

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: P236727

Luminaire Tested: **ARCH-L-AF72-140-D-U-5WQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236727
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29597)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-140-D-U-5WQ
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19949.6 lumens
Efficiency: N/A
Efficacy: 139.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 143
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: 28.75 FT

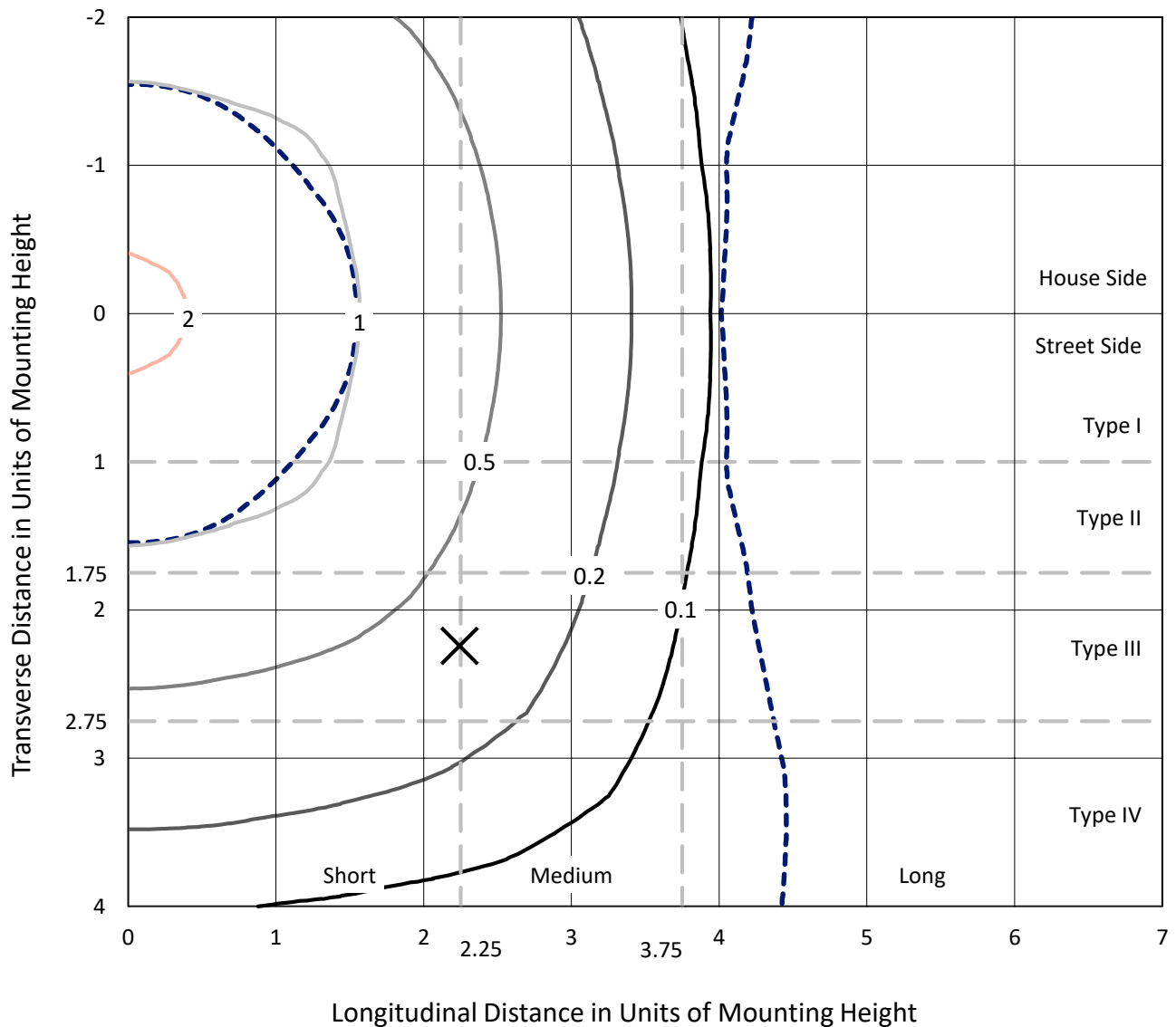


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

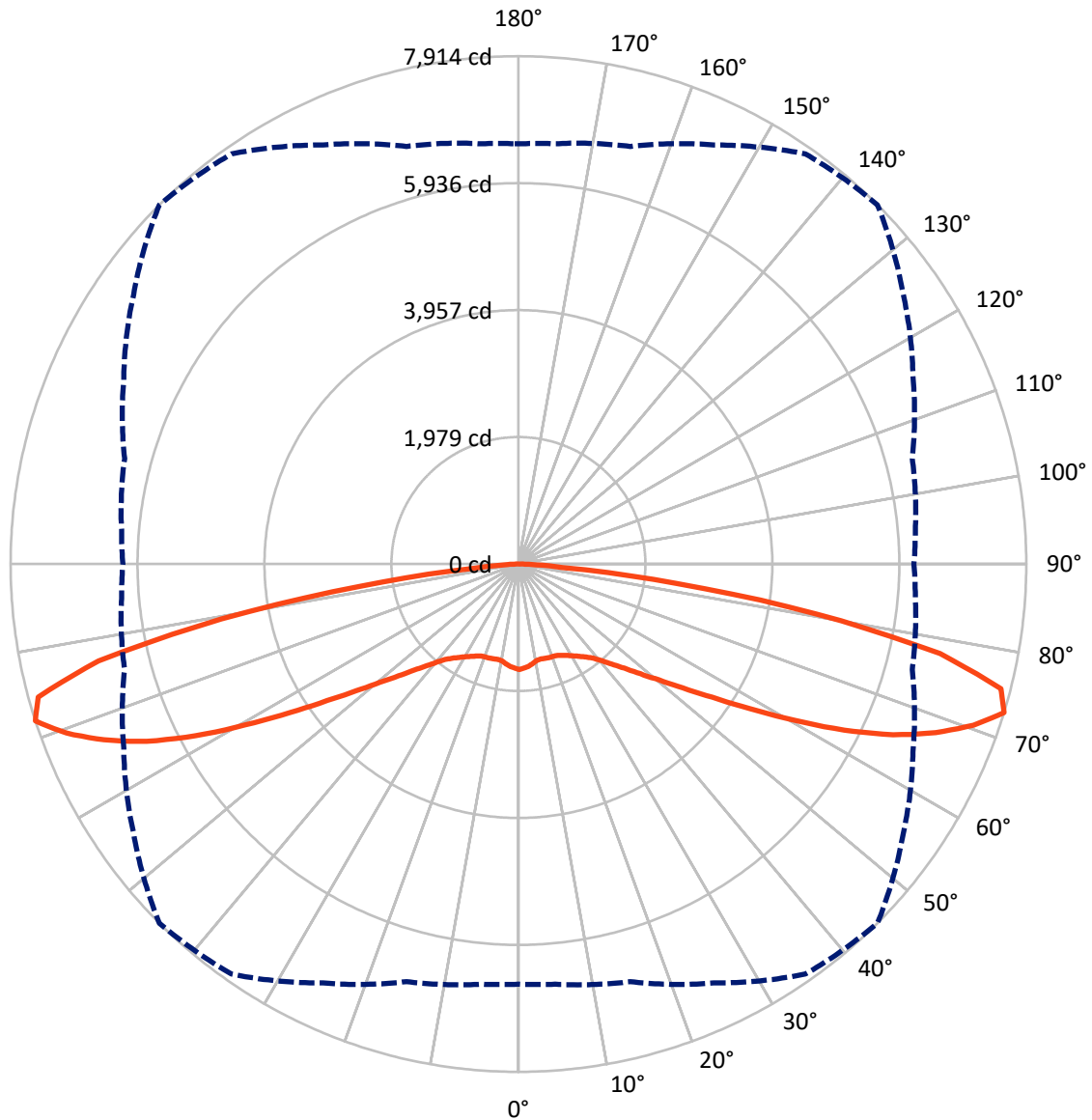


Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9974.8 | 0.0 | 9974.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 9974.8 | 0.0 | 9974.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 19949.6 | 0.0 | 19949.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 151.3 | 0.8 |
| 10°-20° | 436.5 | 2.2 |
| 20°-30° | 730.5 | 3.7 |
| 30°-40° | 1122.4 | 5.6 |
| 40°-50° | 1858.5 | 9.3 |
| 50°-60° | 3304.0 | 16.6 |
| 60°-70° | 5780.4 | 29.0 |
| 70°-80° | 5881.1 | 29.5 |
