

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: P963961

Luminaire Tested: **NAV-SB3B-727-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963961
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-727-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16821.3 lumens
Efficiency: N/A
Efficacy: 154.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

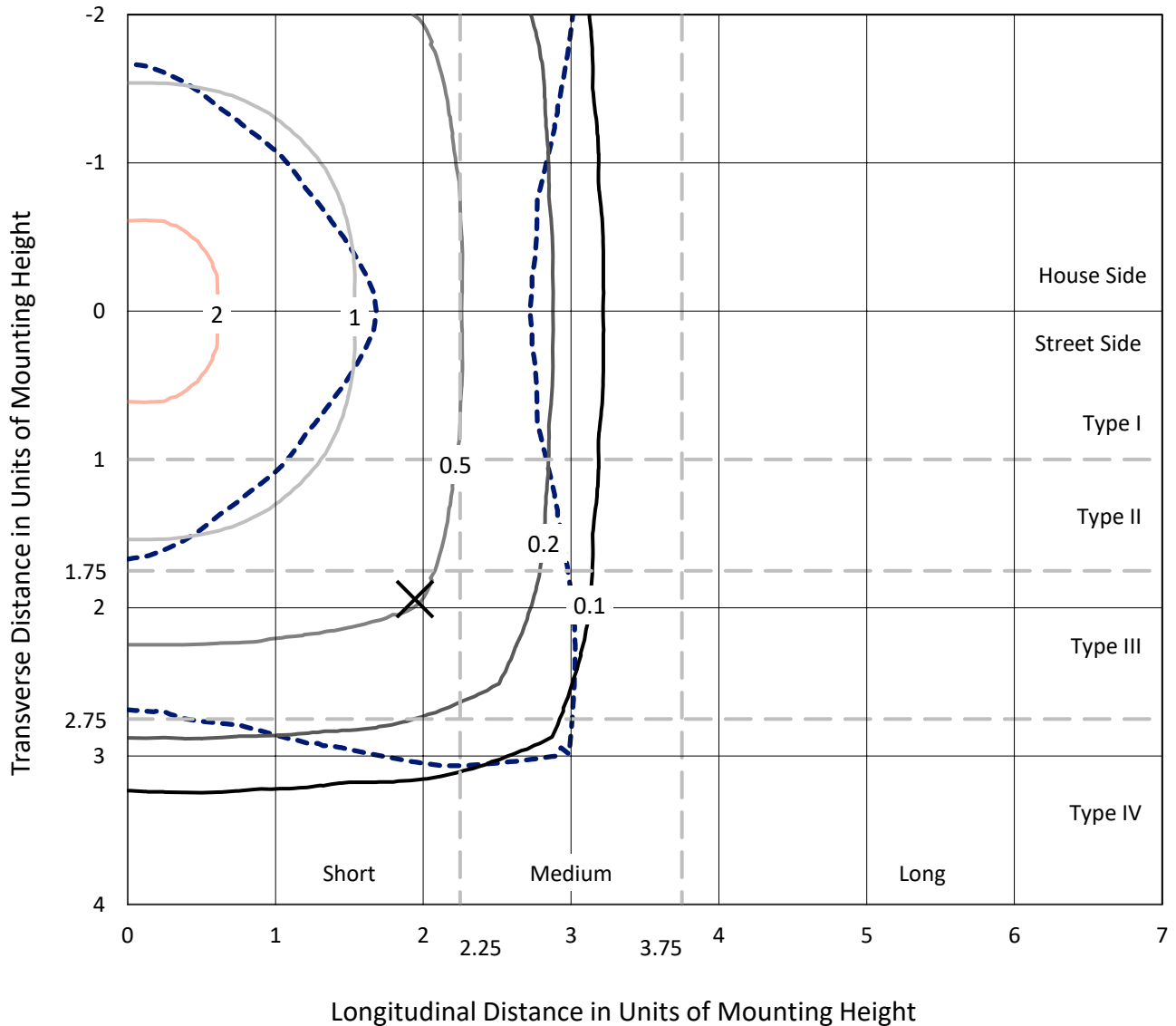
Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P963961
 CATALOG NUMBER: NAV-SB3B-727-U-5MQ

