

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: P#

Luminaire Tested: **FLDSQ4C25D010 FEU4C259050 F4LC-SQLWW-LI**

Issue Date: 12/13/2022

Tested By:

Approved By:



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Test Information

Test Method: LM-79-08
 Report Number: P#
 Test Lab: INNOVATION CENTER
 Issue Date: 12/13/2022
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: FAIL-SAFE
 Catalog Number: FLDSQ4C25D010 FEU4C259050 F4LC-SQLWW-LI
 Description: 4 INCH 2500 LUMEN FAIL-SAFE LED DOWNLIGHT WITH, 5000K, 90CRI LEDS AND F4LC-SQLWW TRIM WITH LI FINISH
 Light Source: -
 Ballast/Driver: -

Summary

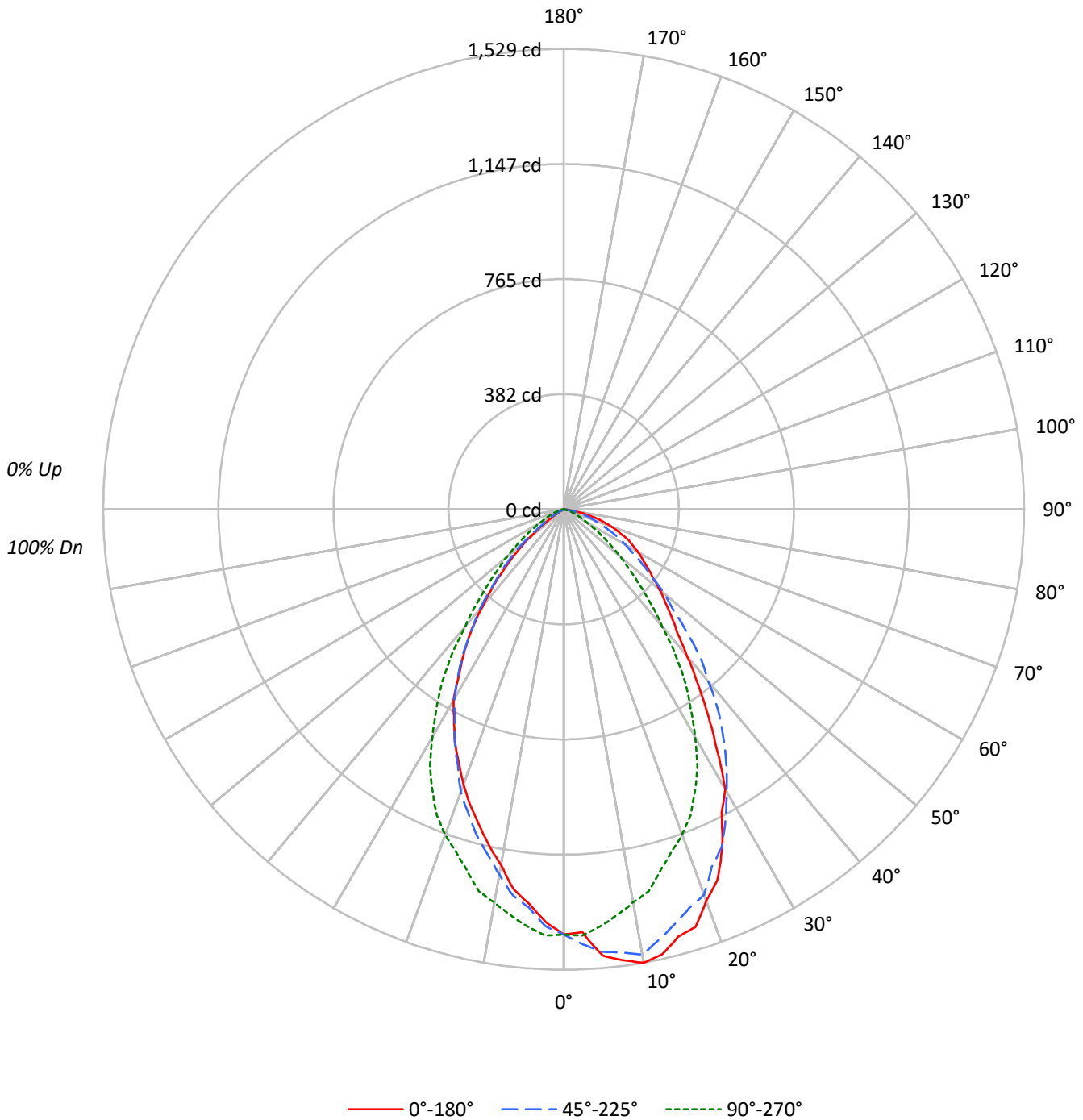
Lumens per Lamp: N/A
 Luminaire Lumens: 2024.0 lumens
 Efficiency: N/A
 Efficacy: 64.3 lumens/watt
 Spacing Criteria (0/90/45): 1.01 / 1 / 1.06
 Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
 CIE Type: Direct

