

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: P453802

Luminaire Tested: **GALN-SA4D-760-U-T1**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453802
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-SA4D-760-U-T1
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 5700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30549 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

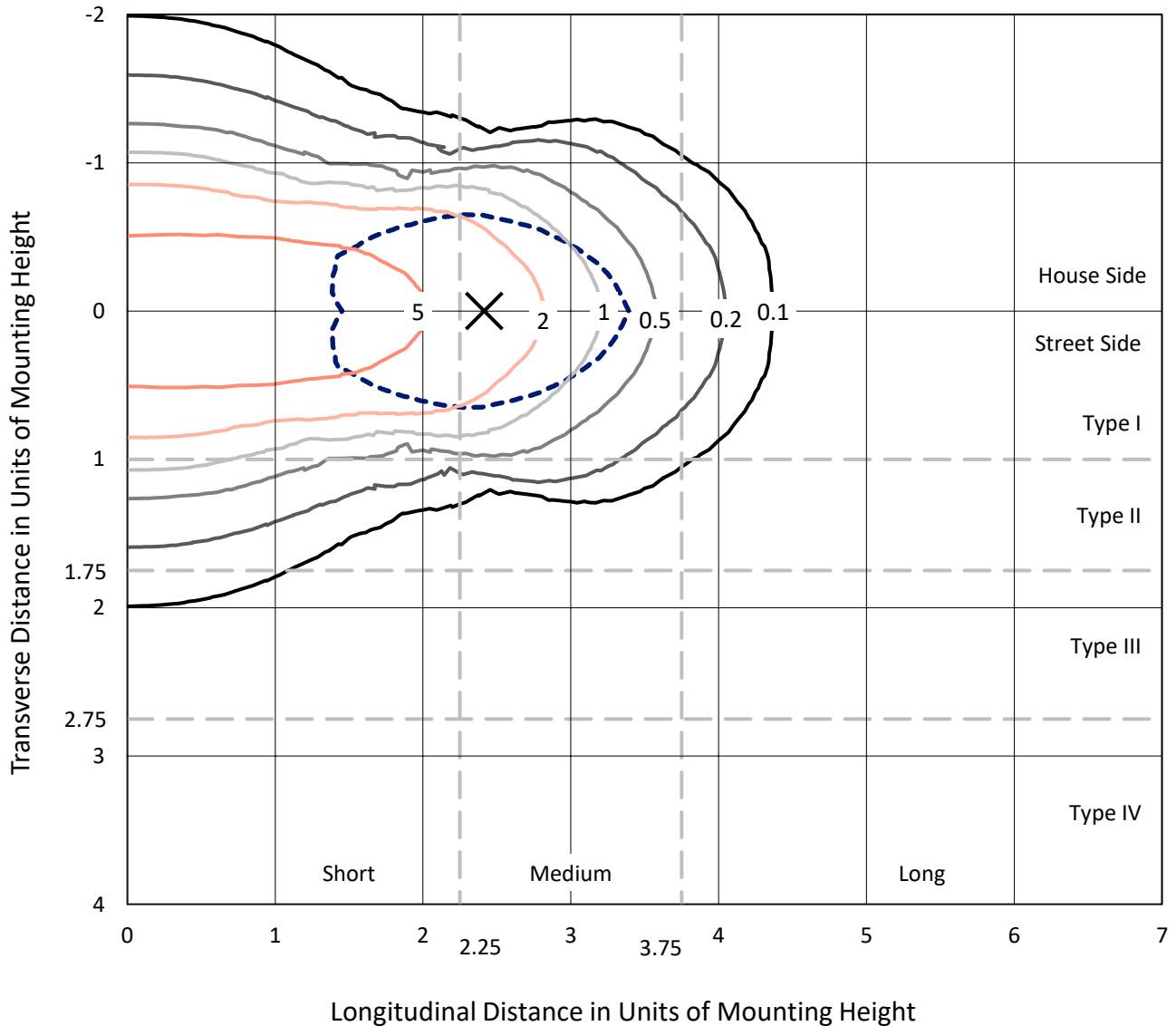
Input Watts (W): 245
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

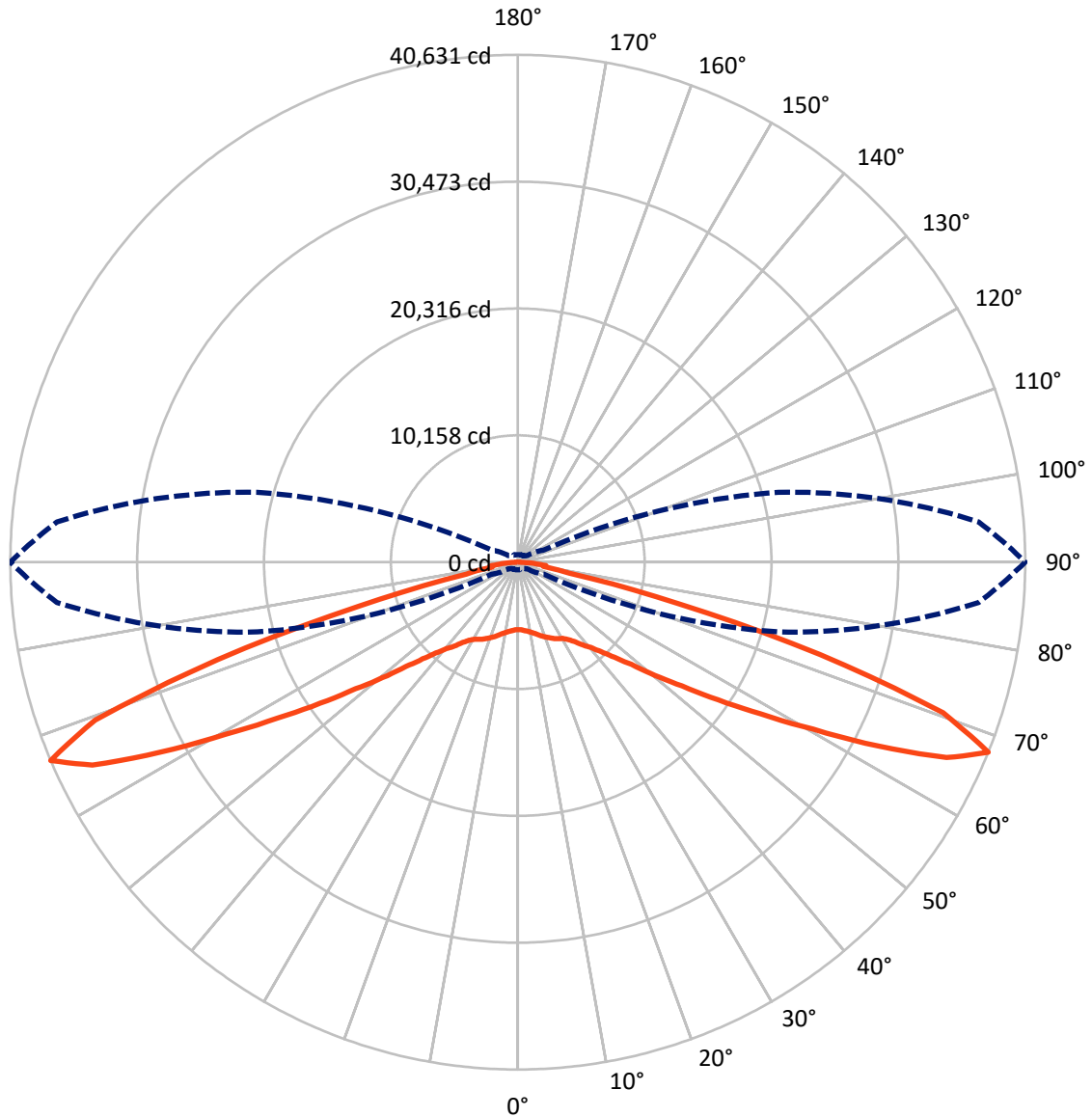
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 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 | 15274.5 | 0.0 | 15274.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 15274.5 | 0.0 | 15274.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 30549.0 | 0.0 | 30549.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 539.2 | 1.8 |
| 10°-20° | 1725.1 | 5.6 |
| 20°-30° | 2887.4 | 9.5 |
| 30°-40° | 3911.7 | 12.8 |
| 40°-50° | 4954.8 | 16.2 |
| 50°-60° | 6189.8 | 20.3 |
| 60°-70° | 7275.8 | 23.8 |
| 70°-80° | 2783.3 | 9.1 |
