

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: P967807

Luminaire Tested: **NAV-SB5A-760-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967807
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-760-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 5700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24855.2 lumens
Efficiency: N/A
Efficacy: 175.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

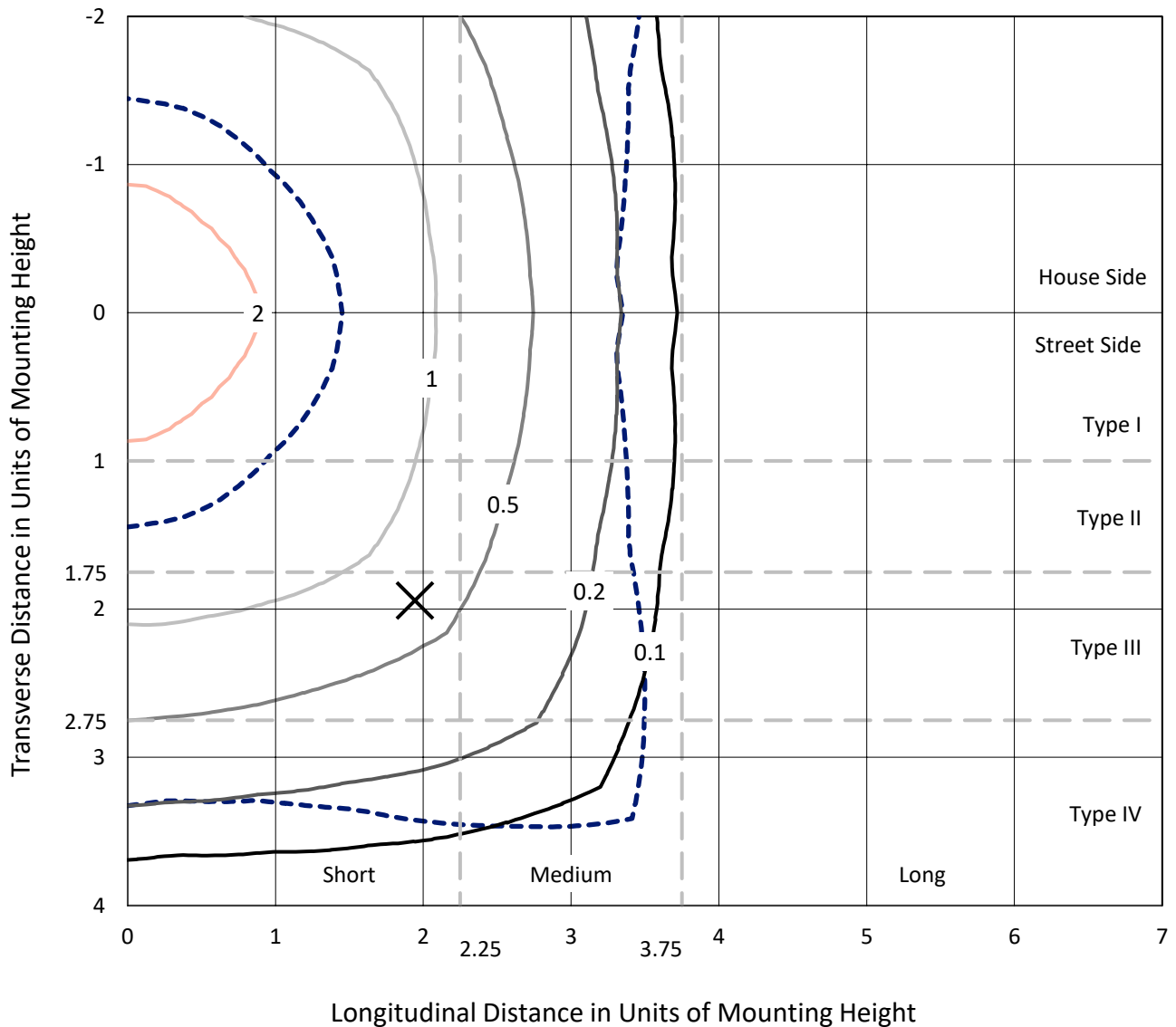
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

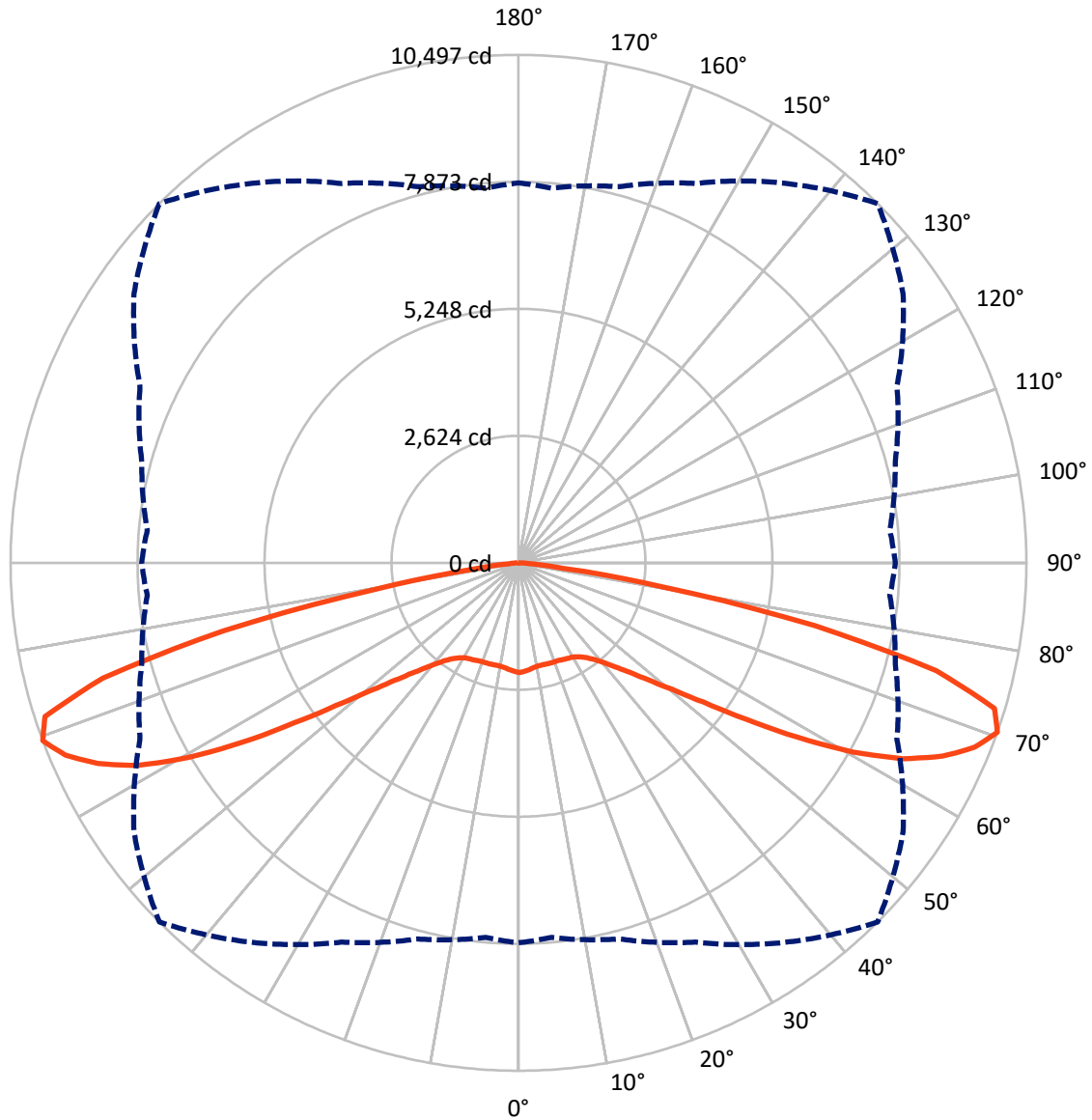
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 12427.6 | 0.0 | 12427.6 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 12427.6 | 0.0 | 12427.6 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 24855.2 | 0.0 | 24855.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 210.9 | 0.8 |
| 10°-20° | 619.3 | 2.5 |
| 20°-30° | 1030.6 | 4.1 |
| 30°-40° | 1558.6 | 6.3 |
| 40°-50° | 2590.0 | 10.4 |
| 50°-60° | 4887.2 | 19.7 |
| 60°-70° | 8252.2 | 33.2 |
| 70°-80° | 5422.5 | 21.8 |
| 80°-90° | 284.1 | 1.1 |