Input Watts (W): 31.5
 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

| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | GONIO 1 IN0055 | 4/22/2021 | 10/22/2021 |
| Power Meter | XITRON 2801 IN0197 | 12/1/2020 | 12/1/2021 |
| AC Power Source | CHROMA 61505 IN0196 | 12/1/2020 | 12/1/2021 |
| DC Power Supply | AGILENT E3634A IN0198 | 11/30/2020 | 11/30/2021 |
| Room Thermometer | ONSET IN0143 | 12/1/2020 | 12/1/2021 |

TEST NUMBER: P#
CATALOG NUMBER: FLDSQ4C25D010 FEU4C259050 F4LC-SQLWW-LI

Luminous Intensity Polar Plot



TEST NUMBER: P#

CATALOG NUMBER: FLDSQ4C25D010 FEU4C259050 F4LC-SQLWW-LI

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 | 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° | 136242 | 136242 | 136242 |
| 5° | 144143 | 134632 | 127416 |
| 10° | 149798 | 129889 | 117445 |
| 15° | 146802 | 123967 | 108404 |
| 20° | 142039 | 118042 | 99786 |
| 25° | 132483 | 109764 | 91026 |
| 30° | 119594 | 97143 | 81489 |
| 35° | 98521 | 83161 | 67612 |
| 40° | 80399 | 64188 | 52033 |
| 45° | 69074 | 48756 | 37430 |
| 50° | 62521 | 37107 | 23642 |
| 55° | 57532 | 26764 | 8546 |
| 60° | 55230 | 18294 | 1312 |
| 65° | 53334 | 12375 | 388 |
| 70° | 47762 | 8576 | 480 |
| 75° | 39144 | 4436 | 0 |
| 80° | 24449 | 1889 | 0 |
| 85° | 0 | 0 | 0 |

TEST NUMBER: P#
 CATALOG NUMBER: FLDSQ4C25D010 FEU4C259050 F4LC-SQLWW-LI

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 132.3 | 6.5 |
| 10°-20° | 356.4 | 17.6 |
| 20°-30° | 475.9 | 23.5 |
| 30°-40° | 451.8 | 22.3 |
| 40°-50° | 312.3 | 15.4 |
| 50°-60° | 172.6 | 8.5 |
| 60°-70° | 85.7 | 4.2 |
| 70°-80° | 33.8 | 1.7 |
| 80°-90° | 3.2 | 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° | 964.7 | 47.7 |
| 0°-40° | 1416.5 | 70.0 |
| 0°-60° | 1901.3 | 93.9 |
| 0°-90° | 2024.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2024.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 1412 | 1412 | 1412 | 1412 | 1412 | |
| 5° | 1488 | 1475 | 1390 | 1327 | 1316 | 142 |
| 15° | 1470 | 1426 | 1241 | 1119 | 1085 | 416 |
| 25° | 1244 | 1239 | 1031 | 855 | 855 | 567 |
| 35° | 836 | 924 | 706 | 581 | 574 | 524 |
| 45° | 506 | 581 | 357 | 293 | 274 | 395 |
| 55° | 342 | 322 | 159 | 81 | 51 | 308 |
| 65° | 234 | 169 | 54 | 2 | 2 | 227 |
| 75° | 105 | 64 | 12 | 0 | 0 | 112 |
| 85° | 0 | 2 | 0 | 0 | 0 | 10 |
| 90° | 0 | 0 | 0 | 0 | 0 | |

