

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: P459413

Luminaire Tested: **GALN-SA8D-735-U-5NQ**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459413
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA8D-735-U-5NQ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 60730 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

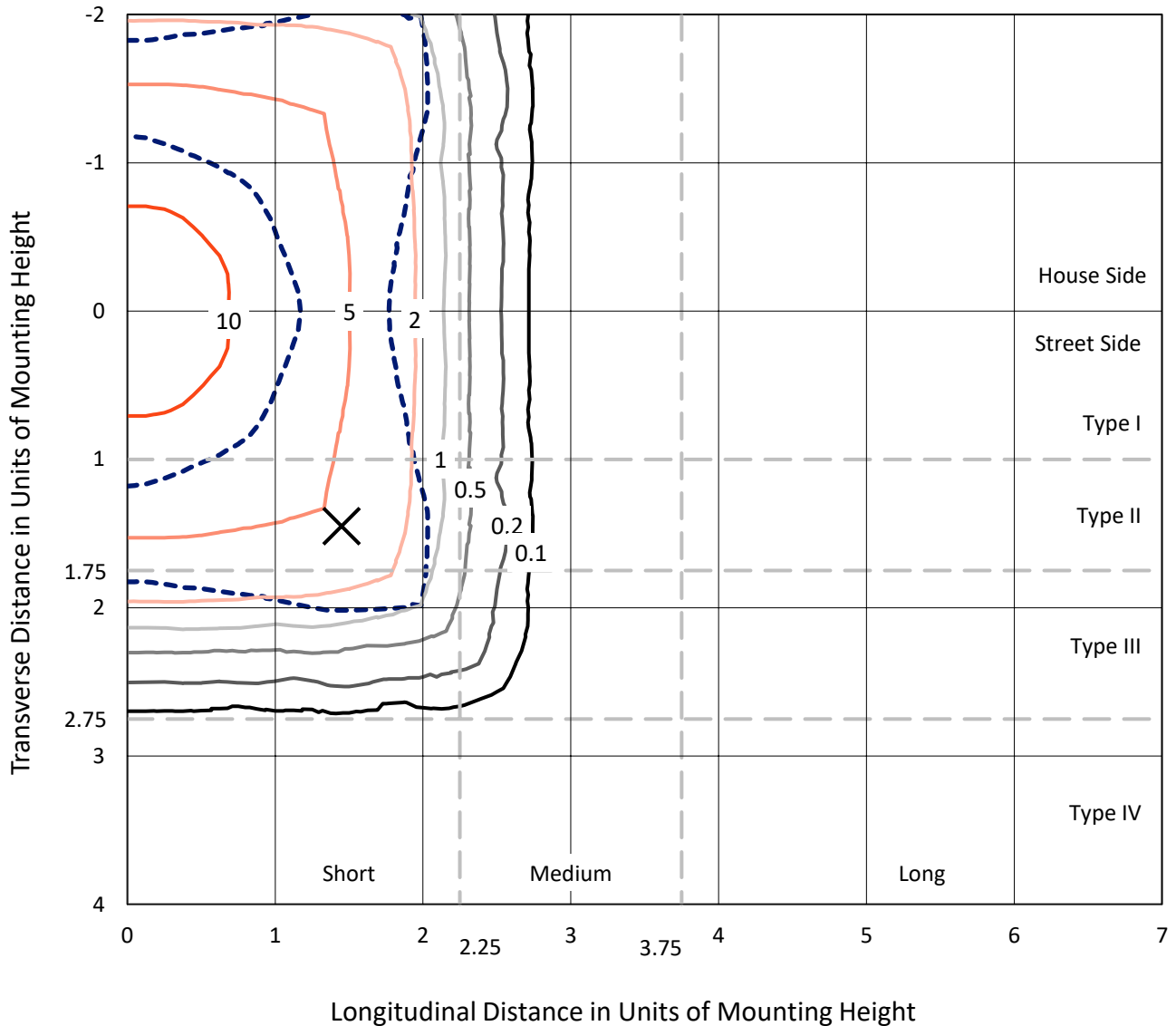
Input Watts (W): 493
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

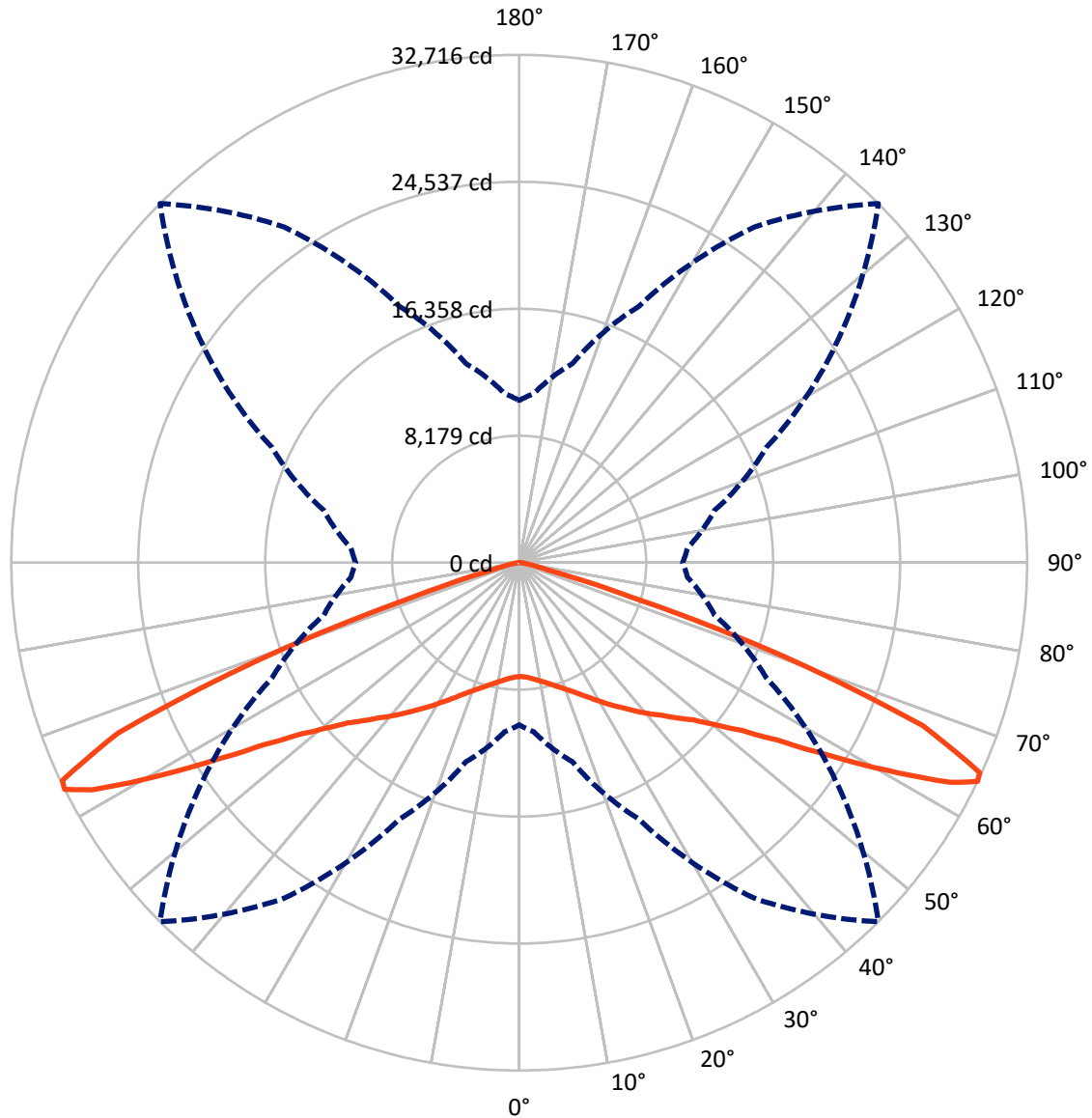
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.9 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 30365.0 | 0.0 | 30365.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 30365.0 | 0.0 | 30365.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 60730.0 | 0.0 | 60730.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 721.1 | 1.2 |
| 10°-20° | 2326.1 | 3.8 |
| 20°-30° | 4395.7 | 7.2 |
| 30°-40° | 7279.7 | 12.0 |
| 40°-50° | 11364.8 | 18.7 |
| 50°-60° | 17569.8 | 28.9 |
| 60°-70° | 15150.2 | 24.9 |
| 70°-80° | 1716.9 | 2.8 |
| 80°-90° | 205.7 | 0.3 |
| 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° | 60730.0 | 100.0 |
| 0°-180° | 60730.0 | 100.0 |

