

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: LUMARK

Report Number: P882635

Luminaire Tested: **NAV-SB2C-835-U-T1**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882635
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-2)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-835-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12740 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B3 - U0 - G3

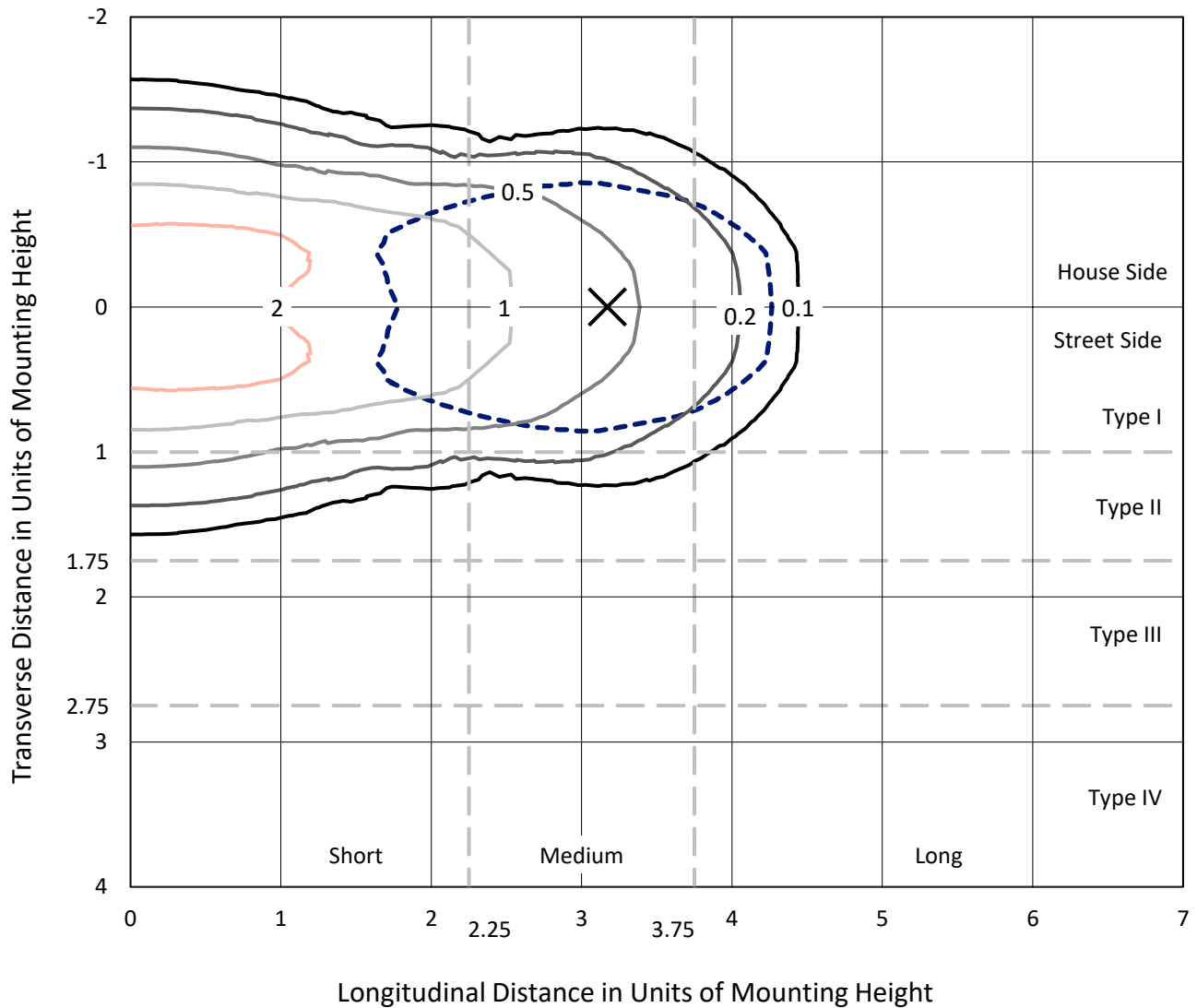
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

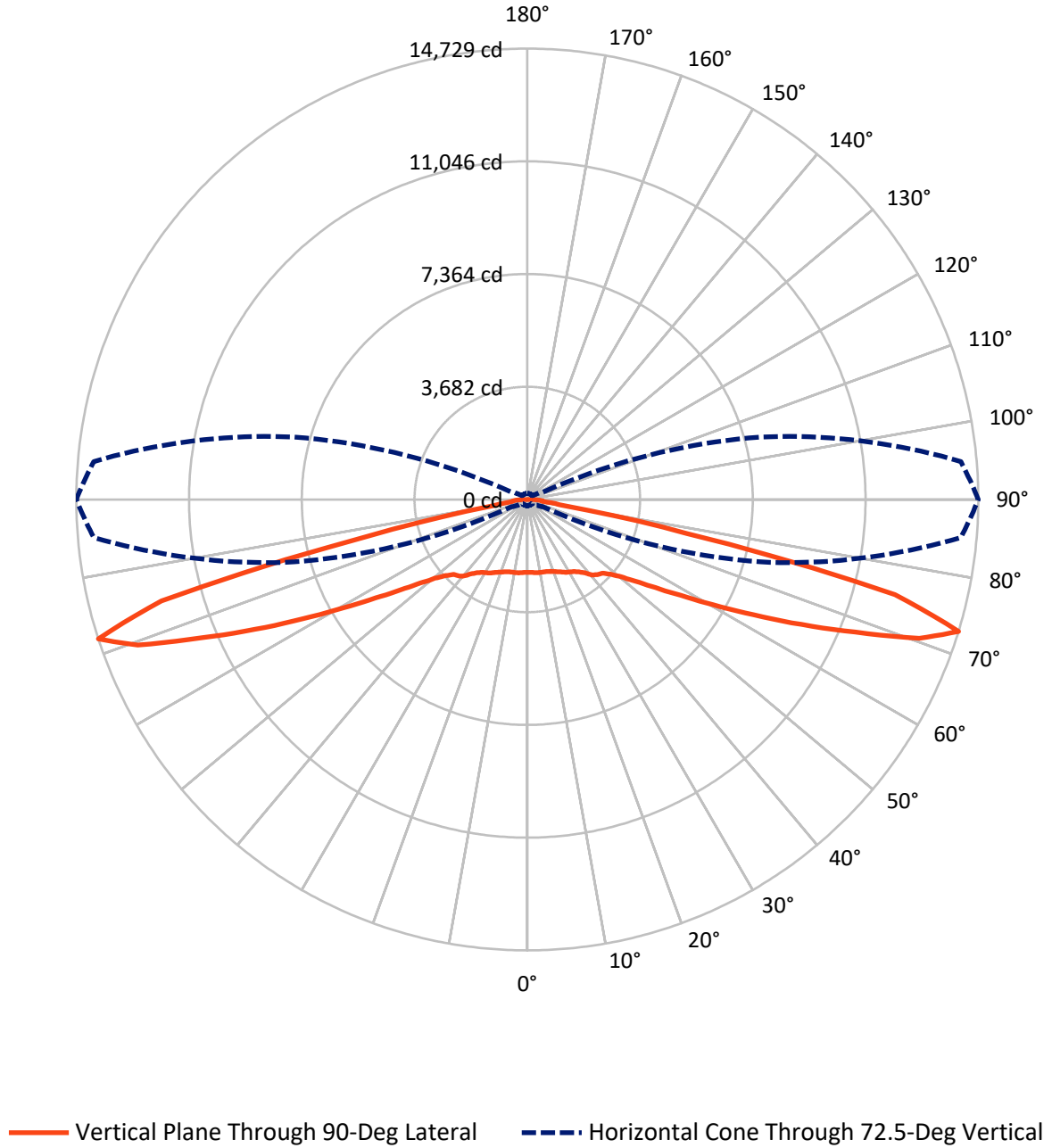
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 6370.0 | 0.0 | 6370.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 6370.0 | 0.0 | 6370.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 12740.0 | 0.0 | 12740.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 230.8 | 1.8 |
| 10°-20° | 705.8 | 5.5 |
| 20°-30° | 1176.8 | 9.2 |
| 30°-40° | 1618.5 | 12.7 |
| 40°-50° | 1976.6 | 15.5 |
| 50°-60° | 2286.2 | 17.9 |
| 60°-70° | 2725.9 | 21.4 |
| 70°-80° | 1902.5 | 14.9 |
| 80°-90° | 116.9 | 0.9 |
