

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: 17290

Luminaire Tested: **S7A/6R/1T8/ETG4/UEB-SI-S22**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 17290
Test Lab: LUMINAIRE TESTING LABORATORY, INC.
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S7A/6R/1T8/ETG4/UEB-SI-S22
Description: FORMED WHITE ENAMEL STEEL AND ALUMINUM HOUSING, FORMED WHITE ENAMEL STEEL REFLECTOR, TRANSLUCENT WHITE PLASTIC ENCLOSURE.
Light Source: ONE 32 WATT T8 LINEAR FLUORESCENT LAMP RATED AT 2850 LUMENS.
PHILIPS F32T8/TL835/ALTO
Ballast/Driver: ONE UNIVERSAL LIGHTING TECHNOLOGIES "TRIAD" B132IUNVEL-A

Summary

Lumens per Lamp: 2850 (1 lamp)
Luminaire Lumens: 1489.3 lumens
Efficiency: 52.3%
Efficacy: 56.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.12 / 1.28
Luminous Opening: Rectangular (W 0.4' x L: 3.91' x H: 0')
CIE Type: Direct

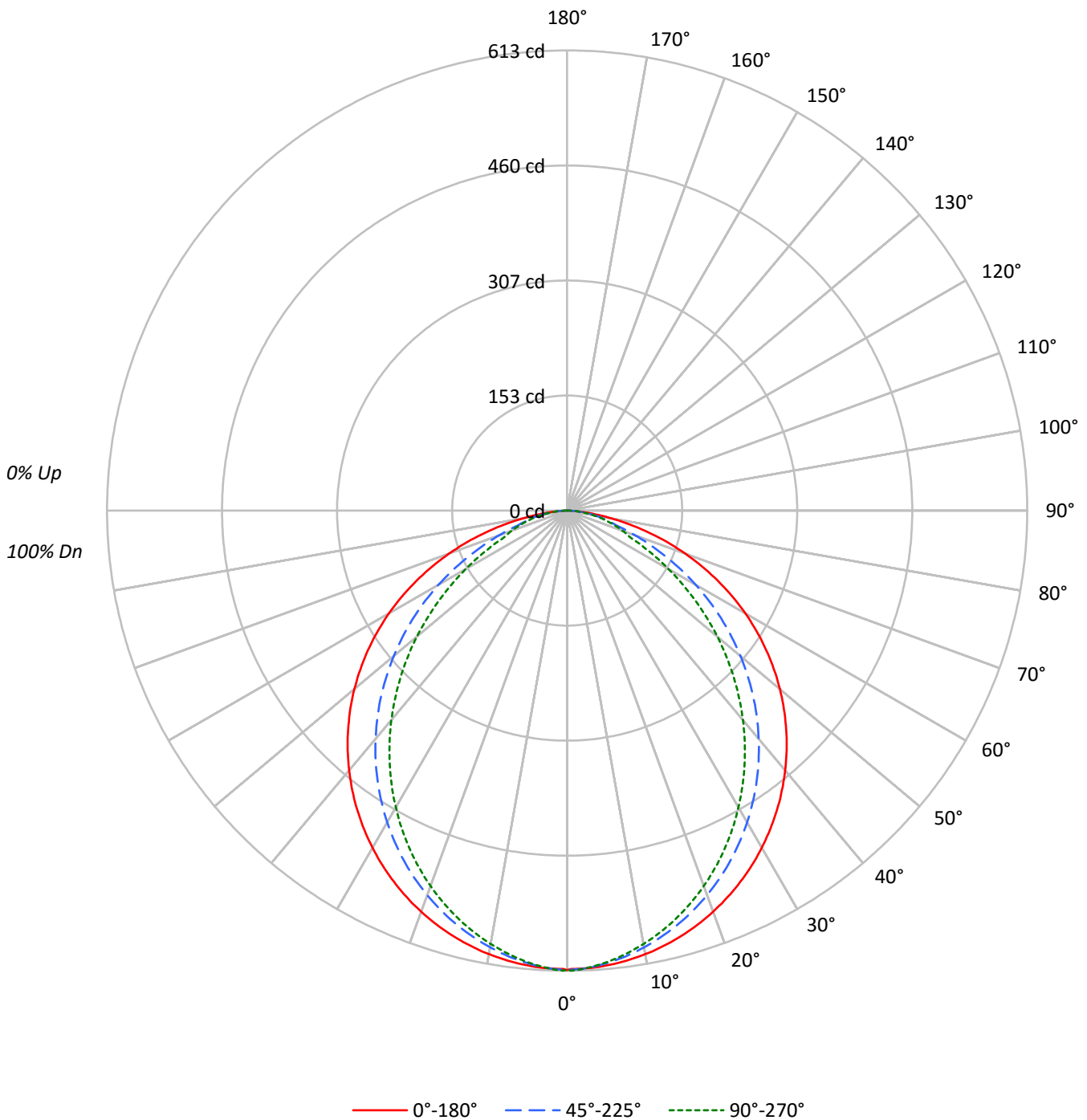
Input Watts (W): 26.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: 17290

