

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: HALO COMMERCIAL

Report Number: P583964

Luminaire Tested: **HC815D010-HM80520940-81WWBB**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P583964
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC815D010-HM80520940-81WWBB
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" WALLWASH DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1302.4 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.07 / 1.16
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

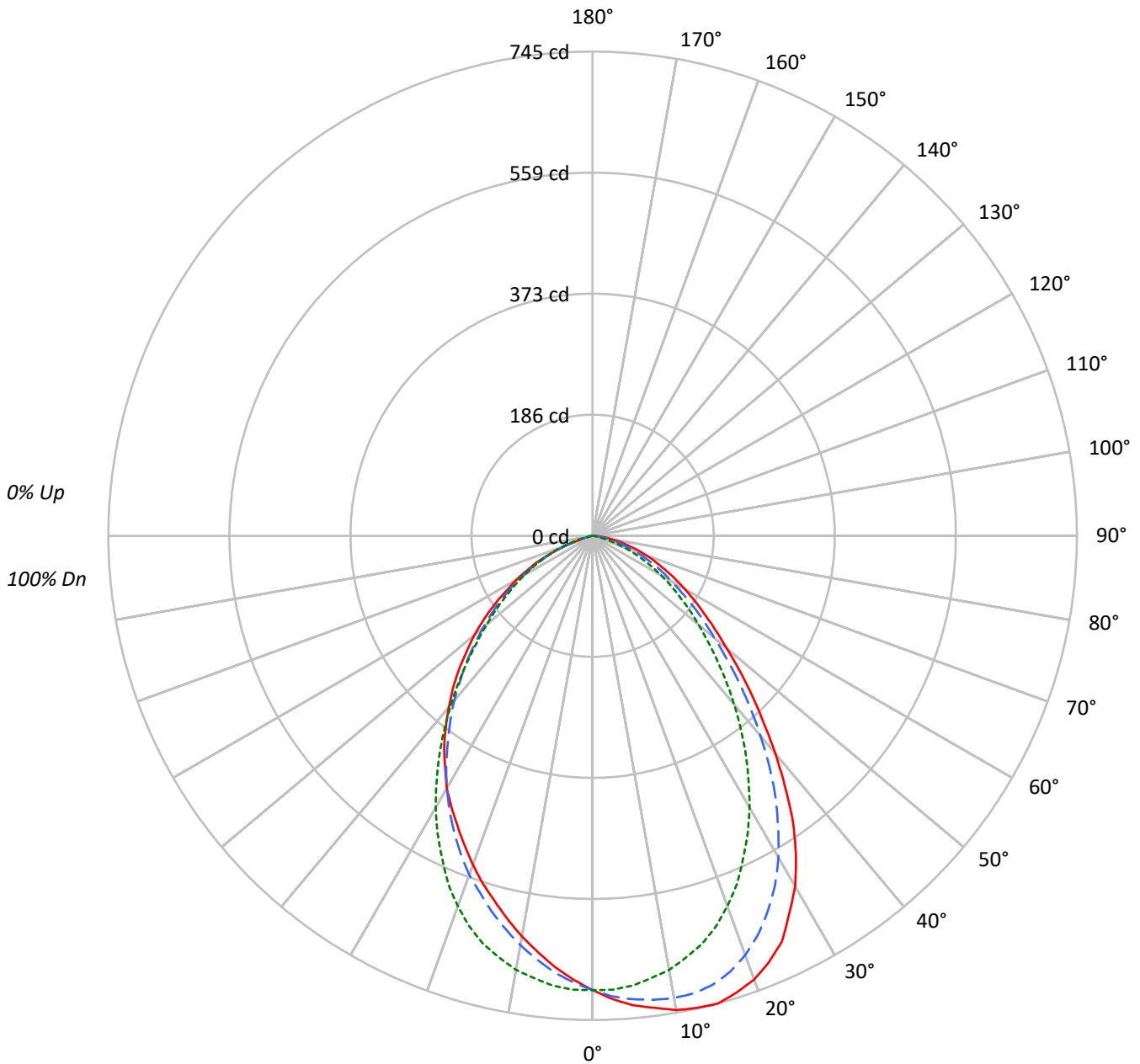
Input Watts (W): 14
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P583964

