

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: FAIL-SAFE

Report Number: P645847

Luminaire Tested: **FLDSQ4C20D010 FEU4C209030 F4LC-SQLWW-LI-D2W**

Issue Date: 12/13/2022

Test Information

Test Method: LM-79-08
Report Number: P645847
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P219529)
Test Lab: INNOVATION CENTER
Issue Date: 12/13/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FLDSQ4C20D010 FEU4C209030 F4LC-SQLWW-LI-D2W
Description: 4 INCH 2000 LUMEN FAIL-SAFE LED DOWNLIGHT WITH, 3000K, 90CRI LEDS AND F4LC-SQLWW TRIM WITH LI FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

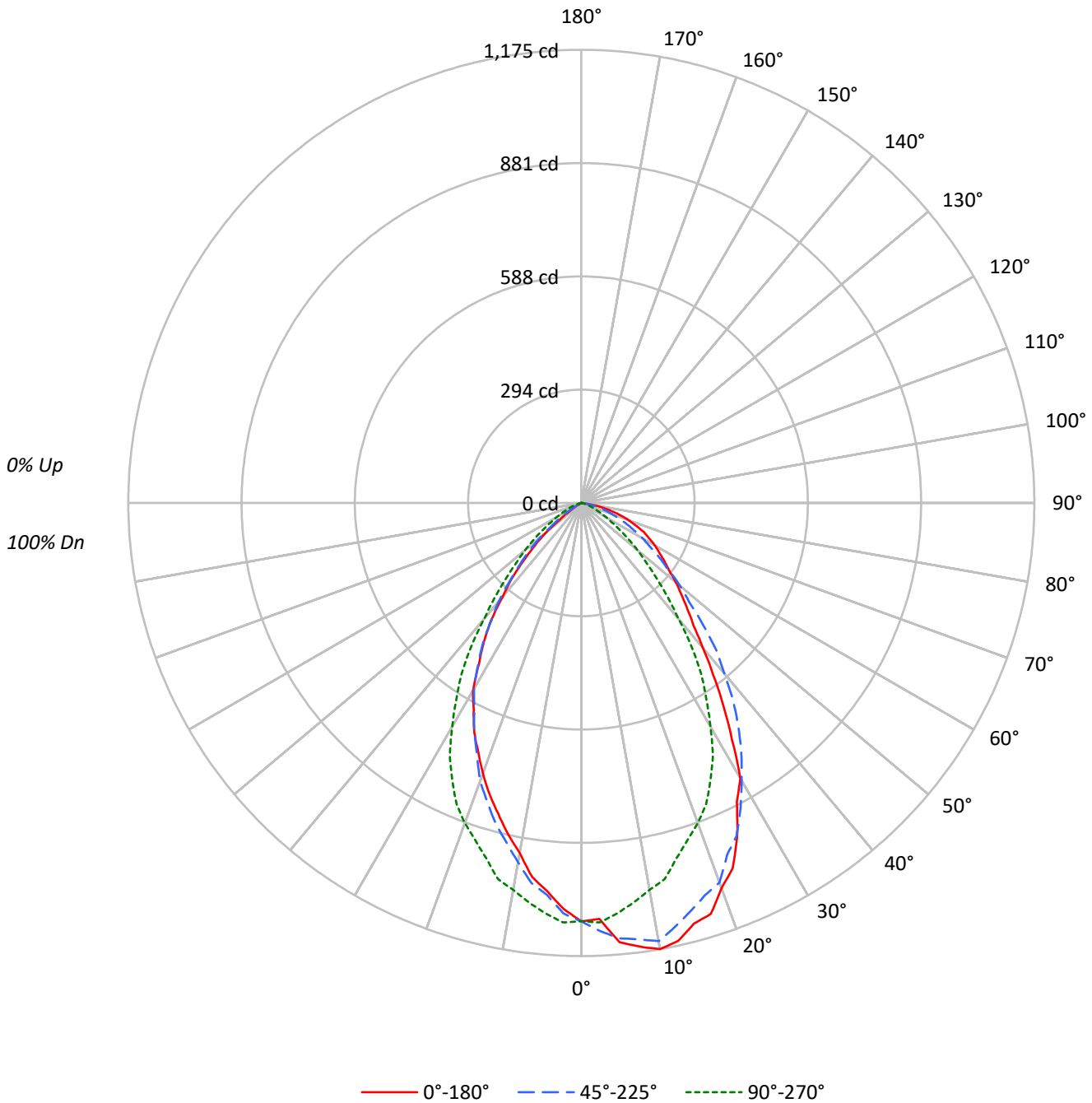
Lumens per Lamp: N/A
Luminaire Lumens: 1555.0 lumens
Efficiency: N/A
Efficacy: 71.3 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1 / 1.06
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
Input Voltage (V):
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: P645847
CATALOG NUMBER: FLDSQ4C20D010 FEU4C209030 F4LC-SQLWW-LI-D2W