TEST NUMBER: P#
 CATALOG NUMBER: FLDSQ4C25D010 FEU4C259050 F4LC-SQLWW-LI

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 |
| 2.5° | 1405.2 | 1444.2 | 1447.5 | 1444.2 | 1449.3 | 1447.5 | 1456.0 | 1447.5 | 1457.8 | 1442.5 | 1445.9 |
| 5° | 1488.2 | 1472.9 | 1505.1 | 1488.2 | 1488.2 | 1486.5 | 1481.4 | 1479.7 | 1486.5 | 1464.5 | 1474.7 |
| 7.5° | 1510.2 | 1532.2 | 1561.0 | 1525.5 | 1527.1 | 1527.1 | 1517.0 | 1513.6 | 1513.6 | 1472.9 | 1484.8 |
| 10° | 1528.9 | 1515.3 | 1530.5 | 1517.0 | 1528.9 | 1527.1 | 1533.9 | 1511.9 | 1527.1 | 1503.5 | 1501.7 |
| 12.5° | 1513.6 | 1508.5 | 1528.9 | 1506.8 | 1500.1 | 1501.7 | 1493.3 | 1488.2 | 1493.3 | 1466.2 | 1464.5 |
| 15° | 1469.6 | 1474.7 | 1505.1 | 1481.4 | 1478.1 | 1474.7 | 1464.5 | 1447.5 | 1461.1 | 1423.9 | 1425.6 |
| 17.5° | 1454.4 | 1445.9 | 1451.0 | 1430.6 | 1435.7 | 1432.4 | 1430.6 | 1415.4 | 1412.0 | 1388.3 | 1388.3 |
| 20° | 1383.3 | 1401.8 | 1401.8 | 1388.3 | 1388.3 | 1386.7 | 1364.6 | 1378.2 | 1362.9 | 1356.1 | 1362.9 |
| 22.5° | 1334.1 | 1335.8 | 1335.8 | 1324.0 | 1325.7 | 1318.9 | 1307.1 | 1298.6 | 1307.1 | 1298.6 | 1285.0 |
| 25° | 1244.4 | 1247.8 | 1268.1 | 1246.1 | 1242.7 | 1249.5 | 1239.3 | 1234.2 | 1232.6 | 1212.3 | 1239.3 |
| 27.5° | 1136.1 | 1169.9 | 1168.2 | 1159.7 | 1169.9 | 1156.3 | 1151.3 | 1153.0 | 1158.1 | 1156.3 | 1163.1 |
| 30° | 1073.4 | 1078.5 | 1083.6 | 1076.8 | 1078.5 | 1073.4 | 1073.4 | 1075.1 | 1088.6 | 1083.6 | 1081.9 |
| 32.5° | 946.4 | 963.3 | 976.9 | 976.9 | 978.6 | 983.7 | 982.0 | 1017.5 | 1026.0 | 1009.1 | 1005.7 |
| 35° | 836.4 | 848.2 | 860.0 | 861.8 | 883.8 | 885.5 | 887.2 | 897.3 | 921.0 | 926.1 | 924.4 |
| 37.5° | 731.4 | 743.2 | 746.6 | 761.9 | 773.8 | 785.6 | 799.2 | 812.7 | 833.0 | 849.9 | 841.5 |
| 40° | 638.3 | 643.3 | 651.8 | 658.6 | 682.3 | 682.3 | 689.0 | 716.2 | 738.2 | 751.7 | 750.0 |
