

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: McGRAW-EDISON

Report Number: P453454

Luminaire Tested: **GALN-SA4C-727-U-T1**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4C-727-U-T1
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23218 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

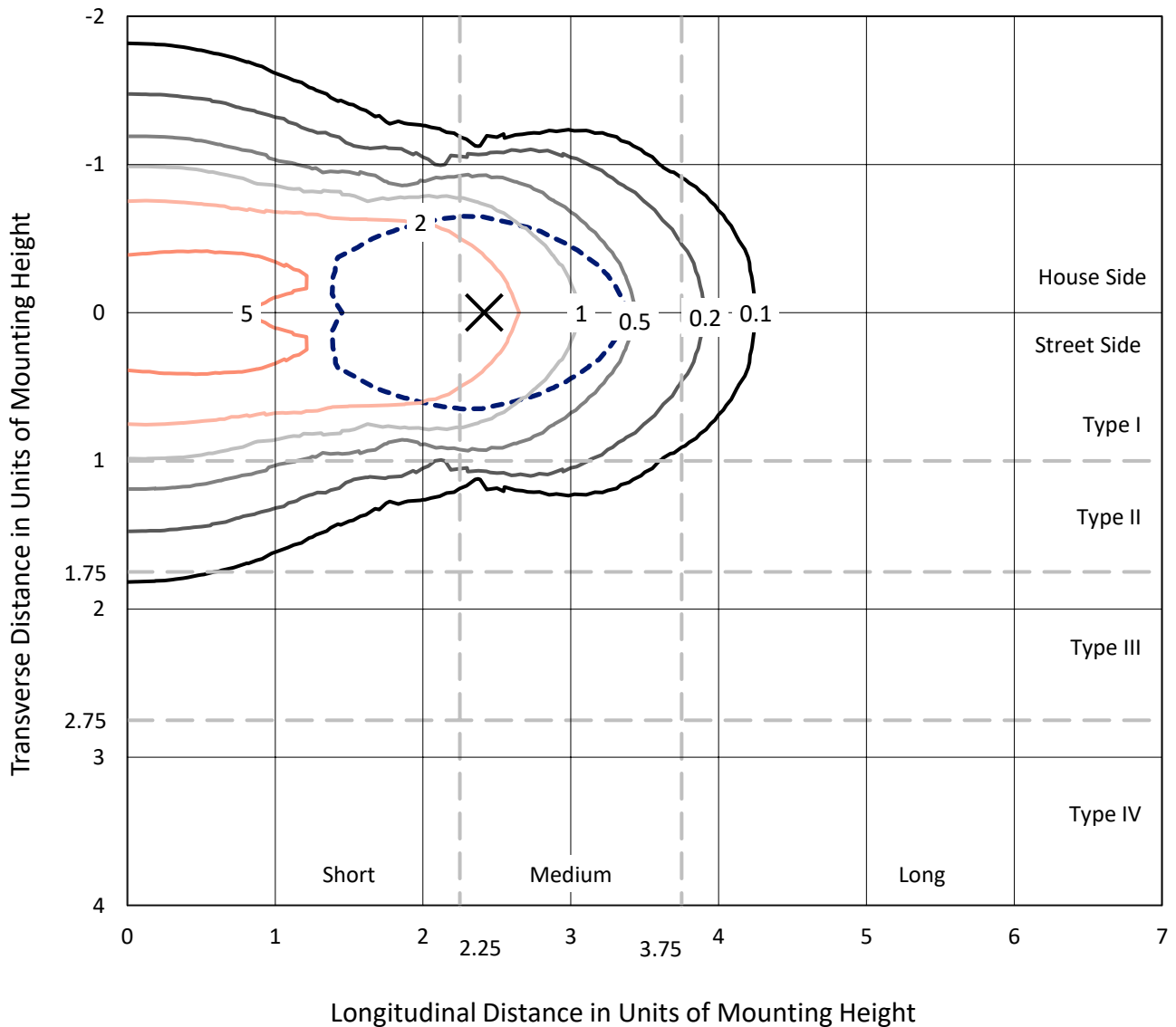
Input Watts (W): 213
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

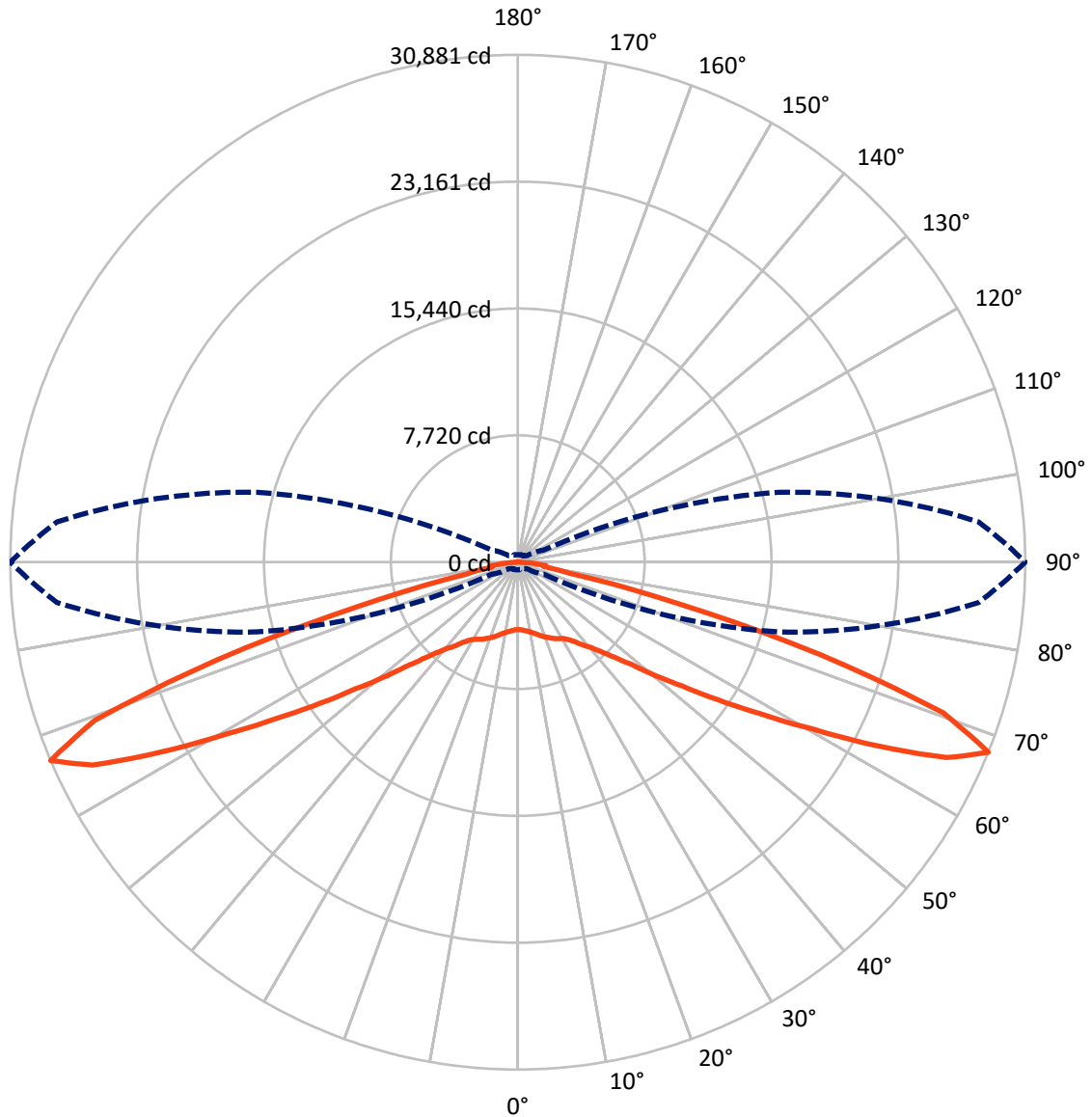
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 11609.0 | 0.0 | 11609.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 11609.0 | 0.0 | 11609.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 23218.0 | 0.0 | 23218.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 409.8 | 1.8 |
| 10°-20° | 1311.1 | 5.6 |
| 20°-30° | 2194.5 | 9.5 |
| 30°-40° | 2973.0 | 12.8 |
| 40°-50° | 3765.8 | 16.2 |
| 50°-60° | 4704.4 | 20.3 |
| 60°-70° | 5529.8 | 23.8 |
| 70°-80° | 2115.4 | 9.1 |
| 80°-90° | 214.3 | 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° | 23218.0 | 100.0 |
| 0°-180° | 23218.0 | 100.0 |

Coefficient of Utilization



