

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: INVUE

Report Number: P401100

Luminaire Tested: **ENV-SA1B-730-U-T2**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401100
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-SA1B-730-U-T2
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3000K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3107 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

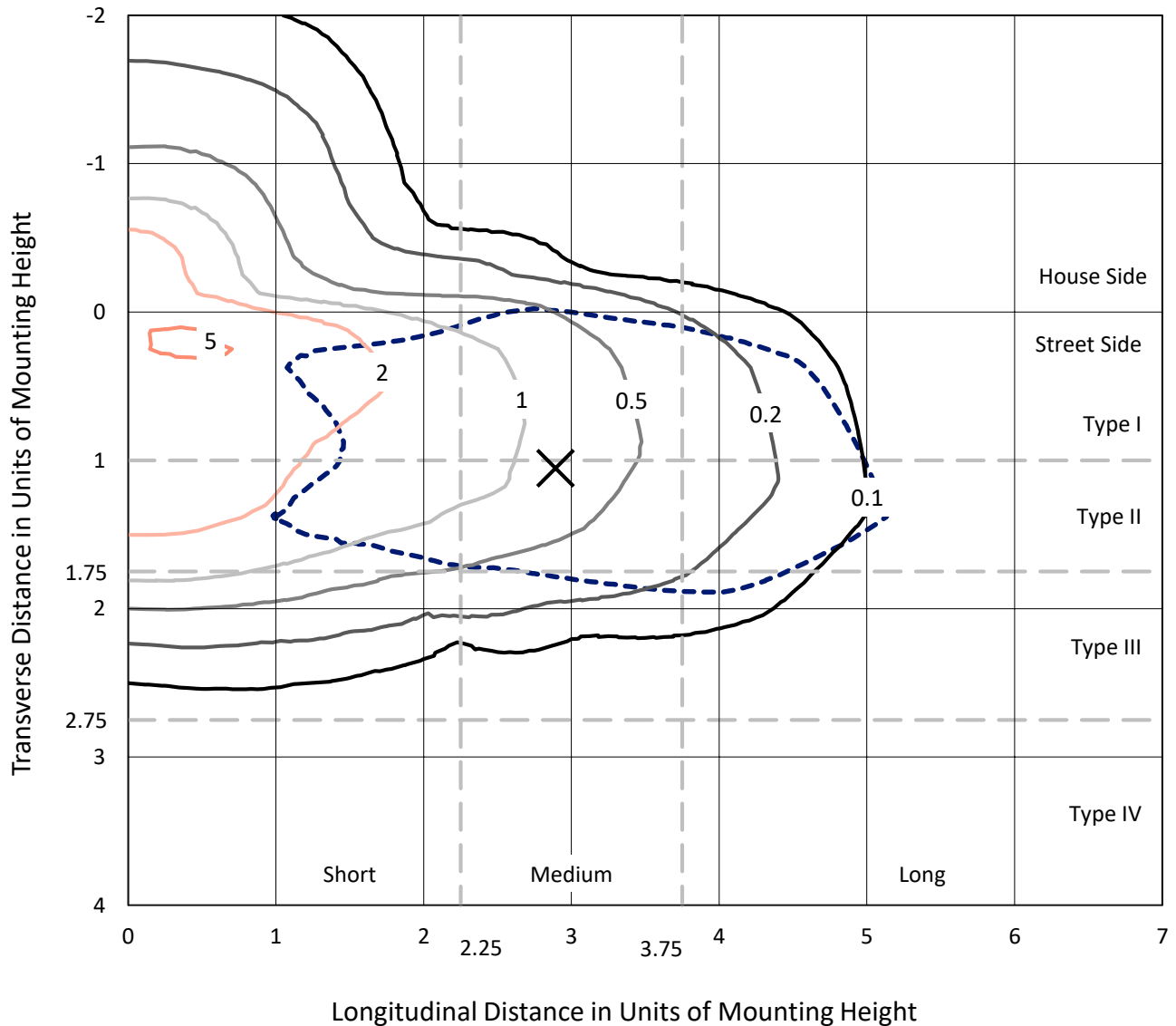
Input Watts (W): 25.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P401100
 CATALOG NUMBER: ENV-SA1B-730-U-T2