CATALOG NUMBER: S7A/6R/1T8/ETG4/UEB-SI-S22

Luminous Intensity Polar Plot





TEST NUMBER: 17290

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 62 | 62 | 62 | 62 | 61 | 61 | 61 | 61 | 58 | 58 | 58 | 56 | 56 | 56 | 53 | 53 | 53 | 52 |
| 1 | 57 | 55 | 53 | 51 | 56 | 54 | 52 | 50 | 52 | 50 | 49 | 49 | 48 | 47 | 48 | 47 | 46 | 45 |
| 2 | 52 | 48 | 45 | 42 | 51 | 47 | 44 | 42 | 45 | 43 | 41 | 44 | 42 | 40 | 42 | 40 | 39 | 38 |
| 3 | 48 | 43 | 39 | 35 | 47 | 42 | 38 | 35 | 40 | 37 | 34 | 39 | 36 | 34 | 38 | 35 | 33 | 32 |
| 4 | 44 | 38 | 34 | 30 | 43 | 37 | 33 | 30 | 36 | 32 | 30 | 35 | 32 | 29 | 34 | 31 | 29 | 28 |
| 5 | 41 | 34 | 30 | 26 | 39 | 34 | 29 | 26 | 32 | 29 | 26 | 31 | 28 | 26 | 30 | 28 | 25 | 24 |
| 6 | 38 | 31 | 26 | 23 | 37 | 30 | 26 | 23 | 29 | 26 | 23 | 29 | 25 | 23 | 28 | 25 | 22 | 21 |
| 7 | 35 | 28 | 24 | 20 | 34 | 28 | 23 | 20 | 27 | 23 | 20 | 26 | 23 | 20 | 25 | 22 | 20 | 19 |
| 8 | 33 | 26 | 21 | 18 | 32 | 25 | 21 | 18 | 25 | 21 | 18 | 24 | 21 | 18 | 23 | 20 | 18 | 17 |
| 9 | 30 | 24 | 19 | 17 | 30 | 23 | 19 | 16 | 23 | 19 | 16 | 22 | 19 | 16 | 22 | 18 | 16 | 15 |
| 10 | 29 | 22 | 18 | 15 | 28 | 22 | 18 | 15 | 21 | 17 | 15 | 21 | 17 | 15 | 20 | 17 | 15 | 14 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 4260 | 4260 | 4260 |
| 5° | 4249 | 4228 | 4219 |
| 10° | 4240 | 4175 | 4143 |
| 15° | 4227 | 4111 | 4050 |
| 20° | 4211 | 4037 | 3940 |
| 25° | 4191 | 3951 | 3815 |
| 30° | 4168 | 3853 | 3667 |
| 35° | 4139 | 3738 | 3502 |
| 40° | 4104 | 3606 | 3310 |
| 45° | 4063 | 3450 | 3087 |
| 50° | 4006 | 3264 | 2830 |
| 55° | 3929 | 3037 | 2521 |
| 60° | 3818 | 2756 | 2173 |
| 65° | 3652 | 2394 | 1792 |
| 70° | 3402 | 1959 | 1593 |
| 75° | 3011 | 1624 | 1516 |
| 80° | 2429 | 1511 | 1419 |
| 85° | 1645 | 1333 | 1270 |