CATALOG NUMBER: HC815D010-HM80520940-81WWBB

Luminous Intensity Polar Plot





TEST NUMBER: P583964

CATALOG NUMBER: HC815D010-HM80520940-81WWBB

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|
| RF | 20 | | | | 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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | 100 |
| 1 | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99 | 101 | 98 | 96 | 97 | 95 | 93 | 93 | 92 | 90 | 88 | | | | 88 |
| 2 | 103 | 96 | 90 | 86 | 100 | 94 | 89 | 85 | 91 | 86 | 83 | 88 | 84 | 81 | 85 | 82 | 79 | 77 | | | | 77 |
| 3 | 95 | 86 | 79 | 74 | 93 | 85 | 78 | 73 | 82 | 76 | 72 | 79 | 74 | 71 | 77 | 73 | 69 | 67 | | | | 67 |
| 4 | 88 | 78 | 70 | 64 | 86 | 76 | 69 | 64 | 74 | 68 | 63 | 72 | 66 | 62 | 70 | 65 | 61 | 59 | | | | 59 |
| 5 | 82 | 70 | 63 | 57 | 80 | 69 | 62 | 56 | 67 | 61 | 56 | 65 | 60 | 55 | 64 | 59 | 55 | 53 | | | | 53 |
| 6 | 76 | 64 | 56 | 51 | 74 | 63 | 56 | 50 | 62 | 55 | 50 | 60 | 54 | 50 | 58 | 53 | 49 | 47 | | | | 47 |
| 7 | 71 | 59 | 51 | 45 | 69 | 58 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 45 | 54 | 49 | 44 | 43 | | | | 43 |
| 8 | 66 | 54 | 46 | 41 | 65 | 53 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 44 | 40 | 39 | | | | 39 |
| 9 | 62 | 50 | 43 | 37 | 61 | 50 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 37 | 46 | 41 | 37 | 35 | | | | 35 |
| 10 | 59 | 47 | 39 | 34 | 57 | 46 | 39 | 34 | 45 | 39 | 34 | 44 | 38 | 34 | 43 | 38 | 34 | 32 | | | | 32 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 21558 | 21558 | 21558 |
| 5° | 22451 | 21513 | 20609 |
| 10° | 23202 | 21239 | 19601 |
| 15° | 23790 | 20754 | 18583 |
| 20° | 23837 | 19893 | 17664 |
| 25° | 23436 | 18635 | 16747 |
| 30° | 22179 | 17191 | 15966 |
| 35° | 20222 | 15464 | 14994 |
| 40° | 17583 | 13630 | 13843 |
| 45° | 15089 | 11801 | 12668 |
| 50° | 12885 | 10180 | 11384 |
| 55° | 11290 | 8763 | 9892 |
| 60° | 10053 | 7475 | 8313 |
| 65° | 8924 | 6100 | 6640 |
| 70° | 7916 | 4517 | 3769 |
| 75° | 6600 | 2371 | 1120 |
| 80° | 5203 | 746 | 195 |
| 85° | 3715 | 389 | 0 |