Luminous Intensity Polar Plot





TEST NUMBER: P645847

CATALOG NUMBER: FLDSQ4C20D010 FEU4C209030 F4LC-SQLWW-LI-D2W

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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98 | 98 | 96 | 95 | 95 | 93 | 92 | 90 |
| 2 | 104 | 98 | 93 | 89 | 102 | 96 | 92 | 88 | 93 | 89 | 86 | 90 | 87 | 84 | 87 | 84 | 82 | 80 |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 77 | 85 | 80 | 76 | 82 | 78 | 75 | 80 | 77 | 74 | 72 |
| 4 | 91 | 81 | 74 | 69 | 89 | 80 | 74 | 69 | 78 | 72 | 68 | 76 | 71 | 67 | 74 | 70 | 66 | 64 |
| 5 | 85 | 75 | 67 | 62 | 83 | 74 | 67 | 62 | 72 | 66 | 61 | 70 | 65 | 60 | 68 | 64 | 60 | 58 |
| 6 | 80 | 69 | 61 | 56 | 78 | 68 | 61 | 56 | 66 | 60 | 55 | 65 | 59 | 55 | 63 | 58 | 54 | 53 |
| 7 | 75 | 63 | 56 | 51 | 73 | 63 | 56 | 51 | 61 | 55 | 50 | 60 | 54 | 50 | 59 | 54 | 50 | 48 |
| 8 | 70 | 59 | 52 | 47 | 69 | 58 | 51 | 46 | 57 | 51 | 46 | 56 | 50 | 46 | 55 | 50 | 46 | 44 |
| 9 | 66 | 55 | 48 | 43 | 65 | 54 | 47 | 43 | 53 | 47 | 43 | 52 | 46 | 42 | 51 | 46 | 42 | 41 |
| 10 | 62 | 51 | 44 | 40 | 61 | 51 | 44 | 40 | 50 | 44 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 38 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|--------|--------|--------|
| 0° | 104671 | 104671 | 104671 |
| 5° | 110747 | 103434 | 97894 |
| 10° | 115084 | 99790 | 90227 |
| 15° | 112779 | 95238 | 83290 |
| 20° | 109119 | 90688 | 76662 |
| 25° | 101790 | 84330 | 69936 |
| 30° | 91885 | 74637 | 62605 |
| 35° | 75693 | 63890 | 51946 |
| 40° | 61769 | 49312 | 39979 |
| 45° | 53068 | 37457 | 28751 |
| 50° | 48035 | 28506 | 18163 |
| 55° | 44209 | 20574 | 6561 |
| 60° | 42417 | 14049 | 1003 |
| 65° | 40982 | 9498 | 297 |
| 70° | 36703 | 6601 | 367 |
| 75° | 30085 | 3393 | 0 |
| 80° | 18781 | 1445 | 0 |
| 85° | 0 | 0 | 0 |



