

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: P968735

Luminaire Tested: **NAV-SB5C-730-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968735
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-SB5C-730-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40609.5 lumens
Efficiency: N/A
Efficacy: 162.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

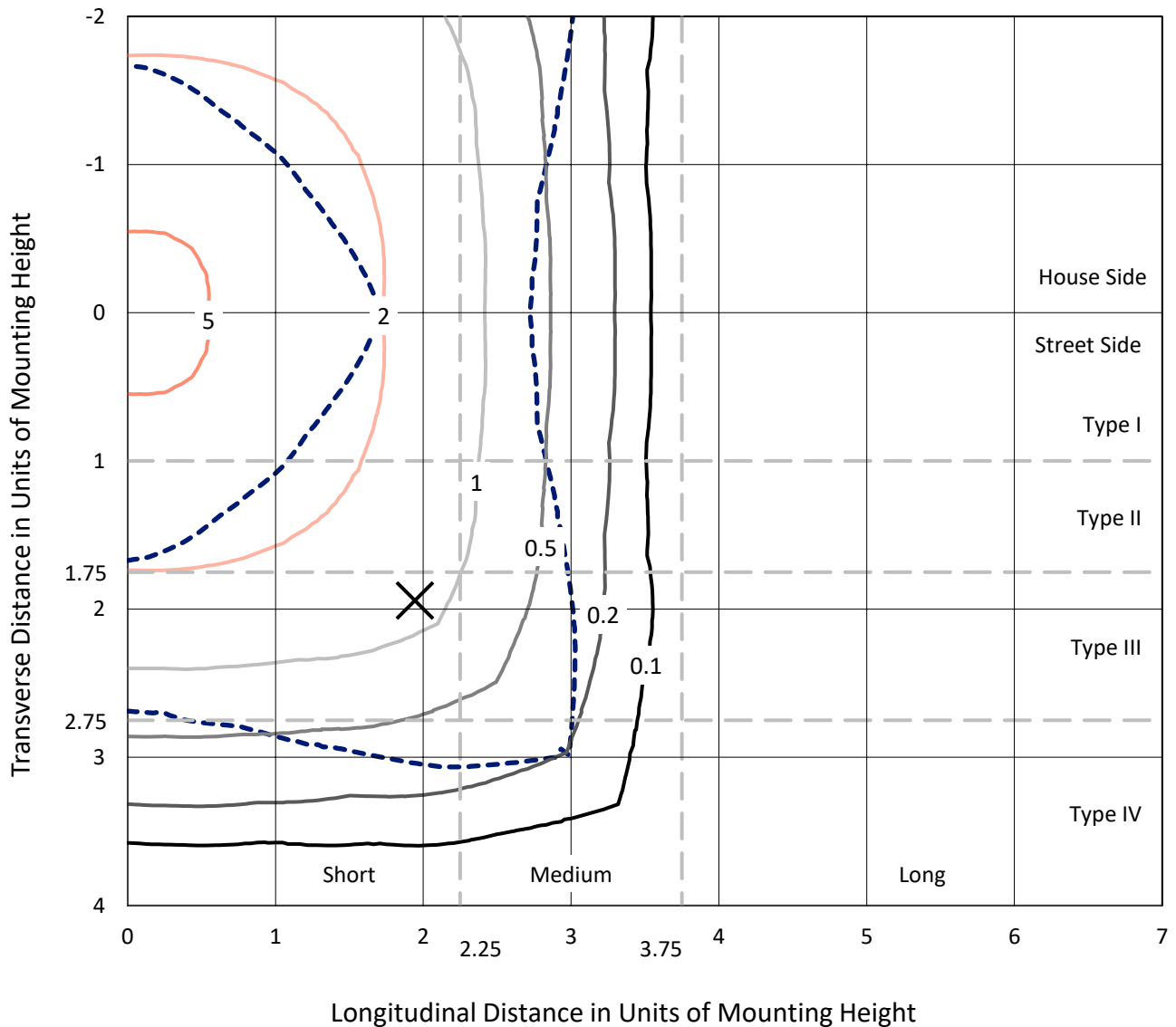
Input Watts (W): 249.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

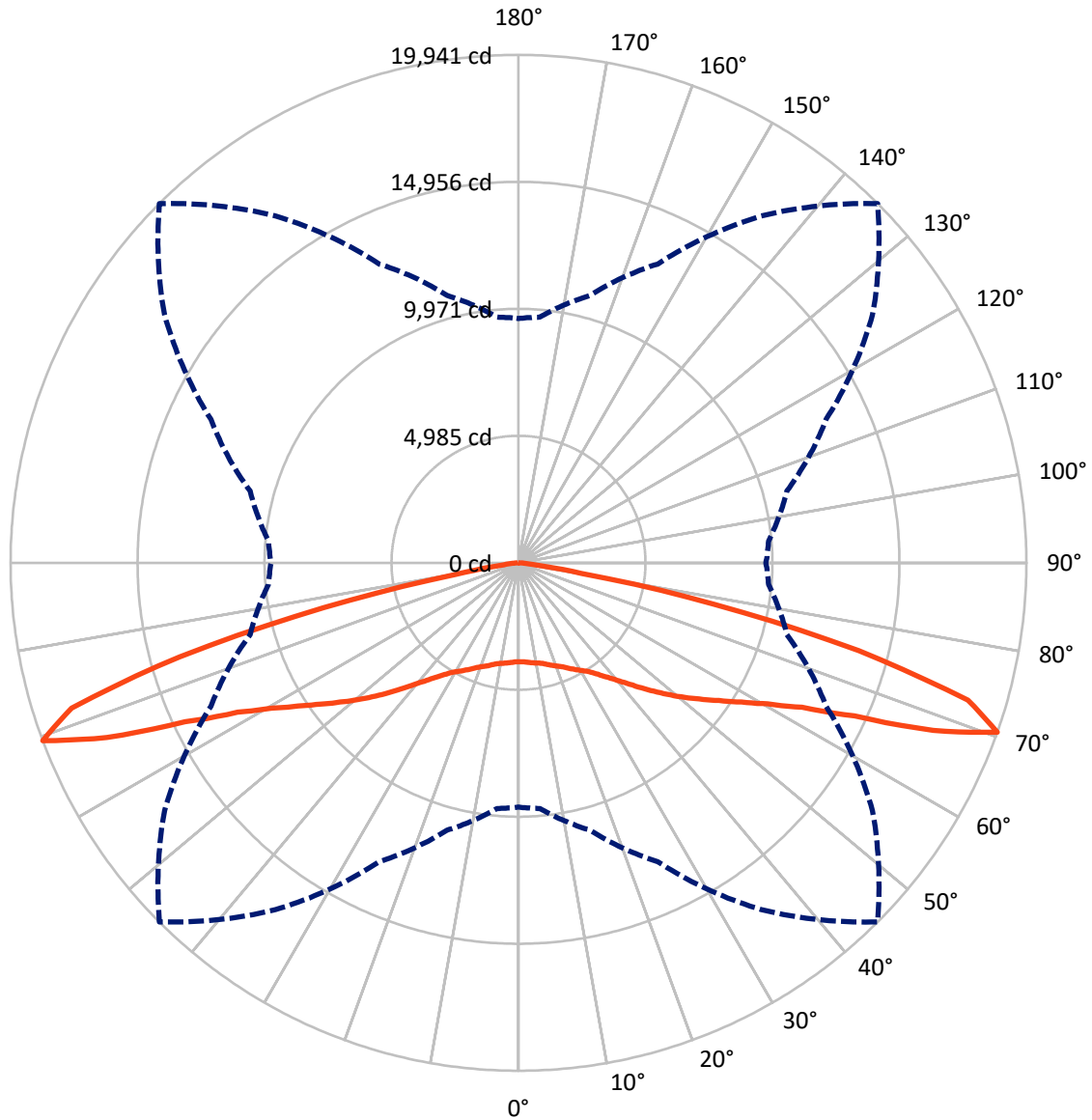
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 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 | 20304.7 | 0.0 | 20304.7 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 20304.7 | 0.0 | 20304.7 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 40609.5 | 0.0 | 40609.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 377.9 | 0.9 |
| 10°-20° | 1171.9 | 2.9 |
| 20°-30° | 2094.2 | 5.2 |
| 30°-40° | 3394.7 | 8.4 |
| 40°-50° | 5529.5 | 13.6 |
| 50°-60° | 8430.6 | 20.8 |
| 60°-70° | 12542.0 | 30.9 |
| 70°-80° | 6835.8 | 16.8 |
| 80°-90° | 232.8 | 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° | 40609.5 | 100.0 |