Iso-Footcandle Lines of Horizontal Illumination

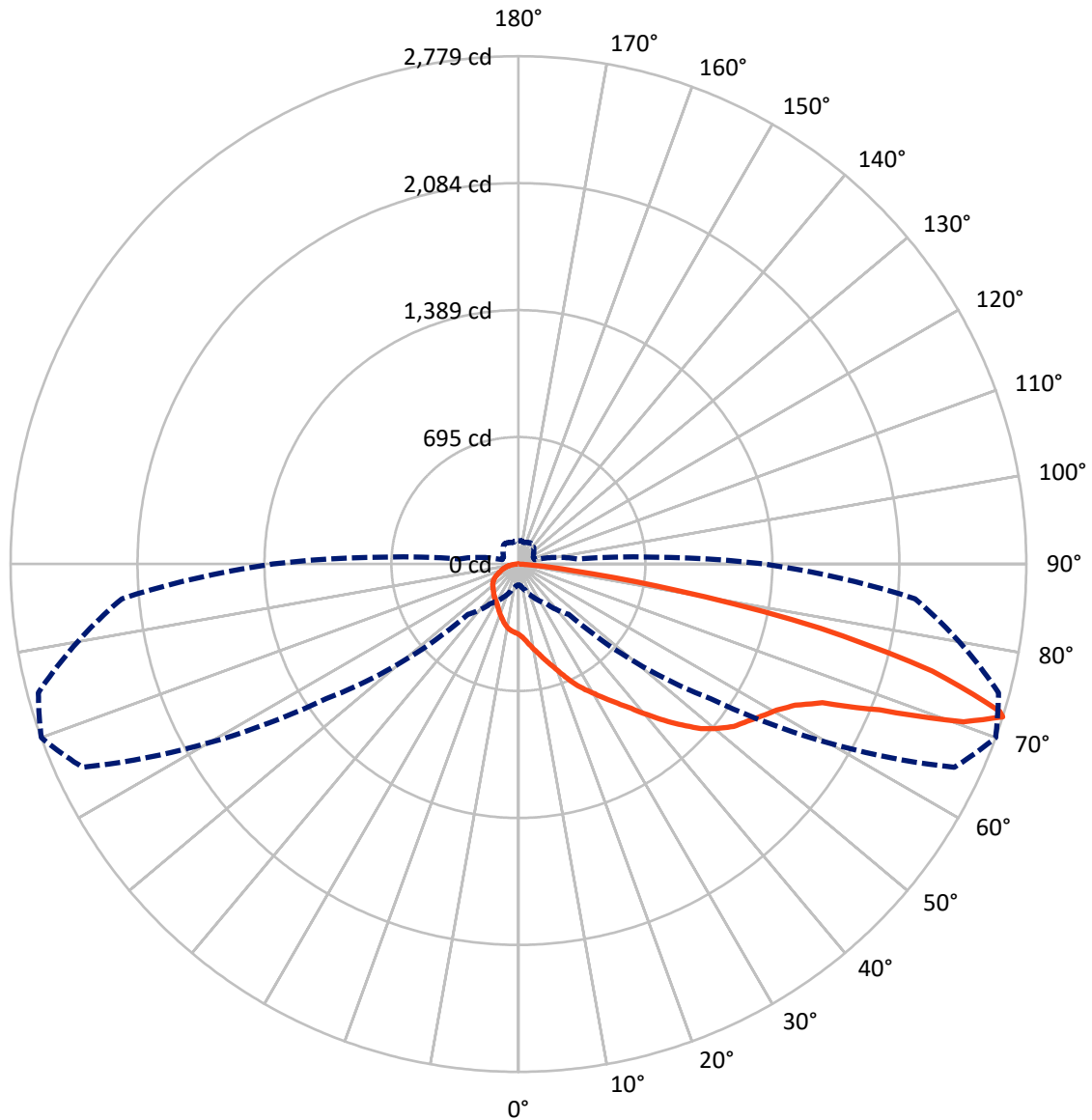
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.4 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P401100
CATALOG NUMBER: ENV-SA1B-730-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P401100

CATALOG NUMBER: ENV-SA1B-730-U-T2

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 577.3 | 0.0 | 577.3 |
| | % Fixture | 18.6 | 0.0 | 18.6 |
| Street Side | Lumens | 2529.7 | 0.0 | 2529.7 |
| | % Fixture | 81.4 | 0.0 | 81.4 |
| Total | Lumens | 3107.0 | 0.0 | 3107.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 38.7 | 1.2 |
| 10°-20° | 124.1 | 4.0 |
| 20°-30° | 219.7 | 7.1 |
| 30°-40° | 326.7 | 10.5 |
| 40°-50° | 473.9 | 15.3 |
| 50°-60° | 647.5 | 20.8 |
| 60°-70° | 708.9 | 22.8 |
| 70°-80° | 504.2 | 16.2 |
| 80°-90° | 63.3 | 2.0 |
| 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°-90° | 3107.0 | 100.0 |
| 0°-180° | 3107.0 | 100.0 |



