

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: P458920

Luminaire Tested: **GALN-SA4C-735-U-5NQ**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458920
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-SA4C-735-U-5NQ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3500K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27038 lumens
Efficiency: N/A
Efficacy: 126.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

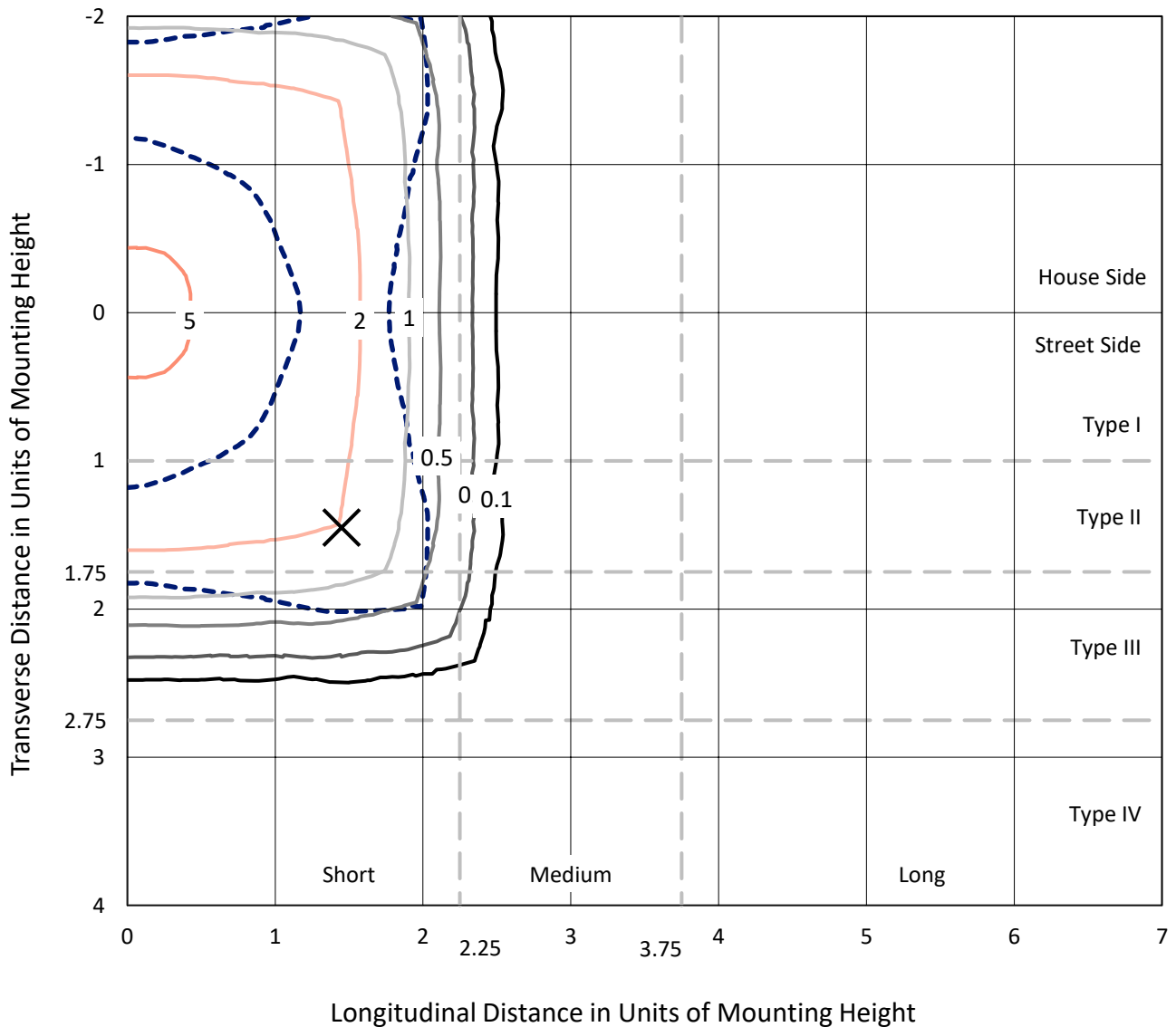
Input Watts (W): 213
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

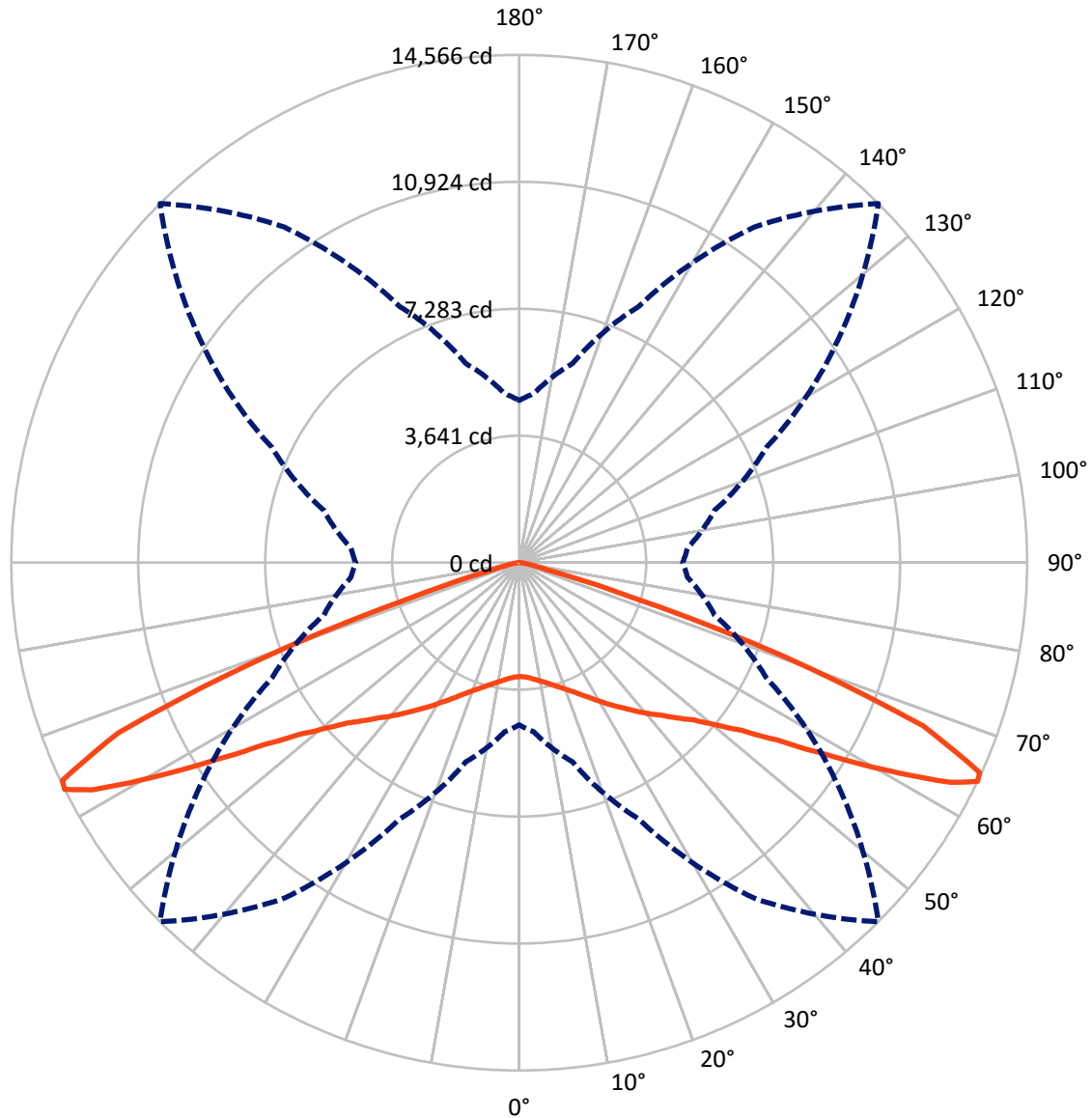
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 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 | 13519.0 | 0.0 | 13519.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 13519.0 | 0.0 | 13519.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 27038.0 | 0.0 | 27038.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 321.1 | 1.2 |
| 10°-20° | 1035.6 | 3.8 |
| 20°-30° | 1957.0 | 7.2 |
| 30°-40° | 3241.0 | 12.0 |
| 40°-50° | 5059.8 | 18.7 |
| 50°-60° | 7822.3 | 28.9 |
| 60°-70° | 6745.1 | 24.9 |
| 70°-80° | 764.4 | 2.8 |