| 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° | 24855.2 | 100.0 |
| 0°-180° | 24855.2 | 100.0 |

Coefficient of Utilization



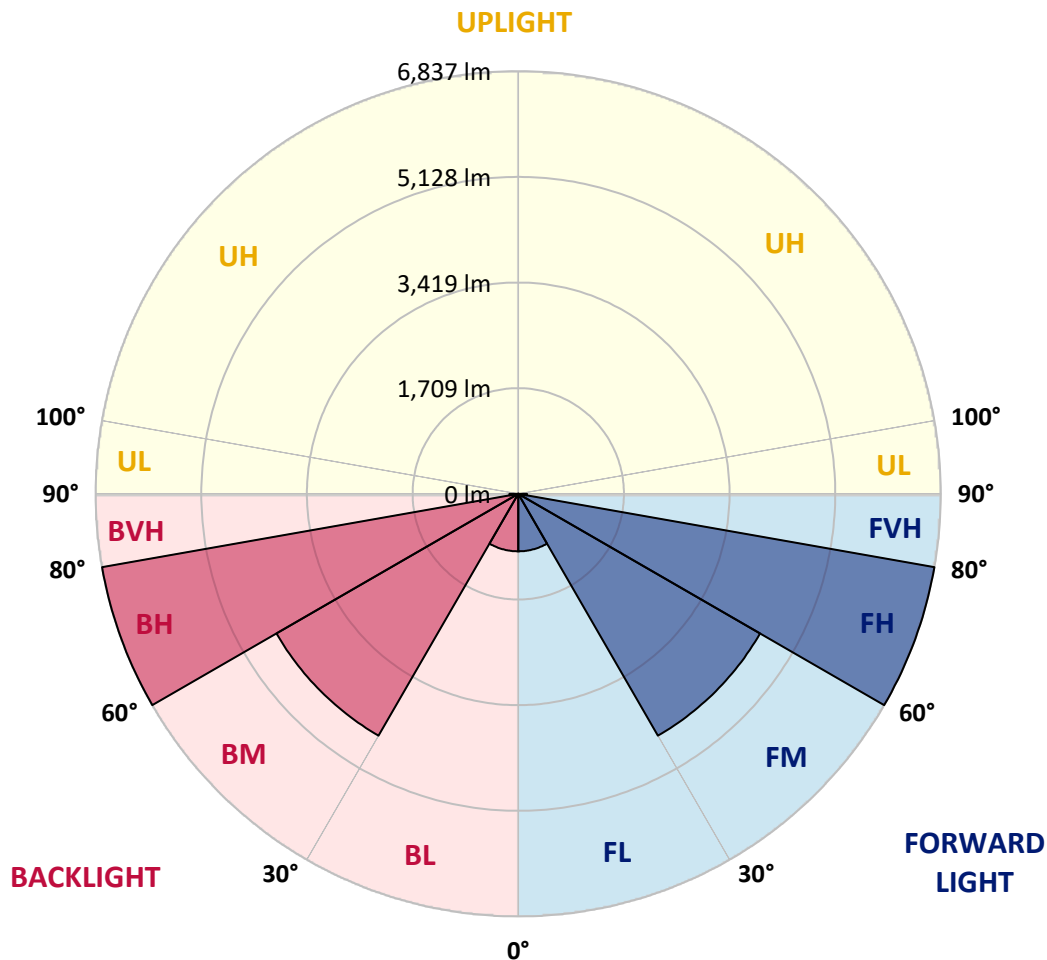
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 930.4 | 3.7 | | | |
| FM (30°-60°) | 4517.8 | 18.2 | | | |
| FH (60°-80°) | 6837.3 | 27.5 | | | G3/7500 |
| FVH (80°-90°) | 142.0 | 0.6 | | | G2/225 |
| BL (0°-30°) | 930.4 | 3.7 | B2/1000 | | |
| BM (30°-60°) | 4517.8 | 18.2 | B3/5000 | | |
| BH (60°-80°) | 6837.3 | 27.5 | B5 | | G3/7500 |
| BVH (80°-90°) | 142.0 | 0.6 | | | G2/225 |
| 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° | 2267.3 | 2267.3 | 2267.3 | 2267.3 | 2267.3 | 2267.3 | 2267.3 | 2267.3 | 2267.3 | 2267.3 | 2267.3 |
| 2.5° | 2253.1 | 2259.5 | 2256.9 | 2251.8 | 2251.8 | 2247.9 | 2251.8 | 2254.4 | 2258.3 | 2260.8 | 2259.5 |
| 5° | 2223.3 | 2228.6 | 2227.2 | 2223.3 | 2224.7 | 2220.8 | 2223.3 | 2227.2 | 2229.8 | 2231.1 | 2231.1 |
| 7.5° | 2197.5 | 2202.7 | 2200.2 | 2193.7 | 2193.7 | 2189.8 | 2191.0 | 2194.9 | 2198.8 | 2200.2 | 2200.2 |
| 10° | 2191.0 | 2196.3 | 2188.5 | 2178.1 | 2174.2 | 2169.1 | 2170.4 | 2174.2 | 2182.0 | 2185.9 | 2185.9 |