| 0°-180° | 40609.5 | 100.0 |

Coefficient of Utilization



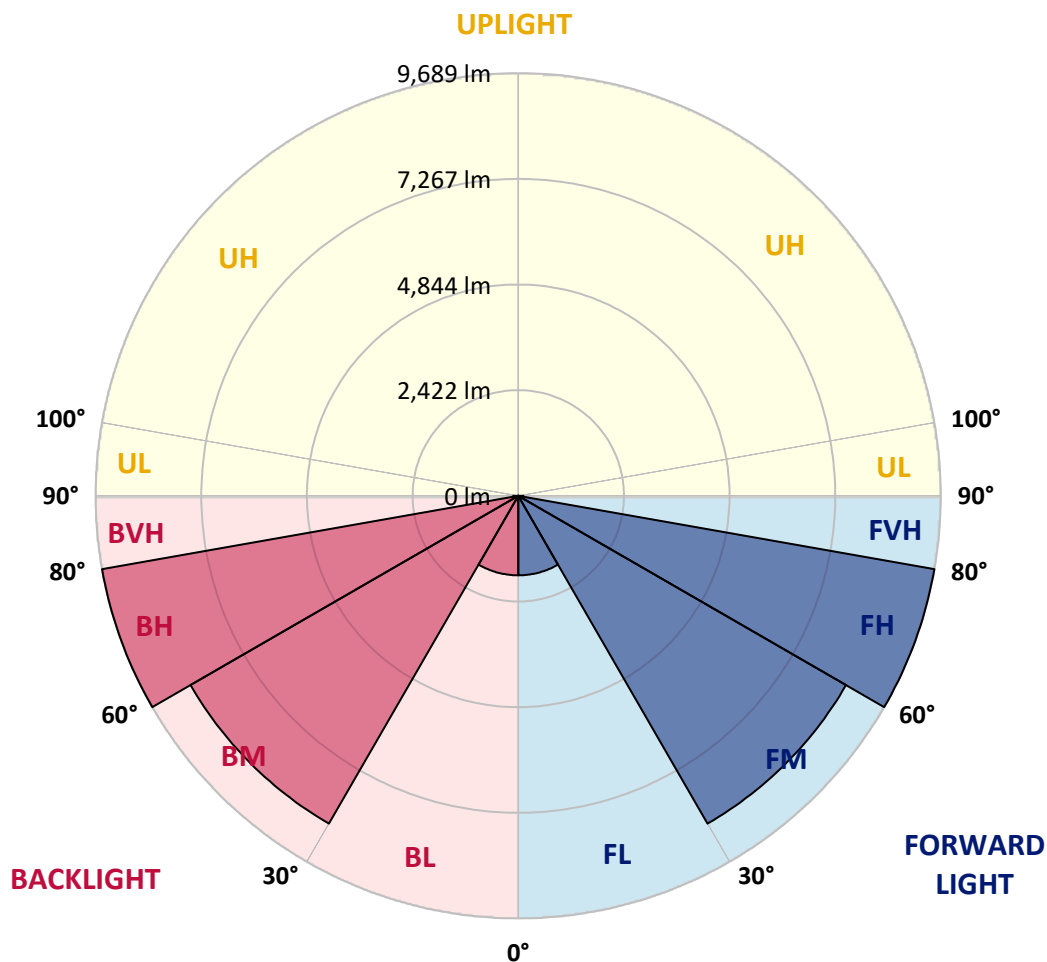
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1822.0 | 4.5 | | | |
| FM (30°-60°) | 8677.4 | 21.4 | | | |
| FH (60°-80°) | 9688.9 | 23.9 | | | G4/12000 |
| FVH (80°-90°) | 116.4 | 0.3 | | | G2/225 |
| BL (0°-30°) | 1822.0 | 4.5 | B3/2500 | | |
| BM (30°-60°) | 8677.4 | 21.4 | B5 | | |
| BH (60°-80°) | 9688.9 | 23.9 | B5 | | G4/12000 |
| BVH (80°-90°) | 116.4 | 0.3 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G4

Type V Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3890.0 | 3890.0 | 3890.0 | 3890.0 | 3890.0 | 3890.0 | 3890.0 | 3890.0 | 3890.0 | 3890.0 | 3890.0 |
| 2.5° | 3908.3 | 3912.4 | 3904.2 | 3900.1 | 3896.1 | 3890.0 | 3892.0 | 3902.2 | 3910.4 | 3908.3 | 3910.4 |
| 5° | 3940.9 | 3945.0 | 3938.9 | 3936.8 | 3928.7 | 3926.7 | 3926.7 | 3936.8 | 3943.0 | 3938.9 | 3940.9 |
| 7.5° | 3977.6 | 3983.8 | 3973.5 | 3971.6 | 3967.5 | 3963.4 | 3961.3 | 3971.6 | 3977.6 | 3977.6 | 3977.6 |
| 10° | 4012.3 | 4018.4 | 4010.2 | 4004.2 | 4000.1 | 4000.1 | 3996.0 | 4004.2 | 4014.3 | 4012.3 | 4012.3 |