| 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° | 12740.0 | 100.0 |
| 0°-180° | 12740.0 | 100.0 |

Coefficient of Utilization

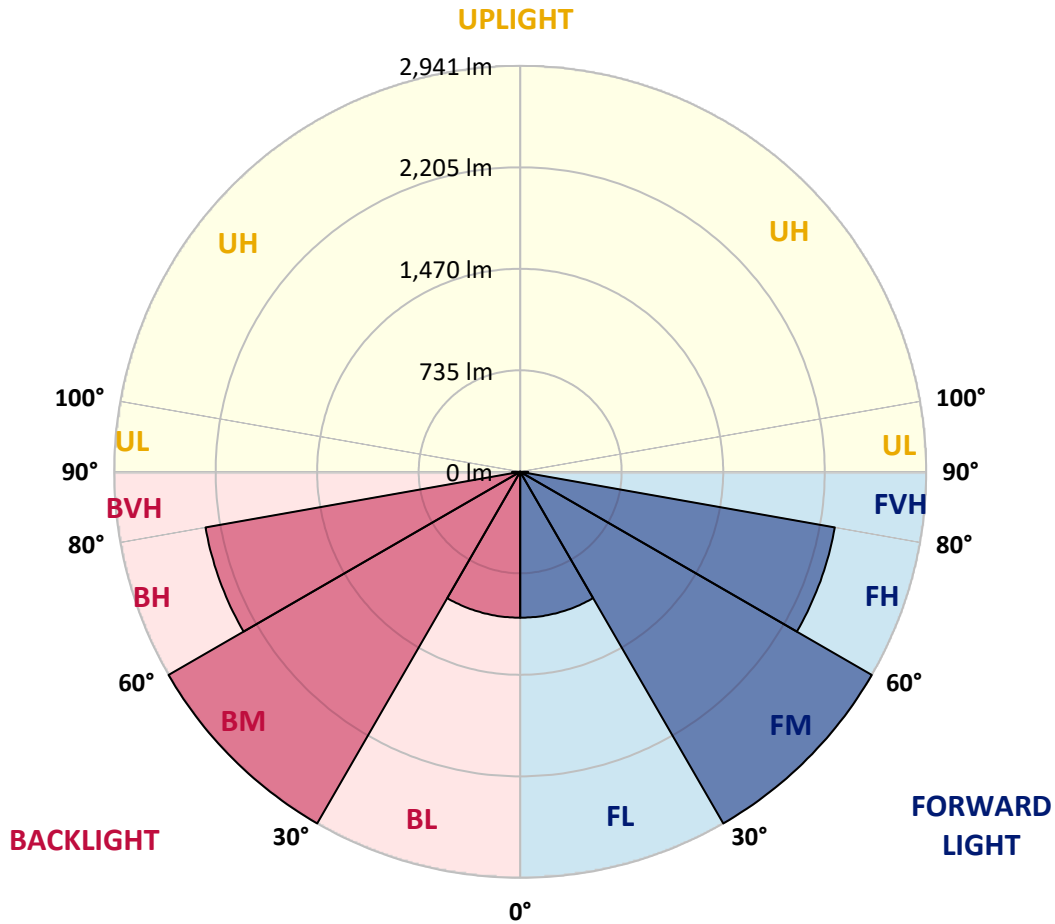


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1056.7 | 8.3 | | | |
| FM (30°-60°) | 2940.7 | 23.1 | | | |
| FH (60°-80°) | 2314.2 | 18.2 | | | G2/5000 |
| FVH (80°-90°) | 58.4 | 0.5 | | | G1/100 |
| BL (0°-30°) | 1056.7 | 8.3 | B3/2500 | | |
| BM (30°-60°) | 2940.7 | 23.1 | B3/5000 | | |
| BH (60°-80°) | 2314.2 | 18.2 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 58.4 | 0.5 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3
 Type I Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| 0° | 2380.6 | 2380.6 | 2380.6 | 2380.6 | 2380.6 | 2380.6 | 2380.6 | 2380.6 | 2380.6 | 2380.6 | 2380.6 |
| 2.5° | 2382.6 | 2385.3 | 2385.3 | 2383.3 | 2388.1 | 2384.0 | 2384.0 | 2382.0 | 2384.0 | 2382.0 | 2382.0 |
| 5° | 2394.8 | 2398.2 | 2399.6 | 2398.9 | 2405.0 | 2401.6 | 2401.6 | 2398.9 | 2399.6 | 2397.5 | 2397.5 |
| 7.5° | 2417.8 | 2422.6 | 2425.3 | 2428.7 | 2437.5 | 2433.4 | 2430.7 | 2422.6 | 2419.2 | 2413.8 | 2413.8 |