TEST NUMBER: P645847
 CATALOG NUMBER: FLDSQ4C20D010 FEU4C209030 F4LC-SQLWW-LI-D2W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 101.6 | 6.5 |
| 10°-20° | 273.8 | 17.6 |
| 20°-30° | 365.7 | 23.5 |
| 30°-40° | 347.1 | 22.3 |
| 40°-50° | 239.9 | 15.4 |
| 50°-60° | 132.6 | 8.5 |
| 60°-70° | 65.8 | 4.2 |
| 70°-80° | 25.9 | 1.7 |
| 80°-90° | 2.5 | 0.2 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 741.1 | 47.7 |
| 0°-40° | 1088.2 | 70.0 |
| 0°-60° | 1460.8 | 93.9 |
| 0°-90° | 1555.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1555.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 1085 | 1085 | 1085 | 1085 | 1085 | |
| 5° | 1143 | 1133 | 1068 | 1020 | 1011 | 109 |
| 15° | 1129 | 1095 | 953 | 860 | 834 | 319 |
| 25° | 956 | 952 | 792 | 657 | 657 | 436 |
| 35° | 643 | 710 | 542 | 446 | 441 | 403 |
| 45° | 389 | 446 | 274 | 225 | 211 | 303 |
| 55° | 263 | 247 | 122 | 62 | 39 | 237 |
| 65° | 180 | 130 | 42 | 1 | 1 | 174 |
| 75° | 81 | 49 | 9 | 0 | 0 | 86 |
| 85° | 0 | 1 | 0 | 0 | 0 | 7 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P645847