| 12.5° | 4049.0 | 4053.1 | 4045.0 | 4040.9 | 4040.9 | 4046.9 | 4040.9 | 4045.0 | 4053.1 | 4049.0 | 4046.9 |
| 15° | 4093.8 | 4095.9 | 4093.8 | 4100.0 | 4110.1 | 4130.5 | 4112.2 | 4108.1 | 4112.2 | 4102.0 | 4102.0 |
| 17.5° | 4155.0 | 4159.0 | 4167.2 | 4181.5 | 4195.7 | 4232.4 | 4199.8 | 4189.7 | 4189.7 | 4169.3 | 4169.3 |
| 20° | 4230.5 | 4236.5 | 4248.8 | 4273.2 | 4291.6 | 4326.2 | 4293.6 | 4279.4 | 4273.2 | 4246.8 | 4246.8 |
| 22.5° | 4309.9 | 4320.2 | 4338.5 | 4371.1 | 4403.7 | 4436.4 | 4403.7 | 4379.3 | 4361.0 | 4326.2 | 4324.3 |
| 25° | 4401.7 | 4414.0 | 4442.5 | 4495.4 | 4540.3 | 4587.2 | 4548.5 | 4499.5 | 4462.8 | 4414.0 | 4411.9 |
| 27.5° | 4532.1 | 4546.5 | 4581.1 | 4646.3 | 4703.4 | 4744.2 | 4707.5 | 4644.3 | 4593.3 | 4534.2 | 4532.1 |
| 30° | 4715.7 | 4730.0 | 4770.8 | 4840.0 | 4878.8 | 4905.2 | 4880.8 | 4831.8 | 4770.8 | 4703.4 | 4703.4 |
| 32.5° | 4952.2 | 4970.5 | 5015.3 | 5080.6 | 5088.7 | 5092.8 | 5084.7 | 5060.2 | 5015.3 | 4933.8 | 4935.9 |
| 35° | 5251.9 | 5272.3 | 5323.2 | 5376.2 | 5368.0 | 5376.2 | 5364.0 | 5355.8 | 5323.2 | 5229.4 | 5229.4 |
