

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: NEO-RAY

Report Number: P24122

Luminaire Tested: **S901DIP-1L35-D02XXD**

Issue Date: 3/3/2020

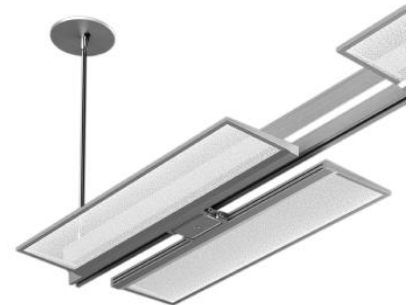
Test Information

Test Method: LM-79-08
Report Number: P24122
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S901DIP-1L35-D02XXD
Description: NEORAY INDEX SUSPENDED WITH 2 FOOT WING YOKE
Light Source: (84) 3500K LEDs
Ballast/Driver: (1) ADVANCE ELECTRONIC DRIVERS
LEDINTA2000C24DO

Summary

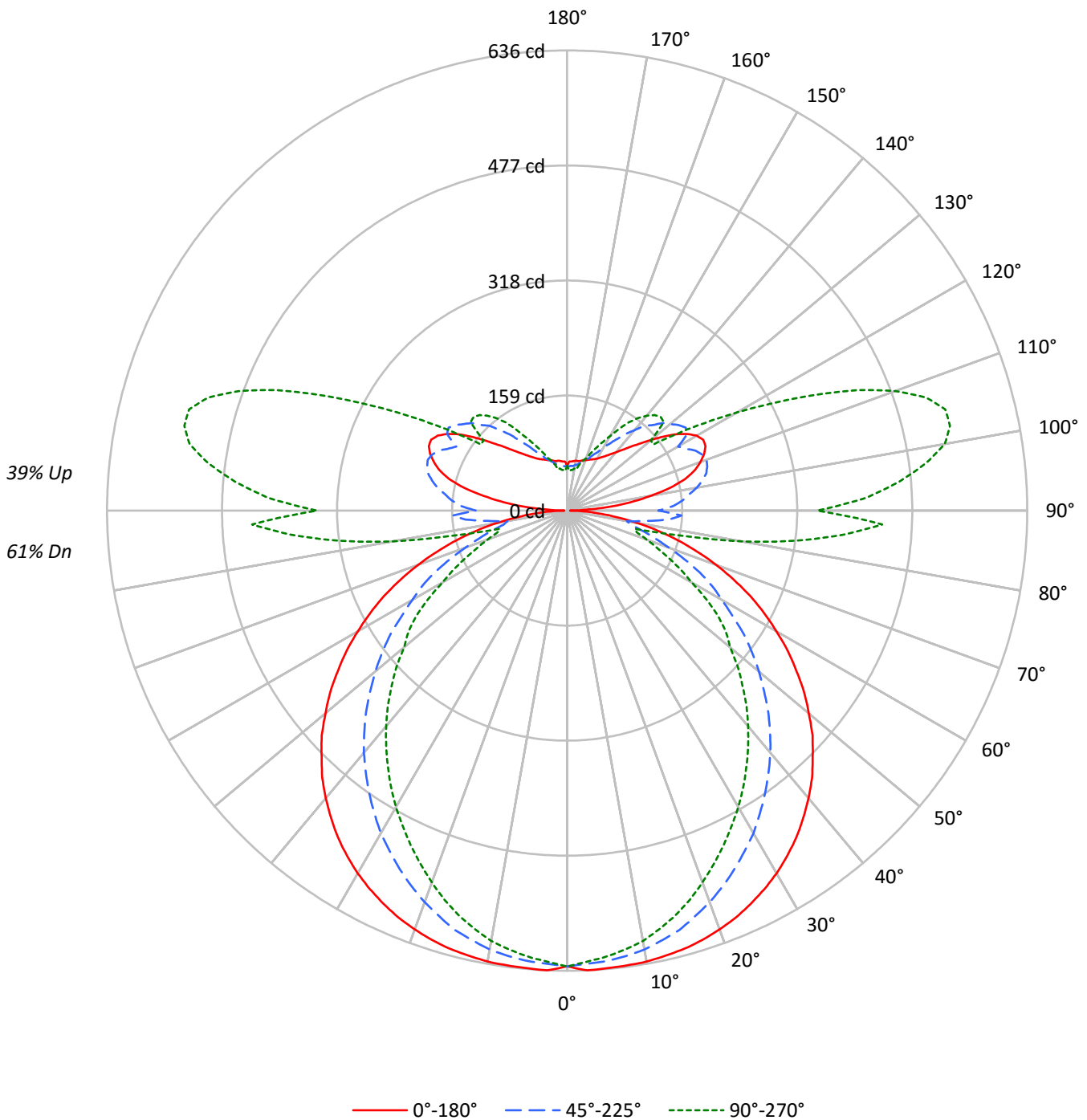
Lumens per Lamp: N/A
Luminaire Lumens: 3105.6 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.13 / 1.32
Luminous Opening: Rectangular (W 1.12' x L: 1.85' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 32.6
Input Voltage (V): 120.11
Input Current (Ain): 0.2728
Voltage Rise (V): NR
Power Factor: 0.9958
Total Harmonic Distortion (THDi):
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 24 HR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P24122
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Luminous Intensity Polar Plot