TEST NUMBER: 17290

CATALOG NUMBER: S7A/6R/1T8/ETG4/UEB-SI-S22

ZONAL LUMENS:

| Zone | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10° | 57.4 | 3.9 | 2.0 |
| 10°-20° | 161.3 | 10.8 | 5.7 |
| 20°-30° | 238.3 | 16.0 | 8.4 |
| 30°-40° | 277.6 | 18.6 | 9.7 |
| 40°-50° | 274.4 | 18.4 | 9.6 |
| 50°-60° | 229.7 | 15.4 | 8.1 |
| 60°-70° | 153.6 | 10.3 | 5.4 |
| 70°-80° | 77.4 | 5.2 | 2.7 |
| 80°-90° | 19.7 | 1.3 | 0.7 |
| 90°-100° | 0.0 | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 | 0.0 |
| 0°-30° | 457.0 | 30.7 | 16.0 |
| 0°-40° | 734.7 | 49.3 | 25.8 |
| 0°-60° | 1238.7 | 83.2 | 43.5 |
| 0°-90° | 1489.3 | 100.0 | 52.3 |
| 90°-120° | 0.0 | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 | 0.0 |
| 0°-180° | 1489.3 | 100.0 | 52.3 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 612 | 612 | 612 | 612 | 612 | |
| 5° | 608 | 608 | 605 | 604 | 604 | 58 |
| 15° | 587 | 581 | 571 | 564 | 562 | 166 |
| 25° | 546 | 533 | 514 | 502 | 497 | 252 |
| 35° | 487 | 468 | 440 | 420 | 412 | 305 |
| 45° | 413 | 387 | 351 | 324 | 314 | 318 |
| 55° | 324 | 294 | 250 | 219 | 208 | 289 |
| 65° | 222 | 191 | 145 | 117 | 109 | 219 |
| 75° | 112 | 88 | 60 | 57 | 56 | 119 |
| 85° | 21 | 18 | 17 | 16 | 16 | 25 |
| 90° | 0 | 0 | 0 | 0 | 0 | 1 |
| 95° | 0 | 0 | 0 | 0 | 0 | 0 |
| 105° | 0 | 0 | 0 | 0 | 0 | 0 |
| 115° | 0 | 0 | 0 | 0 | 0 | 0 |
| 125° | 0 | 0 | 0 | 0 | 0 | 0 |
| 135° | 0 | 0 | 0 | 0 | 0 | 0 |
| 145° | 0 | 0 | 0 | 0 | 0 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: 17290

