

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: P456847

Luminaire Tested: **GALN-SA8A-827-U-T1**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456847
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-SA8A-827-U-T1
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27099 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

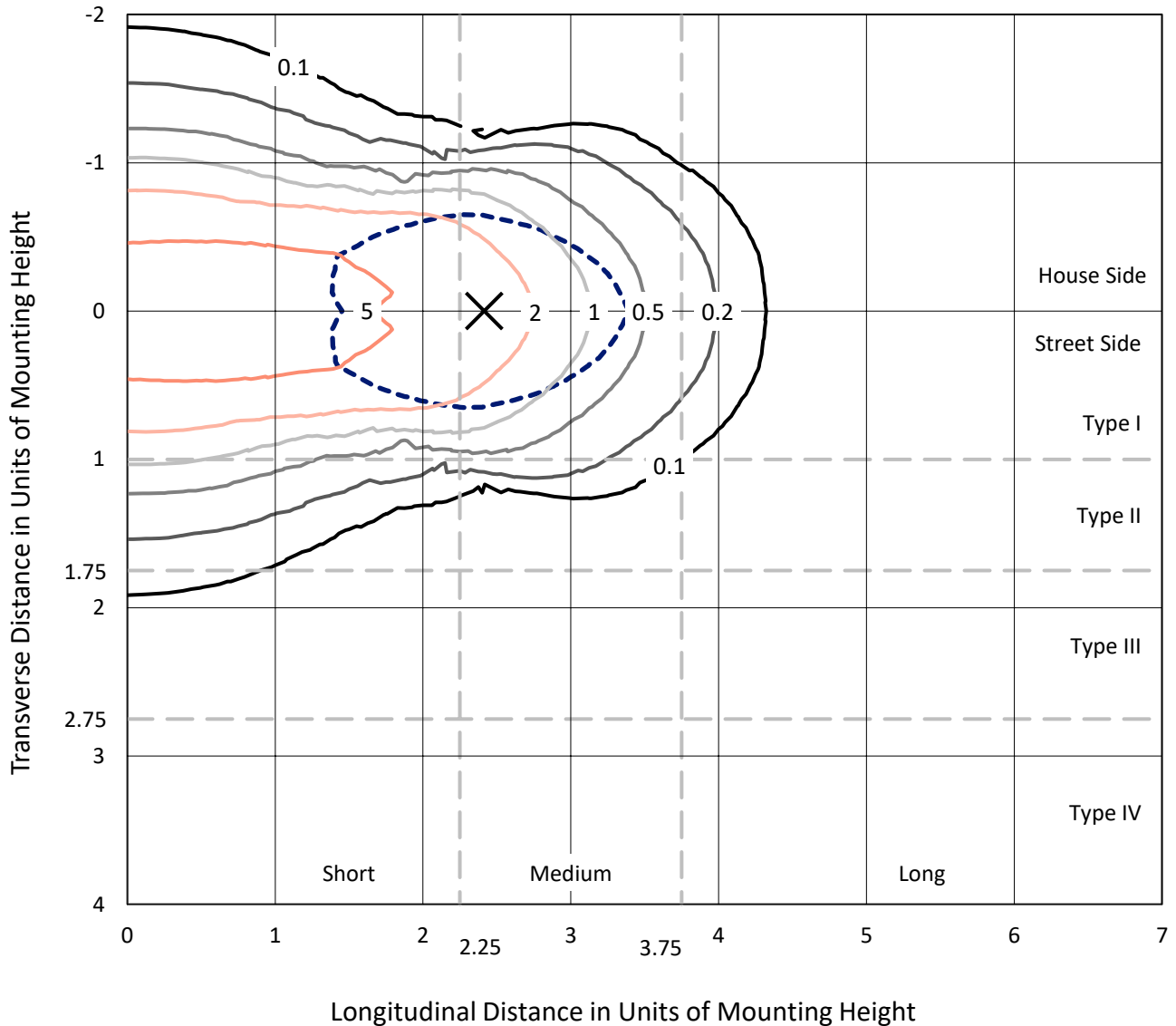
Input Watts (W): 244
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

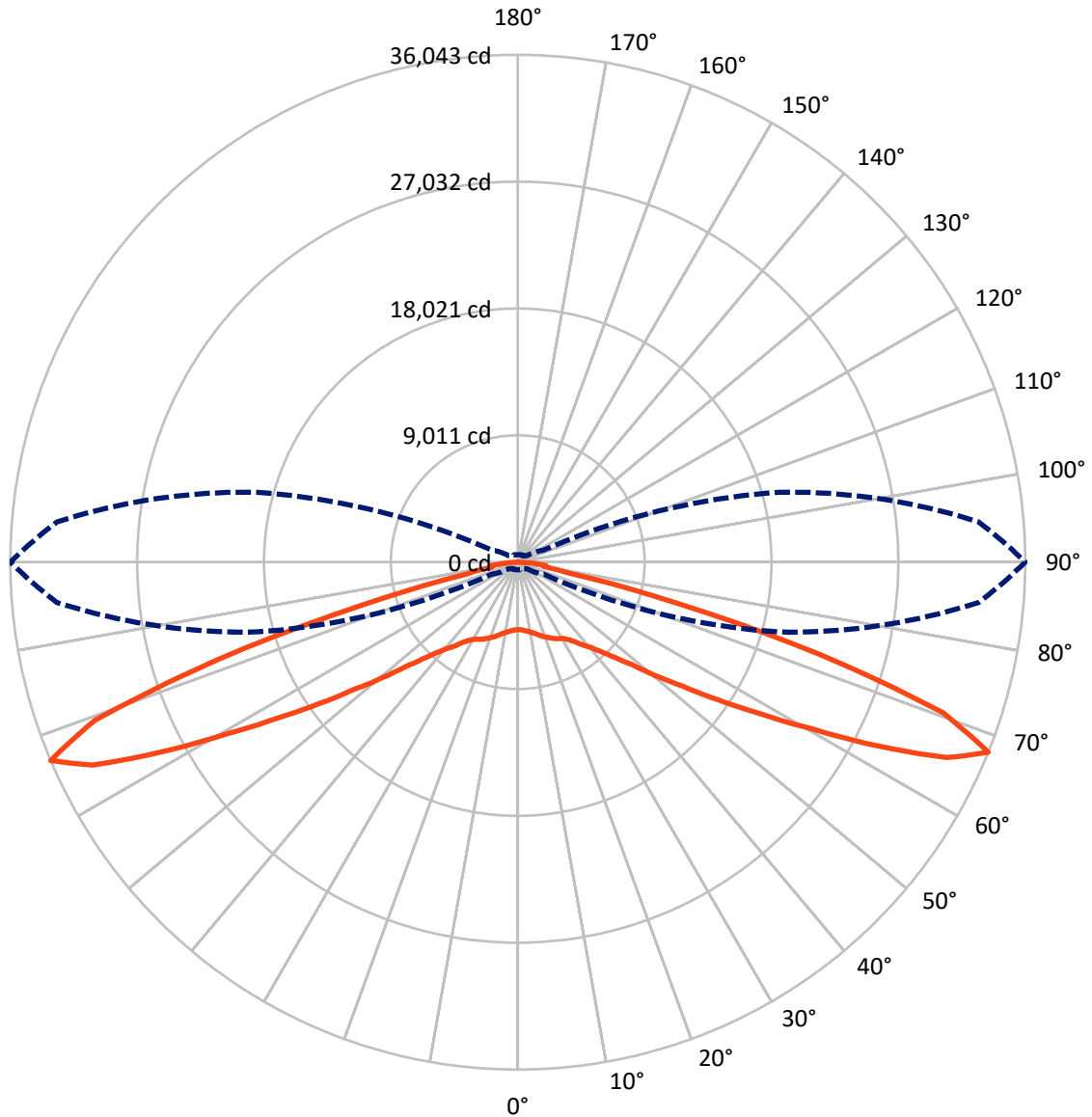
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 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 | 13549.5 | 0.0 | 13549.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 13549.5 | 0.0 | 13549.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 27099.0 | 0.0 | 27099.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 478.3 | 1.8 |
| 10°-20° | 1530.3 | 5.6 |
| 20°-30° | 2561.3 | 9.5 |
| 30°-40° | 3469.9 | 12.8 |
| 40°-50° | 4395.2 | 16.2 |
| 50°-60° | 5490.7 | 20.3 |
| 60°-70° | 6454.1 | 23.8 |
| 70°-80° | 2469.0 | 9.1 |
| 80°-90° | 250.1 | 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° | 27099.0 | 100.0 |