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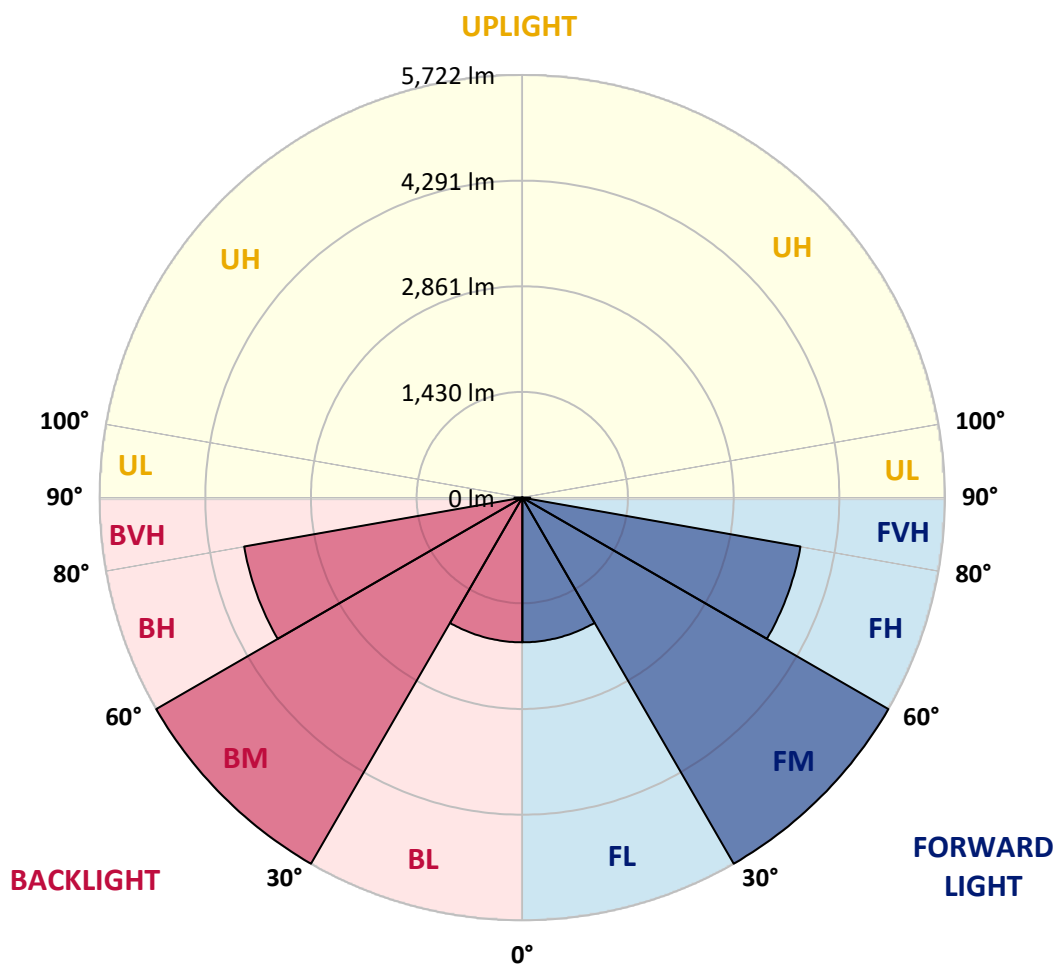
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1957.7 | 8.4 | | | |
| FM | (30°-60°) | 5721.6 | 24.6 | | | |
| FH | (60°-80°) | 3822.6 | 16.5 | | | G2/5000 |
| FVH | (80°-90°) | 107.2 | 0.5 | | | G2/225 |
| BL | (0°-30°) | 1957.7 | 8.4 | B3/2500 | | |
| BM | (30°-60°) | 5721.6 | 24.6 | B4/8500 | | |
| BH | (60°-80°) | 3822.6 | 16.5 | B4/5000 | | G4/5000 |
| BVH | (80°-90°) | 107.2 | 0.5 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G4

Type I Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0° | 4110.3 | 4110.3 | 4110.3 | 4110.3 | 4110.3 | 4110.3 | 4110.3 | 4110.3 | 4110.3 | 4110.3 | 4110.3 |
| 2.5° | 4163.0 | 4160.5 | 4161.7 | 4160.5 | 4164.3 | 4161.7 | 4146.3 | 4133.5 | 4123.2 | 4124.5 | 4120.6 |
| 5° | 4251.7 | 4253.0 | 4254.3 | 4247.9 | 4256.9 | 4251.7 | 4227.3 | 4206.7 | 4186.2 | 4178.4 | 4175.9 |
| 7.5° | 4325.0 | 4331.4 | 4335.3 | 4341.7 | 4357.2 | 4357.2 | 4344.3 | 4314.7 | 4269.7 | 4244.0 | 4242.7 |
| 10° | 4398.3 | 4403.4 | 4415.0 | 4435.6 | 4461.3 | 4485.7 | 4480.6 | 4440.7 | 4382.9 | 4339.2 | 4328.9 |