| 42.5° | 560.4 | 562.1 | 568.9 | 580.7 | 602.8 | 597.6 | 602.8 | 621.4 | 653.5 | 655.2 | 673.9 |
| 45° | 506.2 | 504.5 | 509.6 | 511.3 | 524.9 | 531.6 | 535.0 | 548.6 | 575.6 | 579.0 | 580.7 |
| 47.5° | 457.2 | 455.4 | 463.9 | 467.3 | 472.3 | 479.1 | 479.1 | 480.8 | 491.0 | 499.5 | 492.7 |
| 50° | 416.5 | 416.5 | 416.5 | 419.9 | 428.4 | 426.6 | 428.4 | 435.1 | 440.2 | 436.8 | 435.1 |
| 52.5° | 372.4 | 379.2 | 384.3 | 386.0 | 387.7 | 387.7 | 389.4 | 386.0 | 384.3 | 379.2 | 369.1 |
| 55° | 342.0 | 348.8 | 348.8 | 348.8 | 348.8 | 355.5 | 347.1 | 348.8 | 348.8 | 335.2 | 321.7 |
| 57.5° | 311.6 | 318.3 | 323.4 | 316.6 | 323.4 | 316.6 | 313.2 | 311.6 | 308.1 | 294.6 | 274.3 |
| 60° | 286.2 | 289.5 | 287.8 | 286.2 | 289.5 | 284.4 | 281.0 | 274.3 | 270.9 | 252.3 | 238.7 |
| 62.5° | 257.4 | 259.0 | 260.7 | 257.4 | 254.0 | 252.3 | 245.5 | 235.3 | 228.6 | 213.3 | 201.4 |
| 65° | 233.6 | 228.6 | 226.9 | 225.2 | 221.8 | 216.7 | 211.7 | 199.8 | 194.7 | 181.2 | 169.3 |
| 67.5° | 198.1 | 196.4 | 199.8 | 194.7 | 186.3 | 186.3 | 181.2 | 171.0 | 159.1 | 150.7 | 138.8 |
| 70° | 169.3 | 167.6 | 164.2 | 159.1 | 157.5 | 150.7 | 150.7 | 138.8 | 135.4 | 120.2 | 110.0 |
| 72.5° | 138.8 | 138.8 | 133.7 | 128.7 | 123.6 | 120.2 | 118.5 | 110.0 | 105.0 | 96.5 | 88.0 |
| 75° | 105.0 | 105.0 | 103.3 | 98.2 | 94.8 | 91.4 | 89.7 | 83.0 | 77.9 | 69.4 | 64.3 |
| 77.5° | 74.5 | 74.5 | 67.7 | 64.3 | 66.0 | 62.6 | 59.2 | 57.6 | 55.9 | 50.8 | 44.0 |
| 80° | 44.0 | 42.3 | 37.3 | 38.9 | 37.3 | 37.3 | 35.6 | 33.8 | 30.4 | 27.1 | 23.7 |
| 82.5° | 11.9 | 13.5 | 13.5 | 13.5 | 15.3 | 11.9 | 11.9 | 11.9 | 13.5 | 13.5 | 8.5 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 1.7 | 1.7 |
| 87.5° | 1.7 | 3.4 | 6.8 | 6.8 | 6.8 | 6.8 | 6.8 | 5.1 | 5.1 | 5.1 | 3.4 |
| 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: P#
 CATALOG NUMBER: FLDSQ4C25D010 FEU4C259050 F4LC-SQLWW-LI