CATALOG NUMBER: FLDSQ4C20D010 FEU4C209030 F4LC-SQLWW-LI-D2W

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 |
| 2.5° | 1079.6 | 1109.5 | 1112.1 | 1109.5 | 1113.4 | 1112.1 | 1118.6 | 1112.1 | 1120.0 | 1108.2 | 1110.8 |
| 5° | 1143.4 | 1131.6 | 1156.4 | 1143.4 | 1143.4 | 1142.1 | 1138.2 | 1136.8 | 1142.1 | 1125.2 | 1133.0 |
| 7.5° | 1160.3 | 1177.2 | 1199.3 | 1172.0 | 1173.3 | 1173.3 | 1165.5 | 1162.9 | 1162.9 | 1131.6 | 1140.8 |
| 10° | 1174.6 | 1164.1 | 1175.9 | 1165.5 | 1174.6 | 1173.3 | 1178.5 | 1161.6 | 1173.3 | 1155.1 | 1153.8 |
| 12.5° | 1162.9 | 1159.0 | 1174.6 | 1157.7 | 1152.5 | 1153.8 | 1147.3 | 1143.4 | 1147.3 | 1126.4 | 1125.2 |
| 15° | 1129.0 | 1133.0 | 1156.4 | 1138.2 | 1135.6 | 1133.0 | 1125.2 | 1112.1 | 1122.6 | 1093.9 | 1095.3 |
| 17.5° | 1117.4 | 1110.8 | 1114.8 | 1099.1 | 1103.0 | 1100.4 | 1099.1 | 1087.5 | 1084.8 | 1066.6 | 1066.6 |
| 20° | 1062.7 | 1077.0 | 1077.0 | 1066.6 | 1066.6 | 1065.3 | 1048.4 | 1058.8 | 1047.1 | 1041.9 | 1047.1 |
| 22.5° | 1025.0 | 1026.3 | 1026.3 | 1017.2 | 1018.5 | 1013.3 | 1004.2 | 997.7 | 1004.2 | 997.7 | 987.3 |
| 25° | 956.1 | 958.7 | 974.3 | 957.4 | 954.8 | 959.9 | 952.2 | 948.2 | 947.0 | 931.4 | 952.2 |
| 27.5° | 872.8 | 898.8 | 897.5 | 891.0 | 898.8 | 888.4 | 884.5 | 885.8 | 889.7 | 888.4 | 893.6 |
| 30° | 824.7 | 828.6 | 832.5 | 827.3 | 828.6 | 824.7 | 824.7 | 826.0 | 836.4 | 832.5 | 831.2 |
| 32.5° | 727.1 | 740.1 | 750.6 | 750.6 | 751.8 | 755.7 | 754.4 | 781.7 | 788.3 | 775.3 | 772.7 |
| 35° | 642.6 | 651.7 | 660.8 | 662.1 | 679.0 | 680.3 | 681.6 | 689.4 | 707.6 | 711.5 | 710.2 |
| 37.5° | 561.9 | 571.0 | 573.6 | 585.3 | 594.5 | 603.5 | 614.0 | 624.4 | 640.0 | 653.0 | 646.5 |
| 40° | 490.4 | 494.3 | 500.8 | 506.0 | 524.2 | 524.2 | 529.4 | 550.2 | 567.1 | 577.5 | 576.2 |
| 42.5° | 430.6 | 431.8 | 437.0 | 446.2 | 463.1 | 459.2 | 463.1 | 477.4 | 502.1 | 503.4 | 517.7 |