TEST NUMBER: P583964

CATALOG NUMBER: HC815D010-HM80520940-81WWBB

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 65.9 | 5.1 |
| 10°-20° | 184.7 | 14.2 |
| 20°-30° | 261.4 | 20.1 |
| 30°-40° | 273.4 | 21.0 |
| 40°-50° | 228.1 | 17.5 |
| 50°-60° | 161.7 | 12.4 |
| 60°-70° | 93.1 | 7.2 |
| 70°-80° | 30.0 | 2.3 |
| 80°-90° | 4.1 | 0.3 |
| 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°-30° | 511.9 | 39.3 |
| 0°-40° | 785.3 | 60.3 |
| 0°-60° | 1175.1 | 90.2 |
| 0°-90° | 1302.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1302.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0° | 699 | 699 | 699 | 699 | 699 | |
| 5° | 725 | 716 | 695 | 674 | 666 | 70 |
| 15° | 745 | 715 | 650 | 599 | 582 | 210 |
| 25° | 689 | 638 | 548 | 504 | 492 | 314 |
| 35° | 537 | 490 | 411 | 389 | 398 | 333 |
| 45° | 346 | 318 | 271 | 274 | 290 | 268 |
| 55° | 210 | 188 | 163 | 171 | 184 | 190 |
| 65° | 122 | 102 | 84 | 84 | 91 | 122 |
| 75° | 55 | 41 | 20 | 9 | 9 | 60 |
| 85° | 10 | 5 | 1 | 0 | 0 | 13 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P583964

CATALOG NUMBER: HC815D010-HM80520940-81WWBB

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 |
| 2.5° | 713.8 | 712.8 | 711.8 | 712.8 | 711.8 | 712.8 | 711.8 | 711.8 | 710.7 | 709.6 | 709.6 |
| 5° | 725.3 | 724.3 | 724.3 | 724.3 | 723.2 | 722.2 | 722.2 | 721.2 | 719.0 | 718.1 | 715.9 |
| 7.5° | 732.6 | 733.7 | 733.7 | 733.7 | 731.6 | 731.6 | 729.5 | 727.5 | 725.3 | 723.2 | 720.1 |
| 10° | 741.0 | 741.0 | 740.0 | 738.9 | 736.9 | 735.8 | 734.7 | 732.6 | 729.5 | 725.3 | 722.2 |
| 12.5° | 744.1 | 744.1 | 743.1 | 741.0 | 740.0 | 738.9 | 737.8 | 734.7 | 730.6 | 725.3 | 721.2 |
| 15° | 745.2 | 743.1 | 742.0 | 741.0 | 738.9 | 735.8 | 735.8 | 731.6 | 726.4 | 720.1 | 714.9 |
| 17.5° | 736.9 | 737.8 | 735.8 | 733.7 | 730.6 | 728.4 | 725.3 | 722.2 | 715.9 | 708.7 | 703.4 |
| 20° | 726.4 | 725.3 | 724.3 | 721.2 | 717.0 | 715.9 | 712.8 | 707.6 | 702.3 | 694.0 | 686.6 |
| 22.5° | 709.6 | 708.7 | 706.5 | 704.4 | 700.2 | 698.2 | 695.0 | 688.8 | 681.4 | 673.1 | 664.7 |
| 25° | 688.8 | 686.6 | 683.5 | 679.4 | 676.2 | 674.1 | 670.0 | 663.7 | 655.3 | 645.9 | 637.6 |
| 27.5° | 655.3 | 658.4 | 656.4 | 650.1 | 647.0 | 642.7 | 641.7 | 633.3 | 626.0 | 616.6 | 607.2 |
