             |     |
| 5.1                              | 5.1    | 4.0    | 3.5    | 4.0    | 5.5    | 3.5   | 2.8   | 2.3   | 2.0   | 3.5   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |
| 0.0                              | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |                             |     |

'271632  
 IST-AF-450-LED-E1-SL2-7027

REPORT NUMBER: P271632  
 CATALOG NUMBER: IST-AF-450

**TION (continued):**

**CANDELA DISTRIBUTION (con**

| 87° | 88° | 89° | 90° | 95° | 105° | 115° | 125° | 135° | 145° |        | 155°  | 165°  |
|-----|-----|-----|-----|-----|------|------|------|------|------|--------|-------|-------|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0°     | 554.2 | 554.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.5°   | 550.2 | 547.3 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 5°     | 519.0 | 511.5 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 7.5°   | 473.9 | 465.1 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 10°    | 422.5 | 409.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 12.5°  | 356.8 | 331.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 15°    | 280.8 | 246.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 17.5°  | 193.5 | 165.7 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 20°    | 135.6 | 125.3 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 22.5°  | 104.8 | 105.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 25°    | 87.0  | 91.0  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 27.5°  | 76.7  | 80.7  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 30°    | 70.3  | 74.0  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 32.5°  | 66.0  | 67.6  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 35°    | 60.9  | 61.7  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 37.5°  | 56.5  | 56.5  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 40°    | 52.6  | 52.2  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 42.5°  | 49.0  | 48.7  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 45°    | 45.5  | 45.8  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 47.5°  | 43.5  | 43.8  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 50°    | 41.5  | 42.0  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 52.5°  | 40.0  | 40.0  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 55°    | 38.4  | 38.0  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 57.5°  | 37.2  | 36.4  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 60°    | 36.0  | 35.2  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 62.5°  | 35.2  | 34.0  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 65°    | 34.5  | 33.7  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 66°    | 34.0  | 33.2  |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 67.5°  | 33.7  | 32.8  |
|     |     |     |     |     |      |      |      |      |      | 70°    | 32.0  | 31.2  |
|     |     |     |     |     |      |      |      |      |      | 72.5°  | 29.6  | 29.3  |
|     |     |     |     |     |      |      |      |      |      | 75°    | 27.3  | 26.5  |
|     |     |     |     |     |      |      |      |      |      | 77.5°  | 24.2  | 23.7  |
|     |     |     |     |     |      |      |      |      |      | 80°    | 20.6  | 20.2  |
|     |     |     |     |     |      |      |      |      |      | 82.5°  | 17.3  | 16.6  |
|     |     |     |     |     |      |      |      |      |      | 85°    | 13.8  | 13.0  |
|     |     |     |     |     |      |      |      |      |      | 87.5°  | 9.5   | 8.7   |
|     |     |     |     |     |      |      |      |      |      | 90°    | 2.3   | 2.8   |
|     |     |     |     |     |      |      |      |      |      | 92.5°  | 0.0   | 0.0   |
|     |     |     |     |     |      |      |      |      |      | 95°    | 0.0   | 0.0   |
|     |     |     |     |     |      |      |      |      |      | 97.5°  | 0.0   | 0.0   |
|     |     |     |     |     |      |      |      |      |      | 100°   | 0.0   | 0.0   |
|     |     |     |     |     |      |      |      |      |      | 102.5° | 0.0   | 0.0   |
|     |     |     |     |     |      |      |      |      |      | 105°   | 0.0   | 0.0   |
|     |     |     |     |     |      |      |      |      |      | 107.5° | 0.0   | 0.0   |



REPORT NUMBER: P271632

CATALOG NUMBER: IST-AF-450-LED-E1-S

0-LED-E1-SL2-7027

**tinued):**

| 175°  | 180°  |
|-------|-------|
| 554.2 | 554.2 |
| 545.0 | 548.7 |
| 509.1 | 507.8 |
| 458.0 | 458.5 |
| 396.3 | 397.1 |
| 316.5 | 311.7 |
| 226.6 | 228.6 |
| 157.8 | 157.5 |
| 126.6 | 127.4 |
| 108.3 | 108.3 |
| 96.5  | 96.5  |
| 85.0  | 85.4  |
| 77.2  | 78.0  |
| 70.0  | 70.3  |
| 62.9  | 63.3  |
| 57.0  | 57.0  |
| 53.0  | 53.4  |
| 50.2  | 50.2  |
| 47.5  | 47.5  |
| 45.1  | 45.8  |
| 42.7  | 43.1  |
| 40.3  | 40.7  |
| 38.0  | 38.0  |
| 36.0  | 36.0  |
| 34.5  | 34.0  |
| 33.2  | 32.4  |
| 32.0  | 31.6  |
| 31.6  | 31.2  |
| 31.2  | 30.8  |
| 30.5  | 30.0  |
| 29.3  | 28.8  |
| 26.9  | 26.1  |
| 24.5  | 23.7  |
| 22.5  | 21.4  |
| 19.0  | 18.1  |
| 13.8  | 13.0  |
| 8.4   | 8.4   |
| 2.0   | 2.0   |
| 0.0   | 0.0   |
| 0.0   | 0.0   |
| 0.0   | 0.0   |
| 0.0   | 0.0   |
| 0.0   | 0.0   |
| 0.0   | 0.0   |
| 0.0   | 0.0   |
| 0.0   | 0.0   |
| 0.0   | 0.0   |

**CANDELA DISTRIBUTION (continued):**

|        | 155° | 165° | 175° |
|--------|------|------|------|
| 110°   | 0.0  | 0.0  | 0.0  |
| 112.5° | 0.0  | 0.0  | 0.0  |
| 115°   | 0.0  | 0.0  | 0.0  |
| 117.5° | 0.0  | 0.0  | 0.0  |
| 120°   | 0.0  | 0.0  | 0.0  |
| 122.5° | 0.0  | 0.0  | 0.0  |
| 125°   | 0.0  | 0.0  | 0.0  |
| 127.5° | 0.0  | 0.0  | 0.0  |
| 130°   | 0.0  | 0.0  | 0.0  |
| 132.5° | 0.0  | 0.0  | 0.0  |
| 135°   | 0.0  | 0.0  | 0.0  |
| 137.5° | 0.0  | 0.0  | 0.0  |
| 140°   | 0.0  | 0.0  | 0.0  |
| 142.5° | 0.0  | 0.0  | 0.0  |
| 145°   | 0.0  | 0.0  | 0.0  |
| 147.5° | 0.0  | 0.0  | 0.0  |
| 150°   | 0.0  | 0.0  | 0.0  |
| 152.5° | 0.0  | 0.0  | 0.0  |
| 155°   | 0.0  | 0.0  | 0.0  |
| 157.5° | 0.0  | 0.0  | 0.0  |
| 160°   | 0.0  | 0.0  | 0.0  |
| 162.5° | 0.0  | 0.0  | 0.0  |
| 165°   | 0.0  | 0.0  | 0.0  |
| 167.5° | 0.0  | 0.0  | 0.0  |
| 170°   | 0.0  | 0.0  | 0.0  |
| 172.5° | 0.0  | 0.0  | 0.0  |
| 175°   | 0.0  | 0.0  | 0.0  |
| 177.5° | 0.0  | 0.0  | 0.0  |
| 180°   | 0.0  | 0.0  | 0.0  |