| 80°-90° | 91.6 | 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° | 27038.0 | 100.0 |
| 0°-180° | 27038.0 | 100.0 |

Coefficient of Utilization



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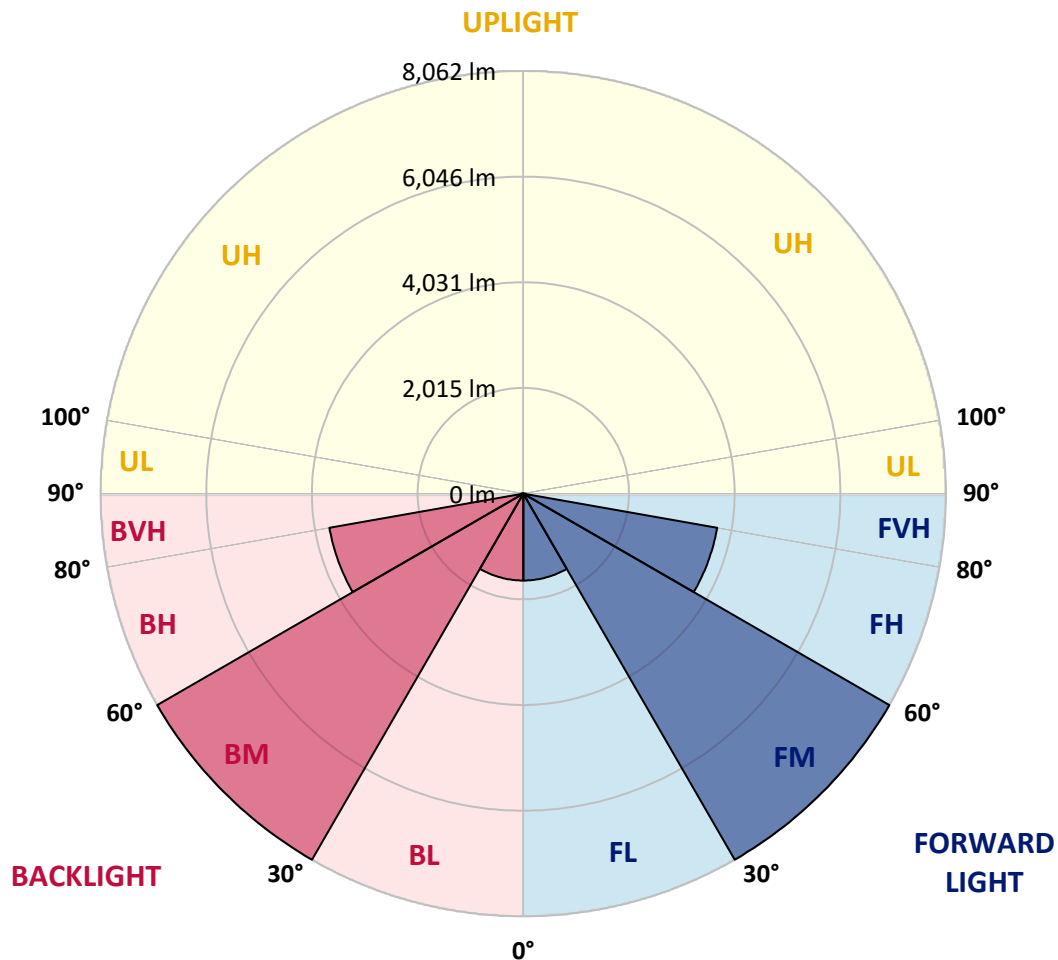
CATALOG NUMBER: GALN-SA4C-735-U-5NQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1656.9 | 6.1 | | | |
| FM | (30°-60°) | 8061.6 | 29.8 | | | |
| FH | (60°-80°) | 3754.8 | 13.9 | | | G2/5000 |
| FVH | (80°-90°) | 45.8 | 0.2 | | | G1/100 |
| BL | (0°-30°) | 1656.9 | 6.1 | B3/2500 | | |
| BM | (30°-60°) | 8061.6 | 29.8 | B4/8500 | | |
| BH | (60°-80°) | 3754.8 | 13.9 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 45.8 | 0.2 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|
| 0° | 3268.0 | 3268.0 | 3268.0 | 3268.0 | 3268.0 | 3268.0 | 3268.0 | 3268.0 | 3268.0 | 3268.0 | 3268.0 |
| 2.5° | 3280.9 | 3288.0 | 3282.3 | 3280.9 | 3279.5 | 3279.5 | 3279.5 | 3280.9 | 3286.6 | 3290.9 | 3288.0 |
| 5° | 3322.4 | 3328.1 | 3325.3 | 3323.8 | 3322.4 | 3323.8 | 3321.0 | 3319.6 | 3323.8 | 3323.8 | 3322.4 |
| 7.5° | 3374.0 | 3381.1 | 3378.3 | 3381.1 | 3382.6 | 3384.0 | 3376.8 | 3371.1 | 3369.7 | 3374.0 | 3371.1 |