| 30° | 622.9 | 622.9 | 619.7 | 616.6 | 611.4 | 608.3 | 604.1 | 597.8 | 590.4 | 579.0 | 571.7 |
| 32.5° | 582.1 | 581.1 | 577.0 | 575.9 | 571.7 | 565.4 | 564.4 | 556.0 | 548.6 | 540.3 | 530.9 |
| 35° | 537.2 | 535.1 | 530.9 | 527.8 | 525.7 | 522.6 | 519.5 | 512.1 | 504.8 | 496.5 | 490.2 |
| 37.5° | 486.0 | 486.0 | 484.9 | 479.7 | 477.7 | 475.5 | 472.4 | 465.1 | 460.9 | 452.6 | 446.3 |
| 40° | 436.8 | 435.8 | 432.7 | 431.6 | 429.6 | 426.4 | 424.3 | 420.2 | 413.9 | 407.7 | 401.4 |
| 42.5° | 388.7 | 389.8 | 385.6 | 386.7 | 382.5 | 380.4 | 379.3 | 373.1 | 369.9 | 363.7 | 358.5 |
| 45° | 346.0 | 344.9 | 342.8 | 341.7 | 339.7 | 337.5 | 335.5 | 332.3 | 327.2 | 320.9 | 317.8 |
| 47.5° | 306.2 | 303.1 | 303.1 | 302.1 | 301.0 | 296.8 | 295.8 | 292.7 | 289.6 | 283.2 | 279.1 |
| 50° | 268.6 | 268.6 | 268.6 | 267.5 | 264.4 | 263.4 | 261.2 | 258.1 | 255.0 | 250.9 | 244.6 |
| 52.5° | 238.3 | 238.3 | 238.3 | 237.3 | 233.0 | 232.0 | 231.0 | 226.8 | 222.6 | 219.4 | 215.3 |
| 55° | 210.0 | 211.1 | 210.0 | 208.0 | 204.8 | 204.8 | 201.7 | 199.7 | 195.5 | 192.3 | 188.1 |
| 57.5° | 186.1 | 186.1 | 184.0 | 182.9 | 180.8 | 179.8 | 177.6 | 175.6 | 170.4 | 167.3 | 162.0 |
| 60° | 163.0 | 162.0 | 162.0 | 159.9 | 157.9 | 155.7 | 154.7 | 151.6 | 149.4 | 144.2 | 140.0 |
| 62.5° | 142.2 | 142.2 | 140.0 | 140.0 | 135.9 | 135.9 | 134.8 | 131.7 | 128.6 | 123.3 | 121.2 |
| 65° | 122.3 | 122.3 | 121.2 | 120.1 | 117.0 | 116.0 | 115.0 | 111.8 | 108.7 | 105.6 | 102.4 |
| 67.5° | 104.5 | 104.5 | 102.4 | 101.3 | 99.3 | 98.2 | 96.2 | 94.1 | 91.0 | 87.8 | 84.7 |
| 70° | 87.8 | 86.8 | 85.7 | 84.7 | 82.5 | 81.6 | 79.4 | 77.4 | 74.2 | 72.1 | 68.9 |
| 72.5° | 71.1 | 71.1 | 70.0 | 68.0 | 66.9 | 65.8 | 64.8 | 62.7 | 59.5 | 56.4 | 54.3 |
| 75° | 55.4 | 55.4 | 55.4 | 53.3 | 51.2 | 50.1 | 50.1 | 48.1 | 46.0 | 42.9 | 40.7 |
| 77.5° | 42.9 | 41.8 | 40.7 | 40.7 | 38.7 | 37.6 | 36.6 | 35.5 | 32.4 | 31.3 | 29.3 |
| 80° | 29.3 | 30.4 | 29.3 | 28.2 | 27.2 | 26.1 | 26.1 | 24.0 | 23.0 | 20.8 | 18.8 |
| 82.5° | 19.9 | 18.8 | 18.8 | 17.7 | 17.7 | 16.7 | 16.7 | 14.6 | 13.6 | 12.5 | 11.4 |
| 85° | 10.5 | 10.5 | 9.4 | 9.4 | 9.4 | 8.3 | 8.3 | 7.4 | 7.4 | 6.3 | 5.2 |
| 87.5° | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 2.0 | 2.0 | 2.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P583964