Coefficient of Utilization



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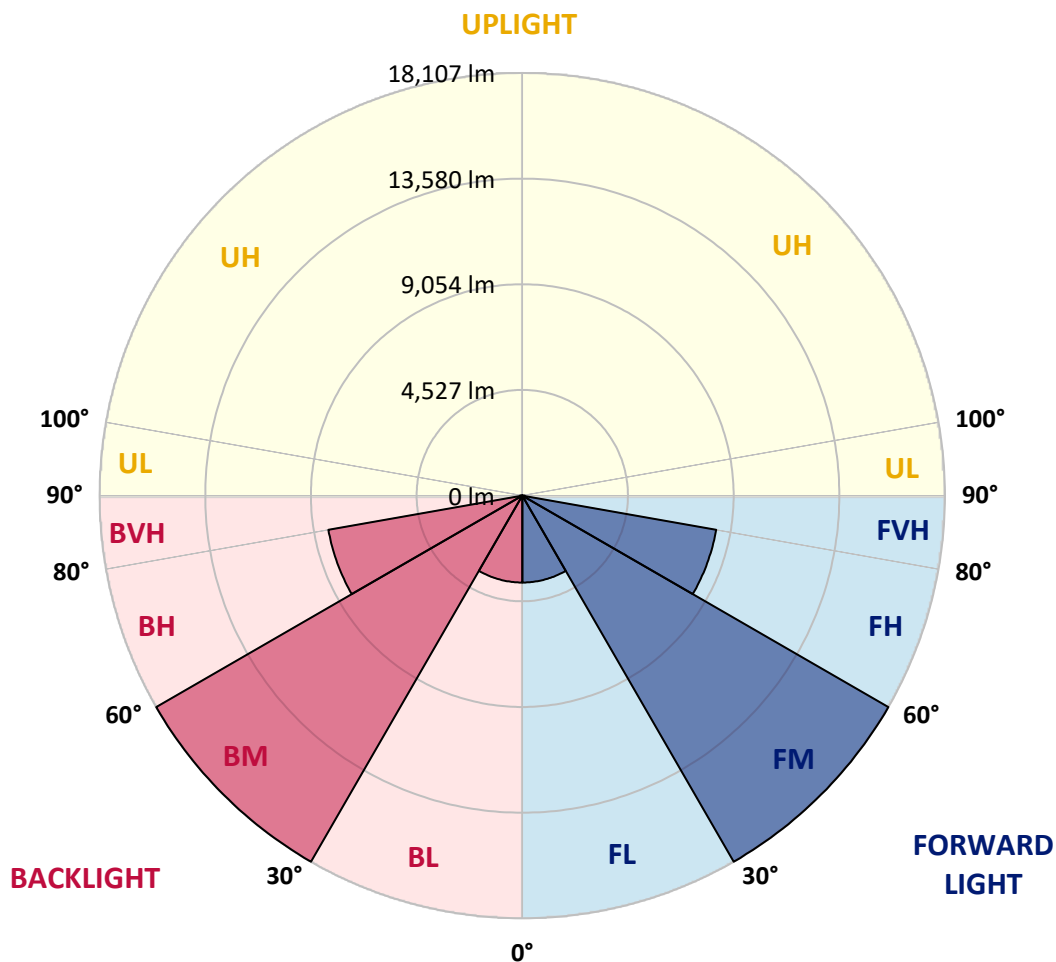
CATALOG NUMBER: GALN-SA8D-735-U-5NQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 3721.4 | 6.1 | | | |
| FM | (30°-60°) | 18107.2 | 29.8 | | | |
| FH | (60°-80°) | 8433.5 | 13.9 | | | G4/12000 |
| FVH | (80°-90°) | 102.8 | 0.2 | | | G2/225 |
| BL | (0°-30°) | 3721.4 | 6.1 | B4/5000 | | |
| BM | (30°-60°) | 18107.2 | 29.8 | B5 | | |
| BH | (60°-80°) | 8433.5 | 13.9 | B5 | | G4/12000 |
| BVH | (80°-90°) | 102.8 | 0.2 | | | 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° | 7340.2 | 7340.2 | 7340.2 | 7340.2 | 7340.2 | 7340.2 | 7340.2 | 7340.2 | 7340.2 | 7340.2 | 7340.2 |
| 2.5° | 7369.2 | 7385.3 | 7372.4 | 7369.2 | 7366.0 | 7366.0 | 7366.0 | 7369.2 | 7382.1 | 7391.7 | 7385.3 |
| 5° | 7462.5 | 7475.3 | 7468.9 | 7465.7 | 7462.5 | 7465.7 | 7459.3 | 7456.0 | 7465.7 | 7465.7 | 7462.5 |
| 7.5° | 7578.3 | 7594.4 | 7587.9 | 7594.4 | 7597.6 | 7600.8 | 7584.7 | 7571.8 | 7568.6 | 7578.3 | 7571.8 |
| 10° | 7735.9 | 7748.7 | 7752.0 | 7755.2 | 7761.6 | 7758.4 | 7739.1 | 7716.6 | 7713.4 | 7710.1 | 7706.9 |