| 0°-180° | 27099.0 | 100.0 |

Coefficient of Utilization



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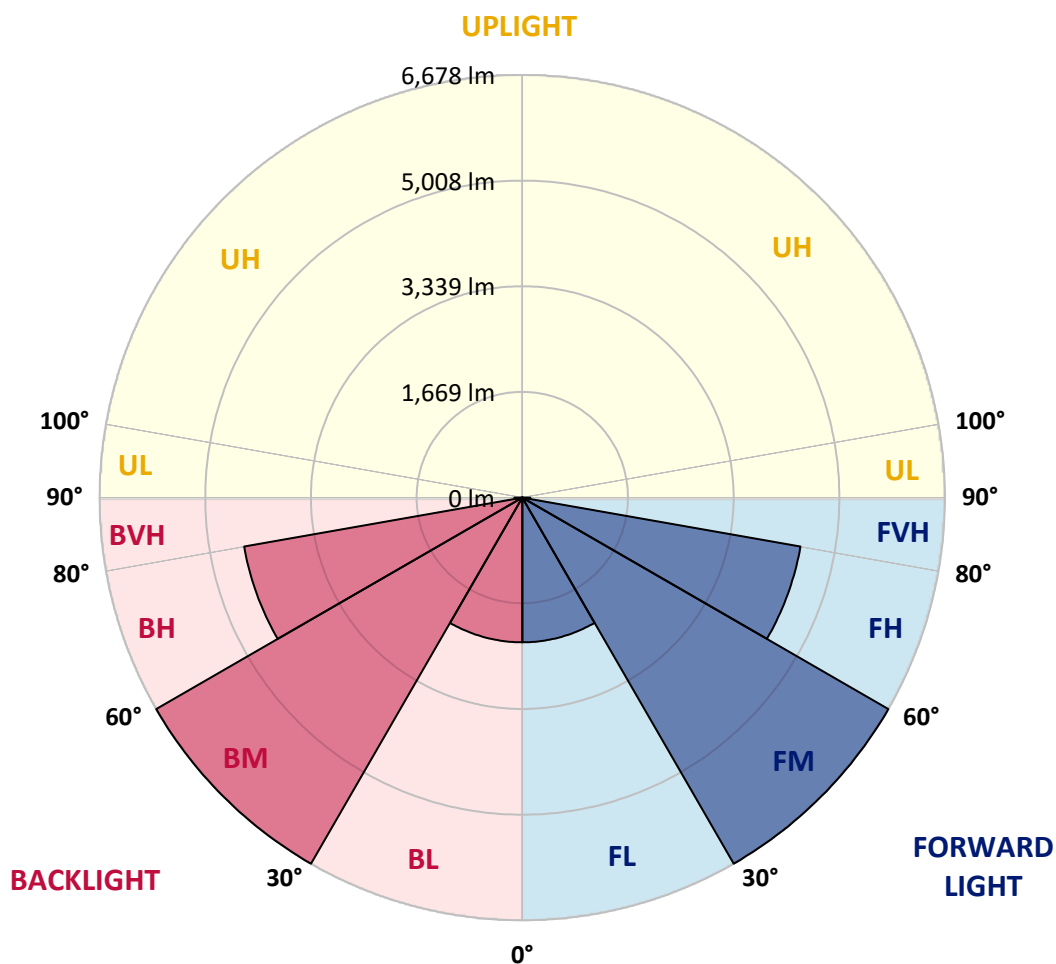
CATALOG NUMBER: GALN-SA8A-827-U-T1

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2285.0 | 8.4 | | | |
| FM (30°-60°) | 6677.9 | 24.6 | | | |
| FH (60°-80°) | 4461.5 | 16.5 | | | G2/5000 |
| FVH (80°-90°) | 125.1 | 0.5 | | | G2/225 |
| BL (0°-30°) | 2285.0 | 8.4 | B3/2500 | | |
| BM (30°-60°) | 6677.9 | 24.6 | B4/8500 | | |
| BH (60°-80°) | 4461.5 | 16.5 | B4/5000 | | G4/5000 |
| BVH (80°-90°) | 125.1 | 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° | 4797.4 | 4797.4 | 4797.4 | 4797.4 | 4797.4 | 4797.4 | 4797.4 | 4797.4 | 4797.4 | 4797.4 | 4797.4 |
| 2.5° | 4858.9 | 4855.9 | 4857.4 | 4855.9 | 4860.4 | 4857.4 | 4839.4 | 4824.4 | 4812.4 | 4813.9 | 4809.4 |
| 5° | 4962.4 | 4963.9 | 4965.4 | 4957.9 | 4968.4 | 4962.4 | 4933.9 | 4909.9 | 4885.9 | 4876.9 | 4873.9 |
| 7.5° | 5048.0 | 5055.5 | 5060.0 | 5067.5 | 5085.5 | 5085.5 | 5070.5 | 5036.0 | 4983.4 | 4953.4 | 4951.9 |
| 10° | 5133.5 | 5139.5 | 5153.0 | 5177.0 | 5207.0 | 5235.5 | 5229.5 | 5183.0 | 5115.5 | 5064.5 | 5052.5 |