| 80°-90° | 282.0 | 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° | 30549.0 | 100.0 |
| 0°-180° | 30549.0 | 100.0 |

Coefficient of Utilization



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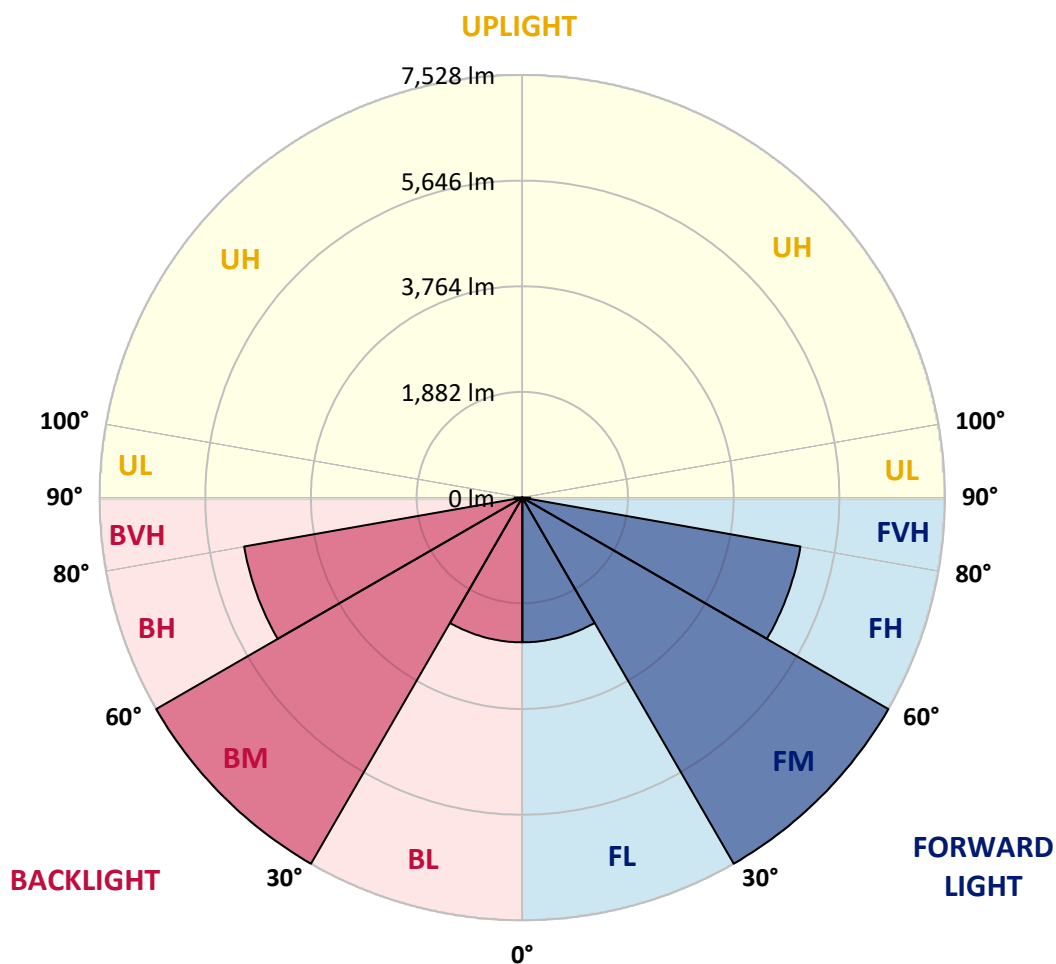
CATALOG NUMBER: GALN-SA4D-760-U-T1

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2575.9 | 8.4 | | | |
| FM (30°-60°) | 7528.1 | 24.6 | | | |
| FH (60°-80°) | 5029.6 | 16.5 | | | G3/7500 |
| FVH (80°-90°) | 141.0 | 0.5 | | | G2/225 |
| BL (0°-30°) | 2575.9 | 8.4 | B4/5000 | | |
| BM (30°-60°) | 7528.1 | 24.6 | B4/8500 | | |
| BH (60°-80°) | 5029.6 | 16.5 | B5 | | G5 |
| BVH (80°-90°) | 141.0 | 0.5 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G5

Type I Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| 0° | 5408.1 | 5408.1 | 5408.1 | 5408.1 | 5408.1 | 5408.1 | 5408.1 | 5408.1 | 5408.1 | 5408.1 | 5408.1 |
| 2.5° | 5477.5 | 5474.1 | 5475.8 | 5474.1 | 5479.2 | 5475.8 | 5455.5 | 5438.6 | 5425.0 | 5426.7 | 5421.7 |
| 5° | 5594.2 | 5595.9 | 5597.6 | 5589.1 | 5601.0 | 5594.2 | 5562.1 | 5535.0 | 5507.9 | 5497.8 | 5494.4 |
| 7.5° | 5690.6 | 5699.1 | 5704.2 | 5712.6 | 5732.9 | 5732.9 | 5716.0 | 5677.1 | 5617.9 | 5584.1 | 5582.4 |