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 95° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 |
| 2.5° | 1429.0 | 1427.2 | 1429.0 | 1417.1 | 1444.2 | 1423.9 | 1420.5 | 1417.1 | 1429.0 | 1417.1 | 1400.2 |
| 5° | 1459.4 | 1442.5 | 1437.4 | 1432.4 | 1447.5 | 1423.9 | 1418.8 | 1420.5 | 1412.0 | 1390.0 | 1391.7 |
| 7.5° | 1469.6 | 1454.4 | 1439.1 | 1406.9 | 1420.5 | 1415.4 | 1401.8 | 1391.7 | 1378.2 | 1359.5 | 1356.1 |
| 10° | 1472.9 | 1456.0 | 1434.0 | 1423.9 | 1403.6 | 1396.8 | 1391.7 | 1374.8 | 1357.9 | 1325.7 | 1317.2 |
| 12.5° | 1462.8 | 1442.5 | 1415.4 | 1406.9 | 1391.7 | 1369.7 | 1357.9 | 1340.9 | 1325.7 | 1300.3 | 1281.6 |
| 15° | 1418.8 | 1401.8 | 1393.4 | 1364.6 | 1357.9 | 1344.3 | 1320.6 | 1296.9 | 1274.9 | 1241.0 | 1230.8 |
| 17.5° | 1368.0 | 1361.2 | 1352.8 | 1330.7 | 1329.1 | 1315.5 | 1293.5 | 1273.2 | 1244.4 | 1191.9 | 1175.0 |
| 20° | 1315.5 | 1315.5 | 1288.4 | 1280.0 | 1296.9 | 1269.8 | 1252.9 | 1234.2 | 1175.0 | 1149.6 | 1119.1 |
| 22.5° | 1276.6 | 1258.0 | 1242.7 | 1229.2 | 1230.8 | 1213.9 | 1190.2 | 1153.0 | 1130.9 | 1100.5 | 1064.9 |
| 25° | 1200.4 | 1207.2 | 1173.3 | 1168.2 | 1173.3 | 1134.3 | 1122.5 | 1092.0 | 1059.8 | 1031.0 | 1004.0 |
| 27.5° | 1153.0 | 1134.3 | 1112.4 | 1093.7 | 1093.7 | 1078.5 | 1044.6 | 1037.9 | 988.7 | 961.7 | 927.8 |
| 30° | 1081.9 | 1068.3 | 1049.7 | 1022.6 | 1019.2 | 1007.4 | 980.3 | 963.3 | 912.6 | 871.9 | 853.3 |
| 32.5° | 992.1 | 987.1 | 971.8 | 941.4 | 931.2 | 917.6 | 883.8 | 855.0 | 831.3 | 785.6 | 763.6 |
| 35° | 927.8 | 909.2 | 877.0 | 851.6 | 843.1 | 819.5 | 792.3 | 772.0 | 746.6 | 706.0 | 677.2 |
| 37.5° | 831.3 | 812.7 | 782.2 | 751.7 | 751.7 | 728.0 | 690.8 | 670.5 | 634.9 | 611.2 | 587.5 |
| 40° | 746.6 | 722.9 | 692.5 | 656.9 | 651.8 | 617.9 | 602.8 | 568.9 | 546.8 | 509.6 | 506.2 |