| 37.5° | 5618.8 | 5643.3 | 5696.3 | 5737.1 | 5716.7 | 5706.5 | 5708.5 | 5710.6 | 5692.2 | 5588.3 | 5588.3 |
| 40° | 6044.9 | 6077.5 | 6116.3 | 6159.1 | 6124.5 | 6093.8 | 6114.2 | 6130.5 | 6114.2 | 6008.2 | 6008.2 |
| 42.5° | 6483.3 | 6530.2 | 6571.0 | 6632.2 | 6603.6 | 6564.8 | 6593.4 | 6611.8 | 6577.0 | 6462.9 | 6471.0 |
| 45° | 6970.5 | 7015.4 | 7068.4 | 7160.1 | 7139.7 | 7098.9 | 7139.7 | 7143.8 | 7084.7 | 6950.1 | 6964.5 |
| 47.5° | 7474.1 | 7521.0 | 7600.5 | 7722.9 | 7714.7 | 7669.9 | 7722.9 | 7694.3 | 7618.8 | 7457.8 | 7447.6 |
| 50° | 7951.2 | 8016.4 | 8138.8 | 8310.0 | 8326.3 | 8271.2 | 8342.7 | 8287.6 | 8161.2 | 7959.3 | 7955.2 |
| 52.5° | 8399.7 | 8469.1 | 8662.7 | 8895.2 | 8954.3 | 8883.0 | 8978.7 | 8883.0 | 8693.3 | 8434.4 | 8409.9 |
| 55° | 8870.7 | 8948.1 | 9178.6 | 9482.3 | 9600.6 | 9547.6 | 9637.3 | 9492.5 | 9223.4 | 8909.4 | 8866.6 |
| 57.5° | 9425.2 | 9472.1 | 9747.3 | 10108.2 | 10308.0 | 10320.2 | 10361.0 | 10116.3 | 9790.2 | 9433.4 | 9384.5 |
| 60° | 10026.7 | 10091.9 | 10391.6 | 10823.8 | 11139.8 | 11241.8 | 11198.9 | 10836.1 | 10456.8 | 10047.0 | 9981.8 |
| 62.5° | 10797.3 | 10868.7 | 11227.4 | 11745.4 | 12244.9 | 12497.6 | 12330.4 | 11804.4 | 11335.6 | 10844.2 | 10758.6 |