| 80°-90° | 684.8 | 3.4 |
| 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° | 19949.6 | 100.0 |
| 0°-180° | 19949.6 | 100.0 |



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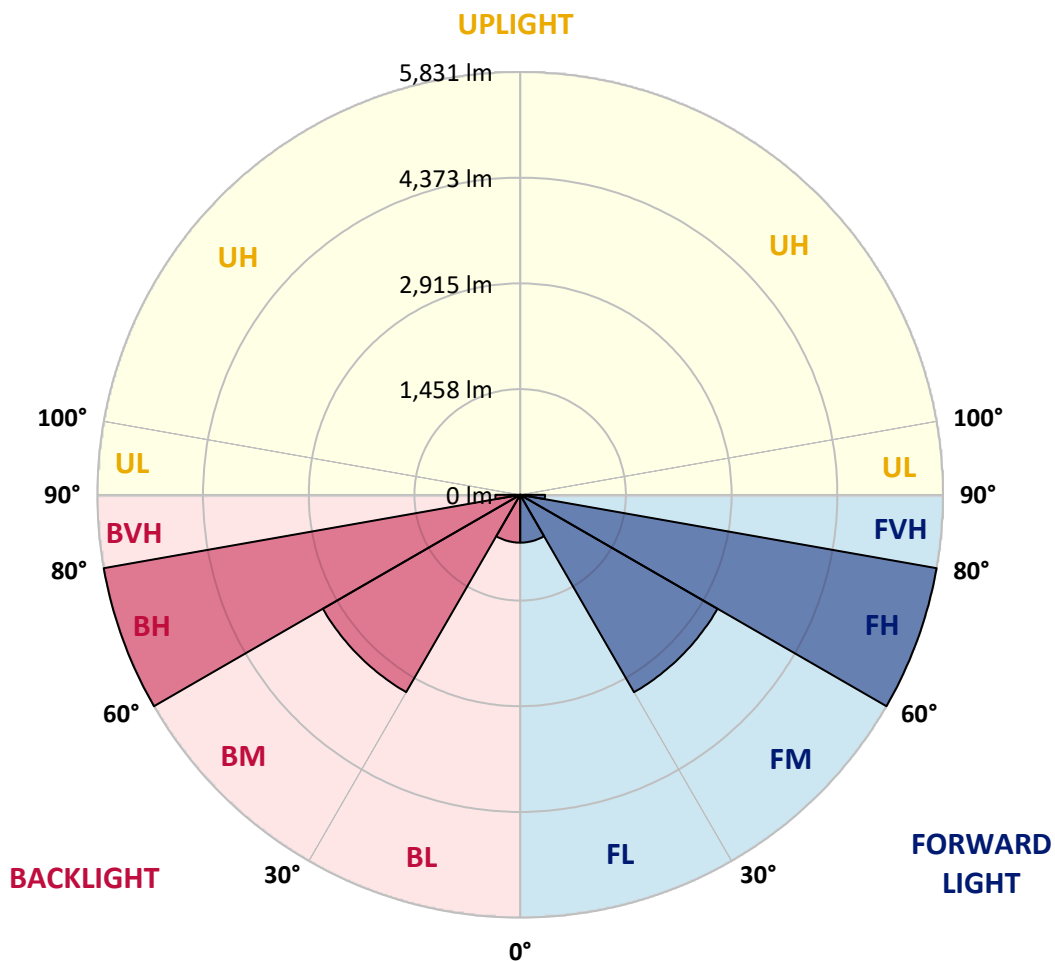
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 659.2 | 3.3 | | | |
| FM | (30°-60°) | 3142.5 | 15.8 | | | |
| FH | (60°-80°) | 5830.7 | 29.2 | | | G3/7500 |
| FVH | (80°-90°) | 342.4 | 1.7 | | | G3/500 |
| BL | (0°-30°) | 659.2 | 3.3 | B2/1000 | | |
| BM | (30°-60°) | 3142.5 | 15.8 | B3/5000 | | |
| BH | (60°-80°) | 5830.7 | 29.2 | B5 | | G3/7500 |
| BVH | (80°-90°) | 342.4 | 1.7 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1644.3 | 1644.3 | 1644.3 | 1644.3 | 1644.3 | 1644.3 | 1644.3 | 1644.3 | 1644.3 | 1644.3 | 1644.3 |
| 2.5° | 1629.2 | 1632.9 | 1625.4 | 1625.4 | 1625.4 | 1621.5 | 1625.4 | 1621.5 | 1625.4 | 1629.2 | 1629.2 |
| 5° | 1613.9 | 1613.9 | 1606.3 | 1606.3 | 1606.3 | 1602.6 | 1606.3 | 1606.3 | 1610.1 | 1613.9 | 1613.9 |
| 7.5° | 1579.7 | 1579.7 | 1576.0 | 1572.2 | 1568.4 | 1568.4 | 1572.2 | 1572.2 | 1576.0 | 1579.7 | 1579.7 |
