

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P638731

Luminaire Tested: GWS-SA4F-740-U-5NQ-W-GRSBK

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P638731  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-8)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA4F-740-U-5NQ-W-GRSBK  
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK  
Light Source: (64) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

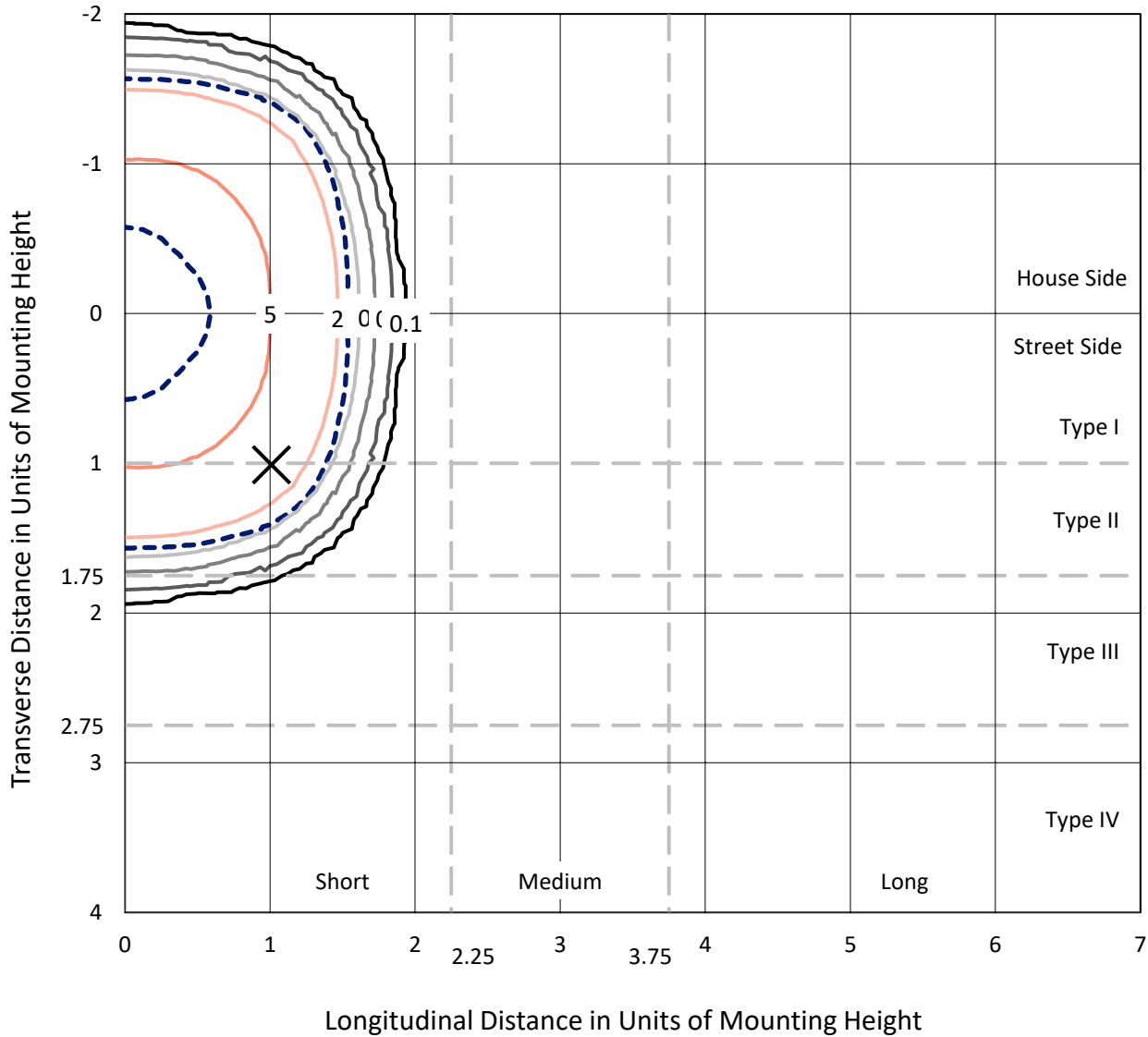
Lumens per Lamp: N/A  
Luminaire Lumens: 23942.4 lumens  
Efficiency: N/A  
Efficacy: 106.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G0  
  
Input Watts (W): 225.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 0  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