Iso-Footcandle Lines of Horizontal Illumination

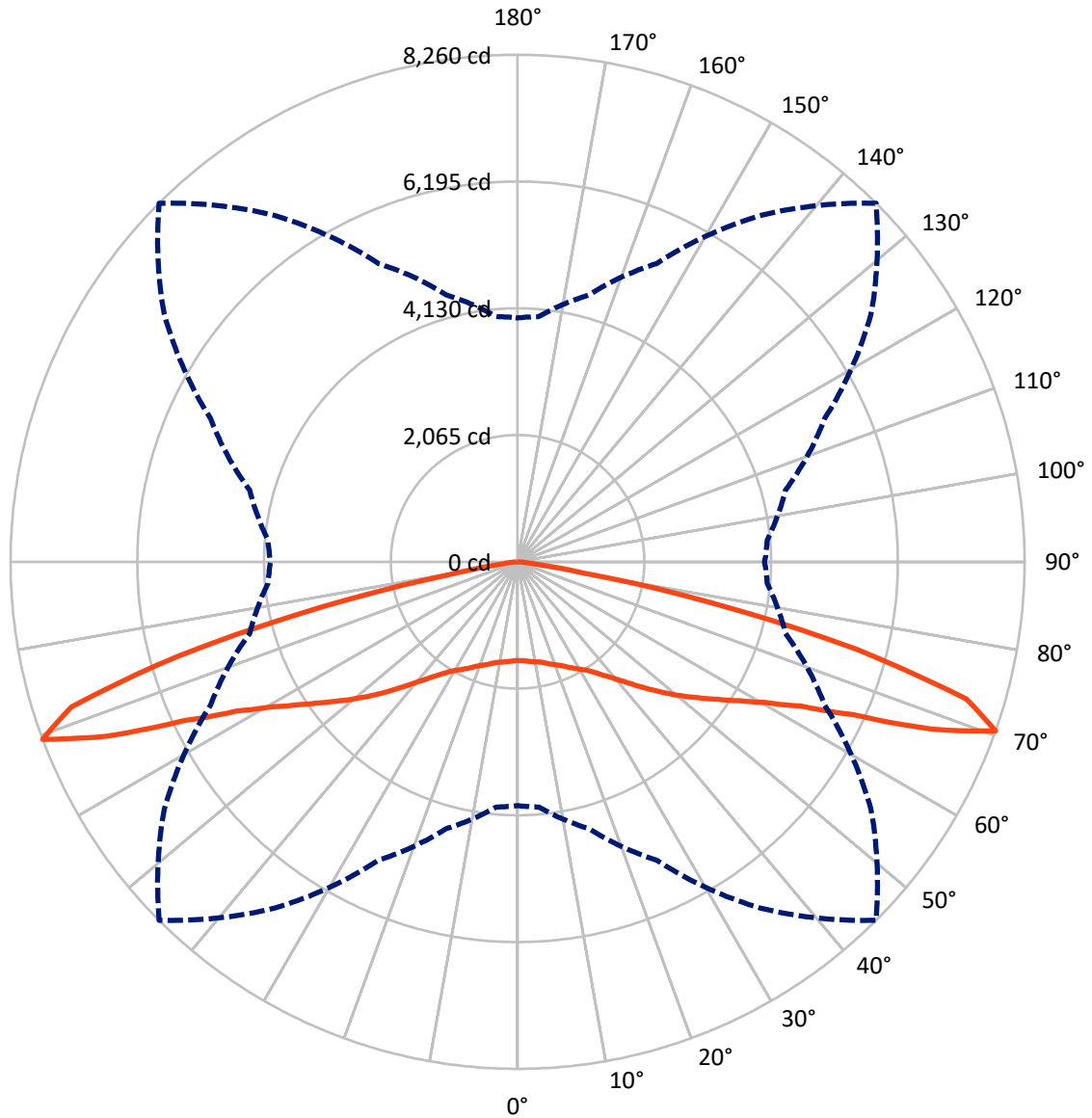
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type V - Short - N/A