REPORT NUMBER: P401100

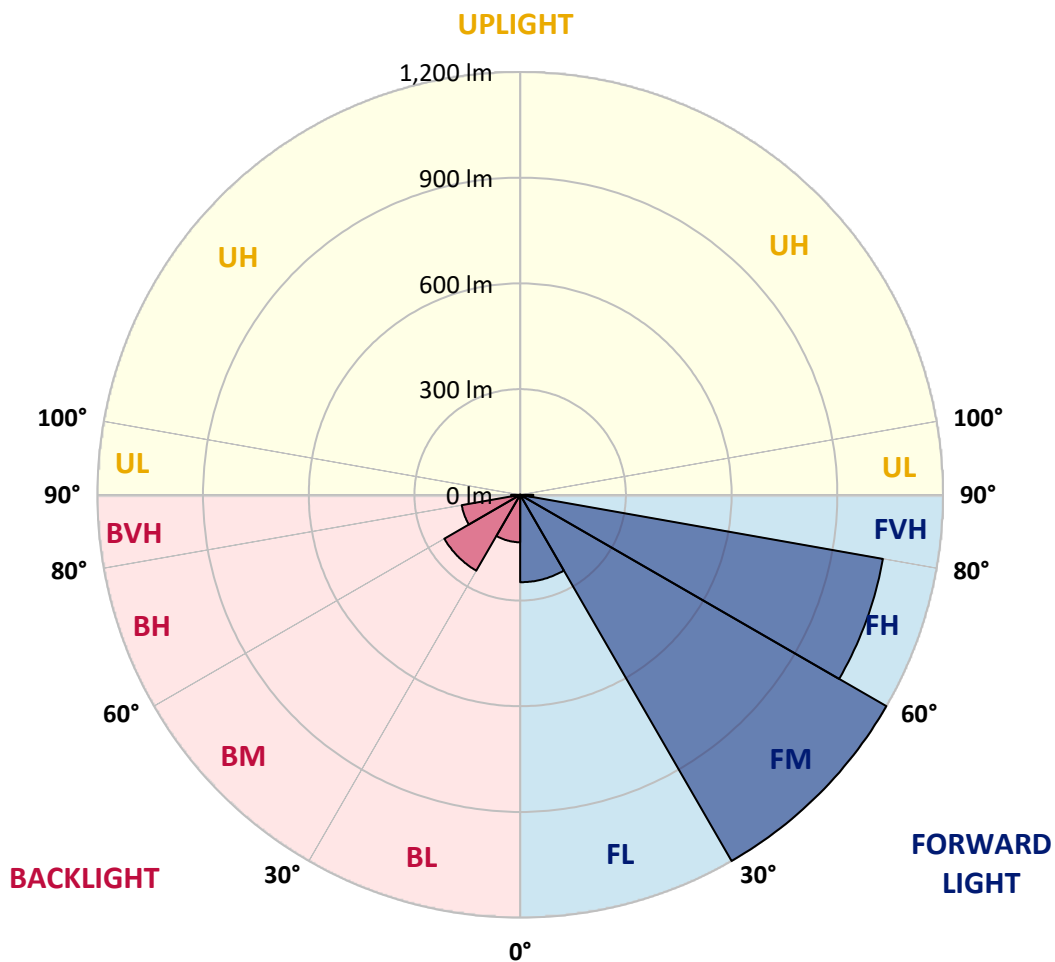
CATALOG NUMBER: ENV-SA1B-730-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 248.0 | 8.0 | | | |
| FM | (30°-60°) | 1199.5 | 38.6 | | | |
| FH | (60°-80°) | 1044.8 | 33.6 | | | G1/1800 |
| FVH | (80°-90°) | 37.4 | 1.2 | | | G1/100 |
| BL | (0°-30°) | 134.5 | 4.3 | B1/500 | | |
| BM | (30°-60°) | 248.6 | 8.0 | B1/1000 | | |
| BH | (60°-80°) | 168.3 | 5.4 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 25.9 | 0.8 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G1

