

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: STREETWORKS

Report Number: P798847

Luminaire Tested: **ARCH1-40-727-U-5WQ**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798847
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-14)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-40-727-U-5WQ
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1220mA LIGHTSQUARE WITH 10 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5431 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type V - Medium
BUG Rating: B3 - U0 - G1

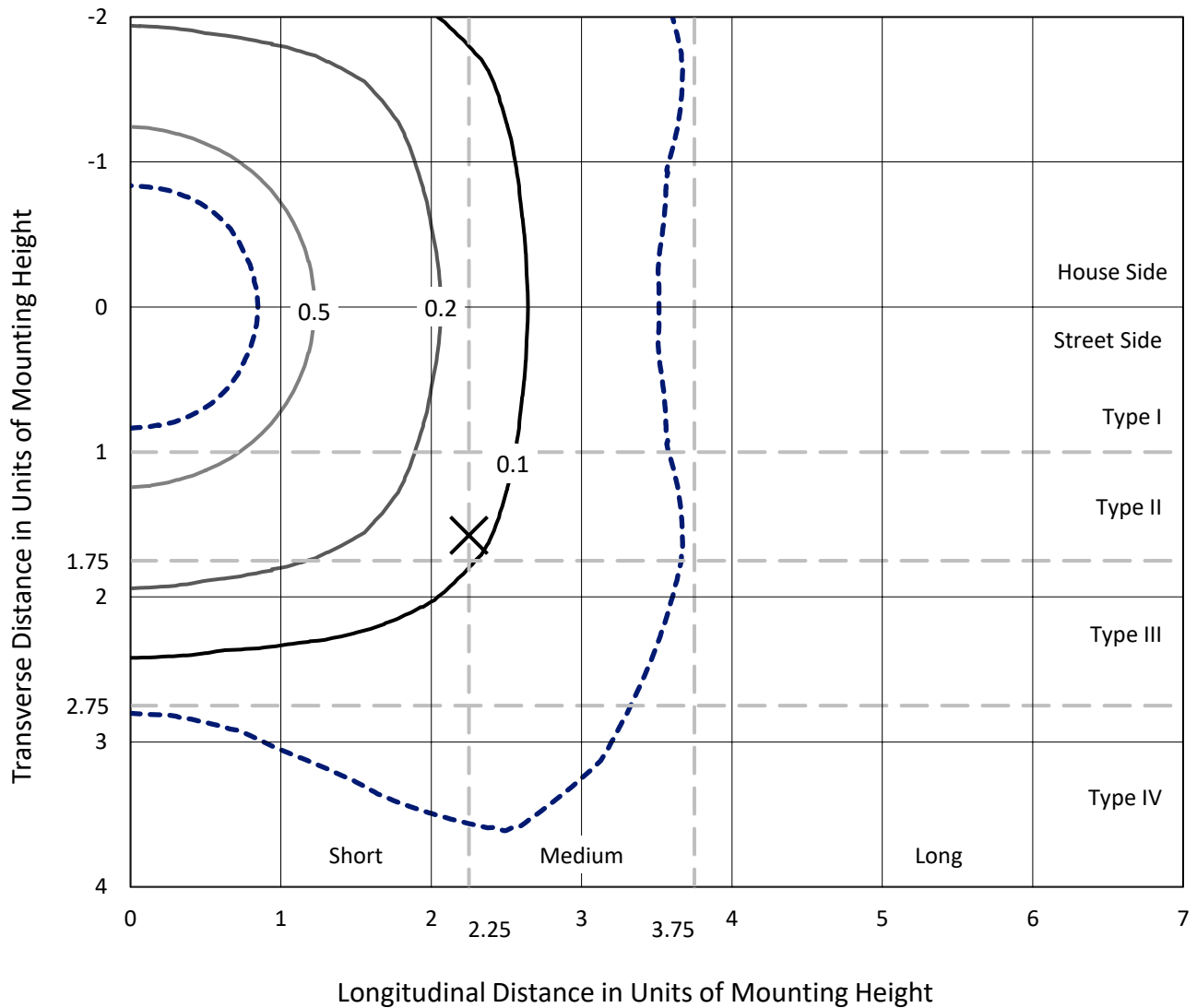
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

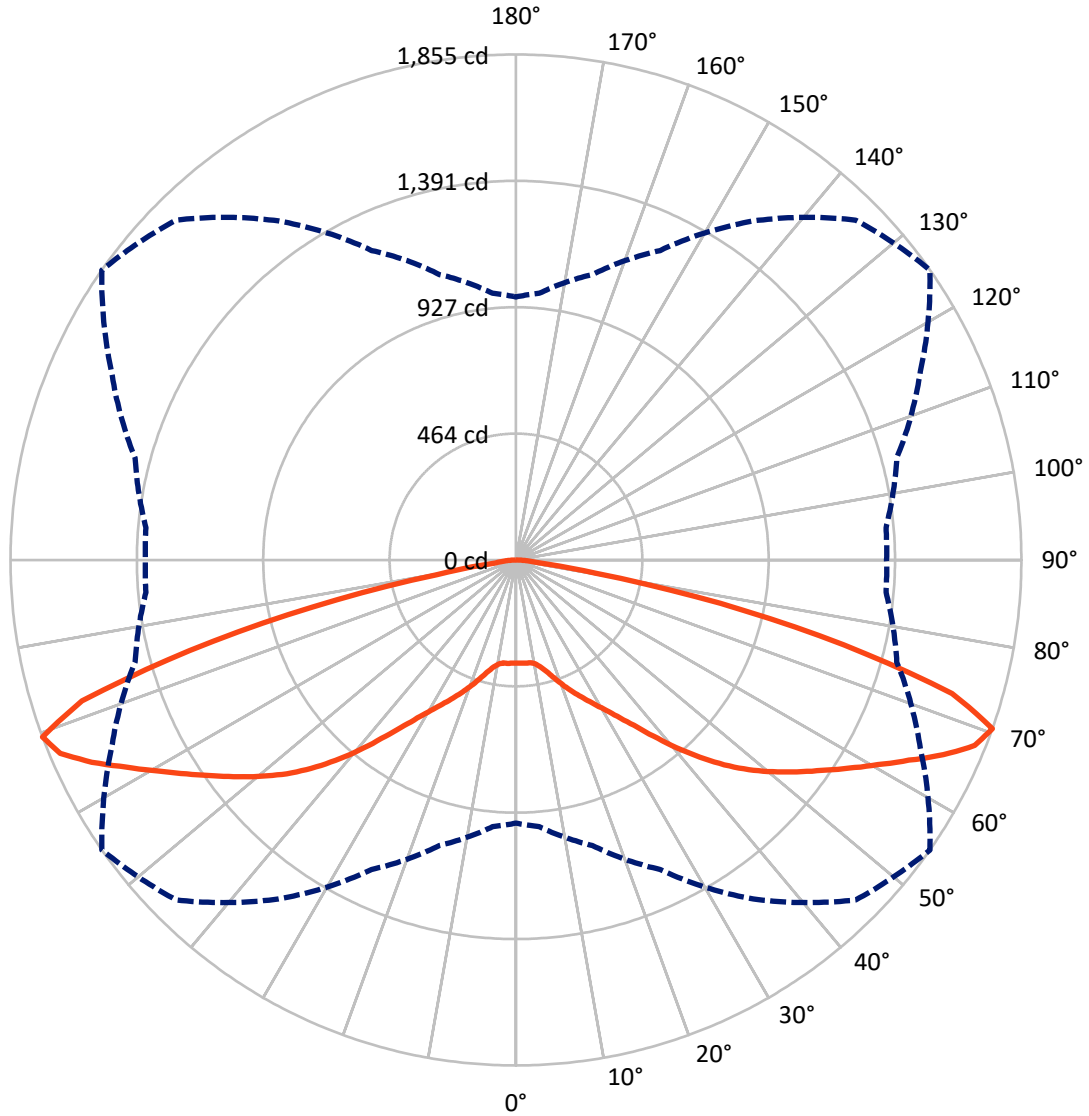
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc
 Type V - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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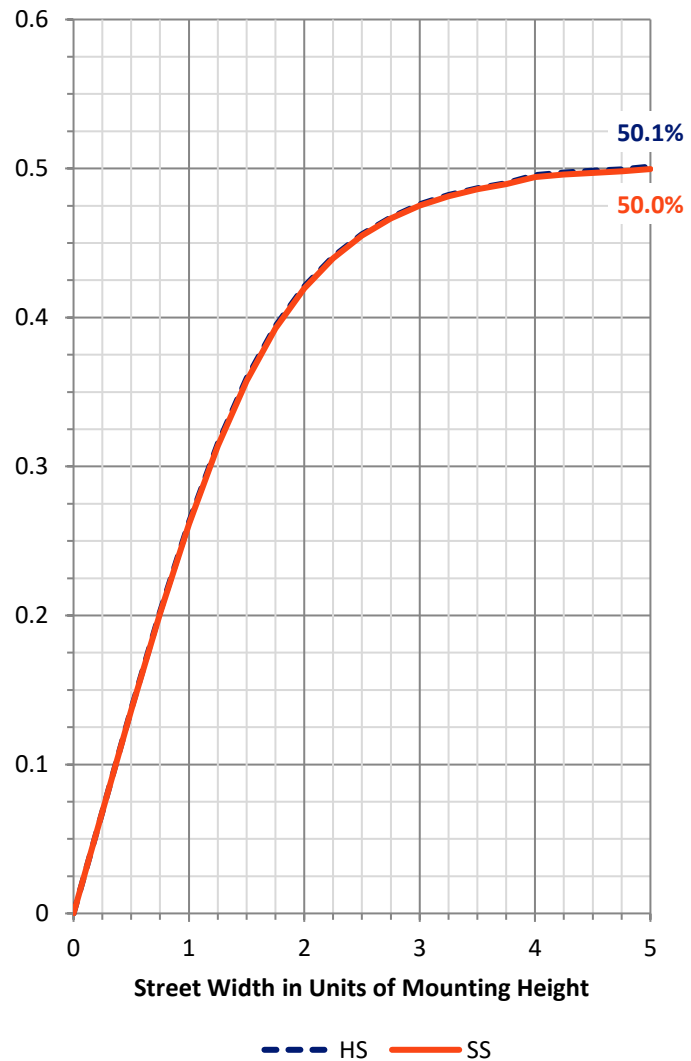
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2715.5 | 0.0 | 2715.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 2715.5 | 0.0 | 2715.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 5431.0 | 0.0 | 5431.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 36.5 | 0.7 |