| 10° | 3444.1 | 3449.9 | 3451.3 | 3452.7 | 3455.6 | 3454.2 | 3445.6 | 3435.5 | 3434.1 | 3432.7 | 3431.3 |
| 12.5° | 3522.9 | 3527.2 | 3528.6 | 3534.4 | 3538.7 | 3540.1 | 3530.1 | 3521.5 | 3507.2 | 3510.0 | 3504.3 |
| 15° | 3611.7 | 3620.3 | 3618.9 | 3627.4 | 3638.9 | 3641.8 | 3631.7 | 3617.4 | 3604.5 | 3597.4 | 3593.1 |
| 17.5° | 3720.5 | 3726.3 | 3723.4 | 3732.0 | 3746.3 | 3753.5 | 3744.9 | 3726.3 | 3713.4 | 3697.6 | 3689.0 |
| 20° | 3849.4 | 3859.4 | 3862.3 | 3862.3 | 3875.2 | 3882.4 | 3869.5 | 3863.7 | 3843.7 | 3832.2 | 3825.1 |
| 22.5° | 3995.5 | 3999.8 | 4008.4 | 4017.0 | 4029.9 | 4027.0 | 4022.7 | 4014.1 | 3995.5 | 3985.5 | 3974.0 |
| 25° | 4160.2 | 4164.5 | 4186.0 | 4204.6 | 4208.9 | 4206.0 | 4200.3 | 4196.0 | 4178.8 | 4155.9 | 4147.3 |
| 27.5° | 4352.1 | 4360.7 | 4389.3 | 4406.5 | 4406.5 | 4407.9 | 4396.5 | 4410.8 | 4373.6 | 4346.4 | 4343.5 |
| 30° | 4592.7 | 4598.4 | 4622.7 | 4639.9 | 4631.3 | 4624.2 | 4621.3 | 4635.6 | 4595.5 | 4546.8 | 4535.4 |
| 32.5° | 4830.4 | 4850.4 | 4871.9 | 4909.2 | 4879.1 | 4866.2 | 4863.3 | 4873.4 | 4827.5 | 4773.1 | 4757.4 |
| 35° | 5085.3 | 5099.6 | 5139.7 | 5171.2 | 5144.0 | 5113.9 | 5126.8 | 5158.3 | 5103.9 | 5030.9 | 5028.0 |