TEST NUMBER: P24122

CATALOG NUMBER: S901DIP-1L35-D02XXD

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 | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 90 | 90 | 90 | 78 | 78 | 78 | 66 | 66 | 66 | 61 |
| 1 | 98 | 93 | 88 | 84 | 92 | 87 | 83 | 79 | 76 | 73 | 70 | 65 | 63 | 61 | 56 | 54 | 52 | 48 |
| 2 | 89 | 81 | 74 | 68 | 83 | 76 | 70 | 64 | 66 | 61 | 57 | 57 | 53 | 50 | 49 | 46 | 43 | 39 |
| 3 | 81 | 71 | 63 | 56 | 76 | 66 | 59 | 53 | 58 | 52 | 48 | 50 | 46 | 42 | 43 | 40 | 37 | 33 |
| 4 | 74 | 63 | 54 | 48 | 69 | 59 | 51 | 45 | 51 | 45 | 41 | 45 | 40 | 36 | 38 | 35 | 31 | 28 |
| 5 | 68 | 56 | 47 | 41 | 63 | 52 | 45 | 39 | 46 | 40 | 35 | 40 | 35 | 31 | 34 | 31 | 27 | 24 |
| 6 | 63 | 50 | 42 | 35 | 58 | 47 | 39 | 34 | 41 | 35 | 30 | 36 | 31 | 27 | 31 | 27 | 24 | 21 |
| 7 | 58 | 45 | 37 | 31 | 54 | 43 | 35 | 30 | 38 | 31 | 27 | 33 | 28 | 24 | 29 | 24 | 21 | 19 |
| 8 | 54 | 41 | 33 | 27 | 50 | 39 | 31 | 26 | 34 | 28 | 24 | 30 | 25 | 21 | 26 | 22 | 19 | 17 |
| 9 | 50 | 38 | 30 | 24 | 47 | 35 | 28 | 23 | 32 | 26 | 21 | 28 | 23 | 19 | 24 | 20 | 17 | 15 |
| 10 | 47 | 35 | 27 | 22 | 44 | 33 | 26 | 21 | 29 | 23 | 19 | 26 | 21 | 17 | 22 | 19 | 16 | 14 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|-------|
| 0° | 3251 | 3251 | 3251 |
| 5° | 3289 | 3237 | 3206 |
| 10° | 3317 | 3228 | 3165 |
| 15° | 3350 | 3205 | 3093 |
| 20° | 3383 | 3163 | 3004 |
| 25° | 3416 | 3114 | 2909 |
| 30° | 3450 | 3069 | 2818 |
| 35° | 3477 | 3005 | 2721 |
| 40° | 3496 | 2944 | 2620 |
| 45° | 3503 | 2868 | 2503 |
| 50° | 3500 | 2778 | 2360 |
| 55° | 3482 | 2681 | 2294 |
| 60° | 3447 | 2549 | 2054 |
| 65° | 3407 | 2466 | 1880 |
| 70° | 3304 | 2248 | 1765 |
| 75° | 3150 | 2133 | 1934 |
| 80° | 2912 | 2496 | 7310 |
| 85° | 2546 | 8348 | 22676 |