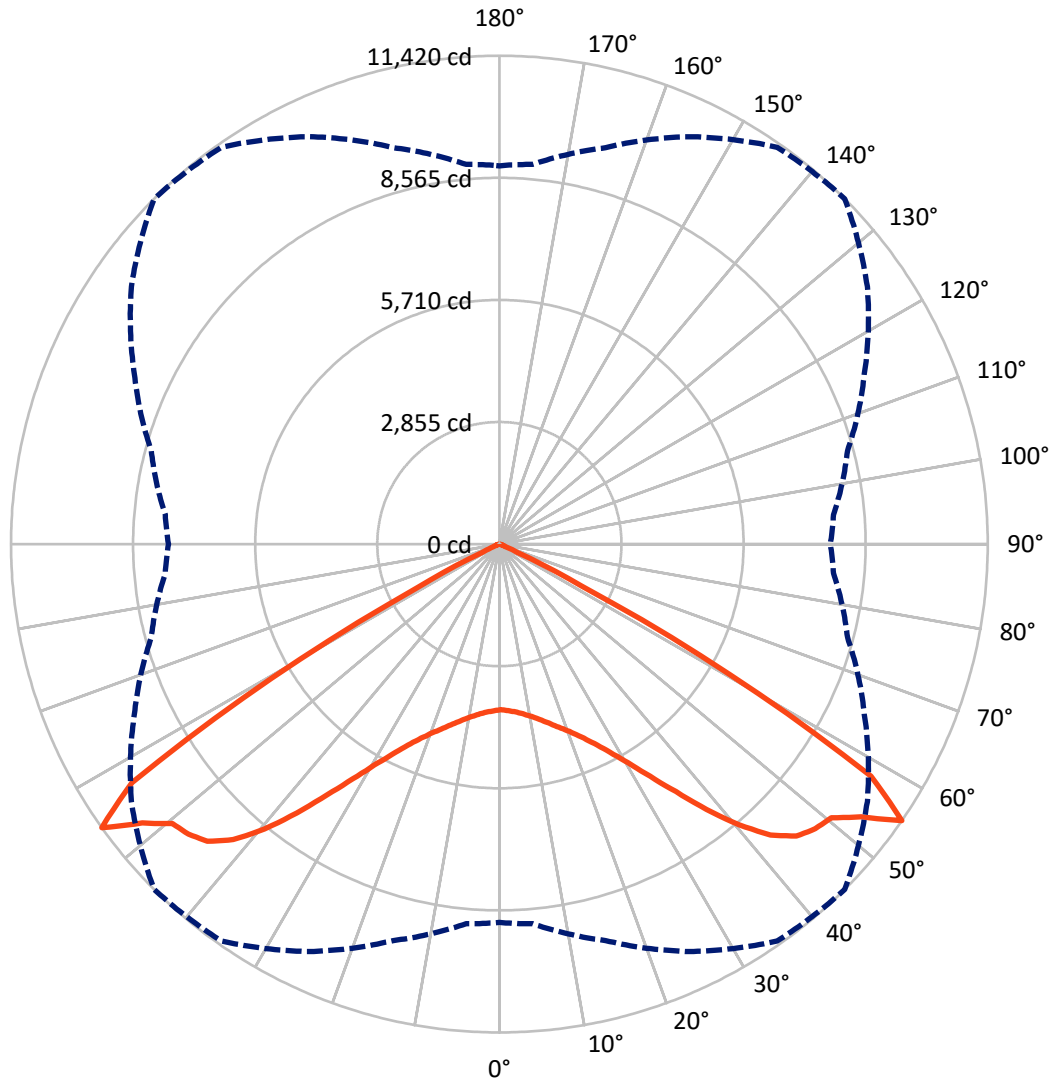
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 55-Deg Vertical