CATALOG NUMBER: HC815D010-HM80520940-81WWBB

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 95° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 |
| 2.5° | 708.7 | 706.5 | 705.4 | 705.4 | 704.4 | 703.4 | 702.3 | 701.3 | 699.1 | 699.1 | 697.1 |
| 5° | 713.8 | 711.8 | 710.7 | 707.6 | 705.4 | 705.4 | 701.3 | 700.2 | 697.1 | 695.0 | 692.9 |
| 7.5° | 718.1 | 713.8 | 710.7 | 707.6 | 705.4 | 703.4 | 699.1 | 695.0 | 690.8 | 686.6 | 684.6 |
| 10° | 718.1 | 713.8 | 708.7 | 703.4 | 701.3 | 699.1 | 694.0 | 687.7 | 682.5 | 678.3 | 673.1 |
| 12.5° | 715.9 | 709.6 | 703.4 | 699.1 | 695.0 | 691.9 | 685.6 | 679.4 | 673.1 | 664.7 | 660.6 |
| 15° | 709.6 | 701.3 | 695.0 | 687.7 | 684.6 | 679.4 | 674.1 | 664.7 | 657.4 | 650.1 | 644.8 |
| 17.5° | 697.1 | 686.6 | 679.4 | 672.0 | 666.8 | 663.7 | 655.3 | 647.0 | 638.5 | 630.2 | 623.9 |
| 20° | 678.3 | 668.9 | 660.6 | 651.1 | 647.0 | 642.7 | 632.3 | 623.9 | 615.6 | 606.2 | 599.8 |
| 22.5° | 655.3 | 645.9 | 634.4 | 627.1 | 620.8 | 615.6 | 606.2 | 596.7 | 588.4 | 580.1 | 571.7 |
| 25° | 627.1 | 617.7 | 607.2 | 595.8 | 591.5 | 586.4 | 575.9 | 566.5 | 557.1 | 547.7 | 540.3 |
| 27.5° | 596.7 | 584.2 | 575.9 | 563.3 | 559.1 | 553.9 | 542.4 | 532.0 | 523.6 | 516.3 | 507.9 |
| 30° | 560.2 | 550.8 | 539.2 | 527.8 | 523.6 | 518.4 | 509.0 | 499.6 | 491.2 | 482.8 | 474.5 |
| 32.5° | 520.4 | 511.0 | 499.6 | 491.2 | 484.9 | 480.8 | 471.4 | 463.0 | 454.6 | 446.3 | 439.0 |
| 35° | 478.6 | 468.3 | 459.8 | 451.5 | 446.3 | 441.0 | 431.6 | 424.3 | 418.0 | 410.8 | 403.4 |
| 37.5° | 435.8 | 428.5 | 420.2 | 410.8 | 405.5 | 401.4 | 394.0 | 385.6 | 380.4 | 374.2 | 369.0 |
| 40° | 394.0 | 385.6 | 378.4 | 369.9 | 365.8 | 362.7 | 355.4 | 349.1 | 343.9 | 338.6 | 335.5 |