TEST NUMBER: P24122

CATALOG NUMBER: S901DIP-1L35-D02XXD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 59.5 | 1.9 |
| 10°-20° | 169.6 | 5.5 |
| 20°-30° | 254.4 | 8.2 |
| 30°-40° | 303.4 | 9.8 |
| 40°-50° | 310.4 | 10.0 |
| 50°-60° | 275.9 | 8.9 |
| 60°-70° | 205.6 | 6.6 |
| 70°-80° | 136.3 | 4.4 |
| 80°-90° | 188.2 | 6.1 |
| 90°-100° | 234.5 | 7.6 |
| 100°-110° | 288.7 | 9.3 |
| 110°-120° | 243.7 | 7.8 |
| 120°-130° | 168.4 | 5.4 |
| 130°-140° | 124.6 | 4.0 |
| 140°-150° | 76.5 | 2.5 |
| 150°-160° | 40.3 | 1.3 |
| 160°-170° | 19.6 | 0.6 |
| 170°-180° | 6.0 | 0.2 |
| 0°-30° | 483.5 | 15.6 |
| 0°-40° | 786.9 | 25.3 |
| 0°-60° | 1373.2 | 44.2 |
| 0°-90° | 1903.3 | 61.3 |
| 90°-120° | 766.8 | 24.7 |
| 90°-150° | 1136.3 | 36.6 |
| 90°-180° | 1202.0 | 38.7 |
| 0°-180° | 3105.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 630 | 630 | 630 | 630 | 630 | |
| 5° | 635 | 633 | 625 | 620 | 619 | 61 |
| 15° | 627 | 620 | 600 | 585 | 579 | 177 |
| 25° | 600 | 584 | 547 | 521 | 511 | 277 |
| 35° | 552 | 527 | 477 | 444 | 432 | 345 |
| 45° | 480 | 448 | 393 | 357 | 343 | 371 |
| 55° | 387 | 353 | 298 | 266 | 255 | 346 |
| 65° | 279 | 248 | 202 | 166 | 154 | 275 |
| 75° | 158 | 140 | 107 | 97 | 97 | 167 |
| 85° | 43 | 56 | 141 | 314 | 383 | 47 |
| 90° | 4 | 47 | 126 | 288 | 346 | 7 |
| 95° | 57 | 72 | 160 | 377 | 461 | 59 |
| 105° | 169 | 148 | 199 | 409 | 541 | 173 |
| 115° | 211 | 206 | 196 | 290 | 378 | 206 |
| 125° | 184 | 192 | 200 | 163 | 184 | 164 |
| 135° | 125 | 144 | 167 | 182 | 183 | 98 |
| 145° | 92 | 98 | 121 | 142 | 149 | 59 |
| 155° | 78 | 78 | 85 | 92 | 96 | 36 |
| 165° | 71 | 70 | 68 | 67 | 66 | 20 |
| 175° | 68 | 66 | 62 | 58 | 56 | 7 |
| 180° | 62 | 62 | 62 | 62 | 62 | |