| 12.5° | 7912.8 | 7922.4 | 7925.7 | 7938.5 | 7948.2 | 7951.4 | 7928.9 | 7909.6 | 7877.4 | 7883.8 | 7871.0 |
| 15° | 8112.2 | 8131.5 | 8128.3 | 8147.6 | 8173.3 | 8179.8 | 8157.3 | 8125.1 | 8096.1 | 8080.1 | 8070.4 |
| 17.5° | 8356.7 | 8369.5 | 8363.1 | 8382.4 | 8414.6 | 8430.7 | 8411.4 | 8369.5 | 8340.6 | 8305.2 | 8285.9 |
| 20° | 8646.2 | 8668.7 | 8675.1 | 8675.1 | 8704.1 | 8720.2 | 8691.2 | 8678.3 | 8633.3 | 8607.6 | 8591.5 |
| 22.5° | 8974.3 | 8983.9 | 9003.2 | 9022.5 | 9051.5 | 9045.0 | 9035.4 | 9016.1 | 8974.3 | 8951.7 | 8926.0 |
| 25° | 9344.2 | 9353.8 | 9402.1 | 9443.9 | 9453.5 | 9447.1 | 9434.2 | 9424.6 | 9386.0 | 9334.5 | 9315.2 |
| 27.5° | 9775.2 | 9794.5 | 9858.8 | 9897.4 | 9897.4 | 9900.6 | 9874.9 | 9907.1 | 9823.4 | 9762.3 | 9755.9 |
| 30° | 10315.6 | 10328.4 | 10383.1 | 10421.7 | 10402.4 | 10386.3 | 10379.9 | 10412.1 | 10322.0 | 10212.7 | 10186.9 |
| 32.5° | 10849.5 | 10894.6 | 10942.8 | 11026.4 | 10958.9 | 10929.9 | 10923.5 | 10946.0 | 10843.1 | 10720.9 | 10685.5 |
| 35° | 11422.1 | 11454.3 | 11544.3 | 11615.1 | 11554.0 | 11486.4 | 11515.4 | 11586.1 | 11463.9 | 11299.9 | 11293.4 |
| 37.5° | 12055.8 | 12084.7 | 12200.5 | 12274.5 | 12229.4 | 12113.7 | 12161.9 | 12245.5 | 12123.3 | 11920.7 | 11878.8 |