CATALOG NUMBER: S7A/6R/1T8/ETG4/UEB-SI-S22

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 612.1 | 612.1 | 612.1 | 612.1 | 612.1 |
| 0.5° | 610.7 | 612.4 | 611.7 | 612.2 | 612.9 |
| 1° | 610.7 | 612.3 | 611.4 | 612.0 | 612.4 |
| 1.5° | 610.6 | 612.1 | 611.0 | 611.3 | 611.8 |
| 2° | 610.4 | 611.8 | 610.5 | 610.5 | 610.9 |
| 2.5° | 610.2 | 611.3 | 609.8 | 609.7 | 609.9 |
| 3° | 609.9 | 610.8 | 609.0 | 608.7 | 608.8 |
| 3.5° | 609.6 | 610.3 | 608.2 | 607.6 | 607.7 |
| 4° | 609.2 | 609.6 | 607.2 | 606.4 | 606.6 |
| 4.5° | 608.7 | 609.0 | 606.2 | 605.3 | 605.3 |
| 5° | 608.2 | 608.1 | 605.2 | 604.0 | 603.9 |
| 5.5° | 607.6 | 607.3 | 604.0 | 602.7 | 602.4 |
| 6° | 607.0 | 606.4 | 602.8 | 601.3 | 601.0 |
| 6.5° | 606.2 | 605.4 | 601.5 | 599.8 | 599.4 |
| 7° | 605.5 | 604.4 | 600.2 | 598.2 | 597.7 |
| 7.5° | 604.7 | 603.3 | 598.8 | 596.6 | 596.0 |
| 8° | 603.9 | 602.2 | 597.3 | 594.8 | 594.2 |
| 8.5° | 602.9 | 601.0 | 595.8 | 593.1 | 592.2 |
| 9° | 602.1 | 599.7 | 594.2 | 591.3 | 590.3 |
| 9.5° | 601.0 | 598.4 | 592.5 | 589.3 | 588.3 |
| 10° | 600.0 | 597.1 | 590.9 | 587.3 | 586.3 |
| 10.5° | 598.9 | 595.8 | 589.0 | 585.4 | 584.1 |
| 11° | 597.8 | 594.2 | 587.2 | 583.2 | 582.0 |
| 11.5° | 596.6 | 592.7 | 585.3 | 581.1 | 579.7 |
| 12° | 595.3 | 591.2 | 583.4 | 578.8 | 577.4 |
| 12.5° | 594.0 | 589.6 | 581.3 | 576.6 | 575.0 |
| 13° | 592.6 | 587.9 | 579.3 | 574.2 | 572.5 |
| 13.5° | 591.2 | 586.2 | 577.2 | 571.8 | 569.9 |
| 14° | 589.8 | 584.4 | 575.1 | 569.4 | 567.4 |
| 14.5° | 588.3 | 582.6 | 572.9 | 566.8 | 564.8 |
| 15° | 586.7 | 580.7 | 570.6 | 564.3 | 562.1 |
| 15.5° | 585.2 | 578.8 | 568.3 | 561.6 | 559.4 |
| 16° | 583.5 | 576.8 | 566.0 | 558.9 | 556.7 |
| 16.5° | 581.9 | 574.8 | 563.6 | 556.2 | 553.7 |
| 17° | 580.1 | 572.7 | 561.0 | 553.4 | 550.8 |
| 17.5° | 578.3 | 570.6 | 558.5 | 550.5 | 547.9 |
| 18° | 576.4 | 568.5 | 555.9 | 547.6 | 544.8 |
| 18.5° | 574.5 | 566.2 | 553.3 | 544.7 | 541.8 |
| 19° | 572.6 | 564.0 | 550.6 | 541.6 | 538.6 |
| 19.5° | 570.7 | 561.6 | 547.9 | 538.7 | 535.4 |
| 20° | 568.6 | 559.3 | 545.1 | 535.5 | 532.1 |
| 20.5° | 566.5 | 556.9 | 542.2 | 532.3 | 528.8 |
| 21° | 564.4 | 554.5 | 539.4 | 529.1 | 525.6 |
| 21.5° | 562.3 | 551.9 | 536.5 | 525.8 | 522.0 |
| 22° | 560.1 | 549.3 | 533.5 | 522.5 | 518.6 |