| 10°-20° | 124.4 | 2.3 |
| 20°-30° | 258.5 | 4.8 |
| 30°-40° | 477.4 | 8.8 |
| 40°-50° | 838.7 | 15.4 |
| 50°-60° | 1209.5 | 22.3 |
| 60°-70° | 1480.3 | 27.3 |
| 70°-80° | 942.0 | 17.3 |
| 80°-90° | 63.7 | 1.2 |
| 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°-90° | 5431.0 | 100.0 |
| 0°-180° | 5431.0 | 100.0 |

Coefficient of Utilization



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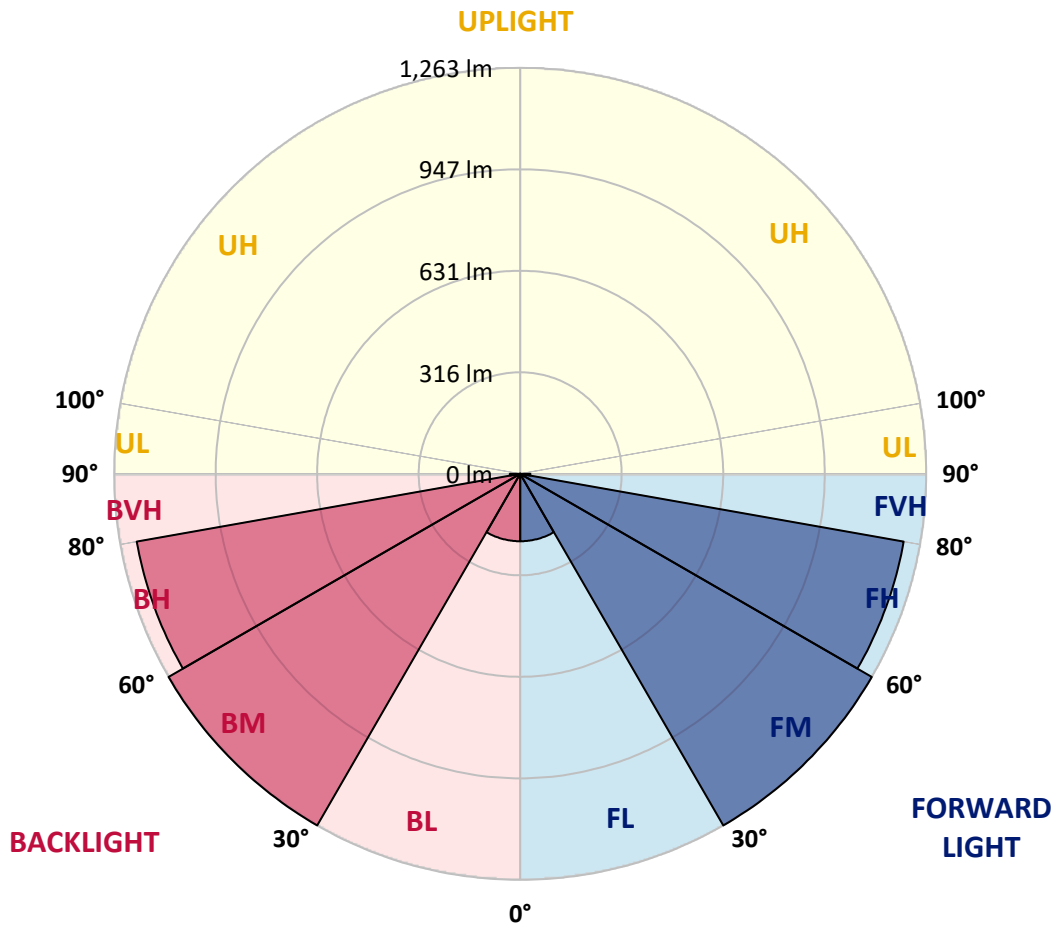
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 209.7 | 3.9 | | | |
| FM (30°-60°) | 1262.8 | 23.3 | | | |
| FH (60°-80°) | 1211.1 | 22.3 | | | G1/1800 |
| FVH (80°-90°) | 31.9 | 0.6 | | | G1/100 |
| BL (0°-30°) | 209.7 | 3.9 | B1/500 | | |
| BM (30°-60°) | 1262.8 | 23.3 | B2/2500 | | |
| BH (60°-80°) | 1211.1 | 22.3 | B3/2500 | | G1/1800 |
| BVH (80°-90°) | 31.9 | 0.6 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G1

Type V Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 378.6 | 378.6 | 378.6 | 378.6 | 378.6 | 378.6 | 378.6 | 378.6 | 378.6 | 378.6 | 378.6 |
| 2.5° | 383.6 | 383.6 | 382.6 | 382.6 | 380.6 | 379.6 | 378.6 | 378.6 | 377.6 | 377.6 | 376.6 |