| 42.5° | 651.8 | 629.8 | 602.8 | 575.6 | 555.3 | 538.4 | 499.5 | 474.1 | 450.4 | 431.7 | 426.6 |
| 45° | 565.5 | 536.7 | 513.0 | 479.1 | 458.8 | 438.5 | 413.1 | 396.2 | 377.6 | 357.3 | 345.4 |
| 47.5° | 491.0 | 467.3 | 433.4 | 403.0 | 382.7 | 372.4 | 343.7 | 325.1 | 309.8 | 296.3 | 287.8 |
| 50° | 414.8 | 386.0 | 367.4 | 333.5 | 330.1 | 306.4 | 282.8 | 267.5 | 259.0 | 247.2 | 235.3 |
| 52.5° | 357.3 | 330.1 | 304.7 | 279.4 | 265.8 | 257.4 | 235.3 | 220.1 | 208.3 | 199.8 | 193.0 |
| 55° | 301.3 | 277.7 | 257.4 | 232.0 | 223.5 | 211.7 | 186.3 | 182.9 | 171.0 | 159.1 | 150.7 |
| 57.5° | 259.0 | 237.0 | 213.3 | 196.4 | 181.2 | 172.7 | 152.4 | 138.8 | 132.1 | 121.9 | 113.4 |
| 60° | 220.1 | 196.4 | 177.8 | 157.5 | 150.7 | 138.8 | 123.6 | 111.8 | 103.3 | 94.8 | 86.4 |
| 62.5° | 184.5 | 164.2 | 143.9 | 127.0 | 116.8 | 110.0 | 98.2 | 88.0 | 79.6 | 72.8 | 66.0 |
| 65° | 152.4 | 133.7 | 116.8 | 99.9 | 94.8 | 86.4 | 77.9 | 69.4 | 62.6 | 54.2 | 47.4 |
| 67.5° | 125.3 | 108.4 | 91.4 | 79.6 | 74.5 | 71.1 | 61.0 | 52.5 | 47.4 | 42.3 | 35.6 |
| 70° | 98.2 | 86.4 | 72.8 | 62.6 | 57.6 | 52.5 | 45.7 | 40.7 | 33.8 | 30.4 | 25.4 |
| 72.5° | 76.2 | 66.0 | 54.2 | 45.7 | 42.3 | 38.9 | 32.2 | 27.1 | 23.7 | 20.3 | 16.9 |
| 75° | 54.2 | 45.7 | 38.9 | 30.4 | 28.8 | 27.1 | 22.0 | 18.6 | 15.3 | 11.9 | 10.1 |
| 77.5° | 37.3 | 30.4 | 23.7 | 20.3 | 18.6 | 15.3 | 13.5 | 10.1 | 8.5 | 6.8 | 5.1 |
| 80° | 20.3 | 15.3 | 11.9 | 10.1 | 8.5 | 6.8 | 6.8 | 5.1 | 3.4 | 3.4 | 1.7 |
| 82.5° | 6.8 | 5.1 | 3.4 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 0.0 | 1.7 |
| 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° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 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: P#
 CATALOG NUMBER: FLDSQ4C25D010 FEU4C259050 F4LC-SQLWW-LI