Type III Medium





REPORT NUMBER: P401100

CATALOG NUMBER: ENV-SA1B-730-U-T2

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 70° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 |
| 2.5° | 427.8 | 425.6 | 426.1 | 422.1 | 419.8 | 414.5 | 408.7 | 402.5 | 399.4 | 397.2 | 389.7 |
| 5° | 469.5 | 469.5 | 471.3 | 468.2 | 459.8 | 450.9 | 440.7 | 426.9 | 421.2 | 413.2 | 398.1 |
| 7.5° | 504.2 | 505.1 | 505.1 | 504.2 | 496.6 | 486.9 | 473.5 | 456.7 | 447.4 | 435.8 | 412.3 |
| 10° | 521.9 | 524.1 | 525.9 | 527.2 | 526.4 | 520.6 | 505.5 | 488.2 | 475.3 | 460.2 | 428.7 |
| 12.5° | 530.8 | 531.7 | 534.8 | 541.4 | 546.8 | 551.2 | 540.1 | 519.7 | 506.8 | 488.6 | 446.5 |
| 15° | 540.6 | 540.6 | 543.7 | 552.1 | 562.3 | 574.3 | 573.0 | 557.0 | 543.2 | 520.6 | 469.1 |
| 17.5° | 546.8 | 548.5 | 554.3 | 563.2 | 577.4 | 597.4 | 607.6 | 598.7 | 580.9 | 557.0 | 493.5 |
| 20° | 543.2 | 544.5 | 556.1 | 573.4 | 591.6 | 617.3 | 643.1 | 643.1 | 626.2 | 598.7 | 520.6 |
| 22.5° | 549.9 | 552.1 | 560.1 | 576.5 | 601.4 | 634.6 | 676.8 | 691.4 | 676.8 | 646.6 | 552.1 |
| 25° | 575.6 | 574.7 | 581.4 | 588.0 | 609.3 | 650.6 | 705.7 | 743.4 | 730.1 | 696.8 | 582.7 |
| 27.5° | 612.9 | 612.9 | 616.4 | 616.0 | 623.5 | 663.9 | 730.9 | 789.1 | 778.0 | 738.0 | 608.0 |
| 30° | 655.9 | 656.8 | 655.9 | 655.5 | 654.2 | 682.1 | 753.6 | 829.9 | 824.1 | 784.6 | 631.1 |
| 32.5° | 708.3 | 710.5 | 707.0 | 698.1 | 692.8 | 708.3 | 772.7 | 875.6 | 877.4 | 830.8 | 653.7 |
| 35° | 774.0 | 777.5 | 764.2 | 751.4 | 738.0 | 745.2 | 794.9 | 918.7 | 936.4 | 883.2 | 681.2 |
| 37.5° | 839.7 | 845.5 | 843.2 | 808.6 | 790.0 | 789.5 | 827.7 | 972.4 | 1002.1 | 951.5 | 720.3 |
| 40° | 895.2 | 900.0 | 902.7 | 871.2 | 845.5 | 844.6 | 876.1 | 1028.3 | 1082.9 | 1030.1 | 766.5 |
| 42.5° | 932.0 | 936.4 | 944.4 | 925.8 | 901.8 | 912.9 | 929.3 | 1083.8 | 1169.9 | 1125.9 | 823.3 |
| 45° | 971.9 | 975.5 | 980.4 | 969.7 | 957.3 | 989.2 | 996.8 | 1145.5 | 1256.9 | 1228.9 | 889.8 |