| 10° | 5787.0 | 5793.8 | 5809.0 | 5836.1 | 5869.9 | 5902.1 | 5895.3 | 5842.9 | 5766.7 | 5709.2 | 5695.7 |
| 12.5° | 5820.9 | 5829.3 | 5880.1 | 5957.9 | 6034.0 | 6096.6 | 6096.6 | 6054.3 | 5956.2 | 5868.2 | 5842.9 |
| 15° | 5702.5 | 5717.7 | 5809.0 | 5974.8 | 6174.4 | 6311.5 | 6341.9 | 6282.7 | 6177.8 | 6042.5 | 6012.0 |
| 17.5° | 5467.3 | 5504.5 | 5638.2 | 5883.5 | 6215.0 | 6499.2 | 6587.2 | 6558.4 | 6423.1 | 6250.6 | 6215.0 |
| 20° | 5215.3 | 5255.9 | 5398.0 | 5722.8 | 6181.2 | 6609.2 | 6864.6 | 6871.4 | 6703.9 | 6453.5 | 6401.1 |
| 22.5° | 4937.9 | 4968.3 | 5151.0 | 5531.6 | 6079.7 | 6634.6 | 7103.1 | 7219.9 | 6993.2 | 6656.5 | 6582.1 |
| 25° | 4626.6 | 4660.4 | 4851.6 | 5262.6 | 5888.5 | 6605.8 | 7321.4 | 7578.5 | 7296.0 | 6873.1 | 6778.3 |
| 27.5° | 4328.9 | 4342.4 | 4547.1 | 4964.9 | 5636.5 | 6531.4 | 7482.1 | 7908.3 | 7630.9 | 7052.4 | 6932.3 |
| 30° | 4043.0 | 4075.1 | 4256.1 | 4668.9 | 5347.2 | 6385.9 | 7620.8 | 8283.9 | 7991.2 | 7240.2 | 7086.2 |
| 32.5° | 3740.2 | 3779.1 | 3975.3 | 4393.1 | 5058.0 | 6167.7 | 7705.4 | 8695.0 | 8493.6 | 7544.6 | 7380.6 |
| 35° | 3449.2 | 3474.6 | 3672.5 | 4078.5 | 4775.5 | 5913.9 | 7720.6 | 9158.5 | 9141.5 | 8006.5 | 7788.2 |
