

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: P961827

Luminaire Tested: **NAV-SB2B-722-U-RW**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961827
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-19)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-722-U-RW
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND RECTANGULAR
WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9818.5 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

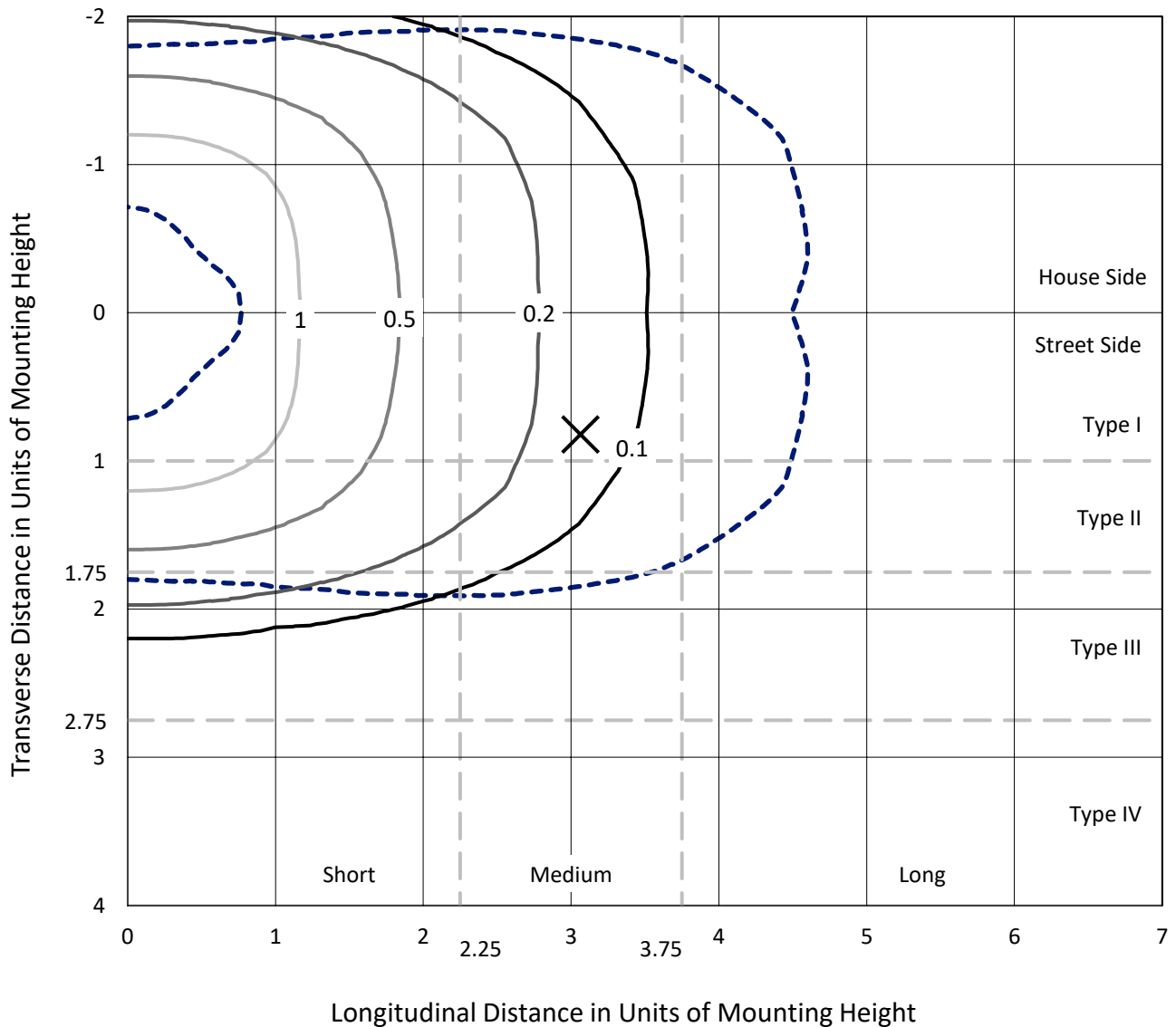
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

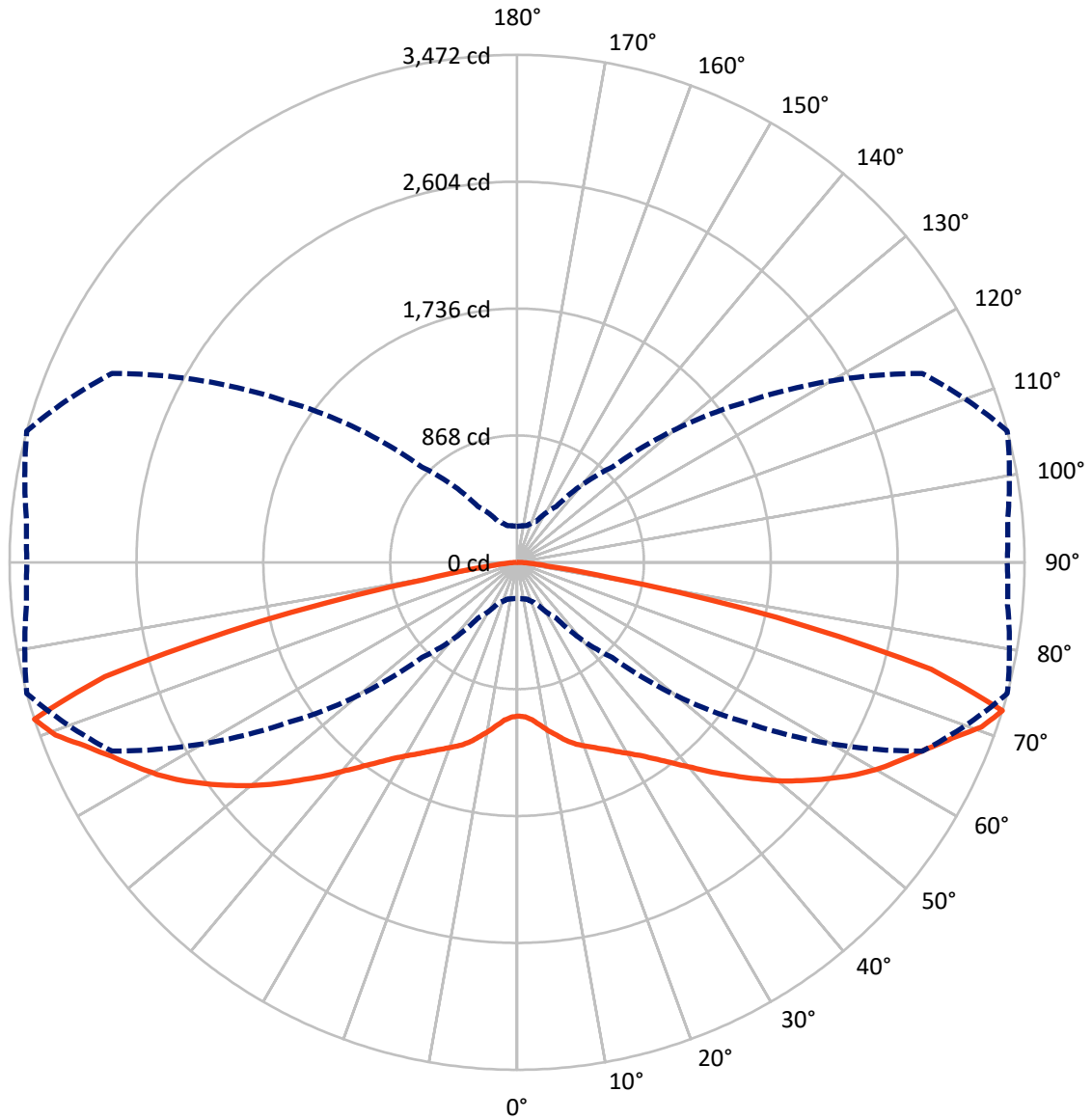
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 4909.2 | 0.0 | 4909.2 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 4909.2 | 0.0 | 4909.2 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 9818.5 | 0.0 | 9818.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 103.0 | 1.0 |
| 10°-20° | 339.8 | 3.5 |
| 20°-30° | 656.6 | 6.7 |
| 30°-40° | 1108.7 | 11.3 |
| 40°-50° | 1758.3 | 17.9 |
| 50°-60° | 2354.1 | 24.0 |
| 60°-70° | 2240.4 | 22.8 |
| 70°-80° | 1169.1 | 11.9 |