| 42.5° | 351.1 | 343.9 | 336.6 | 331.3 | 328.1 | 325.0 | 319.8 | 312.5 | 309.3 | 304.1 | 301.0 |
| 45° | 311.5 | 305.2 | 299.9 | 292.7 | 290.5 | 288.5 | 282.2 | 276.9 | 273.8 | 270.6 | 268.6 |
| 47.5° | 273.8 | 269.7 | 263.4 | 259.2 | 256.1 | 254.0 | 249.8 | 245.6 | 242.4 | 240.4 | 238.3 |
| 50° | 241.5 | 236.2 | 232.0 | 227.9 | 225.7 | 222.6 | 218.5 | 216.3 | 214.2 | 212.2 | 212.2 |
| 52.5° | 211.1 | 205.9 | 201.7 | 198.6 | 196.5 | 194.4 | 191.2 | 190.3 | 188.1 | 188.1 | 187.1 |
| 55° | 182.9 | 179.8 | 175.6 | 171.4 | 170.4 | 169.3 | 167.3 | 165.1 | 164.1 | 163.0 | 164.1 |
| 57.5° | 158.8 | 155.7 | 151.6 | 148.5 | 147.4 | 146.3 | 145.3 | 143.2 | 142.2 | 142.2 | 142.2 |
| 60° | 136.9 | 133.8 | 130.6 | 127.5 | 127.5 | 125.4 | 124.4 | 123.3 | 122.3 | 121.2 | 121.2 |
| 62.5° | 117.0 | 113.9 | 110.7 | 108.7 | 107.6 | 106.6 | 104.5 | 103.5 | 102.4 | 102.4 | 101.3 |
| 65° | 99.3 | 95.1 | 94.1 | 91.0 | 89.9 | 88.8 | 87.8 | 85.7 | 84.7 | 83.6 | 82.5 |
| 67.5° | 81.6 | 79.4 | 76.3 | 74.2 | 73.1 | 72.1 | 71.1 | 68.9 | 68.0 | 66.9 | 64.8 |
| 70° | 65.8 | 63.7 | 61.7 | 59.5 | 58.6 | 57.5 | 55.4 | 53.3 | 52.3 | 50.1 | 47.0 |
| 72.5° | 51.2 | 49.2 | 47.0 | 44.9 | 43.9 | 42.9 | 40.7 | 38.7 | 36.6 | 34.5 | 32.4 |
| 75° | 38.7 | 36.6 | 33.5 | 31.3 | 30.4 | 30.4 | 27.2 | 25.1 | 23.0 | 19.9 | 17.7 |
| 77.5° | 27.2 | 24.0 | 23.0 | 20.8 | 19.9 | 17.7 | 15.7 | 13.6 | 11.4 | 10.5 | 8.3 |
| 80° | 17.7 | 15.7 | 13.6 | 12.5 | 11.4 | 10.5 | 9.4 | 7.4 | 5.2 | 4.2 | 3.1 |
| 82.5° | 10.5 | 9.4 | 8.3 | 7.4 | 6.3 | 5.2 | 4.2 | 4.2 | 3.1 | 2.0 | 1.1 |
| 85° | 5.2 | 4.2 | 3.1 | 3.1 | 2.0 | 2.0 | 2.0 | 1.1 | 1.1 | 1.1 | 1.1 |
| 87.5° | 2.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 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 |