| 45° | 388.9 | 387.6 | 391.5 | 392.8 | 403.3 | 408.5 | 411.1 | 421.4 | 442.2 | 444.8 | 446.2 |
| 47.5° | 351.2 | 349.9 | 356.4 | 359.0 | 362.9 | 368.1 | 368.1 | 369.4 | 377.2 | 383.7 | 378.5 |
| 50° | 320.0 | 320.0 | 320.0 | 322.6 | 329.1 | 327.8 | 329.1 | 334.3 | 338.2 | 335.6 | 334.3 |
| 52.5° | 286.1 | 291.3 | 295.3 | 296.6 | 297.9 | 297.9 | 299.2 | 296.6 | 295.3 | 291.3 | 283.5 |
| 55° | 262.8 | 268.0 | 268.0 | 268.0 | 268.0 | 273.2 | 266.7 | 268.0 | 268.0 | 257.6 | 247.2 |
| 57.5° | 239.4 | 244.6 | 248.4 | 243.2 | 248.4 | 243.2 | 240.6 | 239.4 | 236.7 | 226.3 | 210.7 |
| 60° | 219.8 | 222.4 | 221.1 | 219.8 | 222.4 | 218.5 | 215.9 | 210.7 | 208.1 | 193.8 | 183.4 |
| 62.5° | 197.7 | 199.0 | 200.3 | 197.7 | 195.1 | 193.8 | 188.6 | 180.8 | 175.6 | 163.9 | 154.8 |
| 65° | 179.5 | 175.6 | 174.3 | 173.0 | 170.4 | 166.5 | 162.6 | 153.5 | 149.6 | 139.2 | 130.1 |
| 67.5° | 152.2 | 150.9 | 153.5 | 149.6 | 143.1 | 143.1 | 139.2 | 131.4 | 122.3 | 115.8 | 106.7 |
| 70° | 130.1 | 128.8 | 126.2 | 122.3 | 121.0 | 115.8 | 115.8 | 106.7 | 104.1 | 92.3 | 84.5 |
| 72.5° | 106.7 | 106.7 | 102.7 | 98.9 | 94.9 | 92.3 | 91.1 | 84.5 | 80.7 | 74.1 | 67.6 |
| 75° | 80.7 | 80.7 | 79.3 | 75.4 | 72.8 | 70.2 | 69.0 | 63.8 | 59.8 | 53.4 | 49.4 |
| 77.5° | 57.2 | 57.2 | 52.0 | 49.4 | 50.7 | 48.1 | 45.5 | 44.2 | 42.9 | 39.0 | 33.8 |
| 80° | 33.8 | 32.5 | 28.6 | 29.9 | 28.6 | 28.6 | 27.3 | 26.0 | 23.4 | 20.8 | 18.2 |
| 82.5° | 9.1 | 10.4 | 10.4 | 10.4 | 11.7 | 9.1 | 9.1 | 9.1 | 10.4 | 10.4 | 6.5 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 1.3 | 1.3 |
| 87.5° | 1.3 | 2.6 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 3.9 | 3.9 | 3.9 | 2.6 |
| 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: P645847
 CATALOG NUMBER: FLDSQ4C20D010 FEU4C209030 F4LC-SQLWW-LI-D2W