TEST NUMBER: P24122

CATALOG NUMBER: S901DIP-1L35-D02XXD

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0° | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 |
| 2.5° | 636 | 636 | 636 | 635 | 635 | 634 | 632 | 631 | 629 | 627 | 626 |
| 5° | 635 | 635 | 635 | 634 | 634 | 632 | 631 | 629 | 627 | 625 | 624 |
| 7.5° | 634 | 634 | 633 | 633 | 632 | 631 | 628 | 626 | 624 | 621 | 619 |
| 10° | 633 | 633 | 632 | 631 | 630 | 628 | 625 | 622 | 619 | 616 | 613 |
| 12.5° | 630 | 630 | 629 | 628 | 626 | 623 | 620 | 616 | 612 | 608 | 605 |
| 15° | 627 | 626 | 625 | 624 | 621 | 618 | 613 | 609 | 604 | 600 | 595 |
| 17.5° | 622 | 621 | 620 | 618 | 615 | 611 | 605 | 600 | 594 | 588 | 584 |
| 20° | 616 | 615 | 614 | 611 | 607 | 602 | 596 | 590 | 583 | 576 | 570 |
| 22.5° | 609 | 608 | 606 | 602 | 598 | 592 | 585 | 578 | 570 | 562 | 556 |
| 25° | 600 | 599 | 596 | 593 | 587 | 580 | 572 | 565 | 555 | 547 | 540 |
| 27.5° | 590 | 589 | 586 | 581 | 575 | 568 | 559 | 549 | 540 | 531 | 523 |
| 30° | 579 | 578 | 575 | 569 | 562 | 554 | 544 | 534 | 524 | 515 | 506 |
| 32.5° | 566 | 565 | 561 | 555 | 548 | 539 | 528 | 517 | 506 | 496 | 487 |
| 35° | 552 | 550 | 547 | 540 | 532 | 522 | 510 | 499 | 488 | 477 | 468 |
| 37.5° | 536 | 535 | 530 | 523 | 514 | 503 | 491 | 480 | 468 | 457 | 447 |
| 40° | 519 | 517 | 513 | 505 | 495 | 484 | 472 | 460 | 448 | 437 | 427 |
| 42.5° | 501 | 499 | 494 | 485 | 475 | 464 | 451 | 439 | 427 | 415 | 405 |
| 45° | 480 | 478 | 473 | 464 | 454 | 443 | 430 | 417 | 405 | 393 | 383 |
| 47.5° | 460 | 457 | 452 | 442 | 431 | 420 | 407 | 394 | 382 | 369 | 360 |
| 50° | 436 | 434 | 428 | 418 | 408 | 396 | 384 | 370 | 358 | 346 | 335 |
| 52.5° | 413 | 409 | 404 | 394 | 384 | 373 | 359 | 346 | 333 | 322 | 311 |
| 55° | 387 | 385 | 379 | 369 | 359 | 347 | 334 | 322 | 309 | 298 | 286 |
| 57.5° | 362 | 359 | 353 | 343 | 333 | 322 | 309 | 296 | 283 | 271 | 261 |
| 60° | 334 | 331 | 325 | 317 | 306 | 296 | 283 | 270 | 257 | 247 | 241 |
| 62.5° | 307 | 304 | 298 | 290 | 280 | 269 | 256 | 243 | 232 | 226 | 218 |
| 65° | 279 | 275 | 270 | 262 | 253 | 242 | 229 | 218 | 211 | 202 | 190 |
| 67.5° | 249 | 246 | 242 | 234 | 225 | 215 | 203 | 196 | 187 | 175 | 164 |
| 70° | 219 | 217 | 212 | 206 | 197 | 188 | 179 | 171 | 159 | 149 | 141 |
| 72.5° | 188 | 186 | 183 | 178 | 169 | 163 | 155 | 144 | 134 | 127 | 121 |
| 75° | 158 | 156 | 154 | 148 | 142 | 137 | 129 | 119 | 112 | 107 | 102 |
| 77.5° | 128 | 126 | 124 | 121 | 117 | 112 | 104 | 99 | 94 | 90 | 89 |
| 80° | 98 | 97 | 96 | 95 | 92 | 88 | 84 | 81 | 81 | 84 | 97 |
| 82.5° | 68 | 69 | 71 | 71 | 69 | 68 | 69 | 76 | 89 | 110 | 144 |
| 85° | 43 | 44 | 47 | 48 | 52 | 61 | 75 | 91 | 112 | 141 | 180 |
| 87.5° | 22 | 23 | 27 | 38 | 54 | 70 | 85 | 102 | 126 | 158 | 201 |
| 90° | 4 | 9 | 19 | 30 | 41 | 53 | 66 | 80 | 100 | 126 | 163 |
| 92.5° | 24 | 24 | 30 | 40 | 51 | 65 | 77 | 92 | 115 | 147 | 188 |
| 95° | 57 | 57 | 58 | 60 | 67 | 78 | 88 | 106 | 126 | 160 | 203 |
| 97.5° | 88 | 87 | 89 | 90 | 92 | 94 | 105 | 120 | 141 | 170 | 215 |
| 100° | 117 | 117 | 116 | 113 | 112 | 117 | 125 | 135 | 154 | 182 | 221 |
| 102.5° | 146 | 144 | 139 | 132 | 131 | 136 | 139 | 153 | 166 | 191 | 226 |
| 105° | 169 | 167 | 160 | 155 | 148 | 147 | 155 | 163 | 179 | 199 | 228 |
| 107.5° | 185 | 185 | 182 | 176 | 166 | 159 | 163 | 173 | 183 | 203 | 230 |
| 110° | 196 | 199 | 200 | 191 | 186 | 175 | 169 | 177 | 189 | 205 | 226 |