| 12.5° | 5163.5 | 5171.0 | 5216.0 | 5285.1 | 5352.6 | 5408.1 | 5408.1 | 5370.6 | 5283.6 | 5205.5 | 5183.0 |
| 15° | 5058.5 | 5072.0 | 5153.0 | 5300.1 | 5477.1 | 5598.7 | 5625.7 | 5573.2 | 5480.1 | 5360.1 | 5333.1 |
| 17.5° | 4849.9 | 4882.9 | 5001.4 | 5219.0 | 5513.1 | 5765.2 | 5843.3 | 5817.8 | 5697.7 | 5544.7 | 5513.1 |
| 20° | 4626.3 | 4662.3 | 4788.4 | 5076.5 | 5483.1 | 5862.8 | 6089.4 | 6095.4 | 5946.8 | 5724.7 | 5678.2 |
| 22.5° | 4380.2 | 4407.2 | 4569.3 | 4906.9 | 5393.1 | 5885.3 | 6301.0 | 6404.5 | 6203.4 | 5904.8 | 5838.8 |
| 25° | 4104.1 | 4134.1 | 4303.7 | 4668.3 | 5223.5 | 5859.8 | 6494.5 | 6722.6 | 6472.0 | 6096.9 | 6012.8 |
| 27.5° | 3840.0 | 3852.0 | 4033.6 | 4404.2 | 4999.9 | 5793.8 | 6637.1 | 7015.2 | 6769.1 | 6255.9 | 6149.4 |
| 30° | 3586.4 | 3614.9 | 3775.5 | 4141.6 | 4743.3 | 5664.7 | 6760.1 | 7348.4 | 7088.8 | 6422.5 | 6285.9 |
| 32.5° | 3317.8 | 3352.3 | 3526.4 | 3897.0 | 4486.7 | 5471.1 | 6835.2 | 7713.0 | 7534.4 | 6692.6 | 6547.0 |
| 35° | 3059.7 | 3082.2 | 3257.8 | 3617.9 | 4236.1 | 5246.0 | 6848.7 | 8124.2 | 8109.2 | 7102.3 | 6908.7 |