REPORT NUMBER: P963961
CATALOG NUMBER: NAV-SB3B-727-U-5MQ

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P963961
 CATALOG NUMBER: NAV-SB3B-727-U-5MQ

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 8410.6 | 0.0 | 8410.6 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 8410.6 | 0.0 | 8410.6 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 16821.3 | 0.0 | 16821.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 156.5 | 0.9 |
| 10°-20° | 485.4 | 2.9 |
| 20°-30° | 867.5 | 5.2 |
| 30°-40° | 1406.2 | 8.4 |
| 40°-50° | 2290.4 | 13.6 |
| 50°-60° | 3492.1 | 20.8 |
| 60°-70° | 5195.2 | 30.9 |
| 70°-80° | 2831.5 | 16.8 |
| 80°-90° | 96.4 | 0.6 |
| 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° | 16821.3 | 100.0 |
| 0°-180° | 16821.3 | 100.0 |

Coefficient of Utilization



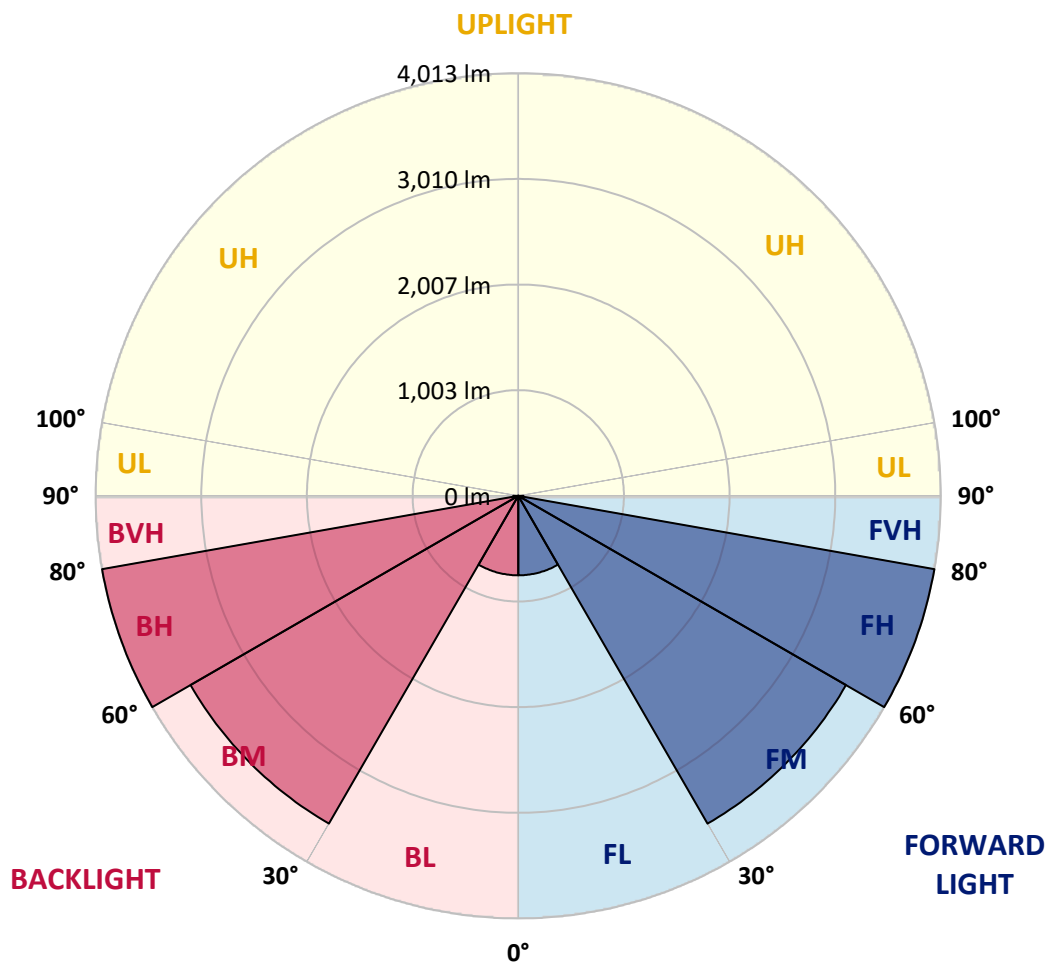
REPORT NUMBER: P963961
 CATALOG NUMBER: NAV-SB3B-727-U-5MQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 754.7 | 4.5 | | | |
| FM | (30°-60°) | 3594.4 | 21.4 | | | |
| FH | (60°-80°) | 4013.4 | 23.9 | | | G2/5000 |
| FVH | (80°-90°) | 48.2 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 754.7 | 4.5 | B2/1000 | | |
| BM | (30°-60°) | 3594.4 | 21.4 | B3/5000 | | |
| BH | (60°-80°) | 4013.4 | 23.9 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 48.2 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G2