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 95° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 |
| 2.5° | 1097.8 | 1096.5 | 1097.8 | 1088.7 | 1109.5 | 1093.9 | 1091.3 | 1088.7 | 1097.8 | 1088.7 | 1075.7 |
| 5° | 1121.2 | 1108.2 | 1104.3 | 1100.4 | 1112.1 | 1093.9 | 1090.1 | 1091.3 | 1084.8 | 1067.9 | 1069.2 |
| 7.5° | 1129.0 | 1117.4 | 1105.6 | 1080.9 | 1091.3 | 1087.5 | 1077.0 | 1069.2 | 1058.8 | 1044.5 | 1041.9 |
| 10° | 1131.6 | 1118.6 | 1101.7 | 1093.9 | 1078.3 | 1073.1 | 1069.2 | 1056.2 | 1043.2 | 1018.5 | 1012.0 |
| 12.5° | 1123.8 | 1108.2 | 1087.5 | 1080.9 | 1069.2 | 1052.3 | 1043.2 | 1030.2 | 1018.5 | 999.0 | 984.7 |
| 15° | 1090.1 | 1077.0 | 1070.5 | 1048.4 | 1043.2 | 1032.8 | 1014.6 | 996.4 | 979.5 | 953.4 | 945.6 |
| 17.5° | 1051.0 | 1045.8 | 1039.3 | 1022.4 | 1021.1 | 1010.7 | 993.8 | 978.1 | 956.1 | 915.7 | 902.7 |
| 20° | 1010.7 | 1010.7 | 989.9 | 983.4 | 996.4 | 975.5 | 962.5 | 948.2 | 902.7 | 883.2 | 859.8 |
| 22.5° | 980.8 | 966.5 | 954.8 | 944.4 | 945.6 | 932.6 | 914.4 | 885.8 | 868.9 | 845.5 | 818.2 |
| 25° | 922.2 | 927.4 | 901.4 | 897.5 | 901.4 | 871.5 | 862.4 | 839.0 | 814.3 | 792.1 | 771.3 |
| 27.5° | 885.8 | 871.5 | 854.6 | 840.3 | 840.3 | 828.6 | 802.6 | 797.4 | 759.6 | 738.8 | 712.8 |
| 30° | 831.2 | 820.8 | 806.5 | 785.7 | 783.1 | 773.9 | 753.2 | 740.1 | 701.1 | 669.9 | 655.6 |
| 32.5° | 762.2 | 758.3 | 746.6 | 723.2 | 715.4 | 705.0 | 679.0 | 656.9 | 638.7 | 603.5 | 586.7 |
| 35° | 712.8 | 698.5 | 673.8 | 654.3 | 647.8 | 629.6 | 608.7 | 593.1 | 573.6 | 542.4 | 520.3 |
| 37.5° | 638.7 | 624.4 | 600.9 | 577.5 | 577.5 | 559.3 | 530.7 | 515.1 | 487.8 | 469.6 | 451.4 |
| 40° | 573.6 | 555.4 | 532.0 | 504.7 | 500.8 | 474.8 | 463.1 | 437.0 | 420.1 | 391.5 | 388.9 |
| 42.5° | 500.8 | 483.9 | 463.1 | 442.2 | 426.6 | 413.6 | 383.7 | 364.2 | 346.0 | 331.7 | 327.8 |
| 45° | 434.4 | 412.3 | 394.1 | 368.1 | 352.5 | 336.9 | 317.4 | 304.4 | 290.1 | 274.5 | 265.4 |
| 47.5° | 377.2 | 359.0 | 333.0 | 309.6 | 294.0 | 286.1 | 264.0 | 249.8 | 238.0 | 227.6 | 221.1 |
| 50° | 318.7 | 296.6 | 282.3 | 256.2 | 253.6 | 235.4 | 217.2 | 205.5 | 199.0 | 189.9 | 180.8 |
| 52.5° | 274.5 | 253.6 | 234.1 | 214.6 | 204.2 | 197.7 | 180.8 | 169.1 | 160.0 | 153.5 | 148.3 |
| 55° | 231.5 | 213.3 | 197.7 | 178.2 | 171.7 | 162.6 | 143.1 | 140.5 | 131.4 | 122.3 | 115.8 |
| 57.5° | 199.0 | 182.1 | 163.9 | 150.9 | 139.2 | 132.7 | 117.1 | 106.7 | 101.5 | 93.7 | 87.1 |
| 60° | 169.1 | 150.9 | 136.6 | 121.0 | 115.8 | 106.7 | 94.9 | 85.9 | 79.3 | 72.8 | 66.4 |
| 62.5° | 141.8 | 126.2 | 110.6 | 97.5 | 89.7 | 84.5 | 75.4 | 67.6 | 61.2 | 56.0 | 50.7 |
| 65° | 117.1 | 102.7 | 89.7 | 76.7 | 72.8 | 66.4 | 59.8 | 53.4 | 48.1 | 41.6 | 36.4 |
| 67.5° | 96.3 | 83.3 | 70.2 | 61.2 | 57.2 | 54.6 | 46.8 | 40.3 | 36.4 | 32.5 | 27.3 |
| 70° | 75.4 | 66.4 | 56.0 | 48.1 | 44.2 | 40.3 | 35.1 | 31.2 | 26.0 | 23.4 | 19.5 |
| 72.5° | 58.6 | 50.7 | 41.6 | 35.1 | 32.5 | 29.9 | 24.7 | 20.8 | 18.2 | 15.6 | 13.0 |
| 75° | 41.6 | 35.1 | 29.9 | 23.4 | 22.1 | 20.8 | 16.9 | 14.3 | 11.7 | 9.1 | 7.8 |
| 77.5° | 28.6 | 23.4 | 18.2 | 15.6 | 14.3 | 11.7 | 10.4 | 7.8 | 6.5 | 5.2 | 3.9 |
| 80° | 15.6 | 11.7 | 9.1 | 7.8 | 6.5 | 5.2 | 5.2 | 3.9 | 2.6 | 2.6 | 1.3 |
| 82.5° | 5.2 | 3.9 | 2.6 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 0.0 | 1.3 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 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 |



