

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: P265841

Luminaire Tested: **ARCH-M-AF48-140-D-U-5WQ-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265841
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-M-AF48-140-D-U-5WQ-7027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 905mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15150.1 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B4 - U0 - G3

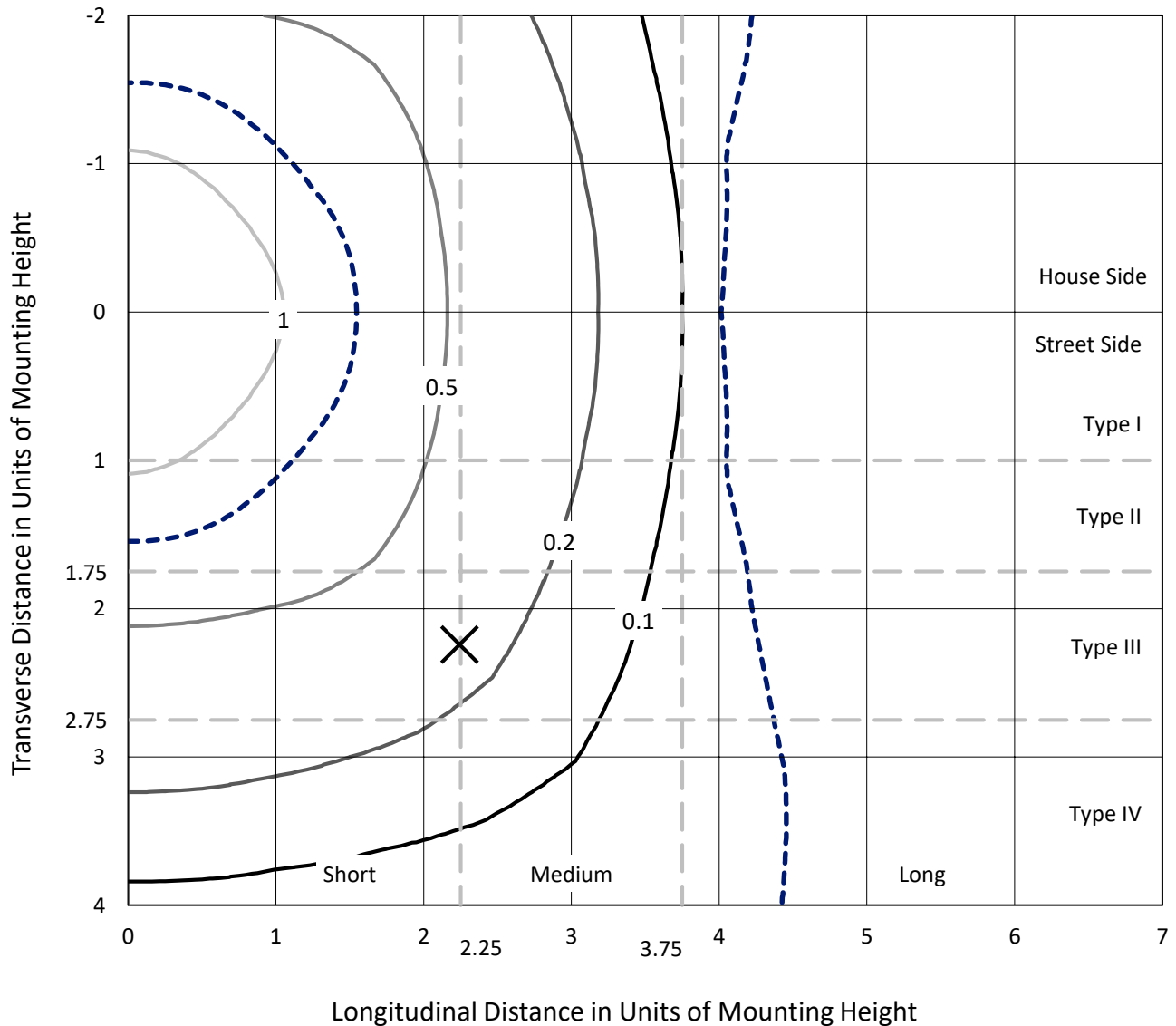
Input Watts (W): 141
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

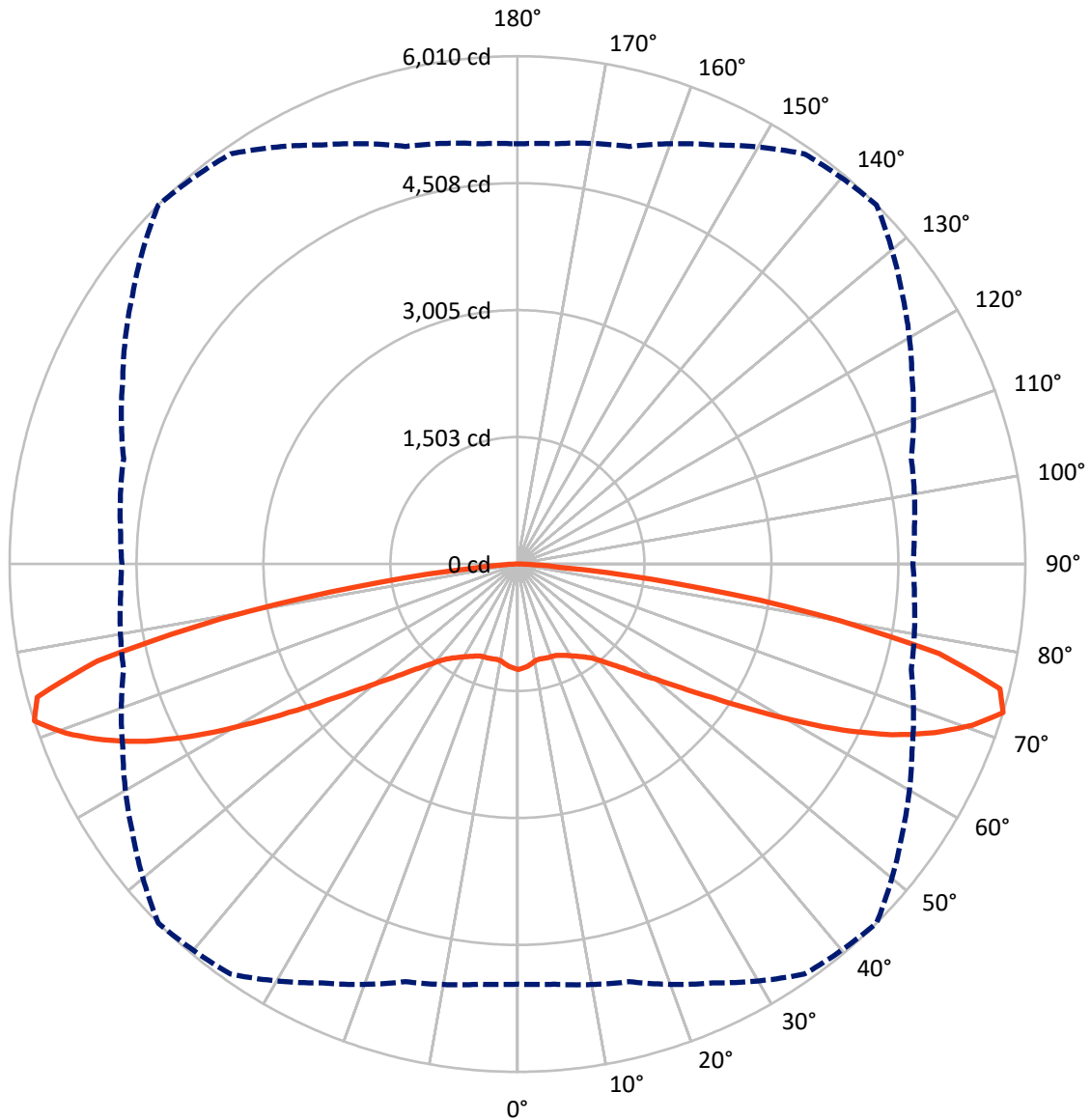


Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type V - Short - Non-Cutoff

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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 | 7575.1 | 0.0 | 7575.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 7575.1 | 0.0 | 7575.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 15150.1 | 0.0 | 15150.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 114.9 | 0.8 |
| 10°-20° | 331.5 | 2.2 |
| 20°-30° | 554.8 | 3.7 |
| 30°-40° | 852.4 | 5.6 |
| 40°-50° | 1411.4 | 9.3 |
| 50°-60° | 2509.2 | 16.6 |