| 10° | 1560.7 | 1556.9 | 1549.4 | 1538.0 | 1534.2 | 1530.3 | 1538.0 | 1545.6 | 1556.9 | 1568.4 | 1564.6 |
| 12.5° | 1553.1 | 1549.4 | 1534.2 | 1522.8 | 1515.2 | 1519.0 | 1526.5 | 1534.2 | 1553.1 | 1564.6 | 1560.7 |
| 15° | 1560.7 | 1553.1 | 1534.2 | 1515.2 | 1519.0 | 1526.5 | 1534.2 | 1534.2 | 1556.9 | 1568.4 | 1568.4 |
| 17.5° | 1560.7 | 1556.9 | 1534.2 | 1519.0 | 1522.8 | 1534.2 | 1538.0 | 1534.2 | 1553.1 | 1572.2 | 1572.2 |
| 20° | 1564.6 | 1564.6 | 1534.2 | 1522.8 | 1526.5 | 1538.0 | 1541.8 | 1538.0 | 1553.1 | 1576.0 | 1576.0 |
| 22.5° | 1572.2 | 1568.4 | 1538.0 | 1530.3 | 1538.0 | 1545.6 | 1549.4 | 1545.6 | 1560.7 | 1579.7 | 1583.5 |
| 25° | 1587.3 | 1579.7 | 1553.1 | 1549.4 | 1564.6 | 1576.0 | 1576.0 | 1568.4 | 1576.0 | 1595.0 | 1595.0 |
| 27.5° | 1606.3 | 1602.6 | 1572.2 | 1572.2 | 1591.1 | 1613.9 | 1602.6 | 1587.3 | 1595.0 | 1613.9 | 1613.9 |
| 30° | 1640.5 | 1636.7 | 1606.3 | 1606.3 | 1632.9 | 1659.5 | 1632.9 | 1613.9 | 1625.4 | 1644.3 | 1648.1 |
| 32.5° | 1689.9 | 1689.9 | 1663.3 | 1655.7 | 1701.3 | 1712.6 | 1701.3 | 1663.3 | 1670.9 | 1697.5 | 1697.5 |
| 35° | 1773.4 | 1765.8 | 1739.2 | 1735.4 | 1781.1 | 1777.2 | 1773.4 | 1739.2 | 1746.8 | 1777.2 | 1777.2 |