CANDELA DISTRIBUTION (continued):

| | 100° | 105° | 110° | 112.5° | 115° | 120° | 125° | 130° | 135° | 140° | 145° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 |
| 2.5° | 1410.3 | 1391.7 | 1396.8 | 1396.8 | 1393.4 | 1393.4 | 1390.0 | 1384.9 | 1386.7 | 1376.4 | 1354.5 |
| 5° | 1395.1 | 1371.4 | 1368.0 | 1371.4 | 1357.9 | 1354.5 | 1347.7 | 1357.9 | 1327.4 | 1339.2 | 1325.7 |
| 7.5° | 1351.1 | 1329.1 | 1324.0 | 1335.8 | 1318.9 | 1308.7 | 1307.1 | 1320.6 | 1293.5 | 1280.0 | 1264.7 |
| 10° | 1301.9 | 1293.5 | 1278.3 | 1269.8 | 1264.7 | 1266.4 | 1252.9 | 1235.9 | 1230.8 | 1227.5 | 1213.9 |
| 12.5° | 1258.0 | 1239.3 | 1225.8 | 1215.6 | 1212.3 | 1212.3 | 1190.2 | 1186.9 | 1171.6 | 1168.2 | 1147.9 |
| 15° | 1205.4 | 1183.5 | 1175.0 | 1161.5 | 1149.6 | 1156.3 | 1130.9 | 1124.2 | 1119.1 | 1097.1 | 1100.5 |
| 17.5° | 1159.7 | 1136.1 | 1115.8 | 1107.3 | 1097.1 | 1087.0 | 1063.2 | 1068.3 | 1056.5 | 1056.5 | 1026.0 |
| 20° | 1100.5 | 1075.1 | 1059.8 | 1042.9 | 1042.9 | 1029.4 | 1012.5 | 1014.1 | 998.9 | 983.7 | 956.6 |
| 22.5° | 1037.9 | 1010.8 | 992.1 | 985.3 | 968.4 | 965.1 | 944.8 | 939.6 | 919.3 | 921.0 | 897.3 |
| 25° | 971.8 | 944.8 | 919.3 | 921.0 | 905.8 | 899.1 | 887.2 | 863.5 | 855.0 | 844.9 | 838.1 |
| 27.5° | 893.9 | 875.3 | 853.3 | 851.6 | 822.8 | 824.5 | 809.3 | 802.5 | 782.2 | 787.3 | 772.0 |
| 30° | 822.8 | 795.8 | 775.4 | 770.4 | 758.5 | 755.1 | 731.4 | 721.2 | 724.7 | 711.1 | 702.6 |
| 32.5° | 750.0 | 709.4 | 700.9 | 690.8 | 684.0 | 675.5 | 658.6 | 665.4 | 650.1 | 653.5 | 640.0 |
| 35° | 653.5 | 636.6 | 614.6 | 614.6 | 607.8 | 601.0 | 589.2 | 596.0 | 580.7 | 574.0 | 560.4 |
| 37.5° | 572.2 | 557.0 | 535.0 | 541.8 | 529.9 | 519.8 | 509.6 | 511.3 | 497.7 | 496.1 | 482.5 |
| 40° | 484.2 | 475.7 | 460.5 | 460.5 | 452.0 | 452.0 | 446.9 | 441.9 | 433.4 | 423.3 | 408.0 |
| 42.5° | 401.2 | 394.5 | 387.7 | 389.4 | 377.6 | 387.7 | 374.2 | 382.7 | 355.5 | 353.9 | 343.7 |
| 45° | 340.3 | 325.1 | 326.7 | 320.0 | 313.2 | 316.6 | 304.7 | 308.1 | 292.9 | 289.5 | 279.4 |
| 47.5° | 276.0 | 270.9 | 260.7 | 257.4 | 257.4 | 252.3 | 247.2 | 245.5 | 238.7 | 230.2 | 216.7 |
| 50° | 226.9 | 208.3 | 204.8 | 199.8 | 196.4 | 196.4 | 189.6 | 179.5 | 181.2 | 172.7 | 159.1 |
| 52.5° | 177.8 | 162.5 | 155.7 | 154.1 | 147.3 | 143.9 | 135.4 | 128.7 | 123.6 | 120.2 | 111.8 |
| 55° | 137.1 | 123.6 | 115.2 | 115.2 | 105.0 | 105.0 | 93.1 | 88.0 | 81.3 | 74.5 | 69.4 |
| 57.5° | 103.3 | 96.5 | 88.0 | 81.3 | 77.9 | 69.4 | 62.6 | 54.2 | 49.1 | 38.9 | 32.2 |
| 60° | 77.9 | 71.1 | 62.6 | 57.6 | 54.2 | 45.7 | 37.3 | 30.4 | 18.6 | 15.3 | 13.5 |
| 62.5° | 57.6 | 50.8 | 42.3 | 38.9 | 35.6 | 28.8 | 20.3 | 10.1 | 5.1 | 5.1 | 5.1 |
| 65° | 42.3 | 33.8 | 27.1 | 23.7 | 20.3 | 15.3 | 6.8 | 3.4 | 1.7 | 1.7 | 1.7 |
| 67.5° | 28.8 | 22.0 | 15.3 | 13.5 | 10.1 | 5.1 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 70° | 18.6 | 13.5 | 6.8 | 5.1 | 3.4 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 72.5° | 11.9 | 6.8 | 3.4 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 6.8 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 3.4 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 1.7 | 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 | 1.7 | 1.7 | 1.7 |
| 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: P#
 CATALOG NUMBER: FLDSQ4C25D010 FEU4C259050 F4LC-SQLWW-LI