| 60°-70° | 4389.7 | 29.0 |
| 70°-80° | 4466.2 | 29.5 |
| 80°-90° | 520.1 | 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° | 15150.1 | 100.0 |
| 0°-180° | 15150.1 | 100.0 |



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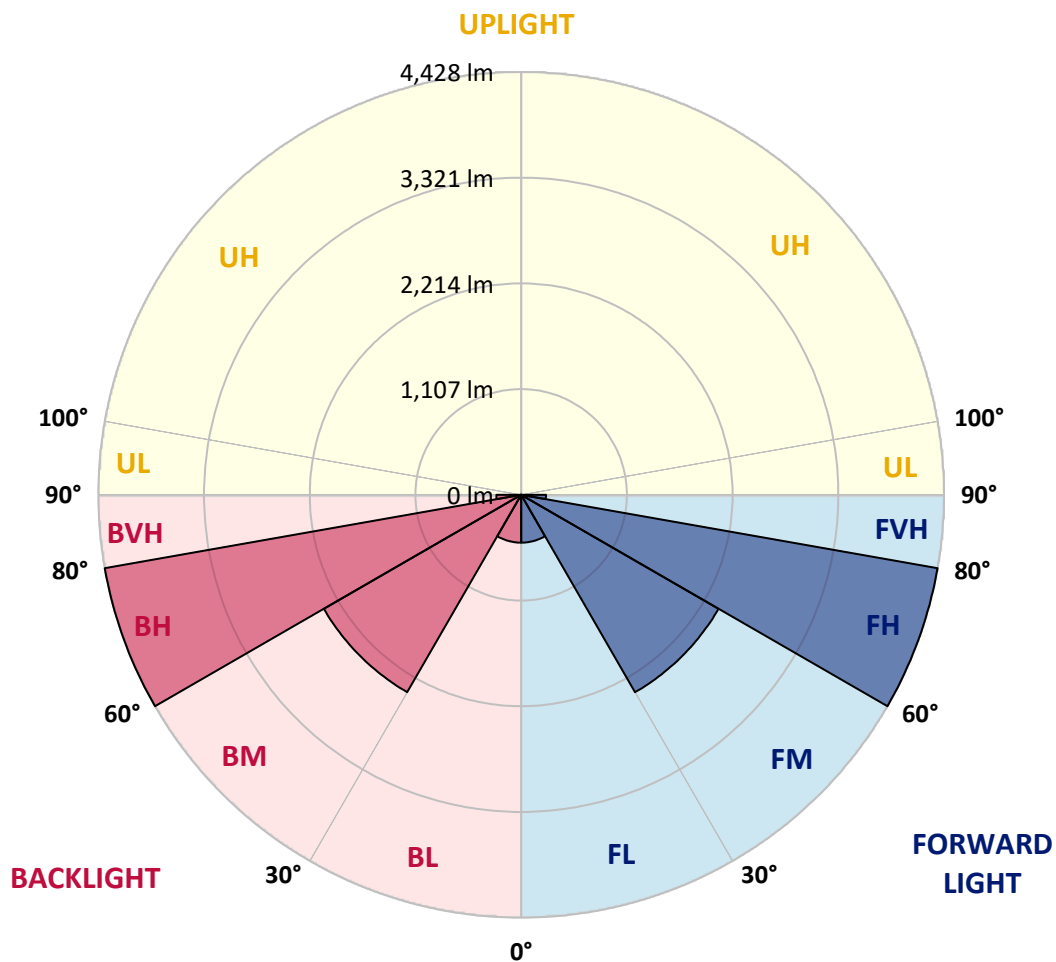
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 500.6 | 3.3 | | | |
| FM | (30°-60°) | 2386.5 | 15.8 | | | |
| FH | (60°-80°) | 4428.0 | 29.2 | | | G2/5000 |
| FVH | (80°-90°) | 260.0 | 1.7 | | | G3/500 |
| BL | (0°-30°) | 500.6 | 3.3 | B2/1000 | | |
| BM | (30°-60°) | 2386.5 | 15.8 | B2/2500 | | |
| BH | (60°-80°) | 4428.0 | 29.2 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 260.0 | 1.7 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1248.7 | 1248.7 | 1248.7 | 1248.7 | 1248.7 | 1248.7 | 1248.7 | 1248.7 | 1248.7 | 1248.7 | 1248.7 |
| 2.5° | 1237.1 | 1240.1 | 1234.4 | 1234.4 | 1234.4 | 1231.4 | 1234.4 | 1231.4 | 1234.4 | 1237.1 | 1237.1 |
| 5° | 1225.6 | 1225.6 | 1219.9 | 1219.9 | 1219.9 | 1217.1 | 1219.9 | 1219.9 | 1222.8 | 1225.6 | 1225.6 |
| 7.5° | 1199.6 | 1199.6 | 1196.8 | 1193.9 | 1191.1 | 1191.1 | 1193.9 | 1193.9 | 1196.8 | 1199.6 | 1199.6 |