| 37.5° | 1883.6 | 1879.8 | 1857.0 | 1845.6 | 1868.3 | 1853.2 | 1860.7 | 1845.6 | 1864.5 | 1887.3 | 1891.1 |
| 40° | 2024.0 | 2020.2 | 2001.3 | 1986.1 | 1993.6 | 1970.9 | 1978.5 | 1986.1 | 2005.1 | 2020.2 | 2024.0 |
| 42.5° | 2198.7 | 2198.7 | 2179.7 | 2153.2 | 2141.8 | 2130.4 | 2130.4 | 2145.5 | 2164.6 | 2183.6 | 2183.6 |
| 45° | 2415.2 | 2415.2 | 2392.4 | 2365.9 | 2331.6 | 2312.7 | 2320.3 | 2335.5 | 2358.2 | 2381.0 | 2388.6 |
| 47.5° | 2669.6 | 2669.6 | 2639.2 | 2612.6 | 2578.4 | 2555.7 | 2555.7 | 2563.3 | 2597.5 | 2616.5 | 2627.9 |
| 50° | 2954.5 | 2943.0 | 2912.6 | 2886.1 | 2867.1 | 2836.7 | 2840.5 | 2836.7 | 2867.1 | 2893.7 | 2901.3 |
| 52.5° | 3250.6 | 3246.8 | 3216.5 | 3208.9 | 3220.2 | 3205.1 | 3205.1 | 3167.1 | 3178.5 | 3193.7 | 3189.9 |
| 55° | 3619.0 | 3607.6 | 3581.0 | 3596.2 | 3641.8 | 3664.6 | 3656.9 | 3596.2 | 3562.0 | 3569.6 | 3565.8 |
| 57.5° | 4021.5 | 4010.2 | 4002.5 | 4048.1 | 4150.6 | 4245.6 | 4226.6 | 4086.1 | 4021.5 | 4025.3 | 4029.1 |
| 60° | 4431.6 | 4431.6 | 4454.4 | 4568.4 | 4788.6 | 4944.3 | 4887.4 | 4651.9 | 4538.0 | 4515.2 | 4507.6 |
| 62.5° | 4853.2 | 4864.5 | 4913.9 | 5103.8 | 5441.8 | 5700.0 | 5555.7 | 5221.6 | 5050.6 | 5005.1 | 4989.9 |