| 5° | 385.7 | 385.7 | 385.7 | 384.6 | 383.6 | 382.6 | 380.6 | 378.6 | 377.6 | 376.6 | 375.6 |
| 7.5° | 386.7 | 386.7 | 385.7 | 385.7 | 384.6 | 383.6 | 380.6 | 377.6 | 376.6 | 375.6 | 375.6 |
| 10° | 394.7 | 393.7 | 392.7 | 390.7 | 390.7 | 390.7 | 386.7 | 383.6 | 382.6 | 382.6 | 382.6 |
| 12.5° | 413.9 | 412.9 | 410.9 | 407.9 | 407.9 | 408.9 | 402.8 | 398.8 | 398.8 | 397.8 | 397.8 |
| 15° | 442.2 | 441.2 | 439.2 | 434.1 | 433.1 | 435.1 | 426.0 | 422.0 | 422.0 | 422.0 | 421.0 |
| 17.5° | 473.5 | 471.5 | 468.4 | 464.4 | 464.4 | 464.4 | 455.3 | 450.3 | 447.2 | 447.2 | 446.2 |
| 20° | 499.7 | 498.7 | 498.7 | 497.7 | 500.8 | 500.8 | 488.6 | 480.6 | 473.5 | 469.5 | 468.4 |
| 22.5° | 523.0 | 522.0 | 524.0 | 528.0 | 534.1 | 536.1 | 522.0 | 509.8 | 498.7 | 490.7 | 488.6 |
| 25° | 554.3 | 553.2 | 552.2 | 558.3 | 568.4 | 571.4 | 556.3 | 541.1 | 530.0 | 526.0 | 524.0 |
| 27.5° | 587.6 | 588.6 | 589.6 | 595.7 | 603.7 | 608.8 | 593.6 | 579.5 | 570.4 | 564.4 | 562.3 |
| 30° | 624.9 | 626.9 | 630.0 | 639.1 | 645.1 | 647.1 | 634.0 | 623.9 | 615.8 | 610.8 | 607.8 |
| 32.5° | 672.4 | 676.4 | 680.5 | 688.5 | 691.6 | 689.5 | 683.5 | 676.4 | 670.4 | 663.3 | 662.3 |