| 10° | 1185.3 | 1182.3 | 1176.6 | 1167.9 | 1165.1 | 1162.1 | 1167.9 | 1173.7 | 1182.3 | 1191.1 | 1188.2 |
| 12.5° | 1179.6 | 1176.6 | 1165.1 | 1156.5 | 1150.6 | 1153.6 | 1159.4 | 1165.1 | 1179.6 | 1188.2 | 1185.3 |
| 15° | 1185.3 | 1179.6 | 1165.1 | 1150.6 | 1153.6 | 1159.4 | 1165.1 | 1165.1 | 1182.3 | 1191.1 | 1191.1 |
| 17.5° | 1185.3 | 1182.3 | 1165.1 | 1153.6 | 1156.5 | 1165.1 | 1167.9 | 1165.1 | 1179.6 | 1193.9 | 1193.9 |
| 20° | 1188.2 | 1188.2 | 1165.1 | 1156.5 | 1159.4 | 1167.9 | 1170.9 | 1167.9 | 1179.6 | 1196.8 | 1196.8 |
| 22.5° | 1193.9 | 1191.1 | 1167.9 | 1162.1 | 1167.9 | 1173.7 | 1176.6 | 1173.7 | 1185.3 | 1199.6 | 1202.7 |
| 25° | 1205.4 | 1199.6 | 1179.6 | 1176.6 | 1188.2 | 1196.8 | 1196.8 | 1191.1 | 1196.8 | 1211.3 | 1211.3 |
| 27.5° | 1219.9 | 1217.1 | 1193.9 | 1193.9 | 1208.3 | 1225.6 | 1217.1 | 1205.4 | 1211.3 | 1225.6 | 1225.6 |
| 30° | 1245.8 | 1243.0 | 1219.9 | 1219.9 | 1240.1 | 1260.2 | 1240.1 | 1225.6 | 1234.4 | 1248.7 | 1251.6 |
| 32.5° | 1283.3 | 1283.3 | 1263.1 | 1257.4 | 1292.0 | 1300.7 | 1292.0 | 1263.1 | 1268.9 | 1289.1 | 1289.1 |
| 35° | 1346.7 | 1341.0 | 1320.8 | 1318.0 | 1352.6 | 1349.7 | 1346.7 | 1320.8 | 1326.5 | 1349.7 | 1349.7 |