| 80°-90° | 88.5 | 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° | 9818.5 | 100.0 |
| 0°-180° | 9818.5 | 100.0 |

Coefficient of Utilization

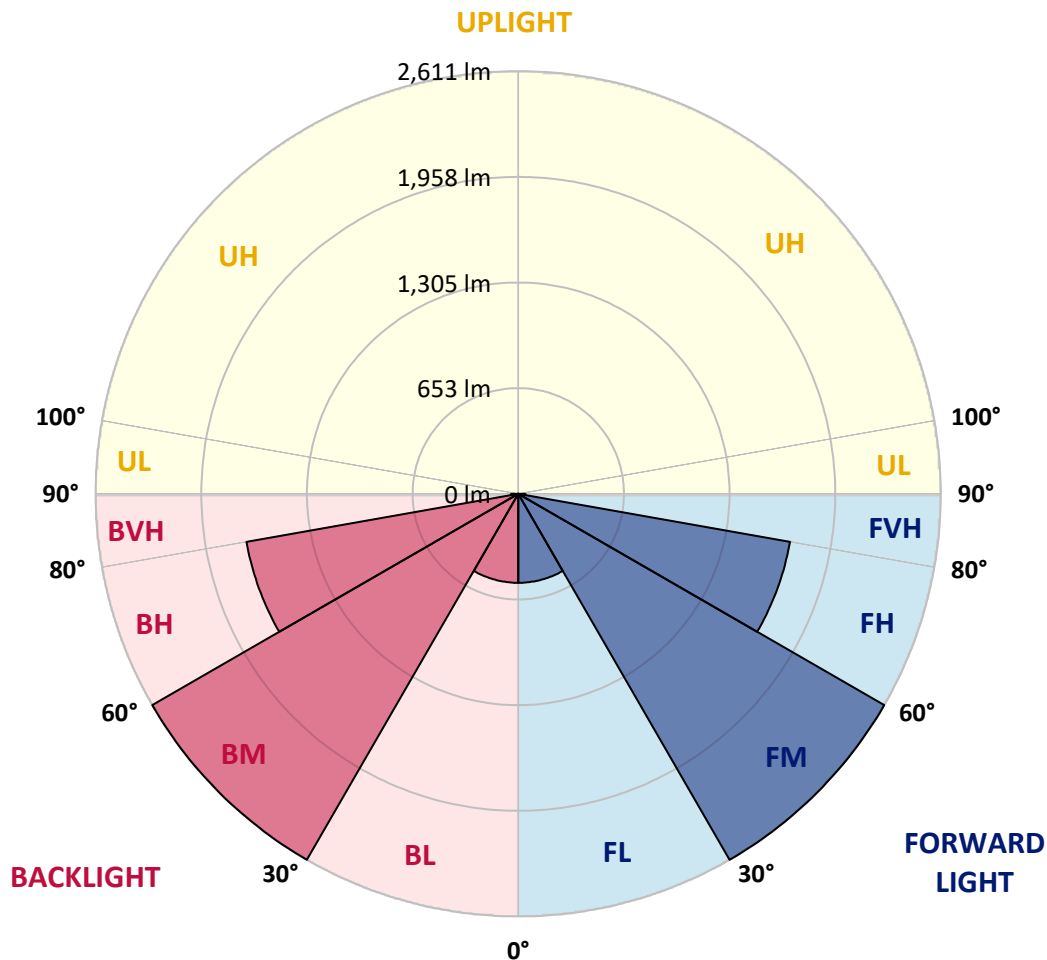


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 549.7 | 5.6 | | | |
| FM (30°-60°) | 2610.6 | 26.6 | | | |
| FH (60°-80°) | 1704.7 | 17.4 | | | G1/1800 |
| FVH (80°-90°) | 44.2 | 0.5 | | | G1/100 |
| BL (0°-30°) | 549.7 | 5.6 | B2/1000 | | |
| BM (30°-60°) | 2610.6 | 26.6 | B3/5000 | | |
| BH (60°-80°) | 1704.7 | 17.4 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 44.2 | 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 III Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1051.8 | 1051.8 | 1051.8 | 1051.8 | 1051.8 | 1051.8 | 1051.8 | 1051.8 | 1051.8 | 1051.8 | 1051.8 |
| 2.5° | 1051.8 | 1050.7 | 1051.8 | 1052.8 | 1052.3 | 1052.3 | 1054.7 | 1056.3 | 1059.2 | 1058.7 | 1058.2 |
| 5° | 1044.7 | 1044.2 | 1048.3 | 1052.8 | 1056.3 | 1062.3 | 1069.8 | 1075.3 | 1082.3 | 1083.8 | 1083.8 |
| 7.5° | 1041.2 | 1039.7 | 1046.7 | 1054.7 | 1065.8 | 1080.8 | 1095.3 | 1110.4 | 1122.4 | 1126.5 | 1127.4 |