TEST NUMBER: 17290

CATALOG NUMBER: S7A/6R/1T8/ETG4/UEB-SI-S22

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 22.5° | 557.7 | 546.8 | 530.4 | 519.2 | 515.1 |
| 23° | 555.6 | 544.1 | 527.4 | 515.7 | 511.6 |
| 23.5° | 553.2 | 541.4 | 524.2 | 512.2 | 507.9 |
| 24° | 550.8 | 538.7 | 521.1 | 508.7 | 504.3 |
| 24.5° | 548.4 | 535.9 | 517.8 | 505.2 | 500.5 |
| 25° | 545.8 | 533.1 | 514.5 | 501.5 | 496.8 |
| 25.5° | 543.3 | 530.1 | 511.2 | 497.9 | 492.9 |
| 26° | 540.7 | 527.3 | 507.9 | 494.0 | 489.0 |
| 26.5° | 538.1 | 524.3 | 504.5 | 490.2 | 485.1 |
| 27° | 535.5 | 521.3 | 501.0 | 486.5 | 481.2 |
| 27.5° | 532.8 | 518.3 | 497.5 | 482.6 | 477.1 |
| 28° | 530.1 | 515.2 | 494.1 | 478.7 | 473.2 |
| 28.5° | 527.3 | 512.0 | 490.5 | 474.7 | 469.1 |
| 29° | 524.4 | 508.9 | 486.9 | 470.8 | 464.9 |
| 29.5° | 521.6 | 505.7 | 483.1 | 466.7 | 460.6 |
| 30° | 518.7 | 502.5 | 479.5 | 462.6 | 456.4 |
| 30.5° | 515.7 | 499.1 | 475.7 | 458.5 | 452.3 |
| 31° | 512.7 | 495.8 | 471.9 | 454.2 | 447.9 |
| 31.5° | 509.6 | 492.4 | 468.1 | 450.2 | 443.5 |
| 32° | 506.6 | 489.0 | 464.3 | 445.9 | 439.2 |
| 32.5° | 503.3 | 485.5 | 460.3 | 441.5 | 434.9 |
| 33° | 500.2 | 482.1 | 456.4 | 437.3 | 430.4 |
| 33.5° | 497.1 | 478.5 | 452.3 | 432.9 | 425.9 |
| 34° | 493.8 | 474.9 | 448.2 | 428.5 | 421.3 |
| 34.5° | 490.5 | 471.3 | 444.2 | 424.1 | 416.8 |
| 35° | 487.2 | 467.6 | 440.0 | 419.6 | 412.2 |
| 35.5° | 483.9 | 464.0 | 435.9 | 415.1 | 407.5 |
| 36° | 480.5 | 460.3 | 431.8 | 410.6 | 402.8 |
| 36.5° | 477.1 | 456.5 | 427.6 | 406.0 | 398.1 |
| 37° | 473.3 | 452.6 | 423.2 | 401.3 | 393.4 |
| 37.5° | 470.0 | 448.8 | 419.0 | 396.7 | 388.7 |
| 38° | 466.5 | 444.9 | 414.7 | 392.1 | 383.8 |
| 38.5° | 462.7 | 441.1 | 410.2 | 387.4 | 378.9 |
| 39° | 459.1 | 437.1 | 405.8 | 382.6 | 374.0 |
| 39.5° | 455.6 | 433.1 | 401.5 | 377.8 | 369.2 |
| 40° | 451.8 | 429.0 | 397.0 | 373.1 | 364.4 |
| 40.5° | 448.0 | 425.0 | 392.5 | 368.2 | 359.3 |
| 41° | 444.3 | 421.0 | 388.0 | 363.4 | 354.3 |
| 41.5° | 440.5 | 416.8 | 383.4 | 358.4 | 349.4 |
| 42° | 436.7 | 412.6 | 378.8 | 353.5 | 344.4 |
| 42.5° | 432.8 | 408.4 | 374.2 | 348.6 | 339.3 |
| 43° | 428.8 | 404.2 | 369.5 | 343.6 | 334.1 |
| 43.5° | 424.9 | 400.0 | 364.8 | 338.6 | 329.2 |
| 44° | 420.8 | 395.8 | 360.2 | 333.7 | 323.9 |
| 44.5° | 416.8 | 391.4 | 355.5 | 328.6 | 318.8 |