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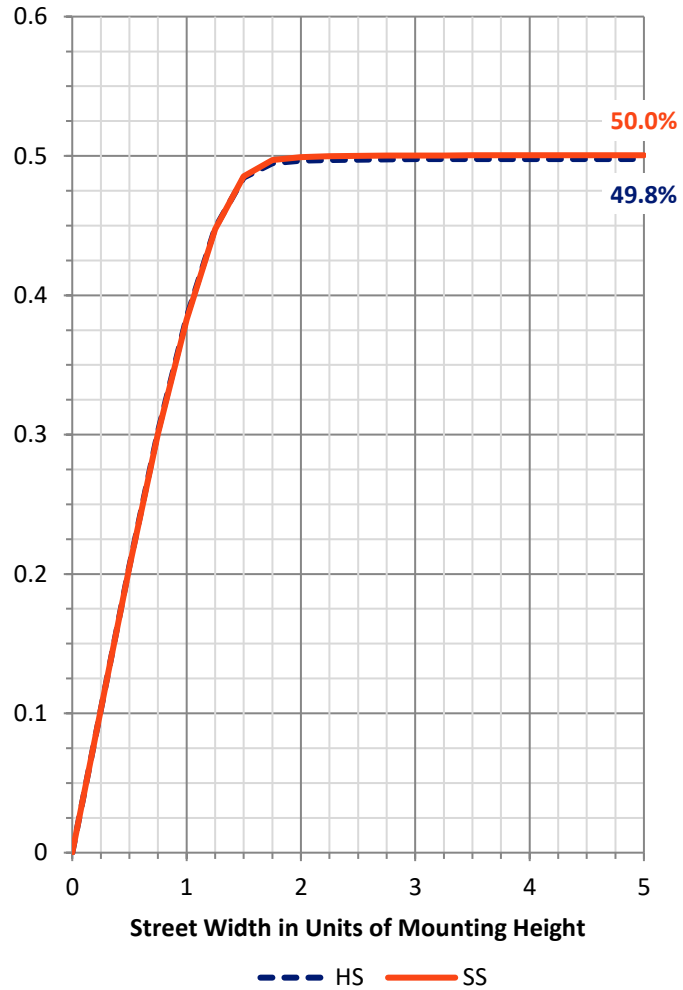
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 11971.2  | 0.0    | 11971.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 11971.2  | 0.0    | 11971.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 23942.4  | 0.0    | 23942.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 379.3   | 1.6       |
| 10°-20°   | 1229.4  | 5.1       |
| 20°-30°   | 2381.0  | 9.9       |
| 30°-40°   | 4265.6  | 17.8      |
| 40°-50°   | 7151.6  | 29.9      |
| 50°-60°   | 7655.5  | 32.0      |
| 60°-70°   | 841.2   | 3.5       |
| 70°-80°   | 37.0    | 0.2       |
| 80°-90°   | 1.7     | 0.0       |
| 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°    | 23942.4 | 100.0     |
| 0°-180°   | 23942.4 | 100.0     |