TEST NUMBER: P583964

CATALOG NUMBER: HC815D010-HM80520940-81WWBB

CANDELA DISTRIBUTION (continued):

| | 100° | 105° | 110° | 112.5° | 115° | 120° | 125° | 130° | 135° | 140° | 145° |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 |
| 2.5° | 696.0 | 695.0 | 694.0 | 692.9 | 692.9 | 690.8 | 690.8 | 689.7 | 687.7 | 686.6 | 686.6 |
| 5° | 689.7 | 686.6 | 684.6 | 683.5 | 682.5 | 679.4 | 678.3 | 676.2 | 674.1 | 672.0 | 670.9 |
| 7.5° | 680.3 | 675.2 | 673.1 | 672.0 | 668.9 | 665.8 | 663.7 | 660.6 | 657.4 | 654.3 | 653.2 |
| 10° | 668.9 | 663.7 | 658.4 | 656.4 | 653.2 | 651.1 | 647.0 | 642.7 | 639.6 | 636.5 | 633.3 |
| 12.5° | 654.3 | 647.9 | 642.7 | 640.7 | 637.6 | 633.3 | 627.1 | 625.0 | 619.7 | 617.7 | 613.5 |
| 15° | 637.6 | 630.2 | 625.0 | 621.9 | 618.8 | 612.5 | 608.3 | 604.1 | 598.9 | 596.7 | 592.6 |
| 17.5° | 616.6 | 608.3 | 603.1 | 599.8 | 597.8 | 592.6 | 586.4 | 581.1 | 575.9 | 573.8 | 570.7 |
| 20° | 591.5 | 586.4 | 579.0 | 575.9 | 573.8 | 567.6 | 561.3 | 559.1 | 555.0 | 550.8 | 547.7 |
| 22.5° | 563.3 | 558.2 | 550.8 | 547.7 | 546.6 | 541.4 | 536.1 | 533.0 | 529.8 | 526.7 | 523.6 |
| 25° | 534.1 | 527.8 | 521.5 | 519.5 | 517.3 | 513.2 | 509.0 | 506.9 | 503.8 | 501.6 | 499.6 |
| 27.5° | 502.7 | 496.5 | 491.2 | 488.0 | 486.0 | 482.8 | 480.8 | 478.6 | 476.6 | 474.5 | 473.4 |
| 30° | 469.2 | 463.0 | 458.9 | 456.7 | 454.6 | 453.6 | 450.4 | 449.5 | 448.4 | 446.3 | 447.3 |
| 32.5° | 435.8 | 430.5 | 426.4 | 423.3 | 423.3 | 421.1 | 420.2 | 420.2 | 419.1 | 419.1 | 419.1 |
| 35° | 399.2 | 396.1 | 393.0 | 391.9 | 390.9 | 389.8 | 388.7 | 389.8 | 388.7 | 389.8 | 390.9 |
| 37.5° | 365.8 | 362.7 | 360.5 | 359.6 | 358.5 | 359.6 | 358.5 | 358.5 | 359.6 | 361.6 | 362.7 |
| 40° | 331.3 | 329.2 | 327.2 | 328.1 | 327.2 | 327.2 | 327.2 | 330.3 | 331.3 | 332.3 | 333.4 |
| 42.5° | 299.0 | 296.8 | 295.8 | 295.8 | 296.8 | 295.8 | 297.9 | 299.0 | 301.0 | 304.1 | 306.2 |
| 45° | 267.5 | 266.5 | 266.5 | 267.5 | 266.5 | 268.6 | 268.6 | 270.6 | 273.8 | 275.9 | 278.0 |
| 47.5° | 238.3 | 238.3 | 238.3 | 239.3 | 239.3 | 240.4 | 242.4 | 243.5 | 245.6 | 247.7 | 249.8 |
| 50° | 211.1 | 212.2 | 213.2 | 213.2 | 213.2 | 215.3 | 217.4 | 218.5 | 219.4 | 220.5 | 223.6 |
| 52.5° | 187.1 | 188.1 | 188.1 | 189.2 | 190.3 | 191.2 | 192.3 | 194.4 | 195.5 | 197.5 | 198.6 |
| 55° | 164.1 | 164.1 | 166.2 | 167.3 | 167.3 | 167.3 | 169.3 | 169.3 | 171.4 | 172.4 | 174.5 |
| 57.5° | 142.2 | 143.2 | 143.2 | 144.2 | 144.2 | 145.3 | 146.3 | 147.4 | 148.5 | 149.4 | 150.5 |
| 60° | 121.2 | 121.2 | 121.2 | 122.3 | 123.3 | 124.4 | 123.3 | 125.4 | 125.4 | 127.5 | 128.6 |
| 62.5° | 101.3 | 102.4 | 102.4 | 102.4 | 102.4 | 102.4 | 102.4 | 103.5 | 104.5 | 105.6 | 106.6 |
| 65° | 82.5 | 82.5 | 82.5 | 81.6 | 82.5 | 81.6 | 82.5 | 83.6 | 83.6 | 84.7 | 85.7 |
| 67.5° | 63.7 | 63.7 | 61.7 | 61.7 | 62.7 | 62.7 | 62.7 | 62.7 | 61.7 | 63.7 | 63.7 |
| 70° | 46.0 | 44.9 | 43.9 | 42.9 | 42.9 | 41.8 | 41.8 | 40.7 | 40.7 | 40.7 | 40.7 |
| 72.5° | 30.4 | 28.2 | 26.1 | 25.1 | 24.0 | 24.0 | 21.9 | 20.8 | 21.9 | 21.9 | 21.9 |
| 75° | 15.7 | 13.6 | 12.5 | 11.4 | 10.5 | 10.5 | 9.4 | 9.4 | 9.4 | 9.4 | 9.4 |
| 77.5° | 6.3 | 5.2 | 4.2 | 4.2 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 |
| 80° | 2.0 | 2.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 82.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 85° | 1.1 | 0.0 | 0.0 | 1.1 | 0.0 | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P583964