| 10° | 1043.8 | 1044.2 | 1053.7 | 1068.8 | 1086.3 | 1107.4 | 1127.9 | 1153.5 | 1170.6 | 1174.5 | 1178.5 |
| 12.5° | 1055.2 | 1054.2 | 1070.3 | 1094.4 | 1118.4 | 1145.0 | 1169.0 | 1197.1 | 1215.6 | 1225.2 | 1229.2 |
| 15° | 1076.2 | 1074.3 | 1096.9 | 1132.4 | 1167.6 | 1198.6 | 1218.2 | 1244.8 | 1266.3 | 1278.3 | 1282.8 |
| 17.5° | 1101.4 | 1102.4 | 1131.9 | 1178.0 | 1224.2 | 1259.3 | 1277.9 | 1291.4 | 1307.9 | 1318.5 | 1323.5 |
| 20° | 1145.4 | 1147.5 | 1180.6 | 1235.2 | 1287.8 | 1328.0 | 1343.0 | 1337.9 | 1342.4 | 1350.5 | 1356.5 |
| 22.5° | 1204.7 | 1205.6 | 1242.7 | 1301.9 | 1357.0 | 1401.2 | 1411.2 | 1390.6 | 1378.1 | 1383.6 | 1387.6 |
| 25° | 1273.4 | 1279.8 | 1316.9 | 1377.6 | 1434.2 | 1476.3 | 1480.8 | 1449.8 | 1418.7 | 1420.2 | 1422.7 |
| 27.5° | 1357.0 | 1363.0 | 1400.7 | 1460.8 | 1518.4 | 1555.0 | 1554.5 | 1512.9 | 1467.3 | 1455.8 | 1459.3 |
| 30° | 1447.8 | 1454.3 | 1492.9 | 1555.0 | 1608.6 | 1640.7 | 1633.7 | 1584.1 | 1518.9 | 1497.4 | 1499.9 |
| 32.5° | 1555.5 | 1559.5 | 1598.7 | 1660.8 | 1710.4 | 1736.0 | 1721.5 | 1660.3 | 1579.1 | 1554.5 | 1560.6 |
| 35° | 1685.9 | 1691.9 | 1721.0 | 1779.6 | 1823.3 | 1844.3 | 1819.7 | 1747.5 | 1656.3 | 1628.7 | 1632.7 |