**Coefficient of Utilization**



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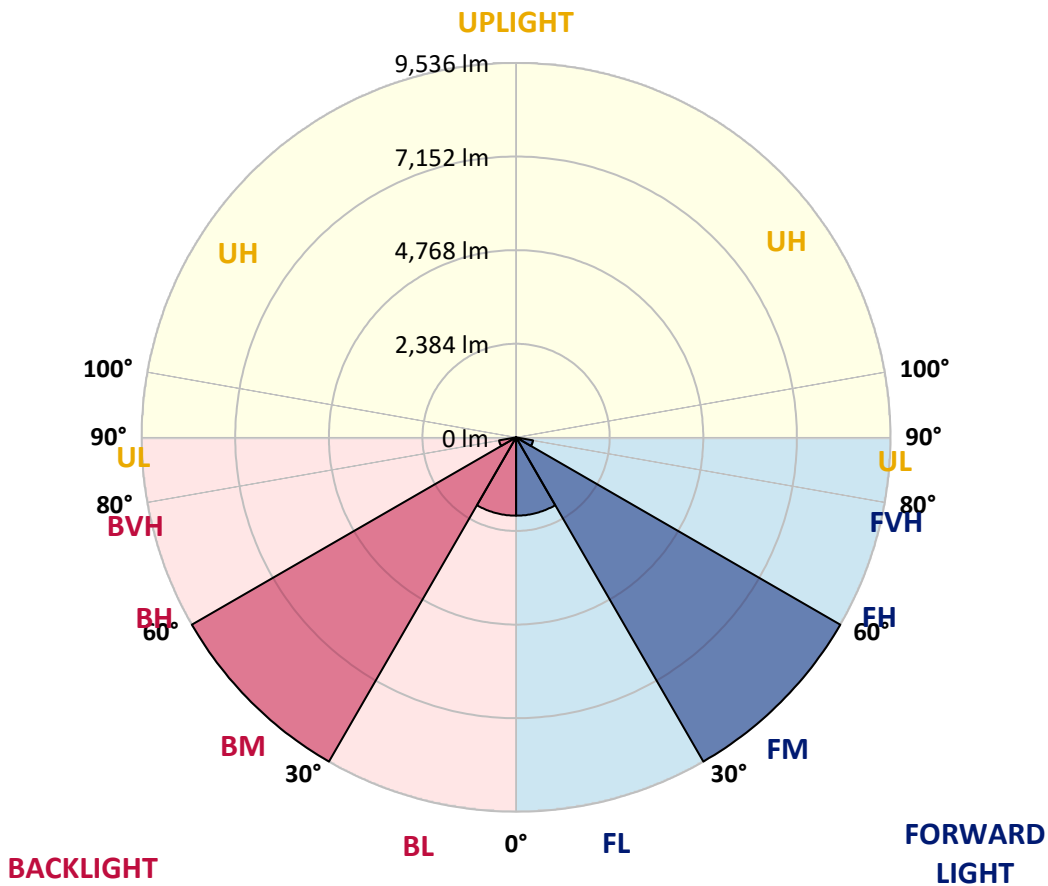
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|--------|-----------|-------------------------|------|--------|
|                |        |           | B                       | U    | G      |
| FL (0°-30°)    | 1994.8 | 8.3       |                         |      |        |
| FM (30°-60°)   | 9536.4 | 39.8      |                         |      |        |
| FH (60°-80°)   | 439.1  | 1.8       |                         |      | G0/660 |
| FVH (80°-90°)  | 0.9    | 0.0       |                         |      | G0/10  |
| BL (0°-30°)    | 1994.8 | 8.3       | B3/2500                 |      |        |
| BM (30°-60°)   | 9536.4 | 39.8      | B5                      |      |        |
| BH (60°-80°)   | 439.1  | 1.8       | B1/500                  |      | G0/660 |
| BVH (80°-90°)  | 0.9    | 0.0       |                         |      | G0/10  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B5-U0-G0**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°    | 85°    | 90°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|
| 0°    | 3871.0  | 3871.0  | 3871.0  | 3871.0  | 3871.0  | 3871.0  | 3871.0  | 3871.0  | 3871.0 | 3871.0 | 3871.0 |
| 2.5°  | 3863.7  | 3863.7  | 3873.5  | 3880.8  | 3880.8  | 3900.3  | 3893.0  | 3885.7  | 3885.7 | 3875.9 | 3895.4 |
| 5°    | 3919.8  | 3917.4  | 3927.1  | 3932.0  | 3922.2  | 3941.8  | 3929.6  | 3922.2  | 3917.4 | 3907.6 | 3927.1 |
| 7.5°  | 3980.8  | 3983.2  | 3985.7  | 3995.4  | 3990.5  | 4010.1  | 4000.3  | 3985.7  | 3980.8 | 3966.2 | 3985.7 |
| 10°   | 4054.0  | 4054.0  | 4058.8  | 4071.0  | 4073.5  | 4097.9  | 4088.1  | 4071.0  | 4056.4 | 4041.8 | 4061.3 |
| 12.5° | 4146.7  | 4149.1  | 4156.4  | 4173.5  | 4183.2  | 4210.1  | 4195.4  | 4161.3  | 4139.3 | 4122.3 | 4144.2 |
| 15°   | 4280.8  | 4278.4  | 4288.1  | 4312.5  | 4324.7  | 4344.2  | 4322.3  | 4275.9  | 4249.1 | 4229.6 | 4244.2 |
| 17.5° | 4427.2  | 4427.2  | 4432.0  | 4456.4  | 4473.5  | 4502.8  | 4475.9  | 4419.8  | 4395.5 | 4368.6 | 4383.3 |
| 20°   | 4588.2  | 4595.5  | 4600.3  | 4617.4  | 4646.7  | 4676.0  | 4654.0  | 4597.9  | 4571.1 | 4536.9 | 4554.0 |
| 22.5° | 4800.4  | 4793.0  | 4795.5  | 4824.8  | 4866.2  | 4895.5  | 4878.4  | 4812.6  | 4766.2 | 4739.4 | 4749.1 |
| 25°   | 5037.0  | 5034.5  | 5041.8  | 5085.8  | 5132.1  | 5163.8  | 5139.4  | 5054.0  | 5007.7 | 4961.4 | 4980.9 |
| 27.5° | 5327.2  | 5329.7  | 5334.5  | 5388.2  | 5461.4  | 5507.7  | 5446.8  | 5361.4  | 5298.0 | 5237.0 | 5251.6 |
| 30°   | 5671.2  | 5666.3  | 5680.9  | 5754.1  | 5861.4  | 5934.6  | 5863.9  | 5744.3  | 5654.1 | 5595.5 | 5602.9 |