| 65° | 11435.4 | 11515.0 | 12163.3 | 13086.9 | 13996.2 | 14503.7 | 14083.8 | 13115.4 | 12271.3 | 11578.2 | 11464.0 |
| 67.5° | 10972.6 | 11070.5 | 12087.8 | 13784.1 | 16045.1 | 17559.9 | 16122.5 | 13992.1 | 12338.6 | 11398.7 | 11258.1 |
| 70° | 9590.3 | 9682.2 | 10868.7 | 12942.1 | 16622.1 | 19941.2 | 16968.7 | 13323.4 | 10907.4 | 9855.4 | 9714.7 |
| 72.5° | 6367.1 | 6662.7 | 7863.5 | 10350.9 | 14842.2 | 18452.9 | 14989.0 | 10140.8 | 7294.7 | 6352.8 | 6146.9 |
| 75° | 2112.1 | 2348.7 | 3168.3 | 5366.1 | 9941.1 | 13800.4 | 9463.9 | 4748.3 | 2509.7 | 1806.4 | 1708.5 |
| 77.5° | 532.1 | 613.7 | 846.1 | 1535.1 | 3965.4 | 7857.4 | 3569.9 | 1253.9 | 683.0 | 477.0 | 426.1 |
| 80° | 258.9 | 285.5 | 407.7 | 511.7 | 992.9 | 2497.5 | 931.7 | 481.1 | 322.2 | 248.8 | 228.4 |
| 82.5° | 142.7 | 144.7 | 230.4 | 289.5 | 369.0 | 646.3 | 383.2 | 281.4 | 185.5 | 150.9 | 150.9 |
| 85° | 87.6 | 85.6 | 122.3 | 155.0 | 155.0 | 230.4 | 183.5 | 155.0 | 106.0 | 93.8 | 97.9 |
| 87.5° | 34.6 | 34.6 | 44.9 | 48.9 | 42.8 | 59.1 | 46.8 | 50.9 | 40.8 | 38.7 | 40.8 |
| 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)