| 10° | 2425.3 | 2430.7 | 2439.5 | 2457.1 | 2477.4 | 2478.1 | 2470.0 | 2449.7 | 2434.1 | 2421.9 | 2419.9 |
| 12.5° | 2402.3 | 2409.7 | 2428.0 | 2463.9 | 2509.2 | 2527.5 | 2514.7 | 2480.8 | 2450.3 | 2428.7 | 2425.3 |
| 15° | 2373.2 | 2381.3 | 2409.0 | 2463.2 | 2530.2 | 2572.9 | 2571.5 | 2526.9 | 2478.1 | 2444.2 | 2438.8 |
| 17.5° | 2327.8 | 2335.9 | 2375.9 | 2451.7 | 2546.5 | 2616.9 | 2635.9 | 2589.8 | 2521.4 | 2476.1 | 2468.6 |
| 20° | 2245.9 | 2253.3 | 2308.8 | 2415.1 | 2551.9 | 2663.6 | 2713.0 | 2672.4 | 2587.1 | 2525.5 | 2514.0 |
| 22.5° | 2139.6 | 2151.1 | 2216.1 | 2352.2 | 2539.0 | 2712.4 | 2801.1 | 2773.3 | 2663.6 | 2578.3 | 2562.7 |
| 25° | 2025.8 | 2038.0 | 2113.8 | 2275.0 | 2505.9 | 2747.6 | 2905.3 | 2887.7 | 2750.3 | 2644.0 | 2622.3 |
| 27.5° | 1927.6 | 1940.5 | 2023.1 | 2198.5 | 2454.4 | 2761.1 | 3008.3 | 3017.1 | 2855.2 | 2716.4 | 2693.4 |
| 30° | 1850.5 | 1862.6 | 1950.7 | 2136.9 | 2388.1 | 2747.6 | 3098.3 | 3159.2 | 2962.2 | 2779.4 | 2746.2 |
| 32.5° | 1765.8 | 1781.4 | 1874.1 | 2061.7 | 2309.5 | 2715.1 | 3176.8 | 3312.9 | 3086.1 | 2847.1 | 2805.1 |
| 35° | 1658.8 | 1673.1 | 1770.6 | 1958.8 | 2206.6 | 2662.9 | 3242.5 | 3483.6 | 3263.5 | 2950.0 | 2903.3 |