CANDELA DISTRIBUTION (continued):

| | 150° | 155° | 157.5° | 160° | 165° | 170° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 | 1412.0 |
| 2.5° | 1378.2 | 1366.3 | 1373.1 | 1357.9 | 1364.6 | 1376.4 | 1368.0 | 1371.4 |
| 5° | 1330.7 | 1324.0 | 1315.5 | 1293.5 | 1310.4 | 1324.0 | 1317.2 | 1315.5 |
| 7.5° | 1280.0 | 1256.2 | 1268.1 | 1261.4 | 1258.0 | 1271.5 | 1256.2 | 1273.2 |
| 10° | 1227.5 | 1210.5 | 1208.9 | 1197.0 | 1197.0 | 1207.2 | 1208.9 | 1198.7 |
| 12.5° | 1149.6 | 1141.2 | 1141.2 | 1139.4 | 1137.7 | 1147.9 | 1149.6 | 1144.5 |
| 15° | 1093.7 | 1090.3 | 1081.9 | 1080.2 | 1070.1 | 1085.2 | 1087.0 | 1085.2 |
| 17.5° | 1026.0 | 1027.7 | 1019.2 | 1019.2 | 1026.0 | 1031.0 | 1017.5 | 1031.0 |
| 20° | 980.3 | 971.8 | 968.4 | 953.2 | 961.7 | 970.2 | 970.2 | 971.8 |
| 22.5° | 914.2 | 900.7 | 905.8 | 897.3 | 892.2 | 904.1 | 904.1 | 909.2 |
| 25° | 839.8 | 839.8 | 843.1 | 838.1 | 841.5 | 848.2 | 843.1 | 855.0 |
| 27.5° | 768.6 | 775.4 | 775.4 | 768.6 | 772.0 | 792.3 | 800.8 | 787.3 |
| 30° | 702.6 | 704.3 | 709.4 | 706.0 | 716.2 | 722.9 | 721.2 | 731.4 |
| 32.5° | 628.2 | 636.6 | 640.0 | 634.9 | 638.3 | 653.5 | 645.1 | 643.3 |
| 35° | 570.6 | 555.3 | 553.7 | 555.3 | 562.1 | 565.5 | 562.1 | 574.0 |
| 37.5° | 487.6 | 482.5 | 475.7 | 477.5 | 482.5 | 489.3 | 492.7 | 501.1 |
| 40° | 408.0 | 401.2 | 401.2 | 399.6 | 394.5 | 413.1 | 413.1 | 413.1 |
| 42.5° | 338.6 | 336.9 | 328.5 | 328.5 | 335.2 | 340.3 | 336.9 | 348.8 |
| 45° | 277.7 | 270.9 | 265.8 | 265.8 | 270.9 | 270.9 | 276.0 | 274.3 |
| 47.5° | 218.4 | 211.7 | 213.3 | 208.3 | 213.3 | 220.1 | 211.7 | 213.3 |
| 50° | 164.2 | 164.2 | 160.9 | 164.2 | 162.5 | 164.2 | 160.9 | 157.5 |
| 52.5° | 111.8 | 127.0 | 128.7 | 121.9 | 106.7 | 93.1 | 84.6 | 91.4 |
| 55° | 64.3 | 57.6 | 57.6 | 55.9 | 52.5 | 50.8 | 45.7 | 50.8 |
| 57.5° | 32.2 | 28.8 | 28.8 | 28.8 | 27.1 | 25.4 | 22.0 | 22.0 |
| 60° | 13.5 | 11.9 | 11.9 | 10.1 | 8.5 | 6.8 | 5.1 | 6.8 |
| 62.5° | 5.1 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 |
| 65° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 67.5° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 70° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 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)