| 37.5° | 3151.5 | 3188.7 | 3388.3 | 3777.4 | 4476.0 | 5645.0 | 7644.5 | 9650.7 | 9923.1 | 8647.6 | 8412.4 |
| 40° | 2865.6 | 2897.8 | 3094.0 | 3486.4 | 4136.0 | 5316.8 | 7463.4 | 10100.7 | 10834.9 | 9307.3 | 8974.1 |
| 42.5° | 2554.4 | 2562.8 | 2777.6 | 3176.9 | 3802.8 | 4936.2 | 7202.9 | 10501.6 | 11851.5 | 10192.0 | 9777.6 |
| 45° | 2200.8 | 2222.8 | 2422.4 | 2814.9 | 3420.5 | 4509.9 | 6849.4 | 10833.2 | 13140.5 | 11418.5 | 10853.5 |
| 47.5° | 1847.3 | 1865.9 | 2048.6 | 2435.9 | 3002.6 | 4021.0 | 6304.7 | 11124.1 | 14463.4 | 12976.5 | 12235.5 |
| 50° | 1502.2 | 1512.3 | 1661.2 | 2004.6 | 2532.4 | 3506.7 | 5629.7 | 11217.2 | 15958.8 | 15182.3 | 14236.7 |
| 52.5° | 1187.5 | 1202.7 | 1316.1 | 1585.1 | 2029.9 | 2899.4 | 4900.6 | 10987.1 | 17704.5 | 17797.6 | 16464.6 |
| 55° | 962.5 | 967.6 | 1052.2 | 1250.1 | 1586.7 | 2263.4 | 4021.0 | 10346.0 | 19582.2 | 21148.7 | 19448.6 |
| 57.5° | 828.9 | 832.3 | 879.6 | 989.6 | 1221.4 | 1706.8 | 3119.4 | 9133.1 | 21268.8 | 25075.0 | 22889.4 |
| 60° | 752.8 | 754.5 | 781.5 | 845.8 | 967.6 | 1309.3 | 2234.6 | 7421.2 | 22933.4 | 29444.4 | 27165.8 |