Type V Short



REPORT NUMBER: P963961
 CATALOG NUMBER: NAV-SB3B-727-U-5MQ

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1611.3 | 1611.3 | 1611.3 | 1611.3 | 1611.3 | 1611.3 | 1611.3 | 1611.3 | 1611.3 | 1611.3 | 1611.3 |
| 2.5° | 1618.9 | 1620.6 | 1617.2 | 1615.5 | 1613.9 | 1611.3 | 1612.1 | 1616.3 | 1619.7 | 1618.9 | 1619.7 |
| 5° | 1632.4 | 1634.1 | 1631.6 | 1630.8 | 1627.4 | 1626.5 | 1626.5 | 1630.8 | 1633.2 | 1631.6 | 1632.4 |
| 7.5° | 1647.6 | 1650.1 | 1645.9 | 1645.1 | 1643.4 | 1641.7 | 1640.8 | 1645.1 | 1647.6 | 1647.6 | 1647.6 |
| 10° | 1661.9 | 1664.5 | 1661.1 | 1658.6 | 1656.9 | 1656.9 | 1655.2 | 1658.6 | 1662.9 | 1661.9 | 1661.9 |
| 12.5° | 1677.2 | 1678.8 | 1675.5 | 1673.8 | 1673.8 | 1676.3 | 1673.8 | 1675.5 | 1678.8 | 1677.2 | 1676.3 |
| 15° | 1695.8 | 1696.6 | 1695.8 | 1698.3 | 1702.5 | 1710.9 | 1703.3 | 1701.7 | 1703.3 | 1699.1 | 1699.1 |
| 17.5° | 1721.1 | 1722.8 | 1726.2 | 1732.0 | 1738.0 | 1753.2 | 1739.6 | 1735.4 | 1735.4 | 1727.0 | 1727.0 |
| 20° | 1752.3 | 1754.9 | 1759.9 | 1770.1 | 1777.7 | 1792.0 | 1778.5 | 1772.6 | 1770.1 | 1759.1 | 1759.1 |
| 22.5° | 1785.2 | 1789.4 | 1797.1 | 1810.6 | 1824.1 | 1837.6 | 1824.1 | 1813.9 | 1806.4 | 1792.0 | 1791.2 |
| 25° | 1823.3 | 1828.3 | 1840.2 | 1862.1 | 1880.7 | 1900.1 | 1884.1 | 1863.9 | 1848.6 | 1828.3 | 1827.5 |
| 27.5° | 1877.3 | 1883.2 | 1897.6 | 1924.6 | 1948.2 | 1965.1 | 1950.0 | 1923.7 | 1902.6 | 1878.2 | 1877.3 |
| 30° | 1953.3 | 1959.3 | 1976.1 | 2004.8 | 2020.9 | 2031.9 | 2021.7 | 2001.4 | 1976.1 | 1948.2 | 1948.2 |
| 32.5° | 2051.3 | 2058.9 | 2077.5 | 2104.5 | 2107.9 | 2109.6 | 2106.2 | 2096.0 | 2077.5 | 2043.6 | 2044.6 |
| 35° | 2175.5 | 2183.9 | 2205.0 | 2226.9 | 2223.5 | 2226.9 | 2221.9 | 2218.5 | 2205.0 | 2166.1 | 2166.1 |
| 37.5° | 2327.5 | 2337.6 | 2359.5 | 2376.5 | 2368.0 | 2363.8 | 2364.6 | 2365.4 | 2357.8 | 2314.8 | 2314.8 |
| 40° | 2504.0 | 2517.5 | 2533.5 | 2551.2 | 2536.9 | 2524.2 | 2532.7 | 2539.4 | 2532.7 | 2488.7 | 2488.7 |