TEST NUMBER: P24122

CATALOG NUMBER: S901DIP-1L35-D02XXD

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 112.5° | 205 | 209 | 209 | 203 | 201 | 193 | 176 | 179 | 187 | 202 | 220 |
| 115° | 211 | 213 | 213 | 211 | 207 | 206 | 197 | 179 | 185 | 196 | 210 |
| 117.5° | 212 | 210 | 214 | 212 | 211 | 208 | 208 | 200 | 177 | 185 | 196 |
| 120° | 207 | 204 | 210 | 207 | 209 | 207 | 207 | 207 | 200 | 177 | 181 |
| 122.5° | 197 | 194 | 200 | 200 | 201 | 203 | 205 | 205 | 203 | 197 | 175 |
| 125° | 184 | 183 | 185 | 189 | 192 | 193 | 196 | 199 | 201 | 200 | 194 |
| 127.5° | 168 | 169 | 171 | 175 | 180 | 184 | 187 | 189 | 192 | 194 | 194 |
| 130° | 152 | 154 | 158 | 161 | 165 | 171 | 177 | 180 | 184 | 186 | 188 |
| 132.5° | 137 | 139 | 144 | 149 | 153 | 158 | 164 | 169 | 174 | 179 | 182 |
| 135° | 125 | 125 | 129 | 134 | 141 | 147 | 153 | 158 | 163 | 167 | 173 |
| 137.5° | 114 | 114 | 117 | 121 | 127 | 133 | 140 | 146 | 153 | 159 | 162 |
| 140° | 105 | 105 | 107 | 111 | 116 | 122 | 129 | 135 | 139 | 145 | 153 |
| 142.5° | 98 | 98 | 100 | 102 | 106 | 110 | 116 | 121 | 129 | 134 | 138 |
| 145° | 92 | 92 | 93 | 94 | 96 | 101 | 107 | 112 | 115 | 121 | 128 |
| 147.5° | 87 | 87 | 87 | 88 | 90 | 95 | 98 | 100 | 106 | 110 | 114 |
| 150° | 83 | 83 | 82 | 84 | 87 | 88 | 89 | 94 | 96 | 100 | 104 |
| 152.5° | 80 | 79 | 79 | 81 | 81 | 82 | 86 | 86 | 90 | 91 | 95 |
| 155° | 78 | 76 | 77 | 78 | 77 | 80 | 79 | 82 | 83 | 85 | 86 |
| 157.5° | 76 | 74 | 76 | 75 | 76 | 76 | 76 | 77 | 78 | 78 | 81 |
| 160° | 74 | 72 | 74 | 72 | 74 | 73 | 74 | 74 | 74 | 75 | 74 |
| 162.5° | 73 | 71 | 72 | 72 | 72 | 72 | 70 | 71 | 71 | 71 | 71 |
| 165° | 71 | 70 | 71 | 71 | 70 | 70 | 70 | 68 | 68 | 68 | 68 |
| 167.5° | 70 | 70 | 69 | 70 | 69 | 68 | 68 | 67 | 66 | 65 | 65 |
| 170° | 70 | 69 | 69 | 69 | 69 | 68 | 67 | 66 | 65 | 64 | 63 |
| 172.5° | 69 | 68 | 68 | 68 | 67 | 67 | 66 | 65 | 63 | 62 | 61 |
| 175° | 68 | 68 | 68 | 67 | 67 | 66 | 65 | 64 | 63 | 62 | 61 |
| 177.5° | 68 | 68 | 67 | 67 | 67 | 66 | 65 | 64 | 62 | 61 | 60 |
| 180° | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 |