| 37.5° | 1430.5 | 1427.5 | 1410.2 | 1401.5 | 1418.9 | 1407.4 | 1413.2 | 1401.5 | 1416.0 | 1433.2 | 1436.2 |
| 40° | 1537.1 | 1534.2 | 1519.8 | 1508.3 | 1514.1 | 1496.8 | 1502.5 | 1508.3 | 1522.6 | 1534.2 | 1537.1 |
| 42.5° | 1669.8 | 1669.8 | 1655.3 | 1635.2 | 1626.6 | 1617.8 | 1617.8 | 1629.3 | 1643.8 | 1658.2 | 1658.2 |
| 45° | 1834.2 | 1834.2 | 1816.8 | 1796.7 | 1770.6 | 1756.2 | 1762.0 | 1773.7 | 1791.0 | 1808.2 | 1813.9 |
| 47.5° | 2027.4 | 2027.4 | 2004.3 | 1984.1 | 1958.1 | 1940.9 | 1940.9 | 1946.6 | 1972.6 | 1987.1 | 1995.7 |
| 50° | 2243.6 | 2235.1 | 2211.9 | 2191.8 | 2177.3 | 2154.2 | 2157.2 | 2154.2 | 2177.3 | 2197.6 | 2203.4 |
| 52.5° | 2468.6 | 2465.7 | 2442.6 | 2436.9 | 2445.5 | 2434.0 | 2434.0 | 2405.1 | 2413.8 | 2425.3 | 2422.5 |
| 55° | 2748.4 | 2739.7 | 2719.4 | 2731.0 | 2765.6 | 2782.9 | 2777.2 | 2731.0 | 2705.1 | 2710.8 | 2708.0 |
| 57.5° | 3054.1 | 3045.3 | 3039.7 | 3074.2 | 3152.2 | 3224.1 | 3209.7 | 3103.0 | 3054.1 | 3056.9 | 3059.7 |
| 60° | 3365.5 | 3365.5 | 3382.7 | 3469.3 | 3636.6 | 3754.8 | 3711.5 | 3532.8 | 3446.3 | 3428.9 | 3423.3 |