| 47.5° | 1014.5 | 1018.1 | 1020.8 | 1012.8 | 1008.3 | 1053.2 | 1062.9 | 1208.5 | 1344.7 | 1335.4 | 954.6 |
| 50° | 1061.6 | 1062.9 | 1065.6 | 1061.6 | 1062.9 | 1111.3 | 1117.5 | 1264.0 | 1414.4 | 1446.4 | 1022.1 |
| 52.5° | 1142.4 | 1144.1 | 1145.0 | 1125.9 | 1119.3 | 1148.1 | 1161.4 | 1323.0 | 1475.7 | 1538.7 | 1081.6 |
| 55° | 1206.3 | 1212.5 | 1240.4 | 1228.0 | 1212.0 | 1174.3 | 1197.8 | 1370.5 | 1519.1 | 1624.8 | 1143.7 |
| 57.5° | 1153.9 | 1168.1 | 1237.8 | 1296.4 | 1341.2 | 1251.1 | 1240.9 | 1419.3 | 1569.3 | 1698.9 | 1216.0 |
| 60° | 1001.7 | 1022.5 | 1123.7 | 1245.8 | 1390.9 | 1427.3 | 1329.2 | 1480.1 | 1623.9 | 1776.1 | 1293.7 |
| 62.5° | 694.6 | 715.9 | 855.7 | 1050.5 | 1307.0 | 1528.0 | 1571.1 | 1587.9 | 1699.8 | 1855.1 | 1394.9 |
| 65° | 332.9 | 354.6 | 470.0 | 675.5 | 1032.3 | 1463.2 | 1852.9 | 1811.6 | 1827.6 | 1955.4 | 1544.0 |
| 67.5° | 211.7 | 223.2 | 268.5 | 367.9 | 600.5 | 1139.7 | 1954.1 | 2257.2 | 2130.3 | 2186.6 | 1840.9 |
| 70° | 154.9 | 157.6 | 196.6 | 254.7 | 356.4 | 665.7 | 1725.5 | 2683.7 | 2584.3 | 2578.1 | 2199.1 |
| 72° | 114.5 | 118.9 | 149.1 | 203.3 | 263.6 | 389.2 | 1283.9 | 2631.8 | 2778.7 | 2719.6 | 2177.8 |
| 72.5° | 107.8 | 111.4 | 137.6 | 192.2 | 249.0 | 341.7 | 1150.3 | 2571.4 | 2754.7 | 2723.6 | 2136.9 |
| 75° | 78.6 | 81.2 | 94.1 | 136.7 | 192.6 | 197.9 | 614.2 | 1973.6 | 2339.3 | 2600.3 | 1937.2 |
| 77.5° | 54.1 | 55.9 | 62.6 | 83.9 | 131.8 | 134.0 | 260.5 | 1347.4 | 1688.2 | 2079.2 | 1489.9 |
| 80° | 32.8 | 33.7 | 37.7 | 45.7 | 83.9 | 79.4 | 107.4 | 704.3 | 881.0 | 1130.4 | 691.0 |
| 82.5° | 13.8 | 14.2 | 16.4 | 18.2 | 35.5 | 37.7 | 43.5 | 229.9 | 291.6 | 353.3 | 199.3 |
| 85° | 0.0 | 0.0 | 0.4 | 0.4 | 0.9 | 4.0 | 6.2 | 28.4 | 43.0 | 51.5 | 35.9 |
| 87.5° | 0.0 | 0.0 | 0.4 | 0.4 | 0.4 | 0.9 | 0.9 | 1.3 | 1.8 | 1.8 | 2.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P401100