| 37.5° | 5367.4 | 5380.3 | 5431.9 | 5464.8 | 5444.8 | 5393.2 | 5414.7 | 5451.9 | 5397.5 | 5307.3 | 5288.7 |
| 40° | 5661.0 | 5688.2 | 5752.6 | 5787.0 | 5754.1 | 5685.3 | 5725.4 | 5765.5 | 5716.8 | 5612.3 | 5570.8 |
| 42.5° | 5990.4 | 6033.3 | 6126.4 | 6143.6 | 6080.6 | 5987.5 | 6057.7 | 6122.1 | 6087.8 | 5967.5 | 5951.7 |
| 45° | 6375.6 | 6401.4 | 6515.9 | 6553.2 | 6465.8 | 6349.8 | 6437.2 | 6554.6 | 6528.8 | 6389.9 | 6359.8 |
| 47.5° | 6806.7 | 6831.0 | 6949.9 | 7005.7 | 6895.4 | 6739.3 | 6896.9 | 7050.1 | 7034.4 | 6885.4 | 6871.1 |
| 50° | 7316.5 | 7322.2 | 7486.9 | 7549.9 | 7439.6 | 7305.0 | 7445.4 | 7635.8 | 7572.8 | 7382.4 | 7379.5 |
| 52.5° | 7875.0 | 7882.1 | 8089.8 | 8211.5 | 8149.9 | 7998.1 | 8164.3 | 8280.3 | 8119.9 | 7870.7 | 7852.1 |
| 55° | 8359.0 | 8394.8 | 8678.4 | 9002.0 | 9086.5 | 8976.3 | 9026.4 | 8972.0 | 8576.7 | 8227.3 | 8172.9 |
| 57.5° | 8556.7 | 8626.8 | 9057.9 | 9662.2 | 10212.1 | 10375.4 | 9988.7 | 9470.3 | 8758.6 | 8264.5 | 8211.5 |
| 60° | 8074.0 | 8149.9 | 8818.7 | 9965.8 | 11369.2 | 12078.1 | 10991.2 | 9554.8 | 8344.7 | 7650.1 | 7567.1 |
| 62.5° | 6465.8 | 6487.3 | 7471.1 | 9251.2 | 12043.8 | 13879.7 | 11413.6 | 8834.5 | 7140.3 | 6196.6 | 6163.7 |