| 62.5° | 3685.7 | 3694.3 | 3731.7 | 3875.9 | 4132.7 | 4328.8 | 4219.1 | 3965.4 | 3835.6 | 3801.0 | 3789.4 |
| 65° | 4057.6 | 4066.3 | 4121.1 | 4299.8 | 4640.1 | 4873.8 | 4686.3 | 4447.0 | 4265.2 | 4193.2 | 4181.6 |
| 67.5° | 4596.9 | 4602.6 | 4645.9 | 4819.0 | 5139.2 | 5326.5 | 5133.4 | 4919.8 | 4723.7 | 4640.1 | 4634.4 |
| 70° | 5081.4 | 5087.2 | 5124.7 | 5352.6 | 5646.7 | 5713.0 | 5499.6 | 5228.4 | 5023.7 | 4957.3 | 4945.9 |
| 72.5° | 4971.8 | 4992.1 | 5115.9 | 5470.8 | 5923.6 | 6010.0 | 5560.1 | 5153.4 | 4824.7 | 4715.2 | 4680.6 |
| 75° | 4170.1 | 4201.8 | 4397.9 | 4931.4 | 5652.4 | 5897.6 | 5202.5 | 4455.7 | 3965.4 | 3754.8 | 3699.9 |
| 77.5° | 2434.0 | 2552.3 | 2889.7 | 3573.2 | 4602.6 | 5101.7 | 4285.5 | 3261.7 | 2436.9 | 2090.8 | 1975.5 |
| 80° | 666.2 | 729.7 | 974.8 | 1643.8 | 2886.8 | 3573.2 | 2733.9 | 1496.8 | 807.4 | 605.5 | 562.3 |
| 82.5° | 210.6 | 279.7 | 354.7 | 473.0 | 1133.4 | 1883.1 | 1015.2 | 441.2 | 346.0 | 285.5 | 253.9 |
| 85° | 112.5 | 121.1 | 199.0 | 230.8 | 340.3 | 527.8 | 314.3 | 230.8 | 207.7 | 152.8 | 144.2 |
| 87.5° | 57.8 | 60.5 | 112.5 | 112.5 | 149.9 | 124.0 | 135.6 | 124.0 | 118.2 | 75.0 | 66.4 |
| 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)