| 12.5° | 2193.7 | 2197.5 | 2189.8 | 2174.2 | 2170.4 | 2165.2 | 2165.2 | 2169.1 | 2179.5 | 2184.6 | 2185.9 |
| 15° | 2201.4 | 2205.3 | 2193.7 | 2176.9 | 2173.0 | 2169.1 | 2167.8 | 2173.0 | 2184.6 | 2193.7 | 2194.9 |
| 17.5° | 2215.6 | 2219.5 | 2201.4 | 2178.1 | 2173.0 | 2174.2 | 2173.0 | 2176.9 | 2194.9 | 2211.7 | 2211.7 |
| 20° | 2228.6 | 2231.1 | 2206.6 | 2178.1 | 2173.0 | 2174.2 | 2173.0 | 2180.8 | 2204.0 | 2227.2 | 2228.6 |
| 22.5° | 2232.4 | 2235.0 | 2211.7 | 2187.2 | 2183.4 | 2184.6 | 2183.4 | 2191.0 | 2213.1 | 2236.2 | 2236.2 |
| 25° | 2233.7 | 2237.6 | 2219.5 | 2200.2 | 2206.6 | 2209.2 | 2206.6 | 2207.8 | 2224.7 | 2245.4 | 2244.0 |
| 27.5° | 2253.1 | 2258.3 | 2241.5 | 2224.7 | 2228.6 | 2227.2 | 2231.1 | 2235.0 | 2247.9 | 2268.6 | 2263.4 |
| 30° | 2293.1 | 2297.0 | 2282.8 | 2266.0 | 2263.4 | 2254.4 | 2266.0 | 2278.9 | 2293.1 | 2311.3 | 2307.4 |
| 32.5° | 2359.0 | 2366.7 | 2348.7 | 2330.6 | 2319.0 | 2313.8 | 2322.9 | 2344.8 | 2364.2 | 2383.5 | 2375.8 |
| 35° | 2468.8 | 2474.0 | 2457.2 | 2423.6 | 2402.9 | 2402.9 | 2410.7 | 2439.1 | 2470.1 | 2494.6 | 2485.6 |