| 40° | 12715.2 | 12776.3 | 12921.0 | 12998.2 | 12924.2 | 12769.8 | 12859.9 | 12950.0 | 12840.6 | 12605.8 | 12512.5 |
| 42.5° | 13455.0 | 13551.5 | 13760.5 | 13799.1 | 13657.6 | 13448.5 | 13606.1 | 13750.9 | 13673.7 | 13403.5 | 13368.1 |
| 45° | 14320.2 | 14378.1 | 14635.5 | 14719.1 | 14522.9 | 14262.3 | 14458.5 | 14722.3 | 14664.4 | 14352.4 | 14284.8 |
| 47.5° | 15288.4 | 15343.1 | 15610.1 | 15735.5 | 15487.8 | 15137.2 | 15491.1 | 15835.2 | 15799.9 | 15465.3 | 15433.2 |
| 50° | 16433.5 | 16446.4 | 16816.3 | 16957.8 | 16710.1 | 16407.8 | 16723.0 | 17150.8 | 17009.3 | 16581.5 | 16575.1 |
| 52.5° | 17688.0 | 17704.1 | 18170.5 | 18443.9 | 18305.6 | 17964.6 | 18337.7 | 18598.3 | 18238.0 | 17678.3 | 17636.5 |
| 55° | 18775.2 | 18855.6 | 19492.5 | 20219.4 | 20409.2 | 20161.5 | 20274.1 | 20151.9 | 19264.1 | 18479.3 | 18357.0 |
| 57.5° | 19219.1 | 19376.7 | 20344.9 | 21702.3 | 22937.5 | 23304.1 | 22435.7 | 21271.3 | 19672.6 | 18562.9 | 18443.9 |
| 60° | 18135.1 | 18305.6 | 19807.7 | 22384.2 | 25536.4 | 27128.7 | 24687.3 | 21461.0 | 18743.0 | 17183.0 | 16996.4 |
| 62.5° | 14522.9 | 14571.1 | 16780.9 | 20779.1 | 27051.5 | 31175.1 | 25636.2 | 19843.1 | 16037.9 | 13918.2 | 13844.2 |