| 64° | 4652.8 | 4873.4 | 5915.9 | 8111.3 | 11748.7 | 14565.6 | 11170.2 | 7824.9 | 5799.9 | 4844.7 | 4690.0 |
| 65° | 3479.9 | 3540.1 | 4768.8 | 6927.0 | 11228.9 | 14514.1 | 10697.6 | 6859.6 | 4803.2 | 3707.6 | 3535.8 |
| 67.5° | 1314.6 | 1321.8 | 1760.0 | 3452.7 | 7993.8 | 12487.7 | 8164.3 | 3732.0 | 2023.5 | 1463.6 | 1410.6 |
| 70° | 545.6 | 555.6 | 645.9 | 1161.4 | 3435.5 | 8018.2 | 3936.8 | 1346.2 | 740.4 | 600.0 | 591.4 |
| 72.5° | 399.5 | 405.3 | 432.5 | 515.5 | 1056.9 | 3292.3 | 1294.6 | 571.4 | 433.9 | 388.1 | 383.8 |
| 75° | 313.6 | 316.5 | 336.5 | 379.5 | 492.6 | 912.2 | 538.5 | 392.4 | 330.8 | 297.9 | 295.0 |
| 77.5° | 239.2 | 246.3 | 260.6 | 289.3 | 330.8 | 432.5 | 356.6 | 293.6 | 254.9 | 227.7 | 223.4 |
| 80° | 164.7 | 173.3 | 200.5 | 211.9 | 222.0 | 280.7 | 243.5 | 222.0 | 199.1 | 166.1 | 156.1 |
| 82.5° | 101.7 | 107.4 | 134.6 | 144.6 | 140.3 | 157.5 | 156.1 | 159.0 | 141.8 | 103.1 | 95.9 |
| 85° | 53.0 | 55.9 | 73.0 | 75.9 | 70.2 | 64.4 | 80.2 | 93.1 | 87.4 | 58.7 | 57.3 |
| 87.5° | 11.5 | 12.9 | 15.8 | 14.3 | 15.8 | 15.8 | 20.0 | 30.1 | 31.5 | 20.0 | 18.6 |
| 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)