| 62.5° | 705.4 | 705.4 | 724.0 | 759.5 | 818.7 | 1004.8 | 1618.9 | 5354.0 | 24073.5 | 33878.2 | 32436.9 |
| 65° | 659.7 | 659.7 | 673.3 | 698.6 | 730.8 | 822.1 | 1196.0 | 3491.5 | 24044.8 | 37107.5 | 37738.5 |
| 67.5° | 607.3 | 607.3 | 617.4 | 642.8 | 661.4 | 707.1 | 923.6 | 2287.1 | 21598.7 | 37036.4 | 40631.1 |
| 70° | 544.7 | 544.7 | 558.2 | 580.2 | 595.5 | 624.2 | 729.1 | 1564.8 | 15867.4 | 31623.2 | 36134.8 |
| 72.5° | 482.1 | 483.8 | 492.3 | 514.3 | 526.1 | 543.0 | 605.6 | 1096.2 | 9733.6 | 21532.7 | 25266.1 |
| 75° | 412.8 | 416.1 | 424.6 | 446.6 | 456.7 | 463.5 | 510.9 | 781.5 | 4924.3 | 11609.6 | 13218.4 |
| 77.5° | 333.3 | 340.0 | 345.1 | 368.8 | 375.5 | 385.7 | 421.2 | 565.0 | 2161.9 | 4171.5 | 4208.8 |
| 80° | 243.6 | 252.1 | 267.3 | 289.3 | 294.3 | 301.1 | 321.4 | 400.9 | 979.5 | 1904.8 | 2068.9 |
| 82.5° | 179.3 | 191.2 | 172.5 | 201.3 | 201.3 | 192.8 | 226.7 | 269.0 | 450.0 | 1886.2 | 2256.6 |
| 85° | 98.1 | 99.8 | 89.7 | 103.2 | 110.0 | 108.3 | 120.1 | 131.9 | 218.2 | 1258.6 | 1297.5 |
| 87.5° | 23.7 | 25.4 | 27.1 | 32.1 | 38.9 | 38.9 | 42.3 | 37.2 | 71.0 | 407.7 | 233.4 |
| 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)