| 37.5° | 1834.7 | 1830.8 | 1863.9 | 1916.0 | 1952.1 | 1965.1 | 1931.5 | 1845.8 | 1744.6 | 1712.0 | 1718.0 |
| 40° | 1990.1 | 1988.2 | 2024.3 | 2074.4 | 2094.0 | 2102.0 | 2052.4 | 1958.6 | 1846.3 | 1811.2 | 1822.8 |
| 42.5° | 2131.1 | 2129.5 | 2178.1 | 2233.8 | 2257.4 | 2248.3 | 2185.7 | 2078.4 | 1964.1 | 1924.0 | 1934.1 |
| 45° | 2243.8 | 2241.8 | 2301.4 | 2379.6 | 2425.8 | 2410.8 | 2326.5 | 2210.7 | 2083.4 | 2041.8 | 2051.3 |
| 47.5° | 2330.5 | 2331.6 | 2395.7 | 2492.5 | 2573.2 | 2578.7 | 2470.5 | 2345.6 | 2214.7 | 2167.7 | 2181.7 |
| 50° | 2393.3 | 2396.2 | 2464.9 | 2572.2 | 2682.4 | 2731.1 | 2617.3 | 2484.0 | 2350.6 | 2297.4 | 2313.5 |
| 52.5° | 2408.8 | 2414.3 | 2497.0 | 2622.8 | 2752.6 | 2845.4 | 2766.7 | 2616.8 | 2479.5 | 2428.8 | 2441.9 |
| 55° | 2326.0 | 2337.1 | 2441.9 | 2618.8 | 2795.8 | 2920.6 | 2898.1 | 2751.6 | 2609.2 | 2557.2 | 2571.7 |
| 57.5° | 2136.1 | 2151.6 | 2274.0 | 2505.0 | 2786.3 | 2972.2 | 2999.8 | 2881.0 | 2739.1 | 2689.0 | 2700.6 |
| 60° | 1869.9 | 1888.5 | 2005.7 | 2257.9 | 2651.9 | 2991.3 | 3071.5 | 3006.8 | 2858.4 | 2809.8 | 2820.3 |