TEST NUMBER: P24122

CATALOG NUMBER: S901DIP-1L35-D02XXD

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|
| 0° | 630 | 630 | 630 | 630 | 630 | 630 | 630 | 630 |
| 2.5° | 626 | 625 | 625 | 625 | 625 | 625 | 625 | 624 |
| 5° | 623 | 622 | 621 | 620 | 620 | 619 | 619 | 619 |
| 7.5° | 618 | 616 | 616 | 614 | 613 | 612 | 612 | 612 |
| 10° | 611 | 609 | 608 | 607 | 605 | 604 | 604 | 604 |
| 12.5° | 602 | 600 | 598 | 596 | 594 | 593 | 593 | 592 |
| 15° | 592 | 589 | 586 | 584 | 581 | 579 | 579 | 579 |
| 17.5° | 579 | 575 | 572 | 569 | 567 | 566 | 564 | 564 |
| 20° | 565 | 561 | 557 | 553 | 550 | 549 | 547 | 547 |
| 22.5° | 550 | 545 | 541 | 537 | 533 | 532 | 529 | 529 |
| 25° | 533 | 528 | 523 | 519 | 515 | 514 | 512 | 511 |
| 27.5° | 516 | 511 | 505 | 500 | 497 | 496 | 494 | 492 |
| 30° | 499 | 492 | 487 | 482 | 478 | 477 | 474 | 473 |
| 32.5° | 479 | 473 | 467 | 462 | 458 | 456 | 454 | 453 |
| 35° | 461 | 454 | 447 | 442 | 438 | 436 | 434 | 432 |
| 37.5° | 440 | 432 | 426 | 421 | 417 | 415 | 412 | 411 |
| 40° | 418 | 412 | 404 | 400 | 395 | 393 | 391 | 389 |
| 42.5° | 397 | 389 | 383 | 378 | 374 | 371 | 368 | 367 |
| 45° | 374 | 367 | 360 | 354 | 349 | 348 | 345 | 343 |
| 47.5° | 352 | 343 | 336 | 332 | 326 | 323 | 321 | 320 |
| 50° | 327 | 319 | 312 | 306 | 301 | 299 | 295 | 294 |
| 52.5° | 303 | 294 | 287 | 284 | 280 | 280 | 278 | 277 |
| 55° | 277 | 272 | 268 | 264 | 262 | 259 | 257 | 255 |
| 57.5° | 257 | 251 | 246 | 243 | 238 | 235 | 231 | 228 |
| 60° | 235 | 229 | 220 | 212 | 208 | 204 | 201 | 199 |
| 62.5° | 209 | 199 | 193 | 188 | 183 | 180 | 178 | 177 |
| 65° | 181 | 174 | 168 | 164 | 159 | 158 | 156 | 154 |
| 67.5° | 157 | 151 | 146 | 143 | 140 | 138 | 135 | 134 |
| 70° | 136 | 131 | 126 | 123 | 122 | 119 | 118 | 117 |
| 72.5° | 116 | 112 | 109 | 107 | 105 | 103 | 102 | 101 |
| 75° | 99 | 97 | 97 | 97 | 97 | 97 | 97 | 97 |
| 77.5° | 91 | 95 | 105 | 120 | 138 | 148 | 157 | 157 |
| 80° | 120 | 151 | 177 | 201 | 221 | 234 | 242 | 246 |
| 82.5° | 177 | 214 | 246 | 272 | 292 | 310 | 318 | 319 |
| 85° | 222 | 263 | 299 | 329 | 352 | 369 | 382 | 383 |
| 87.5° | 250 | 298 | 340 | 374 | 403 | 420 | 432 | 436 |
| 90° | 203 | 241 | 274 | 301 | 322 | 336 | 345 | 346 |
| 92.5° | 237 | 284 | 326 | 359 | 386 | 403 | 412 | 415 |
| 95° | 256 | 308 | 357 | 397 | 423 | 446 | 458 | 461 |
| 97.5° | 271 | 329 | 382 | 425 | 459 | 481 | 496 | 500 |
| 100° | 275 | 335 | 394 | 444 | 481 | 509 | 525 | 530 |
| 102.5° | 275 | 334 | 393 | 446 | 489 | 519 | 536 | 542 |
| 105° | 270 | 323 | 382 | 436 | 481 | 514 | 534 | 541 |
| 107.5° | 265 | 310 | 360 | 413 | 458 | 492 | 513 | 520 |
| 110° | 255 | 292 | 336 | 380 | 423 | 456 | 476 | 483 |