| 65° | 5343.1 | 5354.4 | 5426.7 | 5662.0 | 6110.2 | 6417.8 | 6171.0 | 5855.7 | 5616.5 | 5521.6 | 5506.3 |
| 67.5° | 6053.2 | 6060.8 | 6117.8 | 6345.6 | 6767.1 | 7014.0 | 6759.6 | 6478.6 | 6220.3 | 6110.2 | 6102.5 |
| 70° | 6691.1 | 6698.8 | 6748.1 | 7048.1 | 7435.4 | 7522.8 | 7241.8 | 6884.9 | 6615.2 | 6527.9 | 6512.7 |
| 72.5° | 6546.9 | 6573.5 | 6736.7 | 7203.8 | 7800.0 | 7914.0 | 7321.6 | 6786.1 | 6353.1 | 6208.9 | 6163.3 |
| 75° | 5491.2 | 5532.9 | 5791.1 | 6493.7 | 7443.1 | 7765.8 | 6850.7 | 5867.1 | 5221.6 | 4944.3 | 4872.2 |
| 77.5° | 3205.1 | 3360.8 | 3805.1 | 4705.1 | 6060.8 | 6717.7 | 5643.1 | 4295.0 | 3208.9 | 2753.2 | 2601.3 |
| 80° | 877.2 | 960.8 | 1283.6 | 2164.6 | 3801.3 | 4705.1 | 3600.0 | 1970.9 | 1063.3 | 797.5 | 740.5 |
| 82.5° | 277.2 | 368.4 | 467.1 | 622.8 | 1492.4 | 2479.7 | 1336.7 | 581.0 | 455.7 | 375.9 | 334.2 |
| 85° | 148.1 | 159.5 | 262.0 | 303.8 | 448.1 | 694.9 | 413.9 | 303.8 | 273.4 | 201.3 | 189.9 |
| 87.5° | 75.9 | 79.8 | 148.1 | 148.1 | 197.4 | 163.3 | 178.5 | 163.3 | 155.7 | 98.7 | 87.4 |
| 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)