| 62.5° | 1468.3 | 1492.4 | 1632.7 | 1928.5 | 2368.2 | 2902.6 | 3132.6 | 3120.6 | 2965.7 | 2905.1 | 2912.0 |
| 65° | 942.0 | 967.5 | 1115.4 | 1464.8 | 1989.6 | 2630.9 | 3151.7 | 3231.4 | 3079.0 | 2994.3 | 3004.8 |
| 67.5° | 568.0 | 579.5 | 652.7 | 887.9 | 1454.3 | 2221.3 | 2990.2 | 3354.2 | 3211.3 | 3106.1 | 3114.1 |
| 70° | 363.5 | 369.9 | 413.6 | 521.3 | 822.2 | 1620.7 | 2590.3 | 3377.3 | 3371.7 | 3220.9 | 3219.8 |
| 72.5° | 246.6 | 248.7 | 260.1 | 308.8 | 465.2 | 920.9 | 1910.5 | 3057.5 | 3472.0 | 3368.8 | 3352.7 |
| 75° | 180.5 | 191.5 | 210.0 | 218.5 | 264.1 | 460.2 | 1094.8 | 2148.1 | 2926.1 | 2971.3 | 2861.9 |
| 77.5° | 134.4 | 134.9 | 160.4 | 170.5 | 188.5 | 245.2 | 463.2 | 1199.1 | 1816.7 | 1907.4 | 1701.4 |
| 80° | 113.8 | 107.8 | 107.3 | 137.4 | 141.9 | 152.9 | 207.0 | 414.1 | 650.7 | 394.5 | 298.3 |
| 82.5° | 94.7 | 88.3 | 79.7 | 107.3 | 96.8 | 93.8 | 89.7 | 168.4 | 207.0 | 101.8 | 86.7 |
| 85° | 66.2 | 63.1 | 60.2 | 70.2 | 55.1 | 47.2 | 43.2 | 78.7 | 87.2 | 43.2 | 38.1 |
| 87.5° | 28.6 | 29.6 | 30.0 | 31.1 | 23.1 | 16.5 | 16.5 | 22.0 | 22.0 | 17.0 | 12.5 |
| 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)