| 35° | 743.0 | 747.1 | 746.1 | 749.1 | 750.1 | 748.1 | 745.1 | 741.0 | 738.0 | 728.9 | 727.9 |
| 37.5° | 831.9 | 835.9 | 829.9 | 826.8 | 819.8 | 820.8 | 819.8 | 822.8 | 823.8 | 814.7 | 813.7 |
| 40° | 921.7 | 925.8 | 917.7 | 909.6 | 902.6 | 899.5 | 904.6 | 914.7 | 914.7 | 908.6 | 908.6 |
| 42.5° | 1017.7 | 1020.7 | 1007.6 | 997.5 | 988.4 | 986.4 | 989.4 | 1001.5 | 1004.5 | 1003.5 | 1003.5 |
| 45° | 1113.6 | 1111.5 | 1094.4 | 1084.3 | 1076.2 | 1071.2 | 1072.2 | 1081.3 | 1087.3 | 1090.3 | 1090.3 |
| 47.5° | 1187.3 | 1184.2 | 1170.1 | 1162.0 | 1157.0 | 1149.9 | 1149.9 | 1155.0 | 1158.0 | 1159.0 | 1159.0 |
| 50° | 1245.8 | 1242.8 | 1228.7 | 1227.6 | 1227.6 | 1224.6 | 1221.6 | 1220.6 | 1218.6 | 1219.6 | 1219.6 |
| 52.5° | 1296.3 | 1292.3 | 1282.2 | 1284.2 | 1293.3 | 1295.3 | 1291.3 | 1283.2 | 1275.1 | 1272.1 | 1273.1 |
| 55° | 1350.8 | 1344.8 | 1336.7 | 1342.7 | 1360.9 | 1369.0 | 1362.9 | 1346.8 | 1332.6 | 1323.6 | 1323.6 |
| 57.5° | 1394.2 | 1387.2 | 1387.2 | 1404.3 | 1437.6 | 1453.8 | 1440.7 | 1410.4 | 1386.2 | 1376.1 | 1377.1 |
| 60° | 1363.9 | 1357.9 | 1382.1 | 1457.8 | 1520.4 | 1547.7 | 1525.5 | 1472.0 | 1432.6 | 1420.5 | 1422.5 |