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CANDELA DISTRIBUTION (continued):

| | 100° | 105° | 110° | 112.5° | 115° | 120° | 125° | 130° | 135° | 140° | 145° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 |
| 2.5° | 1083.5 | 1069.2 | 1073.1 | 1073.1 | 1070.5 | 1070.5 | 1067.9 | 1064.0 | 1065.3 | 1057.5 | 1040.6 |
| 5° | 1071.8 | 1053.6 | 1051.0 | 1053.6 | 1043.2 | 1040.6 | 1035.4 | 1043.2 | 1019.8 | 1028.9 | 1018.5 |
| 7.5° | 1038.0 | 1021.1 | 1017.2 | 1026.3 | 1013.3 | 1005.5 | 1004.2 | 1014.6 | 993.8 | 983.4 | 971.7 |
| 10° | 1000.3 | 993.8 | 982.1 | 975.5 | 971.7 | 972.9 | 962.5 | 949.6 | 945.6 | 943.0 | 932.6 |
| 12.5° | 966.5 | 952.2 | 941.8 | 934.0 | 931.4 | 931.4 | 914.4 | 911.8 | 900.1 | 897.5 | 881.9 |
| 15° | 926.1 | 909.2 | 902.7 | 892.3 | 883.2 | 888.4 | 868.9 | 863.7 | 859.8 | 842.9 | 845.5 |
| 17.5° | 891.0 | 872.8 | 857.2 | 850.7 | 842.9 | 835.1 | 816.9 | 820.8 | 811.7 | 811.7 | 788.3 |
| 20° | 845.5 | 826.0 | 814.3 | 801.3 | 801.3 | 790.9 | 777.9 | 779.1 | 767.4 | 755.7 | 734.9 |
| 22.5° | 797.4 | 776.5 | 762.2 | 757.0 | 744.0 | 741.4 | 725.8 | 721.9 | 706.3 | 707.6 | 689.4 |
| 25° | 746.6 | 725.8 | 706.3 | 707.6 | 695.9 | 690.7 | 681.6 | 663.4 | 656.9 | 649.1 | 643.9 |
| 27.5° | 686.8 | 672.5 | 655.6 | 654.3 | 632.2 | 633.4 | 621.8 | 616.6 | 600.9 | 604.9 | 593.1 |
| 30° | 632.2 | 611.4 | 595.7 | 591.9 | 582.7 | 580.1 | 561.9 | 554.1 | 556.7 | 546.3 | 539.8 |
| 32.5° | 576.2 | 545.0 | 538.5 | 530.7 | 525.5 | 519.0 | 506.0 | 511.2 | 499.5 | 502.1 | 491.7 |
| 35° | 502.1 | 489.1 | 472.2 | 472.2 | 467.0 | 461.8 | 452.7 | 457.9 | 446.2 | 441.0 | 430.6 |
| 37.5° | 439.6 | 428.0 | 411.1 | 416.2 | 407.1 | 399.3 | 391.5 | 392.8 | 382.4 | 381.1 | 370.7 |
| 40° | 372.0 | 365.5 | 353.8 | 353.8 | 347.3 | 347.3 | 343.4 | 339.5 | 333.0 | 325.2 | 313.5 |
| 42.5° | 308.3 | 303.1 | 297.9 | 299.2 | 290.1 | 297.9 | 287.5 | 294.0 | 273.2 | 271.9 | 264.0 |
| 45° | 261.4 | 249.8 | 251.0 | 245.8 | 240.6 | 243.2 | 234.1 | 236.7 | 225.0 | 222.4 | 214.6 |
| 47.5° | 212.0 | 208.1 | 200.3 | 197.7 | 197.7 | 193.8 | 189.9 | 188.6 | 183.4 | 176.9 | 166.5 |
| 50° | 174.3 | 160.0 | 157.4 | 153.5 | 150.9 | 150.9 | 145.7 | 137.9 | 139.2 | 132.7 | 122.3 |
| 52.5° | 136.6 | 124.9 | 119.7 | 118.4 | 113.2 | 110.6 | 104.1 | 98.9 | 94.9 | 92.3 | 85.9 |
| 55° | 105.3 | 94.9 | 88.5 | 88.5 | 80.7 | 80.7 | 71.5 | 67.6 | 62.4 | 57.2 | 53.4 |
| 57.5° | 79.3 | 74.1 | 67.6 | 62.4 | 59.8 | 53.4 | 48.1 | 41.6 | 37.7 | 29.9 | 24.7 |
| 60° | 59.8 | 54.6 | 48.1 | 44.2 | 41.6 | 35.1 | 28.6 | 23.4 | 14.3 | 11.7 | 10.4 |
| 62.5° | 44.2 | 39.0 | 32.5 | 29.9 | 27.3 | 22.1 | 15.6 | 7.8 | 3.9 | 3.9 | 3.9 |
| 65° | 32.5 | 26.0 | 20.8 | 18.2 | 15.6 | 11.7 | 5.2 | 2.6 | 1.3 | 1.3 | 1.3 |
| 67.5° | 22.1 | 16.9 | 11.7 | 10.4 | 7.8 | 3.9 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| 70° | 14.3 | 10.4 | 5.2 | 3.9 | 2.6 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| 72.5° | 9.1 | 5.2 | 2.6 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 5.2 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 2.6 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 1.3 | 1.3 | 1.3 |
| 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: P645847
 CATALOG NUMBER: FLDSQ4C20D010 FEU4C209030 F4LC-SQLWW-LI-D2W