| 37.5° | 2623.9 | 2630.4 | 2600.6 | 2560.6 | 2529.6 | 2529.6 | 2539.8 | 2569.6 | 2616.1 | 2651.0 | 2638.0 |
| 40° | 2812.5 | 2821.5 | 2784.1 | 2742.7 | 2713.0 | 2707.8 | 2720.8 | 2754.4 | 2798.2 | 2842.2 | 2828.0 |
| 42.5° | 3039.8 | 3050.2 | 3001.1 | 2964.9 | 2941.6 | 2941.6 | 2948.1 | 2979.2 | 3019.1 | 3073.5 | 3069.6 |
| 45° | 3330.5 | 3348.6 | 3281.4 | 3245.3 | 3223.3 | 3228.4 | 3232.3 | 3259.5 | 3295.7 | 3357.7 | 3355.1 |
| 47.5° | 3676.8 | 3694.8 | 3623.8 | 3586.4 | 3582.5 | 3607.0 | 3591.5 | 3610.9 | 3630.2 | 3701.3 | 3680.7 |
| 50° | 4069.6 | 4100.5 | 4051.4 | 4048.9 | 4056.5 | 4101.8 | 4065.7 | 4076.0 | 4054.0 | 4099.2 | 4072.1 |
| 52.5° | 4550.1 | 4595.3 | 4586.3 | 4601.7 | 4688.3 | 4781.3 | 4698.7 | 4662.5 | 4579.8 | 4594.0 | 4546.2 |
| 55° | 5132.8 | 5201.3 | 5214.2 | 5307.1 | 5503.5 | 5693.5 | 5517.8 | 5371.7 | 5196.0 | 5163.7 | 5113.4 |
| 57.5° | 5795.5 | 5849.8 | 5911.8 | 6101.7 | 6468.6 | 6805.8 | 6468.6 | 6145.6 | 5869.2 | 5803.2 | 5756.7 |
| 60° | 6508.6 | 6575.8 | 6635.2 | 6915.6 | 7460.8 | 7934.9 | 7450.4 | 6937.5 | 6571.9 | 6482.8 | 6405.2 |
| 62.5° | 7274.7 | 7361.2 | 7402.7 | 7713.9 | 8349.5 | 8915.4 | 8358.7 | 7737.2 | 7331.6 | 7236.0 | 7158.5 |