| 62.5° | 1304.4 | 1300.3 | 1330.6 | 1447.7 | 1595.1 | 1651.7 | 1618.4 | 1541.6 | 1483.1 | 1468.9 | 1468.9 |
| 65° | 1216.5 | 1215.5 | 1257.9 | 1402.3 | 1612.3 | 1751.6 | 1723.4 | 1617.3 | 1541.6 | 1522.4 | 1526.5 |
| 67.5° | 1125.7 | 1125.7 | 1164.0 | 1324.6 | 1592.1 | 1794.0 | 1816.2 | 1686.0 | 1569.9 | 1522.4 | 1523.5 |
| 70° | 965.2 | 982.3 | 1084.3 | 1252.9 | 1518.4 | 1763.7 | 1854.6 | 1637.5 | 1446.7 | 1362.9 | 1359.9 |
| 72.5° | 636.0 | 658.2 | 861.2 | 1127.7 | 1445.7 | 1653.7 | 1673.9 | 1438.6 | 1201.4 | 1103.5 | 1098.4 |
| 75° | 383.6 | 402.8 | 558.3 | 880.4 | 1271.1 | 1331.6 | 1242.8 | 1127.7 | 897.5 | 820.8 | 820.8 |
| 77.5° | 113.1 | 126.2 | 257.4 | 558.3 | 879.3 | 875.3 | 766.3 | 664.3 | 531.0 | 451.3 | 457.3 |
| 80° | 66.6 | 68.7 | 83.8 | 254.4 | 364.5 | 383.6 | 295.8 | 184.8 | 184.8 | 137.3 | 133.3 |
| 82.5° | 51.5 | 51.5 | 53.5 | 63.6 | 87.8 | 97.9 | 74.7 | 63.6 | 72.7 | 61.6 | 58.6 |
| 85° | 36.3 | 36.3 | 36.3 | 37.4 | 38.4 | 39.4 | 41.4 | 42.4 | 46.4 | 38.4 | 36.3 |
| 87.5° | 11.1 | 12.1 | 13.1 | 15.1 | 18.2 | 19.2 | 20.2 | 18.2 | 18.2 | 17.2 | 16.2 |
| 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)