| 32.5° | 6037.0  | 6041.9  | 6080.9  | 6198.0  | 6339.5  | 6468.8  | 6324.9  | 6166.3  | 6049.2 | 5939.5 | 5954.1 |
| 35°   | 6432.2  | 6444.4  | 6532.2  | 6705.4  | 6937.1  | 7110.3  | 6910.3  | 6649.3  | 6483.4 | 6341.9 | 6346.8 |
| 37.5° | 6898.1  | 6927.4  | 7049.3  | 7307.9  | 7639.6  | 7871.3  | 7578.6  | 7232.3  | 7017.6 | 6842.0 | 6829.8 |
| 40°   | 7510.3  | 7544.5  | 7710.3  | 8017.7  | 8420.1  | 8632.4  | 8293.3  | 7937.2  | 7671.3 | 7481.1 | 7451.8 |
| 42.5° | 8212.8  | 8256.7  | 8437.2  | 8751.9  | 9154.4  | 9298.3  | 8966.5  | 8666.5  | 8427.5 | 8203.1 | 8193.3 |
| 45°   | 9005.6  | 9030.0  | 9176.3  | 9417.8  | 9708.1  | 9742.2  | 9493.4  | 9327.5  | 9086.1 | 8876.3 | 8859.2 |
| 47.5° | 9749.5  | 9773.9  | 9873.9  | 9998.3  | 10066.6 | 9944.7  | 9900.7  | 9827.6  | 9515.4 | 9256.8 | 9203.1 |
| 50°   | 10315.4 | 10334.9 | 10459.3 | 10508.1 | 10317.9 | 10059.3 | 10144.7 | 9988.6  | 9649.5 | 9359.2 | 9276.3 |
| 52.5° | 10276.4 | 10325.2 | 10644.7 | 10922.8 | 10803.3 | 10593.5 | 10364.2 | 10027.6 | 9500.7 | 9103.1 | 9000.7 |
| 55°   | 8847.0  | 8912.9  | 9598.3  | 10513.0 | 11330.1 | 11420.4 | 10503.2 | 9417.8  | 8427.5 | 7844.5 | 7739.6 |
| 57.5° | 5685.8  | 5702.9  | 6539.5  | 7822.5  | 9664.1  | 10244.7 | 8710.4  | 7100.5  | 5868.7 | 5227.2 | 5183.3 |
| 60°   | 2090.4  | 2056.3  | 2688.0  | 3751.5  | 5566.3  | 6181.0  | 5127.2  | 3590.5  | 2561.2 | 2107.5 | 2070.9 |
| 62.5° | 502.5   | 507.4   | 629.3   | 944.0   | 1746.5  | 2161.1  | 1707.4  | 953.7   | 607.4  | 509.8  | 504.9  |
| 65°   | 253.7   | 248.8   | 251.2   | 270.8   | 373.2   | 446.4   | 365.9   | 258.6   | 248.8  | 251.2  | 248.8  |
| 67.5° | 163.4   | 161.0   | 165.9   | 168.3   | 165.9   | 156.1   | 153.7   | 158.5   | 158.5  | 161.0  | 156.1  |
| 70°   | 100.0   | 97.6    | 102.4   | 109.8   | 104.9   | 92.7    | 97.6    | 102.4   | 97.6   | 95.1   | 95.1   |
| 72.5° | 53.7    | 53.7    | 58.5    | 63.4    | 58.5    | 53.7    | 53.7    | 56.1    | 53.7   | 53.7   | 53.7   |
| 75°   | 24.4    | 24.4    | 26.8    | 29.3    | 24.4    | 24.4    | 24.4    | 24.4    | 24.4   | 24.4   | 24.4   |
| 77.5° | 7.3     | 7.3     | 9.8     | 9.8     | 7.3     | 7.3     | 7.3     | 7.3     | 9.8    | 9.8    | 9.8    |
| 80°   | 2.4     | 4.9     | 4.9     | 2.4     | 2.4     | 2.4     | 2.4     | 2.4     | 4.9    | 4.9    | 4.9    |
| 82.5° | 2.4     | 2.4     | 2.4     | 2.4     | 2.4     | 2.4     | 2.4     | 2.4     | 2.4    | 2.4    | 2.4    |
| 85°   | 2.4     | 2.4     | 2.4     | 0.0     | 0.0     | 0.0     | 0.0     | 2.4     | 2.4    | 2.4    | 2.4    |
| 87.5° | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 2.4     | 2.4    | 2.4    | 2.4    |
| 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)