| 65° | 8009.9 | 8080.9 | 8127.4 | 8459.4 | 9066.6 | 9633.8 | 9107.9 | 8495.6 | 8078.3 | 7953.0 | 7891.0 |
| 67.5° | 8352.2 | 8391.0 | 8504.6 | 8880.6 | 9521.3 | 10168.6 | 9629.9 | 8920.6 | 8454.2 | 8234.6 | 8237.2 |
| 70° | 7850.9 | 7772.1 | 8046.0 | 8648.0 | 9575.7 | 10496.7 | 9699.7 | 8630.0 | 8059.0 | 7702.4 | 7787.6 |
| 72.5° | 6066.8 | 5931.2 | 6406.6 | 7436.2 | 8955.5 | 10287.4 | 9017.5 | 7494.4 | 6702.4 | 5978.9 | 6158.5 |
| 75° | 3300.8 | 3147.1 | 3803.4 | 5105.6 | 7141.7 | 8916.8 | 7305.7 | 5251.6 | 4234.9 | 3276.3 | 3489.4 |
| 77.5° | 931.4 | 873.3 | 1403.0 | 2470.1 | 4295.6 | 6260.6 | 4461.0 | 2524.4 | 1664.0 | 987.0 | 1096.9 |
| 80° | 285.5 | 276.4 | 374.6 | 744.2 | 1824.2 | 2998.5 | 1753.2 | 753.2 | 476.7 | 301.0 | 317.9 |
| 82.5° | 169.2 | 155.0 | 186.0 | 271.3 | 465.0 | 941.8 | 452.1 | 282.9 | 227.3 | 152.4 | 165.3 |
| 85° | 96.9 | 90.4 | 109.8 | 131.8 | 156.3 | 200.3 | 130.5 | 134.4 | 121.5 | 81.4 | 85.3 |
| 87.5° | 40.1 | 36.2 | 42.6 | 41.3 | 36.2 | 46.5 | 34.8 | 41.3 | 49.1 | 32.3 | 29.7 |
| 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)