| 12.5° | 4424.0 | 4430.4 | 4469.0 | 4528.2 | 4586.0 | 4633.6 | 4633.6 | 4601.4 | 4526.9 | 4460.0 | 4440.7 |
| 15° | 4334.0 | 4345.6 | 4415.0 | 4541.0 | 4692.7 | 4796.9 | 4820.0 | 4775.0 | 4695.3 | 4592.4 | 4569.3 |
| 17.5° | 4155.3 | 4183.6 | 4285.2 | 4471.6 | 4723.6 | 4939.6 | 5006.4 | 4984.6 | 4881.7 | 4750.6 | 4723.6 |
| 20° | 3963.7 | 3994.6 | 4102.6 | 4349.4 | 4697.9 | 5023.1 | 5217.3 | 5222.4 | 5095.1 | 4904.9 | 4865.0 |
| 22.5° | 3752.9 | 3776.0 | 3914.9 | 4204.2 | 4620.7 | 5042.4 | 5398.6 | 5487.3 | 5315.0 | 5059.1 | 5002.6 |
| 25° | 3516.3 | 3542.0 | 3687.3 | 3999.7 | 4475.4 | 5020.6 | 5564.4 | 5759.8 | 5545.1 | 5223.7 | 5151.7 |
| 27.5° | 3290.0 | 3300.3 | 3455.9 | 3773.5 | 4283.9 | 4964.0 | 5686.5 | 6010.5 | 5799.7 | 5360.0 | 5268.7 |
| 30° | 3072.8 | 3097.2 | 3234.8 | 3548.5 | 4064.0 | 4853.4 | 5792.0 | 6296.0 | 6073.5 | 5502.7 | 5385.7 |
| 32.5° | 2842.6 | 2872.2 | 3021.3 | 3338.9 | 3844.2 | 4687.6 | 5856.3 | 6608.4 | 6455.4 | 5734.1 | 5609.4 |
| 35° | 2621.5 | 2640.8 | 2791.2 | 3099.8 | 3629.5 | 4494.7 | 5867.8 | 6960.7 | 6947.8 | 6085.1 | 5919.3 |