| 37.5° | 2795.6 | 2828.6 | 3005.7 | 3350.8 | 3970.5 | 5007.4 | 6781.1 | 8560.8 | 8802.4 | 7671.0 | 7462.4 |
| 40° | 2542.0 | 2570.5 | 2744.6 | 3092.7 | 3668.9 | 4716.3 | 6620.6 | 8960.0 | 9611.2 | 8256.2 | 7960.6 |
| 42.5° | 2265.9 | 2273.4 | 2464.0 | 2818.1 | 3373.3 | 4378.7 | 6389.5 | 9315.6 | 10513.1 | 9041.0 | 8673.4 |
| 45° | 1952.3 | 1971.8 | 2148.8 | 2497.0 | 3034.2 | 4000.6 | 6075.9 | 9609.7 | 11656.5 | 10128.9 | 9627.7 |
| 47.5° | 1638.6 | 1655.1 | 1817.2 | 2160.8 | 2663.5 | 3566.9 | 5592.7 | 9867.8 | 12830.0 | 11511.0 | 10853.7 |
| 50° | 1332.5 | 1341.5 | 1473.6 | 1778.2 | 2246.4 | 3110.7 | 4993.9 | 9950.4 | 14156.5 | 13467.7 | 12628.9 |
| 52.5° | 1053.4 | 1066.9 | 1167.5 | 1406.0 | 1800.7 | 2572.0 | 4347.2 | 9746.3 | 15705.1 | 15787.6 | 14605.2 |
| 55° | 853.8 | 858.3 | 933.4 | 1108.9 | 1407.5 | 2007.8 | 3566.9 | 9177.6 | 17370.8 | 18760.3 | 17252.2 |
| 57.5° | 735.3 | 738.3 | 780.3 | 877.8 | 1083.4 | 1514.1 | 2767.1 | 8101.7 | 18866.8 | 22243.2 | 20304.4 |
| 60° | 667.8 | 669.3 | 693.3 | 750.3 | 858.3 | 1161.5 | 1982.3 | 6583.1 | 20343.4 | 26119.2 | 24097.9 |