TEST NUMBER: 17290

CATALOG NUMBER: S7A/6R/1T8/ETG4/UEB-SI-S22

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 45° | 412.8 | 387.0 | 350.6 | 323.5 | 313.7 |
| 45.5° | 408.6 | 382.7 | 345.8 | 318.6 | 308.6 |
| 46° | 404.4 | 378.2 | 341.1 | 313.4 | 303.4 |
| 46.5° | 400.3 | 373.8 | 336.2 | 308.2 | 298.2 |
| 47° | 396.1 | 369.3 | 331.3 | 303.2 | 293.1 |
| 47.5° | 391.8 | 364.8 | 326.3 | 298.0 | 287.6 |
| 48° | 387.4 | 360.1 | 321.4 | 292.9 | 282.6 |
| 48.5° | 383.1 | 355.7 | 316.5 | 287.8 | 277.4 |
| 49° | 378.7 | 351.0 | 311.5 | 282.5 | 272.1 |
| 49.5° | 374.5 | 346.4 | 306.6 | 277.4 | 266.8 |
| 50° | 370.0 | 341.7 | 301.5 | 272.1 | 261.4 |
| 50.5° | 365.4 | 337.0 | 296.5 | 266.9 | 256.0 |
| 51° | 361.0 | 332.3 | 291.4 | 261.7 | 250.8 |
| 51.5° | 356.5 | 327.6 | 286.4 | 256.4 | 245.3 |
| 52° | 351.9 | 322.7 | 281.2 | 251.1 | 240.0 |
| 52.5° | 347.2 | 317.9 | 276.1 | 245.8 | 234.6 |
| 53° | 342.6 | 313.1 | 271.0 | 240.5 | 229.2 |
| 53.5° | 337.9 | 308.2 | 265.8 | 235.0 | 223.9 |
| 54° | 333.3 | 303.3 | 260.7 | 229.7 | 218.5 |
| 54.5° | 328.5 | 298.4 | 255.6 | 224.4 | 213.3 |
| 55° | 323.8 | 293.5 | 250.3 | 219.0 | 207.8 |
| 55.5° | 318.9 | 288.4 | 245.2 | 213.8 | 202.6 |
| 56° | 314.1 | 283.5 | 239.9 | 208.4 | 197.5 |
| 56.5° | 309.1 | 278.4 | 234.7 | 203.1 | 192.1 |
| 57° | 304.3 | 273.5 | 229.5 | 197.8 | 186.8 |
| 57.5° | 299.4 | 268.4 | 224.4 | 192.6 | 181.6 |
| 58° | 294.4 | 263.3 | 219.1 | 187.3 | 176.6 |
| 58.5° | 289.4 | 258.3 | 213.9 | 181.9 | 171.5 |
| 59° | 284.5 | 253.1 | 208.7 | 176.9 | 166.3 |
| 59.5° | 279.3 | 247.9 | 203.3 | 171.6 | 161.0 |
| 60° | 274.3 | 242.8 | 198.0 | 166.5 | 156.1 |
| 60.5° | 269.2 | 237.7 | 192.6 | 161.4 | 151.1 |
| 61° | 264.0 | 232.5 | 187.3 | 156.3 | 146.2 |
| 61.5° | 258.8 | 227.2 | 181.9 | 151.3 | 141.4 |
| 62° | 253.7 | 222.0 | 176.7 | 146.3 | 136.6 |
| 62.5° | 248.3 | 216.9 | 171.4 | 141.2 | 131.6 |
| 63° | 243.0 | 211.6 | 166.1 | 136.3 | 126.8 |
| 63.5° | 237.8 | 206.4 | 160.9 | 131.5 | 122.2 |
| 64° | 232.5 | 201.1 | 155.7 | 126.6 | 117.6 |
| 64.5° | 227.1 | 195.9 | 150.4 | 121.8 | 113.0 |
| 65° | 221.8 | 190.6 | 145.4 | 117.1 | 108.8 |
| 65.5° | 216.3 | 185.4 | 140.2 | 112.6 | 104.3 |
| 66° | 210.9 | 180.1 | 135.1 | 108.1 | 99.6 |
| 66.5° | 205.6 | 174.9 | 130.1 | 103.6 | 94.9 |
| 67° | 200.0 | 169.6 | 125.1 | 99.3 | 91.2 |