| 42.5° | 2685.5 | 2705.0 | 2721.8 | 2747.2 | 2735.3 | 2719.3 | 2731.1 | 2738.7 | 2724.3 | 2677.1 | 2680.5 |
| 45° | 2887.3 | 2905.9 | 2927.9 | 2965.8 | 2957.4 | 2940.5 | 2957.4 | 2959.2 | 2934.7 | 2878.9 | 2884.8 |
| 47.5° | 3095.9 | 3115.4 | 3148.3 | 3198.9 | 3195.5 | 3177.0 | 3198.9 | 3187.1 | 3155.9 | 3089.1 | 3084.9 |
| 50° | 3293.5 | 3320.6 | 3371.2 | 3442.2 | 3448.9 | 3426.2 | 3455.7 | 3432.9 | 3380.6 | 3296.9 | 3295.3 |
| 52.5° | 3479.4 | 3508.1 | 3588.3 | 3684.6 | 3709.1 | 3679.4 | 3719.2 | 3679.4 | 3600.9 | 3493.7 | 3483.6 |
| 55° | 3674.4 | 3706.5 | 3801.9 | 3927.8 | 3976.8 | 3954.8 | 3992.0 | 3932.0 | 3820.5 | 3690.4 | 3672.7 |
| 57.5° | 3904.1 | 3923.5 | 4037.6 | 4187.0 | 4269.7 | 4274.9 | 4291.8 | 4190.4 | 4055.3 | 3907.5 | 3887.2 |
| 60° | 4153.2 | 4180.3 | 4304.4 | 4483.5 | 4614.3 | 4656.6 | 4638.8 | 4488.5 | 4331.4 | 4161.7 | 4134.6 |
| 62.5° | 4472.5 | 4502.0 | 4650.6 | 4865.2 | 5072.1 | 5176.8 | 5107.6 | 4889.7 | 4695.4 | 4491.9 | 4456.4 |
| 65° | 4736.8 | 4769.7 | 5038.3 | 5420.8 | 5797.5 | 6007.7 | 5833.8 | 5432.7 | 5083.1 | 4795.9 | 4748.6 |
| 67.5° | 4545.1 | 4585.6 | 5007.0 | 5709.7 | 6646.2 | 7273.7 | 6678.3 | 5795.8 | 5111.0 | 4721.6 | 4663.3 |
| 70° | 3972.5 | 4010.5 | 4502.0 | 5360.9 | 6885.2 | 8260.1 | 7028.7 | 5518.8 | 4518.1 | 4082.3 | 4024.0 |
| 72.5° | 2637.3 | 2759.8 | 3257.2 | 4287.5 | 6148.0 | 7643.5 | 6208.7 | 4200.6 | 3021.6 | 2631.5 | 2546.2 |
| 75° | 874.9 | 972.8 | 1312.3 | 2222.7 | 4117.7 | 5716.4 | 3920.2 | 1966.9 | 1039.6 | 748.2 | 707.7 |
| 77.5° | 220.4 | 254.2 | 350.4 | 635.9 | 1642.6 | 3254.7 | 1478.8 | 519.4 | 282.9 | 197.6 | 176.5 |
| 80° | 107.2 | 118.2 | 168.9 | 212.0 | 411.2 | 1034.5 | 385.9 | 199.3 | 133.5 | 103.0 | 94.6 |
| 82.5° | 59.1 | 60.0 | 95.4 | 119.9 | 152.8 | 267.7 | 158.8 | 116.5 | 76.9 | 62.5 | 62.5 |
| 85° | 36.3 | 35.5 | 50.6 | 64.2 | 64.2 | 95.4 | 76.1 | 64.2 | 43.9 | 38.8 | 40.5 |
| 87.5° | 14.3 | 14.3 | 18.6 | 20.3 | 17.7 | 24.5 | 19.4 | 21.1 | 16.9 | 16.1 | 16.9 |
| 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)