CATALOG NUMBER: ENV-SA1B-730-U-T2

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 | 384.8 |
| 2.5° | 386.1 | 384.3 | 379.0 | 374.6 | 371.0 | 365.3 | 364.8 | 360.4 | 360.4 | 359.0 | 358.2 |
| 5° | 392.3 | 386.6 | 375.9 | 366.1 | 359.0 | 350.6 | 346.6 | 341.7 | 338.6 | 336.8 | 337.3 |
| 7.5° | 400.3 | 390.5 | 372.4 | 355.9 | 342.6 | 332.0 | 325.8 | 321.8 | 319.5 | 318.7 | 318.7 |
| 10° | 411.4 | 396.3 | 366.6 | 341.7 | 324.9 | 316.9 | 313.8 | 313.3 | 313.8 | 314.2 | 314.7 |
| 12.5° | 423.8 | 400.3 | 355.9 | 324.9 | 311.6 | 308.4 | 310.2 | 314.2 | 317.8 | 319.1 | 319.1 |
| 15° | 436.7 | 403.0 | 341.3 | 309.3 | 301.3 | 304.5 | 310.7 | 318.2 | 324.0 | 327.5 | 328.4 |
| 17.5° | 450.0 | 403.4 | 325.8 | 295.1 | 292.5 | 300.5 | 311.6 | 323.5 | 332.9 | 338.6 | 339.5 |
| 20° | 464.2 | 402.5 | 307.6 | 282.3 | 283.6 | 296.9 | 312.4 | 328.9 | 341.3 | 348.8 | 349.7 |
| 22.5° | 479.8 | 399.0 | 289.8 | 269.8 | 276.0 | 293.4 | 311.6 | 330.6 | 343.9 | 352.8 | 354.6 |
| 25° | 494.8 | 391.9 | 272.1 | 258.7 | 270.7 | 289.8 | 307.1 | 323.5 | 336.4 | 344.8 | 347.1 |
| 27.5° | 502.8 | 376.8 | 255.2 | 250.3 | 266.7 | 284.5 | 296.9 | 308.0 | 315.1 | 320.4 | 322.6 |
| 30° | 504.2 | 355.5 | 241.4 | 244.5 | 262.3 | 276.9 | 284.0 | 285.8 | 284.5 | 286.3 | 284.0 |
| 32.5° | 501.5 | 332.4 | 230.3 | 240.1 | 255.2 | 266.3 | 268.1 | 262.7 | 254.7 | 243.6 | 244.1 |
| 35° | 499.7 | 307.1 | 221.5 | 233.9 | 245.9 | 253.0 | 249.9 | 241.4 | 226.3 | 213.0 | 212.1 |
| 37.5° | 502.8 | 284.0 | 213.9 | 225.9 | 233.9 | 237.0 | 232.6 | 221.5 | 208.1 | 196.6 | 195.3 |
| 40° | 511.7 | 267.2 | 206.8 | 217.0 | 221.0 | 223.2 | 217.9 | 208.1 | 202.8 | 194.4 | 193.1 |
| 42.5° | 529.0 | 255.6 | 200.2 | 207.3 | 209.0 | 211.3 | 205.9 | 199.3 | 204.2 | 202.4 | 202.4 |
| 45° | 553.0 | 250.3 | 194.4 | 197.9 | 199.7 | 203.3 | 200.2 | 194.4 | 199.7 | 189.5 | 187.7 |
| 47.5° | 584.0 | 252.1 | 190.4 | 188.6 | 193.9 | 200.2 | 196.6 | 189.5 | 187.7 | 169.5 | 166.4 |
| 50° | 616.9 | 261.4 | 186.4 | 181.1 | 187.7 | 196.2 | 191.7 | 180.6 | 170.0 | 160.7 | 158.9 |
| 52.5° | 655.5 | 276.9 | 182.8 | 172.6 | 180.6 | 191.7 | 188.6 | 176.6 | 165.5 | 158.9 | 157.6 |
| 55° | 698.1 | 292.0 | 178.4 | 162.9 | 171.3 | 190.4 | 189.5 | 174.0 | 159.3 | 156.2 | 155.3 |
| 57.5° | 746.0 | 304.5 | 173.1 | 151.8 | 162.0 | 186.4 | 185.5 | 167.8 | 157.6 | 154.9 | 154.4 |
| 60° | 806.0 | 319.1 | 163.8 | 138.9 | 152.7 | 178.9 | 178.0 | 164.7 | 153.6 | 151.3 | 150.5 |
| 62.5° | 887.6 | 346.2 | 147.8 | 126.9 | 142.9 | 165.5 | 170.9 | 158.4 | 147.8 | 147.3 | 147.3 |
| 65° | 1022.1 | 398.5 | 131.4 | 116.7 | 131.8 | 152.7 | 161.5 | 151.3 | 142.5 | 144.7 | 144.7 |
| 67.5° | 1276.4 | 469.1 | 114.5 | 107.0 | 121.2 | 140.2 | 153.6 | 144.2 | 136.7 | 141.1 | 141.1 |
| 70° | 1472.5 | 442.9 | 101.2 | 97.6 | 110.5 | 129.1 | 143.3 | 136.7 | 129.6 | 137.1 | 136.2 |
| 72° | 1343.4 | 324.4 | 92.3 | 90.1 | 101.6 | 119.8 | 134.5 | 129.6 | 122.0 | 128.3 | 126.5 |
| 72.5° | 1289.7 | 294.7 | 89.6 | 87.9 | 99.0 | 118.1 | 132.7 | 127.8 | 119.8 | 126.0 | 123.4 |
| 75° | 1125.0 | 248.5 | 78.1 | 77.2 | 87.9 | 106.1 | 121.2 | 118.5 | 110.5 | 114.1 | 111.4 |
| 77.5° | 931.1 | 209.5 | 65.7 | 67.5 | 75.0 | 94.5 | 109.2 | 106.5 | 99.0 | 98.5 | 98.1 |
| 80° | 436.7 | 116.7 | 54.1 | 55.5 | 63.0 | 80.8 | 94.1 | 92.3 | 85.2 | 84.3 | 83.0 |
| 82.5° | 126.5 | 55.9 | 41.7 | 42.6 | 50.6 | 66.1 | 80.8 | 79.9 | 74.6 | 73.2 | 70.1 |
| 85° | 23.5 | 18.2 | 22.6 | 26.6 | 36.8 | 55.0 | 73.7 | 71.9 | 63.9 | 58.1 | 53.7 |
| 87.5° | 1.3 | 3.6 | 7.5 | 12.9 | 23.5 | 41.3 | 59.5 | 58.1 | 51.0 | 43.9 | 44.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)