| 62.5° | 625.7 | 625.7 | 642.2 | 673.8 | 726.3 | 891.3 | 1436.1 | 4749.3 | 21354.8 | 30052.2 | 28773.7 |
| 65° | 585.2 | 585.2 | 597.2 | 619.7 | 648.3 | 729.3 | 1060.9 | 3097.2 | 21329.3 | 32916.8 | 33476.5 |
| 67.5° | 538.7 | 538.7 | 547.7 | 570.2 | 586.7 | 627.2 | 819.3 | 2028.8 | 19159.5 | 32853.8 | 36042.5 |
| 70° | 483.2 | 483.2 | 495.2 | 514.7 | 528.2 | 553.7 | 646.8 | 1388.0 | 14075.5 | 28051.9 | 32054.0 |
| 72.5° | 427.7 | 429.2 | 436.7 | 456.2 | 466.7 | 481.7 | 537.2 | 972.4 | 8634.4 | 19100.9 | 22412.7 |
| 75° | 366.1 | 369.1 | 376.6 | 396.2 | 405.2 | 411.2 | 453.2 | 693.3 | 4368.2 | 10298.5 | 11725.6 |
| 77.5° | 295.6 | 301.6 | 306.1 | 327.1 | 333.1 | 342.1 | 373.6 | 501.2 | 1917.7 | 3700.4 | 3733.5 |
| 80° | 216.1 | 223.6 | 237.1 | 256.6 | 261.1 | 267.1 | 285.1 | 355.6 | 868.8 | 1689.7 | 1835.2 |
| 82.5° | 159.1 | 169.6 | 153.1 | 178.6 | 178.6 | 171.1 | 201.1 | 238.6 | 399.2 | 1673.2 | 2001.8 |
| 85° | 87.0 | 88.5 | 79.5 | 91.5 | 97.5 | 96.0 | 106.5 | 117.0 | 193.6 | 1116.4 | 1150.9 |
| 87.5° | 21.0 | 22.5 | 24.0 | 28.5 | 34.5 | 34.5 | 37.5 | 33.0 | 63.0 | 361.6 | 207.1 |
| 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)