TEST NUMBER: 17290

CATALOG NUMBER: S7A/6R/1T8/ETG4/UEB-SI-S22

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|------|
| 67.5° | 194.6 | 164.3 | 120.2 | 94.9 | 89.1 |
| 68° | 189.2 | 159.1 | 115.4 | 90.2 | 86.9 |
| 68.5° | 183.6 | 153.8 | 110.4 | 86.2 | 84.7 |
| 69° | 178.2 | 148.7 | 105.7 | 83.8 | 82.6 |
| 69.5° | 172.7 | 143.5 | 101.0 | 81.7 | 80.5 |
| 70° | 167.2 | 138.4 | 96.3 | 79.5 | 78.3 |
| 70.5° | 161.5 | 133.3 | 91.9 | 77.3 | 76.2 |
| 71° | 156.2 | 128.2 | 87.6 | 75.2 | 73.9 |
| 71.5° | 150.5 | 123.2 | 83.3 | 73.0 | 71.7 |
| 72° | 145.1 | 118.1 | 79.1 | 70.7 | 69.5 |
| 72.5° | 139.4 | 113.0 | 75.0 | 68.5 | 67.3 |
| 73° | 134.0 | 107.8 | 70.4 | 66.3 | 65.1 |
| 73.5° | 128.6 | 102.6 | 67.3 | 64.1 | 62.9 |
| 74° | 122.9 | 97.6 | 65.1 | 61.8 | 60.8 |
| 74.5° | 117.5 | 92.7 | 62.8 | 59.7 | 58.6 |
| 75° | 112.0 | 87.6 | 60.4 | 57.4 | 56.4 |
| 75.5° | 106.7 | 82.8 | 58.2 | 55.3 | 54.3 |
| 76° | 101.4 | 78.1 | 55.9 | 53.0 | 52.0 |
| 76.5° | 96.0 | 73.3 | 53.6 | 50.9 | 49.9 |
| 77° | 90.8 | 68.9 | 51.3 | 48.7 | 47.8 |
| 77.5° | 85.4 | 64.3 | 49.0 | 46.5 | 45.7 |
| 78° | 80.2 | 60.0 | 46.7 | 44.4 | 43.5 |
| 78.5° | 75.3 | 55.9 | 44.4 | 42.3 | 41.6 |
| 79° | 70.1 | 51.8 | 42.2 | 40.2 | 39.5 |
| 79.5° | 65.2 | 47.9 | 39.9 | 38.0 | 37.4 |
| 80° | 60.6 | 44.2 | 37.7 | 36.0 | 35.4 |
| 80.5° | 55.8 | 40.4 | 35.6 | 34.0 | 33.4 |
| 81° | 51.1 | 37.0 | 33.3 | 31.8 | 31.3 |
| 81.5° | 46.7 | 34.6 | 31.2 | 29.9 | 29.3 |
| 82° | 42.3 | 32.1 | 29.0 | 27.8 | 27.4 |
| 82.5° | 38.3 | 29.6 | 26.9 | 25.8 | 25.5 |
| 83° | 34.4 | 27.2 | 24.8 | 23.9 | 23.4 |
| 83.5° | 30.6 | 24.8 | 22.7 | 21.9 | 21.5 |
| 84° | 27.1 | 22.4 | 20.7 | 20.0 | 19.6 |
| 84.5° | 23.9 | 20.1 | 18.7 | 18.1 | 17.8 |
| 85° | 20.6 | 17.8 | 16.7 | 16.2 | 15.9 |
| 85.5° | 17.1 | 15.6 | 14.8 | 14.3 | 14.0 |
| 86° | 13.8 | 13.6 | 12.8 | 12.4 | 12.3 |
| 86.5° | 10.7 | 11.4 | 11.0 | 10.6 | 10.3 |
| 87° | 8.0 | 9.4 | 9.1 | 8.8 | 8.6 |
| 87.5° | 5.6 | 7.4 | 7.2 | 7.0 | 6.8 |
| 88° | 4.1 | 5.6 | 5.4 | 5.2 | 5.0 |
| 88.5° | 2.8 | 3.7 | 3.6 | 3.4 | 3.3 |
| 89° | 1.3 | 1.9 | 1.8 | 1.7 | 1.6 |
| 89.5° | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 |



TEST NUMBER: 17290

CATALOG NUMBER: S7A/6R/1T8/ETG4/UEB-SI-S22

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 91° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 91.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 93° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 93.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 94° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 94.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 96° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 96.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 97° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 97.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 98° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 98.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 99° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 99.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 100° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 100.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 101° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 101.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 103° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 103.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 104° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 104.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 106° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 106.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 108° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 108.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 109° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 109.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 110.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 111° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 111.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 112° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: 17290

CATALOG NUMBER: S7A/6R/1T8/ETG4/UEB-SI-S22

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 113° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 113.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 114° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 114.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 116° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 116.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 118° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 118.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 119° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 119.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 121° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 121.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 123° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 123.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 124° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 124.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 126° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 126.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 128° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 128.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 129° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 129.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 131° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 131.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 133° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 133.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 134° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 134.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: 17290

CATALOG NUMBER: S7A/6R/1T8/ETG4/UEB-SI-S22

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 135.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 136° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 136.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 138° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 138.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 139° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 139.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 141° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 141.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 143° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 143.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 144° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 144.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 146° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 146.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 148° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 148.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 149° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 149.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 151° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 151.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 153° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 153.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 154° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 154.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 156° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 156.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: 17290

CATALOG NUMBER: S7A/6R/1T8/ETG4/UEB-SI-S22

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 158° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 158.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 159° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 159.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 161° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 161.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 163° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 163.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 164° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 164.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 166° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 166.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 168° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 168.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 169° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 169.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 171° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 171.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 173° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 173.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 174° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 174.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 176° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 176.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 178° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 178.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 179° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 179.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: 17290

CATALOG NUMBER: S7A/6R/1T8/ETG4/UEB-SI-S22

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|------|-----|-------|-----|-------|-----|
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)