CANDELA DISTRIBUTION (continued):

| | 150° | 155° | 157.5° | 160° | 165° | 170° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 | 1084.8 |
| 2.5° | 1058.8 | 1049.7 | 1054.9 | 1043.2 | 1048.4 | 1057.5 | 1051.0 | 1053.6 |
| 5° | 1022.4 | 1017.2 | 1010.7 | 993.8 | 1006.8 | 1017.2 | 1012.0 | 1010.7 |
| 7.5° | 983.4 | 965.1 | 974.3 | 969.1 | 966.5 | 976.9 | 965.1 | 978.1 |
| 10° | 943.0 | 930.0 | 928.8 | 919.6 | 919.6 | 927.4 | 928.8 | 920.9 |
| 12.5° | 883.2 | 876.7 | 876.7 | 875.4 | 874.1 | 881.9 | 883.2 | 879.3 |
| 15° | 840.3 | 837.7 | 831.2 | 829.9 | 822.1 | 833.8 | 835.1 | 833.8 |
| 17.5° | 788.3 | 789.5 | 783.1 | 783.1 | 788.3 | 792.1 | 781.7 | 792.1 |
| 20° | 753.2 | 746.6 | 744.0 | 732.3 | 738.8 | 745.4 | 745.4 | 746.6 |
| 22.5° | 702.4 | 692.0 | 695.9 | 689.4 | 685.5 | 694.6 | 694.6 | 698.5 |
| 25° | 645.2 | 645.2 | 647.8 | 643.9 | 646.5 | 651.7 | 647.8 | 656.9 |
| 27.5° | 590.5 | 595.7 | 595.7 | 590.5 | 593.1 | 608.7 | 615.3 | 604.9 |
| 30° | 539.8 | 541.1 | 545.0 | 542.4 | 550.2 | 555.4 | 554.1 | 561.9 |
| 32.5° | 482.6 | 489.1 | 491.7 | 487.8 | 490.4 | 502.1 | 495.6 | 494.3 |
| 35° | 438.4 | 426.6 | 425.4 | 426.6 | 431.8 | 434.4 | 431.8 | 441.0 |
| 37.5° | 374.6 | 370.7 | 365.5 | 366.8 | 370.7 | 375.9 | 378.5 | 385.0 |
| 40° | 313.5 | 308.3 | 308.3 | 307.0 | 303.1 | 317.4 | 317.4 | 317.4 |
| 42.5° | 260.2 | 258.8 | 252.4 | 252.4 | 257.6 | 261.4 | 258.8 | 268.0 |
| 45° | 213.3 | 208.1 | 204.2 | 204.2 | 208.1 | 208.1 | 212.0 | 210.7 |
| 47.5° | 167.8 | 162.6 | 163.9 | 160.0 | 163.9 | 169.1 | 162.6 | 163.9 |
| 50° | 126.2 | 126.2 | 123.6 | 126.2 | 124.9 | 126.2 | 123.6 | 121.0 |
| 52.5° | 85.9 | 97.5 | 98.9 | 93.7 | 81.9 | 71.5 | 65.0 | 70.2 |
| 55° | 49.4 | 44.2 | 44.2 | 42.9 | 40.3 | 39.0 | 35.1 | 39.0 |
| 57.5° | 24.7 | 22.1 | 22.1 | 22.1 | 20.8 | 19.5 | 16.9 | 16.9 |
| 60° | 10.4 | 9.1 | 9.1 | 7.8 | 6.5 | 5.2 | 3.9 | 5.2 |
| 62.5° | 3.9 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| 65° | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| 67.5° | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| 70° | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| 72.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 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 |

(END OF REPORT)