CATALOG NUMBER: HC815D010-HM80520940-81WWBB

CANDELA DISTRIBUTION (continued):

| | 150° | 155° | 157.5° | 160° | 165° | 170° | 175° | 180° |
|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 0° | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 | 699.1 |
| 2.5° | 685.6 | 685.6 | 684.6 | 685.6 | 683.5 | 684.6 | 683.5 | 683.5 |
| 5° | 670.0 | 667.8 | 667.8 | 667.8 | 666.8 | 666.8 | 665.8 | 665.8 |
| 7.5° | 651.1 | 650.1 | 649.0 | 647.9 | 647.0 | 645.9 | 645.9 | 645.9 |
| 10° | 632.3 | 630.2 | 630.2 | 629.1 | 627.1 | 626.0 | 626.0 | 626.0 |
| 12.5° | 610.3 | 609.4 | 608.3 | 608.3 | 604.1 | 605.2 | 604.1 | 604.1 |
| 15° | 589.5 | 588.4 | 588.4 | 585.3 | 583.2 | 583.2 | 583.2 | 582.1 |
| 17.5° | 567.6 | 566.5 | 565.4 | 563.3 | 561.3 | 561.3 | 560.2 | 561.3 |
| 20° | 544.5 | 543.5 | 541.4 | 541.4 | 540.3 | 539.2 | 537.2 | 538.3 |
| 22.5° | 521.5 | 519.5 | 518.4 | 518.4 | 517.3 | 517.3 | 515.3 | 515.3 |
| 25° | 497.5 | 496.5 | 495.4 | 496.5 | 494.3 | 494.3 | 492.2 | 492.2 |
| 27.5° | 472.4 | 471.4 | 471.4 | 471.4 | 470.3 | 471.4 | 470.3 | 470.3 |
| 30° | 447.3 | 447.3 | 446.3 | 446.3 | 447.3 | 446.3 | 447.3 | 448.4 |
| 32.5° | 420.2 | 420.2 | 421.1 | 421.1 | 422.2 | 422.2 | 422.2 | 422.2 |
| 35° | 391.9 | 394.0 | 394.0 | 395.1 | 396.1 | 397.2 | 397.2 | 398.3 |
| 37.5° | 365.8 | 366.8 | 367.9 | 369.0 | 371.0 | 371.0 | 371.0 | 371.0 |
| 40° | 337.5 | 338.6 | 340.8 | 339.7 | 343.9 | 344.9 | 343.9 | 343.9 |
| 42.5° | 308.4 | 310.4 | 311.5 | 313.5 | 314.6 | 316.7 | 317.8 | 317.8 |
| 45° | 281.1 | 282.2 | 284.3 | 286.3 | 287.4 | 290.5 | 290.5 | 290.5 |
| 47.5° | 252.9 | 255.0 | 256.1 | 258.1 | 259.2 | 262.3 | 263.4 | 262.3 |
| 50° | 225.7 | 227.9 | 229.9 | 229.9 | 233.0 | 234.1 | 236.2 | 237.3 |
| 52.5° | 199.7 | 200.6 | 202.8 | 203.8 | 205.9 | 208.0 | 209.1 | 210.0 |
| 55° | 174.5 | 175.6 | 177.6 | 177.6 | 180.8 | 181.8 | 184.0 | 184.0 |
| 57.5° | 151.6 | 152.6 | 154.7 | 153.6 | 155.7 | 157.9 | 157.9 | 156.8 |
| 60° | 129.5 | 129.5 | 129.5 | 131.7 | 132.8 | 133.8 | 134.8 | 134.8 |
| 62.5° | 106.6 | 108.7 | 109.8 | 109.8 | 110.7 | 111.8 | 111.8 | 110.7 |
| 65° | 85.7 | 87.8 | 88.8 | 88.8 | 89.9 | 89.9 | 89.9 | 91.0 |
| 67.5° | 64.8 | 64.8 | 64.8 | 65.8 | 64.8 | 64.8 | 64.8 | 64.8 |
| 70° | 40.7 | 40.7 | 40.7 | 40.7 | 39.8 | 40.7 | 40.7 | 41.8 |
| 72.5° | 21.9 | 21.9 | 21.9 | 21.9 | 21.9 | 21.9 | 21.9 | 21.9 |
| 75° | 9.4 | 9.4 | 9.4 | 10.5 | 9.4 | 9.4 | 9.4 | 9.4 |
| 77.5° | 4.2 | 3.1 | 4.2 | 4.2 | 3.1 | 3.1 | 3.1 | 3.1 |
| 80° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 82.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 85° | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)