| 37.5° | 2395.2 | 2423.5 | 2575.2 | 2870.9 | 3401.9 | 4290.3 | 5810.0 | 7334.8 | 7541.8 | 6572.4 | 6393.7 |
| 40° | 2177.9 | 2202.4 | 2351.5 | 2649.8 | 3143.5 | 4040.9 | 5672.4 | 7676.8 | 8234.8 | 7073.8 | 6820.5 |
| 42.5° | 1941.4 | 1947.8 | 2111.1 | 2414.5 | 2890.2 | 3751.6 | 5474.4 | 7981.5 | 9007.5 | 7746.2 | 7431.2 |
| 45° | 1672.7 | 1689.4 | 1841.1 | 2139.4 | 2599.6 | 3427.6 | 5205.7 | 8233.5 | 9987.1 | 8678.3 | 8248.9 |
| 47.5° | 1404.0 | 1418.1 | 1557.0 | 1851.4 | 2282.1 | 3056.1 | 4791.7 | 8454.6 | 10992.5 | 9862.4 | 9299.3 |
| 50° | 1141.7 | 1149.4 | 1262.5 | 1523.5 | 1924.7 | 2665.2 | 4278.7 | 8525.3 | 12129.1 | 11538.9 | 10820.3 |
| 52.5° | 902.5 | 914.1 | 1000.3 | 1204.7 | 1542.8 | 2203.7 | 3724.6 | 8350.5 | 13455.9 | 13526.6 | 12513.5 |
| 55° | 731.6 | 735.4 | 799.7 | 950.1 | 1206.0 | 1720.2 | 3056.1 | 7863.2 | 14883.0 | 16073.5 | 14781.4 |
| 57.5° | 630.0 | 632.6 | 668.6 | 752.1 | 928.3 | 1297.2 | 2370.8 | 6941.4 | 16164.8 | 19057.6 | 17396.5 |
| 60° | 572.1 | 573.4 | 594.0 | 642.8 | 735.4 | 995.1 | 1698.4 | 5640.3 | 17429.9 | 22378.5 | 20646.7 |