| 64° | 10450.7 | 10946.0 | 13287.7 | 18218.7 | 26388.8 | 32715.9 | 25089.3 | 17575.4 | 13027.2 | 10881.7 | 10534.3 |
| 65° | 7816.3 | 7951.4 | 10711.2 | 15558.6 | 25221.2 | 32600.1 | 24027.9 | 15407.4 | 10788.4 | 8327.7 | 7941.7 |
| 67.5° | 2952.8 | 2968.9 | 3953.2 | 7755.2 | 17955.0 | 28048.6 | 18337.7 | 8382.4 | 4545.0 | 3287.3 | 3168.3 |
| 70° | 1225.5 | 1248.0 | 1450.7 | 2608.6 | 7716.6 | 18009.6 | 8842.4 | 3023.6 | 1663.0 | 1347.7 | 1328.4 |
| 72.5° | 897.4 | 910.3 | 971.4 | 1158.0 | 2373.8 | 7394.9 | 2907.8 | 1283.4 | 974.6 | 871.7 | 862.0 |
| 75° | 704.4 | 710.9 | 755.9 | 852.4 | 1106.5 | 2049.0 | 1209.4 | 881.3 | 743.0 | 669.0 | 662.6 |
| 77.5° | 537.2 | 553.3 | 585.4 | 649.7 | 743.0 | 971.4 | 800.9 | 659.4 | 572.6 | 511.4 | 501.8 |
| 80° | 369.9 | 389.2 | 450.3 | 476.1 | 498.6 | 630.5 | 546.8 | 498.6 | 447.1 | 373.1 | 350.6 |
| 82.5° | 228.4 | 241.2 | 302.4 | 324.9 | 315.2 | 353.8 | 350.6 | 357.0 | 318.4 | 231.6 | 215.5 |
| 85° | 119.0 | 125.4 | 164.0 | 170.5 | 157.6 | 144.7 | 180.1 | 209.1 | 196.2 | 131.9 | 128.7 |
| 87.5° | 25.7 | 28.9 | 35.4 | 32.2 | 35.4 | 35.4 | 45.0 | 67.5 | 70.8 | 45.0 | 41.8 |
| 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)