| 37.5° | 1528.8 | 1542.4 | 1639.2 | 1830.1 | 2104.4 | 2589.8 | 3292.6 | 3675.9 | 3474.8 | 3098.3 | 3036.0 |
| 40° | 1398.2 | 1411.0 | 1501.8 | 1686.6 | 1981.8 | 2496.4 | 3310.2 | 3864.1 | 3717.2 | 3302.1 | 3235.8 |
| 42.5° | 1278.3 | 1289.8 | 1373.1 | 1545.1 | 1844.4 | 2377.2 | 3287.2 | 4027.9 | 3934.5 | 3444.3 | 3359.0 |
| 45° | 1168.0 | 1178.1 | 1251.9 | 1412.4 | 1701.5 | 2232.3 | 3218.1 | 4204.0 | 4193.1 | 3545.9 | 3430.8 |
| 47.5° | 1042.0 | 1052.2 | 1128.7 | 1283.7 | 1558.6 | 2062.4 | 3101.0 | 4377.3 | 4552.7 | 3776.1 | 3643.4 |
| 50° | 888.3 | 897.1 | 975.7 | 1135.5 | 1410.4 | 1881.6 | 2938.5 | 4513.4 | 5006.3 | 4124.8 | 3958.2 |
| 52.5° | 706.2 | 715.7 | 792.2 | 952.0 | 1234.3 | 1687.3 | 2724.6 | 4602.1 | 5530.4 | 4633.9 | 4428.8 |
| 55° | 525.4 | 532.2 | 598.5 | 742.1 | 1016.3 | 1465.9 | 2456.4 | 4627.1 | 6124.8 | 5330.0 | 5073.3 |
| 57.5° | 381.2 | 385.3 | 427.9 | 534.9 | 770.5 | 1188.9 | 2130.8 | 4562.1 | 6832.4 | 6222.3 | 5899.4 |
| 60° | 308.7 | 310.1 | 323.0 | 370.4 | 535.6 | 876.1 | 1737.4 | 4338.7 | 7600.2 | 7372.7 | 6965.8 |