| 62.5° | 536.1 | 536.1 | 550.3 | 577.3 | 622.3 | 763.7 | 1230.4 | 4069.2 | 18296.5 | 25748.3 | 24652.9 |
| 65° | 501.4 | 501.4 | 511.7 | 531.0 | 555.4 | 624.8 | 909.0 | 2653.6 | 18274.6 | 28202.6 | 28682.2 |
| 67.5° | 461.6 | 461.6 | 469.3 | 488.6 | 502.7 | 537.4 | 702.0 | 1738.2 | 16415.5 | 28148.6 | 30880.7 |
| 70° | 414.0 | 414.0 | 424.3 | 441.0 | 452.6 | 474.4 | 554.1 | 1189.3 | 12059.6 | 24034.4 | 27463.3 |
| 72.5° | 366.4 | 367.7 | 374.1 | 390.8 | 399.8 | 412.7 | 460.3 | 833.1 | 7397.8 | 16365.4 | 19202.9 |
| 75° | 313.7 | 316.3 | 322.7 | 339.4 | 347.1 | 352.3 | 388.3 | 594.0 | 3742.6 | 8823.6 | 10046.3 |
| 77.5° | 253.3 | 258.4 | 262.3 | 280.3 | 285.4 | 293.1 | 320.1 | 429.4 | 1643.1 | 3170.5 | 3198.8 |
| 80° | 185.1 | 191.6 | 203.1 | 219.9 | 223.7 | 228.9 | 244.3 | 304.7 | 744.4 | 1447.7 | 1572.4 |
| 82.5° | 136.3 | 145.3 | 131.1 | 153.0 | 153.0 | 146.6 | 172.3 | 204.4 | 342.0 | 1433.5 | 1715.1 |
| 85° | 74.6 | 75.9 | 68.1 | 78.4 | 83.6 | 82.3 | 91.3 | 100.3 | 165.9 | 956.5 | 986.1 |
| 87.5° | 18.0 | 19.3 | 20.6 | 24.4 | 29.6 | 29.6 | 32.1 | 28.3 | 54.0 | 309.8 | 177.4 |
| 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)