TEST NUMBER: P24122

CATALOG NUMBER: S901DIP-1L35-D02XXD

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|
| 112.5° | 243 | 272 | 307 | 344 | 380 | 409 | 428 | 435 |
| 115° | 229 | 252 | 276 | 305 | 333 | 357 | 372 | 378 |
| 117.5° | 210 | 229 | 249 | 270 | 290 | 306 | 318 | 322 |
| 120° | 192 | 203 | 218 | 233 | 247 | 258 | 267 | 271 |
| 122.5° | 170 | 179 | 186 | 198 | 207 | 215 | 222 | 225 |
| 125° | 177 | 158 | 160 | 166 | 172 | 178 | 182 | 184 |
| 127.5° | 191 | 181 | 166 | 148 | 144 | 146 | 149 | 150 |
| 130° | 190 | 188 | 184 | 180 | 170 | 161 | 155 | 151 |
| 132.5° | 183 | 186 | 185 | 185 | 183 | 182 | 181 | 181 |
| 135° | 178 | 178 | 182 | 182 | 183 | 184 | 183 | 183 |
| 137.5° | 167 | 172 | 174 | 177 | 179 | 180 | 180 | 179 |
| 140° | 156 | 161 | 164 | 168 | 170 | 171 | 171 | 171 |
| 142.5° | 145 | 148 | 154 | 157 | 159 | 160 | 161 | 161 |
| 145° | 131 | 136 | 140 | 143 | 145 | 148 | 148 | 149 |
| 147.5° | 119 | 123 | 126 | 129 | 132 | 134 | 134 | 134 |
| 150° | 107 | 110 | 113 | 117 | 118 | 119 | 119 | 119 |
| 152.5° | 96 | 100 | 102 | 104 | 104 | 106 | 107 | 107 |
| 155° | 89 | 91 | 92 | 93 | 94 | 96 | 96 | 96 |
| 157.5° | 81 | 82 | 84 | 85 | 86 | 86 | 86 | 86 |
| 160° | 75 | 77 | 77 | 77 | 78 | 77 | 77 | 77 |
| 162.5° | 71 | 71 | 71 | 72 | 72 | 72 | 72 | 72 |
| 165° | 68 | 67 | 67 | 67 | 67 | 67 | 67 | 66 |
| 167.5° | 65 | 64 | 64 | 62 | 61 | 60 | 58 | 58 |
| 170° | 62 | 62 | 61 | 61 | 60 | 60 | 59 | 59 |
| 172.5° | 61 | 60 | 60 | 59 | 58 | 58 | 57 | 57 |
| 175° | 60 | 59 | 59 | 58 | 57 | 56 | 56 | 56 |
| 177.5° | 59 | 59 | 58 | 57 | 57 | 56 | 56 | 55 |
| 180° | 62 | 62 | 62 | 62 | 62 | 62 | 62 | 62 |

(END OF REPORT)