| 62.5° | 280.3 | 280.3 | 283.7 | 296.6 | 362.2 | 578.2 | 1261.4 | 3875.6 | 8423.5 | 8826.4 | 8281.3 |
| 65° | 260.7 | 260.7 | 262.0 | 268.1 | 285.7 | 368.3 | 796.2 | 3121.3 | 9117.5 | 10529.2 | 9840.0 |
| 67.5° | 243.1 | 243.7 | 243.1 | 245.1 | 255.3 | 272.2 | 461.8 | 2155.8 | 9491.3 | 12293.7 | 11549.6 |
| 70° | 224.8 | 226.1 | 222.8 | 222.8 | 230.9 | 231.6 | 289.1 | 1182.2 | 9181.2 | 13772.4 | 13576.8 |
| 72.5° | 203.1 | 205.2 | 199.7 | 198.4 | 204.5 | 201.8 | 217.3 | 567.4 | 7882.5 | 14213.9 | 14728.5 |
| 75° | 184.2 | 186.9 | 174.7 | 171.3 | 171.3 | 169.3 | 176.7 | 291.1 | 5116.0 | 11594.9 | 12402.0 |
| 77.5° | 167.2 | 172.7 | 153.0 | 142.2 | 139.5 | 133.4 | 144.2 | 178.1 | 2237.7 | 5443.7 | 5330.6 |
| 80° | 138.1 | 145.6 | 125.9 | 113.1 | 108.3 | 101.6 | 113.7 | 124.6 | 665.6 | 1264.1 | 1210.6 |
| 82.5° | 102.9 | 106.3 | 89.4 | 80.6 | 76.5 | 71.8 | 85.3 | 86.7 | 216.7 | 447.5 | 505.8 |
| 85° | 65.7 | 67.0 | 54.8 | 47.4 | 45.4 | 43.3 | 54.2 | 47.4 | 82.6 | 329.1 | 478.0 |
| 87.5° | 23.0 | 26.4 | 21.0 | 19.0 | 20.3 | 16.9 | 25.1 | 14.2 | 23.0 | 232.2 | 287.8 |
| 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)